

MEASUREMENT REPORT

FCC PART 2 & 22 & 24 & 27

FCC ID: ZMOFM101GL
Applicant: Fibocom Wireless Inc.

Application Type: Certification
Product: LTE Module
Model No.: FM101-GL
Brand Name: Fibocom
FCC Rule Part(s): Part 2, 22 (H), 24 (E), 27
Test Procedure(s): ANSI C63.26: 2015
Test Date: October 22 ~ December 08, 2021

Reviewed By: _____

Approved By: _____



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

| Report No. | Version | Description | Issue Date | Note |
|---------------|---------|---|------------|---------|
| 2110RSU029-U2 | Rev. 01 | Initial Report | 12-17-2021 | Invalid |
| 2110RSU029-U2 | Rev. 02 | Corrected the calibration date of equipment | 12-22-2021 | Valid |

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2. PRODUCT INFORMATION

2.1. Product Information

| | |
|-----------------------|---|
| Product Name | LTE Module |
| Model No. | FM101-GL |
| Brand Name | Fibocom |
| IMEI | Conducted Measurement: 861023050011477 & 861023050010677 Radiated Measurement: 861023050010610 & 861023050010677 |
| Operating Temperature | -10 ~ 55 °C |
| Power Type | 3.135 ~ 4.4Vdc, typical 3.3Vdc |
| Antenna Information | Refer to Section 2.3 |
| UMTS Specification | |
| Single Band | Band 2, 4, 5 |
| Modulation | Uplink up to 16QAM, Downlink up to 64QAM |
| E-UTRA Specification | |
| Single Band | Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 30, 38, 41, 48, 66, 71 |
| HPUE Band | Band 41 |
| Modulation | Uplink up to 16QAM, Downlink up to 64QAM |

Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

2.2. Radio Specification under Test

| | |
|--|--|
| FDD T _x Frequency Range: | Band 2: 1850 ~ 1910 MHz; Band 4: 1710 ~ 1755 MHz Band 5: 824 ~ 849 MHz; Band 7: 2500 ~ 2570 MHz Band 12: 699 ~ 716 MHz; Band 13: 777 ~ 787 MHz Band 17: 704 ~ 716 MHz; Band 25: 1850 ~ 1915 MHz Band 26: 824 ~ 849 MHz; Band 66: 1710 ~ 1780 MHz Band 71: 663 ~ 698 MHz |
| FDD R _x Frequency Range: | Band 2: 1930 ~ 1990 MHz; Band 4: 2110 ~ 2155 MHz Band 5: 869 ~ 894 MHz; Band 7: 2620 ~ 2690 MHz Band 12: 729 ~ 746 MHz; Band 13: 746 ~ 756 MHz Band 17: 734 ~ 746 MHz; Band 25: 1930 ~ 1995 MHz Band 26: 869 ~ 894 MHz; Band 66: 2110 ~ 2200 MHz Band 71: 617 ~ 652 MHz |
| TDD T _x & R _x Frequency Range: | Band 38: 2570 ~ 2620 MHz; Band 41: 2496 ~ 2690 MHz |

Note 1: For other features of this EUT, test reports will be issued separately.

Note 2: LTE band 26 transmit frequency for part 90 rule is 814 ~ 824MHz and part 22 rule is 824 ~ 849MHz. ERP over 15MHz bandwidth complies the ERP limit line of part 22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies.

2.3. Description of Available Antennas

| Technology | Frequency Range (MHz) | Antenna Type | Max Peak Gain (dBi) |
|-------------|-----------------------|--------------|---------------------|
| LTE Band 2 | 1850 ~ 1910 | PIFA | 4.00 |
| LTE Band 4 | 1710 ~ 1755 | | 3.00 |
| LTE Band 5 | 824 ~ 849 | | 3.00 |
| LTE Band 7 | 2500 ~ 2570 | | 4.00 |
| LTE Band 12 | 699 ~ 716 | | 3.00 |
| LTE Band 13 | 777 ~ 787 | | 3.00 |
| LTE Band 14 | 788 ~ 798 | | 3.00 |
| LTE Band 17 | 704 ~ 716 | | 3.00 |
| LTE Band 25 | 1850 ~ 1915 | | 4.00 |
| LTE Band 26 | 814 ~ 849 | | 3.00 |
| LTE Band 30 | 2305 ~ 2315 | | 1.00 |
| LTE Band 38 | 2570 ~ 2620 | | 4.00 |
| LTE Band 41 | 2500 ~ 2690 | | 4.00 |
| LTE Band 48 | 3550 ~ 3700 | | 1.00 |
| LTE Band 66 | 1710 ~ 1780 | | 3.00 |
| LTE Band 71 | 663 ~ 698 | | 3.00 |

2.4. Test Methodology

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r01: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01: Determining ERP and EIRP

2.5. Device Capabilities

This device contains the following capabilities:

Working on LTE Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 30, 38, 41, 48, 66, 71.

LTE Band 66 (1710 ~ 1780 MHz) overlaps the entire frequency range of LTE Band 4 (1710 ~ 1755 MHz). Therefore, test data provided in this report covers Band 4 as well as Band 66.

LTE Band 25 (1850 ~ 1915 MHz) overlaps the entire frequency range of LTE Band 2 (1850 ~ 1910 MHz). Therefore, test data provided in this report covers Band 2 as well as Band 25.

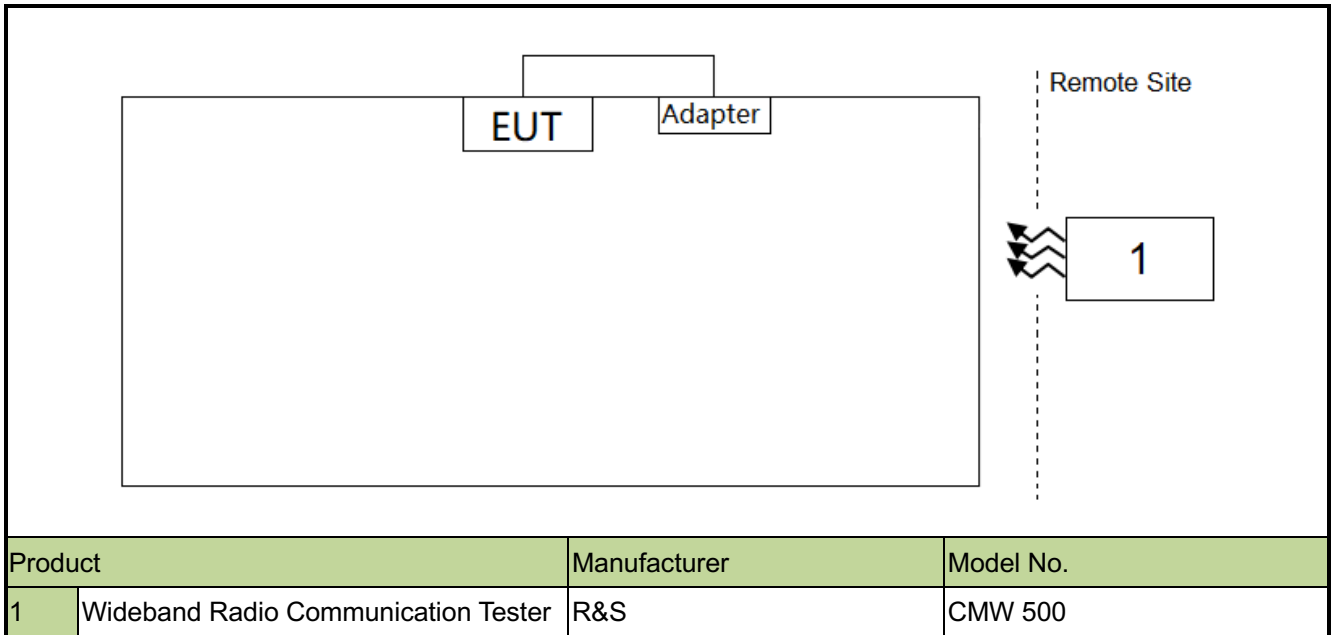
LTE Band 26 (814 ~ 849 MHz) overlaps the entire frequency range of LTE Band 5 (824 ~ 849 MHz). Therefore, test data provided in this report covers Band 5 as well as Band 26.

LTE Band 41 (2496 ~ 2690 MHz) overlaps the entire frequency range of LTE Band 38 (2570 ~ 2620 MHz). Therefore, test data provided in this report covers Band 38 as well as Band 41.

2.6. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.7. Configuration of Tested System



2.8. Test Environment Condition

| | |
|---------------------|-------------|
| Ambient Temperature | 15 ~ 35°C |
| Relative Humidity | 20% ~ 75%RH |

3. TEST EQUIPMENT CALIBRATION DATE

| Instrument Name | Manufacturer | Model No. | Asset No. | Cali. Interval | Cal. Due Date | Test Site |
|--|--------------|-------------|-------------|----------------|---------------|-----------|
| Communication Tester | R&S | CMU 200 | MRTSUE06009 | 1 year | 2022/9/7 | SIP-SR1 |
| Communication Tester | R&S | CMW500 | MRTSUE06243 | 1 year | 2022/10/10 | SIP-SR1 |
| Signal Generator | Keysight | E8257D | MRTSUE06453 | 1 year | 2022/6/24 | SIP-SR1 |
| Thermohygrometer | testo | 622 | MRTSUE06629 | 1 year | 2021/11/25 | SIP-SR1 |
| Thermohygrometer | testo | 622 | MRTSUE06629 | 1 year | 2022/11/2 | SIP-SR1 |
| Signal Generator | Keysight | E8257D | MRTSUE06904 | 1 year | 2021/12/8 | SIP-SR1 |
| Signal Generator | Keysight | E8257D | MRTSUE06904 | 1 year | 2022/11/23 | SIP-SR1 |
| DC POWER MODULE | Keysight | N6743B | MRTSUE06905 | / | / | SIP-SR1 |
| DC POWER MODULE | Keysight | N6743B | MRTSUE06906 | / | / | SIP-SR1 |
| Low-Profile Modular Power System Mainframe | Keysight | N6700C | MRTSUE06907 | / | / | SIP-SR1 |
| Signal Analyzer | Keysight | N9021B | MRTSUE06915 | 1 year | 2022/1/18 | SIP-SR1 |
| Temperature Chamber | BAOYT | BYG-80CL | MRTSUE06932 | 1 year | 2022/3/16 | SIP-SR1 |
| Shielding Room | MIX-BEP | SIP-SR1 | MRTSUE06948 | / | / | SIP-SR1 |
| EMI Test Receiver | R&S | ESR3 | MRTSUE06185 | 1 year | 2022/1/12 | SIP-AC2 |
| Signal Analyzer | Keysight | N9010B | MRTSUE06559 | 1 year | 2022/6/24 | SIP-AC2 |
| Horn Antenna | Schwarzbeck | BBHA 9170 | MRTSUE06599 | 1 year | 2022/10/20 | SIP-AC2 |
| Preamplifier | EMCI | EMC184045SE | MRTSUE06602 | 1 year | 2022/10/11 | SIP-AC2 |
| Thermohygrometer | testo | 608-H1 | MRTSUE06623 | 1 year | 2021/12/3 | SIP-AC2 |
| Thermohygrometer | testo | 608-H1 | MRTSUE06623 | 1 year | 2022/11/28 | SIP-AC2 |
| Thermohygrometer | testo | 608-H1 | MRTSUE06624 | 1 year | 2021/12/3 | SIP-AC2 |
| Thermohygrometer | testo | 608-H1 | MRTSUE06624 | 1 year | 2022/11/28 | SIP-AC2 |
| Preamplifier | EMCI | EMC051845SE | MRTSUE06644 | 1 year | 2021/11/9 | SIP-AC2 |
| Preamplifier | EMCI | EMC051845SE | MRTSUE06644 | 1 year | 2022/11/8 | SIP-AC2 |
| TRILOG Antenna | Schwarzbeck | VULB 9168 | MRTSUE06647 | 1 year | 2022/8/5 | SIP-AC2 |
| Horn Antenna | Schwarzbeck | BBHA 9120D | MRTSUE06648 | 1 year | 2021/11/26 | SIP-AC2 |
| Horn Antenna | Schwarzbeck | BBHA 9120D | MRTSUE06648 | 1 year | 2022/11/9 | SIP-AC2 |
| Anechoic Chamber | RIKEN | SIP-AC2 | MRTSUE06781 | 1 year | 2021/12/24 | SIP-AC2 |

| Software | Version | Function |
|--------------|---------|-------------------|
| EMI Software | V3 | EMI Test Software |

4. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

| |
|--|
| Radiated Spurious Emissions |
| Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): Horizontal: 9kHz ~ 300MHz: 5.04dB 300MHz ~ 1GHz: 4.95dB 1GHz ~ 40GHz: 6.40dB Vertical: 9kHz ~ 300MHz: 5.24dB 300MHz ~ 1GHz: 6.03dB 1GHz ~ 40GHz: 6.40dB |
| Conducted Spurious Emissions |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.78dB |
| Output Power |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.13dB |
| Occupied Bandwidth |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.28% |
| Frequency Stability |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 76.2Hz |

5. TEST RESULT

5.1. Summary

| FCC Part Section(s) | Test Description | Test Limit | Test Condition | Test Result | Reference |
|--|---|----------------------|----------------|-------------|-------------|
| 2.1049 | Occupied Bandwidth | N/A | Conducted | Pass | Section 5.2 |
| 2.1055, 22.355 24.235, 27.54 | Frequency Stability | < 2.5 ppm | | Pass | Section 5.3 |
| 22.913(a)(5) | Equivalent Radiated Power (Band 5/26) | < 7 Watts Max ERP | | Pass | Section 5.4 |
| 27.50(b)(9) 27.50(c)(9) | Equivalent Radiated Power (Band 12, 13, 17) | < 30 Watts Max ERP | | | |
| 27.50(c)(10) | Equivalent Radiated Power (Band 71) | < 3 Watts Max ERP | | | |
| 24.232(c) 27.50(h)(2) | Equivalent Isotropic Radiated Power (Band 2/25, 7, 38/41) | < 2 Watts Max EIRP | | | |
| 27.50(d)(4) 27.50(j)(3) | Equivalent Isotropic Radiated Power (Band 4/66) | < 1 Watts Max EIRP | | | |
| 2.1051, 22.917(a) 24.238(a), 27.53(c), (g), (h), (l)(2), (m) | Band Edge | Refer to section 5.5 | | Pass | Section 5.5 |
| 24.232(d), 27.50(d)(5) | Peak to Average Ratio | < 13dB | | Pass | Section 5.6 |
| 2.1051, 22.917(a) 24.238(a), 27.53(c), (g), (h), (l)(2), (m) | Spurious Emission | Refer to section 5.7 | | Pass | Section 5.7 |
| 2.1051, 22.917(a) 24.238(a), 27.53(c), (g), (h), (l)(2), (m) | Spurious Emission | Refer to section 5.8 | Radiated | Pass | Section 5.8 |

Notes:

- 1) The analyzer plots shown in this report were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 2) All supported modulation types were evaluated. The worst-case emission of modulation was selected. Therefore, the Frequency Stability, Channel Band Edge, Conducted Spurious Emission, Radiated Spurious Emission were presented the worst-case in the test report.

5.2. Occupied Bandwidth Measurement

5.2.1. Test Limit

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

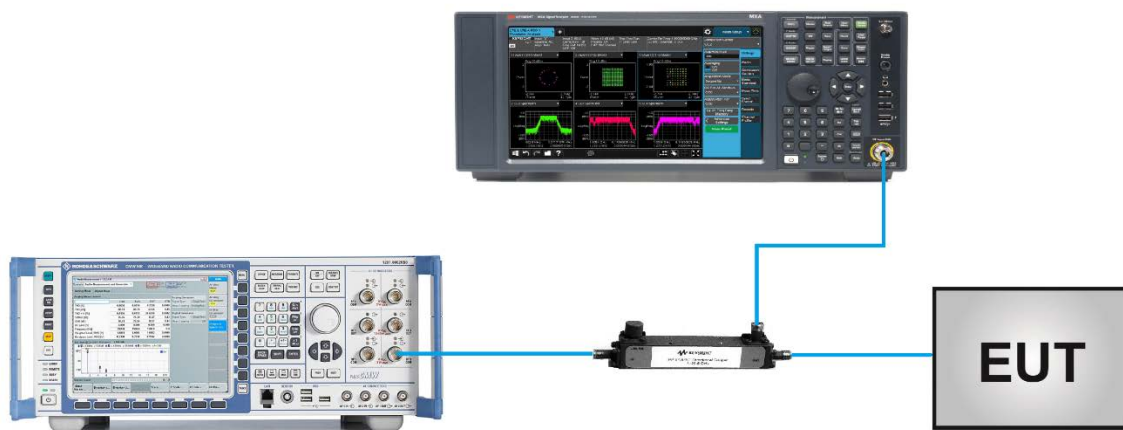
5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.4

5.2.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency
2. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

5.2.4. Test Setup



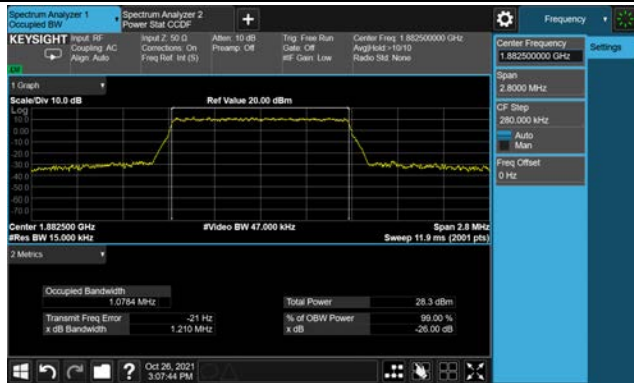
5.2.5.Test Result

| | | | |
|---------------|------------|-----------|-------------------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/26 ~ 2021/11/22 |
| Test Band | Band 2/25 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 26365 | 1882.5 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.48 |
| | | 10 | 8.95 |
| | | 15 | 13.41 |
| | | 20 | 17.90 |
| 16QAM | | | |
| 26365 | 1882.5 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.47 |
| | | 10 | 8.94 |
| | | 15 | 13.40 |
| | | 20 | 17.89 |

99% Bandwidth - QPSK

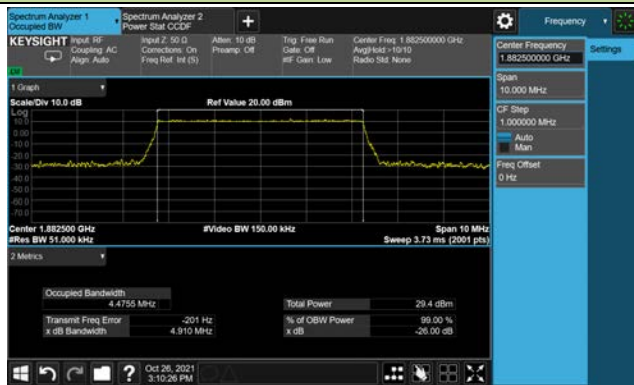
1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth

