

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7420

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.71    | 9.71    | 9.71    | 0.35               | 0.95                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.61    | 9.61    | 9.61    | 0.51               | 0.81                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.03    | 8.03    | 8.03    | 0.37               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.70    | 7.70    | 7.70    | 0.39               | 0.84                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.48    | 7.48    | 7.48    | 0.38               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.34    | 7.34    | 7.34    | 0.32               | 0.88                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.22    | 7.22    | 7.22    | 0.30               | 0.88                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.79    | 4.79    | 4.79    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.08    | 4.08    | 4.08    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.36    | 4.36    | 4.36    | 0.50               | 1.90                    | ± 13.1 %  |

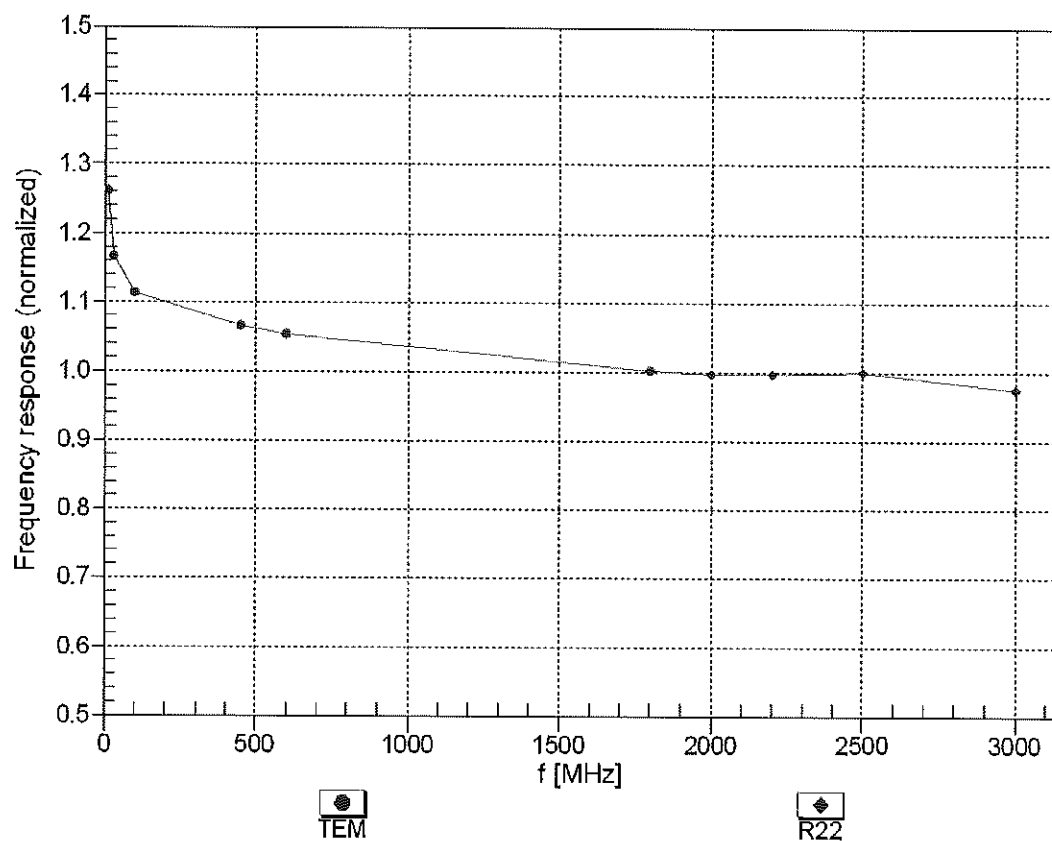
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

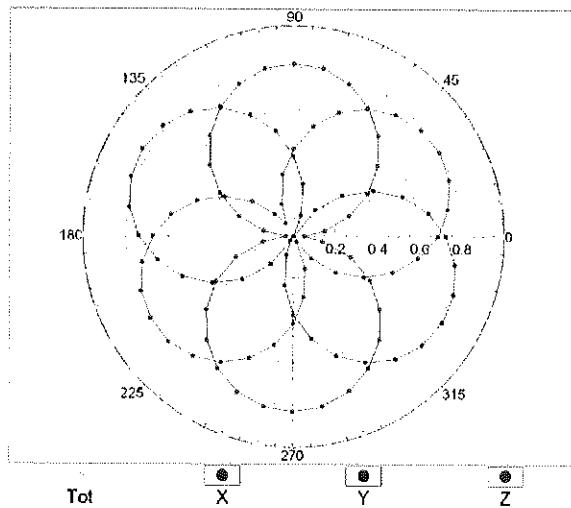
(TEM-Cell:ifi110 EXX, Waveguide: R22)



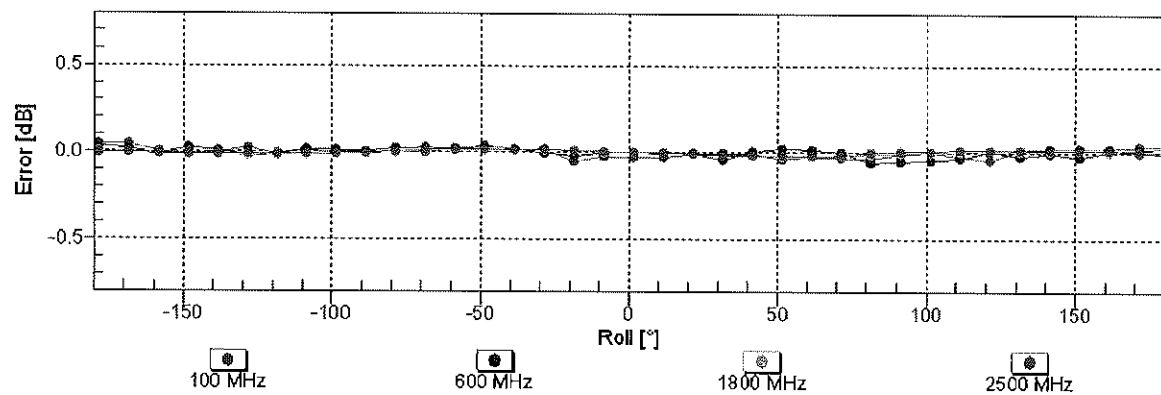
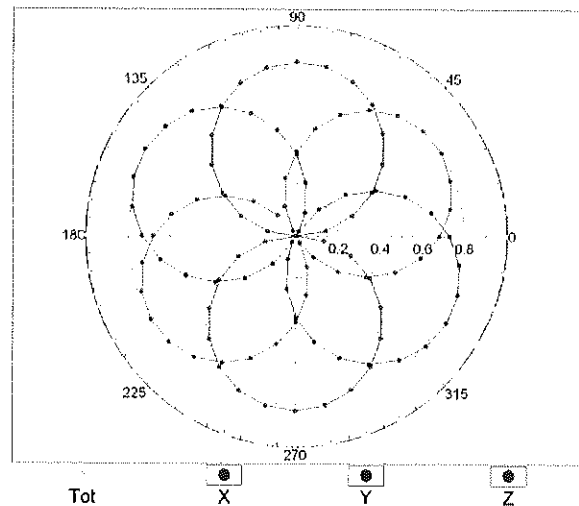
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

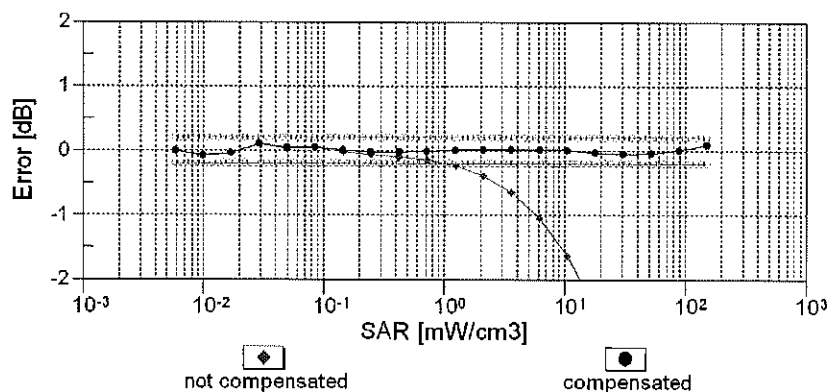
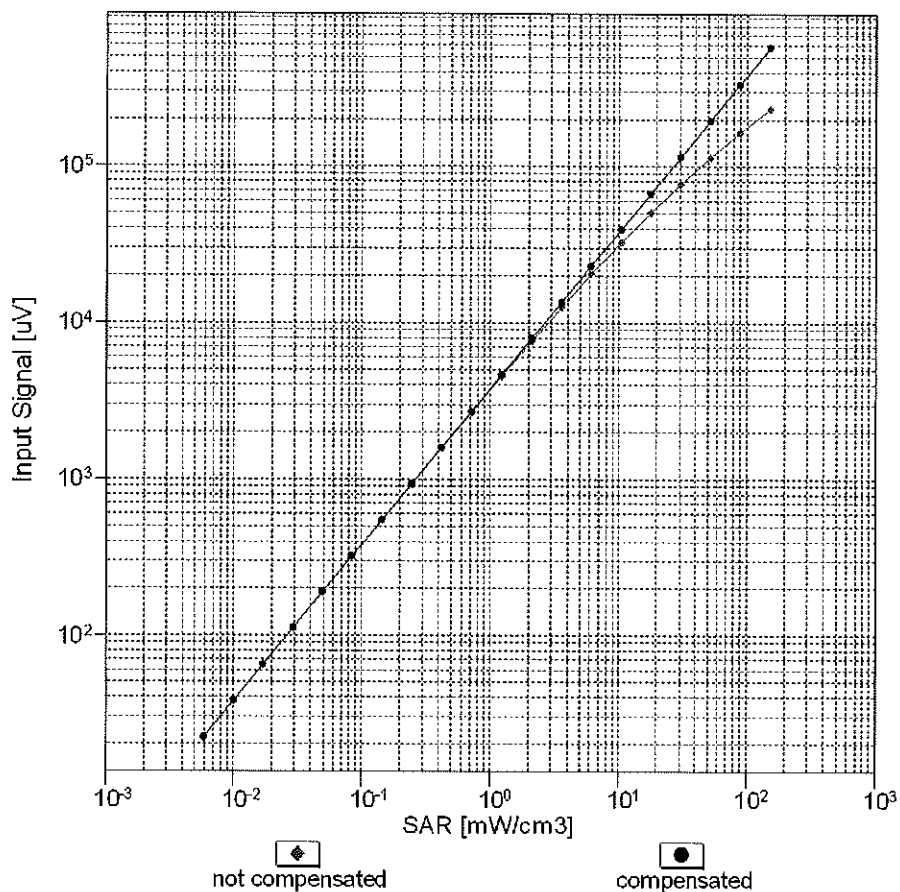


f=1800 MHz,R22



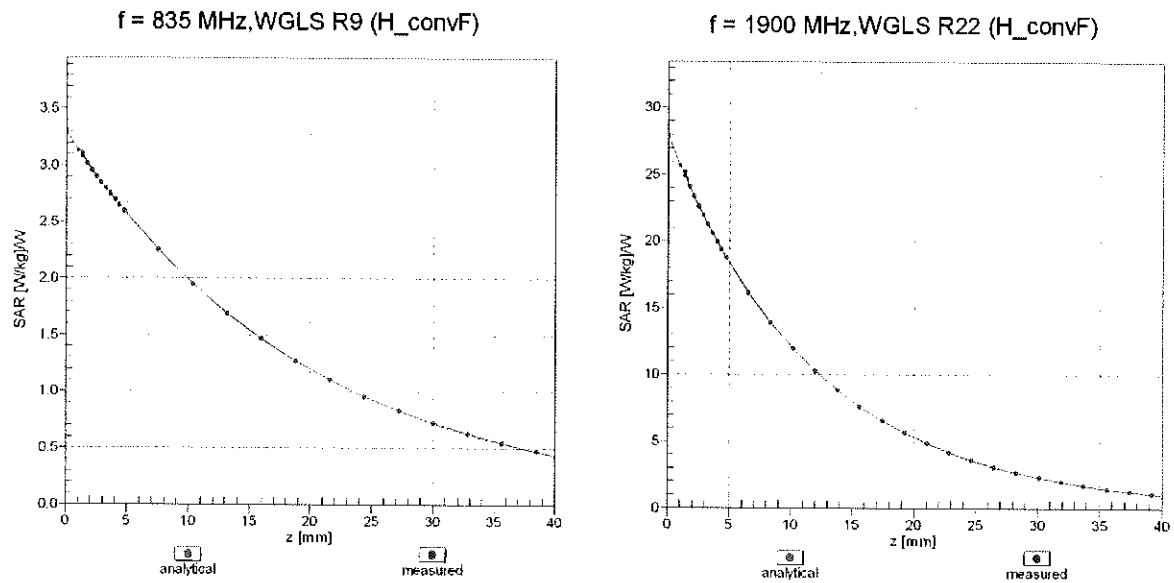
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



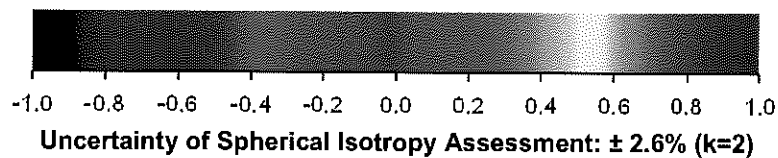
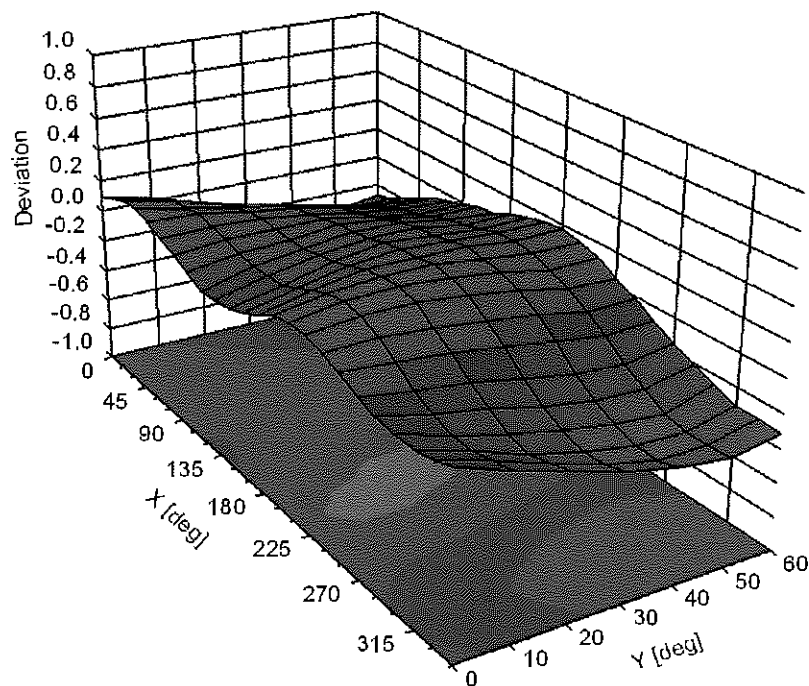
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7420

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 41.5       |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Appendix: Modulation Calibration Parameters**

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB $\mu$ V | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|-----------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00            | 1.00  | 0.00    | 142.4    | $\pm 3.0 \%$                     |
|               |                                               | Y | 0.00    | 0.00            | 1.00  |         | 149.4    |                                  |
|               |                                               | Z | 0.00    | 0.00            | 1.00  |         | 150.8    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 1.98    | 65.48           | 9.62  | 10.00   | 20.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.47    | 62.68           | 7.81  |         | 20.0     |                                  |
|               |                                               | Z | 2.00    | 65.57           | 9.72  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.00    | 67.02           | 14.98 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 0.83    | 64.45           | 12.97 |         | 150.0    |                                  |
|               |                                               | Z | 1.96    | 81.22           | 21.14 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.14    | 63.59           | 15.07 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.04    | 62.37           | 14.08 |         | 150.0    |                                  |
|               |                                               | Z | 1.16    | 66.22           | 17.23 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.79    | 66.65           | 17.04 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.69    | 66.38           | 16.93 |         | 150.0    |                                  |
|               |                                               | Z | 4.61    | 67.51           | 17.78 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 111.76          | 25.68 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 109.09          | 24.23 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 114.78          | 27.14 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 111.11          | 25.44 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 127.89          | 27.94 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 113.52          | 26.62 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 113.65          | 25.51 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 110.68          | 23.73 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 118.22          | 27.47 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 6.23    | 86.55           | 35.63 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 3.75    | 69.80           | 26.94 |         | 50.0     |                                  |
|               |                                               | Z | 11.42   | 109.88          | 46.67 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 8.22    | 92.71           | 33.98 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.56    | 83.39           | 30.47 |         | 60.0     |                                  |
|               |                                               | Z | 8.02    | 95.21           | 36.32 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 117.09          | 26.25 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 112.75          | 23.76 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 126.04          | 29.89 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 121.88          | 27.58 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 113.78          | 23.43 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 141.34          | 35.26 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 4.93    | 79.80           | 27.39 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 3.78    | 74.20           | 25.10 |         | 80.0     |                                  |
|               |                                               | Z | 4.76    | 81.21           | 29.20 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 112.75          | 24.67 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 108.52          | 22.29 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 116.38          | 26.08 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 120.79          | 25.70 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 99.68   | 90.03           | 12.76 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 148.21          | 35.39 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 131.66 | 28.96 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.14   | 60.00  | 3.20  |       | 100.0 |         |
|           |                                                     | Z | 0.30   | 60.00  | 5.00  |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 34.10  | 114.43 | 31.26 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 12.31  | 98.88  | 26.70 |       | 70.0  |         |
|           |                                                     | Z | 100.00 | 124.15 | 31.42 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 3.37   | 80.11  | 19.28 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.69   | 70.98  | 14.93 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 112.59 | 24.56 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 2.03   | 73.99  | 16.65 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.18   | 67.07  | 12.74 |       | 100.0 |         |
|           |                                                     | Z | 4.60   | 80.36  | 15.68 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 87.17  | 129.81 | 35.04 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 23.49  | 109.32 | 29.66 |       | 70.0  |         |
|           |                                                     | Z | 100.00 | 124.84 | 31.72 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 3.02   | 78.74  | 18.77 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.56   | 70.11  | 14.55 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 112.67 | 24.56 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 2.04   | 74.33  | 16.91 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.18   | 67.29  | 12.96 |       | 100.0 |         |
|           |                                                     | Z | 7.48   | 85.69  | 17.45 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 1.64   | 70.84  | 14.77 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.99   | 64.73  | 10.80 |       | 150.0 |         |
|           |                                                     | Z | 0.55   | 61.60  | 7.23  |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 108.63 | 23.57 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 104.99 | 21.61 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 110.10 | 24.21 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 98.66  | 3.53  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.03   | 121.19 | 2.53  |       | 150.0 |         |
|           |                                                     | Z | 0.03   | 138.40 | 2.04  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00 | 107.10 | 25.09 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 61.80  | 98.59  | 22.38 |       | 25.0  |         |
|           |                                                     | Z | 100.00 | 108.47 | 25.89 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 108.99 | 24.81 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 195.67 | 113.34 | 24.95 |       | 40.0  |         |
|           |                                                     | Z | 100.00 | 110.63 | 25.67 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00 | 124.93 | 33.47 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 123.65 | 32.61 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 121.51 | 31.54 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 3.87   | 74.66  | 24.22 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.14   | 70.61  | 22.52 |       | 100.0 |         |
|           |                                                     | Z | 3.77   | 75.92  | 25.92 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.16   | 64.53  | 15.65 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.04   | 63.03  | 14.55 |       | 110.0 |         |
|           |                                                     | Z | 1.23   | 68.05  | 18.30 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 15.10  | 113.48 | 30.90 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 2.20   | 84.00  | 21.73 |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 155.34 | 42.50 |       | 110.0 |         |

|           |                                                |   |       |        |       |      |       |         |
|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 2.40  | 79.17  | 22.27 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 1.58  | 72.97  | 19.64 |      | 110.0 |         |
|           |                                                | Z | 16.21 | 119.48 | 36.23 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.60  | 66.65  | 16.46 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.49  | 66.31  | 16.28 |      | 100.0 |         |
|           |                                                | Z | 4.38  | 67.35  | 17.07 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.62  | 66.73  | 16.56 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.50  | 66.40  | 16.39 |      | 100.0 |         |
|           |                                                | Z | 4.41  | 67.52  | 17.22 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.89  | 66.98  | 16.79 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.77  | 66.66  | 16.63 |      | 100.0 |         |
|           |                                                | Z | 4.62  | 67.67  | 17.39 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.75  | 66.86  | 16.88 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.63  | 66.51  | 16.72 |      | 100.0 |         |
|           |                                                | Z | 4.51  | 67.52  | 17.51 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.77  | 66.87  | 17.05 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.64  | 66.53  | 16.90 |      | 100.0 |         |
|           |                                                | Z | 4.51  | 67.50  | 17.67 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.05  | 67.07  | 17.51 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.94  | 66.81  | 17.41 |      | 100.0 |         |
|           |                                                | Z | 4.79  | 67.81  | 18.17 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.08  | 67.04  | 17.71 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.96  | 66.73  | 17.60 |      | 100.0 |         |
|           |                                                | Z | 4.85  | 67.85  | 18.44 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.16  | 67.06  | 17.91 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.04  | 66.79  | 17.81 |      | 100.0 |         |
|           |                                                | Z | 4.89  | 67.81  | 18.59 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.88  | 66.71  | 17.35 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.78  | 66.45  | 17.24 |      | 100.0 |         |
|           |                                                | Z | 4.72  | 67.62  | 18.12 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.84  | 66.99  | 17.55 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.73  | 66.69  | 17.44 |      | 100.0 |         |
|           |                                                | Z | 4.67  | 67.87  | 18.35 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.89  | 67.13  | 17.88 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.78  | 66.83  | 17.78 |      | 100.0 |         |
|           |                                                | Z | 4.76  | 68.20  | 18.80 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.87  | 67.00  | 18.02 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.76  | 66.71  | 17.92 |      | 100.0 |         |
|           |                                                | Z | 4.79  | 68.25  | 19.02 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.89  | 67.05  | 18.31 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.77  | 66.72  | 18.20 |      | 90.0  |         |
|           |                                                | Z | 4.82  | 68.28  | 19.30 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.90  | 66.85  | 18.44 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.80  | 66.54  | 18.35 |      | 90.0  |         |
|           |                                                | Z | 4.86  | 68.13  | 19.48 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.92  | 66.91  | 18.54 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.82  | 66.61  | 18.45 |      | 90.0  |         |
|           |                                                | Z | 4.90  | 68.27  | 19.62 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.76   | 65.14  | 11.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.53   | 61.53  | 8.49  |      | 150.0 |         |
|           |                                                     | Z | 0.32   | 60.00  | 5.58  |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 3.07   | 65.96  | 5.95  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.68   | 60.01  | 2.69  |      | 80.0  |         |
|           |                                                     | Z | 3.72   | 65.73  | 5.41  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 113.67 | 25.53 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 110.80 | 23.80 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 118.34 | 27.54 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.80   | 67.64  | 15.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.60   | 65.93  | 14.18 |      | 150.0 |         |
|           |                                                     | Z | 2.40   | 74.76  | 18.23 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.76   | 67.59  | 15.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.57   | 65.86  | 14.13 |      | 150.0 |         |
|           |                                                     | Z | 2.37   | 74.85  | 18.29 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 8.30   | 92.94  | 34.06 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 5.60   | 83.56  | 30.54 |      | 60.0  |         |
|           |                                                     | Z | 8.11   | 95.47  | 36.42 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.05   | 70.07  | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.76   | 68.39  | 15.63 |      | 150.0 |         |
|           |                                                     | Z | 3.16   | 72.48  | 18.28 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.18   | 67.38  | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.02   | 66.47  | 15.28 |      | 150.0 |         |
|           |                                                     | Z | 3.08   | 68.35  | 16.76 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.28   | 67.36  | 15.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.13   | 66.51  | 15.41 |      | 150.0 |         |
|           |                                                     | Z | 3.18   | 68.30  | 16.82 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 5.68   | 75.14  | 20.49 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.89   | 73.15  | 19.84 |      | 65.0  |         |
|           |                                                     | Z | 6.24   | 78.98  | 22.83 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.70   | 73.02  | 20.33 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.99   | 71.04  | 19.60 |      | 65.0  |         |
|           |                                                     | Z | 5.49   | 74.02  | 21.36 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.24   | 71.14  | 19.77 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.74   | 69.73  | 19.27 |      | 65.0  |         |
|           |                                                     | Z | 5.36   | 73.24  | 21.27 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.65   | 69.31  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.39   | 67.70  | 15.42 |      | 150.0 |         |
|           |                                                     | Z | 2.77   | 72.57  | 18.40 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.83   | 67.24  | 15.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.65   | 66.25  | 15.04 |      | 150.0 |         |
|           |                                                     | Z | 2.75   | 68.90  | 16.75 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.14   | 68.44  | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.89   | 66.73  | 14.78 |      | 150.0 |         |
|           |                                                     | Z | 2.33   | 73.09  | 18.18 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.55   | 68.11  | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.32   | 66.80  | 14.97 |      | 150.0 |         |
|           |                                                     | Z | 2.67   | 71.57  | 17.20 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.96 | 67.26 | 15.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.78 | 66.34 | 15.15 |      | 150.0 |         |
|           |                                                | Z | 2.87 | 68.92 | 16.78 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.70 | 68.27 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.47 | 67.04 | 15.16 |      | 150.0 |         |
|           |                                                | Z | 2.78 | 71.49 | 17.20 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.07 | 67.16 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.96 | 66.77 | 16.22 |      | 150.0 |         |
|           |                                                | Z | 4.86 | 67.49 | 16.99 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.33 | 67.22 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.22 | 66.88 | 16.29 |      | 150.0 |         |
|           |                                                | Z | 5.13 | 67.68 | 17.06 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.15 | 67.33 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.05 | 66.96 | 16.25 |      | 150.0 |         |
|           |                                                | Z | 4.95 | 67.74 | 17.04 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.03 | 67.02 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.95 | 66.69 | 16.20 |      | 150.0 |         |
|           |                                                | Z | 4.83 | 67.33 | 16.93 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.40 | 67.41 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.31 | 67.12 | 16.42 |      | 150.0 |         |
|           |                                                | Z | 5.15 | 67.71 | 17.09 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.13 | 67.29 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.05 | 66.96 | 16.26 |      | 150.0 |         |
|           |                                                | Z | 4.95 | 67.72 | 17.04 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.31 | 67.37 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.15 | 66.52 | 15.32 |      | 150.0 |         |
|           |                                                | Z | 3.19 | 68.39 | 16.74 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.44 | 67.49 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.28 | 66.69 | 15.53 |      | 150.0 |         |
|           |                                                | Z | 3.31 | 68.55 | 16.92 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.91 | 68.40 | 15.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.63 | 66.25 | 13.94 |      | 150.0 |         |
|           |                                                | Z | 2.18 | 73.58 | 17.08 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.39 | 68.76 | 15.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.06 | 66.68 | 13.95 |      | 150.0 |         |
|           |                                                | Z | 2.31 | 70.61 | 14.98 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.14 | 66.35 | 13.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.88 | 64.69 | 12.43 |      | 150.0 |         |
|           |                                                | Z | 1.86 | 65.35 | 11.84 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.07 | 63.92 | 10.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.79 | 60.96 | 7.96  |      | 150.0 |         |
|           |                                                | Z | 0.51 | 60.00 | 5.19  |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 1.64 | 64.29 | 9.90  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.16 | 61.35 | 7.84  |      | 150.0 |         |
|           |                                                | Z | 0.53 | 58.05 | 3.61  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 1.84 | 65.54 | 10.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.22 | 61.82 | 8.20  |      | 150.0 |         |
|           |                                                | Z | 0.54 | 58.15 | 3.73  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.84 | 67.30 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.66 | 66.31 | 15.09 |      | 150.0 |         |
|           |                                            | Z | 2.77 | 68.99 | 16.81 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.96 | 67.31 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.79 | 66.39 | 15.19 |      | 150.0 |         |
|           |                                            | Z | 2.88 | 69.00 | 16.84 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 6.17 | 78.39 | 21.92 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.05 | 75.73 | 21.02 |      | 65.0  |         |
|           |                                            | Z | 7.31 | 84.36 | 24.91 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 5.24 | 73.02 | 20.03 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.52 | 70.96 | 19.20 |      | 65.0  |         |
|           |                                            | Z | 5.14 | 74.66 | 21.03 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.59 | 73.97 | 20.81 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.84 | 71.94 | 20.02 |      | 65.0  |         |
|           |                                            | Z | 5.56 | 75.95 | 21.96 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.18 | 68.82 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.93 | 67.03 | 14.98 |      | 150.0 |         |
|           |                                            | Z | 2.40 | 73.64 | 18.47 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.55 | 68.13 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.32 | 66.82 | 14.99 |      | 150.0 |         |
|           |                                            | Z | 2.68 | 71.67 | 17.26 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.74 | 68.36 | 15.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.43 | 65.76 | 13.26 |      | 150.0 |         |
|           |                                            | Z | 1.84 | 72.05 | 15.53 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.97 | 66.80 | 13.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.65 | 64.60 | 11.97 |      | 150.0 |         |
|           |                                            | Z | 1.34 | 64.28 | 10.56 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.70 | 68.34 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.47 | 67.10 | 15.21 |      | 150.0 |         |
|           |                                            | Z | 2.80 | 71.64 | 17.29 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.07 | 67.22 | 14.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.72 | 64.86 | 12.16 |      | 150.0 |         |
|           |                                            | Z | 1.37 | 64.28 | 10.59 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.67 | 68.50 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.49 | 67.41 | 15.44 |      | 150.0 |         |
|           |                                            | Z | 2.77 | 71.65 | 17.94 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.86 | 67.26 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.67 | 66.30 | 15.05 |      | 150.0 |         |
|           |                                            | Z | 2.77 | 69.10 | 16.65 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.97 | 67.44 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.78 | 66.52 | 15.20 |      | 150.0 |         |
|           |                                            | Z | 2.89 | 69.36 | 16.80 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.58 | 70.16 | 19.34 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.21 | 68.35 | 18.55 |      | 150.0 |         |
|           |                                            | Z | 2.85 | 69.02 | 19.82 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.66 | 74.24 | 20.21 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.73 | 70.62 | 18.73 |      | 150.0 |         |
|           |                                            | Z | 3.22 | 71.92 | 20.31 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.33  | 77.12  | 21.77 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.14  | 72.91  | 20.14 |      | 150.0 |         |
|           |                                            | Z | 3.62  | 74.71  | 22.00 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.04  | 70.09  | 19.33 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.57  | 66.72  | 17.79 |      | 150.0 |         |
|           |                                            | Z | 2.29  | 66.69  | 18.75 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 4.85  | 78.99  | 22.71 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.18  | 71.08  | 19.61 |      | 150.0 |         |
|           |                                            | Z | 2.66  | 71.22  | 20.84 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 3.69  | 73.30  | 19.35 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.71  | 67.78  | 17.08 |      | 150.0 |         |
|           |                                            | Z | 2.29  | 68.11  | 18.30 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 6.13  | 88.39  | 28.20 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 3.72  | 78.66  | 24.84 |      | 65.0  |         |
|           |                                            | Z | 4.52  | 87.17  | 29.75 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 38.00 | 117.73 | 34.53 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.79  | 88.15  | 26.52 |      | 65.0  |         |
|           |                                            | Z | 10.83 | 103.55 | 33.16 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 29.68 | 111.18 | 32.05 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.46  | 83.31  | 24.22 |      | 65.0  |         |
|           |                                            | Z | 8.53  | 97.38  | 30.44 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.00  | 69.75  | 19.07 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.55  | 66.48  | 17.57 |      | 150.0 |         |
|           |                                            | Z | 2.27  | 66.49  | 18.55 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 4.86  | 79.02  | 22.73 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.19  | 71.10  | 19.62 |      | 150.0 |         |
|           |                                            | Z | 2.67  | 71.24  | 20.85 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.02  | 69.91  | 19.16 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.57  | 66.59  | 17.64 |      | 150.0 |         |
|           |                                            | Z | 2.28  | 66.57  | 18.60 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 4.80  | 78.76  | 22.60 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.17  | 70.97  | 19.54 |      | 150.0 |         |
|           |                                            | Z | 2.66  | 71.16  | 20.79 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 4.20  | 75.94  | 20.87 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.92  | 69.33  | 18.22 |      | 150.0 |         |
|           |                                            | Z | 2.47  | 69.69  | 19.50 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 3.68  | 73.22  | 19.30 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.70  | 67.74  | 17.05 |      | 150.0 |         |
|           |                                            | Z | 2.29  | 68.11  | 18.28 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.02  | 69.89  | 19.16 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.56  | 66.58  | 17.64 |      | 150.0 |         |
|           |                                            | Z | 2.28  | 66.56  | 18.60 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 4.79  | 78.73  | 22.59 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.16  | 70.95  | 19.52 |      | 150.0 |         |
|           |                                            | Z | 2.65  | 71.14  | 20.78 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.67  | 73.19  | 19.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.70  | 67.72  | 17.04 |      | 150.0 |         |
|           |                                            | Z | 2.29  | 68.09  | 18.27 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.03 | 69.94 | 19.18 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.57 | 66.61 | 17.66 |      | 150.0 |         |
|           |                                               | Z | 2.28 | 66.59 | 18.61 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 4.81 | 78.82 | 22.63 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.18 | 71.01 | 19.56 |      | 150.0 |         |
|           |                                               | Z | 2.67 | 71.20 | 20.82 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.69 | 73.27 | 19.33 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.71 | 67.78 | 17.07 |      | 150.0 |         |
|           |                                               | Z | 2.30 | 68.14 | 18.30 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.04 | 70.01 | 19.26 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.58 | 66.67 | 17.73 |      | 150.0 |         |
|           |                                               | Z | 2.29 | 66.66 | 18.70 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 5.03 | 79.71 | 23.08 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.25 | 71.50 | 19.88 |      | 150.0 |         |
|           |                                               | Z | 2.72 | 71.61 | 21.11 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.80 | 73.82 | 19.65 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.76 | 68.10 | 17.31 |      | 150.0 |         |
|           |                                               | Z | 2.34 | 68.44 | 18.54 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.46 | 66.62 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.34 | 66.23 | 15.84 |      | 150.0 |         |
|           |                                               | Z | 4.25 | 67.38 | 16.66 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.62 | 66.91 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.49 | 66.50 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.36 | 67.53 | 16.79 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.66 | 66.94 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.53 | 66.53 | 16.00 |      | 150.0 |         |
|           |                                               | Z | 4.38 | 67.50 | 16.78 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.46 | 66.66 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.33 | 66.25 | 15.84 |      | 150.0 |         |
|           |                                               | Z | 4.22 | 67.32 | 16.61 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.63 | 66.93 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 66.51 | 15.99 |      | 150.0 |         |
|           |                                               | Z | 4.37 | 67.52 | 16.79 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.66 | 66.95 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.53 | 66.54 | 16.01 |      | 150.0 |         |
|           |                                               | Z | 4.37 | 67.48 | 16.77 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.41 | 66.68 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.28 | 66.26 | 15.80 |      | 150.0 |         |
|           |                                               | Z | 4.18 | 67.42 | 16.62 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.62 | 66.89 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 66.48 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.36 | 67.48 | 16.77 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.67 | 66.88 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.54 | 66.48 | 16.00 |      | 150.0 |         |
|           |                                               | Z | 4.39 | 67.44 | 16.77 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.01 | 67.03 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.91 | 66.67 | 16.18 |      | 150.0 |         |
|           |                                               | Z | 4.82 | 67.37 | 16.94 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.31  | 67.27  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.21  | 66.94  | 16.35 |      | 150.0 |         |
|           |                                           | Z | 5.01  | 67.37  | 16.93 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.05  | 67.14  | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.95  | 66.76  | 16.15 |      | 150.0 |         |
|           |                                           | Z | 4.86  | 67.52  | 16.93 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.74  | 66.08  | 15.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.57  | 65.25  | 14.40 |      | 150.0 |         |
|           |                                           | Z | 2.55  | 67.23  | 15.07 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 44.72 | 120.94 | 35.47 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.20  | 89.32  | 27.02 |      | 65.0  |         |
|           |                                           | Z | 12.04 | 105.88 | 33.97 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 40.29 | 116.33 | 33.42 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.53  | 88.97  | 26.21 |      | 65.0  |         |
|           |                                           | Z | 12.85 | 105.50 | 33.01 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 9.31  | 97.05  | 31.18 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 4.36  | 82.33  | 26.40 |      | 65.0  |         |
|           |                                           | Z | 5.06  | 90.04  | 30.91 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 38.44 | 117.91 | 34.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.84  | 88.25  | 26.56 |      | 65.0  |         |
|           |                                           | Z | 10.89 | 103.62 | 33.19 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 34.51 | 113.48 | 32.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.07  | 87.78  | 25.73 |      | 65.0  |         |
|           |                                           | Z | 11.31 | 102.92 | 32.16 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 8.81  | 95.82  | 30.69 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 4.22  | 81.61  | 26.04 |      | 65.0  |         |
|           |                                           | Z | 4.83  | 88.89  | 30.41 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 38.37 | 117.90 | 34.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.83  | 88.23  | 26.55 |      | 65.0  |         |
|           |                                           | Z | 10.87 | 103.59 | 33.18 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 34.36 | 113.43 | 32.58 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.05  | 87.74  | 25.72 |      | 65.0  |         |
|           |                                           | Z | 11.23 | 102.80 | 32.14 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 8.43  | 94.76  | 30.22 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 4.12  | 81.05  | 25.70 |      | 65.0  |         |
|           |                                           | Z | 4.71  | 88.25  | 30.04 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 38.57 | 118.01 | 34.62 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.83  | 88.26  | 26.57 |      | 65.0  |         |
|           |                                           | Z | 10.91 | 103.70 | 33.22 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 35.32 | 113.85 | 32.67 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 7.14  | 87.93  | 25.78 |      | 65.0  |         |
|           |                                           | Z | 11.53 | 103.24 | 32.26 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 8.83  | 95.91  | 30.73 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 4.22  | 81.64  | 26.06 |      | 65.0  |         |
|           |                                           | Z | 4.83  | 88.94  | 30.44 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 38.28 | 117.88 | 34.58 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.81  | 88.20  | 26.54 |      | 65.0  |         |
|           |                                           | Z | 10.85 | 103.59 | 33.18 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 34.18 | 113.37 | 32.56 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.02  | 87.69  | 25.71 |      | 65.0 |         |
|           |                                            | Z | 11.18 | 102.74 | 32.12 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 8.80  | 95.85  | 30.71 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.21  | 81.60  | 26.04 |      | 65.0 |         |
|           |                                            | Z | 4.82  | 88.95  | 30.44 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 7.98  | 82.84  | 26.32 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.25  | 78.17  | 24.62 |      | 65.0 |         |
|           |                                            | Z | 7.24  | 85.75  | 28.71 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 7.84  | 82.54  | 26.13 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.75  | 76.43  | 23.79 |      | 65.0 |         |
|           |                                            | Z | 6.95  | 84.97  | 28.32 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.30  | 74.80  | 23.78 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.77  | 72.98  | 23.12 |      | 65.0 |         |
|           |                                            | Z | 5.45  | 79.70  | 27.16 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 5.35  | 75.26  | 17.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.85  | 71.20  | 16.04 |      | 65.0 |         |
|           |                                            | Z | 2.94  | 67.75  | 12.82 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 5.14  | 74.37  | 17.48 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.74  | 70.47  | 15.64 |      | 65.0 |         |
|           |                                            | Z | 2.81  | 66.92  | 12.35 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 5.18  | 78.96  | 19.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.49  | 73.78  | 17.58 |      | 65.0 |         |
|           |                                            | Z | 3.87  | 74.84  | 16.54 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 4.48  | 73.32  | 18.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.59  | 70.48  | 16.81 |      | 65.0 |         |
|           |                                            | Z | 3.73  | 71.37  | 15.94 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 4.44  | 72.62  | 17.99 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 69.88  | 16.50 |      | 65.0 |         |
|           |                                            | Z | 3.51  | 70.04  | 15.32 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 6.46  | 82.83  | 22.54 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.62  | 78.31  | 20.71 |      | 65.0 |         |
|           |                                            | Z | 10.31 | 91.36  | 24.44 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 5.28  | 75.55  | 21.09 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.43  | 73.18  | 20.10 |      | 65.0 |         |
|           |                                            | Z | 5.62  | 78.69  | 22.14 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 5.05  | 73.44  | 19.78 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.27  | 71.23  | 18.78 |      | 65.0 |         |
|           |                                            | Z | 4.89  | 74.82  | 20.00 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 6.38  | 81.60  | 23.17 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.94  | 78.15  | 21.94 |      | 65.0 |         |
|           |                                            | Z | 9.80  | 92.32  | 27.22 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 5.15  | 72.52  | 19.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.46  | 70.58  | 18.95 |      | 65.0 |         |
|           |                                            | Z | 5.07  | 74.27  | 20.61 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 5.46  | 73.39  | 20.46 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.75  | 71.45  | 19.67 |      | 65.0 |         |
|           |                                            | Z | 5.41  | 75.29  | 21.36 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 5.81 | 77.49 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.80 | 74.95 | 20.87 |      | 65.0 |         |
|           |                                             | Z | 6.84 | 83.29 | 24.55 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 3.73 | 69.85 | 14.38 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.70 | 66.29 | 12.42 |      | 65.0 |         |
|           |                                             | Z | 1.84 | 62.37 | 8.56  |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 3.58 | 68.93 | 13.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.63 | 65.62 | 11.96 |      | 65.0 |         |
|           |                                             | Z | 1.81 | 61.98 | 8.21  |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 3.55 | 72.74 | 16.44 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.36 | 67.80 | 13.71 |      | 65.0 |         |
|           |                                             | Z | 1.76 | 64.10 | 10.09 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 4.82 | 74.25 | 19.37 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.94 | 71.68 | 18.09 |      | 65.0 |         |
|           |                                             | Z | 4.59 | 74.76 | 18.48 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 4.83 | 73.91 | 19.22 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.97 | 71.40 | 17.95 |      | 65.0 |         |
|           |                                             | Z | 4.50 | 74.04 | 18.14 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 6.01 | 81.19 | 22.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.52 | 77.38 | 20.87 |      | 65.0 |         |
|           |                                             | Z | 9.39 | 90.51 | 25.09 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 5.27 | 75.49 | 21.05 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.41 | 73.12 | 20.05 |      | 65.0 |         |
|           |                                             | Z | 5.58 | 78.56 | 22.06 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 5.04 | 73.41 | 19.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.26 | 71.21 | 18.77 |      | 65.0 |         |
|           |                                             | Z | 4.88 | 74.80 | 20.00 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 6.31 | 81.38 | 23.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.89 | 77.95 | 21.83 |      | 65.0 |         |
|           |                                             | Z | 9.59 | 91.86 | 27.03 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 5.24 | 73.02 | 20.04 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.52 | 70.96 | 19.21 |      | 65.0 |         |
|           |                                             | Z | 5.14 | 74.67 | 21.03 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.59 | 73.95 | 20.80 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.84 | 71.93 | 20.01 |      | 65.0 |         |
|           |                                             | Z | 5.56 | 75.94 | 21.95 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 6.16 | 78.34 | 21.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.05 | 75.68 | 21.00 |      | 65.0 |         |
|           |                                             | Z | 7.28 | 84.25 | 24.86 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 5.85 | 72.87 | 20.36 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.16 | 71.02 | 19.67 |      | 65.0 |         |
|           |                                             | Z | 5.66 | 74.08 | 21.40 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 5.84 | 72.44 | 20.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.17 | 70.67 | 19.54 |      | 65.0 |         |
|           |                                             | Z | 5.67 | 73.65 | 21.21 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 5.98 | 75.28 | 20.75 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.14 | 73.22 | 20.06 |      | 65.0 |         |
|           |                                             | Z | 6.27 | 78.45 | 22.79 |      | 65.0 |         |

|           |                                                                    |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.54   | 66.52  | 15.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.38   | 65.58  | 14.29 |      | 150.0 |         |
|           |                                                                    | Z | 2.51   | 68.66  | 15.57 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.56   | 67.69  | 15.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.35   | 65.62  | 13.81 |      | 150.0 |         |
|           |                                                                    | Z | 2.09   | 75.23  | 18.57 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.64   | 60.38  | 5.85  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.38   | 59.39  | 4.80  |      | 50.0  |         |
|           |                                                                    | Z | 1.36   | 59.36  | 4.61  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 4.49   | 73.00  | 15.27 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.09   | 68.07  | 12.50 |      | 50.0  |         |
|           |                                                                    | Z | 2.42   | 64.14  | 9.65  |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 4.67   | 73.44  | 15.53 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.21   | 68.46  | 12.76 |      | 50.0  |         |
|           |                                                                    | Z | 2.46   | 64.27  | 9.79  |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.28   | 67.55  | 13.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.87   | 63.20  | 9.74  |      | 150.0 |         |
|           |                                                                    | Z | 0.46   | 60.16  | 6.10  |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.75   | 64.94  | 11.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.53   | 61.44  | 8.41  |      | 150.0 |         |
|           |                                                                    | Z | 0.32   | 60.00  | 5.56  |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.98   | 69.24  | 14.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.58   | 63.01  | 9.60  |      | 150.0 |         |
|           |                                                                    | Z | 0.33   | 60.54  | 6.17  |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 1.68   | 76.56  | 17.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.74   | 65.59  | 11.37 |      | 150.0 |         |
|           |                                                                    | Z | 0.97   | 69.23  | 10.62 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 12.77  | 92.35  | 26.24 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 22.20  | 100.28 | 27.92 |      | 50.0  |         |
|           |                                                                    | Z | 100.00 | 115.37 | 29.46 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.66   | 69.41  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.40   | 67.79  | 15.48 |      | 150.0 |         |
|           |                                                                    | Z | 2.79   | 72.73  | 18.49 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.42   | 66.77  | 13.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.08   | 63.49  | 10.70 |      | 150.0 |         |
|           |                                                                    | Z | 0.71   | 61.60  | 8.01  |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 2.44   | 68.55  | 13.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.65   | 64.37  | 10.69 |      | 150.0 |         |
|           |                                                                    | Z | 0.87   | 60.44  | 6.67  |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 1.78   | 64.18  | 10.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.37   | 61.93  | 8.69  |      | 150.0 |         |
|           |                                                                    | Z | 0.81   | 60.00  | 5.75  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.62   | 65.42  | 17.37 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.51   | 65.22  | 17.15 |      | 50.0  |         |
|           |                                                                    | Z | 4.62   | 67.58  | 18.20 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.06   | 65.89  | 18.01 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.91   | 65.43  | 17.65 |      | 50.0  |         |
|           |                                                                    | Z | 4.97   | 67.46  | 18.56 |      | 50.0  |         |

