

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** 47 CFR FCC Part 22  
47 CFR FCC Part 24  
47 CFR FCC Part 27  
47 CFR FCC Part 90  
47 CFR FCC Part 2

**Report No.:** RFBEDW-WTW-P26020065

**FCC ID:** GKRRXLN4N

**Product:** LGA Module

**Brand:** COMPAL

**Model No.:** RXL-N4n

**Received Date:** 2026/2/5

**Test Date:** 2026/3/19 ~ 2026/4/7

**Issued Date:** 2026/4/29

**Applicant:** Compal Electronics, Inc.

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**FCC Registration /**

**Designation Number:** 788550 / TW0003

**Approved by:**

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**Date:**

2026/4/29

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Prepared by : Pettie Chen / Senior Specialist



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## Release Control Record

| Issue No.            | Description       | Date Issued |
|----------------------|-------------------|-------------|
| RFBEDW-WTW-P26020065 | Original release. | 2026/4/29   |

## 1 Certificate

**Product:** LGA Module

**Brand:** COMPAL

**Test Model:** RXL-N4n

**Sample Status:** Engineering sample

**Applicant:** Compal Electronics, Inc.

**Test Date:** 2026/3/19 ~ 2026/4/7

**Standard:** 47 CFR FCC Part 22  
47 CFR FCC Part 24  
47 CFR FCC Part 27  
47 CFR FCC Part 90  
47 CFR FCC Part 2

**Measurement Procedure:** ANSI/TIA/EIA-603-E 2016  
ANSI C63.26-2015  
KDB 971168 D01 Power Meas License Digital Systems v03r01  
KDB 971168 D02 Misc Rev Approv License Devices v02r02

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

## 2 Summary of Test Results

| Standard / Clause                                                                                                                                                                              | Test Item                                                            | Result | Remark                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------|---------------------------------------------------|
| Part 2.1046<br>Part 22.913 (a)<br>Part 24.232 (c)<br>Part 27.50(d)<br>Part 27.50(h)<br>Part 27.50(c)<br>Part 27.50(b)<br>Part 27.50(a)<br>Part 27.50(k)<br>Part 90.635(b)<br>Part 90.542(a)(7) | Effective Radiated Power and Equivalent Isotropically Radiated Power | Pass   | Meet the requirement of limit.                    |
| Part 2.1047                                                                                                                                                                                    | Modulation Characteristics                                           | Pass   | Meet the requirement of limit.                    |
| Part 22.913 (d)<br>Part 24.232 (d)<br>Part 27.50(d)<br>Part 27.50(k)(4)                                                                                                                        | Peak to Average Ratio                                                | Pass   | Meet the requirement of limit.                    |
| Part 2.1049                                                                                                                                                                                    | Bandwidth                                                            | Pass   | Meet the requirement of limit.                    |
| Part 2.1051<br>Part 22.917<br>Part 24.238<br>Part 27.53(h)<br>Part 27.53(m)<br>Part 27.53(g)<br>Part 27.53(c)(f)<br>Part 27.53(a)<br>Part 27.53(n)<br>Part 90.691<br>Part 90.543(e)(f)         | Conducted Spurious Emissions                                         | Pass   | Meet the requirement of limit.                    |
| Part 2.1053<br>Part 22.917<br>Part 24.238<br>Part 27.53(h)<br>Part 27.53(m)<br>Part 27.53(g)<br>Part 27.53(c)(f)<br>Part 27.53(a)<br>Part 27.53(n)<br>Part 90.691<br>Part 90.543(e)(f)         | Radiated Spurious Emissions below 1GHz                               | Pass   | Minimum passing margin is -8.06 dB at 107.60 MHz  |
| Part 2.1053<br>Part 22.917<br>Part 24.238<br>Part 27.53(h)<br>Part 27.53(m)<br>Part 27.53(g)<br>Part 27.53(c)(f)<br>Part 27.53(a)<br>Part 27.53(n)<br>Part 90.691<br>Part 90.543(e)(f)         | Radiated Spurious Emissions above 1GHz                               | Pass   | Minimum passing margin is -5.53 dB at 4620.00 MHz |

| Standard / Clause                                                                        | Test Item           | Result | Remark                         |
|------------------------------------------------------------------------------------------|---------------------|--------|--------------------------------|
| Part 2.1055<br>Part 22.355<br>Part 24.235<br>Part 27.54<br>Part 90.213<br>Part 90.539(e) | Frequency Stability | Pass   | Meet the requirement of limit. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

## 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Parameter                                                            | Specification   | Uncertainty<br>(±) |
|----------------------------------------------------------------------|-----------------|--------------------|
| Effective Radiated Power and Equivalent Isotropically Radiated Power | -               | 1.371 dB           |
| Peak to Average Ratio                                                | -               | 0.920 dB           |
| Bandwidth                                                            | -               | 960 Hz             |
| Conducted Spurious Emissions                                         | -               | 2.12 dB            |
| Radiated Spurious Emissions below 1GHz                               | 9 kHz ~ 30 MHz  | 3.59 dB            |
|                                                                      | 30 MHz ~ 1 GHz  | 3.6 dB             |
| Radiated Spurious Emissions above 1GHz                               | 1 GHz ~ 18 GHz  | 2.29 dB            |
|                                                                      | 18 GHz ~ 40 GHz | 2.29 dB            |
| Frequency Stability                                                  | -               | 0.176 ppm          |

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

## 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Product                   | LGA Module                                                                           |
| Brand                     | COMPAL                                                                               |
| Test Model                | RXL-N4n                                                                              |
| Status of EUT             | Engineering sample                                                                   |
| Power Supply Rating       | 3.8Vdc                                                                               |
| EUT Category              | Mobile station                                                                       |
| Modulation Type           | QPSK, 16QAM, 64QAM, 256QAM                                                           |
| LTE support SISO bands    | B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B30, B38, B41, B42, B43, B48, B66, B71 |
| LTE support MIMO bands    | -                                                                                    |
| LTE bands support CA mode | 2C, 5B, 7C, 12B, 41C, 42C, 43C, 48B, 48C, 66B, 66C                                   |
| PC3 for Power Class       | B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B30, B38, B41, B42, B43, B48, B66, B71 |
| PC2 for Power Class       | B38, B41                                                                             |
| Band Covered Information  | LTE Band 41 cover LTE Band 38                                                        |

Note:

#### 1. EUT Overview

##### LTE Band 2

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 1.4 MHz   | 1850.7 ~ 1909.3          | QPSK       | 0.498         | 26.97           | 1M09G7D             |
|           |                          | 16QAM      | 0.4           | 26.02           | 1M09D7W             |
|           |                          | 64QAM      | 0.313         | 24.95           | 1M09D7W             |
|           |                          | 256QAM     | 0.167         | 22.23           | 1M09D7W             |
| 3 MHz     | 1851.5 ~ 1908.5          | QPSK       | 0.492         | 26.92           | 2M70G7D             |
|           |                          | 16QAM      | 0.393         | 25.94           | 2M70D7W             |
|           |                          | 64QAM      | 0.309         | 24.90           | 2M70D7W             |
|           |                          | 256QAM     | 0.168         | 22.25           | 2M70D7W             |
| 5 MHz     | 1852.5 ~ 1907.5          | QPSK       | 0.494         | 26.94           | 4M50G7D             |
|           |                          | 16QAM      | 0.388         | 25.89           | 4M50D7W             |
|           |                          | 64QAM      | 0.313         | 24.95           | 4M50D7W             |
|           |                          | 256QAM     | 0.167         | 22.23           | 4M50D7W             |
| 10 MHz    | 1855 ~ 1905              | QPSK       | 0.504         | 27.02           | 8M98G7D             |
|           |                          | 16QAM      | 0.385         | 25.85           | 8M99D7W             |
|           |                          | 64QAM      | 0.319         | 25.04           | 8M98D7W             |
|           |                          | 256QAM     | 0.169         | 22.29           | 8M98D7W             |
| 15 MHz    | 1857.5 ~ 1902.5          | QPSK       | 0.493         | 26.93           | 13M5G7D             |
|           |                          | 16QAM      | 0.399         | 26.01           | 13M5D7W             |
|           |                          | 64QAM      | 0.321         | 25.06           | 13M5D7W             |
|           |                          | 256QAM     | 0.168         | 22.26           | 13M5D7W             |
| 20 MHz    | 1860 ~ 1900              | QPSK       | 0.507         | 27.05           | 18M0G7D             |
|           |                          | 16QAM      | 0.398         | 26.00           | 18M0D7W             |
|           |                          | 64QAM      | 0.317         | 25.01           | 18M0D7W             |
|           |                          | 256QAM     | 0.172         | 22.35           | 18M0D7W             |

#### LTE Band 4

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 1.4 MHz   | 1710.7 ~ 1754.3          | QPSK       | 0.524         | 27.19           | 1M09G7D             |
|           |                          | 16QAM      | 0.416         | 26.19           | 1M09D7W             |
|           |                          | 64QAM      | 0.337         | 25.28           | 1M09D7W             |
|           |                          | 256QAM     | 0.167         | 22.24           | 1M09D7W             |
| 3 MHz     | 1711.5 ~ 1753.5          | QPSK       | 0.536         | 27.29           | 2M71G7D             |
|           |                          | 16QAM      | 0.423         | 26.26           | 2M70D7W             |
|           |                          | 64QAM      | 0.337         | 25.28           | 2M70D7W             |
|           |                          | 256QAM     | 0.167         | 22.22           | 2M70D7W             |
| 5 MHz     | 1712.5 ~ 1752.5          | QPSK       | 0.536         | 27.29           | 4M50G7D             |
|           |                          | 16QAM      | 0.423         | 26.26           | 4M50D7W             |
|           |                          | 64QAM      | 0.344         | 25.37           | 4M50D7W             |
|           |                          | 256QAM     | 0.168         | 22.25           | 4M50D7W             |
| 10 MHz    | 1715 ~ 1750              | QPSK       | 0.532         | 27.26           | 8M98G7D             |
|           |                          | 16QAM      | 0.426         | 26.29           | 8M98D7W             |
|           |                          | 64QAM      | 0.35          | 25.44           | 8M98D7W             |
|           |                          | 256QAM     | 0.167         | 22.24           | 8M98D7W             |
| 15 MHz    | 1717.5 ~ 1747.5          | QPSK       | 0.531         | 27.25           | 13M5G7D             |
|           |                          | 16QAM      | 0.418         | 26.21           | 13M5D7W             |
|           |                          | 64QAM      | 0.339         | 25.30           | 13M5D7W             |
|           |                          | 256QAM     | 0.168         | 22.25           | 13M5D7W             |
| 20 MHz    | 1720 ~ 1745              | QPSK       | 0.537         | 27.30           | 18M0G7D             |
|           |                          | 16QAM      | 0.434         | 26.37           | 18M0D7W             |
|           |                          | 64QAM      | 0.34          | 25.32           | 18M0D7W             |
|           |                          | 256QAM     | 0.171         | 22.32           | 18M0D7W             |

#### LTE Band 5

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 1.4 MHz   | 824.7 ~ 848.3            | QPSK       | 0.203        | 23.08          | 1M09G7D             |
|           |                          | 16QAM      | 0.163        | 22.13          | 1M09D7W             |
|           |                          | 64QAM      | 0.131        | 21.17          | 1M09D7W             |
|           |                          | 256QAM     | 0.066        | 18.19          | 1M09D7W             |
| 3 MHz     | 825.5 ~ 847.5            | QPSK       | 0.203        | 23.08          | 2M70G7D             |
|           |                          | 16QAM      | 0.165        | 22.18          | 2M70D7W             |
|           |                          | 64QAM      | 0.132        | 21.20          | 2M70D7W             |
|           |                          | 256QAM     | 0.066        | 18.19          | 2M71D7W             |
| 5 MHz     | 826.5 ~ 846.5            | QPSK       | 0.203        | 23.08          | 4M50G7D             |
|           |                          | 16QAM      | 0.165        | 22.18          | 4M50D7W             |
|           |                          | 64QAM      | 0.131        | 21.18          | 4M50D7W             |
|           |                          | 256QAM     | 0.066        | 18.19          | 4M50D7W             |
| 10 MHz    | 829 ~ 844                | QPSK       | 0.204        | 23.09          | 9M00G7D             |
|           |                          | 16QAM      | 0.167        | 22.23          | 9M00D7W             |
|           |                          | 64QAM      | 0.131        | 21.18          | 9M00D7W             |
|           |                          | 256QAM     | 0.066        | 18.19          | 9M00D7W             |

## LTE Band 7

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 5 MHz     | 2502.5 ~ 2567.5          | QPSK       | 0.461         | 26.64           | 4M50G7D             |
|           |                          | 16QAM      | 0.375         | 25.74           | 4M50D7W             |
|           |                          | 64QAM      | 0.29          | 24.63           | 4M50D7W             |
|           |                          | 256QAM     | 0.15          | 21.76           | 4M50D7W             |
| 10 MHz    | 2505 ~ 2565              | QPSK       | 0.459         | 26.62           | 8M98G7D             |
|           |                          | 16QAM      | 0.381         | 25.81           | 8M99D7W             |
|           |                          | 64QAM      | 0.297         | 24.73           | 8M98D7W             |
|           |                          | 256QAM     | 0.149         | 21.73           | 8M99D7W             |
| 15 MHz    | 2507.5 ~ 2562.5          | QPSK       | 0.455         | 26.58           | 13M5G7D             |
|           |                          | 16QAM      | 0.382         | 25.82           | 13M5D7W             |
|           |                          | 64QAM      | 0.303         | 24.82           | 13M5D7W             |
|           |                          | 256QAM     | 0.15          | 21.76           | 13M5D7W             |
| 20 MHz    | 2510 ~ 2560              | QPSK       | 0.47          | 26.72           | 18M0G7D             |
|           |                          | 16QAM      | 0.39          | 25.91           | 18M0D7W             |
|           |                          | 64QAM      | 0.307         | 24.87           | 18M0D7W             |
|           |                          | 256QAM     | 0.152         | 21.81           | 18M0D7W             |

## LTE Band 12

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 1.4 MHz   | 699.7 ~ 715.3            | QPSK       | 0.176        | 22.46          | 1M09G7D             |
|           |                          | 16QAM      | 0.143        | 21.55          | 1M09D7W             |
|           |                          | 64QAM      | 0.114        | 20.58          | 1M09D7W             |
|           |                          | 256QAM     | 0.059        | 17.72          | 1M09D7W             |
| 3 MHz     | 700.5 ~ 714.5            | QPSK       | 0.177        | 22.47          | 2M70G7D             |
|           |                          | 16QAM      | 0.143        | 21.55          | 2M70D7W             |
|           |                          | 64QAM      | 0.114        | 20.55          | 2M70D7W             |
|           |                          | 256QAM     | 0.059        | 17.72          | 2M70D7W             |
| 5 MHz     | 701.5 ~ 713.5            | QPSK       | 0.176        | 22.46          | 4M49G7D             |
|           |                          | 16QAM      | 0.143        | 21.55          | 4M50D7W             |
|           |                          | 64QAM      | 0.114        | 20.58          | 4M49D7W             |
|           |                          | 256QAM     | 0.059        | 17.72          | 4M49D7W             |
| 10 MHz    | 704 ~ 711                | QPSK       | 0.177        | 22.48          | 9M01G7D             |
|           |                          | 16QAM      | 0.146        | 21.64          | 9M00D7W             |
|           |                          | 64QAM      | 0.115        | 20.61          | 9M01D7W             |
|           |                          | 256QAM     | 0.059        | 17.70          | 9M00D7W             |

### LTE Band 13

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 5 MHz     | 779.5 ~ 784.5            | QPSK       | 0.181        | 22.57          | 4M50G7D             |
|           |                          | 16QAM      | 0.148        | 21.71          | 4M50D7W             |
|           |                          | 64QAM      | 0.117        | 20.70          | 4M50D7W             |
|           |                          | 256QAM     | 0.06         | 17.75          | 4M50D7W             |
| 10 MHz    | 782                      | QPSK       | 0.187        | 22.71          | 8M97G7D             |
|           |                          | 16QAM      | 0.15         | 21.77          | 8M96D7W             |
|           |                          | 64QAM      | 0.122        | 20.85          | 8M96D7W             |
|           |                          | 256QAM     | 0.061        | 17.84          | 8M96D7W             |

### LTE Band 14

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 5 MHz     | 790.5 ~ 795.5            | QPSK       | 0.181        | 22.57          | 4M49G7D             |
|           |                          | 16QAM      | 0.15         | 21.77          | 4M49D7W             |
|           |                          | 64QAM      | 0.117        | 20.67          | 4M49D7W             |
|           |                          | 256QAM     | 0.058        | 17.66          | 4M50D7W             |
| 10 MHz    | 793                      | QPSK       | 0.185        | 22.66          | 8M86G7D             |
|           |                          | 16QAM      | 0.152        | 21.82          | 8M95D7W             |
|           |                          | 64QAM      | 0.121        | 20.84          | 8M95D7W             |
|           |                          | 256QAM     | 0.06         | 17.75          | 8M95D7W             |

### LTE Band 17

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 5 MHz     | 706.5 ~ 713.5            | QPSK       | 0.181        | 22.57          | 4M50G7D             |
|           |                          | 16QAM      | 0.145        | 21.60          | 4M50D7W             |
|           |                          | 64QAM      | 0.119        | 20.75          | 4M50D7W             |
|           |                          | 256QAM     | 0.058        | 17.67          | 4M50D7W             |
| 10 MHz    | 709 ~ 711                | QPSK       | 0.185        | 22.66          | 9M01G7D             |
|           |                          | 16QAM      | 0.148        | 21.71          | 9M01D7W             |
|           |                          | 64QAM      | 0.119        | 20.76          | 9M01D7W             |
|           |                          | 256QAM     | 0.06         | 17.76          | 9M01D7W             |

## LTE Band 25

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 1.4 MHz   | 1850.7 ~ 1914.3          | QPSK       | 0.521         | 27.17           | 1M09G7D             |
|           |                          | 16QAM      | 0.426         | 26.29           | 1M09D7W             |
|           |                          | 64QAM      | 0.335         | 25.25           | 1M09D7W             |
|           |                          | 256QAM     | 0.168         | 22.26           | 1M09D7W             |
| 3 MHz     | 1851.5 ~ 1913.5          | QPSK       | 0.52          | 27.16           | 2M70G7D             |
|           |                          | 16QAM      | 0.424         | 26.27           | 2M70D7W             |
|           |                          | 64QAM      | 0.338         | 25.29           | 2M71D7W             |
|           |                          | 256QAM     | 0.167         | 22.23           | 2M70D7W             |
| 5 MHz     | 1852.5 ~ 1912.5          | QPSK       | 0.518         | 27.14           | 4M50G7D             |
|           |                          | 16QAM      | 0.424         | 26.27           | 4M50D7W             |
|           |                          | 64QAM      | 0.332         | 25.21           | 4M50D7W             |
|           |                          | 256QAM     | 0.169         | 22.28           | 4M50D7W             |
| 10 MHz    | 1855 ~ 1910              | QPSK       | 0.521         | 27.17           | 8M99G7D             |
|           |                          | 16QAM      | 0.419         | 26.22           | 8M99D7W             |
|           |                          | 64QAM      | 0.336         | 25.26           | 8M99D7W             |
|           |                          | 256QAM     | 0.169         | 22.28           | 8M99D7W             |
| 15 MHz    | 1857.5 ~ 1907.5          | QPSK       | 0.522         | 27.18           | 13M5G7D             |
|           |                          | 16QAM      | 0.424         | 26.27           | 13M5D7W             |
|           |                          | 64QAM      | 0.337         | 25.28           | 13M5D7W             |
|           |                          | 256QAM     | 0.167         | 22.24           | 13M5D7W             |
| 20 MHz    | 1860 ~ 1905              | QPSK       | 0.524         | 27.19           | 18M0G7D             |
|           |                          | 16QAM      | 0.424         | 26.27           | 18M0D7W             |
|           |                          | 64QAM      | 0.337         | 25.27           | 18M0D7W             |
|           |                          | 256QAM     | 0.169         | 22.29           | 18M0D7W             |

## LTE Band 26 (814 MHz ~ 824 MHz)

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 1.4 MHz   | 814.7 ~ 823.3            | QPSK       | 0.191        | 22.80          | 1M09G7D             |
|           |                          | 16QAM      | 0.161        | 22.06          | 1M09D7W             |
|           |                          | 64QAM      | 0.127        | 21.05          | 1M09D7W             |
|           |                          | 256QAM     | 0.063        | 17.98          | 1M09D7W             |
| 3 MHz     | 815.5 ~ 822.5            | QPSK       | 0.193        | 22.86          | 2M70G7D             |
|           |                          | 16QAM      | 0.161        | 22.06          | 2M70D7W             |
|           |                          | 64QAM      | 0.125        | 20.98          | 2M70D7W             |
|           |                          | 256QAM     | 0.064        | 18.04          | 2M71D7W             |
| 5 MHz     | 816.5 ~ 821.5            | QPSK       | 0.192        | 22.83          | 4M50G7D             |
|           |                          | 16QAM      | 0.162        | 22.09          | 4M50D7W             |
|           |                          | 64QAM      | 0.126        | 20.99          | 4M50D7W             |
|           |                          | 256QAM     | 0.096        | 19.83          | 4M50D7W             |
| 10 MHz    | 819                      | QPSK       | 0.195        | 22.90          | 9M00G7D             |
|           |                          | 16QAM      | 0.162        | 22.10          | 9M00D7W             |
|           |                          | 64QAM      | 0.129        | 21.11          | 9M00D7W             |
|           |                          | 256QAM     | 0.064        | 18.03          | 8M99D7W             |

### LTE Band 26 (824 MHz ~ 849 MHz)

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 1.4 MHz   | 824.7 ~ 848.3            | QPSK       | 0.193        | 22.85          | 1M09G7D             |
|           |                          | 16QAM      | 0.16         | 22.03          | 1M09D7W             |
|           |                          | 64QAM      | 0.127        | 21.03          | 1M09D7W             |
|           |                          | 256QAM     | 0.063        | 17.99          | 1M09D7W             |
| 3 MHz     | 825.5 ~ 847.5            | QPSK       | 0.193        | 22.85          | 2M70G7D             |
|           |                          | 16QAM      | 0.158        | 22.00          | 2M70D7W             |
|           |                          | 64QAM      | 0.126        | 21.02          | 2M70D7W             |
|           |                          | 256QAM     | 0.063        | 17.99          | 2M70D7W             |
| 5 MHz     | 826.5 ~ 846.5            | QPSK       | 0.191        | 22.80          | 4M50G7D             |
|           |                          | 16QAM      | 0.159        | 22.02          | 4M50D7W             |
|           |                          | 64QAM      | 0.128        | 21.08          | 4M50D7W             |
|           |                          | 256QAM     | 0.063        | 18.01          | 4M50D7W             |
| 10 MHz    | 829 ~ 844                | QPSK       | 0.189        | 22.77          | 9M00G7D             |
|           |                          | 16QAM      | 0.158        | 21.98          | 9M00D7W             |
|           |                          | 64QAM      | 0.127        | 21.05          | 8M99D7W             |
|           |                          | 256QAM     | 0.063        | 17.96          | 9M00D7W             |
| 15 MHz    | 831.5 ~ 841.5            | QPSK       | 0.195        | 22.91          | 13M5G7D             |
|           |                          | 16QAM      | 0.164        | 22.14          | 13M5D7W             |
|           |                          | 64QAM      | 0.13         | 21.13          | 13M5D7W             |
|           |                          | 256QAM     | 0.065        | 18.12          | 13M5D7W             |

### LTE Band 30, Output Power: Full Power

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 5 MHz     | 2307.5 ~ 2312.5          | QPSK       | 0.236         | 23.73           | 4M52G7D             |
|           |                          | 16QAM      | 0.19          | 22.78           | 4M50D7W             |
|           |                          | 64QAM      | 0.151         | 21.80           | 4M50D7W             |
|           |                          | 256QAM     | 0.076         | 18.82           | 4M50D7W             |
| 10 MHz    | 2310                     | QPSK       | 0.237         | 23.74           | 8M99G7D             |
|           |                          | 16QAM      | 0.193         | 22.86           | 8M98D7W             |
|           |                          | 64QAM      | 0.154         | 21.88           | 8M98D7W             |
|           |                          | 256QAM     | 0.078         | 18.92           | 8M97D7W             |

### LTE Band 30, Output Power: dBm/5 MHz

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 10 MHz    | 2310                     | QPSK       | 0.234         | 23.70           | 8M99G7D             |
|           |                          | 16QAM      | 0.192         | 22.84           | 8M98D7W             |
|           |                          | 64QAM      | 0.153         | 21.84           | 8M98D7W             |
|           |                          | 256QAM     | 0.077         | 18.88           | 8M97D7W             |

### LTE Band 38

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) |
|-----------|--------------------------|------------|---------------|-----------------|
| 5 MHz     | 2572.5 ~ 2617.5          | QPSK       | 0.351         | 25.45           |
|           |                          | 16QAM      | 0.312         | 24.94           |
|           |                          | 64QAM      | 0.222         | 23.47           |
|           |                          | 256QAM     | 0.111         | 20.46           |
| 10 MHz    | 2575 ~ 2615              | QPSK       | 0.352         | 25.46           |
|           |                          | 16QAM      | 0.316         | 25.00           |
|           |                          | 64QAM      | 0.223         | 23.49           |
|           |                          | 256QAM     | 0.112         | 20.51           |
| 15 MHz    | 2577.5 ~ 2612.5          | QPSK       | 0.353         | 25.48           |
|           |                          | 16QAM      | 0.317         | 25.01           |
|           |                          | 64QAM      | 0.224         | 23.51           |
|           |                          | 256QAM     | 0.114         | 20.55           |
| 20 MHz    | 2580 ~ 2610              | QPSK       | 0.354         | 25.49           |
|           |                          | 16QAM      | 0.318         | 25.02           |
|           |                          | 64QAM      | 0.224         | 23.51           |
|           |                          | 256QAM     | 0.115         | 20.62           |

### LTE Band 41, PC2

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 5 MHz     | 2498.5 ~ 2687.5          | QPSK       | 0.904         | 29.56           | 4M49G7D             |
|           |                          | 16QAM      | 0.719         | 28.57           | 4M50D7W             |
|           |                          | 64QAM      | 0.573         | 27.58           | 4M50D7W             |
|           |                          | 256QAM     | 0.294         | 24.68           | 4M50D7W             |
| 10 MHz    | 2501 ~ 2685              | QPSK       | 0.891         | 29.5            | 8M98G7D             |
|           |                          | 16QAM      | 0.719         | 28.57           | 8M99D7W             |
|           |                          | 64QAM      | 0.566         | 27.53           | 8M98D7W             |
|           |                          | 256QAM     | 0.294         | 24.69           | 8M98D7W             |
| 15 MHz    | 2503.5 ~ 2682.5          | QPSK       | 0.935         | 29.71           | 13M5G7D             |
|           |                          | 16QAM      | 0.711         | 28.52           | 13M5D7W             |
|           |                          | 64QAM      | 0.587         | 27.69           | 13M5D7W             |
|           |                          | 256QAM     | 0.295         | 24.7            | 13M5D7W             |
| 20 MHz    | 2506 ~ 2680              | QPSK       | 0.938         | 29.72           | 18M0G7D             |
|           |                          | 16QAM      | 0.738         | 28.68           | 18M0D7W             |
|           |                          | 64QAM      | 0.586         | 27.68           | 18M0D7W             |
|           |                          | 256QAM     | 0.303         | 24.81           | 18M0D7W             |

### LTE Band 41, PC3

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 5 MHz     | 2498.5 ~ 2687.5          | QPSK       | 0.471         | 26.73           | 4M49G7D             |
|           |                          | 16QAM      | 0.379         | 25.79           | 4M50D7W             |
|           |                          | 64QAM      | 0.304         | 24.83           | 4M50D7W             |
|           |                          | 256QAM     | 0.152         | 21.83           | 4M50D7W             |
| 10 MHz    | 2501 ~ 2685              | QPSK       | 0.471         | 26.73           | 8M98G7D             |
|           |                          | 16QAM      | 0.383         | 25.83           | 8M99D7W             |
|           |                          | 64QAM      | 0.302         | 24.80           | 8M98D7W             |
|           |                          | 256QAM     | 0.151         | 21.80           | 8M98D7W             |
| 15 MHz    | 2503.5 ~ 2682.5          | QPSK       | 0.471         | 26.73           | 13M5G7D             |
|           |                          | 16QAM      | 0.381         | 25.81           | 13M5D7W             |
|           |                          | 64QAM      | 0.305         | 24.84           | 13M5D7W             |
|           |                          | 256QAM     | 0.152         | 21.83           | 13M5D7W             |
| 20 MHz    | 2506 ~ 2680              | QPSK       | 0.472         | 26.74           | 18M0G7D             |
|           |                          | 16QAM      | 0.383         | 25.83           | 18M0D7W             |
|           |                          | 64QAM      | 0.303         | 24.82           | 18M0D7W             |
|           |                          | 256QAM     | 0.153         | 21.85           | 18M0D7W             |

### LTE Band 42 (3.45 GHz ~ 3.55 GHz)

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 5 MHz     | 3452.5 ~ 3547.5          | QPSK       | 0.176         | 22.46           | 4M50G7D             |
|           |                          | 16QAM      | 0.137         | 21.38           | 4M49D7W             |
|           |                          | 64QAM      | 0.113         | 20.54           | 4M50D7W             |
|           |                          | 256QAM     | 0.055         | 17.38           | 4M50D7W             |
| 10 MHz    | 3455 ~ 3545              | QPSK       | 0.176         | 22.45           | 8M99G7D             |
|           |                          | 16QAM      | 0.135         | 21.31           | 8M98D7W             |
|           |                          | 64QAM      | 0.112         | 20.50           | 8M98D7W             |
|           |                          | 256QAM     | 0.054         | 17.34           | 8M98D7W             |
| 15 MHz    | 3457.5 ~ 3542.5          | QPSK       | 0.174         | 22.40           | 13M5G7D             |
|           |                          | 16QAM      | 0.136         | 21.32           | 13M5D7W             |
|           |                          | 64QAM      | 0.115         | 20.59           | 13M5D7W             |
|           |                          | 256QAM     | 0.055         | 17.38           | 13M5D7W             |
| 20 MHz    | 3460 ~ 3540              | QPSK       | 0.177         | 22.47           | 18M0G7D             |
|           |                          | 16QAM      | 0.139         | 21.44           | 18M0D7W             |
|           |                          | 64QAM      | 0.114         | 20.57           | 18M0D7W             |
|           |                          | 256QAM     | 0.054         | 17.35           | 18M0D7W             |

## LTE Band 66

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 1.4 MHz   | 1710.7 ~ 1779.3          | QPSK       | 0.426         | 26.29           | 1M09G7D             |
|           |                          | 16QAM      | 0.344         | 25.36           | 1M09D7W             |
|           |                          | 64QAM      | 0.27          | 24.32           | 1M09D7W             |
|           |                          | 256QAM     | 0.135         | 21.30           | 1M09D7W             |
| 3 MHz     | 1711.5 ~ 1778.5          | QPSK       | 0.426         | 26.29           | 2M70G7D             |
|           |                          | 16QAM      | 0.344         | 25.37           | 2M70D7W             |
|           |                          | 64QAM      | 0.267         | 24.27           | 2M70D7W             |
|           |                          | 256QAM     | 0.136         | 21.33           | 2M70D7W             |
| 5 MHz     | 1712.5 ~ 1777.5          | QPSK       | 0.426         | 26.29           | 4M50G7D             |
|           |                          | 16QAM      | 0.345         | 25.38           | 4M50D7W             |
|           |                          | 64QAM      | 0.261         | 24.17           | 4M50D7W             |
|           |                          | 256QAM     | 0.136         | 21.33           | 4M49D7W             |
| 10 MHz    | 1715 ~ 1775              | QPSK       | 0.426         | 26.29           | 8M99G7D             |
|           |                          | 16QAM      | 0.344         | 25.36           | 8M99D7W             |
|           |                          | 64QAM      | 0.269         | 24.29           | 8M99D7W             |
|           |                          | 256QAM     | 0.136         | 21.34           | 8M99D7W             |
| 15 MHz    | 1717.5 ~ 1772.5          | QPSK       | 0.426         | 26.29           | 13M5G7D             |
|           |                          | 16QAM      | 0.345         | 25.38           | 13M5D7W             |
|           |                          | 64QAM      | 0.268         | 24.28           | 13M5D7W             |
|           |                          | 256QAM     | 0.136         | 21.32           | 13M5D7W             |
| 20 MHz    | 1720 ~ 1770              | QPSK       | 0.427         | 26.30           | 18M0G7D             |
|           |                          | 16QAM      | 0.345         | 25.38           | 18M0D7W             |
|           |                          | 64QAM      | 0.274         | 24.37           | 18M0D7W             |
|           |                          | 256QAM     | 0.138         | 21.41           | 18M0D7W             |

## LTE Band 71

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|-----------|--------------------------|------------|--------------|----------------|---------------------|
| 5 MHz     | 665.5 ~ 695.5            | QPSK       | 0.172        | 22.36          | 4M50G7D             |
|           |                          | 16QAM      | 0.133        | 21.24          | 4M50D7W             |
|           |                          | 64QAM      | 0.109        | 20.36          | 4M50D7W             |
|           |                          | 256QAM     | 0.052        | 17.17          | 4M49D7W             |
| 10 MHz    | 668 ~ 693                | QPSK       | 0.172        | 22.36          | 8M98G7D             |
|           |                          | 16QAM      | 0.132        | 21.21          | 8M98D7W             |
|           |                          | 64QAM      | 0.107        | 20.28          | 8M98D7W             |
|           |                          | 256QAM     | 0.052        | 17.17          | 8M98D7W             |
| 15 MHz    | 670.5 ~ 690.5            | QPSK       | 0.171        | 22.32          | 13M5G7D             |
|           |                          | 16QAM      | 0.134        | 21.27          | 13M5D7W             |
|           |                          | 64QAM      | 0.107        | 20.31          | 13M5D7W             |
|           |                          | 256QAM     | 0.052        | 17.15          | 13M5D7W             |
| 20 MHz    | 673 ~ 688                | QPSK       | 0.173        | 22.37          | 18M0G7D             |
|           |                          | 16QAM      | 0.136        | 21.32          | 18M0D7W             |
|           |                          | 64QAM      | 0.11         | 20.42          | 18M0D7W             |
|           |                          | 256QAM     | 0.054        | 17.30          | 18M0D7W             |

2. The EUT uses following support units.

|              |                                    |
|--------------|------------------------------------|
| Jig          |                                    |
| Brand        | Compal                             |
| Model        | ZYN8                               |
| Adapter      |                                    |
| Brand        | ChenzhouFrecom Electronics Co. Ltd |
| Model        | F24L5-120200SPAU                   |
| Input Power  | 100-240V~50/60Hz 0.6A              |
| Output Power | 12.0V $\overline{\sim}$ 2.0A 24.0W |

3. For detailed information about each WWAN bands frequency range, bandwidth mode of the product, please refer to section 3.3 of the report.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

### 3.2 Antenna Description of EUT

1. The antenna information is listed as below.

| Type            | External          |                                    |              |              |              |
|-----------------|-------------------|------------------------------------|--------------|--------------|--------------|
| Brand           | INPAQ             |                                    |              |              |              |
| Band            | Freq. Range (MHz) | Peak Gain without cable loss (dBi) |              |              |              |
|                 |                   | Ant. 0 (Main)                      | Ant. 1 (DRx) | Ant. 2 (DRx) | Ant. 3 (Aux) |
| LTE B2 (Ant 0)  | 1850 ~ 1910       | 3.2                                | 3.2          | 3.2          | 3.2          |
| LTE B4 (Ant 0)  | 1710 ~ 1755       | 3.31                               | 3.31         | 3.31         | 3.31         |
| LTE B5 (Ant 0)  | 824 ~ 849         | 1.25                               | 1.25         | 1.25         | 1.25         |
| LTE B7 (Ant 3)  | 2500 ~ 2570       | 2.88                               | 2.88         | 2.88         | 2.88         |
| LTE B12 (Ant 0) | 698 ~ 716         | 0.78                               | 0.78         | 0.78         | 0.78         |
| LTE B13 (Ant 0) | 777 ~ 787         | 0.91                               | 0.91         | 0.91         | 0.91         |
| LTE B14 (Ant 0) | 788 ~ 798         | 0.91                               | 0.91         | 0.91         | 0.91         |
| LTE B17 (Ant 0) | 704 ~ 716         | 0.82                               | 0.82         | 0.82         | 0.82         |
| LTE B25 (Ant 0) | 1850 ~ 1915       | 3.2                                | 3.2          | 3.2          | 3.2          |
| LTE B26 (Ant 0) | 814 ~ 849         | 1.25                               | 1.25         | 1.25         | 1.25         |
| LTE B30 (Ant 3) | 2305 ~ 2315       | 0                                  | 0            | 0            | 0            |
| LTE B38 (Ant 3) | 2570 ~ 2620       | 2.75                               | 2.75         | 2.75         | 2.75         |
| LTE B41 (Ant 3) | 2496 ~ 2690       | 2.75                               | 2.75         | 2.75         | 2.75         |
| LTE B42 (Ant 0) | 3400 ~ 3600       | -1.5                               | -1.5         | -1.5         | -1.5         |
| LTE B43 (Ant 0) | 3600 ~ 3800       | -1                                 | -1           | -1           | -1           |
| LTE B48 (Ant 0) | 3550 ~ 3700       | -1                                 | -1           | -1           | -1           |
| LTE B66 (Ant 0) | 1710 ~ 1780       | 2.31                               | 2.31         | 2.31         | 2.31         |
| LTE B71 (Ant 3) | 663 ~ 698         | 0.53                               | 0.53         | 0.53         | 0.53         |

\*The EUT is SISO mode only in LTE Bands, the transmitter antenna is as shown in the brackets in the antenna table.

| Ant. No. | Cable Loss (dB) | Cable Length (mm) |
|----------|-----------------|-------------------|
| Ant. 0   | 1.5             | 141.1             |
| Ant. 1   | 1.3             | 120.3             |
| Ant. 2   | 1               | 78.2              |
| Ant. 3   | 1.3             | 121.2             |

\*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

### 3.3 Test Mode Applicability and Tested Channel Detail

|             |                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Scan:   | 1. The antenna of EUT can be used in the following ways: 0 degree/90 degrees. Pre-scan these ways and find the worst case as a representative test condition.<br>2. Pre-Scan has been conducted to determine the worst-case from all possible combinations of EUT configure mode (1TX or 2TX if available), channel, bandwidth, modulation and RB mode. See below table(s) for details. |
| Worst Case: | 1. 0 degree/90 degrees Worst Condition: 90 degrees                                                                                                                                                                                                                                                                                                                                      |

Following channel(s) was (were) selected for the final test as listed below:

#### 3.3.1 LTE Band 2

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 18607(1850.70 MHz)<br>18900(1880.00 MHz)<br>19193(1909.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 18615(1851.50 MHz)<br>18900(1880.00 MHz)<br>19185(1908.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 18625(1852.50 MHz)<br>18900(1880.00 MHz)<br>19175(1907.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 18650(1855.00 MHz)<br>18900(1880.00 MHz)<br>19150(1905.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 18675(1857.50 MHz)<br>18900(1880.00 MHz)<br>19125(1902.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 18700(1860.00 MHz)<br>18900(1880.00 MHz)<br>19100(1900.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 18900(1880.00 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 18607(1850.70 MHz)<br>18900(1880.00 MHz)<br>19193(1909.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 18615(1851.50 MHz)<br>18900(1880.00 MHz)<br>19185(1908.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 18625(1852.50 MHz)<br>18900(1880.00 MHz)<br>19175(1907.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 18650(1855.00 MHz)<br>18900(1880.00 MHz)<br>19150(1905.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 18675(1857.50 MHz)<br>18900(1880.00 MHz)<br>19125(1902.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 18700(1860.00 MHz)<br>18900(1880.00 MHz)<br>19100(1900.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |

| Test Item                              | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode            |
|----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|-----------------|
| Bandwidth                              | 18607(1850.70 MHz)<br>18900(1880.00 MHz)<br>19193(1909.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 18615(1851.50 MHz)<br>18900(1880.00 MHz)<br>19185(1908.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 18625(1852.50 MHz)<br>18900(1880.00 MHz)<br>19175(1907.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 18650(1855.00 MHz)<br>18900(1880.00 MHz)<br>19150(1905.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 18675(1857.50 MHz)<br>18900(1880.00 MHz)<br>19125(1902.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 18700(1860.00 MHz)<br>18900(1880.00 MHz)<br>19100(1900.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
| Conducted Spurious Emissions           | 18607(1850.70 MHz)<br>18900(1880.00 MHz)<br>19193(1909.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB<br>Full RB |
|                                        | 18615(1851.50 MHz)<br>18900(1880.00 MHz)<br>19185(1908.50 MHz) | 3 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 18625(1852.50 MHz)<br>18900(1880.00 MHz)<br>19175(1907.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 18650(1855.00 MHz)<br>18900(1880.00 MHz)<br>19150(1905.00 MHz) | 10 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 18675(1857.50 MHz)<br>18900(1880.00 MHz)<br>19125(1902.50 MHz) | 15 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 18700(1860.00 MHz)<br>18900(1880.00 MHz)<br>19100(1900.00 MHz) | 20 MHz            | QPSK                          | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 19100(1900.00 MHz)                                             | 20 MHz            | QPSK                          | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 18607(1850.70 MHz)<br>18900(1880.00 MHz)<br>19193(1909.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB            |
|                                        | 18625(1852.50 MHz)<br>18900(1880.00 MHz)<br>19175(1907.50 MHz) | 5 MHz             | QPSK                          | 1 RB            |
|                                        | 18700(1860.00 MHz)<br>18900(1880.00 MHz)<br>19100(1900.00 MHz) | 20 MHz            | QPSK                          | 1 RB            |
| Frequency Stability                    | 18700(1860.00 MHz)<br>19100(1900.00 MHz)                       | 20 MHz            | QPSK                          | Full RB         |

### 3.3.2 LTE Band 4

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 19957(1710.70 MHz)<br>20175(1732.50 MHz)<br>20393(1754.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 19965(1711.50 MHz)<br>20175(1732.50 MHz)<br>20385(1753.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 19975(1712.50 MHz)<br>20175(1732.50 MHz)<br>20375(1752.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20000(1715.00 MHz)<br>20175(1732.50 MHz)<br>20350(1750.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20025(1717.50 MHz)<br>20175(1732.50 MHz)<br>20325(1747.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20050(1720.00 MHz)<br>20175(1732.50 MHz)<br>20300(1745.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 20175(1732.50 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 19957(1710.70 MHz)<br>20175(1732.50 MHz)<br>20393(1754.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 19965(1711.50 MHz)<br>20175(1732.50 MHz)<br>20385(1753.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 19975(1712.50 MHz)<br>20175(1732.50 MHz)<br>20375(1752.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20000(1715.00 MHz)<br>20175(1732.50 MHz)<br>20350(1750.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20025(1717.50 MHz)<br>20175(1732.50 MHz)<br>20325(1747.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20050(1720.00 MHz)<br>20175(1732.50 MHz)<br>20300(1745.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |

| Test Item                              | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode            |
|----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|-----------------|
| Bandwidth                              | 19957(1710.70 MHz)<br>20175(1732.50 MHz)<br>20393(1754.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 19965(1711.50 MHz)<br>20175(1732.50 MHz)<br>20385(1753.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 19975(1712.50 MHz)<br>20175(1732.50 MHz)<br>20375(1752.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 20000(1715.00 MHz)<br>20175(1732.50 MHz)<br>20350(1750.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 20025(1717.50 MHz)<br>20175(1732.50 MHz)<br>20325(1747.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 20050(1720.00 MHz)<br>20175(1732.50 MHz)<br>20300(1745.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
| Conducted Spurious Emissions           | 19957(1710.70 MHz)<br>20175(1732.50 MHz)<br>20393(1754.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB<br>Full RB |
|                                        | 19965(1711.50 MHz)<br>20175(1732.50 MHz)<br>20385(1753.50 MHz) | 3 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 19975(1712.50 MHz)<br>20175(1732.50 MHz)<br>20375(1752.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 20000(1715.00 MHz)<br>20175(1732.50 MHz)<br>20350(1750.00 MHz) | 10 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 20025(1717.50 MHz)<br>20175(1732.50 MHz)<br>20325(1747.50 MHz) | 15 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 20050(1720.00 MHz)<br>20175(1732.50 MHz)<br>20300(1745.00 MHz) | 20 MHz            | QPSK                          | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 20393(1754.30 MHz)                                             | 1.4 MHz           | QPSK                          | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 19957(1710.70 MHz)<br>20175(1732.50 MHz)<br>20393(1754.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB            |
|                                        | 19975(1712.50 MHz)<br>20175(1732.50 MHz)<br>20375(1752.50 MHz) | 5 MHz             | QPSK                          | 1 RB            |
|                                        | 20050(1720.00 MHz)<br>20175(1732.50 MHz)<br>20300(1745.00 MHz) | 20 MHz            | QPSK                          | 1 RB            |
| Frequency Stability                    | 20050(1720.00 MHz)<br>20300(1745.00 MHz)                       | 20 MHz            | QPSK                          | Full RB         |

### 3.3.3 LTE Band 5

| Test Item                    | Tested Channel                                              | Channel Bandwidth | Modulation                       | Mode                       |
|------------------------------|-------------------------------------------------------------|-------------------|----------------------------------|----------------------------|
| Effective Radiated Power     | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics   | 20525(836.50 MHz)                                           | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio        | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                              | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                              | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                              | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
| Bandwidth                    | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                              | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                              | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                              | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz           | QPSK                             | 1 RB<br>Full RB            |
|                              | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz             | QPSK                             | 1 RB<br>Full RB            |
|                              | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz             | QPSK                             | 1 RB<br>Full RB            |
|                              | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz            | QPSK                             | 1 RB<br>Full RB            |

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation | Mode    |
|----------------------------------------|-------------------------------------------------------------|-------------------|------------|---------|
| Radiated Spurious Emissions below 1GHz | 20625(846.50 MHz)                                           | 5 MHz             | QPSK       | 1 RB    |
| Radiated Spurious Emissions above 1GHz | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz           | QPSK       | 1 RB    |
|                                        | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz             | QPSK       | 1 RB    |
|                                        | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz            | QPSK       | 1 RB    |
| Frequency Stability                    | 20450(829.00 MHz)<br>20600(844.00 MHz)                      | 10 MHz            | QPSK       | Full RB |

### 3.3.4 LTE Band 7

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 20775(2502.50 MHz)<br>21100(2535.00 MHz)<br>21425(2567.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20800(2505.00 MHz)<br>21100(2535.00 MHz)<br>21400(2565.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20825(2507.50 MHz)<br>21100(2535.00 MHz)<br>21375(2562.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 20850(2510.00 MHz)<br>21100(2535.00 MHz)<br>21350(2560.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 21100(2535.00 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 20775(2502.50 MHz)<br>21100(2535.00 MHz)<br>21425(2567.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20800(2505.00 MHz)<br>21100(2535.00 MHz)<br>21400(2565.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20825(2507.50 MHz)<br>21100(2535.00 MHz)<br>21375(2562.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 20850(2510.00 MHz)<br>21100(2535.00 MHz)<br>21350(2560.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                               | 20775(2502.50 MHz)<br>21100(2535.00 MHz)<br>21425(2567.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         | 20800(2505.00 MHz)<br>21100(2535.00 MHz)<br>21400(2565.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         | 20825(2507.50 MHz)<br>21100(2535.00 MHz)<br>21375(2562.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         | 20850(2510.00 MHz)<br>21100(2535.00 MHz)<br>21350(2560.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |

| Test Item                              | Tested Channel                                                 | Channel Bandwidth | Modulation | Mode            |
|----------------------------------------|----------------------------------------------------------------|-------------------|------------|-----------------|
| Conducted Spurious Emissions           | 20775(2502.50 MHz)<br>21100(2535.00 MHz)<br>21425(2567.50 MHz) | 5 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        | 20800(2505.00 MHz)<br>21100(2535.00 MHz)<br>21400(2565.00 MHz) | 10 MHz            | QPSK       | 1 RB<br>Full RB |
|                                        | 20825(2507.50 MHz)<br>21100(2535.00 MHz)<br>21375(2562.50 MHz) | 15 MHz            | QPSK       | 1 RB<br>Full RB |
|                                        | 20850(2510.00 MHz)<br>21100(2535.00 MHz)<br>21350(2560.00 MHz) | 20 MHz            | QPSK       | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 21100(2535.00 MHz)                                             | 20 MHz            | QPSK       | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 20775(2502.50 MHz)<br>21100(2535.00 MHz)<br>21425(2567.50 MHz) | 5 MHz             | QPSK       | 1 RB            |
|                                        | 20850(2510.00 MHz)<br>21100(2535.00 MHz)<br>21350(2560.00 MHz) | 20 MHz            | QPSK       | 1 RB            |
| Frequency Stability                    | 20850(2510.00 MHz)<br>21350(2560.00 MHz)                       | 20 MHz            | QPSK       | Full RB         |

### 3.3.5 LTE Band 12

| Test Item                  | Tested Channel                                              | Channel Bandwidth | Modulation                       | Mode                       |
|----------------------------|-------------------------------------------------------------|-------------------|----------------------------------|----------------------------|
| Effective Radiated Power   | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics | 23095(707.50 MHz)                                           | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio      | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                            | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                            | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
|                            | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB                       |
| Bandwidth                  | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                            | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                            | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |
|                            | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB                    |

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation | Mode            |
|----------------------------------------|-------------------------------------------------------------|-------------------|------------|-----------------|
| Conducted Spurious Emissions           | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz           | QPSK       | 1 RB<br>Full RB |
|                                        | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz            | QPSK       | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 23095(707.50 MHz)                                           | 1.4 MHz           | QPSK       | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz           | QPSK       | 1 RB            |
|                                        | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz             | QPSK       | 1 RB            |
|                                        | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz            | QPSK       | 1 RB            |
| Frequency Stability                    | 23060(704.00 MHz)<br>23130(711.00 MHz)                      | 10 MHz            | QPSK       | Full RB         |

### 3.3.6 LTE Band 13

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation                    | Mode                       |
|----------------------------------------|-------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power               | 23205(779.50 MHz)<br>23230(782.00 MHz)<br>23255(784.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 23230(782.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics             | 23230(782.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                  | 23205(779.50 MHz)<br>23230(782.00 MHz)<br>23255(784.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                        | 23230(782.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                              | 23205(779.50 MHz)<br>23230(782.00 MHz)<br>23255(784.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 23230(782.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions           | 23205(779.50 MHz)<br>23230(782.00 MHz)<br>23255(784.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                        | 23230(782.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
| Radiated Spurious Emissions below 1GHz | 23255(784.50 MHz)                                           | 5 MHz             | QPSK                          | 1 RB                       |
| Radiated Spurious Emissions above 1GHz | 23205(779.50 MHz)<br>23230(782.00 MHz)<br>23255(784.50 MHz) | 5 MHz             | QPSK                          | 1 RB                       |
|                                        | 23230(782.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB                       |
| Frequency Stability                    | 23230(782.00 MHz)                                           | 10 MHz            | QPSK                          | Full RB                    |

### 3.3.7 LTE Band 14

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation                    | Mode                       |
|----------------------------------------|-------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power               | 23305(790.50 MHz)<br>23330(793.00 MHz)<br>23355(795.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 23330(793.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics             | 23330(793.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                  | 23305(790.50 MHz)<br>23330(793.00 MHz)<br>23355(795.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 23330(793.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Bandwidth                              | 23305(790.50 MHz)<br>23330(793.00 MHz)<br>23355(795.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 23330(793.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions           | 23305(790.50 MHz)<br>23330(793.00 MHz)<br>23355(795.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                        | 23330(793.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
| Radiated Spurious Emissions below 1GHz | 23330(793.00 MHz)                                           | 5 MHz             | QPSK                          | 1 RB                       |
| Radiated Spurious Emissions above 1GHz | 23305(790.50 MHz)<br>23330(793.00 MHz)<br>23355(795.50 MHz) | 5 MHz             | QPSK                          | 1 RB                       |
|                                        | 23330(793.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB                       |
| Frequency Stability                    | 23330(793.00 MHz)                                           | 10 MHz            | QPSK                          | Full RB                    |

### 3.3.8 LTE Band 17

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation                    | Mode                       |
|----------------------------------------|-------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power               | 23755(706.50 MHz)<br>23790(710.00 MHz)<br>23825(713.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 23780(709.00 MHz)<br>23790(710.00 MHz)<br>23800(711.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics             | 23790(710.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                  | 23755(706.50 MHz)<br>23790(710.00 MHz)<br>23825(713.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                        | 23780(709.00 MHz)<br>23790(710.00 MHz)<br>23800(711.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                              | 23755(706.50 MHz)<br>23790(710.00 MHz)<br>23825(713.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 23780(709.00 MHz)<br>23790(710.00 MHz)<br>23800(711.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions           | 23755(706.50 MHz)<br>23790(710.00 MHz)<br>23825(713.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                        | 23780(709.00 MHz)<br>23790(710.00 MHz)<br>23800(711.00 MHz) | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
| Radiated Spurious Emissions below 1GHz | 23790(710.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB                       |
| Radiated Spurious Emissions above 1GHz | 23755(706.50 MHz)<br>23790(710.00 MHz)<br>23825(713.50 MHz) | 5 MHz             | QPSK                          | 1 RB                       |
|                                        | 23780(709.00 MHz)<br>23790(710.00 MHz)<br>23800(711.00 MHz) | 10 MHz            | QPSK                          | 1 RB                       |
| Frequency Stability                    | 23780(709.00 MHz)<br>23800(711.00 MHz)                      | 10 MHz            | QPSK                          | Full RB                    |

### 3.3.9 LTE Band 25

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 26055(1851.50 MHz)<br>26365(1882.50 MHz)<br>26675(1913.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 26090(1855.00 MHz)<br>26365(1882.50 MHz)<br>26640(1910.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 26115(1857.50 MHz)<br>26365(1882.50 MHz)<br>26615(1907.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 26365(1882.50 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 26055(1851.50 MHz)<br>26365(1882.50 MHz)<br>26675(1913.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 26090(1855.00 MHz)<br>26365(1882.50 MHz)<br>26640(1910.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 26115(1857.50 MHz)<br>26365(1882.50 MHz)<br>26615(1907.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |

| Test Item                                 | Tested Channel                                                 | Channel Bandwidth | Modulation                       | Mode            |
|-------------------------------------------|----------------------------------------------------------------|-------------------|----------------------------------|-----------------|
| Bandwidth                                 | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz           | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
|                                           | 26055(1851.50 MHz)<br>26365(1882.50 MHz)<br>26675(1913.50 MHz) | 3 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
|                                           | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
|                                           | 26090(1855.00 MHz)<br>26365(1882.50 MHz)<br>26640(1910.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
|                                           | 26115(1857.50 MHz)<br>26365(1882.50 MHz)<br>26615(1907.50 MHz) | 15 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
|                                           | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | Full RB         |
| Conducted Spurious Emissions              | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz           | QPSK                             | 1 RB<br>Full RB |
|                                           | 26055(1851.50 MHz)<br>26365(1882.50 MHz)<br>26675(1913.50 MHz) | 3 MHz             | QPSK                             | 1 RB<br>Full RB |
|                                           | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz             | QPSK                             | 1 RB<br>Full RB |
|                                           | 26090(1855.00 MHz)<br>26365(1882.50 MHz)<br>26640(1910.00 MHz) | 10 MHz            | QPSK                             | 1 RB<br>Full RB |
|                                           | 26115(1857.50 MHz)<br>26365(1882.50 MHz)<br>26615(1907.50 MHz) | 15 MHz            | QPSK                             | 1 RB<br>Full RB |
|                                           | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz            | QPSK                             | 1 RB<br>Full RB |
| Radiated Spurious Emissions<br>below 1GHz | 26365(1882.50 MHz)                                             | 20 MHz            | QPSK                             | 1 RB            |
| Radiated Spurious Emissions<br>above 1GHz | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz           | QPSK                             | 1 RB            |
|                                           | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz             | QPSK                             | 1 RB            |
|                                           | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz            | QPSK                             | 1 RB            |
| Frequency Stability                       | 26140(1860.00 MHz)<br>26590(1905.00 MHz)                       | 20 MHz            | QPSK                             | Full RB         |

### 3.3.10 LTE Band 26 (814 MHz ~ 824 MHz)

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation                    | Mode                       |
|----------------------------------------|-------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power               | 26697(814.70 MHz)<br>26740(819.00 MHz)<br>26783(823.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 26705(815.50 MHz)<br>26740(819.00 MHz)<br>26775(822.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 26715(816.50 MHz)<br>26740(819.00 MHz)<br>26765(821.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                        | 26740(819.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics             | 26740(819.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                  | -                                                           | -                 | -                             | -                          |
| Bandwidth                              | 26697(814.70 MHz)<br>26740(819.00 MHz)<br>26783(823.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 26705(815.50 MHz)<br>26740(819.00 MHz)<br>26775(822.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 26715(816.50 MHz)<br>26740(819.00 MHz)<br>26765(821.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                        | 26740(819.00 MHz)                                           | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions           | 26697(814.70 MHz)<br>26740(819.00 MHz)<br>26783(823.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB<br>Full RB            |
|                                        | 26705(815.50 MHz)<br>26740(819.00 MHz)<br>26775(822.50 MHz) | 3 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                        | 26715(816.50 MHz)<br>26740(819.00 MHz)<br>26765(821.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                        | 26740(819.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
| Radiated Spurious Emissions below 1GHz | 26740(819.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB                       |
| Radiated Spurious Emissions above 1GHz | 26697(814.70 MHz)<br>26740(819.00 MHz)<br>26783(823.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB                       |
|                                        | 26715(816.50 MHz)<br>26740(819.00 MHz)<br>26765(821.50 MHz) | 5 MHz             | QPSK                          | 1 RB                       |
|                                        | 26740(819.00 MHz)                                           | 10 MHz            | QPSK                          | 1 RB                       |
| Frequency Stability                    | 26740(819.00 MHz)                                           | 10 MHz            | QPSK                          | Full RB                    |

### 3.3.11 LTE Band 26 (824 MHz ~ 849 MHz)

| Test Item                  | Tested Channel                                              | Channel Bandwidth | Modulation                    | Mode                       |
|----------------------------|-------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power   | 26797(824.70 MHz)<br>26915(836.50 MHz)<br>27033(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 26805(825.50 MHz)<br>26915(836.50 MHz)<br>27025(847.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 26815(826.50 MHz)<br>26915(836.50 MHz)<br>27015(846.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 26840(829.00 MHz)<br>26915(836.50 MHz)<br>26990(844.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                            | 26865(831.50 MHz)<br>26915(836.50 MHz)<br>26965(841.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics | 26915(836.50 MHz)                                           | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio      | 26797(824.70 MHz)<br>26915(836.50 MHz)<br>27033(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                            | 26805(825.50 MHz)<br>26915(836.50 MHz)<br>27025(847.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                            | 26815(826.50 MHz)<br>26915(836.50 MHz)<br>27015(846.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                            | 26840(829.00 MHz)<br>26915(836.50 MHz)<br>26990(844.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                            | 26865(831.50 MHz)<br>26915(836.50 MHz)<br>26965(841.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                  | 26797(824.70 MHz)<br>26915(836.50 MHz)<br>27033(848.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                            | 26805(825.50 MHz)<br>26915(836.50 MHz)<br>27025(847.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                            | 26815(826.50 MHz)<br>26915(836.50 MHz)<br>27015(846.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                            | 26840(829.00 MHz)<br>26915(836.50 MHz)<br>26990(844.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                            | 26865(831.50 MHz)<br>26915(836.50 MHz)<br>26965(841.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |

| Test Item                              | Tested Channel                                              | Channel Bandwidth | Modulation | Mode            |
|----------------------------------------|-------------------------------------------------------------|-------------------|------------|-----------------|
| Conducted Spurious Emissions           | 26797(824.70 MHz)<br>26915(836.50 MHz)<br>27033(848.30 MHz) | 1.4 MHz           | QPSK       | 1 RB<br>Full RB |
|                                        | 26805(825.50 MHz)<br>26915(836.50 MHz)<br>27025(847.50 MHz) | 3 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        | 26815(826.50 MHz)<br>26915(836.50 MHz)<br>27015(846.50 MHz) | 5 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        | 26840(829.00 MHz)<br>26915(836.50 MHz)<br>26990(844.00 MHz) | 10 MHz            | QPSK       | 1 RB<br>Full RB |
|                                        | 26865(831.50 MHz)<br>26915(836.50 MHz)<br>26965(841.50 MHz) | 15 MHz            | QPSK       | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 26965(841.50 MHz)                                           | 15 MHz            | QPSK       | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 26797(824.70 MHz)<br>26915(836.50 MHz)<br>27033(848.30 MHz) | 1.4 MHz           | QPSK       | 1 RB            |
|                                        | 26815(826.50 MHz)<br>26915(836.50 MHz)<br>27015(846.50 MHz) | 5 MHz             | QPSK       | 1 RB            |
|                                        | 26865(831.50 MHz)<br>26915(836.50 MHz)<br>26965(841.50 MHz) | 15 MHz            | QPSK       | 1 RB            |
| Frequency Stability                    | 26865(831.50 MHz)<br>26965(841.50 MHz)                      | 15 MHz            | QPSK       | Full RB         |

### 3.3.12 LTE Band 30

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 27685(2307.50 MHz)<br>27710(2310.00 MHz)<br>27735(2312.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 27685(2307.50 MHz)<br>27710(2310.00 MHz)<br>27735(2312.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                               | 27685(2307.50 MHz)<br>27710(2310.00 MHz)<br>27735(2312.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions            | 27685(2307.50 MHz)<br>27710(2310.00 MHz)<br>27735(2312.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                                         | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
| Radiated Spurious Emissions below 1GHz  | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK                          | 1 RB                       |
| Radiated Spurious Emissions above 1GHz  | 27685(2307.50 MHz)<br>27710(2310.00 MHz)<br>27735(2312.50 MHz) | 5 MHz             | QPSK                          | 1 RB                       |
|                                         | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK                          | 1 RB                       |
| Frequency Stability                     | 27710(2310.00 MHz)                                             | 10 MHz            | QPSK                          | Full RB                    |

### 3.3.13 LTE Band 38

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                       | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|----------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 37775(2572.50 MHz)<br>38000(2595.00 MHz)<br>38225(2617.50 MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 37800(2575.00 MHz)<br>38000(2595.00 MHz)<br>38200(2615.00 MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 37825(2577.50 MHz)<br>38000(2595.00 MHz)<br>38175(2612.50 MHz) | 15 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 37850(2580.00 MHz)<br>38000(2595.00 MHz)<br>38150(2610.00 MHz) | 20 MHz            | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |

\* After technical evaluation, the verification data results of LTE B38 are covered by LTE B41.

