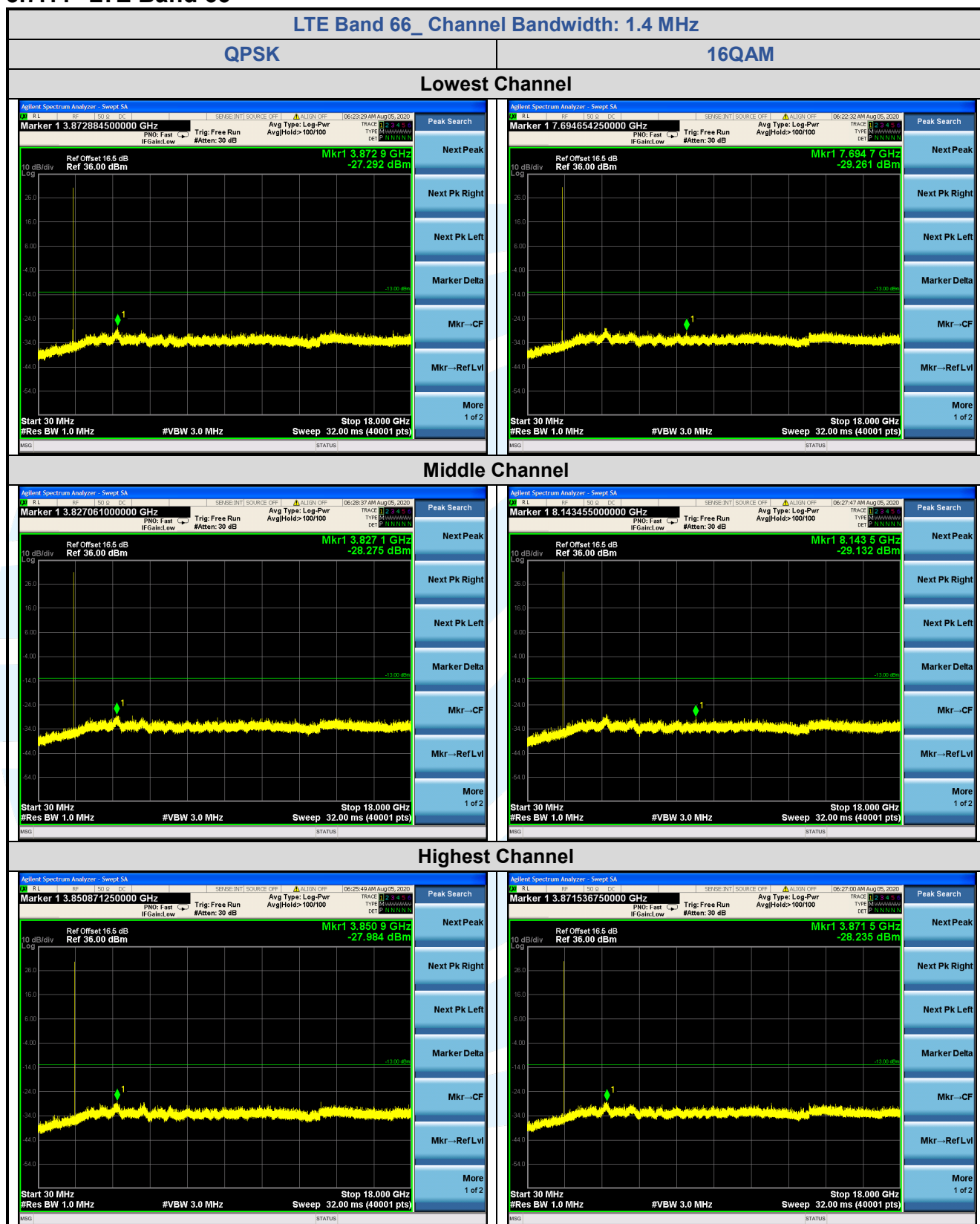
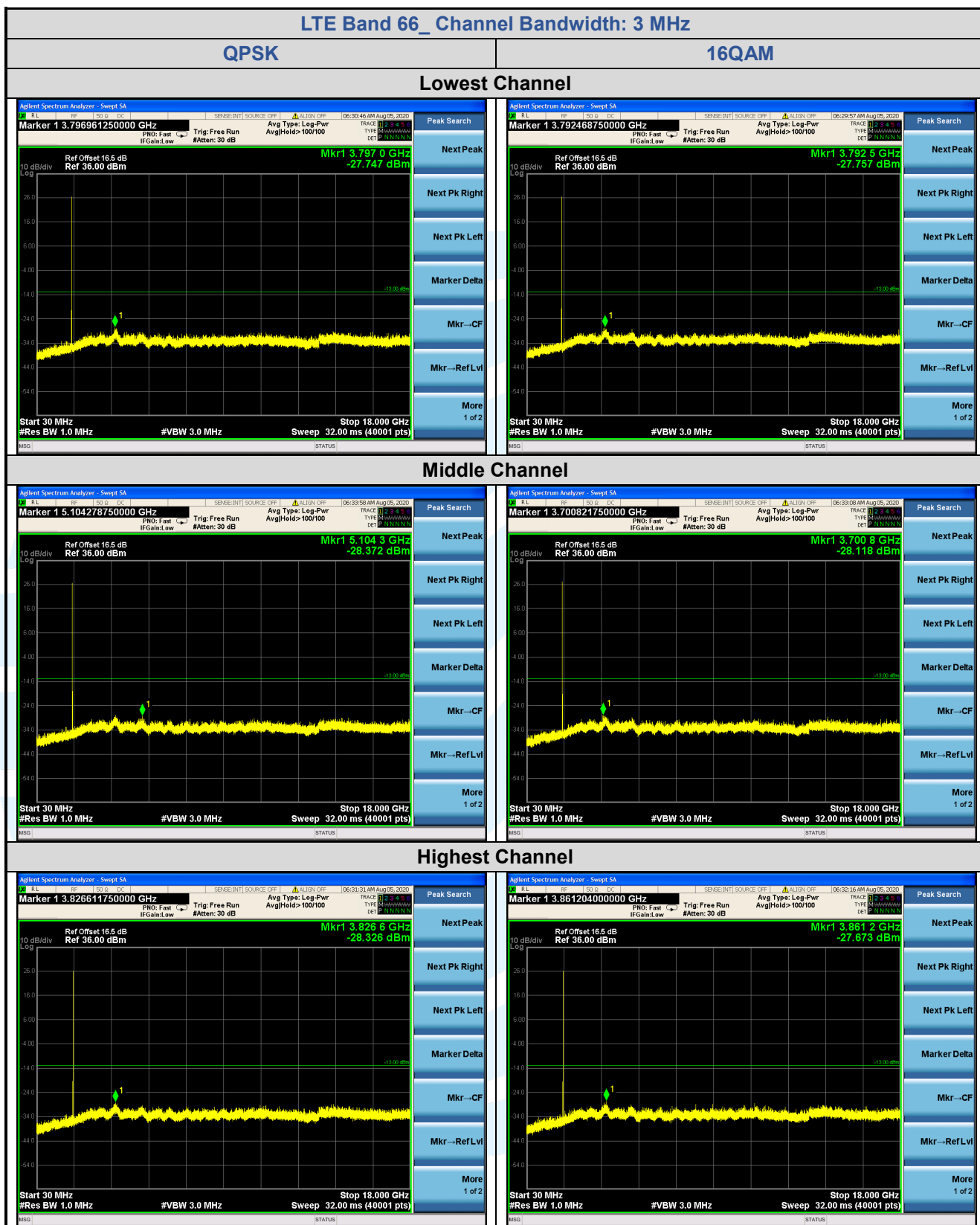
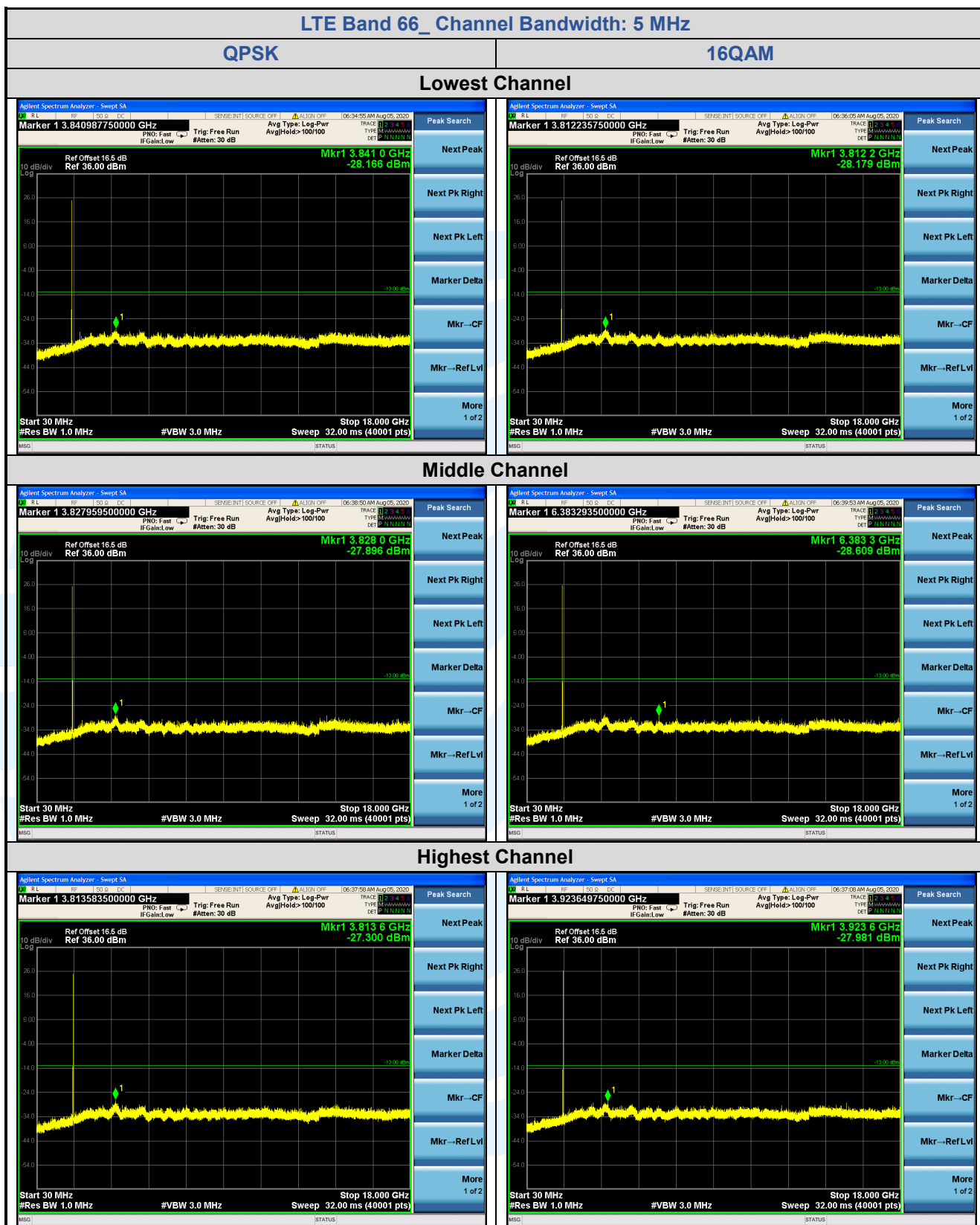
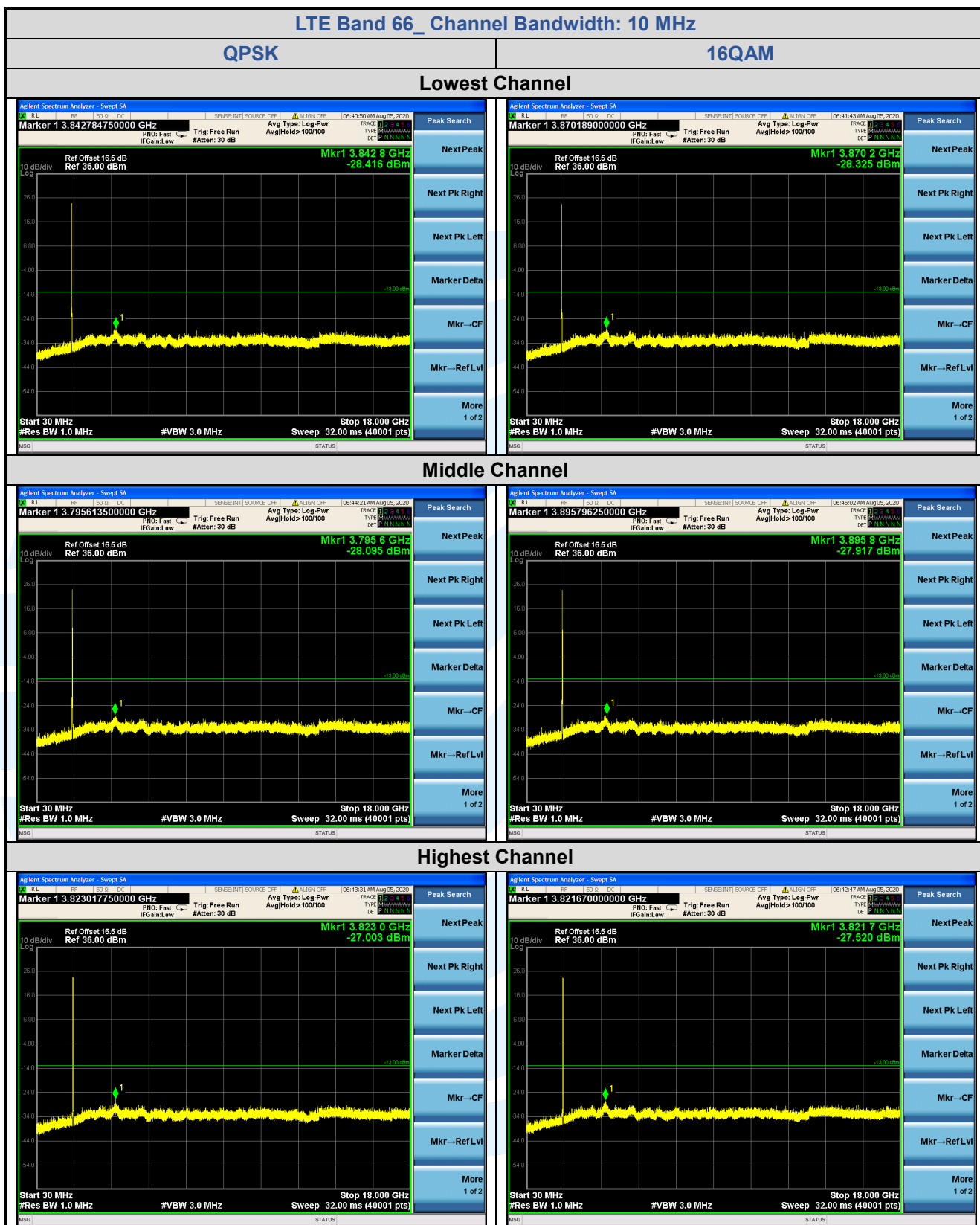


