# TEST REPORT

## CERTIFICATE OF CONFORMITY

| | |
|---|---|
| **Standard:** | **47 CFR FCC Part 22**<br>**47 CFR FCC Part 24**<br>**47 CFR FCC Part 27**<br>**47 CFR FCC Part 90**<br>**47 CFR FCC Part 2** |
| **Report No.:** | RFBCKS-WTW-P24050344 |
| **FCC ID:** | NKR-UMCSTD35GN |
| **Product:** | Automotive 5G-NR NAD |
| **Brand:** | WNC |
| **Model No.:** | UMC-STD35GN |
| **Received Date:** | 2024/5/14 |
| **Test Date:** | 2024/5/20 ~ 2024/7/17 |
| **Issued Date:** | 2024/8/5 |
| **Applicant:** | Wistron NeWeb Corporation |
| **Address:** | 20 Park Ave. II, Hsinchu Science Park,Hsinchu 308, Taiwan |
| **Issued By:** | Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch<br>Lin Kou Laboratories |
| **Lab Address:** | No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan |
| **Test Location:** | No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan |
| **FCC Registration / Designation Number:** | 788550 / TW0003 |

**Approved by:** Jeremy . Lin , **Date:** **2024/8/5**

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist

# Table of Contents

# Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| RFBCKS-WTW-P24050344 | Original release. | 2024/8/5 |

# 1 Certificate

| | |
|---|---|
| **Product:** | Automotive 5G-NR NAD |
| **Brand:** | WNC |
| **Test Model:** | UMC-STD35GN |
| **Sample Status:** | Engineering sample |
| **Applicant:** | Wistron NeWeb Corporation |
| **Test Date:** | 2024/5/20 ~ 2024/7/17 |
| **Standard:** | 47 CFR FCC Part 22<br>47 CFR FCC Part 24<br>47 CFR FCC Part 27<br>47 CFR FCC Part 90<br>47 CFR FCC Part 2 |
| **Measurement procedure:** | ANSI/TIA/EIA-603-E 2016<br>ANSI C63.26-2015<br>KDB 971168 D01 Power Meas License Digital Systems v03r01<br>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 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) | 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 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 90.691<br>Part 90.543(e)(f) | Radiated Spurious Emissions below 1GHz | Pass | Minimum passing margin is -15.46 dB at 31.94 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 90.691<br>Part 90.543(e)(f) | Radiated Spurious Emissions above 1GHz | Pass | Minimum passing margin is -6.87 dB at 5360.00 MHz |
| 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 (±) |
|---|---|---|
| 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 | 2.44 dB |
| | 30 MHz ~ 1 GHz | 2.95 dB |
| Radiated Spurious Emissions above 1GHz | 1 GHz ~ 18 GHz | 2.26 dB |
| | 18 GHz ~ 40 GHz | 1.94 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 | Automotive 5G-NR NAD |
| Brand | WNC |
| Test Model | UMC-STD35GN |
| Status of EUT | Engineering sample |
| Power Supply Rating | 4.7 Vdc |
| EUT Category | Mobile station |

Note:

1. EUT Overview

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 5 | 1.4 MHz | 824.7 ~ 848.3 | QPSK | 0.226 | 23.55 | 1M09G7D |
| | | | 16QAM | 0.213 | 23.29 | 1M09D7W |
| | | | 64QAM | 0.161 | 22.07 | 1M09D7W |
| | | | 256QAM | 0.077 | 18.86 | 1M08D7W |
| | 3 MHz | 825.5 ~ 847.5 | QPSK | 0.232 | 23.66 | 2M70G7D |
| | | | 16QAM | 0.212 | 23.26 | 2M69D7W |
| | | | 64QAM | 0.158 | 22 | 2M69D7W |
| | | | 256QAM | 0.074 | 18.72 | 2M69D7W |
| | 5 MHz | 826.5 ~ 846.5 | QPSK | 0.231 | 23.63 | 4M49G7D |
| | | | 16QAM | 0.209 | 23.21 | 4M49D7W |
| | | | 64QAM | 0.161 | 22.07 | 4M49D7W |
| | | | 256QAM | 0.076 | 18.79 | 4M49D7W |
| | 10 MHz | 829 ~ 844 | QPSK | 0.234 | 23.69 | 8M99G7D |
| | | | 16QAM | 0.214 | 23.3 | 8M99D7W |
| | | | 64QAM | 0.164 | 22.15 | 8M99D7W |
| | | | 256QAM | 0.076 | 18.82 | 8M99D7W |
| LTE Band 12 | 1.4 MHz | 699.7 ~ 715.3 | QPSK | 0.188 | 22.74 | 1M09G7D |
| | | | 16QAM | 0.165 | 22.18 | 1M09D7W |
| | | | 64QAM | 0.130 | 21.13 | 1M09D7W |
| | | | 256QAM | 0.067 | 18.26 | 1M08D7W |
| | 3 MHz | 700.5 ~ 714.5 | QPSK | 0.189 | 22.76 | 2M70G7D |
| | | | 16QAM | 0.167 | 22.22 | 2M70D7W |
| | | | 64QAM | 0.130 | 21.13 | 2M69D7W |
| | | | 256QAM | 0.068 | 18.32 | 2M70D7W |
| | 5 MHz | 701.5 ~ 713.5 | QPSK | 0.187 | 22.72 | 4M50G7D |
| | | | 16QAM | 0.164 | 22.14 | 4M49D7W |
| | | | 64QAM | 0.129 | 21.12 | 4M50D7W |
| | | | 256QAM | 0.067 | 18.26 | 4M48D7W |
| | 10 MHz | 704 ~ 711 | QPSK | 0.192 | 22.83 | 8M98G7D |
| | | | 16QAM | 0.167 | 22.23 | 8M99D7W |
| | | | 64QAM | 0.133 | 21.25 | 8M98D7W |
| | | | 256QAM | 0.067 | 18.24 | 8M98D7W |

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 13 | 5 MHz | 779.5 ~ 784.5 | QPSK | 0.200 | 23 | 4M50G7D |
| | | | 16QAM | 0.171 | 22.33 | 4M49D7W |
| | | | 64QAM | 0.131 | 21.16 | 4M50D7W |
| | | | 256QAM | 0.065 | 18.16 | 4M49D7W |
| | 10 MHz | 782 | QPSK | 0.202 | 23.05 | 8M96G7D |
| | | | 16QAM | 0.168 | 22.26 | 8M97D7W |
| | | | 64QAM | 0.135 | 21.29 | 8M96D7W |
| | | | 256QAM | 0.066 | 18.22 | 8M95D7W |
| LTE Band 14 | 5 MHz | 790.5 ~ 795.5 | QPSK | 0.191 | 22.81 | 4M49G7D |
| | | | 16QAM | 0.171 | 22.33 | 4M49D7W |
| | | | 64QAM | 0.131 | 21.16 | 4M50D7W |
| | | | 256QAM | 0.066 | 18.22 | 4M49D7W |
| | 10 MHz | 793 | QPSK | 0.195 | 22.89 | 8M95G7D |
| | | | 16QAM | 0.161 | 22.06 | 8M95D7W |
| | | | 64QAM | 0.133 | 21.23 | 8M96D7W |
| | | | 256QAM | 0.064 | 18.07 | 8M95D7W |
| LTE Band 17 | 5 MHz | 706.5 ~ 713.5 | QPSK | 0.179 | 22.54 | 4M49G7D |
| | | | 16QAM | 0.161 | 22.06 | 4M49D7W |
| | | | 64QAM | 0.122 | 20.86 | 4M49D7W |
| | | | 256QAM | 0.068 | 18.3 | 4M49D7W |
| | 10 MHz | 709 ~ 711 | QPSK | 0.183 | 22.63 | 8M98G7D |
| | | | 16QAM | 0.163 | 22.11 | 8M98D7W |
| | | | 64QAM | 0.124 | 20.92 | 8M98D7W |
| | | | 256QAM | 0.067 | 18.27 | 8M98D7W |
| LTE Band 26 (814 MHz ~ 824 MHz) | 1.4 MHz | 814.7 ~ 823.3 | QPSK | 0.226 | 23.55 | 1M09G7D |
| | | | 16QAM | 0.211 | 23.25 | 1M09D7W |
| | | | 64QAM | 0.164 | 22.16 | 1M09D7W |
| | | | 256QAM | 0.078 | 18.94 | 1M09D7W |
| | 3 MHz | 815.5 ~ 822.5 | QPSK | 0.230 | 23.62 | 2M70G7D |
| | | | 16QAM | 0.210 | 23.23 | 2M70D7W |
| | | | 64QAM | 0.163 | 22.13 | 2M69D7W |
| | | | 256QAM | 0.078 | 18.91 | 2M70D7W |
| | 5 MHz | 816.5 ~ 821.5 | QPSK | 0.234 | 23.7 | 4M50G7D |
| | | | 16QAM | 0.211 | 23.24 | 4M49D7W |
| | | | 64QAM | 0.164 | 22.15 | 4M50D7W |
| | | | 256QAM | 0.078 | 18.93 | 4M49D7W |
| | 10 MHz | 819 | QPSK | 0.227 | 23.56 | 8M95G7D |
| | | | 16QAM | 0.204 | 23.09 | 8M95D7W |
| | | | 64QAM | 0.157 | 21.95 | 8M96D7W |
| | | | 256QAM | 0.078 | 18.91 | 8M96D7W |

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. ERP (W) | Max. ERP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 26 (824 MHz ~ 849 MHz) | 1.4 MHz | 824.7 ~ 848.3 | QPSK | 0.225 | 23.52 | 1M09G7D |
| | | | 16QAM | 0.204 | 23.1 | 1M09D7W |
| | | | 64QAM | 0.156 | 21.94 | 1M09D7W |
| | | | 256QAM | 0.079 | 18.97 | 1M09D7W |
| | 3 MHz | 825.5 ~ 847.5 | QPSK | 0.223 | 23.49 | 2M70G7D |
| | | | 16QAM | 0.2 | 23.00 | 2M70D7W |
| | | | 64QAM | 0.16 | 22.03 | 2M69D7W |
| | | | 256QAM | 0.077 | 18.87 | 2M69D7W |
| | 5 MHz | 826.5 ~ 846.5 | QPSK | 0.232 | 23.66 | 4M50G7D |
| | | | 16QAM | 0.203 | 23.08 | 4M49D7W |
| | | | 64QAM | 0.159 | 22.01 | 4M49D7W |
| | | | 256QAM | 0.079 | 18.99 | 4M49D7W |
| | 10 MHz | 829 ~ 844 | QPSK | 0.23 | 23.62 | 9M00G7D |
| | | | 16QAM | 0.199 | 22.99 | 8M99D7W |
| | | | 64QAM | 0.157 | 21.96 | 9M00D7W |
| | | | 256QAM | 0.079 | 18.97 | 8M99D7W |
| | 15 MHz | 831.5 ~ 841.5 | QPSK | 0.234 | 23.69 | 13M5G7D |
| | | | 16QAM | 0.2 | 23.02 | 13M5D7W |
| | | | 64QAM | 0.149 | 21.72 | 13M5D7W |
| | | | 256QAM | 0.111 | 20.44 | 13M5D7W |
| LTE Band 71 | 5 MHz | 665.5 ~ 695.5 | QPSK | 0.19 | 22.78 | 4M49G7D |
| | | | 16QAM | 0.17 | 22.3 | 4M49D7W |
| | | | 64QAM | 0.124 | 20.93 | 4M50D7W |
| | | | 256QAM | 0.069 | 18.4 | 4M49D7W |
| | 10 MHz | 668 ~ 693 | QPSK | 0.183 | 22.63 | 8M98G7D |
| | | | 16QAM | 0.165 | 22.17 | 8M98D7W |
| | | | 64QAM | 0.125 | 20.96 | 8M98D7W |
| | | | 256QAM | 0.069 | 18.37 | 8M97D7W |
| | 15 MHz | 670.5 ~ 690.5 | QPSK | 0.19 | 22.78 | 13M5G7D |
| | | | 16QAM | 0.165 | 22.17 | 13M5D7W |
| | | | 64QAM | 0.129 | 21.1 | 13M4D7W |
| | | | 256QAM | 0.068 | 18.31 | 13M5D7W |
| | 20 MHz | 673 ~ 688 | QPSK | 0.196 | 22.93 | 17M9G7D |
| | | | 16QAM | 0.167 | 22.23 | 18M0D7W |
| | | | 64QAM | 0.126 | 21.02 | 18M0D7W |
| | | | 256QAM | 0.069 | 18.37 | 18M0D7W |

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 2 | 1.4 MHz | 1850.7 ~ 1909.3 | QPSK | 0.308 | 24.89 | 1M09G7D |
| | | | 16QAM | 0.28 | 24.47 | 1M09D7W |
| | | | 64QAM | 0.216 | 23.34 | 1M09D7W |
| | | | 256QAM | 0.11 | 20.43 | 1M08D7W |
| | 3 MHz | 1851.5 ~ 1908.5 | QPSK | 0.306 | 24.86 | 2M70G7D |
| | | | 16QAM | 0.272 | 24.35 | 2M70D7W |
| | | | 64QAM | 0.218 | 23.39 | 2M69D7W |
| | | | 256QAM | 0.109 | 20.38 | 2M70D7W |
| | 5 MHz | 1852.5 ~ 1907.5 | QPSK | 0.305 | 24.85 | 4M50G7D |
| | | | 16QAM | 0.288 | 24.6 | 4M49D7W |
| | | | 64QAM | 0.224 | 23.51 | 4M50D7W |
| | | | 256QAM | 0.11 | 20.4 | 4M49D7W |
| | 10 MHz | 1855 ~ 1905 | QPSK | 0.305 | 24.85 | 8M97G7D |
| | | | 16QAM | 0.28 | 24.47 | 8M97D7W |
| | | | 64QAM | 0.215 | 23.33 | 8M98D7W |
| | | | 256QAM | 0.109 | 20.37 | 8M98D7W |
| | 15 MHz | 1857.5 ~ 1902.5 | QPSK | 0.31 | 24.92 | 13M5G7D |
| | | | 16QAM | 0.27 | 24.31 | 13M5D7W |
| | | | 64QAM | 0.217 | 23.37 | 13M5D7W |
| | | | 256QAM | 0.108 | 20.34 | 13M5D7W |
| | 20 MHz | 1860 ~ 1900 | QPSK | 0.316 | 24.99 | 18M0G7D |
| | | | 16QAM | 0.275 | 24.4 | 18M0D7W |
| | | | 64QAM | 0.208 | 23.18 | 18M0D7W |
| | | | 256QAM | 0.106 | 20.27 | 18M0D7W |
| LTE Band 4 | 1.4 MHz | 1710.7 ~ 1754.3 | QPSK | 0.299 | 24.76 | 1M09G7D |
| | | | 16QAM | 0.255 | 24.07 | 1M09D7W |
| | | | 64QAM | 0.205 | 23.11 | 1M09D7W |
| | | | 256QAM | 0.1 | 19.99 | 1M08D7W |
| | 3 MHz | 1711.5 ~ 1753.5 | QPSK | 0.3 | 24.77 | 2M70G7D |
| | | | 16QAM | 0.264 | 24.22 | 2M70D7W |
| | | | 64QAM | 0.208 | 23.18 | 2M69D7W |
| | | | 256QAM | 0.099 | 19.95 | 2M70D7W |
| | 5 MHz | 1712.5 ~ 1752.5 | QPSK | 0.303 | 24.81 | 4M49G7D |
| | | | 16QAM | 0.262 | 24.18 | 4M49D7W |
| | | | 64QAM | 0.203 | 23.07 | 4M49D7W |
| | | | 256QAM | 0.098 | 19.93 | 4M49D7W |
| | 10 MHz | 1715 ~ 1750 | QPSK | 0.303 | 24.81 | 8M98G7D |
| | | | 16QAM | 0.261 | 24.17 | 8M97D7W |
| | | | 64QAM | 0.207 | 23.15 | 8M98D7W |
| | | | 256QAM | 0.099 | 19.94 | 8M97D7W |
| | 15 MHz | 1717.5 ~ 1747.5 | QPSK | 0.299 | 24.75 | 13M5G7D |
| | | | 16QAM | 0.259 | 24.13 | 13M5D7W |
| | | | 64QAM | 0.207 | 23.15 | 13M4D7W |
| | | | 256QAM | 0.097 | 19.89 | 13M5D7W |
| | 20 MHz | 1720 ~ 1745 | QPSK | 0.303 | 24.82 | 18M0G7D |
| | | | 16QAM | 0.262 | 24.18 | 18M0D7W |
| | | | 64QAM | 0.207 | 23.16 | 17M9D7W |
| | | | 256QAM | 0.102 | 20.09 | 18M0D7W |

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 7 | 5 MHz | 2502.5 ~ 2567.5 | QPSK | 0.333 | 25.23 | 4M49G7D |
| | | | 16QAM | 0.282 | 24.5 | 4M49D7W |
| | | | 64QAM | 0.213 | 23.28 | 4M50D7W |
| | | | 256QAM | 0.114 | 20.57 | 4M49D7W |
| | 10 MHz | 2505 ~ 2565 | QPSK | 0.33 | 25.19 | 8M98G7D |
| | | | 16QAM | 0.284 | 24.53 | 8M98D7W |
| | | | 64QAM | 0.218 | 23.39 | 8M98D7W |
| | | | 256QAM | 0.117 | 20.68 | 8M97D7W |
| | 15 MHz | 2507.5 ~ 2562.5 | QPSK | 0.321 | 25.06 | 13M5G7D |
| | | | 16QAM | 0.288 | 24.59 | 13M5D7W |
| | | | 64QAM | 0.212 | 23.27 | 13M4D7W |
| | | | 256QAM | 0.117 | 20.7 | 13M5D7W |
| | 20 MHz | 2510 ~ 2560 | QPSK | 0.334 | 25.24 | 17M9G7D |
| | | | 16QAM | 0.285 | 24.55 | 18M0D7W |
| | | | 64QAM | 0.21 | 23.23 | 17M9D7W |
| | | | 256QAM | 0.119 | 20.74 | 17M9D7W |
| LTE Band 25 | 1.4 MHz | 1850.7 ~ 1914.3 | QPSK | 0.32 | 25.05 | 1M09G7D |
| | | | 16QAM | 0.286 | 24.56 | 1M09D7W |
| | | | 64QAM | 0.232 | 23.66 | 1M09D7W |
| | | | 256QAM | 0.112 | 20.51 | 1M09D7W |
| | 3 MHz | 1851.5 ~ 1913.5 | QPSK | 0.316 | 25 | 2M69G7D |
| | | | 16QAM | 0.29 | 24.63 | 2M70D7W |
| | | | 64QAM | 0.231 | 23.63 | 2M69D7W |
| | | | 256QAM | 0.111 | 20.46 | 2M70D7W |
| | 5 MHz | 1852.5 ~ 1912.5 | QPSK | 0.32 | 25.05 | 4M49G7D |
| | | | 16QAM | 0.29 | 24.63 | 4M49D7W |
| | | | 64QAM | 0.223 | 23.49 | 4M49D7W |
| | | | 256QAM | 0.112 | 20.5 | 4M49D7W |
| | 10 MHz | 1855 ~ 1910 | QPSK | 0.32 | 25.05 | 8M98G7D |
| | | | 16QAM | 0.294 | 24.69 | 8M97D7W |
| | | | 64QAM | 0.234 | 23.69 | 8M98D7W |
| | | | 256QAM | 0.112 | 20.51 | 8M97D7W |
| | 15 MHz | 1857.5 ~ 1907.5 | QPSK | 0.32 | 25.05 | 13M5G7D |
| | | | 16QAM | 0.293 | 24.67 | 13M5D7W |
| | | | 64QAM | 0.225 | 23.52 | 13M5D7W |
| | | | 256QAM | 0.11 | 20.43 | 13M5D7W |
| | 20 MHz | 1860 ~ 1905 | QPSK | 0.321 | 25.07 | 17M9G7D |
| | | | 16QAM | 0.3 | 24.77 | 18M0D7W |
| | | | 64QAM | 0.232 | 23.66 | 18M0D7W |
| | | | 256QAM | 0.111 | 20.46 | 17M9D7W |

| Mode | Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|---|---|---|---|---|---|---|
| LTE Band 41 | 5 MHz | 2498.5 ~ 2687.5 | QPSK | 0.343 | 25.35 | 4M50G7D |
| | | | 16QAM | 0.296 | 24.71 | 4M49D7W |
| | | | 64QAM | 0.215 | 23.32 | 4M53D7W |
| | | | 256QAM | 0.116 | 20.63 | 4M49D7W |
| | 10 MHz | 2501 ~ 2685 | QPSK | 0.348 | 25.42 | 8M98G7D |
| | | | 16QAM | 0.288 | 24.6 | 8M98D7W |
| | | | 64QAM | 0.209 | 23.21 | 9M01D7W |
| | | | 256QAM | 0.115 | 20.6 | 8M96D7W |
| | 15 MHz | 2503.5 ~ 2682.5 | QPSK | 0.35 | 25.44 | 13M5G7D |
| | | | 16QAM | 0.284 | 24.54 | 13M5D7W |
| | | | 64QAM | 0.213 | 23.29 | 13M5D7W |
| | | | 256QAM | 0.112 | 20.5 | 13M4D7W |
| | 20 MHz | 2506 ~ 2680 | QPSK | 0.349 | 25.43 | 18M0G7D |
| | | | 16QAM | 0.286 | 24.57 | 17M9D7W |
| | | | 64QAM | 0.213 | 23.29 | 18M0D7W |
| | | | 256QAM | 0.116 | 20.64 | 17M9D7W |
| LTE Band 66 | 1.4 MHz | 1710.7 ~ 1779.3 | QPSK | 0.318 | 25.03 | 1M09G7D |
| | | | 16QAM | 0.303 | 24.82 | 1M09D7W |
| | | | 64QAM | 0.227 | 23.56 | 1M09D7W |
| | | | 256QAM | 0.109 | 20.39 | 1M09D7W |
| | 3 MHz | 1711.5 ~ 1778.5 | QPSK | 0.32 | 25.05 | 2M70G7D |
| | | | 16QAM | 0.297 | 24.73 | 2M70D7W |
| | | | 64QAM | 0.225 | 23.53 | 2M70D7W |
| | | | 256QAM | 0.11 | 20.43 | 2M70D7W |
| | 5 MHz | 1712.5 ~ 1777.5 | QPSK | 0.318 | 25.03 | 4M49G7D |
| | | | 16QAM | 0.294 | 24.69 | 4M49D7W |
| | | | 64QAM | 0.228 | 23.57 | 4M50D7W |
| | | | 256QAM | 0.114 | 20.55 | 4M49D7W |
| | 10 MHz | 1715 ~ 1775 | QPSK | 0.321 | 25.07 | 8M97G7D |
| | | | 16QAM | 0.301 | 24.79 | 8M97D7W |
| | | | 64QAM | 0.228 | 23.58 | 8M98D7W |
| | | | 256QAM | 0.113 | 20.52 | 8M97D7W |
| | 15 MHz | 1717.5 ~ 1772.5 | QPSK | 0.316 | 25 | 13M5G7D |
| | | | 16QAM | 0.305 | 24.85 | 13M5D7W |
| | | | 64QAM | 0.226 | 23.55 | 13M5D7W |
| | | | 256QAM | 0.111 | 20.47 | 13M5D7W |
| | 20 MHz | 1720 ~ 1770 | QPSK | 0.333 | 25.23 | 18M0G7D |
| | | | 16QAM | 0.305 | 24.84 | 18M0D7W |
| | | | 64QAM | 0.234 | 23.69 | 17M9D7W |
| | | | 256QAM | 0.113 | 20.53 | 18M0D7W |

2. 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.

| Antenna Type | Dipole |
|---|---|
| Antenna Connector | SMA |
| Band | Gain (dBi) |
| LTE Band 2 | 2.03 |
| LTE Band 4 | 2.03 |
| LTE Band 5 | 2.63 |
| LTE Band 7 | 2.26 |
| LTE Band 12 | 1.63 |
| LTE Band 13 | 1.63 |
| LTE Band 14 | 1.63 |
| LTE Band 17 | 1.63 |
| LTE Band 25 | 2.03 |
| LTE Band 26 | 2.63 |
| LTE Band 41 | 2.26 |
| LTE Band 66 | 2.03 |
| LTE Band 71 | 1.63 |

*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.
*The EUT support 1TX/4RX.

### 3.3 Test Mode Applicability and Tested Channel Detail

| | |
|---|---|
| Pre-Scan: | 1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition.<br>2. The EUT's MCU, PMIC, Crystal, EMMC component will with shielding case or without shielding case. The EUT's RF component will always cover in the shielding case. |
| Worst Case: | 1. X-axis/ Y-axis/ Z-axis Worst Condition: Z-axis<br>2. With shielding case or without shielding case (only MCU, PMIC, Crystal, EMMC component): without shielding case (only MCU, PMIC, Crystal, EMMC component) was chosen for final test; with shielding case was perform the radiated spurious emissions test only. |

3.3.1 LTE Band 2

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 18900(1880.00 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Peak to Average Ratio | Without shielding case | 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 |
| Bandwidth | Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 18900(1880.00 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 18607(1850.70 MHz)<br>19193(1909.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 18615(1851.50 MHz)<br>19185(1908.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 18625(1852.50 MHz)<br>19175(1907.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 18650(1855.00 MHz)<br>19150(1905.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 18675(1857.50 MHz)<br>19125(1902.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 18700(1860.00 MHz)<br>19100(1900.00 MHz) | 20 MHz | QPSK | Full RB |

### 3.3.2 LTE Band 4

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 20175(1732.50 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 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 | Without shielding case | 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 | With shielding case, Without shielding case | 20300(1745.00 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Frequency Stability | Without shielding case | 19957(1710.70 MHz)<br>20393(1754.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 19965(1711.50 MHz)<br>20385(1753.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 19975(1712.50 MHz)<br>20375(1752.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 20000(1715.00 MHz)<br>20350(1750.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 20025(1717.50 MHz)<br>20325(1747.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 20050(1720.00 MHz)<br>20300(1745.00 MHz) | 20 MHz | QPSK | Full RB |

### 3.3.3 LTE Band 5

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz | QPSK / 16QAM / 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 / 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 / 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 / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics | Without shielding case | 20525(836.50 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| Bandwidth | Without shielding case | 20407(824.70 MHz)<br>20525(836.50 MHz)<br>20643(848.30 MHz) | 1.4 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 20415(825.50 MHz)<br>20525(836.50 MHz)<br>20635(847.50 MHz) | 3 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 20425(826.50 MHz)<br>20525(836.50 MHz)<br>20625(846.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 20450(829.00 MHz)<br>20525(836.50 MHz)<br>20600(844.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Conducted Spurious Emissions | Without shielding case | 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 |
| Radiated Spurious Emissions below 1GHz | With shielding case, Without shielding case | 20525(836.50 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 20407(824.70 MHz)<br>20643(848.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 20415(825.50 MHz)<br>20635(847.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 20425(826.50 MHz)<br>20625(846.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 20450(829.00 MHz)<br>20600(844.00 MHz) | 10 MHz | QPSK | Full RB |

### 3.3.4 LTE Band 7

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 21100(2535.00 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | Without shielding case | 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 | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 21100(2535.00 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 20775(2502.50 MHz)<br>21425(2567.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 20800(2505.00 MHz)<br>21400(2565.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 20825(2507.50 MHz)<br>21375(2562.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 20850(2510.00 MHz)<br>21350(2560.00 MHz) | 20 MHz | QPSK | Full RB |

### 3.3.5 LTE Band 12

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz | QPSK / 16QAM / 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 / 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 / 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 / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics | Without shielding case | 23095(707.50 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| | | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB |
| Bandwidth | Without shielding case | 23017(699.70 MHz)<br>23095(707.50 MHz)<br>23173(715.30 MHz) | 1.4 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 23025(700.50 MHz)<br>23095(707.50 MHz)<br>23165(714.50 MHz) | 3 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 23035(701.50 MHz)<br>23095(707.50 MHz)<br>23155(713.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 23060(704.00 MHz)<br>23095(707.50 MHz)<br>23130(711.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 23095(707.50 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 23017(699.70 MHz)<br>23173(715.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 23025(700.50 MHz)<br>23165(714.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 23035(701.50 MHz)<br>23155(713.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 23060(704.00 MHz)<br>23130(711.00 MHz) | 10 MHz | QPSK | Full RB |

### 3.3.6 LTE Band 13

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 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 | Without shielding case | 23230(782.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | Without shielding case | 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 | Without shielding case | 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 | With shielding case, Without shielding case | 23230(782.00 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 23205(779.50 MHz)<br>23255(784.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 23230(782.00 MHz) | 10 MHz | QPSK | Full RB |

### 3.3.7 LTE Band 14

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 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 | Without shielding case | 23330(793.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | - | - | - | - |
| Bandwidth | Without shielding case | 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 | Without shielding case | 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 | With shielding case, Without shielding case | 23330(793.00 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 23305(790.50 MHz)<br>23355(795.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 23330(793.00 MHz) | 10 MHz | QPSK | Full RB |

3.3.8 LTE Band 17

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 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 | Without shielding case | 23790(710.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | Without shielding case | 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 | Without shielding case | 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 | With shielding case, Without shielding case | 23790(710.00 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 23755(706.50 MHz)<br>23825(713.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 23780(709.00 MHz)<br>23800(711.00 MHz) | 10 MHz | QPSK | Full RB |

### 3.3.9 LTE Band 25

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 26365(1882.50 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 26047(1850.70 MHz)<br>26365(1882.50 MHz)<br>26683(1914.30 MHz) | 1.4 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 26055(1851.50 MHz)<br>26365(1882.50 MHz)<br>26675(1913.50 MHz) | 3 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 26065(1852.50 MHz)<br>26365(1882.50 MHz)<br>26665(1912.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 26090(1855.00 MHz)<br>26365(1882.50 MHz)<br>26640(1910.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 26115(1857.50 MHz)<br>26365(1882.50 MHz)<br>26615(1907.50 MHz) | 15 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| | | 26140(1860.00 MHz)<br>26365(1882.50 MHz)<br>26590(1905.00 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Conducted Spurious Emissions | Without shielding case | 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 below 1GHz | With shielding case, Without shielding case | 26365(1882.50 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Frequency Stability | Without shielding case | 26047(1850.70 MHz)<br>26683(1914.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 26055(1851.50 MHz)<br>26675(1913.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 26065(1852.50 MHz)<br>26665(1912.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 26090(1855.00 MHz)<br>26640(1910.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 26115(1857.50 MHz)<br>26615(1907.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 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 | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 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 | Without shielding case | 26740(819.00 MHz) | 10 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | - | - | - | - |
| Bandwidth | Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 26740(819.00 MHz) | 10 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 26697(814.70 MHz)<br>26783(823.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 26705(815.50 MHz)<br>26775(822.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 26715(816.50 MHz)<br>26765(821.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 26740(819.00 MHz) | 10 MHz | QPSK | Full RB |

3.3.11 LTE Band 26 (824 MHz ~ 849 MHz)

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 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 | Without shielding case | 26915(836.50 MHz) | 15 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 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 |
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 26915(836.50 MHz) | 15 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Frequency Stability | Without shielding case | 26797(824.70 MHz)<br>27033(848.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 26805(825.50 MHz)<br>27025(847.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 26815(826.50 MHz)<br>27015(846.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 26840(829.00 MHz)<br>26990(844.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 26865(831.50 MHz)<br>26965(841.50 MHz) | 15 MHz | QPSK | Full RB |

3.3.12 LTE Band 41

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 40620(2593.00 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 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 |
| Conducted Spurious Emissions | Without shielding case | 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 | With shielding case, Without shielding case | 41490(2680.00 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 39675(2498.50 MHz)<br>41565(2687.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 39700(2501.00 MHz)<br>41540(2685.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 39725(2503.50 MHz)<br>41515(2682.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 39750(2506.00 MHz)<br>41490(2680.00 MHz) | 20 MHz | QPSK | Full RB |

3.3.13 LTE Band 66

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Equivalent Isotropically Radiated Power | Without shielding case | 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 | Without shielding case | 132322(1745.00 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 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 | Without shielding case | 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 | With shielding case, Without shielding case | 132322(1745.00 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Frequency Stability | Without shielding case | 131979(1710.70 MHz)<br>132665(1779.30 MHz) | 1.4 MHz | QPSK | Full RB |
| | | 131987(1711.50 MHz)<br>132657(1778.50 MHz) | 3 MHz | QPSK | Full RB |
| | | 131997(1712.50 MHz)<br>132647(1777.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 132022(1715.00 MHz)<br>132622(1775.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 132047(1717.50 MHz)<br>132597(1772.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 132072(1720.00 MHz)<br>132572(1770.00 MHz) | 20 MHz | QPSK | Full RB |

3.3.14 LTE Band 71

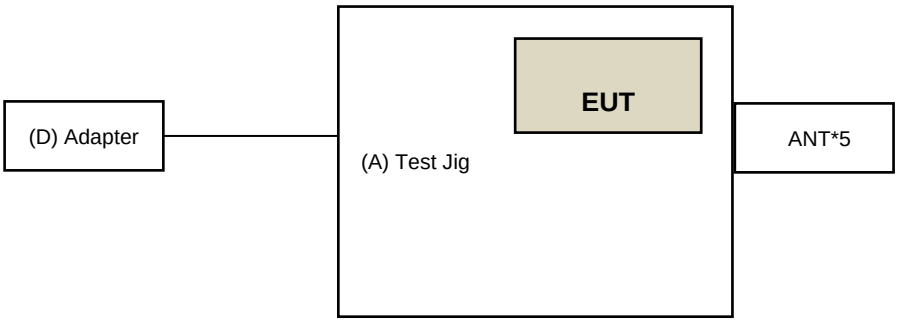
| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Effective Radiated Power | Without shielding case | 133147(665.50 MHz)<br>133297(680.50 MHz)<br>133447(695.50 MHz) | 5 MHz | QPSK / 16QAM / 64QAM / 256QAM | 1 RB<br>Half RB<br>Full 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 | Without shielding case | 133297(680.50 MHz) | 20 MHz | QPSK / 16QAM / 64QAM / 256QAM | Full RB |
| Peak to Average Ratio | Without shielding case | 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 |

| Test Item | EUT Configure Mode | Tested Channel | Channel Bandwidth | Modulation | Mode |
|---|---|---|---|---|---|
| Bandwidth | Without shielding case | 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 | Without shielding case | 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 |
| Radiated Spurious Emissions below 1GHz | With shielding case, Without shielding case | 133297(680.50 MHz) | 20 MHz | QPSK | 1 RB |
| Radiated Spurious Emissions above 1GHz | With shielding case, Without shielding case | 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 | Without shielding case | 133147(665.50 MHz)<br>133447(695.50 MHz) | 5 MHz | QPSK | Full RB |
| | | 133172(668.00 MHz)<br>133422(693.00 MHz) | 10 MHz | QPSK | Full RB |
| | | 133197(670.50 MHz)<br>133397(690.50 MHz) | 15 MHz | QPSK | Full RB |
| | | 133222(673.00 MHz)<br>133372(688.00 MHz) | 20 MHz | QPSK | Full RB |

### 3.4 Test Program Used and Operation Descriptions

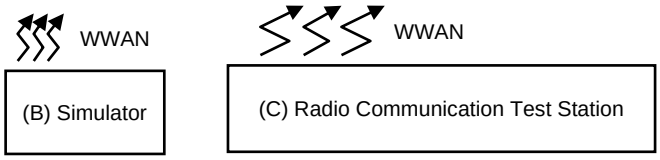
There is no need to controlling software during the test, and the EUT can be paired with the Radio Communication Analyzer to test the connection when it is powered on.

### 3.5 Connection Diagram of EUT and Peripheral Devices




**Under Table**

**Remote Site**




### 3.6 Configuration of Peripheral Devices and Cable Connections

| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|---|---|---|---|---|---|---|
| A | Test Jig | N/A | N/A | N/A | N/A | Supplied by applicant |
| B | Radio Communication Analyzer | Anritsu | MT8821C | 6201462755 | N/A | Provided by Lab |
| C | Radio Communication Test Station | Anritsu | MT8000A | 6272278595 | N/A | Provided by Lab |
| D | ADAPTER | LEADER | MU12B1120100-A1 | N/A | N/A | Supplied by applicant |

# 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 Date | Calibrated Until |
|---|---|---|---|---|
| PXA Signal Analyzer<br>Keysight | N9030B | MY57140938 | 2024/3/20 | 2025/3/19 |
| Radio Communication Analyzer<br>Anritsu | MT8821C | 6201462755 | 2024/3/13 | 2025/3/12 |
| | | 6261806803 | 2024/2/15 | 2025/2/14 |
| Software<br>BV | ADT_RF Test Software V7.6.5.4 | N/A | N/A | N/A |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/5/20 ~ 2024/7/10

## 4.2 Modulation Characteristics

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| PXA Signal Analyzer<br>Keysight | N9030B | MY57140938 | 2024/3/20 | 2025/3/19 |
| Radio Communication Analyzer<br>Anritsu | MT8821C | 6201462755 | 2024/3/13 | 2025/3/12 |
| | | 6261806803 | 2024/2/15 | 2025/2/14 |
| Software<br>BV | ADT_RF Test Software V7.6.5.4 | N/A | N/A | N/A |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/7/8 ~ 2024/7/10

## 4.3 Peak to Average Ratio

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

## 4.4 Bandwidth

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

## 4.5 Conducted Spurious Emissions

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

### 4.6 Radiated Spurious Emissions below 1GHz

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| Antenna Tower &Turn<br>Max-Full | MFA-440H | AT93021705 | N/A | N/A |
| Bi_Log Antenna<br>Schwarzbeck | VULB 9168 | 9168-472 | 2023/10/16 | 2024/10/15 |
| EXA Signal Analyzer<br>Agilent | N9010A | MY52220207 | 2023/12/28 | 2024/12/27 |
| Loop Antenna<br>Electro-Metrics | EM-6879 | 269 | 2023/9/23 | 2024/9/22 |
| Loop Antenna<br>TESEQ | HLA 6121 | 45745 | 2023/8/8 | 2024/8/7 |
| MXE EMI Receiver<br>Agilent | N9038A | MY51210203 | 2023/8/24 | 2024/8/23 |
| Preamplifier<br>EMCI | EMC 330H | 980112 | 2023/9/27 | 2024/9/26 |
| | EMC001340 | 980201 | 2023/9/27 | 2024/9/26 |
| RF Coaxial Cable<br>Woken | 8D-FB | Cable-Ch10-01 | 2023/9/27 | 2024/9/26 |
| Software<br>BV ADT | ADT_Radiated_<br>V7.6.15.9.5 | N/A | N/A | N/A |
| Turn Table<br>Max-Full | MFT-201SS | N/A | N/A | N/A |
| Turn Table Controller<br>Max-Full | MG-7802 | N/A | N/A | N/A |

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2024/6/6

### 4.7 Radiated Spurious Emissions above 1GHz

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| Antenna Tower &Turn<br>Max-Full | MFA-440H | AT93021705 | N/A | N/A |
| Boresight antenna tower fixture<br>BV | BAF-02 | 7 | N/A | N/A |
| EXA Signal Analyzer<br>Agilent | N9010A | MY52220207 | 2023/12/28 | 2024/12/27 |
| Horn Antenna<br>Schwarzbeck | BBHA 9120D | 9120D-969 | 2023/11/12 | 2024/11/11 |
| | BBHA 9170 | 148 | 2023/11/12 | 2024/11/11 |
| MXE EMI Receiver<br>Agilent | N9038A | MY51210203 | 2023/8/24 | 2024/8/23 |
| Preamplifier<br>EMCI | EMC 012645 | 980115 | 2023/9/27 | 2024/9/26 |
| | EMC 184045 | 980116 | 2023/9/27 | 2024/9/26 |
| RF Coaxial Cable<br>EMCI | EMC102-KM-KM-600 | 150928 | 2023/7/8 | 2024/7/7 |
| | EMC102-KM-KM-3000 | 150929 | 2023/7/8 | 2024/7/7 |
| | EMC104-SM-SM-8000+3000 | 171005 | 2023/9/27 | 2024/9/26 |
| RF Coaxial Cable<br>HUBER+SUHNER | SUCOFLEX 104 | EMC104-SM-SM-1000(140807) | 2023/9/27 | 2024/9/26 |
| Software<br>BV ADT | ADT_Radiated_V7.6.15.9.5 | N/A | N/A | N/A |
| Turn Table<br>Max-Full | MFT-201SS | N/A | N/A | N/A |
| Turn Table Controller<br>Max-Full | MG-7802 | N/A | N/A | N/A |

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2024/5/29 ~ 2024/6/24

### 4.8 Frequency Stability

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| 3-channel DC power supply<br>JIN YIH Technology | ODP3033 | ODP30332128138 | N/A | N/A |
| Digital Multimeter<br>Fluke | 8050A | 4660081 | 2024/6/14 | 2025/6/13 |
| PXA Signal Analyzer<br>Keysight | N9030B | MY57140938 | 2024/3/20 | 2025/3/19 |
| Radio Communication Analyzer<br>Anritsu | MT8821C | 6261806803 | 2024/2/15 | 2025/2/14 |
| Software<br>BV | ADT_RF Test Software V7.6.5.4 | N/A | N/A | N/A |
| Temperature & Humidity Chamber<br>Terchy | HRM-120RF | 931022 | 2023/12/19 | 2024/12/18 |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/7/17

# 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 7, LTE Band 41:**

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

## 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 7, 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 that 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.

## 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.

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 grater 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 7, 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.

## 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 grater 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 7, 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.

## 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 41, 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:**

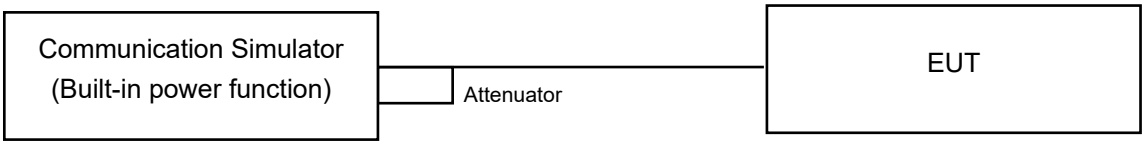
The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

# 6 Test Arrangements

## 6.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

### 6.1.1 Test Setup

**Conducted Power Measurement:**




### 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.

**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:

$EIRP = P_{Meas} + G_T$

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

where

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

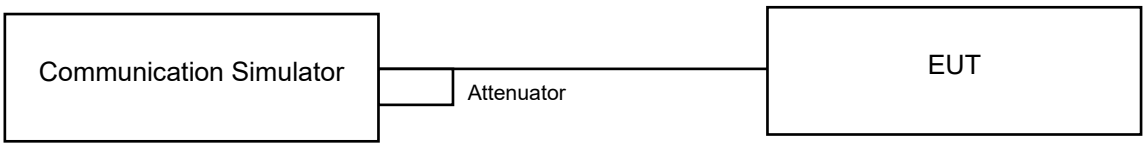
(expressed in the same units as $P_{Meas}$, e.g., dBm or dBW)

$P_{Meas}$ 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



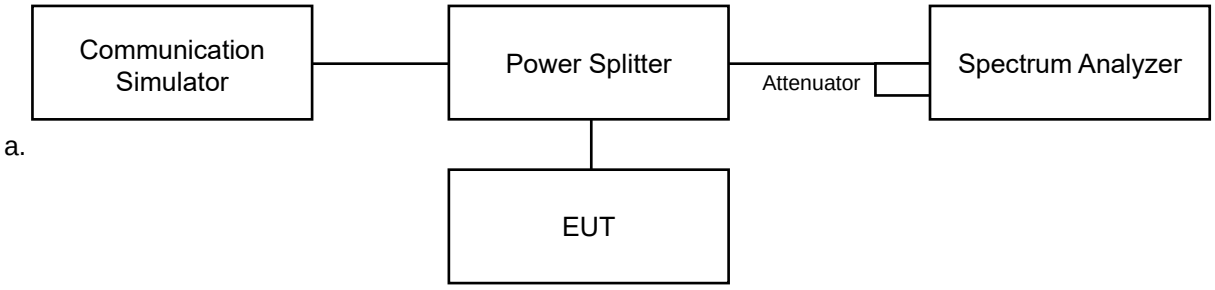

### 6.2.2 Test Procedure

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

a.

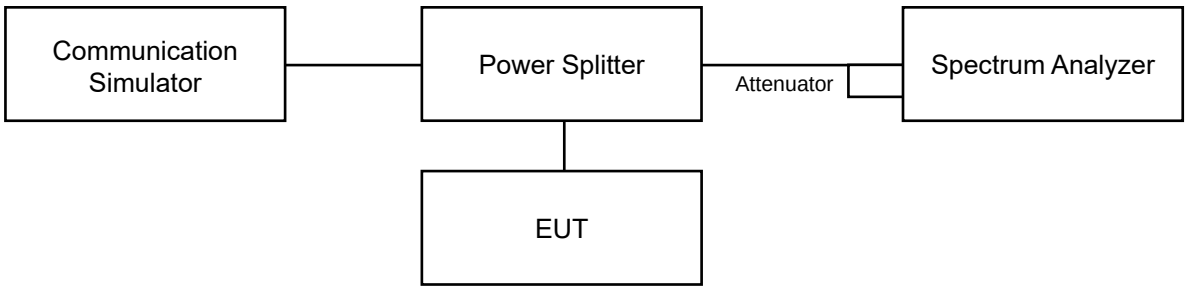



### 6.3.2 Test Procedure

a. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
b. Set the number of counts to a value that stabilizes the measured CCDF curve;
c. 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.

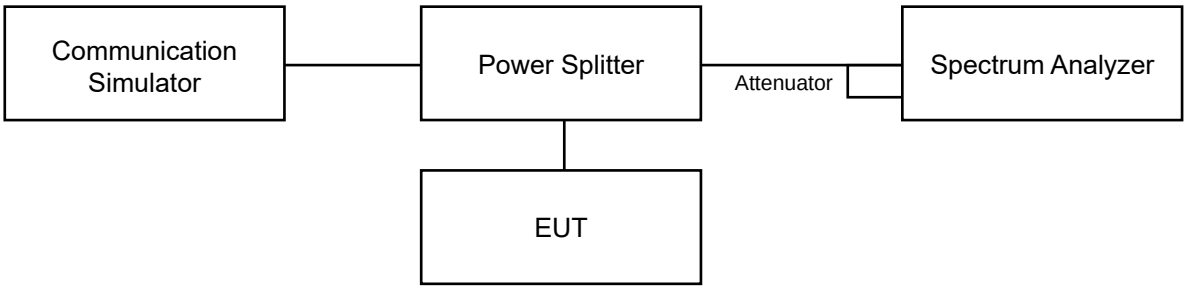
a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × 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 ≥ 3 × 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 reference value by either of the following:
g. 1) 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).
h. 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
i. 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.
j. If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
k. 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. The spectral envelope can cross the "−X dB amplitude" at multiple points. The lowest or highest frequency shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the "−X dB amplitude."
l. 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).

## 6.5 Conducted Spurious Emissions

### 6.5.1 Test Setup




### 6.5.2 Test Procedure

a. Measurement refer to ANSI C63.26 section 5.7.
b. All measurements were done at 3 channels: low, middle and high operational frequency range.
c. Measuring frequency range is from 9 kHz up to the tenth harmonic of the hightest fundamental frequency or to 40 GHz, whichever is lower. 20 dB attenuation pad is connected with spectrum.
d. The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
e. The fundamental frequency below 1 GHz, the spectrum set RBW ≥ 100 kHz, VBW ≥ 3 x RBW, Detector = Average.
f. Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
g. For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
h. e.g. 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* log(1000/100). To compensate for this integration before comparison to the limit, the limit line was reduced by 10 dB accordingly.
i. Record the maximum power value test plot.