|           |                                                                     |   |       |        |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.80  | 65.47  | 17.81 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.65  | 65.01  | 17.42 |       | 50.0  |         |
|           |                                                                     | Z | 4.76  | 67.28  | 18.38 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.63  | 65.40  | 17.32 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.47  | 64.93  | 16.94 |       | 50.0  |         |
|           |                                                                     | Z | 4.59  | 67.18  | 17.91 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.10  | 66.51  | 18.92 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 3.93  | 66.00  | 18.30 |       | 35.0  |         |
|           |                                                                     | Z | 4.59  | 70.79  | 19.72 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.49  | 65.91  | 18.73 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.34  | 65.55  | 18.29 |       | 35.0  |         |
|           |                                                                     | Z | 4.69  | 69.17  | 19.61 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.36  | 65.95  | 18.64 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.21  | 65.52  | 18.16 |       | 35.0  |         |
|           |                                                                     | Z | 4.59  | 69.24  | 19.50 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.34  | 66.13  | 18.77 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.18  | 65.69  | 18.28 |       | 35.0  |         |
|           |                                                                     | Z | 4.61  | 69.65  | 19.75 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.53  | 66.09  | 18.86 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.37  | 65.69  | 18.41 |       | 35.0  |         |
|           |                                                                     | Z | 4.70  | 69.25  | 19.72 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.43  | 65.94  | 18.69 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.28  | 65.57  | 18.25 |       | 35.0  |         |
|           |                                                                     | Z | 4.67  | 69.37  | 19.68 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.02  | 68.71  | 16.12 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.74  | 67.13  | 15.24 |       | 150.0 |         |
|           |                                                                     | Z | 3.10  | 71.08  | 17.81 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 3.73  | 76.32  | 17.72 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.24  | 71.02  | 15.63 |       | 70.0  |         |
|           |                                                                     | Z | 11.13 | 93.46  | 23.95 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 5.96  | 86.74  | 24.63 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 4.04  | 81.26  | 22.67 |       | 30.0  |         |
|           |                                                                     | Z | 34.68 | 118.42 | 34.23 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.06  | 63.52  | 14.98 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.97  | 62.27  | 13.91 |       | 150.0 |         |
|           |                                                                     | Z | 1.08  | 66.42  | 17.31 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.50  | 66.64  | 16.23 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.39  | 66.27  | 16.01 |       | 150.0 |         |
|           |                                                                     | Z | 4.28  | 67.32  | 16.81 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.50  | 66.64  | 16.23 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.39  | 66.27  | 16.01 |       | 150.0 |         |
|           |                                                                     | Z | 4.28  | 67.32  | 16.81 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.60  | 66.96  | 16.21 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.47  | 66.53  | 15.97 |       | 150.0 |         |
|           |                                                                     | Z | 4.29  | 67.46  | 16.74 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.31  | 67.10  | 16.37 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.22  | 66.80  | 16.24 |       | 150.0 |         |
|           |                                                                     | Z | 5.09  | 67.45  | 16.93 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.57   | 67.40  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.47   | 67.02  | 16.23 |      | 150.0 |         |
|           |                                                                                 | Z | 5.38   | 67.62  | 16.93 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.28   | 67.55  | 13.00 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.87   | 63.20  | 9.74  |      | 115.0 |         |
|           |                                                                                 | Z | 0.46   | 60.16  | 6.10  |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.28   | 67.55  | 13.00 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.87   | 63.20  | 9.74  |      | 115.0 |         |
|           |                                                                                 | Z | 0.46   | 60.16  | 6.10  |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 114.35 | 26.69 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 8.61   | 89.18  | 21.46 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 124.12 | 29.49 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 123.47 | 30.44 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 29.88  | 112.60 | 29.12 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 143.39 | 38.45 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.00   | 62.89  | 14.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.92   | 61.78  | 13.44 |      | 150.0 |         |
|           |                                                                                 | Z | 1.00   | 65.42  | 16.60 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.46   | 66.65  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.34   | 66.25  | 15.92 |      | 150.0 |         |
|           |                                                                                 | Z | 4.22   | 67.28  | 16.71 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.46   | 66.65  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.34   | 66.25  | 15.92 |      | 150.0 |         |
|           |                                                                                 | Z | 4.22   | 67.28  | 16.71 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.45   | 66.82  | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.33   | 66.42  | 15.95 |      | 150.0 |         |
|           |                                                                                 | Z | 4.23   | 67.56  | 16.82 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.47   | 66.77  | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.35   | 66.37  | 15.95 |      | 150.0 |         |
|           |                                                                                 | Z | 4.24   | 67.46  | 16.78 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.58   | 66.76  | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.46   | 66.37  | 15.98 |      | 150.0 |         |
|           |                                                                                 | Z | 4.33   | 67.38  | 16.77 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.73   | 67.05  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.60   | 66.64  | 16.07 |      | 150.0 |         |
|           |                                                                                 | Z | 4.44   | 67.62  | 16.84 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.66   | 67.00  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.53   | 66.59  | 16.05 |      | 150.0 |         |
|           |                                                                                 | Z | 4.37   | 67.55  | 16.82 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.26   | 67.24  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.17   | 66.94  | 16.32 |      | 150.0 |         |
|           |                                                                                 | Z | 5.05   | 67.64  | 17.05 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.28   | 67.31  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.20   | 67.06  | 16.38 |      | 150.0 |         |
|           |                                                                                 | Z | 5.11   | 67.90  | 17.18 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.28   | 67.25  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.17   | 66.88  | 16.28 |      | 150.0 |         |
|           |                                                                | Z | 5.03   | 67.51  | 16.98 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.17   | 70.94  | 18.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.94   | 70.25  | 17.43 |      | 150.0 |         |
|           |                                                                | Z | 4.39   | 74.44  | 18.83 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.11   | 67.19  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.95   | 66.68  | 15.73 |      | 150.0 |         |
|           |                                                                | Z | 3.82   | 68.15  | 16.50 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.42   | 67.06  | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.28   | 66.62  | 15.93 |      | 150.0 |         |
|           |                                                                | Z | 4.14   | 67.81  | 16.75 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.67   | 67.03  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.54   | 66.62  | 16.06 |      | 150.0 |         |
|           |                                                                | Z | 4.39   | 67.60  | 16.85 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.27   | 71.80  | 17.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.95   | 70.75  | 17.10 |      | 150.0 |         |
|           |                                                                | Z | 4.37   | 74.54  | 18.01 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 123.21 | 30.32 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 26.80  | 110.87 | 28.64 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 143.00 | 38.28 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.39   | 67.13  | 15.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.16   | 66.26  | 14.52 |      | 150.0 |         |
|           |                                                                | Z | 2.97   | 67.52  | 14.59 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.97   | 66.98  | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.81   | 66.46  | 15.58 |      | 150.0 |         |
|           |                                                                | Z | 3.71   | 67.98  | 16.41 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.25   | 66.89  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.11   | 66.43  | 15.82 |      | 150.0 |         |
|           |                                                                | Z | 4.00   | 67.65  | 16.67 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.45   | 66.81  | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.33   | 66.37  | 15.90 |      | 150.0 |         |
|           |                                                                | Z | 4.22   | 67.38  | 16.71 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.25   | 67.18  | 14.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 2.97   | 66.04  | 13.81 |      | 150.0 |         |
|           |                                                                | Z | 2.60   | 66.32  | 13.13 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.15   | 67.84  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.15   | 67.72  | 16.63 |      | 150.0 |         |
|           |                                                                | Z | 6.64   | 69.94  | 18.14 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.75   | 65.32  | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.67   | 64.95  | 15.62 |      | 150.0 |         |
|           |                                                                | Z | 3.64   | 66.17  | 16.50 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.89   | 70.96  | 17.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.49   | 69.40  | 15.97 |      | 150.0 |         |
|           |                                                                | Z | 2.86   | 68.25  | 14.10 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.98   | 68.55  | 17.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.81   | 68.28  | 17.63 |      | 150.0 |         |
|           |                                                                | Z | 4.33   | 68.29  | 16.68 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.87   | 67.71  | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.70   | 64.66  | 13.36 |      | 150.0 |         |
|           |                                                                   | Z | 3.66   | 95.75  | 26.74 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 129.54 | 33.26 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 14.50  | 104.88 | 28.18 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 153.17 | 42.85 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.39   | 65.03  | 10.31 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.03   | 63.23  | 10.14 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 109.05 | 22.95 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.81   | 60.05  | 7.43  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.75   | 60.00  | 7.90  |      | 80.0  |         |
|           |                                                                   | Z | 0.57   | 60.30  | 7.62  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.14 | 31.52 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 12.10  | 100.62 | 26.22 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 150.19 | 41.19 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.19   | 63.61  | 9.62  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.93   | 62.22  | 9.59  |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.75 | 22.39 |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.81   | 60.00  | 7.35  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.75   | 60.00  | 7.84  |      | 80.0  |         |
|           |                                                                   | Z | 0.55   | 60.00  | 7.41  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.52 | 31.69 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 14.79  | 103.62 | 27.06 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 150.92 | 41.50 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.24   | 63.98  | 9.81  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.95   | 62.51  | 9.76  |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 108.41 | 22.67 |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.81   | 60.00  | 7.35  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.75   | 60.00  | 7.84  |      | 80.0  |         |
|           |                                                                   | Z | 0.55   | 60.00  | 7.42  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.55 | 31.69 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 15.04  | 103.89 | 27.13 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 151.07 | 41.55 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.22   | 63.88  | 9.75  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.95   | 62.45  | 9.71  |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 108.26 | 22.60 |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.81   | 60.00  | 7.33  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.75   | 60.00  | 7.83  |      | 80.0  |         |
|           |                                                                   | Z | 0.55   | 60.00  | 7.40  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.51 | 31.67 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 14.94  | 103.77 | 27.09 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 151.03 | 41.53 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.22   | 63.84  | 9.73  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.94   | 62.42  | 9.70  |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 108.25 | 22.59 |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.81   | 60.00  | 7.33  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.75   | 60.00  | 7.83  |      | 80.0  |         |
|           |                                                                   | Z | 0.55   | 60.00  | 7.40  |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.17   | 63.52  | 9.56  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.92   | 62.18  | 9.55  |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 107.73 | 22.37 |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.81   | 60.00  | 7.32  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.75   | 60.00  | 7.82  |      | 80.0 |         |
|           |                                                                     | Z | 0.55   | 60.00  | 7.38  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 9.04   | 90.33  | 24.26 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.61   | 86.66  | 23.14 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 137.19 | 37.34 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 8.84   | 83.63  | 19.75 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.76   | 76.73  | 17.50 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 115.92 | 27.42 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.75   | 77.50  | 17.30 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.37   | 71.81  | 15.25 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 111.07 | 25.15 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.60   | 71.30  | 16.37 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.67   | 65.92  | 13.44 |      | 80.0 |         |
|           |                                                                     | Z | 2.83   | 72.35  | 14.46 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.50   | 71.18  | 15.46 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.31   | 66.36  | 13.05 |      | 80.0 |         |
|           |                                                                     | Z | 1.29   | 61.22  | 8.83  |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.25   | 69.98  | 14.98 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.20   | 65.52  | 12.66 |      | 80.0 |         |
|           |                                                                     | Z | 1.23   | 60.55  | 8.44  |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.97   | 73.01  | 18.21 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.20   | 69.19  | 16.27 |      | 80.0 |         |
|           |                                                                     | Z | 22.67  | 102.89 | 26.50 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.86   | 68.82  | 15.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.22   | 65.76  | 13.92 |      | 80.0 |         |
|           |                                                                     | Z | 2.70   | 69.32  | 14.28 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.85   | 68.38  | 15.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.23   | 65.43  | 13.74 |      | 80.0 |         |
|           |                                                                     | Z | 2.47   | 67.87  | 13.61 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.20   | 71.90  | 18.58 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.62   | 69.33  | 17.40 |      | 80.0 |         |
|           |                                                                     | Z | 5.59   | 84.24  | 23.63 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.18   | 68.52  | 17.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.77   | 66.86  | 16.15 |      | 80.0 |         |
|           |                                                                     | Z | 3.92   | 74.27  | 19.29 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.27   | 68.37  | 16.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.86   | 66.79  | 16.11 |      | 80.0 |         |
|           |                                                                     | Z | 3.87   | 73.48  | 18.93 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.45   | 70.42  | 18.08 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.96   | 68.43  | 17.20 |      | 80.0 |         |
|           |                                                                     | Z | 4.22   | 76.57  | 21.22 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.52   | 67.77  | 17.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.17   | 66.45  | 16.39 |      | 80.0 |         |
|           |                                                                     | Z | 3.76   | 71.09  | 18.73 |      | 80.0 |         |

|           |                                                                      |   |       |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.59  | 67.65 | 16.99 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.24  | 66.37 | 16.35 |      | 80.0 |         |
|           |                                                                      | Z | 3.77  | 70.74 | 18.54 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.73  | 71.91 | 18.57 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.14  | 69.59 | 17.59 |      | 80.0 |         |
|           |                                                                      | Z | 4.78  | 78.78 | 22.06 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.54  | 68.08 | 17.23 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18  | 66.69 | 16.58 |      | 80.0 |         |
|           |                                                                      | Z | 3.77  | 71.24 | 19.01 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.62  | 67.84 | 17.15 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.27  | 66.53 | 16.54 |      | 80.0 |         |
|           |                                                                      | Z | 3.80  | 70.76 | 18.81 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 1.73  | 65.94 | 12.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.06  | 60.88 | 9.56  |      | 80.0 |         |
|           |                                                                      | Z | 0.85  | 60.00 | 7.05  |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.28  | 60.26 | 8.80  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.16  | 60.00 | 7.85  |      | 80.0 |         |
|           |                                                                      | Z | 1.10  | 60.00 | 5.59  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.27  | 60.00 | 8.50  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.18  | 60.00 | 7.69  |      | 80.0 |         |
|           |                                                                      | Z | 1.14  | 60.00 | 5.40  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.02  | 72.29 | 18.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.36  | 69.20 | 16.71 |      | 80.0 |         |
|           |                                                                      | Z | 10.28 | 93.15 | 24.95 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.02  | 68.86 | 16.31 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.49  | 66.51 | 14.92 |      | 80.0 |         |
|           |                                                                      | Z | 3.75  | 73.54 | 17.07 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.08  | 68.71 | 16.17 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.54  | 66.38 | 14.78 |      | 80.0 |         |
|           |                                                                      | Z | 3.58  | 72.48 | 16.52 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.16  | 71.71 | 18.48 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.59  | 69.16 | 17.30 |      | 80.0 |         |
|           |                                                                      | Z | 5.44  | 83.79 | 23.45 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.16  | 68.43 | 16.98 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.76  | 66.77 | 16.09 |      | 80.0 |         |
|           |                                                                      | Z | 3.88  | 74.08 | 19.19 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.25  | 68.28 | 16.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.85  | 66.70 | 16.06 |      | 80.0 |         |
|           |                                                                      | Z | 3.84  | 73.33 | 18.85 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.70  | 71.78 | 18.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.12  | 69.46 | 17.52 |      | 80.0 |         |
|           |                                                                      | Z | 4.72  | 78.55 | 21.96 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.53  | 68.03 | 17.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.17  | 66.63 | 16.54 |      | 80.0 |         |
|           |                                                                      | Z | 3.75  | 71.16 | 18.97 |      | 80.0 |         |

|           |                                                                     |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.61   | 67.78  | 17.11 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.26   | 66.47  | 16.49 |      | 80.0  |         |
|           |                                                                     | Z | 3.78   | 70.66  | 18.75 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.07   | 70.61  | 17.99 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.56   | 68.75  | 17.23 |      | 80.0  |         |
|           |                                                                     | Z | 4.50   | 74.42  | 20.36 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.01   | 67.79  | 17.19 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.67   | 66.54  | 16.66 |      | 80.0  |         |
|           |                                                                     | Z | 4.03   | 69.58  | 18.54 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.07   | 67.56  | 17.12 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.74   | 66.39  | 16.62 |      | 80.0  |         |
|           |                                                                     | Z | 4.08   | 69.30  | 18.42 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.24   | 72.14  | 18.49 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.60   | 69.85  | 17.56 |      | 80.0  |         |
|           |                                                                     | Z | 4.88   | 76.57  | 21.10 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.89   | 68.00  | 17.28 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.54   | 66.65  | 16.71 |      | 80.0  |         |
|           |                                                                     | Z | 3.93   | 69.75  | 18.67 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.93   | 67.61  | 17.16 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.60   | 66.36  | 16.63 |      | 80.0  |         |
|           |                                                                     | Z | 3.95   | 69.22  | 18.46 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.96   | 63.06  | 14.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.88   | 61.87  | 13.42 |      | 150.0 |         |
|           |                                                                     | Z | 0.97   | 65.95  | 16.87 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.57   | 69.38  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.42   | 64.94  | 13.06 |      | 150.0 |         |
|           |                                                                     | Z | 100.00 | 169.97 | 46.35 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.80   | 64.78  | 15.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.70   | 62.90  | 13.39 |      | 150.0 |         |
|           |                                                                     | Z | 0.98   | 72.03  | 19.62 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.45   | 66.73  | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.33   | 66.33  | 15.90 |      | 150.0 |         |
|           |                                                                     | Z | 4.22   | 67.44  | 16.73 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.62   | 66.93  | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.49   | 66.53  | 16.01 |      | 150.0 |         |
|           |                                                                     | Z | 4.34   | 67.57  | 16.79 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.47   | 66.88  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.34   | 66.44  | 15.91 |      | 150.0 |         |
|           |                                                                     | Z | 4.21   | 67.50  | 16.72 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.41   | 66.87  | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.27   | 66.41  | 15.88 |      | 150.0 |         |
|           |                                                                     | Z | 4.14   | 67.42  | 16.68 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.47   | 66.99  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.33   | 66.55  | 15.99 |      | 150.0 |         |
|           |                                                                     | Z | 4.16   | 67.47  | 16.72 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.36 | 66.89 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.24 | 66.47 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.15 | 67.74 | 16.81 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.41 | 66.91 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.27 | 66.48 | 15.96 |      | 150.0 |         |
|           |                                                            | Z | 4.13 | 67.58 | 16.81 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.42 | 65.98 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.56 | 15.57 |      | 150.0 |         |
|           |                                                            | Z | 4.21 | 66.73 | 16.46 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.56 | 66.31 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.42 | 65.86 | 15.70 |      | 150.0 |         |
|           |                                                            | Z | 4.30 | 66.94 | 16.55 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.49 | 66.27 | 15.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.35 | 65.81 | 15.63 |      | 150.0 |         |
|           |                                                            | Z | 4.25 | 66.95 | 16.50 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.50 | 66.29 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.37 | 65.82 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.26 | 66.95 | 16.53 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.50 | 66.29 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.37 | 65.82 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.26 | 66.95 | 16.53 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.48 | 66.36 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.33 | 65.86 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.21 | 66.92 | 16.48 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.35 | 66.22 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.21 | 65.71 | 15.56 |      | 150.0 |         |
|           |                                                            | Z | 4.11 | 66.80 | 16.43 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.51 | 66.35 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.37 | 65.89 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.26 | 67.08 | 16.55 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.05 | 66.37 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.94 | 65.96 | 15.81 |      | 150.0 |         |
|           |                                                            | Z | 4.84 | 66.67 | 16.54 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.11 | 66.53 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.00 | 66.13 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.87 | 66.81 | 16.62 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.99 | 66.50 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.88 | 66.09 | 15.84 |      | 150.0 |         |
|           |                                                            | Z | 4.76 | 66.80 | 16.58 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.04 | 66.45 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.93 | 66.06 | 15.83 |      | 150.0 |         |
|           |                                                            | Z | 4.87 | 66.94 | 16.66 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.12 | 66.46 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.01 | 66.06 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.87 | 66.70 | 16.57 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.05 | 66.45 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.94 | 66.03 | 15.87 |      | 150.0 |         |
|           |                                                            | Z | 4.81 | 66.67 | 16.58 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.03 | 66.35 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.91 | 65.91 | 15.79 |      | 150.0 |         |
|           |                                                    | Z | 4.81 | 66.64 | 16.54 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.19 | 66.43 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.08 | 66.04 | 15.88 |      | 150.0 |         |
|           |                                                    | Z | 4.95 | 66.69 | 16.58 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.25 | 66.44 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.15 | 66.10 | 15.94 |      | 150.0 |         |
|           |                                                    | Z | 5.03 | 66.83 | 16.69 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.37 | 66.47 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.28 | 66.07 | 15.82 |      | 150.0 |         |
|           |                                                    | Z | 5.21 | 66.60 | 16.48 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.55 | 66.87 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.56 | 16.03 |      | 150.0 |         |
|           |                                                    | Z | 5.42 | 67.24 | 16.77 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.42 | 66.63 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.32 | 66.20 | 15.86 |      | 150.0 |         |
|           |                                                    | Z | 5.23 | 66.72 | 16.51 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.49 | 66.69 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.32 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.44 | 67.30 | 16.80 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.68 | 67.44 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.61 | 67.14 | 16.29 |      | 150.0 |         |
|           |                                                    | Z | 5.44 | 67.46 | 16.86 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.46 | 66.70 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.41 | 15.97 |      | 150.0 |         |
|           |                                                    | Z | 5.44 | 67.48 | 16.91 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.45 | 66.69 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.33 | 66.22 | 15.84 |      | 150.0 |         |
|           |                                                    | Z | 5.21 | 66.64 | 16.46 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.38 | 66.56 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.29 | 66.14 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.21 | 66.76 | 16.51 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.45 | 66.56 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.35 | 66.13 | 15.83 |      | 150.0 |         |
|           |                                                    | Z | 5.25 | 66.64 | 16.47 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.78 | 66.82 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.71 | 66.44 | 15.93 |      | 150.0 |         |
|           |                                                    | Z | 5.67 | 66.90 | 16.54 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.90 | 67.09 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.72 | 16.05 |      | 150.0 |         |
|           |                                                    | Z | 5.76 | 67.16 | 16.66 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.92 | 67.15 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.85 | 66.81 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.85 | 67.43 | 16.79 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.88 | 67.05 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.80 | 66.65 | 16.03 |      | 150.0 |         |
|           |                                                    | Z | 5.73 | 67.07 | 16.62 |      | 150.0 |         |

|           |                                                                 |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.93   | 67.20  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.83   | 66.77  | 16.10 |      | 150.0 |         |
|           |                                                                 | Z | 5.70   | 67.00  | 16.61 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.92   | 67.06  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.83   | 66.66  | 16.08 |      | 150.0 |         |
|           |                                                                 | Z | 5.73   | 66.98  | 16.63 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.85   | 67.03  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.77   | 66.66  | 16.12 |      | 150.0 |         |
|           |                                                                 | Z | 5.67   | 66.99  | 16.67 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.94   | 67.32  | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.83   | 66.85  | 16.21 |      | 150.0 |         |
|           |                                                                 | Z | 5.72   | 67.13  | 16.74 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.03   | 67.22  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.94   | 66.85  | 16.18 |      | 150.0 |         |
|           |                                                                 | Z | 5.87   | 67.29  | 16.79 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.77   | 66.79  | 16.29 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.66   | 66.43  | 16.09 |      | 150.0 |         |
|           |                                                                 | Z | 4.53   | 67.38  | 16.84 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.99   | 67.21  | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86   | 66.84  | 16.41 |      | 150.0 |         |
|           |                                                                 | Z | 4.70   | 67.76  | 17.13 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.82   | 67.05  | 16.42 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69   | 66.65  | 16.20 |      | 150.0 |         |
|           |                                                                 | Z | 4.55   | 67.57  | 16.95 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.85   | 67.43  | 16.77 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72   | 67.02  | 16.56 |      | 150.0 |         |
|           |                                                                 | Z | 4.58   | 67.97  | 17.33 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.73   | 66.84  | 16.20 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.60   | 66.42  | 15.96 |      | 150.0 |         |
|           |                                                                 | Z | 4.41   | 67.18  | 16.62 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.82   | 67.57  | 16.86 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69   | 67.19  | 16.66 |      | 150.0 |         |
|           |                                                                 | Z | 4.60   | 68.35  | 17.57 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.84   | 67.40  | 16.78 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.71   | 67.03  | 16.58 |      | 150.0 |         |
|           |                                                                 | Z | 4.56   | 68.01  | 17.38 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.12   | 63.92  | 15.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.01   | 62.56  | 14.19 |      | 130.0 |         |
|           |                                                                 | Z | 1.16   | 67.01  | 17.67 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.12   | 64.43  | 15.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.01   | 62.96  | 14.46 |      | 130.0 |         |
|           |                                                                 | Z | 1.19   | 67.98  | 18.26 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 1.38   | 80.48  | 21.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.74   | 70.76  | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 100.00 | 166.51 | 46.17 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.17   | 69.37  | 18.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.97   | 66.56  | 16.37 |      | 130.0 |         |
|           |                                                                 | Z | 1.84   | 82.04  | 24.87 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.55 | 66.56 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 66.20 | 16.13 |      | 130.0 |         |
|           |                                                                 | Z | 4.32 | 67.20 | 16.89 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.58 | 66.73 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.38 | 16.20 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 67.48 | 17.02 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.76 | 67.00 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64 | 66.64 | 16.36 |      | 130.0 |         |
|           |                                                                 | Z | 4.49 | 67.66 | 17.14 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.66 | 67.14 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.53 | 66.75 | 16.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.41 | 67.83 | 17.27 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.42 | 66.41 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.29 | 65.99 | 15.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.15 | 66.91 | 16.47 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.47 | 66.47 | 15.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.34 | 66.06 | 15.76 |      | 130.0 |         |
|           |                                                                 | Z | 4.16 | 66.89 | 16.44 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.56 | 67.18 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.43 | 66.79 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 68.05 | 17.33 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.36 | 66.18 | 15.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.23 | 65.77 | 15.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.07 | 66.70 | 16.26 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.55 | 66.56 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 66.20 | 16.13 |      | 130.0 |         |
|           |                                                                 | Z | 4.32 | 67.20 | 16.89 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.58 | 66.73 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.38 | 16.20 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 67.48 | 17.02 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.76 | 67.00 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64 | 66.64 | 16.36 |      | 130.0 |         |
|           |                                                                 | Z | 4.49 | 67.66 | 17.14 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.66 | 67.14 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.53 | 66.75 | 16.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.41 | 67.83 | 17.27 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.42 | 66.41 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.29 | 65.99 | 15.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.15 | 66.91 | 16.47 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.47 | 66.47 | 15.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.34 | 66.06 | 15.76 |      | 130.0 |         |
|           |                                                                 | Z | 4.16 | 66.89 | 16.44 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.56 | 67.18 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.43 | 66.79 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 68.05 | 17.33 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.36 | 66.18 | 15.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.23 | 65.77 | 15.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.07 | 66.70 | 16.26 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.71 | 66.63 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.60 | 66.29 | 16.26 |      | 130.0 |         |
|           |                                                       | Z | 4.48 | 67.29 | 17.03 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.84 | 66.95 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.72 | 66.60 | 16.39 |      | 130.0 |         |
|           |                                                       | Z | 4.57 | 67.53 | 17.14 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.76 | 66.84 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.47 | 16.24 |      | 130.0 |         |
|           |                                                       | Z | 4.49 | 67.44 | 17.01 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.82 | 67.01 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.69 | 66.64 | 16.41 |      | 130.0 |         |
|           |                                                       | Z | 4.55 | 67.60 | 17.18 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.78 | 66.97 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.66 | 66.61 | 16.31 |      | 130.0 |         |
|           |                                                       | Z | 4.51 | 67.61 | 17.10 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.72 | 66.96 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.59 | 66.58 | 16.30 |      | 130.0 |         |
|           |                                                       | Z | 4.43 | 67.54 | 17.08 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.67 | 66.84 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.54 | 66.45 | 16.16 |      | 130.0 |         |
|           |                                                       | Z | 4.40 | 67.40 | 16.91 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.65 | 67.06 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.52 | 66.66 | 16.41 |      | 130.0 |         |
|           |                                                       | Z | 4.41 | 67.68 | 17.21 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.37 | 67.11 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.30 | 66.90 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 5.43 | 68.49 | 17.76 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.48 | 67.47 | 16.80 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 67.38 | 16.80 |      | 130.0 |         |
|           |                                                       | Z | 5.37 | 68.31 | 17.64 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.38 | 67.27 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.32 | 67.07 | 16.65 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 68.14 | 17.57 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.51 | 67.42 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.45 | 67.23 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 5.33 | 67.99 | 17.42 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.56 | 67.64 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.53 | 67.58 | 16.97 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 67.90 | 17.51 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.44 | 67.30 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.41 | 67.23 | 16.78 |      | 130.0 |         |
|           |                                                       | Z | 5.21 | 67.60 | 17.33 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.49 | 67.43 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.43 | 67.25 | 16.78 |      | 130.0 |         |
|           |                                                       | Z | 5.25 | 67.78 | 17.43 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.23 | 66.74 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.17 | 66.56 | 16.29 |      | 130.0 |         |
|           |                                                       | Z | 5.19 | 67.74 | 17.26 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.55 | 65.96 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.43 | 65.59 | 15.87 |      | 130.0 |         |
|           |                                                   | Z | 4.35 | 66.73 | 16.73 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.71 | 66.34 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.58 | 65.94 | 16.03 |      | 130.0 |         |
|           |                                                   | Z | 4.45 | 67.00 | 16.86 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.61 | 66.18 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.48 | 65.77 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.36 | 66.86 | 16.69 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.66 | 66.33 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.53 | 65.93 | 16.01 |      | 130.0 |         |
|           |                                                   | Z | 4.41 | 67.03 | 16.87 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.57 | 66.14 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.44 | 65.73 | 15.86 |      | 130.0 |         |
|           |                                                   | Z | 4.32 | 66.80 | 16.69 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.57 | 66.29 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.44 | 65.87 | 15.89 |      | 130.0 |         |
|           |                                                   | Z | 4.29 | 66.90 | 16.73 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.57 | 66.14 | 15.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.43 | 65.70 | 15.75 |      | 130.0 |         |
|           |                                                   | Z | 4.29 | 66.69 | 16.55 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.52 | 66.33 | 16.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.39 | 65.89 | 15.98 |      | 130.0 |         |
|           |                                                   | Z | 4.28 | 66.96 | 16.83 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.57 | 65.99 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.44 | 65.58 | 15.63 |      | 130.0 |         |
|           |                                                   | Z | 4.31 | 66.67 | 16.47 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.19 | 66.38 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.10 | 66.03 | 16.12 |      | 130.0 |         |
|           |                                                   | Z | 4.99 | 66.75 | 16.86 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.26 | 66.56 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.17 | 66.25 | 16.21 |      | 130.0 |         |
|           |                                                   | Z | 5.03 | 66.90 | 16.92 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.15 | 66.58 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.06 | 66.26 | 16.22 |      | 130.0 |         |
|           |                                                   | Z | 4.94 | 66.92 | 16.95 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.16 | 66.37 | 16.18 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.06 | 16.06 |      | 130.0 |         |
|           |                                                   | Z | 5.03 | 67.03 | 16.93 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.24 | 66.40 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.15 | 66.09 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 5.01 | 66.69 | 16.81 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.25 | 66.54 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.15 | 66.19 | 16.30 |      | 130.0 |         |
|           |                                                   | Z | 5.02 | 66.78 | 16.97 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.26 | 66.70 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.15 | 66.29 | 16.34 |      | 130.0 |         |
|           |                                                   | Z | 5.02 | 66.91 | 17.04 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.14 | 66.22 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.03 | 65.82 | 15.97 |      | 130.0 |         |
|           |                                                    | Z | 4.94 | 66.57 | 16.72 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.33 | 66.43 | 16.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.10 | 16.18 |      | 130.0 |         |
|           |                                                    | Z | 5.10 | 66.74 | 16.87 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.58 | 67.07 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.45 | 16.42 |      | 130.0 |         |
|           |                                                    | Z | 5.23 | 67.07 | 17.11 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.51 | 66.45 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.43 | 66.10 | 16.10 |      | 130.0 |         |
|           |                                                    | Z | 5.35 | 66.63 | 16.76 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.73 | 66.99 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 66.81 | 16.43 |      | 130.0 |         |
|           |                                                    | Z | 5.63 | 67.47 | 17.17 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.52 | 66.48 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.43 | 66.11 | 16.01 |      | 130.0 |         |
|           |                                                    | Z | 5.34 | 66.61 | 16.66 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.60 | 66.56 | 16.18 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.30 | 16.10 |      | 130.0 |         |
|           |                                                    | Z | 5.64 | 67.50 | 17.11 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 5.92 | 67.73 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.89 | 67.56 | 16.73 |      | 130.0 |         |
|           |                                                    | Z | 5.64 | 67.67 | 17.20 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.87 | 67.68 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 67.32 | 16.80 |      | 130.0 |         |
|           |                                                    | Z | 5.62 | 67.70 | 17.39 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.70 | 67.07 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.92 | 16.62 |      | 130.0 |         |
|           |                                                    | Z | 5.80 | 68.22 | 17.68 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.59 | 66.68 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.30 | 16.14 |      | 130.0 |         |
|           |                                                    | Z | 5.36 | 66.70 | 16.74 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.57 | 66.70 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.32 | 16.20 |      | 130.0 |         |
|           |                                                    | Z | 5.40 | 66.93 | 16.91 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.45 | 66.03 | 15.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.35 | 65.64 | 15.59 |      | 130.0 |         |
|           |                                                    | Z | 5.23 | 66.11 | 16.22 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.93 | 66.81 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 66.50 | 16.22 |      | 130.0 |         |
|           |                                                    | Z | 5.83 | 66.96 | 16.84 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.07 | 67.17 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 66.88 | 16.40 |      | 130.0 |         |
|           |                                                    | Z | 5.97 | 67.37 | 17.04 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.07 | 67.15 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 66.88 | 16.37 |      | 130.0 |         |
|           |                                                    | Z | 6.05 | 67.63 | 17.15 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.04   | 67.08  | 16.45 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.98   | 66.75  | 16.35 |       | 130.0 |         |
|           |                                                        | Z | 5.91   | 67.17  | 16.95 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.04   | 67.08  | 16.40 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.96   | 66.72  | 16.28 |       | 130.0 |         |
|           |                                                        | Z | 5.82   | 66.93  | 16.78 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.10   | 67.04  | 16.40 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.06   | 66.80  | 16.34 |       | 130.0 |         |
|           |                                                        | Z | 6.00   | 67.28  | 16.98 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.13   | 67.25  | 16.67 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.06   | 66.93  | 16.57 |       | 130.0 |         |
|           |                                                        | Z | 5.95   | 67.22  | 17.11 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 5.98   | 66.96  | 16.42 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.92   | 66.68  | 16.34 |       | 130.0 |         |
|           |                                                        | Z | 5.80   | 66.93  | 16.86 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.09   | 67.31  | 16.62 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.99   | 66.89  | 16.46 |       | 130.0 |         |
|           |                                                        | Z | 5.86   | 67.11  | 16.97 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.21   | 67.33  | 16.59 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.21   | 67.22  | 16.60 |       | 130.0 |         |
|           |                                                        | Z | 6.00   | 67.25  | 17.00 |       | 130.0 |         |
| 10646-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 16.42  | 111.83 | 39.08 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 7.48   | 93.91  | 33.51 |       | 60.0  |         |
|           |                                                        | Z | 8.24   | 101.48 | 38.03 |       | 60.0  |         |
| 10647-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 13.25  | 107.26 | 37.80 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 6.56   | 91.19  | 32.64 |       | 60.0  |         |
|           |                                                        | Z | 6.86   | 97.18  | 36.65 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.61   | 62.72  | 9.85  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.45   | 60.26  | 7.20  |       | 150.0 |         |
|           |                                                        | Z | 0.31   | 60.00  | 4.97  |       | 150.0 |         |
| 10652-AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.40   | 66.50  | 16.32 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.12   | 65.43  | 15.68 |       | 80.0  |         |
|           |                                                        | Z | 3.58   | 69.50  | 17.50 |       | 80.0  |         |
| 10653-AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 3.93   | 65.85  | 16.50 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.70   | 65.00  | 16.06 |       | 80.0  |         |
|           |                                                        | Z | 3.91   | 67.39  | 17.42 |       | 80.0  |         |
| 10654-AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 3.92   | 65.48  | 16.50 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.72   | 64.66  | 16.11 |       | 80.0  |         |
|           |                                                        | Z | 3.91   | 66.66  | 17.39 |       | 80.0  |         |
| 10655-AAD | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 3.99   | 65.45  | 16.54 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.79   | 64.62  | 16.15 |       | 80.0  |         |
|           |                                                        | Z | 3.98   | 66.38  | 17.37 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 100.00 | 108.15 | 24.34 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 42.87  | 96.86  | 20.96 |       | 50.0  |         |
|           |                                                        | Z | 100.00 | 109.52 | 25.04 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 107.90 | 23.20 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 104.59 | 21.35 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 109.57 | 23.91 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 110.08 | 22.90 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 101.87 | 18.86 |      | 80.0  |         |
|           |                             | Z | 100.00 | 111.81 | 23.42 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 114.06 | 23.41 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 92.16  | 13.92 |      | 100.0 |         |
|           |                             | Z | 100.00 | 107.18 | 20.20 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 119.59 | 23.99 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 13.69  | 60.41  | 1.41  |      | 120.0 |         |
|           |                             | Z | 0.02   | 60.01  | 20.0  |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **ES3-3119\_May18**

## CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3119**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

SC ✓  
5/31/2018

Calibration date: **May 18, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature  $(22 \pm 3)^{\circ}\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| Network Analyzer HP 8753E  | SN: US37390585   | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                       |                                   |               |
|-----------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------|---------------|
| Calibrated by:                                                                                                  | Name<br>Michael Weber | Function<br>Laboratory Technician | Signature<br> |
| Approved by:                                                                                                    | Katja Pokovic         | Technical Manager                 |               |
| Issued: May 21, 2018                                                                                            |                       |                                   |               |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                       |                                   |               |



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Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

## Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\varphi$   | $\varphi$ rotation around probe axis                                                                                                                    |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

## Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below **ConvF**).
- NORM( $f$ )<sub>x,y,z</sub> = NORM<sub>x,y,z</sub> \* frequency\_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of **ConvF**.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>; A, B, C, D** are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe ES3DV3

## SN:3119

Manufactured: March 6, 2006  
Calibrated: May 18, 2018

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

# DASY/EASY - Parameters of Probe: ES3DV3 - SN:3119

## Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 1.29     | 1.24     | 1.46     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 103.8    | 100.9    | 104.2    |               |

## Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB/ $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|-------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                           | 1.0 | 0.00    | 216.1    | $\pm 3.5 \%$              |
|     |                           | Y | 0.0     | 0.0                           | 1.0 |         | 211.8    |                           |
|     |                           | Z | 0.0     | 0.0                           | 1.0 |         | 224.3    |                           |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms} \cdot \text{V}^{-2}$ | T2<br>$\text{ms} \cdot \text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|---------------------------------------|---------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 72.42    | 520.3    | 35.53                       | 32.26                                 | 3.723                                 | 5.10     | 0.546                 | 0.664                 | 1.013 |
| Y | 69.42    | 504.6    | 36.16                       | 29.8                                  | 3.581                                 | 5.10     | 0.322                 | 0.714                 | 1.012 |
| Z | 62.37    | 447.3    | 35.30                       | 29.91                                 | 3.519                                 | 5.10     | 0.726                 | 0.593                 | 1.014 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3119

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 6.18    | 6.18    | 6.18    | 0.80               | 1.17                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 5.96    | 5.96    | 5.96    | 0.80               | 1.12                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 5.22    | 5.22    | 5.22    | 0.55               | 1.37                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 4.97    | 4.97    | 4.97    | 0.71               | 1.21                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 4.78    | 4.78    | 4.78    | 0.79               | 1.28                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 4.58    | 4.58    | 4.58    | 0.60               | 1.44                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 4.47    | 4.47    | 4.47    | 0.78               | 1.30                    | ± 12.0 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3119

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 6.01    | 6.01    | 6.01    | 0.80               | 1.16                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 5.84    | 5.84    | 5.84    | 0.68               | 1.25                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 4.87    | 4.87    | 4.87    | 0.52               | 1.51                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 4.65    | 4.65    | 4.65    | 0.60               | 1.45                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 4.52    | 4.52    | 4.52    | 0.80               | 1.30                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 4.42    | 4.42    | 4.42    | 0.72               | 1.30                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 4.24    | 4.24    | 4.24    | 0.80               | 1.25                    | ± 12.0 %  |

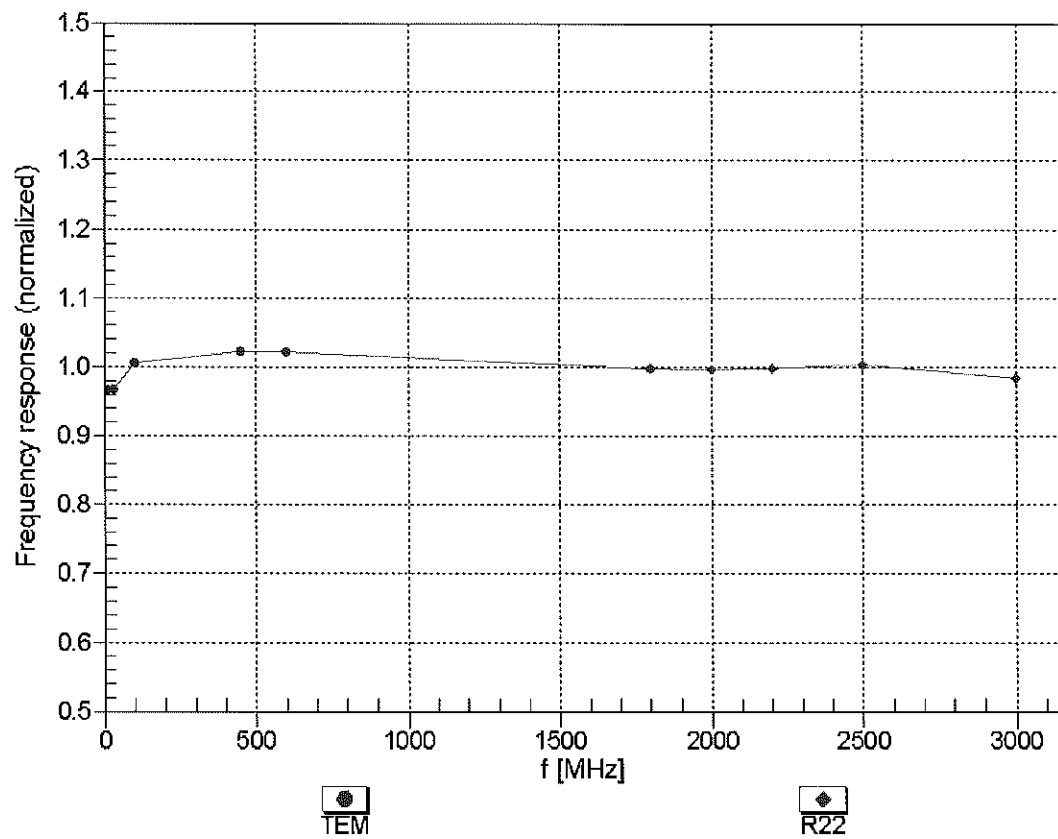
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

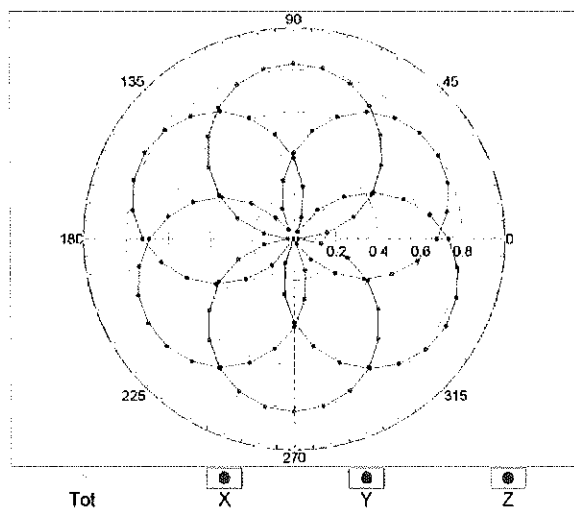
(TEM-Cell:ifi110 EXX, Waveguide: R22)



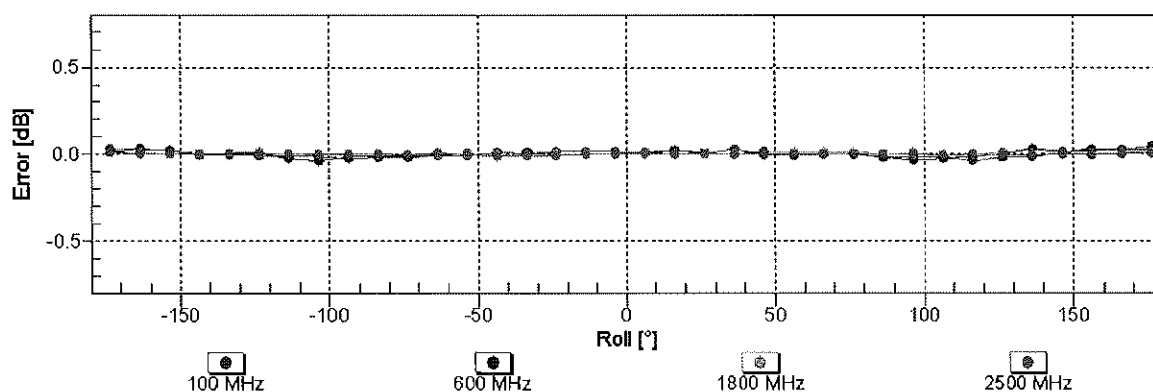
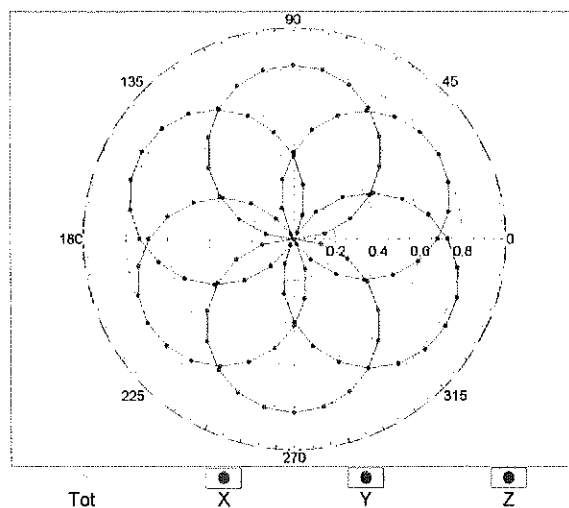
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

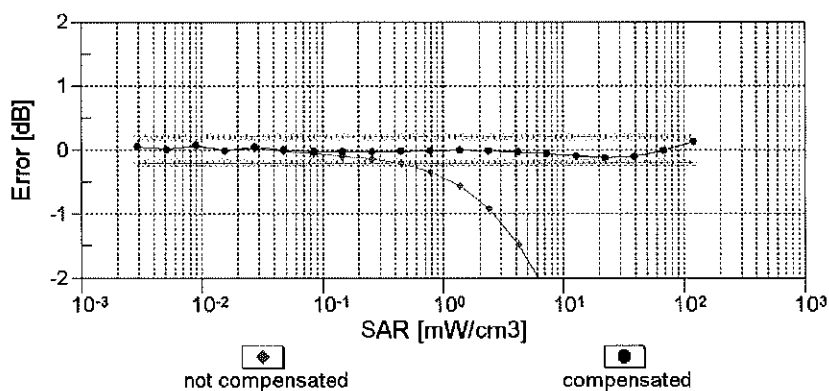
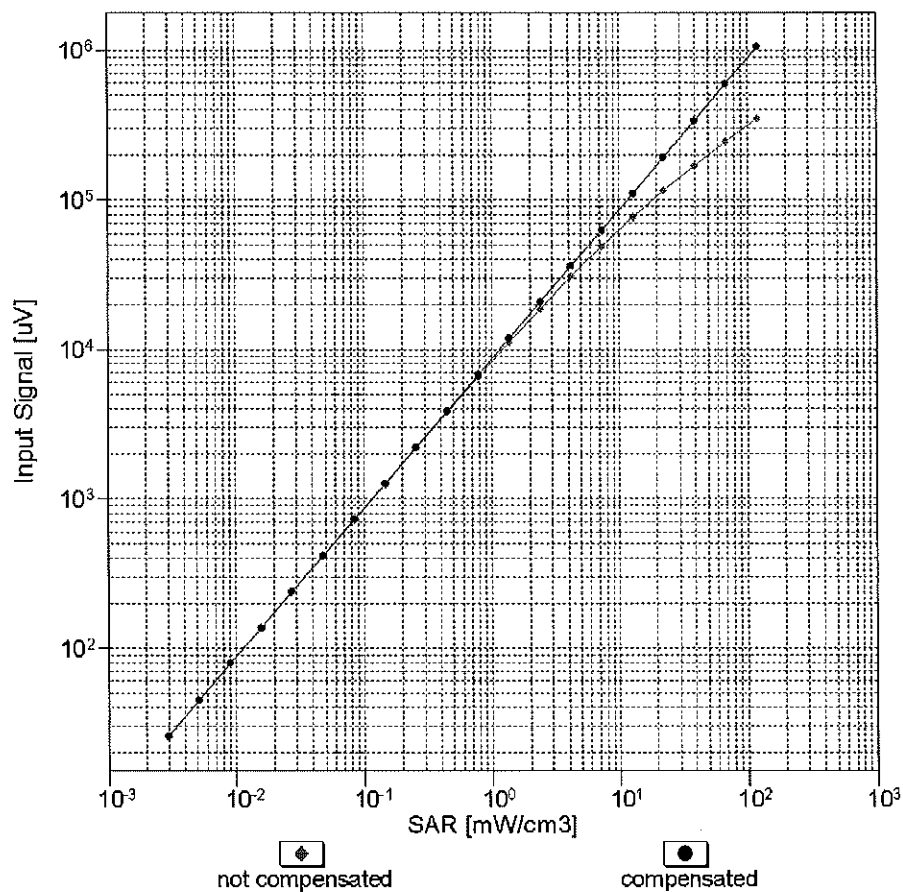
f=600 MHz,TEM



f=1800 MHz,R22

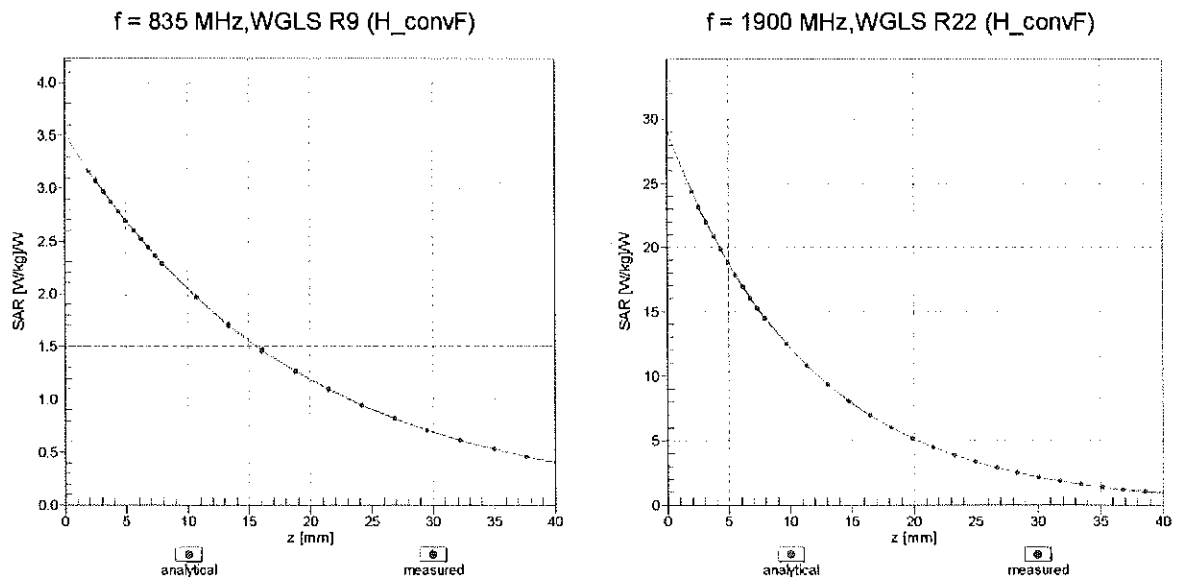
**Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )**

## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$ )



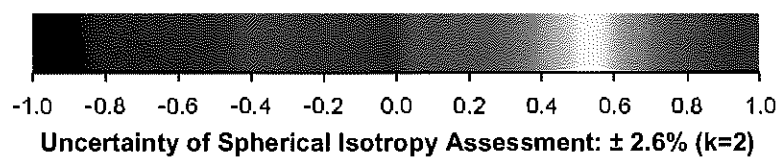
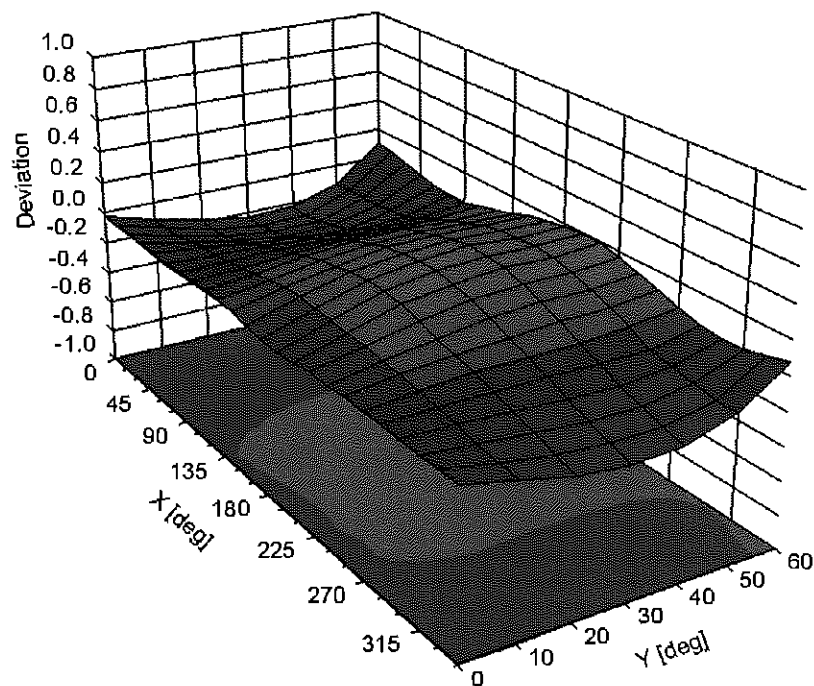
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3119

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 116.5      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 10 mm      |
| Tip Diameter                                  | 4 mm       |
| Probe Tip to Sensor X Calibration Point       | 2 mm       |
| Probe Tip to Sensor Y Calibration Point       | 2 mm       |
| Probe Tip to Sensor Z Calibration Point       | 2 mm       |
| Recommended Measurement Distance from Surface | 3 mm       |

