



# RADIO TEST REPORT

Report No.:STS2006043W01

Issued for

SIMCom Wireless Solutions Limited

No.633, Jinzhong Road, Shanghai, China

|                |                                     |
|----------------|-------------------------------------|
| Product Name:  | LTE/GNSS MODULE                     |
| Brand Name:    | SIMCom                              |
| Model Name:    | SIM7600G-H                          |
| Series Model:  | SIM7600G-H miniPCIE                 |
| FCC ID:        | 2AJYU-8PYA007                       |
| Test Standard: | 47 CFR Part 2, 22(H), 24(E), 27, 90 |

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**TEST RESULT CERTIFICATION**

**Applicant's Name** .....: SIMCom Wireless Solutions Limited  
**Address** .....: No.633, Jinzhong Road, Shanghai, China  
**Manufacture's Name** .....: SIMCom Wireless Solutions Limited  
**Address** .....: No.633, Jinzhong Road, Shanghai, China

**Product Description**

**Product Name** .....: LTE/GNSS MODULE  
**Brand Name** .....: SIMCom  
**Model Name** .....: SIM7600G-H  
**Series Model** .....: SIM7600G-H miniPCIE  
**Test Standards** .....: 47 CFR Part 2, 22(H), 24(E), 27, 90  
**Test Procedure** .....: KDB 971168 D01 v03r01, ANSI C63.26 2015

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.  
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**Date of Test** .....:  
**Date of receipt of test item** .....: 16 June 2020  
**Date (s) of performance of tests**.: 16 June 2020 ~ 12 Aug. 2020  
**Date of Issue** .....: 12 Aug. 2020  
**Test Result** .....: Pass

Testing Engineer :

(Chris Chen)

Technical Manager :

(Sean she)

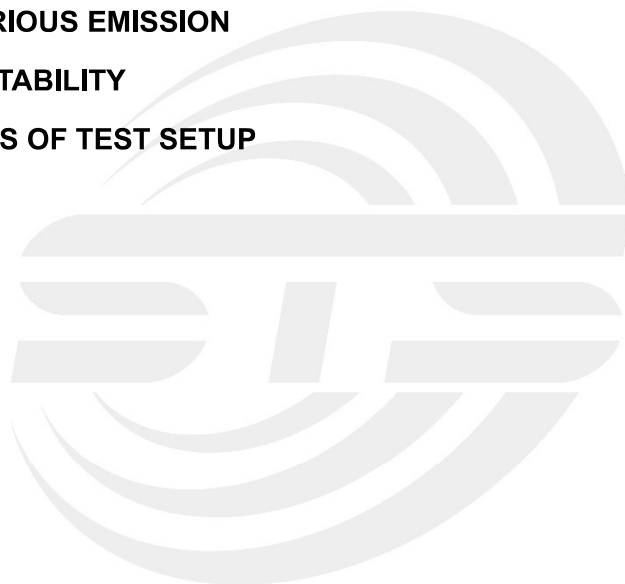
Authorized Signatory :

(Vita Li)





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**Revision History**

| Rev. | Issue Date   | Report NO.    | Effect Page | Contents      |
|------|--------------|---------------|-------------|---------------|
| 00   | 12 Aug. 2020 | STS2006043W01 | ALL         | Initial Issue |
|      |              |               |             |               |





## 1. TEST FACTORY & MEASUREMENT UNCERTAINTY

### 1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

| No. | Item                              | Uncertainty          |
|-----|-----------------------------------|----------------------|
| 1   | RF output power, conducted        | $\pm 0.68\text{dB}$  |
| 2   | Unwanted Emissions, conducted     | $\pm 2.988\text{dB}$ |
| 3   | All emissions, radiated 30-1GHz   | $\pm 5.6\text{dB}$   |
| 4   | All emissions, radiated 1G-6GHz   | $\pm 5.5\text{dB}$   |
| 5   | All emissions, radiated >6G       | $\pm 5.8\text{dB}$   |
| 6   | Conducted Emission (9KHz-150KHz)  | $\pm 3.37\text{dB}$  |
| 7   | Conducted Emission (150KHz-30MHz) | $\pm 3.83\text{dB}$  |



## 2. GENERAL INFORMATION

### 2.1 TECHNICAL SPECIFICATIONS AND REGULATIONS

#### 2.1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

|                             |                                                                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name:               | LTE/GNSS MODULE                                                                                                                                                                           |
| Trade Name                  | SIMCom                                                                                                                                                                                    |
| Model Name                  | SIM7600G-H                                                                                                                                                                                |
| Series Model                | SIM7600G-H miniPCIE                                                                                                                                                                       |
| Model Difference            | Only different in model name and appearance.                                                                                                                                              |
| Frequency Bands:            | U.S. Bands:<br>LTE FDD Band 2      LTE FDD Band 4<br>LTE FDD Band 5      LTE FDD Band 12<br>LTE FDD Band 13     LTE FDD Band 25<br>LTE FDD Band 26     LTE TDD Band 41<br>LTE FDD Band 66 |
| SIM CARD:                   | Only support single SIM Card.                                                                                                                                                             |
| Antenna:                    | Dipole                                                                                                                                                                                    |
| Antenna gain:               | Band2:1.87dBi, Band4:3.12dBi, Band5:0.91dBi,<br>Band12:0.95dBi, Band13:2.23dBi, Band25:1.87dBi,<br>Band26:0.91dBi, Band41:2.90dBi, Band66:3.12dBi                                         |
| Power Rating:               | Input: 3.8V                                                                                                                                                                               |
| Extreme Vol. Limits:        | 3.3V to 4.2V (Nominal 3.8V)                                                                                                                                                               |
| Extreme Temp.<br>Tolerance: | -40°C to +85°C                                                                                                                                                                            |
| Hardware version<br>number: | V2.02                                                                                                                                                                                     |
| Software version number:    | SIM7600M22_V2.0                                                                                                                                                                           |



## 2.1.2 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

| Product Specification Subjective To This Standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tx Frequency                                      | LTE Band 2:1850~1910MHz<br>LTE Band 4:1710~1755MHz<br>LTE Band 5:824~849MHz<br>LTE Band 12:699~716MHz<br>LTE Band 13:777~787MHz<br>LTE Band 25:1850~1915MHz<br>LTE Band 26:814~849MHz<br>LTE Band 41:2496~2690MHz<br>LTE Band 66:1710~1780MHz                                                                                                                                                                                                                   |
| Rx Frequency                                      | LTE Band 2:1930 ~1990MHz<br>LTE Band 4:2110~2155MHz<br>LTE Band 5:869~894MHz<br>LTE Band 12:729~746MHz<br>LTE Band 13:746~756MHz<br>LTE Band 25:1930~1995MHz<br>LTE Band 26:859~894MHz<br>LTE Band 41:2496~2690MHz<br>LTE Band 66:2110~2200MHz                                                                                                                                                                                                                  |
| Bandwidth                                         | LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz<br>LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz<br>LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz<br>LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz<br>LTE Band 13: 5MHz / 10MHz<br>LTE Band 25: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz<br>LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz/15MHz<br>LTE Band 41: 5MHz / 10MHz / 15MHz /20MHz<br>LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz |
| Maximum Output Power                              | LTE Band 2: 23.20 dBm<br>LTE Band 4: 23.67 dBm<br>LTE Band 5: 25.30 dBm<br>LTE Band 12: 24.35 dBm<br>LTE Band 13: 22.06 dBm<br>LTE Band 25: 23.46 dBm<br>LTE Band 26: 24.16 dBm<br>LTE Band 41: 23.16 dBm<br>LTE Band 66: 23.08 dBm                                                                                                                                                                                                                             |
| Type of Modulation                                | QPSK /16QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| RF Function | Band                                | UE Category UL | Modulation  | Power Class | Ant Gain(dBi)                                                                                        | Ant Type | SIM Card                      |
|-------------|-------------------------------------|----------------|-------------|-------------|------------------------------------------------------------------------------------------------------|----------|-------------------------------|
| LTE         | FDD:B2,B4, B5, B12,B13,B25,B26, B66 | 4              | QPSK, 16QAM | 3           | B2:1.87<br>B4:3.12<br>B5:0.91<br>B12:0.95<br>B13:2.23<br>B25:1.87<br>B26:0.91<br>B41:2.9<br>B66:3.12 | Dipole   | 1<br>SIM 1 is used to tested. |
|             | TDD:B41                             |                |             |             |                                                                                                      |          |                               |



## 2.1.3 EMISSION DESIGNATOR

| LTE Band 2               | Emission Designator | Emission Designator |
|--------------------------|---------------------|---------------------|
| BW(MHz)                  | (99%OBW)QPSK        | (99%OBW)16QAM       |
| 1.4                      | 1M10G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M52G7D             | 4M53W7D             |
| 10                       | 8M93G7D             | 8M92W7D             |
| 15                       | 13M4G7D             | 13M4W7D             |
| 20                       | 17M9G7D             | 17M9W7D             |
| LTE Band 4               | Emission Designator | Emission Designator |
| BW(MHz)                  | (99%OBW)QPSK        | (99%OBW)16QAM       |
| 1.4                      | 1M10G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M52G7D             | 4M53W7D             |
| 10                       | 8M93G7D             | 8M93W7D             |
| 15                       | 13M4G7D             | 13M5W7D             |
| 20                       | 17M9G7D             | 17M9W7D             |
| LTE Band 5               | Emission Designator | Emission Designator |
| BW(MHz)                  | (99%OBW)QPSK        | (99%OBW)16QAM       |
| 1.4                      | 1M11G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M51G7D             | 4M53W7D             |
| 10                       | 8M91G7D             | 8M92W7D             |
| LTE Band 12              | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 1.4                      | 1M11G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M52G7D             | 4M53W7D             |
| 10                       | 8M95G7D             | 8M94W7D             |
| LTE Band 13              | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 5                        | 4M53G7D             | 4M53W7D             |
| 10                       | 8M97G7D             | 8M95W7D             |
| LTE Band 25              | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 1.4                      | 1M10G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M53G7D             | 4M53W7D             |
| 10                       | 8M91G7D             | 8M92W7D             |
| 15                       | 13M4G7D             | 13M4W7D             |
| 20                       | 17M8G7D             | 17M8W7D             |
| LTE Band 26<br>(Part 22) | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 1.4                      | 1M11G7D             | 1M10W7D             |
| 3                        | 2M68G7D             | 2M68W7D             |
| 5                        | 4M51G7D             | 4M53W7D             |
| 10                       | 8M92G7D             | 8M92W7D             |
| 15                       | 13M4G7D             | 13M5W7D             |



| LTE Band 26<br>(Part 90) | Emission Designator | Emission Designator |
|--------------------------|---------------------|---------------------|
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 1.4                      | 1M10G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M53G7D             | 4M53W7D             |
| 10                       | 8M92G7D             | 8M93W7D             |
| LTE Band 41              | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 5                        | 4M52G7D             | 4M51W7D             |
| 10                       | 8M94G7D             | 8M94W7D             |
| 15                       | 13M5G7D             | 13M5W7D             |
| 20                       | 17M9G7D             | 17M9W7D             |
| LTE Band 66              | Emission Designator | Emission Designator |
| BW(MHz)                  | (99% BW)QPSK        | (99% BW)16QAM       |
| 1.4                      | 1M11G7D             | 1M10W7D             |
| 3                        | 2M69G7D             | 2M68W7D             |
| 5                        | 4M52G7D             | 4M53W7D             |
| 10                       | 8M93G7D             | 8M93W7D             |
| 15                       | 13M4G7D             | 13M4W7D             |
| 20                       | 17M9G7D             | 19M9W7D             |



#### 2.1.4 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 v03r01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power. Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Remark:

1. The mark 'v' means that this configuration is chosen for testing
2. The mark '-' means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated.

