# FCC Radio Test Report

## FCC ID: N7NRC76C

| | | |
|---|---|---|
| **Report No.** | : | BTL-FCCP-3-2203T030 |
| **Equipment** | : | Module |
| **Model Name** | : | RC7612, RC7612-1 |
| **Brand Name** | : | AirPrime |
| **Applicant** | : | Sierra Wireless, Inc. |
| **Address** | : | 13811 Wireless Way, Richmond, BC V6V 3A4, Canada |
| **Manufacturer** | : | Sierra Wireless, Inc. |
| **Address** | : | 13811 Wireless Way, Richmond, BC V6V 3A4, Canada |
| **Radio Function** | : | WCDMA Band IV, LTE Band 4, 12, 13 |
| **FCC Rule Part(s)** | : | FCC CFR Title 47, Part 27, Subpart F<br>FCC CFR Title 47, Part 27, Subpart H<br>FCC CFR Title 47, Part 27, Subpart L<br>FCC CFR Title 47, Part 27, Subpart N |
| **Measurement Procedure(s)** | : | ANSI C63.26-2015<br>ANSI/TIA-603-E-2016<br>FCC KDB 971168 D01 Power Meas License Digital Systems v03r01 |
| **Date of Receipt** | : | 2022/3/4 |
| **Date of Test** | : | 2022/3/4 ~ 2022/4/26 |
| **Issued Date** | : | 2022/6/21 |

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

**Prepared by** : Eric Lee, Engineer

**Approved by** : Jerry Chuang, Supervisor

**BTL Inc.**
No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan
Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com

**Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

**Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

**CONTENTS**

## REVISION HISTORY

| Report No. | Version | Description | Issued Date | Note |
|---|---|---|---|---|
| BTL-FCCP-3-2203T030 | R00 | Original Report. | 2022/6/21 | Valid |

# 1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

| FCC Clause No | Description | Test Result | Judgement | Remark |
|---|---|---|---|---|
| 15.207 | AC Power Line Conducted Emissions | ------ | N/A | NOTE (3) |
| 2.1046<br>27.50(d)(4)<br>27.50(c)(10) | Conducted Output Power<br>Effective Radiated Power<br>Equivalent Isotropic Radiated Power | APPENDIX A | Pass | ------ |
| 2.1049 | Occupied Bandwidth | APPENDIX B | Pass | ------ |
| 2.1051<br>27.53(h)<br>27.53(g)<br>27.53(c)(2) | Conducted Spurious Emissions | APPENDIX C | Pass | ------ |
| 2.1053<br>27.53(h)<br>27.53(g)<br>27.53(c)(2)(4) | Radiated Spurious Emissions | APPENDIX D | Pass | ------ |
| 2.1051<br>27.53(h)<br>27.53(g)<br>27.53(c)(2)(4) | Band Edge Measurements | APPENDIX E | Pass | ------ |
| - | Peak To Average Ratio | APPENDIX F | Pass | Record Only |
| 2.1055<br>27.54 | Frequency Stability | APPENDIX G | Pass | ------ |

NOTE:
(1) ”N/A” denotes test is not applicable in this Test Report.
(2) The report format version is TP.1.1.1.
(3) This is a DC input device.

## 1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
The test sites and facilities are covered under FCC RN: 674415 and DN: TW0659.

☐ C05 ☐ CB08 ☐ CB11 ☒ CB15 ☐ CB16
☒ SR05

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± U**, where expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k = 2**, providing a level of confidence of approximately **95 %**. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 $U_{cispr}$ requirement.

A. Radiated Spurious Emissions test :

| Test Site | Measurement Frequency Range | U,(dB) |
|---|---|---|
| CB15 | 0.03 GHz ~ 0.2 GHz | 4.17 |
| | 0.2 GHz ~ 1 GHz | 4.72 |
| | 1 GHz ~ 6 GHz | 5.21 |
| | 6 GHz ~ 18 GHz | 5.51 |
| | 18 GHz ~ 26 GHz | 3.69 |
| | 26 GHz ~ 40 GHz | 4.23 |

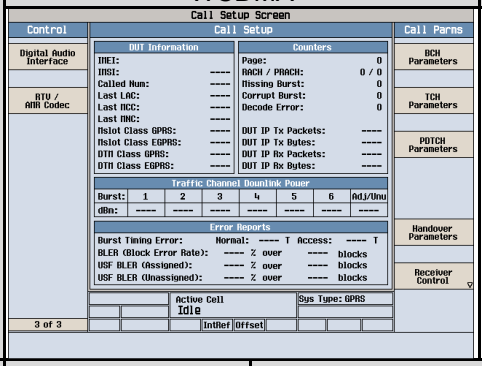
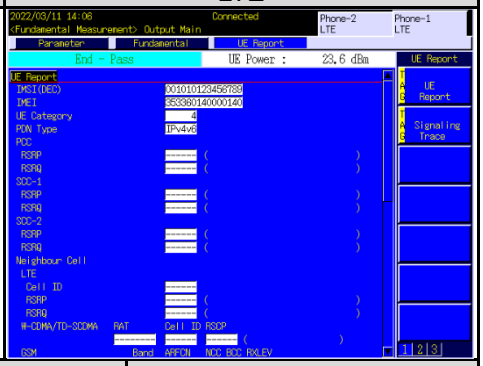
NOTE:
Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

## 1.3 TEST ENVIRONMENT CONDITIONS

| Test Item | Environment Condition | Test Voltage | Tested by |
|---|---|---|---|
| Conducted Output Power | 24.6 °C, 67 % | DC 3.7V | Paul Shen<br>Ronald Kao |
| Occupied Bandwidth | 24.6 °C, 67 % | DC 3.7V | Paul Shen<br>Ronald Kao |
| Conducted Spurious Emissions | 24.6 °C, 67 % | DC 3.7V | Paul Shen<br>Ronald Kao |
| Radiated Spurious Emissions、Effective Isotropic Radiated Power and Effective Radiated Power | Refer to data | DC 3.7V | Vincent Lee |
| Band Edge | 24.6 °C, 67 % | DC 3.7V | Paul Shen<br>Ronald Kao |
| Peak to Average Ratio | 24.6 °C, 67 % | DC 3.7V | Paul Shen<br>Ronald Kao |
| Frequency Stability | Normal and Extreme | | Paul Shen<br>Ronald Kao |

# 2 GENERAL INFORMATION

## 2.1 DESCRIPTION OF EUT

| | |
|---|---|
| Equipment | Module |
| Model Name | RC7612, RC7612-1 |
| Brand Name | AirPrime |
| Model Difference | The hardware of the two models is the same, only the software is different.<br>RC7612 is LTE Category 4<br>RC7612-1 is LTE Category 1 |
| Power Source | DC Voltage supplied from host equipment. |
| Power Rating | DC 3.7V |
| Products Covered | N/A |
| IEMI No. | WCDMA  LTE  |

| Operation Frequency | Band | UL Frequency (MHz) | DL Frequency (MHz) |
|---|---|---|---|
| | WCDMA IV | 1710 ~ 1755 | 2110 ~ 2155 |
| | LTE 4 | 1710 ~ 1755 | 2110 ~ 2155 |
| | LTE 12 | 699 ~ 716 | 729 ~ 746 |
| | LTE 13 | 777 ~ 787 | 746 ~ 756 |

| Maximum EIRP | Band | BW (MHz) | Mode | Power (W) |
|---|---|---|---|---|
| | WCDMA IV | - | - | 0.323 |
| | LTE 4 | 1.4 | QPSK | 0.285 |
| | | | 16QAM | 0.236 |
| | | 3 | QPSK | 0.288 |
| | | | 16QAM | 0.239 |
| | | 5 | QPSK | 0.292 |
| | | | 16QAM | 0.242 |
| | | 10 | QPSK | 0.295 |
| | | | 16QAM | 0.244 |
| | | 15 | QPSK | 0.299 |
| | | | 16QAM | 0.247 |
| | | 20 | QPSK | 0.302 |
| | | | 16QAM | 0.250 |

| | | | | |
|---|---|---|---|---|
| Maximum ERP | LTE 12 | 1.4 | QPSK | 0.126 |
| | | | 16QAM | 0.104 |
| | | 3 | QPSK | 0.127 |
| | | | 16QAM | 0.105 |
| | | 5 | QPSK | 0.129 |
| | | | 16QAM | 0.107 |
| | | 10 | QPSK | 0.130 |
| | | | 16QAM | 0.108 |
| | LTE 13 | 5 | QPSK | 0.126 |
| | | | 16QAM | 0.105 |
| | | 10 | QPSK | 0.127 |
| | | | 16QAM | 0.105 |
| Test Model | RC7612 | | | |
| Sample Status | Engineering Sample | | | |
| EUT Modification(s) | N/A | | | |

NOTE:
(1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

(2) Channel List:

| WCDMA Band IV | | | | |
|---|---|---|---|---|
| Test Frequency ID | UARFCN | Frequency of Uplink (MHz) | UARFCN | Frequency of Downlink (MHz) |
| Low Range | 1312 | 1712.4 | 1537 | 2112.4 |
| Mid Range | 1413 | 1732.6 | 1638 | 2132.6 |
| High Range | 1513 | 1752.6 | 1738 | 2152.6 |

| LTE Band 4 | | | | | |
|---|---|---|---|---|---|
| Test Frequency ID | Bandwidth (MHz) | $N_{UL}$ | Frequency of Uplink (MHz) | $N_{DL}$ | Frequency of Downlink (MHz) |
| Low Range | 1.4 | 19957 | 1710.7 | 1957 | 2110.7 |
| | 3 | 19965 | 1711.5 | 1965 | 2111.5 |
| | 5 | 19975 | 1712.5 | 1975 | 2112.5 |
| | 10 | 20000 | 1715 | 2000 | 2115 |
| | 15 | 20025 | 1717.5 | 2025 | 2117.5 |
| | 20 | 20050 | 1720 | 2050 | 2120 |
| Mid Range | 1.4/3/5/10/15/20 | 20175 | 1732.5 | 2175 | 2132.5 |
| High Range | 1.4 | 20393 | 1754.3 | 2393 | 2154.3 |
| | 3 | 20385 | 1753.5 | 2385 | 2153.5 |
| | 5 | 20375 | 1752.5 | 2375 | 2152.5 |
| | 10 | 20350 | 1750 | 2350 | 2150 |
| | 15 | 20325 | 1747.5 | 2325 | 2147.5 |
| | 20 | 20300 | 1745 | 2300 | 2145 |

| LTE Band 12 | | | | | |
|---|---|---|---|---|---|
| Test Frequency ID | Bandwidth (MHz) | $N_{UL}$ | Frequency of Uplink (MHz) | $N_{DL}$ | Frequency of Downlink (MHz) |
| Low Range | 1.4 | 23017 | 699.7 | 5017 | 729.7 |
| | 3 | 23025 | 700.5 | 5025 | 730.5 |
| | 5 | 23035 | 701.5 | 5035 | 731.5 |
| | 10 | 23060 | 704 | 5060 | 734 |
| Mid Range | 1.4/3/5/10 | 23095 | 707.5 | 5095 | 737.5 |
| High Range | 1.4 | 23173 | 715.3 | 5173 | 745.3 |
| | 3 | 23165 | 714.5 | 5165 | 744.5 |
| | 5 | 23155 | 713.5 | 5155 | 743.5 |
| | 10 | 23130 | 711 | 5130 | 741 |

| LTE Band 13 | | | | | |
|---|---|---|---|---|---|
| Test Frequency ID | Bandwidth (MHz) | $N_{UL}$ | Frequency of Uplink (MHz) | $N_{DL}$ | Frequency of Downlink (MHz) |
| Low Range | 5 | 23205 | 779.5 | 5205 | 748.5 |
| Mid Range | 5/10 | 23230 | 782.0 | 5230 | 751 |
| High Range | 5 | 23255 | 784.5 | 5255 | 753.5 |

(3) Table for Filed Antenna:

| Antenna | Manufacture | Part Number | Type | Connector | Gain (dBi) | Note |
|---|---|---|---|---|---|---|
| 1 | PulseLARSEN Antennas | SPDA24617/3900 | Dipole | SMA-M | 2.5 | WCDMA Band IV |
| | | | | | 2.5 | LTE Band 4 |
| | | | | | 1 | LTE Band 12 |
| | | | | | 1 | LTE Band 13 |

## 2.2 TEST MODES

| WCDMA BAND IV MODE | | | |
|---|---|---|---|
| Test Item | Available Channel | Tested Channel | Mode |
| Conducted Output Power & Equivalent Isotropic Radiated Power | 1312 to 1513 | 1312, 1413, 1513 | WCDMA, HSDPA, HSUPA, HSPA+ |
| Occupied Bandwidth | 1312 to 1513 | 1312, 1413, 1513 | WCDMA |
| Conducted Spurious Emissions | 1312 to 1513 | 1413 | WCDMA |
| Radiated Spurious Emissions | 1312 to 1513 | 1413 | WCDMA |
| Band Edge | 1312 to 1513 | 1312, 1513 | WCDMA |
| Peak To Average Ratio | 1312 to 1513 | 1312, 1413, 1513 | WCDMA |
| Frequency Stability | 1312 to 1513 | 1312, 1513 | WCDMA |

| LTE BAND 4 MODE | | | | | |
|---|---|---|---|---|---|
| Test Item | Available Channel | Tested Channel | Channel Bandwidth | Modulation | Mode |
| Conducted Output Power | 19957 to 20393 | 19957, 20175, 20393 | 1.4MHz | QPSK, 16QAM | 1RB/3RB/6RB |
| | 19965 to 20385 | 19965, 20175, 20385 | 3MHz | QPSK, 16QAM | 1RB/8RB/15RB |
| | 19975 to 20375 | 19975, 20175, 20375 | 5MHz | QPSK, 16QAM | 1RB/12RB/25RB |
| | 20000 to 20350 | 20000, 20175, 20350 | 10MHz | QPSK, 16QAM | 1RB/25RB/50RB |
| | 20025 to 20325 | 20025, 20175, 20325 | 15MHz | QPSK, 16QAM | 1RB/36RB/75RB |
| | 20050 to 20300 | 20050, 20175, 20300 | 20MHz | QPSK, 16QAM | 1RB/50RB/100RB |
| Equivalent Isotropic Radiated Power | 20050 to 20300 | 20050, 20175, 20300 | 20MHz | QPSK | 1RB/50RB/100RB |
| Occupied Bandwidth | 19957 to 20393 | 19957, 20175, 20393 | 1.4MHz | QPSK, 16QAM | 6RB |
| | 19965 to 20385 | 19965, 20175, 20385 | 3MHz | QPSK, 16QAM | 15RB |
| | 19975 to 20375 | 19975, 20175, 20375 | 5MHz | QPSK, 16QAM | 25RB |
| | 20000 to 20350 | 20000, 20175, 20350 | 10MHz | QPSK, 16QAM | 50RB |
| | 20025 to 20325 | 20025, 20175, 20325 | 15MHz | QPSK, 16QAM | 75 RB |
| | 20050 to 20300 | 20050, 20175, 20300 | 20MHz | QPSK, 16QAM | 100RB |
| Conducted Spurious Emissions | 19957 to 20393 | 20175 | 1.4MHz | QPSK | 1RB |
| | 19965 to 20385 | 20175 | 3MHz | QPSK | 1RB |
| | 19975 to 20375 | 20175 | 5MHz | QPSK | 1RB |
| | 20000 to 20350 | 20175 | 10MHz | QPSK | 1RB |
| | 20025 to 20325 | 20175 | 15MHz | QPSK | 1RB |
| | 20050 to 20300 | 20175 | 20MHz | QPSK | 1RB |
| Radiated Spurious Emissions | 20050 to 20300 | 20175 | 20MHz | QPSK | 1RB |
| Band Edge | 19957 to 20393 | 19957, 20393 | 1.4MHz | QPSK | 1RB/6RB |
| | 19965 to 20385 | 19965, 20385 | 3MHz | QPSK | 1RB/15RB |
| | 19975 to 20375 | 19975, 20375 | 5MHz | QPSK | 1RB/25RB |
| | 20000 to 20350 | 20000, 20350 | 10MHz | QPSK | 1RB/50RB |
| | 20025 to 20325 | 20025, 20325 | 15MHz | QPSK | 1RB/75RB |

| | | | | | |
|---|---|---|---|---|---|
| | 20050 to 20300 | 20050, 20300 | 20MHz | QPSK | 1RB/100RB |
| Peak To Average Ratio | 19957 to 20393 | 19957, 20175, 20393 | 1.4MHz | QPSK, 16QAM | 1RB |
| | 19965 to 20385 | 19965, 20175, 20385 | 3MHz | QPSK, 16QAM | 1RB |
| | 19975 to 20375 | 19975, 20175, 20375 | 5MHz | QPSK, 16QAM | 1RB |
| | 20000 to 20350 | 20000, 20175, 20350 | 10MHz | QPSK, 16QAM | 1RB |
| | 20025 to 20325 | 20025, 20175, 20325 | 15MHz | QPSK, 16QAM | 1RB |
| | 20050 to 20300 | 20050, 20175, 20300 | 20MHz | QPSK, 16QAM | 1RB |
| Frequency Stability | 19957 to 20393 | 20175 | 1.4MHz | QPSK | 1RB |
| | 19965 to 20385 | 20175 | 3MHz | QPSK | 1RB |
| | 19975 to 20375 | 20175 | 5MHz | QPSK | 1RB |
| | 20000 to 20350 | 20175 | 10MHz | QPSK | 1RB |
| | 20025 to 20325 | 20175 | 15MHz | QPSK | 1RB |
| | 20050 to 20300 | 20175 | 20MHz | QPSK | 1RB |

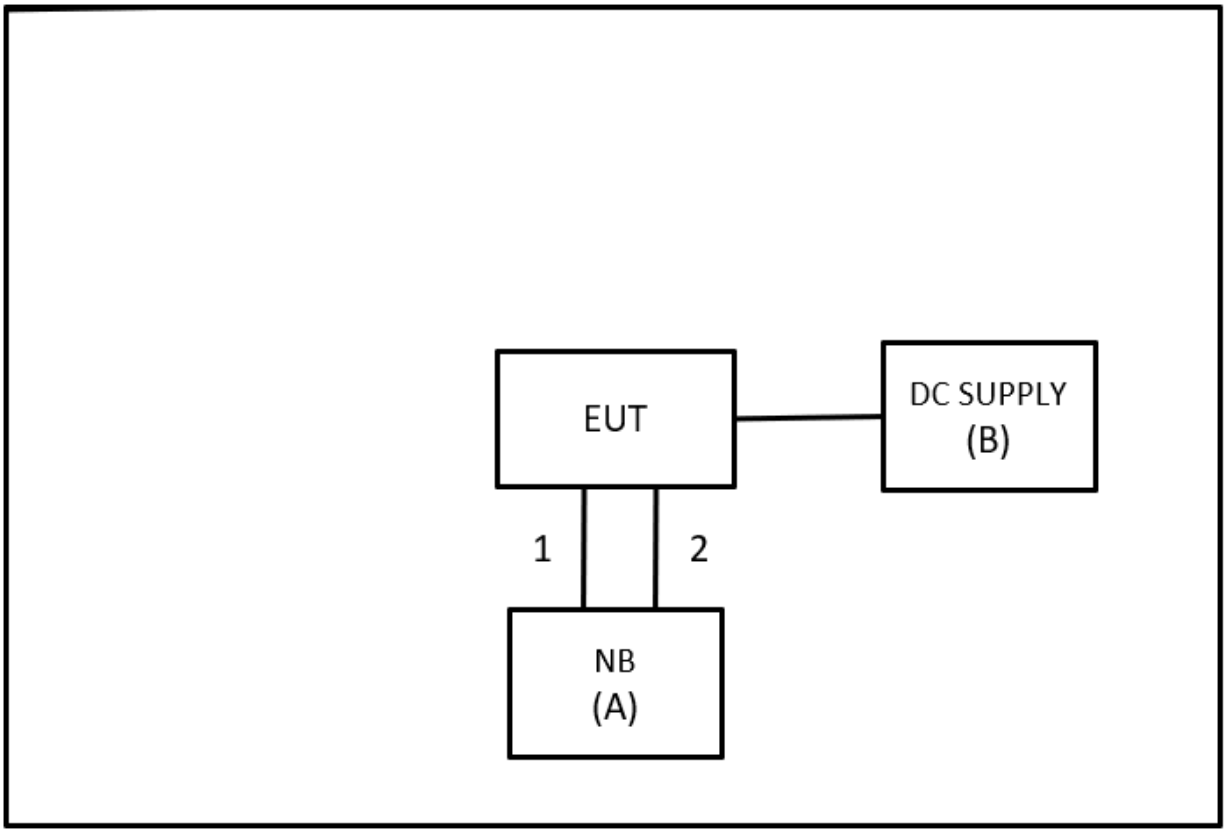
| LTE BAND 12 MODE | | | | | |
|---|---|---|---|---|---|
| Test Item | Available Channel | Tested Channel | Channel Bandwidth | Modulation | Mode |
| Conducted Output Power | 23017 to 23173 | 23017, 23095, 23173 | 1.4MHz | QPSK, 16QAM | 1RB/3RB/6RB |
| | 23025 to 23165 | 23025, 23095, 23165 | 3MHz | QPSK, 16QAM | 1RB/8RB/15RB |
| | 23035 to 23155 | 23035, 23095, 23155 | 5MHz | QPSK, 16QAM | 1RB/12RB/25RB |
| | 23060 to 23130 | 23060, 23095, 23130 | 10MHz | QPSK, 16QAM | 1RB/25RB/50RB |
| Effective Radiated Power | 23060 to 23130 | 23060, 23095, 23130 | 10MHz | QPSK | 1RB/25RB/50RB |
| Occupied Bandwidth | 23017 to 23173 | 23017, 23095, 23173 | 1.4MHz | QPSK, 16QAM | 6RB |
| | 23025 to 23165 | 23025, 23095, 23165 | 3MHz | QPSK, 16QAM | 15RB |
| | 23035 to 23155 | 23035, 23095, 23155 | 5MHz | QPSK, 16QAM | 25RB |
| | 23060 to 23130 | 23060, 23095, 23130 | 10MHz | QPSK, 16QAM | 50RB |
| Conducted Spurious Emissions | 23017 to 23173 | 23095 | 1.4MHz | QPSK | 1RB |
| | 23025 to 23165 | 23095 | 3MHz | QPSK | 1RB |
| | 23035 to 23155 | 23095 | 5MHz | QPSK | 1RB |
| | 23060 to 23130 | 23095 | 10MHz | QPSK | 1RB |
| Radiated Spurious Emissions | 23060 to 23130 | 23095 | 10MHz | QPSK | 1RB |
| Band Edge | 23017 to 23173 | 23017, 23173 | 1.4MHz | QPSK, 16QAM | 1RB/6RB |
| | 23025 to 23165 | 23025, 23165 | 3MHz | QPSK, 16QAM | 1RB/15RB |
| | 23035 to 23155 | 23035, 23155 | 5MHz | QPSK, 16QAM | 1RB/25RB |
| | 23060 to 23130 | 23060, 23130 | 10MHz | QPSK, 16QAM | 1RB/50RB |
| Peak To Average Ratio | 23017 to 23173 | 23017, 23095, 23173 | 1.4MHz | QPSK, 16QAM | 1RB/3RB/6RB |
| | 23025 to 23165 | 23025, 23095, 23165 | 3MHz | QPSK, 16QAM | 1RB/8RB/15RB |
| | 23035 to 23155 | 23035, 23095, 23155 | 5MHz | QPSK, 16QAM | 1RB/12RB/25RB |
| | 23060 to 23130 | 23060, 23095, 23130 | 10MHz | QPSK, 16QAM | 1RB/25RB/50RB |
| Frequency Stability | 23017 to 23173 | 23095 | 1.4MHz | QPSK | 1RB |
| | 23025 to 23165 | 23095 | 3MHz | QPSK | 1RB |
| | 23035 to 23155 | 23095 | 5MHz | QPSK | 1RB |
| | 23060 to 23130 | 23095 | 10MHz | QPSK | 1RB |

| LTE BAND 13 MODE | | | | | |
|---|---|---|---|---|---|
| Test Item | Available Channel | Tested Channel | Channel Bandwidth | Modulation | Mode |
| Conducted Output Power | 23205 to 23255 | 23205, 23230, 23255 | 5MHz | QPSK, 16QAM, 64QAM | 1RB/12RB/25RB |
| Effective Radiated Power | 23230 | 23230 | 10MHz | QPSK, 16QAM, 64QAM | 1RB/25RB/50RB |
| Frequency Stability | 23205 to 23255 | 23205, 23255 | 10MHz | QPSK | 1 RB |
| Occupied Bandwidth | 23205 to 23255 | 23205, 23230, 23255 | 5MHz | QPSK, 16QAM, 64QAM | 25RB |
| | 23230 | 23230 | 10MHz | QPSK, 16QAM, 64QAM | 50RB |
| Peak to Average Ratio | 23205 to 23255 | 23205, 23230, 23255 | 5MHz | QPSK, 16QAM, 64QAM | 1 RB |
| | 23230 | 23230 | 10MHz | QPSK, 16QAM, 64QAM | 1 RB |
| Band Edge | 23205 to 23255 | 23205, 23255 | 5MHz | QPSK | 1RB/25RB |
| | 23230 | 23230 | 10MHz | QPSK | 1RB/50RB |
| Conducted Emission | 23205 to 23255 | 23230 | 5MHz | QPSK | 1 RB |
| | 23230 | 23230 | 10MHz | QPSK | 1 RB |
| Radiated Emission | 23205 to 23255 | 23230 | 5MHz | QPSK | 1 RB |
| | 23230 | 23230 | 10MHz | QPSK | 1 RB |

NOTE:
(1) All X, Y and Z axes are evaluated, but only the worst case (WCDMA Band IV, LTE Band 4: X axis, LTE Band 12,13: Y axis) is recorded.
(2) For Radiated Spurious Emissions both QPSK, 16QAM and 64QAM are evaluated, but only the worst case (QPSK) is recorded.

