



## SAR EVALUATION REPORT

### Applicant Name:

Samsung Electronics Co., Ltd.  
129, Samsung-ro, Maetan dong,  
Yeongtong-gu, Suwon-si  
Gyeonggi-do, 16677, Korea

### Date of Testing:

06/10/19 - 07/10/19

### Test Site/Location:

PCTEST Lab, Columbia, MD, USA

### Document Serial No.:

1M1906070094-01-R1.A3L

### FCC ID:

A3LSMT865

### APPLICANT:

SAMSUNG ELECTRONICS CO., LTD.

### DUT Type:

Portable Tablet

### Application Type:

Certification

### FCC Rule Part(s):

CFR §2.1093

### Model:

SM-T865

### Additional Model(s):

SM-T867

| Equipment Class                            | Band & Mode        | Tx Frequency          | SAR            |
|--------------------------------------------|--------------------|-----------------------|----------------|
|                                            |                    |                       | 1g Body (W/kg) |
| PCB                                        | GSM/GPRS/EDGE 850  | 824.20 - 848.80 MHz   | 1.03           |
| PCB                                        | GSM/GPRS/EDGE 1900 | 1850.20 - 1909.80 MHz | 1.03           |
| PCB                                        | UMTS 850           | 826.40 - 846.60 MHz   | 1.21           |
| PCB                                        | UMTS 1750          | 1712.4 - 1752.6 MHz   | 1.28           |
| PCB                                        | UMTS 1900          | 1852.4 - 1907.6 MHz   | 1.19           |
| PCB                                        | LTE Band 12        | 699.7 - 715.3 MHz     | 0.80           |
| PCB                                        | LTE Band 17        | 706.5 - 713.5 MHz     | 1.00           |
| PCB                                        | LTE Band 13        | 779.5 - 784.5 MHz     | 1.29           |
| PCB                                        | LTE Band 26 (Cell) | 814.7 - 848.3 MHz     | 1.18           |
| PCB                                        | LTE Band 5 (Cell)  | 824.7 - 848.3 MHz     | 1.20           |
| PCB                                        | LTE Band 66 (AWS)  | 1710.7 - 1779.3 MHz   | 1.30           |
| PCB                                        | LTE Band 4 (AWS)   | 1710.7 - 1754.3 MHz   | N/A            |
| PCB                                        | LTE Band 2 (PCS)   | 1850.7 - 1909.3 MHz   | 1.23           |
| PCB                                        | LTE Band 25 (PCS)  | 1850.7 - 1914.3 MHz   | 1.18           |
| PCB                                        | LTE Band 41        | 2498.5 - 2687.5 MHz   | 1.05           |
| DTS                                        | 2.4 GHz WLAN       | 2412 - 2472 MHz       | 1.00           |
| NII                                        | U-NII-1            | 5180 - 5240 MHz       | N/A            |
| NII                                        | U-NII-2A           | 5260 - 5320 MHz       | 0.84           |
| NII                                        | U-NII-2C           | 5500 - 5720 MHz       | 1.18           |
| NII                                        | U-NII-3            | 5745 - 5825 MHz       | 0.76           |
| DSS/DTS                                    | Bluetooth          | 2402 - 2480 MHz       | 0.93           |
| Simultaneous SAR per KDB 690783 D01v01r03: |                    |                       | 1.59           |

Note: This revised Test Report (S/N: 1M1906070094-01-R1.A3L) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.7 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

  
Randy Ortanez  
President



The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 1 of 124                                                                         |                                 |

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|                                                |                                                                                                                                   |                                     |                                                                                       |                                        |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|
| FCC ID: A3LSMT865                              |  <b>PCTEST</b><br>ENGINEERING LABORATORY, INC. | <b>SAR EVALUATION REPORT</b>        |  | <b>Approved by:</b><br>Quality Manager |
| <b>Document S/N:</b><br>1M1906070094-01-R1.A3L | <b>Test Dates:</b><br>06/10/19 - 07/10/19                                                                                         | <b>DUT Type:</b><br>Portable Tablet | Page 2 of 124                                                                         |                                        |

# 1 DEVICE UNDER TEST

## 1.1 Device Overview

| Band & Mode        | Operating Modes | Tx Frequency          |
|--------------------|-----------------|-----------------------|
| GSM/GPRS/EDGE 850  | Voice/Data      | 824.20 - 848.80 MHz   |
| GSM/GPRS/EDGE 1900 | Voice/Data      | 1850.20 - 1909.80 MHz |
| UMTS 850           | Voice/Data      | 826.40 - 846.60 MHz   |
| UMTS 1750          | Voice/Data      | 1712.4 - 1752.6 MHz   |
| UMTS 1900          | Voice/Data      | 1852.4 - 1907.6 MHz   |
| LTE Band 12        | Data            | 699.7 - 715.3 MHz     |
| LTE Band 17        | Data            | 706.5 - 713.5 MHz     |
| LTE Band 13        | Data            | 779.5 - 784.5 MHz     |
| LTE Band 26 (Cell) | Data            | 814.7 - 848.3 MHz     |
| LTE Band 5 (Cell)  | Data            | 824.7 - 848.3 MHz     |
| LTE Band 66 (AWS)  | Data            | 1710.7 - 1779.3 MHz   |
| LTE Band 4 (AWS)   | Data            | 1710.7 - 1754.3 MHz   |
| LTE Band 2 (PCS)   | Data            | 1850.7 - 1909.3 MHz   |
| LTE Band 25 (PCS)  | Data            | 1850.7 - 1914.3 MHz   |
| LTE Band 41        | Data            | 2498.5 - 2687.5 MHz   |
| 2.4 GHz WLAN       | Data            | 2412 - 2472 MHz       |
| U-NII-1            | Data            | 5180 - 5240 MHz       |
| U-NII-2A           | Data            | 5260 - 5320 MHz       |
| U-NII-2C           | Data            | 5500 - 5720 MHz       |
| U-NII-3            | Data            | 5745 - 5825 MHz       |
| Bluetooth          | Data            | 2402 - 2480 MHz       |
| ANT+               | Data            | 2402 - 2480 MHz       |

## 1.2 Power Reduction for SAR

This device uses a power reduction mechanism for SAR compliance. The power reduction mechanism is activated when the device is used in close proximity to the user's body. FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device. Detailed descriptions of the power reduction mechanism are included in the operational description.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 1.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

### 1.3.1 Maximum Output Power

| Mode / Band        |         | Voice (dBm) | Burst Average GMSK (dBm) |            |            |            | Burst Average 8-PSK (dBm) |            |            |            |
|--------------------|---------|-------------|--------------------------|------------|------------|------------|---------------------------|------------|------------|------------|
|                    |         | 1 TX Slot   | 1 TX Slots               | 2 TX Slots | 3 TX Slots | 4 TX Slots | 1 TX Slots                | 2 TX Slots | 3 TX Slots | 4 TX Slots |
| GSM/GPRS/EDGE 850  | Maximum | 33.5        | 33.5                     | 32.5       | 30.5       | 28.5       | 28.0                      | 26.0       | 24.0       | 22.5       |
|                    | Nominal | 32.5        | 32.5                     | 31.5       | 29.5       | 27.5       | 27.0                      | 25.0       | 23.0       | 21.5       |
| GSM/GPRS/EDGE 1900 | Maximum | 30.0        | 30.0                     | 29.0       | 27.0       | 25.0       | 25.5                      | 24.5       | 22.5       | 21.5       |
|                    | Nominal | 29.0        | 29.0                     | 28.0       | 26.0       | 24.0       | 24.5                      | 23.5       | 21.5       | 20.5       |

| Mode / Band            |         | Modulated Average (dBm) |            |            |               |
|------------------------|---------|-------------------------|------------|------------|---------------|
|                        |         | 3GPP WCDMA              | 3GPP HSDPA | 3GPP HSUPA | 3GPP DC-HSDPA |
| UMTS Band 5 (850 MHz)  | Maximum | 25.0                    | 24.0       | 24.0       | 24.0          |
|                        | Nominal | 24.0                    | 23.0       | 23.0       | 23.0          |
| UMTS Band 4 (1750 MHz) | Maximum | 24.5                    | 23.5       | 23.5       | 23.5          |
|                        | Nominal | 23.5                    | 22.5       | 22.5       | 22.5          |
| UMTS Band 2 (1900 MHz) | Maximum | 24.5                    | 23.5       | 23.5       | 23.5          |
|                        | Nominal | 23.5                    | 22.5       | 22.5       | 22.5          |

| Mode / Band        |         | Modulated Average (dBm) |
|--------------------|---------|-------------------------|
| LTE Band 12        | Maximum | 25.0                    |
|                    | Nominal | 24.0                    |
| LTE Band 17        | Maximum | 25.5                    |
|                    | Nominal | 24.5                    |
| LTE Band 13        | Maximum | 25.0                    |
|                    | Nominal | 24.0                    |
| LTE Band 26 (Cell) | Maximum | 23.0                    |
|                    | Nominal | 22.0                    |
| LTE Band 5 (Cell)  | Maximum | 25.0                    |
|                    | Nominal | 24.0                    |
| LTE Band 66 (AWS)  | Maximum | 24.5                    |
|                    | Nominal | 23.5                    |
| LTE Band 4 (AWS)   | Maximum | 24.5                    |
|                    | Nominal | 23.5                    |
| LTE Band 2 (PCS)   | Maximum | 24.5                    |
|                    | Nominal | 23.5                    |
| LTE Band 25 (PCS)  | Maximum | 24.0                    |
|                    | Nominal | 23.0                    |
| LTE Band 41        | Maximum | 24.5                    |
|                    | Nominal | 23.5                    |

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| Mode / Band            |         | Modulated Average - Single Tx Chain (dBm) |                         |       |      |      |      |     |     |
|------------------------|---------|-------------------------------------------|-------------------------|-------|------|------|------|-----|-----|
| Channel                |         | 1                                         | 2                       | 3 - 8 | 9    | 10   | 11   | 12  | 13  |
| IEEE 802.11b (2.4 GHz) | Maximum | 18.5                                      | 20.0                    |       |      |      | 18.5 | 6.0 | 6.0 |
|                        | Nominal | 17.5                                      | 19.0                    |       |      |      | 17.5 | 5.0 | 5.0 |
| IEEE 802.11g (2.4 GHz) | Maximum | 15.0                                      | 16.5                    | 18.0  |      | 16.0 | 14.5 | 6.0 | 3.5 |
|                        | Nominal | 14.0                                      | 15.5                    | 17.0  |      | 15.0 | 13.5 | 5.0 | 2.5 |
| IEEE 802.11n (2.4 GHz) | Maximum | 13.5                                      | 17.5                    | 19.0  | 17.0 | 16.5 | 13.5 | 6.0 | 2.0 |
|                        | Nominal | 12.5                                      | 16.5                    | 18.0  | 16.0 | 15.5 | 12.5 | 5.0 | 1.0 |
| Mode / Band            |         |                                           | Modulated Average (dBm) |       |      |      |      |     |     |
| Bluetooth              | Maximum | 13.0                                      |                         |       |      |      |      |     |     |
|                        | Nominal | 12.0                                      |                         |       |      |      |      |     |     |
| Bluetooth LE           | Maximum | 6.0                                       |                         |       |      |      |      |     |     |
|                        | Nominal | 5.0                                       |                         |       |      |      |      |     |     |

| Mode / Band           |         | Modulated Average - Single Tx Chain (dBm) |                  |                  |
|-----------------------|---------|-------------------------------------------|------------------|------------------|
|                       |         | 20 MHz Bandwidth                          | 40 MHz Bandwidth | 80 MHz Bandwidth |
| IEEE 802.11a (5 GHz)  | Maximum | 18.0                                      |                  |                  |
|                       | Nominal | 17.0                                      |                  |                  |
| IEEE 802.11n (5 GHz)  | Maximum | 18.0                                      | 13.0             |                  |
|                       | Nominal | 17.0                                      | 12.0             |                  |
| IEEE 802.11ac (5 GHz) | Maximum | 13.0                                      | 13.0             | 13.0             |
|                       | Nominal | 12.0                                      | 12.0             | 12.0             |

| Mode / Band            |         | Modulated Average - MIMO (dBm) |      |       |      |      |      |     |     |
|------------------------|---------|--------------------------------|------|-------|------|------|------|-----|-----|
| Channel                |         | 1                              | 2    | 3 - 8 | 9    | 10   | 11   | 12  | 13  |
| IEEE 802.11g (2.4 GHz) | Maximum | 18.0                           | 19.5 | 21.0  | 19.0 | 17.5 | 9.0  | 6.5 |     |
|                        | Nominal | 17.0                           | 18.5 | 20.0  | 18.0 | 16.5 | 8.0  | 5.5 |     |
| IEEE 802.11n (2.4 GHz) | Maximum | 16.5                           | 20.5 | 22.0  | 20.0 | 19.5 | 16.5 | 9.0 | 5.0 |
|                        | Nominal | 15.5                           | 19.5 | 21.0  | 19.0 | 18.5 | 15.5 | 8.0 | 4.0 |

| Mode / Band           |         | Modulated Average - MIMO (dBm) |                  |                  |
|-----------------------|---------|--------------------------------|------------------|------------------|
|                       |         | 20 MHz Bandwidth               | 40 MHz Bandwidth | 80 MHz Bandwidth |
| IEEE 802.11a (5 GHz)  | Maximum | 21.0                           |                  |                  |
|                       | Nominal | 20.0                           |                  |                  |
| IEEE 802.11n (5 GHz)  | Maximum | 21.0                           | 16.0             |                  |
|                       | Nominal | 20.0                           | 15.0             |                  |
| IEEE 802.11ac (5 GHz) | Maximum | 16.0                           | 16.0             | 16.0             |
|                       | Nominal | 15.0                           | 15.0             | 15.0             |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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### 1.3.2

### Reduced Output Power

| Mode / Band        |         | Voice (dBm) | Burst Average GMSK (dBm) |            |            |            | Burst Average 8-PSK (dBm) |            |            |            |
|--------------------|---------|-------------|--------------------------|------------|------------|------------|---------------------------|------------|------------|------------|
|                    |         | 1 TX Slot   | 1 TX Slots               | 2 TX Slots | 3 TX Slots | 4 TX Slots | 1 TX Slots                | 2 TX Slots | 3 TX Slots | 4 TX Slots |
| GSM/GPRS/EDGE 850  | Maximum | 24.5        | 24.5                     | 23.5       | 22.0       | 20.0       | 25.0                      | 23.5       | 21.5       | 19.5       |
|                    | Nominal | 23.5        | 23.5                     | 22.5       | 21.0       | 19.0       | 24.0                      | 22.5       | 20.5       | 18.5       |
| GSM/GPRS/EDGE 1900 | Maximum | 21.0        | 21.0                     | 20.0       | 18.5       | 16.5       | 21.0                      | 20.0       | 18.0       | 16.0       |
|                    | Nominal | 20.0        | 20.0                     | 19.0       | 17.5       | 15.5       | 20.0                      | 19.0       | 17.0       | 15.0       |

| Mode / Band            |         | Modulated Average (dBm) |            |            |               |
|------------------------|---------|-------------------------|------------|------------|---------------|
|                        |         | 3GPP WCDMA              | 3GPP HSDPA | 3GPP HSUPA | 3GPP DC-HSDPA |
| UMTS Band 5 (850 MHz)  | Maximum | 18.0                    | 18.0       | 18.0       | 18.0          |
|                        | Nominal | 17.0                    | 17.0       | 17.0       | 17.0          |
| UMTS Band 4 (1750 MHz) | Maximum | 14.0                    | 13.5       | 13.5       | 13.5          |
|                        | Nominal | 13.0                    | 12.5       | 12.5       | 12.5          |
| UMTS Band 2 (1900 MHz) | Maximum | 14.0                    | 14.0       | 14.5       | 14.0          |
|                        | Nominal | 13.0                    | 13.0       | 13.5       | 13.0          |

| Mode / Band        |         | Modulated Average (dBm) |
|--------------------|---------|-------------------------|
| LTE Band 12        | Maximum | 18.0                    |
|                    | Nominal | 17.0                    |
| LTE Band 17        | Maximum | 18.5                    |
|                    | Nominal | 17.5                    |
| LTE Band 13        | Maximum | 19.0                    |
|                    | Nominal | 18.0                    |
| LTE Band 26 (Cell) | Maximum | 18.0                    |
|                    | Nominal | 17.0                    |
| LTE Band 5 (Cell)  | Maximum | 18.0                    |
|                    | Nominal | 17.0                    |
| LTE Band 66 (AWS)  | Maximum | 14.5                    |
|                    | Nominal | 13.5                    |
| LTE Band 4 (AWS)   | Maximum | 14.5                    |
|                    | Nominal | 13.5                    |
| LTE Band 2 (PCS)   | Maximum | 14.5                    |
|                    | Nominal | 13.5                    |
| LTE Band 25 (PCS)  | Maximum | 14.5                    |
|                    | Nominal | 13.5                    |
| LTE Band 41        | Maximum | 15.5                    |
|                    | Nominal | 14.5                    |

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| Mode / Band            |         | Modulated Average - Single Tx Chain (dBm) |   |       |   |    |    |     |     |
|------------------------|---------|-------------------------------------------|---|-------|---|----|----|-----|-----|
| Channel                |         | 1                                         | 2 | 3 - 8 | 9 | 10 | 11 | 12  | 13  |
| IEEE 802.11b (2.4 GHz) | Maximum | 13.5                                      |   |       |   |    |    | 6.0 | 6.0 |
|                        | Nominal | 12.5                                      |   |       |   |    |    | 5.0 | 5.0 |
| IEEE 802.11g (2.4 GHz) | Maximum | 13.5                                      |   |       |   |    |    | 6.0 | 3.5 |
|                        | Nominal | 12.5                                      |   |       |   |    |    | 5.0 | 2.5 |
| IEEE 802.11n (2.4 GHz) | Maximum | 13.5                                      |   |       |   |    |    | 6.0 | 2.0 |
|                        | Nominal | 12.5                                      |   |       |   |    |    | 5.0 | 1.0 |

| Mode / Band           |         | Modulated Average - Single Tx Chain (dBm) |                  |                  |
|-----------------------|---------|-------------------------------------------|------------------|------------------|
|                       |         | 20 MHz Bandwidth                          | 40 MHz Bandwidth | 80 MHz Bandwidth |
| IEEE 802.11a (5 GHz)  | Maximum | 10.0                                      |                  |                  |
|                       | Nominal | 9.0                                       |                  |                  |
| IEEE 802.11n (5 GHz)  | Maximum | 10.0                                      | 10.0             |                  |
|                       | Nominal | 9.0                                       | 9.0              |                  |
| IEEE 802.11ac (5 GHz) | Maximum | 10.0                                      | 10.0             | 10.0             |
|                       | Nominal | 9.0                                       | 9.0              | 9.0              |

| Mode / Band            |         | Modulated Average - MIMO (dBm) |   |       |   |    |    |     |     |
|------------------------|---------|--------------------------------|---|-------|---|----|----|-----|-----|
| Channel                |         | 1                              | 2 | 3 - 8 | 9 | 10 | 11 | 12  | 13  |
| IEEE 802.11g (2.4 GHz) | Maximum | 16.5                           |   |       |   |    |    | 9.0 | 6.5 |
|                        | Nominal | 15.5                           |   |       |   |    |    | 8.0 | 5.5 |
| IEEE 802.11n (2.4 GHz) | Maximum | 16.5                           |   |       |   |    |    | 9.0 | 5.0 |
|                        | Nominal | 15.5                           |   |       |   |    |    | 8.0 | 4.0 |

| Mode / Band           |         | Modulated Average - MIMO (dBm) |                  |                  |
|-----------------------|---------|--------------------------------|------------------|------------------|
|                       |         | 20 MHz Bandwidth               | 40 MHz Bandwidth | 80 MHz Bandwidth |
| IEEE 802.11a (5 GHz)  | Maximum | 10.0                           |                  |                  |
|                       | Nominal | 9.0                            |                  |                  |
| IEEE 802.11n (5 GHz)  | Maximum | 10.0                           | 10.0             |                  |
|                       | Nominal | 9.0                            | 9.0              |                  |
| IEEE 802.11ac (5 GHz) | Maximum | 10.0                           | 10.0             | 10.0             |
|                       | Nominal | 9.0                            | 9.0              | 9.0              |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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## 1.4 DUT Antenna Locations

The overall diagonal dimension of the device is > 200 mm. A diagram showing the location of the device antennas can be found in Appendix F. Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filings.

**Table 1-1**  
**Device Edges/Sides for SAR Testing**

| Mode               | Back | Top | Bottom | Right | Left |
|--------------------|------|-----|--------|-------|------|
| GPRS 850           | Yes  | Yes | No     | Yes   | Yes  |
| GPRS 1900          | Yes  | Yes | No     | Yes   | Yes  |
| UMTS 850           | Yes  | Yes | No     | Yes   | Yes  |
| UMTS 1750          | Yes  | Yes | No     | Yes   | Yes  |
| UMTS 1900          | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 12        | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 17        | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 13        | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 26 (Cell) | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 5 (Cell)  | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 66 (AWS)  | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 2 (PCS)   | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 25 (PCS)  | Yes  | Yes | No     | Yes   | Yes  |
| LTE Band 41        | Yes  | Yes | No     | Yes   | Yes  |
| 2.4 GHz WLAN Ant 1 | Yes  | Yes | No     | No    | Yes  |
| 2.4 GHz WLAN Ant 2 | Yes  | Yes | No     | Yes   | No   |
| 5 GHz WLAN Ant 1   | Yes  | Yes | No     | No    | Yes  |
| 5 GHz WLAN Ant 2   | Yes  | Yes | No     | Yes   | No   |
| Bluetooth          | Yes  | Yes | No     | No    | Yes  |

Note: Per FCC KDB Publication 616217 D04v01r01, particular edges were not required to be evaluated for SAR based on the SAR exclusion threshold in KDB 447498 D01V06. Additional edges may have been evaluated for simultaneous transmission analysis.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 1.5 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

**Table 1-2**  
**Simultaneous Transmission Scenarios**

| No. | Capable Transmit Configuration                      | Body |
|-----|-----------------------------------------------------|------|
| 1   | GSM voice + 2.4 GHz WI-FI                           | Yes  |
| 2   | GSM voice + 5 GHz WI-FI                             | Yes  |
| 3   | GSM voice + 2.4 GHz Bluetooth                       | Yes  |
| 4   | GSM voice + 2.4 GHz WI-FI MIMO                      | Yes  |
| 5   | GSM voice + 5 GHz WI-FI MIMO                        | Yes  |
| 6   | GSM voice + 2.4 GHz WI-FI Ant 1 + 5 GHz WI-FI Ant 2 | Yes  |
| 7   | GSM voice + 2.4 GHz Bluetooth + 5 GHz WI-FI Ant 2   | Yes  |
| 8   | GPRS/EDGE + 2.4 GHz WI-FI                           | Yes  |
| 9   | GPRS/EDGE + 5 GHz WI-FI                             | Yes  |
| 10  | GPRS/EDGE + 2.4 GHz Bluetooth                       | Yes  |
| 11  | GPRS/EDGE + 2.4 GHz WI-FI MIMO                      | Yes  |
| 12  | GPRS/EDGE + 5 GHz WI-FI MIMO                        | Yes  |
| 13  | GPRS/EDGE + 2.4 GHz WI-FI Ant 1 + 5 GHz WI-FI Ant 2 | Yes  |
| 14  | GPRS/EDGE + 2.4 GHz Bluetooth + 5 GHz WI-FI Ant 2   | Yes  |
| 15  | UMTS + 2.4 GHz WI-FI                                | Yes  |
| 16  | UMTS + 5 GHz WI-FI                                  | Yes  |
| 17  | UMTS + 2.4 GHz Bluetooth                            | Yes  |
| 18  | UMTS + 2.4 GHz WI-FI MIMO                           | Yes  |
| 19  | UMTS + 5 GHz WI-FI MIMO                             | Yes  |
| 20  | UMTS + 2.4 GHz WI-FI Ant 1 + 5 GHz WI-FI Ant 2      | Yes  |
| 21  | UMTS + 2.4 GHz Bluetooth + 5 GHz WI-FI Ant 2        | Yes  |
| 22  | LTE + 2.4 GHz WI-FI                                 | Yes  |
| 23  | LTE + 5 GHz WI-FI                                   | Yes  |
| 24  | LTE + 2.4 GHz Bluetooth                             | Yes  |
| 25  | LTE + 2.4 GHz WI-FI MIMO                            | Yes  |
| 26  | LTE + 5 GHz WI-FI MIMO                              | Yes  |
| 27  | LTE + 2.4 GHz WI-FI Ant 1 + 5 GHz WI-FI Ant 2       | Yes  |
| 28  | LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI Ant 2         | Yes  |

- 2.4 GHz WLAN Ant 1, 5 GHz WLAN Ant 1, and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
- All licensed modes share the same antenna path and cannot transmit simultaneously.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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3. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac. 802.11a/g/n/ac supports CDD and STBC and 802.11n/ac additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.

## 1.6 Miscellaneous SAR Test Considerations

### (A) WIFI/BT

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

This device supports IEEE 802.11ac with the following features:

- a) Up to 80 MHz Bandwidth only
- b) No aggregate channel configurations
- c) 2 Tx antenna output
- d) 256 QAM is supported
- e) TDWR and Band gap channels are supported

### (B) Licensed Transmitter(s)

GSM/GPRS/EDGE DTM is not supported for US bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive. The downlink carrier aggregation exclusion analysis can be found in Appendix H.

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE Band falls completely within an LTE band with a larger transmission frequency range, both LTE bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

This device supports 64QAM on the uplink and 256QAM on the downlink for LTE Operations. Conducted powers for 64QAM uplink configurations were measured per Section 5.1 of FCC KDB Publication 941225

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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D05v02r05. SAR was not required for 64QAM since the highest maximum output power for 64QAM is  $\leq \frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45\text{W/kg}$ , per Section 5.2.4 of FCC KDB Publication 941225 D05v02r05.

## 1.7 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02, D06v02r01 (2G/3G/4G)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 616217 D04v01r02 (Tablet)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO)
- April 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (Dynamic Antenna Tuning)

## 1.8 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 10.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| LTE Information                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|-----------------|
| Form Factor                                                                                                       | Portable Tablet                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
| Frequency Range of each LTE transmission band                                                                     | LTE Band 12 (699.7 - 715.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|                                                                                                                   | LTE Band 17 (706.5 - 713.5 MHz)                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|                                                                                                                   | LTE Band 13 (779.5 - 784.5 MHz)                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|                                                                                                                   | LTE Band 26 (Cell) (814.7 - 848.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                    |                |                |                |                 |
|                                                                                                                   | LTE Band 5 (Cell) (824.7 - 848.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                     |                |                |                |                 |
|                                                                                                                   | LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                   |                |                |                |                 |
|                                                                                                                   | LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                    |                |                |                |                 |
|                                                                                                                   | LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                    |                |                |                |                 |
|                                                                                                                   | LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)                                                                                                                                                                                                                                                                                                                                                                                                   |                |                |                |                 |
|                                                                                                                   | LTE Band 41 (2498.5 - 2687.5 MHz)                                                                                                                                                                                                                                                                                                                                                                                                         |                |                |                |                 |
| Channel Bandwidths                                                                                                | LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz                                                                                                                                                                                                                                                                                                                                                                                                |                |                |                |                 |
|                                                                                                                   | LTE Band 17: 5 MHz, 10 MHz                                                                                                                                                                                                                                                                                                                                                                                                                |                |                |                |                 |
|                                                                                                                   | LTE Band 13: 5 MHz, 10 MHz                                                                                                                                                                                                                                                                                                                                                                                                                |                |                |                |                 |
|                                                                                                                   | LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz                                                                                                                                                                                                                                                                                                                                                                                 |                |                |                |                 |
|                                                                                                                   | LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz                                                                                                                                                                                                                                                                                                                                                                                          |                |                |                |                 |
|                                                                                                                   | LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz                                                                                                                                                                                                                                                                                                                                                                          |                |                |                |                 |
|                                                                                                                   | LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|                                                                                                                   | LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz                                                                                                                                                                                                                                                                                                                                                                           |                |                |                |                 |
|                                                                                                                   | LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz                                                                                                                                                                                                                                                                                                                                                                          |                |                |                |                 |
|                                                                                                                   | LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz                                                                                                                                                                                                                                                                                                                                                                                                |                |                |                |                 |
| Channel Numbers and Frequencies (MHz)                                                                             | Low                                                                                                                                                                                                                                                                                                                                                                                                                                       | Low-Mid        | Mid            | Mid-High       | High            |
| LTE Band 12: 1.4 MHz                                                                                              | 699.7 (23017)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 707.5 (23095)  |                | 715.3 (23173)   |
| LTE Band 12: 3 MHz                                                                                                | 700.5 (23025)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 707.5 (23095)  |                | 714.5 (23165)   |
| LTE Band 12: 5 MHz                                                                                                | 701.5 (23035)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 707.5 (23095)  |                | 713.5 (23155)   |
| LTE Band 12: 10 MHz                                                                                               | 704 (23060)                                                                                                                                                                                                                                                                                                                                                                                                                               |                | 707.5 (23095)  |                | 711 (23130)     |
| LTE Band 17: 5 MHz                                                                                                | 706.5 (23755)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 710 (23790)    |                | 713.5 (23825)   |
| LTE Band 17: 10 MHz                                                                                               | 709 (23780)                                                                                                                                                                                                                                                                                                                                                                                                                               |                | 710 (23790)    |                | 711 (23800)     |
| LTE Band 13: 5 MHz                                                                                                | 779.5 (23205)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 782 (23230)    |                | 784.5 (23255)   |
| LTE Band 13: 10 MHz                                                                                               | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                       |                | 782 (23230)    |                | N/A             |
| LTE Band 26 (Cell): 1.4 MHz                                                                                       | 814.7 (26697)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 831.5 (26865)  |                | 848.3 (27033)   |
| LTE Band 26 (Cell): 3 MHz                                                                                         | 815.5 (26705)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 831.5 (26865)  |                | 847.5 (27025)   |
| LTE Band 26 (Cell): 5 MHz                                                                                         | 816.5 (26715)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 831.5 (26865)  |                | 846.5 (27015)   |
| LTE Band 26 (Cell): 10 MHz                                                                                        | 819 (26740)                                                                                                                                                                                                                                                                                                                                                                                                                               |                | 831.5 (26865)  |                | 844 (26990)     |
| LTE Band 26 (Cell): 15 MHz                                                                                        | 821.5 (26765)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 831.5 (26865)  |                | 841.5 (26965)   |
| LTE Band 5 (Cell): 1.4 MHz                                                                                        | 824.7 (20407)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 836.5 (20525)  |                | 848.3 (20643)   |
| LTE Band 5 (Cell): 3 MHz                                                                                          | 825.5 (20415)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 836.5 (20525)  |                | 847.5 (20635)   |
| LTE Band 5 (Cell): 5 MHz                                                                                          | 826.5 (20425)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 836.5 (20525)  |                | 846.5 (20625)   |
| LTE Band 5 (Cell): 10 MHz                                                                                         | 829 (20450)                                                                                                                                                                                                                                                                                                                                                                                                                               |                | 836.5 (20525)  |                | 844 (20600)     |
| LTE Band 66 (AWS): 1.4 MHz                                                                                        | 1710.7 (131979)                                                                                                                                                                                                                                                                                                                                                                                                                           |                | 1745 (132322)  |                | 1779.3 (132665) |
| LTE Band 66 (AWS): 3 MHz                                                                                          | 1711.5 (131987)                                                                                                                                                                                                                                                                                                                                                                                                                           |                | 1745 (132322)  |                | 1778.5 (132657) |
| LTE Band 66 (AWS): 5 MHz                                                                                          | 1712.5 (131997)                                                                                                                                                                                                                                                                                                                                                                                                                           |                | 1745 (132322)  |                | 1777.5 (132647) |
| LTE Band 66 (AWS): 10 MHz                                                                                         | 1715 (132022)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 1745 (132322)  |                | 1775 (132622)   |
| LTE Band 66 (AWS): 15 MHz                                                                                         | 1717.5 (132047)                                                                                                                                                                                                                                                                                                                                                                                                                           |                | 1745 (132322)  |                | 1772.5 (132597) |
| LTE Band 66 (AWS): 20 MHz                                                                                         | 1720 (132072)                                                                                                                                                                                                                                                                                                                                                                                                                             |                | 1745 (132322)  |                | 1770 (132572)   |
| LTE Band 4 (AWS): 1.4 MHz                                                                                         | 1710.7 (19957)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1732.5 (20175) |                | 1754.3 (20393)  |
| LTE Band 4 (AWS): 3 MHz                                                                                           | 1711.5 (19965)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1732.5 (20175) |                | 1753.5 (20385)  |
| LTE Band 4 (AWS): 5 MHz                                                                                           | 1712.5 (19975)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1732.5 (20175) |                | 1752.5 (20375)  |
| LTE Band 4 (AWS): 10 MHz                                                                                          | 1715 (20000)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1732.5 (20175) |                | 1750 (20350)    |
| LTE Band 4 (AWS): 15 MHz                                                                                          | 1717.5 (20025)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1732.5 (20175) |                | 1747.5 (20325)  |
| LTE Band 4 (AWS): 20 MHz                                                                                          | 1720 (20050)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1732.5 (20175) |                | 1745 (20300)    |
| LTE Band 2 (PCS): 1.4 MHz                                                                                         | 1850.7 (18607)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1880 (18900)   |                | 1909.3 (19193)  |
| LTE Band 2 (PCS): 3 MHz                                                                                           | 1851.5 (18615)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1880 (18900)   |                | 1908.5 (19185)  |
| LTE Band 2 (PCS): 5 MHz                                                                                           | 1852.5 (18625)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1880 (18900)   |                | 1907.5 (19175)  |
| LTE Band 2 (PCS): 10 MHz                                                                                          | 1855 (18650)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1880 (18900)   |                | 1905 (19150)    |
| LTE Band 2 (PCS): 15 MHz                                                                                          | 1857.5 (18675)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1880 (18900)   |                | 1902.5 (19125)  |
| LTE Band 2 (PCS): 20 MHz                                                                                          | 1860 (18700)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1880 (18900)   |                | 1900 (19100)    |
| LTE Band 25 (PCS): 1.4 MHz                                                                                        | 1850.7 (26047)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1882.5 (26365) |                | 1914.3 (26683)  |
| LTE Band 25 (PCS): 3 MHz                                                                                          | 1851.5 (26055)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1882.5 (26365) |                | 1913.5 (26675)  |
| LTE Band 25 (PCS): 5 MHz                                                                                          | 1852.5 (26065)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1882.5 (26365) |                | 1912.5 (26665)  |
| LTE Band 25 (PCS): 10 MHz                                                                                         | 1855 (26090)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1882.5 (26365) |                | 1910 (26640)    |
| LTE Band 25 (PCS): 15 MHz                                                                                         | 1857.5 (26115)                                                                                                                                                                                                                                                                                                                                                                                                                            |                | 1882.5 (26365) |                | 1907.5 (26615)  |
| LTE Band 25 (PCS): 20 MHz                                                                                         | 1860 (26140)                                                                                                                                                                                                                                                                                                                                                                                                                              |                | 1882.5 (26365) |                | 1905 (26590)    |
| LTE Band 41: 5 MHz                                                                                                | 2506 (39750)                                                                                                                                                                                                                                                                                                                                                                                                                              | 2549.5 (40185) | 2593 (40620)   | 2636.5 (41055) | 2680 (41490)    |
| LTE Band 41: 10 MHz                                                                                               | 2506 (39750)                                                                                                                                                                                                                                                                                                                                                                                                                              | 2549.5 (40185) | 2593 (40620)   | 2636.5 (41055) | 2680 (41490)    |
| LTE Band 41: 15 MHz                                                                                               | 2506 (39750)                                                                                                                                                                                                                                                                                                                                                                                                                              | 2549.5 (40185) | 2593 (40620)   | 2636.5 (41055) | 2680 (41490)    |
| LTE Band 41: 20 MHz                                                                                               | 2506 (39750)                                                                                                                                                                                                                                                                                                                                                                                                                              | 2549.5 (40185) | 2593 (40620)   | 2636.5 (41055) | 2680 (41490)    |
| UE Category                                                                                                       | DL UE Cat 15 (QPSK, 16QAM, 64QAM, 256QAM)<br>UL UE Cat 5 (QPSK, 16QAM, 64QAM)                                                                                                                                                                                                                                                                                                                                                             |                |                |                |                 |
| Modulations Supported in UL                                                                                       | QPSK, 16QAM, 64QAM                                                                                                                                                                                                                                                                                                                                                                                                                        |                |                |                |                 |
| LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3-6.2.5? (manufacturer attestation to be provided) | YES                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |                |                |                 |
| A-MPR (Additional MPR) disabled for SAR Testing?                                                                  | YES                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |                |                |                 |
| LTE Carrier Aggregation Possible Combinations                                                                     | The technical description includes all the possible carrier aggregation combinations                                                                                                                                                                                                                                                                                                                                                      |                |                |                |                 |
| LTE Additional Information                                                                                        | This device does not support full CA features on 3GPP Release 12. It supports carrier aggregation and downlink MIMO features as shown in Appendix H. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 12 Features are not supported: Relay, HetNet, Enhanced MIMO, eCIC, WiFi Offloading, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA. |                |                |                |                 |

|                                         |                                                                                     |                              |                       |                                                                                       |                                 |
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### 3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

#### 3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

Equation 3-1  
SAR Mathematical Equation

$$SAR = \frac{d}{dt} \left( \frac{dU}{dm} \right) = \frac{d}{dt} \left( \frac{dU}{\rho dv} \right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

- σ = conductivity of the tissue-simulating material (S/m)
- ρ = mass density of the tissue-simulating material (kg/m<sup>3</sup>)
- E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 4 DOSIMETRIC ASSESSMENT

### 4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):
  - a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).
  - b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.
  - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

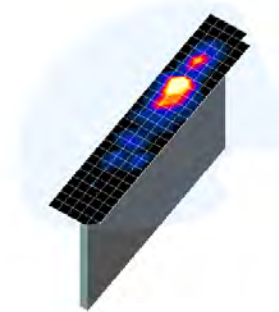


**Figure 4-1**  
Sample SAR Area Scan

**Table 4-1**  
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04\*

| Frequency | Maximum Area Scan Resolution (mm)<br>( $\Delta x_{area}$ , $\Delta y_{area}$ ) | Maximum Zoom Scan Resolution (mm)<br>( $\Delta x_{zoom}$ , $\Delta y_{zoom}$ ) | Maximum Zoom Scan Spatial Resolution (mm) |                        |                                  | Minimum Zoom Scan Volume (mm)<br>(x,y,z) |
|-----------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------|------------------------|----------------------------------|------------------------------------------|
|           |                                                                                |                                                                                | Uniform Grid<br>$\Delta z_{zoom}(n)$      | Graded Grid            |                                  |                                          |
|           |                                                                                |                                                                                |                                           | $\Delta z_{zoom}(1)^*$ | $\Delta z_{zoom}(n>1)^*$         |                                          |
| ≤ 2 GHz   | ≤ 15                                                                           | ≤ 8                                                                            | ≤ 5                                       | ≤ 4                    | $\leq 1.5^*\Delta z_{zoom}(n-1)$ | ≥ 30                                     |
| 2-3 GHz   | ≤ 12                                                                           | ≤ 5                                                                            | ≤ 5                                       | ≤ 4                    | $\leq 1.5^*\Delta z_{zoom}(n-1)$ | ≥ 30                                     |
| 3-4 GHz   | ≤ 12                                                                           | ≤ 5                                                                            | ≤ 4                                       | ≤ 3                    | $\leq 1.5^*\Delta z_{zoom}(n-1)$ | ≥ 28                                     |
| 4-5 GHz   | ≤ 10                                                                           | ≤ 4                                                                            | ≤ 3                                       | ≤ 2.5                  | $\leq 1.5^*\Delta z_{zoom}(n-1)$ | ≥ 25                                     |
| 5-6 GHz   | ≤ 10                                                                           | ≤ 4                                                                            | ≤ 2                                       | ≤ 2                    | $\leq 1.5^*\Delta z_{zoom}(n-1)$ | ≥ 22                                     |

\*Also compliant to IEEE 1528-2013 Table 6

|                                         |                                                                                                                                                                                                        |                              |                                 |
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## 5 TEST CONFIGURATION POSITIONS

### 5.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity  $\epsilon = 3$  and loss tangent  $\delta = 0.02$ .

### 5.2 SAR Testing for Tablet per KDB Publication 616217 D04v01r02

Per FCC KDB Publication 616217 D04v01r02, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. The SAR Exclusion Threshold in KDB 447498 D01v06 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

### 5.3 Proximity Sensor Considerations

This device uses a power reduction mechanism to reduce output powers in certain use conditions when the device is used close the user's body.

When the device's antenna is within a certain distance of the user, the sensor activates and reduces the maximum allowed output power. However, the sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, additional evaluation is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a non-reduced output power level. FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional test positions. Sensor triggering distance summary data is included in Appendix G.

The sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the sensor entirely covers the antennas.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 6 RF EXPOSURE LIMITS

### 6.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

### 6.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**Table 6-1**  
**SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6**

| HUMAN EXPOSURE LIMITS                                               |                                                                           |                                                                   |
|---------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------|
|                                                                     | UNCONTROLLED ENVIRONMENT<br><i>General Population</i><br>(W/kg) or (mW/g) | CONTROLLED ENVIRONMENT<br><i>Occupational</i><br>(W/kg) or (mW/g) |
| <b>Peak Spatial Average SAR</b><br>Head                             | 1.6                                                                       | 8.0                                                               |
| <b>Whole Body SAR</b>                                               | 0.08                                                                      | 0.4                                                               |
| <b>Peak Spatial Average SAR</b><br>Hands, Feet, Ankle, Wrists, etc. | 4.0                                                                       | 20                                                                |

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

|                                         |                                                                                                                                                                                                        |                              |                                 |
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## 7 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

### 7.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

### 7.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is  $\leq 0.25$  dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is  $\leq 1.2$  W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

### 7.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

### 7.4 SAR Measurement Conditions for UMTS

#### 7.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 7.4.2 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all “1s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCH<sub>n</sub> configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCH<sub>n</sub>, for the highest reported SAR configuration in 12.2 kbps RMC.

## 7.4.3 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

## 7.4.4 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

## 7.4.5 SAR Measurement Conditions for DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

## 7.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

### 7.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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## 7.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

## 7.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

## 7.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

- a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
  - i. The required channel and offset combination with the highest maximum output power is required for SAR.
  - ii. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
  - iii. When the reported SAR for a required test channel is  $> 1.45$  W/kg, SAR is required for all RB offset configurations for that channel.
- b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
- c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is  $< 0.8$  W/kg.
- d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to  $\frac{1}{2}$  dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is  $< 1.45$  W/kg.

## 7.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

## 7.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR

|                                         |                                                                                     |                              |                                                                                       |                                 |
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measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

## 7.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

### 7.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

### 7.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is  $> 1.2$  W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is  $> 1.2$  W/kg.

### 7.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

### 7.6.4 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

- 1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is  $\leq 0.8$  W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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- 2) When the reported SAR is  $> 0.8$  W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is  $> 1.2$  W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is  $> 1.2$  W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed.

### 7.6.5 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

### 7.6.6 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is  $\leq 0.8$  W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is  $\leq 1.2$  W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 7.6.5).

### 7.6.7 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is  $\leq 1.2$  W/kg, no additional SAR tests for the subsequent test configurations are required.

### 7.6.8 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is  $< 1.6$  W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

|                                         |                                                                                                                                                                                                        |                              |                                            |
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## 8 RF CONDUCTED POWERS

### 8.1 GSM Conducted Powers

**Table 8-1**  
**Maximum Conducted Power**

| Maximum Burst-Averaged Output Power |         |                          |                         |                         |                         |                         |                         |                         |                         |                         |
|-------------------------------------|---------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                     |         | Voice                    | GPRS/EDGE Data (GMSK)   |                         |                         |                         | EDGE Data (8-PSK)       |                         |                         |                         |
| Band                                | Channel | GSM [dBm]<br>CS (1 Slot) | GPRS [dBm]<br>1 Tx Slot | GPRS [dBm]<br>2 Tx Slot | GPRS [dBm]<br>3 Tx Slot | GPRS [dBm]<br>4 Tx Slot | EDGE [dBm]<br>1 Tx Slot | EDGE [dBm]<br>2 Tx Slot | EDGE [dBm]<br>3 Tx Slot | EDGE [dBm]<br>4 Tx Slot |
| GSM 850                             | 128     | 32.82                    | 32.76                   | 31.73                   | <b>29.80</b>            | 27.74                   | 27.00                   | 25.26                   | 23.01                   | 21.95                   |
|                                     | 190     | 32.83                    | 32.78                   | 31.84                   | <b>29.65</b>            | 27.72                   | 27.36                   | 25.33                   | 23.10                   | 22.24                   |
|                                     | 251     | 32.74                    | 32.53                   | 31.82                   | <b>29.79</b>            | 27.65                   | 26.95                   | 24.96                   | 23.08                   | 22.03                   |
| GSM 1900                            | 512     | 29.21                    | 29.07                   | 27.74                   | <b>26.28</b>            | 24.29                   | 25.30                   | 23.88                   | 21.66                   | 20.50                   |
|                                     | 661     | 29.05                    | 29.09                   | 27.60                   | <b>26.15</b>            | 24.17                   | 25.02                   | 23.66                   | 21.77                   | 20.76                   |
|                                     | 810     | 29.05                    | 28.86                   | 27.81                   | <b>26.16</b>            | 24.13                   | 24.85                   | 23.41                   | 21.51                   | 20.49                   |

| Calculated Maximum Frame-Averaged Output Power |         |                          |                         |                         |                         |                         |                         |                         |                         |                         |
|------------------------------------------------|---------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                                |         | Voice                    | GPRS/EDGE Data (GMSK)   |                         |                         |                         | EDGE Data (8-PSK)       |                         |                         |                         |
| Band                                           | Channel | GSM [dBm]<br>CS (1 Slot) | GPRS [dBm]<br>1 Tx Slot | GPRS [dBm]<br>2 Tx Slot | GPRS [dBm]<br>3 Tx Slot | GPRS [dBm]<br>4 Tx Slot | EDGE [dBm]<br>1 Tx Slot | EDGE [dBm]<br>2 Tx Slot | EDGE [dBm]<br>3 Tx Slot | EDGE [dBm]<br>4 Tx Slot |
| GSM 850                                        | 128     | 23.79                    | 23.73                   | 25.71                   | <b>25.54</b>            | 24.73                   | 17.97                   | 19.24                   | 18.75                   | 18.94                   |
|                                                | 190     | 23.80                    | 23.75                   | 25.82                   | <b>25.39</b>            | 24.71                   | 18.33                   | 19.31                   | 18.84                   | 19.23                   |
|                                                | 251     | 23.71                    | 23.50                   | 25.80                   | <b>25.53</b>            | 24.64                   | 17.92                   | 18.94                   | 18.82                   | 19.02                   |
| GSM 1900                                       | 512     | 20.18                    | 20.04                   | 21.72                   | <b>22.02</b>            | 21.28                   | 16.27                   | 17.86                   | 17.40                   | 17.49                   |
|                                                | 661     | 20.02                    | 20.06                   | 21.58                   | <b>21.89</b>            | 21.16                   | 15.99                   | 17.64                   | 17.51                   | 17.75                   |
|                                                | 810     | 20.02                    | 19.83                   | 21.79                   | <b>21.90</b>            | 21.12                   | 15.82                   | 17.39                   | 17.25                   | 17.48                   |

|          |                       |       |       |       |              |       |       |       |       |       |
|----------|-----------------------|-------|-------|-------|--------------|-------|-------|-------|-------|-------|
| GSM 850  | Frame<br>Avg.Targets: | 23.47 | 23.47 | 25.48 | <b>25.24</b> | 24.49 | 17.97 | 18.98 | 18.74 | 18.49 |
| GSM 1900 |                       | 19.97 | 19.97 | 21.98 | <b>21.74</b> | 20.99 | 15.47 | 17.48 | 17.24 | 17.49 |

|                                         |                                                                                     |                              |                       |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                       |                                                                                       | Page 22 of 124                  |

**Table 8-2**  
**Reduced Conducted Power**

| Maximum Burst-Averaged Output Power |         |                          |                         |                         |                         |                         |                         |                         |                         |                         |
|-------------------------------------|---------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                     |         | Voice                    | GPRS/EDGE Data (GMSK)   |                         |                         |                         | EDGE Data (8-PSK)       |                         |                         |                         |
| Band                                | Channel | GSM [dBm]<br>CS (1 Slot) | GPRS [dBm]<br>1 Tx Slot | GPRS [dBm]<br>2 Tx Slot | GPRS [dBm]<br>3 Tx Slot | GPRS [dBm]<br>4 Tx Slot | EDGE [dBm]<br>1 Tx Slot | EDGE [dBm]<br>2 Tx Slot | EDGE [dBm]<br>3 Tx Slot | EDGE [dBm]<br>4 Tx Slot |
| GSM 850                             | 128     | 24.01                    | 24.04                   | 22.88                   | 20.86                   | 19.02                   | 23.90                   | 22.64                   | 20.71                   | 18.45                   |
|                                     | 190     | 23.67                    | 23.66                   | 22.55                   | 20.93                   | 19.15                   | 23.80                   | 22.84                   | 20.99                   | 18.83                   |
|                                     | 251     | 23.71                    | 23.69                   | 22.72                   | 20.80                   | 19.21                   | 23.63                   | 22.67                   | 20.69                   | 18.74                   |
| GSM 1900                            | 512     | 20.25                    | 20.21                   | 19.15                   | 17.25                   | 15.02                   | 20.24                   | 19.26                   | 17.19                   | 15.19                   |
|                                     | 661     | 20.02                    | 20.30                   | 19.22                   | 17.45                   | 15.08                   | 20.28                   | 19.26                   | 17.29                   | 15.26                   |
|                                     | 810     | 20.01                    | 20.01                   | 18.82                   | 17.08                   | 15.00                   | 20.01                   | 18.82                   | 17.06                   | 14.51                   |

| Calculated Maximum Frame-Averaged Output Power |         |                          |                         |                         |                         |                         |                         |                         |                         |                         |
|------------------------------------------------|---------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                                |         | Voice                    | GPRS/EDGE Data (GMSK)   |                         |                         |                         | EDGE Data (8-PSK)       |                         |                         |                         |
| Band                                           | Channel | GSM [dBm]<br>CS (1 Slot) | GPRS [dBm]<br>1 Tx Slot | GPRS [dBm]<br>2 Tx Slot | GPRS [dBm]<br>3 Tx Slot | GPRS [dBm]<br>4 Tx Slot | EDGE [dBm]<br>1 Tx Slot | EDGE [dBm]<br>2 Tx Slot | EDGE [dBm]<br>3 Tx Slot | EDGE [dBm]<br>4 Tx Slot |
| GSM 850                                        | 128     | 14.98                    | 15.01                   | 16.86                   | 16.60                   | 16.01                   | 14.87                   | 16.62                   | 16.45                   | 15.44                   |
|                                                | 190     | 14.64                    | 14.63                   | 16.53                   | 16.67                   | 16.14                   | 14.77                   | 16.82                   | 16.73                   | 15.82                   |
|                                                | 251     | 14.68                    | 14.66                   | 16.70                   | 16.54                   | 16.20                   | 14.60                   | 16.65                   | 16.43                   | 15.73                   |
| GSM 1900                                       | 512     | 11.22                    | 11.18                   | 13.13                   | 12.99                   | 12.01                   | 11.21                   | 13.24                   | 12.93                   | 12.18                   |
|                                                | 661     | 10.99                    | 11.27                   | 13.20                   | 13.19                   | 12.07                   | 11.25                   | 13.24                   | 13.03                   | 12.25                   |
|                                                | 810     | 10.98                    | 10.98                   | 12.80                   | 12.82                   | 11.99                   | 10.98                   | 12.80                   | 12.80                   | 11.50                   |

|          |                        |       |       |       |       |       |       |       |       |       |
|----------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GSM 850  | Frame<br>Avg. Targets: | 14.47 | 14.47 | 16.48 | 16.74 | 15.99 | 14.97 | 16.48 | 16.24 | 15.49 |
| GSM 1900 |                        | 10.97 | 10.97 | 12.98 | 13.24 | 12.49 | 10.97 | 12.98 | 12.74 | 11.99 |

Note:

- Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 23 of 124                  |

3. EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8PSK modulation do not have an impact on output power.

**GSM Class: B**  
**GPRS Multislot class: 33 (Max 4 Tx uplink slots)**  
**EDGE Multislot class: 33 (Max 4 Tx uplink slots)**  
**DTM Multislot Class: N/A**



**Figure 8-1**  
**Power Measurement Setup**

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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## 8.2 UMTS Conducted Powers

**Table 8-3**  
**Maximum Conducted Power**

| 3GPP Release Version | Mode     | 3GPP 34.121 Subtest | Cellular Band [dBm] |       |       | AWS Band [dBm] |       |       | PCS Band [dBm] |       |       | 3GPP MPR [dB] |
|----------------------|----------|---------------------|---------------------|-------|-------|----------------|-------|-------|----------------|-------|-------|---------------|
|                      |          |                     | 4132                | 4183  | 4233  | 1312           | 1412  | 1513  | 9262           | 9400  | 9538  |               |
| 99                   | WCDMA    | 12.2 kbps RMC       | 24.16               | 24.25 | 24.21 | 23.03          | 23.32 | 23.41 | 23.39          | 23.42 | 23.16 | -             |
| 99                   |          | 12.2 kbps AMR       | 24.18               | 24.25 | 24.19 | 23.07          | 23.31 | 23.46 | 23.39          | 23.40 | 23.14 | -             |
| 6                    | HSDPA    | Subtest 1           | 23.06               | 23.16 | 23.11 | 21.98          | 22.20 | 22.23 | 22.44          | 22.54 | 22.27 | 0             |
| 6                    |          | Subtest 2           | 23.05               | 23.20 | 23.21 | 21.93          | 22.17 | 22.21 | 22.50          | 22.49 | 22.22 | 0             |
| 6                    |          | Subtest 3           | 22.54               | 22.64 | 22.67 | 21.45          | 21.67 | 21.74 | 21.96          | 22.04 | 21.70 | 0.5           |
| 6                    |          | Subtest 4           | 22.57               | 22.67 | 22.65 | 21.47          | 21.68 | 21.72 | 21.92          | 22.02 | 21.68 | 0.5           |
| 6                    | HSUPA    | Subtest 1           | 22.84               | 23.07 | 22.96 | 22.02          | 22.26 | 22.35 | 22.37          | 22.45 | 22.12 | 0             |
| 6                    |          | Subtest 2           | 20.85               | 20.91 | 20.95 | 20.03          | 20.29 | 20.36 | 20.36          | 20.48 | 20.17 | 2             |
| 6                    |          | Subtest 3           | 21.90               | 21.94 | 21.95 | 21.01          | 21.28 | 21.33 | 21.34          | 21.45 | 21.12 | 1             |
| 6                    |          | Subtest 4           | 20.89               | 20.96 | 20.93 | 20.04          | 20.27 | 20.35 | 20.38          | 20.49 | 20.15 | 2             |
| 6                    |          | Subtest 5           | 23.03               | 23.22 | 23.08 | 22.08          | 22.30 | 22.43 | 22.44          | 22.55 | 22.28 | 0             |
| 8                    | DC-HSDPA | Subtest 1           | 22.81               | 22.97 | 22.99 | 22.00          | 22.18 | 22.26 | 22.43          | 22.51 | 22.22 | 0             |
| 8                    |          | Subtest 2           | 22.90               | 22.96 | 23.02 | 21.96          | 22.12 | 22.23 | 22.54          | 22.50 | 22.18 | 0             |
| 8                    |          | Subtest 3           | 22.36               | 22.48 | 22.47 | 21.43          | 21.59 | 21.72 | 21.96          | 22.02 | 21.72 | 0.5           |
| 8                    |          | Subtest 4           | 22.34               | 22.45 | 22.49 | 21.44          | 21.56 | 21.71 | 21.93          | 21.99 | 21.64 | 0.5           |

**Table 8-4**  
**Reduced Conducted Power**

| 3GPP Release Version | Mode     | 3GPP 34.121 Subtest | Cellular Band [dBm] |       |       | AWS Band [dBm] |       |       | PCS Band [dBm] |       |       | 3GPP MPR [dB] |
|----------------------|----------|---------------------|---------------------|-------|-------|----------------|-------|-------|----------------|-------|-------|---------------|
|                      |          |                     | 4132                | 4183  | 4233  | 1312           | 1412  | 1513  | 9262           | 9400  | 9538  |               |
| 99                   | WCDMA    | 12.2 kbps RMC       | 17.73               | 17.84 | 17.82 | 12.83          | 13.07 | 13.21 | 13.33          | 13.36 | 13.02 | -             |
| 99                   |          | 12.2 kbps AMR       | 17.66               | 17.77 | 17.81 | 12.84          | 13.11 | 13.27 | 13.35          | 13.37 | 13.04 | -             |
| 6                    | HSDPA    | Subtest 1           | 16.74               | 16.80 | 16.79 | 11.95          | 12.18 | 12.25 | 12.90          | 12.94 | 12.98 | 0             |
| 6                    |          | Subtest 2           | 16.71               | 16.76 | 16.80 | 11.92          | 12.17 | 12.22 | 12.88          | 12.95 | 12.92 | 0             |
| 6                    |          | Subtest 3           | 16.23               | 16.29 | 16.30 | 11.46          | 11.67 | 11.73 | 12.37          | 12.41 | 12.46 | 0.5           |
| 6                    |          | Subtest 4           | 16.18               | 16.30 | 16.29 | 11.43          | 11.66 | 11.72 | 12.36          | 12.38 | 12.41 | 0.5           |
| 6                    | HSUPA    | Subtest 1           | 16.72               | 16.83 | 16.82 | 11.99          | 12.20 | 12.37 | 12.85          | 13.00 | 12.70 | 0             |
| 6                    |          | Subtest 2           | 14.74               | 14.83 | 14.83 | 10.03          | 10.27 | 10.34 | 10.88          | 10.95 | 10.87 | 2             |
| 6                    |          | Subtest 3           | 15.74               | 15.83 | 15.82 | 11.00          | 11.28 | 11.34 | 11.94          | 12.01 | 11.85 | 1             |
| 6                    |          | Subtest 4           | 14.69               | 14.82 | 14.83 | 10.02          | 10.30 | 10.33 | 10.94          | 10.99 | 10.86 | 2             |
| 6                    |          | Subtest 5           | 16.78               | 16.81 | 16.80 | 12.00          | 12.26 | 12.43 | 12.88          | 13.04 | 12.78 | 0             |
| 8                    | DC-HSDPA | Subtest 1           | 16.69               | 16.80 | 16.79 | 11.71          | 11.97 | 12.02 | 12.91          | 12.98 | 12.76 | 0             |
| 8                    |          | Subtest 2           | 16.64               | 16.79 | 16.80 | 11.68          | 11.96 | 12.03 | 12.77          | 12.99 | 12.80 | 0             |
| 8                    |          | Subtest 3           | 16.19               | 16.31 | 16.35 | 11.26          | 11.45 | 11.50 | 12.39          | 12.44 | 12.26 | 0.5           |
| 8                    |          | Subtest 4           | 16.26               | 16.37 | 16.29 | 11.24          | 11.44 | 11.45 | 12.38          | 12.43 | 12.25 | 0.5           |

It is expected by the manufacturer that MPR for some HSPA subtests may be up to 2 dB more than specified by 3GPP, but also as low as 0 dB according to the chipset implementation in this model.

### DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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**Figure 8-2**  
**Power Measurement Setup**

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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## 8.3 LTE Conducted Powers

### 8.3.1 LTE Band 12

**Table 8-5**  
**LTE Band 12 Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 12<br>10 MHz Bandwidth |         |           |                          |                              |          |
|---------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 23095<br>(707.5 MHz)     |                              |          |
|                                 |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                            | 1       | 0         | 24.23                    | 0                            | 0        |
|                                 | 1       | 25        | 24.20                    |                              | 0        |
|                                 | 1       | 49        | 24.22                    |                              | 0        |
|                                 | 25      | 0         | 23.37                    | 0-1                          | 1        |
|                                 | 25      | 12        | 23.43                    |                              | 1        |
|                                 | 25      | 25        | 23.44                    |                              | 1        |
|                                 | 50      | 0         | 23.39                    |                              | 1        |
| 16QAM                           | 1       | 0         | 23.38                    | 0-1                          | 1        |
|                                 | 1       | 25        | 23.64                    |                              | 1        |
|                                 | 1       | 49        | 23.41                    |                              | 1        |
|                                 | 25      | 0         | 22.42                    | 0-2                          | 2        |
|                                 | 25      | 12        | 22.51                    |                              | 2        |
|                                 | 25      | 25        | 22.46                    |                              | 2        |
|                                 | 50      | 0         | 22.36                    |                              | 2        |
| 64QAM                           | 1       | 0         | 22.42                    | 0-2                          | 2        |
|                                 | 1       | 25        | 22.26                    |                              | 2        |
|                                 | 1       | 49        | 22.84                    |                              | 2        |
|                                 | 25      | 0         | 21.45                    | 0-3                          | 3        |
|                                 | 25      | 12        | 21.41                    |                              | 3        |
|                                 | 25      | 25        | 21.28                    |                              | 3        |
|                                 | 50      | 0         | 21.37                    |                              | 3        |

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-6**  
**LTE Band 12 Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 12<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23035<br>(701.5 MHz)  | 23095<br>(707.5 MHz) | 23155<br>(713.5 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                           | 1       | 0         | 24.20                 | 24.21                | 24.25                | 0                            | 0        |
|                                | 1       | 12        | 24.33                 | 24.32                | 24.26                |                              | 0        |
|                                | 1       | 24        | 24.24                 | 24.25                | 24.17                |                              | 0        |
|                                | 12      | 0         | 23.35                 | 23.41                | 23.34                | 0-1                          | 1        |
|                                | 12      | 6         | 23.42                 | 23.47                | 23.37                |                              | 1        |
|                                | 12      | 13        | 23.38                 | 23.46                | 23.33                |                              | 1        |
|                                | 25      | 0         | 23.38                 | 23.40                | 23.31                |                              | 1        |
| 16QAM                          | 1       | 0         | 23.42                 | 23.45                | 23.48                | 0-1                          | 1        |
|                                | 1       | 12        | 23.48                 | 23.60                | 23.45                |                              | 1        |
|                                | 1       | 24        | 23.56                 | 23.45                | 23.38                |                              | 1        |
|                                | 12      | 0         | 22.31                 | 22.42                | 22.36                | 0-2                          | 2        |
|                                | 12      | 6         | 22.49                 | 22.50                | 22.36                |                              | 2        |
|                                | 12      | 13        | 22.39                 | 22.45                | 22.36                |                              | 2        |
|                                | 25      | 0         | 22.35                 | 22.37                | 22.30                |                              | 2        |
| 64QAM                          | 1       | 0         | 22.40                 | 22.41                | 22.44                | 0-2                          | 2        |
|                                | 1       | 12        | 22.50                 | 22.56                | 22.46                |                              | 2        |
|                                | 1       | 24        | 22.43                 | 22.55                | 22.03                |                              | 2        |
|                                | 12      | 0         | 21.33                 | 21.41                | 21.29                | 0-3                          | 3        |
|                                | 12      | 6         | 21.47                 | 21.56                | 21.22                |                              | 3        |
|                                | 12      | 13        | 21.38                 | 21.43                | 21.09                |                              | 3        |
|                                | 25      | 0         | 21.38                 | 21.38                | 21.15                |                              | 3        |

|                                         |                                                                                     |                              |                       |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------|
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**Table 8-7**  
**LTE Band 12 Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 12<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23025<br>(700.5 MHz)  | 23095<br>(707.5 MHz) | 23165<br>(714.5 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                           | 1       | 0         | 24.20                 | 24.24                | 24.20                | 0                            | 0        |
|                                | 1       | 7         | 24.27                 | 24.29                | 24.24                |                              | 0        |
|                                | 1       | 14        | 24.26                 | 24.33                | 24.21                |                              | 0        |
|                                | 8       | 0         | 23.32                 | 23.39                | 23.37                | 0-1                          | 1        |
|                                | 8       | 4         | 23.42                 | 23.45                | 23.40                |                              | 1        |
|                                | 8       | 7         | 23.33                 | 23.45                | 23.35                |                              | 1        |
|                                | 15      | 0         | 23.36                 | 23.46                | 23.38                |                              | 1        |
| 16QAM                          | 1       | 0         | 23.41                 | 23.44                | 23.43                | 0-1                          | 1        |
|                                | 1       | 7         | 23.50                 | 23.51                | 23.40                |                              | 1        |
|                                | 1       | 14        | 23.40                 | 23.50                | 23.40                |                              | 1        |
|                                | 8       | 0         | 22.34                 | 22.42                | 22.40                | 0-2                          | 2        |
|                                | 8       | 4         | 22.45                 | 22.50                | 22.46                |                              | 2        |
|                                | 8       | 7         | 22.39                 | 22.43                | 22.35                |                              | 2        |
|                                | 15      | 0         | 22.38                 | 22.45                | 22.32                |                              | 2        |
| 64QAM                          | 1       | 0         | 22.44                 | 22.45                | 22.29                | 0-2                          | 2        |
|                                | 1       | 7         | 22.49                 | 22.58                | 22.18                |                              | 2        |
|                                | 1       | 14        | 22.35                 | 22.50                | 22.01                |                              | 2        |
|                                | 8       | 0         | 21.35                 | 21.43                | 21.28                | 0-3                          | 3        |
|                                | 8       | 4         | 21.42                 | 21.54                | 21.17                |                              | 3        |
|                                | 8       | 7         | 21.40                 | 21.46                | 21.07                |                              | 3        |
|                                | 15      | 0         | 21.36                 | 21.44                | 21.11                |                              | 3        |

**Table 8-8**  
**LTE Band 12 Maximum Conducted Powers - 1.4 MHz Bandwidth**

| LTE Band 12<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                       | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                  |         |           | 23017<br>(699.7 MHz)  | 23095<br>(707.5 MHz) | 23173<br>(715.3 MHz) |                              |          |
|                                  |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                             | 1       | 0         | 24.12                 | 24.14                | 24.07                | 0                            | 0        |
|                                  | 1       | 2         | 24.24                 | 24.24                | 24.33                |                              | 0        |
|                                  | 1       | 5         | 24.18                 | 24.23                | 24.16                |                              | 0        |
|                                  | 3       | 0         | 24.20                 | 24.17                | 24.11                |                              | 0        |
|                                  | 3       | 2         | 24.26                 | 24.28                | 24.21                |                              | 0        |
|                                  | 3       | 3         | 24.20                 | 24.25                | 24.15                |                              | 0        |
|                                  | 6       | 0         | 23.30                 | 23.38                | 23.24                | 0-1                          | 1        |
| 16QAM                            | 1       | 0         | 23.36                 | 23.45                | 23.35                | 0-1                          | 1        |
|                                  | 1       | 2         | 23.55                 | 23.49                | 23.49                |                              | 1        |
|                                  | 1       | 5         | 23.38                 | 23.54                | 23.40                |                              | 1        |
|                                  | 3       | 0         | 23.33                 | 23.32                | 23.26                |                              | 1        |
|                                  | 3       | 2         | 23.37                 | 23.44                | 23.35                |                              | 1        |
|                                  | 3       | 3         | 23.30                 | 23.39                | 23.30                |                              | 1        |
|                                  | 6       | 0         | 22.37                 | 22.35                | 22.30                | 0-2                          | 2        |
| 64QAM                            | 1       | 0         | 22.35                 | 22.42                | 22.02                | 0-2                          | 2        |
|                                  | 1       | 2         | 22.45                 | 22.46                | 22.05                |                              | 2        |
|                                  | 1       | 5         | 22.40                 | 22.40                | 21.94                |                              | 2        |
|                                  | 3       | 0         | 22.33                 | 22.40                | 21.99                |                              | 2        |
|                                  | 3       | 2         | 22.42                 | 22.45                | 22.03                |                              | 2        |
|                                  | 3       | 3         | 22.39                 | 22.40                | 22.00                |                              | 2        |
|                                  | 6       | 0         | 21.29                 | 21.34                | 20.90                | 0-3                          | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 28 of 124                  |

**Table 8-9**  
**LTE Band 12 Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 12<br>10 MHz Bandwidth |         |           |                          |                              |          |
|---------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 23095<br>(707.5 MHz)     |                              |          |
|                                 |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                            | 1       | 0         | 17.30                    | 0                            | 0        |
|                                 | 1       | 25        | 17.13                    |                              | 0        |
|                                 | 1       | 49        | 17.14                    |                              | 0        |
|                                 | 25      | 0         | 17.37                    | 0-1                          | 0        |
|                                 | 25      | 12        | 17.25                    |                              | 0        |
|                                 | 25      | 25        | 17.30                    |                              | 0        |
|                                 | 50      | 0         | 17.29                    |                              | 0        |
| 16QAM                           | 1       | 0         | 17.42                    | 0-1                          | 0        |
|                                 | 1       | 25        | 17.25                    |                              | 0        |
|                                 | 1       | 49        | 17.31                    |                              | 0        |
|                                 | 25      | 0         | 17.35                    | 0-2                          | 0        |
|                                 | 25      | 12        | 17.35                    |                              | 0        |
|                                 | 25      | 25        | 17.42                    |                              | 0        |
|                                 | 50      | 0         | 17.27                    |                              | 0        |
| 64QAM                           | 1       | 0         | 17.44                    | 0-2                          | 0        |
|                                 | 1       | 25        | 17.42                    |                              | 0        |
|                                 | 1       | 49        | 17.31                    |                              | 0        |
|                                 | 25      | 0         | 17.35                    | 0-3                          | 0        |
|                                 | 25      | 12        | 17.36                    |                              | 0        |
|                                 | 25      | 25        | 17.30                    |                              | 0        |
|                                 | 50      | 0         | 17.34                    |                              | 0        |

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-10**  
**LTE Band 12 Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 12<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23035<br>(701.5 MHz)  | 23095<br>(707.5 MHz) | 23155<br>(713.5 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                           | 1       | 0         | 17.30                 | 17.49                | 17.35                | 0                            | 0        |
|                                | 1       | 12        | 17.42                 | 17.55                | 17.36                |                              | 0        |
|                                | 1       | 24        | 17.33                 | 17.49                | 17.33                |                              | 0        |
|                                | 12      | 0         | 17.60                 | 17.63                | 17.60                | 0-1                          | 0        |
|                                | 12      | 6         | 17.73                 | 17.76                | 17.62                |                              | 0        |
|                                | 12      | 13        | 17.66                 | 17.69                | 17.59                |                              | 0        |
|                                | 25      | 0         | 17.69                 | 17.70                | 17.58                |                              | 0        |
| 16QAM                          | 1       | 0         | 17.62                 | 17.70                | 17.70                | 0-1                          | 0        |
|                                | 1       | 12        | 17.80                 | 17.79                | 17.77                |                              | 0        |
|                                | 1       | 24        | 17.74                 | 17.71                | 17.69                |                              | 0        |
|                                | 12      | 0         | 17.60                 | 17.62                | 17.61                | 0-2                          | 0        |
|                                | 12      | 6         | 17.73                 | 17.73                | 17.62                |                              | 0        |
|                                | 12      | 13        | 17.65                 | 17.66                | 17.60                |                              | 0        |
|                                | 25      | 0         | 17.62                 | 17.60                | 17.57                |                              | 0        |
| 64QAM                          | 1       | 0         | 17.67                 | 17.63                | 17.69                | 0-2                          | 0        |
|                                | 1       | 12        | 17.75                 | 17.80                | 17.72                |                              | 0        |
|                                | 1       | 24        | 17.71                 | 17.77                | 17.69                |                              | 0        |
|                                | 12      | 0         | 17.60                 | 17.66                | 17.62                | 0-3                          | 0        |
|                                | 12      | 6         | 17.74                 | 17.74                | 17.67                |                              | 0        |
|                                | 12      | 13        | 17.67                 | 17.70                | 17.63                |                              | 0        |
|                                | 25      | 0         | 17.64                 | 17.68                | 17.59                |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 29 of 124                  |

**Table 8-11**  
**LTE Band 12 Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 12<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23025<br>(700.5 MHz)  | 23095<br>(707.5 MHz) | 23165<br>(714.5 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                           | 1       | 0         | 17.50                 | 17.46                | 17.34                | 0                            | 0        |
|                                | 1       | 7         | 17.50                 | 17.52                | 17.39                |                              | 0        |
|                                | 1       | 14        | 17.54                 | 17.51                | 17.31                |                              | 0        |
|                                | 8       | 0         | 17.63                 | 17.63                | 17.58                | 0-1                          | 0        |
|                                | 8       | 4         | 17.73                 | 17.71                | 17.60                |                              | 0        |
|                                | 8       | 7         | 17.63                 | 17.65                | 17.60                |                              | 0        |
|                                | 15      | 0         | 17.70                 | 17.72                | 17.62                |                              | 0        |
| 16QAM                          | 1       | 0         | 17.70                 | 17.51                | 17.65                | 0-1                          | 0        |
|                                | 1       | 7         | 17.75                 | 17.79                | 17.76                |                              | 0        |
|                                | 1       | 14        | 17.76                 | 17.70                | 17.68                |                              | 0        |
|                                | 8       | 0         | 17.61                 | 17.67                | 17.59                | 0-2                          | 0        |
|                                | 8       | 4         | 17.70                 | 17.74                | 17.65                |                              | 0        |
|                                | 8       | 7         | 17.67                 | 17.73                | 17.62                |                              | 0        |
|                                | 15      | 0         | 17.61                 | 17.67                | 17.55                |                              | 0        |
| 64QAM                          | 1       | 0         | 17.65                 | 17.69                | 17.66                | 0-2                          | 0        |
|                                | 1       | 7         | 17.74                 | 17.77                | 17.70                |                              | 0        |
|                                | 1       | 14        | 17.72                 | 17.77                | 17.66                |                              | 0        |
|                                | 8       | 0         | 17.62                 | 17.65                | 17.60                | 0-3                          | 0        |
|                                | 8       | 4         | 17.72                 | 17.71                | 17.64                |                              | 0        |
|                                | 8       | 7         | 17.68                 | 17.66                | 17.63                |                              | 0        |
|                                | 15      | 0         | 17.66                 | 17.72                | 17.60                |                              | 0        |

**Table 8-12**  
**LTE Band 12 Reduced Conducted Powers - 1.4 MHz Bandwidth**

| LTE Band 12<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                       | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                  |         |           | 23017<br>(699.7 MHz)  | 23095<br>(707.5 MHz) | 23173<br>(715.3 MHz) |                              |          |
|                                  |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                             | 1       | 0         | 17.30                 | 17.28                | 17.28                | 0                            | 0        |
|                                  | 1       | 2         | 17.37                 | 17.28                | 17.35                |                              | 0        |
|                                  | 1       | 5         | 17.32                 | 17.35                | 17.29                |                              | 0        |
|                                  | 3       | 0         | 17.36                 | 17.31                | 17.32                |                              | 0        |
|                                  | 3       | 2         | 17.42                 | 17.43                | 17.27                |                              | 0        |
|                                  | 3       | 3         | 17.35                 | 17.38                | 17.25                |                              | 0        |
|                                  | 6       | 0         | 17.57                 | 17.62                | 17.56                | 0-1                          | 0        |
| 16QAM                            | 1       | 0         | 17.63                 | 17.62                | 17.62                | 0-1                          | 0        |
|                                  | 1       | 2         | 17.76                 | 17.71                | 17.72                |                              | 0        |
|                                  | 1       | 5         | 17.68                 | 17.77                | 17.66                |                              | 0        |
|                                  | 3       | 0         | 17.58                 | 17.59                | 17.58                |                              | 0        |
|                                  | 3       | 2         | 17.65                 | 17.65                | 17.64                |                              | 0        |
|                                  | 3       | 3         | 17.61                 | 17.62                | 17.55                |                              | 0        |
|                                  | 6       | 0         | 17.62                 | 17.65                | 17.60                | 0-2                          | 0        |
| 64QAM                            | 1       | 0         | 17.67                 | 17.67                | 17.68                | 0-2                          | 0        |
|                                  | 1       | 2         | 17.72                 | 17.76                | 17.71                |                              | 0        |
|                                  | 1       | 5         | 17.68                 | 17.71                | 17.68                |                              | 0        |
|                                  | 3       | 0         | 17.64                 | 17.65                | 17.65                |                              | 0        |
|                                  | 3       | 2         | 17.71                 | 17.73                | 17.63                |                              | 0        |
|                                  | 3       | 3         | 17.65                 | 17.70                | 17.62                |                              | 0        |
|                                  | 6       | 0         | 17.73                 | 17.59                | 17.54                | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 30 of 124                  |

### 8.3.2

### LTE Band 17

**Table 8-13**  
**LTE Band 17 Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 17<br>10 MHz Bandwidth |         |           |                                     |                              |          |
|---------------------------------|---------|-----------|-------------------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel<br>23790<br>(710.0 MHz) | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | Conducted Power<br>[dBm]            |                              |          |
| QPSK                            | 1       | 0         | 24.93                               | 0                            | 0        |
|                                 | 1       | 25        | 24.87                               |                              | 0        |
|                                 | 1       | 49        | 24.74                               |                              | 0        |
|                                 | 25      | 0         | 24.31                               | 0-1                          | 1        |
|                                 | 25      | 12        | 23.68                               |                              | 1        |
|                                 | 25      | 25        | 23.54                               |                              | 1        |
|                                 | 50      | 0         | 23.66                               |                              | 1        |
| 16QAM                           | 1       | 0         | 23.88                               | 0-1                          | 1        |
|                                 | 1       | 25        | 24.00                               |                              | 1        |
|                                 | 1       | 49        | 23.80                               |                              | 1        |
|                                 | 25      | 0         | 22.66                               | 0-2                          | 2        |
|                                 | 25      | 12        | 22.62                               |                              | 2        |
|                                 | 25      | 25        | 22.56                               |                              | 2        |
|                                 | 50      | 0         | 22.60                               |                              | 2        |
| 64QAM                           | 1       | 0         | 23.09                               | 0-2                          | 2        |
|                                 | 1       | 25        | 22.73                               |                              | 2        |
|                                 | 1       | 49        | 22.32                               |                              | 2        |
|                                 | 25      | 0         | 21.68                               | 0-3                          | 3        |
|                                 | 25      | 12        | 21.59                               |                              | 3        |
|                                 | 25      | 25        | 21.32                               |                              | 3        |
|                                 | 50      | 0         | 21.41                               |                              | 3        |

Note: LTE Band 17 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-14**  
**LTE Band 17 Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 17<br>5 MHz Bandwidth |         |           |                                     |                              |          |
|--------------------------------|---------|-----------|-------------------------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Mid Channel<br>23790<br>(710.0 MHz) | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | Conducted Power<br>[dBm]            |                              |          |
| QPSK                           | 1       | 0         | 24.55                               | 0                            | 0        |
|                                | 1       | 12        | 24.82                               |                              | 0        |
|                                | 1       | 24        | 24.40                               |                              | 0        |
|                                | 12      | 0         | 23.80                               | 0-1                          | 1        |
|                                | 12      | 6         | 23.90                               |                              | 1        |
|                                | 12      | 13        | 23.83                               |                              | 1        |
|                                | 25      | 0         | 23.79                               |                              | 1        |
| 16QAM                          | 1       | 0         | 23.80                               | 0-1                          | 1        |
|                                | 1       | 12        | 24.01                               |                              | 1        |
|                                | 1       | 24        | 23.55                               |                              | 1        |
|                                | 12      | 0         | 22.87                               | 0-2                          | 2        |
|                                | 12      | 6         | 22.92                               |                              | 2        |
|                                | 12      | 13        | 22.71                               |                              | 2        |
|                                | 25      | 0         | 22.78                               |                              | 2        |
| 64QAM                          | 1       | 0         | 22.74                               | 0-2                          | 2        |
|                                | 1       | 12        | 22.57                               |                              | 2        |
|                                | 1       | 24        | 22.15                               |                              | 2        |
|                                | 12      | 0         | 21.65                               | 0-3                          | 3        |
|                                | 12      | 6         | 21.58                               |                              | 3        |
|                                | 12      | 13        | 21.31                               |                              | 3        |
|                                | 25      | 0         | 21.48                               |                              | 3        |

Note: LTE Band 17 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 31 of 124                  |

**Table 8-15**  
**LTE Band 17 Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 17<br>10 MHz Bandwidth |         |           |                                     |                              |          |
|---------------------------------|---------|-----------|-------------------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel<br>23790<br>(710.0 MHz) | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | Conducted Power<br>[dBm]            |                              |          |
| QPSK                            | 1       | 0         | 17.57                               | 0                            | 0        |
|                                 | 1       | 25        | 17.67                               |                              | 0        |
|                                 | 1       | 49        | 17.69                               |                              | 0        |
|                                 | 25      | 0         | 17.63                               | 0-1                          | 0        |
|                                 | 25      | 12        | 17.75                               |                              | 0        |
|                                 | 25      | 25        | 17.54                               |                              | 0        |
|                                 | 50      | 0         | 17.47                               |                              | 0        |
| 16QAM                           | 1       | 0         | 18.02                               | 0-1                          | 0        |
|                                 | 1       | 25        | 17.89                               |                              | 0        |
|                                 | 1       | 49        | 17.93                               |                              | 0        |
|                                 | 25      | 0         | 17.64                               | 0-2                          | 0        |
|                                 | 25      | 12        | 17.80                               |                              | 0        |
|                                 | 25      | 25        | 17.56                               |                              | 0        |
|                                 | 50      | 0         | 17.49                               |                              | 0        |
| 64QAM                           | 1       | 0         | 17.82                               | 0-2                          | 0        |
|                                 | 1       | 25        | 17.86                               |                              | 0        |
|                                 | 1       | 49        | 17.76                               |                              | 0        |
|                                 | 25      | 0         | 17.53                               | 0-3                          | 0        |
|                                 | 25      | 12        | 17.72                               |                              | 0        |
|                                 | 25      | 25        | 17.44                               |                              | 0        |
|                                 | 50      | 0         | 17.53                               |                              | 0        |

Note: LTE Band 17 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-16**  
**LTE Band 17 Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 17<br>5 MHz Bandwidth |         |           |                                     |                              |          |
|--------------------------------|---------|-----------|-------------------------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Mid Channel<br>23790<br>(710.0 MHz) | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | Conducted Power<br>[dBm]            |                              |          |
| QPSK                           | 1       | 0         | 17.44                               | 0                            | 0        |
|                                | 1       | 12        | 17.56                               |                              | 0        |
|                                | 1       | 24        | 17.30                               |                              | 0        |
|                                | 12      | 0         | 17.71                               | 0-1                          | 0        |
|                                | 12      | 6         | 17.71                               |                              | 0        |
|                                | 12      | 13        | 17.62                               |                              | 0        |
|                                | 25      | 0         | 17.64                               |                              | 0        |
| 16QAM                          | 1       | 0         | 17.66                               | 0-1                          | 0        |
|                                | 1       | 12        | 17.85                               |                              | 0        |
|                                | 1       | 24        | 17.53                               |                              | 0        |
|                                | 12      | 0         | 17.70                               | 0-2                          | 0        |
|                                | 12      | 6         | 17.73                               |                              | 0        |
|                                | 12      | 13        | 17.62                               |                              | 0        |
|                                | 25      | 0         | 17.62                               |                              | 0        |
| 64QAM                          | 1       | 0         | 17.65                               | 0-2                          | 0        |
|                                | 1       | 12        | 17.79                               |                              | 0        |
|                                | 1       | 24        | 17.54                               |                              | 0        |
|                                | 12      | 0         | 17.74                               | 0-3                          | 0        |
|                                | 12      | 6         | 17.80                               |                              | 0        |
|                                | 12      | 13        | 17.66                               |                              | 0        |
|                                | 25      | 0         | 17.66                               |                              | 0        |

Note: LTE Band 17 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 32 of 124                                                                        |                                 |

### 8.3.3

### LTE Band 13

**Table 8-17**  
**LTE Band 13 Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 13<br>10 MHz Bandwidth |         |           |                          |                              |          |
|---------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 23230<br>(782.0 MHz)     |                              |          |
|                                 |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                            | 1       | 0         | 24.46                    | 0                            | 0        |
|                                 | 1       | 25        | 24.23                    |                              | 0        |
|                                 | 1       | 49        | 24.01                    |                              | 0        |
|                                 | 25      | 0         | 23.39                    | 0-1                          | 1        |
|                                 | 25      | 12        | 23.44                    |                              | 1        |
|                                 | 25      | 25        | 23.38                    |                              | 1        |
| 16QAM                           | 50      | 0         | 23.43                    | 0-1                          | 1        |
|                                 | 1       | 0         | 23.60                    |                              | 1        |
|                                 | 1       | 25        | 23.52                    |                              | 1        |
|                                 | 1       | 49        | 23.35                    | 0-2                          | 1        |
|                                 | 25      | 0         | 22.44                    |                              | 2        |
|                                 | 25      | 12        | 22.36                    |                              | 2        |
| 64QAM                           | 25      | 25        | 22.42                    | 0-2                          | 2        |
|                                 | 50      | 0         | 22.43                    |                              | 2        |
|                                 | 1       | 0         | 22.13                    | 0-2                          | 2        |
|                                 | 1       | 25        | 22.29                    |                              | 2        |
|                                 | 1       | 49        | 22.38                    | 0-3                          | 2        |
|                                 | 25      | 0         | 21.00                    |                              | 3        |
|                                 | 25      | 12        | 21.25                    |                              | 3        |
|                                 | 25      | 25        | 21.26                    |                              | 3        |
|                                 | 50      | 0         | 21.27                    |                              | 3        |

**Table 8-18**  
**LTE Band 13 Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 13<br>5 MHz Bandwidth |         |           |                          |                              |          |
|--------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23230<br>(782.0 MHz)     |                              |          |
|                                |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                           | 1       | 0         | 24.18                    | 0                            | 0        |
|                                | 1       | 12        | 24.22                    |                              | 0        |
|                                | 1       | 24        | 24.12                    |                              | 0        |
|                                | 12      | 0         | 23.37                    | 0-1                          | 1        |
|                                | 12      | 6         | 23.38                    |                              | 1        |
|                                | 12      | 13        | 23.32                    |                              | 1        |
| 16QAM                          | 25      | 0         | 23.35                    | 0-1                          | 1        |
|                                | 1       | 0         | 23.43                    |                              | 1        |
|                                | 1       | 12        | 23.44                    | 0-2                          | 1        |
|                                | 1       | 24        | 23.29                    |                              | 2        |
|                                | 12      | 0         | 22.37                    |                              | 2        |
|                                | 12      | 6         | 22.36                    | 0-2                          | 2        |
| 64QAM                          | 12      | 13        | 22.30                    |                              | 2        |
|                                | 25      | 0         | 22.32                    | 0-2                          | 2        |
|                                | 1       | 0         | 22.40                    |                              | 2        |
|                                | 1       | 12        | 22.44                    | 0-3                          | 2        |
|                                | 1       | 24        | 22.35                    |                              | 2        |
|                                | 12      | 0         | 21.11                    |                              | 3        |
|                                | 12      | 6         | 21.35                    | 0-3                          | 3        |
|                                | 12      | 13        | 21.35                    |                              | 3        |
|                                | 25      | 0         | 21.34                    |                              | 3        |

Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 33 of 124                  |

**Table 8-19**  
**LTE Band 13 Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 13<br>10 MHz Bandwidth |         |           |                          |                              |          |
|---------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 23230<br>(782.0 MHz)     |                              |          |
|                                 |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                            | 1       | 0         | 18.21                    | 0                            | 0        |
|                                 | 1       | 25        | 18.15                    |                              | 0        |
|                                 | 1       | 49        | 18.06                    |                              | 0        |
|                                 | 25      | 0         | 18.30                    | 0-1                          | 0        |
|                                 | 25      | 12        | 18.29                    |                              | 0        |
|                                 | 25      | 25        | 18.25                    |                              | 0        |
| 16QAM                           | 50      | 0         | 18.21                    | 0                            | 0        |
|                                 | 1       | 0         | 18.52                    |                              | 0        |
|                                 | 1       | 25        | 18.44                    | 0-1                          | 0        |
|                                 | 1       | 49        | 18.41                    |                              | 0        |
|                                 | 25      | 0         | 18.31                    | 0-2                          | 0        |
|                                 | 25      | 12        | 18.29                    |                              | 0        |
| 64QAM                           | 25      | 25        | 18.25                    |                              | 0        |
|                                 | 50      | 0         | 18.27                    | 0                            | 0        |
|                                 | 1       | 0         | 18.49                    | 0-2                          | 0        |
|                                 | 1       | 25        | 18.41                    |                              | 0        |
|                                 | 1       | 49        | 18.28                    | 0-3                          | 0        |
|                                 | 25      | 0         | 18.31                    |                              | 0        |
|                                 | 25      | 12        | 18.28                    |                              | 0        |
|                                 | 25      | 25        | 18.26                    | 0                            | 0        |
|                                 | 50      | 0         | 18.33                    |                              | 0        |

**Table 8-20**  
**LTE Band 13 Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 13<br>5 MHz Bandwidth |         |           |                          |                              |          |
|--------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 23230<br>(782.0 MHz)     |                              |          |
|                                |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                           | 1       | 0         | 18.05                    | 0                            | 0        |
|                                | 1       | 12        | 18.05                    |                              | 0        |
|                                | 1       | 24        | 17.94                    |                              | 0        |
|                                | 12      | 0         | 18.18                    | 0-1                          | 0        |
|                                | 12      | 6         | 18.18                    |                              | 0        |
|                                | 12      | 13        | 18.10                    |                              | 0        |
| 16QAM                          | 25      | 0         | 18.15                    | 0                            | 0        |
|                                | 1       | 0         | 18.28                    | 0-1                          | 0        |
|                                | 1       | 12        | 18.28                    |                              | 0        |
|                                | 1       | 24        | 18.08                    | 0-2                          | 0        |
|                                | 12      | 0         | 18.22                    |                              | 0        |
|                                | 12      | 6         | 18.19                    |                              | 0        |
| 64QAM                          | 12      | 13        | 18.13                    | 0                            | 0        |
|                                | 25      | 0         | 18.17                    |                              | 0        |
|                                | 1       | 0         | 18.33                    | 0-2                          | 0        |
|                                | 1       | 12        | 18.28                    |                              | 0        |
|                                | 1       | 24        | 18.13                    | 0-3                          | 0        |
|                                | 12      | 0         | 18.25                    |                              | 0        |
|                                | 12      | 6         | 18.25                    |                              | 0        |
|                                | 12      | 13        | 18.16                    | 0                            | 0        |
|                                | 25      | 0         | 18.20                    |                              | 0        |

Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 34 of 124                                                                        |                                 |

### 8.3.4

### LTE Band 26 (Cell)

**Table 8-21**  
**LTE Band 26 (Cell) Maximum Conducted Powers - 15 MHz Bandwidth**

| LTE Band 26 (Cell)<br>15 MHz Bandwidth |         |           |                                     |                              |          |
|----------------------------------------|---------|-----------|-------------------------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Mid Channel<br>26865<br>(831.5 MHz) | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | Conducted Power<br>[dBm]            |                              |          |
| QPSK                                   | 1       | 0         | 22.43                               | 0                            | 0        |
|                                        | 1       | 36        | 22.25                               |                              | 0        |
|                                        | 1       | 74        | 22.20                               |                              | 0        |
|                                        | 36      | 0         | 21.42                               | 0-1                          | 1        |
|                                        | 36      | 18        | 21.41                               |                              | 1        |
|                                        | 36      | 37        | 21.32                               |                              | 1        |
|                                        | 75      | 0         | 21.37                               |                              | 1        |
| 16QAM                                  | 1       | 0         | 21.63                               | 0-1                          | 1        |
|                                        | 1       | 36        | 21.41                               |                              | 1        |
|                                        | 1       | 74        | 21.46                               |                              | 1        |
|                                        | 36      | 0         | 20.41                               | 0-2                          | 2        |
|                                        | 36      | 18        | 20.40                               |                              | 2        |
|                                        | 36      | 37        | 20.34                               |                              | 2        |
|                                        | 75      | 0         | 20.38                               |                              | 2        |
| 64QAM                                  | 1       | 0         | 20.73                               | 0-2                          | 2        |
|                                        | 1       | 36        | 20.35                               |                              | 2        |
|                                        | 1       | 74        | 20.50                               |                              | 2        |
|                                        | 36      | 0         | 19.42                               | 0-3                          | 3        |
|                                        | 36      | 18        | 19.45                               |                              | 3        |
|                                        | 36      | 37        | 19.41                               |                              | 3        |
|                                        | 75      | 0         | 19.37                               |                              | 3        |

Note: LTE Band 26 (Cell) at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-22**  
**LTE Band 26 (Cell) Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 26 (Cell)<br>10 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 26740<br>(819.0 MHz)  | 26865<br>(831.5 MHz) | 26990<br>(844.0 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                   | 1       | 0         | 22.36                 | 22.35                | 22.47                | 0                            | 0        |
|                                        | 1       | 25        | 22.34                 | 22.29                | 22.35                |                              | 0        |
|                                        | 1       | 49        | 22.25                 | 22.26                | 22.29                |                              | 0        |
|                                        | 25      | 0         | 21.45                 | 21.39                | 21.45                | 0-1                          | 1        |
|                                        | 25      | 12        | 21.47                 | 21.41                | 21.49                |                              | 1        |
|                                        | 25      | 25        | 21.43                 | 21.40                | 21.43                |                              | 1        |
|                                        | 50      | 0         | 21.44                 | 21.44                | 21.44                |                              | 1        |
| 16QAM                                  | 1       | 0         | 21.66                 | 21.61                | 21.64                | 0-1                          | 1        |
|                                        | 1       | 25        | 21.55                 | 21.45                | 21.60                |                              | 1        |
|                                        | 1       | 49        | 21.55                 | 21.50                | 21.51                |                              | 1        |
|                                        | 25      | 0         | 20.45                 | 20.44                | 20.44                | 0-2                          | 2        |
|                                        | 25      | 12        | 20.45                 | 20.43                | 20.44                |                              | 2        |
|                                        | 25      | 25        | 20.41                 | 20.37                | 20.44                |                              | 2        |
|                                        | 50      | 0         | 20.45                 | 20.37                | 20.43                |                              | 2        |
| 64QAM                                  | 1       | 0         | 20.66                 | 20.53                | 20.57                | 0-2                          | 2        |
|                                        | 1       | 25        | 20.55                 | 20.55                | 20.66                |                              | 2        |
|                                        | 1       | 49        | 20.46                 | 20.44                | 20.58                |                              | 2        |
|                                        | 25      | 0         | 19.45                 | 19.42                | 19.45                | 0-3                          | 3        |
|                                        | 25      | 12        | 19.50                 | 19.43                | 19.50                |                              | 3        |
|                                        | 25      | 25        | 19.43                 | 19.40                | 19.43                |                              | 3        |
|                                        | 50      | 0         | 19.45                 | 19.41                | 19.45                |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  |                              |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 35 of 124                  |

**Table 8-23**  
**LTE Band 26 (Cell) Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 26 (Cell)<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|---------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26715<br>(816.5 MHz)  | 26865<br>(831.5 MHz) | 27015<br>(846.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                  | 1       | 0         | 22.25                 | 22.25                | 22.32                | 0                            | 0        |
|                                       | 1       | 12        | 22.31                 | 22.30                | 22.36                |                              | 0        |
|                                       | 1       | 24        | 22.34                 | 22.29                | 22.33                |                              | 0        |
|                                       | 12      | 0         | 21.39                 | 21.39                | 21.40                | 0-1                          | 1        |
|                                       | 12      | 6         | 21.48                 | 21.45                | 21.45                |                              | 1        |
|                                       | 12      | 13        | 21.45                 | 21.43                | 21.41                |                              | 1        |
|                                       | 25      | 0         | 21.44                 | 21.41                | 21.37                |                              | 1        |
| 16QAM                                 | 1       | 0         | 21.40                 | 21.45                | 21.51                | 0-1                          | 1        |
|                                       | 1       | 12        | 21.59                 | 21.51                | 21.60                |                              | 1        |
|                                       | 1       | 24        | 21.62                 | 21.45                | 21.50                |                              | 1        |
|                                       | 12      | 0         | 20.43                 | 20.41                | 20.43                | 0-2                          | 2        |
|                                       | 12      | 6         | 20.54                 | 20.47                | 20.50                |                              | 2        |
|                                       | 12      | 13        | 20.45                 | 20.43                | 20.40                |                              | 2        |
|                                       | 25      | 0         | 20.48                 | 20.37                | 20.34                |                              | 2        |
| 64QAM                                 | 1       | 0         | 20.44                 | 20.46                | 20.58                | 0-2                          | 2        |
|                                       | 1       | 12        | 20.60                 | 20.54                | 20.69                |                              | 2        |
|                                       | 1       | 24        | 20.57                 | 20.47                | 20.44                |                              | 2        |
|                                       | 12      | 0         | 19.45                 | 19.43                | 19.44                | 0-3                          | 3        |
|                                       | 12      | 6         | 19.52                 | 19.50                | 19.50                |                              | 3        |
|                                       | 12      | 13        | 19.45                 | 19.44                | 19.43                |                              | 3        |
|                                       | 25      | 0         | 19.47                 | 19.42                | 19.37                |                              | 3        |

**Table 8-24**  
**LTE Band 26 (Cell) Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 26 (Cell)<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|---------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26705<br>(815.5 MHz)  | 26865<br>(831.5 MHz) | 27025<br>(847.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                  | 1       | 0         | 22.24                 | 22.64                | 22.36                | 0                            | 0        |
|                                       | 1       | 7         | 22.29                 | 22.29                | 22.31                |                              | 0        |
|                                       | 1       | 14        | 22.30                 | 22.31                | 22.31                |                              | 0        |
|                                       | 8       | 0         | 21.45                 | 21.35                | 21.43                | 0-1                          | 1        |
|                                       | 8       | 4         | 21.48                 | 21.39                | 21.39                |                              | 1        |
|                                       | 8       | 7         | 21.44                 | 21.34                | 21.43                |                              | 1        |
|                                       | 15      | 0         | 21.45                 | 21.38                | 21.41                |                              | 1        |
| 16QAM                                 | 1       | 0         | 21.55                 | 21.36                | 21.64                | 0-1                          | 1        |
|                                       | 1       | 7         | 21.53                 | 21.53                | 21.55                |                              | 1        |
|                                       | 1       | 14        | 21.51                 | 21.50                | 21.55                |                              | 1        |
|                                       | 8       | 0         | 20.46                 | 20.36                | 20.43                | 0-2                          | 2        |
|                                       | 8       | 4         | 20.51                 | 20.45                | 20.46                |                              | 2        |
|                                       | 8       | 7         | 20.46                 | 20.38                | 20.41                |                              | 2        |
|                                       | 15      | 0         | 20.45                 | 20.37                | 20.41                |                              | 2        |
| 64QAM                                 | 1       | 0         | 20.48                 | 20.44                | 20.62                | 0-2                          | 2        |
|                                       | 1       | 7         | 20.50                 | 20.55                | 20.54                |                              | 2        |
|                                       | 1       | 14        | 20.51                 | 20.50                | 20.51                |                              | 2        |
|                                       | 8       | 0         | 19.50                 | 19.37                | 19.44                | 0-3                          | 3        |
|                                       | 8       | 4         | 19.50                 | 19.44                | 19.48                |                              | 3        |
|                                       | 8       | 7         | 19.49                 | 19.38                | 19.33                |                              | 3        |
|                                       | 15      | 0         | 19.49                 | 19.41                | 19.42                |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 36 of 124                  |

**Table 8-25**  
**LTE Band 26 (Cell) Maximum Conducted Powers - 1.4 MHz Bandwidth**

| LTE Band 26 (Cell)<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|-----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                              | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                         |         |           | 26697<br>(814.7 MHz)  | 26865<br>(831.5 MHz) | 27033<br>(848.3 MHz) |                              |          |
|                                         |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                    | 1       | 0         | 22.15                 | 22.24                | 22.22                | 0                            | 0        |
|                                         | 1       | 2         | 22.30                 | 22.38                | 22.30                |                              | 0        |
|                                         | 1       | 5         | 22.24                 | 22.36                | 22.23                |                              | 0        |
|                                         | 3       | 0         | 22.26                 | 22.27                | 22.26                |                              | 0        |
|                                         | 3       | 2         | 22.27                 | 22.26                | 22.30                |                              | 0        |
|                                         | 3       | 3         | 22.22                 | 22.30                | 22.26                |                              | 0        |
|                                         | 6       | 0         | 21.38                 | 21.36                | 21.34                | 0-1                          | 1        |
| 16QAM                                   | 1       | 0         | 21.42                 | 21.39                | 21.53                | 0-1                          | 1        |
|                                         | 1       | 2         | 21.55                 | 21.55                | 21.51                |                              | 1        |
|                                         | 1       | 5         | 21.44                 | 21.60                | 21.41                |                              | 1        |
|                                         | 3       | 0         | 21.40                 | 21.36                | 21.38                |                              | 1        |
|                                         | 3       | 2         | 21.40                 | 21.43                | 21.42                |                              | 1        |
|                                         | 3       | 3         | 21.36                 | 21.42                | 21.31                | 0-2                          | 1        |
| 6                                       | 0       | 20.38     | 20.42                 | 20.36                | 2                    |                              |          |
| 64QAM                                   | 1       | 0         | 20.40                 | 20.46                | 20.45                | 0-2                          | 2        |
|                                         | 1       | 2         | 20.47                 | 20.46                | 20.50                |                              | 2        |
|                                         | 1       | 5         | 20.48                 | 20.59                | 20.43                |                              | 2        |
|                                         | 3       | 0         | 20.40                 | 20.39                | 20.46                |                              | 2        |
|                                         | 3       | 2         | 20.49                 | 20.45                | 20.46                |                              | 2        |
|                                         | 3       | 3         | 20.38                 | 20.47                | 20.40                |                              | 2        |
|                                         | 6       | 0         | 19.34                 | 19.39                | 19.32                | 0-3                          | 3        |

**Table 8-27**  
**LTE Band 26 (Cell) Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 26 (Cell)<br>10 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 26740<br>(819.0 MHz)  | 26865<br>(831.5 MHz) | 26990<br>(844.0 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                   | 1       | 0         | 17.40                 | 17.42                | 17.48                | 0                            | 0        |
|                                        | 1       | 25        | 17.25                 | 17.25                | 17.20                |                              | 0        |
|                                        | 1       | 49        | 17.25                 | 17.29                | 17.20                |                              | 0        |
|                                        | 25      | 0         | 17.44                 | 17.36                | 17.38                | 0-1                          | 0        |
|                                        | 25      | 12        | 17.47                 | 17.37                | 17.41                |                              | 0        |
|                                        | 25      | 25        | 17.47                 | 17.37                | 17.40                |                              | 0        |
|                                        | 50      | 0         | 17.46                 | 17.35                | 17.41                |                              | 0        |
| 16QAM                                  | 1       | 0         | 17.46                 | 17.50                | 17.90                | 0-1                          | 0        |
|                                        | 1       | 25        | 17.42                 | 17.37                | 17.90                |                              | 0        |
|                                        | 1       | 49        | 17.42                 | 17.42                | 17.74                |                              | 0        |
|                                        | 25      | 0         | 17.43                 | 17.40                | 17.44                | 0-2                          | 0        |
|                                        | 25      | 12        | 17.53                 | 17.43                | 17.46                |                              | 0        |
|                                        | 25      | 25        | 17.49                 | 17.41                | 17.45                |                              | 0        |
|                                        | 50      | 0         | 17.50                 | 17.38                | 17.40                |                              | 0        |
| 64QAM                                  | 1       | 0         | 17.48                 | 17.51                | 17.90                | 0-2                          | 0        |
|                                        | 1       | 25        | 17.41                 | 17.50                | 17.89                |                              | 0        |
|                                        | 1       | 49        | 17.47                 | 17.44                | 17.85                |                              | 0        |
|                                        | 25      | 0         | 17.62                 | 17.52                | 17.50                | 0-3                          | 0        |
|                                        | 25      | 12        | 17.45                 | 17.54                | 17.56                |                              | 0        |
|                                        | 25      | 25        | 17.53                 | 17.53                | 17.56                |                              | 0        |
|                                        | 50      | 0         | 17.50                 | 17.42                | 17.50                |                              | 0        |

**Table 8-28**  
**LTE Band 26 (Cell) Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 26 (Cell)<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|---------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26715<br>(816.5 MHz)  | 26865<br>(831.5 MHz) | 27015<br>(846.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                  | 1       | 0         | 17.31                 | 17.34                | 17.34                | 0                            | 0        |
|                                       | 1       | 12        | 17.42                 | 17.39                | 17.44                |                              | 0        |
|                                       | 1       | 24        | 17.40                 | 17.37                | 17.38                |                              | 0        |
|                                       | 12      | 0         | 17.49                 | 17.35                | 17.36                | 0-1                          | 0        |
|                                       | 12      | 6         | 17.57                 | 17.46                | 17.48                |                              | 0        |
|                                       | 12      | 13        | 17.52                 | 17.40                | 17.41                |                              | 0        |
|                                       | 25      | 0         | 17.52                 | 17.42                | 17.38                |                              | 0        |
| 16QAM                                 | 1       | 0         | 17.49                 | 17.51                | 17.70                | 0-1                          | 0        |
|                                       | 1       | 12        | 17.57                 | 17.58                | 17.75                |                              | 0        |
|                                       | 1       | 24        | 17.62                 | 17.58                | 17.68                |                              | 0        |
|                                       | 12      | 0         | 17.50                 | 17.33                | 17.37                | 0-2                          | 0        |
|                                       | 12      | 6         | 17.57                 | 17.44                | 17.42                |                              | 0        |
|                                       | 12      | 13        | 17.53                 | 17.38                | 17.37                |                              | 0        |
|                                       | 25      | 0         | 17.51                 | 17.41                | 17.35                |                              | 0        |
| 64QAM                                 | 1       | 0         | 17.46                 | 17.54                | 17.78                | 0-2                          | 0        |
|                                       | 1       | 12        | 17.54                 | 17.55                | 17.88                |                              | 0        |
|                                       | 1       | 24        | 17.56                 | 17.53                | 17.74                |                              | 0        |
|                                       | 12      | 0         | 17.57                 | 17.15                | 17.42                | 0-3                          | 0        |
|                                       | 12      | 6         | 17.56                 | 17.56                | 17.50                |                              | 0        |
|                                       | 12      | 13        | 17.56                 | 17.50                | 17.39                |                              | 0        |
|                                       | 25      | 0         | 17.59                 | 17.51                | 17.46                |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 38 of 124                  |

**Table 8-29**  
**LTE Band 26 (Cell) Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 26 (Cell)<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|---------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26705<br>(815.5 MHz)  | 26865<br>(831.5 MHz) | 27025<br>(847.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                  | 1       | 0         | 17.30                 | 17.23                | 17.17                | 0                            | 0        |
|                                       | 1       | 7         | 17.35                 | 17.24                | 17.20                |                              | 0        |
|                                       | 1       | 14        | 17.39                 | 17.26                | 17.21                |                              | 0        |
|                                       | 8       | 0         | 17.50                 | 17.33                | 17.32                | 0-1                          | 0        |
|                                       | 8       | 4         | 17.51                 | 17.38                | 17.41                |                              | 0        |
|                                       | 8       | 7         | 17.48                 | 17.37                | 17.37                |                              | 0        |
|                                       | 15      | 0         | 17.49                 | 17.36                | 17.38                |                              | 0        |
| 16QAM                                 | 1       | 0         | 17.48                 | 17.73                | 17.47                | 0-1                          | 0        |
|                                       | 1       | 7         | 17.57                 | 17.77                | 17.49                |                              | 0        |
|                                       | 1       | 14        | 17.48                 | 17.79                | 17.53                |                              | 0        |
|                                       | 8       | 0         | 17.48                 | 17.43                | 17.34                | 0-2                          | 0        |
|                                       | 8       | 4         | 17.47                 | 17.49                | 17.42                |                              | 0        |
|                                       | 8       | 7         | 17.42                 | 17.46                | 17.37                |                              | 0        |
|                                       | 15      | 0         | 17.52                 | 17.42                | 17.40                |                              | 0        |
| 64QAM                                 | 1       | 0         | 17.49                 | 17.53                | 17.44                | 0-2                          | 0        |
|                                       | 1       | 7         | 17.63                 | 17.57                | 17.47                |                              | 0        |
|                                       | 1       | 14        | 17.60                 | 17.52                | 17.45                |                              | 0        |
|                                       | 8       | 0         | 17.55                 | 17.39                | 17.32                | 0-3                          | 0        |
|                                       | 8       | 4         | 17.58                 | 17.44                | 17.42                |                              | 0        |
|                                       | 8       | 7         | 17.54                 | 17.41                | 17.35                |                              | 0        |
|                                       | 15      | 0         | 17.64                 | 17.51                | 17.40                |                              | 0        |

**Table 8-30**  
**LTE Band 26 (Cell) Reduced Conducted Powers – 1.4 MHz Bandwidth**

| LTE Band 26 (Cell)<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|-----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                              | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                         |         |           | 26697<br>(814.7 MHz)  | 26865<br>(831.5 MHz) | 27033<br>(848.3 MHz) |                              |          |
|                                         |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                    | 1       | 0         | 17.38                 | 17.13                | 17.22                | 0                            | 0        |
|                                         | 1       | 2         | 17.50                 | 17.21                | 17.29                |                              | 0        |
|                                         | 1       | 5         | 17.44                 | 17.15                | 17.22                |                              | 0        |
|                                         | 3       | 0         | 17.39                 | 17.24                | 17.20                |                              | 0        |
|                                         | 3       | 2         | 17.40                 | 17.30                | 17.26                |                              | 0        |
|                                         | 3       | 3         | 17.32                 | 17.18                | 17.21                |                              | 0        |
|                                         | 6       | 0         | 17.43                 | 17.36                | 17.30                | 0-1                          | 0        |
| 16QAM                                   | 1       | 0         | 17.22                 | 17.46                | 17.35                | 0-1                          | 0        |
|                                         | 1       | 2         | 17.37                 | 17.50                | 17.41                |                              | 0        |
|                                         | 1       | 5         | 17.30                 | 17.46                | 17.33                |                              | 0        |
|                                         | 3       | 0         | 17.42                 | 17.15                | 17.25                |                              | 0        |
|                                         | 3       | 2         | 17.46                 | 17.20                | 17.30                |                              | 0        |
|                                         | 3       | 3         | 17.43                 | 17.15                | 17.21                |                              | 0        |
|                                         | 6       | 0         | 17.63                 | 17.41                | 17.40                | 0-2                          | 0        |
| 64QAM                                   | 1       | 0         | 17.91                 | 17.37                | 17.44                | 0-2                          | 0        |
|                                         | 1       | 2         | 17.95                 | 17.45                | 17.54                |                              | 0        |
|                                         | 1       | 5         | 17.92                 | 17.42                | 17.38                |                              | 0        |
|                                         | 3       | 0         | 17.71                 | 17.45                | 17.39                |                              | 0        |
|                                         | 3       | 2         | 17.72                 | 17.55                | 17.38                |                              | 0        |
|                                         | 3       | 3         | 17.64                 | 17.47                | 17.30                |                              | 0        |
|                                         | 6       | 0         | 17.45                 | 17.36                | 17.42                | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 39 of 124                  |