**Appendix: Modulation Calibration Parameters**

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB $\mu$ V | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|-----------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00            | 1.00  | 0.00    | 216.1    | $\pm 3.5 \%$                     |
|               |                                               | Y | 0.00    | 0.00            | 1.00  |         | 211.8    |                                  |
|               |                                               | Z | 0.00    | 0.00            | 1.00  |         | 224.3    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 8.73    | 79.24           | 19.64 | 10.00   | 25.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.22    | 78.60           | 19.24 |         | 25.0     |                                  |
|               |                                               | Z | 8.30    | 78.73           | 19.30 |         | 25.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.18    | 69.40           | 16.37 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.00    | 66.42           | 14.47 |         | 150.0    |                                  |
|               |                                               | Z | 1.02    | 66.81           | 14.65 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.35    | 65.74           | 16.29 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.27    | 64.54           | 15.34 |         | 150.0    |                                  |
|               |                                               | Z | 1.29    | 64.83           | 15.46 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.27    | 67.30           | 17.53 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.21    | 67.06           | 17.33 |         | 150.0    |                                  |
|               |                                               | Z | 5.19    | 67.24           | 17.38 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 13.20   | 87.31           | 24.20 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 14.24   | 89.06           | 24.72 |         | 50.0     |                                  |
|               |                                               | Z | 13.07   | 87.41           | 24.10 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 12.71   | 86.51           | 23.97 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 13.48   | 87.95           | 24.39 |         | 50.0     |                                  |
|               |                                               | Z | 12.52   | 86.52           | 23.84 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 29.44   | 100.96          | 26.87 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 36.27   | 104.28          | 27.64 |         | 60.0     |                                  |
|               |                                               | Z | 27.08   | 99.64           | 26.30 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 19.40   | 104.04          | 39.34 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 15.24   | 96.91           | 36.40 |         | 50.0     |                                  |
|               |                                               | Z | 19.47   | 104.97          | 39.82 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 19.15   | 100.47          | 34.47 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 16.00   | 96.21           | 32.83 |         | 60.0     |                                  |
|               |                                               | Z | 18.67   | 100.57          | 34.57 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 118.39          | 30.10 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 118.07          | 29.78 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 117.92          | 29.73 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 118.11          | 29.09 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 117.47          | 28.62 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 117.40          | 28.61 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 14.41   | 94.58           | 31.36 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 11.98   | 90.47           | 29.74 |         | 80.0     |                                  |
|               |                                               | Z | 13.55   | 93.77           | 31.11 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 71.37   | 113.48          | 29.28 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 80.38   | 114.95          | 29.42 |         | 70.0     |                                  |
|               |                                               | Z | 51.73   | 108.49          | 27.78 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 119.05          | 27.84 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.75          | 26.65 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 116.98          | 26.79 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 122.71 | 28.21 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 117.99 | 26.02 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 118.71 | 26.38 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 13.57  | 91.65  | 25.57 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 11.95  | 89.62  | 24.76 |       | 70.0  |         |
|           |                                                     | Z | 11.45  | 88.56  | 24.23 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 7.28   | 86.87  | 22.66 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.23   | 81.63  | 20.57 |       | 100.0 |         |
|           |                                                     | Z | 5.28   | 81.38  | 20.22 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 4.50   | 81.61  | 20.64 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.25   | 76.50  | 18.39 |       | 100.0 |         |
|           |                                                     | Z | 3.35   | 76.72  | 18.21 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 15.24  | 93.77  | 26.32 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 13.48  | 91.82  | 25.54 |       | 70.0  |         |
|           |                                                     | Z | 12.71  | 90.45  | 24.91 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 7.19   | 86.72  | 22.57 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.11   | 81.33  | 20.42 |       | 100.0 |         |
|           |                                                     | Z | 5.15   | 81.11  | 20.08 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 4.68   | 82.42  | 21.00 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.33   | 77.08  | 18.69 |       | 100.0 |         |
|           |                                                     | Z | 3.43   | 77.26  | 18.50 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 2.16   | 73.15  | 17.25 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.77   | 69.93  | 15.42 |       | 150.0 |         |
|           |                                                     | Z | 1.72   | 70.01  | 15.21 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 18.43  | 92.51  | 24.39 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 20.51  | 94.38  | 24.83 |       | 50.0  |         |
|           |                                                     | Z | 17.67  | 91.92  | 24.02 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 122.09 | 1.31  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.04   | 110.13 | 12.38 |       | 150.0 |         |
|           |                                                     | Z | 0.00   | 105.54 | 4.08  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 10.37  | 80.17  | 23.48 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 10.36  | 80.56  | 23.53 |       | 25.0  |         |
|           |                                                     | Z | 10.13  | 80.12  | 23.33 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 11.21  | 83.49  | 23.32 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 11.43  | 84.26  | 23.51 |       | 40.0  |         |
|           |                                                     | Z | 11.02  | 83.48  | 23.17 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 11.59  | 84.51  | 24.03 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 11.18  | 84.11  | 23.78 |       | 50.0  |         |
|           |                                                     | Z | 11.20  | 84.06  | 23.67 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 11.19  | 89.96  | 29.01 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 9.36   | 86.15  | 27.45 |       | 100.0 |         |
|           |                                                     | Z | 10.26  | 88.57  | 28.50 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.57   | 68.22  | 17.45 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.45   | 66.58  | 16.33 |       | 110.0 |         |
|           |                                                     | Z | 1.47   | 66.93  | 16.46 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 130.04 | 33.38 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 26.92  | 109.88 | 28.23 |       | 110.0 |         |
|           |                                                     | Z | 34.27  | 113.21 | 29.05 |       | 110.0 |         |

|           |                                                |   |       |       |       |      |       |         |
|-----------|------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 11.36 | 96.78 | 27.09 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 7.01  | 88.67 | 24.31 |      | 110.0 |         |
|           |                                                | Z | 7.44  | 89.54 | 24.54 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.98  | 67.03 | 16.80 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.93  | 66.80 | 16.61 |      | 100.0 |         |
|           |                                                | Z | 4.88  | 66.93 | 16.62 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 5.03  | 67.22 | 16.96 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.97  | 66.97 | 16.76 |      | 100.0 |         |
|           |                                                | Z | 4.93  | 67.10 | 16.77 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.40  | 67.60 | 17.24 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.33  | 67.36 | 17.04 |      | 100.0 |         |
|           |                                                | Z | 5.27  | 67.47 | 17.06 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.30  | 67.66 | 17.42 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.24  | 67.40 | 17.21 |      | 100.0 |         |
|           |                                                | Z | 5.19  | 67.53 | 17.24 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.37  | 67.83 | 17.66 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.30  | 67.55 | 17.45 |      | 100.0 |         |
|           |                                                | Z | 5.25  | 67.70 | 17.49 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.70  | 67.99 | 18.14 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.63  | 67.72 | 17.92 |      | 100.0 |         |
|           |                                                | Z | 5.59  | 67.91 | 17.99 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.88  | 68.47 | 18.56 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.80  | 68.16 | 18.32 |      | 100.0 |         |
|           |                                                | Z | 5.76  | 68.35 | 18.40 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.95  | 68.35 | 18.73 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.87  | 68.05 | 18.49 |      | 100.0 |         |
|           |                                                | Z | 5.84  | 68.31 | 18.61 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.43  | 67.58 | 17.94 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.37  | 67.33 | 17.73 |      | 100.0 |         |
|           |                                                | Z | 5.35  | 67.53 | 17.80 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.53  | 68.22 | 18.29 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.45  | 67.92 | 18.06 |      | 100.0 |         |
|           |                                                | Z | 5.43  | 68.14 | 18.14 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.69  | 68.63 | 18.74 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.60  | 68.30 | 18.49 |      | 100.0 |         |
|           |                                                | Z | 5.60  | 68.56 | 18.60 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.74  | 68.79 | 19.06 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.65  | 68.42 | 18.78 |      | 100.0 |         |
|           |                                                | Z | 5.65  | 68.70 | 18.90 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.96  | 69.48 | 19.66 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.85  | 69.02 | 19.33 |      | 90.0  |         |
|           |                                                | Z | 5.85  | 69.31 | 19.47 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.96  | 69.26 | 19.77 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.85  | 68.80 | 19.43 |      | 90.0  |         |
|           |                                                | Z | 5.87  | 69.15 | 19.61 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 6.00  | 69.36 | 19.88 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.89  | 68.89 | 19.54 |      | 90.0  |         |
|           |                                                | Z | 5.91  | 69.25 | 19.72 |      | 90.0  |         |

|           |                                                     |   |       |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 1.08  | 68.35  | 14.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.89  | 65.35  | 12.75 |      | 150.0 |         |
|           |                                                     | Z | 0.86  | 65.31  | 12.50 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 2.63  | 65.24  | 10.07 | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 2.38  | 64.43  | 9.48  |      | 80.0  |         |
|           |                                                     | Z | 2.42  | 64.64  | 9.62  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 28.70 | 100.61 | 26.81 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 35.30 | 103.92 | 27.58 |      | 60.0  |         |
|           |                                                     | Z | 26.48 | 99.34  | 26.25 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.91  | 67.94  | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.79  | 66.66  | 15.20 |      | 150.0 |         |
|           |                                                     | Z | 1.79  | 66.89  | 15.24 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.87  | 67.94  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.75  | 66.61  | 15.16 |      | 150.0 |         |
|           |                                                     | Z | 1.75  | 66.86  | 15.20 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 19.04 | 100.29 | 34.41 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 15.94 | 96.08  | 32.79 |      | 60.0  |         |
|           |                                                     | Z | 18.56 | 100.39 | 34.51 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.45  | 71.42  | 17.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.20  | 70.01  | 16.28 |      | 150.0 |         |
|           |                                                     | Z | 3.18  | 70.12  | 16.33 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.47  | 68.22  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.36  | 67.53  | 15.79 |      | 150.0 |         |
|           |                                                     | Z | 3.32  | 67.60  | 15.80 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.56  | 68.08  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.46  | 67.47  | 15.88 |      | 150.0 |         |
|           |                                                     | Z | 3.42  | 67.51  | 15.88 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 8.64  | 77.20  | 20.80 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.38  | 76.89  | 20.66 |      | 65.0  |         |
|           |                                                     | Z | 8.29  | 76.81  | 20.60 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 8.95  | 76.81  | 21.55 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.55  | 76.08  | 21.19 |      | 65.0  |         |
|           |                                                     | Z | 8.63  | 76.46  | 21.35 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 8.33  | 75.39  | 21.22 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.70  | 74.02  | 20.57 |      | 65.0  |         |
|           |                                                     | Z | 8.09  | 75.17  | 21.07 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 3.06  | 70.58  | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.84  | 69.23  | 16.10 |      | 150.0 |         |
|           |                                                     | Z | 2.81  | 69.34  | 16.16 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 3.15  | 67.99  | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.03  | 67.27  | 15.70 |      | 150.0 |         |
|           |                                                     | Z | 2.99  | 67.33  | 15.69 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.53  | 69.63  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.34  | 68.24  | 15.76 |      | 150.0 |         |
|           |                                                     | Z | 2.30  | 68.40  | 15.82 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.82  | 68.33  | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.70  | 67.57  | 15.88 |      | 150.0 |         |
|           |                                                     | Z | 2.66  | 67.62  | 15.81 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.26 | 67.85 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.15 | 67.21 | 15.75 |      | 150.0 |         |
|           |                                                | Z | 3.11 | 67.27 | 15.73 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.97 | 68.34 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.86 | 67.66 | 16.01 |      | 150.0 |         |
|           |                                                | Z | 2.81 | 67.71 | 15.93 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.32 | 67.42 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.26 | 67.16 | 16.36 |      | 150.0 |         |
|           |                                                | Z | 5.21 | 67.21 | 16.35 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.74 | 67.85 | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.67 | 67.57 | 16.57 |      | 150.0 |         |
|           |                                                | Z | 5.59 | 67.55 | 16.53 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.45 | 67.66 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.39 | 67.42 | 16.41 |      | 150.0 |         |
|           |                                                | Z | 5.34 | 67.49 | 16.41 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.32 | 67.43 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.27 | 67.20 | 16.39 |      | 150.0 |         |
|           |                                                | Z | 5.22 | 67.24 | 16.39 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.75 | 67.79 | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.70 | 67.57 | 16.57 |      | 150.0 |         |
|           |                                                | Z | 5.66 | 67.71 | 16.62 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.42 | 67.62 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.37 | 67.40 | 16.41 |      | 150.0 |         |
|           |                                                | Z | 5.32 | 67.45 | 16.41 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.62 | 68.08 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.52 | 67.48 | 15.81 |      | 150.0 |         |
|           |                                                | Z | 3.47 | 67.53 | 15.81 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.73 | 68.07 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.63 | 67.52 | 15.97 |      | 150.0 |         |
|           |                                                | Z | 3.59 | 67.57 | 15.96 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.30 | 69.51 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.11 | 68.01 | 15.52 |      | 150.0 |         |
|           |                                                | Z | 2.07 | 68.17 | 15.52 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.70 | 68.91 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.56 | 68.00 | 15.71 |      | 150.0 |         |
|           |                                                | Z | 2.50 | 68.03 | 15.56 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.56 | 67.32 | 15.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.43 | 66.43 | 14.52 |      | 150.0 |         |
|           |                                                | Z | 2.37 | 66.52 | 14.40 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.69 | 68.28 | 14.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.48 | 66.23 | 13.42 |      | 150.0 |         |
|           |                                                | Z | 1.39 | 65.84 | 12.87 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 3.98 | 75.21 | 17.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.30 | 72.27 | 16.12 |      | 150.0 |         |
|           |                                                | Z | 3.38 | 72.80 | 16.00 |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 4.85 | 78.25 | 19.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.01 | 75.19 | 17.53 |      | 150.0 |         |
|           |                                                | Z | 4.13 | 75.68 | 17.34 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 3.15 | 68.04 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.04 | 67.32 | 15.74 |      | 150.0 |         |
|           |                                            | Z | 3.00 | 67.38 | 15.73 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.27 | 67.89 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.16 | 67.26 | 15.78 |      | 150.0 |         |
|           |                                            | Z | 3.12 | 67.31 | 15.77 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 9.08 | 79.17 | 21.71 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.66 | 78.57 | 21.43 |      | 65.0  |         |
|           |                                            | Z | 8.76 | 78.93 | 21.54 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 8.61 | 77.04 | 21.49 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.16 | 76.19 | 21.06 |      | 65.0  |         |
|           |                                            | Z | 8.25 | 76.62 | 21.21 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 8.89 | 77.55 | 22.01 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.48 | 76.82 | 21.65 |      | 65.0  |         |
|           |                                            | Z | 8.56 | 77.20 | 21.77 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.58 | 70.07 | 16.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39 | 68.67 | 16.03 |      | 150.0 |         |
|           |                                            | Z | 2.35 | 68.75 | 16.04 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.82 | 68.33 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.70 | 67.56 | 15.88 |      | 150.0 |         |
|           |                                            | Z | 2.66 | 67.62 | 15.82 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.17 | 69.82 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.97 | 68.12 | 15.45 |      | 150.0 |         |
|           |                                            | Z | 1.92 | 68.22 | 15.38 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.40 | 67.95 | 15.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.25 | 66.86 | 14.60 |      | 150.0 |         |
|           |                                            | Z | 2.19 | 66.92 | 14.43 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.98 | 68.37 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.87 | 67.70 | 16.04 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 67.75 | 15.96 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.51 | 68.29 | 15.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.35 | 67.25 | 14.87 |      | 150.0 |         |
|           |                                            | Z | 2.29 | 67.27 | 14.67 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.99 | 69.24 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.85 | 68.29 | 15.98 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 68.40 | 16.01 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.15 | 67.74 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.05 | 67.11 | 15.72 |      | 150.0 |         |
|           |                                            | Z | 3.01 | 67.18 | 15.69 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.25 | 67.73 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.15 | 67.15 | 15.79 |      | 150.0 |         |
|           |                                            | Z | 3.11 | 67.26 | 15.78 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.19 | 70.80 | 19.90 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.05 | 70.08 | 19.40 |      | 150.0 |         |
|           |                                            | Z | 4.07 | 70.78 | 19.80 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.48 | 74.21 | 20.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.19 | 73.13 | 19.95 |      | 150.0 |         |
|           |                                            | Z | 5.31 | 74.28 | 20.49 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.90  | 75.78  | 21.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.63  | 74.88  | 21.00 |      | 150.0 |         |
|           |                                            | Z | 5.76  | 76.02  | 21.51 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 4.12  | 73.63  | 21.07 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.82  | 71.98  | 20.15 |      | 150.0 |         |
|           |                                            | Z | 3.81  | 72.59  | 20.57 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 6.34  | 80.63  | 23.44 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.64  | 78.30  | 22.38 |      | 150.0 |         |
|           |                                            | Z | 5.78  | 79.52  | 22.98 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 5.20  | 76.32  | 20.89 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.62  | 73.99  | 19.74 |      | 150.0 |         |
|           |                                            | Z | 4.75  | 75.32  | 20.43 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 28.12 | 106.47 | 32.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 20.29 | 100.26 | 30.66 |      | 65.0  |         |
|           |                                            | Z | 30.84 | 109.43 | 33.61 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 24.51 | 99.51  | 29.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 21.06 | 97.01  | 28.21 |      | 65.0  |         |
|           |                                            | Z | 27.06 | 102.23 | 29.86 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 20.30 | 95.06  | 27.24 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 17.61 | 92.80  | 26.46 |      | 65.0  |         |
|           |                                            | Z | 22.39 | 97.69  | 28.04 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 4.06  | 73.26  | 20.82 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.77  | 71.61  | 19.88 |      | 150.0 |         |
|           |                                            | Z | 3.77  | 72.26  | 20.34 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 6.35  | 80.66  | 23.45 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.65  | 78.32  | 22.39 |      | 150.0 |         |
|           |                                            | Z | 5.79  | 79.55  | 22.99 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 4.10  | 73.44  | 20.92 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.80  | 71.80  | 20.00 |      | 150.0 |         |
|           |                                            | Z | 3.80  | 72.42  | 20.43 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 6.25  | 80.32  | 23.30 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.56  | 77.99  | 22.23 |      | 150.0 |         |
|           |                                            | Z | 5.71  | 79.26  | 22.86 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 5.71  | 78.27  | 22.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.07  | 75.93  | 20.89 |      | 150.0 |         |
|           |                                            | Z | 5.22  | 77.27  | 21.56 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 5.17  | 76.20  | 20.82 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.59  | 73.88  | 19.67 |      | 150.0 |         |
|           |                                            | Z | 4.74  | 75.23  | 20.38 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.09  | 73.42  | 20.91 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.80  | 71.78  | 19.99 |      | 150.0 |         |
|           |                                            | Z | 3.79  | 72.40  | 20.42 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 6.24  | 80.30  | 23.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.55  | 77.97  | 22.22 |      | 150.0 |         |
|           |                                            | Z | 5.70  | 79.24  | 22.84 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 5.16  | 76.18  | 20.81 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.59  | 73.86  | 19.66 |      | 150.0 |         |
|           |                                            | Z | 4.73  | 75.21  | 20.37 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 4.11 | 73.46 | 20.93 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.81 | 71.82 | 20.01 |      | 150.0 |         |
|           |                                               | Z | 3.81 | 72.44 | 20.44 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 6.27 | 80.37 | 23.32 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.58 | 78.04 | 22.26 |      | 150.0 |         |
|           |                                               | Z | 5.73 | 79.31 | 22.88 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 5.19 | 76.25 | 20.85 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.61 | 73.93 | 19.70 |      | 150.0 |         |
|           |                                               | Z | 4.75 | 75.28 | 20.40 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 4.12 | 73.50 | 20.98 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.82 | 71.85 | 20.05 |      | 150.0 |         |
|           |                                               | Z | 3.81 | 72.49 | 20.49 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 6.50 | 81.13 | 23.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.79 | 78.80 | 22.66 |      | 150.0 |         |
|           |                                               | Z | 5.93 | 80.01 | 23.24 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 5.32 | 76.74 | 21.12 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 74.40 | 19.98 |      | 150.0 |         |
|           |                                               | Z | 4.87 | 75.74 | 20.67 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.74 | 66.77 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.69 | 66.52 | 16.12 |      | 150.0 |         |
|           |                                               | Z | 4.64 | 66.62 | 16.12 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.96 | 67.16 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.89 | 66.91 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.84 | 66.99 | 16.23 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.99 | 67.16 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.93 | 66.91 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.88 | 67.00 | 16.24 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.77 | 66.89 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 66.63 | 16.16 |      | 150.0 |         |
|           |                                               | Z | 4.66 | 66.72 | 16.15 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.97 | 67.18 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.91 | 66.93 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.85 | 67.01 | 16.24 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 5.00 | 67.17 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.94 | 66.92 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.88 | 67.02 | 16.25 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.72 | 66.90 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.66 | 66.64 | 16.12 |      | 150.0 |         |
|           |                                               | Z | 4.61 | 66.72 | 16.11 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.98 | 67.19 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.91 | 66.93 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.85 | 67.00 | 16.24 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 5.01 | 67.11 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.95 | 66.87 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.89 | 66.96 | 16.24 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.30 | 67.47 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.25 | 67.22 | 16.39 |      | 150.0 |         |
|           |                                               | Z | 5.20 | 67.26 | 16.38 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.69  | 67.78  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.65  | 67.60  | 16.61 |      | 150.0 |         |
|           |                                           | Z | 5.58  | 67.65  | 16.61 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.37  | 67.60  | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.31  | 67.33  | 16.37 |      | 150.0 |         |
|           |                                           | Z | 5.24  | 67.35  | 16.35 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 3.00  | 66.32  | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.92  | 65.84  | 15.36 |      | 150.0 |         |
|           |                                           | Z | 2.88  | 65.96  | 15.31 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 25.34 | 100.21 | 29.32 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.88 | 97.80  | 28.53 |      | 65.0  |         |
|           |                                           | Z | 28.16 | 103.05 | 30.17 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 20.89 | 95.65  | 27.50 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.66 | 93.90  | 26.89 |      | 65.0  |         |
|           |                                           | Z | 23.03 | 98.25  | 28.28 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 27.90 | 106.81 | 32.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.79 | 102.13 | 31.35 |      | 65.0  |         |
|           |                                           | Z | 29.50 | 109.02 | 33.59 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 24.51 | 99.50  | 29.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.09 | 97.02  | 28.22 |      | 65.0  |         |
|           |                                           | Z | 27.07 | 102.22 | 29.86 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 20.30 | 95.08  | 27.26 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.06 | 93.26  | 26.62 |      | 65.0  |         |
|           |                                           | Z | 22.29 | 97.60  | 28.02 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 26.95 | 106.05 | 32.56 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 20.98 | 101.31 | 31.03 |      | 65.0  |         |
|           |                                           | Z | 28.34 | 108.14 | 33.27 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 24.50 | 99.50  | 29.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.08 | 97.02  | 28.21 |      | 65.0  |         |
|           |                                           | Z | 27.06 | 102.22 | 29.86 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 20.31 | 95.10  | 27.27 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.06 | 93.27  | 26.63 |      | 65.0  |         |
|           |                                           | Z | 22.30 | 97.62  | 28.03 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 25.91 | 105.12 | 32.20 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 20.17 | 100.39 | 30.66 |      | 65.0  |         |
|           |                                           | Z | 27.13 | 107.11 | 32.88 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 24.55 | 99.55  | 29.05 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.11 | 97.06  | 28.23 |      | 65.0  |         |
|           |                                           | Z | 27.13 | 102.28 | 29.88 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 20.44 | 95.20  | 27.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.18 | 93.36  | 26.65 |      | 65.0  |         |
|           |                                           | Z | 22.46 | 97.73  | 28.06 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 27.19 | 106.24 | 32.62 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.11 | 101.45 | 31.07 |      | 65.0  |         |
|           |                                           | Z | 28.60 | 108.34 | 33.33 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 24.51 | 99.52  | 29.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.08 | 97.02  | 28.22 |      | 65.0  |         |
|           |                                           | Z | 27.06 | 102.23 | 29.86 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 20.32 | 95.12  | 27.28 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 18.06 | 93.28  | 26.63 |      | 65.0 |         |
|           |                                            | Z | 22.31 | 97.64  | 28.04 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 27.11 | 106.18 | 32.60 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 21.05 | 101.40 | 31.05 |      | 65.0 |         |
|           |                                            | Z | 28.51 | 108.28 | 33.31 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 13.32 | 86.96  | 27.76 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 12.14 | 84.93  | 26.82 |      | 65.0 |         |
|           |                                            | Z | 13.21 | 87.48  | 27.86 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 13.08 | 86.53  | 27.54 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.36 | 83.43  | 26.15 |      | 65.0 |         |
|           |                                            | Z | 13.18 | 87.43  | 27.79 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 11.12 | 85.13  | 27.92 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.55  | 81.58  | 26.25 |      | 65.0 |         |
|           |                                            | Z | 9.75  | 82.70  | 26.82 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 10.08 | 80.93  | 21.89 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.48  | 80.06  | 21.41 |      | 65.0 |         |
|           |                                            | Z | 9.49  | 80.06  | 21.16 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 10.01 | 80.58  | 21.71 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.41  | 79.71  | 21.23 |      | 65.0 |         |
|           |                                            | Z | 9.41  | 79.68  | 20.97 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 9.15  | 81.91  | 21.99 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.42  | 80.72  | 21.40 |      | 65.0 |         |
|           |                                            | Z | 8.30  | 80.41  | 21.06 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 8.09  | 77.75  | 20.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.59  | 76.84  | 20.43 |      | 65.0 |         |
|           |                                            | Z | 7.53  | 76.72  | 20.17 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 8.15  | 77.44  | 20.80 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.65  | 76.49  | 20.28 |      | 65.0 |         |
|           |                                            | Z | 7.59  | 76.44  | 20.05 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 9.64  | 82.72  | 22.72 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.97  | 81.70  | 22.24 |      | 65.0 |         |
|           |                                            | Z | 9.02  | 81.83  | 22.13 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 8.73  | 78.92  | 22.34 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.28  | 78.14  | 21.95 |      | 65.0 |         |
|           |                                            | Z | 8.33  | 78.38  | 21.94 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 8.43  | 77.25  | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.98  | 76.39  | 21.00 |      | 65.0 |         |
|           |                                            | Z | 8.08  | 76.82  | 21.08 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 9.50  | 81.63  | 22.75 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.96  | 80.86  | 22.39 |      | 65.0 |         |
|           |                                            | Z | 9.11  | 81.29  | 22.49 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 8.39  | 76.50  | 21.34 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.96  | 75.65  | 20.90 |      | 65.0 |         |
|           |                                            | Z | 8.06  | 76.10  | 21.04 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 8.71  | 77.06  | 21.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.30  | 76.30  | 21.46 |      | 65.0 |         |
|           |                                            | Z | 8.39  | 76.71  | 21.57 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 8.87 | 78.97 | 21.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.43 | 78.29 | 21.57 |      | 65.0 |         |
|           |                                             | Z | 8.56 | 78.72 | 21.69 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 9.52 | 79.84 | 20.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.85 | 78.79 | 20.27 |      | 65.0 |         |
|           |                                             | Z | 8.64 | 78.29 | 19.78 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 9.44 | 79.37 | 20.61 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.77 | 78.30 | 20.01 |      | 65.0 |         |
|           |                                             | Z | 8.53 | 77.74 | 19.49 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 8.57 | 80.68 | 21.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.76 | 79.24 | 20.40 |      | 65.0 |         |
|           |                                             | Z | 7.40 | 78.31 | 19.75 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 8.34 | 78.11 | 21.40 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.86 | 77.25 | 20.94 |      | 65.0 |         |
|           |                                             | Z | 7.86 | 77.31 | 20.79 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 8.39 | 77.94 | 21.36 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.92 | 77.09 | 20.90 |      | 65.0 |         |
|           |                                             | Z | 7.90 | 77.14 | 20.75 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 9.35 | 81.91 | 22.65 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.73 | 80.93 | 22.19 |      | 65.0 |         |
|           |                                             | Z | 8.82 | 81.21 | 22.17 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 8.73 | 78.90 | 22.31 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.27 | 78.11 | 21.92 |      | 65.0 |         |
|           |                                             | Z | 8.33 | 78.35 | 21.92 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 8.43 | 77.25 | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.97 | 76.39 | 21.00 |      | 65.0 |         |
|           |                                             | Z | 8.07 | 76.81 | 21.08 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 9.46 | 81.55 | 22.70 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.92 | 80.75 | 22.34 |      | 65.0 |         |
|           |                                             | Z | 9.07 | 81.19 | 22.44 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 8.60 | 77.04 | 21.49 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.16 | 76.19 | 21.06 |      | 65.0 |         |
|           |                                             | Z | 8.25 | 76.62 | 21.21 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 8.89 | 77.55 | 22.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.48 | 76.82 | 21.65 |      | 65.0 |         |
|           |                                             | Z | 8.57 | 77.20 | 21.76 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 9.07 | 79.14 | 21.70 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.65 | 78.54 | 21.42 |      | 65.0 |         |
|           |                                             | Z | 8.76 | 78.90 | 21.53 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 9.02 | 76.50 | 21.57 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.65 | 75.83 | 21.23 |      | 65.0 |         |
|           |                                             | Z | 8.72 | 76.21 | 21.38 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 8.95 | 76.15 | 21.51 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.58 | 75.47 | 21.16 |      | 65.0 |         |
|           |                                             | Z | 8.67 | 75.86 | 21.32 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 8.82 | 77.11 | 21.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.48 | 76.60 | 20.79 |      | 65.0 |         |
|           |                                             | Z | 8.54 | 76.88 | 20.88 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.69  | 66.50 | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.62  | 65.90 | 15.08 |      | 150.0 |         |
|           |                                                                    | Z | 2.61  | 66.11 | 15.09 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.78  | 68.98 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.61  | 67.12 | 15.02 |      | 150.0 |         |
|           |                                                                    | Z | 1.61  | 67.39 | 15.12 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 6.69  | 71.68 | 15.98 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 6.28  | 70.89 | 15.40 |      | 50.0  |         |
|           |                                                                    | Z | 6.22  | 70.67 | 15.16 |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 9.84  | 80.42 | 21.73 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.33  | 79.68 | 21.28 |      | 50.0  |         |
|           |                                                                    | Z | 8.91  | 78.62 | 20.66 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 10.04 | 80.66 | 21.83 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.51  | 79.89 | 21.37 |      | 50.0  |         |
|           |                                                                    | Z | 9.07  | 78.83 | 20.75 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.82  | 70.55 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.53  | 67.85 | 14.22 |      | 150.0 |         |
|           |                                                                    | Z | 1.49  | 67.91 | 13.99 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 1.05  | 68.04 | 14.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.87  | 65.14 | 12.63 |      | 150.0 |         |
|           |                                                                    | Z | 0.85  | 65.11 | 12.38 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.30  | 72.10 | 16.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.99  | 67.69 | 14.29 |      | 150.0 |         |
|           |                                                                    | Z | 0.97  | 67.76 | 14.08 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 1.73  | 76.59 | 19.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.24  | 70.97 | 16.28 |      | 150.0 |         |
|           |                                                                    | Z | 1.22  | 71.03 | 16.05 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 10.30 | 82.33 | 24.11 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.86  | 81.57 | 23.65 |      | 50.0  |         |
|           |                                                                    | Z | 10.26 | 82.24 | 23.75 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 3.07  | 70.67 | 16.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.85  | 69.32 | 16.16 |      | 150.0 |         |
|           |                                                                    | Z | 2.82  | 69.42 | 16.21 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.95  | 69.42 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.73  | 67.49 | 14.59 |      | 150.0 |         |
|           |                                                                    | Z | 1.67  | 67.42 | 14.33 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 4.16  | 75.23 | 18.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 3.62  | 72.95 | 17.02 |      | 150.0 |         |
|           |                                                                    | Z | 3.79  | 73.98 | 17.20 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 3.24  | 70.49 | 15.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.85  | 68.54 | 14.36 |      | 150.0 |         |
|           |                                                                    | Z | 2.88  | 69.12 | 14.38 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 6.29  | 69.71 | 19.78 | 4.17 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 5.94  | 68.34 | 18.90 |      | 80.0  |         |
|           |                                                                    | Z | 6.29  | 70.13 | 19.82 |      | 80.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 6.76  | 70.27 | 20.51 | 4.96 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 6.41  | 68.86 | 19.59 |      | 80.0  |         |
|           |                                                                    | Z | 6.69  | 70.41 | 20.40 |      | 80.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 6.71  | 70.71 | 20.76 | 4.96  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.29  | 69.07 | 19.72 |       | 80.0  |         |
|           |                                                                     | Z | 6.62  | 70.79 | 20.61 |       | 80.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 6.19  | 69.47 | 19.65 | 4.17  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.87  | 68.17 | 18.80 |       | 80.0  |         |
|           |                                                                     | Z | 6.10  | 69.53 | 19.49 |       | 80.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 9.95  | 82.67 | 26.69 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 10.15 | 84.21 | 27.39 |       | 50.0  |         |
|           |                                                                     | Z | 10.19 | 83.14 | 26.44 |       | 50.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 7.82  | 75.69 | 23.92 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.85  | 72.18 | 21.91 |       | 50.0  |         |
|           |                                                                     | Z | 7.86  | 76.03 | 23.76 |       | 50.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 8.17  | 76.98 | 24.26 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.98  | 72.96 | 22.07 |       | 50.0  |         |
|           |                                                                     | Z | 8.22  | 77.31 | 24.10 |       | 50.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 8.34  | 77.70 | 24.59 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.04  | 73.38 | 22.27 |       | 50.0  |         |
|           |                                                                     | Z | 8.42  | 78.07 | 24.43 |       | 50.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 7.98  | 76.05 | 24.09 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.97  | 72.49 | 22.06 |       | 50.0  |         |
|           |                                                                     | Z | 8.04  | 76.48 | 23.98 |       | 50.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 7.91  | 76.10 | 23.99 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.87  | 72.41 | 21.91 |       | 50.0  |         |
|           |                                                                     | Z | 7.97  | 76.48 | 23.85 |       | 50.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.42  | 69.92 | 16.58 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.19  | 68.66 | 15.86 |       | 150.0 |         |
|           |                                                                     | Z | 3.16  | 68.73 | 15.89 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 7.40  | 77.32 | 18.57 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 6.67  | 76.09 | 18.00 |       | 70.0  |         |
|           |                                                                     | Z | 6.86  | 76.47 | 18.15 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 8.58  | 80.83 | 22.15 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 7.73  | 79.50 | 21.60 |       | 30.0  |         |
|           |                                                                     | Z | 7.82  | 79.66 | 21.66 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.19  | 65.11 | 15.97 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.12  | 63.96 | 15.01 |       | 150.0 |         |
|           |                                                                     | Z | 1.14  | 64.21 | 15.10 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.86  | 66.98 | 16.54 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.80  | 66.73 | 16.33 |       | 150.0 |         |
|           |                                                                     | Z | 4.76  | 66.85 | 16.34 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.86  | 66.98 | 16.54 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.80  | 66.73 | 16.33 |       | 150.0 |         |
|           |                                                                     | Z | 4.76  | 66.85 | 16.34 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.98  | 67.24 | 16.44 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.91  | 66.97 | 16.23 |       | 150.0 |         |
|           |                                                                     | Z | 4.85  | 67.07 | 16.24 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.56  | 67.23 | 16.48 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.51  | 67.02 | 16.31 |       | 150.0 |         |
|           |                                                                     | Z | 5.49  | 67.21 | 16.38 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.88   | 67.86  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.83   | 67.64  | 16.45 |      | 150.0 |         |
|           |                                                                                 | Z | 5.78   | 67.69  | 16.45 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.82   | 70.55  | 15.88 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.53   | 67.85  | 14.22 |      | 115.0 |         |
|           |                                                                                 | Z | 1.49   | 67.91  | 13.99 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.82   | 70.55  | 15.88 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.53   | 67.85  | 14.22 |      | 115.0 |         |
|           |                                                                                 | Z | 1.49   | 67.91  | 13.99 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 54.89  | 116.02 | 30.72 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 19.65  | 100.06 | 26.33 |      | 100.0 |         |
|           |                                                                                 | Z | 53.88  | 114.30 | 29.69 |      | 100.0 |         |
| 10410-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 120.18 | 31.16 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 120.00 | 30.94 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 120.41 | 31.02 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.01   | 63.38  | 15.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.97   | 62.46  | 14.12 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 62.70  | 14.21 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.74   | 66.79  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.69   | 66.54  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.64   | 66.66  | 16.16 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.74   | 66.79  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.69   | 66.54  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.64   | 66.66  | 16.16 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.72   | 66.91  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.67   | 66.66  | 16.14 |      | 150.0 |         |
|           |                                                                                 | Z | 4.62   | 66.78  | 16.15 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.75   | 66.88  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.70   | 66.63  | 16.16 |      | 150.0 |         |
|           |                                                                                 | Z | 4.65   | 66.75  | 16.17 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.88   | 66.90  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.83   | 66.66  | 16.18 |      | 150.0 |         |
|           |                                                                                 | Z | 4.78   | 66.77  | 16.19 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 5.11   | 67.32  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.05   | 67.07  | 16.34 |      | 150.0 |         |
|           |                                                                                 | Z | 4.98   | 67.15  | 16.34 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 5.01   | 67.24  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.95   | 66.99  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 4.89   | 67.08  | 16.30 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.58   | 67.64  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.54   | 67.43  | 16.50 |      | 150.0 |         |
|           |                                                                                 | Z | 5.47   | 67.45  | 16.48 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.60   | 67.67  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.55   | 67.46  | 16.51 |      | 150.0 |         |
|           |                                                                                 | Z | 5.48   | 67.49  | 16.50 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.62   | 67.70  | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.57   | 67.46  | 16.51 |      | 150.0 |         |
|           |                                                                | Z | 5.50   | 67.49  | 16.49 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.38   | 69.67  | 17.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.33   | 69.58  | 17.80 |      | 150.0 |         |
|           |                                                                | Z | 4.20   | 69.45  | 17.56 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.52   | 67.35  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.44   | 67.04  | 16.20 |      | 150.0 |         |
|           |                                                                | Z | 4.37   | 67.16  | 16.19 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.80   | 67.28  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.73   | 67.00  | 16.25 |      | 150.0 |         |
|           |                                                                | Z | 4.66   | 67.10  | 16.25 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 5.03   | 67.30  | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.97   | 67.05  | 16.32 |      | 150.0 |         |
|           |                                                                | Z | 4.90   | 67.13  | 16.32 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.44   | 70.22  | 17.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.39   | 70.14  | 17.76 |      | 150.0 |         |
|           |                                                                | Z | 4.25   | 70.00  | 17.47 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.04 | 31.10 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 119.86 | 30.88 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 120.26 | 30.96 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.84   | 67.38  | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.74   | 66.97  | 15.70 |      | 150.0 |         |
|           |                                                                | Z | 3.66   | 67.07  | 15.61 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.32   | 67.11  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.24   | 66.80  | 16.05 |      | 150.0 |         |
|           |                                                                | Z | 4.18   | 66.92  | 16.03 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.56   | 67.09  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.50   | 66.80  | 16.13 |      | 150.0 |         |
|           |                                                                | Z | 4.44   | 66.90  | 16.13 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.73   | 67.04  | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.68   | 66.77  | 16.16 |      | 150.0 |         |
|           |                                                                | Z | 4.63   | 66.86  | 16.16 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.78   | 67.68  | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.67   | 67.21  | 15.46 |      | 150.0 |         |
|           |                                                                | Z | 3.58   | 67.29  | 15.33 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.44   | 68.30  | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.39   | 68.08  | 16.70 |      | 150.0 |         |
|           |                                                                | Z | 6.33   | 68.10  | 16.68 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.88   | 65.45  | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.85   | 65.19  | 15.88 |      | 150.0 |         |
|           |                                                                | Z | 3.83   | 65.30  | 15.89 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.99   | 69.06  | 17.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.94   | 68.99  | 17.12 |      | 150.0 |         |
|           |                                                                | Z | 3.88   | 69.16  | 16.95 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.14   | 66.79  | 17.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.17   | 67.07  | 17.77 |      | 150.0 |         |
|           |                                                                | Z | 5.03   | 67.03  | 17.57 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.01   | 70.18  | 17.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.84   | 66.63  | 14.95 |      | 150.0 |         |
|           |                                                                   | Z | 0.86   | 67.07  | 15.16 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 122.05 | 32.10 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 121.55 | 31.74 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 122.65 | 32.14 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.61 | 26.61 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 94.23  | 109.23 | 26.02 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 110.18 | 26.15 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 78.75  | 105.62 | 24.90 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 29.03  | 93.62  | 21.69 |      | 80.0  |         |
|           |                                                                   | Z | 35.25  | 96.07  | 22.21 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 120.54 | 31.26 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 119.94 | 30.85 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.04 | 31.24 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 110.25 | 26.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 50.78  | 101.60 | 24.13 |      | 80.0  |         |
|           |                                                                   | Z | 70.19  | 105.68 | 25.02 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 47.84  | 99.56  | 23.37 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.27  | 88.73  | 20.29 |      | 80.0  |         |
|           |                                                                   | Z | 23.58  | 91.30  | 20.90 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 120.70 | 31.33 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.11 | 30.92 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.21 | 31.32 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 110.36 | 26.47 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 58.61  | 103.38 | 24.58 |      | 80.0  |         |
|           |                                                                   | Z | 81.66  | 107.55 | 25.48 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 49.33  | 99.92  | 23.45 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.62  | 88.94  | 20.35 |      | 80.0  |         |
|           |                                                                   | Z | 24.11  | 91.56  | 20.96 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 120.72 | 31.34 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.13 | 30.93 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.23 | 31.32 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 110.32 | 26.45 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 58.86  | 103.40 | 24.58 |      | 80.0  |         |
|           |                                                                   | Z | 82.23  | 107.60 | 25.48 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 49.97  | 100.04 | 23.47 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.65  | 88.94  | 20.34 |      | 80.0  |         |
|           |                                                                   | Z | 24.22  | 91.59  | 20.96 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 120.70 | 31.33 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.11 | 30.91 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.21 | 31.31 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 110.33 | 26.46 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 57.97  | 103.23 | 24.54 |      | 80.0  |         |
|           |                                                                   | Z | 80.96  | 107.43 | 25.44 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 49.03  | 99.83  | 23.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.43  | 88.82  | 20.31 |      | 80.0  |         |
|           |                                                                   | Z | 23.91  | 91.46  | 20.92 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 110.21 | 26.40 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 52.60  | 101.98 | 24.20 |      | 80.0 |         |
|           |                                                                     | Z | 73.44  | 106.17 | 25.12 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 48.33  | 99.64  | 23.36 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 19.20  | 88.67  | 20.26 |      | 80.0 |         |
|           |                                                                     | Z | 23.64  | 91.30  | 20.88 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 11.17  | 89.11  | 24.99 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.72   | 86.78  | 24.01 |      | 80.0 |         |
|           |                                                                     | Z | 11.19  | 89.29  | 24.70 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 12.30  | 86.18  | 22.71 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 10.82  | 84.18  | 21.84 |      | 80.0 |         |
|           |                                                                     | Z | 12.05  | 85.88  | 22.16 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 11.45  | 84.51  | 21.90 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 10.02  | 82.49  | 21.00 |      | 80.0 |         |
|           |                                                                     | Z | 10.82  | 83.70  | 21.17 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.11   | 78.83  | 20.21 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.96   | 75.77  | 18.86 |      | 80.0 |         |
|           |                                                                     | Z | 4.90   | 75.64  | 18.57 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 8.68   | 81.26  | 21.25 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.88   | 79.76  | 20.50 |      | 80.0 |         |
|           |                                                                     | Z | 7.94   | 79.89  | 20.29 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 8.31   | 80.37  | 20.94 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.54   | 78.89  | 20.20 |      | 80.0 |         |
|           |                                                                     | Z | 7.52   | 78.88  | 19.94 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.32   | 79.32  | 20.87 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.23   | 76.46  | 19.63 |      | 80.0 |         |
|           |                                                                     | Z | 5.24   | 76.63  | 19.55 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.11   | 73.35  | 18.47 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.61   | 71.85  | 17.68 |      | 80.0 |         |
|           |                                                                     | Z | 4.56   | 71.81  | 17.45 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.09   | 72.96  | 18.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.61   | 71.53  | 17.56 |      | 80.0 |         |
|           |                                                                     | Z | 4.55   | 71.46  | 17.31 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.25   | 77.69  | 20.57 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.40   | 75.44  | 19.60 |      | 80.0 |         |
|           |                                                                     | Z | 5.42   | 75.71  | 19.64 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.17   | 72.45  | 18.81 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.77   | 71.23  | 18.18 |      | 80.0 |         |
|           |                                                                     | Z | 4.76   | 71.40  | 18.15 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.22   | 72.07  | 18.69 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.84   | 70.95  | 18.11 |      | 80.0 |         |
|           |                                                                     | Z | 4.84   | 71.14  | 18.08 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.95   | 75.11  | 19.68 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.36   | 73.49  | 18.94 |      | 80.0 |         |
|           |                                                                     | Z | 5.37   | 73.72  | 18.99 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.37   | 71.35  | 18.56 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.04   | 70.36  | 18.04 |      | 80.0 |         |
|           |                                                                     | Z | 5.04   | 70.57  | 18.06 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.42 | 71.12 | 18.49 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.10 | 70.19 | 18.00 |      | 80.0 |         |
|           |                                                                      | Z | 5.10 | 70.40 | 18.02 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.67 | 77.03 | 20.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.89 | 75.13 | 19.38 |      | 80.0 |         |
|           |                                                                      | Z | 5.87 | 75.25 | 19.40 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.50 | 71.99 | 18.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.13 | 70.92 | 18.24 |      | 80.0 |         |
|           |                                                                      | Z | 5.12 | 71.07 | 18.25 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.52 | 71.52 | 18.64 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.18 | 70.54 | 18.14 |      | 80.0 |         |
|           |                                                                      | Z | 5.17 | 70.71 | 18.15 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.20 | 76.63 | 18.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.16 | 73.44 | 17.44 |      | 80.0 |         |
|           |                                                                      | Z | 3.95 | 72.68 | 16.81 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.23 | 71.07 | 16.05 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.57 | 68.80 | 14.82 |      | 80.0 |         |
|           |                                                                      | Z | 3.29 | 67.79 | 14.00 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.21 | 70.66 | 15.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.55 | 68.42 | 14.55 |      | 80.0 |         |
|           |                                                                      | Z | 3.25 | 67.34 | 13.69 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.06 | 78.01 | 20.54 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.15 | 75.54 | 19.46 |      | 80.0 |         |
|           |                                                                      | Z | 5.19 | 75.83 | 19.46 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.11 | 72.83 | 18.54 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.66 | 71.48 | 17.83 |      | 80.0 |         |
|           |                                                                      | Z | 4.64 | 71.57 | 17.69 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.13 | 72.53 | 18.39 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.71 | 71.27 | 17.72 |      | 80.0 |         |
|           |                                                                      | Z | 4.68 | 71.36 | 17.57 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.18 | 77.51 | 20.49 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.34 | 75.27 | 19.52 |      | 80.0 |         |
|           |                                                                      | Z | 5.37 | 75.55 | 19.57 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.15 | 72.39 | 18.77 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.75 | 71.16 | 18.14 |      | 80.0 |         |
|           |                                                                      | Z | 4.75 | 71.34 | 18.11 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.19 | 72.00 | 18.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.82 | 70.87 | 18.06 |      | 80.0 |         |
|           |                                                                      | Z | 4.82 | 71.07 | 18.04 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.62 | 76.90 | 20.14 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.85 | 75.00 | 19.32 |      | 80.0 |         |
|           |                                                                      | Z | 5.83 | 75.14 | 19.34 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.48 | 71.94 | 18.75 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.11 | 70.86 | 18.21 |      | 80.0 |         |
|           |                                                                      | Z | 5.11 | 71.02 | 18.22 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.50 | 71.47 | 18.61 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.17 | 70.49 | 18.10 |      | 80.0  |         |
|           |                                                                     | Z | 5.16 | 70.66 | 18.12 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 6.45 | 74.61 | 19.28 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.91 | 73.26 | 18.67 |      | 80.0  |         |
|           |                                                                     | Z | 5.88 | 73.34 | 18.68 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.89 | 71.35 | 18.56 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.57 | 70.45 | 18.11 |      | 80.0  |         |
|           |                                                                     | Z | 5.55 | 70.59 | 18.13 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.88 | 70.97 | 18.46 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.58 | 70.13 | 18.03 |      | 80.0  |         |
|           |                                                                     | Z | 5.57 | 70.28 | 18.06 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 7.08 | 76.75 | 19.94 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.33 | 75.02 | 19.19 |      | 80.0  |         |
|           |                                                                     | Z | 6.29 | 75.06 | 19.18 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.86 | 71.94 | 18.77 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.50 | 70.93 | 18.27 |      | 80.0  |         |
|           |                                                                     | Z | 5.49 | 71.03 | 18.28 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.78 | 71.32 | 18.59 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.46 | 70.40 | 18.13 |      | 80.0  |         |
|           |                                                                     | Z | 5.45 | 70.53 | 18.14 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.98 | 63.62 | 15.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.94 | 62.61 | 14.14 |      | 150.0 |         |
|           |                                                                     | Z | 0.95 | 62.86 | 14.24 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.81 | 76.11 | 19.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.51 | 67.70 | 15.09 |      | 150.0 |         |
|           |                                                                     | Z | 0.54 | 68.52 | 15.55 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.86 | 66.23 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.78 | 64.24 | 14.48 |      | 150.0 |         |
|           |                                                                     | Z | 0.80 | 64.56 | 14.64 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.74 | 66.88 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.69 | 66.63 | 16.14 |      | 150.0 |         |
|           |                                                                     | Z | 4.64 | 66.73 | 16.14 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.99 | 67.21 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.92 | 66.95 | 16.29 |      | 150.0 |         |
|           |                                                                     | Z | 4.86 | 67.03 | 16.29 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.83 | 67.19 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.77 | 66.92 | 16.21 |      | 150.0 |         |
|           |                                                                     | Z | 4.70 | 66.99 | 16.20 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.76 | 67.20 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.70 | 66.92 | 16.19 |      | 150.0 |         |
|           |                                                                     | Z | 4.63 | 66.99 | 16.18 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.79 | 67.09 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.73 | 66.84 | 16.20 |      | 150.0 |         |
|           |                                                                     | Z | 4.68 | 66.98 | 16.22 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.67 | 67.04 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.60 | 66.76 | 16.06 |      | 150.0 |         |
|           |                                                            | Z | 4.55 | 66.86 | 16.07 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.75 | 67.08 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.69 | 66.83 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 4.63 | 66.94 | 16.21 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.69 | 66.11 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.63 | 65.84 | 15.78 |      | 150.0 |         |
|           |                                                            | Z | 4.59 | 65.95 | 15.79 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.91 | 66.53 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.85 | 66.26 | 15.93 |      | 150.0 |         |
|           |                                                            | Z | 4.79 | 66.36 | 15.94 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.83 | 66.52 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.76 | 66.23 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.70 | 66.32 | 15.88 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.85 | 66.54 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.78 | 66.26 | 15.92 |      | 150.0 |         |
|           |                                                            | Z | 4.72 | 66.35 | 15.92 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.85 | 66.54 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.78 | 66.26 | 15.92 |      | 150.0 |         |
|           |                                                            | Z | 4.72 | 66.35 | 15.92 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.87 | 66.71 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.80 | 66.41 | 15.94 |      | 150.0 |         |
|           |                                                            | Z | 4.73 | 66.49 | 15.94 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.72 | 66.60 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.64 | 66.28 | 15.89 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.34 | 15.88 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.86 | 66.55 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.79 | 66.27 | 15.89 |      | 150.0 |         |
|           |                                                            | Z | 4.73 | 66.36 | 15.90 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.35 | 66.74 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.30 | 66.49 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 5.24 | 66.53 | 16.00 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.43 | 66.88 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.37 | 66.63 | 16.06 |      | 150.0 |         |
|           |                                                            | Z | 5.31 | 66.67 | 16.05 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.29 | 66.86 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.23 | 66.60 | 16.03 |      | 150.0 |         |
|           |                                                            | Z | 5.18 | 66.65 | 16.02 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.36 | 66.83 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.30 | 66.58 | 16.02 |      | 150.0 |         |
|           |                                                            | Z | 5.24 | 66.64 | 16.02 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.49 | 66.94 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.43 | 66.69 | 16.12 |      | 150.0 |         |
|           |                                                            | Z | 5.36 | 66.72 | 16.11 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.37 | 66.86 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.31 | 66.60 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 5.26 | 66.66 | 16.09 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.37 | 66.83 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.31 | 66.55 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.24 | 66.56 | 16.04 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.51 | 66.80 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.56 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.62 | 16.08 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.61 | 66.84 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.58 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.48 | 66.63 | 16.11 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.61 | 66.83 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.56 | 66.59 | 15.99 |      | 150.0 |         |
|           |                                                    | Z | 5.52 | 66.64 | 15.99 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.83 | 67.22 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 67.01 | 16.14 |      | 150.0 |         |
|           |                                                    | Z | 5.73 | 67.07 | 16.14 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.73 | 67.15 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.90 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.62 | 66.93 | 16.09 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.83 | 67.25 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.77 | 66.99 | 16.14 |      | 150.0 |         |
|           |                                                    | Z | 5.70 | 67.00 | 16.12 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 6.16 | 68.40 | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.13 | 68.23 | 16.73 |      | 150.0 |         |
|           |                                                    | Z | 6.04 | 68.18 | 16.69 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.74 | 67.08 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 66.84 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.63 | 66.88 | 16.07 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.77 | 67.22 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.72 | 66.98 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.65 | 66.98 | 16.08 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.66 | 66.96 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.61 | 66.71 | 16.00 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.73 | 15.97 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.76 | 66.99 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.70 | 66.75 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 5.65 | 66.79 | 16.03 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 6.01 | 67.22 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 67.00 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.92 | 67.04 | 16.09 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.19 | 67.64 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.14 | 67.39 | 16.27 |      | 150.0 |         |
|           |                                                    | Z | 6.07 | 67.38 | 16.24 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.18 | 67.58 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.13 | 67.35 | 16.25 |      | 150.0 |         |
|           |                                                    | Z | 6.08 | 67.39 | 16.24 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.18 | 67.59 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.13 | 67.35 | 16.27 |      | 150.0 |         |
|           |                                                    | Z | 6.07 | 67.36 | 16.25 |      | 150.0 |         |