| ITEMS              | Band | Bandwidth (MHz) |   |   |    |    |    | Modulation |       | RB # |      |      | Test Channel |   |   |
|--------------------|------|-----------------|---|---|----|----|----|------------|-------|------|------|------|--------------|---|---|
|                    |      | 1.4             | 3 | 5 | 10 | 15 | 20 | QPSK       | 16QAM | 1    | Half | Full | L            | M | H |
| Max. Output Power  | 2    | v               | v | v | v  | v  | v  | v          | v     | v    | v    | v    | v            | v | v |
|                    | 4    | v               | v | v | v  | v  | v  | v          | v     | v    | v    | v    | v            | v | v |
|                    | 5    | v               | v | v | v  |    |    | v          | v     | v    | v    | v    | v            | v | v |
|                    | 12   | v               | v | v | v  |    |    | v          | v     | v    | v    | v    | v            | v | v |
|                    | 13   |                 |   | v | v  |    |    | v          | v     | v    | v    | v    |              | v |   |
|                    | 25   | v               | v | v | v  | v  | v  | v          | v     | v    | v    | v    | v            | v | v |
|                    | 26   | v               | v | v | v  | v  |    | v          | v     | v    | v    | v    | v            | v | v |
|                    | 41   |                 |   | v | v  | v  | v  | v          | v     | v    | v    | v    | v            | v | v |
|                    | 66   | v               | v | v | v  | v  | v  | v          | v     | v    | v    | v    | v            | v | v |
| Peak&Avera Ratio   | 2    |                 |   |   |    |    | v  | v          | v     | v    |      | v    | v            | v | v |
|                    | 4    |                 |   |   |    |    | v  | v          | v     | v    |      | v    | v            | v | v |
|                    | 5    |                 |   |   | v  |    |    | v          | v     | v    |      | v    | v            | v | v |
|                    | 12   |                 |   |   | v  |    |    | v          | v     | v    |      | v    | v            | v | v |
|                    | 13   |                 |   |   | v  |    |    | v          | v     | v    |      | v    |              | v |   |
|                    | 25   |                 |   |   |    |    | v  | v          | v     | v    |      | v    | v            | v | v |
|                    | 26   |                 |   |   |    | v  |    | v          | v     | v    |      | v    | v            | v | v |
|                    | 41   |                 |   |   |    |    | v  | v          | v     | v    |      | v    | v            | v | v |
|                    | 66   |                 |   |   |    |    | v  | v          | v     | v    |      | v    | v            | v | v |
| 26dB&99% Bandwidth | 2    | v               | v | v | v  | v  | v  | v          | v     |      |      | v    | v            | v | v |
|                    | 4    | v               | v | v | v  | v  | v  | v          | v     |      |      | v    | v            | v | v |
|                    | 5    | v               | v | v | v  |    |    | v          | v     |      |      | v    | v            | v | v |
|                    | 12   | v               | v | v | v  |    |    | v          | v     |      |      | v    | v            | v | v |
|                    | 13   |                 |   | v | v  |    |    | v          | v     |      |      | v    |              | v |   |
|                    | 25   | v               | v | v | v  | v  | v  | v          | v     |      |      | v    | v            | v | v |
|                    | 26   | v               | v | v | v  | v  |    | v          | v     |      |      | v    | v            | v | v |
|                    | 41   |                 |   | v | v  | v  | v  | v          | v     |      |      | v    | v            | v | v |
|                    | 66   | v               | v | v | v  | v  | v  | v          | v     |      |      | v    | v            | v | v |



|                             |    |   |   |   |   |   |   |   |   |   |  |   |   |   |   |
|-----------------------------|----|---|---|---|---|---|---|---|---|---|--|---|---|---|---|
| Conducted Band Edge         | 2  | v | v | v | v | v | v | v | v | v |  | v | v | v | v |
|                             | 4  | v | v | v | v | v | v | v | v | v |  | v | v | v | v |
|                             | 5  | v | v | v | v |   |   | v | v | v |  | v | v | v | v |
|                             | 12 | v | v | v | v |   |   | v | v | v |  | v | v | v | v |
|                             | 13 |   |   | v | v |   |   | v | v | v |  | v |   | v |   |
|                             | 25 | v | v | v | v | v | v | v | v | v |  | v | v | v | v |
|                             | 26 | v | v | v | v | v |   | v | v | v |  | v | v | v | v |
|                             | 41 |   |   | v | v | v | v | v | v | v |  | v | v | v | v |
|                             | 66 | v | v | v | v | v | v | v | v | v |  | v | v | v | v |
| Conducted Spurious Emission | 2  | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 4  | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 5  | v | v | v | v |   |   | v | v | v |  |   | v | v | v |
|                             | 12 | v | v | v | v |   |   | v | v | v |  |   | v | v | v |
|                             | 13 |   |   | v | v |   |   | v | v | v |  |   |   | v |   |
|                             | 25 | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 26 | v | v | v | v | v |   | v | v | v |  |   | v | v | v |
|                             | 41 |   |   | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 66 | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
| Frequency Stability         | 2  |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 4  |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 5  |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 12 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 13 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 25 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 26 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 41 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
|                             | 66 |   |   |   | v |   |   | v |   |   |  | v |   | v |   |
| E.R.P.& E.I.R.P.            | 2  | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 4  | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 5  | v | v | v | v |   |   | v | v | v |  |   | v | v | v |
|                             | 12 | v | v | v | v |   |   | v | v | v |  |   | v | v | v |
|                             | 13 |   |   | v | v |   |   | v | v | v |  |   |   | v |   |
|                             | 25 | v | v | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 26 | v | v | v | v | v |   | v | v | v |  |   | v | v | v |
|                             | 41 |   |   | v | v | v | v | v | v | v |  |   | v | v | v |
|                             | 66 | v | v | v | v | v | v | v | v | v |  |   | v | v | v |



|                                  |    |   |   |   |   |   |   |   |  |   |  |  |   |   |   |
|----------------------------------|----|---|---|---|---|---|---|---|--|---|--|--|---|---|---|
| Radiated<br>Spurious<br>Emission | 2  | v | v | v | v | v | v | v |  | v |  |  | v | v | v |
|                                  | 4  | v | v | v | v | v | v | v |  | v |  |  | v | v | v |
|                                  | 5  | v | v | v | v |   |   | v |  | v |  |  | v | v | v |
|                                  | 12 | v | v | v | v |   |   | v |  | v |  |  | v | v | v |
|                                  | 13 |   |   | v | v |   |   | v |  | v |  |  |   | v |   |
|                                  | 25 | v | v | v | v | v | v | v |  | v |  |  | v | v | v |
|                                  | 26 | v | v | v | v | v |   | v |  | v |  |  | v | v | v |
|                                  | 41 |   |   | v | v | v | v | v |  | v |  |  | v | v | v |
|                                  | 66 | v | v | v | v | v | v | v |  | v |  |  | v | v | v |





#### 2.1.5 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for filing to comply with the 47 CFR Part 2, 22(H), 24(E), 27, 90.

#### 2.1.6 SPECIAL ACCESSORIES

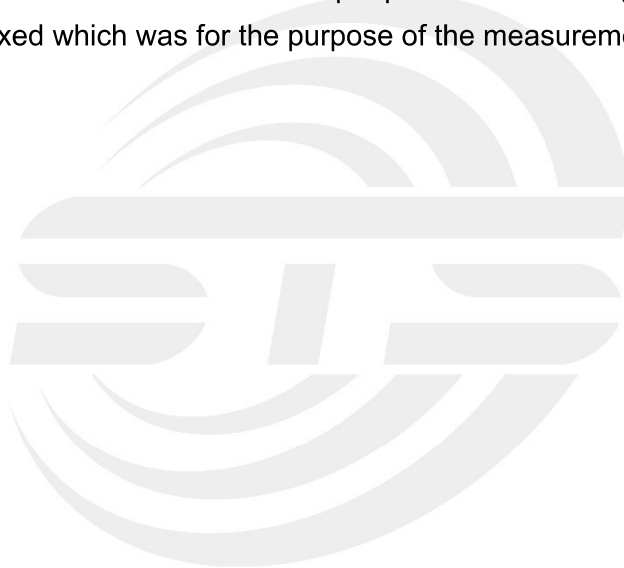
The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with eut intended for fcc grant together.

#### 2.1.7 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

#### 2.1.8 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.





### 2.1.9 CONFIGURATION OF EUT SYSTEM

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

E-1  
EUT

Table 2-1 Equipment Used in EUT System

| Item | Equipment | Model No. | Serial No. | Note |
|------|-----------|-----------|------------|------|
| N/A  | N/A       | N/A       | N/A        | N/A  |
|      |           |           |            |      |
|      |           |           |            |      |
|      |           |           |            |      |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



## 2.1.10 MEASUREMENT INSTRUMENTS

The radiated emission testing was performed according to the procedures of ANSI C63.26 2015 and FCC CFR 47 rules of 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057.

## Radiation Test equipment

| Kind of Equipment                | Manufacturer | Type No.         | Serial No.   | Last calibration | Calibrated until |
|----------------------------------|--------------|------------------|--------------|------------------|------------------|
| Test Receiver                    | R&S          | ESCI             | 101427       | 2019.10.09       | 2020.10.08       |
| Signal Analyzer                  | Agilent      | N9020A           | MY51110105   | 2020.03.05       | 2021.03.04       |
| Signal generator                 | Agilent      | 83752A           | 3610A02740   | 2019.10.09       | 2020.10.08       |
| Wireless Communications Test Set | R&S          | CMW 500          | 133884       | 2020.03.05       | 2021.03.04       |
| Bilog Antenna                    | TESEQ        | CBL6111D         | 34678        | 2017.11.02       | 2020.11.01       |
| Horn Antenna                     | SCHWARZBECK  | BBHA 9120D(1201) | 9120D-1343   | 2018.10.19       | 2021.10.18       |
| Bilog Antenna                    | TESEQ        | CBL6111D         | 45873        | 2018.10.26       | 2021.10.25       |
| Horn Antenna                     | SCHWARZBECK  | BBHA 9120D(1201) | 9120D-2014   | 2019.10.15       | 2022.10.14       |
| SHF-EHF Horn Antenna (18G-40GHz) | A-INFO       | LB-180400-KF     | J211020657   | 2018.03.11       | 2021.03.10       |
| Pre-Amplifier (0.1M-3GHz)        | EM           | EM330            | 060665       | 2019.10.09       | 2020.10.08       |
| Pre-Amplifier (1G-18GHz)         | SKET         | LNPA-01018G-45   | SK2018080901 | 2019.10.12       | 2020.10.11       |
| Pre-Amplifier (18G-40GHz)        | SKET         | LNPA-1840-50     | SK2018101801 | 2019.10.12       | 2020.10.11       |
| Turn table                       | EM           | SC100_1          | 60531        | N/A              | N/A              |
| Antenna mast                     | EM           | SC100            | N/A          | N/A              | N/A              |
| Temperature & Humidity           | HH660        | Mieo             | N/A          | 2019.10.17       | 2020.10.16       |
| Test SW                          | BULUN        | BL410-E/18.905   |              |                  |                  |

## RF Connected Test

| Kind of Equipment                    | Manufacturer | Type No.        | Serial No. | Last calibration | Calibrated until |
|--------------------------------------|--------------|-----------------|------------|------------------|------------------|
| Universal Radio communication tester | R&S          | CMU200          | 119907     | 2020.10.11       | 2021.10.10       |
| Wireless Communications Test Set     | R&S          | CMW 500         | 133884     | 2020.03.05       | 2021.03.04       |
| Signal Analyzer                      | Agilent      | N9020A          | MY49100060 | 2019.10.09       | 2020.10.08       |
| Temperature & Humidity               | HH660        | Mieo            | N/A        | 2019.10.17       | 2020.10.16       |
| Test SW                              | FARAD        | LZ-RF /LzRf-3A3 |            |                  |                  |



## 2.1.11 MEASUREMENT RESULTS EXPLANATION EXAMPLE

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF Cable Loss + Attenuator Factor.*



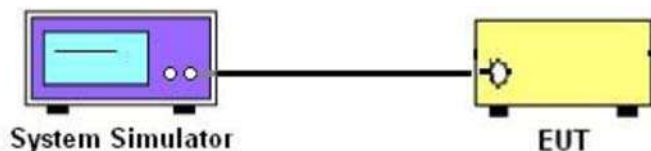
### 3. CONDUCTED OUTPUT POWER

#### 3.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

##### 3.1.1 MEASUREMENT METHOD

A system simulator was used to establish communication with the eut. Its parameters were set to force the eut transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.  
Configuration follows KDB 971168 D01 v03r01.