### 8.3.5

### LTE Band 5 (Cell)

**Table 8-31**  
**LTE Band 5 (Cell) Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 5 (Cell)<br>10 MHz Bandwidth |         |           |                                                  |                              |          |
|---------------------------------------|---------|-----------|--------------------------------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Mid Channel                                      | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 20525<br>(836.5 MHz)<br>Conducted Power<br>[dBm] |                              |          |
| QPSK                                  | 1       | 0         | 24.52                                            | 0                            | 0        |
|                                       | 1       | 25        | 24.37                                            |                              | 0        |
|                                       | 1       | 49        | 24.40                                            |                              | 0        |
|                                       | 25      | 0         | 23.51                                            | 0-1                          | 1        |
|                                       | 25      | 12        | 23.50                                            |                              | 1        |
|                                       | 25      | 25        | 23.47                                            |                              | 1        |
| 16QAM                                 | 50      | 0         | 23.48                                            | 0-1                          | 1        |
|                                       | 1       | 0         | 23.71                                            |                              | 1        |
|                                       | 1       | 25        | 23.50                                            |                              | 1        |
|                                       | 1       | 49        | 23.56                                            | 0-2                          | 1        |
|                                       | 25      | 0         | 22.59                                            |                              | 2        |
|                                       | 25      | 12        | 22.55                                            |                              | 2        |
| 64QAM                                 | 25      | 25        | 22.50                                            | 0-2                          | 2        |
|                                       | 50      | 0         | 22.42                                            |                              | 2        |
|                                       | 1       | 0         | 22.74                                            | 0-2                          | 2        |
|                                       | 1       | 25        | 22.61                                            |                              | 2        |
|                                       | 1       | 49        | 22.56                                            |                              | 2        |
|                                       | 25      | 0         | 21.57                                            | 0-3                          | 3        |
|                                       | 25      | 12        | 21.54                                            |                              | 3        |
|                                       | 25      | 25        | 21.51                                            |                              | 3        |
|                                       | 50      | 0         | 21.47                                            |                              | 3        |

Note: LTE Band 5 (Cell) at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-32**  
**LTE Band 5 (Cell) Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 5 (Cell)<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 20425<br>(826.5 MHz)  | 20525<br>(836.5 MHz) | 20625<br>(846.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                 | 1       | 0         | 24.26                 | 24.36                | 24.31                | 0                            | 0        |
|                                      | 1       | 12        | 24.38                 | 24.45                | 24.40                |                              | 0        |
|                                      | 1       | 24        | 24.36                 | 24.42                | 24.34                |                              | 0        |
|                                      | 12      | 0         | 23.38                 | 23.46                | 23.46                | 0-1                          | 1        |
|                                      | 12      | 6         | 23.52                 | 23.59                | 23.50                |                              | 1        |
|                                      | 12      | 13        | 23.50                 | 23.59                | 23.51                |                              | 1        |
| 16QAM                                | 25      | 0         | 23.46                 | 23.57                | 23.44                | 0-1                          | 1        |
|                                      | 1       | 0         | 23.51                 | 23.51                | 23.53                |                              | 1        |
|                                      | 1       | 12        | 23.56                 | 23.70                | 23.53                |                              | 1        |
|                                      | 1       | 24        | 23.63                 | 23.61                | 23.54                | 0-2                          | 1        |
|                                      | 12      | 0         | 22.38                 | 22.48                | 22.42                |                              | 2        |
|                                      | 12      | 6         | 22.47                 | 22.57                | 22.47                |                              | 2        |
| 64QAM                                | 12      | 13        | 22.51                 | 22.60                | 22.53                | 0-2                          | 2        |
|                                      | 25      | 0         | 22.45                 | 22.56                | 22.43                |                              | 2        |
|                                      | 1       | 0         | 22.44                 | 22.52                | 22.52                | 0-2                          | 2        |
|                                      | 1       | 12        | 22.57                 | 22.59                | 22.57                |                              | 2        |
|                                      | 1       | 24        | 22.57                 | 22.55                | 22.49                |                              | 2        |
|                                      | 64QAM   | 12        | 0                     | 21.33                | 21.48                | 21.45                        | 0-3      |
| 12                                   |         | 6         | 21.52                 | 21.62                | 21.51                | 3                            |          |
| 12                                   |         | 13        | 21.51                 | 21.59                | 21.51                | 3                            |          |
| 25                                   |         | 0         | 21.45                 | 21.55                | 21.43                | 3                            |          |

|                                         |                                                                                     |                              |                       |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  |                              | SAR EVALUATION REPORT |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                       |                                                                                       | Page 40 of 124                  |

**Table 8-33**  
**LTE Band 5 (Cell) Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 5 (Cell)<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 20415<br>(825.5 MHz)  | 20525<br>(836.5 MHz) | 20635<br>(847.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                 | 1       | 0         | 24.24                 | 24.34                | 24.22                | 0                            | 0        |
|                                      | 1       | 7         | 24.34                 | 24.42                | 24.35                |                              | 0        |
|                                      | 1       | 14        | 24.37                 | 24.42                | 24.40                |                              | 0        |
|                                      | 8       | 0         | 23.36                 | 23.50                | 23.44                | 0-1                          | 1        |
|                                      | 8       | 4         | 23.49                 | 23.61                | 23.43                |                              | 1        |
|                                      | 8       | 7         | 23.48                 | 23.56                | 23.49                |                              | 1        |
| 15                                   | 0       | 23.44     | 23.60                 | 23.44                | 1                    |                              |          |
| 16QAM                                | 1       | 0         | 23.48                 | 23.53                | 23.45                | 0-1                          | 1        |
|                                      | 1       | 7         | 23.55                 | 23.45                | 23.56                |                              | 1        |
|                                      | 1       | 14        | 23.70                 | 23.66                | 23.50                |                              | 1        |
|                                      | 8       | 0         | 22.46                 | 22.49                | 22.43                | 0-2                          | 2        |
|                                      | 8       | 4         | 22.54                 | 22.59                | 22.50                |                              | 2        |
|                                      | 8       | 7         | 22.53                 | 22.57                | 22.53                |                              | 2        |
| 15                                   | 0       | 22.42     | 22.54                 | 22.42                | 2                    |                              |          |
| 64QAM                                | 1       | 0         | 22.40                 | 22.55                | 22.48                | 0-2                          | 2        |
|                                      | 1       | 7         | 22.53                 | 22.56                | 22.50                |                              | 2        |
|                                      | 1       | 14        | 22.71                 | 22.58                | 22.52                |                              | 2        |
|                                      | 8       | 0         | 21.40                 | 21.47                | 21.43                | 0-3                          | 3        |
|                                      | 8       | 4         | 21.50                 | 21.59                | 21.48                |                              | 3        |
|                                      | 8       | 7         | 21.44                 | 21.61                | 21.51                |                              | 3        |
| 15                                   | 0       | 21.45     | 21.55                 | 21.44                | 3                    |                              |          |

**Table 8-34**  
**LTE Band 5 (Cell) Maximum Conducted Powers -1.4 MHz Bandwidth**

| LTE Band 5 (Cell)<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 20407<br>(824.7 MHz)  | 20525<br>(836.5 MHz) | 20643<br>(848.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                   | 1       | 0         | 24.33                 | 24.30                | 24.23                | 0                            | 0        |
|                                        | 1       | 2         | 24.42                 | 24.38                | 24.33                |                              | 0        |
|                                        | 1       | 5         | 24.39                 | 24.37                | 24.28                |                              | 0        |
|                                        | 3       | 0         | 24.34                 | 24.32                | 24.26                |                              | 0        |
|                                        | 3       | 2         | 24.42                 | 24.40                | 24.36                |                              | 0        |
|                                        | 3       | 3         | 24.40                 | 24.35                | 24.28                |                              | 0        |
|                                        | 6       | 0         | 23.50                 | 23.50                | 23.40                | 0-1                          | 1        |
| 16QAM                                  | 1       | 0         | 23.55                 | 23.53                | 23.50                | 0-1                          | 1        |
|                                        | 1       | 2         | 23.59                 | 23.65                | 23.58                |                              | 1        |
|                                        | 1       | 5         | 23.62                 | 23.60                | 23.50                |                              | 1        |
|                                        | 3       | 0         | 23.42                 | 23.44                | 23.36                |                              | 1        |
|                                        | 3       | 2         | 23.51                 | 23.51                | 23.39                |                              | 1        |
|                                        | 3       | 3         | 23.46                 | 23.45                | 23.39                |                              | 1        |
|                                        | 6       | 0         | 22.53                 | 22.56                | 22.44                | 0-2                          | 2        |
| 64QAM                                  | 1       | 0         | 22.52                 | 22.50                | 22.48                | 0-2                          | 2        |
|                                        | 1       | 2         | 22.55                 | 22.60                | 22.20                |                              | 2        |
|                                        | 1       | 5         | 22.52                 | 22.56                | 22.40                |                              | 2        |
|                                        | 3       | 0         | 22.48                 | 22.48                | 22.40                |                              | 2        |
|                                        | 3       | 2         | 22.56                 | 22.53                | 22.42                |                              | 2        |
|                                        | 3       | 3         | 22.54                 | 22.48                | 22.28                |                              | 2        |
|                                        | 6       | 0         | 21.45                 | 21.47                | 21.36                | 0-3                          | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 41 of 124                  |

**Table 8-35**  
**LTE Band 5 (Cell) Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 5 (Cell)<br>10 MHz Bandwidth |         |           |                          |                              |          |
|---------------------------------------|---------|-----------|--------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Mid Channel              | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 20525<br>(836.5 MHz)     |                              |          |
|                                       |         |           | Conducted Power<br>[dBm] |                              |          |
| QPSK                                  | 1       | 0         | 17.61                    | 0                            | 0        |
|                                       | 1       | 25        | 17.55                    |                              | 0        |
|                                       | 1       | 49        | 17.50                    |                              | 0        |
|                                       | 25      | 0         | 17.66                    | 0-1                          | 0        |
|                                       | 25      | 12        | 17.65                    |                              | 0        |
|                                       | 25      | 25        | 17.63                    |                              | 0        |
|                                       | 50      | 0         | 17.64                    |                              | 0        |
| 16QAM                                 | 1       | 0         | 17.90                    | 0-1                          | 0        |
|                                       | 1       | 25        | 17.73                    |                              | 0        |
|                                       | 1       | 49        | 17.67                    |                              | 0        |
|                                       | 25      | 0         | 17.47                    | 0-2                          | 0        |
|                                       | 25      | 12        | 17.47                    |                              | 0        |
|                                       | 25      | 25        | 17.43                    |                              | 0        |
|                                       | 50      | 0         | 17.41                    |                              | 0        |
| 64QAM                                 | 1       | 0         | 17.62                    | 0-2                          | 0        |
|                                       | 1       | 25        | 17.59                    |                              | 0        |
|                                       | 1       | 49        | 17.52                    |                              | 0        |
|                                       | 25      | 0         | 17.56                    | 0-3                          | 0        |
|                                       | 25      | 12        | 17.51                    |                              | 0        |
|                                       | 25      | 25        | 17.46                    |                              | 0        |
|                                       | 50      | 0         | 17.48                    |                              | 0        |

Note: LTE Band 5 (Cell) at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**Table 8-36**  
**LTE Band 5 (Cell) Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 5 (Cell)<br>5 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 20425<br>(826.5 MHz)  | 20525<br>(836.5 MHz) | 20625<br>(846.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                 | 1       | 0         | 17.20                 | 17.22                | 17.02                | 0                            | 0        |
|                                      | 1       | 12        | 17.29                 | 17.27                | 17.14                |                              | 0        |
|                                      | 1       | 24        | 17.34                 | 17.29                | 17.11                |                              | 0        |
|                                      | 12      | 0         | 17.30                 | 17.36                | 17.34                | 0-1                          | 0        |
|                                      | 12      | 6         | 17.44                 | 17.42                | 17.39                |                              | 0        |
|                                      | 12      | 13        | 17.40                 | 17.46                | 17.42                |                              | 0        |
|                                      | 25      | 0         | 17.36                 | 17.36                | 17.34                |                              | 0        |
| 16QAM                                | 1       | 0         | 17.36                 | 17.47                | 17.45                | 0-1                          | 0        |
|                                      | 1       | 12        | 17.53                 | 17.51                | 17.56                |                              | 0        |
|                                      | 1       | 24        | 17.55                 | 17.55                | 17.38                |                              | 0        |
|                                      | 12      | 0         | 17.27                 | 17.36                | 17.35                | 0-2                          | 0        |
|                                      | 12      | 6         | 17.48                 | 17.41                | 17.38                |                              | 0        |
|                                      | 12      | 13        | 17.42                 | 17.43                | 17.40                |                              | 0        |
|                                      | 25      | 0         | 17.36                 | 17.32                | 17.29                |                              | 0        |
| 64QAM                                | 1       | 0         | 17.36                 | 17.46                | 17.52                | 0-2                          | 0        |
|                                      | 1       | 12        | 17.50                 | 17.54                | 17.53                |                              | 0        |
|                                      | 1       | 24        | 17.56                 | 17.52                | 17.40                |                              | 0        |
|                                      | 12      | 0         | 17.35                 | 17.41                | 17.38                | 0-3                          | 0        |
|                                      | 12      | 6         | 17.45                 | 17.48                | 17.42                |                              | 0        |
|                                      | 12      | 13        | 17.58                 | 17.49                | 17.42                |                              | 0        |
|                                      | 25      | 0         | 17.39                 | 17.37                | 17.35                |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 42 of 124                  |

**Table 8-37**  
**LTE Band 5 (Cell) Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 5 (Cell)<br>3 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|--------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 20415<br>(825.5 MHz)  | 20525<br>(836.5 MHz) | 20635<br>(847.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                 | 1       | 0         | 17.00                 | 17.21                | 17.00                | 0                            | 0        |
|                                      | 1       | 7         | 17.07                 | 17.28                | 17.09                |                              | 0        |
|                                      | 1       | 14        | 17.18                 | 17.31                | 17.12                |                              | 0        |
|                                      | 8       | 0         | 17.30                 | 17.33                | 17.28                | 0-1                          | 0        |
|                                      | 8       | 4         | 17.42                 | 17.42                | 17.40                |                              | 0        |
|                                      | 8       | 7         | 17.39                 | 17.47                | 17.37                |                              | 0        |
|                                      | 15      | 0         | 17.41                 | 17.39                | 17.45                |                              | 0        |
| 16QAM                                | 1       | 0         | 17.30                 | 17.39                | 17.37                | 0-1                          | 0        |
|                                      | 1       | 7         | 17.50                 | 17.48                | 17.50                |                              | 0        |
|                                      | 1       | 14        | 17.60                 | 17.54                | 17.48                |                              | 0        |
|                                      | 8       | 0         | 17.32                 | 17.36                | 17.33                | 0-2                          | 0        |
|                                      | 8       | 4         | 17.46                 | 17.44                | 17.36                |                              | 0        |
|                                      | 8       | 7         | 17.43                 | 17.42                | 17.39                |                              | 0        |
|                                      | 15      | 0         | 17.33                 | 17.33                | 17.36                |                              | 0        |
| 64QAM                                | 1       | 0         | 17.33                 | 17.56                | 17.44                | 0-2                          | 0        |
|                                      | 1       | 7         | 17.44                 | 17.53                | 17.49                |                              | 0        |
|                                      | 1       | 14        | 17.54                 | 17.57                | 17.45                |                              | 0        |
|                                      | 8       | 0         | 17.26                 | 17.39                | 17.34                | 0-3                          | 0        |
|                                      | 8       | 4         | 17.44                 | 17.53                | 17.44                |                              | 0        |
|                                      | 8       | 7         | 17.46                 | 17.49                | 17.41                |                              | 0        |
|                                      | 15      | 0         | 17.39                 | 17.38                | 17.42                |                              | 0        |

**Table 8-38**  
**LTE Band 5 (Cell) Reduced Conducted Powers – 1.4 MHz Bandwidth**

| LTE Band 5 (Cell)<br>1.4 MHz Bandwidth |         |           |                       |                      |                      |                              |          |
|----------------------------------------|---------|-----------|-----------------------|----------------------|----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel          | High Channel         | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 20407<br>(824.7 MHz)  | 20525<br>(836.5 MHz) | 20643<br>(848.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                      |                      |                              |          |
| QPSK                                   | 1       | 0         | 16.94                 | 16.97                | 17.00                | 0                            | 0        |
|                                        | 1       | 2         | 16.96                 | 17.10                | 17.04                |                              | 0        |
|                                        | 1       | 5         | 17.03                 | 17.12                | 17.06                |                              | 0        |
|                                        | 3       | 0         | 16.93                 | 17.01                | 16.99                |                              | 0        |
|                                        | 3       | 2         | 17.04                 | 17.19                | 17.08                |                              | 0        |
|                                        | 3       | 3         | 17.05                 | 17.13                | 17.03                |                              | 0        |
|                                        | 6       | 0         | 17.29                 | 17.28                | 17.28                | 0-1                          | 0        |
| 16QAM                                  | 1       | 0         | 17.28                 | 17.38                | 17.38                | 0-1                          | 0        |
|                                        | 1       | 2         | 17.40                 | 17.54                | 17.45                |                              | 0        |
|                                        | 1       | 5         | 17.40                 | 17.43                | 17.37                |                              | 0        |
|                                        | 3       | 0         | 17.22                 | 17.28                | 17.26                |                              | 0        |
|                                        | 3       | 2         | 17.35                 | 17.41                | 17.33                |                              | 0        |
|                                        | 3       | 3         | 17.33                 | 17.36                | 17.36                |                              | 0        |
|                                        | 6       | 0         | 17.32                 | 17.35                | 17.36                | 0-2                          | 0        |
| 64QAM                                  | 1       | 0         | 17.24                 | 17.40                | 17.43                | 0-2                          | 0        |
|                                        | 1       | 2         | 17.36                 | 17.55                | 17.43                |                              | 0        |
|                                        | 1       | 5         | 17.37                 | 17.41                | 17.44                |                              | 0        |
|                                        | 3       | 0         | 17.25                 | 17.32                | 17.36                |                              | 0        |
|                                        | 3       | 2         | 17.40                 | 17.45                | 17.38                |                              | 0        |
|                                        | 3       | 3         | 17.37                 | 17.38                | 17.36                |                              | 0        |
|                                        | 6       | 0         | 17.26                 | 17.31                | 17.31                | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 43 of 124                  |

### 8.3.6

### LTE Band 66 (AWS)

**Table 8-39**  
**LTE Band 66 (AWS) Maximum Conducted Powers - 20 MHz Bandwidth**

| LTE Band 66 (AWS)<br>20 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132072<br>(1720.0 MHz) | 132322<br>(1745.0 MHz) | 132572<br>(1770.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 23.22                  | 23.52                  | 23.71                  | 0                            | 0        |
|                                       | 1       | 50        | 23.32                  | 23.51                  | 23.78                  |                              | 0        |
|                                       | 1       | 99        | 23.59                  | 23.93                  | 23.71                  |                              | 0        |
|                                       | 50      | 0         | 22.52                  | 22.81                  | 22.94                  | 0-1                          | 1        |
|                                       | 50      | 25        | 22.51                  | 22.82                  | 22.95                  |                              | 1        |
|                                       | 50      | 50        | 22.56                  | 22.77                  | 22.78                  |                              | 1        |
|                                       | 100     | 0         | 22.53                  | 22.82                  | 22.90                  |                              | 1        |
| 16QAM                                 | 1       | 0         | 22.45                  | 22.98                  | 22.97                  | 0-1                          | 1        |
|                                       | 1       | 50        | 22.48                  | 22.77                  | 23.00                  |                              | 1        |
|                                       | 1       | 99        | 22.87                  | 22.98                  | 23.15                  |                              | 1        |
|                                       | 50      | 0         | 21.60                  | 21.79                  | 21.78                  | 0-2                          | 2        |
|                                       | 50      | 25        | 21.48                  | 21.78                  | 21.89                  |                              | 2        |
|                                       | 50      | 50        | 21.51                  | 21.64                  | 21.80                  |                              | 2        |
|                                       | 100     | 0         | 21.43                  | 21.69                  | 21.82                  |                              | 2        |
| 64QAM                                 | 1       | 0         | 21.32                  | 21.64                  | 21.85                  | 0-2                          | 2        |
|                                       | 1       | 50        | 21.51                  | 21.79                  | 21.99                  |                              | 2        |
|                                       | 1       | 99        | 21.76                  | 22.16                  | 21.89                  |                              | 2        |
|                                       | 50      | 0         | 20.55                  | 20.82                  | 20.93                  | 0-3                          | 3        |
|                                       | 50      | 25        | 20.48                  | 20.78                  | 20.97                  |                              | 3        |
|                                       | 50      | 50        | 20.56                  | 20.73                  | 20.83                  |                              | 3        |
|                                       | 100     | 0         | 20.55                  | 20.75                  | 20.95                  |                              | 3        |

**Table 8-40**  
**LTE Band 66 (AWS) Maximum Conducted Powers - 15 MHz Bandwidth**

| LTE Band 66 (AWS)<br>15 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132047<br>(1717.5 MHz) | 132322<br>(1745.0 MHz) | 132597<br>(1772.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 23.33                  | 23.65                  | 23.82                  | 0                            | 0        |
|                                       | 1       | 36        | 23.35                  | 23.64                  | 23.87                  |                              | 0        |
|                                       | 1       | 74        | 23.38                  | 23.58                  | 23.62                  |                              | 0        |
|                                       | 36      | 0         | 22.54                  | 22.82                  | 22.91                  | 0-1                          | 1        |
|                                       | 36      | 18        | 22.52                  | 22.75                  | 22.88                  |                              | 1        |
|                                       | 36      | 37        | 22.48                  | 22.70                  | 22.83                  |                              | 1        |
|                                       | 75      | 0         | 22.50                  | 22.77                  | 22.89                  |                              | 1        |
| 16QAM                                 | 1       | 0         | 22.65                  | 22.90                  | 23.11                  | 0-1                          | 1        |
|                                       | 1       | 36        | 22.60                  | 22.85                  | 23.11                  |                              | 1        |
|                                       | 1       | 74        | 22.50                  | 22.80                  | 22.87                  |                              | 1        |
|                                       | 36      | 0         | 21.52                  | 21.77                  | 21.88                  | 0-2                          | 2        |
|                                       | 36      | 18        | 21.48                  | 21.73                  | 21.87                  |                              | 2        |
|                                       | 36      | 37        | 21.42                  | 21.66                  | 21.83                  |                              | 2        |
|                                       | 75      | 0         | 21.50                  | 21.75                  | 21.90                  |                              | 2        |
| 64QAM                                 | 1       | 0         | 21.60                  | 21.86                  | 22.15                  | 0-2                          | 2        |
|                                       | 1       | 36        | 21.60                  | 21.80                  | 22.07                  |                              | 2        |
|                                       | 1       | 74        | 21.48                  | 21.77                  | 21.58                  |                              | 2        |
|                                       | 36      | 0         | 20.55                  | 20.83                  | 20.97                  | 0-3                          | 3        |
|                                       | 36      | 18        | 20.52                  | 20.77                  | 20.88                  |                              | 3        |
|                                       | 36      | 37        | 20.45                  | 20.72                  | 20.85                  |                              | 3        |
|                                       | 75      | 0         | 20.50                  | 20.74                  | 20.90                  |                              | 3        |

|                                         |                                                                                     |                              |                       |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  |                              | SAR EVALUATION REPORT |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                       | Page 44 of 124                                                                        |                                 |

**Table 8-41**  
**LTE Band 66 (AWS) Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 66 (AWS)<br>10 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132022<br>(1715.0 MHz) | 132322<br>(1745.0 MHz) | 132622<br>(1775.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 23.10                  | 23.40                  | 23.60                  | 0                            | 0        |
|                                       | 1       | 25        | 23.20                  | 23.48                  | 23.60                  |                              | 0        |
|                                       | 1       | 49        | 23.29                  | 23.45                  | 23.55                  |                              | 0        |
|                                       | 25      | 0         | 22.32                  | 22.60                  | 22.70                  | 0-1                          | 1        |
|                                       | 25      | 12        | 22.33                  | 22.58                  | 22.73                  |                              | 1        |
|                                       | 25      | 25        | 22.26                  | 22.54                  | 22.67                  |                              | 1        |
| 50                                    | 0       | 22.30     | 22.58                  | 22.70                  | 1                      |                              |          |
| 16QAM                                 | 1       | 0         | 22.33                  | 22.66                  | 22.88                  | 0-1                          | 1        |
|                                       | 1       | 25        | 22.44                  | 22.69                  | 22.84                  |                              | 1        |
|                                       | 1       | 49        | 22.49                  | 22.64                  | 22.80                  |                              | 1        |
|                                       | 25      | 0         | 21.33                  | 21.61                  | 21.77                  | 0-2                          | 2        |
|                                       | 25      | 12        | 21.29                  | 21.55                  | 21.70                  |                              | 2        |
|                                       | 25      | 25        | 21.24                  | 21.50                  | 21.66                  |                              | 2        |
| 50                                    | 0       | 21.30     | 21.55                  | 21.72                  | 2                      |                              |          |
| 64QAM                                 | 1       | 0         | 21.33                  | 21.63                  | 21.84                  | 0-2                          | 2        |
|                                       | 1       | 25        | 21.35                  | 21.66                  | 21.84                  |                              | 2        |
|                                       | 1       | 49        | 21.44                  | 21.66                  | 21.63                  |                              | 2        |
|                                       | 25      | 0         | 20.33                  | 20.60                  | 20.75                  | 0-3                          | 3        |
|                                       | 25      | 12        | 20.33                  | 20.59                  | 20.73                  |                              | 3        |
|                                       | 25      | 25        | 20.28                  | 20.54                  | 20.63                  |                              | 3        |
|                                       | 50      | 0         | 20.31                  | 20.56                  | 20.73                  |                              | 3        |

**Table 8-42**  
**LTE Band 66 (AWS) Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 66 (AWS)<br>5 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|--------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 131997<br>(1712.5 MHz) | 132322<br>(1745.0 MHz) | 132647<br>(1777.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                 | 1       | 0         | 23.13                  | 23.37                  | 23.55                  | 0                            | 0        |
|                                      | 1       | 12        | 23.20                  | 23.59                  | 23.60                  |                              | 0        |
|                                      | 1       | 24        | 23.29                  | 23.55                  | 23.66                  |                              | 0        |
|                                      | 12      | 0         | 22.22                  | 22.51                  | 22.69                  | 0-1                          | 1        |
|                                      | 12      | 6         | 22.34                  | 22.58                  | 22.80                  |                              | 1        |
|                                      | 12      | 13        | 22.33                  | 22.60                  | 22.77                  |                              | 1        |
| 16QAM                                | 25      | 0         | 22.31                  | 22.53                  | 22.76                  | 0-1                          | 1        |
|                                      | 1       | 0         | 22.38                  | 22.66                  | 22.90                  |                              | 1        |
|                                      | 1       | 12        | 22.44                  | 22.72                  | 22.91                  |                              | 1        |
|                                      | 1       | 24        | 22.50                  | 22.83                  | 23.00                  | 0-2                          | 1        |
|                                      | 12      | 0         | 21.20                  | 21.54                  | 21.77                  |                              | 2        |
|                                      | 12      | 6         | 21.33                  | 21.60                  | 21.83                  |                              | 2        |
| 64QAM                                | 12      | 13        | 21.32                  | 21.60                  | 21.80                  | 0-2                          | 2        |
|                                      | 25      | 0         | 21.29                  | 21.52                  | 21.75                  |                              | 2        |
|                                      | 1       | 0         | 21.33                  | 21.65                  | 21.79                  | 0-2                          | 2        |
|                                      | 1       | 12        | 21.44                  | 21.66                  | 21.66                  |                              | 2        |
|                                      | 1       | 24        | 21.49                  | 21.75                  | 21.44                  |                              | 2        |
|                                      | 12      | 0         | 20.26                  | 20.55                  | 20.73                  | 0-3                          | 3        |
|                                      | 12      | 6         | 20.39                  | 20.59                  | 20.71                  |                              | 3        |
|                                      | 12      | 13        | 20.38                  | 20.62                  | 20.41                  |                              | 3        |
|                                      | 25      | 0         | 20.31                  | 20.55                  | 20.44                  |                              |          |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 45 of 124                  |

**Table 8-43**  
**LTE Band 66 (AWS) Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 66 (AWS)<br>3 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|--------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 131987<br>(1711.5 MHz) | 132322<br>(1745.0 MHz) | 132657<br>(1778.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                 | 1       | 0         | 23.13                  | 23.37                  | 23.56                  | 0                            | 0        |
|                                      | 1       | 7         | 23.16                  | 23.43                  | 23.61                  |                              | 0        |
|                                      | 1       | 14        | 23.22                  | 23.51                  | 23.64                  |                              | 0        |
|                                      | 8       | 0         | 22.18                  | 22.50                  | 22.70                  | 0-1                          | 1        |
|                                      | 8       | 4         | 22.29                  | 22.63                  | 22.80                  |                              | 1        |
|                                      | 8       | 7         | 22.29                  | 22.60                  | 22.76                  |                              | 1        |
| 16QAM                                | 15      | 0         | 22.28                  | 22.51                  | 22.73                  | 0-1                          | 1        |
|                                      | 1       | 0         | 22.29                  | 22.59                  | 22.90                  |                              | 1        |
|                                      | 1       | 7         | 22.37                  | 22.66                  | 22.89                  |                              | 1        |
|                                      | 1       | 14        | 22.45                  | 22.72                  | 22.90                  | 0-2                          | 1        |
|                                      | 8       | 0         | 21.20                  | 21.55                  | 21.78                  |                              | 2        |
|                                      | 8       | 4         | 21.31                  | 21.65                  | 21.83                  |                              | 2        |
| 64QAM                                | 8       | 7         | 21.31                  | 21.61                  | 21.83                  | 0-2                          | 2        |
|                                      | 15      | 0         | 21.27                  | 21.46                  | 21.70                  |                              | 2        |
|                                      | 1       | 0         | 21.29                  | 21.62                  | 21.46                  |                              | 0-2      |
|                                      | 1       | 7         | 21.35                  | 21.66                  | 21.60                  | 2                            |          |
|                                      | 1       | 14        | 21.42                  | 21.69                  | 21.30                  | 0-3                          |          |
|                                      | 8       | 0         | 20.22                  | 20.55                  | 20.39                  |                              | 3        |
| 8                                    | 4       | 20.33     | 20.66                  | 20.44                  | 3                      |                              |          |
|                                      | 8       | 7         | 20.33                  | 20.58                  | 20.30                  |                              | 3        |
|                                      | 15      | 0         | 20.26                  | 20.55                  | 20.27                  |                              |          |

**Table 8-44**  
**LTE Band 66 (AWS) Maximum Conducted Powers -1.4 MHz Bandwidth**

| LTE Band 66 (AWS)<br>1.4 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|----------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 131979<br>(1710.7 MHz) | 132322<br>(1745.0 MHz) | 132665<br>(1779.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                   | 1       | 0         | 23.05                  | 23.28                  | 23.55                  | 0                            | 0        |
|                                        | 1       | 2         | 23.15                  | 23.48                  | 23.62                  |                              | 0        |
|                                        | 1       | 5         | 23.12                  | 23.35                  | 23.54                  |                              | 0        |
|                                        | 3       | 0         | 23.07                  | 23.35                  | 23.53                  |                              | 0        |
|                                        | 3       | 2         | 23.17                  | 23.52                  | 23.61                  |                              | 0        |
|                                        | 3       | 3         | 23.14                  | 23.40                  | 23.50                  |                              | 0        |
|                                        | 6       | 0         | 22.22                  | 22.46                  | 22.68                  | 0-1                          | 1        |
| 16QAM                                  | 1       | 0         | 22.27                  | 22.57                  | 22.88                  | 0-1                          | 1        |
|                                        | 1       | 2         | 22.30                  | 22.70                  | 22.90                  |                              | 1        |
|                                        | 1       | 5         | 22.30                  | 22.67                  | 22.81                  |                              | 1        |
|                                        | 3       | 0         | 22.14                  | 22.50                  | 22.72                  |                              | 1        |
|                                        | 3       | 2         | 22.30                  | 22.60                  | 22.81                  |                              | 1        |
|                                        | 3       | 3         | 22.25                  | 22.54                  | 22.73                  | 1                            |          |
| 64QAM                                  | 6       | 0         | 21.26                  | 21.51                  | 21.74                  | 0-2                          | 2        |
|                                        | 1       | 0         | 21.28                  | 21.55                  | 21.16                  | 0-2                          | 2        |
|                                        | 1       | 2         | 21.30                  | 21.67                  | 21.12                  |                              | 2        |
|                                        | 1       | 5         | 21.31                  | 21.59                  | 21.10                  |                              | 2        |
|                                        | 3       | 0         | 21.24                  | 21.55                  | 21.16                  |                              | 2        |
|                                        | 3       | 2         | 21.34                  | 21.60                  | 21.20                  |                              | 2        |
|                                        | 3       | 3         | 21.27                  | 21.57                  | 21.16                  | 2                            |          |
| 6                                      | 0       | 20.20     | 20.45                  | 20.05                  | 0-3                    | 3                            |          |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 46 of 124                  |

**Table 8-45**  
**LTE Band 66 (AWS) Reduced Conducted Powers - 20 MHz Bandwidth**

| LTE Band 66 (AWS)<br>20 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132072<br>(1720.0 MHz) | 132322<br>(1745.0 MHz) | 132572<br>(1770.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 13.42                  | 13.58                  | 13.74                  | 0                            | 0        |
|                                       | 1       | 50        | 13.39                  | 13.55                  | 13.70                  |                              | 0        |
|                                       | 1       | 99        | 13.45                  | 13.66                  | 13.72                  |                              | 0        |
|                                       | 50      | 0         | 13.64                  | 13.88                  | 14.01                  | 0-1                          | 0        |
|                                       | 50      | 25        | 13.60                  | 13.83                  | 13.93                  |                              | 0        |
|                                       | 50      | 50        | 13.55                  | 13.76                  | 13.89                  |                              | 0        |
| 16QAM                                 | 100     | 0         | 13.60                  | 13.65                  | 13.73                  | 0-1                          | 0        |
|                                       | 1       | 0         | 13.70                  | 13.82                  | 14.02                  |                              | 0        |
|                                       | 1       | 50        | 13.66                  | 13.85                  | 14.04                  |                              | 0        |
|                                       | 1       | 99        | 13.70                  | 14.01                  | 13.95                  | 0-2                          | 0        |
|                                       | 50      | 0         | 13.61                  | 13.83                  | 13.97                  |                              | 0        |
|                                       | 50      | 25        | 13.58                  | 13.78                  | 13.94                  |                              | 0        |
| 64QAM                                 | 50      | 50        | 13.52                  | 13.74                  | 13.87                  | 0-2                          | 0        |
|                                       | 100     | 0         | 13.54                  | 13.79                  | 13.90                  |                              | 0        |
|                                       | 1       | 0         | 13.49                  | 13.77                  | 14.07                  |                              | 0-2      |
|                                       | 1       | 50        | 13.62                  | 13.91                  | 14.06                  | 0                            |          |
|                                       | 1       | 99        | 13.77                  | 14.05                  | 14.01                  | 0                            |          |
|                                       | 64QAM   | 50        | 0                      | 13.60                  | 13.92                  | 14.07                        | 0-3      |
| 50                                    |         | 25        | 13.58                  | 13.89                  | 14.00                  | 0                            |          |
| 50                                    |         | 50        | 13.63                  | 13.85                  | 13.96                  | 0                            |          |
| 100                                   |         | 0         | 13.59                  | 13.90                  | 13.95                  | 0                            |          |

**Table 8-46**  
**LTE Band 66 (AWS) Reduced Conducted Powers - 15 MHz Bandwidth**

| LTE Band 66 (AWS)<br>15 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132047<br>(1717.5 MHz) | 132322<br>(1745.0 MHz) | 132597<br>(1772.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 13.40                  | 13.50                  | 13.60                  | 0                            | 0        |
|                                       | 1       | 36        | 13.38                  | 13.50                  | 13.43                  |                              | 0        |
|                                       | 1       | 74        | 13.40                  | 13.44                  | 13.45                  |                              | 0        |
|                                       | 36      | 0         | 13.55                  | 13.70                  | 13.81                  | 0-1                          | 0        |
|                                       | 36      | 18        | 13.48                  | 13.66                  | 13.72                  |                              | 0        |
|                                       | 36      | 37        | 13.45                  | 13.60                  | 13.66                  |                              | 0        |
|                                       | 75      | 0         | 13.49                  | 13.66                  | 13.73                  |                              | 0        |
| 16QAM                                 | 1       | 0         | 13.65                  | 13.70                  | 13.80                  | 0-1                          | 0        |
|                                       | 1       | 36        | 13.65                  | 13.70                  | 13.79                  |                              | 0        |
|                                       | 1       | 74        | 13.56                  | 13.65                  | 13.60                  |                              | 0        |
|                                       | 36      | 0         | 13.50                  | 13.66                  | 13.80                  | 0-2                          | 0        |
|                                       | 36      | 18        | 13.47                  | 13.62                  | 13.70                  |                              | 0        |
|                                       | 36      | 37        | 13.39                  | 13.55                  | 13.68                  |                              | 0        |
|                                       | 75      | 0         | 13.44                  | 13.60                  | 13.73                  |                              | 0        |
| 64QAM                                 | 1       | 0         | 13.55                  | 13.85                  | 14.02                  | 0-2                          | 0        |
|                                       | 1       | 36        | 13.55                  | 13.88                  | 14.00                  |                              | 0        |
|                                       | 1       | 74        | 13.54                  | 13.76                  | 13.77                  |                              | 0        |
|                                       | 36      | 0         | 13.58                  | 13.85                  | 13.95                  | 0-3                          | 0        |
|                                       | 36      | 18        | 13.56                  | 13.83                  | 13.91                  |                              | 0        |
|                                       | 36      | 37        | 13.50                  | 13.70                  | 13.85                  |                              | 0        |
|                                       | 75      | 0         | 13.50                  | 13.77                  | 13.88                  |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 47 of 124                  |

**Table 8-47**  
**LTE Band 66 (AWS) Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 66 (AWS)<br>10 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|---------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 132022<br>(1715.0 MHz) | 132322<br>(1745.0 MHz) | 132622<br>(1775.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                  | 1       | 0         | 13.14                  | 13.45                  | 13.46                  | 0                            | 0        |
|                                       | 1       | 25        | 13.00                  | 13.35                  | 13.40                  |                              | 0        |
|                                       | 1       | 49        | 13.01                  | 13.25                  | 13.36                  |                              | 0        |
|                                       | 25      | 0         | 13.27                  | 13.55                  | 13.57                  | 0-1                          | 0        |
|                                       | 25      | 12        | 13.24                  | 13.51                  | 13.60                  |                              | 0        |
|                                       | 25      | 25        | 13.25                  | 13.50                  | 13.58                  |                              | 0        |
| 16QAM                                 | 50      | 0         | 13.20                  | 13.50                  | 13.59                  | 0-1                          | 0        |
|                                       | 1       | 0         | 13.39                  | 13.75                  | 13.66                  |                              | 0        |
|                                       | 1       | 25        | 13.29                  | 13.62                  | 13.66                  |                              | 0        |
|                                       | 1       | 49        | 13.30                  | 13.50                  | 13.55                  | 0-2                          | 0        |
|                                       | 25      | 0         | 13.28                  | 13.49                  | 13.62                  |                              | 0        |
|                                       | 25      | 12        | 13.33                  | 13.45                  | 13.60                  |                              | 0        |
| 64QAM                                 | 25      | 25        | 13.26                  | 13.44                  | 13.55                  | 0-2                          | 0        |
|                                       | 50      | 0         | 13.24                  | 13.48                  | 13.62                  |                              | 0        |
|                                       | 1       | 0         | 13.37                  | 13.60                  | 13.72                  | 0-2                          | 0        |
|                                       | 1       | 25        | 13.32                  | 13.66                  | 13.82                  |                              | 0        |
|                                       | 1       | 49        | 13.49                  | 13.65                  | 13.77                  | 0-3                          | 0        |
|                                       | 25      | 0         | 13.32                  | 13.63                  | 13.72                  |                              | 0        |
|                                       | 25      | 12        | 13.33                  | 13.60                  | 13.71                  |                              | 0        |
|                                       | 25      | 25        | 13.26                  | 13.56                  | 13.65                  |                              | 0        |
|                                       | 50      | 0         | 13.30                  | 13.60                  | 13.71                  |                              | 0        |

**Table 8-48**  
**LTE Band 66 (AWS) Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 66 (AWS)<br>5 MHz Bandwidth |         |           |                        |                        |                        |                              |          |   |
|--------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|---|
| Modulation                           | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |   |
|                                      |         |           | 131997<br>(1712.5 MHz) | 132322<br>(1745.0 MHz) | 132647<br>(1777.5 MHz) |                              |          |   |
|                                      |         |           | Conducted Power [dBm]  |                        |                        |                              |          |   |
| QPSK                                 | 1       | 0         | 12.90                  | 13.28                  | 13.32                  | 0                            | 0        |   |
|                                      | 1       | 12        | 13.03                  | 13.40                  | 13.43                  |                              | 0        |   |
|                                      | 1       | 24        | 12.92                  | 13.30                  | 13.39                  |                              | 0        |   |
|                                      | 12      | 0         | 13.15                  | 13.43                  | 13.48                  | 0-1                          | 0        |   |
|                                      | 12      | 6         | 13.29                  | 13.50                  | 13.58                  |                              | 0        |   |
|                                      | 12      | 13        | 13.23                  | 13.45                  | 13.61                  |                              | 0        |   |
| 16QAM                                | 25      | 0         | 13.22                  | 13.42                  | 13.55                  | 0-1                          | 0        |   |
|                                      | 1       | 0         | 13.20                  | 13.50                  | 13.44                  |                              | 0        |   |
|                                      | 1       | 12        | 13.31                  | 13.69                  | 13.63                  |                              | 0        |   |
|                                      | 1       | 24        | 13.20                  | 13.62                  | 13.51                  | 0-2                          | 0        |   |
|                                      | 12      | 0         | 13.17                  | 13.45                  | 13.60                  |                              | 0        |   |
|                                      | 12      | 6         | 13.33                  | 13.47                  | 13.55                  |                              | 0        |   |
|                                      | 12      | 13        | 13.26                  | 13.49                  | 13.54                  |                              | 0        |   |
| 64QAM                                | 25      | 0         | 13.24                  | 13.42                  | 13.55                  | 0-2                          | 0        |   |
|                                      | 1       | 0         | 13.29                  | 13.65                  | 13.77                  |                              | 0-3      | 0 |
|                                      | 1       | 12        | 13.40                  | 13.74                  | 13.85                  |                              |          | 0 |
|                                      | 1       | 24        | 13.45                  | 13.80                  | 13.83                  | 0                            |          |   |
|                                      | 12      | 0         | 13.27                  | 13.60                  | 13.72                  | 0-3                          | 0        |   |
|                                      | 12      | 6         | 13.39                  | 13.66                  | 13.76                  |                              | 0        |   |
|                                      | 12      | 13        | 13.41                  | 13.70                  | 13.79                  |                              | 0        |   |
|                                      | 25      | 0         | 13.31                  | 13.60                  | 13.72                  |                              | 0        |   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 48 of 124                  |

**Table 8-49**  
**LTE Band 66 (AWS) Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 66 (AWS)<br>3 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|--------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 131987<br>(1711.5 MHz) | 132322<br>(1745.0 MHz) | 132657<br>(1778.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                 | 1       | 0         | 12.94                  | 13.14                  | 13.34                  | 0                            | 0        |
|                                      | 1       | 7         | 13.03                  | 13.25                  | 13.44                  |                              | 0        |
|                                      | 1       | 14        | 13.00                  | 13.24                  | 13.30                  |                              | 0        |
|                                      | 8       | 0         | 13.15                  | 13.36                  | 13.55                  | 0-1                          | 0        |
|                                      | 8       | 4         | 13.24                  | 13.49                  | 13.65                  |                              | 0        |
|                                      | 8       | 7         | 13.26                  | 13.39                  | 13.57                  |                              | 0        |
|                                      | 15      | 0         | 13.22                  | 13.35                  | 13.62                  |                              | 0        |
| 16QAM                                | 1       | 0         | 13.19                  | 13.33                  | 13.53                  | 0-1                          | 0        |
|                                      | 1       | 7         | 13.25                  | 13.52                  | 13.55                  |                              | 0        |
|                                      | 1       | 14        | 13.25                  | 13.44                  | 13.56                  |                              | 0        |
|                                      | 8       | 0         | 13.22                  | 13.44                  | 13.55                  | 0-2                          | 0        |
|                                      | 8       | 4         | 13.31                  | 13.50                  | 13.58                  |                              | 0        |
|                                      | 8       | 7         | 13.25                  | 13.45                  | 13.57                  |                              | 0        |
|                                      | 15      | 0         | 13.20                  | 13.36                  | 13.58                  |                              | 0        |
| 64QAM                                | 1       | 0         | 13.32                  | 13.64                  | 13.74                  | 0-2                          | 0        |
|                                      | 1       | 7         | 13.33                  | 13.70                  | 13.78                  |                              | 0        |
|                                      | 1       | 14        | 13.40                  | 13.78                  | 13.77                  |                              | 0        |
|                                      | 8       | 0         | 13.27                  | 13.60                  | 13.65                  | 0-3                          | 0        |
|                                      | 8       | 4         | 13.39                  | 13.72                  | 13.76                  |                              | 0        |
|                                      | 8       | 7         | 13.31                  | 13.63                  | 13.75                  |                              | 0        |
|                                      | 15      | 0         | 13.31                  | 13.55                  | 13.72                  |                              | 0        |

**Table 8-50**  
**LTE Band 66 (AWS) Reduced Conducted Powers – 1.4 MHz Bandwidth**

| LTE Band 66 (AWS)<br>1.4 MHz Bandwidth |         |           |                        |                        |                        |                              |          |
|----------------------------------------|---------|-----------|------------------------|------------------------|------------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel            | Mid Channel            | High Channel           | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 131979<br>(1710.7 MHz) | 132322<br>(1745.0 MHz) | 132665<br>(1779.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm]  |                        |                        |                              |          |
| QPSK                                   | 1       | 0         | 13.05                  | 13.25                  | 13.39                  | 0                            | 0        |
|                                        | 1       | 2         | 13.18                  | 13.43                  | 13.45                  |                              | 0        |
|                                        | 1       | 5         | 13.09                  | 13.31                  | 13.37                  |                              | 0        |
|                                        | 3       | 0         | 13.13                  | 13.28                  | 13.41                  |                              | 0        |
|                                        | 3       | 2         | 13.15                  | 13.39                  | 13.46                  |                              | 0        |
|                                        | 3       | 3         | 13.09                  | 13.33                  | 13.39                  |                              | 0        |
|                                        | 6       | 0         | 13.23                  | 13.40                  | 13.55                  | 0-1                          | 0        |
| 16QAM                                  | 1       | 0         | 13.32                  | 13.52                  | 13.54                  | 0-1                          | 0        |
|                                        | 1       | 2         | 13.44                  | 13.62                  | 13.44                  |                              | 0        |
|                                        | 1       | 5         | 13.40                  | 13.59                  | 13.56                  |                              | 0        |
|                                        | 3       | 0         | 13.26                  | 13.44                  | 13.48                  |                              | 0        |
|                                        | 3       | 2         | 13.33                  | 13.55                  | 13.54                  |                              | 0        |
|                                        | 3       | 3         | 13.25                  | 13.48                  | 13.52                  |                              | 0        |
|                                        | 6       | 0         | 13.29                  | 13.50                  | 13.65                  | 0-2                          | 0        |
| 64QAM                                  | 1       | 0         | 13.24                  | 13.65                  | 13.77                  | 0-2                          | 0        |
|                                        | 1       | 2         | 13.31                  | 13.70                  | 13.72                  |                              | 0        |
|                                        | 1       | 5         | 13.30                  | 13.66                  | 13.74                  |                              | 0        |
|                                        | 3       | 0         | 13.21                  | 13.58                  | 13.74                  |                              | 0        |
|                                        | 3       | 2         | 13.32                  | 13.65                  | 13.73                  |                              | 0        |
|                                        | 3       | 3         | 13.29                  | 13.64                  | 13.75                  |                              | 0        |
|                                        | 6       | 0         | 13.20                  | 13.50                  | 13.65                  | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 49 of 124                  |

### 8.3.7

### LTE Band 2 (PCS)

**Table 8-51**  
**LTE Band 2 (PCS) Maximum Conducted Powers - 20 MHz Bandwidth**

| LTE Band 2 (PCS)<br>20 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18700<br>(1860.0 MHz) | 18900<br>(1880.0 MHz) | 19100<br>(1900.0 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 23.75                 | 23.70                 | 23.67                 | 0                            | 0        |
|                                      | 1       | 50        | 23.64                 | 23.70                 | 23.58                 |                              | 0        |
|                                      | 1       | 99        | 23.73                 | 23.68                 | 23.54                 |                              | 0        |
|                                      | 50      | 0         | 22.89                 | 22.81                 | 22.67                 | 0-1                          | 1        |
|                                      | 50      | 25        | 22.87                 | 22.85                 | 22.70                 |                              | 1        |
|                                      | 50      | 50        | 22.88                 | 22.84                 | 22.69                 |                              | 1        |
|                                      | 100     | 0         | 22.88                 | 22.84                 | 22.68                 |                              | 1        |
| 16QAM                                | 1       | 0         | 23.30                 | 22.94                 | 23.16                 | 0-1                          | 1        |
|                                      | 1       | 50        | 23.21                 | 22.94                 | 23.03                 |                              | 1        |
|                                      | 1       | 99        | 23.28                 | 22.91                 | 23.02                 |                              | 1        |
|                                      | 50      | 0         | 21.86                 | 21.92                 | 21.68                 | 0-2                          | 2        |
|                                      | 50      | 25        | 21.88                 | 21.90                 | 21.68                 |                              | 2        |
|                                      | 50      | 50        | 21.86                 | 21.92                 | 21.67                 |                              | 2        |
|                                      | 100     | 0         | 21.92                 | 21.87                 | 21.70                 |                              | 2        |
| 64QAM                                | 1       | 0         | 22.06                 | 22.00                 | 21.96                 | 0-2                          | 2        |
|                                      | 1       | 50        | 21.92                 | 22.01                 | 22.16                 |                              | 2        |
|                                      | 1       | 99        | 22.01                 | 21.79                 | 22.14                 |                              | 2        |
|                                      | 50      | 0         | 20.91                 | 20.90                 | 20.66                 | 0-3                          | 3        |
|                                      | 50      | 25        | 20.90                 | 20.91                 | 20.68                 |                              | 3        |
|                                      | 50      | 50        | 20.89                 | 20.95                 | 20.67                 |                              | 3        |
|                                      | 100     | 0         | 20.91                 | 20.91                 | 20.69                 |                              | 3        |

**Table 8-52**  
**LTE Band 2 (PCS) Maximum Conducted Powers - 15 MHz Bandwidth**

| LTE Band 2 (PCS)<br>15 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18675<br>(1857.5 MHz) | 18900<br>(1880.0 MHz) | 19125<br>(1902.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 23.66                 | 23.58                 | 23.45                 | 0                            | 0        |
|                                      | 1       | 36        | 23.60                 | 23.58                 | 23.43                 |                              | 0        |
|                                      | 1       | 74        | 23.71                 | 23.65                 | 23.41                 |                              | 0        |
|                                      | 36      | 0         | 22.88                 | 22.94                 | 22.62                 | 0-1                          | 1        |
|                                      | 36      | 18        | 22.92                 | 22.97                 | 22.58                 |                              | 1        |
|                                      | 36      | 37        | 22.92                 | 22.98                 | 22.58                 |                              | 1        |
|                                      | 75      | 0         | 22.90                 | 22.96                 | 22.63                 |                              | 1        |
| 16QAM                                | 1       | 0         | 23.11                 | 23.24                 | 22.96                 | 0-1                          | 1        |
|                                      | 1       | 36        | 22.97                 | 23.30                 | 22.86                 |                              | 1        |
|                                      | 1       | 74        | 23.00                 | 23.34                 | 22.80                 |                              | 1        |
|                                      | 36      | 0         | 21.88                 | 22.02                 | 21.68                 | 0-2                          | 2        |
|                                      | 36      | 18        | 21.88                 | 22.01                 | 21.67                 |                              | 2        |
|                                      | 36      | 37        | 21.91                 | 22.03                 | 21.62                 |                              | 2        |
|                                      | 75      | 0         | 21.93                 | 21.99                 | 21.59                 |                              | 2        |
| 64QAM                                | 1       | 0         | 21.55                 | 22.25                 | 21.88                 | 0-2                          | 2        |
|                                      | 1       | 36        | 21.88                 | 22.25                 | 21.62                 |                              | 2        |
|                                      | 1       | 74        | 22.02                 | 21.75                 | 21.09                 |                              | 2        |
|                                      | 36      | 0         | 20.97                 | 20.99                 | 20.15                 | 0-3                          | 3        |
|                                      | 36      | 18        | 20.98                 | 21.00                 | 20.54                 |                              | 3        |
|                                      | 36      | 37        | 20.98                 | 20.63                 | 20.58                 |                              | 3        |
|                                      | 75      | 0         | 20.96                 | 21.01                 | 20.43                 |                              | 3        |

|                                         |                                                                                     |                              |                       |                                                                                       |  |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------|---------------------------------------------------------------------------------------|--|---------------------------------|
| FCC ID: A3LSMT865                       |  |                              | SAR EVALUATION REPORT |  |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                       | Page 50 of 124                                                                        |  |                                 |

**Table 8-53**  
**LTE Band 2 (PCS) Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 2 (PCS)<br>10 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18650<br>(1855.0 MHz) | 18900<br>(1880.0 MHz) | 19150<br>(1905.0 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 23.58                 | 23.73                 | 23.48                 | 0                            | 0        |
|                                      | 1       | 25        | 23.59                 | 23.68                 | 23.32                 |                              | 0        |
|                                      | 1       | 49        | 23.66                 | 23.74                 | 23.27                 |                              | 0        |
|                                      | 25      | 0         | 22.80                 | 22.85                 | 22.48                 | 0-1                          | 1        |
|                                      | 25      | 12        | 22.80                 | 22.85                 | 22.45                 |                              | 1        |
|                                      | 25      | 25        | 22.75                 | 22.81                 | 22.40                 |                              | 1        |
| 16QAM                                | 50      | 0         | 22.77                 | 22.79                 | 22.40                 | 0-1                          | 1        |
|                                      | 1       | 0         | 22.82                 | 22.91                 | 23.01                 |                              | 1        |
|                                      | 1       | 25        | 22.84                 | 22.84                 | 22.81                 |                              | 1        |
|                                      | 1       | 49        | 22.93                 | 22.89                 | 22.81                 | 0-2                          | 1        |
|                                      | 25      | 0         | 21.86                 | 21.90                 | 21.48                 |                              | 2        |
|                                      | 25      | 12        | 21.85                 | 21.90                 | 21.49                 |                              | 2        |
| 64QAM                                | 25      | 25        | 21.81                 | 21.86                 | 21.42                 | 0-2                          | 2        |
|                                      | 50      | 0         | 21.79                 | 21.82                 | 21.45                 |                              | 2        |
|                                      | 1       | 0         | 21.80                 | 21.96                 | 21.88                 |                              | 0-2      |
|                                      | 1       | 25        | 21.75                 | 21.90                 | 21.71                 | 2                            |          |
|                                      | 1       | 49        | 21.80                 | 21.93                 | 21.31                 | 2                            |          |
|                                      | 25      | 0         | 20.88                 | 20.96                 | 20.54                 | 0-3                          | 3        |
| 25                                   | 12      | 20.87     | 20.99                 | 20.54                 | 3                     |                              |          |
| 25                                   | 25      | 20.80     | 20.86                 | 20.47                 | 3                     |                              |          |
|                                      | 50      | 0         | 20.82                 | 20.87                 | 20.46                 |                              | 3        |

**Table 8-54**  
**LTE Band 2 (PCS) Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 2 (PCS)<br>5 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|-------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                          | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                     |         |           | 18625<br>(1852.5 MHz) | 18900<br>(1880.0 MHz) | 19175<br>(1907.5 MHz) |                              |          |
|                                     |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                | 1       | 0         | 23.62                 | 23.63                 | 23.26                 | 0                            | 0        |
|                                     | 1       | 12        | 23.61                 | 23.74                 | 23.34                 |                              | 0        |
|                                     | 1       | 24        | 23.64                 | 23.66                 | 23.39                 |                              | 0        |
|                                     | 12      | 0         | 22.75                 | 22.71                 | 22.42                 | 0-1                          | 1        |
|                                     | 12      | 6         | 22.80                 | 22.77                 | 22.49                 |                              | 1        |
|                                     | 12      | 13        | 22.77                 | 22.75                 | 22.47                 |                              | 1        |
| 16QAM                               | 25      | 0         | 22.75                 | 22.76                 | 22.43                 | 0-1                          | 1        |
|                                     | 1       | 0         | 22.87                 | 22.90                 | 22.68                 |                              | 1        |
|                                     | 1       | 12        | 22.89                 | 22.95                 | 22.54                 |                              | 1        |
|                                     | 1       | 24        | 22.80                 | 22.93                 | 22.52                 | 0-2                          | 1        |
|                                     | 12      | 0         | 21.80                 | 21.73                 | 21.45                 |                              | 2        |
|                                     | 12      | 6         | 21.82                 | 21.83                 | 21.50                 |                              | 2        |
| 64QAM                               | 12      | 13        | 21.80                 | 21.83                 | 21.46                 | 0-2                          | 2        |
|                                     | 25      | 0         | 21.73                 | 21.75                 | 21.42                 |                              | 2        |
|                                     | 1       | 0         | 21.41                 | 21.82                 | 21.56                 |                              | 0-2      |
|                                     | 1       | 12        | 21.85                 | 21.85                 | 21.40                 | 2                            |          |
|                                     | 1       | 24        | 21.81                 | 21.95                 | 20.87                 | 2                            |          |
|                                     | 64QAM   | 12        | 0                     | 20.78                 | 20.78                 | 20.52                        | 0-3      |
| 12                                  |         | 6         | 20.87                 | 20.84                 | 20.52                 | 3                            |          |
| 12                                  |         | 13        | 20.84                 | 20.80                 | 20.22                 | 3                            |          |
| 25                                  |         | 0         | 20.77                 | 20.75                 | 20.30                 |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 51 of 124                                                                        |                                 |

**Table 8-55**  
**LTE Band 2 (PCS) Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 2 (PCS)<br>3 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|-------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                          | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                     |         |           | 18615<br>(1851.5 MHz) | 18900<br>(1880.0 MHz) | 19185<br>(1908.5 MHz) |                              |          |
|                                     |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                | 1       | 0         | 23.63                 | 23.61                 | 23.27                 | 0                            | 0        |
|                                     | 1       | 7         | 23.66                 | 23.70                 | 23.35                 |                              | 0        |
|                                     | 1       | 14        | 23.69                 | 23.70                 | 23.31                 |                              | 0        |
|                                     | 8       | 0         | 22.74                 | 22.71                 | 22.39                 | 0-1                          | 1        |
|                                     | 8       | 4         | 22.80                 | 22.75                 | 22.45                 |                              | 1        |
|                                     | 8       | 7         | 22.78                 | 22.74                 | 22.43                 |                              | 1        |
| 16QAM                               | 15      | 0         | 22.80                 | 22.77                 | 22.45                 | 0-1                          | 1        |
|                                     | 1       | 0         | 22.88                 | 22.79                 | 22.50                 |                              | 1        |
|                                     | 1       | 7         | 22.81                 | 22.95                 | 22.55                 |                              | 1        |
|                                     | 1       | 14        | 22.85                 | 22.90                 | 22.56                 | 0-2                          | 1        |
|                                     | 8       | 0         | 21.82                 | 21.76                 | 21.43                 |                              | 2        |
|                                     | 8       | 4         | 21.83                 | 21.83                 | 21.50                 |                              | 2        |
| 64QAM                               | 8       | 7         | 21.83                 | 21.80                 | 21.52                 | 0-2                          | 2        |
|                                     | 15      | 0         | 21.78                 | 21.77                 | 21.40                 |                              | 2        |
|                                     | 1       | 0         | 21.44                 | 21.79                 | 21.40                 | 0-2                          | 2        |
|                                     | 1       | 7         | 21.85                 | 21.94                 | 21.11                 |                              | 2        |
|                                     | 1       | 14        | 21.93                 | 21.93                 | 20.89                 | 0-3                          | 2        |
|                                     | 8       | 0         | 20.63                 | 20.79                 | 20.33                 |                              | 3        |
|                                     | 8       | 4         | 20.84                 | 20.81                 | 20.25                 |                              | 3        |
|                                     | 8       | 7         | 20.85                 | 20.85                 | 20.04                 |                              | 3        |
| 15                                  | 0       | 20.80     | 20.80                 | 20.15                 | 3                     |                              |          |

**Table 8-56**  
**LTE Band 2 (PCS) Maximum Conducted Powers -1.4 MHz Bandwidth**

| LTE Band 2 (PCS)<br>1.4 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 18607<br>(1850.7 MHz) | 18900<br>(1880.0 MHz) | 19193<br>(1909.3 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 23.59                 | 23.57                 | 23.22                 | 0                            | 0        |
|                                       | 1       | 2         | 23.65                 | 23.70                 | 23.39                 |                              | 0        |
|                                       | 1       | 5         | 23.66                 | 23.70                 | 23.29                 |                              | 0        |
|                                       | 3       | 0         | 23.57                 | 23.60                 | 23.25                 |                              | 0        |
|                                       | 3       | 2         | 23.68                 | 23.75                 | 23.28                 |                              | 0        |
|                                       | 3       | 3         | 23.58                 | 23.67                 | 23.26                 |                              | 0        |
|                                       | 6       | 0         | 22.73                 | 22.70                 | 22.33                 | 0-1                          | 1        |
| 16QAM                                 | 1       | 0         | 22.80                 | 22.76                 | 22.50                 | 0-1                          | 1        |
|                                       | 1       | 2         | 22.90                 | 22.94                 | 22.55                 |                              | 1        |
|                                       | 1       | 5         | 22.88                 | 22.92                 | 22.52                 |                              | 1        |
|                                       | 3       | 0         | 22.74                 | 22.71                 | 22.40                 |                              | 1        |
|                                       | 3       | 2         | 22.80                 | 22.90                 | 22.45                 |                              | 1        |
|                                       | 3       | 3         | 22.78                 | 22.80                 | 22.43                 |                              | 1        |
|                                       | 6       | 0         | 21.80                 | 21.78                 | 21.43                 | 0-2                          | 2        |
| 64QAM                                 | 1       | 0         | 21.44                 | 21.81                 | 21.09                 | 0-2                          | 2        |
|                                       | 1       | 2         | 21.69                 | 21.90                 | 21.06                 |                              | 2        |
|                                       | 1       | 5         | 21.80                 | 21.90                 | 20.88                 |                              | 2        |
|                                       | 3       | 0         | 21.56                 | 21.76                 | 21.10                 |                              | 2        |
|                                       | 3       | 2         | 21.83                 | 21.91                 | 21.04                 |                              | 2        |
|                                       | 3       | 3         | 21.82                 | 21.87                 | 20.88                 |                              | 2        |
|                                       | 6       | 0         | 20.51                 | 20.73                 | 19.92                 | 0-3                          | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 52 of 124                                                                        |                                 |

**Table 8-57**  
**LTE Band 2 (PCS) Reduced Conducted Powers - 20 MHz Bandwidth**

| LTE Band 2 (PCS)<br>20 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18700<br>(1860.0 MHz) | 18900<br>(1880.0 MHz) | 19100<br>(1900.0 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 13.87                 | 13.76                 | 13.70                 | 0                            | 0        |
|                                      | 1       | 50        | 13.72                 | 13.79                 | 13.57                 |                              | 0        |
|                                      | 1       | 99        | 13.75                 | 13.77                 | 13.54                 |                              | 0        |
|                                      | 50      | 0         | 13.93                 | 13.93                 | 13.72                 | 0-1                          | 0        |
|                                      | 50      | 25        | 13.92                 | 13.95                 | 13.72                 |                              | 0        |
|                                      | 50      | 50        | 13.87                 | 13.90                 | 13.65                 |                              | 0        |
|                                      | 100     | 0         | 13.80                 | 13.85                 | 13.61                 |                              | 0        |
| 16QAM                                | 1       | 0         | 14.35                 | 14.22                 | 14.25                 | 0-1                          | 0        |
|                                      | 1       | 50        | 14.24                 | 14.25                 | 14.24                 |                              | 0        |
|                                      | 1       | 99        | 14.30                 | 14.24                 | 14.25                 |                              | 0        |
|                                      | 50      | 0         | 13.83                 | 13.95                 | 13.75                 | 0-2                          | 0        |
|                                      | 50      | 25        | 13.87                 | 13.98                 | 13.72                 |                              | 0        |
|                                      | 50      | 50        | 13.82                 | 13.96                 | 13.66                 |                              | 0        |
|                                      | 100     | 0         | 13.87                 | 13.96                 | 13.68                 |                              | 0        |
| 64QAM                                | 1       | 0         | 13.99                 | 14.00                 | 14.21                 | 0-2                          | 0        |
|                                      | 1       | 50        | 13.92                 | 14.03                 | 14.17                 |                              | 0        |
|                                      | 1       | 99        | 13.99                 | 14.05                 | 14.14                 |                              | 0        |
|                                      | 50      | 0         | 13.86                 | 13.89                 | 13.68                 | 0-3                          | 0        |
|                                      | 50      | 25        | 13.87                 | 13.90                 | 13.65                 |                              | 0        |
|                                      | 50      | 50        | 13.83                 | 13.92                 | 13.65                 |                              | 0        |
|                                      | 100     | 0         | 13.84                 | 13.90                 | 13.64                 |                              | 0        |

**Table 8-58**  
**LTE Band 2 (PCS) Reduced Conducted Powers - 15 MHz Bandwidth**

| LTE Band 2 (PCS)<br>15 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18675<br>(1857.5 MHz) | 18900<br>(1880.0 MHz) | 19125<br>(1902.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 13.57                 | 13.75                 | 13.56                 | 0                            | 0        |
|                                      | 1       | 36        | 13.50                 | 13.73                 | 13.41                 |                              | 0        |
|                                      | 1       | 74        | 13.45                 | 13.70                 | 13.48                 |                              | 0        |
|                                      | 36      | 0         | 13.71                 | 13.85                 | 13.69                 | 0-1                          | 0        |
|                                      | 36      | 18        | 13.75                 | 13.89                 | 13.72                 |                              | 0        |
|                                      | 36      | 37        | 13.73                 | 13.90                 | 13.80                 |                              | 0        |
|                                      | 75      | 0         | 13.73                 | 13.86                 | 13.69                 |                              | 0        |
| 16QAM                                | 1       | 0         | 13.85                 | 14.01                 | 13.75                 | 0-1                          | 0        |
|                                      | 1       | 36        | 13.75                 | 13.90                 | 13.77                 |                              | 0        |
|                                      | 1       | 74        | 13.70                 | 13.77                 | 13.71                 |                              | 0        |
|                                      | 36      | 0         | 13.75                 | 13.85                 | 13.64                 | 0-2                          | 0        |
|                                      | 36      | 18        | 13.80                 | 13.88                 | 13.67                 |                              | 0        |
|                                      | 36      | 37        | 13.73                 | 13.86                 | 13.65                 |                              | 0        |
|                                      | 75      | 0         | 13.78                 | 13.88                 | 13.65                 |                              | 0        |
| 64QAM                                | 1       | 0         | 13.94                 | 13.84                 | 13.65                 | 0-2                          | 0        |
|                                      | 1       | 36        | 13.83                 | 13.90                 | 13.59                 |                              | 0        |
|                                      | 1       | 74        | 13.77                 | 13.90                 | 13.67                 |                              | 0        |
|                                      | 36      | 0         | 13.81                 | 13.85                 | 13.65                 | 0-3                          | 0        |
|                                      | 36      | 18        | 13.78                 | 13.88                 | 13.68                 |                              | 0        |
|                                      | 36      | 37        | 13.79                 | 13.90                 | 13.70                 |                              | 0        |
|                                      | 75      | 0         | 13.80                 | 13.93                 | 13.65                 |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 53 of 124                  |

**Table 8-59**  
**LTE Band 2 (PCS) Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 2 (PCS)<br>10 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 18650<br>(1855.0 MHz) | 18900<br>(1880.0 MHz) | 19150<br>(1905.0 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 13.42                 | 13.45                 | 13.22                 | 0                            | 0        |
|                                      | 1       | 25        | 13.54                 | 13.56                 | 13.21                 |                              | 0        |
|                                      | 1       | 49        | 13.30                 | 13.40                 | 13.12                 |                              | 0        |
|                                      | 25      | 0         | 13.58                 | 13.70                 | 13.40                 | 0-1                          | 0        |
|                                      | 25      | 12        | 13.57                 | 13.70                 | 13.41                 |                              | 0        |
|                                      | 25      | 25        | 13.53                 | 13.66                 | 13.34                 |                              | 0        |
| 50                                   | 0       | 13.56     | 13.68                 | 13.37                 | 0                     |                              |          |
| 16QAM                                | 1       | 0         | 13.70                 | 13.65                 | 13.35                 | 0-1                          | 0        |
|                                      | 1       | 25        | 13.66                 | 13.65                 | 13.38                 |                              | 0        |
|                                      | 1       | 49        | 13.50                 | 13.57                 | 13.24                 |                              | 0        |
|                                      | 25      | 0         | 13.63                 | 13.68                 | 13.35                 | 0-2                          | 0        |
|                                      | 25      | 12        | 13.64                 | 13.80                 | 13.36                 |                              | 0        |
|                                      | 25      | 25        | 13.58                 | 13.60                 | 13.32                 |                              | 0        |
| 50                                   | 0       | 13.60     | 13.68                 | 13.32                 | 0                     |                              |          |
| 64QAM                                | 1       | 0         | 13.64                 | 13.88                 | 13.52                 | 0-2                          | 0        |
|                                      | 1       | 25        | 13.75                 | 13.85                 | 13.52                 |                              | 0        |
|                                      | 1       | 49        | 13.58                 | 13.85                 | 13.42                 |                              | 0        |
|                                      | 25      | 0         | 13.62                 | 13.80                 | 13.40                 | 0-3                          | 0        |
|                                      | 25      | 12        | 13.63                 | 13.81                 | 13.41                 |                              | 0        |
|                                      | 25      | 25        | 13.55                 | 13.77                 | 13.34                 |                              | 0        |
| 50                                   | 0       | 13.60     | 13.80                 | 13.41                 | 0                     |                              |          |

**Table 8-60**  
**LTE Band 2 (PCS) Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 2 (PCS)<br>5 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|-------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                          | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                     |         |           | 18625<br>(1852.5 MHz) | 18900<br>(1880.0 MHz) | 19175<br>(1907.5 MHz) |                              |          |
|                                     |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                | 1       | 0         | 13.30                 | 13.34                 | 13.18                 | 0                            | 0        |
|                                     | 1       | 12        | 13.33                 | 13.44                 | 13.30                 |                              | 0        |
|                                     | 1       | 24        | 13.25                 | 13.40                 | 13.16                 |                              | 0        |
|                                     | 12      | 0         | 13.52                 | 13.53                 | 13.34                 | 0-1                          | 0        |
|                                     | 12      | 6         | 13.55                 | 13.63                 | 13.41                 |                              | 0        |
|                                     | 12      | 13        | 13.53                 | 13.64                 | 13.35                 |                              | 0        |
|                                     | 25      | 0         | 13.52                 | 13.56                 | 13.39                 |                              | 0        |
| 16QAM                               | 1       | 0         | 13.59                 | 13.54                 | 13.39                 | 0-1                          | 0        |
|                                     | 1       | 12        | 13.62                 | 13.67                 | 13.35                 |                              | 0        |
|                                     | 1       | 24        | 13.58                 | 13.55                 | 13.22                 |                              | 0        |
|                                     | 12      | 0         | 13.55                 | 13.55                 | 13.31                 | 0-2                          | 0        |
|                                     | 12      | 6         | 13.67                 | 13.55                 | 13.41                 |                              | 0        |
|                                     | 12      | 13        | 13.58                 | 13.59                 | 13.37                 |                              | 0        |
|                                     | 25      | 0         | 13.53                 | 13.51                 | 13.36                 |                              | 0        |
| 64QAM                               | 1       | 0         | 13.66                 | 13.72                 | 13.46                 | 0-2                          | 0        |
|                                     | 1       | 12        | 13.66                 | 13.77                 | 13.44                 |                              | 0        |
|                                     | 1       | 24        | 13.70                 | 13.70                 | 13.41                 |                              | 0        |
|                                     | 12      | 0         | 13.61                 | 13.65                 | 13.37                 | 0-3                          | 0        |
|                                     | 12      | 6         | 13.69                 | 13.67                 | 13.42                 |                              | 0        |
|                                     | 12      | 13        | 13.66                 | 13.67                 | 13.39                 |                              | 0        |
|                                     | 25      | 0         | 13.64                 | 13.67                 | 13.40                 |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 54 of 124                                                                        |                                 |

**Table 8-61**  
**LTE Band 2 (PCS) Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 2 (PCS)<br>3 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|-------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                          | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                     |         |           | 18615<br>(1851.5 MHz) | 18900<br>(1880.0 MHz) | 19185<br>(1908.5 MHz) |                              |          |
|                                     |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                | 1       | 0         | 13.27                 | 13.28                 | 13.09                 | 0                            | 0        |
|                                     | 1       | 7         | 13.35                 | 13.44                 | 13.15                 |                              | 0        |
|                                     | 1       | 14        | 13.32                 | 13.43                 | 13.15                 |                              | 0        |
|                                     | 8       | 0         | 13.47                 | 13.49                 | 13.32                 | 0-1                          | 0        |
|                                     | 8       | 4         | 13.55                 | 13.59                 | 13.37                 |                              | 0        |
|                                     | 8       | 7         | 13.56                 | 13.64                 | 13.37                 |                              | 0        |
|                                     | 15      | 0         | 13.49                 | 13.57                 | 13.35                 |                              | 0        |
| 16QAM                               | 1       | 0         | 13.55                 | 13.44                 | 13.27                 | 0-1                          | 0        |
|                                     | 1       | 7         | 13.60                 | 13.66                 | 13.35                 |                              | 0        |
|                                     | 1       | 14        | 13.61                 | 13.59                 | 13.28                 |                              | 0        |
|                                     | 8       | 0         | 13.53                 | 13.49                 | 13.29                 | 0-2                          | 0        |
|                                     | 8       | 4         | 13.65                 | 13.56                 | 13.34                 |                              | 0        |
|                                     | 8       | 7         | 13.58                 | 13.58                 | 13.36                 |                              | 0        |
|                                     | 15      | 0         | 13.55                 | 13.50                 | 13.31                 |                              | 0        |
| 64QAM                               | 1       | 0         | 13.65                 | 13.66                 | 13.70                 | 0-2                          | 0        |
|                                     | 1       | 7         | 13.68                 | 13.74                 | 13.66                 |                              | 0        |
|                                     | 1       | 14        | 13.73                 | 13.72                 | 13.73                 |                              | 0        |
|                                     | 8       | 0         | 13.61                 | 13.61                 | 13.42                 | 0-3                          | 0        |
|                                     | 8       | 4         | 13.68                 | 13.68                 | 13.45                 |                              | 0        |
|                                     | 8       | 7         | 13.63                 | 13.66                 | 13.43                 |                              | 0        |
|                                     | 15      | 0         | 13.64                 | 13.66                 | 13.20                 |                              | 0        |

**Table 8-62**  
**LTE Band 2 (PCS) Reduced Conducted Powers – 1.4 MHz Bandwidth**

| LTE Band 2 (PCS)<br>1.4 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 18607<br>(1850.7 MHz) | 18900<br>(1880.0 MHz) | 19193<br>(1909.3 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 13.53                 | 13.49                 | 13.13                 | 0                            | 0        |
|                                       | 1       | 2         | 13.65                 | 13.64                 | 13.24                 |                              | 0        |
|                                       | 1       | 5         | 13.64                 | 13.60                 | 13.20                 |                              | 0        |
|                                       | 3       | 0         | 13.50                 | 13.46                 | 13.05                 |                              | 0        |
|                                       | 3       | 2         | 13.58                 | 13.57                 | 13.16                 |                              | 0        |
|                                       | 3       | 3         | 13.57                 | 13.52                 | 13.13                 |                              | 0        |
|                                       | 6       | 0         | 13.65                 | 13.62                 | 13.30                 | 0-1                          | 0        |
| 16QAM                                 | 1       | 0         | 13.48                 | 13.38                 | 12.99                 | 0-1                          | 0        |
|                                       | 1       | 2         | 13.59                 | 13.51                 | 13.10                 |                              | 0        |
|                                       | 1       | 5         | 13.60                 | 13.50                 | 13.08                 |                              | 0        |
|                                       | 3       | 0         | 13.65                 | 13.49                 | 13.16                 |                              | 0        |
|                                       | 3       | 2         | 13.74                 | 13.64                 | 13.24                 |                              | 0        |
|                                       | 3       | 3         | 13.72                 | 13.61                 | 13.20                 |                              | 0        |
|                                       | 6       | 0         | 13.70                 | 13.58                 | 13.25                 | 0-2                          | 0        |
| 64QAM                                 | 1       | 0         | 13.95                 | 13.94                 | 13.53                 | 0-2                          | 0        |
|                                       | 1       | 2         | 14.08                 | 14.10                 | 13.62                 |                              | 0        |
|                                       | 1       | 5         | 14.10                 | 14.08                 | 13.61                 |                              | 0        |
|                                       | 3       | 0         | 13.83                 | 13.76                 | 13.34                 |                              | 0        |
|                                       | 3       | 2         | 13.90                 | 13.90                 | 13.40                 |                              | 0        |
|                                       | 3       | 3         | 13.85                 | 13.86                 | 13.35                 |                              | 0        |
|                                       | 6       | 0         | 13.66                 | 13.58                 | 13.17                 | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 55 of 124                                                                        |                                 |

### 8.3.8

### LTE Band 25 (PCS)

**Table 8-63**  
**LTE Band 25 (PCS) Maximum Conducted Powers - 20 MHz Bandwidth**

| LTE Band 25 (PCS)<br>20 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26140<br>(1860.0 MHz) | 26365<br>(1882.5 MHz) | 26590<br>(1905.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 23.30                 | 23.17                 | 23.17                 | 0                            | 0        |
|                                       | 1       | 50        | 23.20                 | 23.17                 | 23.03                 |                              | 0        |
|                                       | 1       | 99        | 23.38                 | 23.20                 | 23.07                 |                              | 0        |
|                                       | 50      | 0         | 22.34                 | 22.30                 | 22.24                 | 0-1                          | 1        |
|                                       | 50      | 25        | 22.29                 | 22.27                 | 22.23                 |                              | 1        |
|                                       | 50      | 50        | 22.28                 | 22.31                 | 22.22                 |                              | 1        |
|                                       | 100     | 0         | 22.33                 | 22.33                 | 22.23                 |                              | 1        |
| 16QAM                                 | 1       | 0         | 22.71                 | 22.38                 | 22.47                 | 0-1                          | 1        |
|                                       | 1       | 50        | 22.11                 | 22.41                 | 22.30                 |                              | 1        |
|                                       | 1       | 99        | 22.47                 | 22.30                 | 22.29                 |                              | 1        |
|                                       | 50      | 0         | 21.33                 | 21.31                 | 21.18                 | 0-2                          | 2        |
|                                       | 50      | 25        | 21.32                 | 21.35                 | 21.21                 |                              | 2        |
|                                       | 50      | 50        | 21.26                 | 21.30                 | 21.18                 |                              | 2        |
|                                       | 100     | 0         | 21.27                 | 21.30                 | 21.20                 |                              | 2        |
| 64QAM                                 | 1       | 0         | 21.53                 | 21.57                 | 21.04                 | 0-2                          | 2        |
|                                       | 1       | 50        | 21.45                 | 21.35                 | 21.28                 |                              | 2        |
|                                       | 1       | 99        | 21.43                 | 20.89                 | 21.38                 |                              | 2        |
|                                       | 50      | 0         | 20.48                 | 20.32                 | 20.24                 | 0-3                          | 3        |
|                                       | 50      | 25        | 20.36                 | 20.33                 | 20.29                 |                              | 3        |
|                                       | 50      | 50        | 20.32                 | 20.31                 | 20.24                 |                              | 3        |
|                                       | 100     | 0         | 20.33                 | 20.31                 | 20.20                 |                              | 3        |

**Table 8-64**  
**LTE Band 25 (PCS) Maximum Conducted Powers - 15 MHz Bandwidth**

| LTE Band 25 (PCS)<br>15 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26115<br>(1857.5 MHz) | 26365<br>(1882.5 MHz) | 26615<br>(1907.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 23.03                 | 23.14                 | 23.10                 | 0                            | 0        |
|                                       | 1       | 36        | 23.02                 | 23.10                 | 23.06                 |                              | 0        |
|                                       | 1       | 74        | 23.05                 | 23.15                 | 23.03                 |                              | 0        |
|                                       | 36      | 0         | 22.26                 | 22.28                 | 22.26                 | 0-1                          | 1        |
|                                       | 36      | 18        | 22.28                 | 22.38                 | 22.32                 |                              | 1        |
|                                       | 36      | 37        | 22.28                 | 22.36                 | 22.28                 |                              | 1        |
|                                       | 75      | 0         | 22.30                 | 22.36                 | 22.31                 |                              | 1        |
| 16QAM                                 | 1       | 0         | 22.46                 | 22.57                 | 22.43                 | 0-1                          | 1        |
|                                       | 1       | 36        | 22.45                 | 22.51                 | 22.45                 |                              | 1        |
|                                       | 1       | 74        | 22.45                 | 22.50                 | 22.40                 |                              | 1        |
|                                       | 36      | 0         | 21.29                 | 21.31                 | 21.26                 | 0-2                          | 2        |
|                                       | 36      | 18        | 21.32                 | 21.36                 | 21.32                 |                              | 2        |
|                                       | 36      | 37        | 21.29                 | 21.38                 | 21.30                 |                              | 2        |
|                                       | 75      | 0         | 21.28                 | 21.33                 | 21.31                 |                              | 2        |
| 64QAM                                 | 1       | 0         | 21.48                 | 21.56                 | 21.51                 | 0-2                          | 2        |
|                                       | 1       | 36        | 21.40                 | 21.44                 | 21.40                 |                              | 2        |
|                                       | 1       | 74        | 21.36                 | 20.90                 | 20.71                 |                              | 2        |
|                                       | 36      | 0         | 20.31                 | 20.35                 | 20.31                 | 0-3                          | 3        |
|                                       | 36      | 18        | 20.33                 | 20.41                 | 20.33                 |                              | 3        |
|                                       | 36      | 37        | 20.30                 | 20.34                 | 20.12                 |                              | 3        |
|                                       | 75      | 0         | 20.30                 | 20.36                 | 20.31                 |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 56 of 124                  |

**Table 8-65**  
**LTE Band 25 (PCS) Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 25 (PCS)<br>10 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26090<br>(1855.0 MHz) | 26365<br>(1882.5 MHz) | 26640<br>(1910.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 23.18                 | 23.14                 | 23.08                 | 0                            | 0        |
|                                       | 1       | 25        | 23.10                 | 23.10                 | 23.05                 |                              | 0        |
|                                       | 1       | 49        | 23.09                 | 23.11                 | 23.06                 |                              | 0        |
|                                       | 25      | 0         | 22.12                 | 22.15                 | 22.05                 | 0-1                          | 1        |
|                                       | 25      | 12        | 22.11                 | 22.15                 | 22.08                 |                              | 1        |
|                                       | 25      | 25        | 22.10                 | 22.18                 | 22.05                 |                              | 1        |
|                                       | 50      | 0         | 22.15                 | 22.17                 | 22.08                 |                              | 1        |
| 16QAM                                 | 1       | 0         | 22.37                 | 22.35                 | 22.15                 | 0-1                          | 1        |
|                                       | 1       | 25        | 22.24                 | 22.29                 | 22.19                 |                              | 1        |
|                                       | 1       | 49        | 22.09                 | 22.25                 | 22.22                 |                              | 1        |
|                                       | 25      | 0         | 21.13                 | 21.13                 | 21.06                 | 0-2                          | 2        |
|                                       | 25      | 12        | 21.13                 | 21.16                 | 21.07                 |                              | 2        |
|                                       | 25      | 25        | 21.10                 | 21.17                 | 21.09                 |                              | 2        |
|                                       | 50      | 0         | 21.11                 | 21.17                 | 21.08                 |                              | 2        |
| 64QAM                                 | 1       | 0         | 21.31                 | 21.30                 | 21.22                 | 0-2                          | 2        |
|                                       | 1       | 25        | 21.25                 | 21.22                 | 21.13                 |                              | 2        |
|                                       | 1       | 49        | 21.20                 | 21.20                 | 20.70                 |                              | 2        |
|                                       | 25      | 0         | 20.13                 | 20.18                 | 20.08                 | 0-3                          | 3        |
|                                       | 25      | 12        | 20.14                 | 20.18                 | 20.09                 |                              | 3        |
|                                       | 25      | 25        | 20.10                 | 20.16                 | 19.77                 |                              | 3        |
|                                       | 50      | 0         | 20.16                 | 20.19                 | 20.06                 |                              | 3        |

**Table 8-66**  
**LTE Band 25 (PCS) Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 25 (PCS)<br>5 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 26065<br>(1852.5 MHz) | 26365<br>(1882.5 MHz) | 26665<br>(1912.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 23.12                 | 23.05                 | 22.96                 | 0                            | 0        |
|                                      | 1       | 12        | 23.17                 | 23.19                 | 23.11                 |                              | 0        |
|                                      | 1       | 24        | 23.20                 | 23.26                 | 22.80                 |                              | 0        |
|                                      | 12      | 0         | 22.11                 | 22.08                 | 22.01                 | 0-1                          | 1        |
|                                      | 12      | 6         | 22.21                 | 22.00                 | 22.12                 |                              | 1        |
|                                      | 12      | 13        | 22.15                 | 22.19                 | 22.08                 |                              | 1        |
|                                      | 25      | 0         | 22.14                 | 22.10                 | 22.09                 |                              | 1        |
| 16QAM                                | 1       | 0         | 22.28                 | 22.11                 | 22.08                 | 0-1                          | 1        |
|                                      | 1       | 12        | 22.30                 | 22.20                 | 22.24                 |                              | 1        |
|                                      | 1       | 24        | 22.30                 | 22.26                 | 22.28                 |                              | 1        |
|                                      | 12      | 0         | 21.18                 | 21.07                 | 21.02                 | 0-2                          | 2        |
|                                      | 12      | 6         | 21.20                 | 21.14                 | 21.13                 |                              | 2        |
|                                      | 12      | 13        | 21.21                 | 21.16                 | 21.15                 |                              | 2        |
|                                      | 25      | 0         | 21.15                 | 21.08                 | 21.09                 |                              | 2        |
| 64QAM                                | 1       | 0         | 21.27                 | 21.22                 | 21.08                 | 0-2                          | 2        |
|                                      | 1       | 12        | 21.30                 | 21.32                 | 20.78                 |                              | 2        |
|                                      | 1       | 24        | 21.30                 | 21.35                 | 20.72                 |                              | 2        |
|                                      | 12      | 0         | 20.20                 | 20.12                 | 19.90                 | 0-3                          | 3        |
|                                      | 12      | 6         | 20.22                 | 20.18                 | 19.82                 |                              | 3        |
|                                      | 12      | 13        | 20.20                 | 20.23                 | 19.74                 |                              | 3        |
|                                      | 25      | 0         | 20.16                 | 20.11                 | 19.70                 |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 57 of 124                  |

**Table 8-67**  
**LTE Band 25 (PCS) Maximum Conducted Powers - 3 MHz Bandwidth**

| LTE Band 25 (PCS)<br>3 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 26055<br>(1851.5 MHz) | 26365<br>(1882.5 MHz) | 26675<br>(1913.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 23.23                 | 23.10                 | 23.04                 | 0                            | 0        |
|                                      | 1       | 7         | 23.26                 | 23.26                 | 23.18                 |                              | 0        |
|                                      | 1       | 14        | 23.24                 | 23.24                 | 23.17                 |                              | 0        |
|                                      | 8       | 0         | 22.22                 | 22.11                 | 22.06                 | 0-1                          | 1        |
|                                      | 8       | 4         | 22.24                 | 22.20                 | 22.21                 |                              | 1        |
|                                      | 8       | 7         | 22.23                 | 22.23                 | 22.19                 |                              | 1        |
| 16QAM                                | 15      | 0         | 22.24                 | 22.16                 | 22.19                 | 0-1                          | 1        |
|                                      | 1       | 0         | 22.32                 | 22.25                 | 22.18                 |                              | 1        |
|                                      | 1       | 7         | 22.33                 | 22.38                 | 22.30                 |                              | 1        |
|                                      | 1       | 14        | 22.40                 | 22.34                 | 22.30                 | 0-2                          | 1        |
|                                      | 8       | 0         | 21.27                 | 21.21                 | 21.14                 |                              | 2        |
|                                      | 8       | 4         | 21.33                 | 21.23                 | 21.28                 |                              | 2        |
| 64QAM                                | 8       | 7         | 21.30                 | 21.28                 | 21.24                 | 0-2                          | 2        |
|                                      | 15      | 0         | 21.24                 | 21.16                 | 21.16                 |                              | 2        |
|                                      | 1       | 0         | 21.33                 | 21.25                 | 21.02                 | 0-2                          | 2        |
|                                      | 1       | 7         | 21.37                 | 21.36                 | 21.00                 |                              | 2        |
|                                      | 1       | 14        | 21.44                 | 21.50                 | 21.00                 |                              | 2        |
|                                      | 64QAM   | 8         | 0                     | 20.29                 | 20.18                 | 19.90                        | 0-3      |
| 8                                    |         | 4         | 20.33                 | 20.28                 | 19.93                 | 3                            |          |
| 8                                    |         | 7         | 20.21                 | 20.32                 | 19.95                 | 3                            |          |
| 15                                   |         | 0         | 20.28                 | 20.21                 | 19.80                 | 3                            |          |

**Table 8-68**  
**LTE Band 25 (PCS) Maximum Conducted Powers -1.4 MHz Bandwidth**

| LTE Band 25 (PCS)<br>1.4 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|----------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 26047<br>(1850.7 MHz) | 26365<br>(1882.5 MHz) | 26683<br>(1914.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                   | 1       | 0         | 23.21                 | 23.13                 | 23.03                 | 0                            | 0        |
|                                        | 1       | 2         | 23.28                 | 23.23                 | 23.16                 |                              | 0        |
|                                        | 1       | 5         | 23.23                 | 23.19                 | 23.11                 |                              | 0        |
|                                        | 3       | 0         | 22.82                 | 22.80                 | 22.68                 |                              | 0        |
|                                        | 3       | 2         | 22.88                 | 22.86                 | 22.80                 |                              | 0        |
|                                        | 3       | 3         | 22.85                 | 22.82                 | 22.76                 |                              | 0        |
|                                        | 6       | 0         | 22.20                 | 22.18                 | 22.05                 | 0-1                          | 1        |
| 16QAM                                  | 1       | 0         | 22.29                 | 22.28                 | 22.14                 | 0-1                          | 1        |
|                                        | 1       | 2         | 22.42                 | 22.40                 | 22.30                 |                              | 1        |
|                                        | 1       | 5         | 22.33                 | 22.35                 | 22.20                 |                              | 1        |
|                                        | 3       | 0         | 22.22                 | 22.19                 | 22.04                 |                              | 1        |
|                                        | 3       | 2         | 22.28                 | 22.26                 | 22.18                 |                              | 1        |
|                                        | 3       | 3         | 22.21                 | 22.21                 | 22.14                 | 1                            |          |
| 64QAM                                  | 6       | 0         | 21.25                 | 21.26                 | 21.09                 | 0-2                          | 2        |
|                                        | 1       | 0         | 21.33                 | 21.27                 | 20.84                 | 0-2                          | 2        |
|                                        | 1       | 2         | 21.39                 | 21.37                 | 20.88                 |                              | 2        |
|                                        | 1       | 5         | 21.30                 | 21.29                 | 20.78                 |                              | 2        |
|                                        | 3       | 0         | 21.31                 | 21.27                 | 20.95                 |                              | 2        |
|                                        | 3       | 2         | 21.37                 | 21.31                 | 21.00                 |                              | 2        |
|                                        | 3       | 3         | 21.31                 | 21.26                 | 20.93                 |                              | 2        |
|                                        | 6       | 0         | 20.21                 | 20.20                 | 19.75                 | 0-3                          | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 58 of 124                  |

**Table 8-69**  
**LTE Band 25 (PCS) Reduced Conducted Powers - 20 MHz Bandwidth**

| LTE Band 25 (PCS)<br>20 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26140<br>(1860.0 MHz) | 26365<br>(1882.5 MHz) | 26590<br>(1905.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 13.34                 | 13.50                 | 13.49                 | 0                            | 0        |
|                                       | 1       | 50        | 13.25                 | 13.41                 | 13.36                 |                              | 0        |
|                                       | 1       | 99        | 13.29                 | 13.38                 | 13.41                 |                              | 0        |
|                                       | 50      | 0         | 13.45                 | 13.51                 | 13.46                 | 0-1                          | 0        |
|                                       | 50      | 25        | 13.43                 | 13.49                 | 13.48                 |                              | 0        |
|                                       | 50      | 50        | 13.36                 | 13.45                 | 13.36                 |                              | 0        |
|                                       | 100     | 0         | 13.45                 | 13.40                 | 13.42                 |                              | 0        |
| 16QAM                                 | 1       | 0         | 13.50                 | 13.66                 | 13.80                 | 0-1                          | 0        |
|                                       | 1       | 50        | 13.37                 | 13.61                 | 13.71                 |                              | 0        |
|                                       | 1       | 99        | 13.38                 | 13.49                 | 13.61                 |                              | 0        |
|                                       | 50      | 0         | 13.43                 | 13.57                 | 13.49                 | 0-2                          | 0        |
|                                       | 50      | 25        | 13.38                 | 13.44                 | 13.45                 |                              | 0        |
|                                       | 50      | 50        | 13.37                 | 13.36                 | 13.34                 |                              | 0        |
|                                       | 100     | 0         | 13.38                 | 13.44                 | 13.45                 |                              | 0        |
| 64QAM                                 | 1       | 0         | 13.87                 | 13.73                 | 13.66                 | 0-2                          | 0        |
|                                       | 1       | 50        | 13.69                 | 13.65                 | 13.65                 |                              | 0        |
|                                       | 1       | 99        | 13.85                 | 13.64                 | 13.59                 |                              | 0        |
|                                       | 50      | 0         | 13.67                 | 13.59                 | 13.54                 | 0-3                          | 0        |
|                                       | 50      | 25        | 13.75                 | 13.63                 | 13.59                 |                              | 0        |
|                                       | 50      | 50        | 13.68                 | 13.62                 | 13.54                 |                              | 0        |
|                                       | 100     | 0         | 13.63                 | 13.59                 | 13.55                 |                              | 0        |

**Table 8-70**  
**LTE Band 25 (PCS) Reduced Conducted Powers - 15 MHz Bandwidth**

| LTE Band 25 (PCS)<br>15 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26115<br>(1857.5 MHz) | 26365<br>(1882.5 MHz) | 26615<br>(1907.5 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 13.44                 | 13.42                 | 13.43                 | 0                            | 0        |
|                                       | 1       | 36        | 13.37                 | 13.50                 | 13.32                 |                              | 0        |
|                                       | 1       | 74        | 13.35                 | 13.33                 | 13.30                 |                              | 0        |
|                                       | 36      | 0         | 13.58                 | 13.64                 | 13.60                 | 0-1                          | 0        |
|                                       | 36      | 18        | 13.55                 | 13.63                 | 13.60                 |                              | 0        |
|                                       | 36      | 37        | 13.48                 | 13.58                 | 13.53                 |                              | 0        |
|                                       | 75      | 0         | 13.54                 | 13.64                 | 13.60                 |                              | 0        |
| 16QAM                                 | 1       | 0         | 13.74                 | 13.70                 | 13.64                 | 0-1                          | 0        |
|                                       | 1       | 36        | 13.61                 | 13.65                 | 13.52                 |                              | 0        |
|                                       | 1       | 74        | 13.55                 | 13.69                 | 13.49                 |                              | 0        |
|                                       | 36      | 0         | 13.58                 | 13.60                 | 13.60                 | 0-2                          | 0        |
|                                       | 36      | 18        | 13.55                 | 13.58                 | 13.60                 |                              | 0        |
|                                       | 36      | 37        | 13.48                 | 13.56                 | 13.55                 |                              | 0        |
|                                       | 75      | 0         | 13.50                 | 13.63                 | 13.58                 |                              | 0        |
| 64QAM                                 | 1       | 0         | 13.60                 | 13.58                 | 13.73                 | 0-2                          | 0        |
|                                       | 1       | 36        | 13.61                 | 13.71                 | 13.63                 |                              | 0        |
|                                       | 1       | 74        | 13.55                 | 13.60                 | 13.65                 |                              | 0        |
|                                       | 36      | 0         | 13.57                 | 13.55                 | 13.59                 | 0-3                          | 0        |
|                                       | 36      | 18        | 13.59                 | 13.65                 | 13.63                 |                              | 0        |
|                                       | 36      | 37        | 13.57                 | 13.65                 | 13.59                 |                              | 0        |
|                                       | 75      | 0         | 13.55                 | 13.61                 | 13.56                 |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 59 of 124                  |

**Table 8-71**  
**LTE Band 25 (PCS) Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 25 (PCS)<br>10 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|---------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                            | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                       |         |           | 26090<br>(1855.0 MHz) | 26365<br>(1882.5 MHz) | 26640<br>(1910.0 MHz) |                              |          |
|                                       |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                  | 1       | 0         | 13.18                 | 13.27                 | 13.22                 | 0                            | 0        |
|                                       | 1       | 25        | 13.15                 | 13.17                 | 13.21                 |                              | 0        |
|                                       | 1       | 49        | 13.08                 | 13.19                 | 13.20                 |                              | 0        |
|                                       | 25      | 0         | 13.40                 | 13.38                 | 13.40                 | 0-1                          | 0        |
|                                       | 25      | 12        | 13.36                 | 13.41                 | 13.43                 |                              | 0        |
|                                       | 25      | 25        | 13.26                 | 13.39                 | 13.44                 |                              | 0        |
|                                       | 50      | 0         | 13.32                 | 13.38                 | 13.42                 |                              | 0        |
| 16QAM                                 | 1       | 0         | 13.48                 | 13.44                 | 13.47                 | 0-1                          | 0        |
|                                       | 1       | 25        | 13.29                 | 13.35                 | 13.41                 |                              | 0        |
|                                       | 1       | 49        | 13.30                 | 13.30                 | 13.33                 |                              | 0        |
|                                       | 25      | 0         | 13.34                 | 13.36                 | 13.48                 | 0-2                          | 0        |
|                                       | 25      | 12        | 13.40                 | 13.40                 | 13.49                 |                              | 0        |
|                                       | 25      | 25        | 13.31                 | 13.36                 | 13.42                 |                              | 0        |
|                                       | 50      | 0         | 13.30                 | 13.36                 | 13.46                 |                              | 0        |
| 64QAM                                 | 1       | 0         | 13.57                 | 13.60                 | 13.44                 | 0-2                          | 0        |
|                                       | 1       | 25        | 13.44                 | 13.51                 | 13.46                 |                              | 0        |
|                                       | 1       | 49        | 13.35                 | 13.48                 | 13.48                 |                              | 0        |
|                                       | 25      | 0         | 13.43                 | 13.46                 | 13.40                 | 0-3                          | 0        |
|                                       | 25      | 12        | 13.44                 | 13.47                 | 13.40                 |                              | 0        |
|                                       | 25      | 25        | 13.40                 | 13.48                 | 13.42                 |                              | 0        |
|                                       | 50      | 0         | 13.44                 | 13.48                 | 13.40                 |                              | 0        |

**Table 8-72**  
**LTE Band 25 (PCS) Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 25 (PCS)<br>5 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 26065<br>(1852.5 MHz) | 26365<br>(1882.5 MHz) | 26665<br>(1912.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 13.18                 | 13.15                 | 13.33                 | 0                            | 0        |
|                                      | 1       | 12        | 13.19                 | 13.22                 | 13.40                 |                              | 0        |
|                                      | 1       | 24        | 13.12                 | 13.17                 | 13.39                 |                              | 0        |
|                                      | 12      | 0         | 13.40                 | 13.33                 | 13.43                 | 0-1                          | 0        |
|                                      | 12      | 6         | 13.45                 | 13.40                 | 13.48                 |                              | 0        |
|                                      | 12      | 13        | 13.38                 | 13.40                 | 13.52                 |                              | 0        |
|                                      | 25      | 0         | 13.32                 | 13.37                 | 13.50                 |                              | 0        |
| 16QAM                                | 1       | 0         | 13.41                 | 13.35                 | 13.55                 | 0-1                          | 0        |
|                                      | 1       | 12        | 13.43                 | 13.45                 | 13.53                 |                              | 0        |
|                                      | 1       | 24        | 13.35                 | 13.32                 | 13.62                 |                              | 0        |
|                                      | 12      | 0         | 13.44                 | 13.35                 | 13.45                 | 0-2                          | 0        |
|                                      | 12      | 6         | 13.50                 | 13.31                 | 13.50                 |                              | 0        |
|                                      | 12      | 13        | 13.38                 | 13.36                 | 13.50                 |                              | 0        |
|                                      | 25      | 0         | 13.36                 | 13.32                 | 13.48                 |                              | 0        |
| 64QAM                                | 1       | 0         | 13.49                 | 13.46                 | 13.34                 | 0-2                          | 0        |
|                                      | 1       | 12        | 13.55                 | 13.56                 | 13.56                 |                              | 0        |
|                                      | 1       | 24        | 13.53                 | 13.63                 | 13.46                 |                              | 0        |
|                                      | 12      | 0         | 13.44                 | 13.40                 | 13.33                 | 0-3                          | 0        |
|                                      | 12      | 6         | 13.53                 | 13.49                 | 13.46                 |                              | 0        |
|                                      | 12      | 13        | 13.53                 | 13.46                 | 13.48                 |                              | 0        |
|                                      | 25      | 0         | 13.47                 | 13.42                 | 13.42                 |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 60 of 124                  |

**Table 8-73**  
**LTE Band 25 (PCS) Reduced Conducted Powers - 3 MHz Bandwidth**

| LTE Band 25 (PCS)<br>3 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|--------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                           | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                      |         |           | 26055<br>(1851.5 MHz) | 26365<br>(1882.5 MHz) | 26675<br>(1913.5 MHz) |                              |          |
|                                      |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                 | 1       | 0         | 13.35                 | 13.28                 | 13.17                 | 0                            | 0        |
|                                      | 1       | 7         | 13.32                 | 13.34                 | 13.24                 |                              | 0        |
|                                      | 1       | 14        | 13.32                 | 13.37                 | 13.20                 |                              | 0        |
|                                      | 8       | 0         | 13.43                 | 13.39                 | 13.36                 | 0-1                          | 0        |
|                                      | 8       | 4         | 13.45                 | 13.49                 | 13.40                 |                              | 0        |
|                                      | 8       | 7         | 13.42                 | 13.40                 | 13.40                 |                              | 0        |
|                                      | 15      | 0         | 13.48                 | 13.46                 | 13.39                 |                              | 0        |
| 16QAM                                | 1       | 0         | 13.56                 | 13.49                 | 13.36                 | 0-1                          | 0        |
|                                      | 1       | 7         | 13.56                 | 13.52                 | 13.44                 |                              | 0        |
|                                      | 1       | 14        | 13.61                 | 13.54                 | 13.50                 |                              | 0        |
|                                      | 8       | 0         | 13.45                 | 13.36                 | 13.39                 | 0-2                          | 0        |
|                                      | 8       | 4         | 13.49                 | 13.44                 | 13.40                 |                              | 0        |
|                                      | 8       | 7         | 13.50                 | 13.38                 | 13.49                 |                              | 0        |
|                                      | 15      | 0         | 13.42                 | 13.41                 | 13.39                 |                              | 0        |
| 64QAM                                | 1       | 0         | 13.44                 | 13.40                 | 13.36                 | 0-2                          | 0        |
|                                      | 1       | 7         | 13.53                 | 13.56                 | 13.48                 |                              | 0        |
|                                      | 1       | 14        | 13.50                 | 13.53                 | 13.55                 |                              | 0        |
|                                      | 8       | 0         | 13.45                 | 13.42                 | 13.33                 | 0-3                          | 0        |
|                                      | 8       | 4         | 13.55                 | 13.46                 | 13.44                 |                              | 0        |
|                                      | 8       | 7         | 13.47                 | 13.54                 | 13.45                 |                              | 0        |
|                                      | 15      | 0         | 13.48                 | 13.42                 | 13.50                 |                              | 0        |

**Table 8-74**  
**LTE Band 25 (PCS) Reduced Conducted Powers – 1.4 MHz Bandwidth**

| LTE Band 25 (PCS)<br>1.4 MHz Bandwidth |         |           |                       |                       |                       |                              |          |
|----------------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                             | RB Size | RB Offset | Low Channel           | Mid Channel           | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                        |         |           | 26047<br>(1850.7 MHz) | 26365<br>(1882.5 MHz) | 26683<br>(1914.3 MHz) |                              |          |
|                                        |         |           | Conducted Power [dBm] |                       |                       |                              |          |
| QPSK                                   | 1       | 0         | 13.14                 | 13.23                 | 13.32                 | 0                            | 0        |
|                                        | 1       | 2         | 13.19                 | 13.34                 | 13.40                 |                              | 0        |
|                                        | 1       | 5         | 13.10                 | 13.30                 | 13.35                 |                              | 0        |
|                                        | 3       | 0         | 13.09                 | 13.25                 | 13.32                 |                              | 0        |
|                                        | 3       | 2         | 13.16                 | 13.36                 | 13.39                 |                              | 0        |
|                                        | 3       | 3         | 13.08                 | 13.30                 | 13.32                 |                              | 0        |
|                                        | 6       | 0         | 13.27                 | 13.36                 | 13.49                 | 0-1                          | 0        |
| 16QAM                                  | 1       | 0         | 13.40                 | 13.45                 | 13.54                 | 0-1                          | 0        |
|                                        | 1       | 2         | 13.38                 | 13.50                 | 13.56                 |                              | 0        |
|                                        | 1       | 5         | 13.30                 | 13.44                 | 13.58                 |                              | 0        |
|                                        | 3       | 0         | 13.26                 | 13.33                 | 13.50                 |                              | 0        |
|                                        | 3       | 2         | 13.35                 | 13.42                 | 13.51                 |                              | 0        |
|                                        | 3       | 3         | 13.30                 | 13.34                 | 13.48                 |                              | 0        |
|                                        | 6       | 0         | 13.40                 | 13.33                 | 13.49                 | 0-2                          | 0        |
| 64QAM                                  | 1       | 0         | 13.49                 | 13.44                 | 13.35                 | 0-2                          | 0        |
|                                        | 1       | 2         | 13.53                 | 13.54                 | 13.52                 |                              | 0        |
|                                        | 1       | 5         | 13.52                 | 13.47                 | 13.35                 |                              | 0        |
|                                        | 3       | 0         | 13.42                 | 13.47                 | 13.35                 |                              | 0        |
|                                        | 3       | 2         | 13.52                 | 13.50                 | 13.47                 |                              | 0        |
|                                        | 3       | 3         | 13.47                 | 13.43                 | 13.42                 |                              | 0        |
|                                        | 6       | 0         | 13.40                 | 13.40                 | 13.30                 | 0-3                          | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 61 of 124                  |

## 8.3.9

## LTE Band 41

**Table 8-75**  
**LTE Band 41 Maximum Conducted Powers - 20 MHz Bandwidth**

| LTE Band 41<br>20 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                            | 1       | 0         | 23.34                 | 23.21                 | 23.28                 | 23.27                 | 23.16                 | 0                            | 0        |
|                                 | 1       | 50        | 23.24                 | 23.15                 | 23.29                 | 23.04                 | 23.31                 |                              | 0        |
|                                 | 1       | 99        | 23.16                 | 23.07                 | 23.13                 | 22.87                 | 23.38                 |                              | 0        |
|                                 | 50      | 0         | 22.41                 | 22.36                 | 22.46                 | 22.31                 | 22.46                 | 0-1                          | 1        |
|                                 | 50      | 25        | 22.39                 | 22.38                 | 22.39                 | 22.29                 | 22.50                 |                              | 1        |
|                                 | 50      | 50        | 22.41                 | 22.32                 | 22.33                 | 22.24                 | 22.55                 |                              | 1        |
|                                 | 100     | 0         | 22.39                 | 22.34                 | 22.41                 | 22.34                 | 22.49                 |                              | 1        |
| 16QAM                           | 1       | 0         | 22.37                 | 22.37                 | 22.34                 | 22.33                 | 22.29                 | 0-1                          | 1        |
|                                 | 1       | 50        | 22.31                 | 22.23                 | 22.28                 | 22.16                 | 22.36                 |                              | 1        |
|                                 | 1       | 99        | 22.25                 | 22.19                 | 22.16                 | 21.97                 | 22.51                 |                              | 1        |
|                                 | 50      | 0         | 21.47                 | 21.43                 | 21.46                 | 21.42                 | 21.46                 | 0-2                          | 2        |
|                                 | 50      | 25        | 21.48                 | 21.45                 | 21.43                 | 21.36                 | 21.53                 |                              | 2        |
|                                 | 50      | 50        | 21.49                 | 21.36                 | 21.38                 | 21.27                 | 21.56                 |                              | 2        |
|                                 | 100     | 0         | 21.42                 | 21.41                 | 21.44                 | 21.36                 | 21.57                 |                              | 2        |
| 64QAM                           | 1       | 0         | 21.13                 | 21.06                 | 21.06                 | 21.02                 | 21.08                 | 0-2                          | 2        |
|                                 | 1       | 50        | 21.01                 | 20.96                 | 21.00                 | 20.89                 | 21.04                 |                              | 2        |
|                                 | 1       | 99        | 20.99                 | 20.89                 | 20.82                 | 20.72                 | 21.20                 |                              | 2        |
|                                 | 50      | 0         | 20.53                 | 20.46                 | 20.48                 | 20.44                 | 20.52                 | 0-3                          | 3        |
|                                 | 50      | 25        | 20.55                 | 20.46                 | 20.51                 | 20.38                 | 20.58                 |                              | 3        |
|                                 | 50      | 50        | 20.52                 | 20.38                 | 20.43                 | 20.28                 | 20.62                 |                              | 3        |
|                                 | 100     | 0         | 20.48                 | 20.33                 | 20.42                 | 20.34                 | 20.46                 |                              | 3        |