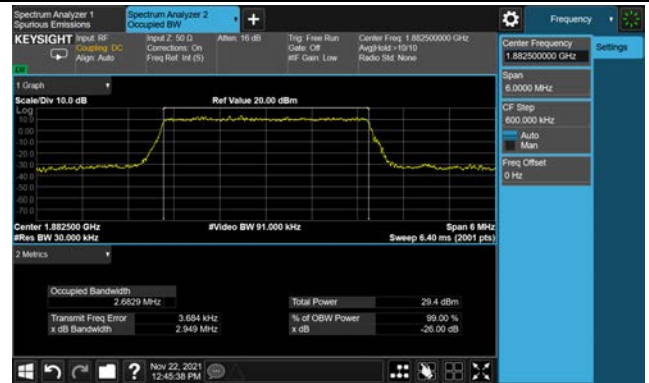


99% Bandwidth - 16QAM

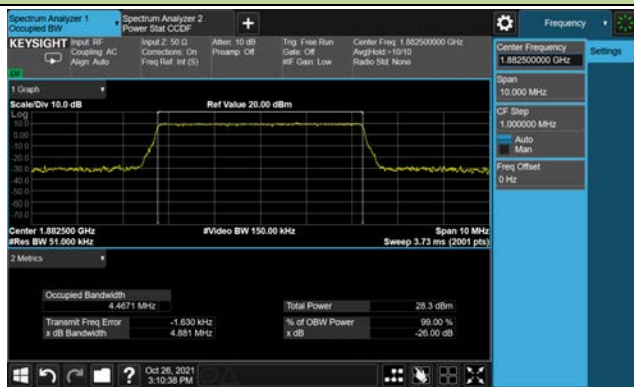
1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



| | | | |
|---------------|------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | Band 4/66 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 20300 | 1745.0 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.48 |
| | | 10 | 8.95 |
| | | 15 | 13.41 |
| | | 20 | 17.87 |
| 16QAM | | | |
| 20300 | 1745.0 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.47 |
| | | 10 | 8.95 |
| | | 15 | 13.41 |
| | | 20 | 17.87 |

99% Bandwidth - QPSK

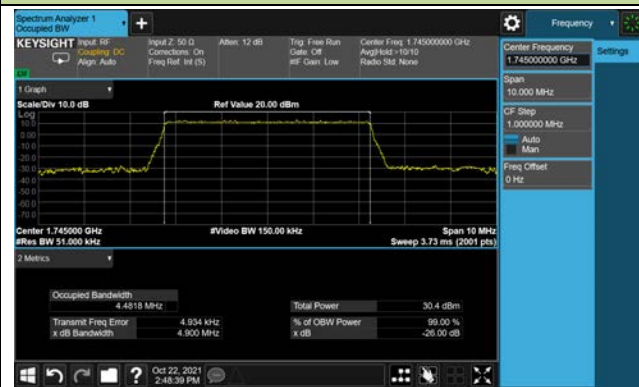
1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



99% Bandwidth - 16QAM

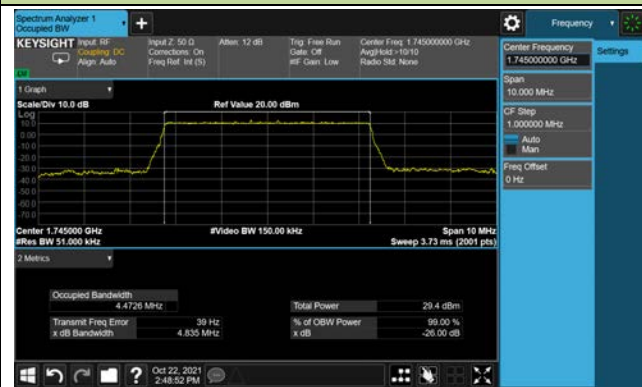
1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



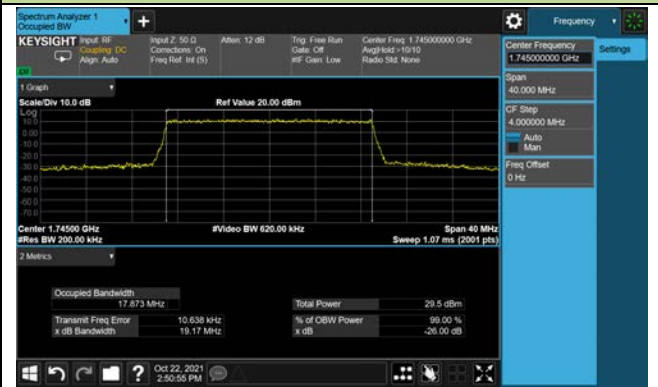
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | LTE Band 5/26 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 20525 | 836.5 | 1.4 | 1.08 |
| | | 3 | 2.69 |
| | | 5 | 4.49 |
| | | 10 | 8.95 |
| | | 15 | 13.43 |
| 27185 | 821.5 | 15 | 13.41 |
| 16QAM | | | |
| 20525 | 836.5 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.47 |
| | | 10 | 8.94 |
| | | 15 | 13.41 |
| 27185 | 821.5 | 15 | 13.41 |

99% Bandwidth - QPSK

1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



821.5MHz



99% Bandwidth -16QAM

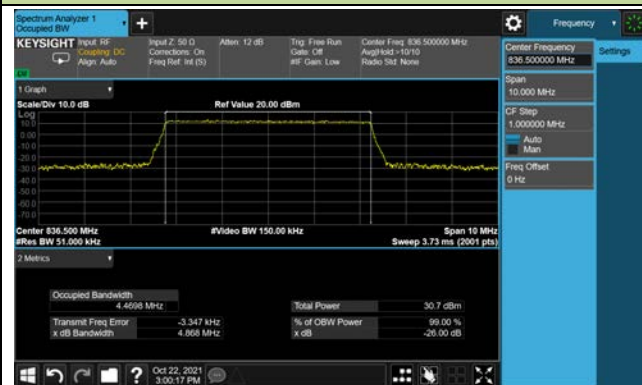
1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



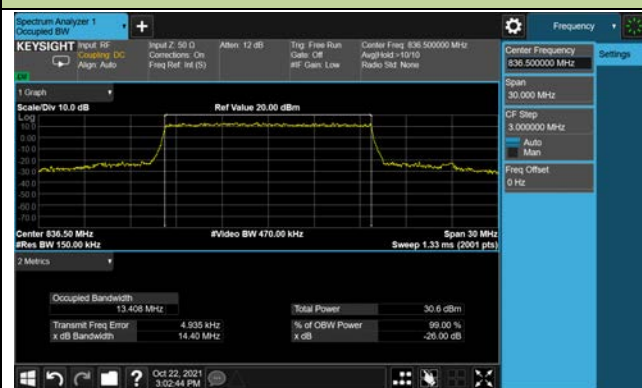
5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



821.5MHz



| | | | |
|---------------|------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/12/05 |
| Test Band | LTE Band 7 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 21100 | 2535.0 | 5 | 4.47 |
| | | 10 | 8.95 |
| | | 15 | 13.42 |
| | | 20 | 17.86 |
| 16QAM | | | |
| 21100 | 2535.0 | 5 | 4.49 |
| | | 10 | 8.95 |
| | | 15 | 13.42 |
| | | 20 | 17.91 |

99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth

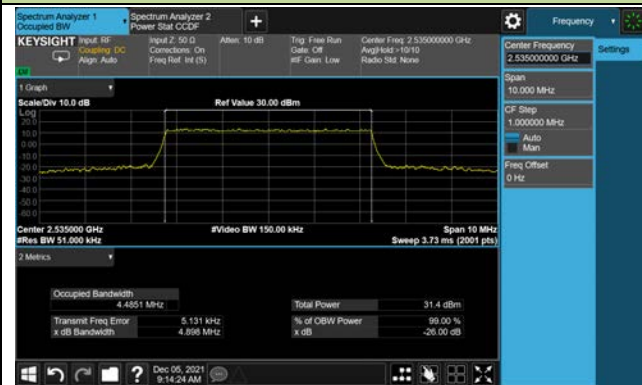


20MHz Channel Bandwidth



99% Bandwidth - 16QAM

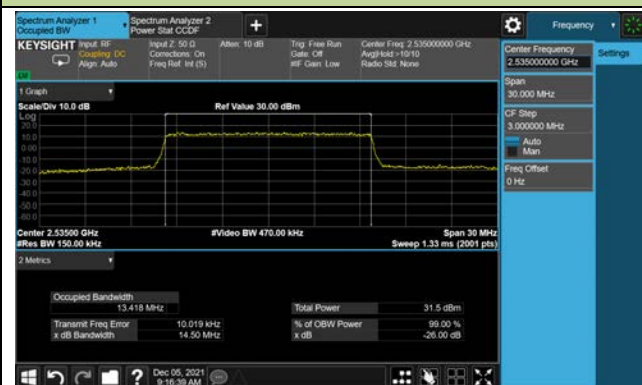
5MHz Channel Bandwidth



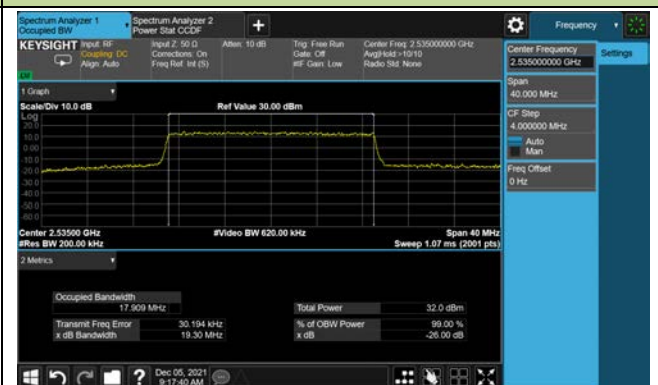
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | LTE Band 12 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 23095 | 707.5 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.48 |
| | | 10 | 8.95 |
| 16QAM | | | |
| 23095 | 707.5 | 1.4 | 1.08 |
| | | 3 | 2.68 |
| | | 5 | 4.47 |
| | | 10 | 8.95 |

99% Bandwidth - QPSK

1.4MHz Channel Bandwidth



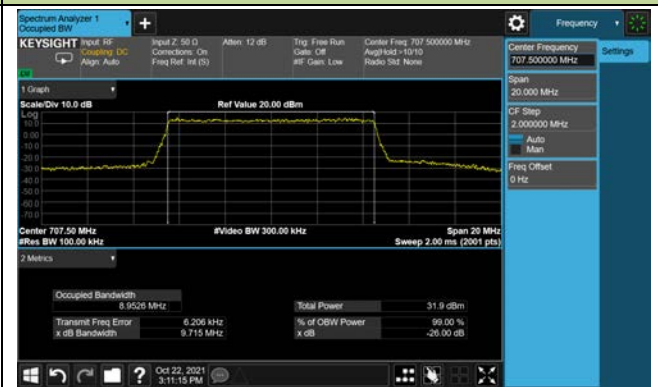
3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



99% Bandwidth - 16QAM

1.4MHz Channel Bandwidth



3MHz Channel Bandwidth



5MHz Channel Bandwidth



10MHz Channel Bandwidth



| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | LTE Band 13 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 23230 | 782.0 | 5 | 4.47 |
| | | 10 | 8.93 |
| 16QAM | | | |
| 23230 | 782.0 | 5 | 4.46 |
| | | 10 | 8.91 |

99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



99% Bandwidth - 16QAM

5MHz Channel Bandwidth



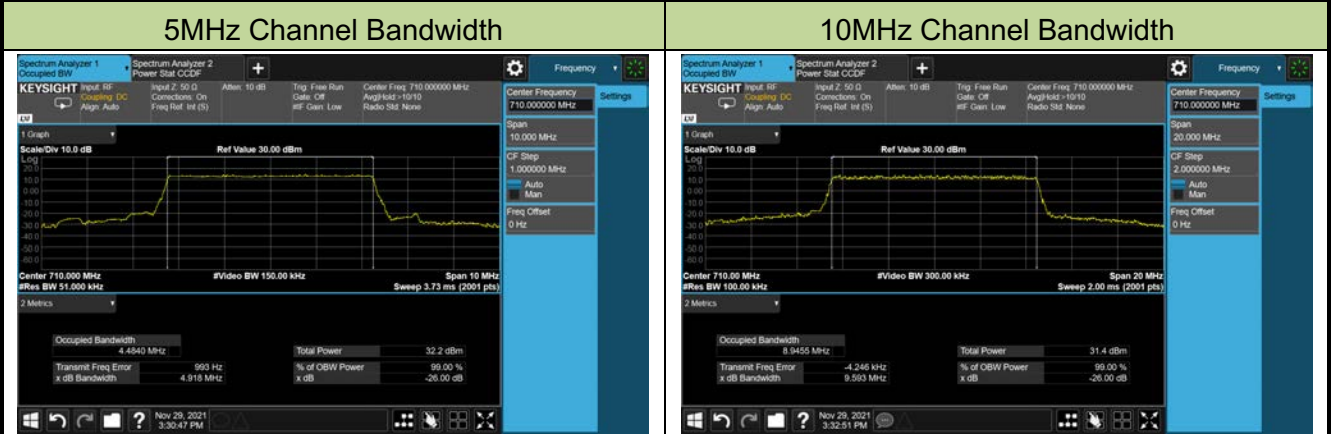
10MHz Channel Bandwidth



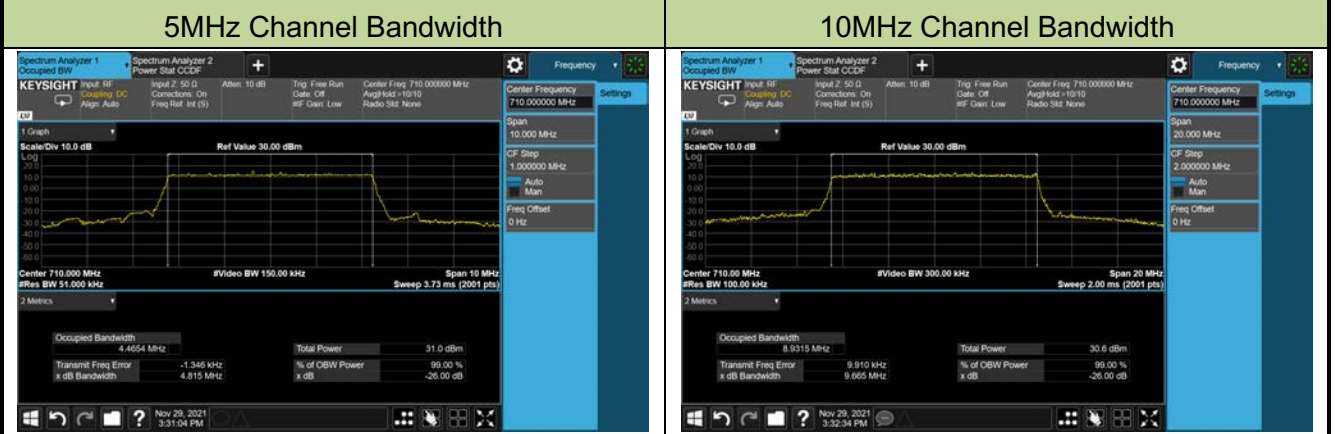
| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/29 |
| Test Band | LTE Band 17 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 23790 | 710.0 | 5 | 4.48 |
| | | 10 | 8.95 |
| 16QAM | | | |
| 23790 | 710.0 | 5 | 4.47 |
| | | 10 | 8.93 |

99% Bandwidth - QPSK



99% Bandwidth - 16QAM



| | | | |
|---------------|----------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | LTE Band 38/41 | | |

| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 37980 | 2593.0 | 5 | 4.46 |
| | | 10 | 8.93 |
| | | 15 | 13.38 |
| | | 20 | 17.86 |
| 16QAM | | | |
| 37980 | 2593.0 | 5 | 4.46 |
| | | 10 | 8.95 |
| | | 15 | 13.41 |
| | | 20 | 17.85 |

99% Bandwidth - QPSK

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



99% Bandwidth - 16QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/22 |
| Test Band | LTE Band 71 | | |

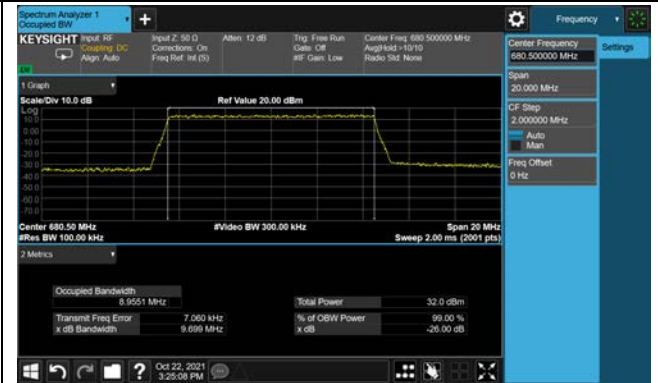
| Channel | Frequency (MHz) | Bandwidth (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|-----------------|---------------------|
| QPSK | | | |
| 133297 | 680.5 | 5 | 4.48 |
| | | 10 | 8.96 |
| | | 15 | 13.42 |
| | | 20 | 17.83 |
| 16QAM | | | |
| 133297 | 680.5 | 5 | 4.48 |
| | | 10 | 8.95 |
| | | 15 | 13.41 |
| | | 20 | 17.86 |

99% Bandwidth - QPSK

5MHz Channel Bandwidth



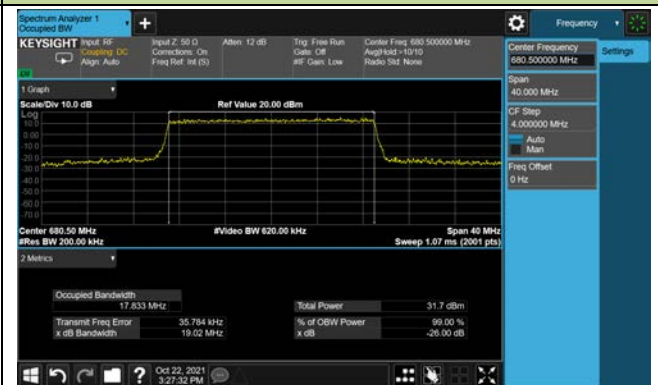
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



99% Bandwidth - 16QAM

5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



5.3. Frequency Stability Measurement

5.3.1. Test Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

5.3.2. Test Procedure

ANSI C63.26-2015 - Section 5.6

5.3.3. Test Setting

Frequency Stability Under Temperature Variations:

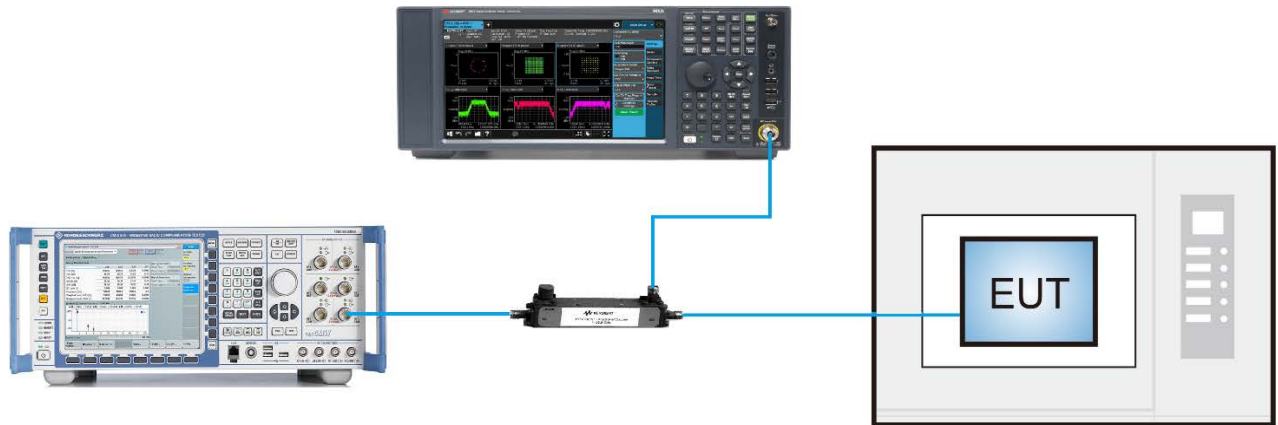
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

5.3.4. Test Setup



5.3.5. Test Result

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 2/25 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | -0.0103 |
| | - 20 | -0.0097 |
| | - 10 | -0.0095 |
| | 0 | -0.0089 |
| | + 10 | -0.0083 |
| | + 20 | -0.0089 |
| | + 30 | -0.0105 |
| | + 40 | -0.0092 |
| | + 50 | -0.0098 |
| 4.4 | + 20 | -0.0079 |
| 3.135 | + 20 | -0.0090 |

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 4/66 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0082 |
| | - 20 | 0.0092 |
| | - 10 | 0.0066 |
| | 0 | 0.0034 |
| | + 10 | -0.0067 |
| | + 20 | 0.0059 |
| | + 30 | -0.0065 |
| | + 40 | 0.0072 |
| | + 50 | 0.0063 |
| 4.4 | + 20 | -0.0070 |
| 3.135 | + 20 | -0.0054 |

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 5/26 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | -0.0114 |
| | - 20 | -0.0100 |
| | - 10 | -0.0111 |
| | 0 | -0.0108 |
| | + 10 | -0.0097 |
| | + 20 | -0.0118 |
| | + 30 | -0.0093 |
| | + 40 | -0.0117 |
| | + 50 | -0.0055 |
| 4.4 | + 20 | -0.0090 |
| 3.135 | + 20 | -0.0094 |

| | | | |
|---------------|------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/12/05 |
| Test Band | LTE Band 7 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0058 |
| | - 20 | 0.0054 |
| | - 10 | 0.0050 |
| | 0 | -0.0046 |
| | + 10 | -0.0034 |
| | + 20 | 0.0045 |
| | + 30 | 0.0053 |
| | + 40 | -0.0042 |
| | + 50 | 0.0052 |
| 4.4 | + 20 | -0.0043 |
| 3.135 | + 20 | 0.0059 |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 12 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0168 |
| | - 20 | -0.0131 |
| | - 10 | 0.0185 |
| | 0 | 0.0071 |
| | + 10 | -0.0111 |
| | + 20 | 0.0122 |
| | + 30 | -0.0124 |
| | + 40 | -0.0144 |
| | + 50 | -0.0135 |
| 4.4 | + 20 | -0.0124 |
| 3.135 | + 20 | 0.0110 |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 13 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | -0.0087 |
| | - 20 | -0.0101 |
| | - 10 | -0.0090 |
| | 0 | -0.0067 |
| | + 10 | -0.0115 |
| | + 20 | -0.0119 |
| | + 30 | -0.0110 |
| | + 40 | -0.0118 |
| | + 50 | -0.0073 |
| 4.4 | + 20 | -0.0097 |
| 3.135 | + 20 | -0.0107 |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 17 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0031 |
| | - 20 | 0.0046 |
| | - 10 | 0.0027 |
| | 0 | -0.0012 |
| | + 10 | 0.0094 |
| | + 20 | 0.0071 |
| | + 30 | 0.0069 |
| | + 40 | 0.0044 |
| | + 50 | 0.0103 |
| 4.4 | + 20 | 0.0103 |
| 3.135 | + 20 | 0.0124 |

| | | | |
|---------------|---------------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 38/41_HPUE | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0086 |
| | - 20 | 0.0073 |
| | - 10 | 0.0086 |
| | 0 | 0.0082 |
| | + 10 | 0.0050 |
| | + 20 | 0.0072 |
| | + 30 | 0.0076 |
| | + 40 | 0.0070 |
| | + 50 | 0.0044 |
| 4.4 | + 20 | 0.0020 |
| 3.135 | + 20 | 0.0048 |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/11 |
| Test Band | LTE Band 71 | | |

| Power (Vdc) | Temp (°C) | Frequency Tolerance (ppm) |
|-------------|-----------|---------------------------|
| 3.3 | - 30 | 0.0098 |
| | - 20 | -0.0055 |
| | - 10 | 0.0091 |
| | 0 | 0.0051 |
| | + 10 | 0.0080 |
| | + 20 | 0.0070 |
| | + 30 | -0.0085 |
| | + 40 | -0.0093 |
| | + 50 | 0.0082 |
| 4.4 | + 20 | -0.0062 |
| 3.135 | + 20 | -0.0061 |

5.4. Equivalent Isotropically Radiated Power Measurement

5.4.1. Test Limit

Band 5/26:

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

Band 12, 13, 17

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

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

Band 71

Fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

Band 2/25, 7, 38/41:

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

Band 4/66:

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

5.4.2. Test Procedure

ANSI C63.26-2015 - Section 5.2

5.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

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

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

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

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

ERP = EIRP - 2.15

5.4.4. Test Setup



5.4.5. Test Result

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 2/25 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 26047 | 1850.70 | 1.4 | 1 | 0 | 22.27 | 26.27 | < 33.01 |
| 26365 | 1882.50 | | | | 21.82 | 25.82 | < 33.01 |
| 26683 | 1914.30 | | | | 22.00 | 26.00 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 1 | 2 | 22.35 | 26.35 | < 33.01 |
| 26365 | 1882.50 | | | | 22.30 | 26.30 | < 33.01 |
| 26683 | 1914.30 | | | | 22.12 | 26.12 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 1 | 6 | 22.31 | 26.31 | < 33.01 |
| 26365 | 1882.50 | | | | 22.25 | 26.25 | < 33.01 |
| 26683 | 1914.30 | | | | 22.15 | 26.15 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 6 | 0 | 21.32 | 25.32 | < 33.01 |
| 26365 | 1882.50 | | | | 21.02 | 25.02 | < 33.01 |
| 26683 | 1914.30 | | | | 21.20 | 25.20 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 0 | 22.54 | 26.54 | < 33.01 |
| 26365 | 1882.50 | | | | 22.09 | 26.09 | < 33.01 |
| 26675 | 1913.50 | | | | 22.28 | 26.28 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 7 | 22.36 | 26.36 | < 33.01 |
| 26365 | 1882.50 | | | | 22.12 | 26.12 | < 33.01 |
| 26675 | 1913.50 | | | | 22.22 | 26.22 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 14 | 22.54 | 26.54 | < 33.01 |
| 26365 | 1882.50 | | | | 22.05 | 26.05 | < 33.01 |
| 26675 | 1913.50 | | | | 22.20 | 26.20 | < 33.01 |
| 26055 | 1851.50 | 3 | 15 | 0 | 21.46 | 25.46 | < 33.01 |
| 26365 | 1882.50 | | | | 21.10 | 25.10 | < 33.01 |
| 26675 | 1913.50 | | | | 21.30 | 25.30 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 26065 | 1852.50 | 5 | 1 | 0 | 22.47 | 26.47 | < 33.01 |
| 26365 | 1882.50 | | | | 22.18 | 26.18 | < 33.01 |
| 26665 | 1912.50 | | | | 22.15 | 26.15 | < 33.01 |
| 26065 | 1852.50 | 5 | 1 | 12 | 22.58 | 26.58 | < 33.01 |
| 26365 | 1882.50 | | | | 22.17 | 26.17 | < 33.01 |
| 26665 | 1912.50 | | | | 22.35 | 26.35 | < 33.01 |
| 26065 | 1852.50 | 5 | 1 | 24 | 22.36 | 26.36 | < 33.01 |
| 26365 | 1882.50 | | | | 22.11 | 26.11 | < 33.01 |
| 26665 | 1912.50 | | | | 22.32 | 26.32 | < 33.01 |
| 26065 | 1852.50 | 5 | 25 | 0 | 21.45 | 25.45 | < 33.01 |
| 26365 | 1882.50 | | | | 21.21 | 25.21 | < 33.01 |
| 26665 | 1912.50 | | | | 21.19 | 25.19 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 0 | 22.52 | 26.52 | < 33.01 |
| 26365 | 1882.50 | | | | 22.13 | 26.13 | < 33.01 |
| 26640 | 1910.00 | | | | 22.13 | 26.13 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 24 | 22.38 | 26.38 | < 33.01 |
| 26365 | 1882.50 | | | | 22.10 | 26.10 | < 33.01 |
| 26640 | 1910.00 | | | | 22.23 | 26.23 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 49 | 22.51 | 26.51 | < 33.01 |
| 26365 | 1882.50 | | | | 22.38 | 26.38 | < 33.01 |
| 26640 | 1910.00 | | | | 22.26 | 26.26 | < 33.01 |
| 16390 | 1855.00 | 10 | 50 | 0 | 21.40 | 25.40 | < 33.01 |
| 26365 | 1882.50 | | | | 21.15 | 25.15 | < 33.01 |
| 26640 | 1910.00 | | | | 21.16 | 25.16 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 26115 | 1857.50 | 15 | 1 | 0 | 22.37 | 26.37 | < 33.01 |
| 26365 | 1882.50 | | | | 22.03 | 26.03 | < 33.01 |
| 26615 | 1907.50 | | | | 22.06 | 26.06 | < 33.01 |
| 26115 | 1857.50 | 15 | 1 | 37 | 22.36 | 26.36 | < 33.01 |
| 26365 | 1882.50 | | | | 22.10 | 26.10 | < 33.01 |
| 26615 | 1907.50 | | | | 22.27 | 26.27 | < 33.01 |
| 26115 | 1857.50 | 15 | 1 | 74 | 22.33 | 26.33 | < 33.01 |
| 26365 | 1882.50 | | | | 22.06 | 26.06 | < 33.01 |
| 26615 | 1907.50 | | | | 22.32 | 26.32 | < 33.01 |
| 26115 | 1857.50 | 15 | 75 | 0 | 21.42 | 25.42 | < 33.01 |
| 26365 | 1882.50 | | | | 21.13 | 25.13 | < 33.01 |
| 26615 | 1907.50 | | | | 21.20 | 25.20 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 0 | 22.49 | 26.49 | < 33.01 |
| 26365 | 1882.50 | | | | 22.10 | 26.10 | < 33.01 |
| 26590 | 1905.00 | | | | 22.07 | 26.07 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 49 | 22.38 | 26.38 | < 33.01 |
| 26365 | 1882.50 | | | | 22.02 | 26.02 | < 33.01 |
| 26590 | 1905.00 | | | | 22.13 | 26.13 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 99 | 22.33 | 26.33 | < 33.01 |
| 26365 | 1882.50 | | | | 22.04 | 26.04 | < 33.01 |
| 26590 | 1905.00 | | | | 22.21 | 26.21 | < 33.01 |
| 26140 | 1860.00 | 20 | 100 | 0 | 21.25 | 25.25 | < 33.01 |
| 26365 | 1882.50 | | | | 21.15 | 25.15 | < 33.01 |
| 26590 | 1905.00 | | | | 21.21 | 25.21 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 26047 | 1850.70 | 1.4 | 1 | 0 | 21.34 | 25.34 | < 33.01 |
| 26365 | 1882.50 | | | | 21.08 | 25.08 | < 33.01 |
| 26683 | 1914.30 | | | | 21.03 | 25.03 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 1 | 2 | 21.42 | 25.42 | < 33.01 |
| 26365 | 1882.50 | | | | 21.58 | 25.58 | < 33.01 |
| 26683 | 1914.30 | | | | 21.54 | 25.54 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 1 | 6 | 21.20 | 25.20 | < 33.01 |
| 26365 | 1882.50 | | | | 21.33 | 25.33 | < 33.01 |
| 26683 | 1914.30 | | | | 20.97 | 24.97 | < 33.01 |
| 26047 | 1850.70 | 1.4 | 6 | 0 | 20.41 | 24.41 | < 33.01 |
| 26365 | 1882.50 | | | | 20.01 | 24.01 | < 33.01 |
| 26683 | 1914.30 | | | | 20.22 | 24.22 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 0 | 21.57 | 25.57 | < 33.01 |
| 26365 | 1882.50 | | | | 20.90 | 24.90 | < 33.01 |
| 26675 | 1913.50 | | | | 21.93 | 25.93 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 7 | 21.59 | 25.59 | < 33.01 |
| 26365 | 1882.50 | | | | 20.88 | 24.88 | < 33.01 |
| 26675 | 1913.50 | | | | 21.73 | 25.73 | < 33.01 |
| 26055 | 1851.50 | 3 | 1 | 14 | 21.47 | 25.47 | < 33.01 |
| 26365 | 1882.50 | | | | 21.06 | 25.06 | < 33.01 |
| 26675 | 1913.50 | | | | 21.67 | 25.67 | < 33.01 |
| 26055 | 1851.50 | 3 | 15 | 0 | 20.38 | 24.38 | < 33.01 |
| 26365 | 1882.50 | | | | 20.24 | 24.24 | < 33.01 |
| 26675 | 1913.50 | | | | 20.31 | 24.31 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 26065 | 1852.50 | 5 | 1 | 0 | 21.24 | 25.24 | < 33.01 |
| 26365 | 1882.50 | | | | 21.53 | 25.53 | < 33.01 |
| 26665 | 1912.50 | | | | 21.58 | 25.58 | < 33.01 |
| 26065 | 1852.50 | 5 | 1 | 12 | 21.20 | 25.20 | < 33.01 |
| 26365 | 1882.50 | | | | 21.61 | 25.61 | < 33.01 |
| 26665 | 1912.50 | | | | 21.42 | 25.42 | < 33.01 |
| 26065 | 1852.50 | 5 | 1 | 24 | 21.49 | 25.49 | < 33.01 |
| 26365 | 1882.50 | | | | 20.79 | 24.79 | < 33.01 |
| 26665 | 1912.50 | | | | 21.42 | 25.42 | < 33.01 |
| 26065 | 1852.50 | 5 | 25 | 0 | 20.38 | 24.38 | < 33.01 |
| 26365 | 1882.50 | | | | 20.20 | 24.20 | < 33.01 |
| 26665 | 1912.50 | | | | 20.32 | 24.32 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 0 | 21.92 | 25.92 | < 33.01 |
| 26365 | 1882.50 | | | | 21.31 | 25.31 | < 33.01 |
| 26640 | 1910.00 | | | | 21.18 | 25.18 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 24 | 22.10 | 26.10 | < 33.01 |
| 26365 | 1882.50 | | | | 21.29 | 25.29 | < 33.01 |
| 26640 | 1910.00 | | | | 21.75 | 25.75 | < 33.01 |
| 16390 | 1855.00 | 10 | 1 | 49 | 22.11 | 26.11 | < 33.01 |
| 26365 | 1882.50 | | | | 21.38 | 25.38 | < 33.01 |
| 26640 | 1910.00 | | | | 21.00 | 25.00 | < 33.01 |
| 16390 | 1855.00 | 10 | 50 | 0 | 20.45 | 24.45 | < 33.01 |
| 26365 | 1882.50 | | | | 20.12 | 24.12 | < 33.01 |
| 26640 | 1910.00 | | | | 20.32 | 24.32 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 26115 | 1857.50 | 15 | 1 | 0 | 21.77 | 25.77 | < 33.01 |
| 26365 | 1882.50 | | | | 21.24 | 25.24 | < 33.01 |
| 26615 | 1907.50 | | | | 21.22 | 25.22 | < 33.01 |
| 26115 | 1857.50 | 15 | 1 | 37 | 21.84 | 25.84 | < 33.01 |
| 26365 | 1882.50 | | | | 21.21 | 25.21 | < 33.01 |
| 26615 | 1907.50 | | | | 21.54 | 25.54 | < 33.01 |
| 26115 | 1857.50 | 15 | 1 | 74 | 21.79 | 25.79 | < 33.01 |
| 26365 | 1882.50 | | | | 21.23 | 25.23 | < 33.01 |
| 26615 | 1907.50 | | | | 21.64 | 25.64 | < 33.01 |
| 26115 | 1857.50 | 15 | 75 | 0 | 20.39 | 24.39 | < 33.01 |
| 26365 | 1882.50 | | | | 20.19 | 24.19 | < 33.01 |
| 26615 | 1907.50 | | | | 20.25 | 24.25 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 0 | 21.84 | 25.84 | < 33.01 |
| 26365 | 1882.50 | | | | 21.32 | 25.32 | < 33.01 |
| 26590 | 1905.00 | | | | 21.57 | 25.57 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 49 | 21.81 | 25.81 | < 33.01 |
| 26365 | 1882.50 | | | | 21.27 | 25.27 | < 33.01 |
| 26590 | 1905.00 | | | | 21.63 | 25.63 | < 33.01 |
| 26140 | 1860.00 | 20 | 1 | 99 | 21.56 | 25.56 | < 33.01 |
| 26365 | 1882.50 | | | | 21.23 | 25.23 | < 33.01 |
| 26590 | 1905.00 | | | | 21.79 | 25.79 | < 33.01 |
| 26140 | 1860.00 | 20 | 100 | 0 | 20.30 | 24.30 | < 33.01 |
| 26365 | 1882.50 | | | | 20.12 | 24.12 | < 33.01 |
| 26590 | 1905.00 | | | | 20.22 | 24.22 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 4/66 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 131979 | 1710.70 | 1.4 | 1 | 0 | 22.02 | 25.02 | < 30.00 |
| 132322 | 1745.00 | | | | 22.50 | 25.50 | < 30.00 |
| 132665 | 1779.30 | | | | 22.09 | 25.09 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 1 | 2 | 22.09 | 25.09 | < 30.00 |
| 132322 | 1745.00 | | | | 22.53 | 25.53 | < 30.00 |
| 132665 | 1779.30 | | | | 22.17 | 25.17 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 1 | 6 | 22.06 | 25.06 | < 30.00 |
| 132322 | 1745.00 | | | | 22.43 | 25.43 | < 30.00 |
| 132665 | 1779.30 | | | | 22.10 | 25.10 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 6 | 0 | 21.15 | 24.15 | < 30.00 |
| 132322 | 1745.00 | | | | 21.54 | 24.54 | < 30.00 |
| 132665 | 1779.30 | | | | 21.13 | 24.13 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 0 | 22.10 | 25.10 | < 30.00 |
| 132322 | 1745.00 | | | | 22.38 | 25.38 | < 30.00 |
| 132657 | 1778.50 | | | | 22.05 | 25.05 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 7 | 22.24 | 25.24 | < 30.00 |
| 132322 | 1745.00 | | | | 22.47 | 25.47 | < 30.00 |
| 132657 | 1778.50 | | | | 22.20 | 25.20 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 14 | 22.11 | 25.11 | < 30.00 |
| 132322 | 1745.00 | | | | 22.41 | 25.41 | < 30.00 |
| 132657 | 1778.50 | | | | 22.04 | 25.04 | < 30.00 |
| 131987 | 1711.50 | 3 | 15 | 0 | 21.14 | 24.14 | < 30.00 |
| 132322 | 1745.00 | | | | 21.55 | 24.55 | < 30.00 |
| 132657 | 1778.50 | | | | 21.14 | 24.14 | < 30.00 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 131997 | 1712.50 | 5 | 1 | 0 | 22.11 | 25.11 | < 30.00 |
| 132322 | 1745.00 | | | | 22.43 | 25.43 | < 30.00 |
| 132647 | 1777.50 | | | | 22.13 | 25.13 | < 30.00 |
| 131997 | 1712.50 | 5 | 1 | 12 | 22.40 | 25.40 | < 30.00 |
| 132322 | 1745.00 | | | | 22.60 | 25.60 | < 30.00 |
| 132647 | 1777.50 | | | | 22.35 | 25.35 | < 30.00 |
| 131997 | 1712.50 | 5 | 1 | 24 | 22.05 | 25.05 | < 30.00 |
| 132322 | 1745.00 | | | | 22.40 | 25.40 | < 30.00 |
| 132647 | 1777.50 | | | | 21.97 | 24.97 | < 30.00 |
| 131997 | 1712.50 | 5 | 25 | 0 | 21.13 | 24.13 | < 30.00 |
| 132322 | 1745.00 | | | | 21.47 | 24.47 | < 30.00 |
| 132647 | 1777.50 | | | | 21.16 | 24.16 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 0 | 22.06 | 25.06 | < 30.00 |
| 132322 | 1745.00 | | | | 22.45 | 25.45 | < 30.00 |
| 132622 | 1775.00 | | | | 22.10 | 25.10 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 24 | 22.43 | 25.43 | < 30.00 |
| 132322 | 1745.00 | | | | 22.63 | 25.63 | < 30.00 |
| 132622 | 1775.00 | | | | 22.29 | 25.29 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 49 | 22.18 | 25.18 | < 30.00 |
| 132322 | 1745.00 | | | | 22.43 | 25.43 | < 30.00 |
| 132622 | 1775.00 | | | | 22.03 | 25.03 | < 30.00 |
| 132022 | 1715.00 | 10 | 50 | 0 | 21.18 | 24.18 | < 30.00 |
| 132322 | 1745.00 | | | | 21.50 | 24.50 | < 30.00 |
| 132622 | 1775.00 | | | | 21.20 | 24.20 | < 30.00 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 132047 | 1717.50 | 15 | 1 | 0 | 22.20 | 25.20 | < 30.00 |
| 132322 | 1745.00 | | | | 22.46 | 25.46 | < 30.00 |
| 132597 | 1772.50 | | | | 22.28 | 25.28 | < 30.00 |
| 132047 | 1717.50 | 15 | 1 | 37 | 22.30 | 25.30 | < 30.00 |
| 132322 | 1745.00 | | | | 22.62 | 25.62 | < 30.00 |
| 132597 | 1772.50 | | | | 22.29 | 25.29 | < 30.00 |
| 132047 | 1717.50 | 15 | 1 | 74 | 22.30 | 25.30 | < 30.00 |
| 132322 | 1745.00 | | | | 22.51 | 25.51 | < 30.00 |
| 132597 | 1772.50 | | | | 22.12 | 25.12 | < 30.00 |
| 132047 | 1717.50 | 15 | 75 | 0 | 21.22 | 24.22 | < 30.00 |
| 132322 | 1745.00 | | | | 21.52 | 24.52 | < 30.00 |
| 132597 | 1772.50 | | | | 21.23 | 24.23 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 0 | 22.23 | 25.23 | < 30.00 |
| 132322 | 1745.00 | | | | 22.60 | 25.60 | < 30.00 |
| 132572 | 1770.00 | | | | 22.48 | 25.48 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 49 | 22.44 | 25.44 | < 30.00 |
| 132322 | 1745.00 | | | | 22.72 | 25.72 | < 30.00 |
| 132572 | 1770.00 | | | | 22.32 | 25.32 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 99 | 22.39 | 25.39 | < 30.00 |
| 132322 | 1745.00 | | | | 22.68 | 25.68 | < 30.00 |
| 132572 | 1770.00 | | | | 22.12 | 25.12 | < 30.00 |
| 132072 | 1720.00 | 20 | 100 | 0 | 21.31 | 24.31 | < 30.00 |
| 132322 | 1745.00 | | | | 21.53 | 24.53 | < 30.00 |
| 132572 | 1770.00 | | | | 21.23 | 24.23 | < 30.00 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 131979 | 1710.70 | 1.4 | 1 | 0 | 21.21 | 24.21 | < 30.00 |
| 132322 | 1745.00 | | | | 21.30 | 24.30 | < 30.00 |
| 132665 | 1779.30 | | | | 20.89 | 23.89 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 1 | 2 | 21.26 | 24.26 | < 30.00 |
| 132322 | 1745.00 | | | | 21.43 | 24.43 | < 30.00 |
| 132665 | 1779.30 | | | | 21.29 | 24.29 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 1 | 6 | 20.88 | 23.88 | < 30.00 |
| 132322 | 1745.00 | | | | 21.32 | 24.32 | < 30.00 |
| 132665 | 1779.30 | | | | 20.86 | 23.86 | < 30.00 |
| 131979 | 1710.70 | 1.4 | 6 | 0 | 20.23 | 23.23 | < 30.00 |
| 132322 | 1745.00 | | | | 20.54 | 23.54 | < 30.00 |
| 132665 | 1779.30 | | | | 20.18 | 23.18 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 0 | 21.51 | 24.51 | < 30.00 |
| 132322 | 1745.00 | | | | 21.53 | 24.53 | < 30.00 |
| 132657 | 1778.50 | | | | 20.87 | 23.87 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 7 | 21.66 | 24.66 | < 30.00 |
| 132322 | 1745.00 | | | | 21.64 | 24.64 | < 30.00 |
| 132657 | 1778.50 | | | | 21.02 | 24.02 | < 30.00 |
| 131987 | 1711.50 | 3 | 1 | 14 | 21.44 | 24.44 | < 30.00 |
| 132322 | 1745.00 | | | | 21.63 | 24.63 | < 30.00 |
| 132657 | 1778.50 | | | | 21.47 | 24.47 | < 30.00 |
| 131987 | 1711.50 | 3 | 15 | 0 | 20.23 | 23.23 | < 30.00 |
| 132322 | 1745.00 | | | | 20.55 | 23.55 | < 30.00 |
| 132657 | 1778.50 | | | | 20.23 | 23.23 | < 30.00 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 131997 | 1712.50 | 5 | 1 | 0 | 21.37 | 24.37 | < 30.00 |
| 132322 | 1745.00 | | | | 21.56 | 24.56 | < 30.00 |
| 132647 | 1777.50 | | | | 20.83 | 23.83 | < 30.00 |
| 131997 | 1712.50 | 5 | 1 | 12 | 21.70 | 24.70 | < 30.00 |
| 132322 | 1745.00 | | | | 21.40 | 24.40 | < 30.00 |
| 132647 | 1777.50 | | | | 21.69 | 24.69 | < 30.00 |
| 131997 | 1712.50 | 5 | 1 | 24 | 21.16 | 24.16 | < 30.00 |
| 132322 | 1745.00 | | | | 21.16 | 24.16 | < 30.00 |
| 132647 | 1777.50 | | | | 21.10 | 24.10 | < 30.00 |
| 131997 | 1712.50 | 5 | 25 | 0 | 20.19 | 23.19 | < 30.00 |
| 132322 | 1745.00 | | | | 20.46 | 23.46 | < 30.00 |
| 132647 | 1777.50 | | | | 20.14 | 23.14 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 0 | 20.78 | 23.78 | < 30.00 |
| 132322 | 1745.00 | | | | 21.49 | 24.49 | < 30.00 |
| 132622 | 1775.00 | | | | 20.83 | 23.83 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 24 | 21.73 | 24.73 | < 30.00 |
| 132322 | 1745.00 | | | | 21.87 | 24.87 | < 30.00 |
| 132622 | 1775.00 | | | | 20.97 | 23.97 | < 30.00 |
| 132022 | 1715.00 | 10 | 1 | 49 | 21.51 | 24.51 | < 30.00 |
| 132322 | 1745.00 | | | | 21.54 | 24.54 | < 30.00 |
| 132622 | 1775.00 | | | | 20.80 | 23.80 | < 30.00 |
| 132022 | 1715.00 | 10 | 50 | 0 | 20.26 | 23.26 | < 30.00 |
| 132322 | 1745.00 | | | | 20.55 | 23.55 | < 30.00 |
| 132622 | 1775.00 | | | | 20.16 | 23.16 | < 30.00 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 132047 | 1717.50 | 15 | 1 | 0 | 21.65 | 24.65 | < 30.00 |
| 132322 | 1745.00 | | | | 21.65 | 24.65 | < 30.00 |
| 132597 | 1772.50 | | | | 21.40 | 24.40 | < 30.00 |
| 132047 | 1717.50 | 15 | 1 | 37 | 21.84 | 24.84 | < 30.00 |
| 132322 | 1745.00 | | | | 21.81 | 24.81 | < 30.00 |
| 132597 | 1772.50 | | | | 21.52 | 24.52 | < 30.00 |
| 132047 | 1717.50 | 15 | 1 | 74 | 21.77 | 24.77 | < 30.00 |
| 132322 | 1745.00 | | | | 21.72 | 24.72 | < 30.00 |
| 132597 | 1772.50 | | | | 21.82 | 24.82 | < 30.00 |
| 132047 | 1717.50 | 15 | 75 | 0 | 20.28 | 23.28 | < 30.00 |
| 132322 | 1745.00 | | | | 20.54 | 23.54 | < 30.00 |
| 132597 | 1772.50 | | | | 20.18 | 23.18 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 0 | 21.79 | 24.79 | < 30.00 |
| 132322 | 1745.00 | | | | 21.85 | 24.85 | < 30.00 |
| 132572 | 1770.00 | | | | 21.47 | 24.47 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 49 | 21.94 | 24.94 | < 30.00 |
| 132322 | 1745.00 | | | | 22.09 | 25.09 | < 30.00 |
| 132572 | 1770.00 | | | | 21.65 | 24.65 | < 30.00 |
| 132072 | 1720.00 | 20 | 1 | 99 | 21.97 | 24.97 | < 30.00 |
| 132322 | 1745.00 | | | | 21.78 | 24.78 | < 30.00 |
| 132572 | 1770.00 | | | | 21.24 | 24.24 | < 30.00 |
| 132072 | 1720.00 | 20 | 100 | 0 | 20.34 | 23.34 | < 30.00 |
| 132322 | 1745.00 | | | | 20.56 | 23.56 | < 30.00 |
| 132572 | 1770.00 | | | | 20.20 | 23.20 | < 30.00 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| | | | |
|---------------|---------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 5/26 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 26797 | 824.70 | 1.4 | 1 | 0 | 23.56 | 24.41 | < 38.45 |
| 26915 | 836.50 | | | | 23.51 | 24.36 | < 38.45 |
| 27033 | 848.30 | | | | 23.40 | 24.25 | < 38.45 |
| 26797 | 824.70 | 1.4 | 1 | 2 | 23.45 | 24.30 | < 38.45 |
| 26915 | 836.50 | | | | 23.45 | 24.30 | < 38.45 |
| 27033 | 848.30 | | | | 23.33 | 24.18 | < 38.45 |
| 26797 | 824.70 | 1.4 | 1 | 6 | 23.51 | 24.36 | < 38.45 |
| 26915 | 836.50 | | | | 23.46 | 24.31 | < 38.45 |
| 27033 | 848.30 | | | | 23.40 | 24.25 | < 38.45 |
| 26797 | 824.70 | 1.4 | 6 | 0 | 22.58 | 23.43 | < 38.45 |
| 26915 | 836.50 | | | | 22.54 | 23.39 | < 38.45 |
| 27033 | 848.30 | | | | 22.47 | 23.32 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 0 | 23.61 | 24.46 | < 38.45 |
| 26915 | 836.50 | | | | 23.59 | 24.44 | < 38.45 |
| 27015 | 846.50 | | | | 23.50 | 24.35 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 7 | 23.58 | 24.43 | < 38.45 |
| 26915 | 836.50 | | | | 23.53 | 24.38 | < 38.45 |
| 27015 | 846.50 | | | | 23.47 | 24.32 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 14 | 23.53 | 24.38 | < 38.45 |
| 26915 | 836.50 | | | | 23.63 | 24.48 | < 38.45 |
| 27015 | 846.50 | | | | 23.31 | 24.16 | < 38.45 |
| 26805 | 825.50 | 3 | 15 | 0 | 23.56 | 24.41 | < 38.45 |
| 26915 | 836.50 | | | | 23.62 | 24.47 | < 38.45 |
| 27015 | 846.50 | | | | 23.39 | 24.24 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 26815 | 826.50 | 5 | 1 | 0 | 23.70 | 24.55 | < 38.45 |
| 26915 | 836.50 | | | | 23.57 | 24.42 | < 38.45 |
| 27015 | 846.50 | | | | 23.60 | 24.45 | < 38.45 |
| 26815 | 826.50 | 5 | 1 | 12 | 23.68 | 24.53 | < 38.45 |
| 26915 | 836.50 | | | | 23.65 | 24.50 | < 38.45 |
| 27015 | 846.50 | | | | 23.61 | 24.46 | < 38.45 |
| 26815 | 826.50 | 5 | 1 | 24 | 23.52 | 24.37 | < 38.45 |
| 26915 | 836.50 | | | | 23.61 | 24.46 | < 38.45 |
| 27015 | 846.50 | | | | 23.36 | 24.21 | < 38.45 |
| 26815 | 826.50 | 5 | 25 | 0 | 22.63 | 23.48 | < 38.45 |
| 26915 | 836.50 | | | | 22.64 | 23.49 | < 38.45 |
| 27015 | 846.50 | | | | 22.61 | 23.46 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 0 | 23.63 | 24.48 | < 38.45 |
| 26915 | 836.50 | | | | 23.66 | 24.51 | < 38.45 |
| 26990 | 844.00 | | | | 23.39 | 24.24 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 24 | 23.56 | 24.41 | < 38.45 |
| 26915 | 836.50 | | | | 23.64 | 24.49 | < 38.45 |
| 26990 | 844.00 | | | | 23.42 | 24.27 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 49 | 23.63 | 24.48 | < 38.45 |
| 26915 | 836.50 | | | | 23.45 | 24.30 | < 38.45 |
| 26990 | 844.00 | | | | 23.40 | 24.25 | < 38.45 |
| 26840 | 829.00 | 10 | 50 | 0 | 22.69 | 23.54 | < 38.45 |
| 26915 | 836.50 | | | | 22.70 | 23.55 | < 38.45 |
| 26990 | 844.00 | | | | 22.53 | 23.38 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 26765 | 821.50 | 15 | 1 | 0 | 23.60 | 24.45 | < 38.45 |
| 26915 | 836.50 | | | | 23.46 | 24.31 | < 38.45 |
| 26965 | 841.50 | | | | 23.55 | 24.40 | < 38.45 |
| 26765 | 821.50 | 15 | 1 | 37 | 23.52 | 24.37 | < 38.45 |
| 26915 | 836.50 | | | | 23.41 | 24.26 | < 38.45 |
| 26965 | 841.50 | | | | 23.54 | 24.39 | < 38.45 |
| 26765 | 821.50 | 15 | 1 | 74 | 23.51 | 24.36 | < 38.45 |
| 26915 | 836.50 | | | | 23.48 | 24.33 | < 38.45 |
| 26965 | 841.50 | | | | 23.08 | 23.93 | < 38.45 |
| 26765 | 821.50 | 15 | 75 | 0 | 23.41 | 24.26 | < 38.45 |
| 26915 | 836.50 | | | | 23.54 | 24.39 | < 38.45 |
| 26965 | 841.50 | | | | 23.07 | 23.92 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 26797 | 824.70 | 1.4 | 1 | 0 | 22.39 | 23.24 | < 38.45 |
| 26915 | 836.50 | | | | 22.62 | 23.47 | < 38.45 |
| 27033 | 848.30 | | | | 22.18 | 23.03 | < 38.45 |
| 26797 | 824.70 | 1.4 | 1 | 2 | 22.36 | 23.21 | < 38.45 |
| 26915 | 836.50 | | | | 22.61 | 23.46 | < 38.45 |
| 27033 | 848.30 | | | | 22.20 | 23.05 | < 38.45 |
| 26797 | 824.70 | 1.4 | 1 | 6 | 22.34 | 23.19 | < 38.45 |
| 26915 | 836.50 | | | | 22.65 | 23.50 | < 38.45 |
| 27033 | 848.30 | | | | 22.39 | 23.24 | < 38.45 |
| 26797 | 824.70 | 1.4 | 6 | 0 | 21.66 | 22.51 | < 38.45 |
| 26915 | 836.50 | | | | 21.61 | 22.46 | < 38.45 |
| 27033 | 848.30 | | | | 21.49 | 22.34 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 0 | 23.05 | 23.90 | < 38.45 |
| 26915 | 836.50 | | | | 22.76 | 23.61 | < 38.45 |
| 27015 | 846.50 | | | | 22.30 | 23.15 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 7 | 23.01 | 23.86 | < 38.45 |
| 26915 | 836.50 | | | | 22.72 | 23.57 | < 38.45 |
| 27015 | 846.50 | | | | 22.92 | 23.77 | < 38.45 |
| 26805 | 825.50 | 3 | 1 | 14 | 22.50 | 23.35 | < 38.45 |
| 26915 | 836.50 | | | | 22.99 | 23.84 | < 38.45 |
| 27015 | 846.50 | | | | 22.59 | 23.44 | < 38.45 |
| 26805 | 825.50 | 3 | 15 | 0 | 22.33 | 23.18 | < 38.45 |
| 26915 | 836.50 | | | | 22.99 | 23.84 | < 38.45 |
| 27015 | 846.50 | | | | 22.57 | 23.42 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 26815 | 826.50 | 5 | 1 | 0 | 22.93 | 23.78 | < 38.45 |
| 26915 | 836.50 | | | | 22.72 | 23.57 | < 38.45 |
| 27015 | 846.50 | | | | 22.25 | 23.10 | < 38.45 |
| 26815 | 826.50 | 5 | 1 | 12 | 23.01 | 23.86 | < 38.45 |
| 26915 | 836.50 | | | | 22.44 | 23.29 | < 38.45 |
| 27015 | 846.50 | | | | 22.93 | 23.78 | < 38.45 |
| 26815 | 826.50 | 5 | 1 | 24 | 22.28 | 23.13 | < 38.45 |
| 26915 | 836.50 | | | | 22.94 | 23.79 | < 38.45 |
| 27015 | 846.50 | | | | 22.56 | 23.41 | < 38.45 |
| 26815 | 826.50 | 5 | 25 | 0 | 21.72 | 22.57 | < 38.45 |
| 26915 | 836.50 | | | | 21.61 | 22.46 | < 38.45 |
| 27015 | 846.50 | | | | 21.60 | 22.45 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 0 | 23.09 | 23.94 | < 38.45 |
| 26915 | 836.50 | | | | 23.17 | 24.02 | < 38.45 |
| 26990 | 844.00 | | | | 22.57 | 23.42 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 24 | 22.28 | 23.13 | < 38.45 |
| 26915 | 836.50 | | | | 23.00 | 23.85 | < 38.45 |
| 26990 | 844.00 | | | | 22.65 | 23.50 | < 38.45 |
| 26840 | 829.00 | 10 | 1 | 49 | 22.94 | 23.79 | < 38.45 |
| 26915 | 836.50 | | | | 22.63 | 23.48 | < 38.45 |
| 26990 | 844.00 | | | | 22.40 | 23.25 | < 38.45 |
| 26840 | 829.00 | 10 | 50 | 0 | 21.79 | 22.64 | < 38.45 |
| 26915 | 836.50 | | | | 21.61 | 22.46 | < 38.45 |
| 26990 | 844.00 | | | | 21.52 | 22.37 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 26765 | 821.50 | 15 | 1 | 0 | 22.97 | 23.82 | < 38.45 |
| 26915 | 836.50 | | | | 22.70 | 23.55 | < 38.45 |
| 26965 | 841.50 | | | | 22.72 | 23.57 | < 38.45 |
| 26765 | 821.50 | 15 | 1 | 37 | 22.93 | 23.78 | < 38.45 |
| 26915 | 836.50 | | | | 22.60 | 23.45 | < 38.45 |
| 26965 | 841.50 | | | | 22.75 | 23.60 | < 38.45 |
| 26765 | 821.50 | 15 | 1 | 74 | 22.98 | 23.83 | < 38.45 |
| 26915 | 836.50 | | | | 22.60 | 23.45 | < 38.45 |
| 26965 | 841.50 | | | | 22.56 | 23.41 | < 38.45 |
| 26765 | 821.50 | 15 | 75 | 0 | 22.56 | 23.41 | < 38.45 |
| 26915 | 836.50 | | | | 22.73 | 23.58 | < 38.45 |
| 26965 | 841.50 | | | | 22.55 | 23.40 | < 38.45 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| | | | |
|---------------|------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/12/05 |
| Test Band | LTE Band 7 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 20775 | 2502.50 | 5 | 1 | 0 | 23.15 | 27.15 | < 33.01 |
| 21100 | 2535.00 | | | | 23.10 | 27.10 | < 33.01 |
| 21425 | 2567.50 | | | | 23.05 | 27.05 | < 33.01 |
| 20775 | 2502.50 | 5 | 1 | 12 | 23.24 | 27.24 | < 33.01 |
| 21100 | 2535.00 | | | | 22.89 | 26.89 | < 33.01 |
| 21425 | 2567.50 | | | | 22.51 | 26.51 | < 33.01 |
| 20775 | 2502.50 | 5 | 1 | 24 | 23.11 | 27.11 | < 33.01 |
| 21100 | 2535.00 | | | | 22.79 | 26.79 | < 33.01 |
| 21425 | 2567.50 | | | | 22.31 | 26.31 | < 33.01 |
| 20775 | 2502.50 | 5 | 25 | 0 | 22.28 | 26.28 | < 33.01 |
| 21100 | 2535.00 | | | | 21.76 | 25.76 | < 33.01 |
| 21425 | 2567.50 | | | | 21.48 | 25.48 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 0 | 23.25 | 27.25 | < 33.01 |
| 21100 | 2535.00 | | | | 23.09 | 27.09 | < 33.01 |
| 21400 | 2565.00 | | | | 23.15 | 27.15 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 24 | 23.20 | 27.20 | < 33.01 |
| 21100 | 2535.00 | | | | 22.95 | 26.95 | < 33.01 |
| 21400 | 2565.00 | | | | 23.10 | 27.10 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 49 | 23.17 | 27.17 | < 33.01 |
| 21100 | 2535.00 | | | | 22.45 | 26.45 | < 33.01 |
| 21400 | 2565.00 | | | | 22.29 | 26.29 | < 33.01 |
| 20800 | 2505.00 | 10 | 50 | 0 | 22.22 | 26.22 | < 33.01 |
| 21100 | 2535.00 | | | | 21.80 | 25.80 | < 33.01 |
| 21400 | 2565.00 | | | | 22.23 | 26.23 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 20825 | 2507.50 | 15 | 1 | 0 | 23.13 | 27.13 | < 33.01 |
| 21100 | 2535.00 | | | | 23.10 | 27.10 | < 33.01 |
| 21375 | 2562.50 | | | | 23.29 | 27.29 | < 33.01 |
| 20825 | 2507.50 | 15 | 1 | 37 | 23.15 | 27.15 | < 33.01 |
| 21100 | 2535.00 | | | | 22.94 | 26.94 | < 33.01 |
| 21375 | 2562.50 | | | | 23.12 | 27.12 | < 33.01 |
| 20825 | 2507.50 | 15 | 1 | 74 | 23.21 | 27.21 | < 33.01 |
| 21100 | 2535.00 | | | | 22.74 | 26.74 | < 33.01 |
| 21375 | 2562.50 | | | | 22.41 | 26.41 | < 33.01 |
| 20825 | 2507.50 | 15 | 75 | 0 | 22.29 | 26.29 | < 33.01 |
| 21100 | 2535.00 | | | | 22.22 | 26.22 | < 33.01 |
| 21375 | 2562.50 | | | | 22.26 | 26.26 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 0 | 23.33 | 27.33 | < 33.01 |
| 21100 | 2535.00 | | | | 23.23 | 27.23 | < 33.01 |
| 21350 | 2560.00 | | | | 23.29 | 27.29 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 49 | 23.17 | 27.17 | < 33.01 |
| 21100 | 2535.00 | | | | 23.08 | 27.08 | < 33.01 |
| 21350 | 2560.00 | | | | 23.19 | 27.19 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 99 | 23.24 | 27.24 | < 33.01 |
| 21100 | 2535.00 | | | | 22.90 | 26.90 | < 33.01 |
| 21350 | 2560.00 | | | | 22.50 | 26.50 | < 33.01 |
| 20850 | 2510.00 | 20 | 100 | 0 | 23.16 | 27.16 | < 33.01 |
| 21100 | 2535.00 | | | | 22.88 | 26.88 | < 33.01 |
| 21350 | 2560.00 | | | | 22.52 | 26.52 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 20775 | 2502.50 | 5 | 1 | 0 | 21.94 | 25.94 | < 33.01 |
| 21100 | 2535.00 | | | | 22.25 | 26.25 | < 33.01 |
| 21425 | 2567.50 | | | | 22.24 | 26.24 | < 33.01 |
| 20775 | 2502.50 | 5 | 1 | 12 | 22.02 | 26.02 | < 33.01 |
| 21100 | 2535.00 | | | | 22.44 | 26.44 | < 33.01 |
| 21425 | 2567.50 | | | | 21.65 | 25.65 | < 33.01 |
| 20775 | 2502.50 | 5 | 1 | 24 | 22.04 | 26.04 | < 33.01 |
| 21100 | 2535.00 | | | | 22.16 | 26.16 | < 33.01 |
| 21425 | 2567.50 | | | | 21.47 | 25.47 | < 33.01 |
| 20775 | 2502.50 | 5 | 25 | 0 | 21.34 | 25.34 | < 33.01 |
| 21100 | 2535.00 | | | | 20.75 | 24.75 | < 33.01 |
| 21425 | 2567.50 | | | | 20.71 | 24.71 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 0 | 22.70 | 26.70 | < 33.01 |
| 21100 | 2535.00 | | | | 22.28 | 26.28 | < 33.01 |
| 21400 | 2565.00 | | | | 21.92 | 25.92 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 24 | 22.65 | 26.65 | < 33.01 |
| 21100 | 2535.00 | | | | 22.11 | 26.11 | < 33.01 |
| 21400 | 2565.00 | | | | 22.02 | 26.02 | < 33.01 |
| 20800 | 2505.00 | 10 | 1 | 49 | 22.61 | 26.61 | < 33.01 |
| 21100 | 2535.00 | | | | 21.77 | 25.77 | < 33.01 |
| 21400 | 2565.00 | | | | 21.12 | 25.12 | < 33.01 |
| 20800 | 2505.00 | 10 | 50 | 0 | 21.24 | 25.24 | < 33.01 |
| 21100 | 2535.00 | | | | 20.86 | 24.86 | < 33.01 |
| 21400 | 2565.00 | | | | 21.27 | 25.27 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 20825 | 2507.50 | 15 | 1 | 0 | 22.37 | 26.37 | < 33.01 |
| 21100 | 2535.00 | | | | 22.27 | 26.27 | < 33.01 |
| 21375 | 2562.50 | | | | 22.69 | 26.69 | < 33.01 |
| 20825 | 2507.50 | 15 | 1 | 37 | 22.38 | 26.38 | < 33.01 |
| 21100 | 2535.00 | | | | 22.27 | 26.27 | < 33.01 |
| 21375 | 2562.50 | | | | 22.63 | 26.63 | < 33.01 |
| 20825 | 2507.50 | 15 | 1 | 74 | 22.41 | 26.41 | < 33.01 |
| 21100 | 2535.00 | | | | 21.95 | 25.95 | < 33.01 |
| 21375 | 2562.50 | | | | 21.93 | 25.93 | < 33.01 |
| 20825 | 2507.50 | 15 | 75 | 0 | 21.31 | 25.31 | < 33.01 |
| 21100 | 2535.00 | | | | 21.30 | 25.30 | < 33.01 |
| 21375 | 2562.50 | | | | 21.35 | 25.35 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 0 | 22.46 | 26.46 | < 33.01 |
| 21100 | 2535.00 | | | | 22.47 | 26.47 | < 33.01 |
| 21350 | 2560.00 | | | | 22.82 | 26.82 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 49 | 22.66 | 26.66 | < 33.01 |
| 21100 | 2535.00 | | | | 22.73 | 26.73 | < 33.01 |
| 21350 | 2560.00 | | | | 22.45 | 26.45 | < 33.01 |
| 20850 | 2510.00 | 20 | 1 | 99 | 22.42 | 26.42 | < 33.01 |
| 21100 | 2535.00 | | | | 22.44 | 26.44 | < 33.01 |
| 21350 | 2560.00 | | | | 21.89 | 25.89 | < 33.01 |
| 20850 | 2510.00 | 20 | 100 | 0 | 22.40 | 26.40 | < 33.01 |
| 21100 | 2535.00 | | | | 22.42 | 26.42 | < 33.01 |
| 21350 | 2560.00 | | | | 21.93 | 25.93 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 12 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 23017 | 699.7 | 1.4 | 1 | 0 | 23.62 | 24.47 | < 44.77 |
| 23095 | 707.5 | | | | 23.63 | 24.48 | < 44.77 |
| 23173 | 715.3 | | | | 23.46 | 24.31 | < 44.77 |
| 23017 | 699.7 | 1.4 | 1 | 2 | 23.70 | 24.55 | < 44.77 |
| 23095 | 707.5 | | | | 23.71 | 24.56 | < 44.77 |
| 23173 | 715.3 | | | | 23.54 | 24.39 | < 44.77 |
| 23017 | 699.7 | 1.4 | 1 | 6 | 23.61 | 24.46 | < 44.77 |
| 23095 | 707.5 | | | | 23.65 | 24.50 | < 44.77 |
| 23173 | 715.3 | | | | 23.49 | 24.34 | < 44.77 |
| 23017 | 699.7 | 1.4 | 6 | 0 | 22.70 | 23.55 | < 44.77 |
| 23095 | 707.5 | | | | 22.75 | 23.60 | < 44.77 |
| 23173 | 715.3 | | | | 22.55 | 23.40 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 0 | 23.66 | 24.51 | < 44.77 |
| 23095 | 707.5 | | | | 23.76 | 24.61 | < 44.77 |
| 23165 | 714.5 | | | | 23.56 | 24.41 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 7 | 23.67 | 24.52 | < 44.77 |
| 23095 | 707.5 | | | | 23.63 | 24.48 | < 44.77 |
| 23165 | 714.5 | | | | 23.57 | 24.42 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 14 | 23.60 | 24.45 | < 44.77 |
| 23095 | 707.5 | | | | 23.73 | 24.58 | < 44.77 |
| 23165 | 714.5 | | | | 23.54 | 24.39 | < 44.77 |
| 23025 | 700.5 | 3 | 15 | 0 | 22.73 | 23.58 | < 44.77 |
| 23095 | 707.5 | | | | 22.76 | 23.61 | < 44.77 |
| 23165 | 714.5 | | | | 22.64 | 23.49 | < 44.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 23035 | 701.5 | 5 | 1 | 0 | 23.84 | 24.69 | < 44.77 |
| 23095 | 707.5 | | | | 23.79 | 24.64 | < 44.77 |
| 23155 | 713.5 | | | | 23.58 | 24.43 | < 44.77 |
| 23035 | 701.5 | 5 | 1 | 12 | 23.82 | 24.67 | < 44.77 |
| 23095 | 707.5 | | | | 23.85 | 24.70 | < 44.77 |
| 23155 | 713.5 | | | | 23.65 | 24.50 | < 44.77 |
| 23035 | 701.5 | 5 | 1 | 24 | 23.86 | 24.71 | < 44.77 |
| 23095 | 707.5 | | | | 23.70 | 24.55 | < 44.77 |
| 23155 | 713.5 | | | | 23.54 | 24.39 | < 44.77 |
| 23035 | 701.5 | 5 | 25 | 0 | 22.80 | 23.65 | < 44.77 |
| 23095 | 707.5 | | | | 22.82 | 23.67 | < 44.77 |
| 23155 | 713.5 | | | | 22.64 | 23.49 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 0 | 23.73 | 24.58 | < 44.77 |
| 23095 | 707.5 | | | | 23.73 | 24.58 | < 44.77 |
| 23130 | 711.0 | | | | 23.78 | 24.63 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 24 | 23.78 | 24.63 | < 44.77 |
| 23095 | 707.5 | | | | 23.74 | 24.59 | < 44.77 |
| 23130 | 711.0 | | | | 23.71 | 24.56 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 49 | 23.65 | 24.50 | < 44.77 |
| 23095 | 707.5 | | | | 23.73 | 24.58 | < 44.77 |
| 23130 | 711.0 | | | | 23.61 | 24.46 | < 44.77 |
| 23060 | 704.0 | 10 | 50 | 0 | 22.81 | 23.66 | < 44.77 |
| 23095 | 707.5 | | | | 22.81 | 23.66 | < 44.77 |
| 23130 | 711.0 | | | | 22.77 | 23.62 | < 44.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 23017 | 699.7 | 1.4 | 1 | 0 | 22.41 | 23.26 | < 44.77 |
| 23095 | 707.5 | | | | 22.70 | 23.55 | < 44.77 |
| 23173 | 715.3 | | | | 22.33 | 23.18 | < 44.77 |
| 23017 | 699.7 | 1.4 | 1 | 2 | 22.79 | 23.64 | < 44.77 |
| 23095 | 707.5 | | | | 22.48 | 23.33 | < 44.77 |
| 23173 | 715.3 | | | | 22.40 | 23.25 | < 44.77 |
| 23017 | 699.7 | 1.4 | 1 | 6 | 22.75 | 23.60 | < 44.77 |
| 23095 | 707.5 | | | | 22.49 | 23.34 | < 44.77 |
| 23173 | 715.3 | | | | 22.37 | 23.22 | < 44.77 |
| 23017 | 699.7 | 1.4 | 6 | 0 | 21.66 | 22.51 | < 44.77 |
| 23095 | 707.5 | | | | 21.79 | 22.64 | < 44.77 |
| 23173 | 715.3 | | | | 21.56 | 22.41 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 0 | 22.82 | 23.67 | < 44.77 |
| 23095 | 707.5 | | | | 22.61 | 23.46 | < 44.77 |
| 23165 | 714.5 | | | | 23.04 | 23.89 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 7 | 22.80 | 23.65 | < 44.77 |
| 23095 | 707.5 | | | | 22.48 | 23.33 | < 44.77 |
| 23165 | 714.5 | | | | 22.93 | 23.78 | < 44.77 |
| 23025 | 700.5 | 3 | 1 | 14 | 22.73 | 23.58 | < 44.77 |
| 23095 | 707.5 | | | | 22.46 | 23.31 | < 44.77 |
| 23165 | 714.5 | | | | 22.94 | 23.79 | < 44.77 |
| 23025 | 700.5 | 3 | 15 | 0 | 21.78 | 22.63 | < 44.77 |
| 23095 | 707.5 | | | | 21.79 | 22.64 | < 44.77 |
| 23165 | 714.5 | | | | 21.59 | 22.44 | < 44.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 23035 | 701.5 | 5 | 1 | 0 | 23.12 | 23.97 | < 44.77 |
| 23095 | 707.5 | | | | 22.87 | 23.72 | < 44.77 |
| 23155 | 713.5 | | | | 22.34 | 23.19 | < 44.77 |
| 23035 | 701.5 | 5 | 1 | 12 | 23.20 | 24.05 | < 44.77 |
| 23095 | 707.5 | | | | 22.90 | 23.75 | < 44.77 |
| 23155 | 713.5 | | | | 22.40 | 23.25 | < 44.77 |
| 23035 | 701.5 | 5 | 1 | 24 | 23.19 | 24.04 | < 44.77 |
| 23095 | 707.5 | | | | 22.80 | 23.65 | < 44.77 |
| 23155 | 713.5 | | | | 22.39 | 23.24 | < 44.77 |
| 23035 | 701.5 | 5 | 25 | 0 | 21.89 | 22.74 | < 44.77 |
| 23095 | 707.5 | | | | 21.77 | 22.62 | < 44.77 |
| 23155 | 713.5 | | | | 21.64 | 22.49 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 0 | 22.81 | 23.66 | < 44.77 |
| 23095 | 707.5 | | | | 22.58 | 23.43 | < 44.77 |
| 23130 | 711.0 | | | | 23.20 | 24.05 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 24 | 22.50 | 23.35 | < 44.77 |
| 23095 | 707.5 | | | | 23.20 | 24.05 | < 44.77 |
| 23130 | 711.0 | | | | 22.82 | 23.67 | < 44.77 |
| 23060 | 704.0 | 10 | 1 | 49 | 22.51 | 23.36 | < 44.77 |
| 23095 | 707.5 | | | | 23.16 | 24.01 | < 44.77 |
| 23130 | 711.0 | | | | 22.71 | 23.56 | < 44.77 |
| 23060 | 704.0 | 10 | 50 | 0 | 21.90 | 22.75 | < 44.77 |
| 23095 | 707.5 | | | | 21.88 | 22.73 | < 44.77 |
| 23130 | 711.0 | | | | 21.79 | 22.64 | < 44.77 |
| Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15 | | | | | | | |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 13 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 23205 | 779.5 | 5 | 1 | 0 | 22.70 | 23.55 | < 44.77 |
| 23230 | 782.0 | | | | 23.68 | 24.53 | < 44.77 |
| 23255 | 784.5 | | | | 23.61 | 24.46 | < 44.77 |
| 23205 | 779.5 | 5 | 1 | 12 | 23.75 | 24.60 | < 44.77 |
| 23230 | 782.0 | | | | 23.72 | 24.57 | < 44.77 |
| 23255 | 784.5 | | | | 23.72 | 24.57 | < 44.77 |
| 23205 | 779.5 | 5 | 1 | 24 | 23.63 | 24.48 | < 44.77 |
| 23230 | 782.0 | | | | 23.67 | 24.52 | < 44.77 |
| 23255 | 784.5 | | | | 23.68 | 24.53 | < 44.77 |
| 23205 | 779.5 | 5 | 25 | 0 | 22.71 | 23.56 | < 44.77 |
| 23230 | 782.0 | | | | 22.64 | 23.49 | < 44.77 |
| 23255 | 784.5 | | | | 22.60 | 23.45 | < 44.77 |
| 23230 | 782.0 | 10 | 1 | 0 | 23.05 | 23.90 | < 44.77 |
| 23230 | 782.0 | | 1 | 24 | 23.59 | 24.44 | < 44.77 |
| 23230 | 782.0 | | 1 | 49 | 23.59 | 24.44 | < 44.77 |
| 23230 | 782.0 | | 50 | 0 | 22.66 | 23.51 | < 44.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 23205 | 779.5 | 5 | 1 | 0 | 21.75 | 22.60 | < 44.77 |
| 23230 | 782.0 | | | | 22.92 | 23.77 | < 44.77 |
| 23255 | 784.5 | | | | 22.31 | 23.16 | < 44.77 |
| 23205 | 779.5 | 5 | 1 | 12 | 23.01 | 23.86 | < 44.77 |
| 23230 | 782.0 | | | | 22.83 | 23.68 | < 44.77 |
| 23255 | 784.5 | | | | 22.48 | 23.33 | < 44.77 |
| 23205 | 779.5 | 5 | 1 | 24 | 22.97 | 23.82 | < 44.77 |
| 23230 | 782.0 | | | | 22.78 | 23.63 | < 44.77 |
| 23255 | 784.5 | | | | 22.41 | 23.26 | < 44.77 |
| 23205 | 779.5 | 5 | 25 | 0 | 21.68 | 22.53 | < 44.77 |
| 23230 | 782.0 | | | | 21.73 | 22.58 | < 44.77 |
| 23255 | 784.5 | | | | 21.69 | 22.54 | < 44.77 |
| 23230 | 782.0 | 10 | 1 | 0 | 22.53 | 23.38 | < 44.77 |
| 23230 | 782.0 | | 1 | 24 | 23.01 | 23.86 | < 44.77 |
| 23230 | 782.0 | | 1 | 49 | 23.06 | 23.91 | < 44.77 |
| 23230 | 782.0 | | 50 | 0 | 21.77 | 22.62 | < 44.77 |
| Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15 | | | | | | | |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/11/05 |
| Test Band | LTE Band 17 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 23755 | 706.5 | 5 | 1 | 0 | 23.84 | 24.69 | < 44.77 |
| 23790 | 710.0 | | | | 23.70 | 24.55 | < 44.77 |
| 23825 | 713.5 | | | | 23.71 | 24.56 | < 44.77 |
| 23755 | 706.5 | 5 | 1 | 12 | 23.71 | 24.56 | < 44.77 |
| 23790 | 710.0 | | | | 23.77 | 24.62 | < 44.77 |
| 23825 | 713.5 | | | | 23.78 | 24.63 | < 44.77 |
| 23755 | 706.5 | 5 | 1 | 24 | 23.66 | 24.51 | < 44.77 |
| 23790 | 710.0 | | | | 23.76 | 24.61 | < 44.77 |
| 23825 | 713.5 | | | | 23.64 | 24.49 | < 44.77 |
| 23755 | 706.5 | 5 | 25 | 0 | 22.74 | 23.59 | < 44.77 |
| 23790 | 710.0 | | | | 22.72 | 23.57 | < 44.77 |
| 23825 | 713.5 | | | | 22.68 | 23.53 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 0 | 23.73 | 24.58 | < 44.77 |
| 23790 | 710.0 | | | | 23.76 | 24.61 | < 44.77 |
| 23800 | 711.0 | | | | 23.74 | 24.59 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 24 | 23.69 | 24.54 | < 44.77 |
| 23790 | 710.0 | | | | 23.72 | 24.57 | < 44.77 |
| 23800 | 711.0 | | | | 23.67 | 24.52 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 49 | 23.59 | 24.44 | < 44.77 |
| 23790 | 710.0 | | | | 23.63 | 24.48 | < 44.77 |
| 23800 | 711.0 | | | | 23.58 | 24.43 | < 44.77 |
| 23780 | 709.0 | 10 | 50 | 0 | 22.73 | 23.58 | < 44.77 |
| 23790 | 710.0 | | | | 22.74 | 23.59 | < 44.77 |
| 23800 | 711.0 | | | | 22.77 | 23.62 | < 44.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 23755 | 706.5 | 5 | 1 | 0 | 23.08 | 23.93 | < 44.77 |
| 23790 | 710.0 | | | | 22.37 | 23.22 | < 44.77 |
| 23825 | 713.5 | | | | 22.77 | 23.62 | < 44.77 |
| 23755 | 706.5 | 5 | 1 | 12 | 22.82 | 23.67 | < 44.77 |
| 23790 | 710.0 | | | | 22.47 | 23.32 | < 44.77 |
| 23825 | 713.5 | | | | 23.09 | 23.94 | < 44.77 |
| 23755 | 706.5 | 5 | 1 | 24 | 22.82 | 23.67 | < 44.77 |
| 23790 | 710.0 | | | | 23.02 | 23.87 | < 44.77 |
| 23825 | 713.5 | | | | 22.69 | 23.54 | < 44.77 |
| 23755 | 706.5 | 5 | 25 | 0 | 21.84 | 22.69 | < 44.77 |
| 23790 | 710.0 | | | | 21.60 | 22.45 | < 44.77 |
| 23825 | 713.5 | | | | 21.75 | 22.60 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 0 | 22.84 | 23.69 | < 44.77 |
| 23790 | 710.0 | | | | 22.46 | 23.31 | < 44.77 |
| 23800 | 711.0 | | | | 23.20 | 24.05 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 24 | 22.82 | 23.67 | < 44.77 |
| 23790 | 710.0 | | | | 22.40 | 23.25 | < 44.77 |
| 23800 | 711.0 | | | | 22.10 | 22.95 | < 44.77 |
| 23780 | 709.0 | 10 | 1 | 49 | 22.75 | 23.60 | < 44.77 |
| 23790 | 710.0 | | | | 22.36 | 23.21 | < 44.77 |
| 23800 | 711.0 | | | | 23.03 | 23.88 | < 44.77 |
| 23780 | 709.0 | 10 | 50 | 0 | 21.70 | 22.55 | < 44.77 |
| 23790 | 710.0 | | | | 21.70 | 22.55 | < 44.77 |
| 23800 | 711.0 | | | | 21.73 | 22.58 | < 44.77 |
| Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15 | | | | | | | |