##### 3.1.2 TEST SETUP



##### 3.1.3 TEST PROCEDURES

1. The transmitter output port was connected to system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest/middle/highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



## 3.1.4 TEST RESULTS

| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 22.86  | 22.93  | 22.88   |
| 1.4                                    | 1       | 2         |        | 22.61  | 22.72  | 22.62   |
| 1.4                                    | 1       | 5         |        | 22.40  | 22.45  | 22.33   |
| 1.4                                    | 3       | 0         |        | 22.11  | 22.19  | 22.12   |
| 1.4                                    | 3       | 1         |        | 21.87  | 21.96  | 21.85   |
| 1.4                                    | 3       | 2         |        | 21.61  | 21.68  | 21.56   |
| 1.4                                    | 6       | 0         |        | 21.33  | 21.46  | 21.36   |
| 1.4                                    | 1       | 0         | 16-QAM | 22.64  | 22.71  | 22.67   |
| 1.4                                    | 1       | 2         |        | 22.39  | 22.41  | 22.38   |
| 1.4                                    | 1       | 5         |        | 22.13  | 22.11  | 22.13   |
| 1.4                                    | 3       | 0         |        | 21.85  | 21.90  | 21.91   |
| 1.4                                    | 3       | 1         |        | 21.55  | 21.66  | 21.70   |
| 1.4                                    | 3       | 2         |        | 21.31  | 21.37  | 21.43   |
| 1.4                                    | 6       | 0         |        | 21.11  | 21.09  | 21.20   |
| 3                                      | 1       | 0         | QPSK   | 23.07  | 23.01  | 22.96   |
| 3                                      | 1       | 7         |        | 22.86  | 22.79  | 22.74   |
| 3                                      | 1       | 14        |        | 22.58  | 22.55  | 22.54   |
| 3                                      | 8       | 0         |        | 22.33  | 22.30  | 22.27   |
| 3                                      | 8       | 4         |        | 22.11  | 22.08  | 22.05   |
| 3                                      | 8       | 7         |        | 21.87  | 21.78  | 21.77   |
| 3                                      | 15      | 0         |        | 21.64  | 21.56  | 21.47   |
| 3                                      | 1       | 0         | 16-QAM | 22.85  | 22.71  | 22.69   |
| 3                                      | 1       | 7         |        | 22.65  | 22.44  | 22.40   |
| 3                                      | 1       | 14        |        | 22.40  | 22.17  | 22.16   |
| 3                                      | 8       | 0         |        | 22.19  | 21.95  | 21.94   |
| 3                                      | 8       | 4         |        | 21.94  | 21.66  | 21.66   |
| 3                                      | 8       | 7         |        | 21.66  | 21.39  | 21.45   |
| 3                                      | 15      | 0         |        | 21.42  | 21.12  | 21.15   |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 22.77  | 22.92  | 22.83   |
| 5                                      | 1       | 12        |        | 22.55  | 22.68  | 22.57   |
| 5                                      | 1       | 24        |        | 22.34  | 22.47  | 22.29   |
| 5                                      | 12      | 0         |        | 22.07  | 22.17  | 22.08   |
| 5                                      | 12      | 6         |        | 21.79  | 21.88  | 21.86   |
| 5                                      | 12      | 11        |        | 21.57  | 21.59  | 21.63   |
| 5                                      | 25      | 0         |        | 21.35  | 21.31  | 21.42   |
| 5                                      | 1       | 0         | 16-QAM | 22.49  | 22.67  | 22.57   |
| 5                                      | 1       | 12        |        | 22.27  | 22.39  | 22.36   |
| 5                                      | 1       | 24        |        | 21.98  | 22.12  | 22.10   |
| 5                                      | 12      | 0         |        | 21.77  | 21.84  | 21.82   |
| 5                                      | 12      | 6         |        | 21.55  | 21.62  | 21.56   |
| 5                                      | 12      | 11        |        | 21.27  | 21.33  | 21.26   |
| 5                                      | 25      | 0         |        | 21.01  | 21.11  | 21.03   |
| 10                                     | 1       | 0         | QPSK   | 22.89  | 23.09  | 22.66   |
| 10                                     | 1       | 24        |        | 22.59  | 22.82  | 22.45   |
| 10                                     | 1       | 49        |        | 22.36  | 22.58  | 22.22   |
| 10                                     | 25      | 0         |        | 22.15  | 22.29  | 22.01   |
| 10                                     | 25      | 12        |        | 21.90  | 22.06  | 21.73   |
| 10                                     | 25      | 24        |        | 21.65  | 21.78  | 21.46   |
| 10                                     | 50      | 0         |        | 21.44  | 21.52  | 21.25   |
| 10                                     | 1       | 0         | 16-QAM | 22.68  | 22.83  | 22.38   |
| 10                                     | 1       | 24        |        | 22.40  | 22.56  | 22.12   |
| 10                                     | 1       | 49        |        | 22.10  | 22.33  | 21.84   |
| 10                                     | 25      | 0         |        | 21.84  | 22.10  | 21.63   |
| 10                                     | 25      | 12        |        | 21.54  | 21.85  | 21.35   |
| 10                                     | 25      | 24        |        | 21.32  | 21.57  | 21.14   |
| 10                                     | 50      | 0         |        | 21.10  | 21.35  | 20.90   |



| LTE Band 2 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 22.99  | 22.97  | 22.77   |
| 15                                     | 1       | 37        |        | 22.69  | 22.70  | 22.51   |
| 15                                     | 1       | 74        |        | 22.47  | 22.43  | 22.24   |
| 15                                     | 36      | 0         |        | 22.22  | 22.15  | 21.96   |
| 15                                     | 36      | 18        |        | 22.01  | 21.89  | 21.73   |
| 15                                     | 36      | 39        |        | 21.74  | 21.63  | 21.45   |
| 15                                     | 75      | 0         |        | 21.53  | 21.36  | 21.21   |
| 15                                     | 1       | 0         | 16-QAM | 22.74  | 22.73  | 22.55   |
| 15                                     | 1       | 38        |        | 22.46  | 22.49  | 22.33   |
| 15                                     | 1       | 75        |        | 22.25  | 22.25  | 22.09   |
| 15                                     | 36      | 0         |        | 22.01  | 21.97  | 21.80   |
| 15                                     | 36      | 18        |        | 21.80  | 21.76  | 21.58   |
| 15                                     | 36      | 39        |        | 21.52  | 21.50  | 21.35   |
| 15                                     | 75      | 0         |        | 21.26  | 21.24  | 21.15   |
| 20                                     | 1       | 0         | QPSK   | 23.18  | 23.20  | 23.16   |
| 20                                     | 1       | 49        |        | 22.91  | 22.98  | 22.95   |
| 20                                     | 1       | 99        |        | 22.62  | 22.76  | 22.66   |
| 20                                     | 50      | 0         |        | 22.37  | 22.52  | 22.38   |
| 20                                     | 50      | 24        |        | 22.09  | 22.29  | 22.14   |
| 20                                     | 50      | 49        |        | 21.80  | 22.00  | 21.90   |
| 20                                     | 100     | 0         |        | 21.50  | 21.78  | 21.65   |
| 20                                     | 1       | 0         | 16-QAM | 22.88  | 22.93  | 22.87   |
| 20                                     | 1       | 49        |        | 22.62  | 22.68  | 22.63   |
| 20                                     | 1       | 99        |        | 22.36  | 22.43  | 22.42   |
| 20                                     | 50      | 0         |        | 22.12  | 22.20  | 22.15   |
| 20                                     | 50      | 24        |        | 21.87  | 21.92  | 21.94   |
| 20                                     | 50      | 49        |        | 21.58  | 21.64  | 21.73   |
| 20                                     | 100     | 0         |        | 21.35  | 21.42  | 21.53   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 23.41  | 23.36  | 23.42   |
| 1.4                                    | 1       | 2         |        | 23.17  | 23.13  | 23.20   |
| 1.4                                    | 1       | 5         |        | 22.89  | 22.87  | 22.94   |
| 1.4                                    | 3       | 0         |        | 22.62  | 22.57  | 22.71   |
| 1.4                                    | 3       | 1         |        | 22.36  | 22.33  | 22.45   |
| 1.4                                    | 3       | 2         |        | 22.14  | 22.05  | 22.16   |
| 1.4                                    | 6       | 0         |        | 21.93  | 21.82  | 21.92   |
| 1.4                                    | 1       | 0         | 16-QAM | 23.20  | 23.09  | 23.16   |
| 1.4                                    | 1       | 2         |        | 22.93  | 22.86  | 22.91   |
| 1.4                                    | 1       | 5         |        | 22.67  | 22.59  | 22.67   |
| 1.4                                    | 3       | 0         |        | 22.39  | 22.36  | 22.41   |
| 1.4                                    | 3       | 1         |        | 22.16  | 22.12  | 22.12   |
| 1.4                                    | 3       | 2         |        | 21.93  | 21.91  | 21.87   |
| 1.4                                    | 6       | 0         |        | 21.70  | 21.65  | 21.57   |
| 3                                      | 1       | 0         | QPSK   | 23.40  | 23.52  | 23.49   |
| 3                                      | 1       | 7         |        | 23.12  | 23.29  | 23.24   |
| 3                                      | 1       | 14        |        | 22.84  | 23.06  | 22.98   |
| 3                                      | 8       | 0         |        | 22.61  | 22.86  | 22.72   |
| 3                                      | 8       | 4         |        | 22.31  | 22.61  | 22.52   |
| 3                                      | 8       | 7         |        | 22.05  | 22.33  | 22.28   |
| 3                                      | 15      | 0         |        | 21.77  | 22.05  | 22.02   |
| 3                                      | 1       | 0         | 16-QAM | 23.13  | 23.32  | 23.25   |
| 3                                      | 1       | 7         |        | 22.88  | 23.03  | 23.04   |
| 3                                      | 1       | 14        |        | 22.62  | 22.74  | 22.81   |
| 3                                      | 8       | 0         |        | 22.33  | 22.49  | 22.61   |
| 3                                      | 8       | 4         |        | 22.10  | 22.21  | 22.39   |
| 3                                      | 8       | 7         |        | 21.81  | 21.97  | 22.12   |
| 3                                      | 15      | 0         |        | 21.56  | 21.68  | 21.89   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 23.38  | 23.43  | 23.40   |
| 5                                      | 1       | 12        |        | 23.18  | 23.20  | 23.14   |
| 5                                      | 1       | 24        |        | 22.91  | 22.99  | 22.90   |
| 5                                      | 12      | 0         |        | 22.66  | 22.79  | 22.68   |
| 5                                      | 12      | 6         |        | 22.38  | 22.49  | 22.39   |
| 5                                      | 12      | 11        |        | 22.08  | 22.25  | 22.12   |
| 5                                      | 25      | 0         |        | 21.80  | 21.98  | 21.89   |
| 5                                      | 1       | 0         | 16-QAM | 23.14  | 23.22  | 23.14   |
| 5                                      | 1       | 12        |        | 22.89  | 22.98  | 22.86   |
| 5                                      | 1       | 24        |        | 22.60  | 22.77  | 22.59   |
| 5                                      | 12      | 0         |        | 22.40  | 22.48  | 22.36   |
| 5                                      | 12      | 6         |        | 22.11  | 22.22  | 22.07   |
| 5                                      | 12      | 11        |        | 21.89  | 22.02  | 21.87   |
| 5                                      | 25      | 0         |        | 21.65  | 21.75  | 21.65   |
| 10                                     | 1       | 0         | QPSK   | 23.49  | 23.44  | 23.33   |
| 10                                     | 1       | 24        |        | 23.23  | 23.22  | 23.10   |
| 10                                     | 1       | 49        |        | 22.95  | 22.99  | 22.84   |
| 10                                     | 25      | 0         |        | 22.67  | 22.70  | 22.60   |
| 10                                     | 25      | 12        |        | 22.40  | 22.45  | 22.34   |
| 10                                     | 25      | 24        |        | 22.16  | 22.15  | 22.13   |
| 10                                     | 50      | 0         |        | 21.94  | 21.95  | 21.85   |
| 10                                     | 1       | 0         | 16-QAM | 23.20  | 23.15  | 23.11   |
| 10                                     | 1       | 24        |        | 22.94  | 22.86  | 22.83   |
| 10                                     | 1       | 49        |        | 22.72  | 22.62  | 22.58   |
| 10                                     | 25      | 0         |        | 22.46  | 22.37  | 22.37   |
| 10                                     | 25      | 12        |        | 22.23  | 22.07  | 22.13   |
| 10                                     | 25      | 24        |        | 22.03  | 21.85  | 21.92   |
| 10                                     | 50      | 0         |        | 21.79  | 21.56  | 21.70   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 23.42  | 23.19  | 23.39   |
| 15                                     | 1       | 37        |        | 23.18  | 22.90  | 23.16   |
| 15                                     | 1       | 74        |        | 22.94  | 22.65  | 22.88   |
| 15                                     | 36      | 0         |        | 22.70  | 22.40  | 22.60   |
| 15                                     | 36      | 18        |        | 22.48  | 22.18  | 22.32   |
| 15                                     | 36      | 39        |        | 22.21  | 21.93  | 22.11   |
| 15                                     | 75      | 0         |        | 21.93  | 21.72  | 21.90   |
| 15                                     | 1       | 0         | 16-QAM | 23.15  | 22.95  | 23.18   |
| 15                                     | 1       | 38        |        | 22.89  | 22.66  | 22.93   |
| 15                                     | 1       | 75        |        | 22.69  | 22.38  | 22.69   |
| 15                                     | 36      | 0         |        | 22.45  | 22.10  | 22.45   |
| 15                                     | 36      | 18        |        | 22.18  | 21.81  | 22.18   |
| 15                                     | 36      | 39        |        | 21.94  | 21.59  | 21.97   |
| 15                                     | 75      | 0         |        | 21.73  | 21.32  | 21.73   |
| 20                                     | 1       | 0         | QPSK   | 23.62  | 23.59  | 23.67   |
| 20                                     | 1       | 49        |        | 23.33  | 23.34  | 23.45   |
| 20                                     | 1       | 99        |        | 23.03  | 23.04  | 23.23   |
| 20                                     | 50      | 0         |        | 22.78  | 22.83  | 22.99   |
| 20                                     | 50      | 24        |        | 22.58  | 22.57  | 22.73   |
| 20                                     | 50      | 49        |        | 22.36  | 22.35  | 22.45   |
| 20                                     | 100     | 0         |        | 22.14  | 22.11  | 22.21   |
| 20                                     | 1       | 0         | 16-QAM | 23.39  | 23.35  | 23.40   |
| 20                                     | 1       | 49        |        | 23.17  | 23.05  | 23.11   |
| 20                                     | 1       | 99        |        | 22.89  | 22.84  | 22.82   |
| 20                                     | 50      | 0         |        | 22.60  | 22.63  | 22.56   |
| 20                                     | 50      | 24        |        | 22.36  | 22.35  | 22.32   |
| 20                                     | 50      | 49        |        | 22.11  | 22.09  | 22.11   |
| 20                                     | 100     | 0         |        | 21.88  | 21.80  | 21.82   |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 24.92  | 24.97  | 25.06   |
| 1.4                                    | 1       | 2         |        | 24.67  | 24.73  | 24.86   |
| 1.4                                    | 1       | 5         |        | 24.40  | 24.49  | 24.66   |
| 1.4                                    | 3       | 0         |        | 24.14  | 24.23  | 24.38   |
| 1.4                                    | 3       | 1         |        | 23.88  | 23.93  | 24.15   |
| 1.4                                    | 3       | 2         |        | 23.58  | 23.71  | 23.88   |
| 1.4                                    | 6       | 0         |        | 23.37  | 23.48  | 23.60   |
| 1.4                                    | 1       | 0         | 16-QAM | 24.71  | 24.74  | 24.82   |
| 1.4                                    | 1       | 2         |        | 24.45  | 24.47  | 24.58   |
| 1.4                                    | 1       | 5         |        | 24.24  | 24.17  | 24.31   |
| 1.4                                    | 3       | 0         |        | 23.99  | 23.87  | 24.02   |
| 1.4                                    | 3       | 1         |        | 23.70  | 23.59  | 23.73   |
| 1.4                                    | 3       | 2         |        | 23.47  | 23.34  | 23.52   |
| 1.4                                    | 6       | 0         |        | 23.25  | 23.04  | 23.32   |
| 3                                      | 1       | 0         | QPSK   | 24.76  | 25.11  | 25.06   |
| 3                                      | 1       | 7         |        | 24.54  | 24.83  | 24.76   |
| 3                                      | 1       | 14        |        | 24.29  | 24.58  | 24.48   |
| 3                                      | 8       | 0         |        | 24.01  | 24.30  | 24.26   |
| 3                                      | 8       | 4         |        | 23.80  | 24.09  | 24.06   |
| 3                                      | 8       | 7         |        | 23.51  | 23.88  | 23.78   |
| 3                                      | 15      | 0         |        | 23.21  | 23.66  | 23.48   |
| 3                                      | 1       | 0         | 16-QAM | 24.52  | 24.81  | 24.81   |
| 3                                      | 1       | 7         |        | 24.29  | 24.56  | 24.57   |
| 3                                      | 1       | 14        |        | 24.08  | 24.35  | 24.33   |
| 3                                      | 8       | 0         |        | 23.79  | 24.06  | 24.11   |
| 3                                      | 8       | 4         |        | 23.50  | 23.83  | 23.84   |
| 3                                      | 8       | 7         |        | 23.20  | 23.61  | 23.55   |
| 3                                      | 15      | 0         |        | 23.00  | 23.33  | 23.32   |