**Table 8-76**  
**LTE Band 41 Maximum Conducted Powers - 15 MHz Bandwidth**

| LTE Band 41<br>15 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                            | 1       | 0         | 23.51                 | 23.55                 | 23.42                 | 23.62                 | 23.40                 | 0                            | 0        |
|                                 | 1       | 36        | 23.45                 | 23.50                 | 23.40                 | 23.48                 | 23.40                 |                              | 0        |
|                                 | 1       | 74        | 23.45                 | 23.36                 | 23.36                 | 23.36                 | 23.51                 |                              | 0        |
|                                 | 36      | 0         | 22.66                 | 22.76                 | 22.56                 | 22.75                 | 22.57                 | 0-1                          | 1        |
|                                 | 36      | 18        | 22.69                 | 22.70                 | 22.58                 | 22.69                 | 22.60                 |                              | 1        |
|                                 | 36      | 37        | 22.66                 | 22.74                 | 22.54                 | 22.62                 | 22.60                 |                              | 1        |
|                                 | 75      | 0         | 22.70                 | 22.68                 | 22.58                 | 22.68                 | 22.59                 |                              | 1        |
| 16QAM                           | 1       | 0         | 22.93                 | 22.93                 | 22.78                 | 22.98                 | 22.36                 | 0-1                          | 1        |
|                                 | 1       | 36        | 22.87                 | 22.82                 | 22.72                 | 22.85                 | 22.71                 |                              | 1        |
|                                 | 1       | 74        | 22.84                 | 22.69                 | 22.63                 | 22.69                 | 22.76                 |                              | 1        |
|                                 | 36      | 0         | 21.76                 | 21.73                 | 21.60                 | 21.75                 | 21.58                 | 0-2                          | 2        |
|                                 | 36      | 18        | 21.74                 | 21.72                 | 21.63                 | 21.73                 | 21.59                 |                              | 2        |
|                                 | 36      | 37        | 21.75                 | 21.66                 | 21.57                 | 21.65                 | 21.61                 |                              | 2        |
|                                 | 75      | 0         | 21.74                 | 21.70                 | 21.59                 | 21.68                 | 21.58                 |                              | 2        |
| 64QAM                           | 1       | 0         | 21.65                 | 21.67                 | 21.51                 | 21.69                 | 21.44                 | 0-2                          | 2        |
|                                 | 1       | 36        | 21.57                 | 21.60                 | 21.46                 | 21.57                 | 21.44                 |                              | 2        |
|                                 | 1       | 74        | 21.58                 | 21.44                 | 21.36                 | 21.44                 | 21.52                 |                              | 2        |
|                                 | 36      | 0         | 20.71                 | 20.72                 | 20.54                 | 20.73                 | 20.55                 | 0-3                          | 3        |
|                                 | 36      | 18        | 20.73                 | 20.72                 | 20.58                 | 20.69                 | 20.59                 |                              | 3        |
|                                 | 36      | 37        | 20.71                 | 20.62                 | 20.55                 | 20.62                 | 20.57                 |                              | 3        |
|                                 | 75      | 0         | 20.73                 | 20.71                 | 20.58                 | 20.70                 | 20.60                 |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 62 of 124                  |

**Table 8-77**  
**LTE Band 41 Maximum Conducted Powers - 10 MHz Bandwidth**

| LTE Band 41<br>10 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                            | 1       | 0         | 23.33                 | 23.52                 | 23.36                 | 23.49                 | 23.36                 | 0                            | 0        |
|                                 | 1       | 25        | 23.49                 | 23.49                 | 23.30                 | 23.45                 | 23.33                 |                              | 0        |
|                                 | 1       | 49        | 23.46                 | 23.44                 | 23.25                 | 23.38                 | 23.28                 |                              | 0        |
|                                 | 25      | 0         | 22.64                 | 22.68                 | 22.52                 | 22.63                 | 22.50                 | 0-1                          | 1        |
|                                 | 25      | 12        | 22.62                 | 22.64                 | 22.53                 | 22.63                 | 22.49                 |                              | 1        |
|                                 | 25      | 25        | 22.60                 | 22.61                 | 22.45                 | 22.55                 | 22.44                 |                              | 1        |
|                                 | 50      | 0         | 22.61                 | 22.65                 | 22.50                 | 22.60                 | 22.49                 |                              | 1        |
| 16QAM                           | 1       | 0         | 22.82                 | 22.84                 | 22.71                 | 22.78                 | 22.66                 | 0-1                          | 1        |
|                                 | 1       | 25        | 22.75                 | 22.77                 | 22.64                 | 22.74                 | 22.61                 |                              | 1        |
|                                 | 1       | 49        | 22.73                 | 22.71                 | 22.58                 | 22.69                 | 22.54                 |                              | 1        |
|                                 | 25      | 0         | 21.57                 | 21.57                 | 21.45                 | 21.53                 | 21.40                 | 0-2                          | 2        |
|                                 | 25      | 12        | 21.57                 | 21.60                 | 21.46                 | 21.52                 | 21.38                 |                              | 2        |
|                                 | 25      | 25        | 21.52                 | 21.55                 | 21.39                 | 21.50                 | 21.35                 |                              | 2        |
|                                 | 50      | 0         | 21.66                 | 21.68                 | 21.53                 | 21.62                 | 21.50                 |                              | 2        |
| 64QAM                           | 1       | 0         | 21.57                 | 21.61                 | 21.46                 | 21.54                 | 21.40                 | 0-2                          | 2        |
|                                 | 1       | 25        | 21.51                 | 21.52                 | 21.40                 | 21.47                 | 21.36                 |                              | 2        |
|                                 | 1       | 49        | 21.50                 | 21.47                 | 21.33                 | 21.41                 | 21.28                 |                              | 2        |
|                                 | 25      | 0         | 20.70                 | 20.73                 | 20.59                 | 20.68                 | 20.55                 | 0-3                          | 3        |
|                                 | 25      | 12        | 20.69                 | 20.70                 | 20.57                 | 20.67                 | 20.55                 |                              | 3        |
|                                 | 25      | 25        | 20.65                 | 20.66                 | 20.51                 | 20.64                 | 20.50                 |                              | 3        |
|                                 | 50      | 0         | 20.63                 | 20.67                 | 20.54                 | 20.62                 | 20.49                 |                              | 3        |

**Table 8-78**  
**LTE Band 41 Maximum Conducted Powers - 5 MHz Bandwidth**

| LTE Band 41<br>5 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|--------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                           | 1       | 0         | 23.45                 | 23.53                 | 23.43                 | 23.47                 | 23.32                 | 0                            | 0        |
|                                | 1       | 12        | 23.48                 | 23.56                 | 23.47                 | 23.51                 | 23.38                 |                              | 0        |
|                                | 1       | 24        | 23.51                 | 23.54                 | 23.44                 | 23.49                 | 23.40                 |                              | 0        |
|                                | 12      | 0         | 22.62                 | 22.67                 | 22.48                 | 22.53                 | 22.41                 | 0-1                          | 1        |
|                                | 12      | 6         | 22.67                 | 22.69                 | 22.60                 | 22.58                 | 22.45                 |                              | 1        |
|                                | 12      | 13        | 22.63                 | 22.63                 | 22.54                 | 22.61                 | 22.46                 |                              | 1        |
|                                | 25      | 0         | 22.64                 | 22.64                 | 22.53                 | 22.55                 | 22.40                 |                              | 1        |
| 16QAM                          | 1       | 0         | 22.81                 | 22.86                 | 22.73                 | 22.80                 | 22.68                 | 0-1                          | 1        |
|                                | 1       | 12        | 22.85                 | 22.82                 | 22.74                 | 22.78                 | 22.70                 |                              | 1        |
|                                | 1       | 24        | 22.87                 | 22.84                 | 22.74                 | 22.79                 | 22.64                 |                              | 1        |
|                                | 12      | 0         | 21.71                 | 21.72                 | 21.55                 | 21.59                 | 21.46                 | 0-2                          | 2        |
|                                | 12      | 6         | 21.69                 | 21.78                 | 21.62                 | 21.60                 | 21.50                 |                              | 2        |
|                                | 12      | 13        | 21.68                 | 21.74                 | 21.55                 | 21.64                 | 21.51                 |                              | 2        |
|                                | 25      | 0         | 21.58                 | 21.63                 | 21.48                 | 21.48                 | 21.37                 |                              | 2        |
| 64QAM                          | 1       | 0         | 21.62                 | 21.57                 | 21.48                 | 21.50                 | 21.43                 | 0-2                          | 2        |
|                                | 1       | 12        | 21.58                 | 21.59                 | 21.49                 | 21.53                 | 21.42                 |                              | 2        |
|                                | 1       | 24        | 21.62                 | 21.60                 | 21.51                 | 21.54                 | 21.44                 |                              | 2        |
|                                | 12      | 0         | 20.67                 | 20.75                 | 20.53                 | 20.57                 | 20.50                 | 0-3                          | 3        |
|                                | 12      | 6         | 20.75                 | 20.74                 | 20.63                 | 20.64                 | 20.51                 |                              | 3        |
|                                | 12      | 13        | 20.69                 | 20.72                 | 20.61                 | 20.64                 | 20.56                 |                              | 3        |
|                                | 25      | 0         | 20.70                 | 20.70                 | 20.60                 | 20.59                 | 20.48                 |                              | 3        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 63 of 124                  |

**Table 8-79**  
**LTE Band 41 Reduced Conducted Powers - 20 MHz Bandwidth**

| LTE Band 41<br>20 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                            | 1       | 0         | 14.72                 | 14.47                 | 14.64                 | 14.41                 | 14.43                 | 0                            | 0        |
|                                 | 1       | 50        | 14.59                 | 14.48                 | 14.39                 | 14.25                 | 14.32                 |                              | 0        |
|                                 | 1       | 99        | 14.64                 | 14.57                 | 14.26                 | 14.23                 | 14.20                 |                              | 0        |
|                                 | 50      | 0         | 14.82                 | 14.66                 | 14.71                 | 14.44                 | 14.57                 | 0-1                          | 0        |
|                                 | 50      | 25        | 14.85                 | 14.69                 | 14.61                 | 14.47                 | 14.54                 |                              | 0        |
|                                 | 50      | 50        | 14.80                 | 14.70                 | 14.52                 | 14.50                 | 14.49                 |                              | 0        |
|                                 | 100     | 0         | 14.71                 | 14.60                 | 14.63                 | 14.45                 | 14.51                 |                              | 0        |
| 16QAM                           | 1       | 0         | 14.87                 | 14.61                 | 14.49                 | 14.39                 | 14.36                 | 0-1                          | 0        |
|                                 | 1       | 50        | 14.77                 | 14.48                 | 14.45                 | 14.28                 | 14.39                 |                              | 0        |
|                                 | 1       | 99        | 14.74                 | 14.47                 | 14.36                 | 14.11                 | 14.58                 |                              | 0        |
|                                 | 50      | 0         | 14.90                 | 14.64                 | 14.61                 | 14.45                 | 14.64                 | 0-2                          | 0        |
|                                 | 50      | 25        | 14.91                 | 14.63                 | 14.59                 | 14.41                 | 14.52                 |                              | 0        |
|                                 | 50      | 50        | 14.89                 | 14.57                 | 14.52                 | 14.33                 | 14.61                 |                              | 0        |
|                                 | 100     | 0         | 14.91                 | 14.59                 | 14.58                 | 14.35                 | 14.48                 |                              | 0        |
| 64QAM                           | 1       | 0         | 14.50                 | 14.28                 | 14.14                 | 14.07                 | 14.10                 | 0-2                          | 0        |
|                                 | 1       | 50        | 14.43                 | 14.16                 | 14.10                 | 13.95                 | 14.05                 |                              | 0        |
|                                 | 1       | 99        | 14.37                 | 14.11                 | 13.95                 | 13.87                 | 14.23                 |                              | 0        |
|                                 | 50      | 0         | 14.91                 | 14.67                 | 14.61                 | 14.54                 | 14.51                 | 0-3                          | 0        |
|                                 | 50      | 25        | 14.93                 | 14.66                 | 14.60                 | 14.42                 | 14.56                 |                              | 0        |
|                                 | 50      | 50        | 14.92                 | 14.57                 | 14.57                 | 14.35                 | 14.62                 |                              | 0        |
|                                 | 100     | 0         | 14.85                 | 14.57                 | 14.55                 | 14.41                 | 14.48                 |                              | 0        |

**Table 8-80**  
**LTE Band 41 Reduced Conducted Powers - 15 MHz Bandwidth**

| LTE Band 41<br>15 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |   |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|---|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |   |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |   |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |   |
| QPSK                            | 1       | 0         | 14.58                 | 14.69                 | 14.72                 | 14.69                 | 14.52                 | 0                            | 0        |   |
|                                 | 1       | 36        | 14.56                 | 14.60                 | 14.56                 | 14.57                 | 14.50                 |                              | 0-1      | 0 |
|                                 | 1       | 74        | 14.55                 | 14.64                 | 14.40                 | 14.58                 | 14.40                 |                              |          | 0 |
|                                 | 36      | 0         | 14.70                 | 14.76                 | 14.77                 | 14.76                 | 14.66                 | 0                            |          |   |
|                                 | 36      | 18        | 14.72                 | 14.80                 | 14.74                 | 14.78                 | 14.65                 | 0-1                          |          | 0 |
|                                 | 36      | 37        | 14.70                 | 14.80                 | 14.62                 | 14.79                 | 14.57                 |                              | 0        |   |
|                                 | 75      | 0         | 14.70                 | 14.81                 | 14.68                 | 14.77                 | 14.60                 |                              | 0        |   |
| 16QAM                           | 1       | 0         | 15.08                 | 15.05                 | 14.93                 | 15.11                 | 14.84                 | 0-1                          | 0        |   |
|                                 | 1       | 36        | 14.97                 | 15.01                 | 14.90                 | 14.95                 | 14.87                 |                              | 0-2      | 0 |
|                                 | 1       | 74        | 14.99                 | 14.85                 | 14.81                 | 14.82                 | 14.95                 |                              |          | 0 |
|                                 | 36      | 0         | 14.77                 | 14.78                 | 14.66                 | 14.74                 | 14.61                 | 0                            |          |   |
|                                 | 36      | 18        | 14.78                 | 14.78                 | 14.69                 | 14.73                 | 14.66                 | 0-2                          |          | 0 |
|                                 | 36      | 37        | 14.78                 | 14.70                 | 14.65                 | 14.66                 | 14.65                 |                              | 0        |   |
|                                 | 75      | 0         | 14.78                 | 14.76                 | 14.67                 | 14.72                 | 14.63                 |                              | 0        |   |
| 64QAM                           | 1       | 0         | 14.67                 | 14.70                 | 14.58                 | 14.68                 | 14.46                 | 0-2                          | 0        |   |
|                                 | 1       | 36        | 14.56                 | 14.60                 | 14.49                 | 14.59                 | 14.49                 |                              | 0-3      | 0 |
|                                 | 1       | 74        | 14.56                 | 14.48                 | 14.43                 | 14.41                 | 14.54                 |                              |          | 0 |
|                                 | 36      | 0         | 14.74                 | 14.75                 | 14.67                 | 14.78                 | 14.61                 | 0                            |          |   |
|                                 | 36      | 18        | 14.74                 | 14.73                 | 14.68                 | 14.75                 | 14.63                 | 0-3                          |          | 0 |
|                                 | 36      | 37        | 14.74                 | 14.67                 | 14.64                 | 14.67                 | 14.64                 |                              | 0        |   |
|                                 | 75      | 0         | 14.79                 | 14.75                 | 14.67                 | 14.74                 | 14.65                 |                              | 0        |   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 64 of 124                  |

**Table 8-81**  
**LTE Band 41 Reduced Conducted Powers - 10 MHz Bandwidth**

| LTE Band 41<br>10 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |   |
|---------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|---|
| Modulation                      | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |   |
|                                 |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |   |
|                                 |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |   |
| QPSK                            | 1       | 0         | 14.48                 | 14.57                 | 14.42                 | 14.55                 | 14.37                 | 0                            | 0        |   |
|                                 | 1       | 25        | 14.47                 | 14.51                 | 14.40                 | 14.50                 | 14.37                 |                              | 0-1      | 0 |
|                                 | 1       | 49        | 14.39                 | 14.42                 | 14.25                 | 14.40                 | 14.23                 |                              |          | 0 |
|                                 | 25      | 0         | 14.60                 | 14.63                 | 14.59                 | 14.66                 | 14.54                 | 0                            |          |   |
|                                 | 25      | 12        | 14.57                 | 14.65                 | 14.55                 | 14.60                 | 14.50                 | 0                            |          |   |
|                                 | 25      | 25        | 14.51                 | 14.59                 | 14.48                 | 14.55                 | 14.46                 | 0                            |          |   |
|                                 | 50      | 0         | 14.59                 | 14.62                 | 14.53                 | 14.60                 | 14.67                 | 0                            |          |   |
| 16QAM                           | 1       | 0         | 14.89                 | 14.93                 | 14.81                 | 14.88                 | 14.79                 | 0-1                          | 0        |   |
|                                 | 1       | 25        | 14.86                 | 14.93                 | 14.77                 | 14.86                 | 14.76                 |                              | 0-2      | 0 |
|                                 | 1       | 49        | 14.83                 | 14.91                 | 14.68                 | 14.81                 | 14.69                 |                              |          | 0 |
|                                 | 25      | 0         | 14.55                 | 14.85                 | 14.47                 | 14.54                 | 14.42                 | 0                            |          |   |
|                                 | 25      | 12        | 14.54                 | 14.59                 | 14.48                 | 14.52                 | 14.44                 | 0                            |          |   |
|                                 | 25      | 25        | 14.50                 | 14.60                 | 14.40                 | 14.47                 | 14.36                 | 0                            |          |   |
|                                 | 50      | 0         | 14.63                 | 14.68                 | 14.57                 | 14.62                 | 14.51                 | 0                            |          |   |
| 64QAM                           | 1       | 0         | 14.54                 | 14.58                 | 14.45                 | 14.50                 | 14.42                 | 0-2                          | 0        |   |
|                                 | 1       | 25        | 14.45                 | 14.52                 | 14.37                 | 14.45                 | 14.36                 |                              | 0-3      | 0 |
|                                 | 1       | 49        | 14.44                 | 14.45                 | 14.30                 | 14.41                 | 14.30                 |                              |          | 0 |
|                                 | 25      | 0         | 14.69                 | 14.72                 | 14.59                 | 14.67                 | 14.60                 | 0                            |          |   |
|                                 | 25      | 12        | 14.65                 | 14.73                 | 14.60                 | 14.68                 | 14.55                 | 0                            |          |   |
|                                 | 25      | 25        | 14.61                 | 14.67                 | 14.54                 | 14.62                 | 14.50                 | 0                            |          |   |
|                                 | 50      | 0         | 14.62                 | 14.65                 | 14.57                 | 14.64                 | 14.53                 | 0                            |          |   |

**Table 8-82**  
**LTE Band 41 Reduced Conducted Powers - 5 MHz Bandwidth**

| LTE Band 41<br>5 MHz Bandwidth |         |           |                       |                       |                       |                       |                       |                              |          |
|--------------------------------|---------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|----------|
| Modulation                     | RB Size | RB Offset | Low Channel           | Low-Mid Channel       | Mid Channel           | Mid-High Channel      | High Channel          | MPR Allowed per<br>3GPP [dB] | MPR [dB] |
|                                |         |           | 39750<br>(2506.0 MHz) | 40185<br>(2549.5 MHz) | 40620<br>(2593.0 MHz) | 41055<br>(2636.5 MHz) | 41490<br>(2680.0 MHz) |                              |          |
|                                |         |           | Conducted Power [dBm] |                       |                       |                       |                       |                              |          |
| QPSK                           | 1       | 0         | 14.39                 | 14.44                 | 14.54                 | 14.42                 | 14.24                 | 0                            | 0        |
|                                | 1       | 12        | 14.42                 | 14.52                 | 14.39                 | 14.52                 | 14.36                 |                              | 0        |
|                                | 1       | 24        | 14.35                 | 14.46                 | 14.26                 | 14.38                 | 14.24                 |                              | 0        |
|                                | 12      | 0         | 14.50                 | 14.61                 | 14.43                 | 14.55                 | 14.38                 | 0-1                          | 0        |
|                                | 12      | 6         | 14.50                 | 14.60                 | 14.47                 | 14.53                 | 14.50                 |                              | 0        |
|                                | 12      | 13        | 14.48                 | 14.58                 | 14.48                 | 14.56                 | 14.40                 |                              | 0        |
|                                | 25      | 0         | 14.52                 | 14.57                 | 14.44                 | 14.50                 | 14.45                 |                              | 0        |
| 16QAM                          | 1       | 0         | 14.88                 | 14.90                 | 14.78                 | 14.90                 | 14.79                 | 0-1                          | 0        |
|                                | 1       | 12        | 14.87                 | 14.91                 | 14.79                 | 14.88                 | 14.79                 |                              | 0        |
|                                | 1       | 24        | 14.90                 | 14.90                 | 14.75                 | 14.87                 | 14.74                 |                              | 0        |
|                                | 12      | 0         | 14.61                 | 14.68                 | 14.47                 | 14.55                 | 14.44                 | 0-2                          | 0        |
|                                | 12      | 6         | 14.62                 | 14.66                 | 14.54                 | 14.55                 | 14.45                 |                              | 0        |
|                                | 12      | 13        | 14.60                 | 14.65                 | 14.51                 | 14.60                 | 14.51                 |                              | 0        |
|                                | 25      | 0         | 14.50                 | 14.56                 | 14.41                 | 14.46                 | 14.36                 |                              | 0        |
| 64QAM                          | 1       | 0         | 14.46                 | 14.53                 | 14.37                 | 14.41                 | 14.37                 | 0-2                          | 0        |
|                                | 1       | 12        | 14.41                 | 14.52                 | 14.40                 | 14.51                 | 14.42                 |                              | 0        |
|                                | 1       | 24        | 14.46                 | 14.52                 | 14.40                 | 14.50                 | 14.42                 |                              | 0        |
|                                | 12      | 0         | 14.60                 | 14.69                 | 14.47                 | 14.58                 | 14.51                 | 0-3                          | 0        |
|                                | 12      | 6         | 14.68                 | 14.67                 | 14.60                 | 14.61                 | 14.51                 |                              | 0        |
|                                | 12      | 13        | 14.63                 | 14.66                 | 14.57                 | 14.65                 | 14.51                 |                              | 0        |
|                                | 25      | 0         | 14.63                 | 14.67                 | 14.55                 | 14.56                 | 14.47                 |                              | 0        |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 65 of 124                  |

## 8.4 WLAN Conducted Powers

**Table 8-83**  
**2.4 GHz WLAN Maximum Average RF Power – Ant 1**

| 2.4GHz Conducted Power [dBm] |         |                        |         |         |
|------------------------------|---------|------------------------|---------|---------|
| Freq [MHz]                   | Channel | IEEE Transmission Mode |         |         |
|                              |         | 802.11b                | 802.11g | 802.11n |
|                              |         | Average                | Average | Average |
| 2412                         | 1       | 17.84                  | 14.75   | 12.35   |
| 2417                         | 2       | 19.22                  | 16.27   | 17.42   |
| 2422                         | 3       | N/A                    | 17.34   | 18.84   |
| 2437                         | 6       | 19.67                  | 17.66   | 18.90   |
| 2447                         | 8       | N/A                    | N/A     | 18.86   |
| 2452                         | 9       | N/A                    | 17.43   | 16.57   |
| 2457                         | 10      | 19.53                  | 15.58   | 16.28   |
| 2462                         | 11      | 18.12                  | 14.12   | 13.25   |

**Table 8-84**  
**2.4 GHz WLAN Maximum Average RF Power – Ant 2**

| 2.4GHz Conducted Power [dBm] |         |                        |         |         |
|------------------------------|---------|------------------------|---------|---------|
| Freq [MHz]                   | Channel | IEEE Transmission Mode |         |         |
|                              |         | 802.11b                | 802.11g | 802.11n |
|                              |         | Average                | Average | Average |
| 2412                         | 1       | 18.49                  | 14.96   | 12.82   |
| 2417                         | 2       | 19.73                  | 16.37   | 17.32   |
| 2422                         | 3       | N/A                    | 17.51   | 18.81   |
| 2437                         | 6       | 19.65                  | 17.62   | 18.95   |
| 2447                         | 8       | N/A                    | N/A     | 18.91   |
| 2452                         | 9       | N/A                    | 17.54   | 16.64   |
| 2457                         | 10      | 19.86                  | 15.79   | 16.44   |
| 2462                         | 11      | 18.25                  | 13.75   | 13.28   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 66 of 124                  |

**Table 8-85**  
**5 GHz WLAN Maximum Average RF Power – Ant 1**

| 5GHz (20MHz) Conducted Power [dBm] |         |                        |         |          |
|------------------------------------|---------|------------------------|---------|----------|
| Freq [MHz]                         | Channel | IEEE Transmission Mode |         |          |
|                                    |         | 802.11a                | 802.11n | 802.11ac |
|                                    |         | Average                | Average | Average  |
| 5180                               | 36      | 17.59                  | 17.98   | 12.98    |
| 5200                               | 40      | 17.58                  | 17.96   | 12.44    |
| 5220                               | 44      | 17.76                  | 17.85   | 12.79    |
| 5240                               | 48      | 17.73                  | 17.93   | 12.71    |
| 5260                               | 52      | 17.82                  | 17.95   | 12.83    |
| 5280                               | 56      | 17.62                  | 17.83   | 12.98    |
| 5300                               | 60      | 17.67                  | 17.94   | 12.62    |
| 5320                               | 64      | 17.81                  | 17.92   | 12.77    |
| 5500                               | 100     | 17.72                  | 17.99   | 12.64    |
| 5600                               | 120     | 17.38                  | 17.84   | 12.94    |
| 5620                               | 124     | 17.49                  | 17.80   | 12.50    |
| 5720                               | 144     | 17.40                  | 17.61   | 12.46    |
| 5745                               | 149     | 17.51                  | 17.81   | 12.61    |
| 5785                               | 157     | 17.77                  | 17.94   | 12.76    |
| 5825                               | 165     | 17.50                  | 17.64   | 12.53    |

**Table 8-86**  
**5 GHz WLAN Maximum Average RF Power – Ant 2**

| 5GHz (20MHz) Conducted Power [dBm] |         |                        |         |          |
|------------------------------------|---------|------------------------|---------|----------|
| Freq [MHz]                         | Channel | IEEE Transmission Mode |         |          |
|                                    |         | 802.11a                | 802.11n | 802.11ac |
|                                    |         | Average                | Average | Average  |
| 5180                               | 36      | 17.82                  | 17.86   | 12.64    |
| 5200                               | 40      | 17.61                  | 17.95   | 12.91    |
| 5220                               | 44      | 17.57                  | 17.99   | 12.94    |
| 5240                               | 48      | 17.93                  | 17.94   | 12.90    |
| 5260                               | 52      | 17.80                  | 17.89   | 12.64    |
| 5280                               | 56      | 17.93                  | 17.97   | 12.85    |
| 5300                               | 60      | 17.57                  | 17.70   | 12.50    |
| 5320                               | 64      | 17.71                  | 17.85   | 12.55    |
| 5500                               | 100     | 17.70                  | 17.83   | 12.59    |
| 5600                               | 120     | 17.64                  | 17.65   | 12.51    |
| 5620                               | 124     | 17.93                  | 17.86   | 12.82    |
| 5720                               | 144     | 17.96                  | 17.93   | 12.53    |
| 5745                               | 149     | 17.95                  | 17.94   | 12.57    |
| 5785                               | 157     | 17.95                  | 17.96   | 12.57    |
| 5825                               | 165     | 17.58                  | 17.87   | 12.62    |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 67 of 124                  |

**Table 8-87**  
**2.4 GHz WLAN Reduced Average RF Power – Ant 1**

| 2.4GHz Conducted Power [dBm] |         |                        |         |         |
|------------------------------|---------|------------------------|---------|---------|
| Freq [MHz]                   | Channel | IEEE Transmission Mode |         |         |
|                              |         | 802.11b                | 802.11g | 802.11n |
|                              |         | Average                | Average | Average |
| 2412                         | 1       | 12.84                  | 12.86   | 12.74   |
| 2437                         | 6       | 12.80                  | 12.84   | 12.75   |
| 2462                         | 11      | 13.46                  | 13.36   | 13.24   |

**Table 8-88**  
**2.4 GHz WLAN Reduced Average RF Power – Ant 2**

| 2.4GHz Conducted Power [dBm] |         |                        |         |         |
|------------------------------|---------|------------------------|---------|---------|
| Freq [MHz]                   | Channel | IEEE Transmission Mode |         |         |
|                              |         | 802.11b                | 802.11g | 802.11n |
|                              |         | Average                | Average | Average |
| 2412                         | 1       | 13.03                  | 13.00   | 12.90   |
| 2437                         | 6       | 12.94                  | 12.77   | 12.63   |
| 2462                         | 11      | 12.87                  | 12.84   | 12.67   |

**Table 8-89**  
**5 GHz WLAN Reduced Average RF Power – Ant 1**

| 5GHz (80MHz) Conducted Power [dBm] |         |                        |
|------------------------------------|---------|------------------------|
| Freq [MHz]                         | Channel | IEEE Transmission Mode |
|                                    |         | 802.11ac               |
|                                    |         | Average                |
| 5210                               | 42      | 9.98                   |
| 5290                               | 58      | 9.94                   |
| 5530                               | 106     | 9.95                   |
| 5610                               | 122     | 9.79                   |
| 5690                               | 138     | 9.74                   |
| 5775                               | 155     | 9.90                   |

**Table 8-90**  
**5 GHz WLAN Reduced Average RF Power – Ant 2**

| 5GHz (80MHz) Conducted Power [dBm] |         |                        |
|------------------------------------|---------|------------------------|
| Freq [MHz]                         | Channel | IEEE Transmission Mode |
|                                    |         | 802.11ac               |
|                                    |         | Average                |
| 5210                               | 42      | 9.98                   |
| 5290                               | 58      | 9.99                   |
| 5530                               | 106     | 9.91                   |
| 5610                               | 122     | 9.87                   |
| 5690                               | 138     | 9.98                   |
| 5775                               | 155     | 9.99                   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 68 of 124                  |

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

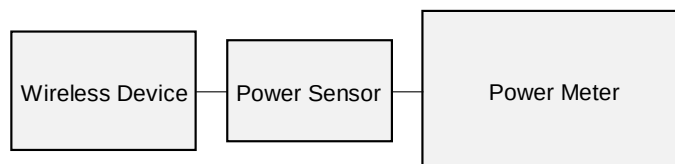


**Figure 8-3**  
**Power Measurement Setup**

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 69 of 124                  |

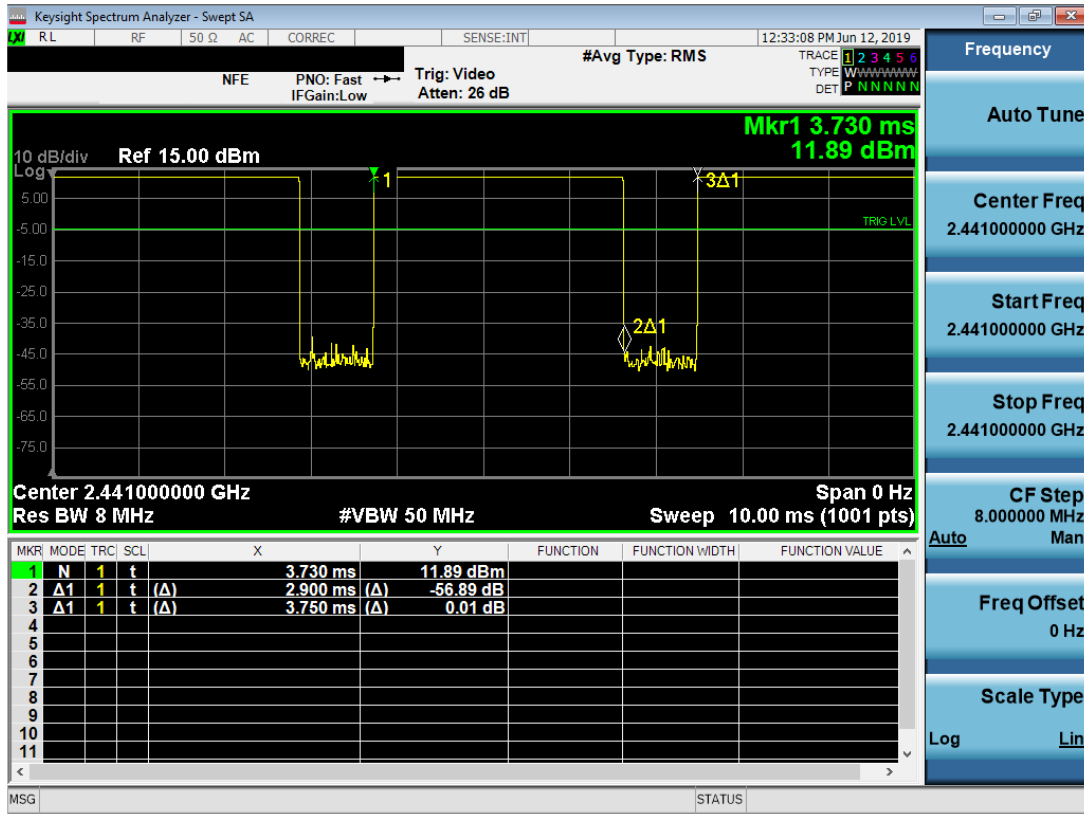
## 8.5 Bluetooth Conducted Powers

**Table 8-91**  
**Bluetooth Average RF Power**

| Frequency<br>[MHz] | Data<br>Rate<br>[Mbps] | Channel<br>No. | Avg Conducted<br>Power |        |
|--------------------|------------------------|----------------|------------------------|--------|
|                    |                        |                | [dBm]                  | [mW]   |
| 2402               | 1.0                    | 0              | 12.82                  | 19.157 |
| 2441               | 1.0                    | 39             | 12.98                  | 19.844 |
| 2480               | 1.0                    | 78             | 12.48                  | 17.683 |
| 2402               | 2.0                    | 0              | 10.73                  | 11.837 |
| 2441               | 2.0                    | 39             | 10.37                  | 10.883 |
| 2480               | 2.0                    | 78             | 10.08                  | 10.195 |
| 2402               | 3.0                    | 0              | 10.78                  | 11.979 |
| 2441               | 3.0                    | 39             | 10.42                  | 11.019 |
| 2480               | 3.0                    | 78             | 10.14                  | 10.326 |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 70 of 124                  |

**Figure 8-4**  
**Bluetooth Transmission Plot**



**Equation 8-1**  
**Bluetooth Duty Cycle Calculation**

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.90\ ms}{3.75\ ms} * 100\% = 77.3\%$$

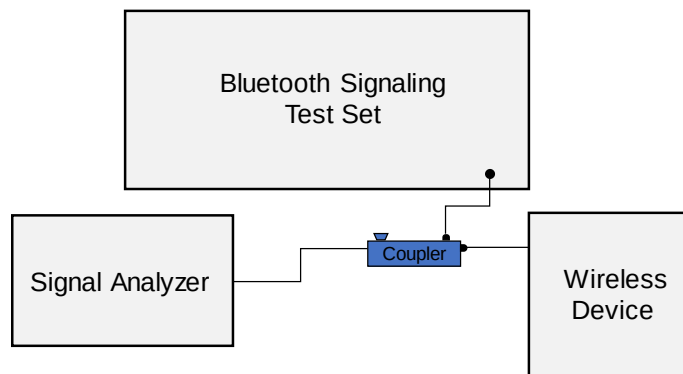


**Figure 8-5**  
**Power Measurement Setup**

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 71 of 124                                                                        |                                 |

## 9.1 Tissue Verification

Table 9-1  
Measured Tissue Properties

| Calibrated for Tests Performed on: | Tissue Type | Tissue Temp During Calibration (°C) | Measured Frequency (MHz) | Measured Conductivity, $\sigma$ (S/m) | Measured Dielectric Constant, $\epsilon$ | TARGET Conductivity, $\sigma$ (S/m) | TARGET Dielectric Constant, $\epsilon$ | % dev $\sigma$ | % dev $\epsilon$ |
|------------------------------------|-------------|-------------------------------------|--------------------------|---------------------------------------|------------------------------------------|-------------------------------------|----------------------------------------|----------------|------------------|
| 7/2/2019                           | 750B        | 23.6                                | 695                      | 0.923                                 | 57.653                                   | 0.959                               | 55.745                                 | -3.75%         | 3.42%            |
|                                    |             |                                     | 700                      | 0.924                                 | 57.619                                   | 0.959                               | 55.726                                 | -3.65%         | 3.40%            |
|                                    |             |                                     | 710                      | 0.929                                 | 57.629                                   | 0.960                               | 55.687                                 | -3.23%         | 3.49%            |
|                                    |             |                                     | 740                      | 0.940                                 | 57.563                                   | 0.963                               | 55.570                                 | -2.39%         | 3.59%            |
|                                    |             |                                     | 755                      | 0.947                                 | 57.543                                   | 0.964                               | 55.512                                 | -1.76%         | 3.66%            |
|                                    |             |                                     | 770                      | 0.951                                 | 57.523                                   | 0.965                               | 55.453                                 | -1.45%         | 3.73%            |
|                                    |             |                                     | 785                      | 0.956                                 | 57.480                                   | 0.966                               | 55.395                                 | -1.04%         | 3.76%            |
| 6/10/2019                          | 835B        | 20.0                                | 820                      | 0.977                                 | 54.093                                   | 0.969                               | 55.258                                 | 0.83%          | -2.11%           |
|                                    |             |                                     | 835                      | 0.983                                 | 54.072                                   | 0.970                               | 55.200                                 | 1.34%          | -2.04%           |
|                                    |             |                                     | 850                      | 0.990                                 | 54.043                                   | 0.988                               | 55.154                                 | 0.20%          | -2.01%           |
| 7/1/2019                           | 835B        | 22.1                                | 820                      | 0.945                                 | 56.950                                   | 0.969                               | 55.258                                 | -2.48%         | 3.06%            |
|                                    |             |                                     | 835                      | 0.951                                 | 56.942                                   | 0.970                               | 55.200                                 | -1.96%         | 3.16%            |
|                                    |             |                                     | 850                      | 0.957                                 | 56.918                                   | 0.988                               | 55.154                                 | -3.14%         | 3.20%            |
| 7/3/2019                           | 835B        | 20.4                                | 820                      | 0.967                                 | 55.380                                   | 0.969                               | 55.258                                 | -0.21%         | 0.22%            |
|                                    |             |                                     | 835                      | 0.972                                 | 55.349                                   | 0.970                               | 55.200                                 | 0.21%          | 0.27%            |
|                                    |             |                                     | 850                      | 0.978                                 | 55.303                                   | 0.988                               | 55.154                                 | -1.01%         | 0.27%            |
| 7/9/2019                           | 835B        | 20.0                                | 820                      | 0.965                                 | 55.272                                   | 0.969                               | 55.258                                 | -0.41%         | 0.03%            |
|                                    |             |                                     | 835                      | 0.971                                 | 55.240                                   | 0.970                               | 55.200                                 | 0.10%          | 0.07%            |
|                                    |             |                                     | 850                      | 0.977                                 | 55.186                                   | 0.988                               | 55.154                                 | -1.11%         | 0.06%            |
| 7/1/2019                           | 1750B       | 21.5                                | 1710                     | 1.460                                 | 52.571                                   | 1.463                               | 53.537                                 | -0.21%         | -1.80%           |
|                                    |             |                                     | 1750                     | 1.505                                 | 52.424                                   | 1.488                               | 53.432                                 | 1.14%          | -1.89%           |
|                                    |             |                                     | 1790                     | 1.551                                 | 52.287                                   | 1.514                               | 53.326                                 | 2.44%          | -1.95%           |
| 6/10/2019                          | 1900B       | 23.7                                | 1850                     | 1.519                                 | 52.304                                   | 1.520                               | 53.300                                 | -0.07%         | -1.87%           |
|                                    |             |                                     | 1880                     | 1.554                                 | 52.184                                   | 1.520                               | 53.300                                 | 2.24%          | -2.09%           |
|                                    |             |                                     | 1910                     | 1.588                                 | 52.087                                   | 1.520                               | 53.300                                 | 4.47%          | -2.28%           |
| 6/12/2019                          | 1900B       | 23.2                                | 1850                     | 1.510                                 | 51.888                                   | 1.520                               | 53.300                                 | -0.66%         | -2.65%           |
|                                    |             |                                     | 1880                     | 1.542                                 | 51.791                                   | 1.520                               | 53.300                                 | 1.45%          | -2.83%           |
|                                    |             |                                     | 1910                     | 1.575                                 | 51.706                                   | 1.520                               | 53.300                                 | 3.62%          | -2.99%           |
| 7/1/2019                           | 1900B       | 22.7                                | 1850                     | 1.503                                 | 51.182                                   | 1.520                               | 53.300                                 | -1.12%         | -3.97%           |
|                                    |             |                                     | 1880                     | 1.536                                 | 51.067                                   | 1.520                               | 53.300                                 | 1.05%          | -4.19%           |
|                                    |             |                                     | 1910                     | 1.570                                 | 50.971                                   | 1.520                               | 53.300                                 | 3.29%          | -4.37%           |
| 6/12/2019                          | 2450B       | 21.8                                | 2400                     | 1.988                                 | 52.651                                   | 1.902                               | 52.767                                 | 4.52%          | -0.22%           |
|                                    |             |                                     | 2450                     | 2.033                                 | 52.570                                   | 1.950                               | 52.700                                 | 4.26%          | -0.25%           |
|                                    |             |                                     | 2500                     | 2.080                                 | 52.522                                   | 2.021                               | 52.636                                 | 2.92%          | -0.22%           |
|                                    |             |                                     | 2550                     | 2.127                                 | 52.435                                   | 2.092                               | 52.573                                 | 1.67%          | -0.26%           |
|                                    |             |                                     | 2600                     | 2.177                                 | 52.375                                   | 2.163                               | 52.509                                 | 0.65%          | -0.26%           |
|                                    |             |                                     | 2650                     | 2.227                                 | 52.291                                   | 2.234                               | 52.445                                 | -0.31%         | -0.29%           |
|                                    |             |                                     | 2700                     | 2.276                                 | 52.194                                   | 2.305                               | 52.382                                 | -1.26%         | -0.36%           |
| 7/10/2019                          | 2450B       | 23.0                                | 2400                     | 1.979                                 | 51.763                                   | 1.902                               | 52.767                                 | 4.05%          | -1.90%           |
|                                    |             |                                     | 2450                     | 2.035                                 | 51.648                                   | 1.950                               | 52.700                                 | 4.36%          | -2.00%           |
|                                    |             |                                     | 2500                     | 2.094                                 | 51.512                                   | 2.021                               | 52.636                                 | 3.61%          | -2.14%           |
| 06/27/2019                         | 5200B-5800B | 22.1                                | 5180                     | 5.352                                 | 48.703                                   | 5.276                               | 49.041                                 | 1.44%          | -0.69%           |
|                                    |             |                                     | 5200                     | 5.385                                 | 48.659                                   | 5.299                               | 49.014                                 | 1.62%          | -0.72%           |
|                                    |             |                                     | 5220                     | 5.415                                 | 48.610                                   | 5.323                               | 48.987                                 | 1.73%          | -0.77%           |
|                                    |             |                                     | 5240                     | 5.442                                 | 48.567                                   | 5.346                               | 48.960                                 | 1.80%          | -0.80%           |
|                                    |             |                                     | 5260                     | 5.465                                 | 48.532                                   | 5.369                               | 48.933                                 | 1.79%          | -0.82%           |
|                                    |             |                                     | 5280                     | 5.493                                 | 48.504                                   | 5.393                               | 48.906                                 | 1.85%          | -0.82%           |
|                                    |             |                                     | 5300                     | 5.524                                 | 48.466                                   | 5.416                               | 48.879                                 | 1.99%          | -0.84%           |
|                                    |             |                                     | 5320                     | 5.560                                 | 48.429                                   | 5.439                               | 48.851                                 | 2.22%          | -0.86%           |
|                                    |             |                                     | 5500                     | 5.813                                 | 48.090                                   | 5.650                               | 48.607                                 | 2.88%          | -1.06%           |
|                                    |             |                                     | 5520                     | 5.850                                 | 48.051                                   | 5.673                               | 48.580                                 | 3.12%          | -1.09%           |
|                                    |             |                                     | 5540                     | 5.886                                 | 47.997                                   | 5.696                               | 48.553                                 | 3.34%          | -1.15%           |
|                                    |             |                                     | 5560                     | 5.917                                 | 47.968                                   | 5.720                               | 48.526                                 | 3.44%          | -1.15%           |
|                                    |             |                                     | 5580                     | 5.951                                 | 47.943                                   | 5.743                               | 48.499                                 | 3.62%          | -1.15%           |
|                                    |             |                                     | 5600                     | 5.972                                 | 47.912                                   | 5.766                               | 48.471                                 | 3.57%          | -1.15%           |
|                                    |             |                                     | 5620                     | 5.998                                 | 47.848                                   | 5.790                               | 48.444                                 | 3.59%          | -1.23%           |
|                                    |             |                                     | 5640                     | 6.033                                 | 47.789                                   | 5.813                               | 48.417                                 | 3.78%          | -1.30%           |
|                                    |             |                                     | 5660                     | 6.071                                 | 47.763                                   | 5.837                               | 48.390                                 | 4.01%          | -1.30%           |
|                                    |             |                                     | 5680                     | 6.102                                 | 47.735                                   | 5.860                               | 48.363                                 | 4.13%          | -1.30%           |
|                                    |             |                                     | 5700                     | 6.135                                 | 47.729                                   | 5.883                               | 48.336                                 | 4.28%          | -1.26%           |
|                                    |             |                                     | 5745                     | 6.197                                 | 47.605                                   | 5.936                               | 48.275                                 | 4.40%          | -1.39%           |
|                                    |             |                                     | 5765                     | 6.228                                 | 47.556                                   | 5.959                               | 48.248                                 | 4.51%          | -1.43%           |
|                                    |             |                                     | 5785                     | 6.268                                 | 47.514                                   | 5.982                               | 48.220                                 | 4.78%          | -1.46%           |
|                                    |             |                                     | 5800                     | 6.292                                 | 47.512                                   | 6.000                               | 48.200                                 | 4.87%          | -1.43%           |
|                                    |             |                                     | 5805                     | 6.298                                 | 47.519                                   | 6.006                               | 48.193                                 | 4.86%          | -1.40%           |
|                                    |             |                                     | 5825                     | 6.323                                 | 47.483                                   | 6.029                               | 48.166                                 | 4.88%          | -1.42%           |

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 72 of 124                  |

## 9.2 Test System Verification

Prior to SAR assessment, the system is verified to  $\pm 10\%$  of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix E.

**Table 9-2**  
**System Verification Results**

| System Verification<br>TARGET & MEASURED |                        |             |            |                |                  |                 |           |          |                                   |                                     |                                         |                             |
|------------------------------------------|------------------------|-------------|------------|----------------|------------------|-----------------|-----------|----------|-----------------------------------|-------------------------------------|-----------------------------------------|-----------------------------|
| SAR System #                             | Tissue Frequency (MHz) | Tissue Type | Date       | Amb. Temp (°C) | Liquid Temp (°C) | Input Power (W) | Source SN | Probe SN | Measured SAR <sub>1g</sub> (W/kg) | 1 W Target SAR <sub>1g</sub> (W/kg) | 1 W Normalized SAR <sub>1g</sub> (W/kg) | Deviation <sub>1g</sub> (%) |
| D                                        | 750                    | BODY        | 07/02/2019 | 23.6           | 22.6             | 0.200           | 1003      | 3914     | 1.690                             | 8.580                               | 8.450                                   | -1.52%                      |
| J                                        | 835                    | BODY        | 06/10/2019 | 20.5           | 20.0             | 0.200           | 4d132     | 7488     | 1.900                             | 9.670                               | 9.500                                   | -1.76%                      |
| D                                        | 835                    | BODY        | 07/01/2019 | 22.8           | 22.1             | 0.200           | 4d132     | 3914     | 2.030                             | 9.670                               | 10.150                                  | 4.96%                       |
| O                                        | 835                    | BODY        | 07/03/2019 | 22.0           | 20.4             | 0.200           | 4d047     | 7538     | 1.950                             | 9.470                               | 9.750                                   | 2.96%                       |
| O                                        | 835                    | BODY        | 07/09/2019 | 20.3           | 20.0             | 0.200           | 4d047     | 7538     | 2.040                             | 9.470                               | 10.200                                  | 7.71%                       |
| I                                        | 1750                   | BODY        | 07/01/2019 | 22.7           | 21.0             | 0.100           | 1150      | 7357     | 3.970                             | 36.600                              | 39.700                                  | 8.47%                       |
| G                                        | 1900                   | BODY        | 06/10/2019 | 22.0           | 22.1             | 0.100           | 5d148     | 7410     | 4.030                             | 39.100                              | 40.300                                  | 3.07%                       |
| G                                        | 1900                   | BODY        | 06/12/2019 | 22.6           | 22.0             | 0.100           | 5d149     | 7410     | 3.980                             | 39.400                              | 39.800                                  | 1.02%                       |
| J                                        | 1900                   | BODY        | 07/01/2019 | 20.7           | 22.7             | 0.100           | 5d080     | 7488     | 4.080                             | 39.200                              | 40.800                                  | 4.08%                       |
| L                                        | 2450                   | BODY        | 06/12/2019 | 22.8           | 21.8             | 0.100           | 981       | 7308     | 5.130                             | 50.900                              | 51.300                                  | 0.79%                       |
| K                                        | 2450                   | BODY        | 07/10/2019 | 22.7           | 22.5             | 0.100           | 719       | 7417     | 5.140                             | 50.100                              | 51.400                                  | 2.59%                       |
| L                                        | 2600                   | BODY        | 06/12/2019 | 22.8           | 21.8             | 0.100           | 1004      | 7308     | 5.730                             | 54.800                              | 57.300                                  | 4.56%                       |
| L                                        | 5250                   | BODY        | 06/27/2019 | 23.5           | 21.1             | 0.050           | 1191      | 7308     | 3.710                             | 77.000                              | 74.200                                  | -3.64%                      |
| L                                        | 5600                   | BODY        | 06/27/2019 | 23.5           | 21.1             | 0.050           | 1191      | 7308     | 3.890                             | 79.200                              | 77.800                                  | -1.77%                      |
| L                                        | 5750                   | BODY        | 06/27/2019 | 23.5           | 21.1             | 0.050           | 1191      | 7308     | 3.580                             | 76.100                              | 71.600                                  | -5.91%                      |

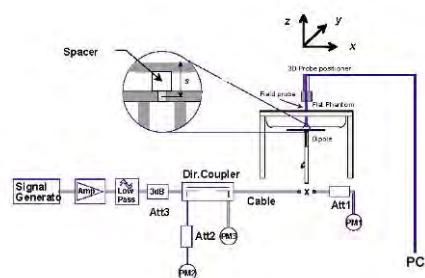


**Figure 9-1**  
**System Verification Setup Diagram**



**Figure 9-2**  
**System Verification Setup Photo**

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 73 of 124                  |

# 10 SAR DATA SUMMARY

## 10.1 Standalone Body SAR Data

Table 10-1  
GPRS/UMTS Body SAR Data

| MEASUREMENT RESULTS                      |      |           |         |                             |                       |                  |                      |           |                      |                 |            |       |          |                |              |        |
|------------------------------------------|------|-----------|---------|-----------------------------|-----------------------|------------------|----------------------|-----------|----------------------|-----------------|------------|-------|----------|----------------|--------------|--------|
| FREQUENCY                                |      | Mode      | Service | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Power Drift (dB) | Spacing              | Ant State | Device Serial Number | # of Time Slots | Duty Cycle | Side  | SAR (lg) | Scaling Factor | Reported SAR | Plot # |
| MHz                                      | Ch.  |           |         |                             |                       |                  |                      |           |                      |                 |            |       | (W/kg)   |                | (lg) (W/kg)  |        |
| 824.20                                   | 128  | GSM 850   | GPRS    | 30.5                        | 29.80                 | -0.08            | 16 mm                | N/A       | 29093                | 3               | 1.2/76     | back  | 0.712    | 1.175          | 0.837        |        |
| 836.60                                   | 190  | GSM 850   | GPRS    | 30.5                        | 29.65                 | -0.02            | 16 mm                | N/A       | 29093                | 3               | 1.2/76     | back  | 0.677    | 1.216          | 0.823        |        |
| 848.80                                   | 251  | GSM 850   | GPRS    | 30.5                        | 29.79                 | -0.12            | 16 mm                | N/A       | 29093                | 3               | 1.2/76     | back  | 0.707    | 1.178          | 0.833        |        |
| 824.20                                   | 128  | GSM 850   | GPRS    | 30.5                        | 29.80                 | -0.05            | 17 mm                | N/A       | 29093                | 3               | 1.2/76     | top   | 0.876    | 1.175          | 1.029        | A1     |
| 836.60                                   | 190  | GSM 850   | GPRS    | 30.5                        | 29.65                 | 0.01             | 17 mm                | N/A       | 29093                | 3               | 1.2/76     | top   | 0.795    | 1.216          | 0.967        |        |
| 848.80                                   | 251  | GSM 850   | GPRS    | 30.5                        | 29.79                 | -0.11            | 17 mm                | N/A       | 29093                | 3               | 1.2/76     | top   | 0.758    | 1.178          | 0.893        |        |
| 836.60                                   | 190  | GSM 850   | GPRS    | 30.5                        | 29.65                 | -0.01            | 0 mm                 | N/A       | 29093                | 3               | 1.2/76     | right | 0.228    | 1.216          | 0.277        |        |
| 836.60                                   | 190  | GSM 850   | GPRS    | 30.5                        | 29.65                 | 0.10             | 0 mm                 | N/A       | 29093                | 3               | 1.2/76     | left  | 0.200    | 1.216          | 0.243        |        |
| 836.60                                   | 190  | GSM 850   | GPRS    | 22.0                        | 20.93                 | 0.01             | 0 mm                 | N/A       | 29093                | 3               | 1.2/76     | back  | 0.409    | 1.279          | 0.523        |        |
| 836.60                                   | 190  | GSM 850   | GPRS    | 22.0                        | 20.93                 | -0.05            | 0 mm                 | N/A       | 29093                | 3               | 1.2/76     | top   | 0.404    | 1.279          | 0.517        |        |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 27.0                        | 26.15                 | 0.02             | 16 mm                | N/A       | 29143                | 3               | 1.2/76     | back  | 0.458    | 1.216          | 0.557        |        |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 27.0                        | 26.15                 | 0.05             | 17 mm                | N/A       | 29143                | 3               | 1.2/76     | top   | 0.549    | 1.216          | 0.668        |        |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 27.0                        | 26.15                 | 0.18             | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | right | 0.023    | 1.216          | 0.028        |        |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 27.0                        | 26.15                 | 0.08             | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | left  | 0.146    | 1.216          | 0.178        |        |
| 1850.20                                  | 512  | GSM 1900  | GPRS    | 18.5                        | 17.25                 | -0.04            | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | back  | 0.768    | 1.334          | 1.025        | A2     |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 18.5                        | 17.45                 | -0.01            | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | back  | 0.753    | 1.274          | 0.959        |        |
| 1909.80                                  | 810  | GSM 1900  | GPRS    | 18.5                        | 17.08                 | -0.03            | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | back  | 0.686    | 1.387          | 0.951        |        |
| 1880.00                                  | 661  | GSM 1900  | GPRS    | 18.5                        | 17.45                 | -0.06            | 0 mm                 | N/A       | 29143                | 3               | 1.2/76     | top   | 0.433    | 1.274          | 0.552        |        |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 25.0                        | 24.25                 | -0.01            | 16 mm                | 54        | 29143                | N/A             | 1:1        | back  | 0.463    | 1.189          | 0.551        |        |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 25.0                        | 24.25                 | 0.00             | 17 mm                | 54        | 29143                | N/A             | 1:1        | top   | 0.656    | 1.189          | 0.780        |        |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 25.0                        | 24.25                 | 0.00             | 0 mm                 | 54        | 29143                | N/A             | 1:1        | right | 0.194    | 1.189          | 0.231        |        |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 25.0                        | 24.25                 | 0.04             | 0 mm                 | 54        | 29143                | N/A             | 1:1        | left  | 0.131    | 1.189          | 0.156        |        |
| 826.40                                   | 4132 | UMTS 850  | RMC     | 18.0                        | 17.73                 | -0.02            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | back  | 0.970    | 1.064          | 1.032        |        |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 18.0                        | 17.84                 | -0.02            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | back  | 1.020    | 1.038          | 1.059        |        |
| 846.60                                   | 4233 | UMTS 850  | RMC     | 18.0                        | 17.82                 | -0.03            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | back  | 0.987    | 1.042          | 1.028        |        |
| 826.40                                   | 4132 | UMTS 850  | RMC     | 18.0                        | 17.73                 | -0.01            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | top   | 1.140    | 1.064          | 1.213        | A3     |
| 836.60                                   | 4183 | UMTS 850  | RMC     | 18.0                        | 17.84                 | -0.01            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | top   | 1.100    | 1.038          | 1.142        |        |
| 846.60                                   | 4233 | UMTS 850  | RMC     | 18.0                        | 17.82                 | 0.00             | 0 mm                 | 54        | 29168                | N/A             | 1:1        | top   | 1.030    | 1.042          | 1.073        |        |
| 826.40                                   | 4132 | UMTS 850  | RMC     | 18.0                        | 17.73                 | -0.02            | 0 mm                 | 54        | 29168                | N/A             | 1:1        | top   | 1.110    | 1.064          | 1.181        |        |
| 1712.40                                  | 1312 | UMTS 1750 | RMC     | 24.5                        | 23.03                 | 0.03             | 16 mm                | 25        | 29085                | N/A             | 1:1        | back  | 0.672    | 1.403          | 0.943        |        |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 24.5                        | 23.32                 | 0.01             | 16 mm                | 25        | 29085                | N/A             | 1:1        | back  | 0.735    | 1.312          | 0.964        |        |
| 1752.60                                  | 1513 | UMTS 1750 | RMC     | 24.5                        | 23.41                 | -0.01            | 16 mm                | 25        | 29085                | N/A             | 1:1        | back  | 0.754    | 1.285          | 0.969        |        |
| 1712.40                                  | 1312 | UMTS 1750 | RMC     | 24.5                        | 23.03                 | -0.02            | 17 mm                | 25        | 29085                | N/A             | 1:1        | top   | 0.888    | 1.403          | 1.246        |        |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 24.5                        | 23.32                 | 0.00             | 17 mm                | 25        | 29085                | N/A             | 1:1        | top   | 0.978    | 1.312          | 1.283        |        |
| 1752.60                                  | 1513 | UMTS 1750 | RMC     | 24.5                        | 23.41                 | -0.02            | 17 mm                | 25        | 29085                | N/A             | 1:1        | top   | 0.990    | 1.285          | 1.272        | A4     |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 24.5                        | 23.32                 | 0.12             | 0 mm                 | 25        | 29085                | N/A             | 1:1        | right | 0.070    | 1.312          | 0.092        |        |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 24.5                        | 23.32                 | 0.07             | 0 mm                 | 25        | 29085                | N/A             | 1:1        | left  | 0.127    | 1.312          | 0.167        |        |
| 1712.40                                  | 1312 | UMTS 1750 | RMC     | 14.0                        | 12.83                 | 0.00             | 0 mm                 | 25        | 29085                | N/A             | 1:1        | back  | 0.846    | 1.309          | 1.107        |        |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 14.0                        | 13.07                 | -0.01            | 0 mm                 | 25        | 29085                | N/A             | 1:1        | back  | 0.875    | 1.239          | 1.084        |        |
| 1752.60                                  | 1513 | UMTS 1750 | RMC     | 14.0                        | 13.21                 | 0.01             | 0 mm                 | 25        | 29085                | N/A             | 1:1        | back  | 0.861    | 1.199          | 1.032        |        |
| 1732.40                                  | 1412 | UMTS 1750 | RMC     | 14.0                        | 13.07                 | 0.06             | 0 mm                 | 25        | 29085                | N/A             | 1:1        | top   | 0.426    | 1.239          | 0.528        |        |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 24.5                        | 23.42                 | -0.02            | 16 mm                | 34        | 29085                | N/A             | 1:1        | back  | 0.614    | 1.282          | 0.787        |        |
| 1852.40                                  | 9262 | UMTS 1900 | RMC     | 24.5                        | 23.39                 | -0.03            | 17 mm                | 34        | 29085                | N/A             | 1:1        | top   | 0.650    | 1.291          | 0.839        |        |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 24.5                        | 23.42                 | -0.01            | 17 mm                | 34        | 29085                | N/A             | 1:1        | top   | 0.827    | 1.282          | 1.060        |        |
| 1907.60                                  | 9538 | UMTS 1900 | RMC     | 24.5                        | 23.16                 | -0.03            | 17 mm                | 34        | 29085                | N/A             | 1:1        | top   | 0.872    | 1.361          | 1.187        |        |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 24.5                        | 23.42                 | -0.01            | 0 mm                 | 34        | 29085                | N/A             | 1:1        | right | 0.039    | 1.282          | 0.050        |        |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 24.5                        | 23.42                 | -0.12            | 0 mm                 | 34        | 29085                | N/A             | 1:1        | left  | 0.182    | 1.282          | 0.233        |        |
| 1852.40                                  | 9262 | UMTS 1900 | RMC     | 14.0                        | 13.33                 | -0.03            | 0 mm                 | 34        | 29143                | N/A             | 1:1        | back  | 0.875    | 1.167          | 1.021        | A5     |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 14.0                        | 13.36                 | 0.01             | 0 mm                 | 34        | 29143                | N/A             | 1:1        | back  | 0.864    | 1.159          | 1.001        |        |
| 1907.60                                  | 9538 | UMTS 1900 | RMC     | 14.0                        | 13.02                 | -0.03            | 0 mm                 | 34        | 29143                | N/A             | 1:1        | back  | 0.779    | 1.253          | 0.976        |        |
| 1880.00                                  | 9400 | UMTS 1900 | RMC     | 14.0                        | 13.36                 | -0.04            | 0 mm                 | 34        | 29143                | N/A             | 1:1        | top   | 0.403    | 1.159          | 0.467        |        |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |      |           |         |                             |                       |                  | Body                 |           |                      |                 |            |       |          |                |              |        |
| Spatial Peak                             |      |           |         |                             |                       |                  | 1.6 W/kg (mW/g)      |           |                      |                 |            |       |          |                |              |        |
| Uncontrolled Exposure/General Population |      |           |         |                             |                       |                  | averaged over 1 gram |           |                      |                 |            |       |          |                |              |        |

Note: Blue entry represents variability measurement.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 74 of 124                  |

**Table 10-2**  
**LTE Band 12 Body SAR**

| MEASUREMENT RESULTS                                                                               |       |      |                 |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            |          |                |                   |        |    |
|---------------------------------------------------------------------------------------------------|-------|------|-----------------|-----------|-----------------------------|-----------------------|------------------|----------|-------------------------------------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|----|
| FREQUENCY                                                                                         |       | Mode | Bandwidth [MHz] | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number                            | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |    |
| MHz                                                                                               | Ch.   |      |                 |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 25.0                  | 24.23            | -0.05    | 0                                               | 29168      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.245          | 1.194             | 0.293  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 24.0                  | 23.44            | 0.03     | 1                                               | 29168      | QPSK    | 25        | 25      | 16 mm | back       | 1:1      | 0.191          | 1.138             | 0.217  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 25.0                  | 24.23            | 0.03     | 0                                               | 29168      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.204          | 1.194             | 0.244  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 24.0                  | 23.44            | 0.01     | 1                                               | 29168      | QPSK    | 25        | 25      | 17 mm | top        | 1:1      | 0.187          | 1.138             | 0.213  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 25.0                  | 24.23            | 0.11     | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.107          | 1.194             | 0.128  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 24.0                  | 23.44            | 0.09     | 1                                               | 29168      | QPSK    | 25        | 25      | 0 mm  | right      | 1:1      | 0.079          | 1.138             | 0.090  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 25.0                  | 24.23            | -0.10    | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.092          | 1.194             | 0.110  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 24.0                  | 23.44            | 0.00     | 1                                               | 29168      | QPSK    | 25        | 25      | 0 mm  | left       | 1:1      | 0.067          | 1.138             | 0.076  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 18.0                  | 17.30            | -0.07    | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.610          | 1.175             | 0.717  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 18.0                  | 17.37            | -0.03    | 0                                               | 29168      | QPSK    | 25        | 0       | 0 mm  | back       | 1:1      | 0.633          | 1.156             | 0.732  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 18.0                  | 17.30            | -0.17    | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.659          | 1.175             | 0.774  |    |
| 707.50                                                                                            | 23095 | Mid  | LTE Band 12     | 10        | 50                          | 18.0                  | 17.37            | -0.13    | 0                                               | 29168      | QPSK    | 25        | 0       | 0 mm  | top        | 1:1      | 0.691          | 1.156             | 0.799  | A6 |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |       |      |                 |           |                             |                       |                  |          | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |    |

**Table 10-3**  
**LTE Band 17 Body SAR**

| MEASUREMENT RESULTS                      |       |      |                 |           |                             |                       |                  |          |                      |            |         |           |         |       |            |          |                |                   |        |    |
|------------------------------------------|-------|------|-----------------|-----------|-----------------------------|-----------------------|------------------|----------|----------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|----|
| FREQUENCY                                |       | Mode | Bandwidth [MHz] | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |    |
| MHz                                      | Ch.   |      |                 |           |                             |                       |                  |          |                      |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 25.5                  | 24.93            | 0.06     | 0                    | 29168      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.271          | 1.140             | 0.309  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 24.5                  | 24.31            | 0.00     | 1                    | 29168      | QPSK    | 25        | 0       | 16 mm | back       | 1:1      | 0.215          | 1.045             | 0.225  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 25.5                  | 24.93            | -0.01    | 0                    | 29168      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.238          | 1.140             | 0.271  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 24.5                  | 24.31            | 0.01     | 1                    | 29168      | QPSK    | 25        | 0       | 17 mm | top        | 1:1      | 0.189          | 1.045             | 0.198  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 25.5                  | 24.93            | 0.02     | 0                    | 29168      | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.123          | 1.140             | 0.140  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 24.5                  | 24.31            | 0.00     | 1                    | 29168      | QPSK    | 25        | 0       | 0 mm  | right      | 1:1      | 0.097          | 1.045             | 0.101  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 25.5                  | 24.93            | -0.14    | 0                    | 29168      | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.108          | 1.140             | 0.123  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 24.5                  | 24.31            | 0.01     | 1                    | 29168      | QPSK    | 25        | 0       | 0 mm  | left       | 1:1      | 0.080          | 1.045             | 0.084  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.69            | -0.08    | 0                    | 29168      | QPSK    | 1         | 49      | 0 mm  | back       | 1:1      | 0.658          | 1.205             | 0.793  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.75            | -0.01    | 0                    | 29168      | QPSK    | 25        | 12      | 0 mm  | back       | 1:1      | 0.687          | 1.189             | 0.817  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.47            | -0.04    | 0                    | 29168      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.666          | 1.268             | 0.844  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.69            | -0.11    | 0                    | 29168      | QPSK    | 1         | 49      | 0 mm  | top        | 1:1      | 0.823          | 1.205             | 0.992  | A7 |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.75            | -0.03    | 0                    | 29168      | QPSK    | 25        | 12      | 0 mm  | top        | 1:1      | 0.805          | 1.189             | 0.957  |    |
| 710.00                                   | 23790 | Mid  | LTE Band 17     | 10        | 50                          | 18.5                  | 17.47            | -0.02    | 0                    | 29168      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1      | 0.786          | 1.268             | 0.997  |    |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |       |      |                 |           |                             |                       |                  |          | Body                 |            |         |           |         |       |            |          |                |                   |        |    |
| Spatial Peak                             |       |      |                 |           |                             |                       |                  |          | 1.6 W/kg (mW/g)      |            |         |           |         |       |            |          |                |                   |        |    |
| Uncontrolled Exposure/General Population |       |      |                 |           |                             |                       |                  |          | averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |    |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 75 of 124                  |

**Table 10-4**  
**LTE Band 13 Body SAR**

| MEASUREMENT RESULTS                                                                               |       |      |                 |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            |          |                |                   |        |    |
|---------------------------------------------------------------------------------------------------|-------|------|-----------------|-----------|-----------------------------|-----------------------|------------------|----------|-------------------------------------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|----|
| FREQUENCY                                                                                         |       | Mode | Bandwidth [MHz] | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number                            | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |    |
| MHz                                                                                               | Ch.   |      |                 |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 25.0                  | 24.46            | -0.01    | 0                                               | 29168      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.374          | 1.132             | 0.423  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 24.0                  | 23.44            | 0.00     | 1                                               | 29168      | QPSK    | 25        | 12      | 16 mm | back       | 1:1      | 0.304          | 1.138             | 0.346  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 25.0                  | 24.46            | -0.02    | 0                                               | 29168      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.442          | 1.132             | 0.500  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 24.0                  | 23.44            | 0.00     | 1                                               | 29168      | QPSK    | 25        | 12      | 17 mm | top        | 1:1      | 0.351          | 1.138             | 0.399  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 25.0                  | 24.46            | 0.04     | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.143          | 1.132             | 0.162  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 24.0                  | 23.44            | 0.08     | 1                                               | 29168      | QPSK    | 25        | 12      | 0 mm  | right      | 1:1      | 0.124          | 1.138             | 0.141  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 25.0                  | 24.46            | -0.01    | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.119          | 1.132             | 0.135  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 24.0                  | 23.44            | 0.02     | 1                                               | 29168      | QPSK    | 25        | 12      | 0 mm  | left       | 1:1      | 0.094          | 1.138             | 0.107  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.21            | 0.04     | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.852          | 1.199             | 1.022  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.30            | -0.01    | 0                                               | 29168      | QPSK    | 25        | 0       | 0 mm  | back       | 1:1      | 0.849          | 1.175             | 0.998  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.21            | -0.01    | 0                                               | 29168      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.846          | 1.199             | 1.014  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.21            | -0.07    | 0                                               | 29168      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 1.070          | 1.199             | 1.283  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.30            | -0.15    | 0                                               | 29168      | QPSK    | 25        | 0       | 0 mm  | top        | 1:1      | 1.100          | 1.175             | 1.293  | A8 |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.21            | -0.08    | 0                                               | 29168      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1      | 1.060          | 1.199             | 1.271  |    |
| 782.00                                                                                            | 23230 | Mid  | LTE Band 13     | 10        | 52                          | 19.0                  | 18.30            | 0.13     | 0                                               | 29168      | QPSK    | 25        | 0       | 0 mm  | top        | 1:1      | 1.060          | 1.175             | 1.246  |    |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |       |      |                 |           |                             |                       |                  |          | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |    |

Note: Blue entry represents variability measurement.

**Table 10-5**  
**LTE Band 26 (Cell) Body SAR**

| MEASUREMENT RESULTS                                                                               |       |      |                    |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            |          |                |                   |        |    |
|---------------------------------------------------------------------------------------------------|-------|------|--------------------|-----------|-----------------------------|-----------------------|------------------|----------|-------------------------------------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|----|
| FREQUENCY                                                                                         |       | Mode | Bandwidth [MHz]    | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number                            | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |    |
| MHz                                                                                               | Ch.   |      |                    |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 23.0                  | 22.43            | -0.01    | 0                                               | 29119      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.348          | 1.140             | 0.397  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 22.0                  | 21.42            | 0.03     | 1                                               | 29119      | QPSK    | 36        | 0       | 16 mm | back       | 1:1      | 0.272          | 1.143             | 0.311  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 23.0                  | 22.43            | 0.00     | 0                                               | 29119      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.389          | 1.140             | 0.443  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 22.0                  | 21.42            | -0.02    | 1                                               | 29119      | QPSK    | 36        | 0       | 17 mm | top        | 1:1      | 0.306          | 1.143             | 0.350  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 23.0                  | 22.43            | -0.04    | 0                                               | 29119      | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.138          | 1.140             | 0.157  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 22.0                  | 21.42            | -0.02    | 1                                               | 29119      | QPSK    | 36        | 0       | 0 mm  | right      | 1:1      | 0.108          | 1.143             | 0.123  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 23.0                  | 22.43            | 0.04     | 0                                               | 29119      | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.087          | 1.140             | 0.099  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 22.0                  | 21.42            | 0.02     | 1                                               | 29119      | QPSK    | 36        | 0       | 0 mm  | left       | 1:1      | 0.066          | 1.143             | 0.075  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.54            | -0.03    | 0                                               | 29119      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 1.060          | 1.112             | 1.179  | A9 |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.58            | -0.01    | 0                                               | 29119      | QPSK    | 36        | 18      | 0 mm  | back       | 1:1      | 1.040          | 1.102             | 1.146  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.50            | -0.01    | 0                                               | 29119      | QPSK    | 75        | 0       | 0 mm  | back       | 1:1      | 1.020          | 1.122             | 1.144  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.54            | -0.12    | 0                                               | 29119      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.920          | 1.112             | 1.023  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.58            | -0.15    | 0                                               | 29119      | QPSK    | 36        | 18      | 0 mm  | top        | 1:1      | 0.876          | 1.102             | 0.965  |    |
| 831.50                                                                                            | 26865 | Mid  | LTE Band 26 (Cell) | 15        | 55                          | 18.0                  | 17.50            | -0.04    | 0                                               | 29119      | QPSK    | 75        | 0       | 0 mm  | top        | 1:1      | 0.895          | 1.122             | 1.004  |    |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |       |      |                    |           |                             |                       |                  |          | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |    |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 76 of 124                  |

**Table 10-6**  
**LTE Band 5 (Cell) Body SAR**

| MEASUREMENT RESULTS                                                                               |       |      |                   |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            |          |                |                   |        |     |
|---------------------------------------------------------------------------------------------------|-------|------|-------------------|-----------|-----------------------------|-----------------------|------------------|----------|-------------------------------------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|-----|
| FREQUENCY                                                                                         |       | Mode | Bandwidth [MHz]   | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number                            | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |     |
| MHz                                                                                               | Ch.   |      |                   |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 25.0                  | 24.52            | 0.01     | 0                                               | 29101      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.548          | 1.117             | 0.612  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 24.0                  | 23.51            | 0.02     | 1                                               | 29101      | QPSK    | 25        | 0       | 16 mm | back       | 1:1      | 0.453          | 1.119             | 0.507  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 25.0                  | 24.52            | -0.02    | 0                                               | 29101      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.832          | 1.117             | 0.929  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 24.0                  | 23.51            | 0.06     | 1                                               | 29101      | QPSK    | 25        | 0       | 17 mm | top        | 1:1      | 0.667          | 1.119             | 0.746  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 24.0                  | 23.48            | -0.03    | 1                                               | 29101      | QPSK    | 50        | 0       | 17 mm | top        | 1:1      | 0.641          | 1.127             | 0.722  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 25.0                  | 24.52            | -0.10    | 0                                               | 29101      | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.198          | 1.117             | 0.221  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 24.0                  | 23.51            | 0.03     | 1                                               | 29101      | QPSK    | 25        | 0       | 0 mm  | right      | 1:1      | 0.161          | 1.119             | 0.180  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 25.0                  | 24.52            | 0.10     | 0                                               | 29101      | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.110          | 1.117             | 0.123  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 24.0                  | 23.51            | 0.09     | 1                                               | 29101      | QPSK    | 25        | 0       | 0 mm  | left       | 1:1      | 0.098          | 1.119             | 0.110  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.61            | -0.02    | 0                                               | 29101      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 1.070          | 1.094             | 1.171  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.66            | -0.01    | 0                                               | 29101      | QPSK    | 25        | 0       | 0 mm  | back       | 1:1      | 1.110          | 1.081             | 1.200  | A10 |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.64            | -0.03    | 0                                               | 29101      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 1.100          | 1.086             | 1.195  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.61            | -0.04    | 0                                               | 29101      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.991          | 1.094             | 1.084  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.66            | -0.03    | 0                                               | 29101      | QPSK    | 25        | 0       | 0 mm  | top        | 1:1      | 1.060          | 1.081             | 1.146  |     |
| 836.50                                                                                            | 20525 | Mid  | LTE Band 5 (Cell) | 10        | 55                          | 18.0                  | 17.64            | -0.04    | 0                                               | 29101      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1      | 1.060          | 1.086             | 1.151  |     |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |       |      |                   |           |                             |                       |                  |          | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |     |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 77 of 124                  |

**Table 10-7**  
**LTE Band 66 (AWS) Body SAR**

| MEASUREMENT RESULTS                      |        |      |                   |           |                             |                       |                  |          |                      |            |         |           |         |       |            |          |                |                   |        |     |
|------------------------------------------|--------|------|-------------------|-----------|-----------------------------|-----------------------|------------------|----------|----------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|-----|
| FREQUENCY                                |        | Mode | Bandwidth [MHz]   | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |     |
| MHz                                      | Ch.    |      |                   |           |                             |                       |                  |          |                      |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |     |
| 1720.00                                  | 132072 | Low  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.59            | 0.03     | 0                    | 29085      | QPSK    | 1         | 99      | 16 mm | back       | 1:1      | 0.730          | 1.233             | 0.900  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.93            | 0.02     | 0                    | 29085      | QPSK    | 1         | 99      | 16 mm | back       | 1:1      | 0.747          | 1.140             | 0.852  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.78            | -0.12    | 0                    | 29085      | QPSK    | 1         | 50      | 16 mm | back       | 1:1      | 0.729          | 1.180             | 0.860  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.95            | -0.03    | 1                    | 29085      | QPSK    | 50        | 25      | 16 mm | back       | 1:1      | 0.598          | 1.135             | 0.679  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.90            | 0.01     | 1                    | 29085      | QPSK    | 100       | 0       | 16 mm | back       | 1:1      | 0.589          | 1.148             | 0.676  |     |
| 1720.00                                  | 132072 | Low  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.59            | 0.08     | 0                    | 29085      | QPSK    | 1         | 99      | 17 mm | top        | 1:1      | 1.050          | 1.233             | 1.295  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.93            | 0.07     | 0                    | 29085      | QPSK    | 1         | 99      | 17 mm | top        | 1:1      | 1.080          | 1.140             | 1.231  | A11 |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.78            | -0.05    | 0                    | 29085      | QPSK    | 1         | 50      | 17 mm | top        | 1:1      | 1.020          | 1.180             | 1.204  |     |
| 1720.00                                  | 132072 | Low  | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.56            | 0.02     | 1                    | 29085      | QPSK    | 50        | 50      | 17 mm | top        | 1:1      | 0.829          | 1.242             | 1.030  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.82            | 0.02     | 1                    | 29085      | QPSK    | 50        | 25      | 17 mm | top        | 1:1      | 0.884          | 1.169             | 1.033  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.95            | 0.00     | 1                    | 29085      | QPSK    | 50        | 25      | 17 mm | top        | 1:1      | 0.846          | 1.135             | 0.960  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.90            | -0.02    | 1                    | 29085      | QPSK    | 100       | 0       | 17 mm | top        | 1:1      | 0.845          | 1.148             | 0.970  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.93            | 0.04     | 0                    | 29085      | QPSK    | 1         | 99      | 0 mm  | right      | 1:1      | 0.058          | 1.140             | 0.066  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.95            | 0.19     | 1                    | 29085      | QPSK    | 50        | 25      | 0 mm  | right      | 1:1      | 0.038          | 1.135             | 0.043  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.93            | -0.07    | 0                    | 29085      | QPSK    | 1         | 99      | 0 mm  | left       | 1:1      | 0.164          | 1.140             | 0.187  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 23.5                  | 22.95            | 0.02     | 1                    | 29085      | QPSK    | 50        | 25      | 0 mm  | left       | 1:1      | 0.127          | 1.135             | 0.144  |     |
| 1720.00                                  | 132072 | Low  | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.45            | 0.02     | 0                    | 29085      | QPSK    | 1         | 99      | 0 mm  | back       | 1:1      | 0.843          | 1.274             | 1.074  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.66            | -0.03    | 0                    | 29085      | QPSK    | 1         | 99      | 0 mm  | back       | 1:1      | 0.827          | 1.213             | 1.003  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.74            | -0.04    | 0                    | 29085      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.834          | 1.191             | 0.993  |     |
| 1720.00                                  | 132072 | Low  | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.64            | 0.13     | 0                    | 29085      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.896          | 1.219             | 1.092  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.88            | -0.02    | 0                    | 29085      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.884          | 1.153             | 1.019  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 14.01            | 0.00     | 0                    | 29085      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.833          | 1.119             | 0.932  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.73            | 0.15     | 0                    | 29085      | QPSK    | 100       | 0       | 0 mm  | back       | 1:1      | 0.822          | 1.194             | 0.981  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 13.74            | 0.04     | 0                    | 29085      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.423          | 1.191             | 0.504  |     |
| 1770.00                                  | 132572 | High | LTE Band 66 (AWS) | 20        | 24                          | 14.5                  | 14.01            | 0.05     | 0                    | 29085      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1      | 0.434          | 1.119             | 0.486  |     |
| 1745.00                                  | 132322 | Mid  | LTE Band 66 (AWS) | 20        | 24                          | 24.5                  | 23.93            | -0.13    | 0                    | 29085      | QPSK    | 1         | 99      | 17 mm | top        | 1:1      | 1.080          | 1.140             | 1.231  |     |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |        |      |                   |           |                             |                       |                  |          | Body                 |            |         |           |         |       |            |          |                |                   |        |     |
| Spatial Peak                             |        |      |                   |           |                             |                       |                  |          | 1.6 W/kg (mW/g)      |            |         |           |         |       |            |          |                |                   |        |     |
| Uncontrolled Exposure/General Population |        |      |                   |           |                             |                       |                  |          | averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |     |

Note: Blue entry represents variability measurement.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 78 of 124                  |

**Table 10-8**  
**LTE Band 2 (PCS) Body SAR**

| MEASUREMENT RESULTS                      |       |      |                  |           |                             |                       |                  |          |                      |                      |         |           |         |       |            |          |                |                   |        |     |
|------------------------------------------|-------|------|------------------|-----------|-----------------------------|-----------------------|------------------|----------|----------------------|----------------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|-----|
| FREQUENCY                                |       | Mode | Bandwidth [MHz]  | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number | Modulation           | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |     |
| MHz                                      | Ch.   |      |                  |           |                             |                       |                  |          |                      |                      |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.75            | 0.00     | 0                    | 29093                | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.673          | 1.189             | 0.800  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.70            | 0.02     | 0                    | 29093                | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.651          | 1.202             | 0.783  |     |
| 1900.00                                  | 19100 | High | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.67            | -0.03    | 0                    | 29093                | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.704          | 1.211             | 0.853  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.89            | -0.01    | 1                    | 29093                | QPSK    | 50        | 0       | 16 mm | back       | 1:1      | 0.545          | 1.151             | 0.627  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.88            | 0.01     | 1                    | 29093                | QPSK    | 100       | 0       | 16 mm | back       | 1:1      | 0.537          | 1.153             | 0.619  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.75            | 0.02     | 0                    | 29093                | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 1.020          | 1.189             | 1.213  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.70            | -0.10    | 0                    | 29093                | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.965          | 1.202             | 1.160  |     |
| 1900.00                                  | 19100 | High | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.67            | -0.09    | 0                    | 29093                | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.873          | 1.211             | 1.057  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.89            | -0.05    | 1                    | 29093                | QPSK    | 50        | 0       | 17 mm | top        | 1:1      | 0.849          | 1.151             | 0.977  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.85            | -0.05    | 1                    | 29093                | QPSK    | 50        | 25      | 17 mm | top        | 1:1      | 0.897          | 1.161             | 1.041  |     |
| 1900.00                                  | 19100 | High | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.70            | -0.07    | 1                    | 29093                | QPSK    | 50        | 25      | 17 mm | top        | 1:1      | 0.675          | 1.202             | 0.811  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.88            | -0.09    | 1                    | 29093                | QPSK    | 100       | 0       | 17 mm | top        | 1:1      | 0.840          | 1.153             | 0.969  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.75            | 0.01     | 0                    | 29093                | QPSK    | 1         | 0       | 0 mm  | right      | 1:1      | 0.208          | 1.189             | 0.247  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.89            | 0.10     | 1                    | 29093                | QPSK    | 50        | 0       | 0 mm  | right      | 1:1      | 0.163          | 1.151             | 0.188  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.75            | -0.12    | 0                    | 29093                | QPSK    | 1         | 0       | 0 mm  | left       | 1:1      | 0.183          | 1.189             | 0.218  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 23.5                  | 22.89            | -0.02    | 1                    | 29093                | QPSK    | 50        | 0       | 0 mm  | left       | 1:1      | 0.155          | 1.151             | 0.178  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.87            | 0.04     | 0                    | 29093                | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.763          | 1.156             | 0.882  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.79            | 0.03     | 0                    | 29093                | QPSK    | 1         | 50      | 0 mm  | back       | 1:1      | 0.718          | 1.178             | 0.846  |     |
| 1900.00                                  | 19100 | High | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.70            | -0.01    | 0                    | 29093                | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.721          | 1.202             | 0.867  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.93            | 0.02     | 0                    | 29093                | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.769          | 1.140             | 0.877  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.95            | 0.03     | 0                    | 29093                | QPSK    | 50        | 25      | 0 mm  | back       | 1:1      | 0.747          | 1.135             | 0.848  |     |
| 1900.00                                  | 19100 | High | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.72            | 0.00     | 0                    | 29093                | QPSK    | 50        | 25      | 0 mm  | back       | 1:1      | 0.695          | 1.197             | 0.832  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.85            | -0.01    | 0                    | 29093                | QPSK    | 100       | 0       | 0 mm  | back       | 1:1      | 0.763          | 1.161             | 0.886  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.87            | -0.10    | 0                    | 29093                | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.401          | 1.156             | 0.464  |     |
| 1880.00                                  | 18900 | Mid  | LTE Band 2 (PCS) | 20        | 18                          | 14.5                  | 13.95            | -0.12    | 0                    | 29093                | QPSK    | 50        | 25      | 0 mm  | top        | 1:1      | 0.403          | 1.135             | 0.457  |     |
| 1860.00                                  | 18700 | Low  | LTE Band 2 (PCS) | 20        | 18                          | 24.5                  | 23.75            | -0.13    | 0                    | 29093                | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 1.030          | 1.189             | 1.225  | A12 |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |       |      |                  |           |                             |                       |                  |          |                      | Body                 |         |           |         |       |            |          |                |                   |        |     |
| Spatial Peak                             |       |      |                  |           |                             |                       |                  |          |                      | 1.6 W/kg (mW/g)      |         |           |         |       |            |          |                |                   |        |     |
| Uncontrolled Exposure/General Population |       |      |                  |           |                             |                       |                  |          |                      | averaged over 1 gram |         |           |         |       |            |          |                |                   |        |     |

Note: Blue entry represents variability measurement.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 79 of 124                  |

**Table 10-9**  
**LTE Band 25 (PCS) Body SAR**

| MEASUREMENT RESULTS                                                                               |       |      |                   |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            |          |                |                   |        |     |
|---------------------------------------------------------------------------------------------------|-------|------|-------------------|-----------|-----------------------------|-----------------------|------------------|----------|-------------------------------------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|-----|
| FREQUENCY                                                                                         |       | Mode | Bandwidth [MHz]   | Ant State | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number                            | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |     |
| MHz                                                                                               | Ch.   |      |                   |           |                             |                       |                  |          |                                                 |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.38            | 0.02     | 0                                               | 29093      | QPSK    | 1         | 99      | 16 mm | back       | 1:1      | 0.707          | 1.153             | 0.815  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.20            | -0.04    | 0                                               | 29093      | QPSK    | 1         | 99      | 16 mm | back       | 1:1      | 0.695          | 1.202             | 0.835  |     |
| 1905.00                                                                                           | 26590 | High | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.17            | -0.01    | 0                                               | 29093      | QPSK    | 1         | 0       | 16 mm | back       | 1:1      | 0.693          | 1.211             | 0.839  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.34            | 0.00     | 1                                               | 29093      | QPSK    | 50        | 0       | 16 mm | back       | 1:1      | 0.666          | 1.164             | 0.775  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.33            | -0.03    | 1                                               | 29093      | QPSK    | 100       | 0       | 16 mm | back       | 1:1      | 0.694          | 1.167             | 0.810  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.38            | 0.02     | 0                                               | 29085      | QPSK    | 1         | 99      | 17 mm | top        | 1:1      | 0.994          | 1.153             | 1.146  | A13 |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.20            | 0.05     | 0                                               | 29085      | QPSK    | 1         | 99      | 17 mm | top        | 1:1      | 0.981          | 1.202             | 1.179  |     |
| 1905.00                                                                                           | 26590 | High | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.17            | -0.04    | 0                                               | 29085      | QPSK    | 1         | 0       | 17 mm | top        | 1:1      | 0.967          | 1.211             | 1.171  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.34            | -0.01    | 1                                               | 29085      | QPSK    | 50        | 0       | 17 mm | top        | 1:1      | 0.806          | 1.164             | 0.938  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.31            | -0.04    | 1                                               | 29085      | QPSK    | 50        | 50      | 17 mm | top        | 1:1      | 0.804          | 1.172             | 0.942  |     |
| 1905.00                                                                                           | 26590 | High | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.24            | 0.01     | 1                                               | 29085      | QPSK    | 50        | 0       | 17 mm | top        | 1:1      | 0.779          | 1.191             | 0.928  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.33            | -0.01    | 1                                               | 29085      | QPSK    | 100       | 0       | 17 mm | top        | 1:1      | 0.808          | 1.167             | 0.943  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.38            | 0.12     | 0                                               | 29085      | QPSK    | 1         | 99      | 0 mm  | right      | 1:1      | 0.075          | 1.153             | 0.086  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.34            | 0.04     | 1                                               | 29085      | QPSK    | 50        | 0       | 0 mm  | right      | 1:1      | 0.058          | 1.164             | 0.068  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 24.0                  | 23.38            | -0.17    | 0                                               | 29085      | QPSK    | 1         | 99      | 0 mm  | left       | 1:1      | 0.107          | 1.153             | 0.123  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 23.0                  | 22.34            | 0.13     | 1                                               | 29085      | QPSK    | 50        | 0       | 0 mm  | left       | 1:1      | 0.098          | 1.164             | 0.114  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.34            | -0.02    | 0                                               | 29093      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.755          | 1.306             | 0.986  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.50            | -0.03    | 0                                               | 29093      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.727          | 1.259             | 0.915  |     |
| 1905.00                                                                                           | 26590 | High | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.49            | -0.02    | 0                                               | 29093      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1      | 0.704          | 1.262             | 0.888  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.45            | -0.01    | 0                                               | 29093      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.765          | 1.274             | 0.975  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.51            | -0.03    | 0                                               | 29093      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1      | 0.743          | 1.256             | 0.933  |     |
| 1905.00                                                                                           | 26590 | High | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.48            | 0.00     | 0                                               | 29093      | QPSK    | 50        | 25      | 0 mm  | back       | 1:1      | 0.709          | 1.265             | 0.897  |     |
| 1860.00                                                                                           | 26140 | Low  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.45            | -0.03    | 0                                               | 29093      | QPSK    | 100       | 0       | 0 mm  | back       | 1:1      | 0.745          | 1.274             | 0.949  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.50            | -0.03    | 0                                               | 29093      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1      | 0.411          | 1.259             | 0.517  |     |
| 1882.50                                                                                           | 26365 | Mid  | LTE Band 25 (PCS) | 20        | 19                          | 14.5                  | 13.51            | -0.03    | 0                                               | 29093      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1      | 0.427          | 1.256             | 0.536  |     |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |       |      |                   |           |                             |                       |                  |          | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |     |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 80 of 124                  |

**Table 10-10**  
**LTE Band 41 Body SAR**

| MEASUREMENT RESULTS                      |       |          |                 |                             |                       |                  |          |                      |            |         |           |         |       |            |          |                |                   |        |     |
|------------------------------------------|-------|----------|-----------------|-----------------------------|-----------------------|------------------|----------|----------------------|------------|---------|-----------|---------|-------|------------|----------|----------------|-------------------|--------|-----|
| FREQUENCY                                |       | Mode     | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side  | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | Plot # |     |
| MHz                                      | Ch.   |          |                 |                             |                       |                  |          |                      |            |         |           |         |       |            | (W/kg)   |                | (W/kg)            |        |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 24.5                  | 23.38            | -0.07    | 0                    | 29150      | QPSK    | 1         | 99      | 16 mm | back       | 1:1.58   | 0.141          | 1.294             | 0.182  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 23.5                  | 22.55            | -0.06    | 1                    | 29150      | QPSK    | 50        | 50      | 16 mm | back       | 1:1.58   | 0.112          | 1.245             | 0.139  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 24.5                  | 23.38            | -0.06    | 0                    | 29150      | QPSK    | 1         | 99      | 17 mm | top        | 1:1.58   | 0.221          | 1.294             | 0.286  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 23.5                  | 22.55            | -0.14    | 1                    | 29150      | QPSK    | 50        | 50      | 17 mm | top        | 1:1.58   | 0.177          | 1.245             | 0.220  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 24.5                  | 23.38            | -0.10    | 0                    | 29150      | QPSK    | 1         | 99      | 0 mm  | right      | 1:1.58   | 0.243          | 1.294             | 0.314  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 23.5                  | 22.55            | -0.07    | 1                    | 29150      | QPSK    | 50        | 50      | 0 mm  | right      | 1:1.58   | 0.201          | 1.245             | 0.250  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 24.5                  | 23.38            | -0.18    | 0                    | 29150      | QPSK    | 1         | 99      | 0 mm  | left       | 1:1.58   | 0.388          | 1.294             | 0.502  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 23.5                  | 22.55            | -0.07    | 1                    | 29150      | QPSK    | 50        | 50      | 0 mm  | left       | 1:1.58   | 0.310          | 1.245             | 0.386  |     |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.72            | -0.15    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1.58   | 0.740          | 1.197             | 0.886  |     |
| 2549.50                                  | 40185 | Low-Mid  | LTE Band 41     | 20                          | 15.5                  | 14.57            | -0.08    | 0                    | 29150      | QPSK    | 1         | 99      | 0 mm  | back       | 1:1.58   | 0.685          | 1.239             | 0.849  |     |
| 2593.00                                  | 40620 | Mid      | LTE Band 41     | 20                          | 15.5                  | 14.64            | -0.07    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1.58   | 0.731          | 1.219             | 0.891  |     |
| 2636.50                                  | 41055 | Mid-High | LTE Band 41     | 20                          | 15.5                  | 14.41            | -0.11    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1.58   | 0.741          | 1.285             | 0.952  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 15.5                  | 14.43            | -0.15    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | back       | 1:1.58   | 0.763          | 1.279             | 0.976  |     |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.85            | -0.18    | 0                    | 29150      | QPSK    | 50        | 25      | 0 mm  | back       | 1:1.58   | 0.738          | 1.161             | 0.857  |     |
| 2549.50                                  | 40185 | Low-Mid  | LTE Band 41     | 20                          | 15.5                  | 14.70            | -0.16    | 0                    | 29150      | QPSK    | 50        | 50      | 0 mm  | back       | 1:1.58   | 0.691          | 1.202             | 0.831  |     |
| 2593.00                                  | 40620 | Mid      | LTE Band 41     | 20                          | 15.5                  | 14.71            | -0.10    | 0                    | 29150      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1.58   | 0.744          | 1.199             | 0.892  |     |
| 2636.50                                  | 41055 | Mid-High | LTE Band 41     | 20                          | 15.5                  | 14.50            | -0.10    | 0                    | 29150      | QPSK    | 50        | 50      | 0 mm  | back       | 1:1.58   | 0.764          | 1.259             | 0.962  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 15.5                  | 14.57            | -0.06    | 0                    | 29150      | QPSK    | 50        | 0       | 0 mm  | back       | 1:1.58   | 0.772          | 1.239             | 0.957  |     |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.71            | -0.18    | 0                    | 29150      | QPSK    | 100       | 0       | 0 mm  | back       | 1:1.58   | 0.697          | 1.199             | 0.836  |     |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.72            | -0.07    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1.58   | 0.769          | 1.197             | 0.920  |     |
| 2549.50                                  | 40185 | Low-Mid  | LTE Band 41     | 20                          | 15.5                  | 14.57            | -0.05    | 0                    | 29150      | QPSK    | 1         | 99      | 0 mm  | top        | 1:1.58   | 0.739          | 1.239             | 0.916  |     |
| 2593.00                                  | 40620 | Mid      | LTE Band 41     | 20                          | 15.5                  | 14.64            | -0.07    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1.58   | 0.789          | 1.219             | 0.962  |     |
| 2636.50                                  | 41055 | Mid-High | LTE Band 41     | 20                          | 15.5                  | 14.41            | -0.06    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1.58   | 0.816          | 1.285             | 1.049  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 15.5                  | 14.43            | -0.04    | 0                    | 29150      | QPSK    | 1         | 0       | 0 mm  | top        | 1:1.58   | 0.819          | 1.279             | 1.048  |     |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.85            | -0.07    | 0                    | 29150      | QPSK    | 50        | 25      | 0 mm  | top        | 1:1.58   | 0.776          | 1.161             | 0.901  |     |
| 2549.50                                  | 40185 | Low-Mid  | LTE Band 41     | 20                          | 15.5                  | 14.70            | -0.06    | 0                    | 29150      | QPSK    | 50        | 50      | 0 mm  | top        | 1:1.58   | 0.782          | 1.202             | 0.940  |     |
| 2593.00                                  | 40620 | Mid      | LTE Band 41     | 20                          | 15.5                  | 14.71            | -0.05    | 0                    | 29150      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1.58   | 0.821          | 1.199             | 0.984  |     |
| 2636.50                                  | 41055 | Mid-High | LTE Band 41     | 20                          | 15.5                  | 14.50            | -0.06    | 0                    | 29150      | QPSK    | 50        | 50      | 0 mm  | top        | 1:1.58   | 0.819          | 1.259             | 1.031  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 15.5                  | 14.57            | -0.06    | 0                    | 29150      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1.58   | 0.834          | 1.239             | 1.033  | A14 |
| 2506.00                                  | 39750 | Low      | LTE Band 41     | 20                          | 15.5                  | 14.71            | -0.06    | 0                    | 29150      | QPSK    | 100       | 0       | 0 mm  | top        | 1:1.58   | 0.779          | 1.199             | 0.934  |     |
| 2680.00                                  | 41490 | High     | LTE Band 41     | 20                          | 15.5                  | 14.57            | -0.06    | 0                    | 29150      | QPSK    | 50        | 0       | 0 mm  | top        | 1:1.58   | 0.832          | 1.239             | 1.031  |     |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |       |          |                 |                             |                       |                  |          | Body                 |            |         |           |         |       |            |          |                |                   |        |     |
| Spatial Peak                             |       |          |                 |                             |                       |                  |          | 1.6 W/kg (mW/g)      |            |         |           |         |       |            |          |                |                   |        |     |
| Uncontrolled Exposure/General Population |       |          |                 |                             |                       |                  |          | averaged over 1 gram |            |         |           |         |       |            |          |                |                   |        |     |

Note: Blue entry represents variability measurement.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 81 of 124                  |

**Table 10-11  
DTS Body SAR**

| MEASUREMENT RESULTS                      |     |         |         |                 |                             |                       |                  |                      |                 |                      |                  |       |                |          |                        |                             |                   |        |
|------------------------------------------|-----|---------|---------|-----------------|-----------------------------|-----------------------|------------------|----------------------|-----------------|----------------------|------------------|-------|----------------|----------|------------------------|-----------------------------|-------------------|--------|
| FREQUENCY                                |     | Mode    | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing              | Antenna Config. | Device Serial Number | Data Rate (Mbps) | Side  | Duty Cycle (%) | SAR (1g) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) | Plot # |
| MHz                                      | Ch. |         |         |                 |                             |                       |                  |                      |                 |                      |                  |       |                | (W/kg)   |                        |                             | (W/kg)            |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 20.0                        | 19.67                 | -0.05            | 15 mm                | 1               | 29333                | 1                | back  | 99.1           | 0.100    | 1.079                  | 1.009                       | 0.109             |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 20.0                        | 19.67                 | -0.09            | 14 mm                | 1               | 29333                | 1                | top   | 99.1           | 0.042    | 1.079                  | 1.009                       | 0.046             |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 20.0                        | 19.67                 | 0.10             | 0 mm                 | 1               | 29333                | 1                | right | 99.1           | 0.007    | 1.079                  | 1.009                       | 0.008             |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 20.0                        | 19.67                 | -0.02            | 6 mm                 | 1               | 29333                | 1                | left  | 99.1           | 0.372    | 1.079                  | 1.009                       | 0.405             |        |
| 2462                                     | 11  | 802.11b | DSSS    | 22              | 13.5                        | 13.46                 | 0.04             | 0 mm                 | 1               | 29143                | 1                | back  | 99.1           | 0.569    | 1.009                  | 1.009                       | 0.579             |        |
| 2462                                     | 11  | 802.11b | DSSS    | 22              | 13.5                        | 13.46                 | -0.15            | 0 mm                 | 1               | 29143                | 1                | top   | 99.1           | 0.119    | 1.009                  | 1.009                       | 0.121             |        |
| 2412                                     | 1   | 802.11b | DSSS    | 22              | 13.5                        | 12.84                 | 0.11             | 0 mm                 | 1               | 29143                | 1                | left  | 99.1           | 0.722    | 1.164                  | 1.009                       | 0.848             |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 13.5                        | 12.80                 | 0.14             | 0 mm                 | 1               | 29143                | 1                | left  | 99.1           | 0.694    | 1.175                  | 1.009                       | 0.823             |        |
| 2462                                     | 11  | 802.11b | DSSS    | 22              | 13.5                        | 13.46                 | 0.05             | 0 mm                 | 1               | 29143                | 1                | left  | 99.1           | 0.979    | 1.009                  | 1.009                       | 0.997             | A15    |
| 2457                                     | 10  | 802.11b | DSSS    | 22              | 20.0                        | 19.86                 | -0.01            | 15 mm                | 2               | 29333                | 1                | back  | 99.0           | 0.141    | 1.033                  | 1.010                       | 0.147             |        |
| 2457                                     | 10  | 802.11b | DSSS    | 22              | 20.0                        | 19.86                 | -0.09            | 14 mm                | 2               | 29333                | 1                | top   | 99.0           | 0.253    | 1.033                  | 1.010                       | 0.264             |        |
| 2457                                     | 10  | 802.11b | DSSS    | 22              | 20.0                        | 19.86                 | 0.00             | 6 mm                 | 2               | 29333                | 1                | right | 99.0           | 0.386    | 1.033                  | 1.010                       | 0.403             |        |
| 2457                                     | 10  | 802.11b | DSSS    | 22              | 20.0                        | 19.86                 | 0.19             | 0 mm                 | 2               | 29333                | 1                | left  | 99.0           | 0.001    | 1.033                  | 1.010                       | 0.001             |        |
| 2412                                     | 1   | 802.11b | DSSS    | 22              | 13.5                        | 13.03                 | 0.00             | 0 mm                 | 2               | 29143                | 1                | back  | 99.0           | 0.689    | 1.114                  | 1.010                       | 0.775             |        |
| 2437                                     | 6   | 802.11b | DSSS    | 22              | 13.5                        | 12.94                 | 0.06             | 0 mm                 | 2               | 29143                | 1                | back  | 99.0           | 0.383    | 1.138                  | 1.010                       | 0.440             |        |
| 2462                                     | 11  | 802.11b | DSSS    | 22              | 13.5                        | 12.87                 | -0.02            | 0 mm                 | 2               | 29143                | 1                | back  | 99.0           | 0.508    | 1.156                  | 1.010                       | 0.593             |        |
| 2412                                     | 1   | 802.11b | DSSS    | 22              | 13.5                        | 13.03                 | 0.09             | 0 mm                 | 2               | 29143                | 1                | top   | 99.0           | 0.377    | 1.114                  | 1.010                       | 0.424             |        |
| 2412                                     | 1   | 802.11b | DSSS    | 22              | 13.5                        | 13.03                 | -0.01            | 0 mm                 | 2               | 29143                | 1                | right | 99.0           | 0.647    | 1.114                  | 1.010                       | 0.728             |        |
| 2462                                     | 11  | 802.11b | DSSS    | 22              | 13.5                        | 13.46                 | -0.08            | 0 mm                 | 1               | 29143                | 1                | left  | 99.1           | 0.902    | 1.009                  | 1.009                       | 0.918             |        |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |     |         |         |                 |                             |                       |                  | Body                 |                 |                      |                  |       |                |          |                        |                             |                   |        |
| Spatial Peak                             |     |         |         |                 |                             |                       |                  | 1.6 W/kg (mW/g)      |                 |                      |                  |       |                |          |                        |                             |                   |        |
| Uncontrolled Exposure/General Population |     |         |         |                 |                             |                       |                  | averaged over 1 gram |                 |                      |                  |       |                |          |                        |                             |                   |        |

Note: Blue entry represents variability measurement.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 82 of 124                  |

**Table 10-12  
U-NII Body SAR**

| MEASUREMENT RESULTS                      |     |          |         |                 |                             |                       |                  |                      |                 |                      |                  |       |                |          |                        |                             |                          |        |
|------------------------------------------|-----|----------|---------|-----------------|-----------------------------|-----------------------|------------------|----------------------|-----------------|----------------------|------------------|-------|----------------|----------|------------------------|-----------------------------|--------------------------|--------|
| FREQUENCY                                |     | Mode     | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing              | Antenna Config. | Device Serial Number | Data Rate (Mbps) | Side  | Duty Cycle (%) | SAR (1g) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) (W/kg) | Plot # |
| MHz                                      | Ch. |          |         |                 |                             |                       |                  |                      |                 |                      |                  |       |                | (W/kg)   |                        |                             |                          |        |
| 5260                                     | 52  | 802.11a  | OFDM    | 20              | 18.0                        | 17.82                 | 0.20             | 15 mm                | 1               | 29333                | 6                | back  | 98.8           | 0.015    | 1.042                  | 1.012                       | 0.016                    |        |
| 5260                                     | 52  | 802.11a  | OFDM    | 20              | 18.0                        | 17.82                 | 0.20             | 14 mm                | 1               | 29333                | 6                | top   | 98.8           | 0.017    | 1.042                  | 1.012                       | 0.018                    |        |
| 5260                                     | 52  | 802.11a  | OFDM    | 20              | 18.0                        | 17.82                 | 0.19             | 0 mm                 | 1               | 29333                | 6                | right | 98.8           | 0.002    | 1.042                  | 1.012                       | 0.002                    |        |
| 5260                                     | 52  | 802.11a  | OFDM    | 20              | 18.0                        | 17.82                 | -0.10            | 6 mm                 | 1               | 29333                | 6                | left  | 98.8           | 0.177    | 1.042                  | 1.012                       | 0.187                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.94                  | -0.18            | 0 mm                 | 1               | 29333                | 29.3             | back  | 94.5           | 0.375    | 1.014                  | 1.058                       | 0.402                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.94                  | 0.17             | 0 mm                 | 1               | 29333                | 29.3             | top   | 94.5           | 0.090    | 1.014                  | 1.058                       | 0.097                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.94                  | -0.03            | 0 mm                 | 1               | 29333                | 29.3             | left  | 94.5           | 0.218    | 1.014                  | 1.058                       | 0.234                    |        |
| 5280                                     | 56  | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | -0.13            | 15 mm                | 2               | 29333                | 6                | back  | 98.7           | 0.098    | 1.016                  | 1.013                       | 0.101                    |        |
| 5280                                     | 56  | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | 0.17             | 14 mm                | 2               | 29333                | 6                | top   | 98.7           | 0.058    | 1.016                  | 1.013                       | 0.060                    |        |
| 5260                                     | 52  | 802.11a  | OFDM    | 20              | 18.0                        | 17.80                 | 0.00             | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.731    | 1.047                  | 1.013                       | 0.775                    |        |
| 5280                                     | 56  | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | 0.00             | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.815    | 1.016                  | 1.013                       | 0.839                    |        |
| 5280                                     | 56  | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | 0.14             | 0 mm                 | 2               | 29333                | 6                | left  | 98.7           | 0.009    | 1.016                  | 1.013                       | 0.009                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.15            | 0 mm                 | 2               | 29333                | 29.3             | back  | 94.5           | 0.620    | 1.002                  | 1.058                       | 0.657                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.08            | 0 mm                 | 2               | 29333                | 29.3             | top   | 94.5           | 0.368    | 1.002                  | 1.058                       | 0.390                    |        |
| 5290                                     | 58  | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.15            | 0 mm                 | 2               | 29333                | 29.3             | right | 94.5           | 0.545    | 1.002                  | 1.058                       | 0.578                    |        |
| 5500                                     | 100 | 802.11a  | OFDM    | 20              | 18.0                        | 17.72                 | 0.15             | 15 mm                | 1               | 29333                | 6                | back  | 98.8           | 0.026    | 1.067                  | 1.012                       | 0.028                    |        |
| 5500                                     | 100 | 802.11a  | OFDM    | 20              | 18.0                        | 17.72                 | 0.11             | 14 mm                | 1               | 29333                | 6                | top   | 98.8           | 0.024    | 1.067                  | 1.012                       | 0.026                    |        |
| 5500                                     | 100 | 802.11a  | OFDM    | 20              | 18.0                        | 17.72                 | -0.18            | 0 mm                 | 1               | 29333                | 6                | right | 98.8           | 0.004    | 1.067                  | 1.012                       | 0.004                    |        |
| 5500                                     | 100 | 802.11a  | OFDM    | 20              | 18.0                        | 17.72                 | -0.03            | 6 mm                 | 1               | 29333                | 6                | left  | 98.8           | 0.373    | 1.067                  | 1.012                       | 0.403                    |        |
| 5530                                     | 106 | 802.11ac | OFDM    | 80              | 10.0                        | 9.95                  | 0.15             | 0 mm                 | 1               | 29333                | 29.3             | back  | 94.5           | 0.433    | 1.012                  | 1.058                       | 0.464                    |        |
| 5530                                     | 106 | 802.11ac | OFDM    | 80              | 10.0                        | 9.95                  | 0.16             | 0 mm                 | 1               | 29333                | 29.3             | top   | 94.5           | 0.157    | 1.012                  | 1.058                       | 0.168                    |        |
| 5530                                     | 106 | 802.11ac | OFDM    | 80              | 10.0                        | 9.95                  | -0.04            | 0 mm                 | 1               | 29333                | 29.3             | left  | 94.5           | 0.396    | 1.012                  | 1.058                       | 0.424                    |        |
| 5720                                     | 144 | 802.11a  | OFDM    | 20              | 18.0                        | 17.96                 | -0.14            | 15 mm                | 2               | 29333                | 6                | back  | 98.7           | 0.090    | 1.009                  | 1.013                       | 0.092                    |        |
| 5720                                     | 144 | 802.11a  | OFDM    | 20              | 18.0                        | 17.96                 | -0.19            | 14 mm                | 2               | 29333                | 6                | top   | 98.7           | 0.040    | 1.009                  | 1.013                       | 0.041                    |        |
| 5500                                     | 100 | 802.11a  | OFDM    | 20              | 18.0                        | 17.70                 | -0.01            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 1.050    | 1.072                  | 1.013                       | 1.140                    |        |
| 5620                                     | 124 | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | -0.10            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 1.150    | 1.016                  | 1.013                       | 1.184                    | A16    |
| 5720                                     | 144 | 802.11a  | OFDM    | 20              | 18.0                        | 17.96                 | -0.15            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.941    | 1.009                  | 1.013                       | 0.962                    |        |
| 5720                                     | 144 | 802.11a  | OFDM    | 20              | 18.0                        | 17.96                 | 0.12             | 0 mm                 | 2               | 29333                | 6                | left  | 98.7           | 0.010    | 1.009                  | 1.013                       | 0.010                    |        |
| 5690                                     | 138 | 802.11ac | OFDM    | 80              | 10.0                        | 9.98                  | 0.13             | 0 mm                 | 2               | 29333                | 29.3             | back  | 94.5           | 0.540    | 1.005                  | 1.058                       | 0.574                    |        |
| 5690                                     | 138 | 802.11ac | OFDM    | 80              | 10.0                        | 9.98                  | 0.01             | 0 mm                 | 2               | 29333                | 29.3             | top   | 94.5           | 0.269    | 1.005                  | 1.058                       | 0.286                    |        |
| 5690                                     | 138 | 802.11ac | OFDM    | 80              | 10.0                        | 9.98                  | -0.10            | 0 mm                 | 2               | 29333                | 29.3             | right | 94.5           | 0.661    | 1.005                  | 1.058                       | 0.703                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.77                 | -0.12            | 15 mm                | 1               | 29333                | 6                | back  | 98.8           | 0.027    | 1.054                  | 1.012                       | 0.029                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.77                 | -0.11            | 14 mm                | 1               | 29333                | 6                | top   | 98.8           | 0.023    | 1.054                  | 1.012                       | 0.025                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.77                 | 0.18             | 0 mm                 | 1               | 29333                | 6                | right | 98.8           | 0.000    | 1.054                  | 1.012                       | 0.000                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.77                 | -0.10            | 6 mm                 | 1               | 29333                | 6                | left  | 98.8           | 0.342    | 1.054                  | 1.012                       | 0.365                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.90                  | -0.18            | 0 mm                 | 1               | 29333                | 29.3             | back  | 94.5           | 0.318    | 1.023                  | 1.058                       | 0.344                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.90                  | 0.10             | 0 mm                 | 1               | 29333                | 29.3             | top   | 94.5           | 0.061    | 1.023                  | 1.058                       | 0.066                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.90                  | 0.05             | 0 mm                 | 1               | 29333                | 29.3             | left  | 94.5           | 0.363    | 1.023                  | 1.058                       | 0.393                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.95                 | 0.10             | 15 mm                | 2               | 29333                | 6                | back  | 98.7           | 0.064    | 1.012                  | 1.013                       | 0.066                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.95                 | -0.17            | 14 mm                | 2               | 29333                | 6                | top   | 98.7           | 0.031    | 1.012                  | 1.013                       | 0.032                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.95                 | -0.10            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.745    | 1.012                  | 1.013                       | 0.764                    |        |
| 5785                                     | 157 | 802.11a  | OFDM    | 20              | 18.0                        | 17.95                 | 0.12             | 0 mm                 | 2               | 29333                | 6                | left  | 98.7           | 0.006    | 1.012                  | 1.013                       | 0.006                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.17            | 0 mm                 | 2               | 29333                | 29.3             | back  | 94.5           | 0.370    | 1.002                  | 1.058                       | 0.392                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.03            | 0 mm                 | 2               | 29333                | 29.3             | top   | 94.5           | 0.186    | 1.002                  | 1.058                       | 0.197                    |        |
| 5775                                     | 155 | 802.11ac | OFDM    | 80              | 10.0                        | 9.99                  | -0.10            | 0 mm                 | 2               | 29333                | 29.3             | right | 94.5           | 0.507    | 1.002                  | 1.058                       | 0.537                    |        |
| 5280                                     | 56  | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | -0.08            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.814    | 1.016                  | 1.013                       | 0.838                    |        |
| 5620                                     | 124 | 802.11a  | OFDM    | 20              | 18.0                        | 17.93                 | -0.13            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 1.150    | 1.016                  | 1.013                       | 1.184                    |        |
| 5720                                     | 144 | 802.11a  | OFDM    | 20              | 18.0                        | 17.96                 | -0.11            | 6 mm                 | 2               | 29333                | 6                | right | 98.7           | 0.920    | 1.009                  | 1.013                       | 0.940                    |        |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |     |          |         |                 |                             |                       |                  | Body                 |                 |                      |                  |       |                |          |                        |                             |                          |        |
| Spatial Peak                             |     |          |         |                 |                             |                       |                  | 1.6 W/kg (mW/g)      |                 |                      |                  |       |                |          |                        |                             |                          |        |
| Uncontrolled Exposure/General Population |     |          |         |                 |                             |                       |                  | averaged over 1 gram |                 |                      |                  |       |                |          |                        |                             |                          |        |

Note: Blue entries represent variability measurements.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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**Table 10-13  
DSS Body SAR**

| MEASUREMENT RESULTS                                                                               |     |           |         |                             |                       |                  |                                                 |                      |                  |       |                |          |                             |                             |                   |        |
|---------------------------------------------------------------------------------------------------|-----|-----------|---------|-----------------------------|-----------------------|------------------|-------------------------------------------------|----------------------|------------------|-------|----------------|----------|-----------------------------|-----------------------------|-------------------|--------|
| FREQUENCY                                                                                         |     | Mode      | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing                                         | Device Serial Number | Data Rate (Mbps) | Side  | Duty Cycle (%) | SAR (1g) | Scaling Factor (Cond Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) | Plot # |
| MHz                                                                                               | Ch. |           |         |                             |                       |                  |                                                 |                      |                  |       |                | (W/kg)   |                             |                             | (W/kg)            |        |
| 2441                                                                                              | 39  | Bluetooth | FHSS    | 13.0                        | 12.98                 | -0.16            | 0 mm                                            | 29119                | 1                | back  | 77.3           | 0.286    | 1.005                       | 1.294                       | 0.372             |        |
| 2441                                                                                              | 39  | Bluetooth | FHSS    | 13.0                        | 12.98                 | 0.12             | 0 mm                                            | 29333                | 1                | top   | 77.3           | 0.071    | 1.005                       | 1.294                       | 0.092             |        |
| 2441                                                                                              | 39  | Bluetooth | FHSS    | 13.0                        | 12.98                 | 0.00             | 0 mm                                            | 29119                | 1                | right | 77.3           | 0.000    | 1.005                       | 1.294                       | 0.000             |        |
| 2402                                                                                              | 0   | Bluetooth | FHSS    | 13.0                        | 12.82                 | -0.04            | 0 mm                                            | 29333                | 1                | left  | 77.3           | 0.582    | 1.042                       | 1.294                       | 0.785             |        |
| 2441                                                                                              | 39  | Bluetooth | FHSS    | 13.0                        | 12.98                 | -0.16            | 0 mm                                            | 29333                | 1                | left  | 77.3           | 0.642    | 1.005                       | 1.294                       | 0.835             | A17    |
| 2480                                                                                              | 78  | Bluetooth | FHSS    | 13.0                        | 12.48                 | -0.08            | 0 mm                                            | 29333                | 1                | left  | 77.3           | 0.634    | 1.127                       | 1.294                       | 0.925             |        |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population |     |           |         |                             |                       |                  | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |                      |                  |       |                |          |                             |                             |                   |        |

## 10.2 SAR Test Notes

### General Notes:

- The test data reported are the worst-case SAR values according to test procedures specified in FCC KDB Publication 616217 D04v01r02 and FCC KDB Publication 447498 D01v06.
- Batteries are fully charged at the beginning of the SAR measurements.
- Liquid tissue depth was at least 15.0 cm for all frequencies.
- The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
- SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
- Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 12 for variability analysis.
- FCC KDB Publication 616217 D04v01r02 Section 4.3, SAR tests are required for the back surface and edges of the tablet with the tablet touching the phantom. The SAR Exclusion Threshold in FCC KDB 447498 D01v06 was applied to determine SAR test exclusion for adjacent edge configurations.
- This device supports dynamic antenna tuning for some bands. Per April 2019 Workshop Notes, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Section 13 for supplemental data.