| | | | |
|---------------|----------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 38/41 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 39675 | 2498.50 | 5 | 1 | 0 | 23.39 | 27.39 | < 33.01 |
| 40620 | 2593.00 | | | | 23.16 | 27.16 | < 33.01 |
| 40565 | 2687.50 | | | | 23.10 | 27.10 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 12 | 23.54 | 27.54 | < 33.01 |
| 40620 | 2593.00 | | | | 23.31 | 27.31 | < 33.01 |
| 40565 | 2687.50 | | | | 23.20 | 27.20 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 24 | 23.55 | 27.55 | < 33.01 |
| 40620 | 2593.00 | | | | 23.34 | 27.34 | < 33.01 |
| 40565 | 2687.50 | | | | 23.24 | 27.24 | < 33.01 |
| 39675 | 2498.50 | 5 | 25 | 0 | 23.44 | 27.44 | < 33.01 |
| 40620 | 2593.00 | | | | 23.28 | 27.28 | < 33.01 |
| 40565 | 2687.50 | | | | 23.42 | 27.42 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 0 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.21 | 27.21 | < 33.01 |
| 41540 | 2685.00 | | | | 23.49 | 27.49 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 24 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.33 | 27.33 | < 33.01 |
| 41540 | 2685.00 | | | | 23.47 | 27.47 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 49 | 23.70 | 27.70 | < 33.01 |
| 40620 | 2593.00 | | | | 23.32 | 27.32 | < 33.01 |
| 41540 | 2685.00 | | | | 23.59 | 27.59 | < 33.01 |
| 39700 | 2501.00 | 10 | 50 | 0 | 23.70 | 27.70 | < 33.01 |
| 40620 | 2593.00 | | | | 23.38 | 27.38 | < 33.01 |
| 41540 | 2685.00 | | | | 23.57 | 27.57 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 39725 | 2503.50 | 15 | 1 | 0 | 23.66 | 27.66 | < 33.01 |
| 40620 | 2593.00 | | | | 23.39 | 27.39 | < 33.01 |
| 41515 | 2682.50 | | | | 23.39 | 27.39 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 37 | 23.64 | 27.64 | < 33.01 |
| 40620 | 2593.00 | | | | 23.34 | 27.34 | < 33.01 |
| 41515 | 2682.50 | | | | 23.52 | 27.52 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 74 | 23.74 | 27.74 | < 33.01 |
| 40620 | 2593.00 | | | | 23.36 | 27.36 | < 33.01 |
| 41515 | 2682.50 | | | | 23.50 | 27.50 | < 33.01 |
| 39725 | 2503.50 | 15 | 75 | 0 | 23.57 | 27.57 | < 33.01 |
| 40620 | 2593.00 | | | | 23.36 | 27.36 | < 33.01 |
| 41515 | 2682.50 | | | | 23.50 | 27.50 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 0 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.32 | 27.32 | < 33.01 |
| 41490 | 2680.00 | | | | 23.47 | 27.47 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 49 | 23.55 | 27.55 | < 33.01 |
| 40620 | 2593.00 | | | | 23.35 | 27.35 | < 33.01 |
| 41490 | 2680.00 | | | | 23.45 | 27.45 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 99 | 23.70 | 27.70 | < 33.01 |
| 40620 | 2593.00 | | | | 23.44 | 27.44 | < 33.01 |
| 41490 | 2680.00 | | | | 23.60 | 27.60 | < 33.01 |
| 39750 | 2506.00 | 20 | 100 | 0 | 23.63 | 27.63 | < 33.01 |
| 40620 | 2593.00 | | | | 23.43 | 27.43 | < 33.01 |
| 41490 | 2680.00 | | | | 23.50 | 27.50 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 39675 | 2498.50 | 5 | 1 | 0 | 23.70 | 27.70 | < 33.01 |
| 40620 | 2593.00 | | | | 23.34 | 27.34 | < 33.01 |
| 40565 | 2687.50 | | | | 23.41 | 27.41 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 12 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.56 | 27.56 | < 33.01 |
| 40565 | 2687.50 | | | | 23.50 | 27.50 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 24 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.48 | 27.48 | < 33.01 |
| 40565 | 2687.50 | | | | 23.45 | 27.45 | < 33.01 |
| 39675 | 2498.50 | 5 | 25 | 0 | 23.43 | 27.43 | < 33.01 |
| 40620 | 2593.00 | | | | 23.29 | 27.29 | < 33.01 |
| 40565 | 2687.50 | | | | 23.34 | 27.34 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 0 | 23.73 | 27.73 | < 33.01 |
| 40620 | 2593.00 | | | | 22.83 | 26.83 | < 33.01 |
| 41540 | 2685.00 | | | | 23.89 | 27.89 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 24 | 23.77 | 27.77 | < 33.01 |
| 40620 | 2593.00 | | | | 22.93 | 26.93 | < 33.01 |
| 41540 | 2685.00 | | | | 23.90 | 27.90 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 49 | 23.85 | 27.85 | < 33.01 |
| 40620 | 2593.00 | | | | 23.03 | 27.03 | < 33.01 |
| 41540 | 2685.00 | | | | 23.89 | 27.89 | < 33.01 |
| 39700 | 2501.00 | 10 | 50 | 0 | 23.75 | 27.75 | < 33.01 |
| 40620 | 2593.00 | | | | 23.60 | 27.60 | < 33.01 |
| 41540 | 2685.00 | | | | 23.58 | 27.58 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 39725 | 2503.50 | 15 | 1 | 0 | 23.72 | 27.72 | < 33.01 |
| 40620 | 2593.00 | | | | 23.79 | 27.79 | < 33.01 |
| 41515 | 2682.50 | | | | 23.82 | 27.82 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 37 | 23.75 | 27.75 | < 33.01 |
| 40620 | 2593.00 | | | | 23.88 | 27.88 | < 33.01 |
| 41515 | 2682.50 | | | | 23.49 | 27.49 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 74 | 23.82 | 27.82 | < 33.01 |
| 40620 | 2593.00 | | | | 23.91 | 27.91 | < 33.01 |
| 41515 | 2682.50 | | | | 23.94 | 27.94 | < 33.01 |
| 39725 | 2503.50 | 15 | 75 | 0 | 23.68 | 27.68 | < 33.01 |
| 40620 | 2593.00 | | | | 23.40 | 27.40 | < 33.01 |
| 41515 | 2682.50 | | | | 23.49 | 27.49 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 0 | 23.38 | 27.38 | < 33.01 |
| 40620 | 2593.00 | | | | 23.52 | 27.52 | < 33.01 |
| 41490 | 2680.00 | | | | 23.31 | 27.31 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 49 | 23.80 | 27.80 | < 33.01 |
| 40620 | 2593.00 | | | | 23.50 | 27.50 | < 33.01 |
| 41490 | 2680.00 | | | | 23.23 | 27.23 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 99 | 23.66 | 27.66 | < 33.01 |
| 40620 | 2593.00 | | | | 23.62 | 27.62 | < 33.01 |
| 41490 | 2680.00 | | | | 23.27 | 27.27 | < 33.01 |
| 39750 | 2506.00 | 20 | 100 | 0 | 23.67 | 27.67 | < 33.01 |
| 40620 | 2593.00 | | | | 23.34 | 27.34 | < 33.01 |
| 41490 | 2680.00 | | | | 23.50 | 27.50 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| | | | |
|---------------|------------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 41_HPUE | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 39675 | 2498.50 | 5 | 1 | 0 | 26.25 | 30.25 | < 33.01 |
| 40620 | 2593.00 | | | | 26.28 | 30.28 | < 33.01 |
| 40565 | 2687.50 | | | | 26.45 | 30.45 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 12 | 26.34 | 30.34 | < 33.01 |
| 40620 | 2593.00 | | | | 26.22 | 30.22 | < 33.01 |
| 40565 | 2687.50 | | | | 26.49 | 30.49 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 24 | 26.26 | 30.26 | < 33.01 |
| 40620 | 2593.00 | | | | 26.19 | 30.19 | < 33.01 |
| 40565 | 2687.50 | | | | 26.47 | 30.47 | < 33.01 |
| 39675 | 2498.50 | 5 | 25 | 0 | 25.21 | 29.21 | < 33.01 |
| 40620 | 2593.00 | | | | 25.19 | 29.19 | < 33.01 |
| 40565 | 2687.50 | | | | 25.39 | 29.39 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 0 | 26.20 | 30.20 | < 33.01 |
| 40620 | 2593.00 | | | | 26.19 | 30.19 | < 33.01 |
| 41540 | 2685.00 | | | | 26.45 | 30.45 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 24 | 26.38 | 30.38 | < 33.01 |
| 40620 | 2593.00 | | | | 26.21 | 30.21 | < 33.01 |
| 41540 | 2685.00 | | | | 26.30 | 30.30 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 49 | 26.44 | 30.44 | < 33.01 |
| 40620 | 2593.00 | | | | 26.27 | 30.27 | < 33.01 |
| 41540 | 2685.00 | | | | 26.53 | 30.53 | < 33.01 |
| 39700 | 2501.00 | 10 | 50 | 0 | 25.29 | 29.29 | < 33.01 |
| 40620 | 2593.00 | | | | 25.17 | 29.17 | < 33.01 |
| 41540 | 2685.00 | | | | 25.41 | 29.41 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| QPSK | | | | | | | |
| 39725 | 2503.50 | 15 | 1 | 0 | 26.44 | 30.44 | < 33.01 |
| 40620 | 2593.00 | | | | 26.28 | 30.28 | < 33.01 |
| 41515 | 2682.50 | | | | 26.39 | 30.39 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 37 | 26.39 | 30.39 | < 33.01 |
| 40620 | 2593.00 | | | | 26.26 | 30.26 | < 33.01 |
| 41515 | 2682.50 | | | | 26.34 | 30.34 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 74 | 26.44 | 30.44 | < 33.01 |
| 40620 | 2593.00 | | | | 26.29 | 30.29 | < 33.01 |
| 41515 | 2682.50 | | | | 26.27 | 30.27 | < 33.01 |
| 39725 | 2503.50 | 15 | 75 | 0 | 25.29 | 29.29 | < 33.01 |
| 40620 | 2593.00 | | | | 25.29 | 29.29 | < 33.01 |
| 41515 | 2682.50 | | | | 25.33 | 29.33 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 0 | 26.25 | 30.25 | < 33.01 |
| 40620 | 2593.00 | | | | 26.33 | 30.33 | < 33.01 |
| 41490 | 2680.00 | | | | 25.96 | 29.96 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 49 | 26.21 | 30.21 | < 33.01 |
| 40620 | 2593.00 | | | | 26.28 | 30.28 | < 33.01 |
| 41490 | 2680.00 | | | | 26.21 | 30.21 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 99 | 26.21 | 30.21 | < 33.01 |
| 40620 | 2593.00 | | | | 26.26 | 30.26 | < 33.01 |
| 41490 | 2680.00 | | | | 26.14 | 30.14 | < 33.01 |
| 39750 | 2506.00 | 20 | 100 | 0 | 25.25 | 29.25 | < 33.01 |
| 40620 | 2593.00 | | | | 25.28 | 29.28 | < 33.01 |
| 41490 | 2680.00 | | | | 25.41 | 29.41 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 39675 | 2498.50 | 5 | 1 | 0 | 25.29 | 29.29 | < 33.01 |
| 40620 | 2593.00 | | | | 25.04 | 29.04 | < 33.01 |
| 40565 | 2687.50 | | | | 25.51 | 29.51 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 12 | 25.32 | 29.32 | < 33.01 |
| 40620 | 2593.00 | | | | 25.58 | 29.58 | < 33.01 |
| 40565 | 2687.50 | | | | 25.59 | 29.59 | < 33.01 |
| 39675 | 2498.50 | 5 | 1 | 24 | 25.27 | 29.27 | < 33.01 |
| 40620 | 2593.00 | | | | 25.51 | 29.51 | < 33.01 |
| 40565 | 2687.50 | | | | 25.53 | 29.53 | < 33.01 |
| 39675 | 2498.50 | 5 | 25 | 0 | 24.23 | 28.23 | < 33.01 |
| 40620 | 2593.00 | | | | 24.17 | 28.17 | < 33.01 |
| 40565 | 2687.50 | | | | 24.30 | 28.30 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 0 | 25.01 | 29.01 | < 33.01 |
| 40620 | 2593.00 | | | | 25.12 | 29.12 | < 33.01 |
| 41540 | 2685.00 | | | | 25.75 | 29.75 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 24 | 24.96 | 28.96 | < 33.01 |
| 40620 | 2593.00 | | | | 25.10 | 29.10 | < 33.01 |
| 41540 | 2685.00 | | | | 25.91 | 29.91 | < 33.01 |
| 39700 | 2501.00 | 10 | 1 | 49 | 25.07 | 29.07 | < 33.01 |
| 40620 | 2593.00 | | | | 25.19 | 29.19 | < 33.01 |
| 41540 | 2685.00 | | | | 25.93 | 29.93 | < 33.01 |
| 39700 | 2501.00 | 10 | 50 | 0 | 24.36 | 28.36 | < 33.01 |
| 40620 | 2593.00 | | | | 24.36 | 28.36 | < 33.01 |
| 41540 | 2685.00 | | | | 24.33 | 28.33 | < 33.01 |