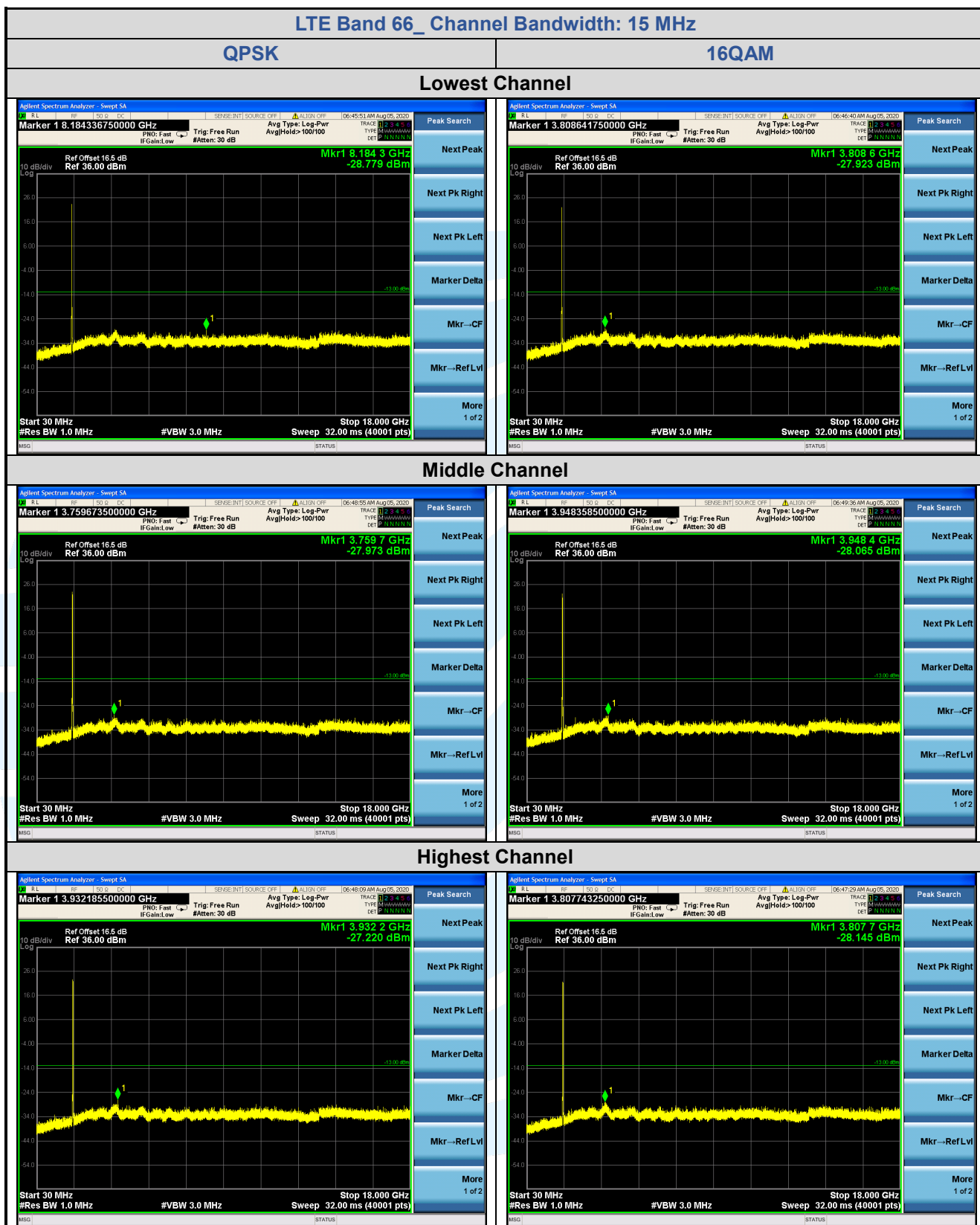
## 5.7.11 LTE Band 66

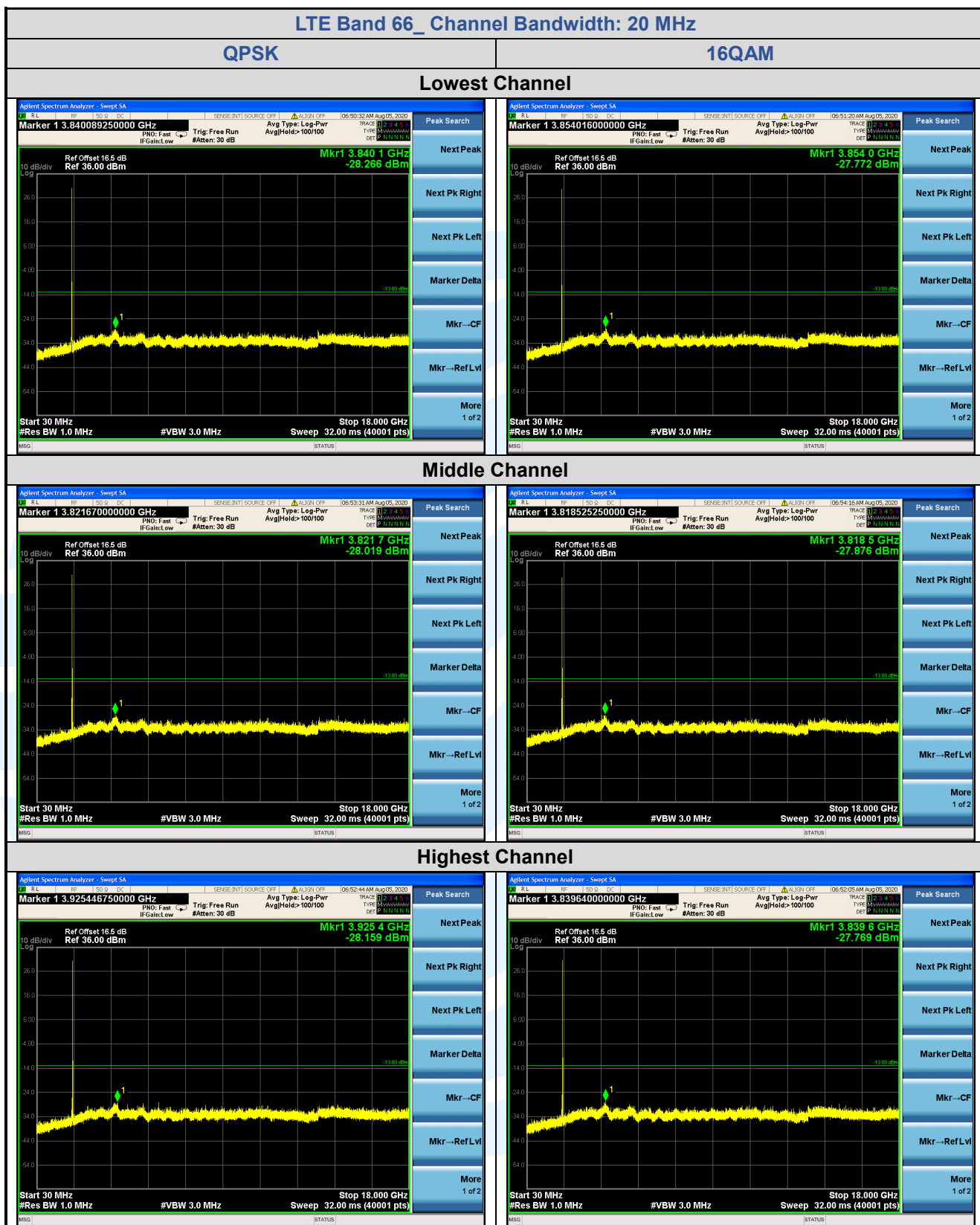












## 5.8 FIELD STRENGTH OF SPURIOUS RADIATION

**Test Requirement:** **LTE Band 2:** FCC 47 CFR Part 24.238(a), RSS-133 Issue 6, Section 6.5  
**LTE Band 4 & LTE Band 66:** FCC 47 CFR Part 27.53(h), RSS-139 Issue 3, Section 6.6  
**LTE Band 5 & LTE Band 26:** FCC 47 CFR Part 22.917(a), RSS-132 Issue 3, Section 5.5  
**LTE Band 7 & Band 38 & Band 41:** FCC 47 CFR Part 27.53(m)(4), RSS-199 Issue 3, Section 4.5  
**LTE Band 12:** FCC 47 CFR Part 27.53(g), RSS-130 Issue 2, Section 4.7  
**LTE Band 13:** FCC 47 CFR Part 27.53, RSS-130 Issue 2, Section 4.7  
**LTE Band 26:** FCC 47 CFR Part 90.691

**Test Method:** ANSI C63.26-2015 & KDB 971168 D01v03r01

**Receiver Setup:**

| Frequency        | Detector   | RBW     | VBW     | Remark |
|------------------|------------|---------|---------|--------|
| 0.009 MHz-30 MHz | Peak       | 10 kHz  | 30 KHz  | Peak   |
| 30 MHz-1 GHz     | Quasi-peak | 100 kHz | 300 KHz | Peak   |
| Above 1 GHz      | Peak       | 1 MHz   | 3 MHz   | Peak   |

**Limits:**

**FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a), 27.53(g), 27.53(c)(2), 90.691:**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to -13 dBm.

**FCC 47 CFR Part 27.53(m)(4):**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $55 + 10 \log(P)$  dB. The emission limit equal to -25 dBm.

**FCC 47 CFR Part 27.53:**

(c) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals. (-70 dBW/MHz = -40dBm/MHz).

**RSS-132 Issue 3, Section 5.5, RSS-133 Issue 6, Section 6.6, RSS-139 Issue 3, Section 6.5,**

**RSS-130 Issue 2, Section 4.7:**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to -13 dBm.

**RSS-199 Issue 3, Section 4.5:**

The minimum permissible attenuation level of any spurious emissions is  $55 + 10 \log(P)$  dB where transmitting power (P) in Watts. The emission limit equal to -25 dBm.

**Test Setup:** Refer to section 4.2.1 for details.

**Test Procedures:** KDB 971168 D01v03r01 Section 7

**Equipment Used:** Refer to section 3 for details.

**Test Result:** Pass

**The measurement data as follows:**



### 5.8.1 LTE Band 2

| LTE Band 2_ 20 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 64.532    | -64.70     | -5.36             | -70.06      | -13.00 | -57.06 | Horizontal |
| 2                                    | 97.002    | -66.77     | -3.39             | -70.16      | -13.00 | -57.16 | Horizontal |
| 3                                    | 147.875   | -65.70     | -2.39             | -68.09      | -13.00 | -55.09 | Horizontal |
| 4                                    | 54.135    | -59.37     | -5.34             | -64.71      | -13.00 | -51.71 | Vertical   |
| 5                                    | 65.445    | -55.86     | -5.06             | -60.92      | -13.00 | -47.92 | Vertical   |
| 6                                    | 94.979    | -58.47     | -3.56             | -62.03      | -13.00 | -49.03 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 64.987    | -69.60     | -5.32             | -74.92      | -13.00 | -61.92 | Horizontal |
| 2                                    | 95.649    | -71.84     | -3.49             | -75.33      | -13.00 | -62.33 | Horizontal |
| 3                                    | 152.090   | -71.89     | -1.98             | -73.87      | -13.00 | -60.87 | Horizontal |
| 4                                    | 54.135    | -61.45     | -5.34             | -66.79      | -13.00 | -53.79 | Vertical   |
| 5                                    | 69.718    | -57.84     | -4.91             | -62.75      | -13.00 | -49.75 | Vertical   |
| 6                                    | 94.979    | -61.55     | -3.56             | -65.11      | -13.00 | -52.11 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 96.323    | -72.59     | -3.45             | -76.04      | -13.00 | -63.04 | Horizontal |
| 2                                    | 153.163   | -73.47     | -1.88             | -75.35      | -13.00 | -62.35 | Horizontal |
| 3                                    | 833.013   | -80.53     | 11.87             | -68.66      | -13.00 | -55.66 | Horizontal |
| 4                                    | 68.264    | -58.01     | -4.96             | -62.97      | -13.00 | -49.97 | Vertical   |
| 5                                    | 97.002    | -64.58     | -3.39             | -67.97      | -13.00 | -54.97 | Vertical   |
| 6                                    | 176.275   | -69.25     | -1.45             | -70.70      | -13.00 | -57.70 | Vertical   |

| LTE Band 2_ 20 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 3720.000  | -62.64     | 5.87              | -56.77      | -13.00 | -43.77 | Horizontal |
| 2                                    | 5580.000  | -62.81     | 9.57              | -53.24      | -13.00 | -40.24 | Horizontal |
| 3                                    | 3720.000  | -63.44     | 5.86              | -57.58      | -13.00 | -44.58 | Vertical   |
| 4                                    | 5580.000  | -63.16     | 10.05             | -53.11      | -13.00 | -40.11 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 3760.000  | -61.84     | 5.97              | -55.87      | -13.00 | -42.87 | Horizontal |
| 2                                    | 5640.000  | -62.80     | 9.53              | -53.27      | -13.00 | -40.27 | Horizontal |