|           |                                                                 |   |       |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.25  | 67.80  | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.20  | 67.56  | 16.39 |      | 150.0 |         |
|           |                                                                 | Z | 6.13  | 67.56  | 16.36 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.25  | 67.63  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.19  | 67.37  | 16.33 |      | 150.0 |         |
|           |                                                                 | Z | 6.12  | 67.38  | 16.31 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 6.15  | 67.57  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.09  | 67.32  | 16.35 |      | 150.0 |         |
|           |                                                                 | Z | 6.04  | 67.34  | 16.33 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.33  | 68.13  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.28  | 67.89  | 16.63 |      | 150.0 |         |
|           |                                                                 | Z | 6.20  | 67.86  | 16.59 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.57  | 68.37  | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.55  | 68.21  | 16.74 |      | 150.0 |         |
|           |                                                                 | Z | 6.52  | 68.35  | 16.79 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 5.09  | 67.05  | 16.56 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.04  | 66.80  | 16.35 |      | 150.0 |         |
|           |                                                                 | Z | 4.99  | 66.92  | 16.37 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.37  | 67.55  | 16.88 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.31  | 67.30  | 16.68 |      | 150.0 |         |
|           |                                                                 | Z | 5.24  | 67.38  | 16.68 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.20  | 67.44  | 16.72 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.14  | 67.17  | 16.51 |      | 150.0 |         |
|           |                                                                 | Z | 5.08  | 67.26  | 16.52 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.22  | 67.76  | 17.01 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.16  | 67.53  | 16.82 |      | 150.0 |         |
|           |                                                                 | Z | 5.09  | 67.58  | 16.80 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 5.11  | 67.15  | 16.48 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.05  | 66.88  | 16.25 |      | 150.0 |         |
|           |                                                                 | Z | 5.00  | 67.04  | 16.31 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.15  | 67.74  | 17.00 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.09  | 67.52  | 16.83 |      | 150.0 |         |
|           |                                                                 | Z | 5.03  | 67.57  | 16.81 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.20  | 67.58  | 16.95 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.14  | 67.36  | 16.77 |      | 150.0 |         |
|           |                                                                 | Z | 5.08  | 67.46  | 16.78 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.41  | 66.77  | 16.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.31  | 65.36  | 15.71 |      | 130.0 |         |
|           |                                                                 | Z | 1.33  | 65.68  | 15.83 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.44  | 67.46  | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.33  | 65.94  | 16.04 |      | 130.0 |         |
|           |                                                                 | Z | 1.35  | 66.24  | 16.15 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 14.90 | 112.90 | 30.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 2.52  | 84.17  | 21.53 |      | 130.0 |         |
|           |                                                                 | Z | 2.93  | 86.36  | 22.30 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.82  | 75.10  | 20.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.52  | 71.65  | 18.64 |      | 130.0 |         |
|           |                                                                 | Z | 1.54  | 71.84  | 18.68 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.91 | 66.92 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86 | 66.67 | 16.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 66.80 | 16.47 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.94 | 67.06 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.88 | 66.82 | 16.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.84 | 66.94 | 16.52 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.19 | 67.42 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.13 | 67.18 | 16.70 |      | 130.0 |         |
|           |                                                                 | Z | 5.07 | 67.27 | 16.70 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 5.08 | 67.57 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.02 | 67.33 | 16.78 |      | 130.0 |         |
|           |                                                                 | Z | 4.96 | 67.40 | 16.77 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.88 | 67.07 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 66.76 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.75 | 66.88 | 16.21 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.92 | 67.00 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 66.70 | 16.17 |      | 130.0 |         |
|           |                                                                 | Z | 4.80 | 66.86 | 16.22 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 5.00 | 67.69 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.93 | 67.42 | 16.74 |      | 130.0 |         |
|           |                                                                 | Z | 4.86 | 67.47 | 16.72 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.84 | 66.84 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 66.51 | 15.99 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.67 | 16.04 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.91 | 66.92 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86 | 66.67 | 16.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 66.80 | 16.47 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.94 | 67.06 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.88 | 66.82 | 16.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.84 | 66.94 | 16.52 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 5.19 | 67.42 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.13 | 67.18 | 16.70 |      | 130.0 |         |
|           |                                                                 | Z | 5.07 | 67.27 | 16.70 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 5.08 | 67.57 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.02 | 67.33 | 16.78 |      | 130.0 |         |
|           |                                                                 | Z | 4.96 | 67.40 | 16.77 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.88 | 67.07 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 66.76 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.75 | 66.88 | 16.21 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.92 | 67.00 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 66.70 | 16.17 |      | 130.0 |         |
|           |                                                                 | Z | 4.80 | 66.86 | 16.22 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 5.00 | 67.69 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.93 | 67.42 | 16.74 |      | 130.0 |         |
|           |                                                                 | Z | 4.86 | 67.47 | 16.72 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.84 | 66.84 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 66.51 | 15.99 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.67 | 16.04 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 5.06 | 66.96 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.01 | 66.74 | 16.55 |      | 130.0 |         |
|           |                                                       | Z | 4.96 | 66.85 | 16.56 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.25 | 67.31 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.19 | 67.08 | 16.67 |      | 130.0 |         |
|           |                                                       | Z | 5.13 | 67.19 | 16.68 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.19 | 67.30 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.13 | 67.05 | 16.59 |      | 130.0 |         |
|           |                                                       | Z | 5.07 | 67.15 | 16.60 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.23 | 67.42 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.17 | 67.18 | 16.71 |      | 130.0 |         |
|           |                                                       | Z | 5.11 | 67.28 | 16.72 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.22 | 67.43 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.16 | 67.17 | 16.63 |      | 130.0 |         |
|           |                                                       | Z | 5.09 | 67.26 | 16.64 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.15 | 67.41 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.09 | 67.15 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 5.03 | 67.27 | 16.64 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 5.11 | 67.38 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.04 | 67.11 | 16.54 |      | 130.0 |         |
|           |                                                       | Z | 4.98 | 67.21 | 16.55 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 5.09 | 67.62 | 17.00 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.02 | 67.35 | 16.79 |      | 130.0 |         |
|           |                                                       | Z | 4.96 | 67.41 | 16.78 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.73 | 67.62 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.68 | 67.40 | 16.77 |      | 130.0 |         |
|           |                                                       | Z | 5.63 | 67.48 | 16.78 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 6.00 | 68.43 | 17.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.96 | 68.23 | 17.16 |      | 130.0 |         |
|           |                                                       | Z | 5.85 | 68.13 | 17.09 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.81 | 67.92 | 17.08 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.76 | 67.71 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.69 | 67.73 | 16.90 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.94 | 68.04 | 17.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.88 | 67.79 | 16.88 |      | 130.0 |         |
|           |                                                       | Z | 5.78 | 67.75 | 16.84 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 6.05 | 68.39 | 17.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.99 | 68.16 | 17.18 |      | 130.0 |         |
|           |                                                       | Z | 5.87 | 68.05 | 17.10 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.75 | 67.62 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.70 | 67.40 | 16.79 |      | 130.0 |         |
|           |                                                       | Z | 5.64 | 67.44 | 16.79 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.86 | 67.93 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.81 | 67.71 | 16.95 |      | 130.0 |         |
|           |                                                       | Z | 5.75 | 67.77 | 16.96 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.62 | 67.39 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.58 | 67.18 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.25 | 16.58 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.88 | 66.23 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.82 | 65.98 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 4.78 | 66.10 | 16.14 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 5.11 | 66.66 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.05 | 66.41 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 4.99 | 66.52 | 16.30 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 5.01 | 66.58 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.94 | 66.31 | 16.16 |      | 130.0 |         |
|           |                                                   | Z | 4.89 | 66.41 | 16.17 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 5.06 | 66.72 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.99 | 66.46 | 16.31 |      | 130.0 |         |
|           |                                                   | Z | 4.94 | 66.55 | 16.32 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.99 | 66.60 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.92 | 66.32 | 16.19 |      | 130.0 |         |
|           |                                                   | Z | 4.86 | 66.40 | 16.19 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 5.01 | 66.73 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.94 | 66.45 | 16.21 |      | 130.0 |         |
|           |                                                   | Z | 4.88 | 66.56 | 16.23 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 5.03 | 66.69 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.96 | 66.39 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 4.90 | 66.50 | 16.15 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.95 | 66.85 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.88 | 66.56 | 16.35 |      | 130.0 |         |
|           |                                                   | Z | 4.82 | 66.62 | 16.33 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 5.00 | 66.42 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.93 | 66.13 | 15.97 |      | 130.0 |         |
|           |                                                   | Z | 4.87 | 66.26 | 16.00 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.54 | 66.86 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.49 | 66.62 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 5.43 | 66.68 | 16.35 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.61 | 66.97 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.56 | 66.74 | 16.38 |      | 130.0 |         |
|           |                                                   | Z | 5.49 | 66.78 | 16.38 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.50 | 67.03 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.44 | 66.79 | 16.42 |      | 130.0 |         |
|           |                                                   | Z | 5.39 | 66.84 | 16.42 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.52 | 66.85 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.47 | 66.61 | 16.27 |      | 130.0 |         |
|           |                                                   | Z | 5.41 | 66.69 | 16.29 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.67 | 67.04 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.61 | 66.78 | 16.41 |      | 130.0 |         |
|           |                                                   | Z | 5.54 | 66.82 | 16.40 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.62 | 67.03 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.56 | 66.80 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 5.50 | 66.82 | 16.50 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.61 | 67.13 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.56 | 66.90 | 16.57 |      | 130.0 |         |
|           |                                                   | Z | 5.50 | 66.94 | 16.56 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.54 | 66.86 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.57 | 16.30 |      | 130.0 |         |
|           |                                                    | Z | 5.40 | 66.58 | 16.27 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.69 | 66.89 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.64 | 66.67 | 16.41 |      | 130.0 |         |
|           |                                                    | Z | 5.58 | 66.74 | 16.41 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 6.04 | 67.74 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.03 | 67.66 | 16.95 |      | 130.0 |         |
|           |                                                    | Z | 6.00 | 67.84 | 17.02 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.78 | 66.87 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.73 | 66.65 | 16.29 |      | 130.0 |         |
|           |                                                    | Z | 5.69 | 66.71 | 16.29 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 6.04 | 67.38 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.00 | 67.21 | 16.52 |      | 130.0 |         |
|           |                                                    | Z | 5.95 | 67.28 | 16.53 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.87 | 67.10 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.81 | 66.87 | 16.29 |      | 130.0 |         |
|           |                                                    | Z | 5.76 | 66.92 | 16.30 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.98 | 67.25 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.00 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 5.85 | 66.99 | 16.32 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.60 | 69.22 | 17.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.58 | 69.06 | 17.38 |      | 130.0 |         |
|           |                                                    | Z | 6.45 | 68.96 | 17.32 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.44 | 68.80 | 17.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.38 | 68.59 | 17.32 |      | 130.0 |         |
|           |                                                    | Z | 6.26 | 68.46 | 17.23 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 6.03 | 67.50 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.98 | 67.30 | 16.70 |      | 130.0 |         |
|           |                                                    | Z | 5.91 | 67.29 | 16.66 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 6.01 | 67.47 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.95 | 67.22 | 16.50 |      | 130.0 |         |
|           |                                                    | Z | 5.86 | 67.16 | 16.44 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.97 | 67.40 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.91 | 67.16 | 16.53 |      | 130.0 |         |
|           |                                                    | Z | 5.82 | 67.10 | 16.46 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.85 | 66.78 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.79 | 66.49 | 15.94 |      | 130.0 |         |
|           |                                                    | Z | 5.73 | 66.56 | 15.97 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.18 | 67.27 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.14 | 67.07 | 16.41 |      | 130.0 |         |
|           |                                                    | Z | 6.10 | 67.11 | 16.40 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.39 | 67.76 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.34 | 67.53 | 16.61 |      | 130.0 |         |
|           |                                                    | Z | 6.27 | 67.52 | 16.58 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.36 | 67.63 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.32 | 67.44 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 6.27 | 67.48 | 16.55 |      | 130.0 |         |

|           |                                                        |   |       |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.38  | 67.71  | 16.77 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.33  | 67.49  | 16.62 |       | 130.0 |         |
|           |                                                        | Z | 6.27  | 67.50  | 16.60 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.43  | 67.85  | 16.80 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.38  | 67.63  | 16.63 |       | 130.0 |         |
|           |                                                        | Z | 6.31  | 67.62  | 16.61 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.40  | 67.53  | 16.65 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.35  | 67.30  | 16.49 |       | 130.0 |         |
|           |                                                        | Z | 6.29  | 67.34  | 16.48 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.48  | 67.86  | 16.97 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.42  | 67.63  | 16.81 |       | 130.0 |         |
|           |                                                        | Z | 6.35  | 67.61  | 16.77 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.31  | 67.58  | 16.75 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.25  | 67.34  | 16.57 |       | 130.0 |         |
|           |                                                        | Z | 6.19  | 67.36  | 16.56 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.58  | 68.40  | 17.19 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.53  | 68.15  | 17.01 |       | 130.0 |         |
|           |                                                        | Z | 6.43  | 68.09  | 16.96 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.81  | 68.60  | 17.23 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.79  | 68.43  | 17.09 |       | 130.0 |         |
|           |                                                        | Z | 6.78  | 68.63  | 17.18 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 25.15 | 105.85 | 35.05 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 21.75 | 102.80 | 33.96 |       | 60.0  |         |
|           |                                                        | Z | 30.08 | 111.30 | 36.91 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 26.44 | 107.75 | 35.76 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 22.30 | 104.09 | 34.48 |       | 60.0  |         |
|           |                                                        | Z | 32.07 | 113.59 | 37.73 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.88  | 65.58  | 12.85 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.76  | 63.51  | 11.26 |       | 150.0 |         |
|           |                                                        | Z | 0.73  | 63.36  | 10.94 |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.67  | 68.94  | 17.67 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.45  | 68.16  | 17.20 |       | 80.0  |         |
|           |                                                        | Z | 4.45  | 68.41  | 17.21 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 5.13  | 68.26  | 17.69 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.94  | 67.62  | 17.31 |       | 80.0  |         |
|           |                                                        | Z | 4.95  | 67.85  | 17.35 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 5.04  | 67.95  | 17.68 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.86  | 67.32  | 17.30 |       | 80.0  |         |
|           |                                                        | Z | 4.89  | 67.55  | 17.36 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 5.09  | 68.03  | 17.74 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.92  | 67.39  | 17.35 |       | 80.0  |         |
|           |                                                        | Z | 4.94  | 67.61  | 17.41 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 11.06 | 82.99  | 22.61 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 11.23 | 83.63  | 22.75 |       | 50.0  |         |
|           |                                                        | Z | 10.79 | 82.81  | 22.39 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 18.52 | 92.74  | 24.40 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 20.18 | 94.23  | 24.71 |       | 60.0  |         |
|           |                                                        | Z | 17.35 | 91.74  | 23.89 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 116.44 | 28.66 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 115.80 | 28.20 |      | 80.0  |         |
|           |                             | Z | 100.00 | 115.68 | 28.17 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 117.14 | 27.43 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 115.35 | 26.46 |      | 100.0 |         |
|           |                             | Z | 100.00 | 115.50 | 26.56 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 121.39 | 27.21 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 115.32 | 24.49 |      | 120.0 |         |
|           |                             | Z | 100.00 | 116.43 | 25.01 |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **EX3-7416\_Jul18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7416**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

Calibration date: **July 20, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                              |                                          |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Michael Weber</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br><b>Technical Manager</b>     |               |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                          | Issued: July 21, 2018                                                                              |



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 Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\varphi$   | $\varphi$ rotation around probe axis                                                                                                                    |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM( $f$ )<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7416

Manufactured: March 10, 2016  
Calibrated: July 20, 2018

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.59     | 0.52     | 0.53     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 97.2     | 93.5     | 96.5     |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 149.4    | $\pm 3.3 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 140.2    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 147.9    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms} \cdot \text{V}^{-2}$ | T2<br>$\text{ms} \cdot \text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|---------------------------------------|---------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 29.94    | 230.8    | 37.81                       | 8.573                                 | 0.020                                 | 5.100    | 0.000                 | 0.329                 | 1.005 |
| Y | 35.08    | 270.5    | 37.53                       | 5.275                                 | 0.109                                 | 5.067    | 0.000                 | 0.317                 | 1.010 |
| Z | 37.25    | 278.1    | 35.59                       | 8.445                                 | 0.000                                 | 5.071    | 1.581                 | 0.146                 | 1.007 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter; uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 9.95    | 9.95    | 9.95    | 0.38               | 1.03                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.45    | 9.45    | 9.45    | 0.35               | 0.96                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.37    | 8.37    | 8.37    | 0.40               | 0.84                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.04    | 8.04    | 8.04    | 0.42               | 0.90                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.70    | 7.70    | 7.70    | 0.41               | 0.84                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.25    | 7.25    | 7.25    | 0.45               | 0.81                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.04    | 7.04    | 7.04    | 0.43               | 0.84                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.21    | 5.21    | 5.21    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.75    | 4.75    | 4.75    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.98    | 4.98    | 4.98    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.60    | 9.60    | 9.60    | 0.47               | 0.80                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.40    | 9.40    | 9.40    | 0.46               | 0.85                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.99    | 7.99    | 7.99    | 0.41               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.69    | 7.69    | 7.69    | 0.40               | 0.84                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.49    | 7.49    | 7.49    | 0.39               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.31    | 7.31    | 7.31    | 0.32               | 0.96                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.23    | 7.23    | 7.23    | 0.32               | 0.97                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.61    | 4.61    | 4.61    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.02    | 4.02    | 4.02    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.21    | 4.21    | 4.21    | 0.50               | 1.90                    | ± 13.1 %  |

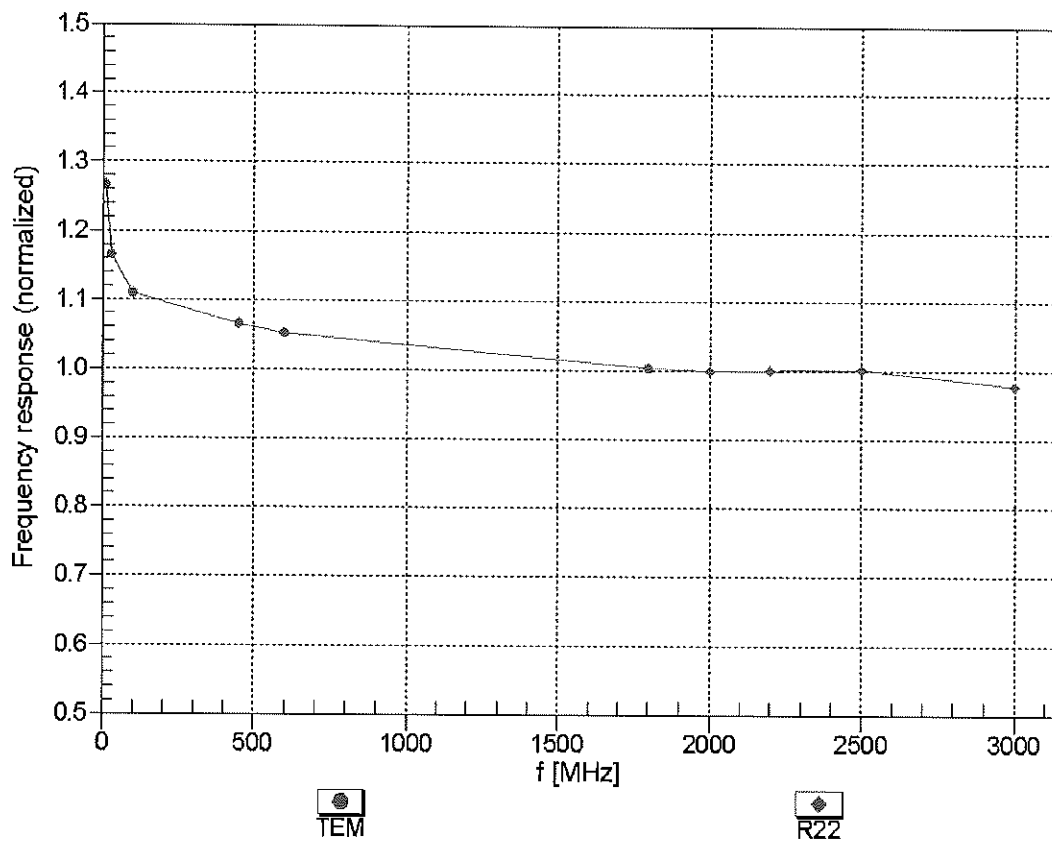
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

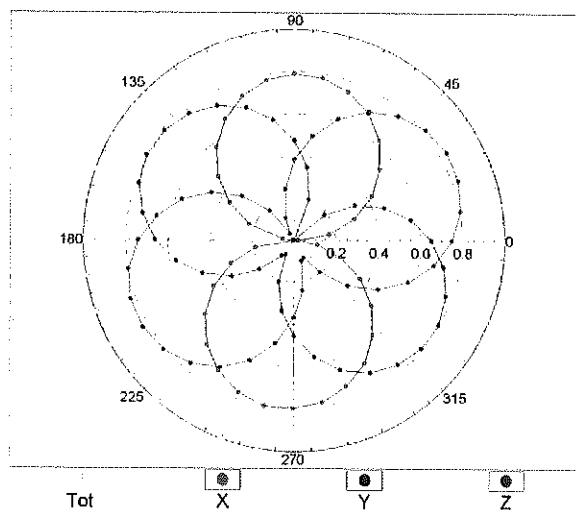
(TEM-Cell:ifi110 EXX, Waveguide: R22)



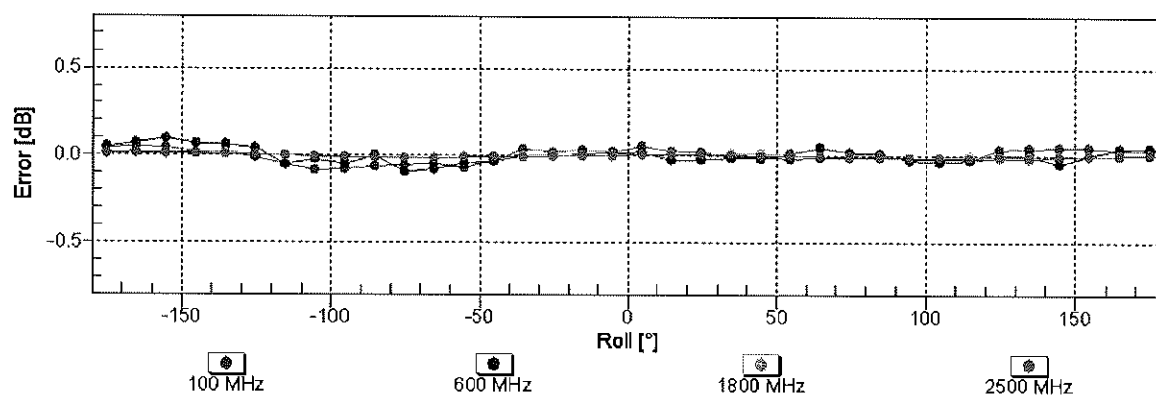
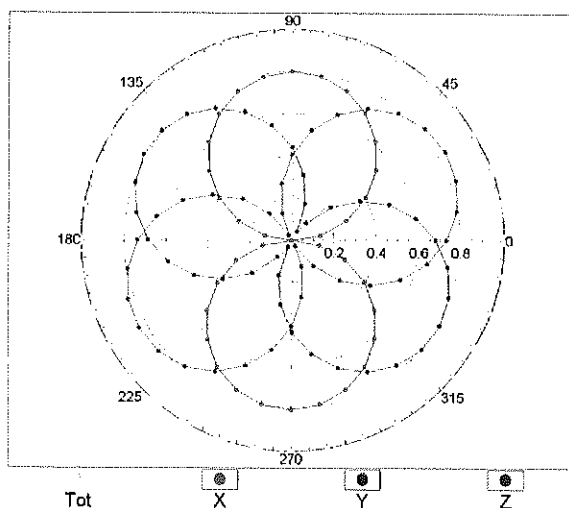
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

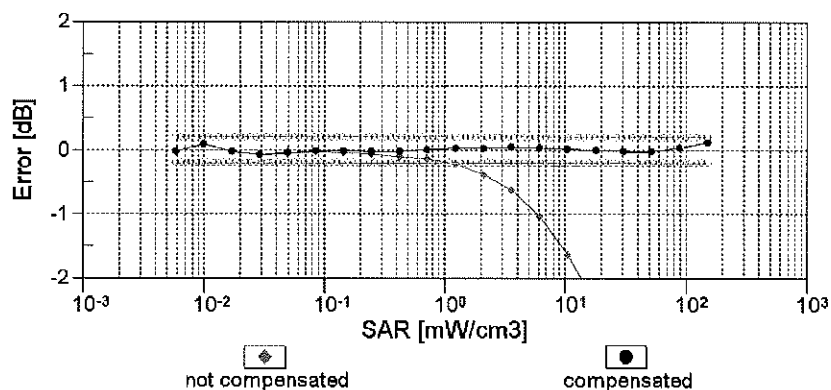
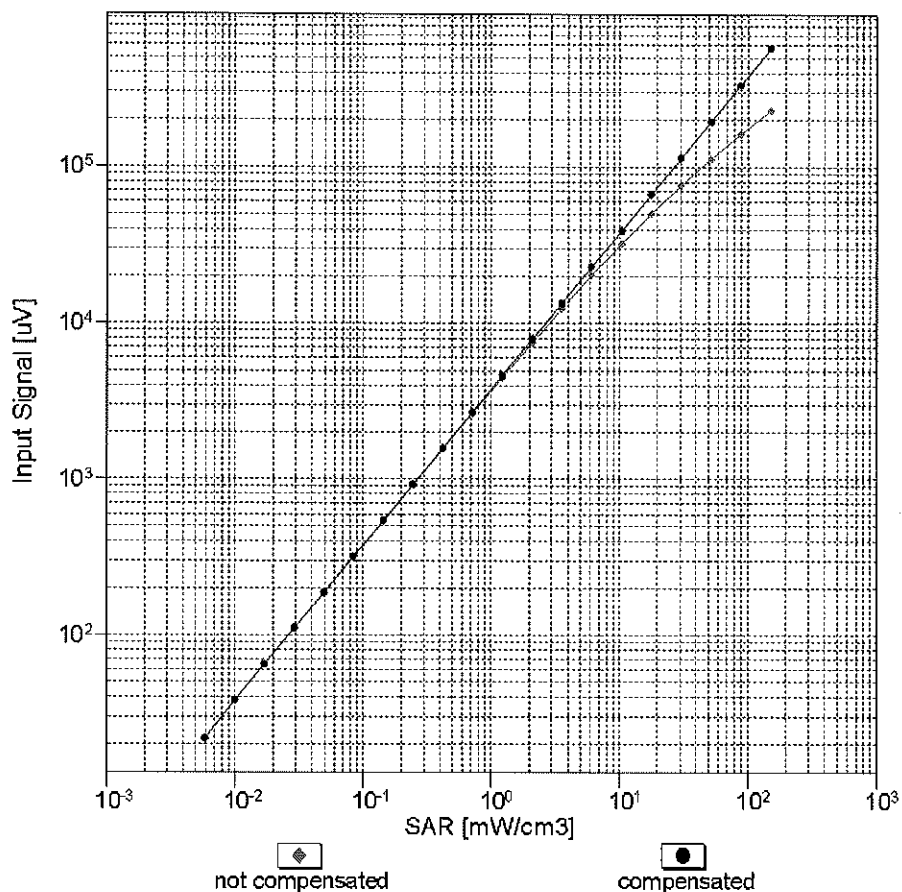


f=1800 MHz,R22



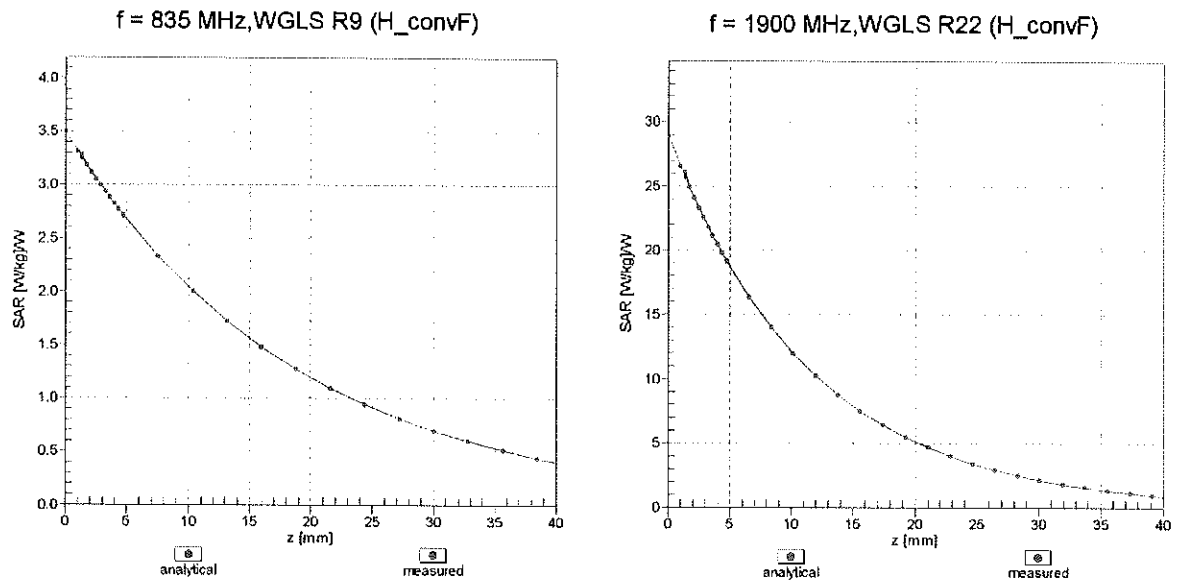
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



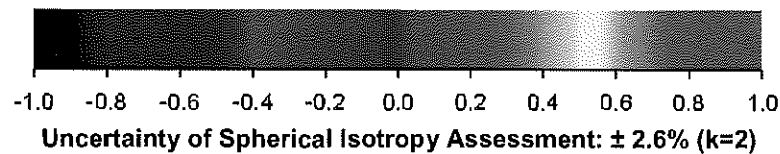
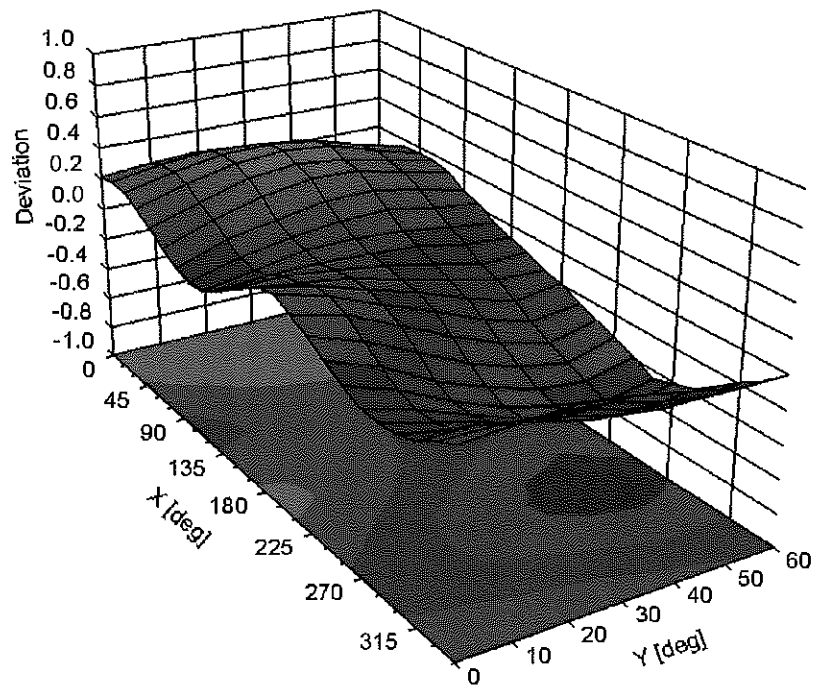
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | -25.3      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Appendix: Modulation Calibration Parameters**

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB/μV | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00       | 1.00  | 0.00    | 149.4    | ± 3.3 %                          |
|               |                                               | Y | 0.00    | 0.00       | 1.00  |         | 140.2    |                                  |
|               |                                               | Z | 0.00    | 0.00       | 1.00  |         | 147.9    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 1.77    | 64.87      | 9.11  | 10.00   | 20.0     | ± 9.6 %                          |
|               |                                               | Y | 1.63    | 63.41      | 8.37  |         | 20.0     |                                  |
|               |                                               | Z | 1.76    | 64.55      | 8.94  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.21    | 72.37      | 17.53 | 0.00    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 0.82    | 64.46      | 12.98 |         | 150.0    |                                  |
|               |                                               | Z | 0.96    | 66.91      | 14.78 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.14    | 65.01      | 16.27 | 0.41    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.05    | 62.41      | 14.04 |         | 150.0    |                                  |
|               |                                               | Z | 1.12    | 63.56      | 15.01 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.63    | 67.24      | 17.52 | 1.46    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 4.63    | 66.45      | 16.87 |         | 150.0    |                                  |
|               |                                               | Z | 4.71    | 66.75      | 17.07 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 114.11     | 26.55 | 9.39    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 109.62     | 24.58 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 111.08     | 25.19 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 112.70     | 25.96 | 9.57    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 108.79     | 24.27 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 110.19     | 24.84 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 120.02     | 28.01 | 6.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 111.41     | 24.12 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 114.41     | 25.59 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 8.40    | 100.18     | 43.08 | 12.57   | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 3.56    | 67.47      | 25.23 |         | 50.0     |                                  |
|               |                                               | Z | 6.34    | 88.37      | 36.90 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 6.98    | 91.66      | 34.92 | 9.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 5.10    | 80.82      | 29.16 |         | 60.0     |                                  |
|               |                                               | Z | 6.93    | 89.58      | 33.16 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 130.74     | 31.67 | 4.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 114.42     | 24.52 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 119.79     | 27.11 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 148.32     | 37.98 | 3.55    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 117.49     | 25.01 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 127.11     | 29.41 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 4.35    | 78.88      | 28.05 | 7.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 3.59    | 72.82      | 24.31 |         | 80.0     |                                  |
|               |                                               | Z | 4.33    | 77.60      | 26.71 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 119.14     | 27.08 | 5.30    | 70.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 109.23     | 22.63 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 113.47     | 24.71 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 161.91     | 40.82 | 1.88    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 96.93      | 15.49 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 123.29     | 26.32 |         | 100.0    |                                  |

|           |                                                     |   |         |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|---------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00  | 280.92 | 82.03 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.12    | 60.00  | 4.04  |       | 100.0 |         |
|           |                                                     | Z | 100.00  | 135.50 | 29.96 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00  | 128.03 | 33.18 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 7.89    | 90.52  | 23.51 |       | 70.0  |         |
|           |                                                     | Z | 61.16   | 122.77 | 32.75 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 100.00  | 117.76 | 27.00 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.49    | 69.12  | 13.56 |       | 100.0 |         |
|           |                                                     | Z | 3.50    | 80.40  | 18.67 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 6.88    | 86.78  | 18.70 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.08    | 66.04  | 11.73 |       | 100.0 |         |
|           |                                                     | Z | 1.93    | 73.40  | 15.69 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00  | 128.79 | 33.51 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 12.46   | 97.66  | 25.74 |       | 70.0  |         |
|           |                                                     | Z | 100.00  | 130.93 | 34.74 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 62.76   | 112.55 | 25.87 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.37    | 68.27  | 13.18 |       | 100.0 |         |
|           |                                                     | Z | 2.98    | 78.43  | 17.97 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 8.30    | 89.45  | 19.68 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.08    | 66.20  | 11.94 |       | 100.0 |         |
|           |                                                     | Z | 1.95    | 73.76  | 15.98 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 0.88    | 65.39  | 10.07 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.87    | 63.82  | 9.91  |       | 150.0 |         |
|           |                                                     | Z | 1.31    | 68.61  | 13.02 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00  | 110.34 | 24.10 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 105.89 | 22.09 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 108.02 | 23.10 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.01    | 123.11 | 1.52  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.01    | 119.53 | 3.43  |       | 150.0 |         |
|           |                                                     | Z | 0.00    | 101.85 | 5.28  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00  | 106.52 | 24.67 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 32.57   | 91.78  | 20.89 |       | 25.0  |         |
|           |                                                     | Z | 100.00  | 105.11 | 24.06 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 1149.99 | 136.06 | 30.09 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 85.21   | 104.98 | 23.36 |       | 40.0  |         |
|           |                                                     | Z | 420.34  | 123.09 | 27.26 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00  | 123.43 | 32.32 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 121.65 | 31.62 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 123.95 | 32.75 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 3.53    | 74.19  | 24.94 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.03    | 69.69  | 21.96 |       | 100.0 |         |
|           |                                                     | Z | 3.51    | 73.08  | 23.72 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.18    | 66.36  | 17.11 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.05    | 63.01  | 14.46 |       | 110.0 |         |
|           |                                                     | Z | 1.13    | 64.45  | 15.58 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00  | 153.23 | 41.70 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.65    | 79.63  | 20.25 |       | 110.0 |         |
|           |                                                     | Z | 14.24   | 114.10 | 31.29 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 4.44 | 94.01 | 28.61 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 1.48 | 71.54 | 18.86 |      | 110.0 |         |
|           |                                                | Z | 2.17 | 78.36 | 22.10 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.41 | 67.11 | 16.83 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.42 | 66.37 | 16.23 |      | 100.0 |         |
|           |                                                | Z | 4.51 | 66.70 | 16.45 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.44 | 67.26 | 16.97 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.44 | 66.46 | 16.33 |      | 100.0 |         |
|           |                                                | Z | 4.52 | 66.80 | 16.56 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.66 | 67.43 | 17.15 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.68 | 66.69 | 16.56 |      | 100.0 |         |
|           |                                                | Z | 4.77 | 67.02 | 16.77 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.54 | 67.28 | 17.27 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.55 | 66.53 | 16.64 |      | 100.0 |         |
|           |                                                | Z | 4.64 | 66.88 | 16.86 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.54 | 67.27 | 17.43 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.56 | 66.53 | 16.81 |      | 100.0 |         |
|           |                                                | Z | 4.65 | 66.89 | 17.03 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 4.83 | 67.58 | 17.95 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.85 | 66.84 | 17.32 |      | 100.0 |         |
|           |                                                | Z | 4.94 | 67.15 | 17.53 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 4.87 | 67.55 | 18.17 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.87 | 66.73 | 17.49 |      | 100.0 |         |
|           |                                                | Z | 4.96 | 67.06 | 17.70 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 4.92 | 67.54 | 18.34 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.94 | 66.78 | 17.69 |      | 100.0 |         |
|           |                                                | Z | 5.03 | 67.10 | 17.91 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.73 | 67.33 | 17.85 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.52 | 17.18 |      | 100.0 |         |
|           |                                                | Z | 4.80 | 66.81 | 17.37 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.68 | 67.58 | 18.08 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.66 | 66.72 | 17.36 |      | 100.0 |         |
|           |                                                | Z | 4.75 | 67.06 | 17.58 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.75 | 67.85 | 18.49 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71 | 66.88 | 17.70 |      | 100.0 |         |
|           |                                                | Z | 4.80 | 67.22 | 17.92 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.77 | 67.84 | 18.69 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71 | 66.81 | 17.86 |      | 100.0 |         |
|           |                                                | Z | 4.79 | 67.13 | 18.08 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.79 | 67.83 | 18.96 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.78 | 18.11 |      | 90.0  |         |
|           |                                                | Z | 4.80 | 67.13 | 18.34 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.82 | 67.68 | 19.13 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.76 | 66.65 | 18.28 |      | 90.0  |         |
|           |                                                | Z | 4.83 | 66.97 | 18.50 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.86 | 67.80 | 19.27 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.78 | 66.73 | 18.39 |      | 90.0  |         |
|           |                                                | Z | 4.86 | 67.05 | 18.61 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.44   | 61.65  | 7.56  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.49   | 61.12  | 7.86  |      | 150.0 |         |
|           |                                                     | Z | 0.64   | 63.85  | 10.26 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.89   | 61.48  | 3.95  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.59   | 60.00  | 2.93  |      | 80.0  |         |
|           |                                                     | Z | 0.55   | 60.00  | 3.58  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 120.10 | 28.07 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 111.49 | 24.17 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 114.44 | 25.62 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 2.01   | 71.24  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.59   | 66.13  | 14.13 |      | 150.0 |         |
|           |                                                     | Z | 1.77   | 67.84  | 15.37 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.98   | 71.24  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.56   | 66.06  | 14.09 |      | 150.0 |         |
|           |                                                     | Z | 1.73   | 67.79  | 15.34 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 7.05   | 91.92  | 35.02 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 5.13   | 80.96  | 29.22 |      | 60.0  |         |
|           |                                                     | Z | 7.00   | 89.81  | 33.25 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.04   | 71.26  | 17.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.71   | 68.34  | 15.65 |      | 150.0 |         |
|           |                                                     | Z | 2.94   | 69.85  | 16.50 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.07   | 67.87  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.97   | 66.45  | 15.26 |      | 150.0 |         |
|           |                                                     | Z | 3.10   | 67.26  | 15.77 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.17   | 67.84  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.08   | 66.51  | 15.39 |      | 150.0 |         |
|           |                                                     | Z | 3.20   | 67.26  | 15.86 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 5.93   | 77.85  | 22.25 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.91   | 73.42  | 19.90 |      | 65.0  |         |
|           |                                                     | Z | 5.48   | 75.26  | 20.69 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.36   | 73.42  | 20.98 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.85   | 70.69  | 19.33 |      | 65.0  |         |
|           |                                                     | Z | 5.38   | 72.53  | 20.20 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.20   | 72.50  | 20.84 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.80   | 70.17  | 19.39 |      | 65.0  |         |
|           |                                                     | Z | 5.06   | 71.08  | 19.82 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.62   | 70.93  | 17.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.33   | 67.66  | 15.42 |      | 150.0 |         |
|           |                                                     | Z | 2.54   | 69.16  | 16.32 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.72   | 68.12  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.60   | 66.27  | 15.00 |      | 150.0 |         |
|           |                                                     | Z | 2.74   | 67.17  | 15.61 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.13   | 70.69  | 17.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.84   | 66.69  | 14.71 |      | 150.0 |         |
|           |                                                     | Z | 2.04   | 68.34  | 15.81 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.53   | 70.01  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.27   | 66.91  | 14.87 |      | 150.0 |         |
|           |                                                     | Z | 2.46   | 68.17  | 15.78 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.85 | 68.17 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.73 | 66.39 | 15.11 |      | 150.0 |         |
|           |                                                | Z | 2.87 | 67.23 | 15.69 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.66 | 70.08 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.41 | 67.16 | 15.06 |      | 150.0 |         |
|           |                                                | Z | 2.61 | 68.36 | 15.92 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 4.89 | 67.34 | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.90 | 66.78 | 16.20 |      | 150.0 |         |
|           |                                                | Z | 4.96 | 67.07 | 16.36 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.12 | 67.41 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.15 | 66.88 | 16.26 |      | 150.0 |         |
|           |                                                | Z | 5.21 | 67.15 | 16.40 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 4.96 | 67.51 | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.95 | 16.22 |      | 150.0 |         |
|           |                                                | Z | 5.04 | 67.27 | 16.38 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 4.85 | 67.18 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.89 | 66.71 | 16.19 |      | 150.0 |         |
|           |                                                | Z | 4.95 | 67.03 | 16.35 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.21 | 67.66 | 16.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.23 | 67.11 | 16.39 |      | 150.0 |         |
|           |                                                | Z | 5.28 | 67.32 | 16.50 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 4.97 | 67.54 | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.97 | 16.24 |      | 150.0 |         |
|           |                                                | Z | 5.04 | 67.25 | 16.39 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.18 | 67.90 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.10 | 66.53 | 15.31 |      | 150.0 |         |
|           |                                                | Z | 3.22 | 67.28 | 15.78 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.31 | 68.06 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.23 | 66.72 | 15.52 |      | 150.0 |         |
|           |                                                | Z | 3.35 | 67.43 | 15.97 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.90 | 70.81 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.56 | 66.13 | 13.71 |      | 150.0 |         |
|           |                                                | Z | 1.79 | 68.21 | 15.15 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.27 | 69.87 | 15.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.97 | 66.56 | 13.59 |      | 150.0 |         |
|           |                                                | Z | 2.26 | 68.57 | 15.01 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 1.77 | 65.70 | 12.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.77 | 64.41 | 11.96 |      | 150.0 |         |
|           |                                                | Z | 1.97 | 65.88 | 13.14 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 0.57 | 60.00 | 6.01  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.69 | 60.18 | 6.93  |      | 150.0 |         |
|           |                                                | Z | 0.84 | 61.95 | 8.70  |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 0.77 | 60.00 | 5.45  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.96 | 60.51 | 6.88  |      | 150.0 |         |
|           |                                                | Z | 1.21 | 61.91 | 7.88  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 0.78 | 60.00 | 5.51  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.01 | 60.88 | 7.17  |      | 150.0 |         |
|           |                                                | Z | 1.29 | 62.52 | 8.30  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.73 | 68.20 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.61 | 66.33 | 15.05 |      | 150.0 |         |
|           |                                            | Z | 2.75 | 67.23 | 15.66 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.86 | 68.24 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 66.44 | 15.16 |      | 150.0 |         |
|           |                                            | Z | 2.87 | 67.28 | 15.73 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 6.63 | 82.27 | 24.05 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.86 | 75.26 | 20.73 |      | 65.0  |         |
|           |                                            | Z | 5.85 | 78.40 | 22.06 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 4.98 | 73.89 | 20.68 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.38 | 70.57 | 18.85 |      | 65.0  |         |
|           |                                            | Z | 4.92 | 72.60 | 19.86 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.37 | 75.09 | 21.57 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.71 | 71.64 | 19.72 |      | 65.0  |         |
|           |                                            | Z | 5.27 | 73.62 | 20.68 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.18 | 71.12 | 17.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.86 | 66.97 | 14.90 |      | 150.0 |         |
|           |                                            | Z | 2.07 | 68.69 | 16.03 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.54 | 70.08 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.28 | 66.95 | 14.90 |      | 150.0 |         |
|           |                                            | Z | 2.46 | 68.21 | 15.81 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.67 | 70.04 | 15.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.35 | 65.50 | 12.88 |      | 150.0 |         |
|           |                                            | Z | 1.61 | 67.93 | 14.60 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.52 | 65.24 | 11.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.54 | 64.16 | 11.37 |      | 150.0 |         |
|           |                                            | Z | 1.78 | 66.05 | 12.85 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.68 | 70.20 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.42 | 67.23 | 15.11 |      | 150.0 |         |
|           |                                            | Z | 2.61 | 68.43 | 15.98 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 1.57 | 65.38 | 11.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.59 | 64.37 | 11.51 |      | 150.0 |         |
|           |                                            | Z | 1.86 | 66.39 | 13.06 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.66 | 70.27 | 17.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.43 | 67.39 | 15.40 |      | 150.0 |         |
|           |                                            | Z | 2.59 | 68.51 | 16.14 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.74 | 68.27 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.62 | 66.35 | 14.98 |      | 150.0 |         |
|           |                                            | Z | 2.76 | 67.24 | 15.61 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.85 | 68.52 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.73 | 66.59 | 15.14 |      | 150.0 |         |
|           |                                            | Z | 2.87 | 67.46 | 15.76 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 2.92 | 68.58 | 19.12 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.05 | 68.19 | 18.71 |      | 150.0 |         |
|           |                                            | Z | 3.38 | 69.92 | 19.37 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 3.31 | 71.11 | 19.43 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.43 | 70.35 | 18.91 |      | 150.0 |         |
|           |                                            | Z | 4.27 | 73.87 | 20.20 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 3.69  | 73.59  | 20.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.83  | 72.88  | 20.47 |      | 150.0 |         |
|           |                                            | Z | 4.91  | 76.88  | 21.85 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.36  | 66.51  | 18.14 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.07  | 17.76 |      | 150.0 |         |
|           |                                            | Z | 2.80  | 69.10  | 19.04 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 2.79  | 70.74  | 19.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.81  | 70.18  | 19.64 |      | 150.0 |         |
|           |                                            | Z | 4.13  | 77.05  | 22.20 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.40  | 67.71  | 17.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.93  | 17.03 |      | 150.0 |         |
|           |                                            | Z | 3.24  | 71.98  | 19.00 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 4.00  | 83.17  | 27.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 3.32  | 77.43  | 24.67 |      | 65.0  |         |
|           |                                            | Z | 4.82  | 85.38  | 27.66 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 7.95  | 95.13  | 29.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.14  | 85.14  | 25.95 |      | 65.0  |         |
|           |                                            | Z | 22.01 | 111.28 | 33.56 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 6.44  | 90.03  | 27.42 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.72  | 82.84  | 24.49 |      | 65.0  |         |
|           |                                            | Z | 11.40 | 97.81  | 28.98 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.34  | 66.31  | 17.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.38  | 65.84  | 17.53 |      | 150.0 |         |
|           |                                            | Z | 2.77  | 68.80  | 18.79 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 2.79  | 70.75  | 20.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.81  | 70.20  | 19.65 |      | 150.0 |         |
|           |                                            | Z | 4.14  | 77.08  | 22.21 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.35  | 66.39  | 17.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39  | 65.94  | 17.60 |      | 150.0 |         |
|           |                                            | Z | 2.79  | 68.93  | 18.87 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 2.78  | 70.67  | 19.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80  | 70.08  | 19.57 |      | 150.0 |         |
|           |                                            | Z | 4.10  | 76.88  | 22.11 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 2.58  | 69.20  | 18.68 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.58  | 68.48  | 18.22 |      | 150.0 |         |
|           |                                            | Z | 3.64  | 74.38  | 20.46 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.40  | 67.70  | 17.53 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.90  | 17.01 |      | 150.0 |         |
|           |                                            | Z | 3.24  | 71.93  | 18.96 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.35  | 66.38  | 17.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39  | 65.93  | 17.60 |      | 150.0 |         |
|           |                                            | Z | 2.78  | 68.92  | 18.87 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 2.78  | 70.65  | 19.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80  | 70.06  | 19.56 |      | 150.0 |         |
|           |                                            | Z | 4.09  | 76.85  | 22.10 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.40  | 67.68  | 17.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.89  | 16.99 |      | 150.0 |         |
|           |                                            | Z | 3.23  | 71.90  | 18.95 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.36 | 66.41 | 18.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.40 | 65.96 | 17.62 |      | 150.0 |         |
|           |                                               | Z | 2.79 | 68.96 | 18.89 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 2.79 | 70.71 | 19.97 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.81 | 70.12 | 19.59 |      | 150.0 |         |
|           |                                               | Z | 4.12 | 76.94 | 22.14 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 2.41 | 67.73 | 17.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.41 | 66.94 | 17.03 |      | 150.0 |         |
|           |                                               | Z | 3.25 | 71.97 | 18.99 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.37 | 66.48 | 18.09 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.40 | 66.03 | 17.69 |      | 150.0 |         |
|           |                                               | Z | 2.80 | 69.04 | 18.97 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 2.84 | 71.12 | 20.25 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.87 | 70.60 | 19.92 |      | 150.0 |         |
|           |                                               | Z | 4.27 | 77.69 | 22.54 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 2.45 | 68.02 | 17.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.44 | 67.25 | 17.27 |      | 150.0 |         |
|           |                                               | Z | 3.33 | 72.45 | 19.29 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.28 | 67.12 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.28 | 66.34 | 15.82 |      | 150.0 |         |
|           |                                               | Z | 4.37 | 66.69 | 16.05 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.40 | 67.30 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.42 | 66.58 | 15.96 |      | 150.0 |         |
|           |                                               | Z | 4.51 | 66.94 | 16.19 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.43 | 67.29 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.46 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 66.96 | 16.21 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.25 | 67.08 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.27 | 66.33 | 15.80 |      | 150.0 |         |
|           |                                               | Z | 4.36 | 66.69 | 16.05 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.41 | 67.30 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.43 | 66.58 | 15.97 |      | 150.0 |         |
|           |                                               | Z | 4.52 | 66.95 | 16.20 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.42 | 67.28 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.45 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.96 | 16.21 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.21 | 67.15 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.22 | 66.36 | 15.77 |      | 150.0 |         |
|           |                                               | Z | 4.31 | 66.72 | 16.02 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.40 | 67.25 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.42 | 66.55 | 15.96 |      | 150.0 |         |
|           |                                               | Z | 4.51 | 66.91 | 16.18 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.44 | 67.23 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.47 | 66.55 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.56 | 66.90 | 16.20 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 4.84 | 67.21 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.86 | 66.70 | 16.17 |      | 150.0 |         |
|           |                                               | Z | 4.92 | 67.00 | 16.33 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.05  | 67.28  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.13  | 66.92  | 16.30 |      | 150.0 |         |
|           |                                           | Z | 5.19  | 67.21  | 16.45 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.88  | 67.36  | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.89  | 66.80  | 16.15 |      | 150.0 |         |
|           |                                           | Z | 4.96  | 67.11  | 16.31 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.56  | 66.77  | 14.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.51  | 65.29  | 14.20 |      | 150.0 |         |
|           |                                           | Z | 2.64  | 66.08  | 14.88 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 8.58  | 96.74  | 30.43 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.44  | 86.30  | 26.47 |      | 65.0  |         |
|           |                                           | Z | 25.25 | 114.07 | 34.44 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 8.97  | 96.28  | 29.51 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.82  | 86.62  | 25.89 |      | 65.0  |         |
|           |                                           | Z | 26.62 | 112.59 | 33.14 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 4.46  | 85.84  | 28.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.52  | 78.94  | 25.38 |      | 65.0  |         |
|           |                                           | Z | 6.28  | 91.07  | 29.77 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 8.00  | 95.21  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.18  | 85.25  | 25.99 |      | 65.0  |         |
|           |                                           | Z | 22.25 | 111.44 | 33.61 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 8.20  | 94.53  | 28.89 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.45  | 85.38  | 25.38 |      | 65.0  |         |
|           |                                           | Z | 22.92 | 109.78 | 32.30 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 4.29  | 84.95  | 28.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.42  | 78.29  | 25.03 |      | 65.0  |         |
|           |                                           | Z | 6.00  | 90.04  | 29.32 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 7.99  | 95.19  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.17  | 85.23  | 25.98 |      | 65.0  |         |
|           |                                           | Z | 22.20 | 111.42 | 33.61 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 8.17  | 94.46  | 28.87 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.43  | 85.32  | 25.36 |      | 65.0  |         |
|           |                                           | Z | 22.79 | 109.69 | 32.28 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 4.20  | 84.39  | 27.96 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.35  | 77.81  | 24.72 |      | 65.0  |         |
|           |                                           | Z | 5.81  | 89.24  | 28.92 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 8.00  | 95.25  | 29.86 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.17  | 85.25  | 25.99 |      | 65.0  |         |
|           |                                           | Z | 22.28 | 111.52 | 33.64 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 8.32  | 94.76  | 28.95 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.50  | 85.52  | 25.42 |      | 65.0  |         |
|           |                                           | Z | 23.43 | 110.13 | 32.39 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 4.29  | 84.99  | 28.32 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.42  | 78.29  | 25.04 |      | 65.0  |         |
|           |                                           | Z | 6.00  | 90.09  | 29.35 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 7.97  | 95.17  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.16  | 85.19  | 25.97 |      | 65.0  |         |
|           |                                           | Z | 22.13 | 111.39 | 33.60 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 8.13  | 94.40  | 28.85 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.41  | 85.27  | 25.34 |      | 65.0 |         |
|           |                                            | Z | 22.65 | 109.61 | 32.26 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.29  | 84.98  | 28.32 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.41  | 78.27  | 25.03 |      | 65.0 |         |
|           |                                            | Z | 5.99  | 90.06  | 29.34 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 6.78  | 83.01  | 27.19 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.79  | 77.77  | 24.62 |      | 65.0 |         |
|           |                                            | Z | 7.46  | 82.96  | 26.61 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.48  | 82.12  | 26.76 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.59  | 77.10  | 24.26 |      | 65.0 |         |
|           |                                            | Z | 6.60  | 80.40  | 25.51 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.17  | 77.50  | 25.78 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.73  | 73.67  | 23.57 |      | 65.0 |         |
|           |                                            | Z | 5.15  | 75.48  | 24.33 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 3.16  | 68.74  | 13.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.46  | 70.01  | 15.08 |      | 65.0 |         |
|           |                                            | Z | 4.53  | 73.34  | 16.60 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 3.03  | 67.91  | 13.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.34  | 69.23  | 14.64 |      | 65.0 |         |
|           |                                            | Z | 4.31  | 72.35  | 16.12 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 4.58  | 77.82  | 18.26 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 2.94  | 71.18  | 15.91 |      | 65.0 |         |
|           |                                            | Z | 4.43  | 77.10  | 18.78 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 3.93  | 72.44  | 16.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.31  | 69.30  | 15.75 |      | 65.0 |         |
|           |                                            | Z | 4.04  | 72.29  | 17.45 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 3.71  | 71.10  | 16.24 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.28  | 68.68  | 15.43 |      | 65.0 |         |
|           |                                            | Z | 3.97  | 71.47  | 17.06 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 8.97  | 89.85  | 24.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.14  | 76.51  | 19.58 |      | 65.0 |         |
|           |                                            | Z | 6.04  | 82.54  | 22.20 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 5.29  | 77.58  | 21.84 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.28  | 72.75  | 19.64 |      | 65.0 |         |
|           |                                            | Z | 4.96  | 75.21  | 20.85 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 4.75  | 74.27  | 19.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.08  | 70.67  | 18.23 |      | 65.0 |         |
|           |                                            | Z | 4.69  | 72.94  | 19.43 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 8.00  | 88.54  | 26.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.67  | 77.36  | 21.42 |      | 65.0 |         |
|           |                                            | Z | 6.06  | 81.76  | 23.28 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 4.92  | 73.55  | 20.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.33  | 70.27  | 18.60 |      | 65.0 |         |
|           |                                            | Z | 4.85  | 72.20  | 19.59 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 5.24  | 74.52  | 21.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.62  | 71.19  | 19.34 |      | 65.0 |         |
|           |                                            | Z | 5.16  | 73.09  | 20.30 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.21 | 81.24 | 23.74 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.64 | 74.55 | 20.56 |      | 65.0 |         |
|           |                                             | Z | 5.52 | 77.51 | 21.87 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 2.00 | 63.20 | 9.38  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.33 | 64.83 | 11.17 |      | 65.0 |         |
|           |                                             | Z | 2.92 | 67.15 | 12.48 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 1.96 | 62.72 | 8.99  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.28 | 64.22 | 10.72 |      | 65.0 |         |
|           |                                             | Z | 2.80 | 66.30 | 11.94 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 2.08 | 66.35 | 11.80 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 1.98 | 65.50 | 11.93 |      | 65.0 |         |
|           |                                             | Z | 2.75 | 69.63 | 14.40 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 4.58 | 74.93 | 18.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.71 | 70.81 | 17.27 |      | 65.0 |         |
|           |                                             | Z | 4.44 | 73.61 | 18.79 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 4.52 | 74.29 | 18.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.74 | 70.54 | 17.12 |      | 65.0 |         |
|           |                                             | Z | 4.45 | 73.22 | 18.60 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 7.88 | 87.94 | 24.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.19 | 76.19 | 20.04 |      | 65.0 |         |
|           |                                             | Z | 5.68 | 81.15 | 22.23 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 5.27 | 77.47 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.26 | 72.68 | 19.58 |      | 65.0 |         |
|           |                                             | Z | 4.94 | 75.14 | 20.80 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 4.75 | 74.24 | 19.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.08 | 70.65 | 18.22 |      | 65.0 |         |
|           |                                             | Z | 4.68 | 72.91 | 19.42 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 7.86 | 88.17 | 25.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.62 | 77.15 | 21.31 |      | 65.0 |         |
|           |                                             | Z | 5.99 | 81.52 | 23.16 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 4.98 | 73.90 | 20.68 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.38 | 70.57 | 18.86 |      | 65.0 |         |
|           |                                             | Z | 4.92 | 72.60 | 19.87 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.37 | 75.08 | 21.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.71 | 71.63 | 19.71 |      | 65.0 |         |
|           |                                             | Z | 5.27 | 73.60 | 20.67 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 6.61 | 82.19 | 24.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.85 | 75.21 | 20.70 |      | 65.0 |         |
|           |                                             | Z | 5.84 | 78.34 | 22.04 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 5.53 | 73.44 | 21.03 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.03 | 70.75 | 19.43 |      | 65.0 |         |
|           |                                             | Z | 5.54 | 72.47 | 20.25 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 5.54 | 73.02 | 20.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.06 | 70.44 | 19.31 |      | 65.0 |         |
|           |                                             | Z | 5.54 | 72.08 | 20.10 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 5.98 | 77.31 | 22.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.00 | 72.98 | 19.88 |      | 65.0 |         |
|           |                                             | Z | 5.69 | 75.16 | 20.83 |      | 65.0 |         |