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | EIRP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|------------|-------------|
| 16QAM | | | | | | | |
| 39725 | 2503.50 | 15 | 1 | 0 | 25.11 | 29.11 | < 33.01 |
| 40620 | 2593.00 | | | | 25.53 | 29.53 | < 33.01 |
| 41515 | 2682.50 | | | | 25.76 | 29.76 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 37 | 25.06 | 29.06 | < 33.01 |
| 40620 | 2593.00 | | | | 25.52 | 29.52 | < 33.01 |
| 41515 | 2682.50 | | | | 25.75 | 29.75 | < 33.01 |
| 39725 | 2503.50 | 15 | 1 | 74 | 25.03 | 29.03 | < 33.01 |
| 40620 | 2593.00 | | | | 25.48 | 29.48 | < 33.01 |
| 41515 | 2682.50 | | | | 25.89 | 29.89 | < 33.01 |
| 39725 | 2503.50 | 15 | 75 | 0 | 24.29 | 28.29 | < 33.01 |
| 40620 | 2593.00 | | | | 24.30 | 28.30 | < 33.01 |
| 41515 | 2682.50 | | | | 24.33 | 28.33 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 0 | 25.23 | 29.23 | < 33.01 |
| 40620 | 2593.00 | | | | 25.55 | 29.55 | < 33.01 |
| 41490 | 2680.00 | | | | 25.34 | 29.34 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 49 | 25.32 | 29.32 | < 33.01 |
| 40620 | 2593.00 | | | | 25.55 | 29.55 | < 33.01 |
| 41490 | 2680.00 | | | | 24.74 | 28.74 | < 33.01 |
| 39750 | 2506.00 | 20 | 1 | 99 | 25.20 | 29.20 | < 33.01 |
| 40620 | 2593.00 | | | | 25.53 | 29.53 | < 33.01 |
| 41490 | 2680.00 | | | | 25.47 | 29.47 | < 33.01 |
| 39750 | 2506.00 | 20 | 100 | 0 | 24.42 | 28.42 | < 33.01 |
| 40620 | 2593.00 | | | | 24.24 | 28.24 | < 33.01 |
| 41490 | 2680.00 | | | | 24.41 | 28.41 | < 33.01 |
| Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi) | | | | | | | |