| 3                                    | 3760.000  | -62.37     | 5.97              | -56.40      | -13.00 | -43.40 | Vertical   |
| 4                                    | 5640.000  | -62.22     | 10.01             | -52.21      | -13.00 | -39.21 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 3800.000  | -62.53     | 6.06              | -56.47      | -13.00 | -43.47 | Horizontal |
| 2                                    | 5700.000  | -62.38     | 9.50              | -52.88      | -13.00 | -39.88 | Horizontal |
| 3                                    | 3800.000  | -61.19     | 6.08              | -55.11      | -13.00 | -42.11 | Vertical   |
| 4                                    | 5700.000  | -62.60     | 9.96              | -52.64      | -13.00 | -39.64 | Vertical   |

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### 5.8.2 LTE Band 4

| LTE Band 4_20 MHz_QPSK (Below 1 G) |                    |                     |                                |                      |                |                |            |
|------------------------------------|--------------------|---------------------|--------------------------------|----------------------|----------------|----------------|------------|
| No.                                | Frequency<br>(MHz) | SA Reading<br>(dBm) | Correction<br>factor<br>(dB/m) | EIRP Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Ant. Pol.  |
| Lowest Channel                     |                    |                     |                                |                      |                |                |            |
| 1                                  | 154.243            | -72.78              | -1.77                          | -74.55               | -13.00         | -61.55         | Horizontal |
| 2                                  | 562.014            | -78.74              | 7.94                           | -70.80               | -13.00         | -57.80         | Horizontal |
| 3                                  | 754.963            | -79.46              | 11.04                          | -68.42               | -13.00         | -55.42         | Horizontal |
| 4                                  | 70.210             | -57.09              | -4.88                          | -61.97               | -13.00         | -48.97         | Vertical   |
| 5                                  | 94.979             | -61.29              | -3.56                          | -64.85               | -13.00         | -51.85         | Vertical   |
| 6                                  | 148.917            | -66.72              | -2.29                          | -69.01               | -13.00         | -56.01         | Vertical   |
| Middle Channel                     |                    |                     |                                |                      |                |                |            |
| 1                                  | 152.090            | -71.02              | -1.98                          | -73.00               | -13.00         | -60.00         | Horizontal |
| 2                                  | 798.620            | -80.84              | 12.02                          | -68.82               | -13.00         | -55.82         | Horizontal |
| 3                                  | 938.714            | -81.22              | 14.28                          | -66.94               | -13.00         | -53.94         | Horizontal |
| 4                                  | 69.718             | -57.73              | -4.91                          | -62.64               | -13.00         | -49.64         | Vertical   |
| 5                                  | 96.323             | -63.45              | -3.45                          | -66.90               | -13.00         | -53.90         | Vertical   |
| 6                                  | 152.090            | -68.14              | -2.13                          | -70.27               | -13.00         | -57.27         | Vertical   |
| Highest Channel                    |                    |                     |                                |                      |                |                |            |
| 1                                  | 154.243            | -72.10              | -1.77                          | -73.87               | -13.00         | -60.87         | Horizontal |
| 2                                  | 495.238            | -78.84              | 6.74                           | -72.10               | -13.00         | -59.10         | Horizontal |
| 3                                  | 945.334            | -80.43              | 14.50                          | -65.93               | -13.00         | -52.93         | Horizontal |
| 4                                  | 69.718             | -58.03              | -4.91                          | -62.94               | -13.00         | -49.94         | Vertical   |
| 5                                  | 96.323             | -62.15              | -3.45                          | -65.60               | -13.00         | -52.60         | Vertical   |
| 6                                  | 148.917            | -65.66              | -2.29                          | -67.95               | -13.00         | -54.95         | Vertical   |