### 3.3.14 LTE Band 41

| Test Item                               | Tx/Rx condition | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|-----------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | PC2/3 (1TX)     | 39675(2498.50 MHz)<br>40620(2593.00 MHz)<br>41565(2687.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         |                 | 39700(2501.00 MHz)<br>40620(2593.00 MHz)<br>41540(2685.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         |                 | 39725(2503.50 MHz)<br>40620(2593.00 MHz)<br>41515(2682.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         |                 | 39750(2506.00 MHz)<br>40620(2593.00 MHz)<br>41490(2680.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | PC2 (1TX)       | 40620(2593.00 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | PC2 (1TX)       | 39675(2498.50 MHz)<br>40620(2593.00 MHz)<br>41565(2687.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         |                 | 39700(2501.00 MHz)<br>40620(2593.00 MHz)<br>41540(2685.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         |                 | 39725(2503.50 MHz)<br>40620(2593.00 MHz)<br>41515(2682.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         |                 | 39750(2506.00 MHz)<br>40620(2593.00 MHz)<br>41490(2680.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                               | PC2 (1TX)       | 39675(2498.50 MHz)<br>40620(2593.00 MHz)<br>41565(2687.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         |                 | 39700(2501.00 MHz)<br>40620(2593.00 MHz)<br>41540(2685.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         |                 | 39725(2503.50 MHz)<br>40620(2593.00 MHz)<br>41515(2682.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                                         |                 | 39750(2506.00 MHz)<br>40620(2593.00 MHz)<br>41490(2680.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |

| Test Item                              | Tx/Rx condition | Tested Channel                                                 | Channel Bandwidth | Modulation | Mode            |
|----------------------------------------|-----------------|----------------------------------------------------------------|-------------------|------------|-----------------|
| Conducted Spurious Emissions           | PC2 (1TX)       | 39675(2498.50 MHz)<br>40620(2593.00 MHz)<br>41565(2687.50 MHz) | 5 MHz             | QPSK       | 1 RB<br>Full RB |
|                                        |                 | 39700(2501.00 MHz)<br>40620(2593.00 MHz)<br>41540(2685.00 MHz) | 10 MHz            | QPSK       | 1 RB<br>Full RB |
|                                        |                 | 39725(2503.50 MHz)<br>40620(2593.00 MHz)<br>41515(2682.50 MHz) | 15 MHz            | QPSK       | 1 RB<br>Full RB |
|                                        |                 | 39750(2506.00 MHz)<br>40620(2593.00 MHz)<br>41490(2680.00 MHz) | 20 MHz            | QPSK       | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | PC2 (1TX)       | 40620(2593.00 MHz)                                             | 20 MHz            | QPSK       | 1 RB            |
| Radiated Spurious Emissions above 1GHz | PC2 (1TX)       | 39675(2498.50 MHz)<br>40620(2593.00 MHz)<br>41565(2687.50 MHz) | 5 MHz             | QPSK       | 1 RB            |
|                                        |                 | 39750(2506.00 MHz)<br>40620(2593.00 MHz)<br>41490(2680.00 MHz) | 20 MHz            | QPSK       | 1 RB            |
| Frequency Stability                    | PC2 (1TX)       | 39750(2506.00 MHz)<br>41490(2680.00 MHz)                       | 20 MHz            | QPSK       | Full RB         |

### 3.3.15 LTE Band 42 (3.45 GHz ~ 3.55 GHz)

| Test Item                               | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 42115(3452.50 MHz)<br>42590(3500.00 MHz)<br>43065(3547.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 42140(3455.00 MHz)<br>42590(3500.00 MHz)<br>43040(3545.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 42165(3457.50 MHz)<br>42590(3500.00 MHz)<br>43015(3542.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 42190(3460.00 MHz)<br>42590(3500.00 MHz)<br>42990(3540.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 42590(3500.00 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 42115(3452.50 MHz)<br>42590(3500.00 MHz)<br>43065(3547.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42140(3455.00 MHz)<br>42590(3500.00 MHz)<br>43040(3545.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42165(3457.50 MHz)<br>42590(3500.00 MHz)<br>43015(3542.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42190(3460.00 MHz)<br>42590(3500.00 MHz)<br>42990(3540.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                               | 42115(3452.50 MHz)<br>42590(3500.00 MHz)<br>43065(3547.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42140(3455.00 MHz)<br>42590(3500.00 MHz)<br>43040(3545.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42165(3457.50 MHz)<br>42590(3500.00 MHz)<br>43015(3542.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42190(3460.00 MHz)<br>42590(3500.00 MHz)<br>42990(3540.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Conducted Spurious Emissions            | 42115(3452.50 MHz)<br>42590(3500.00 MHz)<br>43065(3547.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42140(3455.00 MHz)<br>42590(3500.00 MHz)<br>43040(3545.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42165(3457.50 MHz)<br>42590(3500.00 MHz)<br>43015(3542.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 42190(3460.00 MHz)<br>42590(3500.00 MHz)<br>42990(3540.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |

| Test Item                              | Tested Channel                                                 | Channel Bandwidth | Modulation | Mode    |
|----------------------------------------|----------------------------------------------------------------|-------------------|------------|---------|
| Radiated Spurious Emissions below 1GHz | 42590(3500.00 MHz)                                             | 5 MHz             | QPSK       | 1 RB    |
| Radiated Spurious Emissions above 1GHz | 42115(3452.50 MHz)<br>42590(3500.00 MHz)<br>43065(3547.50 MHz) | 5 MHz             | QPSK       | 1 RB    |
|                                        | 42190(3460.00 MHz)<br>42590(3500.00 MHz)<br>42990(3540.00 MHz) | 20 MHz            | QPSK       | 1 RB    |
|                                        | 42190(3460.00 MHz)<br>42990(3540.00 MHz)                       | 20 MHz            | QPSK       | Full RB |

### 3.3.16 LTE Band 66

| Test Item                               | Tested Channel                                                    | Channel Bandwidth | Modulation                    | Mode                       |
|-----------------------------------------|-------------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Equivalent Isotropically Radiated Power | 131979(1710.70 MHz)<br>132322(1745.00 MHz)<br>132665(1779.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 131987(1711.50 MHz)<br>132322(1745.00 MHz)<br>132657(1778.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 131997(1712.50 MHz)<br>132322(1745.00 MHz)<br>132647(1777.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 132022(1715.00 MHz)<br>132322(1745.00 MHz)<br>132622(1775.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 132047(1717.50 MHz)<br>132322(1745.00 MHz)<br>132597(1772.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                                         | 132072(1720.00 MHz)<br>132322(1745.00 MHz)<br>132572(1770.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics              | 132322(1745.00 MHz)                                               | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio                   | 131979(1710.70 MHz)<br>132322(1745.00 MHz)<br>132665(1779.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 131987(1711.50 MHz)<br>132322(1745.00 MHz)<br>132657(1778.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 131997(1712.50 MHz)<br>132322(1745.00 MHz)<br>132647(1777.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 132022(1715.00 MHz)<br>132322(1745.00 MHz)<br>132622(1775.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 132047(1717.50 MHz)<br>132322(1745.00 MHz)<br>132597(1772.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                                         | 132072(1720.00 MHz)<br>132322(1745.00 MHz)<br>132572(1770.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |

| Test Item                              | Tested Channel                                                    | Channel Bandwidth | Modulation                    | Mode            |
|----------------------------------------|-------------------------------------------------------------------|-------------------|-------------------------------|-----------------|
| Bandwidth                              | 131979(1710.70 MHz)<br>132322(1745.00 MHz)<br>132665(1779.30 MHz) | 1.4 MHz           | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 131987(1711.50 MHz)<br>132322(1745.00 MHz)<br>132657(1778.50 MHz) | 3 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 131997(1712.50 MHz)<br>132322(1745.00 MHz)<br>132647(1777.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 132022(1715.00 MHz)<br>132322(1745.00 MHz)<br>132622(1775.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 132047(1717.50 MHz)<br>132322(1745.00 MHz)<br>132597(1772.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
|                                        | 132072(1720.00 MHz)<br>132322(1745.00 MHz)<br>132572(1770.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB         |
| Conducted Spurious Emissions           | 131979(1710.70 MHz)<br>132322(1745.00 MHz)<br>132665(1779.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB<br>Full RB |
|                                        | 131987(1711.50 MHz)<br>132322(1745.00 MHz)<br>132657(1778.50 MHz) | 3 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 131997(1712.50 MHz)<br>132322(1745.00 MHz)<br>132647(1777.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB |
|                                        | 132022(1715.00 MHz)<br>132322(1745.00 MHz)<br>132622(1775.00 MHz) | 10 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 132047(1717.50 MHz)<br>132322(1745.00 MHz)<br>132597(1772.50 MHz) | 15 MHz            | QPSK                          | 1 RB<br>Full RB |
|                                        | 132072(1720.00 MHz)<br>132322(1745.00 MHz)<br>132572(1770.00 MHz) | 20 MHz            | QPSK                          | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 132665(1779.30 MHz)                                               | 1.4 MHz           | QPSK                          | 1 RB            |
| Radiated Spurious Emissions above 1GHz | 131979(1710.70 MHz)<br>132322(1745.00 MHz)<br>132665(1779.30 MHz) | 1.4 MHz           | QPSK                          | 1 RB            |
|                                        | 131997(1712.50 MHz)<br>132322(1745.00 MHz)<br>132647(1777.50 MHz) | 5 MHz             | QPSK                          | 1 RB            |
|                                        | 132072(1720.00 MHz)<br>132322(1745.00 MHz)<br>132572(1770.00 MHz) | 20 MHz            | QPSK                          | 1 RB            |
| Frequency Stability                    | 132072(1720.00 MHz)<br>132572(1770.00 MHz)                        | 20 MHz            | QPSK                          | Full RB         |

### 3.3.17 LTE Band 71

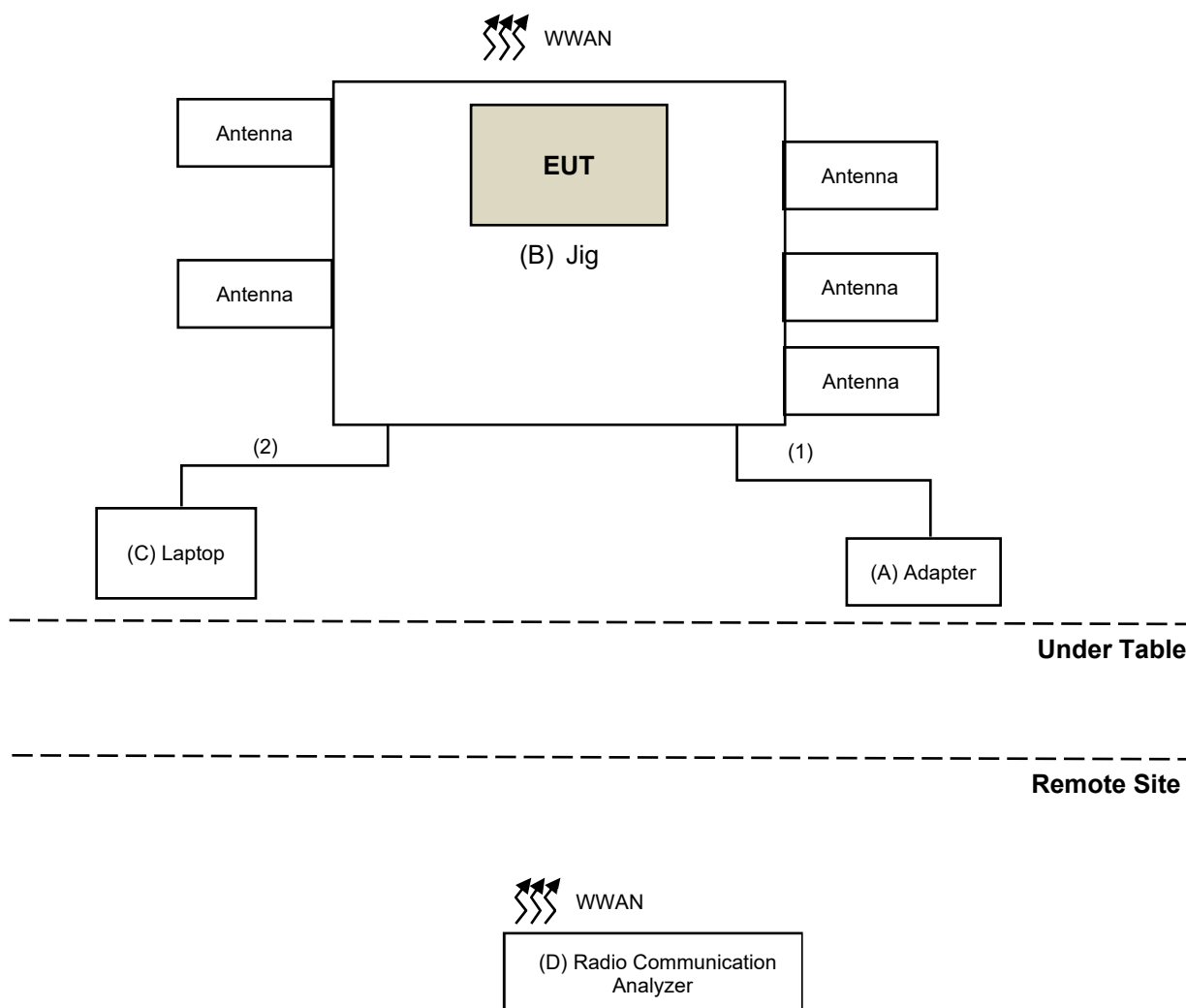
| Test Item                    | Tested Channel                                                 | Channel Bandwidth | Modulation                    | Mode                       |
|------------------------------|----------------------------------------------------------------|-------------------|-------------------------------|----------------------------|
| Effective Radiated Power     | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 133172(668.00 MHz)<br>133297(680.50 MHz)<br>133422(693.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 133197(670.50 MHz)<br>133297(680.50 MHz)<br>133397(690.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
|                              | 133222(673.00 MHz)<br>133297(680.50 MHz)<br>133372(688.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics   | 133297(680.50 MHz)                                             | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Peak to Average Ratio        | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                              | 133172(668.00 MHz)<br>133297(680.50 MHz)<br>133422(693.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                              | 133197(670.50 MHz)<br>133297(680.50 MHz)<br>133397(690.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
|                              | 133222(673.00 MHz)<br>133297(680.50 MHz)<br>133372(688.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB                       |
| Bandwidth                    | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz             | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                              | 133172(668.00 MHz)<br>133297(680.50 MHz)<br>133422(693.00 MHz) | 10 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                              | 133197(670.50 MHz)<br>133297(680.50 MHz)<br>133397(690.50 MHz) | 15 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
|                              | 133222(673.00 MHz)<br>133297(680.50 MHz)<br>133372(688.00 MHz) | 20 MHz            | QPSK / 16QAM / 64QAM / 256QAM | Full RB                    |
| Conducted Spurious Emissions | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz             | QPSK                          | 1 RB<br>Full RB            |
|                              | 133172(668.00 MHz)<br>133297(680.50 MHz)<br>133422(693.00 MHz) | 10 MHz            | QPSK                          | 1 RB<br>Full RB            |
|                              | 133197(670.50 MHz)<br>133297(680.50 MHz)<br>133397(690.50 MHz) | 15 MHz            | QPSK                          | 1 RB<br>Full RB            |
|                              | 133222(673.00 MHz)<br>133297(680.50 MHz)<br>133372(688.00 MHz) | 20 MHz            | QPSK                          | 1 RB<br>Full RB            |

| Test Item                              | Tested Channel                                                 | Channel Bandwidth | Modulation | Mode    |
|----------------------------------------|----------------------------------------------------------------|-------------------|------------|---------|
| Radiated Spurious Emissions below 1GHz | 133372(688.00 MHz)                                             | 20 MHz            | QPSK       | 1 RB    |
| Radiated Spurious Emissions above 1GHz | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz             | QPSK       | 1 RB    |
|                                        | 133222(673.00 MHz)<br>133297(680.50 MHz)<br>133372(688.00 MHz) | 20 MHz            | QPSK       | 1 RB    |
| Frequency Stability                    | 133222(673.00 MHz)<br>133372(688.00 MHz)                       | 20 MHz            | QPSK       | Full RB |

### 3.4 Test Program Used and Operation Descriptions

There is no need to controlling software during the test, and the EUT can be paired with the Radio Communication Analyzer to test the connection when it is powered on.

### 3.5 Connection Diagram of EUT and Peripheral Devices



### 3.6 Configuration of Peripheral Devices and Cable Connections

| ID | Product                      | Brand   | Model No.         | Serial No. | FCC ID | Remarks               |
|----|------------------------------|---------|-------------------|------------|--------|-----------------------|
| A  | Adapter                      | Frecom  | F24L15-120200SPAU | N/A        | N/A    | Supplied by applicant |
| B  | Jig                          | Compal  | ZYN8              | NA         | NA     | Supplied by applicant |
| C  | Laptop                       | Lenovo  | X260 4G           | N/A        | N/A    | Provided by Lab       |
| D  | Radio Communication Analyzer | Anritsu | MT8821C           | 6201462755 | N/A    | Provided by Lab       |

| ID | Cable Descriptions    | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks               |
|----|-----------------------|------|------------|--------------------|--------------|-----------------------|
| 1  | AC Cable              | 1    | 1          | No                 | 0            | Supplied by applicant |
| 2  | Type-C to USB A Cable | 1    | 1          | No                 | 0            | Provided by Lab       |

## 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

| Description<br>Manufacturer             | Model No.                        | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------------|----------------------------------|-------------------|--------------------|---------------------|
| Fixed Attenuator<br>Woken               | 00800A1K01A-10                   | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
| PXA Signal Analyzer<br>Keysight         | N9030B                           | MY57140953        | 2025/7/31          | 2026/7/30           |
| Radio Communication Analyzer<br>Anritsu | MT8821C                          | 6201462755        | 2025/4/8           | 2026/4/7            |
| Software<br>BV                          | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/3/20 ~ 2026/4/1

### 4.2 Modulation Characteristics

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.3 Peak to Average Ratio

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.4 Bandwidth

| Description<br>Manufacturer             | Model No.                        | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------------|----------------------------------|-------------------|--------------------|---------------------|
| Fixed Attenuator<br>Woken               | 00800A1K01A-10                   | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
| PXA Signal Analyzer<br>Keysight         | N9030B                           | MY57140953        | 2025/7/31          | 2026/7/30           |
| Radio Communication Analyzer<br>Anritsu | MT8821C                          | 6201462755        | 2025/4/8           | 2026/4/7            |
| Software<br>BV                          | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/3/20 ~ 2026/4/3

#### 4.5 Conducted Spurious Emissions

| Description<br>Manufacturer             | Model No.                        | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------------|----------------------------------|-------------------|--------------------|---------------------|
| Fixed Attenuator<br>Woken               | 00800A1K01A-10                   | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
| PXA Signal Analyzer<br>Keysight         | N9030B                           | MY57140953        | 2025/7/31          | 2026/7/30           |
| Radio Communication Analyzer<br>Anritsu | MT8821C                          | 6201462755        | 2025/4/8           | 2026/4/7            |
| Software<br>BV                          | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/3/24 ~ 2026/4/7

#### 4.6 Radiated Spurious Emissions below 1GHz

| Description<br>Manufacturer       | Model No.                    | Serial No.   | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------|------------------------------|--------------|--------------------|---------------------|
| Antenna Tower &Turn<br>BV ADT     | AT100                        | AT93021705   | N/A                | N/A                 |
| Bi_Log Antenna<br>Schwarzbeck     | VULB 9168                    | 9168-160     | 2025/9/16          | 2026/9/15           |
| Loop Antenna<br>TESEQ             | HLA 6121                     | 45745        | 2025/9/1           | 2026/8/31           |
| MXE EMI Receiver<br>Agilent       | N9038A                       | MY51210203   | 2025/8/27          | 2026/8/26           |
| Preamplifier<br>Agilent           | 8447D                        | 2944A10638   | 2025/4/27          | 2026/4/26           |
| Preamplifier<br>EMCI              | EMC001340                    | 980201       | 2025/9/21          | 2026/9/20           |
| RF Coaxial Cable<br>Woken         | 8D-FB                        | Cable-CH9-01 | 2025/4/27          | 2026/4/26           |
| Signal & Spectrum Analyzer<br>R&S | FSW43                        | 101582       | 2025/4/15          | 2026/4/14           |
| Software<br>BV ADT                | ADT_Radiated_<br>V7.6.15.9.5 | N/A          | N/A                | N/A                 |
| Turn Table<br>BV ADT              | TT100                        | TT93021705   | N/A                | N/A                 |
| Turn Table Controller<br>BV ADT   | SC100                        | SC93021705   | N/A                | N/A                 |

Notes:

1. The test was performed in HY - 966 chamber 4(Hwaya).
2. Tested Date: 2026/3/27

#### 4.7 Radiated Spurious Emissions above 1GHz

| Description<br>Manufacturer           | Model No.                         | Serial No.                      | Calibrated<br>Date | Calibrated<br>Until |
|---------------------------------------|-----------------------------------|---------------------------------|--------------------|---------------------|
| Antenna Tower & Turn<br>BV ADT        | AT100                             | AT93021705                      | N/A                | N/A                 |
| Boresight antenna tower fixture<br>BV | BAF-02                            | 5                               | N/A                | N/A                 |
| Horn Antenna<br>Schwarzbeck           | BBHA 9120D                        | 9120D-1169                      | 2025/11/9          | 2026/11/8           |
|                                       | BBHA 9170                         | 9170-480                        | 2025/11/9          | 2026/11/8           |
|                                       |                                   | BBHA9170243                     | 2025/11/9          | 2026/11/8           |
| MXE EMI Receiver<br>Agilent           | N9038A                            | MY51210203                      | 2025/8/27          | 2026/8/26           |
| Preamplifier<br>Agilent               | 8449B                             | 3008A02367                      | 2026/1/3           | 2027/1/2            |
| Preamplifier<br>EMCI                  | EMC 184045                        | 980116                          | 2025/9/21          | 2026/9/20           |
| RF Coaxial Cable<br>EMCI              | EMC102-KM-KM-600                  | 150928                          | 2025/6/30          | 2026/6/29           |
|                                       | EMC102-KM-KM-3000                 | 150929                          | 2025/6/30          | 2026/6/29           |
| RF Coaxial Cable<br>HUBER+SUHNER      | SUCOFLEX 104                      | CABLE-CH9-(250795/4)            | 2026/1/3           | 2027/1/2            |
| RF Coaxial Cable<br>HUBER+SUHNER&EMCI | SUCOFLEX 104&<br>EMC104-SM-SM8000 | CABLE-CH9-02<br>(248780+171006) | 2026/1/3           | 2027/1/2            |
| Signal & Spectrum Analyzer<br>R&S     | FSW43                             | 101582                          | 2025/4/15          | 2026/4/14           |
| Software<br>BV ADT                    | ADT_Radiated_<br>V7.6.15.9.5      | N/A                             | N/A                | N/A                 |
| Turn Table<br>BV ADT                  | TT100                             | TT93021705                      | N/A                | N/A                 |
| Turn Table Controller<br>BV ADT       | SC100                             | SC93021705                      | N/A                | N/A                 |

**Notes:**

1. The test was performed in HY - 966 chamber 4(Hwaya).
2. Tested Date: 2026/3/19 ~ 2026/3/20

#### 4.8 Frequency Stability

| Description<br>Manufacturer              | Model No.                        | Serial No.        | Calibrated<br>Date | Calibrated<br>Until |
|------------------------------------------|----------------------------------|-------------------|--------------------|---------------------|
| 3-channel DC power supply<br>OWON        | ODP3033                          | ODP30332128138    | N/A                | N/A                 |
| Digital Multimeter<br>Fluke              | 8050A                            | 4660081           | 2025/6/6           | 2026/6/5            |
| Fixed Attenuator<br>Woken                | 00800A1K01A-10                   | 00800A1K01A-10-01 | 2025/5/23          | 2026/5/22           |
| Signal & Spectrum Analyzer<br>R&S        | FSV3044                          | 101504            | 2025/6/18          | 2026/6/17           |
| Software<br>BV                           | ADT_RF Test Software<br>V7.6.5.4 | N/A               | N/A                | N/A                 |
| Temperature & Humidity Chamber<br>Terchy | MHU-225AU                        | 920842            | 2025/6/25          | 2026/6/24           |

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/4/2

## 5 Limits of Test Items

### 5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

#### For LTE Band 5, LTE Band 26 (824 MHz ~ 849 MHz):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

#### For LTE Band 2, LTE Band 25:

Mobile and portable stations are limited to 2 watts EIRP.

#### For LTE Band 14:

Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP.

#### For LTE Band 26 (814 MHz ~ 824 MHz):

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw) ERP.

#### For LTE Band 12, LTE Band 17, LTE Band 71:

Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

#### For LTE Band 13:

Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands and fixed stations transmitting in the 787-788 MHz and 805-806 MHz bands are limited to 30 watts ERP.

#### For LTE Band 4, LTE Band 66:

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

#### For LTE Band 30:

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

#### For LTE Band 7, LTE Band 38, LTE Band 41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

#### For LTE Band 42 (3.45 GHz ~ 3.55 GHz):

Mobile devices are limited to 1Watt (30 dBm) EIRP.

### 5.2 Modulation Characteristics

A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

### 5.3 Peak to Average Ratio

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 5.4 Bandwidth

According to FCC 47 CFR part 2.1049, the occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.

## 5.5 Conducted Spurious Emissions

### For LTE Band 2, LTE Band 5, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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.

### For LTE Band 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than  $65 + 10 \log(P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.
- (2) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least  $43 + 10 \log(P)$  dB.

According to FCC 47 CFR part 90.543 (f), for operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to  $-70$  dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and  $-80$  dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

### For LTE Band 26 (814 MHz ~ 824 MHz):

According to FCC 47 CFR part 90.691 shall be tested the emission masks. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 300 Hz for offset less than 37.5 kHz from channel edge and RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.

### For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

### For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 47 CFR part 27.53(c)(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $65 + 10 \log(P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to  $-70$  dBW/MHz (EIRP). The limit of emissions is equal to  $-40$  dBm.

### For LTE Band 4, LTE Band 66:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log(P)$  dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

#### For LTE Band 30:

According to FCC 47 CFR part 27.53(a)(4), for mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than:  $43 + 10 \log (P)$  dB on all frequencies between 2305 MHz and 2320 MHz and on all frequencies between 2345 MHz and 2360 MHz that are outside the licensed band(s) of operation, not less than  $55 + 10 \log (P)$  dB on all frequencies between 2320 MHz and 2324 MHz and on all frequencies between 2341 MHz and 2345 MHz, not less than  $61 + 10 \log (P)$  dB on all frequencies between 2324 MHz and 2328 MHz and on all frequencies between 2337 MHz and 2341 MHz, and not less than  $67 + 10 \log (P)$  dB on all frequencies between 2328 MHz and 2337 MHz;
- (ii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2300 MHz and 2305 MHz,  $55 + 10 \log (P)$  dB on all frequencies between 2296 MHz and 2300 MHz,  $61 + 10 \log (P)$  dB on all frequencies between 2292 MHz and 2296 MHz,  $67 + 10 \log (P)$  dB on all frequencies between 2288 MHz and 2292 MHz, and  $70 + 10 \log (P)$  dB below 2288 MHz;
- (iii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2360 MHz and 2365 MHz, and not less than  $70 + 10 \log (P)$  dB above 2365 MHz.
- (iv) Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305 MHz, 2310 MHz, 2315 MHz, 2320 MHz, 2345 MHz, 2350 MHz, 2355 MHz, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

#### For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4) regulations, any transmit power outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

#### For LTE Band 42 (3.45 GHz ~ 3.55 GHz):

According to FCC 47 CFR part 27.53(n), for operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed  $-13$  dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

## 5.6 Radiated Spurious Emissions below 1GHz

### For LTE Band 2, LTE Band 5, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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.

### For LTE Band 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log(P)$  dB.

### For LTE Band 26 (814 MHz ~ 824 MHz):

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 100 kHz for offset greater than 37.5 kHz from channel edge is allowed.

### For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. The limit of emissions is equal to  $-13$  dBm.

### For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB. The limit of emissions is equal to  $-13$  dBm.

### For LTE Band 4, LTE Band 66:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log(P)$  dB. The limit of emission is equal to  $-13$  dBm.

### For LTE Band 30:

According to FCC 47 CFR part 27.53(a)(4)(ii)(iii), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $70 + 10 \log(P)$  dB. The limit of emission is equal to  $-40$  dBm.

### For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log(P)$  dB. The emission limit equal to  $-25$  dBm.

### For LTE Band 42 (3.45 GHz ~ 3.55 GHz):

According to FCC 47 CFR part 27.53(n), for operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed  $-13$  dBm/MHz.

## 5.7 Radiated Spurious Emissions above 1GHz

### For LTE Band 2, LTE Band 5, LTE Band 25, LTE Band 26 (824 MHz ~ 849 MHz):

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.

### For LTE Band 14:

According to FCC 47 CFR part 90.543 (e), for operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log(P)$  dB.

According to FCC 47 CFR part 90.543 (f), for operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to  $-70$  dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and  $-80$  dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

### For LTE Band 26 (814 MHz ~ 824 MHz):

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For §90.691(a), RBW = 100 kHz for offset greater than 37.5 kHz from channel edge is allowed.

### For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 47 CFR part 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. The limit of emissions is equal to  $-13$  dBm.

### For LTE Band 13:

According to FCC 47 CFR part 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB. The limit of emissions is equal to  $-13$  dBm.

For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to  $-70$  dBW/MHz (EIRP). The limit of emissions is equal to  $-40$  dBm.

### For LTE Band 4, LTE Band 66:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log(P)$  dB. The limit of emission is equal to  $-13$  dBm.

### For LTE Band 30:

According to FCC 47 CFR part 27.53(a)(4)(ii)(iii), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $70 + 10 \log(P)$  dB. The limit of emission is equal to  $-40$  dBm.

### For LTE Band 7, LTE Band 38, LTE Band 41:

According to FCC 47 CFR part 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $55 + 10 \log(P)$  dB. The emission limit equal to  $-25$  dBm.

### For LTE Band 42 (3.45 GHz ~ 3.55 GHz):

According to FCC 47 CFR part 27.53(n), for operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed  $-13$  dBm/MHz.

## 5.8 Frequency Stability

**For LTE Band 5, LTE Band 26 (814 MHz ~ 824 MHz), LTE Band 26 (824 MHz ~ 849 MHz):**

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

**For LTE Band 2, LTE Band 4, LTE Band 7, LTE Band 12, LTE Band 13, LTE Band 17, LTE Band 25, LTE Band 30, LTE Band 38, LTE Band 41, LTE Band 42 (3.45 GHz ~ 3.55 GHz), LTE Band 66, LTE Band 71:**

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (authorized frequency block).

**For LTE Band 14:**

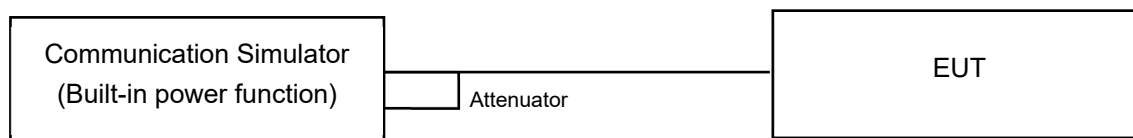
The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

## 6 Test Arrangements

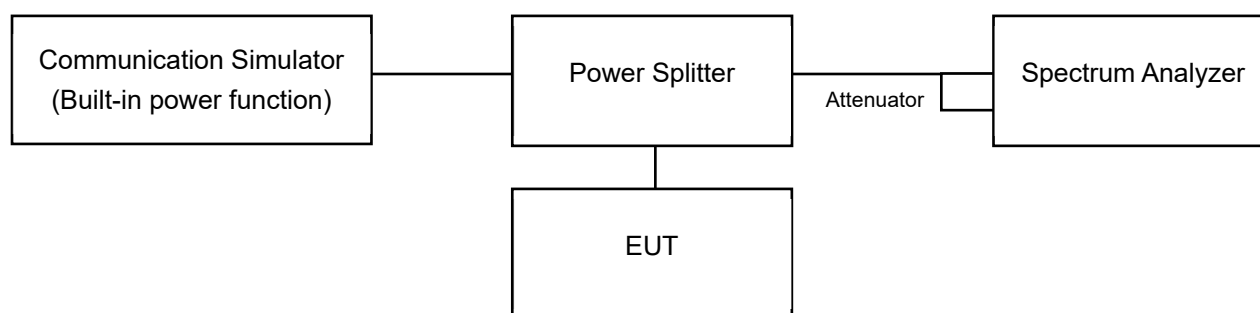
### 6.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

#### 6.1.1 Test Setup

##### Conducted Power Measurement:



#### For measuring output power using spectrum



#### 6.1.2 Test Procedure

##### Conducted Power Measurement:

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology. The average (rms) power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

#### For measuring output power using spectrum

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology and link to spectrum analyzer measurements. Set the EUT to transmit under low, middle and high channel and record the power level shown on spectrum analyzer. Power measurements use detector average (rms).

#### For measuring output power using spectrum

Measurement method refers to ANSI C63.26 section 5.2.4.4.

- Set span to  $2 \times$  to  $3 \times$  the OBW.
- Set RBW = 1% to 5% of the OBW.
- Set VBW  $\geq 3 \times$  RBW.
- Set number of measurement points in sweep  $\geq 2 \times$  span / RBW.
- Set Sweep time = auto-couple.
- Detector = power averaging (rms).
- Set sweep trigger to "free run."
- Trace average at least 100 traces in power averaging (rms) mode.
- Use the Band/Channel Power function to determine the integrated power per 5 MHz bandwidth, according to the 47 CFR FCC Part 27 section 27.53(a)(3)(i) standard.
- If Duty cycle < 98%, Add  $10 \log (1/\text{duty cycle})$  to the measured power level to compute the average power during continuous transmission.

## Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$

$$\text{ERP} = P_{\text{Meas}} + G_T - 2.15$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively

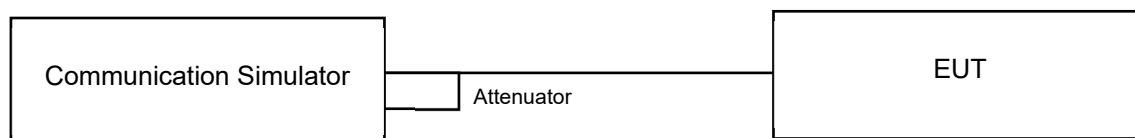
(expressed in the same units as  $P_{\text{Meas}}$ , e.g., dBm or dBW)

$P_{\text{Meas}}$  measured transmitter output power or PSD, in dBm or dBW

$G_T$  gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

## 6.2 Modulation Characteristics

### 6.2.1 Test Setup

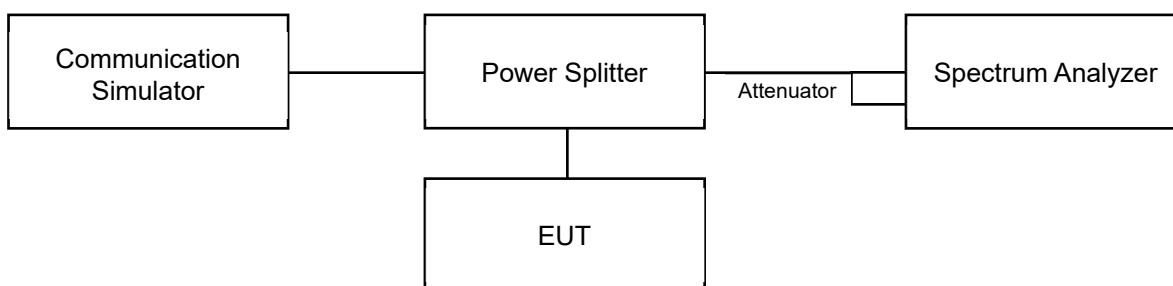


### 6.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, the frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

## 6.3 Peak to Average Ratio

### 6.3.1 Test Setup

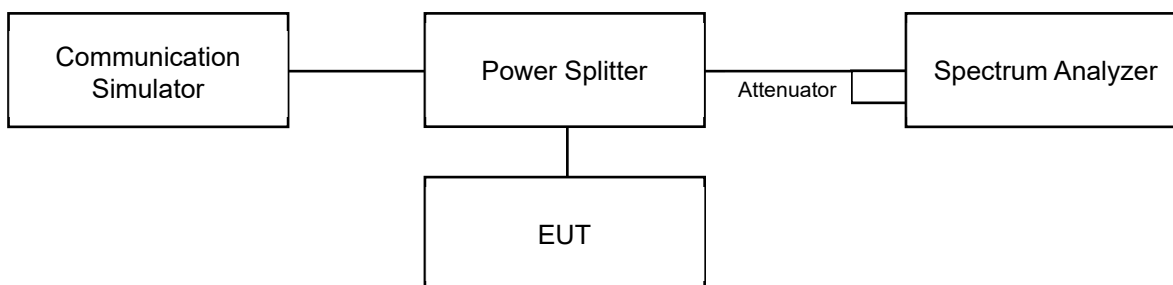


### 6.3.2 Test Procedure

- Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

## 6.4 Bandwidth

### 6.4.1 Test Setup



### 6.4.2 Test Procedure

For the 26 dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

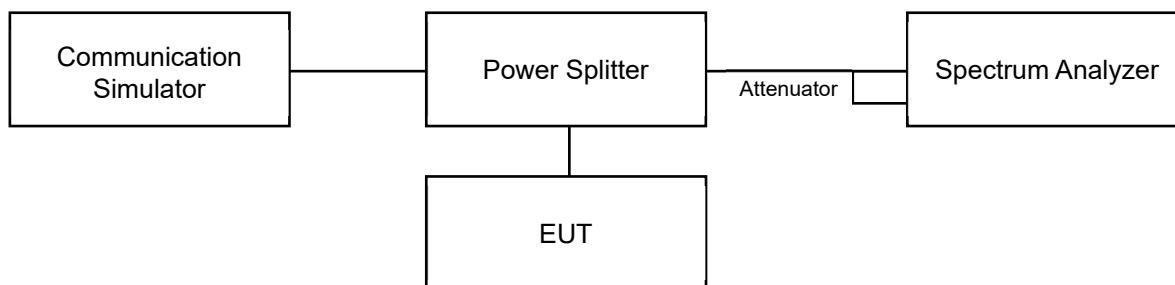
- a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- f. Determine the following reference values: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- g. Determine the “-X dB amplitude” as equal to (Reference Value - X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
- h. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB amplitude” determined in step f). If a marker is below this “-X dB amplitude” value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers.
- i. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

For the occupied bandwidth measurement method, please refer to section 5.4.4 of ANSI C63.26.

- a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- d. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- e. If the instrument does not have a 99% OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5% of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5% of the total is reached and record that frequency as the upper OBW frequency. The 99% power OBW can be determined by computing the difference these two frequencies.
- f. The OBW shall be reported by providing plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

## 6.5 Conducted Spurious Emissions

### 6.5.1 Test Setup



### 6.5.2 Test Procedure

- Measurement refer to ANSI C63.26 section 5.7.
- All measurements were done at 3 channels: low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. 10 dB attenuation pad is connected with spectrum.
- The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
- The fundamental frequency below 1 GHz, the spectrum set RBW  $\geq$  100 kHz, VBW  $\geq$  3 x RBW, Detector = Average.
- Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
- For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.  
For example: Where Reference RBW = 1 MHz and a smaller RBW = 100 kHz is used, worst-case integrated BW power = [Max Measured Value (dBm) with RBW = 100 kHz] +  $10 \cdot \log(1000/100)$ . To compensate for this integration before comparison to the value, the adjusted reference level offset was increase by 10 dB accordingly.
- Record the maximum power value test plot.

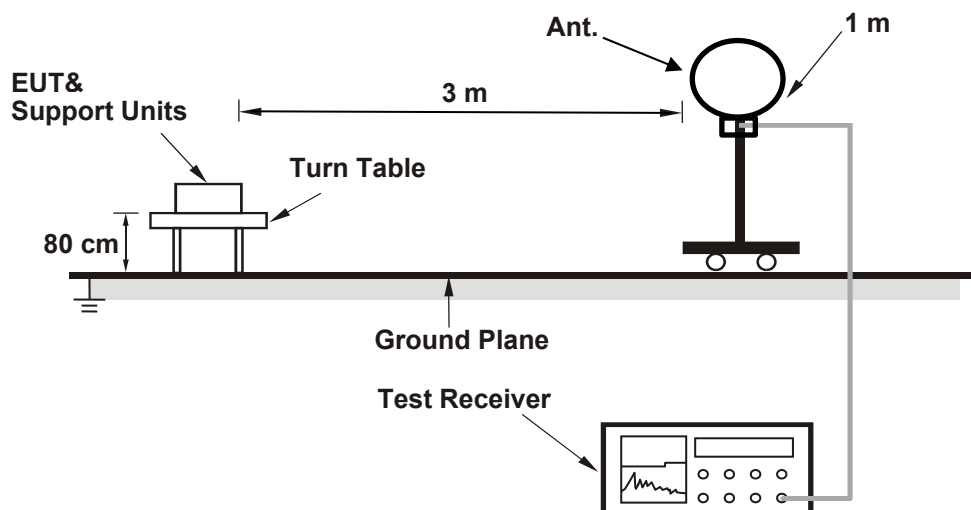
#### For Emission Mask:

- Measurement refer to ANSI C63.26 section 5.7.
- All measurements were done at 2 channels: low and high operational frequency range.
- Accoding to FCC 47 CFR part 90.691(a), the spectrum set RBW = 300 Hz for offset less than 37.5 kHz from channel edge and RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.
- For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.  
For example: Where Reference RBW = 1 MHz and a smaller RBW = 100 kHz is used, worst-case integrated BW power = [Max Measured Value (dBm) with RBW = 100 kHz] +  $10 \cdot \log(1000/100)$ . To compensate for this integration before comparison to the value, the adjusted reference level offset was increase by 10 dB accordingly.
- Record the maximum power value test plot.

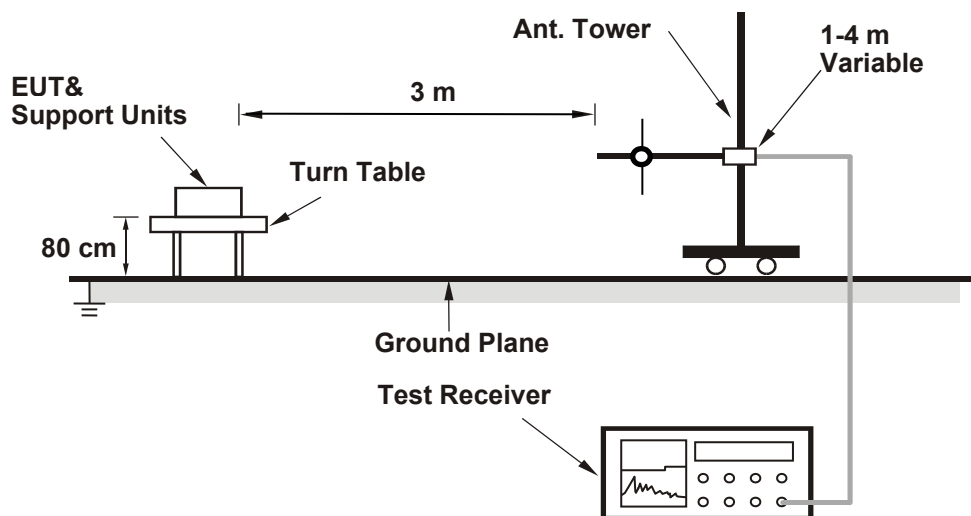
## 6.6 Radiated Spurious Emissions below 1GHz

### 6.6.1 Test Setup

#### For Radiated emission below 30 MHz



#### For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

## 6.6.2 Test Procedure

The EUT is configured to set data modulation and maximum power using WWAN technology.

- a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following ANSI C63.26 section 5.5 and 5.2.7
- e.  $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
- f.  $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

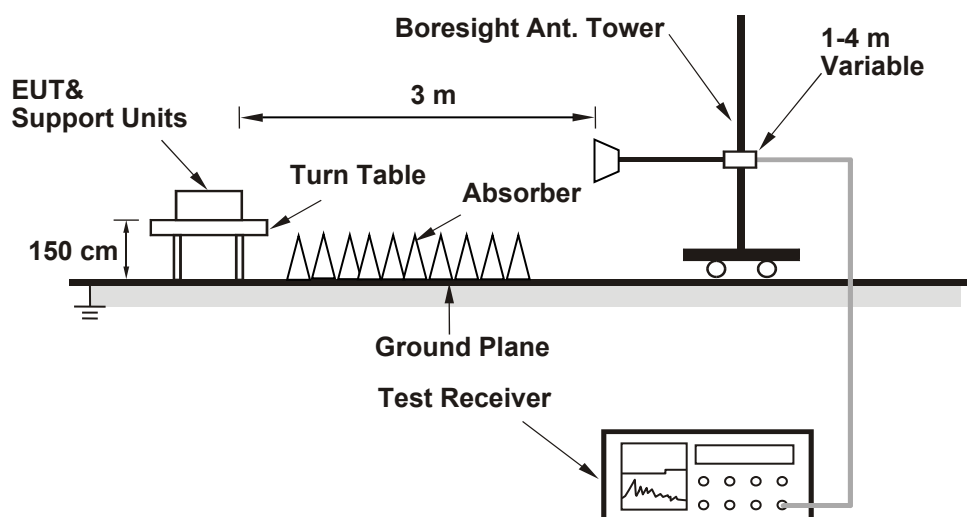
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.
2. The amplitude of spurious emissions in the range 9 kHz to 30 MHz which are attenuated more than 20 dB below the permissible value need not be reported.

## 6.7 Radiated Spurious Emissions above 1GHz

### 6.7.1 Test Setup

For radiated emission above 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 6.7.2 Test Procedure

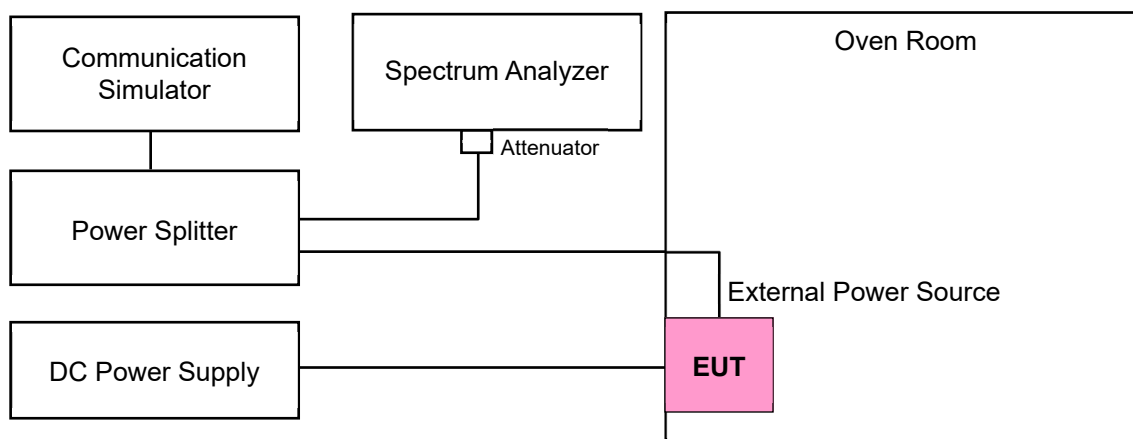
The EUT is configured to set data modulation and maximum power using WWAN technology.

- In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- Following ANSI C63.26 section 5.5 and 5.2.7
- $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
- $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.

## 6.8 Frequency Stability

### 6.8.1 Test Setup



### 6.8.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the  $\pm 0.5^{\circ}\text{C}$  during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

Note: The frequency error was recorded frequency error from the communication simulator.

## 7 Test Results of Test Item

### 7.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

|                           |              |            |               |
|---------------------------|--------------|------------|---------------|
| Environmental Conditions: | 23°C, 62% RH | Tested By: | Charles Hsiao |
|---------------------------|--------------|------------|---------------|

#### 7.1.1 LTE Band 2

##### LTE Band 2, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 18607                          | CH 18900 | CH 19193   |
|            |         |           | 1850.7 MHz                        | 1880 MHz | 1909.3 MHz |
| QPSK       | 1       | 0         | 23.62                             | 23.68    | 23.53      |
|            | 1       | 2         | 23.71                             | 23.77    | 23.61      |
|            | 1       | 5         | 23.51                             | 23.65    | 23.59      |
|            | 3       | 0         | 22.63                             | 22.61    | 22.56      |
|            | 3       | 1         | 22.74                             | 22.78    | 22.77      |
|            | 3       | 3         | 22.77                             | 22.79    | 22.70      |
|            | 6       | 0         | 22.65                             | 22.70    | 22.63      |
| 16QAM      | 1       | 0         | 22.55                             | 22.70    | 22.53      |
|            | 1       | 2         | 22.73                             | 22.82    | 22.71      |
|            | 1       | 5         | 22.50                             | 22.57    | 22.57      |
|            | 3       | 0         | 21.51                             | 21.63    | 21.56      |
|            | 3       | 1         | 21.77                             | 21.70    | 21.76      |
|            | 3       | 3         | 21.80                             | 21.77    | 21.80      |
|            | 6       | 0         | 21.50                             | 21.73    | 21.66      |
| 64QAM      | 1       | 0         | 21.51                             | 21.63    | 21.55      |
|            | 1       | 2         | 21.55                             | 21.75    | 21.63      |
|            | 1       | 5         | 21.50                             | 21.60    | 21.56      |
|            | 3       | 0         | 20.54                             | 20.54    | 20.58      |
|            | 3       | 1         | 20.57                             | 20.65    | 20.67      |
|            | 3       | 3         | 20.57                             | 20.69    | 20.53      |
|            | 6       | 0         | 20.59                             | 20.54    | 20.54      |
| 256QAM     | 1       | 0         | 18.54                             | 18.74    | 18.51      |
|            | 1       | 2         | 18.65                             | 18.86    | 18.69      |
|            | 1       | 5         | 18.53                             | 18.61    | 18.55      |
|            | 3       | 0         | 18.80                             | 18.91    | 18.79      |
|            | 3       | 1         | 18.84                             | 19.00    | 18.90      |
|            | 3       | 3         | 18.94                             | 19.03    | 18.92      |
|            | 6       | 0         | 18.89                             | 18.90    | 18.80      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.56                           | 23.77                           | 25.76                    | 26.97                    | 33.01                  |
| 16QAM      | 21.50                           | 22.82                           | 24.70                    | 26.02                    | 33.01                  |
| 64QAM      | 20.53                           | 21.75                           | 23.73                    | 24.95                    | 33.01                  |
| 256QAM     | 18.51                           | 19.03                           | 21.71                    | 22.23                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

## LTE Band 2, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 18615                          | CH 18900 | CH 19185   |
|            |         |           | 1851.5 MHz                        | 1880 MHz | 1908.5 MHz |
| QPSK       | 1       | 0         | 23.58                             | 23.65    | 23.63      |
|            | 1       | 7         | 23.72                             | 23.72    | 23.72      |
|            | 1       | 14        | 23.54                             | 23.64    | 23.52      |
|            | 8       | 0         | 22.57                             | 22.64    | 22.60      |
|            | 8       | 3         | 22.75                             | 22.77    | 22.75      |
|            | 8       | 7         | 22.84                             | 22.78    | 22.82      |
|            | 15      | 0         | 22.66                             | 22.80    | 22.62      |
| 16QAM      | 1       | 0         | 22.59                             | 22.70    | 22.65      |
|            | 1       | 7         | 22.67                             | 22.74    | 22.64      |
|            | 1       | 14        | 22.54                             | 22.67    | 22.57      |
|            | 8       | 0         | 21.57                             | 21.50    | 21.66      |
|            | 8       | 3         | 21.54                             | 21.72    | 21.74      |
|            | 8       | 7         | 21.77                             | 21.94    | 21.77      |
|            | 15      | 0         | 21.70                             | 21.83    | 21.66      |
| 64QAM      | 1       | 0         | 21.58                             | 21.66    | 21.58      |
|            | 1       | 7         | 21.58                             | 21.70    | 21.56      |
|            | 1       | 14        | 21.50                             | 21.63    | 21.57      |
|            | 8       | 0         | 20.57                             | 20.54    | 20.59      |
|            | 8       | 3         | 20.66                             | 20.69    | 20.71      |
|            | 8       | 7         | 20.50                             | 20.67    | 20.62      |
|            | 15      | 0         | 20.62                             | 20.57    | 20.54      |
| 256QAM     | 1       | 0         | 18.62                             | 18.72    | 18.55      |
|            | 1       | 7         | 18.64                             | 18.84    | 18.69      |
|            | 1       | 14        | 18.53                             | 18.87    | 18.58      |
|            | 8       | 0         | 18.85                             | 18.86    | 18.75      |
|            | 8       | 3         | 18.83                             | 18.93    | 18.98      |
|            | 8       | 7         | 18.87                             | 19.01    | 19.05      |
|            | 15      | 0         | 18.85                             | 18.90    | 18.76      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.57                           | 23.72                           | 25.77                    | 26.92                    | 33.01                  |
| 16QAM        | 21.50                           | 22.74                           | 24.70                    | 25.94                    | 33.01                  |
| 64QAM        | 20.50                           | 21.70                           | 23.70                    | 24.90                    | 33.01                  |
| 256QAM       | 18.53                           | 19.05                           | 21.73                    | 22.25                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

## LTE Band 2, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 18625                          | CH 18900 | CH 19175   |
|            |         |           | 1852.5 MHz                        | 1880 MHz | 1907.5 MHz |
| QPSK       | 1       | 0         | 23.50                             | 23.61    | 23.63      |
|            | 1       | 12        | 23.66                             | 23.74    | 23.59      |
|            | 1       | 24        | 23.54                             | 23.64    | 23.58      |
|            | 12      | 0         | 22.54                             | 22.69    | 22.52      |
|            | 12      | 6         | 22.65                             | 22.86    | 22.63      |
|            | 12      | 13        | 22.68                             | 22.89    | 22.81      |
|            | 25      | 0         | 22.71                             | 22.66    | 22.63      |
| 16QAM      | 1       | 0         | 22.58                             | 22.60    | 22.53      |
|            | 1       | 12        | 22.53                             | 22.62    | 22.69      |
|            | 1       | 24        | 22.59                             | 22.60    | 22.57      |
|            | 12      | 0         | 21.65                             | 21.75    | 21.57      |
|            | 12      | 6         | 21.84                             | 21.75    | 21.63      |
|            | 12      | 13        | 21.75                             | 21.89    | 21.82      |
|            | 25      | 0         | 21.65                             | 21.59    | 21.68      |
| 64QAM      | 1       | 0         | 21.54                             | 21.63    | 21.51      |
|            | 1       | 12        | 21.58                             | 21.74    | 21.50      |
|            | 1       | 24        | 21.58                             | 21.75    | 21.64      |
|            | 12      | 0         | 20.52                             | 20.55    | 20.50      |
|            | 12      | 6         | 20.50                             | 20.66    | 20.56      |
|            | 12      | 13        | 20.52                             | 20.77    | 20.63      |
|            | 25      | 0         | 20.58                             | 20.62    | 20.67      |
| 256QAM     | 1       | 0         | 18.50                             | 18.70    | 18.74      |
|            | 1       | 12        | 18.61                             | 18.82    | 18.66      |
|            | 1       | 24        | 18.45                             | 18.67    | 18.54      |
|            | 12      | 0         | 18.95                             | 18.87    | 18.87      |
|            | 12      | 6         | 18.89                             | 18.90    | 18.83      |
|            | 12      | 13        | 18.87                             | 19.03    | 18.95      |
|            | 25      | 0         | 18.91                             | 19.03    | 18.84      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.52                           | 23.74                           | 25.72                    | 26.94                    | 33.01                  |
| 16QAM      | 21.57                           | 22.69                           | 24.77                    | 25.89                    | 33.01                  |
| 64QAM      | 20.50                           | 21.75                           | 23.70                    | 24.95                    | 33.01                  |
| 256QAM     | 18.45                           | 19.03                           | 21.65                    | 22.23                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 2, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 18650                          | CH 18900 | CH 19150 |
|            |         |           | 1855 MHz                          | 1880 MHz | 1905 MHz |
| QPSK       | 1       | 0         | 23.60                             | 23.65    | 23.58    |
|            | 1       | 24        | 23.56                             | 23.82    | 23.60    |
|            | 1       | 49        | 23.52                             | 23.60    | 23.55    |
|            | 25      | 0         | 22.50                             | 22.64    | 22.52    |
|            | 25      | 12        | 22.65                             | 22.71    | 22.75    |
|            | 25      | 25        | 22.71                             | 22.80    | 22.71    |
|            | 50      | 0         | 22.65                             | 22.68    | 22.72    |
| 16QAM      | 1       | 0         | 22.52                             | 22.65    | 22.53    |
|            | 1       | 24        | 22.56                             | 22.65    | 22.62    |
|            | 1       | 49        | 22.51                             | 22.55    | 22.53    |
|            | 25      | 0         | 21.54                             | 21.59    | 21.55    |
|            | 25      | 12        | 21.68                             | 21.86    | 21.61    |
|            | 25      | 25        | 21.63                             | 21.69    | 21.80    |
|            | 50      | 0         | 21.57                             | 21.62    | 21.67    |
| 64QAM      | 1       | 0         | 21.51                             | 21.68    | 21.56    |
|            | 1       | 24        | 21.57                             | 21.84    | 21.52    |
|            | 1       | 49        | 21.58                             | 21.72    | 21.57    |
|            | 25      | 0         | 20.58                             | 20.65    | 20.52    |
|            | 25      | 12        | 20.65                             | 20.59    | 20.58    |
|            | 25      | 25        | 20.59                             | 20.68    | 20.67    |
|            | 50      | 0         | 20.53                             | 20.65    | 20.53    |
| 256QAM     | 1       | 0         | 18.54                             | 18.61    | 18.59    |
|            | 1       | 24        | 18.64                             | 18.82    | 18.76    |
|            | 1       | 49        | 18.55                             | 18.67    | 18.60    |
|            | 25      | 0         | 18.78                             | 18.89    | 18.79    |
|            | 25      | 12        | 18.90                             | 18.87    | 18.90    |
|            | 25      | 25        | 18.90                             | 19.09    | 18.92    |
|            | 50      | 0         | 18.86                             | 18.99    | 18.91    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.50                           | 23.82                           | 25.70                    | 27.02                    | 33.01                  |
| 16QAM      | 21.54                           | 22.65                           | 24.74                    | 25.85                    | 33.01                  |
| 64QAM      | 20.52                           | 21.84                           | 23.72                    | 25.04                    | 33.01                  |
| 256QAM     | 18.54                           | 19.09                           | 21.74                    | 22.29                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 2, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 18675                          | CH 18900 | CH 19125   |
|            |         |           | 1857.5 MHz                        | 1880 MHz | 1902.5 MHz |
| QPSK       | 1       | 0         | 23.56                             | 23.73    | 23.56      |
|            | 1       | 37        | 23.69                             | 23.71    | 23.63      |
|            | 1       | 74        | 23.53                             | 23.66    | 23.58      |
|            | 36      | 0         | 22.61                             | 22.61    | 22.50      |
|            | 36      | 19        | 22.62                             | 22.79    | 22.74      |
|            | 36      | 39        | 22.78                             | 22.79    | 22.71      |
|            | 75      | 0         | 22.68                             | 22.79    | 22.66      |
| 16QAM      | 1       | 0         | 22.55                             | 22.54    | 22.60      |
|            | 1       | 37        | 22.56                             | 22.81    | 22.63      |
|            | 1       | 74        | 22.57                             | 22.81    | 22.70      |
|            | 36      | 0         | 21.59                             | 21.78    | 21.66      |
|            | 36      | 19        | 21.61                             | 21.76    | 21.75      |
|            | 36      | 39        | 21.77                             | 21.85    | 21.76      |
|            | 75      | 0         | 21.52                             | 21.63    | 21.57      |
| 64QAM      | 1       | 0         | 21.50                             | 21.50    | 21.50      |
|            | 1       | 37        | 21.53                             | 21.67    | 21.50      |
|            | 1       | 74        | 21.56                             | 21.86    | 21.52      |
|            | 36      | 0         | 20.52                             | 20.60    | 20.56      |
|            | 36      | 19        | 20.57                             | 20.67    | 20.51      |
|            | 36      | 39        | 20.55                             | 20.74    | 20.66      |
|            | 75      | 0         | 20.55                             | 20.65    | 20.46      |
| 256QAM     | 1       | 0         | 18.71                             | 18.81    | 18.75      |
|            | 1       | 37        | 18.69                             | 18.83    | 18.65      |
|            | 1       | 74        | 18.59                             | 18.76    | 18.58      |
|            | 36      | 0         | 18.78                             | 18.94    | 18.72      |
|            | 36      | 19        | 18.87                             | 18.97    | 18.86      |
|            | 36      | 39        | 18.94                             | 19.06    | 18.92      |
|            | 75      | 0         | 18.83                             | 18.89    | 18.97      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.50                           | 23.73                           | 25.70                    | 26.93                    | 33.01                  |
| 16QAM        | 21.52                           | 22.81                           | 24.72                    | 26.01                    | 33.01                  |
| 64QAM        | 20.46                           | 21.86                           | 23.66                    | 25.06                    | 33.01                  |
| 256QAM       | 18.58                           | 19.06                           | 21.78                    | 22.26                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 2, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 18700                          | CH 18900 | CH 19100 |
|            |         |           | 1860 MHz                          | 1880 MHz | 1900 MHz |
| QPSK       | 1       | 0         | 23.65                             | 23.76    | 23.61    |
|            | 1       | 50        | 23.75                             | 23.85    | 23.73    |
|            | 1       | 99        | 23.55                             | 23.69    | 23.55    |
|            | 50      | 0         | 22.58                             | 22.72    | 22.66    |
|            | 50      | 25        | 22.76                             | 22.86    | 22.76    |
|            | 50      | 50        | 22.86                             | 22.91    | 22.82    |
|            | 100     | 0         | 22.75                             | 22.81    | 22.75    |
| 16QAM      | 1       | 0         | 22.57                             | 22.72    | 22.60    |
|            | 1       | 50        | 22.68                             | 22.80    | 22.77    |
|            | 1       | 99        | 22.57                             | 22.72    | 22.60    |
|            | 50      | 0         | 21.55                             | 21.68    | 21.59    |
|            | 50      | 25        | 21.68                             | 21.77    | 21.79    |
|            | 50      | 50        | 21.92                             | 21.87    | 21.86    |
|            | 100     | 0         | 21.80                             | 21.82    | 21.69    |
| 64QAM      | 1       | 0         | 21.54                             | 21.68    | 21.52    |
|            | 1       | 50        | 21.67                             | 21.70    | 21.57    |
|            | 1       | 99        | 21.55                             | 21.81    | 21.51    |
|            | 50      | 0         | 20.52                             | 20.66    | 20.59    |
|            | 50      | 25        | 20.61                             | 20.69    | 20.56    |
|            | 50      | 50        | 20.67                             | 20.72    | 20.69    |
|            | 100     | 0         | 20.61                             | 20.74    | 20.59    |
| 256QAM     | 1       | 0         | 18.76                             | 18.81    | 18.62    |
|            | 1       | 50        | 18.72                             | 18.91    | 18.70    |
|            | 1       | 99        | 18.58                             | 18.69    | 18.66    |
|            | 50      | 0         | 19.00                             | 19.03    | 19.00    |
|            | 50      | 25        | 19.04                             | 19.06    | 19.01    |
|            | 50      | 50        | 19.00                             | 19.15    | 19.02    |
|            | 100     | 0         | 19.09                             | 19.09    | 19.00    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.58                           | 23.85                           | 25.78                    | 27.05                    | 33.01                  |
| 16QAM      | 21.55                           | 22.80                           | 24.75                    | 26.00                    | 33.01                  |
| 64QAM      | 20.52                           | 21.81                           | 23.72                    | 25.01                    | 33.01                  |
| 256QAM     | 18.58                           | 19.15                           | 21.78                    | 22.35                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

## 7.1.2 LTE Band 4

### LTE Band 4, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 19957                          | CH 20175   | CH 20393   |
|            |         |           | 1710.7 MHz                        | 1732.5 MHz | 1754.3 MHz |
| QPSK       | 1       | 0         | 23.75                             | 23.81      | 23.58      |
|            | 1       | 2         | 23.88                             | 23.87      | 23.81      |
|            | 1       | 5         | 23.67                             | 23.82      | 23.77      |
|            | 3       | 0         | 22.75                             | 22.81      | 22.68      |
|            | 3       | 1         | 22.87                             | 22.91      | 22.82      |
|            | 3       | 3         | 22.76                             | 22.93      | 22.75      |
|            | 6       | 0         | 22.67                             | 22.81      | 22.77      |
| 16QAM      | 1       | 0         | 22.71                             | 22.67      | 22.64      |
|            | 1       | 2         | 22.88                             | 22.85      | 22.73      |
|            | 1       | 5         | 22.68                             | 22.73      | 22.76      |
|            | 3       | 0         | 21.78                             | 21.87      | 21.73      |
|            | 3       | 1         | 21.73                             | 21.92      | 21.76      |
|            | 3       | 3         | 21.72                             | 21.97      | 21.78      |
|            | 6       | 0         | 21.69                             | 21.84      | 21.75      |
| 64QAM      | 1       | 0         | 21.69                             | 21.83      | 21.73      |
|            | 1       | 2         | 21.78                             | 21.97      | 21.91      |
|            | 1       | 5         | 21.75                             | 21.87      | 21.90      |
|            | 3       | 0         | 20.83                             | 20.80      | 20.87      |
|            | 3       | 1         | 20.83                             | 20.85      | 20.85      |
|            | 3       | 3         | 20.79                             | 20.94      | 20.95      |
|            | 6       | 0         | 20.79                             | 20.96      | 20.71      |
| 256QAM     | 1       | 0         | 18.58                             | 18.61      | 18.51      |
|            | 1       | 2         | 18.56                             | 18.61      | 18.62      |
|            | 1       | 5         | 18.59                             | 18.71      | 18.59      |
|            | 3       | 0         | 18.93                             | 18.83      | 18.78      |
|            | 3       | 1         | 18.62                             | 18.84      | 18.70      |
|            | 3       | 3         | 18.78                             | 18.91      | 18.86      |
|            | 6       | 0         | 18.87                             | 18.81      | 18.74      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.67                           | 23.88                           | 25.98                    | 27.19                    | 30                     |
| 16QAM      | 21.69                           | 22.88                           | 25.00                    | 26.19                    | 30                     |
| 64QAM      | 20.71                           | 21.97                           | 24.02                    | 25.28                    | 30                     |
| 256QAM     | 18.51                           | 18.93                           | 21.82                    | 22.24                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### LTE Band 4, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 19965                          | CH 20175   | CH 20385   |
|            |         |           | 1711.5 MHz                        | 1732.5 MHz | 1753.5 MHz |
| QPSK       | 1       | 0         | 23.76                             | 23.80      | 23.69      |
|            | 1       | 7         | 23.72                             | 23.98      | 23.80      |
|            | 1       | 14        | 23.60                             | 23.85      | 23.61      |
|            | 8       | 0         | 22.64                             | 22.76      | 22.66      |
|            | 8       | 3         | 22.75                             | 22.80      | 22.73      |
|            | 8       | 7         | 22.83                             | 22.88      | 22.70      |
|            | 15      | 0         | 22.71                             | 22.87      | 22.79      |
| 16QAM      | 1       | 0         | 22.72                             | 22.69      | 22.68      |
|            | 1       | 7         | 22.65                             | 22.95      | 22.85      |
|            | 1       | 14        | 22.71                             | 22.77      | 22.72      |
|            | 8       | 0         | 21.68                             | 21.76      | 21.66      |
|            | 8       | 3         | 21.79                             | 21.90      | 21.67      |
|            | 8       | 7         | 21.77                             | 21.87      | 21.78      |
|            | 15      | 0         | 21.61                             | 21.86      | 21.75      |
| 64QAM      | 1       | 0         | 21.73                             | 21.92      | 21.68      |
|            | 1       | 7         | 21.89                             | 21.96      | 21.97      |
|            | 1       | 14        | 21.83                             | 21.90      | 21.85      |
|            | 8       | 0         | 20.72                             | 21.01      | 20.82      |
|            | 8       | 3         | 20.81                             | 20.96      | 20.73      |
|            | 8       | 7         | 20.92                             | 21.00      | 20.99      |
|            | 15      | 0         | 20.80                             | 20.94      | 20.94      |
| 256QAM     | 1       | 0         | 18.67                             | 18.68      | 18.59      |
|            | 1       | 7         | 18.57                             | 18.59      | 18.56      |
|            | 1       | 14        | 18.51                             | 18.67      | 18.52      |
|            | 8       | 0         | 18.80                             | 18.88      | 18.78      |
|            | 8       | 3         | 18.78                             | 18.78      | 18.82      |
|            | 8       | 7         | 18.80                             | 18.91      | 18.89      |
|            | 15      | 0         | 18.77                             | 18.91      | 18.84      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.64                           | 23.98                           | 25.95                    | 27.29                    | 30                     |
| 16QAM      | 21.61                           | 22.95                           | 24.92                    | 26.26                    | 30                     |
| 64QAM      | 20.72                           | 21.97                           | 24.03                    | 25.28                    | 30                     |
| 256QAM     | 18.51                           | 18.91                           | 21.82                    | 22.22                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 4, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 19975                          | CH 20175   | CH 20375   |
|            |         |           | 1712.5 MHz                        | 1732.5 MHz | 1752.5 MHz |
| QPSK       | 1       | 0         | 23.57                             | 23.78      | 23.66      |
|            | 1       | 12        | 23.90                             | 23.98      | 23.92      |
|            | 1       | 24        | 23.68                             | 23.73      | 23.69      |
|            | 12      | 0         | 22.76                             | 22.90      | 22.75      |
|            | 12      | 6         | 22.66                             | 22.92      | 22.68      |
|            | 12      | 13        | 22.77                             | 22.95      | 22.88      |
|            | 25      | 0         | 22.82                             | 22.83      | 22.75      |
| 16QAM      | 1       | 0         | 22.59                             | 22.70      | 22.73      |
|            | 1       | 12        | 22.95                             | 22.88      | 22.89      |
|            | 1       | 24        | 22.76                             | 22.68      | 22.60      |
|            | 12      | 0         | 21.65                             | 21.76      | 21.78      |
|            | 12      | 6         | 21.75                             | 21.83      | 21.65      |
|            | 12      | 13        | 21.73                             | 21.86      | 21.76      |
|            | 25      | 0         | 21.71                             | 21.81      | 21.81      |
| 64QAM      | 1       | 0         | 21.70                             | 21.90      | 21.78      |
|            | 1       | 12        | 21.90                             | 21.99      | 22.06      |
|            | 1       | 24        | 21.73                             | 21.84      | 21.82      |
|            | 12      | 0         | 20.74                             | 20.88      | 20.87      |
|            | 12      | 6         | 20.74                             | 20.90      | 20.87      |
|            | 12      | 13        | 20.86                             | 20.89      | 20.95      |
|            | 25      | 0         | 20.79                             | 20.92      | 20.93      |
| 256QAM     | 1       | 0         | 18.58                             | 18.69      | 18.66      |
|            | 1       | 12        | 18.59                             | 18.61      | 18.64      |
|            | 1       | 24        | 18.50                             | 18.64      | 18.50      |
|            | 12      | 0         | 18.74                             | 18.94      | 18.76      |
|            | 12      | 6         | 18.74                             | 18.83      | 18.75      |
|            | 12      | 13        | 18.78                             | 18.88      | 18.86      |
|            | 25      | 0         | 18.89                             | 18.83      | 18.88      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.66                           | 23.98                           | 25.97                    | 27.29                    | 30                     |
| 16QAM      | 21.65                           | 22.95                           | 24.96                    | 26.26                    | 30                     |
| 64QAM      | 20.74                           | 22.06                           | 24.05                    | 25.37                    | 30                     |
| 256QAM     | 18.50                           | 18.94                           | 21.81                    | 22.25                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 4, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |          |
|------------|---------|-----------|-----------------------------------|------------|----------|
|            |         |           | CH 20000                          | CH 20175   | CH 20350 |
|            |         |           | 1715 MHz                          | 1732.5 MHz | 1750 MHz |
| QPSK       | 1       | 0         | 23.57                             | 23.75      | 23.74    |
|            | 1       | 24        | 23.79                             | 23.95      | 23.88    |
|            | 1       | 49        | 23.76                             | 23.79      | 23.70    |
|            | 25      | 0         | 22.73                             | 22.83      | 22.73    |
|            | 25      | 12        | 22.75                             | 22.79      | 22.67    |
|            | 25      | 25        | 22.85                             | 22.89      | 22.73    |
|            | 50      | 0         | 22.67                             | 22.83      | 22.62    |
| 16QAM      | 1       | 0         | 22.67                             | 22.72      | 22.66    |
|            | 1       | 24        | 22.88                             | 22.98      | 22.84    |
|            | 1       | 49        | 22.61                             | 22.84      | 22.79    |
|            | 25      | 0         | 21.77                             | 21.73      | 21.66    |
|            | 25      | 12        | 21.70                             | 21.78      | 21.64    |
|            | 25      | 25        | 21.76                             | 21.92      | 21.67    |
|            | 50      | 0         | 21.75                             | 21.79      | 21.73    |
| 64QAM      | 1       | 0         | 21.67                             | 21.90      | 21.82    |
|            | 1       | 24        | 21.86                             | 22.13      | 21.99    |
|            | 1       | 49        | 21.82                             | 21.83      | 21.79    |
|            | 25      | 0         | 20.79                             | 20.87      | 20.78    |
|            | 25      | 12        | 20.83                             | 20.95      | 20.84    |
|            | 25      | 25        | 20.95                             | 21.03      | 20.96    |
|            | 50      | 0         | 20.72                             | 20.94      | 20.83    |
| 256QAM     | 1       | 0         | 18.59                             | 18.62      | 18.57    |
|            | 1       | 24        | 18.57                             | 18.66      | 18.57    |
|            | 1       | 49        | 18.58                             | 18.63      | 18.53    |
|            | 25      | 0         | 18.91                             | 18.89      | 18.90    |
|            | 25      | 12        | 18.81                             | 18.81      | 18.74    |
|            | 25      | 25        | 18.75                             | 18.87      | 18.84    |
|            | 50      | 0         | 18.79                             | 18.87      | 18.93    |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.62                           | 23.95                           | 25.93                    | 27.26                    | 30                     |
| 16QAM        | 21.64                           | 22.98                           | 24.95                    | 26.29                    | 30                     |
| 64QAM        | 20.72                           | 22.13                           | 24.03                    | 25.44                    | 30                     |
| 256QAM       | 18.53                           | 18.93                           | 21.84                    | 22.24                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 4, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 20025                          | CH 20175   | CH 20325   |
|            |         |           | 1717.5 MHz                        | 1732.5 MHz | 1747.5 MHz |
| QPSK       | 1       | 0         | 23.64                             | 23.77      | 23.70      |
|            | 1       | 37        | 23.93                             | 23.94      | 23.83      |
|            | 1       | 74        | 23.74                             | 23.78      | 23.70      |
|            | 36      | 0         | 22.63                             | 22.75      | 22.75      |
|            | 36      | 19        | 22.77                             | 22.86      | 22.67      |
|            | 36      | 39        | 22.81                             | 22.97      | 22.88      |
|            | 75      | 0         | 22.74                             | 22.80      | 22.75      |
| 16QAM      | 1       | 0         | 22.64                             | 22.69      | 22.69      |
|            | 1       | 37        | 22.85                             | 22.90      | 22.86      |
|            | 1       | 74        | 22.68                             | 22.81      | 22.71      |
|            | 36      | 0         | 21.74                             | 21.86      | 21.72      |
|            | 36      | 19        | 21.73                             | 21.90      | 21.72      |
|            | 36      | 39        | 21.80                             | 21.91      | 21.92      |
|            | 75      | 0         | 21.64                             | 21.75      | 21.60      |
| 64QAM      | 1       | 0         | 21.84                             | 21.80      | 21.66      |
|            | 1       | 37        | 21.96                             | 21.99      | 21.98      |
|            | 1       | 74        | 21.80                             | 21.84      | 21.91      |
|            | 36      | 0         | 20.63                             | 20.90      | 20.90      |
|            | 36      | 19        | 20.91                             | 20.90      | 20.71      |
|            | 36      | 39        | 20.86                             | 20.87      | 20.91      |
|            | 75      | 0         | 20.73                             | 20.79      | 20.78      |
| 256QAM     | 1       | 0         | 18.51                             | 18.53      | 18.53      |
|            | 1       | 37        | 18.58                             | 18.57      | 18.63      |
|            | 1       | 74        | 18.53                             | 18.56      | 18.50      |
|            | 36      | 0         | 18.84                             | 18.90      | 18.85      |
|            | 36      | 19        | 18.81                             | 18.76      | 18.71      |
|            | 36      | 39        | 18.85                             | 18.94      | 18.84      |
|            | 75      | 0         | 18.79                             | 18.84      | 18.71      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.63                           | 23.94                           | 25.94                    | 27.25                    | 30                     |
| 16QAM      | 21.60                           | 22.90                           | 24.91                    | 26.21                    | 30                     |
| 64QAM      | 20.63                           | 21.99                           | 23.94                    | 25.30                    | 30                     |
| 256QAM     | 18.50                           | 18.94                           | 21.81                    | 22.25                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 4, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |          |
|------------|---------|-----------|-----------------------------------|------------|----------|
|            |         |           | CH 20050                          | CH 20175   | CH 20300 |
|            |         |           | 1720 MHz                          | 1732.5 MHz | 1745 MHz |
| QPSK       | 1       | 0         | 23.80                             | 23.86      | 23.81    |
|            | 1       | 50        | 23.94                             | 23.99      | 23.89    |
|            | 1       | 99        | 23.74                             | 23.88      | 23.73    |
|            | 50      | 0         | 22.78                             | 22.90      | 22.75    |
|            | 50      | 25        | 22.80                             | 22.94      | 22.80    |
|            | 50      | 50        | 22.89                             | 22.99      | 22.89    |
|            | 100     | 0         | 22.75                             | 22.89      | 22.83    |
| 16QAM      | 1       | 0         | 22.80                             | 22.80      | 22.80    |
|            | 1       | 50        | 22.95                             | 23.06      | 22.94    |
|            | 1       | 99        | 22.80                             | 22.81      | 22.78    |
|            | 50      | 0         | 21.70                             | 21.94      | 21.76    |
|            | 50      | 25        | 21.84                             | 21.89      | 21.73    |
|            | 50      | 50        | 21.91                             | 21.90      | 21.95    |
|            | 100     | 0         | 21.68                             | 21.92      | 21.75    |
| 64QAM      | 1       | 0         | 21.84                             | 21.95      | 21.80    |
|            | 1       | 50        | 22.01                             | 22.01      | 21.97    |
|            | 1       | 99        | 21.81                             | 21.93      | 21.80    |
|            | 50      | 0         | 20.86                             | 20.89      | 20.86    |
|            | 50      | 25        | 20.83                             | 20.98      | 20.93    |
|            | 50      | 50        | 20.89                             | 20.99      | 20.90    |
|            | 100     | 0         | 20.76                             | 20.89      | 20.95    |
| 256QAM     | 1       | 0         | 18.51                             | 18.50      | 18.57    |
|            | 1       | 50        | 18.61                             | 18.76      | 18.66    |
|            | 1       | 99        | 18.53                             | 18.51      | 18.56    |
|            | 50      | 0         | 18.87                             | 19.00      | 18.91    |
|            | 50      | 25        | 18.84                             | 18.94      | 18.81    |
|            | 50      | 50        | 18.90                             | 19.01      | 19.01    |
|            | 100     | 0         | 18.87                             | 18.99      | 18.93    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.75                           | 23.99                           | 26.06                    | 27.30                    | 30                     |
| 16QAM      | 21.68                           | 23.06                           | 24.99                    | 26.37                    | 30                     |
| 64QAM      | 20.76                           | 22.01                           | 24.07                    | 25.32                    | 30                     |
| 256QAM     | 18.50                           | 19.01                           | 21.81                    | 22.32                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### 7.1.3 LTE Band 5

