


SPOT CHECK REPORT

FCC ID: ZMOFM101GL
Applicant: Fibocom Wireless Inc.
Product: LTE Module
Model No.: FM101-GL
Brand Name: Fibocom
FCC Rule(s): Part 2, 22(H), 24(E), 27, 90, 96
Result: Complies
Received Date: 2023-10-27
Test Date: 2023-10-27 ~ 2023-11-09

Reviewed By:



Jame Yuan

Approved By:



Robin Wu



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
2311RSU028-U1	V01	Initial Report	2023-11-10	Valid

Note: This report is prepared for FCC Class II permissive supplement to FCC ID: ZMOFM101GL, and to disable the WCDMA 16-QAM uplink mode through firmware updates.

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1.4. Product Information

Product Name	LTE Module
Model No.	FM101-GL
Brand Name	Fibocom
IMEI	861023050031426
3GPP Specification	WCDMA Band II/IV/V LTE FDD Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 30, 66, 71 LTE TDD Band 38, 41, 48
Antenna Information	Refer to Section 1.6
Temperature Operating Range	-10 ~ 55 °C
Power Supply Rating	3.135 ~ 4.4Vdc, typical 3.3Vdc
Remark:	The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

1.5. Radio Specification under Testing

UMTS Specification	
TX Frequency Range:	WCDMA Band II: 1850 ~ 1910MHz, WCDMA Band IV: 1710 ~ 1755MHz WCDMA Band V: 824 ~ 849MHz
RX Frequency Range:	WCDMA Band II: 1930 ~ 1990MHz, WCDMA Band IV: 2110 ~ 2155MHz WCDMA Band V: 869 ~ 894MHz
Modulation	UL up to QPSK & DL up to 64QAM
Power Class	3
E-UTRA Specification	
TX Frequency Range	LTE Band 2: 1850 ~ 1910MHz, LTE Band 4: 1710 ~ 1755MHz LTE Band 5: 824 ~ 849MHz, LTE Band 7: 2500 ~ 2570MHz LTE Band 12: 699 ~ 716MHz, LTE Band 13: 777 ~ 787MHz LTE Band 14: 788 ~ 798 MHz, LTE Band 17: 704 ~ 716MHz, LTE Band 25: 1850 ~ 1915MHz, LTE Band 26: 814 ~ 849MHz LTE Band 30: 2305 ~ 2315MHz, LTE Band 38: 2570 ~ 2620MHz LTE Band 41: 2496 ~ 2690MHz, LTE Band 48: 3550 ~ 3700MHz LTE Band 66: 1710 ~ 1780MHz, LTE Band 71: 663 ~ 698MHz
RX Frequency Range	LTE Band 2: 1930 ~ 1990MHz, LTE Band 4: 2110 ~ 2155MHz LTE Band 5: 869 ~ 894MHz, LTE Band 7: 2620 ~ 2690MHz LTE Band 12: 729 ~ 746MHz, LTE Band 13: 746 ~ 756MHz LTE Band 14: 758 ~ 768 MHz, LTE Band 17: 734 ~ 746MHz LTE Band 25: 1930 ~ 1995MHz, LTE Band 26: 859 ~ 894MHz

	LTE Band 30: 2350 ~ 2360MHz, LTE Band 38: 2570 ~ 2620MHz LTE Band 41: 2496 ~ 2690MHz, LTE Band 48: 3550 ~ 3700MHz LTE Band 66: 2110 ~ 2200MHz, LTE Band 71: 617 ~ 652MHz
Modulation	UL up to 16QAM & DL up to 64QAM
Power Class	3 & 2 (Band 41 support PC2)

1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	Max Peak Gain (dBi)
WCDMA Band II	1850 ~ 1910	PIFA	4.00
WCDMA Band IV	1710 ~ 1755		3.00
WCDMA Band V	824 ~ 849		3.00
LTE Band 2	1850 ~ 1910		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	2496 ~ 2690		4.00
LTE Band 48	3550 ~ 3700		1.00
LTE Band 66	1710 ~ 1780		3.00
LTE Band 71	663 ~ 698		3.00

Note 1: All antenna information (Antenna type and Peak Gain) is provided by the manufacturer.

Note 2: The typical antennas used to calculate the ERP (EIRP).

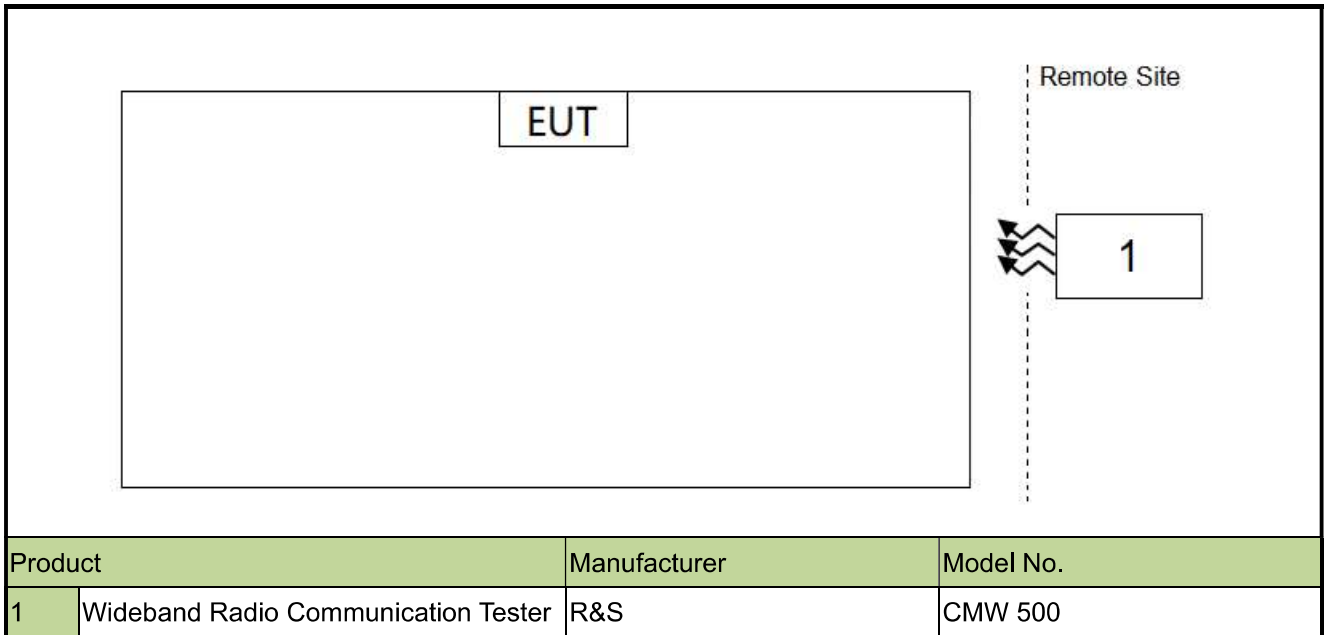
1.7. Test Methodology

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, Part 90, Part 96
- 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. Test Configuration