| LTE Band 4_20 MHz_QPSK (Above 1 G) |                    |                     |                                |                      |                |                |            |
|------------------------------------|--------------------|---------------------|--------------------------------|----------------------|----------------|----------------|------------|
| No.                                | Frequency<br>(MHz) | SA Reading<br>(dBm) | Correction<br>factor<br>(dB/m) | EIRP Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Ant. Pol.  |
| Lowest Channel                     |                    |                     |                                |                      |                |                |            |
| 1                                  | 3440.000           | -61.80              | 5.02                           | -56.78               | -13.00         | -43.78         | Horizontal |
| 2                                  | 5160.000           | -62.25              | 8.11                           | -54.14               | -13.00         | -41.14         | Horizontal |
| 3                                  | 3440.000           | -61.39              | 4.83                           | -56.56               | -13.00         | -43.56         | Vertical   |
| 4                                  | 5160.000           | -63.02              | 8.47                           | -54.55               | -13.00         | -41.55         | Vertical   |
| Middle Channel                     |                    |                     |                                |                      |                |                |            |
| 1                                  | 3465.000           | -62.73              | 5.10                           | -57.63               | -13.00         | -44.63         | Horizontal |
| 2                                  | 5197.500           | -63.43              | 8.25                           | -55.18               | -13.00         | -42.18         | Horizontal |
| 3                                  | 3465.000           | -62.05              | 4.95                           | -57.10               | -13.00         | -44.10         | Vertical   |
| 4                                  | 5197.500           | -62.68              | 8.63                           | -54.05               | -13.00         | -41.05         | Vertical   |
| Highest Channel                    |                    |                     |                                |                      |                |                |            |
| 1                                  | 3490.000           | -61.60              | 5.18                           | -56.42               | -13.00         | -43.42         | Horizontal |
| 2                                  | 5235.000           | -63.12              | 8.41                           | -54.71               | -13.00         | -41.71         | Horizontal |
| 3                                  | 3490.000           | -60.72              | 5.06                           | -55.66               | -13.00         | -42.66         | Vertical   |
| 4                                  | 5235.000           | -63.57              | 8.80                           | -54.77               | -13.00         | -41.77         | Vertical   |

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### 5.8.3 LTE Band 5

| LTE Band 5_ 10 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 95.649    | -70.81     | 25.33             | -45.48      | -13.00 | -32.48 | Horizontal |
| 2                                    | 149.968   | -73.03     | 26.44             | -46.59      | -13.00 | -33.59 | Horizontal |
| 3                                    | 703.731   | -80.87     | 40.67             | -40.20      | -13.00 | -27.20 | Horizontal |
| 4                                    | 69.718    | -56.99     | 23.99             | -33.00      | -13.00 | -20.00 | Vertical   |
| 5                                    | 94.979    | -61.51     | 25.27             | -36.24      | -13.00 | -23.24 | Vertical   |
| 6                                    | 149.968   | -66.61     | 26.44             | -40.17      | -13.00 | -27.17 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 95.649    | -69.94     | 25.33             | -44.61      | -13.00 | -31.61 | Horizontal |
| 2                                    | 153.163   | -73.94     | 26.73             | -47.21      | -13.00 | -34.21 | Horizontal |
| 3                                    | 520.208   | -78.82     | 37.25             | -41.57      | -13.00 | -28.57 | Horizontal |
| 4                                    | 69.718    | -58.02     | 23.99             | -34.03      | -13.00 | -21.03 | Vertical   |
| 5                                    | 92.997    | -62.02     | 25.12             | -36.90      | -13.00 | -23.90 | Vertical   |
| 6                                    | 146.839   | -66.06     | 26.15             | -39.91      | -13.00 | -26.91 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 53.756    | -70.91     | 23.62             | -47.29      | -13.00 | -34.29 | Horizontal |
| 2                                    | 96.323    | -72.29     | 25.37             | -46.92      | -13.00 | -33.92 | Horizontal |
| 3                                    | 698.804   | -80.93     | 40.73             | -40.20      | -13.00 | -27.20 | Horizontal |
| 4                                    | 32.870    | -69.56     | 31.39             | -38.17      | -13.00 | -25.17 | Vertical   |
| 5                                    | 70.210    | -57.54     | 24.02             | -33.52      | -13.00 | -20.52 | Vertical   |
| 6                                    | 94.979    | -60.68     | 25.27             | -35.41      | -13.00 | -22.41 | Vertical   |

| LTE Band 5_ 10 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 1658.000  | -62.50     | -0.61             | -63.11      | -13.00 | -50.11 | Horizontal |
| 2                                    | 2487.000  | -61.90     | 2.00              | -59.90      | -13.00 | -46.90 | Horizontal |
| 3                                    | 1658.000  | -62.49     | -1.38             | -63.87      | -13.00 | -50.87 | Vertical   |
| 4                                    | 2487.000  | -61.51     | 1.60              | -59.91      | -13.00 | -46.91 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 1673.000  | -63.22     | -0.53             | -63.75      | -13.00 | -50.75 | Horizontal |
| 2                                    | 2509.500  | -62.69     | 2.06              | -60.63      | -13.00 | -47.63 | Horizontal |
| 3                                    | 1673.000  | -62.24     | -1.29             | -63.53      | -13.00 | -50.53 | Vertical   |
| 4                                    | 2509.500  | -62.42     | 1.65              | -60.77      | -13.00 | -47.77 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 1688.000  | -62.82     | -0.44             | -63.26      | -13.00 | -50.26 | Horizontal |
| 2                                    | 2532.000  | -63.14     | 2.13              | -61.01      | -13.00 | -48.01 | Horizontal |
| 3                                    | 1688.000  | -63.43     | -1.19             | -64.62      | -13.00 | -51.62 | Vertical   |
| 4                                    | 2532.000  | -62.51     | 1.71              | -60.80      | -13.00 | -47.80 | Vertical   |

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### 5.8.4 LTE Band 7

| LTE Band 7_ 20 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 95.649    | -70.90     | -3.49             | -74.39      | -13.00 | -61.39 | Horizontal |
| 2                                    | 148.917   | -71.90     | -2.29             | -74.19      | -13.00 | -61.19 | Horizontal |
| 3                                    | 698.804   | -79.87     | 11.30             | -68.57      | -13.00 | -55.57 | Horizontal |
| 4                                    | 69.718    | -57.24     | -4.91             | -62.15      | -13.00 | -49.15 | Vertical   |
| 5                                    | 94.314    | -62.93     | -3.61             | -66.54      | -13.00 | -53.54 | Vertical   |
| 6                                    | 153.163   | -67.02     | -2.10             | -69.12      | -13.00 | -56.12 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 154.243   | -72.08     | -1.77             | -73.85      | -13.00 | -60.85 | Horizontal |
| 2                                    | 401.105   | -79.83     | 6.26              | -73.57      | -13.00 | -60.57 | Horizontal |
| 3                                    | 660.602   | -80.32     | 10.24             | -70.08      | -13.00 | -57.08 | Horizontal |
| 4                                    | 33.101    | -69.37     | 2.21              | -67.16      | -13.00 | -54.16 | Vertical   |
| 5                                    | 66.840    | -58.47     | -5.00             | -63.47      | -13.00 | -50.47 | Vertical   |
| 6                                    | 94.979    | -62.93     | -3.56             | -66.49      | -13.00 | -53.49 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 97.002    | -71.96     | -3.39             | -75.35      | -13.00 | -62.35 | Horizontal |
| 2                                    | 153.163   | -74.41     | -1.88             | -76.29      | -13.00 | -63.29 | Horizontal |
| 3                                    | 642.292   | -79.90     | 9.84              | -70.06      | -13.00 | -57.06 | Horizontal |
| 4                                    | 69.718    | -58.48     | -4.91             | -63.39      | -13.00 | -50.39 | Vertical   |
| 5                                    | 95.649    | -62.10     | -3.49             | -65.59      | -13.00 | -52.59 | Vertical   |
| 6                                    | 153.163   | -66.92     | -2.10             | -69.02      | -13.00 | -56.02 | Vertical   |

| LTE Band 7_ 20 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|--------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                  | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                      | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 5020.000  | -60.95     | 7.59              | -53.36      | -13.00 | -40.36 | Horizontal |
| 2                                    | 7530.000  | -62.23     | 11.45             | -50.78      | -13.00 | -37.78 | Horizontal |
| 3                                    | 5020.000  | -62.24     | 7.89              | -54.35      | -13.00 | -41.35 | Vertical   |
| 4                                    | 7530.000  | -62.31     | 11.55             | -50.76      | -13.00 | -37.76 | Vertical   |
| Middle Channel                       |           |            |                   |             |        |        |            |
| 1                                    | 5070.000  | -62.27     | 7.78              | -54.49      | -13.00 | -41.49 | Horizontal |
| 2                                    | 7605.000  | -63.36     | 11.61             | -51.75      | -13.00 | -38.75 | Horizontal |
| 3                                    | 5070.000  | -61.98     | 8.10              | -53.88      | -13.00 | -40.88 | Vertical   |
| 4                                    | 7605.000  | -61.83     | 11.71             | -50.12      | -13.00 | -37.12 | Vertical   |
| Highest Channel                      |           |            |                   |             |        |        |            |
| 1                                    | 5120.000  | -62.00     | 7.96              | -54.04      | -13.00 | -41.04 | Horizontal |
| 2                                    | 7680.000  | -64.28     | 11.76             | -52.52      | -13.00 | -39.52 | Horizontal |
| 3                                    | 5120.000  | -62.71     | 8.30              | -54.41      | -13.00 | -41.41 | Vertical   |
| 4                                    | 7680.000  | -62.74     | 11.86             | -50.88      | -13.00 | -37.88 | Vertical   |