| LTE Band 5 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 25.04  | 24.99  | 25.18   |
| 5                                      | 1       | 12        |        | 24.77  | 24.71  | 24.90   |
| 5                                      | 1       | 24        |        | 24.51  | 24.47  | 24.60   |
| 5                                      | 12      | 0         |        | 24.29  | 24.27  | 24.37   |
| 5                                      | 12      | 6         |        | 24.05  | 24.06  | 24.15   |
| 5                                      | 12      | 11        |        | 23.77  | 23.83  | 23.94   |
| 5                                      | 25      | 0         |        | 23.50  | 23.58  | 23.70   |
| 5                                      | 1       | 0         | 16-QAM | 24.79  | 24.76  | 24.97   |
| 5                                      | 1       | 12        |        | 24.51  | 24.49  | 24.68   |
| 5                                      | 1       | 24        |        | 24.30  | 24.24  | 24.39   |
| 5                                      | 12      | 0         |        | 24.07  | 23.95  | 24.16   |
| 5                                      | 12      | 6         |        | 23.83  | 23.68  | 23.92   |
| 5                                      | 12      | 11        |        | 23.59  | 23.42  | 23.71   |
| 5                                      | 25      | 0         |        | 23.34  | 23.20  | 23.43   |
| 10                                     | 1       | 0         | QPSK   | 25.26  | 25.30  | 25.28   |
| 10                                     | 1       | 24        |        | 24.97  | 25.02  | 24.98   |
| 10                                     | 1       | 49        |        | 24.77  | 24.79  | 24.73   |
| 10                                     | 25      | 0         |        | 24.54  | 24.56  | 24.49   |
| 10                                     | 25      | 12        |        | 24.27  | 24.28  | 24.23   |
| 10                                     | 25      | 24        |        | 24.01  | 24.01  | 23.95   |
| 10                                     | 50      | 0         |        | 23.76  | 23.75  | 23.70   |
| 10                                     | 1       | 0         | 16-QAM | 25.00  | 25.02  | 24.99   |
| 10                                     | 1       | 24        |        | 24.80  | 24.72  | 24.69   |
| 10                                     | 1       | 49        |        | 24.55  | 24.46  | 24.49   |
| 10                                     | 25      | 0         |        | 24.27  | 24.18  | 24.19   |
| 10                                     | 25      | 12        |        | 24.06  | 23.93  | 23.92   |
| 10                                     | 25      | 24        |        | 23.82  | 23.68  | 23.70   |
| 10                                     | 50      | 0         |        | 23.54  | 23.48  | 23.44   |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                     | 1       | 0         | QPSK   | 24.07  | 24.25  | 24.16   |
| 1.4                                     | 1       | 2         |        | 23.87  | 23.98  | 23.89   |
| 1.4                                     | 1       | 5         |        | 23.60  | 23.72  | 23.66   |
| 1.4                                     | 3       | 0         |        | 23.38  | 23.45  | 23.45   |
| 1.4                                     | 3       | 1         |        | 23.13  | 23.18  | 23.19   |
| 1.4                                     | 3       | 2         |        | 22.86  | 22.92  | 22.91   |
| 1.4                                     | 6       | 0         |        | 22.62  | 22.66  | 22.69   |
| 1.4                                     | 1       | 0         | 16-QAM | 23.83  | 24.03  | 23.87   |
| 1.4                                     | 1       | 2         |        | 23.62  | 23.81  | 23.65   |
| 1.4                                     | 1       | 5         |        | 23.33  | 23.55  | 23.43   |
| 1.4                                     | 3       | 0         |        | 23.09  | 23.30  | 23.23   |
| 1.4                                     | 3       | 1         |        | 22.82  | 23.03  | 22.95   |
| 1.4                                     | 3       | 2         |        | 22.59  | 22.73  | 22.67   |
| 1.4                                     | 6       | 0         |        | 22.36  | 22.43  | 22.46   |
| 3                                       | 1       | 0         | QPSK   | 23.85  | 23.92  | 24.01   |
| 3                                       | 1       | 7         |        | 23.60  | 23.67  | 23.73   |
| 3                                       | 1       | 14        |        | 23.39  | 23.40  | 23.48   |
| 3                                       | 8       | 0         |        | 23.12  | 23.19  | 23.24   |
| 3                                       | 8       | 4         |        | 22.91  | 22.99  | 23.03   |
| 3                                       | 8       | 7         |        | 22.70  | 22.74  | 22.81   |
| 3                                       | 15      | 0         |        | 22.44  | 22.53  | 22.59   |
| 3                                       | 1       | 0         | 16-QAM | 23.62  | 23.65  | 23.77   |
| 3                                       | 1       | 7         |        | 23.40  | 23.40  | 23.56   |
| 3                                       | 1       | 14        |        | 23.10  | 23.12  | 23.35   |
| 3                                       | 8       | 0         |        | 22.85  | 22.84  | 23.09   |
| 3                                       | 8       | 4         |        | 22.62  | 22.63  | 22.83   |
| 3                                       | 8       | 7         |        | 22.34  | 22.37  | 22.60   |
| 3                                       | 15      | 0         |        | 22.04  | 22.09  | 22.32   |



| LTE Band 12 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 24.22  | 24.03  | 23.97   |
| 5                                       | 1       | 12        |        | 23.93  | 23.76  | 23.76   |
| 5                                       | 1       | 24        |        | 23.71  | 23.50  | 23.55   |
| 5                                       | 12      | 0         |        | 23.47  | 23.25  | 23.33   |
| 5                                       | 12      | 6         |        | 23.20  | 23.05  | 23.07   |
| 5                                       | 12      | 11        |        | 22.91  | 22.83  | 22.83   |
| 5                                       | 25      | 0         |        | 22.64  | 22.59  | 22.56   |
| 5                                       | 1       | 0         | 16-QAM | 24.01  | 23.82  | 23.73   |
| 5                                       | 1       | 12        |        | 23.76  | 23.59  | 23.49   |
| 5                                       | 1       | 24        |        | 23.52  | 23.36  | 23.25   |
| 5                                       | 12      | 0         |        | 23.25  | 23.10  | 22.99   |
| 5                                       | 12      | 6         |        | 22.95  | 22.84  | 22.71   |
| 5                                       | 12      | 11        |        | 22.68  | 22.62  | 22.41   |
| 5                                       | 25      | 0         |        | 22.42  | 22.41  | 22.13   |
| 10                                      | 1       | 0         | QPSK   | 24.31  | 24.25  | 24.35   |
| 10                                      | 1       | 24        |        | 24.10  | 23.98  | 24.09   |
| 10                                      | 1       | 49        |        | 23.81  | 23.74  | 23.83   |
| 10                                      | 25      | 0         |        | 23.58  | 23.49  | 23.57   |
| 10                                      | 25      | 12        |        | 23.37  | 23.22  | 23.33   |
| 10                                      | 25      | 24        |        | 23.10  | 23.02  | 23.12   |
| 10                                      | 50      | 0         |        | 22.88  | 22.79  | 22.87   |
| 10                                      | 1       | 0         | 16-QAM | 24.10  | 24.00  | 24.13   |
| 10                                      | 1       | 24        |        | 23.89  | 23.71  | 23.92   |
| 10                                      | 1       | 49        |        | 23.63  | 23.49  | 23.64   |
| 10                                      | 25      | 0         |        | 23.35  | 23.24  | 23.42   |
| 10                                      | 25      | 12        |        | 23.07  | 23.04  | 23.16   |
| 10                                      | 25      | 24        |        | 22.81  | 22.82  | 22.88   |
| 10                                      | 50      | 0         |        | 22.53  | 22.62  | 22.59   |