2.1. Test System Connection Diagram



2.2. Test Environment Condition

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

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Communication Tester	R&S	CMW500	MRTSUE06243	1 year	2024-09-27	SIP-SR1
Thermohygrometer	testo	622	MRTSUE06629	1 year	2024-01-03	SIP-SR1
Communication Tester	R&S	CMW500	MRTSUE06881	1 year	2024-05-23	SIP-SR1
Signal Analyzer	Keysight	N9021B	MRTSUE06915	1 year	2023-12-28	SIP-SR1
Thermohygrometer	testo	622	MRTSUE06629	1 year	2024-01-03	SIP-SR1
DC POWER MODULE	Keysight	N6743B	MRTSUE06905	N/A	N/A	SIP-SR1
DC POWER MODULE	Keysight	N6743B	MRTSUE06906	N/A	N/A	SIP-SR1
Shielding Room	MIX-BEP	SIP-SR1	MRTSUE06948	N/A	N/A	SIP-SR1

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. 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 $k = 2$.

Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.66dB

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result
22.913(a)(5), 24.232(c) 27.50(a)(3)(b)(9)(c)(9)(10)(d)(4)(h)(2) 90.542(a)(7), 90.635, 96.41(b)	Equivalent Radiated Power / Equivalent Isotropic Radiated Power	Conducted	Pass

Notes:

- 1) The analyzer plots shown in this section 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 output power were presented worst-case in the test report.
- 3) 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 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 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.
- 4) 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.

5.2. Equivalent Isotropically Radiated Power Measurement

5.2.1. Test Limit

Band 2/25:

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.

Band 5:

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

Band 7:

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

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 14:

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

Band 26:

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

Band 30:

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

Band 38/41:

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

Band 48:

The maximum effective isotropic radiated power (EIRP) End User Device is 23dBm/10MHz.

Band 71:

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

5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.2

5.2.3. Test Setting

When the fundamental condition for average power measurements cannot be realized (i.e., the EUT can not be configured to transmit at full-power on a continuous basis (i.e., duty cycle < 98%) and the instrumentation cannot be configured to measure only during active full-power transmissions), then the following procedure can be used if the EUT duty cycle is constant (i.e., duty cycle variations are less than or equal to $\pm 2\%$).

- a) Set span to $2 \times$ to $3 \times$ the OBW.
- b) Set RBW = 1% to 5% of the OBW.
- c) Set VBW $\geq 3 \times$ RBW.
- d) Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
- e) Sweep time:
 - 1) Set = auto-couple, or
 - 2) Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ for single sweep (automation-compatible) measurement.
- f) Detector = power averaging (rms).
- g) Set sweep trigger to "free run."
- h) 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.
- i) Using the marker function to identify the maximum PSD.
- j) Add $10 \log (1/\text{duty cycle})$ to the measured power level to compute the average power during continuous transmission. For example, add $[10 \log (1/0.25)] = 6 \text{ dB}$ if the duty cycle is a constant 25%.

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

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T \tag{1}$$

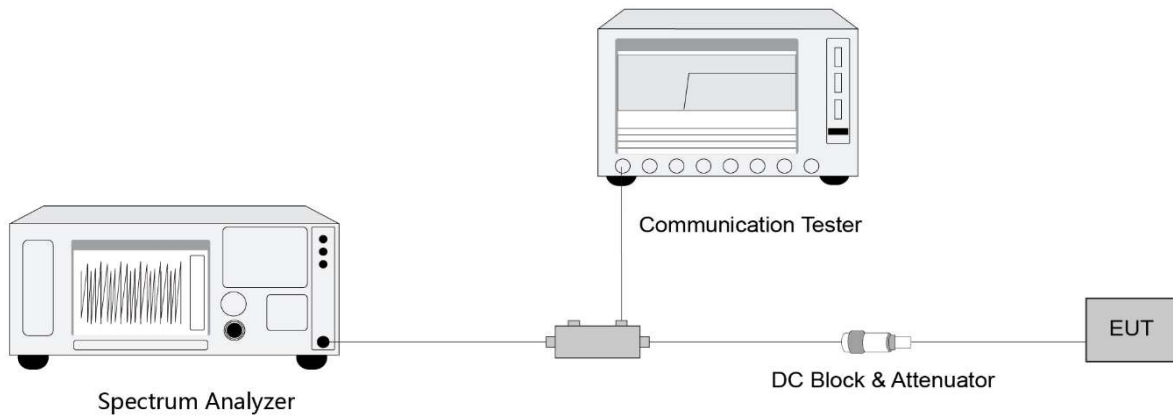
where

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)

5.2.4. Test Setup



5.2.5. Test Result

Refer to Appendix A.1.