|           |                                                                    |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.47   | 67.82  | 15.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.33   | 65.69  | 14.15 |      | 150.0 |         |
|           |                                                                    | Z | 2.48   | 66.63  | 14.91 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.71   | 71.16  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.33   | 65.66  | 13.76 |      | 150.0 |         |
|           |                                                                    | Z | 1.51   | 67.66  | 15.15 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.23   | 59.02  | 4.21  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.36   | 59.15  | 4.53  |      | 50.0  |         |
|           |                                                                    | Z | 1.40   | 59.60  | 4.92  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 2.49   | 65.17  | 10.30 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.68   | 65.81  | 11.00 |      | 50.0  |         |
|           |                                                                    | Z | 3.26   | 68.70  | 12.71 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 2.55   | 65.39  | 10.49 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.76   | 66.08  | 11.22 |      | 50.0  |         |
|           |                                                                    | Z | 3.39   | 69.09  | 12.97 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 0.66   | 62.54  | 8.32  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.76   | 62.40  | 8.87  |      | 150.0 |         |
|           |                                                                    | Z | 1.02   | 65.60  | 11.30 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.43   | 61.50  | 7.46  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.48   | 61.03  | 7.79  |      | 150.0 |         |
|           |                                                                    | Z | 0.63   | 63.68  | 10.15 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.68   | 66.33  | 10.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.54   | 62.59  | 8.99  |      | 150.0 |         |
|           |                                                                    | Z | 0.84   | 67.69  | 12.53 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 100.00 | 115.49 | 24.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.69   | 65.22  | 10.79 |      | 150.0 |         |
|           |                                                                    | Z | 1.61   | 75.87  | 16.40 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 100.00 | 119.39 | 31.37 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 30.54  | 103.12 | 27.89 |      | 50.0  |         |
|           |                                                                    | Z | 25.86  | 103.05 | 28.71 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.64   | 71.06  | 17.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.34   | 67.75  | 15.49 |      | 150.0 |         |
|           |                                                                    | Z | 2.55   | 69.26  | 16.39 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 0.90   | 63.34  | 9.68  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.97   | 62.80  | 9.90  |      | 150.0 |         |
|           |                                                                    | Z | 1.20   | 65.31  | 11.89 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 1.04   | 61.35  | 7.67  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.45   | 63.85  | 10.09 |      | 150.0 |         |
|           |                                                                    | Z | 1.91   | 66.23  | 11.37 |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 0.88   | 59.77  | 6.06  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.18   | 61.29  | 7.96  |      | 150.0 |         |
|           |                                                                    | Z | 1.43   | 62.58  | 8.80  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.48   | 66.53  | 17.71 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.32   | 64.81  | 16.78 |      | 50.0  |         |
|           |                                                                    | Z | 4.53   | 65.70  | 17.38 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.90   | 66.77  | 18.24 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.79   | 65.40  | 17.49 |      | 50.0  |         |
|           |                                                                    | Z | 4.93   | 65.95  | 17.91 |      | 50.0  |         |

|           |                                                                     |   |       |        |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.67  | 66.48  | 18.03 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.54  | 65.00  | 17.25 |       | 50.0  |         |
|           |                                                                     | Z | 4.68  | 65.54  | 17.69 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.50  | 66.44  | 17.58 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.37  | 64.94  | 16.79 |       | 50.0  |         |
|           |                                                                     | Z | 4.51  | 65.50  | 17.22 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.12  | 68.45  | 18.95 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 3.86  | 66.02  | 17.96 |       | 35.0  |         |
|           |                                                                     | Z | 3.97  | 66.57  | 18.59 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.42  | 67.53  | 18.97 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.25  | 65.60  | 18.06 |       | 35.0  |         |
|           |                                                                     | Z | 4.36  | 66.03  | 18.53 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.30  | 67.51  | 18.83 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.12  | 65.54  | 17.91 |       | 35.0  |         |
|           |                                                                     | Z | 4.23  | 66.00  | 18.40 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.29  | 67.78  | 19.02 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.09  | 65.70  | 18.03 |       | 35.0  |         |
|           |                                                                     | Z | 4.20  | 66.19  | 18.54 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.43  | 67.59  | 19.06 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.27  | 65.68  | 18.15 |       | 35.0  |         |
|           |                                                                     | Z | 4.39  | 66.15  | 18.64 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.38  | 67.63  | 18.98 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.20  | 65.62  | 18.03 |       | 35.0  |         |
|           |                                                                     | Z | 4.31  | 66.06  | 18.50 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 2.99  | 69.90  | 17.05 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.69  | 67.10  | 15.26 |       | 150.0 |         |
|           |                                                                     | Z | 2.91  | 68.52  | 16.06 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 8.87  | 90.94  | 23.28 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.18  | 70.62  | 15.55 |       | 70.0  |         |
|           |                                                                     | Z | 3.65  | 77.10  | 18.17 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 23.31 | 113.29 | 33.24 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 4.07  | 81.07  | 22.63 |       | 30.0  |         |
|           |                                                                     | Z | 6.41  | 89.12  | 25.62 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.06  | 65.07  | 16.25 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.98  | 62.35  | 13.91 |       | 150.0 |         |
|           |                                                                     | Z | 1.04  | 63.52  | 14.91 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.31  | 67.08  | 16.57 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32  | 66.32  | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.41  | 66.68  | 16.20 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.31  | 67.08  | 16.57 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32  | 66.32  | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.41  | 66.68  | 16.20 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.34  | 67.26  | 16.50 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.38  | 66.57  | 15.93 |       | 150.0 |         |
|           |                                                                     | Z | 4.48  | 66.96  | 16.18 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.02  | 66.93  | 16.50 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.07  | 66.49  | 16.04 |       | 150.0 |         |
|           |                                                                     | Z | 5.15  | 66.85  | 16.24 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.40   | 67.50  | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.42   | 67.05  | 16.22 |      | 150.0 |         |
|           |                                                                                 | Z | 5.48   | 67.35  | 16.37 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 0.66   | 62.54  | 8.32  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.76   | 62.40  | 8.87  |      | 115.0 |         |
|           |                                                                                 | Z | 1.02   | 65.60  | 11.30 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 0.66   | 62.54  | 8.32  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.76   | 62.40  | 8.87  |      | 115.0 |         |
|           |                                                                                 | Z | 1.02   | 65.60  | 11.30 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 120.66 | 28.47 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 124.32 | 30.49 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 114.36 | 26.36 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 137.18 | 35.87 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 89.20  | 133.87 | 34.99 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 128.26 | 32.27 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.00   | 64.27  | 15.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.93   | 61.90  | 13.47 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 62.92  | 14.41 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.26   | 67.05  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.28   | 66.33  | 15.89 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.69  | 16.13 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.26   | 67.05  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.28   | 66.33  | 15.89 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.69  | 16.13 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.26   | 67.30  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.27   | 66.52  | 15.94 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.88  | 16.18 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.27   | 67.21  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.29   | 66.46  | 15.93 |      | 150.0 |         |
|           |                                                                                 | Z | 4.38   | 66.82  | 16.17 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.37   | 67.16  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.40   | 66.45  | 15.96 |      | 150.0 |         |
|           |                                                                                 | Z | 4.48   | 66.80  | 16.18 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.48   | 67.40  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.52   | 66.70  | 16.04 |      | 150.0 |         |
|           |                                                                                 | Z | 4.61   | 67.06  | 16.27 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.42   | 67.34  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.45   | 66.65  | 16.02 |      | 150.0 |         |
|           |                                                                                 | Z | 4.54   | 67.01  | 16.25 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.06   | 67.40  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.10   | 66.94  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 5.16   | 67.23  | 16.44 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.11   | 67.63  | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.13   | 67.07  | 16.35 |      | 150.0 |         |
|           |                                                                                 | Z | 5.18   | 67.30  | 16.47 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.05   | 67.32  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.08   | 66.82  | 16.22 |      | 150.0 |         |
|           |                                                                | Z | 5.15   | 67.12  | 16.38 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.23   | 73.22  | 18.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.93   | 70.77  | 17.45 |      | 150.0 |         |
|           |                                                                | Z | 4.10   | 71.37  | 17.95 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 3.86   | 67.78  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.86   | 66.76  | 15.64 |      | 150.0 |         |
|           |                                                                | Z | 3.98   | 67.24  | 16.01 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.18   | 67.53  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.20   | 66.69  | 15.89 |      | 150.0 |         |
|           |                                                                | Z | 4.31   | 67.10  | 16.17 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.44   | 67.38  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.47   | 66.68  | 16.04 |      | 150.0 |         |
|           |                                                                | Z | 4.56   | 67.05  | 16.27 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.26   | 73.70  | 17.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.90   | 71.13  | 16.99 |      | 150.0 |         |
|           |                                                                | Z | 4.17   | 72.14  | 17.74 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 136.85 | 35.71 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 73.85  | 130.75 | 34.24 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 127.97 | 32.14 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.04   | 67.36  | 14.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.04   | 66.19  | 14.22 |      | 150.0 |         |
|           |                                                                | Z | 3.23   | 67.03  | 14.92 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.74   | 67.60  | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.73   | 66.55  | 15.51 |      | 150.0 |         |
|           |                                                                | Z | 3.85   | 67.04  | 15.88 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.04   | 67.36  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.04   | 66.51  | 15.78 |      | 150.0 |         |
|           |                                                                | Z | 4.14   | 66.92  | 16.07 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.25   | 67.17  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.27   | 66.44  | 15.88 |      | 150.0 |         |
|           |                                                                | Z | 4.35   | 66.83  | 16.12 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 2.75   | 66.59  | 13.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 2.81   | 65.78  | 13.36 |      | 150.0 |         |
|           |                                                                | Z | 3.04   | 66.85  | 14.23 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.15   | 68.30  | 17.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.05   | 67.54  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 6.09   | 67.83  | 16.64 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.66   | 65.89  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.65   | 65.10  | 15.61 |      | 150.0 |         |
|           |                                                                | Z | 3.71   | 65.42  | 15.85 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.20   | 69.58  | 15.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.29   | 69.02  | 15.37 |      | 150.0 |         |
|           |                                                                | Z | 3.67   | 70.71  | 16.58 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.50   | 68.59  | 17.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.66   | 68.32  | 17.33 |      | 150.0 |         |
|           |                                                                | Z | 4.81   | 68.67  | 17.71 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.26   | 76.31  | 19.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.71   | 64.73  | 13.42 |      | 150.0 |         |
|           |                                                                   | Z | 0.85   | 67.74  | 15.61 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 143.66 | 38.88 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 34.56  | 122.60 | 33.52 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.99 | 35.38 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.61   | 76.64  | 14.82 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.01   | 64.66  | 10.84 |      | 80.0  |         |
|           |                                                                   | Z | 1.31   | 65.68  | 10.55 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.60   | 60.00  | 7.56  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.83  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.29  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 140.29 | 37.09 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 41.01  | 122.69 | 32.58 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 131.53 | 33.60 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.51   | 68.56  | 12.04 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.85   | 62.97  | 9.99  |      | 80.0  |         |
|           |                                                                   | Z | 1.06   | 63.78  | 9.68  |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.61   | 60.00  | 7.50  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.64   | 60.00  | 7.76  |      | 80.0  |         |
|           |                                                                   | Z | 0.71   | 60.00  | 7.23  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 140.88 | 37.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 59.18  | 128.48 | 33.95 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 131.99 | 33.80 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.90   | 70.77  | 12.88 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.89   | 63.46  | 10.25 |      | 80.0  |         |
|           |                                                                   | Z | 1.12   | 64.32  | 9.94  |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.60   | 60.00  | 7.50  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.77  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.23  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 140.97 | 37.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 62.06  | 129.24 | 34.12 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 132.05 | 33.81 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.84   | 70.47  | 12.75 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.88   | 63.38  | 10.20 |      | 80.0  |         |
|           |                                                                   | Z | 1.11   | 64.20  | 9.87  |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.60   | 60.00  | 7.48  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.75  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.21  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 140.94 | 37.36 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 61.16  | 128.99 | 34.05 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 132.00 | 33.79 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.81   | 70.32  | 12.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.88   | 63.33  | 10.17 |      | 80.0  |         |
|           |                                                                   | Z | 1.10   | 64.15  | 9.85  |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.60   | 60.00  | 7.48  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.75  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.21  |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.53   | 68.71  | 12.08 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.84   | 62.95  | 9.96  |      | 80.0 |         |
|           |                                                                     | Z | 1.05   | 63.70  | 9.62  |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.60   | 60.00  | 7.47  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.63   | 60.00  | 7.74  |      | 80.0 |         |
|           |                                                                     | Z | 0.70   | 60.00  | 7.20  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 131.86 | 35.15 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 12.94  | 98.67  | 26.98 |      | 80.0 |         |
|           |                                                                     | Z | 22.21  | 105.39 | 28.53 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 113.57 | 26.62 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.74   | 85.47  | 20.23 |      | 80.0 |         |
|           |                                                                     | Z | 17.38  | 92.40  | 21.93 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 18.06  | 91.55  | 20.55 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.37   | 76.08  | 16.65 |      | 80.0 |         |
|           |                                                                     | Z | 7.35   | 80.99  | 18.05 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.29   | 74.82  | 16.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.38   | 63.83  | 11.93 |      | 80.0 |         |
|           |                                                                     | Z | 2.24   | 69.89  | 15.23 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.50   | 62.45  | 9.85  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.04   | 65.44  | 12.22 |      | 80.0 |         |
|           |                                                                     | Z | 2.87   | 69.16  | 14.04 |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.43   | 61.71  | 9.45  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.92   | 64.48  | 11.76 |      | 80.0 |         |
|           |                                                                     | Z | 2.62   | 67.82  | 13.47 |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.78   | 86.86  | 22.48 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.98   | 67.95  | 15.36 |      | 80.0 |         |
|           |                                                                     | Z | 2.84   | 73.18  | 18.01 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.84   | 70.05  | 15.08 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.97   | 64.49  | 12.85 |      | 80.0 |         |
|           |                                                                     | Z | 2.60   | 68.12  | 14.98 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.67   | 68.87  | 14.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.98   | 64.19  | 12.66 |      | 80.0 |         |
|           |                                                                     | Z | 2.57   | 67.61  | 14.72 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.07   | 78.46  | 21.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.46   | 68.67  | 16.96 |      | 80.0 |         |
|           |                                                                     | Z | 3.04   | 71.93  | 18.60 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.48   | 71.99  | 18.44 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.66   | 66.56  | 15.77 |      | 80.0 |         |
|           |                                                                     | Z | 3.05   | 68.58  | 16.94 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.50   | 71.49  | 18.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.75   | 66.49  | 15.73 |      | 80.0 |         |
|           |                                                                     | Z | 3.12   | 68.41  | 16.86 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.72   | 73.90  | 20.02 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.82   | 67.95  | 16.90 |      | 80.0 |         |
|           |                                                                     | Z | 3.28   | 70.32  | 18.09 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.56   | 69.77  | 18.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.07   | 66.24  | 16.14 |      | 80.0 |         |
|           |                                                                     | Z | 3.38   | 67.73  | 16.98 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.59 | 69.52 | 17.96 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.13 | 66.17 | 16.10 |      | 80.0 |         |
|           |                                                                      | Z | 3.43 | 67.60 | 16.92 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.13 | 75.78 | 20.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.97 | 68.99 | 17.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.53 | 71.74 | 18.59 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.57 | 69.95 | 18.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.08 | 66.44 | 16.34 |      | 80.0 |         |
|           |                                                                      | Z | 3.39 | 67.98 | 17.18 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.63 | 69.58 | 18.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18 | 66.32 | 16.31 |      | 80.0 |         |
|           |                                                                      | Z | 3.48 | 67.76 | 17.10 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 0.86 | 60.00 | 7.83  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 0.94 | 60.00 | 8.43  |      | 80.0 |         |
|           |                                                                      | Z | 1.26 | 62.86 | 10.60 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.06 | 60.00 | 6.32  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.11 | 60.00 | 7.15  |      | 80.0 |         |
|           |                                                                      | Z | 1.15 | 60.00 | 7.79  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.09 | 60.00 | 6.13  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.13 | 60.00 | 6.98  |      | 80.0 |         |
|           |                                                                      | Z | 1.16 | 60.00 | 7.62  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.11 | 82.69 | 21.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.18 | 68.30 | 16.03 |      | 80.0 |         |
|           |                                                                      | Z | 2.89 | 72.51 | 18.19 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.38 | 72.12 | 16.89 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.30 | 65.71 | 14.16 |      | 80.0 |         |
|           |                                                                      | Z | 2.84 | 68.67 | 15.89 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.32 | 71.47 | 16.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.34 | 65.56 | 14.00 |      | 80.0 |         |
|           |                                                                      | Z | 2.88 | 68.46 | 15.71 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.00 | 78.15 | 21.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.43 | 68.50 | 16.86 |      | 80.0 |         |
|           |                                                                      | Z | 3.00 | 71.73 | 18.50 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.45 | 71.84 | 18.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.65 | 66.46 | 15.71 |      | 80.0 |         |
|           |                                                                      | Z | 3.03 | 68.49 | 16.88 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.47 | 71.37 | 18.13 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.73 | 66.40 | 15.67 |      | 80.0 |         |
|           |                                                                      | Z | 3.11 | 68.32 | 16.80 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.09 | 75.59 | 20.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.95 | 68.87 | 17.20 |      | 80.0 |         |
|           |                                                                      | Z | 3.51 | 71.60 | 18.52 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.56 | 69.88 | 18.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.07 | 66.39 | 16.30 |      | 80.0 |         |
|           |                                                                      | Z | 3.38 | 67.92 | 17.15 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.61 | 69.50 | 18.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.17 | 66.26 | 16.27 |      | 80.0  |         |
|           |                                                                     | Z | 3.46 | 67.69 | 17.06 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.20 | 72.86 | 19.53 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.42 | 68.34 | 17.01 |      | 80.0  |         |
|           |                                                                     | Z | 3.88 | 70.43 | 18.01 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.92 | 68.81 | 18.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.56 | 66.32 | 16.47 |      | 80.0  |         |
|           |                                                                     | Z | 3.85 | 67.60 | 17.14 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.98 | 68.57 | 17.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.64 | 66.21 | 16.45 |      | 80.0  |         |
|           |                                                                     | Z | 3.92 | 67.41 | 17.08 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.48 | 74.72 | 20.17 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.43 | 69.26 | 17.28 |      | 80.0  |         |
|           |                                                                     | Z | 4.02 | 71.84 | 18.48 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.82 | 68.98 | 18.16 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.45 | 66.38 | 16.51 |      | 80.0  |         |
|           |                                                                     | Z | 3.74 | 67.76 | 17.23 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.85 | 68.52 | 17.99 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.51 | 66.13 | 16.44 |      | 80.0  |         |
|           |                                                                     | Z | 3.78 | 67.40 | 17.11 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.96 | 64.60 | 15.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.89 | 61.99 | 13.45 |      | 150.0 |         |
|           |                                                                     | Z | 0.95 | 63.08 | 14.46 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 2.33 | 97.00 | 27.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.43 | 64.91 | 13.28 |      | 150.0 |         |
|           |                                                                     | Z | 0.56 | 69.50 | 16.60 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.86 | 68.07 | 17.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.71 | 62.96 | 13.44 |      | 150.0 |         |
|           |                                                                     | Z | 0.79 | 64.75 | 14.96 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.25 | 67.19 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.27 | 66.42 | 15.88 |      | 150.0 |         |
|           |                                                                     | Z | 4.35 | 66.78 | 16.12 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.38 | 67.33 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                                                     | Z | 4.50 | 66.96 | 16.21 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.25 | 67.26 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.27 | 66.51 | 15.88 |      | 150.0 |         |
|           |                                                                     | Z | 4.36 | 66.89 | 16.12 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.18 | 67.20 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.20 | 66.46 | 15.85 |      | 150.0 |         |
|           |                                                                     | Z | 4.29 | 66.86 | 16.10 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.21 | 67.26 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.24 | 66.58 | 15.94 |      | 150.0 |         |
|           |                                                                     | Z | 4.35 | 66.98 | 16.20 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.18 | 67.45 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.18 | 66.58 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.27 | 66.96 | 16.11 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.18 | 67.33 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.20 | 66.55 | 15.94 |      | 150.0 |         |
|           |                                                            | Z | 4.30 | 66.94 | 16.19 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.24 | 66.47 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.23 | 65.66 | 15.56 |      | 150.0 |         |
|           |                                                            | Z | 4.32 | 66.04 | 15.81 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.34 | 66.70 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.35 | 65.92 | 15.67 |      | 150.0 |         |
|           |                                                            | Z | 4.45 | 66.33 | 15.93 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.28 | 66.69 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.28 | 65.87 | 15.61 |      | 150.0 |         |
|           |                                                            | Z | 4.38 | 66.29 | 15.86 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.29 | 66.70 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.89 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 66.31 | 15.90 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.29 | 66.70 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.89 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 66.31 | 15.90 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.24 | 66.68 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.25 | 65.90 | 15.61 |      | 150.0 |         |
|           |                                                            | Z | 4.36 | 66.34 | 15.88 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.14 | 66.55 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.14 | 65.75 | 15.53 |      | 150.0 |         |
|           |                                                            | Z | 4.24 | 66.20 | 15.81 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.29 | 66.80 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.97 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.40 | 66.39 | 15.90 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 4.86 | 66.53 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.88 | 65.98 | 15.79 |      | 150.0 |         |
|           |                                                            | Z | 4.95 | 66.32 | 15.97 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 4.89 | 66.65 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.91 | 66.10 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 5.00 | 66.46 | 16.03 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.79 | 66.64 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.80 | 66.08 | 15.81 |      | 150.0 |         |
|           |                                                            | Z | 4.89 | 66.46 | 16.01 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 4.88 | 66.74 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.88 | 66.12 | 15.83 |      | 150.0 |         |
|           |                                                            | Z | 4.95 | 66.44 | 16.00 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 4.91 | 66.59 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.94 | 66.07 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 5.01 | 66.41 | 16.03 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 4.85 | 66.55 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.86 | 66.01 | 15.84 |      | 150.0 |         |
|           |                                                            | Z | 4.94 | 66.38 | 16.03 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 4.84 | 66.50 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.85 | 65.93 | 15.78 |      | 150.0 |         |
|           |                                                    | Z | 4.93 | 66.29 | 15.97 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 4.98 | 66.58 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.01 | 66.06 | 15.86 |      | 150.0 |         |
|           |                                                    | Z | 5.08 | 66.39 | 16.04 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.07 | 66.72 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.09 | 66.19 | 15.96 |      | 150.0 |         |
|           |                                                    | Z | 5.15 | 66.45 | 16.09 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.23 | 66.52 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.23 | 66.08 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.29 | 66.42 | 15.97 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.42 | 67.07 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.42 | 66.57 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.47 | 66.84 | 16.14 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.25 | 66.63 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.26 | 66.19 | 15.83 |      | 150.0 |         |
|           |                                                    | Z | 5.33 | 66.54 | 16.00 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.40 | 66.98 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.37 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.40 | 66.64 | 16.04 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.46 | 67.37 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.97 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 67.26 | 16.33 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.39 | 67.12 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.34 | 66.47 | 15.98 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.70 | 16.09 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.22 | 66.55 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.25 | 66.14 | 15.78 |      | 150.0 |         |
|           |                                                    | Z | 5.32 | 66.52 | 15.96 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.23 | 66.67 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.18 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.30 | 66.53 | 15.97 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.27 | 66.57 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.29 | 66.14 | 15.81 |      | 150.0 |         |
|           |                                                    | Z | 5.36 | 66.48 | 15.98 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.67 | 66.83 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.66 | 66.44 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.71 | 66.75 | 16.05 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.75 | 67.04 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.76 | 66.67 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.81 | 66.99 | 16.15 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.82 | 67.26 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.80 | 66.81 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.84 | 67.08 | 16.19 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.74 | 67.02 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 66.64 | 16.00 |      | 150.0 |         |
|           |                                                    | Z | 5.80 | 66.96 | 16.15 |      | 150.0 |         |

|           |                                                                 |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.72   | 66.97  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.74   | 66.66  | 16.03 |      | 150.0 |         |
|           |                                                                 | Z | 5.82   | 67.04  | 16.20 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.75   | 66.95  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.77   | 66.62  | 16.04 |      | 150.0 |         |
|           |                                                                 | Z | 5.83   | 66.96  | 16.20 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.69   | 66.96  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.71   | 66.62  | 16.07 |      | 150.0 |         |
|           |                                                                 | Z | 5.76   | 66.94  | 16.22 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.73   | 67.07  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.75   | 66.74  | 16.14 |      | 150.0 |         |
|           |                                                                 | Z | 5.82   | 67.12  | 16.31 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 5.85   | 67.14  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87   | 66.79  | 16.13 |      | 150.0 |         |
|           |                                                                 | Z | 5.91   | 67.06  | 16.25 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.57   | 67.17  | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.59   | 66.49  | 16.05 |      | 150.0 |         |
|           |                                                                 | Z | 4.67   | 66.83  | 16.27 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.74   | 67.55  | 16.90 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78   | 66.90  | 16.38 |      | 150.0 |         |
|           |                                                                 | Z | 4.87   | 67.23  | 16.58 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.59   | 67.37  | 16.72 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62   | 66.70  | 16.17 |      | 150.0 |         |
|           |                                                                 | Z | 4.71   | 67.05  | 16.39 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.62   | 67.76  | 17.09 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65   | 67.09  | 16.54 |      | 150.0 |         |
|           |                                                                 | Z | 4.74   | 67.43  | 16.75 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.46   | 67.03  | 16.42 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.51   | 66.42  | 15.90 |      | 150.0 |         |
|           |                                                                 | Z | 4.61   | 66.81  | 16.14 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.63   | 68.10  | 17.29 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.63   | 67.31  | 16.68 |      | 150.0 |         |
|           |                                                                 | Z | 4.72   | 67.64  | 16.87 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.60   | 67.79  | 17.13 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64   | 67.10  | 16.57 |      | 150.0 |         |
|           |                                                                 | Z | 4.73   | 67.44  | 16.77 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.13   | 65.55  | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.02   | 62.57  | 14.13 |      | 130.0 |         |
|           |                                                                 | Z | 1.09   | 63.87  | 15.18 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.14   | 66.28  | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.02   | 62.97  | 14.40 |      | 130.0 |         |
|           |                                                                 | Z | 1.10   | 64.37  | 15.52 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 100.00 | 160.36 | 43.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.72   | 69.89  | 16.37 |      | 130.0 |         |
|           |                                                                 | Z | 1.32   | 80.40  | 21.60 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.39   | 74.93  | 21.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.97   | 66.41  | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 1.14   | 69.27  | 18.15 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.35 | 66.98 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.25 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.45 | 66.60 | 16.31 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.39 | 67.23 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.45 | 16.16 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.79 | 16.39 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.53 | 67.43 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.69 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 67.03 | 16.53 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.44 | 67.57 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.81 | 16.41 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 67.16 | 16.63 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.19 | 66.71 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.21 | 65.98 | 15.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 66.39 | 15.91 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.21 | 66.71 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.24 | 66.03 | 15.66 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.45 | 15.94 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.37 | 67.75 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.88 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.46 | 67.24 | 16.60 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.11 | 66.49 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.14 | 65.75 | 15.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.24 | 66.16 | 15.70 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.35 | 66.98 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.25 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.45 | 66.60 | 16.31 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.39 | 67.23 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.45 | 16.16 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.79 | 16.39 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.53 | 67.43 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.69 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 67.03 | 16.53 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.44 | 67.57 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.81 | 16.41 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 67.16 | 16.63 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.19 | 66.71 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.21 | 65.98 | 15.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 66.39 | 15.91 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.21 | 66.71 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.24 | 66.03 | 15.66 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.45 | 15.94 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.37 | 67.75 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.88 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.46 | 67.24 | 16.60 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.11 | 66.49 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.14 | 65.75 | 15.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.24 | 66.16 | 15.70 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.51 | 67.07 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.53 | 66.37 | 16.22 |      | 130.0 |         |
|           |                                                       | Z | 4.61 | 66.68 | 16.43 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.61 | 67.33 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.64 | 16.34 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 66.98 | 16.55 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.53 | 67.22 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.56 | 66.51 | 16.19 |      | 130.0 |         |
|           |                                                       | Z | 4.65 | 66.86 | 16.41 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.59 | 67.39 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.61 | 66.69 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.70 | 67.03 | 16.57 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.55 | 67.39 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.58 | 66.66 | 16.27 |      | 130.0 |         |
|           |                                                       | Z | 4.67 | 67.01 | 16.48 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.48 | 67.33 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.51 | 66.61 | 16.25 |      | 130.0 |         |
|           |                                                       | Z | 4.60 | 66.98 | 16.48 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.44 | 67.19 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.46 | 66.47 | 16.09 |      | 130.0 |         |
|           |                                                       | Z | 4.55 | 66.85 | 16.33 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.44 | 67.44 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.45 | 66.70 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.54 | 67.07 | 16.59 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.25 | 67.58 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.24 | 66.95 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 67.14 | 16.66 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.34 | 67.95 | 17.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.36 | 67.36 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 5.38 | 67.49 | 16.81 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.27 | 67.81 | 17.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.25 | 67.09 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 67.28 | 16.72 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.32 | 67.68 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.35 | 67.17 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 5.40 | 67.38 | 16.69 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.33 | 67.78 | 17.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.40 | 67.40 | 16.84 |      | 130.0 |         |
|           |                                                       | Z | 5.46 | 67.65 | 16.96 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.20 | 67.32 | 17.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.27 | 66.98 | 16.60 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 67.32 | 16.78 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.29 | 67.63 | 17.19 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.33 | 67.16 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 5.38 | 67.39 | 16.82 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.14 | 67.30 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.12 | 66.62 | 16.27 |      | 130.0 |         |
|           |                                                       | Z | 5.16 | 66.82 | 16.38 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.38 | 66.48 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.37 | 65.68 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.03 | 16.07 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.49 | 66.76 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.50 | 65.99 | 15.98 |      | 130.0 |         |
|           |                                                   | Z | 4.60 | 66.37 | 16.22 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.40 | 66.61 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.40 | 65.81 | 15.80 |      | 130.0 |         |
|           |                                                   | Z | 4.50 | 66.21 | 16.04 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.45 | 66.79 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.45 | 65.98 | 15.97 |      | 130.0 |         |
|           |                                                   | Z | 4.55 | 66.37 | 16.21 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.36 | 66.56 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.36 | 65.77 | 15.81 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.17 | 16.06 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.33 | 66.68 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.35 | 65.88 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.45 | 66.30 | 16.10 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.33 | 66.47 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.34 | 65.70 | 15.68 |      | 130.0 |         |
|           |                                                   | Z | 4.45 | 66.12 | 15.94 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.31 | 66.72 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.31 | 65.92 | 15.93 |      | 130.0 |         |
|           |                                                   | Z | 4.41 | 66.33 | 16.19 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.35 | 66.43 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.35 | 65.61 | 15.57 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.02 | 15.84 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.02 | 66.60 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.03 | 66.05 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 5.10 | 66.36 | 16.25 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.05 | 66.72 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.17 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.50 | 16.30 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 4.96 | 66.75 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.97 | 66.21 | 16.16 |      | 130.0 |         |
|           |                                                   | Z | 5.05 | 66.56 | 16.35 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.03 | 66.77 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.01 | 66.10 | 16.04 |      | 130.0 |         |
|           |                                                   | Z | 5.07 | 66.37 | 16.19 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.04 | 66.57 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.08 | 16.08 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.38 | 16.24 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.05 | 66.67 | 16.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.16 | 16.24 |      | 130.0 |         |
|           |                                                   | Z | 5.15 | 66.49 | 16.41 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.05 | 66.78 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.06 | 66.25 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.58 | 16.45 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 4.96 | 66.41 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 4.96 | 65.81 | 15.92 |      | 130.0 |         |
|           |                                                    | Z | 5.03 | 66.14 | 16.10 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.14 | 66.62 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.16 | 66.09 | 16.13 |      | 130.0 |         |
|           |                                                    | Z | 5.23 | 66.40 | 16.29 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.23 | 66.81 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.23 | 16.27 |      | 130.0 |         |
|           |                                                    | Z | 5.33 | 66.59 | 16.45 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.37 | 66.54 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.37 | 66.08 | 16.06 |      | 130.0 |         |
|           |                                                    | Z | 5.43 | 66.40 | 16.21 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.62 | 67.27 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.62 | 66.78 | 16.39 |      | 130.0 |         |
|           |                                                    | Z | 5.65 | 66.98 | 16.48 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.36 | 66.51 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.07 | 15.95 |      | 130.0 |         |
|           |                                                    | Z | 5.42 | 66.39 | 16.11 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.56 | 67.07 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.34 | 16.09 |      | 130.0 |         |
|           |                                                    | Z | 5.52 | 66.54 | 16.19 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 5.66 | 67.55 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.72 | 67.24 | 16.55 |      | 130.0 |         |
|           |                                                    | Z | 5.76 | 67.49 | 16.67 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.63 | 67.57 | 17.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 67.19 | 16.71 |      | 130.0 |         |
|           |                                                    | Z | 5.73 | 67.50 | 16.85 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.69 | 67.71 | 17.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.98 | 16.63 |      | 130.0 |         |
|           |                                                    | Z | 5.64 | 67.12 | 16.68 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.36 | 66.53 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.38 | 66.12 | 16.02 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.52 | 16.21 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.40 | 66.78 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.32 | 16.17 |      | 130.0 |         |
|           |                                                    | Z | 5.48 | 66.65 | 16.33 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.26 | 66.02 | 16.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 65.59 | 15.53 |      | 130.0 |         |
|           |                                                    | Z | 5.34 | 65.94 | 15.71 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.83 | 66.88 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.47 | 16.18 |      | 130.0 |         |
|           |                                                    | Z | 5.86 | 66.75 | 16.30 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 5.94 | 67.19 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.94 | 66.79 | 16.33 |      | 130.0 |         |
|           |                                                    | Z | 5.98 | 67.06 | 16.44 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.01 | 67.39 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 66.85 | 16.33 |      | 130.0 |         |
|           |                                                    | Z | 6.00 | 67.11 | 16.45 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 5.91   | 67.09  | 16.74 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.91   | 66.70  | 16.30 |       | 130.0 |         |
|           |                                                        | Z | 5.96   | 67.00  | 16.43 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 5.83   | 66.88  | 16.58 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.86   | 66.56  | 16.17 |       | 130.0 |         |
|           |                                                        | Z | 5.93   | 66.93  | 16.34 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 5.99   | 67.15  | 16.74 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.98   | 66.73  | 16.28 |       | 130.0 |         |
|           |                                                        | Z | 6.02   | 66.98  | 16.39 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 5.96   | 67.18  | 16.91 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.99   | 66.86  | 16.51 |       | 130.0 |         |
|           |                                                        | Z | 6.04   | 67.17  | 16.64 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 5.82   | 66.90  | 16.67 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.84   | 66.57  | 16.25 |       | 130.0 |         |
|           |                                                        | Z | 5.89   | 66.88  | 16.40 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 5.87   | 67.05  | 16.76 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.88   | 66.71  | 16.35 |       | 130.0 |         |
|           |                                                        | Z | 5.96   | 67.09  | 16.52 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.02   | 67.22  | 16.81 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.06   | 66.92  | 16.42 |       | 130.0 |         |
|           |                                                        | Z | 6.08   | 67.13  | 16.51 |       | 130.0 |         |
| 10646-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 7.45   | 98.05  | 36.37 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 5.70   | 87.94  | 31.48 |       | 60.0  |         |
|           |                                                        | Z | 10.68  | 104.19 | 37.43 |       | 60.0  |         |
| 10647-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 6.28   | 94.10  | 35.07 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 5.09   | 85.56  | 30.67 |       | 60.0  |         |
|           |                                                        | Z | 8.75   | 99.75  | 36.06 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.35   | 60.00  | 5.99  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.42   | 60.00  | 6.66  |       | 150.0 |         |
|           |                                                        | Z | 0.51   | 61.64  | 8.47  |       | 150.0 |         |
| 10652-AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.43   | 68.40  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.04   | 65.40  | 15.46 |       | 80.0  |         |
|           |                                                        | Z | 3.29   | 66.60  | 16.23 |       | 80.0  |         |
| 10653-AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 3.85   | 66.81  | 17.07 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.63   | 65.00  | 15.94 |       | 80.0  |         |
|           |                                                        | Z | 3.82   | 65.84  | 16.44 |       | 80.0  |         |
| 10654-AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 3.86   | 66.20  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.67   | 64.66  | 16.00 |       | 80.0  |         |
|           |                                                        | Z | 3.83   | 65.44  | 16.46 |       | 80.0  |         |
| 10655-AAD | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 3.94   | 66.00  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.75   | 64.59  | 16.05 |       | 80.0  |         |
|           |                                                        | Z | 3.91   | 65.37  | 16.49 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 100.00 | 108.27 | 24.21 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 20.54  | 89.19  | 19.09 |       | 50.0  |         |
|           |                                                        | Z | 100.00 | 106.85 | 23.58 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 109.79 | 23.79 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 105.04 | 21.61 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 107.25 | 22.69 |       | 60.0  |         |

|           |                             |   |        |        |        |      |       |         |
|-----------|-----------------------------|---|--------|--------|--------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 116.02 | 25.06  | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 103.57 | 19.60  |      | 80.0  |         |
|           |                             | Z | 100.00 | 110.44 | 22.79  |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 127.15 | 28.10  | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 96.83  | 15.82  |      | 100.0 |         |
|           |                             | Z | 100.00 | 114.65 | 23.34  |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 99.99  | 357.35 | 106.97 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 0.15   | 60.00  | 2.92   |      | 120.0 |         |
|           |                             | Z | 100.00 | 114.05 | 21.55  |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7491\_Jul18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7491**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

Calibration date: **July 20, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                              |                                   |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Michael Weber</b> | Function<br>Laboratory Technician | Signature<br> |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br>Technical Manager     | Signature<br> |
|                                                                                                                 |                              |                                   | Issued: July 23, 2018                                                                              |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                   |                                                                                                    |



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Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>; A, B, C, D** are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7491

|               |                |
|---------------|----------------|
| Manufactured: | March 20, 2017 |
| Repaired:     | July 10, 2018  |
| Calibrated:   | July 20, 2018  |

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7491

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.56     | 0.55     | 0.49     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 99.1     | 99.7     | 100.8    |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 150.4    | $\pm 3.3 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 146.8    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 158.3    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms.V}^{-2}$ | T2<br>$\text{ms.V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|--------------------------|--------------------------|----------|-----------------------|-----------------------|-------|
| X | 35.21    | 264.2    | 36.02                       | 7.203                    | 0.000                    | 5.028    | 1.076                 | 0.208                 | 1.005 |
| Y | 43.10    | 332.1    | 37.48                       | 6.569                    | 0.184                    | 5.070    | 0.501                 | 0.436                 | 1.008 |
| Z | 32.15    | 239.5    | 35.45                       | 5.491                    | 0.000                    | 5.007    | 0.859                 | 0.176                 | 1.004 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7491

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 10.48   | 10.48   | 10.48   | 0.55               | 0.85                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 10.10   | 10.10   | 10.10   | 0.53               | 0.80                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.81    | 8.81    | 8.81    | 0.36               | 0.80                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.48    | 8.48    | 8.48    | 0.30               | 0.87                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 8.12    | 8.12    | 8.12    | 0.25               | 0.90                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.67    | 7.67    | 7.67    | 0.33               | 0.84                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.52    | 7.52    | 7.52    | 0.30               | 0.88                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.62    | 5.62    | 5.62    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 5.05    | 5.05    | 5.05    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 5.27    | 5.27    | 5.27    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7491

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>c</sup> | Relative Permittivity <sup>f</sup> | Conductivity (S/m) <sup>f</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>g</sup> | Depth <sup>g</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 10.60   | 10.60   | 10.60   | 0.35               | 0.97                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 10.30   | 10.30   | 10.30   | 0.41               | 0.86                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.55    | 8.55    | 8.55    | 0.35               | 0.87                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 8.19    | 8.19    | 8.19    | 0.36               | 0.85                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.91    | 7.91    | 7.91    | 0.34               | 0.87                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.74    | 7.74    | 7.74    | 0.34               | 0.85                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.44    | 7.44    | 7.44    | 0.25               | 0.92                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.82    | 4.82    | 4.82    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.19    | 4.19    | 4.19    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.37    | 4.37    | 4.37    | 0.50               | 1.90                    | ± 13.1 %  |

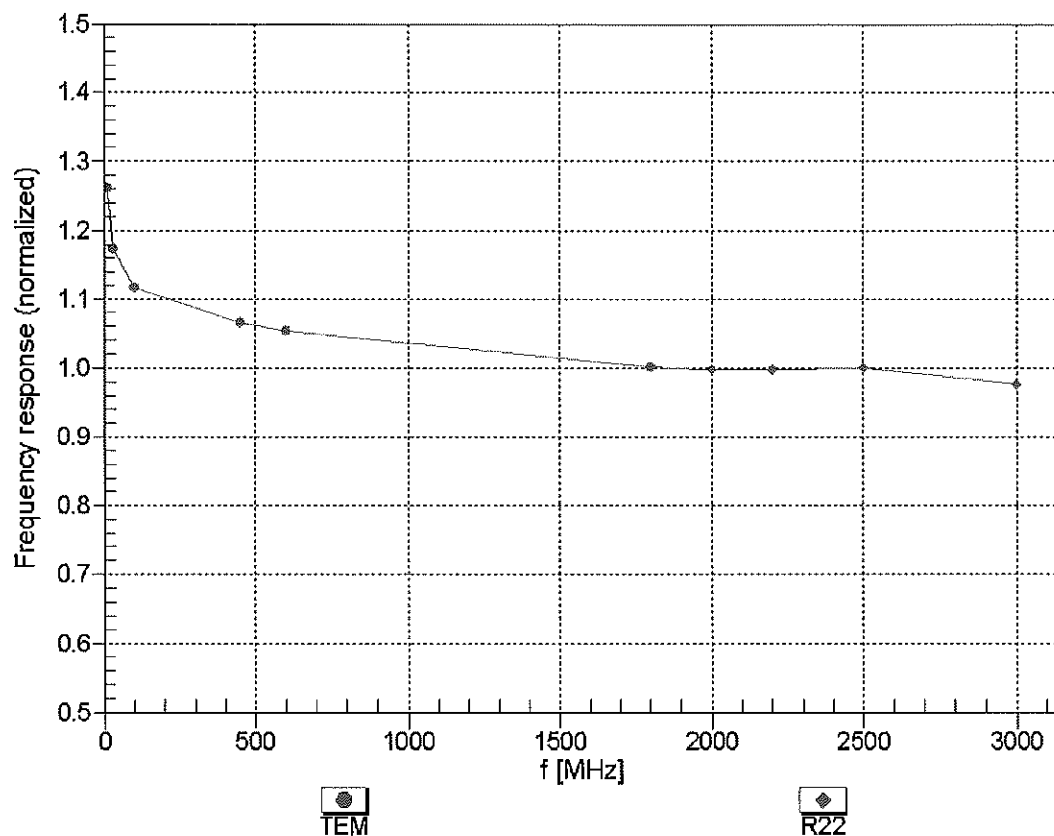
<sup>c</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>f</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>g</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

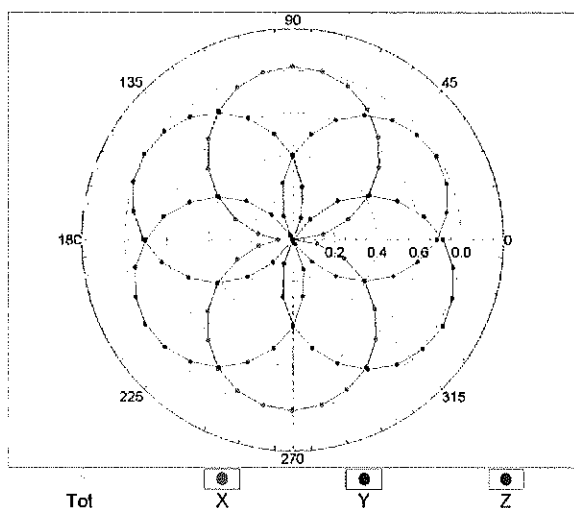
(TEM-Cell:ifi110 EXX, Waveguide: R22)