### GSM Test Notes:

- Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
- Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is  $\leq 0.8$  W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is  $> \frac{1}{2}$  dB, instead of the middle channel, the highest output power channel was used.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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#### UMTS Notes:

1. UMTS mode in was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is  $\leq 0.8$  W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is  $> \frac{1}{2}$  dB, instead of the middle channel, the highest output power channel was used.

#### LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 7.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported LTE Band 41 SAR measured at the highest output power channel in a given a test configuration was  $> 0.6$  W/kg for 1g evaluations, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not  $> 0.25$  dB higher than the maximum output power when downlink carrier aggregation was inactive.

#### WLAN Notes:

1. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.6.4 for more information.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 7.6.5 for more information.
3. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Section 11 for complete analysis.
4. When the maximum reported 1g averaged SAR is  $\leq 0.8$  W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was  $\leq 1.20$  W/kg for 1g evaluations or all test channels were measured.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The

|                                         |                                                                                     |                              |                                                                                       |                                 |
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reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.

#### Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 100% transmission duty factor to determine compliance. See Section 8.5 for the time domain plot and calculation for the duty factor of the device.

|                                                |                                                                                     |                                     |                                                                                       |                                        |
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| <b>Document S/N:</b><br>1M1906070094-01-R1.A3L | <b>Test Dates:</b><br>06/10/19 - 07/10/19                                           | <b>DUT Type:</b><br>Portable Tablet |                                                                                       | Page 86 of 124                         |

# 11 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

## 11.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

## 11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is  $\leq 1.6$  W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g SAR.

**Table 11-1**  
**Simultaneous Transmission Scenario with 2.4 GHz WLAN**

| Simult Tx | Configuration | GPRS 850 SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|-----------|---------------|----------------------|-------------------------------|-------------------------------|---------------------|------------|--------------|-------|------|------|
|           |               | 1                    | 2                             | 3                             | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.837                | 0.579                         | 0.775                         | 1.416               | See Note 1 | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 1.029                | 0.121                         | 0.424                         | 1.150               | 1.453      | <b>1.574</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                | 0.400                         | 0.400                         | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.277                | 0.008                         | 0.728                         | 0.285               | 1.005      | 1.013        | N/A   | N/A  | N/A  |
|           | Left          | 0.243                | 0.997                         | 0.001                         | 1.240               | 0.244      | 1.241        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | GPRS 1900 SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|           |               | 1                    | 2                             | 3                             | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.025                | 0.579                         | 0.775                         | See Note 1          | See Note 1 | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 0.668                | 0.121                         | 0.424                         | 0.789               | 1.092      | <b>1.213</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                | 0.400                         | 0.400                         | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.028                | 0.008                         | 0.728                         | 0.036               | 0.756      | 0.764        | N/A   | N/A  | N/A  |
|           | Left          | 0.178                | 0.997                         | 0.001                         | 1.175               | 0.179      | 1.176        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 850 SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|           |               | 1                    | 2                             | 3                             | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.059                | 0.579                         | 0.775                         | See Note 1          | See Note 1 | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.213                | 0.121                         | 0.424                         | <b>1.334</b>        | See Note 1 | See Note 1   | 0.02  | 0.03 | 0.00 |
|           | Bottom        | 0.400                | 0.400                         | 0.400                         | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.231                | 0.008                         | 0.728                         | 0.239               | 0.959      | 0.967        | N/A   | N/A  | N/A  |
|           | Left          | 0.156                | 0.997                         | 0.001                         | 1.153               | 0.157      | 1.154        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 87 of 124                  |

| Simult Tx | Configuration | UMTS 1750 SAR (W/kg)   | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|------------------------|-------------------------------|-------------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                      | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.107                  | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.283                  | 0.121                         | 0.424                         | <b>1.404</b>        | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.00 |
|           | Bottom        | 0.400                  | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.092                  | 0.008                         | 0.728                         | 0.100               | 0.820        | 0.828        | N/A   | N/A  | N/A  |
|           | Left          | 0.167                  | 0.997                         | 0.001                         | 1.164               | 0.168        | 1.165        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 1900 SAR (W/kg)   | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                      | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.021                  | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.187                  | 0.121                         | 0.424                         | <b>1.308</b>        | See Note 1   | See Note 1   | 0.02  | 0.02 | 0.00 |
|           | Bottom        | 0.400                  | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.050                  | 0.008                         | 0.728                         | 0.058               | 0.778        | 0.786        | N/A   | N/A  | N/A  |
|           | Left          | 0.233                  | 0.997                         | 0.001                         | 1.230               | 0.234        | 1.231        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 12 SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                      | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.732                  | 0.579                         | 0.775                         | 1.311               | <b>1.507</b> | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.799                  | 0.121                         | 0.424                         | 0.920               | 1.223        | 1.344        | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                  | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.128                  | 0.008                         | 0.728                         | 0.136               | 0.856        | 0.864        | N/A   | N/A  | N/A  |
|           | Left          | 0.110                  | 0.997                         | 0.001                         | 1.107               | 0.111        | 1.108        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 17 SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                      | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.844                  | 0.579                         | 0.775                         | 1.423               | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.997                  | 0.121                         | 0.424                         | 1.118               | 1.421        | <b>1.542</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                  | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.140                  | 0.008                         | 0.728                         | 0.148               | 0.868        | 0.876        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                  | 0.997                         | 0.001                         | 1.120               | 0.124        | 1.121        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 13 SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                      | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.022                  | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.293                  | 0.121                         | 0.424                         | <b>1.414</b>        | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.00 |
|           | Bottom        | 0.400                  | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.162                  | 0.008                         | 0.728                         | 0.170               | 0.890        | 0.898        | N/A   | N/A  | N/A  |
|           | Left          | 0.135                  | 0.997                         | 0.001                         | 1.132               | 0.136        | 1.133        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 88 of 124                  |

| Simult Tx | Configuration | LTE Band 26 (Cell) SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|-------------------------------|-------------------------------|-------------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                             | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.179                         | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.04 | 0.01 |
|           | Top           | 1.023                         | 0.121                         | 0.424                         | 1.144               | 1.447        | <b>1.568</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                         | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.157                         | 0.008                         | 0.728                         | 0.165               | 0.885        | 0.893        | N/A   | N/A  | N/A  |
|           | Left          | 0.099                         | 0.997                         | 0.001                         | 1.096               | 0.100        | 1.097        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 5 (Cell) SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.200                         | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.151                         | 0.121                         | 0.424                         | 1.272               | <b>1.575</b> | See Note 1   | 0.02  | 0.02 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.221                         | 0.008                         | 0.728                         | 0.229               | 0.949        | 0.957        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                         | 0.997                         | 0.001                         | 1.120               | 0.124        | 1.121        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 66 (AWS) SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.092                         | 0.579                         | 0.775                         | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.295                         | 0.121                         | 0.424                         | <b>1.416</b>        | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.066                         | 0.008                         | 0.728                         | 0.074               | 0.794        | 0.802        | N/A   | N/A  | N/A  |
|           | Left          | 0.187                         | 0.997                         | 0.001                         | 1.184               | 0.188        | 1.185        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 2 (PCS) SAR (W/kg)   | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.886                         | 0.579                         | 0.775                         | <b>1.465</b>        | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.225                         | 0.121                         | 0.424                         | 1.346               | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.247                         | 0.008                         | 0.728                         | 0.255               | 0.975        | 0.983        | N/A   | N/A  | N/A  |
|           | Left          | 0.218                         | 0.997                         | 0.001                         | 1.215               | 0.219        | 1.216        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 25 (PCS) SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                             | 3                             | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.986                         | 0.579                         | 0.775                         | <b>1.565</b>        | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.179                         | 0.121                         | 0.424                         | 1.300               | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                         | 0.400                         | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.086                         | 0.008                         | 0.728                         | 0.094               | 0.814        | 0.822        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                         | 0.997                         | 0.001                         | 1.120               | 0.124        | 1.121        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 89 of 124                  |

| Simult Tx | Configuration | LTE Band<br>41 SAR<br>(W/kg) | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 2.4 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|-----------|---------------|------------------------------|----------------------------------------|----------------------------------------|---------------------|------------|--------------|-------|------|------|
|           |               | 1                            | 2                                      | 3                                      | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.976                        | 0.579                                  | 0.775                                  | 1.555               | See Note 1 | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.049                        | 0.121                                  | 0.424                                  | 1.170               | 1.473      | <b>1.594</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                        | 0.400                                  | 0.400                                  | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.314                        | 0.008                                  | 0.728                                  | 0.322               | 1.042      | 1.050        | N/A   | N/A  | N/A  |
|           | Left          | 0.502                        | 0.997                                  | 0.001                                  | 1.499               | 0.503      | 1.500        | N/A   | N/A  | N/A  |

**Table 11-2**  
**Simultaneous Transmission Scenario with 5 GHz WLAN**

| Simult Tx | Configuration | GPRS 850<br>SAR (W/kg)  | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|-----------|---------------|-------------------------|--------------------------------------|--------------------------------------|---------------------|------------|--------------|-------|------|------|
|           |               | 1                       | 2                                    | 3                                    | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.837                   | 0.464                                | 0.657                                | 1.301               | 1.494      | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.029                   | 0.168                                | 0.390                                | 1.197               | 1.419      | <b>1.587</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                   | 0.400                                | 0.400                                | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.277                   | 0.004                                | 1.184                                | 0.281               | 1.461      | 1.465        | N/A   | N/A  | N/A  |
|           | Left          | 0.243                   | 0.424                                | 0.010                                | 0.667               | 0.253      | 0.677        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | GPRS 1900<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|           |               | 1                       | 2                                    | 3                                    | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.025                   | 0.464                                | 0.657                                | <b>1.489</b>        | See Note 1 | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 0.668                   | 0.168                                | 0.390                                | 0.836               | 1.058      | 1.226        | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                   | 0.400                                | 0.400                                | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.028                   | 0.004                                | 1.184                                | 0.032               | 1.212      | 1.216        | N/A   | N/A  | N/A  |
|           | Left          | 0.178                   | 0.424                                | 0.010                                | 0.602               | 0.188      | 0.612        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 850<br>SAR (W/kg)  | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|           |               | 1                       | 2                                    | 3                                    | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.059                   | 0.464                                | 0.657                                | <b>1.523</b>        | See Note 1 | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.213                   | 0.168                                | 0.390                                | 1.381               | See Note 1 | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                   | 0.400                                | 0.400                                | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.231                   | 0.004                                | 1.184                                | 0.235               | 1.415      | 1.419        | N/A   | N/A  | N/A  |
|           | Left          | 0.156                   | 0.424                                | 0.010                                | 0.580               | 0.166      | 0.590        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 1750<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |            |              | SPLSR |      |      |
|           |               | 1                       | 2                                    | 3                                    | 1+2                 | 1+3        | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.107                   | 0.464                                | 0.657                                | <b>1.571</b>        | See Note 1 | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.283                   | 0.168                                | 0.390                                | 1.451               | See Note 1 | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                   | 0.400                                | 0.400                                | 0.800               | 0.800      | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.092                   | 0.004                                | 1.184                                | 0.096               | 1.276      | 1.280        | N/A   | N/A  | N/A  |
|           | Left          | 0.167                   | 0.424                                | 0.010                                | 0.591               | 0.177      | 0.601        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 90 of 124                  |

| Simult Tx | Configuration | UMTS 1900 SAR (W/kg)          | 5 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|-------------------------------|-----------------------------|-----------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                             | 2                           | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.021                         | 0.464                       | 0.657                       | 1.485               | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.187                         | 0.168                       | 0.390                       | 1.355               | <b>1.577</b> | See Note 1   | 0.04  | 0.01 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                       | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.050                         | 0.004                       | 1.184                       | 0.054               | 1.234        | 1.238        | N/A   | N/A  | N/A  |
|           | Left          | 0.233                         | 0.424                       | 0.010                       | 0.657               | 0.243        | 0.667        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 12 SAR (W/kg)        | 5 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                           | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.732                         | 0.464                       | 0.657                       | 1.196               | <b>1.389</b> | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.799                         | 0.168                       | 0.390                       | 0.967               | 1.189        | 1.357        | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                         | 0.400                       | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.128                         | 0.004                       | 1.184                       | 0.132               | 1.312        | 1.316        | N/A   | N/A  | N/A  |
|           | Left          | 0.110                         | 0.424                       | 0.010                       | 0.534               | 0.120        | 0.544        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 17 SAR (W/kg)        | 5 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                           | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.844                         | 0.464                       | 0.657                       | 1.308               | 1.501        | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.997                         | 0.168                       | 0.390                       | 1.165               | 1.387        | <b>1.555</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                         | 0.400                       | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.140                         | 0.004                       | 1.184                       | 0.144               | 1.324        | 1.328        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                         | 0.424                       | 0.010                       | 0.547               | 0.133        | 0.557        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 13 SAR (W/kg)        | 5 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                           | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.022                         | 0.464                       | 0.657                       | <b>1.486</b>        | See Note 1   | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.293                         | 0.168                       | 0.390                       | 1.461               | See Note 1   | See Note 1   | 0.04  | 0.01 | 0.00 |
|           | Bottom        | 0.400                         | 0.400                       | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.162                         | 0.004                       | 1.184                       | 0.166               | 1.346        | 1.350        | N/A   | N/A  | N/A  |
|           | Left          | 0.135                         | 0.424                       | 0.010                       | 0.559               | 0.145        | 0.569        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 26 (Cell) SAR (W/kg) | 5 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                             | 2                           | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.179                         | 0.464                       | 0.657                       | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.023                         | 0.168                       | 0.390                       | 1.191               | 1.413        | <b>1.581</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                         | 0.400                       | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.157                         | 0.004                       | 1.184                       | 0.161               | 1.341        | 1.345        | N/A   | N/A  | N/A  |
|           | Left          | 0.099                         | 0.424                       | 0.010                       | 0.523               | 0.109        | 0.533        | N/A   | N/A  | N/A  |

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 91 of 124                  |

| Simult Tx | Configuration | LTE Band 5<br>(Cell) SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|------------------------------------|--------------------------------------|--------------------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                                  | 2                                    | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.200                              | 0.464                                | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.151                              | 0.168                                | 0.390                                | 1.319               | <b>1.541</b> | See Note 1   | 0.04  | 0.01 | 0.00 |
|           | Bottom        | 0.400                              | 0.400                                | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.221                              | 0.004                                | 1.184                                | 0.225               | 1.405        | 1.409        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                              | 0.424                                | 0.010                                | 0.547               | 0.133        | 0.557        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 66 (AWS)<br>SAR (W/kg)    | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                  | 2                                    | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.092                              | 0.464                                | 0.657                                | <b>1.556</b>        | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.295                              | 0.168                                | 0.390                                | 1.463               | See Note 1   | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                              | 0.400                                | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.066                              | 0.004                                | 1.184                                | 0.070               | 1.250        | 1.254        | N/A   | N/A  | N/A  |
|           | Left          | 0.187                              | 0.424                                | 0.010                                | 0.611               | 0.197        | 0.621        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 2<br>(PCS) SAR<br>(W/kg)  | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                  | 2                                    | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.886                              | 0.464                                | 0.657                                | 1.350               | <b>1.543</b> | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 1.225                              | 0.168                                | 0.390                                | 1.393               | See Note 1   | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                              | 0.400                                | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.247                              | 0.004                                | 1.184                                | 0.251               | 1.431        | 1.435        | N/A   | N/A  | N/A  |
|           | Left          | 0.218                              | 0.424                                | 0.010                                | 0.642               | 0.228        | 0.652        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 25 (PCS)<br>SAR (W/kg)    | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                  | 2                                    | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.986                              | 0.464                                | 0.657                                | 1.450               | See Note 1   | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 1.179                              | 0.168                                | 0.390                                | 1.347               | <b>1.569</b> | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                              | 0.400                                | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.086                              | 0.004                                | 1.184                                | 0.090               | 1.270        | 1.274        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                              | 0.424                                | 0.010                                | 0.547               | 0.133        | 0.557        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 41<br>SAR (W/kg)          | 5 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                  | 2                                    | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.976                              | 0.464                                | 0.657                                | 1.440               | See Note 1   | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.049                              | 0.168                                | 0.390                                | 1.217               | 1.439        | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                              | 0.400                                | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.314                              | 0.004                                | 1.184                                | 0.318               | 1.498        | <b>1.502</b> | N/A   | N/A  | N/A  |
|           | Left          | 0.502                              | 0.424                                | 0.010                                | 0.926               | 0.512        | 0.936        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 92 of 124                  |

**Table 11-3**  
**Simultaneous Transmission Scenario with 2.4 GHz WLAN Ant 1 and 5 GHz WLAN Ant 2**

| Simult Tx | Configuration | GPRS 850<br>SAR (W/kg)  | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|-------------------------|----------------------------------------|--------------------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                       | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.837                   | 0.579                                  | 0.657                                | 1.416               | 1.494        | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.029                   | 0.121                                  | 0.390                                | 1.150               | 1.419        | <b>1.540</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                   | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.277                   | 0.008                                  | 1.184                                | 0.285               | 1.461        | 1.469        | N/A   | N/A  | N/A  |
|           | Left          | 0.243                   | 0.997                                  | 0.010                                | 1.240               | 0.253        | 1.250        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | GPRS 1900<br>SAR (W/kg) | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                       | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.025                   | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 0.668                   | 0.121                                  | 0.390                                | 0.789               | 1.058        | 1.179        | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                   | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.028                   | 0.008                                  | 1.184                                | 0.036               | 1.212        | <b>1.220</b> | N/A   | N/A  | N/A  |
|           | Left          | 0.178                   | 0.997                                  | 0.010                                | 1.175               | 0.188        | 1.185        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 850<br>SAR (W/kg)  | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                       | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.059                   | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.213                   | 0.121                                  | 0.390                                | 1.334               | See Note 1   | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                   | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.231                   | 0.008                                  | 1.184                                | 0.239               | 1.415        | <b>1.423</b> | N/A   | N/A  | N/A  |
|           | Left          | 0.156                   | 0.997                                  | 0.010                                | 1.153               | 0.166        | 1.163        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 1750<br>SAR (W/kg) | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                       | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.107                   | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.283                   | 0.121                                  | 0.390                                | <b>1.404</b>        | See Note 1   | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                   | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.092                   | 0.008                                  | 1.184                                | 0.100               | 1.276        | 1.284        | N/A   | N/A  | N/A  |
|           | Left          | 0.167                   | 0.997                                  | 0.010                                | 1.164               | 0.177        | 1.174        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | UMTS 1900<br>SAR (W/kg) | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                       | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.021                   | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.187                   | 0.121                                  | 0.390                                | 1.308               | <b>1.577</b> | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                   | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.050                   | 0.008                                  | 1.184                                | 0.058               | 1.234        | 1.242        | N/A   | N/A  | N/A  |
|           | Left          | 0.233                   | 0.997                                  | 0.010                                | 1.230               | 0.243        | 1.240        | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 93 of 124                  |

| Simult Tx | Configuration | LTE Band<br>12 SAR<br>(W/kg)        | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|-------------------------------------|----------------------------------------|--------------------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                                   | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.732                               | 0.579                                  | 0.657                                | 1.311               | <b>1.389</b> | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.799                               | 0.121                                  | 0.390                                | 0.920               | 1.189        | 1.310        | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.128                               | 0.008                                  | 1.184                                | 0.136               | 1.312        | 1.320        | N/A   | N/A  | N/A  |
|           | Left          | 0.110                               | 0.997                                  | 0.010                                | 1.107               | 0.120        | 1.117        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>17 SAR<br>(W/kg)        | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                   | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.844                               | 0.579                                  | 0.657                                | 1.423               | 1.501        | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.997                               | 0.121                                  | 0.390                                | 1.118               | 1.387        | <b>1.508</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.140                               | 0.008                                  | 1.184                                | 0.148               | 1.324        | 1.332        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                               | 0.997                                  | 0.010                                | 1.120               | 0.133        | 1.130        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>13 SAR<br>(W/kg)        | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                   | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.022                               | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.293                               | 0.121                                  | 0.390                                | <b>1.414</b>        | See Note 1   | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                               | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.162                               | 0.008                                  | 1.184                                | 0.170               | 1.346        | 1.354        | N/A   | N/A  | N/A  |
|           | Left          | 0.135                               | 0.997                                  | 0.010                                | 1.132               | 0.145        | 1.142        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>26 (Cell)<br>SAR (W/kg) | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                   | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.179                               | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.04 | 0.01 |
|           | Top           | 1.023                               | 0.121                                  | 0.390                                | 1.144               | 1.413        | <b>1.534</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.157                               | 0.008                                  | 1.184                                | 0.165               | 1.341        | 1.349        | N/A   | N/A  | N/A  |
|           | Left          | 0.099                               | 0.997                                  | 0.010                                | 1.096               | 0.109        | 1.106        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 5<br>(Cell) SAR<br>(W/kg)  | 2.4 GHz<br>WLAN Ant<br>1 SAR<br>(W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                                   | 2                                      | 3                                    | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.200                               | 0.579                                  | 0.657                                | See Note 1          | See Note 1   | See Note 1   | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.151                               | 0.121                                  | 0.390                                | 1.272               | <b>1.541</b> | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                               | 0.400                                  | 0.400                                | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.221                               | 0.008                                  | 1.184                                | 0.229               | 1.405        | 1.413        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                               | 0.997                                  | 0.010                                | 1.120               | 0.133        | 1.130        | N/A   | N/A  | N/A  |

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 94 of 124                  |

| Simult Tx | Configuration | LTE Band 66 (AWS) SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|------------------------------|-------------------------------|-----------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                            | 2                             | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.092                        | 0.579                         | 0.657                       | See Note 1          | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.295                        | 0.121                         | 0.390                       | <b>1.416</b>        | See Note 1   | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                         | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.066                        | 0.008                         | 1.184                       | 0.074               | 1.250        | 1.258        | N/A   | N/A  | N/A  |
|           | Left          | 0.187                        | 0.997                         | 0.010                       | 1.184               | 0.197        | 1.194        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 2 (PCS) SAR (W/kg)  | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                             | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.886                        | 0.579                         | 0.657                       | 1.465               | <b>1.543</b> | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.225                        | 0.121                         | 0.390                       | 1.346               | See Note 1   | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                         | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.247                        | 0.008                         | 1.184                       | 0.255               | 1.431        | 1.439        | N/A   | N/A  | N/A  |
|           | Left          | 0.218                        | 0.997                         | 0.010                       | 1.215               | 0.228        | 1.225        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 25 (PCS) SAR (W/kg) | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                             | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.986                        | 0.579                         | 0.657                       | 1.565               | See Note 1   | See Note 1   | 0.04  | 0.03 | 0.01 |
|           | Top           | 1.179                        | 0.121                         | 0.390                       | 1.300               | <b>1.569</b> | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                         | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.086                        | 0.008                         | 1.184                       | 0.094               | 1.270        | 1.278        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                        | 0.997                         | 0.010                       | 1.120               | 0.133        | 1.130        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 41 SAR (W/kg)       | 2.4 GHz WLAN Ant 1 SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                             | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.976                        | 0.579                         | 0.657                       | 1.555               | See Note 1   | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.049                        | 0.121                         | 0.390                       | 1.170               | 1.439        | <b>1.560</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                        | 0.400                         | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.314                        | 0.008                         | 1.184                       | 0.322               | 1.498        | 1.506        | N/A   | N/A  | N/A  |
|           | Left          | 0.502                        | 0.997                         | 0.010                       | 1.499               | 0.512        | 1.509        | N/A   | N/A  | N/A  |

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 95 of 124                  |

**Table 11-4**  
**Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN Ant 2**

| Simult Tx | Configuration | GPRS 850 SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |       |              | SPLSR |      |      |
|-----------|---------------|---------------------|----------------------|-----------------------------|---------------------|-------|--------------|-------|------|------|
|           |               | 1                   | 2                    | 3                           | 1+2                 | 1+3   | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.837               | 0.372                | 0.657                       | 1.209               | 1.494 | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.029               | 0.092                | 0.390                       | 1.121               | 1.419 | <b>1.511</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400               | 0.400                | 0.400                       | 0.800               | 0.800 | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.277               | 0.000                | 1.184                       | 0.277               | 1.461 | 1.461        | N/A   | N/A  | N/A  |
|           | Left          | 0.243               | 0.925                | 0.010                       | 1.168               | 0.253 | 1.178        | N/A   | N/A  | N/A  |

| Simult Tx | Configuration | GPRS 1900 SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |            | SPLSR |      |      |
|-----------|---------------|----------------------|----------------------|-----------------------------|---------------------|------------|------------|-------|------|------|
|           |               | 1                    | 2                    | 3                           | 1+2                 | 1+3        | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.025                | 0.372                | 0.657                       | <b>1.397</b>        | See Note 1 | See Note 1 | 0.03  | 0.03 | 0.01 |
|           | Top           | 0.668                | 0.092                | 0.390                       | 0.760               | 1.058      | 1.150      | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                | 0.400                | 0.400                       | 0.800               | 0.800      | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.028                | 0.000                | 1.184                       | 0.028               | 1.212      | 1.212      | N/A   | N/A  | N/A  |
|           | Left          | 0.178                | 0.925                | 0.010                       | 1.103               | 0.188      | 1.113      | N/A   | N/A  | N/A  |

| Simult Tx | Configuration | UMTS 850 SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |            | SPLSR |      |      |
|-----------|---------------|---------------------|----------------------|-----------------------------|---------------------|------------|------------|-------|------|------|
|           |               | 1                   | 2                    | 3                           | 1+2                 | 1+3        | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.059               | 0.372                | 0.657                       | <b>1.431</b>        | See Note 1 | See Note 1 | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.213               | 0.092                | 0.390                       | 1.305               | See Note 1 | See Note 1 | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400               | 0.400                | 0.400                       | 0.800               | 0.800      | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.231               | 0.000                | 1.184                       | 0.231               | 1.415      | 1.415      | N/A   | N/A  | N/A  |
|           | Left          | 0.156               | 0.925                | 0.010                       | 1.081               | 0.166      | 1.091      | N/A   | N/A  | N/A  |

| Simult Tx | Configuration | UMTS 1750 SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |            |            | SPLSR |      |      |
|-----------|---------------|----------------------|----------------------|-----------------------------|---------------------|------------|------------|-------|------|------|
|           |               | 1                    | 2                    | 3                           | 1+2                 | 1+3        | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.107                | 0.372                | 0.657                       | <b>1.479</b>        | See Note 1 | See Note 1 | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.283                | 0.092                | 0.390                       | 1.375               | See Note 1 | See Note 1 | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                | 0.400                | 0.400                       | 0.800               | 0.800      | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.092                | 0.000                | 1.184                       | 0.092               | 1.276      | 1.276      | N/A   | N/A  | N/A  |
|           | Left          | 0.167                | 0.925                | 0.010                       | 1.092               | 0.177      | 1.102      | N/A   | N/A  | N/A  |

| Simult Tx | Configuration | UMTS 1900 SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|-----------|---------------|----------------------|----------------------|-----------------------------|---------------------|--------------|------------|-------|------|------|
|           |               | 1                    | 2                    | 3                           | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.021                | 0.372                | 0.657                       | 1.393               | See Note 1   | See Note 1 | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.187                | 0.092                | 0.390                       | 1.279               | <b>1.577</b> | See Note 1 | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                | 0.400                | 0.400                       | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.050                | 0.000                | 1.184                       | 0.050               | 1.234        | 1.234      | N/A   | N/A  | N/A  |
|           | Left          | 0.233                | 0.925                | 0.010                       | 1.158               | 0.243        | 1.168      | N/A   | N/A  | N/A  |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 96 of 124                  |

| Simult Tx | Configuration | LTE Band<br>12 SAR<br>(W/kg)        | Bluetooth<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|-----------|---------------|-------------------------------------|-------------------------|--------------------------------------|---------------------|--------------|------------|-------|------|------|
|           |               | 1                                   | 2                       | 3                                    | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.732                               | 0.372                   | 0.657                                | 1.104               | <b>1.389</b> | See Note 1 | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.799                               | 0.092                   | 0.390                                | 0.891               | 1.189        | 1.281      | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                   | 0.400                                | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.128                               | 0.000                   | 1.184                                | 0.128               | 1.312        | 1.312      | N/A   | N/A  | N/A  |
|           | Left          | 0.110                               | 0.925                   | 0.010                                | 1.035               | 0.120        | 1.045      | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>17 SAR<br>(W/kg)        | Bluetooth<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|           |               | 1                                   | 2                       | 3                                    | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.844                               | 0.372                   | 0.657                                | 1.216               | <b>1.501</b> | See Note 1 | 0.02  | 0.03 | 0.01 |
|           | Top           | 0.997                               | 0.092                   | 0.390                                | 1.089               | 1.387        | 1.479      | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                   | 0.400                                | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.140                               | 0.000                   | 1.184                                | 0.140               | 1.324        | 1.324      | N/A   | N/A  | N/A  |
|           | Left          | 0.123                               | 0.925                   | 0.010                                | 1.048               | 0.133        | 1.058      | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>13 SAR<br>(W/kg)        | Bluetooth<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|           |               | 1                                   | 2                       | 3                                    | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.022                               | 0.372                   | 0.657                                | <b>1.394</b>        | See Note 1   | See Note 1 | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.293                               | 0.092                   | 0.390                                | 1.385               | See Note 1   | See Note 1 | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                               | 0.400                   | 0.400                                | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.162                               | 0.000                   | 1.184                                | 0.162               | 1.346        | 1.346      | N/A   | N/A  | N/A  |
|           | Left          | 0.135                               | 0.925                   | 0.010                                | 1.060               | 0.145        | 1.070      | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band<br>26 (Cell)<br>SAR (W/kg) | Bluetooth<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|           |               | 1                                   | 2                       | 3                                    | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.179                               | 0.372                   | 0.657                                | <b>1.551</b>        | See Note 1   | See Note 1 | 0.03  | 0.04 | 0.01 |
|           | Top           | 1.023                               | 0.092                   | 0.390                                | 1.115               | 1.413        | 1.505      | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                               | 0.400                   | 0.400                                | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.157                               | 0.000                   | 1.184                                | 0.157               | 1.341        | 1.341      | N/A   | N/A  | N/A  |
|           | Left          | 0.099                               | 0.925                   | 0.010                                | 1.024               | 0.109        | 1.034      | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 5<br>(Cell) SAR<br>(W/kg)  | Bluetooth<br>SAR (W/kg) | 5 GHz<br>WLAN Ant<br>2 SAR<br>(W/kg) | $\Sigma$ SAR (W/kg) |              |            | SPLSR |      |      |
|           |               | 1                                   | 2                       | 3                                    | 1+2                 | 1+3          | 1+2+3      | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.200                               | 0.372                   | 0.657                                | <b>1.572</b>        | See Note 1   | See Note 1 | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.151                               | 0.092                   | 0.390                                | 1.243               | 1.541        | See Note 1 | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                               | 0.400                   | 0.400                                | 0.800               | 0.800        | 1.200      | N/A   | N/A  | N/A  |
|           | Right         | 0.221                               | 0.000                   | 1.184                                | 0.221               | 1.405        | 1.405      | N/A   | N/A  | N/A  |
|           | Left          | 0.123                               | 0.925                   | 0.010                                | 1.048               | 0.133        | 1.058      | N/A   | N/A  | N/A  |

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 97 of 124                  |

| Simult Tx | Configuration | LTE Band 66 (AWS) SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|-----------|---------------|------------------------------|----------------------|-----------------------------|---------------------|--------------|--------------|-------|------|------|
|           |               | 1                            | 2                    | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 1.092                        | 0.372                | 0.657                       | <b>1.464</b>        | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.295                        | 0.092                | 0.390                       | 1.387               | See Note 1   | See Note 1   | 0.03  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.066                        | 0.000                | 1.184                       | 0.066               | 1.250        | 1.250        | N/A   | N/A  | N/A  |
|           | Left          | 0.187                        | 0.925                | 0.010                       | 1.112               | 0.197        | 1.122        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 2 (PCS) SAR (W/kg)  | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                    | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.886                        | 0.372                | 0.657                       | 1.258               | <b>1.543</b> | See Note 1   | 0.02  | 0.03 | 0.01 |
|           | Top           | 1.225                        | 0.092                | 0.390                       | 1.317               | See Note 1   | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.247                        | 0.000                | 1.184                       | 0.247               | 1.431        | 1.431        | N/A   | N/A  | N/A  |
|           | Left          | 0.218                        | 0.925                | 0.010                       | 1.143               | 0.228        | 1.153        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 25 (PCS) SAR (W/kg) | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                    | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.986                        | 0.372                | 0.657                       | 1.358               | See Note 1   | See Note 1   | 0.03  | 0.03 | 0.01 |
|           | Top           | 1.179                        | 0.092                | 0.390                       | 1.271               | <b>1.569</b> | See Note 1   | 0.02  | 0.01 | 0.00 |
|           | Bottom        | 0.400                        | 0.400                | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.086                        | 0.000                | 1.184                       | 0.086               | 1.270        | 1.270        | N/A   | N/A  | N/A  |
|           | Left          | 0.123                        | 0.925                | 0.010                       | 1.048               | 0.133        | 1.058        | N/A   | N/A  | N/A  |
| Simult Tx | Configuration | LTE Band 41 SAR (W/kg)       | Bluetooth SAR (W/kg) | 5 GHz WLAN Ant 2 SAR (W/kg) | $\Sigma$ SAR (W/kg) |              |              | SPLSR |      |      |
|           |               | 1                            | 2                    | 3                           | 1+2                 | 1+3          | 1+2+3        | 1+2   | 1+3  | 2+3  |
| Body SAR  | Back          | 0.976                        | 0.372                | 0.657                       | 1.348               | See Note 1   | See Note 1   | 0.02  | 0.04 | 0.01 |
|           | Top           | 1.049                        | 0.092                | 0.390                       | 1.141               | 1.439        | <b>1.531</b> | N/A   | N/A  | N/A  |
|           | Bottom        | 0.400                        | 0.400                | 0.400                       | 0.800               | 0.800        | 1.200        | N/A   | N/A  | N/A  |
|           | Right         | 0.314                        | 0.000                | 1.184                       | 0.314               | 1.498        | 1.498        | N/A   | N/A  | N/A  |
|           | Left          | 0.502                        | 0.925                | 0.010                       | 1.427               | 0.512        | 1.437        | N/A   | N/A  | N/A  |

Notes:

1. No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.3 for detailed SPLS ratio analysis.
2. For SAR summation, the highest reported SAR across all test distances was used as the most conservative evaluation for simultaneous transmission analysis for each device edge.
3. When the antenna separation distance was > 50 mm, an estimated SAR of 0.4 W/kg was used to determine the simultaneous transmission SAR exclusion for test positions excluded per FCC KDB Publication 447498 D01v06.

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 98 of 124                  |

### 11.3 SPLSR Evaluation and Analysis

Per FCC KDB Publication 447498 D01v06, when the sum of the standalone transmitters is more than 1.6 W/kg for 1g, the SAR sum to peak locations can be analyzed to determine SAR distribution overlaps. When the SAR peak to location ratio (shown below) for each pair of antennas is  $\leq 0.04$  for 1g, simultaneous SAR evaluation is not required. The distance between the transmitters was calculated using the following formula.

$$\text{Distance}_{\text{Tx1} - \text{Tx2}} = R_i = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2} \text{ (Body)}$$

$$\text{SPLS Ratio} = \frac{(SAR_1 + SAR_2)^{1.5}}{R_i}$$

#### 11.3.1 Back Side SPLSR Evaluation and Analysis

**Table 11-5**  
**Peak SAR Locations for Body Back Side**

| Mode/Band          | x (mm) | y (mm) | Reported SAR (W/kg) |
|--------------------|--------|--------|---------------------|
| 2.4 GHz WLAN Ant 1 | 5.40   | -64.20 | 0.579               |
| 2.4 GHz WLAN Ant 2 | 5.40   | 75.00  | 0.775               |
| 5 GHz WLAN Ant 1   | 5.00   | -81.00 | 0.464               |
| 5 GHz WLAN Ant 2   | 7.00   | 66.00  | 0.657               |
| Bluetooth          | 4.60   | -69.60 | 0.372               |
| GPRS 850           | 10.50  | 15.50  | 0.837               |
| GPRS 1900          | 13.50  | -16.50 | 1.025               |
| UMTS 850           | 18.00  | 3.00   | 1.059               |
| UMTS 1750          | 10.50  | -3.50  | 1.107               |
| UMTS 1900          | 12.00  | -17.00 | 1.021               |
| LTE Band 12        | 20.00  | 4.50   | 0.732               |
| LTE Band 17        | 20.00  | 4.50   | 0.844               |
| LTE Band 13        | 18.50  | 11.00  | 1.022               |
| LTE Band 26 (Cell) | 10.50  | -2.50  | 1.179               |
| LTE Band 5 (Cell)  | 25.00  | 12.00  | 1.200               |
| LTE Band 66 (AWS)  | 12.00  | -8.00  | 1.092               |
| LTE Band 2 (PCS)   | 12.50  | -6.00  | 0.886               |
| LTE Band 25 (PCS)  | 14.00  | -11.00 | 0.986               |
| LTE Band 41        | 15.70  | 13.00  | 0.976               |

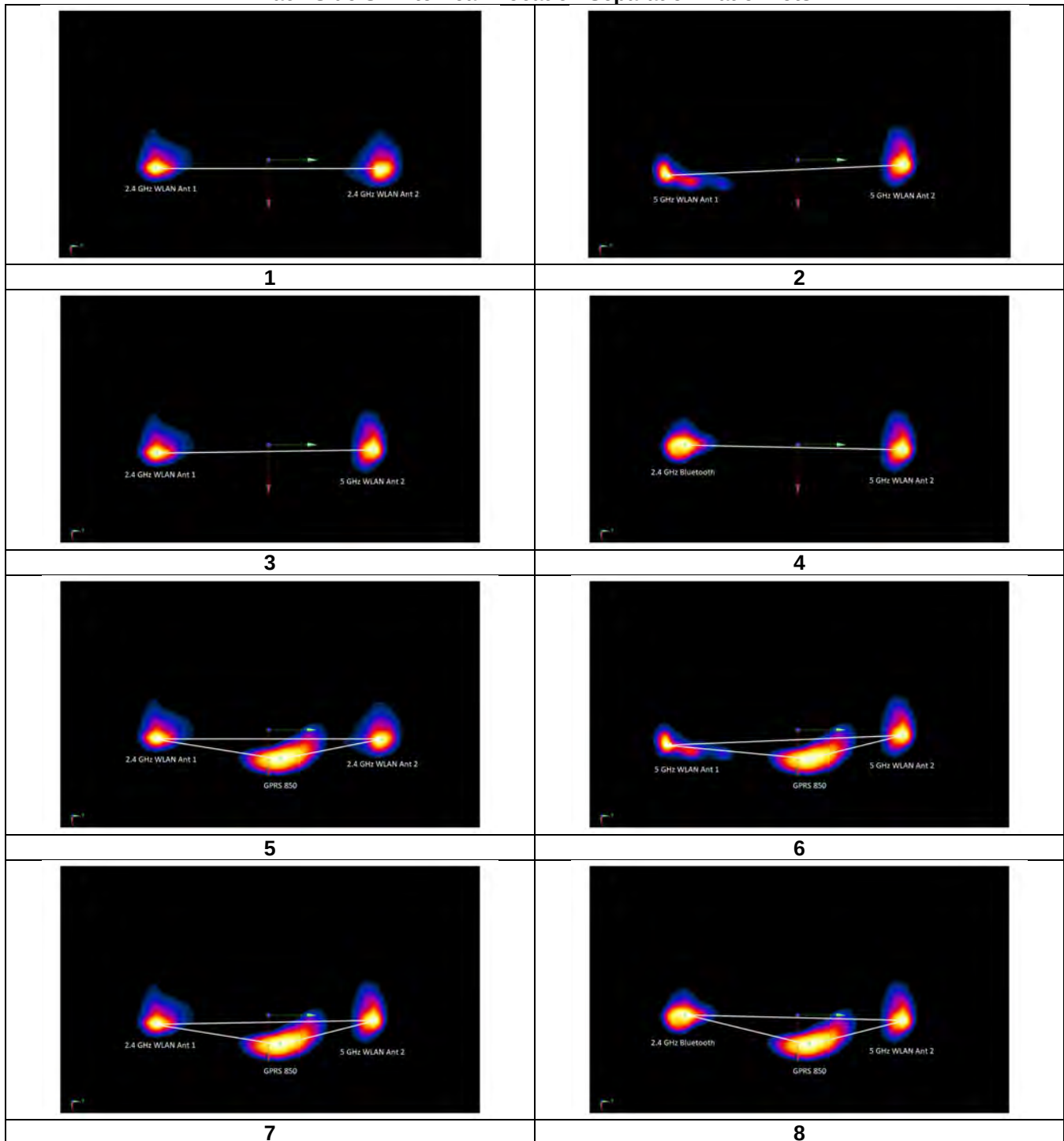
|                                         |                                                                                     |                              |                                                                                       |                                        |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | <b>Approved by:</b><br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 99 of 124                         |

**Table 11-6**  
**Back Side SAR to Peak Location Separation Ratio Calculations**

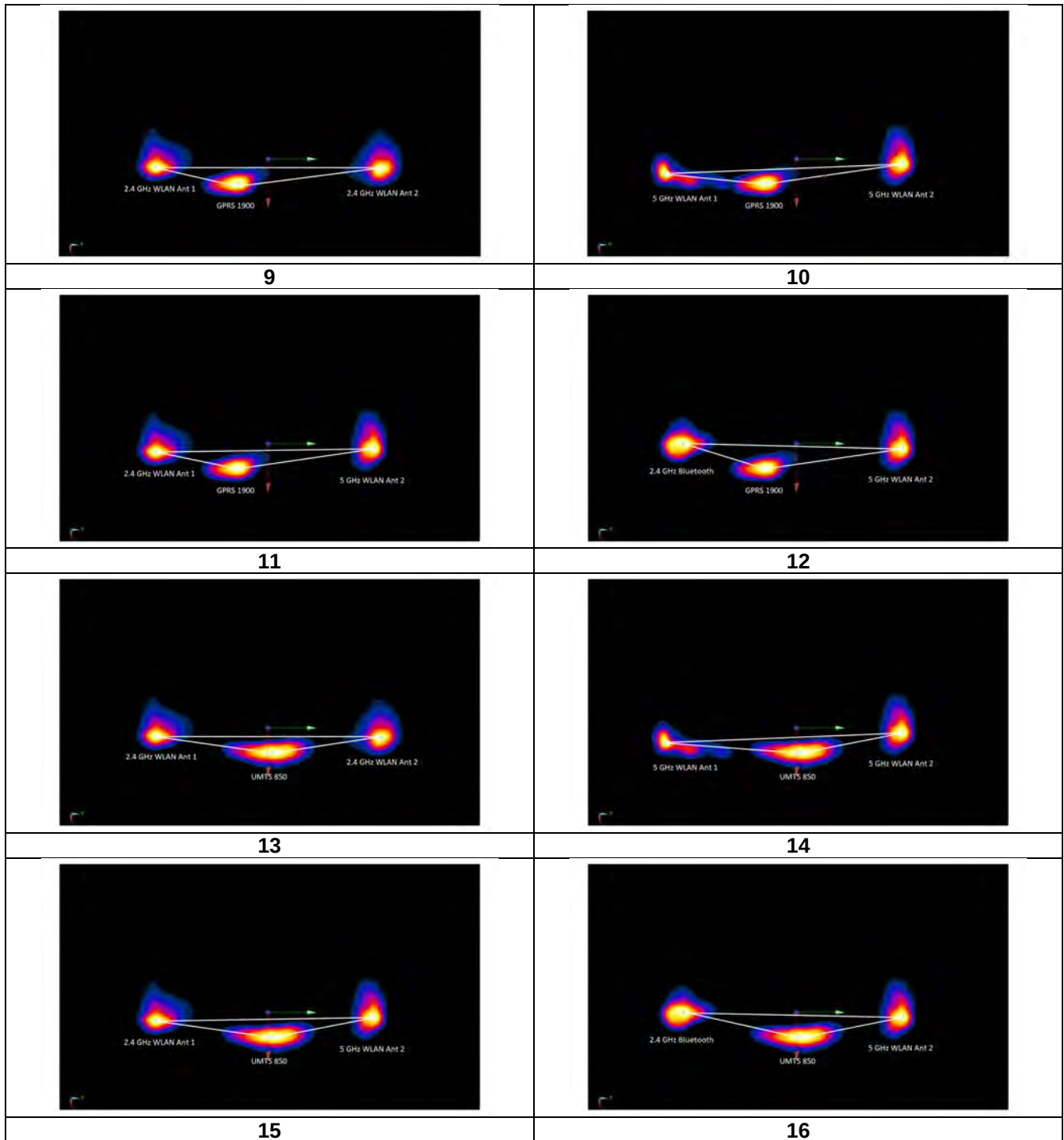
| Antenna Pair       |                    | Standalone SAR (W/kg) |       | Standalone SAR Sum (W/kg) | Peak SAR Separation Distance (mm) | SPLS Ratio                             | Plot Number |
|--------------------|--------------------|-----------------------|-------|---------------------------|-----------------------------------|----------------------------------------|-------------|
| Ant "a"            | Ant "b"            | a                     | b     | a+b                       | D <sub>a-b</sub>                  | (a+b) <sup>1.5</sup> /D <sub>a-b</sub> |             |
| 2.4 GHz WLAN Ant 1 | 2.4 GHz WLAN Ant 2 | 0.579                 | 0.775 | 1.354                     | 139.20                            | 0.01                                   | 1           |
| 5 GHz WLAN Ant 1   | 5 GHz WLAN Ant 2   | 0.464                 | 0.657 | 1.121                     | 147.01                            | 0.01                                   | 2           |
| 2.4 GHz WLAN Ant 1 | 5 GHz WLAN Ant 2   | 0.579                 | 0.657 | 1.236                     | 130.21                            | 0.01                                   | 3           |
| Bluetooth          | 5 GHz WLAN Ant 2   | 0.372                 | 0.657 | 1.029                     | 135.62                            | 0.01                                   | 4           |
| GPRS 850           | 2.4 GHz WLAN Ant 1 | 0.837                 | 0.579 | 1.416                     | 79.86                             | 0.02                                   | 5, 7        |
| GPRS 850           | 2.4 GHz WLAN Ant 2 | 0.837                 | 0.775 | 1.612                     | 59.72                             | 0.03                                   | 5           |
| GPRS 850           | 5 GHz WLAN Ant 1   | 0.837                 | 0.464 | 1.301                     | 96.66                             | 0.02                                   | 6           |
| GPRS 850           | 5 GHz WLAN Ant 2   | 0.837                 | 0.657 | 1.494                     | 50.62                             | 0.04                                   | 6, 7, 8     |
| GPRS 850           | Bluetooth          | 0.837                 | 0.372 | 1.209                     | 85.30                             | 0.02                                   | 8           |
| GPRS 1900          | 2.4 GHz WLAN Ant 1 | 1.025                 | 0.579 | 1.604                     | 48.38                             | 0.04                                   | 9, 11       |
| GPRS 1900          | 2.4 GHz WLAN Ant 2 | 1.025                 | 0.775 | 1.8                       | 91.86                             | 0.03                                   | 9           |
| GPRS 1900          | 5 GHz WLAN Ant 1   | 1.025                 | 0.464 | 1.489                     | 65.06                             | 0.03                                   | 10          |
| GPRS 1900          | 5 GHz WLAN Ant 2   | 1.025                 | 0.657 | 1.682                     | 82.76                             | 0.03                                   | 10, 11, 12  |
| GPRS 1900          | Bluetooth          | 1.025                 | 0.372 | 1.397                     | 53.84                             | 0.03                                   | 12          |
| UMTS 850           | 2.4 GHz WLAN Ant 1 | 1.059                 | 0.579 | 1.638                     | 68.37                             | 0.03                                   | 13, 15      |
| UMTS 850           | 2.4 GHz WLAN Ant 2 | 1.059                 | 0.775 | 1.834                     | 73.09                             | 0.03                                   | 13          |
| UMTS 850           | 5 GHz WLAN Ant 1   | 1.059                 | 0.464 | 1.523                     | 85.00                             | 0.02                                   | 14          |
| UMTS 850           | 5 GHz WLAN Ant 2   | 1.059                 | 0.657 | 1.716                     | 63.95                             | 0.04                                   | 14, 15, 16  |
| UMTS 850           | Bluetooth          | 1.059                 | 0.372 | 1.431                     | 73.83                             | 0.02                                   | 16          |
| UMTS 1750          | 2.4 GHz WLAN Ant 1 | 1.107                 | 0.579 | 1.686                     | 60.91                             | 0.04                                   | 17, 19      |
| UMTS 1750          | 2.4 GHz WLAN Ant 2 | 1.107                 | 0.775 | 1.882                     | 78.67                             | 0.03                                   | 17          |
| UMTS 1750          | 5 GHz WLAN Ant 1   | 1.107                 | 0.464 | 1.571                     | 77.69                             | 0.03                                   | 18          |
| UMTS 1750          | 5 GHz WLAN Ant 2   | 1.107                 | 0.657 | 1.764                     | 69.59                             | 0.03                                   | 18, 19, 20  |
| UMTS 1750          | Bluetooth          | 1.107                 | 0.372 | 1.479                     | 66.36                             | 0.03                                   | 20          |
| UMTS 1900          | 2.4 GHz WLAN Ant 1 | 1.021                 | 0.579 | 1.6                       | 47.66                             | 0.04                                   | 21, 23      |
| UMTS 1900          | 2.4 GHz WLAN Ant 2 | 1.021                 | 0.775 | 1.796                     | 92.24                             | 0.03                                   | 21          |
| UMTS 1900          | 5 GHz WLAN Ant 1   | 1.021                 | 0.464 | 1.485                     | 64.38                             | 0.03                                   | 22          |
| UMTS 1900          | 5 GHz WLAN Ant 2   | 1.021                 | 0.657 | 1.678                     | 83.15                             | 0.03                                   | 22, 23, 24  |
| UMTS 1900          | Bluetooth          | 1.021                 | 0.372 | 1.393                     | 53.12                             | 0.03                                   | 24          |
| LTE Band 12        | 2.4 GHz WLAN Ant 1 | 0.732                 | 0.579 | 1.311                     | 70.23                             | 0.02                                   | 25, 27      |
| LTE Band 12        | 2.4 GHz WLAN Ant 2 | 0.732                 | 0.775 | 1.507                     | 72.00                             | 0.03                                   | 25          |
| LTE Band 12        | 5 GHz WLAN Ant 1   | 0.732                 | 0.464 | 1.196                     | 86.81                             | 0.02                                   | 26          |
| LTE Band 12        | 5 GHz WLAN Ant 2   | 0.732                 | 0.657 | 1.389                     | 62.86                             | 0.03                                   | 26, 27, 28  |
| LTE Band 12        | Bluetooth          | 0.732                 | 0.372 | 1.104                     | 75.68                             | 0.02                                   | 28          |
| LTE Band 17        | 2.4 GHz WLAN Ant 1 | 0.844                 | 0.579 | 1.423                     | 70.23                             | 0.02                                   | 29, 31      |
| LTE Band 17        | 2.4 GHz WLAN Ant 2 | 0.844                 | 0.775 | 1.619                     | 72.00                             | 0.03                                   | 29          |
| LTE Band 17        | 5 GHz WLAN Ant 1   | 0.844                 | 0.464 | 1.308                     | 86.81                             | 0.02                                   | 30          |
| LTE Band 17        | 5 GHz WLAN Ant 2   | 0.844                 | 0.657 | 1.501                     | 62.86                             | 0.03                                   | 30, 31, 32  |
| LTE Band 17        | Bluetooth          | 0.844                 | 0.372 | 1.216                     | 75.68                             | 0.02                                   | 32          |
| LTE Band 13        | 2.4 GHz WLAN Ant 1 | 1.022                 | 0.579 | 1.601                     | 76.33                             | 0.03                                   | 33, 35      |
| LTE Band 13        | 2.4 GHz WLAN Ant 2 | 1.022                 | 0.775 | 1.797                     | 65.33                             | 0.04                                   | 33          |
| LTE Band 13        | 5 GHz WLAN Ant 1   | 1.022                 | 0.464 | 1.486                     | 92.99                             | 0.02                                   | 34          |
| LTE Band 13        | 5 GHz WLAN Ant 2   | 1.022                 | 0.657 | 1.679                     | 56.19                             | 0.04                                   | 34, 35, 36  |
| LTE Band 13        | Bluetooth          | 1.022                 | 0.372 | 1.394                     | 81.79                             | 0.02                                   | 36          |
| LTE Band 26 (Cell) | 2.4 GHz WLAN Ant 1 | 1.179                 | 0.579 | 1.758                     | 61.91                             | 0.04                                   | 37, 39      |
| LTE Band 26 (Cell) | 2.4 GHz WLAN Ant 2 | 1.179                 | 0.775 | 1.954                     | 77.67                             | 0.04                                   | 37          |
| LTE Band 26 (Cell) | 5 GHz WLAN Ant 1   | 1.179                 | 0.464 | 1.643                     | 78.69                             | 0.03                                   | 38          |
| LTE Band 26 (Cell) | 5 GHz WLAN Ant 2   | 1.179                 | 0.657 | 1.836                     | 68.59                             | 0.04                                   | 38, 39, 40  |
| LTE Band 26 (Cell) | Bluetooth          | 1.179                 | 0.372 | 1.551                     | 67.36                             | 0.03                                   | 40          |
| LTE Band 5 (Cell)  | 2.4 GHz WLAN Ant 1 | 1.200                 | 0.579 | 1.779                     | 78.68                             | 0.03                                   | 41, 43      |
| LTE Band 5 (Cell)  | 2.4 GHz WLAN Ant 2 | 1.200                 | 0.775 | 1.975                     | 65.98                             | 0.04                                   | 41          |
| LTE Band 5 (Cell)  | 5 GHz WLAN Ant 1   | 1.200                 | 0.464 | 1.664                     | 95.13                             | 0.02                                   | 42          |
| LTE Band 5 (Cell)  | 5 GHz WLAN Ant 2   | 1.200                 | 0.657 | 1.857                     | 56.92                             | 0.04                                   | 42, 43, 44  |
| LTE Band 5 (Cell)  | Bluetooth          | 1.200                 | 0.372 | 1.572                     | 84.11                             | 0.02                                   | 44          |
| LTE Band 66 (AWS)  | 2.4 GHz WLAN Ant 1 | 1.092                 | 0.579 | 1.671                     | 56.59                             | 0.04                                   | 45, 47      |
| LTE Band 66 (AWS)  | 2.4 GHz WLAN Ant 2 | 1.092                 | 0.775 | 1.867                     | 83.26                             | 0.03                                   | 45          |
| LTE Band 66 (AWS)  | 5 GHz WLAN Ant 1   | 1.092                 | 0.464 | 1.556                     | 73.33                             | 0.03                                   | 46          |
| LTE Band 66 (AWS)  | 5 GHz WLAN Ant 2   | 1.092                 | 0.657 | 1.749                     | 74.17                             | 0.03                                   | 46, 47, 48  |
| LTE Band 66 (AWS)  | Bluetooth          | 1.092                 | 0.372 | 1.464                     | 62.04                             | 0.03                                   | 48          |
| LTE Band 2 (PCS)   | 2.4 GHz WLAN Ant 1 | 0.886                 | 0.579 | 1.465                     | 58.63                             | 0.03                                   | 49, 51      |
| LTE Band 2 (PCS)   | 2.4 GHz WLAN Ant 2 | 0.886                 | 0.775 | 1.661                     | 81.31                             | 0.03                                   | 49          |
| LTE Band 2 (PCS)   | 5 GHz WLAN Ant 1   | 0.886                 | 0.464 | 1.35                      | 75.37                             | 0.02                                   | 50          |
| LTE Band 2 (PCS)   | 5 GHz WLAN Ant 2   | 0.886                 | 0.657 | 1.543                     | 72.21                             | 0.03                                   | 50, 51, 52  |
| LTE Band 2 (PCS)   | Bluetooth          | 0.886                 | 0.372 | 1.258                     | 64.09                             | 0.02                                   | 52          |
| LTE Band 25 (PCS)  | 2.4 GHz WLAN Ant 1 | 0.986                 | 0.579 | 1.565                     | 53.89                             | 0.04                                   | 53, 55      |
| LTE Band 25 (PCS)  | 2.4 GHz WLAN Ant 2 | 0.986                 | 0.775 | 1.761                     | 86.43                             | 0.03                                   | 53          |
| LTE Band 25 (PCS)  | 5 GHz WLAN Ant 1   | 0.986                 | 0.464 | 1.45                      | 70.58                             | 0.02                                   | 54          |
| LTE Band 25 (PCS)  | 5 GHz WLAN Ant 2   | 0.986                 | 0.657 | 1.643                     | 77.32                             | 0.03                                   | 54, 55, 56  |
| LTE Band 25 (PCS)  | Bluetooth          | 0.986                 | 0.372 | 1.358                     | 59.35                             | 0.03                                   | 56          |
| LTE Band 41        | 2.4 GHz WLAN Ant 1 | 0.976                 | 0.579 | 1.555                     | 77.88                             | 0.02                                   | 57, 59      |
| LTE Band 41        | 2.4 GHz WLAN Ant 2 | 0.976                 | 0.775 | 1.751                     | 62.85                             | 0.04                                   | 57          |
| LTE Band 41        | 5 GHz WLAN Ant 1   | 0.976                 | 0.464 | 1.44                      | 94.61                             | 0.02                                   | 58          |
| LTE Band 41        | 5 GHz WLAN Ant 2   | 0.976                 | 0.657 | 1.633                     | 53.71                             | 0.04                                   | 58, 59, 60  |
| LTE Band 41        | Bluetooth          | 0.976                 | 0.372 | 1.348                     | 83.34                             | 0.02                                   | 60          |

|                                         |                                                                                     |                              |                                                                                       |                                 |
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| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 100 of 124                                                                       |                                 |

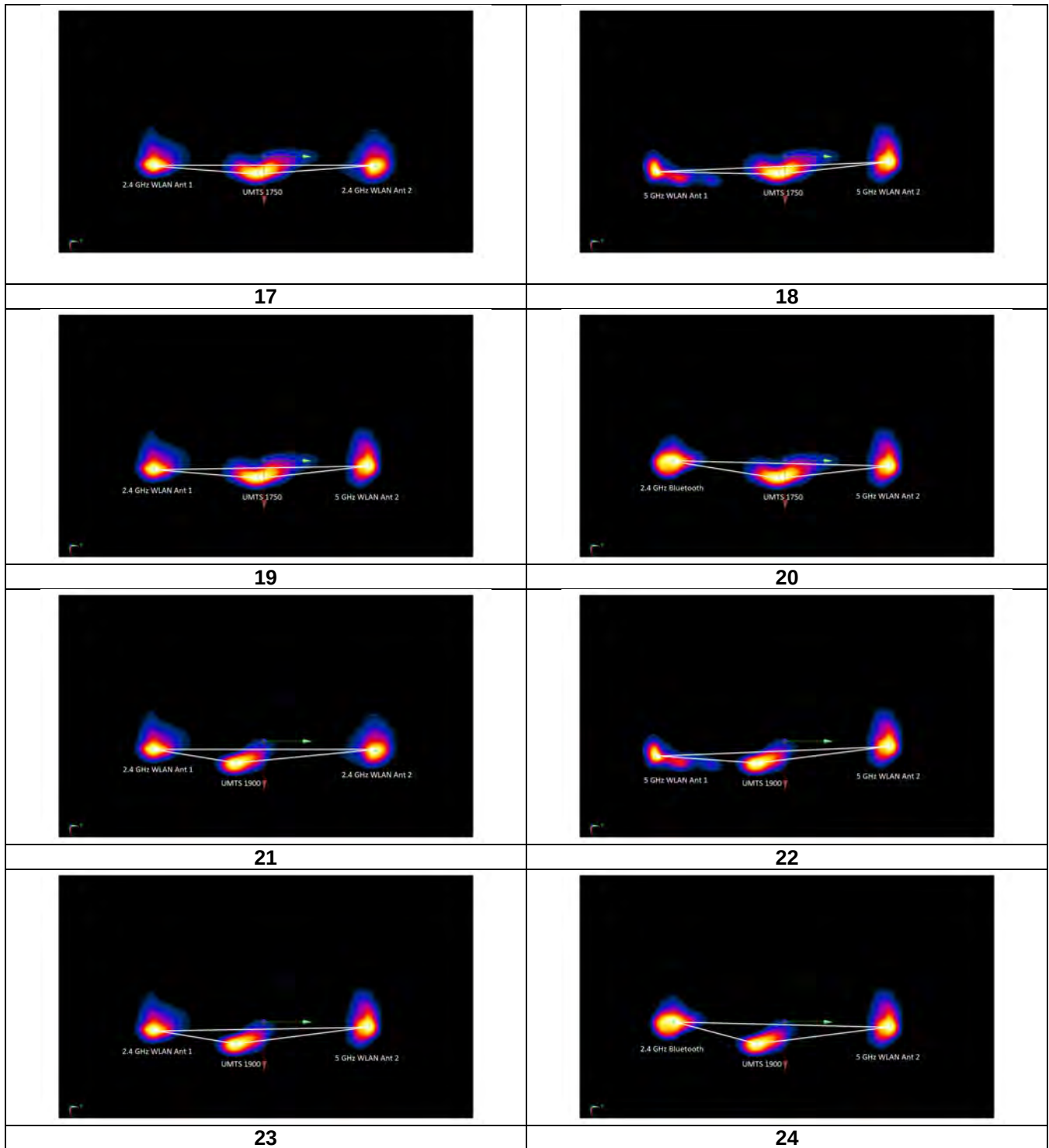
**Table 11-7**  
**Back Side SAR to Peak Location Separation Ratio Plots**



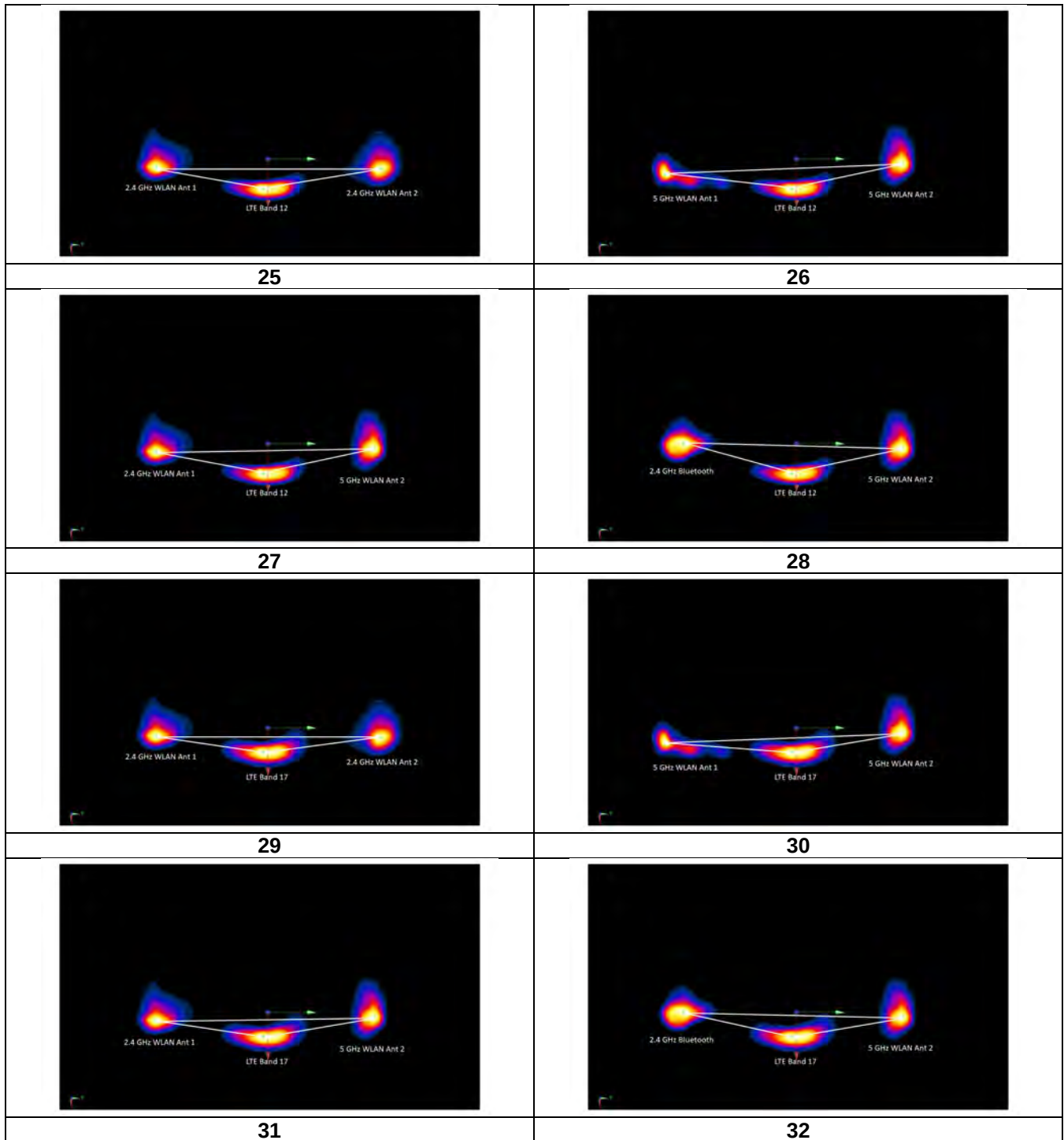
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 101 of 124                 |



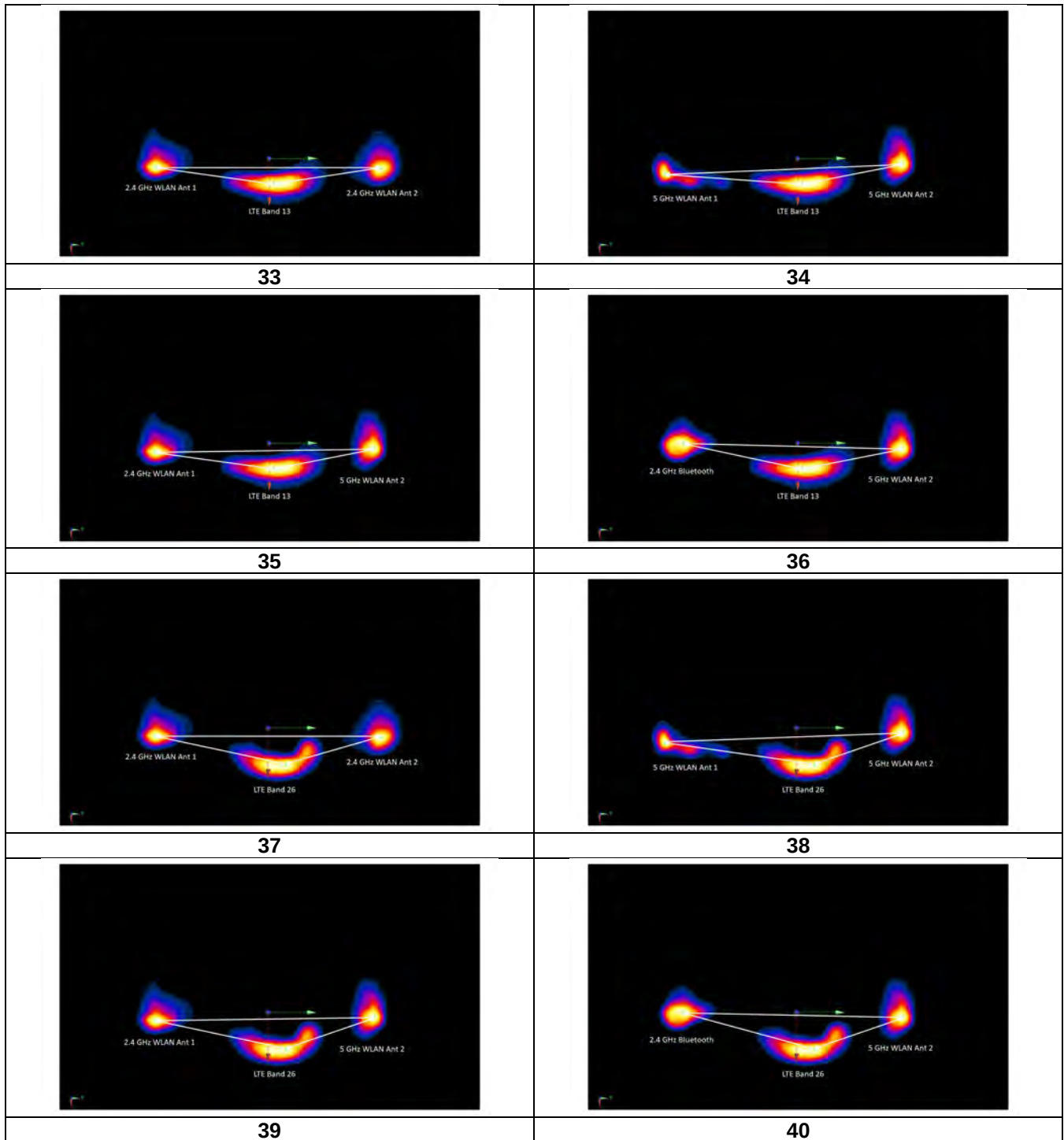
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| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 102 of 124                 |



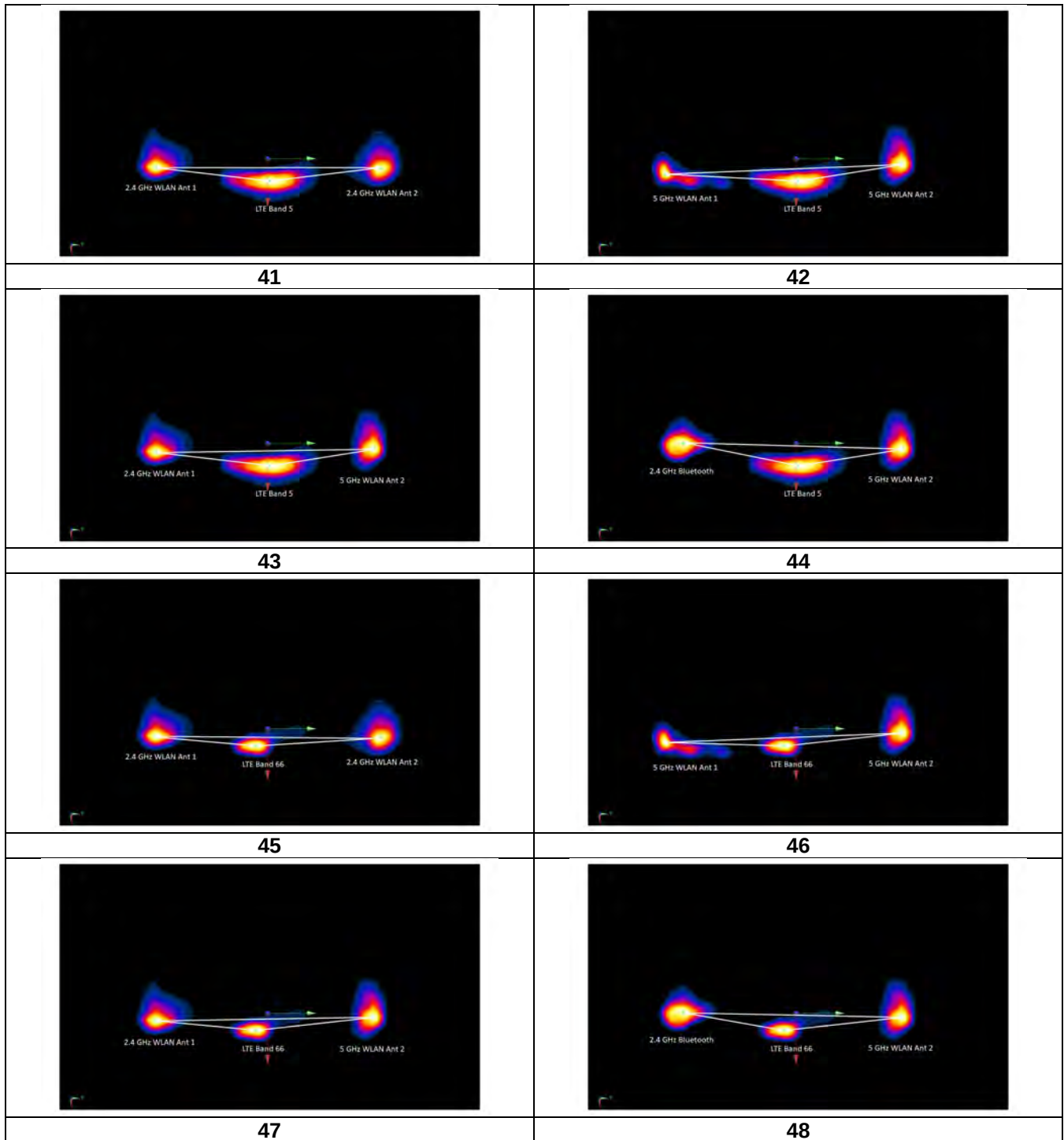
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| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 103 of 124                 |



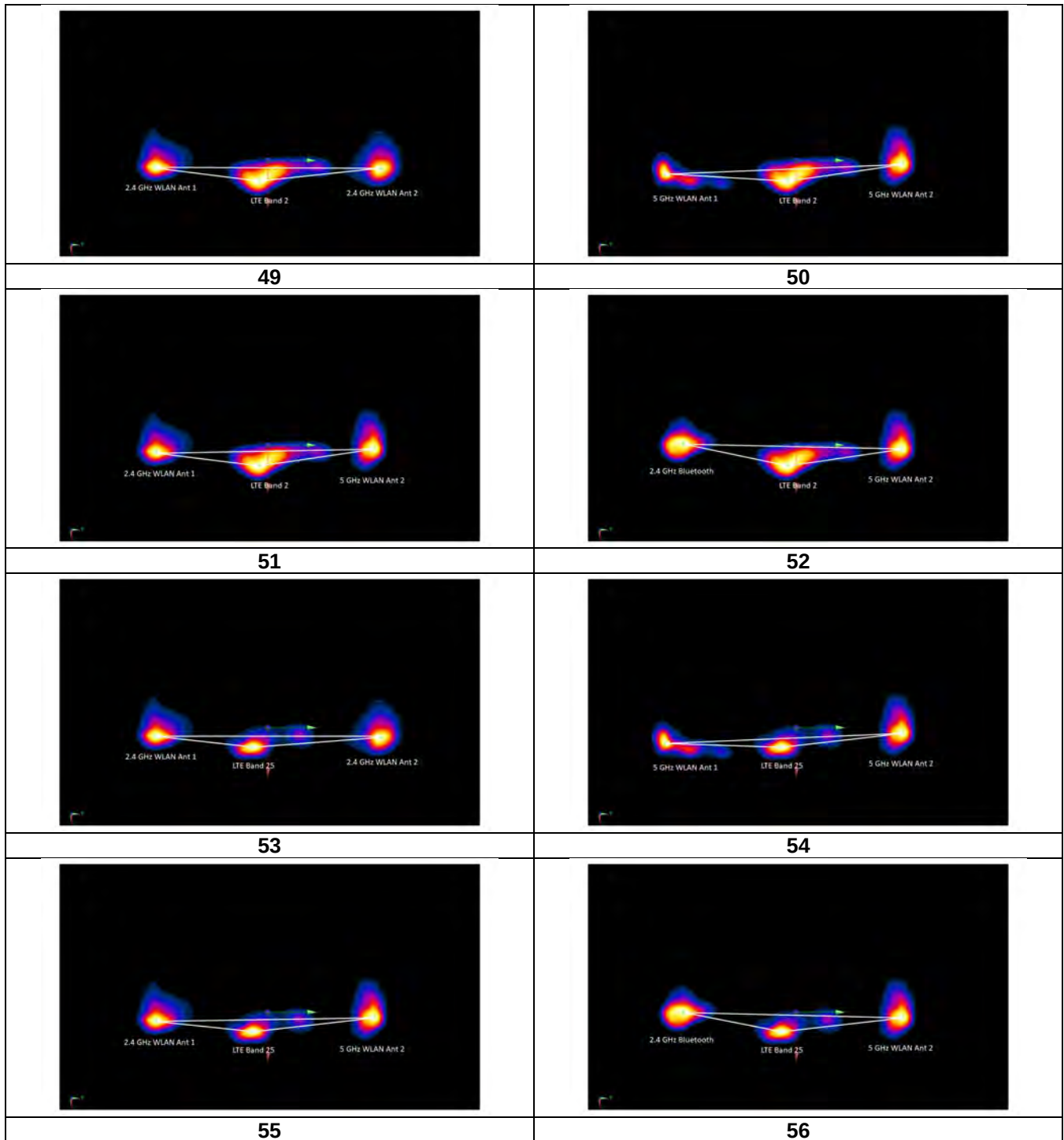
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| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 104 of 124                 |



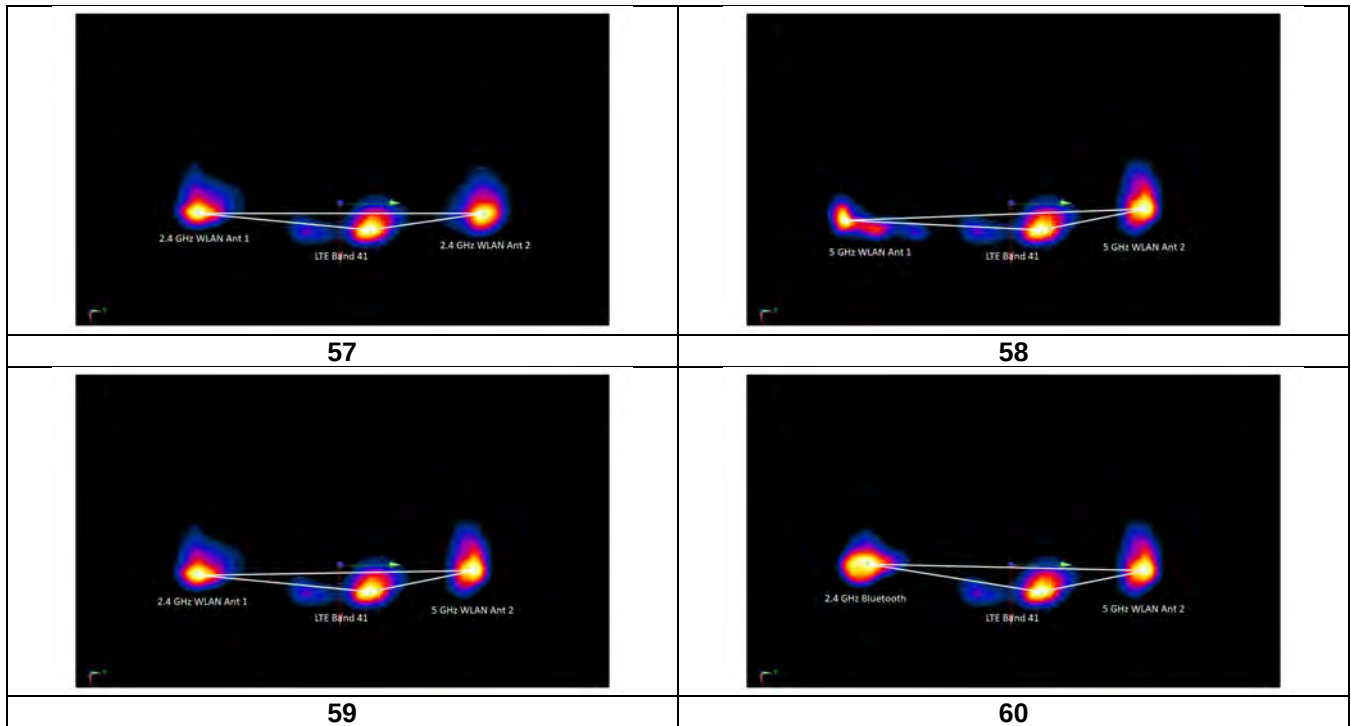
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| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 105 of 124                 |



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| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 106 of 124                 |



|                                         |                                                                                                                                                                                                        |                              |                                 |
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| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 107 of 124                 |



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| FCC ID: A3LSMT865                       |  <b>SAR EVALUATION REPORT</b>  |                              | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                                                                                                                                     | DUT Type:<br>Portable Tablet | Page 108 of 124                 |

### 11.3.2 Top Edge SPLSR Evaluation and Analysis

**Table 11-8**  
**Peak SAR Locations for Body Top Edge**

| Mode/Band          | x (mm) | y (mm)  | Reported SAR (W/kg) |
|--------------------|--------|---------|---------------------|
| 2.4 GHz WLAN Ant 1 | -29.00 | -74.40  | 0.121               |
| 2.4 GHz WLAN Ant 2 | -31.00 | 68.40   | 0.424               |
| 5 GHz WLAN Ant 1   | -24.00 | -57.00  | 0.168               |
| 5 GHz WLAN Ant 2   | 59.00  | -206.25 | 0.390               |
| Bluetooth          | -26.50 | -68.40  | 0.092               |
| UMTS 850           | -26.00 | -5.00   | 1.213               |
| UMTS 1750          | -25.00 | 0.00    | 1.283               |
| UMTS 1900          | -29.50 | -13.50  | 1.187               |
| LTE Band 13        | -24.50 | -16.00  | 1.293               |
| LTE Band 5 (Cell)  | -17.00 | -16.00  | 1.151               |
| LTE Band 66 (AWS)  | -28.00 | -6.00   | 1.295               |
| LTE Band 2 (PCS)   | -27.00 | 0.00    | 1.225               |
| LTE Band 25 (PCS)  | -29.50 | -10.50  | 1.179               |
| LTE Band 41        | -24.50 | 30.20   | 1.049               |

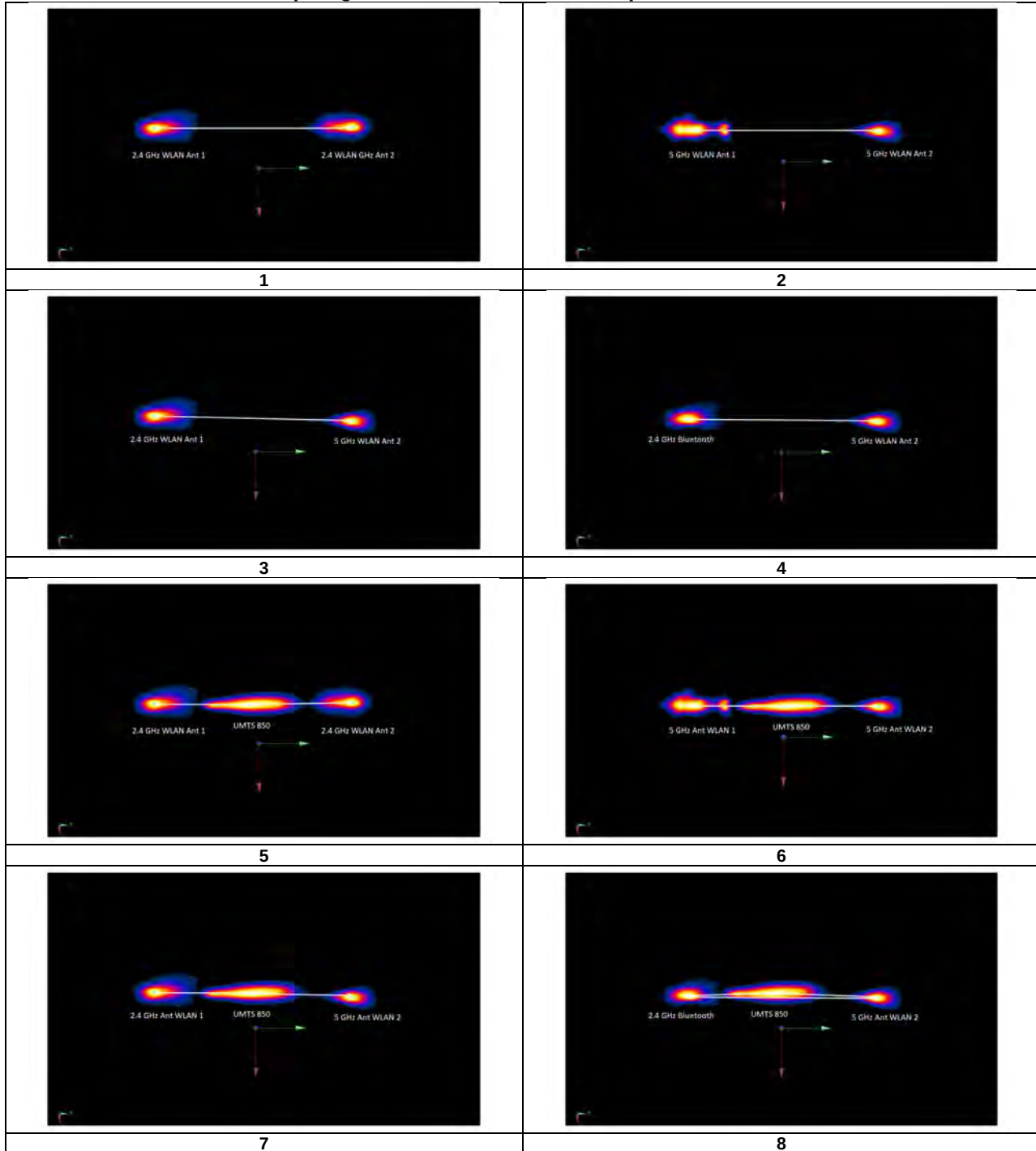
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| FCC ID: A3LSMT865                       |  | SAR EVALUATION REPORT        |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 109 of 124                 |

**Table 11-9**  
**Top Edge SAR to Peak Location Separation Ratio Calculations**

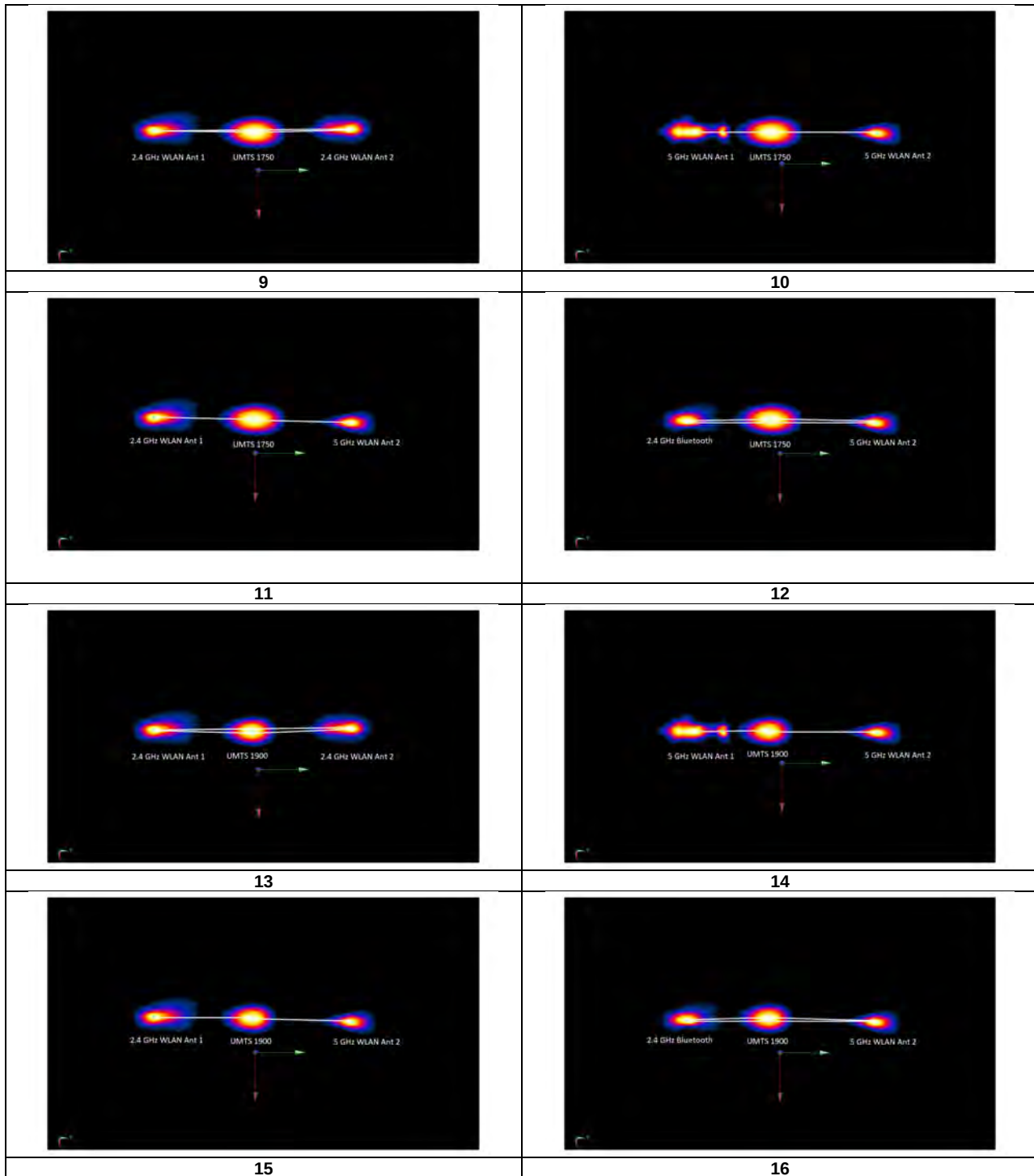
| Antenna Pair       |                    | Standalone SAR (W/kg) |       | Standalone SAR Sum (W/kg) | Peak SAR Separation Distance (mm) | SPLS Ratio            | Plot Number |
|--------------------|--------------------|-----------------------|-------|---------------------------|-----------------------------------|-----------------------|-------------|
| Ant "a"            | Ant "b"            | a                     | b     | a+b                       | D <sub>a-b</sub>                  | $(a+b)^{1.5}/D_{a-b}$ |             |
| 2.4 GHz WLAN Ant 1 | 2.4 GHz WLAN Ant 2 | 0.121                 | 0.424 | 0.545                     | 142.81                            | 0.00                  | 1           |
| 5 GHz WLAN Ant 1   | 5 GHz WLAN Ant 2   | 0.168                 | 0.390 | 0.558                     | 170.78                            | 0.00                  | 2           |
| 2.4 GHz WLAN Ant 1 | 5 GHz WLAN Ant 2   | 0.121                 | 0.390 | 0.511                     | 158.52                            | 0.00                  | 3           |
| Bluetooth          | 5 GHz WLAN Ant 2   | 0.092                 | 0.390 | 0.482                     | 162.21                            | 0.00                  | 4           |
| UMTS 850           | 2.4 GHz WLAN Ant 1 | 1.213                 | 0.121 | 1.334                     | 69.46                             | 0.02                  | 5, 7        |
| UMTS 850           | 2.4 GHz WLAN Ant 2 | 1.213                 | 0.424 | 1.637                     | 73.57                             | 0.03                  | 5           |
| UMTS 850           | 5 GHz WLAN Ant 1   | 1.213                 | 0.168 | 1.381                     | 52.04                             | 0.03                  | 6           |
| UMTS 850           | 5 GHz WLAN Ant 2   | 1.213                 | 0.390 | 1.603                     | 218.46                            | 0.01                  | 6, 7, 8     |
| UMTS 850           | Bluetooth          | 1.213                 | 0.092 | 1.305                     | 63.40                             | 0.02                  | 8           |
| UMTS 1750          | 2.4 GHz WLAN Ant 1 | 1.283                 | 0.121 | 1.404                     | 74.51                             | 0.02                  | 9, 11       |
| UMTS 1750          | 2.4 GHz WLAN Ant 2 | 1.283                 | 0.424 | 1.707                     | 68.66                             | 0.03                  | 9           |
| UMTS 1750          | 5 GHz WLAN Ant 1   | 1.283                 | 0.168 | 1.451                     | 57.01                             | 0.03                  | 10          |
| UMTS 1750          | 5 GHz WLAN Ant 2   | 1.283                 | 0.390 | 1.673                     | 222.70                            | 0.01                  | 10, 11, 12  |
| UMTS 1750          | Bluetooth          | 1.283                 | 0.092 | 1.375                     | 68.42                             | 0.02                  | 12          |
| UMTS 1900          | 2.4 GHz WLAN Ant 1 | 1.187                 | 0.121 | 1.308                     | 60.90                             | 0.02                  | 13, 15      |
| UMTS 1900          | 2.4 GHz WLAN Ant 2 | 1.187                 | 0.424 | 1.611                     | 81.91                             | 0.02                  | 13          |
| UMTS 1900          | 5 GHz WLAN Ant 1   | 1.187                 | 0.168 | 1.355                     | 43.85                             | 0.04                  | 14          |
| UMTS 1900          | 5 GHz WLAN Ant 2   | 1.187                 | 0.390 | 1.577                     | 212.10                            | 0.01                  | 14, 15, 16  |
| UMTS 1900          | Bluetooth          | 1.187                 | 0.092 | 1.279                     | 54.98                             | 0.03                  | 16          |
| LTE Band 13        | 2.4 GHz WLAN Ant 1 | 1.293                 | 0.121 | 1.414                     | 58.57                             | 0.03                  | 17, 19      |
| LTE Band 13        | 2.4 GHz WLAN Ant 2 | 1.293                 | 0.424 | 1.717                     | 84.65                             | 0.03                  | 17          |
| LTE Band 13        | 5 GHz WLAN Ant 1   | 1.293                 | 0.168 | 1.461                     | 41.00                             | 0.04                  | 18          |
| LTE Band 13        | 5 GHz WLAN Ant 2   | 1.293                 | 0.390 | 1.683                     | 207.77                            | 0.01                  | 18, 19, 20  |
| LTE Band 13        | Bluetooth          | 1.293                 | 0.092 | 1.385                     | 52.44                             | 0.03                  | 20          |
| LTE Band 5 (Cell)  | 2.4 GHz WLAN Ant 1 | 1.151                 | 0.121 | 1.272                     | 59.62                             | 0.02                  | 21, 23      |
| LTE Band 5 (Cell)  | 2.4 GHz WLAN Ant 2 | 1.151                 | 0.424 | 1.575                     | 85.55                             | 0.02                  | 21          |
| LTE Band 5 (Cell)  | 5 GHz WLAN Ant 1   | 1.151                 | 0.168 | 1.319                     | 41.59                             | 0.04                  | 22          |
| LTE Band 5 (Cell)  | 5 GHz WLAN Ant 2   | 1.151                 | 0.390 | 1.541                     | 204.87                            | 0.01                  | 22, 23, 24  |
| LTE Band 5 (Cell)  | Bluetooth          | 1.151                 | 0.092 | 1.243                     | 53.25                             | 0.03                  | 24          |
| LTE Band 66 (AWS)  | 2.4 GHz WLAN Ant 1 | 1.295                 | 0.121 | 1.416                     | 68.41                             | 0.02                  | 25, 27      |
| LTE Band 66 (AWS)  | 2.4 GHz WLAN Ant 2 | 1.295                 | 0.424 | 1.719                     | 74.46                             | 0.03                  | 25          |
| LTE Band 66 (AWS)  | 5 GHz WLAN Ant 1   | 1.295                 | 0.168 | 1.463                     | 51.16                             | 0.03                  | 26          |
| LTE Band 66 (AWS)  | 5 GHz WLAN Ant 2   | 1.295                 | 0.390 | 1.685                     | 218.33                            | 0.01                  | 26, 27, 28  |
| LTE Band 66 (AWS)  | Bluetooth          | 1.295                 | 0.092 | 1.387                     | 62.42                             | 0.03                  | 28          |
| LTE Band 2 (PCS)   | 2.4 GHz WLAN Ant 1 | 1.225                 | 0.121 | 1.346                     | 74.43                             | 0.02                  | 29, 31      |
| LTE Band 2 (PCS)   | 2.4 GHz WLAN Ant 2 | 1.225                 | 0.424 | 1.649                     | 68.52                             | 0.03                  | 29          |
| LTE Band 2 (PCS)   | 5 GHz WLAN Ant 1   | 1.225                 | 0.168 | 1.393                     | 57.08                             | 0.03                  | 30          |
| LTE Band 2 (PCS)   | 5 GHz WLAN Ant 2   | 1.225                 | 0.390 | 1.615                     | 223.46                            | 0.01                  | 30, 31, 32  |
| LTE Band 2 (PCS)   | Bluetooth          | 1.225                 | 0.092 | 1.317                     | 68.40                             | 0.02                  | 32          |
| LTE Band 25 (PCS)  | 2.4 GHz WLAN Ant 1 | 1.179                 | 0.121 | 1.3                       | 63.90                             | 0.02                  | 33, 35      |
| LTE Band 25 (PCS)  | 2.4 GHz WLAN Ant 2 | 1.179                 | 0.424 | 1.603                     | 78.91                             | 0.03                  | 33          |
| LTE Band 25 (PCS)  | 5 GHz WLAN Ant 1   | 1.179                 | 0.168 | 1.347                     | 46.82                             | 0.03                  | 34          |
| LTE Band 25 (PCS)  | 5 GHz WLAN Ant 2   | 1.179                 | 0.390 | 1.569                     | 214.83                            | 0.01                  | 34, 35, 36  |
| LTE Band 25 (PCS)  | Bluetooth          | 1.179                 | 0.092 | 1.271                     | 57.98                             | 0.02                  | 36          |
| LTE Band 41        | 5 GHz WLAN Ant 1   | 1.049                 | 0.168 | 1.217                     | 87.20                             | 0.02                  | 37          |
| LTE Band 41        | 5 GHz WLAN Ant 2   | 1.049                 | 0.390 | 1.439                     | 250.76                            | 0.01                  | 37          |

|                                         |                                                                                     |                              |                                                                                       |                                        |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|
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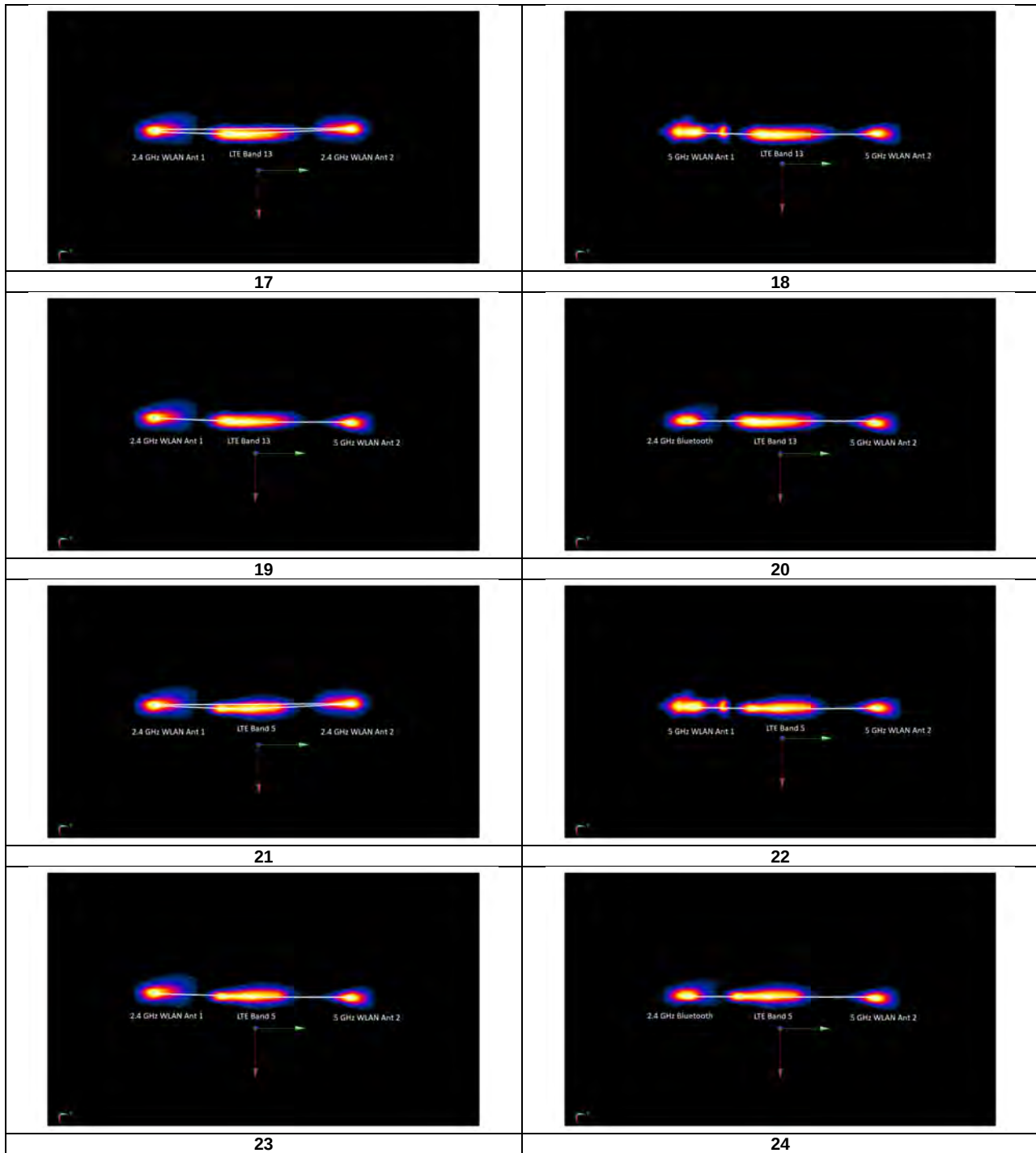
**Table 11-10**  
**Top Edge SAR to Peak Location Separation Ratio Plots**



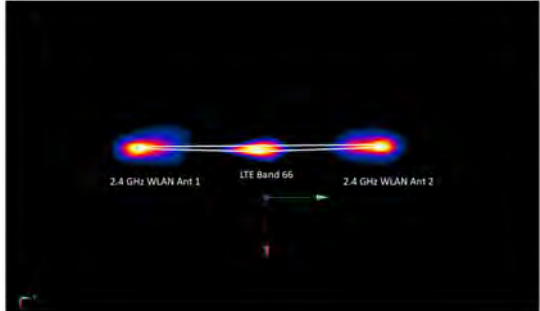
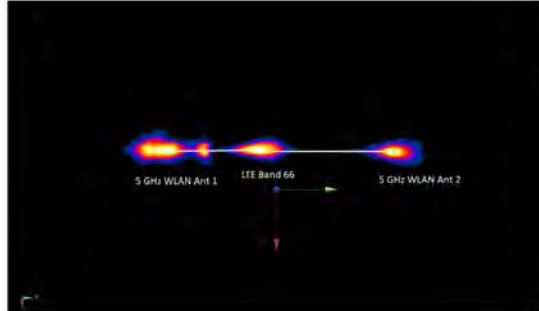
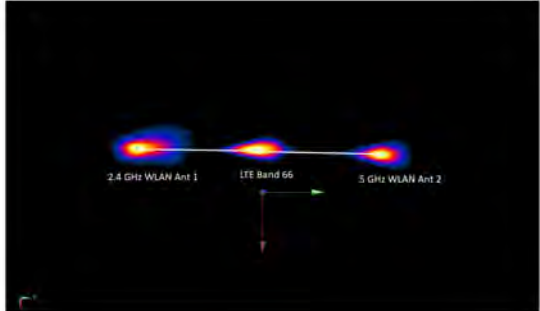
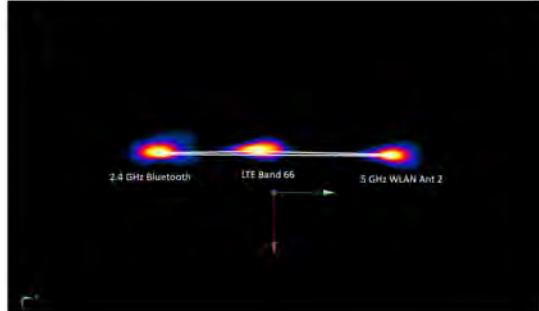
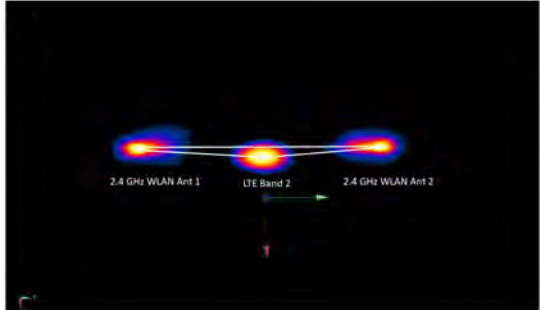
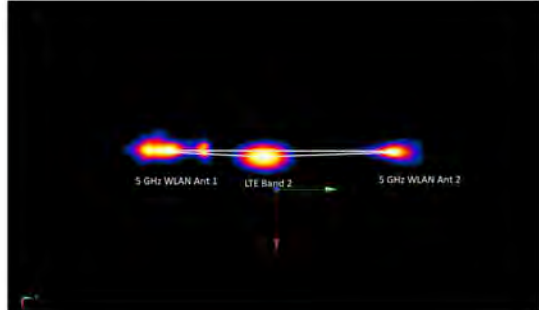
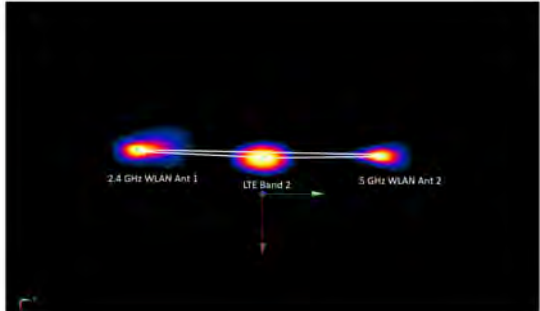
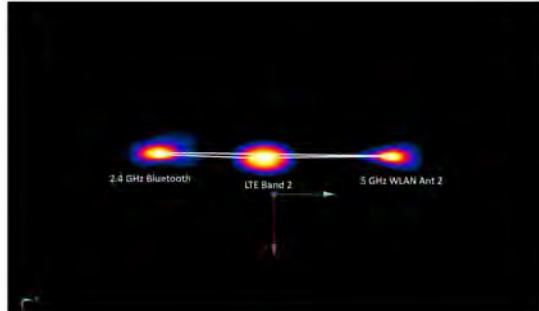
|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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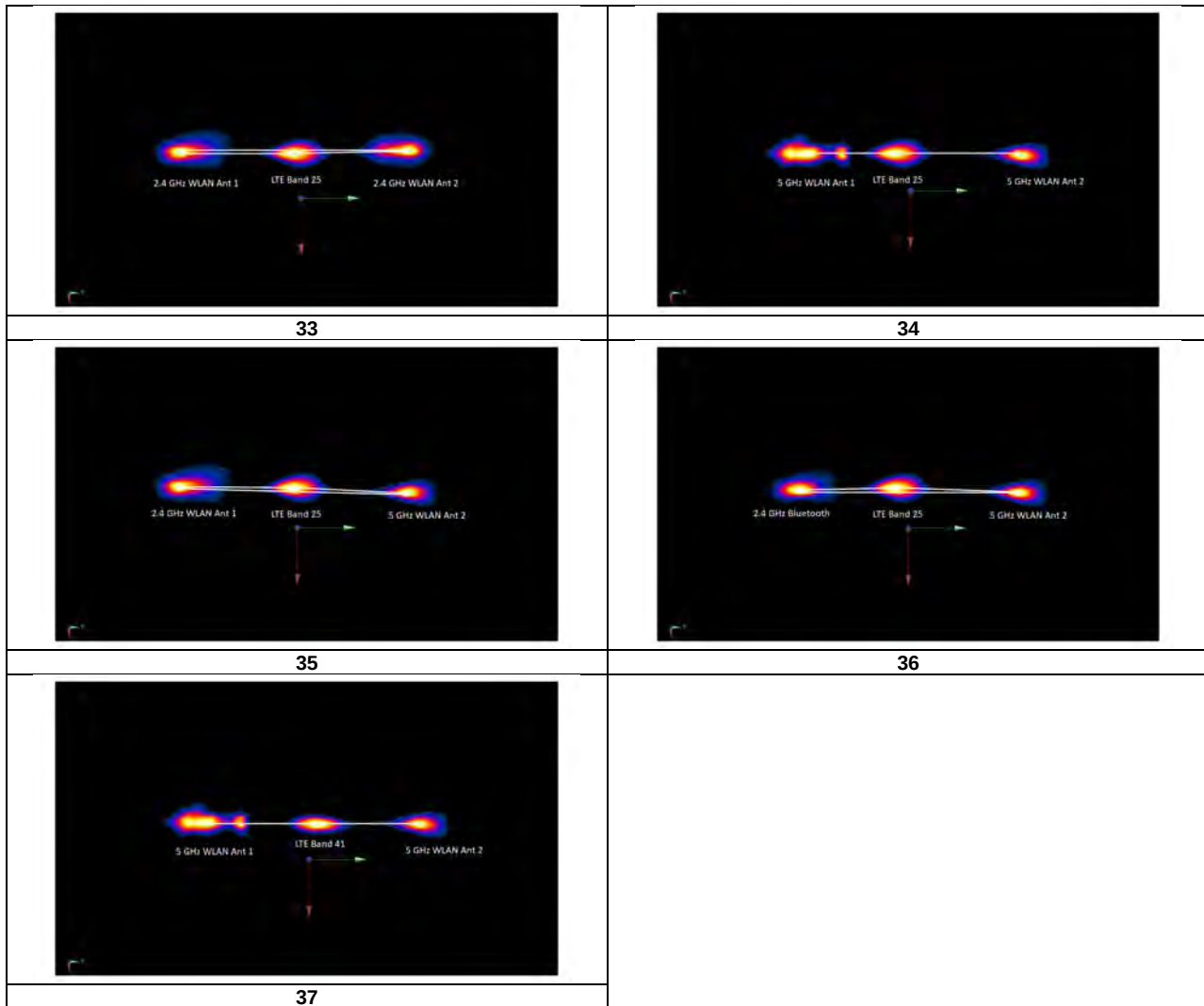
|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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|                                         |                                                                                                                                                                                                        |                              |                                 |
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|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| 25                                                                                  | 26                                                                                   |
|    |    |
| 27                                                                                  | 28                                                                                   |
|   |   |
| 29                                                                                  | 30                                                                                   |
|  |  |
| 31                                                                                  | 32                                                                                   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
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#### 11.4 Simultaneous Transmission Conclusion

The above numerical summed SAR results and SPLSR analysis are sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

|                                         |                                                                                                                                                                                                        |                              |                                 |
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## 12 SAR MEASUREMENT VARIABILITY

### 12.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- 1) When the original highest measured SAR is  $\geq 0.80$  W/kg, the measurement was repeated once.
- 2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was  $> 1.20$  or when the original or repeated measurement was  $\geq 1.45$  W/kg (~ 10% from the 1g SAR limit).
- 3) A third repeated measurement was performed only if the original, first or second repeated measurement was  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ .
- 4) Repeated measurements are not required when the original highest measured SAR is  $< 0.80$  W/kg

**Table 12-1**  
**Body SAR Measurement Variability Results**

| BODY VARIABILITY RESULTS                 |           |        |                                     |                          |                  |       |                      |                   |                       |       |                       |       |                       |
|------------------------------------------|-----------|--------|-------------------------------------|--------------------------|------------------|-------|----------------------|-------------------|-----------------------|-------|-----------------------|-------|-----------------------|
| Band                                     | FREQUENCY |        | Mode                                | Service                  | Data Rate (Mbps) | Side  | Spacing              | Measured SAR (1g) | 1st Repeated SAR (1g) | Ratio | 2nd Repeated SAR (1g) | Ratio | 3rd Repeated SAR (1g) |
|                                          | MHz       | Ch.    |                                     |                          |                  |       |                      | (W/kg)            | (W/kg)                |       | (W/kg)                |       | (W/kg)                |
| 835                                      | 826.40    | 4132   | UMTS 850                            | RMC                      | N/A              | top   | 0 mm                 | 1.140             | 1.110                 | 1.03  | N/A                   | N/A   | N/A                   |
| 750                                      | 782.00    | 23230  | LTE Band 13, 10 MHz Bandwidth       | QPSK, 25 RB, 0 RB Offset | N/A              | top   | 0 mm                 | 1.100             | 1.060                 | 1.04  | N/A                   | N/A   | N/A                   |
| 1750                                     | 1745.00   | 132322 | LTE Band 66 (AWS), 20 MHz Bandwidth | QPSK, 1 RB, 99 RB Offset | N/A              | top   | 17 mm                | 1.080             | 1.080                 | 1.00  | N/A                   | N/A   | N/A                   |
| 1900                                     | 1860.00   | 18700  | LTE Band 2 (PCS), 20 MHz Bandwidth  | QPSK, 1 RB, 0 RB Offset  | N/A              | top   | 17 mm                | 1.020             | 1.030                 | 1.01  | N/A                   | N/A   | N/A                   |
| 2600                                     | 2680.00   | 41490  | LTE Band 41, 20 MHz Bandwidth       | QPSK, 50 RB, 0 RB Offset | N/A              | top   | 0 mm                 | 0.834             | 0.832                 | 1.00  | N/A                   | N/A   | N/A                   |
| 2450                                     | 2462.00   | 11     | 802.11b, 22 MHz Bandwidth           | DSSS, ANT 1              | 1                | left  | 0 mm                 | 0.979             | 0.902                 | 1.09  | N/A                   | N/A   | N/A                   |
| 5250                                     | 5280.00   | 56     | 802.11a, 20 MHz Bandwidth           | OFDM, ANT 2              | 6                | right | 6 mm                 | 0.815             | 0.814                 | 1.00  | N/A                   | N/A   | N/A                   |
| 5600                                     | 5620.00   | 124    | 802.11a, 20 MHz Bandwidth           | OFDM, ANT 2              | 6                | right | 6 mm                 | 1.150             | 1.150                 | 1.00  | N/A                   | N/A   | N/A                   |
| 5750                                     | 5720.00   | 144    | 802.11a, 20 MHz Bandwidth           | OFDM, ANT 2              | 6                | right | 6 mm                 | 0.941             | 0.920                 | 1.02  | N/A                   | N/A   | N/A                   |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT    |           |        |                                     |                          |                  |       | Body                 |                   |                       |       |                       |       |                       |
| Spatial Peak                             |           |        |                                     |                          |                  |       | 1.6 W/kg (mW/g)      |                   |                       |       |                       |       |                       |
| Uncontrolled Exposure/General Population |           |        |                                     |                          |                  |       | averaged over 1 gram |                   |                       |       |                       |       |                       |

### 12.2 Measurement Uncertainty

The measured SAR was  $< 1.5$  W/kg for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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## 13 ADDITIONAL TESTING PER FCC GUIDANCE

### 13.1 Tuner Testing

The following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.