Appendix A - Test Result

A.1 Equivalent Isotropically Radited Power Test Result

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-09	Test Band	WCDMA Band II

Mode	3GPP Subtest	Conducted Power (dBm)			Antenna Gain (dBi)	EIRP (dBm)		
		Channel				Channel		
		Low	Middle	High		Low	Middle	High
WCDMA R99	1	22.68	22.63	22.67	4.00	26.68	26.63	26.67
HSDPA	1	21.68	21.76	21.37	4.00	25.68	25.76	25.37
	2	21.70	21.73	21.51	4.00	25.70	25.73	25.51
	3	21.24	21.24	21.03	4.00	25.24	25.24	25.03
	4	21.25	21.18	21.12	4.00	25.25	25.18	25.12
HSUPA	1	21.57	21.62	21.14	4.00	25.57	25.62	25.14
	2	20.61	20.59	20.19	4.00	24.61	24.59	24.19
	3	19.48	19.69	19.05	4.00	23.48	23.69	23.05
	4	19.66	19.69	19.09	4.00	23.66	23.69	23.09
	5	21.62	21.58	21.47	4.00	25.62	25.58	25.47
Limit	33.01dBm							

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	WCDMA Band IV

Mode	3GPP Subtest	Conducted Power (dBm)			Antenna Gain (dBi)	EIRP (dBm)		
		Channel				Channel		
		Low	Middle	High		Low	Middle	High
WCDMA R99	1	22.71	22.71	22.63	3.00	25.71	25.71	25.63
HSDPA	1	21.83	21.76	21.73	3.00	24.83	24.76	24.73
	2	21.79	21.77	21.71	3.00	24.79	24.77	24.71
	3	21.32	21.32	21.22	3.00	24.32	24.32	24.22
	4	21.32	21.30	21.20	3.00	24.32	24.30	24.20
HSUPA	1	21.78	21.68	21.58	3.00	24.78	24.68	24.58
	2	19.67	19.74	19.72	3.00	22.67	22.74	22.72
	3	20.81	20.66	20.66	3.00	23.81	23.66	23.66
	4	19.76	19.85	19.59	3.00	22.76	22.85	22.59
	5	21.79	21.71	21.61	3.00	24.79	24.71	24.61
Limit	30.00dBm							

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	WCDMA Band V

Mode	3GPP Subtest	Conducted Power (dBm)			Antenna Gain (dBi)	ERP (dBm)		
		Channel				Channel		
		Low	Middle	High		Low	Middle	High
WCDMA R99	1	23.48	23.52	23.45	3.0	24.33	24.37	24.30
HSDPA	1	22.57	22.56	22.58	3.0	23.42	23.41	23.43
	2	22.54	22.53	22.54	3.0	23.39	23.38	23.39
	3	22.07	22.00	22.05	3.0	22.92	22.85	22.90
	4	22.05	22.08	22.07	3.0	22.90	22.93	22.92
HSUPA	1	22.46	22.49	22.50	3.0	23.31	23.34	23.35
	2	20.48	20.74	20.88	3.0	21.33	21.59	21.73
	3	21.59	21.44	21.47	3.0	22.44	22.29	22.32
	4	20.48	20.48	20.54	3.0	21.33	21.33	21.39
	5	22.40	22.38	22.33	3.0	23.25	23.23	23.18
Limit	38.45dBm							

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 2/25

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
1.4	1850.70	1	0	23.06	27.06	< 33.01
	1880.00			23.05	27.05	< 33.01
	1909.30			22.92	26.92	< 33.01
1.4	1850.70	1	2	23.12	27.12	< 33.01
	1880.00			23.12	27.12	< 33.01
	1909.30			23.02	27.02	< 33.01
1.4	1850.70	1	6	23.08	27.08	< 33.01
	1880.00			23.03	27.03	< 33.01
	1909.30			22.95	26.95	< 33.01
1.4	1850.70	6	0	22.08	26.08	< 33.01
	1880.00			22.10	26.10	< 33.01
	1909.30			21.94	25.94	< 33.01
3	1851.50	1	0	23.10	27.10	< 33.01
	1880.00			23.16	27.16	< 33.01
	1908.50			22.91	26.91	< 33.01
3	1851.50	1	7	23.15	27.15	< 33.01
	1880.00			23.15	27.15	< 33.01
	1908.50			22.92	26.92	< 33.01
3	1851.50	1	14	23.12	27.12	< 33.01
	1880.00			23.15	27.15	< 33.01
	1908.50			22.91	26.91	< 33.01
3	1851.50	15	0	22.13	26.13	< 33.01
	1880.00			22.18	26.18	< 33.01
	1908.50			22.00	26.00	< 33.01

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	1852.50	1	0	23.15	27.15	< 33.01
	1880.00			23.15	27.15	< 33.01
	1907.50			22.98	26.98	< 33.01
5	1852.50	1	12	23.24	27.24	< 33.01
	1880.00			23.24	27.24	< 33.01
	1907.50			23.13	27.13	< 33.01
5	1852.50	1	24	23.15	27.15	< 33.01
	1880.00			23.13	27.13	< 33.01
	1907.50			22.95	26.95	< 33.01
5	1852.50	25	0	22.17	26.17	< 33.01
	1880.00			22.21	26.21	< 33.01
	1907.50			22.00	26.00	< 33.01
10	1855.00	1	0	23.20	27.20	< 33.01
	1880.00			23.27	27.27	< 33.01
	1905.00			23.03	27.03	< 33.01
10	1855.00	1	24	23.18	27.18	< 33.01
	1880.00			23.21	27.21	< 33.01
	1905.00			23.00	27.00	< 33.01
10	1855.00	1	49	23.22	27.22	< 33.01
	1880.00			23.25	27.25	< 33.01
	1905.00			22.98	26.98	< 33.01
10	1855.00	50	0	22.21	26.21	< 33.01
	1880.00			22.22	26.22	< 33.01
	1905.00			22.05	26.05	< 33.01

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	1857.50	1	0	23.03	27.03	< 33.01
	1880.00			23.15	27.15	< 33.01
	1902.50			23.07	27.07	< 33.01
15	1857.50	1	37	23.09	27.09	< 33.01
	1880.00			23.23	27.23	< 33.01
	1902.50			23.04	27.04	< 33.01
15	1857.50	1	74	23.12	27.12	< 33.01
	1880.00			23.20	27.20	< 33.01
	1902.50			23.04	27.04	< 33.01
15	1857.50	75	0	22.25	26.25	< 33.01
	1880.00			22.18	26.18	< 33.01
	1902.50			22.20	26.20	< 33.01
20	1860.00	1	0	23.15	27.15	< 33.01
	1880.00			23.15	27.15	< 33.01
	1900.00			23.09	27.09	< 33.01
20	1860.00	1	49	23.18	27.18	< 33.01
	1880.00			23.12	27.12	< 33.01
	1900.00			23.05	27.05	< 33.01
20	1860.00	1	99	23.25	27.25	< 33.01
	1880.00			23.07	27.07	< 33.01
	1900.00			23.13	27.13	< 33.01
20	1860.00	100	0	22.21	26.21	< 33.01
	1880.00			22.22	26.22	< 33.01
	1900.00			22.20	26.20	< 33.01