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UTTR-RF-FCC4G-V1.1

### 5.8.5 LTE Band 12

| LTE Band 12_ 10 MHz_ QPSK (Below 1 G) |                    |                     |                                |                      |                |                |            |
|---------------------------------------|--------------------|---------------------|--------------------------------|----------------------|----------------|----------------|------------|
| No.                                   | Frequency<br>(MHz) | SA Reading<br>(dBm) | Correction<br>factor<br>(dB/m) | EIRP Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Ant. Pol.  |
| Lowest Channel                        |                    |                     |                                |                      |                |                |            |
| 1                                     | 56.466             | -67.35              | 23.41                          | -43.94               | -13.00         | -30.94         | Horizontal |
| 2                                     | 474.791            | -80.01              | 36.09                          | -43.92               | -13.00         | -30.92         | Horizontal |
| 3                                     | 598.707            | -78.99              | 38.78                          | -40.21               | -13.00         | -27.21         | Horizontal |
| 4                                     | 31.513             | -72.23              | 32.25                          | -39.98               | -13.00         | -26.98         | Vertical   |
| 5                                     | 56.864             | -56.45              | 23.61                          | -32.84               | -13.00         | -19.84         | Vertical   |
| 6                                     | 129.392            | -71.54              | 25.26                          | -46.28               | -13.00         | -33.28         | Vertical   |
| Middle Channel                        |                    |                     |                                |                      |                |                |            |
| 1                                     | 32.640             | -78.62              | 31.58                          | -47.04               | -13.00         | -34.04         | Horizontal |
| 2                                     | 56.071             | -68.85              | 23.44                          | -45.41               | -13.00         | -32.41         | Horizontal |
| 3                                     | 538.811            | -79.57              | 37.46                          | -42.11               | -13.00         | -29.11         | Horizontal |
| 4                                     | 31.292             | -72.29              | 32.39                          | -39.90               | -13.00         | -26.90         | Vertical   |
| 5                                     | 57.265             | -56.32              | 23.61                          | -32.71               | -13.00         | -19.71         | Vertical   |
| 6                                     | 578.036            | -79.44              | 38.30                          | -41.14               | -13.00         | -28.14         | Vertical   |
| Highest Channel                       |                    |                     |                                |                      |                |                |            |
| 1                                     | 43.845             | -73.67              | 26.35                          | -47.32               | -13.00         | -34.32         | Horizontal |
| 2                                     | 56.466             | -68.20              | 23.41                          | -44.79               | -13.00         | -31.79         | Horizontal |
| 3                                     | 628.894            | -80.68              | 39.28                          | -41.40               | -13.00         | -28.40         | Horizontal |
| 4                                     | 31.073             | -72.57              | 32.53                          | -40.04               | -13.00         | -27.04         | Vertical   |
| 5                                     | 56.864             | -58.34              | 23.61                          | -34.73               | -13.00         | -21.73         | Vertical   |
| 6                                     | 505.789            | -80.21              | 36.97                          | -43.24               | -13.00         | -30.24         | Vertical   |

| LTE Band 12_ 10 MHz_ QPSK (Above 1 G) |                    |                     |                                |                      |                |                |            |
|---------------------------------------|--------------------|---------------------|--------------------------------|----------------------|----------------|----------------|------------|
| No.                                   | Frequency<br>(MHz) | SA Reading<br>(dBm) | Correction<br>factor<br>(dB/m) | EIRP Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Ant. Pol.  |
| Lowest Channel                        |                    |                     |                                |                      |                |                |            |
| 1                                     | 1408.000           | -60.90              | -1.04                          | -61.94               | -13.00         | -48.94         | Horizontal |
| 2                                     | 2112.000           | -62.11              | 1.27                           | -60.84               | -13.00         | -47.84         | Horizontal |
| 3                                     | 1408.000           | -61.79              | -1.81                          | -63.60               | -13.00         | -50.60         | Vertical   |
| 4                                     | 2112.000           | -62.41              | 0.79                           | -61.62               | -13.00         | -48.62         | Vertical   |
| Middle Channel                        |                    |                     |                                |                      |                |                |            |
| 1                                     | 1415.000           | -61.04              | -1.05                          | -62.09               | -13.00         | -49.09         | Horizontal |
| 2                                     | 2122.500           | -64.38              | 1.27                           | -63.11               | -13.00         | -50.11         | Horizontal |
| 3                                     | 1415.000           | -60.91              | -1.83                          | -62.74               | -13.00         | -49.74         | Vertical   |
| 4                                     | 2122.500           | -64.28              | 0.80                           | -63.48               | -13.00         | -50.48         | Vertical   |
| Highest Channel                       |                    |                     |                                |                      |                |                |            |
| 1                                     | 1422.000           | -61.07              | -1.07                          | -62.14               | -13.00         | -49.14         | Horizontal |
| 2                                     | 2133.000           | -63.26              | 1.29                           | -61.97               | -13.00         | -48.97         | Horizontal |
| 3                                     | 1422.000           | -53.85              | -1.86                          | -55.71               | -13.00         | -42.71         | Vertical   |
| 4                                     | 2133.000           | -56.87              | 0.81                           | -56.06               | -13.00         | -43.06         | Vertical   |

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### 5.8.6 LTE Band 13

| LTE Band 13_ 10 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 47.703    | -72.21     | 24.82             | -47.39      | -13.00 | -34.39 | Horizontal |
| 2                                     | 65.445    | -70.63     | 23.62             | -47.01      | -13.00 | -34.01 | Horizontal |
| 3                                     | 140.777   | -74.21     | 25.57             | -48.64      | -13.00 | -35.64 | Horizontal |
| 4                                     | 31.513    | -70.76     | 32.25             | -38.51      | -13.00 | -25.51 | Vertical   |
| 5                                     | 70.210    | -58.09     | 24.02             | -34.07      | -13.00 | -21.07 | Vertical   |
| 6                                     | 95.649    | -61.52     | 25.33             | -36.19      | -13.00 | -23.19 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 50.461    | -70.36     | 23.86             | -46.50      | -13.00 | -33.50 | Horizontal |
| 2                                     | 96.323    | -72.34     | 25.37             | -46.97      | -13.00 | -33.97 | Horizontal |
| 3                                     | 157.529   | -74.57     | 27.15             | -47.42      | -13.00 | -34.42 | Horizontal |
| 4                                     | 46.381    | -62.88     | 24.72             | -38.16      | -13.00 | -25.16 | Vertical   |
| 5                                     | 69.718    | -58.63     | 23.99             | -34.64      | -13.00 | -21.64 | Vertical   |
| 6                                     | 94.979    | -61.71     | 25.27             | -36.44      | -13.00 | -23.44 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 96.323    | -73.50     | 25.37             | -48.13      | -13.00 | -35.13 | Horizontal |
| 2                                     | 149.968   | -72.60     | 26.44             | -46.16      | -13.00 | -33.16 | Horizontal |
| 3                                     | 516.565   | -80.37     | 37.07             | -43.30      | -13.00 | -30.30 | Horizontal |
| 4                                     | 69.230    | -58.63     | 23.98             | -34.65      | -13.00 | -21.65 | Vertical   |
| 5                                     | 93.653    | -63.68     | 25.18             | -38.50      | -13.00 | -25.50 | Vertical   |
| 6                                     | 590.351   | -78.42     | 37.94             | -40.48      | -13.00 | -27.48 | Vertical   |

| LTE Band 13_ 10 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1559.000  | -59.26     | -1.11             | -60.37      | -13.00 | -47.37 | Horizontal |
| 2                                     | 2338.500  | -59.85     | 1.67              | -58.18      | -13.00 | -45.18 | Horizontal |
| 3                                     | 1559.000  | -55.75     | -1.96             | -57.71      | -13.00 | -44.71 | Vertical   |
| 4                                     | 2338.500  | -58.03     | 1.24              | -56.79      | -13.00 | -43.79 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1564.000  | -62.03     | -1.09             | -63.12      | -13.00 | -50.12 | Horizontal |
| 2                                     | 2346.000  | -61.46     | 1.69              | -59.77      | -13.00 | -46.77 | Horizontal |
| 3                                     | 1564.000  | -61.34     | -1.94             | -63.28      | -13.00 | -50.28 | Vertical   |
| 4                                     | 2346.000  | -62.55     | 1.26              | -61.29      | -13.00 | -48.29 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 1569.000  | -63.21     | -1.07             | -64.28      | -13.00 | -51.28 | Horizontal |
| 2                                     | 2353.500  | -62.40     | 1.70              | -60.70      | -13.00 | -47.70 | Horizontal |
| 3                                     | 1569.000  | -62.74     | -1.92             | -64.66      | -13.00 | -51.66 | Vertical   |
| 4                                     | 2353.500  | -62.05     | 1.28              | -60.77      | -13.00 | -47.77 | Vertical   |

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### 5.8.7 LTE Band 26

| LTE Band 26_ 15 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 97.002    | -73.27     | 25.42             | -47.85      | -13.00 | -34.85 | Horizontal |
| 2                                     | 147.875   | -74.96     | 26.24             | -48.72      | -13.00 | -35.72 | Horizontal |
| 3                                     | 611.462   | -80.61     | 39.04             | -41.57      | -13.00 | -28.57 | Horizontal |
| 4                                     | 32.640    | -69.70     | 31.54             | -38.16      | -13.00 | -25.16 | Vertical   |
| 5                                     | 69.718    | -57.77     | 23.99             | -33.78      | -13.00 | -20.78 | Vertical   |
| 6                                     | 95.649    | -61.85     | 25.33             | -36.52      | -13.00 | -23.52 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 65.445    | -70.35     | 23.62             | -46.73      | -13.00 | -33.73 | Horizontal |
| 2                                     | 151.025   | -73.23     | 26.53             | -46.70      | -13.00 | -33.70 | Horizontal |
| 3                                     | 684.226   | -79.64     | 40.41             | -39.23      | -13.00 | -26.23 | Horizontal |
| 4                                     | 31.959    | -68.92     | 31.97             | -36.95      | -13.00 | -23.95 | Vertical   |
| 5                                     | 69.718    | -57.61     | 23.99             | -33.62      | -13.00 | -20.62 | Vertical   |
| 6                                     | 94.979    | -61.11     | 25.27             | -35.84      | -13.00 | -22.84 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 51.176    | -69.66     | 23.82             | -45.84      | -13.00 | -32.84 | Horizontal |
| 2                                     | 96.323    | -71.36     | 25.37             | -45.99      | -13.00 | -32.99 | Horizontal |
| 3                                     | 148.917   | -72.88     | 26.34             | -46.54      | -13.00 | -33.54 | Horizontal |
| 4                                     | 31.959    | -70.07     | 31.97             | -38.10      | -13.00 | -25.10 | Vertical   |
| 5                                     | 69.230    | -58.83     | 23.98             | -34.85      | -13.00 | -21.85 | Vertical   |
| 6                                     | 94.979    | -62.96     | 25.27             | -37.69      | -13.00 | -24.69 | Vertical   |

| LTE Band 26_ 15 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1663.000  | -64.81     | -0.59             | -65.40      | -13.00 | -52.40 | Horizontal |
| 2                                     | 2494.500  | -63.31     | 2.01              | -61.30      | -13.00 | -48.30 | Horizontal |
| 3                                     | 1663.000  | -64.51     | -1.36             | -65.87      | -13.00 | -52.87 | Vertical   |
| 4                                     | 2494.500  | -65.52     | 1.61              | -63.91      | -13.00 | -50.91 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1673.000  | -63.37     | -0.53             | -63.90      | -13.00 | -50.90 | Horizontal |
| 2                                     | 2509.500  | -62.85     | 2.06              | -60.79      | -13.00 | -47.79 | Horizontal |
| 3                                     | 1673.000  | -63.48     | -1.29             | -64.77      | -13.00 | -51.77 | Vertical   |
| 4                                     | 2509.500  | -62.96     | 1.65              | -61.31      | -13.00 | -48.31 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 1683.000  | -62.22     | -0.47             | -62.69      | -13.00 | -49.69 | Horizontal |
| 2                                     | 2524.500  | -62.95     | 2.11              | -60.84      | -13.00 | -47.84 | Horizontal |
| 3                                     | 1683.000  | -63.12     | -1.22             | -64.34      | -13.00 | -51.34 | Vertical   |
| 4                                     | 2524.500  | -63.20     | 1.69              | -61.51      | -13.00 | -48.51 | Vertical   |