| LTE Band 13 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 21.36  | 21.41  | 21.46   |
| 5                                       | 1       | 12        |        | 21.14  | 21.21  | 21.18   |
| 5                                       | 1       | 24        |        | 20.89  | 20.94  | 20.91   |
| 5                                       | 12      | 0         |        | 20.67  | 20.66  | 20.67   |
| 5                                       | 12      | 6         |        | 20.43  | 20.44  | 20.46   |
| 5                                       | 12      | 11        |        | 20.21  | 20.14  | 20.17   |
| 5                                       | 25      | 0         |        | 19.92  | 19.86  | 19.89   |
| 5                                       | 1       | 0         | 16-QAM | 21.07  | 21.19  | 21.19   |
| 5                                       | 1       | 12        |        | 20.81  | 20.91  | 20.89   |
| 5                                       | 1       | 24        |        | 20.52  | 20.71  | 20.62   |
| 5                                       | 12      | 0         |        | 20.30  | 20.45  | 20.33   |
| 5                                       | 12      | 6         |        | 20.04  | 20.18  | 20.09   |
| 5                                       | 12      | 11        |        | 19.76  | 19.95  | 19.79   |
| 5                                       | 25      | 0         |        | 19.50  | 19.75  | 19.58   |
| 10                                      | 1       | 0         | QPSK   | N/A    | 22.06  | N/A     |
| 10                                      | 1       | 24        |        | N/A    | 21.80  | N/A     |
| 10                                      | 1       | 49        |        | N/A    | 21.60  | N/A     |
| 10                                      | 25      | 0         |        | N/A    | 21.34  | N/A     |
| 10                                      | 25      | 12        |        | N/A    | 21.12  | N/A     |
| 10                                      | 25      | 24        |        | N/A    | 20.84  | N/A     |
| 10                                      | 50      | 0         |        | N/A    | 20.59  | N/A     |
| 10                                      | 1       | 0         | 16-QAM | N/A    | 21.85  | N/A     |
| 10                                      | 1       | 24        |        | N/A    | 21.60  | N/A     |
| 10                                      | 1       | 49        |        | N/A    | 21.35  | N/A     |
| 10                                      | 25      | 0         |        | N/A    | 21.10  | N/A     |
| 10                                      | 25      | 12        |        | N/A    | 20.86  | N/A     |
| 10                                      | 25      | 24        |        | N/A    | 20.61  | N/A     |
| 10                                      | 50      | 0         |        | N/A    | 20.35  | N/A     |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                     | 1       | 0         | QPSK   | 23.16  | 23.05  | 23.20   |
| 1.4                                     | 1       | 2         |        | 22.91  | 22.78  | 22.98   |
| 1.4                                     | 1       | 5         |        | 22.68  | 22.52  | 22.73   |
| 1.4                                     | 3       | 0         |        | 22.45  | 22.32  | 22.46   |
| 1.4                                     | 3       | 1         |        | 22.22  | 22.02  | 22.23   |
| 1.4                                     | 3       | 2         |        | 22.01  | 21.78  | 22.00   |
| 1.4                                     | 6       | 0         |        | 21.75  | 21.49  | 21.75   |
| 1.4                                     | 1       | 0         | 16-QAM | 22.88  | 22.79  | 22.97   |
| 1.4                                     | 1       | 2         |        | 22.63  | 22.52  | 22.71   |
| 1.4                                     | 1       | 5         |        | 22.37  | 22.23  | 22.41   |
| 1.4                                     | 3       | 0         |        | 22.15  | 21.98  | 22.18   |
| 1.4                                     | 3       | 1         |        | 21.85  | 21.72  | 21.96   |
| 1.4                                     | 3       | 2         |        | 21.59  | 21.52  | 21.74   |
| 1.4                                     | 6       | 0         |        | 21.34  | 21.30  | 21.44   |
| 3                                       | 1       | 0         | QPSK   | 22.85  | 22.91  | 23.03   |
| 3                                       | 1       | 7         |        | 22.64  | 22.69  | 22.83   |
| 3                                       | 1       | 14        |        | 22.40  | 22.44  | 22.55   |
| 3                                       | 8       | 0         |        | 22.19  | 22.16  | 22.28   |
| 3                                       | 8       | 4         |        | 21.95  | 21.95  | 22.06   |
| 3                                       | 8       | 7         |        | 21.72  | 21.68  | 21.77   |
| 3                                       | 15      | 0         |        | 21.50  | 21.38  | 21.49   |
| 3                                       | 1       | 0         | 16-QAM | 22.62  | 22.63  | 22.76   |
| 3                                       | 1       | 7         |        | 22.34  | 22.35  | 22.49   |
| 3                                       | 1       | 14        |        | 22.06  | 22.09  | 22.20   |
| 3                                       | 8       | 0         |        | 21.77  | 21.79  | 22.00   |
| 3                                       | 8       | 4         |        | 21.54  | 21.53  | 21.71   |
| 3                                       | 8       | 7         |        | 21.25  | 21.24  | 21.50   |
| 3                                       | 15      | 0         |        | 21.01  | 20.98  | 21.24   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.71  | 22.80  | 22.84   |
| 5                                       | 1       | 12        |        | 22.49  | 22.55  | 22.62   |
| 5                                       | 1       | 24        |        | 22.25  | 22.31  | 22.38   |
| 5                                       | 12      | 0         |        | 21.97  | 22.02  | 22.15   |
| 5                                       | 12      | 6         |        | 21.68  | 21.79  | 21.91   |
| 5                                       | 12      | 11        |        | 21.40  | 21.52  | 21.66   |
| 5                                       | 25      | 0         |        | 21.18  | 21.29  | 21.36   |
| 5                                       | 1       | 0         | 16-QAM | 22.46  | 22.59  | 22.58   |
| 5                                       | 1       | 12        |        | 22.20  | 22.38  | 22.32   |
| 5                                       | 1       | 24        |        | 21.96  | 22.17  | 22.09   |
| 5                                       | 12      | 0         |        | 21.67  | 21.87  | 21.86   |
| 5                                       | 12      | 6         |        | 21.44  | 21.62  | 21.64   |
| 5                                       | 12      | 11        |        | 21.16  | 21.35  | 21.40   |
| 5                                       | 25      | 0         |        | 20.93  | 21.07  | 21.17   |
| 10                                      | 1       | 0         | QPSK   | 23.18  | 23.05  | 23.16   |
| 10                                      | 1       | 24        |        | 22.94  | 22.83  | 22.94   |
| 10                                      | 1       | 49        |        | 22.71  | 22.57  | 22.71   |
| 10                                      | 25      | 0         |        | 22.45  | 22.30  | 22.42   |
| 10                                      | 25      | 12        |        | 22.20  | 22.07  | 22.16   |
| 10                                      | 25      | 24        |        | 21.94  | 21.79  | 21.92   |
| 10                                      | 50      | 0         |        | 21.73  | 21.58  | 21.66   |
| 10                                      | 1       | 0         | 16-QAM | 22.94  | 22.75  | 22.93   |
| 10                                      | 1       | 24        |        | 22.71  | 22.52  | 22.73   |
| 10                                      | 1       | 49        |        | 22.50  | 22.31  | 22.47   |
| 10                                      | 25      | 0         |        | 22.28  | 22.07  | 22.17   |
| 10                                      | 25      | 12        |        | 22.05  | 21.86  | 21.93   |
| 10                                      | 25      | 24        |        | 21.82  | 21.60  | 21.71   |
| 10                                      | 50      | 0         |        | 21.52  | 21.32  | 21.47   |



| LTE Band 25 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 23.06  | 23.17  | 23.22   |
| 15                                      | 1       | 37        |        | 22.82  | 22.92  | 22.93   |
| 15                                      | 1       | 74        |        | 22.52  | 22.68  | 22.67   |
| 15                                      | 36      | 0         |        | 22.29  | 22.43  | 22.39   |
| 15                                      | 36      | 18        |        | 22.07  | 22.20  | 22.18   |
| 15                                      | 36      | 39        |        | 21.83  | 21.95  | 21.95   |
| 15                                      | 75      | 0         |        | 21.57  | 21.69  | 21.65   |
| 15                                      | 1       | 0         | 16-QAM | 22.79  | 22.94  | 22.99   |
| 15                                      | 1       | 38        |        | 22.52  | 22.66  | 22.70   |
| 15                                      | 1       | 75        |        | 22.25  | 22.44  | 22.45   |
| 15                                      | 36      | 0         |        | 22.03  | 22.16  | 22.21   |
| 15                                      | 36      | 18        |        | 21.81  | 21.89  | 21.99   |
| 15                                      | 36      | 39        |        | 21.52  | 21.62  | 21.70   |
| 15                                      | 75      | 0         |        | 21.25  | 21.41  | 21.47   |
| 20                                      | 1       | 0         | QPSK   | 23.35  | 23.40  | 23.46   |
| 20                                      | 1       | 49        |        | 23.07  | 23.16  | 23.21   |
| 20                                      | 1       | 99        |        | 22.82  | 22.87  | 22.98   |
| 20                                      | 50      | 0         |        | 22.62  | 22.65  | 22.75   |
| 20                                      | 50      | 24        |        | 22.34  | 22.42  | 22.49   |
| 20                                      | 50      | 49        |        | 22.13  | 22.12  | 22.24   |
| 20                                      | 100     | 0         |        | 21.85  | 21.88  | 22.03   |
| 20                                      | 1       | 0         | 16-QAM | 23.06  | 23.12  | 23.26   |
| 20                                      | 1       | 49        |        | 22.83  | 22.88  | 23.02   |
| 20                                      | 1       | 99        |        | 22.62  | 22.61  | 22.73   |
| 20                                      | 50      | 0         |        | 22.33  | 22.41  | 22.51   |
| 20                                      | 50      | 24        |        | 22.06  | 22.14  | 22.26   |
| 20                                      | 50      | 49        |        | 21.83  | 21.85  | 22.02   |
| 20                                      | 100     | 0         |        | 21.55  | 21.63  | 21.76   |



| LTE Band 26(Part 22) Maximum Average Power [dBm] |         |           |        |        |        |         |
|--------------------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                         | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                              | 1       | 0         | QPSK   | 23.77  | 23.69  | 23.81   |
| 1.4                                              | 1       | 2         |        | 23.50  | 23.44  | 23.53   |
| 1.4                                              | 1       | 5         |        | 23.22  | 23.20  | 23.31   |
| 1.4                                              | 3       | 0         |        | 22.97  | 23.00  | 23.02   |
| 1.4                                              | 3       | 1         |        | 22.72  | 22.77  | 22.75   |
| 1.4                                              | 3       | 2         |        | 22.52  | 22.53  | 22.51   |
| 1.4                                              | 6       | 0         |        | 22.29  | 22.28  | 22.30   |
| 1.4                                              | 1       | 0         | 16-QAM | 23.47  | 23.48  | 23.59   |
| 1.4                                              | 1       | 2         |        | 23.22  | 23.27  | 23.36   |
| 1.4                                              | 1       | 5         |        | 22.99  | 23.04  | 23.09   |
| 1.4                                              | 3       | 0         |        | 22.78  | 22.76  | 22.88   |
| 1.4                                              | 3       | 1         |        | 22.52  | 22.50  | 22.59   |
| 1.4                                              | 3       | 2         |        | 22.32  | 22.22  | 22.29   |
| 1.4                                              | 6       | 0         |        | 22.06  | 22.01  | 22.06   |
| 3                                                | 1       | 0         | QPSK   | 23.35  | 23.42  | 23.60   |
| 3                                                | 1       | 7         |        | 23.15  | 23.13  | 23.31   |
| 3                                                | 1       | 14        |        | 22.86  | 22.88  | 23.03   |
| 3                                                | 8       | 0         |        | 22.61  | 22.68  | 22.79   |
| 3                                                | 8       | 4         |        | 22.39  | 22.39  | 22.57   |
| 3                                                | 8       | 7         |        | 22.10  | 22.10  | 22.31   |
| 3                                                | 15      | 0         |        | 21.81  | 21.88  | 22.02   |
| 3                                                | 1       | 0         | 16-QAM | 23.14  | 23.22  | 23.35   |
| 3                                                | 1       | 7         |        | 22.86  | 22.99  | 23.11   |
| 3                                                | 1       | 14        |        | 22.65  | 22.69  | 22.84   |
| 3                                                | 8       | 0         |        | 22.39  | 22.44  | 22.57   |
| 3                                                | 8       | 4         |        | 22.11  | 22.16  | 22.28   |
| 3                                                | 8       | 7         |        | 21.87  | 21.90  | 22.04   |
| 3                                                | 15      | 0         |        | 21.58  | 21.69  | 21.77   |



| LTE Band 26(Part 22) Maximum Average Power [dBm] |         |           |        |        |        |         |
|--------------------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                         | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                                | 1       | 0         | QPSK   | 23.54  | 23.67  | 23.69   |
| 5                                                | 1       | 12        |        | 23.27  | 23.39  | 23.47   |
| 5                                                | 1       | 24        |        | 23.03  | 23.18  | 23.25   |
| 5                                                | 12      | 0         |        | 22.76  | 22.92  | 23.00   |
| 5                                                | 12      | 6         |        | 22.49  | 22.69  | 22.75   |
| 5                                                | 12      | 11        |        | 22.21  | 22.47  | 22.53   |
| 5                                                | 25      | 0         |        | 21.97  | 22.26  | 22.25   |
| 5                                                | 1       | 0         | 16-QAM | 23.31  | 23.45  | 23.46   |
| 5                                                | 1       | 12        |        | 23.04  | 23.21  | 23.21   |
| 5                                                | 1       | 24        |        | 22.82  | 22.97  | 22.92   |
| 5                                                | 12      | 0         |        | 22.55  | 22.73  | 22.68   |
| 5                                                | 12      | 6         |        | 22.26  | 22.52  | 22.45   |
| 5                                                | 12      | 11        |        | 21.99  | 22.30  | 22.20   |
| 5                                                | 25      | 0         |        | 21.71  | 22.01  | 21.92   |
| 10                                               | 1       | 0         | QPSK   | 23.37  | 23.38  | 23.13   |
| 10                                               | 1       | 24        |        | 23.14  | 23.09  | 22.90   |
| 10                                               | 1       | 49        |        | 22.88  | 22.87  | 22.64   |
| 10                                               | 25      | 0         |        | 22.67  | 22.65  | 22.41   |
| 10                                               | 25      | 12        |        | 22.43  | 22.40  | 22.18   |
| 10                                               | 25      | 24        |        | 22.15  | 22.11  | 21.91   |
| 10                                               | 50      | 0         |        | 21.92  | 21.84  | 21.63   |
| 10                                               | 1       | 0         | 16-QAM | 23.08  | 23.13  | 22.83   |
| 10                                               | 1       | 24        |        | 22.86  | 22.86  | 22.54   |
| 10                                               | 1       | 49        |        | 22.58  | 22.61  | 22.29   |
| 10                                               | 25      | 0         |        | 22.37  | 22.36  | 22.04   |
| 10                                               | 25      | 12        |        | 22.15  | 22.12  | 21.81   |
| 10                                               | 25      | 24        |        | 21.85  | 21.89  | 21.55   |
| 10                                               | 50      | 0         |        | 21.65  | 21.61  | 21.29   |