## 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.




## 2.4 SUPPORT UNITS

| Item | Equipment | Brand | Model No. | Series No. | Remarks |
|---|---|---|---|---|---|
| A | NB | HP | TPN-I119 | N/A | Furnished by test lab. |
| B | DC Power Supply | ABM | 8303D | N/A | Furnished by test lab. |

| Item | Shielded | Ferrite Core | Length | Cable Type | Remarks |
|---|---|---|---|---|---|
| 1 | N/A | N/A | 0.5m | Micro USB Cable | Furnished by test lab. |
| 2 | N/A | N/A | 1m | Micro USB Cable | Furnished by test lab. |

# 3 CONDUCTED OUTPUT POWER AND EFFECTIVE RADIATED POWER AND EFFECTIVE RADIATED POWER MEASUREMENT

## 3.1 LIMIT

WCDMA IV, LTE Band 4:
27.50(d)(4) 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.

LTE Band 12:
27.50(c)(10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

LTE Band 13:
27.50(b)(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

NOTE:
(1) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

| Reading Level | | Correct Factor | | Measurement Value |
|---|---|---|---|---|
| -29.66 | + | 34.26 | = | 4.60 |

| Measurement Value | | Limit Value | | Margin Level |
|---|---|---|---|---|
| 4.60 | - | 30 | = | -25.40 |

## 3.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.

**EIRP / ERP Power Measurement:**
EIRP = Conducted Power + Antenna gain.
ERP power = EIPR power - 2.15 dBi.

**Conducted Measurement:**

The EUT was set up for the maximum power with LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

**Radiated Measurement:**

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m 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 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
d. ERP can be calculated form EIRP by subtracting the gain of dipole, ERP = EIPR - 2.15dBi..
e. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

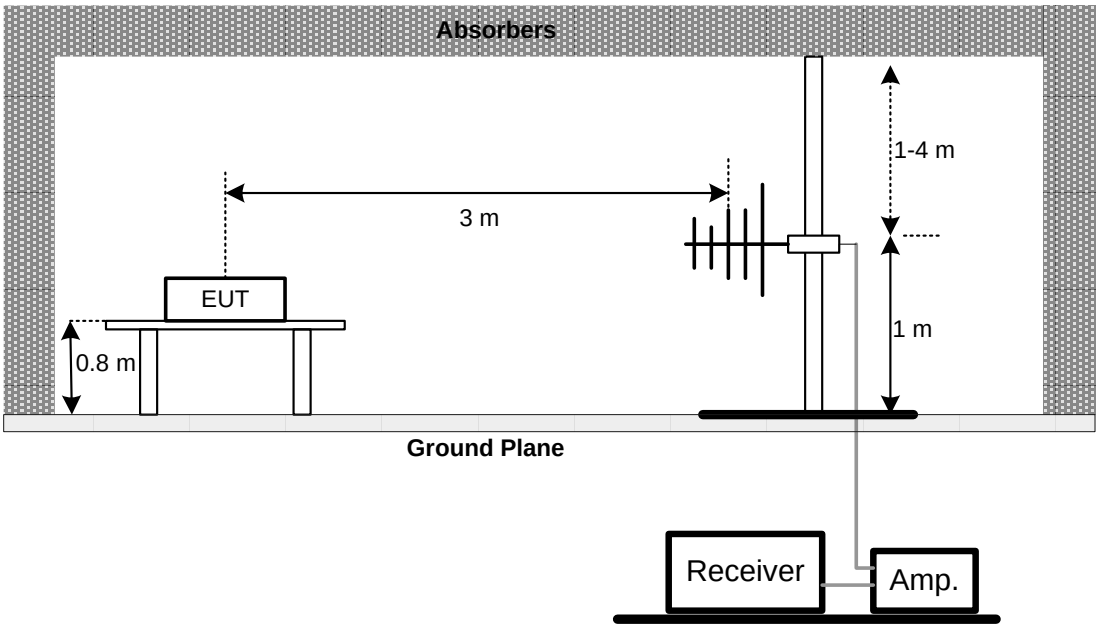
### 3.3 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4 TEST SETUP

**Conducted Measurement:**


**Radiated Measurement:**




### 3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 3.6 TEST RESULT

Please refer to the APPENDIX A

# 4 OCCUPIED BANDWIDTH MEASUREMENT

## 4.1 TEST PROCEDURE

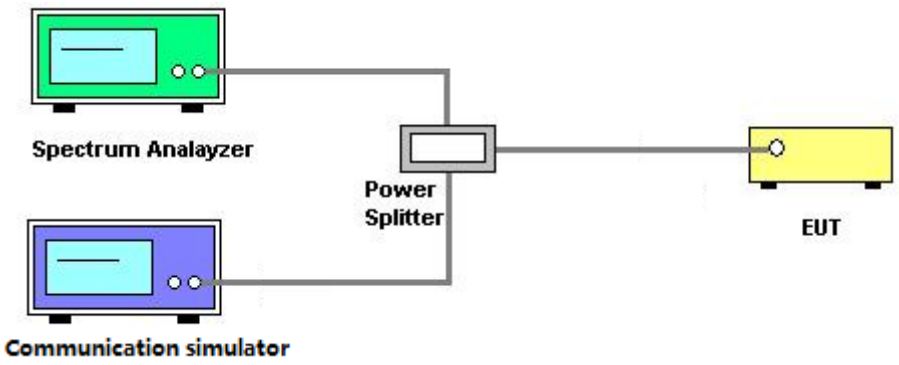
The testing follows FCC KDB 971168 v03r01 Section 4.

a. The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.
b. The EUT was connected to spectrum analyzer and system simulator via a power divider.
c. RBW=(1% ~ 5%)*EBW
   VBW⩾3* RBW.
d. Set spectrum analyzer with Peak detector.

## 4.2 DEVIATION FROM TEST STANDARD

No deviation.

## 4.3 TEST SETUP




## 4.4 TEST RESULT

Please refer to the APPENDIX B.

# 5 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

## 5.1 LIMIT

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 -13dBm. (Part 27 Subpart L & H)

## 5.2 TEST PROCEDURE

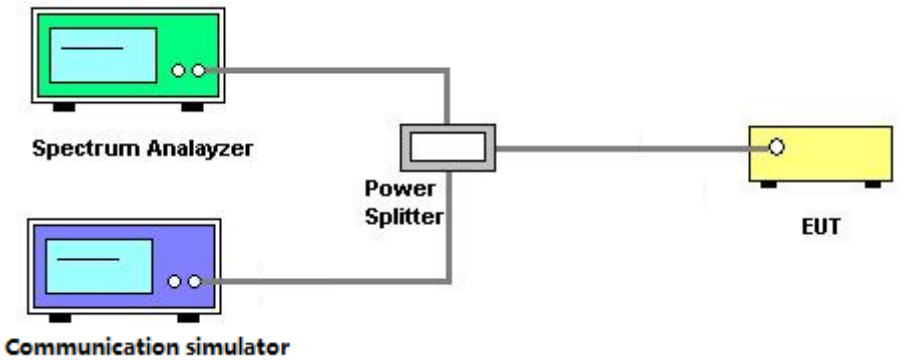
The testing follows FCC KDB 971168 v03r01 Section 6.

a. The EUT was connected to spectrum analyzer and system simulator via a power divider.
b. The band edges of low and high channels for the highest RF powers were measured. Set RBW>=1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
c. Set spectrum analyzer with Peak detector.
d. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

## 5.3 DEVIATION FROM TEST STANDARD

No deviation.

## 5.4 TEST SETUP




## 5.5 TEST RESULT

Please refer to the APPENDIX C.

# 6 RADIATED SPURIOUS EMISSIONS TEST

## 6.1 LIMIT

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 -13dBm. (Part 27 Subpart L & H)

NOTE:
(1) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

| Reading Level | | Correct Factor | | Measurement Value |
|---|---|---|---|---|
| -50.43 | + | -2.11 | = | -52.54 |

| Measurement Value | | Limit Value | | Margin Level |
|---|---|---|---|---|
| -52.54 | - | -13 | = | -39.54 |

## 6.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 6.2.

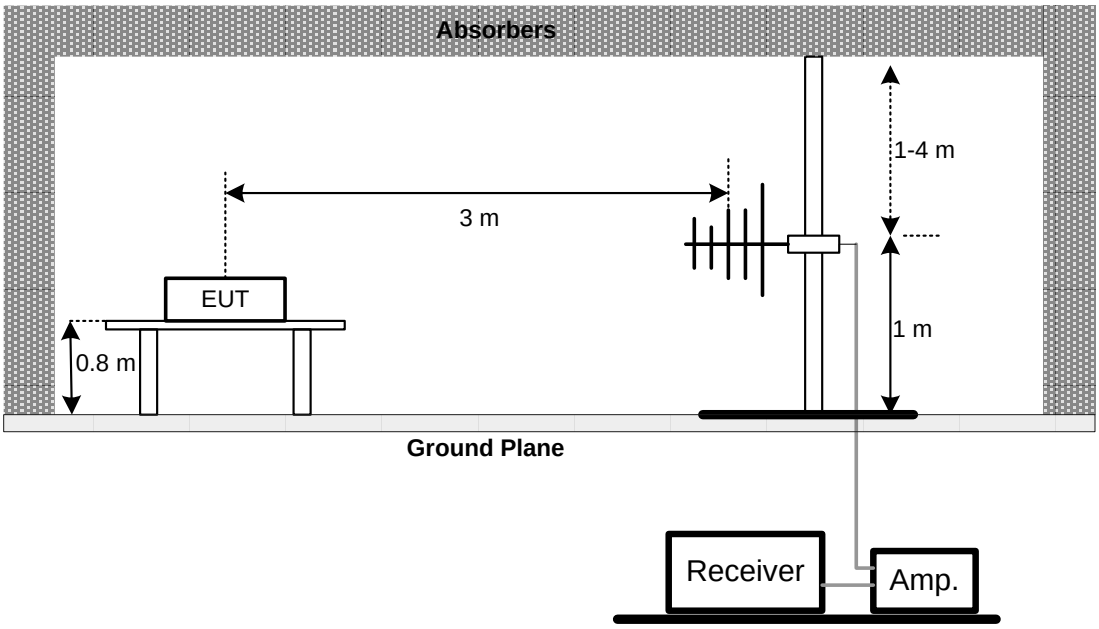
a. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G
c. EIRP = Output power level of S.G - TX cable loss + Antenna gain of substitution horn.
d. ERP can be calculated form EIRP by subtracting the gain of dipole, ERP = EIPR - 2.15dBi.
The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

## 6.3 DEVIATION FROM TEST STANDARD

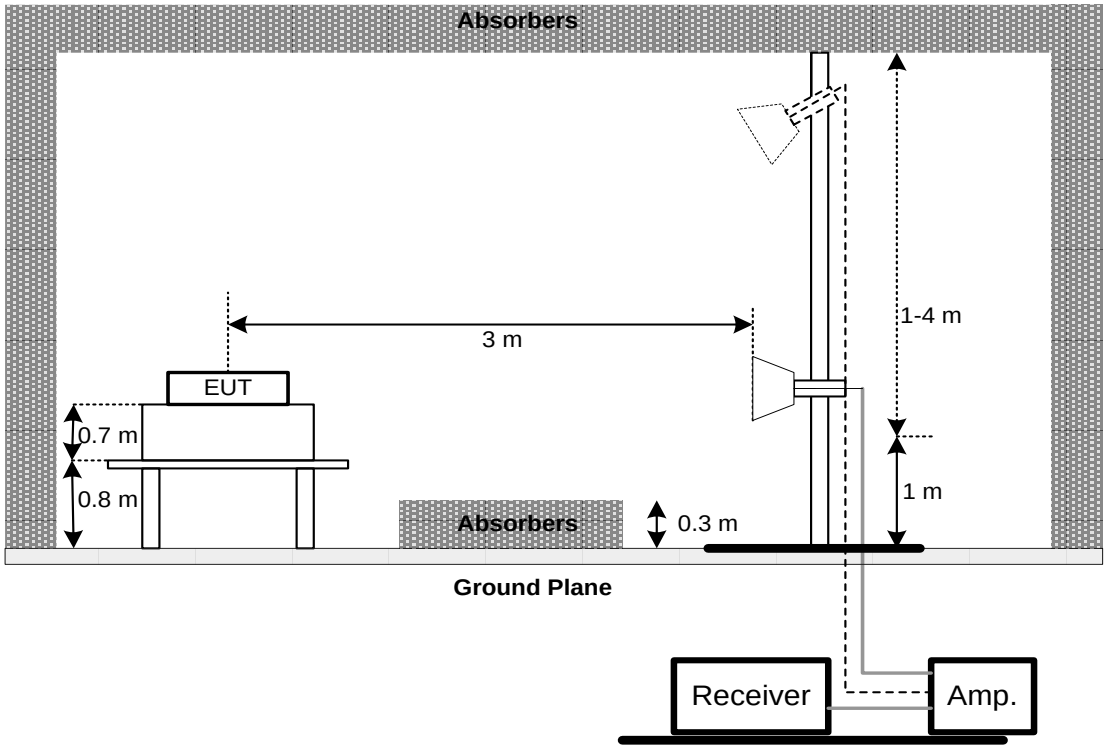
No deviation.

## 6.4 TEST SETUP

**30 MHz to 1 GHz**




**Above 1 GHz**




## 6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 6.6 TEST RESULT

Please refer to the APPENDIX D

# 7 BAND EDGE MEASUREMENT

## 7.1 LIMIT

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. (Part 27 Subpart L & H)

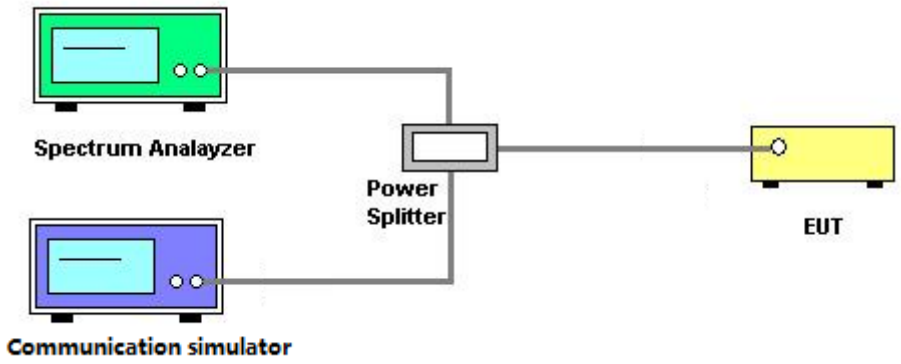
## 7.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 6.
a. All measurements were done at low and high operational frequency range.
b. Record the max trace plot into the test report.

## 7.3 DEVIATION FROM TEST STANDARD

No deviation.

## 7.4 TEST SETUP




## 7.5 TEST RESULT

Please refer to the APPENDIX E.

# 8 PEAK TO AVERAGE RATIO MEASUREMENT

## 8.1 LIMIT

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.

## 8.2 TEST PROCEDURE

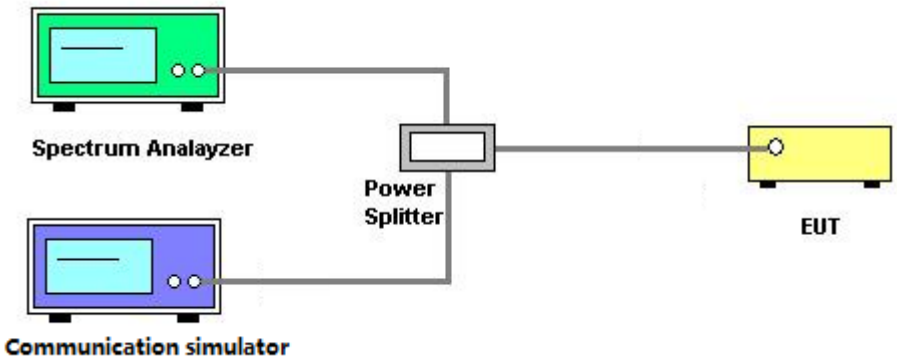
The testing follows FCC KDB 971168 v03r01 Section 5.7.

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%.

## 8.3 DEVIATION FROM TEST STANDARD

No deviation.

## 8.4 TEST SETUP




## 8.5 TEST RESULT

Please refer to the APPENDIX F.

# 9 FREQUENCY STABILITY MEASUREMENT

## 9.1 LIMIT

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

## 9.2 TEST PROCEDURE

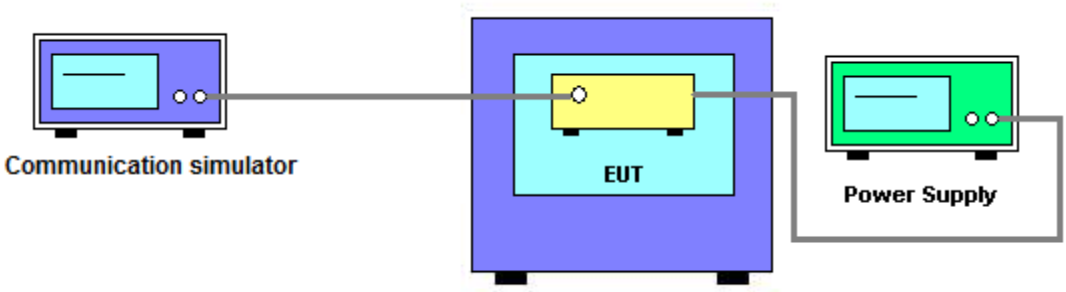
The testing follows FCC KDB 971168 v03r01 Section 9.

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°C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
d. The frequency error was recorded frequency error from the communication simulator.

## 9.3 DEVIATION FROM TEST STANDARD

No deviation.

## 9.4 TEST SETUP




## 9.5 TEST RESULT

Please refer to the APPENDIX G.

# 10 LIST OF MEASURING EQUIPMENTS

**For WCDNA Band IV:**

| Conducted Output Power | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/7/23 | 2022/7/22 |

| Equivalent Isotropic Radiated Power and Effective Radiated Power and Radiated Spurious Emissions | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | Preamplifier | EMCI | EMC02325 | 980217 | 2022/4/6 | 2023/4/5 |
| 2 | Preamplifier | EMCI | EMC012645B | 980222 | 2022/4/6 | 2023/4/5 |
| 3 | Test Cable | EMCI | EMC104-SM-1000 | 180809 | 2022/4/6 | 2023/4/5 |
| 4 | Test Cable | EMCI | EMC104-SM-SM-2500 | 160413 | 2022/4/6 | 2023/4/5 |
| 5 | Test Cable | EMCI | EMC-SM-SM-7000 | 180408 | 2022/4/6 | 2023/4/5 |
| 6 | MXE EMI Receiver | Agilent | N9038A | MY56400087 | 2021/5/27 | 2022/5/26 |
| 7 | Signal Analyzer | Agilent | N9010A | MY56480554 | 2021/8/25 | 2022/8/24 |
| 8 | Horn Ant | SCHWARZBECK | BBHA 9120D | 9120D-1342 | 2021/6/2 | 2022/6/1 |
| 9 | Horn Ant | Schwarzbeck | BBHA 9170 | 340 | 2021/7/9 | 2022/7/8 |
| 10 | Trilog-Broadband Antenna | Schwarzbeck | VULB 9168 | 9168-352 | 2021/8/11 | 2022/8/10 |
| 11 | 5dB Attenuator | EMCI | EMCI-N-6-05 | AT-N0625 | 2021/8/11 | 2022/8/10 |
| 12 | Measurement Software | EZ | EZ_EMC (Version NB-03A1-01) | N/A | N/A | N/A |
| 13 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/7/23 | 2022/7/22 |

| Peak To Average Ratio Measurement | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/6/8 | 2022/6/7 |
| 2 | Spectrum Analyzer | Agilent | N9010A | MY54200240 | 2021/5/27 | 2022/5/26 |

| Frequency Stability Measurement | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/6/8 | 2022/6/7 |
| 2 | Thermal Chamber | HOLINK | H-T-1F-D | BA03101701 | 2021/6/28 | 2022/6/27 |

| Others Conducted Measurement | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/6/8 | 2022/6/7 |
| 2 | Spectrum Analyzer | R&S | FSP40 | 100129 | 2021/6/8 | 2022/6/7 |

**For Others Band:**

| Conducted Output Power | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/7/23 | 2022/7/22 |
| 2 | Radio Communication Analyzer | Anritsu | MT8820C | 6201381608 | 2021/12/15 | 2022/12/14 |

| Equivalent Isotropic Radiated Power and Effective Radiated Power and Radiated Spurious Emissions | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | Preamplifier | EMCI | EMC02325 | 980217 | 2021/4/8 | 2022/4/7 |
| 2 | Preamplifier | EMCI | EMC012645B | 980222 | 2021/4/8 | 2022/4/7 |
| 3 | Test Cable | EMCI | EMC104-SM-100 0 | 180809 | 2021/4/8 | 2022/4/7 |
| 4 | Test Cable | EMCI | EMC104-SM-SM-3000 | 151205 | 2021/4/8 | 2022/4/7 |
| 5 | Test Cable | EMCI | EMC-SM-SM-700 0 | 180408 | 2021/4/8 | 2022/4/7 |
| 6 | MXE EMI Receiver | Agilent | N9038A | MY56400087 | 2021/5/27 | 2022/5/26 |
| 7 | Signal Analyzer | Agilent | N9010A | MY56480554 | 2021/8/25 | 2022/8/24 |
| 8 | Horn Ant | SCHWARZBECK | BBHA 9120D | 9120D-1342 | 2021/6/2 | 2022/6/1 |
| 9 | Horn Ant | Schwarzbeck | BBHA 9170 | 340 | 2021/7/9 | 2022/7/8 |
| 10 | Trilog-Broadband Antenna | Schwarzbeck | VULB 9168 | 9168-352 | 2021/8/11 | 2022/8/10 |
| 11 | 5dB Attenuator | EMCI | EMCI-N-6-05 | AT-N0625 | 2021/8/11 | 2022/8/10 |
| 12 | Measurement Software | EZ | EZ_EMC (Version NB-03A1-01) | N/A | N/A | N/A |
| 13 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/7/23 | 2022/7/22 |
| 14 | Radio Communication Analyzer (LTE) | Anritsu | MT8821C | 6262044728 | 2021/11/28 | 2022/11/27 |

| Frequency Stability Measurement | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/7/23 | 2022/7/22 |
| 2 | Radio Communication Analyzer | Anritsu | MT8820C | 6201381608 | 2021/5/27 | 2022/5/26 |
| 3 | Thermal Chamber | HOLINK | H-T-1F-D | BA03101701 | 2021/6/28 | 2022/6/27 |

| Others Conducted Measurement | | | | | | |
|---|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated Date | Calibrated Until |
| 1 | 8960 Series 10 Wireless Com Test Set | Agilent | E5515C | GB47390193 | 2021/6/8 | 2022/6/7 |
| 2 | Radio Communication Analyzer | Anritsu | MT8820C | 6201381608 | 2021/5/27 | 2022/5/26 |
| 3 | Spectrum Analyzer | Agilent | N9010A | MY54200240 | 2021/5/27 | 2022/5/26 |

Remark: “N/A” denotes no model name, no serial no. or no calibration specified.
All calibration period of equipment list is one year.