| | | | |
|---------------|-------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/25 |
| Test Band | LTE Band 71 | | |

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 133147 | 665.5 | 5 | 1 | 0 | 22.73 | 23.58 | < 34.77 |
| 133297 | 680.5 | | | | 22.78 | 23.63 | < 34.77 |
| 133447 | 695.5 | | | | 22.80 | 23.65 | < 34.77 |
| 133147 | 665.5 | 5 | 1 | 12 | 22.72 | 23.57 | < 34.77 |
| 133297 | 680.5 | | | | 22.82 | 23.67 | < 34.77 |
| 133447 | 695.5 | | | | 22.91 | 23.76 | < 34.77 |
| 133147 | 665.5 | 5 | 1 | 24 | 22.68 | 23.53 | < 34.77 |
| 133297 | 680.5 | | | | 22.61 | 23.46 | < 34.77 |
| 133447 | 695.5 | | | | 22.78 | 23.63 | < 34.77 |
| 133147 | 665.5 | 5 | 25 | 0 | 21.75 | 22.60 | < 34.77 |
| 133297 | 680.5 | | | | 21.79 | 22.64 | < 34.77 |
| 133447 | 695.5 | | | | 21.79 | 22.64 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 0 | 22.77 | 23.62 | < 34.77 |
| 133297 | 680.5 | | | | 22.69 | 23.54 | < 34.77 |
| 133422 | 693.0 | | | | 22.76 | 23.61 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 24 | 22.68 | 23.53 | < 34.77 |
| 133297 | 680.5 | | | | 22.72 | 23.57 | < 34.77 |
| 133422 | 693.0 | | | | 22.78 | 23.63 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 49 | 22.69 | 23.54 | < 34.77 |
| 133297 | 680.5 | | | | 22.71 | 23.56 | < 34.77 |
| 133422 | 693.0 | | | | 22.71 | 23.56 | < 34.77 |
| 133172 | 668.0 | 10 | 50 | 0 | 21.86 | 22.71 | < 34.77 |
| 133297 | 680.5 | | | | 21.83 | 22.68 | < 34.77 |
| 133422 | 693.0 | | | | 21.81 | 22.66 | < 34.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| QPSK | | | | | | | |
| 133197 | 670.5 | 15 | 1 | 0 | 22.70 | 23.55 | < 34.77 |
| 133297 | 680.5 | | | | 22.71 | 23.56 | < 34.77 |
| 133397 | 690.5 | | | | 22.81 | 23.66 | < 34.77 |
| 133197 | 670.5 | 15 | 1 | 37 | 22.65 | 23.50 | < 34.77 |
| 133297 | 680.5 | | | | 22.73 | 23.58 | < 34.77 |
| 133397 | 690.5 | | | | 22.85 | 23.70 | < 34.77 |
| 133197 | 670.5 | 15 | 1 | 74 | 22.63 | 23.48 | < 34.77 |
| 133297 | 680.5 | | | | 22.77 | 23.62 | < 34.77 |
| 133397 | 690.5 | | | | 22.79 | 23.64 | < 34.77 |
| 133197 | 670.5 | 15 | 75 | 0 | 21.82 | 22.67 | < 34.77 |
| 133297 | 680.5 | | | | 21.80 | 22.65 | < 34.77 |
| 133397 | 690.5 | | | | 21.77 | 22.62 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 0 | 22.71 | 23.56 | < 34.77 |
| 133322 | 683.0 | | | | 22.77 | 23.62 | < 34.77 |
| 133372 | 688.0 | | | | 22.92 | 23.77 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 49 | 22.58 | 23.43 | < 34.77 |
| 133322 | 683.0 | | | | 22.70 | 23.55 | < 34.77 |
| 133372 | 688.0 | | | | 22.65 | 23.50 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 99 | 22.70 | 23.55 | < 34.77 |
| 133322 | 683.0 | | | | 22.82 | 23.67 | < 34.77 |
| 133372 | 688.0 | | | | 22.66 | 23.51 | < 34.77 |
| 133222 | 673.0 | 20 | 100 | 0 | 21.77 | 22.62 | < 34.77 |
| 133322 | 683.0 | | | | 21.74 | 22.59 | < 34.77 |
| 133372 | 688.0 | | | | 21.80 | 22.65 | < 34.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|-------------|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 133147 | 665.5 | 5 | 1 | 0 | 21.45 | 22.30 | < 34.77 |
| 133297 | 680.5 | | | | 22.16 | 23.01 | < 34.77 |
| 133447 | 695.5 | | | | 22.15 | 23.00 | < 34.77 |
| 133147 | 665.5 | 5 | 1 | 12 | 21.85 | 22.70 | < 34.77 |
| 133297 | 680.5 | | | | 21.48 | 22.33 | < 34.77 |
| 133447 | 695.5 | | | | 22.19 | 23.04 | < 34.77 |
| 133147 | 665.5 | 5 | 1 | 24 | 21.72 | 22.57 | < 34.77 |
| 133297 | 680.5 | | | | 21.42 | 22.27 | < 34.77 |
| 133447 | 695.5 | | | | 22.15 | 23.00 | < 34.77 |
| 133147 | 665.5 | 5 | 25 | 0 | 20.85 | 21.70 | < 34.77 |
| 133297 | 680.5 | | | | 20.80 | 21.65 | < 34.77 |
| 133447 | 695.5 | | | | 20.73 | 21.58 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 0 | 22.14 | 22.99 | < 34.77 |
| 133297 | 680.5 | | | | 21.81 | 22.66 | < 34.77 |
| 133422 | 693.0 | | | | 21.59 | 22.44 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 24 | 22.11 | 22.96 | < 34.77 |
| 133297 | 680.5 | | | | 21.76 | 22.61 | < 34.77 |
| 133422 | 693.0 | | | | 21.54 | 22.39 | < 34.77 |
| 133172 | 668.0 | 10 | 1 | 49 | 22.05 | 22.90 | < 34.77 |
| 133297 | 680.5 | | | | 21.86 | 22.71 | < 34.77 |
| 133422 | 693.0 | | | | 21.41 | 22.26 | < 34.77 |
| 133172 | 668.0 | 10 | 50 | 0 | 20.91 | 21.76 | < 34.77 |
| 133297 | 680.5 | | | | 20.85 | 21.70 | < 34.77 |
| 133422 | 693.0 | | | | 20.80 | 21.65 | < 34.77 |

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

| Channel No. | Frequency (MHz) | Channel Bandwidth (MHz) | RB Size | RB Offset | Output Power (dBm) | ERP (dBm) | Limit (dBm) |
|--|-----------------|-------------------------|---------|-----------|--------------------|-----------|-------------|
| 16QAM | | | | | | | |
| 133197 | 670.5 | 15 | 1 | 0 | 22.17 | 23.02 | < 34.77 |
| 133297 | 680.5 | | | | 21.85 | 22.70 | < 34.77 |
| 133397 | 690.5 | | | | 21.97 | 22.82 | < 34.77 |
| 133197 | 670.5 | 15 | 1 | 37 | 22.12 | 22.97 | < 34.77 |
| 133297 | 680.5 | | | | 21.79 | 22.64 | < 34.77 |
| 133397 | 690.5 | | | | 21.99 | 22.84 | < 34.77 |
| 133197 | 670.5 | 15 | 1 | 74 | 22.08 | 22.93 | < 34.77 |
| 133297 | 680.5 | | | | 21.87 | 22.72 | < 34.77 |
| 133397 | 690.5 | | | | 21.87 | 22.72 | < 34.77 |
| 133197 | 670.5 | 15 | 75 | 0 | 20.80 | 21.65 | < 34.77 |
| 133297 | 680.5 | | | | 20.75 | 21.60 | < 34.77 |
| 133397 | 690.5 | | | | 20.78 | 21.63 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 0 | 22.01 | 22.86 | < 34.77 |
| 133322 | 683.0 | | | | 22.31 | 23.16 | < 34.77 |
| 133372 | 688.0 | | | | 22.18 | 23.03 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 49 | 22.24 | 23.09 | < 34.77 |
| 133322 | 683.0 | | | | 22.06 | 22.91 | < 34.77 |
| 133372 | 688.0 | | | | 21.83 | 22.68 | < 34.77 |
| 133222 | 673.0 | 20 | 1 | 99 | 22.10 | 22.95 | < 34.77 |
| 133322 | 683.0 | | | | 22.11 | 22.96 | < 34.77 |
| 133372 | 688.0 | | | | 21.90 | 22.75 | < 34.77 |
| 133222 | 673.0 | 20 | 100 | 0 | 20.90 | 21.75 | < 34.77 |
| 133322 | 683.0 | | | | 20.84 | 21.69 | < 34.77 |
| 133372 | 688.0 | | | | 20.85 | 21.70 | < 34.77 |
| Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15 | | | | | | | |

5.5. Band Edge Measurement

5.5.1. Test Limit

22.917(a), 24.238 (a), 27.53 (g) (h)

For operations in the 824 ~ 849 MHz, 1850 ~ 1910 MHz, 1930 ~ 1990 MHz, 600MHz & 698 ~ 746 MHz and 1710 ~ 1755 MHz, the FCC limit is $43 + 10\log_{10}(P_{\text{Watts}})$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (c)

For operations in the 776-788 MHz band, the FCC limit is $43 + 10\log_{10}(P_{\text{Watts}})$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least $65 + 10 \log_{10} (P_{\text{Watts}})$, dB, for mobile and portable equipment.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

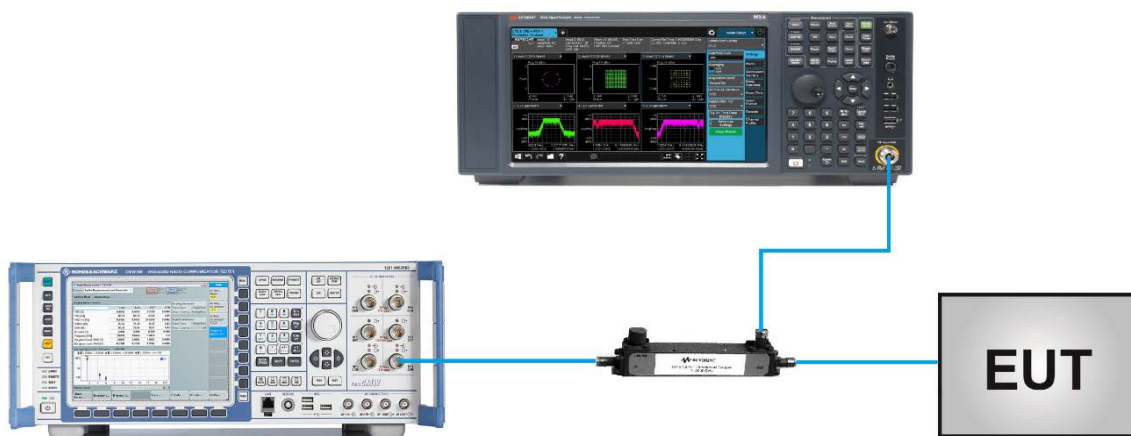
5.5.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

5.5.3. Test Setting

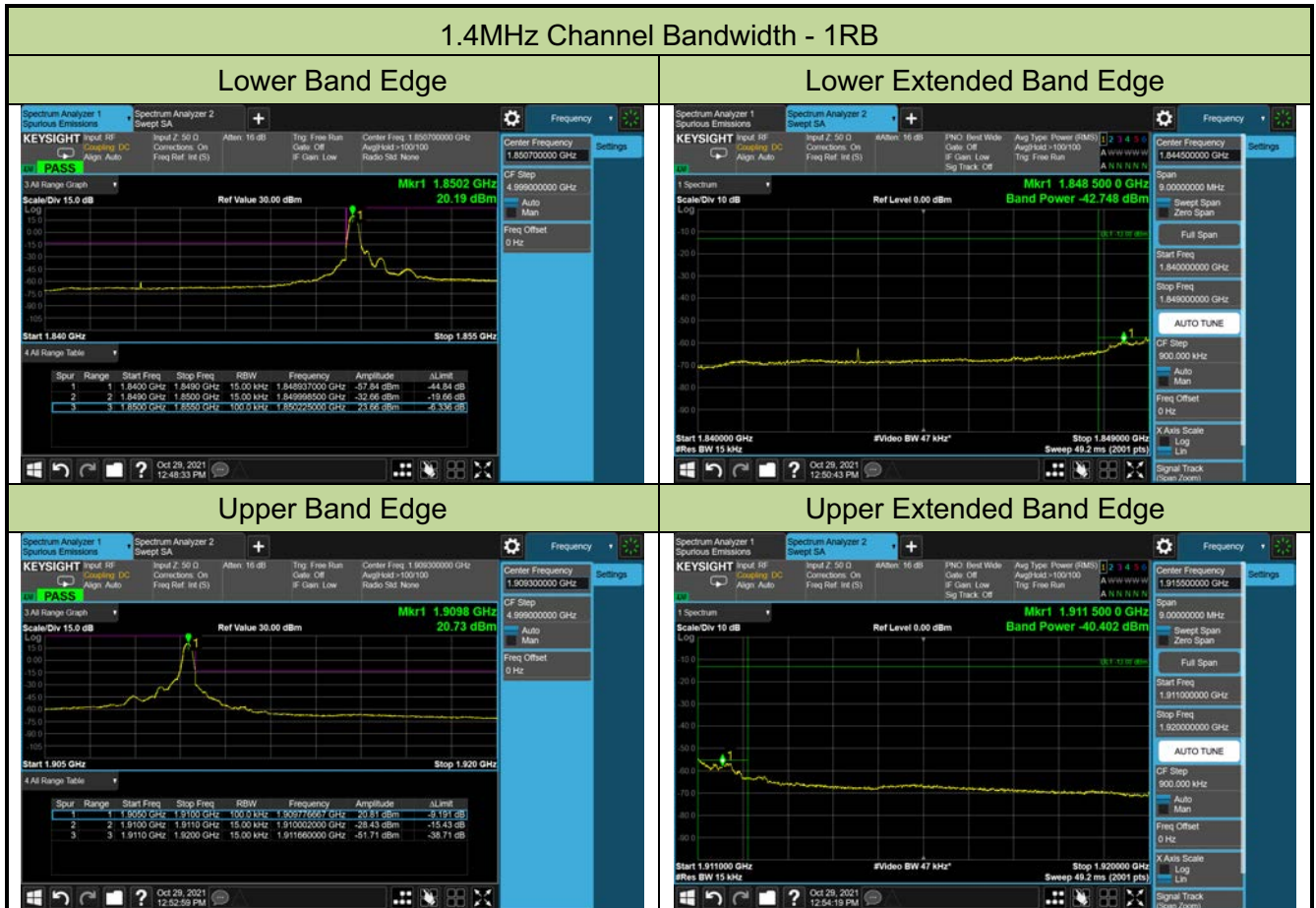
1. Set the analyzer frequency to low or high channel
2. $RBW \geq$ The nominal RBW shall be in the range of 1% of the anticipated OBW (in the 1MHz band immediately outside and adjacent to the band edge). For improvement of the accuracy in the measurement of the average power of a noise-like emission, a RBW narrower than the specified reference bandwidth can be used (generally limited to no less than 1% of the OBW), provided that a subsequent integration is performed over the full required measurement bandwidth. This integration should be performed using the spectrum analyzer's band power functions.
3. $VBW \geq 3 * RBW$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

5.5.4. Test Setup



5.5.5. Test Result

| | | | |
|---------------|--------------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/29 |
| Test Band | LTE Band 2/25_QPSK | | |