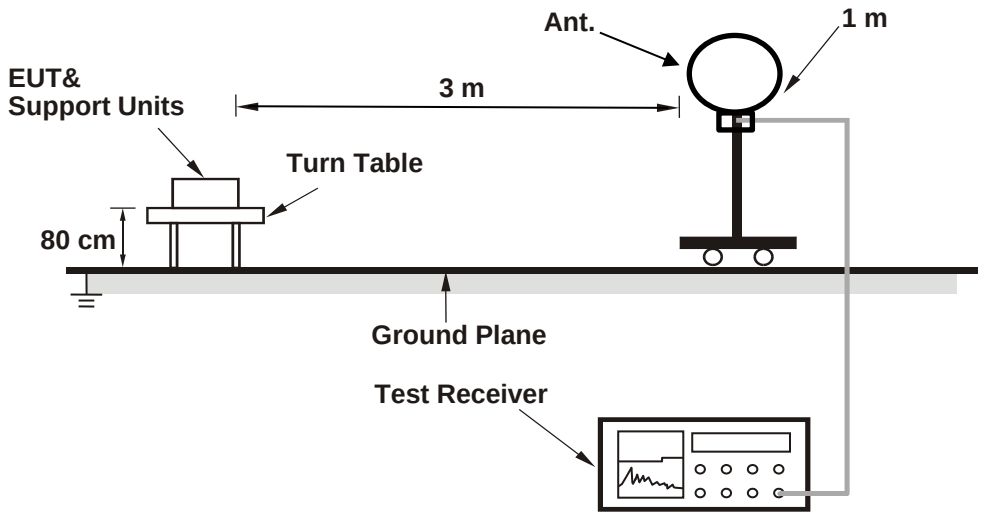
For Emission Mask:

a. Measurement refer to ANSI C63.26 section 5.7.
b. All measurements were done at 2 channels: low and high operational frequency range.
c. 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.
d. For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
e. e.g. 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* log(1000/100). To compensate for this integration before comparison to the limit, the limit line was reduced by 10 dB accordingly.
f. Record the maximum power value test plot.

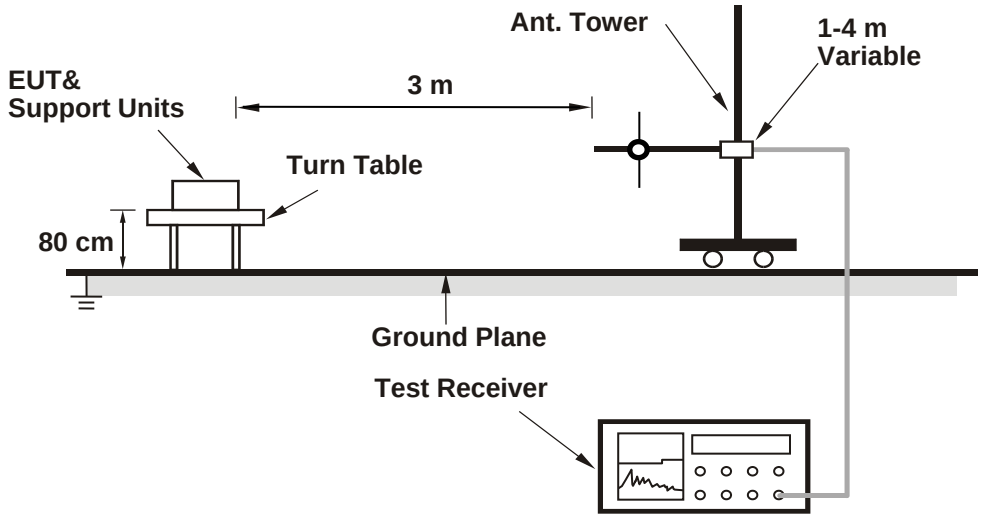
## 6.6 Radiated Spurious Emissions below 1GHz

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 by emulator 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 (dBµV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

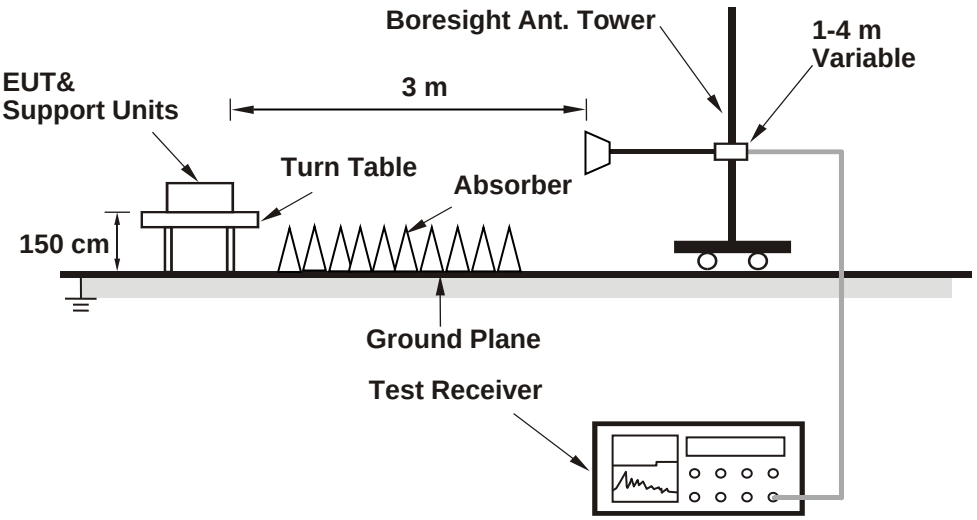
Note:

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 by emulator to set data modulation and maximum power using WWAN technology.

a. 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.

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 (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

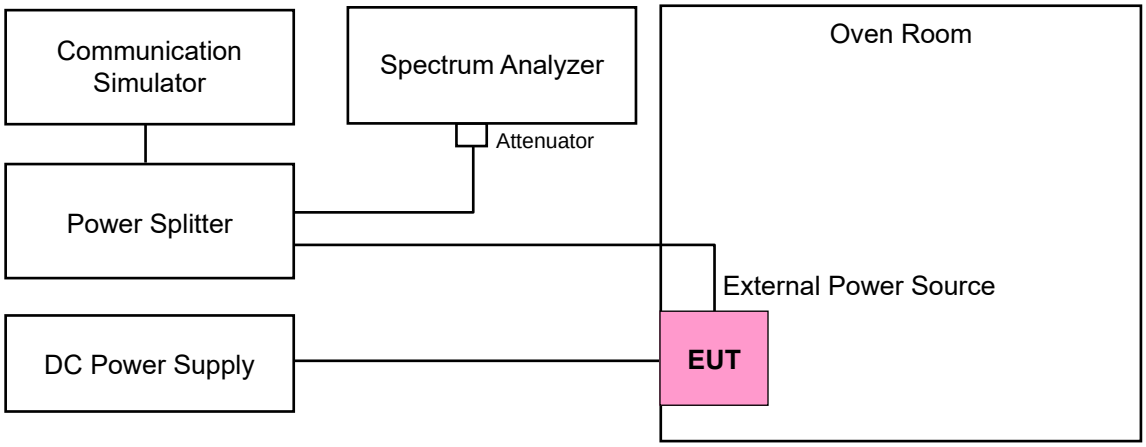
f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note:

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

## 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.

a. 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.
b. 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.
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ 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

| Input Power: | 4.7 Vdc | Environmental Conditions: | 22°C, 68% RH | Tested By: | Noah Chang |
|---|---|---|---|---|---|

### 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 | 22.77 | 22.70 | 22.74 |
| | 1 | 2 | 22.75 | 22.73 | 22.86 |
| | 1 | 5 | 22.64 | 22.85 | 22.68 |
| | 3 | 0 | 22.71 | 22.76 | 22.70 |
| | 3 | 1 | 22.83 | 22.80 | 22.71 |
| | 3 | 3 | 22.72 | 22.85 | 22.72 |
| | 6 | 0 | 21.96 | 21.67 | 21.81 |
| 16QAM | 1 | 0 | 22.01 | 22.36 | 22.03 |
| | 1 | 2 | 22.10 | 22.40 | 22.16 |
| | 1 | 5 | 22.13 | 22.44 | 22.37 |
| | 3 | 0 | 22.05 | 22.05 | 22.03 |
| | 3 | 1 | 21.93 | 21.98 | 21.97 |
| | 3 | 3 | 21.83 | 22.21 | 21.93 |
| | 6 | 0 | 21.02 | 20.80 | 21.02 |
| 64QAM | 1 | 0 | 20.99 | 21.10 | 21.12 |
| | 1 | 2 | 21.24 | 21.31 | 21.26 |
| | 1 | 5 | 20.95 | 21.20 | 21.06 |
| | 3 | 0 | 21.10 | 21.07 | 21.16 |
| | 3 | 1 | 21.12 | 21.20 | 21.01 |
| | 3 | 3 | 21.14 | 21.15 | 21.16 |
| | 6 | 0 | 19.97 | 19.89 | 19.98 |
| 256QAM | 1 | 0 | 18.21 | 18.09 | 18.27 |
| | 1 | 2 | 18.11 | 18.28 | 18.18 |
| | 1 | 5 | 18.29 | 18.29 | 18.05 |
| | 3 | 0 | 18.40 | 18.11 | 18.09 |
| | 3 | 1 | 18.07 | 18.20 | 17.97 |
| | 3 | 3 | 18.39 | 18.06 | 18.13 |
| | 6 | 0 | 18.06 | 18.02 | 17.93 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.67 | 23.7 | 22.86 | 24.89 | 33.01 |
| 16QAM | 20.8 | 22.83 | 22.44 | 24.47 | 33.01 |
| 64QAM | 19.89 | 21.92 | 21.31 | 23.34 | 33.01 |
| 256QAM | 17.93 | 19.96 | 18.4 | 20.43 | 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 | 22.65 | 22.71 | 22.58 |
| | 1 | 7 | 22.83 | 22.67 | 22.73 |
| | 1 | 14 | 22.60 | 22.77 | 22.66 |
| | 8 | 0 | 21.80 | 21.97 | 21.65 |
| | 8 | 3 | 21.75 | 21.96 | 21.75 |
| | 8 | 7 | 22.04 | 21.95 | 21.74 |
| | 15 | 0 | 21.66 | 21.82 | 21.67 |
| 16QAM | 1 | 0 | 21.97 | 22.16 | 22.05 |
| | 1 | 7 | 22.20 | 22.07 | 22.17 |
| | 1 | 14 | 22.04 | 22.32 | 22.05 |
| | 8 | 0 | 20.99 | 21.11 | 21.16 |
| | 8 | 3 | 21.16 | 21.14 | 21.02 |
| | 8 | 7 | 20.99 | 21.00 | 21.06 |
| | 15 | 0 | 20.93 | 20.83 | 21.02 |
| 64QAM | 1 | 0 | 21.11 | 21.05 | 21.23 |
| | 1 | 7 | 21.16 | 21.14 | 21.23 |
| | 1 | 14 | 21.36 | 20.89 | 21.08 |
| | 8 | 0 | 20.20 | 19.86 | 20.10 |
| | 8 | 3 | 20.07 | 19.90 | 19.94 |
| | 8 | 7 | 20.02 | 20.10 | 20.13 |
| | 15 | 0 | 19.93 | 20.05 | 20.04 |
| 256QAM | 1 | 0 | 17.80 | 17.99 | 18.23 |
| | 1 | 7 | 18.28 | 18.09 | 18.35 |
| | 1 | 14 | 18.02 | 18.16 | 18.17 |
| | 8 | 0 | 18.06 | 17.93 | 17.82 |
| | 8 | 3 | 17.88 | 17.87 | 17.95 |
| | 8 | 7 | 17.95 | 18.02 | 17.89 |
| | 15 | 0 | 17.89 | 17.92 | 17.87 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.65 | 23.68 | 22.83 | 24.86 | 33.01 |
| 16QAM | 20.83 | 22.86 | 22.32 | 24.35 | 33.01 |
| 64QAM | 19.86 | 21.89 | 21.36 | 23.39 | 33.01 |
| 256QAM | 17.8 | 19.83 | 18.35 | 20.38 | 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 | 22.51 | 22.78 | 22.64 |
| | 1 | 12 | 22.70 | 22.78 | 22.82 |
| | 1 | 24 | 22.68 | 22.75 | 22.67 |
| | 12 | 0 | 22.06 | 21.96 | 21.85 |
| | 12 | 6 | 21.92 | 21.89 | 21.82 |
| | 12 | 13 | 21.94 | 22.01 | 21.61 |
| | 25 | 0 | 22.01 | 21.96 | 21.75 |
| 16QAM | 1 | 0 | 22.24 | 22.57 | 22.37 |
| | 1 | 12 | 22.19 | 22.41 | 22.16 |
| | 1 | 24 | 22.22 | 22.25 | 22.14 |
| | 12 | 0 | 21.22 | 21.03 | 21.10 |
| | 12 | 6 | 21.15 | 21.11 | 21.12 |
| | 12 | 13 | 21.02 | 21.08 | 20.98 |
| | 25 | 0 | 20.94 | 21.07 | 21.02 |
| 64QAM | 1 | 0 | 21.48 | 21.19 | 21.29 |
| | 1 | 12 | 21.37 | 21.16 | 21.10 |
| | 1 | 24 | 21.23 | 21.21 | 21.19 |
| | 12 | 0 | 20.07 | 20.03 | 20.06 |
| | 12 | 6 | 20.15 | 20.04 | 20.03 |
| | 12 | 13 | 19.91 | 20.13 | 19.88 |
| | 25 | 0 | 19.89 | 19.92 | 20.01 |
| 256QAM | 1 | 0 | 18.33 | 18.37 | 18.32 |
| | 1 | 12 | 18.01 | 18.29 | 18.04 |
| | 1 | 24 | 17.97 | 18.25 | 18.20 |
| | 12 | 0 | 17.92 | 18.03 | 17.88 |
| | 12 | 6 | 17.93 | 17.92 | 17.96 |
| | 12 | 13 | 17.97 | 17.91 | 17.89 |
| | 25 | 0 | 17.86 | 17.93 | 17.90 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.61 | 23.64 | 22.82 | 24.85 | 33.01 |
| 16QAM | 20.94 | 22.97 | 22.57 | 24.6 | 33.01 |
| 64QAM | 19.88 | 21.91 | 21.48 | 23.51 | 33.01 |
| 256QAM | 17.86 | 19.89 | 18.37 | 20.4 | 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 | 22.71 | 22.82 | 22.76 |
| | 1 | 24 | 22.76 | 22.75 | 22.66 |
| | 1 | 49 | 22.78 | 22.76 | 22.63 |
| | 25 | 0 | 21.93 | 22.00 | 21.75 |
| | 25 | 12 | 22.00 | 22.02 | 21.75 |
| | 25 | 25 | 21.92 | 21.77 | 21.77 |
| | 50 | 0 | 22.07 | 21.98 | 21.80 |
| 16QAM | 1 | 0 | 22.06 | 22.44 | 22.01 |
| | 1 | 24 | 22.12 | 22.34 | 21.94 |
| | 1 | 49 | 22.29 | 22.01 | 21.85 |
| | 25 | 0 | 20.99 | 20.89 | 20.95 |
| | 25 | 12 | 21.10 | 21.03 | 20.97 |
| | 25 | 25 | 21.07 | 20.98 | 20.92 |
| | 50 | 0 | 20.96 | 20.90 | 20.96 |
| 64QAM | 1 | 0 | 21.23 | 21.28 | 21.25 |
| | 1 | 24 | 21.30 | 21.03 | 21.10 |
| | 1 | 49 | 21.09 | 21.22 | 21.05 |
| | 25 | 0 | 20.09 | 20.05 | 20.04 |
| | 25 | 12 | 19.95 | 19.92 | 19.94 |
| | 25 | 25 | 20.05 | 19.89 | 19.97 |
| | 50 | 0 | 19.93 | 19.96 | 19.99 |
| 256QAM | 1 | 0 | 18.34 | 18.26 | 18.29 |
| | 1 | 24 | 18.12 | 18.26 | 18.12 |
| | 1 | 49 | 18.31 | 18.09 | 18.10 |
| | 25 | 0 | 17.85 | 17.95 | 18.11 |
| | 25 | 12 | 17.96 | 17.93 | 18.02 |
| | 25 | 25 | 17.80 | 17.81 | 17.86 |
| | 50 | 0 | 17.89 | 17.83 | 17.82 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.75 | 23.78 | 22.82 | 24.85 | 33.01 |
| 16QAM | 20.89 | 22.92 | 22.44 | 24.47 | 33.01 |
| 64QAM | 19.89 | 21.92 | 21.3 | 23.33 | 33.01 |
| 256QAM | 17.8 | 19.83 | 18.34 | 20.37 | 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 | 22.65 | 22.61 | 22.58 |
| | 1 | 37 | 22.89 | 22.70 | 22.64 |
| | 1 | 74 | 22.60 | 22.75 | 22.65 |
| | 36 | 0 | 22.00 | 21.92 | 21.89 |
| | 36 | 19 | 21.99 | 21.89 | 21.80 |
| | 36 | 39 | 22.04 | 21.88 | 21.87 |
| | 75 | 0 | 21.92 | 21.92 | 21.67 |
| 16QAM | 1 | 0 | 22.15 | 22.28 | 21.97 |
| | 1 | 37 | 22.19 | 22.16 | 22.27 |
| | 1 | 74 | 22.10 | 22.10 | 22.15 |
| | 36 | 0 | 20.97 | 20.93 | 21.01 |
| | 36 | 19 | 21.11 | 21.09 | 20.97 |
| | 36 | 39 | 20.92 | 21.02 | 21.06 |
| | 75 | 0 | 20.91 | 20.93 | 20.88 |
| 64QAM | 1 | 0 | 21.34 | 21.03 | 21.07 |
| | 1 | 37 | 20.98 | 21.09 | 21.06 |
| | 1 | 74 | 21.21 | 21.02 | 21.08 |
| | 36 | 0 | 19.94 | 19.96 | 20.01 |
| | 36 | 19 | 20.08 | 19.92 | 20.05 |
| | 36 | 39 | 19.97 | 20.00 | 19.93 |
| | 75 | 0 | 19.94 | 19.95 | 19.88 |
| 256QAM | 1 | 0 | 18.13 | 18.14 | 17.95 |
| | 1 | 37 | 18.11 | 18.31 | 18.10 |
| | 1 | 74 | 17.88 | 18.15 | 18.20 |
| | 36 | 0 | 17.95 | 17.98 | 17.95 |
| | 36 | 19 | 17.83 | 17.82 | 17.96 |
| | 36 | 39 | 17.79 | 17.98 | 17.86 |
| | 75 | 0 | 17.91 | 17.86 | 17.88 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.67 | 23.7 | 22.89 | 24.92 | 33.01 |
| 16QAM | 20.88 | 22.91 | 22.28 | 24.31 | 33.01 |
| 64QAM | 19.88 | 21.91 | 21.34 | 23.37 | 33.01 |
| 256QAM | 17.79 | 19.82 | 18.31 | 20.34 | 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 | 22.84 | 22.96 | 22.71 |
| | 1 | 50 | 22.88 | 22.75 | 22.80 |
| | 1 | 99 | 22.56 | 22.68 | 22.76 |
| | 50 | 0 | 22.02 | 22.04 | 21.85 |
| | 50 | 25 | 22.06 | 22.03 | 21.78 |
| | 50 | 50 | 22.10 | 21.74 | 21.71 |
| | 100 | 0 | 22.01 | 21.81 | 21.73 |
| 16QAM | 1 | 0 | 22.18 | 22.34 | 22.07 |
| | 1 | 50 | 22.12 | 22.37 | 22.31 |
| | 1 | 99 | 22.31 | 22.22 | 21.87 |
| | 50 | 0 | 21.05 | 20.98 | 21.02 |
| | 50 | 25 | 21.03 | 21.02 | 20.92 |
| | 50 | 50 | 21.00 | 20.97 | 20.98 |
| | 100 | 0 | 20.99 | 20.84 | 20.94 |
| 64QAM | 1 | 0 | 20.88 | 21.15 | 21.10 |
| | 1 | 50 | 21.08 | 21.02 | 20.99 |
| | 1 | 99 | 21.15 | 20.88 | 20.97 |
| | 50 | 0 | 20.01 | 19.88 | 19.97 |
| | 50 | 25 | 20.06 | 19.99 | 19.91 |
| | 50 | 50 | 20.00 | 19.91 | 19.94 |
| | 100 | 0 | 19.93 | 19.86 | 19.88 |
| 256QAM | 1 | 0 | 18.07 | 18.04 | 18.07 |
| | 1 | 50 | 18.19 | 18.05 | 18.04 |
| | 1 | 99 | 18.24 | 17.96 | 17.99 |
| | 50 | 0 | 17.86 | 17.86 | 17.90 |
| | 50 | 25 | 18.01 | 17.92 | 18.01 |
| | 50 | 50 | 17.99 | 17.87 | 17.86 |
| | 100 | 0 | 17.84 | 17.79 | 17.78 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.71 | 23.74 | 22.96 | 24.99 | 33.01 |
| 16QAM | 20.84 | 22.87 | 22.37 | 24.4 | 33.01 |
| 64QAM | 19.86 | 21.89 | 21.15 | 23.18 | 33.01 |
| 256QAM | 17.78 | 19.81 | 18.24 | 20.27 | 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 | 22.59 | 22.65 | 22.59 |
| | 1 | 2 | 22.54 | 22.73 | 22.37 |
| | 1 | 5 | 22.24 | 22.35 | 22.27 |
| | 3 | 0 | 21.79 | 21.72 | 21.85 |
| | 3 | 1 | 21.72 | 21.84 | 21.60 |
| | 3 | 3 | 21.79 | 21.63 | 21.38 |
| | 6 | 0 | 21.60 | 21.77 | 21.57 |
| 16QAM | 1 | 0 | 21.74 | 21.91 | 21.76 |
| | 1 | 2 | 22.04 | 22.01 | 21.91 |
| | 1 | 5 | 21.95 | 21.94 | 22.01 |
| | 3 | 0 | 20.59 | 20.84 | 20.68 |
| | 3 | 1 | 20.88 | 20.94 | 20.90 |
| | 3 | 3 | 20.84 | 20.93 | 20.60 |
| | 6 | 0 | 20.81 | 20.84 | 20.57 |
| 64QAM | 1 | 0 | 20.97 | 21.04 | 20.92 |
| | 1 | 2 | 20.84 | 21.08 | 20.92 |
| | 1 | 5 | 21.04 | 20.95 | 20.88 |
| | 3 | 0 | 19.62 | 19.78 | 19.86 |
| | 3 | 1 | 19.77 | 19.97 | 19.63 |
| | 3 | 3 | 19.59 | 19.76 | 19.69 |
| | 6 | 0 | 19.49 | 19.86 | 19.67 |
| 256QAM | 1 | 0 | 17.74 | 17.96 | 17.80 |
| | 1 | 2 | 17.56 | 17.86 | 17.64 |
| | 1 | 5 | 17.49 | 17.73 | 17.49 |
| | 3 | 0 | 17.63 | 17.76 | 17.54 |
| | 3 | 1 | 17.71 | 17.77 | 17.64 |
| | 3 | 3 | 17.45 | 17.69 | 17.57 |
| | 6 | 0 | 17.41 | 17.77 | 17.60 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.38 | 23.41 | 22.73 | 24.76 | 30.00 |
| 16QAM | 20.57 | 22.6 | 22.04 | 24.07 | 30.00 |
| 64QAM | 19.49 | 21.52 | 21.08 | 23.11 | 30.00 |
| 256QAM | 17.41 | 19.44 | 17.96 | 19.99 | 30.00 |

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 | 22.44 | 22.74 | 22.54 |
| | 1 | 7 | 22.38 | 22.60 | 22.47 |
| | 1 | 14 | 22.19 | 22.51 | 22.20 |
| | 8 | 0 | 21.89 | 21.88 | 21.44 |
| | 8 | 3 | 21.81 | 21.80 | 21.59 |
| | 8 | 7 | 21.52 | 21.90 | 21.60 |
| | 15 | 0 | 21.62 | 21.81 | 21.53 |
| 16QAM | 1 | 0 | 21.97 | 21.89 | 21.74 |
| | 1 | 7 | 21.79 | 21.98 | 22.19 |
| | 1 | 14 | 21.94 | 22.07 | 21.76 |
| | 8 | 0 | 20.77 | 20.74 | 20.60 |
| | 8 | 3 | 20.69 | 20.78 | 20.66 |
| | 8 | 7 | 20.73 | 20.93 | 20.72 |
| | 15 | 0 | 20.85 | 20.73 | 20.49 |
| 64QAM | 1 | 0 | 20.95 | 21.08 | 20.89 |
| | 1 | 7 | 21.09 | 21.05 | 21.01 |
| | 1 | 14 | 20.80 | 21.15 | 20.97 |
| | 8 | 0 | 19.59 | 19.72 | 19.54 |
| | 8 | 3 | 19.63 | 19.87 | 19.51 |
| | 8 | 7 | 19.71 | 19.81 | 19.64 |
| | 15 | 0 | 19.64 | 19.64 | 19.54 |
| 256QAM | 1 | 0 | 17.86 | 17.83 | 17.92 |
| | 1 | 7 | 17.77 | 17.81 | 17.44 |
| | 1 | 14 | 17.77 | 17.68 | 17.83 |
| | 8 | 0 | 17.35 | 17.76 | 17.68 |
| | 8 | 3 | 17.58 | 17.70 | 17.65 |
| | 8 | 7 | 17.51 | 17.78 | 17.61 |
| | 15 | 0 | 17.77 | 17.78 | 17.32 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.44 | 23.47 | 22.74 | 24.77 | 30.00 |
| 16QAM | 20.49 | 22.52 | 22.19 | 24.22 | 30.00 |
| 64QAM | 19.51 | 21.54 | 21.15 | 23.18 | 30.00 |
| 256QAM | 17.32 | 19.35 | 17.92 | 19.95 | 30.00 |

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 | 22.43 | 22.78 | 22.57 |
| | 1 | 12 | 22.29 | 22.70 | 22.42 |
| | 1 | 24 | 22.42 | 22.44 | 22.41 |
| | 12 | 0 | 21.52 | 21.79 | 21.69 |
| | 12 | 6 | 21.46 | 21.60 | 21.51 |
| | 12 | 13 | 21.47 | 21.79 | 21.72 |
| | 25 | 0 | 21.57 | 21.78 | 21.59 |
| 16QAM | 1 | 0 | 21.91 | 22.07 | 21.80 |
| | 1 | 12 | 21.98 | 22.15 | 22.06 |
| | 1 | 24 | 21.72 | 22.08 | 21.81 |
| | 12 | 0 | 20.44 | 20.86 | 20.77 |
| | 12 | 6 | 20.79 | 20.93 | 20.60 |
| | 12 | 13 | 20.80 | 20.81 | 20.84 |
| | 25 | 0 | 20.53 | 20.82 | 20.48 |
| 64QAM | 1 | 0 | 20.93 | 21.02 | 20.90 |
| | 1 | 12 | 20.89 | 21.04 | 20.81 |
| | 1 | 24 | 20.84 | 20.99 | 20.77 |
| | 12 | 0 | 19.60 | 19.87 | 19.55 |
| | 12 | 6 | 19.88 | 19.94 | 19.72 |
| | 12 | 13 | 19.62 | 19.85 | 19.55 |
| | 25 | 0 | 19.75 | 19.81 | 19.63 |
| 256QAM | 1 | 0 | 17.63 | 17.80 | 17.86 |
| | 1 | 12 | 17.61 | 17.81 | 17.78 |
| | 1 | 24 | 17.74 | 17.63 | 17.67 |
| | 12 | 0 | 17.70 | 17.84 | 17.83 |
| | 12 | 6 | 17.90 | 17.64 | 17.74 |
| | 12 | 13 | 17.63 | 17.70 | 17.45 |
| | 25 | 0 | 17.81 | 17.62 | 17.60 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.46 | 23.49 | 22.78 | 24.81 | 30.00 |
| 16QAM | 20.44 | 22.47 | 22.15 | 24.18 | 30.00 |
| 64QAM | 19.55 | 21.58 | 21.04 | 23.07 | 30.00 |
| 256QAM | 17.45 | 19.48 | 17.9 | 19.93 | 30.00 |

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 | 22.49 | 22.78 | 22.63 |
| | 1 | 24 | 22.35 | 22.46 | 22.61 |
| | 1 | 49 | 22.31 | 22.42 | 22.41 |
| | 25 | 0 | 21.89 | 21.82 | 21.69 |
| | 25 | 12 | 21.53 | 21.66 | 21.68 |
| | 25 | 25 | 21.86 | 21.75 | 21.40 |
| | 50 | 0 | 21.68 | 21.73 | 21.89 |
| 16QAM | 1 | 0 | 21.87 | 22.14 | 21.90 |
| | 1 | 24 | 21.92 | 22.02 | 21.87 |
| | 1 | 49 | 21.96 | 22.00 | 21.80 |
| | 25 | 0 | 20.82 | 20.87 | 20.83 |
| | 25 | 12 | 20.61 | 20.86 | 20.84 |
| | 25 | 25 | 20.68 | 20.88 | 20.84 |
| | 50 | 0 | 20.60 | 20.72 | 20.76 |
| 64QAM | 1 | 0 | 20.87 | 21.06 | 20.80 |
| | 1 | 24 | 20.84 | 20.92 | 20.94 |
| | 1 | 49 | 20.67 | 21.08 | 21.12 |
| | 25 | 0 | 19.79 | 19.77 | 19.64 |
| | 25 | 12 | 19.58 | 19.74 | 19.41 |
| | 25 | 25 | 19.63 | 19.78 | 19.63 |
| | 50 | 0 | 19.64 | 19.88 | 19.57 |
| 256QAM | 1 | 0 | 17.56 | 17.91 | 17.69 |
| | 1 | 24 | 17.57 | 17.80 | 17.55 |
| | 1 | 49 | 17.48 | 17.65 | 17.75 |
| | 25 | 0 | 17.75 | 17.67 | 17.76 |
| | 25 | 12 | 17.64 | 17.73 | 17.60 |
| | 25 | 25 | 17.53 | 17.69 | 17.29 |
| | 50 | 0 | 17.52 | 17.58 | 17.83 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.4 | 23.43 | 22.78 | 24.81 | 30.00 |
| 16QAM | 20.6 | 22.63 | 22.14 | 24.17 | 30.00 |
| 64QAM | 19.41 | 21.44 | 21.12 | 23.15 | 30.00 |
| 256QAM | 17.29 | 19.32 | 17.91 | 19.94 | 30.00 |

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 | 22.53 | 22.72 | 22.48 |
| | 1 | 37 | 22.48 | 22.48 | 22.58 |
| | 1 | 74 | 22.43 | 22.39 | 22.36 |
| | 36 | 0 | 21.60 | 21.87 | 21.62 |
| | 36 | 19 | 21.52 | 21.82 | 21.72 |
| | 36 | 39 | 21.54 | 21.74 | 21.58 |
| | 75 | 0 | 21.73 | 21.86 | 21.75 |
| 16QAM | 1 | 0 | 21.84 | 22.03 | 21.60 |
| | 1 | 37 | 21.92 | 22.03 | 22.10 |
| | 1 | 74 | 21.85 | 21.96 | 21.81 |
| | 36 | 0 | 20.47 | 20.80 | 20.78 |
| | 36 | 19 | 20.63 | 20.89 | 20.65 |
| | 36 | 39 | 20.71 | 20.81 | 20.74 |
| | 75 | 0 | 20.80 | 20.76 | 20.86 |
| 64QAM | 1 | 0 | 20.87 | 21.09 | 20.99 |
| | 1 | 37 | 21.02 | 21.00 | 21.12 |
| | 1 | 74 | 20.81 | 21.05 | 20.59 |
| | 36 | 0 | 19.49 | 19.86 | 19.64 |
| | 36 | 19 | 19.71 | 19.72 | 19.86 |
| | 36 | 39 | 19.63 | 19.68 | 19.50 |
| | 75 | 0 | 19.78 | 19.76 | 19.75 |
| 256QAM | 1 | 0 | 17.69 | 17.86 | 17.69 |
| | 1 | 37 | 17.60 | 17.70 | 17.46 |
| | 1 | 74 | 17.62 | 17.72 | 17.67 |
| | 36 | 0 | 17.46 | 17.84 | 17.75 |
| | 36 | 19 | 17.64 | 17.83 | 17.82 |
| | 36 | 39 | 17.43 | 17.76 | 17.60 |
| | 75 | 0 | 17.64 | 17.77 | 17.56 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.52 | 23.55 | 22.72 | 24.75 | 30.00 |
| 16QAM | 20.47 | 22.5 | 22.1 | 24.13 | 30.00 |
| 64QAM | 19.49 | 21.52 | 21.12 | 23.15 | 30.00 |
| 256QAM | 17.43 | 19.46 | 17.86 | 19.89 | 30.00 |

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 | 22.42 | 22.79 | 22.61 |
| | 1 | 50 | 22.48 | 22.71 | 22.68 |
| | 1 | 99 | 22.32 | 22.40 | 22.18 |
| | 50 | 0 | 21.76 | 21.83 | 21.53 |
| | 50 | 25 | 21.72 | 21.67 | 21.63 |
| | 50 | 50 | 21.63 | 21.92 | 21.74 |
| | 100 | 0 | 21.63 | 21.76 | 21.74 |
| 16QAM | 1 | 0 | 21.74 | 22.10 | 21.90 |
| | 1 | 50 | 22.07 | 22.08 | 22.15 |
| | 1 | 99 | 21.89 | 21.98 | 21.97 |
| | 50 | 0 | 20.55 | 20.91 | 20.71 |
| | 50 | 25 | 20.65 | 20.91 | 20.85 |
| | 50 | 50 | 20.95 | 20.91 | 20.81 |
| | 100 | 0 | 20.85 | 20.91 | 20.75 |
| 64QAM | 1 | 0 | 21.00 | 21.13 | 20.84 |
| | 1 | 50 | 20.94 | 21.09 | 21.10 |
| | 1 | 99 | 20.89 | 21.08 | 21.01 |
| | 50 | 0 | 19.62 | 19.76 | 19.85 |
| | 50 | 25 | 19.65 | 19.80 | 19.85 |
| | 50 | 50 | 19.71 | 19.75 | 19.57 |
| | 100 | 0 | 19.73 | 19.86 | 19.66 |
| 256QAM | 1 | 0 | 17.66 | 17.99 | 18.06 |
| | 1 | 50 | 17.85 | 17.82 | 17.96 |
| | 1 | 99 | 17.62 | 17.63 | 17.61 |
| | 50 | 0 | 17.50 | 17.88 | 17.67 |
| | 50 | 25 | 17.66 | 17.75 | 17.52 |
| | 50 | 50 | 17.62 | 17.72 | 17.32 |
| | 100 | 0 | 17.47 | 17.63 | 17.57 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.53 | 23.56 | 22.79 | 24.82 | 30.00 |
| 16QAM | 20.55 | 22.58 | 22.15 | 24.18 | 30.00 |
| 64QAM | 19.57 | 21.6 | 21.13 | 23.16 | 30.00 |
| 256QAM | 17.32 | 19.35 | 18.06 | 20.09 | 30.00 |