## 11 EUT TEST PHOTO

Please refer to document Appendix No.: TP-2203T030-FCCP-1 (APPENDIX-TEST PHOTOS).

## 12 EUT PHOTOS

Please refer to document Appendix No.: EP-2203T030-2 (APPENDIX-EUT PHOTOS).

# APPENDIX A CONDUCTED OUTPUT POWER AND EQUIVALENT ISOTROPIC RADIATED POWER EFFECTIVE RADIATED POWER

**Conducted Output Power:**

| Band | Mode | UL/DL Channel No. | Frequency(MHz) | Average power(dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|
| WCDMA Band IV | Rel 99 | 1312/1537 | 1712.4 | 22.48 | 24.98 | 0.315 |
| | | 1413/1638 | 1732.6 | 22.44 | 24.94 | 0.312 |
| | | 1513/1738 | 1752.6 | 22.59 | 25.09 | 0.323 |

| Band | Sub-test | UL/DL Channel No. | Frequency(MHz) | Average power(dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|
| HSDPA IV | 1 | 1312/1537 | 1712.4 | 22.36 | 24.86 | 0.306 |
| | | 1413/1638 | 1732.6 | 22.32 | 24.82 | 0.303 |
| | | 1513/1738 | 1752.6 | 22.47 | 24.97 | 0.314 |
| | 2 | 1312/1537 | 1712.4 | 21.91 | 24.41 | 0.276 |
| | | 1413/1638 | 1732.6 | 21.87 | 24.37 | 0.274 |
| | | 1513/1738 | 1752.6 | 22.02 | 24.52 | 0.283 |
| | 3 | 1312/1537 | 1712.4 | 21.46 | 23.96 | 0.249 |
| | | 1413/1638 | 1732.6 | 21.42 | 23.92 | 0.247 |
| | | 1513/1738 | 1752.6 | 21.57 | 24.07 | 0.255 |
| | 4 | 1312/1537 | 1712.4 | 20.48 | 22.98 | 0.199 |
| | | 1413/1638 | 1732.6 | 20.44 | 22.94 | 0.197 |
| | | 1513/1738 | 1752.6 | 20.59 | 23.09 | 0.204 |

| Band | Sub-test | UL/DL Channel No. | Frequency(MHz) | Average power(dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|
| HSUPA IV | 1 | 1312/1537 | 1712.4 | 22.39 | 24.89 | 0.308 |
| | | 1413/1638 | 1732.6 | 22.35 | 24.85 | 0.305 |
| | | 1513/1738 | 1752.6 | 22.50 | 25.00 | 0.316 |
| | 2 | 1312/1537 | 1712.4 | 20.45 | 22.95 | 0.197 |
| | | 1413/1638 | 1732.6 | 20.41 | 22.91 | 0.195 |
| | | 1513/1738 | 1752.6 | 20.56 | 23.06 | 0.202 |
| | 3 | 1312/1537 | 1712.4 | 19.57 | 22.07 | 0.161 |
| | | 1413/1638 | 1732.6 | 19.53 | 22.03 | 0.160 |
| | | 1513/1738 | 1752.6 | 19.68 | 22.18 | 0.165 |
| | 4 | 1312/1537 | 1712.4 | 19.51 | 22.01 | 0.159 |
| | | 1413/1638 | 1732.6 | 19.47 | 21.97 | 0.157 |
| | | 1513/1738 | 1752.6 | 19.62 | 22.12 | 0.163 |
| | 5 | 1312/1537 | 1712.4 | 19.42 | 21.92 | 0.156 |
| | | 1413/1638 | 1732.6 | 19.38 | 21.88 | 0.154 |
| | | 1513/1738 | 1752.6 | 19.53 | 22.03 | 0.160 |