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### 5.8.8 LTE Band 26 (Part 90S)

| LTE Band 26_ 10 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 64.987    | -70.06     | 23.58             | -46.48      | -13.00 | -33.48 | Horizontal |
| 2                                     | 98.375    | -72.77     | 25.53             | -47.24      | -13.00 | -34.24 | Horizontal |
| 3                                     | 156.426   | -75.27     | 27.04             | -48.23      | -13.00 | -35.23 | Horizontal |
| 4                                     | 33.101    | -70.23     | 31.24             | -38.99      | -13.00 | -25.99 | Vertical   |
| 5                                     | 69.718    | -58.05     | 23.99             | -34.06      | -13.00 | -21.06 | Vertical   |
| 6                                     | 95.649    | -64.31     | 25.33             | -38.98      | -13.00 | -25.98 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 95.649    | -70.58     | 25.33             | -45.25      | -13.00 | -32.25 | Horizontal |
| 2                                     | 156.426   | -74.73     | 27.04             | -47.69      | -13.00 | -34.69 | Horizontal |
| 3                                     | 458.399   | -79.71     | 35.54             | -44.17      | -13.00 | -31.17 | Horizontal |
| 4                                     | 45.733    | -63.87     | 24.95             | -38.92      | -13.00 | -25.92 | Vertical   |
| 5                                     | 68.264    | -58.85     | 23.94             | -34.91      | -13.00 | -21.91 | Vertical   |
| 6                                     | 94.979    | -63.04     | 25.27             | -37.77      | -13.00 | -24.77 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 65.445    | -69.74     | 23.62             | -46.12      | -13.00 | -33.12 | Horizontal |
| 2                                     | 146.839   | -72.74     | 26.15             | -46.59      | -13.00 | -33.59 | Horizontal |
| 3                                     | 674.677   | -80.83     | 40.21             | -40.62      | -13.00 | -27.62 | Horizontal |
| 4                                     | 33.101    | -69.69     | 31.24             | -38.45      | -13.00 | -25.45 | Vertical   |
| 5                                     | 70.210    | -59.03     | 24.02             | -35.01      | -13.00 | -22.01 | Vertical   |
| 6                                     | 96.323    | -62.92     | 25.37             | -37.55      | -13.00 | -24.55 | Vertical   |

| LTE Band 26_ 10 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1629.400  | -62.15     | -0.77             | -62.92      | -13.00 | -49.92 | Horizontal |
| 2                                     | 2444.100  | -62.60     | 1.90              | -60.70      | -13.00 | -47.70 | Horizontal |
| 3                                     | 1629.400  | -62.15     | -1.57             | -63.72      | -13.00 | -50.72 | Vertical   |
| 4                                     | 2444.100  | -62.69     | 1.49              | -61.20      | -13.00 | -48.20 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 1638.000  | -61.87     | -0.73             | -62.60      | -13.00 | -49.60 | Horizontal |
| 2                                     | 2457.000  | -63.56     | 1.94              | -61.62      | -13.00 | -48.62 | Horizontal |
| 3                                     | 1638.000  | -62.48     | -1.52             | -64.00      | -13.00 | -51.00 | Vertical   |
| 4                                     | 2457.000  | -62.67     | 1.53              | -61.14      | -13.00 | -48.14 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 1643.000  | -62.73     | -0.71             | -63.44      | -13.00 | -50.44 | Horizontal |
| 2                                     | 2464.500  | -62.97     | 1.95              | -61.02      | -13.00 | -48.02 | Horizontal |
| 3                                     | 1643.000  | -62.69     | -1.49             | -64.18      | -13.00 | -51.18 | Vertical   |
| 4                                     | 2464.500  | -63.33     | 1.54              | -61.79      | -13.00 | -48.79 | Vertical   |

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### 5.8.9 LTE Band 38

| LTE Band 38_ 20 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 65.907    | -70.17     | -5.25             | -75.42      | -13.00 | -62.42 | Horizontal |
| 2                                     | 689.051   | -80.66     | 11.08             | -69.58      | -13.00 | -56.58 | Horizontal |
| 3                                     | 938.714   | -82.05     | 14.28             | -67.77      | -13.00 | -54.77 | Horizontal |
| 4                                     | 46.056    | -63.29     | -4.09             | -67.38      | -13.00 | -54.38 | Vertical   |
| 5                                     | 67.786    | -59.37     | -4.98             | -64.35      | -13.00 | -51.35 | Vertical   |
| 6                                     | 94.979    | -61.35     | -3.56             | -64.91      | -13.00 | -51.91 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 153.163   | -74.30     | -1.88             | -76.18      | -13.00 | -63.18 | Horizontal |
| 2                                     | 607.181   | -79.87     | 9.51              | -70.36      | -13.00 | -57.36 | Horizontal |
| 3                                     | 938.714   | -81.82     | 14.28             | -67.54      | -13.00 | -54.54 | Horizontal |
| 4                                     | 46.056    | -63.19     | -4.09             | -67.28      | -13.00 | -54.28 | Vertical   |
| 5                                     | 66.371    | -58.25     | -5.02             | -63.27      | -13.00 | -50.27 | Vertical   |
| 6                                     | 94.979    | -61.49     | -3.56             | -65.05      | -13.00 | -52.05 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 95.649    | -72.76     | -3.49             | -76.25      | -13.00 | -63.25 | Horizontal |
| 2                                     | 155.331   | -74.10     | -1.67             | -75.77      | -13.00 | -62.77 | Horizontal |
| 3                                     | 651.383   | -79.07     | 9.90              | -69.17      | -13.00 | -56.17 | Horizontal |
| 4                                     | 46.708    | -62.73     | -4.30             | -67.03      | -13.00 | -54.03 | Vertical   |
| 5                                     | 69.718    | -58.03     | -4.91             | -62.94      | -13.00 | -49.94 | Vertical   |
| 6                                     | 95.649    | -62.39     | -3.49             | -65.88      | -13.00 | -52.88 | Vertical   |

| LTE Band 38_ 20 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 5160.000  | -61.30     | 8.11              | -53.19      | -13.00 | -40.19 | Horizontal |
| 2                                     | 7740.000  | -62.85     | 11.88             | -50.97      | -13.00 | -37.97 | Horizontal |
| 3                                     | 5160.000  | -62.31     | 8.47              | -53.84      | -13.00 | -40.84 | Vertical   |
| 4                                     | 7740.000  | -62.09     | 11.98             | -50.11      | -13.00 | -37.11 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 5190.000  | -62.08     | 8.21              | -53.87      | -13.00 | -40.87 | Horizontal |
| 2                                     | 7785.000  | -64.03     | 11.97             | -52.06      | -13.00 | -39.06 | Horizontal |
| 3                                     | 5190.000  | -62.48     | 8.59              | -53.89      | -13.00 | -40.89 | Vertical   |
| 4                                     | 7785.000  | -62.00     | 12.07             | -49.93      | -13.00 | -36.93 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 5220.000  | -62.92     | 8.34              | -54.58      | -13.00 | -41.58 | Horizontal |
| 2                                     | 7830.000  | -63.02     | 12.07             | -50.95      | -13.00 | -37.95 | Horizontal |
| 3                                     | 5220.000  | -61.82     | 8.72              | -53.10      | -13.00 | -40.10 | Vertical   |
| 4                                     | 7830.000  | -62.22     | 12.17             | -50.05      | -13.00 | -37.05 | Vertical   |

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UTTR-RF-FCC4G-V1.1

### 5.8.10 LTE Band 41

| LTE Band 41_ 20 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 65.445    | -70.02     | -5.28             | -75.30      | -13.00 | -62.30 | Horizontal |
| 2                                     | 684.226   | -81.27     | 10.97             | -70.30      | -13.00 | -57.30 | Horizontal |
| 3                                     | 952.000   | -82.44     | 14.62             | -67.82      | -13.00 | -54.82 | Horizontal |
| 4                                     | 46.056    | -63.83     | -4.09             | -67.92      | -13.00 | -54.92 | Vertical   |
| 5                                     | 68.745    | -58.70     | -4.94             | -63.64      | -13.00 | -50.64 | Vertical   |
| 6                                     | 94.979    | -62.41     | -3.56             | -65.97      | -13.00 | -52.97 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 144.790   | -72.37     | -2.69             | -75.06      | -13.00 | -62.06 | Horizontal |
| 2                                     | 708.694   | -81.22     | 11.13             | -70.09      | -13.00 | -57.09 | Horizontal |
| 3                                     | 906.304   | -80.82     | 13.38             | -67.44      | -13.00 | -54.44 | Horizontal |
| 4                                     | 53.379    | -61.73     | -5.35             | -67.08      | -13.00 | -54.08 | Vertical   |
| 5                                     | 70.210    | -58.41     | -4.88             | -63.29      | -13.00 | -50.29 | Vertical   |
| 6                                     | 96.323    | -63.67     | -3.45             | -67.12      | -13.00 | -54.12 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 96.323    | -71.71     | -3.45             | -75.16      | -13.00 | -62.16 | Horizontal |
| 2                                     | 155.331   | -73.62     | -1.67             | -75.29      | -13.00 | -62.29 | Horizontal |
| 3                                     | 674.677   | -80.24     | 10.77             | -69.47      | -13.00 | -56.47 | Horizontal |
| 4                                     | 46.708    | -63.05     | -4.30             | -67.35      | -13.00 | -54.35 | Vertical   |
| 5                                     | 65.907    | -59.67     | -5.04             | -64.71      | -13.00 | -51.71 | Vertical   |
| 6                                     | 95.649    | -62.29     | -3.49             | -65.78      | -13.00 | -52.78 | Vertical   |

| LTE Band 41_ 20 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 5012.000  | -62.01     | 7.56              | -54.45      | -13.00 | -41.45 | Horizontal |
| 2                                     | 7518.000  | -62.38     | 11.42             | -50.96      | -13.00 | -37.96 | Horizontal |
| 3                                     | 5012.000  | -63.39     | 7.86              | -55.53      | -13.00 | -42.53 | Vertical   |
| 4                                     | 7518.000  | -62.24     | 11.52             | -50.72      | -13.00 | -37.72 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 5186.000  | -62.07     | 8.20              | -53.87      | -13.00 | -40.87 | Horizontal |
| 2                                     | 7779.000  | -62.26     | 11.96             | -50.30      | -13.00 | -37.30 | Horizontal |
| 3                                     | 5186.000  | -62.51     | 8.57              | -53.94      | -13.00 | -40.94 | Vertical   |
| 4                                     | 7779.000  | -62.21     | 12.06             | -50.15      | -13.00 | -37.15 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 5360.000  | -62.70     | 8.98              | -53.72      | -13.00 | -40.72 | Horizontal |
| 2                                     | 8040.000  | -63.02     | 12.48             | -50.54      | -13.00 | -37.54 | Horizontal |
| 3                                     | 5360.000  | -63.14     | 9.42              | -53.72      | -13.00 | -40.72 | Vertical   |
| 4                                     | 8040.000  | -63.71     | 12.57             | -51.14      | -13.00 | -38.14 | Vertical   |