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 4/66

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
1.4	1710.70	1	0	22.82	25.82	< 30.00
	1745.00			23.02	26.02	< 30.00
	1779.30			23.12	26.12	< 30.00
1.4	1710.70	1	2	22.89	25.89	< 30.00
	1745.00			23.09	26.09	< 30.00
	1779.30			23.21	26.21	< 30.00
1.4	1710.70	1	6	22.81	25.81	< 30.00
	1745.00			23.00	26.00	< 30.00
	1779.30			22.15	25.15	< 30.00
1.4	1710.70	6	0	21.85	24.85	< 30.00
	1745.00			22.02	25.02	< 30.00
	1779.30			22.14	25.14	< 30.00
3	1711.50	1	0	22.80	25.80	< 30.00
	1745.00			22.95	25.95	< 30.00
	1778.50			23.05	26.05	< 30.00
3	1711.50	1	7	22.93	25.93	< 30.00
	1745.00			23.09	26.09	< 30.00
	1778.50			23.16	26.16	< 30.00
3	1711.50	1	14	22.84	25.84	< 30.00
	1745.00			22.94	25.94	< 30.00
	1778.50			23.04	26.04	< 30.00
3	1711.50	15	0	21.87	24.87	< 30.00
	1745.00			22.05	25.05	< 30.00
	1778.50			22.16	25.16	< 30.00

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	1712.50	1	0	22.78	25.78	< 30.00
	1745.00			22.94	25.94	< 30.00
	1777.50			23.04	26.04	< 30.00
5	1712.50	1	12	23.00	26.00	< 30.00
	1745.00			23.17	26.17	< 30.00
	1777.50			23.27	26.27	< 30.00
5	1712.50	1	24	22.83	25.83	< 30.00
	1745.00			22.91	25.91	< 30.00
	1777.50			22.99	25.99	< 30.00
5	1712.50	25	0	21.85	24.85	< 30.00
	1745.00			22.08	25.08	< 30.00
	1777.50			22.15	25.15	< 30.00
10	1715.00	1	0	23.00	26.00	< 30.00
	1745.00			23.12	26.12	< 30.00
	1775.00			23.14	26.14	< 30.00
10	1715.00	1	24	23.03	26.03	< 30.00
	1745.00			23.13	26.13	< 30.00
	1775.00			23.15	26.15	< 30.00
10	1715.00	1	49	22.96	25.96	< 30.00
	1745.00			23.06	26.06	< 30.00
	1775.00			23.07	26.07	< 30.00
10	1715.00	50	0	21.94	24.94	< 30.00
	1745.00			22.10	25.10	< 30.00
	1775.00			22.14	25.14	< 30.00

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	1717.50	1	0	23.05	26.05	< 30.00
	1745.00			23.14	26.14	< 30.00
	1772.50			23.16	26.16	< 30.00
15	1717.50	1	37	23.11	26.11	< 30.00
	1745.00			23.20	26.20	< 30.00
	1772.50			23.23	26.23	< 30.00
15	1717.50	1	74	23.05	26.05	< 30.00
	1745.00			23.10	26.10	< 30.00
	1772.50			23.13	26.13	< 30.00
15	1717.50	75	0	21.88	24.88	< 30.00
	1745.00			22.03	25.03	< 30.00
	1772.50			22.10	25.10	< 30.00
20	1720.00	1	0	22.96	25.96	< 30.00
	1745.00			23.14	26.14	< 30.00
	1770.00			23.25	26.25	< 30.00
20	1720.00	1	49	23.11	26.11	< 30.00
	1745.00			23.20	26.20	< 30.00
	1770.00			23.30	26.30	< 30.00
20	1720.00	1	99	23.05	26.05	< 30.00
	1745.00			23.16	26.16	< 30.00
	1770.00			23.32	26.32	< 30.00
20	1720.00	100	0	21.95	24.95	< 30.00
	1745.00			22.07	25.07	< 30.00
	1770.00			22.12	25.12	< 30.00

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 5/26

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
1.4	824.70	1	0	23.74	24.59	< 38.45
	836.50			23.64	24.49	< 38.45
	848.30			23.73	24.58	< 38.45
1.4	824.70	1	2	23.77	24.62	< 38.45
	836.50			23.65	24.50	< 38.45
	848.30			23.70	24.55	< 38.45
1.4	824.70	1	6	23.68	24.53	< 38.45
	836.50			23.64	24.49	< 38.45
	848.30			23.71	24.56	< 38.45
1.4	824.70	6	0	22.74	23.59	< 38.45
	836.50			22.66	23.51	< 38.45
	848.30			22.69	23.54	< 38.45
3	825.50	1	0	23.80	24.65	< 38.45
	836.50			23.66	24.51	< 38.45
	847.50			23.73	24.58	< 38.45
3	825.50	1	7	23.77	24.62	< 38.45
	836.50			23.63	24.48	< 38.45
	847.50			23.68	24.53	< 38.45
3	825.50	1	14	23.74	24.59	< 38.45
	836.50			23.64	24.49	< 38.45
	847.50			23.68	24.53	< 38.45
3	825.50	15	0	22.81	23.66	< 38.45
	836.50			22.73	23.58	< 38.45
	847.50			22.75	23.60	< 38.45

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	826.50	1	0	23.77	24.62	< 38.45
	836.50			23.69	24.54	< 38.45
	846.50			23.69	24.54	< 38.45
5	826.50	1	12	23.85	24.70	< 38.45
	836.50			23.78	24.63	< 38.45
	846.50			23.77	24.62	< 38.45
5	826.50	1	24	23.69	24.54	< 38.45
	836.50			23.66	24.51	< 38.45
	846.50			23.67	24.52	< 38.45
5	826.50	25	0	22.77	23.62	< 38.45
	836.50			22.71	23.56	< 38.45
	846.50			22.76	23.61	< 38.45
10	829.00	1	0	23.80	24.65	< 38.45
	836.50			23.67	24.52	< 38.45
	844.00			23.66	24.51	< 38.45
10	829.00	1	24	23.78	24.63	< 38.45
	836.50			23.68	24.53	< 38.45
	844.00			23.72	24.57	< 38.45
10	829.00	1	49	23.73	24.58	< 38.45
	836.50			23.62	24.47	< 38.45
	844.00			23.66	24.51	< 38.45
10	829.00	50	0	22.78	23.63	< 38.45
	836.50			22.72	23.57	< 38.45
	844.00			22.70	23.55	< 38.45