| Band | UL/DL Channel No. | Frequency(MHz) | Average power(dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|
| HSPA+ IV | 1312/1537 | 1712.4 | 22.34 | 24.84 | 0.305 |
| | 1413/1638 | 1732.6 | 22.33 | 24.83 | 0.304 |
| | 1513/1738 | 1752.6 | 22.45 | 24.95 | 0.313 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 1.4 | 19957 | 1710.7 | QPSK | 1 | 0 | 0 | 22.05 | 24.6 | 0.285 |
| | | | | | 1 | 2 | 0 | 21.77 | 24.3 | 0.267 |
| | | | | | 1 | 5 | 0 | 22.03 | 24.5 | 0.284 |
| | | | | | 3 | 0 | 0 | 22.05 | 24.6 | 0.285 |
| | | | | | 3 | 1 | 0 | 21.77 | 24.3 | 0.267 |
| | | | | | 3 | 2 | 0 | 22.03 | 24.5 | 0.284 |
| | | | | | 6 | 0 | 1 | 21.11 | 23.6 | 0.230 |
| | | | | 16QAM | 1 | 0 | 1 | 21.23 | 23.7 | 0.236 |
| | | | | | 1 | 2 | 1 | 21.19 | 23.7 | 0.234 |
| | | | | | 1 | 5 | 1 | 21.10 | 23.6 | 0.229 |
| | | | | | 3 | 0 | 1 | 21.23 | 23.7 | 0.236 |
| | | | | | 3 | 1 | 1 | 21.19 | 23.7 | 0.234 |
| | | | | | 3 | 2 | 1 | 21.10 | 23.6 | 0.229 |
| | | | | | 6 | 0 | 2 | 20.20 | 22.7 | 0.186 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.04 | 24.5 | 0.284 |
| | | | | | 1 | 2 | 0 | 22.04 | 24.5 | 0.284 |
| | | | | | 1 | 5 | 0 | 21.75 | 24.3 | 0.266 |
| | | | | | 3 | 0 | 0 | 22.04 | 24.5 | 0.284 |
| | | | | | 3 | 1 | 0 | 22.04 | 24.5 | 0.284 |
| | | | | | 3 | 2 | 0 | 21.75 | 24.3 | 0.266 |
| | | | | | 6 | 0 | 1 | 21.10 | 23.6 | 0.229 |
| | | | | 16QAM | 1 | 0 | 1 | 21.22 | 23.7 | 0.236 |
| | | | | | 1 | 2 | 1 | 21.18 | 23.7 | 0.233 |
| | | | | | 1 | 5 | 1 | 20.82 | 23.3 | 0.215 |
| | | | | | 3 | 0 | 1 | 21.22 | 23.7 | 0.236 |
| | | | | | 3 | 1 | 1 | 21.18 | 23.7 | 0.233 |
| | | | | | 3 | 2 | 1 | 20.82 | 23.3 | 0.215 |
| | | | | | 6 | 0 | 2 | 20.50 | 23.0 | 0.200 |
| | | 20393 | 1754.3 | QPSK | 1 | 0 | 0 | 21.71 | 24.2 | 0.264 |
| | | | | | 1 | 2 | 0 | 21.98 | 24.5 | 0.281 |
| | | | | | 1 | 5 | 0 | 21.85 | 24.4 | 0.272 |
| | | | | | 3 | 0 | 0 | 21.71 | 24.2 | 0.264 |
| | | | | | 3 | 1 | 0 | 21.98 | 24.5 | 0.281 |
| | | | | | 3 | 2 | 0 | 21.85 | 24.4 | 0.272 |
| | | | | | 6 | 0 | 1 | 20.77 | 23.3 | 0.212 |
| | | | | 16QAM | 1 | 0 | 1 | 20.89 | 23.4 | 0.218 |
| | | | | | 1 | 2 | 1 | 20.85 | 23.4 | 0.216 |
| | | | | | 1 | 5 | 1 | 20.92 | 23.4 | 0.220 |
| | | | | | 3 | 0 | 1 | 20.89 | 23.4 | 0.218 |
| | | | | | 3 | 1 | 1 | 20.85 | 23.4 | 0.216 |
| | | | | | 3 | 2 | 1 | 20.92 | 23.4 | 0.220 |
| | | | | | 6 | 0 | 2 | 20.60 | 23.1 | 0.204 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 3 | 19965 | 1711.5 | QPSK | 1 | 0 | 0 | 22.10 | 24.6 | 0.288 |
| | | | | | 1 | 7 | 0 | 21.82 | 24.3 | 0.270 |
| | | | | | 1 | 14 | 0 | 22.08 | 24.6 | 0.287 |
| | | | | | 8 | 0 | 1 | 21.21 | 23.7 | 0.235 |
| | | | | | 8 | 4 | 1 | 20.86 | 23.4 | 0.217 |
| | | | | | 8 | 7 | 1 | 21.26 | 23.8 | 0.238 |
| | | | | | 15 | 0 | 1 | 21.16 | 23.7 | 0.232 |
| | | | | 16QAM | 1 | 0 | 1 | 21.28 | 23.8 | 0.239 |
| | | | | | 1 | 7 | 1 | 21.24 | 23.7 | 0.237 |
| | | | | | 1 | 14 | 1 | 21.15 | 23.7 | 0.232 |
| | | | | | 8 | 0 | 2 | 20.11 | 22.6 | 0.182 |
| | | | | | 8 | 4 | 2 | 19.96 | 22.5 | 0.176 |
| | | | | | 8 | 7 | 2 | 20.11 | 22.6 | 0.182 |
| | | | | | 15 | 0 | 2 | 20.25 | 22.8 | 0.188 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.09 | 24.6 | 0.288 |
| | | | | | 1 | 7 | 0 | 22.09 | 24.6 | 0.288 |
| | | | | | 1 | 14 | 0 | 21.80 | 24.3 | 0.269 |
| | | | | | 8 | 0 | 1 | 21.20 | 23.7 | 0.234 |
| | | | | | 8 | 4 | 1 | 21.13 | 23.6 | 0.231 |
| | | | | | 8 | 7 | 1 | 20.98 | 23.5 | 0.223 |
| | | | | | 15 | 0 | 1 | 21.15 | 23.7 | 0.232 |
| | | | | 16QAM | 1 | 0 | 1 | 21.27 | 23.8 | 0.238 |
| | | | | | 1 | 7 | 1 | 21.23 | 23.7 | 0.236 |
| | | | | | 1 | 14 | 1 | 20.87 | 23.4 | 0.217 |
| | | | | | 8 | 0 | 2 | 20.10 | 22.6 | 0.182 |
| | | | | | 8 | 4 | 2 | 20.23 | 22.7 | 0.187 |
| | | | | | 8 | 7 | 2 | 19.83 | 22.3 | 0.171 |
| | | | | | 15 | 0 | 2 | 20.24 | 22.7 | 0.188 |
| | | 20385 | 1753.5 | QPSK | 1 | 0 | 0 | 21.76 | 24.3 | 0.267 |
| | | | | | 1 | 7 | 0 | 22.03 | 24.5 | 0.284 |
| | | | | | 1 | 14 | 0 | 21.90 | 24.4 | 0.275 |
| | | | | | 8 | 0 | 1 | 20.87 | 23.4 | 0.217 |
| | | | | | 8 | 4 | 1 | 21.07 | 23.6 | 0.228 |
| | | | | | 8 | 7 | 1 | 21.08 | 23.6 | 0.228 |
| | | | | | 15 | 0 | 1 | 20.82 | 23.3 | 0.215 |
| | | | | 16QAM | 1 | 0 | 1 | 20.94 | 23.4 | 0.221 |
| | | | | | 1 | 7 | 1 | 20.90 | 23.4 | 0.219 |
| | | | | | 1 | 14 | 1 | 20.97 | 23.5 | 0.222 |
| | | | | | 8 | 0 | 2 | 19.77 | 22.3 | 0.169 |
| | | | | | 8 | 4 | 2 | 20.17 | 22.7 | 0.185 |
| | | | | | 8 | 7 | 2 | 19.93 | 22.4 | 0.175 |
| | | | | | 15 | 0 | 2 | 19.91 | 22.4 | 0.174 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) P(W) = 1 W · $10^{(P(dBm)/10)}$ / 1000
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 5 | 19975 | 1712.5 | QPSK | 1 | 0 | 0 | 22.15 | 24.7 | 0.292 |
| | | | | | 1 | 12 | 0 | 21.87 | 24.4 | 0.274 |
| | | | | | 1 | 24 | 0 | 22.13 | 24.6 | 0.290 |
| | | | | | 12 | 0 | 1 | 21.26 | 23.8 | 0.238 |
| | | | | | 12 | 6 | 1 | 20.91 | 23.4 | 0.219 |
| | | | | | 12 | 11 | 1 | 21.31 | 23.8 | 0.240 |
| | | | | | 25 | 0 | 1 | 21.21 | 23.7 | 0.235 |
| | | | | 16QAM | 1 | 0 | 1 | 21.33 | 23.8 | 0.242 |
| | | | | | 1 | 12 | 1 | 21.29 | 23.8 | 0.239 |
| | | | | | 1 | 24 | 1 | 21.20 | 23.7 | 0.234 |
| | | | | | 12 | 0 | 2 | 20.16 | 22.7 | 0.185 |
| | | | | | 12 | 6 | 2 | 20.01 | 22.5 | 0.178 |
| | | | | | 12 | 11 | 2 | 20.16 | 22.7 | 0.185 |
| | | | | | 25 | 0 | 2 | 20.30 | 22.8 | 0.191 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.14 | 24.6 | 0.291 |
| | | | | | 1 | 12 | 0 | 22.14 | 24.6 | 0.291 |
| | | | | | 1 | 24 | 0 | 21.85 | 24.4 | 0.272 |
| | | | | | 12 | 0 | 1 | 21.25 | 23.8 | 0.237 |
| | | | | | 12 | 6 | 1 | 21.18 | 23.7 | 0.233 |
| | | | | | 12 | 11 | 1 | 21.03 | 23.5 | 0.225 |
| | | | | | 25 | 0 | 1 | 21.20 | 23.7 | 0.234 |
| | | | | 16QAM | 1 | 0 | 1 | 21.32 | 23.8 | 0.241 |
| | | | | | 1 | 12 | 1 | 21.28 | 23.8 | 0.239 |
| | | | | | 1 | 24 | 1 | 20.92 | 23.4 | 0.220 |
| | | | | | 12 | 0 | 2 | 20.15 | 22.7 | 0.184 |
| | | | | | 12 | 6 | 2 | 20.28 | 22.8 | 0.190 |
| | | | | | 12 | 11 | 2 | 19.88 | 22.4 | 0.173 |
| | | | | | 25 | 0 | 2 | 20.29 | 22.8 | 0.190 |
| | | 20375 | 1752.5 | QPSK | 1 | 0 | 0 | 21.81 | 24.3 | 0.270 |
| | | | | | 1 | 12 | 0 | 22.08 | 24.6 | 0.287 |
| | | | | | 1 | 24 | 0 | 21.95 | 24.5 | 0.279 |
| | | | | | 12 | 0 | 1 | 20.92 | 23.4 | 0.220 |
| | | | | | 12 | 6 | 1 | 21.12 | 23.6 | 0.230 |
| | | | | | 12 | 11 | 1 | 21.13 | 23.6 | 0.231 |
| | | | | | 25 | 0 | 1 | 20.87 | 23.4 | 0.217 |
| | | | | 16QAM | 1 | 0 | 1 | 20.99 | 23.5 | 0.223 |
| | | | | | 1 | 12 | 1 | 20.95 | 23.5 | 0.221 |
| | | | | | 1 | 24 | 1 | 21.02 | 23.5 | 0.225 |
| | | | | | 12 | 0 | 2 | 19.82 | 22.3 | 0.171 |
| | | | | | 12 | 6 | 2 | 20.22 | 22.7 | 0.187 |
| | | | | | 12 | 11 | 2 | 19.98 | 22.5 | 0.177 |
| | | | | | 25 | 0 | 2 | 19.96 | 22.5 | 0.176 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 10 | 20000 | 1715.0 | QPSK | 1 | 0 | 0 | 22.20 | 24.7 | 0.295 |
| | | | | | 1 | 24 | 0 | 21.92 | 24.4 | 0.277 |
| | | | | | 1 | 49 | 0 | 22.18 | 24.7 | 0.294 |
| | | | | | 25 | 0 | 1 | 21.31 | 23.8 | 0.240 |
| | | | | | 25 | 12 | 1 | 20.96 | 23.5 | 0.222 |
| | | | | | 25 | 24 | 1 | 21.36 | 23.9 | 0.243 |
| | | | | | 50 | 0 | 1 | 21.26 | 23.8 | 0.238 |
| | | | | 16QAM | 1 | 0 | 1 | 21.38 | 23.9 | 0.244 |
| | | | | | 1 | 24 | 1 | 21.34 | 23.8 | 0.242 |
| | | | | | 1 | 49 | 1 | 21.25 | 23.8 | 0.237 |
| | | | | | 25 | 0 | 2 | 20.21 | 22.7 | 0.187 |
| | | | | | 25 | 12 | 2 | 20.06 | 22.6 | 0.180 |
| | | | | | 25 | 24 | 2 | 20.21 | 22.7 | 0.187 |
| | | | | | 50 | 0 | 2 | 20.35 | 22.9 | 0.193 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.19 | 24.7 | 0.294 |
| | | | | | 1 | 24 | 0 | 22.19 | 24.7 | 0.294 |
| | | | | | 1 | 49 | 0 | 21.90 | 24.4 | 0.275 |
| | | | | | 25 | 0 | 1 | 21.30 | 23.8 | 0.240 |
| | | | | | 25 | 12 | 1 | 21.23 | 23.7 | 0.236 |
| | | | | | 25 | 24 | 1 | 21.08 | 23.6 | 0.228 |
| | | | | | 50 | 0 | 1 | 21.25 | 23.8 | 0.237 |
| | | | | 16QAM | 1 | 0 | 1 | 21.37 | 23.9 | 0.244 |
| | | | | | 1 | 24 | 1 | 21.33 | 23.8 | 0.242 |
| | | | | | 1 | 49 | 1 | 20.97 | 23.5 | 0.222 |
| | | | | | 25 | 0 | 2 | 20.20 | 22.7 | 0.186 |
| | | | | | 25 | 12 | 2 | 20.33 | 22.8 | 0.192 |
| | | | | | 25 | 24 | 2 | 19.93 | 22.4 | 0.175 |
| | | | | | 50 | 0 | 2 | 20.34 | 22.8 | 0.192 |
| | | 20350 | 1750.0 | QPSK | 1 | 0 | 0 | 21.86 | 24.4 | 0.273 |
| | | | | | 1 | 24 | 0 | 22.13 | 24.6 | 0.290 |
| | | | | | 1 | 49 | 0 | 22.00 | 24.5 | 0.282 |
| | | | | | 25 | 0 | 1 | 20.97 | 23.5 | 0.222 |
| | | | | | 25 | 12 | 1 | 21.17 | 23.7 | 0.233 |
| | | | | | 25 | 24 | 1 | 21.18 | 23.7 | 0.233 |
| | | | | | 50 | 0 | 1 | 20.92 | 23.4 | 0.220 |
| | | | | 16QAM | 1 | 0 | 1 | 21.04 | 23.5 | 0.226 |
| | | | | | 1 | 24 | 1 | 21.00 | 23.5 | 0.224 |
| | | | | | 1 | 49 | 1 | 21.07 | 23.6 | 0.228 |
| | | | | | 25 | 0 | 2 | 19.87 | 22.4 | 0.173 |
| | | | | | 25 | 12 | 2 | 20.27 | 22.8 | 0.189 |
| | | | | | 25 | 24 | 2 | 20.03 | 22.5 | 0.179 |
| | | | | | 50 | 0 | 2 | 20.01 | 22.5 | 0.178 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 15 | 20025 | 1717.5 | QPSK | 1 | 0 | 0 | 22.25 | 24.8 | 0.299 |
| | | | | | 1 | 37 | 0 | 21.97 | 24.5 | 0.280 |
| | | | | | 1 | 74 | 0 | 22.23 | 24.7 | 0.297 |
| | | | | | 36 | 0 | 1 | 21.36 | 23.9 | 0.243 |
| | | | | | 36 | 18 | 1 | 21.01 | 23.5 | 0.224 |
| | | | | | 36 | 35 | 1 | 21.41 | 23.9 | 0.246 |
| | | | | | 75 | 0 | 1 | 21.31 | 23.8 | 0.240 |
| | | | | 16QAM | 1 | 0 | 1 | 21.43 | 23.9 | 0.247 |
| | | | | | 1 | 37 | 1 | 21.39 | 23.9 | 0.245 |
| | | | | | 1 | 74 | 1 | 21.30 | 23.8 | 0.240 |
| | | | | | 36 | 0 | 2 | 20.26 | 22.8 | 0.189 |
| | | | | | 36 | 18 | 2 | 20.11 | 22.6 | 0.182 |
| | | | | | 36 | 35 | 2 | 20.26 | 22.8 | 0.189 |
| | | | | | 75 | 0 | 2 | 20.40 | 22.9 | 0.195 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.24 | 24.7 | 0.298 |
| | | | | | 1 | 37 | 0 | 22.24 | 24.7 | 0.298 |
| | | | | | 1 | 74 | 0 | 21.95 | 24.5 | 0.279 |
| | | | | | 36 | 0 | 1 | 21.35 | 23.9 | 0.243 |
| | | | | | 36 | 18 | 1 | 21.28 | 23.8 | 0.239 |
| | | | | | 36 | 35 | 1 | 21.13 | 23.6 | 0.231 |
| | | | | | 75 | 0 | 1 | 21.30 | 23.8 | 0.240 |
| | | | | 16QAM | 1 | 0 | 1 | 21.42 | 23.9 | 0.247 |
| | | | | | 1 | 37 | 1 | 21.38 | 23.9 | 0.244 |
| | | | | | 1 | 74 | 1 | 21.02 | 23.5 | 0.225 |
| | | | | | 36 | 0 | 2 | 20.25 | 22.8 | 0.188 |
| | | | | | 36 | 18 | 2 | 20.38 | 22.9 | 0.194 |
| | | | | | 36 | 35 | 2 | 19.98 | 22.5 | 0.177 |
| | | | | | 75 | 0 | 2 | 20.39 | 22.9 | 0.195 |
| | | 20325 | 1747.5 | QPSK | 1 | 0 | 0 | 21.91 | 24.4 | 0.276 |
| | | | | | 1 | 37 | 0 | 22.18 | 24.7 | 0.294 |
| | | | | | 1 | 74 | 0 | 22.05 | 24.6 | 0.285 |
| | | | | | 36 | 0 | 1 | 21.02 | 23.5 | 0.225 |
| | | | | | 36 | 18 | 1 | 21.22 | 23.7 | 0.236 |
| | | | | | 36 | 35 | 1 | 21.23 | 23.7 | 0.236 |
| | | | | | 75 | 0 | 1 | 20.97 | 23.5 | 0.222 |
| | | | | 16QAM | 1 | 0 | 1 | 21.09 | 23.6 | 0.229 |
| | | | | | 1 | 37 | 1 | 21.05 | 23.6 | 0.226 |
| | | | | | 1 | 74 | 1 | 21.12 | 23.6 | 0.230 |
| | | | | | 36 | 0 | 2 | 19.92 | 22.4 | 0.175 |
| | | | | | 36 | 18 | 2 | 20.32 | 22.8 | 0.191 |
| | | | | | 36 | 35 | 2 | 20.08 | 22.6 | 0.181 |
| | | | | | 75 | 0 | 2 | 20.06 | 22.6 | 0.180 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power (dBm) | EIRP power (dBm) | EIRP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 20 | 20050 | 1720.0 | QPSK | 1 | 0 | 0 | 22.30 | 24.8 | 0.302 |
| | | | | | 1 | 49 | 0 | 22.02 | 24.5 | 0.283 |
| | | | | | 1 | 99 | 0 | 22.28 | 24.8 | 0.301 |
| | | | | | 50 | 0 | 1 | 21.41 | 23.9 | 0.246 |
| | | | | | 50 | 24 | 1 | 21.06 | 23.6 | 0.227 |
| | | | | | 50 | 49 | 1 | 21.46 | 24.0 | 0.249 |
| | | | | | 100 | 0 | 1 | 21.36 | 23.9 | 0.243 |
| | | | | 16QAM | 1 | 0 | 1 | 21.48 | 24.0 | 0.250 |
| | | | | | 1 | 49 | 1 | 21.44 | 23.9 | 0.248 |
| | | | | | 1 | 99 | 1 | 21.35 | 23.9 | 0.243 |
| | | | | | 50 | 0 | 2 | 20.31 | 22.8 | 0.191 |
| | | | | | 50 | 24 | 2 | 20.16 | 22.7 | 0.185 |
| | | | | | 50 | 49 | 2 | 20.31 | 22.8 | 0.191 |
| | | | | | 100 | 0 | 2 | 20.45 | 23.0 | 0.197 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 0 | 22.29 | 24.8 | 0.301 |
| | | | | | 1 | 49 | 0 | 22.29 | 24.8 | 0.301 |
| | | | | | 1 | 99 | 0 | 22.00 | 24.5 | 0.282 |
| | | | | | 50 | 0 | 1 | 21.40 | 23.9 | 0.245 |
| | | | | | 50 | 24 | 1 | 21.33 | 23.8 | 0.242 |
| | | | | | 50 | 49 | 1 | 21.18 | 23.7 | 0.233 |
| | | | | | 100 | 0 | 1 | 21.35 | 23.9 | 0.243 |
| | | | | 16QAM | 1 | 0 | 1 | 21.47 | 24.0 | 0.249 |
| | | | | | 1 | 49 | 1 | 21.43 | 23.9 | 0.247 |
| | | | | | 1 | 99 | 1 | 21.07 | 23.6 | 0.228 |
| | | | | | 50 | 0 | 2 | 20.30 | 22.8 | 0.191 |
| | | | | | 50 | 24 | 2 | 20.43 | 22.9 | 0.196 |
| | | | | | 50 | 49 | 2 | 20.03 | 22.5 | 0.179 |
| | | | | | 100 | 0 | 2 | 20.44 | 22.9 | 0.197 |
| | | 20300 | 1745.0 | QPSK | 1 | 0 | 0 | 21.96 | 24.5 | 0.279 |
| | | | | | 1 | 49 | 0 | 22.23 | 24.7 | 0.297 |
| | | | | | 1 | 99 | 0 | 22.10 | 24.6 | 0.288 |
| | | | | | 50 | 0 | 1 | 21.07 | 23.6 | 0.228 |
| | | | | | 50 | 24 | 1 | 21.27 | 23.8 | 0.238 |
| | | | | | 50 | 49 | 1 | 21.28 | 23.8 | 0.239 |
| | | | | | 100 | 0 | 1 | 21.02 | 23.5 | 0.225 |
| | | | | 16QAM | 1 | 0 | 1 | 21.14 | 23.6 | 0.231 |
| | | | | | 1 | 49 | 1 | 21.10 | 23.6 | 0.229 |
| | | | | | 1 | 99 | 1 | 21.17 | 23.7 | 0.233 |
| | | | | | 50 | 0 | 2 | 19.97 | 22.5 | 0.177 |
| | | | | | 50 | 24 | 2 | 20.37 | 22.9 | 0.194 |
| | | | | | 50 | 49 | 2 | 20.13 | 22.6 | 0.183 |
| | | | | | 100 | 0 | 2 | 20.11 | 22.6 | 0.182 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)/10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 1.4 | 23017 | 699.7 | QPSK | 1 | 0 | 0 | 22.04 | 20.9 | 0.123 |
| | | | | | 1 | 2 | 0 | 22.04 | 20.9 | 0.123 |
| | | | | | 1 | 5 | 0 | 22.10 | 21.0 | 0.124 |
| | | | | | 3 | 0 | 0 | 22.04 | 20.9 | 0.123 |
| | | | | | 3 | 1 | 0 | 22.04 | 20.9 | 0.123 |
| | | | | | 3 | 2 | 0 | 22.10 | 21.0 | 0.124 |
| | | | | | 6 | 0 | 1 | 21.10 | 20.0 | 0.099 |
| | | | | 16QAM | 1 | 0 | 1 | 21.22 | 20.1 | 0.102 |
| | | | | | 1 | 2 | 1 | 21.18 | 20.0 | 0.101 |
| | | | | | 1 | 5 | 1 | 21.17 | 20.0 | 0.100 |
| | | | | | 3 | 0 | 1 | 21.22 | 20.1 | 0.102 |
| | | | | | 3 | 1 | 1 | 21.18 | 20.0 | 0.101 |
| | | | | | 3 | 2 | 1 | 21.17 | 20.0 | 0.100 |
| | | | | | 6 | 0 | 2 | 20.19 | 19.0 | 0.080 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 0 | 22.13 | 21.0 | 0.125 |
| | | | | | 1 | 2 | 0 | 22.10 | 21.0 | 0.124 |
| | | | | | 1 | 5 | 0 | 21.82 | 20.7 | 0.117 |
| | | | | | 3 | 0 | 0 | 22.13 | 21.0 | 0.125 |
| | | | | | 3 | 1 | 0 | 22.10 | 21.0 | 0.124 |
| | | | | | 3 | 2 | 0 | 21.82 | 20.7 | 0.117 |
| | | | | | 6 | 0 | 1 | 21.19 | 20.0 | 0.101 |
| | | | | 16QAM | 1 | 0 | 1 | 21.31 | 20.2 | 0.104 |
| | | | | | 1 | 2 | 1 | 21.27 | 20.1 | 0.103 |
| | | | | | 1 | 5 | 1 | 20.89 | 19.7 | 0.094 |
| | | | | | 3 | 0 | 1 | 21.31 | 20.2 | 0.104 |
| | | | | | 3 | 1 | 1 | 21.27 | 20.1 | 0.103 |
| | | | | | 3 | 2 | 1 | 20.89 | 19.7 | 0.094 |
| | | | | | 6 | 0 | 2 | 20.50 | 19.4 | 0.086 |
| | | 23173 | 715.3 | QPSK | 1 | 0 | 0 | 22.15 | 21.0 | 0.126 |
| | | | | | 1 | 2 | 0 | 21.96 | 20.8 | 0.121 |
| | | | | | 1 | 5 | 0 | 21.88 | 20.7 | 0.118 |
| | | | | | 3 | 0 | 0 | 22.15 | 21.0 | 0.126 |
| | | | | | 3 | 1 | 0 | 21.96 | 20.8 | 0.121 |
| | | | | | 3 | 2 | 0 | 21.88 | 20.7 | 0.118 |
| | | | | | 6 | 0 | 1 | 21.21 | 20.1 | 0.101 |
| | | | | 16QAM | 1 | 0 | 1 | 21.33 | 20.2 | 0.104 |
| | | | | | 1 | 2 | 1 | 21.29 | 20.1 | 0.103 |
| | | | | | 1 | 5 | 1 | 20.95 | 19.8 | 0.095 |
| | | | | | 3 | 0 | 1 | 21.33 | 20.2 | 0.104 |
| | | | | | 3 | 1 | 1 | 21.29 | 20.1 | 0.103 |
| | | | | | 3 | 2 | 1 | 20.95 | 19.8 | 0.095 |
| | | | | | 6 | 0 | 2 | 20.60 | 19.5 | 0.088 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 3 | 23025 | 700.5 | QPSK | 1 | 0 | 0 | 22.09 | 20.9 | 0.124 |
| | | | | | 1 | 7 | 0 | 22.09 | 20.9 | 0.124 |
| | | | | | 1 | 14 | 0 | 22.15 | 21.0 | 0.126 |
| | | | | | 8 | 0 | 1 | 21.20 | 20.1 | 0.101 |
| | | | | | 8 | 4 | 1 | 21.13 | 20.0 | 0.100 |
| | | | | | 8 | 7 | 1 | 21.33 | 20.2 | 0.104 |
| | | | | | 15 | 0 | 1 | 21.15 | 20.0 | 0.100 |
| | | | | 16QAM | 1 | 0 | 1 | 21.27 | 20.1 | 0.103 |
| | | | | | 1 | 7 | 1 | 21.23 | 20.1 | 0.102 |
| | | | | | 1 | 14 | 1 | 21.22 | 20.1 | 0.102 |
| | | | | | 8 | 0 | 2 | 20.10 | 19.0 | 0.079 |
| | | | | | 8 | 4 | 2 | 20.23 | 19.1 | 0.081 |
| | | | | | 8 | 7 | 2 | 20.18 | 19.0 | 0.080 |
| | | | | | 15 | 0 | 2 | 20.24 | 19.1 | 0.081 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 0 | 22.18 | 21.0 | 0.127 |
| | | | | | 1 | 7 | 0 | 22.15 | 21.0 | 0.126 |
| | | | | | 1 | 14 | 0 | 21.87 | 20.7 | 0.118 |
| | | | | | 8 | 0 | 1 | 21.29 | 20.1 | 0.103 |
| | | | | | 8 | 4 | 1 | 21.19 | 20.0 | 0.101 |
| | | | | | 8 | 7 | 1 | 21.05 | 19.9 | 0.098 |
| | | | | | 15 | 0 | 1 | 21.24 | 20.1 | 0.102 |
| | | | | 16QAM | 1 | 0 | 1 | 21.36 | 20.2 | 0.105 |
| | | | | | 1 | 7 | 1 | 21.32 | 20.2 | 0.104 |
| | | | | | 1 | 14 | 1 | 20.94 | 19.8 | 0.095 |
| | | | | | 8 | 0 | 2 | 20.19 | 19.0 | 0.080 |
| | | | | | 8 | 4 | 2 | 20.29 | 19.1 | 0.082 |
| | | | | | 8 | 7 | 2 | 19.90 | 18.8 | 0.075 |
| | | | | | 15 | 0 | 2 | 20.33 | 19.2 | 0.083 |
| | | 23165 | 714.5 | QPSK | 1 | 0 | 0 | 22.20 | 21.1 | 0.127 |
| | | | | | 1 | 7 | 0 | 22.01 | 20.9 | 0.122 |
| | | | | | 1 | 14 | 0 | 21.93 | 20.8 | 0.120 |
| | | | | | 8 | 0 | 1 | 21.31 | 20.2 | 0.104 |
| | | | | | 8 | 4 | 1 | 21.05 | 19.9 | 0.098 |
| | | | | | 8 | 7 | 1 | 21.11 | 20.0 | 0.099 |
| | | | | | 15 | 0 | 1 | 21.26 | 20.1 | 0.103 |
| | | | | 16QAM | 1 | 0 | 1 | 21.38 | 20.2 | 0.105 |
| | | | | | 1 | 7 | 1 | 21.34 | 20.2 | 0.104 |
| | | | | | 1 | 14 | 1 | 21.00 | 19.9 | 0.097 |
| | | | | | 8 | 0 | 2 | 20.21 | 19.1 | 0.081 |
| | | | | | 8 | 4 | 2 | 20.15 | 19.0 | 0.079 |
| | | | | | 8 | 7 | 2 | 19.96 | 18.8 | 0.076 |
| | | | | | 15 | 0 | 2 | 20.35 | 19.2 | 0.083 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 0 | 22.14 | 21.0 | 0.126 |
| | | | | | 1 | 12 | 0 | 22.14 | 21.0 | 0.126 |
| | | | | | 1 | 24 | 0 | 22.20 | 21.1 | 0.127 |
| | | | | | 12 | 0 | 1 | 21.25 | 20.1 | 0.102 |
| | | | | | 12 | 6 | 1 | 21.18 | 20.0 | 0.101 |
| | | | | | 12 | 11 | 1 | 21.38 | 20.2 | 0.105 |
| | | | | | 25 | 0 | 1 | 21.20 | 20.1 | 0.101 |
| | | | | 16QAM | 1 | 0 | 1 | 21.32 | 20.2 | 0.104 |
| | | | | | 1 | 12 | 1 | 21.28 | 20.1 | 0.103 |
| | | | | | 1 | 24 | 1 | 21.27 | 20.1 | 0.103 |
| | | | | | 12 | 0 | 2 | 20.15 | 19.0 | 0.079 |
| | | | | | 12 | 6 | 2 | 20.28 | 19.1 | 0.082 |
| | | | | | 12 | 11 | 2 | 20.23 | 19.1 | 0.081 |
| | | | | | 25 | 0 | 2 | 20.29 | 19.1 | 0.082 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 0 | 22.23 | 21.1 | 0.128 |
| | | | | | 1 | 12 | 0 | 22.20 | 21.1 | 0.127 |
| | | | | | 1 | 24 | 0 | 21.92 | 20.8 | 0.119 |
| | | | | | 12 | 0 | 1 | 21.34 | 20.2 | 0.104 |
| | | | | | 12 | 6 | 1 | 21.24 | 20.1 | 0.102 |
| | | | | | 12 | 11 | 1 | 21.10 | 20.0 | 0.099 |
| | | | | | 25 | 0 | 1 | 21.29 | 20.1 | 0.103 |
| | | | | 16QAM | 1 | 0 | 1 | 21.41 | 20.3 | 0.106 |
| | | | | | 1 | 12 | 1 | 21.37 | 20.2 | 0.105 |
| | | | | | 1 | 24 | 1 | 20.99 | 19.8 | 0.096 |
| | | | | | 12 | 0 | 2 | 20.24 | 19.1 | 0.081 |
| | | | | | 12 | 6 | 2 | 20.34 | 19.2 | 0.083 |
| | | | | | 12 | 11 | 2 | 19.95 | 18.8 | 0.076 |
| | | | | | 25 | 0 | 2 | 20.38 | 19.2 | 0.084 |
| | | 23155 | 713.5 | QPSK | 1 | 0 | 0 | 22.25 | 21.1 | 0.129 |
| | | | | | 1 | 12 | 0 | 22.06 | 20.9 | 0.123 |
| | | | | | 1 | 24 | 0 | 21.98 | 20.8 | 0.121 |
| | | | | | 12 | 0 | 1 | 21.36 | 20.2 | 0.105 |
| | | | | | 12 | 6 | 1 | 21.10 | 20.0 | 0.099 |
| | | | | | 12 | 11 | 1 | 21.16 | 20.0 | 0.100 |
| | | | | | 25 | 0 | 1 | 21.31 | 20.2 | 0.104 |
| | | | | 16QAM | 1 | 0 | 1 | 21.43 | 20.3 | 0.107 |
| | | | | | 1 | 12 | 1 | 21.39 | 20.2 | 0.106 |
| | | | | | 1 | 24 | 1 | 21.05 | 19.9 | 0.098 |
| | | | | | 12 | 0 | 2 | 20.26 | 19.1 | 0.081 |
| | | | | | 12 | 6 | 2 | 20.20 | 19.1 | 0.080 |
| | | | | | 12 | 11 | 2 | 20.01 | 18.9 | 0.077 |
| | | | | | 25 | 0 | 2 | 20.40 | 19.3 | 0.084 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 10 | 23060 | 704.0 | QPSK | 1 | 0 | 0 | 22.19 | 21.0 | 0.127 |
| | | | | | 1 | 24 | 0 | 22.19 | 21.0 | 0.127 |
| | | | | | 1 | 49 | 0 | 22.25 | 21.1 | 0.129 |
| | | | | | 25 | 0 | 1 | 21.30 | 20.2 | 0.104 |
| | | | | | 25 | 12 | 1 | 21.23 | 20.1 | 0.102 |
| | | | | | 25 | 24 | 1 | 21.43 | 20.3 | 0.107 |
| | | | | | 50 | 0 | 1 | 21.25 | 20.1 | 0.102 |
| | | | | 16QAM | 1 | 0 | 1 | 21.37 | 20.2 | 0.105 |
| | | | | | 1 | 24 | 1 | 21.33 | 20.2 | 0.104 |
| | | | | | 1 | 49 | 1 | 21.32 | 20.2 | 0.104 |
| | | | | | 25 | 0 | 2 | 20.20 | 19.1 | 0.080 |
| | | | | | 25 | 12 | 2 | 20.33 | 19.2 | 0.083 |
| | | | | | 25 | 24 | 2 | 20.28 | 19.1 | 0.082 |
| | | | | | 50 | 0 | 2 | 20.34 | 19.2 | 0.083 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 0 | 22.28 | 21.1 | 0.130 |
| | | | | | 1 | 24 | 0 | 22.25 | 21.1 | 0.129 |
| | | | | | 1 | 49 | 0 | 21.97 | 20.8 | 0.121 |
| | | | | | 25 | 0 | 1 | 21.39 | 20.2 | 0.106 |
| | | | | | 25 | 12 | 1 | 21.29 | 20.1 | 0.103 |
| | | | | | 25 | 24 | 1 | 21.15 | 20.0 | 0.100 |
| | | | | | 50 | 0 | 1 | 21.34 | 20.2 | 0.104 |
| | | | | 16QAM | 1 | 0 | 1 | 21.46 | 20.3 | 0.107 |
| | | | | | 1 | 24 | 1 | 21.42 | 20.3 | 0.106 |
| | | | | | 1 | 49 | 1 | 21.04 | 19.9 | 0.097 |
| | | | | | 25 | 0 | 2 | 20.29 | 19.1 | 0.082 |
| | | | | | 25 | 12 | 2 | 20.39 | 19.2 | 0.084 |
| | | | | | 25 | 24 | 2 | 20.00 | 18.9 | 0.077 |
| | | | | | 50 | 0 | 2 | 20.43 | 19.3 | 0.085 |
| | | 23130 | 711.0 | QPSK | 1 | 0 | 0 | 22.30 | 21.2 | 0.130 |
| | | | | | 1 | 24 | 0 | 22.11 | 21.0 | 0.125 |
| | | | | | 1 | 49 | 0 | 22.03 | 20.9 | 0.122 |
| | | | | | 25 | 0 | 1 | 21.41 | 20.3 | 0.106 |
| | | | | | 25 | 12 | 1 | 21.15 | 20.0 | 0.100 |
| | | | | | 25 | 24 | 1 | 21.21 | 20.1 | 0.101 |
| | | | | | 50 | 0 | 1 | 21.36 | 20.2 | 0.105 |
| | | | | 16QAM | 1 | 0 | 1 | 21.48 | 20.3 | 0.108 |
| | | | | | 1 | 24 | 1 | 21.44 | 20.3 | 0.107 |
| | | | | | 1 | 49 | 1 | 21.10 | 20.0 | 0.099 |
| | | | | | 25 | 0 | 2 | 20.31 | 19.2 | 0.082 |
| | | | | | 25 | 12 | 2 | 20.25 | 19.1 | 0.081 |
| | | | | | 25 | 24 | 2 | 20.06 | 18.9 | 0.078 |
| | | | | | 50 | 0 | 2 | 20.45 | 19.3 | 0.085 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 5 | 23205 | 779.5 | QPSK | 1 | 0 | 0 | 22.17 | 21.02 | 0.126 |
| | | | | | 1 | 12 | 0 | 22.14 | 20.99 | 0.126 |
| | | | | | 1 | 24 | 0 | 22.08 | 20.93 | 0.124 |
| | | | | | 12 | 0 | 1 | 21.28 | 20.13 | 0.103 |
| | | | | | 12 | 6 | 1 | 21.18 | 20.03 | 0.101 |
| | | | | | 12 | 11 | 1 | 21.26 | 20.11 | 0.103 |
| | | | | | 25 | 0 | 1 | 21.23 | 20.08 | 0.102 |
| | | | | 16QAM | 1 | 0 | 1 | 21.35 | 20.20 | 0.105 |
| | | | | | 1 | 12 | 1 | 21.31 | 20.16 | 0.104 |
| | | | | | 1 | 24 | 1 | 21.15 | 20.00 | 0.100 |
| | | | | | 12 | 0 | 2 | 20.18 | 19.03 | 0.080 |
| | | | | | 12 | 6 | 2 | 20.28 | 19.13 | 0.082 |
| | | | | | 12 | 11 | 2 | 20.11 | 18.96 | 0.079 |
| | | | | | 25 | 0 | 2 | 20.32 | 19.17 | 0.083 |
| | | 23230 | 752.0 | QPSK | 1 | 0 | 0 | 22.17 | 21.02 | 0.126 |
| | | | | | 1 | 12 | 0 | 22.14 | 20.99 | 0.126 |
| | | | | | 1 | 24 | 0 | 22.08 | 20.93 | 0.124 |
| | | | | | 12 | 0 | 1 | 21.28 | 20.13 | 0.103 |
| | | | | | 12 | 6 | 1 | 21.18 | 20.03 | 0.101 |
| | | | | | 12 | 11 | 1 | 21.26 | 20.11 | 0.103 |
| | | | | | 25 | 0 | 1 | 21.23 | 20.08 | 0.102 |
| | | | | 16QAM | 1 | 0 | 1 | 21.35 | 20.20 | 0.105 |
| | | | | | 1 | 12 | 1 | 21.31 | 20.16 | 0.104 |
| | | | | | 1 | 24 | 1 | 21.15 | 20.00 | 0.100 |
| | | | | | 12 | 0 | 2 | 20.18 | 19.03 | 0.080 |
| | | | | | 12 | 6 | 2 | 20.28 | 19.13 | 0.082 |
| | | | | | 12 | 11 | 2 | 20.11 | 18.96 | 0.079 |
| | | | | | 25 | 0 | 2 | 20.32 | 19.17 | 0.083 |
| | | 23255 | 784.5 | QPSK | 1 | 0 | 0 | 22.17 | 21.02 | 0.126 |
| | | | | | 1 | 12 | 0 | 22.14 | 20.99 | 0.126 |
| | | | | | 1 | 24 | 0 | 22.08 | 20.93 | 0.124 |
| | | | | | 12 | 0 | 1 | 21.28 | 20.13 | 0.103 |
| | | | | | 12 | 6 | 1 | 21.18 | 20.03 | 0.101 |
| | | | | | 12 | 11 | 1 | 21.26 | 20.11 | 0.103 |
| | | | | | 25 | 0 | 1 | 21.23 | 20.08 | 0.102 |
| | | | | 16QAM | 1 | 0 | 1 | 21.35 | 20.20 | 0.105 |
| | | | | | 1 | 12 | 1 | 21.31 | 20.16 | 0.104 |
| | | | | | 1 | 24 | 1 | 21.15 | 20.00 | 0.100 |
| | | | | | 12 | 0 | 2 | 20.18 | 19.03 | 0.080 |
| | | | | | 12 | 6 | 2 | 20.28 | 19.13 | 0.082 |
| | | | | | 12 | 11 | 2 | 20.11 | 18.96 | 0.079 |
| | | | | | 25 | 0 | 2 | 20.32 | 19.17 | 0.083 |