| LTE Band 26(Part 22) Maximum Average Power [dBm] |         |           |        |        |        |         |
|--------------------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                         | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                               | 1       | 0         | QPSK   | 23.81  | 23.76  | 23.92   |
| 15                                               | 1       | 37        |        | 23.55  | 23.54  | 23.69   |
| 15                                               | 1       | 74        |        | 23.33  | 23.30  | 23.45   |
| 15                                               | 36      | 0         |        | 23.12  | 23.01  | 23.25   |
| 15                                               | 36      | 18        |        | 22.84  | 22.75  | 23.01   |
| 15                                               | 36      | 39        |        | 22.61  | 22.46  | 22.74   |
| 15                                               | 75      | 0         |        | 22.41  | 22.24  | 22.52   |
| 15                                               | 1       | 0         | 16-QAM | 23.52  | 23.55  | 23.65   |
| 15                                               | 1       | 38        |        | 23.25  | 23.28  | 23.45   |
| 15                                               | 1       | 75        |        | 23.00  | 22.98  | 23.22   |
| 15                                               | 36      | 0         |        | 22.76  | 22.77  | 23.01   |
| 15                                               | 36      | 18        |        | 22.49  | 22.54  | 22.72   |
| 15                                               | 36      | 39        |        | 22.21  | 22.31  | 22.47   |
| 15                                               | 75      | 0         |        | 21.97  | 22.06  | 22.20   |



| LTE Band 26(Part 90) Maximum Average Power [dBm] |         |           |        |        |        |         |
|--------------------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                         | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                              | 1       | 0         | QPSK   | 23.91  | 23.86  | 23.88   |
| 1.4                                              | 1       | 2         |        | 23.66  | 23.57  | 23.63   |
| 1.4                                              | 1       | 5         |        | 23.44  | 23.27  | 23.37   |
| 1.4                                              | 3       | 0         |        | 23.15  | 22.99  | 23.15   |
| 1.4                                              | 3       | 1         |        | 22.89  | 22.74  | 22.89   |
| 1.4                                              | 3       | 2         |        | 22.63  | 22.51  | 22.67   |
| 1.4                                              | 6       | 0         |        | 22.40  | 22.23  | 22.46   |
| 1.4                                              | 1       | 0         | 16-QAM | 23.63  | 23.56  | 23.65   |
| 1.4                                              | 1       | 2         |        | 23.40  | 23.36  | 23.36   |
| 1.4                                              | 1       | 5         |        | 23.13  | 23.07  | 23.10   |
| 1.4                                              | 3       | 0         |        | 22.85  | 22.86  | 22.87   |
| 1.4                                              | 3       | 1         |        | 22.56  | 22.59  | 22.63   |
| 1.4                                              | 3       | 2         |        | 22.31  | 22.30  | 22.34   |
| 1.4                                              | 6       | 0         |        | 22.04  | 22.09  | 22.11   |
| 3                                                | 1       | 0         | QPSK   | 24.03  | 23.95  | 23.94   |
| 3                                                | 1       | 7         |        | 23.74  | 23.70  | 23.65   |
| 3                                                | 1       | 14        |        | 23.47  | 23.49  | 23.42   |
| 3                                                | 8       | 0         |        | 23.21  | 23.19  | 23.19   |
| 3                                                | 8       | 4         |        | 22.93  | 22.94  | 22.96   |
| 3                                                | 8       | 7         |        | 22.70  | 22.72  | 22.71   |
| 3                                                | 15      | 0         |        | 22.41  | 22.51  | 22.50   |
| 3                                                | 1       | 0         | 16-QAM | 23.82  | 23.75  | 23.68   |
| 3                                                | 1       | 7         |        | 23.59  | 23.53  | 23.40   |
| 3                                                | 1       | 14        |        | 23.35  | 23.28  | 23.15   |
| 3                                                | 8       | 0         |        | 23.08  | 23.07  | 22.87   |
| 3                                                | 8       | 4         |        | 22.82  | 22.86  | 22.63   |
| 3                                                | 8       | 7         |        | 22.54  | 22.61  | 22.36   |
| 3                                                | 15      | 0         |        | 22.26  | 22.34  | 22.09   |



| LTE Band 26(Part 90) Maximum Average Power [dBm] |         |           |        |        |        |         |
|--------------------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                         | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                                | 1       | 0         | QPSK   | 24.04  | 23.94  | 23.97   |
| 5                                                | 1       | 12        |        | 23.79  | 23.69  | 23.74   |
| 5                                                | 1       | 24        |        | 23.53  | 23.40  | 23.47   |
| 5                                                | 12      | 0         |        | 23.30  | 23.19  | 23.20   |
| 5                                                | 12      | 6         |        | 23.09  | 22.90  | 22.95   |
| 5                                                | 12      | 11        |        | 22.86  | 22.67  | 22.69   |
| 5                                                | 25      | 0         |        | 22.60  | 22.46  | 22.49   |
| 5                                                | 1       | 0         | 16-QAM | 23.77  | 23.73  | 23.72   |
| 5                                                | 1       | 12        |        | 23.47  | 23.48  | 23.49   |
| 5                                                | 1       | 24        |        | 23.22  | 23.26  | 23.25   |
| 5                                                | 12      | 0         |        | 22.96  | 22.98  | 23.04   |
| 5                                                | 12      | 6         |        | 22.73  | 22.74  | 22.83   |
| 5                                                | 12      | 11        |        | 22.49  | 22.47  | 22.59   |
| 5                                                | 25      | 0         |        | 22.19  | 22.21  | 22.32   |
| 10                                               | 1       | 0         | QPSK   | N/A    | 24.16  | N/A     |
| 10                                               | 1       | 24        |        | N/A    | 23.87  | N/A     |
| 10                                               | 1       | 49        |        | N/A    | 23.60  | N/A     |
| 10                                               | 25      | 0         |        | N/A    | 23.36  | N/A     |
| 10                                               | 25      | 12        |        | N/A    | 23.11  | N/A     |
| 10                                               | 25      | 24        |        | N/A    | 22.87  | N/A     |
| 10                                               | 50      | 0         |        | N/A    | 22.62  | N/A     |
| 10                                               | 1       | 0         | 16-QAM | N/A    | 23.87  | N/A     |
| 10                                               | 1       | 24        |        | N/A    | 23.66  | N/A     |
| 10                                               | 1       | 49        |        | N/A    | 23.41  | N/A     |
| 10                                               | 25      | 0         |        | N/A    | 23.12  | N/A     |
| 10                                               | 25      | 12        |        | N/A    | 22.90  | N/A     |
| 10                                               | 25      | 24        |        | N/A    | 22.64  | N/A     |
| 10                                               | 50      | 0         |        | N/A    | 22.37  | N/A     |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.88  | 22.80  | 22.86   |
| 5                                       | 1       | 12        |        | 22.67  | 22.53  | 22.58   |
| 5                                       | 1       | 24        |        | 22.43  | 22.24  | 22.36   |
| 5                                       | 12      | 0         |        | 22.15  | 22.04  | 22.14   |
| 5                                       | 12      | 6         |        | 21.91  | 21.81  | 21.85   |
| 5                                       | 12      | 11        |        | 21.61  | 21.54  | 21.61   |
| 5                                       | 25      | 0         |        | 21.40  | 21.34  | 21.40   |
| 5                                       | 1       | 0         | 16-QAM | 22.61  | 22.56  | 22.64   |
| 5                                       | 1       | 12        |        | 22.32  | 22.34  | 22.34   |
| 5                                       | 1       | 24        |        | 22.07  | 22.06  | 22.12   |
| 5                                       | 12      | 0         |        | 21.81  | 21.78  | 21.90   |
| 5                                       | 12      | 6         |        | 21.51  | 21.49  | 21.65   |
| 5                                       | 12      | 11        |        | 21.26  | 21.29  | 21.43   |
| 5                                       | 25      | 0         |        | 21.01  | 20.99  | 21.14   |
| 10                                      | 1       | 0         | QPSK   | 22.76  | 22.83  | 22.91   |
| 10                                      | 1       | 24        |        | 22.53  | 22.59  | 22.68   |
| 10                                      | 1       | 49        |        | 22.32  | 22.34  | 22.43   |
| 10                                      | 25      | 0         |        | 22.10  | 22.05  | 22.23   |
| 10                                      | 25      | 12        |        | 21.88  | 21.81  | 21.96   |
| 10                                      | 25      | 24        |        | 21.64  | 21.54  | 21.75   |
| 10                                      | 50      | 0         |        | 21.38  | 21.33  | 21.49   |
| 10                                      | 1       | 0         | 16-QAM | 22.53  | 22.56  | 22.67   |
| 10                                      | 1       | 49        |        | 22.30  | 22.32  | 22.42   |
| 10                                      | 1       | 99        |        | 22.03  | 22.06  | 22.14   |
| 10                                      | 50      | 0         |        | 21.79  | 21.82  | 21.87   |
| 10                                      | 50      | 24        |        | 21.57  | 21.54  | 21.66   |
| 10                                      | 50      | 49        |        | 21.36  | 21.34  | 21.46   |
| 10                                      | 100     | 0         |        | 21.12  | 21.10  | 21.22   |



| LTE Band 41 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.81  | 22.76  | 22.90   |
| 15                                      | 1       | 37        |        | 22.60  | 22.49  | 22.68   |
| 15                                      | 1       | 74        |        | 22.40  | 22.26  | 22.46   |
| 15                                      | 36      | 0         |        | 22.18  | 22.00  | 22.24   |
| 15                                      | 36      | 18        |        | 21.89  | 21.73  | 21.99   |
| 15                                      | 36      | 39        |        | 21.62  | 21.50  | 21.75   |
| 15                                      | 75      | 0         |        | 21.40  | 21.25  | 21.54   |
| 15                                      | 1       | 0         | 16-QAM | 22.59  | 22.50  | 22.63   |
| 15                                      | 1       | 49        |        | 22.35  | 22.30  | 22.36   |
| 15                                      | 1       | 99        |        | 22.11  | 22.01  | 22.15   |
| 15                                      | 50      | 0         |        | 21.85  | 21.78  | 21.89   |
| 15                                      | 50      | 24        |        | 21.59  | 21.56  | 21.62   |
| 15                                      | 50      | 49        |        | 21.34  | 21.33  | 21.35   |
| 15                                      | 100     | 0         |        | 21.08  | 21.06  | 21.12   |
| 20                                      | 1       | 0         | QPSK   | 23.03  | 23.16  | 23.07   |
| 20                                      | 1       | 49        |        | 22.77  | 22.87  | 22.86   |
| 20                                      | 1       | 99        |        | 22.54  | 22.62  | 22.65   |
| 20                                      | 50      | 0         |        | 22.33  | 22.35  | 22.42   |
| 20                                      | 50      | 24        |        | 22.04  | 22.08  | 22.17   |
| 20                                      | 50      | 49        |        | 21.74  | 21.86  | 21.90   |
| 20                                      | 100     | 0         |        | 21.47  | 21.63  | 21.63   |
| 20                                      | 1       | 0         | 16-QAM | 22.74  | 22.93  | 22.79   |
| 20                                      | 1       | 49        |        | 22.45  | 22.72  | 22.57   |
| 20                                      | 1       | 99        |        | 22.17  | 22.44  | 22.29   |
| 20                                      | 50      | 0         |        | 21.95  | 22.15  | 22.09   |
| 20                                      | 50      | 24        |        | 21.71  | 21.89  | 21.84   |
| 20                                      | 50      | 49        |        | 21.50  | 21.67  | 21.62   |
| 20                                      | 100     | 0         |        | 21.28  | 21.42  | 21.38   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                     | 1       | 0         | QPSK   | 22.83  | 22.91  | 22.85   |
| 1.4                                     | 1       | 2         |        | 22.57  | 22.62  | 22.61   |
| 1.4                                     | 1       | 5         |        | 22.33  | 22.32  | 22.32   |
| 1.4                                     | 3       | 0         |        | 22.09  | 22.06  | 22.03   |
| 1.4                                     | 3       | 1         |        | 21.81  | 21.84  | 21.82   |
| 1.4                                     | 3       | 2         |        | 21.60  | 21.57  | 21.61   |
| 1.4                                     | 6       | 0         |        | 21.39  | 21.31  | 21.33   |
| 1.4                                     | 1       | 0         | 16-QAM | 22.63  | 22.67  | 22.59   |
| 1.4                                     | 1       | 2         |        | 22.34  | 22.47  | 22.32   |
| 1.4                                     | 1       | 5         |        | 22.09  | 22.21  | 22.06   |
| 1.4                                     | 3       | 0         |        | 21.80  | 21.98  | 21.80   |
| 1.4                                     | 3       | 1         |        | 21.52  | 21.76  | 21.56   |
| 1.4                                     | 3       | 2         |        | 21.26  | 21.51  | 21.31   |
| 1.4                                     | 6       | 0         |        | 20.98  | 21.25  | 21.03   |
| 3                                       | 1       | 0         | QPSK   | 22.65  | 22.68  | 22.70   |
| 3                                       | 1       | 7         |        | 22.40  | 22.46  | 22.46   |
| 3                                       | 1       | 14        |        | 22.16  | 22.21  | 22.19   |
| 3                                       | 8       | 0         |        | 21.94  | 21.93  | 21.97   |
| 3                                       | 8       | 4         |        | 21.65  | 21.70  | 21.75   |
| 3                                       | 8       | 7         |        | 21.40  | 21.45  | 21.45   |
| 3                                       | 15      | 0         |        | 21.13  | 21.25  | 21.16   |
| 3                                       | 1       | 0         | 16-QAM | 22.42  | 22.43  | 22.43   |
| 3                                       | 1       | 7         |        | 22.16  | 22.20  | 22.15   |
| 3                                       | 1       | 14        |        | 21.94  | 21.99  | 21.85   |
| 3                                       | 8       | 0         |        | 21.73  | 21.78  | 21.62   |
| 3                                       | 8       | 4         |        | 21.53  | 21.51  | 21.41   |
| 3                                       | 8       | 7         |        | 21.25  | 21.27  | 21.20   |
| 3                                       | 15      | 0         |        | 20.99  | 21.02  | 20.96   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                       | 1       | 0         | QPSK   | 22.71  | 22.69  | 22.63   |
| 5                                       | 1       | 12        |        | 22.49  | 22.40  | 22.36   |
| 5                                       | 1       | 24        |        | 22.29  | 22.10  | 22.14   |
| 5                                       | 12      | 0         |        | 22.08  | 21.87  | 21.90   |
| 5                                       | 12      | 6         |        | 21.83  | 21.64  | 21.66   |
| 5                                       | 12      | 11        |        | 21.56  | 21.38  | 21.41   |
| 5                                       | 25      | 0         |        | 21.34  | 21.08  | 21.15   |
| 5                                       | 1       | 0         | 16-QAM | 22.42  | 22.42  | 22.34   |
| 5                                       | 1       | 12        |        | 22.15  | 22.19  | 22.14   |
| 5                                       | 1       | 24        |        | 21.95  | 21.93  | 21.85   |
| 5                                       | 12      | 0         |        | 21.69  | 21.71  | 21.62   |
| 5                                       | 12      | 6         |        | 21.46  | 21.43  | 21.37   |
| 5                                       | 12      | 11        |        | 21.20  | 21.21  | 21.11   |
| 5                                       | 25      | 0         |        | 20.97  | 20.98  | 20.82   |
| 10                                      | 1       | 0         | QPSK   | 22.47  | 22.39  | 22.52   |
| 10                                      | 1       | 24        |        | 22.19  | 22.13  | 22.30   |
| 10                                      | 1       | 49        |        | 21.89  | 21.92  | 22.00   |
| 10                                      | 25      | 0         |        | 21.69  | 21.66  | 21.74   |
| 10                                      | 25      | 12        |        | 21.46  | 21.37  | 21.51   |
| 10                                      | 25      | 24        |        | 21.18  | 21.16  | 21.25   |
| 10                                      | 50      | 0         |        | 20.90  | 20.88  | 20.98   |
| 10                                      | 1       | 0         | 16-QAM | 22.23  | 22.15  | 22.27   |
| 10                                      | 1       | 24        |        | 22.02  | 21.87  | 22.04   |
| 10                                      | 1       | 49        |        | 21.81  | 21.66  | 21.82   |
| 10                                      | 25      | 0         |        | 21.57  | 21.36  | 21.59   |
| 10                                      | 25      | 12        |        | 21.29  | 21.16  | 21.30   |
| 10                                      | 25      | 24        |        | 21.00  | 20.90  | 21.06   |
| 10                                      | 50      | 0         |        | 20.78  | 20.65  | 20.78   |