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 | 23.02 | 23.07 | 23.04 |
| | 1 | 2 | 23.05 | 23.04 | 22.94 |
| | 1 | 5 | 22.78 | 22.87 | 22.73 |
| | 3 | 0 | 21.77 | 22.16 | 21.91 |
| | 3 | 1 | 22.01 | 22.07 | 21.92 |
| | 3 | 3 | 21.87 | 22.13 | 21.73 |
| | 6 | 0 | 22.14 | 21.98 | 21.94 |
| 16QAM | 1 | 0 | 22.49 | 22.79 | 22.59 |
| | 1 | 2 | 22.51 | 22.81 | 22.60 |
| | 1 | 5 | 22.37 | 22.58 | 22.39 |
| | 3 | 0 | 20.90 | 20.98 | 20.81 |
| | 3 | 1 | 20.92 | 21.03 | 20.85 |
| | 3 | 3 | 20.94 | 21.19 | 20.67 |
| | 6 | 0 | 21.10 | 20.80 | 20.77 |
| 64QAM | 1 | 0 | 21.59 | 21.44 | 21.51 |
| | 1 | 2 | 21.32 | 21.47 | 21.04 |
| | 1 | 5 | 21.30 | 21.35 | 20.98 |
| | 3 | 0 | 19.74 | 20.00 | 19.60 |
| | 3 | 1 | 19.68 | 20.04 | 19.85 |
| | 3 | 3 | 19.97 | 19.89 | 19.95 |
| | 6 | 0 | 19.77 | 20.07 | 19.58 |
| 256QAM | 1 | 0 | 18.29 | 18.38 | 17.92 |
| | 1 | 2 | 18.01 | 18.32 | 18.12 |
| | 1 | 5 | 17.83 | 18.15 | 18.13 |
| | 3 | 0 | 17.63 | 18.01 | 18.10 |
| | 3 | 1 | 17.71 | 18.15 | 17.87 |
| | 3 | 3 | 17.92 | 17.96 | 17.81 |
| | 6 | 0 | 17.83 | 17.91 | 17.85 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.73 | 22.21 | 23.07 | 23.55 | 38.45 |
| 16QAM | 20.67 | 21.15 | 22.81 | 23.29 | 38.45 |
| 64QAM | 19.58 | 20.06 | 21.59 | 22.07 | 38.45 |
| 256QAM | 17.63 | 18.11 | 18.38 | 18.86 | 38.45 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.16 | 23.18 | 23.12 |
| | 1 | 7 | 23.15 | 23.12 | 23.00 |
| | 1 | 14 | 22.94 | 23.05 | 22.71 |
| | 8 | 0 | 21.94 | 21.94 | 21.93 |
| | 8 | 3 | 22.09 | 21.91 | 21.69 |
| | 8 | 7 | 21.86 | 21.98 | 22.06 |
| | 15 | 0 | 22.06 | 21.98 | 21.71 |
| 16QAM | 1 | 0 | 22.43 | 22.66 | 22.68 |
| | 1 | 7 | 22.75 | 22.59 | 22.72 |
| | 1 | 14 | 22.78 | 22.63 | 22.34 |
| | 8 | 0 | 20.96 | 20.89 | 20.77 |
| | 8 | 3 | 20.96 | 21.20 | 20.93 |
| | 8 | 7 | 20.98 | 21.09 | 20.97 |
| | 15 | 0 | 20.75 | 21.09 | 21.17 |
| 64QAM | 1 | 0 | 21.41 | 21.52 | 21.36 |
| | 1 | 7 | 21.52 | 21.50 | 21.24 |
| | 1 | 14 | 21.40 | 21.47 | 21.43 |
| | 8 | 0 | 20.00 | 19.87 | 19.71 |
| | 8 | 3 | 19.87 | 20.10 | 19.83 |
| | 8 | 7 | 19.88 | 19.98 | 19.72 |
| | 15 | 0 | 19.99 | 19.91 | 19.71 |
| 256QAM | 1 | 0 | 18.12 | 18.19 | 18.18 |
| | 1 | 7 | 18.13 | 18.24 | 18.19 |
| | 1 | 14 | 18.04 | 18.01 | 18.03 |
| | 8 | 0 | 17.68 | 17.82 | 17.65 |
| | 8 | 3 | 17.79 | 18.02 | 17.81 |
| | 8 | 7 | 17.94 | 17.99 | 17.93 |
| | 15 | 0 | 17.85 | 17.81 | 17.70 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.69 | 22.17 | 23.18 | 23.66 | 38.45 |
| 16QAM | 20.75 | 21.23 | 22.78 | 23.26 | 38.45 |
| 64QAM | 19.71 | 20.19 | 21.52 | 22 | 38.45 |
| 256QAM | 17.65 | 18.13 | 18.24 | 18.72 | 38.45 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.15 | 23.09 | 23.12 |
| | 1 | 12 | 22.87 | 23.09 | 23.00 |
| | 1 | 24 | 22.88 | 22.95 | 22.70 |
| | 12 | 0 | 22.00 | 21.99 | 21.87 |
| | 12 | 6 | 21.78 | 22.11 | 22.04 |
| | 12 | 13 | 21.67 | 22.13 | 22.17 |
| | 25 | 0 | 21.96 | 22.08 | 21.97 |
| 16QAM | 1 | 0 | 22.53 | 22.53 | 22.68 |
| | 1 | 12 | 22.53 | 22.60 | 22.52 |
| | 1 | 24 | 22.68 | 22.73 | 22.25 |
| | 12 | 0 | 20.89 | 21.02 | 20.88 |
| | 12 | 6 | 20.94 | 21.05 | 20.98 |
| | 12 | 13 | 20.91 | 21.02 | 20.91 |
| | 25 | 0 | 20.82 | 20.99 | 20.92 |
| 64QAM | 1 | 0 | 21.10 | 21.56 | 21.59 |
| | 1 | 12 | 21.17 | 21.48 | 21.33 |
| | 1 | 24 | 21.28 | 21.35 | 21.40 |
| | 12 | 0 | 19.96 | 19.97 | 19.95 |
| | 12 | 6 | 19.86 | 20.02 | 19.93 |
| | 12 | 13 | 19.99 | 20.01 | 19.84 |
| | 25 | 0 | 19.97 | 19.96 | 19.69 |
| 256QAM | 1 | 0 | 18.11 | 18.18 | 18.14 |
| | 1 | 12 | 18.23 | 18.29 | 18.31 |
| | 1 | 24 | 18.10 | 18.30 | 17.93 |
| | 12 | 0 | 17.90 | 17.85 | 17.92 |
| | 12 | 6 | 17.94 | 18.09 | 17.73 |
| | 12 | 13 | 18.04 | 18.02 | 17.98 |
| | 25 | 0 | 17.76 | 17.93 | 17.71 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.67 | 22.15 | 23.15 | 23.63 | 38.45 |
| 16QAM | 20.82 | 21.3 | 22.73 | 23.21 | 38.45 |
| 64QAM | 19.69 | 20.17 | 21.59 | 22.07 | 38.45 |
| 256QAM | 17.71 | 18.19 | 18.31 | 18.79 | 38.45 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.08 | 23.21 | 23.03 |
| | 1 | 24 | 22.98 | 23.20 | 23.13 |
| | 1 | 49 | 23.01 | 22.97 | 22.92 |
| | 25 | 0 | 22.10 | 22.04 | 22.02 |
| | 25 | 12 | 21.93 | 22.00 | 21.99 |
| | 25 | 25 | 21.85 | 22.06 | 21.88 |
| | 50 | 0 | 22.03 | 22.12 | 21.99 |
| 16QAM | 1 | 0 | 22.54 | 22.82 | 22.60 |
| | 1 | 24 | 22.71 | 22.64 | 22.53 |
| | 1 | 49 | 22.50 | 22.67 | 22.68 |
| | 25 | 0 | 21.03 | 21.05 | 20.92 |
| | 25 | 12 | 21.04 | 21.27 | 21.12 |
| | 25 | 25 | 21.06 | 21.02 | 21.15 |
| | 50 | 0 | 21.07 | 21.07 | 20.93 |
| 64QAM | 1 | 0 | 21.33 | 21.67 | 21.52 |
| | 1 | 24 | 21.34 | 21.52 | 21.34 |
| | 1 | 49 | 21.50 | 21.39 | 21.50 |
| | 25 | 0 | 19.97 | 19.92 | 20.03 |
| | 25 | 12 | 19.90 | 20.06 | 19.88 |
| | 25 | 25 | 19.76 | 19.95 | 19.87 |
| | 50 | 0 | 19.89 | 20.00 | 20.08 |
| 256QAM | 1 | 0 | 18.20 | 18.26 | 18.02 |
| | 1 | 24 | 18.17 | 18.34 | 18.09 |
| | 1 | 49 | 18.03 | 18.19 | 18.01 |
| | 25 | 0 | 18.00 | 17.91 | 17.88 |
| | 25 | 12 | 17.91 | 18.14 | 18.01 |
| | 25 | 25 | 17.77 | 18.04 | 18.07 |
| | 50 | 0 | 18.00 | 17.90 | 17.64 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.85 | 22.33 | 23.21 | 23.69 | 38.45 |
| 16QAM | 20.92 | 21.4 | 22.82 | 23.3 | 38.45 |
| 64QAM | 19.76 | 20.24 | 21.67 | 22.15 | 38.45 |
| 256QAM | 17.64 | 18.12 | 18.34 | 18.82 | 38.45 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 22.72 | 22.97 | 22.60 |
| | 1 | 12 | 22.97 | 22.67 | 22.84 |
| | 1 | 24 | 22.42 | 22.49 | 22.48 |
| | 12 | 0 | 21.98 | 21.97 | 21.81 |
| | 12 | 6 | 21.66 | 21.91 | 21.82 |
| | 12 | 13 | 21.39 | 21.68 | 21.52 |
| | 25 | 0 | 21.60 | 21.60 | 21.65 |
| 16QAM | 1 | 0 | 22.03 | 22.24 | 22.23 |
| | 1 | 12 | 22.16 | 22.20 | 22.07 |
| | 1 | 24 | 21.89 | 22.09 | 21.88 |
| | 12 | 0 | 20.82 | 21.03 | 20.60 |
| | 12 | 6 | 20.57 | 20.76 | 20.66 |
| | 12 | 13 | 20.51 | 20.70 | 20.77 |
| | 25 | 0 | 20.53 | 20.79 | 20.72 |
| 64QAM | 1 | 0 | 21.01 | 21.00 | 20.89 |
| | 1 | 12 | 20.93 | 20.98 | 21.02 |
| | 1 | 24 | 20.84 | 20.98 | 20.71 |
| | 12 | 0 | 19.95 | 19.96 | 20.03 |
| | 12 | 6 | 19.79 | 19.91 | 19.88 |
| | 12 | 13 | 19.81 | 19.94 | 19.75 |
| | 25 | 0 | 19.77 | 19.93 | 20.03 |
| 256QAM | 1 | 0 | 18.20 | 18.26 | 18.31 |
| | 1 | 12 | 18.09 | 18.19 | 17.91 |
| | 1 | 24 | 18.06 | 18.13 | 17.94 |
| | 12 | 0 | 17.91 | 17.87 | 17.68 |
| | 12 | 6 | 17.80 | 17.85 | 17.91 |
| | 12 | 13 | 17.54 | 17.77 | 17.52 |
| | 25 | 0 | 17.58 | 17.85 | 17.72 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.39 | 23.65 | 22.97 | 25.23 | 33.01 |
| 16QAM | 20.51 | 22.77 | 22.24 | 24.5 | 33.01 |
| 64QAM | 19.75 | 22.01 | 21.02 | 23.28 | 33.01 |
| 256QAM | 17.52 | 19.78 | 18.31 | 20.57 | 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 | 22.80 | 22.93 | 22.69 |
| | 1 | 24 | 22.62 | 22.86 | 22.59 |
| | 1 | 49 | 22.31 | 22.46 | 22.54 |
| | 25 | 0 | 21.78 | 21.84 | 21.70 |
| | 25 | 12 | 21.95 | 21.75 | 21.78 |
| | 25 | 25 | 21.72 | 21.57 | 21.55 |
| | 50 | 0 | 21.88 | 21.70 | 21.83 |
| 16QAM | 1 | 0 | 22.22 | 22.15 | 22.27 |
| | 1 | 24 | 22.09 | 22.21 | 21.91 |
| | 1 | 49 | 22.02 | 22.19 | 21.76 |
| | 25 | 0 | 20.79 | 20.90 | 20.74 |
| | 25 | 12 | 20.72 | 20.61 | 20.53 |
| | 25 | 25 | 20.36 | 20.57 | 20.63 |
| | 50 | 0 | 20.66 | 20.68 | 20.80 |
| 64QAM | 1 | 0 | 21.12 | 21.13 | 20.77 |
| | 1 | 24 | 21.00 | 21.00 | 20.79 |
| | 1 | 49 | 20.93 | 20.75 | 20.89 |
| | 25 | 0 | 19.75 | 19.90 | 19.87 |
| | 25 | 12 | 19.87 | 19.93 | 19.73 |
| | 25 | 25 | 19.61 | 19.84 | 19.78 |
| | 50 | 0 | 19.91 | 19.87 | 19.70 |
| 256QAM | 1 | 0 | 18.42 | 18.27 | 18.05 |
| | 1 | 24 | 18.04 | 18.13 | 18.00 |
| | 1 | 49 | 18.10 | 18.02 | 17.92 |
| | 25 | 0 | 17.85 | 17.88 | 17.81 |
| | 25 | 12 | 17.41 | 17.79 | 17.81 |
| | 25 | 25 | 17.54 | 17.81 | 17.63 |
| | 50 | 0 | 17.76 | 17.88 | 17.62 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.55 | 23.81 | 22.93 | 25.19 | 33.01 |
| 16QAM | 20.36 | 22.62 | 22.27 | 24.53 | 33.01 |
| 64QAM | 19.61 | 21.87 | 21.13 | 23.39 | 33.01 |
| 256QAM | 17.41 | 19.67 | 18.42 | 20.68 | 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 | 22.74 | 22.78 | 22.73 |
| | 1 | 37 | 22.76 | 22.80 | 22.56 |
| | 1 | 74 | 22.48 | 22.76 | 22.29 |
| | 36 | 0 | 21.88 | 21.88 | 22.04 |
| | 36 | 19 | 21.71 | 21.75 | 21.82 |
| | 36 | 39 | 21.55 | 21.79 | 21.58 |
| | 75 | 0 | 21.69 | 21.68 | 21.60 |
| 16QAM | 1 | 0 | 22.11 | 22.33 | 21.77 |
| | 1 | 37 | 22.14 | 22.26 | 21.80 |
| | 1 | 74 | 22.03 | 22.00 | 21.81 |
| | 36 | 0 | 20.88 | 20.86 | 20.77 |
| | 36 | 19 | 20.77 | 20.89 | 20.56 |
| | 36 | 39 | 20.65 | 20.61 | 20.51 |
| | 75 | 0 | 20.65 | 20.81 | 20.84 |
| 64QAM | 1 | 0 | 20.99 | 21.01 | 21.01 |
| | 1 | 37 | 20.87 | 20.98 | 20.99 |
| | 1 | 74 | 20.59 | 20.94 | 20.83 |
| | 36 | 0 | 19.98 | 20.01 | 19.89 |
| | 36 | 19 | 19.81 | 19.99 | 19.98 |
| | 36 | 39 | 19.73 | 19.83 | 19.81 |
| | 75 | 0 | 19.96 | 20.10 | 20.03 |
| 256QAM | 1 | 0 | 18.15 | 18.44 | 17.88 |
| | 1 | 37 | 18.11 | 18.15 | 17.84 |
| | 1 | 74 | 18.06 | 18.11 | 18.06 |
| | 36 | 0 | 17.95 | 17.95 | 17.90 |
| | 36 | 19 | 17.56 | 17.74 | 17.66 |
| | 36 | 39 | 17.75 | 17.65 | 17.68 |
| | 75 | 0 | 17.90 | 17.75 | 17.74 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.55 | 23.81 | 22.8 | 25.06 | 33.01 |
| 16QAM | 20.51 | 22.77 | 22.33 | 24.59 | 33.01 |
| 64QAM | 19.73 | 21.99 | 21.01 | 23.27 | 33.01 |
| 256QAM | 17.56 | 19.82 | 18.44 | 20.7 | 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 | 22.88 | 22.98 | 22.73 |
| | 1 | 50 | 22.74 | 22.89 | 22.83 |
| | 1 | 99 | 22.49 | 22.77 | 22.46 |
| | 50 | 0 | 21.85 | 22.06 | 21.65 |
| | 50 | 25 | 21.84 | 22.01 | 21.97 |
| | 50 | 50 | 21.63 | 21.79 | 21.64 |
| | 100 | 0 | 21.66 | 21.82 | 21.58 |
| 16QAM | 1 | 0 | 22.29 | 22.24 | 22.29 |
| | 1 | 50 | 21.88 | 22.24 | 22.13 |
| | 1 | 99 | 21.96 | 22.23 | 22.06 |
| | 50 | 0 | 20.66 | 20.80 | 20.67 |
| | 50 | 25 | 20.65 | 20.93 | 20.64 |
| | 50 | 50 | 20.73 | 20.79 | 20.72 |
| | 100 | 0 | 20.64 | 20.83 | 20.63 |
| 64QAM | 1 | 0 | 20.92 | 20.97 | 20.91 |
| | 1 | 50 | 20.79 | 20.93 | 20.85 |
| | 1 | 99 | 20.61 | 20.81 | 20.87 |
| | 50 | 0 | 19.94 | 20.09 | 20.08 |
| | 50 | 25 | 19.79 | 20.04 | 19.87 |
| | 50 | 50 | 19.64 | 19.78 | 19.86 |
| | 100 | 0 | 19.73 | 20.02 | 20.05 |
| 256QAM | 1 | 0 | 18.23 | 18.48 | 18.15 |
| | 1 | 50 | 18.02 | 18.09 | 18.01 |
| | 1 | 99 | 18.17 | 18.17 | 18.11 |
| | 50 | 0 | 17.72 | 18.07 | 17.83 |
| | 50 | 25 | 17.52 | 17.89 | 17.71 |
| | 50 | 50 | 17.96 | 17.77 | 17.67 |
| | 100 | 0 | 17.73 | 18.00 | 17.68 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.58 | 23.84 | 22.98 | 25.24 | 33.01 |
| 16QAM | 20.63 | 22.89 | 22.29 | 24.55 | 33.01 |
| 64QAM | 19.64 | 21.9 | 20.97 | 23.23 | 33.01 |
| 256QAM | 17.52 | 19.78 | 18.48 | 20.74 | 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 | 23.23 | 23.26 | 23.18 |
| | 1 | 2 | 23.20 | 23.19 | 22.78 |
| | 1 | 5 | 23.06 | 23.09 | 23.18 |
| | 3 | 0 | 21.85 | 22.41 | 22.01 |
| | 3 | 1 | 22.24 | 22.18 | 21.97 |
| | 3 | 3 | 22.15 | 22.44 | 22.24 |
| | 6 | 0 | 22.22 | 22.43 | 22.22 |
| 16QAM | 1 | 0 | 22.41 | 22.70 | 22.50 |
| | 1 | 2 | 22.34 | 22.62 | 22.36 |
| | 1 | 5 | 22.49 | 22.46 | 22.20 |
| | 3 | 0 | 21.43 | 21.24 | 20.97 |
| | 3 | 1 | 21.11 | 21.17 | 21.26 |
| | 3 | 3 | 20.95 | 21.35 | 21.27 |
| | 6 | 0 | 21.34 | 21.34 | 21.14 |
| 64QAM | 1 | 0 | 21.32 | 21.61 | 21.32 |
| | 1 | 2 | 21.65 | 21.53 | 21.30 |
| | 1 | 5 | 21.52 | 21.47 | 21.55 |
| | 3 | 0 | 20.20 | 20.37 | 20.43 |
| | 3 | 1 | 20.06 | 20.23 | 19.93 |
| | 3 | 3 | 20.07 | 20.27 | 20.18 |
| | 6 | 0 | 20.20 | 20.44 | 20.13 |
| 256QAM | 1 | 0 | 18.78 | 18.75 | 18.77 |
| | 1 | 2 | 18.43 | 18.61 | 18.62 |
| | 1 | 5 | 18.50 | 18.69 | 18.65 |
| | 3 | 0 | 18.34 | 18.41 | 18.42 |
| | 3 | 1 | 18.15 | 18.43 | 18.41 |
| | 3 | 3 | 18.50 | 18.43 | 18.05 |
| | 6 | 0 | 18.20 | 18.42 | 18.18 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.85 | 21.33 | 23.26 | 22.74 | 34.77 |
| 16QAM | 20.95 | 20.43 | 22.7 | 22.18 | 34.77 |
| 64QAM | 19.93 | 19.41 | 21.65 | 21.13 | 34.77 |
| 256QAM | 18.05 | 17.53 | 18.78 | 18.26 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.26 | 23.28 | 23.22 |
| | 1 | 7 | 23.01 | 23.05 | 22.87 |
| | 1 | 14 | 22.99 | 23.24 | 23.03 |
| | 8 | 0 | 22.13 | 22.19 | 21.96 |
| | 8 | 3 | 22.11 | 22.17 | 21.89 |
| | 8 | 7 | 22.32 | 22.22 | 22.24 |
| | 15 | 0 | 21.88 | 22.19 | 22.23 |
| 16QAM | 1 | 0 | 22.48 | 22.74 | 22.52 |
| | 1 | 7 | 22.54 | 22.57 | 22.41 |
| | 1 | 14 | 22.24 | 22.61 | 22.26 |
| | 8 | 0 | 21.25 | 21.46 | 21.30 |
| | 8 | 3 | 21.11 | 21.26 | 21.17 |
| | 8 | 7 | 21.04 | 21.30 | 21.14 |
| | 15 | 0 | 21.11 | 21.34 | 21.13 |
| 64QAM | 1 | 0 | 21.48 | 21.65 | 21.56 |
| | 1 | 7 | 21.31 | 21.62 | 21.53 |
| | 1 | 14 | 21.40 | 21.63 | 21.54 |
| | 8 | 0 | 20.25 | 20.45 | 20.13 |
| | 8 | 3 | 20.16 | 20.32 | 20.13 |
| | 8 | 7 | 20.17 | 20.15 | 20.09 |
| | 15 | 0 | 20.26 | 20.32 | 20.24 |
| 256QAM | 1 | 0 | 18.84 | 18.68 | 18.46 |
| | 1 | 7 | 18.63 | 18.57 | 18.46 |
| | 1 | 14 | 18.50 | 18.60 | 18.63 |
| | 8 | 0 | 18.59 | 18.49 | 18.38 |
| | 8 | 3 | 18.32 | 18.33 | 18.32 |
| | 8 | 7 | 18.43 | 18.52 | 18.40 |
| | 15 | 0 | 18.36 | 18.48 | 18.16 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.88 | 21.36 | 23.28 | 22.76 | 34.77 |
| 16QAM | 21.04 | 20.52 | 22.74 | 22.22 | 34.77 |
| 64QAM | 20.09 | 19.57 | 21.65 | 21.13 | 34.77 |
| 256QAM | 18.16 | 17.64 | 18.84 | 18.32 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.14 | 23.19 | 23.20 |
| | 1 | 12 | 22.79 | 23.18 | 23.24 |
| | 1 | 24 | 23.09 | 23.15 | 23.17 |
| | 12 | 0 | 22.28 | 22.23 | 22.36 |
| | 12 | 6 | 22.19 | 22.17 | 21.87 |
| | 12 | 13 | 22.40 | 22.38 | 22.08 |
| | 25 | 0 | 22.28 | 22.20 | 22.16 |
| 16QAM | 1 | 0 | 22.30 | 22.54 | 22.47 |
| | 1 | 12 | 22.64 | 22.59 | 22.30 |
| | 1 | 24 | 22.65 | 22.66 | 22.28 |
| | 12 | 0 | 21.16 | 21.24 | 21.25 |
| | 12 | 6 | 21.13 | 21.17 | 20.90 |
| | 12 | 13 | 21.22 | 21.24 | 21.18 |
| | 25 | 0 | 21.19 | 21.34 | 21.17 |
| 64QAM | 1 | 0 | 21.62 | 21.54 | 21.47 |
| | 1 | 12 | 21.53 | 21.64 | 21.59 |
| | 1 | 24 | 21.50 | 21.60 | 21.31 |
| | 12 | 0 | 20.19 | 20.42 | 20.26 |
| | 12 | 6 | 20.32 | 20.17 | 19.92 |
| | 12 | 13 | 20.11 | 20.23 | 20.26 |
| | 25 | 0 | 20.21 | 20.36 | 20.21 |
| 256QAM | 1 | 0 | 18.65 | 18.73 | 18.78 |
| | 1 | 12 | 18.57 | 18.59 | 18.51 |
| | 1 | 24 | 18.57 | 18.65 | 18.46 |
| | 12 | 0 | 18.54 | 18.58 | 18.49 |
| | 12 | 6 | 18.13 | 18.36 | 18.30 |
| | 12 | 13 | 18.16 | 18.32 | 18.37 |
| | 25 | 0 | 18.27 | 18.45 | 18.15 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.87 | 21.35 | 23.24 | 22.72 | 34.77 |
| 16QAM | 20.9 | 20.38 | 22.66 | 22.14 | 34.77 |
| 64QAM | 19.92 | 19.4 | 21.64 | 21.12 | 34.77 |
| 256QAM | 18.13 | 17.61 | 18.78 | 18.26 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.28 | 23.35 | 23.29 |
| | 1 | 24 | 23.17 | 23.23 | 23.01 |
| | 1 | 49 | 23.20 | 23.26 | 22.85 |
| | 25 | 0 | 22.14 | 22.31 | 22.15 |
| | 25 | 12 | 21.96 | 22.20 | 22.19 |
| | 25 | 25 | 22.13 | 22.36 | 22.24 |
| | 50 | 0 | 22.28 | 22.33 | 22.29 |
| 16QAM | 1 | 0 | 22.45 | 22.75 | 22.40 |
| | 1 | 24 | 22.49 | 22.68 | 22.67 |
| | 1 | 49 | 22.46 | 22.70 | 22.31 |
| | 25 | 0 | 21.32 | 21.38 | 21.19 |
| | 25 | 12 | 21.11 | 21.34 | 21.38 |
| | 25 | 25 | 20.99 | 21.35 | 21.17 |
| | 50 | 0 | 21.00 | 21.42 | 21.24 |
| 64QAM | 1 | 0 | 21.45 | 21.77 | 21.72 |
| | 1 | 24 | 21.38 | 21.61 | 21.64 |
| | 1 | 49 | 21.37 | 21.64 | 21.57 |
| | 25 | 0 | 20.23 | 20.33 | 20.36 |
| | 25 | 12 | 20.05 | 20.22 | 20.12 |
| | 25 | 25 | 20.07 | 20.34 | 20.29 |
| | 50 | 0 | 20.24 | 20.43 | 20.16 |
| 256QAM | 1 | 0 | 18.62 | 18.76 | 18.73 |
| | 1 | 24 | 18.62 | 18.75 | 18.51 |
| | 1 | 49 | 18.52 | 18.75 | 18.44 |
| | 25 | 0 | 18.24 | 18.63 | 18.51 |
| | 25 | 12 | 18.12 | 18.39 | 18.28 |
| | 25 | 25 | 18.47 | 18.43 | 18.22 |
| | 50 | 0 | 18.48 | 18.51 | 18.55 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.96 | 21.44 | 23.35 | 22.83 | 34.77 |
| 16QAM | 20.99 | 20.47 | 22.75 | 22.23 | 34.77 |
| 64QAM | 20.05 | 19.53 | 21.77 | 21.25 | 34.77 |
| 256QAM | 18.12 | 17.6 | 18.76 | 18.24 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.39 | 23.28 | 23.52 |
| | 1 | 12 | 23.25 | 23.25 | 23.46 |
| | 1 | 24 | 23.29 | 23.30 | 23.29 |
| | 12 | 0 | 22.09 | 22.27 | 22.17 |
| | 12 | 6 | 22.16 | 22.42 | 22.17 |
| | 12 | 13 | 22.02 | 22.40 | 22.18 |
| | 25 | 0 | 22.23 | 22.35 | 22.18 |
| 16QAM | 1 | 0 | 22.65 | 22.76 | 22.45 |
| | 1 | 12 | 22.70 | 22.81 | 22.61 |
| | 1 | 24 | 22.85 | 22.64 | 22.62 |
| | 12 | 0 | 21.25 | 21.43 | 21.31 |
| | 12 | 6 | 21.26 | 21.44 | 21.24 |
| | 12 | 13 | 21.11 | 21.38 | 21.20 |
| | 25 | 0 | 21.39 | 21.30 | 20.96 |
| 64QAM | 1 | 0 | 21.41 | 21.68 | 21.42 |
| | 1 | 12 | 21.34 | 21.50 | 21.54 |
| | 1 | 24 | 21.61 | 21.48 | 21.41 |
| | 12 | 0 | 20.15 | 20.31 | 20.39 |
| | 12 | 6 | 20.09 | 20.39 | 20.50 |
| | 12 | 13 | 20.29 | 20.22 | 20.29 |
| | 25 | 0 | 20.26 | 20.41 | 20.11 |
| 256QAM | 1 | 0 | 18.42 | 18.63 | 18.55 |
| | 1 | 12 | 18.68 | 18.55 | 18.49 |
| | 1 | 24 | 18.53 | 18.62 | 18.65 |
| | 12 | 0 | 18.00 | 18.30 | 18.05 |
| | 12 | 6 | 18.09 | 18.27 | 17.99 |
| | 12 | 13 | 18.00 | 18.21 | 18.17 |
| | 25 | 0 | 18.12 | 18.12 | 17.95 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 22.02 | 21.5 | 23.52 | 23 | 34.77 |
| 16QAM | 20.96 | 20.44 | 22.85 | 22.33 | 34.77 |
| 64QAM | 20.09 | 19.57 | 21.68 | 21.16 | 34.77 |
| 256QAM | 17.95 | 17.43 | 18.68 | 18.16 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.57 |
| | 1 | 24 | 23.41 |
| | 1 | 49 | 23.33 |
| | 25 | 0 | 22.21 |
| | 25 | 12 | 22.13 |
| | 25 | 25 | 22.14 |
| | 50 | 0 | 22.35 |
| 16QAM | 1 | 0 | 22.78 |
| | 1 | 24 | 22.73 |
| | 1 | 49 | 22.73 |
| | 25 | 0 | 21.16 |
| | 25 | 12 | 21.32 |
| | 25 | 25 | 21.17 |
| | 50 | 0 | 21.09 |
| 64QAM | 1 | 0 | 21.81 |
| | 1 | 24 | 21.57 |
| | 1 | 49 | 21.53 |
| | 25 | 0 | 20.14 |
| | 25 | 12 | 20.37 |
| | 25 | 25 | 20.18 |
| | 50 | 0 | 20.29 |
| 256QAM | 1 | 0 | 18.61 |
| | 1 | 24 | 18.64 |
| | 1 | 49 | 18.74 |
| | 25 | 0 | 18.09 |
| | 25 | 12 | 18.29 |
| | 25 | 25 | 18.23 |
| | 50 | 0 | 18.21 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 22.13 | 21.61 | 23.57 | 23.05 | 34.77 |
| 16QAM | 21.09 | 20.57 | 22.78 | 22.26 | 34.77 |
| 64QAM | 20.14 | 19.62 | 21.81 | 21.29 | 34.77 |
| 256QAM | 18.09 | 17.57 | 18.74 | 18.22 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.32 | 23.33 | 23.31 |
| | 1 | 12 | 23.15 | 23.26 | 23.13 |
| | 1 | 24 | 22.94 | 23.32 | 23.12 |
| | 12 | 0 | 22.10 | 22.35 | 22.09 |
| | 12 | 6 | 22.08 | 22.36 | 22.27 |
| | 12 | 13 | 22.21 | 22.18 | 22.15 |
| | 25 | 0 | 22.10 | 22.20 | 21.92 |
| 16QAM | 1 | 0 | 22.71 | 22.69 | 22.42 |
| | 1 | 12 | 22.59 | 22.84 | 22.70 |
| | 1 | 24 | 22.63 | 22.85 | 22.71 |
| | 12 | 0 | 21.21 | 21.25 | 21.06 |
| | 12 | 6 | 20.97 | 21.27 | 21.47 |
| | 12 | 13 | 21.17 | 21.22 | 21.03 |
| | 25 | 0 | 20.94 | 21.16 | 20.96 |
| 64QAM | 1 | 0 | 21.44 | 21.57 | 21.46 |
| | 1 | 12 | 21.60 | 21.62 | 21.55 |
| | 1 | 24 | 21.30 | 21.58 | 21.68 |
| | 12 | 0 | 20.01 | 20.20 | 20.24 |
| | 12 | 6 | 20.17 | 20.41 | 20.18 |
| | 12 | 13 | 20.21 | 20.22 | 20.14 |
| | 25 | 0 | 20.19 | 20.12 | 19.93 |
| 256QAM | 1 | 0 | 18.43 | 18.74 | 18.64 |
| | 1 | 12 | 18.35 | 18.70 | 18.24 |
| | 1 | 24 | 18.30 | 18.48 | 18.51 |
| | 12 | 0 | 17.78 | 18.23 | 17.98 |
| | 12 | 6 | 18.21 | 18.20 | 18.20 |
| | 12 | 13 | 18.20 | 18.23 | 18.26 |
| | 25 | 0 | 18.17 | 18.14 | 18.09 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.92 | 21.4 | 23.33 | 22.81 | 34.77 |
| 16QAM | 20.94 | 20.42 | 22.85 | 22.33 | 34.77 |
| 64QAM | 19.93 | 19.41 | 21.68 | 21.16 | 34.77 |
| 256QAM | 17.78 | 17.26 | 18.74 | 18.22 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.41 |
| | 1 | 24 | 23.35 |
| | 1 | 49 | 23.32 |
| | 25 | 0 | 22.16 |
| | 25 | 12 | 22.25 |
| | 25 | 25 | 22.15 |
| | 50 | 0 | 22.20 |
| 16QAM | 1 | 0 | 22.58 |
| | 1 | 24 | 22.49 |
| | 1 | 49 | 22.57 |
| | 25 | 0 | 21.23 |
| | 25 | 12 | 21.37 |
| | 25 | 25 | 21.13 |
| | 50 | 0 | 21.28 |
| 64QAM | 1 | 0 | 21.67 |
| | 1 | 24 | 21.75 |
| | 1 | 49 | 21.63 |
| | 25 | 0 | 20.05 |
| | 25 | 12 | 20.26 |
| | 25 | 25 | 20.28 |
| | 50 | 0 | 20.09 |
| 256QAM | 1 | 0 | 18.50 |
| | 1 | 24 | 18.59 |
| | 1 | 49 | 18.50 |
| | 25 | 0 | 18.23 |
| | 25 | 12 | 18.21 |
| | 25 | 25 | 18.19 |
| | 50 | 0 | 18.13 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 22.15 | 21.63 | 23.41 | 22.89 | 34.77 |
| 16QAM | 21.13 | 20.61 | 22.58 | 22.06 | 34.77 |
| 64QAM | 20.05 | 19.53 | 21.75 | 21.23 | 34.77 |
| 256QAM | 18.13 | 17.61 | 18.59 | 18.07 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 22.93 | 23.06 | 23.03 |
| | 1 | 12 | 22.92 | 22.90 | 22.76 |
| | 1 | 24 | 22.66 | 22.95 | 22.93 |
| | 12 | 0 | 21.85 | 21.88 | 21.86 |
| | 12 | 6 | 21.79 | 22.02 | 21.87 |
| | 12 | 13 | 21.82 | 22.04 | 21.97 |
| | 25 | 0 | 21.90 | 21.96 | 21.86 |
| 16QAM | 1 | 0 | 22.42 | 22.58 | 22.38 |
| | 1 | 12 | 22.44 | 22.39 | 22.31 |
| | 1 | 24 | 22.19 | 22.43 | 22.37 |
| | 12 | 0 | 21.19 | 20.99 | 20.98 |
| | 12 | 6 | 20.90 | 21.08 | 20.89 |
| | 12 | 13 | 20.93 | 21.20 | 21.14 |
| | 25 | 0 | 20.76 | 21.14 | 20.90 |
| 64QAM | 1 | 0 | 21.27 | 21.38 | 21.36 |
| | 1 | 12 | 21.22 | 21.20 | 21.20 |
| | 1 | 24 | 20.90 | 21.22 | 21.03 |
| | 12 | 0 | 19.97 | 19.98 | 19.87 |
| | 12 | 6 | 19.81 | 20.07 | 19.76 |
| | 12 | 13 | 19.93 | 20.00 | 20.16 |
| | 25 | 0 | 20.18 | 19.97 | 20.03 |
| 256QAM | 1 | 0 | 18.80 | 18.82 | 18.36 |
| | 1 | 12 | 18.42 | 18.35 | 18.22 |
| | 1 | 24 | 18.64 | 18.52 | 18.39 |
| | 12 | 0 | 17.99 | 18.15 | 17.99 |
| | 12 | 6 | 17.89 | 18.26 | 18.28 |
| | 12 | 13 | 18.27 | 18.22 | 17.93 |
| | 25 | 0 | 17.99 | 18.15 | 17.96 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.79 | 21.27 | 23.06 | 22.54 | 34.77 |
| 16QAM | 20.76 | 20.24 | 22.58 | 22.06 | 34.77 |
| 64QAM | 19.76 | 19.24 | 21.38 | 20.86 | 34.77 |
| 256QAM | 17.89 | 17.37 | 18.82 | 18.3 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.07 | 23.15 | 23.00 |
| | 1 | 24 | 22.96 | 22.98 | 23.09 |
| | 1 | 49 | 23.10 | 23.07 | 22.85 |
| | 25 | 0 | 21.89 | 22.00 | 21.85 |
| | 25 | 12 | 21.90 | 22.09 | 22.01 |
| | 25 | 25 | 22.09 | 22.14 | 21.82 |
| | 50 | 0 | 22.06 | 22.14 | 21.98 |
| 16QAM | 1 | 0 | 22.55 | 22.63 | 22.58 |
| | 1 | 24 | 22.59 | 22.60 | 22.37 |
| | 1 | 49 | 22.30 | 22.47 | 22.29 |
| | 25 | 0 | 20.86 | 20.98 | 21.07 |
| | 25 | 12 | 21.14 | 21.12 | 21.03 |
| | 25 | 25 | 20.87 | 21.13 | 21.03 |
| | 50 | 0 | 20.95 | 21.11 | 20.92 |
| 64QAM | 1 | 0 | 21.26 | 21.44 | 21.12 |
| | 1 | 24 | 21.20 | 21.26 | 21.25 |
| | 1 | 49 | 21.40 | 21.28 | 21.36 |
| | 25 | 0 | 20.08 | 20.09 | 20.14 |
| | 25 | 12 | 19.88 | 20.03 | 19.93 |
| | 25 | 25 | 20.18 | 20.20 | 20.02 |
| | 50 | 0 | 20.06 | 20.16 | 19.77 |
| 256QAM | 1 | 0 | 18.76 | 18.79 | 18.51 |
| | 1 | 24 | 18.51 | 18.51 | 18.40 |
| | 1 | 49 | 18.48 | 18.64 | 18.48 |
| | 25 | 0 | 18.11 | 18.21 | 18.22 |
| | 25 | 12 | 17.93 | 18.14 | 18.19 |
| | 25 | 25 | 18.11 | 18.22 | 18.20 |
| | 50 | 0 | 18.15 | 18.23 | 18.22 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.82 | 21.3 | 23.15 | 22.63 | 34.77 |
| 16QAM | 20.86 | 20.34 | 22.63 | 22.11 | 34.77 |
| 64QAM | 19.77 | 19.25 | 21.44 | 20.92 | 34.77 |
| 256QAM | 17.93 | 17.41 | 18.79 | 18.27 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 22.74 | 22.89 | 23.02 |
| | 1 | 2 | 22.63 | 22.77 | 22.88 |
| | 1 | 5 | 22.71 | 22.79 | 22.69 |
| | 3 | 0 | 21.79 | 22.12 | 22.10 |
| | 3 | 1 | 21.95 | 22.11 | 21.75 |
| | 3 | 3 | 21.64 | 21.87 | 21.72 |
| | 6 | 0 | 21.69 | 21.80 | 21.71 |
| 16QAM | 1 | 0 | 22.44 | 22.50 | 22.45 |
| | 1 | 2 | 22.36 | 22.53 | 22.38 |
| | 1 | 5 | 22.15 | 22.25 | 22.08 |
| | 3 | 0 | 21.00 | 20.97 | 21.12 |
| | 3 | 1 | 21.00 | 21.08 | 20.89 |
| | 3 | 3 | 20.88 | 21.30 | 20.94 |
| | 6 | 0 | 21.15 | 21.15 | 21.08 |
| 64QAM | 1 | 0 | 21.26 | 21.43 | 21.19 |
| | 1 | 2 | 21.63 | 21.52 | 21.36 |
| | 1 | 5 | 21.45 | 21.38 | 21.18 |
| | 3 | 0 | 19.91 | 20.05 | 20.04 |
| | 3 | 1 | 19.90 | 20.07 | 20.14 |
| | 3 | 3 | 20.04 | 20.09 | 19.93 |
| | 6 | 0 | 19.95 | 20.13 | 19.93 |
| 256QAM | 1 | 0 | 18.37 | 18.48 | 18.20 |
| | 1 | 2 | 18.26 | 18.28 | 18.17 |
| | 1 | 5 | 18.40 | 18.41 | 18.36 |
| | 3 | 0 | 18.06 | 18.08 | 17.83 |
| | 3 | 1 | 17.97 | 18.10 | 17.87 |
| | 3 | 3 | 18.04 | 18.05 | 17.98 |
| | 6 | 0 | 17.79 | 17.97 | 18.06 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.64 | 23.67 | 23.02 | 25.05 | 33.01 |
| 16QAM | 20.88 | 22.91 | 22.53 | 24.56 | 33.01 |
| 64QAM | 19.9 | 21.93 | 21.63 | 23.66 | 33.01 |
| 256QAM | 17.79 | 19.82 | 18.48 | 20.51 | 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 | 22.74 | 22.94 | 22.97 |
| | 1 | 7 | 22.84 | 22.94 | 22.80 |
| | 1 | 14 | 22.57 | 22.80 | 22.60 |
| | 8 | 0 | 22.07 | 22.11 | 21.83 |
| | 8 | 3 | 22.10 | 22.18 | 22.05 |
| | 8 | 7 | 21.82 | 21.93 | 21.90 |
| | 15 | 0 | 21.61 | 21.77 | 21.71 |
| 16QAM | 1 | 7 | 22.24 | 22.55 | 22.12 |
| | 1 | 7 | 22.60 | 22.59 | 22.38 |
| | 1 | 14 | 22.03 | 22.33 | 22.30 |
| | 8 | 0 | 21.14 | 21.17 | 21.24 |
| | 8 | 3 | 21.11 | 21.36 | 20.93 |
| | 8 | 7 | 20.84 | 21.07 | 21.05 |
| | 15 | 0 | 20.83 | 21.15 | 21.15 |
| 64QAM | 1 | 0 | 21.20 | 21.58 | 21.20 |
| | 1 | 7 | 21.31 | 21.60 | 21.19 |
| | 1 | 14 | 21.38 | 21.45 | 21.30 |
| | 8 | 0 | 20.12 | 20.06 | 19.95 |
| | 8 | 3 | 20.03 | 20.19 | 20.08 |
| | 8 | 7 | 19.81 | 20.02 | 19.97 |
| | 15 | 0 | 20.07 | 20.18 | 19.80 |
| 256QAM | 1 | 0 | 18.22 | 18.41 | 18.43 |
| | 1 | 7 | 18.16 | 18.37 | 18.18 |
| | 1 | 14 | 18.30 | 18.16 | 18.15 |
| | 8 | 0 | 17.93 | 18.02 | 17.99 |
| | 8 | 3 | 18.10 | 17.99 | 18.03 |
| | 8 | 7 | 17.90 | 18.12 | 17.94 |
| | 15 | 0 | 17.97 | 17.93 | 17.76 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.61 | 23.64 | 22.97 | 25 | 33.01 |
| 16QAM | 20.83 | 22.86 | 22.6 | 24.63 | 33.01 |
| 64QAM | 19.8 | 21.83 | 21.6 | 23.63 | 33.01 |
| 256QAM | 17.76 | 19.79 | 18.43 | 20.46 | 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 | 22.79 | 23.02 | 22.93 |
| | 1 | 12 | 22.64 | 22.82 | 22.66 |
| | 1 | 24 | 22.52 | 22.83 | 22.68 |
| | 12 | 0 | 21.89 | 22.00 | 21.83 |
| | 12 | 6 | 21.90 | 22.08 | 21.98 |
| | 12 | 13 | 21.94 | 21.91 | 21.59 |
| | 25 | 0 | 21.67 | 21.89 | 21.73 |
| 16QAM | 1 | 0 | 22.43 | 22.39 | 22.39 |
| | 1 | 12 | 22.38 | 22.60 | 22.46 |
| | 1 | 24 | 22.30 | 22.35 | 22.17 |
| | 12 | 0 | 20.97 | 21.06 | 20.98 |
| | 12 | 6 | 20.93 | 21.20 | 20.94 |
| | 12 | 13 | 21.04 | 21.21 | 20.91 |
| | 25 | 0 | 20.98 | 21.03 | 20.93 |
| 64QAM | 1 | 0 | 21.30 | 21.46 | 21.46 |
| | 1 | 12 | 21.39 | 21.38 | 21.23 |
| | 1 | 24 | 21.14 | 21.37 | 21.22 |
| | 12 | 0 | 20.07 | 20.09 | 19.89 |
| | 12 | 6 | 20.12 | 20.08 | 19.76 |
| | 12 | 13 | 19.90 | 19.94 | 19.98 |
| | 25 | 0 | 19.84 | 20.14 | 20.00 |
| 256QAM | 1 | 0 | 18.47 | 18.35 | 18.29 |
| | 1 | 12 | 18.24 | 18.43 | 18.37 |
| | 1 | 24 | 18.05 | 18.20 | 18.06 |
| | 12 | 0 | 17.96 | 18.10 | 17.95 |
| | 12 | 6 | 18.09 | 18.04 | 17.92 |
| | 12 | 13 | 17.77 | 18.12 | 17.79 |
| | 25 | 0 | 17.94 | 17.99 | 17.87 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.59 | 23.62 | 23.02 | 25.05 | 33.01 |
| 16QAM | 20.91 | 22.94 | 22.6 | 24.63 | 33.01 |
| 64QAM | 19.76 | 21.79 | 21.46 | 23.49 | 33.01 |
| 256QAM | 17.77 | 19.8 | 18.47 | 20.5 | 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 | 22.74 | 23.02 | 22.89 |
| | 1 | 24 | 22.75 | 22.96 | 22.93 |
| | 1 | 49 | 22.73 | 22.91 | 22.88 |
| | 25 | 0 | 21.79 | 22.02 | 22.04 |
| | 25 | 12 | 21.99 | 21.93 | 21.89 |
| | 25 | 25 | 21.98 | 22.09 | 21.82 |
| | 50 | 0 | 21.53 | 21.80 | 21.57 |
| 16QAM | 1 | 0 | 22.34 | 22.40 | 22.40 |
| | 1 | 24 | 22.66 | 22.41 | 22.35 |
| | 1 | 49 | 21.89 | 22.31 | 21.89 |
| | 25 | 0 | 20.95 | 21.14 | 21.04 |
| | 25 | 12 | 20.88 | 21.07 | 21.03 |
| | 25 | 25 | 21.18 | 21.21 | 20.97 |
| | 50 | 0 | 21.10 | 21.15 | 20.78 |
| 64QAM | 1 | 0 | 21.52 | 21.51 | 21.14 |
| | 1 | 24 | 21.22 | 21.59 | 21.66 |
| | 1 | 49 | 21.48 | 21.28 | 21.27 |
| | 25 | 0 | 19.87 | 20.04 | 19.79 |
| | 25 | 12 | 19.88 | 20.03 | 20.12 |
| | 25 | 25 | 20.02 | 19.94 | 19.69 |
| | 50 | 0 | 20.10 | 20.04 | 19.97 |
| 256QAM | 1 | 0 | 18.21 | 18.48 | 18.28 |
| | 1 | 24 | 18.12 | 18.41 | 18.42 |
| | 1 | 49 | 18.07 | 18.31 | 18.06 |
| | 25 | 0 | 17.76 | 18.11 | 18.01 |
| | 25 | 12 | 17.90 | 18.16 | 18.03 |
| | 25 | 25 | 17.82 | 18.03 | 18.02 |
| | 50 | 0 | 17.82 | 17.96 | 17.96 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.53 | 23.56 | 23.02 | 25.05 | 33.01 |
| 16QAM | 20.78 | 22.81 | 22.66 | 24.69 | 33.01 |
| 64QAM | 19.69 | 21.72 | 21.66 | 23.69 | 33.01 |
| 256QAM | 17.76 | 19.79 | 18.48 | 20.51 | 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 | 22.69 | 22.88 | 22.97 |
| | 1 | 37 | 22.87 | 23.02 | 22.78 |
| | 1 | 74 | 22.78 | 22.84 | 22.79 |
| | 36 | 0 | 21.83 | 22.15 | 21.90 |
| | 36 | 19 | 21.88 | 22.06 | 21.75 |
| | 36 | 39 | 21.74 | 21.91 | 21.64 |
| | 75 | 0 | 21.76 | 21.92 | 21.79 |
| 16QAM | 1 | 0 | 22.20 | 22.57 | 22.35 |
| | 1 | 37 | 22.34 | 22.51 | 22.64 |
| | 1 | 74 | 22.30 | 22.44 | 22.10 |
| | 36 | 0 | 21.01 | 21.13 | 20.93 |
| | 36 | 19 | 20.96 | 21.07 | 20.96 |
| | 36 | 39 | 21.04 | 21.02 | 20.78 |
| | 75 | 0 | 20.97 | 20.99 | 20.97 |
| 64QAM | 1 | 0 | 21.33 | 21.45 | 21.49 |
| | 1 | 37 | 21.40 | 21.49 | 21.49 |
| | 1 | 74 | 21.16 | 21.35 | 21.31 |
| | 36 | 0 | 19.84 | 20.10 | 19.88 |
| | 36 | 19 | 20.00 | 20.03 | 19.78 |
| | 36 | 39 | 20.13 | 20.05 | 19.77 |
| | 75 | 0 | 19.79 | 19.92 | 20.02 |
| 256QAM | 1 | 0 | 18.33 | 18.40 | 18.09 |
| | 1 | 37 | 18.31 | 18.39 | 18.37 |
| | 1 | 74 | 18.33 | 18.12 | 18.09 |
| | 36 | 0 | 18.05 | 18.18 | 17.84 |
| | 36 | 19 | 17.94 | 17.99 | 17.80 |
| | 36 | 39 | 17.81 | 18.06 | 18.04 |
| | 75 | 0 | 17.93 | 17.95 | 17.88 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.64 | 23.67 | 23.02 | 25.05 | 33.01 |
| 16QAM | 20.78 | 22.81 | 22.64 | 24.67 | 33.01 |
| 64QAM | 19.77 | 21.8 | 21.49 | 23.52 | 33.01 |
| 256QAM | 17.8 | 19.83 | 18.4 | 20.43 | 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 | 22.95 | 23.04 | 22.97 |
| | 1 | 50 | 22.74 | 22.97 | 22.91 |
| | 1 | 99 | 22.73 | 22.87 | 22.97 |
| | 50 | 0 | 22.20 | 22.21 | 21.97 |
| | 50 | 25 | 21.92 | 21.95 | 22.04 |
| | 50 | 50 | 21.98 | 21.93 | 21.96 |
| | 100 | 0 | 21.72 | 21.91 | 21.90 |
| 16QAM | 1 | 0 | 22.29 | 22.61 | 22.39 |
| | 1 | 50 | 22.55 | 22.74 | 22.64 |
| | 1 | 99 | 22.36 | 22.38 | 22.11 |
| | 50 | 0 | 20.79 | 21.16 | 20.84 |
| | 50 | 25 | 20.93 | 21.27 | 20.90 |
| | 50 | 50 | 21.29 | 21.06 | 20.91 |
| | 100 | 0 | 21.00 | 21.08 | 20.94 |
| 64QAM | 1 | 0 | 21.28 | 21.60 | 21.48 |
| | 1 | 50 | 21.59 | 21.55 | 21.63 |
| | 1 | 99 | 21.48 | 21.50 | 21.54 |
| | 50 | 0 | 19.80 | 19.99 | 20.13 |
| | 50 | 25 | 19.92 | 20.21 | 20.16 |
| | 50 | 50 | 19.85 | 20.24 | 19.85 |
| | 100 | 0 | 20.20 | 20.19 | 19.94 |
| 256QAM | 1 | 0 | 18.43 | 18.36 | 18.42 |
| | 1 | 50 | 18.17 | 18.32 | 18.24 |
| | 1 | 99 | 18.09 | 18.33 | 18.40 |
| | 50 | 0 | 18.09 | 18.11 | 18.00 |
| | 50 | 25 | 17.85 | 18.20 | 17.91 |
| | 50 | 50 | 18.03 | 18.08 | 17.90 |
| | 100 | 0 | 18.03 | 18.19 | 17.99 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.72 | 23.75 | 23.04 | 25.07 | 33.01 |
| 16QAM | 20.79 | 22.82 | 22.74 | 24.77 | 33.01 |
| 64QAM | 19.8 | 21.83 | 21.63 | 23.66 | 33.01 |
| 256QAM | 17.85 | 19.88 | 18.43 | 20.46 | 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**

| LTE Band 26 1.4M | | | | | |
|---|---|---|---|---|---|
| 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 | 22.95 | 23.04 | 23.04 |
| | 1 | 2 | 22.84 | 23.02 | 22.84 |
| | 1 | 5 | 23.07 | 22.96 | 22.99 |
| | 3 | 0 | 22.06 | 22.08 | 21.88 |
| | 3 | 1 | 21.95 | 22.11 | 22.09 |
| | 3 | 3 | 22.02 | 22.12 | 22.21 |
| | 6 | 0 | 22.14 | 22.11 | 21.99 |
| 16QAM | 1 | 0 | 22.65 | 22.77 | 22.57 |
| | 1 | 2 | 22.48 | 22.65 | 22.56 |
| | 1 | 5 | 22.46 | 22.54 | 22.41 |
| | 3 | 0 | 21.15 | 21.27 | 21.08 |
| | 3 | 1 | 21.16 | 21.27 | 21.14 |
| | 3 | 3 | 21.26 | 21.12 | 21.15 |
| | 6 | 0 | 21.10 | 21.19 | 21.06 |
| 64QAM | 1 | 0 | 21.55 | 21.68 | 21.31 |
| | 1 | 2 | 21.44 | 21.52 | 21.63 |
| | 1 | 5 | 21.55 | 21.57 | 21.27 |
| | 3 | 0 | 19.98 | 20.19 | 20.00 |
| | 3 | 1 | 20.17 | 20.23 | 20.30 |
| | 3 | 3 | 20.03 | 20.31 | 19.98 |
| | 6 | 0 | 19.98 | 20.04 | 19.95 |
| 256QAM | 1 | 0 | 18.34 | 18.46 | 18.24 |
| | 1 | 2 | 18.21 | 18.45 | 18.39 |
| | 1 | 5 | 18.17 | 18.35 | 18.04 |
| | 3 | 0 | 18.02 | 18.10 | 17.94 |
| | 3 | 1 | 18.04 | 18.05 | 18.03 |
| | 3 | 3 | 17.88 | 18.01 | 17.71 |
| | 6 | 0 | 17.94 | 18.11 | 18.07 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.88 | 22.36 | 23.07 | 23.55 | 50.00 |
| 16QAM | 21.06 | 21.54 | 22.77 | 23.25 | 50.00 |
| 64QAM | 19.95 | 20.43 | 21.68 | 22.16 | 50.00 |
| 256QAM | 17.71 | 18.19 | 18.46 | 18.94 | 50.00 |

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

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

| LTE Band 26 3M | | | | | |
|---|---|---|---|---|---|
| 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 | 23.02 | 23.06 | 23.13 |
| | 1 | 7 | 23.11 | 23.03 | 22.85 |
| | 1 | 14 | 22.96 | 23.14 | 22.96 |
| | 8 | 0 | 22.04 | 22.02 | 22.07 |
| | 8 | 3 | 22.18 | 22.17 | 22.02 |
| | 8 | 7 | 21.88 | 22.19 | 21.95 |
| | 15 | 0 | 21.96 | 22.14 | 21.90 |
| 16QAM | 1 | 0 | 22.63 | 22.66 | 22.62 |
| | 1 | 7 | 22.75 | 22.44 | 22.61 |
| | 1 | 14 | 22.49 | 22.70 | 22.65 |
| | 8 | 0 | 20.83 | 21.24 | 20.92 |
| | 8 | 3 | 21.07 | 21.11 | 21.02 |
| | 8 | 7 | 21.02 | 21.17 | 20.91 |
| | 15 | 0 | 21.09 | 21.13 | 21.16 |
| 64QAM | 1 | 0 | 21.32 | 21.54 | 21.43 |
| | 1 | 7 | 21.10 | 21.65 | 21.37 |
| | 1 | 14 | 21.28 | 21.53 | 21.49 |
| | 8 | 0 | 19.85 | 20.17 | 20.16 |
| | 8 | 3 | 19.91 | 20.06 | 19.87 |
| | 8 | 7 | 19.93 | 20.32 | 20.10 |
| | 15 | 0 | 19.84 | 20.27 | 20.04 |
| 256QAM | 1 | 0 | 18.43 | 18.27 | 18.30 |
| | 1 | 7 | 18.25 | 18.31 | 18.01 |
| | 1 | 14 | 18.29 | 18.29 | 18.09 |
| | 8 | 0 | 18.12 | 17.92 | 17.75 |
| | 8 | 3 | 17.99 | 17.87 | 18.02 |
| | 8 | 7 | 18.01 | 18.05 | 17.69 |
| | 15 | 0 | 17.92 | 18.10 | 18.01 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.88 | 22.36 | 23.14 | 23.62 | 50.00 |
| 16QAM | 20.83 | 21.31 | 22.75 | 23.23 | 50.00 |
| 64QAM | 19.84 | 20.32 | 21.65 | 22.13 | 50.00 |
| 256QAM | 17.69 | 18.17 | 18.43 | 18.91 | 50.00 |

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

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

| LTE Band 26 5M | | | | | |
|---|---|---|---|---|---|
| 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 | 23.19 | 23.06 | 23.18 |
| | 1 | 12 | 22.98 | 23.08 | 22.83 |
| | 1 | 24 | 22.86 | 23.22 | 23.01 |
| | 12 | 0 | 22.23 | 22.16 | 22.08 |
| | 12 | 6 | 21.88 | 22.27 | 22.03 |
| | 12 | 13 | 22.13 | 22.26 | 22.04 |
| | 25 | 0 | 21.93 | 22.10 | 21.99 |
| 16QAM | 1 | 0 | 22.75 | 22.73 | 22.58 |
| | 1 | 12 | 22.45 | 22.76 | 22.75 |
| | 1 | 24 | 22.53 | 22.74 | 22.41 |
| | 12 | 0 | 21.12 | 21.10 | 21.08 |
| | 12 | 6 | 21.14 | 21.20 | 21.26 |
| | 12 | 13 | 21.08 | 21.06 | 21.04 |
| | 25 | 0 | 21.11 | 21.22 | 21.31 |
| 64QAM | 1 | 0 | 21.32 | 21.67 | 21.53 |
| | 1 | 12 | 21.61 | 21.58 | 21.47 |
| | 1 | 24 | 21.52 | 21.64 | 21.51 |
| | 12 | 0 | 19.97 | 20.29 | 19.95 |
| | 12 | 6 | 20.09 | 20.23 | 20.01 |
| | 12 | 13 | 20.24 | 20.16 | 19.89 |
| | 25 | 0 | 20.18 | 20.11 | 20.36 |
| 256QAM | 1 | 0 | 18.17 | 18.45 | 18.33 |
| | 1 | 12 | 18.28 | 18.42 | 18.09 |
| | 1 | 24 | 18.39 | 18.35 | 18.20 |
| | 12 | 0 | 17.97 | 18.13 | 17.86 |
| | 12 | 6 | 18.00 | 18.01 | 18.01 |
| | 12 | 13 | 17.90 | 18.05 | 18.05 |
| | 25 | 0 | 18.09 | 18.23 | 18.08 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.88 | 22.36 | 23.22 | 23.7 | 50.00 |
| 16QAM | 21.04 | 21.52 | 22.76 | 23.24 | 50.00 |
| 64QAM | 19.89 | 20.37 | 21.67 | 22.15 | 50.00 |
| 256QAM | 17.86 | 18.34 | 18.45 | 18.93 | 50.00 |