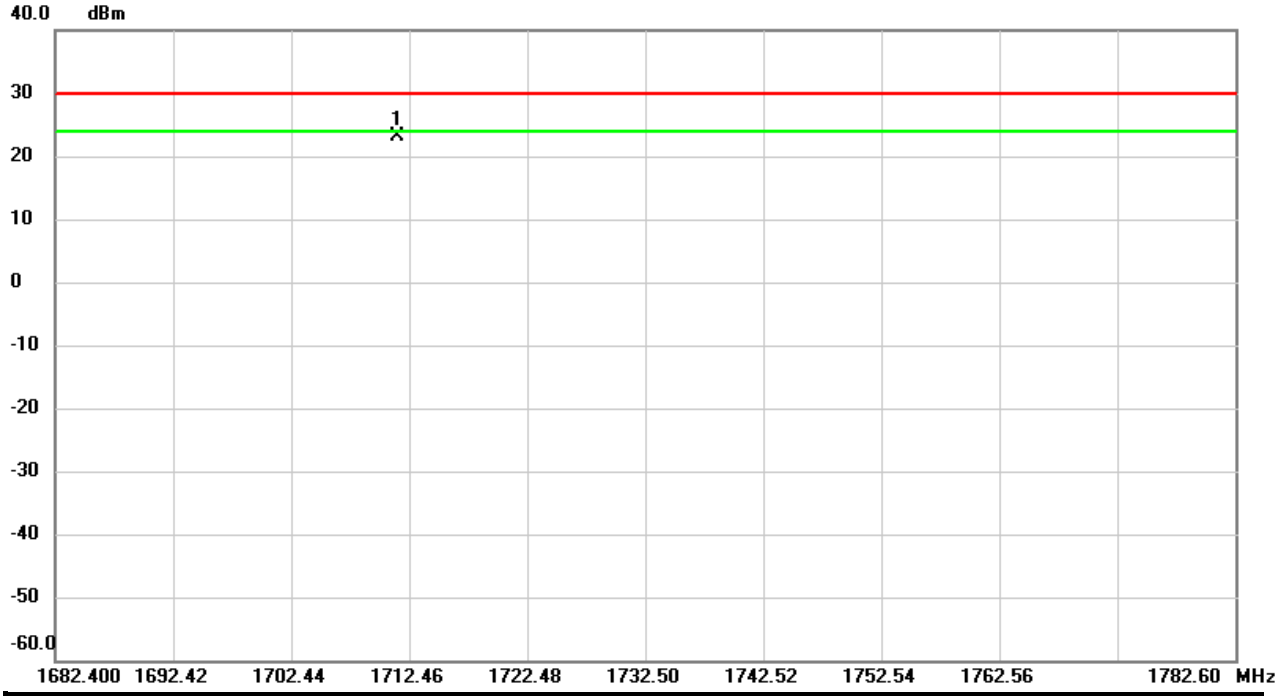
NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

| Band | BW (MHz) | Channel | Frequency (MHz) | Mode | UL RB Allocation | UL RB Offset | MPR | Average power | ERP power (dBm) | ERP power (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 10 | 23230 | 782.0 | QPSK | 1 | 0 | 0 | 22.20 | 21.05 | 0.127 |
| | | | | | 1 | 24 | 0 | 22.17 | 21.02 | 0.126 |
| | | | | | 1 | 49 | 0 | 22.11 | 20.96 | 0.125 |
| | | | | | 25 | 0 | 1 | 21.31 | 20.16 | 0.104 |
| | | | | | 25 | 12 | 1 | 21.21 | 20.06 | 0.101 |
| | | | | | 25 | 24 | 1 | 21.29 | 20.14 | 0.103 |
| | | | | | 50 | 0 | 1 | 21.26 | 20.11 | 0.103 |
| | | | | 16QAM | 1 | 0 | 1 | 21.38 | 20.23 | 0.105 |
| | | | | | 1 | 24 | 1 | 21.34 | 20.19 | 0.104 |
| | | | | | 1 | 49 | 1 | 21.18 | 20.03 | 0.101 |
| | | | | | 25 | 0 | 2 | 20.21 | 19.06 | 0.081 |
| | | | | | 25 | 12 | 2 | 20.31 | 19.16 | 0.082 |
| | | | | | 25 | 24 | 2 | 20.14 | 18.99 | 0.079 |
| | | | | | 50 | 0 | 2 | 20.35 | 19.20 | 0.083 |

NOTE:
(1) EIRP = Average power + Antenna gain.
(2) ERP = EIRP - 2.15.
(3) $P(W) = 1\ W \cdot 10^{(P(dBm)\ /\ 10)} / 1000$
(4) The maximum antenna gain is applied.

**Effective Isotropic Radiated Power:**

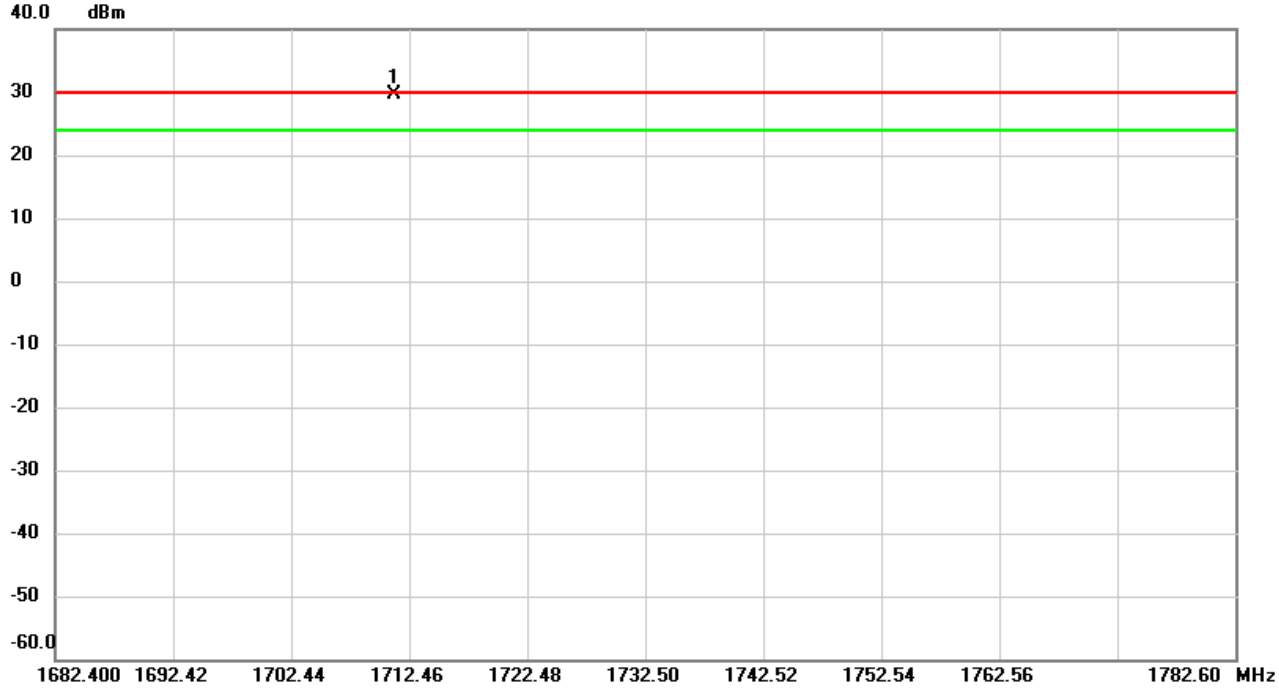
| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1312 | Polarization | Vertical |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1711.415 | -17.27 | 40.30 | 23.03 | 30.00 | -6.97 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

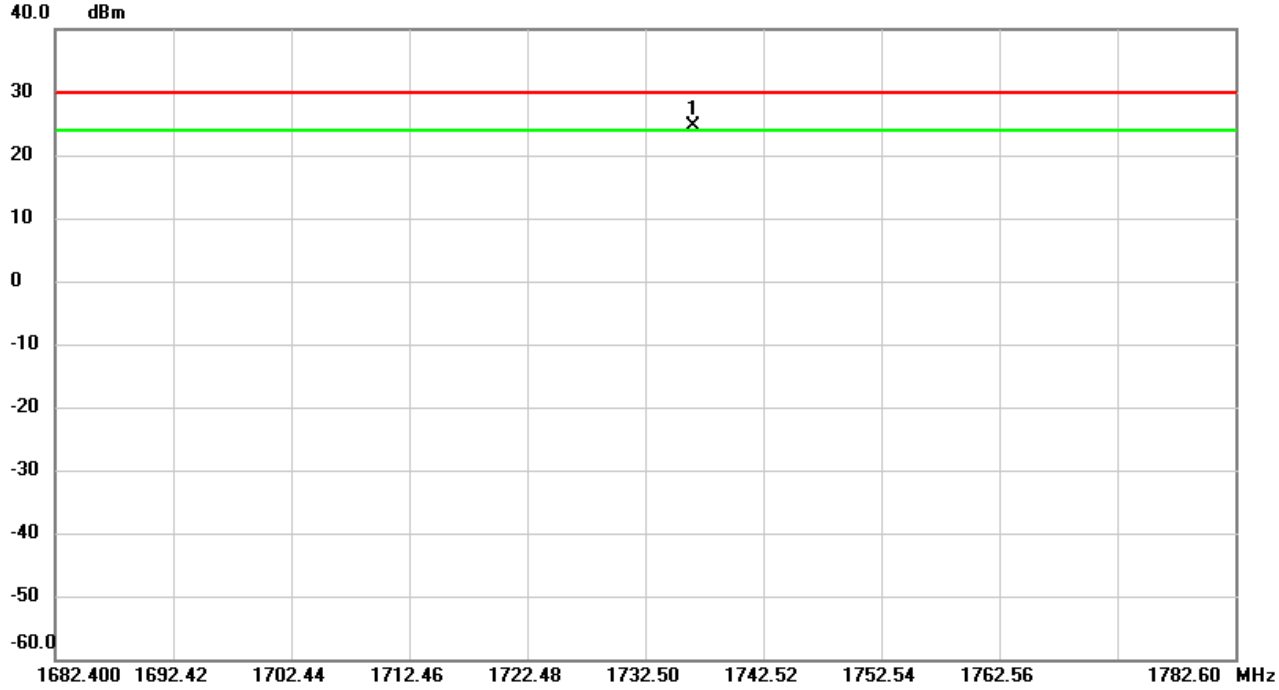
| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1312 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1711.214 | -10.75 | 40.39 | 29.64 | 30.00 | -0.36 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

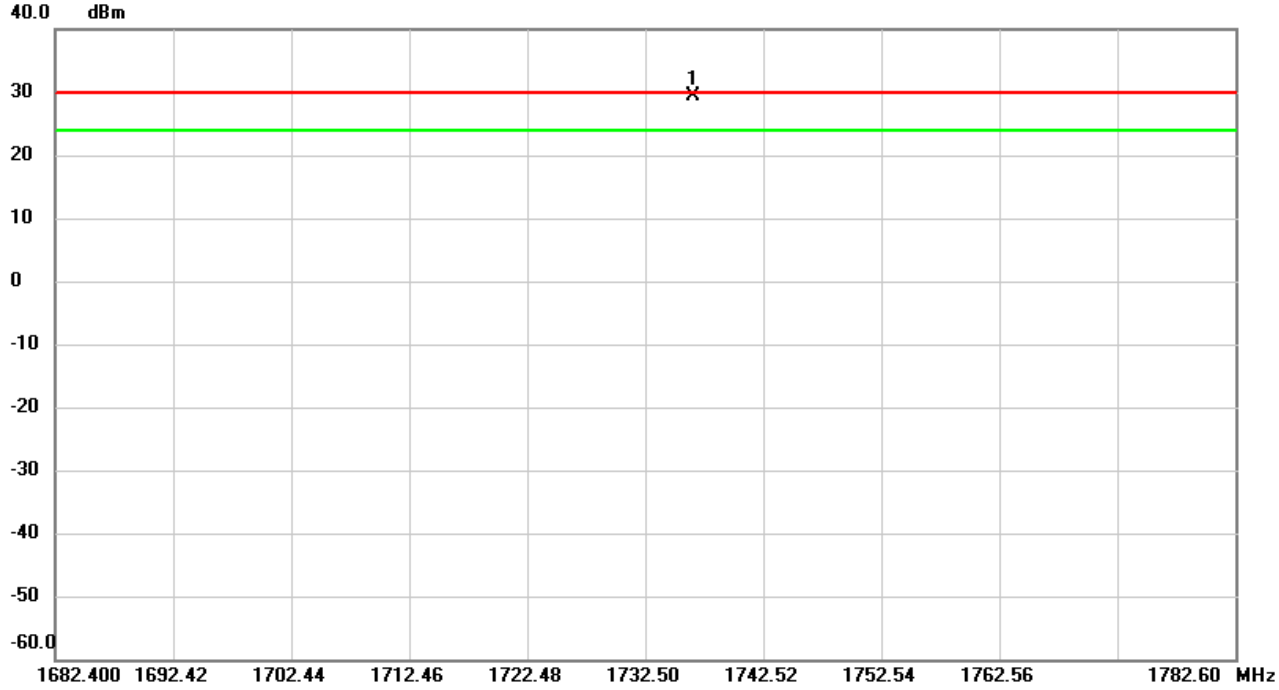
| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1413 | Polarization | Vertical |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1736.571 | -15.74 | 40.35 | 24.61 | 30.00 | -5.39 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

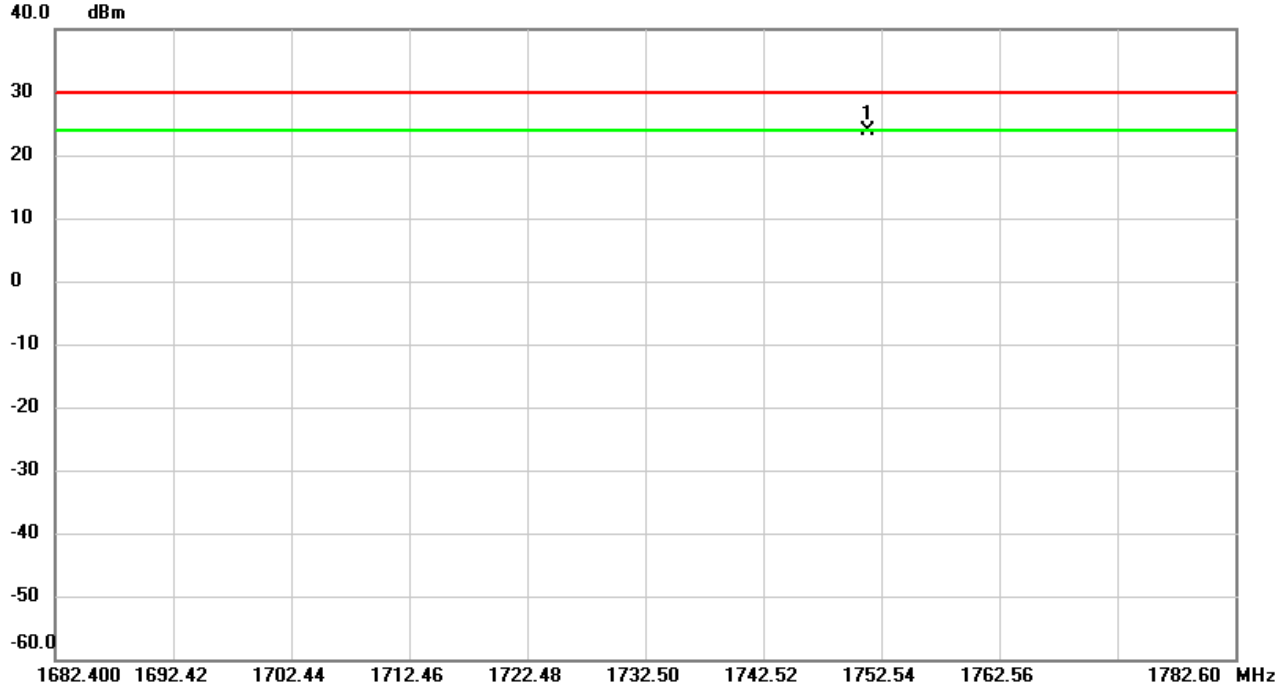
| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1413 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1736.568 | -11.17 | 40.44 | 29.27 | 30.00 | -0.73 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

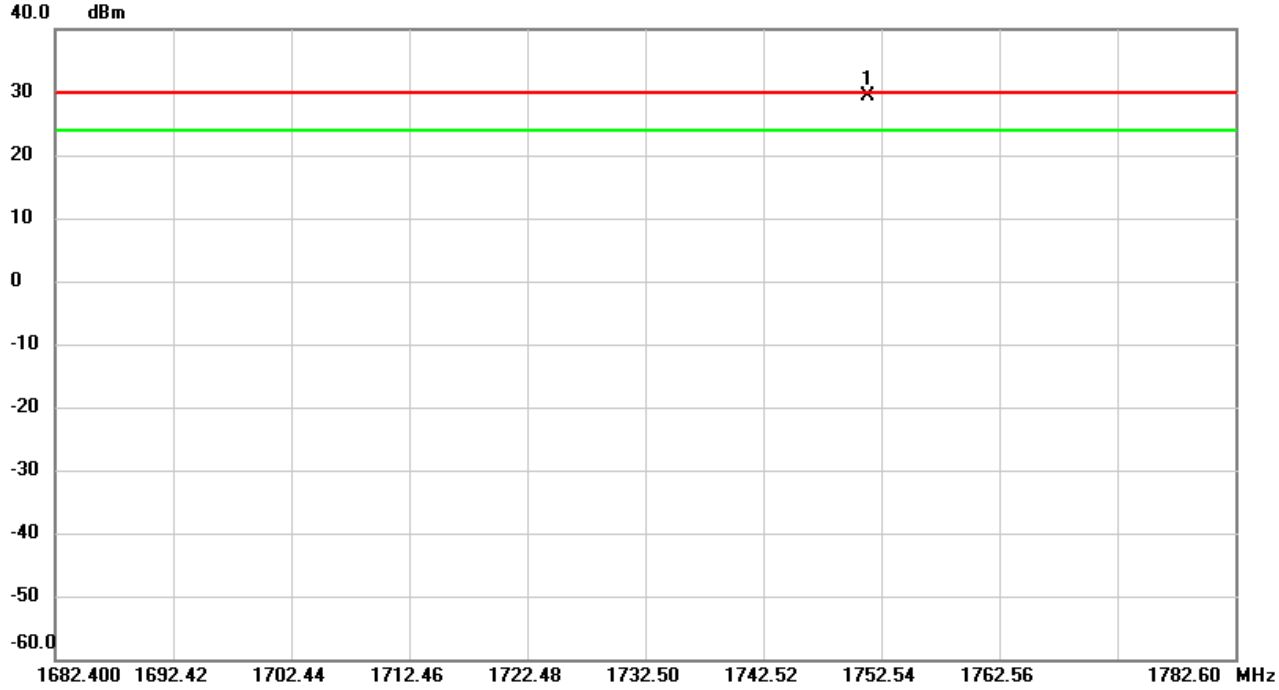
| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1513 | Polarization | Vertical |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1751.438 | -16.54 | 40.38 | 23.84 | 30.00 | -6.16 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | WCDMA Band IV | Test Date | 2022/4/26 |
|---|---|---|---|
| Test Channel | CH1513 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 56% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1751.394 | -11.20 | 40.47 | 29.27 | 30.00 | -0.73 | peak | |

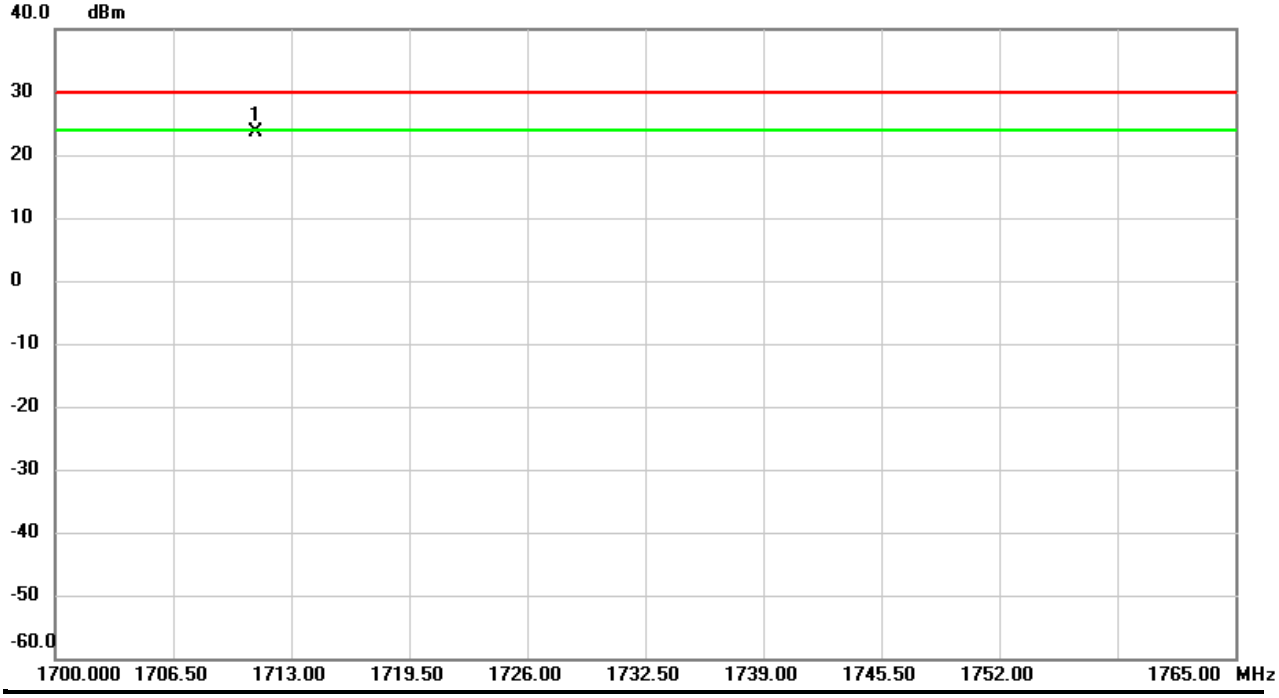
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20050 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1711.076 | -9.78 | 39.12 | 29.34 | 30.00 | -0.66 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

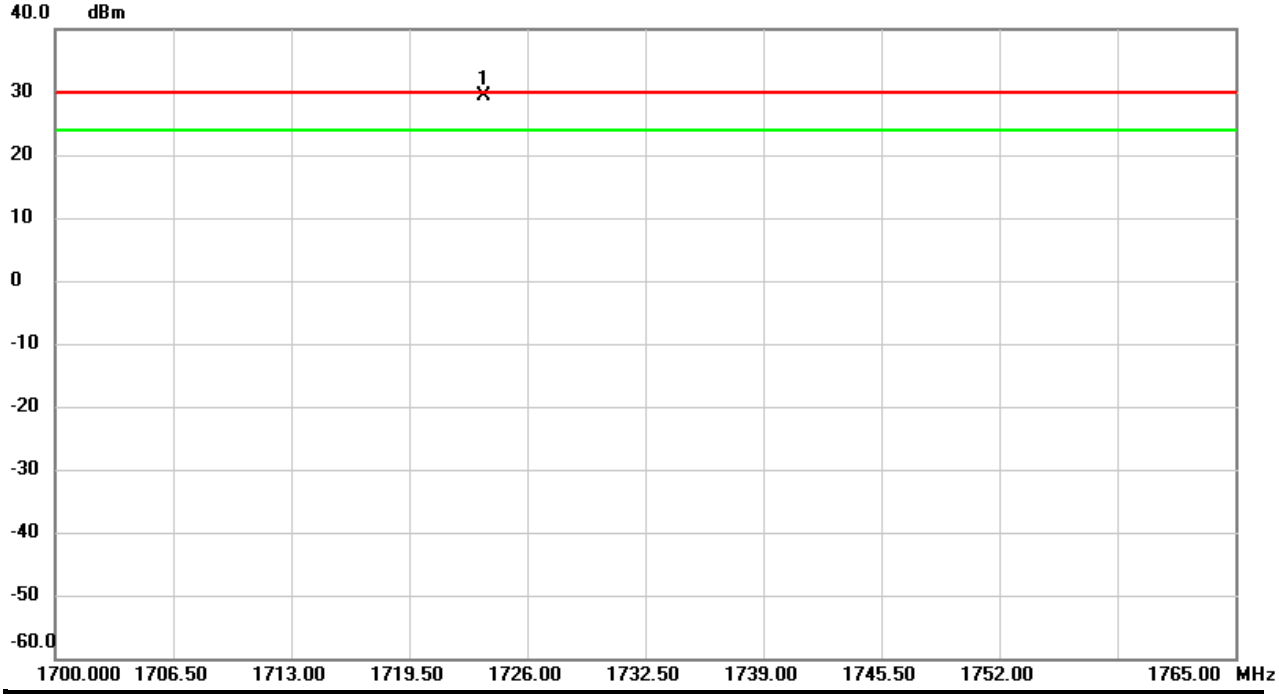
| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20050 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1711.082 | -16.15 | 39.86 | 23.71 | 30.00 | -6.29 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