| LTE Band 66 Maximum Average Power [dBm] |         |           |        |        |        |         |
|-----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                                | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                      | 1       | 0         | QPSK   | 22.66  | 22.75  | 22.80   |
| 15                                      | 1       | 37        |        | 22.37  | 22.52  | 22.56   |
| 15                                      | 1       | 74        |        | 22.10  | 22.26  | 22.33   |
| 15                                      | 36      | 0         |        | 21.81  | 22.06  | 22.06   |
| 15                                      | 36      | 18        |        | 21.58  | 21.81  | 21.86   |
| 15                                      | 36      | 39        |        | 21.30  | 21.57  | 21.63   |
| 15                                      | 75      | 0         |        | 21.02  | 21.32  | 21.38   |
| 15                                      | 1       | 0         | 16-QAM | 22.38  | 22.49  | 22.52   |
| 15                                      | 1       | 38        |        | 22.14  | 22.23  | 22.27   |
| 15                                      | 1       | 75        |        | 21.94  | 22.00  | 22.01   |
| 15                                      | 36      | 0         |        | 21.64  | 21.72  | 21.76   |
| 15                                      | 36      | 18        |        | 21.35  | 21.49  | 21.48   |
| 15                                      | 36      | 39        |        | 21.09  | 21.22  | 21.27   |
| 15                                      | 75      | 0         |        | 20.81  | 20.94  | 21.00   |
| 20                                      | 1       | 0         | QPSK   | 22.95  | 23.08  | 22.96   |
| 20                                      | 1       | 49        |        | 22.73  | 22.82  | 22.67   |
| 20                                      | 1       | 99        |        | 22.52  | 22.59  | 22.47   |
| 20                                      | 50      | 0         |        | 22.28  | 22.32  | 22.19   |
| 20                                      | 50      | 24        |        | 22.03  | 22.05  | 21.97   |
| 20                                      | 50      | 49        |        | 21.74  | 21.79  | 21.70   |
| 20                                      | 100     | 0         |        | 21.51  | 21.58  | 21.46   |
| 20                                      | 1       | 0         | 16-QAM | 22.67  | 22.81  | 22.66   |
| 20                                      | 1       | 49        |        | 22.43  | 22.57  | 22.39   |
| 20                                      | 1       | 99        |        | 22.17  | 22.30  | 22.13   |
| 20                                      | 50      | 0         |        | 21.91  | 22.02  | 21.88   |
| 20                                      | 50      | 24        |        | 21.70  | 21.79  | 21.66   |
| 20                                      | 50      | 49        |        | 21.41  | 21.54  | 21.41   |
| 20                                      | 100     | 0         |        | 21.16  | 21.29  | 21.12   |

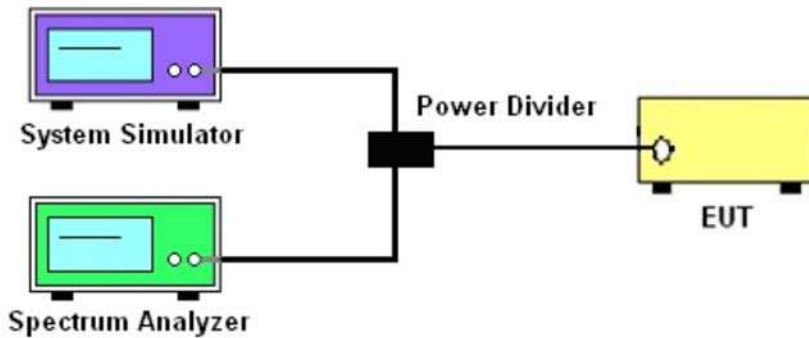
## 4. PEAK-TO-AVERAGE RATIO

### 4.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

#### 4.1.1 MEASUREMENT METHOD

Use one of the procedures presented in 4.1.3 to measure the total peak power and record as PPK. Use one of the applicable procedures presented 4.1.3 to measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:  
 $PAPR (dB) = PPK (dBm) - PAvg (dBm)$ .

#### 4.1.2 TEST SETUP



#### 4.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.7 and ANSI C63.26 2015 Section 5.2.6.
2. The EUT was connected to spectrum and system simulator via a power divider
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure the peak and average power of the spectrum analyzer
5. Record the deviation as Peak to Average Ratio.

|             | LTE    |        |        |        |         |         |
|-------------|--------|--------|--------|--------|---------|---------|
| LTE BW      | 1.4M   | 3M     | 5M     | 10M    | 15M     | 20M     |
| Span        | 3MHz   | 6MHz   | 10MHz  | 20MHz  | 30MHz   | 40MHz   |
| RBW         | 30kHz  | 30kHz  | 100kHz | 100kHz | 300kHz  | 300kHz  |
| VBW         | 100kHz | 100kHz | 300kHz | 300kHz | 1000kHz | 1000kHz |
| Detector    | PK/AVG | PK/AVG | PK/AVG | PK/AVG | PK/AVG  | PK/AVG  |
| Trace       | Max    | Max    | Max    | Max    | Max     | Max     |
| Sweep Count | Auto   | Auto   | Auto   | Auto   | Auto    | Auto    |



## 4.1.4 TEST RESULTS

| LTE Band 2 PAR [dBm] |         |            |        |        |         |
|----------------------|---------|------------|--------|--------|---------|
| BW [MHz]             | RB Size | Modulation | Lowest | Middle | Highest |
|                      |         |            | P-A    | P-A    | P-A     |
| 20                   | 1       | QPSK       | 5.17   | 4.8    | 4.4     |
| 20                   | 100     |            | 5.28   | 5.47   | 5.56    |
| 20                   | 1       | 16-QAM     | 5.93   | 5.69   | 5.08    |
| 20                   | 100     |            | 6.12   | 6.29   | 6.4     |
| Limit                |         |            | ≤13dB  |        |         |

| LTE Band 4 PAR [dBm] |         |            |        |        |         |
|----------------------|---------|------------|--------|--------|---------|
| BW [MHz]             | RB Size | Modulation | Lowest | Middle | Highest |
|                      |         |            | P-A    | P-A    | P-A     |
| 20                   | 1       | QPSK       | 4.48   | 4.81   | 4.61    |
| 20                   | 100     |            | 5.06   | 5.21   | 5.31    |
| 20                   | 1       | 16-QAM     | 5.49   | 5.61   | 5.47    |
| 20                   | 100     |            | 5.8    | 6.07   | 6.13    |
| Limit                |         |            | ≤13dB  |        |         |

| LTE Band 5 PAR [dBm] |         |            |        |        |         |
|----------------------|---------|------------|--------|--------|---------|
| BW [MHz]             | RB Size | Modulation | Lowest | Middle | Highest |
|                      |         |            | P-A    | P-A    | P-A     |
| 10                   | 1       | QPSK       | 4.1    | 4.92   | 3.94    |
| 10                   | 50      |            | 5.07   | 4.78   | 4.79    |
| 10                   | 1       | 16-QAM     | 5.03   | 5.54   | 4.91    |
| 10                   | 50      |            | 5.82   | 5.52   | 5.71    |
| Limit                |         |            | ≤13dB  |        |         |

| LTE Band 12 PAR [dBm] |         |            |        |        |         |
|-----------------------|---------|------------|--------|--------|---------|
| BW [MHz]              | RB Size | Modulation | Lowest | Middle | Highest |
|                       |         |            | P-A    | P-A    | P-A     |
| 10                    | 1       | QPSK       | 3.79   | 3.67   | 3.56    |
| 10                    | 50      |            | 5.28   | 5.55   | 5.16    |
| 10                    | 1       | 16-QAM     | 4.68   | 4.53   | 4.6     |
| 10                    | 50      |            | 5.96   | 6.07   | 5.92    |
| Limit                 |         |            | ≤13dB  |        |         |

| LTE Band 13 PAR [dBm] |         |            |        |
|-----------------------|---------|------------|--------|
| BW [MHz]              | RB Size | Modulation | Middle |
|                       |         |            | P-A    |
| 10                    | 1       | QPSK       | 4.53   |
| 10                    | 50      |            | 5.74   |
| 10                    | 1       | 16-QAM     | 5.42   |
| 10                    | 50      |            | 6.56   |
| Limit                 |         |            | ≤13dB  |



| LTE Band 25 PAR [dBm] |         |            |        |        |         |
|-----------------------|---------|------------|--------|--------|---------|
| BW [MHz]              | RB Size | Modulation | Lowest | Middle | Highest |
|                       |         |            | P-A    | P-A    | P-A     |
| 20                    | 1       | QPSK       | 5.11   | 4.75   | 4.83    |
| 20                    | 100     |            | 5.34   | 5.19   | 5.15    |
| 20                    | 1       | 16-QAM     | 6.58   | 5.75   | 5.58    |
| 20                    | 100     |            | 6.16   | 6.23   | 6.19    |
| Limit                 |         |            | ≤13dB  |        |         |

| LTE Band 26(Part 22) PAR [dBm] |         |            |        |        |         |
|--------------------------------|---------|------------|--------|--------|---------|
| BW [MHz]                       | RB Size | Modulation | Lowest | Middle | Highest |
|                                |         |            | P-A    | P-A    | P-A     |
| 15                             | 1       | QPSK       | 4.85   | 4.73   | 5.19    |
| 15                             | 75      |            | 3.35   | 3.63   | 3.3     |
| 15                             | 1       | 16-QAM     | 4.04   | 4.49   | 3.72    |
| 15                             | 75      |            | 5.27   | 5.41   | 5.56    |
| Limit                          |         |            | ≤13dB  |        |         |

| LTE Band 26(Part 90) PAR [dBm] |         |            |        |
|--------------------------------|---------|------------|--------|
| BW [MHz]                       | RB Size | Modulation | Middle |
|                                |         |            | P-A    |
| 10                             | 1       | QPSK       | 3.64   |
| 10                             | 50      |            | 4.64   |
| 10                             | 1       | 16-QAM     | 4.4    |
| 10                             | 50      |            | 5.56   |
| Limit                          |         |            | ≤13dB  |

| LTE Band 41PAR [dBm] |     |  |        |        |         |
|----------------------|-----|--|--------|--------|---------|
|                      |     |  | Lowest | Middle | Highest |
|                      |     |  | P-A    | P-A    | P-A     |
| 20                   | 1   |  | 3.62   | 4.48   | 4.72    |
| 20                   | 100 |  | 3.63   | 3.4    | 3.92    |
| 20                   | 1   |  | 4.3    | 3.88   | 4.54    |
| 20                   | 100 |  | 5.59   | 5.22   | 5.35    |
| Limit                |     |  | ≤13dB  |        |         |

| LTE Band 66 PAR [dBm] |         |            |        |        |         |
|-----------------------|---------|------------|--------|--------|---------|
| BW [MHz]              | RB Size | Modulation | Lowest | Middle | Highest |
|                       |         |            | P-A    | P-A    | P-A     |
| 20                    | 1       | QPSK       | 4.99   | 5.34   | 4.8     |
| 20                    | 100     |            | 4.47   | 4.64   | 4.18    |
| 20                    | 1       | 16-QAM     | 5.31   | 6.73   | 4.99    |
| 20                    | 100     |            | 5.25   | 6.49   | 5.64    |
| Limit                 |         |            | ≤13dB  |        |         |