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

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

| LTE Band 26 10M | | | |
|---|---|---|---|
| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |
| | | | CH 26740 |
| | | | 819 MHz |
| QPSK | 1 | 0 | 23.08 |
| | 1 | 24 | 23.06 |
| | 1 | 49 | 22.96 |
| | 25 | 0 | 21.95 |
| | 25 | 12 | 22.16 |
| | 25 | 25 | 21.94 |
| | 50 | 0 | 22.07 |
| 16QAM | 1 | 0 | 22.49 |
| | 1 | 24 | 22.45 |
| | 1 | 49 | 22.61 |
| | 25 | 0 | 20.99 |
| | 25 | 12 | 21.16 |
| | 25 | 25 | 21.07 |
| | 50 | 0 | 21.10 |
| 64QAM | 1 | 0 | 21.47 |
| | 1 | 24 | 21.23 |
| | 1 | 49 | 21.36 |
| | 25 | 0 | 20.07 |
| | 25 | 12 | 20.14 |
| | 25 | 25 | 20.04 |
| | 50 | 0 | 20.03 |
| 256QAM | 1 | 0 | 18.43 |
| | 1 | 24 | 18.23 |
| | 1 | 49 | 18.08 |
| | 25 | 0 | 17.90 |
| | 25 | 12 | 17.99 |
| | 25 | 25 | 18.02 |
| | 50 | 0 | 18.01 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.94 | 22.42 | 23.08 | 23.56 | 50.00 |
| 16QAM | 20.99 | 21.47 | 22.61 | 23.09 | 50.00 |
| 64QAM | 20.03 | 20.51 | 21.47 | 21.95 | 50.00 |
| 256QAM | 17.9 | 18.38 | 18.43 | 18.91 | 50.00 |

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

7.1.11 LTE Band 26 (824 MHz ~ 849 MHz)

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

| LTE Band 26 1.4M | | | | | |
|---|---|---|---|---|---|
| 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 | 22.99 | 23.01 | 23.04 |
| | 1 | 2 | 22.95 | 23.04 | 22.95 |
| | 1 | 5 | 22.74 | 22.82 | 22.89 |
| | 3 | 0 | 21.83 | 21.93 | 22.09 |
| | 3 | 1 | 21.70 | 22.01 | 21.76 |
| | 3 | 3 | 21.83 | 21.97 | 21.93 |
| | 6 | 0 | 21.99 | 22.09 | 21.87 |
| 16QAM | 1 | 0 | 22.27 | 22.53 | 22.38 |
| | 1 | 2 | 22.20 | 22.52 | 22.27 |
| | 1 | 5 | 22.42 | 22.62 | 22.12 |
| | 3 | 0 | 20.87 | 21.19 | 20.83 |
| | 3 | 1 | 20.99 | 21.01 | 20.80 |
| | 3 | 3 | 21.02 | 21.22 | 20.99 |
| | 6 | 0 | 20.73 | 21.06 | 20.86 |
| 64QAM | 1 | 0 | 21.34 | 21.46 | 21.35 |
| | 1 | 2 | 21.08 | 21.25 | 21.27 |
| | 1 | 5 | 21.02 | 21.16 | 21.04 |
| | 3 | 0 | 19.80 | 20.02 | 19.62 |
| | 3 | 1 | 20.12 | 20.00 | 19.82 |
| | 3 | 3 | 19.96 | 20.12 | 19.91 |
| | 6 | 0 | 19.71 | 20.06 | 19.96 |
| 256QAM | 1 | 0 | 18.22 | 18.33 | 18.17 |
| | 1 | 2 | 18.14 | 18.49 | 17.96 |
| | 1 | 5 | 18.28 | 18.37 | 18.06 |
| | 3 | 0 | 17.75 | 17.93 | 18.05 |
| | 3 | 1 | 17.83 | 17.89 | 18.03 |
| | 3 | 3 | 17.88 | 18.10 | 17.77 |
| | 6 | 0 | 17.65 | 18.11 | 17.87 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.7 | 22.18 | 23.04 | 23.52 | 38.45 |
| 16QAM | 20.73 | 21.21 | 22.62 | 23.1 | 38.45 |
| 64QAM | 19.62 | 20.1 | 21.46 | 21.94 | 38.45 |
| 256QAM | 17.65 | 18.13 | 18.49 | 18.97 | 38.45 |

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

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

| LTE Band 26 3M | | | | | |
|---|---|---|---|---|---|
| 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 | 23.01 | 22.99 | 22.92 |
| | 1 | 7 | 22.97 | 22.97 | 22.94 |
| | 1 | 14 | 22.92 | 22.95 | 22.88 |
| | 8 | 0 | 22.08 | 22.07 | 21.88 |
| | 8 | 3 | 21.99 | 21.98 | 22.01 |
| | 8 | 7 | 22.24 | 22.07 | 22.05 |
| | 15 | 0 | 21.97 | 22.15 | 22.21 |
| 16QAM | 1 | 0 | 22.39 | 22.52 | 22.40 |
| | 1 | 7 | 22.31 | 22.47 | 22.25 |
| | 1 | 14 | 22.18 | 22.52 | 22.18 |
| | 8 | 0 | 21.08 | 21.02 | 20.78 |
| | 8 | 3 | 20.95 | 21.01 | 20.88 |
| | 8 | 7 | 21.09 | 21.09 | 20.96 |
| | 15 | 0 | 20.96 | 20.93 | 20.96 |
| 64QAM | 1 | 0 | 21.15 | 21.55 | 21.37 |
| | 1 | 7 | 21.14 | 21.29 | 20.97 |
| | 1 | 14 | 20.86 | 21.26 | 21.09 |
| | 8 | 0 | 20.06 | 20.00 | 19.86 |
| | 8 | 3 | 20.01 | 20.08 | 20.08 |
| | 8 | 7 | 20.00 | 20.04 | 20.02 |
| | 15 | 0 | 20.06 | 20.14 | 19.73 |
| 256QAM | 1 | 0 | 18.09 | 18.39 | 18.34 |
| | 1 | 7 | 18.11 | 18.35 | 18.07 |
| | 1 | 14 | 18.38 | 18.36 | 18.15 |
| | 8 | 0 | 17.62 | 18.09 | 17.90 |
| | 8 | 3 | 17.89 | 18.05 | 17.85 |
| | 8 | 7 | 18.01 | 18.07 | 17.83 |
| | 15 | 0 | 17.78 | 18.02 | 17.90 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.88 | 22.36 | 23.01 | 23.49 | 38.45 |
| 16QAM | 20.78 | 21.26 | 22.52 | 23.00 | 38.45 |
| 64QAM | 19.73 | 20.21 | 21.55 | 22.03 | 38.45 |
| 256QAM | 17.62 | 18.10 | 18.39 | 18.87 | 38.45 |

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

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

| LTE Band 26 5M | | | | | |
|---|---|---|---|---|---|
| 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 | 23.18 | 23.16 | 23.03 |
| | 1 | 12 | 23.06 | 23.06 | 22.89 |
| | 1 | 24 | 22.83 | 23.08 | 22.94 |
| | 12 | 0 | 21.92 | 22.14 | 22.12 |
| | 12 | 6 | 21.91 | 22.04 | 22.06 |
| | 12 | 13 | 21.87 | 22.17 | 22.14 |
| | 25 | 0 | 22.01 | 22.15 | 21.74 |
| 16QAM | 1 | 0 | 22.37 | 22.56 | 22.51 |
| | 1 | 12 | 22.47 | 22.54 | 22.28 |
| | 1 | 24 | 22.28 | 22.45 | 22.60 |
| | 12 | 0 | 20.75 | 21.20 | 21.04 |
| | 12 | 6 | 21.18 | 21.10 | 21.16 |
| | 12 | 13 | 21.10 | 21.25 | 20.93 |
| | 25 | 0 | 20.88 | 21.07 | 20.95 |
| 64QAM | 1 | 0 | 21.32 | 21.53 | 21.36 |
| | 1 | 12 | 21.18 | 21.21 | 21.27 |
| | 1 | 24 | 20.97 | 21.26 | 21.07 |
| | 12 | 0 | 19.76 | 20.11 | 20.00 |
| | 12 | 6 | 20.00 | 20.06 | 19.90 |
| | 12 | 13 | 19.98 | 20.13 | 19.85 |
| | 25 | 0 | 19.88 | 20.11 | 19.96 |
| 256QAM | 1 | 0 | 18.28 | 18.40 | 18.28 |
| | 1 | 12 | 18.15 | 18.26 | 18.15 |
| | 1 | 24 | 18.26 | 18.51 | 18.32 |
| | 12 | 0 | 17.76 | 17.96 | 18.09 |
| | 12 | 6 | 17.76 | 18.05 | 17.79 |
| | 12 | 13 | 18.04 | 17.95 | 18.00 |
| | 25 | 0 | 17.81 | 18.03 | 18.08 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.74 | 22.22 | 23.18 | 23.66 | 38.45 |
| 16QAM | 20.75 | 21.23 | 22.6 | 23.08 | 38.45 |
| 64QAM | 19.76 | 20.24 | 21.53 | 22.01 | 38.45 |
| 256QAM | 17.76 | 18.24 | 18.51 | 18.99 | 38.45 |

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

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

| LTE Band 26 10M | | | | | |
|---|---|---|---|---|---|
| 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 | 22.98 | 23.14 | 22.84 |
| | 1 | 24 | 22.99 | 22.94 | 22.87 |
| | 1 | 49 | 22.89 | 22.85 | 22.74 |
| | 25 | 0 | 21.83 | 22.16 | 22.04 |
| | 25 | 12 | 21.77 | 22.07 | 21.96 |
| | 25 | 25 | 21.95 | 22.13 | 21.99 |
| | 50 | 0 | 21.92 | 22.10 | 22.05 |
| 16QAM | 1 | 0 | 22.24 | 22.48 | 22.32 |
| | 1 | 24 | 22.50 | 22.50 | 22.37 |
| | 1 | 49 | 22.33 | 22.51 | 22.50 |
| | 25 | 0 | 21.18 | 21.04 | 20.92 |
| | 25 | 12 | 21.11 | 21.19 | 21.09 |
| | 25 | 25 | 21.05 | 21.17 | 20.97 |
| | 50 | 0 | 20.86 | 21.07 | 21.02 |
| 64QAM | 1 | 0 | 21.43 | 21.41 | 21.31 |
| | 1 | 24 | 21.18 | 21.32 | 21.48 |
| | 1 | 49 | 21.27 | 21.23 | 21.02 |
| | 25 | 0 | 19.89 | 20.00 | 20.11 |
| | 25 | 12 | 19.90 | 20.09 | 20.12 |
| | 25 | 25 | 19.89 | 20.20 | 20.06 |
| | 50 | 0 | 20.14 | 20.01 | 20.06 |
| 256QAM | 1 | 0 | 18.33 | 18.47 | 18.16 |
| | 1 | 24 | 18.29 | 18.49 | 18.36 |
| | 1 | 49 | 18.23 | 18.42 | 18.37 |
| | 25 | 0 | 17.78 | 18.00 | 18.11 |
| | 25 | 12 | 17.81 | 18.09 | 18.04 |
| | 25 | 25 | 18.04 | 17.96 | 17.96 |
| | 50 | 0 | 17.95 | 17.94 | 17.89 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.77 | 22.25 | 23.14 | 23.62 | 38.45 |
| 16QAM | 20.86 | 21.34 | 22.51 | 22.99 | 38.45 |
| 64QAM | 19.89 | 20.37 | 21.48 | 21.96 | 38.45 |
| 256QAM | 17.78 | 18.26 | 18.49 | 18.97 | 38.45 |

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

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

| LTE Band 26 15M | | | | | |
|---|---|---|---|---|---|
| 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 | 23.09 | 23.21 | 22.93 |
| | 1 | 37 | 22.98 | 23.13 | 22.69 |
| | 1 | 74 | 22.97 | 22.94 | 22.90 |
| | 36 | 0 | 22.69 | 22.97 | 22.84 |
| | 36 | 19 | 21.83 | 21.96 | 21.63 |
| | 36 | 39 | 21.74 | 21.94 | 21.87 |
| | 75 | 0 | 21.89 | 21.99 | 21.95 |
| 16QAM | 1 | 0 | 21.85 | 21.98 | 21.94 |
| | 1 | 37 | 22.41 | 22.37 | 22.13 |
| | 1 | 74 | 22.12 | 22.53 | 22.53 |
| | 36 | 0 | 22.25 | 22.54 | 22.44 |
| | 36 | 19 | 20.68 | 20.93 | 20.76 |
| | 36 | 39 | 21.10 | 21.04 | 21.06 |
| | 75 | 0 | 20.75 | 20.95 | 20.88 |
| 64QAM | 1 | 0 | 20.98 | 21.02 | 20.98 |
| | 1 | 37 | 21.14 | 21.24 | 21.15 |
| | 1 | 74 | 21.11 | 21.15 | 21.05 |
| | 36 | 0 | 20.90 | 21.16 | 21.13 |
| | 36 | 19 | 19.90 | 20.04 | 19.99 |
| | 36 | 39 | 20.02 | 20.01 | 20.01 |
| | 75 | 0 | 19.85 | 20.03 | 19.76 |
| 256QAM | 1 | 0 | 19.96 | 19.91 | 19.90 |
| | 1 | 37 | 18.25 | 18.21 | 18.16 |
| | 1 | 74 | 18.26 | 18.40 | 18.22 |
| | 36 | 0 | 18.00 | 18.20 | 18.15 |
| | 36 | 19 | 17.67 | 17.86 | 17.80 |
| | 36 | 39 | 17.86 | 17.90 | 17.71 |
| | 75 | 0 | 17.67 | 17.91 | 17.95 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.63 | 22.11 | 23.21 | 23.69 | 38.45 |
| 16QAM | 20.68 | 21.16 | 22.54 | 23.02 | 38.45 |
| 64QAM | 19.76 | 20.24 | 21.24 | 21.72 | 38.45 |
| 256QAM | 17.67 | 18.15 | 19.96 | 20.44 | 38.45 |

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

7.1.12 LTE Band 41

**LTE Band 41, 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 | 23.02 | 23.05 | 22.98 |
| | 1 | 12 | 23.08 | 23.09 | 22.69 |
| | 1 | 24 | 22.73 | 22.94 | 22.74 |
| | 12 | 0 | 21.89 | 22.05 | 21.79 |
| | 12 | 6 | 21.73 | 22.01 | 22.00 |
| | 12 | 13 | 21.84 | 22.00 | 21.92 |
| | 25 | 0 | 21.78 | 21.95 | 21.78 |
| 16QAM | 1 | 0 | 22.21 | 22.22 | 22.25 |
| | 1 | 12 | 22.01 | 22.45 | 22.11 |
| | 1 | 24 | 22.06 | 22.00 | 22.11 |
| | 12 | 0 | 20.90 | 21.03 | 20.99 |
| | 12 | 6 | 20.69 | 21.07 | 20.73 |
| | 12 | 13 | 20.94 | 21.08 | 21.02 |
| | 25 | 0 | 20.84 | 20.91 | 20.74 |
| 64QAM | 1 | 0 | 20.78 | 20.80 | 20.86 |
| | 1 | 12 | 20.84 | 21.06 | 20.67 |
| | 1 | 24 | 20.37 | 20.73 | 20.87 |
| | 12 | 0 | 20.22 | 20.22 | 19.94 |
| | 12 | 6 | 19.94 | 20.11 | 20.05 |
| | 12 | 13 | 19.94 | 20.03 | 19.89 |
| | 25 | 0 | 20.06 | 20.12 | 19.89 |
| 256QAM | 1 | 0 | 17.66 | 17.89 | 17.84 |
| | 1 | 12 | 17.75 | 18.06 | 18.00 |
| | 1 | 24 | 17.77 | 17.85 | 17.71 |
| | 12 | 0 | 18.32 | 18.37 | 18.33 |
| | 12 | 6 | 18.17 | 18.19 | 18.10 |
| | 12 | 13 | 17.95 | 18.27 | 17.85 |
| | 25 | 0 | 17.92 | 18.22 | 17.73 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.73 | 23.99 | 23.09 | 25.35 | 33.01 |
| 16QAM | 20.69 | 22.95 | 22.45 | 24.71 | 33.01 |
| 64QAM | 19.89 | 22.15 | 21.06 | 23.32 | 33.01 |
| 256QAM | 17.66 | 19.92 | 18.37 | 20.63 | 33.01 |

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

## LTE Band 41, 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 | 23.01 | 23.16 | 22.93 |
| | 1 | 24 | 22.83 | 23.04 | 22.96 |
| | 1 | 49 | 22.67 | 22.82 | 22.76 |
| | 25 | 0 | 21.94 | 22.01 | 21.92 |
| | 25 | 12 | 21.92 | 21.91 | 21.90 |
| | 25 | 25 | 21.83 | 21.90 | 21.79 |
| | 50 | 0 | 21.97 | 22.07 | 21.68 |
| 16QAM | 1 | 0 | 22.24 | 22.17 | 21.99 |
| | 1 | 24 | 22.26 | 22.34 | 22.20 |
| | 1 | 49 | 21.87 | 22.12 | 21.79 |
| | 25 | 0 | 21.07 | 21.19 | 20.96 |
| | 25 | 12 | 20.74 | 21.09 | 20.60 |
| | 25 | 25 | 20.76 | 21.00 | 21.02 |
| | 50 | 0 | 20.99 | 20.93 | 20.70 |
| 64QAM | 1 | 0 | 20.74 | 20.88 | 20.76 |
| | 1 | 24 | 20.90 | 20.95 | 20.73 |
| | 1 | 49 | 20.78 | 20.93 | 20.76 |
| | 25 | 0 | 19.79 | 20.23 | 20.23 |
| | 25 | 12 | 20.00 | 20.23 | 19.89 |
| | 25 | 25 | 20.01 | 19.94 | 19.98 |
| | 50 | 0 | 19.87 | 20.23 | 19.77 |
| 256QAM | 1 | 0 | 18.01 | 17.87 | 17.76 |
| | 1 | 24 | 17.65 | 17.98 | 17.78 |
| | 1 | 49 | 17.87 | 17.68 | 17.49 |
| | 25 | 0 | 18.07 | 18.15 | 17.90 |
| | 25 | 12 | 18.34 | 18.19 | 18.02 |
| | 25 | 25 | 17.92 | 18.03 | 17.99 |
| | 50 | 0 | 17.87 | 18.11 | 17.85 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.68 | 23.94 | 23.16 | 25.42 | 33.01 |
| 16QAM | 20.6 | 22.86 | 22.34 | 24.6 | 33.01 |
| 64QAM | 19.77 | 22.03 | 20.95 | 23.21 | 33.01 |
| 256QAM | 17.49 | 19.75 | 18.34 | 20.6 | 33.01 |

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

## LTE Band 41, 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 | 22.92 | 23.06 | 22.91 |
| | 1 | 37 | 22.76 | 23.18 | 23.00 |
| | 1 | 74 | 22.66 | 23.10 | 22.84 |
| | 36 | 0 | 22.07 | 22.00 | 21.74 |
| | 36 | 19 | 21.78 | 21.99 | 21.68 |
| | 36 | 39 | 21.68 | 22.03 | 22.02 |
| | 75 | 0 | 21.84 | 21.92 | 21.71 |
| 16QAM | 1 | 0 | 22.12 | 22.26 | 22.22 |
| | 1 | 37 | 22.09 | 22.26 | 21.89 |
| | 1 | 74 | 21.92 | 22.28 | 21.84 |
| | 36 | 0 | 20.70 | 20.86 | 20.72 |
| | 36 | 19 | 20.93 | 21.06 | 20.80 |
| | 36 | 39 | 21.09 | 20.94 | 20.61 |
| | 75 | 0 | 20.90 | 21.13 | 20.76 |
| 64QAM | 1 | 0 | 20.79 | 21.03 | 20.90 |
| | 1 | 37 | 20.93 | 20.95 | 20.91 |
| | 1 | 74 | 20.66 | 20.80 | 20.87 |
| | 36 | 0 | 20.11 | 20.25 | 20.02 |
| | 36 | 19 | 20.03 | 20.26 | 19.79 |
| | 36 | 39 | 19.98 | 20.14 | 19.99 |
| | 75 | 0 | 20.14 | 20.19 | 20.15 |
| 256QAM | 1 | 0 | 17.87 | 18.14 | 17.97 |
| | 1 | 37 | 17.84 | 18.04 | 17.97 |
| | 1 | 74 | 17.82 | 17.89 | 17.59 |
| | 36 | 0 | 18.24 | 18.22 | 17.99 |
| | 36 | 19 | 17.83 | 18.14 | 17.92 |
| | 36 | 39 | 18.00 | 18.20 | 17.84 |
| | 75 | 0 | 18.09 | 18.18 | 18.07 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.68 | 23.94 | 23.18 | 25.44 | 33.01 |
| 16QAM | 20.61 | 22.87 | 22.28 | 24.54 | 33.01 |
| 64QAM | 19.79 | 22.05 | 21.03 | 23.29 | 33.01 |
| 256QAM | 17.59 | 19.85 | 18.24 | 20.5 | 33.01 |

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

## LTE Band 41, 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 | 23.15 | 23.17 | 23.05 |
| | 1 | 50 | 23.09 | 23.07 | 22.95 |
| | 1 | 99 | 22.69 | 22.97 | 23.00 |
| | 50 | 0 | 21.78 | 22.11 | 21.93 |
| | 50 | 25 | 22.12 | 22.08 | 21.89 |
| | 50 | 50 | 21.72 | 22.09 | 21.92 |
| | 100 | 0 | 21.87 | 21.94 | 21.79 |
| 16QAM | 1 | 0 | 22.21 | 22.20 | 22.21 |
| | 1 | 50 | 22.31 | 22.28 | 22.12 |
| | 1 | 99 | 22.04 | 22.07 | 22.00 |
| | 50 | 0 | 20.96 | 21.22 | 21.05 |
| | 50 | 25 | 21.05 | 20.98 | 21.05 |
| | 50 | 50 | 20.91 | 21.04 | 20.89 |
| | 100 | 0 | 20.98 | 20.98 | 20.83 |
| 64QAM | 1 | 0 | 20.69 | 21.01 | 20.89 |
| | 1 | 50 | 20.77 | 21.03 | 20.96 |
| | 1 | 99 | 20.83 | 20.75 | 20.51 |
| | 50 | 0 | 20.11 | 20.14 | 20.02 |
| | 50 | 25 | 20.25 | 20.22 | 19.98 |
| | 50 | 50 | 20.14 | 20.19 | 19.93 |
| | 100 | 0 | 19.98 | 20.20 | 20.05 |
| 256QAM | 1 | 0 | 17.91 | 17.95 | 17.76 |
| | 1 | 50 | 17.83 | 18.13 | 17.86 |
| | 1 | 99 | 17.64 | 17.78 | 17.89 |
| | 50 | 0 | 18.38 | 18.25 | 18.28 |
| | 50 | 25 | 18.20 | 18.24 | 17.99 |
| | 50 | 50 | 17.88 | 18.20 | 18.07 |
| | 100 | 0 | 18.23 | 18.16 | 17.77 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.72 | 23.98 | 23.17 | 25.43 | 33.01 |
| 16QAM | 20.83 | 23.09 | 22.31 | 24.57 | 33.01 |
| 64QAM | 19.93 | 22.19 | 21.03 | 23.29 | 33.01 |
| 256QAM | 17.64 | 19.9 | 18.38 | 20.64 | 33.01 |

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

7.1.13 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 | 22.70 | 23.00 | 22.69 |
| | 1 | 2 | 22.75 | 22.91 | 22.61 |
| | 1 | 5 | 22.84 | 22.83 | 22.77 |
| | 3 | 0 | 21.98 | 22.12 | 21.77 |
| | 3 | 1 | 21.95 | 22.16 | 22.35 |
| | 3 | 3 | 22.08 | 22.09 | 21.84 |
| | 6 | 0 | 22.05 | 22.09 | 22.17 |
| 16QAM | 1 | 0 | 22.13 | 22.26 | 21.88 |
| | 1 | 2 | 22.41 | 22.68 | 22.64 |
| | 1 | 5 | 22.52 | 22.79 | 22.47 |
| | 3 | 0 | 21.10 | 21.20 | 21.10 |
| | 3 | 1 | 21.07 | 21.25 | 21.29 |
| | 3 | 3 | 21.29 | 21.15 | 20.83 |
| | 6 | 0 | 20.77 | 20.97 | 20.84 |
| 64QAM | 1 | 0 | 21.35 | 21.44 | 21.32 |
| | 1 | 2 | 21.53 | 21.39 | 21.39 |
| | 1 | 5 | 21.28 | 21.44 | 21.21 |
| | 3 | 0 | 19.93 | 20.19 | 19.69 |
| | 3 | 1 | 19.88 | 20.11 | 19.93 |
| | 3 | 3 | 20.06 | 20.18 | 19.76 |
| | 6 | 0 | 19.84 | 20.04 | 19.68 |
| 256QAM | 1 | 0 | 18.22 | 18.14 | 17.97 |
| | 1 | 2 | 18.19 | 18.36 | 18.25 |
| | 1 | 5 | 18.18 | 18.36 | 18.11 |
| | 3 | 0 | 17.91 | 17.94 | 17.87 |
| | 3 | 1 | 17.97 | 18.01 | 17.80 |
| | 3 | 3 | 17.76 | 17.98 | 17.90 |
| | 6 | 0 | 18.08 | 18.04 | 17.80 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.77 | 23.8 | 23 | 25.03 | 30.00 |
| 16QAM | 20.77 | 22.8 | 22.79 | 24.82 | 30.00 |
| 64QAM | 19.68 | 21.71 | 21.53 | 23.56 | 30.00 |
| 256QAM | 17.76 | 19.79 | 18.36 | 20.39 | 30.00 |

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 | 22.59 | 22.97 | 22.70 |
| | 1 | 7 | 22.89 | 22.72 | 22.75 |
| | 1 | 14 | 22.79 | 23.02 | 22.90 |
| | 8 | 0 | 21.96 | 22.01 | 22.01 |
| | 8 | 3 | 22.09 | 22.20 | 22.00 |
| | 8 | 7 | 21.79 | 21.99 | 22.13 |
| | 15 | 0 | 21.88 | 22.20 | 22.28 |
| 16QAM | 1 | 0 | 22.15 | 22.20 | 22.10 |
| | 1 | 7 | 22.57 | 22.60 | 22.65 |
| | 1 | 14 | 22.49 | 22.70 | 22.26 |
| | 8 | 0 | 21.16 | 21.22 | 21.06 |
| | 8 | 3 | 21.01 | 21.34 | 21.02 |
| | 8 | 7 | 21.25 | 21.15 | 21.18 |
| | 15 | 0 | 20.94 | 21.05 | 20.82 |
| 64QAM | 1 | 0 | 21.06 | 21.26 | 21.21 |
| | 1 | 7 | 21.38 | 21.37 | 21.16 |
| | 1 | 14 | 21.23 | 21.50 | 21.20 |
| | 8 | 0 | 20.02 | 20.22 | 20.05 |
| | 8 | 3 | 20.07 | 20.12 | 19.87 |
| | 8 | 7 | 19.95 | 20.11 | 19.99 |
| | 15 | 0 | 20.07 | 20.15 | 19.85 |
| 256QAM | 1 | 0 | 18.11 | 18.31 | 18.06 |
| | 1 | 7 | 18.40 | 18.33 | 18.17 |
| | 1 | 14 | 17.98 | 18.26 | 18.09 |
| | 8 | 0 | 17.73 | 17.97 | 17.88 |
| | 8 | 3 | 17.69 | 18.11 | 17.64 |
| | 8 | 7 | 18.01 | 18.04 | 17.99 |
| | 15 | 0 | 17.73 | 18.22 | 17.88 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.79 | 23.82 | 23.02 | 25.05 | 30.00 |
| 16QAM | 20.82 | 22.85 | 22.7 | 24.73 | 30.00 |
| 64QAM | 19.85 | 21.88 | 21.5 | 23.53 | 30.00 |
| 256QAM | 17.64 | 19.67 | 18.4 | 20.43 | 30.00 |

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 | 22.66 | 22.96 | 22.77 |
| | 1 | 12 | 22.51 | 22.77 | 22.55 |
| | 1 | 24 | 22.92 | 23.00 | 22.92 |
| | 12 | 0 | 22.09 | 22.19 | 22.06 |
| | 12 | 6 | 21.95 | 22.11 | 21.89 |
| | 12 | 13 | 21.96 | 21.93 | 22.05 |
| | 25 | 0 | 21.90 | 22.21 | 22.08 |
| 16QAM | 1 | 0 | 22.25 | 22.16 | 22.10 |
| | 1 | 12 | 22.66 | 22.61 | 22.46 |
| | 1 | 24 | 22.55 | 22.65 | 22.66 |
| | 12 | 0 | 21.10 | 21.10 | 20.86 |
| | 12 | 6 | 21.28 | 21.21 | 21.12 |
| | 12 | 13 | 20.99 | 21.16 | 21.16 |
| | 25 | 0 | 20.96 | 21.08 | 20.84 |
| 64QAM | 1 | 0 | 21.25 | 21.24 | 21.20 |
| | 1 | 12 | 21.48 | 21.37 | 21.54 |
| | 1 | 24 | 21.44 | 21.47 | 21.31 |
| | 12 | 0 | 20.16 | 20.14 | 19.88 |
| | 12 | 6 | 19.90 | 20.15 | 20.13 |
| | 12 | 13 | 19.99 | 20.05 | 19.87 |
| | 25 | 0 | 19.86 | 20.08 | 20.00 |
| 256QAM | 1 | 0 | 18.10 | 18.32 | 18.35 |
| | 1 | 12 | 18.52 | 18.49 | 18.34 |
| | 1 | 24 | 17.94 | 18.29 | 18.15 |
| | 12 | 0 | 17.71 | 17.80 | 17.92 |
| | 12 | 6 | 17.92 | 18.08 | 18.11 |
| | 12 | 13 | 18.00 | 17.90 | 17.78 |
| | 25 | 0 | 17.78 | 17.92 | 18.03 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.89 | 23.92 | 23 | 25.03 | 30.00 |
| 16QAM | 20.84 | 22.87 | 22.66 | 24.69 | 30.00 |
| 64QAM | 19.86 | 21.89 | 21.54 | 23.57 | 30.00 |
| 256QAM | 17.71 | 19.74 | 18.52 | 20.55 | 30.00 |

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 | 22.51 | 23.04 | 22.76 |
| | 1 | 24 | 22.69 | 22.90 | 22.63 |
| | 1 | 49 | 22.64 | 22.88 | 22.97 |
| | 25 | 0 | 22.00 | 22.17 | 22.14 |
| | 25 | 12 | 22.25 | 22.20 | 21.79 |
| | 25 | 25 | 21.94 | 21.99 | 21.84 |
| | 50 | 0 | 21.92 | 22.16 | 21.76 |
| 16QAM | 1 | 0 | 22.33 | 22.16 | 22.28 |
| | 1 | 24 | 22.44 | 22.76 | 22.46 |
| | 1 | 49 | 22.54 | 22.65 | 22.46 |
| | 25 | 0 | 21.06 | 21.06 | 21.01 |
| | 25 | 12 | 21.28 | 21.15 | 21.00 |
| | 25 | 25 | 21.35 | 21.28 | 20.96 |
| | 50 | 0 | 20.97 | 21.22 | 21.13 |
| 64QAM | 1 | 0 | 21.16 | 21.36 | 21.43 |
| | 1 | 24 | 21.55 | 21.34 | 21.21 |
| | 1 | 49 | 21.52 | 21.51 | 21.30 |
| | 25 | 0 | 20.08 | 20.11 | 20.05 |
| | 25 | 12 | 19.87 | 20.19 | 19.96 |
| | 25 | 25 | 19.60 | 19.99 | 20.06 |
| | 50 | 0 | 19.89 | 20.20 | 19.91 |
| 256QAM | 1 | 0 | 18.05 | 18.20 | 18.14 |
| | 1 | 24 | 18.49 | 18.44 | 18.33 |
| | 1 | 49 | 18.12 | 18.15 | 18.08 |
| | 25 | 0 | 17.94 | 18.09 | 17.75 |
| | 25 | 12 | 17.79 | 18.00 | 17.76 |
| | 25 | 25 | 17.88 | 17.96 | 17.56 |
| | 50 | 0 | 17.96 | 18.02 | 17.65 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.76 | 23.79 | 23.04 | 25.07 | 30.00 |
| 16QAM | 20.96 | 22.99 | 22.76 | 24.79 | 30.00 |
| 64QAM | 19.6 | 21.63 | 21.55 | 23.58 | 30.00 |
| 256QAM | 17.56 | 19.59 | 18.49 | 20.52 | 30.00 |

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 | 22.58 | 22.95 | 22.66 |
| | 1 | 37 | 22.53 | 22.72 | 22.62 |
| | 1 | 74 | 22.74 | 22.95 | 22.97 |
| | 36 | 0 | 22.13 | 22.14 | 21.98 |
| | 36 | 19 | 22.00 | 22.18 | 22.03 |
| | 36 | 39 | 21.94 | 22.00 | 21.93 |
| | 75 | 0 | 21.88 | 22.21 | 21.88 |
| 16QAM | 1 | 0 | 22.10 | 22.26 | 22.25 |
| | 1 | 37 | 22.56 | 22.76 | 22.54 |
| | 1 | 74 | 22.79 | 22.82 | 22.55 |
| | 36 | 0 | 20.93 | 21.00 | 21.02 |
| | 36 | 19 | 21.06 | 21.20 | 21.11 |
| | 36 | 39 | 21.27 | 21.10 | 21.00 |
| | 75 | 0 | 21.00 | 21.03 | 21.17 |
| 64QAM | 1 | 0 | 21.26 | 21.21 | 21.13 |
| | 1 | 37 | 21.35 | 21.52 | 21.30 |
| | 1 | 74 | 21.40 | 21.46 | 21.42 |
| | 36 | 0 | 20.14 | 20.05 | 20.06 |
| | 36 | 19 | 19.81 | 20.19 | 19.97 |
| | 36 | 39 | 19.92 | 20.00 | 19.89 |
| | 75 | 0 | 20.02 | 19.98 | 19.77 |
| 256QAM | 1 | 0 | 18.25 | 18.12 | 17.93 |
| | 1 | 37 | 18.23 | 18.44 | 18.36 |
| | 1 | 74 | 18.05 | 18.30 | 18.34 |
| | 36 | 0 | 17.92 | 17.95 | 17.64 |
| | 36 | 19 | 17.93 | 18.11 | 17.79 |
| | 36 | 39 | 17.74 | 17.99 | 17.94 |
| | 75 | 0 | 17.84 | 18.11 | 18.00 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.88 | 23.91 | 22.97 | 25 | 30.00 |
| 16QAM | 20.93 | 22.96 | 22.82 | 24.85 | 30.00 |
| 64QAM | 19.77 | 21.8 | 21.52 | 23.55 | 30.00 |
| 256QAM | 17.64 | 19.67 | 18.44 | 20.47 | 30.00 |

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 | 22.67 | 23.20 | 22.76 |
| | 1 | 50 | 22.86 | 22.93 | 22.81 |
| | 1 | 99 | 22.77 | 22.96 | 22.89 |
| | 50 | 0 | 22.18 | 22.08 | 22.03 |
| | 50 | 25 | 22.16 | 22.18 | 22.21 |
| | 50 | 50 | 22.11 | 22.06 | 21.97 |
| | 100 | 0 | 22.19 | 22.16 | 21.98 |
| 16QAM | 1 | 0 | 22.24 | 22.37 | 22.08 |
| | 1 | 50 | 22.51 | 22.64 | 22.75 |
| | 1 | 99 | 22.60 | 22.77 | 22.81 |
| | 50 | 0 | 21.05 | 21.26 | 21.15 |
| | 50 | 25 | 20.92 | 21.27 | 21.21 |
| | 50 | 50 | 21.20 | 21.35 | 21.22 |
| | 100 | 0 | 21.02 | 21.18 | 21.02 |
| 64QAM | 1 | 0 | 21.18 | 21.37 | 21.33 |
| | 1 | 50 | 21.35 | 21.39 | 21.22 |
| | 1 | 99 | 21.33 | 21.66 | 21.41 |
| | 50 | 0 | 20.17 | 20.15 | 20.15 |
| | 50 | 25 | 20.03 | 20.29 | 20.04 |
| | 50 | 50 | 19.95 | 20.13 | 19.97 |
| | 100 | 0 | 20.04 | 20.15 | 19.94 |
| 256QAM | 1 | 0 | 18.13 | 18.31 | 18.16 |
| | 1 | 50 | 18.33 | 18.48 | 18.50 |
| | 1 | 99 | 18.26 | 18.34 | 18.34 |
| | 50 | 0 | 17.99 | 18.05 | 17.95 |
| | 50 | 25 | 17.92 | 18.05 | 18.09 |
| | 50 | 50 | 18.06 | 18.06 | 17.78 |
| | 100 | 0 | 17.94 | 17.99 | 18.01 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum Cond. Power (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| QPSK | 21.97 | 24 | 23.2 | 25.23 | 30.00 |
| 16QAM | 20.92 | 22.95 | 22.81 | 24.84 | 30.00 |
| 64QAM | 19.94 | 21.97 | 21.66 | 23.69 | 30.00 |
| 256QAM | 17.78 | 19.81 | 18.5 | 20.53 | 30.00 |

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

7.1.14 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 | 23.13 | 23.23 | 23.27 |
| | 1 | 12 | 23.03 | 23.30 | 23.23 |
| | 1 | 24 | 23.09 | 22.90 | 22.91 |
| | 12 | 0 | 22.17 | 22.16 | 21.97 |
| | 12 | 6 | 22.10 | 22.10 | 22.01 |
| | 12 | 13 | 21.78 | 22.21 | 21.98 |
| | 25 | 0 | 22.17 | 22.10 | 21.94 |
| 16QAM | 1 | 0 | 22.22 | 22.57 | 22.54 |
| | 1 | 12 | 22.53 | 22.82 | 22.44 |
| | 1 | 24 | 22.28 | 22.32 | 22.20 |
| | 12 | 0 | 21.20 | 21.16 | 21.05 |
| | 12 | 6 | 21.08 | 21.20 | 21.21 |
| | 12 | 13 | 20.88 | 21.25 | 21.17 |
| | 25 | 0 | 21.01 | 21.11 | 21.17 |
| 64QAM | 1 | 0 | 21.31 | 21.45 | 21.13 |
| | 1 | 12 | 21.07 | 21.27 | 21.22 |
| | 1 | 24 | 21.32 | 21.28 | 21.19 |
| | 12 | 0 | 19.78 | 20.09 | 20.02 |
| | 12 | 6 | 20.08 | 20.06 | 19.91 |
| | 12 | 13 | 19.78 | 19.92 | 20.10 |
| | 25 | 0 | 19.89 | 20.19 | 19.97 |
| 256QAM | 1 | 0 | 18.59 | 18.64 | 18.43 |
| | 1 | 12 | 18.84 | 18.92 | 18.68 |
| | 1 | 24 | 18.09 | 18.28 | 18.21 |
| | 12 | 0 | 18.31 | 18.36 | 18.16 |
| | 12 | 6 | 17.99 | 18.19 | 18.26 |
| | 12 | 13 | 18.06 | 18.32 | 18.11 |
| | 25 | 0 | 18.09 | 18.07 | 18.03 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.78 | 21.26 | 23.3 | 22.78 | 34.77 |
| 16QAM | 20.88 | 20.36 | 22.82 | 22.3 | 34.77 |
| 64QAM | 19.78 | 19.26 | 21.45 | 20.93 | 34.77 |
| 256QAM | 17.99 | 17.47 | 18.92 | 18.4 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.09 | 23.15 | 23.03 |
| | 1 | 24 | 23.01 | 23.05 | 23.10 |
| | 1 | 49 | 23.09 | 23.08 | 22.97 |
| | 25 | 0 | 22.12 | 22.21 | 22.07 |
| | 25 | 12 | 22.07 | 22.30 | 21.99 |
| | 25 | 25 | 21.75 | 22.17 | 21.90 |
| | 50 | 0 | 21.92 | 21.99 | 22.14 |
| 16QAM | 1 | 0 | 22.69 | 22.68 | 22.39 |
| | 1 | 24 | 22.48 | 22.50 | 22.50 |
| | 1 | 49 | 22.36 | 22.30 | 22.22 |
| | 25 | 0 | 20.93 | 21.19 | 21.06 |
| | 25 | 12 | 21.22 | 21.20 | 21.04 |
| | 25 | 25 | 20.99 | 21.17 | 20.82 |
| | 50 | 0 | 20.99 | 20.96 | 20.99 |
| 64QAM | 1 | 0 | 21.18 | 21.48 | 21.38 |
| | 1 | 24 | 21.25 | 21.27 | 21.20 |
| | 1 | 49 | 21.20 | 21.42 | 21.12 |
| | 25 | 0 | 19.88 | 19.96 | 19.96 |
| | 25 | 12 | 20.07 | 20.22 | 20.02 |
| | 25 | 25 | 19.81 | 20.16 | 19.93 |
| | 50 | 0 | 19.97 | 20.16 | 20.13 |
| 256QAM | 1 | 0 | 18.71 | 18.72 | 18.70 |
| | 1 | 24 | 18.65 | 18.89 | 18.80 |
| | 1 | 49 | 18.18 | 18.24 | 18.14 |
| | 25 | 0 | 18.17 | 18.41 | 18.07 |
| | 25 | 12 | 17.99 | 17.97 | 18.14 |
| | 25 | 25 | 18.18 | 18.34 | 17.97 |
| | 50 | 0 | 18.01 | 18.30 | 18.08 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.75 | 21.23 | 23.15 | 22.63 | 34.77 |
| 16QAM | 20.82 | 20.3 | 22.69 | 22.17 | 34.77 |
| 64QAM | 19.81 | 19.29 | 21.48 | 20.96 | 34.77 |
| 256QAM | 17.97 | 17.45 | 18.89 | 18.37 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.27 | 23.30 | 23.28 |
| | 1 | 37 | 23.10 | 23.15 | 23.06 |
| | 1 | 74 | 23.03 | 23.06 | 23.10 |
| | 36 | 0 | 21.89 | 22.15 | 22.11 |
| | 36 | 19 | 22.04 | 22.17 | 21.96 |
| | 36 | 39 | 21.90 | 22.15 | 21.73 |
| | 75 | 0 | 21.95 | 21.98 | 22.10 |
| 16QAM | 1 | 0 | 22.53 | 22.69 | 22.23 |
| | 1 | 37 | 22.24 | 22.52 | 22.45 |
| | 1 | 74 | 22.21 | 22.40 | 22.32 |
| | 36 | 0 | 20.93 | 21.19 | 21.03 |
| | 36 | 19 | 21.29 | 21.12 | 21.14 |
| | 36 | 39 | 20.93 | 21.24 | 21.01 |
| | 75 | 0 | 21.07 | 21.00 | 21.08 |
| 64QAM | 1 | 0 | 21.29 | 21.49 | 21.62 |
| | 1 | 37 | 21.13 | 21.21 | 21.16 |
| | 1 | 74 | 21.27 | 21.32 | 21.09 |
| | 36 | 0 | 20.19 | 20.22 | 19.80 |
| | 36 | 19 | 20.02 | 20.10 | 19.87 |
| | 36 | 39 | 19.84 | 20.11 | 19.89 |
| | 75 | 0 | 19.91 | 20.20 | 20.03 |
| 256QAM | 1 | 0 | 18.32 | 18.63 | 18.48 |
| | 1 | 37 | 18.73 | 18.83 | 18.75 |
| | 1 | 74 | 18.21 | 18.29 | 18.17 |
| | 36 | 0 | 18.07 | 18.24 | 18.24 |
| | 36 | 19 | 17.80 | 18.10 | 17.95 |
| | 36 | 39 | 18.23 | 18.24 | 18.15 |
| | 75 | 0 | 18.02 | 18.06 | 18.11 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.73 | 21.21 | 23.3 | 22.78 | 34.77 |
| 16QAM | 20.93 | 20.41 | 22.69 | 22.17 | 34.77 |
| 64QAM | 19.8 | 19.28 | 21.62 | 21.1 | 34.77 |
| 256QAM | 17.8 | 17.28 | 18.83 | 18.31 | 34.77 |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 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 | 23.41 | 23.45 | 23.28 |
| | 1 | 50 | 22.93 | 23.19 | 23.24 |
| | 1 | 99 | 22.85 | 23.05 | 22.86 |
| | 50 | 0 | 22.00 | 22.17 | 21.91 |
| | 50 | 25 | 22.09 | 22.16 | 22.19 |
| | 50 | 50 | 22.09 | 22.20 | 22.23 |
| | 100 | 0 | 21.93 | 22.20 | 22.04 |
| 16QAM | 1 | 0 | 22.71 | 22.60 | 22.53 |
| | 1 | 50 | 22.65 | 22.64 | 22.75 |
| | 1 | 99 | 22.47 | 22.42 | 22.17 |
| | 50 | 0 | 20.98 | 21.12 | 21.08 |
| | 50 | 25 | 21.21 | 21.19 | 21.07 |
| | 50 | 50 | 21.05 | 21.06 | 21.27 |
| | 100 | 0 | 20.91 | 21.29 | 21.17 |
| 64QAM | 1 | 0 | 21.39 | 21.54 | 21.36 |
| | 1 | 50 | 21.28 | 21.36 | 21.27 |
| | 1 | 99 | 21.34 | 21.31 | 21.32 |
| | 50 | 0 | 20.18 | 20.11 | 20.13 |
| | 50 | 25 | 20.16 | 20.16 | 20.05 |
| | 50 | 50 | 20.21 | 20.11 | 20.08 |
| | 100 | 0 | 19.86 | 20.07 | 20.23 |
| 256QAM | 1 | 0 | 18.51 | 18.63 | 18.55 |
| | 1 | 50 | 18.61 | 18.89 | 18.62 |
| | 1 | 99 | 18.46 | 18.40 | 18.16 |
| | 50 | 0 | 18.11 | 18.28 | 18.08 |
| | 50 | 25 | 17.92 | 18.19 | 18.03 |
| | 50 | 50 | 18.15 | 18.35 | 18.20 |
| | 100 | 0 | 18.02 | 18.23 | 18.10 |

| Output Power | | | | | |
|---|---|---|---|---|---|
| Modulation | Minimum Cond. Power (dBm) | Minimum ERP (dBm) | Maximum Cond. Power (dBm) | Maximum ERP (dBm) | ERP Limit (dBm) |
| QPSK | 21.91 | 21.39 | 23.45 | 22.93 | 34.77 |
| 16QAM | 20.91 | 20.39 | 22.75 | 22.23 | 34.77 |
| 64QAM | 19.86 | 19.34 | 21.54 | 21.02 | 34.77 |
| 256QAM | 17.92 | 17.40 | 18.89 | 18.37 | 34.77 |