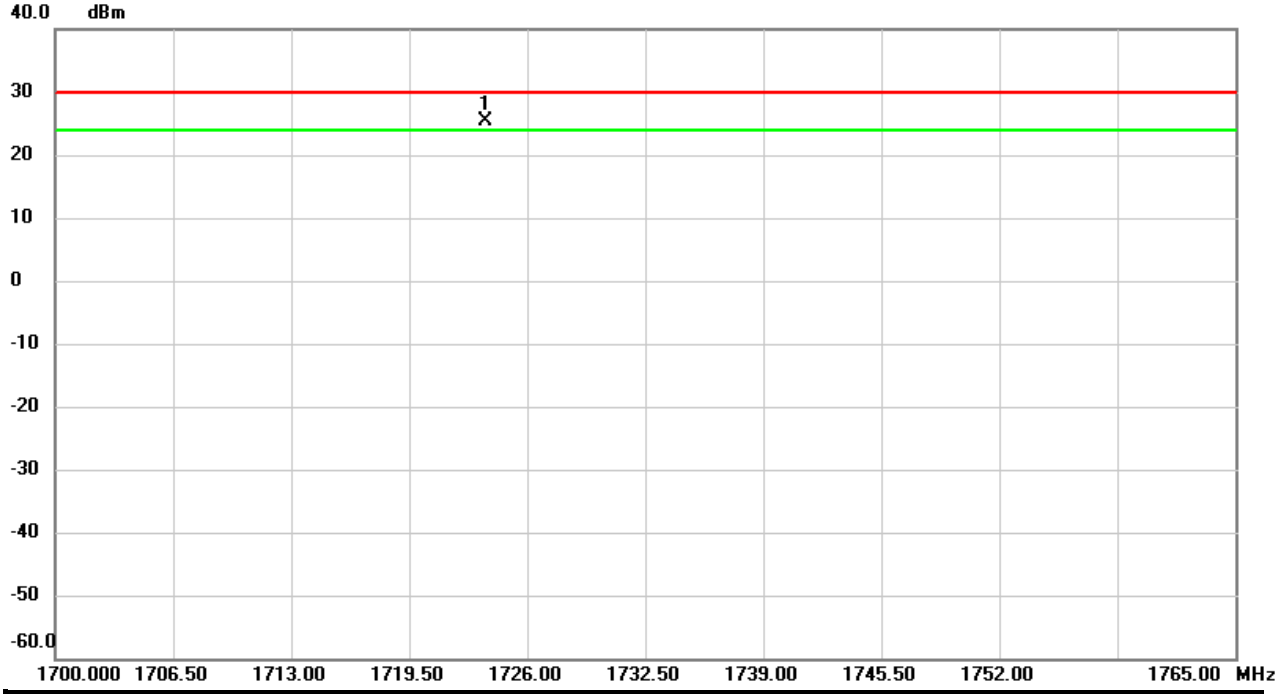
| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20175 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1723.578 | -9.78 | 39.17 | 29.39 | 30.00 | -0.61 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

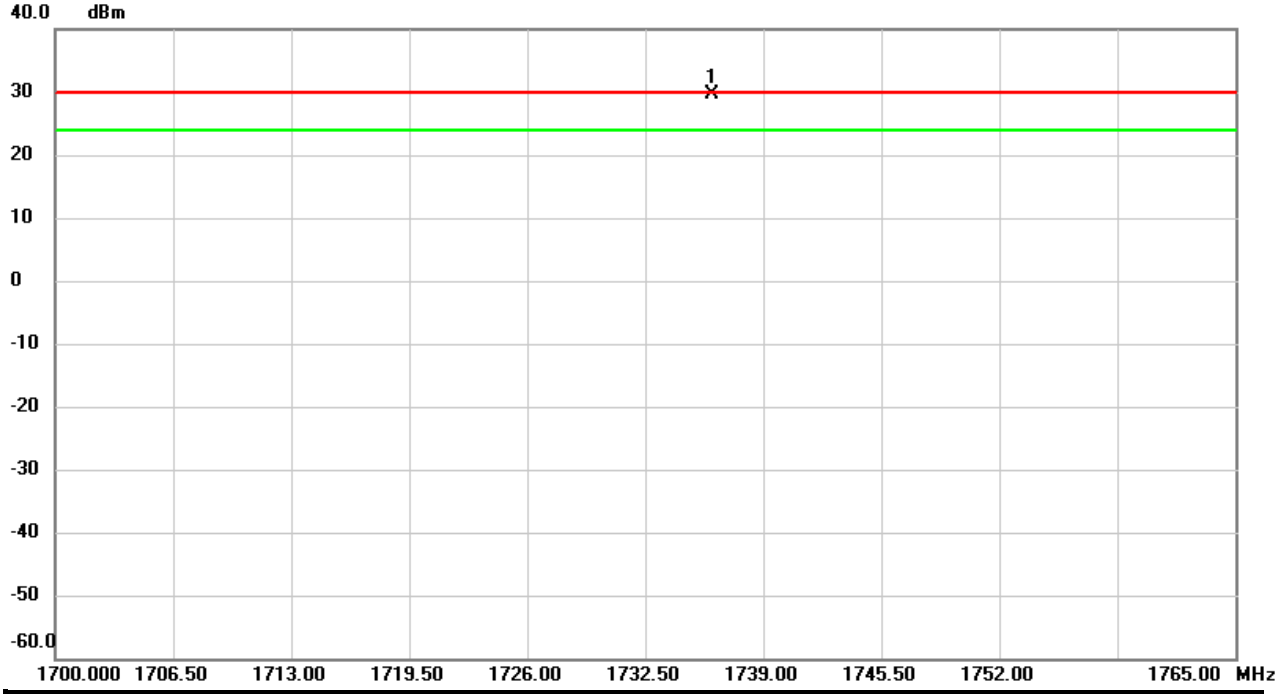
| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20175 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1723.710 | -14.49 | 39.92 | 25.43 | 30.00 | -4.57 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

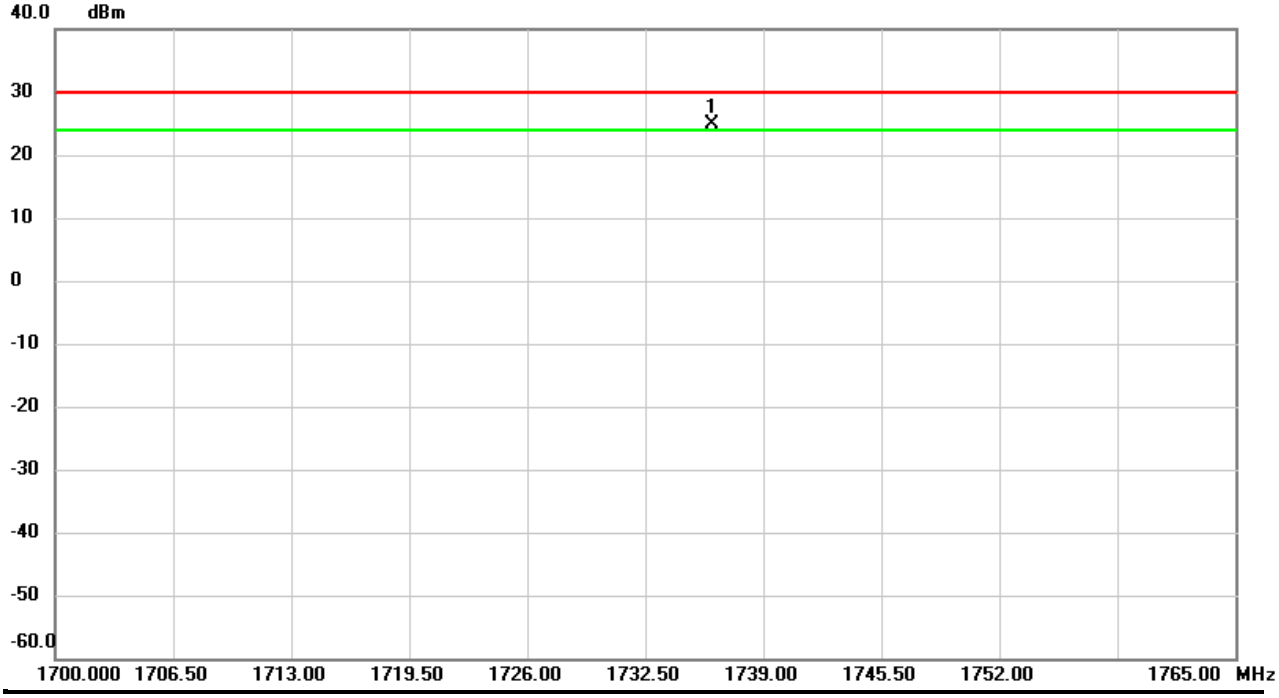
| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20300 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1736.192 | -9.61 | 39.22 | 29.61 | 30.00 | -0.39 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | LTE Band 4 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH20300 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |

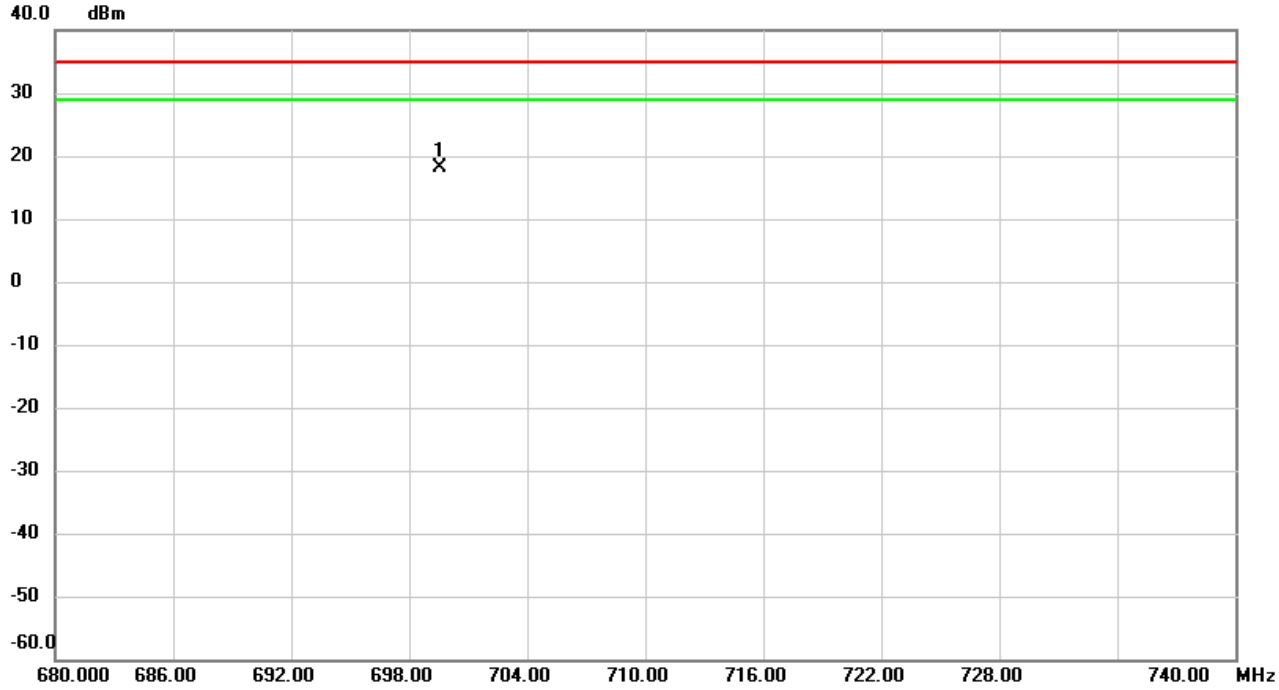



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 1736.218 | -15.19 | 39.99 | 24.80 | 30.00 | -5.20 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

**Effective Radiated Power:**

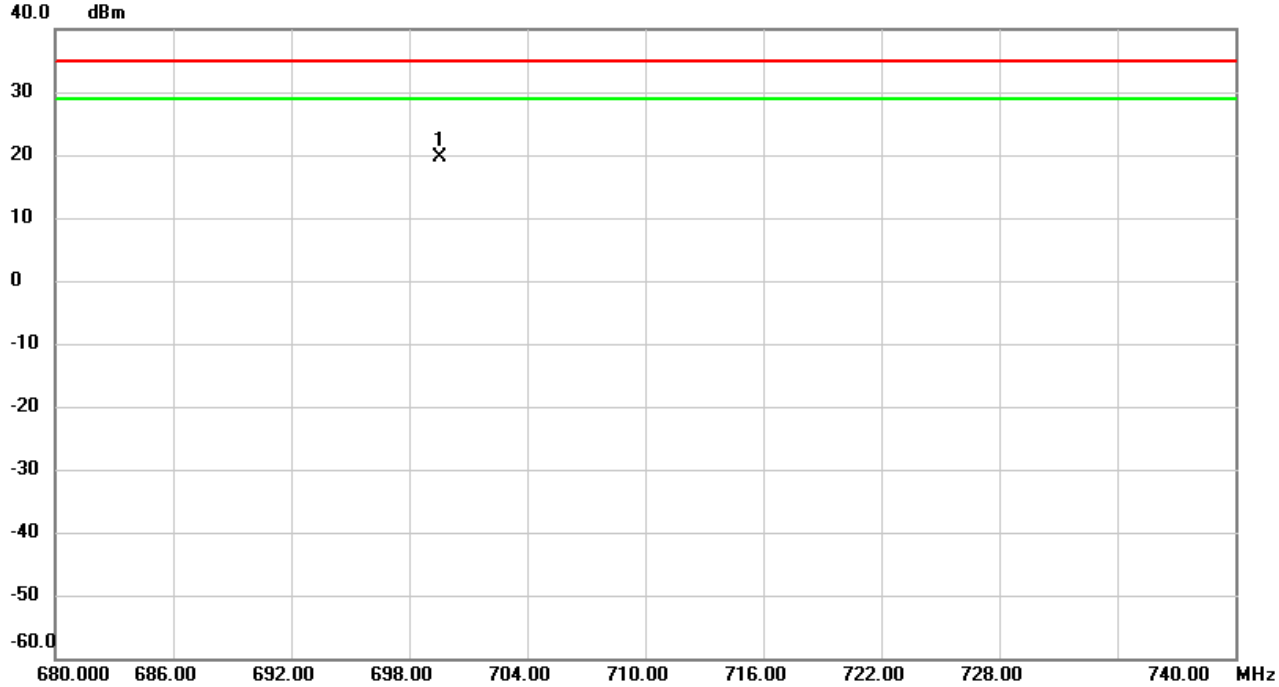
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23060 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 699.5860 | -14.42 | 32.55 | 18.13 | 34.77 | -16.64 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

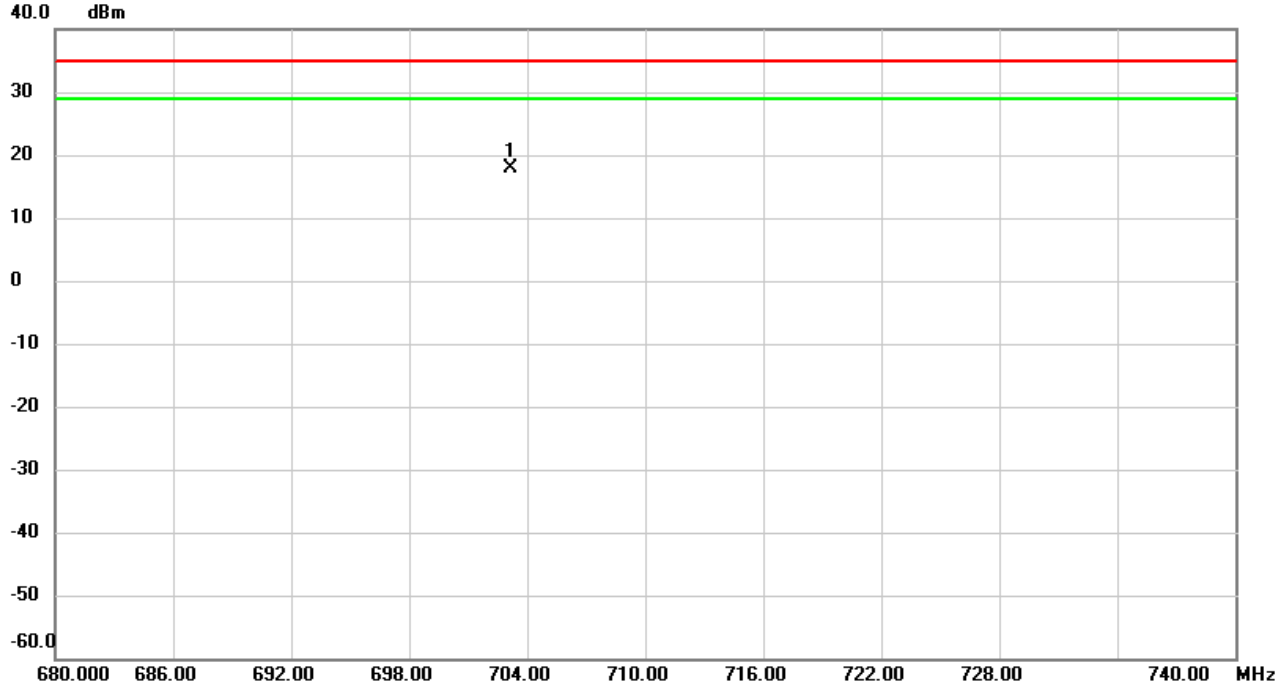
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23060 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 699.5360 | -10.47 | 30.10 | 19.63 | 34.77 | -15.14 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

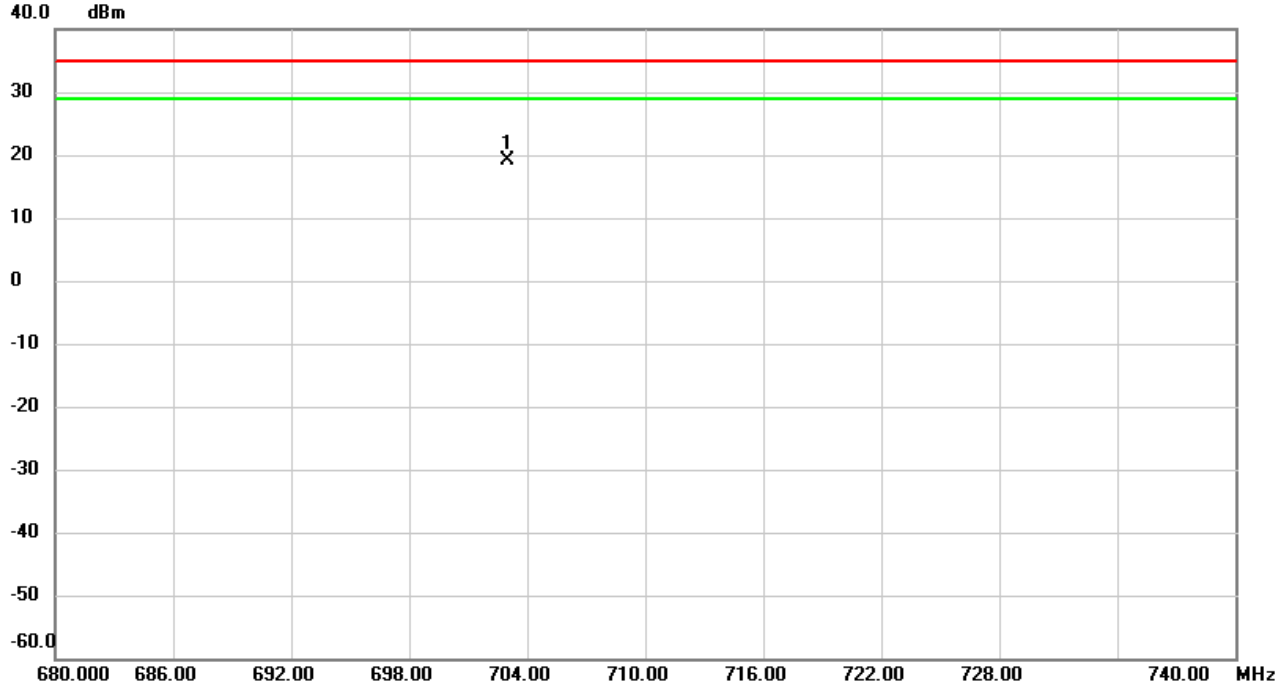
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23095 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 703.1560 | -14.66 | 32.61 | 17.95 | 34.77 | -16.82 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

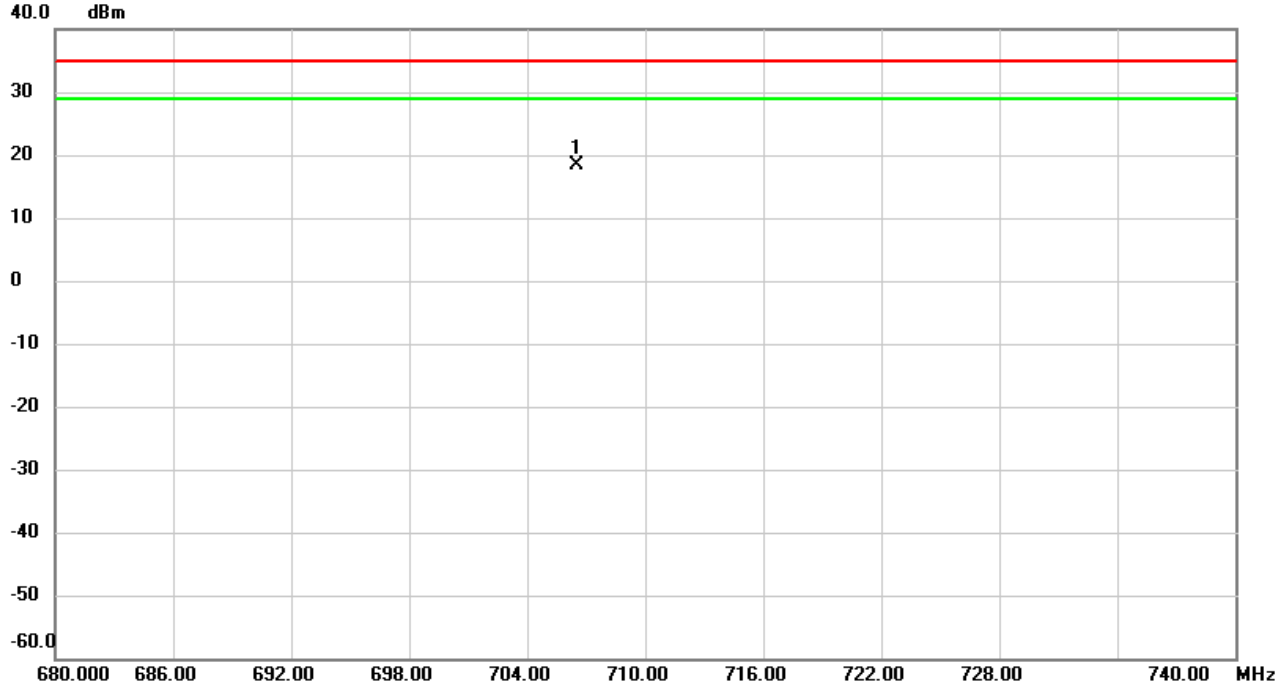
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23095 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 703.0320 | -10.98 | 30.22 | 19.24 | 34.77 | -15.53 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