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### 5.8.11 LTE Band 66

| LTE Band 66_ 20 MHz_ QPSK (Below 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 155.331   | -74.25     | -1.67             | -75.92      | -13.00 | -62.92 | Horizontal |
| 2                                     | 633.328   | -80.19     | 9.82              | -70.37      | -13.00 | -57.37 | Horizontal |
| 3                                     | 952.000   | -82.47     | 14.62             | -67.85      | -13.00 | -54.85 | Horizontal |
| 4                                     | 46.381    | -63.71     | -4.21             | -67.92      | -13.00 | -54.92 | Vertical   |
| 5                                     | 67.786    | -58.09     | -4.98             | -63.07      | -13.00 | -50.07 | Vertical   |
| 6                                     | 94.979    | -61.20     | -3.56             | -64.76      | -13.00 | -51.76 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 65.445    | -69.89     | -5.28             | -75.17      | -13.00 | -62.17 | Horizontal |
| 2                                     | 689.051   | -80.75     | 11.08             | -69.67      | -13.00 | -56.67 | Horizontal |
| 3                                     | 945.334   | -81.99     | 14.50             | -67.49      | -13.00 | -54.49 | Horizontal |
| 4                                     | 54.135    | -62.08     | -5.34             | -67.42      | -13.00 | -54.42 | Vertical   |
| 5                                     | 66.371    | -58.94     | -5.02             | -63.96      | -13.00 | -50.96 | Vertical   |
| 6                                     | 94.979    | -64.57     | -3.56             | -68.13      | -13.00 | -55.13 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 153.163   | -74.47     | -1.88             | -76.35      | -13.00 | -63.35 | Horizontal |
| 2                                     | 679.435   | -80.61     | 10.88             | -69.73      | -13.00 | -56.73 | Horizontal |
| 3                                     | 932.141   | -81.67     | 14.05             | -67.62      | -13.00 | -54.62 | Horizontal |
| 4                                     | 62.743    | -60.44     | -5.15             | -65.59      | -13.00 | -52.59 | Vertical   |
| 5                                     | 69.718    | -57.34     | -4.91             | -62.25      | -13.00 | -49.25 | Vertical   |
| 6                                     | 92.997    | -65.61     | -3.72             | -69.33      | -13.00 | -56.33 | Vertical   |

| LTE Band 66_ 20 MHz_ QPSK (Above 1 G) |           |            |                   |             |        |        |            |
|---------------------------------------|-----------|------------|-------------------|-------------|--------|--------|------------|
| No.                                   | Frequency | SA Reading | Correction factor | EIRP Result | Limit  | Margin | Ant. Pol.  |
|                                       | (MHz)     | (dBm)      | (dB/m)            | (dBm)       | (dBm)  | (dB)   |            |
| Lowest Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 3440.000  | -62.06     | 5.02              | -57.04      | -13.00 | -44.04 | Horizontal |
| 2                                     | 5160.000  | -62.91     | 8.11              | -54.80      | -13.00 | -41.80 | Horizontal |
| 3                                     | 3440.000  | -61.48     | 4.83              | -56.65      | -13.00 | -43.65 | Vertical   |
| 4                                     | 5160.000  | -62.37     | 8.47              | -53.90      | -13.00 | -40.90 | Vertical   |
| Middle Channel                        |           |            |                   |             |        |        |            |
| 1                                     | 3490.000  | -61.88     | 5.18              | -56.70      | -13.00 | -43.70 | Horizontal |
| 2                                     | 5235.000  | -61.30     | 8.41              | -52.89      | -13.00 | -39.89 | Horizontal |
| 3                                     | 3490.000  | -60.92     | 5.06              | -55.86      | -13.00 | -42.86 | Vertical   |
| 4                                     | 5235.000  | -61.84     | 8.80              | -53.04      | -13.00 | -40.04 | Vertical   |
| Highest Channel                       |           |            |                   |             |        |        |            |
| 1                                     | 3540.000  | -61.73     | 5.34              | -56.39      | -13.00 | -43.39 | Horizontal |
| 2                                     | 5310.000  | -62.90     | 8.75              | -54.15      | -13.00 | -41.15 | Horizontal |
| 3                                     | 3540.000  | -61.18     | 5.26              | -55.92      | -13.00 | -42.92 | Vertical   |
| 4                                     | 5310.000  | -62.15     | 9.17              | -52.98      | -13.00 | -39.98 | Vertical   |

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## Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit



## 5.9 FREQUENCY STABILITY

**Test Requirement:** FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 22.355 & FCC 47 CFR Part 24.235 & FCC 47 CFR Part 27.54, RSS-133 Issue 6, Section 6.3 & RSS-139 Issue 3, Section 6.4 RSS-132 Issue 3, Section 5.3 & RSS-199 Issue 3, Section 4.3 RSS-130 Issue 2, Section 4.5

**Test Method:** ANSI C63.26-2015 & KDB 971168 D01v03r01

**Limits:**

**FCC 47 CFR Part 22.355, FCC 47 CFR Part 90.213**

The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations.

**FCC 47 CFR Part 24.235, FCC 47 CFR Part 27.54**

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

**RSS-132 Issue 3, Section 5.3:**

The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations and  $\pm 1.5$  ppm for base stations

**RSS-133 Issue 6, Section 6.3:**

The carrier frequency shall not depart from the reference frequency, in excess of  $\pm 2.5$  ppm for mobile stations and  $\pm 1.0$  ppm for base stations.

**RSS-139 Issue 3, Section 6.4, RSS-130 Issue 2, Section 4.5:**

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

**RSS-199 Issue 3, Section 4.3:**

The transmitter frequency stability limit shall be determined as follows:

- (a) the frequency offset shall be measured according to the procedure described in RSS-Gen and recorded;
- (b) using a resolution bandwidth equal to that permitted within the 1 MHz band immediately outside the channel edge, as found in section 4.5, reference points will be selected at the unwanted emission limits, which comply with the attenuation specified in section 4.5 for the type of device under test, on the emission mask of the lowest and highest channels. The frequency at these points shall be recorded as  $f_L$  and  $f_H$  respectively.

The applicant shall ensure compliance with frequency stability requirements by showing that  $f_L$  minus the frequency offset and  $f_H$  plus the frequency offset is within the frequency range in which the equipment is designed to operate.

**Test Setup:** Refer to section 4.2.2 for details.

**Test Procedures:**

- 1) Use CMW 500 or CMU 200 with Frequency Error measurement capability.
  - a) Temp. =  $-30^{\circ}$  to  $+50^{\circ}\text{C}$
  - b) Voltage = low voltage, 3.2 Vdc, Normal, 3.85Vdc and High voltage, 4.5 Vdc.

- 2) Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to  $20^{\circ}\text{C}$  and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until  $+50^{\circ}\text{C}$  is reached.

- 3) Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

**Equipment Used:** Refer to section 3 for details.

**Test Result:** Pass

### 5.9.1 LTE Band 2

| Modulation                   | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Pass/ Fail |
|------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|------------|
| LTE Band 2 / 20MHz / Full RB |                                |                  |                     |                   |                    |                |            |
| QPSK                         | 18900 /<br>1880.0              | VL               | TN                  | 2                 | 0.0011             | N/A            | Pass       |
|                              |                                | VN               |                     | 3                 | 0.0016             |                | Pass       |
|                              |                                | VH               |                     | 5                 | 0.0027             |                | Pass       |
|                              |                                | VN               | 50                  | -3                | -0.0016            |                | Pass       |
|                              |                                |                  | 40                  | -6                | -0.0032            |                | Pass       |
|                              |                                |                  | 30                  | 7                 | 0.0037             |                | Pass       |
|                              |                                |                  | 20                  | 4                 | 0.0021             |                | Pass       |
|                              |                                |                  | 10                  | 6                 | 0.0032             |                | Pass       |
|                              |                                |                  | 0                   | 3                 | 0.0016             |                | Pass       |
|                              |                                |                  | -10                 | 4                 | 0.0021             |                | Pass       |
|                              |                                |                  | -20                 | 3                 | 0.0016             |                | Pass       |
|                              |                                |                  | -30                 | 6                 | 0.0032             |                | Pass       |



### 5.9.2 LTE Band 4

| Modulation                   | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Pass/ Fail |
|------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|------------|
| LTE Band 4 / 20MHz / Full RB |                                |                  |                     |                   |                    |                |            |
| QPSK                         | 20175 /<br>1732.5              | VL               | TN                  | 6                 | 0.0035             | N/A            | Pass       |
|                              |                                | VN               |                     | 7                 | 0.0040             |                | Pass       |
|                              |                                | VH               |                     | 9                 | 0.0052             |                | Pass       |
|                              |                                | VN               | 50                  | 4                 | 0.0023             |                | Pass       |
|                              |                                |                  | 40                  | 6                 | 0.0035             |                | Pass       |
|                              |                                |                  | 30                  | 3                 | 0.0017             |                | Pass       |
|                              |                                |                  | 20                  | 7                 | 0.0040             |                | Pass       |
|                              |                                |                  | 10                  | 8                 | 0.0046             |                | Pass       |
|                              |                                |                  | 0                   | 4                 | 0.0023             |                | Pass       |
|                              |                                |                  | -10                 | 3                 | 0.0017             |                | Pass       |
|                              |                                |                  | -20                 | 5                 | 0.0029             |                | Pass       |
|                              |                                |                  | -30                 | 7                 | 0.0040             |                | Pass       |

### 5.9.3 LTE Band 5

| Modulation                   | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 5 / 10MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                         | 20525 / 836.5                  | VL               | TN                  | -7                | -0.0084            | ± 2.5          | Pass   |
|                              |                                | VN               |                     | -12               | -0.0143            | ± 2.5          | Pass   |
|                              |                                | VH               |                     | -10               | -0.0120            | ± 2.5          | Pass   |
|                              |                                | VN               | 50                  | -14               | -0.0167            | ± 2.5          | Pass   |
|                              |                                |                  | 40                  | -15               | -0.0179            | ± 2.5          | Pass   |
|                              |                                |                  | 30                  | -12               | -0.0143            | ± 2.5          | Pass   |
|                              |                                |                  | 20                  | -11               | -0.0132            | ± 2.5          | Pass   |
|                              |                                |                  | 10                  | -9                | -0.0108            | ± 2.5          | Pass   |
|                              |                                |                  | 0                   | -7                | -0.0084            | ± 2.5          | Pass   |
|                              |                                |                  | -10                 | -6                | -0.0072            | ± 2.5          | Pass   |
|                              |                                |                  | -20                 | -12               | -0.0143            | ± 2.5          | Pass   |
|                              |                                |                  | -30                 | -14               | -0.0167            | ± 2.5          | Pass   |