#### LTE Band 5, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 20407                          | CH 20525  | CH 20643  |
|            |         |           | 824.7 MHz                         | 836.5 MHz | 848.3 MHz |
| QPSK       | 1       | 0         | 23.74                             | 23.98     | 23.91     |
|            | 1       | 2         | 23.87                             | 23.97     | 23.86     |
|            | 1       | 5         | 23.96                             | 23.93     | 23.83     |
|            | 3       | 0         | 22.89                             | 22.96     | 22.80     |
|            | 3       | 1         | 22.84                             | 22.89     | 23.01     |
|            | 3       | 3         | 22.99                             | 23.01     | 23.02     |
|            | 6       | 0         | 22.88                             | 23.05     | 22.84     |
| 16QAM      | 1       | 0         | 22.94                             | 23.03     | 22.83     |
|            | 1       | 2         | 23.00                             | 23.00     | 23.03     |
|            | 1       | 5         | 23.02                             | 23.00     | 23.03     |
|            | 3       | 0         | 22.03                             | 21.93     | 21.89     |
|            | 3       | 1         | 22.02                             | 21.95     | 22.00     |
|            | 3       | 3         | 22.03                             | 22.01     | 21.92     |
|            | 6       | 0         | 21.81                             | 21.83     | 21.83     |
| 64QAM      | 1       | 0         | 22.04                             | 22.07     | 22.07     |
|            | 1       | 2         | 22.03                             | 22.05     | 21.92     |
|            | 1       | 5         | 22.05                             | 22.01     | 22.07     |
|            | 3       | 0         | 20.74                             | 20.87     | 20.89     |
|            | 3       | 1         | 20.97                             | 20.83     | 20.76     |
|            | 3       | 3         | 20.99                             | 21.05     | 20.84     |
|            | 6       | 0         | 20.91                             | 21.00     | 20.80     |
| 256QAM     | 1       | 0         | 19.00                             | 18.95     | 18.87     |
|            | 1       | 2         | 19.03                             | 19.00     | 19.00     |
|            | 1       | 5         | 19.05                             | 19.03     | 19.06     |
|            | 3       | 0         | 18.84                             | 18.96     | 18.92     |
|            | 3       | 1         | 18.93                             | 18.92     | 18.83     |
|            | 3       | 3         | 19.09                             | 19.06     | 18.98     |
|            | 6       | 0         | 18.90                             | 18.86     | 18.75     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.80                           | 23.98                           | 21.90                   | 23.08                   | 38.45                 |
| 16QAM      | 21.81                           | 23.03                           | 20.91                   | 22.13                   | 38.45                 |
| 64QAM      | 20.74                           | 22.07                           | 19.84                   | 21.17                   | 38.45                 |
| 256QAM     | 18.75                           | 19.09                           | 17.85                   | 18.19                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

### LTE Band 5, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 20415                          | CH 20525  | CH 20635  |
|            |         |           | 825.5 MHz                         | 836.5 MHz | 847.5 MHz |
| QPSK       | 1       | 0         | 23.85                             | 23.96     | 23.81     |
|            | 1       | 7         | 23.92                             | 23.98     | 23.95     |
|            | 1       | 14        | 23.86                             | 23.95     | 23.95     |
|            | 8       | 0         | 22.86                             | 22.92     | 22.89     |
|            | 8       | 3         | 22.87                             | 22.89     | 22.84     |
|            | 8       | 7         | 23.02                             | 23.10     | 22.85     |
|            | 15      | 0         | 22.88                             | 22.97     | 22.88     |
| 16QAM      | 1       | 0         | 23.00                             | 22.99     | 22.82     |
|            | 1       | 7         | 23.01                             | 23.03     | 23.00     |
|            | 1       | 14        | 23.08                             | 23.00     | 22.93     |
|            | 8       | 0         | 21.84                             | 22.00     | 21.82     |
|            | 8       | 3         | 21.87                             | 21.96     | 21.96     |
|            | 8       | 7         | 22.06                             | 22.00     | 21.90     |
|            | 15      | 0         | 21.87                             | 21.98     | 21.89     |
| 64QAM      | 1       | 0         | 21.85                             | 22.05     | 21.86     |
|            | 1       | 7         | 21.99                             | 22.00     | 22.02     |
|            | 1       | 14        | 22.02                             | 22.10     | 21.94     |
|            | 8       | 0         | 20.89                             | 20.86     | 20.83     |
|            | 8       | 3         | 20.84                             | 20.86     | 20.86     |
|            | 8       | 7         | 21.01                             | 21.00     | 20.98     |
|            | 15      | 0         | 20.93                             | 20.89     | 20.75     |
| 256QAM     | 1       | 0         | 18.84                             | 18.95     | 18.94     |
|            | 1       | 7         | 19.04                             | 19.00     | 18.96     |
|            | 1       | 14        | 19.03                             | 19.09     | 19.01     |
|            | 8       | 0         | 18.91                             | 18.94     | 18.85     |
|            | 8       | 3         | 18.75                             | 18.98     | 18.92     |
|            | 8       | 7         | 18.97                             | 19.08     | 19.01     |
|            | 15      | 0         | 18.82                             | 18.92     | 18.96     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.84                           | 23.98                           | 21.94                   | 23.08                   | 38.45                 |
| 16QAM      | 21.82                           | 23.08                           | 20.92                   | 22.18                   | 38.45                 |
| 64QAM      | 20.75                           | 22.10                           | 19.85                   | 21.20                   | 38.45                 |
| 256QAM     | 18.75                           | 19.09                           | 17.85                   | 18.19                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 5, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 20425                          | CH 20525  | CH 20625  |
|            |         |           | 826.5 MHz                         | 836.5 MHz | 846.5 MHz |
| QPSK       | 1       | 0         | 23.87                             | 23.94     | 23.87     |
|            | 1       | 12        | 23.97                             | 23.94     | 23.93     |
|            | 1       | 24        | 23.87                             | 23.98     | 23.89     |
|            | 12      | 0         | 22.88                             | 22.99     | 22.98     |
|            | 12      | 6         | 22.89                             | 22.94     | 22.85     |
|            | 12      | 13        | 23.03                             | 22.97     | 22.90     |
|            | 25      | 0         | 22.83                             | 22.98     | 22.91     |
| 16QAM      | 1       | 0         | 23.02                             | 23.04     | 22.92     |
|            | 1       | 12        | 23.08                             | 23.01     | 23.07     |
|            | 1       | 24        | 23.03                             | 23.05     | 22.99     |
|            | 12      | 0         | 21.95                             | 21.93     | 21.85     |
|            | 12      | 6         | 22.04                             | 22.00     | 21.95     |
|            | 12      | 13        | 21.97                             | 21.98     | 21.91     |
|            | 25      | 0         | 21.90                             | 21.94     | 21.82     |
| 64QAM      | 1       | 0         | 22.02                             | 22.06     | 21.86     |
|            | 1       | 12        | 22.00                             | 22.02     | 22.01     |
|            | 1       | 24        | 22.05                             | 22.01     | 22.08     |
|            | 12      | 0         | 20.83                             | 20.84     | 20.82     |
|            | 12      | 6         | 20.85                             | 20.96     | 20.87     |
|            | 12      | 13        | 20.87                             | 21.04     | 20.88     |
|            | 25      | 0         | 20.87                             | 20.94     | 20.82     |
| 256QAM     | 1       | 0         | 18.88                             | 19.01     | 18.86     |
|            | 1       | 12        | 19.02                             | 19.09     | 19.09     |
|            | 1       | 24        | 19.03                             | 19.04     | 19.00     |
|            | 12      | 0         | 18.78                             | 18.97     | 18.87     |
|            | 12      | 6         | 18.84                             | 18.88     | 18.80     |
|            | 12      | 13        | 19.00                             | 19.08     | 19.04     |
|            | 25      | 0         | 18.94                             | 18.97     | 18.98     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.83                           | 23.98                           | 21.93                   | 23.08                   | 38.45                 |
| 16QAM      | 21.82                           | 23.08                           | 20.92                   | 22.18                   | 38.45                 |
| 64QAM      | 20.82                           | 22.08                           | 19.92                   | 21.18                   | 38.45                 |
| 256QAM     | 18.78                           | 19.09                           | 17.88                   | 18.19                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 5, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |          |
|------------|---------|-----------|-----------------------------------|-----------|----------|
|            |         |           | CH 20450                          | CH 20525  | CH 20600 |
|            |         |           | 829 MHz                           | 836.5 MHz | 844 MHz  |
| QPSK       | 1       | 0         | 23.91                             | 23.97     | 23.82    |
|            | 1       | 24        | 23.98                             | 23.99     | 23.95    |
|            | 1       | 49        | 23.97                             | 23.89     | 23.98    |
|            | 25      | 0         | 23.10                             | 23.10     | 23.07    |
|            | 25      | 12        | 23.07                             | 23.08     | 23.07    |
|            | 25      | 25        | 23.17                             | 23.17     | 23.16    |
|            | 50      | 0         | 23.04                             | 23.10     | 23.09    |
| 16QAM      | 1       | 0         | 23.10                             | 23.13     | 22.98    |
|            | 1       | 24        | 23.01                             | 23.04     | 23.02    |
|            | 1       | 49        | 22.98                             | 23.03     | 23.01    |
|            | 25      | 0         | 22.03                             | 22.02     | 21.98    |
|            | 25      | 12        | 22.00                             | 22.03     | 22.02    |
|            | 25      | 25        | 22.07                             | 22.05     | 22.02    |
|            | 50      | 0         | 21.91                             | 22.03     | 21.99    |
| 64QAM      | 1       | 0         | 22.00                             | 22.04     | 22.00    |
|            | 1       | 24        | 22.03                             | 22.02     | 22.01    |
|            | 1       | 49        | 22.08                             | 22.07     | 22.06    |
|            | 25      | 0         | 20.91                             | 21.02     | 20.88    |
|            | 25      | 12        | 20.88                             | 21.03     | 20.89    |
|            | 25      | 25        | 21.02                             | 21.07     | 21.05    |
|            | 50      | 0         | 21.03                             | 21.06     | 20.93    |
| 256QAM     | 1       | 0         | 19.08                             | 19.08     | 19.03    |
|            | 1       | 24        | 19.08                             | 19.08     | 19.03    |
|            | 1       | 49        | 19.08                             | 19.04     | 19.09    |
|            | 25      | 0         | 18.89                             | 19.04     | 19.01    |
|            | 25      | 12        | 18.94                             | 19.07     | 19.05    |
|            | 25      | 25        | 19.03                             | 19.00     | 19.04    |
|            | 50      | 0         | 19.03                             | 19.04     | 18.97    |

| <b>Output Power</b> |                                 |                                 |                         |                         |                       |
|---------------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation          | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK                | 23.04                           | 23.99                           | 22.14                   | 23.09                   | 38.45                 |
| 16QAM               | 21.91                           | 23.13                           | 21.01                   | 22.23                   | 38.45                 |
| 64QAM               | 20.88                           | 22.08                           | 19.98                   | 21.18                   | 38.45                 |
| 256QAM              | 18.89                           | 19.09                           | 17.99                   | 18.19                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

#### 7.1.4 LTE Band 7

##### LTE Band 7, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 20775                          | CH 21100 | CH 21425   |
|            |         |           | 2502.5 MHz                        | 2535 MHz | 2567.5 MHz |
| QPSK       | 1       | 0         | 23.64                             | 23.76    | 23.65      |
|            | 1       | 12        | 23.53                             | 23.55    | 23.63      |
|            | 1       | 24        | 23.63                             | 23.75    | 23.67      |
|            | 12      | 0         | 22.54                             | 22.61    | 22.65      |
|            | 12      | 6         | 22.59                             | 22.64    | 22.53      |
|            | 12      | 13        | 22.59                             | 22.58    | 22.54      |
|            | 25      | 0         | 22.56                             | 22.62    | 22.58      |
| 16QAM      | 1       | 0         | 22.77                             | 22.85    | 22.85      |
|            | 1       | 12        | 22.71                             | 22.86    | 22.67      |
|            | 1       | 24        | 22.74                             | 22.86    | 22.74      |
|            | 12      | 0         | 21.69                             | 21.77    | 21.66      |
|            | 12      | 6         | 21.82                             | 21.80    | 21.80      |
|            | 12      | 13        | 21.59                             | 21.64    | 21.69      |
|            | 25      | 0         | 21.65                             | 21.68    | 21.74      |
| 64QAM      | 1       | 0         | 21.64                             | 21.75    | 21.65      |
|            | 1       | 12        | 21.66                             | 21.69    | 21.60      |
|            | 1       | 24        | 21.16                             | 21.19    | 21.10      |
|            | 12      | 0         | 20.77                             | 20.69    | 20.60      |
|            | 12      | 6         | 20.64                             | 20.75    | 20.66      |
|            | 12      | 13        | 20.50                             | 20.68    | 20.58      |
|            | 25      | 0         | 20.53                             | 20.75    | 20.60      |
| 256QAM     | 1       | 0         | 18.66                             | 18.88    | 18.62      |
|            | 1       | 12        | 18.57                             | 18.73    | 18.68      |
|            | 1       | 24        | 18.57                             | 18.69    | 18.69      |
|            | 12      | 0         | 18.59                             | 18.63    | 18.53      |
|            | 12      | 6         | 18.63                             | 18.65    | 18.66      |
|            | 12      | 13        | 18.53                             | 18.63    | 18.65      |
|            | 25      | 0         | 18.52                             | 18.68    | 18.50      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.53                           | 23.76                           | 25.41                    | 26.64                    | 33.01                  |
| 16QAM      | 21.59                           | 22.86                           | 24.47                    | 25.74                    | 33.01                  |
| 64QAM      | 20.50                           | 21.75                           | 23.38                    | 24.63                    | 33.01                  |
| 256QAM     | 18.50                           | 18.88                           | 21.38                    | 21.76                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 7, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 20800                          | CH 21100 | CH 21400 |
|            |         |           | 2505 MHz                          | 2535 MHz | 2565 MHz |
| QPSK       | 1       | 0         | 23.67                             | 23.74    | 23.55    |
|            | 1       | 24        | 23.58                             | 23.70    | 23.54    |
|            | 1       | 49        | 23.61                             | 23.71    | 23.71    |
|            | 25      | 0         | 22.59                             | 22.58    | 22.66    |
|            | 25      | 12        | 22.53                             | 22.65    | 22.55    |
|            | 25      | 25        | 22.59                             | 22.65    | 22.55    |
|            | 50      | 0         | 22.53                             | 22.57    | 22.57    |
| 16QAM      | 1       | 0         | 22.70                             | 22.93    | 22.83    |
|            | 1       | 24        | 22.64                             | 22.79    | 22.89    |
|            | 1       | 49        | 22.71                             | 22.77    | 22.77    |
|            | 25      | 0         | 21.58                             | 21.79    | 21.67    |
|            | 25      | 12        | 21.77                             | 21.75    | 21.66    |
|            | 25      | 25        | 21.53                             | 21.75    | 21.67    |
|            | 50      | 0         | 21.73                             | 21.71    | 21.58    |
| 64QAM      | 1       | 0         | 21.59                             | 21.77    | 21.59    |
|            | 1       | 24        | 21.85                             | 21.82    | 21.67    |
|            | 1       | 49        | 21.69                             | 21.81    | 21.65    |
|            | 25      | 0         | 20.67                             | 20.70    | 20.59    |
|            | 25      | 12        | 20.70                             | 20.68    | 20.62    |
|            | 25      | 25        | 20.55                             | 20.68    | 20.54    |
|            | 50      | 0         | 20.52                             | 20.70    | 20.62    |
| 256QAM     | 1       | 0         | 18.85                             | 18.85    | 18.78    |
|            | 1       | 24        | 18.72                             | 18.77    | 18.72    |
|            | 1       | 49        | 18.69                             | 18.66    | 18.60    |
|            | 25      | 0         | 18.50                             | 18.59    | 18.55    |
|            | 25      | 12        | 18.67                             | 18.69    | 18.65    |
|            | 25      | 25        | 18.60                             | 18.71    | 18.61    |
|            | 50      | 0         | 18.56                             | 18.54    | 18.55    |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.53                           | 23.74                           | 25.41                    | 26.62                    | 33.01                  |
| 16QAM        | 21.53                           | 22.93                           | 24.41                    | 25.81                    | 33.01                  |
| 64QAM        | 20.52                           | 21.85                           | 23.40                    | 24.73                    | 33.01                  |
| 256QAM       | 18.50                           | 18.85                           | 21.38                    | 21.73                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 7, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 20825                          | CH 21100 | CH 21375   |
|            |         |           | 2507.5 MHz                        | 2535 MHz | 2562.5 MHz |
| QPSK       | 1       | 0         | 23.70                             | 23.65    | 23.64      |
|            | 1       | 37        | 23.56                             | 23.63    | 23.60      |
|            | 1       | 74        | 23.55                             | 23.51    | 23.51      |
|            | 36      | 0         | 22.52                             | 22.68    | 22.51      |
|            | 36      | 19        | 22.53                             | 22.59    | 22.63      |
|            | 36      | 39        | 22.58                             | 22.68    | 22.60      |
|            | 75      | 0         | 22.53                             | 22.68    | 22.53      |
| 16QAM      | 1       | 0         | 22.89                             | 22.94    | 22.89      |
|            | 1       | 37        | 22.68                             | 22.87    | 22.68      |
|            | 1       | 74        | 22.67                             | 22.84    | 22.77      |
|            | 36      | 0         | 21.59                             | 21.70    | 21.59      |
|            | 36      | 19        | 21.64                             | 21.70    | 21.67      |
|            | 36      | 39        | 21.67                             | 21.75    | 21.63      |
|            | 75      | 0         | 21.67                             | 21.67    | 21.55      |
| 64QAM      | 1       | 0         | 21.71                             | 21.63    | 21.70      |
|            | 1       | 37        | 21.76                             | 21.94    | 21.71      |
|            | 1       | 74        | 21.70                             | 21.75    | 21.53      |
|            | 36      | 0         | 20.70                             | 20.69    | 20.70      |
|            | 36      | 19        | 20.66                             | 20.77    | 20.63      |
|            | 36      | 39        | 20.54                             | 20.58    | 20.58      |
|            | 75      | 0         | 20.61                             | 20.66    | 20.63      |
| 256QAM     | 1       | 0         | 18.62                             | 18.88    | 18.79      |
|            | 1       | 37        | 18.64                             | 18.78    | 18.61      |
|            | 1       | 74        | 18.63                             | 18.63    | 18.72      |
|            | 36      | 0         | 18.60                             | 18.58    | 18.62      |
|            | 36      | 19        | 18.72                             | 18.78    | 18.77      |
|            | 36      | 39        | 18.53                             | 18.62    | 18.56      |
|            | 75      | 0         | 18.51                             | 18.54    | 18.53      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.51                           | 23.70                           | 25.39                    | 26.58                    | 33.01                  |
| 16QAM      | 21.55                           | 22.94                           | 24.43                    | 25.82                    | 33.01                  |
| 64QAM      | 20.54                           | 21.94                           | 23.42                    | 24.82                    | 33.01                  |
| 256QAM     | 18.51                           | 18.88                           | 21.39                    | 21.76                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 7, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 20850                          | CH 21100 | CH 21350 |
|            |         |           | 2510 MHz                          | 2535 MHz | 2560 MHz |
| QPSK       | 1       | 0         | 23.71                             | 23.84    | 23.75    |
|            | 1       | 50        | 23.69                             | 23.75    | 23.66    |
|            | 1       | 99        | 23.52                             | 23.57    | 23.52    |
|            | 50      | 0         | 22.69                             | 22.73    | 22.60    |
|            | 50      | 25        | 22.72                             | 22.73    | 22.62    |
|            | 50      | 50        | 22.63                             | 22.75    | 22.67    |
|            | 100     | 0         | 22.62                             | 22.73    | 22.65    |
| 16QAM      | 1       | 0         | 22.88                             | 23.03    | 22.98    |
|            | 1       | 50        | 22.87                             | 22.97    | 22.97    |
|            | 1       | 99        | 22.86                             | 22.93    | 22.87    |
|            | 50      | 0         | 21.80                             | 21.85    | 21.74    |
|            | 50      | 25        | 21.80                             | 21.89    | 21.84    |
|            | 50      | 50        | 21.79                             | 21.82    | 21.71    |
|            | 100     | 0         | 21.69                             | 21.82    | 21.76    |
| 64QAM      | 1       | 0         | 21.67                             | 21.82    | 21.67    |
|            | 1       | 50        | 21.99                             | 21.99    | 21.98    |
|            | 1       | 99        | 21.50                             | 21.57    | 21.50    |
|            | 50      | 0         | 20.81                             | 20.89    | 20.86    |
|            | 50      | 25        | 20.80                             | 20.86    | 20.71    |
|            | 50      | 50        | 20.65                             | 20.75    | 20.73    |
|            | 100     | 0         | 20.79                             | 20.82    | 20.71    |
| 256QAM     | 1       | 0         | 18.92                             | 18.93    | 18.87    |
|            | 1       | 50        | 18.84                             | 18.85    | 18.85    |
|            | 1       | 99        | 18.75                             | 18.82    | 18.72    |
|            | 50      | 0         | 18.60                             | 18.75    | 18.68    |
|            | 50      | 25        | 18.75                             | 18.83    | 18.68    |
|            | 50      | 50        | 18.71                             | 18.78    | 18.75    |
|            | 100     | 0         | 18.72                             | 18.74    | 18.74    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.60                           | 23.84                           | 25.48                    | 26.72                    | 33.01                  |
| 16QAM      | 21.69                           | 23.03                           | 24.57                    | 25.91                    | 33.01                  |
| 64QAM      | 20.65                           | 21.99                           | 23.53                    | 24.87                    | 33.01                  |
| 256QAM     | 18.60                           | 18.93                           | 21.48                    | 21.81                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### 7.1.5 LTE Band 12

#### LTE Band 12, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 23017                          | CH 23095  | CH 23173  |
|            |         |           | 699.7 MHz                         | 707.5 MHz | 715.3 MHz |
| QPSK       | 1       | 0         | 23.65                             | 23.83     | 23.76     |
|            | 1       | 2         | 23.66                             | 23.64     | 23.58     |
|            | 1       | 5         | 23.63                             | 23.70     | 23.62     |
|            | 3       | 0         | 22.71                             | 22.85     | 22.62     |
|            | 3       | 1         | 22.68                             | 22.83     | 22.66     |
|            | 3       | 3         | 22.87                             | 22.93     | 22.82     |
|            | 6       | 0         | 22.90                             | 22.85     | 22.81     |
| 16QAM      | 1       | 0         | 22.62                             | 22.84     | 22.85     |
|            | 1       | 2         | 22.62                             | 22.74     | 22.66     |
|            | 1       | 5         | 22.67                             | 22.92     | 22.73     |
|            | 3       | 0         | 21.56                             | 21.77     | 21.56     |
|            | 3       | 1         | 21.63                             | 21.85     | 21.70     |
|            | 3       | 3         | 21.65                             | 21.83     | 21.81     |
|            | 6       | 0         | 21.79                             | 21.82     | 21.58     |
| 64QAM      | 1       | 0         | 21.78                             | 21.95     | 21.72     |
|            | 1       | 2         | 21.65                             | 21.65     | 21.57     |
|            | 1       | 5         | 21.74                             | 21.90     | 21.82     |
|            | 3       | 0         | 20.53                             | 20.83     | 20.60     |
|            | 3       | 1         | 20.53                             | 20.83     | 20.72     |
|            | 3       | 3         | 20.76                             | 20.85     | 20.77     |
|            | 6       | 0         | 20.79                             | 20.86     | 20.71     |
| 256QAM     | 1       | 0         | 18.71                             | 18.75     | 18.70     |
|            | 1       | 2         | 18.94                             | 19.09     | 19.02     |
|            | 1       | 5         | 18.80                             | 18.95     | 18.80     |
|            | 3       | 0         | 18.78                             | 18.88     | 18.81     |
|            | 3       | 1         | 18.85                             | 18.89     | 18.76     |
|            | 3       | 3         | 18.88                             | 19.07     | 18.84     |
|            | 6       | 0         | 18.80                             | 18.92     | 19.05     |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.62                           | 23.83                           | 21.25                   | 22.46                   | 44.77                 |
| 16QAM        | 21.56                           | 22.92                           | 20.19                   | 21.55                   | 44.77                 |
| 64QAM        | 20.53                           | 21.95                           | 19.16                   | 20.58                   | 44.77                 |
| 256QAM       | 18.70                           | 19.09                           | 17.33                   | 17.72                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 12, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 23025                          | CH 23095  | CH 23165  |
|            |         |           | 700.5 MHz                         | 707.5 MHz | 714.5 MHz |
| QPSK       | 1       | 0         | 23.66                             | 23.84     | 23.67     |
|            | 1       | 7         | 23.58                             | 23.61     | 23.59     |
|            | 1       | 14        | 23.68                             | 23.77     | 23.64     |
|            | 8       | 0         | 22.75                             | 22.74     | 22.74     |
|            | 8       | 3         | 22.70                             | 22.79     | 22.82     |
|            | 8       | 7         | 22.75                             | 22.95     | 22.88     |
|            | 15      | 0         | 22.75                             | 22.90     | 22.75     |
| 16QAM      | 1       | 0         | 22.86                             | 22.82     | 22.88     |
|            | 1       | 7         | 22.63                             | 22.69     | 22.64     |
|            | 1       | 14        | 22.90                             | 22.89     | 22.92     |
|            | 8       | 0         | 21.79                             | 21.82     | 21.69     |
|            | 8       | 3         | 21.76                             | 21.63     | 21.67     |
|            | 8       | 7         | 21.71                             | 21.88     | 21.77     |
|            | 15      | 0         | 21.75                             | 21.71     | 21.64     |
| 64QAM      | 1       | 0         | 21.78                             | 21.80     | 21.89     |
|            | 1       | 7         | 21.66                             | 21.64     | 21.65     |
|            | 1       | 14        | 21.81                             | 21.92     | 21.78     |
|            | 8       | 0         | 20.64                             | 20.63     | 20.61     |
|            | 8       | 3         | 20.64                             | 20.88     | 20.85     |
|            | 8       | 7         | 20.68                             | 20.87     | 20.77     |
|            | 15      | 0         | 20.69                             | 20.79     | 20.80     |
| 256QAM     | 1       | 0         | 18.60                             | 18.74     | 18.67     |
|            | 1       | 7         | 19.00                             | 19.09     | 19.08     |
|            | 1       | 14        | 18.93                             | 19.03     | 18.83     |
|            | 8       | 0         | 18.81                             | 18.96     | 18.81     |
|            | 8       | 3         | 18.74                             | 18.94     | 18.74     |
|            | 8       | 7         | 19.00                             | 18.99     | 18.97     |
|            | 15      | 0         | 18.85                             | 18.99     | 18.90     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.70                           | 23.84                           | 21.33                   | 22.47                   | 44.77                 |
| 16QAM      | 21.63                           | 22.92                           | 20.26                   | 21.55                   | 44.77                 |
| 64QAM      | 20.61                           | 21.92                           | 19.24                   | 20.55                   | 44.77                 |
| 256QAM     | 18.60                           | 19.09                           | 17.23                   | 17.72                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 12, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 23035                          | CH 23095  | CH 23155  |
|            |         |           | 701.5 MHz                         | 707.5 MHz | 713.5 MHz |
| QPSK       | 1       | 0         | 23.65                             | 23.83     | 23.76     |
|            | 1       | 12        | 23.66                             | 23.64     | 23.60     |
|            | 1       | 24        | 23.63                             | 23.70     | 23.62     |
|            | 12      | 0         | 22.77                             | 22.79     | 22.75     |
|            | 12      | 6         | 22.81                             | 22.82     | 22.80     |
|            | 12      | 13        | 22.77                             | 22.97     | 22.77     |
|            | 25      | 0         | 22.87                             | 22.86     | 22.87     |
| 16QAM      | 1       | 0         | 22.77                             | 22.92     | 22.91     |
|            | 1       | 12        | 22.72                             | 22.86     | 22.73     |
|            | 1       | 24        | 22.77                             | 22.83     | 22.85     |
|            | 12      | 0         | 21.59                             | 21.58     | 21.54     |
|            | 12      | 6         | 21.55                             | 21.79     | 21.64     |
|            | 12      | 13        | 21.78                             | 21.83     | 21.54     |
|            | 25      | 0         | 21.83                             | 21.82     | 21.73     |
| 64QAM      | 1       | 0         | 21.77                             | 21.83     | 21.75     |
|            | 1       | 12        | 21.66                             | 21.78     | 21.65     |
|            | 1       | 24        | 21.63                             | 21.95     | 21.76     |
|            | 12      | 0         | 20.68                             | 20.64     | 20.62     |
|            | 12      | 6         | 20.57                             | 20.69     | 20.72     |
|            | 12      | 13        | 20.73                             | 20.89     | 20.81     |
|            | 25      | 0         | 20.66                             | 20.79     | 20.77     |
| 256QAM     | 1       | 0         | 18.64                             | 18.83     | 18.68     |
|            | 1       | 12        | 18.98                             | 19.06     | 19.09     |
|            | 1       | 24        | 18.95                             | 19.06     | 18.88     |
|            | 12      | 0         | 18.80                             | 18.97     | 18.87     |
|            | 12      | 6         | 18.84                             | 18.97     | 18.92     |
|            | 12      | 13        | 18.98                             | 18.97     | 18.96     |
|            | 25      | 0         | 19.00                             | 18.97     | 18.94     |

| Output Power |                           |                           |                   |                   |                 |
|--------------|---------------------------|---------------------------|-------------------|-------------------|-----------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK         | 22.75                     | 23.83                     | 21.38             | 22.46             | 44.77           |
| 16QAM        | 21.54                     | 22.92                     | 20.17             | 21.55             | 44.77           |
| 64QAM        | 20.57                     | 21.95                     | 19.20             | 20.58             | 44.77           |
| 256QAM       | 18.64                     | 19.09                     | 17.27             | 17.72             | 44.77           |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 12, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |          |
|------------|---------|-----------|-----------------------------------|-----------|----------|
|            |         |           | CH 23060                          | CH 23095  | CH 23130 |
|            |         |           | 704 MHz                           | 707.5 MHz | 711 MHz  |
| QPSK       | 1       | 0         | 23.78                             | 23.84     | 23.71    |
|            | 1       | 24        | 23.61                             | 23.72     | 23.59    |
|            | 1       | 49        | 23.76                             | 23.85     | 23.78    |
|            | 25      | 0         | 22.75                             | 22.87     | 22.80    |
|            | 25      | 12        | 22.86                             | 22.94     | 22.83    |
|            | 25      | 25        | 22.88                             | 23.01     | 22.86    |
|            | 50      | 0         | 22.92                             | 23.00     | 22.86    |
| 16QAM      | 1       | 0         | 22.94                             | 23.01     | 22.78    |
|            | 1       | 24        | 22.71                             | 22.90     | 22.77    |
|            | 1       | 49        | 22.85                             | 22.92     | 22.94    |
|            | 25      | 0         | 21.73                             | 21.74     | 21.74    |
|            | 25      | 12        | 21.72                             | 21.80     | 21.75    |
|            | 25      | 25        | 21.82                             | 21.97     | 21.69    |
|            | 50      | 0         | 21.87                             | 21.98     | 21.70    |
| 64QAM      | 1       | 0         | 21.87                             | 21.95     | 21.77    |
|            | 1       | 24        | 21.66                             | 21.83     | 21.64    |
|            | 1       | 49        | 21.87                             | 21.98     | 21.93    |
|            | 25      | 0         | 20.70                             | 20.82     | 20.73    |
|            | 25      | 12        | 20.78                             | 20.84     | 20.80    |
|            | 25      | 25        | 20.70                             | 20.96     | 20.68    |
|            | 50      | 0         | 20.74                             | 20.93     | 20.70    |
| 256QAM     | 1       | 0         | 18.84                             | 18.88     | 18.85    |
|            | 1       | 24        | 19.03                             | 19.06     | 19.01    |
|            | 1       | 49        | 18.99                             | 19.01     | 18.96    |
|            | 25      | 0         | 18.95                             | 19.03     | 19.01    |
|            | 25      | 12        | 18.95                             | 19.05     | 19.02    |
|            | 25      | 25        | 19.00                             | 19.04     | 19.02    |
|            | 50      | 0         | 19.07                             | 19.02     | 19.01    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.75                           | 23.85                           | 21.38                   | 22.48                   | 44.77                 |
| 16QAM      | 21.69                           | 23.01                           | 20.32                   | 21.64                   | 44.77                 |
| 64QAM      | 20.68                           | 21.98                           | 19.31                   | 20.61                   | 44.77                 |
| 256QAM     | 18.84                           | 19.07                           | 17.47                   | 17.70                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

## 7.1.6 LTE Band 13

### LTE Band 13, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 23205                          | CH 23230 | CH 23255  |
|            |         |           | 779.5 MHz                         | 782 MHz  | 784.5 MHz |
| QPSK       | 1       | 0         | 23.81                             | 23.78    | 23.66     |
|            | 1       | 12        | 23.80                             | 23.78    | 23.73     |
|            | 1       | 24        | 23.65                             | 23.74    | 23.62     |
|            | 12      | 0         | 22.73                             | 22.79    | 22.80     |
|            | 12      | 6         | 22.68                             | 22.75    | 22.75     |
|            | 12      | 13        | 22.74                             | 22.84    | 22.76     |
|            | 25      | 0         | 22.83                             | 22.91    | 22.77     |
| 16QAM      | 1       | 0         | 22.86                             | 22.81    | 22.74     |
|            | 1       | 12        | 22.91                             | 22.95    | 22.92     |
|            | 1       | 24        | 22.86                             | 22.85    | 22.76     |
|            | 12      | 0         | 21.86                             | 21.76    | 21.76     |
|            | 12      | 6         | 21.87                             | 21.83    | 21.75     |
|            | 12      | 13        | 21.75                             | 21.80    | 21.79     |
|            | 25      | 0         | 21.89                             | 21.90    | 21.77     |
| 64QAM      | 1       | 0         | 21.74                             | 21.94    | 21.79     |
|            | 1       | 12        | 21.76                             | 21.94    | 21.91     |
|            | 1       | 24        | 21.90                             | 21.87    | 21.86     |
|            | 12      | 0         | 20.76                             | 20.86    | 20.64     |
|            | 12      | 6         | 20.78                             | 20.76    | 20.72     |
|            | 12      | 13        | 20.67                             | 20.81    | 20.78     |
|            | 25      | 0         | 20.72                             | 20.92    | 20.68     |
| 256QAM     | 1       | 0         | 18.62                             | 18.78    | 18.63     |
|            | 1       | 12        | 18.76                             | 18.79    | 18.79     |
|            | 1       | 24        | 18.79                             | 18.72    | 18.72     |
|            | 12      | 0         | 18.74                             | 18.74    | 18.69     |
|            | 12      | 6         | 18.85                             | 18.90    | 18.72     |
|            | 12      | 13        | 18.78                             | 18.82    | 18.60     |
|            | 25      | 0         | 18.80                             | 18.99    | 18.93     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.68                           | 23.81                           | 21.44                   | 22.57                   | 44.77                 |
| 16QAM      | 21.75                           | 22.95                           | 20.51                   | 21.71                   | 44.77                 |
| 64QAM      | 20.64                           | 21.94                           | 19.40                   | 20.70                   | 44.77                 |
| 256QAM     | 18.60                           | 18.99                           | 17.36                   | 17.75                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 13, Channel Bandwidth: 10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
|------------|---------|-----------|-----------------------------------|
|            |         |           | CH 23230                          |
|            |         |           | 782 MHz                           |
| QPSK       | 1       | 0         | 23.87                             |
|            | 1       | 24        | 23.95                             |
|            | 1       | 49        | 23.88                             |
|            | 25      | 0         | 22.88                             |
|            | 25      | 12        | 22.94                             |
|            | 25      | 25        | 22.91                             |
|            | 50      | 0         | 23.02                             |
| 16QAM      | 1       | 0         | 22.96                             |
|            | 1       | 24        | 23.01                             |
|            | 1       | 49        | 22.99                             |
|            | 25      | 0         | 21.94                             |
|            | 25      | 12        | 22.00                             |
|            | 25      | 25        | 21.97                             |
|            | 50      | 0         | 22.02                             |
| 64QAM      | 1       | 0         | 22.09                             |
|            | 1       | 24        | 22.04                             |
|            | 1       | 49        | 22.07                             |
|            | 25      | 0         | 20.91                             |
|            | 25      | 12        | 20.96                             |
|            | 25      | 25        | 20.90                             |
|            | 50      | 0         | 20.97                             |
| 256QAM     | 1       | 0         | 18.84                             |
|            | 1       | 24        | 18.98                             |
|            | 1       | 49        | 18.91                             |
|            | 25      | 0         | 18.91                             |
|            | 25      | 12        | 18.98                             |
|            | 25      | 25        | 18.90                             |
|            | 50      | 0         | 19.08                             |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.88                           | 23.95                           | 21.64                   | 22.71                   | 44.77                 |
| 16QAM        | 21.94                           | 23.01                           | 20.70                   | 21.77                   | 44.77                 |
| 64QAM        | 20.90                           | 22.09                           | 19.66                   | 20.85                   | 44.77                 |
| 256QAM       | 18.84                           | 19.08                           | 17.60                   | 17.84                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

### 7.1.7 LTE Band 14

#### LTE Band 14, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 23305                          | CH 23330 | CH 23355  |
|            |         |           | 790.5 MHz                         | 793 MHz  | 795.5 MHz |
| QPSK       | 1       | 0         | 23.66                             | 23.81    | 23.74     |
|            | 1       | 12        | 23.55                             | 23.65    | 23.58     |
|            | 1       | 24        | 23.54                             | 23.65    | 23.53     |
|            | 12      | 0         | 22.67                             | 22.73    | 22.84     |
|            | 12      | 6         | 22.51                             | 22.80    | 22.75     |
|            | 12      | 13        | 22.65                             | 22.59    | 22.55     |
|            | 25      | 0         | 22.80                             | 22.73    | 22.74     |
| 16QAM      | 1       | 0         | 23.01                             | 23.01    | 22.88     |
|            | 1       | 12        | 22.86                             | 22.86    | 22.88     |
|            | 1       | 24        | 22.75                             | 22.75    | 22.78     |
|            | 12      | 0         | 21.52                             | 21.73    | 21.66     |
|            | 12      | 6         | 21.78                             | 21.82    | 21.73     |
|            | 12      | 13        | 21.60                             | 21.58    | 21.65     |
|            | 25      | 0         | 21.62                             | 21.78    | 21.55     |
| 64QAM      | 1       | 0         | 21.73                             | 21.78    | 21.91     |
|            | 1       | 12        | 21.81                             | 21.91    | 21.76     |
|            | 1       | 24        | 21.69                             | 21.83    | 21.72     |
|            | 12      | 0         | 20.62                             | 20.83    | 20.71     |
|            | 12      | 6         | 20.79                             | 20.74    | 20.72     |
|            | 12      | 13        | 20.51                             | 20.60    | 20.62     |
|            | 25      | 0         | 20.55                             | 20.71    | 20.69     |
| 256QAM     | 1       | 0         | 18.87                             | 18.90    | 18.65     |
|            | 1       | 12        | 18.80                             | 18.86    | 18.72     |
|            | 1       | 24        | 18.52                             | 18.57    | 18.56     |
|            | 12      | 0         | 18.66                             | 18.81    | 18.77     |
|            | 12      | 6         | 18.53                             | 18.76    | 18.59     |
|            | 12      | 13        | 18.57                             | 18.55    | 18.53     |
|            | 25      | 0         | 18.59                             | 18.73    | 18.79     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.51                           | 23.81                           | 21.27                   | 22.57                   | 44.77                 |
| 16QAM      | 21.52                           | 23.01                           | 20.28                   | 21.77                   | 44.77                 |
| 64QAM      | 20.51                           | 21.91                           | 19.27                   | 20.67                   | 44.77                 |
| 256QAM     | 18.52                           | 18.90                           | 17.28                   | 17.66                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 14, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
|------------|---------|-----------|-----------------------------------|
|            |         |           | CH 23330                          |
|            |         |           | 793 MHz                           |
| QPSK       | 1       | 0         | 23.90                             |
|            | 1       | 24        | 23.70                             |
|            | 1       | 49        | 23.70                             |
|            | 25      | 0         | 22.92                             |
|            | 25      | 12        | 22.85                             |
|            | 25      | 25        | 22.73                             |
|            | 50      | 0         | 22.91                             |
| 16QAM      | 1       | 0         | 23.06                             |
|            | 1       | 24        | 23.06                             |
|            | 1       | 49        | 22.92                             |
|            | 25      | 0         | 21.85                             |
|            | 25      | 12        | 21.92                             |
|            | 25      | 25        | 21.77                             |
|            | 50      | 0         | 21.86                             |
| 64QAM      | 1       | 0         | 21.98                             |
|            | 1       | 24        | 22.08                             |
|            | 1       | 49        | 21.90                             |
|            | 25      | 0         | 20.91                             |
|            | 25      | 12        | 20.94                             |
|            | 25      | 25        | 20.76                             |
|            | 50      | 0         | 20.89                             |
| 256QAM     | 1       | 0         | 18.95                             |
|            | 1       | 24        | 18.99                             |
|            | 1       | 49        | 18.65                             |
|            | 25      | 0         | 18.97                             |
|            | 25      | 12        | 18.81                             |
|            | 25      | 25        | 18.70                             |
|            | 50      | 0         | 18.86                             |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.73                           | 23.90                           | 21.49                   | 22.66                   | 44.77                 |
| 16QAM        | 21.77                           | 23.06                           | 20.53                   | 21.82                   | 44.77                 |
| 64QAM        | 20.76                           | 22.08                           | 19.52                   | 20.84                   | 44.77                 |
| 256QAM       | 18.65                           | 18.99                           | 17.41                   | 17.75                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

### 7.1.8 LTE Band 17

#### LTE Band 17, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 23755                          | CH 23790 | CH 23825  |
|            |         |           | 706.5 MHz                         | 710 MHz  | 713.5 MHz |
| QPSK       | 1       | 0         | 23.63                             | 23.64    | 23.62     |
|            | 1       | 12        | 23.81                             | 23.82    | 23.78     |
|            | 1       | 24        | 23.90                             | 23.87    | 23.77     |
|            | 12      | 0         | 22.52                             | 22.73    | 22.57     |
|            | 12      | 6         | 22.70                             | 22.77    | 22.62     |
|            | 12      | 13        | 22.69                             | 22.90    | 22.74     |
|            | 25      | 0         | 22.65                             | 22.74    | 22.70     |
| 16QAM      | 1       | 0         | 22.80                             | 22.81    | 22.72     |
|            | 1       | 12        | 22.92                             | 22.90    | 22.80     |
|            | 1       | 24        | 22.84                             | 22.93    | 22.89     |
|            | 12      | 0         | 21.68                             | 21.71    | 21.65     |
|            | 12      | 6         | 21.76                             | 21.83    | 21.75     |
|            | 12      | 13        | 21.69                             | 21.91    | 21.82     |
|            | 25      | 0         | 21.66                             | 21.69    | 21.59     |
| 64QAM      | 1       | 0         | 21.62                             | 21.60    | 21.71     |
|            | 1       | 12        | 21.87                             | 22.05    | 21.90     |
|            | 1       | 24        | 22.08                             | 22.01    | 21.87     |
|            | 12      | 0         | 20.70                             | 20.74    | 20.67     |
|            | 12      | 6         | 20.61                             | 20.77    | 20.68     |
|            | 12      | 13        | 20.85                             | 20.76    | 20.86     |
|            | 25      | 0         | 20.86                             | 20.87    | 20.78     |
| 256QAM     | 1       | 0         | 18.57                             | 18.66    | 18.53     |
|            | 1       | 12        | 18.86                             | 18.92    | 18.81     |
|            | 1       | 24        | 18.76                             | 19.00    | 19.00     |
|            | 12      | 0         | 18.56                             | 18.64    | 18.53     |
|            | 12      | 6         | 18.75                             | 18.69    | 18.68     |
|            | 12      | 13        | 18.80                             | 18.83    | 18.74     |
|            | 25      | 0         | 18.70                             | 18.79    | 18.65     |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.52                           | 23.90                           | 21.19                   | 22.57                   | 44.77                 |
| 16QAM        | 21.59                           | 22.93                           | 20.26                   | 21.60                   | 44.77                 |
| 64QAM        | 20.61                           | 22.08                           | 19.28                   | 20.75                   | 44.77                 |
| 256QAM       | 18.53                           | 19.00                           | 17.20                   | 17.67                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 17, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 23780                          | CH 23790 | CH 23800 |
|            |         |           | 709 MHz                           | 710 MHz  | 711 MHz  |
| QPSK       | 1       | 0         | 23.74                             | 23.77    | 23.66    |
|            | 1       | 24        | 23.87                             | 23.91    | 23.81    |
|            | 1       | 49        | 23.91                             | 23.99    | 23.98    |
|            | 25      | 0         | 22.76                             | 22.81    | 22.73    |
|            | 25      | 12        | 22.76                             | 22.90    | 22.81    |
|            | 25      | 25        | 22.86                             | 22.95    | 22.85    |
|            | 50      | 0         | 22.76                             | 22.83    | 22.73    |
| 16QAM      | 1       | 0         | 22.88                             | 22.88    | 22.77    |
|            | 1       | 24        | 22.91                             | 23.03    | 22.88    |
|            | 1       | 49        | 23.01                             | 23.04    | 23.01    |
|            | 25      | 0         | 21.73                             | 21.79    | 21.73    |
|            | 25      | 12        | 21.80                             | 21.88    | 21.82    |
|            | 25      | 25        | 21.91                             | 22.01    | 21.88    |
|            | 50      | 0         | 21.77                             | 21.86    | 21.76    |
| 64QAM      | 1       | 0         | 21.66                             | 21.80    | 21.78    |
|            | 1       | 24        | 22.00                             | 22.02    | 22.02    |
|            | 1       | 49        | 22.06                             | 22.09    | 22.07    |
|            | 25      | 0         | 20.67                             | 20.80    | 20.73    |
|            | 25      | 12        | 20.84                             | 20.89    | 20.88    |
|            | 25      | 25        | 20.89                             | 20.94    | 20.80    |
|            | 50      | 0         | 20.89                             | 20.95    | 20.89    |
| 256QAM     | 1       | 0         | 18.65                             | 18.71    | 18.69    |
|            | 1       | 24        | 19.07                             | 19.09    | 19.06    |
|            | 1       | 49        | 19.00                             | 19.05    | 18.97    |
|            | 25      | 0         | 18.62                             | 18.77    | 18.77    |
|            | 25      | 12        | 18.80                             | 18.84    | 18.70    |
|            | 25      | 25        | 18.90                             | 18.90    | 18.76    |
|            | 50      | 0         | 18.76                             | 18.90    | 18.90    |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.73                           | 23.99                           | 21.40                   | 22.66                   | 44.77                 |
| 16QAM        | 21.73                           | 23.04                           | 20.40                   | 21.71                   | 44.77                 |
| 64QAM        | 20.67                           | 22.09                           | 19.34                   | 20.76                   | 44.77                 |
| 256QAM       | 18.62                           | 19.09                           | 17.29                   | 17.76                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

### 7.1.9 LTE Band 25

#### LTE Band 25, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 26047                          | CH 26365   | CH 26683   |
|            |         |           | 1850.7 MHz                        | 1882.5 MHz | 1914.3 MHz |
| QPSK       | 1       | 0         | 23.91                             | 23.86      | 23.87      |
|            | 1       | 2         | 23.91                             | 23.97      | 23.88      |
|            | 1       | 5         | 23.84                             | 23.96      | 23.87      |
|            | 3       | 0         | 22.81                             | 22.71      | 22.68      |
|            | 3       | 1         | 22.74                             | 22.89      | 22.76      |
|            | 3       | 3         | 22.99                             | 22.99      | 22.74      |
|            | 6       | 0         | 22.75                             | 22.87      | 22.66      |
| 16QAM      | 1       | 0         | 22.90                             | 22.92      | 22.93      |
|            | 1       | 2         | 22.99                             | 23.09      | 22.91      |
|            | 1       | 5         | 23.04                             | 22.92      | 22.81      |
|            | 3       | 0         | 21.77                             | 21.76      | 21.66      |
|            | 3       | 1         | 21.85                             | 21.93      | 21.72      |
|            | 3       | 3         | 21.83                             | 21.99      | 21.85      |
|            | 6       | 0         | 21.83                             | 21.88      | 21.78      |
| 64QAM      | 1       | 0         | 21.94                             | 21.89      | 21.96      |
|            | 1       | 2         | 22.05                             | 22.05      | 22.02      |
|            | 1       | 5         | 21.83                             | 22.00      | 21.92      |
|            | 3       | 0         | 20.69                             | 20.70      | 20.72      |
|            | 3       | 1         | 20.81                             | 20.95      | 20.71      |
|            | 3       | 3         | 20.81                             | 20.98      | 20.82      |
|            | 6       | 0         | 20.79                             | 20.84      | 20.66      |
| 256QAM     | 1       | 0         | 18.69                             | 18.82      | 18.82      |
|            | 1       | 2         | 19.04                             | 19.06      | 18.95      |
|            | 1       | 5         | 18.80                             | 18.90      | 18.84      |
|            | 3       | 0         | 18.79                             | 18.82      | 18.75      |
|            | 3       | 1         | 18.70                             | 18.81      | 18.78      |
|            | 3       | 3         | 18.84                             | 19.01      | 18.99      |
|            | 6       | 0         | 18.74                             | 18.78      | 18.58      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.66                           | 23.97                           | 25.86                    | 27.17                    | 33.01                  |
| 16QAM      | 21.66                           | 23.09                           | 24.86                    | 26.29                    | 33.01                  |
| 64QAM      | 20.66                           | 22.05                           | 23.86                    | 25.25                    | 33.01                  |
| 256QAM     | 18.58                           | 19.06                           | 21.78                    | 22.26                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 25, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 26055                          | CH 26365   | CH 26675   |
|            |         |           | 1851.5 MHz                        | 1882.5 MHz | 1913.5 MHz |
| QPSK       | 1       | 0         | 23.75                             | 23.91      | 23.83      |
|            | 1       | 7         | 23.87                             | 23.96      | 23.87      |
|            | 1       | 14        | 23.85                             | 23.95      | 23.82      |
|            | 8       | 0         | 22.60                             | 22.73      | 22.58      |
|            | 8       | 3         | 22.67                             | 22.81      | 22.78      |
|            | 8       | 7         | 22.87                             | 23.01      | 22.88      |
|            | 15      | 0         | 22.75                             | 22.80      | 22.85      |
| 16QAM      | 1       | 0         | 22.80                             | 22.86      | 22.86      |
|            | 1       | 7         | 22.98                             | 23.07      | 23.01      |
|            | 1       | 14        | 22.89                             | 23.03      | 22.99      |
|            | 8       | 0         | 21.75                             | 21.82      | 21.78      |
|            | 8       | 3         | 21.79                             | 21.95      | 21.80      |
|            | 8       | 7         | 21.76                             | 21.99      | 21.83      |
|            | 15      | 0         | 21.71                             | 21.84      | 21.87      |
| 64QAM      | 1       | 0         | 22.02                             | 21.94      | 21.87      |
|            | 1       | 7         | 22.03                             | 22.09      | 22.09      |
|            | 1       | 14        | 21.83                             | 22.06      | 21.95      |
|            | 8       | 0         | 20.57                             | 20.80      | 20.62      |
|            | 8       | 3         | 20.76                             | 20.89      | 20.89      |
|            | 8       | 7         | 20.95                             | 20.96      | 20.86      |
|            | 15      | 0         | 20.83                             | 20.87      | 20.71      |
| 256QAM     | 1       | 0         | 18.78                             | 18.96      | 18.73      |
|            | 1       | 7         | 18.92                             | 19.03      | 19.01      |
|            | 1       | 14        | 18.92                             | 18.98      | 18.80      |
|            | 8       | 0         | 18.83                             | 18.91      | 18.73      |
|            | 8       | 3         | 18.74                             | 18.91      | 18.77      |
|            | 8       | 7         | 18.86                             | 18.92      | 18.77      |
|            | 15      | 0         | 18.70                             | 18.76      | 18.76      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.58                           | 23.96                           | 25.78                    | 27.16                    | 33.01                  |
| 16QAM      | 21.71                           | 23.07                           | 24.91                    | 26.27                    | 33.01                  |
| 64QAM      | 20.57                           | 22.09                           | 23.77                    | 25.29                    | 33.01                  |
| 256QAM     | 18.70                           | 19.03                           | 21.90                    | 22.23                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 25, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 26065                          | CH 26365   | CH 26665   |
|            |         |           | 1852.5 MHz                        | 1882.5 MHz | 1912.5 MHz |
| QPSK       | 1       | 0         | 23.93                             | 23.83      | 23.76      |
|            | 1       | 12        | 23.84                             | 23.94      | 23.89      |
|            | 1       | 24        | 23.93                             | 23.87      | 23.88      |
|            | 12      | 0         | 22.64                             | 22.83      | 22.72      |
|            | 12      | 6         | 22.82                             | 22.81      | 22.69      |
|            | 12      | 13        | 22.94                             | 22.90      | 22.77      |
|            | 25      | 0         | 22.72                             | 22.87      | 22.69      |
| 16QAM      | 1       | 0         | 22.78                             | 22.88      | 22.87      |
|            | 1       | 12        | 23.05                             | 23.07      | 22.90      |
|            | 1       | 24        | 22.96                             | 23.00      | 22.90      |
|            | 12      | 0         | 21.70                             | 21.87      | 21.65      |
|            | 12      | 6         | 21.72                             | 21.95      | 21.81      |
|            | 12      | 13        | 21.84                             | 21.86      | 21.74      |
|            | 25      | 0         | 21.82                             | 21.85      | 21.74      |
| 64QAM      | 1       | 0         | 21.84                             | 21.96      | 21.87      |
|            | 1       | 12        | 21.96                             | 22.01      | 21.94      |
|            | 1       | 24        | 21.79                             | 21.95      | 21.91      |
|            | 12      | 0         | 20.81                             | 20.77      | 20.63      |
|            | 12      | 6         | 20.87                             | 20.83      | 20.79      |
|            | 12      | 13        | 20.76                             | 20.99      | 20.78      |
|            | 25      | 0         | 20.77                             | 20.74      | 20.73      |
| 256QAM     | 1       | 0         | 18.78                             | 18.97      | 18.77      |
|            | 1       | 12        | 19.08                             | 19.05      | 19.02      |
|            | 1       | 24        | 18.77                             | 18.99      | 18.80      |
|            | 12      | 0         | 18.65                             | 18.86      | 18.71      |
|            | 12      | 6         | 18.89                             | 18.82      | 18.72      |
|            | 12      | 13        | 18.80                             | 18.95      | 18.88      |
|            | 25      | 0         | 18.65                             | 18.79      | 18.71      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.64                           | 23.94                           | 25.84                    | 27.14                    | 33.01                  |
| 16QAM      | 21.65                           | 23.07                           | 24.85                    | 26.27                    | 33.01                  |
| 64QAM      | 20.63                           | 22.01                           | 23.83                    | 25.21                    | 33.01                  |
| 256QAM     | 18.65                           | 19.08                           | 21.85                    | 22.28                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 25, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |          |
|------------|---------|-----------|-----------------------------------|------------|----------|
|            |         |           | CH 26090                          | CH 26365   | CH 26640 |
|            |         |           | 1855 MHz                          | 1882.5 MHz | 1910 MHz |
| QPSK       | 1       | 0         | 23.76                             | 23.89      | 23.80    |
|            | 1       | 24        | 23.91                             | 23.97      | 23.93    |
|            | 1       | 49        | 23.89                             | 23.96      | 23.74    |
|            | 25      | 0         | 22.69                             | 22.79      | 22.63    |
|            | 25      | 12        | 22.64                             | 22.79      | 22.69    |
|            | 25      | 25        | 22.87                             | 22.97      | 22.85    |
|            | 50      | 0         | 22.83                             | 22.87      | 22.77    |
| 16QAM      | 1       | 0         | 22.77                             | 22.90      | 22.91    |
|            | 1       | 24        | 22.94                             | 23.02      | 22.97    |
|            | 1       | 49        | 22.83                             | 22.98      | 22.85    |
|            | 25      | 0         | 21.65                             | 21.90      | 21.81    |
|            | 25      | 12        | 21.83                             | 21.84      | 21.82    |
|            | 25      | 25        | 21.80                             | 21.88      | 21.94    |
|            | 50      | 0         | 21.72                             | 21.82      | 21.72    |
| 64QAM      | 1       | 0         | 21.94                             | 21.97      | 21.88    |
|            | 1       | 24        | 21.93                             | 22.06      | 22.05    |
|            | 1       | 49        | 22.05                             | 21.94      | 21.90    |
|            | 25      | 0         | 20.81                             | 20.76      | 20.63    |
|            | 25      | 12        | 20.69                             | 20.95      | 20.86    |
|            | 25      | 25        | 20.75                             | 20.96      | 20.80    |
|            | 50      | 0         | 20.87                             | 20.83      | 20.64    |
| 256QAM     | 1       | 0         | 18.88                             | 18.85      | 18.82    |
|            | 1       | 24        | 18.95                             | 19.05      | 19.08    |
|            | 1       | 49        | 18.92                             | 18.97      | 18.82    |
|            | 25      | 0         | 18.79                             | 18.91      | 18.80    |
|            | 25      | 12        | 18.83                             | 18.88      | 18.86    |
|            | 25      | 25        | 18.80                             | 18.86      | 18.79    |
|            | 50      | 0         | 18.71                             | 18.82      | 18.83    |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.63                           | 23.97                           | 25.83                    | 27.17                    | 33.01                  |
| 16QAM        | 21.65                           | 23.02                           | 24.85                    | 26.22                    | 33.01                  |
| 64QAM        | 20.63                           | 22.06                           | 23.83                    | 25.26                    | 33.01                  |
| 256QAM       | 18.71                           | 19.08                           | 21.91                    | 22.28                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 25, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |            |
|------------|---------|-----------|-----------------------------------|------------|------------|
|            |         |           | CH 26115                          | CH 26365   | CH 26615   |
|            |         |           | 1857.5 MHz                        | 1882.5 MHz | 1907.5 MHz |
| QPSK       | 1       | 0         | 23.85                             | 23.85      | 23.96      |
|            | 1       | 37        | 23.88                             | 23.98      | 23.93      |
|            | 1       | 74        | 23.81                             | 23.97      | 23.85      |
|            | 36      | 0         | 22.67                             | 22.77      | 22.73      |
|            | 36      | 19        | 22.73                             | 22.92      | 22.67      |
|            | 36      | 39        | 22.78                             | 23.01      | 22.90      |
|            | 75      | 0         | 22.88                             | 22.79      | 22.87      |
| 16QAM      | 1       | 0         | 22.82                             | 22.97      | 22.87      |
|            | 1       | 37        | 22.95                             | 23.02      | 23.00      |
|            | 1       | 74        | 22.93                             | 23.07      | 22.93      |
|            | 36      | 0         | 21.75                             | 21.75      | 21.68      |
|            | 36      | 19        | 21.93                             | 21.96      | 21.94      |
|            | 36      | 39        | 21.76                             | 21.90      | 21.84      |
|            | 75      | 0         | 21.93                             | 21.96      | 21.89      |
| 64QAM      | 1       | 0         | 21.85                             | 21.89      | 21.80      |
|            | 1       | 37        | 22.08                             | 22.03      | 21.99      |
|            | 1       | 74        | 21.83                             | 21.98      | 21.92      |
|            | 36      | 0         | 20.63                             | 20.82      | 20.69      |
|            | 36      | 19        | 20.76                             | 20.93      | 20.71      |
|            | 36      | 39        | 20.89                             | 20.97      | 20.79      |
|            | 75      | 0         | 20.73                             | 20.84      | 20.66      |
| 256QAM     | 1       | 0         | 18.82                             | 18.88      | 18.84      |
|            | 1       | 37        | 18.92                             | 19.04      | 18.99      |
|            | 1       | 74        | 18.87                             | 18.88      | 18.81      |
|            | 36      | 0         | 18.87                             | 18.85      | 18.85      |
|            | 36      | 19        | 18.74                             | 18.91      | 18.88      |
|            | 36      | 39        | 18.74                             | 18.94      | 18.84      |
|            | 75      | 0         | 18.67                             | 18.82      | 18.67      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.67                           | 23.98                           | 25.87                    | 27.18                    | 33.01                  |
| 16QAM        | 21.68                           | 23.07                           | 24.88                    | 26.27                    | 33.01                  |
| 64QAM        | 20.63                           | 22.08                           | 23.83                    | 25.28                    | 33.01                  |
| 256QAM       | 18.67                           | 19.04                           | 21.87                    | 22.24                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 25, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |            |          |
|------------|---------|-----------|-----------------------------------|------------|----------|
|            |         |           | CH 26140                          | CH 26365   | CH 26590 |
|            |         |           | 1860 MHz                          | 1882.5 MHz | 1905 MHz |
| QPSK       | 1       | 0         | 23.95                             | 23.98      | 23.88    |
|            | 1       | 50        | 23.95                             | 23.99      | 23.98    |
|            | 1       | 99        | 23.93                             | 23.97      | 23.94    |
|            | 50      | 0         | 22.86                             | 22.91      | 22.77    |
|            | 50      | 25        | 22.97                             | 22.97      | 22.93    |
|            | 50      | 50        | 23.03                             | 23.07      | 23.06    |
|            | 100     | 0         | 22.86                             | 22.95      | 22.88    |
| 16QAM      | 1       | 0         | 23.00                             | 23.03      | 22.93    |
|            | 1       | 50        | 23.07                             | 23.07      | 23.07    |
|            | 1       | 99        | 23.01                             | 23.02      | 23.00    |
|            | 50      | 0         | 21.81                             | 21.95      | 21.94    |
|            | 50      | 25        | 21.90                             | 22.02      | 21.95    |
|            | 50      | 50        | 21.96                             | 22.05      | 22.00    |
|            | 100     | 0         | 21.88                             | 22.02      | 21.95    |
| 64QAM      | 1       | 0         | 22.03                             | 22.07      | 22.04    |
|            | 1       | 50        | 22.07                             | 22.01      | 22.06    |
|            | 1       | 99        | 22.02                             | 22.02      | 21.99    |
|            | 50      | 0         | 20.77                             | 20.89      | 20.89    |
|            | 50      | 25        | 21.01                             | 21.01      | 20.90    |
|            | 50      | 50        | 20.99                             | 21.06      | 20.92    |
|            | 100     | 0         | 20.79                             | 20.93      | 20.93    |
| 256QAM     | 1       | 0         | 18.97                             | 19.02      | 19.00    |
|            | 1       | 50        | 19.09                             | 19.06      | 19.07    |
|            | 1       | 99        | 19.02                             | 19.04      | 19.03    |
|            | 50      | 0         | 18.89                             | 18.99      | 18.98    |
|            | 50      | 25        | 18.95                             | 18.98      | 18.86    |
|            | 50      | 50        | 18.96                             | 19.06      | 18.95    |
|            | 100     | 0         | 18.76                             | 18.91      | 18.91    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.77                           | 23.99                           | 25.97                    | 27.19                    | 33.01                  |
| 16QAM      | 21.81                           | 23.07                           | 25.01                    | 26.27                    | 33.01                  |
| 64QAM      | 20.77                           | 22.07                           | 23.97                    | 25.27                    | 33.01                  |
| 256QAM     | 18.76                           | 19.09                           | 21.96                    | 22.29                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### 7.1.10 LTE Band 26 (814 MHz ~ 824 MHz)

#### LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 26697                          | CH 26740 | CH 26783  |
|            |         |           | 814.7 MHz                         | 819 MHz  | 823.3 MHz |
| QPSK       | 1       | 0         | 23.54                             | 23.65    | 23.58     |
|            | 1       | 2         | 23.54                             | 23.67    | 23.70     |
|            | 1       | 5         | 23.68                             | 23.64    | 23.61     |
|            | 3       | 0         | 22.67                             | 22.82    | 22.71     |
|            | 3       | 1         | 22.73                             | 22.76    | 22.65     |
|            | 3       | 3         | 22.60                             | 22.79    | 22.72     |
|            | 6       | 0         | 22.52                             | 22.66    | 22.56     |
| 16QAM      | 1       | 0         | 22.76                             | 22.80    | 22.83     |
|            | 1       | 2         | 22.85                             | 22.89    | 22.86     |
|            | 1       | 5         | 22.84                             | 22.84    | 22.96     |
|            | 3       | 0         | 21.71                             | 21.62    | 21.66     |
|            | 3       | 1         | 21.62                             | 21.76    | 21.51     |
|            | 3       | 3         | 21.82                             | 21.90    | 21.79     |
|            | 6       | 0         | 21.69                             | 21.78    | 21.57     |
| 64QAM      | 1       | 0         | 21.68                             | 21.83    | 21.61     |
|            | 1       | 2         | 21.90                             | 21.95    | 21.84     |
|            | 1       | 5         | 21.90                             | 21.86    | 21.71     |
|            | 3       | 0         | 20.57                             | 20.79    | 20.63     |
|            | 3       | 1         | 20.64                             | 20.61    | 20.55     |
|            | 3       | 3         | 20.63                             | 20.71    | 20.60     |
|            | 6       | 0         | 20.67                             | 20.65    | 20.57     |
| 256QAM     | 1       | 0         | 18.83                             | 18.88    | 18.72     |
|            | 1       | 2         | 18.85                             | 18.87    | 18.74     |
|            | 1       | 5         | 18.64                             | 18.76    | 18.62     |
|            | 3       | 0         | 18.71                             | 18.75    | 18.80     |
|            | 3       | 1         | 18.62                             | 18.65    | 18.76     |
|            | 3       | 3         | 18.57                             | 18.78    | 18.61     |
|            | 6       | 0         | 18.66                             | 18.65    | 18.62     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.52                           | 23.70                           | 21.62                   | 22.80                   | 50                    |
| 16QAM      | 21.51                           | 22.96                           | 20.61                   | 22.06                   | 50                    |
| 64QAM      | 20.55                           | 21.95                           | 19.65                   | 21.05                   | 50                    |
| 256QAM     | 18.57                           | 18.88                           | 17.67                   | 17.98                   | 50                    |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 26705                          | CH 26740 | CH 26775  |
|            |         |           | 815.5 MHz                         | 819 MHz  | 822.5 MHz |
| QPSK       | 1       | 0         | 23.63                             | 23.56    | 23.54     |
|            | 1       | 7         | 23.61                             | 23.76    | 23.53     |
|            | 1       | 14        | 23.69                             | 23.70    | 23.57     |
|            | 8       | 0         | 22.65                             | 22.75    | 22.67     |
|            | 8       | 3         | 22.58                             | 22.82    | 22.67     |
|            | 8       | 7         | 22.76                             | 22.78    | 22.69     |
|            | 15      | 0         | 22.62                             | 22.71    | 22.62     |
| 16QAM      | 1       | 0         | 22.75                             | 22.83    | 22.76     |
|            | 1       | 7         | 22.89                             | 22.96    | 22.80     |
|            | 1       | 14        | 22.85                             | 22.82    | 22.83     |
|            | 8       | 0         | 21.54                             | 21.67    | 21.70     |
|            | 8       | 3         | 21.58                             | 21.69    | 21.63     |
|            | 8       | 7         | 21.89                             | 21.91    | 21.84     |
|            | 15      | 0         | 21.66                             | 21.80    | 21.59     |
| 64QAM      | 1       | 0         | 21.84                             | 21.71    | 21.71     |
|            | 1       | 7         | 21.83                             | 21.83    | 21.83     |
|            | 1       | 14        | 21.77                             | 21.88    | 21.74     |
|            | 8       | 0         | 20.80                             | 20.73    | 20.70     |
|            | 8       | 3         | 20.55                             | 20.62    | 20.50     |
|            | 8       | 7         | 20.61                             | 20.71    | 20.64     |
|            | 15      | 0         | 20.58                             | 20.65    | 20.52     |
| 256QAM     | 1       | 0         | 18.74                             | 18.91    | 18.76     |
|            | 1       | 7         | 18.81                             | 18.94    | 18.90     |
|            | 1       | 14        | 18.61                             | 18.68    | 18.68     |
|            | 8       | 0         | 18.64                             | 18.73    | 18.71     |
|            | 8       | 3         | 18.71                             | 18.68    | 18.50     |
|            | 8       | 7         | 18.62                             | 18.74    | 18.76     |
|            | 15      | 0         | 18.71                             | 18.75    | 18.76     |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.58                           | 23.76                           | 21.68                   | 22.86                   | 50                    |
| 16QAM        | 21.54                           | 22.96                           | 20.64                   | 22.06                   | 50                    |
| 64QAM        | 20.50                           | 21.88                           | 19.60                   | 20.98                   | 50                    |
| 256QAM       | 18.50                           | 18.94                           | 17.60                   | 18.04                   | 50                    |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 5 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |           |
|------------|---------|-----------|-----------------------------------|----------|-----------|
|            |         |           | CH 26715                          | CH 26740 | CH 26765  |
|            |         |           | 816.5 MHz                         | 819 MHz  | 821.5 MHz |
| QPSK       | 1       | 0         | 23.62                             | 23.61    | 23.54     |
|            | 1       | 12        | 23.67                             | 23.70    | 23.73     |
|            | 1       | 24        | 23.56                             | 23.72    | 23.62     |
|            | 12      | 0         | 22.68                             | 22.68    | 22.63     |
|            | 12      | 6         | 22.62                             | 22.69    | 22.68     |
|            | 12      | 13        | 22.62                             | 22.79    | 22.74     |
|            | 25      | 0         | 22.58                             | 22.61    | 22.60     |
| 16QAM      | 1       | 0         | 22.78                             | 22.77    | 22.66     |
|            | 1       | 12        | 22.84                             | 22.99    | 22.73     |
|            | 1       | 24        | 22.73                             | 22.97    | 22.76     |
|            | 12      | 0         | 21.62                             | 21.73    | 21.69     |
|            | 12      | 6         | 21.67                             | 21.70    | 21.63     |
|            | 12      | 13        | 21.77                             | 21.83    | 21.82     |
|            | 25      | 0         | 21.46                             | 21.78    | 21.77     |
| 64QAM      | 1       | 0         | 21.67                             | 21.85    | 21.79     |
|            | 1       | 12        | 21.77                             | 21.88    | 21.89     |
|            | 1       | 24        | 21.73                             | 21.87    | 21.71     |
|            | 12      | 0         | 20.65                             | 20.75    | 20.72     |
|            | 12      | 6         | 20.57                             | 20.62    | 20.58     |
|            | 12      | 13        | 20.68                             | 20.71    | 20.53     |
|            | 25      | 0         | 20.67                             | 20.73    | 20.57     |
| 256QAM     | 1       | 0         | 18.67                             | 18.81    | 18.72     |
|            | 1       | 12        | 18.83                             | 18.90    | 18.68     |
|            | 1       | 24        | 18.71                             | 18.71    | 18.61     |
|            | 12      | 0         | 18.58                             | 18.80    | 18.75     |
|            | 12      | 6         | 18.72                             | 18.70    | 18.62     |
|            | 12      | 13        | 18.61                             | 18.72    | 18.57     |
|            | 25      | 0         | 20.67                             | 20.73    | 20.57     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.58                           | 23.73                           | 21.68                   | 22.83                   | 50                    |
| 16QAM      | 21.46                           | 22.99                           | 20.56                   | 22.09                   | 50                    |
| 64QAM      | 20.53                           | 21.89                           | 19.63                   | 20.99                   | 50                    |
| 256QAM     | 18.57                           | 20.73                           | 17.67                   | 19.83                   | 50                    |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
|------------|---------|-----------|-----------------------------------|
|            |         |           | CH 26740                          |
|            |         |           | 819 MHz                           |
| QPSK       | 1       | 0         | 23.57                             |
|            | 1       | 24        | 23.80                             |
|            | 1       | 49        | 23.71                             |
|            | 25      | 0         | 22.86                             |
|            | 25      | 12        | 22.79                             |
|            | 25      | 25        | 22.79                             |
|            | 50      | 0         | 22.77                             |
| 16QAM      | 1       | 0         | 22.86                             |
|            | 1       | 24        | 23.00                             |
|            | 1       | 49        | 22.88                             |
|            | 25      | 0         | 21.75                             |
|            | 25      | 12        | 21.75                             |
|            | 25      | 25        | 21.94                             |
|            | 50      | 0         | 21.74                             |
| 64QAM      | 1       | 0         | 21.89                             |
|            | 1       | 24        | 22.01                             |
|            | 1       | 49        | 21.84                             |
|            | 25      | 0         | 20.87                             |
|            | 25      | 12        | 20.67                             |
|            | 25      | 25        | 20.82                             |
|            | 50      | 0         | 20.75                             |
| 256QAM     | 1       | 0         | 18.82                             |
|            | 1       | 24        | 18.93                             |
|            | 1       | 49        | 18.68                             |
|            | 25      | 0         | 18.84                             |
|            | 25      | 12        | 18.71                             |
|            | 25      | 25        | 18.76                             |
|            | 50      | 0         | 18.79                             |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.77                           | 23.80                           | 21.87                   | 22.90                   | 50                    |
| 16QAM        | 21.74                           | 23.00                           | 20.84                   | 22.10                   | 50                    |
| 64QAM        | 20.67                           | 22.01                           | 19.77                   | 21.11                   | 50                    |
| 256QAM       | 18.68                           | 18.93                           | 17.78                   | 18.03                   | 50                    |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

### 7.1.11 LTE Band 26 (824 MHz ~ 849 MHz)

#### LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 26797                          | CH 26915  | CH 27033  |
|            |         |           | 824.7 MHz                         | 836.5 MHz | 848.3 MHz |
| QPSK       | 1       | 0         | 23.55                             | 23.75     | 23.67     |
|            | 1       | 2         | 23.64                             | 23.61     | 23.55     |
|            | 1       | 5         | 23.65                             | 23.69     | 23.60     |
|            | 3       | 0         | 22.65                             | 22.73     | 22.68     |
|            | 3       | 1         | 22.63                             | 22.70     | 22.70     |
|            | 3       | 3         | 22.68                             | 22.69     | 22.55     |
|            | 6       | 0         | 22.74                             | 22.76     | 22.57     |
| 16QAM      | 1       | 0         | 22.81                             | 22.81     | 22.79     |
|            | 1       | 2         | 22.82                             | 22.93     | 22.85     |
|            | 1       | 5         | 22.87                             | 22.89     | 22.91     |
|            | 3       | 0         | 21.70                             | 21.72     | 21.66     |
|            | 3       | 1         | 21.63                             | 21.76     | 21.58     |
|            | 3       | 3         | 21.79                             | 21.89     | 21.75     |
|            | 6       | 0         | 21.54                             | 21.67     | 21.55     |
| 64QAM      | 1       | 0         | 21.55                             | 21.75     | 21.70     |
|            | 1       | 2         | 21.88                             | 21.93     | 21.82     |
|            | 1       | 5         | 21.73                             | 21.85     | 21.86     |
|            | 3       | 0         | 20.59                             | 20.71     | 20.76     |
|            | 3       | 1         | 20.64                             | 20.63     | 20.60     |
|            | 3       | 3         | 20.53                             | 20.74     | 20.55     |
|            | 6       | 0         | 20.60                             | 20.71     | 20.72     |
| 256QAM     | 1       | 0         | 18.85                             | 18.81     | 18.75     |
|            | 1       | 2         | 18.83                             | 18.89     | 18.83     |
|            | 1       | 5         | 18.73                             | 18.61     | 18.63     |
|            | 3       | 0         | 18.79                             | 18.77     | 18.63     |
|            | 3       | 1         | 18.60                             | 18.64     | 18.56     |
|            | 3       | 3         | 18.66                             | 18.79     | 18.69     |
|            | 6       | 0         | 18.70                             | 18.67     | 18.72     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.55                           | 23.75                           | 21.65                   | 22.85                   | 38.45                 |
| 16QAM      | 21.54                           | 22.93                           | 20.64                   | 22.03                   | 38.45                 |
| 64QAM      | 20.53                           | 21.93                           | 19.63                   | 21.03                   | 38.45                 |
| 256QAM     | 18.56                           | 18.89                           | 17.66                   | 17.99                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 3 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 26805                          | CH 26915  | CH 27025  |
|            |         |           | 825.5 MHz                         | 836.5 MHz | 847.5 MHz |
| QPSK       | 1       | 0         | 23.59                             | 23.69     | 23.56     |
|            | 1       | 7         | 23.74                             | 23.75     | 23.65     |
|            | 1       | 14        | 23.61                             | 23.67     | 23.52     |
|            | 8       | 0         | 22.81                             | 22.80     | 22.59     |
|            | 8       | 3         | 22.72                             | 22.75     | 22.59     |
|            | 8       | 7         | 22.69                             | 22.72     | 22.79     |
|            | 15      | 0         | 22.63                             | 22.75     | 22.69     |
| 16QAM      | 1       | 0         | 22.75                             | 22.76     | 22.65     |
|            | 1       | 7         | 22.83                             | 22.85     | 22.75     |
|            | 1       | 14        | 22.82                             | 22.90     | 22.72     |
|            | 8       | 0         | 21.57                             | 21.72     | 21.54     |
|            | 8       | 3         | 21.60                             | 21.69     | 21.53     |
|            | 8       | 7         | 21.68                             | 21.85     | 21.85     |
|            | 15      | 0         | 21.58                             | 21.75     | 21.68     |
| 64QAM      | 1       | 0         | 21.61                             | 21.70     | 21.81     |
|            | 1       | 7         | 21.80                             | 21.84     | 21.83     |
|            | 1       | 14        | 21.90                             | 21.92     | 21.83     |
|            | 8       | 0         | 20.65                             | 20.71     | 20.69     |
|            | 8       | 3         | 20.50                             | 20.58     | 20.59     |
|            | 8       | 7         | 20.64                             | 20.72     | 20.60     |
|            | 15      | 0         | 20.58                             | 20.73     | 20.57     |
| 256QAM     | 1       | 0         | 18.83                             | 18.86     | 18.80     |
|            | 1       | 7         | 18.80                             | 18.89     | 18.76     |
|            | 1       | 14        | 18.59                             | 18.76     | 18.62     |
|            | 8       | 0         | 18.59                             | 18.77     | 18.75     |
|            | 8       | 3         | 18.62                             | 18.77     | 18.72     |
|            | 8       | 7         | 18.71                             | 18.76     | 18.82     |
|            | 15      | 0         | 18.71                             | 18.79     | 18.63     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.59                           | 23.75                           | 21.69                   | 22.85                   | 38.45                 |
| 16QAM      | 21.53                           | 22.90                           | 20.63                   | 22.00                   | 38.45                 |
| 64QAM      | 20.50                           | 21.92                           | 19.60                   | 21.02                   | 38.45                 |
| 256QAM     | 18.59                           | 18.89                           | 17.69                   | 17.99                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 5 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 26815                          | CH 26915  | CH 27015  |
|            |         |           | 826.5 MHz                         | 836.5 MHz | 846.5 MHz |
| QPSK       | 1       | 0         | 23.56                             | 23.59     | 23.52     |
|            | 1       | 12        | 23.51                             | 23.70     | 23.66     |
|            | 1       | 24        | 23.63                             | 23.62     | 23.69     |
|            | 12      | 0         | 22.53                             | 22.74     | 22.81     |
|            | 12      | 6         | 22.77                             | 22.74     | 22.72     |
|            | 12      | 13        | 22.63                             | 22.77     | 22.67     |
|            | 25      | 0         | 22.58                             | 22.65     | 22.63     |
| 16QAM      | 1       | 0         | 22.75                             | 22.86     | 22.67     |
|            | 1       | 12        | 22.89                             | 22.85     | 22.92     |
|            | 1       | 24        | 22.82                             | 22.85     | 22.78     |
|            | 12      | 0         | 21.63                             | 21.70     | 21.63     |
|            | 12      | 6         | 21.67                             | 21.71     | 21.67     |
|            | 12      | 13        | 21.86                             | 21.92     | 21.67     |
|            | 25      | 0         | 21.56                             | 21.61     | 21.58     |
| 64QAM      | 1       | 0         | 21.76                             | 21.83     | 21.67     |
|            | 1       | 12        | 21.90                             | 21.98     | 21.95     |
|            | 1       | 24        | 21.78                             | 21.81     | 21.75     |
|            | 12      | 0         | 20.71                             | 20.74     | 20.67     |
|            | 12      | 6         | 20.53                             | 20.71     | 20.56     |
|            | 12      | 13        | 20.56                             | 20.71     | 20.68     |
|            | 25      | 0         | 20.57                             | 20.62     | 20.69     |
| 256QAM     | 1       | 0         | 18.72                             | 18.79     | 18.72     |
|            | 1       | 12        | 18.84                             | 18.91     | 18.72     |
|            | 1       | 24        | 18.65                             | 18.73     | 18.67     |
|            | 12      | 0         | 18.60                             | 18.68     | 18.67     |
|            | 12      | 6         | 18.60                             | 18.73     | 18.63     |
|            | 12      | 13        | 18.62                             | 18.78     | 18.61     |
|            | 25      | 0         | 18.73                             | 18.72     | 18.72     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.53                           | 23.70                           | 21.63                   | 22.80                   | 38.45                 |
| 16QAM      | 21.56                           | 22.92                           | 20.66                   | 22.02                   | 38.45                 |
| 64QAM      | 20.53                           | 21.98                           | 19.63                   | 21.08                   | 38.45                 |
| 256QAM     | 18.60                           | 18.91                           | 17.70                   | 18.01                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |          |
|------------|---------|-----------|-----------------------------------|-----------|----------|
|            |         |           | CH 26840                          | CH 26915  | CH 26990 |
|            |         |           | 829 MHz                           | 836.5 MHz | 844 MHz  |
| QPSK       | 1       | 0         | 23.53                             | 23.64     | 23.65    |
|            | 1       | 24        | 23.58                             | 23.61     | 23.62    |
|            | 1       | 49        | 23.56                             | 23.67     | 23.50    |
|            | 25      | 0         | 22.62                             | 22.67     | 22.73    |
|            | 25      | 12        | 22.68                             | 22.68     | 22.67    |
|            | 25      | 25        | 22.68                             | 22.74     | 22.72    |
|            | 50      | 0         | 22.62                             | 22.66     | 22.57    |
| 16QAM      | 1       | 0         | 22.73                             | 22.88     | 22.79    |
|            | 1       | 24        | 22.85                             | 22.84     | 22.86    |
|            | 1       | 49        | 22.82                             | 22.82     | 22.81    |
|            | 25      | 0         | 21.57                             | 21.65     | 21.69    |
|            | 25      | 12        | 21.59                             | 21.64     | 21.66    |
|            | 25      | 25        | 21.55                             | 21.73     | 21.69    |
|            | 50      | 0         | 21.55                             | 21.73     | 21.69    |
| 64QAM      | 1       | 0         | 21.59                             | 21.70     | 21.62    |
|            | 1       | 24        | 21.81                             | 21.95     | 21.79    |
|            | 1       | 49        | 21.67                             | 21.83     | 21.89    |
|            | 25      | 0         | 20.70                             | 20.81     | 20.67    |
|            | 25      | 12        | 20.57                             | 20.67     | 20.71    |
|            | 25      | 25        | 20.68                             | 20.69     | 20.53    |
|            | 50      | 0         | 20.51                             | 20.72     | 20.72    |
| 256QAM     | 1       | 0         | 18.82                             | 18.77     | 18.86    |
|            | 1       | 24        | 18.84                             | 18.85     | 18.82    |
|            | 1       | 49        | 18.59                             | 18.73     | 18.72    |
|            | 25      | 0         | 18.59                             | 18.73     | 18.72    |
|            | 25      | 12        | 18.66                             | 18.72     | 18.62    |
|            | 25      | 25        | 18.79                             | 18.81     | 18.75    |
|            | 50      | 0         | 18.72                             | 18.71     | 18.58    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.57                           | 23.67                           | 21.67                   | 22.77                   | 38.45                 |
| 16QAM      | 21.45                           | 22.88                           | 20.55                   | 21.98                   | 38.45                 |
| 64QAM      | 20.51                           | 21.95                           | 19.61                   | 21.05                   | 38.45                 |
| 256QAM     | 18.49                           | 18.86                           | 17.59                   | 17.96                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 26865                          | CH 26915  | CH 26965  |
|            |         |           | 831.5 MHz                         | 836.5 MHz | 841.5 MHz |
| QPSK       | 1       | 0         | 23.51                             | 23.65     | 23.60     |
|            | 1       | 37        | 23.72                             | 23.81     | 23.80     |
|            | 1       | 74        | 23.69                             | 23.78     | 23.74     |
|            | 36      | 0         | 22.73                             | 22.87     | 22.81     |
|            | 36      | 19        | 22.75                             | 22.88     | 22.84     |
|            | 36      | 39        | 22.83                             | 22.87     | 22.84     |
|            | 75      | 0         | 22.66                             | 22.81     | 22.76     |
| 16QAM      | 1       | 0         | 22.89                             | 22.94     | 22.81     |
|            | 1       | 37        | 22.94                             | 23.04     | 22.93     |
|            | 1       | 74        | 22.89                             | 23.02     | 23.02     |
|            | 36      | 0         | 21.69                             | 21.82     | 21.73     |
|            | 36      | 19        | 21.72                             | 21.81     | 21.70     |
|            | 36      | 39        | 21.86                             | 21.97     | 21.91     |
|            | 75      | 0         | 21.74                             | 21.75     | 21.68     |
| 64QAM      | 1       | 0         | 21.88                             | 21.90     | 21.83     |
|            | 1       | 37        | 22.02                             | 22.03     | 21.97     |
|            | 1       | 74        | 21.92                             | 21.98     | 21.97     |
|            | 36      | 0         | 20.79                             | 20.87     | 20.80     |
|            | 36      | 19        | 20.71                             | 20.76     | 20.62     |
|            | 36      | 39        | 20.74                             | 20.82     | 20.68     |
|            | 75      | 0         | 20.77                             | 20.79     | 20.71     |
| 256QAM     | 1       | 0         | 18.95                             | 18.97     | 18.93     |
|            | 1       | 37        | 18.92                             | 19.02     | 18.95     |
|            | 1       | 74        | 18.76                             | 18.81     | 18.81     |
|            | 36      | 0         | 18.84                             | 18.87     | 18.83     |
|            | 36      | 19        | 18.78                             | 18.84     | 18.84     |
|            | 36      | 39        | 18.83                             | 18.89     | 18.88     |
|            | 75      | 0         | 18.79                             | 18.84     | 18.82     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.66                           | 23.81                           | 21.76                   | 22.91                   | 38.45                 |
| 16QAM      | 21.68                           | 23.04                           | 20.78                   | 22.14                   | 38.45                 |
| 64QAM      | 20.62                           | 22.03                           | 19.72                   | 21.13                   | 38.45                 |
| 256QAM     | 18.76                           | 19.02                           | 17.86                   | 18.12                   | 38.45                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# 7.1.12 LTE Band 30

## LTE Band 30, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 27685                          | CH 27710 | CH 27735   |
|            |         |           | 2307.5 MHz                        | 2310 MHz | 2312.5 MHz |
| QPSK       | 1       | 0         | 23.52                             | 23.52    | 23.56      |
|            | 1       | 12        | 23.64                             | 23.66    | 23.57      |
|            | 1       | 24        | 23.52                             | 23.67    | 23.73      |
|            | 12      | 0         | 22.53                             | 22.68    | 22.75      |
|            | 12      | 6         | 22.58                             | 22.64    | 22.57      |
|            | 12      | 13        | 22.75                             | 22.73    | 22.58      |
|            | 25      | 0         | 21.25                             | 21.15    | 21.05      |
| 16QAM      | 1       | 0         | 22.60                             | 22.64    | 22.74      |
|            | 1       | 12        | 22.60                             | 22.77    | 22.78      |
|            | 1       | 24        | 22.54                             | 22.59    | 22.54      |
|            | 12      | 0         | 21.76                             | 21.75    | 21.65      |
|            | 12      | 6         | 21.57                             | 21.79    | 21.64      |
|            | 12      | 13        | 21.64                             | 21.59    | 21.52      |
|            | 25      | 0         | 20.16                             | 20.34    | 20.20      |
| 64QAM      | 1       | 0         | 21.58                             | 21.80    | 21.73      |
|            | 1       | 12        | 21.73                             | 21.79    | 21.73      |
|            | 1       | 24        | 21.67                             | 21.70    | 21.52      |
|            | 12      | 0         | 20.71                             | 20.72    | 20.65      |
|            | 12      | 6         | 20.62                             | 20.78    | 20.72      |
|            | 12      | 13        | 20.52                             | 20.65    | 20.61      |
|            | 25      | 0         | 19.80                             | 19.76    | 19.75      |
| 256QAM     | 1       | 0         | 18.69                             | 18.82    | 18.66      |
|            | 1       | 12        | 18.76                             | 18.71    | 18.71      |
|            | 1       | 24        | 18.55                             | 18.65    | 18.59      |
|            | 12      | 0         | 18.58                             | 18.70    | 18.63      |
|            | 12      | 6         | 18.55                             | 18.66    | 18.56      |
|            | 12      | 13        | 18.59                             | 18.60    | 18.52      |
|            | 25      | 0         | 18.76                             | 18.82    | 18.69      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 21.05                           | 23.73                           | 21.05                    | 23.73                    | 23.98                  |
| 16QAM        | 20.16                           | 22.78                           | 20.16                    | 22.78                    | 23.98                  |
| 64QAM        | 19.75                           | 21.80                           | 19.75                    | 21.80                    | 23.98                  |
| 256QAM       | 18.52                           | 18.82                           | 18.52                    | 18.82                    | 23.98                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 30, Channel Bandwidth: 10 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
|------------|---------|-----------|-----------------------------------|
|            |         |           | CH 27710                          |
|            |         |           | 2310 MHz                          |
| QPSK       | 1       | 0         | 23.70                             |
|            | 1       | 24        | 23.74                             |
|            | 1       | 49        | 23.64                             |
|            | 25      | 0         | 22.80                             |
|            | 25      | 12        | 22.77                             |
|            | 25      | 25        | 22.66                             |
|            | 50      | 0         | 21.25                             |
| 16QAM      | 1       | 0         | 22.84                             |
|            | 1       | 24        | 22.86                             |
|            | 1       | 49        | 22.64                             |
|            | 25      | 0         | 21.89                             |
|            | 25      | 12        | 21.86                             |
|            | 25      | 25        | 21.72                             |
|            | 50      | 0         | 20.31                             |
| 64QAM      | 1       | 0         | 21.86                             |
|            | 1       | 24        | 21.88                             |
|            | 1       | 49        | 21.65                             |
|            | 25      | 0         | 20.88                             |
|            | 25      | 12        | 20.88                             |
|            | 25      | 25        | 20.71                             |
|            | 50      | 0         | 19.83                             |
| 256QAM     | 1       | 0         | 18.92                             |
|            | 1       | 24        | 18.87                             |
|            | 1       | 49        | 18.60                             |
|            | 25      | 0         | 18.86                             |
|            | 25      | 12        | 18.79                             |
|            | 25      | 25        | 18.68                             |
|            | 50      | 0         | 18.88                             |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 21.25                           | 23.74                           | 21.25                    | 23.74                    | 23.98                  |
| 16QAM        | 20.31                           | 22.86                           | 20.31                    | 22.86                    | 23.98                  |
| 64QAM        | 20.71                           | 21.88                           | 20.71                    | 21.88                    | 23.98                  |
| 256QAM       | 18.60                           | 18.92                           | 18.60                    | 18.92                    | 23.98                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 30, Channel Bandwidth: 10 MHz, Output Power: dBm/5 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
|------------|---------|-----------|-----------------------------------|
|            |         |           | CH 27710                          |
|            |         |           | 2310 MHz                          |
| QPSK       | 1       | 0         | 23.67                             |
|            | 1       | 24        | 23.70                             |
|            | 1       | 49        | 23.62                             |
|            | 25      | 0         | 22.74                             |
|            | 25      | 12        | 22.75                             |
|            | 25      | 25        | 22.64                             |
|            | 50      | 0         | 18.96                             |
| 16QAM      | 1       | 0         | 22.83                             |
|            | 1       | 24        | 22.84                             |
|            | 1       | 49        | 22.61                             |
|            | 25      | 0         | 21.84                             |
|            | 25      | 12        | 21.80                             |
|            | 25      | 25        | 21.69                             |
|            | 50      | 0         | 18.00                             |
| 64QAM      | 1       | 0         | 21.82                             |
|            | 1       | 24        | 21.84                             |
|            | 1       | 49        | 21.60                             |
|            | 25      | 0         | 20.86                             |
|            | 25      | 12        | 20.85                             |
|            | 25      | 25        | 20.68                             |
|            | 50      | 0         | 18.52                             |
| 256QAM     | 1       | 0         | 18.88                             |
|            | 1       | 24        | 18.83                             |
|            | 1       | 49        | 18.54                             |
|            | 25      | 0         | 18.80                             |
|            | 25      | 12        | 18.77                             |
|            | 25      | 25        | 18.63                             |
|            | 50      | 0         | 16.58                             |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 18.96                           | 23.70                           | 18.96                    | 23.70                    | 23.98                  |
| 16QAM        | 18.00                           | 22.84                           | 18.00                    | 22.84                    | 23.98                  |
| 64QAM        | 18.52                           | 21.84                           | 18.52                    | 21.84                    | 23.98                  |
| 256QAM       | 16.58                           | 18.88                           | 16.58                    | 18.88                    | 23.98                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### 7.1.13 LTE Band 38

#### LTE Band 38, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 37775                          | CH 38000 | CH 38225   |
|            |         |           | 2572.5 MHz                        | 2595 MHz | 2617.5 MHz |
| QPSK       | 1       | 0         | 22.45                             | 22.50    | 22.51      |
|            | 1       | 12        | 22.70                             | 22.62    | 22.49      |
|            | 1       | 24        | 22.58                             | 22.49    | 22.44      |
|            | 12      | 0         | 21.24                             | 21.31    | 21.25      |
|            | 12      | 6         | 21.21                             | 21.24    | 21.08      |
|            | 12      | 13        | 21.01                             | 21.03    | 20.96      |
|            | 25      | 0         | 21.08                             | 21.23    | 21.21      |
| 16QAM      | 1       | 0         | 21.73                             | 21.77    | 21.58      |
|            | 1       | 12        | 21.55                             | 21.47    | 21.57      |
|            | 1       | 24        | 22.19                             | 22.07    | 22.07      |
|            | 12      | 0         | 20.07                             | 20.00    | 20.05      |
|            | 12      | 6         | 20.20                             | 20.26    | 20.17      |
|            | 12      | 13        | 20.10                             | 19.99    | 19.86      |
|            | 25      | 0         | 20.24                             | 20.17    | 20.21      |
| 64QAM      | 1       | 0         | 20.52                             | 20.56    | 20.29      |
|            | 1       | 12        | 20.39                             | 20.49    | 20.51      |
|            | 1       | 24        | 20.51                             | 20.49    | 20.72      |
|            | 12      | 0         | 18.79                             | 18.84    | 18.90      |
|            | 12      | 6         | 19.29                             | 19.18    | 19.17      |
|            | 12      | 13        | 18.82                             | 18.85    | 18.81      |
|            | 25      | 0         | 19.07                             | 19.14    | 19.14      |
| 256QAM     | 1       | 0         | 17.71                             | 17.71    | 17.69      |
|            | 1       | 12        | 17.67                             | 17.51    | 17.61      |
|            | 1       | 24        | 17.26                             | 17.36    | 17.46      |
|            | 12      | 0         | 17.04                             | 17.15    | 17.20      |
|            | 12      | 6         | 17.16                             | 17.30    | 17.32      |
|            | 12      | 13        | 17.07                             | 17.10    | 17.13      |
|            | 25      | 0         | 17.15                             | 17.19    | 17.19      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 20.96                           | 22.70                           | 23.71                    | 25.45                    | 33.01                  |
| 16QAM      | 19.86                           | 22.19                           | 22.61                    | 24.94                    | 33.01                  |
| 64QAM      | 18.79                           | 20.72                           | 21.54                    | 23.47                    | 33.01                  |
| 256QAM     | 17.04                           | 17.71                           | 19.79                    | 20.46                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 38, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 37800                          | CH 38000 | CH 38200 |
|            |         |           | 2575 MHz                          | 2595 MHz | 2615 MHz |
| QPSK       | 1       | 0         | 22.51                             | 22.50    | 22.58    |
|            | 1       | 24        | 22.71                             | 22.63    | 22.53    |
|            | 1       | 49        | 22.59                             | 22.54    | 22.44    |
|            | 25      | 0         | 21.27                             | 21.35    | 21.31    |
|            | 25      | 12        | 21.24                             | 21.27    | 21.12    |
|            | 25      | 25        | 21.07                             | 21.10    | 21.01    |
|            | 50      | 0         | 21.14                             | 21.23    | 21.23    |
| 16QAM      | 1       | 0         | 21.78                             | 21.78    | 21.62    |
|            | 1       | 24        | 21.61                             | 21.54    | 21.57    |
|            | 1       | 49        | 22.25                             | 22.12    | 22.11    |
|            | 25      | 0         | 20.12                             | 20.02    | 20.08    |
|            | 25      | 12        | 20.26                             | 20.27    | 20.20    |
|            | 25      | 25        | 20.13                             | 19.99    | 19.89    |
|            | 50      | 0         | 20.30                             | 20.19    | 20.23    |
| 64QAM      | 1       | 0         | 20.55                             | 20.59    | 20.36    |
|            | 1       | 24        | 20.45                             | 20.50    | 20.54    |
|            | 1       | 49        | 20.54                             | 20.53    | 20.74    |
|            | 25      | 0         | 18.84                             | 18.86    | 18.96    |
|            | 25      | 12        | 19.34                             | 19.20    | 19.23    |
|            | 25      | 25        | 18.89                             | 18.88    | 18.83    |
|            | 50      | 0         | 19.09                             | 19.16    | 19.20    |
| 256QAM     | 1       | 0         | 17.76                             | 17.75    | 17.71    |
|            | 1       | 24        | 17.71                             | 17.56    | 17.66    |
|            | 1       | 49        | 17.33                             | 17.40    | 17.47    |
|            | 25      | 0         | 17.05                             | 17.15    | 17.21    |
|            | 25      | 12        | 17.23                             | 17.30    | 17.39    |
|            | 25      | 25        | 17.14                             | 17.15    | 17.18    |
|            | 50      | 0         | 17.18                             | 17.23    | 17.24    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 21.01                           | 22.71                           | 23.76                    | 25.46                    | 33.01                  |
| 16QAM      | 19.89                           | 22.25                           | 22.64                    | 25.00                    | 33.01                  |
| 64QAM      | 18.83                           | 20.74                           | 21.58                    | 23.49                    | 33.01                  |
| 256QAM     | 17.05                           | 17.76                           | 19.80                    | 20.51                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 38, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 37825                          | CH 38000 | CH 38175   |
|            |         |           | 2577.5 MHz                        | 2595 MHz | 2612.5 MHz |
| QPSK       | 1       | 0         | 22.55                             | 22.55    | 22.60      |
|            | 1       | 37        | 22.73                             | 22.67    | 22.59      |
|            | 1       | 74        | 22.59                             | 22.58    | 22.49      |
|            | 36      | 0         | 21.27                             | 21.37    | 21.31      |
|            | 36      | 19        | 21.30                             | 21.31    | 21.19      |
|            | 36      | 39        | 21.09                             | 21.11    | 21.03      |
|            | 75      | 0         | 21.21                             | 21.29    | 21.30      |
| 16QAM      | 1       | 0         | 21.83                             | 21.81    | 21.69      |
|            | 1       | 37        | 21.61                             | 21.59    | 21.59      |
|            | 1       | 74        | 22.26                             | 22.17    | 22.16      |
|            | 36      | 0         | 20.17                             | 20.07    | 20.09      |
|            | 36      | 19        | 20.26                             | 20.28    | 20.23      |
|            | 36      | 39        | 20.14                             | 20.00    | 19.96      |
|            | 75      | 0         | 20.34                             | 20.25    | 20.24      |
| 64QAM      | 1       | 0         | 20.56                             | 20.60    | 20.43      |
|            | 1       | 37        | 20.46                             | 20.50    | 20.59      |
|            | 1       | 74        | 20.54                             | 20.60    | 20.76      |
|            | 36      | 0         | 18.85                             | 18.89    | 18.99      |
|            | 36      | 19        | 19.35                             | 19.25    | 19.26      |
|            | 36      | 39        | 18.94                             | 18.94    | 18.88      |
|            | 75      | 0         | 19.13                             | 19.22    | 19.24      |
| 256QAM     | 1       | 0         | 17.80                             | 17.75    | 17.78      |
|            | 1       | 37        | 17.71                             | 17.61    | 17.73      |
|            | 1       | 74        | 17.40                             | 17.43    | 17.48      |
|            | 36      | 0         | 17.12                             | 17.15    | 17.26      |
|            | 36      | 19        | 17.26                             | 17.30    | 17.43      |
|            | 36      | 39        | 17.18                             | 17.18    | 17.21      |
|            | 75      | 0         | 17.24                             | 17.25    | 17.24      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 21.03                           | 22.73                           | 23.78                    | 25.48                    | 33.01                  |
| 16QAM      | 19.96                           | 22.26                           | 22.71                    | 25.01                    | 33.01                  |
| 64QAM      | 18.85                           | 20.76                           | 21.60                    | 23.51                    | 33.01                  |
| 256QAM     | 17.12                           | 17.80                           | 19.87                    | 20.55                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 38, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 37850                          | CH 38000 | CH 38150 |
|            |         |           | 2580 MHz                          | 2595 MHz | 2610 MHz |
| QPSK       | 1       | 0         | 22.55                             | 22.58    | 22.62    |
|            | 1       | 50        | 22.73                             | 22.74    | 22.64    |
|            | 1       | 99        | 22.65                             | 22.59    | 22.54    |
|            | 50      | 0         | 21.34                             | 21.39    | 21.32    |
|            | 50      | 25        | 21.36                             | 21.33    | 21.22    |
|            | 50      | 50        | 21.16                             | 21.17    | 21.09    |
|            | 100     | 0         | 21.27                             | 21.31    | 21.34    |
| 16QAM      | 1       | 0         | 21.85                             | 21.82    | 21.75    |
|            | 1       | 50        | 21.65                             | 21.65    | 21.59    |
|            | 1       | 99        | 22.27                             | 22.24    | 22.16    |
|            | 50      | 0         | 20.24                             | 20.12    | 20.10    |
|            | 50      | 25        | 20.28                             | 20.32    | 20.24    |
|            | 50      | 50        | 20.15                             | 20.04    | 19.99    |
|            | 100     | 0         | 20.35                             | 20.30    | 20.31    |
| 64QAM      | 1       | 0         | 20.60                             | 20.60    | 20.50    |
|            | 1       | 50        | 20.48                             | 20.52    | 20.59    |
|            | 1       | 99        | 20.54                             | 20.64    | 20.76    |
|            | 50      | 0         | 18.92                             | 18.91    | 18.99    |
|            | 50      | 25        | 19.35                             | 19.28    | 19.32    |
|            | 50      | 50        | 19.00                             | 19.00    | 18.90    |
|            | 100     | 0         | 19.20                             | 19.24    | 19.31    |
| 256QAM     | 1       | 0         | 17.87                             | 17.81    | 17.83    |
|            | 1       | 50        | 17.71                             | 17.66    | 17.76    |
|            | 1       | 99        | 17.42                             | 17.50    | 17.55    |
|            | 50      | 0         | 17.13                             | 17.20    | 17.32    |
|            | 50      | 25        | 17.30                             | 17.36    | 17.44    |
|            | 50      | 50        | 17.25                             | 17.19    | 17.22    |
|            | 100     | 0         | 17.26                             | 17.30    | 17.28    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 21.09                           | 22.74                           | 23.84                    | 25.49                    | 33.01                  |
| 16QAM      | 19.99                           | 22.27                           | 22.74                    | 25.02                    | 33.01                  |
| 64QAM      | 18.90                           | 20.76                           | 21.65                    | 23.51                    | 33.01                  |
| 256QAM     | 17.13                           | 17.87                           | 19.88                    | 20.62                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

#### 7.1.14 LTE Band 41

#### LTE Band 41, PC2, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 39675                          | CH 40620 | CH 41565   |
|            |         |           | 2498.5 MHz                        | 2593 MHz | 2687.5 MHz |
| QPSK       | 1       | 0         | 26.52                             | 26.52    | 26.53      |
|            | 1       | 12        | 26.78                             | 26.59    | 26.81      |
|            | 1       | 24        | 26.69                             | 26.68    | 26.61      |
|            | 12      | 0         | 25.73                             | 25.72    | 25.73      |
|            | 12      | 6         | 25.81                             | 25.77    | 25.83      |
|            | 12      | 13        | 25.95                             | 25.90    | 25.93      |
|            | 25      | 0         | 25.72                             | 25.77    | 25.70      |
| 16QAM      | 1       | 0         | 25.78                             | 25.82    | 25.78      |
|            | 1       | 12        | 25.63                             | 25.58    | 25.59      |
|            | 1       | 24        | 25.67                             | 25.65    | 25.66      |
|            | 12      | 0         | 24.74                             | 24.58    | 24.64      |
|            | 12      | 6         | 24.83                             | 24.70    | 24.66      |
|            | 12      | 13        | 24.60                             | 24.81    | 24.83      |
|            | 25      | 0         | 24.83                             | 24.62    | 24.62      |
| 64QAM      | 1       | 0         | 24.33                             | 24.79    | 24.83      |
|            | 1       | 12        | 24.54                             | 24.57    | 24.52      |
|            | 1       | 24        | 24.56                             | 24.64    | 24.61      |
|            | 12      | 0         | 23.71                             | 23.70    | 23.71      |
|            | 12      | 6         | 23.72                             | 23.71    | 23.71      |
|            | 12      | 13        | 23.84                             | 23.82    | 23.84      |
|            | 25      | 0         | 23.61                             | 23.62    | 23.64      |
| 256QAM     | 1       | 0         | 21.61                             | 21.56    | 21.56      |
|            | 1       | 12        | 21.93                             | 21.88    | 21.90      |
|            | 1       | 24        | 21.90                             | 21.86    | 21.86      |
|            | 12      | 0         | 21.84                             | 21.83    | 21.85      |
|            | 12      | 6         | 21.83                             | 21.76    | 21.78      |
|            | 12      | 13        | 21.89                             | 21.82    | 21.87      |
|            | 25      | 0         | 21.77                             | 21.76    | 21.79      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 25.7                            | 26.81                           | 28.45                    | 29.56                    | 33.01                  |
| 16QAM      | 24.58                           | 25.82                           | 27.33                    | 28.57                    | 33.01                  |
| 64QAM      | 23.61                           | 24.83                           | 26.36                    | 27.58                    | 33.01                  |
| 256QAM     | 21.56                           | 21.93                           | 24.31                    | 24.68                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 41, PC2, Channel Bandwidth: 10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 39700                          | CH 40620 | CH 41540 |
|            |         |           | 2501 MHz                          | 2593 MHz | 2685 MHz |
| QPSK       | 1       | 0         | 26.52                             | 26.54    | 26.56    |
|            | 1       | 24        | 26.75                             | 26.63    | 26.71    |
|            | 1       | 49        | 26.70                             | 26.69    | 26.60    |
|            | 25      | 0         | 25.69                             | 25.76    | 25.70    |
|            | 25      | 12        | 25.84                             | 25.82    | 25.87    |
|            | 25      | 25        | 25.94                             | 25.86    | 25.85    |
|            | 50      | 0         | 25.72                             | 25.70    | 25.76    |
| 16QAM      | 1       | 0         | 25.82                             | 25.78    | 25.79    |
|            | 1       | 24        | 25.60                             | 25.60    | 25.57    |
|            | 1       | 49        | 25.63                             | 25.68    | 25.67    |
|            | 25      | 0         | 24.56                             | 24.65    | 24.63    |
|            | 25      | 12        | 24.74                             | 24.72    | 24.70    |
|            | 25      | 25        | 24.76                             | 24.83    | 24.80    |
|            | 50      | 0         | 24.63                             | 24.67    | 24.62    |
| 64QAM      | 1       | 0         | 24.74                             | 24.73    | 24.78    |
|            | 1       | 24        | 24.50                             | 24.50    | 24.54    |
|            | 1       | 49        | 24.65                             | 24.63    | 24.58    |
|            | 25      | 0         | 23.65                             | 23.66    | 23.64    |
|            | 25      | 12        | 23.76                             | 23.68    | 23.70    |
|            | 25      | 25        | 23.82                             | 23.78    | 23.79    |
|            | 50      | 0         | 23.66                             | 23.60    | 23.63    |
| 256QAM     | 1       | 0         | 21.65                             | 21.63    | 21.59    |
|            | 1       | 24        | 21.93                             | 21.91    | 21.91    |
|            | 1       | 49        | 21.94                             | 21.88    | 21.89    |
|            | 25      | 0         | 21.86                             | 21.78    | 21.79    |
|            | 25      | 12        | 21.84                             | 21.85    | 21.76    |
|            | 25      | 25        | 21.89                             | 21.91    | 21.86    |
|            | 50      | 0         | 21.74                             | 21.87    | 21.79    |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 25.69                           | 26.75                           | 28.44                    | 29.5                     | 33.01                  |
| 16QAM        | 24.56                           | 25.82                           | 27.31                    | 28.57                    | 33.01                  |
| 64QAM        | 23.6                            | 24.78                           | 26.35                    | 27.53                    | 33.01                  |
| 256QAM       | 21.59                           | 21.94                           | 24.34                    | 24.69                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 41, PC2, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 39725                          | CH 40620 | CH 41515   |
|            |         |           | 2503.5 MHz                        | 2593 MHz | 2682.5 MHz |
| QPSK       | 1       | 0         | 26.54                             | 26.58    | 26.00      |
|            | 1       | 37        | 26.72                             | 26.96    | 26.30      |
|            | 1       | 74        | 26.60                             | 26.67    | 26.13      |
|            | 36      | 0         | 25.68                             | 25.69    | 25.19      |
|            | 36      | 19        | 25.83                             | 25.82    | 25.31      |
|            | 36      | 39        | 25.85                             | 25.91    | 25.35      |
|            | 75      | 0         | 25.74                             | 25.73    | 25.27      |
| 16QAM      | 1       | 0         | 25.77                             | 25.76    | 25.27      |
|            | 1       | 37        | 25.59                             | 25.62    | 25.57      |
|            | 1       | 74        | 25.61                             | 25.58    | 25.66      |
|            | 36      | 0         | 24.64                             | 24.63    | 24.13      |
|            | 36      | 19        | 24.71                             | 24.71    | 24.19      |
|            | 36      | 39        | 24.81                             | 24.76    | 24.34      |
|            | 75      | 0         | 24.65                             | 24.67    | 24.14      |
| 64QAM      | 1       | 0         | 24.81                             | 24.74    | 24.25      |
|            | 1       | 37        | 24.57                             | 24.94    | 24.52      |
|            | 1       | 74        | 24.65                             | 24.64    | 24.58      |
|            | 36      | 0         | 23.63                             | 23.72    | 23.17      |
|            | 36      | 19        | 23.75                             | 23.75    | 23.19      |
|            | 36      | 39        | 23.75                             | 23.77    | 23.34      |
|            | 75      | 0         | 23.64                             | 23.67    | 23.13      |
| 256QAM     | 1       | 0         | 21.55                             | 21.63    | 21.06      |
|            | 1       | 37        | 21.95                             | 21.93    | 21.44      |
|            | 1       | 74        | 21.86                             | 21.92    | 21.41      |
|            | 36      | 0         | 21.86                             | 21.83    | 21.28      |
|            | 36      | 19        | 21.85                             | 21.85    | 21.29      |
|            | 36      | 39        | 21.92                             | 21.90    | 21.36      |
|            | 75      | 0         | 21.79                             | 21.79    | 21.24      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 25.19                           | 26.96                           | 27.94                    | 29.71                    | 33.01                  |
| 16QAM      | 24.13                           | 25.77                           | 26.88                    | 28.52                    | 33.01                  |
| 64QAM      | 23.13                           | 24.94                           | 25.88                    | 27.69                    | 33.01                  |
| 256QAM     | 21.06                           | 21.95                           | 23.81                    | 24.7                     | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 41, PC2, Channel Bandwidth: 20 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 39750                          | CH 40620 | CH 41490 |
|            |         |           | 2506 MHz                          | 2593 MHz | 2680 MHz |
| QPSK       | 1       | 0         | 26.55                             | 26.64    | 26.57    |
|            | 1       | 50        | 26.81                             | 26.97    | 26.77    |
|            | 1       | 99        | 26.66                             | 26.80    | 26.68    |
|            | 50      | 0         | 25.73                             | 25.88    | 25.75    |
|            | 50      | 25        | 25.88                             | 25.97    | 25.86    |
|            | 50      | 50        | 25.97                             | 26.05    | 25.91    |
|            | 100     | 0         | 25.82                             | 25.89    | 25.82    |
| 16QAM      | 1       | 0         | 25.81                             | 25.93    | 25.79    |
|            | 1       | 50        | 25.65                             | 25.77    | 25.63    |
|            | 1       | 99        | 25.67                             | 25.78    | 25.66    |
|            | 50      | 0         | 24.67                             | 24.76    | 24.70    |
|            | 50      | 25        | 24.75                             | 24.85    | 24.78    |
|            | 50      | 50        | 24.88                             | 24.94    | 24.83    |
|            | 100     | 0         | 24.70                             | 24.80    | 24.68    |
| 64QAM      | 1       | 0         | 24.85                             | 24.93    | 24.81    |
|            | 1       | 50        | 24.53                             | 24.64    | 24.59    |
|            | 1       | 99        | 24.61                             | 24.75    | 24.70    |
|            | 50      | 0         | 23.75                             | 23.83    | 23.71    |
|            | 50      | 25        | 23.72                             | 23.87    | 23.76    |
|            | 50      | 50        | 23.82                             | 23.95    | 23.90    |
|            | 100     | 0         | 23.65                             | 23.79    | 23.70    |
| 256QAM     | 1       | 0         | 21.63                             | 21.75    | 21.65    |
|            | 1       | 50        | 21.99                             | 22.06    | 21.99    |
|            | 1       | 99        | 21.98                             | 22.05    | 21.98    |
|            | 50      | 0         | 21.87                             | 21.96    | 21.88    |
|            | 50      | 25        | 21.88                             | 21.95    | 21.86    |
|            | 50      | 50        | 21.92                             | 22.02    | 21.95    |
|            | 100     | 0         | 21.81                             | 21.94    | 21.80    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 25.73                           | 26.97                           | 28.48                    | 29.72                    | 33.01                  |
| 16QAM      | 24.67                           | 25.93                           | 27.42                    | 28.68                    | 33.01                  |
| 64QAM      | 23.65                           | 24.93                           | 26.40                    | 27.68                    | 33.01                  |
| 256QAM     | 21.63                           | 22.06                           | 24.38                    | 24.81                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 41, PC3, Channel Bandwidth: 5 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 39675                          | CH 40620 | CH 41565   |
|            |         |           | 2498.5 MHz                        | 2593 MHz | 2687.5 MHz |
| QPSK       | 1       | 0         | 23.90                             | 23.94    | 23.86      |
|            | 1       | 12        | 23.92                             | 23.94    | 23.91      |
|            | 1       | 24        | 23.87                             | 23.96    | 23.98      |
|            | 12      | 0         | 23.01                             | 23.01    | 22.99      |
|            | 12      | 6         | 22.96                             | 22.97    | 23.04      |
|            | 12      | 13        | 23.01                             | 22.96    | 23.09      |
|            | 25      | 0         | 22.95                             | 23.04    | 23.05      |
| 16QAM      | 1       | 0         | 22.96                             | 22.84    | 22.87      |
|            | 1       | 12        | 23.04                             | 22.97    | 22.99      |
|            | 1       | 24        | 23.04                             | 22.97    | 23.02      |
|            | 12      | 0         | 22.07                             | 22.03    | 22.04      |
|            | 12      | 6         | 22.01                             | 21.97    | 21.92      |
|            | 12      | 13        | 22.01                             | 22.07    | 22.02      |
|            | 25      | 0         | 21.91                             | 21.99    | 22.00      |
| 64QAM      | 1       | 0         | 22.06                             | 22.03    | 21.96      |
|            | 1       | 12        | 22.01                             | 22.04    | 22.08      |
|            | 1       | 24        | 21.97                             | 21.98    | 21.86      |
|            | 12      | 0         | 21.03                             | 20.97    | 20.97      |
|            | 12      | 6         | 20.98                             | 21.04    | 20.99      |
|            | 12      | 13        | 21.04                             | 21.03    | 21.05      |
|            | 25      | 0         | 21.05                             | 20.95    | 20.93      |
| 256QAM     | 1       | 0         | 18.91                             | 18.88    | 18.89      |
|            | 1       | 12        | 19.08                             | 18.99    | 19.06      |
|            | 1       | 24        | 18.98                             | 18.96    | 19.00      |
|            | 12      | 0         | 19.02                             | 19.05    | 19.05      |
|            | 12      | 6         | 19.04                             | 19.07    | 19.04      |
|            | 12      | 13        | 19.02                             | 19.03    | 19.06      |
|            | 25      | 0         | 18.97                             | 19.00    | 18.99      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.95                           | 23.98                           | 25.70                    | 26.73                    | 33.01                  |
| 16QAM        | 21.91                           | 23.04                           | 24.66                    | 25.79                    | 33.01                  |
| 64QAM        | 20.93                           | 22.08                           | 23.68                    | 24.83                    | 33.01                  |
| 256QAM       | 18.88                           | 19.08                           | 21.63                    | 21.83                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 41, PC3, Channel Bandwidth: 10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 39700                          | CH 40620 | CH 41540 |
|            |         |           | 2501 MHz                          | 2593 MHz | 2685 MHz |
| QPSK       | 1       | 0         | 23.94                             | 23.96    | 23.98    |
|            | 1       | 24        | 23.95                             | 23.97    | 23.98    |
|            | 1       | 49        | 23.98                             | 23.88    | 23.88    |
|            | 25      | 0         | 23.09                             | 23.01    | 23.02    |
|            | 25      | 12        | 23.05                             | 23.01    | 22.96    |
|            | 25      | 25        | 23.03                             | 22.97    | 22.95    |
|            | 50      | 0         | 22.91                             | 23.02    | 23.05    |
| 16QAM      | 1       | 0         | 22.86                             | 22.83    | 22.89    |
|            | 1       | 24        | 23.00                             | 23.07    | 23.07    |
|            | 1       | 49        | 23.04                             | 23.08    | 23.01    |
|            | 25      | 0         | 21.93                             | 22.00    | 22.02    |
|            | 25      | 12        | 22.03                             | 22.03    | 22.04    |
|            | 25      | 25        | 22.00                             | 22.08    | 22.02    |
|            | 50      | 0         | 21.89                             | 21.94    | 21.90    |
| 64QAM      | 1       | 0         | 21.92                             | 21.94    | 21.96    |
|            | 1       | 24        | 22.02                             | 22.05    | 22.05    |
|            | 1       | 49        | 21.97                             | 21.99    | 21.94    |
|            | 25      | 0         | 21.09                             | 21.04    | 21.07    |
|            | 25      | 12        | 21.03                             | 21.03    | 21.02    |
|            | 25      | 25        | 21.00                             | 21.01    | 21.11    |
|            | 50      | 0         | 21.02                             | 20.93    | 20.96    |
| 256QAM     | 1       | 0         | 18.98                             | 18.93    | 18.90    |
|            | 1       | 24        | 19.05                             | 19.03    | 19.00    |
|            | 1       | 49        | 19.01                             | 18.97    | 19.03    |
|            | 25      | 0         | 19.04                             | 19.02    | 19.04    |
|            | 25      | 12        | 19.04                             | 19.00    | 19.03    |
|            | 25      | 25        | 18.95                             | 18.95    | 18.98    |
|            | 50      | 0         | 18.94                             | 19.05    | 18.97    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.91                           | 23.98                           | 25.66                    | 26.73                    | 33.01                  |
| 16QAM      | 21.89                           | 23.08                           | 24.64                    | 25.83                    | 33.01                  |
| 64QAM      | 20.93                           | 22.05                           | 23.68                    | 24.80                    | 33.01                  |
| 256QAM     | 18.90                           | 19.05                           | 21.65                    | 21.80                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 41, PC3, Channel Bandwidth: 15 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 39725                          | CH 40620 | CH 41515   |
|            |         |           | 2503.5 MHz                        | 2593 MHz | 2682.5 MHz |
| QPSK       | 1       | 0         | 23.93                             | 23.95    | 23.96      |
|            | 1       | 37        | 23.97                             | 23.98    | 23.96      |
|            | 1       | 74        | 23.92                             | 23.97    | 23.87      |
|            | 36      | 0         | 23.01                             | 23.03    | 23.06      |
|            | 36      | 19        | 22.99                             | 23.07    | 22.97      |
|            | 36      | 39        | 23.02                             | 23.02    | 23.04      |
|            | 75      | 0         | 22.97                             | 22.90    | 23.02      |
| 16QAM      | 1       | 0         | 22.95                             | 22.89    | 22.85      |
|            | 1       | 37        | 23.02                             | 22.97    | 23.06      |
|            | 1       | 74        | 22.99                             | 23.06    | 23.01      |
|            | 36      | 0         | 21.99                             | 22.03    | 22.02      |
|            | 36      | 19        | 21.95                             | 22.01    | 22.04      |
|            | 36      | 39        | 22.05                             | 22.14    | 22.07      |
|            | 75      | 0         | 21.99                             | 22.01    | 21.93      |
| 64QAM      | 1       | 0         | 22.06                             | 22.03    | 21.99      |
|            | 1       | 37        | 22.09                             | 22.02    | 22.05      |
|            | 1       | 74        | 21.97                             | 21.88    | 21.85      |
|            | 36      | 0         | 21.01                             | 20.96    | 21.04      |
|            | 36      | 19        | 21.00                             | 21.00    | 21.01      |
|            | 36      | 39        | 21.05                             | 21.00    | 21.00      |
|            | 75      | 0         | 20.91                             | 20.95    | 21.00      |
| 256QAM     | 1       | 0         | 18.96                             | 18.96    | 18.99      |
|            | 1       | 37        | 19.06                             | 19.04    | 19.03      |
|            | 1       | 74        | 18.96                             | 19.07    | 18.99      |
|            | 36      | 0         | 19.05                             | 19.01    | 19.08      |
|            | 36      | 19        | 19.06                             | 19.04    | 19.04      |
|            | 36      | 39        | 19.06                             | 18.96    | 19.08      |
|            | 75      | 0         | 18.91                             | 19.00    | 18.95      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.90                           | 23.98                           | 25.65                    | 26.73                    | 33.01                  |
| 16QAM        | 21.93                           | 23.06                           | 24.68                    | 25.81                    | 33.01                  |
| 64QAM        | 20.91                           | 22.09                           | 23.66                    | 24.84                    | 33.01                  |
| 256QAM       | 18.91                           | 19.08                           | 21.66                    | 21.83                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 41, PC3, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 39750                          | CH 40620 | CH 41490 |
|            |         |           | 2506 MHz                          | 2593 MHz | 2680 MHz |
| QPSK       | 1       | 0         | 23.90                             | 23.95    | 23.98    |
|            | 1       | 50        | 23.95                             | 23.99    | 23.96    |
|            | 1       | 99        | 23.93                             | 23.94    | 23.98    |
|            | 50      | 0         | 23.09                             | 23.08    | 23.05    |
|            | 50      | 25        | 23.07                             | 23.06    | 23.05    |
|            | 50      | 50        | 23.06                             | 23.05    | 23.07    |
|            | 100     | 0         | 23.09                             | 23.00    | 23.00    |
| 16QAM      | 1       | 0         | 22.97                             | 23.02    | 22.88    |
|            | 1       | 50        | 23.07                             | 23.06    | 23.04    |
|            | 1       | 99        | 23.02                             | 23.07    | 23.08    |
|            | 50      | 0         | 22.05                             | 22.03    | 22.07    |
|            | 50      | 25        | 22.01                             | 22.02    | 22.02    |
|            | 50      | 50        | 22.08                             | 22.02    | 22.07    |
|            | 100     | 0         | 22.00                             | 22.08    | 21.94    |
| 64QAM      | 1       | 0         | 22.05                             | 22.01    | 22.07    |
|            | 1       | 50        | 22.01                             | 22.00    | 22.04    |
|            | 1       | 99        | 21.91                             | 22.05    | 22.01    |
|            | 50      | 0         | 21.01                             | 21.01    | 21.04    |
|            | 50      | 25        | 21.02                             | 21.02    | 21.04    |
|            | 50      | 50        | 21.00                             | 21.00    | 21.09    |
|            | 100     | 0         | 21.00                             | 21.01    | 21.01    |
| 256QAM     | 1       | 0         | 18.99                             | 19.05    | 18.99    |
|            | 1       | 50        | 19.04                             | 19.09    | 19.10    |
|            | 1       | 99        | 19.01                             | 19.02    | 19.02    |
|            | 50      | 0         | 19.06                             | 19.00    | 19.04    |
|            | 50      | 25        | 19.06                             | 19.08    | 19.08    |
|            | 50      | 50        | 19.00                             | 19.04    | 19.07    |
|            | 100     | 0         | 19.03                             | 19.00    | 19.04    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 23.00                           | 23.99                           | 25.75                    | 26.74                    | 33.01                  |
| 16QAM      | 21.94                           | 23.08                           | 24.69                    | 25.83                    | 33.01                  |
| 64QAM      | 21.00                           | 22.07                           | 23.75                    | 24.82                    | 33.01                  |
| 256QAM     | 18.99                           | 19.10                           | 21.74                    | 21.85                    | 33.01                  |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