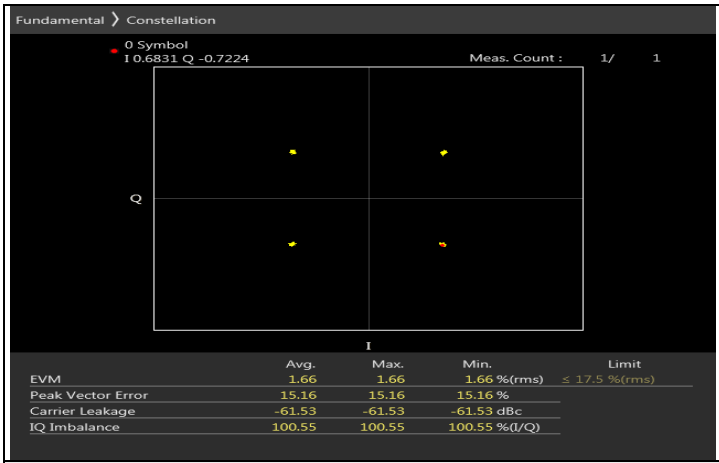
Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)
ERP (dBm) = EIRP (dBm) - 2.15

## 7.2 Modulation Characteristics

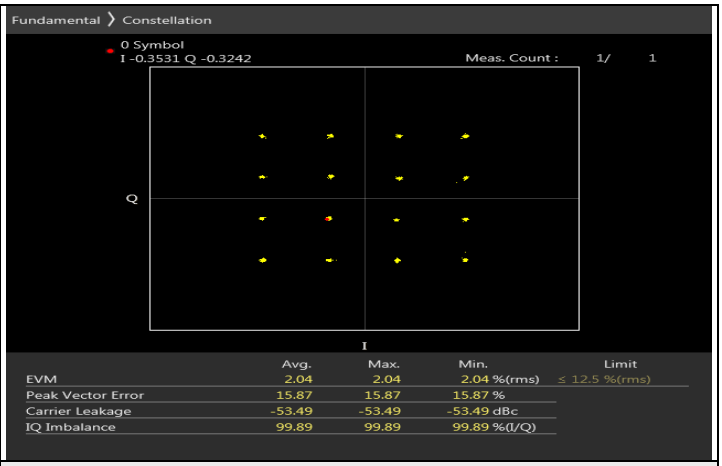
| Input Power: | 4.7 Vdc | Environmental Conditions: | 24°C, 67% RH | Tested By: | Noah Chang |
|---|---|---|---|---|---|

### 7.2.1 LTE Band 2

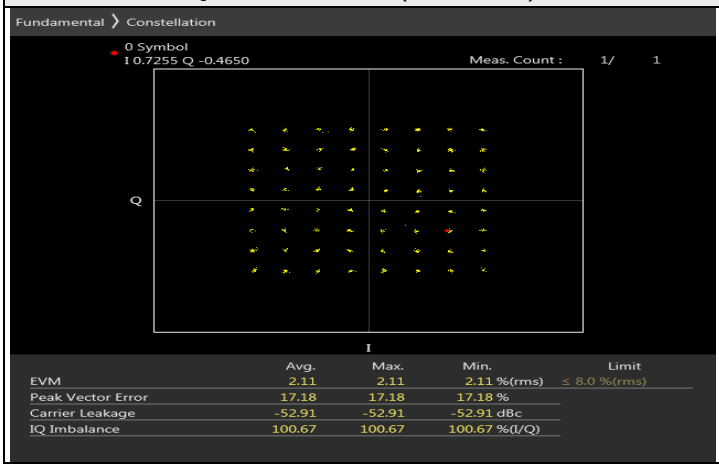
**LTE Band 2, Channel Bandwidth: 20 MHz**



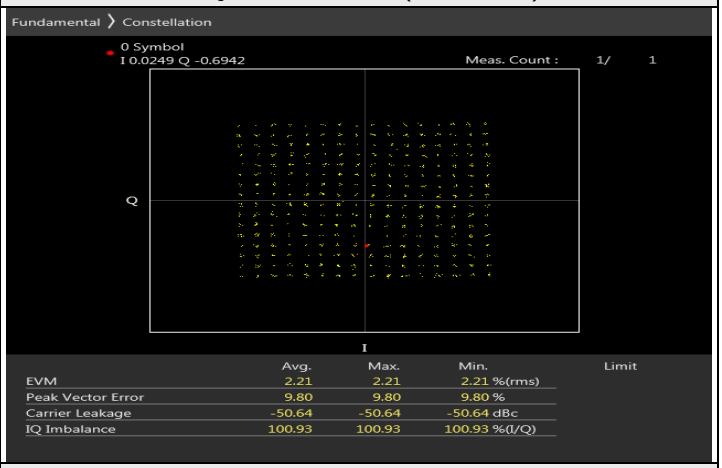

QPSK CH 18900 (1880 MHz)




16QAM CH 18900 (1880 MHz)



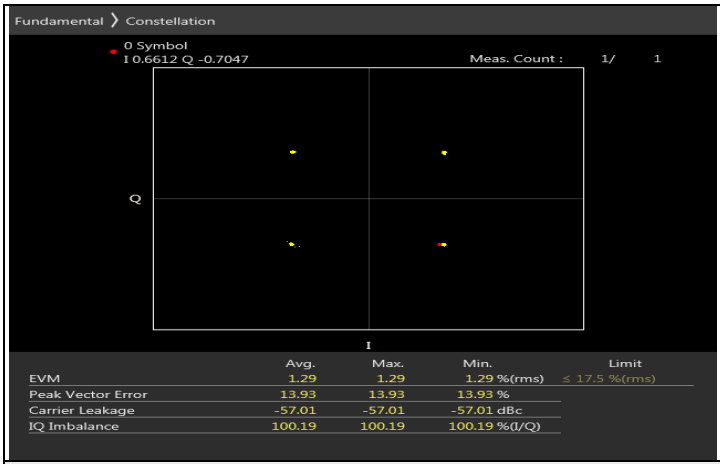

64QAM CH 18900 (1880 MHz)



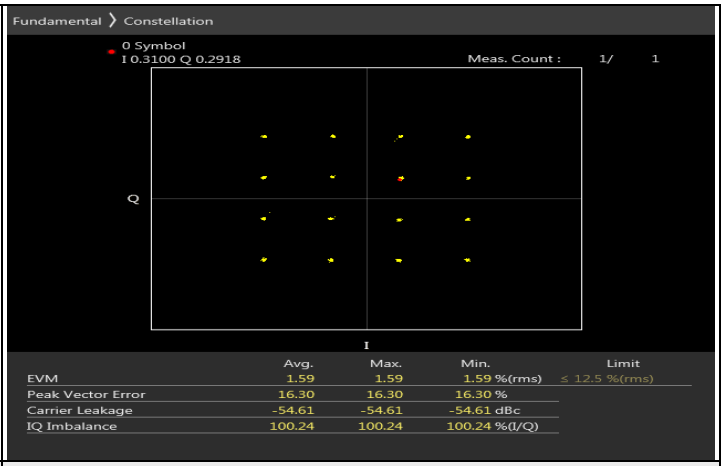

256QAM CH 18900 (1880 MHz)

### 7.2.2 LTE Band 4

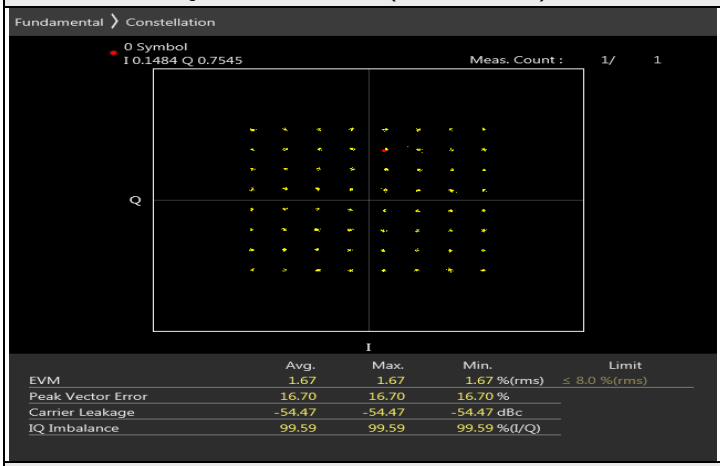
**LTE Band 4, Channel Bandwidth: 20 MHz**



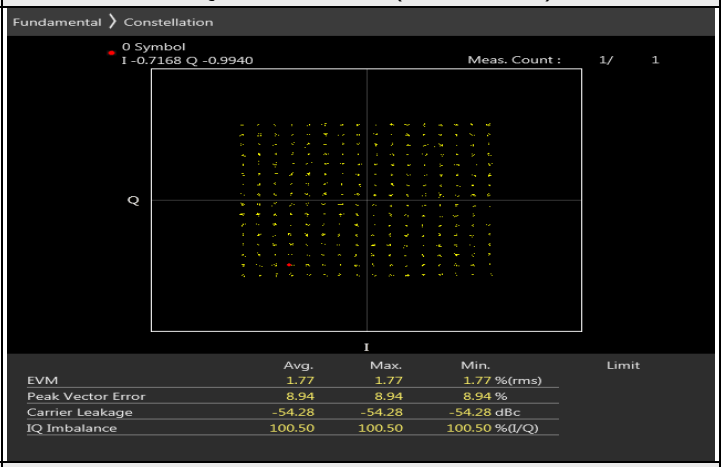

QPSK CH 20175 (1732.5 MHz)




16QAM CH 20175 (1732.5 MHz)



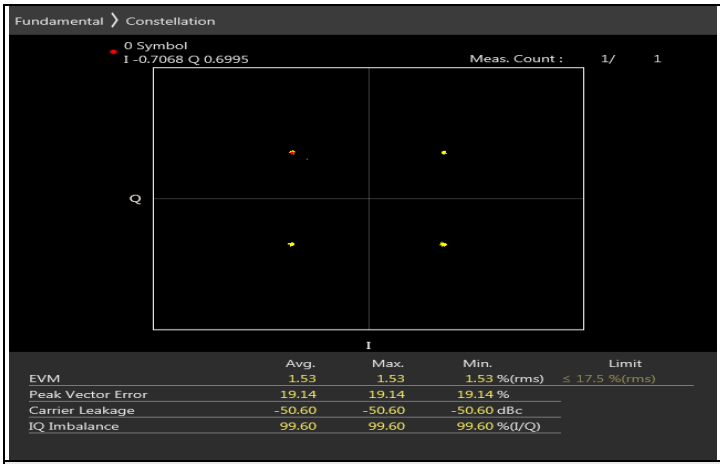

64QAM CH 20175 (1732.5 MHz)



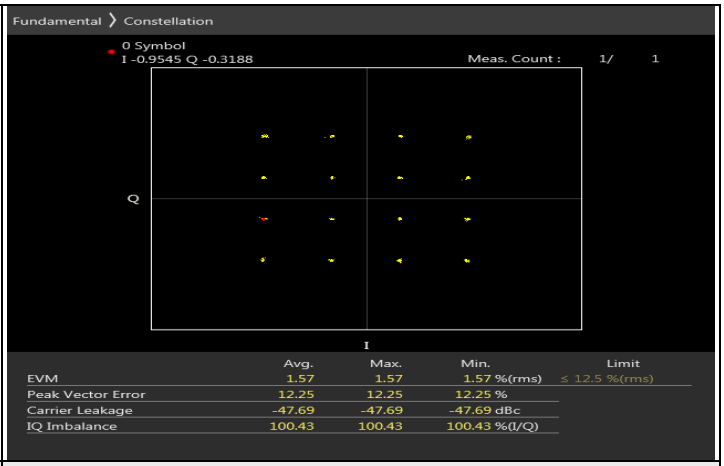

256QAM CH 20175 (1732.5 MHz)

### 7.2.3 LTE Band 5

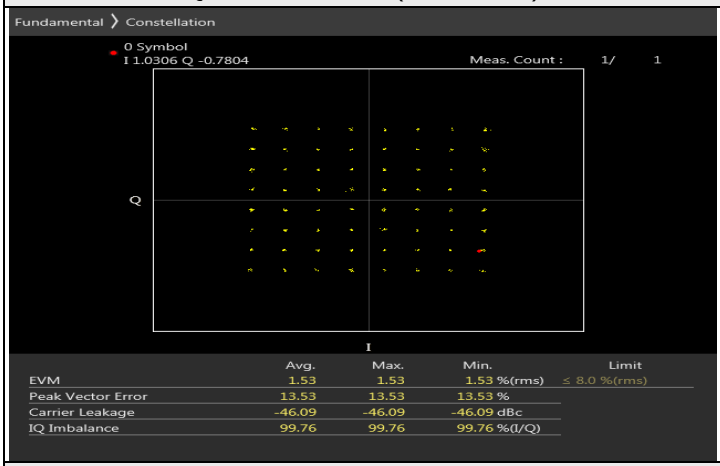
**LTE Band 5, Channel Bandwidth: 10 MHz**



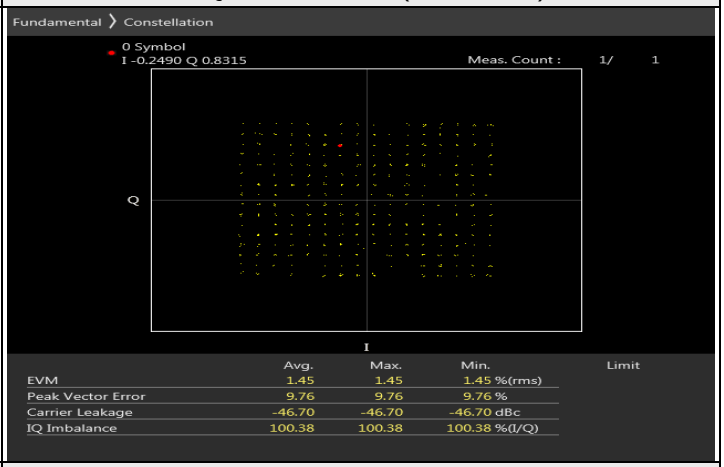

QPSK CH 20525 (836.5 MHz)




16QAM CH 20525 (836.5 MHz)



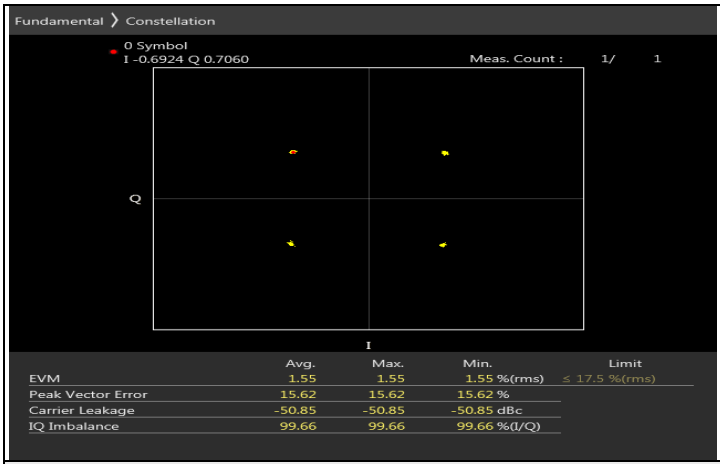

64QAM CH 20525 (836.5 MHz)



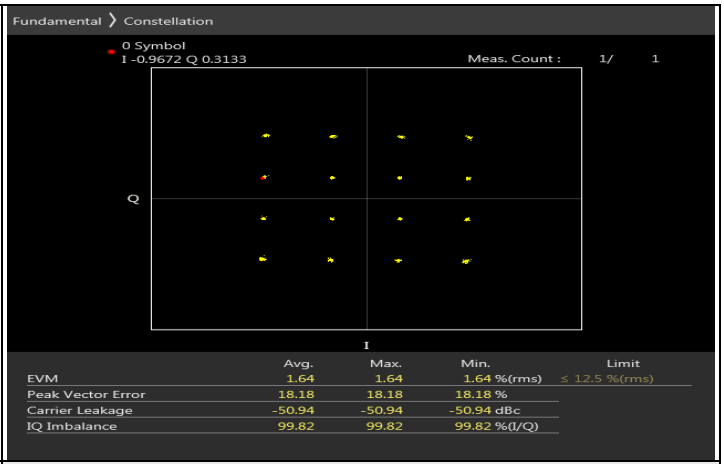

256QAM CH 20525 (836.5 MHz)

### 7.2.4 LTE Band 7

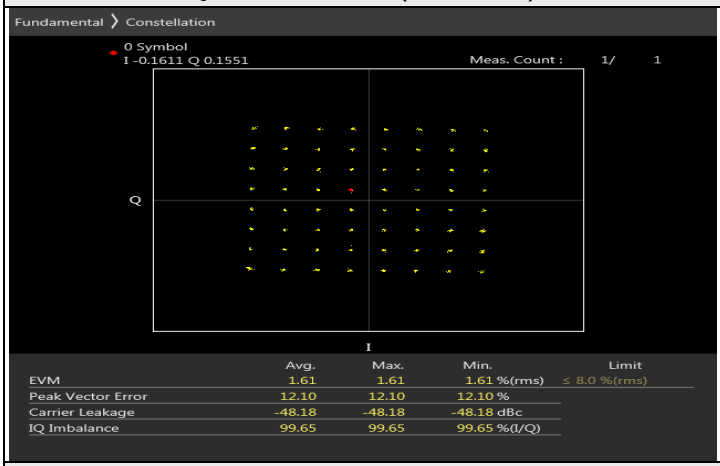
**LTE Band 7, Channel Bandwidth: 20 MHz**



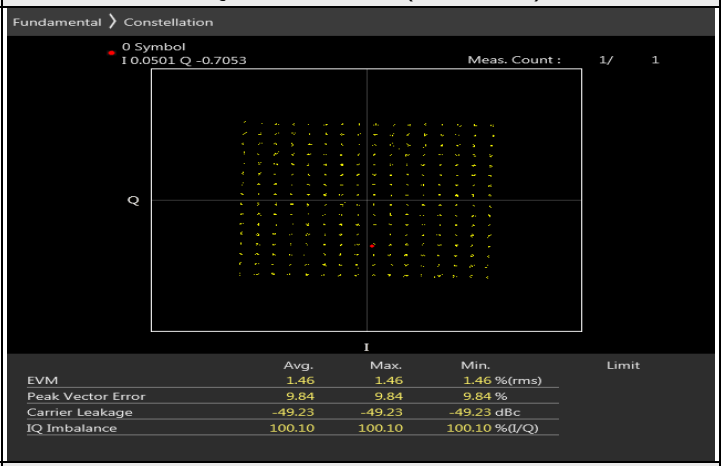

QPSK CH 21100 (2535 MHz)




16QAM CH 21100 (2535 MHz)



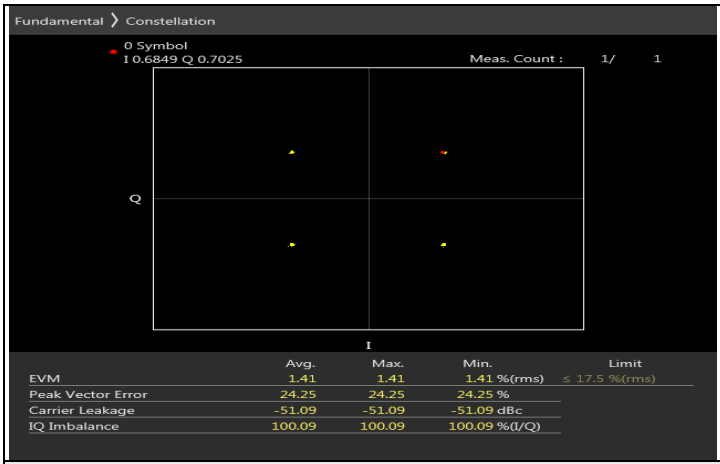

64QAM CH 21100 (2535 MHz)



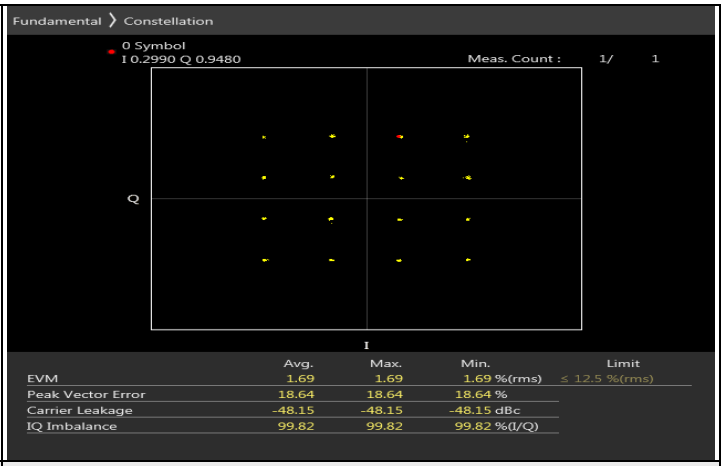

256QAM CH 21100 (2535 MHz)

### 7.2.5 LTE Band 12

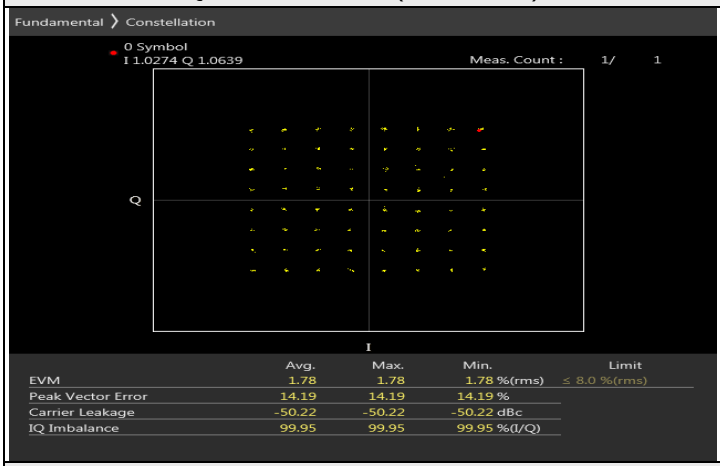
**LTE Band 12, Channel Bandwidth: 10 MHz**



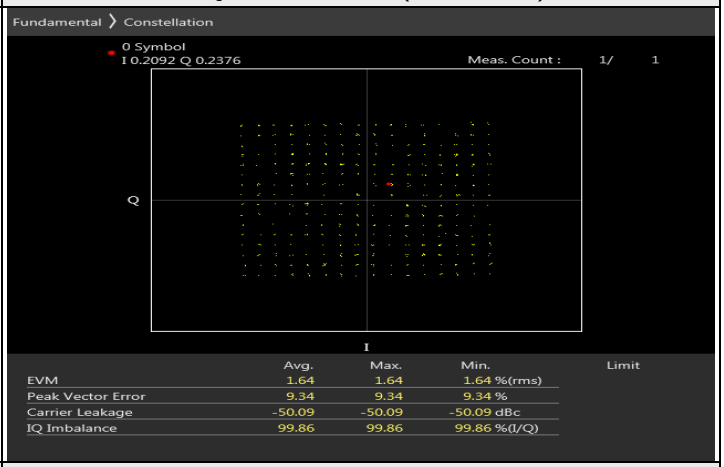

QPSK CH 23095 (707.5 MHz)




16QAM CH 23095 (707.5 MHz)



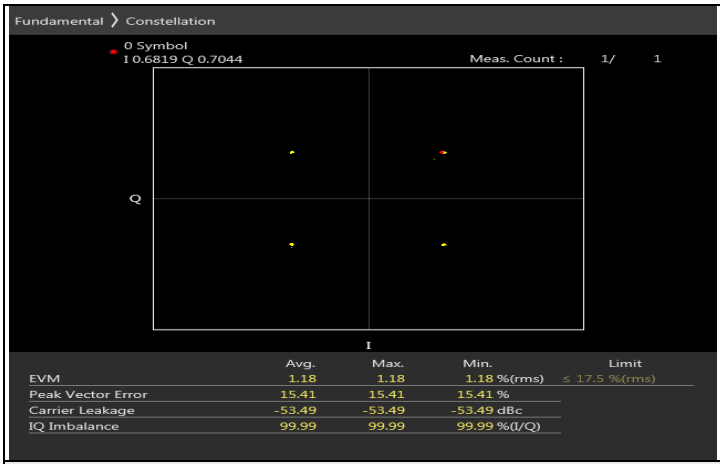

64QAM CH 23095 (707.5 MHz)



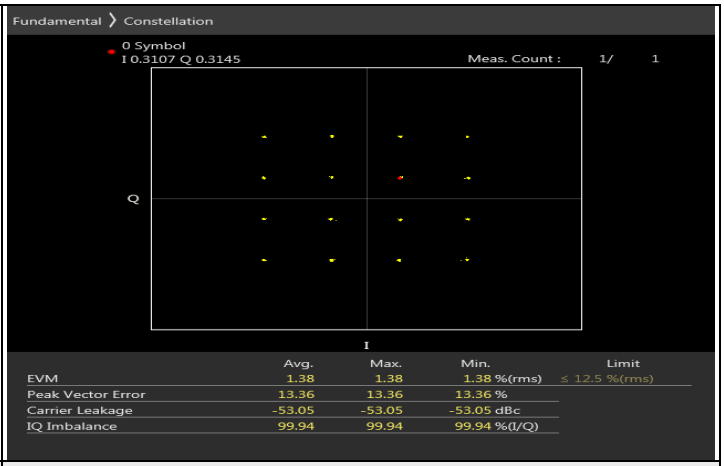

256QAM CH 23095 (707.5 MHz)

### 7.2.6 LTE Band 13

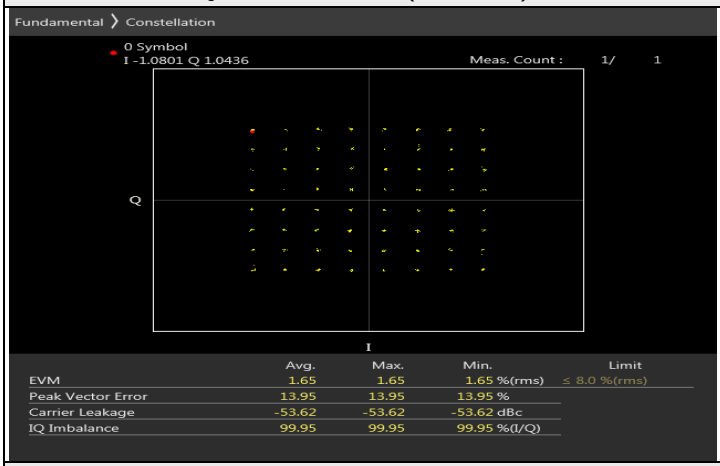
**LTE Band 13, Channel Bandwidth: 10 MHz**



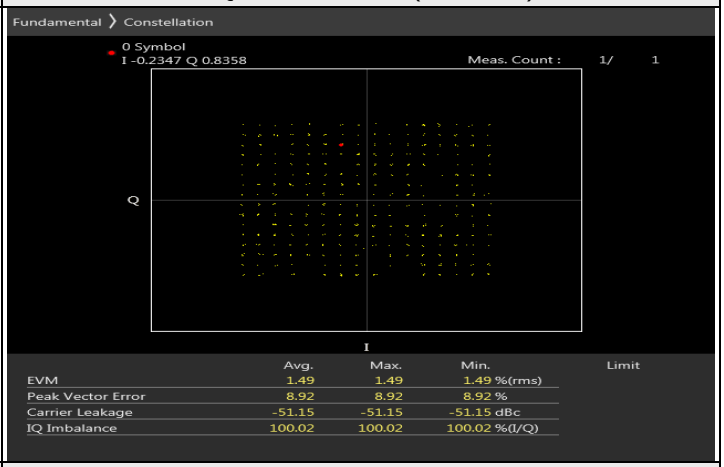

QPSK CH 23230 (782 MHz)




16QAM CH 23230 (782 MHz)



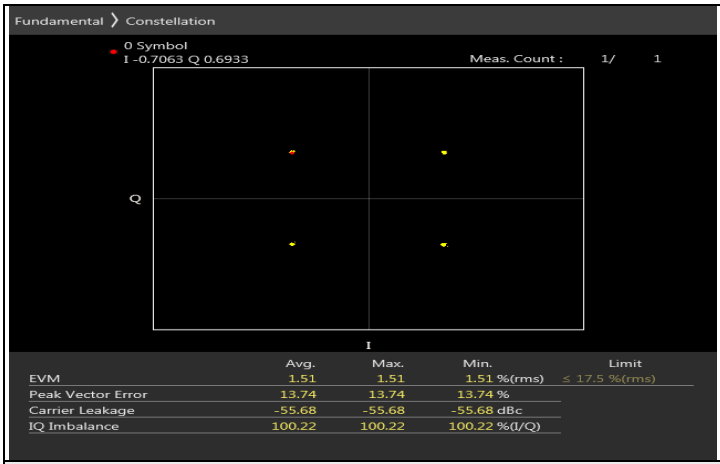

64QAM CH 23230 (782 MHz)



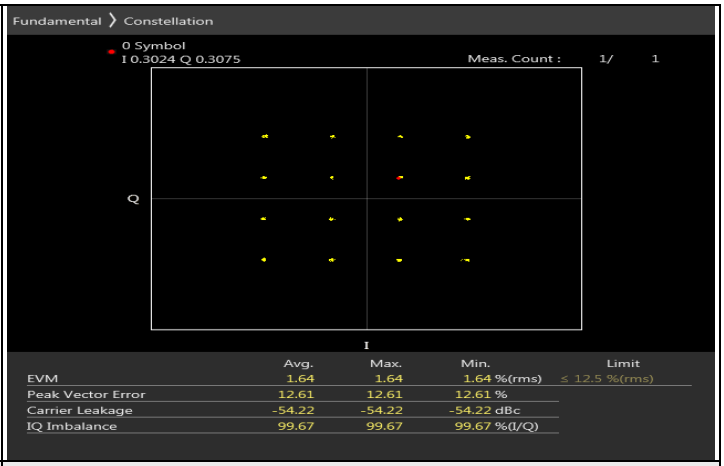

256QAM CH 23230 (782 MHz)

### 7.2.7 LTE Band 14

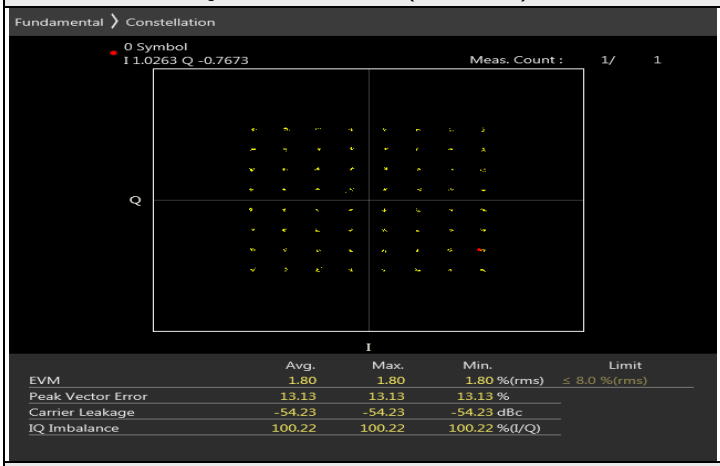
**LTE Band 14, Channel Bandwidth: 10 MHz**



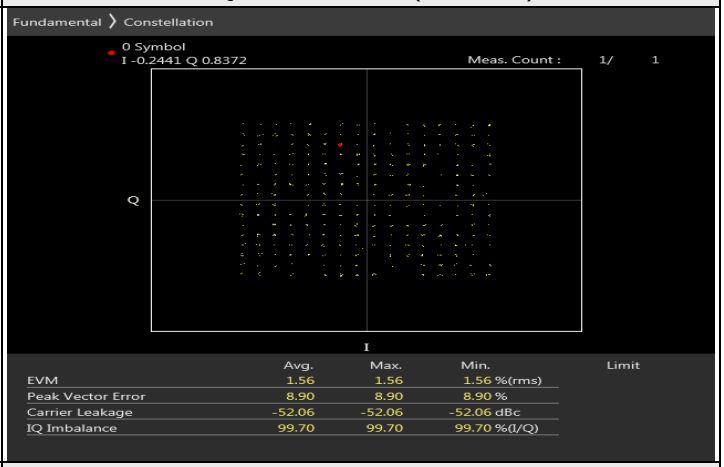

QPSK CH 23330 (793 MHz)




16QAM CH 23330 (793 MHz)



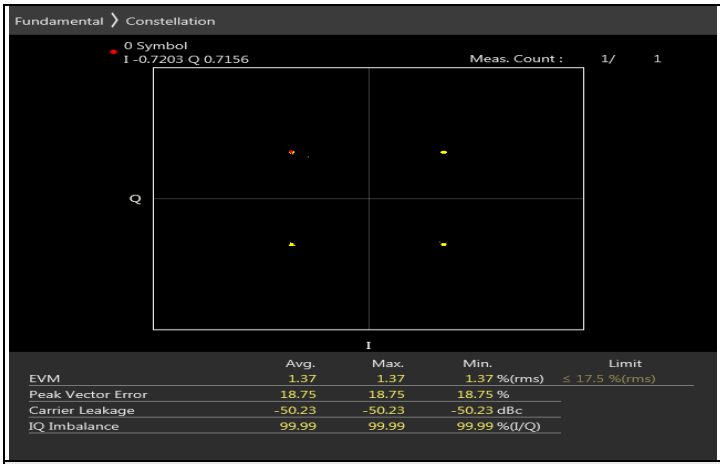

64QAM CH 23330 (793 MHz)



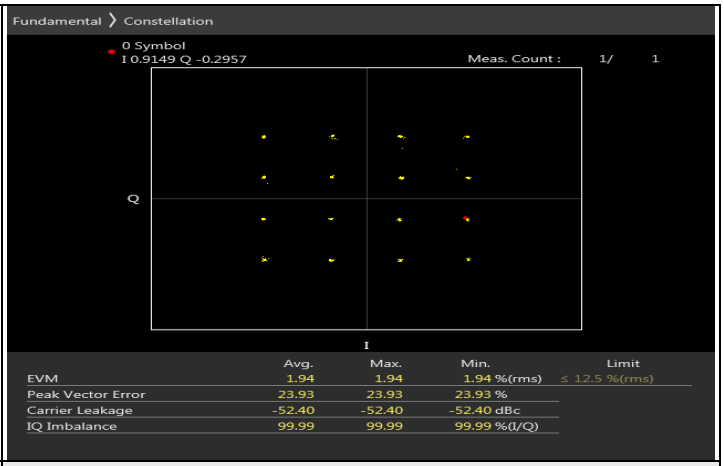

256QAM CH 23330 (793 MHz)

### 7.2.8 LTE Band 17

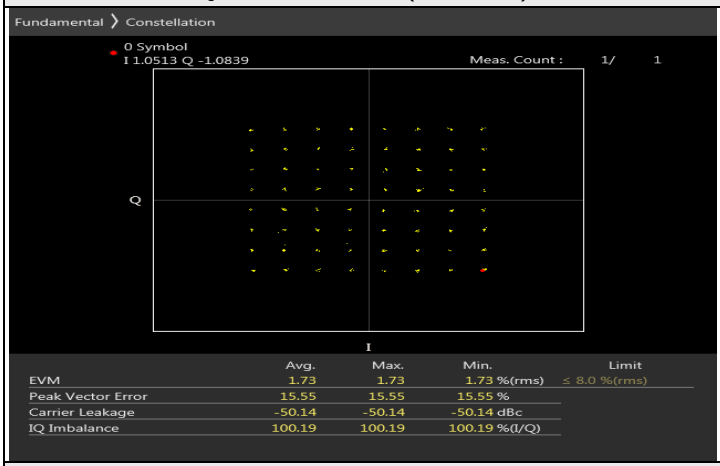
**LTE Band 17, Channel Bandwidth: 10 MHz**



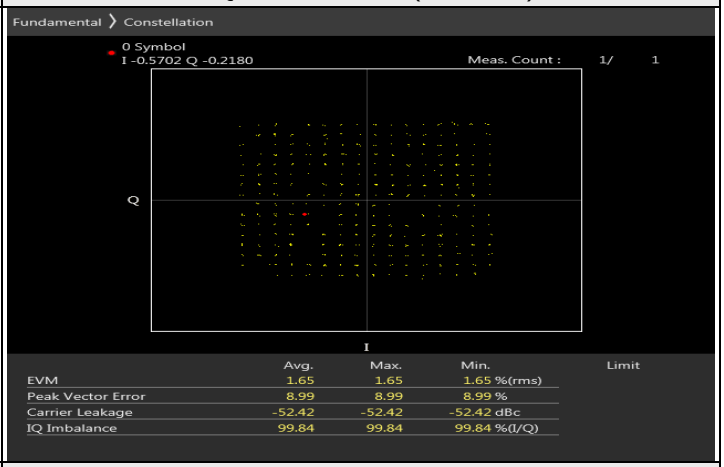

QPSK CH 23790 (710 MHz)




16QAM CH 23790 (710 MHz)



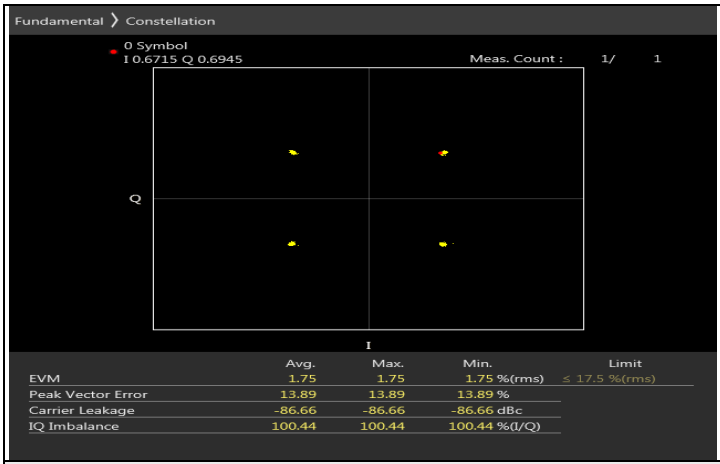

64QAM CH 23790 (710 MHz)



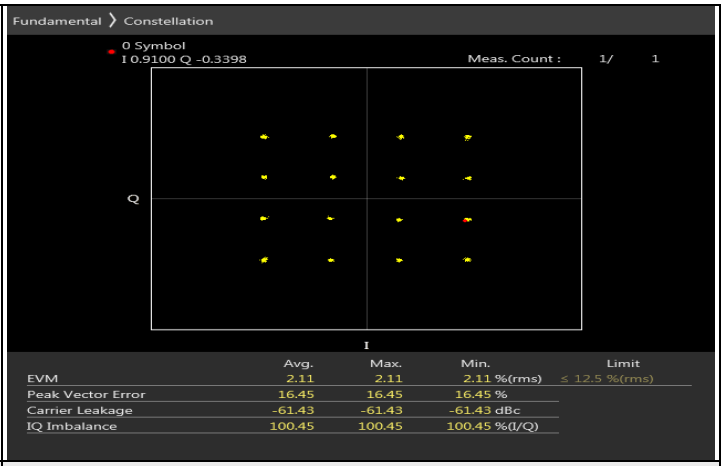

256QAM CH 23790 (710 MHz)

### 7.2.9 LTE Band 25

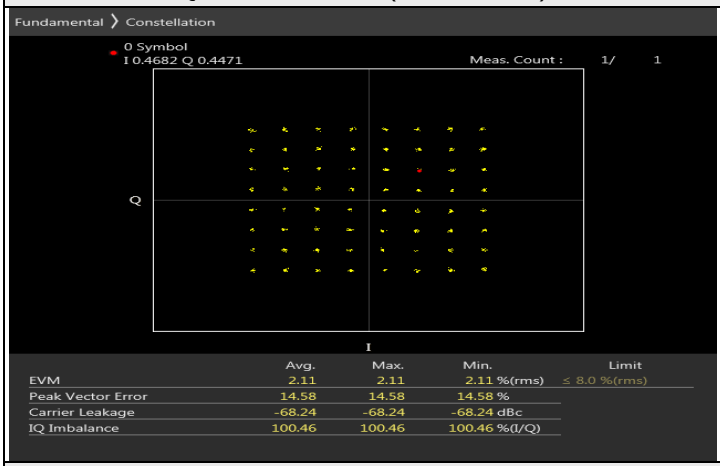
**LTE Band 25, Channel Bandwidth: 20 MHz**



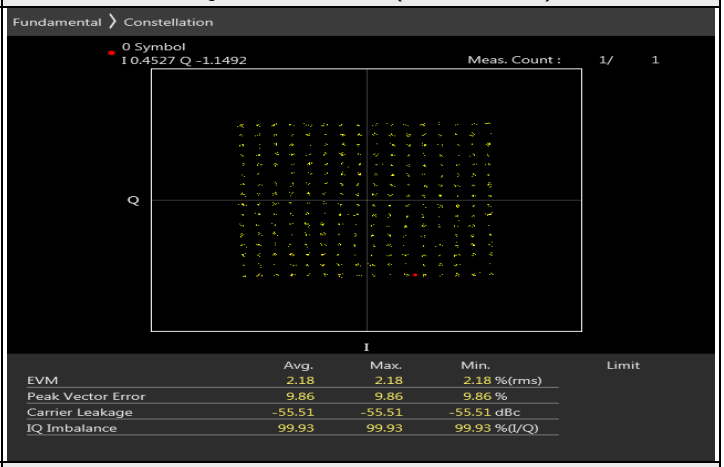

QPSK CH 26365 (1882.5 MHz)




16QAM CH 26365 (1882.5 MHz)



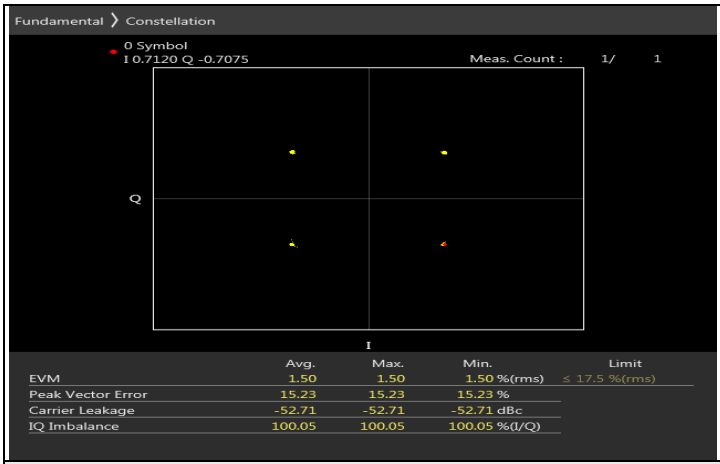

64QAM CH 26365 (1882.5 MHz)



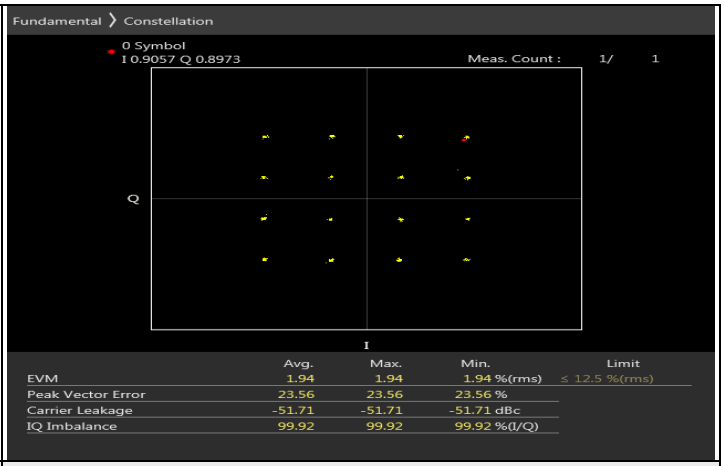

256QAM CH 26365 (1882.5 MHz)

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

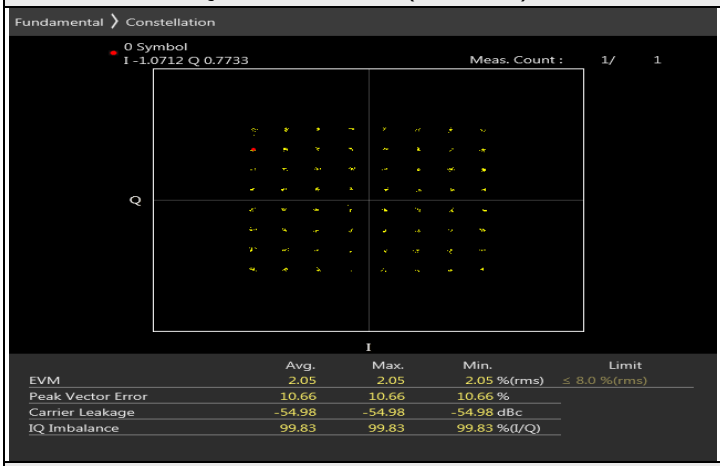
**LTE Band 26 (814 MHz ~ 824 MHz), Channel Bandwidth: 10 MHz**



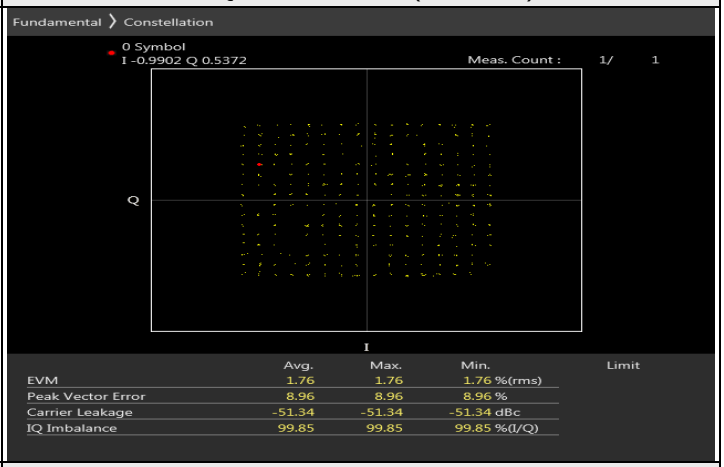

QPSK CH 26740 (819 MHz)




16QAM CH 26740 (819 MHz)



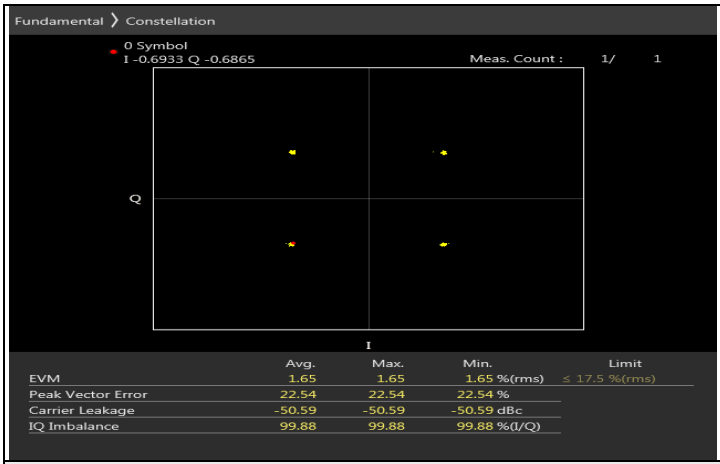

64QAM CH 26740 (819 MHz)