Per April 2019 TCB Workshop notes, in order to evaluate all the tuner states, the 60 tuner states were divided among evenly among each supported band and exposure condition combination. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was  $> 1.2$  W/kg for a particular band/mode/exposure condition, point SAR measurements were made for all 60 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

|                                         |                                                                                     |                              |                                                                                       |                                 |
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**Table 13-1**  
**UMTS Supplemental Body SAR Data**

| Supplemental Body SAR Data          |        |                                     |         |                                     |         |
|-------------------------------------|--------|-------------------------------------|---------|-------------------------------------|---------|
| UMTS 850                            |        | UMTS 1750                           |         | UMTS 1900                           |         |
| RMC                                 |        | RMC                                 |         | RMC                                 |         |
| Test Position                       | Top    | Test Position                       | Top     | Test Position                       | Top     |
| Spacing                             | 0 mm   | Spacing                             | 17 mm   | Spacing                             | 17 mm   |
| Frequency (MHz)                     | 826.40 | Frequency (MHz)                     | 1732.40 | Frequency (MHz)                     | 1907.60 |
| Channel                             | 4132   | Channel                             | 1412    | Channel                             | 9538    |
| Measured 1g SAR (W/kg)              | 1.140  | Measured 1g SAR (W/kg)              | 0.978   | Measured 1g SAR (W/kg)              | 0.872   |
| Average Value of Time Sweep ( W/kg) |        | Average Value of Time Sweep ( W/kg) |         | Average Value of Time Sweep ( W/kg) |         |
| Auto-tune (State 54)                | 2.112  | Auto-tune (State 25)                | 1.431   | Auto-tune (State 34)                | 1.585   |
| Default (State 48)                  | 1.823  | Default (State 24)                  | 1.397   | Default (State 24)                  | 1.113   |
| State 0                             | 1.180  | State 0                             | 1.259   | State 0                             | 1.293   |
| State 1                             | 1.164  | State 1                             | 1.251   | State 1                             | 1.286   |
| State 2                             | 1.485  | State 2                             | 1.147   | State 2                             | 1.304   |
| State 3                             | 1.528  | State 3                             | 1.093   | State 3                             | 1.305   |
| State 4                             | 1.650  | State 4                             | 1.025   | State 4                             | 1.301   |
| State 5                             | 1.667  | State 5                             | 0.888   | State 5                             | 1.295   |
| State 6                             | 1.586  | State 6                             | 0.798   | State 6                             | 1.289   |
| State 7                             | 1.394  | State 7                             | 0.669   | State 7                             | 1.275   |
| State 8                             | 1.044  | State 8                             | 0.523   | State 8                             | 1.247   |
| State 9                             | 0.812  | State 9                             | 0.434   | State 9                             | 1.216   |
| State 10                            | 0.569  | State 10                            | 0.335   | State 10                            | 1.165   |
| State 11                            | 0.348  | State 11                            | 0.235   | State 11                            | 1.074   |
| State 12                            | 0.358  | State 12                            | 1.320   | State 12                            | 1.129   |
| State 13                            | 0.352  | State 13                            | 1.293   | State 13                            | 1.121   |
| State 14                            | 0.590  | State 14                            | 1.316   | State 14                            | 1.153   |
| State 15                            | 0.677  | State 15                            | 1.269   | State 15                            | 1.159   |
| State 16                            | 0.937  | State 16                            | 1.219   | State 16                            | 1.156   |
| State 17                            | 1.405  | State 17                            | 1.089   | State 17                            | 1.163   |
| State 18                            | 1.901  | State 18                            | 0.986   | State 18                            | 1.162   |
| State 19                            | 1.969  | State 19                            | 0.836   | State 19                            | 1.163   |
| State 20                            | 1.118  | State 20                            | 0.645   | State 20                            | 1.147   |
| State 21                            | 0.647  | State 21                            | 0.525   | State 21                            | 1.131   |
| State 22                            | 0.334  | State 22                            | 0.396   | State 22                            | 1.097   |
| State 23                            | 0.154  | State 23                            | 0.269   | State 23                            | 1.025   |
| State 24                            | 0.487  | State 24                            | 1.397   | State 24                            | 1.113   |
| State 25                            | 0.480  | State 25                            | 1.386   | State 25                            | 1.092   |
| State 26                            | 0.566  | State 26                            | 1.280   | State 26                            | 1.192   |
| State 27                            | 0.558  | State 27                            | 1.225   | State 27                            | 1.218   |
| State 28                            | 0.541  | State 28                            | 1.159   | State 28                            | 1.238   |
| State 29                            | 0.473  | State 29                            | 1.022   | State 29                            | 1.298   |
| State 30                            | 0.398  | State 30                            | 0.925   | State 30                            | 1.336   |
| State 31                            | 0.317  | State 31                            | 0.796   | State 31                            | 1.390   |
| State 32                            | 0.217  | State 32                            | 0.634   | State 32                            | 1.456   |
| State 33                            | 0.165  | State 33                            | 0.529   | State 33                            | 1.491   |
| State 34                            | 0.115  | State 34                            | 0.415   | State 34                            | 1.514   |
| State 35                            | 0.072  | State 35                            | 0.297   | State 35                            | 1.464   |
| State 36                            | 0.185  | State 36                            | 1.424   | State 36                            | 0.879   |
| State 37                            | 0.181  | State 37                            | 1.397   | State 37                            | 0.864   |
| State 38                            | 0.389  | State 38                            | 1.416   | State 38                            | 0.953   |
| State 39                            | 0.437  | State 39                            | 1.385   | State 39                            | 0.979   |
| State 40                            | 0.771  | State 40                            | 1.338   | State 40                            | 1.001   |
| State 41                            | 1.039  | State 41                            | 1.216   | State 41                            | 1.065   |
| State 42                            | 0.775  | State 42                            | 1.116   | State 42                            | 1.106   |
| State 43                            | 0.413  | State 43                            | 0.966   | State 43                            | 1.172   |
| State 44                            | 0.162  | State 44                            | 0.762   | State 44                            | 1.263   |
| State 45                            | 0.095  | State 45                            | 0.627   | State 45                            | 1.325   |
| State 46                            | 0.053  | State 46                            | 0.483   | State 46                            | 1.389   |
| State 47                            | 0.026  | State 47                            | 0.333   | State 47                            | 1.412   |
| State 48                            | 1.823  | State 48                            | 0.562   | State 48                            | 0.256   |
| State 49                            | 1.777  | State 49                            | 0.536   | State 49                            | 0.237   |
| State 50                            | 1.926  | State 50                            | 0.514   | State 50                            | 0.239   |
| State 51                            | 1.946  | State 51                            | 0.478   | State 51                            | 0.224   |
| State 52                            | 2.006  | State 52                            | 0.461   | State 52                            | 0.225   |
| State 53                            | 2.046  | State 53                            | 0.383   | State 53                            | 0.195   |
| State 54                            | 2.096  | State 54                            | 0.341   | State 54                            | 0.181   |
| State 55                            | 2.054  | State 55                            | 0.276   | State 55                            | 0.154   |
| State 56                            | 1.969  | State 56                            | 0.206   | State 56                            | 0.121   |
| State 57                            | 1.858  | State 57                            | 0.163   | State 57                            | 0.099   |
| State 58                            | 1.661  | State 58                            | 0.121   | State 58                            | 0.075   |
| State 59                            | 1.331  | State 59                            | 0.079   | State 59                            | 0.050   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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**Table 13-2**  
**LTE Supplemental Body SAR Data**

| Supplemental Body SAR Data                  |        |                                             |        |                                             |        |                                             |        |                                            |        |                                             |         |                                            |         |                                             |         |
|---------------------------------------------|--------|---------------------------------------------|--------|---------------------------------------------|--------|---------------------------------------------|--------|--------------------------------------------|--------|---------------------------------------------|---------|--------------------------------------------|---------|---------------------------------------------|---------|
| LTE Band 12                                 |        | LTE Band 17                                 |        | LTE Band 13                                 |        | LTE Band 5                                  |        | LTE Band 26                                |        | LTE Band 66                                 |         | LTE Band 2                                 |         | LTE Band 25                                 |         |
| QPSK, 10 MHz Bandwidth, 25 RB, 0 RB Offsets |        | QPSK, 10 MHz Bandwidth, 50 RB, 0 RB Offsets |        | QPSK, 10 MHz Bandwidth, 25 RB, 0 RB Offsets |        | QPSK, 10 MHz Bandwidth, 25 RB, 0 RB Offsets |        | QPSK, 15 MHz Bandwidth, 1 RB, 0 RB Offsets |        | QPSK, 20 MHz Bandwidth, 1 RB, 99 RB Offsets |         | QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offsets |         | QPSK, 20 MHz Bandwidth, 1 RB, 99 RB Offsets |         |
| Test Position                               | Top    | Test Position                               | Top    | Test Position                               | Top    | Test Position                               | Back   | Test Position                              | Back   | Test Position                               | Top     | Test Position                              | Top     | Test Position                               | Top     |
| Spacing                                     | 0 mm   | Spacing                                     | 0 mm   | Spacing                                     | 0 mm   | Spacing                                     | 0 mm   | Spacing                                    | 0 mm   | Spacing                                     | 17 mm   | Spacing                                    | 17 mm   | Spacing                                     | 17 mm   |
| Frequency (MHz)                             | 707.50 | Frequency (MHz)                             | 710.00 | Frequency (MHz)                             | 782.00 | Frequency (MHz)                             | 836.50 | Frequency (MHz)                            | 831.50 | Frequency (MHz)                             | 1720.00 | Frequency (MHz)                            | 1860.00 | Frequency (MHz)                             | 1882.50 |
| Channel                                     | 23095  | Channel                                     | 23790  | Channel                                     | 23230  | Channel                                     | 20525  | Channel                                    | 26865  | Channel                                     | 132072  | Channel                                    | 18700   | Channel                                     | 26365   |
| Measured 1g SAR (W/kg)                      | 0.691  | Measured 1g SAR (W/kg)                      | 0.786  | Measured 1g SAR (W/kg)                      | 1.100  | Measured 1g SAR (W/kg)                      | 1.110  | Measured 1g SAR (W/kg)                     | 1.060  | Measured 1g SAR (W/kg)                      | 1.050   | Measured 1g SAR (W/kg)                     | 1.030   | Measured 1g SAR (W/kg)                      | 0.981   |
| Average Value of Time Sweep (W/kg)          |        | Average Value of Time Sweep (W/kg)          |        | Average Value of Time Sweep (W/kg)          |        | Average Value of Time Sweep (W/kg)          |        | Average Value of Time Sweep (W/kg)         |        | Average Value of Time Sweep (W/kg)          |         | Average Value of Time Sweep (W/kg)         |         | Average Value of Time Sweep (W/kg)          |         |
| Auto-tune (State 50)                        | 1.856  | Auto-tune (State 50)                        | 1.949  | Auto-tune (State 52)                        | 2.129  | Auto-tune (State 55)                        | 1.944  | Auto-tune (State 55)                       | 2.083  | Auto-tune (State 24)                        | 1.560   | Auto-tune (State 18)                       | 1.487   | Auto-tune (State 19)                        | 1.461   |
| Default (State 0)                           | 1.159  | Default (State 0)                           | 1.160  | Default (State 48)                          | 1.718  | Default (State 48)                          | 1.530  | Default (State 48)                         | 1.583  | Default (State 24)                          | 1.557   | Default (State 24)                         | 1.535   | Default (State 24)                          | 1.378   |
| State 0                                     | 1.159  | State 0                                     | 1.160  | State 0                                     | 1.122  | State 0                                     | 0.846  | State 0                                    | 0.954  | State 0                                     | 1.339   | State 0                                    | 1.314   | State 0                                     | 1.342   |
| State 1                                     | 1.142  | State 1                                     | 1.149  | State 1                                     | 1.108  | State 1                                     | 0.836  | State 1                                    | 0.944  | State 1                                     | 1.341   | State 1                                    | 1.294   | State 1                                     | 1.317   |
| State 2                                     | 1.538  | State 2                                     | 1.602  | State 2                                     | 1.475  | State 2                                     | 1.061  | State 2                                    | 1.192  | State 2                                     | 1.212   | State 2                                    | 1.235   | State 2                                     | 1.342   |
| State 3                                     | 1.584  | State 3                                     | 1.645  | State 3                                     | 1.545  | State 3                                     | 1.054  | State 3                                    | 1.211  | State 3                                     | 1.160   | State 3                                    | 1.202   | State 3                                     | 1.323   |
| State 4                                     | 1.596  | State 4                                     | 1.655  | State 4                                     | 1.653  | State 4                                     | 1.152  | State 4                                    | 1.283  | State 4                                     | 1.086   | State 4                                    | 1.162   | State 4                                     | 1.301   |
| State 5                                     | 1.403  | State 5                                     | 1.461  | State 5                                     | 1.655  | State 5                                     | 1.130  | State 5                                    | 1.252  | State 5                                     | 0.941   | State 5                                    | 1.043   | State 5                                     | 1.222   |
| State 6                                     | 1.133  | State 6                                     | 1.190  | State 6                                     | 1.527  | State 6                                     | 1.043  | State 6                                    | 1.149  | State 6                                     | 0.849   | State 6                                    | 0.966   | State 6                                     | 1.157   |
| State 7                                     | 0.846  | State 7                                     | 0.894  | State 7                                     | 1.291  | State 7                                     | 0.888  | State 7                                    | 0.978  | State 7                                     | 0.722   | State 7                                    | 0.846   | State 7                                     | 1.045   |
| State 8                                     | 0.534  | State 8                                     | 0.568  | State 8                                     | 0.905  | State 8                                     | 0.643  | State 8                                    | 0.702  | State 8                                     | 0.567   | State 8                                    | 0.694   | State 8                                     | 0.876   |
| State 9                                     | 0.385  | State 9                                     | 0.411  | State 9                                     | 0.678  | State 9                                     | 0.494  | State 9                                    | 0.541  | State 9                                     | 0.470   | State 9                                    | 0.586   | State 9                                     | 0.753   |
| State 10                                    | 0.255  | State 10                                    | 0.273  | State 10                                    | 0.460  | State 10                                    | 0.344  | State 10                                   | 0.375  | State 10                                    | 0.365   | State 10                                   | 0.463   | State 10                                    | 0.602   |
| State 11                                    | 0.152  | State 11                                    | 0.162  | State 11                                    | 0.274  | State 11                                    | 0.211  | State 11                                   | 0.230  | State 11                                    | 0.258   | State 11                                   | 0.333   | State 11                                    | 0.434   |
| State 12                                    | 0.440  | State 12                                    | 0.450  | State 12                                    | 0.364  | State 12                                    | 0.296  | State 12                                   | 0.305  | State 12                                    | 1.434   | State 12                                   | 1.361   | State 12                                    | 1.259   |
| State 13                                    | 0.433  | State 13                                    | 0.443  | State 13                                    | 0.359  | State 13                                    | 0.291  | State 13                                   | 0.300  | State 13                                    | 1.403   | State 13                                   | 1.321   | State 13                                    | 1.216   |
| State 14                                    | 0.966  | State 14                                    | 0.983  | State 14                                    | 0.662  | State 14                                    | 0.506  | State 14                                   | 0.535  | State 14                                    | 1.405   | State 14                                   | 1.390   | State 14                                    | 1.365   |
| State 15                                    | 1.163  | State 15                                    | 1.201  | State 15                                    | 0.789  | State 15                                    | 0.551  | State 15                                   | 0.581  | State 15                                    | 1.367   | State 15                                   | 1.377   | State 15                                    | 1.383   |
| State 16                                    | 1.601  | State 16                                    | 1.634  | State 16                                    | 1.152  | State 16                                    | 0.836  | State 16                                   | 0.904  | State 16                                    | 1.307   | State 16                                   | 1.351   | State 16                                    | 1.391   |
| State 17                                    | 1.438  | State 17                                    | 1.509  | State 17                                    | 1.734  | State 17                                    | 1.280  | State 17                                   | 1.395  | State 17                                    | 1.165   | State 17                                   | 1.260   | State 17                                    | 1.377   |
| State 18                                    | 0.891  | State 18                                    | 0.949  | State 18                                    | 1.936  | State 18                                    | 1.529  | State 18                                   | 1.743  | State 18                                    | 1.054   | State 18                                   | 1.490   | State 18                                    | 1.347   |
| State 19                                    | 0.492  | State 19                                    | 0.526  | State 19                                    | 1.400  | State 19                                    | 1.471  | State 19                                   | 1.447  | State 19                                    | 0.898   | State 19                                   | 1.043   | State 19                                    | 1.497   |
| State 20                                    | 0.277  | State 20                                    | 0.245  | State 20                                    | 0.622  | State 20                                    | 0.750  | State 20                                   | 0.680  | State 20                                    | 0.693   | State 20                                   | 0.839   | State 20                                    | 1.071   |
| State 21                                    | 0.143  | State 21                                    | 0.152  | State 21                                    | 0.359  | State 21                                    | 0.425  | State 21                                   | 0.389  | State 21                                    | 0.563   | State 21                                   | 0.701   | State 21                                    | 0.912   |
| State 22                                    | 0.083  | State 22                                    | 0.089  | State 22                                    | 0.192  | State 22                                    | 0.218  | State 22                                   | 0.204  | State 22                                    | 0.426   | State 22                                   | 0.540   | State 22                                    | 0.718   |
| State 23                                    | 0.044  | State 23                                    | 0.047  | State 23                                    | 0.093  | State 23                                    | 0.101  | State 23                                   | 0.097  | State 23                                    | 0.288   | State 23                                   | 0.373   | State 23                                    | 0.498   |
| State 24                                    | 0.577  | State 24                                    | 0.589  | State 24                                    | 0.490  | State 24                                    | 0.404  | State 24                                   | 0.415  | State 24                                    | 1.557   | State 24                                   | 1.535   | State 24                                    | 1.378   |
| State 25                                    | 0.570  | State 25                                    | 0.580  | State 25                                    | 0.486  | State 25                                    | 0.400  | State 25                                   | 0.409  | State 25                                    | 1.488   | State 25                                   | 1.430   | State 25                                    | 1.345   |
| State 26                                    | 0.750  | State 26                                    | 0.765  | State 26                                    | 0.609  | State 26                                    | 0.457  | State 26                                   | 0.474  | State 26                                    | 1.366   | State 26                                   | 1.380   | State 26                                    | 1.382   |
| State 27                                    | 0.479  | State 27                                    | 0.763  | State 27                                    | 0.615  | State 27                                    | 0.456  | State 27                                   | 0.475  | State 27                                    | 1.310   | State 27                                   | 1.341   | State 27                                    | 1.370   |
| State 28                                    | 0.677  | State 28                                    | 0.691  | State 28                                    | 0.595  | State 28                                    | 0.426  | State 28                                   | 0.452  | State 28                                    | 1.241   | State 28                                   | 1.296   | State 28                                    | 1.343   |
| State 29                                    | 0.523  | State 29                                    | 0.536  | State 29                                    | 0.515  | State 29                                    | 0.368  | State 29                                   | 0.395  | State 29                                    | 1.101   | State 29                                   | 1.186   | State 29                                    | 1.275   |
| State 30                                    | 0.384  | State 30                                    | 0.398  | State 30                                    | 0.419  | State 30                                    | 0.307  | State 30                                   | 0.330  | State 30                                    | 0.997   | State 30                                   | 1.104   | State 30                                    | 1.215   |
| State 31                                    | 0.269  | State 31                                    | 0.282  | State 31                                    | 0.320  | State 31                                    | 0.241  | State 31                                   | 0.260  | State 31                                    | 0.862   | State 31                                   | 0.979   | State 31                                    | 1.104   |
| State 32                                    | 0.164  | State 32                                    | 0.172  | State 32                                    | 0.208  | State 32                                    | 0.166  | State 32                                   | 0.177  | State 32                                    | 0.692   | State 32                                   | 0.813   | State 32                                    | 0.939   |
| State 33                                    | 0.117  | State 33                                    | 0.123  | State 33                                    | 0.153  | State 33                                    | 0.126  | State 33                                   | 0.135  | State 33                                    | 0.584   | State 33                                   | 0.693   | State 33                                    | 0.806   |
| State 34                                    | 0.078  | State 34                                    | 0.082  | State 34                                    | 0.104  | State 34                                    | 0.089  | State 34                                   | 0.094  | State 34                                    | 0.460   | State 34                                   | 0.559   | State 34                                    | 0.653   |
| State 35                                    | 0.047  | State 35                                    | 0.049  | State 35                                    | 0.063  | State 35                                    | 0.056  | State 35                                   | 0.059  | State 35                                    | 0.333   | State 35                                   | 0.407   | State 35                                    | 0.474   |
| State 36                                    | 0.255  | State 36                                    | 0.265  | State 36                                    | 0.198  | State 36                                    | 0.158  | State 36                                   | 0.164  | State 36                                    | 1.487   | State 36                                   | 1.470   | State 36                                    | 1.265   |
| State 37                                    | 0.249  | State 37                                    | 0.259  | State 37                                    | 0.193  | State 37                                    | 0.155  | State 37                                   | 0.161  | State 37                                    | 1.480   | State 37                                   | 1.436   | State 37                                    | 1.227   |
| State 38                                    | 0.796  | State 38                                    | 0.818  | State 38                                    | 0.482  | State 38                                    | 0.335  | State 38                                   | 0.359  | State 38                                    | 1.543   | State 38                                   | 1.499   | State 38                                    | 1.377   |
| State 39                                    | 1.042  | State 39                                    | 1.069  | State 39                                    | 0.627  | State 39                                    | 0.375  | State 39                                   | 0.405  | State 39                                    | 1.498   | State 39                                   | 1.492   | State 39                                    | 1.397   |
| State 40                                    | 1.140  | State 40                                    | 1.208  | State 40                                    | 1.025  | State 40                                    | 0.650  | State 40                                   | 0.722  | State 40                                    | 1.452   | State 40                                   | 1.459   | State 40                                    | 1.409   |
| State 41                                    | 0.541  | State 41                                    | 0.597  | State 41                                    | 0.981  | State 41                                    | 0.843  | State 41                                   | 0.896  | State 41                                    | 1.311   | State 41                                   | 1.377   | State 41                                    | 1.411   |
| State 42                                    | 0.253  | State 42                                    | 0.282  | State 42                                    | 0.523  | State 42                                    | 0.625  | State 42                                   | 0.606  | State 42                                    | 1.204   | State 42                                   | 1.301   | State 42                                    | 1.386   |
| State 43                                    | 0.130  | State 43                                    | 0.145  | State 43                                    | 0.251  | State 43                                    | 0.333  | State 43                                   | 0.309  | State 43                                    | 1.040   | State 43                                   | 1.162   | State 43                                    | 1.301   |
| State 44                                    | 0.059  | State 44                                    | 0.062  | State 44                                    | 0.103  | State 44                                    | 0.137  | State 44                                   | 0.126  | State 44                                    | 0.826   | State 44                                   | 0.958   | State 44                                    | 1.125   |
| State 45                                    | 0.037  | State 45                                    | 0.039  | State 45                                    | 0.062  | State 45                                    | 0.081  | State 45                                   | 0.075  | State 45                                    | 0.680   | State 45                                   | 0.808   | State 45                                    | 0.973   |
| State 46                                    | 0.022  | State 46                                    | 0.023  | State 46                                    | 0.035  | State 46                                    | 0.044  | State 46                                   | 0.042  | State 46                                    | 0.527   | State 46                                   | 0.638   | State 46                                    | 0.773   |
| State 47                                    | 0.011  | State 47                                    | 0.012  | State 47                                    | 0.017  | State 47                                    | 0.022  | State 47                                   | 0.021  | State 47                                    | 0.363   | State 47                                   | 0.446   | State 47                                    | 0.541   |
| State 48                                    | 1.547  | State 48                                    | 1.621  | State 48                                    | 1.718  | State 48                                    | 1.530  | State 48                                   | 1.583  | State 48                                    | 0.577   | State 48                                   | 0.487   | State 48                                    | 0.704   |
| State 49                                    | 1.531  | State 49                                    | 1.606  | State 49                                    | 1.697  | State 49                                    | 1.521  | State 49                                   | 1.573  | State 49                                    | 0.550   | State 49                                   | 0.454   | State 49                                    | 0.658   |
| State 50                                    | 1.894  | State 50                                    | 1.979  | State 50                                    | 1.960  | State 50                                    | 1.727  | State 50                                   | 1.800  | State 50                                    | 0.522   | State 50                                   | 0.473   | State 50                                    | 0.700   |
| State 51                                    | 1.776  | State 51                                    | 1.999  | State 51                                    | 2.017  | State 51                                    | 1.752  | State 51                                   | 1.833  | State 51                                    | 0.483   | State 51                                   | 0.447   | State 51                                    | 0.667   |
| State 52                                    | 1.800  | State 52                                    | 2.026  | State 52                                    | 2.132  | State 52                                    | 1.852  | State 52                                   | 1.946  | State 52                                    | 0.466   | State 52                                   | 0.450   | State 52                                    | 0.681   |
| State 53                                    | 1.699  | State 53                                    | 1.904  | State 53                                    | 2.196  | State 53                                    | 1.920  | State 53                                   | 2.027  | State 53                                    | 0.386   | State 53                                   | 0.392   | State 53                                    | 0.610   |
| State 54                                    | 1.656  | State 54                                    | 1.694  | State 54                                    | 2.220  | State 54                                    | 1.954  | State 54                                   | 2.064  | State 54                                    | 0.343   | State 54                                   | 0.363   | State 54                                    | 0.573   |
| State 55                                    | 1.369  | State 55                                    | 1.404  | State 55                                    | 2.167  | State 55                                    | 1.956  | State 55                                   | 2.043  | State 55                                    | 0.280   | State 55                                   | 0.306   | State 55                                    | 0.494   |
| State 56                                    | 0.960  | State 56                                    | 1.010  | State 56                                    | 1.958  | State 56                                    | 1.850  | State 56                                   | 1.896  | State 56                                    | 0.211   | State 56                                   | 0.237   | State 56                                    | 0.399   |
| State 57                                    | 0.731  | State 57                                    | 0.764  | State 57                                    | 1.737  | State 57                                    | 1.700  | State 57                                   | 1.716  | State 57                                    | 0.167   | State 57                                   | 0.191   | State 57                                    | 0.319   |
| State 58                                    | 0.511  | State 58                                    | 0.535  | State 58                                    | 1.409  | State 58                                    | 1.440  | State 58                                   | 1.421  | State 58                                    | 0.124   | State 58                                   | 0.142   | State 58                                    | 0.243   |
| State 59                                    | 0.315  | State 59                                    | 0.330  | State 59                                    | 0.985  | State 59                                    | 1.070  | State 59                                   | 1.021  | State 59                                    | 0.082   | State 59                                   | 0.094   | State 59                                    | 0.163   |

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: A3LSMT865                       |  | <b>SAR EVALUATION REPORT</b> |  | Approved by:<br>Quality Manager |
| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet | Page 119 of 124                                                                       |                                 |

# 14 EQUIPMENT LIST

| Manufacturer       | Model     | Description                                     | Cal Date   | Cal Interval | Cal Due    | Serial Number |
|--------------------|-----------|-------------------------------------------------|------------|--------------|------------|---------------|
| Agilent            | 8753ES    | S-Parameter Network Analyzer                    | 7/30/2018  | Annual       | 7/30/2019  | MY40000670    |
| Agilent            | 8753ES    | S-Parameter Vector Network Analyzer             | 8/30/2018  | Annual       | 8/30/2019  | MY40003841    |
| Agilent            | N5182A    | MXG Vector Signal Generator                     | 11/28/2018 | Annual       | 11/28/2019 | MY47420603    |
| Agilent            | E5515C    | 8960 Series 10 Wireless Communications Test Set | 12/18/2018 | Annual       | 12/18/2019 | GB42230325    |
| Agilent            | N9020A    | MXA Signal Analyzer                             | 4/20/2019  | Annual       | 4/20/2020  | US46470561    |
| Agilent            | E4438C    | ESG Vector Signal Generator                     | 5/22/2019  | Annual       | 5/22/2020  | MY45091346    |
| Agilent            | E4438C    | ESG Vector Signal Generator                     | 5/23/2019  | Annual       | 5/23/2020  | MY47270002    |
| Agilent            | E5515C    | Wireless Communications Test Set                | 2/7/2018   | Triennial    | 2/7/2021   | GB43304447    |
| Agilent            | N4010A    | Wireless Connectivity Test Set                  | N/A        | N/A          | N/A        | GB46170464    |
| Amplifier Research | 150A100C  | DC Amplifier                                    | CBT        | N/A          | CBT        | 348812        |
| Amplifier Research | 1551G6    | Amplifier                                       | CBT        | N/A          | CBT        | 433972        |
| Anritsu            | MA2411B   | Pulse Power Sensor                              | 11/20/2018 | Annual       | 11/20/2019 | 1339008       |
| Anritsu            | MA24106A  | USB Power Sensor                                | 1/31/2019  | Annual       | 1/31/2020  | 1244524       |
| Anritsu            | MA24106A  | USB Power Sensor                                | 3/5/2019   | Annual       | 3/5/2020   | 1349501       |
| Anritsu            | MA2411B   | Pulse Power Sensor                              | 3/6/2019   | Annual       | 3/6/2020   | 1339018       |
| Anritsu            | MT8821C   | Radio Communication Analyzer                    | 3/6/2019   | Annual       | 3/6/2020   | 6201381794    |
| Anritsu            | MT8820C   | Radio Communication Analyzer                    | 3/29/2019  | Annual       | 3/29/2020  | 6201300731    |
| Anritsu            | MT8821C   | Radio Communication Analyzer                    | 5/13/2019  | Annual       | 5/13/2020  | 6201524637    |
| Anritsu            | ML2495A   | Power Meter                                     | 10/5/2018  | Annual       | 10/5/2019  | 1328004       |
| Control Company    | 4040      | Therm./ Clock/ Humidity Monitor                 | 10/9/2018  | Biennial     | 10/9/2020  | 181647811     |
| Control Company    | 4040      | Therm./ Clock/ Humidity Monitor                 | 10/9/2018  | Biennial     | 10/9/2020  | 181647802     |
| Control Company    | 4352      | Ultra Long Stem Thermometer                     | 11/29/2018 | Biennial     | 11/29/2020 | 181766816     |
| Control Company    | 4352      | Ultra Long Stem Thermometer                     | 11/29/2018 | Biennial     | 11/29/2020 | 181766817     |
| Keysight           | 772D      | Dual Directional Coupler                        | CBT        | N/A          | CBT        | MY52180215    |
| MCL                | BW-N6W5+  | 6dB Attenuator                                  | CBT        | N/A          | CBT        | 1139          |
| MiniCircuits       | SLP-2400+ | Low Pass Filter                                 | CBT        | N/A          | CBT        | R897950903    |
| MiniCircuits       | VLF-6000+ | Low Pass Filter                                 | CBT        | N/A          | CBT        | N/A           |
| Mini-Circuits      | NLP-2950+ | Low Pass Filter DC to 2700 MHz                  | CBT        | N/A          | CBT        | N/A           |
| Mini-Circuits      | NLP-1200+ | Low Pass Filter DC to 1000 MHz                  | CBT        | N/A          | CBT        | N/A           |
| Mini-Circuits      | BW-N20W5  | Power Attenuator                                | CBT        | N/A          | CBT        | 1226          |
| Narda              | 4772-3    | Attenuator (3dB)                                | CBT        | N/A          | CBT        | 9406          |
| Narda              | BW-S3W2   | Attenuator (3dB)                                | CBT        | N/A          | CBT        | 120           |
| Pasternack         | NC-100    | Torque Wrench                                   | 11/1/2017  | Biennial     | 11/1/2019  | N/A           |
| Pasternack         | NC-100    | Torque Wrench                                   | 11/7/2017  | Biennial     | 11/7/2019  | N/A           |
| Pasternack         | PE2208-6  | Bidirectional Coupler                           | CBT        | N/A          | CBT        | N/A           |
| Pasternack         | PE2209-10 | Bidirectional Coupler                           | CBT        | N/A          | CBT        | N/A           |
| Rohde & Schwarz    | CMW500    | Radio Communication Tester                      | 4/15/2019  | Annual       | 4/15/2020  | 167283        |
| Rohde & Schwarz    | CMW500    | Radio Communication Tester                      | 4/19/2019  | Annual       | 4/19/2020  | 128633        |
| Rohde & Schwarz    | CMW500    | Radio Communication Tester                      | 5/17/2019  | Annual       | 5/17/2020  | 128635        |
| Rohde & Schwarz    | CMW500    | Radio Communication Tester                      | 6/6/2019   | Annual       | 6/6/2020   | 140148        |
| Rohde & Schwarz    | CMW500    | Wideband Radio Communication Tester             | 6/6/2019   | Annual       | 6/6/2020   | 161662        |
| SPEAG              | D750V3    | 750 MHz SAR Dipole                              | 1/15/2018  | Biennial     | 1/15/2020  | 1003          |
| SPEAG              | D835V2    | 835 MHz SAR Dipole                              | 1/22/2019  | Annual       | 1/22/2020  | 46132         |
| SPEAG              | D835V2    | 835 MHz SAR Dipole                              | 3/13/2019  | Annual       | 3/13/2020  | 46047         |
| SPEAG              | D1750V2   | 1750 MHz SAR Dipole                             | 10/22/2018 | Annual       | 10/22/2019 | 1150          |
| SPEAG              | D1900V2   | 1900 MHz SAR Dipole                             | 2/21/2019  | Annual       | 2/21/2020  | 56148         |
| SPEAG              | D1900V2   | 1900 MHz SAR Dipole                             | 10/23/2018 | Annual       | 10/23/2019 | 56149         |
| SPEAG              | D1900V2   | 1900 MHz SAR Dipole                             | 10/23/2018 | Annual       | 10/23/2019 | 50080         |
| SPEAG              | D2450V2   | 2450 MHz SAR Dipole                             | 8/16/2018  | Annual       | 8/16/2019  | 981           |
| SPEAG              | D2450V2   | 2450 MHz SAR Dipole                             | 8/17/2017  | Biennial     | 8/17/2019  | 719           |
| SPEAG              | D2600V2   | 2600 MHz SAR Dipole                             | 4/11/2018  | Biennial     | 4/11/2020  | 1004          |
| SPEAG              | D5GHzV2   | 5 GHz SAR Dipole                                | 9/21/2016  | Triennial    | 9/21/2019  | 1191          |
| SPEAG              | DAK-3.5   | Dielectric Assessment Kit                       | 9/11/2018  | Annual       | 9/11/2019  | 1091          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 2/14/2019  | Annual       | 2/14/2020  | 1272          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 1/15/2019  | Annual       | 1/15/2020  | 1530          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 7/11/2018  | Annual       | 7/11/2019  | 1322          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 5/8/2019   | Annual       | 5/8/2020   | 728           |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 4/18/2019  | Annual       | 4/18/2020  | 1407          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 10/3/2018  | Annual       | 10/3/2019  | 1558          |
| SPEAG              | DAE4      | Dasy Data Acquisition Electronics               | 2/13/2019  | Annual       | 2/13/2020  | 665           |
| SPEAG              | EX3DV4    | SAR Probe                                       | 2/19/2019  | Annual       | 2/19/2020  | 3914          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 1/24/2019  | Annual       | 1/24/2020  | 7488          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 7/20/2018  | Annual       | 7/20/2019  | 7410          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 5/16/2019  | Annual       | 5/16/2020  | 7538          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 4/24/2019  | Annual       | 4/24/2020  | 7357          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 8/23/2018  | Annual       | 8/23/2019  | 7308          |
| SPEAG              | EX3DV4    | SAR Probe                                       | 2/19/2019  | Annual       | 2/19/2020  | 7417          |

Each equipment was used solely within its calibration period.

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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| Document S/N:<br>1M1906070094-01-R1.A3L | Test Dates:<br>06/10/19 - 07/10/19                                                  | DUT Type:<br>Portable Tablet |                                                                                       | Page 120 of 124                 |

# 15 MEASUREMENT UNCERTAINTIES

| a                                                                             | c             | d              | e=<br>f(d,k) | f                     | g                        | h =<br>c x f/e                 | i =<br>c x g/e                   | k              |
|-------------------------------------------------------------------------------|---------------|----------------|--------------|-----------------------|--------------------------|--------------------------------|----------------------------------|----------------|
| Uncertainty Component                                                         | Tol.<br>(± %) | Prob.<br>Dist. | Div.         | c <sub>i</sub><br>1gm | c <sub>i</sub><br>10 gms | 1gm<br>u <sub>i</sub><br>(± %) | 10gms<br>u <sub>i</sub><br>(± %) | v <sub>i</sub> |
| <b>Measurement System</b>                                                     |               |                |              |                       |                          |                                |                                  |                |
| Probe Calibration                                                             | 6.55          | N              | 1            | 1.0                   | 1.0                      | 6.6                            | 6.6                              | ∞              |
| Axial Isotropy                                                                | 0.25          | N              | 1            | 0.7                   | 0.7                      | 0.2                            | 0.2                              | ∞              |
| Hemishperical Isotropy                                                        | 1.3           | N              | 1            | 0.7                   | 0.7                      | 0.9                            | 0.9                              | ∞              |
| Boundary Effect                                                               | 2.0           | R              | 1.73         | 1.0                   | 1.0                      | 1.2                            | 1.2                              | ∞              |
| Linearity                                                                     | 0.3           | N              | 1            | 1.0                   | 1.0                      | 0.3                            | 0.3                              | ∞              |
| System Detection Limits                                                       | 0.25          | R              | 1.73         | 1.0                   | 1.0                      | 0.1                            | 0.1                              | ∞              |
| Readout Electronics                                                           | 0.3           | N              | 1            | 1.0                   | 1.0                      | 0.3                            | 0.3                              | ∞              |
| Response Time                                                                 | 0.8           | R              | 1.73         | 1.0                   | 1.0                      | 0.5                            | 0.5                              | ∞              |
| Integration Time                                                              | 2.6           | R              | 1.73         | 1.0                   | 1.0                      | 1.5                            | 1.5                              | ∞              |
| RF Ambient Conditions - Noise                                                 | 3.0           | R              | 1.73         | 1.0                   | 1.0                      | 1.7                            | 1.7                              | ∞              |
| RF Ambient Conditions - Reflections                                           | 3.0           | R              | 1.73         | 1.0                   | 1.0                      | 1.7                            | 1.7                              | ∞              |
| Probe Positioner Mechanical Tolerance                                         | 0.4           | R              | 1.73         | 1.0                   | 1.0                      | 0.2                            | 0.2                              | ∞              |
| Probe Positioning w/ respect to Phantom                                       | 6.7           | R              | 1.73         | 1.0                   | 1.0                      | 3.9                            | 3.9                              | ∞              |
| Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation | 4.0           | R              | 1.73         | 1.0                   | 1.0                      | 2.3                            | 2.3                              | ∞              |
| <b>Test Sample Related</b>                                                    |               |                |              |                       |                          |                                |                                  |                |
| Test Sample Positioning                                                       | 2.7           | N              | 1            | 1.0                   | 1.0                      | 2.7                            | 2.7                              | 35             |
| Device Holder Uncertainty                                                     | 1.67          | N              | 1            | 1.0                   | 1.0                      | 1.7                            | 1.7                              | 5              |
| Output Power Variation - SAR drift measurement                                | 5.0           | R              | 1.73         | 1.0                   | 1.0                      | 2.9                            | 2.9                              | ∞              |
| SAR Scaling                                                                   | 0.0           | R              | 1.73         | 1.0                   | 1.0                      | 0.0                            | 0.0                              | ∞              |
| <b>Phantom &amp; Tissue Parameters</b>                                        |               |                |              |                       |                          |                                |                                  |                |
| Phantom Uncertainty (Shape & Thickness tolerances)                            | 7.6           | R              | 1.73         | 1.0                   | 1.0                      | 4.4                            | 4.4                              | ∞              |
| Liquid Conductivity - measurement uncertainty                                 | 4.2           | N              | 1            | 0.78                  | 0.71                     | 3.3                            | 3.0                              | 10             |
| Liquid Permittivity - measurement uncertainty                                 | 4.1           | N              | 1            | 0.23                  | 0.26                     | 1.0                            | 1.1                              | 10             |
| Liquid Conductivity - Temperature Uncertainty                                 | 3.4           | R              | 1.73         | 0.78                  | 0.71                     | 1.5                            | 1.4                              | ∞              |
| Liquid Permittivity - Temperature Uncertainty                                 | 0.6           | R              | 1.73         | 0.23                  | 0.26                     | 0.1                            | 0.1                              | ∞              |
| Liquid Conductivity - deviation from target values                            | 5.0           | R              | 1.73         | 0.64                  | 0.43                     | 1.8                            | 1.2                              | ∞              |
| Liquid Permittivity - deviation from target values                            | 5.0           | R              | 1.73         | 0.60                  | 0.49                     | 1.7                            | 1.4                              | ∞              |
| <b>Combined Standard Uncertainty (k=1)</b>                                    | RSS           |                |              |                       |                          | 11.5                           | 11.3                             | 60             |
| <b>Expanded Uncertainty</b><br>(95% CONFIDENCE LEVEL)                         | k=2           |                |              |                       |                          | 23.0                           | 22.6                             |                |

|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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## 16 CONCLUSION

### 16.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

|                                         |                                                                                     |                              |                                                                                       |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------|
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|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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|                                         |                                                                                                                                                                                                        |                              |                                 |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------|
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## APPENDIX A: SAR TEST DATA

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29093**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:2.76

Medium: 835 Body Medium parameters used (interpolated):

$f = 824.2 \text{ MHz}$ ;  $\sigma = 0.979 \text{ S/m}$ ;  $\epsilon_r = 54.087$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.7 cm

Test Date: 06-10-2019; Ambient Temp: 20.5°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7488; ConvF(11.03, 11.03, 11.03) @ 824.2 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: GPRS 850, Body SAR, Top Edge, Low.ch, 3 Tx Slots**

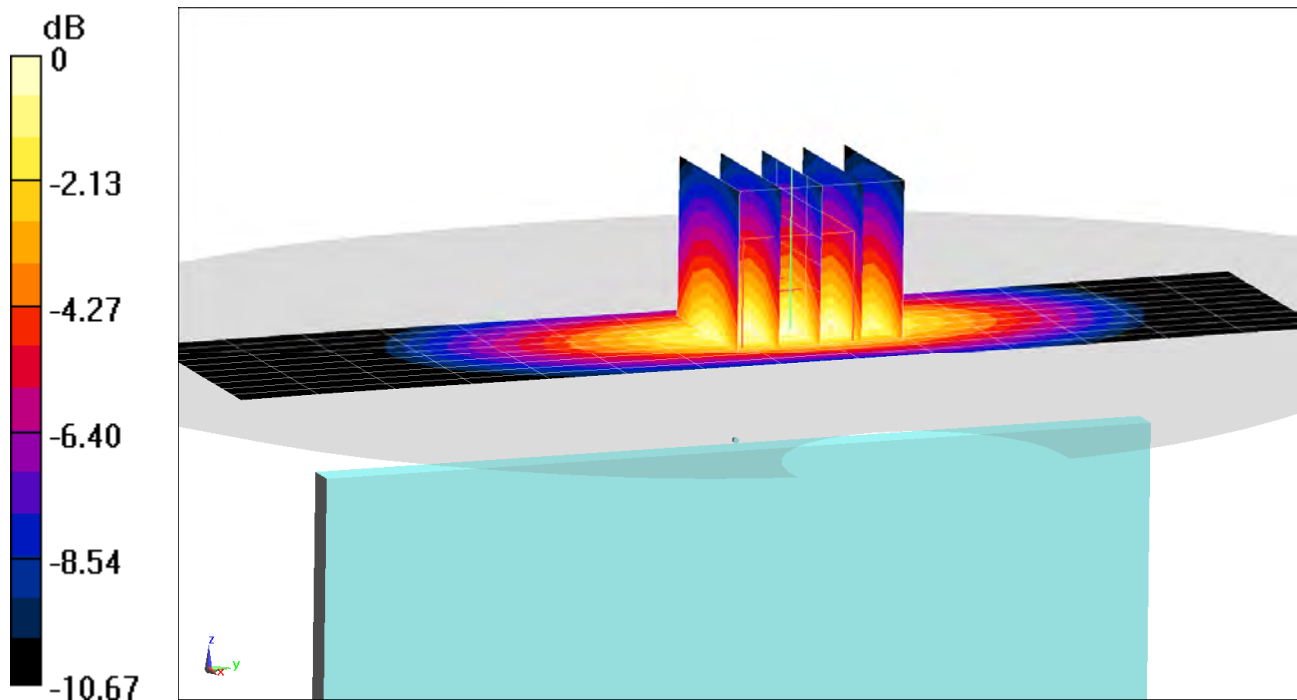
**Area Scan (11x15x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 30.95 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.876 W/kg**



0 dB = 1.15 W/kg = 0.61 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29143**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 1850.2 MHz; Duty Cycle: 1:2.76

Medium: 1900 Body Medium parameters used:

$f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.51 \text{ S/m}$ ;  $\epsilon_r = 51.887$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(7.78, 7.78, 7.78) @ 1850.2 MHz; Calibrated: 7/20/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2018

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: GPRS 1900, Body SAR, Back side, Low.ch, 3 Tx Slots**

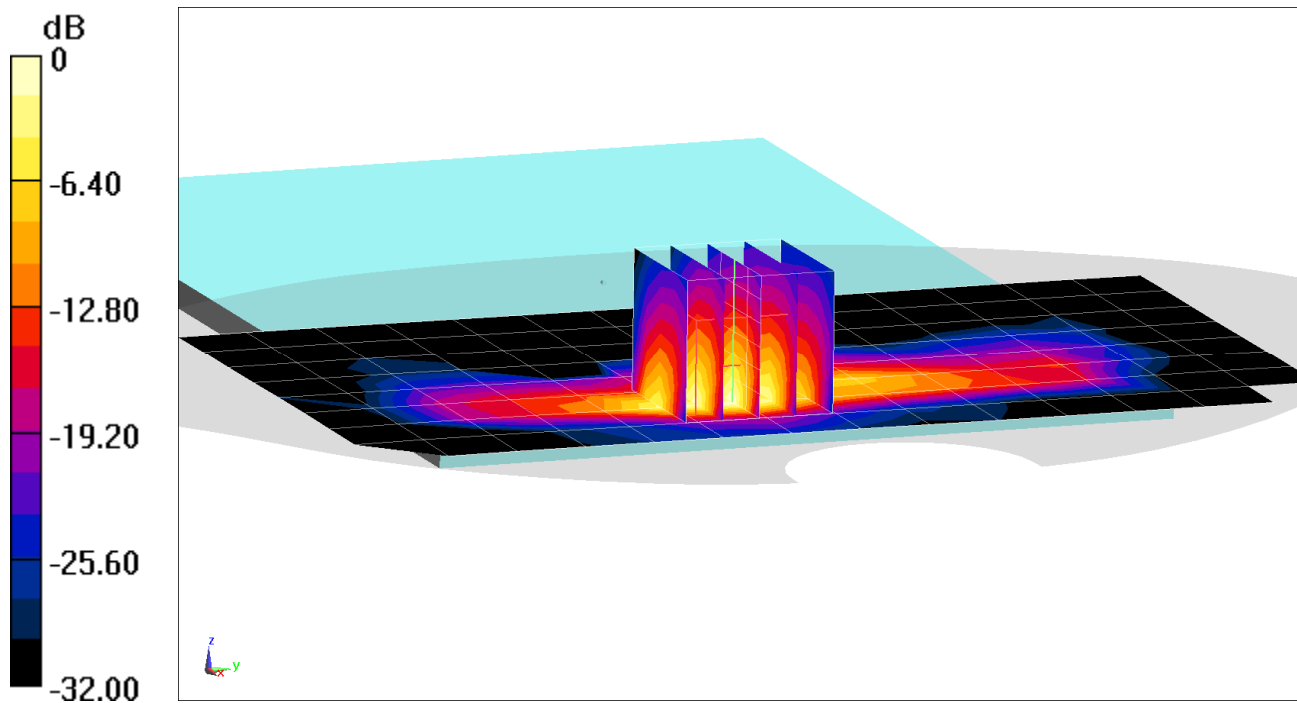
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 25.55 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.77 W/kg

**SAR(1 g) = 0.768 W/kg**



0 dB = 1.40 W/kg = 1.46 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29168**

Communication System: UID 0, UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 826.4 \text{ MHz}$ ;  $\sigma = 0.968 \text{ S/m}$ ;  $\epsilon_r = 55.258$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-09-2019; Ambient Temp: 20.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7538; ConvF(9.85, 9.85, 9.85) @ 826.4 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

Phantom: Left Twin-SAM V5.0 30; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: UMTS 850, Body SAR, Top Edge, Low.ch**

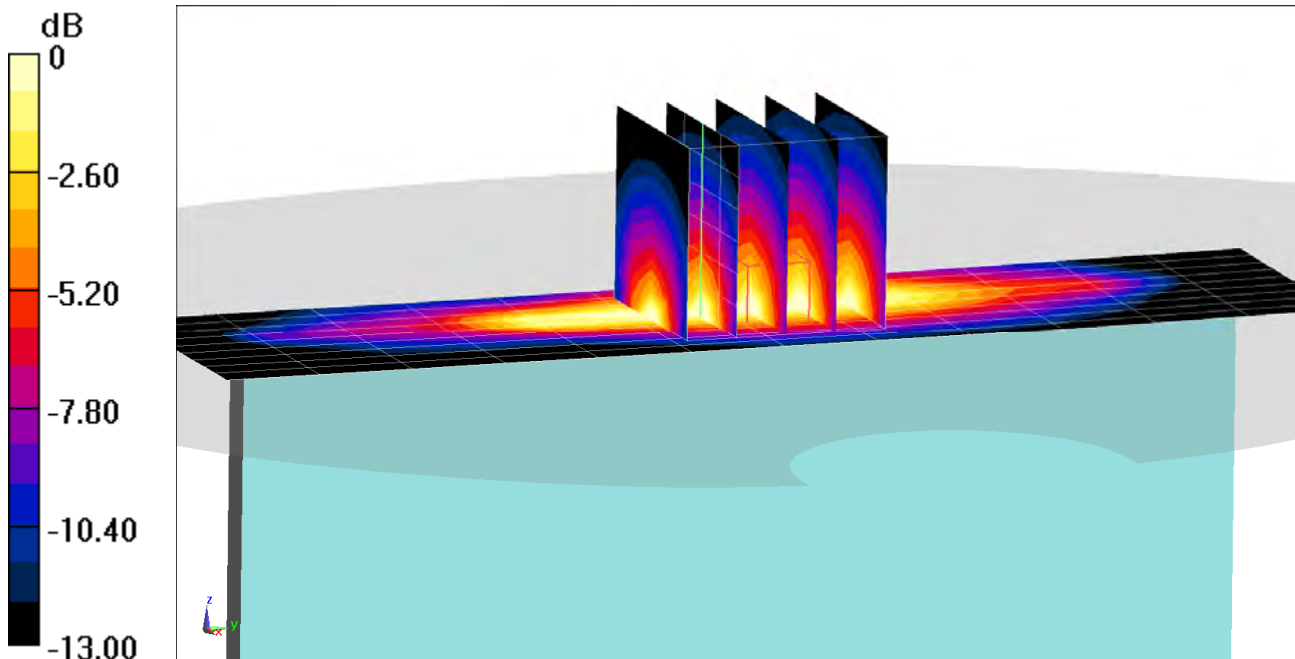
**Area Scan (10x13x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 35.83 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.05 W/kg

**SAR(1 g) = 1.14 W/kg**



0 dB = 1.43 W/kg = 1.55 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29085**

Communication System: UID 0, UMTS, Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used (interpolated):

$f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.508 \text{ S/m}$ ;  $\epsilon_r = 52.415$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.7 cm

Test Date: 07-01-2019; Ambient Temp: 22.7°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1752.6 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 Front Right; Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: UMTS 1750, Body SAR, Top Edge, High.ch**

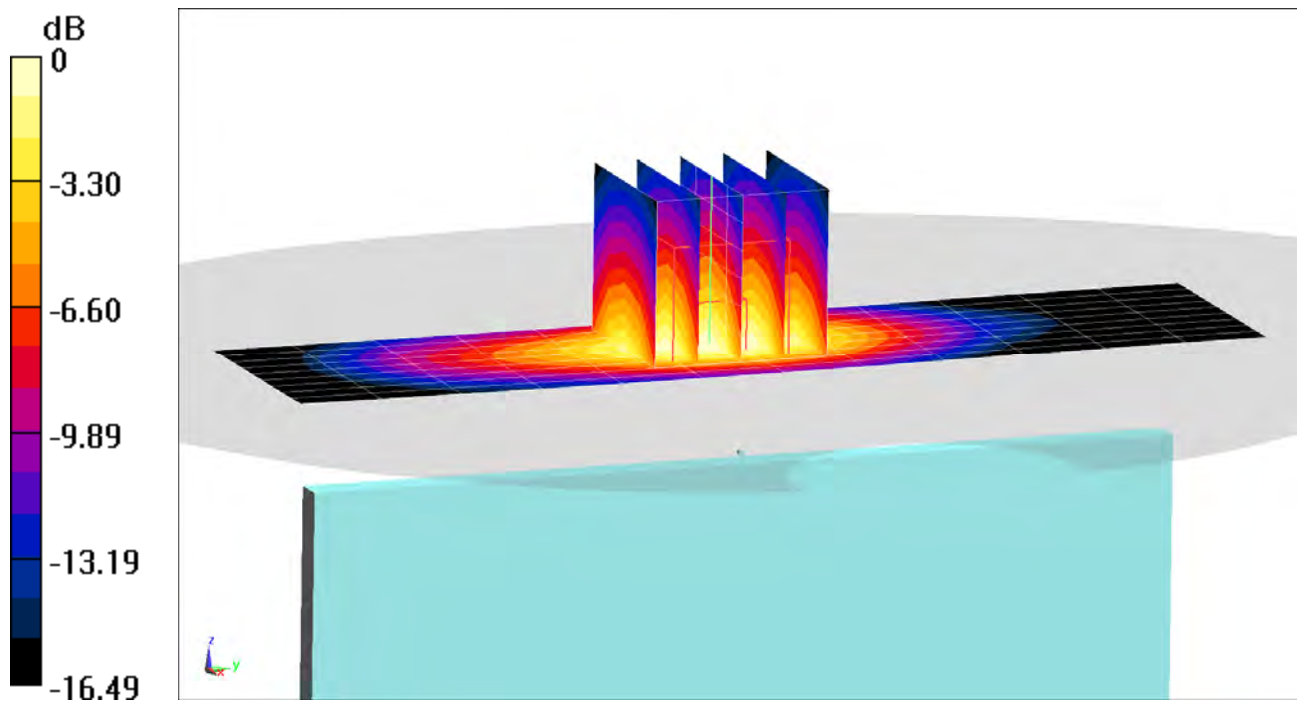
**Area Scan (10x13x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan 1 (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.90 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.69 W/kg

**SAR(1 g) = 0.990 W/kg**



0 dB = 1.44 W/kg = 1.58 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29143**

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.513 \text{ S/m}$ ;  $\epsilon_r = 51.88$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(7.78, 7.78, 7.78) @ 1852.4 MHz; Calibrated: 7/20/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2018

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: UMTS 1900, Body SAR, Back side, Low.ch**

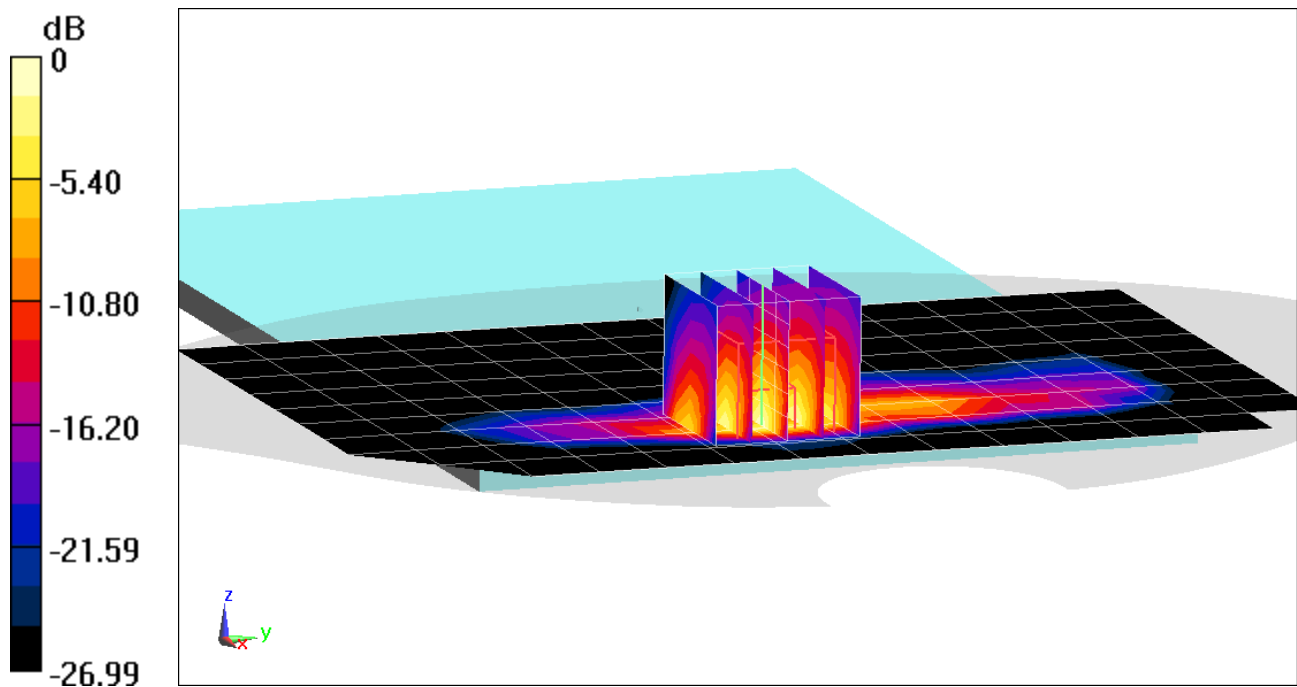
**Area Scan (10x15x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.67 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.07 W/kg

**SAR(1 g) = 0.875 W/kg**



0 dB = 1.69 W/kg = 2.28 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29168**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 707.5 \text{ MHz}$ ;  $\sigma = 0.928 \text{ S/m}$ ;  $\epsilon_r = 57.627$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-02-2019; Ambient Temp: 23.6°C; Tissue Temp: 22.6°C

Probe: EX3DV4 – SN3914; ConvF(9.73, 9.73, 9.73) @ 707.5 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 12, Body SAR, Top Edge, Mid.ch, 10 MHz Bandwidth,  
QPSK, 25 RB, 0 RB Offset**

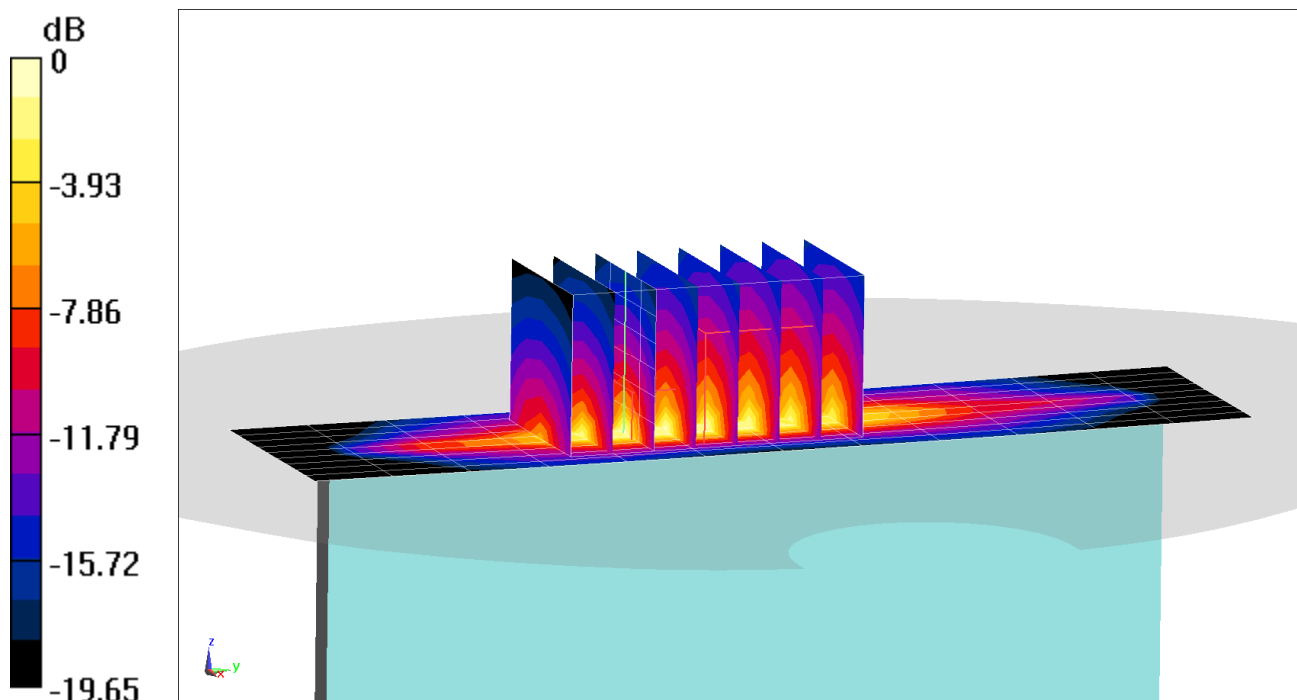
**Area Scan (10x13x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x8x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.95 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.57 W/kg

**SAR(1 g) = 0.691 W/kg**



0 dB = 1.75 W/kg = 2.43 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29168**

Communication System: UID 0, LTE Band 17; Frequency: 710 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 710 \text{ MHz}$ ;  $\sigma = 0.929 \text{ S/m}$ ;  $\epsilon_r = 57.629$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-02-2019; Ambient Temp: 23.6°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3914; ConvF(9.73, 9.73, 9.73) @ 710 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 17, Body SAR, Top Edge, Mid.ch, 10 MHz Bandwidth,  
QPSK, 1 RB, 49 RB Offset**

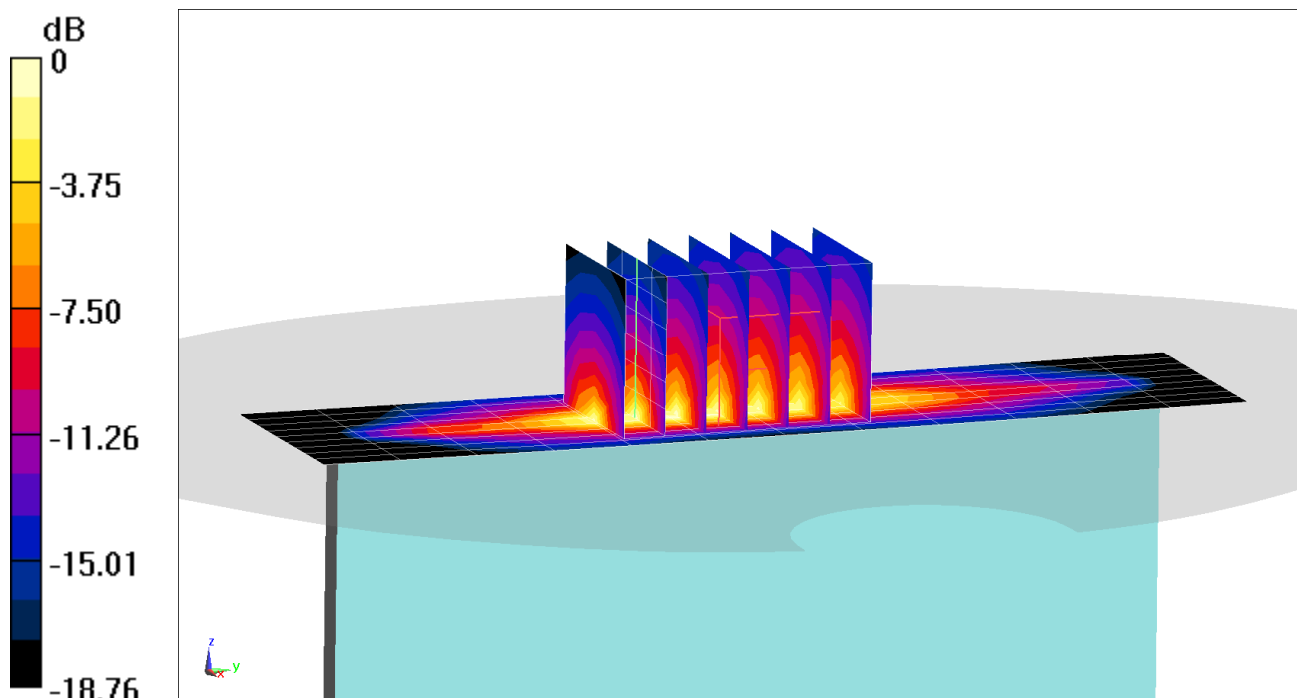
**Area Scan (10x13x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x7x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.93 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.77 W/kg

**SAR(1 g) = 0.823 W/kg**



0 dB = 1.96 W/kg = 2.92 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29168**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.955 \text{ S/m}$ ;  $\epsilon_r = 57.489$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-02-2019; Ambient Temp: 23.6°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3914; ConvF(9.73, 9.73, 9.73) @ 782 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 13, Body SAR, Top Edge, Mid.ch, 10 MHz Bandwidth,  
QPSK, 25 RB, 0 RB Offset**

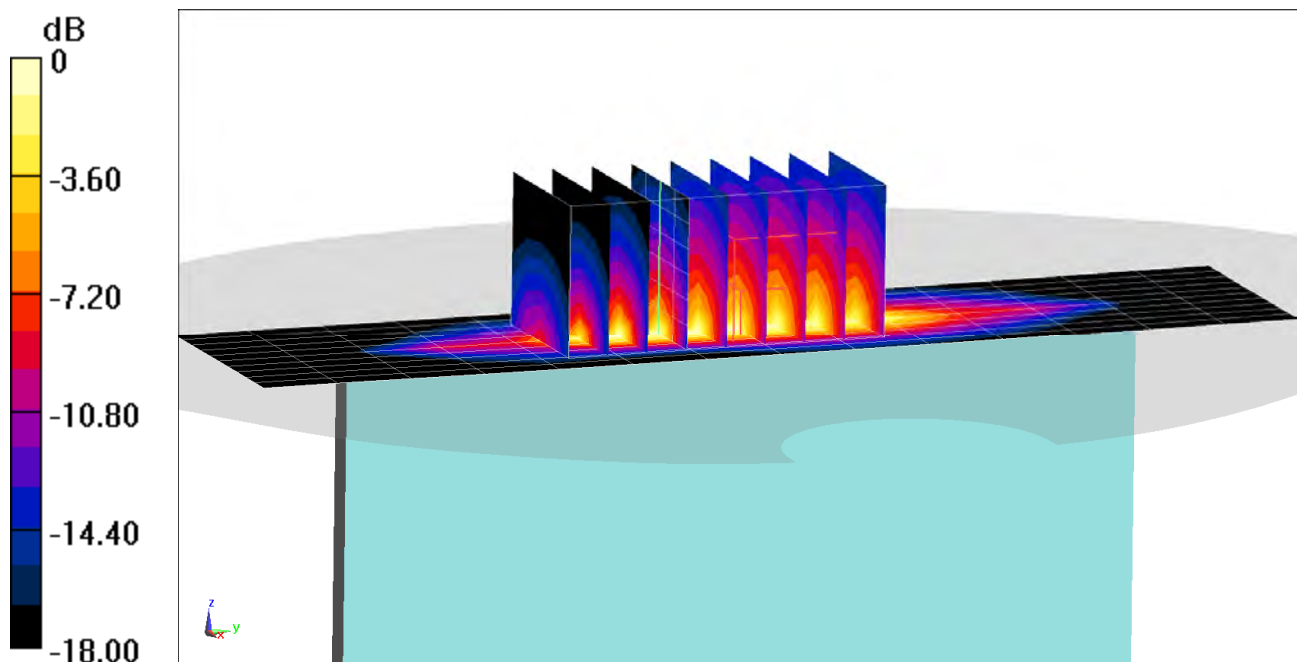
**Area Scan (11x15x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x9x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 35.94 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 3.55 W/kg

**SAR(1 g) = 1.1 W/kg**



0 dB = 2.44 W/kg = 3.87 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29119**

Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 831.5 \text{ MHz}$ ;  $\sigma = 0.95 \text{ S/m}$ ;  $\epsilon_r = 56.944$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-01-2019; Ambient Temp: 22.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN3914; ConvF(9.46, 9.46, 9.46) @ 831.5 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: SAM with CRP v5.0 Left; Type: QD000P40CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch, 15 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

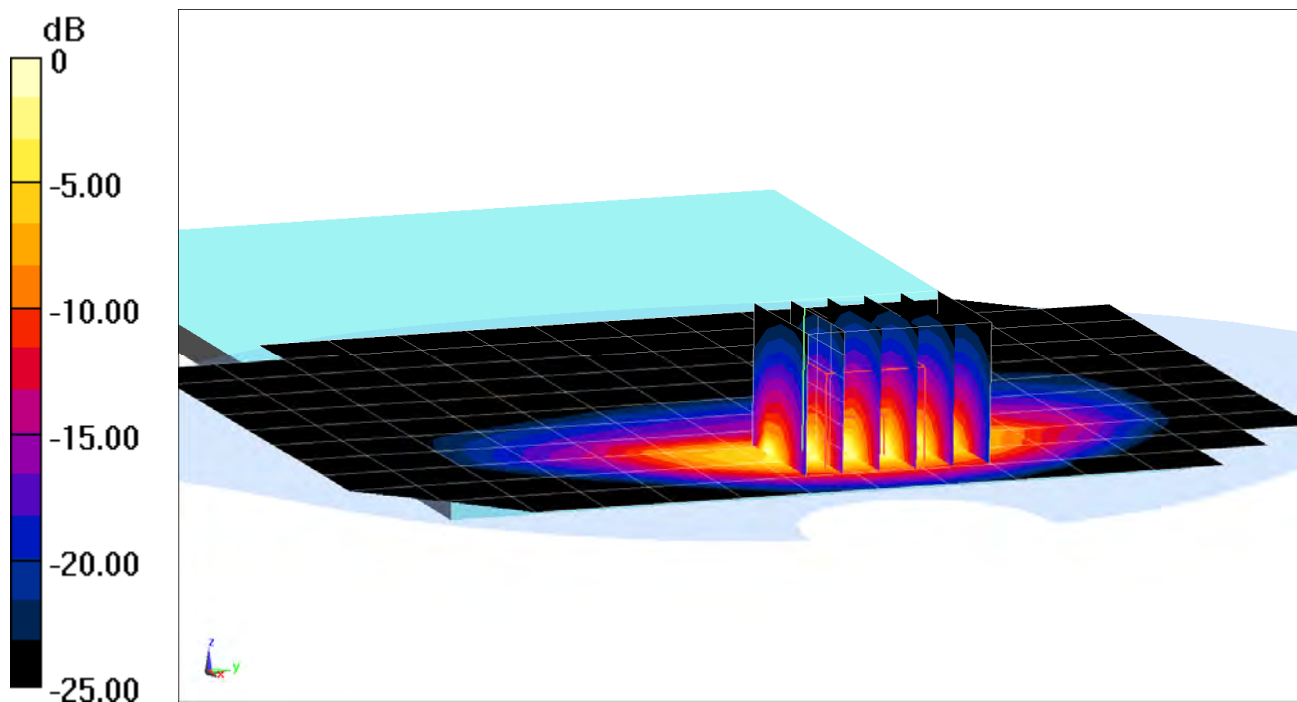
**Area Scan (12x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x6x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 31.26 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.06 W/kg

**SAR(1 g) = 1.06 W/kg**



0 dB = 1.73 W/kg = 2.38 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29101**

Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used (interpolated):

$f = 836.5 \text{ MHz}$ ;  $\sigma = 0.972 \text{ S/m}$ ;  $\epsilon_r = 55.235$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-09-2019; Ambient Temp: 20.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7538; ConvF(9.85, 9.85, 9.85) @ 836.5 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

Phantom: Left Twin-SAM V5.0 30; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 5 (Cell.), Body SAR, Back side, Mid.ch, 10 MHz Bandwidth,  
QPSK, 25 RB, 0 RB Offset**

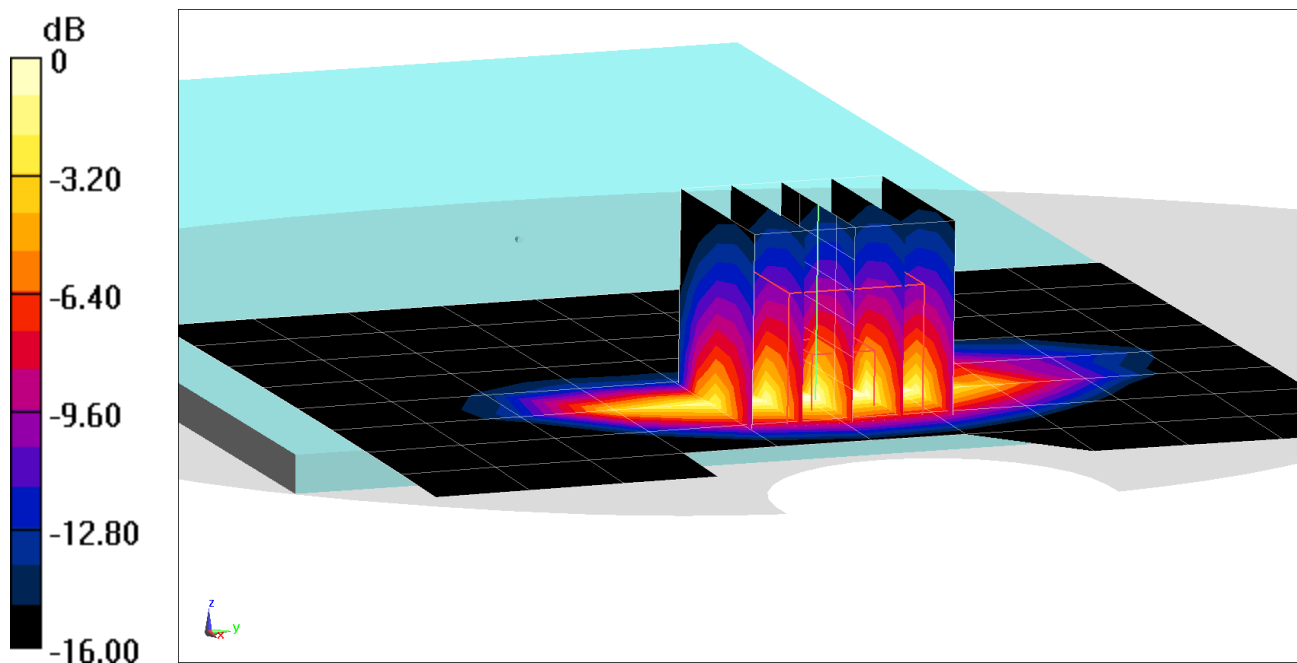
**Area Scan (9x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 34.74 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.35 W/kg

**SAR(1 g) = 1.11 W/kg**



0 dB = 1.89 W/kg = 2.76 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29085**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used (interpolated):

$f = 1745 \text{ MHz}$ ;  $\sigma = 1.499 \text{ S/m}$ ;  $\epsilon_r = 52.442$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.7 cm

Test Date: 07-01-2019; Ambient Temp: 22.7°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1745 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 Front Right; Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 66 (AWS), Body SAR, Top Edge, Mid.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 99 RB Offset**

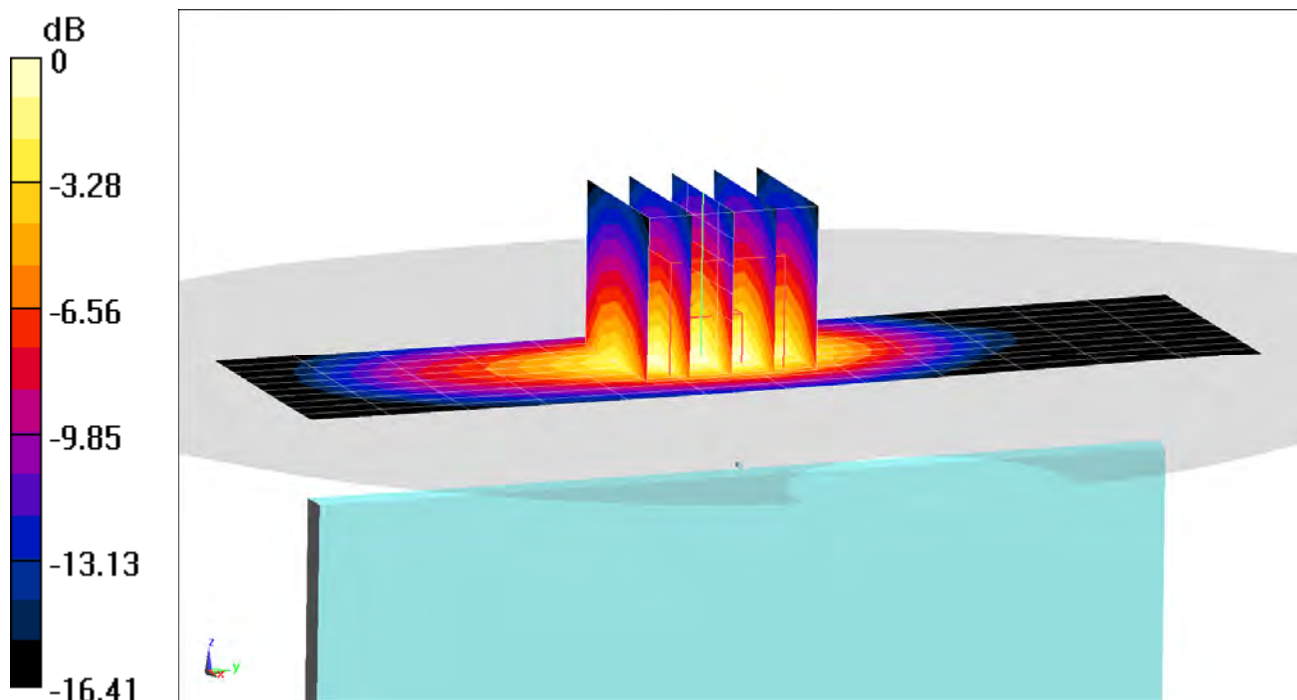
**Area Scan (11x13x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.98 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.84 W/kg

**SAR(1 g) = 1.08 W/kg**



0 dB = 1.57 W/kg = 1.96 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29093**

Communication System: UID 0, LTE Band 2 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1860 \text{ MHz}$ ;  $\sigma = 1.514 \text{ S/m}$ ;  $\epsilon_r = 51.144$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.7 cm

Test Date: 07-01-2019; Ambient Temp: 20.7°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1860 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 2 (PCS), Body SAR, Top Edge, Low.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 0 RB Offset**

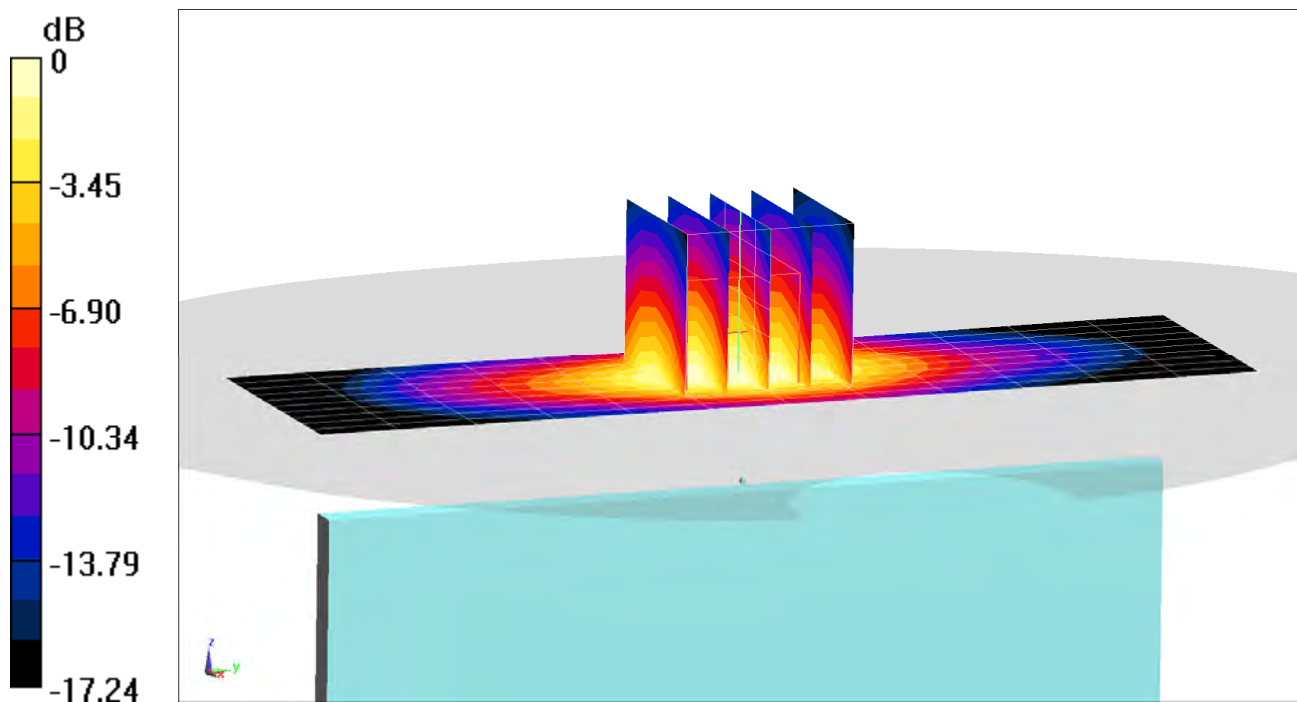
**Area Scan (11x13x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.27 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.79 W/kg

**SAR(1 g) = 1.03 W/kg**



0 dB = 1.47 W/kg = 1.67 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29085**

Communication System: UID 0,LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1860 \text{ MHz}$ ;  $\sigma = 1.531 \text{ S/m}$ ;  $\epsilon_r = 52.264$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.7 cm

Test Date:06-10-2019; Ambient Temp: 22.0°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7410; ConvF(7.78, 7.78, 7.78) @ 1860 MHz; Calibrated: 7/20/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2018

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 25 (PCS), Body SAR, Top Edge, Low.ch, 20 MHz Bandwidth,  
QPSK, 1 RB, 99 RB Offset**

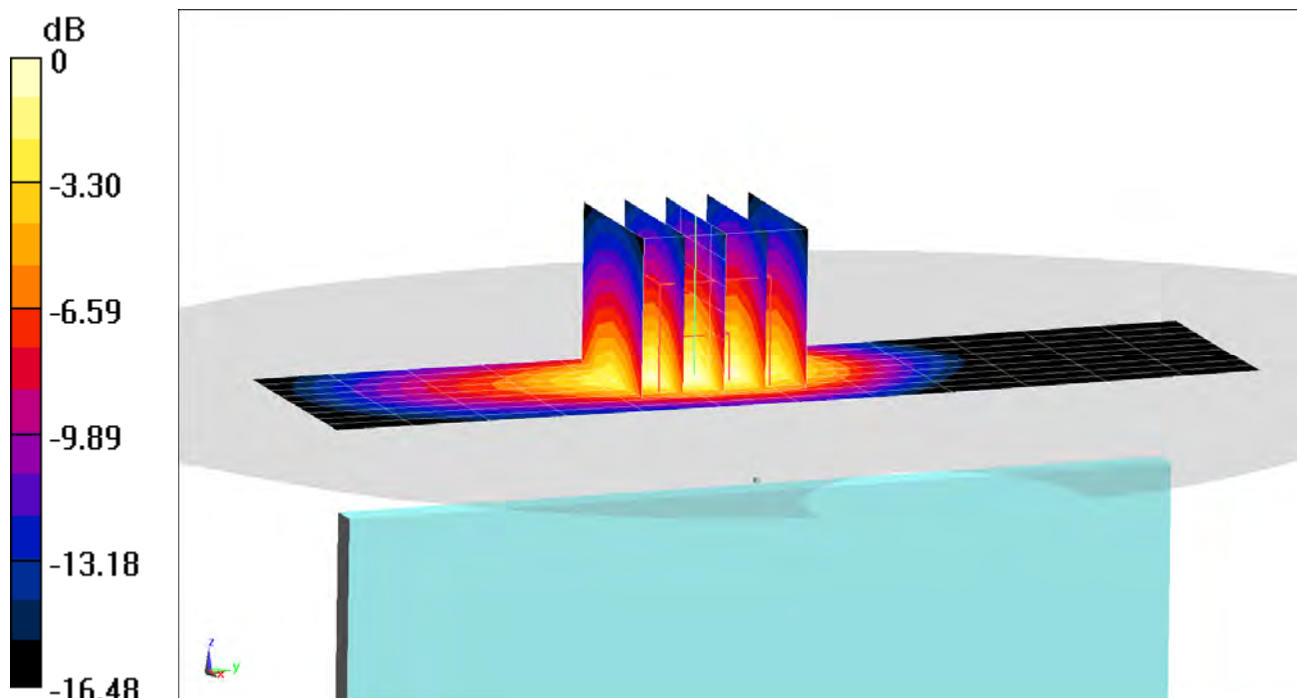
**Area Scan (10x13x1):** Measurement grid: dx=5mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.81 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.69 W/kg

**SAR(1 g) = 0.994 W/kg**



0 dB = 1.45 W/kg = 1.61 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29150**

Communication System: UID 0, LTE Band 41; Frequency: 2680 MHz; Duty Cycle: 1:1.58

Medium: 2450 MHz Body Medium parameters used (interpolated):

$f = 2680 \text{ MHz}$ ;  $\sigma = 2.256 \text{ S/m}$ ;  $\epsilon_r = 52.233$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.8°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.4, 7.4, 7.4) @ 2680 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: LTE Band 41, Body SAR, Top Edge, High.ch, 20 MHz Bandwidth,  
QPSK, 50 RB, 0 RB Offset**

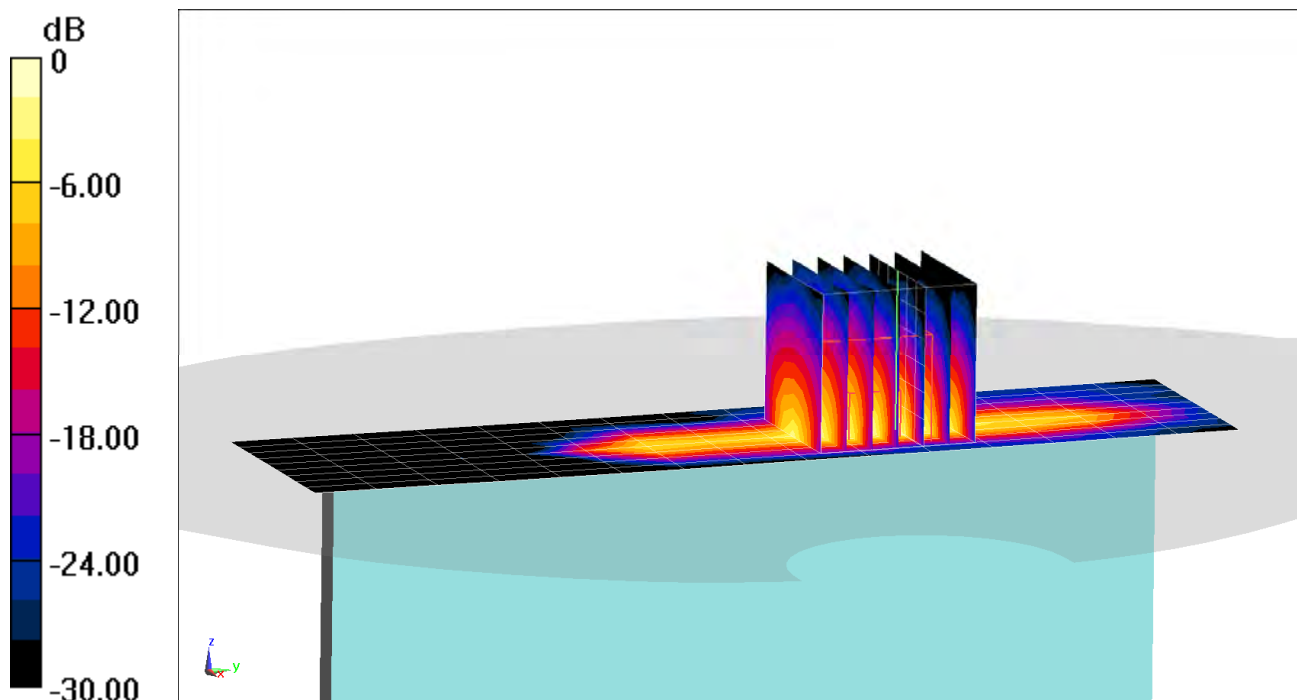
**Area Scan (10x16x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.23 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.21 W/kg

**SAR(1 g) = 0.834 W/kg**



0 dB = 2.13 W/kg = 3.28 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29143**

Communication System: UID 0, \_IEEE 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used (interpolated):

$f = 2462 \text{ MHz}$ ;  $\sigma = 2.049 \text{ S/m}$ ;  $\epsilon_r = 51.615$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 07-10-2019; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7417; ConvF(7.51, 7.51, 7.51) @ 2462 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: IEEE 802.11b, 22 MHz Bandwidth, Body SAR, Ch 11, 1 Mbps,  
Left Edge, Antenna 1**

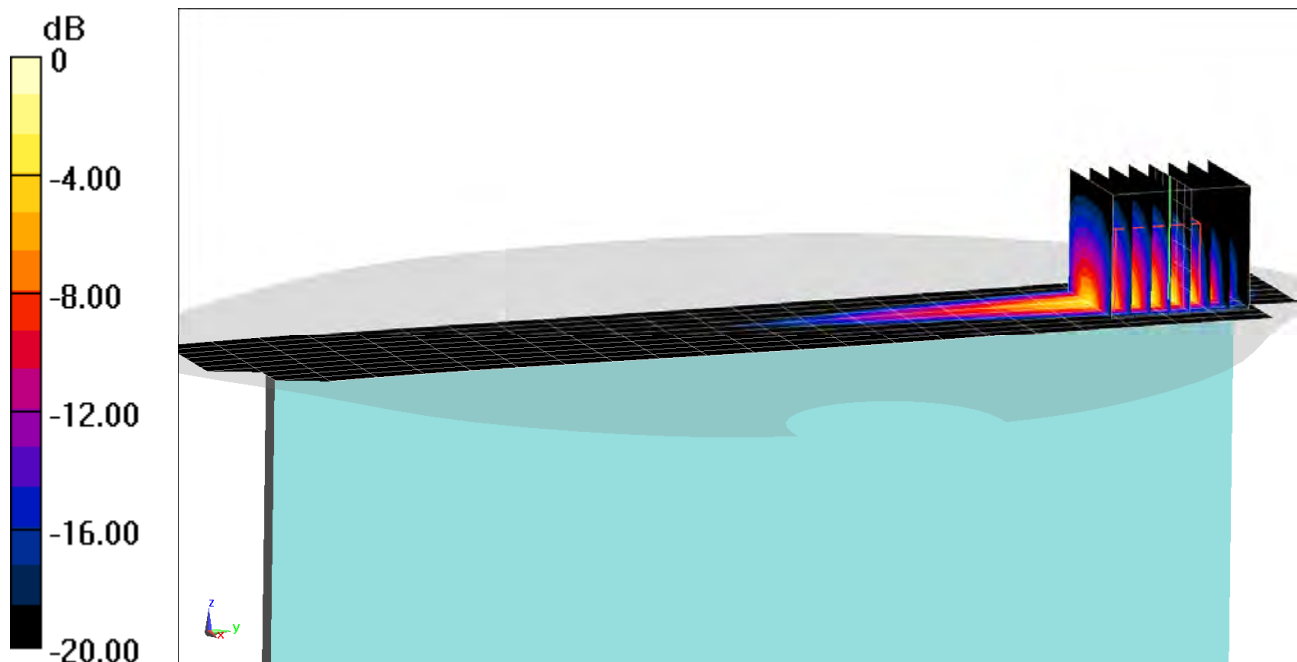
**Area Scan (11x24x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x8x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 24.01 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.48 W/kg

**SAR(1 g) = 0.979 W/kg**



0 dB = 2.35 W/kg = 3.71 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29333**

Communication System: UID 0, 802.11a 5.2-5.8 GHz Band; Frequency: 5620 MHz; Duty Cycle: 1:1

Medium: 5GHz Body Medium parameters used:

$f = 5620 \text{ MHz}$ ;  $\sigma = 5.998 \text{ S/m}$ ;  $\epsilon_r = 47.848$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.6 cm

Test Date: 06-27-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7308; ConvF(4, 4, 4) @ 5620 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

**Mode: IEEE 802.11a, U-NII-2C, 20 MHz Bandwidth, Body SAR, Ch 124, 6 Mbps,  
Right Edge, Antenna 2**

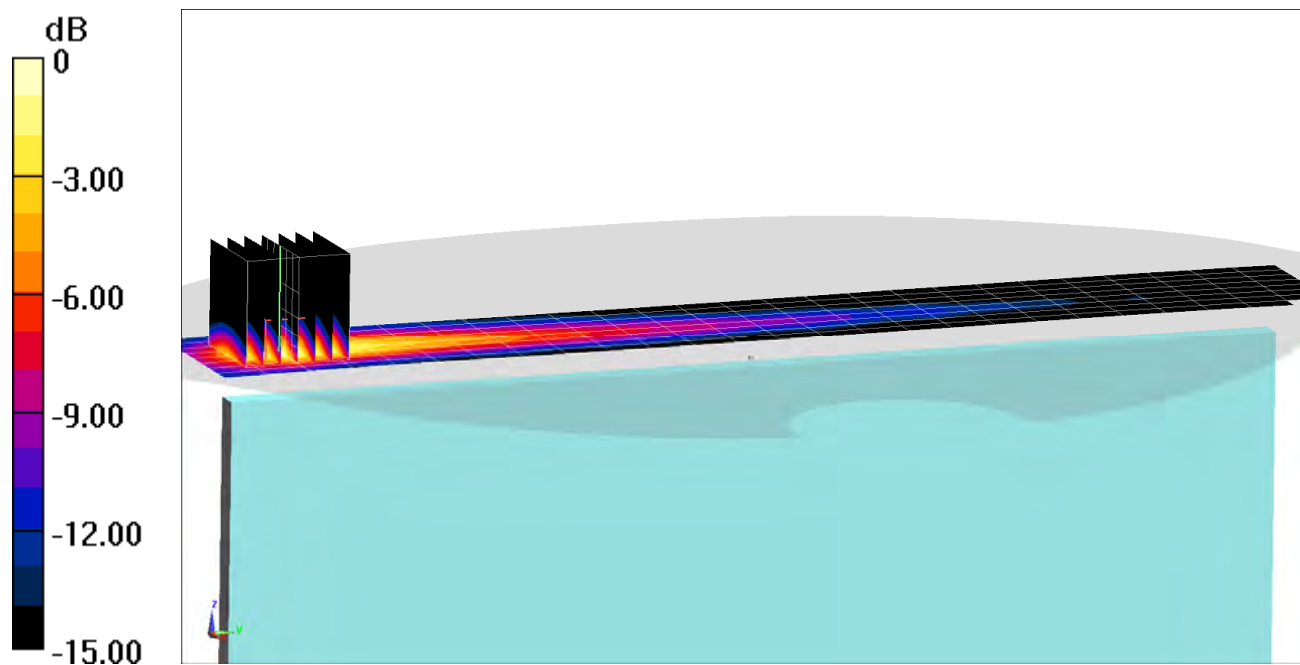
**Area Scan (9x27x1):** Measurement grid: dx=5mm, dy=10mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 14.69 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 5.07 W/kg

**SAR(1 g) = 1.15 W/kg**



0 dB = 2.95 W/kg = 4.70 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: A3LSMT865; Type: Portable Tablet; Serial: 29333**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.294

Medium: 2450 MHz Body Medium parameters used (interpolated):

$f = 2441 \text{ MHz}$ ;  $\sigma = 2.025 \text{ S/m}$ ;  $\epsilon_r = 52.585$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.8°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.57, 7.57, 7.57) @ 2441 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Mode: Bluetooth, Body SAR, Ch 39, 1 Mbps, Left Edge**

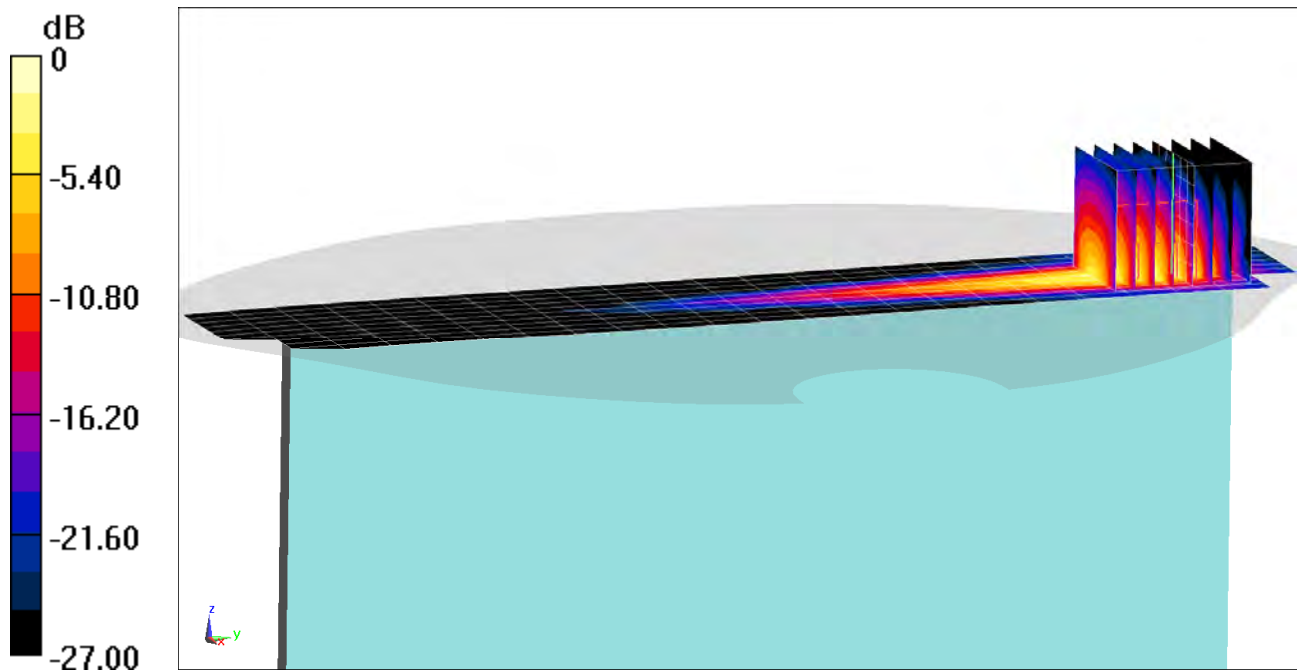
**Area Scan (11x24x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x8x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.43 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 2.13 W/kg