3MHz Channel Bandwidth - 1RB

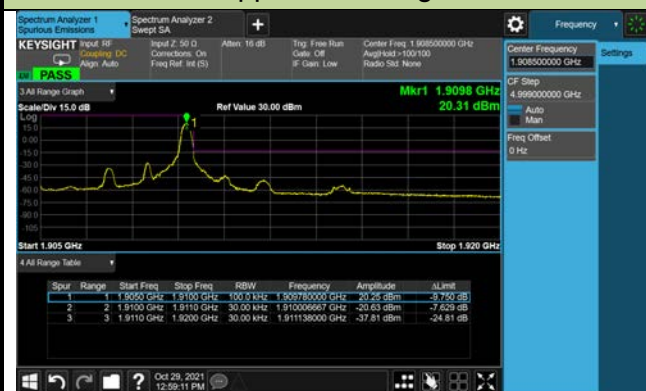
Lower Band Edge



Lower Extended Band Edge



Upper Band Edge

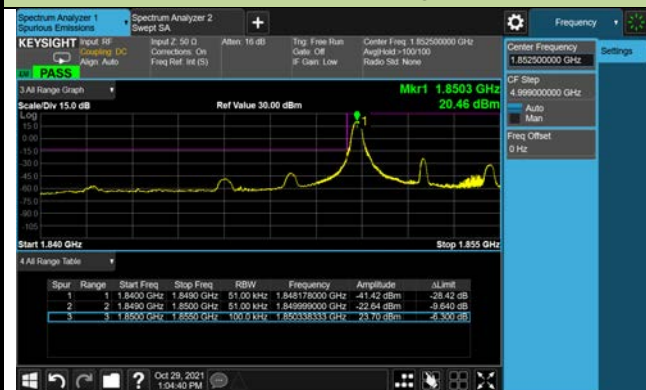


Upper Extended Band Edge

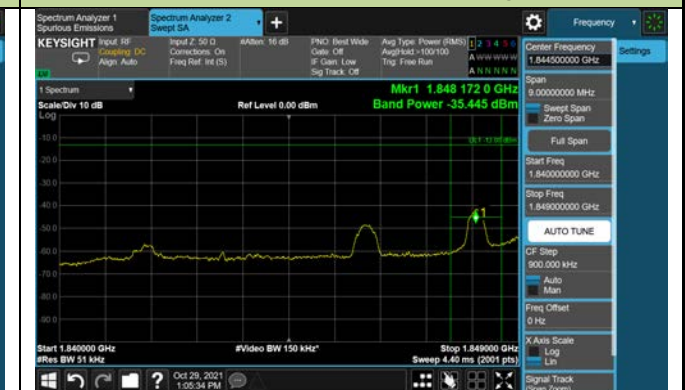


5MHz Channel Bandwidth - 1RB

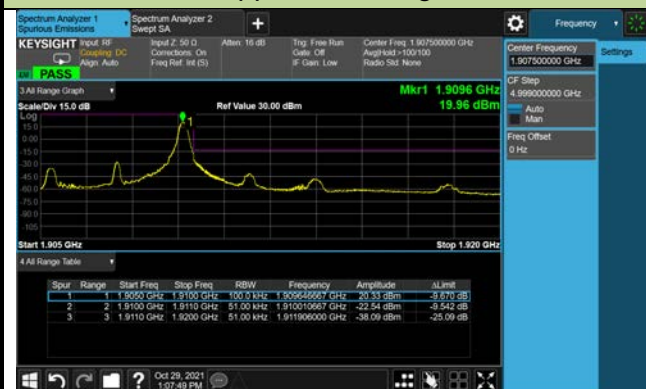
Lower Band Edge



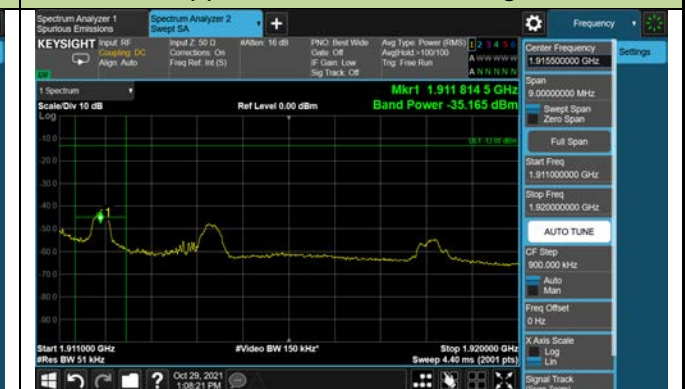
Lower Extended Band Edge



Upper Band Edge

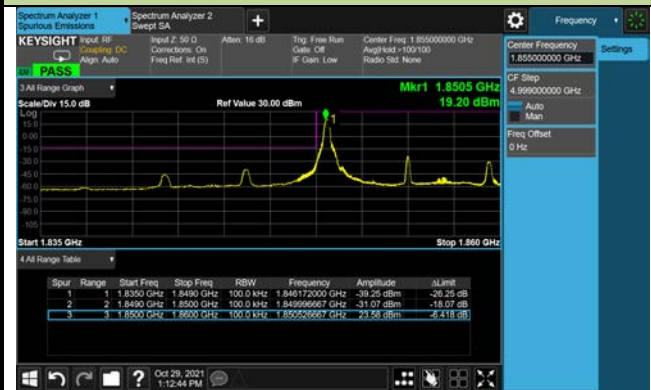


Upper Extended Band Edge



10MHz Channel Bandwidth - 1RB

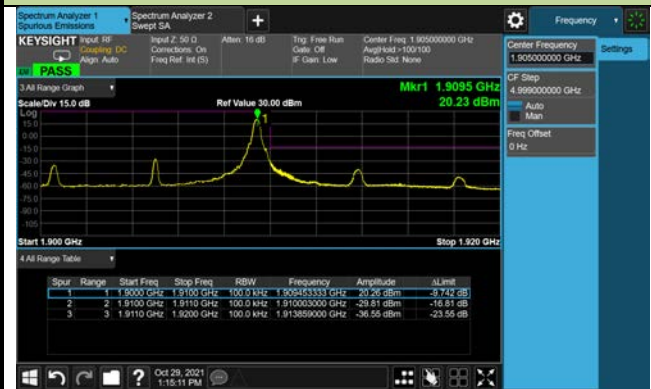
Lower Band Edge



Lower Extended Band Edge



Upper Band Edge

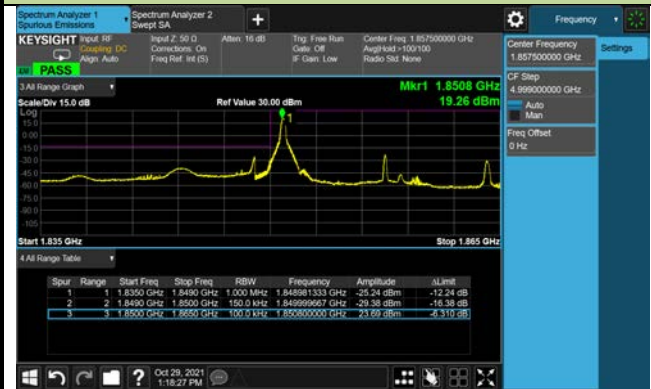


Upper Extended Band Edge

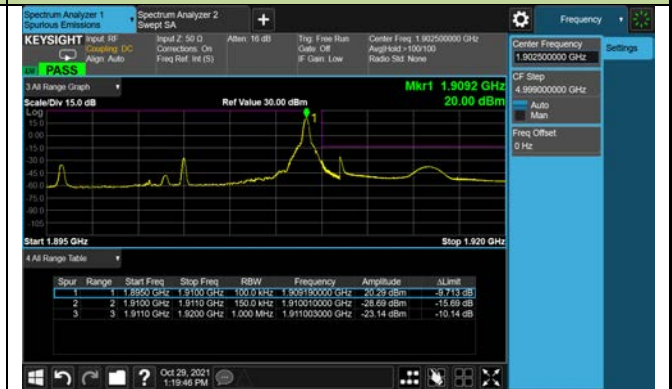


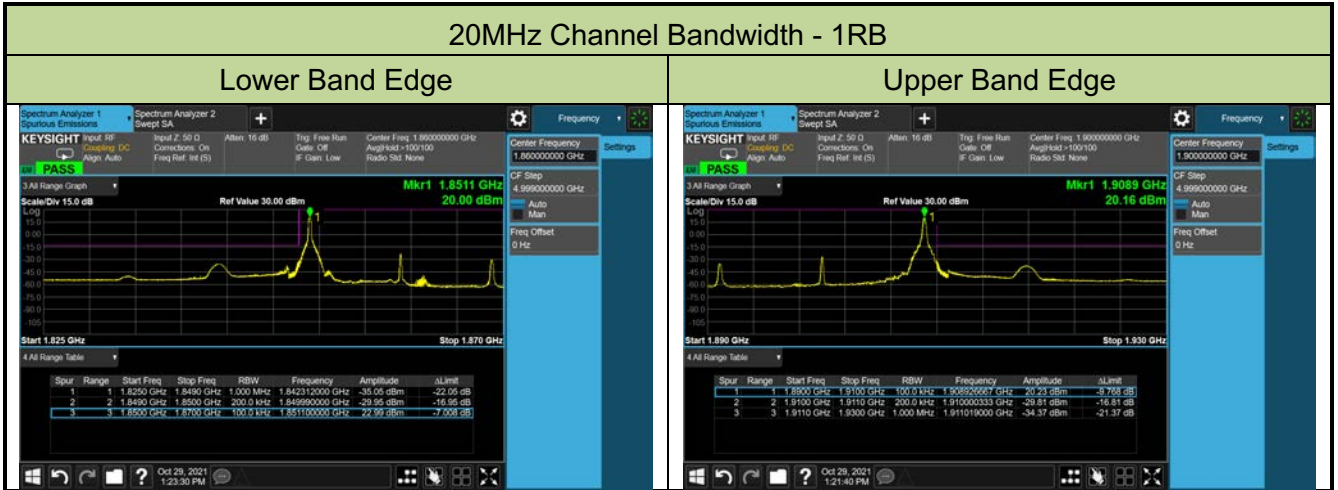
15MHz Channel Bandwidth - 1RB

Lower Band Edge



Upper Band Edge





1.4MHz Channel Bandwidth - Full RB

Lower Band Edge



Lower Extended Band Edge



Upper Band Edge

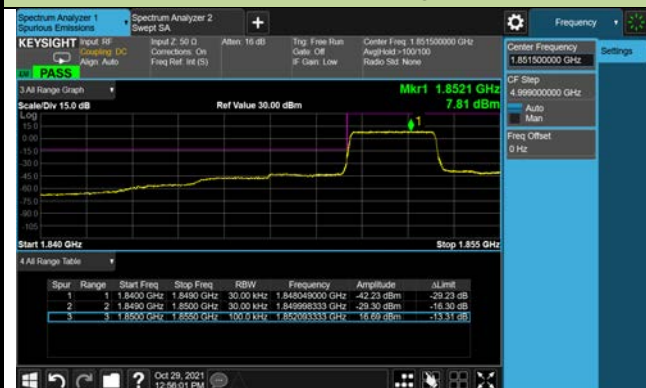


Upper Extended Band Edge



3MHz Channel Bandwidth - Full RB

Lower Band Edge



Lower Extended Band Edge



Upper Band Edge

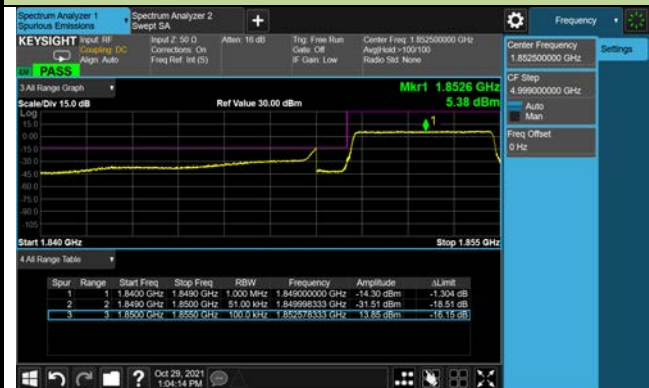


Upper Extended Band Edge

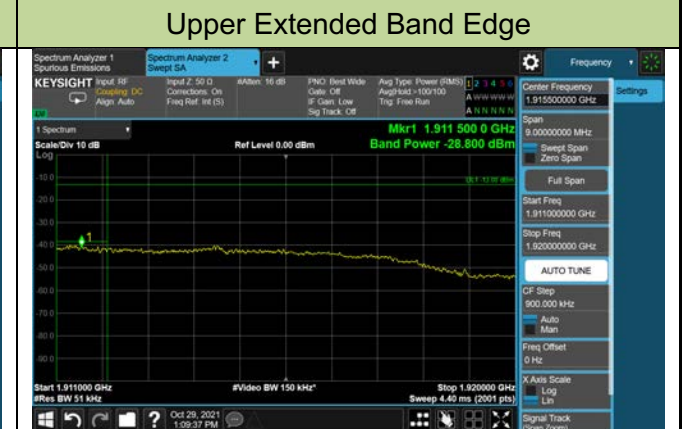
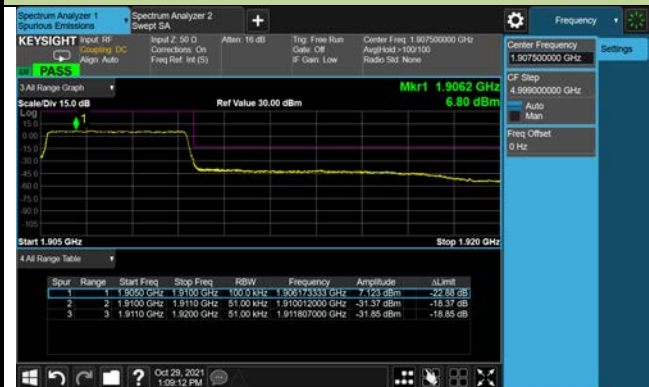


5MHz Channel Bandwidth - Full RB

Lower Band Edge

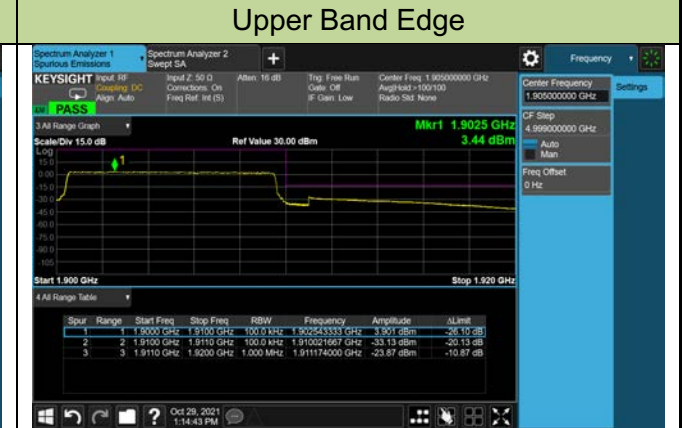


Upper Band Edge

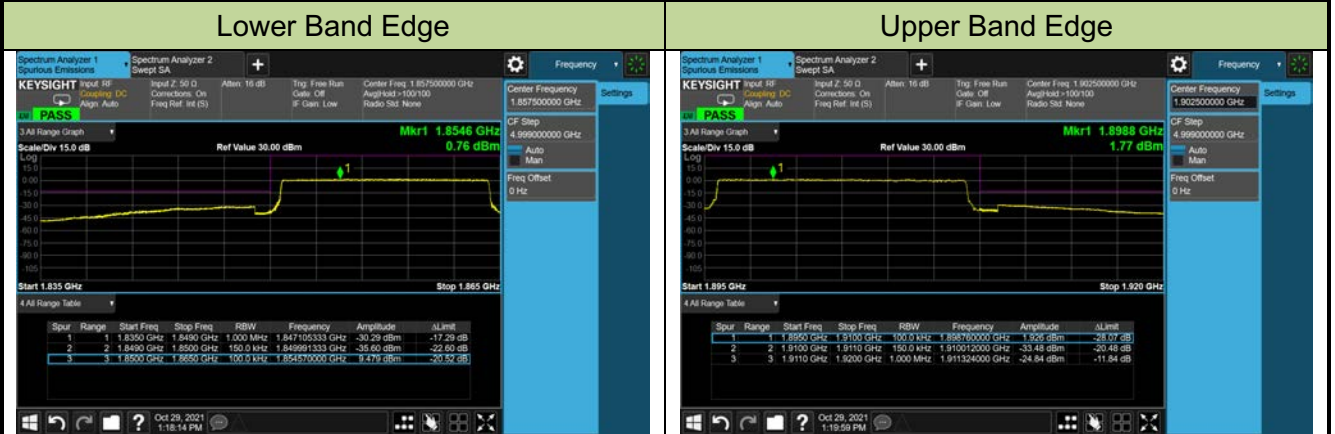


10MHz Channel Bandwidth - Full RB

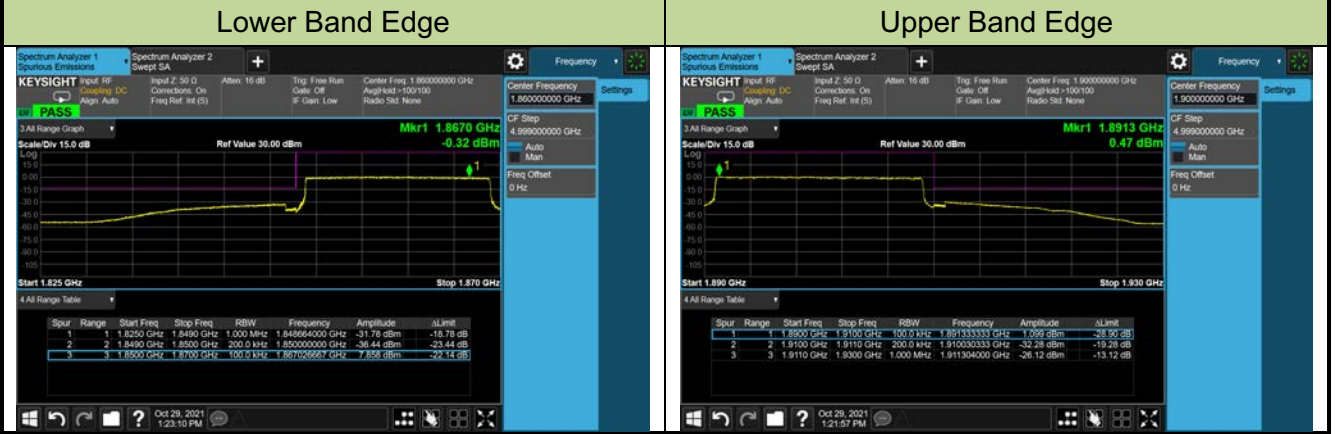
Lower Band Edge



15MHz Channel Bandwidth - Full RB



20MHz Channel Bandwidth - Full RB



| | | | |
|---------------|------------------|-----------|------------|
| Product | LTE Module | Test Site | SIP-SR1 |
| Test Engineer | Candy Luo | Test Date | 2021/10/29 |
| Test Band | LTE Band 25_QPSK | | |

1.4MHz Channel Bandwidth - 1RB



3MHz Channel Bandwidth - 1RB



5MHz Channel Bandwidth - 1RB