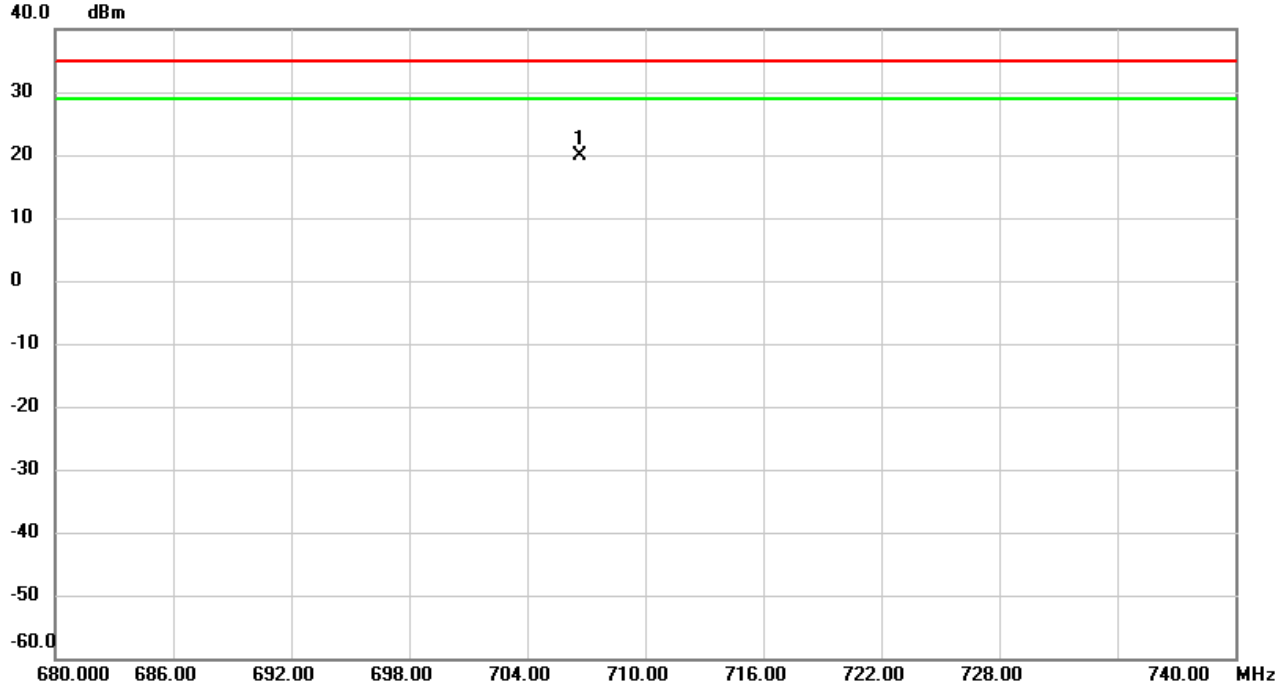
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23130 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 706.5500 | -14.29 | 32.69 | 18.40 | 34.77 | -16.37 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

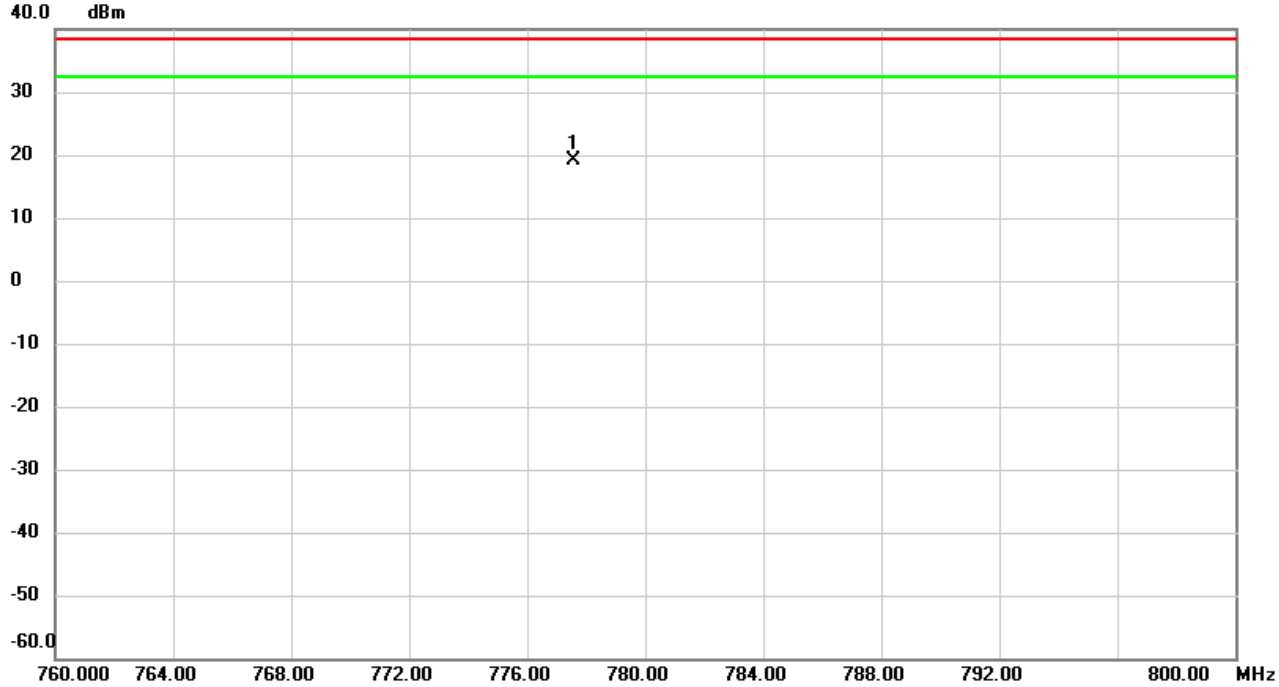
| Test Mode | LTE Band 12 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23130 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 706.6580 | -10.54 | 30.36 | 19.82 | 34.77 | -14.95 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

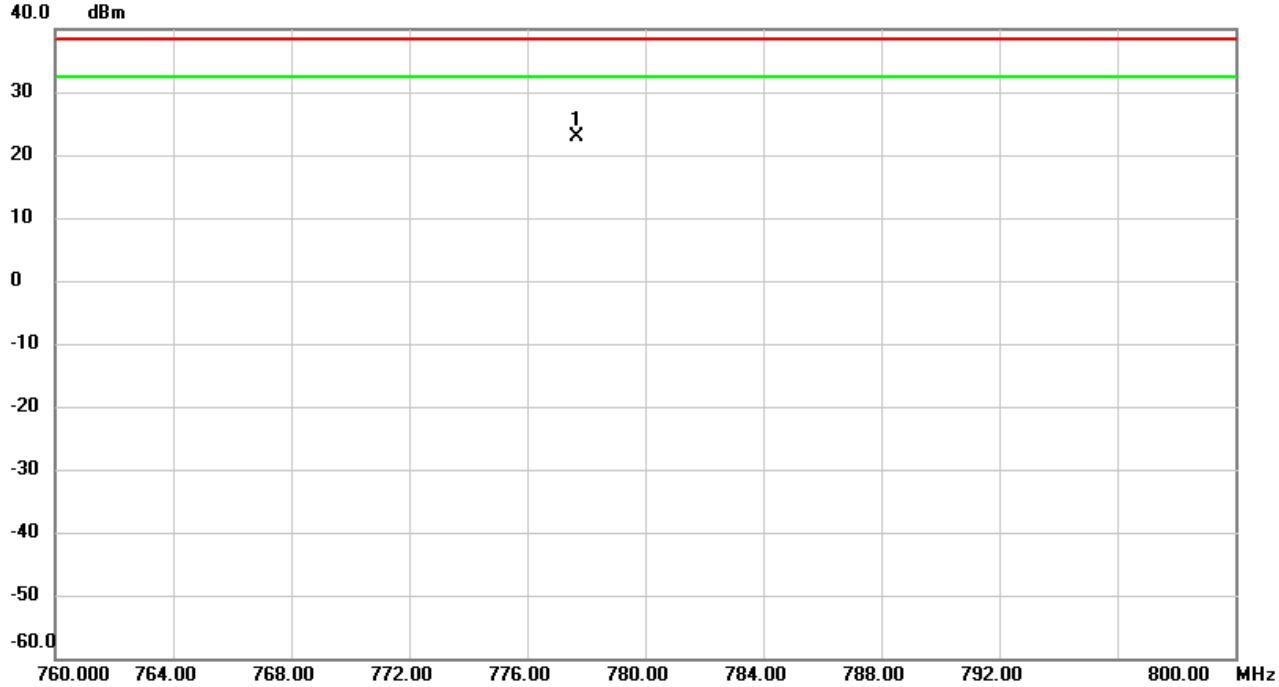
| Test Mode | LTE Band 13 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23230 | Polarization | Vertical |
| Temp | 21°C | Hum. | 64% |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 777.5480 | -14.78 | 34.02 | 19.24 | 38.45 | -19.21 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | LTE Band 13 | Test Date | 2022/3/10 |
|---|---|---|---|
| Test Channel | CH23230 | Polarization | Horizontal |
| Temp | 21°C | Hum. | 64% |

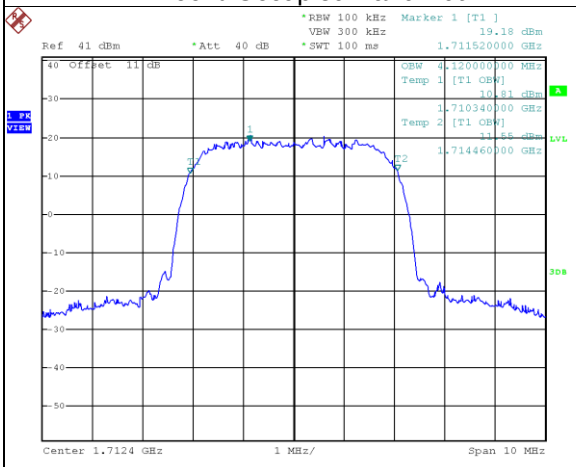
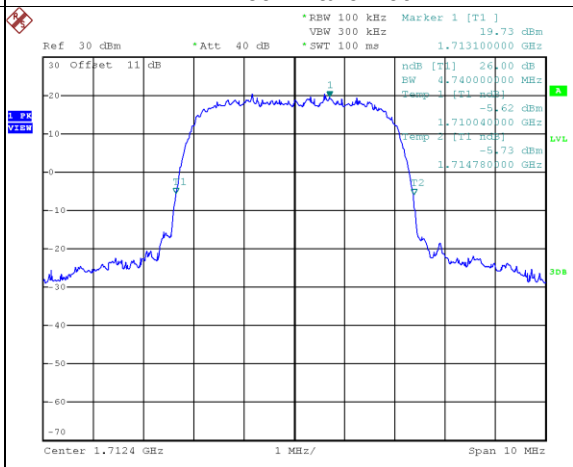
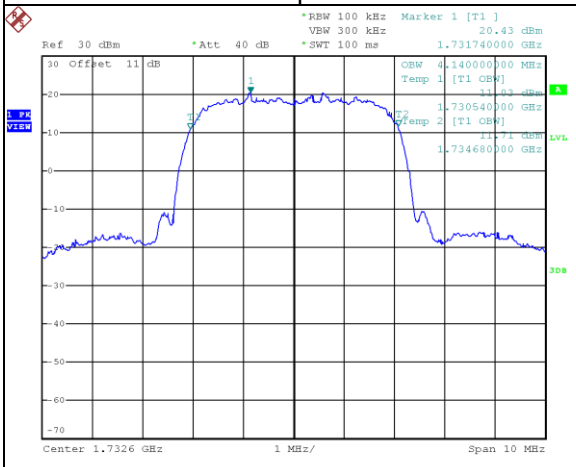
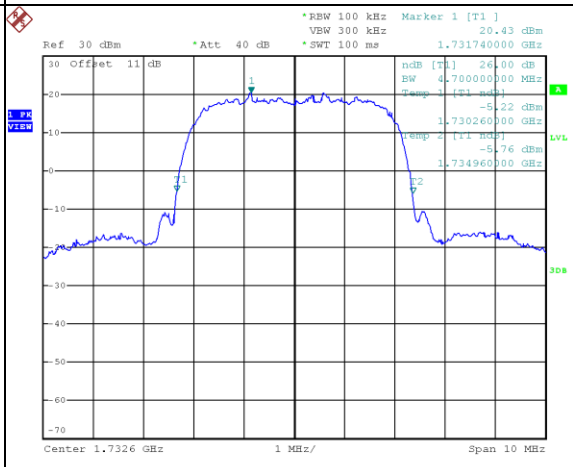


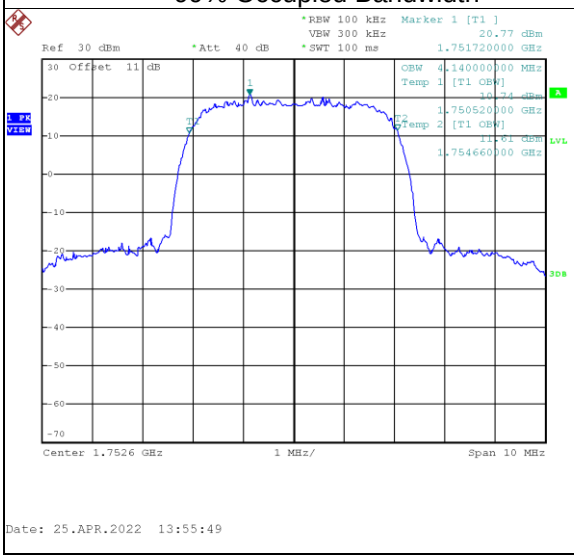
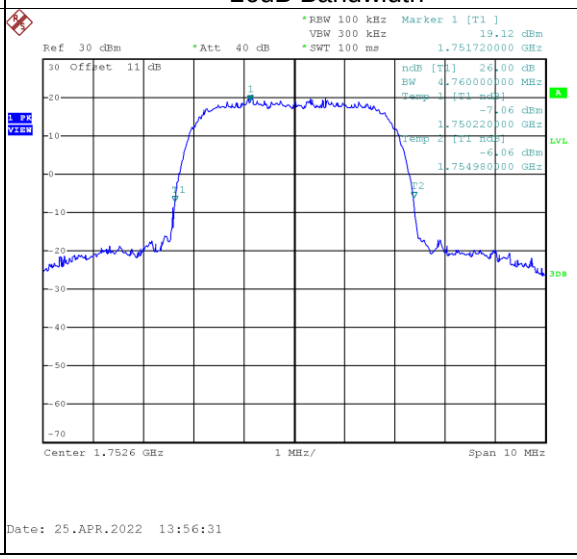

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBm | dB | dBm | dBm | dB | Detector | Comment |
| 1 | * | 777.6640 | -10.41 | 33.24 | 22.83 | 38.45 | -15.62 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

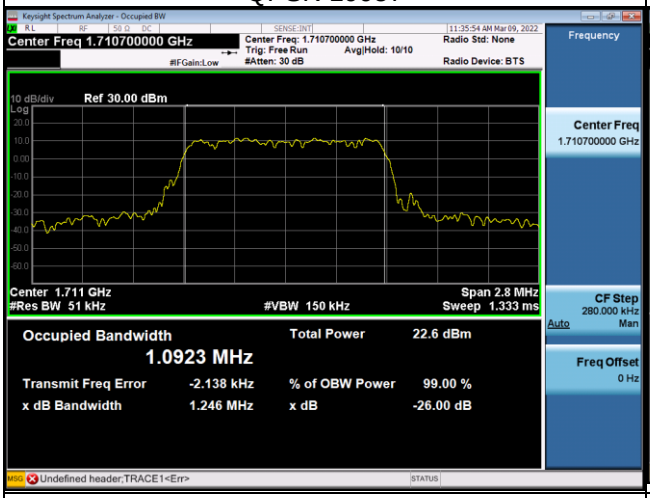
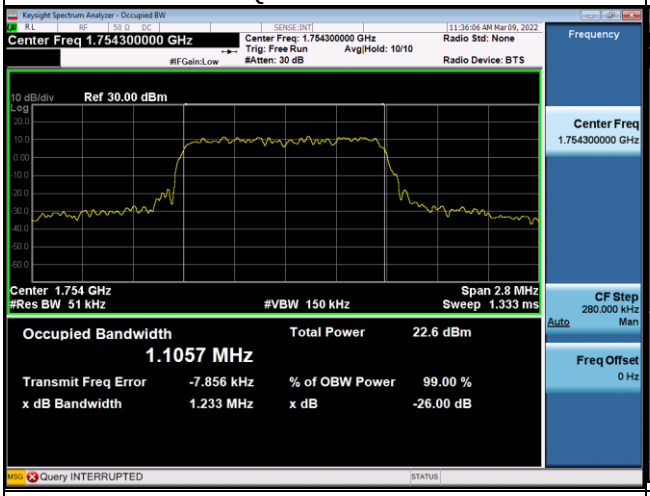
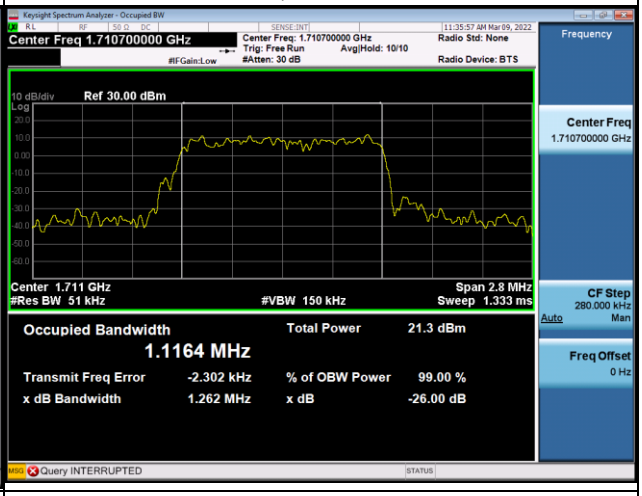
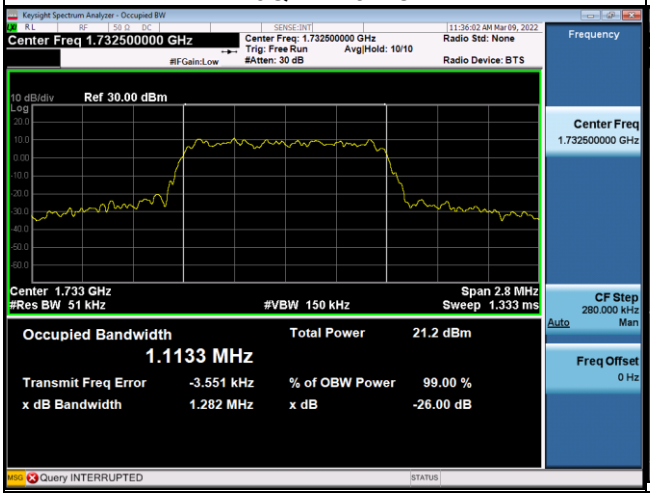
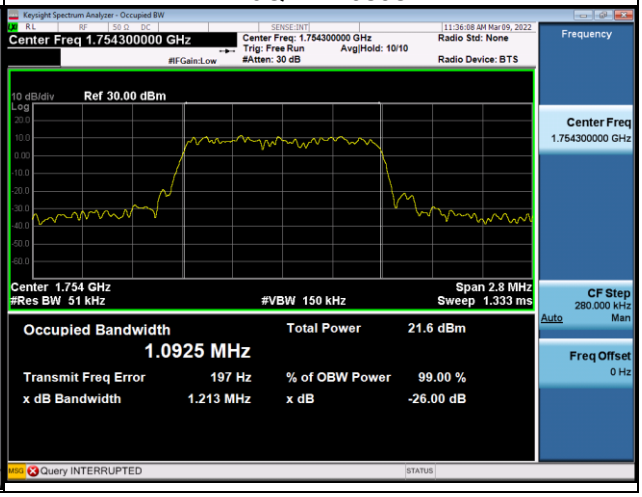
# APPENDIX B OCCUPIED BANDWIDTH

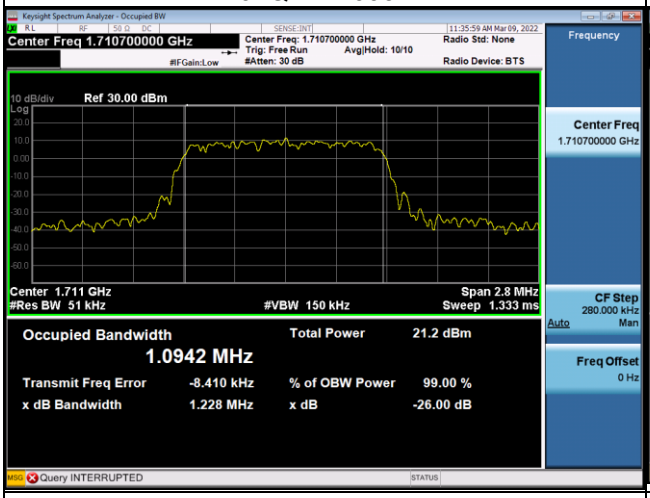
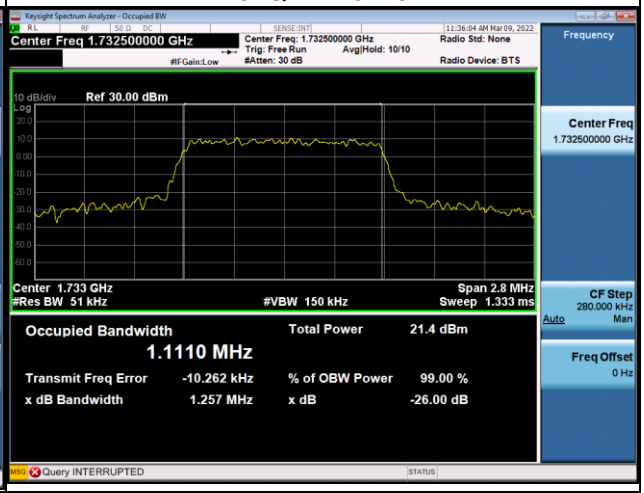
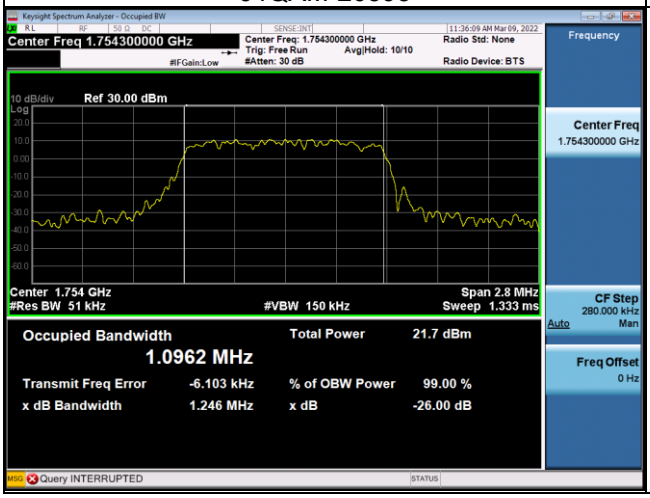
| WCDMA Band IV_WCDMA | | | | | |
|---|---|---|---|---|---|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 1312 | 1712.4 | 4.12 | 1312 | 1712.4 | 4.74 |
| 1413 | 1732.6 | 4.14 | 1413 | 1732.6 | 4.70 |
| 1513 | 1752.6 | 4.14 | 1513 | 1752.6 | 4.76 |

| Spectrum Plot | |
|---|---|
| 1312 | |
| 99% Occupied Bandwidth | 26dB Bandwidth |
|  |  |
| 1413 | |
| 99% Occupied Bandwidth | 26dB Bandwidth |
|  |  |