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
15	831.50	1	0	23.61	24.46	< 38.45
	836.50			23.75	24.60	< 38.45
	841.50			23.74	24.59	< 38.45
15	831.50	1	37	23.66	24.51	< 38.45
	836.50			23.70	24.55	< 38.45
	841.50			23.72	24.57	< 38.45
15	831.50	1	74	23.64	24.49	< 38.45
	836.50			23.78	24.63	< 38.45
	841.50			23.15	24.00	< 38.45
15	831.50	75	0	22.75	23.60	< 38.45
	836.50			22.69	23.54	< 38.45
	841.50			22.66	23.51	< 38.45

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 7

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	2502.50	1	0	23.20	27.20	< 33.01
	2535.00			23.20	27.20	< 33.01
	2567.50			23.33	27.33	< 33.01
5	2502.50	1	12	23.30	27.30	< 33.01
	2535.00			23.26	27.26	< 33.01
	2567.50			23.45	27.45	< 33.01
5	2502.50	1	24	23.24	27.24	< 33.01
	2535.00			23.25	27.25	< 33.01
	2567.50			23.36	27.36	< 33.01
5	2502.50	25	0	22.17	26.17	< 33.01
	2535.00			22.20	26.20	< 33.01
	2567.50			22.43	26.43	< 33.01
10	2505.00	1	0	23.20	27.20	< 33.01
	2535.00			23.15	27.15	< 33.01
	2565.00			23.36	27.36	< 33.01
10	2505.00	1	24	23.22	27.22	< 33.01
	2535.00			23.19	27.19	< 33.01
	2565.00			23.32	27.32	< 33.01
10	2505.00	1	49	23.20	27.20	< 33.01
	2535.00			23.20	27.20	< 33.01
	2565.00			23.40	27.40	< 33.01
10	2505.00	50	0	22.17	26.17	< 33.01
	2535.00			22.18	26.18	< 33.01
	2565.00			22.42	26.42	< 33.01

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	2507.50	1	0	23.27	27.27	< 33.01
	2535.00			23.14	27.14	< 33.01
	2562.50			23.33	27.33	< 33.01
15	2507.50	1	37	23.26	27.26	< 33.01
	2535.00			23.13	27.13	< 33.01
	2562.50			23.36	27.36	< 33.01
15	2507.50	1	74	23.22	27.22	< 33.01
	2535.00			23.23	27.23	< 33.01
	2562.50			23.44	27.44	< 33.01
15	2507.50	75	0	22.15	26.15	< 33.01
	2535.00			22.19	26.19	< 33.01
	2562.50			22.43	26.43	< 33.01
20	2510.00	1	0	23.22	27.22	< 33.01
	2535.00			23.26	27.26	< 33.01
	2560.00			23.36	27.36	< 33.01
20	2510.00	1	49	23.08	27.08	< 33.01
	2535.00			23.22	27.22	< 33.01
	2560.00			23.33	27.33	< 33.01
20	2510.00	1	99	23.17	27.17	< 33.01
	2535.00			23.27	27.27	< 33.01
	2560.00			23.38	27.38	< 33.01
20	2510.00	100	0	22.20	26.20	< 33.01
	2535.00			22.19	26.19	< 33.01
	2560.00			22.53	26.53	< 33.01

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 12

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
1.4	699.70	1	0	23.72	24.57	< 44.77
	707.50			23.68	24.53	< 44.77
	715.30			23.65	24.50	< 44.77
1.4	699.70	1	2	23.76	24.61	< 44.77
	707.50			23.74	24.59	< 44.77
	715.30			23.67	24.52	< 44.77
1.4	699.70	1	6	23.70	24.55	< 44.77
	707.50			23.62	24.47	< 44.77
	715.30			23.63	24.48	< 44.77
1.4	699.70	6	0	22.75	23.60	< 44.77
	707.50			22.74	23.59	< 44.77
	715.30			22.70	23.55	< 44.77
3	700.50	1	0	23.73	24.58	< 44.77
	707.50			23.76	24.61	< 44.77
	714.50			23.71	24.56	< 44.77
3	700.50	1	7	23.72	24.57	< 44.77
	707.50			23.74	24.59	< 44.77
	714.50			23.70	24.55	< 44.77
3	700.50	1	14	23.71	24.56	< 44.77
	707.50			23.65	24.50	< 44.77
	714.50			23.65	24.50	< 44.77
3	700.50	15	0	22.76	23.61	< 44.77
	707.50			22.78	23.63	< 44.77
	714.50			22.81	23.66	< 44.77

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	701.50	1	0	23.77	24.62	< 44.77
	707.50			23.78	24.63	< 44.77
	713.50			23.71	24.56	< 44.77
5	701.50	1	12	23.80	24.65	< 44.77
	707.50			23.82	24.67	< 44.77
	713.50			23.79	24.64	< 44.77
5	701.50	1	24	23.77	24.62	< 44.77
	707.50			23.63	24.48	< 44.77
	713.50			23.65	24.50	< 44.77
5	701.50	25	0	22.86	23.71	< 44.77
	707.50			22.82	23.67	< 44.77
	713.50			22.72	23.57	< 44.77
10	704.00	1	0	23.76	24.61	< 44.77
	707.50			23.71	24.56	< 44.77
	711.00			23.76	24.61	< 44.77
10	704.00	1	24	23.80	24.65	< 44.77
	707.50			23.77	24.62	< 44.77
	711.00			23.67	24.52	< 44.77
10	704.00	1	49	23.72	24.57	< 44.77
	707.50			23.66	24.51	< 44.77
	711.00			23.69	24.54	< 44.77
10	704.00	50	0	22.85	23.70	< 44.77
	707.50			22.80	23.65	< 44.77
	711.00			22.77	23.62	< 44.77