**SAR(1 g) = 0.642 W/kg**



0 dB = 1.47 W/kg = 1.67 dBW/kg

## APPENDIX B: SYSTEM VERIFICATION

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used (interpolated):

$f = 750 \text{ MHz}$ ;  $\sigma = 0.945 \text{ S/m}$ ;  $\epsilon_r = 57.55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-02-2019; Ambient Temp: 23.6°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3914; ConvF(9.73, 9.73, 9.73) @ 750 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: SAM with CRP v5.0 Left; Type: QD000P40CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **750 MHz System Verification at 23.0 dBm (200 mW)**

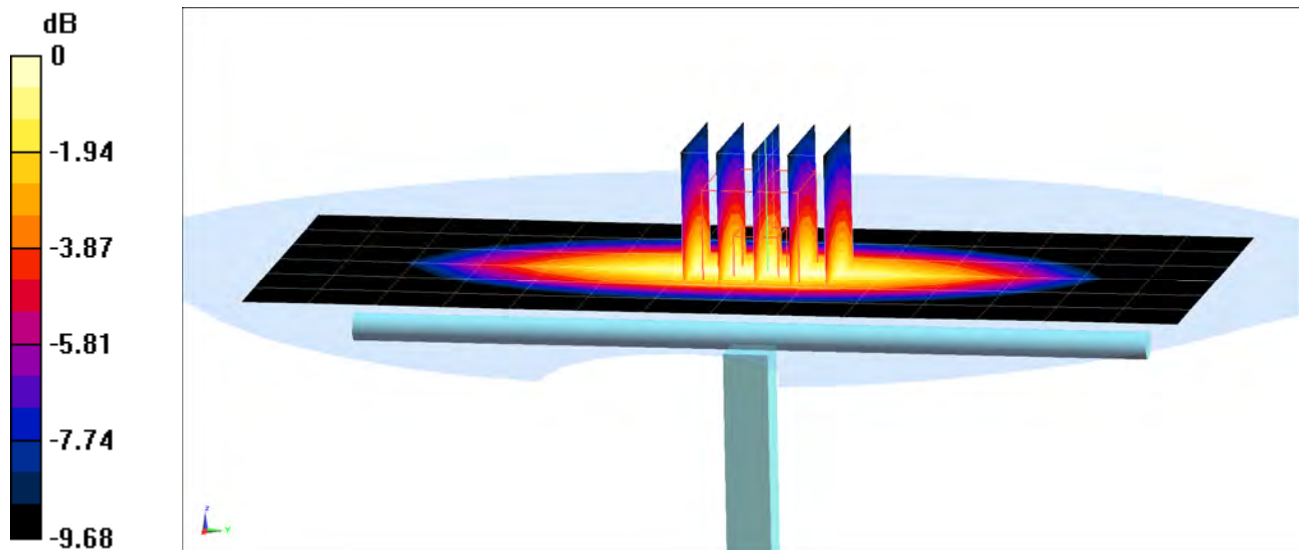
**Area Scan (7x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.48 W/kg

**SAR(1 g) = 1.69 W/kg**

Deviation(1 g) = -1.52%



0 dB = 2.22 W/kg = 3.46 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.983 \text{ S/m}$ ;  $\epsilon_r = 54.072$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06-10-2019; Ambient Temp: 20.5°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7488; ConvF(11.03, 11.03, 11.03) @ 835 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## **835 MHz System Verification at 23.0 dBm (200 mW)**

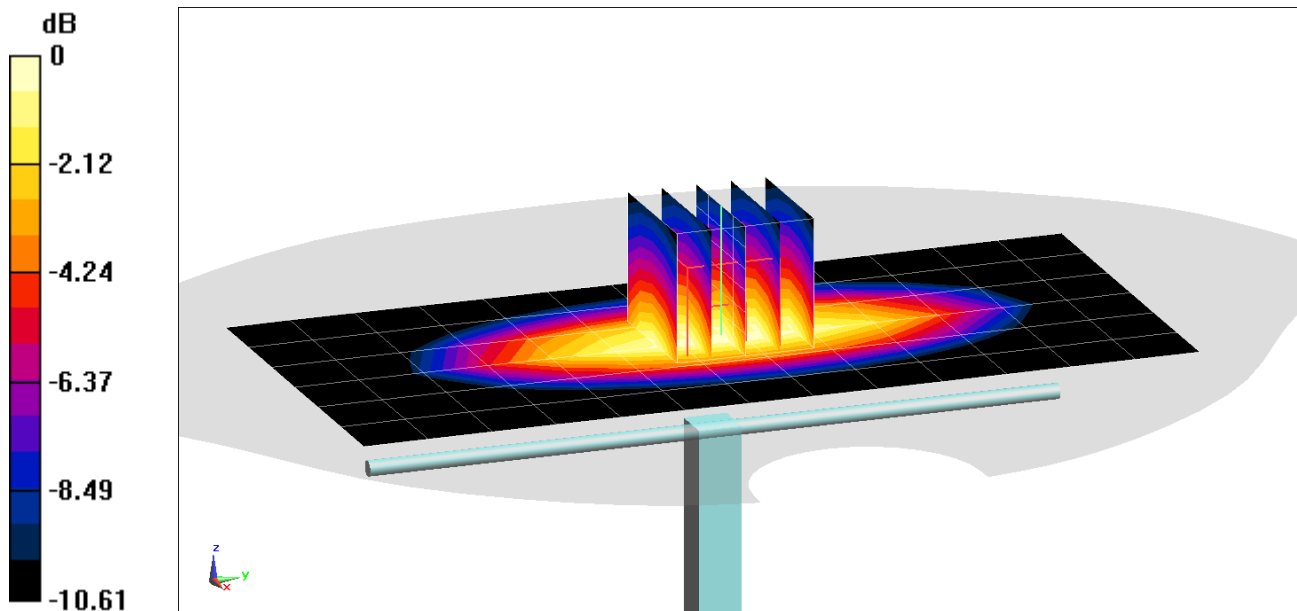
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 1.9 W/kg**

Deviation(1 g) = -1.76%



0 dB = 2.59 W/kg = 4.13 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d132**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.951 \text{ S/m}$ ;  $\epsilon_r = 56.942$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-01-2019; Ambient Temp: 22.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN3914; ConvF(9.46, 9.46, 9.46) @ 835 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 2/14/2019

Phantom: SAM with CRP v5.0 Left; Type: QD000P40CD; Serial: 1687

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **835 MHz System Verification at 23.0 dBm (200 mW)**

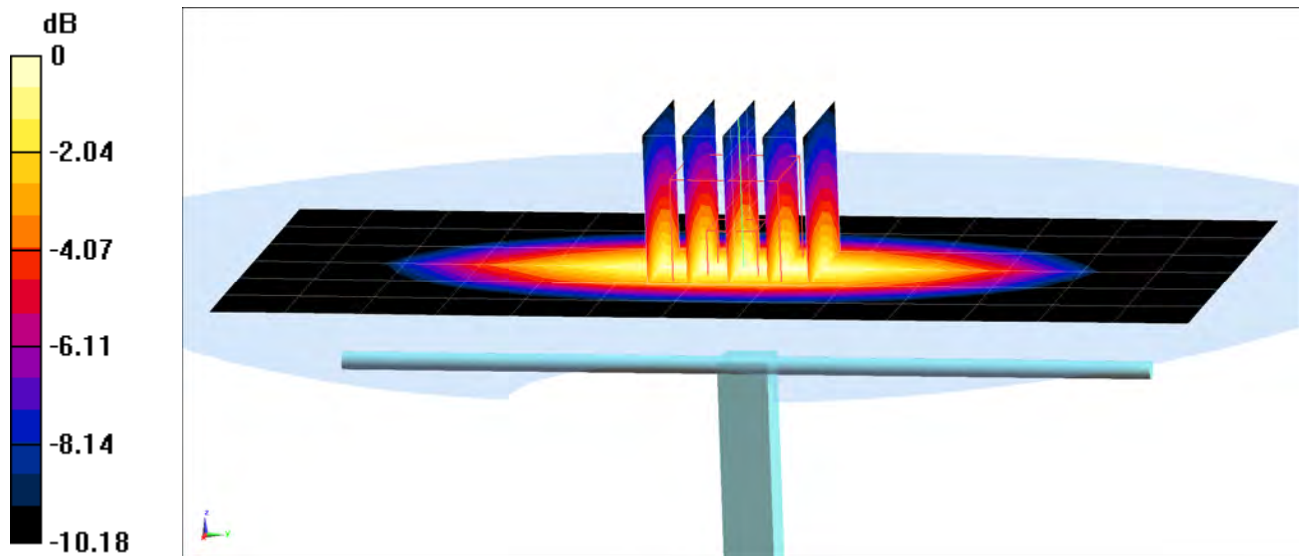
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 3.05 W/kg

**SAR(1 g) = 2.03 W/kg**

Deviation(1 g) = 4.96%



0 dB = 2.70 W/kg = 4.31 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.972 \text{ S/m}$ ;  $\epsilon_r = 55.349$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-03-2019; Ambient Temp: 22.0°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7538; ConvF(9.85, 9.85, 9.85) @ 835 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

Phantom: SAM V5.0 Left; Type: QD000P40CA; Serial: TP: 1018

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **835 MHz System Verification at 23.0 dBm (200 mW)**

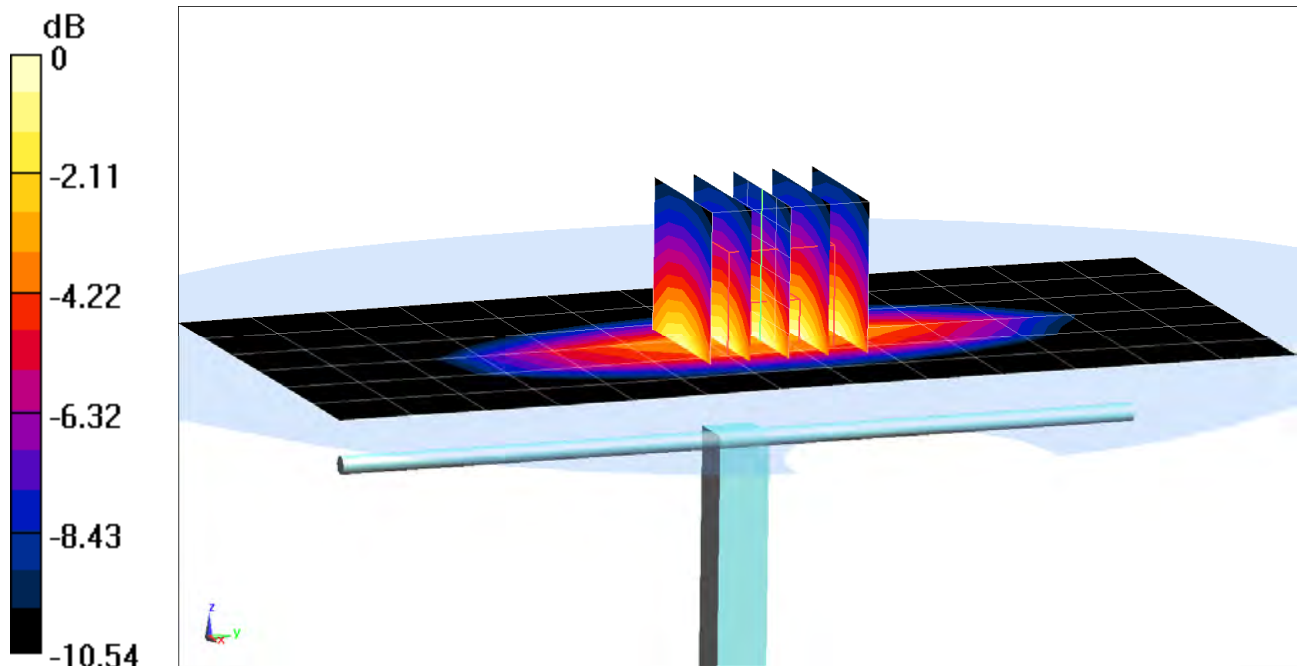
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 3.01 W/kg

**SAR(1 g) = 1.95 W/kg**

Deviation(1 g) = 2.96%



0 dB = 2.61 W/kg = 4.17 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.971 \text{ S/m}$ ;  $\epsilon_r = 55.24$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 07-09-2019; Ambient Temp: 20.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7538; ConvF(9.85, 9.85, 9.85) @ 835 MHz; Calibrated: 5/16/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/8/2019

Phantom: Left Twin-SAM V5.0 30; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **835 MHz System Verification at 23.0 dBm (200 mW)**

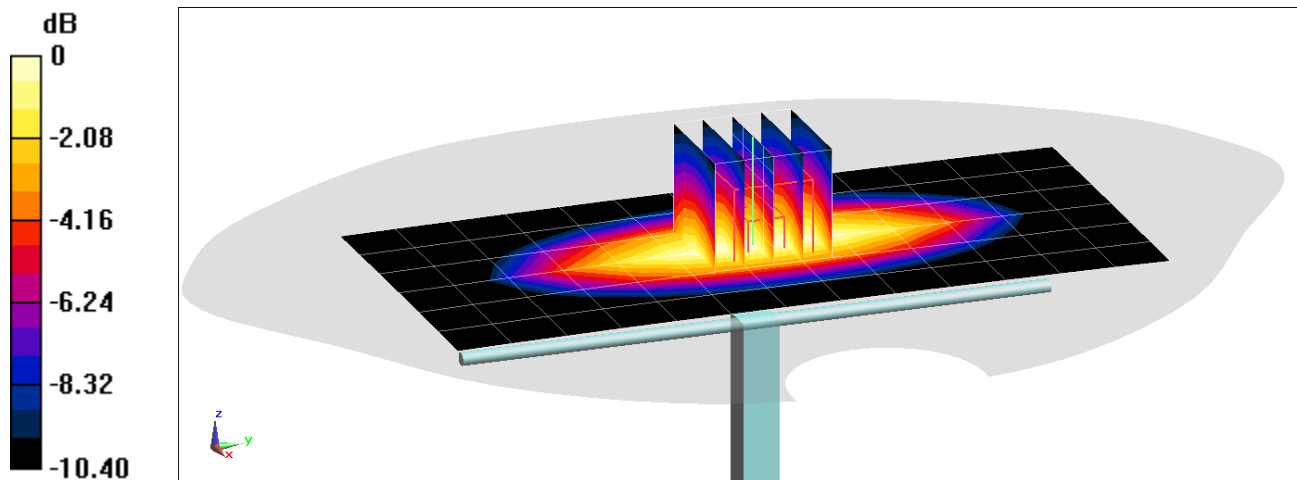
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 3.08 W/kg

**SAR(1 g) = 2.04 W/kg**

Deviation(1 g) = 7.71%



0 dB = 2.72 W/kg = 4.35 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.505 \text{ S/m}$ ;  $\epsilon_r = 52.424$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2019; Ambient Temp: 22.7°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF(8.26, 8.26, 8.26) @ 1750 MHz; Calibrated: 4/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/18/2019

Phantom: Twin-SAM V4.0 Front Right; Type: QD 000 P40 CC; Serial: 1167

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

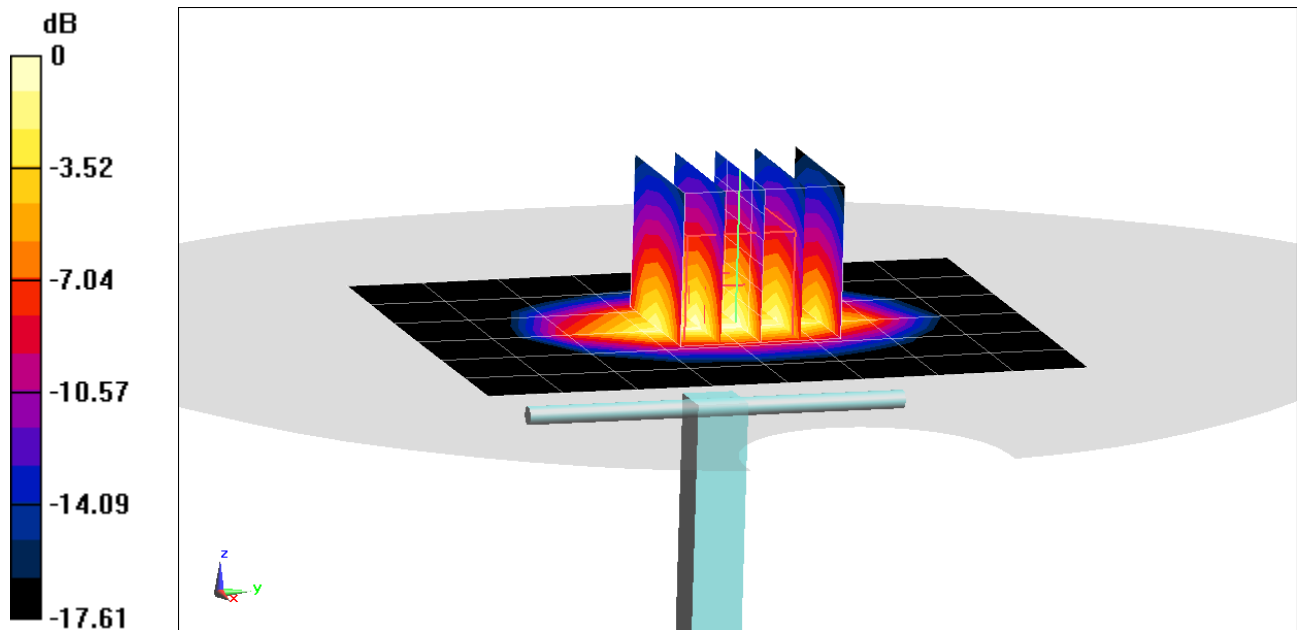
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 7.26 W/kg

**SAR(1 g) = 3.97 W/kg**

Deviation(1 g) = 8.47%



0 dB = 6.07 W/kg = 7.83 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.577 \text{ S/m}$ ;  $\epsilon_r = 52.119$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date:06-10-2019; Ambient Temp: 22.0°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7410; ConvF(7.78, 7.78, 7.78) @ 1900 MHz; Calibrated: 7/20/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2018

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

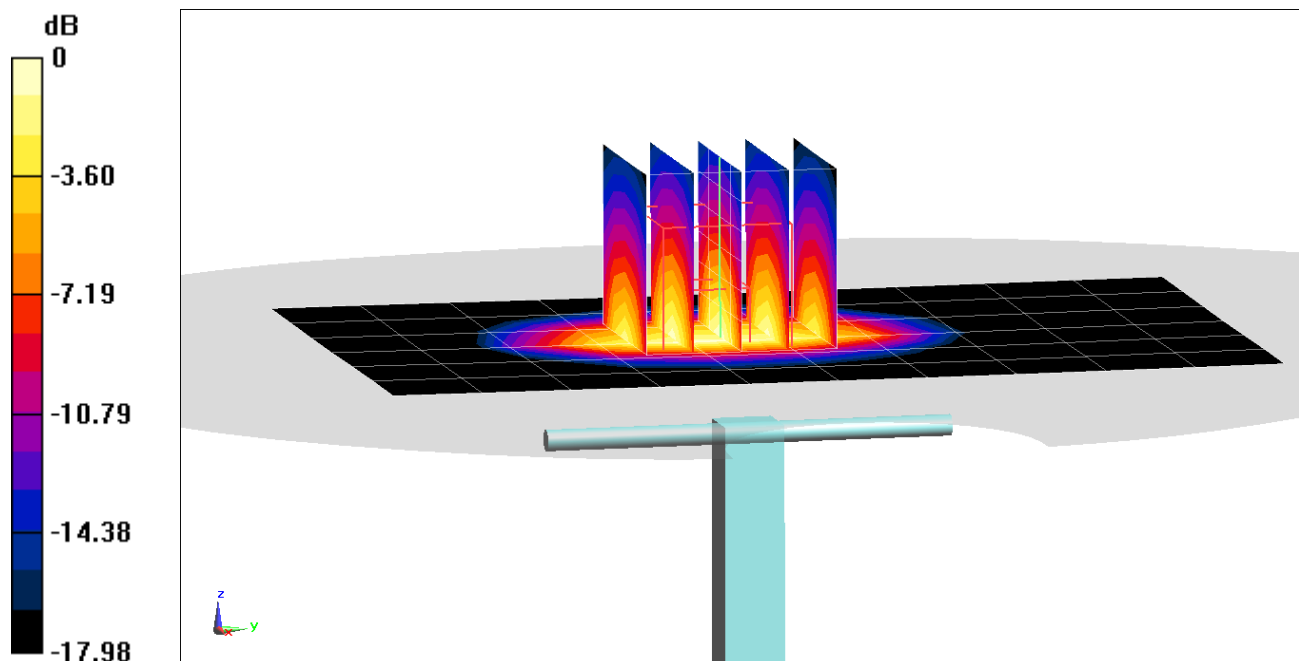
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 7.44 W/kg

**SAR(1 g) = 4.03 W/kg**

Deviation(1 g) = 3.07%



0 dB = 6.25 W/kg = 7.96 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.564 \text{ S/m}$ ;  $\epsilon_r = 51.734$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.6°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(7.78, 7.78, 7.78) @ 1900 MHz; Calibrated: 7/20/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/11/2018

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

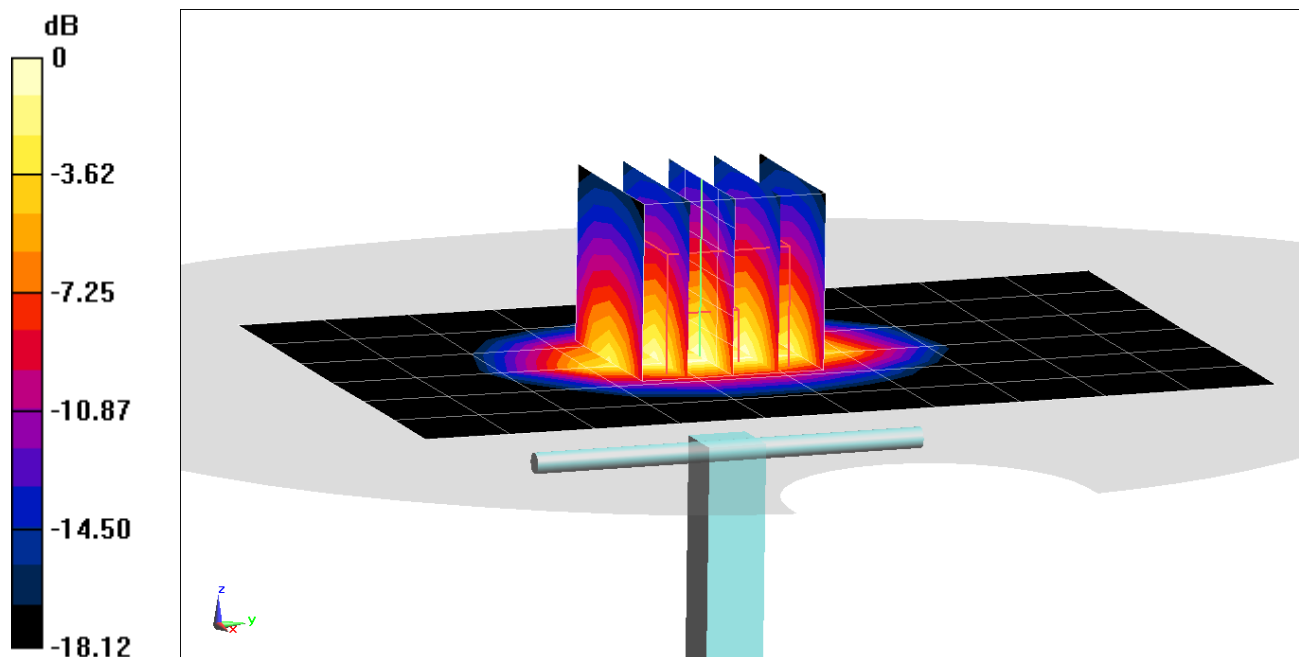
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.41 W/kg

**SAR(1 g) = 3.98 W/kg**

Deviation(1 g) = 1.02%



0 dB = 6.24 W/kg = 7.95 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.559 \text{ S/m}$ ;  $\epsilon_r = 51.003$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-01-2019; Ambient Temp: 20.7°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7488; ConvF(8.37, 8.37, 8.37) @ 1900 MHz; Calibrated: 1/24/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1530; Calibrated: 1/15/2019

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

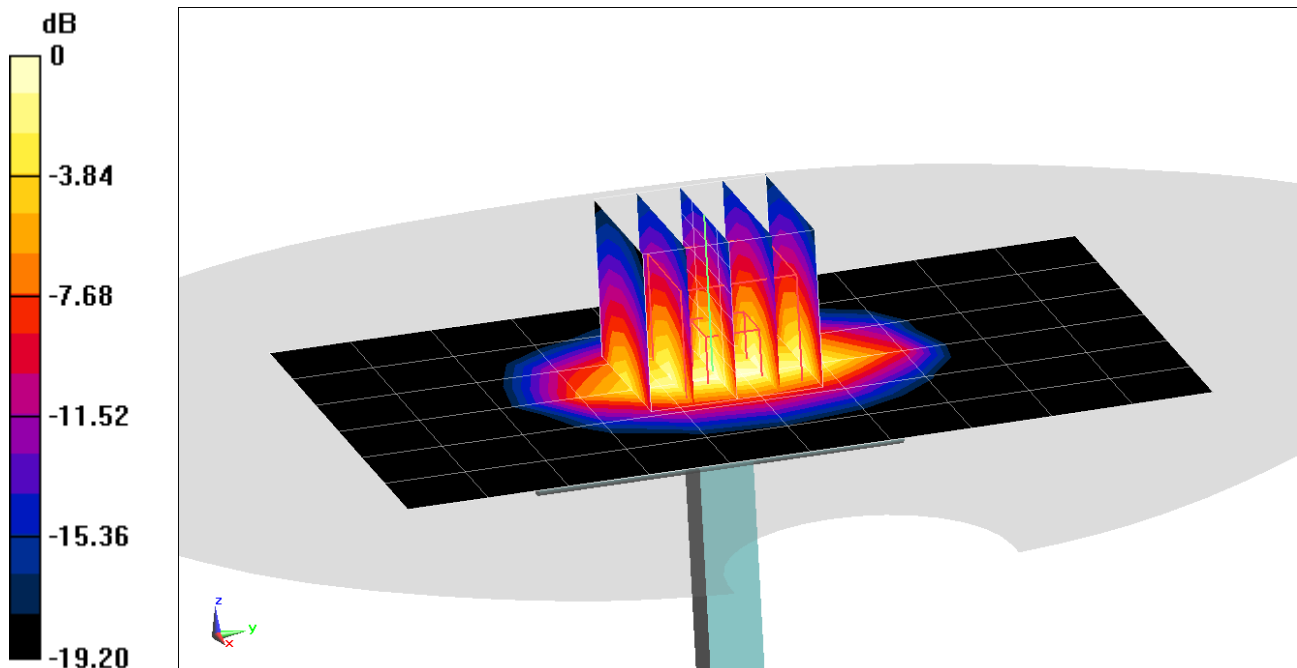
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Peak SAR (extrapolated) = 7.84 W/kg

**SAR(1 g) = 4.08 W/kg**

Deviation(1 g) = 4.08%



0 dB = 6.39 W/kg = 8.06 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 981**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 MHz Body Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 2.033 \text{ S/m}$ ;  $\epsilon_r = 52.57$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.8°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.57, 7.57, 7.57) @ 2450 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **2450 MHz System Verification at 20.0 dBm (100 mW)**

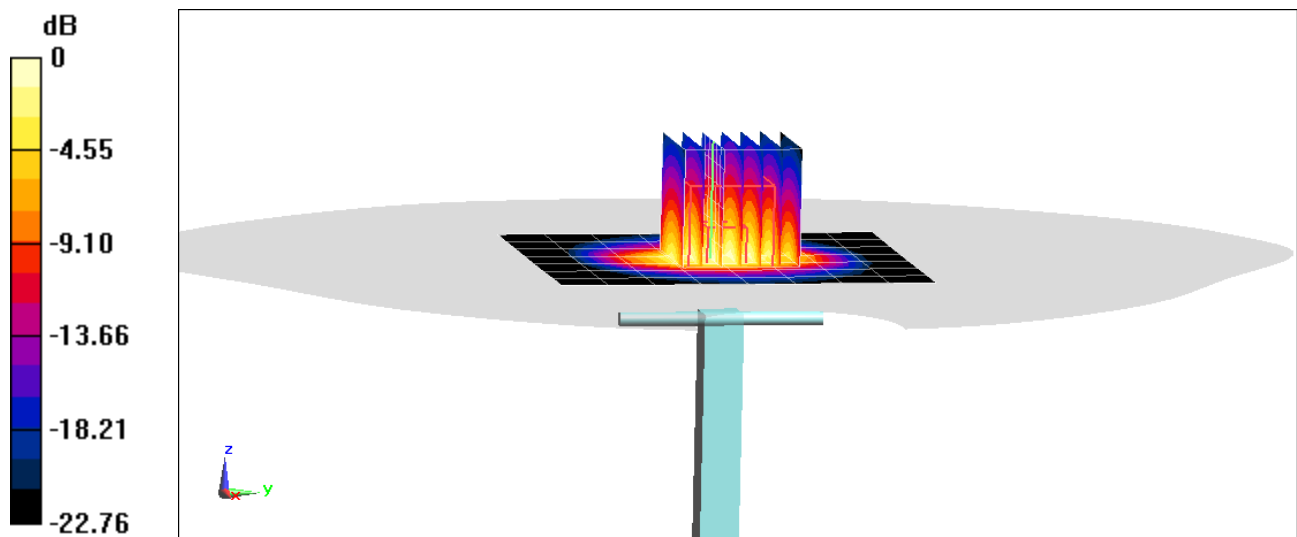
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.0 W/kg

**SAR(1 g) = 5.13 W/kg**

Deviation(1 g) = 0.79%



0 dB = 8.62 W/kg = 9.36 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 2.035 \text{ S/m}$ ;  $\epsilon_r = 51.648$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 07-10-2019; Ambient Temp: 22.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7417; ConvF(7.51, 7.51, 7.51) @ 2450 MHz; Calibrated: 2/19/2019

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 2/13/2019

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **2450 MHz System Verification at 20.0 dBm (100 mW)**

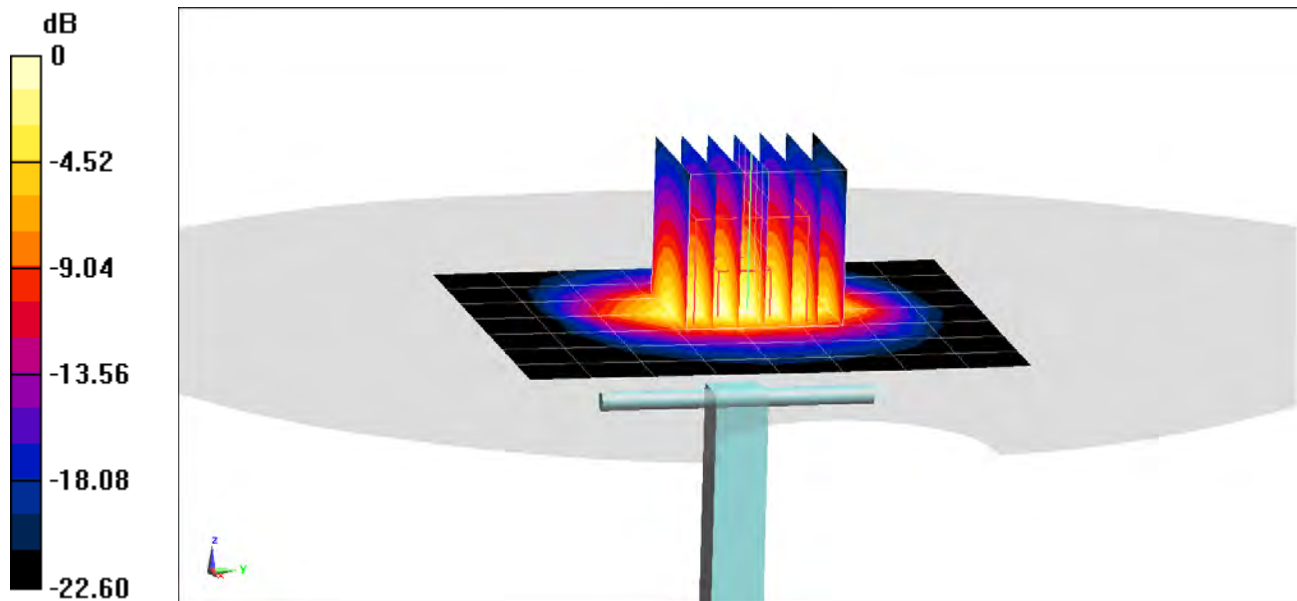
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.7 W/kg

**SAR(1 g) = 5.14 W/kg**

Deviation(1 g) = 2.59%



0 dB = 8.63 W/kg = 9.36 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 MHz Body Medium parameters used:

$f = 2600 \text{ MHz}$ ;  $\sigma = 2.177 \text{ S/m}$ ;  $\epsilon_r = 52.375$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-12-2019; Ambient Temp: 22.8°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF(7.4, 7.4, 7.4) @ 2600 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

## **2600 MHz System Verification at 20.0 dBm (100 mW)**

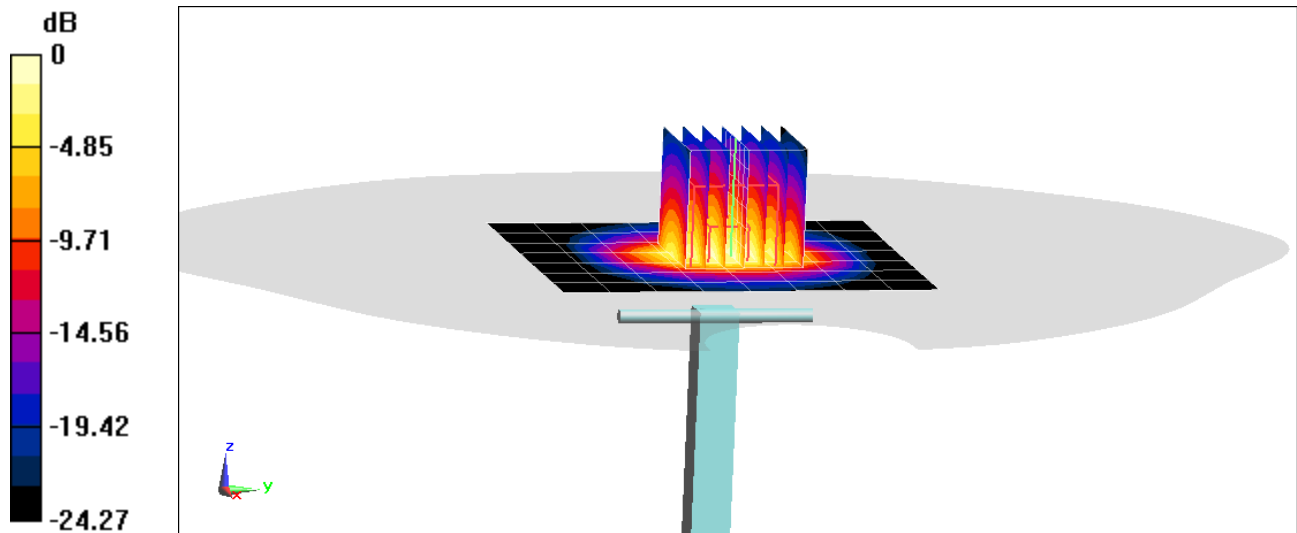
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.8 W/kg

**SAR(1 g) = 5.73 W/kg**

Deviation(1 g) = 4.56%



0 dB = 9.96 W/kg = 9.98 dBW/kg

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5GHz Body; Medium parameters used (interpolated):

$f = 5250 \text{ MHz}$ ;  $\sigma = 5.453 \text{ S/m}$ ;  $\epsilon_r = 48.55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-27-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7308; ConvF(4.48, 4.48, 4.48) @ 5250 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

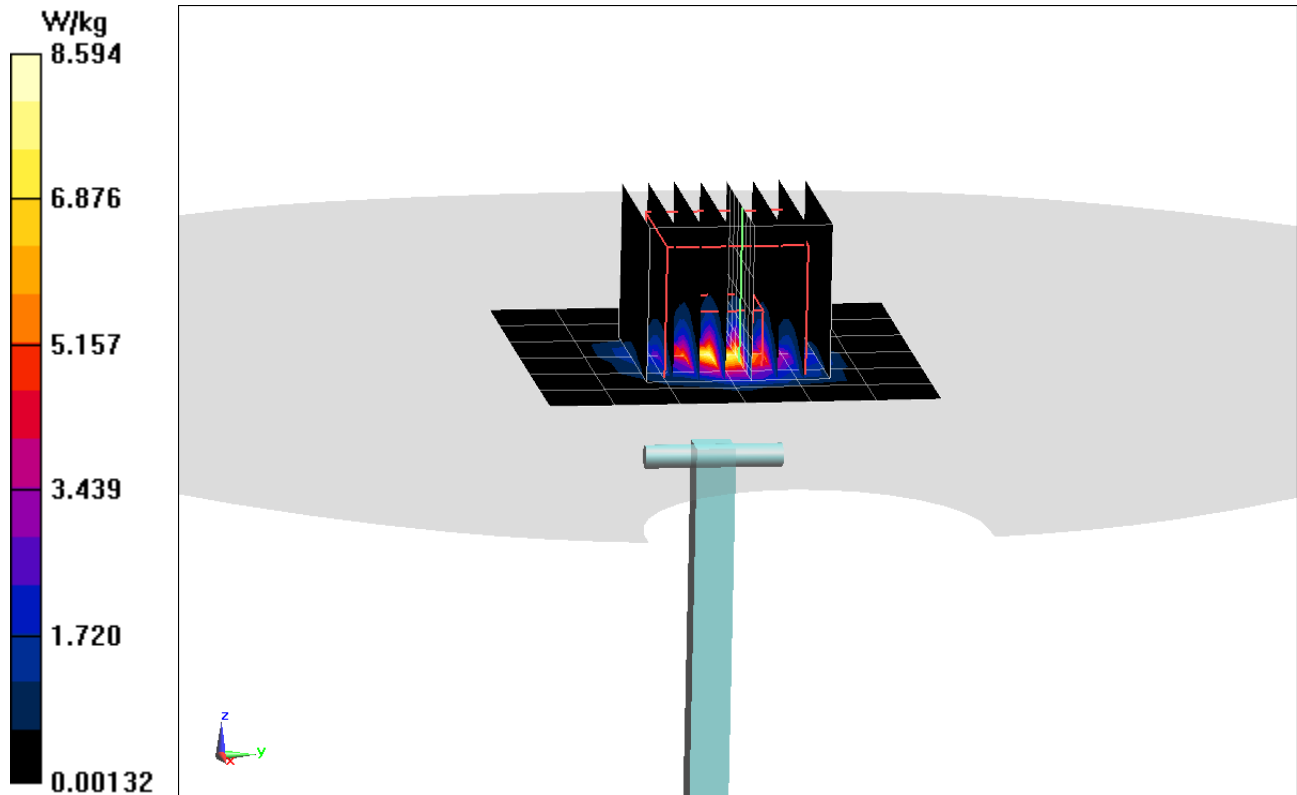
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 14.9 W/kg

**SAR(1 g) = 3.71 W/kg**

Deviation(1 g) = -3.64%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5GHz Body; Medium parameters used:

$f = 5600 \text{ MHz}$ ;  $\sigma = 5.972 \text{ S/m}$ ;  $\epsilon_r = 47.912$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-27-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7308; ConvF(4, 4, 4) @ 5600 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## **5600 MHz System Verification at 17.0 dBm (50 mW)**

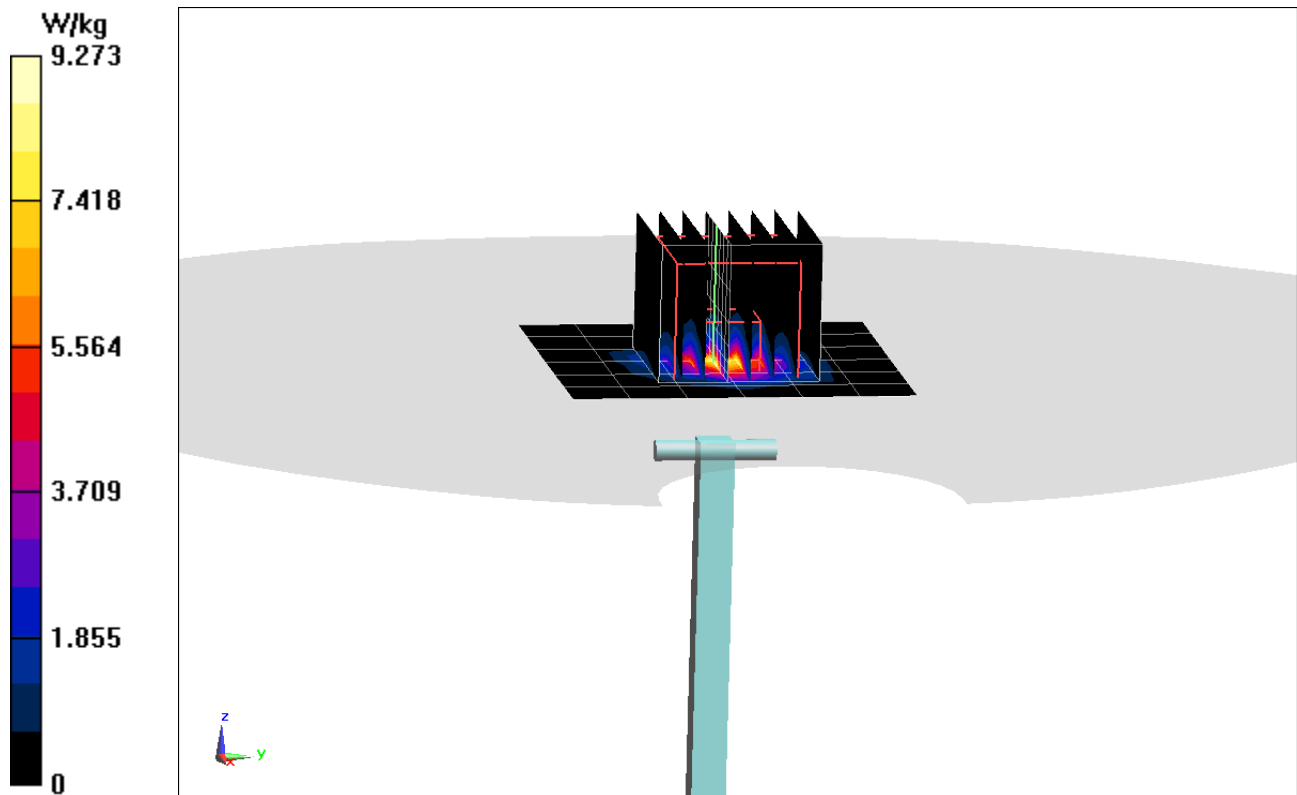
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 3.89 W/kg**

Deviation(1 g) = -1.77%



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1191**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5GHz Body; Medium parameters used (interpolated):

$f = 5750 \text{ MHz}$ ;  $\sigma = 6.205 \text{ S/m}$ ;  $\epsilon_r = 47.593$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06-27-2019; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7308; ConvF(4.18, 4.18, 4.18) @ 5750 MHz; Calibrated: 8/23/2018

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 10/3/2018

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7450)

## **5750 MHz System Verification at 17.0 dBm (50 mW)**

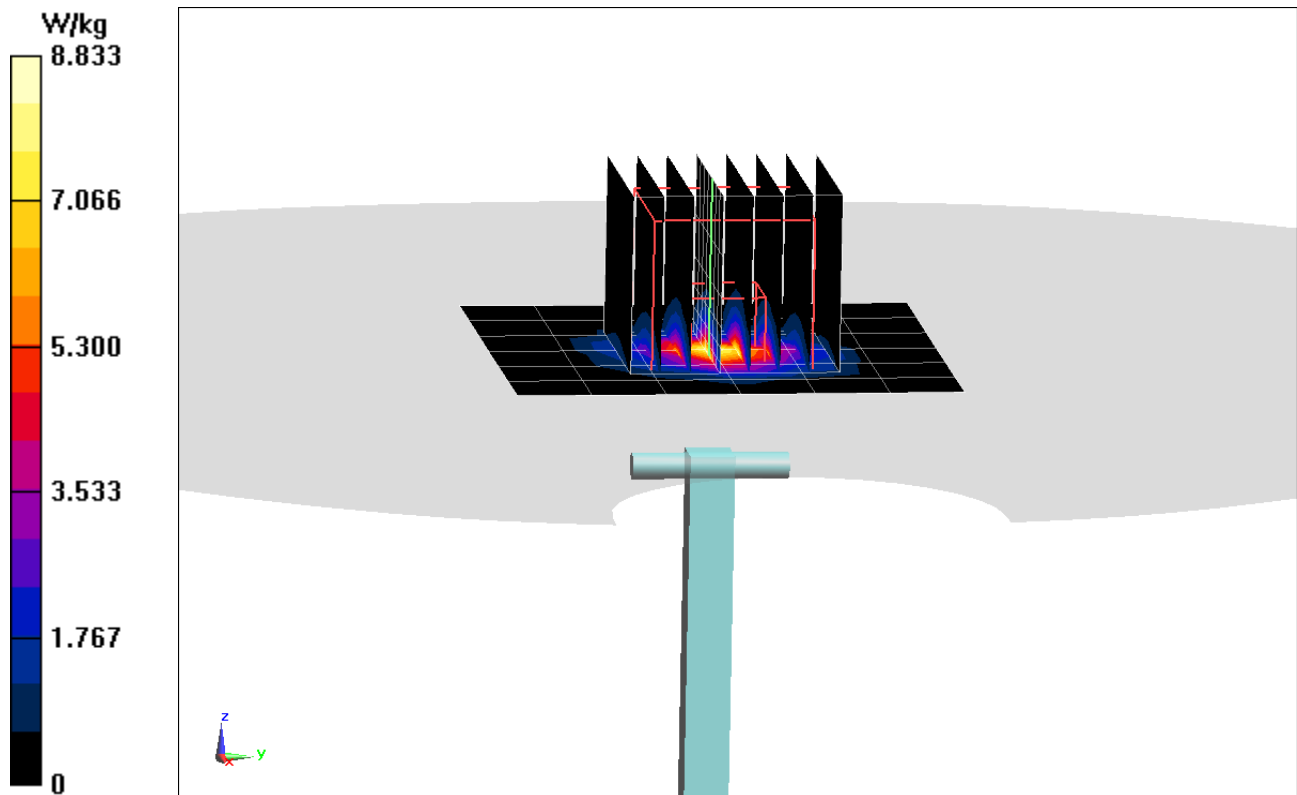
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.7 W/kg

**SAR(1 g) = 3.58 W/kg**

Deviation(1 g) = -5.91%



## APPENDIX C: PROBE CALIBRATION



Accredited by the Swiss Accreditation Service (SAS)  
 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-3914\_Feb19**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3914**

Calibration procedure(s) **QA CAL-01 v5, QA CAL-12 v5, QA CAL-14 v5, QA CAL-23 v5,  
 QA CAL-25 v7  
 Calibration procedure for dosimetric E-field probes**

Calibration date: **February 19, 2019**

*02-26-2019*

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature  $(22 \pm 3)^\circ\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| DAE4                       | SN: 660          | 19-Dec-18 (No. DAE4-660_Dec18)    | Dec-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 31-Dec-18 (No. ES3-3013_Dec18)    | Dec-19                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-18) | In house check: Oct-19 |

|                                                                                                                 | Name           | Function              | Signature |
|-----------------------------------------------------------------------------------------------------------------|----------------|-----------------------|-----------|
| Calibrated by:                                                                                                  | Jeton Kastrati | Laboratory Technician |           |
| Approved by:                                                                                                    | Katja Pokovic  | Technical Manager     |           |
| Issued: February 20, 2019                                                                                       |                |                       |           |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                |                       |           |



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

## Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|-----------------------------------------------------------|----------|----------|----------|-----------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.46     | 0.41     | 0.44     | ± 10.1 %  |
| DCP (mV) <sup>B</sup>                                     | 98.0     | 104.4    | 100.8    |           |

## Calibration Results for Modulation Response

| UID           | Communication System Name   |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C     | D<br>dB | VR<br>mV | Max<br>dev. | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------|---|---------|------------------------------|-------|---------|----------|-------------|----------------------------------|
| 0             | CW                          | X | 0.00    | 0.00                         | 1.00  | 0.00    | 135.8    | ± 3.3 %     | ± 4.7 %                          |
|               |                             | Y | 0.00    | 0.00                         | 1.00  |         | 149.1    |             |                                  |
|               |                             | Z | 0.00    | 0.00                         | 1.00  |         | 130.4    |             |                                  |
| 10352-<br>AAA | Pulse Waveform (200Hz, 10%) | X | 11.50   | 82.25                        | 17.46 | 10.00   | 60.0     | ± 2.9 %     | ± 9.6 %                          |
|               |                             | Y | 13.06   | 84.85                        | 18.88 |         | 60.0     |             |                                  |
|               |                             | Z | 15.00   | 85.74                        | 19.04 |         | 60.0     |             |                                  |
| 10353-<br>AAA | Pulse Waveform (200Hz, 20%) | X | 15.00   | 85.61                        | 17.12 | 6.99    | 80.0     | ± 1.7 %     | ± 9.6 %                          |
|               |                             | Y | 15.00   | 87.20                        | 18.40 |         | 80.0     |             |                                  |
|               |                             | Z | 15.00   | 86.88                        | 18.11 |         | 80.0     |             |                                  |
| 10354-<br>AAA | Pulse Waveform (200Hz, 40%) | X | 15.00   | 85.07                        | 15.18 | 3.98    | 95.0     | ± 1.1 %     | ± 9.6 %                          |
|               |                             | Y | 15.00   | 89.57                        | 18.09 |         | 95.0     |             |                                  |
|               |                             | Z | 15.00   | 87.22                        | 16.52 |         | 95.0     |             |                                  |
| 10355-<br>AAA | Pulse Waveform (200Hz, 60%) | X | 0.82    | 65.05                        | 7.38  | 2.22    | 120.0    | ± 1.2 %     | ± 9.6 %                          |
|               |                             | Y | 15.00   | 94.17                        | 19.03 |         | 120.0    |             |                                  |
|               |                             | Z | 15.00   | 84.14                        | 13.59 |         | 120.0    |             |                                  |
| 10387-<br>AAA | QPSK Waveform, 1 MHz        | X | 0.56    | 60.35                        | 7.26  | 0.00    | 150.0    | ± 2.8 %     | ± 9.6 %                          |
|               |                             | Y | 0.80    | 64.04                        | 10.54 |         | 150.0    |             |                                  |
|               |                             | Z | 0.51    | 60.00                        | 6.79  |         | 150.0    |             |                                  |
| 10388-<br>AAA | QPSK Waveform, 10 MHz       | X | 2.18    | 68.24                        | 15.67 | 0.00    | 150.0    | ± 1.2 %     | ± 9.6 %                          |
|               |                             | Y | 2.41    | 70.06                        | 16.91 |         | 150.0    |             |                                  |
|               |                             | Z | 2.04    | 67.38                        | 15.28 |         | 150.0    |             |                                  |
| 10396-<br>AAA | 64-QAM Waveform, 100 kHz    | X | 2.71    | 69.05                        | 18.06 | 3.01    | 150.0    | ± 0.7 %     | ± 9.6 %                          |
|               |                             | Y | 3.50    | 74.05                        | 20.22 |         | 150.0    |             |                                  |
|               |                             | Z | 2.76    | 69.32                        | 18.16 |         | 150.0    |             |                                  |
| 10399-<br>AAA | 64-QAM Waveform, 40 MHz     | X | 3.50    | 67.38                        | 15.86 | 0.00    | 150.0    | ± 2.2 %     | ± 9.6 %                          |
|               |                             | Y | 3.57    | 67.89                        | 16.25 |         | 150.0    |             |                                  |
|               |                             | Z | 3.38    | 66.82                        | 15.58 |         | 150.0    |             |                                  |
| 10414-<br>AAA | WLAN CCDF, 64-QAM, 40MHz    | X | 4.87    | 65.94                        | 15.72 | 0.00    | 150.0    | ± 4.2 %     | ± 9.6 %                          |
|               |                             | Y | 4.84    | 65.99                        | 15.74 |         | 150.0    |             |                                  |
|               |                             | Z | 4.71    | 65.47                        | 15.46 |         | 150.0    |             |                                  |

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$V^{-1}$ | T1<br>$ms.V^{-2}$ | T2<br>$ms.V^{-1}$ | T3<br>ms | T4<br>$V^{-2}$ | T5<br>$V^{-1}$ | T6   |
|---|----------|----------|----------------------|-------------------|-------------------|----------|----------------|----------------|------|
| X | 42.5     | 324.17   | 36.82                | 9.95              | 0.55              | 5.06     | 0.00           | 0.49           | 1.01 |
| Y | 42.9     | 310.45   | 33.81                | 12.34             | 0.63              | 5.02     | 2.00           | 0.15           | 1.01 |
| Z | 39.7     | 301.66   | 36.55                | 9.75              | 0.75              | 5.05     | 0.45           | 0.44           | 1.01 |

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 0.5        |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 6                    | 55.5                               | 0.75                            | 21.24   | 21.24   | 21.24   | 0.00               | 1.00                    | ± 13.3 %  |
| 13                   | 55.5                               | 0.75                            | 18.06   | 18.06   | 18.06   | 0.00               | 1.00                    | ± 13.3 %  |
| 750                  | 41.9                               | 0.89                            | 10.00   | 10.00   | 10.00   | 0.54               | 0.82                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.50    | 9.50    | 9.50    | 0.50               | 0.86                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.16    | 8.16    | 8.16    | 0.41               | 0.80                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 7.80    | 7.80    | 7.80    | 0.40               | 0.84                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.44    | 7.44    | 7.44    | 0.37               | 0.84                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.13    | 7.13    | 7.13    | 0.39               | 0.86                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.11    | 7.11    | 7.11    | 0.39               | 0.89                    | ± 12.0 %  |
| 3500                 | 37.9                               | 2.91                            | 6.99    | 6.99    | 6.99    | 0.25               | 1.20                    | ± 13.1 %  |
| 3700                 | 37.7                               | 3.12                            | 6.75    | 6.75    | 6.75    | 0.25               | 1.20                    | ± 13.1 %  |
| 5250                 | 35.9                               | 4.71                            | 5.19    | 5.19    | 5.19    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.73    | 4.73    | 4.73    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.90    | 4.90    | 4.90    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.73    | 9.73    | 9.73    | 0.54               | 0.84                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.46    | 9.46    | 9.46    | 0.50               | 0.80                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.89    | 7.89    | 7.89    | 0.38               | 0.84                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.60    | 7.60    | 7.60    | 0.29               | 1.03                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.43    | 7.43    | 7.43    | 0.38               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.34    | 7.34    | 7.34    | 0.33               | 0.87                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.15    | 7.15    | 7.15    | 0.26               | 0.97                    | ± 12.0 %  |
| 3500                 | 51.3                               | 3.31                            | 6.88    | 6.88    | 6.88    | 0.25               | 1.15                    | ± 13.1 %  |
| 3700                 | 51.0                               | 3.55                            | 6.58    | 6.58    | 6.58    | 0.30               | 1.15                    | ± 13.1 %  |
| 5250                 | 48.9                               | 5.36                            | 4.61    | 4.61    | 4.61    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 3.92    | 3.92    | 3.92    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.05    | 4.05    | 4.05    | 0.50               | 1.90                    | ± 13.1 %  |

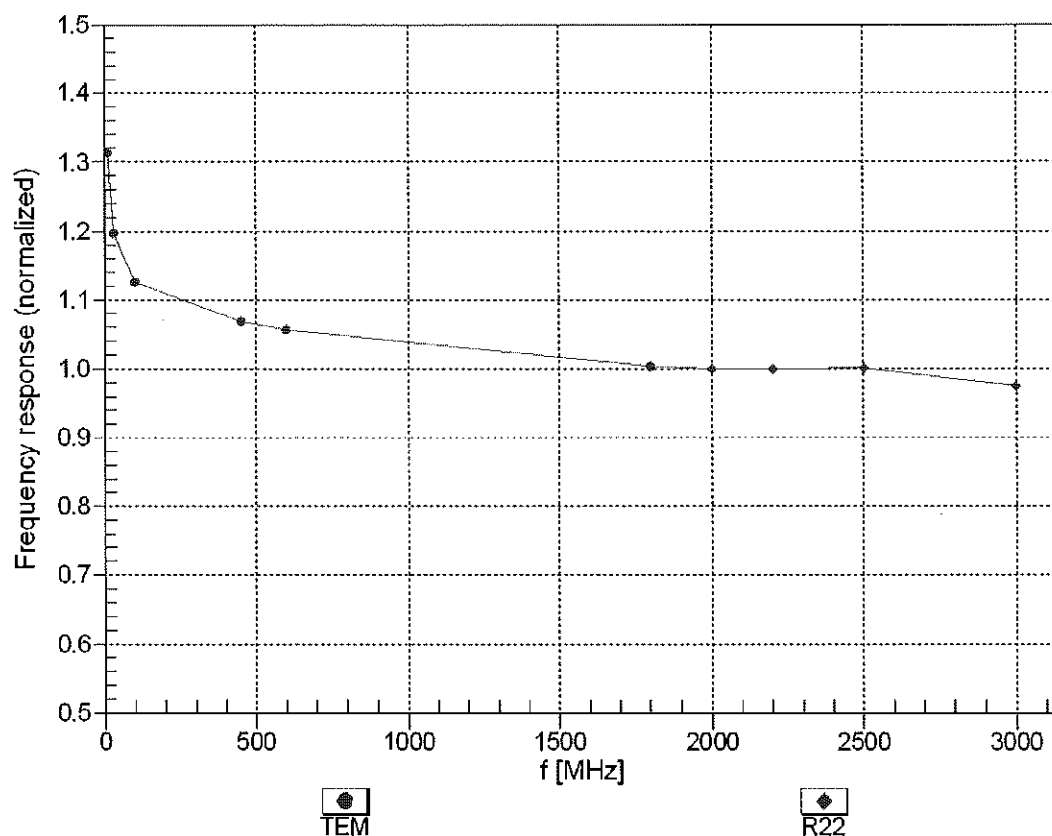
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

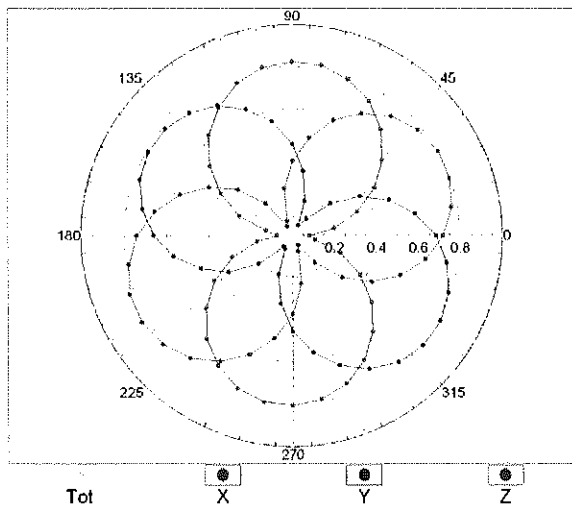
(TEM-Cell:ifi110 EXX, Waveguide: R22)



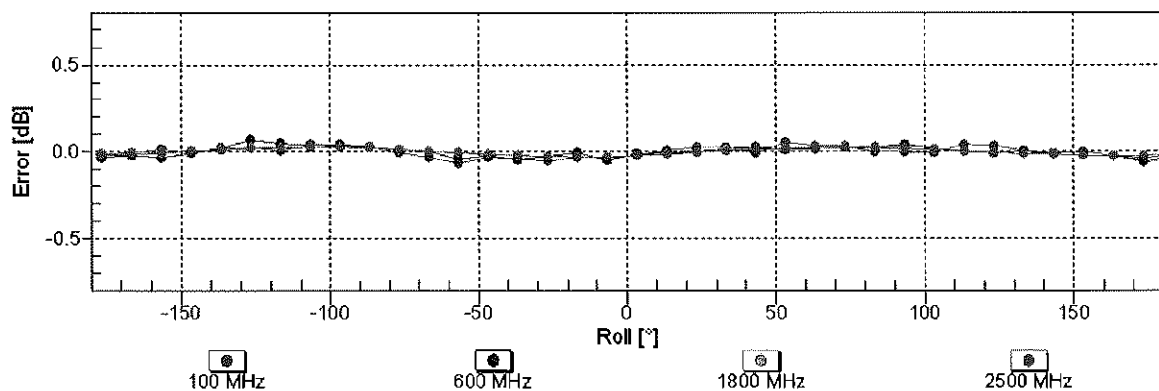
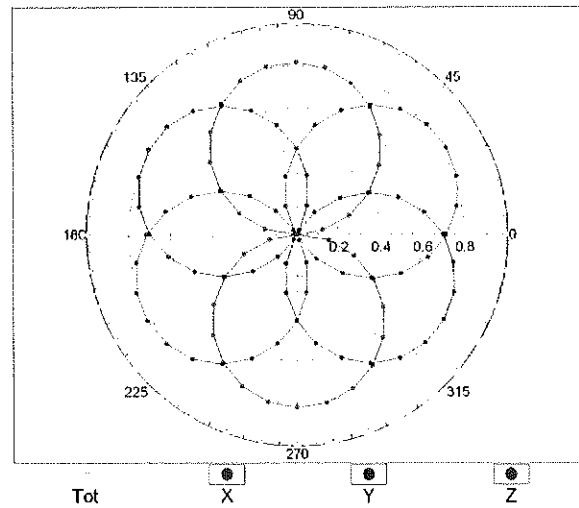
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

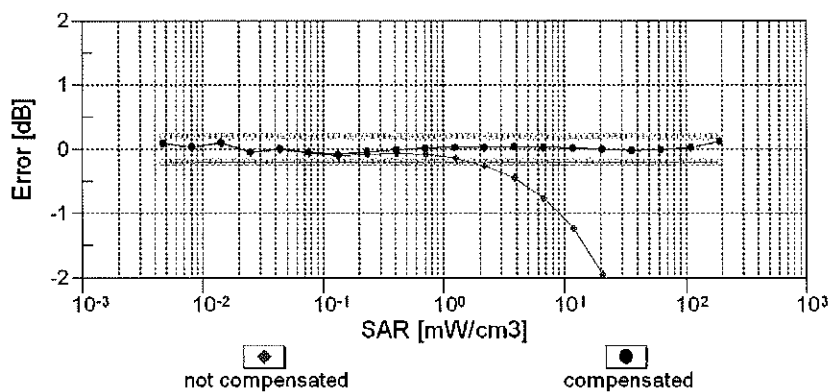
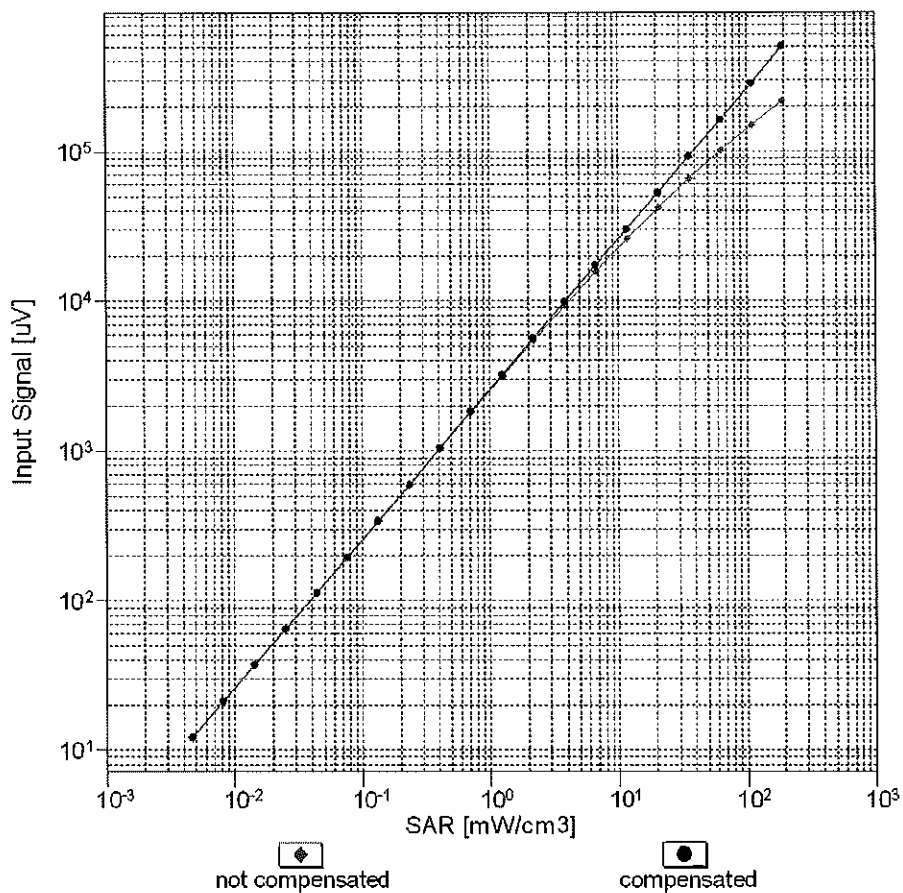


f=1800 MHz,R22



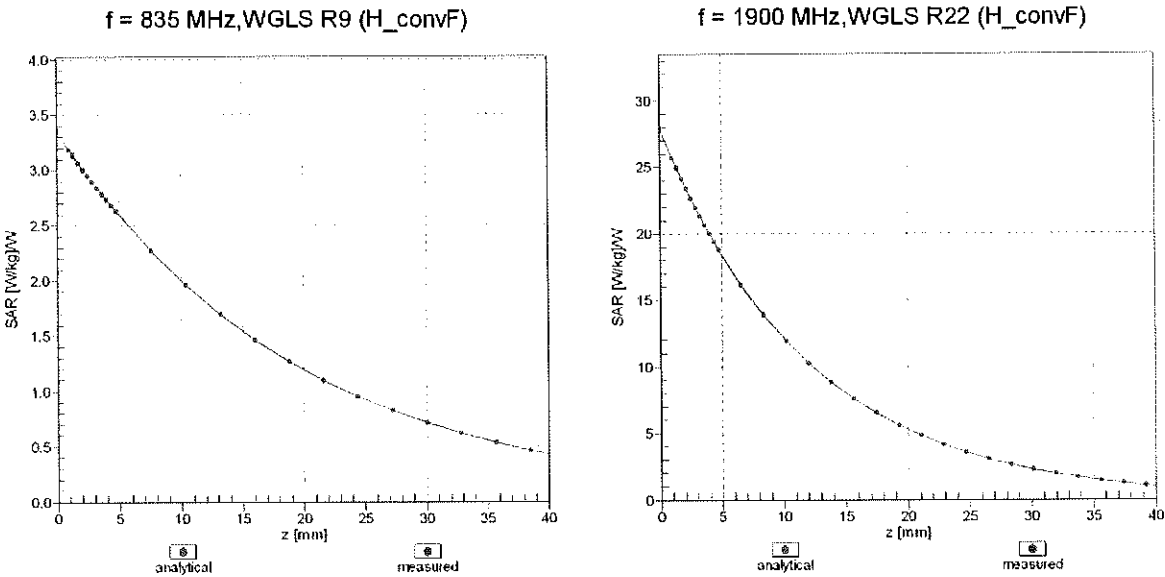
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



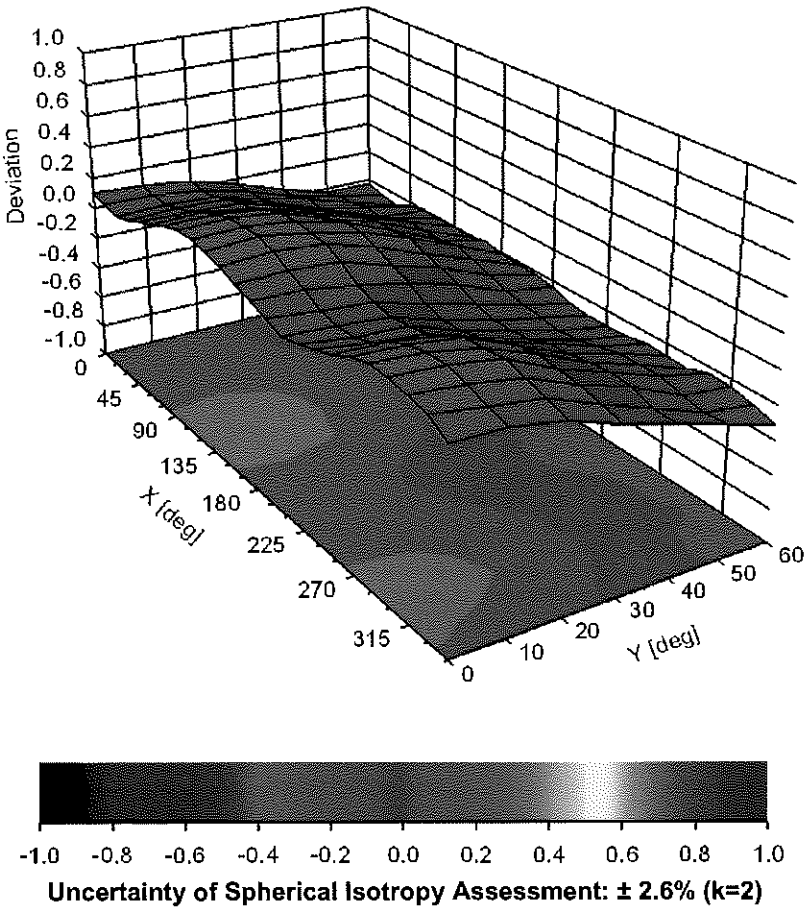
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ), f = 900 MHz



**Appendix: Modulation Calibration Parameters**

| UID   | Rev | Communication System Name                           | Group     | PAR (dB) | Unc <sup>E</sup> (k=2) |
|-------|-----|-----------------------------------------------------|-----------|----------|------------------------|
| 0     |     | CW                                                  | CW        | 0.00     | ± 4.7 %                |
| 10010 | CAA | SAR Validation (Square, 100ms, 10ms)                | Test      | 10.00    | ± 9.6 %                |
| 10011 | CAB | UMTS-FDD (WCDMA)                                    | WCDMA     | 2.91     | ± 9.6 %                |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)            | WLAN      | 1.87     | ± 9.6 %                |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)       | WLAN      | 9.46     | ± 9.6 %                |
| 10021 | DAC | GSM-FDD (TDMA, GMSK)                                | GSM       | 9.39     | ± 9.6 %                |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0)                         | GSM       | 9.57     | ± 9.6 %                |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                       | GSM       | 6.56     | ± 9.6 %                |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                         | GSM       | 12.62    | ± 9.6 %                |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                       | GSM       | 9.55     | ± 9.6 %                |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)                     | GSM       | 4.80     | ± 9.6 %                |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)                   | GSM       | 3.55     | ± 9.6 %                |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)                     | GSM       | 7.78     | ± 9.6 %                |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)                 | Bluetooth | 5.30     | ± 9.6 %                |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)                 | Bluetooth | 1.87     | ± 9.6 %                |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | Bluetooth | 1.16     | ± 9.6 %                |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | Bluetooth | 7.74     | ± 9.6 %                |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | Bluetooth | 4.53     | ± 9.6 %                |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | Bluetooth | 3.83     | ± 9.6 %                |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | Bluetooth | 8.01     | ± 9.6 %                |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | Bluetooth | 4.77     | ± 9.6 %                |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | Bluetooth | 4.10     | ± 9.6 %                |
| 10039 | CAB | CDMA2000 (1xRTT, RC1)                               | CDMA2000  | 4.57     | ± 9.6 %                |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | AMPS      | 7.78     | ± 9.6 %                |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | AMPS      | 0.00     | ± 9.6 %                |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | DECT      | 13.80    | ± 9.6 %                |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | DECT      | 10.79    | ± 9.6 %                |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | TD-SCDMA  | 11.01    | ± 9.6 %                |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | GSM       | 6.52     | ± 9.6 %                |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | WLAN      | 2.12     | ± 9.6 %                |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | WLAN      | 2.83     | ± 9.6 %                |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)           | WLAN      | 3.60     | ± 9.6 %                |
| 10062 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)            | WLAN      | 8.68     | ± 9.6 %                |
| 10063 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)            | WLAN      | 8.63     | ± 9.6 %                |
| 10064 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)           | WLAN      | 9.09     | ± 9.6 %                |
| 10065 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)           | WLAN      | 9.00     | ± 9.6 %                |
| 10066 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)           | WLAN      | 9.38     | ± 9.6 %                |
| 10067 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)           | WLAN      | 10.12    | ± 9.6 %                |
| 10068 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)           | WLAN      | 10.24    | ± 9.6 %                |
| 10069 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)           | WLAN      | 10.56    | ± 9.6 %                |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)       | WLAN      | 9.83     | ± 9.6 %                |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)      | WLAN      | 9.62     | ± 9.6 %                |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)      | WLAN      | 9.94     | ± 9.6 %                |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)      | WLAN      | 10.30    | ± 9.6 %                |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)      | WLAN      | 10.77    | ± 9.6 %                |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)      | WLAN      | 10.94    | ± 9.6 %                |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)      | WLAN      | 11.00    | ± 9.6 %                |
| 10081 | CAB | CDMA2000 (1xRTT, RC3)                               | CDMA2000  | 3.97     | ± 9.6 %                |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | AMPS      | 4.77     | ± 9.6 %                |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | GSM       | 6.56     | ± 9.6 %                |
| 10097 | CAB | UMTS-FDD (HSDPA)                                    | WCDMA     | 3.98     | ± 9.6 %                |
| 10098 | CAB | UMTS-FDD (HSUPA, Subtest 2)                         | WCDMA     | 3.98     | ± 9.6 %                |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | GSM       | 9.55     | ± 9.6 %                |
| 10100 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | LTE-FDD   | 5.67     | ± 9.6 %                |
| 10101 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | LTE-FDD   | 6.42     | ± 9.6 %                |
| 10102 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | LTE-FDD   | 6.60     | ± 9.6 %                |
| 10103 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | LTE-TDD   | 9.29     | ± 9.6 %                |
| 10104 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | LTE-TDD   | 9.97     | ± 9.6 %                |
| 10105 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | LTE-TDD   | 10.01    | ± 9.6 %                |
| 10108 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | LTE-FDD   | 5.80     | ± 9.6 %                |

|       |     |                                                |         |       |         |
|-------|-----|------------------------------------------------|---------|-------|---------|
| 10109 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)     | LTE-FDD | 6.43  | ± 9.6 % |
| 10110 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10111 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)      | LTE-FDD | 6.44  | ± 9.6 % |
| 10112 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | LTE-FDD | 6.59  | ± 9.6 % |
| 10113 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10114 | CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | WLAN    | 8.10  | ± 9.6 % |
| 10115 | CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | WLAN    | 8.46  | ± 9.6 % |
| 10116 | CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN    | 8.15  | ± 9.6 % |
| 10117 | CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | WLAN    | 8.07  | ± 9.6 % |
| 10118 | CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | WLAN    | 8.59  | ± 9.6 % |
| 10119 | CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | WLAN    | 8.13  | ± 9.6 % |
| 10140 | CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | LTE-FDD | 6.49  | ± 9.6 % |
| 10141 | CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | LTE-FDD | 6.53  | ± 9.6 % |
| 10142 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | LTE-FDD | 5.73  | ± 9.6 % |
| 10143 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | LTE-FDD | 6.35  | ± 9.6 % |
| 10144 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | LTE-FDD | 6.65  | ± 9.6 % |
| 10145 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | LTE-FDD | 5.76  | ± 9.6 % |
| 10146 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | LTE-FDD | 6.41  | ± 9.6 % |
| 10147 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | LTE-FDD | 6.72  | ± 9.6 % |
| 10149 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-FDD | 6.42  | ± 9.6 % |
| 10150 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-FDD | 6.60  | ± 9.6 % |
| 10151 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)        | LTE-TDD | 9.28  | ± 9.6 % |
| 10152 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-TDD | 9.92  | ± 9.6 % |
| 10153 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-TDD | 10.05 | ± 9.6 % |
| 10154 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10155 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10156 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         | LTE-FDD | 5.79  | ± 9.6 % |
| 10157 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)       | LTE-FDD | 6.49  | ± 9.6 % |
| 10158 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10159 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)       | LTE-FDD | 6.56  | ± 9.6 % |
| 10160 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)        | LTE-FDD | 5.82  | ± 9.6 % |
| 10161 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10162 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)      | LTE-FDD | 6.58  | ± 9.6 % |
| 10166 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)       | LTE-FDD | 5.46  | ± 9.6 % |
| 10167 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)     | LTE-FDD | 6.21  | ± 9.6 % |
| 10168 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)     | LTE-FDD | 6.79  | ± 9.6 % |
| 10169 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-FDD | 5.73  | ± 9.6 % |
| 10170 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10171 | AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-FDD | 6.49  | ± 9.6 % |
| 10172 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-TDD | 9.21  | ± 9.6 % |
| 10173 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-TDD | 9.48  | ± 9.6 % |
| 10174 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-TDD | 10.25 | ± 9.6 % |
| 10175 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)          | LTE-FDD | 5.72  | ± 9.6 % |
| 10176 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10177 | CAI | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)           | LTE-FDD | 5.73  | ± 9.6 % |
| 10178 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)         | LTE-FDD | 6.52  | ± 9.6 % |
| 10179 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)        | LTE-FDD | 6.50  | ± 9.6 % |
| 10180 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)         | LTE-FDD | 6.50  | ± 9.6 % |
| 10181 | CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)          | LTE-FDD | 5.72  | ± 9.6 % |
| 10182 | CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10183 | AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)        | LTE-FDD | 6.50  | ± 9.6 % |
| 10184 | CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)           | LTE-FDD | 5.73  | ± 9.6 % |
| 10185 | CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)         | LTE-FDD | 6.51  | ± 9.6 % |
| 10186 | AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)         | LTE-FDD | 6.50  | ± 9.6 % |
| 10187 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         | LTE-FDD | 5.73  | ± 9.6 % |
| 10188 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)       | LTE-FDD | 6.52  | ± 9.6 % |
| 10189 | AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)       | LTE-FDD | 6.50  | ± 9.6 % |
| 10193 | CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)   | WLAN    | 8.09  | ± 9.6 % |
| 10194 | CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)  | WLAN    | 8.12  | ± 9.6 % |
| 10195 | CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)  | WLAN    | 8.21  | ± 9.6 % |
| 10196 | CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)        | WLAN    | 8.10  | ± 9.6 % |
| 10197 | CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)       | WLAN    | 8.13  | ± 9.6 % |
| 10198 | CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)       | WLAN    | 8.27  | ± 9.6 % |
| 10219 | CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)        | WLAN    | 8.03  | ± 9.6 % |

|       |     |                                             |          |       |         |
|-------|-----|---------------------------------------------|----------|-------|---------|
| 10220 | CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)  | WLAN     | 8.13  | ± 9.6 % |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)  | WLAN     | 8.27  | ± 9.6 % |
| 10222 | CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)      | WLAN     | 8.06  | ± 9.6 % |
| 10223 | CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)    | WLAN     | 8.48  | ± 9.6 % |
| 10224 | CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)   | WLAN     | 8.08  | ± 9.6 % |
| 10225 | CAB | UMTS-FDD (HSPA+)                            | WCDMA    | 5.97  | ± 9.6 % |
| 10226 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)    | LTE-TDD  | 9.49  | ± 9.6 % |
| 10227 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)    | LTE-TDD  | 10.26 | ± 9.6 % |
| 10228 | CAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)        | LTE-TDD  | 9.22  | ± 9.6 % |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)      | LTE-TDD  | 9.48  | ± 9.6 % |
| 10230 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)      | LTE-TDD  | 10.25 | ± 9.6 % |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)        | LTE-TDD  | 9.19  | ± 9.6 % |
| 10232 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)      | LTE-TDD  | 9.48  | ± 9.6 % |
| 10233 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)      | LTE-TDD  | 10.25 | ± 9.6 % |
| 10234 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)        | LTE-TDD  | 9.21  | ± 9.6 % |
| 10235 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)     | LTE-TDD  | 9.48  | ± 9.6 % |
| 10236 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)     | LTE-TDD  | 10.25 | ± 9.6 % |
| 10237 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       | LTE-TDD  | 9.21  | ± 9.6 % |
| 10238 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)     | LTE-TDD  | 9.48  | ± 9.6 % |
| 10239 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)     | LTE-TDD  | 10.25 | ± 9.6 % |
| 10240 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)       | LTE-TDD  | 9.21  | ± 9.6 % |
| 10241 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)  | LTE-TDD  | 9.82  | ± 9.6 % |
| 10242 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)  | LTE-TDD  | 9.86  | ± 9.6 % |
| 10243 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)    | LTE-TDD  | 9.46  | ± 9.6 % |
| 10244 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)    | LTE-TDD  | 10.06 | ± 9.6 % |
| 10245 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)    | LTE-TDD  | 10.06 | ± 9.6 % |
| 10246 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)      | LTE-TDD  | 9.30  | ± 9.6 % |
| 10247 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)    | LTE-TDD  | 9.91  | ± 9.6 % |
| 10248 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)    | LTE-TDD  | 10.09 | ± 9.6 % |
| 10249 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)      | LTE-TDD  | 9.29  | ± 9.6 % |
| 10250 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)   | LTE-TDD  | 9.81  | ± 9.6 % |
| 10251 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   | LTE-TDD  | 10.17 | ± 9.6 % |
| 10252 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)     | LTE-TDD  | 9.24  | ± 9.6 % |
| 10253 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)   | LTE-TDD  | 9.90  | ± 9.6 % |
| 10254 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)   | LTE-TDD  | 10.14 | ± 9.6 % |
| 10255 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | LTE-TDD  | 9.20  | ± 9.6 % |
| 10256 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-TDD  | 9.96  | ± 9.6 % |
| 10257 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-TDD  | 10.08 | ± 9.6 % |
| 10258 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | LTE-TDD  | 9.34  | ± 9.6 % |
| 10259 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | LTE-TDD  | 9.98  | ± 9.6 % |
| 10260 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | LTE-TDD  | 9.97  | ± 9.6 % |
| 10261 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | LTE-TDD  | 9.24  | ± 9.6 % |
| 10262 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | LTE-TDD  | 9.83  | ± 9.6 % |
| 10263 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | LTE-TDD  | 10.16 | ± 9.6 % |
| 10264 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | LTE-TDD  | 9.23  | ± 9.6 % |
| 10265 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | LTE-TDD  | 9.92  | ± 9.6 % |
| 10266 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | LTE-TDD  | 10.07 | ± 9.6 % |
| 10267 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | LTE-TDD  | 9.30  | ± 9.6 % |
| 10268 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | LTE-TDD  | 10.06 | ± 9.6 % |
| 10269 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | LTE-TDD  | 10.13 | ± 9.6 % |
| 10270 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | LTE-TDD  | 9.58  | ± 9.6 % |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)   | WCDMA    | 4.87  | ± 9.6 % |
| 10275 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)    | WCDMA    | 3.96  | ± 9.6 % |
| 10277 | CAA | PHS (QPSK)                                  | PHS      | 11.81 | ± 9.6 % |
| 10278 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)          | PHS      | 11.81 | ± 9.6 % |
| 10279 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)         | PHS      | 12.18 | ± 9.6 % |
| 10290 | AAB | CDMA2000, RC1, SO55, Full Rate              | CDMA2000 | 3.91  | ± 9.6 % |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate              | CDMA2000 | 3.46  | ± 9.6 % |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate              | CDMA2000 | 3.39  | ± 9.6 % |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate               | CDMA2000 | 3.50  | ± 9.6 % |
| 10295 | AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.       | CDMA2000 | 12.49 | ± 9.6 % |
| 10297 | AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)     | LTE-FDD  | 5.81  | ± 9.6 % |
| 10298 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)      | LTE-FDD  | 5.72  | ± 9.6 % |
| 10299 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)    | LTE-FDD  | 6.39  | ± 9.6 % |

|       |     |                                                                                 |          |       |         |
|-------|-----|---------------------------------------------------------------------------------|----------|-------|---------|
| 10300 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                                        | LTE-FDD  | 6.60  | ± 9.6 % |
| 10301 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                              | WiMAX    | 12.03 | ± 9.6 % |
| 10302 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)              | WiMAX    | 12.57 | ± 9.6 % |
| 10303 | AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                             | WiMAX    | 12.52 | ± 9.6 % |
| 10304 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                             | WiMAX    | 11.86 | ± 9.6 % |
| 10305 | AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)                | WiMAX    | 15.24 | ± 9.6 % |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)                | WiMAX    | 14.67 | ± 9.6 % |
| 10307 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)                 | WiMAX    | 14.49 | ± 9.6 % |
| 10308 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                            | WiMAX    | 14.46 | ± 9.6 % |
| 10309 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)             | WiMAX    | 14.58 | ± 9.6 % |
| 10310 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)              | WiMAX    | 14.57 | ± 9.6 % |
| 10311 | AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                                        | LTE-FDD  | 6.06  | ± 9.6 % |
| 10313 | AAA | IDEN 1:3                                                                        | IDEN     | 10.51 | ± 9.6 % |
| 10314 | AAA | IDEN 1:6                                                                        | IDEN     | 13.48 | ± 9.6 % |
| 10315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)                       | WLAN     | 1.71  | ± 9.6 % |
| 10316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)                   | WLAN     | 8.36  | ± 9.6 % |
| 10317 | AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)                         | WLAN     | 8.36  | ± 9.6 % |
| 10352 | AAA | Pulse Waveform (200Hz, 10%)                                                     | Generic  | 10.00 | ± 9.6 % |
| 10353 | AAA | Pulse Waveform (200Hz, 20%)                                                     | Generic  | 6.99  | ± 9.6 % |
| 10354 | AAA | Pulse Waveform (200Hz, 40%)                                                     | Generic  | 3.98  | ± 9.6 % |
| 10355 | AAA | Pulse Waveform (200Hz, 60%)                                                     | Generic  | 2.22  | ± 9.6 % |
| 10356 | AAA | Pulse Waveform (200Hz, 80%)                                                     | Generic  | 0.97  | ± 9.6 % |
| 10387 | AAA | QPSK Waveform, 1 MHz                                                            | Generic  | 5.10  | ± 9.6 % |
| 10388 | AAA | QPSK Waveform, 10 MHz                                                           | Generic  | 5.22  | ± 9.6 % |
| 10396 | AAA | 64-QAM Waveform, 100 kHz                                                        | Generic  | 6.27  | ± 9.6 % |
| 10399 | AAA | 64-QAM Waveform, 40 MHz                                                         | Generic  | 6.27  | ± 9.6 % |
| 10400 | AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.37  | ± 9.6 % |
| 10401 | AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.60  | ± 9.6 % |
| 10402 | AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.53  | ± 9.6 % |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | CDMA2000 | 3.76  | ± 9.6 % |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | CDMA2000 | 3.77  | ± 9.6 % |
| 10406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | CDMA2000 | 5.22  | ± 9.6 % |
| 10410 | AAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | LTE-TDD  | 7.82  | ± 9.6 % |
| 10414 | AAA | WLAN CCDF, 64-QAM, 40MHz                                                        | Generic  | 8.54  | ± 9.6 % |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | WLAN     | 1.54  | ± 9.6 % |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | WLAN     | 8.23  | ± 9.6 % |
| 10417 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | WLAN     | 8.23  | ± 9.6 % |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | WLAN     | 8.14  | ± 9.6 % |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | WLAN     | 8.19  | ± 9.6 % |
| 10422 | AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | WLAN     | 8.32  | ± 9.6 % |
| 10423 | AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | WLAN     | 8.47  | ± 9.6 % |
| 10424 | AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | WLAN     | 8.40  | ± 9.6 % |
| 10425 | AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | WLAN     | 8.41  | ± 9.6 % |
| 10426 | AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | WLAN     | 8.45  | ± 9.6 % |
| 10427 | AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                                  | WLAN     | 8.41  | ± 9.6 % |
| 10430 | AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                                                | LTE-FDD  | 8.28  | ± 9.6 % |
| 10431 | AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.38  | ± 9.6 % |
| 10432 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34  | ± 9.6 % |
| 10433 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34  | ± 9.6 % |
| 10434 | AAA | W-CDMA (BS Test Model 1, 64 DPCH)                                               | WCDMA    | 8.60  | ± 9.6 % |
| 10435 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82  | ± 9.6 % |
| 10447 | AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                                  | LTE-FDD  | 7.56  | ± 9.6 % |
| 10448 | AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.53  | ± 9.6 % |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.51  | ± 9.6 % |
| 10450 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.48  | ± 9.6 % |

|       |     |                                                                        |          |      |         |
|-------|-----|------------------------------------------------------------------------|----------|------|---------|
| 10451 | AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                        | WCDMA    | 7.59 | ± 9.6 % |
| 10456 | AAB | IEEE 802.11ac WIFI (160MHz, 64-QAM, 99pc duty cycle)                   | WLAN     | 8.63 | ± 9.6 % |
| 10457 | AAA | UMTS-FDD (DC-HSDPA)                                                    | WCDMA    | 6.62 | ± 9.6 % |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                                 | CDMA2000 | 6.55 | ± 9.6 % |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                                 | CDMA2000 | 8.25 | ± 9.6 % |
| 10460 | AAA | UMTS-FDD (WCDMA, AMR)                                                  | WCDMA    | 2.39 | ± 9.6 % |
| 10461 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.82 | ± 9.6 % |
| 10462 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.30 | ± 9.6 % |
| 10463 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.56 | ± 9.6 % |
| 10464 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)       | LTE-TDD  | 7.82 | ± 9.6 % |
| 10465 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.32 | ± 9.6 % |
| 10466 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.57 | ± 9.6 % |
| 10467 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)       | LTE-TDD  | 7.82 | ± 9.6 % |
| 10468 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.32 | ± 9.6 % |
| 10469 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.56 | ± 9.6 % |
| 10470 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)      | LTE-TDD  | 7.82 | ± 9.6 % |
| 10471 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10472 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10473 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)      | LTE-TDD  | 7.82 | ± 9.6 % |
| 10474 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10475 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10477 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10478 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10479 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 7.74 | ± 9.6 % |
| 10480 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9) | LTE-TDD  | 8.18 | ± 9.6 % |
| 10481 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9) | LTE-TDD  | 8.45 | ± 9.6 % |
| 10482 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.71 | ± 9.6 % |
| 10483 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.39 | ± 9.6 % |
| 10484 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.47 | ± 9.6 % |
| 10485 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.59 | ± 9.6 % |
| 10486 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.38 | ± 9.6 % |
| 10487 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.60 | ± 9.6 % |
| 10488 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 7.70 | ± 9.6 % |
| 10489 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)  | LTE-TDD  | 8.31 | ± 9.6 % |
| 10490 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)  | LTE-TDD  | 8.54 | ± 9.6 % |
| 10491 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 7.74 | ± 9.6 % |

|       |     |                                                                      |         |      |         |
|-------|-----|----------------------------------------------------------------------|---------|------|---------|
| 10492 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.41 | ± 9.6 % |
| 10493 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.55 | ± 9.6 % |
| 10494 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74 | ± 9.6 % |
| 10495 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.37 | ± 9.6 % |
| 10496 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10497 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 7.67 | ± 9.6 % |
| 10498 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.40 | ± 9.6 % |
| 10499 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68 | ± 9.6 % |
| 10500 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.67 | ± 9.6 % |
| 10501 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.44 | ± 9.6 % |
| 10502 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.52 | ± 9.6 % |
| 10503 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.72 | ± 9.6 % |
| 10504 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31 | ± 9.6 % |
| 10505 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10506 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10507 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.36 | ± 9.6 % |
| 10508 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.55 | ± 9.6 % |
| 10509 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.99 | ± 9.6 % |
| 10510 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.49 | ± 9.6 % |
| 10511 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.51 | ± 9.6 % |
| 10512 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10513 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.42 | ± 9.6 % |
| 10514 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45 | ± 9.6 % |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)            | WLAN    | 1.58 | ± 9.6 % |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)          | WLAN    | 1.57 | ± 9.6 % |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)           | WLAN    | 1.58 | ± 9.6 % |
| 10518 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)            | WLAN    | 8.23 | ± 9.6 % |
| 10519 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)           | WLAN    | 8.39 | ± 9.6 % |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)           | WLAN    | 8.12 | ± 9.6 % |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)           | WLAN    | 7.97 | ± 9.6 % |
| 10522 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)           | WLAN    | 8.45 | ± 9.6 % |
| 10523 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)           | WLAN    | 8.08 | ± 9.6 % |
| 10524 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)           | WLAN    | 8.27 | ± 9.6 % |
| 10525 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10526 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)                    | WLAN    | 8.42 | ± 9.6 % |
| 10527 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)                    | WLAN    | 8.21 | ± 9.6 % |
| 10528 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10529 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10531 | AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)                    | WLAN    | 8.43 | ± 9.6 % |
| 10532 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)                    | WLAN    | 8.29 | ± 9.6 % |
| 10533 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)                    | WLAN    | 8.38 | ± 9.6 % |
| 10534 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)                    | WLAN    | 8.45 | ± 9.6 % |

|       |     |                                                                 |      |      |         |
|-------|-----|-----------------------------------------------------------------|------|------|---------|
| 10535 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)               | WLAN | 8.45 | ± 9.6 % |
| 10536 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)               | WLAN | 8.32 | ± 9.6 % |
| 10537 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)               | WLAN | 8.44 | ± 9.6 % |
| 10538 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)               | WLAN | 8.54 | ± 9.6 % |
| 10540 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)               | WLAN | 8.39 | ± 9.6 % |
| 10541 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)               | WLAN | 8.46 | ± 9.6 % |
| 10542 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)               | WLAN | 8.65 | ± 9.6 % |
| 10543 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)               | WLAN | 8.65 | ± 9.6 % |
| 10544 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)               | WLAN | 8.47 | ± 9.6 % |
| 10545 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)               | WLAN | 8.55 | ± 9.6 % |
| 10546 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)               | WLAN | 8.35 | ± 9.6 % |
| 10547 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)               | WLAN | 8.49 | ± 9.6 % |
| 10548 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)               | WLAN | 8.37 | ± 9.6 % |
| 10550 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)               | WLAN | 8.38 | ± 9.6 % |
| 10551 | AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)               | WLAN | 8.50 | ± 9.6 % |
| 10552 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)               | WLAN | 8.42 | ± 9.6 % |
| 10553 | AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)               | WLAN | 8.45 | ± 9.6 % |
| 10554 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)              | WLAN | 8.48 | ± 9.6 % |
| 10555 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)              | WLAN | 8.47 | ± 9.6 % |
| 10556 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)              | WLAN | 8.50 | ± 9.6 % |
| 10557 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)              | WLAN | 8.52 | ± 9.6 % |
| 10558 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | WLAN | 8.61 | ± 9.6 % |
| 10560 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | WLAN | 8.73 | ± 9.6 % |
| 10561 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | WLAN | 8.56 | ± 9.6 % |
| 10562 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | WLAN | 8.69 | ± 9.6 % |
| 10563 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | WLAN | 8.77 | ± 9.6 % |
| 10564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | WLAN | 8.25 | ± 9.6 % |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.45 | ± 9.6 % |
| 10566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.13 | ± 9.6 % |
| 10567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 8.00 | ± 9.6 % |
| 10568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.37 | ± 9.6 % |
| 10569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.10 | ± 9.6 % |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.30 | ± 9.6 % |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | WLAN | 1.99 | ± 9.6 % |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | WLAN | 1.99 | ± 9.6 % |
| 10573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | WLAN | 1.98 | ± 9.6 % |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | WLAN | 1.98 | ± 9.6 % |
| 10575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | WLAN | 8.59 | ± 9.6 % |
| 10576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | WLAN | 8.60 | ± 9.6 % |
| 10577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | WLAN | 8.70 | ± 9.6 % |
| 10578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | WLAN | 8.49 | ± 9.6 % |
| 10579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | WLAN | 8.36 | ± 9.6 % |
| 10580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | WLAN | 8.76 | ± 9.6 % |
| 10581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ± 9.6 % |
| 10582 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | WLAN | 8.67 | ± 9.6 % |
| 10583 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | WLAN | 8.59 | ± 9.6 % |
| 10584 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | WLAN | 8.60 | ± 9.6 % |
| 10585 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | WLAN | 8.70 | ± 9.6 % |
| 10586 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | WLAN | 8.49 | ± 9.6 % |
| 10587 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | WLAN | 8.36 | ± 9.6 % |

|       |     |                                                            |          |       |         |
|-------|-----|------------------------------------------------------------|----------|-------|---------|
| 10588 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | WLAN     | 8.76  | ± 9.6 % |
| 10589 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | WLAN     | 8.35  | ± 9.6 % |
| 10590 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | WLAN     | 8.67  | ± 9.6 % |
| 10591 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)      | WLAN     | 8.63  | ± 9.6 % |
| 10592 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)      | WLAN     | 8.79  | ± 9.6 % |
| 10593 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)      | WLAN     | 8.64  | ± 9.6 % |
| 10594 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)      | WLAN     | 8.74  | ± 9.6 % |
| 10595 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)      | WLAN     | 8.74  | ± 9.6 % |
| 10596 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)      | WLAN     | 8.71  | ± 9.6 % |
| 10597 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)      | WLAN     | 8.72  | ± 9.6 % |
| 10598 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)      | WLAN     | 8.50  | ± 9.6 % |
| 10599 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)      | WLAN     | 8.79  | ± 9.6 % |
| 10600 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)      | WLAN     | 8.88  | ± 9.6 % |
| 10601 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)      | WLAN     | 8.82  | ± 9.6 % |
| 10602 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)      | WLAN     | 8.94  | ± 9.6 % |
| 10603 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)      | WLAN     | 9.03  | ± 9.6 % |
| 10604 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)      | WLAN     | 8.76  | ± 9.6 % |
| 10605 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)      | WLAN     | 8.97  | ± 9.6 % |
| 10606 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)      | WLAN     | 8.82  | ± 9.6 % |
| 10607 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.64  | ± 9.6 % |
| 10608 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10609 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.57  | ± 9.6 % |
| 10610 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.78  | ± 9.6 % |
| 10611 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.70  | ± 9.6 % |
| 10612 | AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10613 | AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.94  | ± 9.6 % |
| 10614 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.59  | ± 9.6 % |
| 10615 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10616 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10617 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10618 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.58  | ± 9.6 % |
| 10619 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.86  | ± 9.6 % |
| 10620 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.87  | ± 9.6 % |
| 10621 | AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10622 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.68  | ± 9.6 % |
| 10623 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10624 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.96  | ± 9.6 % |
| 10625 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)          | WLAN     | 8.96  | ± 9.6 % |
| 10626 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.83  | ± 9.6 % |
| 10627 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.88  | ± 9.6 % |
| 10628 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.71  | ± 9.6 % |
| 10629 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.85  | ± 9.6 % |
| 10630 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.72  | ± 9.6 % |
| 10631 | AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10632 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.74  | ± 9.6 % |
| 10633 | AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.83  | ± 9.6 % |
| 10634 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.80  | ± 9.6 % |
| 10635 | AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10636 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)         | WLAN     | 8.83  | ± 9.6 % |
| 10637 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)         | WLAN     | 8.79  | ± 9.6 % |
| 10638 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)         | WLAN     | 8.86  | ± 9.6 % |
| 10639 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)         | WLAN     | 8.85  | ± 9.6 % |
| 10640 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)         | WLAN     | 8.98  | ± 9.6 % |
| 10641 | AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)         | WLAN     | 9.06  | ± 9.6 % |
| 10642 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)         | WLAN     | 9.06  | ± 9.6 % |
| 10643 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)         | WLAN     | 8.89  | ± 9.6 % |
| 10644 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)         | WLAN     | 9.05  | ± 9.6 % |
| 10645 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)         | WLAN     | 9.11  | ± 9.6 % |
| 10646 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)      | LTE-TDD  | 11.96 | ± 9.6 % |
| 10647 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)     | LTE-TDD  | 11.96 | ± 9.6 % |
| 10648 | AAA | CDMA2000 (1x Advanced)                                     | CDMA2000 | 3.45  | ± 9.6 % |
| 10652 | AAD | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)             | LTE-TDD  | 6.91  | ± 9.6 % |
| 10653 | AAD | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)            | LTE-TDD  | 7.42  | ± 9.6 % |
| 10654 | AAD | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)            | LTE-TDD  | 6.96  | ± 9.6 % |

|       |     |                                                 |           |       |         |
|-------|-----|-------------------------------------------------|-----------|-------|---------|
| 10655 | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD   | 7.21  | ± 9.6 % |
| 10658 | AAA | Pulse Waveform (200Hz, 10%)                     | Test      | 10.00 | ± 9.6 % |
| 10659 | AAA | Pulse Waveform (200Hz, 20%)                     | Test      | 6.99  | ± 9.6 % |
| 10660 | AAA | Pulse Waveform (200Hz, 40%)                     | Test      | 3.98  | ± 9.6 % |
| 10661 | AAA | Pulse Waveform (200Hz, 60%)                     | Test      | 2.22  | ± 9.6 % |
| 10662 | AAA | Pulse Waveform (200Hz, 80%)                     | Test      | 0.97  | ± 9.6 % |
| 10670 | AAA | Bluetooth Low Energy                            | Bluetooth | 2.19  | ± 9.6 % |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC-Test**

Certificate No: **EX3-7308 Aug18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7308**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

Calibration date: **August 23, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

|                |                               |                                          |               |
|----------------|-------------------------------|------------------------------------------|---------------|
| Calibrated by: | Name<br><b>Jeton Kastrati</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:   | Name<br><b>Katja Pokovic</b>  | Function<br><b>Technical Manager</b>     | Signature<br> |

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Issued: August 24, 2018



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7308

Manufactured: March 11, 2014  
Calibrated: August 23, 2018

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Basic Calibration Parameters

|                                       | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|---------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu V/(V/m)^2$ ) <sup>A</sup> | 0.49     | 0.60     | 0.44     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                 | 99.6     | 97.1     | 102.5    |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu V}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                    | 1.0 | 0.00    | 177.2    | $\pm 3.5 \%$              |
|     |                           | Y | 0.0     | 0.0                    | 1.0 |         | 165.4    |                           |
|     |                           | Z | 0.0     | 0.0                    | 1.0 |         | 159.6    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$V^{-1}$ | T1<br>$ms.V^{-2}$ | T2<br>$ms.V^{-1}$ | T3<br>ms | T4<br>$V^{-2}$ | T5<br>$V^{-1}$ | T6    |
|---|----------|----------|----------------------|-------------------|-------------------|----------|----------------|----------------|-------|
| X | 53.71    | 401.2    | 35.76                | 12.80             | 0.351             | 5.077    | 0.717          | 0.413          | 1.005 |
| Y | 56.67    | 439.8    | 38.08                | 13.44             | 0.524             | 5.100    | 0.000          | 0.597          | 1.012 |
| Z | 40.98    | 304.1    | 35.29                | 8.573             | 0.334             | 5.045    | 1.531          | 0.174          | 1.005 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 10.23   | 10.23   | 10.23   | 0.57               | 0.81                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.96    | 9.96    | 9.96    | 0.58               | 0.81                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.66    | 8.66    | 8.66    | 0.36               | 0.80                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.26    | 8.26    | 8.26    | 0.29               | 0.85                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.81    | 7.81    | 7.81    | 0.29               | 0.85                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.45    | 7.45    | 7.45    | 0.35               | 0.91                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.30    | 7.30    | 7.30    | 0.35               | 0.87                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.10    | 5.10    | 5.10    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.85    | 4.85    | 4.85    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 5.04    | 5.04    | 5.04    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>c</sup> | Relative Permittivity <sup>f</sup> | Conductivity (S/m) <sup>f</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>g</sup> | Depth <sup>g</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 10.38   | 10.38   | 10.38   | 0.36               | 0.99                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 10.19   | 10.19   | 10.19   | 0.50               | 0.82                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.13    | 8.13    | 8.13    | 0.27               | 1.04                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.79    | 7.79    | 7.79    | 0.38               | 0.85                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.73    | 7.73    | 7.73    | 0.37               | 0.80                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.57    | 7.57    | 7.57    | 0.34               | 0.88                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.40    | 7.40    | 7.40    | 0.29               | 0.95                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.48    | 4.48    | 4.48    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.00    | 4.00    | 4.00    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.18    | 4.18    | 4.18    | 0.50               | 1.90                    | ± 13.1 %  |

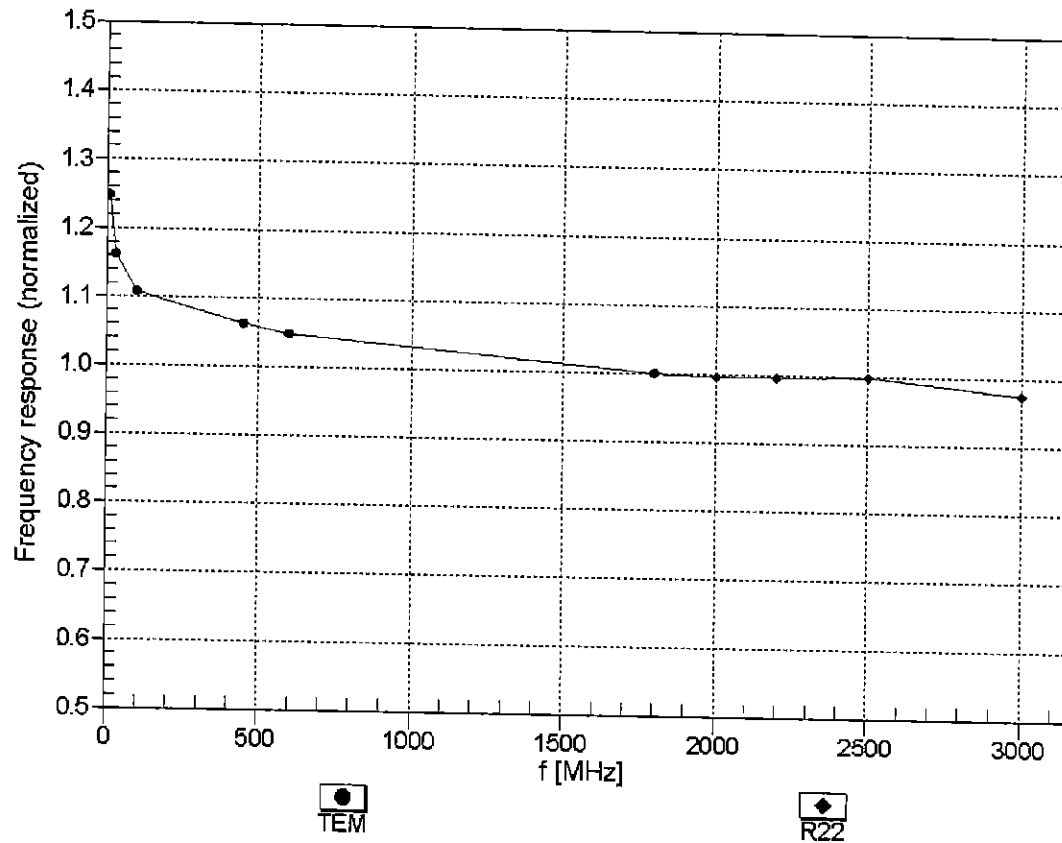
<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>f</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>g</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

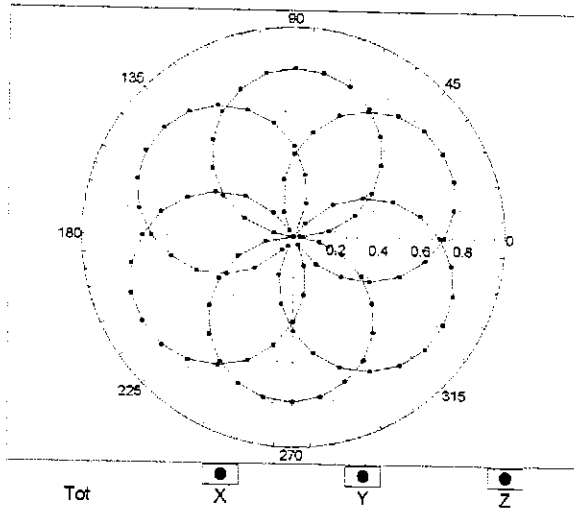
(TEM-Cell:ifi110 EXX, Waveguide: R22)



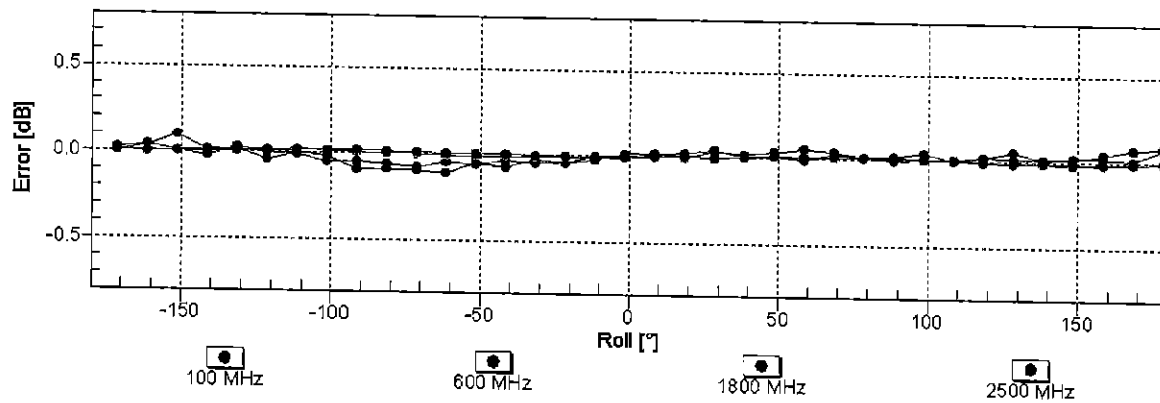
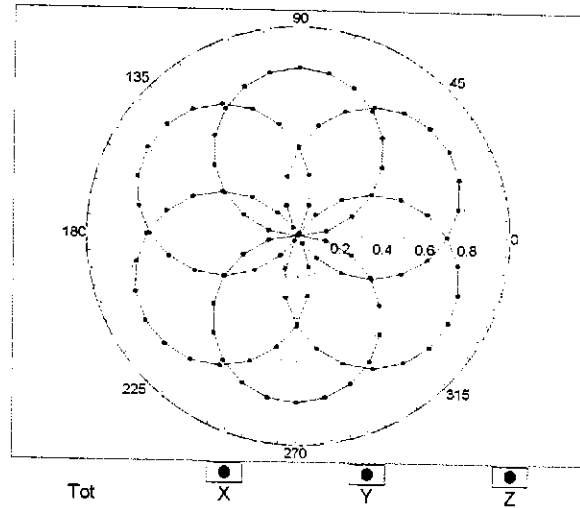
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz, TEM