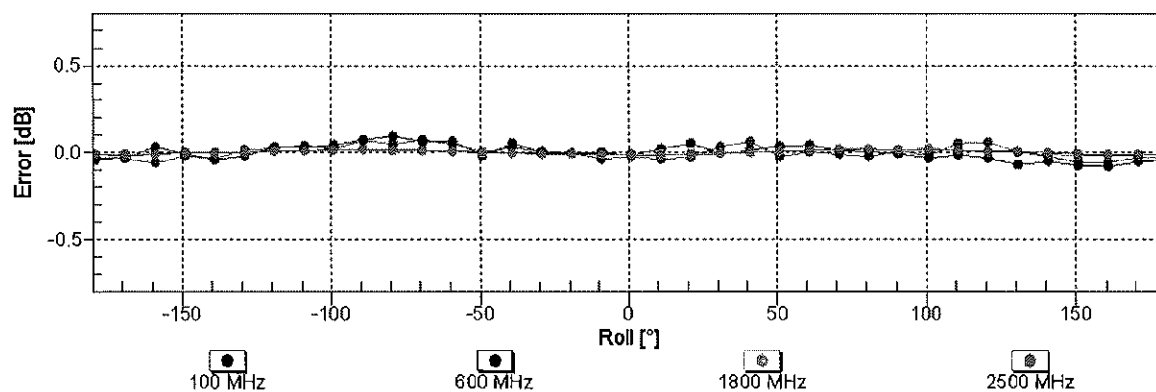
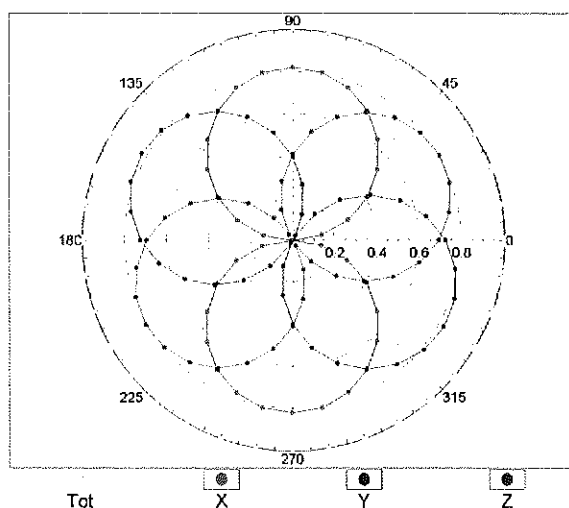
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\vartheta = 0^\circ$

f=600 MHz,TEM



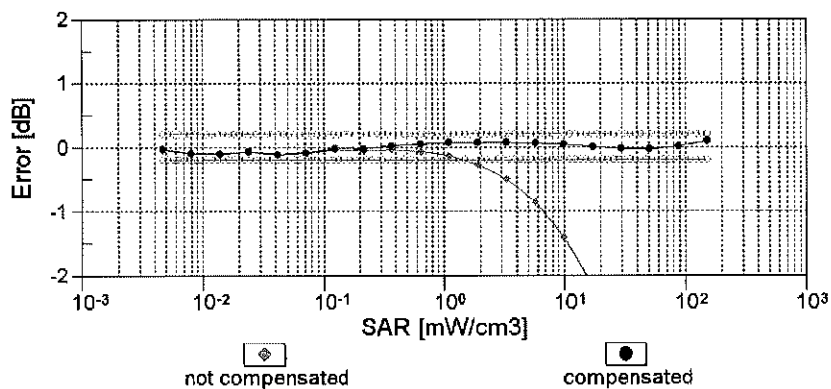
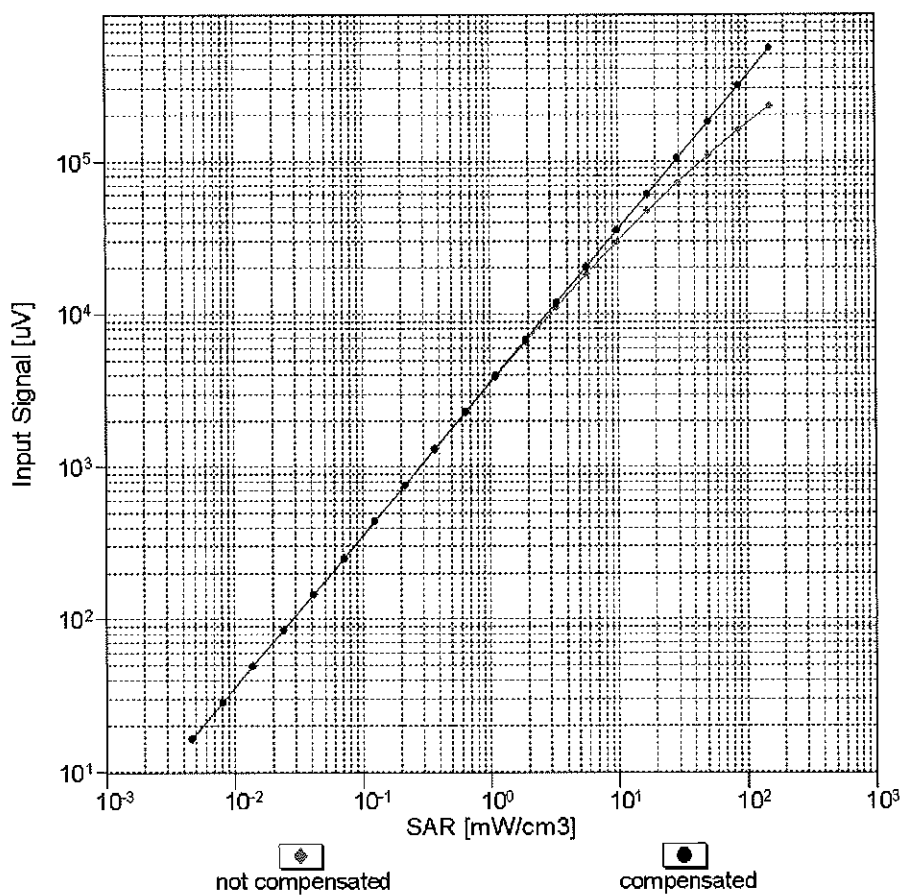
f=1800 MHz,R22



Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

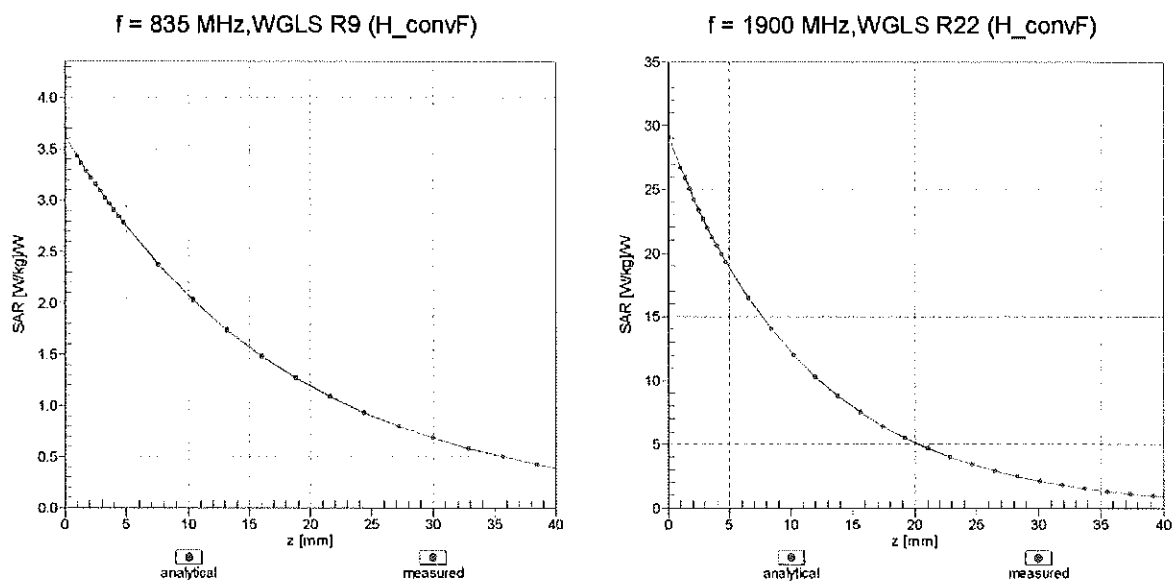
## Dynamic Range f(SAR<sub>head</sub>)

(TEM cell , f<sub>eval</sub>= 1900 MHz)



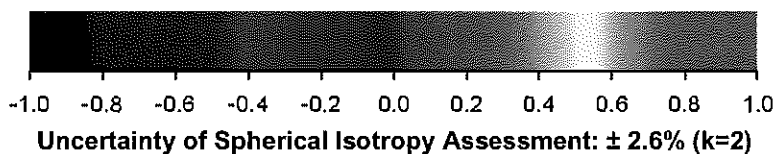
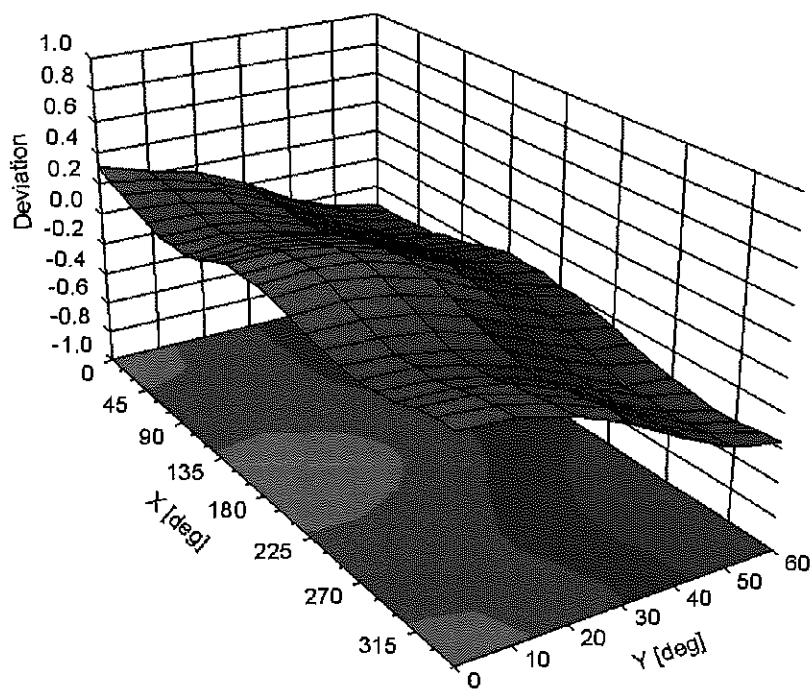
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  (k=2)

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7491

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 110.9      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Appendix: Modulation Calibration Parameters**

| UID       | Communication System Name                     |   | A<br>dB | B<br>dB/μV | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|-----------|-----------------------------------------------|---|---------|------------|-------|---------|----------|----------------------------------|
| 0         | CW                                            | X | 0.00    | 0.00       | 1.00  | 0.00    | 150.4    | ± 3.3 %                          |
|           |                                               | Y | 0.00    | 0.00       | 1.00  |         | 146.8    |                                  |
|           |                                               | Z | 0.00    | 0.00       | 1.00  |         | 158.3    |                                  |
| 10010-CAA | SAR Validation (Square, 100ms, 10ms)          | X | 1.34    | 61.83      | 7.07  | 10.00   | 20.0     | ± 9.6 %                          |
|           |                                               | Y | 1.58    | 62.93      | 8.08  |         | 20.0     |                                  |
|           |                                               | Z | 1.36    | 61.75      | 7.02  |         | 20.0     |                                  |
| 10011-CAB | UMTS-FDD (WCDMA)                              | X | 1.10    | 69.86      | 16.50 | 0.00    | 150.0    | ± 9.6 %                          |
|           |                                               | Y | 0.84    | 64.59      | 13.11 |         | 150.0    |                                  |
|           |                                               | Z | 0.95    | 67.18      | 14.87 |         | 150.0    |                                  |
| 10012-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.13    | 64.17      | 15.58 | 0.41    | 150.0    | ± 9.6 %                          |
|           |                                               | Y | 1.05    | 62.41      | 14.09 |         | 150.0    |                                  |
|           |                                               | Z | 1.10    | 63.39      | 14.82 |         | 150.0    |                                  |
| 10013-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.65    | 66.79      | 17.11 | 1.46    | 150.0    | ± 9.6 %                          |
|           |                                               | Y | 4.73    | 66.33      | 16.86 |         | 150.0    |                                  |
|           |                                               | Z | 4.57    | 66.64      | 16.86 |         | 150.0    |                                  |
| 10021-DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 103.89     | 21.71 | 9.39    | 50.0     | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 108.73     | 24.23 |         | 50.0     |                                  |
|           |                                               | Z | 26.33   | 90.02      | 18.11 |         | 50.0     |                                  |
| 10023-DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 103.35     | 21.52 | 9.57    | 50.0     | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 108.19     | 24.05 |         | 50.0     |                                  |
|           |                                               | Z | 8.05    | 78.49      | 14.82 |         | 50.0     |                                  |
| 10024-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 103.76     | 20.63 | 6.56    | 60.0     | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 108.89     | 23.12 |         | 60.0     |                                  |
|           |                                               | Z | 100.00  | 101.52     | 19.56 |         | 60.0     |                                  |
| 10025-DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 7.71    | 95.52      | 39.83 | 12.57   | 50.0     | ± 9.6 %                          |
|           |                                               | Y | 3.82    | 69.58      | 26.35 |         | 50.0     |                                  |
|           |                                               | Z | 5.34    | 82.06      | 33.11 |         | 50.0     |                                  |
| 10026-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 6.67    | 89.14      | 32.86 | 9.56    | 60.0     | ± 9.6 %                          |
|           |                                               | Y | 6.11    | 84.79      | 30.60 |         | 60.0     |                                  |
|           |                                               | Z | 5.40    | 83.14      | 30.03 |         | 60.0     |                                  |
| 10027-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 105.72     | 20.77 | 4.80    | 80.0     | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 109.47     | 22.55 |         | 80.0     |                                  |
|           |                                               | Z | 100.00  | 102.59     | 19.31 |         | 80.0     |                                  |
| 10028-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 109.66     | 21.79 | 3.55    | 100.0    | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 109.26     | 21.76 |         | 100.0    |                                  |
|           |                                               | Z | 100.00  | 105.24     | 19.82 |         | 100.0    |                                  |
| 10029-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 4.10    | 76.83      | 26.30 | 7.80    | 80.0     | ± 9.6 %                          |
|           |                                               | Y | 4.05    | 75.26      | 25.26 |         | 80.0     |                                  |
|           |                                               | Z | 3.61    | 73.61      | 24.52 |         | 80.0     |                                  |
| 10030-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 101.83     | 19.37 | 5.30    | 70.0     | ± 9.6 %                          |
|           |                                               | Y | 100.00  | 106.78     | 21.72 |         | 70.0     |                                  |
|           |                                               | Z | 100.00  | 99.08      | 18.07 |         | 70.0     |                                  |
| 10031-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 99.29      | 16.49 | 1.88    | 100.0    | ± 9.6 %                          |
|           |                                               | Y | 0.43    | 63.88      | 6.46  |         | 100.0    |                                  |
|           |                                               | Z | 100.00  | 95.02      | 14.71 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 103.35 | 17.34 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.14   | 60.00  | 3.51  |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 98.56  | 15.49 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 15.94  | 99.69  | 25.70 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 8.86   | 93.04  | 24.94 |       | 70.0  |         |
|           |                                                     | Z | 4.54   | 80.85  | 19.18 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 2.96   | 77.85  | 17.14 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.73   | 70.99  | 15.19 |       | 100.0 |         |
|           |                                                     | Z | 1.45   | 68.86  | 12.96 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 1.93   | 73.49  | 15.25 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.24   | 67.47  | 13.23 |       | 100.0 |         |
|           |                                                     | Z | 1.14   | 67.01  | 11.91 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 33.38  | 110.64 | 28.65 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 14.03  | 100.51 | 27.24 |       | 70.0  |         |
|           |                                                     | Z | 5.92   | 84.73  | 20.56 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 2.49   | 75.90  | 16.43 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.61   | 70.25  | 14.86 |       | 100.0 |         |
|           |                                                     | Z | 1.32   | 67.93  | 12.55 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 1.97   | 74.03  | 15.61 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.24   | 67.69  | 13.45 |       | 100.0 |         |
|           |                                                     | Z | 1.14   | 67.23  | 12.15 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 1.69   | 72.14  | 14.31 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.13   | 65.88  | 11.78 |       | 150.0 |         |
|           |                                                     | Z | 1.05   | 66.64  | 11.42 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 99.80  | 100.56 | 19.56 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 104.61 | 21.59 |       | 50.0  |         |
|           |                                                     | Z | 2.99   | 70.61  | 11.28 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 110.68 | 3.82  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.02   | 125.31 | 15.46 |       | 150.0 |         |
|           |                                                     | Z | 0.00   | 100.18 | 3.88  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 5.03   | 70.28  | 13.19 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 19.60  | 86.32  | 19.47 |       | 25.0  |         |
|           |                                                     | Z | 3.96   | 67.14  | 11.88 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 6.28   | 75.19  | 13.99 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 49.36  | 98.98  | 21.95 |       | 40.0  |         |
|           |                                                     | Z | 4.01   | 70.23  | 12.03 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00 | 119.24 | 30.27 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 79.13  | 119.42 | 31.62 |       | 50.0  |         |
|           |                                                     | Z | 21.35  | 96.00  | 23.74 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 3.32   | 72.42  | 23.38 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.31   | 71.39  | 22.62 |       | 100.0 |         |
|           |                                                     | Z | 3.02   | 70.13  | 22.02 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.13   | 65.02  | 16.09 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.05   | 63.09  | 14.54 |       | 110.0 |         |
|           |                                                     | Z | 1.09   | 63.96  | 15.16 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 146.09 | 38.55 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 2.18   | 83.07  | 21.15 |       | 110.0 |         |
|           |                                                     | Z | 2.56   | 86.95  | 23.01 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 2.12 | 78.72 | 22.19 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 1.64 | 72.98 | 19.41 |      | 110.0 |         |
|           |                                                | Z | 1.52 | 72.27 | 19.03 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.48 | 66.83 | 16.57 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.53 | 66.30 | 16.26 |      | 100.0 |         |
|           |                                                | Z | 4.39 | 66.67 | 16.33 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.48 | 66.91 | 16.66 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.54 | 66.38 | 16.35 |      | 100.0 |         |
|           |                                                | Z | 4.40 | 66.74 | 16.41 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.72 | 67.10 | 16.85 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.82 | 66.65 | 16.60 |      | 100.0 |         |
|           |                                                | Z | 4.63 | 66.92 | 16.60 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.58 | 66.91 | 16.91 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.68 | 66.51 | 16.69 |      | 100.0 |         |
|           |                                                | Z | 4.49 | 66.71 | 16.64 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.59 | 66.89 | 17.05 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.69 | 66.53 | 16.86 |      | 100.0 |         |
|           |                                                | Z | 4.49 | 66.66 | 16.76 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 4.87 | 67.15 | 17.52 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.75 | 17.34 |      | 100.0 |         |
|           |                                                | Z | 4.76 | 66.93 | 17.23 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 4.88 | 67.02 | 17.67 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.01 | 66.72 | 17.53 |      | 100.0 |         |
|           |                                                | Z | 4.78 | 66.80 | 17.37 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 4.94 | 67.05 | 17.86 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.09 | 66.76 | 17.74 |      | 100.0 |         |
|           |                                                | Z | 4.83 | 66.81 | 17.55 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.73 | 66.83 | 17.38 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.81 | 66.40 | 17.17 |      | 100.0 |         |
|           |                                                | Z | 4.65 | 66.66 | 17.13 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.68 | 67.04 | 17.56 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.77 | 66.65 | 17.36 |      | 100.0 |         |
|           |                                                | Z | 4.58 | 66.82 | 17.27 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.72 | 67.18 | 17.88 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.81 | 66.77 | 17.68 |      | 100.0 |         |
|           |                                                | Z | 4.63 | 66.96 | 17.58 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.71 | 67.08 | 18.01 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.79 | 66.64 | 17.82 |      | 100.0 |         |
|           |                                                | Z | 4.63 | 66.89 | 17.72 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.72 | 67.05 | 18.25 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.81 | 66.68 | 18.10 |      | 90.0  |         |
|           |                                                | Z | 4.63 | 66.84 | 17.94 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.75 | 66.90 | 18.41 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.82 | 66.48 | 18.23 |      | 90.0  |         |
|           |                                                | Z | 4.67 | 66.71 | 18.11 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.77 | 66.98 | 18.52 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.85 | 66.54 | 18.33 |      | 90.0  |         |
|           |                                                | Z | 4.69 | 66.79 | 18.22 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.70   | 65.48  | 10.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.59   | 62.19  | 9.27  |      | 150.0 |         |
|           |                                                     | Z | 0.55   | 62.91  | 9.10  |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.63   | 60.00  | 2.84  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.58   | 60.00  | 3.13  |      | 80.0  |         |
|           |                                                     | Z | 20.99  | 63.47  | 2.92  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 103.79 | 20.66 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 109.00 | 23.19 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 101.52 | 19.57 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.91   | 69.67  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.62   | 65.97  | 14.31 |      | 150.0 |         |
|           |                                                     | Z | 1.77   | 68.37  | 15.43 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.88   | 69.64  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.59   | 65.90  | 14.26 |      | 150.0 |         |
|           |                                                     | Z | 1.73   | 68.31  | 15.40 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 6.73   | 89.36  | 32.94 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 6.15   | 84.95  | 30.66 |      | 60.0  |         |
|           |                                                     | Z | 5.44   | 83.31  | 30.09 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.08   | 70.94  | 17.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.81   | 68.58  | 15.67 |      | 150.0 |         |
|           |                                                     | Z | 2.88   | 69.85  | 16.58 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.13   | 67.76  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.05   | 66.58  | 15.31 |      | 150.0 |         |
|           |                                                     | Z | 3.04   | 67.27  | 15.79 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.23   | 67.73  | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.16   | 66.61  | 15.44 |      | 150.0 |         |
|           |                                                     | Z | 3.14   | 67.29  | 15.89 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 5.24   | 74.74  | 20.38 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.97   | 72.97  | 19.57 |      | 65.0  |         |
|           |                                                     | Z | 4.85   | 73.48  | 19.68 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.14   | 72.01  | 19.90 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.15   | 71.24  | 19.54 |      | 65.0  |         |
|           |                                                     | Z | 4.80   | 70.82  | 19.17 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 4.94   | 70.96  | 19.71 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.80   | 69.63  | 19.08 |      | 65.0  |         |
|           |                                                     | Z | 4.76   | 70.37  | 19.26 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.66   | 70.35  | 17.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.44   | 67.86  | 15.47 |      | 150.0 |         |
|           |                                                     | Z | 2.48   | 69.23  | 16.39 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.78   | 67.82  | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.70   | 66.35  | 15.10 |      | 150.0 |         |
|           |                                                     | Z | 2.68   | 67.26  | 15.62 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.15   | 69.80  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.95   | 66.88  | 14.89 |      | 150.0 |         |
|           |                                                     | Z | 1.97   | 68.48  | 15.81 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.56   | 69.31  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.37   | 66.90  | 15.11 |      | 150.0 |         |
|           |                                                     | Z | 2.41   | 68.50  | 15.76 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.91 | 67.86 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.82 | 66.42 | 15.21 |      | 150.0 |         |
|           |                                                | Z | 2.81 | 67.36 | 15.70 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.70 | 69.44 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.52 | 67.13 | 15.30 |      | 150.0 |         |
|           |                                                | Z | 2.55 | 68.68 | 15.89 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 4.96 | 67.25 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.01 | 66.84 | 16.22 |      | 150.0 |         |
|           |                                                | Z | 4.89 | 67.13 | 16.39 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.20 | 67.30 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.27 | 66.93 | 16.28 |      | 150.0 |         |
|           |                                                | Z | 5.12 | 67.16 | 16.41 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.04 | 67.44 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.09 | 67.01 | 16.23 |      | 150.0 |         |
|           |                                                | Z | 4.96 | 67.28 | 16.40 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 4.95 | 67.19 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.97 | 66.69 | 16.16 |      | 150.0 |         |
|           |                                                | Z | 4.87 | 67.03 | 16.37 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.27 | 67.51 | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.35 | 67.15 | 16.40 |      | 150.0 |         |
|           |                                                | Z | 5.19 | 67.35 | 16.51 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.04 | 67.44 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.08 | 66.98 | 16.23 |      | 150.0 |         |
|           |                                                | Z | 4.97 | 67.30 | 16.42 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.26 | 67.76 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.19 | 66.62 | 15.35 |      | 150.0 |         |
|           |                                                | Z | 3.16 | 67.32 | 15.80 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.38 | 67.90 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.32 | 66.77 | 15.56 |      | 150.0 |         |
|           |                                                | Z | 3.29 | 67.50 | 16.00 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.93 | 70.04 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.69 | 66.50 | 14.20 |      | 150.0 |         |
|           |                                                | Z | 1.71 | 68.26 | 14.94 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.41 | 70.07 | 15.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.14 | 66.99 | 14.32 |      | 150.0 |         |
|           |                                                | Z | 2.16 | 68.55 | 14.60 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.01 | 66.59 | 13.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.96 | 65.02 | 12.83 |      | 150.0 |         |
|           |                                                | Z | 1.82 | 65.43 | 12.49 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 0.79 | 61.74 | 8.30  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.89 | 61.82 | 8.93  |      | 150.0 |         |
|           |                                                | Z | 0.67 | 60.49 | 7.04  |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 1.02 | 60.90 | 6.96  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.41 | 62.85 | 9.13  |      | 150.0 |         |
|           |                                                | Z | 0.86 | 60.00 | 5.90  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 1.08 | 61.31 | 7.28  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.52 | 63.66 | 9.67  |      | 150.0 |         |
|           |                                                | Z | 0.87 | 60.00 | 5.96  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.79 | 67.89 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.70 | 66.41 | 15.15 |      | 150.0 |         |
|           |                                            | Z | 2.69 | 67.33 | 15.67 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.92 | 67.92 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.83 | 66.48 | 15.25 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 67.42 | 15.75 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 5.50 | 77.63 | 21.63 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.18 | 75.55 | 20.75 |      | 65.0  |         |
|           |                                            | Z | 4.81 | 75.35 | 20.47 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 4.69 | 72.03 | 19.49 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.67 | 71.10 | 19.15 |      | 65.0  |         |
|           |                                            | Z | 4.32 | 70.65 | 18.61 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.03 | 73.08 | 20.33 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.99 | 72.06 | 19.96 |      | 65.0  |         |
|           |                                            | Z | 4.65 | 71.74 | 19.48 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.19 | 70.20 | 16.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.98 | 67.20 | 15.11 |      | 150.0 |         |
|           |                                            | Z | 2.01 | 68.83 | 16.03 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.56 | 69.35 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.37 | 66.92 | 15.13 |      | 150.0 |         |
|           |                                            | Z | 2.42 | 68.55 | 15.79 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.76 | 69.95 | 15.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.51 | 66.15 | 13.66 |      | 150.0 |         |
|           |                                            | Z | 1.51 | 67.73 | 14.15 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.82 | 66.90 | 13.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.75 | 65.08 | 12.50 |      | 150.0 |         |
|           |                                            | Z | 1.60 | 65.31 | 11.95 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.71 | 69.53 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.53 | 67.19 | 15.35 |      | 150.0 |         |
|           |                                            | Z | 2.57 | 68.78 | 15.96 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 1.91 | 67.25 | 13.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.83 | 65.40 | 12.72 |      | 150.0 |         |
|           |                                            | Z | 1.66 | 65.56 | 12.11 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.68 | 69.59 | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.52 | 67.43 | 15.45 |      | 150.0 |         |
|           |                                            | Z | 2.53 | 68.66 | 16.19 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.81 | 67.92 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.72 | 66.39 | 15.12 |      | 150.0 |         |
|           |                                            | Z | 2.70 | 67.39 | 15.59 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.92 | 68.14 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.83 | 66.59 | 15.27 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 67.63 | 15.75 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.26 | 69.74 | 19.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.39 | 68.99 | 18.81 |      | 150.0 |         |
|           |                                            | Z | 3.02 | 68.53 | 18.69 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.01 | 73.35 | 20.11 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.09 | 71.71 | 19.17 |      | 150.0 |         |
|           |                                            | Z | 3.52 | 71.40 | 19.14 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 4.59 | 76.27 | 21.75 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.58 | 74.20 | 20.63 |      | 150.0 |         |
|           |                                            | Z | 3.97 | 74.08 | 20.73 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.66 | 68.45 | 18.86 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.77 | 67.93 | 18.32 |      | 150.0 |         |
|           |                                            | Z | 2.45 | 66.96 | 17.96 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 3.66 | 75.27 | 21.65 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.69 | 73.46 | 20.56 |      | 150.0 |         |
|           |                                            | Z | 3.08 | 72.31 | 20.27 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.97 | 70.84 | 18.68 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.04 | 69.43 | 17.75 |      | 150.0 |         |
|           |                                            | Z | 2.56 | 68.54 | 17.49 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 4.18 | 82.75 | 26.36 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.30 | 80.68 | 25.32 |      | 65.0  |         |
|           |                                            | Z | 3.13 | 76.88 | 23.63 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 9.86 | 96.13 | 28.68 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.48 | 92.84 | 27.67 |      | 65.0  |         |
|           |                                            | Z | 4.73 | 83.11 | 23.98 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 6.74 | 88.25 | 25.46 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.71 | 85.70 | 24.69 |      | 65.0  |         |
|           |                                            | Z | 4.01 | 79.63 | 22.09 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.63 | 68.18 | 18.63 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 67.64 | 18.08 |      | 150.0 |         |
|           |                                            | Z | 2.43 | 66.71 | 17.74 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 3.67 | 75.30 | 21.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.70 | 73.49 | 20.57 |      | 150.0 |         |
|           |                                            | Z | 3.09 | 72.34 | 20.28 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.65 | 68.30 | 18.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.76 | 67.77 | 18.17 |      | 150.0 |         |
|           |                                            | Z | 2.44 | 66.81 | 17.80 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 3.64 | 75.14 | 21.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.66 | 73.30 | 20.46 |      | 150.0 |         |
|           |                                            | Z | 3.07 | 72.22 | 20.21 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 3.29 | 72.97 | 20.05 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.33 | 71.30 | 19.01 |      | 150.0 |         |
|           |                                            | Z | 2.79 | 70.34 | 18.76 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.96 | 70.81 | 18.65 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.03 | 69.37 | 17.71 |      | 150.0 |         |
|           |                                            | Z | 2.56 | 68.52 | 17.47 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.65 | 68.29 | 18.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.76 | 67.76 | 18.16 |      | 150.0 |         |
|           |                                            | Z | 2.44 | 66.80 | 17.80 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 3.64 | 75.12 | 21.57 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.66 | 73.28 | 20.45 |      | 150.0 |         |
|           |                                            | Z | 3.06 | 72.19 | 20.19 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.96 | 70.78 | 18.63 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.03 | 69.35 | 17.70 |      | 150.0 |         |
|           |                                            | Z | 2.56 | 68.50 | 17.46 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.65 | 68.32 | 18.72 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.76 | 67.80 | 18.18 |      | 150.0 |         |
|           |                                               | Z | 2.45 | 66.83 | 17.82 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 3.66 | 75.19 | 21.61 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.68 | 73.35 | 20.49 |      | 150.0 |         |
|           |                                               | Z | 3.08 | 72.26 | 20.23 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 2.97 | 70.85 | 18.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.04 | 69.41 | 17.73 |      | 150.0 |         |
|           |                                               | Z | 2.57 | 68.55 | 17.49 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.67 | 68.40 | 18.80 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.77 | 67.86 | 18.25 |      | 150.0 |         |
|           |                                               | Z | 2.46 | 66.91 | 17.90 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 3.77 | 75.83 | 21.98 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.79 | 73.98 | 20.86 |      | 150.0 |         |
|           |                                               | Z | 3.16 | 72.79 | 20.57 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.04 | 71.27 | 18.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.10 | 69.80 | 18.00 |      | 150.0 |         |
|           |                                               | Z | 2.61 | 68.91 | 17.74 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.36 | 66.94 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.38 | 66.23 | 15.84 |      | 150.0 |         |
|           |                                               | Z | 4.30 | 66.83 | 16.07 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.51 | 67.17 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.54 | 66.52 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.43 | 67.04 | 16.21 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.54 | 67.18 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.58 | 66.56 | 16.00 |      | 150.0 |         |
|           |                                               | Z | 4.46 | 67.04 | 16.22 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.35 | 66.93 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.38 | 66.27 | 15.85 |      | 150.0 |         |
|           |                                               | Z | 4.28 | 66.81 | 16.05 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.51 | 67.17 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.55 | 66.54 | 15.99 |      | 150.0 |         |
|           |                                               | Z | 4.43 | 67.04 | 16.21 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.53 | 67.18 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.58 | 66.57 | 16.01 |      | 150.0 |         |
|           |                                               | Z | 4.45 | 67.04 | 16.22 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.30 | 66.98 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.33 | 66.28 | 15.81 |      | 150.0 |         |
|           |                                               | Z | 4.23 | 66.86 | 16.03 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.50 | 67.13 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.55 | 66.51 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.43 | 67.00 | 16.20 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.55 | 67.12 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.59 | 66.51 | 16.00 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 66.99 | 16.21 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 4.92 | 67.18 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.95 | 66.69 | 16.15 |      | 150.0 |         |
|           |                                               | Z | 4.85 | 67.04 | 16.36 |      | 150.0 |         |

|           |                                           |   |       |       |       |      |       |         |
|-----------|-------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.18  | 67.36 | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.25  | 66.97 | 16.32 |      | 150.0 |         |
|           |                                           | Z | 5.09  | 67.17 | 16.43 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.96  | 67.29 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.98  | 66.79 | 16.13 |      | 150.0 |         |
|           |                                           | Z | 4.89  | 67.16 | 16.35 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.66  | 66.63 | 15.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.62  | 65.33 | 14.56 |      | 150.0 |         |
|           |                                           | Z | 2.57  | 66.18 | 14.66 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 10.77 | 97.88 | 29.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.19 | 94.28 | 28.24 |      | 65.0  |         |
|           |                                           | Z | 5.01  | 84.20 | 24.48 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 10.74 | 96.09 | 27.95 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.37 | 93.13 | 27.16 |      | 65.0  |         |
|           |                                           | Z | 4.96  | 83.01 | 23.31 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 4.87  | 86.06 | 27.65 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.45  | 85.87 | 27.38 |      | 65.0  |         |
|           |                                           | Z | 3.29  | 77.92 | 24.09 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 9.95  | 96.25 | 28.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.56  | 92.96 | 27.71 |      | 65.0  |         |
|           |                                           | Z | 4.76  | 83.20 | 24.02 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 9.77  | 94.37 | 27.34 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.64  | 91.75 | 26.64 |      | 65.0  |         |
|           |                                           | Z | 4.66  | 81.93 | 22.85 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 4.69  | 85.20 | 27.25 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.24  | 85.03 | 26.99 |      | 65.0  |         |
|           |                                           | Z | 3.19  | 77.30 | 23.76 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 9.93  | 96.23 | 28.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.54  | 92.93 | 27.70 |      | 65.0  |         |
|           |                                           | Z | 4.76  | 83.19 | 24.02 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 9.73  | 94.32 | 27.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.60  | 91.71 | 26.63 |      | 65.0  |         |
|           |                                           | Z | 4.65  | 81.89 | 22.84 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 4.55  | 84.53 | 26.87 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.09  | 84.33 | 26.61 |      | 65.0  |         |
|           |                                           | Z | 3.13  | 76.83 | 23.44 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 9.95  | 96.29 | 28.74 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.55  | 92.97 | 27.72 |      | 65.0  |         |
|           |                                           | Z | 4.76  | 83.21 | 24.03 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 9.91  | 94.59 | 27.40 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.74  | 91.91 | 26.69 |      | 65.0  |         |
|           |                                           | Z | 4.70  | 82.06 | 22.89 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 4.68  | 85.24 | 27.27 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.24  | 85.07 | 27.01 |      | 65.0  |         |
|           |                                           | Z | 3.19  | 77.31 | 23.77 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 9.90  | 96.21 | 28.71 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.52  | 92.90 | 27.69 |      | 65.0  |         |
|           |                                           | Z | 4.74  | 83.16 | 24.01 |      | 65.0  |         |

|           |                                            |   |      |       |       |      |      |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 9.68 | 94.26 | 27.32 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.56 | 91.66 | 26.61 |      | 65.0 |         |
|           |                                            | Z | 4.63 | 81.85 | 22.83 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.67 | 85.21 | 27.26 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.23 | 85.02 | 26.99 |      | 65.0 |         |
|           |                                            | Z | 3.18 | 77.30 | 23.76 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 6.80 | 81.39 | 25.80 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.69 | 78.79 | 24.70 |      | 65.0 |         |
|           |                                            | Z | 5.79 | 78.45 | 24.38 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.26 | 79.71 | 25.05 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.96 | 76.36 | 23.58 |      | 65.0 |         |
|           |                                            | Z | 5.52 | 77.59 | 23.96 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.99 | 75.34 | 24.14 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.91 | 72.91 | 22.91 |      | 65.0 |         |
|           |                                            | Z | 4.65 | 74.20 | 23.42 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 3.39 | 69.24 | 14.20 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.36 | 72.64 | 16.92 |      | 65.0 |         |
|           |                                            | Z | 2.62 | 66.00 | 12.07 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 3.29 | 68.57 | 13.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.24 | 71.91 | 16.54 |      | 65.0 |         |
|           |                                            | Z | 2.58 | 65.59 | 11.80 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 3.44 | 73.33 | 16.69 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.71 | 74.16 | 17.87 |      | 65.0 |         |
|           |                                            | Z | 2.50 | 68.87 | 14.20 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 3.59 | 70.57 | 16.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.77 | 70.80 | 17.09 |      | 65.0 |         |
|           |                                            | Z | 3.05 | 68.22 | 14.66 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 3.53 | 69.86 | 15.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.77 | 70.27 | 16.82 |      | 65.0 |         |
|           |                                            | Z | 3.03 | 67.66 | 14.38 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 5.15 | 79.98 | 20.81 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.72 | 77.98 | 20.57 |      | 65.0 |         |
|           |                                            | Z | 3.76 | 74.94 | 18.36 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 4.66 | 74.40 | 20.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.57 | 73.23 | 20.07 |      | 65.0 |         |
|           |                                            | Z | 4.18 | 72.55 | 19.13 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 4.41 | 72.16 | 18.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.43 | 71.37 | 18.81 |      | 65.0 |         |
|           |                                            | Z | 3.97 | 70.48 | 17.75 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 5.61 | 80.70 | 22.65 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.05 | 77.80 | 21.64 |      | 65.0 |         |
|           |                                            | Z | 4.58 | 77.18 | 20.94 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 4.62 | 71.66 | 19.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.60 | 70.68 | 18.91 |      | 65.0 |         |
|           |                                            | Z | 4.27 | 70.36 | 18.33 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 4.92 | 72.56 | 19.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.89 | 71.55 | 19.63 |      | 65.0 |         |
|           |                                            | Z | 4.55 | 71.27 | 19.06 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 5.21 | 76.84 | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.93 | 74.79 | 20.63 |      | 65.0 |         |
|           |                                             | Z | 4.60 | 74.68 | 20.30 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 2.27 | 64.22 | 10.38 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.13 | 67.86 | 13.52 |      | 65.0 |         |
|           |                                             | Z | 1.86 | 62.36 | 8.79  |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 2.23 | 63.73 | 10.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.04 | 67.13 | 13.05 |      | 65.0 |         |
|           |                                             | Z | 1.85 | 62.05 | 8.52  |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 2.12 | 66.29 | 12.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.63 | 68.85 | 14.46 |      | 65.0 |         |
|           |                                             | Z | 1.69 | 63.73 | 10.31 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 4.04 | 72.27 | 17.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.10 | 71.83 | 18.23 |      | 65.0 |         |
|           |                                             | Z | 3.51 | 70.05 | 16.39 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 4.06 | 71.92 | 17.67 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.14 | 71.59 | 18.11 |      | 65.0 |         |
|           |                                             | Z | 3.54 | 69.80 | 16.26 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 5.08 | 79.44 | 21.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.62 | 77.05 | 20.68 |      | 65.0 |         |
|           |                                             | Z | 3.97 | 75.34 | 19.17 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 4.64 | 74.33 | 20.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.56 | 73.18 | 20.02 |      | 65.0 |         |
|           |                                             | Z | 4.16 | 72.47 | 19.07 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 4.40 | 72.13 | 18.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.42 | 71.34 | 18.80 |      | 65.0 |         |
|           |                                             | Z | 3.96 | 70.46 | 17.74 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 5.54 | 80.46 | 22.53 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.00 | 77.61 | 21.54 |      | 65.0 |         |
|           |                                             | Z | 4.54 | 76.98 | 20.83 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 4.68 | 72.03 | 19.49 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.67 | 71.10 | 19.16 |      | 65.0 |         |
|           |                                             | Z | 4.32 | 70.66 | 18.61 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.03 | 73.07 | 20.32 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.99 | 72.05 | 19.95 |      | 65.0 |         |
|           |                                             | Z | 4.65 | 71.73 | 19.47 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 5.49 | 77.58 | 21.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.17 | 75.51 | 20.73 |      | 65.0 |         |
|           |                                             | Z | 4.81 | 75.30 | 20.45 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 5.31 | 72.01 | 19.97 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.31 | 71.19 | 19.61 |      | 65.0 |         |
|           |                                             | Z | 4.98 | 70.92 | 19.27 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 5.33 | 71.64 | 19.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.32 | 70.82 | 19.49 |      | 65.0 |         |
|           |                                             | Z | 5.01 | 70.63 | 19.17 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 5.42 | 74.57 | 20.50 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.27 | 73.21 | 19.87 |      | 65.0 |         |
|           |                                             | Z | 4.97 | 73.14 | 19.70 |      | 65.0 |         |

|           |                                                                    |   |       |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.53  | 67.41  | 15.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.41  | 65.60  | 14.41 |      | 150.0 |         |
|           |                                                                    | Z | 2.42  | 66.84  | 14.77 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.65  | 69.68  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.38  | 65.75  | 13.95 |      | 150.0 |         |
|           |                                                                    | Z | 1.48  | 67.93  | 15.18 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.26  | 58.91  | 4.09  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.56  | 59.91  | 5.41  |      | 50.0  |         |
|           |                                                                    | Z | 1.20  | 58.49  | 3.63  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 2.42  | 64.72  | 10.06 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.46  | 69.25  | 13.34 |      | 50.0  |         |
|           |                                                                    | Z | 2.18  | 63.34  | 8.95  |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 2.50  | 65.01  | 10.28 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.59  | 69.64  | 13.59 |      | 50.0  |         |
|           |                                                                    | Z | 2.24  | 63.55  | 9.13  |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.10  | 66.98  | 11.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.97  | 64.13  | 10.63 |      | 150.0 |         |
|           |                                                                    | Z | 0.82  | 63.94  | 9.79  |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.68  | 65.20  | 10.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.58  | 62.08  | 9.19  |      | 150.0 |         |
|           |                                                                    | Z | 0.54  | 62.76  | 9.00  |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.41  | 74.35  | 15.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.64  | 63.89  | 10.50 |      | 150.0 |         |
|           |                                                                    | Z | 0.74  | 66.77  | 11.39 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 29.38 | 111.39 | 26.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.83  | 66.81  | 12.42 |      | 150.0 |         |
|           |                                                                    | Z | 1.83  | 77.13  | 16.03 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 22.91 | 98.36  | 26.23 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 12.18 | 90.45  | 25.14 |      | 50.0  |         |
|           |                                                                    | Z | 17.79 | 92.67  | 23.76 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.67  | 70.47  | 17.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.45  | 67.95  | 15.53 |      | 150.0 |         |
|           |                                                                    | Z | 2.49  | 69.33  | 16.47 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.24  | 66.33  | 12.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.18  | 64.26  | 11.46 |      | 150.0 |         |
|           |                                                                    | Z | 1.02  | 64.03  | 10.60 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 1.64  | 64.98  | 10.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.00  | 66.27  | 12.01 |      | 150.0 |         |
|           |                                                                    | Z | 1.26  | 62.57  | 8.71  |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 1.26  | 61.78  | 8.09  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.59  | 63.07  | 9.68  |      | 150.0 |         |
|           |                                                                    | Z | 1.05  | 60.58  | 6.91  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.39  | 65.54  | 17.37 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.53  | 65.00  | 17.08 |      | 50.0  |         |
|           |                                                                    | Z | 4.11  | 64.57  | 16.69 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.79  | 65.79  | 17.90 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.96  | 65.41  | 17.67 |      | 50.0  |         |
|           |                                                                    | Z | 4.63  | 65.39  | 17.52 |      | 50.0  |         |

|           |                                                                     |   |      |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.53 | 65.36 | 17.66 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.70 | 64.98 | 17.46 |       | 50.0  |         |
|           |                                                                     | Z | 4.38 | 64.98 | 17.27 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.38 | 65.39 | 17.23 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 64.89 | 16.97 |       | 50.0  |         |
|           |                                                                     | Z | 4.23 | 65.02 | 16.87 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 3.76 | 65.93 | 18.22 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.01 | 66.05 | 18.49 |       | 35.0  |         |
|           |                                                                     | Z | 3.58 | 65.17 | 17.48 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.18 | 65.57 | 18.28 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 65.53 | 18.38 |       | 35.0  |         |
|           |                                                                     | Z | 4.02 | 65.02 | 17.72 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.04 | 65.50 | 18.13 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.28 | 65.55 | 18.28 |       | 35.0  |         |
|           |                                                                     | Z | 3.88 | 64.91 | 17.55 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.02 | 65.66 | 18.27 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.25 | 65.71 | 18.40 |       | 35.0  |         |
|           |                                                                     | Z | 3.85 | 65.05 | 17.67 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.20 | 65.65 | 18.38 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.45 | 65.69 | 18.51 |       | 35.0  |         |
|           |                                                                     | Z | 4.03 | 65.07 | 17.79 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.12 | 65.58 | 18.25 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.35 | 65.54 | 18.34 |       | 35.0  |         |
|           |                                                                     | Z | 3.96 | 65.03 | 17.69 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.03 | 69.56 | 16.72 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.79 | 67.30 | 15.28 |       | 150.0 |         |
|           |                                                                     | Z | 2.85 | 68.56 | 16.14 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 2.69 | 72.96 | 16.14 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.22 | 69.97 | 14.93 |       | 70.0  |         |
|           |                                                                     | Z | 2.03 | 69.45 | 14.60 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 4.98 | 84.30 | 23.43 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 3.76 | 78.85 | 21.43 |       | 30.0  |         |
|           |                                                                     | Z | 3.48 | 78.21 | 21.09 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.05 | 64.29 | 15.62 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.97 | 62.31 | 13.94 |       | 150.0 |         |
|           |                                                                     | Z | 1.03 | 63.50 | 14.84 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.38 | 66.85 | 16.35 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.43 | 66.27 | 16.00 |       | 150.0 |         |
|           |                                                                     | Z | 4.30 | 66.68 | 16.12 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.38 | 66.85 | 16.35 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.43 | 66.27 | 16.00 |       | 150.0 |         |
|           |                                                                     | Z | 4.30 | 66.68 | 16.12 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.47 | 67.19 | 16.39 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52 | 66.56 | 15.97 |       | 150.0 |         |
|           |                                                                     | Z | 4.37 | 67.01 | 16.17 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.12 | 66.93 | 16.38 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.29 | 66.93 | 16.27 |       | 150.0 |         |
|           |                                                                     | Z | 5.04 | 66.77 | 16.19 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.47   | 67.49  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.51   | 67.07  | 16.21 |      | 150.0 |         |
|           |                                                                                 | Z | 5.41   | 67.37  | 16.39 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.10   | 66.98  | 11.77 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.97   | 64.13  | 10.63 |      | 115.0 |         |
|           |                                                                                 | Z | 0.82   | 63.94  | 9.79  |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.10   | 66.98  | 11.77 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.97   | 64.13  | 10.63 |      | 115.0 |         |
|           |                                                                                 | Z | 0.82   | 63.94  | 9.79  |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 116.47 | 27.13 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 29.77  | 103.98 | 25.46 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 114.71 | 26.02 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 126.17 | 31.03 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 87.88  | 124.76 | 31.39 |      | 80.0  |         |
|           |                                                                                 | Z | 4.36   | 84.82  | 20.04 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.01   | 63.77  | 15.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.92   | 61.81  | 13.48 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 63.12  | 14.51 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.36   | 66.92  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.38   | 66.26  | 15.92 |      | 150.0 |         |
|           |                                                                                 | Z | 4.28   | 66.79  | 16.14 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.36   | 66.92  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.38   | 66.26  | 15.92 |      | 150.0 |         |
|           |                                                                                 | Z | 4.28   | 66.79  | 16.14 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.36   | 67.14  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.37   | 66.43  | 15.94 |      | 150.0 |         |
|           |                                                                                 | Z | 4.28   | 67.01  | 16.20 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.37   | 67.06  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.39   | 66.38  | 15.94 |      | 150.0 |         |
|           |                                                                                 | Z | 4.30   | 66.93  | 16.18 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.47   | 67.03  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.51   | 66.38  | 15.97 |      | 150.0 |         |
|           |                                                                                 | Z | 4.40   | 66.91  | 16.20 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.60   | 67.29  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.65   | 66.67  | 16.07 |      | 150.0 |         |
|           |                                                                                 | Z | 4.51   | 67.15  | 16.28 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.53   | 67.24  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.58   | 66.62  | 16.04 |      | 150.0 |         |
|           |                                                                                 | Z | 4.45   | 67.09  | 16.25 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.15   | 67.39  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.21   | 66.96  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 5.07   | 67.22  | 16.44 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.18   | 67.50  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.23   | 67.07  | 16.34 |      | 150.0 |         |
|           |                                                                                 | Z | 5.09   | 67.33  | 16.49 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.13   | 67.26  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.22   | 66.97  | 16.29 |      | 150.0 |         |
|           |                                                                | Z | 5.06   | 67.12  | 16.38 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.22   | 72.38  | 18.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.01   | 70.26  | 17.57 |      | 150.0 |         |
|           |                                                                | Z | 4.13   | 72.22  | 18.07 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 3.98   | 67.59  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.01   | 66.71  | 15.78 |      | 150.0 |         |
|           |                                                                | Z | 3.88   | 67.37  | 15.95 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.30   | 67.37  | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.34   | 66.64  | 15.95 |      | 150.0 |         |
|           |                                                                | Z | 4.21   | 67.21  | 16.16 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.55   | 67.28  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.59   | 66.65  | 16.06 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 67.13  | 16.28 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.35   | 73.32  | 18.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.05   | 70.87  | 17.35 |      | 150.0 |         |
|           |                                                                | Z | 4.17   | 72.84  | 17.69 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 125.82 | 30.87 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 73.81  | 122.13 | 30.75 |      | 80.0  |         |
|           |                                                                | Z | 4.08   | 83.85  | 19.66 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.23   | 67.50  | 15.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.25   | 66.39  | 14.73 |      | 150.0 |         |
|           |                                                                | Z | 3.08   | 66.97  | 14.58 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.85   | 67.40  | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.87   | 66.48  | 15.63 |      | 150.0 |         |
|           |                                                                | Z | 3.75   | 67.17  | 15.83 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.14   | 67.21  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.16   | 66.45  | 15.83 |      | 150.0 |         |
|           |                                                                | Z | 4.06   | 67.04  | 16.07 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.35   | 67.06  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.37   | 66.40  | 15.90 |      | 150.0 |         |
|           |                                                                | Z | 4.28   | 66.91  | 16.14 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.03   | 67.26  | 14.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.08   | 66.30  | 14.14 |      | 150.0 |         |
|           |                                                                | Z | 2.83   | 66.49  | 13.65 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.07   | 67.88  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.13   | 67.63  | 16.53 |      | 150.0 |         |
|           |                                                                | Z | 6.01   | 67.74  | 16.60 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.71   | 65.66  | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.69   | 64.94  | 15.62 |      | 150.0 |         |
|           |                                                                | Z | 3.67   | 65.60  | 15.88 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.75   | 71.45  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.64   | 69.80  | 16.44 |      | 150.0 |         |
|           |                                                                | Z | 3.40   | 70.10  | 15.76 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.81   | 69.03  | 17.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.90   | 68.30  | 17.81 |      | 150.0 |         |
|           |                                                                | Z | 4.64   | 68.70  | 17.34 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.03   | 71.85  | 17.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.71   | 64.78  | 13.50 |      | 150.0 |         |
|           |                                                                   | Z | 0.86   | 68.25  | 15.84 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 131.71 | 33.64 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 32.60  | 114.44 | 30.12 |      | 80.0  |         |
|           |                                                                   | Z | 1.88   | 75.83  | 18.17 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.65   | 60.00  | 7.39  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.20   | 63.97  | 10.37 |      | 80.0  |         |
|           |                                                                   | Z | 0.61   | 60.00  | 6.84  |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.68   | 60.00  | 6.65  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.82   | 60.05  | 7.89  |      | 80.0  |         |
|           |                                                                   | Z | 0.64   | 60.00  | 6.09  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 127.54 | 31.55 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 24.98  | 108.46 | 27.80 |      | 80.0  |         |
|           |                                                                   | Z | 1.39   | 71.68  | 15.85 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.66   | 60.00  | 7.31  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.08   | 62.87  | 9.80  |      | 80.0  |         |
|           |                                                                   | Z | 0.61   | 60.00  | 6.76  |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.68   | 60.00  | 6.60  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.81   | 60.00  | 7.80  |      | 80.0  |         |
|           |                                                                   | Z | 0.65   | 60.00  | 6.05  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 128.04 | 31.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 33.02  | 112.47 | 28.81 |      | 80.0  |         |
|           |                                                                   | Z | 1.47   | 72.51  | 16.23 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.65   | 60.00  | 7.33  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.11   | 63.17  | 9.96  |      | 80.0  |         |
|           |                                                                   | Z | 0.61   | 60.00  | 6.79  |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.68   | 60.00  | 6.60  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.81   | 60.00  | 7.80  |      | 80.0  |         |
|           |                                                                   | Z | 0.65   | 60.00  | 6.05  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 128.07 | 31.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 33.76  | 112.80 | 28.88 |      | 80.0  |         |
|           |                                                                   | Z | 1.47   | 72.53  | 16.23 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.65   | 60.00  | 7.32  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.10   | 63.10  | 9.91  |      | 80.0  |         |
|           |                                                                   | Z | 0.61   | 60.00  | 6.77  |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.68   | 60.00  | 6.58  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.81   | 60.00  | 7.79  |      | 80.0  |         |
|           |                                                                   | Z | 0.65   | 60.00  | 6.03  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 128.02 | 31.75 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 33.47  | 112.65 | 28.84 |      | 80.0  |         |
|           |                                                                   | Z | 1.47   | 72.48  | 16.20 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.65   | 60.00  | 7.31  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.09   | 63.07  | 9.90  |      | 80.0  |         |
|           |                                                                   | Z | 0.61   | 60.00  | 6.77  |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.68   | 60.00  | 6.58  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.81   | 60.00  | 7.79  |      | 80.0  |         |
|           |                                                                   | Z | 0.64   | 60.00  | 6.03  |      | 80.0  |         |