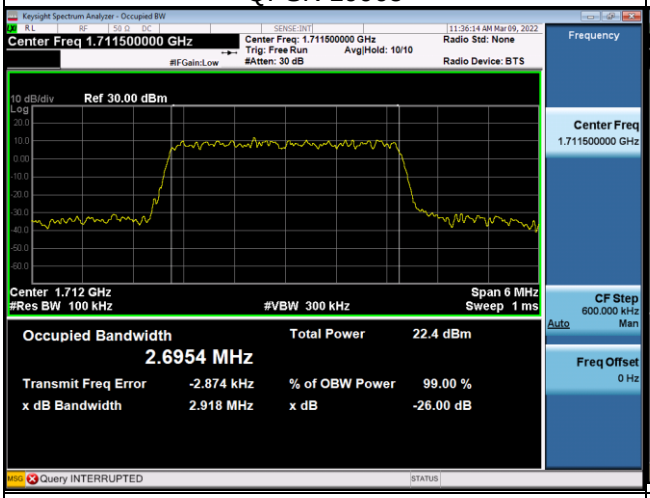
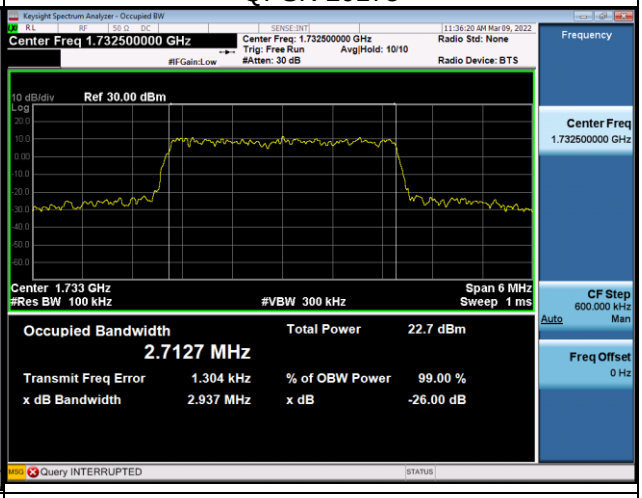
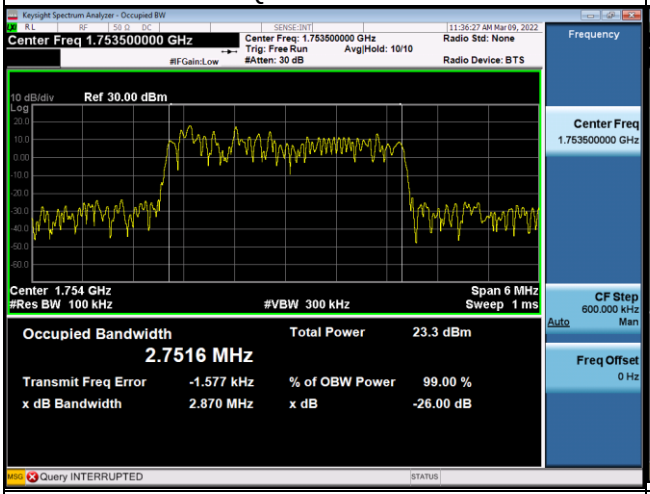
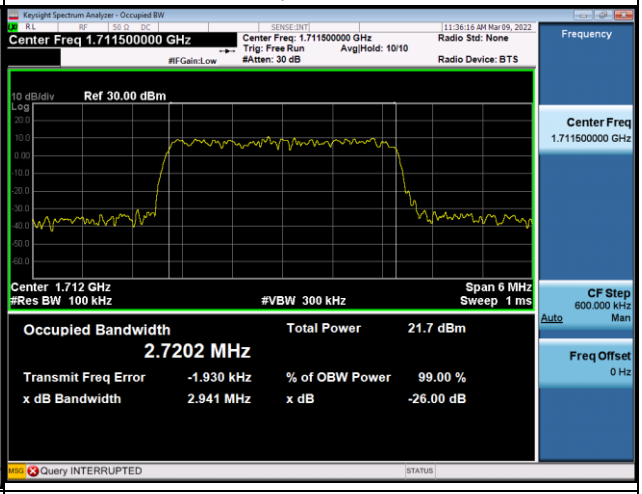
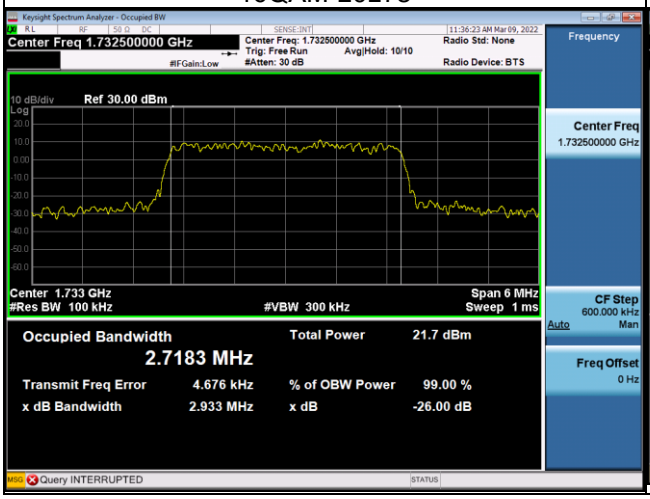
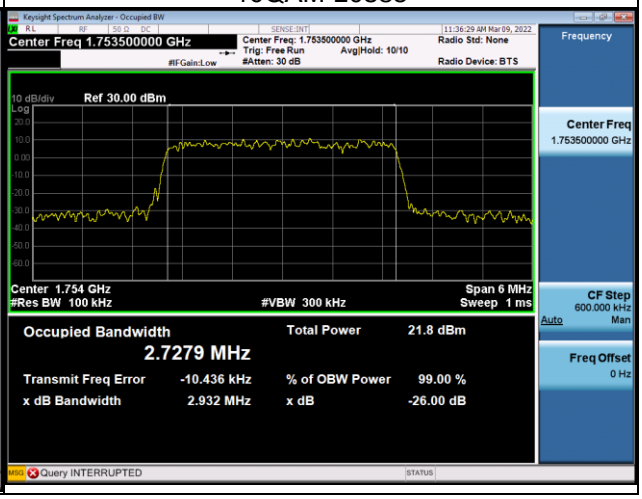
| 1513 | |
|---|---|
| 99% Occupied Bandwidth | 26dB Bandwidth |
|  |  |

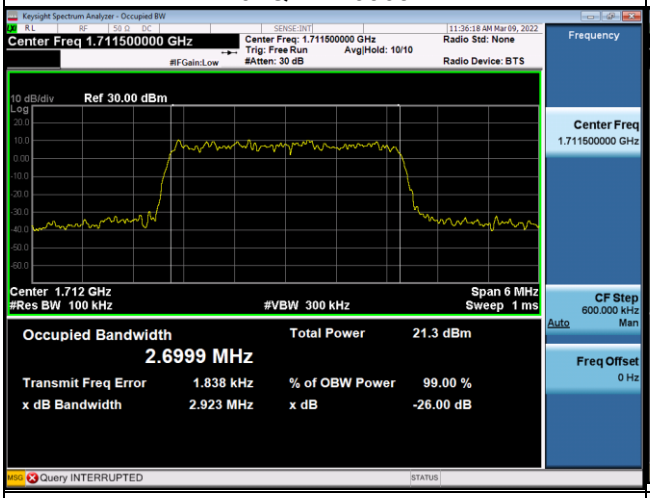
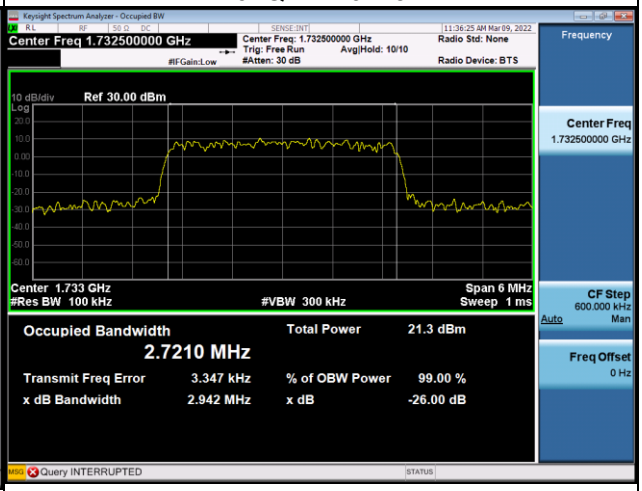
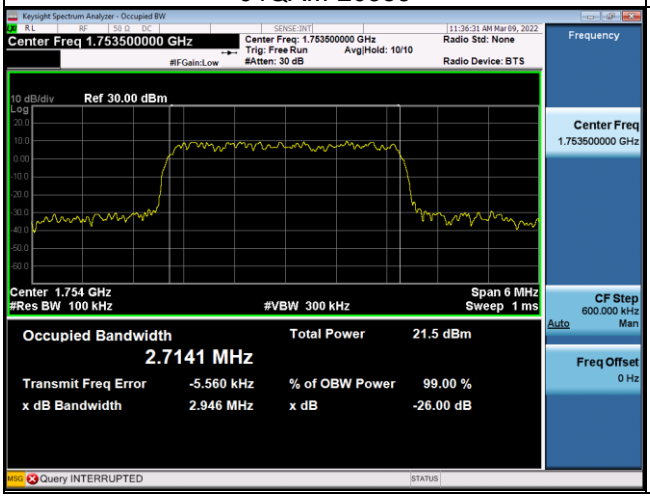
| LTE Band 4_1.4M | | | | | |
|---|---|---|---|---|---|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19957 | 1710.7 | 1.0923 | 19957 | 1710.7 | 1.246 |
| 20175 | 1732.5 | 1.1072 | 20175 | 1732.5 | 1.256 |
| 20393 | 1754.3 | 1.1057 | 20393 | 1754.3 | 1.233 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19957 | 1710.7 | 1.1164 | 19957 | 1710.7 | 1.262 |
| 20175 | 1732.5 | 1.1133 | 20175 | 1732.5 | 1.282 |
| 20393 | 1754.3 | 1.0925 | 20393 | 1754.3 | 1.213 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19957 | 1710.7 | 1.0942 | 19957 | 1710.7 | 1.228 |
| 20175 | 1732.5 | 1.1110 | 20175 | 1732.5 | 1.257 |
| 20393 | 1754.3 | 1.0962 | 20393 | 1754.3 | 1.246 |

| Spectrum Plot | |
|---|---|
| QPSK-19957 | QPSK-20175 |
|  |  |
| QPSK-20393 | 16QAM-19957 |
|  |  |
| 16QAM-20175 | 16QAM-20393 |
|  |  |

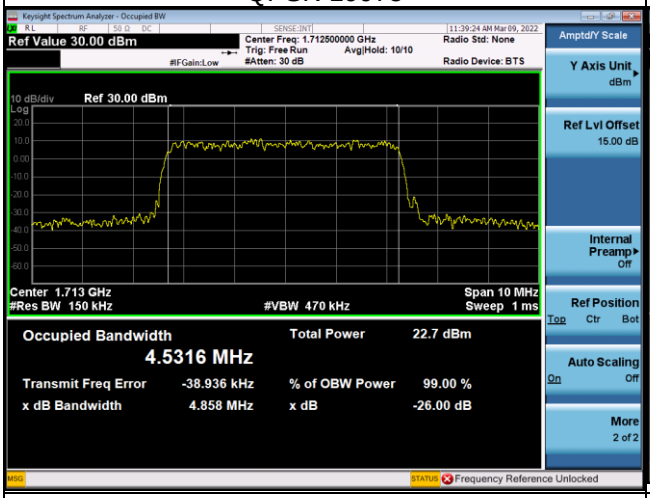
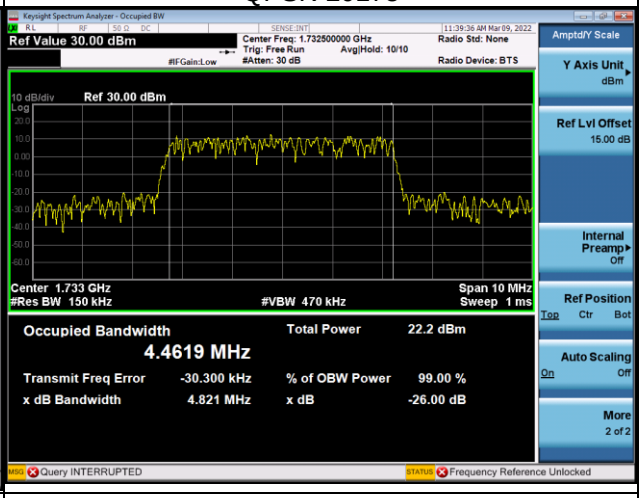
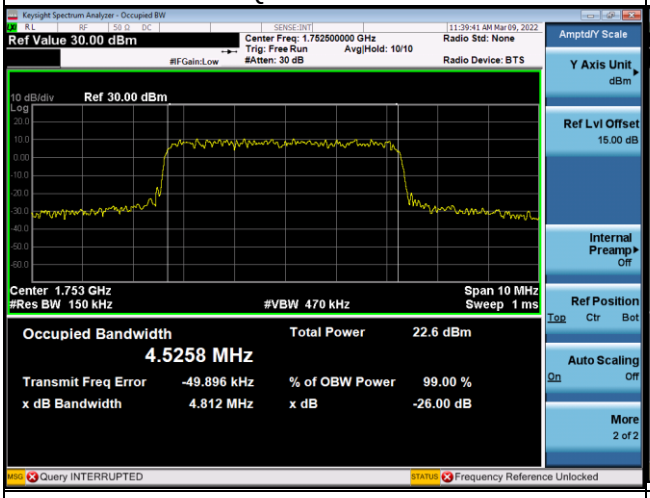
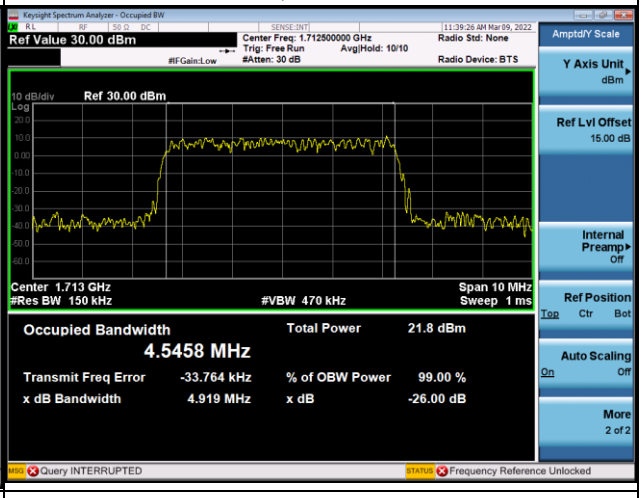
| 64QAM-19957 | 64QAM-20175 |
|---|---|
|  |  |
| 64QAM-20393 | - |
|  | - |

| LTE Band 4_3M | | | | | |
|---|---|---|---|---|---|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19965 | 1711.5 | 2.6954 | 19965 | 1711.5 | 2.918 |
| 20175 | 1732.5 | 2.7127 | 20175 | 1732.5 | 2.937 |
| 20385 | 1753.5 | 2.7516 | 20385 | 1753.5 | 2.870 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19965 | 1711.5 | 2.7202 | 19965 | 1711.5 | 2.941 |
| 20175 | 1732.5 | 2.7183 | 20175 | 1732.5 | 2.933 |
| 20385 | 1753.5 | 2.7279 | 20385 | 1753.5 | 2.932 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19965 | 1711.5 | 2.6999 | 19965 | 1711.5 | 2.923 |
| 20175 | 1732.5 | 2.7210 | 20175 | 1732.5 | 2.942 |
| 20385 | 1753.5 | 2.7141 | 20385 | 1753.5 | 2.946 |

| Spectrum Plot | |
|---|---|
| QPSK-19965 | QPSK-20175 |
|  |  |
| QPSK-20385 | 16QAM-19965 |
|  |  |
| 16QAM-20175 | 16QAM-20385 |
|  |  |

| 64QAM-19965 | 64QAM-20175 |
|---|---|
|  |  |
| 64QAM-20385 | - |
|  | - |

| LTE Band 4_5M | | | | | |
|---|---|---|---|---|---|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19975 | 1712.5 | 4.5316 | 19975 | 1712.5 | 4.858 |
| 20175 | 1732.5 | 4.4619 | 20175 | 1732.5 | 4.821 |
| 20375 | 1752.5 | 4.5258 | 20375 | 1752.5 | 4.812 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19975 | 1712.5 | 4.5458 | 19975 | 1712.5 | 4.919 |
| 20175 | 1732.5 | 4.5380 | 20175 | 1732.5 | 4.856 |
| 20375 | 1752.5 | 4.5077 | 20375 | 1752.5 | 4.882 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 19975 | 1712.5 | 4.5207 | 19975 | 1712.5 | 4.855 |
| 20175 | 1732.5 | 4.4741 | 20175 | 1732.5 | 4.873 |
| 20375 | 1752.5 | 4.5022 | 20375 | 1752.5 | 4.852 |

| Spectrum Plot | |
|---|---|
| QPSK-19975 | QPSK-20175 |
|  |  |
| QPSK-20375 | 16QAM-19975 |
|  |  |
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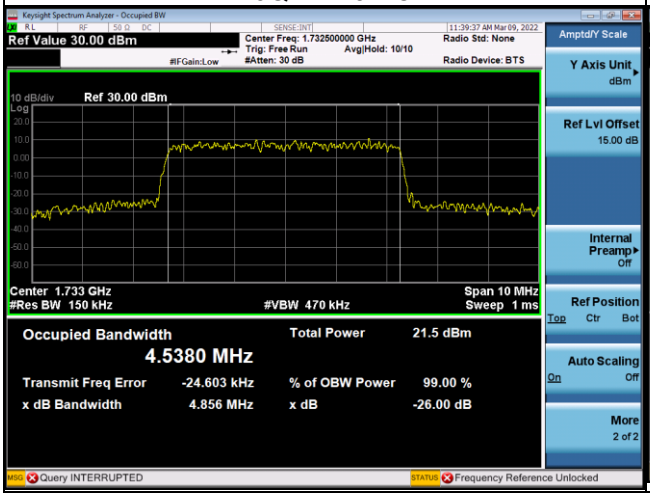
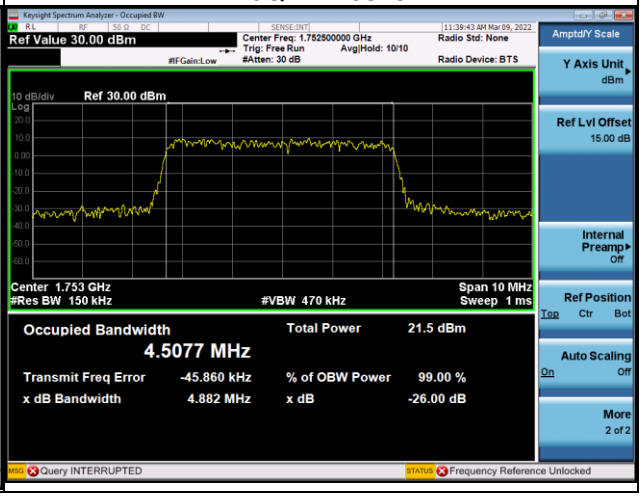
|  |  |

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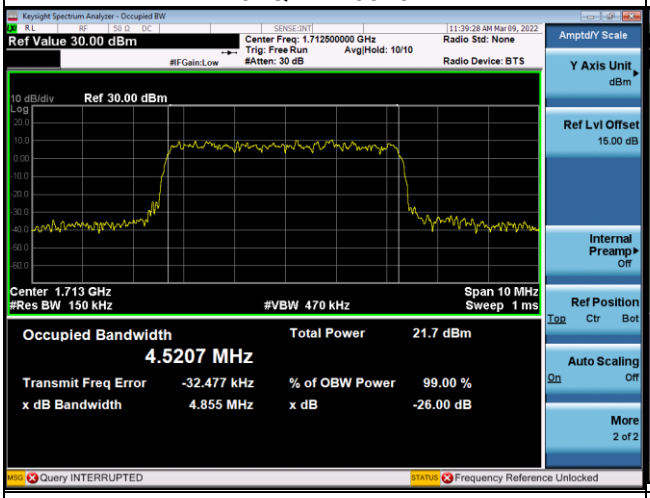
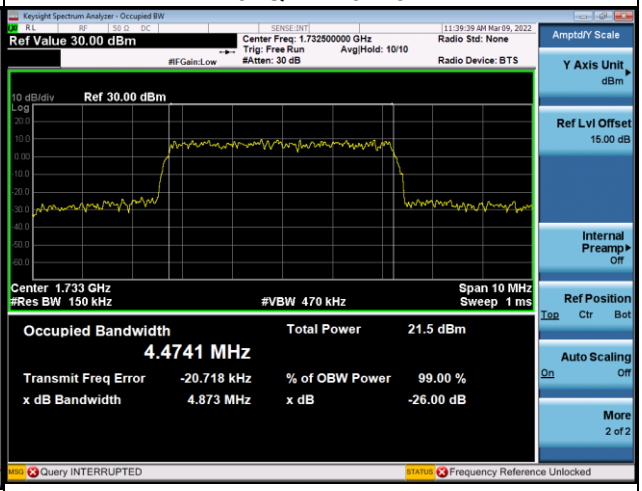
|---|---|
|  |  |
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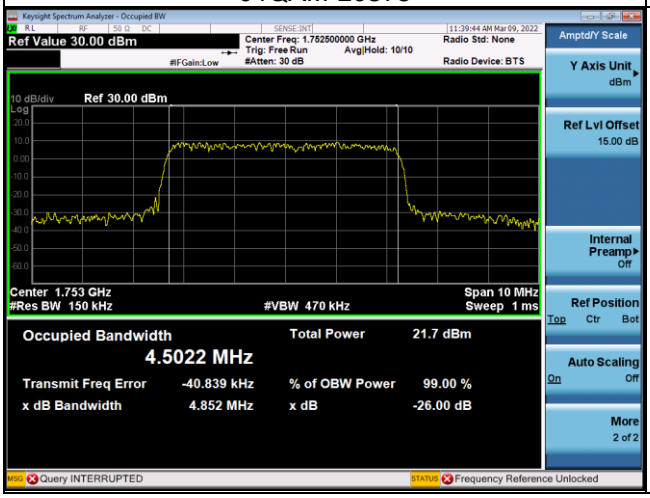
|  | - |

| LTE Band 4_10M | | | | | |
|---|---|---|---|---|---|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 20000 | 1715 | 8.9740 | 20000 | 1715 | 9.483 |
| 20175 | 1732.5 | 8.9413 | 20175 | 1732.5 | 9.417 |
| 20350 | 1750 | 8.8982 | 20350 | 1750 | 9.467 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 20000 | 1715 | 8.8920 | 20000 | 1715 | 9.477 |
| 20175 | 1732.5 | 8.9294 | 20175 | 1732.5 | 9.437 |
| 20350 | 1750 | 8.9375 | 20350 | 1750 | 9.490 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 20000 | 1715 | 8.8918 | 20000 | 1715 | 9.520 |
| 20175 | 1732.5 | 8.9404 | 20175 | 1732.5 | 9.484 |
| 20350 | 1750 | 8.9460 | 20350 | 1750 | 9.568 |