### 7.1.15 LTE Band 42 (3.45 GHz ~ 3.55 GHz)

#### LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 42115                          | CH 42590 | CH 43065   |
|            |         |           | 3452.5 MHz                        | 3500 MHz | 3547.5 MHz |
| QPSK       | 1       | 0         | 23.72                             | 23.68    | 23.74      |
|            | 1       | 12        | 23.84                             | 23.96    | 23.93      |
|            | 1       | 24        | 23.70                             | 23.72    | 23.62      |
|            | 12      | 0         | 22.78                             | 22.57    | 22.55      |
|            | 12      | 6         | 22.66                             | 22.65    | 22.60      |
|            | 12      | 13        | 22.52                             | 22.59    | 22.59      |
|            | 25      | 0         | 22.69                             | 22.72    | 22.53      |
| 16QAM      | 1       | 0         | 22.74                             | 22.79    | 22.61      |
|            | 1       | 12        | 22.74                             | 22.88    | 22.81      |
|            | 1       | 24        | 22.72                             | 22.69    | 22.80      |
|            | 12      | 0         | 21.61                             | 21.57    | 21.61      |
|            | 12      | 6         | 21.70                             | 21.72    | 21.62      |
|            | 12      | 13        | 21.72                             | 21.69    | 21.50      |
|            | 25      | 0         | 21.77                             | 21.74    | 21.53      |
| 64QAM      | 1       | 0         | 21.98                             | 22.04    | 21.80      |
|            | 1       | 12        | 21.91                             | 22.01    | 21.96      |
|            | 1       | 24        | 21.71                             | 21.81    | 21.77      |
|            | 12      | 0         | 20.67                             | 20.55    | 20.64      |
|            | 12      | 6         | 20.61                             | 20.60    | 20.55      |
|            | 12      | 13        | 20.61                             | 20.70    | 20.57      |
|            | 25      | 0         | 20.53                             | 20.62    | 20.53      |
| 256QAM     | 1       | 0         | 18.77                             | 18.67    | 18.51      |
|            | 1       | 12        | 18.73                             | 18.85    | 18.88      |
|            | 1       | 24        | 18.55                             | 18.57    | 18.58      |
|            | 12      | 0         | 18.64                             | 18.66    | 18.59      |
|            | 12      | 6         | 18.65                             | 18.57    | 18.52      |
|            | 12      | 13        | 18.61                             | 18.64    | 18.60      |
|            | 25      | 0         | 18.69                             | 18.66    | 18.72      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.52                           | 23.96                           | 21.02                    | 22.46                    | 30                     |
| 16QAM      | 21.50                           | 22.88                           | 20.00                    | 21.38                    | 30                     |
| 64QAM      | 20.53                           | 22.04                           | 19.03                    | 20.54                    | 30                     |
| 256QAM     | 18.51                           | 18.88                           | 17.01                    | 17.38                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 42140                          | CH 42590 | CH 43040 |
|            |         |           | 3455 MHz                          | 3500 MHz | 3545 MHz |
| QPSK       | 1       | 0         | 23.76                             | 23.76    | 23.67    |
|            | 1       | 24        | 23.91                             | 23.95    | 23.69    |
|            | 1       | 49        | 23.77                             | 23.60    | 23.69    |
|            | 25      | 0         | 22.69                             | 22.60    | 22.65    |
|            | 25      | 12        | 22.80                             | 22.61    | 22.53    |
|            | 25      | 25        | 22.60                             | 22.56    | 22.59    |
|            | 50      | 0         | 22.77                             | 22.58    | 22.65    |
| 16QAM      | 1       | 0         | 22.71                             | 22.75    | 22.74    |
|            | 1       | 24        | 22.73                             | 22.77    | 22.77    |
|            | 1       | 49        | 22.67                             | 22.81    | 22.70    |
|            | 25      | 0         | 21.50                             | 21.58    | 21.62    |
|            | 25      | 12        | 21.62                             | 21.61    | 21.71    |
|            | 25      | 25        | 21.72                             | 21.63    | 21.53    |
|            | 50      | 0         | 21.67                             | 21.61    | 21.71    |
| 64QAM      | 1       | 0         | 21.95                             | 21.92    | 21.89    |
|            | 1       | 24        | 21.89                             | 22.00    | 21.85    |
|            | 1       | 49        | 21.89                             | 21.91    | 21.81    |
|            | 25      | 0         | 20.58                             | 20.56    | 20.54    |
|            | 25      | 12        | 20.61                             | 20.66    | 20.61    |
|            | 25      | 25        | 20.53                             | 20.66    | 20.51    |
|            | 50      | 0         | 20.71                             | 20.73    | 20.62    |
| 256QAM     | 1       | 0         | 18.68                             | 18.63    | 18.59    |
|            | 1       | 24        | 18.82                             | 18.84    | 18.79    |
|            | 1       | 49        | 18.65                             | 18.52    | 18.53    |
|            | 25      | 0         | 18.54                             | 18.69    | 18.60    |
|            | 25      | 12        | 18.69                             | 18.57    | 18.59    |
|            | 25      | 25        | 18.70                             | 18.65    | 18.61    |
|            | 50      | 0         | 18.67                             | 18.73    | 18.71    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.53                           | 23.95                           | 21.03                    | 22.45                    | 30                     |
| 16QAM      | 21.50                           | 22.81                           | 20.00                    | 21.31                    | 30                     |
| 64QAM      | 20.51                           | 22.00                           | 19.01                    | 20.50                    | 30                     |
| 256QAM     | 18.52                           | 18.84                           | 17.02                    | 17.34                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 15 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |            |
|------------|---------|-----------|-----------------------------------|----------|------------|
|            |         |           | CH 42165                          | CH 42590 | CH 43015   |
|            |         |           | 3457.5 MHz                        | 3500 MHz | 3542.5 MHz |
| QPSK       | 1       | 0         | 23.63                             | 23.70    | 23.57      |
|            | 1       | 37        | 23.82                             | 23.90    | 23.68      |
|            | 1       | 74        | 23.78                             | 23.63    | 23.61      |
|            | 36      | 0         | 22.80                             | 22.55    | 22.66      |
|            | 36      | 19        | 22.92                             | 22.70    | 22.68      |
|            | 36      | 39        | 22.68                             | 22.68    | 22.53      |
|            | 75      | 0         | 22.68                             | 22.69    | 22.53      |
| 16QAM      | 1       | 0         | 22.76                             | 22.82    | 22.68      |
|            | 1       | 37        | 22.71                             | 22.80    | 22.79      |
|            | 1       | 74        | 22.70                             | 22.79    | 22.67      |
|            | 36      | 0         | 21.52                             | 21.58    | 21.55      |
|            | 36      | 19        | 21.51                             | 21.76    | 21.58      |
|            | 36      | 39        | 21.57                             | 21.70    | 21.58      |
|            | 75      | 0         | 21.52                             | 21.72    | 21.53      |
| 64QAM      | 1       | 0         | 21.80                             | 22.03    | 21.98      |
|            | 1       | 37        | 21.92                             | 22.09    | 21.99      |
|            | 1       | 74        | 21.85                             | 21.86    | 21.74      |
|            | 36      | 0         | 20.70                             | 20.76    | 20.67      |
|            | 36      | 19        | 20.77                             | 20.64    | 20.56      |
|            | 36      | 39        | 20.76                             | 20.66    | 20.55      |
|            | 75      | 0         | 20.71                             | 20.64    | 20.70      |
| 256QAM     | 1       | 0         | 18.69                             | 18.67    | 18.62      |
|            | 1       | 37        | 18.85                             | 18.81    | 18.88      |
|            | 1       | 74        | 18.58                             | 18.56    | 18.48      |
|            | 36      | 0         | 18.60                             | 18.68    | 18.53      |
|            | 36      | 19        | 18.57                             | 18.57    | 18.57      |
|            | 36      | 39        | 18.65                             | 18.60    | 18.62      |
|            | 75      | 0         | 18.64                             | 18.67    | 18.57      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.53                           | 23.90                           | 21.03                    | 22.40                    | 30                     |
| 16QAM        | 21.51                           | 22.82                           | 20.01                    | 21.32                    | 30                     |
| 64QAM        | 20.55                           | 22.09                           | 19.05                    | 20.59                    | 30                     |
| 256QAM       | 18.48                           | 18.88                           | 16.98                    | 17.38                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 20 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |          |          |
|------------|---------|-----------|-----------------------------------|----------|----------|
|            |         |           | CH 42190                          | CH 42590 | CH 42990 |
|            |         |           | 3460 MHz                          | 3500 MHz | 3540 MHz |
| QPSK       | 1       | 0         | 23.78                             | 23.78    | 23.74    |
|            | 1       | 50        | 23.89                             | 23.97    | 23.90    |
|            | 1       | 99        | 23.77                             | 23.69    | 23.71    |
|            | 50      | 0         | 22.67                             | 22.70    | 22.67    |
|            | 50      | 25        | 22.81                             | 22.78    | 22.80    |
|            | 50      | 50        | 22.74                             | 22.71    | 22.72    |
|            | 100     | 0         | 22.69                             | 22.77    | 22.71    |
| 16QAM      | 1       | 0         | 22.83                             | 22.87    | 22.91    |
|            | 1       | 50        | 22.94                             | 22.81    | 22.93    |
|            | 1       | 99        | 22.74                             | 22.85    | 22.72    |
|            | 50      | 0         | 21.68                             | 21.61    | 21.69    |
|            | 50      | 25        | 21.66                             | 21.69    | 21.73    |
|            | 50      | 50        | 21.65                             | 21.76    | 21.78    |
|            | 100     | 0         | 21.75                             | 21.65    | 21.65    |
| 64QAM      | 1       | 0         | 21.98                             | 22.07    | 21.99    |
|            | 1       | 50        | 22.02                             | 22.02    | 22.02    |
|            | 1       | 99        | 21.97                             | 21.88    | 21.86    |
|            | 50      | 0         | 20.69                             | 20.71    | 20.71    |
|            | 50      | 25        | 20.63                             | 20.70    | 20.63    |
|            | 50      | 50        | 20.73                             | 20.67    | 20.68    |
|            | 100     | 0         | 20.68                             | 20.67    | 20.75    |
| 256QAM     | 1       | 0         | 18.74                             | 18.81    | 18.78    |
|            | 1       | 50        | 18.84                             | 18.85    | 18.85    |
|            | 1       | 99        | 18.68                             | 18.68    | 18.65    |
|            | 50      | 0         | 18.71                             | 18.66    | 18.69    |
|            | 50      | 25        | 18.62                             | 18.65    | 18.69    |
|            | 50      | 50        | 18.71                             | 18.68    | 18.69    |
|            | 100     | 0         | 18.72                             | 18.75    | 18.71    |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.67                           | 23.97                           | 21.17                    | 22.47                    | 30                     |
| 16QAM      | 21.61                           | 22.94                           | 20.11                    | 21.44                    | 30                     |
| 64QAM      | 20.63                           | 22.07                           | 19.13                    | 20.57                    | 30                     |
| 256QAM     | 18.62                           | 18.85                           | 17.12                    | 17.35                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# 7.1.16 LTE Band 66

## LTE Band 66, Channel Bandwidth: 1.4 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |            |
|------------|---------|-----------|-----------------------------------|-----------|------------|
|            |         |           | CH 131979                         | CH 132322 | CH 132665  |
|            |         |           | 1710.7 MHz                        | 1745 MHz  | 1779.3 MHz |
| QPSK       | 1       | 0         | 23.89                             | 23.90     | 23.74      |
|            | 1       | 2         | 23.98                             | 23.86     | 23.83      |
|            | 1       | 5         | 23.89                             | 23.95     | 23.91      |
|            | 3       | 0         | 22.95                             | 23.03     | 23.04      |
|            | 3       | 1         | 22.92                             | 23.05     | 23.01      |
|            | 3       | 3         | 23.04                             | 23.09     | 22.97      |
|            | 6       | 0         | 23.03                             | 23.03     | 22.92      |
| 16QAM      | 1       | 0         | 22.82                             | 22.84     | 22.83      |
|            | 1       | 2         | 22.93                             | 23.05     | 23.01      |
|            | 1       | 5         | 22.91                             | 23.00     | 22.93      |
|            | 3       | 0         | 21.76                             | 21.86     | 21.73      |
|            | 3       | 1         | 21.70                             | 21.84     | 21.84      |
|            | 3       | 3         | 21.84                             | 21.92     | 21.77      |
|            | 6       | 0         | 21.85                             | 21.96     | 21.91      |
| 64QAM      | 1       | 0         | 21.77                             | 21.80     | 21.77      |
|            | 1       | 2         | 21.87                             | 22.01     | 21.71      |
|            | 1       | 5         | 21.84                             | 21.93     | 21.81      |
|            | 3       | 0         | 20.87                             | 20.80     | 20.76      |
|            | 3       | 1         | 20.98                             | 20.88     | 20.87      |
|            | 3       | 3         | 20.72                             | 20.84     | 20.77      |
|            | 6       | 0         | 20.88                             | 20.90     | 20.87      |
| 256QAM     | 1       | 0         | 18.63                             | 18.74     | 18.65      |
|            | 1       | 2         | 18.77                             | 18.91     | 18.77      |
|            | 1       | 5         | 18.92                             | 18.99     | 18.92      |
|            | 3       | 0         | 18.69                             | 18.92     | 18.70      |
|            | 3       | 1         | 18.82                             | 18.99     | 18.82      |
|            | 3       | 3         | 18.87                             | 18.89     | 18.82      |
|            | 6       | 0         | 18.86                             | 18.97     | 18.98      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.92                           | 23.98                           | 25.23                    | 26.29                    | 30                     |
| 16QAM      | 21.70                           | 23.05                           | 24.01                    | 25.36                    | 30                     |
| 64QAM      | 20.72                           | 22.01                           | 23.03                    | 24.32                    | 30                     |
| 256QAM     | 18.63                           | 18.99                           | 20.94                    | 21.30                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 66, Channel Bandwidth: 3 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |            |
|------------|---------|-----------|-----------------------------------|-----------|------------|
|            |         |           | CH 131987                         | CH 132322 | CH 132657  |
|            |         |           | 1711.5 MHz                        | 1745 MHz  | 1778.5 MHz |
| QPSK       | 1       | 0         | 23.77                             | 23.86     | 23.83      |
|            | 1       | 7         | 23.98                             | 23.85     | 23.98      |
|            | 1       | 14        | 23.90                             | 23.97     | 23.93      |
|            | 8       | 0         | 22.99                             | 23.06     | 22.94      |
|            | 8       | 3         | 23.01                             | 23.08     | 23.01      |
|            | 8       | 7         | 22.98                             | 23.02     | 22.97      |
|            | 15      | 0         | 22.98                             | 23.02     | 22.94      |
| 16QAM      | 1       | 0         | 22.86                             | 22.88     | 22.92      |
|            | 1       | 7         | 23.04                             | 23.06     | 23.00      |
|            | 1       | 14        | 22.73                             | 22.92     | 22.88      |
|            | 8       | 0         | 21.81                             | 21.88     | 21.72      |
|            | 8       | 3         | 21.81                             | 21.81     | 21.78      |
|            | 8       | 7         | 21.90                             | 22.00     | 21.82      |
|            | 15      | 0         | 21.89                             | 21.90     | 21.75      |
| 64QAM      | 1       | 0         | 21.74                             | 21.80     | 21.71      |
|            | 1       | 7         | 21.88                             | 21.96     | 21.76      |
|            | 1       | 14        | 21.80                             | 21.92     | 21.93      |
|            | 8       | 0         | 20.74                             | 20.86     | 20.78      |
|            | 8       | 3         | 20.89                             | 21.00     | 20.83      |
|            | 8       | 7         | 20.72                             | 20.97     | 20.93      |
|            | 15      | 0         | 20.82                             | 20.82     | 20.91      |
| 256QAM     | 1       | 0         | 18.76                             | 18.68     | 18.72      |
|            | 1       | 7         | 18.86                             | 19.01     | 18.82      |
|            | 1       | 14        | 18.80                             | 18.94     | 18.78      |
|            | 8       | 0         | 18.65                             | 18.81     | 18.65      |
|            | 8       | 3         | 18.84                             | 19.02     | 18.87      |
|            | 8       | 7         | 18.94                             | 19.00     | 18.95      |
|            | 15      | 0         | 18.81                             | 18.88     | 18.86      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.94                           | 23.98                           | 25.25                    | 26.29                    | 30                     |
| 16QAM        | 21.72                           | 23.06                           | 24.03                    | 25.37                    | 30                     |
| 64QAM        | 20.72                           | 21.96                           | 23.03                    | 24.27                    | 30                     |
| 256QAM       | 18.65                           | 19.02                           | 20.96                    | 21.33                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 66, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |            |
|------------|---------|-----------|-----------------------------------|-----------|------------|
|            |         |           | CH 131997                         | CH 132322 | CH 132647  |
|            |         |           | 1712.5 MHz                        | 1745 MHz  | 1777.5 MHz |
| QPSK       | 1       | 0         | 23.66                             | 23.90     | 23.77      |
|            | 1       | 12        | 23.96                             | 23.98     | 23.94      |
|            | 1       | 24        | 23.83                             | 23.98     | 23.87      |
|            | 12      | 0         | 23.08                             | 23.02     | 23.06      |
|            | 12      | 6         | 23.03                             | 23.02     | 22.93      |
|            | 12      | 13        | 23.02                             | 23.07     | 22.93      |
|            | 25      | 0         | 22.92                             | 23.07     | 22.99      |
| 16QAM      | 1       | 0         | 22.89                             | 22.87     | 22.76      |
|            | 1       | 12        | 23.07                             | 23.06     | 23.07      |
|            | 1       | 24        | 22.88                             | 22.90     | 22.78      |
|            | 12      | 0         | 21.73                             | 21.81     | 21.75      |
|            | 12      | 6         | 21.89                             | 21.92     | 21.87      |
|            | 12      | 13        | 21.88                             | 21.89     | 21.82      |
|            | 25      | 0         | 21.81                             | 21.92     | 21.79      |
| 64QAM      | 1       | 0         | 21.67                             | 21.80     | 21.84      |
|            | 1       | 12        | 21.77                             | 21.86     | 21.74      |
|            | 1       | 24        | 21.73                             | 21.85     | 21.82      |
|            | 12      | 0         | 20.78                             | 20.84     | 20.81      |
|            | 12      | 6         | 20.89                             | 20.86     | 20.89      |
|            | 12      | 13        | 20.92                             | 20.97     | 20.73      |
|            | 25      | 0         | 20.78                             | 20.94     | 20.88      |
| 256QAM     | 1       | 0         | 18.56                             | 18.73     | 18.57      |
|            | 1       | 12        | 18.83                             | 18.96     | 18.97      |
|            | 1       | 24        | 18.86                             | 18.94     | 18.85      |
|            | 12      | 0         | 18.78                             | 18.90     | 18.81      |
|            | 12      | 6         | 18.81                             | 18.93     | 19.02      |
|            | 12      | 13        | 18.88                             | 19.01     | 18.90      |
|            | 25      | 0         | 18.87                             | 18.95     | 18.96      |

| Output Power |                                 |                                 |                          |                          |                        |
|--------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
| QPSK         | 22.92                           | 23.98                           | 25.23                    | 26.29                    | 30                     |
| 16QAM        | 21.73                           | 23.07                           | 24.04                    | 25.38                    | 30                     |
| 64QAM        | 20.73                           | 21.86                           | 23.04                    | 24.17                    | 30                     |
| 256QAM       | 18.56                           | 19.02                           | 20.87                    | 21.33                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 66, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 132022                         | CH 132322 | CH 132622 |
|            |         |           | 1715 MHz                          | 1745 MHz  | 1775 MHz  |
| QPSK       | 1       | 0         | 23.77                             | 23.91     | 23.83     |
|            | 1       | 24        | 23.95                             | 23.97     | 23.89     |
|            | 1       | 49        | 23.87                             | 23.98     | 23.85     |
|            | 25      | 0         | 23.09                             | 22.99     | 23.03     |
|            | 25      | 12        | 22.92                             | 23.04     | 22.98     |
|            | 25      | 25        | 23.01                             | 23.03     | 23.09     |
|            | 50      | 0         | 22.93                             | 23.04     | 23.04     |
| 16QAM      | 1       | 0         | 22.72                             | 22.94     | 22.87     |
|            | 1       | 24        | 23.02                             | 23.05     | 22.97     |
|            | 1       | 49        | 22.89                             | 22.99     | 22.83     |
|            | 25      | 0         | 21.69                             | 21.83     | 21.63     |
|            | 25      | 12        | 21.72                             | 21.88     | 21.78     |
|            | 25      | 25        | 21.79                             | 21.94     | 21.88     |
|            | 50      | 0         | 21.95                             | 21.97     | 21.78     |
| 64QAM      | 1       | 0         | 21.83                             | 21.84     | 21.75     |
|            | 1       | 24        | 21.82                             | 21.98     | 21.79     |
|            | 1       | 49        | 21.89                             | 21.89     | 21.92     |
|            | 25      | 0         | 20.83                             | 20.86     | 20.75     |
|            | 25      | 12        | 20.86                             | 21.00     | 20.90     |
|            | 25      | 25        | 20.82                             | 20.96     | 20.85     |
|            | 50      | 0         | 20.84                             | 20.82     | 20.95     |
| 256QAM     | 1       | 0         | 18.68                             | 18.78     | 18.74     |
|            | 1       | 24        | 19.01                             | 19.03     | 18.87     |
|            | 1       | 49        | 18.97                             | 18.97     | 18.83     |
|            | 25      | 0         | 18.78                             | 18.86     | 18.73     |
|            | 25      | 12        | 18.87                             | 18.97     | 18.99     |
|            | 25      | 25        | 18.83                             | 18.94     | 18.90     |
|            | 50      | 0         | 18.78                             | 18.94     | 18.85     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.92                           | 23.98                           | 25.23                    | 26.29                    | 30                     |
| 16QAM      | 21.63                           | 23.05                           | 23.94                    | 25.36                    | 30                     |
| 64QAM      | 20.75                           | 21.98                           | 23.06                    | 24.29                    | 30                     |
| 256QAM     | 18.68                           | 19.03                           | 20.99                    | 21.34                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 66, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |            |
|------------|---------|-----------|-----------------------------------|-----------|------------|
|            |         |           | CH 132047                         | CH 132322 | CH 132597  |
|            |         |           | 1717.5 MHz                        | 1745 MHz  | 1772.5 MHz |
| QPSK       | 1       | 0         | 23.81                             | 23.91     | 23.74      |
|            | 1       | 37        | 23.95                             | 23.82     | 23.89      |
|            | 1       | 74        | 23.87                             | 23.98     | 23.84      |
|            | 36      | 0         | 22.99                             | 23.07     | 22.96      |
|            | 36      | 19        | 23.00                             | 23.05     | 23.02      |
|            | 36      | 39        | 22.99                             | 23.09     | 22.92      |
|            | 75      | 0         | 23.02                             | 23.06     | 23.02      |
| 16QAM      | 1       | 0         | 22.77                             | 22.88     | 22.78      |
|            | 1       | 37        | 23.04                             | 23.07     | 22.99      |
|            | 1       | 74        | 22.80                             | 22.97     | 22.88      |
|            | 36      | 0         | 21.69                             | 21.83     | 21.77      |
|            | 36      | 19        | 21.84                             | 21.90     | 21.72      |
|            | 36      | 39        | 21.86                             | 21.89     | 21.82      |
|            | 75      | 0         | 21.89                             | 21.98     | 21.95      |
| 64QAM      | 1       | 0         | 21.77                             | 21.91     | 21.80      |
|            | 1       | 37        | 21.85                             | 21.97     | 21.84      |
|            | 1       | 74        | 21.78                             | 21.95     | 21.84      |
|            | 36      | 0         | 20.77                             | 20.88     | 20.72      |
|            | 36      | 19        | 20.96                             | 20.97     | 20.76      |
|            | 36      | 39        | 20.81                             | 20.96     | 20.83      |
|            | 75      | 0         | 20.75                             | 20.81     | 20.73      |
| 256QAM     | 1       | 0         | 18.63                             | 18.74     | 18.69      |
|            | 1       | 37        | 18.94                             | 19.01     | 18.88      |
|            | 1       | 74        | 18.70                             | 18.98     | 18.76      |
|            | 36      | 0         | 18.88                             | 18.87     | 18.70      |
|            | 36      | 19        | 18.91                             | 18.92     | 18.96      |
|            | 36      | 39        | 18.80                             | 18.98     | 18.85      |
|            | 75      | 0         | 18.87                             | 18.84     | 18.91      |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 22.92                           | 23.98                           | 25.23                    | 26.29                    | 30                     |
| 16QAM      | 21.69                           | 23.07                           | 24.00                    | 25.38                    | 30                     |
| 64QAM      | 20.72                           | 21.97                           | 23.03                    | 24.28                    | 30                     |
| 256QAM     | 18.63                           | 19.01                           | 20.94                    | 21.32                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# LTE Band 66, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 132072                         | CH 132322 | CH 132572 |
|            |         |           | 1720 MHz                          | 1745 MHz  | 1770 MHz  |
| QPSK       | 1       | 0         | 23.93                             | 23.98     | 23.98     |
|            | 1       | 50        | 23.94                             | 23.96     | 23.96     |
|            | 1       | 99        | 23.87                             | 23.99     | 23.86     |
|            | 50      | 0         | 23.09                             | 23.08     | 23.03     |
|            | 50      | 25        | 23.07                             | 23.09     | 23.06     |
|            | 50      | 50        | 23.00                             | 23.02     | 23.07     |
|            | 100     | 0         | 23.03                             | 23.02     | 23.08     |
| 16QAM      | 1       | 0         | 23.02                             | 23.02     | 23.00     |
|            | 1       | 50        | 23.02                             | 23.03     | 23.01     |
|            | 1       | 99        | 23.04                             | 23.07     | 23.03     |
|            | 50      | 0         | 21.87                             | 21.95     | 21.85     |
|            | 50      | 25        | 21.92                             | 22.01     | 21.86     |
|            | 50      | 50        | 22.09                             | 22.09     | 21.96     |
|            | 100     | 0         | 21.95                             | 22.08     | 22.04     |
| 64QAM      | 1       | 0         | 21.93                             | 21.96     | 21.82     |
|            | 1       | 50        | 21.94                             | 22.06     | 21.92     |
|            | 1       | 99        | 22.00                             | 22.05     | 21.91     |
|            | 50      | 0         | 20.96                             | 20.97     | 20.93     |
|            | 50      | 25        | 21.01                             | 21.05     | 21.04     |
|            | 50      | 50        | 20.90                             | 21.02     | 20.87     |
|            | 100     | 0         | 20.95                             | 21.01     | 21.00     |
| 256QAM     | 1       | 0         | 18.77                             | 18.87     | 18.77     |
|            | 1       | 50        | 18.96                             | 19.09     | 18.96     |
|            | 1       | 99        | 18.94                             | 19.05     | 19.01     |
|            | 50      | 0         | 18.84                             | 18.98     | 18.84     |
|            | 50      | 25        | 19.01                             | 19.10     | 19.03     |
|            | 50      | 50        | 19.01                             | 19.07     | 19.00     |
|            | 100     | 0         | 19.02                             | 19.04     | 19.01     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>EIRP<br>(dBm) | Maximum<br>EIRP<br>(dBm) | EIRP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|--------------------------|--------------------------|------------------------|
| QPSK       | 23.00                           | 23.99                           | 25.31                    | 26.30                    | 30                     |
| 16QAM      | 21.85                           | 23.07                           | 24.16                    | 25.38                    | 30                     |
| 64QAM      | 20.87                           | 22.06                           | 23.18                    | 24.37                    | 30                     |
| 256QAM     | 18.77                           | 19.10                           | 21.08                    | 21.41                    | 30                     |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# 7.1.17 LTE Band 71

## LTE Band 71, Channel Bandwidth: 5 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 133147                         | CH 133297 | CH 133447 |
|            |         |           | 665.5 MHz                         | 680.5 MHz | 695.5 MHz |
| QPSK       | 1       | 0         | 23.74                             | 23.81     | 23.73     |
|            | 1       | 12        | 23.86                             | 23.98     | 23.90     |
|            | 1       | 24        | 23.71                             | 23.77     | 23.74     |
|            | 12      | 0         | 22.51                             | 22.67     | 22.50     |
|            | 12      | 6         | 22.56                             | 22.64     | 22.55     |
|            | 12      | 13        | 22.70                             | 22.78     | 22.52     |
|            | 25      | 0         | 22.61                             | 22.66     | 22.64     |
| 16QAM      | 1       | 0         | 22.68                             | 22.67     | 22.57     |
|            | 1       | 12        | 22.60                             | 22.86     | 22.82     |
|            | 1       | 24        | 22.71                             | 22.83     | 22.72     |
|            | 12      | 0         | 21.62                             | 21.65     | 21.53     |
|            | 12      | 6         | 21.64                             | 21.61     | 21.50     |
|            | 12      | 13        | 21.68                             | 21.70     | 21.65     |
|            | 25      | 0         | 21.53                             | 21.64     | 21.53     |
| 64QAM      | 1       | 0         | 21.71                             | 21.98     | 21.85     |
|            | 1       | 12        | 21.72                             | 21.70     | 21.62     |
|            | 1       | 24        | 21.62                             | 21.72     | 21.57     |
|            | 12      | 0         | 20.52                             | 20.65     | 20.55     |
|            | 12      | 6         | 20.52                             | 20.61     | 20.61     |
|            | 12      | 13        | 20.67                             | 20.76     | 20.71     |
|            | 25      | 0         | 20.61                             | 20.69     | 20.56     |
| 256QAM     | 1       | 0         | 18.66                             | 18.77     | 18.55     |
|            | 1       | 12        | 18.68                             | 18.77     | 18.78     |
|            | 1       | 24        | 18.55                             | 18.79     | 18.67     |
|            | 12      | 0         | 18.57                             | 18.56     | 18.55     |
|            | 12      | 6         | 18.65                             | 18.71     | 18.77     |
|            | 12      | 13        | 18.51                             | 18.62     | 18.56     |
|            | 25      | 0         | 18.58                             | 18.56     | 18.56     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.50                           | 23.98                           | 20.88                   | 22.36                   | 44.77                 |
| 16QAM      | 21.50                           | 22.86                           | 19.88                   | 21.24                   | 44.77                 |
| 64QAM      | 20.52                           | 21.98                           | 18.90                   | 20.36                   | 44.77                 |
| 256QAM     | 18.51                           | 18.79                           | 16.89                   | 17.17                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 71, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 133172                         | CH 133297 | CH 133422 |
|            |         |           | 668 MHz                           | 680.5 MHz | 693 MHz   |
| QPSK       | 1       | 0         | 23.71                             | 23.74     | 23.69     |
|            | 1       | 24        | 23.87                             | 23.93     | 23.98     |
|            | 1       | 49        | 23.83                             | 23.74     | 23.80     |
|            | 25      | 0         | 22.68                             | 22.60     | 22.65     |
|            | 25      | 12        | 22.61                             | 22.65     | 22.65     |
|            | 25      | 25        | 22.66                             | 22.69     | 22.63     |
|            | 50      | 0         | 22.59                             | 22.67     | 22.59     |
| 16QAM      | 1       | 0         | 22.52                             | 22.78     | 22.70     |
|            | 1       | 24        | 22.77                             | 22.83     | 22.65     |
|            | 1       | 49        | 22.74                             | 22.77     | 22.74     |
|            | 25      | 0         | 21.70                             | 21.59     | 21.57     |
|            | 25      | 12        | 21.60                             | 21.58     | 21.61     |
|            | 25      | 25        | 21.75                             | 21.76     | 21.71     |
|            | 50      | 0         | 21.51                             | 21.66     | 21.50     |
| 64QAM      | 1       | 0         | 21.85                             | 21.90     | 21.84     |
|            | 1       | 24        | 21.64                             | 21.77     | 21.67     |
|            | 1       | 49        | 21.66                             | 21.72     | 21.64     |
|            | 25      | 0         | 20.64                             | 20.55     | 20.58     |
|            | 25      | 12        | 20.60                             | 20.67     | 20.66     |
|            | 25      | 25        | 20.71                             | 20.80     | 20.76     |
|            | 50      | 0         | 20.59                             | 20.72     | 20.63     |
| 256QAM     | 1       | 0         | 18.64                             | 18.79     | 18.60     |
|            | 1       | 24        | 18.66                             | 18.76     | 18.72     |
|            | 1       | 49        | 18.68                             | 18.68     | 18.69     |
|            | 25      | 0         | 18.55                             | 18.57     | 18.66     |
|            | 25      | 12        | 18.56                             | 18.67     | 18.65     |
|            | 25      | 25        | 18.59                             | 18.72     | 18.54     |
|            | 50      | 0         | 18.57                             | 18.57     | 18.55     |

| Output Power |                                 |                                 |                         |                         |                       |
|--------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| Modulation   | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
| QPSK         | 22.59                           | 23.98                           | 20.97                   | 22.36                   | 44.77                 |
| 16QAM        | 21.50                           | 22.83                           | 19.88                   | 21.21                   | 44.77                 |
| 64QAM        | 20.55                           | 21.90                           | 18.93                   | 20.28                   | 44.77                 |
| 256QAM       | 18.54                           | 18.79                           | 16.92                   | 17.17                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 71, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 133197                         | CH 133297 | CH 133397 |
|            |         |           | 670.5 MHz                         | 680.5 MHz | 690.5 MHz |
| QPSK       | 1       | 0         | 23.84                             | 23.81     | 23.75     |
|            | 1       | 37        | 23.84                             | 23.85     | 23.94     |
|            | 1       | 74        | 23.65                             | 23.81     | 23.82     |
|            | 36      | 0         | 22.58                             | 22.73     | 22.60     |
|            | 36      | 19        | 22.66                             | 22.58     | 22.60     |
|            | 36      | 39        | 22.68                             | 22.78     | 22.71     |
|            | 75      | 0         | 22.65                             | 22.73     | 22.63     |
| 16QAM      | 1       | 0         | 22.59                             | 22.70     | 22.69     |
|            | 1       | 37        | 22.72                             | 22.78     | 22.60     |
|            | 1       | 74        | 22.65                             | 22.89     | 22.66     |
|            | 36      | 0         | 21.50                             | 21.58     | 21.57     |
|            | 36      | 19        | 21.57                             | 21.66     | 21.52     |
|            | 36      | 39        | 21.54                             | 21.80     | 21.66     |
|            | 75      | 0         | 21.54                             | 21.57     | 21.67     |
| 64QAM      | 1       | 0         | 21.69                             | 21.93     | 21.82     |
|            | 1       | 37        | 21.62                             | 21.68     | 21.59     |
|            | 1       | 74        | 21.58                             | 21.73     | 21.55     |
|            | 36      | 0         | 20.58                             | 20.63     | 20.57     |
|            | 36      | 19        | 20.50                             | 20.61     | 20.56     |
|            | 36      | 39        | 20.72                             | 20.78     | 20.62     |
|            | 75      | 0         | 20.52                             | 20.68     | 20.53     |
| 256QAM     | 1       | 0         | 18.62                             | 18.64     | 18.61     |
|            | 1       | 37        | 18.69                             | 18.76     | 18.62     |
|            | 1       | 74        | 18.58                             | 18.71     | 18.65     |
|            | 36      | 0         | 18.51                             | 18.61     | 18.56     |
|            | 36      | 19        | 18.60                             | 18.77     | 18.56     |
|            | 36      | 39        | 18.52                             | 18.59     | 18.65     |
|            | 75      | 0         | 18.61                             | 18.66     | 18.55     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.58                           | 23.94                           | 20.96                   | 22.32                   | 44.77                 |
| 16QAM      | 21.50                           | 22.89                           | 19.88                   | 21.27                   | 44.77                 |
| 64QAM      | 20.50                           | 21.93                           | 18.88                   | 20.31                   | 44.77                 |
| 256QAM     | 18.51                           | 18.77                           | 16.89                   | 17.15                   | 44.77                 |

Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

# LTE Band 71, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |           |           |
|------------|---------|-----------|-----------------------------------|-----------|-----------|
|            |         |           | CH 133222                         | CH 133297 | CH 133372 |
|            |         |           | 673 MHz                           | 680.5 MHz | 688 MHz   |
| QPSK       | 1       | 0         | 23.89                             | 23.93     | 23.88     |
|            | 1       | 50        | 23.97                             | 23.99     | 23.95     |
|            | 1       | 99        | 23.92                             | 23.93     | 23.84     |
|            | 50      | 0         | 22.63                             | 22.74     | 22.71     |
|            | 50      | 25        | 22.77                             | 22.78     | 22.75     |
|            | 50      | 50        | 22.82                             | 22.85     | 22.82     |
|            | 100     | 0         | 22.80                             | 22.80     | 22.66     |
| 16QAM      | 1       | 0         | 22.66                             | 22.66     | 22.55     |
|            | 1       | 50        | 22.91                             | 22.92     | 22.90     |
|            | 1       | 99        | 22.88                             | 22.94     | 22.80     |
|            | 50      | 0         | 21.70                             | 21.77     | 21.75     |
|            | 50      | 25        | 21.69                             | 21.76     | 21.67     |
|            | 50      | 50        | 21.84                             | 21.85     | 21.70     |
|            | 100     | 0         | 21.66                             | 21.74     | 21.71     |
| 64QAM      | 1       | 0         | 21.90                             | 22.04     | 22.00     |
|            | 1       | 50        | 21.67                             | 21.82     | 21.78     |
|            | 1       | 99        | 21.80                             | 21.85     | 21.85     |
|            | 50      | 0         | 20.71                             | 20.71     | 20.71     |
|            | 50      | 25        | 20.68                             | 20.79     | 20.75     |
|            | 50      | 50        | 20.80                             | 20.89     | 20.80     |
|            | 100     | 0         | 20.64                             | 20.78     | 20.68     |
| 256QAM     | 1       | 0         | 18.78                             | 18.84     | 18.69     |
|            | 1       | 50        | 18.81                             | 18.92     | 18.77     |
|            | 1       | 99        | 18.72                             | 18.86     | 18.81     |
|            | 50      | 0         | 18.75                             | 18.75     | 18.72     |
|            | 50      | 25        | 18.70                             | 18.84     | 18.69     |
|            | 50      | 50        | 18.72                             | 18.78     | 18.68     |
|            | 100     | 0         | 18.72                             | 18.73     | 18.72     |

**Output Power**

| Modulation | Minimum<br>Cond. Power<br>(dBm) | Maximum<br>Cond. Power<br>(dBm) | Minimum<br>ERP<br>(dBm) | Maximum<br>ERP<br>(dBm) | ERP<br>Limit<br>(dBm) |
|------------|---------------------------------|---------------------------------|-------------------------|-------------------------|-----------------------|
| QPSK       | 22.63                           | 23.99                           | 21.01                   | 22.37                   | 44.77                 |
| 16QAM      | 21.66                           | 22.94                           | 20.04                   | 21.32                   | 44.77                 |
| 64QAM      | 20.64                           | 22.04                           | 19.02                   | 20.42                   | 44.77                 |
| 256QAM     | 18.68                           | 18.92                           | 17.06                   | 17.30                   | 44.77                 |

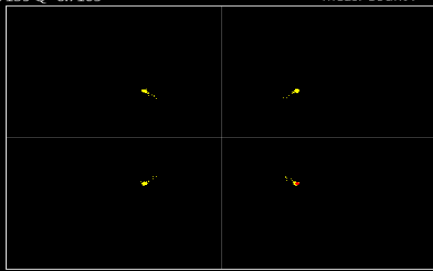
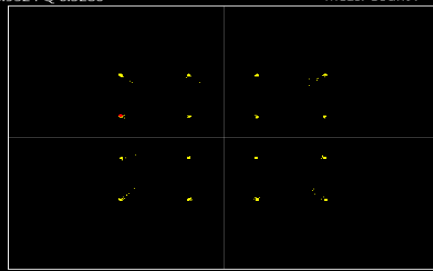
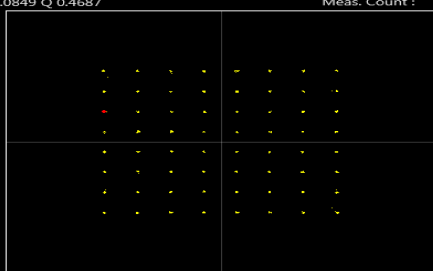
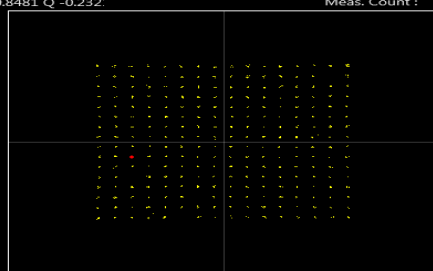
Note: ERP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)-2.15

## 7.2 Modulation Characteristics

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 65% RH | Tested By: | Kevin Kuo |
|---------------------------|--------------|------------|-----------|

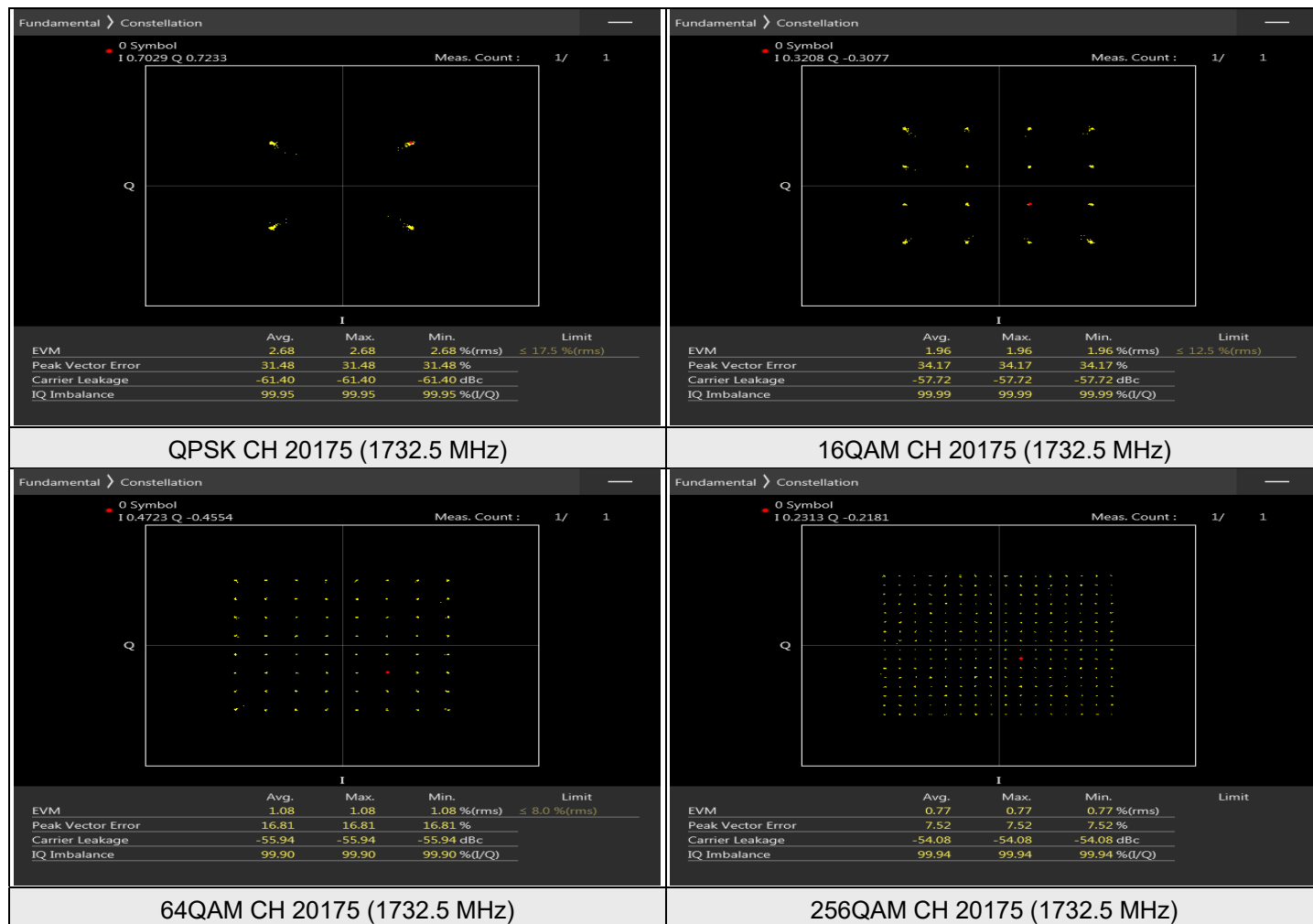
### 7.2.1 LTE Band 2

#### LTE Band 2, Channel Bandwidth: 20 MHz

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |           |                  |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------|------------------|---------------------|---------------------|-------------------|-------|-------|---------|--|-----------------|--------|--------|------------|--|--------------|--------|--------|---------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|-----------|------------------|---------------------|-------------------|-------|-------|---------|--|-----------------|--------|--------|------------|--|--------------|--------|--------|---------------|--|
| <div><div>Fundamental &gt; Constellation</div><div>0 Symbol<br/>I 0.7135 Q -0.7105 Meas. Count : 1/ 1</div><div></div><div><table><tr><td>EVM</td><td>Avg. 2.05</td><td>Max. 2.05</td><td>Min. 2.05 %(rms)</td><td>Limit ≤ 17.5 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>25.91</td><td>25.91</td><td>25.91 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-56.16</td><td>-56.16</td><td>-56.16 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>100.00</td><td>100.00</td><td>100.00 %(I/Q)</td><td></td></tr></table></div></div> | EVM                        | Avg. 2.05 | Max. 2.05        | Min. 2.05 %(rms)    | Limit ≤ 17.5 %(rms) | Peak Vector Error | 25.91 | 25.91 | 25.91 % |  | Carrier Leakage | -56.16 | -56.16 | -56.16 dBc |  | IQ Imbalance | 100.00 | 100.00 | 100.00 %(I/Q) |  | <div><div>Fundamental &gt; Constellation</div><div>0 Symbol<br/>I -0.9524 Q 0.3280 Meas. Count : 1/ 1</div><div></div><div><table><tr><td>EVM</td><td>Avg. 1.61</td><td>Max. 1.61</td><td>Min. 1.61 %(rms)</td><td>Limit ≤ 12.5 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>25.03</td><td>25.03</td><td>25.03 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-56.78</td><td>-56.78</td><td>-56.78 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>100.30</td><td>100.30</td><td>100.30 %(I/Q)</td><td></td></tr></table></div></div> | EVM | Avg. 1.61 | Max. 1.61 | Min. 1.61 %(rms) | Limit ≤ 12.5 %(rms) | Peak Vector Error | 25.03 | 25.03 | 25.03 % |  | Carrier Leakage | -56.78 | -56.78 | -56.78 dBc |  | IQ Imbalance | 100.30 | 100.30 | 100.30 %(I/Q) |  |
| EVM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Avg. 2.05                  | Max. 2.05 | Min. 2.05 %(rms) | Limit ≤ 17.5 %(rms) |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Peak Vector Error                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 25.91                      | 25.91     | 25.91 %          |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Carrier Leakage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -56.16                     | -56.16    | -56.16 dBc       |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| IQ Imbalance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100.00                     | 100.00    | 100.00 %(I/Q)    |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| EVM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Avg. 1.61                  | Max. 1.61 | Min. 1.61 %(rms) | Limit ≤ 12.5 %(rms) |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Peak Vector Error                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 25.03                      | 25.03     | 25.03 %          |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Carrier Leakage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -56.78                     | -56.78    | -56.78 dBc       |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| IQ Imbalance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100.30                     | 100.30    | 100.30 %(I/Q)    |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| QPSK CH 18900 (1880 MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16QAM CH 18900 (1880 MHz)  |           |                  |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| <div><div>Fundamental &gt; Constellation</div><div>0 Symbol<br/>I -1.0849 Q 0.4687 Meas. Count : 1/ 1</div><div></div><div><table><tr><td>EVM</td><td>Avg. 1.15</td><td>Max. 1.15</td><td>Min. 1.15 %(rms)</td><td>Limit ≤ 8.0 %(rms)</td></tr><tr><td>Peak Vector Error</td><td>19.33</td><td>19.33</td><td>19.33 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-57.33</td><td>-57.33</td><td>-57.33 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>99.90</td><td>99.90</td><td>99.90 %(I/Q)</td><td></td></tr></table></div></div>   | EVM                        | Avg. 1.15 | Max. 1.15        | Min. 1.15 %(rms)    | Limit ≤ 8.0 %(rms)  | Peak Vector Error | 19.33 | 19.33 | 19.33 % |  | Carrier Leakage | -57.33 | -57.33 | -57.33 dBc |  | IQ Imbalance | 99.90  | 99.90  | 99.90 %(I/Q)  |  | <div><div>Fundamental &gt; Constellation</div><div>0 Symbol<br/>I -0.8481 Q -0.2321 Meas. Count : 1/ 1</div><div></div><div><table><tr><td>EVM</td><td>Avg. 1.20</td><td>Max. 1.20</td><td>Min. 1.20 %(rms)</td><td>Limit</td></tr><tr><td>Peak Vector Error</td><td>8.91</td><td>8.91</td><td>8.91 %</td><td></td></tr><tr><td>Carrier Leakage</td><td>-56.35</td><td>-56.35</td><td>-56.35 dBc</td><td></td></tr><tr><td>IQ Imbalance</td><td>99.97</td><td>99.97</td><td>99.97 %(I/Q)</td><td></td></tr></table></div></div>                  | EVM | Avg. 1.20 | Max. 1.20 | Min. 1.20 %(rms) | Limit               | Peak Vector Error | 8.91  | 8.91  | 8.91 %  |  | Carrier Leakage | -56.35 | -56.35 | -56.35 dBc |  | IQ Imbalance | 99.97  | 99.97  | 99.97 %(I/Q)  |  |
| EVM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Avg. 1.15                  | Max. 1.15 | Min. 1.15 %(rms) | Limit ≤ 8.0 %(rms)  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Peak Vector Error                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 19.33                      | 19.33     | 19.33 %          |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Carrier Leakage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -57.33                     | -57.33    | -57.33 dBc       |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| IQ Imbalance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 99.90                      | 99.90     | 99.90 %(I/Q)     |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| EVM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Avg. 1.20                  | Max. 1.20 | Min. 1.20 %(rms) | Limit               |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Peak Vector Error                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 8.91                       | 8.91      | 8.91 %           |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| Carrier Leakage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -56.35                     | -56.35    | -56.35 dBc       |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| IQ Imbalance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 99.97                      | 99.97     | 99.97 %(I/Q)     |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |
| 64QAM CH 18900 (1880 MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 256QAM CH 18900 (1880 MHz) |           |                  |                     |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |           |           |                  |                     |                   |       |       |         |  |                 |        |        |            |  |              |        |        |               |  |