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 13

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	779.5	1	0	23.74	24.59	< 44.77
	782.0			23.72	24.57	< 44.77
	784.5			23.64	24.49	< 44.77
5	779.5	1	12	23.81	24.66	< 44.77
	782.0			23.76	24.61	< 44.77
	784.5			23.78	24.63	< 44.77
5	779.5	1	24	23.71	24.56	< 44.77
	782.0			23.77	24.62	< 44.77
	784.5			23.52	24.37	< 44.77
5	779.5	25	0	22.79	23.64	< 44.77
	782.0			22.77	23.62	< 44.77
	784.5			22.68	23.53	< 44.77
10	782.0	1	0	23.73	24.58	< 44.77
	782.0	1	24	23.69	24.54	< 44.77
	782.0	1	49	23.74	24.59	< 44.77
	782.0	50	0	22.82	23.67	< 44.77
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15						

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 14

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	790.5	1	0	23.84	24.69	< 44.77
	793.0			23.69	24.54	< 44.77
	795.5			23.80	24.65	< 44.77
5	790.5	1	12	23.79	24.64	< 44.77
	793.0			23.76	24.61	< 44.77
	795.5			23.88	24.73	< 44.77
5	790.5	1	24	23.73	24.58	< 44.77
	793.0			23.68	24.53	< 44.77
	795.5			23.70	24.55	< 44.77
5	790.5	25	0	22.77	23.62	< 44.77
	793.0			22.72	23.57	< 44.77
	795.5			22.88	23.73	< 44.77
10	793.0	1	0	23.72	24.57	< 44.77
	793.0	1	24	23.68	24.53	< 44.77
	793.0	1	49	23.62	24.47	< 44.77
	793.0	50	0	22.76	23.61	< 44.77

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 17

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	706.5	1	0	23.71	24.56	< 44.77
	710.0			23.68	24.53	< 44.77
	713.5			23.86	24.71	< 44.77
5	706.5	1	12	23.78	24.63	< 44.77
	710.0			23.81	24.66	< 44.77
	713.5			23.83	24.68	< 44.77
5	706.5	1	24	23.66	24.51	< 44.77
	710.0			23.64	24.49	< 44.77
	713.5			23.69	24.54	< 44.77
5	706.5	25	0	22.71	23.56	< 44.77
	710.0			22.78	23.63	< 44.77
	713.5			22.82	23.67	< 44.77
10	709.0	1	0	23.73	24.58	< 44.77
	710.0			23.70	24.55	< 44.77
	711.0			23.66	24.51	< 44.77
10	709.0	1	24	23.79	24.64	< 44.77
	710.0			23.76	24.61	< 44.77
	711.0			23.71	24.56	< 44.77
10	709.0	1	49	23.70	24.55	< 44.77
	710.0			23.61	24.46	< 44.77
	711.0			23.61	24.46	< 44.77
10	709.0	50	0	22.81	23.66	< 44.77
	710.0			22.77	23.62	< 44.77
	711.0			22.77	23.62	< 44.77

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-09	Test Band	LTE Band 26 (Part 90)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
QPSK						
1.4	824.70	1	0	23.61	0.2296	< 100.00
	836.50			23.63	0.2307	< 100.00
	848.30			23.61	0.2296	< 100.00
1.4	824.70	1	2	23.68	0.2333	< 100.00
	836.50			23.67	0.2328	< 100.00
	848.30			23.63	0.2307	< 100.00
1.4	824.70	1	6	23.58	0.2280	< 100.00
	836.50			23.63	0.2307	< 100.00
	848.30			23.60	0.2291	< 100.00
1.4	824.70	6	0	22.65	0.1841	< 100.00
	836.50			22.68	0.1854	< 100.00
	848.30			22.65	0.1841	< 100.00
3	825.50	1	0	23.68	0.2333	< 100.00
	836.50			23.60	0.2291	< 100.00
	847.50			23.67	0.2328	< 100.00
3	825.50	1	7	23.67	0.2328	< 100.00
	836.50			23.70	0.2344	< 100.00
	847.50			23.67	0.2328	< 100.00
3	825.50	1	14	23.61	0.2296	< 100.00
	836.50			23.68	0.2333	< 100.00
	847.50			23.63	0.2307	< 100.00
3	825.50	15	0	22.88	0.1941	< 100.00
	836.50			22.71	0.1866	< 100.00
	847.50			22.76	0.1888	< 100.00

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
QPSK						
5	826.50	1	0	23.72	0.2355	< 100.00
	836.50			23.62	0.2301	< 100.00
	846.50			23.71	0.2350	< 100.00
5	826.50	1	12	23.73	0.2360	< 100.00
	836.50			23.76	0.2377	< 100.00
	846.50			23.78	0.2388	< 100.00
5	826.50	1	24	23.72	0.2355	< 100.00
	836.50			23.64	0.2312	< 100.00
	846.50			23.63	0.2307	< 100.00
5	826.50	25	0	22.80	0.1905	< 100.00
	836.50			22.76	0.1888	< 100.00
	846.50			22.73	0.1875	< 100.00
10	819.0	1	0	23.65	0.2317	< 100.00
	819.0	1	24	23.70	0.2344	< 100.00
	819.0	1	49	23.63	0.2307	< 100.00
	819.0	50	0	22.77	0.1892	< 100.00
15	819.0	1	0	23.64	0.2312	< 100.00
	819.0	1	37	23.66	0.2323	< 100.00
	819.0	1	74	23.71	0.2350	< 100.00
	819.0	75	0	22.73	0.1875	< 100.00

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-09	Test Band	LTE Band 30

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Power Density (dBm/5MHz)	EIRP Density (dBm/5MHz)	Limit (dBm /5MHz)
QPSK						
5	2307.5	1	0	22.00	23.00	< 23.98
	2310.0			22.13	23.13	< 23.98
	2312.5			22.31	23.31	< 23.98
5	2307.5	1	12	22.25	23.25	< 23.98
	2310.0			22.39	23.39	< 23.98
	2312.5			22.44	23.44	< 23.98
5	2307.5	1	24	22.40	23.40	< 23.98
	2310.0			22.23	23.23	< 23.98
	2312.5			22.29	23.29	< 23.98
5	2307.5	25	0	21.44	22.44	< 23.98
	2310.0			21.36	22.36	< 23.98
	2312.5			21.39	22.39	< 23.98
10	2310.0	1	0	22.25	23.25	< 23.98
	2310.0	1	24	22.25	23.25	< 23.98
	2310.0	1	49	22.43	23.43	< 23.98
	2310.0	50	0	19.06	20.06	< 23.98