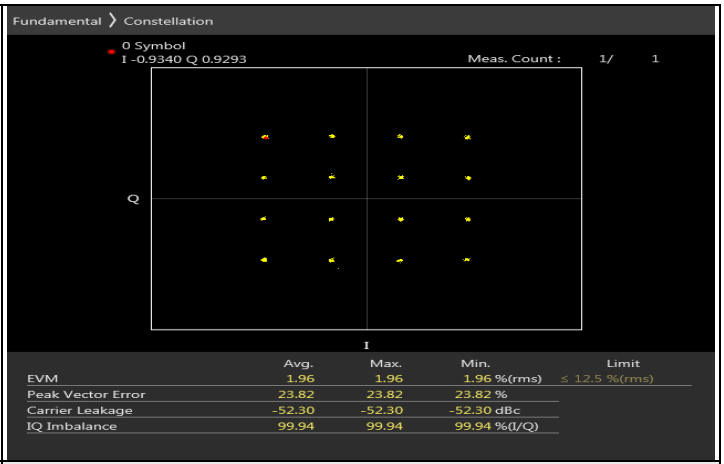

256QAM CH 26740 (819 MHz)

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

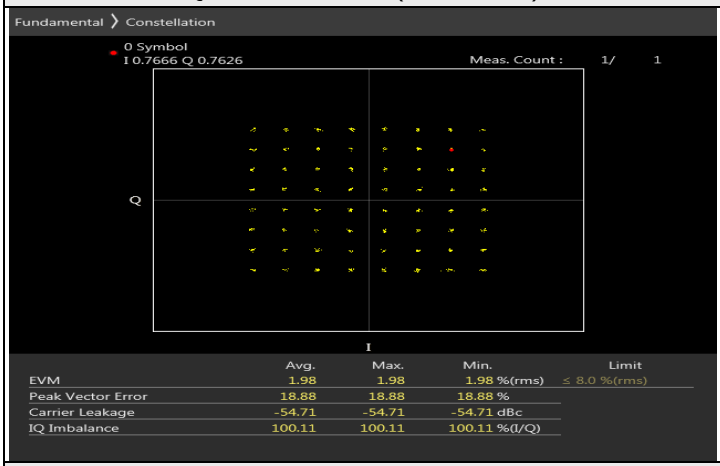
**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 15 MHz**



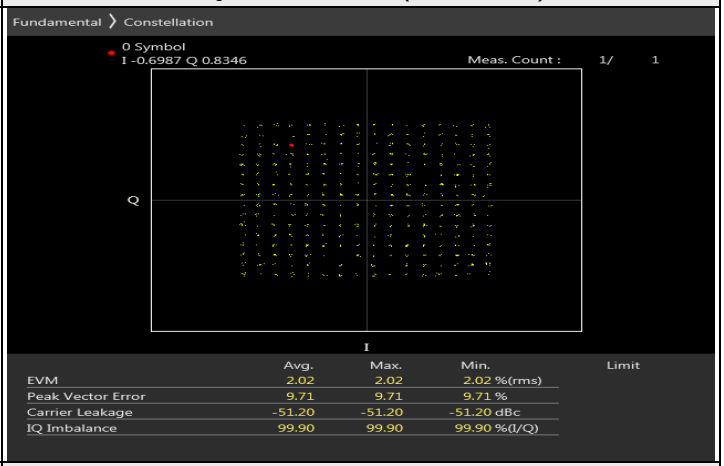

QPSK CH 26915 (836.5 MHz)




16QAM CH 26915 (836.5 MHz)



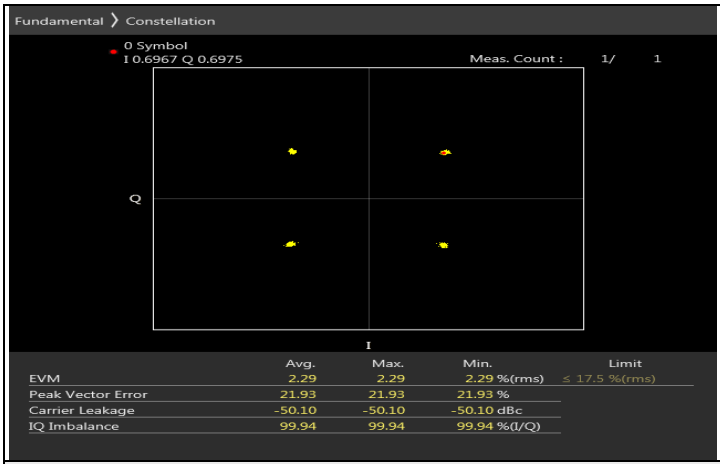

64QAM CH 26915 (836.5 MHz)



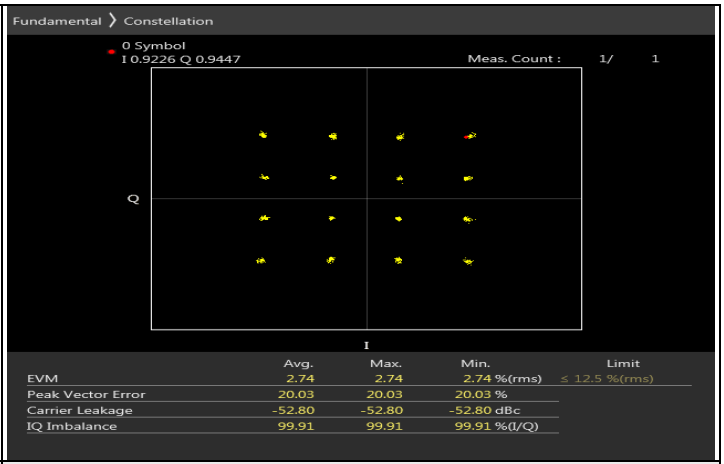

256QAM CH 26915 (836.5 MHz)

### 7.2.12 LTE Band 41

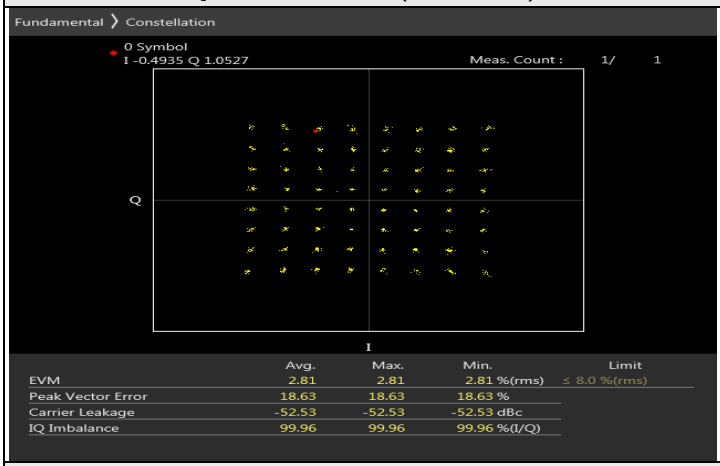
**LTE Band 41, Channel Bandwidth: 20 MHz**



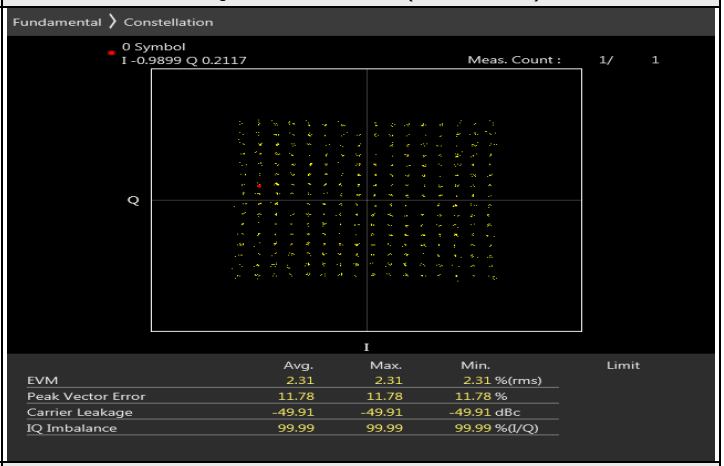

QPSK CH 40620 (2593 MHz)




16QAM CH 40620 (2593 MHz)



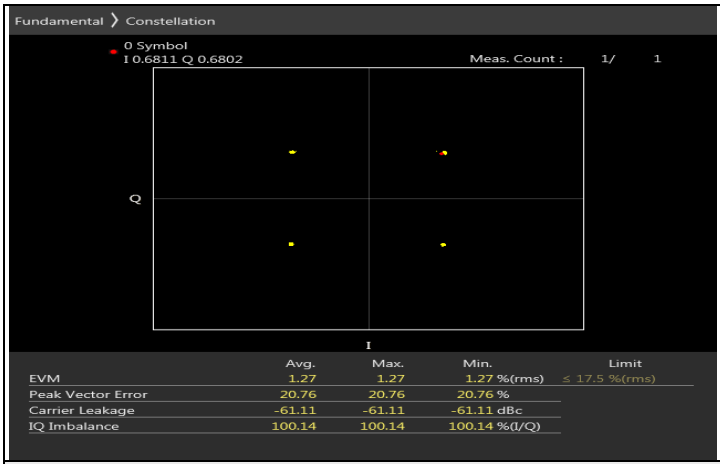

64QAM CH 40620 (2593 MHz)



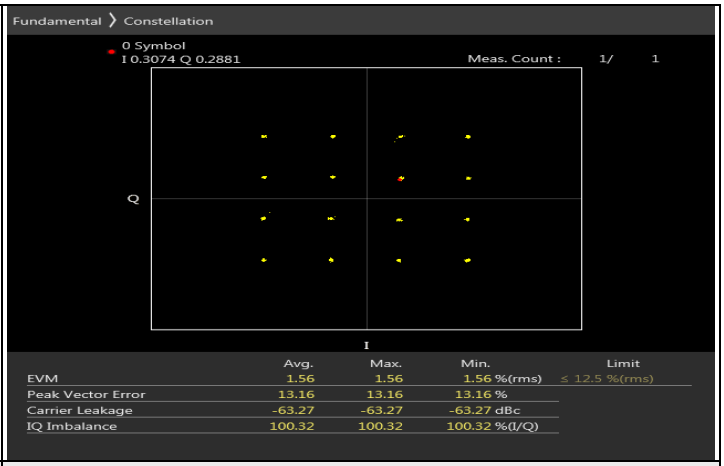

256QAM CH 40620 (2593 MHz)

### 7.2.13 LTE Band 66

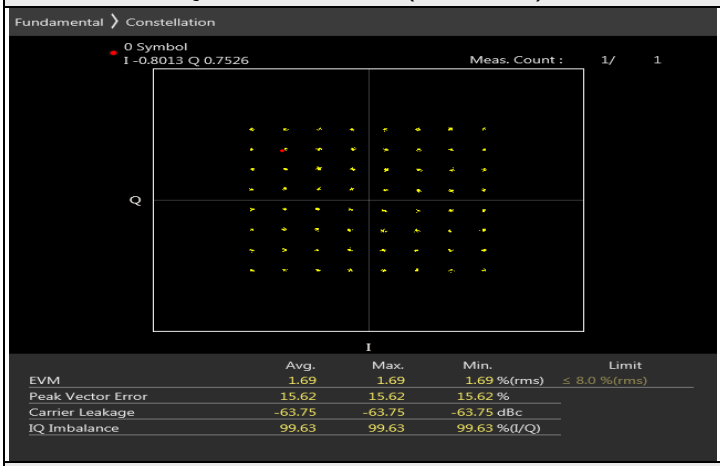
**LTE Band 66, Channel Bandwidth: 20 MHz**



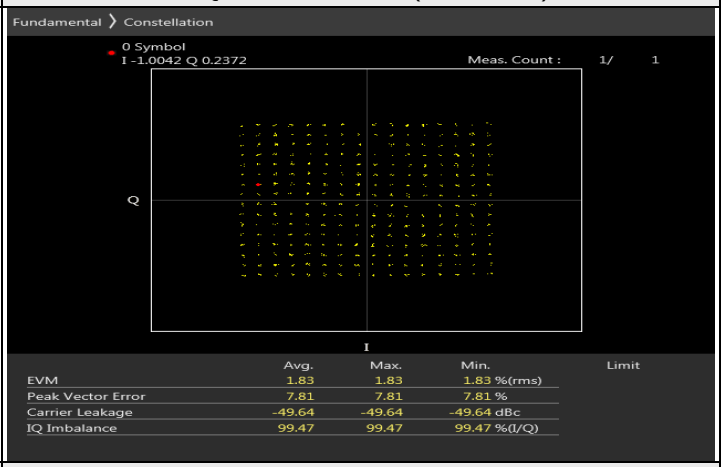

QPSK CH 132322 (1745 MHz)




16QAM CH 132322 (1745 MHz)



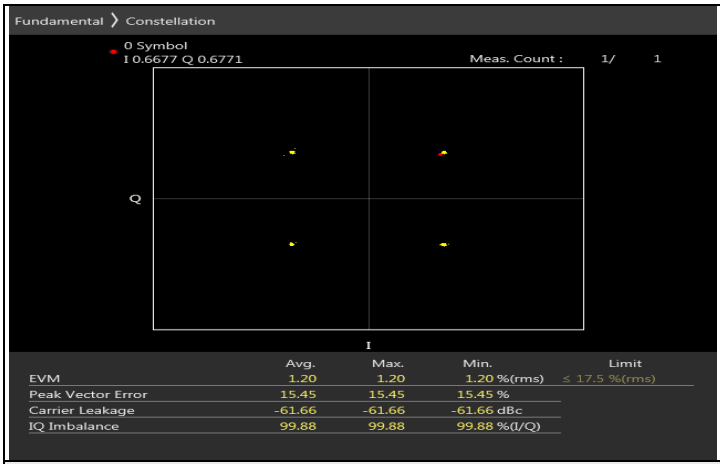

64QAM CH 132322 (1745 MHz)



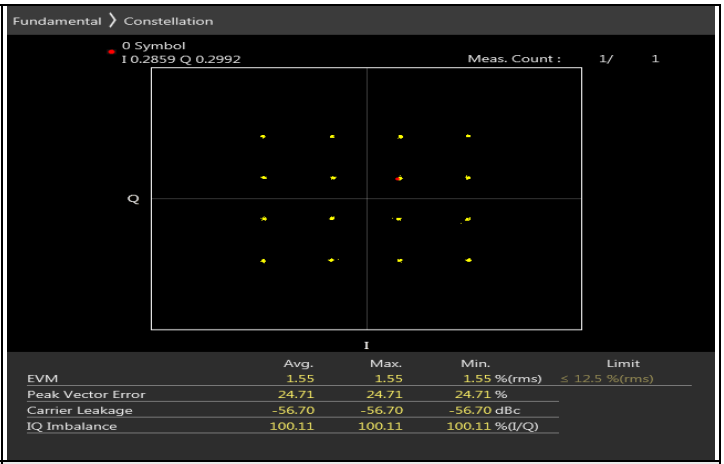

256QAM CH 132322 (1745 MHz)

### 7.2.14 LTE Band 71

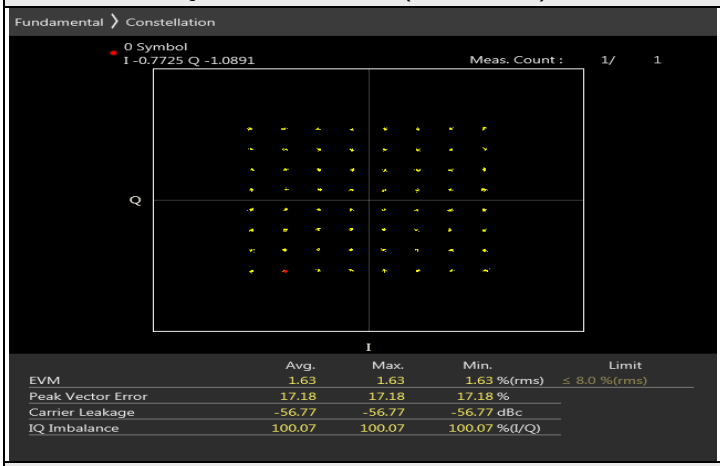
**LTE Band 71, Channel Bandwidth: 20 MHz**



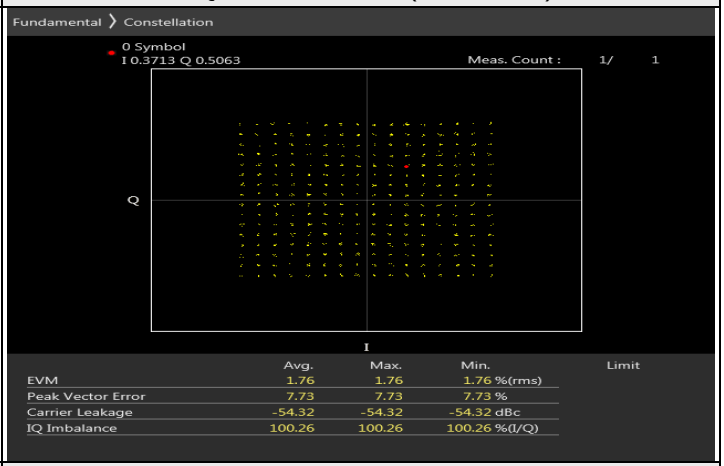

QPSK CH 133297 (680.5 MHz)




16QAM CH 133297 (680.5 MHz)




64QAM CH 133297 (680.5 MHz)




256QAM CH 133297 (680.5 MHz)

## 7.3 Peak to Average Ratio

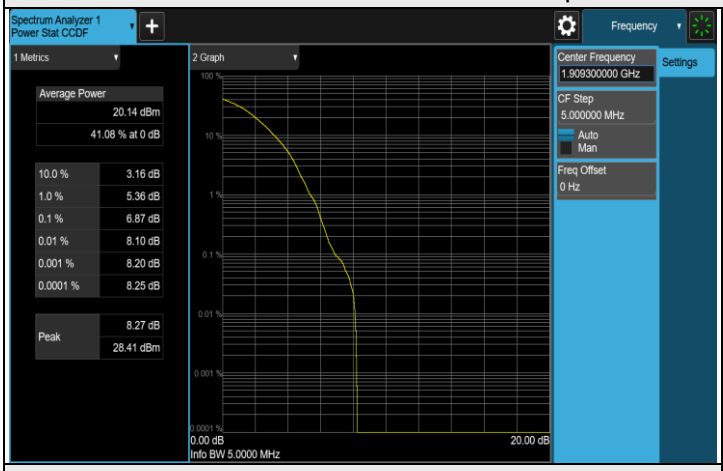
| Input Power: | 4.7 Vdc | Environmental Conditions: | 22°C, 73% RH | Tested By: | Willy Cheng |
|---|---|---|---|---|---|

### 7.3.1 LTE Band 2

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 18607 | 1850.7 | 5.33 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.10 | 13 | PASS |
| QPSK | 19193 | 1909.3 | 5.01 | 13 | PASS |
| 16QAM | 18607 | 1850.7 | 6.35 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.21 | 13 | PASS |
| 16QAM | 19193 | 1909.3 | 6.05 | 13 | PASS |
| 64QAM | 18607 | 1850.7 | 6.47 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.50 | 13 | PASS |
| 64QAM | 19193 | 1909.3 | 6.40 | 13 | PASS |
| 256QAM | 18607 | 1850.7 | 6.78 | 13 | PASS |
| 256QAM | 18900 | 1880 | 6.85 | 13 | PASS |
| 256QAM | 19193 | 1909.3 | 6.87 | 13 | PASS |

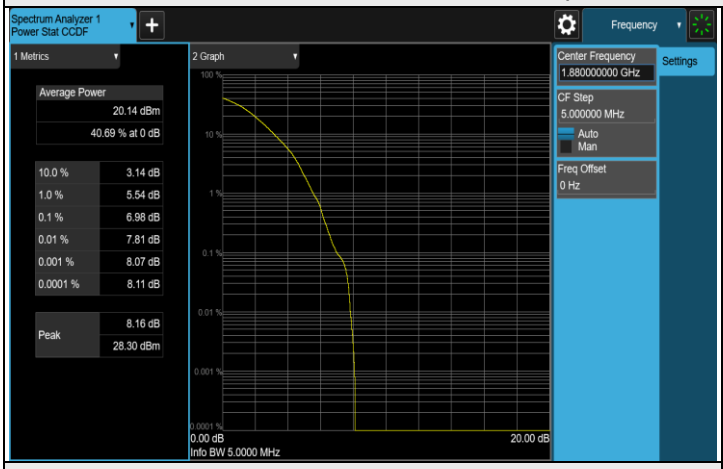
Spectrum Plot of Worst Value




256QAM CH 19193 (1909.3 MHz)

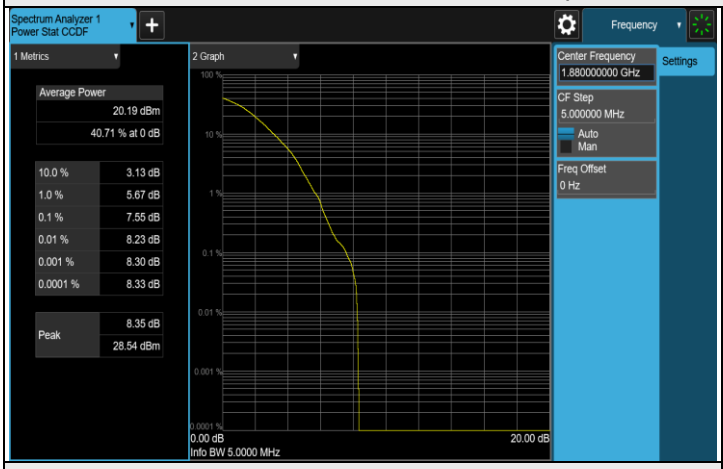
## LTE Band 2, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 18615 | 1851.5 | 4.99 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.04 | 13 | PASS |
| QPSK | 19185 | 1908.5 | 4.75 | 13 | PASS |
| 16QAM | 18615 | 1851.5 | 6.08 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.09 | 13 | PASS |
| 16QAM | 19185 | 1908.5 | 5.82 | 13 | PASS |
| 64QAM | 18615 | 1851.5 | 6.43 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.45 | 13 | PASS |
| 64QAM | 19185 | 1908.5 | 6.35 | 13 | PASS |
| 256QAM | 18615 | 1851.5 | 6.74 | 13 | PASS |
| 256QAM | 18900 | 1880 | 6.98 | 13 | PASS |
| 256QAM | 19185 | 1908.5 | 6.79 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 18900 (1880 MHz) | |

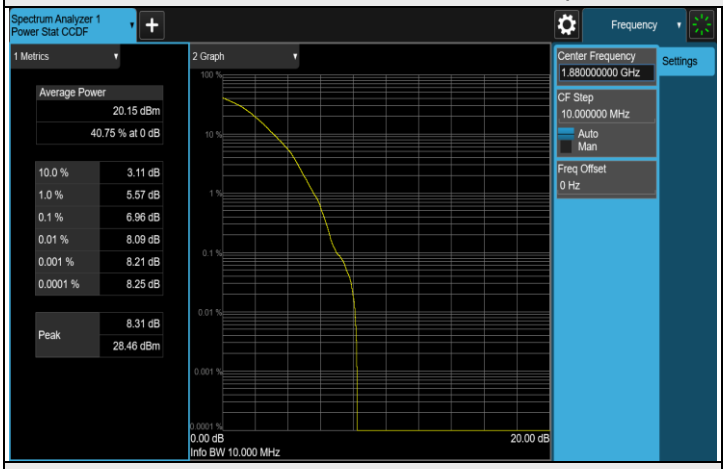
## LTE Band 2, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 18625 | 1852.5 | 5.04 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.02 | 13 | PASS |
| QPSK | 19175 | 1907.5 | 4.87 | 13 | PASS |
| 16QAM | 18625 | 1852.5 | 6.73 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.08 | 13 | PASS |
| 16QAM | 19175 | 1907.5 | 6.04 | 13 | PASS |
| 64QAM | 18625 | 1852.5 | 6.47 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.50 | 13 | PASS |
| 64QAM | 19175 | 1907.5 | 6.37 | 13 | PASS |
| 256QAM | 18625 | 1852.5 | 7.18 | 13 | PASS |
| 256QAM | 18900 | 1880 | 7.55 | 13 | PASS |
| 256QAM | 19175 | 1907.5 | 7.20 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 18900 (1880 MHz) | |

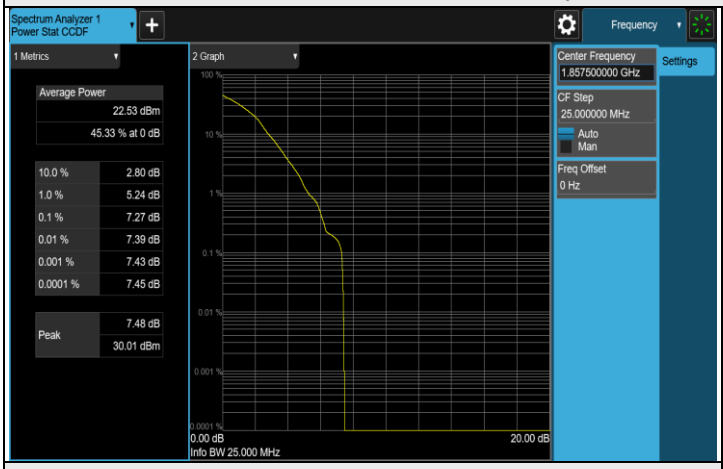
## LTE Band 2, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 18650 | 1855 | 5.09 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.12 | 13 | PASS |
| QPSK | 19150 | 1905 | 4.92 | 13 | PASS |
| 16QAM | 18650 | 1855 | 6.29 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.32 | 13 | PASS |
| 16QAM | 19150 | 1905 | 6.05 | 13 | PASS |
| 64QAM | 18650 | 1855 | 6.43 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.48 | 13 | PASS |
| 64QAM | 19150 | 1905 | 6.38 | 13 | PASS |
| 256QAM | 18650 | 1855 | 6.67 | 13 | PASS |
| 256QAM | 18900 | 1880 | 6.96 | 13 | PASS |
| 256QAM | 19150 | 1905 | 6.82 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 18900 (1880 MHz) | |

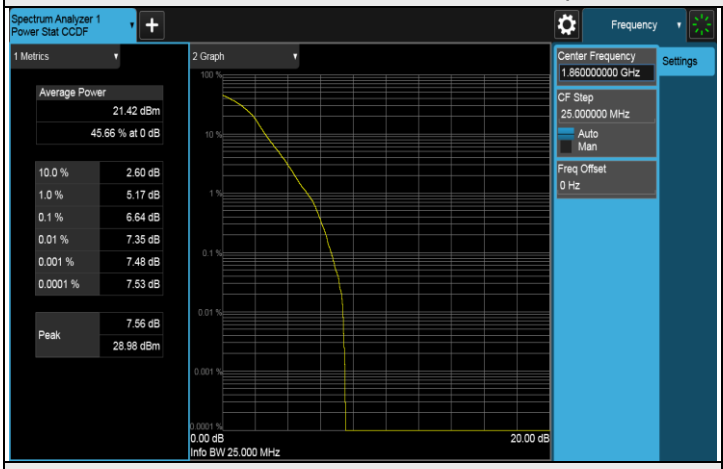
## LTE Band 2, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 18675 | 1857.5 | 5.04 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.25 | 13 | PASS |
| QPSK | 19125 | 1902.5 | 5.13 | 13 | PASS |
| 16QAM | 18675 | 1857.5 | 7.27 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.03 | 13 | PASS |
| 16QAM | 19125 | 1902.5 | 5.90 | 13 | PASS |
| 64QAM | 18675 | 1857.5 | 6.64 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.40 | 13 | PASS |
| 64QAM | 19125 | 1902.5 | 6.57 | 13 | PASS |
| 256QAM | 18675 | 1857.5 | 7.04 | 13 | PASS |
| 256QAM | 18900 | 1880 | 7.04 | 13 | PASS |
| 256QAM | 19125 | 1902.5 | 6.82 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 16QAM CH 18675 (1857.5 MHz) | |

## LTE Band 2, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 18700 | 1860 | 5.38 | 13 | PASS |
| QPSK | 18900 | 1880 | 5.53 | 13 | PASS |
| QPSK | 19100 | 1900 | 5.54 | 13 | PASS |
| 16QAM | 18700 | 1860 | 6.64 | 13 | PASS |
| 16QAM | 18900 | 1880 | 6.45 | 13 | PASS |
| 16QAM | 19100 | 1900 | 6.56 | 13 | PASS |
| 64QAM | 18700 | 1860 | 6.56 | 13 | PASS |
| 64QAM | 18900 | 1880 | 6.44 | 13 | PASS |
| 64QAM | 19100 | 1900 | 6.46 | 13 | PASS |
| 256QAM | 18700 | 1860 | 6.23 | 13 | PASS |
| 256QAM | 18900 | 1880 | 6.30 | 13 | PASS |
| 256QAM | 19100 | 1900 | 6.58 | 13 | PASS |

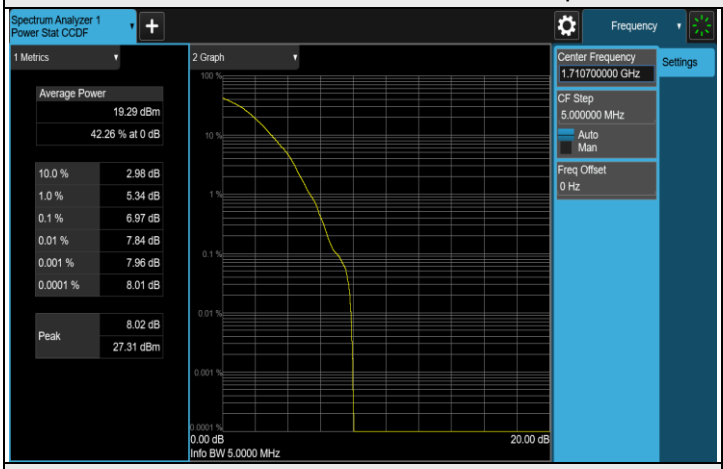
| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 16QAM CH 18700 (1860 MHz) | |

7.3.2 LTE Band 4

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 19957 | 1710.7 | 5.61 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 5.26 | 13 | PASS |
| QPSK | 20393 | 1754.3 | 5.31 | 13 | PASS |
| 16QAM | 19957 | 1710.7 | 6.46 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 6.38 | 13 | PASS |
| 16QAM | 20393 | 1754.3 | 6.37 | 13 | PASS |
| 64QAM | 19957 | 1710.7 | 6.36 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.34 | 13 | PASS |
| 64QAM | 20393 | 1754.3 | 6.46 | 13 | PASS |
| 256QAM | 19957 | 1710.7 | 6.97 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.65 | 13 | PASS |
| 256QAM | 20393 | 1754.3 | 6.51 | 13 | PASS |

Spectrum Plot of Worst Value

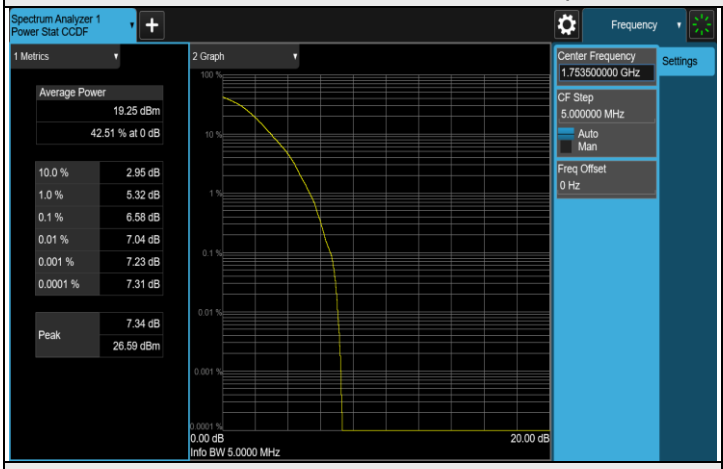



256QAM CH 19957 (1710.7 MHz)

## LTE Band 4, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 19965 | 1711.5 | 4.89 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 4.83 | 13 | PASS |
| QPSK | 20385 | 1753.5 | 4.98 | 13 | PASS |
| 16QAM | 19965 | 1711.5 | 5.85 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 5.92 | 13 | PASS |
| 16QAM | 20385 | 1753.5 | 5.93 | 13 | PASS |
| 64QAM | 19965 | 1711.5 | 6.21 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.22 | 13 | PASS |
| 64QAM | 20385 | 1753.5 | 6.33 | 13 | PASS |
| 256QAM | 19965 | 1711.5 | 6.46 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.18 | 13 | PASS |
| 256QAM | 20385 | 1753.5 | 6.58 | 13 | PASS |

Spectrum Plot of Worst Value

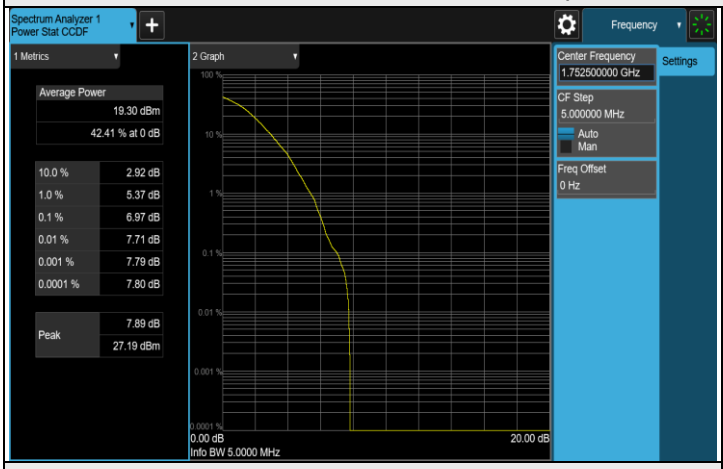



256QAM CH 20385 (1753.5 MHz)

## LTE Band 4, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 19975 | 1712.5 | 5.17 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 5.08 | 13 | PASS |
| QPSK | 20375 | 1752.5 | 5.32 | 13 | PASS |
| 16QAM | 19975 | 1712.5 | 6.30 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 6.21 | 13 | PASS |
| 16QAM | 20375 | 1752.5 | 6.55 | 13 | PASS |
| 64QAM | 19975 | 1712.5 | 6.39 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.30 | 13 | PASS |
| 64QAM | 20375 | 1752.5 | 6.42 | 13 | PASS |
| 256QAM | 19975 | 1712.5 | 6.82 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.53 | 13 | PASS |
| 256QAM | 20375 | 1752.5 | 6.97 | 13 | PASS |

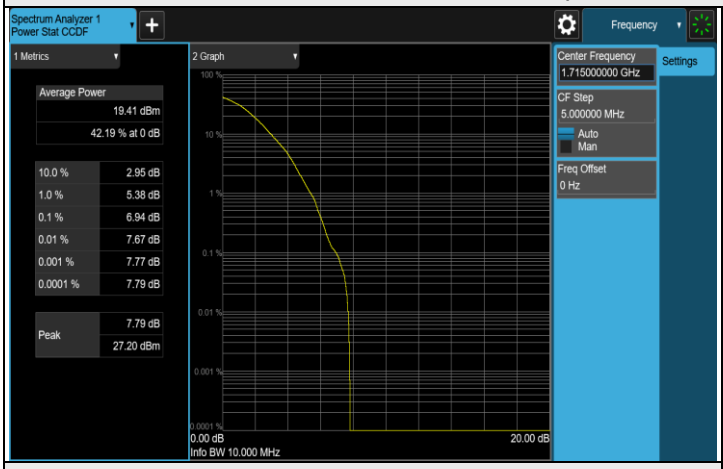
Spectrum Plot of Worst Value




256QAM CH 20375 (1752.5 MHz)

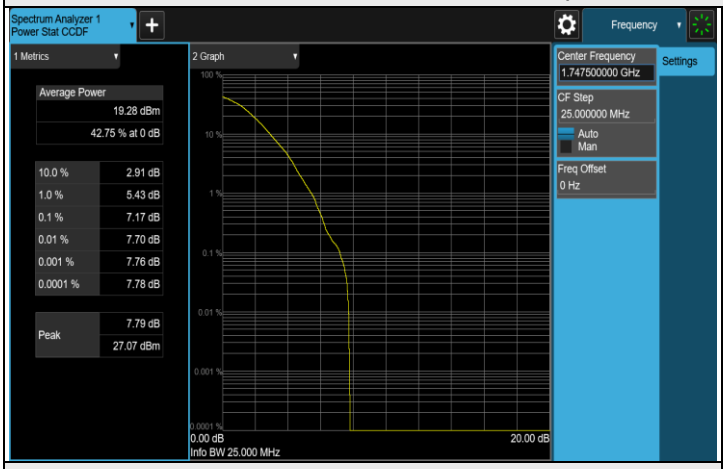
## LTE Band 4, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20000 | 1715 | 5.03 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 5.18 | 13 | PASS |
| QPSK | 20350 | 1750 | 5.33 | 13 | PASS |
| 16QAM | 20000 | 1715 | 6.33 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 6.15 | 13 | PASS |
| 16QAM | 20350 | 1750 | 6.28 | 13 | PASS |
| 64QAM | 20000 | 1715 | 6.35 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.29 | 13 | PASS |
| 64QAM | 20350 | 1750 | 6.43 | 13 | PASS |
| 256QAM | 20000 | 1715 | 6.94 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.79 | 13 | PASS |
| 256QAM | 20350 | 1750 | 6.66 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 20000 (1715 MHz) | |

## LTE Band 4, Channel Bandwidth: 15 MHz

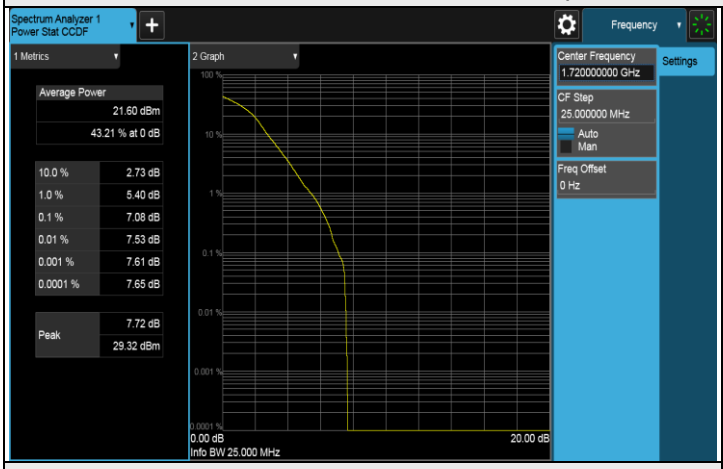
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20025 | 1717.5 | 5.12 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 5.03 | 13 | PASS |
| QPSK | 20325 | 1747.5 | 5.24 | 13 | PASS |
| 16QAM | 20025 | 1717.5 | 6.92 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 6.28 | 13 | PASS |
| 16QAM | 20325 | 1747.5 | 7.06 | 13 | PASS |
| 64QAM | 20025 | 1717.5 | 6.29 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.17 | 13 | PASS |
| 64QAM | 20325 | 1747.5 | 6.29 | 13 | PASS |
| 256QAM | 20025 | 1717.5 | 7.00 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.69 | 13 | PASS |
| 256QAM | 20325 | 1747.5 | 7.17 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 20325 (1747.5 MHz) | |

## LTE Band 4, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 20050 | 1720 | 5.77 | 13 | PASS |
| QPSK | 20175 | 1732.5 | 5.71 | 13 | PASS |
| QPSK | 20300 | 1745 | 5.82 | 13 | PASS |
| 16QAM | 20050 | 1720 | 7.08 | 13 | PASS |
| 16QAM | 20175 | 1732.5 | 6.74 | 13 | PASS |
| 16QAM | 20300 | 1745 | 6.98 | 13 | PASS |
| 64QAM | 20050 | 1720 | 6.60 | 13 | PASS |
| 64QAM | 20175 | 1732.5 | 6.69 | 13 | PASS |
| 64QAM | 20300 | 1745 | 6.88 | 13 | PASS |
| 256QAM | 20050 | 1720 | 6.73 | 13 | PASS |
| 256QAM | 20175 | 1732.5 | 6.22 | 13 | PASS |
| 256QAM | 20300 | 1745 | 6.80 | 13 | PASS |

Spectrum Plot of Worst Value



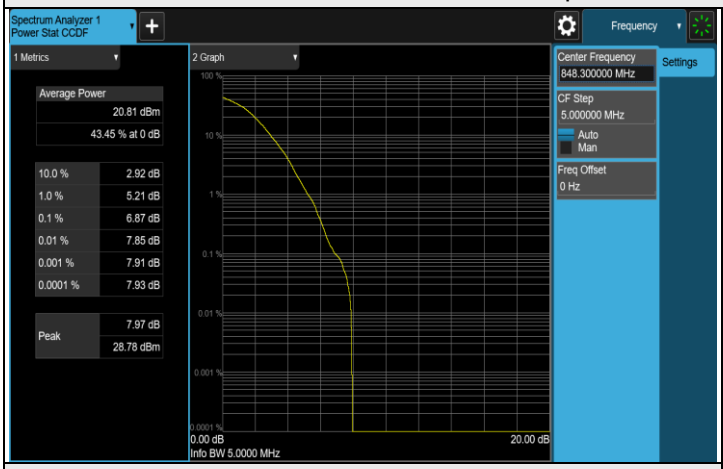

16QAM CH 20050 (1720 MHz)

### 7.3.3 LTE Band 5

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20407 | 824.7 | 4.50 | 13 | PASS |
| QPSK | 20525 | 836.5 | 4.97 | 13 | PASS |
| QPSK | 20643 | 848.3 | 3.56 | 13 | PASS |
| 16QAM | 20407 | 824.7 | 5.56 | 13 | PASS |
| 16QAM | 20525 | 836.5 | 6.00 | 13 | PASS |
| 16QAM | 20643 | 848.3 | 4.88 | 13 | PASS |
| 64QAM | 20407 | 824.7 | 6.02 | 13 | PASS |
| 64QAM | 20525 | 836.5 | 6.64 | 13 | PASS |
| 64QAM | 20643 | 848.3 | 5.61 | 13 | PASS |
| 256QAM | 20407 | 824.7 | 6.36 | 13 | PASS |
| 256QAM | 20525 | 836.5 | 6.77 | 13 | PASS |
| 256QAM | 20643 | 848.3 | 6.87 | 13 | PASS |

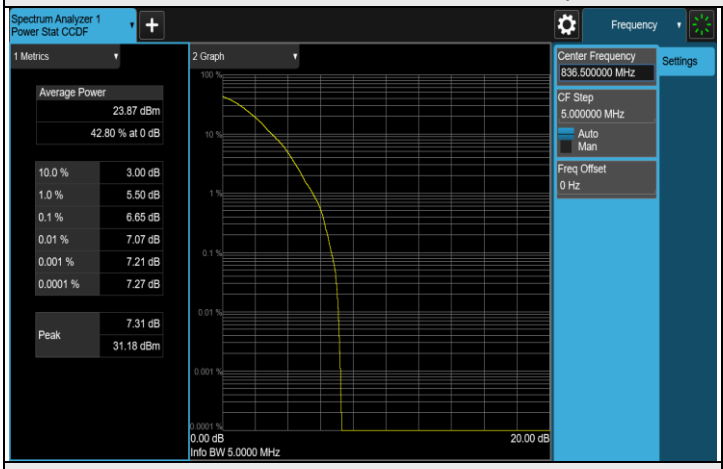
Spectrum Plot of Worst Value




256QAM CH 20643 (848.3 MHz)

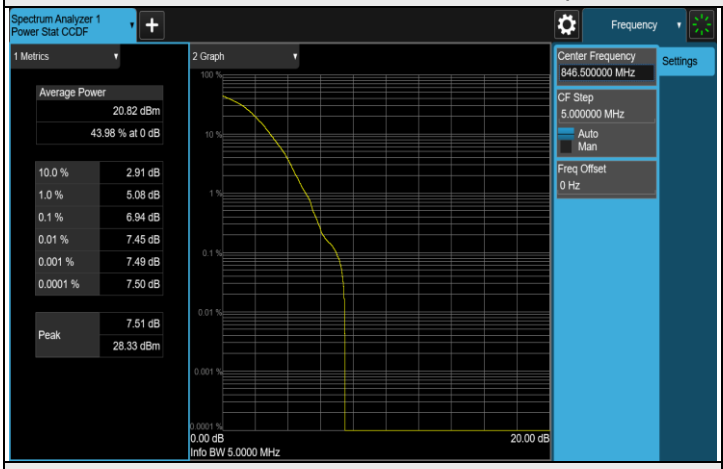
## LTE Band 5, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20415 | 825.5 | 4.43 | 13 | PASS |
| QPSK | 20525 | 836.5 | 5.14 | 13 | PASS |
| QPSK | 20635 | 847.5 | 4.45 | 13 | PASS |
| 16QAM | 20415 | 825.5 | 5.42 | 13 | PASS |
| 16QAM | 20525 | 836.5 | 5.85 | 13 | PASS |
| 16QAM | 20635 | 847.5 | 5.52 | 13 | PASS |
| 64QAM | 20415 | 825.5 | 5.82 | 13 | PASS |
| 64QAM | 20525 | 836.5 | 6.65 | 13 | PASS |
| 64QAM | 20635 | 847.5 | 6.19 | 13 | PASS |
| 256QAM | 20415 | 825.5 | 6.25 | 13 | PASS |
| 256QAM | 20525 | 836.5 | 6.22 | 13 | PASS |
| 256QAM | 20635 | 847.5 | 5.94 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 64QAM CH 20525 (836.5 MHz) | |

## LTE Band 5, Channel Bandwidth: 5 MHz

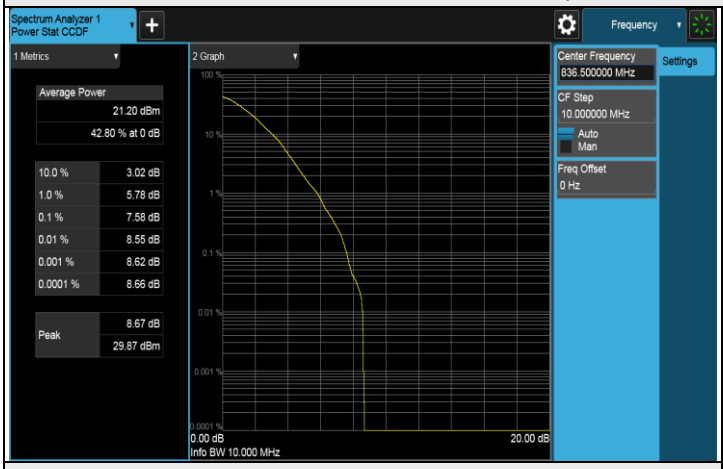
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20425 | 826.5 | 4.44 | 13 | PASS |
| QPSK | 20525 | 836.5 | 5.29 | 13 | PASS |
| QPSK | 20625 | 846.5 | 4.46 | 13 | PASS |
| 16QAM | 20425 | 826.5 | 5.54 | 13 | PASS |
| 16QAM | 20525 | 836.5 | 6.32 | 13 | PASS |
| 16QAM | 20625 | 846.5 | 5.43 | 13 | PASS |
| 64QAM | 20425 | 826.5 | 5.97 | 13 | PASS |
| 64QAM | 20525 | 836.5 | 6.81 | 13 | PASS |
| 64QAM | 20625 | 846.5 | 6.21 | 13 | PASS |
| 256QAM | 20425 | 826.5 | 6.49 | 13 | PASS |
| 256QAM | 20525 | 836.5 | 6.70 | 13 | PASS |
| 256QAM | 20625 | 846.5 | 6.94 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 20625 (846.5 MHz) | |