### 5.9.4 LTE Band 7

| Modulation                   | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 7 / 20MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                         | 21100 / 2535                   | VL               | TN                  | -5                | -0.0020            | N/A            | Pass   |
|                              |                                | VN               |                     | -4                | -0.0016            |                | Pass   |
|                              |                                | VH               |                     | -8                | -0.0032            |                | Pass   |
|                              |                                | VN               | 50                  | -3                | -0.0012            |                | Pass   |
|                              |                                |                  | 40                  | -5                | -0.0020            |                | Pass   |
|                              |                                |                  | 30                  | -4                | -0.0016            |                | Pass   |
|                              |                                |                  | 20                  | -7                | -0.0028            |                | Pass   |
|                              |                                |                  | 10                  | -5                | -0.0020            |                | Pass   |
|                              |                                |                  | 0                   | -8                | -0.0032            |                | Pass   |
|                              |                                |                  | -10                 | -4                | -0.0016            |                | Pass   |
|                              |                                |                  | -20                 | -7                | -0.0028            |                | Pass   |
|                              |                                |                  | -30                 | -9                | -0.0036            |                | Pass   |

### 5.9.5 LTE Band 12

| Modulation                    | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|-------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 12 / 10MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                          | 23095 / 707.5                  | VL               | TN                  | -7                | -0.0099            | N/A            | Pass   |
|                               |                                | VN               |                     | -13               | -0.0184            |                | Pass   |
|                               |                                | VH               |                     | -12               | -0.0170            |                | Pass   |
|                               |                                | VN               | 50                  | -9                | -0.0127            |                | Pass   |
|                               |                                |                  | 40                  | -12               | -0.0170            |                | Pass   |
|                               |                                |                  | 30                  | -13               | -0.0184            |                | Pass   |
|                               |                                |                  | 20                  | -10               | -0.0141            |                | Pass   |
|                               |                                |                  | 10                  | -12               | -0.0170            |                | Pass   |
|                               |                                |                  | 0                   | -17               | -0.0240            |                | Pass   |
|                               |                                |                  | -10                 | -16               | -0.0226            |                | Pass   |
|                               |                                |                  | -20                 | -13               | -0.0184            |                | Pass   |
|                               |                                |                  | -30                 | -17               | -0.0240            |                | Pass   |

### 5.9.6 LTE Band 13

| Modulation                    | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|-------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 13 / 10MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                          | 23230 / 782                    | VL               | TN                  | -5                | -0.0064            | N/A            | Pass   |
|                               |                                | VN               |                     | -4                | -0.0051            |                | Pass   |
|                               |                                | VH               |                     | -8                | -0.0102            |                | Pass   |
|                               |                                | VN               | 50                  | -12               | -0.0153            |                | Pass   |
|                               |                                |                  | 40                  | -9                | -0.0115            |                | Pass   |
|                               |                                |                  | 30                  | -11               | -0.0141            |                | Pass   |
|                               |                                |                  | 20                  | -10               | -0.0128            |                | Pass   |
|                               |                                |                  | 10                  | -6                | -0.0077            |                | Pass   |
|                               |                                |                  | 0                   | -8                | -0.0102            |                | Pass   |
|                               |                                |                  | -10                 | -13               | -0.0166            |                | Pass   |
|                               |                                |                  | -20                 | -12               | -0.0153            |                | Pass   |
|                               |                                |                  | -30                 | -10               | -0.0128            |                | Pass   |

### 5.9.7 LTE Band 26

| Modulation                    | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|-------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 26 / 15MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                          | 26915 / 836.5                  | VL               | TN                  | -9                | -0.0108            | ± 2.5          | Pass   |
|                               |                                | VN               |                     | -11               | -0.0132            | ± 2.5          | Pass   |
|                               |                                | VH               |                     | -12               | -0.0143            | ± 2.5          | Pass   |
|                               |                                | VN               | 50                  | -8                | -0.0096            | ± 2.5          | Pass   |
|                               |                                |                  | 40                  | -13               | -0.0155            | ± 2.5          | Pass   |
|                               |                                |                  | 30                  | -13               | -0.0155            | ± 2.5          | Pass   |
|                               |                                |                  | 20                  | -19               | -0.0227            | ± 2.5          | Pass   |
|                               |                                |                  | 10                  | -13               | -0.0155            | ± 2.5          | Pass   |
|                               |                                |                  | 0                   | -8                | -0.0096            | ± 2.5          | Pass   |
|                               |                                |                  | -10                 | -11               | -0.0132            | ± 2.5          | Pass   |
|                               |                                |                  | -20                 | -15               | -0.0179            | ± 2.5          | Pass   |
|                               |                                |                  | -30                 | -14               | -0.0167            | ± 2.5          | Pass   |

### 5.9.8 LTE Band 26 (Part 90S)

| Modulation                    | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|-------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 26 / 10MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                          | 26740 / 819                    | VL               | TN                  | -11               | -0.0134            | ± 2.5          | Pass   |
|                               |                                | VN               |                     | -15               | -0.0183            | ± 2.5          | Pass   |
|                               |                                | VH               |                     | -13               | -0.0159            | ± 2.5          | Pass   |
|                               |                                | VN               | 50                  | -9                | -0.0110            | ± 2.5          | Pass   |
|                               |                                |                  | 40                  | -10               | -0.0122            | ± 2.5          | Pass   |
|                               |                                |                  | 30                  | -11               | -0.0134            | ± 2.5          | Pass   |
|                               |                                |                  | 20                  | -15               | -0.0183            | ± 2.5          | Pass   |
|                               |                                |                  | 10                  | -14               | -0.0171            | ± 2.5          | Pass   |
|                               |                                |                  | 0                   | -18               | -0.0220            | ± 2.5          | Pass   |
|                               |                                |                  | -10                 | -15               | -0.0183            | ± 2.5          | Pass   |
|                               |                                |                  | -20                 | -16               | -0.0195            | ± 2.5          | Pass   |
|                               |                                |                  | -30                 | -12               | -0.0147            | ± 2.5          | Pass   |

### 5.9.9 LTE Band 38

| Modulation                    | Channel/<br>Frequency<br>(MHz) | Voltage<br>(Vdc) | Temperature<br>(°C) | Deviation<br>(Hz) | Deviation<br>(ppm) | Limit<br>(ppm) | Result |
|-------------------------------|--------------------------------|------------------|---------------------|-------------------|--------------------|----------------|--------|
| LTE Band 38 / 20MHz / Full RB |                                |                  |                     |                   |                    |                |        |
| QPSK                          | 38000 / 2595                   | VL               | TN                  | -10               | -0.0039            | N/A            | Pass   |
|                               |                                | VN               |                     | -8                | -0.0031            |                | Pass   |
|                               |                                | VH               |                     | -7                | -0.0027            |                | Pass   |
|                               |                                | VN               | 50                  | -5                | -0.0019            |                | Pass   |
|                               |                                |                  | 40                  | -7                | -0.0027            |                | Pass   |
|                               |                                |                  | 30                  | -4                | -0.0015            |                | Pass   |
|                               |                                |                  | 20                  | -12               | -0.0046            |                | Pass   |
|                               |                                |                  | 10                  | -9                | -0.0035            |                | Pass   |
|                               |                                |                  | 0                   | -7                | -0.0027            |                | Pass   |
|                               |                                |                  | -10                 | -6                | -0.0023            |                | Pass   |
|                               |                                |                  | -20                 | -8                | -0.0031            |                | Pass   |
|                               |                                |                  | -30                 | -10               | -0.0039            |                | Pass   |

### 5.9.10 LTE Band 41

| Modulation                    | Channel/<br>Frequency | Voltage | Temperature | Deviation | Deviation | Limit | Result |
|-------------------------------|-----------------------|---------|-------------|-----------|-----------|-------|--------|
|                               | (MHz)                 | (Vdc)   | (°C)        | (Hz)      | (ppm)     | (ppm) |        |
| LTE Band 41 / 20MHz / Full RB |                       |         |             |           |           |       |        |
| QPSK                          | 40640 / 2595          | VL      | TN          | 8         | 0.0031    | N/A   | Pass   |
|                               |                       | VN      |             | 4         | 0.0015    |       | Pass   |
|                               |                       | VH      |             | 6         | 0.0023    |       | Pass   |
|                               |                       | VN      | 50          | 4         | 0.0015    |       | Pass   |
|                               |                       |         | 40          | 5         | 0.0019    |       | Pass   |
|                               |                       |         | 30          | 7         | 0.0027    |       | Pass   |
|                               |                       |         | 20          | 9         | 0.0035    |       | Pass   |
|                               |                       |         | 10          | 7         | 0.0027    |       | Pass   |
|                               |                       |         | 0           | 6         | 0.0023    |       | Pass   |
|                               |                       |         | -10         | 5         | 0.0019    |       | Pass   |
|                               |                       |         | -20         | 10        | 0.0039    |       | Pass   |
|                               |                       |         | -30         | 9         | 0.0035    |       | Pass   |

### 5.9.11 LTE Band 66

| Modulation                    | Channel/<br>Frequency | Voltage | Temperature | Deviation | Deviation | Limit | Result |
|-------------------------------|-----------------------|---------|-------------|-----------|-----------|-------|--------|
|                               | (MHz)                 | (Vdc)   | (°C)        | (Hz)      | (ppm)     | (ppm) |        |
| LTE Band 66 / 20MHz / Full RB |                       |         |             |           |           |       |        |
| QPSK                          | 132322 / 1745         | VL      | TN          | -14       | -0.0080   | N/A   | Pass   |
|                               |                       | VN      |             | -7        | -0.0040   |       | Pass   |
|                               |                       | VH      |             | -8        | -0.0046   |       | Pass   |
|                               |                       | VN      | 50          | -11       | -0.0063   |       | Pass   |
|                               |                       |         | 40          | -13       | -0.0074   |       | Pass   |
|                               |                       |         | 30          | -9        | -0.0052   |       | Pass   |
|                               |                       |         | 20          | -4        | -0.0023   |       | Pass   |
|                               |                       |         | 10          | -7        | -0.0040   |       | Pass   |
|                               |                       |         | 0           | -8        | -0.0046   |       | Pass   |
|                               |                       |         | -10         | -12       | -0.0069   |       | Pass   |
|                               |                       |         | -20         | -14       | -0.0080   |       | Pass   |
|                               |                       |         | -30         | -7        | -0.0040   |       | Pass   |

## APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

## APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

\*\*\* End of Report \*\*\*

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