Note: The EIRP Density (dBm/5MHz) = Power Density (dBm/5MHz) + Antenna Gain (dBi)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Power Density (dBm/5MHz)	EIRP Density (dBm/5MHz)	Limit (dBm /5MHz)
16QAM						
5	2307.5	1	0	20.14	21.14	< 23.98
	2310.0			20.23	21.23	< 23.98
	2312.5			20.21	21.21	< 23.98
5	2307.5	1	12	20.26	21.26	< 23.98
	2310.0			20.26	21.26	< 23.98
	2312.5			20.32	21.32	< 23.98
5	2307.5	1	24	20.43	21.43	< 23.98
	2310.0			20.16	21.16	< 23.98
	2312.5			20.24	21.24	< 23.98
5	2307.5	25	0	19.06	20.06	< 23.98
	2310.0			19.12	20.12	< 23.98
	2312.5			19.12	20.12	< 23.98
10	2310.0	1	0	20.87	21.87	< 23.98
	2310.0	1	24	21.19	22.19	< 23.98
	2310.0	1	49	21.14	22.14	< 23.98
	2310.0	50	0	17.77	18.77	< 23.98
Note: The EIRP Density (dBm/5MHz) = Power Density (dBm/5MHz) + Antenna Gain (dBi)						

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 71

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
5	665.50	1	0	23.72	24.57	< 34.77
	680.50			23.74	24.59	< 34.77
	695.50			23.69	24.54	< 34.77
5	665.50	1	12	23.74	24.59	< 34.77
	680.50			23.76	24.61	< 34.77
	695.50			23.74	24.59	< 34.77
5	665.50	1	24	23.75	24.60	< 34.77
	680.50			23.72	24.57	< 34.77
	695.50			23.64	24.49	< 34.77
5	665.50	25	0	22.88	23.73	< 34.77
	680.50			22.78	23.63	< 34.77
	695.50			22.71	23.56	< 34.77
10	668.00	1	0	23.88	24.73	< 34.77
	680.50			23.84	24.69	< 34.77
	693.00			23.75	24.60	< 34.77
10	668.00	1	24	23.87	24.72	< 34.77
	680.50			23.74	24.59	< 34.77
	693.00			23.78	24.63	< 34.77
10	668.00	1	49	23.75	24.60	< 34.77
	680.50			23.75	24.60	< 34.77
	693.00			23.69	24.54	< 34.77
10	668.00	50	0	22.87	23.72	< 34.77
	680.50			22.79	23.64	< 34.77
	693.00			22.75	23.60	< 34.77

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
15	670.50	1	0	23.70	24.55	< 34.77
	680.50			23.64	24.49	< 34.77
	690.50			23.67	24.52	< 34.77
15	670.50	1	37	23.65	24.50	< 34.77
	680.50			23.59	24.44	< 34.77
	690.50			23.71	24.56	< 34.77
15	670.50	1	74	23.70	24.55	< 34.77
	680.50			23.62	24.47	< 34.77
	690.50			23.60	24.45	< 34.77
15	670.50	75	0	23.01	23.86	< 34.77
	680.50			22.67	23.52	< 34.77
	690.50			22.65	23.50	< 34.77
20	673.00	1	0	23.89	24.74	< 34.77
	683.00			23.78	24.63	< 34.77
	688.00			23.81	24.66	< 34.77
20	673.00	1	49	23.74	24.59	< 34.77
	683.00			23.67	24.52	< 34.77
	688.00			23.58	24.43	< 34.77
20	673.00	1	99	23.71	24.56	< 34.77
	683.00			23.67	24.52	< 34.77
	688.00			23.73	24.58	< 34.77
20	673.00	100	0	22.86	23.71	< 34.77
	683.00			22.72	23.57	< 34.77
	688.00			22.76	23.61	< 34.77

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 38/41 HPUE

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	2498.50	1	0	25.36	29.36	< 33.01
	2593.00			26.22	30.22	< 33.01
	2687.50			26.69	30.69	< 33.01
5	2498.50	1	12	25.42	29.42	< 33.01
	2593.00			26.29	30.29	< 33.01
	2687.50			26.74	30.74	< 33.01
5	2498.50	1	24	25.38	29.38	< 33.01
	2593.00			26.23	30.23	< 33.01
	2687.50			26.65	30.65	< 33.01
5	2498.50	25	0	24.52	28.52	< 33.01
	2593.00			25.21	29.21	< 33.01
	2687.50			25.75	29.75	< 33.01
10	2501.00	1	0	25.70	29.70	< 33.01
	2593.00			26.28	30.28	< 33.01
	2685.00			26.67	30.67	< 33.01
10	2501.00	1	24	25.59	29.59	< 33.01
	2593.00			26.24	30.24	< 33.01
	2685.00			26.82	30.82	< 33.01
10	2501.00	1	49	25.67	29.67	< 33.01
	2593.00			26.25	30.25	< 33.01
	2685.00			26.96	30.96	< 33.01
10	2501.00	50	0	24.59	28.59	< 33.01
	2593.00			25.27	29.27	< 33.01
	2685.00			25.76	29.76	< 33.01

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	2503.50	1	0	25.63	29.63	< 33.01
	2593.00			26.42	30.42	< 33.01
	2682.50			26.78	30.78	< 33.01
15	2503.50	1	37	25.58	29.58	< 33.01
	2593.00			26.34	30.34	< 33.01
	2682.50			26.85	30.85	< 33.01
15	2503.50	1	74	25.69	29.69	< 33.01
	2593.00			26.38	30.38	< 33.01
	2682.50			26.79	30.79	< 33.01
15	2503.50	75	0	24.64	28.64	< 33.01
	2593.00			25.29	29.29	< 33.01
	2682.50			25.82	29.82	< 33.01
20	2506.00	1	0	25.69	29.69	< 33.01
	2593.00			26.38	30.38	< 33.01
	2680.00			26.44	30.44	< 33.01
20	2506.00	1	49	25.65	29.65	< 33.01
	2593.00			26.35	30.35	< 33.01
	2680.00			26.78	30.78	< 33.01
20	2506.00	1	99	25.69	29.69	< 33.01
	2593.00			26.39	30.39	< 33.01
	2680.00			26.49	30.49	< 33.01
20	2506.00	100	0	24.68	28.68	< 33.01
	2593.00			25.34	29.34	< 33.01
	2680.00			25.83	29.83	< 33.01