## LTE Band 5, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 20450 | 829 | 5.47 | 13 | PASS |
| QPSK | 20525 | 836.5 | 6.41 | 13 | PASS |
| QPSK | 20600 | 844 | 5.19 | 13 | PASS |
| 16QAM | 20450 | 829 | 6.50 | 13 | PASS |
| 16QAM | 20525 | 836.5 | 7.40 | 13 | PASS |
| 16QAM | 20600 | 844 | 6.25 | 13 | PASS |
| 64QAM | 20450 | 829 | 6.62 | 13 | PASS |
| 64QAM | 20525 | 836.5 | 7.58 | 13 | PASS |
| 64QAM | 20600 | 844 | 6.44 | 13 | PASS |
| 256QAM | 20450 | 829 | 6.73 | 13 | PASS |
| 256QAM | 20525 | 836.5 | 6.86 | 13 | PASS |
| 256QAM | 20600 | 844 | 6.49 | 13 | PASS |

Spectrum Plot of Worst Value

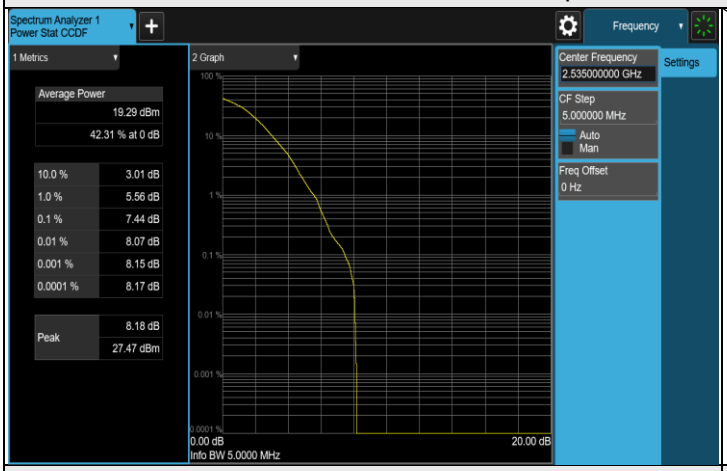



64QAM CH 20525 (836.5 MHz)

### 7.3.4 LTE Band 7

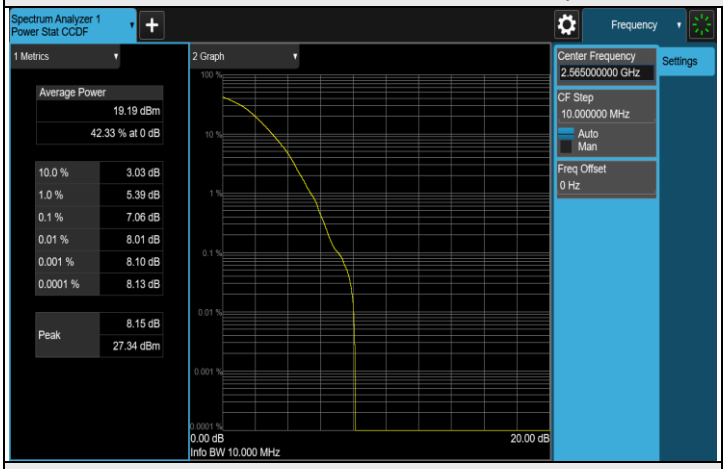
**LTE Band 7, Channel Bandwidth: 5 MHz**

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20775 | 2502.5 | 5.33 | 13 | PASS |
| QPSK | 21100 | 2535 | 5.77 | 13 | PASS |
| QPSK | 21425 | 2567.5 | 4.94 | 13 | PASS |
| 16QAM | 20775 | 2502.5 | 6.17 | 13 | PASS |
| 16QAM | 21100 | 2535 | 6.22 | 13 | PASS |
| 16QAM | 21425 | 2567.5 | 6.05 | 13 | PASS |
| 64QAM | 20775 | 2502.5 | 6.50 | 13 | PASS |
| 64QAM | 21100 | 2535 | 6.53 | 13 | PASS |
| 64QAM | 21425 | 2567.5 | 6.22 | 13 | PASS |
| 256QAM | 20775 | 2502.5 | 7.23 | 13 | PASS |
| 256QAM | 21100 | 2535 | 7.44 | 13 | PASS |
| 256QAM | 21425 | 2567.5 | 7.05 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 21100 (2535 MHz) | |

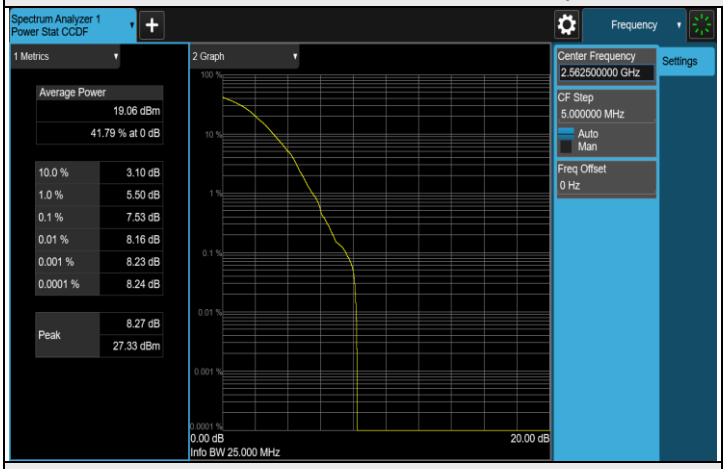
## LTE Band 7, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20800 | 2505 | 5.12 | 13 | PASS |
| QPSK | 21100 | 2535 | 5.10 | 13 | PASS |
| QPSK | 21400 | 2565 | 5.29 | 13 | PASS |
| 16QAM | 20800 | 2505 | 6.41 | 13 | PASS |
| 16QAM | 21100 | 2535 | 6.16 | 13 | PASS |
| 16QAM | 21400 | 2565 | 6.41 | 13 | PASS |
| 64QAM | 20800 | 2505 | 6.42 | 13 | PASS |
| 64QAM | 21100 | 2535 | 6.42 | 13 | PASS |
| 64QAM | 21400 | 2565 | 6.44 | 13 | PASS |
| 256QAM | 20800 | 2505 | 6.81 | 13 | PASS |
| 256QAM | 21100 | 2535 | 6.74 | 13 | PASS |
| 256QAM | 21400 | 2565 | 7.06 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 21400 (2565 MHz) | |

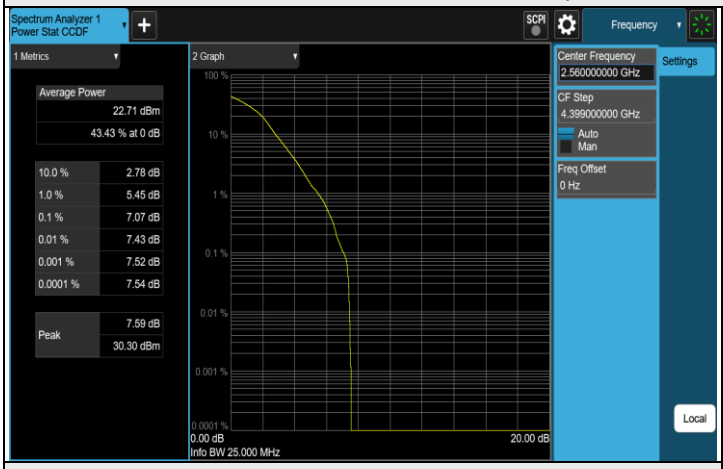
## LTE Band 7, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 20825 | 2507.5 | 5.14 | 13 | PASS |
| QPSK | 21100 | 2535 | 5.30 | 13 | PASS |
| QPSK | 21375 | 2562.5 | 5.32 | 13 | PASS |
| 16QAM | 20825 | 2507.5 | 6.42 | 13 | PASS |
| 16QAM | 21100 | 2535 | 5.91 | 13 | PASS |
| 16QAM | 21375 | 2562.5 | 5.98 | 13 | PASS |
| 64QAM | 20825 | 2507.5 | 6.56 | 13 | PASS |
| 64QAM | 21100 | 2535 | 6.35 | 13 | PASS |
| 64QAM | 21375 | 2562.5 | 6.67 | 13 | PASS |
| 256QAM | 20825 | 2507.5 | 7.47 | 13 | PASS |
| 256QAM | 21100 | 2535 | 6.64 | 13 | PASS |
| 256QAM | 21375 | 2562.5 | 7.53 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 21375 (2562.5 MHz) | |

## LTE Band 7, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 20850 | 2510 | 5.66 | 13 | PASS |
| QPSK | 21100 | 2535 | 5.64 | 13 | PASS |
| QPSK | 21350 | 2560 | 5.60 | 13 | PASS |
| 16QAM | 20850 | 2510 | 6.63 | 13 | PASS |
| 16QAM | 21100 | 2535 | 6.94 | 13 | PASS |
| 16QAM | 21350 | 2560 | 7.07 | 13 | PASS |
| 64QAM | 20850 | 2510 | 6.70 | 13 | PASS |
| 64QAM | 21100 | 2535 | 6.55 | 13 | PASS |
| 64QAM | 21350 | 2560 | 6.74 | 13 | PASS |
| 256QAM | 20850 | 2510 | 6.95 | 13 | PASS |
| 256QAM | 21100 | 2535 | 6.98 | 13 | PASS |
| 256QAM | 21350 | 2560 | 6.93 | 13 | PASS |

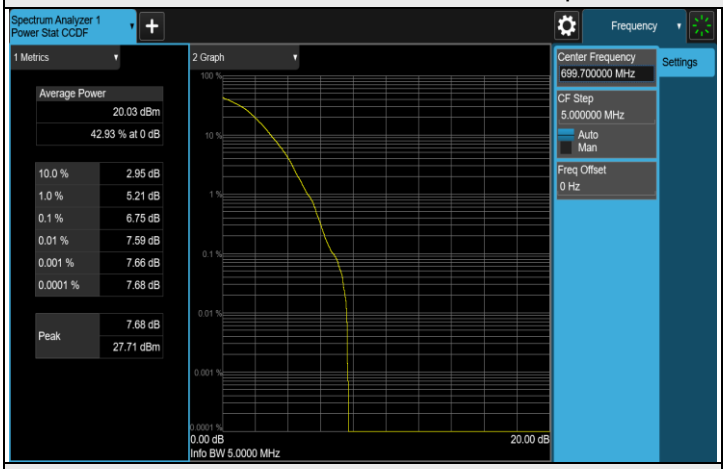
| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 16QAM CH 21350 (2560 MHz) | |

### 7.3.5 LTE Band 12

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 23017 | 699.7 | 4.57 | 13 | PASS |
| QPSK | 23095 | 707.5 | 4.99 | 13 | PASS |
| QPSK | 23173 | 715.3 | 4.75 | 13 | PASS |
| 16QAM | 23017 | 699.7 | 5.57 | 13 | PASS |
| 16QAM | 23095 | 707.5 | 6.05 | 13 | PASS |
| 16QAM | 23173 | 715.3 | 5.75 | 13 | PASS |
| 64QAM | 23017 | 699.7 | 5.90 | 13 | PASS |
| 64QAM | 23095 | 707.5 | 6.12 | 13 | PASS |
| 64QAM | 23173 | 715.3 | 5.98 | 13 | PASS |
| 256QAM | 23017 | 699.7 | 6.75 | 13 | PASS |
| 256QAM | 23095 | 707.5 | 6.67 | 13 | PASS |
| 256QAM | 23173 | 715.3 | 6.71 | 13 | PASS |

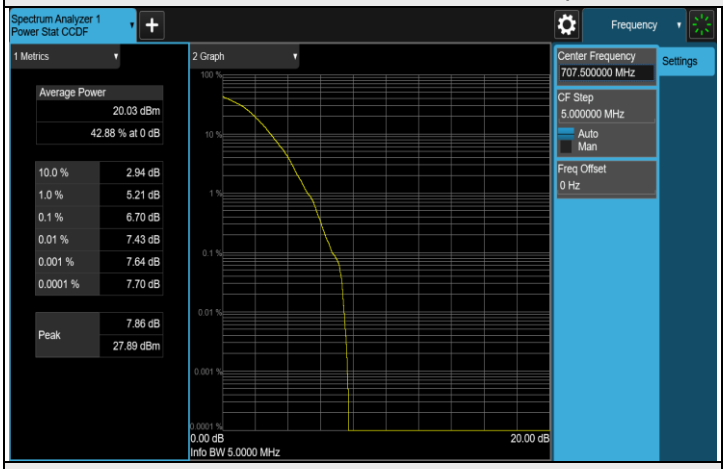
Spectrum Plot of Worst Value




256QAM CH 23017 (699.7 MHz)

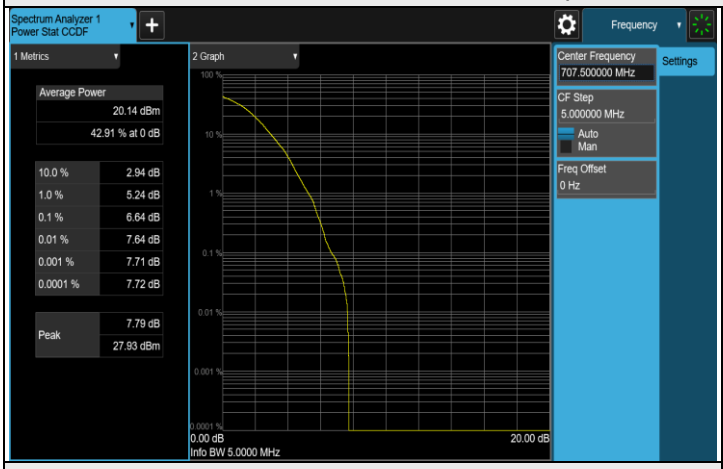
## LTE Band 12, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 23025 | 700.5 | 4.57 | 13 | PASS |
| QPSK | 23095 | 707.5 | 4.94 | 13 | PASS |
| QPSK | 23165 | 714.5 | 4.69 | 13 | PASS |
| 16QAM | 23025 | 700.5 | 5.57 | 13 | PASS |
| 16QAM | 23095 | 707.5 | 5.97 | 13 | PASS |
| 16QAM | 23165 | 714.5 | 5.46 | 13 | PASS |
| 64QAM | 23025 | 700.5 | 5.97 | 13 | PASS |
| 64QAM | 23095 | 707.5 | 6.10 | 13 | PASS |
| 64QAM | 23165 | 714.5 | 5.67 | 13 | PASS |
| 256QAM | 23025 | 700.5 | 6.59 | 13 | PASS |
| 256QAM | 23095 | 707.5 | 6.70 | 13 | PASS |
| 256QAM | 23165 | 714.5 | 6.48 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 23097 (707.5 MHz) | |

## LTE Band 12, Channel Bandwidth: 5 MHz

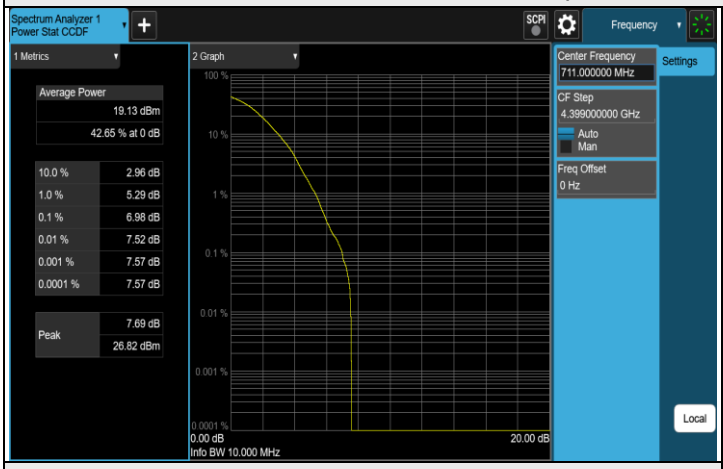
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 23035 | 701.5 | 4.57 | 13 | PASS |
| QPSK | 23095 | 707.5 | 4.98 | 13 | PASS |
| QPSK | 23155 | 713.5 | 4.63 | 13 | PASS |
| 16QAM | 23035 | 701.5 | 5.55 | 13 | PASS |
| 16QAM | 23095 | 707.5 | 6.11 | 13 | PASS |
| 16QAM | 23155 | 713.5 | 5.83 | 13 | PASS |
| 64QAM | 23035 | 701.5 | 5.79 | 13 | PASS |
| 64QAM | 23095 | 707.5 | 6.07 | 13 | PASS |
| 64QAM | 23155 | 713.5 | 5.96 | 13 | PASS |
| 256QAM | 23035 | 701.5 | 6.38 | 13 | PASS |
| 256QAM | 23095 | 707.5 | 6.64 | 13 | PASS |
| 256QAM | 23155 | 713.5 | 6.62 | 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 | 5.42 | 13 | PASS |
| QPSK | 23095 | 707.5 | 5.47 | 13 | PASS |
| QPSK | 23130 | 711 | 5.43 | 13 | PASS |
| 16QAM | 23060 | 704 | 6.61 | 13 | PASS |
| 16QAM | 23095 | 707.5 | 6.79 | 13 | PASS |
| 16QAM | 23130 | 711 | 6.74 | 13 | PASS |
| 64QAM | 23060 | 704 | 6.46 | 13 | PASS |
| 64QAM | 23095 | 707.5 | 6.35 | 13 | PASS |
| 64QAM | 23130 | 711 | 6.53 | 13 | PASS |
| 256QAM | 23060 | 704 | 6.50 | 13 | PASS |
| 256QAM | 23095 | 707.5 | 6.87 | 13 | PASS |
| 256QAM | 23130 | 711 | 6.98 | 13 | PASS |

Spectrum Plot of Worst Value



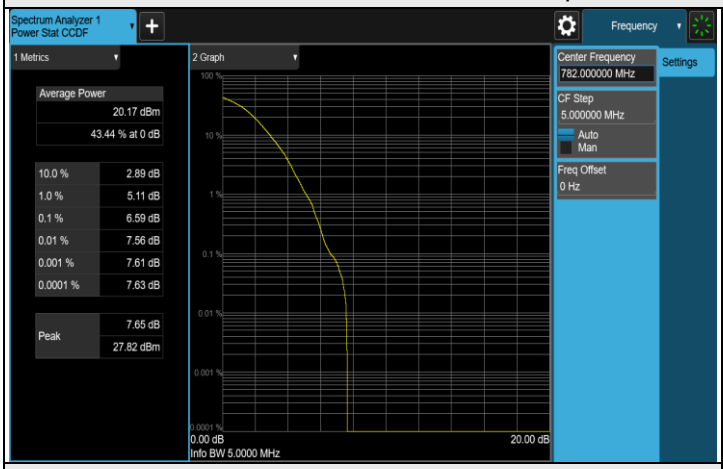

256QAM CH 23130 (711 MHz)

7.3.6 LTE Band 13

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 23205 | 779.5 | 4.12 | 13 | PASS |
| QPSK | 23230 | 782 | 4.37 | 13 | PASS |
| QPSK | 23255 | 784.5 | 4.36 | 13 | PASS |
| 16QAM | 23205 | 779.5 | 5.11 | 13 | PASS |
| 16QAM | 23230 | 782 | 6.04 | 13 | PASS |
| 16QAM | 23255 | 784.5 | 5.34 | 13 | PASS |
| 64QAM | 23205 | 779.5 | 5.69 | 13 | PASS |
| 64QAM | 23230 | 782 | 5.82 | 13 | PASS |
| 64QAM | 23255 | 784.5 | 5.76 | 13 | PASS |
| 256QAM | 23205 | 779.5 | 6.47 | 13 | PASS |
| 256QAM | 23230 | 782 | 6.59 | 13 | PASS |
| 256QAM | 23255 | 784.5 | 6.43 | 13 | PASS |

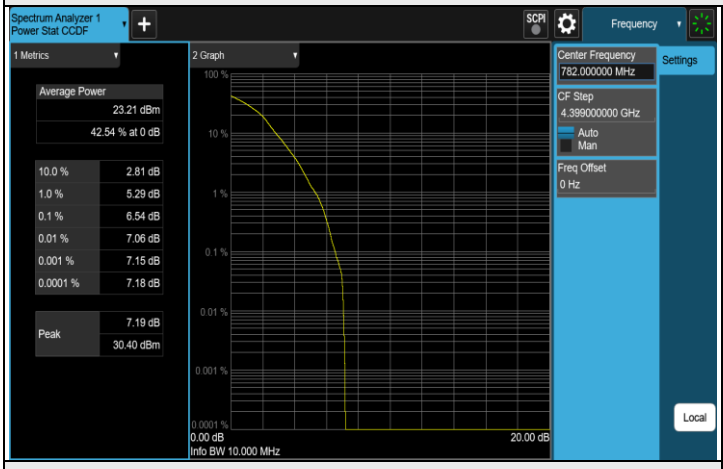
Spectrum Plot of Worst Value




256QAM CH 23230 (782 MHz)

## LTE Band 13, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 23230 | 782 | 5.10 | 13 | PASS |
| 16QAM | 23230 | 782 | 6.54 | 13 | PASS |
| 64QAM | 23230 | 782 | 6.38 | 13 | PASS |
| 256QAM | 23230 | 782 | 6.54 | 13 | PASS |

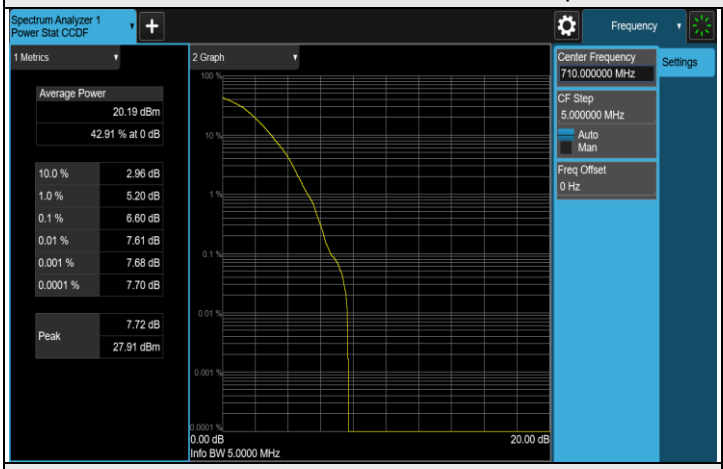
| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 16QAM CH 23230 (782 MHz) | |

### 7.3.7 LTE Band 17

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

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 23755 | 706.5 | 4.86 | 13 | PASS |
| QPSK | 23790 | 710 | 4.97 | 13 | PASS |
| QPSK | 23825 | 713.5 | 4.89 | 13 | PASS |
| 16QAM | 23755 | 706.5 | 6.02 | 13 | PASS |
| 16QAM | 23790 | 710 | 6.10 | 13 | PASS |
| 16QAM | 23825 | 713.5 | 5.80 | 13 | PASS |
| 64QAM | 23755 | 706.5 | 5.60 | 13 | PASS |
| 64QAM | 23790 | 710 | 6.06 | 13 | PASS |
| 64QAM | 23825 | 713.5 | 5.99 | 13 | PASS |
| 256QAM | 23755 | 706.5 | 6.54 | 13 | PASS |
| 256QAM | 23790 | 710 | 6.60 | 13 | PASS |
| 256QAM | 23825 | 713.5 | 6.60 | 13 | PASS |

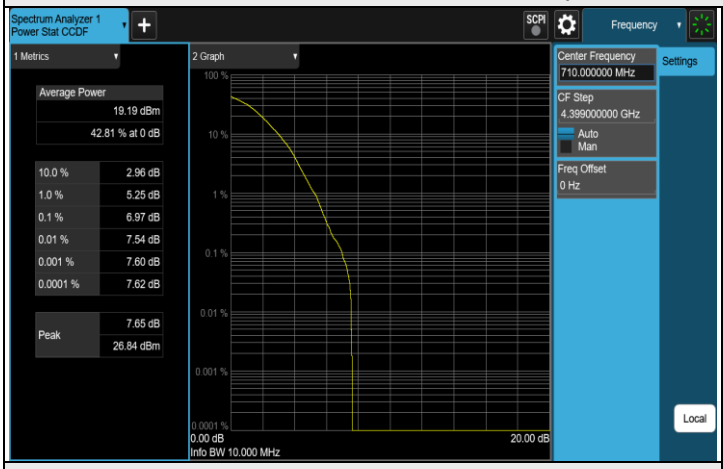
Spectrum Plot of Worst Value




256QAM CH 23790 (710 MHz)

## LTE Band 17, Channel Bandwidth: 10 MHz

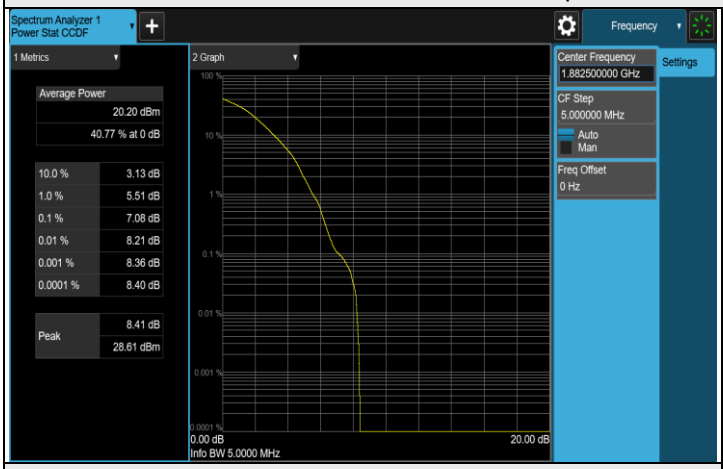
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 23780 | 709 | 5.17 | 13 | PASS |
| QPSK | 23790 | 710 | 5.48 | 13 | PASS |
| QPSK | 23800 | 711 | 5.45 | 13 | PASS |
| 16QAM | 23780 | 709 | 6.76 | 13 | PASS |
| 16QAM | 23790 | 710 | 6.81 | 13 | PASS |
| 16QAM | 23800 | 711 | 6.58 | 13 | PASS |
| 64QAM | 23780 | 709 | 6.37 | 13 | PASS |
| 64QAM | 23790 | 710 | 6.44 | 13 | PASS |
| 64QAM | 23800 | 711 | 6.60 | 13 | PASS |
| 256QAM | 23780 | 709 | 6.94 | 13 | PASS |
| 256QAM | 23790 | 710 | 6.97 | 13 | PASS |
| 256QAM | 23800 | 711 | 6.83 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 23790 (710 MHz) | |

### 7.3.8 LTE Band 25

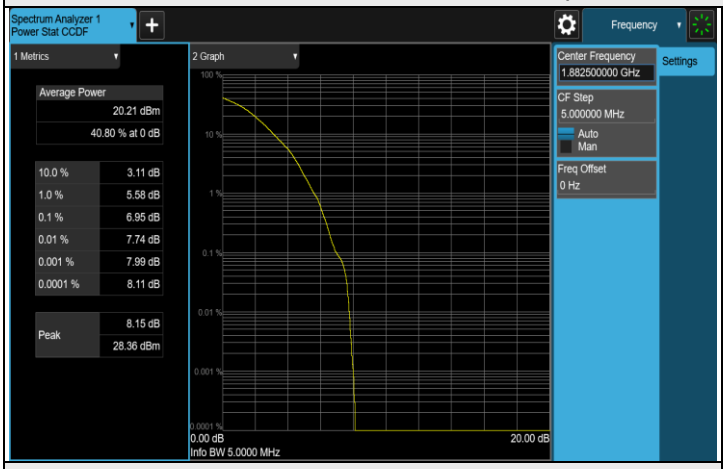
**LTE Band 25, Channel Bandwidth: 1.4 MHz**

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 26047 | 1850.7 | 5.12 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.05 | 13 | PASS |
| QPSK | 26683 | 1914.3 | 4.69 | 13 | PASS |
| 16QAM | 26047 | 1850.7 | 6.23 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 6.43 | 13 | PASS |
| 16QAM | 26683 | 1914.3 | 5.92 | 13 | PASS |
| 64QAM | 26047 | 1850.7 | 6.44 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.45 | 13 | PASS |
| 64QAM | 26683 | 1914.3 | 6.20 | 13 | PASS |
| 256QAM | 26047 | 1850.7 | 6.60 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 7.08 | 13 | PASS |
| 256QAM | 26683 | 1914.3 | 7.08 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26365 (1882.5 MHz) | |

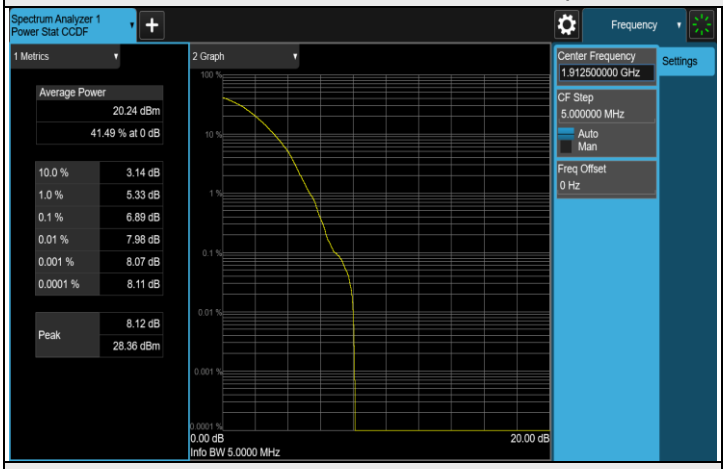
## LTE Band 25, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 26055 | 1851.5 | 5.01 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.00 | 13 | PASS |
| QPSK | 26675 | 1913.5 | 4.74 | 13 | PASS |
| 16QAM | 26055 | 1851.5 | 6.01 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 6.00 | 13 | PASS |
| 16QAM | 26675 | 1913.5 | 5.89 | 13 | PASS |
| 64QAM | 26055 | 1851.5 | 6.41 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.45 | 13 | PASS |
| 64QAM | 26675 | 1913.5 | 6.10 | 13 | PASS |
| 256QAM | 26055 | 1851.5 | 6.69 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 6.95 | 13 | PASS |
| 256QAM | 26675 | 1913.5 | 6.68 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26365 (1882.5 MHz) | |

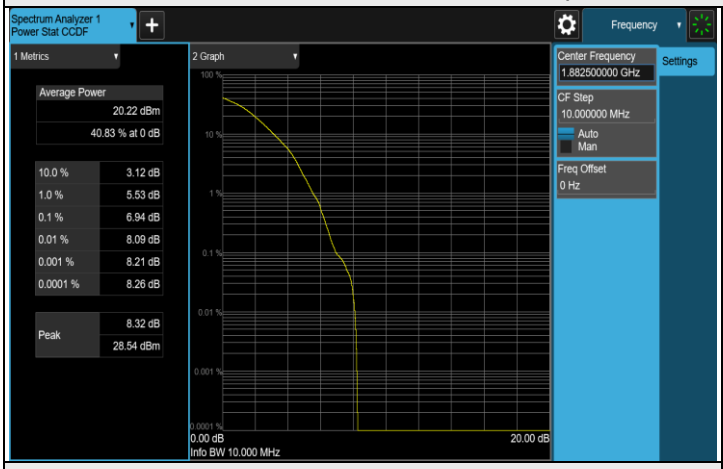
## LTE Band 25, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 26065 | 1852.5 | 5.14 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.04 | 13 | PASS |
| QPSK | 26665 | 1912.5 | 4.89 | 13 | PASS |
| 16QAM | 26065 | 1852.5 | 6.42 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 6.17 | 13 | PASS |
| 16QAM | 26665 | 1912.5 | 6.07 | 13 | PASS |
| 64QAM | 26065 | 1852.5 | 6.44 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.44 | 13 | PASS |
| 64QAM | 26665 | 1912.5 | 6.30 | 13 | PASS |
| 256QAM | 26065 | 1852.5 | 6.72 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 6.71 | 13 | PASS |
| 256QAM | 26665 | 1912.5 | 6.89 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26665 (1912.5 MHz) | |

## LTE Band 25, Channel Bandwidth: 10 MHz

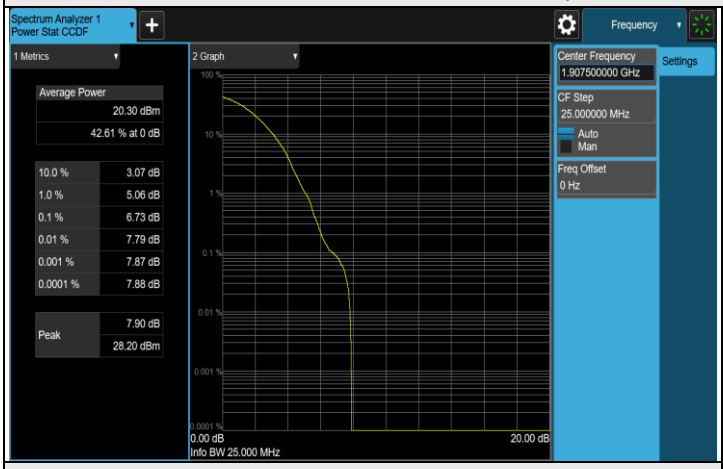
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 26090 | 1855 | 5.03 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.06 | 13 | PASS |
| QPSK | 26640 | 1910 | 4.85 | 13 | PASS |
| 16QAM | 26090 | 1855 | 6.30 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 6.10 | 13 | PASS |
| 16QAM | 26640 | 1910 | 6.05 | 13 | PASS |
| 64QAM | 26090 | 1855 | 6.47 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.44 | 13 | PASS |
| 64QAM | 26640 | 1910 | 6.34 | 13 | PASS |
| 256QAM | 26090 | 1855 | 6.85 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 6.94 | 13 | PASS |
| 256QAM | 26640 | 1910 | 6.53 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26365 (1882.5 MHz) | |

## LTE Band 25, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 26115 | 1857.5 | 5.09 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.08 | 13 | PASS |
| QPSK | 26615 | 1907.5 | 4.93 | 13 | PASS |
| 16QAM | 26115 | 1857.5 | 6.25 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 5.97 | 13 | PASS |
| 16QAM | 26615 | 1907.5 | 6.07 | 13 | PASS |
| 64QAM | 26115 | 1857.5 | 6.33 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.47 | 13 | PASS |
| 64QAM | 26615 | 1907.5 | 6.37 | 13 | PASS |
| 256QAM | 26115 | 1857.5 | 6.62 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 6.70 | 13 | PASS |
| 256QAM | 26615 | 1907.5 | 6.73 | 13 | PASS |

Spectrum Plot of Worst Value

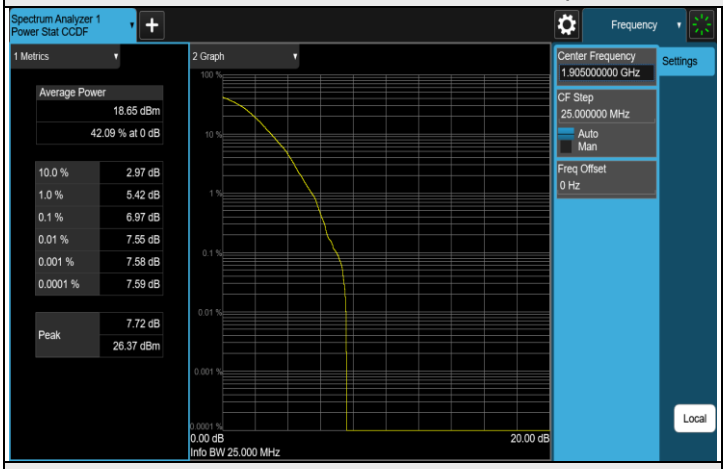



256QAM CH 26615 (1907.5 MHz)

## LTE Band 25, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 26140 | 1860 | 5.27 | 13 | PASS |
| QPSK | 26365 | 1882.5 | 5.54 | 13 | PASS |
| QPSK | 26590 | 1905 | 5.58 | 13 | PASS |
| 16QAM | 26140 | 1860 | 6.80 | 13 | PASS |
| 16QAM | 26365 | 1882.5 | 6.64 | 13 | PASS |
| 16QAM | 26590 | 1905 | 6.56 | 13 | PASS |
| 64QAM | 26140 | 1860 | 6.52 | 13 | PASS |
| 64QAM | 26365 | 1882.5 | 6.57 | 13 | PASS |
| 64QAM | 26590 | 1905 | 6.57 | 13 | PASS |
| 256QAM | 26140 | 1860 | 6.76 | 13 | PASS |
| 256QAM | 26365 | 1882.5 | 6.87 | 13 | PASS |
| 256QAM | 26590 | 1905 | 6.97 | 13 | PASS |

Spectrum Plot of Worst Value

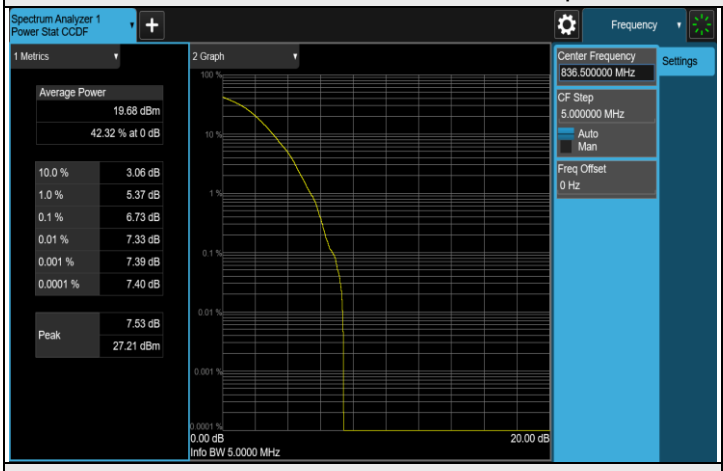



256QAM CH 26590 (1905 MHz)

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

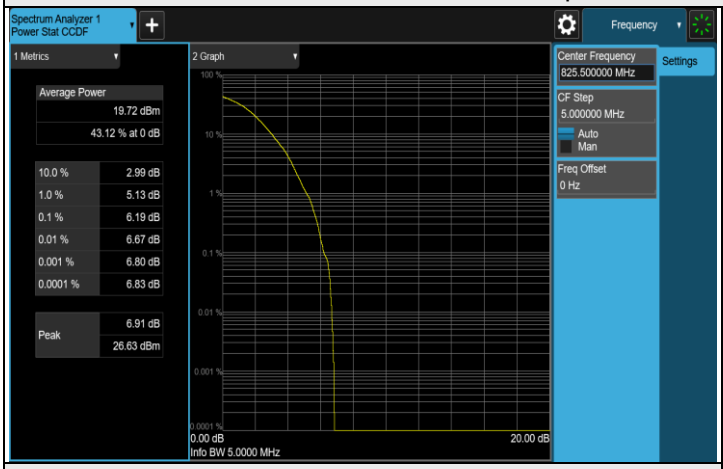
**LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 1.4 MHz**

| LTE Band 26 1.4M | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
| QPSK | 26797 | 824.7 | 3.79 | 13 | PASS |
| QPSK | 26915 | 836.5 | 3.94 | 13 | PASS |
| QPSK | 27033 | 848.3 | 2.95 | 13 | PASS |
| 16QAM | 26797 | 824.7 | 4.73 | 13 | PASS |
| 16QAM | 26915 | 836.5 | 5.10 | 13 | PASS |
| 16QAM | 27033 | 848.3 | 4.09 | 13 | PASS |
| 64QAM | 26797 | 824.7 | 5.31 | 13 | PASS |
| 64QAM | 26915 | 836.5 | 5.36 | 13 | PASS |
| 64QAM | 27033 | 848.3 | 4.75 | 13 | PASS |
| 256QAM | 26797 | 824.7 | 6.48 | 13 | PASS |
| 256QAM | 26915 | 836.5 | 6.73 | 13 | PASS |
| 256QAM | 27033 | 848.3 | 6.49 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26915 (836.5 MHz) | |

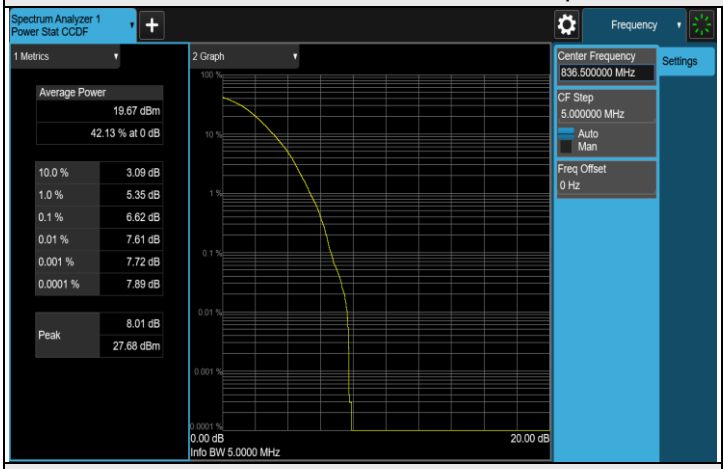
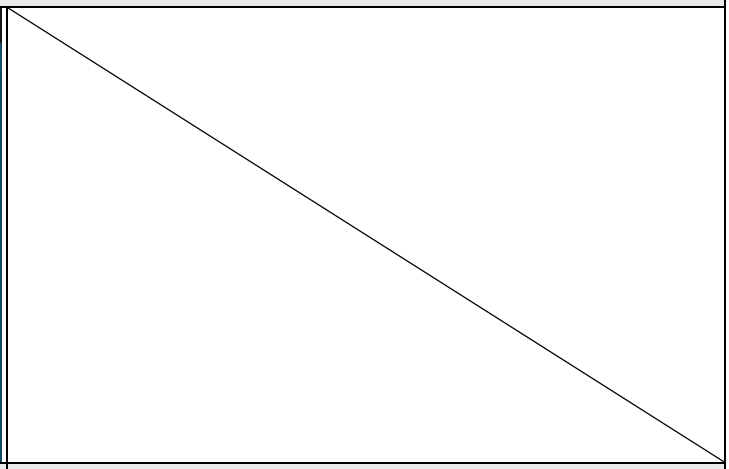
## LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 3 MHz

| LTE Band 26 3M | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
| QPSK | 26805 | 825.5 | 3.63 | 13 | PASS |
| QPSK | 26915 | 836.5 | 3.87 | 13 | PASS |
| QPSK | 27025 | 847.5 | 3.55 | 13 | PASS |
| 16QAM | 26805 | 825.5 | 4.42 | 13 | PASS |
| 16QAM | 26915 | 836.5 | 4.96 | 13 | PASS |
| 16QAM | 27025 | 847.5 | 4.52 | 13 | PASS |
| 64QAM | 26805 | 825.5 | 5.20 | 13 | PASS |
| 64QAM | 26915 | 836.5 | 5.10 | 13 | PASS |
| 64QAM | 27025 | 847.5 | 5.22 | 13 | PASS |
| 256QAM | 26805 | 825.5 | 6.19 | 13 | PASS |
| 256QAM | 26915 | 836.5 | 6.10 | 13 | PASS |
| 256QAM | 27025 | 847.5 | 6.05 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26805 (825.5 MHz) | |

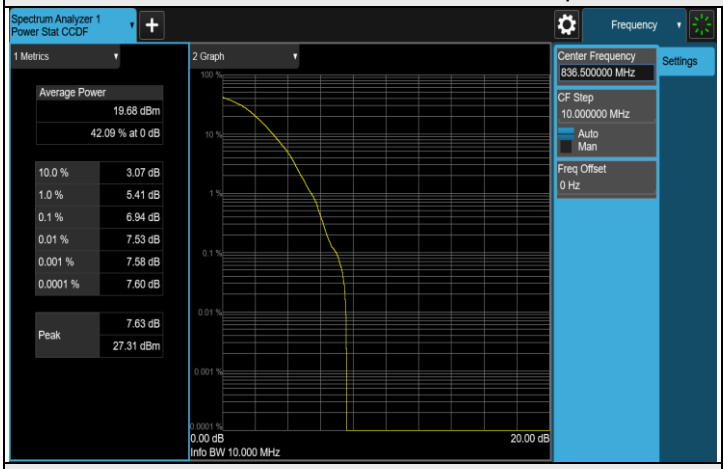
## LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 5 MHz

| LTE Band 26 5M | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
| QPSK | 26815 | 826.5 | 3.67 | 13 | PASS |
| QPSK | 26915 | 836.5 | 4.00 | 13 | PASS |
| QPSK | 27015 | 846.5 | 3.63 | 13 | PASS |
| 16QAM | 26815 | 826.5 | 4.79 | 13 | PASS |
| 16QAM | 26915 | 836.5 | 5.02 | 13 | PASS |
| 16QAM | 27015 | 846.5 | 4.63 | 13 | PASS |
| 64QAM | 26815 | 826.5 | 5.22 | 13 | PASS |
| 64QAM | 26915 | 836.5 | 5.53 | 13 | PASS |
| 64QAM | 27015 | 846.5 | 5.15 | 13 | PASS |
| 256QAM | 26815 | 826.5 | 6.25 | 13 | PASS |
| 256QAM | 26915 | 836.5 | 6.62 | 13 | PASS |
| 256QAM | 27015 | 846.5 | 6.15 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  |  |
| 256QAM CH 26915 (836.5 MHz) | |

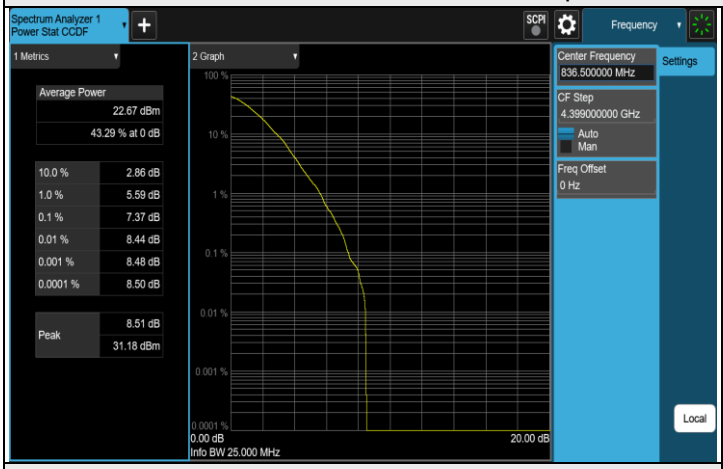
## LTE Band 26 (824 MHz ~ 849 MHz), Channel Bandwidth: 10 MHz

| LTE Band 26 10M | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
| QPSK | 26840 | 829 | 3.71 | 13 | PASS |
| QPSK | 26915 | 836.5 | 4.05 | 13 | PASS |
| QPSK | 26990 | 844 | 3.36 | 13 | PASS |
| 16QAM | 26840 | 829 | 4.74 | 13 | PASS |
| 16QAM | 26915 | 836.5 | 5.06 | 13 | PASS |
| 16QAM | 26990 | 844 | 4.50 | 13 | PASS |
| 64QAM | 26840 | 829 | 5.22 | 13 | PASS |
| 64QAM | 26915 | 836.5 | 5.53 | 13 | PASS |
| 64QAM | 26990 | 844 | 4.94 | 13 | PASS |
| 256QAM | 26840 | 829 | 6.53 | 13 | PASS |
| 256QAM | 26915 | 836.5 | 6.94 | 13 | PASS |
| 256QAM | 26990 | 844 | 6.54 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 26915 (836.5 MHz) | |