|           |                                                                     |   |       |       |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.65  | 60.00 | 7.28  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.07  | 62.81 | 9.75  |      | 80.0 |         |
|           |                                                                     | Z | 0.61  | 60.00 | 6.74  |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.68  | 60.00 | 6.57  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.81  | 60.00 | 7.78  |      | 80.0 |         |
|           |                                                                     | Z | 0.65  | 60.00 | 6.01  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 15.35 | 99.32 | 26.35 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.41  | 85.43 | 22.76 |      | 80.0 |         |
|           |                                                                     | Z | 4.06  | 80.14 | 19.99 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.37  | 78.01 | 17.06 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.35  | 77.64 | 17.96 |      | 80.0 |         |
|           |                                                                     | Z | 1.93  | 66.81 | 12.39 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.93  | 70.49 | 13.89 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.92  | 73.08 | 15.89 |      | 80.0 |         |
|           |                                                                     | Z | 1.44  | 63.40 | 10.40 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 1.84  | 67.62 | 13.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.79  | 66.37 | 13.87 |      | 80.0 |         |
|           |                                                                     | Z | 1.21  | 62.72 | 10.93 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.84  | 64.12 | 11.25 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.82  | 68.57 | 14.37 |      | 80.0 |         |
|           |                                                                     | Z | 1.24  | 60.24 | 8.65  |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.77  | 63.42 | 10.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.67  | 67.61 | 13.95 |      | 80.0 |         |
|           |                                                                     | Z | 1.24  | 60.00 | 8.50  |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.68  | 72.67 | 17.51 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.24  | 68.93 | 16.21 |      | 80.0 |         |
|           |                                                                     | Z | 1.88  | 67.68 | 14.90 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.33  | 66.95 | 14.11 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.33  | 66.00 | 14.21 |      | 80.0 |         |
|           |                                                                     | Z | 1.81  | 63.82 | 12.13 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.31  | 66.44 | 13.84 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.35  | 65.72 | 14.06 |      | 80.0 |         |
|           |                                                                     | Z | 1.82  | 63.51 | 11.93 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 2.93  | 71.87 | 18.48 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.67  | 69.13 | 17.21 |      | 80.0 |         |
|           |                                                                     | Z | 2.42  | 68.86 | 16.85 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.94  | 68.42 | 16.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.82  | 66.76 | 16.09 |      | 80.0 |         |
|           |                                                                     | Z | 2.61  | 66.69 | 15.60 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.01  | 68.24 | 16.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.92  | 66.70 | 16.07 |      | 80.0 |         |
|           |                                                                     | Z | 2.68  | 66.59 | 15.54 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.17  | 70.20 | 18.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.02  | 68.34 | 17.05 |      | 80.0 |         |
|           |                                                                     | Z | 2.77  | 68.13 | 16.83 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.27  | 67.59 | 16.86 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.23  | 66.40 | 16.32 |      | 80.0 |         |
|           |                                                                     | Z | 3.01  | 66.40 | 16.03 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.33 | 67.46 | 16.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.30 | 66.34 | 16.29 |      | 80.0 |         |
|           |                                                                      | Z | 3.07 | 66.32 | 15.98 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.41 | 71.59 | 18.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.20 | 69.50 | 17.42 |      | 80.0 |         |
|           |                                                                      | Z | 2.93 | 69.17 | 17.22 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.29 | 67.83 | 17.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.24 | 66.67 | 16.50 |      | 80.0 |         |
|           |                                                                      | Z | 3.03 | 66.60 | 16.25 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.37 | 67.61 | 17.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.33 | 66.52 | 16.46 |      | 80.0 |         |
|           |                                                                      | Z | 3.12 | 66.48 | 16.23 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 0.96 | 60.41 | 8.76  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.20 | 61.87 | 10.44 |      | 80.0 |         |
|           |                                                                      | Z | 0.89 | 60.00 | 7.88  |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.10 | 60.00 | 7.20  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.22 | 60.00 | 8.28  |      | 80.0 |         |
|           |                                                                      | Z | 1.07 | 60.00 | 6.56  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.12 | 60.00 | 7.03  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.23 | 60.00 | 8.13  |      | 80.0 |         |
|           |                                                                      | Z | 1.09 | 60.00 | 6.39  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.77 | 72.31 | 17.90 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.40 | 68.91 | 16.59 |      | 80.0 |         |
|           |                                                                      | Z | 2.11 | 68.30 | 15.75 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.66 | 68.05 | 15.35 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.57 | 66.52 | 15.04 |      | 80.0 |         |
|           |                                                                      | Z | 2.19 | 65.43 | 13.68 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.69 | 67.80 | 15.15 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.62 | 66.43 | 14.93 |      | 80.0 |         |
|           |                                                                      | Z | 2.21 | 65.25 | 13.50 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.90 | 71.67 | 18.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.64 | 68.96 | 17.12 |      | 80.0 |         |
|           |                                                                      | Z | 2.39 | 68.69 | 16.76 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.92 | 68.32 | 16.67 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.81 | 66.67 | 16.03 |      | 80.0 |         |
|           |                                                                      | Z | 2.59 | 66.59 | 15.53 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.99 | 68.14 | 16.59 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.91 | 66.61 | 16.01 |      | 80.0 |         |
|           |                                                                      | Z | 2.67 | 66.51 | 15.48 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.39 | 71.45 | 18.43 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18 | 69.38 | 17.35 |      | 80.0 |         |
|           |                                                                      | Z | 2.91 | 69.05 | 17.15 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.28 | 67.77 | 17.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.23 | 66.62 | 16.46 |      | 80.0 |         |
|           |                                                                      | Z | 3.02 | 66.54 | 16.22 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.36 | 67.55 | 16.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.32 | 66.46 | 16.42 |      | 80.0  |         |
|           |                                                                     | Z | 3.11 | 66.42 | 16.18 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.76 | 70.24 | 17.92 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.62 | 68.73 | 17.09 |      | 80.0  |         |
|           |                                                                     | Z | 3.37 | 68.53 | 16.98 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.74 | 67.43 | 17.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.73 | 66.59 | 16.58 |      | 80.0  |         |
|           |                                                                     | Z | 3.51 | 66.46 | 16.41 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.81 | 67.25 | 17.00 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.80 | 66.42 | 16.55 |      | 80.0  |         |
|           |                                                                     | Z | 3.59 | 66.36 | 16.39 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.88 | 71.59 | 18.36 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.66 | 69.84 | 17.42 |      | 80.0  |         |
|           |                                                                     | Z | 3.39 | 69.44 | 17.24 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.63 | 67.57 | 17.13 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.60 | 66.72 | 16.64 |      | 80.0  |         |
|           |                                                                     | Z | 3.40 | 66.51 | 16.45 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.67 | 67.22 | 17.02 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.65 | 66.41 | 16.56 |      | 80.0  |         |
|           |                                                                     | Z | 3.46 | 66.27 | 16.38 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.97 | 64.02 | 15.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.88 | 61.91 | 13.46 |      | 150.0 |         |
|           |                                                                     | Z | 0.95 | 63.29 | 14.56 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.90 | 79.01 | 21.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.42 | 65.04 | 13.17 |      | 150.0 |         |
|           |                                                                     | Z | 0.58 | 70.14 | 17.04 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.84 | 66.65 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.70 | 62.97 | 13.46 |      | 150.0 |         |
|           |                                                                     | Z | 0.79 | 64.99 | 15.11 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.35 | 67.03 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.37 | 66.34 | 15.89 |      | 150.0 |         |
|           |                                                                     | Z | 4.28 | 66.91 | 16.13 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.49 | 67.19 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.54 | 66.55 | 16.01 |      | 150.0 |         |
|           |                                                                     | Z | 4.41 | 67.05 | 16.22 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.35 | 67.13 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.39 | 66.48 | 15.91 |      | 150.0 |         |
|           |                                                                     | Z | 4.27 | 66.98 | 16.13 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.29 | 67.10 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32 | 66.45 | 15.89 |      | 150.0 |         |
|           |                                                                     | Z | 4.20 | 66.93 | 16.10 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.33 | 67.22 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.38 | 66.59 | 16.00 |      | 150.0 |         |
|           |                                                                     | Z | 4.24 | 67.02 | 16.17 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.27 | 67.25 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.28 | 66.47 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 4.19 | 67.11 | 16.15 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.29 | 67.20 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.33 | 66.50 | 15.96 |      | 150.0 |         |
|           |                                                            | Z | 4.20 | 67.03 | 16.20 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.33 | 66.31 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.33 | 65.56 | 15.56 |      | 150.0 |         |
|           |                                                            | Z | 4.25 | 66.17 | 15.84 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.45 | 66.58 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.48 | 65.89 | 15.70 |      | 150.0 |         |
|           |                                                            | Z | 4.35 | 66.41 | 15.94 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.38 | 66.56 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.40 | 65.84 | 15.63 |      | 150.0 |         |
|           |                                                            | Z | 4.29 | 66.39 | 15.88 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.39 | 66.57 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.42 | 65.86 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.31 | 66.41 | 15.92 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.39 | 66.57 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.42 | 65.86 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.31 | 66.41 | 15.92 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.36 | 66.59 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.39 | 65.91 | 15.65 |      | 150.0 |         |
|           |                                                            | Z | 4.26 | 66.40 | 15.88 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.24 | 66.46 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.26 | 65.76 | 15.57 |      | 150.0 |         |
|           |                                                            | Z | 4.15 | 66.27 | 15.81 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.40 | 66.66 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.42 | 65.92 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.31 | 66.49 | 15.92 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 4.95 | 66.50 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.98 | 66.00 | 15.79 |      | 150.0 |         |
|           |                                                            | Z | 4.87 | 66.36 | 15.99 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 4.99 | 66.63 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.04 | 66.19 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.90 | 66.45 | 16.04 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.88 | 66.64 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.92 | 66.13 | 15.82 |      | 150.0 |         |
|           |                                                            | Z | 4.80 | 66.46 | 16.02 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 4.95 | 66.65 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.97 | 66.09 | 15.81 |      | 150.0 |         |
|           |                                                            | Z | 4.88 | 66.50 | 16.04 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.01 | 66.59 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.05 | 66.11 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.92 | 66.42 | 16.04 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 4.94 | 66.54 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.98 | 66.09 | 15.87 |      | 150.0 |         |
|           |                                                            | Z | 4.86 | 66.38 | 16.04 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 4.93 | 66.47 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.96 | 65.98 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 4.85 | 66.33 | 15.99 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.08 | 66.56 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.12 | 66.08 | 15.87 |      | 150.0 |         |
|           |                                                    | Z | 5.00 | 66.42 | 16.05 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.16 | 66.66 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.18 | 66.11 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.08 | 66.53 | 16.14 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.29 | 66.55 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.31 | 66.13 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.23 | 66.42 | 15.98 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.47 | 67.02 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.50 | 66.58 | 15.99 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.84 | 16.16 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.33 | 66.68 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.28 | 15.85 |      | 150.0 |         |
|           |                                                    | Z | 5.26 | 66.52 | 16.00 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.41 | 66.81 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.43 | 66.36 | 15.88 |      | 150.0 |         |
|           |                                                    | Z | 5.35 | 66.69 | 16.09 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.55 | 67.42 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 67.22 | 16.29 |      | 150.0 |         |
|           |                                                    | Z | 5.44 | 67.17 | 16.30 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.40 | 66.91 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.40 | 15.92 |      | 150.0 |         |
|           |                                                    | Z | 5.33 | 66.78 | 16.15 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.32 | 66.64 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.38 | 66.34 | 15.85 |      | 150.0 |         |
|           |                                                    | Z | 5.24 | 66.47 | 15.96 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.31 | 66.68 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.32 | 66.19 | 15.78 |      | 150.0 |         |
|           |                                                    | Z | 5.24 | 66.55 | 16.00 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.35 | 66.62 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.20 | 15.82 |      | 150.0 |         |
|           |                                                    | Z | 5.28 | 66.48 | 15.99 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.72 | 66.88 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.73 | 66.50 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.66 | 66.74 | 16.06 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.81 | 67.10 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.85 | 66.79 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 5.73 | 66.93 | 16.14 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.85 | 67.23 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 66.85 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.78 | 67.07 | 16.20 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.80 | 67.08 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.83 | 66.72 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.74 | 66.93 | 16.15 |      | 150.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.81 | 67.13 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87 | 66.87 | 16.10 |      | 150.0 |         |
|           |                                                                 | Z | 5.72 | 66.92 | 16.16 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.83 | 67.06 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87 | 66.73 | 16.07 |      | 150.0 |         |
|           |                                                                 | Z | 5.76 | 66.90 | 16.19 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.77 | 67.06 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.80 | 66.73 | 16.10 |      | 150.0 |         |
|           |                                                                 | Z | 5.69 | 66.88 | 16.21 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.81 | 67.21 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.88 | 66.99 | 16.24 |      | 150.0 |         |
|           |                                                                 | Z | 5.73 | 67.01 | 16.27 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 5.92 | 67.21 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.98 | 66.94 | 16.17 |      | 150.0 |         |
|           |                                                                 | Z | 5.84 | 67.02 | 16.25 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.66 | 67.03 | 16.46 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 66.43 | 16.07 |      | 150.0 |         |
|           |                                                                 | Z | 4.58 | 66.90 | 16.26 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.85 | 67.42 | 16.76 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91 | 66.86 | 16.40 |      | 150.0 |         |
|           |                                                                 | Z | 4.77 | 67.30 | 16.57 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.69 | 67.24 | 16.57 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.68 | 16.20 |      | 150.0 |         |
|           |                                                                 | Z | 4.61 | 67.10 | 16.37 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.72 | 67.63 | 16.94 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 67.06 | 16.55 |      | 150.0 |         |
|           |                                                                 | Z | 4.64 | 67.49 | 16.74 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.58 | 66.97 | 16.31 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.46 | 15.97 |      | 150.0 |         |
|           |                                                                 | Z | 4.48 | 66.76 | 16.06 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.71 | 67.87 | 17.08 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.74 | 67.19 | 16.64 |      | 150.0 |         |
|           |                                                                 | Z | 4.64 | 67.76 | 16.90 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.71 | 67.66 | 16.97 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.76 | 67.04 | 16.57 |      | 150.0 |         |
|           |                                                                 | Z | 4.63 | 67.51 | 16.78 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.10 | 64.47 | 15.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.01 | 62.60 | 14.19 |      | 130.0 |         |
|           |                                                                 | Z | 1.06 | 63.56 | 14.88 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.11 | 65.05 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.02 | 63.01 | 14.47 |      | 130.0 |         |
|           |                                                                 | Z | 1.07 | 64.03 | 15.21 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 2.89 | 95.49 | 27.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.76 | 70.85 | 16.60 |      | 130.0 |         |
|           |                                                                 | Z | 1.03 | 76.59 | 20.03 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.21 | 71.26 | 19.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.98 | 66.68 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 1.07 | 68.47 | 17.67 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.43 | 66.75 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.48 | 66.20 | 16.11 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.59 | 16.21 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.46 | 66.96 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.50 | 66.37 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.38 | 66.81 | 16.31 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.62 | 67.18 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 66.65 | 16.35 |      | 130.0 |         |
|           |                                                                 | Z | 4.53 | 67.03 | 16.45 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.52 | 67.32 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 66.77 | 16.43 |      | 130.0 |         |
|           |                                                                 | Z | 4.44 | 67.16 | 16.56 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.28 | 66.52 | 16.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.34 | 66.01 | 15.71 |      | 130.0 |         |
|           |                                                                 | Z | 4.18 | 66.30 | 15.78 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.31 | 66.57 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.39 | 66.08 | 15.75 |      | 130.0 |         |
|           |                                                                 | Z | 4.21 | 66.32 | 15.78 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.44 | 67.43 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.48 | 66.79 | 16.37 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 67.27 | 16.54 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.21 | 66.30 | 15.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.28 | 65.79 | 15.50 |      | 130.0 |         |
|           |                                                                 | Z | 4.11 | 66.07 | 15.56 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.43 | 66.75 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.48 | 66.20 | 16.11 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.59 | 16.21 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.46 | 66.96 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.50 | 66.37 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.38 | 66.81 | 16.31 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.62 | 67.18 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 66.65 | 16.35 |      | 130.0 |         |
|           |                                                                 | Z | 4.53 | 67.03 | 16.45 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.52 | 67.32 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 66.77 | 16.43 |      | 130.0 |         |
|           |                                                                 | Z | 4.44 | 67.16 | 16.56 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.28 | 66.52 | 16.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.34 | 66.01 | 15.71 |      | 130.0 |         |
|           |                                                                 | Z | 4.18 | 66.30 | 15.78 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.31 | 66.57 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.39 | 66.08 | 15.75 |      | 130.0 |         |
|           |                                                                 | Z | 4.21 | 66.32 | 15.78 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.44 | 67.43 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.48 | 66.79 | 16.37 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 67.27 | 16.54 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.21 | 66.30 | 15.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.28 | 65.79 | 15.50 |      | 130.0 |         |
|           |                                                                 | Z | 4.11 | 66.07 | 15.56 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.58 | 66.83 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.29 | 16.23 |      | 130.0 |         |
|           |                                                       | Z | 4.51 | 66.70 | 16.35 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.70 | 67.12 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.77 | 66.60 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.61 | 66.96 | 16.47 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.62 | 67.00 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.69 | 66.48 | 16.23 |      | 130.0 |         |
|           |                                                       | Z | 4.53 | 66.84 | 16.32 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.67 | 67.17 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.74 | 66.66 | 16.39 |      | 130.0 |         |
|           |                                                       | Z | 4.59 | 67.01 | 16.49 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.64 | 67.16 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.71 | 66.61 | 16.28 |      | 130.0 |         |
|           |                                                       | Z | 4.55 | 67.00 | 16.40 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.57 | 67.12 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.59 | 16.28 |      | 130.0 |         |
|           |                                                       | Z | 4.47 | 66.93 | 16.38 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.52 | 66.99 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.59 | 66.47 | 16.14 |      | 130.0 |         |
|           |                                                       | Z | 4.43 | 66.80 | 16.23 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.51 | 67.21 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.57 | 66.69 | 16.40 |      | 130.0 |         |
|           |                                                       | Z | 4.43 | 67.05 | 16.50 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.27 | 67.29 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.32 | 66.86 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 5.20 | 67.15 | 16.64 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.37 | 67.66 | 16.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.46 | 67.32 | 16.71 |      | 130.0 |         |
|           |                                                       | Z | 5.27 | 67.44 | 16.76 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.28 | 67.43 | 16.88 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.34 | 67.03 | 16.59 |      | 130.0 |         |
|           |                                                       | Z | 5.21 | 67.35 | 16.73 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.36 | 67.45 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.47 | 67.18 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 5.26 | 67.24 | 16.59 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.43 | 67.74 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.53 | 67.44 | 16.85 |      | 130.0 |         |
|           |                                                       | Z | 5.32 | 67.49 | 16.86 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.30 | 67.33 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.41 | 67.10 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 5.19 | 67.02 | 16.59 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.35 | 67.50 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.46 | 67.23 | 16.73 |      | 130.0 |         |
|           |                                                       | Z | 5.26 | 67.28 | 16.73 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.15 | 66.97 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.18 | 66.48 | 16.20 |      | 130.0 |         |
|           |                                                       | Z | 5.08 | 66.83 | 16.35 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.44 | 66.21 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.47 | 65.58 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.36 | 66.06 | 16.01 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.57 | 66.53 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.63 | 65.95 | 16.00 |      | 130.0 |         |
|           |                                                   | Z | 4.48 | 66.35 | 16.14 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.47 | 66.37 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.52 | 65.78 | 15.82 |      | 130.0 |         |
|           |                                                   | Z | 4.38 | 66.18 | 15.96 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.52 | 66.54 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.57 | 65.94 | 15.99 |      | 130.0 |         |
|           |                                                   | Z | 4.43 | 66.35 | 16.13 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.44 | 66.33 | 16.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.49 | 65.74 | 15.83 |      | 130.0 |         |
|           |                                                   | Z | 4.34 | 66.13 | 15.96 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.43 | 66.46 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.49 | 65.88 | 15.87 |      | 130.0 |         |
|           |                                                   | Z | 4.32 | 66.23 | 15.99 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.42 | 66.27 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.49 | 65.73 | 15.74 |      | 130.0 |         |
|           |                                                   | Z | 4.32 | 66.05 | 15.83 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.39 | 66.50 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.44 | 65.92 | 15.97 |      | 130.0 |         |
|           |                                                   | Z | 4.30 | 66.29 | 16.09 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.43 | 66.18 | 15.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.49 | 65.58 | 15.61 |      | 130.0 |         |
|           |                                                   | Z | 4.33 | 65.97 | 15.73 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.08 | 66.47 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.13 | 66.06 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 5.00 | 66.30 | 16.19 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.12 | 66.59 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.20 | 66.27 | 16.17 |      | 130.0 |         |
|           |                                                   | Z | 5.02 | 66.38 | 16.22 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.03 | 66.66 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.09 | 66.27 | 16.18 |      | 130.0 |         |
|           |                                                   | Z | 4.93 | 66.45 | 16.26 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.06 | 66.51 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.10 | 66.05 | 16.01 |      | 130.0 |         |
|           |                                                   | Z | 4.98 | 66.36 | 16.15 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.12 | 66.49 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.19 | 66.09 | 16.08 |      | 130.0 |         |
|           |                                                   | Z | 5.02 | 66.29 | 16.16 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.12 | 66.58 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.20 | 66.23 | 16.27 |      | 130.0 |         |
|           |                                                   | Z | 5.04 | 66.42 | 16.35 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.11 | 66.67 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.21 | 66.42 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 5.03 | 66.49 | 16.38 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.01 | 66.24 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.08 | 65.89 | 15.96 |      | 130.0 |         |
|           |                                                    | Z | 4.93 | 66.09 | 16.04 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.20 | 66.50 | 16.42 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 66.13 | 16.15 |      | 130.0 |         |
|           |                                                    | Z | 5.12 | 66.34 | 16.23 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.28 | 66.62 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 66.78 | 16.53 |      | 130.0 |         |
|           |                                                    | Z | 5.22 | 66.53 | 16.39 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.41 | 66.47 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.14 | 16.07 |      | 130.0 |         |
|           |                                                    | Z | 5.34 | 66.32 | 16.15 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.64 | 67.10 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.70 | 66.78 | 16.36 |      | 130.0 |         |
|           |                                                    | Z | 5.55 | 66.91 | 16.42 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.40 | 66.46 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.46 | 66.17 | 15.99 |      | 130.0 |         |
|           |                                                    | Z | 5.33 | 66.28 | 16.04 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.52 | 66.68 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.28 | 16.04 |      | 130.0 |         |
|           |                                                    | Z | 5.45 | 66.56 | 16.18 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 5.74 | 67.57 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.93 | 67.64 | 16.72 |      | 130.0 |         |
|           |                                                    | Z | 5.60 | 67.21 | 16.51 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.71 | 67.57 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.83 | 67.42 | 16.80 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 67.33 | 16.76 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.65 | 67.29 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.86 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 5.58 | 67.17 | 16.70 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.43 | 66.53 | 16.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.53 | 66.37 | 16.12 |      | 130.0 |         |
|           |                                                    | Z | 5.34 | 66.35 | 16.11 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.46 | 66.73 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.51 | 66.37 | 16.17 |      | 130.0 |         |
|           |                                                    | Z | 5.38 | 66.57 | 16.27 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.32 | 65.99 | 15.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 65.70 | 15.57 |      | 130.0 |         |
|           |                                                    | Z | 5.23 | 65.80 | 15.61 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.85 | 66.82 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.88 | 66.53 | 16.18 |      | 130.0 |         |
|           |                                                    | Z | 5.78 | 66.67 | 16.24 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 5.96 | 67.13 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.04 | 66.92 | 16.36 |      | 130.0 |         |
|           |                                                    | Z | 5.88 | 66.92 | 16.36 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 5.99 | 67.20 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.03 | 66.89 | 16.32 |      | 130.0 |         |
|           |                                                    | Z | 5.93 | 67.07 | 16.41 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 5.94   | 67.06  | 16.54 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.00   | 66.80  | 16.32 |       | 130.0 |         |
|           |                                                        | Z | 5.87   | 66.89  | 16.36 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 5.90   | 66.94  | 16.43 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.00   | 66.80  | 16.26 |       | 130.0 |         |
|           |                                                        | Z | 5.80   | 66.71  | 16.22 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.01   | 67.05  | 16.50 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.07   | 66.80  | 16.29 |       | 130.0 |         |
|           |                                                        | Z | 5.93   | 66.87  | 16.32 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.02   | 67.21  | 16.75 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09   | 66.98  | 16.54 |       | 130.0 |         |
|           |                                                        | Z | 5.94   | 67.03  | 16.57 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 5.87   | 66.93  | 16.50 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.94   | 66.70  | 16.30 |       | 130.0 |         |
|           |                                                        | Z | 5.79   | 66.72  | 16.30 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 5.92   | 67.10  | 16.61 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.04   | 67.02  | 16.47 |       | 130.0 |         |
|           |                                                        | Z | 5.83   | 66.87  | 16.40 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.06   | 67.18  | 16.61 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.19   | 67.13  | 16.50 |       | 130.0 |         |
|           |                                                        | Z | 5.97   | 66.97  | 16.42 |       | 130.0 |         |
| 10646-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 8.98   | 100.12 | 35.66 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 9.25   | 97.39  | 34.22 |       | 60.0  |         |
|           |                                                        | Z | 5.51   | 87.84  | 30.74 |       | 60.0  |         |
| 10647-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 7.44   | 96.05  | 34.38 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 8.05   | 94.62  | 33.38 |       | 60.0  |         |
|           |                                                        | Z | 4.82   | 85.09  | 29.79 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.50   | 62.05  | 8.49  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.50   | 60.81  | 7.93  |       | 150.0 |         |
|           |                                                        | Z | 0.43   | 60.79  | 7.32  |       | 150.0 |         |
| 10652-AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.23   | 66.68  | 16.20 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.16   | 65.37  | 15.67 |       | 80.0  |         |
|           |                                                        | Z | 3.03   | 65.81  | 15.50 |       | 80.0  |         |
| 10653-AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 3.76   | 65.86  | 16.44 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.74   | 65.00  | 16.03 |       | 80.0  |         |
|           |                                                        | Z | 3.61   | 65.32  | 15.97 |       | 80.0  |         |
| 10654-AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 3.78   | 65.43  | 16.47 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.75   | 64.68  | 16.07 |       | 80.0  |         |
|           |                                                        | Z | 3.66   | 64.95  | 16.04 |       | 80.0  |         |
| 10655-AAD | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 3.85   | 65.34  | 16.50 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.82   | 64.66  | 16.12 |       | 80.0  |         |
|           |                                                        | Z | 3.74   | 64.87  | 16.09 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 3.77   | 70.26  | 12.03 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 12.27  | 83.59  | 17.52 |       | 50.0  |         |
|           |                                                        | Z | 2.96   | 67.48  | 10.74 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 8.98   | 79.72  | 14.13 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 104.15 | 21.31 |       | 60.0  |         |
|           |                                                        | Z | 1.95   | 66.96  | 9.59  |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 97.77  | 17.15 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 100.91 | 18.60 |      | 80.0  |         |
|           |                             | Z | 3.91   | 74.43  | 11.04 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 96.14  | 15.60 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 92.62  | 14.21 |      | 100.0 |         |
|           |                             | Z | 100.00 | 92.91  | 14.19 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 99.96  | 83.24  | 9.71  | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 17.02  | 60.55  | 1.46  |      | 120.0 |         |
|           |                             | Z | 0.12   | 60.00  | 3.87  |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity  $\epsilon'$  can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r'\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where  $Y$  is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively,  $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

**Table D-I**  
**Composition of the Tissue Equivalent Matter**

| Frequency (MHz)           | 750        | 835   | 1750 | 1900  | 2300-2600 | 5200-5800 |
|---------------------------|------------|-------|------|-------|-----------|-----------|
| Tissue                    | Body       | Body  | Body | Body  | Body      | Body      |
| Ingredients (% by weight) |            |       |      |       |           |           |
| Bactericide               | See page 2 | 0.1   |      |       |           |           |
| DGBE                      |            |       | 31   | 29.44 | 26.7      |           |
| HEC                       |            | 1     |      |       |           |           |
| NaCl                      |            | 0.94  | 0.2  | 0.39  | 0.1       |           |
| Sucrose                   |            | 44.9  |      |       |           |           |
| Polysorbate (Tween) 80    |            |       |      |       |           | 20        |
| Water                     |            | 53.06 | 68.8 | 70.17 | 73.2      | 80        |

|                                         |                                                                                                                                   |                              |                                        |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
| FCC ID: BCGA2153                        |  <b>PCTEST</b><br>ENGINEERING LABORATORY, INC. | <b>SAR EVALUATION REPORT</b> | <b>Approved by:</b><br>Quality Manager |
| <b>Test Dates:</b><br>01/02/19-01/14/19 | <b>DUT Type:</b><br>Tablet Device                                                                                                 |                              | <b>APPENDIX D:</b><br>Page 1 of 2      |

## 2 Composition / Information on ingredients

The Item is composed of the following ingredients:

|                                                                  |                                                                                                                                                     |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| H <sub>2</sub> O                                                 | Water, 35 – 58%                                                                                                                                     |
| Sucrose                                                          | Sugar, white, refined, 40 – 60%                                                                                                                     |
| NaCl                                                             | Sodium Chloride, 0 – 6%                                                                                                                             |
| Hydroxyethyl-cellulose                                           | Medium Viscosity (CAS# 9004-62-0), <0.3%                                                                                                            |
| Preventol-D7                                                     | Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyl-3(2H)-isothiazolone, 0.1 – 0.7% |
| Relevant for safety; Refer to the respective Safety Data Sheet*. |                                                                                                                                                     |

**Figure D-1**

### Composition of 750 MHz Body Tissue Equivalent Matter

**Note:** 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Schmid & Partner Engineering AG

**s p e a g**

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#### Measurement Certificate / Material Test

|              |                                          |
|--------------|------------------------------------------|
| Item Name    | Body Tissue Simulating Liquid (MSL750V2) |
| Product No.  | SL AAM 075 AA (Batch: 170608-1)          |
| Manufacturer | SPEAG                                    |

#### Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

#### Setup Validation

Validation results were within  $\pm 2.5\%$  towards the target values of Methanol.

#### Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

#### Test Condition

|                 |                                                             |
|-----------------|-------------------------------------------------------------|
| Ambient         | Environment temperatur ( $22 \pm 3$ )°C and humidity < 70%. |
| TSL Temperature | 22°C                                                        |
| Test Date       | 20-Jun-17                                                   |
| Operator        | CL                                                          |

#### Additional Information

|                   |                         |
|-------------------|-------------------------|
| TSL Density       | 1.212 g/cm <sup>3</sup> |
| TSL Heat-capacity | 3.006 kJ/(kg·K)         |

| f [MHz] | Measured |       |       | Target |       | Diff. to Target [%] |         |
|---------|----------|-------|-------|--------|-------|---------------------|---------|
|         | e'       | e''   | sigma | eps    | sigma | Δ-eps               | Δ-sigma |
| 600     | 57.3     | 25.02 | 0.84  | 56.1   | 0.95  | 2.2                 | -12.2   |
| 625     | 57.1     | 24.67 | 0.86  | 56.0   | 0.95  | 1.9                 | -10.1   |
| 650     | 56.8     | 24.32 | 0.88  | 55.9   | 0.96  | 1.6                 | -8.0    |
| 675     | 56.6     | 24.02 | 0.90  | 55.8   | 0.96  | 1.3                 | -5.8    |
| 700     | 56.3     | 23.71 | 0.92  | 55.7   | 0.96  | 1.1                 | -3.8    |
| 725     | 56.1     | 23.48 | 0.95  | 55.6   | 0.96  | 0.8                 | -1.5    |
| 750     | 55.9     | 23.25 | 0.97  | 55.5   | 0.96  | 0.6                 | 0.7     |
| 775     | 55.6     | 23.04 | 0.99  | 55.4   | 0.97  | 0.3                 | 2.9     |
| 800     | 55.4     | 22.82 | 1.02  | 55.3   | 0.97  | 0.1                 | 5.0     |
| 825     | 55.2     | 22.65 | 1.04  | 55.2   | 0.98  | -0.1                | 6.3     |
| 838     | 55.1     | 22.56 | 1.05  | 55.2   | 0.98  | -0.3                | 6.9     |
| 850     | 54.9     | 22.47 | 1.06  | 55.2   | 0.99  | -0.4                | 7.5     |
| 875     | 54.7     | 22.34 | 1.09  | 55.1   | 1.02  | -0.7                | 6.7     |
| 900     | 54.5     | 22.21 | 1.11  | 55.0   | 1.05  | -0.9                | 5.9     |
| 925     | 54.3     | 22.08 | 1.14  | 55.0   | 1.06  | -1.3                | 6.9     |
| 950     | 54.1     | 21.95 | 1.16  | 54.9   | 1.08  | -1.6                | 7.9     |
| 975     | 53.8     | 21.86 | 1.19  | 54.9   | 1.09  | -1.9                | 9.1     |
| 1000    | 53.6     | 21.76 | 1.21  | 54.8   | 1.10  | -2.2                | 10.2    |

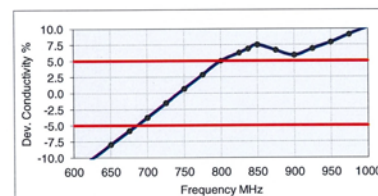
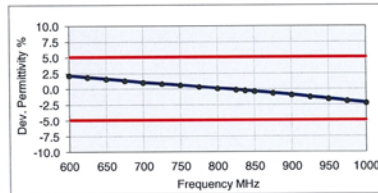


**Figure D-2**

### 750MHz Body Tissue Equivalent Matter

|                                  |                                                                                     |                       |                                 |
|----------------------------------|-------------------------------------------------------------------------------------|-----------------------|---------------------------------|
| FCC ID: BCGA2153                 |  | SAR EVALUATION REPORT | Approved by:<br>Quality Manager |
| Test Dates:<br>01/02/19-01/14/19 | DUT Type:<br>Tablet Device                                                          |                       | APPENDIX D:<br>Page 2 of 2      |

## APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

**Table E-1**  
**SAR System Validation Summary**

| SAR SYSTEM # | FREQ. [MHz] | DATE       | PROBE SN | PROBE TYPE | PROBE CAL. POINT |      | COND. | PERM.  | CW VALIDATION |                 |                | MOD. VALIDATION |             |      |
|--------------|-------------|------------|----------|------------|------------------|------|-------|--------|---------------|-----------------|----------------|-----------------|-------------|------|
|              |             |            |          |            |                  |      | (σ)   | (εr)   | SENSITIVITY   | PROBE LINEARITY | PROBE ISOTROPY | MOD. TYPE       | DUTY FACTOR | PAR  |
| AM1          | 750         | 7/13/2018  | 3275     | ES3DV3     | 750              | Body | 1.005 | 54.788 | PASS          | PASS            | PASS           | N/A             | N/A         | N/A  |
| AM6          | 835         | 4/4/2018   | 3131     | ES3DV3     | 835              | Body | 0.997 | 56.122 | PASS          | PASS            | PASS           | GMSK            | PASS        | N/A  |
| AM7          | 1750        | 3/30/2018  | 3329     | ES3DV3     | 1750             | Body | 1.534 | 54.760 | PASS          | PASS            | PASS           | N/A             | N/A         | N/A  |
| AM7          | 1900        | 4/2/2018   | 3329     | ES3DV3     | 1900             | Body | 1.555 | 51.277 | PASS          | PASS            | PASS           | GMSK            | PASS        | N/A  |
| AM3          | 1900        | 11/30/2018 | 7420     | EX3DV4     | 1900             | Body | 1.573 | 51.227 | PASS          | PASS            | PASS           | GMSK            | PASS        | N/A  |
| AM4          | 2300        | 6/20/2018  | 3119     | ES3DV3     | 2300             | Body | 1.850 | 52.830 | PASS          | PASS            | PASS           | N/A             | N/A         | N/A  |
| AM4          | 2450        | 6/20/2018  | 3119     | ES3DV3     | 2450             | Body | 1.983 | 52.621 | PASS          | PASS            | PASS           | OFDM/TDD        | PASS        | PASS |
| AM2          | 2450        | 11/9/2018  | 7416     | EX3DV4     | 2450             | Body | 2.020 | 51.408 | PASS          | PASS            | PASS           | OFDM/TDD        | PASS        | PASS |
| AM3          | 2450        | 12/10/2018 | 7420     | EX3DV4     | 2450             | Body | 2.044 | 51.289 | PASS          | PASS            | PASS           | OFDM/TDD        | PASS        | PASS |
| AM2          | 2600        | 11/12/2018 | 7416     | EX3DV4     | 2600             | Body | 2.245 | 52.580 | PASS          | PASS            | PASS           | TDD             | PASS        | N/A  |
| AM3          | 2600        | 12/6/2018  | 7420     | EX3DV4     | 2600             | Body | 2.189 | 50.357 | PASS          | PASS            | PASS           | TDD             | PASS        | N/A  |
| AM8          | 5250        | 8/7/2018   | 7491     | EX3DV4     | 5250             | Body | 5.468 | 47.980 | PASS          | PASS            | PASS           | OFDM            | N/A         | PASS |
| AM8          | 5600        | 8/7/2018   | 7491     | EX3DV4     | 5600             | Body | 5.938 | 47.370 | PASS          | PASS            | PASS           | OFDM            | N/A         | PASS |
| AM8          | 5750        | 8/7/2018   | 7491     | EX3DV4     | 5750             | Body | 6.150 | 47.127 | PASS          | PASS            | PASS           | OFDM            | N/A         | PASS |

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

|                                  |                                                                                     |                       |                                 |
|----------------------------------|-------------------------------------------------------------------------------------|-----------------------|---------------------------------|
| FCC ID: BCGA2153                 |  | SAR EVALUATION REPORT | Approved by:<br>Quality Manager |
| Test Dates:<br>01/02/19-01/14/19 | DUT Type:<br>Tablet Device                                                          |                       | APPENDIX E:<br>Page 1 of 1      |

## APPENDIX G: POWER REDUCTION VERIFICATION

The device supports manufacturer's proprietary power reduction mechanism called "Detect Mode" for the Main Cellular Antenna. Details of this mechanism can be found in the Operational Description. When the device is being used "on-body" or "held in hand" by the user, the device will detect motion and reduce the power of the main antenna. Per the manufacturer, the mechanism is agnostic to different cellular air interfaces. Detect Mode operation was verified for two test cases, on-body and held in hand, for each supported cellular band. The power reduction verification results are below.

### 1.1 Main Antenna Power Reduction Verification Summary

**Table G-1**  
**Main Antenna Power Reduction Verification**

| Mode/Band         | Maximum Scenario<br>Maximum Allowed<br>Target Power [dBm] | Reduced Scenario<br>Maximum Allowed<br>Target Power [dBm] | Conducted Power [dBm] |             |             | Verdict |
|-------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------|-------------|-------------|---------|
|                   |                                                           |                                                           | Maximum               | Test Case 1 | Test Case 2 |         |
| GPRS 850 (2 Tx)   | 28.50 ( $\pm 0.75$ )                                      | 23.95 ( $\pm 0.75$ )                                      | 28.95                 | 24.38       | 24.29       | PASS    |
| GPRS 1900 (2 Tx)  | 26.00 ( $\pm 0.75$ )                                      | 20.05 ( $\pm 0.75$ )                                      | 25.33                 | 19.37       | 19.37       | PASS    |
| WCDMA B5          | 25.00 ( $\pm 0.5$ )                                       | 18.20 ( $\pm 0.5$ )                                       | 25.43                 | 18.00       | 18.00       | PASS    |
| WCDMA B4          | 24.50 ( $\pm 0.5$ )                                       | 13.70 ( $\pm 0.5$ )                                       | 24.62                 | 13.59       | 13.61       | PASS    |
| WCDMA B2          | 25.00 ( $\pm 0.5$ )                                       | 13.00 ( $\pm 0.5$ )                                       | 25.24                 | 13.13       | 13.15       | PASS    |
| LTE Band 71       | 24.00 ( $\pm 0.5$ )                                       | 18.50 ( $\pm 0.5$ )                                       | 24.13                 | 18.80       | 18.72       | PASS    |
| LTE Band 12       | 25.00 ( $\pm 0.5$ )                                       | 18.50 ( $\pm 0.5$ )                                       | 25.34                 | 18.94       | 18.91       | PASS    |
| LTE Band 17       | 24.00 ( $\pm 0.5$ )                                       | 18.50 ( $\pm 0.5$ )                                       | 24.03                 | 18.59       | 18.58       | PASS    |
| LTE Band 14       | 25.00 ( $\pm 0.5$ )                                       | 18.00 ( $\pm 0.5$ )                                       | 25.22                 | 18.11       | 18.13       | PASS    |
| LTE Band 13       | 24.00 ( $\pm 0.5$ )                                       | 19.60 ( $\pm 0.5$ )                                       | 24.32                 | 19.82       | 19.83       | PASS    |
| LTE Band 5        | 25.00 ( $\pm 0.5$ )                                       | 18.20 ( $\pm 0.5$ )                                       | 25.17                 | 18.44       | 18.40       | PASS    |
| LTE Band 26       | 24.00 ( $\pm 0.5$ )                                       | 19.50 ( $\pm 0.5$ )                                       | 24.04                 | 19.50       | 19.45       | PASS    |
| LTE Band 4        | 25.00 ( $\pm 0.5$ )                                       | 13.50 ( $\pm 0.5$ )                                       | 25.07                 | 13.65       | 13.70       | PASS    |
| LTE Band 66       | 23.00 ( $\pm 0.5$ )                                       | 13.70 ( $\pm 0.5$ )                                       | 23.13                 | 13.95       | 13.92       | PASS    |
| LTE Band 2        | 25.00 ( $\pm 0.5$ )                                       | 13.00 ( $\pm 0.5$ )                                       | 25.27                 | 13.33       | 13.30       | PASS    |
| LTE Band 25       | 23.00 ( $\pm 0.5$ )                                       | 13.80 ( $\pm 0.5$ )                                       | 23.13                 | 13.81       | 13.89       | PASS    |
| LTE Band 30       | 22.80 ( $\pm 0.5$ )                                       | 12.50 ( $\pm 0.5$ )                                       | 22.81                 | 12.50       | 12.47       | PASS    |
| LTE Band 7        | 22.75 ( $\pm 0.5$ )                                       | 11.40 ( $\pm 0.5$ )                                       | 22.70                 | 11.37       | 11.35       | PASS    |
| LTE Band 41 (PC3) | 22.75 ( $\pm 0.5$ )                                       | 14.00 ( $\pm 0.5$ )                                       | 23.19                 | 14.29       | 14.22       | PASS    |
| LTE Band 41 (PC2) | 26.50 ( $\pm 0.5$ )                                       | 13.50 ( $\pm 0.5$ )                                       | 26.86                 | 13.55       | 13.60       | PASS    |

Test Case 1: Device Held in Hand

Test Case 2: Device Resting on Lap

Test Cases represent typical scenarios in which the device power would be reduced. In these scenarios detect mode has been verified to identify typical on-body use-cases including when thin objects, such as a magazine or newspaper, are placed between the body and the device. In the absence of detect mode output, the device defaults to the most conservative power.

|                                    |                                                                                                           |                                 |
|------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: BCGA2153                   |  SAR EVALUATION REPORT | Reviewed by:<br>Quality Manager |
| Test Dates:<br>01/02/19 – 01/14/19 | DUT Type:<br>Tablet Device                                                                                | APPENDIX G:<br>Page 1 of 1      |

# APPENDIX H: DOWNLINK LTE CA RF CONDUCTED POWERS

## 1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

### LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA\_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table 1 – Example of Exclusion Table for SISO Configurations

| Table 1: Channel Bandwidth Superset |                                                                                 |                                   |               |             | Table 2: Channel Bandwidth Superset        |         |                                                                                         |                                   |               | Table 3: Channel Bandwidth Superset |                                            |         |                                                                                                 |                                   | Table 4: Channel Bandwidth Superset |             |                                            |  |  |
|-------------------------------------|---------------------------------------------------------------------------------|-----------------------------------|---------------|-------------|--------------------------------------------|---------|-----------------------------------------------------------------------------------------|-----------------------------------|---------------|-------------------------------------|--------------------------------------------|---------|-------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|-------------|--------------------------------------------|--|--|
| Index                               | 2CC                                                                             | Supported Channel Bandwidth (MHz) |               | Restriction | Completely Covered by Measurement Superset | Index   | 2CC                                                                                     | Supported Channel Bandwidth (MHz) |               | Restriction                         | Completely Covered by Measurement Superset | Index   | 2CC                                                                                             | Supported Channel Bandwidth (MHz) |                                     | Restriction | Completely Covered by Measurement Superset |  |  |
|                                     |                                                                                 | CC1                               | CC2           |             |                                            |         |                                                                                         | CC1                               | CC2           |                                     |                                            |         |                                                                                                 | CC1                               | CC2                                 |             |                                            |  |  |
| CCC #1                              | CA 2A                                                                           | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #1      | No                                         | CCC #1  | CA 2A-2A-4A                                                                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #1                              | No                                         | CCC #1  | CA 2A-2A-4A-12A                                                                                 | 5, 10, 15, 20                     | 5, 10                               | CCC #1      | No                                         |  |  |
| CCC #2                              | CA 2A-2A                                                                        | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #2      | No                                         | CCC #2  | CA 2A-2A-4A-12A                                                                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #2                              | No                                         | CCC #2  | CA 2A-2A-4A-12A-12A                                                                             | 5, 10, 15, 20                     | 5, 10                               | CCC #2      | No                                         |  |  |
| CCC #3                              | CA 2A-2A-4A                                                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #3      | No                                         | CCC #3  | CA 2A-2A-4A-12A-12A                                                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #3                              | No                                         | CCC #3  | CA 2A-2A-4A-12A-12A-12A                                                                         | 5, 10, 15, 20                     | 5, 10                               | CCC #3      | No                                         |  |  |
| CCC #4                              | CA 2A-2A-4A-12A                                                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #4      | No                                         | CCC #4  | CA 2A-2A-4A-12A-12A-12A                                                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #4                              | No                                         | CCC #4  | CA 2A-2A-4A-12A-12A-12A-12A                                                                     | 5, 10, 15, 20                     | 5, 10                               | CCC #4      | No                                         |  |  |
| CCC #5                              | CA 2A-2A-4A-12A-12A                                                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #5      | No                                         | CCC #5  | CA 2A-2A-4A-12A-12A-12A-12A                                                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #5                              | No                                         | CCC #5  | CA 2A-2A-4A-12A-12A-12A-12A-12A                                                                 | 5, 10, 15, 20                     | 5, 10                               | CCC #5      | No                                         |  |  |
| CCC #6                              | CA 2A-2A-4A-12A-12A-12A                                                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #6      | No                                         | CCC #6  | CA 2A-2A-4A-12A-12A-12A-12A-12A                                                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #6                              | No                                         | CCC #6  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A                                                             | 5, 10, 15, 20                     | 5, 10                               | CCC #6      | No                                         |  |  |
| CCC #7                              | CA 2A-2A-4A-12A-12A-12A-12A                                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #7      | No                                         | CCC #7  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A                                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #7                              | No                                         | CCC #7  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A                                                         | 5, 10, 15, 20                     | 5, 10                               | CCC #7      | No                                         |  |  |
| CCC #8                              | CA 2A-2A-4A-12A-12A-12A-12A-12A                                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #8      | No                                         | CCC #8  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A                                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #8                              | No                                         | CCC #8  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A                                                     | 5, 10, 15, 20                     | 5, 10                               | CCC #8      | No                                         |  |  |
| CCC #9                              | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A                                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #9      | No                                         | CCC #9  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A                                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #9                              | No                                         | CCC #9  | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                                 | 5, 10, 15, 20                     | 5, 10                               | CCC #9      | No                                         |  |  |
| CCC #10                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A                                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #10     | No                                         | CCC #10 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #10                             | No                                         | CCC #10 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                             | 5, 10, 15, 20                     | 5, 10                               | CCC #10     | No                                         |  |  |
| CCC #11                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #11     | No                                         | CCC #11 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #11                             | No                                         | CCC #11 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                         | 5, 10, 15, 20                     | 5, 10                               | CCC #11     | No                                         |  |  |
| CCC #12                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #12     | No                                         | CCC #12 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #12                             | No                                         | CCC #12 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                     | 5, 10, 15, 20                     | 5, 10                               | CCC #12     | No                                         |  |  |
| CCC #13                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #13     | No                                         | CCC #13 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #13                             | No                                         | CCC #13 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                                 | 5, 10, 15, 20                     | 5, 10                               | CCC #13     | No                                         |  |  |
| CCC #14                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #14     | No                                         | CCC #14 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #14                             | No                                         | CCC #14 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                             | 5, 10, 15, 20                     | 5, 10                               | CCC #14     | No                                         |  |  |
| CCC #15                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #15     | No                                         | CCC #15 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #15                             | No                                         | CCC #15 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                         | 5, 10, 15, 20                     | 5, 10                               | CCC #15     | No                                         |  |  |
| CCC #16                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #16     | No                                         | CCC #16 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                 | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #16                             | No                                         | CCC #16 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                     | 5, 10, 15, 20                     | 5, 10                               | CCC #16     | No                                         |  |  |
| CCC #17                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #17     | No                                         | CCC #17 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A             | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #17                             | No                                         | CCC #17 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                 | 5, 10, 15, 20                     | 5, 10                               | CCC #17     | No                                         |  |  |
| CCC #18                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #18     | No                                         | CCC #18 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A         | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #18                             | No                                         | CCC #18 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A             | 5, 10, 15, 20                     | 5, 10                               | CCC #18     | No                                         |  |  |
| CCC #19                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #19     | No                                         | CCC #19 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A     | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #19                             | No                                         | CCC #19 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A         | 5, 10, 15, 20                     | 5, 10                               | CCC #19     | No                                         |  |  |
| CCC #20                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #20     | No                                         | CCC #20 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #20                             | No                                         | CCC #20 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A     | 5, 10, 15, 20                     | 5, 10                               | CCC #20     | No                                         |  |  |
| CCC #21                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #21     | No                                         | CCC #21 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #21                             | No                                         | CCC #21 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #21     | No                                         |  |  |
| CCC #22                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #22     | No                                         | CCC #22 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #22                             | No                                         | CCC #22 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #22     | No                                         |  |  |
| CCC #23                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #23     | No                                         | CCC #23 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #23                             | No                                         | CCC #23 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #23     | No                                         |  |  |
| CCC #24                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #24     | No                                         | CCC #24 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #24                             | No                                         | CCC #24 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #24     | No                                         |  |  |
| CCC #25                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #25     | No                                         | CCC #25 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #25                             | No                                         | CCC #25 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #25     | No                                         |  |  |
| CCC #26                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #26     | No                                         | CCC #26 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #26                             | No                                         | CCC #26 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #26     | No                                         |  |  |
| CCC #27                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #27     | No                                         | CCC #27 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #27                             | No                                         | CCC #27 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #27     | No                                         |  |  |
| CCC #28                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #28     | No                                         | CCC #28 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #28                             | No                                         | CCC #28 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #28     | No                                         |  |  |
| CCC #29                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #29     | No                                         | CCC #29 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #29                             | No                                         | CCC #29 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #29     | No                                         |  |  |
| CCC #30                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #30     | No                                         | CCC #30 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #30                             | No                                         | CCC #30 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #30     | No                                         |  |  |
| CCC #31                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #31     | No                                         | CCC #31 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #31                             | No                                         | CCC #31 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #31     | No                                         |  |  |
| CCC #32                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #32     | No                                         | CCC #32 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #32                             | No                                         | CCC #32 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10                               | CCC #32     | No                                         |  |  |
| CCC #33                             | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A | 5, 10, 15, 20                     | 5, 10, 15, 20 | CCC #33     | No                                         | CCC #33 | CA 2A-2A-4A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A-12A                             |                                   |               |                                     |                                            |         |                                                                                                 |                                   |                                     |             |                                            |  |  |

## 1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

This device supports LAA with downlink carrier aggregation only. It uses carrier aggregation in the downlink to combine LTE in the unlicensed spectrum (i.e. LTE Band 46) with LTE in the licensed band (served as PCC). All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

### General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KDB 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.
- When a device supports LTE capabilities with overlapping transmission frequency ranges, the standalone powers from the band with a larger transmission frequency range can be used to select measurement configurations for the band with the fully covered transmission frequency range.