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

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-09	Test Band	LTE Band 48

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm/10MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)
QPSK						
5	3552.50	1	0	21.18	22.18	< 23.00
	3625.00			20.95	21.95	< 23.00
	3697.50			20.42	21.42	< 23.00
5	3552.50	1	12	21.96	22.96	< 23.00
	3625.00			20.98	21.98	< 23.00
	3697.50			20.70	21.70	< 23.00
5	3552.50	1	24	21.25	22.25	< 23.00
	3625.00			21.03	22.03	< 23.00
	3697.50			21.22	22.22	< 23.00
5	3552.50	25	0	20.48	21.48	< 23.00
	3625.00			20.12	21.12	< 23.00
	3697.50			19.72	20.72	< 23.00
10	3555.00	1	0	21.41	22.41	< 23.00
	3625.00			20.16	21.16	< 23.00
	3695.00			21.77	22.77	< 23.00
10	3555.00	1	24	21.32	22.32	< 23.00
	3625.00			21.63	22.63	< 23.00
	3695.00			20.41	21.41	< 23.00
10	3555.00	1	49	21.77	22.77	< 23.00
	3625.00			21.62	22.62	< 23.00
	3695.00			20.59	21.59	< 23.00
10	3555.00	50	0	20.34	21.34	< 23.00
	3625.00			20.32	21.32	< 23.00
	3695.00			19.91	20.91	< 23.00

Note: The EIRP (dBm/10MHz) = Output Power (dBm/10MHz) + Antenna Gain (dBi)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm/10MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)
QPSK						
15	3557.50	1	0	21.28	22.28	< 23.00
	3625.00			20.97	21.97	< 23.00
	3692.50			20.63	21.63	< 23.00
15	3557.50	1	37	21.61	22.61	< 23.00
	3625.00			21.07	22.07	< 23.00
	3692.50			21.03	22.03	< 23.00
15	3557.50	1	74	21.25	22.25	< 23.00
	3625.00			20.87	21.87	< 23.00
	3692.50			21.30	22.30	< 23.00
15	3557.50	75	0	19.34	20.34	< 23.00
	3625.00			19.00	20.00	< 23.00
	3692.50			18.63	19.63	< 23.00
20	3560.00	1	0	21.84	22.84	< 23.00
	3625.00			21.10	22.10	< 23.00
	3690.00			20.75	21.75	< 23.00
20	3560.00	1	49	21.82	22.82	< 23.00
	3625.00			21.10	22.10	< 23.00
	3690.00			21.00	22.00	< 23.00
20	3560.00	1	99	21.39	22.39	< 23.00
	3625.00			21.37	22.37	< 23.00
	3690.00			20.86	21.86	< 23.00
20	3560.00	100	0	18.02	19.02	< 23.00
	3625.00			17.78	18.78	< 23.00
	3690.00			17.80	18.80	< 23.00

Note: The EIRP (dBm/10MHz) = Output Power (dBm/10MHz) + Antenna Gain (dBi)

Test Site	SIP-SR1	Test Engineer	Candy Luo
Test Date	2023-10-27 ~ 2023-11-06	Test Band	LTE Band 48 (Report only)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	3552.50	1	0	21.20	22.20	N/A
	3625.00			21.00	22.00	N/A
	3697.50			20.94	21.94	N/A
5	3552.50	1	12	21.18	22.18	N/A
	3625.00			21.08	22.08	N/A
	3697.50			20.96	21.96	N/A
5	3552.50	1	24	21.14	22.14	N/A
	3625.00			21.00	22.00	N/A
	3697.50			20.96	21.96	N/A
5	3552.50	25	0	20.15	21.15	N/A
	3625.00			20.04	21.04	N/A
	3697.50			19.97	20.97	N/A
10	3555.00	1	0	21.15	22.15	N/A
	3625.00			21.00	22.00	N/A
	3695.00			20.93	21.93	N/A
10	3555.00	1	24	21.11	22.11	N/A
	3625.00			21.07	22.07	N/A
	3695.00			20.87	21.87	N/A
10	3555.00	1	49	21.09	22.09	N/A
	3625.00			21.16	22.16	N/A
	3695.00			20.90	21.90	N/A
10	3555.00	50	0	20.16	21.16	N/A
	3625.00			20.08	21.08	N/A
	3695.00			19.95	20.95	N/A

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

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	3557.50	1	0	21.07	22.07	N/A
	3625.00			21.02	22.02	N/A
	3692.50			20.86	21.86	N/A
15	3557.50	1	37	21.08	22.08	N/A
	3625.00			21.05	22.05	N/A
	3692.50			20.88	21.88	N/A
15	3557.50	1	74	21.12	22.12	N/A
	3625.00			21.18	22.18	N/A
	3692.50			20.93	21.93	N/A
15	3557.50	75	0	20.10	21.10	N/A
	3625.00			20.03	21.03	N/A
	3692.50			20.05	21.05	N/A
20	3560.00	1	0	21.11	22.11	N/A
	3625.00			21.03	22.03	N/A
	3690.00			20.94	21.94	N/A
20	3560.00	1	49	21.10	22.10	N/A
	3625.00			21.05	22.05	N/A
	3690.00			20.88	21.88	N/A
20	3560.00	1	99	21.16	22.16	N/A
	3625.00			21.21	22.21	N/A
	3690.00			20.94	21.94	N/A
20	3560.00	100	0	20.12	21.12	N/A
	3625.00			20.08	21.08	N/A
	3690.00			19.93	20.93	N/A
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Appendix B - Test Setup Photograph

Refer to "2311RSU028-UT" file.

Appendix C - EUT Photograph

Refer to "2311RSU028-UE" file.