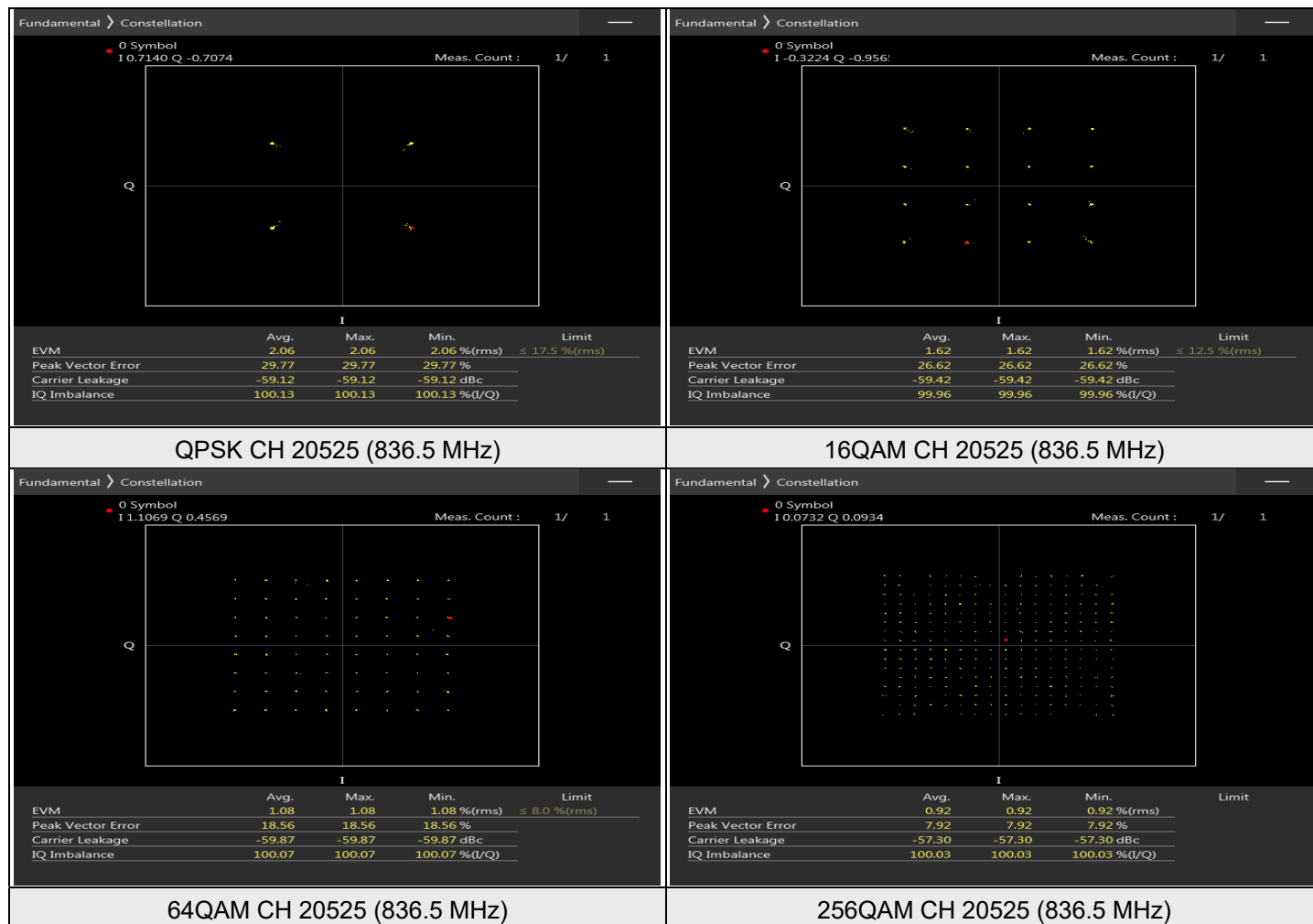
## 7.2.2 LTE Band 4

### LTE Band 4, Channel Bandwidth: 20 MHz



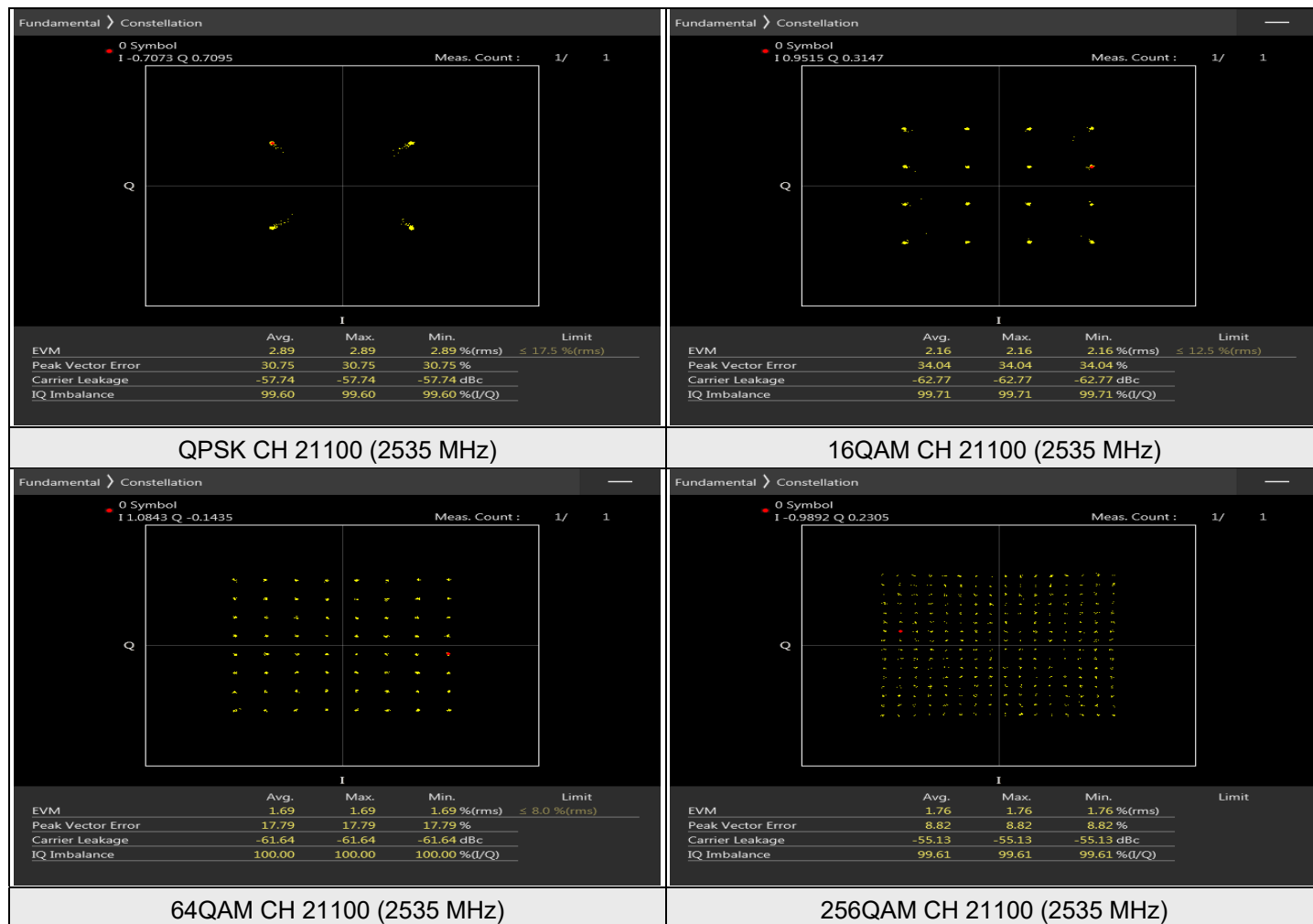
## 7.2.3 LTE Band 5

### LTE Band 5, Channel Bandwidth: 10 MHz



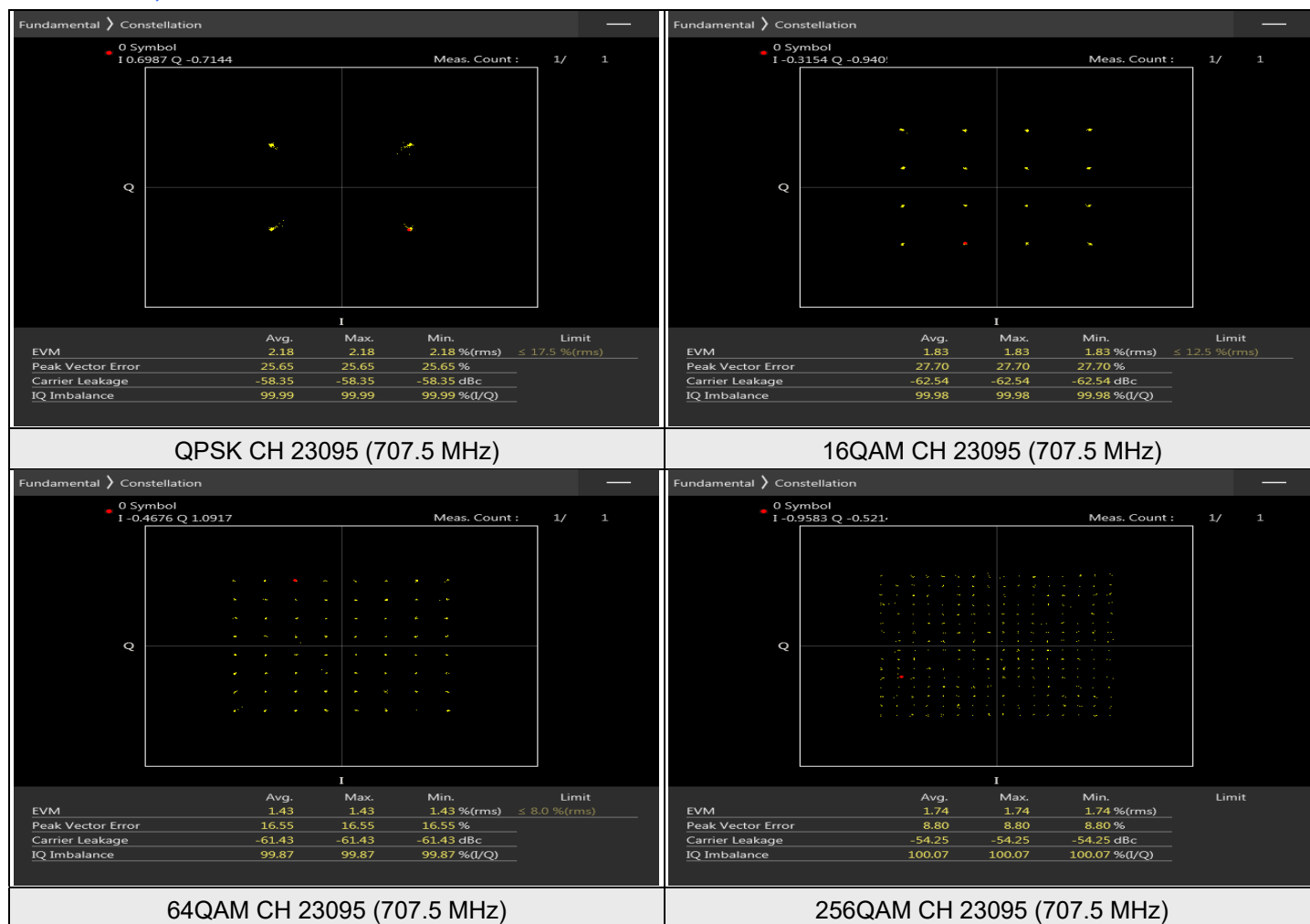
## 7.2.4 LTE Band 7

### LTE Band 7, Channel Bandwidth: 20 MHz



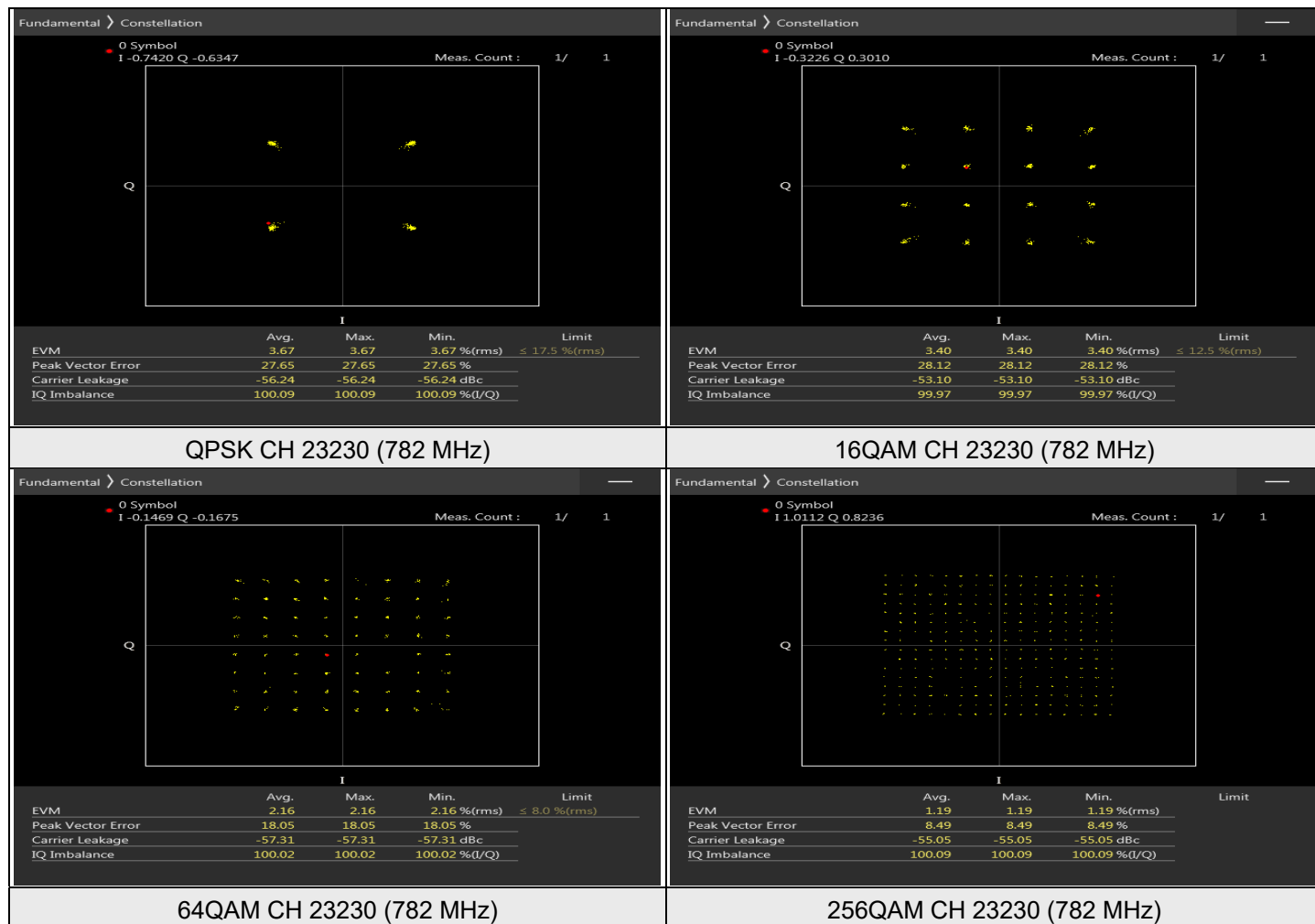
## 7.2.5 LTE Band 12

### LTE Band 12, Channel Bandwidth: 10 MHz



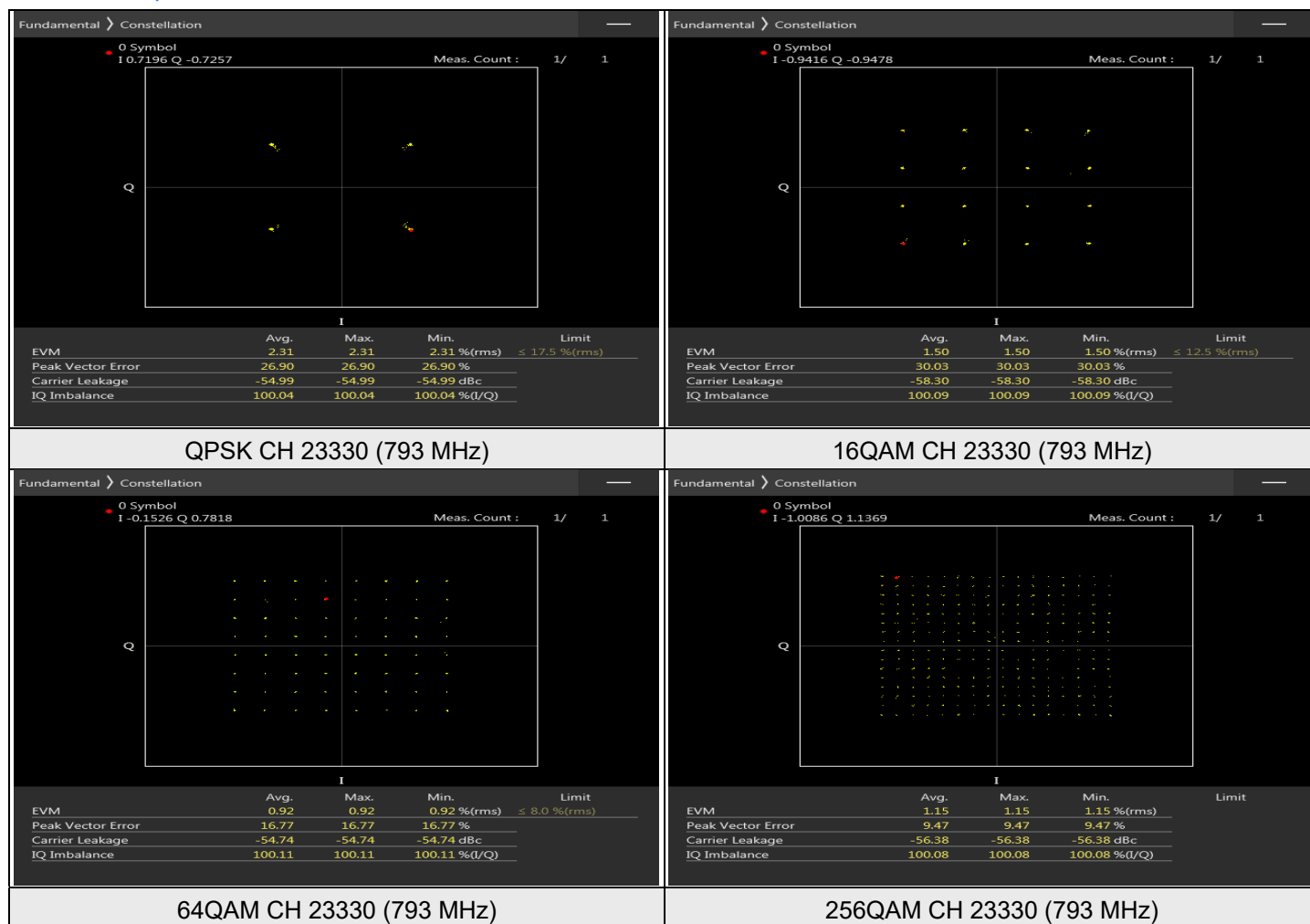
## 7.2.6 LTE Band 13

### LTE Band 13, Channel Bandwidth: 10 MHz



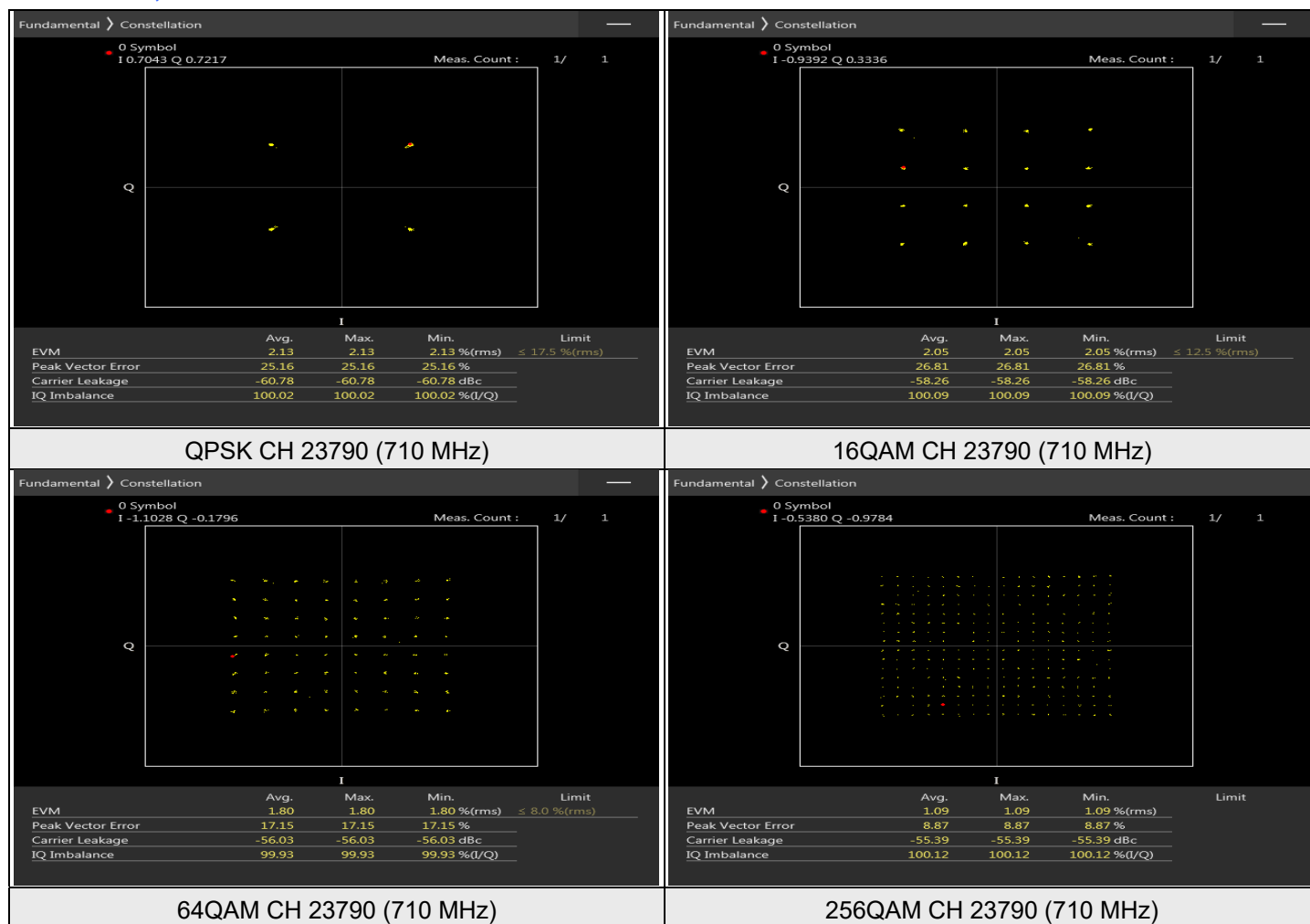
## 7.2.7 LTE Band 14

### LTE Band 14, Channel Bandwidth: 10 MHz



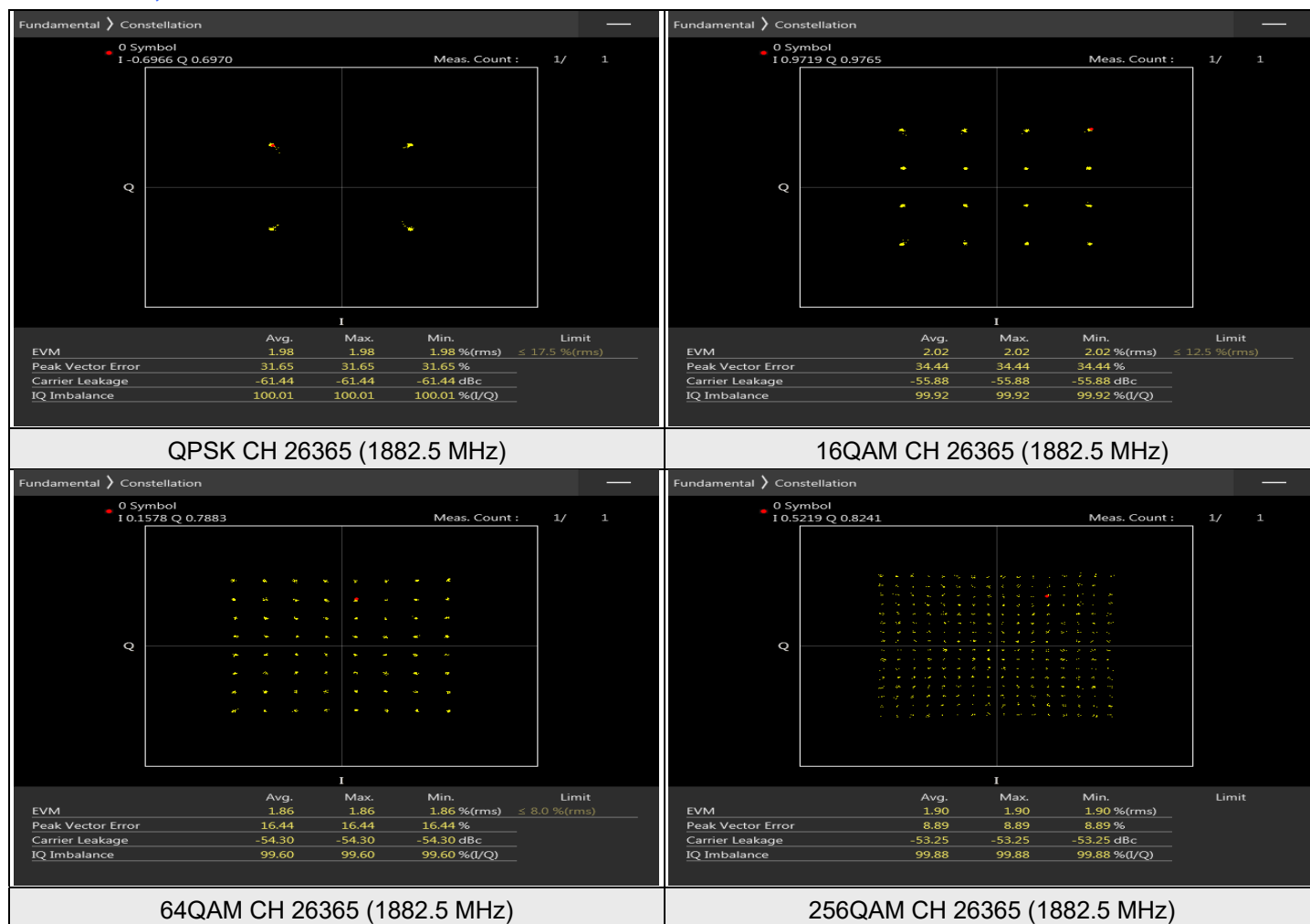
## 7.2.8 LTE Band 17

### LTE Band 17, Channel Bandwidth: 10 MHz



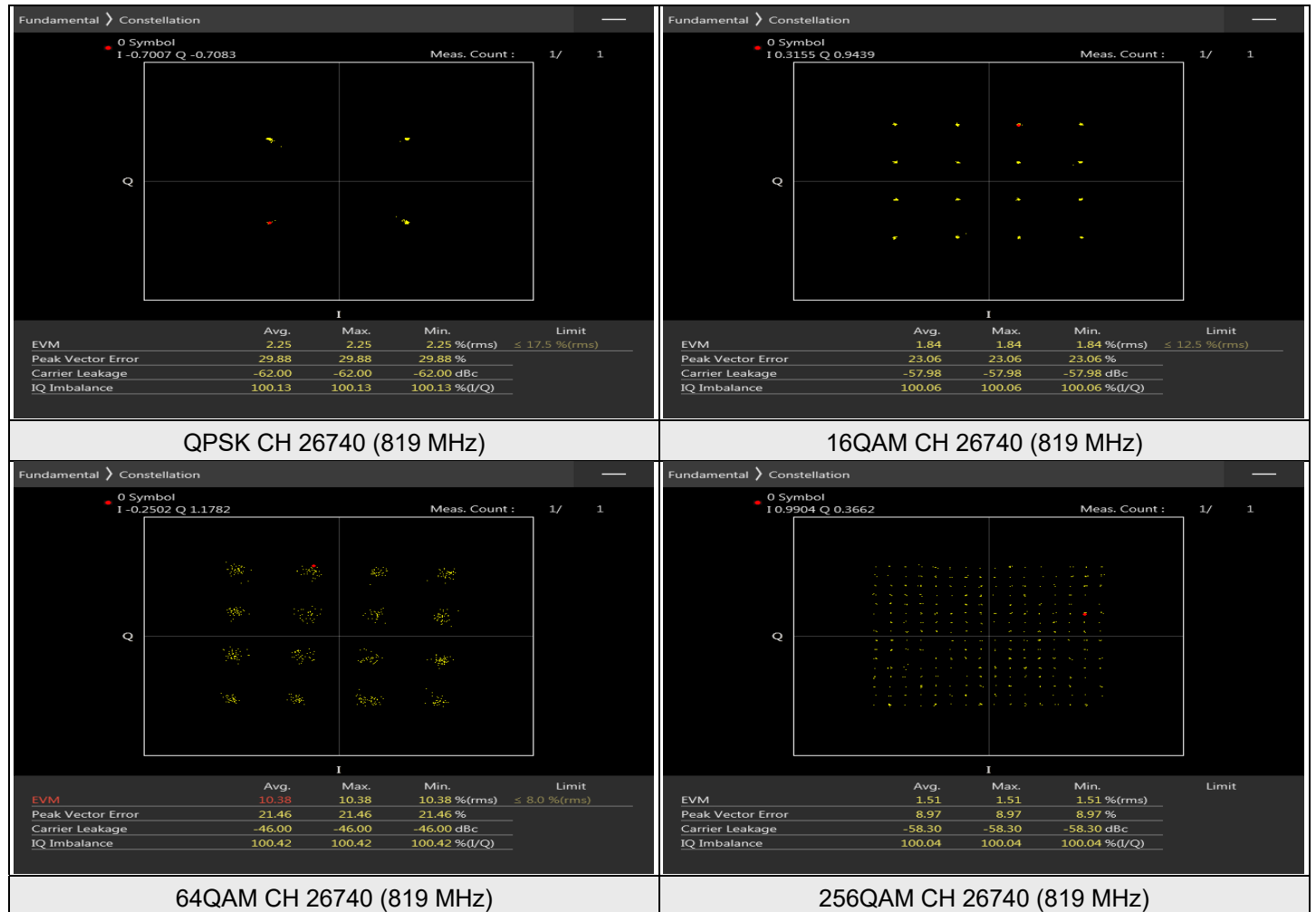
## 7.2.9 LTE Band 25

### LTE Band 25, Channel Bandwidth: 20 MHz



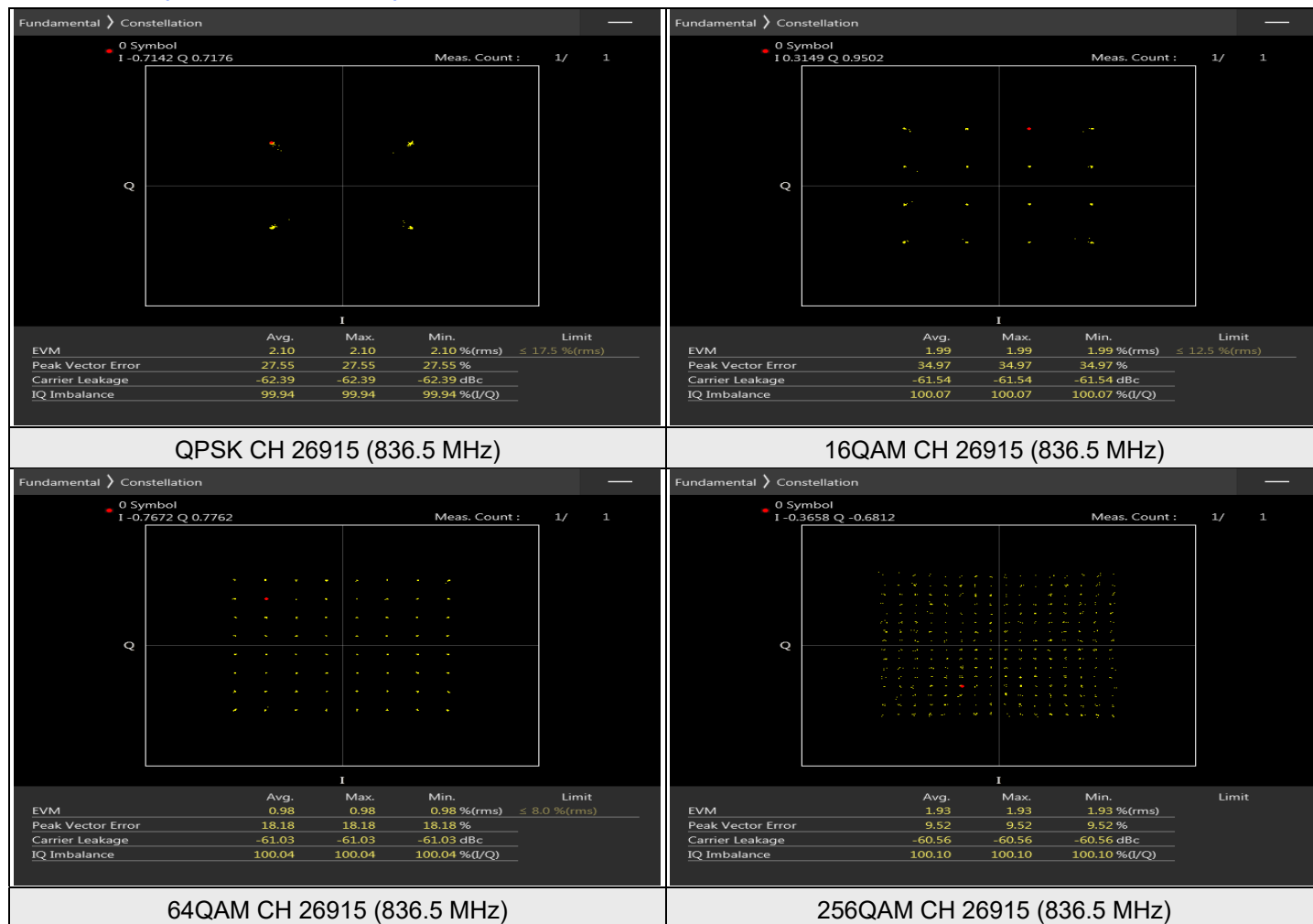
## 7.2.10 LTE Band 26 (814 MHz ~ 824 MHz)

### LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 10 MHz



## 7.2.11 LTE Band 26 (824 MHz ~ 849 MHz)

### LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz



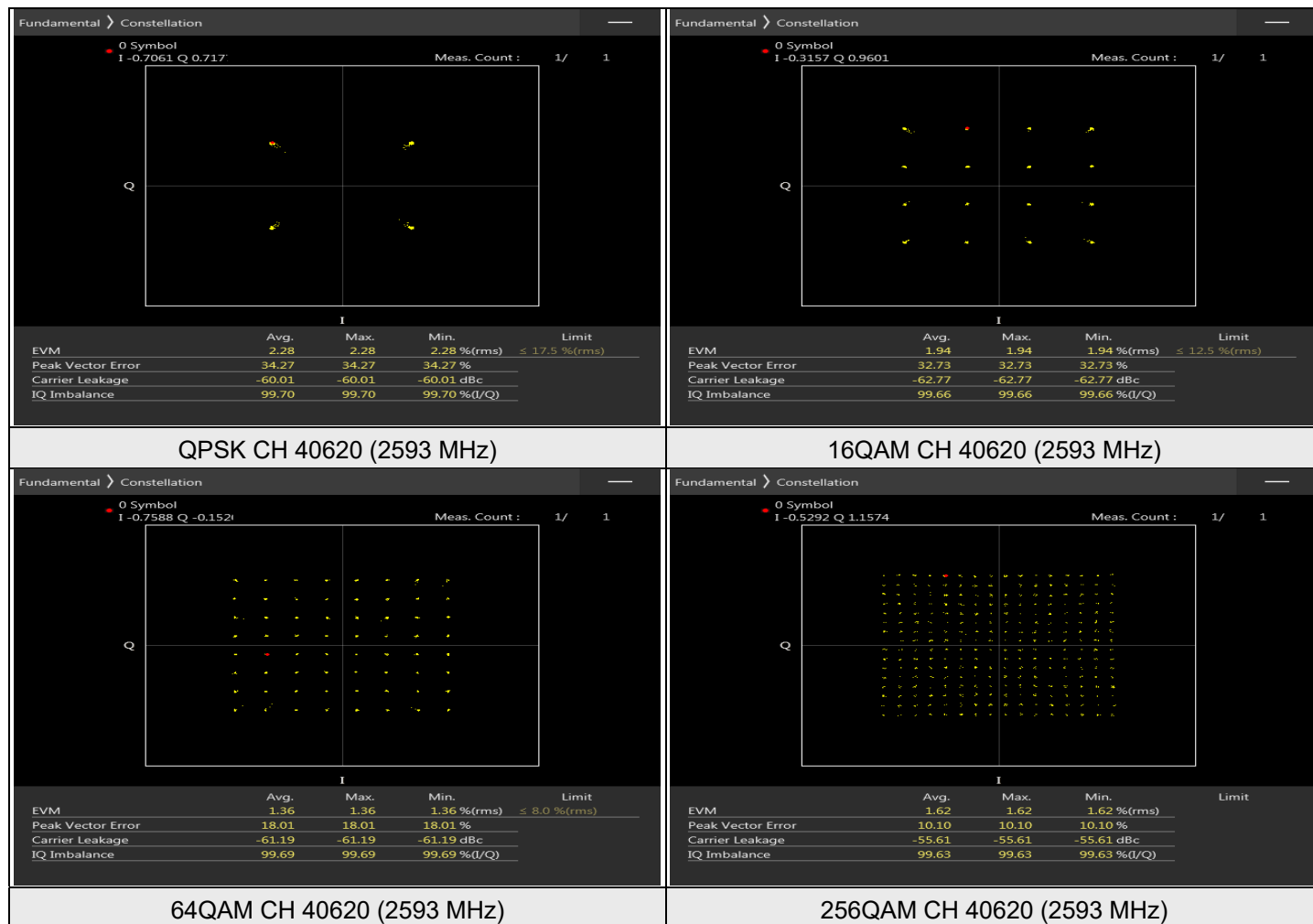
## 7.2.12 LTE Band 30

### LTE Band 30, Channel Bandwidth: 10 MHz



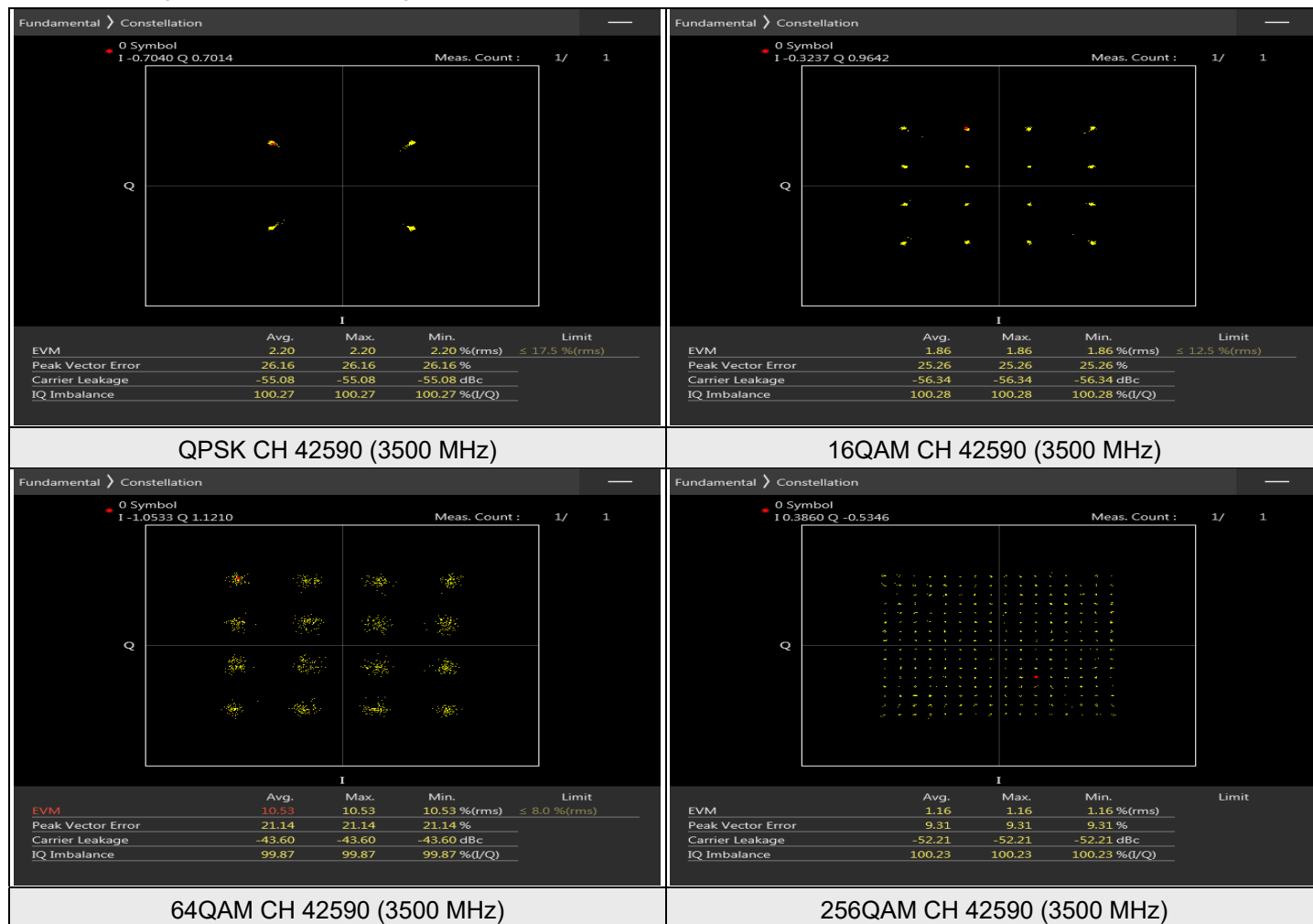
## 7.2.13 LTE Band 41

### LTE Band 41, Channel Bandwidth: 20 MHz



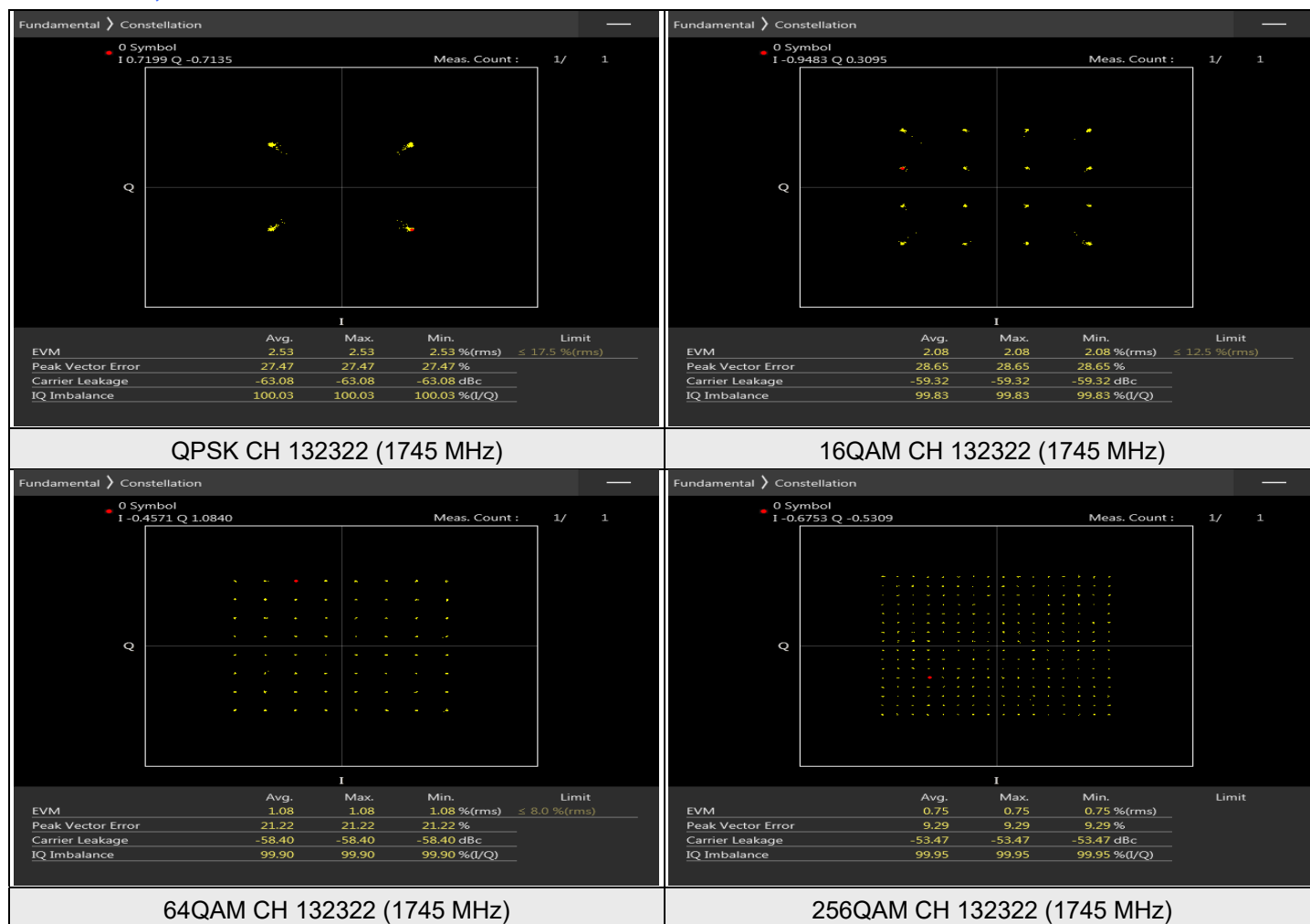
## 7.2.14 LTE Band 42 (3.45 GHz ~ 3.55 GHz)

### LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 20 MHz



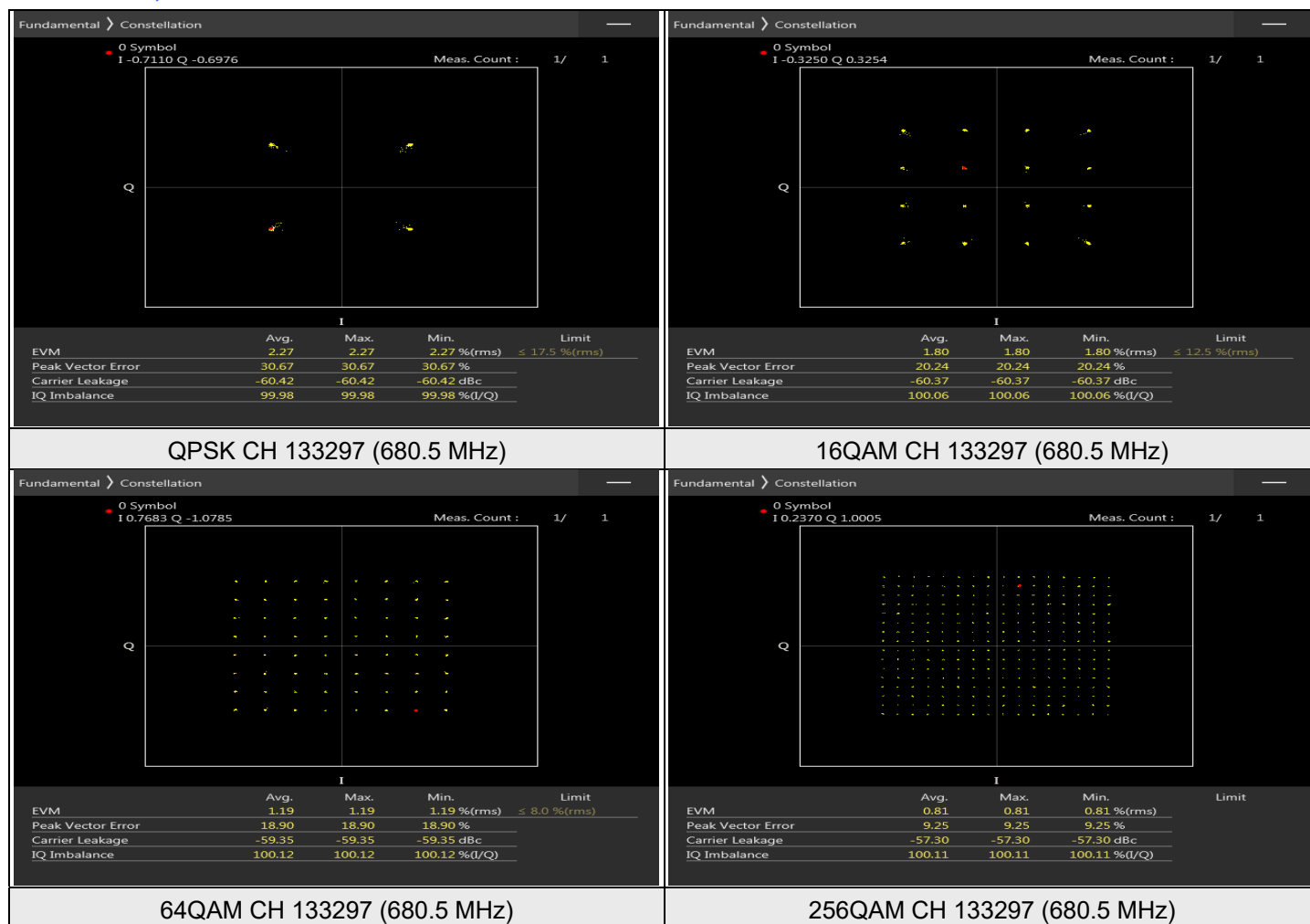
## 7.2.15 LTE Band 66

### LTE Band 66, Channel Bandwidth: 20 MHz



## 7.2.16 LTE Band 71

### LTE Band 71, Channel Bandwidth: 20 MHz



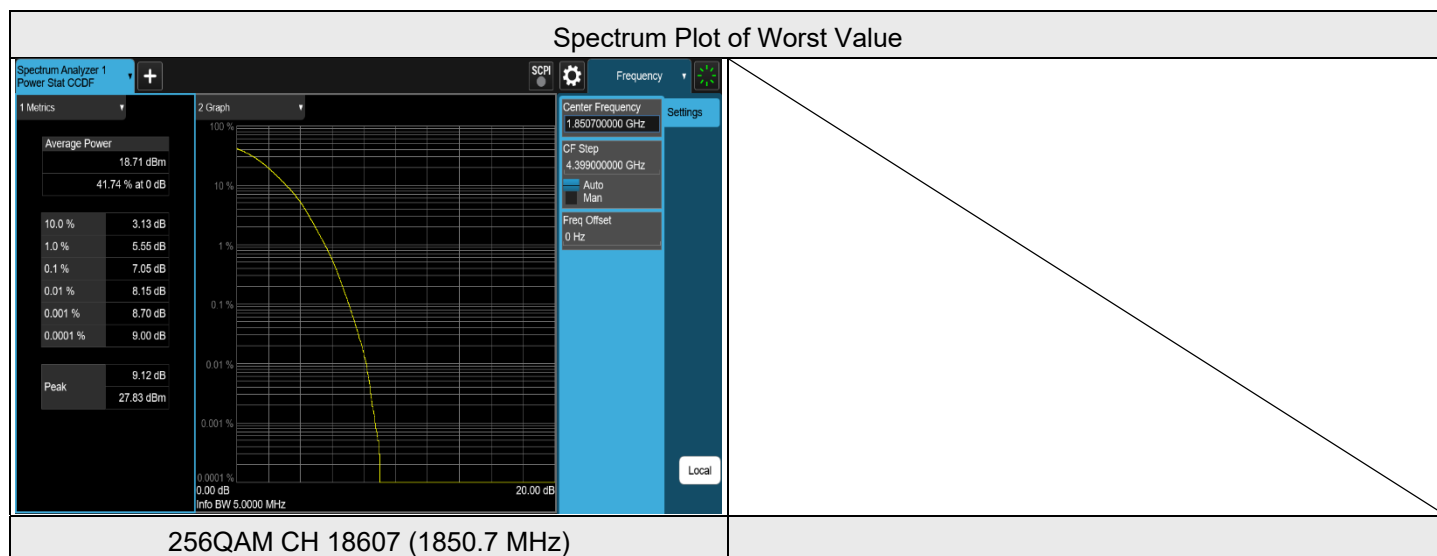
### 7.3 Peak to Average Ratio

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 65% RH | Tested By: | Kevin Kuo |
|---------------------------|--------------|------------|-----------|

#### 7.3.1 LTE Band 2

##### LTE Band 2, Channel Bandwidth: 1.4 MHz

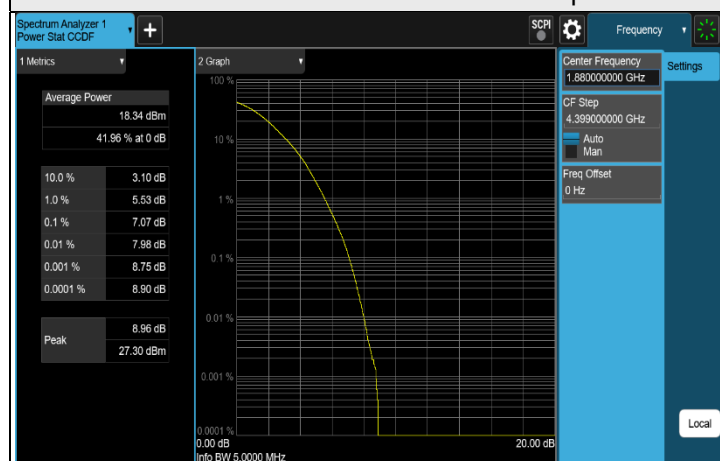
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18607   | 1850.7          | 3.82                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 3.90                  | 13         | PASS   |
| QPSK       | 19193   | 1909.3          | 3.36                  | 13         | PASS   |
| 16QAM      | 18607   | 1850.7          | 4.66                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.67                  | 13         | PASS   |
| 16QAM      | 19193   | 1909.3          | 4.05                  | 13         | PASS   |
| 64QAM      | 18607   | 1850.7          | 4.75                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 4.88                  | 13         | PASS   |
| 64QAM      | 19193   | 1909.3          | 4.20                  | 13         | PASS   |
| 256QAM     | 18607   | 1850.7          | 7.05                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.03                  | 13         | PASS   |
| 256QAM     | 19193   | 1909.3          | 6.80                  | 13         | PASS   |



# LTE Band 2, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18615   | 1851.5          | 3.91                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 3.89                  | 13         | PASS   |
| QPSK       | 19185   | 1908.5          | 3.50                  | 13         | PASS   |
| 16QAM      | 18615   | 1851.5          | 4.85                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.93                  | 13         | PASS   |
| 16QAM      | 19185   | 1908.5          | 4.43                  | 13         | PASS   |
| 64QAM      | 18615   | 1851.5          | 5.86                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 5.92                  | 13         | PASS   |
| 64QAM      | 19185   | 1908.5          | 5.44                  | 13         | PASS   |
| 256QAM     | 18615   | 1851.5          | 6.96                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.07                  | 13         | PASS   |
| 256QAM     | 19185   | 1908.5          | 6.85                  | 13         | PASS   |

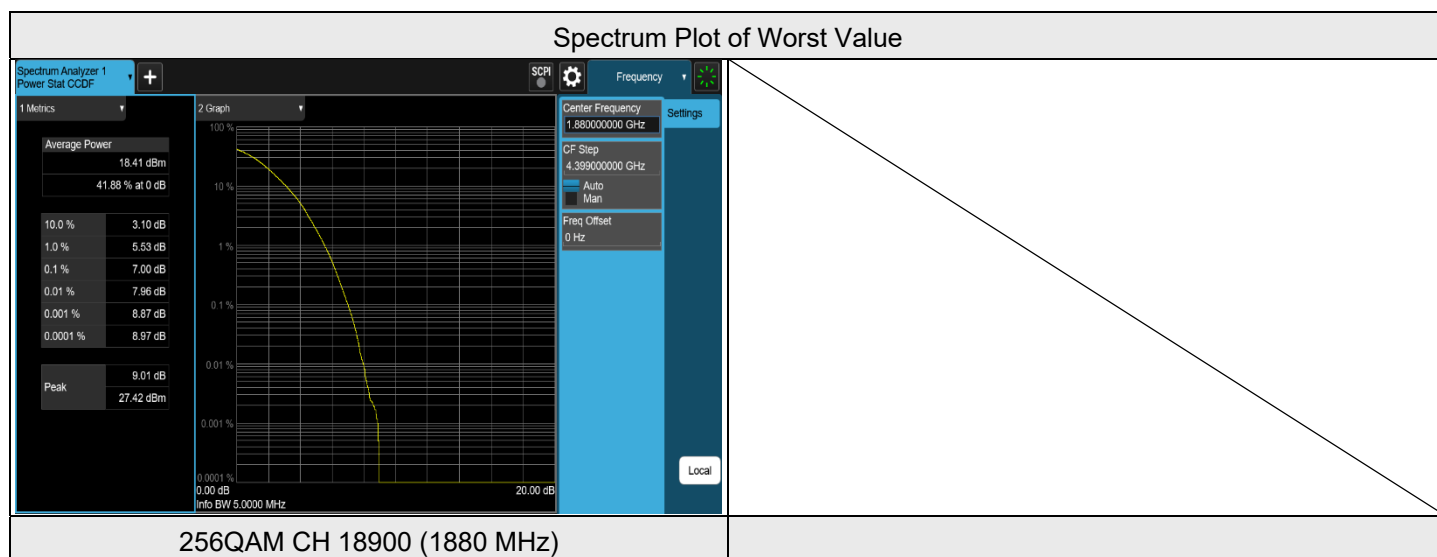
Spectrum Plot of Worst Value



256QAM CH 18900 (1880 MHz)

# LTE Band 2, Channel Bandwidth: 5 MHz

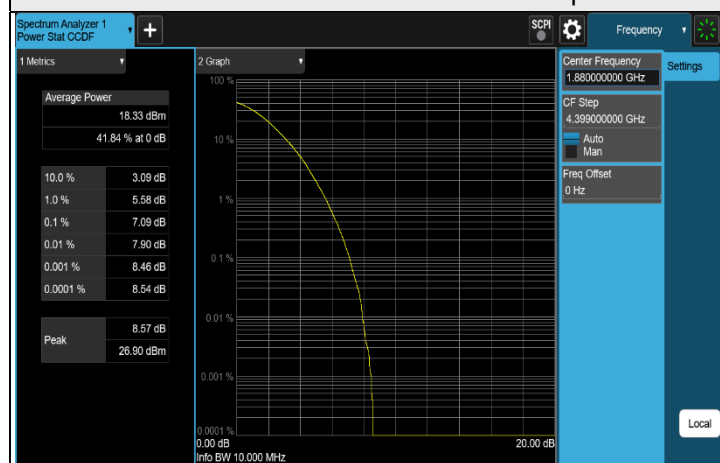
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18625   | 1852.5          | 4.15                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 4.19                  | 13         | PASS   |
| QPSK       | 19175   | 1907.5          | 3.86                  | 13         | PASS   |
| 16QAM      | 18625   | 1852.5          | 4.95                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.94                  | 13         | PASS   |
| 16QAM      | 19175   | 1907.5          | 4.62                  | 13         | PASS   |
| 64QAM      | 18625   | 1852.5          | 5.81                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 5.87                  | 13         | PASS   |
| 64QAM      | 19175   | 1907.5          | 5.57                  | 13         | PASS   |
| 256QAM     | 18625   | 1852.5          | 6.97                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.00                  | 13         | PASS   |
| 256QAM     | 19175   | 1907.5          | 6.85                  | 13         | PASS   |



### LTE Band 2, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18650   | 1855            | 4.16                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 4.23                  | 13         | PASS   |
| QPSK       | 19150   | 1905            | 4.17                  | 13         | PASS   |
| 16QAM      | 18650   | 1855            | 4.92                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.98                  | 13         | PASS   |
| 16QAM      | 19150   | 1905            | 4.83                  | 13         | PASS   |
| 64QAM      | 18650   | 1855            | 5.98                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 6.07                  | 13         | PASS   |
| 64QAM      | 19150   | 1905            | 5.84                  | 13         | PASS   |
| 256QAM     | 18650   | 1855            | 6.84                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.09                  | 13         | PASS   |
| 256QAM     | 19150   | 1905            | 6.91                  | 13         | PASS   |

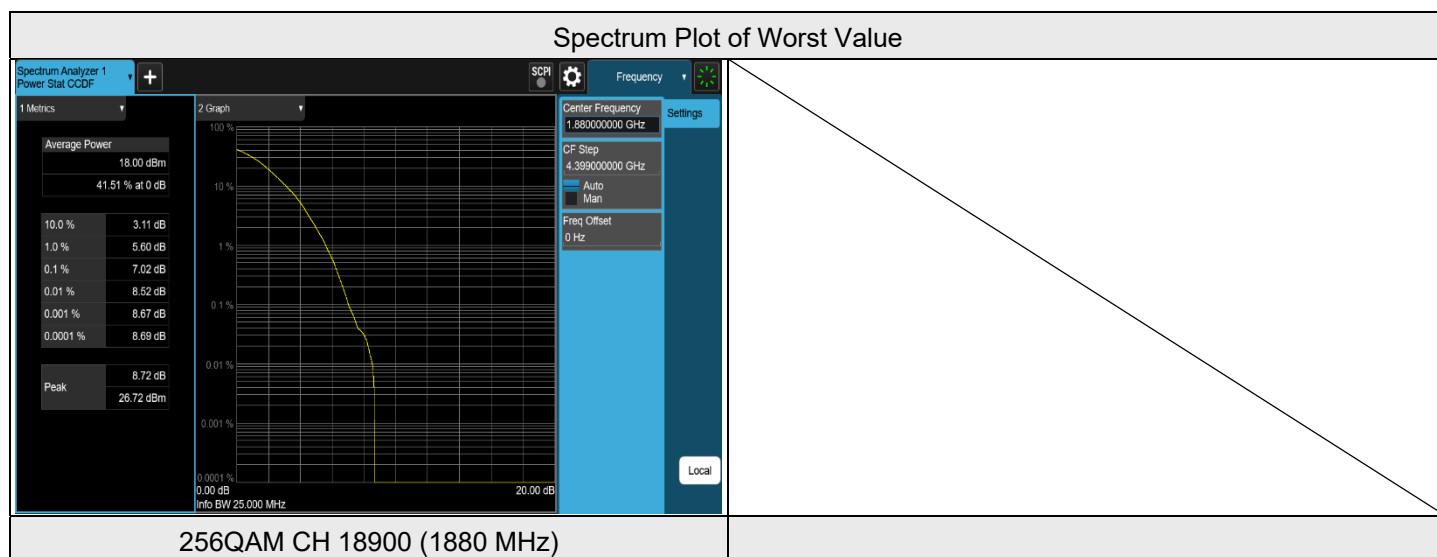
Spectrum Plot of Worst Value



256QAM CH 18900 (1880 MHz)

# LTE Band 2, Channel Bandwidth: 15 MHz

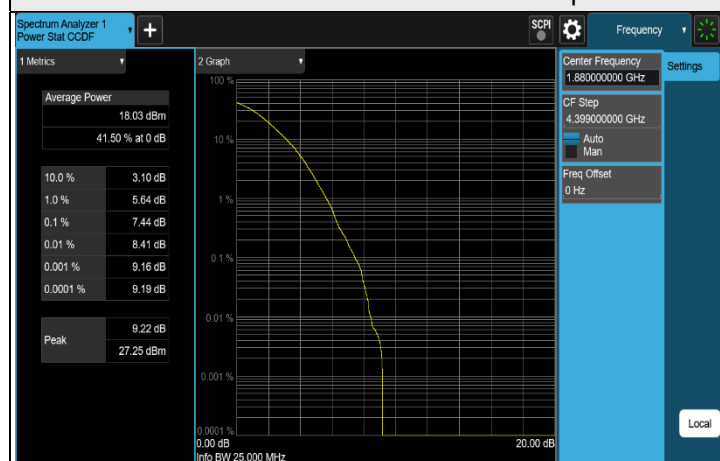
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18675   | 1857.5          | 4.07                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 4.18                  | 13         | PASS   |
| QPSK       | 19125   | 1902.5          | 3.84                  | 13         | PASS   |
| 16QAM      | 18675   | 1857.5          | 4.61                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.60                  | 13         | PASS   |
| 16QAM      | 19125   | 1902.5          | 4.47                  | 13         | PASS   |
| 64QAM      | 18675   | 1857.5          | 5.92                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 5.93                  | 13         | PASS   |
| 64QAM      | 19125   | 1902.5          | 5.77                  | 13         | PASS   |
| 256QAM     | 18675   | 1857.5          | 6.90                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.02                  | 13         | PASS   |
| 256QAM     | 19125   | 1902.5          | 6.83                  | 13         | PASS   |



# LTE Band 2, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 18700   | 1860            | 4.19                  | 13         | PASS   |
| QPSK       | 18900   | 1880            | 4.23                  | 13         | PASS   |
| QPSK       | 19100   | 1900            | 4.03                  | 13         | PASS   |
| 16QAM      | 18700   | 1860            | 4.87                  | 13         | PASS   |
| 16QAM      | 18900   | 1880            | 4.94                  | 13         | PASS   |
| 16QAM      | 19100   | 1900            | 4.77                  | 13         | PASS   |
| 64QAM      | 18700   | 1860            | 6.00                  | 13         | PASS   |
| 64QAM      | 18900   | 1880            | 6.02                  | 13         | PASS   |
| 64QAM      | 19100   | 1900            | 5.74                  | 13         | PASS   |
| 256QAM     | 18700   | 1860            | 7.05                  | 13         | PASS   |
| 256QAM     | 18900   | 1880            | 7.44                  | 13         | PASS   |
| 256QAM     | 19100   | 1900            | 7.06                  | 13         | PASS   |

Spectrum Plot of Worst Value

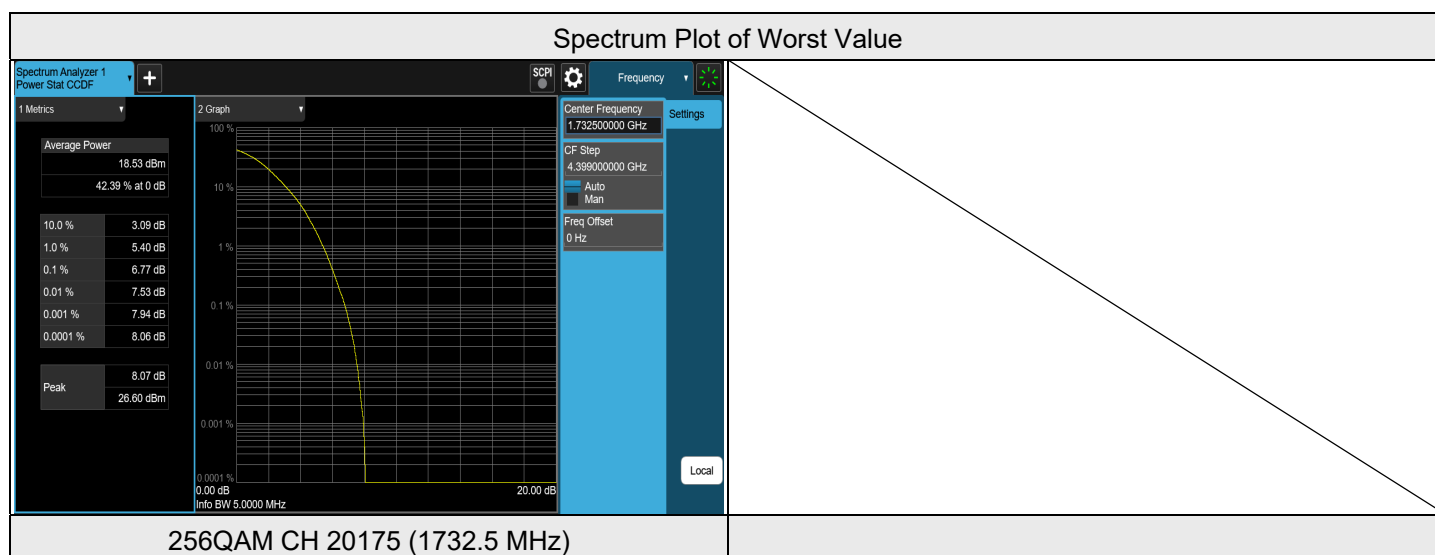


256QAM CH 18900 (1880 MHz)

### 7.3.2 LTE Band 4

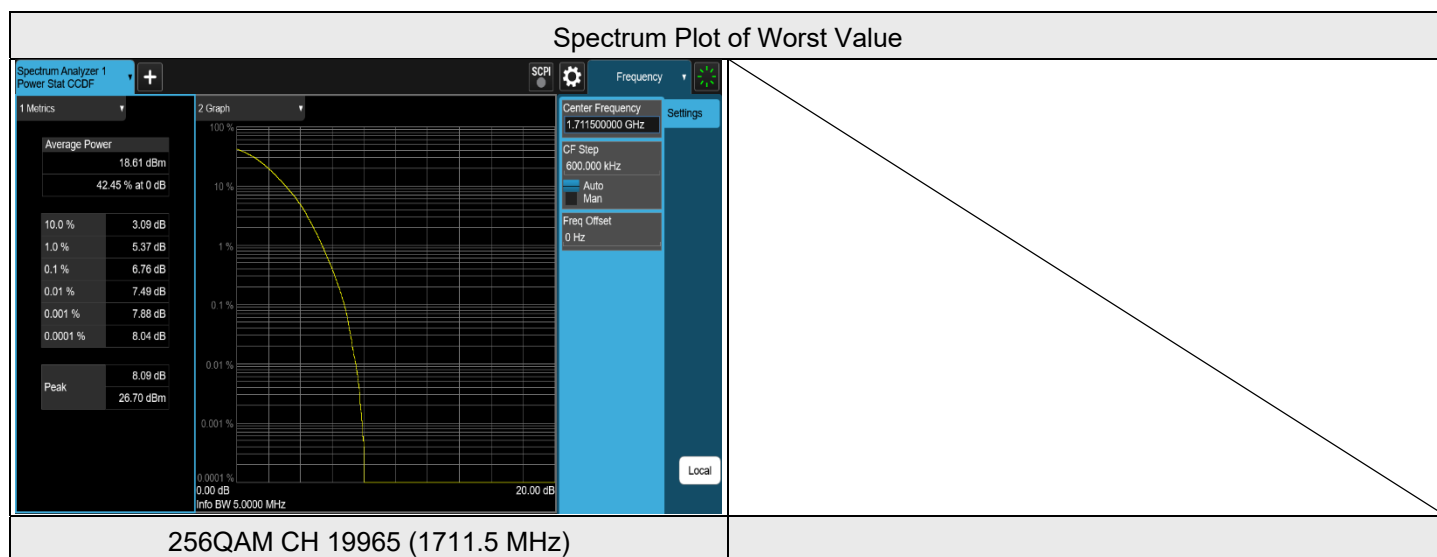
#### LTE Band 4, Channel Bandwidth: 1.4 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 19957   | 1710.7          | 3.77                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 3.77                  | 13         | PASS   |
| QPSK       | 20393   | 1754.3          | 3.04                  | 13         | PASS   |
| 16QAM      | 19957   | 1710.7          | 4.54                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.56                  | 13         | PASS   |
| 16QAM      | 20393   | 1754.3          | 3.68                  | 13         | PASS   |
| 64QAM      | 19957   | 1710.7          | 4.61                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 4.63                  | 13         | PASS   |
| 64QAM      | 20393   | 1754.3          | 4.42                  | 13         | PASS   |
| 256QAM     | 19957   | 1710.7          | 6.65                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.77                  | 13         | PASS   |
| 256QAM     | 20393   | 1754.3          | 6.60                  | 13         | PASS   |



# LTE Band 4, Channel Bandwidth: 3 MHz

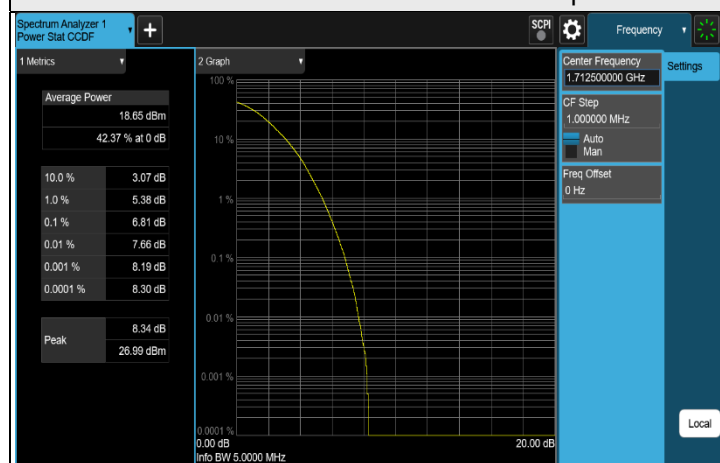
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 19965   | 1711.5          | 3.77                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 3.71                  | 13         | PASS   |
| QPSK       | 20385   | 1753.5          | 3.04                  | 13         | PASS   |
| 16QAM      | 19965   | 1711.5          | 4.77                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.72                  | 13         | PASS   |
| 16QAM      | 20385   | 1753.5          | 4.40                  | 13         | PASS   |
| 64QAM      | 19965   | 1711.5          | 5.76                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 5.73                  | 13         | PASS   |
| 64QAM      | 20385   | 1753.5          | 4.83                  | 13         | PASS   |
| 256QAM     | 19965   | 1711.5          | 6.76                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.66                  | 13         | PASS   |
| 256QAM     | 20385   | 1753.5          | 6.48                  | 13         | PASS   |



### LTE Band 4, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 19975   | 1712.5          | 4.04                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 4.00                  | 13         | PASS   |
| QPSK       | 20375   | 1752.5          | 3.88                  | 13         | PASS   |
| 16QAM      | 19975   | 1712.5          | 4.84                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.74                  | 13         | PASS   |
| 16QAM      | 20375   | 1752.5          | 4.66                  | 13         | PASS   |
| 64QAM      | 19975   | 1712.5          | 5.69                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 5.68                  | 13         | PASS   |
| 64QAM      | 20375   | 1752.5          | 5.38                  | 13         | PASS   |
| 256QAM     | 19975   | 1712.5          | 6.81                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.69                  | 13         | PASS   |
| 256QAM     | 20375   | 1752.5          | 6.54                  | 13         | PASS   |

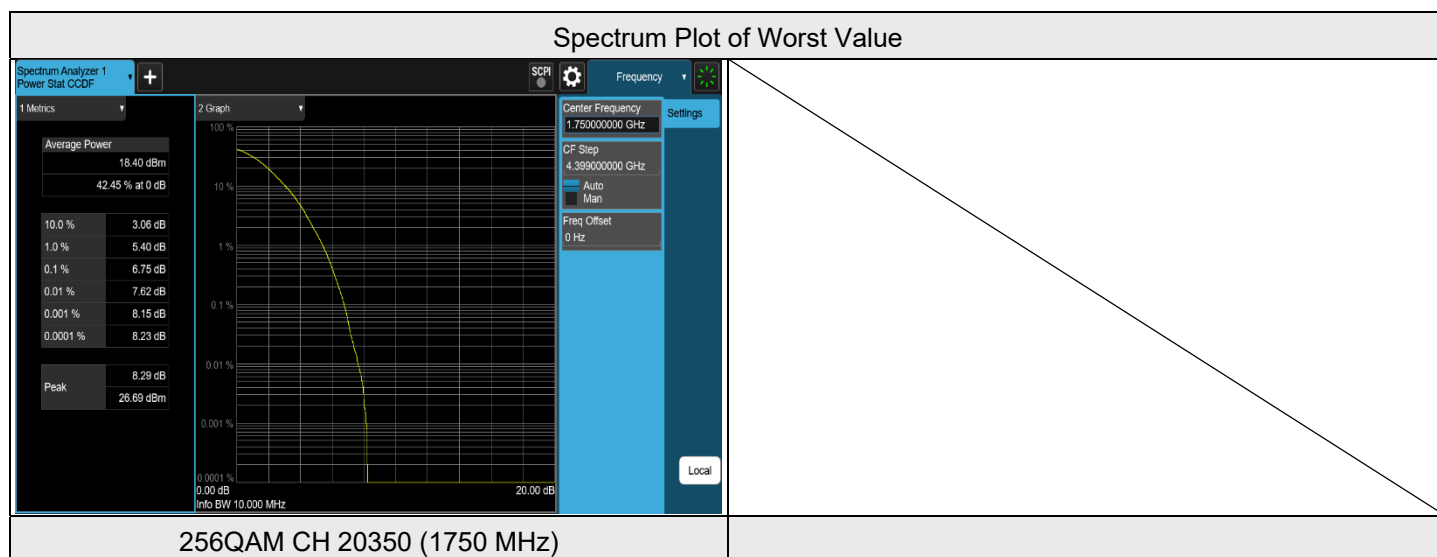
Spectrum Plot of Worst Value



256QAM CH 19975 (1712.5 MHz)

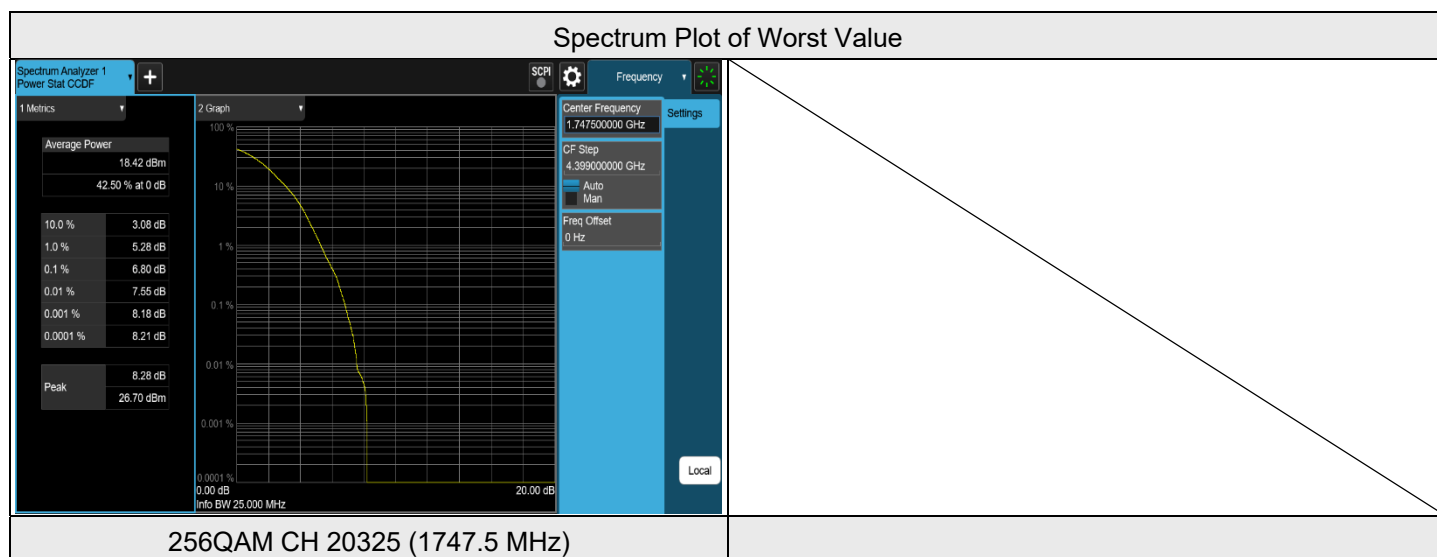
# LTE Band 4, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20000   | 1715            | 4.11                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 3.98                  | 13         | PASS   |
| QPSK       | 20350   | 1750            | 4.06                  | 13         | PASS   |
| 16QAM      | 20000   | 1715            | 4.87                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.72                  | 13         | PASS   |
| 16QAM      | 20350   | 1750            | 4.81                  | 13         | PASS   |
| 64QAM      | 20000   | 1715            | 5.86                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 5.24                  | 13         | PASS   |
| 64QAM      | 20350   | 1750            | 5.81                  | 13         | PASS   |
| 256QAM     | 20000   | 1715            | 6.68                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.68                  | 13         | PASS   |
| 256QAM     | 20350   | 1750            | 6.75                  | 13         | PASS   |



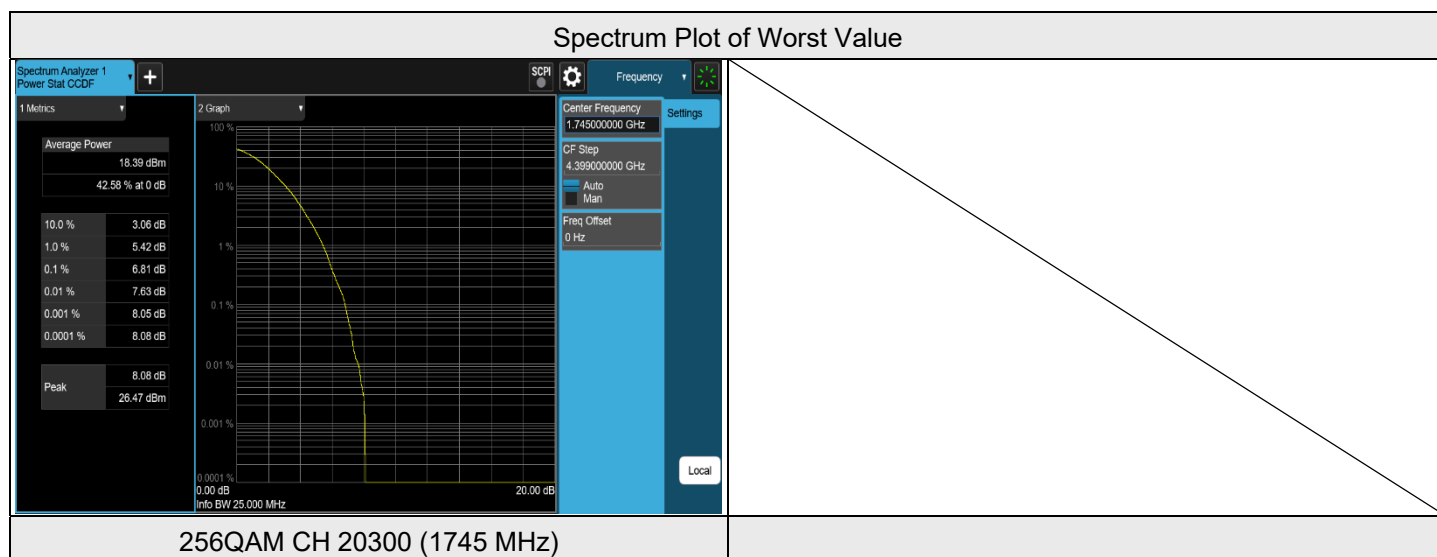
# LTE Band 4, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20025   | 1717.5          | 3.96                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 3.93                  | 13         | PASS   |
| QPSK       | 20325   | 1747.5          | 4.06                  | 13         | PASS   |
| 16QAM      | 20025   | 1717.5          | 4.43                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.36                  | 13         | PASS   |
| 16QAM      | 20325   | 1747.5          | 4.48                  | 13         | PASS   |
| 64QAM      | 20025   | 1717.5          | 5.67                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 5.08                  | 13         | PASS   |
| 64QAM      | 20325   | 1747.5          | 5.76                  | 13         | PASS   |
| 256QAM     | 20025   | 1717.5          | 6.77                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.54                  | 13         | PASS   |
| 256QAM     | 20325   | 1747.5          | 6.80                  | 13         | PASS   |



# LTE Band 4, Channel Bandwidth: 20 MHz

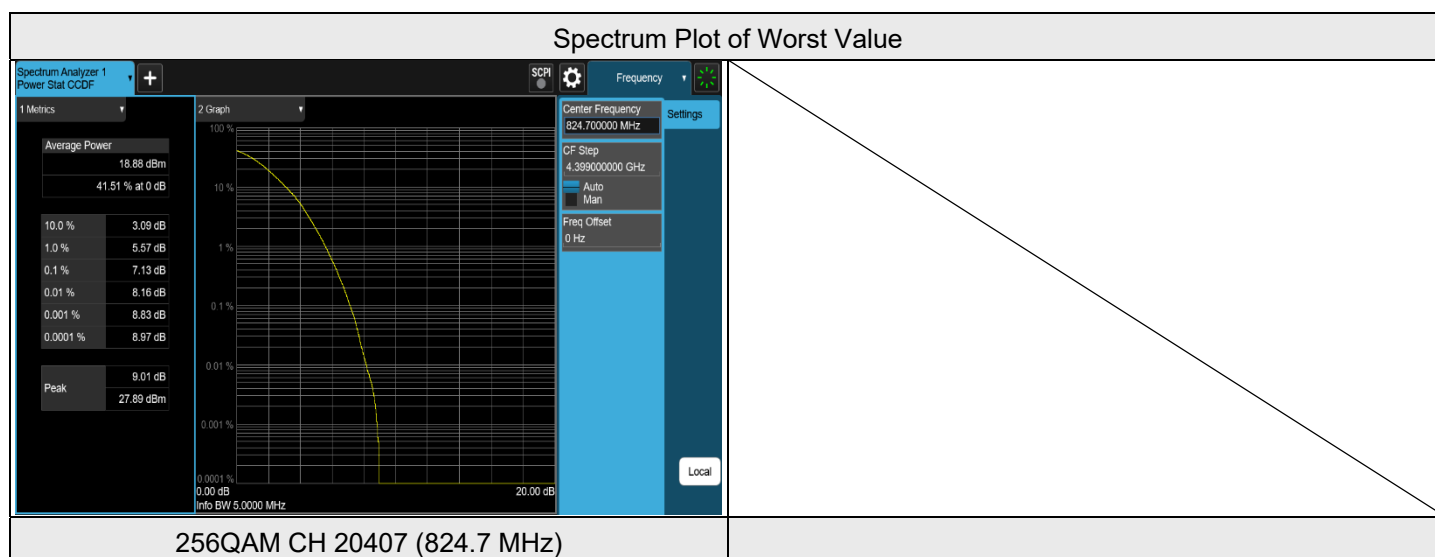
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20050   | 1720            | 4.07                  | 13         | PASS   |
| QPSK       | 20175   | 1732.5          | 4.10                  | 13         | PASS   |
| QPSK       | 20300   | 1745            | 4.18                  | 13         | PASS   |
| 16QAM      | 20050   | 1720            | 4.92                  | 13         | PASS   |
| 16QAM      | 20175   | 1732.5          | 4.16                  | 13         | PASS   |
| 16QAM      | 20300   | 1745            | 4.81                  | 13         | PASS   |
| 64QAM      | 20050   | 1720            | 5.81                  | 13         | PASS   |
| 64QAM      | 20175   | 1732.5          | 5.19                  | 13         | PASS   |
| 64QAM      | 20300   | 1745            | 5.91                  | 13         | PASS   |
| 256QAM     | 20050   | 1720            | 6.76                  | 13         | PASS   |
| 256QAM     | 20175   | 1732.5          | 6.53                  | 13         | PASS   |
| 256QAM     | 20300   | 1745            | 6.81                  | 13         | PASS   |



### 7.3.3 LTE Band 5

#### LTE Band 5, Channel Bandwidth: 1.4 MHz

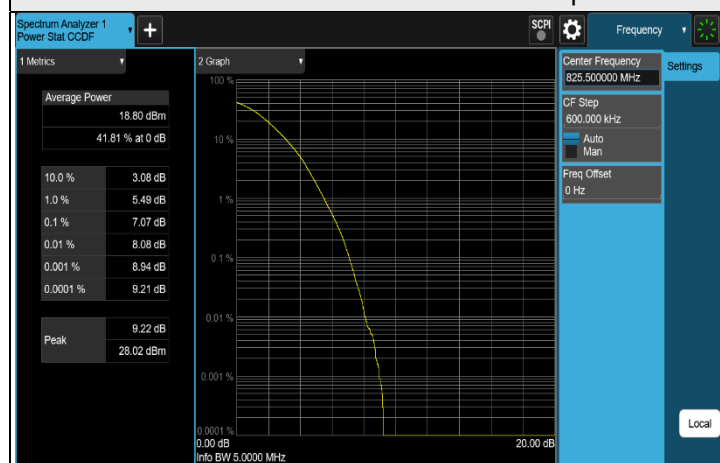
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20407   | 824.7           | 3.96                  | 13         | PASS   |
| QPSK       | 20525   | 836.5           | 4.08                  | 13         | PASS   |
| QPSK       | 20643   | 848.3           | 4.05                  | 13         | PASS   |
| 16QAM      | 20407   | 824.7           | 4.92                  | 13         | PASS   |
| 16QAM      | 20525   | 836.5           | 4.78                  | 13         | PASS   |
| 16QAM      | 20643   | 848.3           | 4.77                  | 13         | PASS   |
| 64QAM      | 20407   | 824.7           | 5.10                  | 13         | PASS   |
| 64QAM      | 20525   | 836.5           | 4.77                  | 13         | PASS   |
| 64QAM      | 20643   | 848.3           | 5.09                  | 13         | PASS   |
| 256QAM     | 20407   | 824.7           | 7.13                  | 13         | PASS   |
| 256QAM     | 20525   | 836.5           | 6.98                  | 13         | PASS   |
| 256QAM     | 20643   | 848.3           | 6.92                  | 13         | PASS   |



### LTE Band 5, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20415   | 825.5           | 4.23                  | 13         | PASS   |
| QPSK       | 20525   | 836.5           | 3.88                  | 13         | PASS   |
| QPSK       | 20635   | 847.5           | 3.71                  | 13         | PASS   |
| 16QAM      | 20415   | 825.5           | 5.13                  | 13         | PASS   |
| 16QAM      | 20525   | 836.5           | 4.88                  | 13         | PASS   |
| 16QAM      | 20635   | 847.5           | 4.65                  | 13         | PASS   |
| 64QAM      | 20415   | 825.5           | 6.00                  | 13         | PASS   |
| 64QAM      | 20525   | 836.5           | 5.90                  | 13         | PASS   |
| 64QAM      | 20635   | 847.5           | 5.65                  | 13         | PASS   |
| 256QAM     | 20415   | 825.5           | 7.07                  | 13         | PASS   |
| 256QAM     | 20525   | 836.5           | 7.01                  | 13         | PASS   |
| 256QAM     | 20635   | 847.5           | 6.91                  | 13         | PASS   |

Spectrum Plot of Worst Value

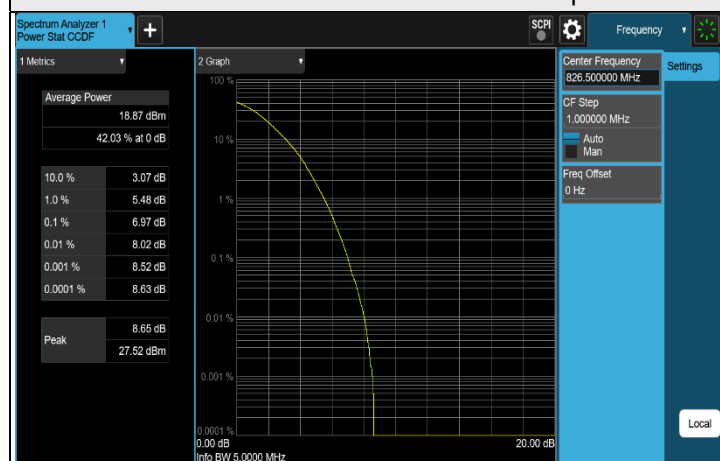


256QAM CH 20415 (825.5 MHz)