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

| LTE Band 26 15M | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
| QPSK | 26865 | 831.5 | 5.55 | 13 | PASS |
| QPSK | 26915 | 836.5 | 6.08 | 13 | PASS |
| QPSK | 26965 | 841.5 | 6.09 | 13 | PASS |
| 16QAM | 26865 | 831.5 | 6.47 | 13 | PASS |
| 16QAM | 26915 | 836.5 | 7.15 | 13 | PASS |
| 16QAM | 26965 | 841.5 | 7.26 | 13 | PASS |
| 64QAM | 26865 | 831.5 | 6.57 | 13 | PASS |
| 64QAM | 26915 | 836.5 | 7.37 | 13 | PASS |
| 64QAM | 26965 | 841.5 | 6.90 | 13 | PASS |
| 256QAM | 26865 | 831.5 | 6.48 | 13 | PASS |
| 256QAM | 26915 | 836.5 | 6.68 | 13 | PASS |
| 256QAM | 26965 | 841.5 | 6.54 | 13 | PASS |

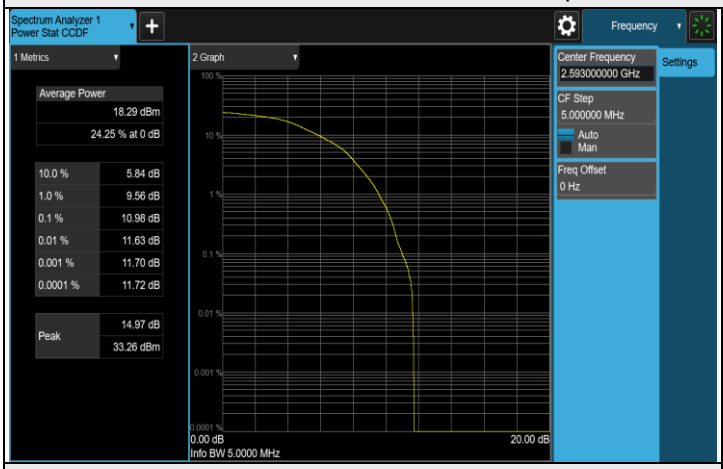
| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 64QAM CH 26915 (836.5 MHz) | |

7.3.10 LTE Band 41

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

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 39675 | 2498.5 | 9.31 | 13 | PASS |
| QPSK | 40620 | 2593 | 9.32 | 13 | PASS |
| QPSK | 41565 | 2687.5 | 9.32 | 13 | PASS |
| 16QAM | 39675 | 2498.5 | 6.39 | 13 | PASS |
| 16QAM | 40620 | 2593 | 10.98 | 13 | PASS |
| 16QAM | 41565 | 2687.5 | 9.77 | 13 | PASS |
| 64QAM | 39675 | 2498.5 | 7.38 | 13 | PASS |
| 64QAM | 40620 | 2593 | 9.99 | 13 | PASS |
| 64QAM | 41565 | 2687.5 | 10.87 | 13 | PASS |
| 256QAM | 39675 | 2498.5 | 8.93 | 13 | PASS |
| 256QAM | 40620 | 2593 | 8.78 | 13 | PASS |
| 256QAM | 41565 | 2687.5 | 9.39 | 13 | PASS |

Spectrum Plot of Worst Value

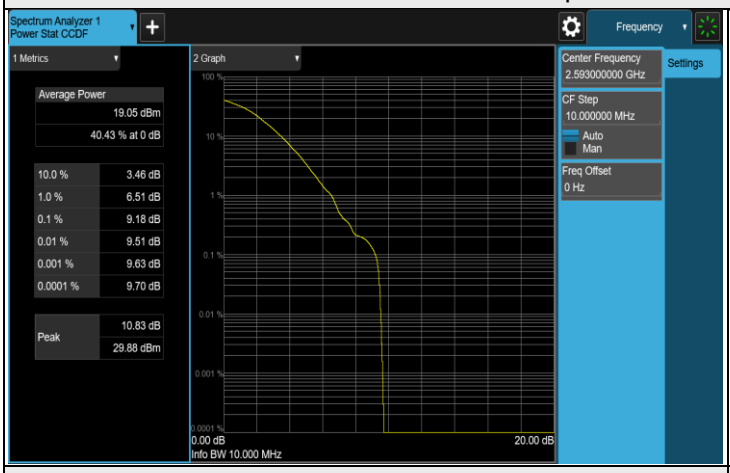



16QAM CH 40620 (2593 MHz)

## LTE Band 41, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 39700 | 2501 | 5.56 | 13 | PASS |
| QPSK | 40620 | 2593 | 5.45 | 13 | PASS |
| QPSK | 41540 | 2685 | 5.09 | 13 | PASS |
| 16QAM | 39700 | 2501 | 6.15 | 13 | PASS |
| 16QAM | 40620 | 2593 | 6.69 | 13 | PASS |
| 16QAM | 41540 | 2685 | 5.95 | 13 | PASS |
| 64QAM | 39700 | 2501 | 6.78 | 13 | PASS |
| 64QAM | 40620 | 2593 | 7.12 | 13 | PASS |
| 64QAM | 41540 | 2685 | 6.77 | 13 | PASS |
| 256QAM | 39700 | 2501 | 8.83 | 13 | PASS |
| 256QAM | 40620 | 2593 | 9.18 | 13 | PASS |
| 256QAM | 41540 | 2685 | 6.95 | 13 | PASS |

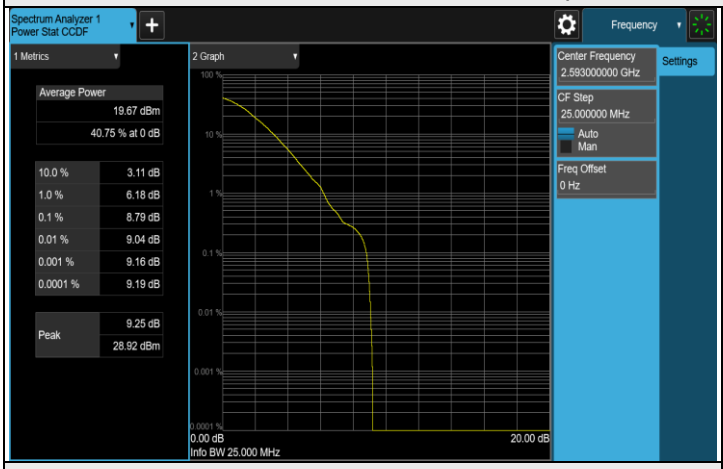
Spectrum Plot of Worst Value




256QAM CH 40620 (2593 MHz)

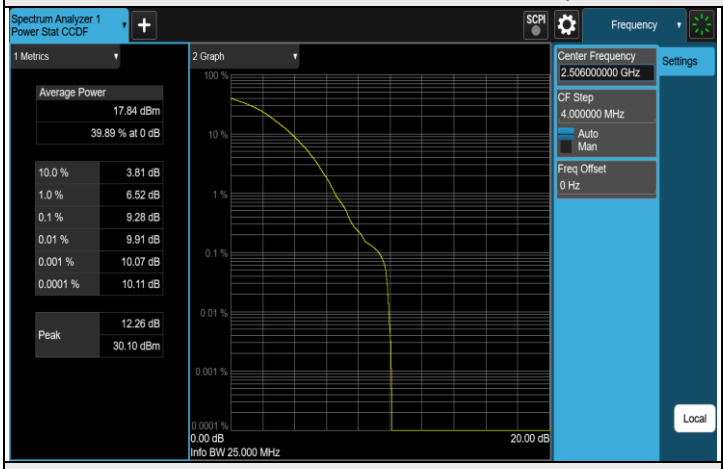
## LTE Band 41, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 39725 | 2503.5 | 5.66 | 13 | PASS |
| QPSK | 40620 | 2593 | 5.97 | 13 | PASS |
| QPSK | 41515 | 2682.5 | 5.27 | 13 | PASS |
| 16QAM | 39725 | 2503.5 | 6.07 | 13 | PASS |
| 16QAM | 40620 | 2593 | 6.32 | 13 | PASS |
| 16QAM | 41515 | 2682.5 | 6.02 | 13 | PASS |
| 64QAM | 39725 | 2503.5 | 6.73 | 13 | PASS |
| 64QAM | 40620 | 2593 | 6.87 | 13 | PASS |
| 64QAM | 41515 | 2682.5 | 6.58 | 13 | PASS |
| 256QAM | 39725 | 2503.5 | 8.64 | 13 | PASS |
| 256QAM | 40620 | 2593 | 8.79 | 13 | PASS |
| 256QAM | 41515 | 2682.5 | 6.85 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 40620 (2593 MHz) | |

## LTE Band 41, Channel Bandwidth: 20 MHz

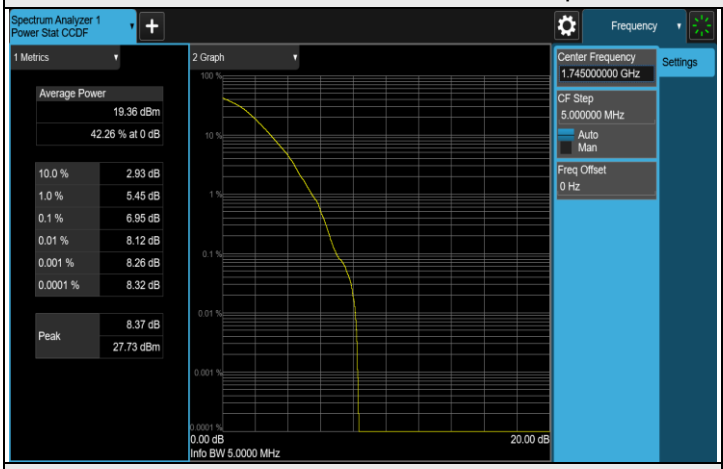
| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 39750 | 2506 | 6.86 | 13 | PASS |
| QPSK | 40620 | 2593 | 7.13 | 13 | PASS |
| QPSK | 41490 | 2680 | 6.96 | 13 | PASS |
| 16QAM | 39750 | 2506 | 8.39 | 13 | PASS |
| 16QAM | 40620 | 2593 | 8.74 | 13 | PASS |
| 16QAM | 41490 | 2680 | 8.29 | 13 | PASS |
| 64QAM | 39750 | 2506 | 7.67 | 13 | PASS |
| 64QAM | 40620 | 2593 | 7.98 | 13 | PASS |
| 64QAM | 41490 | 2680 | 8.07 | 13 | PASS |
| 256QAM | 39750 | 2506 | 9.28 | 13 | PASS |
| 256QAM | 40620 | 2593 | 9.07 | 13 | PASS |
| 256QAM | 41490 | 2680 | 9.10 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 39750 (2506 MHz) | |

7.3.11 LTE Band 66

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

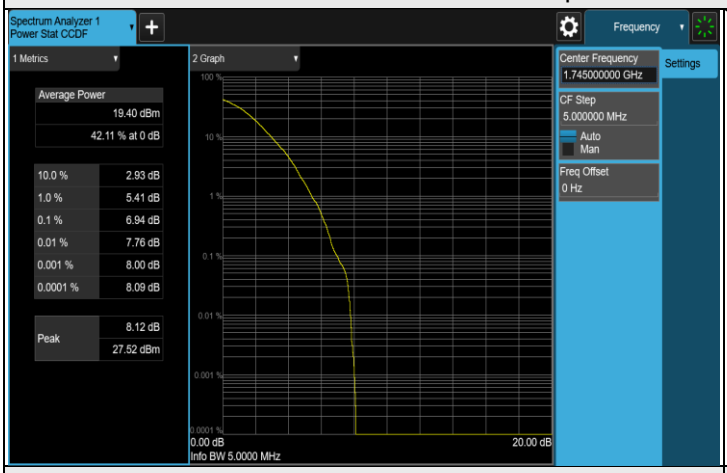
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 131979 | 1710.7 | 5.67 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.88 | 13 | PASS |
| QPSK | 132665 | 1779.3 | 5.68 | 13 | PASS |
| 16QAM | 131979 | 1710.7 | 6.56 | 13 | PASS |
| 16QAM | 132322 | 1745 | 6.69 | 13 | PASS |
| 16QAM | 132665 | 1779.3 | 6.58 | 13 | PASS |
| 64QAM | 131979 | 1710.7 | 6.20 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.69 | 13 | PASS |
| 64QAM | 132665 | 1779.3 | 6.75 | 13 | PASS |
| 256QAM | 131979 | 1710.7 | 6.76 | 13 | PASS |
| 256QAM | 132322 | 1745 | 6.95 | 13 | PASS |
| 256QAM | 132665 | 1779.3 | 6.94 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 132322 (1745 MHz) | |

## LTE Band 66, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 131987 | 1711.5 | 5.32 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.44 | 13 | PASS |
| QPSK | 132657 | 1778.5 | 5.46 | 13 | PASS |
| 16QAM | 131987 | 1711.5 | 6.32 | 13 | PASS |
| 16QAM | 132322 | 1745 | 6.56 | 13 | PASS |
| 16QAM | 132657 | 1778.5 | 6.43 | 13 | PASS |
| 64QAM | 131987 | 1711.5 | 6.51 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.75 | 13 | PASS |
| 64QAM | 132657 | 1778.5 | 6.72 | 13 | PASS |
| 256QAM | 131987 | 1711.5 | 6.82 | 13 | PASS |
| 256QAM | 132322 | 1745 | 6.94 | 13 | PASS |
| 256QAM | 132657 | 1778.5 | 6.90 | 13 | PASS |

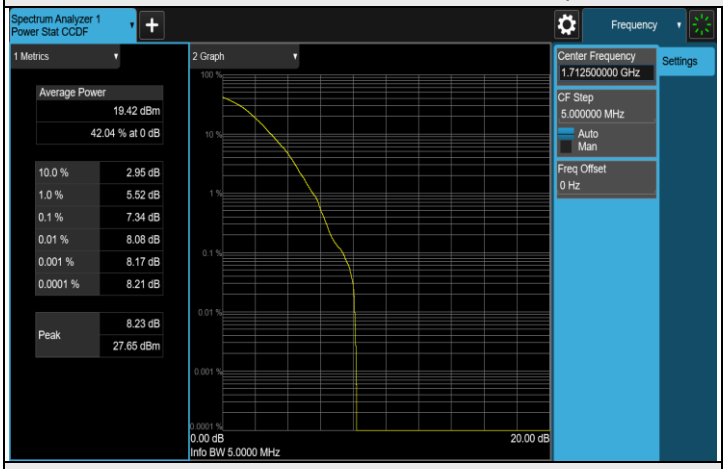
Spectrum Plot of Worst Value




256QAM CH 132322 (1745 MHz)

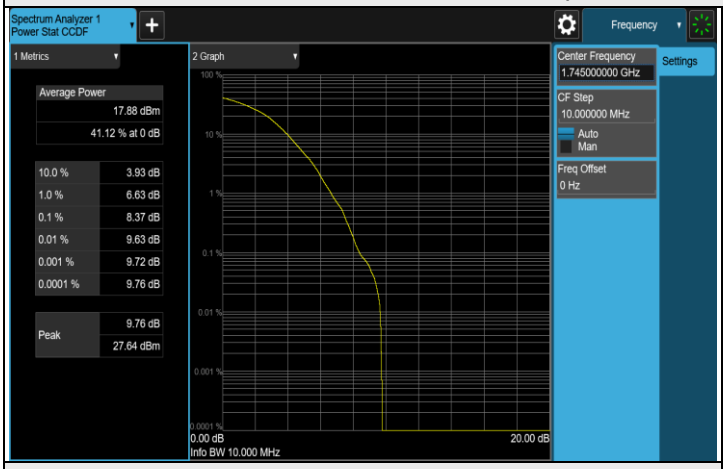
## LTE Band 66, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 131997 | 1712.5 | 5.33 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.46 | 13 | PASS |
| QPSK | 132647 | 1777.5 | 5.39 | 13 | PASS |
| 16QAM | 131997 | 1712.5 | 6.74 | 13 | PASS |
| 16QAM | 132322 | 1745 | 6.64 | 13 | PASS |
| 16QAM | 132647 | 1777.5 | 6.77 | 13 | PASS |
| 64QAM | 131997 | 1712.5 | 6.54 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.65 | 13 | PASS |
| 64QAM | 132647 | 1777.5 | 6.68 | 13 | PASS |
| 256QAM | 131997 | 1712.5 | 7.34 | 13 | PASS |
| 256QAM | 132322 | 1745 | 6.83 | 13 | PASS |
| 256QAM | 132647 | 1777.5 | 6.80 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 131997 (1712.5 MHz) | |

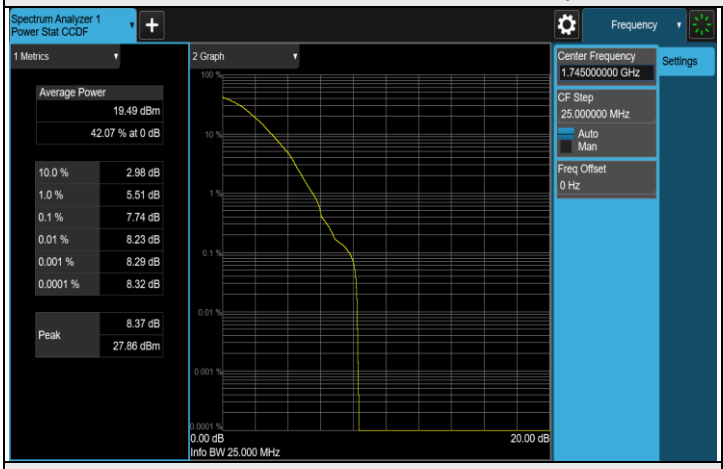
## LTE Band 66, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 132022 | 1715 | 5.30 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.47 | 13 | PASS |
| QPSK | 132622 | 1775 | 5.71 | 13 | PASS |
| 16QAM | 132022 | 1715 | 6.76 | 13 | PASS |
| 16QAM | 132322 | 1745 | 6.76 | 13 | PASS |
| 16QAM | 132622 | 1775 | 6.41 | 13 | PASS |
| 64QAM | 132022 | 1715 | 6.48 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.64 | 13 | PASS |
| 64QAM | 132622 | 1775 | 6.60 | 13 | PASS |
| 256QAM | 132022 | 1715 | 7.32 | 13 | PASS |
| 256QAM | 132322 | 1745 | 8.37 | 13 | PASS |
| 256QAM | 132622 | 1775 | 7.07 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 132322 (1745 MHz) | |

## LTE Band 66, Channel Bandwidth: 15 MHz

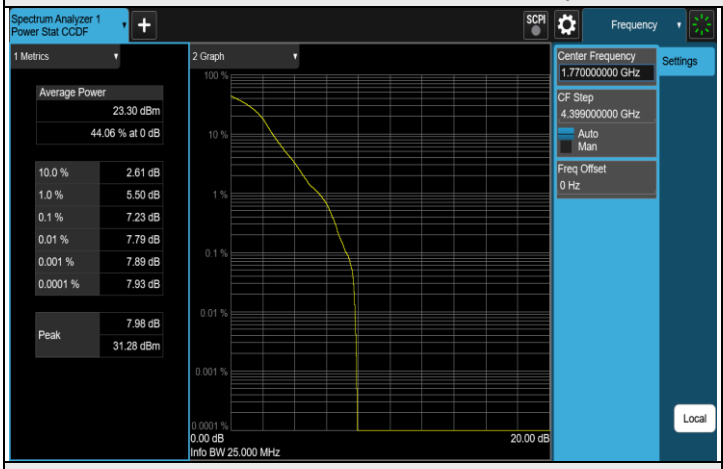
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 132047 | 1717.5 | 5.31 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.40 | 13 | PASS |
| QPSK | 132597 | 1772.5 | 5.06 | 13 | PASS |
| 16QAM | 132047 | 1717.5 | 6.32 | 13 | PASS |
| 16QAM | 132322 | 1745 | 7.43 | 13 | PASS |
| 16QAM | 132597 | 1772.5 | 6.04 | 13 | PASS |
| 64QAM | 132047 | 1717.5 | 6.70 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.74 | 13 | PASS |
| 64QAM | 132597 | 1772.5 | 6.14 | 13 | PASS |
| 256QAM | 132047 | 1717.5 | 6.36 | 13 | PASS |
| 256QAM | 132322 | 1745 | 7.74 | 13 | PASS |
| 256QAM | 132597 | 1772.5 | 6.82 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 132322 (1745 MHz) | |

## LTE Band 66, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 132072 | 1720 | 5.72 | 13 | PASS |
| QPSK | 132322 | 1745 | 5.77 | 13 | PASS |
| QPSK | 132572 | 1770 | 5.77 | 13 | PASS |
| 16QAM | 132072 | 1720 | 6.97 | 13 | PASS |
| 16QAM | 132322 | 1745 | 7.16 | 13 | PASS |
| 16QAM | 132572 | 1770 | 7.23 | 13 | PASS |
| 64QAM | 132072 | 1720 | 6.83 | 13 | PASS |
| 64QAM | 132322 | 1745 | 6.80 | 13 | PASS |
| 64QAM | 132572 | 1770 | 6.76 | 13 | PASS |
| 256QAM | 132072 | 1720 | 7.03 | 13 | PASS |
| 256QAM | 132322 | 1745 | 6.80 | 13 | PASS |
| 256QAM | 132572 | 1770 | 6.86 | 13 | PASS |

Spectrum Plot of Worst Value



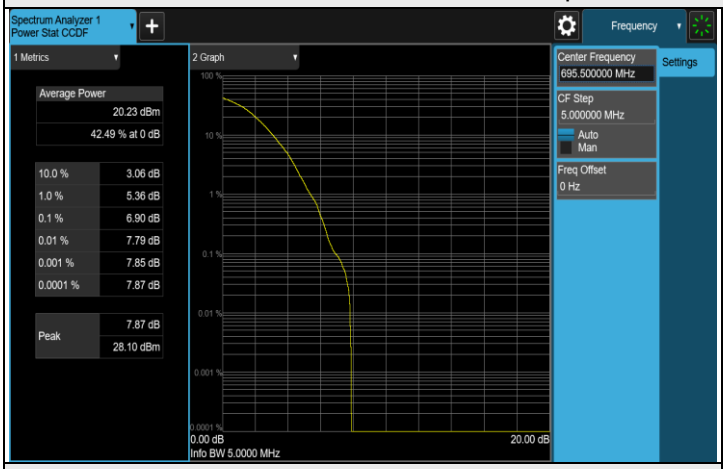

16QAM CH 132572 (1770 MHz)

7.3.12 LTE Band 71

**LTE Band 71, Channel Bandwidth: 5 MHz**

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 133147 | 665.5 | 4.59 | 13 | PASS |
| QPSK | 133297 | 680.5 | 4.39 | 13 | PASS |
| QPSK | 133447 | 695.5 | 4.39 | 13 | PASS |
| 16QAM | 133147 | 665.5 | 5.61 | 13 | PASS |
| 16QAM | 133297 | 680.5 | 5.47 | 13 | PASS |
| 16QAM | 133447 | 695.5 | 5.44 | 13 | PASS |
| 64QAM | 133147 | 665.5 | 5.93 | 13 | PASS |
| 64QAM | 133297 | 680.5 | 5.86 | 13 | PASS |
| 64QAM | 133447 | 695.5 | 5.96 | 13 | PASS |
| 256QAM | 133147 | 665.5 | 6.69 | 13 | PASS |
| 256QAM | 133297 | 680.5 | 6.69 | 13 | PASS |
| 256QAM | 133447 | 695.5 | 6.90 | 13 | PASS |

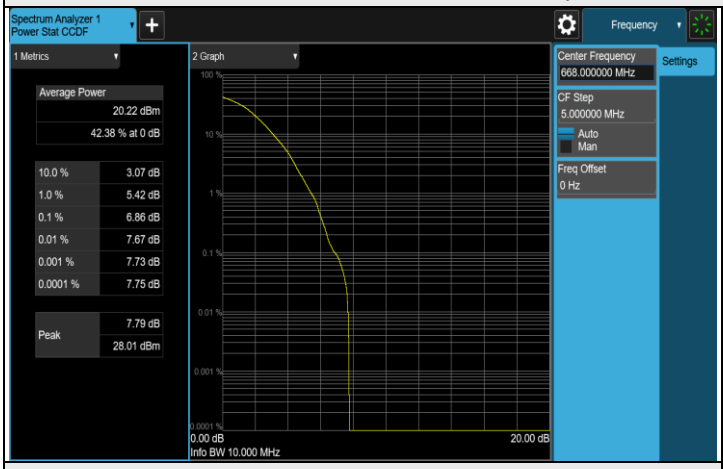
Spectrum Plot of Worst Value




256QAM CH 133447 (695.5 MHz)

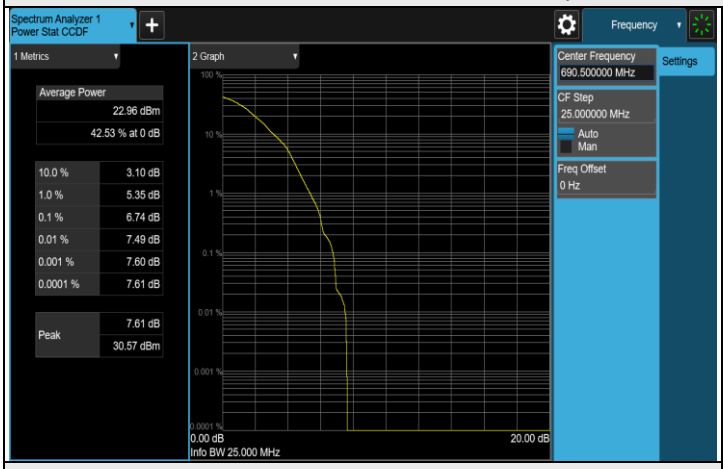
## LTE Band 71, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 133172 | 668 | 4.65 | 13 | PASS |
| QPSK | 133297 | 680.5 | 4.21 | 13 | PASS |
| QPSK | 133422 | 693 | 4.35 | 13 | PASS |
| 16QAM | 133172 | 668 | 5.57 | 13 | PASS |
| 16QAM | 133297 | 680.5 | 5.28 | 13 | PASS |
| 16QAM | 133422 | 693 | 5.47 | 13 | PASS |
| 64QAM | 133172 | 668 | 5.95 | 13 | PASS |
| 64QAM | 133297 | 680.5 | 5.73 | 13 | PASS |
| 64QAM | 133422 | 693 | 5.93 | 13 | PASS |
| 256QAM | 133172 | 668 | 6.86 | 13 | PASS |
| 256QAM | 133297 | 680.5 | 6.50 | 13 | PASS |
| 256QAM | 133422 | 693 | 6.74 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 256QAM CH 133172 (668 MHz) | |

## LTE Band 71, Channel Bandwidth: 15 MHz

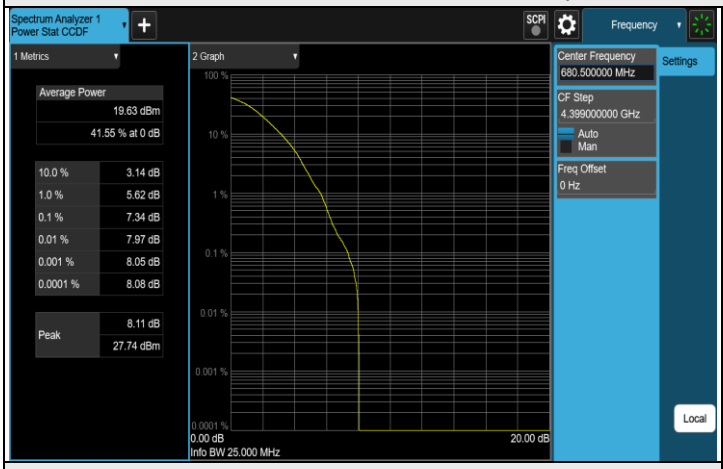
| Modulation | Channel | Frequency (MHz) | Measurement Value((dB)) | Limit (\n(dB)) | Result |
|---|---|---|---|---|---|
| QPSK | 133197 | 670.5 | 4.54 | 13 | PASS |
| QPSK | 133297 | 680.5 | 4.29 | 13 | PASS |
| QPSK | 133397 | 690.5 | 4.97 | 13 | PASS |
| 16QAM | 133197 | 670.5 | 5.35 | 13 | PASS |
| 16QAM | 133297 | 680.5 | 5.21 | 13 | PASS |
| 16QAM | 133397 | 690.5 | 5.97 | 13 | PASS |
| 64QAM | 133197 | 670.5 | 5.85 | 13 | PASS |
| 64QAM | 133297 | 680.5 | 5.78 | 13 | PASS |
| 64QAM | 133397 | 690.5 | 6.74 | 13 | PASS |
| 256QAM | 133197 | 670.5 | 6.39 | 13 | PASS |
| 256QAM | 133297 | 680.5 | 6.30 | 13 | PASS |
| 256QAM | 133397 | 690.5 | 6.56 | 13 | PASS |

| Spectrum Plot of Worst Value | |
|---|---|
|  | |
| 64QAM CH 133397 (690.5 MHz) | |

## LTE Band 71, Channel Bandwidth: 20 MHz

| Modulation | Channel | Frequency (MHz) | Measurement Value(dB) | Limit (dB) | Result |
|---|---|---|---|---|---|
| QPSK | 133222 | 673 | 5.72 | 13 | PASS |
| QPSK | 133297 | 680.5 | 5.69 | 13 | PASS |
| QPSK | 133372 | 688 | 5.76 | 13 | PASS |
| 16QAM | 133222 | 673 | 7.04 | 13 | PASS |
| 16QAM | 133297 | 680.5 | 6.99 | 13 | PASS |
| 16QAM | 133372 | 688 | 6.80 | 13 | PASS |
| 64QAM | 133222 | 673 | 6.75 | 13 | PASS |
| 64QAM | 133297 | 680.5 | 6.73 | 13 | PASS |
| 64QAM | 133372 | 688 | 6.84 | 13 | PASS |
| 256QAM | 133222 | 673 | 7.04 | 13 | PASS |
| 256QAM | 133297 | 680.5 | 7.34 | 13 | PASS |
| 256QAM | 133372 | 688 | 6.86 | 13 | PASS |

Spectrum Plot of Worst Value




256QAM CH 133297 (680.5 MHz)

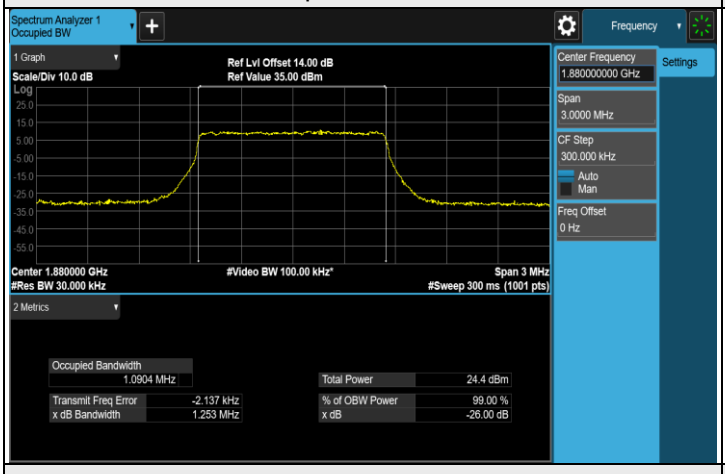
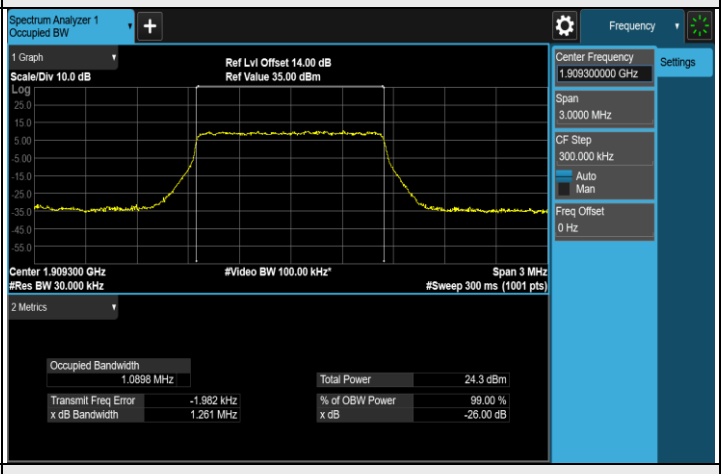
## 7.4 Bandwidth

| Input Power: | 4.7 Vdc | Environmental Conditions: | 22°C, 73% RH | Tested By: | Willy Cheng |
|---|---|---|---|---|---|

### 7.4.1 LTE Band 2

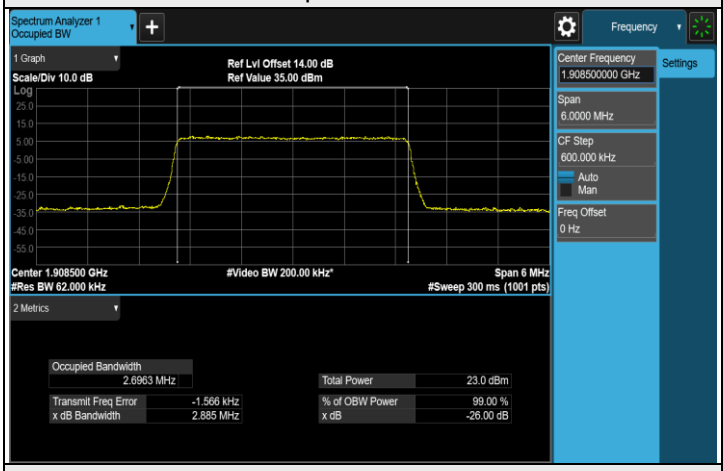
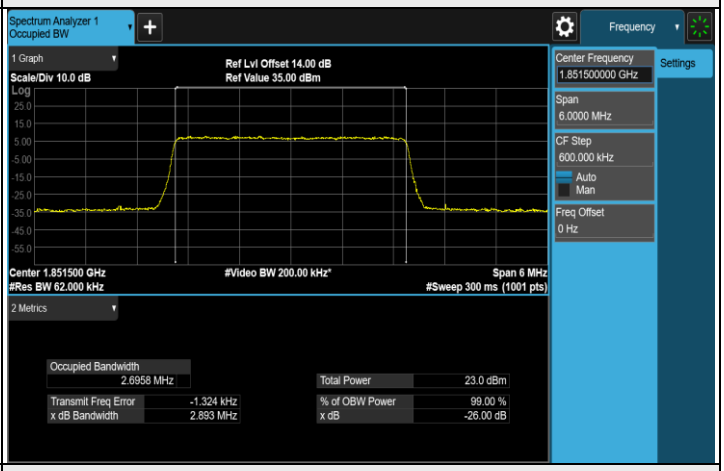
**LTE Band 2, Channel Bandwidth: 1.4 MHz**

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth ((MHz)) | 26 dB Bandwidth ((MHz)) |
|---|---|---|---|---|
| QPSK | 18607 | 1850.7 | 1.0848 | 1.248 |
| QPSK | 18900 | 1880 | 1.0904 | 1.253 |
| QPSK | 19193 | 1909.3 | 1.0898 | 1.261 |
| 16QAM | 18607 | 1850.7 | 1.0874 | 1.243 |
| 16QAM | 18900 | 1880 | 1.0877 | 1.246 |
| 16QAM | 19193 | 1909.3 | 1.0884 | 1.253 |
| 64QAM | 18607 | 1850.7 | 1.0891 | 1.255 |
| 64QAM | 18900 | 1880 | 1.0894 | 1.251 |
| 64QAM | 19193 | 1909.3 | 1.0897 | 1.252 |
| 256QAM | 18607 | 1850.7 | 1.0840 | 1.241 |
| 256QAM | 18900 | 1880 | 1.0848 | 1.240 |
| 256QAM | 19193 | 1909.3 | 1.0843 | 1.231 |

| Spectrum Plot of Worst Value | |
|---|---|
| Occupied bandwidth | 26 dB Bandwidth |
|  |  |
| QPSK CH 18900 (1880 MHz) | QPSK CH 19193 (1909.3 MHz) |

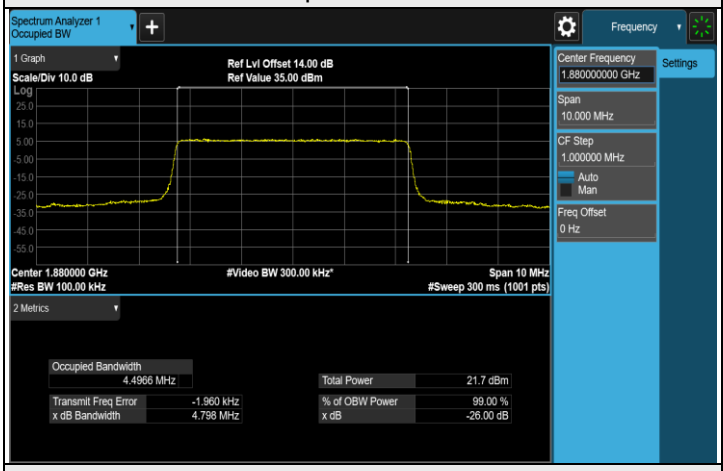
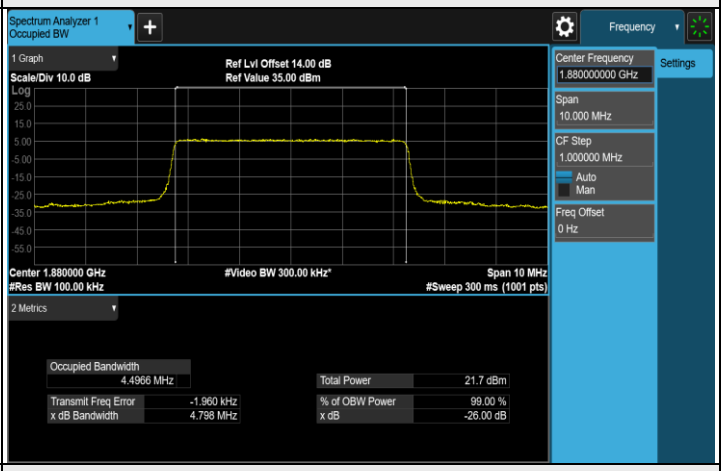
## LTE Band 2, Channel Bandwidth: 3 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth ((MHz)) | 26 dB Bandwidth ((MHz)) |
|---|---|---|---|---|
| QPSK | 18615 | 1851.5 | 2.6949 | 2.881 |
| QPSK | 18900 | 1880 | 2.6961 | 2.878 |
| QPSK | 19185 | 1908.5 | 2.6945 | 2.881 |
| 16QAM | 18615 | 1851.5 | 2.6958 | 2.893 |
| 16QAM | 18900 | 1880 | 2.6960 | 2.887 |
| 16QAM | 19185 | 1908.5 | 2.6963 | 2.885 |
| 64QAM | 18615 | 1851.5 | 2.6941 | 2.870 |
| 64QAM | 18900 | 1880 | 2.6926 | 2.873 |
| 64QAM | 19185 | 1908.5 | 2.6946 | 2.873 |
| 256QAM | 18615 | 1851.5 | 2.6947 | 2.881 |
| 256QAM | 18900 | 1880 | 2.6955 | 2.883 |
| 256QAM | 19185 | 1908.5 | 2.6953 | 2.885 |

| Spectrum Plot of Worst Value | |
|---|---|
| Occupied bandwidth | 26 dB Bandwidth |
|  |  |
| 16QAM CH 19185 (1908.5 MHz) | 16QAM CH 18615 (1851.5 MHz) |

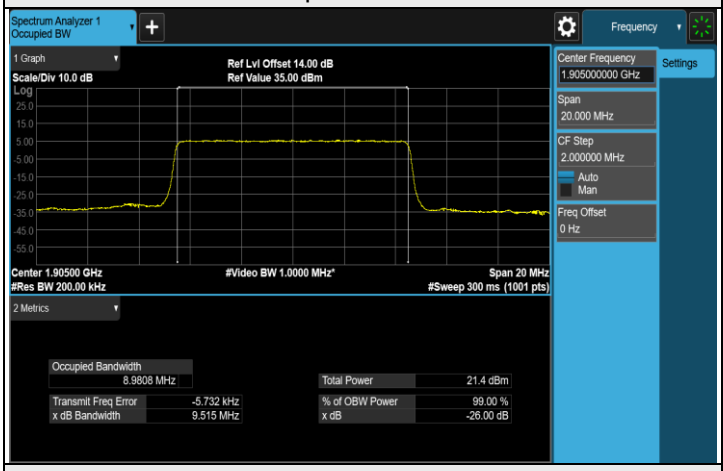
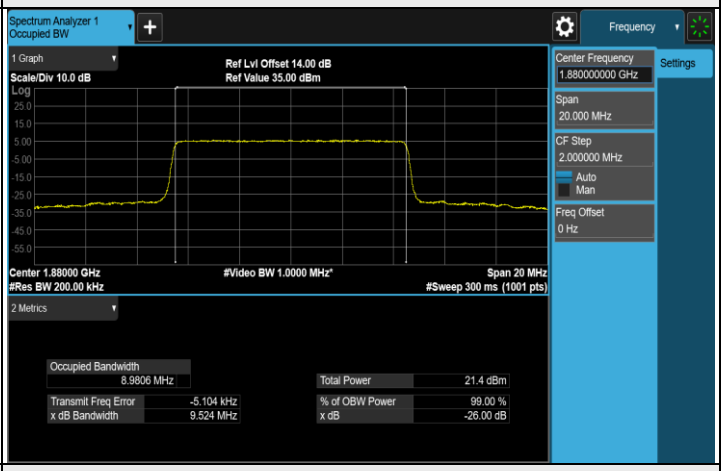
## LTE Band 2, Channel Bandwidth: 5 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth ((MHz)) | 26 dB Bandwidth ((MHz)) |
|---|---|---|---|---|
| QPSK | 18625 | 1852.5 | 4.4948 | 4.785 |
| QPSK | 18900 | 1880 | 4.4954 | 4.782 |
| QPSK | 19175 | 1907.5 | 4.4929 | 4.786 |
| 16QAM | 18625 | 1852.5 | 4.4895 | 4.778 |
| 16QAM | 18900 | 1880 | 4.4897 | 4.784 |
| 16QAM | 19175 | 1907.5 | 4.4910 | 4.776 |
| 64QAM | 18625 | 1852.5 | 4.4935 | 4.792 |
| 64QAM | 18900 | 1880 | 4.4966 | 4.798 |
| 64QAM | 19175 | 1907.5 | 4.4930 | 4.795 |
| 256QAM | 18625 | 1852.5 | 4.4892 | 4.792 |
| 256QAM | 18900 | 1880 | 4.4906 | 4.796 |
| 256QAM | 19175 | 1907.5 | 4.4874 | 4.796 |

| Spectrum Plot of Worst Value | |
|---|---|
| Occupied bandwidth | 26 dB Bandwidth |
|  |  |
| 64QAM CH 18900 (1880 MHz) | 64QAM CH 18900 (1880 MHz) |

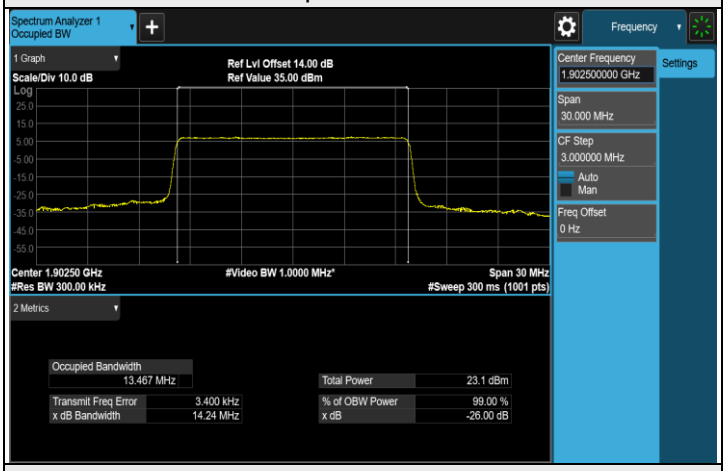
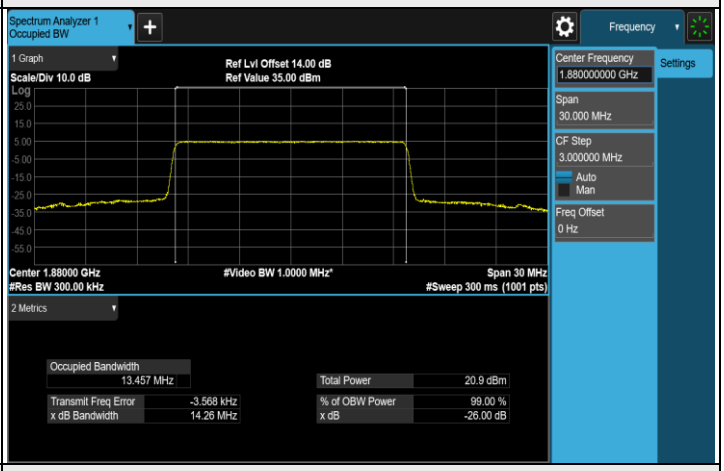
## LTE Band 2, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth ((MHz)) | 26 dB Bandwidth ((MHz)) |
|---|---|---|---|---|
| QPSK | 18650 | 1855 | 8.9746 | 9.497 |
| QPSK | 18900 | 1880 | 8.9745 | 9.509 |
| QPSK | 19150 | 1905 | 8.9736 | 9.501 |
| 16QAM | 18650 | 1855 | 8.9705 | 9.505 |
| 16QAM | 18900 | 1880 | 8.9719 | 9.502 |
| 16QAM | 19150 | 1905 | 8.9711 | 9.492 |
| 64QAM | 18650 | 1855 | 8.9759 | 9.510 |
| 64QAM | 18900 | 1880 | 8.9806 | 9.524 |
| 64QAM | 19150 | 1905 | 8.9808 | 9.515 |
| 256QAM | 18650 | 1855 | 8.9715 | 9.511 |
| 256QAM | 18900 | 1880 | 8.9774 | 9.516 |
| 256QAM | 19150 | 1905 | 8.9718 | 9.516 |

| Spectrum Plot of Worst Value | |
|---|---|
| Occupied bandwidth | 26 dB Bandwidth |
|  |  |
| 64QAM CH 19150 (1905 MHz) | 64QAM CH 18900 (1880 MHz) |

## LTE Band 2, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth ((MHz)) | 26 dB Bandwidth ((MHz)) |
|---|---|---|---|---|
| QPSK | 18675 | 1857.5 | 13.4617 | 14.232 |
| QPSK | 18900 | 1880 | 13.4557 | 14.232 |
| QPSK | 19125 | 1902.5 | 13.4674 | 14.237 |
| 16QAM | 18675 | 1857.5 | 13.4574 | 14.244 |
| 16QAM | 18900 | 1880 | 13.4533 | 14.225 |
| 16QAM | 19125 | 1902.5 | 13.4563 | 14.230 |
| 64QAM | 18675 | 1857.5 | 13.4526 | 14.237 |
| 64QAM | 18900 | 1880 | 13.4567 | 14.238 |
| 64QAM | 19125 | 1902.5 | 13.4551 | 14.238 |
| 256QAM | 18675 | 1857.5 | 13.4584 | 14.247 |
| 256QAM | 18900 | 1880 | 13.4570 | 14.259 |
| 256QAM | 19125 | 1902.5 | 13.4636 | 14.243 |

| Spectrum Plot of Worst Value | |
|---|---|
| Occupied bandwidth | 26 dB Bandwidth |
|  |  |
| QPSK CH 19125 (1902.5 MHz) | 256QAM CH 18900 (1880 MHz) |