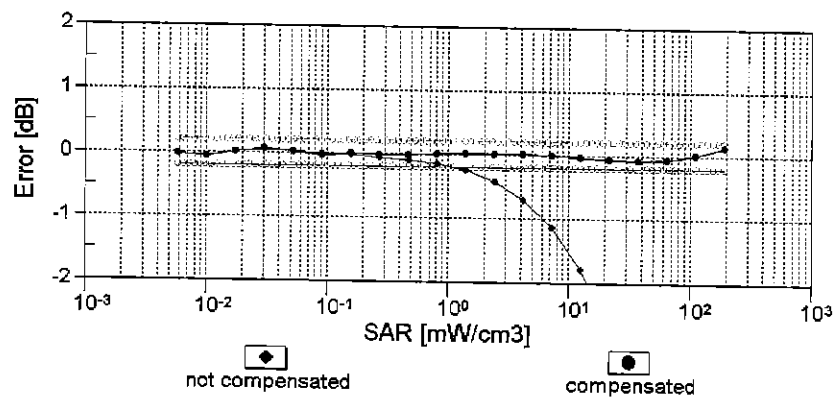
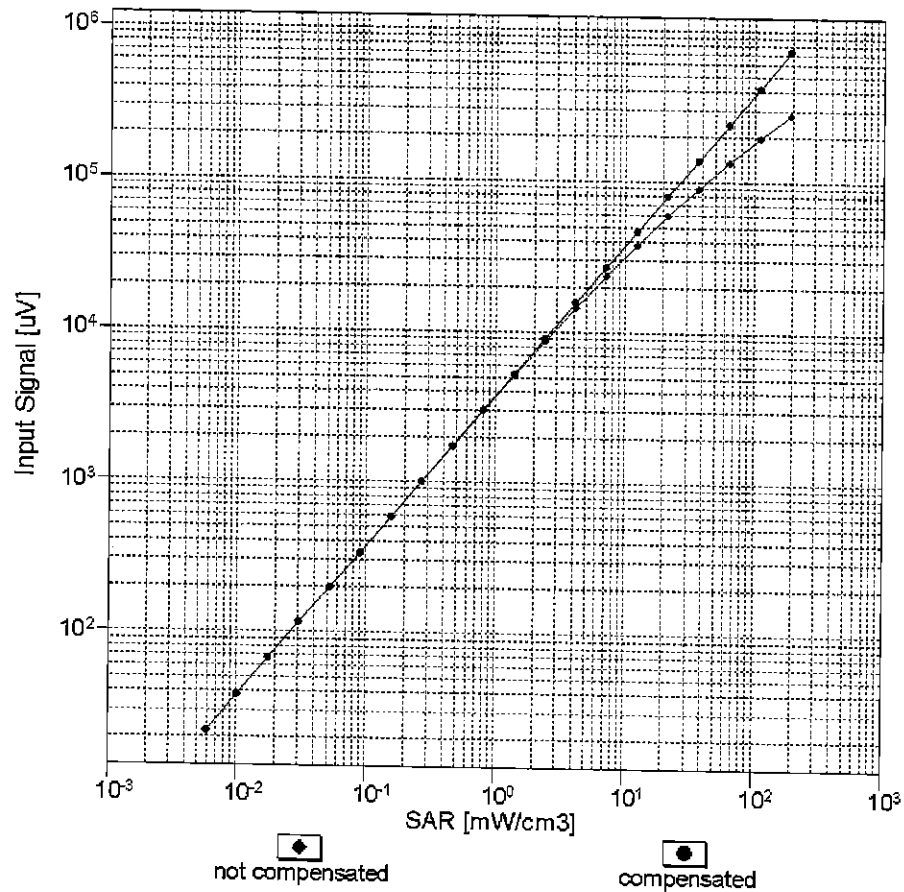


f=1800 MHz, R22



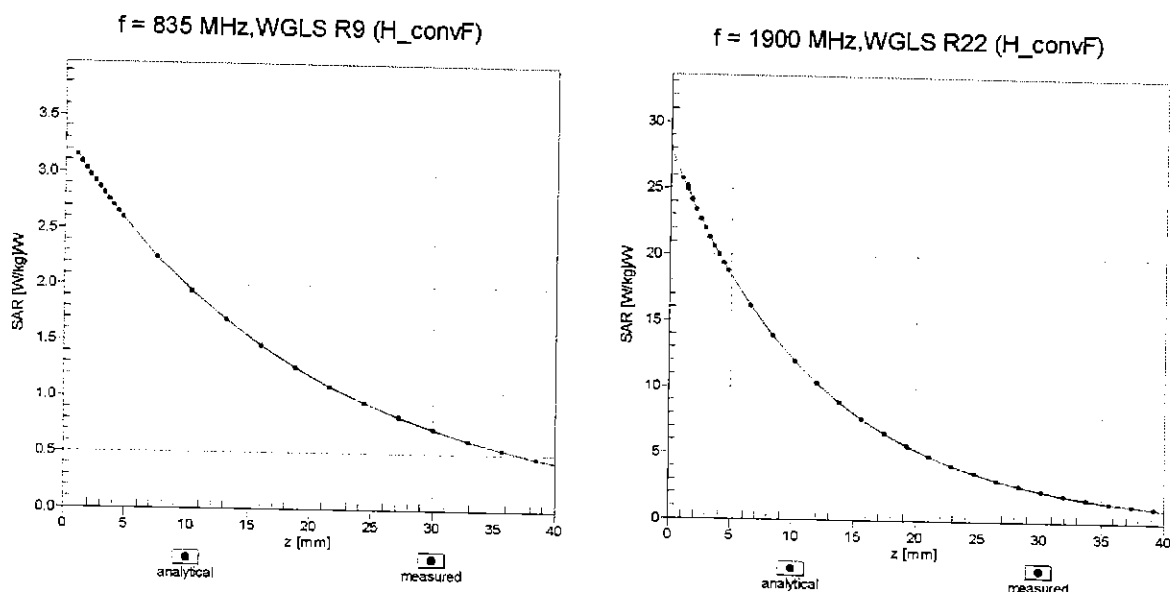
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  (k=2)

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



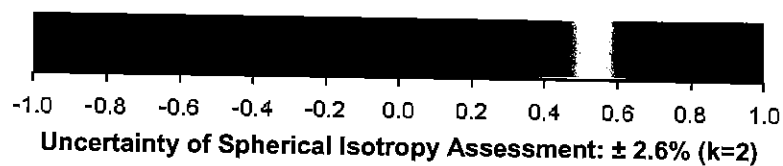
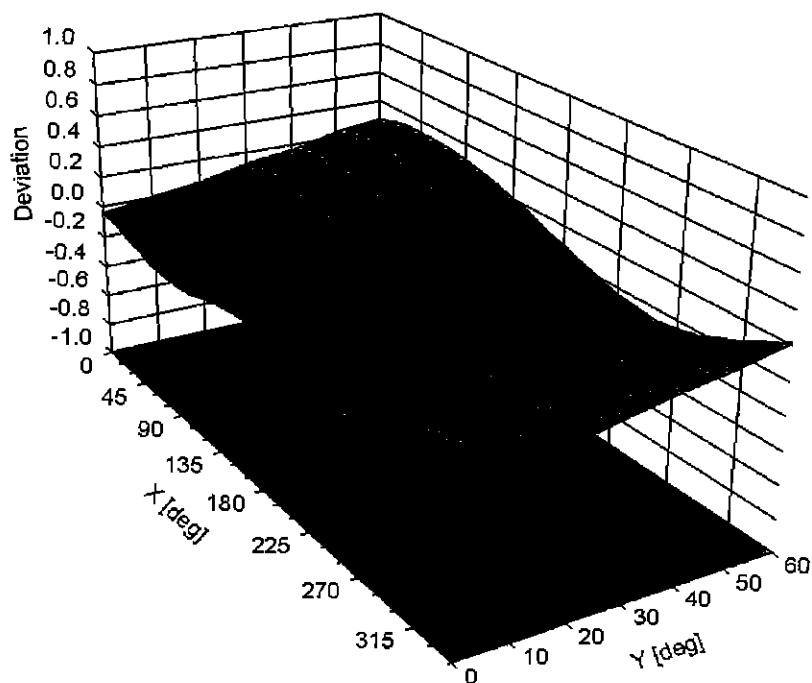
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 108.5      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Appendix: Modulation Calibration Parameters**

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB $\sqrt{\mu V}$ | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00                   | 1.00  | 0.00    | 177.2    | $\pm 3.5\%$                      |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 165.4    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 159.6    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 2.71    | 68.17                  | 11.26 | 10.00   | 20.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 2.39    | 66.64                  | 10.67 |         | 20.0     |                                  |
|               |                                               | Z | 1.90    | 64.26                  | 9.03  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.19    | 70.37                  | 17.06 | 0.00    | 150.0    | $\pm 9.6\%$                      |
|               |                                               | Y | 0.96    | 66.50                  | 14.51 |         | 150.0    |                                  |
|               |                                               | Z | 1.05    | 68.92                  | 16.00 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.18    | 64.67                  | 16.08 | 0.41    | 150.0    | $\pm 9.6\%$                      |
|               |                                               | Y | 1.11    | 63.43                  | 15.04 |         | 150.0    |                                  |
|               |                                               | Z | 1.13    | 64.11                  | 15.48 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.93    | 66.75                  | 17.26 | 1.46    | 150.0    | $\pm 9.6\%$                      |
|               |                                               | Y | 4.92    | 66.47                  | 17.15 |         | 150.0    |                                  |
|               |                                               | Z | 4.74    | 66.75                  | 17.08 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 114.38                 | 27.28 | 9.39    | 50.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 114.83                 | 27.64 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 109.69                 | 24.90 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 113.94                 | 27.13 | 9.57    | 50.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 114.49                 | 27.54 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 109.21                 | 24.74 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 115.48                 | 26.77 | 6.56    | 60.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 114.18                 | 26.29 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 109.85                 | 23.86 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 6.22    | 84.66                  | 34.29 | 12.57   | 50.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 4.94    | 76.24                  | 29.94 |         | 50.0     |                                  |
|               |                                               | Z | 5.36    | 79.88                  | 31.57 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 11.81   | 100.22                 | 36.35 | 9.56    | 60.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 11.10   | 97.75                  | 35.30 |         | 60.0     |                                  |
|               |                                               | Z | 7.89    | 90.81                  | 32.78 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 118.27                 | 27.22 | 4.80    | 80.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 114.44                 | 25.61 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 111.67                 | 23.86 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 122.72                 | 28.40 | 3.55    | 100.0    | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 114.80                 | 25.04 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 114.83                 | 24.49 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 6.56    | 85.50                  | 29.56 | 7.80    | 80.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 6.53    | 84.80                  | 29.16 |         | 80.0     |                                  |
|               |                                               | Z | 4.80    | 79.03                  | 26.78 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 114.96                 | 26.10 | 5.30    | 70.0     | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 112.69                 | 25.18 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 108.37                 | 22.73 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 126.84                 | 28.53 | 1.88    | 100.0    | $\pm 9.6\%$                      |
|               |                                               | Y | 100.00  | 105.21                 | 19.68 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 108.61                 | 20.59 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 146.53 | 35.02 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 95.65  | 15.05 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 112.23 | 21.08 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00 | 133.98 | 36.90 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 94.91  | 132.14 | 36.35 |       | 70.0  |         |
|           |                                                     | Z | 24.70  | 106.96 | 28.52 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 8.70   | 95.28  | 25.33 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.18   | 83.23  | 21.11 |       | 100.0 |         |
|           |                                                     | Z | 3.97   | 82.01  | 19.44 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 3.83   | 83.82  | 21.38 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.23   | 74.99  | 17.69 |       | 100.0 |         |
|           |                                                     | Z | 2.33   | 75.94  | 16.98 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00 | 134.50 | 37.14 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 133.48 | 36.76 |       | 70.0  |         |
|           |                                                     | Z | 56.60  | 119.91 | 31.85 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 7.69   | 93.53  | 24.78 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.89   | 82.31  | 20.76 |       | 100.0 |         |
|           |                                                     | Z | 3.40   | 80.12  | 18.77 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 3.93   | 84.59  | 21.78 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.28   | 75.57  | 18.03 |       | 100.0 |         |
|           |                                                     | Z | 2.38   | 76.51  | 17.34 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 2.78   | 78.14  | 18.71 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.67   | 70.12  | 14.94 |       | 150.0 |         |
|           |                                                     | Z | 2.00   | 74.01  | 15.76 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 110.92 | 24.96 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 110.22 | 24.75 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 106.01 | 22.46 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 112.58 | 4.43  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.07   | 121.95 | 9.84  |       | 150.0 |         |
|           |                                                     | Z | 0.01   | 118.94 | 9.83  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00 | 111.48 | 27.44 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 112.85 | 28.28 |       | 25.0  |         |
|           |                                                     | Z | 18.65  | 86.54  | 19.90 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 112.40 | 26.75 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 113.42 | 27.38 |       | 40.0  |         |
|           |                                                     | Z | 46.23  | 99.19  | 22.45 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00 | 126.85 | 34.82 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 126.84 | 34.96 |       | 50.0  |         |
|           |                                                     | Z | 73.14  | 116.99 | 30.84 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 4.87   | 79.06  | 26.07 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.89   | 78.72  | 25.82 |       | 100.0 |         |
|           |                                                     | Z | 3.78   | 74.24  | 23.87 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.24   | 66.08  | 16.89 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.15   | 64.70  | 15.80 |       | 110.0 |         |
|           |                                                     | Z | 1.15   | 65.12  | 16.08 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 145.11 | 38.67 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 138.14 | 35.54 |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 143.13 | 37.45 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 5.01 | 92.44 | 27.34 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 3.88 | 86.79 | 24.94 |      | 110.0 |         |
|           |                                                | Z | 2.64 | 81.37 | 23.02 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.74 | 66.80 | 16.70 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.44 | 16.52 |      | 100.0 |         |
|           |                                                | Z | 4.55 | 66.78 | 16.53 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.76 | 66.90 | 16.81 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.74 | 66.55 | 16.64 |      | 100.0 |         |
|           |                                                | Z | 4.57 | 66.86 | 16.62 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.07 | 67.18 | 17.05 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.06 | 66.88 | 16.91 |      | 100.0 |         |
|           |                                                | Z | 4.83 | 67.08 | 16.83 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.93 | 67.08 | 17.15 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.92 | 66.80 | 17.03 |      | 100.0 |         |
|           |                                                | Z | 4.69 | 66.95 | 16.91 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.95 | 67.11 | 17.33 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.94 | 66.84 | 17.22 |      | 100.0 |         |
|           |                                                | Z | 4.70 | 66.94 | 17.07 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.22 | 67.17 | 17.72 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.23 | 66.94 | 17.65 |      | 100.0 |         |
|           |                                                | Z | 4.99 | 67.15 | 17.52 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.28 | 67.31 | 17.99 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.30 | 67.12 | 17.95 |      | 100.0 |         |
|           |                                                | Z | 5.01 | 67.08 | 17.69 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.36 | 67.24 | 18.15 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.38 | 67.05 | 18.11 |      | 100.0 |         |
|           |                                                | Z | 5.09 | 67.11 | 17.88 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.01 | 66.83 | 17.56 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.01 | 66.58 | 17.48 |      | 100.0 |         |
|           |                                                | Z | 4.83 | 66.80 | 17.36 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.00 | 67.20 | 17.81 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.01 | 66.96 | 17.73 |      | 100.0 |         |
|           |                                                | Z | 4.79 | 67.07 | 17.56 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.05 | 67.32 | 18.13 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.06 | 67.11 | 18.07 |      | 100.0 |         |
|           |                                                | Z | 4.84 | 67.21 | 17.87 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.01 | 67.17 | 18.27 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.03 | 66.98 | 18.23 |      | 100.0 |         |
|           |                                                | Z | 4.82 | 67.10 | 18.01 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.05 | 67.33 | 18.61 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.08 | 67.18 | 18.60 |      | 90.0  |         |
|           |                                                | Z | 4.84 | 67.13 | 18.28 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.04 | 67.01 | 18.67 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.06 | 66.85 | 18.66 |      | 90.0  |         |
|           |                                                | Z | 4.86 | 66.95 | 18.41 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.05 | 67.06 | 18.76 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.07 | 66.89 | 18.74 |      | 90.0  |         |
|           |                                                | Z | 4.89 | 67.03 | 18.52 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 1.10   | 69.87  | 14.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.78   | 64.74  | 11.83 |      | 150.0 |         |
|           |                                                     | Z | 0.78   | 66.34  | 11.97 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.69   | 60.00  | 4.39  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.71   | 60.00  | 4.39  |      | 80.0  |         |
|           |                                                     | Z | 7.97   | 68.50  | 6.36  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 115.53 | 26.81 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 114.29 | 26.36 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 109.90 | 23.90 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.95   | 68.97  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.75   | 66.81  | 15.24 |      | 150.0 |         |
|           |                                                     | Z | 1.87   | 68.90  | 16.13 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.91   | 68.95  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.71   | 66.77  | 15.20 |      | 150.0 |         |
|           |                                                     | Z | 1.83   | 68.86  | 16.11 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 11.93  | 100.45 | 36.42 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 11.20  | 97.95  | 35.37 |      | 60.0  |         |
|           |                                                     | Z | 7.96   | 90.99  | 32.84 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.40   | 71.76  | 17.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.10   | 69.82  | 16.33 |      | 150.0 |         |
|           |                                                     | Z | 3.12   | 70.91  | 17.03 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.36   | 68.15  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.24   | 67.23  | 15.77 |      | 150.0 |         |
|           |                                                     | Z | 3.17   | 67.74  | 16.07 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.45   | 68.05  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.34   | 67.19  | 15.87 |      | 150.0 |         |
|           |                                                     | Z | 3.28   | 67.71  | 16.16 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 6.86   | 77.75  | 21.56 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.56   | 76.62  | 21.10 |      | 65.0  |         |
|           |                                                     | Z | 5.69   | 75.27  | 20.45 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 6.41   | 74.58  | 21.07 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.33   | 74.04  | 20.86 |      | 65.0  |         |
|           |                                                     | Z | 5.58   | 72.74  | 20.11 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 6.09   | 73.43  | 20.88 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.03   | 72.95  | 20.69 |      | 65.0  |         |
|           |                                                     | Z | 5.24   | 71.29  | 19.75 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.97   | 70.94  | 17.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.72   | 69.08  | 16.17 |      | 150.0 |         |
|           |                                                     | Z | 2.70   | 70.20  | 16.88 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 3.02   | 68.05  | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.90   | 67.02  | 15.66 |      | 150.0 |         |
|           |                                                     | Z | 2.83   | 67.71  | 15.99 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.42   | 70.09  | 17.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.21   | 68.14  | 15.78 |      | 150.0 |         |
|           |                                                     | Z | 2.18   | 69.46  | 16.49 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.76   | 69.06  | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.59   | 67.59  | 15.88 |      | 150.0 |         |
|           |                                                     | Z | 2.59   | 68.99  | 16.39 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.14 | 67.97 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.03 | 67.00 | 15.72 |      | 150.0 |         |
|           |                                                | Z | 2.95 | 67.72 | 16.05 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.92 | 69.11 | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.75 | 67.72 | 16.02 |      | 150.0 |         |
|           |                                                | Z | 2.74 | 69.14 | 16.51 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.18 | 67.31 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.14 | 66.93 | 16.36 |      | 150.0 |         |
|           |                                                | Z | 5.02 | 67.26 | 16.48 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.52 | 67.57 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.51 | 67.29 | 16.56 |      | 150.0 |         |
|           |                                                | Z | 5.27 | 67.30 | 16.50 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.29 | 67.56 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.27 | 67.21 | 16.43 |      | 150.0 |         |
|           |                                                | Z | 5.10 | 67.44 | 16.50 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.16 | 67.25 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.13 | 66.89 | 16.36 |      | 150.0 |         |
|           |                                                | Z | 4.99 | 67.15 | 16.44 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.59 | 67.74 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.60 | 67.49 | 16.67 |      | 150.0 |         |
|           |                                                | Z | 5.34 | 67.49 | 16.60 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.26 | 67.49 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.24 | 67.15 | 16.41 |      | 150.0 |         |
|           |                                                | Z | 5.09 | 67.40 | 16.49 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.50 | 68.05 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.39 | 67.19 | 15.79 |      | 150.0 |         |
|           |                                                | Z | 3.30 | 67.72 | 16.07 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.62 | 68.10 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.51 | 67.27 | 15.96 |      | 150.0 |         |
|           |                                                | Z | 3.43 | 67.85 | 16.25 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.22 | 70.35 | 16.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.98 | 67.98 | 15.45 |      | 150.0 |         |
|           |                                                | Z | 1.97 | 69.67 | 16.10 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.70 | 70.21 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.44 | 68.12 | 15.58 |      | 150.0 |         |
|           |                                                | Z | 2.48 | 69.97 | 16.00 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.42 | 67.64 | 15.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.26 | 66.15 | 14.15 |      | 150.0 |         |
|           |                                                | Z | 2.13 | 66.86 | 13.96 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.54 | 68.23 | 14.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.25 | 64.93 | 12.03 |      | 150.0 |         |
|           |                                                | Z | 1.00 | 63.72 | 10.21 |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 2.38 | 68.67 | 13.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.63 | 70.03 | 14.41 |      | 150.0 |         |
|           |                                                | Z | 1.37 | 62.94 | 8.80  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 3.01 | 71.74 | 14.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.44 | 73.73 | 16.16 |      | 150.0 |         |
|           |                                                | Z | 1.50 | 63.86 | 9.38  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 3.03 | 68.12 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.91 | 67.08 | 15.71 |      | 150.0 |         |
|           |                                            | Z | 2.84 | 67.78 | 16.04 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.15 | 68.03 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.03 | 67.05 | 15.76 |      | 150.0 |         |
|           |                                            | Z | 2.96 | 67.78 | 16.09 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 7.33 | 80.62 | 22.85 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.93 | 79.21 | 22.28 |      | 65.0  |         |
|           |                                            | Z | 6.07 | 78.22 | 21.74 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 5.98 | 74.73 | 20.92 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.89 | 74.12 | 20.68 |      | 65.0  |         |
|           |                                            | Z | 5.12 | 72.74 | 19.78 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 6.33 | 75.57 | 21.65 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.23 | 74.94 | 21.41 |      | 65.0  |         |
|           |                                            | Z | 5.49 | 73.78 | 20.61 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.49 | 70.63 | 17.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.26 | 68.57 | 16.06 |      | 150.0 |         |
|           |                                            | Z | 2.24 | 69.92 | 16.77 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.77 | 69.07 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.59 | 67.59 | 15.89 |      | 150.0 |         |
|           |                                            | Z | 2.59 | 69.02 | 16.41 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.11 | 70.85 | 16.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.83 | 68.04 | 15.26 |      | 150.0 |         |
|           |                                            | Z | 1.82 | 69.80 | 15.80 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.31 | 68.61 | 15.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.08 | 66.62 | 14.16 |      | 150.0 |         |
|           |                                            | Z | 1.98 | 67.47 | 13.92 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.92 | 69.17 | 16.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.75 | 67.77 | 16.06 |      | 150.0 |         |
|           |                                            | Z | 2.75 | 69.22 | 16.57 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.44 | 69.17 | 15.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.19 | 67.06 | 14.45 |      | 150.0 |         |
|           |                                            | Z | 2.09 | 67.96 | 14.21 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.90 | 69.57 | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 68.24 | 16.05 |      | 150.0 |         |
|           |                                            | Z | 2.70 | 69.25 | 16.60 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.05 | 67.98 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.93 | 66.95 | 15.69 |      | 150.0 |         |
|           |                                            | Z | 2.86 | 67.77 | 16.01 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.15 | 68.06 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.03 | 67.06 | 15.79 |      | 150.0 |         |
|           |                                            | Z | 2.97 | 67.96 | 16.14 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.67 | 69.77 | 19.22 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.71 | 69.61 | 19.37 |      | 150.0 |         |
|           |                                            | Z | 3.45 | 70.11 | 19.35 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.61 | 72.92 | 19.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.57 | 72.37 | 19.78 |      | 150.0 |         |
|           |                                            | Z | 4.42 | 74.02 | 20.14 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.13  | 75.25  | 21.12 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.05  | 74.54  | 21.07 |      | 150.0 |         |
|           |                                            | Z | 5.13  | 77.22  | 21.87 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.12  | 70.03  | 19.37 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.15  | 69.73  | 19.46 |      | 150.0 |         |
|           |                                            | Z | 2.86  | 69.57  | 19.15 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 4.58  | 77.10  | 22.08 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.39  | 75.79  | 21.81 |      | 150.0 |         |
|           |                                            | Z | 4.44  | 78.23  | 22.53 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 3.64  | 72.24  | 19.05 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.59  | 71.47  | 18.98 |      | 150.0 |         |
|           |                                            | Z | 3.36  | 72.39  | 19.02 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 12.64 | 100.34 | 31.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 12.97 | 100.68 | 32.37 |      | 65.0  |         |
|           |                                            | Z | 5.77  | 87.24  | 27.51 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 36.96 | 114.71 | 33.67 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 30.92 | 112.16 | 33.64 |      | 65.0  |         |
|           |                                            | Z | 22.36 | 108.00 | 31.61 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 22.92 | 104.35 | 30.17 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 21.96 | 104.04 | 30.70 |      | 65.0  |         |
|           |                                            | Z | 11.65 | 95.24  | 27.25 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.08  | 69.68  | 19.10 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11  | 69.39  | 19.20 |      | 150.0 |         |
|           |                                            | Z | 2.82  | 69.22  | 18.88 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 4.59  | 77.13  | 22.09 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.40  | 75.82  | 21.82 |      | 150.0 |         |
|           |                                            | Z | 4.45  | 78.26  | 22.55 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.11  | 69.85  | 19.21 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.14  | 69.56  | 19.30 |      | 150.0 |         |
|           |                                            | Z | 2.84  | 69.38  | 18.97 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 4.53  | 76.83  | 21.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.34  | 75.53  | 21.68 |      | 150.0 |         |
|           |                                            | Z | 4.39  | 77.99  | 22.42 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 4.06  | 74.50  | 20.40 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.95  | 73.49  | 20.26 |      | 150.0 |         |
|           |                                            | Z | 3.83  | 75.09  | 20.61 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 3.62  | 72.15  | 18.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 71.38  | 18.93 |      | 150.0 |         |
|           |                                            | Z | 3.35  | 72.32  | 18.97 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.10  | 69.83  | 19.20 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.13  | 69.54  | 19.29 |      | 150.0 |         |
|           |                                            | Z | 2.84  | 69.36  | 18.97 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 4.52  | 76.80  | 21.93 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.33  | 75.51  | 21.66 |      | 150.0 |         |
|           |                                            | Z | 4.38  | 77.96  | 22.40 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.62  | 72.12  | 18.97 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.57  | 71.35  | 18.91 |      | 150.0 |         |
|           |                                            | Z | 3.34  | 72.29  | 18.96 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.11 | 69.88 | 19.22 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.14 | 69.58 | 19.32 |      | 150.0 |         |
|           |                                               | Z | 2.85 | 69.41 | 18.99 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 4.54 | 76.88 | 21.97 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.35 | 75.59 | 21.70 |      | 150.0 |         |
|           |                                               | Z | 4.41 | 78.06 | 22.45 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.64 | 72.20 | 19.01 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.59 | 71.42 | 18.95 |      | 150.0 |         |
|           |                                               | Z | 3.36 | 72.37 | 19.00 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.12 | 69.93 | 19.28 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.15 | 69.63 | 19.37 |      | 150.0 |         |
|           |                                               | Z | 2.86 | 69.48 | 19.07 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 4.72 | 77.70 | 22.40 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.51 | 76.33 | 22.11 |      | 150.0 |         |
|           |                                               | Z | 4.61 | 78.98 | 22.92 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.73 | 72.70 | 19.32 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.67 | 71.88 | 19.24 |      | 150.0 |         |
|           |                                               | Z | 3.46 | 72.92 | 19.33 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.59 | 66.76 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.55 | 66.31 | 16.09 |      | 150.0 |         |
|           |                                               | Z | 4.42 | 66.80 | 16.19 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.77 | 67.10 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.74 | 66.66 | 16.21 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 67.08 | 16.32 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.82 | 67.12 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.78 | 66.69 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.62 | 67.10 | 16.34 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.60 | 66.84 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.56 | 66.40 | 16.12 |      | 150.0 |         |
|           |                                               | Z | 4.41 | 66.83 | 16.20 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.79 | 67.12 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.75 | 66.69 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.59 | 67.09 | 16.33 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.82 | 67.14 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.78 | 66.71 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.61 | 67.11 | 16.35 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.55 | 66.86 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.51 | 66.41 | 16.08 |      | 150.0 |         |
|           |                                               | Z | 4.37 | 66.86 | 16.17 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.79 | 67.10 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.75 | 66.67 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 67.05 | 16.32 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.83 | 67.06 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.79 | 66.64 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.62 | 67.04 | 16.33 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.14 | 67.26 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.11 | 66.90 | 16.36 |      | 150.0 |         |
|           |                                               | Z | 4.97 | 67.15 | 16.43 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.45  | 67.43  | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.45  | 67.18  | 16.52 |      | 150.0 |         |
|           |                                           | Z | 5.25  | 67.35  | 16.55 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.19  | 67.37  | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.15  | 66.99  | 16.33 |      | 150.0 |         |
|           |                                           | Z | 5.01  | 67.26  | 16.42 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.89  | 66.55  | 15.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.80  | 65.71  | 15.24 |      | 150.0 |         |
|           |                                           | Z | 2.72  | 66.49  | 15.32 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 42.12 | 117.30 | 34.47 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 34.39 | 114.35 | 34.35 |      | 65.0  |         |
|           |                                           | Z | 25.78 | 110.75 | 32.49 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 33.34 | 110.83 | 32.01 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 29.14 | 109.23 | 32.25 |      | 65.0  |         |
|           |                                           | Z | 23.91 | 107.08 | 30.63 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 15.66 | 105.06 | 33.38 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.84 | 105.37 | 33.95 |      | 65.0  |         |
|           |                                           | Z | 7.75  | 93.33  | 29.68 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 37.28 | 114.84 | 33.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 31.13 | 112.26 | 33.67 |      | 65.0  |         |
|           |                                           | Z | 22.62 | 108.17 | 31.67 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 29.88 | 108.76 | 31.36 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.58 | 107.43 | 31.66 |      | 65.0  |         |
|           |                                           | Z | 20.85 | 104.61 | 29.86 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 14.65 | 103.59 | 32.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.88 | 103.95 | 33.43 |      | 65.0  |         |
|           |                                           | Z | 7.34  | 92.15  | 29.19 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 37.25 | 114.84 | 33.71 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 31.10 | 112.26 | 33.67 |      | 65.0  |         |
|           |                                           | Z | 22.58 | 108.16 | 31.67 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 29.82 | 108.74 | 31.35 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.53 | 107.41 | 31.66 |      | 65.0  |         |
|           |                                           | Z | 20.76 | 104.56 | 29.85 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 13.83 | 102.21 | 32.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.10 | 102.64 | 32.91 |      | 65.0  |         |
|           |                                           | Z | 7.03  | 91.14  | 28.71 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 37.39 | 114.93 | 33.74 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 31.21 | 112.34 | 33.70 |      | 65.0  |         |
|           |                                           | Z | 22.65 | 108.24 | 31.69 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 30.43 | 109.05 | 31.43 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 27.03 | 107.71 | 31.73 |      | 65.0  |         |
|           |                                           | Z | 21.22 | 104.87 | 29.93 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 14.73 | 103.74 | 32.90 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.96 | 104.11 | 33.48 |      | 65.0  |         |
|           |                                           | Z | 7.35  | 92.21  | 29.22 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 37.20 | 114.83 | 33.71 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 31.07 | 112.26 | 33.67 |      | 65.0  |         |
|           |                                           | Z | 22.51 | 108.13 | 31.66 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 29.73 | 108.72 | 31.35 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 26.48 | 107.40 | 31.66 |      | 65.0 |         |
|           |                                            | Z | 20.66 | 104.50 | 29.83 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 14.67 | 103.66 | 32.88 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 14.89 | 104.03 | 33.46 |      | 65.0 |         |
|           |                                            | Z | 7.33  | 92.17  | 29.20 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 8.22  | 81.62  | 25.84 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.21  | 81.11  | 25.93 |      | 65.0 |         |
|           |                                            | Z | 7.55  | 81.89  | 25.74 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 7.60  | 79.92  | 25.06 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.70  | 79.68  | 25.24 |      | 65.0 |         |
|           |                                            | Z | 6.63  | 79.21  | 24.57 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 6.06  | 76.28  | 24.43 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.20  | 76.29  | 24.69 |      | 65.0 |         |
|           |                                            | Z | 5.27  | 75.02  | 23.70 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 6.94  | 79.13  | 20.40 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.61  | 80.93  | 21.65 |      | 65.0 |         |
|           |                                            | Z | 4.63  | 73.01  | 16.54 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 6.74  | 78.35  | 20.03 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.38  | 80.11  | 21.28 |      | 65.0 |         |
|           |                                            | Z | 4.46  | 72.20  | 16.14 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 8.26  | 86.16  | 23.38 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.07  | 83.23  | 22.34 |      | 65.0 |         |
|           |                                            | Z | 4.76  | 77.46  | 19.00 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 5.60  | 76.50  | 20.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.37  | 75.45  | 19.96 |      | 65.0 |         |
|           |                                            | Z | 4.29  | 72.64  | 17.71 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 5.54  | 75.70  | 19.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.35  | 74.79  | 19.65 |      | 65.0 |         |
|           |                                            | Z | 4.24  | 71.91  | 17.36 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 9.19  | 88.24  | 24.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.96  | 85.32  | 23.90 |      | 65.0 |         |
|           |                                            | Z | 6.28  | 82.28  | 22.02 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 6.20  | 77.76  | 22.32 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.01  | 76.85  | 21.97 |      | 65.0 |         |
|           |                                            | Z | 5.20  | 75.42  | 20.86 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 5.85  | 75.32  | 20.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.73  | 74.58  | 20.63 |      | 65.0 |         |
|           |                                            | Z | 4.92  | 73.12  | 19.45 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 8.09  | 84.95  | 24.58 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.42  | 82.94  | 23.81 |      | 65.0 |         |
|           |                                            | Z | 6.31  | 81.52  | 22.96 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 5.80  | 74.00  | 20.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.72  | 73.40  | 20.39 |      | 65.0 |         |
|           |                                            | Z | 5.04  | 72.28  | 19.52 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 6.14  | 74.84  | 21.30 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.05  | 74.22  | 21.07 |      | 65.0 |         |
|           |                                            | Z | 5.36  | 73.21  | 20.25 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.81 | 79.50 | 22.67 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.50 | 78.25 | 22.16 |      | 65.0 |         |
|           |                                             | Z | 5.72 | 77.37 | 21.59 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 5.54 | 75.38 | 17.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.45 | 78.02 | 19.55 |      | 65.0 |         |
|           |                                             | Z | 3.15 | 67.52 | 12.83 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 5.31 | 74.31 | 17.34 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.14 | 76.80 | 18.96 |      | 65.0 |         |
|           |                                             | Z | 3.05 | 66.79 | 12.37 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 6.24 | 81.13 | 20.76 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.52 | 78.91 | 19.97 |      | 65.0 |         |
|           |                                             | Z | 3.09 | 70.62 | 15.05 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 5.84 | 76.93 | 21.04 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.63 | 75.94 | 20.66 |      | 65.0 |         |
|           |                                             | Z | 4.68 | 73.82 | 18.92 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 5.84 | 76.54 | 20.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.65 | 75.62 | 20.54 |      | 65.0 |         |
|           |                                             | Z | 4.68 | 73.47 | 18.76 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 7.94 | 85.32 | 24.30 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.17 | 83.07 | 23.45 |      | 65.0 |         |
|           |                                             | Z | 5.90 | 80.89 | 22.01 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 6.19 | 77.72 | 22.28 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.00 | 76.81 | 21.93 |      | 65.0 |         |
|           |                                             | Z | 5.19 | 75.36 | 20.81 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 5.84 | 75.30 | 20.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.72 | 74.57 | 20.63 |      | 65.0 |         |
|           |                                             | Z | 4.91 | 73.09 | 19.44 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 8.00 | 84.72 | 24.48 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.34 | 82.73 | 23.71 |      | 65.0 |         |
|           |                                             | Z | 6.24 | 81.28 | 22.84 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 5.98 | 74.73 | 20.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.89 | 74.12 | 20.69 |      | 65.0 |         |
|           |                                             | Z | 5.12 | 72.74 | 19.78 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 6.33 | 75.56 | 21.64 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.22 | 74.93 | 21.40 |      | 65.0 |         |
|           |                                             | Z | 5.49 | 73.76 | 20.60 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 7.32 | 80.56 | 22.82 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.92 | 79.16 | 22.26 |      | 65.0 |         |
|           |                                             | Z | 6.05 | 78.17 | 21.72 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 6.52 | 74.24 | 21.04 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.45 | 73.73 | 20.85 |      | 65.0 |         |
|           |                                             | Z | 5.74 | 72.63 | 20.16 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 6.46 | 73.71 | 20.87 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.39 | 73.22 | 20.69 |      | 65.0 |         |
|           |                                             | Z | 5.73 | 72.22 | 20.02 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 6.79 | 76.82 | 21.42 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.57 | 75.90 | 21.04 |      | 65.0 |         |
|           |                                             | Z | 5.88 | 75.11 | 20.59 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.66  | 66.98 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.54  | 65.90 | 15.04 |      | 150.0 |         |
|           |                                                                    | Z | 2.55  | 67.07 | 15.35 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.78  | 69.77 | 16.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.55  | 67.13 | 15.03 |      | 150.0 |         |
|           |                                                                    | Z | 1.62  | 69.04 | 16.02 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 2.12  | 61.97 | 7.55  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.25  | 62.30 | 7.96  |      | 50.0  |         |
|           |                                                                    | Z | 1.72  | 60.31 | 5.78  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 10.93 | 86.19 | 21.29 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.64  | 84.41 | 20.95 |      | 50.0  |         |
|           |                                                                    | Z | 3.57  | 69.00 | 13.15 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 11.22 | 86.49 | 21.46 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.91  | 84.71 | 21.11 |      | 50.0  |         |
|           |                                                                    | Z | 3.69  | 69.35 | 13.38 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.95  | 72.86 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.38  | 67.46 | 13.46 |      | 150.0 |         |
|           |                                                                    | Z | 1.34  | 68.81 | 13.27 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 1.06  | 69.47 | 14.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.76  | 64.53 | 11.71 |      | 150.0 |         |
|           |                                                                    | Z | 0.76  | 66.05 | 11.81 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.83  | 78.35 | 18.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.91  | 67.73 | 13.68 |      | 150.0 |         |
|           |                                                                    | Z | 1.34  | 73.93 | 15.68 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 4.73  | 93.04 | 24.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.31  | 72.72 | 16.40 |      | 150.0 |         |
|           |                                                                    | Z | 6.43  | 94.81 | 23.11 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 10.60 | 89.87 | 26.40 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 10.25 | 88.78 | 26.08 |      | 50.0  |         |
|           |                                                                    | Z | 12.25 | 89.80 | 24.68 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.99  | 71.06 | 17.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.73  | 69.18 | 16.24 |      | 150.0 |         |
|           |                                                                    | Z | 2.72  | 70.32 | 16.96 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.90  | 70.47 | 15.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.56  | 67.01 | 13.91 |      | 150.0 |         |
|           |                                                                    | Z | 1.44  | 67.67 | 13.50 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 3.07  | 71.64 | 15.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 3.23  | 72.42 | 16.33 |      | 150.0 |         |
|           |                                                                    | Z | 2.17  | 67.61 | 12.32 |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 2.19  | 66.26 | 12.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.31  | 66.80 | 13.02 |      | 150.0 |         |
|           |                                                                    | Z | 1.57  | 63.33 | 9.50  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.82  | 65.43 | 17.57 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.87  | 65.32 | 17.50 |      | 50.0  |         |
|           |                                                                    | Z | 4.60  | 65.72 | 17.49 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.31  | 66.17 | 18.35 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.36  | 66.00 | 18.25 |      | 50.0  |         |
|           |                                                                    | Z | 5.00  | 66.00 | 18.02 |      | 50.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.06  | 65.83 | 18.21 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.11  | 65.70 | 18.12 |       | 50.0  |         |
|           |                                                                     | Z | 4.75  | 65.61 | 17.82 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.87  | 65.69 | 17.69 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.90  | 65.47 | 17.55 |       | 50.0  |         |
|           |                                                                     | Z | 4.58  | 65.56 | 17.35 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.43  | 67.35 | 19.83 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.56  | 67.70 | 19.98 |       | 35.0  |         |
|           |                                                                     | Z | 4.15  | 67.17 | 19.10 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.77  | 66.43 | 19.36 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.86  | 66.61 | 19.45 |       | 35.0  |         |
|           |                                                                     | Z | 4.49  | 66.31 | 18.82 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.67  | 66.65 | 19.36 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.78  | 66.88 | 19.46 |       | 35.0  |         |
|           |                                                                     | Z | 4.37  | 66.39 | 18.75 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.64  | 66.81 | 19.48 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.74  | 67.03 | 19.58 |       | 35.0  |         |
|           |                                                                     | Z | 4.35  | 66.60 | 18.90 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.84  | 66.72 | 19.54 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.94  | 66.92 | 19.63 |       | 35.0  |         |
|           |                                                                     | Z | 4.52  | 66.47 | 18.95 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.71  | 66.49 | 19.33 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.81  | 66.68 | 19.42 |       | 35.0  |         |
|           |                                                                     | Z | 4.43  | 66.37 | 18.80 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.36  | 70.26 | 16.95 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.08  | 68.46 | 15.91 |       | 150.0 |         |
|           |                                                                     | Z | 3.08  | 69.51 | 16.57 |       | 150.0 |         |
| 10313-AAA | IDEN 1:3                                                            | X | 5.95  | 81.40 | 19.48 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 4.30  | 76.35 | 17.48 |       | 70.0  |         |
|           |                                                                     | Z | 3.21  | 73.80 | 16.43 |       | 70.0  |         |
| 10314-AAA | IDEN 1:6                                                            | X | 12.17 | 97.07 | 27.72 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 7.44  | 87.94 | 24.60 |       | 30.0  |         |
|           |                                                                     | Z | 6.18  | 85.76 | 23.72 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.10  | 64.61 | 16.02 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.01  | 63.21 | 14.85 |       | 150.0 |         |
|           |                                                                     | Z | 1.05  | 64.14 | 15.48 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.65  | 66.81 | 16.47 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.62  | 66.42 | 16.27 |       | 150.0 |         |
|           |                                                                     | Z | 4.46  | 66.78 | 16.31 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.65  | 66.81 | 16.47 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.62  | 66.42 | 16.27 |       | 150.0 |         |
|           |                                                                     | Z | 4.46  | 66.78 | 16.31 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.78  | 67.16 | 16.44 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.74  | 66.73 | 16.21 |       | 150.0 |         |
|           |                                                                     | Z | 4.55  | 67.11 | 16.31 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.43  | 67.23 | 16.53 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.42  | 66.92 | 16.38 |       | 150.0 |         |
|           |                                                                     | Z | 5.24  | 67.11 | 16.40 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.71   | 67.66  | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.70   | 67.34  | 16.43 |      | 150.0 |         |
|           |                                                                                 | Z | 5.52   | 67.48  | 16.45 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.95   | 72.86  | 16.32 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.38   | 67.46  | 13.46 |      | 115.0 |         |
|           |                                                                                 | Z | 1.34   | 68.81  | 13.27 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.95   | 72.86  | 16.32 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.38   | 67.46  | 13.46 |      | 115.0 |         |
|           |                                                                                 | Z | 1.34   | 68.81  | 13.27 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 122.38 | 30.73 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 81.48  | 123.67 | 32.28 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 114.83 | 26.66 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 123.65 | 31.04 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 127.30 | 33.02 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 122.18 | 29.60 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.02   | 63.74  | 15.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.94   | 62.36  | 14.20 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 63.49  | 14.99 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.59   | 66.79  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.55   | 66.36  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.42   | 66.82  | 16.27 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.59   | 66.79  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.55   | 66.36  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.42   | 66.82  | 16.27 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.58   | 66.96  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.54   | 66.49  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.42   | 67.01  | 16.31 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.61   | 66.90  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.56   | 66.45  | 16.16 |      | 150.0 |         |
|           |                                                                                 | Z | 4.43   | 66.95  | 16.30 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.73   | 66.90  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.69   | 66.47  | 16.18 |      | 150.0 |         |
|           |                                                                                 | Z | 4.54   | 66.92  | 16.31 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.91   | 67.24  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.87   | 66.82  | 16.31 |      | 150.0 |         |
|           |                                                                                 | Z | 4.68   | 67.21  | 16.40 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.82   | 67.19  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.79   | 66.76  | 16.28 |      | 150.0 |         |
|           |                                                                                 | Z | 4.61   | 67.16  | 16.38 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.41   | 67.47  | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.40   | 67.17  | 16.50 |      | 150.0 |         |
|           |                                                                                 | Z | 5.21   | 67.35  | 16.53 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.41   | 67.47  | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.40   | 67.19  | 16.50 |      | 150.0 |         |
|           |                                                                                 | Z | 5.23   | 67.42  | 16.56 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.42   | 67.47  | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.41   | 67.16  | 16.48 |      | 150.0 |         |
|           |                                                                | Z | 5.22   | 67.32  | 16.51 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.40   | 71.17  | 18.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.23   | 70.08  | 17.99 |      | 150.0 |         |
|           |                                                                | Z | 4.30   | 72.10  | 18.56 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.31   | 67.42  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.26   | 66.88  | 16.15 |      | 150.0 |         |
|           |                                                                | Z | 4.07   | 67.45  | 16.24 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.60   | 67.26  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.56   | 66.79  | 16.22 |      | 150.0 |         |
|           |                                                                | Z | 4.38   | 67.26  | 16.33 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.84   | 67.23  | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.80   | 66.80  | 16.30 |      | 150.0 |         |
|           |                                                                | Z | 4.63   | 67.20  | 16.40 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.54   | 72.17  | 18.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.31   | 70.81  | 17.94 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 73.20  | 18.53 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 123.43 | 30.93 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 127.09 | 32.93 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 121.88 | 29.46 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.63   | 67.60  | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.55   | 66.82  | 15.51 |      | 150.0 |         |
|           |                                                                | Z | 3.36   | 67.49  | 15.39 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.14   | 67.21  | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.08   | 66.64  | 16.00 |      | 150.0 |         |
|           |                                                                | Z | 3.93   | 67.24  | 16.11 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.40   | 67.10  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.35   | 66.60  | 16.11 |      | 150.0 |         |
|           |                                                                | Z | 4.21   | 67.10  | 16.24 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.59   | 67.00  | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.54   | 66.54  | 16.14 |      | 150.0 |         |
|           |                                                                | Z | 4.41   | 66.98  | 16.27 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.56   | 67.91  | 15.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.45   | 67.01  | 15.16 |      | 150.0 |         |
|           |                                                                | Z | 3.21   | 67.51  | 14.85 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.26   | 68.01  | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.26   | 67.75  | 16.66 |      | 150.0 |         |
|           |                                                                | Z | 6.13   | 67.97  | 16.72 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.81   | 65.42  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.77   | 64.98  | 15.86 |      | 150.0 |         |
|           |                                                                | Z | 3.73   | 65.50  | 15.98 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 4.16   | 71.37  | 18.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.92   | 69.91  | 17.32 |      | 150.0 |         |
|           |                                                                | Z | 4.02   | 72.11  | 17.63 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.19   | 68.40  | 18.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.10   | 67.75  | 18.06 |      | 150.0 |         |
|           |                                                                | Z | 5.01   | 69.18  | 18.25 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.07   | 72.05  | 18.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.81   | 67.05  | 15.17 |      | 150.0 |         |
|           |                                                                   | Z | 0.95   | 70.49  | 17.24 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 129.11 | 33.59 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 132.68 | 35.56 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 128.17 | 32.38 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 29.76  | 94.39  | 20.32 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 112.07 | 25.94 |      | 80.0  |         |
|           |                                                                   | Z | 0.79   | 60.49  | 7.76  |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.50   | 68.97  | 12.20 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 107.58 | 23.85 |      | 80.0  |         |
|           |                                                                   | Z | 0.77   | 60.00  | 6.89  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.29 | 32.12 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 130.29 | 34.26 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 124.25 | 30.42 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 9.13   | 82.53  | 17.12 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.30 | 25.58 |      | 80.0  |         |
|           |                                                                   | Z | 0.75   | 60.00  | 7.44  |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.98   | 66.71  | 11.27 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 99.88  | 106.88 | 23.53 |      | 80.0  |         |
|           |                                                                   | Z | 0.78   | 60.00  | 6.83  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.60 | 32.25 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 130.59 | 34.40 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 124.67 | 30.60 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 11.66  | 85.00  | 17.83 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.53 | 25.68 |      | 80.0  |         |
|           |                                                                   | Z | 0.75   | 60.09  | 7.51  |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.98   | 66.75  | 11.28 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 106.90 | 23.54 |      | 80.0  |         |
|           |                                                                   | Z | 0.77   | 60.00  | 6.83  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.64 | 32.26 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 130.65 | 34.41 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 124.69 | 30.60 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 11.32  | 84.67  | 17.72 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.46 | 25.64 |      | 80.0  |         |
|           |                                                                   | Z | 0.75   | 60.04  | 7.47  |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.96   | 66.63  | 11.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 106.82 | 23.49 |      | 80.0  |         |
|           |                                                                   | Z | 0.77   | 60.00  | 6.81  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.60 | 32.24 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 130.61 | 34.39 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 124.64 | 30.58 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 11.06  | 84.45  | 17.66 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.47 | 25.64 |      | 80.0  |         |
|           |                                                                   | Z | 0.74   | 60.02  | 7.45  |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.95   | 66.59  | 11.20 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 99.99  | 106.84 | 23.50 |      | 80.0  |         |
|           |                                                                   | Z | 0.77   | 60.00  | 6.81  |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 9.10   | 82.47  | 17.07 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 100.00 | 111.24 | 25.54 |      | 80.0 |         |
|           |                                                                     | Z | 0.74   | 60.00  | 7.42  |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.93   | 66.47  | 11.14 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 96.81  | 106.44 | 23.40 |      | 80.0 |         |
|           |                                                                     | Z | 0.77   | 60.00  | 6.80  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 9.68   | 90.97  | 25.10 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 13.83  | 97.37  | 27.65 |      | 80.0 |         |
|           |                                                                     | Z | 12.23  | 94.71  | 25.17 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 11.91  | 88.02  | 22.17 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 19.25  | 95.65  | 25.10 |      | 80.0 |         |
|           |                                                                     | Z | 7.50   | 81.30  | 18.54 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 9.15   | 83.59  | 20.38 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 15.12  | 91.18  | 23.39 |      | 80.0 |         |
|           |                                                                     | Z | 4.40   | 74.24  | 15.71 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.76   | 79.70  | 20.44 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.53   | 74.74  | 18.45 |      | 80.0 |         |
|           |                                                                     | Z | 2.62   | 71.60  | 16.13 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.87   | 78.17  | 19.16 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.24   | 83.44  | 21.55 |      | 80.0 |         |
|           |                                                                     | Z | 2.93   | 69.04  | 14.15 |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.35   | 76.61  | 18.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.24   | 81.28  | 20.83 |      | 80.0 |         |
|           |                                                                     | Z | 2.73   | 67.94  | 13.69 |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.47   | 78.87  | 21.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.68   | 75.23  | 19.49 |      | 80.0 |         |
|           |                                                                     | Z | 3.15   | 74.27  | 18.50 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.79   | 72.50  | 18.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.38   | 70.29  | 17.05 |      | 80.0 |         |
|           |                                                                     | Z | 2.84   | 69.02  | 15.57 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.74   | 71.89  | 17.77 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.37   | 69.86  | 16.85 |      | 80.0 |         |
|           |                                                                     | Z | 2.81   | 68.50  | 15.32 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.24   | 75.86  | 20.43 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.83   | 73.65  | 19.40 |      | 80.0 |         |
|           |                                                                     | Z | 3.28   | 72.72  | 18.85 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.72   | 70.49  | 18.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.53   | 69.26  | 17.66 |      | 80.0 |         |
|           |                                                                     | Z | 3.19   | 68.97  | 17.14 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.79   | 70.18  | 18.14 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.62   | 69.04  | 17.58 |      | 80.0 |         |
|           |                                                                     | Z | 3.27   | 68.77  | 17.05 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.23   | 73.19  | 19.42 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.95   | 71.65  | 18.67 |      | 80.0 |         |
|           |                                                                     | Z | 3.47   | 70.90  | 18.25 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.97   | 69.24  | 17.95 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.85   | 68.36  | 17.51 |      | 80.0 |         |
|           |                                                                     | Z | 3.50   | 68.04  | 17.11 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.03 | 69.04 | 17.87 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.92 | 68.21 | 17.46 |      | 80.0 |         |
|           |                                                                      | Z | 3.56 | 67.90 | 17.04 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.79 | 75.46 | 20.14 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.38 | 73.53 | 19.24 |      | 80.0 |         |
|           |                                                                      | Z | 3.78 | 72.48 | 18.78 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.03 | 69.76 | 18.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.90 | 68.85 | 17.73 |      | 80.0 |         |
|           |                                                                      | Z | 3.53 | 68.35 | 17.31 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.08 | 69.35 | 18.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.97 | 68.51 | 17.62 |      | 80.0 |         |
|           |                                                                      | Z | 3.60 | 68.09 | 17.22 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.72 | 75.87 | 18.08 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.64 | 70.76 | 15.98 |      | 80.0 |         |
|           |                                                                      | Z | 1.51 | 64.60 | 11.77 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.30 | 66.27 | 12.99 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.02 | 64.31 | 12.06 |      | 80.0 |         |
|           |                                                                      | Z | 1.20 | 60.00 | 8.21  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.18 | 65.35 | 12.41 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.97 | 63.70 | 11.62 |      | 80.0 |         |
|           |                                                                      | Z | 1.22 | 60.00 | 8.05  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.19 | 76.87 | 20.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.63 | 74.04 | 19.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.15 | 73.35 | 18.54 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.74 | 71.57 | 18.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.44 | 69.83 | 17.26 |      | 80.0 |         |
|           |                                                                      | Z | 3.03 | 69.25 | 16.29 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.79 | 71.34 | 17.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.50 | 69.66 | 17.14 |      | 80.0 |         |
|           |                                                                      | Z | 3.07 | 69.05 | 16.12 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.18 | 75.62 | 20.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.77 | 73.43 | 19.30 |      | 80.0 |         |
|           |                                                                      | Z | 3.23 | 72.50 | 18.74 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.70 | 70.40 | 18.21 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.52 | 69.18 | 17.61 |      | 80.0 |         |
|           |                                                                      | Z | 3.17 | 68.86 | 17.07 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.77 | 70.08 | 18.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.60 | 68.95 | 17.53 |      | 80.0 |         |
|           |                                                                      | Z | 3.25 | 68.67 | 16.99 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.74 | 75.29 | 20.06 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.34 | 73.37 | 19.17 |      | 80.0 |         |
|           |                                                                      | Z | 3.74 | 72.32 | 18.70 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.01 | 69.69 | 18.15 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.88 | 68.79 | 17.69 |      | 80.0 |         |
|           |                                                                      | Z | 3.51 | 68.29 | 17.27 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.07 | 69.28 | 18.00 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.96 | 68.45 | 17.58 |      | 80.0  |         |
|           |                                                                     | Z | 3.59 | 68.02 | 17.17 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.87 | 73.12 | 19.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.57 | 71.69 | 18.46 |      | 80.0  |         |
|           |                                                                     | Z | 4.08 | 70.95 | 18.12 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.46 | 69.19 | 17.97 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.36 | 68.46 | 17.61 |      | 80.0  |         |
|           |                                                                     | Z | 3.98 | 67.93 | 17.23 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.49 | 68.83 | 17.85 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.40 | 68.15 | 17.52 |      | 80.0  |         |
|           |                                                                     | Z | 4.03 | 67.70 | 17.16 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.35 | 75.53 | 19.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.89 | 73.64 | 19.09 |      | 80.0  |         |
|           |                                                                     | Z | 4.27 | 72.56 | 18.64 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.37 | 69.62 | 18.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.26 | 68.83 | 17.75 |      | 80.0  |         |
|           |                                                                     | Z | 3.86 | 68.15 | 17.33 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.36 | 69.04 | 17.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.26 | 68.32 | 17.60 |      | 80.0  |         |
|           |                                                                     | Z | 3.89 | 67.75 | 17.20 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.98 | 64.01 | 15.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.90 | 62.52 | 14.23 |      | 150.0 |         |
|           |                                                                     | Z | 0.95 | 63.71 | 15.08 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.96 | 80.43 | 22.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.52 | 69.16 | 15.73 |      | 150.0 |         |
|           |                                                                     | Z | 0.74 | 75.71 | 19.80 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.87 | 66.95 | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.75 | 64.30 | 14.64 |      | 150.0 |         |
|           |                                                                     | Z | 0.81 | 66.10 | 15.98 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.59 | 66.88 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55 | 66.43 | 16.12 |      | 150.0 |         |
|           |                                                                     | Z | 4.41 | 66.91 | 16.25 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.79 | 67.13 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.75 | 66.71 | 16.26 |      | 150.0 |         |
|           |                                                                     | Z | 4.57 | 67.10 | 16.35 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.64 | 67.11 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.60 | 66.67 | 16.18 |      | 150.0 |         |
|           |                                                                     | Z | 4.43 | 67.05 | 16.27 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.57 | 67.12 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 66.66 | 16.16 |      | 150.0 |         |
|           |                                                                     | Z | 4.36 | 67.04 | 16.26 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.63 | 67.16 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.59 | 66.70 | 16.22 |      | 150.0 |         |
|           |                                                                     | Z | 4.42 | 67.17 | 16.36 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.51 | 67.05 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.46 | 66.56 | 16.06 |      | 150.0 |         |
|           |                                                            | Z | 4.33 | 67.10 | 16.24 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.58 | 67.09 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.53 | 66.64 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 4.37 | 67.10 | 16.33 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.55 | 66.14 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.50 | 65.66 | 15.78 |      | 150.0 |         |
|           |                                                            | Z | 4.38 | 66.18 | 15.95 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.74 | 66.53 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.69 | 66.05 | 15.93 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 66.50 | 16.07 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.66 | 66.50 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.61 | 66.01 | 15.87 |      | 150.0 |         |
|           |                                                            | Z | 4.45 | 66.47 | 16.02 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.67 | 66.52 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.62 | 66.03 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.47 | 66.48 | 16.05 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.67 | 66.52 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.62 | 66.03 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.47 | 66.48 | 16.05 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.67 | 66.65 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.63 | 66.16 | 15.93 |      | 150.0 |         |
|           |                                                            | Z | 4.44 | 66.54 | 16.04 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.53 | 66.51 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.48 | 66.01 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.32 | 66.41 | 15.98 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.68 | 66.56 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.63 | 66.06 | 15.89 |      | 150.0 |         |
|           |                                                            | Z | 4.48 | 66.56 | 16.05 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.19 | 66.60 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.16 | 66.20 | 15.99 |      | 150.0 |         |
|           |                                                            | Z | 5.01 | 66.50 | 16.09 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.26 | 66.75 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.22 | 66.35 | 16.06 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.65 | 16.16 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.13 | 66.73 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.09 | 66.32 | 16.02 |      | 150.0 |         |
|           |                                                            | Z | 4.95 | 66.64 | 16.13 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.19 | 66.69 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.15 | 66.30 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 5.00 | 66.59 | 16.11 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.28 | 66.73 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.26 | 66.36 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 5.08 | 66.58 | 16.14 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.21 | 66.72 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.17 | 66.33 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 5.01 | 66.56 | 16.15 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.18 | 66.60 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.14 | 66.20 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 4.99 | 66.47 | 16.09 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.33 | 66.65 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.31 | 66.28 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.14 | 66.55 | 16.15 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.41 | 66.68 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.31 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.20 | 66.56 | 16.18 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.49 | 66.70 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.31 | 15.98 |      | 150.0 |         |
|           |                                                    | Z | 5.34 | 66.58 | 16.07 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.68 | 67.09 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.66 | 66.76 | 16.15 |      | 150.0 |         |
|           |                                                    | Z | 5.51 | 66.98 | 16.23 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.57 | 66.94 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.57 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.73 | 16.11 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.64 | 66.98 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.66 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 66.79 | 16.14 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.90 | 67.92 | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.97 | 67.87 | 16.68 |      | 150.0 |         |
|           |                                                    | Z | 5.63 | 67.50 | 16.47 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.59 | 66.92 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.54 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.42 | 66.82 | 16.17 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.60 | 66.98 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.56 | 66.60 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.40 | 66.75 | 16.10 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.51 | 66.77 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.37 | 15.96 |      | 150.0 |         |
|           |                                                    | Z | 5.35 | 66.67 | 16.06 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.60 | 66.81 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.56 | 66.43 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.41 | 66.65 | 16.08 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.89 | 67.05 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.86 | 66.69 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.75 | 66.91 | 16.14 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.02 | 67.35 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.00 | 67.02 | 16.22 |      | 150.0 |         |
|           |                                                    | Z | 5.86 | 67.17 | 16.25 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.04 | 67.39 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 67.06 | 16.23 |      | 150.0 |         |
|           |                                                    | Z | 5.88 | 67.24 | 16.28 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.01 | 67.32 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.99 | 66.98 | 16.22 |      | 150.0 |         |
|           |                                                    | Z | 5.85 | 67.13 | 16.24 |      | 150.0 |         |

|           |                                                                 |   |       |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.07  | 67.49  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.05  | 67.17  | 16.33 |      | 150.0 |         |
|           |                                                                 | Z | 5.88  | 67.26  | 16.33 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.06  | 67.34  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.04  | 66.99  | 16.28 |      | 150.0 |         |
|           |                                                                 | Z | 5.88  | 67.13  | 16.30 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.98  | 67.30  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.96  | 66.96  | 16.30 |      | 150.0 |         |
|           |                                                                 | Z | 5.81  | 67.11  | 16.32 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.11  | 67.72  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.12  | 67.46  | 16.55 |      | 150.0 |         |
|           |                                                                 | Z | 5.89  | 67.37  | 16.45 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.43  | 68.23  | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.50  | 68.16  | 16.85 |      | 150.0 |         |
|           |                                                                 | Z | 5.96  | 67.23  | 16.35 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.91  | 66.93  | 16.51 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.88  | 66.54  | 16.31 |      | 150.0 |         |
|           |                                                                 | Z | 4.73  | 66.93  | 16.37 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.16  | 67.40  | 16.83 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.13  | 67.02  | 16.64 |      | 150.0 |         |
|           |                                                                 | Z | 4.93  | 67.35  | 16.69 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.99  | 67.26  | 16.66 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.96  | 66.87  | 16.45 |      | 150.0 |         |
|           |                                                                 | Z | 4.77  | 67.18  | 16.50 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.02  | 67.67  | 17.02 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.98  | 67.25  | 16.79 |      | 150.0 |         |
|           |                                                                 | Z | 4.81  | 67.60  | 16.88 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.90  | 67.00  | 16.42 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87  | 66.62  | 16.22 |      | 150.0 |         |
|           |                                                                 | Z | 4.67  | 66.94  | 16.26 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.97  | 67.73  | 17.07 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.93  | 67.29  | 16.83 |      | 150.0 |         |
|           |                                                                 | Z | 4.78  | 67.78  | 16.99 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.01  | 67.57  | 17.00 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.97  | 67.15  | 16.77 |      | 150.0 |         |
|           |                                                                 | Z | 4.80  | 67.57  | 16.89 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.17  | 65.22  | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.09  | 63.89  | 15.30 |      | 130.0 |         |
|           |                                                                 | Z | 1.10  | 64.48  | 15.68 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.19  | 65.91  | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.10  | 64.45  | 15.65 |      | 130.0 |         |
|           |                                                                 | Z | 1.12  | 65.08  | 16.07 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 11.95 | 118.97 | 33.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 2.10  | 86.50  | 22.92 |      | 130.0 |         |
|           |                                                                 | Z | 2.78  | 93.83  | 26.37 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.42  | 73.69  | 20.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.20  | 70.19  | 18.52 |      | 130.0 |         |
|           |                                                                 | Z | 1.24  | 71.54  | 19.44 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.69 | 66.71 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.67 | 66.34 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 66.68 | 16.40 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.72 | 66.88 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 66.50 | 16.44 |      | 130.0 |         |
|           |                                                                 | Z | 4.53 | 66.88 | 16.48 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.94 | 67.20 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91 | 66.83 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.13 | 16.63 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.83 | 67.37 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 66.98 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 67.29 | 16.74 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.60 | 66.66 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.30 | 16.05 |      | 130.0 |         |
|           |                                                                 | Z | 4.37 | 66.49 | 16.00 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.64 | 66.67 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.31 | 16.06 |      | 130.0 |         |
|           |                                                                 | Z | 4.41 | 66.55 | 16.03 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.73 | 67.42 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 67.02 | 16.65 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 67.36 | 16.71 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.54 | 66.41 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.53 | 66.07 | 15.85 |      | 130.0 |         |
|           |                                                                 | Z | 4.30 | 66.25 | 15.78 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.69 | 66.71 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.67 | 66.34 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 66.68 | 16.40 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.72 | 66.88 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 66.50 | 16.44 |      | 130.0 |         |
|           |                                                                 | Z | 4.53 | 66.88 | 16.48 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.94 | 67.20 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91 | 66.83 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.13 | 16.63 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.83 | 67.37 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 66.98 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 67.29 | 16.74 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.60 | 66.66 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.30 | 16.05 |      | 130.0 |         |
|           |                                                                 | Z | 4.37 | 66.49 | 16.00 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.64 | 66.67 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.31 | 16.06 |      | 130.0 |         |
|           |                                                                 | Z | 4.41 | 66.55 | 16.03 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.73 | 67.42 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 67.02 | 16.65 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 67.36 | 16.71 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.54 | 66.41 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.53 | 66.07 | 15.85 |      | 130.0 |         |
|           |                                                                 | Z | 4.30 | 66.25 | 15.78 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.84 | 66.77 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.82 | 66.41 | 16.48 |      | 130.0 |         |
|           |                                                       | Z | 4.66 | 66.76 | 16.51 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.01 | 67.12 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.99 | 66.76 | 16.61 |      | 130.0 |         |
|           |                                                       | Z | 4.79 | 67.07 | 16.64 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.93 | 67.04 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.91 | 66.69 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 4.71 | 66.95 | 16.50 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.98 | 67.20 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.96 | 66.84 | 16.65 |      | 130.0 |         |
|           |                                                       | Z | 4.76 | 67.13 | 16.67 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.95 | 67.16 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.93 | 66.80 | 16.55 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 67.10 | 16.57 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.89 | 67.16 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.87 | 66.79 | 16.55 |      | 130.0 |         |
|           |                                                       | Z | 4.66 | 67.08 | 16.56 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.84 | 67.08 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.82 | 66.71 | 16.44 |      | 130.0 |         |
|           |                                                       | Z | 4.61 | 66.96 | 16.43 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.82 | 67.33 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.80 | 66.95 | 16.70 |      | 130.0 |         |
|           |                                                       | Z | 4.60 | 67.20 | 16.70 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.51 | 67.30 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.50 | 67.04 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 5.31 | 67.18 | 16.69 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.66 | 67.75 | 17.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.70 | 67.66 | 17.00 |      | 130.0 |         |
|           |                                                       | Z | 5.42 | 67.55 | 16.85 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.54 | 67.49 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.55 | 67.29 | 16.83 |      | 130.0 |         |
|           |                                                       | Z | 5.33 | 67.34 | 16.76 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.62 | 67.47 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.64 | 67.27 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 5.46 | 67.51 | 16.77 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.72 | 67.83 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.72 | 67.56 | 17.01 |      | 130.0 |         |
|           |                                                       | Z | 5.53 | 67.80 | 17.05 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.51 | 67.26 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.51 | 67.00 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 5.40 | 67.44 | 16.85 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.62 | 67.58 | 16.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.63 | 67.37 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.43 | 67.48 | 16.86 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.39 | 67.04 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.38 | 66.75 | 16.46 |      | 130.0 |         |
|           |                                                       | Z | 5.18 | 66.82 | 16.39 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.69 | 66.11 | 16.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.65 | 65.70 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 4.51 | 66.12 | 16.16 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.89 | 66.54 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.86 | 66.13 | 16.26 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 66.48 | 16.32 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.78 | 66.40 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.74 | 65.99 | 16.10 |      | 130.0 |         |
|           |                                                   | Z | 4.56 | 66.32 | 16.14 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.83 | 66.56 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.80 | 66.15 | 16.27 |      | 130.0 |         |
|           |                                                   | Z | 4.61 | 66.49 | 16.31 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.74 | 66.37 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.71 | 65.96 | 16.12 |      | 130.0 |         |
|           |                                                   | Z | 4.52 | 66.28 | 16.15 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.76 | 66.53 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.73 | 66.12 | 16.16 |      | 130.0 |         |
|           |                                                   | Z | 4.52 | 66.43 | 16.20 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.76 | 66.43 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.74 | 66.03 | 16.06 |      | 130.0 |         |
|           |                                                   | Z | 4.52 | 66.26 | 16.05 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.70 | 66.62 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 66.19 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 4.48 | 66.49 | 16.31 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.74 | 66.19 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.72 | 65.79 | 15.90 |      | 130.0 |         |
|           |                                                   | Z | 4.52 | 66.11 | 15.92 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.34 | 66.61 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.32 | 66.28 | 16.32 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.47 | 16.32 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.40 | 66.74 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.38 | 66.41 | 16.35 |      | 130.0 |         |
|           |                                                   | Z | 5.21 | 66.65 | 16.39 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.29 | 66.79 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.27 | 66.46 | 16.39 |      | 130.0 |         |
|           |                                                   | Z | 5.11 | 66.70 | 16.43 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.31 | 66.61 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.30 | 66.30 | 16.25 |      | 130.0 |         |
|           |                                                   | Z | 5.11 | 66.46 | 16.24 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.41 | 66.67 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.41 | 66.38 | 16.34 |      | 130.0 |         |
|           |                                                   | Z | 5.19 | 66.48 | 16.30 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.40 | 66.76 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.38 | 66.43 | 16.48 |      | 130.0 |         |
|           |                                                   | Z | 5.21 | 66.64 | 16.50 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.41 | 66.91 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.39 | 66.60 | 16.55 |      | 130.0 |         |
|           |                                                   | Z | 5.20 | 66.74 | 16.55 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.29 | 66.45 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 66.12 | 16.20 |      | 130.0 |         |
|           |                                                    | Z | 5.08 | 66.28 | 16.19 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.48 | 66.64 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.35 | 16.38 |      | 130.0 |         |
|           |                                                    | Z | 5.28 | 66.51 | 16.36 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.87 | 67.67 | 17.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.56 | 17.03 |      | 130.0 |         |
|           |                                                    | Z | 5.48 | 66.99 | 16.66 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.62 | 66.65 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 66.32 | 16.26 |      | 130.0 |         |
|           |                                                    | Z | 5.46 | 66.52 | 16.28 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.86 | 67.19 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 66.96 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 5.68 | 67.07 | 16.52 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.67 | 66.78 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 66.49 | 16.24 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.52 | 16.18 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.76 | 66.87 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 66.55 | 16.26 |      | 130.0 |         |
|           |                                                    | Z | 5.55 | 66.62 | 16.22 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.21 | 68.41 | 17.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.36 | 68.57 | 17.26 |      | 130.0 |         |
|           |                                                    | Z | 5.84 | 67.72 | 16.78 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.11 | 68.22 | 17.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.15 | 68.07 | 17.21 |      | 130.0 |         |
|           |                                                    | Z | 5.81 | 67.73 | 16.97 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.83 | 67.26 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.98 | 16.68 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 67.19 | 16.73 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.73 | 66.95 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.72 | 66.66 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 5.54 | 66.74 | 16.32 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.72 | 66.98 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.70 | 66.65 | 16.41 |      | 130.0 |         |
|           |                                                    | Z | 5.52 | 66.78 | 16.40 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.60 | 66.32 | 15.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 66.03 | 15.84 |      | 130.0 |         |
|           |                                                    | Z | 5.39 | 66.04 | 15.76 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.03 | 67.02 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 66.74 | 16.37 |      | 130.0 |         |
|           |                                                    | Z | 5.89 | 66.87 | 16.36 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.19 | 67.40 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.19 | 67.15 | 16.56 |      | 130.0 |         |
|           |                                                    | Z | 6.02 | 67.21 | 16.51 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.19 | 67.38 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.19 | 67.12 | 16.52 |      | 130.0 |         |
|           |                                                    | Z | 6.03 | 67.21 | 16.49 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.18   | 67.36  | 16.66 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.17   | 67.09  | 16.55 |       | 130.0 |         |
|           |                                                        | Z | 6.00   | 67.13  | 16.50 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.19   | 67.39  | 16.62 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.20   | 67.16  | 16.53 |       | 130.0 |         |
|           |                                                        | Z | 5.99   | 67.11  | 16.43 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.21   | 67.22  | 16.56 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.20   | 66.94  | 16.44 |       | 130.0 |         |
|           |                                                        | Z | 6.05   | 67.08  | 16.43 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.27   | 67.52  | 16.87 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.26   | 67.23  | 16.75 |       | 130.0 |         |
|           |                                                        | Z | 6.09   | 67.31  | 16.72 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.10   | 67.19  | 16.61 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09   | 66.93  | 16.50 |       | 130.0 |         |
|           |                                                        | Z | 5.93   | 67.00  | 16.46 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.29   | 67.77  | 16.92 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.32   | 67.61  | 16.86 |       | 130.0 |         |
|           |                                                        | Z | 6.02   | 67.30  | 16.63 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.72   | 68.61  | 17.29 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.81   | 68.60  | 17.31 |       | 130.0 |         |
|           |                                                        | Z | 6.13   | 67.29  | 16.58 |       | 130.0 |         |
| 10646-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 26.22  | 119.06 | 40.53 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 23.98  | 116.77 | 40.23 |       | 60.0  |         |
|           |                                                        | Z | 13.39  | 105.96 | 36.68 |       | 60.0  |         |
| 10647-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 21.91  | 115.56 | 39.67 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 20.79  | 114.08 | 39.59 |       | 60.0  |         |
|           |                                                        | Z | 11.12  | 102.25 | 35.63 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.80   | 65.60  | 12.34 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.65   | 62.69  | 10.17 |       | 150.0 |         |
|           |                                                        | Z | 0.58   | 62.96  | 9.61  |       | 150.0 |         |
| 10652-AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.70   | 67.38  | 17.08 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.59   | 66.56  | 16.66 |       | 80.0  |         |
|           |                                                        | Z | 3.39   | 66.83  | 16.41 |       | 80.0  |         |
| 10653-AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.17   | 66.50  | 17.03 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.11   | 65.95  | 16.76 |       | 80.0  |         |
|           |                                                        | Z | 3.90   | 66.02  | 16.55 |       | 80.0  |         |
| 10654-AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.13   | 66.12  | 17.00 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.07   | 65.60  | 16.75 |       | 80.0  |         |
|           |                                                        | Z | 3.90   | 65.62  | 16.55 |       | 80.0  |         |
| 10655-AAD | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.19   | 66.12  | 17.04 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.13   | 65.62  | 16.79 |       | 80.0  |         |
|           |                                                        | Z | 3.96   | 65.57  | 16.58 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 100.00 | 111.27 | 26.15 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 112.15 | 26.71 |       | 50.0  |         |
|           |                                                        | Z | 14.35  | 85.50  | 18.40 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 110.66 | 24.83 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 110.25 | 24.76 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 105.29 | 22.07 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 112.93 | 24.53 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 108.47 | 22.64 |      | 80.0  |         |
|           |                             | Z | 100.00 | 104.83 | 20.58 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 118.71 | 25.68 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 104.33 | 19.70 |      | 100.0 |         |
|           |                             | Z | 100.00 | 104.48 | 19.32 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 138.66 | 31.49 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 0.19   | 60.00  | 4.09  |      | 120.0 |         |
|           |                             | Z | 100.00 | 91.23  | 12.90 |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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 Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **EX3-7357\_Apr19**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7357**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v5, QA CAL-23.v5,  
 QA CAL-25.v7  
 Calibration procedure for dosimetric E-field probes**

Calibration date: **April 24, 2019**

*BN ✓  
 4-29-2019*

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature  $(22 \pm 3)^{\circ}\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 03-Apr-19 (No. 217-02892/02893)   | Apr-20                 |
| Power sensor NRP-Z91       | SN: 103244       | 03-Apr-19 (No. 217-02892)         | Apr-20                 |
| Power sensor NRP-Z91       | SN: 103245       | 03-Apr-19 (No. 217-02893)         | Apr-20                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-19 (No. 217-02894)         | Apr-20                 |
| DAE4                       | SN: 660          | 19-Dec-18 (No. DAE4-660_Dec18)    | Dec-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 31-Dec-18 (No. ES3-3013_Dec18)    | Dec-19                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-18) | In house check: Oct-19 |

|                |                                |                                   |               |
|----------------|--------------------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br><b>Claudio Leubler</b> | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Name<br><b>Katja Pokovic</b>   | Function<br>Technical Manager     | Signature<br> |

Issued: April 24, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



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## Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

## Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

## Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.37     | 0.48     | 0.41     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 87.5     | 101.0    | 95.2     |               |

## Calibration Results for Modulation Response

| UID       | Communication System Name   |   | A<br>dB | B<br>dB/ $\mu\text{V}$ | C     | D<br>dB | VR<br>mV | Max<br>dev.  | Max<br>Unc <sup>E</sup><br>(k=2) |
|-----------|-----------------------------|---|---------|------------------------|-------|---------|----------|--------------|----------------------------------|
| 0         | CW                          | X | 0.00    | 0.00                   | 1.00  | 0.00    | 175.5    | $\pm 2.7 \%$ | $\pm 4.7 \%$                     |
|           |                             | Y | 0.00    | 0.00                   | 1.00  |         | 162.7    |              |                                  |
|           |                             | Z | 0.00    | 0.00                   | 1.00  |         | 160.1    |              |                                  |
| 10352-AAA | Pulse Waveform (200Hz, 10%) | X | 1.63    | 60.99                  | 8.59  | 10.00   | 60.0     | $\pm 3.2 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 15.00   | 88.78                  | 20.10 |         | 60.0     |              |                                  |
|           |                             | Z | 1.92    | 62.77                  | 9.39  |         | 60.0     |              |                                  |
| 10353-AAA | Pulse Waveform (200Hz, 20%) | X | 1.28    | 62.05                  | 7.66  | 6.99    | 80.0     | $\pm 2.1 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 15.00   | 92.12                  | 20.60 |         | 80.0     |              |                                  |
|           |                             | Z | 1.44    | 63.37                  | 8.24  |         | 80.0     |              |                                  |
| 10354-AAA | Pulse Waveform (200Hz, 40%) | X | 0.53    | 60.00                  | 5.08  | 3.98    | 95.0     | $\pm 1.2 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 15.00   | 98.74                  | 22.38 |         | 95.0     |              |                                  |
|           |                             | Z | 0.50    | 60.00                  | 4.96  |         | 95.0     |              |                                  |
| 10355-AAA | Pulse Waveform (200Hz, 60%) | X | 0.34    | 60.00                  | 3.46  | 2.22    | 120.0    | $\pm 1.3 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 15.00   | 122.09                 | 31.59 |         | 120.0    |              |                                  |
|           |                             | Z | 0.32    | 60.00                  | 3.17  |         | 120.0    |              |                                  |
| 10387-AAA | QPSK Waveform, 1 MHz        | X | 0.47    | 60.00                  | 5.85  | 0.00    | 150.0    | $\pm 3.4 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 0.84    | 63.60                  | 10.73 |         | 150.0    |              |                                  |
|           |                             | Z | 0.47    | 60.00                  | 5.64  |         | 150.0    |              |                                  |
| 10388-AAA | QPSK Waveform, 10 MHz       | X | 2.22    | 69.17                  | 16.45 | 0.00    | 150.0    | $\pm 1.2 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 2.39    | 69.28                  | 16.48 |         | 150.0    |              |                                  |
|           |                             | Z | 2.05    | 67.86                  | 15.44 |         | 150.0    |              |                                  |
| 10396-AAA | 64-QAM Waveform, 100 kHz    | X | 1.74    | 66.32                  | 18.65 | 3.01    | 150.0    | $\pm 6.4 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 3.21    | 72.13                  | 19.45 |         | 150.0    |              |                                  |
|           |                             | Z | 2.50    | 68.64                  | 18.00 |         | 150.0    |              |                                  |
| 10399-AAA | 64-QAM Waveform, 40 MHz     | X | 3.50    | 67.46                  | 16.21 | 0.00    | 150.0    | $\pm 2.5 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 3.59    | 67.57                  | 16.11 |         | 150.0    |              |                                  |
|           |                             | Z | 3.40    | 67.11                  | 15.75 |         | 150.0    |              |                                  |
| 10414-AAA | WLAN CCDF, 64-QAM, 40MHz    | X | 4.79    | 65.80                  | 15.93 | 0.00    | 150.0    | $\pm 4.6 \%$ | $\pm 9.6 \%$                     |
|           |                             | Y | 4.92    | 65.80                  | 15.71 |         | 150.0    |              |                                  |
|           |                             | Z | 4.73    | 65.72                  | 15.66 |         | 150.0    |              |                                  |

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>V <sup>-1</sup> | T1<br>ms.V <sup>-2</sup> | T2<br>ms.V <sup>-1</sup> | T3<br>ms | T4<br>V <sup>-2</sup> | T5<br>V <sup>-1</sup> | T6   |
|---|----------|----------|-----------------------------|--------------------------|--------------------------|----------|-----------------------|-----------------------|------|
| X | 37.3     | 299.85   | 40.64                       | 5.98                     | 0.77                     | 5.00     | 0.00                  | 0.00                  | 1.02 |
| Y | 48.9     | 366.83   | 35.90                       | 10.43                    | 0.11                     | 5.09     | 1.58                  | 0.24                  | 1.01 |
| Z | 37.8     | 294.77   | 38.42                       | 5.12                     | 0.55                     | 5.04     | 0.00                  | 0.43                  | 1.01 |

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 14.2       |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 64                   | 54.2                               | 0.75                            | 14.77   | 14.77   | 14.77   | 0.00               | 1.00                    | ± 13.3 %  |
| 750                  | 41.9                               | 0.89                            | 10.26   | 10.26   | 10.26   | 0.45               | 0.95                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.91    | 9.91    | 9.91    | 0.53               | 0.85                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.69    | 8.69    | 8.69    | 0.35               | 0.80                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.26    | 8.26    | 8.26    | 0.33               | 0.84                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.70    | 7.70    | 7.70    | 0.33               | 0.85                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.57    | 7.57    | 7.57    | 0.39               | 0.85                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.31    | 7.31    | 7.31    | 0.40               | 0.80                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.45    | 5.45    | 5.45    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.85    | 4.85    | 4.85    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 5.06    | 5.06    | 5.06    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 10.19   | 10.19   | 10.19   | 0.37               | 0.96                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.95    | 9.95    | 9.95    | 0.47               | 0.80                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.26    | 8.26    | 8.26    | 0.35               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.93    | 7.93    | 7.93    | 0.32               | 0.90                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.72    | 7.72    | 7.72    | 0.30               | 0.85                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.59    | 7.59    | 7.59    | 0.35               | 0.86                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.39    | 7.39    | 7.39    | 0.32               | 0.89                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.61    | 4.61    | 4.61    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.03    | 4.03    | 4.03    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.15    | 4.15    | 4.15    | 0.50               | 1.90                    | ± 13.1 %  |

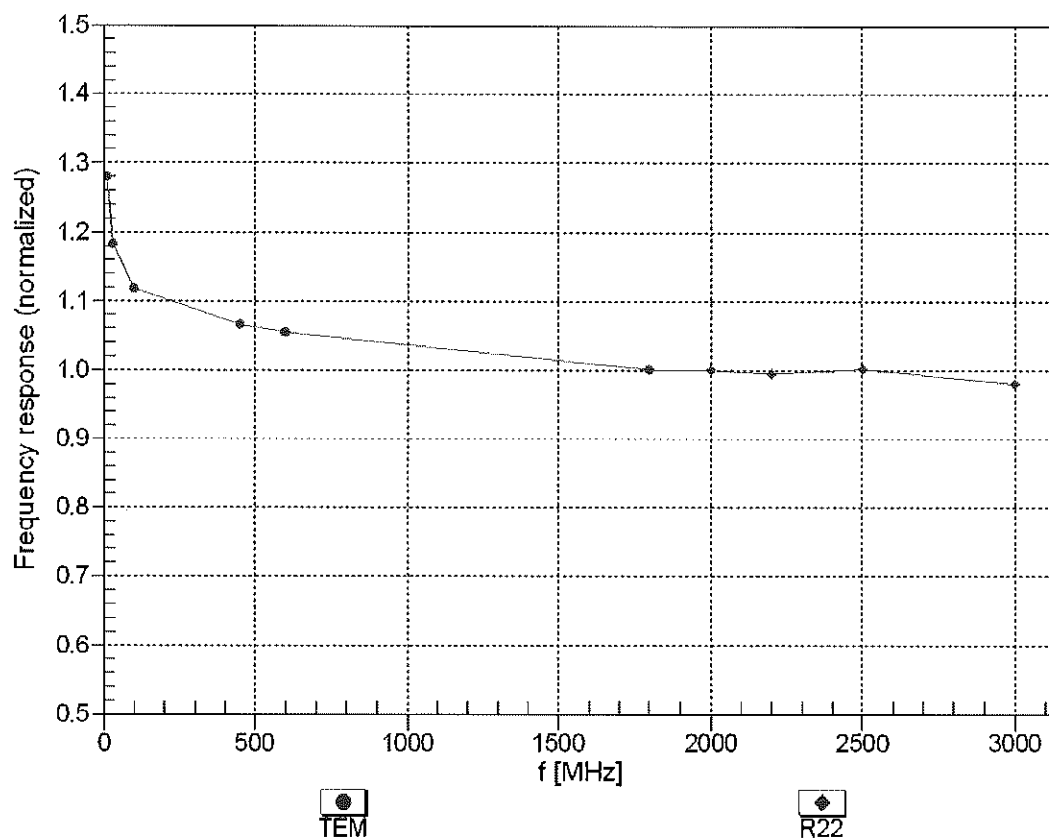
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

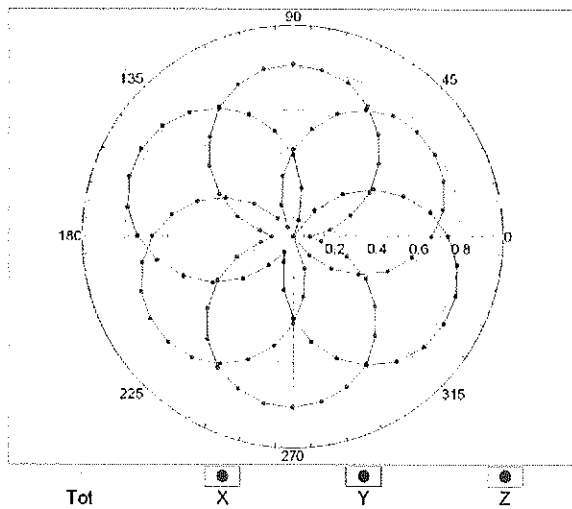
(TEM-Cell:ifi110 EXX, Waveguide: R22)



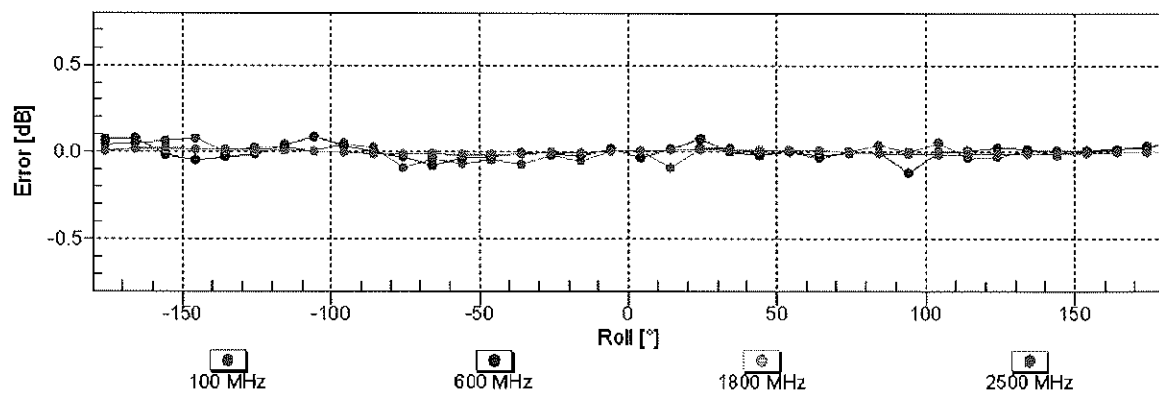
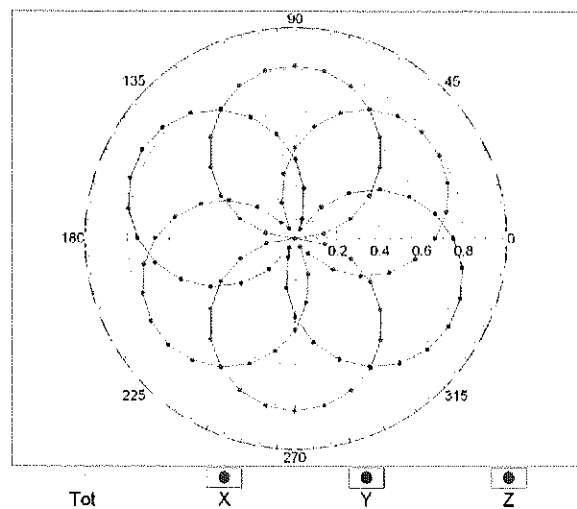
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

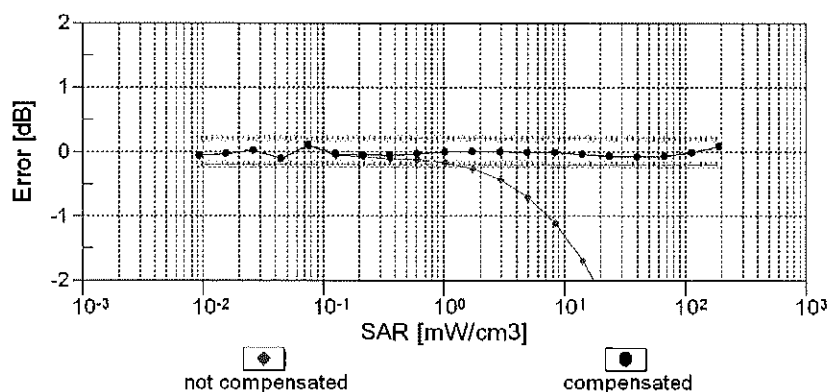
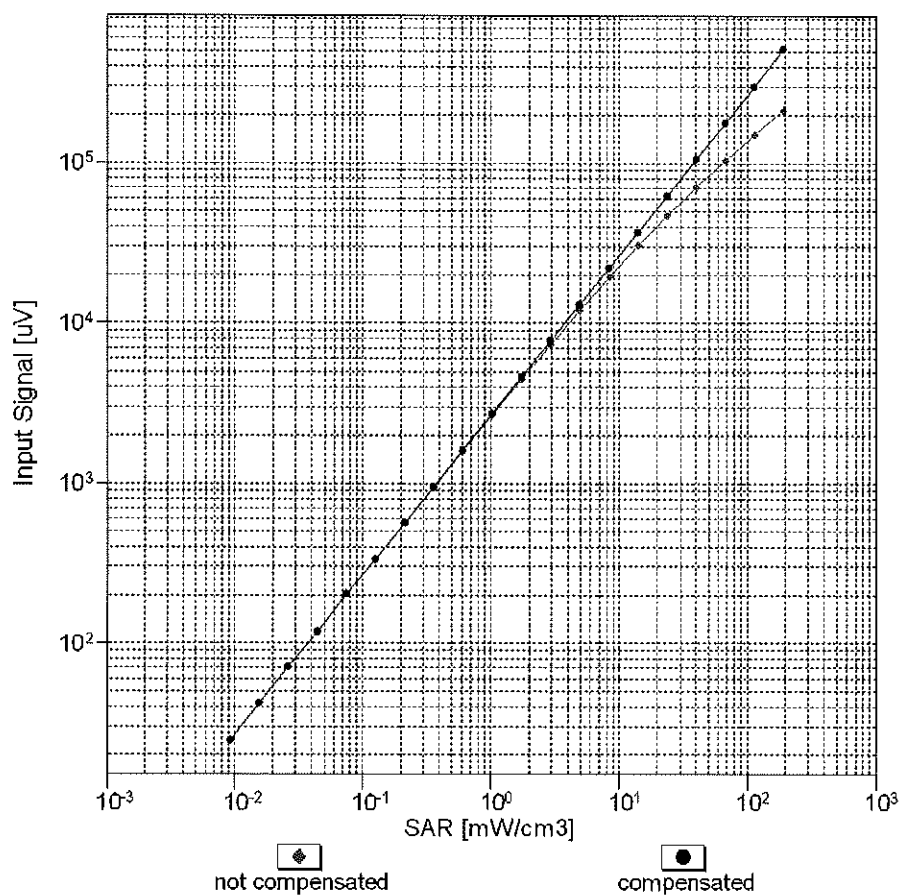


f=1800 MHz,R22



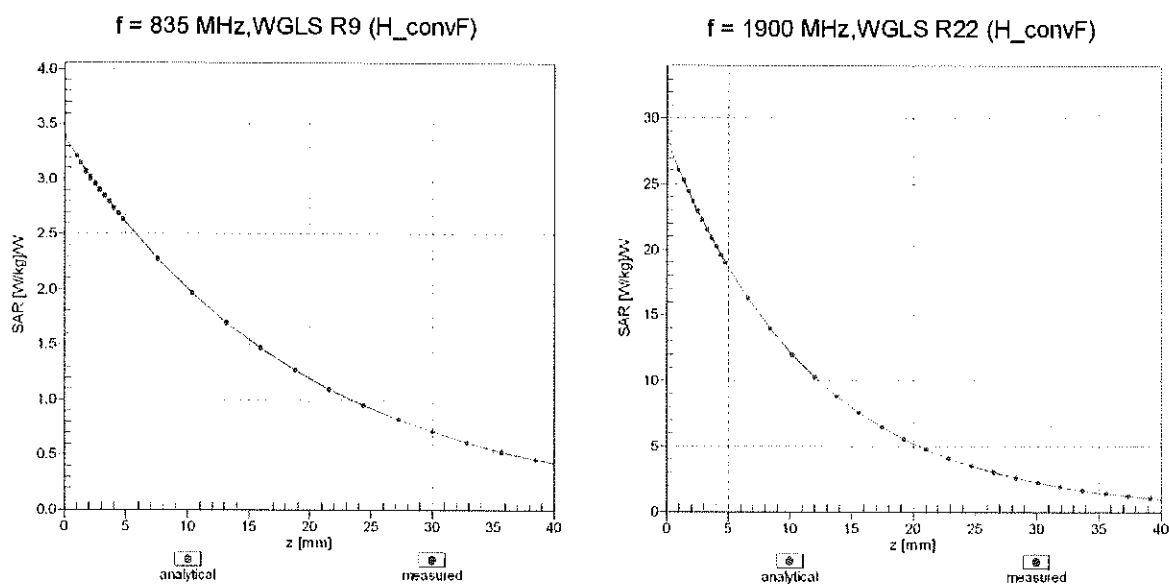
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$ )



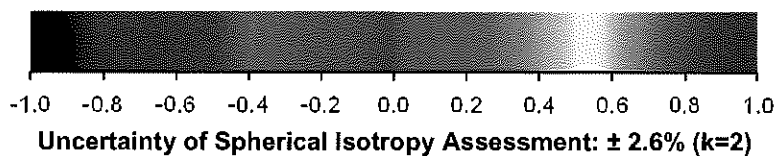
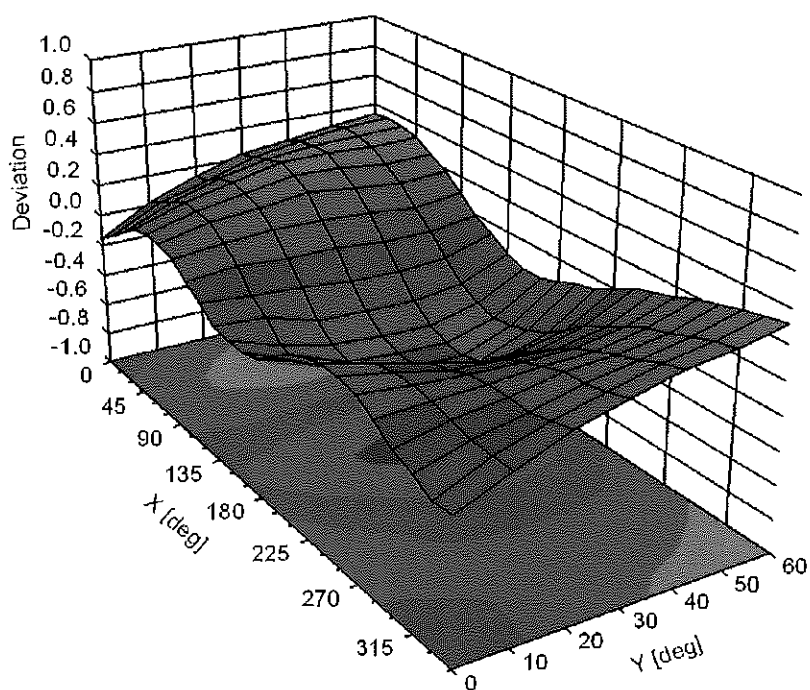
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