### LTE Band 5, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20425   | 826.5           | 4.29                  | 13         | PASS   |
| QPSK       | 20525   | 836.5           | 4.11                  | 13         | PASS   |
| QPSK       | 20625   | 846.5           | 3.97                  | 13         | PASS   |
| 16QAM      | 20425   | 826.5           | 5.07                  | 13         | PASS   |
| 16QAM      | 20525   | 836.5           | 4.88                  | 13         | PASS   |
| 16QAM      | 20625   | 846.5           | 4.68                  | 13         | PASS   |
| 64QAM      | 20425   | 826.5           | 5.97                  | 13         | PASS   |
| 64QAM      | 20525   | 836.5           | 5.73                  | 13         | PASS   |
| 64QAM      | 20625   | 846.5           | 5.65                  | 13         | PASS   |
| 256QAM     | 20425   | 826.5           | 6.97                  | 13         | PASS   |
| 256QAM     | 20525   | 836.5           | 6.86                  | 13         | PASS   |
| 256QAM     | 20625   | 846.5           | 6.86                  | 13         | PASS   |

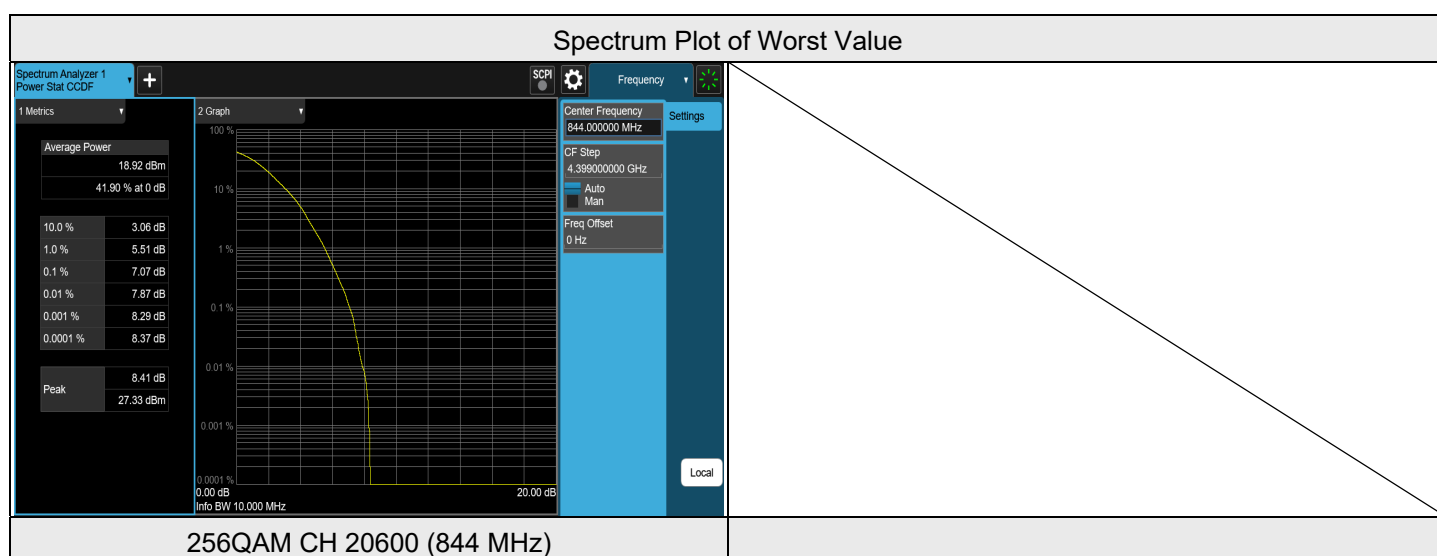
Spectrum Plot of Worst Value



256QAM CH 20425 (826.5 MHz)

# LTE Band 5, Channel Bandwidth: 10 MHz

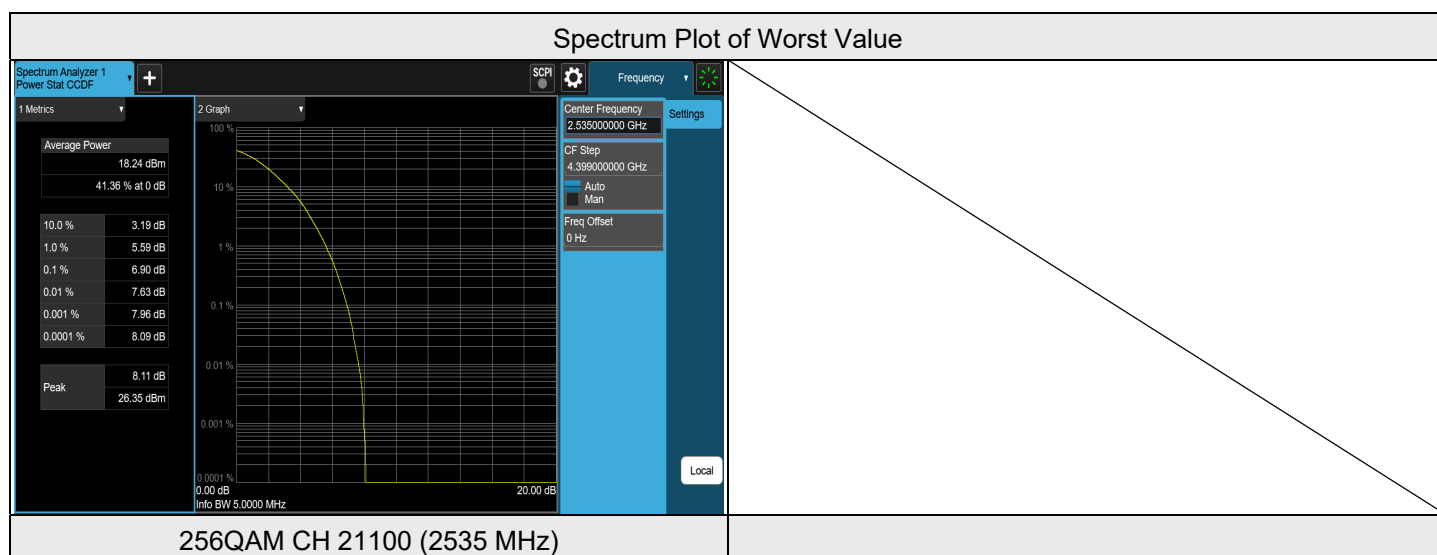
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20450   | 829             | 4.27                  | 13         | PASS   |
| QPSK       | 20525   | 836.5           | 3.99                  | 13         | PASS   |
| QPSK       | 20600   | 844             | 4.33                  | 13         | PASS   |
| 16QAM      | 20450   | 829             | 5.02                  | 13         | PASS   |
| 16QAM      | 20525   | 836.5           | 4.78                  | 13         | PASS   |
| 16QAM      | 20600   | 844             | 5.07                  | 13         | PASS   |
| 64QAM      | 20450   | 829             | 6.09                  | 13         | PASS   |
| 64QAM      | 20525   | 836.5           | 5.76                  | 13         | PASS   |
| 64QAM      | 20600   | 844             | 6.08                  | 13         | PASS   |
| 256QAM     | 20450   | 829             | 6.41                  | 13         | PASS   |
| 256QAM     | 20525   | 836.5           | 6.90                  | 13         | PASS   |
| 256QAM     | 20600   | 844             | 7.07                  | 13         | PASS   |



### 7.3.4 LTE Band 7

#### LTE Band 7, Channel Bandwidth: 5 MHz

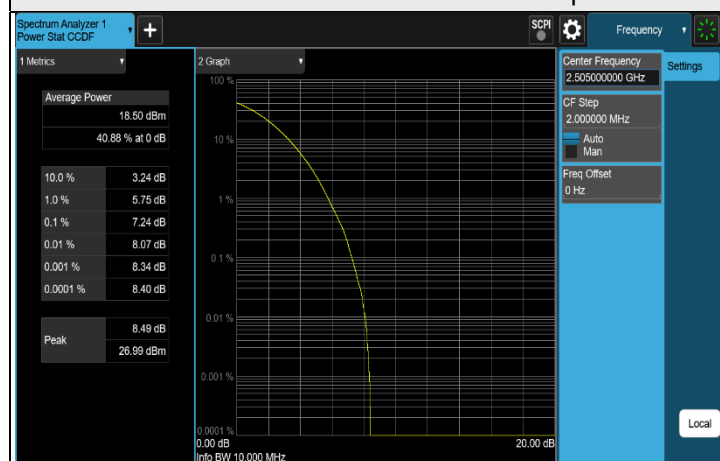
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20775   | 2502.5          | 3.90                  | 13         | PASS   |
| QPSK       | 21100   | 2535            | 3.34                  | 13         | PASS   |
| QPSK       | 21425   | 2567.5          | 3.51                  | 13         | PASS   |
| 16QAM      | 20775   | 2502.5          | 4.45                  | 13         | PASS   |
| 16QAM      | 21100   | 2535            | 3.99                  | 13         | PASS   |
| 16QAM      | 21425   | 2567.5          | 4.22                  | 13         | PASS   |
| 64QAM      | 20775   | 2502.5          | 4.63                  | 13         | PASS   |
| 64QAM      | 21100   | 2535            | 4.41                  | 13         | PASS   |
| 64QAM      | 21425   | 2567.5          | 4.34                  | 13         | PASS   |
| 256QAM     | 20775   | 2502.5          | 6.80                  | 13         | PASS   |
| 256QAM     | 21100   | 2535            | 6.90                  | 13         | PASS   |
| 256QAM     | 21425   | 2567.5          | 6.88                  | 13         | PASS   |



# LTE Band 7, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20800   | 2505            | 3.78                  | 13         | PASS   |
| QPSK       | 21100   | 2535            | 3.24                  | 13         | PASS   |
| QPSK       | 21400   | 2565            | 3.92                  | 13         | PASS   |
| 16QAM      | 20800   | 2505            | 4.58                  | 13         | PASS   |
| 16QAM      | 21100   | 2535            | 4.03                  | 13         | PASS   |
| 16QAM      | 21400   | 2565            | 4.78                  | 13         | PASS   |
| 64QAM      | 20800   | 2505            | 5.55                  | 13         | PASS   |
| 64QAM      | 21100   | 2535            | 5.02                  | 13         | PASS   |
| 64QAM      | 21400   | 2565            | 5.63                  | 13         | PASS   |
| 256QAM     | 20800   | 2505            | 7.24                  | 13         | PASS   |
| 256QAM     | 21100   | 2535            | 6.97                  | 13         | PASS   |
| 256QAM     | 21400   | 2565            | 7.02                  | 13         | PASS   |

Spectrum Plot of Worst Value



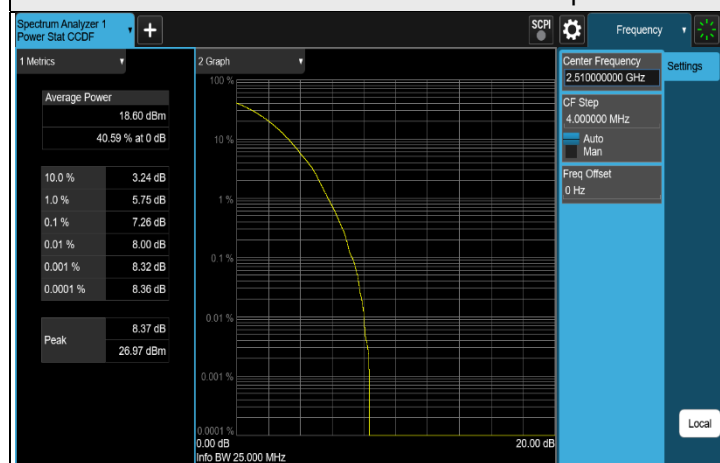
256QAM CH 20800 (2505 MHz)



### LTE Band 7, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 20850   | 2510            | 3.81                  | 13         | PASS   |
| QPSK       | 21100   | 2535            | 3.20                  | 13         | PASS   |
| QPSK       | 21350   | 2560            | 4.27                  | 13         | PASS   |
| 16QAM      | 20850   | 2510            | 4.57                  | 13         | PASS   |
| 16QAM      | 21100   | 2535            | 3.99                  | 13         | PASS   |
| 16QAM      | 21350   | 2560            | 5.02                  | 13         | PASS   |
| 64QAM      | 20850   | 2510            | 5.60                  | 13         | PASS   |
| 64QAM      | 21100   | 2535            | 4.93                  | 13         | PASS   |
| 64QAM      | 21350   | 2560            | 6.22                  | 13         | PASS   |
| 256QAM     | 20850   | 2510            | 7.26                  | 13         | PASS   |
| 256QAM     | 21100   | 2535            | 7.11                  | 13         | PASS   |
| 256QAM     | 21350   | 2560            | 6.95                  | 13         | PASS   |

Spectrum Plot of Worst Value

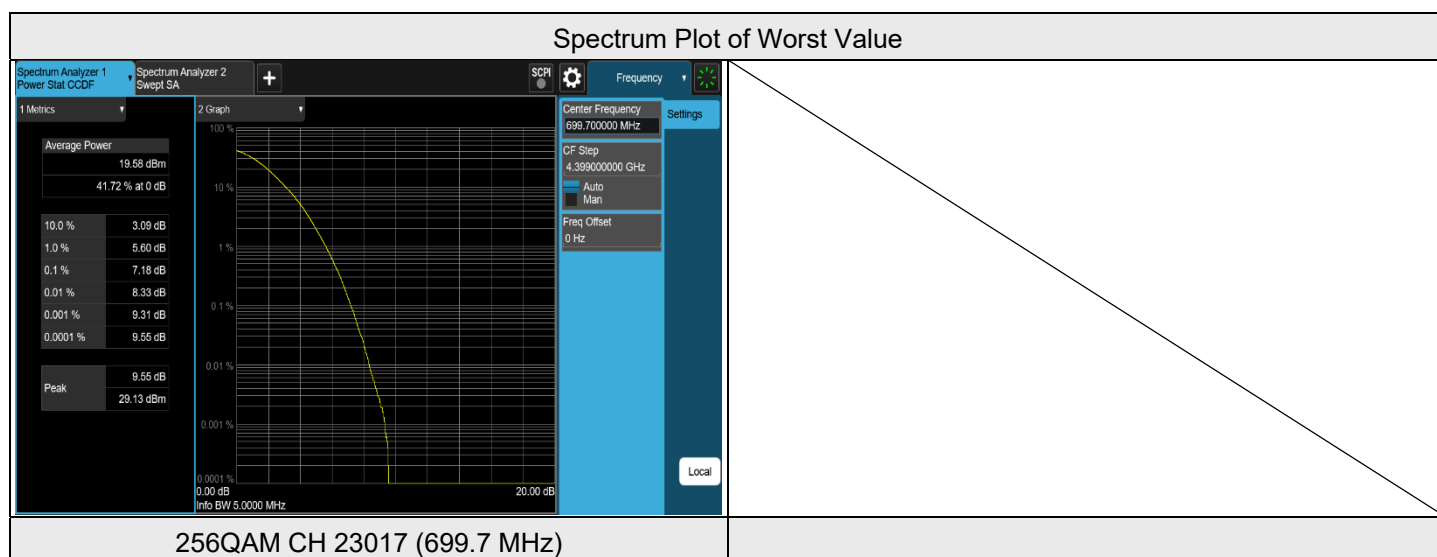


256QAM CH 20850 (2510 MHz)

### 7.3.5 LTE Band 12

#### LTE Band 12, Channel Bandwidth: 1.4 MHz

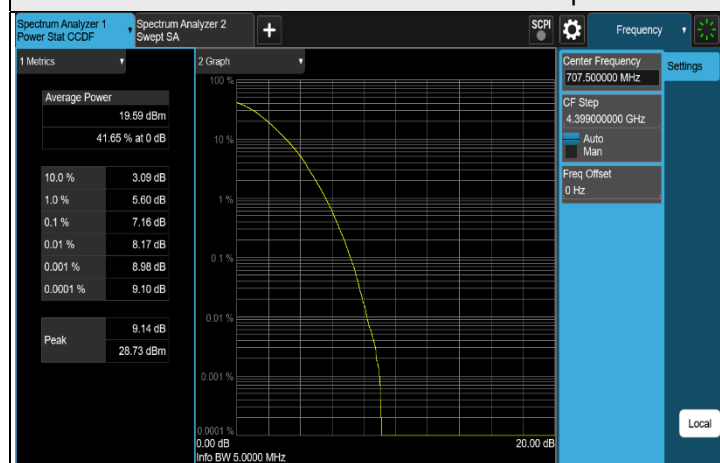
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23017   | 699.7           | 4.49                  | 13         | PASS   |
| QPSK       | 23095   | 707.5           | 4.02                  | 13         | PASS   |
| QPSK       | 23173   | 715.3           | 3.67                  | 13         | PASS   |
| 16QAM      | 23017   | 699.7           | 4.98                  | 13         | PASS   |
| 16QAM      | 23095   | 707.5           | 4.90                  | 13         | PASS   |
| 16QAM      | 23173   | 715.3           | 4.38                  | 13         | PASS   |
| 64QAM      | 23017   | 699.7           | 5.10                  | 13         | PASS   |
| 64QAM      | 23095   | 707.5           | 4.91                  | 13         | PASS   |
| 64QAM      | 23173   | 715.3           | 4.55                  | 13         | PASS   |
| 256QAM     | 23017   | 699.7           | 7.18                  | 13         | PASS   |
| 256QAM     | 23095   | 707.5           | 7.05                  | 13         | PASS   |
| 256QAM     | 23173   | 715.3           | 6.95                  | 13         | PASS   |



### LTE Band 12, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23025   | 700.5           | 4.16                  | 13         | PASS   |
| QPSK       | 23095   | 707.5           | 3.96                  | 13         | PASS   |
| QPSK       | 23165   | 714.5           | 3.83                  | 13         | PASS   |
| 16QAM      | 23025   | 700.5           | 5.26                  | 13         | PASS   |
| 16QAM      | 23095   | 707.5           | 4.99                  | 13         | PASS   |
| 16QAM      | 23165   | 714.5           | 4.88                  | 13         | PASS   |
| 64QAM      | 23025   | 700.5           | 6.26                  | 13         | PASS   |
| 64QAM      | 23095   | 707.5           | 5.95                  | 13         | PASS   |
| 64QAM      | 23165   | 714.5           | 5.92                  | 13         | PASS   |
| 256QAM     | 23025   | 700.5           | 7.09                  | 13         | PASS   |
| 256QAM     | 23095   | 707.5           | 7.16                  | 13         | PASS   |
| 256QAM     | 23165   | 714.5           | 7.10                  | 13         | PASS   |

Spectrum Plot of Worst Value

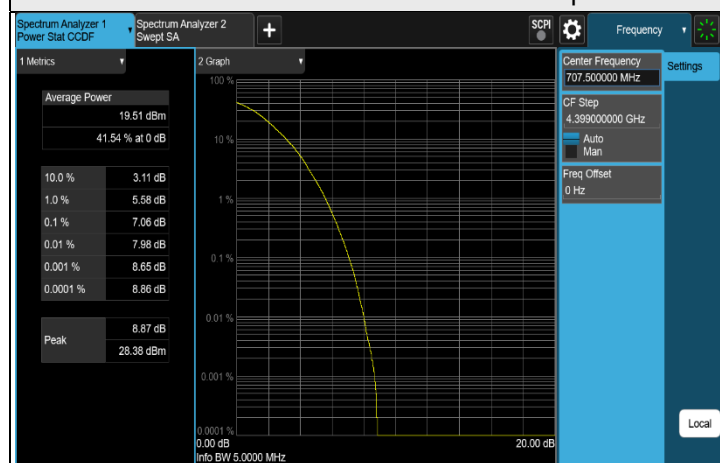


256QAM CH 23095 (707.5 MHz)

### LTE Band 12, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23035   | 701.5           | 4.57                  | 13         | PASS   |
| QPSK       | 23095   | 707.5           | 4.22                  | 13         | PASS   |
| QPSK       | 23155   | 713.5           | 4.53                  | 13         | PASS   |
| 16QAM      | 23035   | 701.5           | 5.38                  | 13         | PASS   |
| 16QAM      | 23095   | 707.5           | 4.94                  | 13         | PASS   |
| 16QAM      | 23155   | 713.5           | 5.43                  | 13         | PASS   |
| 64QAM      | 23035   | 701.5           | 6.24                  | 13         | PASS   |
| 64QAM      | 23095   | 707.5           | 5.87                  | 13         | PASS   |
| 64QAM      | 23155   | 713.5           | 6.20                  | 13         | PASS   |
| 256QAM     | 23035   | 701.5           | 7.00                  | 13         | PASS   |
| 256QAM     | 23095   | 707.5           | 7.06                  | 13         | PASS   |
| 256QAM     | 23155   | 713.5           | 6.98                  | 13         | PASS   |

Spectrum Plot of Worst Value

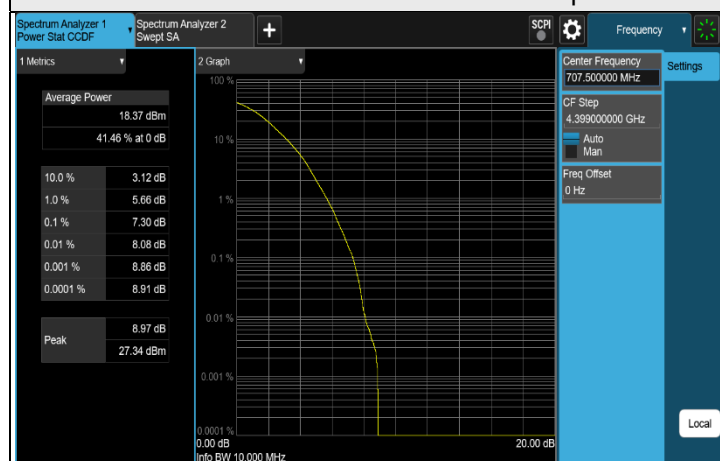


256QAM CH 23095 (707.5 MHz)

### LTE Band 12, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23060   | 704             | 4.58                  | 13         | PASS   |
| QPSK       | 23095   | 707.5           | 4.24                  | 13         | PASS   |
| QPSK       | 23130   | 711             | 4.31                  | 13         | PASS   |
| 16QAM      | 23060   | 704             | 5.32                  | 13         | PASS   |
| 16QAM      | 23095   | 707.5           | 4.96                  | 13         | PASS   |
| 16QAM      | 23130   | 711             | 5.01                  | 13         | PASS   |
| 64QAM      | 23060   | 704             | 6.40                  | 13         | PASS   |
| 64QAM      | 23095   | 707.5           | 6.08                  | 13         | PASS   |
| 64QAM      | 23130   | 711             | 6.09                  | 13         | PASS   |
| 256QAM     | 23060   | 704             | 7.07                  | 13         | PASS   |
| 256QAM     | 23095   | 707.5           | 7.30                  | 13         | PASS   |
| 256QAM     | 23130   | 711             | 7.29                  | 13         | PASS   |

Spectrum Plot of Worst Value

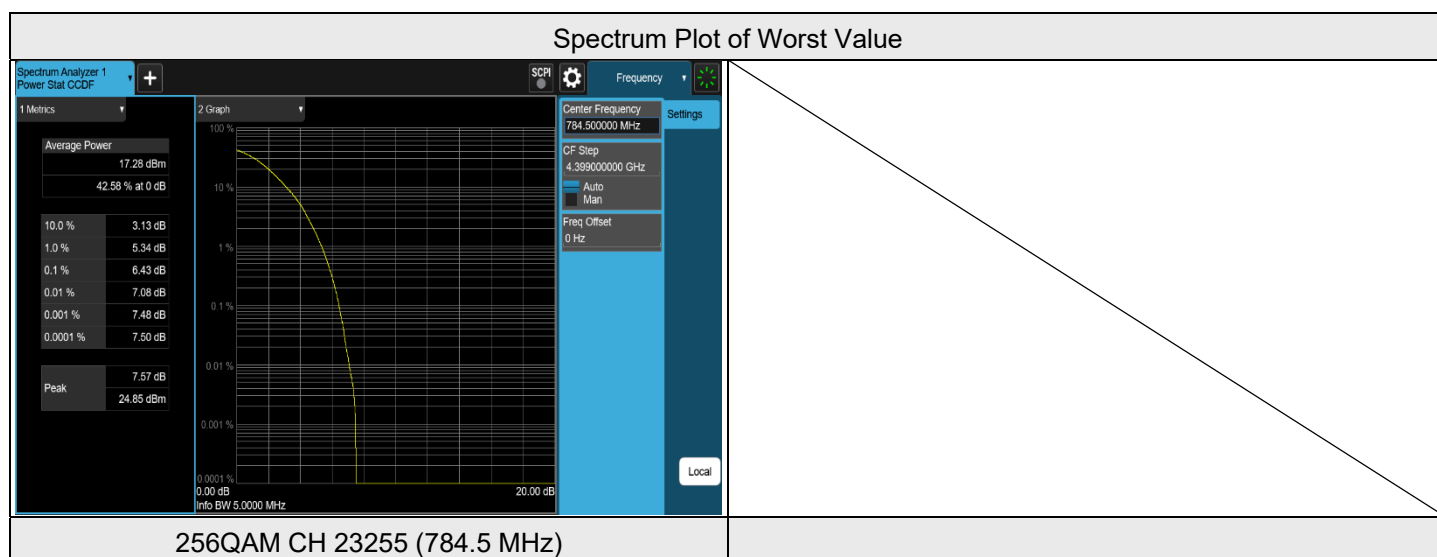


256QAM CH 23095 (707.5 MHz)

### 7.3.6 LTE Band 13

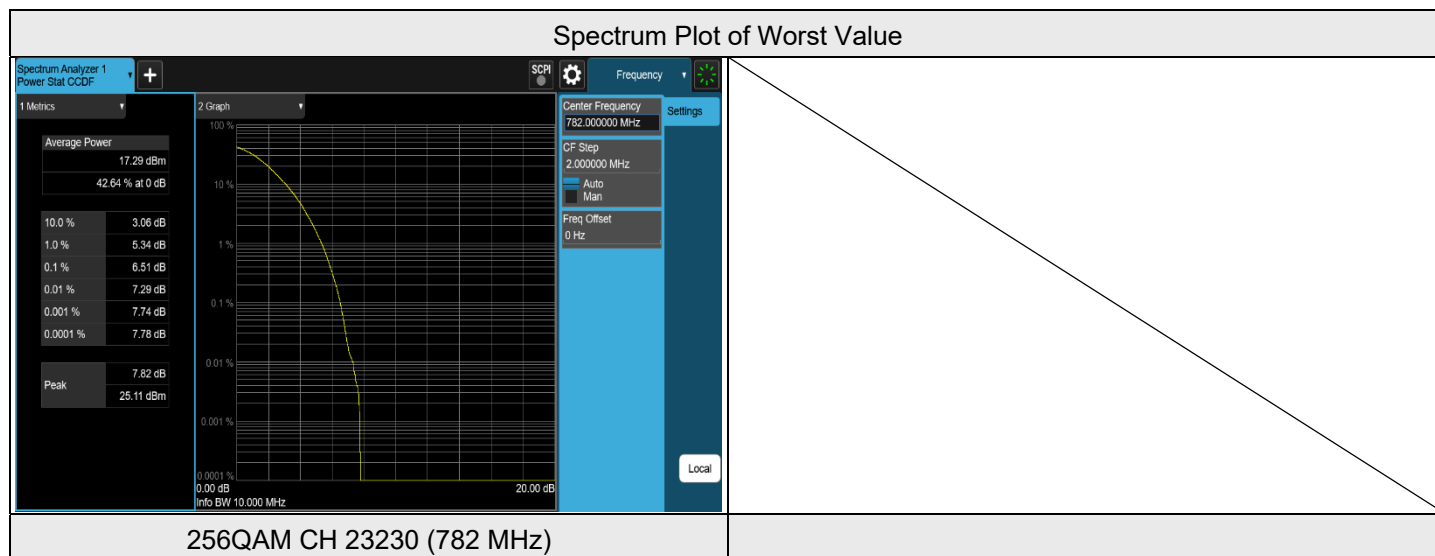
#### LTE Band 13, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23205   | 779.5           | 2.99                  | 13         | PASS   |
| QPSK       | 23230   | 782             | 3.31                  | 13         | PASS   |
| QPSK       | 23255   | 784.5           | 2.32                  | 13         | PASS   |
| 16QAM      | 23205   | 779.5           | 3.61                  | 13         | PASS   |
| 16QAM      | 23230   | 782             | 4.07                  | 13         | PASS   |
| 16QAM      | 23255   | 784.5           | 3.64                  | 13         | PASS   |
| 64QAM      | 23205   | 779.5           | 3.81                  | 13         | PASS   |
| 64QAM      | 23230   | 782             | 4.21                  | 13         | PASS   |
| 64QAM      | 23255   | 784.5           | 3.09                  | 13         | PASS   |
| 256QAM     | 23205   | 779.5           | 6.37                  | 13         | PASS   |
| 256QAM     | 23230   | 782             | 6.35                  | 13         | PASS   |
| 256QAM     | 23255   | 784.5           | 6.43                  | 13         | PASS   |



### LTE Band 13, Channel Bandwidth: 10 MHz

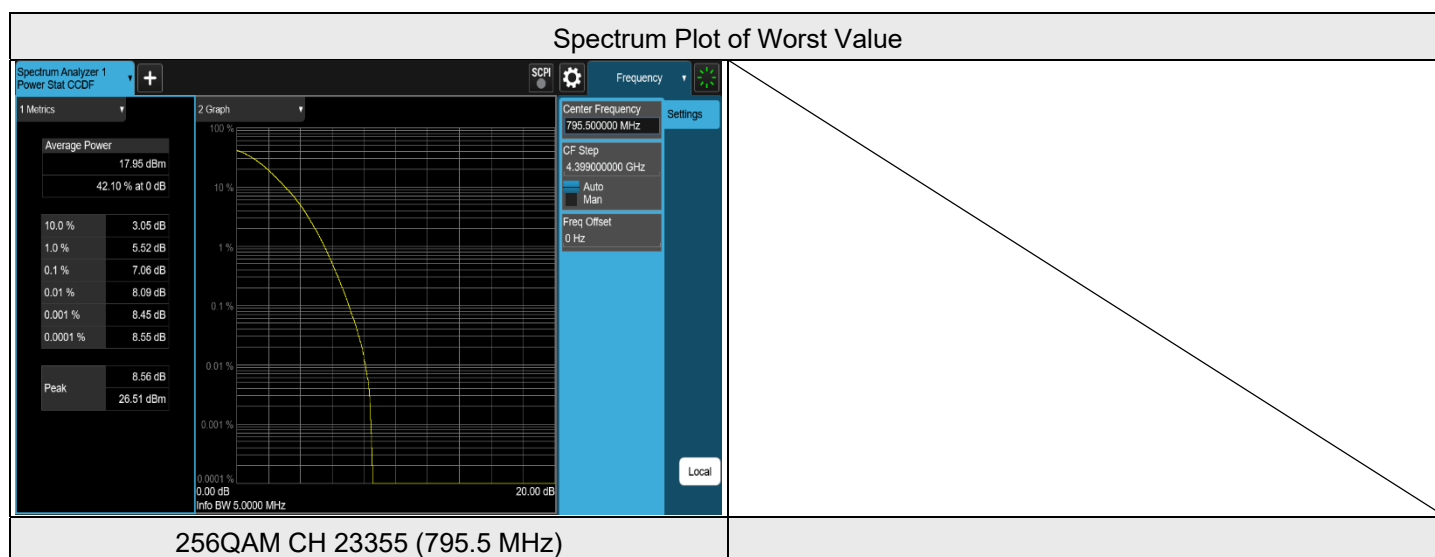
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23230   | 782             | 2.76                  | 13         | PASS   |
| 16QAM      | 23230   | 782             | 4.22                  | 13         | PASS   |
| 64QAM      | 23230   | 782             | 4.50                  | 13         | PASS   |
| 256QAM     | 23230   | 782             | 6.51                  | 13         | PASS   |



### 7.3.7 LTE Band 14

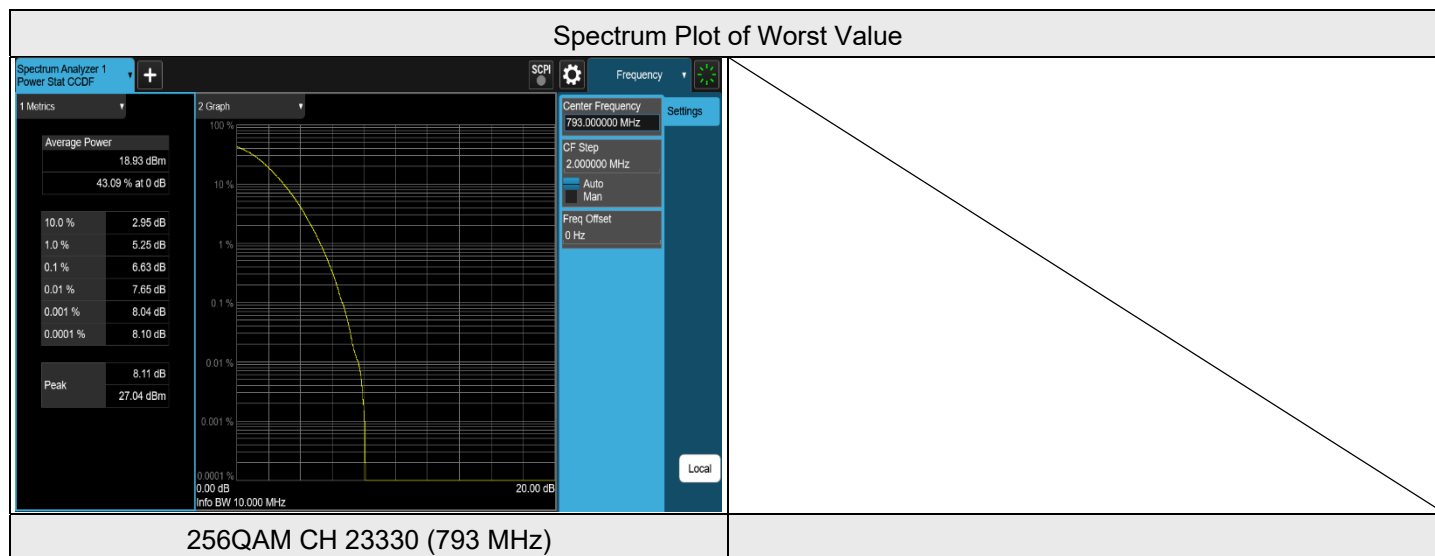
#### LTE Band 14, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23305   | 790.5           | 4.45                  | 13         | PASS   |
| QPSK       | 23330   | 793             | 4.34                  | 13         | PASS   |
| QPSK       | 23355   | 795.5           | 4.31                  | 13         | PASS   |
| 16QAM      | 23305   | 790.5           | 5.57                  | 13         | PASS   |
| 16QAM      | 23330   | 793             | 5.13                  | 13         | PASS   |
| 16QAM      | 23355   | 795.5           | 4.99                  | 13         | PASS   |
| 64QAM      | 23305   | 790.5           | 6.48                  | 13         | PASS   |
| 64QAM      | 23330   | 793             | 6.01                  | 13         | PASS   |
| 64QAM      | 23355   | 795.5           | 5.95                  | 13         | PASS   |
| 256QAM     | 23305   | 790.5           | 6.90                  | 13         | PASS   |
| 256QAM     | 23330   | 793             | 6.95                  | 13         | PASS   |
| 256QAM     | 23355   | 795.5           | 7.06                  | 13         | PASS   |



### LTE Band 14, Channel Bandwidth: 10 MHz

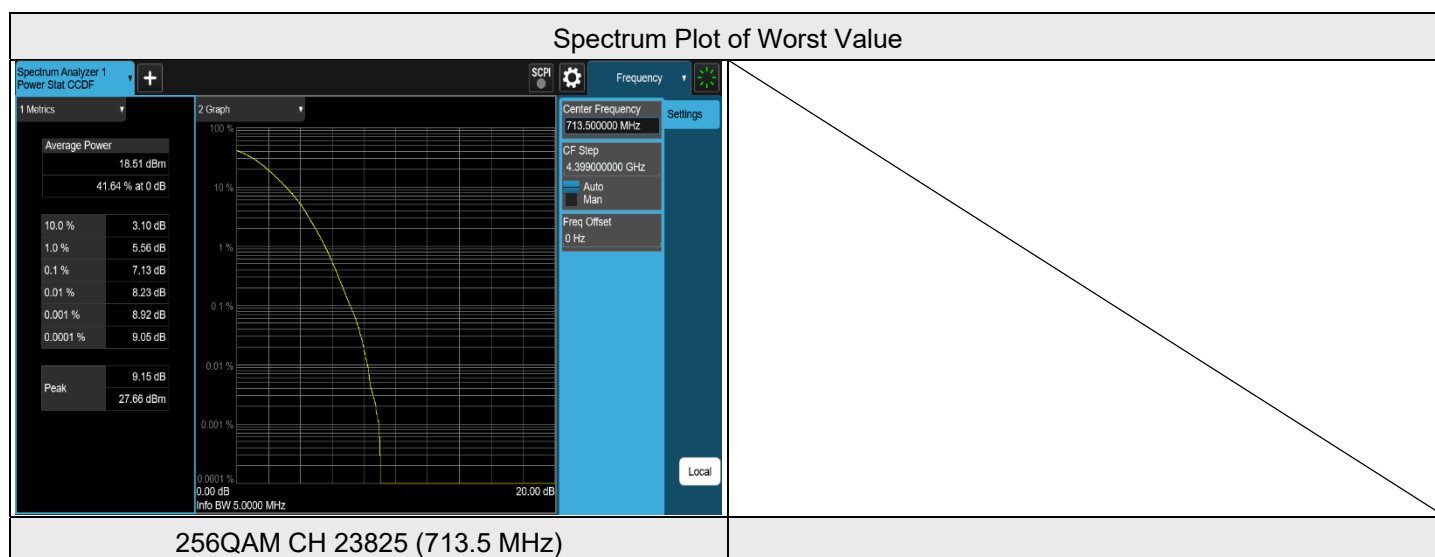
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23330   | 793             | 4.56                  | 13         | PASS   |
| 16QAM      | 23330   | 793             | 5.27                  | 13         | PASS   |
| 64QAM      | 23330   | 793             | 6.36                  | 13         | PASS   |
| 256QAM     | 23330   | 793             | 6.63                  | 13         | PASS   |



### 7.3.8 LTE Band 17

#### LTE Band 17, Channel Bandwidth: 5 MHz

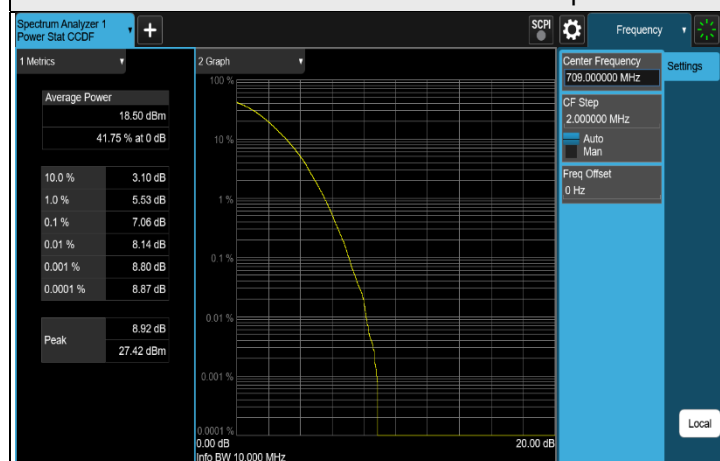
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23755   | 706.5           | 4.27                  | 13         | PASS   |
| QPSK       | 23790   | 710             | 4.71                  | 13         | PASS   |
| QPSK       | 23825   | 713.5           | 4.59                  | 13         | PASS   |
| 16QAM      | 23755   | 706.5           | 5.05                  | 13         | PASS   |
| 16QAM      | 23790   | 710             | 5.49                  | 13         | PASS   |
| 16QAM      | 23825   | 713.5           | 5.44                  | 13         | PASS   |
| 64QAM      | 23755   | 706.5           | 6.02                  | 13         | PASS   |
| 64QAM      | 23790   | 710             | 6.46                  | 13         | PASS   |
| 64QAM      | 23825   | 713.5           | 6.36                  | 13         | PASS   |
| 256QAM     | 23755   | 706.5           | 7.07                  | 13         | PASS   |
| 256QAM     | 23790   | 710             | 7.02                  | 13         | PASS   |
| 256QAM     | 23825   | 713.5           | 7.13                  | 13         | PASS   |



### LTE Band 17, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 23780   | 709             | 4.28                  | 13         | PASS   |
| QPSK       | 23790   | 710             | 4.45                  | 13         | PASS   |
| QPSK       | 23800   | 711             | 4.53                  | 13         | PASS   |
| 16QAM      | 23780   | 709             | 5.11                  | 13         | PASS   |
| 16QAM      | 23790   | 710             | 5.19                  | 13         | PASS   |
| 16QAM      | 23800   | 711             | 5.27                  | 13         | PASS   |
| 64QAM      | 23780   | 709             | 6.20                  | 13         | PASS   |
| 64QAM      | 23790   | 710             | 6.29                  | 13         | PASS   |
| 64QAM      | 23800   | 711             | 6.33                  | 13         | PASS   |
| 256QAM     | 23780   | 709             | 7.06                  | 13         | PASS   |
| 256QAM     | 23790   | 710             | 6.99                  | 13         | PASS   |
| 256QAM     | 23800   | 711             | 6.89                  | 13         | PASS   |

Spectrum Plot of Worst Value

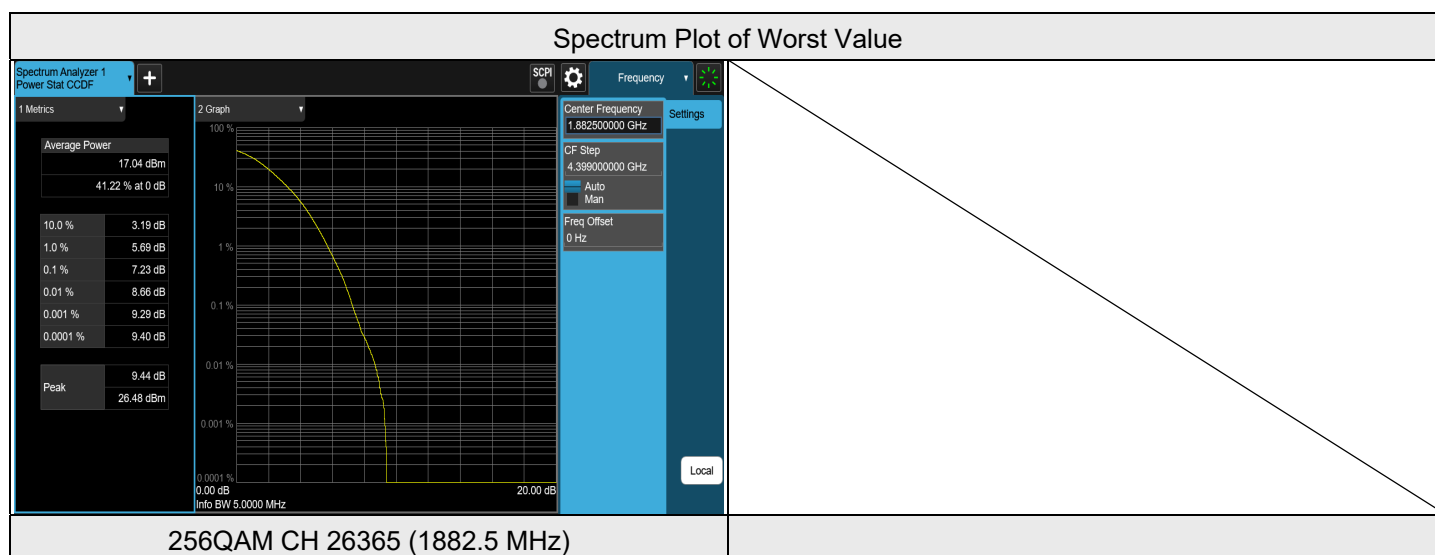


256QAM CH 23780 (709 MHz)

### 7.3.9 LTE Band 25

#### LTE Band 25, Channel Bandwidth: 1.4 MHz

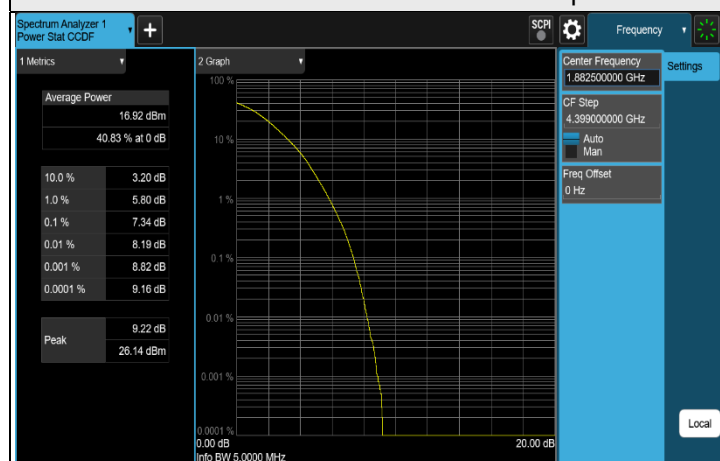
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26047   | 1850.7          | 4.36                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.00                  | 13         | PASS   |
| QPSK       | 26683   | 1914.3          | 2.99                  | 13         | PASS   |
| 16QAM      | 26047   | 1850.7          | 4.83                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 4.80                  | 13         | PASS   |
| 16QAM      | 26683   | 1914.3          | 3.64                  | 13         | PASS   |
| 64QAM      | 26047   | 1850.7          | 4.88                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 4.81                  | 13         | PASS   |
| 64QAM      | 26683   | 1914.3          | 3.87                  | 13         | PASS   |
| 256QAM     | 26047   | 1850.7          | 6.37                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 7.23                  | 13         | PASS   |
| 256QAM     | 26683   | 1914.3          | 6.83                  | 13         | PASS   |



# LTE Band 25, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26055   | 1851.5          | 3.99                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.01                  | 13         | PASS   |
| QPSK       | 26675   | 1913.5          | 3.29                  | 13         | PASS   |
| 16QAM      | 26055   | 1851.5          | 4.95                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 5.03                  | 13         | PASS   |
| 16QAM      | 26675   | 1913.5          | 4.07                  | 13         | PASS   |
| 64QAM      | 26055   | 1851.5          | 5.99                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 6.04                  | 13         | PASS   |
| 64QAM      | 26675   | 1913.5          | 5.18                  | 13         | PASS   |
| 256QAM     | 26055   | 1851.5          | 7.19                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 7.34                  | 13         | PASS   |
| 256QAM     | 26675   | 1913.5          | 6.96                  | 13         | PASS   |

Spectrum Plot of Worst Value

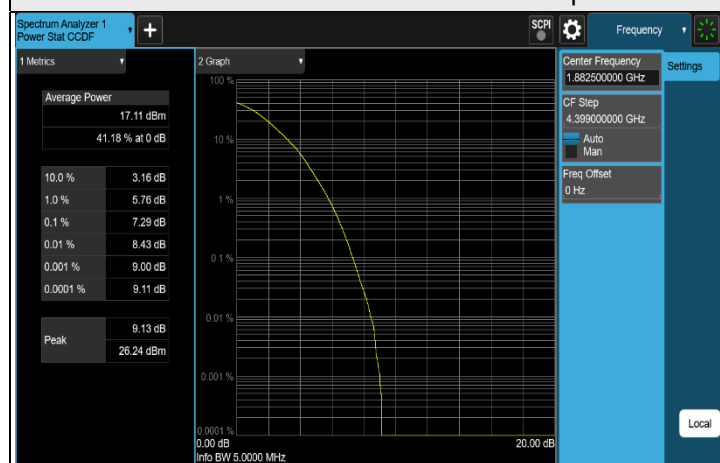


256QAM CH 26365 (1882.5 MHz)

### LTE Band 25, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26065   | 1852.5          | 4.21                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.23                  | 13         | PASS   |
| QPSK       | 26665   | 1912.5          | 3.73                  | 13         | PASS   |
| 16QAM      | 26065   | 1852.5          | 4.96                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 5.03                  | 13         | PASS   |
| 16QAM      | 26665   | 1912.5          | 4.42                  | 13         | PASS   |
| 64QAM      | 26065   | 1852.5          | 5.94                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 5.98                  | 13         | PASS   |
| 64QAM      | 26665   | 1912.5          | 5.35                  | 13         | PASS   |
| 256QAM     | 26065   | 1852.5          | 7.20                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 7.29                  | 13         | PASS   |
| 256QAM     | 26665   | 1912.5          | 7.12                  | 13         | PASS   |

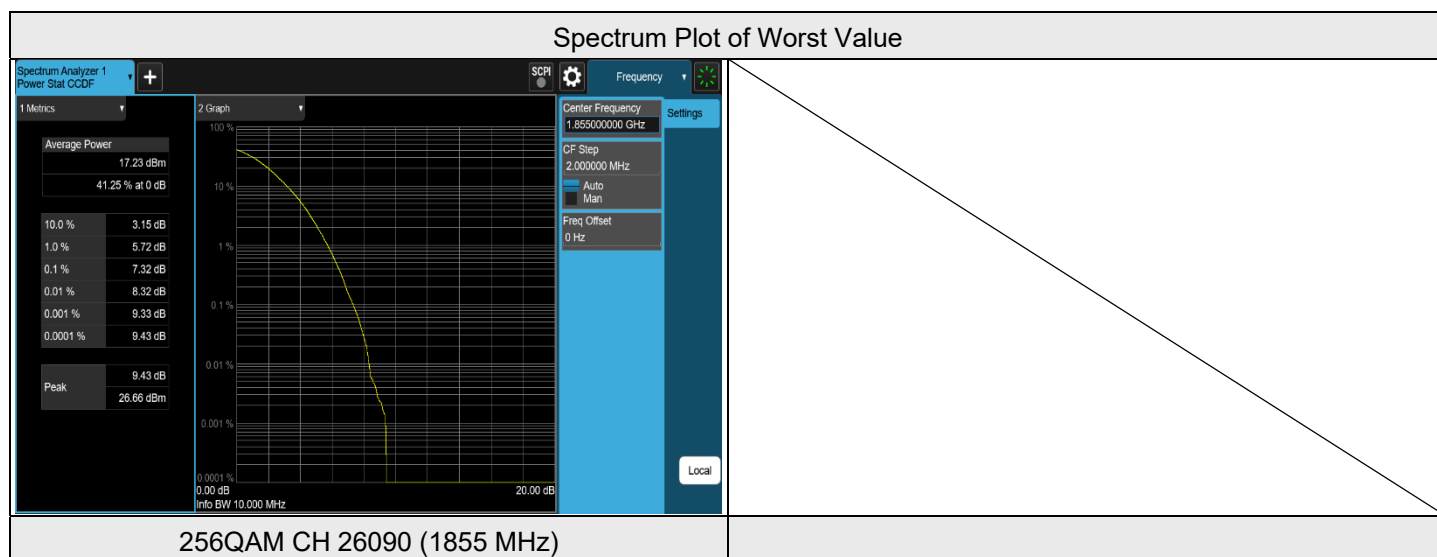
Spectrum Plot of Worst Value



256QAM CH 26365 (1882.5 MHz)

# LTE Band 25, Channel Bandwidth: 10 MHz

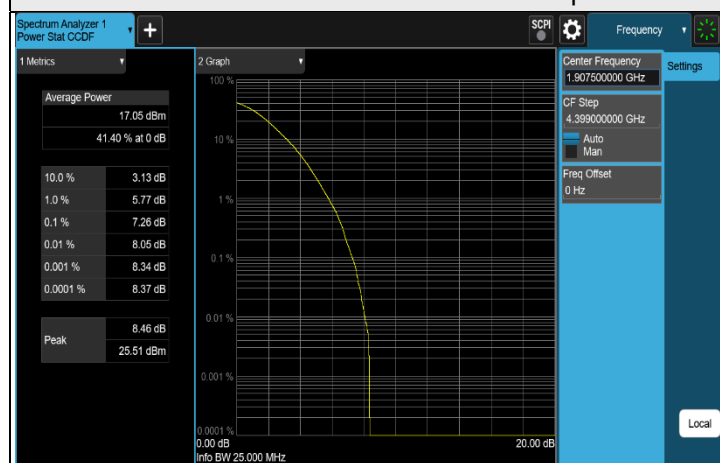
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26090   | 1855            | 4.23                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.29                  | 13         | PASS   |
| QPSK       | 26640   | 1910            | 4.03                  | 13         | PASS   |
| 16QAM      | 26090   | 1855            | 5.10                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 5.09                  | 13         | PASS   |
| 16QAM      | 26640   | 1910            | 4.75                  | 13         | PASS   |
| 64QAM      | 26090   | 1855            | 6.09                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 6.17                  | 13         | PASS   |
| 64QAM      | 26640   | 1910            | 5.81                  | 13         | PASS   |
| 256QAM     | 26090   | 1855            | 7.32                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 7.20                  | 13         | PASS   |
| 256QAM     | 26640   | 1910            | 7.15                  | 13         | PASS   |



### LTE Band 25, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26115   | 1857.5          | 4.21                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.32                  | 13         | PASS   |
| QPSK       | 26615   | 1907.5          | 3.95                  | 13         | PASS   |
| 16QAM      | 26115   | 1857.5          | 4.65                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 4.74                  | 13         | PASS   |
| 16QAM      | 26615   | 1907.5          | 4.56                  | 13         | PASS   |
| 64QAM      | 26115   | 1857.5          | 6.07                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 6.10                  | 13         | PASS   |
| 64QAM      | 26615   | 1907.5          | 5.82                  | 13         | PASS   |
| 256QAM     | 26115   | 1857.5          | 6.96                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 6.91                  | 13         | PASS   |
| 256QAM     | 26615   | 1907.5          | 7.26                  | 13         | PASS   |

Spectrum Plot of Worst Value

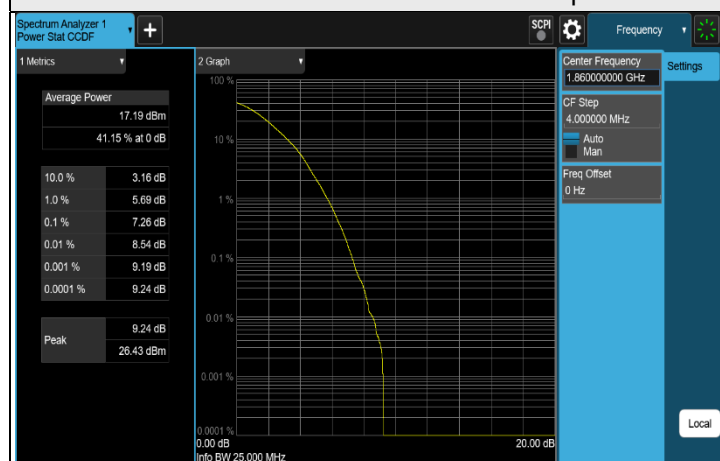


256QAM CH 26615 (1907.5 MHz)

# LTE Band 25, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26140   | 1860            | 4.29                  | 13         | PASS   |
| QPSK       | 26365   | 1882.5          | 4.27                  | 13         | PASS   |
| QPSK       | 26590   | 1905            | 4.07                  | 13         | PASS   |
| 16QAM      | 26140   | 1860            | 4.99                  | 13         | PASS   |
| 16QAM      | 26365   | 1882.5          | 5.17                  | 13         | PASS   |
| 16QAM      | 26590   | 1905            | 4.90                  | 13         | PASS   |
| 64QAM      | 26140   | 1860            | 6.05                  | 13         | PASS   |
| 64QAM      | 26365   | 1882.5          | 6.13                  | 13         | PASS   |
| 64QAM      | 26590   | 1905            | 5.86                  | 13         | PASS   |
| 256QAM     | 26140   | 1860            | 7.26                  | 13         | PASS   |
| 256QAM     | 26365   | 1882.5          | 7.07                  | 13         | PASS   |
| 256QAM     | 26590   | 1905            | 7.19                  | 13         | PASS   |

Spectrum Plot of Worst Value

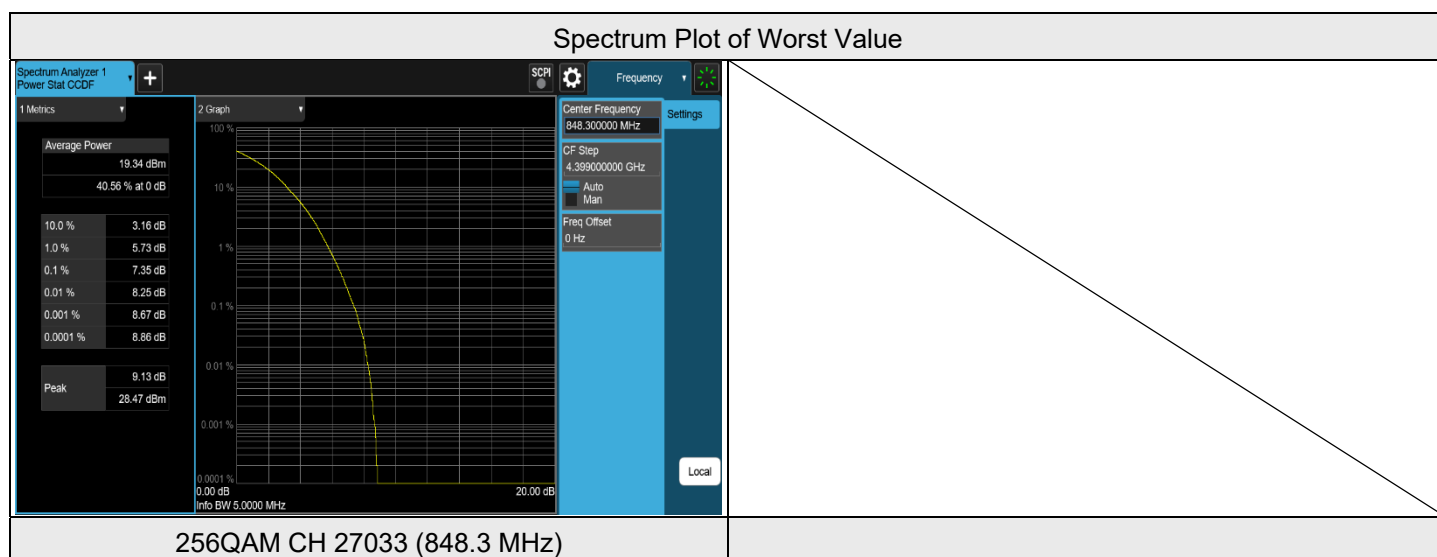


256QAM CH 26140 (1860 MHz)

### 7.3.10 LTE Band 26 (824 MHz ~ 849 MHz)

#### LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 1.4 MHz

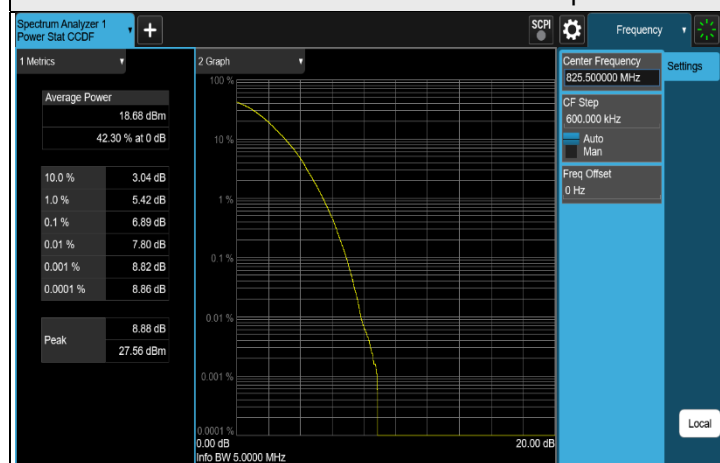
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26797   | 824.7           | 4.47                  | 13         | PASS   |
| QPSK       | 26915   | 836.5           | 4.39                  | 13         | PASS   |
| QPSK       | 27033   | 848.3           | 4.61                  | 13         | PASS   |
| 16QAM      | 26797   | 824.7           | 5.22                  | 13         | PASS   |
| 16QAM      | 26915   | 836.5           | 5.07                  | 13         | PASS   |
| 16QAM      | 27033   | 848.3           | 5.25                  | 13         | PASS   |
| 64QAM      | 26797   | 824.7           | 5.32                  | 13         | PASS   |
| 64QAM      | 26915   | 836.5           | 5.22                  | 13         | PASS   |
| 64QAM      | 27033   | 848.3           | 5.40                  | 13         | PASS   |
| 256QAM     | 26797   | 824.7           | 6.97                  | 13         | PASS   |
| 256QAM     | 26915   | 836.5           | 6.84                  | 13         | PASS   |
| 256QAM     | 27033   | 848.3           | 7.35                  | 13         | PASS   |



### LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26805   | 825.5           | 3.85                  | 13         | PASS   |
| QPSK       | 26915   | 836.5           | 3.73                  | 13         | PASS   |
| QPSK       | 27025   | 847.5           | 3.70                  | 13         | PASS   |
| 16QAM      | 26805   | 825.5           | 4.84                  | 13         | PASS   |
| 16QAM      | 26915   | 836.5           | 4.70                  | 13         | PASS   |
| 16QAM      | 27025   | 847.5           | 4.59                  | 13         | PASS   |
| 64QAM      | 26805   | 825.5           | 5.89                  | 13         | PASS   |
| 64QAM      | 26915   | 836.5           | 5.71                  | 13         | PASS   |
| 64QAM      | 27025   | 847.5           | 5.51                  | 13         | PASS   |
| 256QAM     | 26805   | 825.5           | 6.89                  | 13         | PASS   |
| 256QAM     | 26915   | 836.5           | 6.88                  | 13         | PASS   |
| 256QAM     | 27025   | 847.5           | 6.74                  | 13         | PASS   |

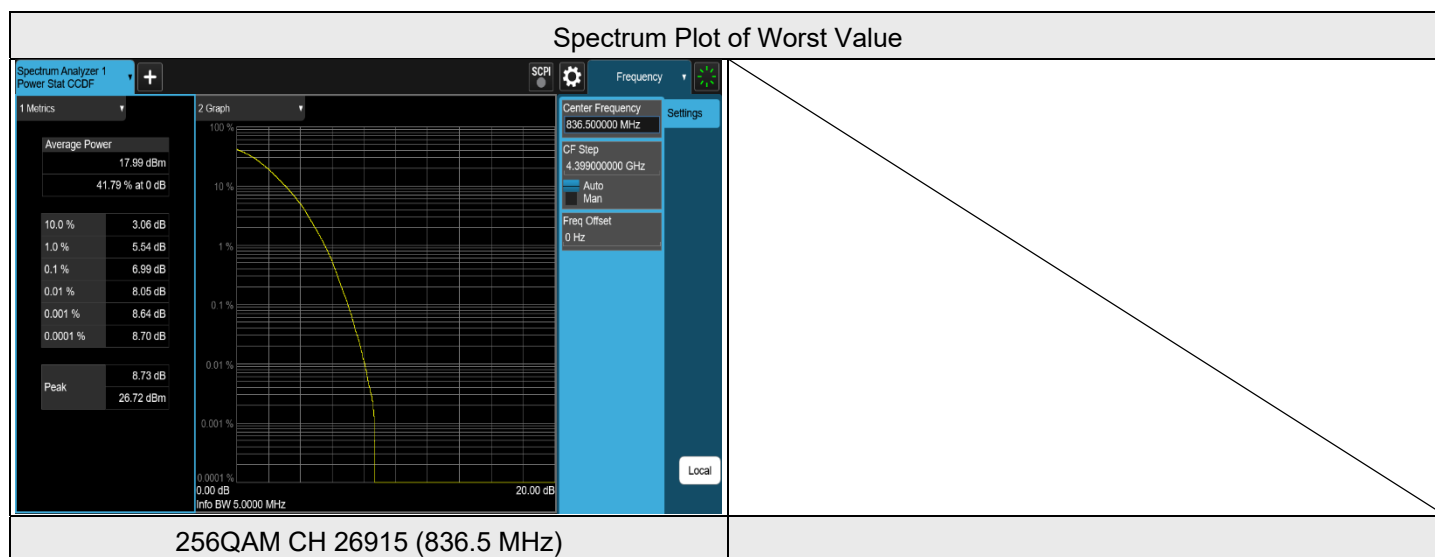
Spectrum Plot of Worst Value



256QAM CH 26805 (825.5 MHz)

# LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 5 MHz

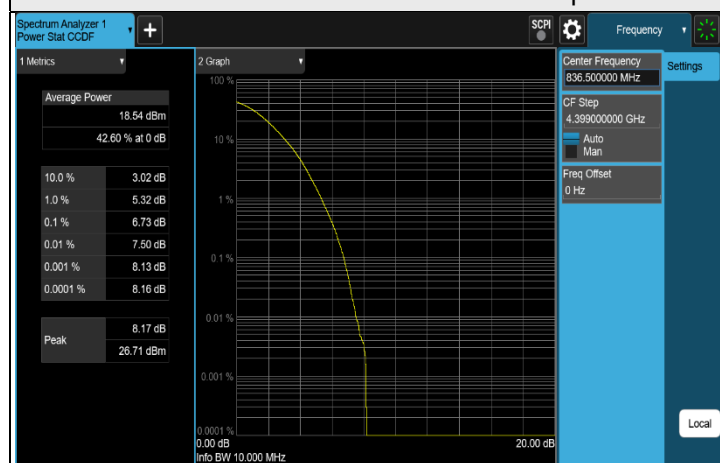
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26815   | 826.5           | 4.39                  | 13         | PASS   |
| QPSK       | 26915   | 836.5           | 3.98                  | 13         | PASS   |
| QPSK       | 27015   | 846.5           | 3.84                  | 13         | PASS   |
| 16QAM      | 26815   | 826.5           | 5.07                  | 13         | PASS   |
| 16QAM      | 26915   | 836.5           | 4.71                  | 13         | PASS   |
| 16QAM      | 27015   | 846.5           | 4.63                  | 13         | PASS   |
| 64QAM      | 26815   | 826.5           | 5.84                  | 13         | PASS   |
| 64QAM      | 26915   | 836.5           | 5.64                  | 13         | PASS   |
| 64QAM      | 27015   | 846.5           | 5.53                  | 13         | PASS   |
| 256QAM     | 26815   | 826.5           | 6.96                  | 13         | PASS   |
| 256QAM     | 26915   | 836.5           | 6.99                  | 13         | PASS   |
| 256QAM     | 27015   | 846.5           | 6.93                  | 13         | PASS   |



# LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26840   | 829             | 4.37                  | 13         | PASS   |
| QPSK       | 26915   | 836.5           | 4.03                  | 13         | PASS   |
| QPSK       | 26990   | 844             | 4.20                  | 13         | PASS   |
| 16QAM      | 26840   | 829             | 4.96                  | 13         | PASS   |
| 16QAM      | 26915   | 836.5           | 4.73                  | 13         | PASS   |
| 16QAM      | 26990   | 844             | 5.00                  | 13         | PASS   |
| 64QAM      | 26840   | 829             | 5.95                  | 13         | PASS   |
| 64QAM      | 26915   | 836.5           | 5.69                  | 13         | PASS   |
| 64QAM      | 26990   | 844             | 6.08                  | 13         | PASS   |
| 256QAM     | 26840   | 829             | 6.69                  | 13         | PASS   |
| 256QAM     | 26915   | 836.5           | 6.73                  | 13         | PASS   |
| 256QAM     | 26990   | 844             | 6.67                  | 13         | PASS   |

Spectrum Plot of Worst Value

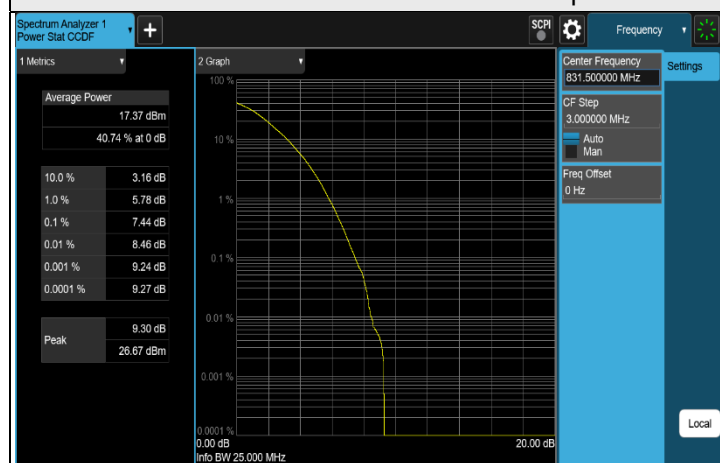


256QAM CH 26915 (836.5 MHz)

### LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 26865   | 831.5           | 4.31                  | 13         | PASS   |
| QPSK       | 26915   | 836.5           | 3.83                  | 13         | PASS   |
| QPSK       | 26965   | 841.5           | 3.93                  | 13         | PASS   |
| 16QAM      | 26865   | 831.5           | 4.59                  | 13         | PASS   |
| 16QAM      | 26915   | 836.5           | 4.29                  | 13         | PASS   |
| 16QAM      | 26965   | 841.5           | 4.46                  | 13         | PASS   |
| 64QAM      | 26865   | 831.5           | 5.89                  | 13         | PASS   |
| 64QAM      | 26915   | 836.5           | 5.67                  | 13         | PASS   |
| 64QAM      | 26965   | 841.5           | 5.72                  | 13         | PASS   |
| 256QAM     | 26865   | 831.5           | 7.44                  | 13         | PASS   |
| 256QAM     | 26915   | 836.5           | 6.63                  | 13         | PASS   |
| 256QAM     | 26965   | 841.5           | 7.19                  | 13         | PASS   |

Spectrum Plot of Worst Value

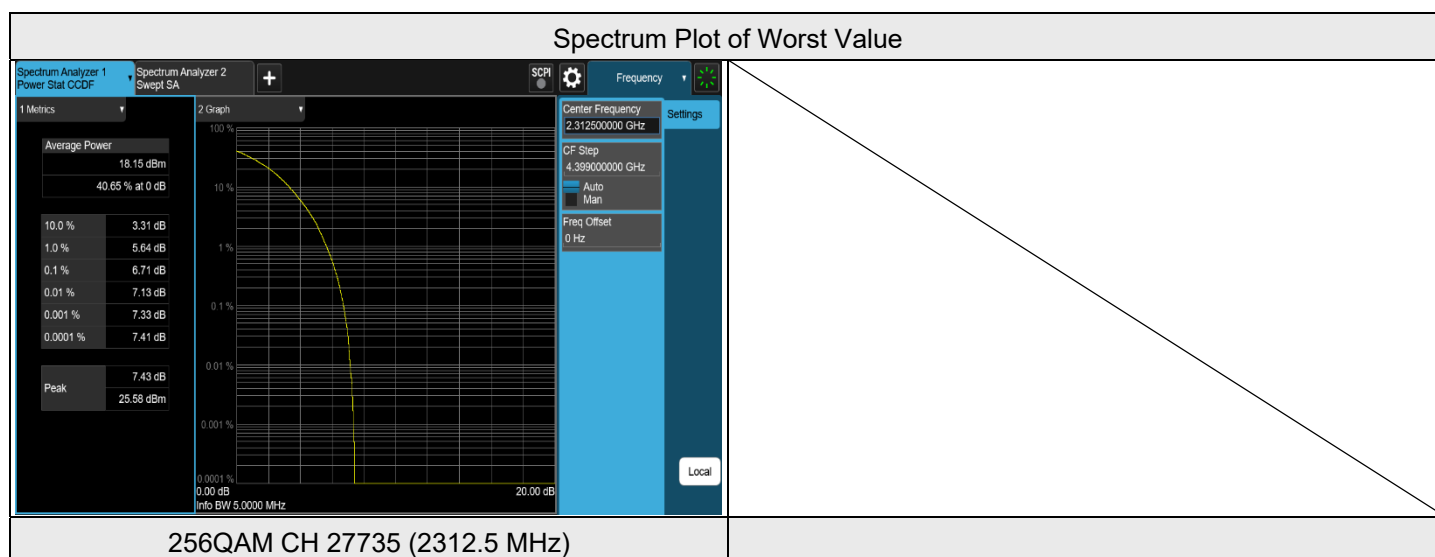


256QAM CH 26865 (831.5 MHz)

### 7.3.11 LTE Band 30

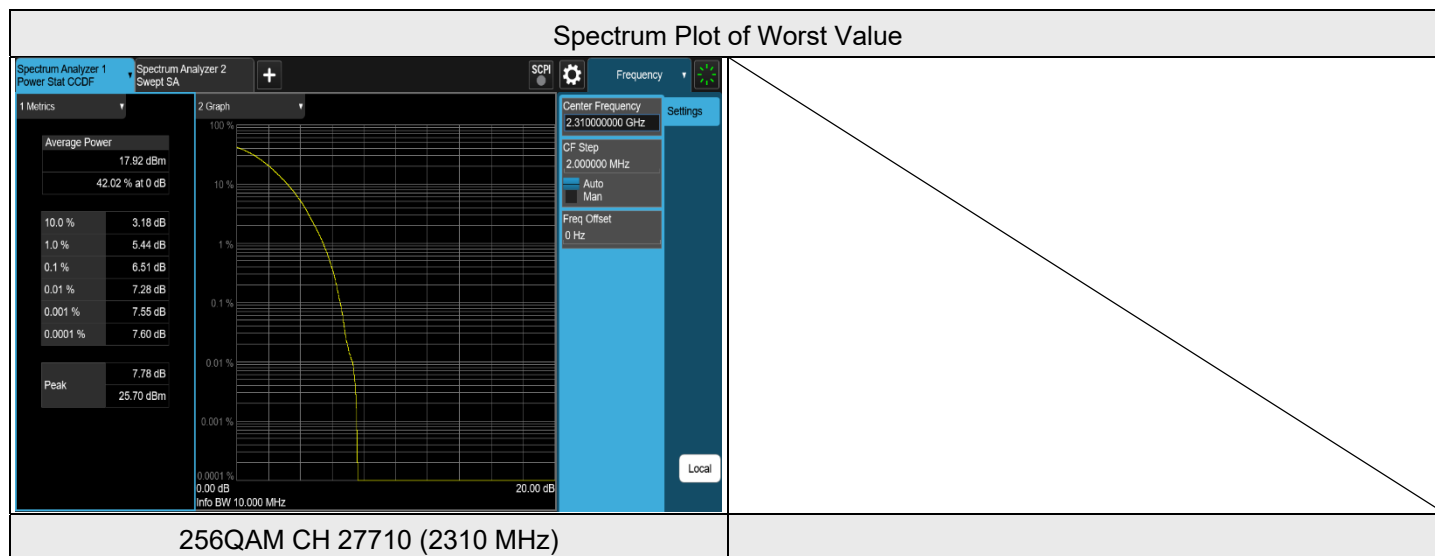
#### LTE Band 30, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 27685   | 2307.5          | 2.86                  | 13         | PASS   |
| QPSK       | 27710   | 2310            | 2.84                  | 13         | PASS   |
| QPSK       | 27735   | 2312.5          | 2.58                  | 13         | PASS   |
| 16QAM      | 27685   | 2307.5          | 3.35                  | 13         | PASS   |
| 16QAM      | 27710   | 2310            | 3.39                  | 13         | PASS   |
| 16QAM      | 27735   | 2312.5          | 3.31                  | 13         | PASS   |
| 64QAM      | 27685   | 2307.5          | 4.50                  | 13         | PASS   |
| 64QAM      | 27710   | 2310            | 4.47                  | 13         | PASS   |
| 64QAM      | 27735   | 2312.5          | 4.30                  | 13         | PASS   |
| 256QAM     | 27685   | 2307.5          | 6.59                  | 13         | PASS   |
| 256QAM     | 27710   | 2310            | 6.55                  | 13         | PASS   |
| 256QAM     | 27735   | 2312.5          | 6.71                  | 13         | PASS   |



### LTE Band 30, Channel Bandwidth: 10 MHz

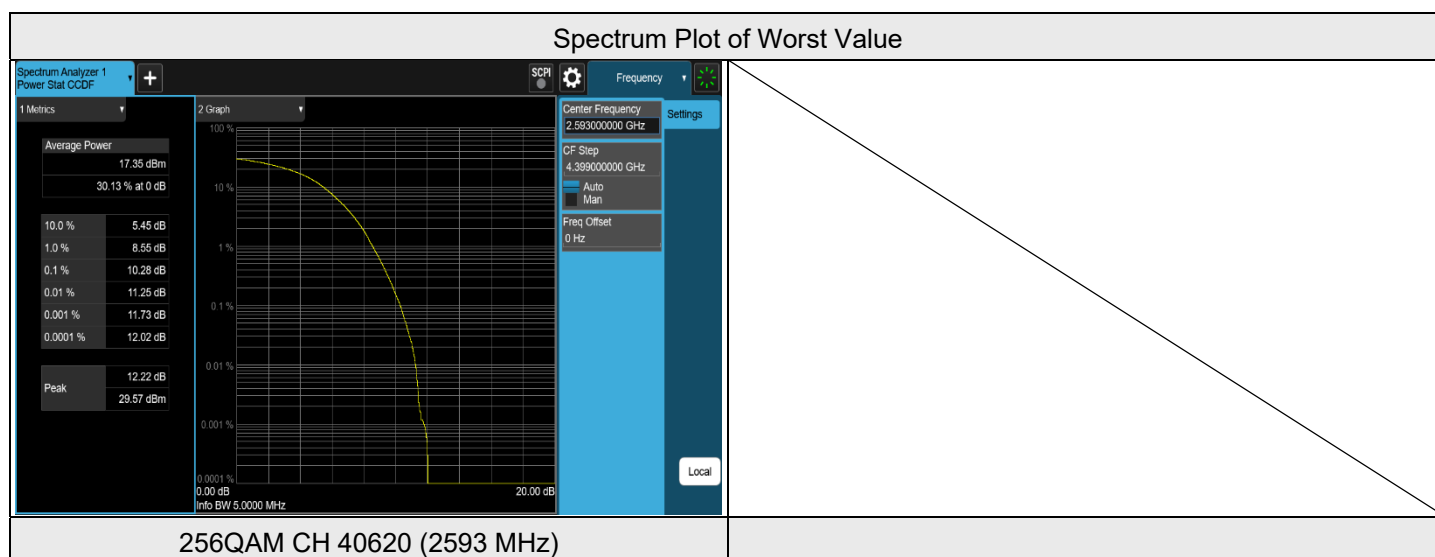
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 27710   | 2310            | 2.98                  | 13         | PASS   |
| 16QAM      | 27710   | 2310            | 3.76                  | 13         | PASS   |
| 64QAM      | 27710   | 2310            | 4.59                  | 13         | PASS   |
| 256QAM     | 27710   | 2310            | 6.51                  | 13         | PASS   |



### 7.3.12 LTE Band 41

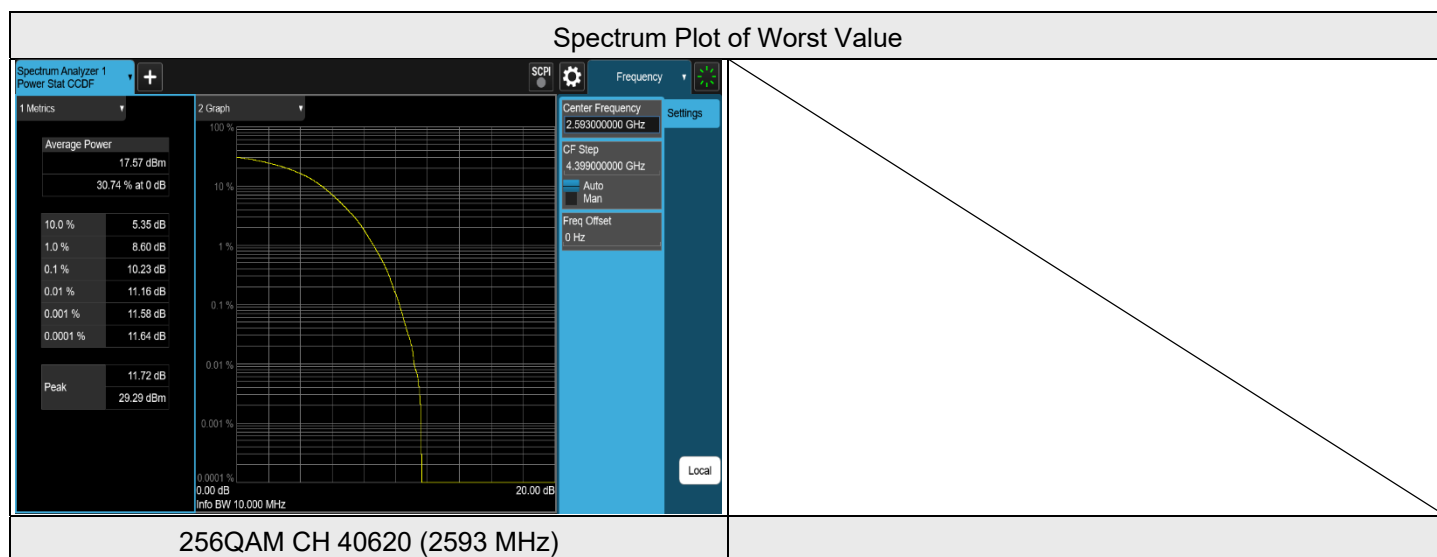
#### LTE Band 41, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 39675   | 2498.5          | 7.60                  | 13         | PASS   |
| QPSK       | 40620   | 2593            | 7.41                  | 13         | PASS   |
| QPSK       | 41565   | 2687.5          | 7.25                  | 13         | PASS   |
| 16QAM      | 39675   | 2498.5          | 8.45                  | 13         | PASS   |
| 16QAM      | 40620   | 2593            | 8.28                  | 13         | PASS   |
| 16QAM      | 41565   | 2687.5          | 7.76                  | 13         | PASS   |
| 64QAM      | 39675   | 2498.5          | 8.46                  | 13         | PASS   |
| 64QAM      | 40620   | 2593            | 8.32                  | 13         | PASS   |
| 64QAM      | 41565   | 2687.5          | 8.05                  | 13         | PASS   |
| 256QAM     | 39675   | 2498.5          | 9.95                  | 13         | PASS   |
| 256QAM     | 40620   | 2593            | 10.28                 | 13         | PASS   |
| 256QAM     | 41565   | 2687.5          | 10.08                 | 13         | PASS   |



# LTE Band 41, Channel Bandwidth: 10 MHz

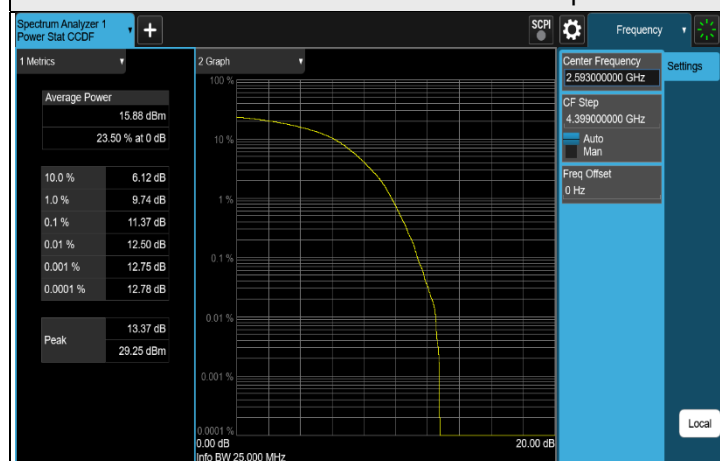
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 39700   | 2501            | 7.71                  | 13         | PASS   |
| QPSK       | 40620   | 2593            | 7.56                  | 13         | PASS   |
| QPSK       | 41540   | 2685            | 7.27                  | 13         | PASS   |
| 16QAM      | 39700   | 2501            | 8.44                  | 13         | PASS   |
| 16QAM      | 40620   | 2593            | 8.29                  | 13         | PASS   |
| 16QAM      | 41540   | 2685            | 8.55                  | 13         | PASS   |
| 64QAM      | 39700   | 2501            | 9.12                  | 13         | PASS   |
| 64QAM      | 40620   | 2593            | 9.51                  | 13         | PASS   |
| 64QAM      | 41540   | 2685            | 8.72                  | 13         | PASS   |
| 256QAM     | 39700   | 2501            | 10.11                 | 13         | PASS   |
| 256QAM     | 40620   | 2593            | 10.23                 | 13         | PASS   |
| 256QAM     | 41540   | 2685            | 10.13                 | 13         | PASS   |



### LTE Band 41, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 39725   | 2503.5          | 8.10                  | 13         | PASS   |
| QPSK       | 40620   | 2593            | 7.59                  | 13         | PASS   |
| QPSK       | 41515   | 2682.5          | 6.18                  | 13         | PASS   |
| 16QAM      | 39725   | 2503.5          | 6.75                  | 13         | PASS   |
| 16QAM      | 40620   | 2593            | 8.48                  | 13         | PASS   |
| 16QAM      | 41515   | 2682.5          | 7.77                  | 13         | PASS   |
| 64QAM      | 39725   | 2503.5          | 9.08                  | 13         | PASS   |
| 64QAM      | 40620   | 2593            | 8.55                  | 13         | PASS   |
| 64QAM      | 41515   | 2682.5          | 9.04                  | 13         | PASS   |
| 256QAM     | 39725   | 2503.5          | 9.41                  | 13         | PASS   |
| 256QAM     | 40620   | 2593            | 11.37                 | 13         | PASS   |
| 256QAM     | 41515   | 2682.5          | 9.89                  | 13         | PASS   |

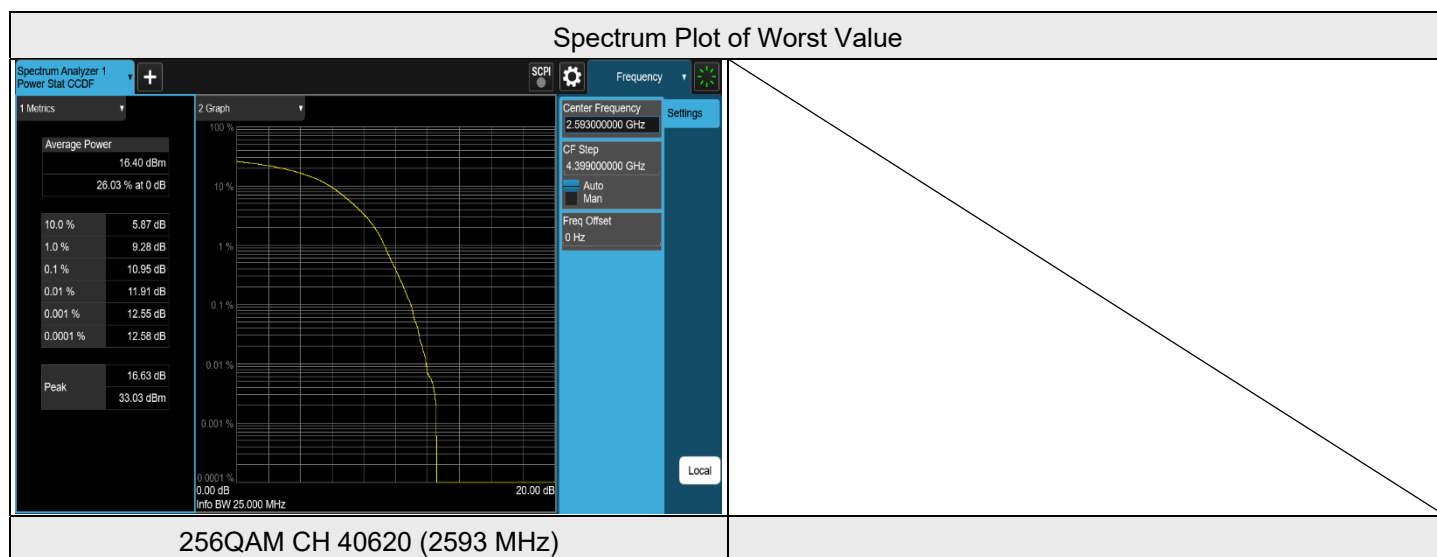
Spectrum Plot of Worst Value



256QAM CH 40620 (2593 MHz)

# LTE Band 41, Channel Bandwidth: 20 MHz

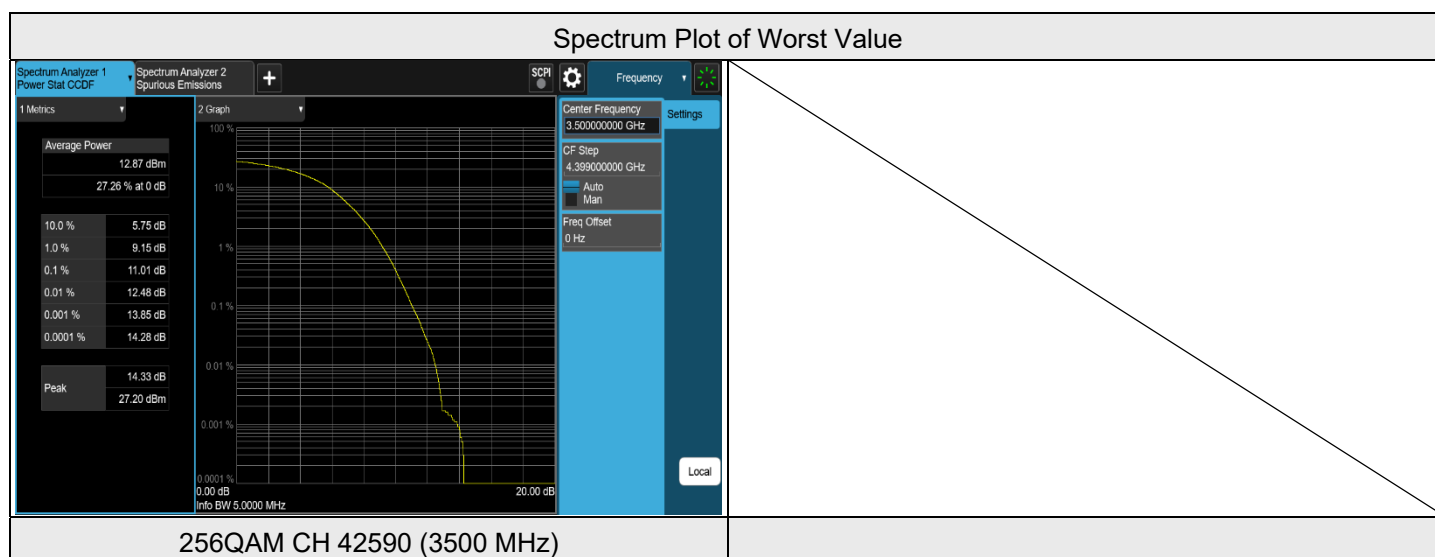
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 39750   | 2506            | 6.61                  | 13         | PASS   |
| QPSK       | 40620   | 2593            | 10.51                 | 13         | PASS   |
| QPSK       | 41490   | 2680            | 7.34                  | 13         | PASS   |
| 16QAM      | 39750   | 2506            | 9.89                  | 13         | PASS   |
| 16QAM      | 40620   | 2593            | 8.70                  | 13         | PASS   |
| 16QAM      | 41490   | 2680            | 7.56                  | 13         | PASS   |
| 64QAM      | 39750   | 2506            | 10.71                 | 13         | PASS   |
| 64QAM      | 40620   | 2593            | 9.00                  | 13         | PASS   |
| 64QAM      | 41490   | 2680            | 9.02                  | 13         | PASS   |
| 256QAM     | 39750   | 2506            | 10.17                 | 13         | PASS   |
| 256QAM     | 40620   | 2593            | 10.95                 | 13         | PASS   |
| 256QAM     | 41490   | 2680            | 9.88                  | 13         | PASS   |



### 7.3.13 LTE Band 42 (3.45 GHz ~ 3.55 GHz)

#### LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 5 MHz

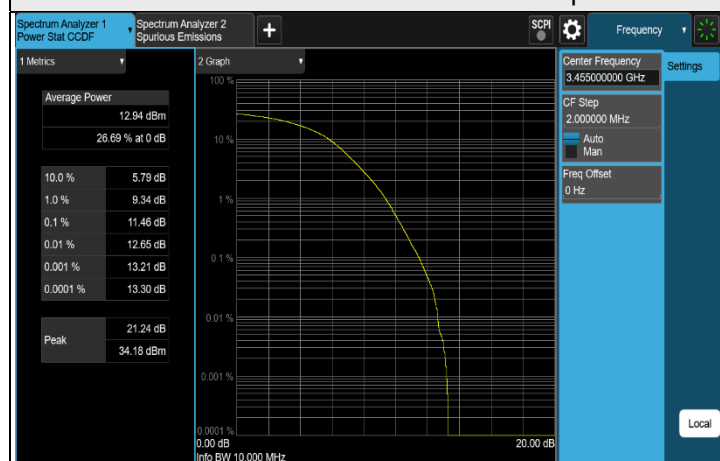
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 42115   | 3452.5          | 8.58                  | 13         | PASS   |
| QPSK       | 42590   | 3500            | 8.73                  | 13         | PASS   |
| QPSK       | 43065   | 3547.5          | 8.66                  | 13         | PASS   |
| 16QAM      | 42115   | 3452.5          | 9.59                  | 13         | PASS   |
| 16QAM      | 42590   | 3500            | 9.55                  | 13         | PASS   |
| 16QAM      | 43065   | 3547.5          | 9.59                  | 13         | PASS   |
| 64QAM      | 42115   | 3452.5          | 9.62                  | 13         | PASS   |
| 64QAM      | 42590   | 3500            | 9.42                  | 13         | PASS   |
| 64QAM      | 43065   | 3547.5          | 9.68                  | 13         | PASS   |
| 256QAM     | 42115   | 3452.5          | 10.45                 | 13         | PASS   |
| 256QAM     | 42590   | 3500            | 11.01                 | 13         | PASS   |
| 256QAM     | 43065   | 3547.5          | 10.56                 | 13         | PASS   |



# LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 42140   | 3455            | 8.99                  | 13         | PASS   |
| QPSK       | 42590   | 3500            | 8.73                  | 13         | PASS   |
| QPSK       | 43040   | 3545            | 8.40                  | 13         | PASS   |
| 16QAM      | 42140   | 3455            | 9.62                  | 13         | PASS   |
| 16QAM      | 42590   | 3500            | 9.69                  | 13         | PASS   |
| 16QAM      | 43040   | 3545            | 9.41                  | 13         | PASS   |
| 64QAM      | 42140   | 3455            | 9.56                  | 13         | PASS   |
| 64QAM      | 42590   | 3500            | 9.57                  | 13         | PASS   |
| 64QAM      | 43040   | 3545            | 9.57                  | 13         | PASS   |
| 256QAM     | 42140   | 3455            | 11.46                 | 13         | PASS   |
| 256QAM     | 42590   | 3500            | 10.63                 | 13         | PASS   |
| 256QAM     | 43040   | 3545            | 10.80                 | 13         | PASS   |

Spectrum Plot of Worst Value

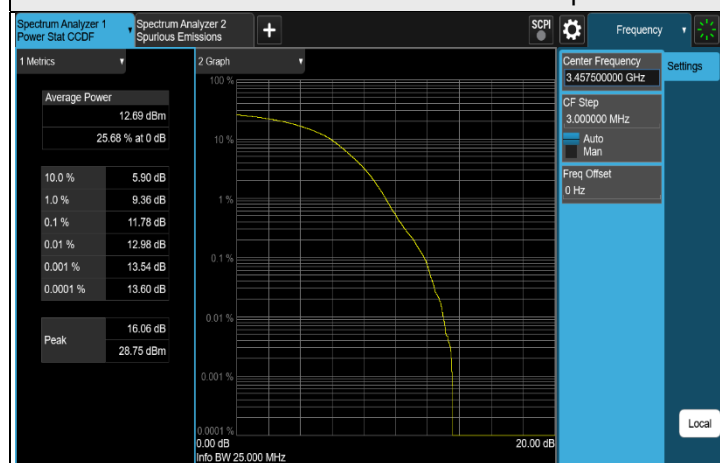


256QAM CH 42140 (3455 MHz)

### LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 42165   | 3457.5          | 10.97                 | 13         | PASS   |
| QPSK       | 42590   | 3500            | 8.68                  | 13         | PASS   |
| QPSK       | 43015   | 3542.5          | 10.25                 | 13         | PASS   |
| 16QAM      | 42165   | 3457.5          | 7.92                  | 13         | PASS   |
| 16QAM      | 42590   | 3500            | 8.11                  | 13         | PASS   |
| 16QAM      | 43015   | 3542.5          | 9.35                  | 13         | PASS   |
| 64QAM      | 42165   | 3457.5          | 7.86                  | 13         | PASS   |
| 64QAM      | 42590   | 3500            | 11.42                 | 13         | PASS   |
| 64QAM      | 43015   | 3542.5          | 8.16                  | 13         | PASS   |
| 256QAM     | 42165   | 3457.5          | 11.78                 | 13         | PASS   |
| 256QAM     | 42590   | 3500            | 11.28                 | 13         | PASS   |
| 256QAM     | 43015   | 3542.5          | 10.20                 | 13         | PASS   |

Spectrum Plot of Worst Value

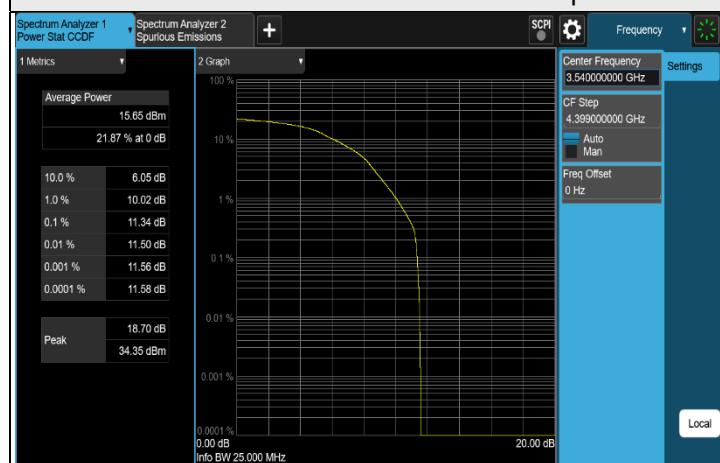


256QAM CH 42165 (3457.5 MHz)

### LTE Band 42 (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 42190   | 3460            | 8.31                  | 13         | PASS   |
| QPSK       | 42590   | 3500            | 8.08                  | 13         | PASS   |
| QPSK       | 42990   | 3540            | 8.21                  | 13         | PASS   |
| 16QAM      | 42190   | 3460            | 10.70                 | 13         | PASS   |
| 16QAM      | 42590   | 3500            | 8.55                  | 13         | PASS   |
| 16QAM      | 42990   | 3540            | 10.87                 | 13         | PASS   |
| 64QAM      | 42190   | 3460            | 9.96                  | 13         | PASS   |
| 64QAM      | 42590   | 3500            | 11.04                 | 13         | PASS   |
| 64QAM      | 42990   | 3540            | 11.34                 | 13         | PASS   |
| 256QAM     | 42190   | 3460            | 10.99                 | 13         | PASS   |
| 256QAM     | 42590   | 3500            | 9.65                  | 13         | PASS   |
| 256QAM     | 42990   | 3540            | 10.88                 | 13         | PASS   |

Spectrum Plot of Worst Value

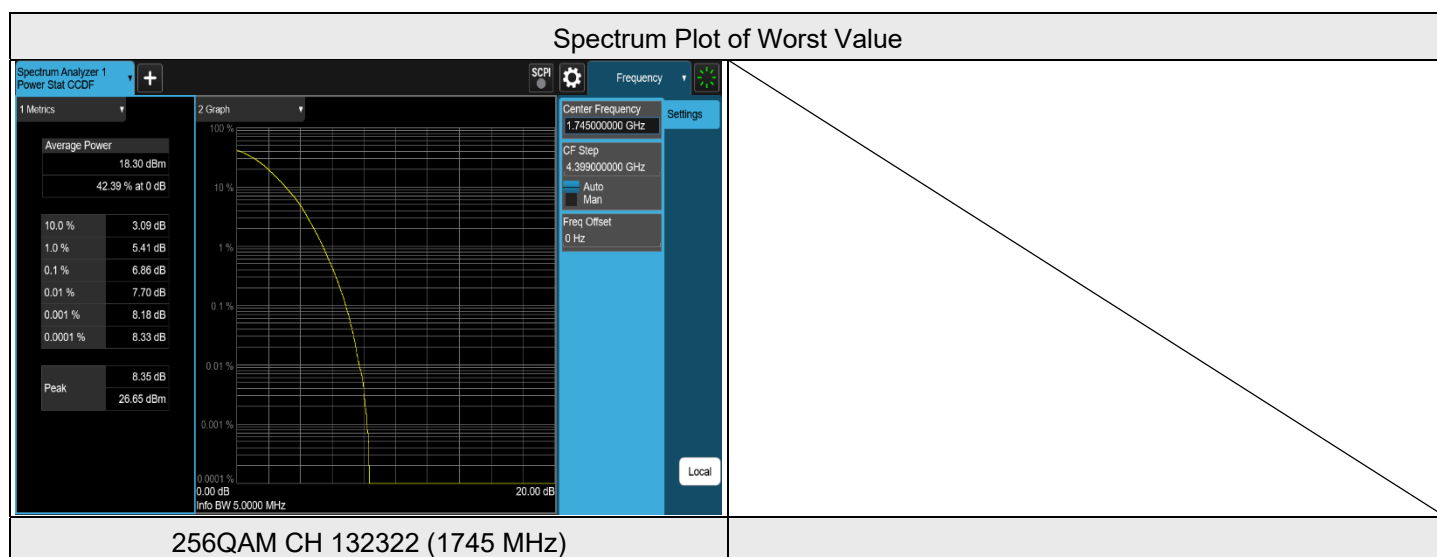


64QAM CH 42990 (3540 MHz)

### 7.3.14 LTE Band 66

#### LTE Band 66, Channel Bandwidth: 1.4 MHz

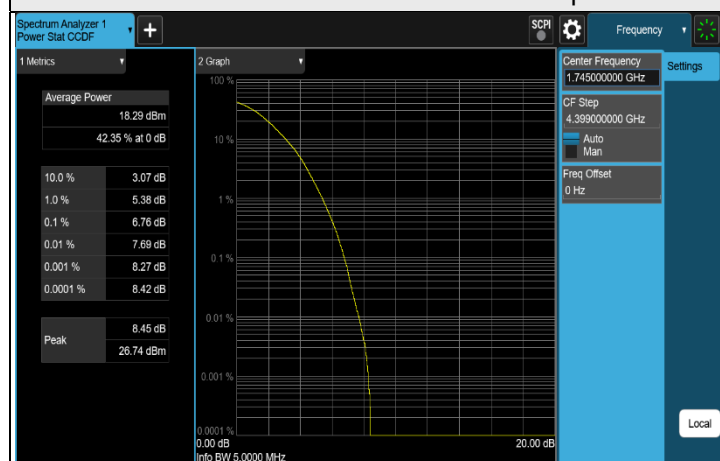
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 131979  | 1710.7          | 3.37                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 3.45                  | 13         | PASS   |
| QPSK       | 132665  | 1779.3          | 3.70                  | 13         | PASS   |
| 16QAM      | 131979  | 1710.7          | 4.54                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.51                  | 13         | PASS   |
| 16QAM      | 132665  | 1779.3          | 4.28                  | 13         | PASS   |
| 64QAM      | 131979  | 1710.7          | 5.19                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.07                  | 13         | PASS   |
| 64QAM      | 132665  | 1779.3          | 5.00                  | 13         | PASS   |
| 256QAM     | 131979  | 1710.7          | 6.77                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.86                  | 13         | PASS   |
| 256QAM     | 132665  | 1779.3          | 6.69                  | 13         | PASS   |



# LTE Band 66, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 131987  | 1711.5          | 3.40                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 3.45                  | 13         | PASS   |
| QPSK       | 132657  | 1778.5          | 3.43                  | 13         | PASS   |
| 16QAM      | 131987  | 1711.5          | 4.58                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.33                  | 13         | PASS   |
| 16QAM      | 132657  | 1778.5          | 4.32                  | 13         | PASS   |
| 64QAM      | 131987  | 1711.5          | 5.72                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.29                  | 13         | PASS   |
| 64QAM      | 132657  | 1778.5          | 5.34                  | 13         | PASS   |
| 256QAM     | 131987  | 1711.5          | 6.63                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.76                  | 13         | PASS   |
| 256QAM     | 132657  | 1778.5          | 6.76                  | 13         | PASS   |

Spectrum Plot of Worst Value

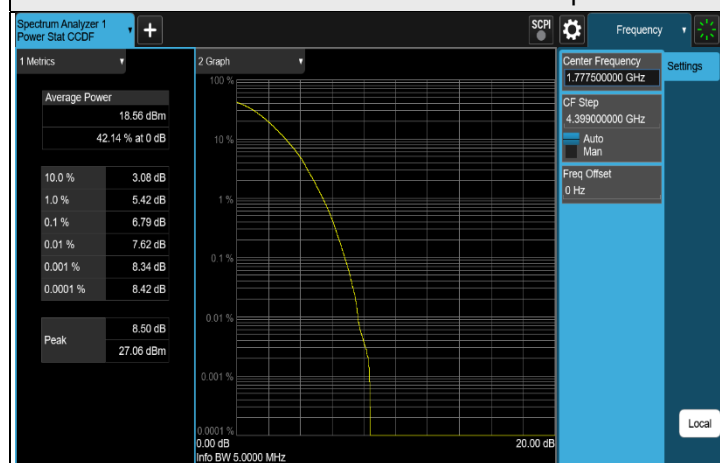


256QAM CH 132322 (1745 MHz)

### LTE Band 66, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 131997  | 1712.5          | 4.03                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 4.08                  | 13         | PASS   |
| QPSK       | 132647  | 1777.5          | 4.00                  | 13         | PASS   |
| 16QAM      | 131997  | 1712.5          | 4.80                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.85                  | 13         | PASS   |
| 16QAM      | 132647  | 1777.5          | 4.73                  | 13         | PASS   |
| 64QAM      | 131997  | 1712.5          | 5.23                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.34                  | 13         | PASS   |
| 64QAM      | 132647  | 1777.5          | 5.44                  | 13         | PASS   |
| 256QAM     | 131997  | 1712.5          | 6.70                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.73                  | 13         | PASS   |
| 256QAM     | 132647  | 1777.5          | 6.79                  | 13         | PASS   |

Spectrum Plot of Worst Value

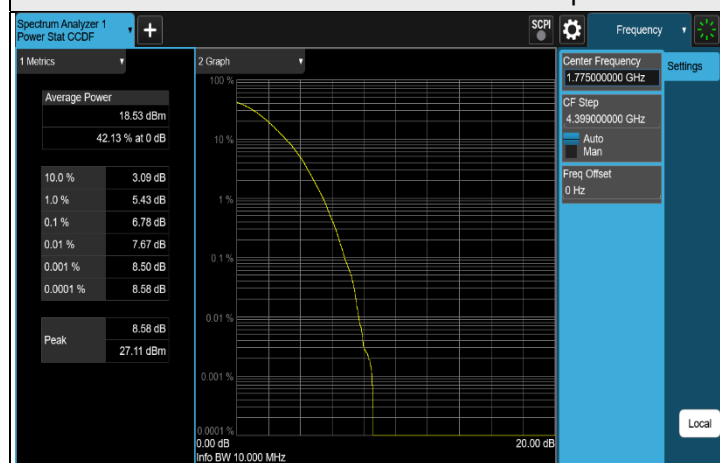


256QAM CH 132647 (1777.5 MHz)

# LTE Band 66, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 132022  | 1715            | 4.06                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 4.15                  | 13         | PASS   |
| QPSK       | 132622  | 1775            | 3.96                  | 13         | PASS   |
| 16QAM      | 132022  | 1715            | 4.76                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.85                  | 13         | PASS   |
| 16QAM      | 132622  | 1775            | 4.77                  | 13         | PASS   |
| 64QAM      | 132022  | 1715            | 5.41                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.47                  | 13         | PASS   |
| 64QAM      | 132622  | 1775            | 5.74                  | 13         | PASS   |
| 256QAM     | 132022  | 1715            | 6.69                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.72                  | 13         | PASS   |
| 256QAM     | 132622  | 1775            | 6.78                  | 13         | PASS   |

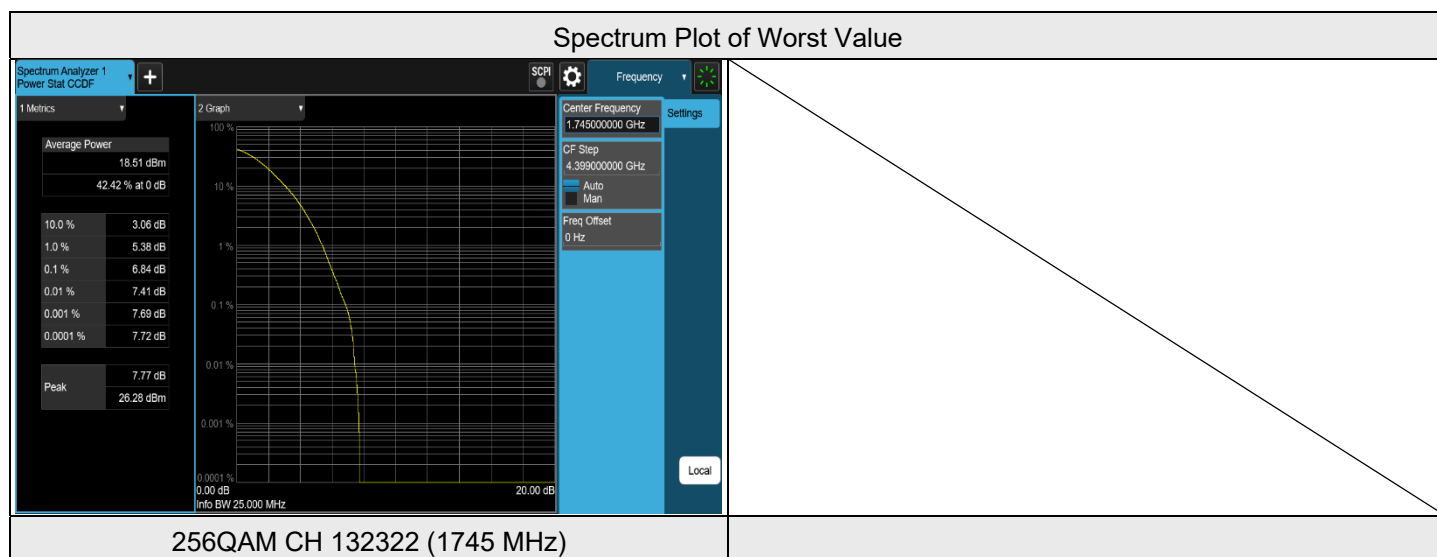
Spectrum Plot of Worst Value



256QAM CH 132622 (1775 MHz)

# LTE Band 66, Channel Bandwidth: 15 MHz

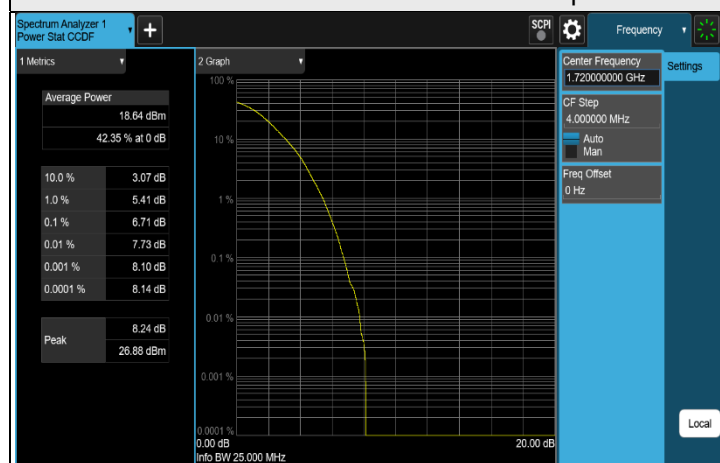
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 132047  | 1717.5          | 3.92                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 4.02                  | 13         | PASS   |
| QPSK       | 132597  | 1772.5          | 3.78                  | 13         | PASS   |
| 16QAM      | 132047  | 1717.5          | 4.43                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.46                  | 13         | PASS   |
| 16QAM      | 132597  | 1772.5          | 4.35                  | 13         | PASS   |
| 64QAM      | 132047  | 1717.5          | 5.30                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.42                  | 13         | PASS   |
| 64QAM      | 132597  | 1772.5          | 5.07                  | 13         | PASS   |
| 256QAM     | 132047  | 1717.5          | 6.70                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.84                  | 13         | PASS   |
| 256QAM     | 132597  | 1772.5          | 6.70                  | 13         | PASS   |



# LTE Band 66, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 132072  | 1720            | 4.11                  | 13         | PASS   |
| QPSK       | 132322  | 1745            | 4.10                  | 13         | PASS   |
| QPSK       | 132572  | 1770            | 3.84                  | 13         | PASS   |
| 16QAM      | 132072  | 1720            | 4.67                  | 13         | PASS   |
| 16QAM      | 132322  | 1745            | 4.93                  | 13         | PASS   |
| 16QAM      | 132572  | 1770            | 3.86                  | 13         | PASS   |
| 64QAM      | 132072  | 1720            | 5.33                  | 13         | PASS   |
| 64QAM      | 132322  | 1745            | 5.47                  | 13         | PASS   |
| 64QAM      | 132572  | 1770            | 4.92                  | 13         | PASS   |
| 256QAM     | 132072  | 1720            | 6.71                  | 13         | PASS   |
| 256QAM     | 132322  | 1745            | 6.43                  | 13         | PASS   |
| 256QAM     | 132572  | 1770            | 6.40                  | 13         | PASS   |

Spectrum Plot of Worst Value



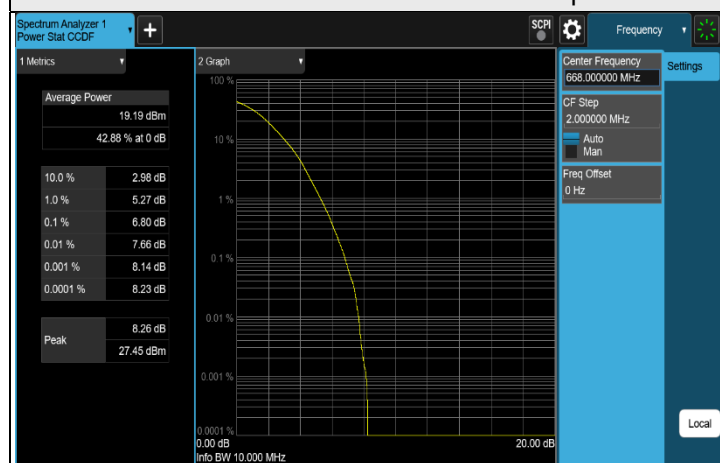
256QAM CH 132072 (1720 MHz)



# LTE Band 71, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 133172  | 668             | 4.41                  | 13         | PASS   |
| QPSK       | 133297  | 680.5           | 4.35                  | 13         | PASS   |
| QPSK       | 133422  | 693             | 3.92                  | 13         | PASS   |
| 16QAM      | 133172  | 668             | 5.15                  | 13         | PASS   |
| 16QAM      | 133297  | 680.5           | 4.92                  | 13         | PASS   |
| 16QAM      | 133422  | 693             | 4.66                  | 13         | PASS   |
| 64QAM      | 133172  | 668             | 5.29                  | 13         | PASS   |
| 64QAM      | 133297  | 680.5           | 5.07                  | 13         | PASS   |
| 64QAM      | 133422  | 693             | 4.78                  | 13         | PASS   |
| 256QAM     | 133172  | 668             | 6.80                  | 13         | PASS   |
| 256QAM     | 133297  | 680.5           | 6.78                  | 13         | PASS   |
| 256QAM     | 133422  | 693             | 6.50                  | 13         | PASS   |

Spectrum Plot of Worst Value

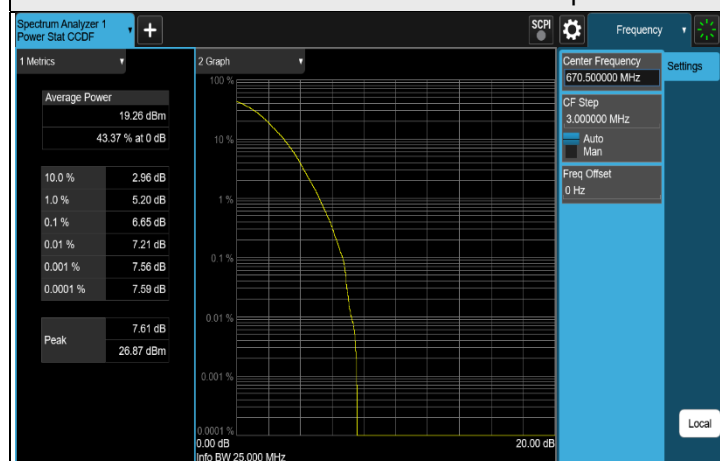


256QAM CH 133172 (668 MHz)

### LTE Band 71, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 133197  | 670.5           | 4.21                  | 13         | PASS   |
| QPSK       | 133297  | 680.5           | 4.05                  | 13         | PASS   |
| QPSK       | 133397  | 690.5           | 3.24                  | 13         | PASS   |
| 16QAM      | 133197  | 670.5           | 4.73                  | 13         | PASS   |
| 16QAM      | 133297  | 680.5           | 4.39                  | 13         | PASS   |
| 16QAM      | 133397  | 690.5           | 4.21                  | 13         | PASS   |
| 64QAM      | 133197  | 670.5           | 5.98                  | 13         | PASS   |
| 64QAM      | 133297  | 680.5           | 5.84                  | 13         | PASS   |
| 64QAM      | 133397  | 690.5           | 5.02                  | 13         | PASS   |
| 256QAM     | 133197  | 670.5           | 6.65                  | 13         | PASS   |
| 256QAM     | 133297  | 680.5           | 6.46                  | 13         | PASS   |
| 256QAM     | 133397  | 690.5           | 6.36                  | 13         | PASS   |

Spectrum Plot of Worst Value

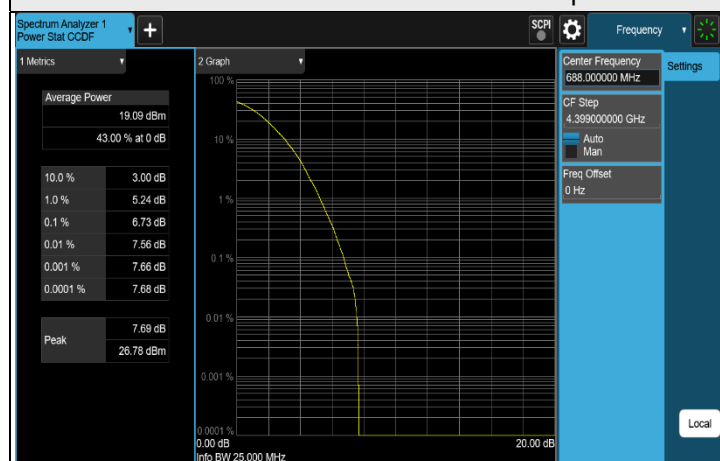


256QAM CH 133197 (670.5 MHz)

### LTE Band 71, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|------------|---------|-----------------|-----------------------|------------|--------|
| QPSK       | 133222  | 673             | 4.51                  | 13         | PASS   |
| QPSK       | 133297  | 680.5           | 3.88                  | 13         | PASS   |
| QPSK       | 133372  | 688             | 4.20                  | 13         | PASS   |
| 16QAM      | 133222  | 673             | 5.08                  | 13         | PASS   |
| 16QAM      | 133297  | 680.5           | 4.59                  | 13         | PASS   |
| 16QAM      | 133372  | 688             | 4.71                  | 13         | PASS   |
| 64QAM      | 133222  | 673             | 6.10                  | 13         | PASS   |
| 64QAM      | 133297  | 680.5           | 5.56                  | 13         | PASS   |
| 64QAM      | 133372  | 688             | 5.77                  | 13         | PASS   |
| 256QAM     | 133222  | 673             | 6.70                  | 13         | PASS   |
| 256QAM     | 133297  | 680.5           | 6.36                  | 13         | PASS   |
| 256QAM     | 133372  | 688             | 6.73                  | 13         | PASS   |

Spectrum Plot of Worst Value



256QAM CH 133372 (688 MHz)

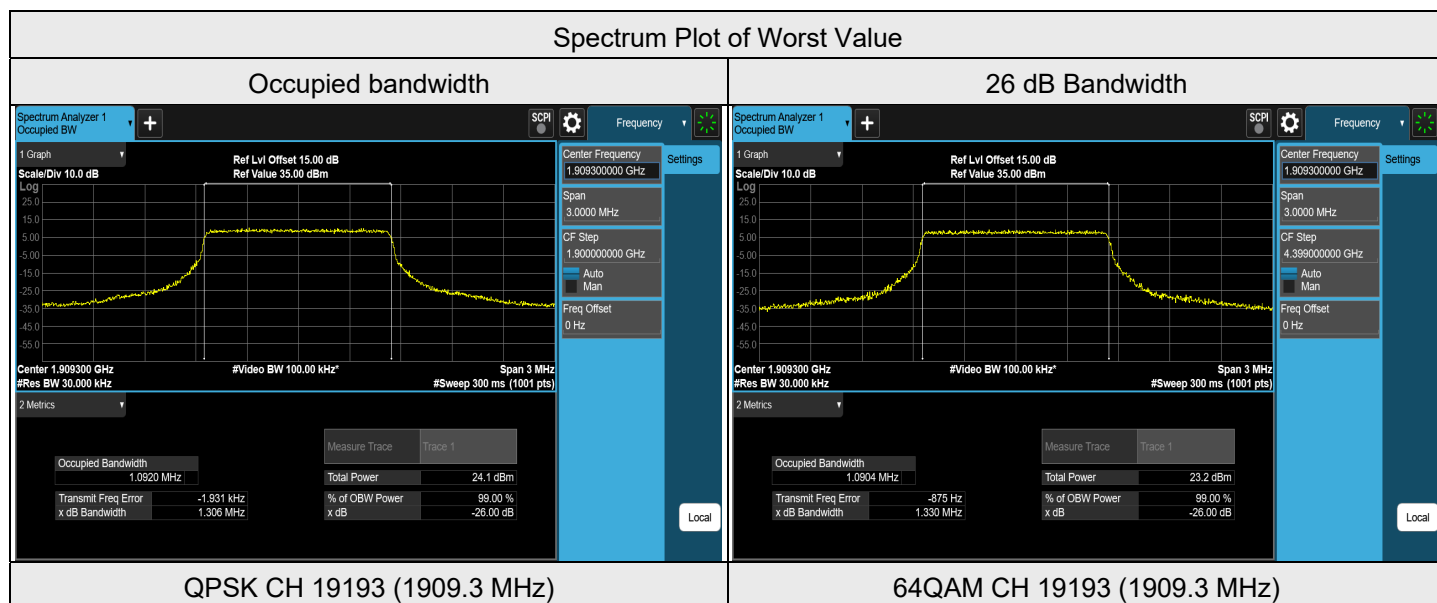
## 7.4 Bandwidth

|                           |              |            |           |
|---------------------------|--------------|------------|-----------|
| Environmental Conditions: | 25°C, 65% RH | Tested By: | Kevin Kuo |
|---------------------------|--------------|------------|-----------|

### 7.4.1 LTE Band 2

#### LTE Band 2, Channel Bandwidth: 1.4 MHz

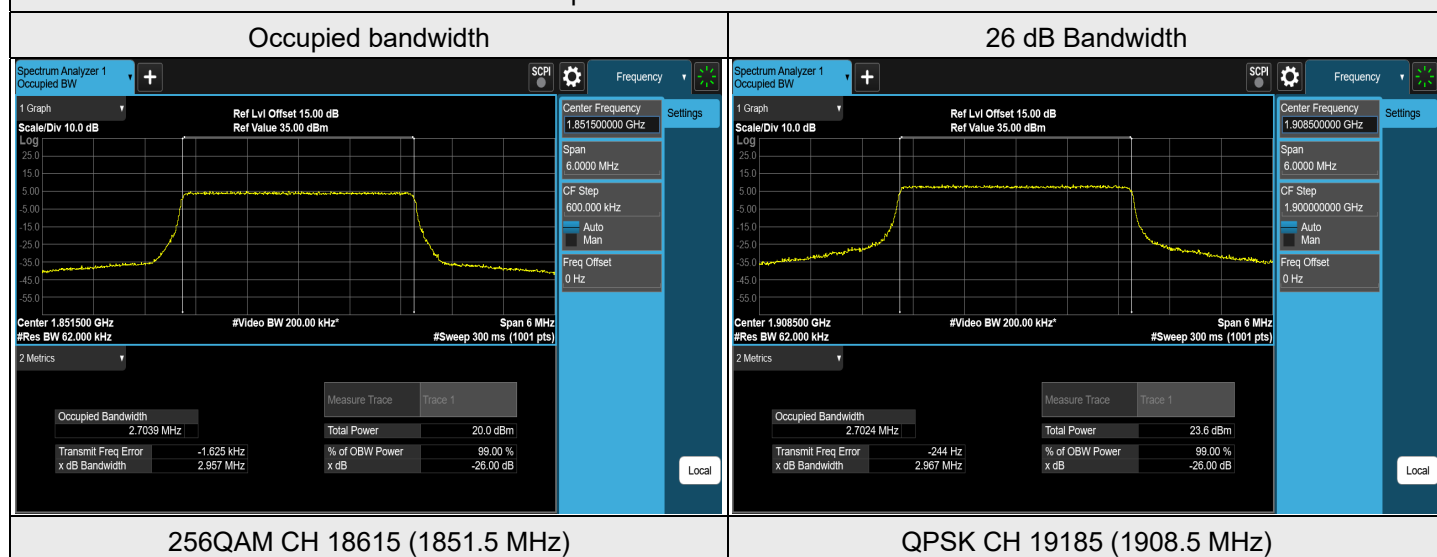
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| QPSK       | 18607   | 1850.7          | 1.0902                   | 1.298                 |
| QPSK       | 18900   | 1880            | 1.0877                   | 1.319                 |
| QPSK       | 19193   | 1909.3          | 1.0920                   | 1.306                 |
| 16QAM      | 18607   | 1850.7          | 1.0910                   | 1.304                 |
| 16QAM      | 18900   | 1880            | 1.0914                   | 1.300                 |
| 16QAM      | 19193   | 1909.3          | 1.0910                   | 1.323                 |
| 64QAM      | 18607   | 1850.7          | 1.0881                   | 1.297                 |
| 64QAM      | 18900   | 1880            | 1.0903                   | 1.288                 |
| 64QAM      | 19193   | 1909.3          | 1.0904                   | 1.330                 |
| 256QAM     | 18607   | 1850.7          | 1.0905                   | 1.309                 |
| 256QAM     | 18900   | 1880            | 1.0908                   | 1.309                 |
| 256QAM     | 19193   | 1909.3          | 1.0901                   | 1.297                 |



## LTE Band 2, Channel Bandwidth: 3 MHz

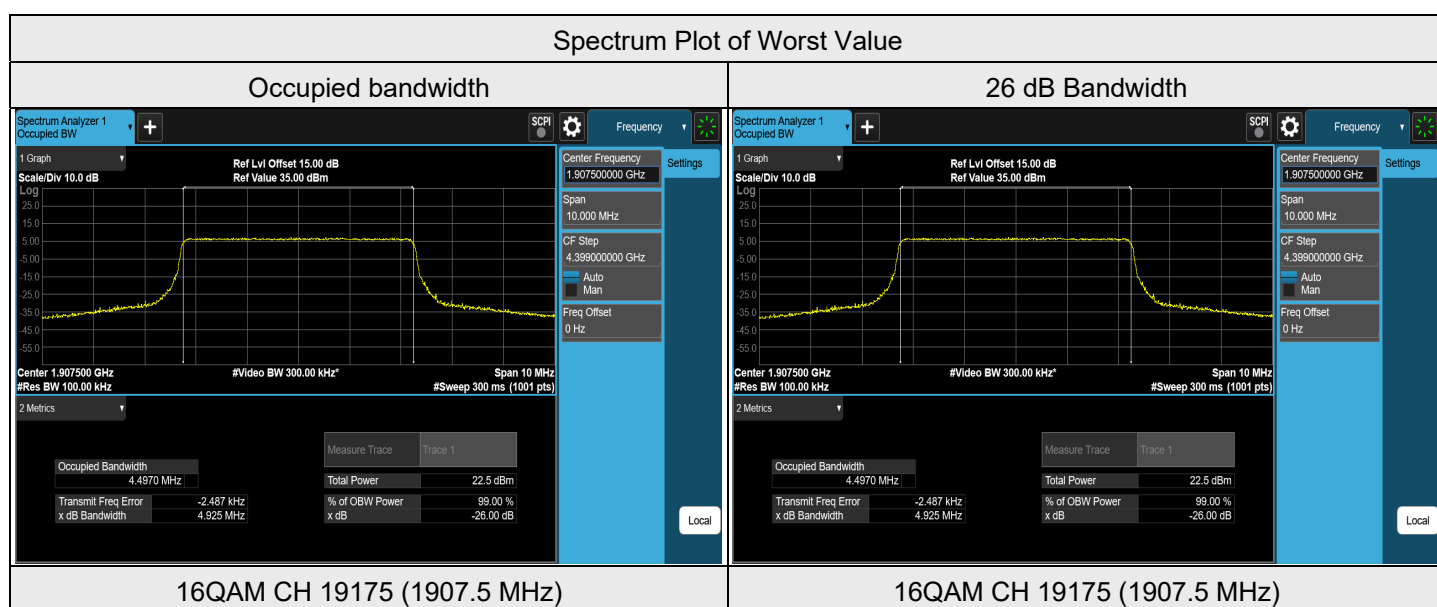
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| QPSK       | 18615   | 1851.5          | 2.7007                   | 2.938                 |
| QPSK       | 18900   | 1880            | 2.6992                   | 2.948                 |
| QPSK       | 19185   | 1908.5          | 2.7024                   | 2.967                 |
| 16QAM      | 18615   | 1851.5          | 2.7014                   | 2.960                 |
| 16QAM      | 18900   | 1880            | 2.7007                   | 2.945                 |
| 16QAM      | 19185   | 1908.5          | 2.7018                   | 2.950                 |
| 64QAM      | 18615   | 1851.5          | 2.7012                   | 2.958                 |
| 64QAM      | 18900   | 1880            | 2.7018                   | 2.954                 |
| 64QAM      | 19185   | 1908.5          | 2.7006                   | 2.954                 |
| 256QAM     | 18615   | 1851.5          | 2.7039                   | 2.957                 |
| 256QAM     | 18900   | 1880            | 2.7010                   | 2.957                 |
| 256QAM     | 19185   | 1908.5          | 2.7016                   | 2.943                 |

### Spectrum Plot of Worst Value



## LTE Band 2, Channel Bandwidth: 5 MHz

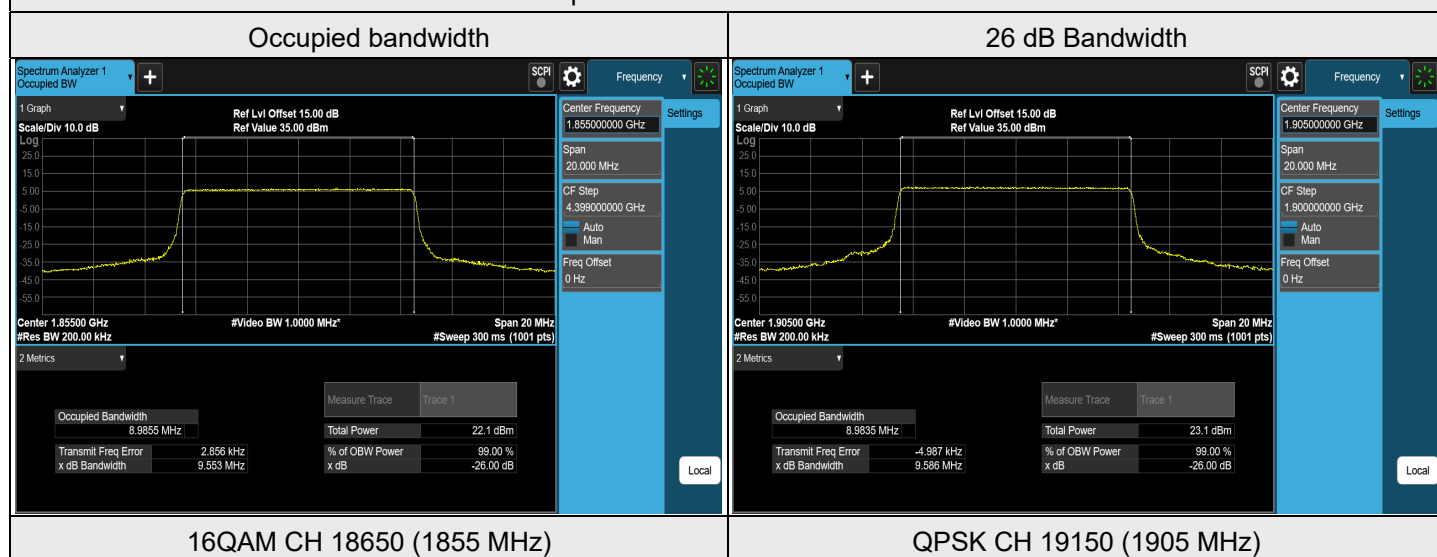
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| QPSK       | 18625   | 1852.5          | 4.4932                   | 4.882                 |
| QPSK       | 18900   | 1880            | 4.4911                   | 4.878                 |
| QPSK       | 19175   | 1907.5          | 4.4951                   | 4.881                 |
| 16QAM      | 18625   | 1852.5          | 4.4933                   | 4.887                 |
| 16QAM      | 18900   | 1880            | 4.4884                   | 4.891                 |
| 16QAM      | 19175   | 1907.5          | 4.4970                   | 4.925                 |
| 64QAM      | 18625   | 1852.5          | 4.4950                   | 4.875                 |
| 64QAM      | 18900   | 1880            | 4.4944                   | 4.899                 |
| 64QAM      | 19175   | 1907.5          | 4.4942                   | 4.872                 |
| 256QAM     | 18625   | 1852.5          | 4.4956                   | 4.881                 |
| 256QAM     | 18900   | 1880            | 4.4929                   | 4.856                 |
| 256QAM     | 19175   | 1907.5          | 4.4956                   | 4.879                 |



## LTE Band 2, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| QPSK       | 18650   | 1855            | 8.9782                   | 9.566                 |
| QPSK       | 18900   | 1880            | 8.9824                   | 9.552                 |
| QPSK       | 19150   | 1905            | 8.9835                   | 9.586                 |
| 16QAM      | 18650   | 1855            | 8.9855                   | 9.553                 |
| 16QAM      | 18900   | 1880            | 8.9804                   | 9.565                 |
| 16QAM      | 19150   | 1905            | 8.9849                   | 9.575                 |
| 64QAM      | 18650   | 1855            | 8.9829                   | 9.573                 |
| 64QAM      | 18900   | 1880            | 8.9832                   | 9.565                 |
| 64QAM      | 19150   | 1905            | 8.9823                   | 9.585                 |
| 256QAM     | 18650   | 1855            | 8.9786                   | 9.576                 |
| 256QAM     | 18900   | 1880            | 8.9831                   | 9.571                 |
| 256QAM     | 19150   | 1905            | 8.9772                   | 9.547                 |

### Spectrum Plot of Worst Value



# LTE Band 2, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| QPSK       | 18675   | 1857.5          | 13.4733                  | 14.285                |
| QPSK       | 18900   | 1880            | 13.4773                  | 14.291                |
| QPSK       | 19125   | 1902.5          | 13.4676                  | 14.279                |
| 16QAM      | 18675   | 1857.5          | 13.4643                  | 14.263                |
| 16QAM      | 18900   | 1880            | 13.4767                  | 14.268                |
| 16QAM      | 19125   | 1902.5          | 13.4752                  | 14.294                |
| 64QAM      | 18675   | 1857.5          | 13.4655                  | 14.264                |
| 64QAM      | 18900   | 1880            | 13.4731                  | 14.286                |
| 64QAM      | 19125   | 1902.5          | 13.4719                  | 14.260                |
| 256QAM     | 18675   | 1857.5          | 13.4732                  | 14.278                |
| 256QAM     | 18900   | 1880            | 13.4793                  | 14.272                |
| 256QAM     | 19125   | 1902.5          | 13.4730                  | 14.257                |

## Spectrum Plot of Worst Value