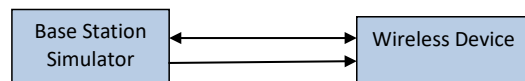


**Figure 1**  
**DL CA Power Measurement Setup**

|                                           |                                                                                                                  |                                        |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| FCC ID: BCGA2153                          |  <b>SAR EVALUATION REPORT</b> | <b>Reviewed by:</b><br>Quality Manager |
| <b>Test Dates:</b><br>01/02/19 – 01/14/19 | <b>DUT Type:</b><br>Tablet Device                                                                                | <b>APPENDIX H:</b><br>Page 2 of 9      |

## 1.3 Downlink Carrier Aggregation RF Conducted Powers

### 1.3.1 LTE Band 71 as PCC

Table 1  
Output Powers – Ant WF3

| Combination  | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | PCC   |            |                  |  | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | Power                                 |                                   |
|--------------|----------|--------------|--------------|----------------------|-------|------------|------------------|--|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|              |          |              |              |                      | Mod.  | PCC UL# RB | PCC UL RB Offset |  |                  |                      | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-2A-71A | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | 18.38                                 | 18.46                             |
| CA 2A-4A-71A | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | 18.34                                 | 18.46                             |
| CA 2A-6A-71A | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B66  | 20           | 66786            | 2145                 | 18.34                                 | 18.46                             |
| CA 4A-4A-71A | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | 18.40                                 | 18.46                             |
| CA 6A-6A-71A | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 67236            | 2190                 | 18.38                                 | 18.46                             |
| CA 66C-71A   | LTE B71  | 20           | 133297       | 680.5                | 16QAM | 1          | 99               |  | 68761            | 634.5                | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 66984            | 2164.8               | 18.44                                 | 18.46                             |

Table 2  
Output Powers – Ant WF5

| Combination  | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | PCC  |            |                  |  | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | Power                                 |                                   |
|--------------|----------|--------------|--------------|----------------------|------|------------|------------------|--|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|              |          |              |              |                      | Mod. | PCC UL# RB | PCC UL RB Offset |  |                  |                      | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-2A-71A | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | 18.96                                 | 19.00                             |
| CA 2A-4A-71A | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | 18.97                                 | 19.00                             |
| CA 2A-6A-71A | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B2   | 20           | 900              | 1960                 | LTE B66  | 20           | 66786            | 2145                 | 18.99                                 | 19.00                             |
| CA 4A-4A-71A | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | 18.97                                 | 19.00                             |
| CA 6A-6A-71A | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 67236            | 2190                 | 18.96                                 | 19.00                             |
| CA 66C-71A   | LTE B71  | 20           | 133297       | 680.5                | QPSK | 1          | 0                |  | 68761            | 634.5                | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 66984            | 2164.8               | 18.96                                 | 19.00                             |

### 1.3.2 LTE Band 12 as PCC

Table 3  
Output Powers – Ant WF3

| Combination        | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC 1        |                  |                      |          | SCC 2        |                  |                      |          | SCC 3        |                  |                      |                      | Power                                 |                                   |
|--------------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------------------|---------------------------------------|-----------------------------------|
|                    |          |              |              |                      |      |            |                  |                  |                      |          | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-12A          | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | -        | -            | -                | -                    | -        | -            | -                | 18.96                | 19.00                |                                       |                                   |
| CA 4A-12A (1)      | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B4   | 20           | 2175             | 2132.5               | -        | -            | -                | -                    | -        | -            | -                | 18.81                | 19.00                |                                       |                                   |
| CA 4A-12A (2)      | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B4   | 20           | 2175             | 2132.5               | -        | -            | -                | -                    | -        | -            | -                | 18.90                | 19.00                |                                       |                                   |
| CA 12A-66A (1)     | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B66  | 20           | 66786            | 2145                 | -        | -            | -                | -                    | -        | -            | -                | 18.86                | 19.00                |                                       |                                   |
| CA 12A-66A (2)     | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B66  | 20           | 66786            | 2145                 | -        | -            | -                | -                    | -        | -            | -                | 19.00                | 19.00                |                                       |                                   |
| CA 2C-12A          | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 702              | 1940.2               | -        | -            | -                | 19.00                | 19.00                |                                       |                                   |
| CA 4A-7A-12A (1)   | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B4   | 20           | 2175             | 2132.5               | LTE B7   | 20           | 3100             | 2655                 | -        | -            | -                | 18.86                | 19.00                |                                       |                                   |
| CA 2A-2A-12B       | LTE B12  | 5            | 23035        | 701.5                | QPSK | 1          | 0                | 5035             | 731.5                | LTE B12  | 10           | 5107             | 738.7                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | 19.00                | 19.00                                 |                                   |
| CA 2A-2A-4A-12A    | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B4   | 20           | 2175             | 2132.5               | 18.86                | 19.00                                 |                                   |
| CA 2A-4A-12A       | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | 18.86                | 19.00                                 |                                   |
| CA 2A-4A-12B       | LTE B12  | 5            | 23035        | 701.5                | QPSK | 1          | 0                | 5035             | 731.5                | LTE B12  | 10           | 5107             | 738.7                | LTE B2   | 20           | 900              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | 19.00                | 19.00                                 |                                   |
| CA 2A-2A-12A-30A   | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B30  | 10           | 9820             | 2355                 | 18.94                | 19.00                                 |                                   |
| CA 2A-2A-12A-66A   | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B66  | 20           | 66786            | 2145                 | 18.95                | 19.00                                 |                                   |
| CA 2A-12A-66A-66A  | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 67236            | 2190                 | 18.94                | 19.00                                 |                                   |
| CA 2A-12A-66C      | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 66984            | 2164.8               | 18.96                | 19.00                                 |                                   |
| CA 2A-4A-12A-30A   | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B30  | 10           | 9820             | 2355                 | 18.95                | 19.00                                 |                                   |
| CA 2A-12A-30A-66A  | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B2   | 20           | 900              | 1960                 | LTE B30  | 10           | 9820             | 2355                 | LTE B66  | 20           | 66786            | 2145                 | 18.96                | 19.00                                 |                                   |
| CA 4A-4A-12B       | LTE B12  | 5            | 23035        | 701.5                | QPSK | 1          | 0                | 5035             | 731.5                | LTE B12  | 10           | 5107             | 738.7                | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | 18.76                | 19.00                                 |                                   |
| CA 4A-4A-12A-30A   | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | LTE B30  | 10           | 9820             | 2355                 | 19.00                | 19.00                                 |                                   |
| CA 12A-30A-66A-66A | LTE B12  | 10           | 23095        | 707.5                | QPSK | 1          | 0                | 5095             | 737.5                | LTE B30  | 10           | 9820             | 2355                 | LTE B66  | 20           | 66786            | 2145                 | LTE B66  | 20           | 67236            | 2190                 | 19.00                | 19.00                                 |                                   |

|                                    |                                                                                                                            |                       |                                 |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------|
| FCC ID: BCGA2153                   |  PCTEST<br>ENGINEERING LABORATORY, INC. | SAR EVALUATION REPORT | Reviewed by:<br>Quality Manager |
| Test Dates:<br>01/02/19 – 01/14/19 | DUT Type:<br>Tablet Device                                                                                                 |                       | APPENDIX H:<br>Page 3 of 9      |

**Table 4**  
**Output Powers – Ant WF5**

| Combination       | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC   |           |                  |                  | PCC (DL) Freq. [MHz] | SCC Band | SCC 1        |                  |                      |          | SCC 2        |                  |                      |          | SCC 3        |                  |                      |          | Power                                 |                                   |
|-------------------|----------|--------------|--------------|-------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|---------------------------------------|-----------------------------------|
|                   |          |              |              | Mod.  | PCC UL RB | PCC UL RB Offset | PCC (DL) Channel |                      |          | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-2A          | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | -            | -                | -                    | -        | -            | -                | -                    | -        | 18.96                                 | 18.97                             |
| CA 4A-12A (1)     | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B4       | 20               | 2175                 | 2132.5   | -            | -                | -                    | -        | -            | -                | -                    | -        | 18.96                                 | 18.97                             |
| CA 4A-12A (2)     | LTE B12  | 3            | 23095        | 707.5 | 16QAM     | 1                | 7                | 5095                 | 737.5    | LTE B4       | 20               | 2175                 | 2132.5   | -            | -                | -                    | -        | -            | -                | -                    | -        | 18.96                                 | 18.97                             |
| CA 12A-66A (1)    | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B66      | 20               | 66786                | 2145     | -            | -                | -                    | -        | -            | -                | -                    | -        | 18.94                                 | 18.97                             |
| CA 12A-66A (2)    | LTE B12  | 3            | 23095        | 707.5 | 16QAM     | 1                | 7                | 5095                 | 737.5    | LTE B66      | 20               | 66786                | 2145     | -            | -                | -                    | -        | -            | -                | -                    | -        | 18.94                                 | 18.97                             |
| CA 2C-12A         | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B2       | 20               | 700                  | 1940     | -            | -                | -                    | -        | 18.76                                 | 18.97                             |
| CA 4A-7A-12A (1)  | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B4       | 20               | 2175                 | 2132.5   | LTE B7       | 20               | 3100                 | 2656     | -            | -                | -                    | -        | 18.79                                 | 18.97                             |
| CA 2A-2A-12B      | LTE B12  | 5            | 23095        | 707.5 | 16QAM     | 1                | 0                | 5095                 | 737.5    | LTE B12      | 5                | 9047                 | 732.7    | LTE B2       | 20               | 900                  | 1960     | LTE B2       | 20               | 700                  | 1940     | 18.79                                 | 18.96                             |
| CA 2A-2A-4A-12A   | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B2       | 20               | 700                  | 1940     | LTE B4       | 20               | 2175                 | 2132.5   | 18.73                                 | 18.97                             |
| CA 2A-4A-4A-12A   | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 20               | 2175                 | 2132.5   | 18.80                                 | 18.97                             |
| CA 2A-4A-12B      | LTE B12  | 5            | 23095        | 707.5 | 16QAM     | 1                | 0                | 5095                 | 737.5    | LTE B12      | 5                | 9047                 | 732.7    | LTE B2       | 20               | 900                  | 1960     | LTE B4       | 20               | 2175                 | 2132.5   | 18.69                                 | 18.96                             |
| CA 2A-2A-12A-30A  | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B2       | 20               | 700                  | 1940     | LTE B30      | 10               | 9820                 | 2265     | 18.75                                 | 18.97                             |
| CA 2A-2A-12A-66A  | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B2       | 20               | 700                  | 1940     | LTE B66      | 20               | 66786                | 2145     | 18.78                                 | 18.97                             |
| CA 2A-12A-66A-66A | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 67236                | 2190     | 18.55                                 | 18.97                             |
| CA 2A-12A-66B     | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66956                | 2264.6   | 18.60                                 | 18.97                             |
| CA 2A-4A-12A-30A  | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B4       | 20               | 2175                 | 2132.5   | LTE B30      | 10               | 9820                 | 2265     | 18.67                                 | 18.97                             |
| CA 2A-12A-30A-66A | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B2       | 20               | 900                  | 1960     | LTE B30      | 10               | 9820                 | 2265     | LTE B66      | 20               | 66786                | 2145     | 18.59                                 | 18.97                             |
| CA 4A-4A-12B      | LTE B12  | 5            | 23095        | 707.5 | 16QAM     | 1                | 0                | 5095                 | 737.5    | LTE B12      | 5                | 9047                 | 732.7    | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 20               | 2175                 | 2132.5   | 18.90                                 | 18.96                             |
| CA 4A-4A-12A-30A  | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 20               | 2175                 | 2132.5   | LTE B30      | 10               | 9820                 | 2265     | 18.60                                 | 18.97                             |
| CA 1A-30A-66A-66A | LTE B12  | 10           | 23095        | 707.5 | 16QAM     | 1                | 49               | 5095                 | 737.5    | LTE B30      | 10               | 9820                 | 2265     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 67236                | 2190     | 18.75                                 | 18.97                             |

### 1.3.3 LTE Band 13 as PCC

**Table 5**  
**Output Powers – Ant WF3**

| Combination      | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC  |           |                  |                  | PCC (DL) Freq. [MHz] | SCC Band | SCC 1        |                  |                      |          | SCC 2        |                  |                      |          | SCC 3        |                  |                      |          | Power                                 |                                   |
|------------------|----------|--------------|--------------|------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|---------------------------------------|-----------------------------------|
|                  |          |              |              | Mod. | PCC UL RB | PCC UL RB Offset | PCC (DL) Channel |                      |          | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-4A-13A     | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B4       | 20               | 2175                 | 2132.5   | -            | -                | -                    | -        | 18.80                                 | 18.88                             |
| CA 2A-13A-66A    | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | -            | -                | -                    | -        | 18.82                                 | 18.48                             |
| CA 4A-4A-13A     | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 20               | 2260                 | 2150     | -            | -                | -                    | -        | 18.82                                 | 18.88                             |
| CA 13A-46A-66A   | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B66      | 20               | 66786                | 2145     | -            | -                | -                    | -        | 18.99                                 | 18.48                             |
| CA 2A-2A-13A-66A | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | 18.81                                 | 18.48                             |
| CA 2A-13A-46C    | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66786                | 2145     | 18.88                                 | 18.48                             |
| CA 2A-13A-66B    | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 5                | 66979                | 2164.5   | 18.82                                 | 18.48                             |
| CA 2A-13A-66C    | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66956                | 2164.5   | 18.89                                 | 18.48                             |
| CA 13A-66A-66B   | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 5                | 67148                | 2163.2   | LTE B66      | 15               | 67261                | 2162.9   | 18.81                                 | 18.48                             |
| CA 13A-66A-66C   | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 67138                | 2170.2   | LTE B66      | 20               | 67236                | 2190     | 18.86                                 | 18.48                             |
| CA 13A-66C-66A   | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B66      | 20               | 50665                | 5537.5   | LTE B66      | 20               | 50467                | 5537.7   | LTE B66      | 20               | 66786                | 2145     | 18.81                                 | 18.48                             |
| CA 2A-13A-46D    | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | 18.80                                 | 18.48                             |
| CA 13A-46E       | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | LTE B46      | 20               | 50663                | 5537.1   | 18.24                                 | 18.48                             |
| CA 13A-46D-66A   | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | LTE B46      | 20               | 50663                | 5537.1   | 18.23                                 | 18.48                             |

**Table 6**  
**Output Powers – Ant WF5**

| Combination      | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC  |           |                  |                  | PCC (DL) Freq. [MHz] | SCC Band | SCC 1        |                  |                      |          | SCC 2        |                  |                      |          | SCC 3        |                  |                      |          | Power                                 |                                   |
|------------------|----------|--------------|--------------|------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|---------------------------------------|-----------------------------------|
|                  |          |              |              | Mod. | PCC UL RB | PCC UL RB Offset | PCC (DL) Channel |                      |          | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA 2A-4A-13A     | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B4       | 20               | 2175                 | 2132.5   | -            | -                | -                    | -        | 18.88                                 | 20.06                             |
| CA 2A-13A-66A    | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | -            | -                | -                    | -        | 18.86                                 | 20.06                             |
| CA 4A-4A-13A     | LTE B13  | 10           | 23230        | 762  | 16QAM     | 1                | 0                | 5230                 | 763      | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 20               | 2260                 | 2150     | -            | -                | -                    | -        | 18.80                                 | 20.06                             |
| CA 13A-46A-66A   | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B66      | 20               | 66786                | 2145     | -            | -                | -                    | -        | 18.88                                 | 20.06                             |
| CA 2A-2A-13A-66A | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | 18.81                                 | 20.06                             |
| CA 2A-13A-46C    | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66786                | 2145     | 20.08                                 | 20.06                             |
| CA 2A-13A-66B    | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66979                | 2164.5   | 20.04                                 | 20.06                             |
| CA 2A-13A-66C    | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 66956                | 2164.5   | 20.04                                 | 20.06                             |
| CA 13A-66A-66B   | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 5                | 67148                | 2163.2   | LTE B66      | 15               | 67261                | 2162.9   | 20.00                                 | 20.06                             |
| CA 13A-66A-66C   | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B66      | 20               | 66786                | 2145     | LTE B66      | 20               | 67138                | 2170.2   | LTE B66      | 20               | 67236                | 2190     | 19.92                                 | 20.06                             |
| CA 13A-66C-66A   | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B66      | 20               | 50665                | 5537.5   | LTE B66      | 20               | 50467                | 5537.7   | LTE B66      | 20               | 66786                | 2145     | 19.86                                 | 20.06                             |
| CA 2A-13A-46D    | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B2       | 20               | 900                  | 1960     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | 20.08                                 | 20.06                             |
| CA 13A-46E       | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | LTE B46      | 20               | 50663                | 5537.1   | 20.03                                 | 20.06                             |
| CA 13A-46D-66A   | LTE B13  | 10           | 23230        | 762  | QPSK      | 1                | 24               | 5230                 | 763      | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | LTE B46      | 20               | 66786                | 2145     | 20.05                                 | 20.06                             |

### 1.3.4 LTE Band 14 as PCC



# 1.3.7 LTE Band 66 as PCC

Table 13  
Output Powers – Ant WF3

| Combination         | PCC Band | PCC BW [MHz] | PCC          |                      |       |           |                  | SCC 1            |                      |          |              |                  | SCC 2                |          |              |                  |                      | SCC 3    |              |                  |                      |          | SCC 4        |                  |                      |   |   | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Power (dBm) |   |       |       |       |
|---------------------|----------|--------------|--------------|----------------------|-------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---|---|---------------------------------------|--------------------------------|---|-------|-------|-------|
|                     |          |              | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] |   |   |                                       |                                |   |       |       |       |
| CA 2A-66A           | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | -        | -            | -                | -                    | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 13.95 | 14.05 |       |
| CA 7A-66A           | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B7   | 20           | 3100             | 2655                 | -        | -            | -                | -                    | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.99 | 14.05 |       |
| CA 12A-66A (1)      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.99 | 14.05 |       |
| CA 12A-66A (2)      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.99 | 14.05 |       |
| CA 2C-66A           | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 702              | 1940.2               | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.72 | 14.05 |       |
| CA 2A-4A-66A        | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B46  | 20           | 50665            | 5537.5               | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.69 | 14.05 |       |
| CA 2A-6A-7A         | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B71  | 20           | 68761            | 634.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.72 | 14.05 |       |
| CA 13A-66A-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 50665            | 5537.5               | LTE B13  | 10           | 5230             | 763                  | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.66 | 14.05 |       |
| CA 29A-66A-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B29  | 20           | 67236            | 2130                 | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.77 | 14.05 |       |
| CA 4A-6A-66A        | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 50665            | 5537.5               | LTE B46  | 20           | 50665            | 5537.5               | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.68 | 14.05 |       |
| CA 4A-6A-66A-66A    | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B46  | 20           | 50665            | 5537.5               | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.72 | 14.05 |       |
| CA 66B-71A          | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B71  | 20           | 68761            | 634.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.75 | 14.05 |       |
| CA 66C-71A          | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 60734            | 2139.8               | LTE B71  | 20           | 68761            | 634.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.75 | 14.05 |       |
| CA 2A-2A-66A-66A    | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.67 | 14.05 |       |
| CA 2A-2A-5A-66A     | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.81 | 14.05 |       |
| CA 2A-2A-6A-66A     | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | 11.62 | 14.05 |       |
| CA 2A-12A-66A       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.62 | 14.05 |
| CA 2A-12A-66A-66A   | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B2   | 20           | 900              | 1960                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.63 | 14.05 |
| CA 2A-13A-66C       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 60734            | 2139.8               | LTE B2   | 20           | 900              | 1960                 | LTE B12  | 10           | 5095             | 737.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.60 | 14.05 |
| CA 2A-13A-66A-66A   | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 60734            | 2139.8               | LTE B2   | 20           | 900              | 1960                 | LTE B13  | 10           | 5230             | 763                  | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.68 | 14.05 |
| CA 2A-13A-66A       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B14  | 10           | 5330             | 763                  | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.89 | 14.20 |
| CA 2A-13A-66A-66A   | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B2   | 20           | 900              | 1960                 | LTE B14  | 10           | 5330             | 763                  | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.89 | 14.20 |
| CA 2A-2A-3A-66A     | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B30  | 10           | 9620             | 2355                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.61 | 14.05 |
| CA 2A-6A-66A        | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.80 | 14.20 |
| CA 2A-5A-3A-66A     | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | LTE B30  | 10           | 9620             | 2355                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.78 | 14.20 |
| CA 2A-2A-3A-66A-66A | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | LTE B30  | 10           | 9620             | 2355                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.72 | 14.20 |
| CA 2A-14A-20A-66A   | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B2   | 20           | 900              | 1960                 | LTE B14  | 10           | 5330             | 763                  | LTE B30  | 10           | 9620             | 2355                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.75 | 14.20 |
| CA 2A-66C-66A       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 20           | 700              | 1940                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.65 | 14.05 |
| CA 2A-2A-20A-66A    | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B29  | 20           | 67236            | 2130                 | LTE B2   | 20           | 700              | 1940                 | LTE B29  | 20           | 67236            | 2130                 | - | - | -                                     | -                              | - | 11.65 | 14.05 |       |
| CA 2A-2A-3A-66A     | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 900              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B29  | 20           | 67236            | 2130                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.65 | 14.05 |
| CA 5A-66A           | LTE B66  | 5            | 132647       | 1777.5               | 12QAM | 1         | 0                | 67111            | 2177.5               | LTE B66  | 15           | 67038            | 2168.2               | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.58 | 14.05 |
| CA 5A-66A-66B       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.68 | 14.05 |
| CA 5A-66B-66A       | LTE B66  | 5            | 132647       | 1777.5               | 12QAM | 1         | 0                | 67111            | 2177.5               | LTE B66  | 15           | 67038            | 2168.2               | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.58 | 14.05 |
| CA 5A-66A-66C       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 60734            | 2139.8               | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.63 | 14.05 |
| CA 5A-66C-66A       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 60734            | 2139.8               | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.62 | 14.05 |
| CA 13A-66A-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.63 | 14.05 |
| CA 13A-66A-66B      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B66  | 20           | 67236            | 2130                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.64 | 14.05 |
| CA 13A-66A-66C      | LTE B66  | 5            | 132647       | 1777.5               | 12QAM | 1         | 0                | 67111            | 2177.5               | LTE B66  | 15           | 67038            | 2168.2               | LTE B66  | 20           | 67236            | 2130                 | LTE B13  | 10           | 5230             | 763                  | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.74 | 14.20 |
| CA 13A-66C-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B66  | 20           | 67236            | 2130                 | LTE B13  | 10           | 5230             | 763                  | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.74 | 14.20 |
| CA 13A-4C-66A       | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B66  | 20           | 50665            | 5537.5               | LTE B46  | 20           | 50667            | 5537.7               | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.74 | 14.20 |
| CA 14A-3A-66A-66A   | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B14  | 10           | 5330             | 763                  | LTE B46  | 20           | 50667            | 5537.7               | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.77 | 14.20 |
| CA 46A-46C-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B46  | 20           | 50665            | 5537.5               | LTE B46  | 20           | 50667            | 5537.7               | LTE B46  | 20           | 53440            | 5825                 | -        | -            | -                | -                    | - | - | -                                     | -                              | - | -     | 11.76 | 14.20 |
| CA 46A-66A-66A      | LTE B66  | 20           | 132072       | 1720                 | 12QAM | 1         | 99               | 66536            | 2120                 | LTE B66  | 20           | 67236            | 2130                 | LTE B46  | 20           | 50665            | 5537.5               | LTE B46  | 20           |                  |                      |          |              |                  |                      |   |   |                                       |                                |   |       |       |       |

## 1.3.8 LTE Band 25 as PCC

Table 15  
Output Powers – Ant WF3

| Combination    | PCC Band | PCC          |              |                      |       |            |                  |                  |                      | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | Power                                 |                                   |
|----------------|----------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|                |          | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5A-25A      | LTE B25  | 20           | 26365        | 1882.5               | 64QAM | 1          | 99               | 8365             | 1962.5               | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | 13.40                                 | 13.50                             |
| CA_25A-26A     | LTE B25  | 20           | 26365        | 1882.5               | 64QAM | 1          | 99               | 8365             | 1962.5               | LTE B26  | 15           | 8865             | 876.5                | -        | -            | -                | -                    | 13.41                                 | 13.50                             |
| CA_25A-25A-26A | LTE B25  | 20           | 26365        | 1882.5               | 64QAM | 1          | 99               | 8365             | 1962.5               | LTE B25  | 20           | 8140             | 1940                 | LTE B26  | 5            | 8865             | 876.5                | 13.30                                 | 13.50                             |

Table 16  
Output Powers – Ant WF5

| Combination    | PCC Band | PCC          |              |                      |      |            |                  |                  |                      | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | Power                                 |                                   |
|----------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|                |          | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5A-25A      | LTE B25  | 15           | 26365        | 1882.5               | QPSK | 1          | 74               | 8365             | 1962.5               | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | 14.30                                 | 14.30                             |
| CA_25A-26A     | LTE B25  | 15           | 26365        | 1882.5               | QPSK | 1          | 74               | 8365             | 1962.5               | LTE B26  | 15           | 8865             | 876.5                | -        | -            | -                | -                    | 14.26                                 | 14.30                             |
| CA_25A-25A-26A | LTE B25  | 15           | 26365        | 1882.5               | QPSK | 1          | 74               | 8365             | 1962.5               | LTE B25  | 20           | 8140             | 1940                 | LTE B26  | 5            | 8865             | 876.5                | 14.26                                 | 14.30                             |

## 1.3.9 LTE Band 30 as PCC

Table 17  
Output Powers – Ant WF3

| Combination        | PCC Band | PCC          |              |                      |       |            |                  |                  |                      | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | SCC 3    |              |                  |                      | Power                                 |                                   |
|--------------------|----------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|                    |          | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_30-30A          | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B5   | 10           | 2525             | 881.5                | 12.80                                 | 12.80                             |
| CA_2A-2A-30A       | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.85                                 | 12.85                             |
| CA_2A-2A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.82                                 | 12.82                             |
| CA_2A-2A-26A-30A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.84                                 | 12.84                             |
| CA_2A-2A-30A-66A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.86                                 | 12.86                             |
| CA_2A-4A-30A       | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B5   | 10           | 2525             | 881.5                | 12.83                                 | 12.83                             |
| CA_2A-4A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B2   | 10           | 2525             | 881.5                | 12.84                                 | 12.84                             |
| CA_2A-4A-26A-30A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B2   | 10           | 2525             | 881.5                | 12.87                                 | 12.87                             |
| CA_2A-5A-30A-66A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | LTE B6   | 20           | 6878             | 2145                 | 12.85                                 | 12.85                             |
| CA_2A-12A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B12  | 10           | 5095             | 737.5                | LTE B6   | 20           | 6878             | 2145                 | 12.86                                 | 12.86                             |
| CA_2A-14A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B14  | 10           | 5330             | 763                  | LTE B6   | 20           | 6878             | 2145                 | 12.70                                 | 12.70                             |
| CA_2A-26A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B23  | 10           | 9715             | 722.5                | LTE B6   | 20           | 6878             | 2145                 | 12.83                                 | 12.83                             |
| CA_4A-4A-30A       | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 20           | 2350             | 2150                 | LTE B5   | 10           | 2525             | 881.5                | 12.86                                 | 12.86                             |
| CA_4A-4A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 20           | 2350             | 2150                 | LTE B2   | 10           | 5095             | 737.5                | 12.81                                 | 12.81                             |
| CA_5A-30A-66A-66A  | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B5   | 10           | 2525             | 881.5                | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.80                                 | 12.80                             |
| CA_12A-30A-66A-66A | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B12  | 10           | 5095             | 737.5                | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.88                                 | 12.88                             |
| CA_14A-30A-66A-66A | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B14  | 10           | 5330             | 763                  | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.80                                 | 12.80                             |
| CA_26A-30A-66A     | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B23  | 10           | 9715             | 722.5                | LTE B5   | 10           | 2525             | 881.5                | LTE B5   | 5            | 2453             | 874.3                | 12.76                                 | 12.76                             |
| CA_5B-30A-66A-66A  | LTE B30  | 20           | 27710        | 2310                 | 16QAM | 1          | 49               | 8820             | 2355                 | LTE B5   | 10           | 2525             | 881.5                | LTE B5   | 5            | 2453             | 874.3                | LTE B6   | 20           | 6878             | 2145                 | 12.71                                 | 12.71                             |

Table 18  
Output Powers – Ant WF5

| Combination        | PCC Band | PCC          |              |                      |      |            |                  |                  |                      | SCC 1    |              |                  |                      | SCC 2    |              |                  |                      | SCC 3    |              |                  |                      | Power                                 |                                   |
|--------------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
|                    |          | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_30-30A          | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B5   | 10           | 2525             | 881.5                | 12.20                                 | 12.20                             |
| CA_2A-2A-30A       | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.20                                 | 12.20                             |
| CA_2A-2A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.20                                 | 12.20                             |
| CA_2A-2A-26A-30A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.20                                 | 12.20                             |
| CA_2A-2A-30A-66A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B2   | 20           | 700              | 1940                 | LTE B2   | 10           | 2525             | 881.5                | 12.20                                 | 12.20                             |
| CA_2A-4A-30A       | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B5   | 10           | 2525             | 881.5                | 12.19                                 | 12.19                             |
| CA_2A-4A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B2   | 10           | 5095             | 737.5                | 12.19                                 | 12.19                             |
| CA_2A-4A-26A-30A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B2   | 10           | 5095             | 737.5                | 12.16                                 | 12.16                             |
| CA_2A-5A-30A-66A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B5   | 10           | 2525             | 881.5                | LTE B6   | 20           | 6878             | 2145                 | 12.20                                 | 12.20                             |
| CA_2A-12A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B12  | 10           | 5095             | 737.5                | LTE B6   | 20           | 6878             | 2145                 | 12.20                                 | 12.20                             |
| CA_2A-14A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B14  | 10           | 5330             | 763                  | LTE B6   | 20           | 6878             | 2145                 | 12.18                                 | 12.18                             |
| CA_2A-26A-30A-66A  | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B2   | 20           | 800              | 1960                 | LTE B23  | 10           | 9715             | 722.5                | LTE B5   | 10           | 2525             | 881.5                | 12.18                                 | 12.18                             |
| CA_4A-4A-30A       | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 20           | 2350             | 2150                 | LTE B5   | 10           | 2525             | 881.5                | 12.19                                 | 12.19                             |
| CA_4A-4A-12A-30A   | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 20           | 2350             | 2150                 | LTE B2   | 10           | 5095             | 737.5                | 12.18                                 | 12.18                             |
| CA_5A-30A-66A-66A  | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B5   | 10           | 2525             | 881.5                | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.20                                 | 12.20                             |
| CA_12A-30A-66A-66A | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B12  | 10           | 5095             | 737.5                | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.20                                 | 12.20                             |
| CA_14A-30A-66A-66A | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B14  | 10           | 5330             | 763                  | LTE B6   | 20           | 6878             | 2145                 | LTE B6   | 20           | 6728             | 2150                 | 12.18                                 | 12.18                             |
| CA_26A-30A-66A     | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B23  | 10           | 9715             | 722.5                | LTE B5   | 10           | 2525             | 881.5                | LTE B5   | 5            | 2453             | 874.3                | 12.76                                 | 12.76                             |
| CA_5B-30A-66A-66A  | LTE B30  | 20           | 27710        | 2310                 | QPSK | 1          | 49               | 8820             | 2355                 | LTE B5   | 10           | 2525             | 881.5                | LTE B5   | 5            | 2453             | 874.3                | LTE B6   | 20           | 6878             | 2145                 | 12.71                                 | 12.71                             |

## 1.3.10 LTE Band 7 as PCC

Table 19  
Output Powers – Ant WF3

| Combination      | PCC Band | PCC BW [MHz] | PCC          |                      |       |           |                  | SCC 1            |                      |          |              | SCC 2            |                      |          |              | SCC 3            |                      |          |              | Power            |                      |                                       |                                   |       |
|------------------|----------|--------------|--------------|----------------------|-------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|-------|
|                  |          |              | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |       |
| CA_5A-7A         | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B5   | 10           | 2525             | 881.5                | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.40                             | 11.48 |
| CA_7A            | LTE B7   | 15           | 20850        | 2507.5               | 64QAM | 1         | 0                | 2825             | 2627.5               | LTE B7   | 5            | 2918             | 263.8                | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.37                             | 11.38 |
| CA_5C (1)        | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2637                 | LTE B7   | 20           | 3048             | 264.9                | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.46                             | 11.48 |
| CA_7A-66A (1)    | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B46  | 20           | 50665            | 5537.5               | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.48                             | 11.48 |
| CA_7A-66A        | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B66  | 20           | 66786            | 2145                 | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.43                             | 11.48 |
| CA_4A-6A-7A (1)  | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B4   | 20           | 2175             | 2132.5               | LTE B4   | 10           | 2350             | 2150                 | -        | -            | -                | -                    | -                                     | 11.44                             | 11.48 |
| CA_4A-7A         | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B7   | 20           | 3350             | 2680                 | -        | -            | -                | -                    | -        | -            | -                | -                    | -                                     | 11.44                             | 11.48 |
| CA_4A-7A-12A (1) | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B4   | 20           | 2175             | 2133.5               | LTE B12  | 10           | 2358             | 213.5                | -        | -            | -                | -                    | -                                     | 11.46                             | 11.48 |
| CA_7A-86C (1)    | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B46  | 20           | 50605            | 5537.5               | LTE B46  | 20           | 50467            | 5537.7               | -        | -            | -                | -                    | -                                     | 11.48                             | 11.48 |
| CA_7A-86D (1)    | LTE B7   | 20           | 20850        | 2510                 | QPSK  | 1         | 0                | 2850             | 2630                 | LTE B46  | 20           | 50605            | 5537.5               | LTE B46  | 20           | 50467            | 5537.7               | LTE B46  | 20           | 50683            | 5557.3               | 11.40                                 | 11.48                             |       |

**Table 20**  
**Output Powers – Ant WF5**

| Combination      | PCC Band | PCC BW [MHz] | PCC (UL) Ch. Freq. [MHz] | PCC    |            |                  |                  | SCC 1                |          |              |                  | SCC 2                |          |              |                  | SCC 3                |          |              |                  | LTE Tx Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |                      |       |
|------------------|----------|--------------|--------------------------|--------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|---------------------------------------|-----------------------------------|----------------------|-------|
|                  |          |              |                          | Mod.   | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel |                                       |                                   | SCC (DL) Freq. [MHz] |       |
| CA 5A-7A         | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B5       | 10               | 2525                 | 881.5    | -            | -                | -                    | -        | -            | -                | -                                     | -                                 | 11.66                | 11.90 |
| CA 7B            | LTE B7   | 15           | 20825                    | 2507.5 | 16QAM      | 1                | 0                | 2825                 | 2627.5   | LTE B7       | 5                | 2918                 | 2636.8   | -            | -                | -                    | -        | -            | -                | -                                     | -                                 | 11.77                | 11.85 |
| CA 7C (1)        | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B7       | 20               | 3048                 | 2649.8   | -            | -                | -                    | -        | -            | -                | -                                     | -                                 | 11.69                | 11.90 |
| CA 7A-6B (1)     | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B46      | 20               | 50665                | 5537.5   | -            | -                | -                    | -        | -            | -                | -                                     | -                                 | 11.90                | 11.90 |
| CA 7A-6B         | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B66      | 20               | 66786                | 2145     | -            | -                | -                    | -        | -            | -                | -                                     | -                                 | 11.90                | 11.90 |
| CA 4A-4A-7A (1)  | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B4       | 20               | 2175                 | 2132.5   | LTE B4       | 10               | 2950                 | 2150     | -            | -                | -                                     | -                                 | 11.55                | 11.90 |
| CA 4A-7A-7A      | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B7       | 20               | 3350                 | 2680     | LTE B4       | 20               | 2175                 | 2132.5   | -            | -                | -                                     | -                                 | 11.60                | 11.90 |
| CA 4A-7A-12A (1) | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B4       | 20               | 2175                 | 2132.5   | LTE B12      | 10               | 5095                 | 737.5    | -            | -                | -                                     | -                                 | 11.57                | 11.90 |
| CA 7A-4B2 (1)    | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | -            | -                | -                                     | -                                 | 11.63                | 11.90 |
| CA 7A-4B2 (1)    | LTE B7   | 20           | 20850                    | 2510   | 16QAM      | 1                | 0                | 2850                 | 2630     | LTE B46      | 20               | 50665                | 5537.5   | LTE B46      | 20               | 50467                | 5537.7   | LTE B46      | 20               | 50663                                 | 5557.3                            | 11.56                | 11.90 |

### 1.3.11 LTE Band 41 as PCC

**Table 21**  
**Output Powers – Ant WF3**

| PCC            |          |              |              |                      |       |            |                  |                  |                      | SCC 1    |              | SCC 2            |                      | SCC 3    |              | SCC 4            |                      | Power                                 |                                   |
|----------------|----------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
| Combination    | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled [dBm] | LTE Single Carrier Tx Power [dBm] |
| CA 41A-41A (1) | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 41490            | 2680                 | -        | -            | -                | -                    | 13.99                                 | 14.00                             |
| CA 41A-41C     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 41290            | 2662.2               | LTE B41  | 20           | 41490            | 2680                 | 13.97                                 | 14.00                             |
| CA 41C-41A     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 40329            | 2563.9               | LTE B41  | 20           | 41490            | 2680                 | 14.00                                 | 14.00                             |
| CA 41A-41D     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 41094            | 2640.4               | LTE B41  | 20           | 41290            | 2662.2               | 13.97                                 | 14.00                             |
| CA 41D-41A     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 40329            | 2563.9               | LTE B41  | 20           | 41290            | 2662.2               | 13.97                                 | 14.00                             |
| CA 41C-41C     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 40329            | 2563.9               | LTE B41  | 20           | 41490            | 2680                 | 13.97                                 | 14.00                             |
| CA 41E         | LTE B41  | 20           | 39750        | 2500                 | 64QAM | 1          | 0                | 39750            | 2500                 | LTE B41  | 20           | 39948            | 2525.8               | LTE B41  | 20           | 40344            | 2565.4               | 13.99                                 | 13.99                             |
| CA 41C-41D     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 40329            | 2563.9               | LTE B41  | 20           | 41290            | 2662.2               | 13.96                                 | 14.00                             |
| CA 41D-41C     | LTE B41  | 10           | 40185        | 2540.5               | 64QAM | 1          | 0                | 40185            | 2540.5               | LTE B41  | 20           | 40329            | 2563.9               | LTE B41  | 20           | 41290            | 2662.2               | 14.00                                 | 14.00                             |

**Table 22**  
**Output Powers – Ant WF5**

| PCC            |          |              |              |                      |       |            |                  |                  |                      | SCC 1    |              | SCC 2            |                      | SCC 3    |              | SCC 4            |                      | Power                                 |                                   |
|----------------|----------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
| Combination    | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled [dBm] | LTE Single Carrier Tx Power [dBm] |
| CA 41A-41A (1) | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 39750            | 2506                 | -        | -            | -                | -                    | 14.48                                 | 14.50                             |
| CA 41A-41C     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 39948            | 2525.8               | LTE B41  | 20           | 39750            | 2506                 | 14.50                                 | 14.50                             |
| CA 41C-41A     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 39750            | 2506                 | 14.49                                 | 14.50                             |
| CA 41A-41D     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 40146            | 2545.6               | LTE B41  | 20           | 39948            | 2525.8               | 14.49                                 | 14.50                             |
| CA 41D-41A     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 39948            | 2525.8               | 14.49                                 | 14.50                             |
| CA 41C-41C     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 39948            | 2525.8               | 14.50                                 | 14.50                             |
| CA 41E         | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 41121            | 2643.1               | 14.47                                 | 14.50                             |
| CA 41C-41D     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 39948            | 2525.8               | 14.49                                 | 14.50                             |
| CA 41D-41C     | LTE B41  | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41  | 20           | 41319            | 2662.9               | LTE B41  | 20           | 39948            | 2525.8               | 14.43                                 | 14.50                             |

### 1.3.12 LTE Band 41 PC2 as PCC

**Table 23**  
**Output Powers – Ant WF3**

| PCC            |             |              |              |                      |       |            |                  |                  |                      | SCC 1       |              | SCC 2            |                      | SCC 3       |              | SCC 4            |                      | Power                                 |                                   |
|----------------|-------------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|-------------|--------------|------------------|----------------------|-------------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
| Combination    | PCC Band    | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band    | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band    | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled [dBm] | LTE Single Carrier Tx Power [dBm] |
| CA 41A-41A (1) | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 39750            | 2506                 | -           | -            | -                | -                    | 13.99                                 | 13.99                             |
| CA 41A-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 39948            | 2525.8               | LTE B41 PC2 | 20           | 39750            | 2506                 | 13.80                                 | 13.99                             |
| CA 41C-41A     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39750            | 2506                 | 13.78                                 | 13.99                             |
| CA 41A-41D     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 40146            | 2545.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 13.44                                 | 13.99                             |
| CA 41D-41A     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39750            | 2506                 | 13.55                                 | 13.99                             |
| CA 41C-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 13.53                                 | 13.99                             |
| CA 41E         | LTE B41 PC2 | 20           | 39750        | 2506                 | 16QAM | 1          | 0                | 39750            | 2506                 | LTE B41 PC2 | 20           | 39948            | 2525.8               | LTE B41 PC2 | 20           | 40344            | 2565.4               | 13.91                                 | 13.94                             |
| CA 41C-41D     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 13.72                                 | 13.99                             |
| CA 41D-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 25               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 13.71                                 | 13.99                             |

**Table 24**  
**Output Powers – Ant WF5**

| PCC            |             |              |              |                      |       |            |                  |                  |                      | SCC 1       |              | SCC 2            |                      | SCC 3       |              | SCC 4            |                      | Power                                 |                                   |
|----------------|-------------|--------------|--------------|----------------------|-------|------------|------------------|------------------|----------------------|-------------|--------------|------------------|----------------------|-------------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|
| Combination    | PCC Band    | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod.  | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band    | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band    | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx Power with DL CA Enabled [dBm] | LTE Single Carrier Tx Power [dBm] |
| CA 41A-41A (1) | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 39750            | 2506                 | -           | -            | -                | -                    | 14.49                                 | 14.50                             |
| CA 41A-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 39948            | 2525.8               | LTE B41 PC2 | 20           | 39750            | 2506                 | 14.25                                 | 14.50                             |
| CA 41C-41A     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 40146            | 2545.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 14.29                                 | 14.50                             |
| CA 41A-41D     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39750            | 2506                 | 14.25                                 | 14.50                             |
| CA 41C-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 14.27                                 | 14.50                             |
| CA 41E         | LTE B41 PC2 | 15           | 41490        | 2680                 | 16QAM | 1          | 0                | 41490            | 2680                 | LTE B41 PC2 | 20           | 41319            | 2662.9               | LTE B41 PC2 | 20           | 40329            | 2662.3               | 14.27                                 | 14.48                             |
| CA 41C-41D     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 14.00                                 | 14.50                             |
| CA 41D-41C     | LTE B41 PC2 | 10           | 41490        | 2680                 | 16QAM | 1          | 49               | 41490            | 2680                 | LTE B41 PC2 | 20           | 41346            | 2665.6               | LTE B41 PC2 | 20           | 39948            | 2525.8               | 14.12                                 | 14.50                             |

FCC ID: BCGA2153



SAR EVALUATION REPORT

Test Dates:

01/02/19 – 01/14/19

DUT Type:

Tablet Device

Reviewed by:

Quality Manager

APPENDIX H:

Page 8 of 9

## 1.4 Downlink Carrier Aggregation with CA\_41C Uplink Carrier Aggregation enabled

This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

Per FCC Guidance, additional SAR measurements for these configurations were not required since their maximum output power was not more than 0.25 dB higher than the maximum output power for with only ULCA active.

### 1.4.1 DL Carrier Aggregation RF Conducted Powers

**Table 25**  
**Output Powers – Ant WF3**

| Combination | PCC      |                     |                     |                             |            |            |                  |          |                     |                     | SCC1                        |            |            |                  | SCC2     |                     |                |                        | SCC3     |                     |                |                        | SCC4     |                     |                |                        | Power                                                         |                      |
|-------------|----------|---------------------|---------------------|-----------------------------|------------|------------|------------------|----------|---------------------|---------------------|-----------------------------|------------|------------|------------------|----------|---------------------|----------------|------------------------|----------|---------------------|----------------|------------------------|----------|---------------------|----------------|------------------------|---------------------------------------------------------------|----------------------|
|             | PCC Band | PCC Bandwidth [MHz] | PCC [UL/DL] Channel | PCC [UL/DL] Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC [UL/DL] Channel | SCC [UL/DL] Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | ULCA Tx. Power with add'l CA configuration active in DL [dBm] | ULCA Tx. Power [dBm] |
| CA_41C-41A  | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | -        | -                   | -              | -                      | 13.72                                                         | 13.74                |
| CA_41D      | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 41094          | 2640.4                 | -        | -                   | -              | -                      | -        | -                   | -              | -                      | 13.74                                                         | 13.74                |
| CA_41E      | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 41094          | 2640.4                 | LTE B41  | 20                  | 40996          | 2620.6                 | -        | -                   | -              | -                      | 13.77                                                         | 13.74                |
| CA_41C-41C  | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | 13.70                                                         | 13.74                |
| CA_41D-41A  | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 41094          | 2640.4                 | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | 13.73                                                         | 13.74                |
| CA_41C-41D  | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40146          | 2545.6                 | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | 13.70                                                         | 13.74                |
| CA_41D-41C  | LTE B41  | 20                  | 41490               | 2680                        | QPSK       | 1          | 0                | LTE B41  | 20                  | 41292               | 2660.2                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 41094          | 2640.4                 | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | 13.73                                                         | 13.74                |

**Table 26**  
**Output Powers – Ant WF5**

| Combination | PCC      |                     |                     |                             |            |            |                  |          |                     |                     | SCC1                        |            |            |                  | SCC2     |                     |                |                        | SCC3     |                     |                |                        | SCC4     |                     |                |                        | Power                                                         |                      |
|-------------|----------|---------------------|---------------------|-----------------------------|------------|------------|------------------|----------|---------------------|---------------------|-----------------------------|------------|------------|------------------|----------|---------------------|----------------|------------------------|----------|---------------------|----------------|------------------------|----------|---------------------|----------------|------------------------|---------------------------------------------------------------|----------------------|
|             | PCC Band | PCC Bandwidth [MHz] | PCC [UL/DL] Channel | PCC [UL/DL] Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC [UL/DL] Channel | SCC [UL/DL] Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | ULCA Tx. Power with add'l CA configuration active in DL [dBm] | ULCA Tx. Power [dBm] |
| CA_41C-41A  | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | -        | -                   | -              | -                      | 14.29                                                         | 14.29                |
| CA_41D      | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40659          | 2596.9                 | -        | -                   | -              | -                      | -        | -                   | -              | -                      | 14.29                                                         | 14.29                |
| CA_41E      | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40659          | 2596.9                 | LTE B41  | 20                  | 40461          | 2577.1                 | -        | -                   | -              | -                      | 14.28                                                         | 14.29                |
| CA_41C-41C  | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | 14.27                                                         | 14.29                |
| CA_41D-41A  | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40659          | 2596.9                 | LTE B41  | 20                  | 39750          | 2506                   | -        | -                   | -              | -                      | 14.30                                                         | 14.29                |
| CA_41C-41D  | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40446          | 2545.6                 | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | 14.30                                                         | 14.29                |
| CA_41D-41C  | LTE B41  | 20                  | 41055               | 2636.5                      | QPSK       | 1          | 0                | LTE B41  | 20                  | 40857               | 2616.7                      | QPSK       | 1          | 99               | LTE B41  | 20                  | 40659          | 2596.9                 | LTE B41  | 20                  | 39948          | 2525.8                 | LTE B41  | 20                  | 39750          | 2506                   | 14.26                                                         | 14.29                |

|                                           |                                                                                                                                   |                              |                                        |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
| <b>FCC ID:</b> BCGA2153                   |  <b>PCTEST</b><br>ENGINEERING LABORATORY, INC. | <b>SAR EVALUATION REPORT</b> | <b>Reviewed by:</b><br>Quality Manager |
| <b>Test Dates:</b><br>01/02/19 – 01/14/19 | <b>DUT Type:</b><br>Tablet Device                                                                                                 |                              | <b>APPENDIX H:</b><br>Page 9 of 9      |