**Appendix: Modulation Calibration Parameters**

| UID   | Rev | Communication System Name                           | Group     | PAR (dB) | Unc <sup>E</sup> (k=2) |
|-------|-----|-----------------------------------------------------|-----------|----------|------------------------|
| 0     |     | CW                                                  | CW        | 0.00     | ± 4.7 %                |
| 10010 | CAA | SAR Validation (Square, 100ms, 10ms)                | Test      | 10.00    | ± 9.6 %                |
| 10011 | CAB | UMTS-FDD (WCDMA)                                    | WCDMA     | 2.91     | ± 9.6 %                |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)            | WLAN      | 1.87     | ± 9.6 %                |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)       | WLAN      | 9.46     | ± 9.6 %                |
| 10021 | DAC | GSM-FDD (TDMA, GMSK)                                | GSM       | 9.39     | ± 9.6 %                |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0)                         | GSM       | 9.57     | ± 9.6 %                |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                       | GSM       | 6.56     | ± 9.6 %                |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                         | GSM       | 12.62    | ± 9.6 %                |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                       | GSM       | 9.55     | ± 9.6 %                |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)                     | GSM       | 4.80     | ± 9.6 %                |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)                   | GSM       | 3.55     | ± 9.6 %                |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)                     | GSM       | 7.78     | ± 9.6 %                |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)                 | Bluetooth | 5.30     | ± 9.6 %                |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)                 | Bluetooth | 1.87     | ± 9.6 %                |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | Bluetooth | 1.16     | ± 9.6 %                |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | Bluetooth | 7.74     | ± 9.6 %                |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | Bluetooth | 4.53     | ± 9.6 %                |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | Bluetooth | 3.83     | ± 9.6 %                |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | Bluetooth | 8.01     | ± 9.6 %                |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | Bluetooth | 4.77     | ± 9.6 %                |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | Bluetooth | 4.10     | ± 9.6 %                |
| 10039 | CAB | CDMA2000 (1xRTT, RC1)                               | CDMA2000  | 4.57     | ± 9.6 %                |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | AMPS      | 7.78     | ± 9.6 %                |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | AMPS      | 0.00     | ± 9.6 %                |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | DECT      | 13.80    | ± 9.6 %                |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | DECT      | 10.79    | ± 9.6 %                |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | TD-SCDMA  | 11.01    | ± 9.6 %                |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | GSM       | 6.52     | ± 9.6 %                |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | WLAN      | 2.12     | ± 9.6 %                |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | WLAN      | 2.83     | ± 9.6 %                |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)           | WLAN      | 3.60     | ± 9.6 %                |
| 10062 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)            | WLAN      | 8.68     | ± 9.6 %                |
| 10063 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)            | WLAN      | 8.63     | ± 9.6 %                |
| 10064 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)           | WLAN      | 9.09     | ± 9.6 %                |
| 10065 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)           | WLAN      | 9.00     | ± 9.6 %                |
| 10066 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)           | WLAN      | 9.38     | ± 9.6 %                |
| 10067 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)           | WLAN      | 10.12    | ± 9.6 %                |
| 10068 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)           | WLAN      | 10.24    | ± 9.6 %                |
| 10069 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)           | WLAN      | 10.56    | ± 9.6 %                |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)       | WLAN      | 9.83     | ± 9.6 %                |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)      | WLAN      | 9.62     | ± 9.6 %                |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)      | WLAN      | 9.94     | ± 9.6 %                |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)      | WLAN      | 10.30    | ± 9.6 %                |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)      | WLAN      | 10.77    | ± 9.6 %                |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)      | WLAN      | 10.94    | ± 9.6 %                |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)      | WLAN      | 11.00    | ± 9.6 %                |
| 10081 | CAB | CDMA2000 (1xRTT, RC3)                               | CDMA2000  | 3.97     | ± 9.6 %                |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | AMPS      | 4.77     | ± 9.6 %                |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | GSM       | 6.56     | ± 9.6 %                |
| 10097 | CAB | UMTS-FDD (HSDPA)                                    | WCDMA     | 3.98     | ± 9.6 %                |
| 10098 | CAB | UMTS-FDD (HSUPA, Subtest 2)                         | WCDMA     | 3.98     | ± 9.6 %                |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | GSM       | 9.55     | ± 9.6 %                |
| 10100 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | LTE-FDD   | 5.67     | ± 9.6 %                |
| 10101 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | LTE-FDD   | 6.42     | ± 9.6 %                |
| 10102 | CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | LTE-FDD   | 6.60     | ± 9.6 %                |
| 10103 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | LTE-TDD   | 9.29     | ± 9.6 %                |
| 10104 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | LTE-TDD   | 9.97     | ± 9.6 %                |
| 10105 | CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | LTE-TDD   | 10.01    | ± 9.6 %                |
| 10108 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | LTE-FDD   | 5.80     | ± 9.6 %                |

|       |     |                                                |         |       |         |
|-------|-----|------------------------------------------------|---------|-------|---------|
| 10109 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)     | LTE-FDD | 6.43  | ± 9.6 % |
| 10110 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10111 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)      | LTE-FDD | 6.44  | ± 9.6 % |
| 10112 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | LTE-FDD | 6.59  | ± 9.6 % |
| 10113 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10114 | CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | WLAN    | 8.10  | ± 9.6 % |
| 10115 | CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | WLAN    | 8.46  | ± 9.6 % |
| 10116 | CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN    | 8.15  | ± 9.6 % |
| 10117 | CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | WLAN    | 8.07  | ± 9.6 % |
| 10118 | CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | WLAN    | 8.59  | ± 9.6 % |
| 10119 | CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | WLAN    | 8.13  | ± 9.6 % |
| 10140 | CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | LTE-FDD | 6.49  | ± 9.6 % |
| 10141 | CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | LTE-FDD | 6.53  | ± 9.6 % |
| 10142 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | LTE-FDD | 5.73  | ± 9.6 % |
| 10143 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | LTE-FDD | 6.35  | ± 9.6 % |
| 10144 | CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | LTE-FDD | 6.65  | ± 9.6 % |
| 10145 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | LTE-FDD | 5.76  | ± 9.6 % |
| 10146 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | LTE-FDD | 6.41  | ± 9.6 % |
| 10147 | CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | LTE-FDD | 6.72  | ± 9.6 % |
| 10149 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-FDD | 6.42  | ± 9.6 % |
| 10150 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-FDD | 6.60  | ± 9.6 % |
| 10151 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)        | LTE-TDD | 9.28  | ± 9.6 % |
| 10152 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-TDD | 9.92  | ± 9.6 % |
| 10153 | CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-TDD | 10.05 | ± 9.6 % |
| 10154 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)        | LTE-FDD | 5.75  | ± 9.6 % |
| 10155 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10156 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         | LTE-FDD | 5.79  | ± 9.6 % |
| 10157 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)       | LTE-FDD | 6.49  | ± 9.6 % |
| 10158 | CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)      | LTE-FDD | 6.62  | ± 9.6 % |
| 10159 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)       | LTE-FDD | 6.56  | ± 9.6 % |
| 10160 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)        | LTE-FDD | 5.82  | ± 9.6 % |
| 10161 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)      | LTE-FDD | 6.43  | ± 9.6 % |
| 10162 | CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)      | LTE-FDD | 6.58  | ± 9.6 % |
| 10166 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)       | LTE-FDD | 5.46  | ± 9.6 % |
| 10167 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)     | LTE-FDD | 6.21  | ± 9.6 % |
| 10168 | CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)     | LTE-FDD | 6.79  | ± 9.6 % |
| 10169 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-FDD | 5.73  | ± 9.6 % |
| 10170 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10171 | AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-FDD | 6.49  | ± 9.6 % |
| 10172 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-TDD | 9.21  | ± 9.6 % |
| 10173 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-TDD | 9.48  | ± 9.6 % |
| 10174 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-TDD | 10.25 | ± 9.6 % |
| 10175 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)          | LTE-FDD | 5.72  | ± 9.6 % |
| 10176 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10177 | CAI | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)           | LTE-FDD | 5.73  | ± 9.6 % |
| 10178 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)         | LTE-FDD | 6.52  | ± 9.6 % |
| 10179 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)        | LTE-FDD | 6.50  | ± 9.6 % |
| 10180 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)         | LTE-FDD | 6.50  | ± 9.6 % |
| 10181 | CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)          | LTE-FDD | 5.72  | ± 9.6 % |
| 10182 | CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)        | LTE-FDD | 6.52  | ± 9.6 % |
| 10183 | AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)        | LTE-FDD | 6.50  | ± 9.6 % |
| 10184 | CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)           | LTE-FDD | 5.73  | ± 9.6 % |
| 10185 | CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)         | LTE-FDD | 6.51  | ± 9.6 % |
| 10186 | AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)         | LTE-FDD | 6.50  | ± 9.6 % |
| 10187 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         | LTE-FDD | 5.73  | ± 9.6 % |
| 10188 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)       | LTE-FDD | 6.52  | ± 9.6 % |
| 10189 | AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)       | LTE-FDD | 6.50  | ± 9.6 % |
| 10193 | CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)   | WLAN    | 8.09  | ± 9.6 % |
| 10194 | CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)  | WLAN    | 8.12  | ± 9.6 % |
| 10195 | CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)  | WLAN    | 8.21  | ± 9.6 % |
| 10196 | CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)        | WLAN    | 8.10  | ± 9.6 % |
| 10197 | CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)       | WLAN    | 8.13  | ± 9.6 % |
| 10198 | CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)       | WLAN    | 8.27  | ± 9.6 % |
| 10219 | CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)        | WLAN    | 8.03  | ± 9.6 % |

|       |     |                                             |          |       |         |
|-------|-----|---------------------------------------------|----------|-------|---------|
| 10220 | CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)  | WLAN     | 8.13  | ± 9.6 % |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)  | WLAN     | 8.27  | ± 9.6 % |
| 10222 | CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)      | WLAN     | 8.06  | ± 9.6 % |
| 10223 | CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)    | WLAN     | 8.48  | ± 9.6 % |
| 10224 | CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)   | WLAN     | 8.08  | ± 9.6 % |
| 10225 | CAB | UMTS-FDD (HSPA+)                            | WCDMA    | 5.97  | ± 9.6 % |
| 10226 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)    | LTE-TDD  | 9.49  | ± 9.6 % |
| 10227 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)    | LTE-TDD  | 10.26 | ± 9.6 % |
| 10228 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)      | LTE-TDD  | 9.22  | ± 9.6 % |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)      | LTE-TDD  | 9.48  | ± 9.6 % |
| 10230 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)      | LTE-TDD  | 10.25 | ± 9.6 % |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)        | LTE-TDD  | 9.19  | ± 9.6 % |
| 10232 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)      | LTE-TDD  | 9.48  | ± 9.6 % |
| 10233 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)      | LTE-TDD  | 10.25 | ± 9.6 % |
| 10234 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)        | LTE-TDD  | 9.21  | ± 9.6 % |
| 10235 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)     | LTE-TDD  | 9.48  | ± 9.6 % |
| 10236 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)     | LTE-TDD  | 10.25 | ± 9.6 % |
| 10237 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)       | LTE-TDD  | 9.21  | ± 9.6 % |
| 10238 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)     | LTE-TDD  | 9.48  | ± 9.6 % |
| 10239 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)     | LTE-TDD  | 10.25 | ± 9.6 % |
| 10240 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)       | LTE-TDD  | 9.21  | ± 9.6 % |
| 10241 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)  | LTE-TDD  | 9.82  | ± 9.6 % |
| 10242 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)  | LTE-TDD  | 9.86  | ± 9.6 % |
| 10243 | CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)    | LTE-TDD  | 9.46  | ± 9.6 % |
| 10244 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)    | LTE-TDD  | 10.06 | ± 9.6 % |
| 10245 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)    | LTE-TDD  | 10.06 | ± 9.6 % |
| 10246 | CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)      | LTE-TDD  | 9.30  | ± 9.6 % |
| 10247 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)    | LTE-TDD  | 9.91  | ± 9.6 % |
| 10248 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)    | LTE-TDD  | 10.09 | ± 9.6 % |
| 10249 | CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)      | LTE-TDD  | 9.29  | ± 9.6 % |
| 10250 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)   | LTE-TDD  | 9.81  | ± 9.6 % |
| 10251 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)   | LTE-TDD  | 10.17 | ± 9.6 % |
| 10252 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)     | LTE-TDD  | 9.24  | ± 9.6 % |
| 10253 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)   | LTE-TDD  | 9.90  | ± 9.6 % |
| 10254 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)   | LTE-TDD  | 10.14 | ± 9.6 % |
| 10255 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | LTE-TDD  | 9.20  | ± 9.6 % |
| 10256 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-TDD  | 9.96  | ± 9.6 % |
| 10257 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-TDD  | 10.08 | ± 9.6 % |
| 10258 | CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | LTE-TDD  | 9.34  | ± 9.6 % |
| 10259 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | LTE-TDD  | 9.98  | ± 9.6 % |
| 10260 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | LTE-TDD  | 9.97  | ± 9.6 % |
| 10261 | CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | LTE-TDD  | 9.24  | ± 9.6 % |
| 10262 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | LTE-TDD  | 9.83  | ± 9.6 % |
| 10263 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | LTE-TDD  | 10.16 | ± 9.6 % |
| 10264 | CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | LTE-TDD  | 9.23  | ± 9.6 % |
| 10265 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | LTE-TDD  | 9.92  | ± 9.6 % |
| 10266 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | LTE-TDD  | 10.07 | ± 9.6 % |
| 10267 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | LTE-TDD  | 9.30  | ± 9.6 % |
| 10268 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | LTE-TDD  | 10.06 | ± 9.6 % |
| 10269 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | LTE-TDD  | 10.13 | ± 9.6 % |
| 10270 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | LTE-TDD  | 9.58  | ± 9.6 % |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)   | WCDMA    | 4.87  | ± 9.6 % |
| 10275 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)    | WCDMA    | 3.96  | ± 9.6 % |
| 10277 | CAA | PHS (QPSK)                                  | PHS      | 11.81 | ± 9.6 % |
| 10278 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)          | PHS      | 11.81 | ± 9.6 % |
| 10279 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)         | PHS      | 12.18 | ± 9.6 % |
| 10290 | AAB | CDMA2000, RC1, SO55, Full Rate              | CDMA2000 | 3.91  | ± 9.6 % |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate              | CDMA2000 | 3.46  | ± 9.6 % |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate              | CDMA2000 | 3.39  | ± 9.6 % |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate               | CDMA2000 | 3.50  | ± 9.6 % |
| 10295 | AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.       | CDMA2000 | 12.49 | ± 9.6 % |
| 10297 | AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)     | LTE-FDD  | 5.81  | ± 9.6 % |
| 10298 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)      | LTE-FDD  | 5.72  | ± 9.6 % |
| 10299 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)    | LTE-FDD  | 6.39  | ± 9.6 % |

|       |     |                                                                                 |          |       |         |
|-------|-----|---------------------------------------------------------------------------------|----------|-------|---------|
| 10300 | AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                                        | LTE-FDD  | 6.60  | ± 9.6 % |
| 10301 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                              | WiMAX    | 12.03 | ± 9.6 % |
| 10302 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)              | WiMAX    | 12.57 | ± 9.6 % |
| 10303 | AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                             | WiMAX    | 12.52 | ± 9.6 % |
| 10304 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                             | WiMAX    | 11.86 | ± 9.6 % |
| 10305 | AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)                | WiMAX    | 15.24 | ± 9.6 % |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)                | WiMAX    | 14.67 | ± 9.6 % |
| 10307 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)                 | WiMAX    | 14.49 | ± 9.6 % |
| 10308 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                            | WiMAX    | 14.46 | ± 9.6 % |
| 10309 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)             | WiMAX    | 14.58 | ± 9.6 % |
| 10310 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)              | WiMAX    | 14.57 | ± 9.6 % |
| 10311 | AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                                        | LTE-FDD  | 6.06  | ± 9.6 % |
| 10313 | AAA | iDEN 1:3                                                                        | iDEN     | 10.51 | ± 9.6 % |
| 10314 | AAA | iDEN 1:6                                                                        | iDEN     | 13.48 | ± 9.6 % |
| 10315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)                       | WLAN     | 1.71  | ± 9.6 % |
| 10316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)                   | WLAN     | 8.36  | ± 9.6 % |
| 10317 | AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)                         | WLAN     | 8.36  | ± 9.6 % |
| 10352 | AAA | Pulse Waveform (200Hz, 10%)                                                     | Generic  | 10.00 | ± 9.6 % |
| 10353 | AAA | Pulse Waveform (200Hz, 20%)                                                     | Generic  | 6.99  | ± 9.6 % |
| 10354 | AAA | Pulse Waveform (200Hz, 40%)                                                     | Generic  | 3.98  | ± 9.6 % |
| 10355 | AAA | Pulse Waveform (200Hz, 60%)                                                     | Generic  | 2.22  | ± 9.6 % |
| 10356 | AAA | Pulse Waveform (200Hz, 80%)                                                     | Generic  | 0.97  | ± 9.6 % |
| 10387 | AAA | QPSK Waveform, 1 MHz                                                            | Generic  | 5.10  | ± 9.6 % |
| 10388 | AAA | QPSK Waveform, 10 MHz                                                           | Generic  | 5.22  | ± 9.6 % |
| 10396 | AAA | 64-QAM Waveform, 100 kHz                                                        | Generic  | 6.27  | ± 9.6 % |
| 10399 | AAA | 64-QAM Waveform, 40 MHz                                                         | Generic  | 6.27  | ± 9.6 % |
| 10400 | AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.37  | ± 9.6 % |
| 10401 | AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.60  | ± 9.6 % |
| 10402 | AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | WLAN     | 8.53  | ± 9.6 % |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | CDMA2000 | 3.76  | ± 9.6 % |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | CDMA2000 | 3.77  | ± 9.6 % |
| 10406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | CDMA2000 | 5.22  | ± 9.6 % |
| 10410 | AAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | LTE-TDD  | 7.82  | ± 9.6 % |
| 10414 | AAA | WLAN CCDF, 64-QAM, 40MHz                                                        | Generic  | 8.54  | ± 9.6 % |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | WLAN     | 1.54  | ± 9.6 % |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | WLAN     | 8.23  | ± 9.6 % |
| 10417 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | WLAN     | 8.23  | ± 9.6 % |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | WLAN     | 8.14  | ± 9.6 % |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | WLAN     | 8.19  | ± 9.6 % |
| 10422 | AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | WLAN     | 8.32  | ± 9.6 % |
| 10423 | AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | WLAN     | 8.47  | ± 9.6 % |
| 10424 | AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | WLAN     | 8.40  | ± 9.6 % |
| 10425 | AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | WLAN     | 8.41  | ± 9.6 % |
| 10426 | AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | WLAN     | 8.45  | ± 9.6 % |
| 10427 | AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                                  | WLAN     | 8.41  | ± 9.6 % |
| 10430 | AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                                                | LTE-FDD  | 8.28  | ± 9.6 % |
| 10431 | AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.38  | ± 9.6 % |
| 10432 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34  | ± 9.6 % |
| 10433 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34  | ± 9.6 % |
| 10434 | AAA | W-CDMA (BS Test Model 1, 64 DPCH)                                               | WCDMA    | 8.60  | ± 9.6 % |
| 10435 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82  | ± 9.6 % |
| 10447 | AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                                  | LTE-FDD  | 7.56  | ± 9.6 % |
| 10448 | AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.53  | ± 9.6 % |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.51  | ± 9.6 % |
| 10450 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.48  | ± 9.6 % |

|       |     |                                                                        |          |      |         |
|-------|-----|------------------------------------------------------------------------|----------|------|---------|
| 10451 | AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                        | WCDMA    | 7.59 | ± 9.6 % |
| 10456 | AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)                   | WLAN     | 8.63 | ± 9.6 % |
| 10457 | AAA | UMTS-FDD (DC-HSDPA)                                                    | WCDMA    | 6.62 | ± 9.6 % |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                                 | CDMA2000 | 6.55 | ± 9.6 % |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                                 | CDMA2000 | 8.25 | ± 9.6 % |
| 10460 | AAA | UMTS-FDD (WCDMA, AMR)                                                  | WCDMA    | 2.39 | ± 9.6 % |
| 10461 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.82 | ± 9.6 % |
| 10462 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.30 | ± 9.6 % |
| 10463 | AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.56 | ± 9.6 % |
| 10464 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)       | LTE-TDD  | 7.82 | ± 9.6 % |
| 10465 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.32 | ± 9.6 % |
| 10466 | AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.57 | ± 9.6 % |
| 10467 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)       | LTE-TDD  | 7.82 | ± 9.6 % |
| 10468 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.32 | ± 9.6 % |
| 10469 | AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 8.56 | ± 9.6 % |
| 10470 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)      | LTE-TDD  | 7.82 | ± 9.6 % |
| 10471 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10472 | AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10473 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)      | LTE-TDD  | 7.82 | ± 9.6 % |
| 10474 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10475 | AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10477 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.32 | ± 9.6 % |
| 10478 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 8.57 | ± 9.6 % |
| 10479 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 7.74 | ± 9.6 % |
| 10480 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9) | LTE-TDD  | 8.18 | ± 9.6 % |
| 10481 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9) | LTE-TDD  | 8.45 | ± 9.6 % |
| 10482 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.71 | ± 9.6 % |
| 10483 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.39 | ± 9.6 % |
| 10484 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.47 | ± 9.6 % |
| 10485 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)     | LTE-TDD  | 7.59 | ± 9.6 % |
| 10486 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.38 | ± 9.6 % |
| 10487 | AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)   | LTE-TDD  | 8.60 | ± 9.6 % |
| 10488 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 7.70 | ± 9.6 % |
| 10489 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)  | LTE-TDD  | 8.31 | ± 9.6 % |
| 10490 | AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)  | LTE-TDD  | 8.54 | ± 9.6 % |
| 10491 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL<br>Subframe=2,3,4,7,8,9)    | LTE-TDD  | 7.74 | ± 9.6 % |

|       |     |                                                                      |         |      |         |
|-------|-----|----------------------------------------------------------------------|---------|------|---------|
| 10492 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.41 | ± 9.6 % |
| 10493 | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.55 | ± 9.6 % |
| 10494 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74 | ± 9.6 % |
| 10495 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.37 | ± 9.6 % |
| 10496 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10497 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 7.67 | ± 9.6 % |
| 10498 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.40 | ± 9.6 % |
| 10499 | AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68 | ± 9.6 % |
| 10500 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.67 | ± 9.6 % |
| 10501 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.44 | ± 9.6 % |
| 10502 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.52 | ± 9.6 % |
| 10503 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.72 | ± 9.6 % |
| 10504 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31 | ± 9.6 % |
| 10505 | AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54 | ± 9.6 % |
| 10506 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10507 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.36 | ± 9.6 % |
| 10508 | AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.55 | ± 9.6 % |
| 10509 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.99 | ± 9.6 % |
| 10510 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.49 | ± 9.6 % |
| 10511 | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.51 | ± 9.6 % |
| 10512 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74 | ± 9.6 % |
| 10513 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.42 | ± 9.6 % |
| 10514 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45 | ± 9.6 % |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)            | WLAN    | 1.58 | ± 9.6 % |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)          | WLAN    | 1.57 | ± 9.6 % |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)           | WLAN    | 1.58 | ± 9.6 % |
| 10518 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)            | WLAN    | 8.23 | ± 9.6 % |
| 10519 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)           | WLAN    | 8.39 | ± 9.6 % |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)           | WLAN    | 8.12 | ± 9.6 % |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)           | WLAN    | 7.97 | ± 9.6 % |
| 10522 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)           | WLAN    | 8.45 | ± 9.6 % |
| 10523 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)           | WLAN    | 8.08 | ± 9.6 % |
| 10524 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)           | WLAN    | 8.27 | ± 9.6 % |
| 10525 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10526 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)                    | WLAN    | 8.42 | ± 9.6 % |
| 10527 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)                    | WLAN    | 8.21 | ± 9.6 % |
| 10528 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10529 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)                    | WLAN    | 8.36 | ± 9.6 % |
| 10531 | AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)                    | WLAN    | 8.43 | ± 9.6 % |
| 10532 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)                    | WLAN    | 8.29 | ± 9.6 % |
| 10533 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)                    | WLAN    | 8.38 | ± 9.6 % |
| 10534 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)                    | WLAN    | 8.45 | ± 9.6 % |

|       |     |                                                                 |      |      |         |
|-------|-----|-----------------------------------------------------------------|------|------|---------|
| 10535 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)               | WLAN | 8.45 | ± 9.6 % |
| 10536 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)               | WLAN | 8.32 | ± 9.6 % |
| 10537 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)               | WLAN | 8.44 | ± 9.6 % |
| 10538 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)               | WLAN | 8.54 | ± 9.6 % |
| 10540 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)               | WLAN | 8.39 | ± 9.6 % |
| 10541 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)               | WLAN | 8.46 | ± 9.6 % |
| 10542 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)               | WLAN | 8.65 | ± 9.6 % |
| 10543 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)               | WLAN | 8.65 | ± 9.6 % |
| 10544 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)               | WLAN | 8.47 | ± 9.6 % |
| 10545 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)               | WLAN | 8.55 | ± 9.6 % |
| 10546 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)               | WLAN | 8.35 | ± 9.6 % |
| 10547 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)               | WLAN | 8.49 | ± 9.6 % |
| 10548 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)               | WLAN | 8.37 | ± 9.6 % |
| 10550 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)               | WLAN | 8.38 | ± 9.6 % |
| 10551 | AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)               | WLAN | 8.50 | ± 9.6 % |
| 10552 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)               | WLAN | 8.42 | ± 9.6 % |
| 10553 | AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)               | WLAN | 8.45 | ± 9.6 % |
| 10554 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)              | WLAN | 8.48 | ± 9.6 % |
| 10555 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)              | WLAN | 8.47 | ± 9.6 % |
| 10556 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)              | WLAN | 8.50 | ± 9.6 % |
| 10557 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)              | WLAN | 8.52 | ± 9.6 % |
| 10558 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | WLAN | 8.61 | ± 9.6 % |
| 10560 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | WLAN | 8.73 | ± 9.6 % |
| 10561 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | WLAN | 8.56 | ± 9.6 % |
| 10562 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | WLAN | 8.69 | ± 9.6 % |
| 10563 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | WLAN | 8.77 | ± 9.6 % |
| 10564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | WLAN | 8.25 | ± 9.6 % |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.45 | ± 9.6 % |
| 10566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.13 | ± 9.6 % |
| 10567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 8.00 | ± 9.6 % |
| 10568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.37 | ± 9.6 % |
| 10569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.10 | ± 9.6 % |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.30 | ± 9.6 % |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | WLAN | 1.99 | ± 9.6 % |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | WLAN | 1.99 | ± 9.6 % |
| 10573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | WLAN | 1.98 | ± 9.6 % |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | WLAN | 1.98 | ± 9.6 % |
| 10575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | WLAN | 8.59 | ± 9.6 % |
| 10576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | WLAN | 8.60 | ± 9.6 % |
| 10577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | WLAN | 8.70 | ± 9.6 % |
| 10578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | WLAN | 8.49 | ± 9.6 % |
| 10579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | WLAN | 8.36 | ± 9.6 % |
| 10580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | WLAN | 8.76 | ± 9.6 % |
| 10581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ± 9.6 % |
| 10582 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | WLAN | 8.67 | ± 9.6 % |
| 10583 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | WLAN | 8.59 | ± 9.6 % |
| 10584 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | WLAN | 8.60 | ± 9.6 % |
| 10585 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | WLAN | 8.70 | ± 9.6 % |
| 10586 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | WLAN | 8.49 | ± 9.6 % |
| 10587 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | WLAN | 8.36 | ± 9.6 % |

|       |     |                                                            |          |       |         |
|-------|-----|------------------------------------------------------------|----------|-------|---------|
| 10588 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | WLAN     | 8.76  | ± 9.6 % |
| 10589 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | WLAN     | 8.35  | ± 9.6 % |
| 10590 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | WLAN     | 8.67  | ± 9.6 % |
| 10591 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)      | WLAN     | 8.63  | ± 9.6 % |
| 10592 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)      | WLAN     | 8.79  | ± 9.6 % |
| 10593 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)      | WLAN     | 8.64  | ± 9.6 % |
| 10594 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)      | WLAN     | 8.74  | ± 9.6 % |
| 10595 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)      | WLAN     | 8.74  | ± 9.6 % |
| 10596 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)      | WLAN     | 8.71  | ± 9.6 % |
| 10597 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)      | WLAN     | 8.72  | ± 9.6 % |
| 10598 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)      | WLAN     | 8.50  | ± 9.6 % |
| 10599 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)      | WLAN     | 8.79  | ± 9.6 % |
| 10600 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)      | WLAN     | 8.88  | ± 9.6 % |
| 10601 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)      | WLAN     | 8.82  | ± 9.6 % |
| 10602 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)      | WLAN     | 8.94  | ± 9.6 % |
| 10603 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)      | WLAN     | 9.03  | ± 9.6 % |
| 10604 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)      | WLAN     | 8.76  | ± 9.6 % |
| 10605 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)      | WLAN     | 8.97  | ± 9.6 % |
| 10606 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)      | WLAN     | 8.82  | ± 9.6 % |
| 10607 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.64  | ± 9.6 % |
| 10608 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10609 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.57  | ± 9.6 % |
| 10610 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.78  | ± 9.6 % |
| 10611 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.70  | ± 9.6 % |
| 10612 | AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10613 | AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.94  | ± 9.6 % |
| 10614 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.59  | ± 9.6 % |
| 10615 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10616 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10617 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10618 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.58  | ± 9.6 % |
| 10619 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.86  | ± 9.6 % |
| 10620 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.87  | ± 9.6 % |
| 10621 | AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.77  | ± 9.6 % |
| 10622 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.68  | ± 9.6 % |
| 10623 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.82  | ± 9.6 % |
| 10624 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.96  | ± 9.6 % |
| 10625 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)          | WLAN     | 8.96  | ± 9.6 % |
| 10626 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)          | WLAN     | 8.83  | ± 9.6 % |
| 10627 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)          | WLAN     | 8.88  | ± 9.6 % |
| 10628 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)          | WLAN     | 8.71  | ± 9.6 % |
| 10629 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)          | WLAN     | 8.85  | ± 9.6 % |
| 10630 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)          | WLAN     | 8.72  | ± 9.6 % |
| 10631 | AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10632 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)          | WLAN     | 8.74  | ± 9.6 % |
| 10633 | AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)          | WLAN     | 8.83  | ± 9.6 % |
| 10634 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)          | WLAN     | 8.80  | ± 9.6 % |
| 10635 | AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)          | WLAN     | 8.81  | ± 9.6 % |
| 10636 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)         | WLAN     | 8.83  | ± 9.6 % |
| 10637 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)         | WLAN     | 8.79  | ± 9.6 % |
| 10638 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)         | WLAN     | 8.86  | ± 9.6 % |
| 10639 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)         | WLAN     | 8.85  | ± 9.6 % |
| 10640 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)         | WLAN     | 8.98  | ± 9.6 % |
| 10641 | AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)         | WLAN     | 9.06  | ± 9.6 % |
| 10642 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)         | WLAN     | 9.06  | ± 9.6 % |
| 10643 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)         | WLAN     | 8.89  | ± 9.6 % |
| 10644 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)         | WLAN     | 9.05  | ± 9.6 % |
| 10645 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)         | WLAN     | 9.11  | ± 9.6 % |
| 10646 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)      | LTE-TDD  | 11.96 | ± 9.6 % |
| 10647 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)     | LTE-TDD  | 11.96 | ± 9.6 % |
| 10648 | AAA | CDMA2000 (1x Advanced)                                     | CDMA2000 | 3.45  | ± 9.6 % |
| 10652 | AAD | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)             | LTE-TDD  | 6.91  | ± 9.6 % |
| 10653 | AAD | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)            | LTE-TDD  | 7.42  | ± 9.6 % |
| 10654 | AAD | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)            | LTE-TDD  | 6.96  | ± 9.6 % |

|       |     |                                                 |           |       |         |
|-------|-----|-------------------------------------------------|-----------|-------|---------|
| 10655 | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD   | 7.21  | ± 9.6 % |
| 10658 | AAA | Pulse Waveform (200Hz, 10%)                     | Test      | 10.00 | ± 9.6 % |
| 10659 | AAA | Pulse Waveform (200Hz, 20%)                     | Test      | 6.99  | ± 9.6 % |
| 10660 | AAA | Pulse Waveform (200Hz, 40%)                     | Test      | 3.98  | ± 9.6 % |
| 10661 | AAA | Pulse Waveform (200Hz, 60%)                     | Test      | 2.22  | ± 9.6 % |
| 10662 | AAA | Pulse Waveform (200Hz, 80%)                     | Test      | 0.97  | ± 9.6 % |
| 10670 | AAA | Bluetooth Low Energy                            | Bluetooth | 2.19  | ± 9.6 % |
| 10671 | AAA | IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle)    | WLAN      | 9.09  | ± 9.6 % |
| 10672 | AAA | IEEE 802.11ax (20MHz, MCS1, 90pc duty cycle)    | WLAN      | 8.57  | ± 9.6 % |
| 10673 | AAA | IEEE 802.11ax (20MHz, MCS2, 90pc duty cycle)    | WLAN      | 8.78  | ± 9.6 % |
| 10674 | AAA | IEEE 802.11ax (20MHz, MCS3, 90pc duty cycle)    | WLAN      | 8.74  | ± 9.6 % |
| 10675 | AAA | IEEE 802.11ax (20MHz, MCS4, 90pc duty cycle)    | WLAN      | 8.90  | ± 9.6 % |
| 10676 | AAA | IEEE 802.11ax (20MHz, MCS5, 90pc duty cycle)    | WLAN      | 8.77  | ± 9.6 % |
| 10677 | AAA | IEEE 802.11ax (20MHz, MCS6, 90pc duty cycle)    | WLAN      | 8.73  | ± 9.6 % |
| 10678 | AAA | IEEE 802.11ax (20MHz, MCS7, 90pc duty cycle)    | WLAN      | 8.78  | ± 9.6 % |
| 10679 | AAA | IEEE 802.11ax (20MHz, MCS8, 90pc duty cycle)    | WLAN      | 8.89  | ± 9.6 % |
| 10680 | AAA | IEEE 802.11ax (20MHz, MCS9, 90pc duty cycle)    | WLAN      | 8.80  | ± 9.6 % |
| 10681 | AAA | IEEE 802.11ax (20MHz, MCS10, 90pc duty cycle)   | WLAN      | 8.62  | ± 9.6 % |
| 10682 | AAA | IEEE 802.11ax (20MHz, MCS11, 90pc duty cycle)   | WLAN      | 8.83  | ± 9.6 % |
| 10683 | AAA | IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle)    | WLAN      | 8.42  | ± 9.6 % |
| 10684 | AAA | IEEE 802.11ax (20MHz, MCS1, 99pc duty cycle)    | WLAN      | 8.26  | ± 9.6 % |
| 10685 | AAA | IEEE 802.11ax (20MHz, MCS2, 99pc duty cycle)    | WLAN      | 8.33  | ± 9.6 % |
| 10686 | AAA | IEEE 802.11ax (20MHz, MCS3, 99pc duty cycle)    | WLAN      | 8.28  | ± 9.6 % |
| 10687 | AAA | IEEE 802.11ax (20MHz, MCS4, 99pc duty cycle)    | WLAN      | 8.45  | ± 9.6 % |
| 10688 | AAA | IEEE 802.11ax (20MHz, MCS5, 99pc duty cycle)    | WLAN      | 8.29  | ± 9.6 % |
| 10689 | AAA | IEEE 802.11ax (20MHz, MCS6, 99pc duty cycle)    | WLAN      | 8.55  | ± 9.6 % |
| 10690 | AAA | IEEE 802.11ax (20MHz, MCS7, 99pc duty cycle)    | WLAN      | 8.29  | ± 9.6 % |
| 10691 | AAA | IEEE 802.11ax (20MHz, MCS8, 99pc duty cycle)    | WLAN      | 8.25  | ± 9.6 % |
| 10692 | AAA | IEEE 802.11ax (20MHz, MCS9, 99pc duty cycle)    | WLAN      | 8.29  | ± 9.6 % |
| 10693 | AAA | IEEE 802.11ax (20MHz, MCS10, 99pc duty cycle)   | WLAN      | 8.25  | ± 9.6 % |
| 10694 | AAA | IEEE 802.11ax (20MHz, MCS11, 99pc duty cycle)   | WLAN      | 8.57  | ± 9.6 % |
| 10695 | AAA | IEEE 802.11ax (40MHz, MCS0, 90pc duty cycle)    | WLAN      | 8.78  | ± 9.6 % |
| 10696 | AAA | IEEE 802.11ax (40MHz, MCS1, 90pc duty cycle)    | WLAN      | 8.91  | ± 9.6 % |
| 10697 | AAA | IEEE 802.11ax (40MHz, MCS2, 90pc duty cycle)    | WLAN      | 8.61  | ± 9.6 % |
| 10698 | AAA | IEEE 802.11ax (40MHz, MCS3, 90pc duty cycle)    | WLAN      | 8.89  | ± 9.6 % |
| 10699 | AAA | IEEE 802.11ax (40MHz, MCS4, 90pc duty cycle)    | WLAN      | 8.82  | ± 9.6 % |
| 10700 | AAA | IEEE 802.11ax (40MHz, MCS5, 90pc duty cycle)    | WLAN      | 8.73  | ± 9.6 % |
| 10701 | AAA | IEEE 802.11ax (40MHz, MCS6, 90pc duty cycle)    | WLAN      | 8.86  | ± 9.6 % |
| 10702 | AAA | IEEE 802.11ax (40MHz, MCS7, 90pc duty cycle)    | WLAN      | 8.70  | ± 9.6 % |
| 10703 | AAA | IEEE 802.11ax (40MHz, MCS8, 90pc duty cycle)    | WLAN      | 8.82  | ± 9.6 % |
| 10704 | AAA | IEEE 802.11ax (40MHz, MCS9, 90pc duty cycle)    | WLAN      | 8.56  | ± 9.6 % |
| 10705 | AAA | IEEE 802.11ax (40MHz, MCS10, 90pc duty cycle)   | WLAN      | 8.69  | ± 9.6 % |
| 10706 | AAA | IEEE 802.11ax (40MHz, MCS11, 90pc duty cycle)   | WLAN      | 8.66  | ± 9.6 % |
| 10707 | AAA | IEEE 802.11ax (40MHz, MCS0, 99pc duty cycle)    | WLAN      | 8.32  | ± 9.6 % |
| 10708 | AAA | IEEE 802.11ax (40MHz, MCS1, 99pc duty cycle)    | WLAN      | 8.55  | ± 9.6 % |
| 10709 | AAA | IEEE 802.11ax (40MHz, MCS2, 99pc duty cycle)    | WLAN      | 8.33  | ± 9.6 % |
| 10710 | AAA | IEEE 802.11ax (40MHz, MCS3, 99pc duty cycle)    | WLAN      | 8.29  | ± 9.6 % |
| 10711 | AAA | IEEE 802.11ax (40MHz, MCS4, 99pc duty cycle)    | WLAN      | 8.39  | ± 9.6 % |
| 10712 | AAA | IEEE 802.11ax (40MHz, MCS5, 99pc duty cycle)    | WLAN      | 8.67  | ± 9.6 % |
| 10713 | AAA | IEEE 802.11ax (40MHz, MCS6, 99pc duty cycle)    | WLAN      | 8.33  | ± 9.6 % |
| 10714 | AAA | IEEE 802.11ax (40MHz, MCS7, 99pc duty cycle)    | WLAN      | 8.26  | ± 9.6 % |
| 10715 | AAA | IEEE 802.11ax (40MHz, MCS8, 99pc duty cycle)    | WLAN      | 8.45  | ± 9.6 % |
| 10716 | AAA | IEEE 802.11ax (40MHz, MCS9, 99pc duty cycle)    | WLAN      | 8.30  | ± 9.6 % |
| 10717 | AAA | IEEE 802.11ax (40MHz, MCS10, 99pc duty cycle)   | WLAN      | 8.48  | ± 9.6 % |
| 10718 | AAA | IEEE 802.11ax (40MHz, MCS11, 99pc duty cycle)   | WLAN      | 8.24  | ± 9.6 % |
| 10719 | AAA | IEEE 802.11ax (80MHz, MCS0, 90pc duty cycle)    | WLAN      | 8.81  | ± 9.6 % |
| 10720 | AAA | IEEE 802.11ax (80MHz, MCS1, 90pc duty cycle)    | WLAN      | 8.87  | ± 9.6 % |
| 10721 | AAA | IEEE 802.11ax (80MHz, MCS2, 90pc duty cycle)    | WLAN      | 8.76  | ± 9.6 % |
| 10722 | AAA | IEEE 802.11ax (80MHz, MCS3, 90pc duty cycle)    | WLAN      | 8.55  | ± 9.6 % |
| 10723 | AAA | IEEE 802.11ax (80MHz, MCS4, 90pc duty cycle)    | WLAN      | 8.70  | ± 9.6 % |
| 10724 | AAA | IEEE 802.11ax (80MHz, MCS5, 90pc duty cycle)    | WLAN      | 8.90  | ± 9.6 % |
| 10725 | AAA | IEEE 802.11ax (80MHz, MCS6, 90pc duty cycle)    | WLAN      | 8.74  | ± 9.6 % |
| 10726 | AAA | IEEE 802.11ax (80MHz, MCS7, 90pc duty cycle)    | WLAN      | 8.72  | ± 9.6 % |
| 10727 | AAA | IEEE 802.11ax (80MHz, MCS8, 90pc duty cycle)    | WLAN      | 8.66  | ± 9.6 % |

|       |     |                                                |      |      |         |
|-------|-----|------------------------------------------------|------|------|---------|
| 10728 | AAA | IEEE 802.11ax (80MHz, MCS9, 90pc duty cycle)   | WLAN | 8.65 | ± 9.6 % |
| 10729 | AAA | IEEE 802.11ax (80MHz, MCS10, 90pc duty cycle)  | WLAN | 8.64 | ± 9.6 % |
| 10730 | AAA | IEEE 802.11ax (80MHz, MCS11, 90pc duty cycle)  | WLAN | 8.67 | ± 9.6 % |
| 10731 | AAA | IEEE 802.11ax (80MHz, MCS0, 99pc duty cycle)   | WLAN | 8.42 | ± 9.6 % |
| 10732 | AAA | IEEE 802.11ax (80MHz, MCS1, 99pc duty cycle)   | WLAN | 8.46 | ± 9.6 % |
| 10733 | AAA | IEEE 802.11ax (80MHz, MCS2, 99pc duty cycle)   | WLAN | 8.40 | ± 9.6 % |
| 10734 | AAA | IEEE 802.11ax (80MHz, MCS3, 99pc duty cycle)   | WLAN | 8.25 | ± 9.6 % |
| 10735 | AAA | IEEE 802.11ax (80MHz, MCS4, 99pc duty cycle)   | WLAN | 8.33 | ± 9.6 % |
| 10736 | AAA | IEEE 802.11ax (80MHz, MCS5, 99pc duty cycle)   | WLAN | 8.27 | ± 9.6 % |
| 10737 | AAA | IEEE 802.11ax (80MHz, MCS6, 99pc duty cycle)   | WLAN | 8.36 | ± 9.6 % |
| 10738 | AAA | IEEE 802.11ax (80MHz, MCS7, 99pc duty cycle)   | WLAN | 8.42 | ± 9.6 % |
| 10739 | AAA | IEEE 802.11ax (80MHz, MCS8, 99pc duty cycle)   | WLAN | 8.29 | ± 9.6 % |
| 10740 | AAA | IEEE 802.11ax (80MHz, MCS9, 99pc duty cycle)   | WLAN | 8.48 | ± 9.6 % |
| 10741 | AAA | IEEE 802.11ax (80MHz, MCS10, 99pc duty cycle)  | WLAN | 8.40 | ± 9.6 % |
| 10742 | AAA | IEEE 802.11ax (80MHz, MCS11, 99pc duty cycle)  | WLAN | 8.43 | ± 9.6 % |
| 10743 | AAA | IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle)  | WLAN | 8.94 | ± 9.6 % |
| 10744 | AAA | IEEE 802.11ax (160MHz, MCS1, 90pc duty cycle)  | WLAN | 9.16 | ± 9.6 % |
| 10745 | AAA | IEEE 802.11ax (160MHz, MCS2, 90pc duty cycle)  | WLAN | 8.93 | ± 9.6 % |
| 10746 | AAA | IEEE 802.11ax (160MHz, MCS3, 90pc duty cycle)  | WLAN | 9.11 | ± 9.6 % |
| 10747 | AAA | IEEE 802.11ax (160MHz, MCS4, 90pc duty cycle)  | WLAN | 9.04 | ± 9.6 % |
| 10748 | AAA | IEEE 802.11ax (160MHz, MCS5, 90pc duty cycle)  | WLAN | 8.93 | ± 9.6 % |
| 10749 | AAA | IEEE 802.11ax (160MHz, MCS6, 90pc duty cycle)  | WLAN | 8.90 | ± 9.6 % |
| 10750 | AAA | IEEE 802.11ax (160MHz, MCS7, 90pc duty cycle)  | WLAN | 8.79 | ± 9.6 % |
| 10751 | AAA | IEEE 802.11ax (160MHz, MCS8, 90pc duty cycle)  | WLAN | 8.82 | ± 9.6 % |
| 10752 | AAA | IEEE 802.11ax (160MHz, MCS9, 90pc duty cycle)  | WLAN | 8.81 | ± 9.6 % |
| 10753 | AAA | IEEE 802.11ax (160MHz, MCS10, 90pc duty cycle) | WLAN | 9.00 | ± 9.6 % |
| 10754 | AAA | IEEE 802.11ax (160MHz, MCS11, 90pc duty cycle) | WLAN | 8.94 | ± 9.6 % |
| 10755 | AAA | IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle)  | WLAN | 8.64 | ± 9.6 % |
| 10756 | AAA | IEEE 802.11ax (160MHz, MCS1, 99pc duty cycle)  | WLAN | 8.77 | ± 9.6 % |
| 10757 | AAA | IEEE 802.11ax (160MHz, MCS2, 99pc duty cycle)  | WLAN | 8.77 | ± 9.6 % |
| 10758 | AAA | IEEE 802.11ax (160MHz, MCS3, 99pc duty cycle)  | WLAN | 8.69 | ± 9.6 % |
| 10759 | AAA | IEEE 802.11ax (160MHz, MCS4, 99pc duty cycle)  | WLAN | 8.58 | ± 9.6 % |
| 10760 | AAA | IEEE 802.11ax (160MHz, MCS5, 99pc duty cycle)  | WLAN | 8.49 | ± 9.6 % |
| 10761 | AAA | IEEE 802.11ax (160MHz, MCS6, 99pc duty cycle)  | WLAN | 8.58 | ± 9.6 % |
| 10762 | AAA | IEEE 802.11ax (160MHz, MCS7, 99pc duty cycle)  | WLAN | 8.49 | ± 9.6 % |
| 10763 | AAA | IEEE 802.11ax (160MHz, MCS8, 99pc duty cycle)  | WLAN | 8.53 | ± 9.6 % |
| 10764 | AAA | IEEE 802.11ax (160MHz, MCS9, 99pc duty cycle)  | WLAN | 8.54 | ± 9.6 % |
| 10765 | AAA | IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle) | WLAN | 8.54 | ± 9.6 % |
| 10766 | AAA | IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle) | WLAN | 8.51 | ± 9.6 % |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7410\_Jul18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7410**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

**BN** ✓  
**07/26/2018**

Calibration date: **July 20, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                              |                                          |                       |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|-----------------------|
| Calibrated by:                                                                                                  | Name<br><b>Michael Weber</b> | Function<br><b>Laboratory Technician</b> | Signature<br>         |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br><b>Technical Manager</b>     | Signature<br>         |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                          | Issued: July 21, 2018 |



Accredited by the Swiss Accreditation Service (SAS)

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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7410

Manufactured: November 24, 2015  
Calibrated: July 20, 2018

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.41     | 0.47     | 0.43     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 93.6     | 99.2     | 96.3     |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 142.1    | $\pm 2.5 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 157.1    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 143.0    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms}\cdot\text{V}^{-2}$ | T2<br>$\text{ms}\cdot\text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|-------------------------------------|-------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 32.22    | 246.3    | 37.01                       | 4.015                               | 0.380                               | 5.018    | 0.000                 | 0.327                 | 1.006 |
| Y | 34.20    | 252.5    | 34.94                       | 7.011                               | 0.000                               | 5.034    | 0.846                 | 0.193                 | 1.003 |
| Z | 38.58    | 298.4    | 37.77                       | 5.097                               | 0.373                               | 5.059    | 0.000                 | 0.338                 | 1.011 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 10.13   | 10.13   | 10.13   | 0.37               | 0.98                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.81    | 9.81    | 9.81    | 0.47               | 0.80                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.40    | 8.40    | 8.40    | 0.60               | 0.80                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.16    | 8.16    | 8.16    | 0.56               | 0.80                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.78    | 7.78    | 7.78    | 0.32               | 0.85                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.50    | 7.50    | 7.50    | 0.34               | 0.84                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.24    | 7.24    | 7.24    | 0.32               | 0.89                    | ± 12.0 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.87    | 9.87    | 9.87    | 0.33               | 1.02                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.63    | 9.63    | 9.63    | 0.42               | 0.86                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.06    | 8.06    | 8.06    | 0.35               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.78    | 7.78    | 7.78    | 0.39               | 0.80                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.64    | 7.64    | 7.64    | 0.35               | 0.85                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.45    | 7.45    | 7.45    | 0.32               | 0.86                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.34    | 7.34    | 7.34    | 0.31               | 0.94                    | ± 12.0 %  |

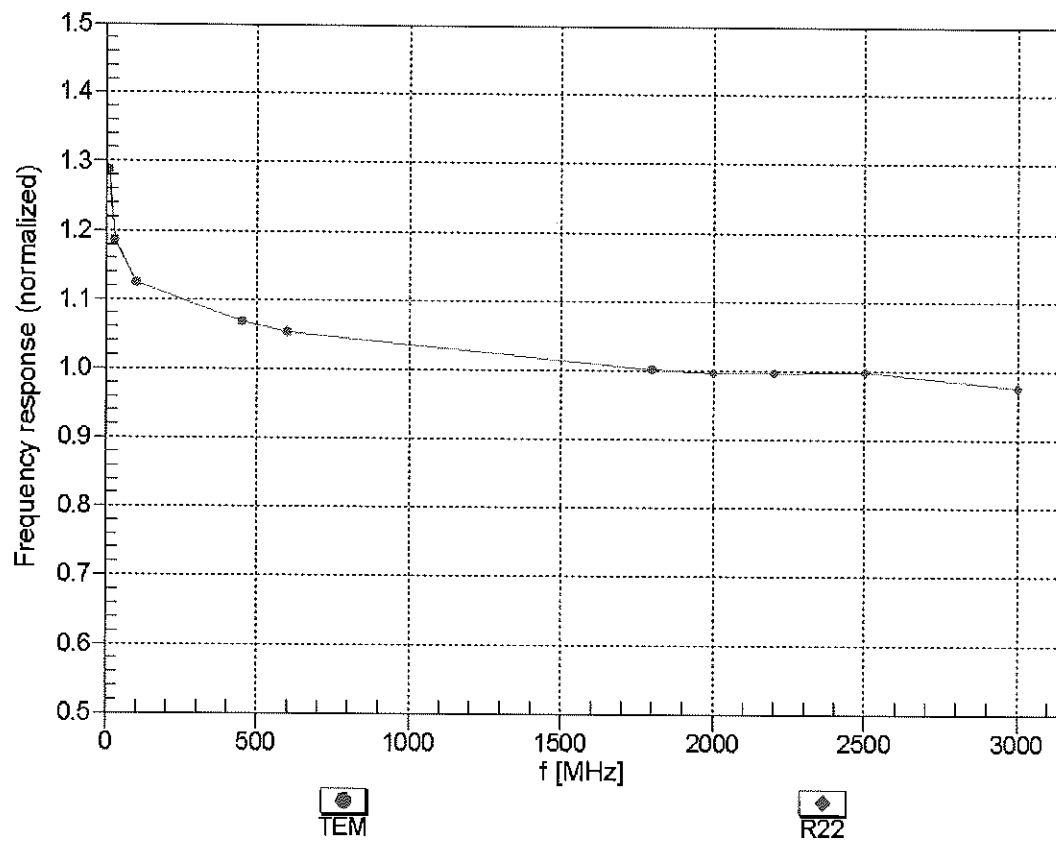
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

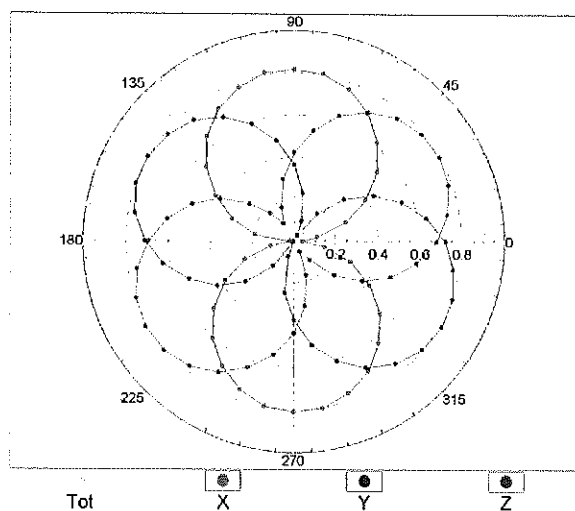
(TEM-Cell:ifi110 EXX, Waveguide: R22)



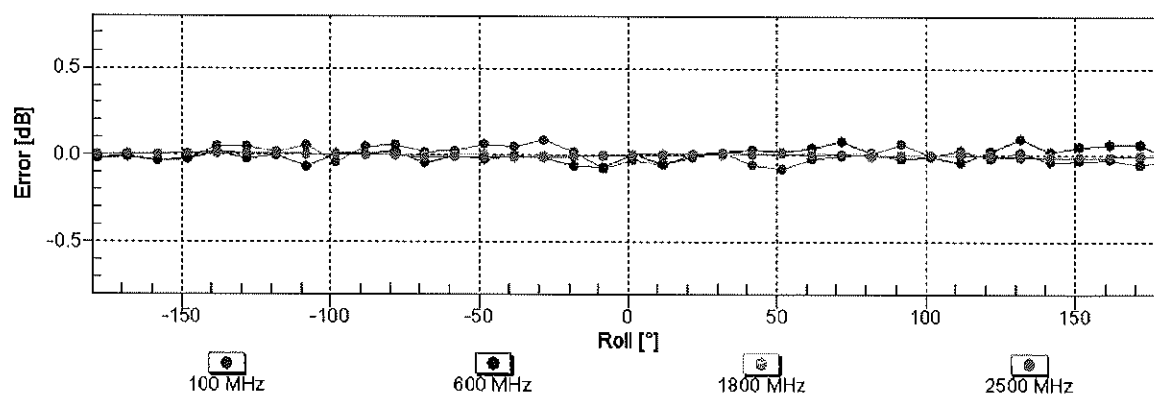
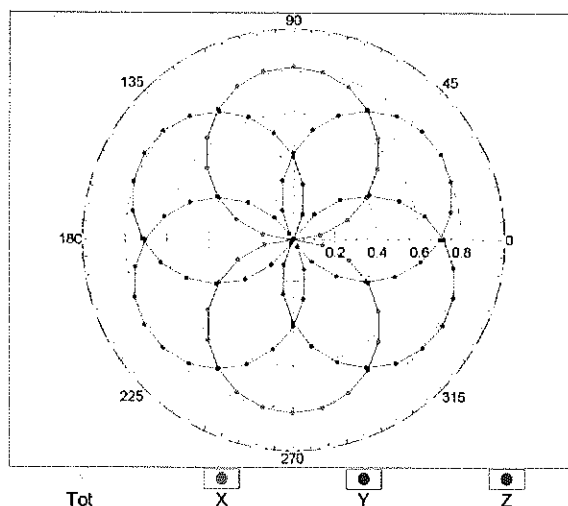
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

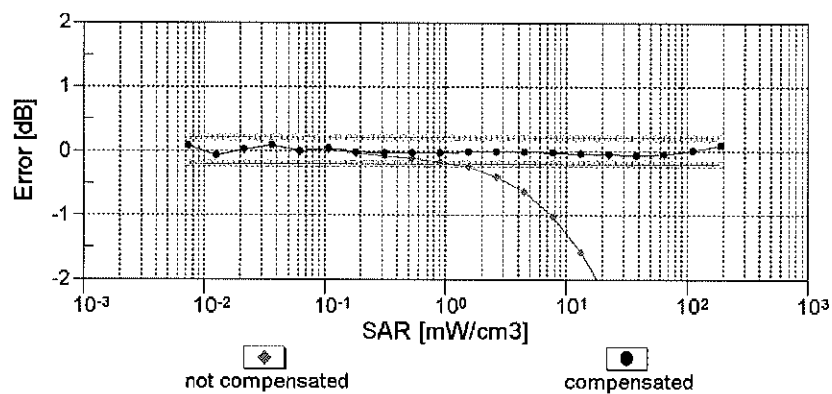
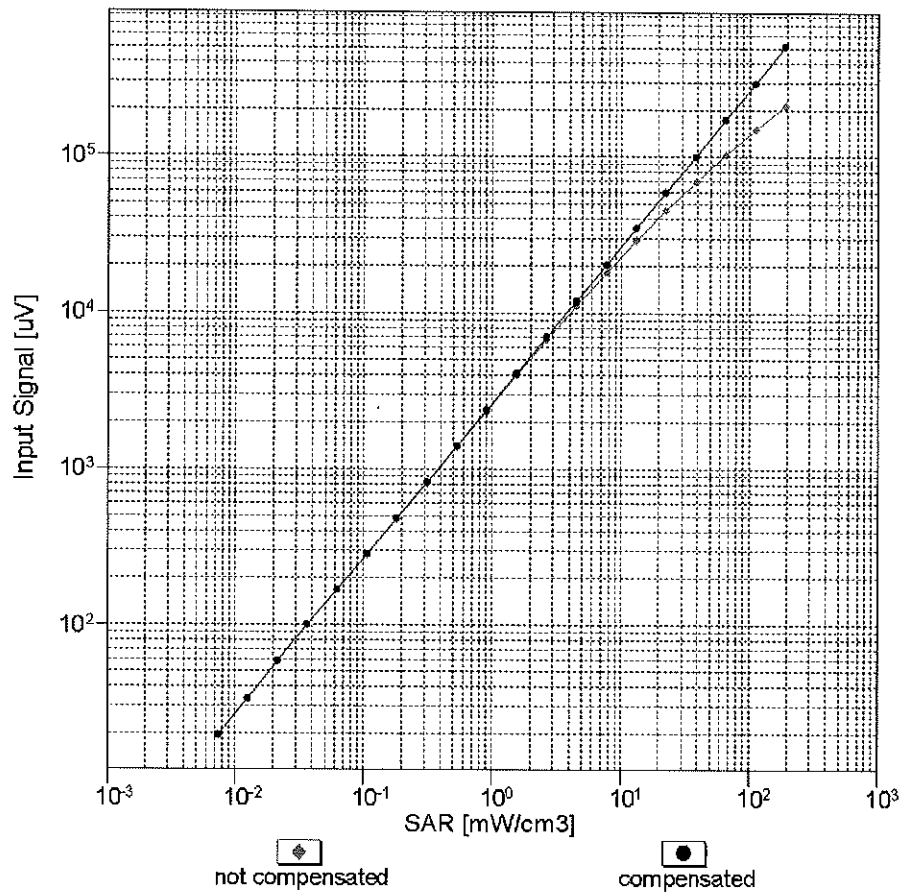


f=1800 MHz,R22



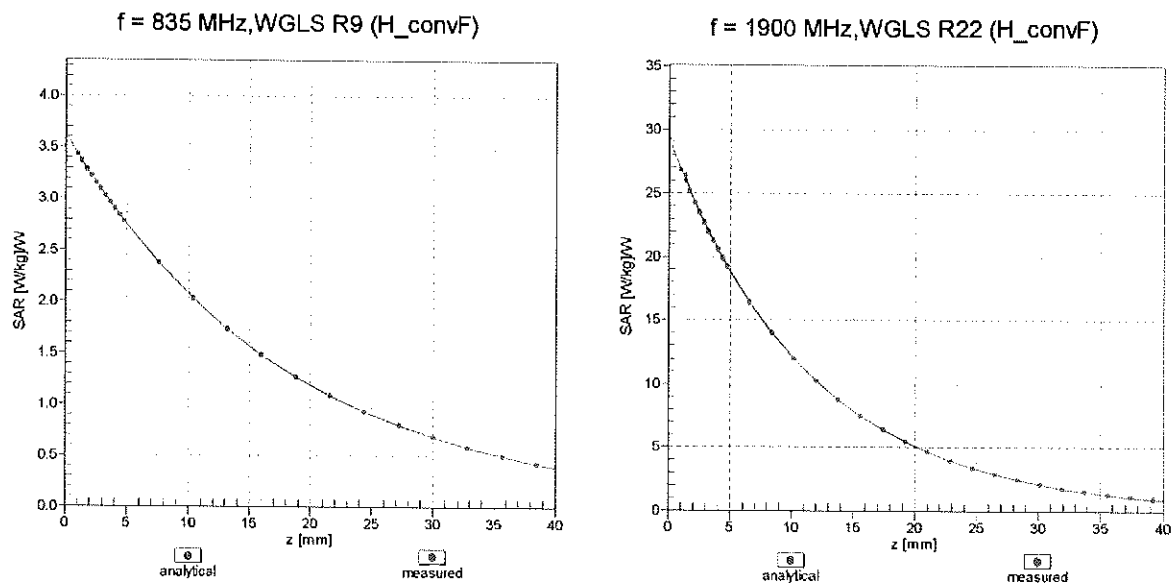
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  (k=2)

## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



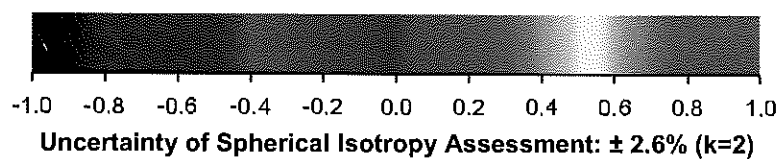
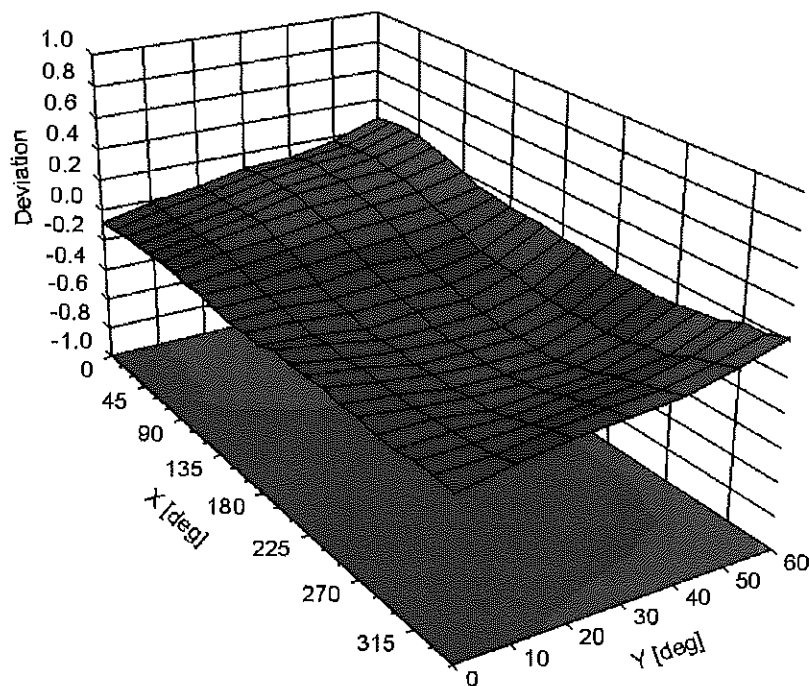
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 1.8        |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Appendix: Modulation Calibration Parameters**

| UID       | Communication System Name                     |   | A<br>dB | B<br>dB $\mu$ V | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|-----------|-----------------------------------------------|---|---------|-----------------|-------|---------|----------|----------------------------------|
| 0         | CW                                            | X | 0.00    | 0.00            | 1.00  | 0.00    | 142.1    | $\pm 2.5\%$                      |
|           |                                               | Y | 0.00    | 0.00            | 1.00  |         | 157.1    |                                  |
|           |                                               | Z | 0.00    | 0.00            | 1.00  |         | 143.0    |                                  |
| 10010-CAA | SAR Validation (Square, 100ms, 10ms)          | X | 1.62    | 62.34           | 7.74  | 10.00   | 20.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 1.47    | 62.51           | 7.58  |         | 20.0     |                                  |
|           |                                               | Z | 1.74    | 63.23           | 8.42  |         | 20.0     |                                  |
| 10011-CAB | UMTS-FDD (WCDMA)                              | X | 0.82    | 65.36           | 13.43 | 0.00    | 150.0    | $\pm 9.6\%$                      |
|           |                                               | Y | 1.01    | 68.19           | 15.53 |         | 150.0    |                                  |
|           |                                               | Z | 0.83    | 64.89           | 13.22 |         | 150.0    |                                  |
| 10012-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.03    | 62.67           | 14.19 | 0.41    | 150.0    | $\pm 9.6\%$                      |
|           |                                               | Y | 1.12    | 63.85           | 15.21 |         | 150.0    |                                  |
|           |                                               | Z | 1.03    | 62.50           | 14.16 |         | 150.0    |                                  |
| 10013-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.54    | 66.46           | 16.76 | 1.46    | 150.0    | $\pm 9.6\%$                      |
|           |                                               | Y | 4.63    | 66.78           | 17.00 |         | 150.0    |                                  |
|           |                                               | Z | 4.66    | 66.40           | 16.88 |         | 150.0    |                                  |
| 10021-DAC | GSM-FDD (TDMA, GMSK)                          | X | 13.15   | 84.51           | 17.52 | 9.39    | 50.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 105.54          | 22.55 |         | 50.0     |                                  |
|           |                                               | Z | 100.00  | 109.08          | 24.59 |         | 50.0     |                                  |
| 10023-DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 7.05    | 77.63           | 15.35 | 9.57    | 50.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 104.89          | 22.31 |         | 50.0     |                                  |
|           |                                               | Z | 100.00  | 108.55          | 24.42 |         | 50.0     |                                  |
| 10024-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 103.12          | 20.53 | 6.56    | 60.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 106.39          | 21.86 |         | 60.0     |                                  |
|           |                                               | Z | 100.00  | 108.56          | 23.07 |         | 60.0     |                                  |
| 10025-DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 3.34    | 64.62           | 22.65 | 12.57   | 50.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 5.12    | 80.55           | 32.48 |         | 50.0     |                                  |
|           |                                               | Z | 3.40    | 65.03           | 23.22 |         | 50.0     |                                  |
| 10026-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 5.08    | 79.74           | 27.91 | 9.56    | 60.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 6.12    | 86.23           | 31.42 |         | 60.0     |                                  |
|           |                                               | Z | 5.62    | 82.16           | 29.24 |         | 60.0     |                                  |
| 10027-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 101.64          | 19.06 | 4.80    | 80.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 109.60          | 22.50 |         | 80.0     |                                  |
|           |                                               | Z | 100.00  | 108.56          | 22.18 |         | 80.0     |                                  |
| 10028-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 99.62           | 17.55 | 3.55    | 100.0    | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 115.32          | 24.21 |         | 100.0    |                                  |
|           |                                               | Z | 100.00  | 107.61          | 21.03 |         | 100.0    |                                  |
| 10029-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 3.55    | 72.28           | 23.51 | 7.80    | 80.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 3.97    | 75.71           | 25.59 |         | 80.0     |                                  |
|           |                                               | Z | 3.84    | 73.87           | 24.49 |         | 80.0     |                                  |
| 10030-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 2.93    | 72.58           | 11.67 | 5.30    | 70.0     | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 104.73          | 20.69 |         | 70.0     |                                  |
|           |                                               | Z | 100.00  | 105.98          | 21.40 |         | 70.0     |                                  |
| 10031-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 0.19    | 60.00           | 3.86  | 1.88    | 100.0    | $\pm 9.6\%$                      |
|           |                                               | Y | 100.00  | 108.46          | 20.17 |         | 100.0    |                                  |
|           |                                               | Z | 0.20    | 60.00           | 4.39  |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 8.28   | 60.36  | 1.45  | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 125.60 | 25.79 |       | 100.0 |         |
|           |                                                     | Z | 9.15   | 64.10  | 3.12  |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 3.18   | 74.95  | 16.76 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 16.17  | 99.83  | 25.75 |       | 70.0  |         |
|           |                                                     | Z | 6.70   | 87.29  | 22.45 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 1.10   | 65.34  | 10.90 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.67   | 76.50  | 16.58 |       | 100.0 |         |
|           |                                                     | Z | 1.54   | 69.44  | 13.90 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 0.87   | 63.89  | 9.87  | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.73   | 72.02  | 14.58 |       | 100.0 |         |
|           |                                                     | Z | 1.13   | 66.49  | 12.17 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 3.74   | 77.33  | 17.73 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 34.06  | 110.90 | 28.74 |       | 70.0  |         |
|           |                                                     | Z | 9.80   | 93.25  | 24.40 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 1.04   | 64.82  | 10.64 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.27   | 74.65  | 15.89 |       | 100.0 |         |
|           |                                                     | Z | 1.43   | 68.68  | 13.56 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 0.88   | 64.05  | 10.08 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.75   | 72.43  | 14.90 |       | 100.0 |         |
|           |                                                     | Z | 1.13   | 66.71  | 12.40 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 0.74   | 62.99  | 8.94  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.38   | 69.75  | 13.20 |       | 150.0 |         |
|           |                                                     | Z | 0.98   | 64.89  | 10.73 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 2.54   | 68.84  | 11.04 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 102.42 | 20.46 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 104.71 | 21.76 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.06   | 120.88 | 5.44  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00   | 104.37 | 4.38  |       | 150.0 |         |
|           |                                                     | Z | 0.08   | 121.43 | 6.73  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 4.91   | 69.00  | 13.47 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 7.93   | 75.14  | 15.14 |       | 25.0  |         |
|           |                                                     | Z | 10.77  | 79.26  | 17.66 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 4.71   | 71.69  | 13.37 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 12.12  | 82.16  | 16.51 |       | 40.0  |         |
|           |                                                     | Z | 15.08  | 85.95  | 18.75 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 9.20   | 83.60  | 20.05 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 119.47 | 30.42 |       | 50.0  |         |
|           |                                                     | Z | 26.92  | 101.32 | 26.50 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 2.97   | 69.27  | 21.35 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.27   | 71.77  | 22.91 |       | 100.0 |         |
|           |                                                     | Z | 3.17   | 70.45  | 22.11 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.02   | 63.20  | 14.50 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.12   | 64.64  | 15.70 |       | 110.0 |         |
|           |                                                     | Z | 1.03   | 63.16  | 14.59 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 1.55   | 78.45  | 19.20 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 11.63  | 111.29 | 30.45 |       | 110.0 |         |
|           |                                                     | Z | 2.11   | 82.91  | 21.03 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 1.39 | 70.50 | 17.86 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 1.94 | 76.74 | 21.24 |      | 110.0 |         |
|           |                                                | Z | 1.58 | 72.59 | 19.16 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.34 | 66.44 | 16.20 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.45 | 66.80 | 16.45 |      | 100.0 |         |
|           |                                                | Z | 4.46 | 66.35 | 16.27 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.35 | 66.52 | 16.28 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.46 | 66.88 | 16.54 |      | 100.0 |         |
|           |                                                | Z | 4.47 | 66.44 | 16.36 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.58 | 66.71 | 16.48 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.69 | 67.07 | 16.73 |      | 100.0 |         |
|           |                                                | Z | 4.73 | 66.68 | 16.59 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.45 | 66.52 | 16.53 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.56 | 66.89 | 16.79 |      | 100.0 |         |
|           |                                                | Z | 4.60 | 66.53 | 16.67 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.45 | 66.48 | 16.65 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.56 | 66.86 | 16.93 |      | 100.0 |         |
|           |                                                | Z | 4.61 | 66.54 | 16.84 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 4.73 | 66.77 | 17.13 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.84 | 67.12 | 17.40 |      | 100.0 |         |
|           |                                                | Z | 4.90 | 66.81 | 17.33 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 4.76 | 66.66 | 17.29 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.86 | 67.00 | 17.55 |      | 100.0 |         |
|           |                                                | Z | 4.92 | 66.73 | 17.50 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 4.81 | 66.68 | 17.46 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.92 | 67.01 | 17.74 |      | 100.0 |         |
|           |                                                | Z | 5.00 | 66.78 | 17.71 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.62 | 66.50 | 17.03 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.82 | 17.28 |      | 100.0 |         |
|           |                                                | Z | 4.75 | 66.47 | 17.18 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.56 | 66.67 | 17.18 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.66 | 67.03 | 17.45 |      | 100.0 |         |
|           |                                                | Z | 4.70 | 66.70 | 17.36 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.61 | 66.83 | 17.49 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71 | 67.17 | 17.77 |      | 100.0 |         |
|           |                                                | Z | 4.75 | 66.85 | 17.68 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.62 | 66.77 | 17.64 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.70 | 67.09 | 17.92 |      | 100.0 |         |
|           |                                                | Z | 4.74 | 66.75 | 17.83 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.63 | 66.75 | 17.86 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.71 | 67.06 | 18.15 |      | 90.0  |         |
|           |                                                | Z | 4.76 | 66.76 | 18.09 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.68 | 66.63 | 18.04 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.74 | 66.91 | 18.31 |      | 90.0  |         |
|           |                                                | Z | 4.79 | 66.61 | 18.24 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.71 | 66.72 | 18.15 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.77 | 66.99 | 18.42 |      | 90.0  |         |
|           |                                                | Z | 4.82 | 66.69 | 18.35 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.41   | 60.41  | 6.86  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.64   | 64.39  | 10.26 |      | 150.0 |         |
|           |                                                     | Z | 0.51   | 61.51  | 8.28  |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 6.37   | 60.67  | 1.90  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.58   | 60.00  | 3.05  |      | 80.0  |         |
|           |                                                     | Z | 0.60   | 60.00  | 3.10  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 103.19 | 20.57 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 106.40 | 21.88 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 108.67 | 23.14 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.61   | 66.98  | 14.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.83   | 68.94  | 15.87 |      | 150.0 |         |
|           |                                                     | Z | 1.61   | 66.33  | 14.36 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.57   | 66.91  | 14.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.80   | 68.88  | 15.85 |      | 150.0 |         |
|           |                                                     | Z | 1.57   | 66.26  | 14.32 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 5.11   | 79.85  | 27.95 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 6.18   | 86.42  | 31.49 |      | 60.0  |         |
|           |                                                     | Z | 5.66   | 82.29  | 29.29 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 2.72   | 68.86  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.98   | 70.42  | 16.85 |      | 150.0 |         |
|           |                                                     | Z | 2.77   | 68.66  | 15.78 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 2.94   | 66.71  | 15.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.09   | 67.54  | 15.94 |      | 150.0 |         |
|           |                                                     | Z | 3.00   | 66.60  | 15.35 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.05   | 66.78  | 15.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.19   | 67.54  | 16.04 |      | 150.0 |         |
|           |                                                     | Z | 3.11   | 66.65  | 15.49 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 4.63   | 72.33  | 19.10 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.31   | 74.95  | 20.40 |      | 65.0  |         |
|           |                                                     | Z | 5.01   | 73.33  | 19.72 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 4.71   | 70.15  | 18.78 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.12   | 71.87  | 19.74 |      | 65.0  |         |
|           |                                                     | Z | 4.99   | 70.84  | 19.32 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 4.62   | 69.52  | 18.79 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.98   | 71.08  | 19.67 |      | 65.0  |         |
|           |                                                     | Z | 4.89   | 70.18  | 19.31 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.32   | 68.23  | 15.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.56   | 69.77  | 16.68 |      | 150.0 |         |
|           |                                                     | Z | 2.39   | 67.99  | 15.57 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.57   | 66.62  | 15.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.73   | 67.56  | 15.82 |      | 150.0 |         |
|           |                                                     | Z | 2.64   | 66.42  | 15.13 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 1.82   | 67.31  | 15.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.06   | 69.08  | 16.19 |      | 150.0 |         |
|           |                                                     | Z | 1.89   | 67.03  | 14.94 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.27   | 67.56  | 15.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.50   | 68.95  | 16.11 |      | 150.0 |         |
|           |                                                     | Z | 2.32   | 67.14  | 15.12 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.70 | 66.75 | 15.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.86 | 67.62 | 15.89 |      | 150.0 |         |
|           |                                                | Z | 2.77 | 66.52 | 15.24 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.41 | 67.80 | 15.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.64 | 69.12 | 16.24 |      | 150.0 |         |
|           |                                                | Z | 2.47 | 67.38 | 15.32 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 4.85 | 66.91 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.92 | 67.20 | 16.42 |      | 150.0 |         |
|           |                                                | Z | 4.93 | 66.80 | 16.23 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.08 | 66.97 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.16 | 67.24 | 16.44 |      | 150.0 |         |
|           |                                                | Z | 5.19 | 66.91 | 16.30 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 4.91 | 67.06 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.00 | 67.37 | 16.44 |      | 150.0 |         |
|           |                                                | Z | 5.02 | 67.01 | 16.26 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 4.82 | 66.80 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.91 | 67.14 | 16.41 |      | 150.0 |         |
|           |                                                | Z | 4.92 | 66.75 | 16.22 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.15 | 67.18 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.23 | 67.42 | 16.54 |      | 150.0 |         |
|           |                                                | Z | 5.28 | 67.15 | 16.43 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 4.92 | 67.09 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.00 | 67.37 | 16.45 |      | 150.0 |         |
|           |                                                | Z | 5.02 | 67.00 | 16.27 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.06 | 66.79 | 15.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.21 | 67.57 | 15.95 |      | 150.0 |         |
|           |                                                | Z | 3.13 | 66.66 | 15.40 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.19 | 67.01 | 15.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.34 | 67.73 | 16.14 |      | 150.0 |         |
|           |                                                | Z | 3.26 | 66.83 | 15.61 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.53 | 66.71 | 13.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.82 | 69.13 | 15.54 |      | 150.0 |         |
|           |                                                | Z | 1.62 | 66.60 | 14.09 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 1.93 | 66.97 | 13.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.31 | 69.49 | 15.29 |      | 150.0 |         |
|           |                                                | Z | 2.06 | 67.05 | 14.07 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 1.68 | 64.38 | 11.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.94 | 66.13 | 13.09 |      | 150.0 |         |
|           |                                                | Z | 1.85 | 64.82 | 12.42 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 0.61 | 60.00 | 6.25  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.75 | 61.41 | 7.98  |      | 150.0 |         |
|           |                                                | Z | 0.75 | 60.75 | 7.63  |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 0.82 | 60.00 | 5.83  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.92 | 60.25 | 6.35  |      | 150.0 |         |
|           |                                                | Z | 1.12 | 61.59 | 7.98  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 0.84 | 60.00 | 5.89  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.96 | 60.55 | 6.61  |      | 150.0 |         |
|           |                                                | Z | 1.20 | 62.21 | 8.43  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.58 | 66.69 | 15.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 67.63 | 15.87 |      | 150.0 |         |
|           |                                            | Z | 2.65 | 66.49 | 15.18 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.71 | 66.82 | 15.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.87 | 67.69 | 15.94 |      | 150.0 |         |
|           |                                            | Z | 2.78 | 66.58 | 15.28 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 4.58 | 74.10 | 19.83 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.45 | 77.40 | 21.46 |      | 65.0  |         |
|           |                                            | Z | 5.00 | 75.19 | 20.56 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 4.21 | 69.89 | 18.16 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.65 | 71.84 | 19.30 |      | 65.0  |         |
|           |                                            | Z | 4.51 | 70.68 | 18.85 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 4.55 | 71.06 | 19.09 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.01 | 72.96 | 20.18 |      | 65.0  |         |
|           |                                            | Z | 4.85 | 71.76 | 19.74 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 1.85 | 67.65 | 15.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.10 | 69.48 | 16.44 |      | 150.0 |         |
|           |                                            | Z | 1.92 | 67.37 | 15.16 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.27 | 67.61 | 15.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.50 | 69.00 | 16.15 |      | 150.0 |         |
|           |                                            | Z | 2.33 | 67.17 | 15.15 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.31 | 65.90 | 12.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.64 | 68.88 | 14.94 |      | 150.0 |         |
|           |                                            | Z | 1.43 | 66.11 | 13.38 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.43 | 63.96 | 10.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.74 | 66.31 | 12.74 |      | 150.0 |         |
|           |                                            | Z | 1.63 | 64.73 | 11.94 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.42 | 67.89 | 15.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.65 | 69.22 | 16.31 |      | 150.0 |         |
|           |                                            | Z | 2.48 | 67.46 | 15.37 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 1.49 | 64.13 | 11.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.82 | 66.66 | 12.95 |      | 150.0 |         |
|           |                                            | Z | 1.70 | 65.00 | 12.13 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.41 | 67.89 | 15.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.60 | 69.05 | 16.44 |      | 150.0 |         |
|           |                                            | Z | 2.48 | 67.64 | 15.56 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.59 | 66.74 | 15.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.76 | 67.68 | 15.82 |      | 150.0 |         |
|           |                                            | Z | 2.66 | 66.50 | 15.14 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.70 | 67.00 | 15.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.87 | 67.91 | 15.97 |      | 150.0 |         |
|           |                                            | Z | 2.77 | 66.73 | 15.29 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 2.91 | 67.87 | 18.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.09 | 68.81 | 18.75 |      | 150.0 |         |
|           |                                            | Z | 3.17 | 68.75 | 19.02 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 3.24 | 69.92 | 18.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.65 | 71.74 | 19.22 |      | 150.0 |         |
|           |                                            | Z | 3.63 | 71.08 | 19.26 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 3.66 | 72.66 | 20.22 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.14 | 74.51 | 20.83 |      | 150.0 |         |
|           |                                            | Z | 4.11 | 73.91 | 20.95 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.32 | 65.83 | 17.44 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.49 | 67.28 | 18.07 |      | 150.0 |         |
|           |                                            | Z | 2.46 | 66.70 | 18.14 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 2.74 | 70.01 | 19.35 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.21 | 72.95 | 20.48 |      | 150.0 |         |
|           |                                            | Z | 3.00 | 71.51 | 20.32 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.31 | 66.53 | 16.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.63 | 68.93 | 17.60 |      | 150.0 |         |
|           |                                            | Z | 2.50 | 67.67 | 17.42 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.90 | 74.23 | 22.35 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 3.68 | 79.90 | 24.98 |      | 65.0  |         |
|           |                                            | Z | 3.91 | 80.19 | 25.56 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 3.92 | 78.79 | 22.40 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.85 | 89.50 | 26.38 |      | 65.0  |         |
|           |                                            | Z | 6.70 | 89.11 | 27.06 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.90 | 73.28 | 19.67 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.51 | 84.77 | 24.11 |      | 65.0  |         |
|           |                                            | Z | 4.93 | 82.66 | 24.17 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.30 | 65.58 | 17.20 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.47 | 67.02 | 17.83 |      | 150.0 |         |
|           |                                            | Z | 2.44 | 66.43 | 17.89 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 2.74 | 70.03 | 19.36 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.21 | 72.97 | 20.49 |      | 150.0 |         |
|           |                                            | Z | 3.00 | 71.53 | 20.33 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.31 | 65.68 | 17.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.48 | 67.13 | 17.91 |      | 150.0 |         |
|           |                                            | Z | 2.45 | 66.56 | 17.98 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 2.73 | 69.91 | 19.28 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.19 | 72.83 | 20.41 |      | 150.0 |         |
|           |                                            | Z | 2.98 | 71.36 | 20.23 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 2.50 | 68.14 | 17.82 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.89 | 70.84 | 18.91 |      | 150.0 |         |
|           |                                            | Z | 2.72 | 69.48 | 18.74 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.31 | 66.50 | 16.56 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.63 | 68.90 | 17.57 |      | 150.0 |         |
|           |                                            | Z | 2.50 | 67.63 | 17.39 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.31 | 65.67 | 17.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.48 | 67.11 | 17.90 |      | 150.0 |         |
|           |                                            | Z | 2.45 | 66.54 | 17.97 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 2.73 | 69.88 | 19.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.19 | 72.81 | 20.40 |      | 150.0 |         |
|           |                                            | Z | 2.98 | 71.34 | 20.21 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.31 | 66.48 | 16.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.63 | 68.87 | 17.56 |      | 150.0 |         |
|           |                                            | Z | 2.49 | 67.61 | 17.37 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.32 | 65.70 | 17.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.49 | 67.15 | 17.92 |      | 150.0 |         |
|           |                                               | Z | 2.46 | 66.58 | 17.99 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 2.74 | 69.95 | 19.31 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.20 | 72.88 | 20.43 |      | 150.0 |         |
|           |                                               | Z | 2.99 | 71.41 | 20.26 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 2.32 | 66.53 | 16.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.64 | 68.94 | 17.60 |      | 150.0 |         |
|           |                                               | Z | 2.51 | 67.67 | 17.41 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.33 | 65.78 | 17.37 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.50 | 67.22 | 18.00 |      | 150.0 |         |
|           |                                               | Z | 2.47 | 66.64 | 18.07 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 2.80 | 70.47 | 19.65 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.29 | 73.46 | 20.79 |      | 150.0 |         |
|           |                                               | Z | 3.07 | 72.01 | 20.64 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 2.35 | 66.85 | 16.82 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.69 | 69.31 | 17.86 |      | 150.0 |         |
|           |                                               | Z | 2.55 | 68.03 | 17.68 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.23 | 66.54 | 15.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.33 | 66.90 | 16.14 |      | 150.0 |         |
|           |                                               | Z | 4.32 | 66.32 | 15.87 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.36 | 66.75 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.47 | 67.12 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 66.58 | 16.01 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.39 | 66.76 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 67.13 | 16.28 |      | 150.0 |         |
|           |                                               | Z | 4.50 | 66.61 | 16.03 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.21 | 66.52 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.32 | 66.89 | 16.12 |      | 150.0 |         |
|           |                                               | Z | 4.31 | 66.33 | 15.87 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.37 | 66.75 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.48 | 67.12 | 16.28 |      | 150.0 |         |
|           |                                               | Z | 4.48 | 66.59 | 16.02 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.38 | 66.75 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 67.13 | 16.28 |      | 150.0 |         |
|           |                                               | Z | 4.50 | 66.62 | 16.04 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.16 | 66.56 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.27 | 66.93 | 16.10 |      | 150.0 |         |
|           |                                               | Z | 4.26 | 66.35 | 15.83 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.36 | 66.72 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.47 | 67.08 | 16.26 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 66.56 | 16.01 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.40 | 66.71 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.51 | 67.07 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.51 | 66.56 | 16.03 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 4.80 | 66.80 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.88 | 67.12 | 16.39 |      | 150.0 |         |
|           |                                               | Z | 4.89 | 66.72 | 16.20 |      | 150.0 |         |

|           |                                           |   |      |       |       |      |       |         |
|-----------|-------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.04 | 66.95 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.14 | 67.29 | 16.49 |      | 150.0 |         |
|           |                                           | Z | 5.18 | 66.99 | 16.36 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.84 | 66.92 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.92 | 67.24 | 16.38 |      | 150.0 |         |
|           |                                           | Z | 4.93 | 66.82 | 16.18 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.46 | 65.56 | 14.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.62 | 66.44 | 14.96 |      | 150.0 |         |
|           |                                           | Z | 2.55 | 65.41 | 14.45 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 4.12 | 79.74 | 22.87 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.38 | 90.96 | 26.97 |      | 65.0  |         |
|           |                                           | Z | 7.19 | 90.56 | 27.66 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 4.10 | 78.95 | 21.90 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.43 | 89.71 | 25.78 |      | 65.0  |         |
|           |                                           | Z | 7.75 | 90.70 | 26.99 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 3.12 | 75.94 | 23.15 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 4.06 | 82.01 | 25.85 |      | 65.0  |         |
|           |                                           | Z | 4.25 | 82.24 | 26.47 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 3.94 | 78.88 | 22.44 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.91 | 89.62 | 26.42 |      | 65.0  |         |
|           |                                           | Z | 6.76 | 89.24 | 27.11 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 3.89 | 78.03 | 21.47 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.86 | 88.27 | 25.23 |      | 65.0  |         |
|           |                                           | Z | 7.16 | 89.19 | 26.40 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 3.03 | 75.32 | 22.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.92 | 81.25 | 25.48 |      | 65.0  |         |
|           |                                           | Z | 4.10 | 81.44 | 26.07 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 3.94 | 78.86 | 22.44 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.89 | 89.60 | 26.42 |      | 65.0  |         |
|           |                                           | Z | 6.74 | 89.21 | 27.10 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 3.88 | 77.99 | 21.46 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.83 | 88.22 | 25.21 |      | 65.0  |         |
|           |                                           | Z | 7.13 | 89.13 | 26.38 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 2.96 | 74.84 | 22.48 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.82 | 80.66 | 25.12 |      | 65.0  |         |
|           |                                           | Z | 4.00 | 80.82 | 25.70 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 3.94 | 78.87 | 22.44 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.90 | 89.63 | 26.43 |      | 65.0  |         |
|           |                                           | Z | 6.75 | 89.23 | 27.11 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 3.92 | 78.11 | 21.50 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.93 | 88.43 | 25.27 |      | 65.0  |         |
|           |                                           | Z | 7.23 | 89.34 | 26.44 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 3.03 | 75.32 | 22.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.92 | 81.27 | 25.49 |      | 65.0  |         |
|           |                                           | Z | 4.10 | 81.45 | 26.08 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 3.93 | 78.83 | 22.43 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.87 | 89.57 | 26.41 |      | 65.0  |         |
|           |                                           | Z | 6.72 | 89.17 | 27.08 |      | 65.0  |         |

|           |                                            |   |      |       |       |      |      |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.87 | 77.95 | 21.45 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.80 | 88.17 | 25.20 |      | 65.0 |         |
|           |                                            | Z | 7.10 | 89.08 | 26.37 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.02 | 75.30 | 22.81 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.91 | 81.25 | 25.48 |      | 65.0 |         |
|           |                                            | Z | 4.09 | 81.42 | 26.07 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.47 | 76.60 | 23.52 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.28 | 79.70 | 24.95 |      | 65.0 |         |
|           |                                            | Z | 6.08 | 77.98 | 24.56 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.17 | 75.55 | 22.99 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.96 | 78.71 | 24.47 |      | 65.0 |         |
|           |                                            | Z | 5.82 | 77.10 | 24.09 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.47 | 72.66 | 22.57 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.85 | 74.66 | 23.64 |      | 65.0 |         |
|           |                                            | Z | 4.89 | 73.70 | 23.43 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 2.59 | 65.60 | 11.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.16 | 68.30 | 13.59 |      | 65.0 |         |
|           |                                            | Z | 3.94 | 71.58 | 16.14 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 2.56 | 65.23 | 11.69 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.08 | 67.71 | 13.25 |      | 65.0 |         |
|           |                                            | Z | 3.80 | 70.75 | 15.70 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 2.30 | 67.33 | 13.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.40 | 73.14 | 16.55 |      | 65.0 |         |
|           |                                            | Z | 3.20 | 71.92 | 16.41 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.93 | 67.28 | 14.07 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.57 | 70.51 | 16.14 |      | 65.0 |         |
|           |                                            | Z | 3.50 | 69.72 | 16.15 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.93 | 66.83 | 13.84 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.51 | 69.74 | 15.76 |      | 65.0 |         |
|           |                                            | Z | 3.49 | 69.17 | 15.87 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 3.40 | 72.89 | 17.31 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.05 | 79.62 | 20.60 |      | 65.0 |         |
|           |                                            | Z | 4.35 | 76.73 | 19.72 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 4.07 | 71.77 | 18.68 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.65 | 74.35 | 20.17 |      | 65.0 |         |
|           |                                            | Z | 4.43 | 72.91 | 19.73 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 3.86 | 69.66 | 17.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.37 | 71.98 | 18.68 |      | 65.0 |         |
|           |                                            | Z | 4.24 | 70.85 | 18.35 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 4.28 | 75.56 | 20.13 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.50 | 80.28 | 22.41 |      | 65.0 |         |
|           |                                            | Z | 4.84 | 77.34 | 21.32 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 4.17 | 69.62 | 17.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.59 | 71.50 | 19.03 |      | 65.0 |         |
|           |                                            | Z | 4.46 | 70.34 | 18.61 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 4.46 | 70.60 | 18.66 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.90 | 72.45 | 19.77 |      | 65.0 |         |
|           |                                            | Z | 4.75 | 71.28 | 19.37 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 4.40 | 73.51 | 19.69 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.16 | 76.59 | 21.27 |      | 65.0 |         |
|           |                                             | Z | 4.77 | 74.49 | 20.43 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 1.88 | 62.21 | 8.80  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.16 | 63.72 | 9.95  |      | 65.0 |         |
|           |                                             | Z | 2.68 | 66.18 | 12.27 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 1.87 | 61.92 | 8.53  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.13 | 63.28 | 9.61  |      | 65.0 |         |
|           |                                             | Z | 2.60 | 65.47 | 11.78 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 1.63 | 62.98 | 9.76  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.11 | 66.24 | 12.11 |      | 65.0 |         |
|           |                                             | Z | 2.20 | 66.42 | 12.68 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 3.37 | 69.09 | 15.81 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.03 | 72.21 | 17.73 |      | 65.0 |         |
|           |                                             | Z | 3.88 | 71.08 | 17.53 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 3.41 | 68.89 | 15.70 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.05 | 71.86 | 17.55 |      | 65.0 |         |
|           |                                             | Z | 3.92 | 70.83 | 17.40 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 3.65 | 73.54 | 18.24 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.99 | 79.08 | 21.01 |      | 65.0 |         |
|           |                                             | Z | 4.36 | 76.25 | 20.08 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 4.05 | 71.68 | 18.62 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.63 | 74.27 | 20.11 |      | 65.0 |         |
|           |                                             | Z | 4.42 | 72.84 | 19.67 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 3.85 | 69.65 | 17.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.36 | 71.96 | 18.67 |      | 65.0 |         |
|           |                                             | Z | 4.23 | 70.83 | 18.35 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 4.23 | 75.35 | 20.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.43 | 80.04 | 22.29 |      | 65.0 |         |
|           |                                             | Z | 4.79 | 77.13 | 21.21 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 4.21 | 69.90 | 18.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.65 | 71.84 | 19.30 |      | 65.0 |         |
|           |                                             | Z | 4.51 | 70.68 | 18.86 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 4.55 | 71.05 | 19.08 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.00 | 72.95 | 20.16 |      | 65.0 |         |
|           |                                             | Z | 4.85 | 71.75 | 19.72 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 4.57 | 74.06 | 19.81 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.43 | 77.35 | 21.43 |      | 65.0 |         |
|           |                                             | Z | 4.99 | 75.14 | 20.54 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 4.89 | 70.28 | 18.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.29 | 71.90 | 19.82 |      | 65.0 |         |
|           |                                             | Z | 5.16 | 70.86 | 19.41 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 4.93 | 70.03 | 18.82 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.31 | 71.54 | 19.69 |      | 65.0 |         |
|           |                                             | Z | 5.18 | 70.53 | 19.29 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 4.82 | 72.26 | 19.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.40 | 74.50 | 20.39 |      | 65.0 |         |
|           |                                             | Z | 5.12 | 72.93 | 19.74 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.30  | 66.08 | 14.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.48  | 67.13 | 15.07 |      | 150.0 |         |
|           |                                                                    | Z | 2.37  | 65.78 | 14.35 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.33  | 66.42 | 14.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.55  | 68.66 | 15.67 |      | 150.0 |         |
|           |                                                                    | Z | 1.35  | 65.99 | 13.99 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.44  | 58.96 | 4.35  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.29  | 58.94 | 4.16  |      | 50.0  |         |
|           |                                                                    | Z | 1.60  | 59.77 | 5.29  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 2.42  | 63.55 | 9.32  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.50  | 65.00 | 10.23 |      | 50.0  |         |
|           |                                                                    | Z | 3.00  | 66.61 | 11.73 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 2.47  | 63.72 | 9.48  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.58  | 65.28 | 10.45 |      | 50.0  |         |
|           |                                                                    | Z | 3.09  | 66.89 | 11.94 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 0.64  | 61.56 | 7.87  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.98  | 65.79 | 11.09 |      | 150.0 |         |
|           |                                                                    | Z | 0.84  | 63.19 | 9.57  |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.41  | 60.33 | 6.79  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.62  | 64.18 | 10.12 |      | 150.0 |         |
|           |                                                                    | Z | 0.50  | 61.40 | 8.20  |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.46  | 61.89 | 7.99  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.01  | 70.37 | 13.40 |      | 150.0 |         |
|           |                                                                    | Z | 0.57  | 63.19 | 9.51  |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 0.64  | 65.03 | 10.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 4.97  | 89.66 | 20.54 |      | 150.0 |         |
|           |                                                                    | Z | 0.76  | 66.38 | 11.57 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 14.73 | 88.54 | 22.30 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 21.95 | 97.75 | 26.07 |      | 50.0  |         |
|           |                                                                    | Z | 14.97 | 91.80 | 24.79 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.34  | 68.34 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.58  | 69.89 | 16.76 |      | 150.0 |         |
|           |                                                                    | Z | 2.40  | 68.08 | 15.64 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 0.86  | 62.29 | 9.16  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.16  | 65.45 | 11.69 |      | 150.0 |         |
|           |                                                                    | Z | 1.05  | 63.56 | 10.60 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 1.14  | 61.76 | 8.21  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.41  | 63.51 | 9.50  |      | 150.0 |         |
|           |                                                                    | Z | 1.73  | 65.72 | 11.49 |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 0.97  | 60.07 | 6.55  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.14  | 61.11 | 7.49  |      | 150.0 |         |
|           |                                                                    | Z | 1.33  | 62.21 | 8.89  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.13  | 64.55 | 16.56 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.26  | 65.00 | 16.97 |      | 50.0  |         |
|           |                                                                    | Z | 4.39  | 64.86 | 16.90 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.66  | 65.38 | 17.39 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.76  | 65.70 | 17.72 |      | 50.0  |         |
|           |                                                                    | Z | 4.88  | 65.46 | 17.59 |      | 50.0  |         |

|           |                                                                     |   |      |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.45 | 65.36 | 17.40 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.51 | 65.30 | 17.48 |       | 50.0  |         |
|           |                                                                     | Z | 4.62 | 65.06 | 17.37 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.25 | 64.98 | 16.73 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.36 | 65.33 | 17.07 |       | 50.0  |         |
|           |                                                                     | Z | 4.45 | 64.98 | 16.90 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 3.81 | 66.28 | 17.81 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 3.76 | 65.91 | 18.03 |       | 35.0  |         |
|           |                                                                     | Z | 4.04 | 66.66 | 18.48 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.18 | 65.73 | 17.92 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.17 | 65.55 | 18.11 |       | 35.0  |         |
|           |                                                                     | Z | 4.39 | 65.94 | 18.38 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.05 | 65.69 | 17.78 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.04 | 65.48 | 17.96 |       | 35.0  |         |
|           |                                                                     | Z | 4.27 | 65.96 | 18.27 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.03 | 65.87 | 17.91 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.01 | 65.64 | 18.09 |       | 35.0  |         |
|           |                                                                     | Z | 4.25 | 66.15 | 18.40 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.18 | 65.77 | 18.00 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.19 | 65.61 | 18.20 |       | 35.0  |         |
|           |                                                                     | Z | 4.42 | 66.06 | 18.49 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.13 | 65.78 | 17.90 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.12 | 65.57 | 18.08 |       | 35.0  |         |
|           |                                                                     | Z | 4.34 | 65.98 | 18.35 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 2.69 | 67.62 | 15.56 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.94 | 69.08 | 16.39 |       | 150.0 |         |
|           |                                                                     | Z | 2.75 | 67.40 | 15.38 |       | 150.0 |         |
| 10313-AAA | IDEN 1:3                                                            | X | 1.80 | 67.21 | 13.40 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.78 | 73.35 | 16.36 |       | 70.0  |         |
|           |                                                                     | Z | 2.09 | 69.09 | 14.51 |       | 70.0  |         |
| 10314-AAA | IDEN 1:6                                                            | X | 3.26 | 75.39 | 19.57 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 5.56 | 85.97 | 24.05 |       | 30.0  |         |
|           |                                                                     | Z | 4.04 | 79.23 | 21.39 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 0.96 | 62.72 | 14.16 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.05 | 63.94 | 15.22 |       | 150.0 |         |
|           |                                                                     | Z | 0.96 | 62.45 | 14.04 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.24 | 66.42 | 15.96 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.35 | 66.80 | 16.22 |       | 150.0 |         |
|           |                                                                     | Z | 4.36 | 66.32 | 16.01 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.24 | 66.42 | 15.96 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.35 | 66.80 | 16.22 |       | 150.0 |         |
|           |                                                                     | Z | 4.36 | 66.32 | 16.01 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.31 | 66.71 | 15.99 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.43 | 67.11 | 16.24 |       | 150.0 |         |
|           |                                                                     | Z | 4.43 | 66.60 | 15.99 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 4.98 | 66.52 | 16.05 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.08 | 66.87 | 16.24 |       | 150.0 |         |
|           |                                                                     | Z | 5.16 | 66.70 | 16.18 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.36   | 67.14  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.44   | 67.45  | 16.42 |      | 150.0 |         |
|           |                                                                                 | Z | 5.45   | 67.07  | 16.25 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 0.64   | 61.56  | 7.87  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.98   | 65.79  | 11.09 |      | 115.0 |         |
|           |                                                                                 | Z | 0.84   | 63.19  | 9.57  |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 0.64   | 61.56  | 7.87  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.98   | 65.79  | 11.09 |      | 115.0 |         |
|           |                                                                                 | Z | 0.84   | 63.19  | 9.57  |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 119.53 | 28.08 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 115.68 | 26.57 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 126.19 | 31.47 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 2.86   | 79.80  | 18.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 25.09  | 107.33 | 26.44 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 133.23 | 34.42 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 0.92   | 62.32  | 13.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.00   | 63.42  | 14.80 |      | 150.0 |         |
|           |                                                                                 | Z | 0.91   | 61.96  | 13.60 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.22   | 66.50  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.32   | 66.87  | 16.21 |      | 150.0 |         |
|           |                                                                                 | Z | 4.32   | 66.33  | 15.95 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.22   | 66.50  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.32   | 66.87  | 16.21 |      | 150.0 |         |
|           |                                                                                 | Z | 4.32   | 66.33  | 15.95 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.21   | 66.71  | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.32   | 67.09  | 16.27 |      | 150.0 |         |
|           |                                                                                 | Z | 4.31   | 66.51  | 15.99 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.23   | 66.64  | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.34   | 67.01  | 16.25 |      | 150.0 |         |
|           |                                                                                 | Z | 4.33   | 66.45  | 15.98 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.33   | 66.62  | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.44   | 66.98  | 16.26 |      | 150.0 |         |
|           |                                                                                 | Z | 4.44   | 66.45  | 16.00 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.45   | 66.86  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.56   | 67.23  | 16.34 |      | 150.0 |         |
|           |                                                                                 | Z | 4.57   | 66.72  | 16.10 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.38   | 66.81  | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.50   | 67.18  | 16.32 |      | 150.0 |         |
|           |                                                                                 | Z | 4.50   | 66.66  | 16.07 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.03   | 67.03  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.11   | 67.32  | 16.49 |      | 150.0 |         |
|           |                                                                                 | Z | 5.14   | 66.98  | 16.33 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.06   | 67.16  | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.13   | 67.40  | 16.52 |      | 150.0 |         |
|           |                                                                                 | Z | 5.17   | 67.10  | 16.39 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.01   | 66.91  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.09   | 67.19  | 16.41 |      | 150.0 |         |
|           |                                                                | Z | 5.13   | 66.90  | 16.28 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.07   | 72.07  | 17.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.24   | 72.56  | 18.40 |      | 150.0 |         |
|           |                                                                | Z | 4.04   | 71.02  | 17.78 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 3.79   | 66.99  | 15.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.94   | 67.49  | 16.09 |      | 150.0 |         |
|           |                                                                | Z | 3.92   | 66.79  | 15.76 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.13   | 66.89  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.26   | 67.30  | 16.25 |      | 150.0 |         |
|           |                                                                | Z | 4.25   | 66.71  | 15.96 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.40   | 66.85  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.51   | 67.22  | 16.34 |      | 150.0 |         |
|           |                                                                | Z | 4.51   | 66.70  | 16.09 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.05   | 72.38  | 17.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.37   | 73.48  | 18.19 |      | 150.0 |         |
|           |                                                                | Z | 4.07   | 71.60  | 17.46 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.72   | 79.05  | 18.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 21.44  | 105.07 | 25.81 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 132.91 | 34.27 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 2.96   | 66.34  | 14.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.18   | 67.31  | 14.92 |      | 150.0 |         |
|           |                                                                | Z | 3.13   | 66.39  | 14.53 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.67   | 66.79  | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.81   | 67.30  | 15.97 |      | 150.0 |         |
|           |                                                                | Z | 3.78   | 66.58  | 15.62 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 3.98   | 66.71  | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.10   | 67.14  | 16.16 |      | 150.0 |         |
|           |                                                                | Z | 4.09   | 66.52  | 15.85 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.21   | 66.62  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.32   | 67.01  | 16.21 |      | 150.0 |         |
|           |                                                                | Z | 4.30   | 66.46  | 15.93 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 2.70   | 65.75  | 13.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 2.96   | 67.00  | 14.12 |      | 150.0 |         |
|           |                                                                | Z | 2.94   | 66.14  | 13.79 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 5.99   | 67.61  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.02   | 67.80  | 16.61 |      | 150.0 |         |
|           |                                                                | Z | 6.11   | 67.72  | 16.61 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.61   | 65.32  | 15.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.69   | 65.64  | 15.94 |      | 150.0 |         |
|           |                                                                | Z | 3.65   | 65.04  | 15.66 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.19   | 69.07  | 15.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.69   | 71.30  | 16.62 |      | 150.0 |         |
|           |                                                                | Z | 3.53   | 69.92  | 16.16 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.69   | 69.03  | 17.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.79   | 69.11  | 17.75 |      | 150.0 |         |
|           |                                                                | Z | 4.84   | 68.73  | 17.83 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.72   | 66.02  | 14.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.91   | 69.57  | 16.66 |      | 150.0 |         |
|           |                                                                   | Z | 0.71   | 65.26  | 13.72 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 1.93   | 75.92  | 18.31 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 6.83   | 93.43  | 24.06 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 137.66 | 36.58 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.63   | 60.00  | 7.27  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.19  |      | 80.0  |         |
|           |                                                                   | Z | 1.15   | 65.31  | 10.99 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.65   | 60.00  | 6.55  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.66   | 60.00  | 6.45  |      | 80.0  |         |
|           |                                                                   | Z | 0.67   | 60.00  | 7.76  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.38   | 71.32  | 15.83 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 4.54   | 86.66  | 21.20 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.26 | 34.80 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.63   | 60.00  | 7.20  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.11  |      | 80.0  |         |
|           |                                                                   | Z | 0.94   | 63.37  | 10.05 |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.65   | 60.00  | 6.50  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.66   | 60.00  | 6.41  |      | 80.0  |         |
|           |                                                                   | Z | 0.68   | 60.00  | 7.70  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.47   | 72.19  | 16.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.30   | 88.83  | 21.91 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.76 | 35.02 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.63   | 60.00  | 7.22  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.14  |      | 80.0  |         |
|           |                                                                   | Z | 0.99   | 63.90  | 10.32 |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.65   | 60.00  | 6.51  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.66   | 60.00  | 6.41  |      | 80.0  |         |
|           |                                                                   | Z | 0.68   | 60.00  | 7.70  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 1.46   | 72.21  | 16.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.35   | 88.98  | 21.94 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.82 | 35.03 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.63   | 60.00  | 7.21  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.12  |      | 80.0  |         |
|           |                                                                   | Z | 0.98   | 63.79  | 10.26 |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.65   | 60.00  | 6.49  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.66   | 60.00  | 6.39  |      | 80.0  |         |
|           |                                                                   | Z | 0.67   | 60.00  | 7.68  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 1.46   | 72.15  | 16.20 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.31   | 88.87  | 21.90 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.77 | 35.01 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.63   | 60.00  | 7.20  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.12  |      | 80.0  |         |
|           |                                                                   | Z | 0.97   | 63.74  | 10.23 |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.65   | 60.00  | 6.49  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.66   | 60.00  | 6.39  |      | 80.0  |         |
|           |                                                                   | Z | 0.67   | 60.00  | 7.69  |      | 80.0  |         |

|           |                                                                     |   |       |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.63  | 60.00  | 7.17  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.63  | 60.00  | 7.08  |      | 80.0 |         |
|           |                                                                     | Z | 0.93  | 63.31  | 10.01 |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.65  | 60.00  | 6.47  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.66  | 60.00  | 6.37  |      | 80.0 |         |
|           |                                                                     | Z | 0.67  | 60.00  | 7.67  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.26  | 80.69  | 20.19 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.01  | 87.70  | 22.71 |      | 80.0 |         |
|           |                                                                     | Z | 21.27 | 105.57 | 28.88 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.88  | 66.39  | 12.32 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.13  | 71.95  | 14.74 |      | 80.0 |         |
|           |                                                                     | Z | 13.52 | 90.52  | 21.87 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.43  | 63.16  | 10.40 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.06  | 66.80  | 12.23 |      | 80.0 |         |
|           |                                                                     | Z | 6.11  | 79.62  | 18.02 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.06  | 61.11  | 9.78  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.73  | 66.89  | 13.39 |      | 80.0 |         |
|           |                                                                     | Z | 1.53  | 64.78  | 12.61 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.23  | 60.00  | 8.50  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.57  | 62.45  | 10.22 |      | 80.0 |         |
|           |                                                                     | Z | 2.78  | 68.98  | 14.19 |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.26  | 60.00  | 8.49  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.54  | 61.98  | 9.97  |      | 80.0 |         |
|           |                                                                     | Z | 2.53  | 67.57  | 13.58 |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.66  | 65.74  | 13.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.52  | 71.78  | 17.06 |      | 80.0 |         |
|           |                                                                     | Z | 2.10  | 68.47  | 15.70 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.66  | 62.56  | 11.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.26  | 66.58  | 13.85 |      | 80.0 |         |
|           |                                                                     | Z | 2.12  | 65.12  | 13.38 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.67  | 62.33  | 11.12 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.24  | 66.10  | 13.59 |      | 80.0 |         |
|           |                                                                     | Z | 2.14  | 64.83  | 13.21 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 2.26  | 67.65  | 16.13 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.82  | 71.24  | 18.12 |      | 80.0 |         |
|           |                                                                     | Z | 2.57  | 69.00  | 17.08 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.49  | 65.85  | 15.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.90  | 68.21  | 16.54 |      | 80.0 |         |
|           |                                                                     | Z | 2.74  | 66.70  | 15.91 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.57  | 65.79  | 15.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.97  | 68.04  | 16.46 |      | 80.0 |         |
|           |                                                                     | Z | 2.83  | 66.63  | 15.88 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 2.64  | 67.24  | 16.30 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.09  | 69.79  | 17.74 |      | 80.0 |         |
|           |                                                                     | Z | 2.92  | 68.21  | 16.96 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.93  | 65.80  | 15.66 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.24  | 67.45  | 16.69 |      | 80.0 |         |
|           |                                                                     | Z | 3.14  | 66.35  | 16.22 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.99 | 65.74 | 15.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.29 | 67.32 | 16.63 |      | 80.0 |         |
|           |                                                                      | Z | 3.21 | 66.28 | 16.18 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.77 | 68.16 | 16.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.31 | 71.10 | 18.21 |      | 80.0 |         |
|           |                                                                      | Z | 3.09 | 69.31 | 17.33 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.95 | 66.01 | 15.89 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.25 | 67.67 | 16.91 |      | 80.0 |         |
|           |                                                                      | Z | 3.16 | 66.59 | 16.41 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.04 | 65.92 | 15.89 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.34 | 67.48 | 16.84 |      | 80.0 |         |
|           |                                                                      | Z | 3.25 | 66.45 | 16.38 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 0.90 | 60.00 | 7.56  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 0.94 | 60.22 | 8.59  |      | 80.0 |         |
|           |                                                                      | Z | 0.98 | 60.00 | 8.77  |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.09 | 60.00 | 6.33  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.09 | 60.00 | 7.12  |      | 80.0 |         |
|           |                                                                      | Z | 1.16 | 60.00 | 7.58  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.11 | 60.00 | 6.17  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.11 | 60.00 | 6.94  |      | 80.0 |         |
|           |                                                                      | Z | 1.17 | 60.00 | 7.42  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.91 | 66.68 | 14.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.64 | 71.54 | 17.49 |      | 80.0 |         |
|           |                                                                      | Z | 2.29 | 68.68 | 16.26 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.02 | 64.23 | 12.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.60 | 67.75 | 15.11 |      | 80.0 |         |
|           |                                                                      | Z | 2.42 | 66.09 | 14.51 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.05 | 64.07 | 12.75 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.63 | 67.51 | 14.92 |      | 80.0 |         |
|           |                                                                      | Z | 2.46 | 65.95 | 14.37 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.23 | 67.47 | 16.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.79 | 71.03 | 18.01 |      | 80.0 |         |
|           |                                                                      | Z | 2.54 | 68.82 | 16.98 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.48 | 65.75 | 15.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.88 | 68.10 | 16.48 |      | 80.0 |         |
|           |                                                                      | Z | 2.73 | 66.60 | 15.85 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.55 | 65.70 | 14.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.95 | 67.94 | 16.40 |      | 80.0 |         |
|           |                                                                      | Z | 2.81 | 66.54 | 15.82 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 2.76 | 68.04 | 16.58 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.29 | 70.96 | 18.14 |      | 80.0 |         |
|           |                                                                      | Z | 3.07 | 69.18 | 17.26 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.93 | 65.95 | 15.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.24 | 67.61 | 16.87 |      | 80.0 |         |
|           |                                                                      | Z | 3.14 | 66.53 | 16.37 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.03 | 65.86 | 15.84 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.33 | 67.40 | 16.79 |      | 80.0  |         |
|           |                                                                     | Z | 3.24 | 66.38 | 16.33 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.24 | 67.72 | 16.53 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.69 | 69.96 | 17.72 |      | 80.0  |         |
|           |                                                                     | Z | 3.51 | 68.56 | 17.03 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.43 | 65.97 | 16.12 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.71 | 67.32 | 16.91 |      | 80.0  |         |
|           |                                                                     | Z | 3.64 | 66.47 | 16.52 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.52 | 65.89 | 16.12 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.78 | 67.15 | 16.86 |      | 80.0  |         |
|           |                                                                     | Z | 3.71 | 66.32 | 16.49 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.22 | 68.47 | 16.72 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.79 | 71.22 | 18.12 |      | 80.0  |         |
|           |                                                                     | Z | 3.54 | 69.57 | 17.32 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.32 | 66.00 | 16.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.60 | 67.43 | 16.98 |      | 80.0  |         |
|           |                                                                     | Z | 3.52 | 66.56 | 16.56 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.39 | 65.79 | 16.10 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.64 | 67.11 | 16.88 |      | 80.0  |         |
|           |                                                                     | Z | 3.57 | 66.28 | 16.49 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.88 | 62.44 | 13.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.96 | 63.62 | 14.88 |      | 150.0 |         |
|           |                                                                     | Z | 0.87 | 62.07 | 13.59 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.45 | 66.98 | 14.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.65 | 72.72 | 18.47 |      | 150.0 |         |
|           |                                                                     | Z | 0.42 | 65.95 | 13.66 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.70 | 63.68 | 13.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.81 | 65.65 | 15.62 |      | 150.0 |         |
|           |                                                                     | Z | 0.69 | 63.23 | 13.65 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.21 | 66.61 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32 | 66.98 | 16.20 |      | 150.0 |         |
|           |                                                                     | Z | 4.31 | 66.42 | 15.93 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.34 | 66.77 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.46 | 67.14 | 16.28 |      | 150.0 |         |
|           |                                                                     | Z | 4.46 | 66.61 | 16.03 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.20 | 66.68 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32 | 67.07 | 16.20 |      | 150.0 |         |
|           |                                                                     | Z | 4.31 | 66.53 | 15.94 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.13 | 66.63 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.25 | 67.04 | 16.18 |      | 150.0 |         |
|           |                                                                     | Z | 4.24 | 66.49 | 15.91 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.17 | 66.72 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.29 | 67.14 | 16.26 |      | 150.0 |         |
|           |                                                                     | Z | 4.30 | 66.63 | 16.02 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.12 | 66.80 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.24 | 67.19 | 16.22 |      | 150.0 |         |
|           |                                                            | Z | 4.21 | 66.57 | 15.90 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.13 | 66.73 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.25 | 67.13 | 16.27 |      | 150.0 |         |
|           |                                                            | Z | 4.25 | 66.57 | 15.99 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.18 | 65.86 | 15.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 66.26 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.27 | 65.65 | 15.61 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.28 | 66.10 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.41 | 66.52 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 4.40 | 65.94 | 15.73 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.22 | 66.07 | 15.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.34 | 66.49 | 15.96 |      | 150.0 |         |
|           |                                                            | Z | 4.33 | 65.90 | 15.66 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.23 | 66.08 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.36 | 66.51 | 15.99 |      | 150.0 |         |
|           |                                                            | Z | 4.34 | 65.91 | 15.70 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.23 | 66.08 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.36 | 66.51 | 15.99 |      | 150.0 |         |
|           |                                                            | Z | 4.34 | 65.91 | 15.70 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.19 | 66.07 | 15.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.32 | 66.52 | 15.96 |      | 150.0 |         |
|           |                                                            | Z | 4.31 | 65.94 | 15.68 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.08 | 65.93 | 15.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.20 | 66.39 | 15.90 |      | 150.0 |         |
|           |                                                            | Z | 4.19 | 65.79 | 15.60 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.23 | 66.16 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.36 | 66.60 | 16.00 |      | 150.0 |         |
|           |                                                            | Z | 4.35 | 65.98 | 15.69 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 4.82 | 66.10 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.91 | 66.46 | 16.04 |      | 150.0 |         |
|           |                                                            | Z | 4.91 | 66.02 | 15.83 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 4.85 | 66.20 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.94 | 66.56 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.97 | 66.17 | 15.90 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.74 | 66.19 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.84 | 66.58 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 4.85 | 66.14 | 15.86 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 4.82 | 66.26 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.91 | 66.59 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 4.91 | 66.13 | 15.86 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 4.87 | 66.17 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.97 | 66.52 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.98 | 66.12 | 15.90 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 4.80 | 66.12 | 15.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.90 | 66.49 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.91 | 66.07 | 15.89 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 4.79 | 66.06 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.89 | 66.43 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 4.89 | 65.96 | 15.82 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 4.94 | 66.17 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.04 | 66.51 | 16.10 |      | 150.0 |         |
|           |                                                    | Z | 5.05 | 66.09 | 15.90 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.03 | 66.31 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.11 | 66.60 | 16.17 |      | 150.0 |         |
|           |                                                    | Z | 5.12 | 66.17 | 15.97 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.18 | 66.16 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.26 | 66.52 | 16.02 |      | 150.0 |         |
|           |                                                    | Z | 5.26 | 66.12 | 15.84 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.36 | 66.65 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.42 | 66.93 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 66.61 | 16.04 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.20 | 66.27 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.29 | 66.63 | 16.05 |      | 150.0 |         |
|           |                                                    | Z | 5.29 | 66.25 | 15.87 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.31 | 66.50 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.37 | 66.75 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.37 | 15.93 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.41 | 66.98 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 67.30 | 16.36 |      | 150.0 |         |
|           |                                                    | Z | 5.57 | 67.13 | 16.28 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.30 | 66.60 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.35 | 66.83 | 16.16 |      | 150.0 |         |
|           |                                                    | Z | 5.37 | 66.46 | 15.99 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.19 | 66.21 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.28 | 66.60 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.30 | 66.24 | 15.84 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.18 | 66.29 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 66.65 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 5.26 | 66.20 | 15.82 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.23 | 66.22 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.32 | 66.58 | 16.03 |      | 150.0 |         |
|           |                                                    | Z | 5.32 | 66.18 | 15.85 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.62 | 66.51 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.68 | 66.84 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.69 | 66.48 | 15.94 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.69 | 66.71 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.76 | 67.04 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.79 | 66.75 | 16.05 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.75 | 66.88 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.80 | 67.16 | 16.23 |      | 150.0 |         |
|           |                                                    | Z | 5.83 | 66.85 | 16.10 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.69 | 66.70 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.76 | 67.04 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.77 | 66.69 | 16.03 |      | 150.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.67 | 66.68 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.76 | 67.07 | 16.22 |      | 150.0 |         |
|           |                                                                 | Z | 5.80 | 66.79 | 16.10 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.71 | 66.66 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.79 | 67.02 | 16.23 |      | 150.0 |         |
|           |                                                                 | Z | 5.81 | 66.69 | 16.09 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.65 | 66.65 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.72 | 67.00 | 16.25 |      | 150.0 |         |
|           |                                                                 | Z | 5.75 | 66.69 | 16.12 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.68 | 66.77 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.77 | 67.15 | 16.33 |      | 150.0 |         |
|           |                                                                 | Z | 5.80 | 66.87 | 16.21 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 5.80 | 66.82 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.88 | 67.15 | 16.29 |      | 150.0 |         |
|           |                                                                 | Z | 5.91 | 66.85 | 16.17 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.52 | 66.62 | 16.09 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.63 | 66.97 | 16.32 |      | 150.0 |         |
|           |                                                                 | Z | 4.63 | 66.48 | 16.09 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.71 | 67.05 | 16.42 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.82 | 67.38 | 16.63 |      | 150.0 |         |
|           |                                                                 | Z | 4.83 | 66.91 | 16.42 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.54 | 66.82 | 16.20 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 67.19 | 16.43 |      | 150.0 |         |
|           |                                                                 | Z | 4.66 | 66.71 | 16.22 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.58 | 67.25 | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 67.60 | 16.82 |      | 150.0 |         |
|           |                                                                 | Z | 4.69 | 67.12 | 16.60 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.42 | 66.46 | 15.88 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.54 | 66.88 | 16.15 |      | 150.0 |         |
|           |                                                                 | Z | 4.56 | 66.45 | 15.95 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.58 | 67.53 | 16.78 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.68 | 67.86 | 16.97 |      | 150.0 |         |
|           |                                                                 | Z | 4.68 | 67.31 | 16.72 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.57 | 67.27 | 16.64 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.68 | 67.61 | 16.85 |      | 150.0 |         |
|           |                                                                 | Z | 4.69 | 67.12 | 16.62 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 0.99 | 62.81 | 14.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.09 | 64.12 | 15.35 |      | 130.0 |         |
|           |                                                                 | Z | 1.00 | 62.69 | 14.25 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.00 | 63.25 | 14.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.10 | 64.66 | 15.71 |      | 130.0 |         |
|           |                                                                 | Z | 1.00 | 63.12 | 14.54 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 0.77 | 71.94 | 17.18 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.53 | 83.79 | 23.08 |      | 130.0 |         |
|           |                                                                 | Z | 0.78 | 71.84 | 17.05 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 0.97 | 67.27 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.16 | 70.12 | 18.67 |      | 130.0 |         |
|           |                                                                 | Z | 0.98 | 67.08 | 16.66 |      | 130.0 |         |