Note: Test chart See Appendix D

## 5. RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER

### 5.1 DESCRIPTION OF THE ERP/EIRP MEASUREMENT

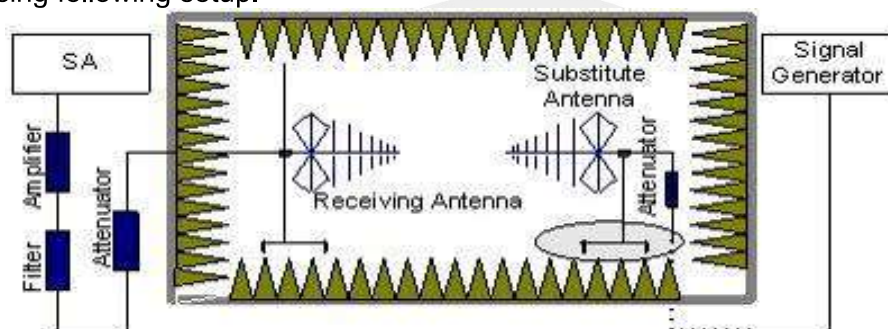
#### 5.1.1 MEASUREMENT METHOD

Effective radiated power output measurements by substitution method according to ANSI C63.26 2015, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems. Mobile and portable (hand-held) stations operating are limited to average ERP, Equivalent isotropic radiated power output measurements by substitution method according to ANSI C63.26 2015, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. Mobile and portable (hand-held) stations operating are limited to average EIRP.

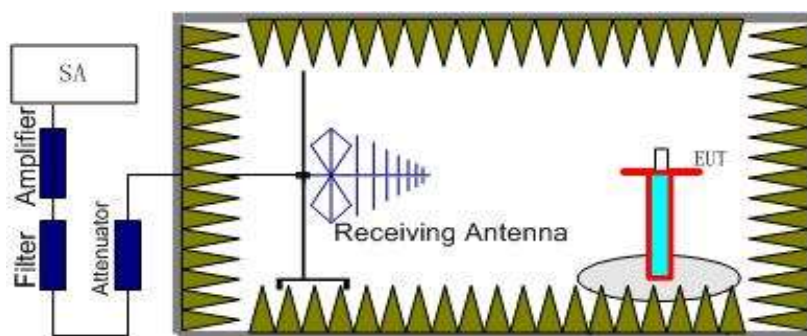
#### 5.1.2 TEST SETUP

The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as,  $RSE = R_x (\text{dBuV}) + CL (\text{dB}) + SA (\text{dB}) + \text{Gain} (\text{dBi}) - 107 (\text{dBuV to dBm})$  The SA is calibrated using following setup.



b) EUT was placed on a 1.5m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.



Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below:

Power=PMea+ARpl



### 5.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01v03r01 Section 5.6 and ANSI C63.26 2015 Section 5.2.
2. The EUT was placed on a non-conductive rotating platform 1.5 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with Peak detector.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 m in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to ANSI C63.26 2015. The EUT was replaced by dipole antenna (substitution antenna) at same location and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor,  $EIRP/ERP = LVL + \text{Correction factor}$ .
5. RB Set greater than bandwidth, VB Set spectrum analyzer Maximum support.





## 5.1.4 TEST RESULTS

Note: Test is divided into three directions, X/Y/Z. X pattern for the worst.

| Radiated Power (EIRP) for LTE Band 2 / 1.4M |               |        |         |                       |               |               |                        |                                 |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                        | 1             | 0      | Lowest  | 12.06                 | 2.37          | 10.40         | 20.09                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 12.22                 | 2.39          | 10.42         | 20.25                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 12.18                 | 2.40          | 10.44         | 20.22                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 13.45                 | 2.37          | 10.40         | 21.48                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 13.62                 | 2.39          | 10.42         | 21.65                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 13.59                 | 2.40          | 10.44         | 21.63                  | Vertical                        | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 11.9                  | 2.37          | 10.40         | 19.93                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 12.11                 | 2.39          | 10.42         | 20.14                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 11.88                 | 2.40          | 10.44         | 19.92                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 13.29                 | 2.37          | 10.40         | 21.32                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 13.42                 | 2.39          | 10.42         | 21.45                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 13.37                 | 2.40          | 10.44         | 21.41                  | Vertical                        | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 2 / 3M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 12.33                 | 2.37          | 10.40         | 20.36                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.22                 | 2.39          | 10.42         | 20.25                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 12.28                 | 2.40          | 10.44         | 20.32                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 13.73                 | 2.37          | 10.40         | 21.76                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 13.64                 | 2.39          | 10.42         | 21.67                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 13.69                 | 2.40          | 10.44         | 21.73                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 12.09                 | 2.37          | 10.40         | 20.12                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.06                 | 2.39          | 10.42         | 20.09                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 11.96                 | 2.40          | 10.44         | 20.00                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 13.47                 | 2.37          | 10.40         | 21.50                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 13.38                 | 2.39          | 10.42         | 21.41                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 13.3                  | 2.40          | 10.44         | 21.34                  | Vertical                        | Pass       |
| Limit                                     | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |



| Radiated Power (EIRP) for LTE Band 2 / 5M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 12.09                 | 2.37          | 10.40         | 20.12                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.19                 | 2.39          | 10.42         | 20.22                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 12.09                 | 2.40          | 10.44         | 20.13                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 13.43                 | 2.37          | 10.40         | 21.46                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 13.63                 | 2.39          | 10.42         | 21.66                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 13.48                 | 2.40          | 10.44         | 21.52                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 11.75                 | 2.37          | 10.40         | 19.78                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 11.83                 | 2.39          | 10.42         | 19.86                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 11.71                 | 2.40          | 10.44         | 19.75                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 13.19                 | 2.37          | 10.40         | 21.22                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 13.33                 | 2.39          | 10.42         | 21.36                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 13.2                  | 2.40          | 10.44         | 21.24                  | Vertical                        | Pass       |
| Limit                                     | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 2 / 10M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 12.11                 | 2.37          | 10.40         | 20.14                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.18                 | 2.39          | 10.42         | 20.21                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 11.93                 | 2.40          | 10.44         | 19.97                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.57                 | 2.37          | 10.40         | 21.60                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.67                 | 2.39          | 10.42         | 21.70                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.3                  | 2.40          | 10.44         | 21.34                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 12.03                 | 2.37          | 10.40         | 20.06                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.21                 | 2.39          | 10.42         | 20.24                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 11.58                 | 2.40          | 10.44         | 19.62                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.44                 | 2.37          | 10.40         | 21.47                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.56                 | 2.39          | 10.42         | 21.59                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 12.94                 | 2.40          | 10.44         | 20.98                  | Vertical                        | Pass       |
| Limit                                      | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |



| Radiated Power (EIRP) for LTE Band 2 / 15M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 12.2                  | 2.37          | 10.40         | 20.23                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.21                 | 2.39          | 10.42         | 20.24                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.06                 | 2.40          | 10.44         | 20.10                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.67                 | 2.37          | 10.40         | 21.70                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.58                 | 2.39          | 10.42         | 21.61                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.5                  | 2.40          | 10.44         | 21.54                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 12.09                 | 2.37          | 10.40         | 20.12                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.15                 | 2.39          | 10.42         | 20.18                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 11.78                 | 2.40          | 10.44         | 19.82                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.46                 | 2.37          | 10.40         | 21.49                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.45                 | 2.39          | 10.42         | 21.48                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.22                 | 2.40          | 10.44         | 21.26                  | Vertical                        | Pass       |
| Limit                                      | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 2 / 20M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 12.33                 | 2.37          | 10.40         | 20.36                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.47                 | 2.39          | 10.42         | 20.50                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.55                 | 2.40          | 10.44         | 20.59                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.8                  | 2.37          | 10.40         | 21.83                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.84                 | 2.39          | 10.42         | 21.87                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.88                 | 2.40          | 10.44         | 21.92                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 12.16                 | 2.37          | 10.40         | 20.19                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.21                 | 2.39          | 10.42         | 20.24                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.23                 | 2.40          | 10.44         | 20.27                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 13.48                 | 2.37          | 10.40         | 21.51                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 13.64                 | 2.39          | 10.42         | 21.67                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.54                 | 2.40          | 10.44         | 21.58                  | Vertical                        | Pass       |
| Limit                                      | EIRP<2W=33dBm |        |         |                       |               |               |                        |                                 |            |



| Radiated Power (EIRP) for LTE Band 4 / 1.4M |               |        |         |                       |               |               |                        |                                 |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                        | 1             | 0      | Lowest  | 12.86                 | 2.35          | 10.13         | 20.64                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 12.95                 | 2.36          | 10.16         | 20.75                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 12.78                 | 2.37          | 10.22         | 20.63                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 14.3                  | 2.35          | 10.13         | 22.08                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 14.35                 | 2.36          | 10.16         | 22.15                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 14.23                 | 2.37          | 10.22         | 22.08                  | Vertical                        | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 12.8                  | 2.35          | 10.13         | 20.58                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 12.61                 | 2.36          | 10.16         | 20.41                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 12.58                 | 2.37          | 10.22         | 20.43                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 14.12                 | 2.35          | 10.13         | 21.90                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 14.06                 | 2.36          | 10.16         | 21.86                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 13.97                 | 2.37          | 10.22         | 21.82                  | Vertical                        | Pass       |
| Limit                                       | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 4 / 3M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 12.87                 | 2.35          | 10.13         | 20.65                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 13.05                 | 2.36          | 10.16         | 20.85                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 13.01                 | 2.37          | 10.22         | 20.86                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.32                 | 2.35          | 10.13         | 22.10                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.51                 | 2.36          | 10.16         | 22.31                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.4                  | 2.37          | 10.22         | 22.25                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 12.62                 | 2.35          | 10.13         | 20.40                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.85                 | 2.36          | 10.16         | 20.65                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 12.74                 | 2.37          | 10.22         | 20.59                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.02                 | 2.35          | 10.13         | 21.80                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.25                 | 2.36          | 10.16         | 22.05                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.06                 | 2.37          | 10.22         | 21.91                  | Vertical                        | Pass       |
| Limit                                     | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |



| Radiated Power (EIRP) for LTE Band 4 / 5M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 12.96                 | 2.35          | 10.13         | 20.74                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.89                 | 2.36          | 10.16         | 20.69                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 12.79                 | 2.37          | 10.22         | 20.64                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.29                 | 2.35          | 10.13         | 22.07                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.3                  | 2.36          | 10.16         | 22.10                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.17                 | 2.37          | 10.22         | 22.02                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 12.7                  | 2.35          | 10.13         | 20.48                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 12.7                  | 2.36          | 10.16         | 20.50                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 12.64                 | 2.37          | 10.22         | 20.49                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.01                 | 2.35          | 10.13         | 21.79                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.1                  | 2.36          | 10.16         | 21.90                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.05                 | 2.37          | 10.22         | 21.90                  | Vertical                        | Pass       |
| Limit                                     | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 4 / 10M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 12.94                 | 2.35          | 10.13         | 20.72                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.11                 | 2.36          | 10.16         | 20.91                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.83                 | 2.37          | 10.22         | 20.68                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 14.42                 | 2.35          | 10.13         | 22.20                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 14.42                 | 2.36          | 10.16         | 22.22                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 14.24                 | 2.37          | 10.22         | 22.09                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 12.72                 | 2.35          | 10.13         | 20.50                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 12.73                 | 2.36          | 10.16         | 20.53                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.53                 | 2.37          | 10.22         | 20.38                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 14.17                 | 2.35          | 10.13         | 21.95                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 14.04                 | 2.36          | 10.16         | 21.84                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.98                 | 2.37          | 10.22         | 21.83                  | Vertical                        | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |