FCC RF Test Report

APPLICANT	:	Fibocom Wireless Inc.
EQUIPMENT	:	5G module
BRAND NAME	:	Fibocom
MODEL NAME	:	FM350R-GL
FCC ID	:	ZMOFM350RGL
STANDARD	:	47 CFR Part 2, and 90(S)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	May 07, 2024 ~ Jun. 06, 2024

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG431133E	Rev. 01	Initial issue of report	Jun. 21, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§2.1046	Conducted Output Power	—	Report only	-
3.2	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	—	Report only	-
3.3	§2.1051 §90.691	Emission masks – In-band emissions	< $50+10\log_{10}$(P[Watts])	PASS	-
3.4	§2.1051 §90.691	Emission masks – Out of band emissions	< $43+10\log_{10}$(P[Watts])	PASS	-
3.5	§2.1053 §90.691	Field Strength of Spurious Radiation	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 44.21 dB at 3258.000 MHz
3.6	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	< 2.5 ppm	PASS	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.2 Manufacturer

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G module
Brand Name	Fibocom
Model Name	FM350R-GL
FCC ID	ZMOFM350RGL
IMEI Code	Conducted: 863687070000500 Radiation: 863687070001516 for sample 1 863687070000526 for sample 2
HW Version	V1.1
SW Version	81601.0000.00.29.24.13
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	814 ~ 824 MHz
Rx Frequency	859 ~ 869 MHz
Bandwidth	1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz
Maximum Output Power to Antenna	23.47 dBm
Antenna Gain	3.00 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The device has two optional antennas, they are same antenna gain, RSE pretest the two antennas, choose worst antenna to perform final test and recorded in the report.
2. There are two samples under test, sample 1 is 1st source and sample 2 is 2nd source, the detailed differences could be referred to the FM350R-GL_Operational Description of Product Equality

Declaration which is exhibit separately. According to the differences, sample 1 perform full test, sample 2 verify conducted power and found less than sample 1, and sample 2 additional verify the worst case of RSE.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum Conducted Power and Emission Designator

LTE Band 26		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
1.4	814.7 ~ 823.3	0.2109	1M09G7D	0.1722	1M10W7D
3	815.5 ~ 822.5	0.2133	2M72G7D	0.1754	2M73W7D
5	816.5 ~ 821.5	0.2084	4M49G7D	0.1730	4M49W7D
10	819.0	0.2075	9M03G7D	0.1637	9M03W7D
15	824	0.2223	13M5G7D	0.1795	13M4W7D

Note: All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Site

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH01-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.9 Applied Standards

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

- 47 CFR Part 2, 90(S)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

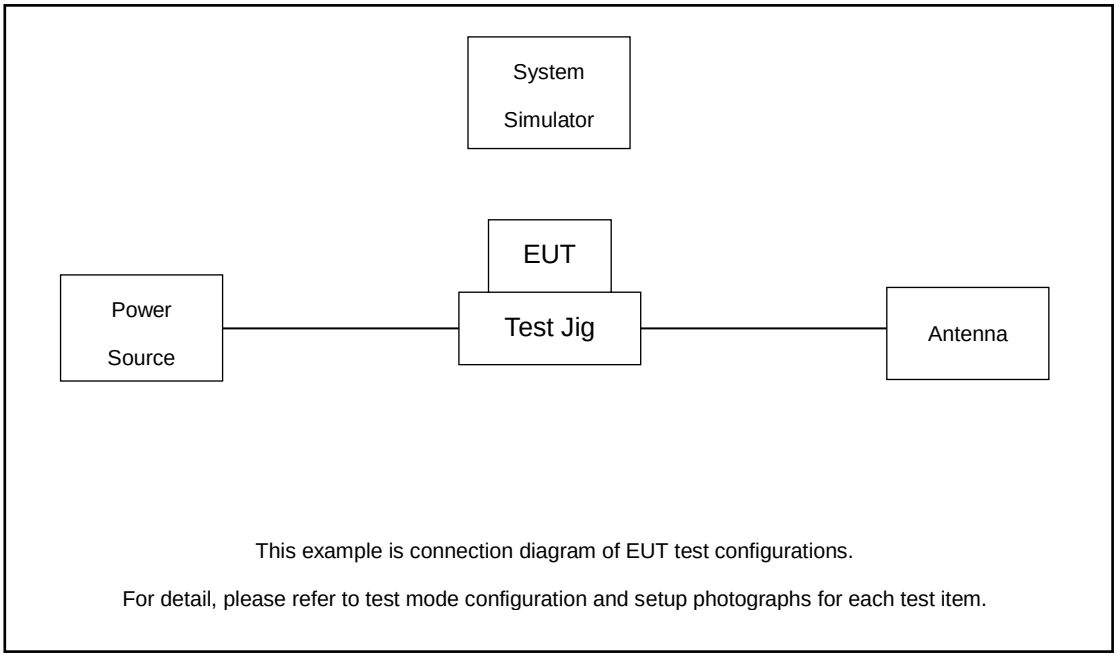
2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is 30 MHz to 9000 MHz. (X Plane)

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	26	v	v	v	v	v	-	v	v					v		v	
Emission masks In-band emissions	26	v	v	v	v	v	-	v	v	v		v		v	v		v
Emission masks – Out of band emissions	26	v	v	v	v	v	-	v	v	v		v			v	v	v
Frequency Stability	26				v		-	v						v		v	
Radiated Spurious Emission	26			v	v	v	-	v				v				v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz. ERP over 15MHz bandwidth complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power.																

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Antenna	N/A	N/A	N/A	N/A	N/A
3.	Adapter	N/A	N/A	N/A	N/A	N/A
4.	Test Jig	N/A	N/A	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.0 dB and 10dB attenuator.

Example :
Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.0 + 10 = 14.0 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 26 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	26740	-
	Frequency	-	819	-
5	Channel	26715	26740	26765
	Frequency	816.5	819	821.5
3	Channel	26705	26740	26775
	Frequency	815.5	819	822.5
1.4	Channel	26697	26740	26783
	Frequency	814.7	819	823.3

LTE Band 26 Cross-rule Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**-**	**Middle**	**-**
15	Channel	-	26790	-
	Frequency	-	824	-
10	Channel	-	26790	-
	Frequency	-	824	-
5	Channel	-	26790	-
	Frequency	-	824	-
3	Channel	-	26790	-
	Frequency	-	824	-
1.4	Channel	-	26790	-
	Frequency	-	824	-

3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

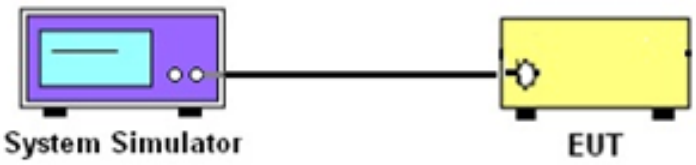
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

Please refer to Appendix A.

3.2 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.2.1 Description of (Occupied) Bandwidth Limitations Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

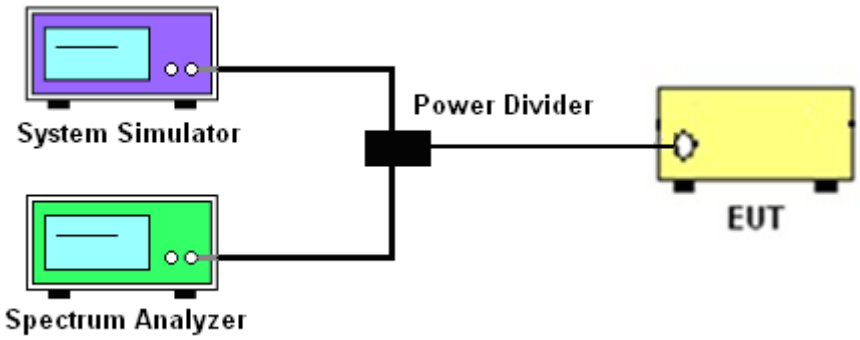
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.

3.2.4 Test Setup



3.2.5 Test Result of 99% Occupied Bandwidth and 26dB Bandwidth

Please refer to Appendix A.

3.3 Emissions Mask Measurement

3.3.1 Description of Emissions Mask Measurement

Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of FCC Part 90.691.(a):

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

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

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

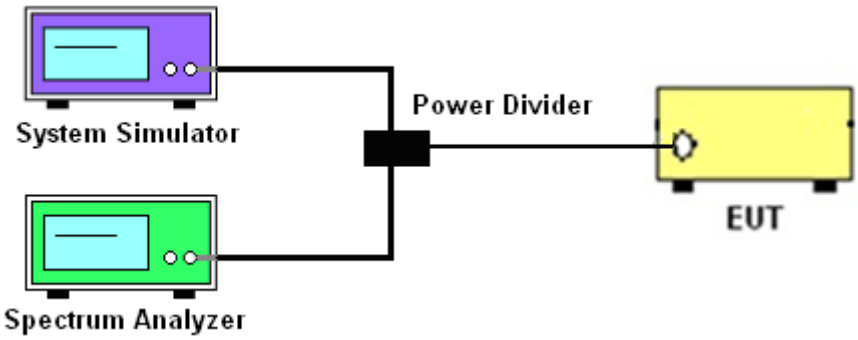
3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The emissions mask of low and high channels for the highest RF powers were measured.
3. The measured RBW and the VBW set 3 times of RBW are then set in spectrum analyzer, and the RBW correction factor 10log (1% of OBW/measured RBW)(dB) was compensated, if required.
4. The test results were shown below plots with a correction offset factor including cable loss, insertion loss of power divider.

3.3.4 Test Setup



3.3.5 Test Result (Plots) of Conducted Emissions Mask

Please refer to Appendix A.

3.4 Emissions Mask – Out Of Band Emissions Measurement

3.4.1 Description of Conducted Emissions Out of band emissions measurement

The power of any emission FCC Part 90.691 (a)(2) on any frequency removed from the assigned frequency by out of the authorized bandwidth at least 43 + 10 log (P) dB. It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

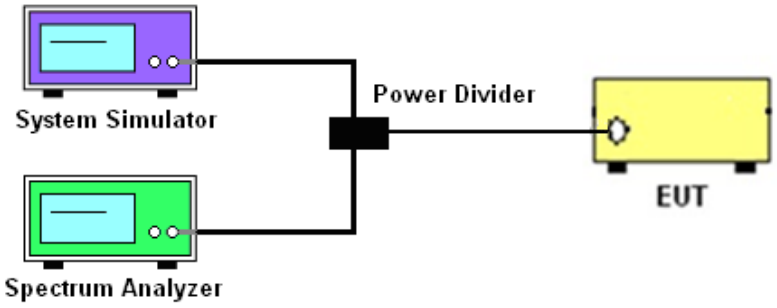
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

3.4.4 Test Setup



3.4.5 Test Result (Plots) of Conducted Emission

Please refer to Appendix A.

3.5 Field Strength of Spurious Radiation Measurement

3.5.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43+10\log_{10}(P[Watts])$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.5.2 Measuring Instruments

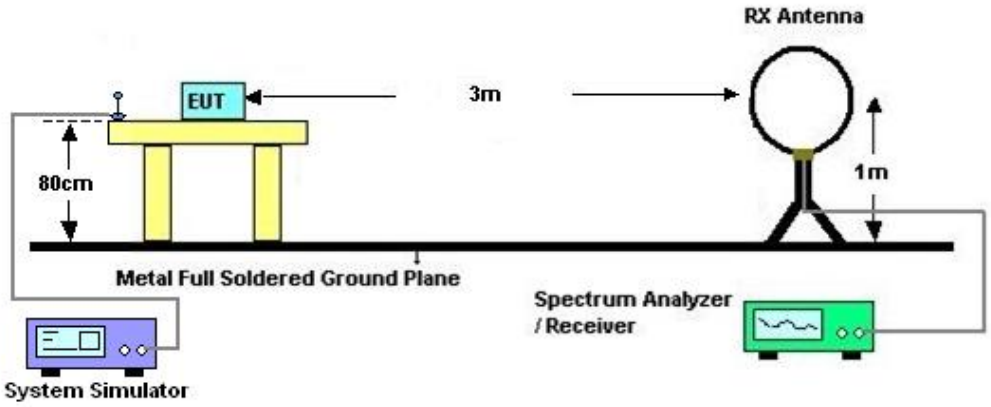
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

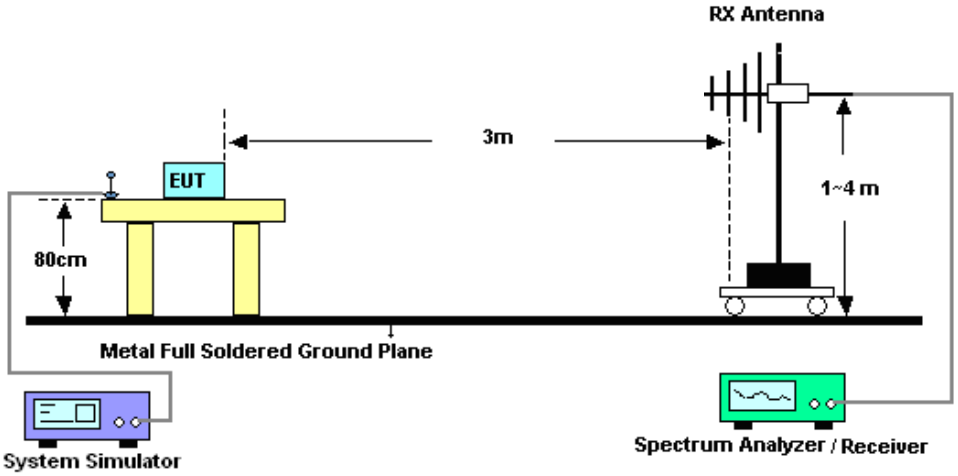
1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

3.5.4 Test Setup

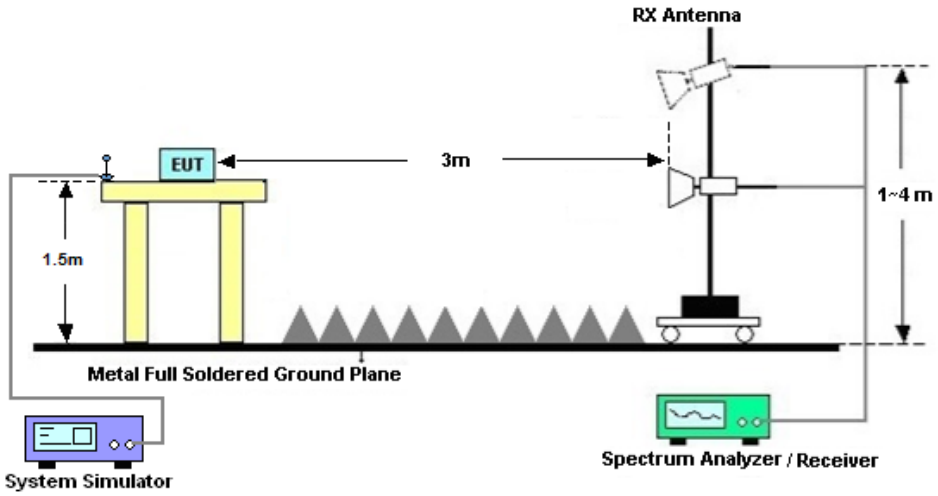
For radiated test from 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



3.5.5 Test Result of Field Strength of Spurious Radiated

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

3.6 Frequency Stability Measurement

3.6.1 Description of Frequency Stability Measurement

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 ±0.00025% (±2.5ppm) of the center frequency according to FCC Part 90.213.

3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

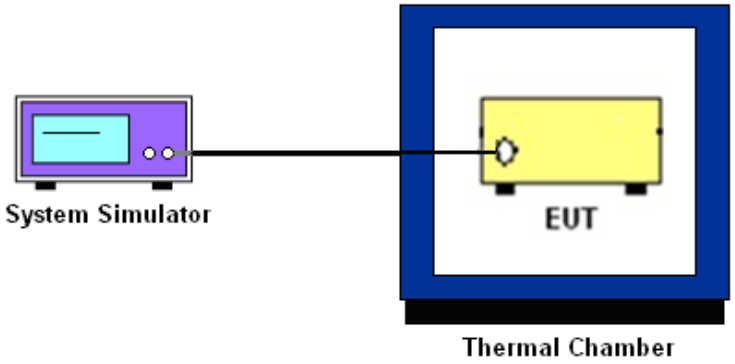
3.6.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.6.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
3. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the
4. battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

3.6.5 Test Setup



3.6.6 Test Result of Temperature Variation

Please refer to Appendix A.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jun. 06, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Jun. 06, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 25, 2023	Jun. 06, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Power Divider	SOLVANG TECHNOLOY	STI08-0055	-	Max 40GHz	Mar. 20, 2024	Jun. 06, 2024	Mar. 19, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Jun. 06, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	May 07, 2024 Jun. 03, 2024	Dec. 26, 2024	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	May 07, 2024 Jun. 03, 2024	Jul. 27, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18,2023	May 07, 2024 Jun. 03, 2024	Oct. 17,2024	Radiation (03CH01-SZ
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	May 07, 2024 Jun. 03, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	May 07, 2024 Jun. 03, 2024	Jul. 07, 2024	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	May 07, 2024 Jun. 03, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	May 07, 2024 Jun. 03, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18, 2023	May 07, 2024 Jun. 03, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 07, 2023	May 07, 2024 Jun. 03, 2024	Jul. 06, 2024	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 18, 2023	May 07, 2024 Jun. 03, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 07, 2024 Jun. 03, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 07, 2024 Jun. 03, 2024	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Frequency Stability	±1.3 Hz

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.02dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Gary	Temperature :	24~26℃
		Relative Humidity :	50~53%

Conducted Output Power (Average power)

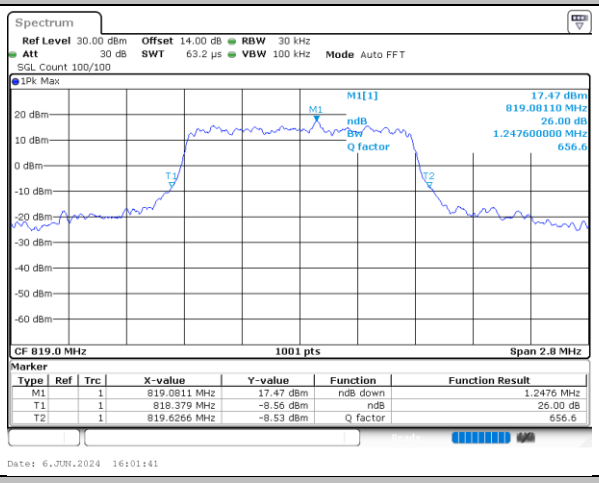
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel					26790	
Frequency (MHz)					824	
15	QPSK	1	0		23.18	
15	QPSK	1	37		23.47	
15	QPSK	1	74		23.18	
15	QPSK	36	0		22.29	
15	QPSK	36	20		22.22	
15	QPSK	36	39		22.18	
15	QPSK	75	0		22.27	
15	16QAM	1	0		22.54	
15	64QAM	1	0		21.27	
15	256QAM	1	0		18.21	
Channel					26740	
Frequency (MHz)					819	
10	QPSK	1	0		23.16	
10	QPSK	1	49		23.10	
10	QPSK	1	49		23.17	
10	QPSK	1	49		22.01	
10	QPSK	1	49		22.01	
10	QPSK	1	49		22.44	
10	QPSK	50	0		22.24	
10	16QAM	1	0		22.14	
10	64QAM	1	0		21.44	
10	256QAM	1	0		18.25	
Channel				26715	26740	26765
Frequency (MHz)				816.5	819	821.5
5	QPSK	1	0	23.14	23.17	23.19
5	16QAM	1	0	22.10	22.38	22.20
Channel				26705	26740	26775
Frequency (MHz)				815.5	819	822.5
3	QPSK	1	0	23.20	23.11	23.29
3	16QAM	1	0	22.05	22.44	22.24
Channel				26697	26740	26783
Frequency (MHz)				814.7	819	823.3
1.4	QPSK	1	0	23.16	23.19	23.24
1.4	16QAM	1	0	22.10	22.36	22.24

26dB Bandwidth

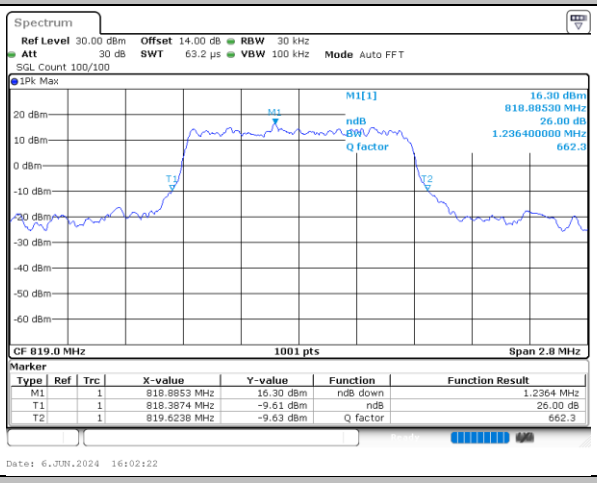
Mode	LTE Band 26 : 26dB BW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.25	1.24	2.97	2.97	4.81	4.89	9.69	9.83	14.33	14.27

LTE Band 26

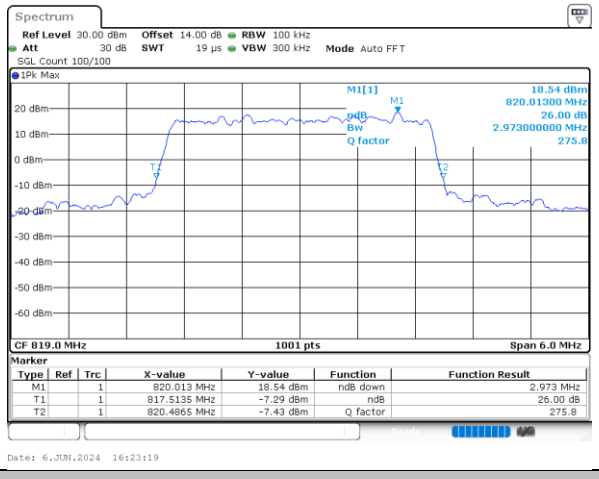
Middle Channel / 1.4MHz / QPSK



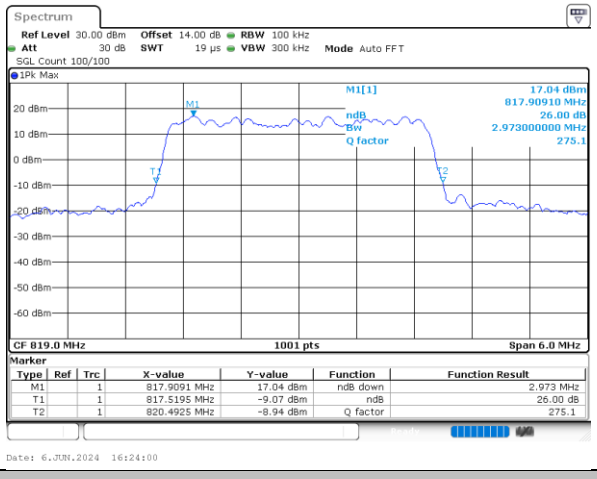
Middle Channel / 1.4MHz / 16QAM



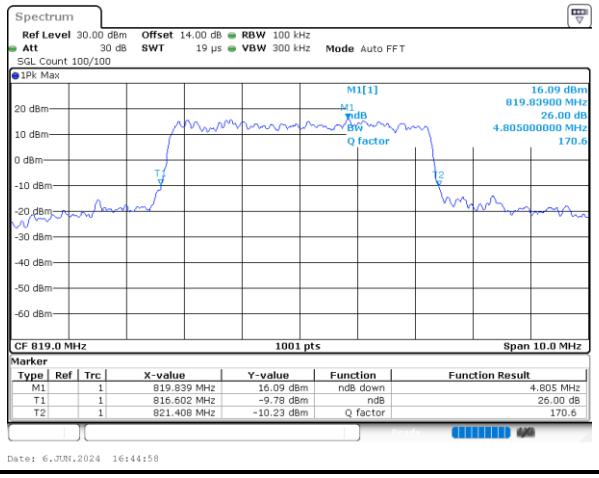
Middle Channel / 3MHz / QPSK



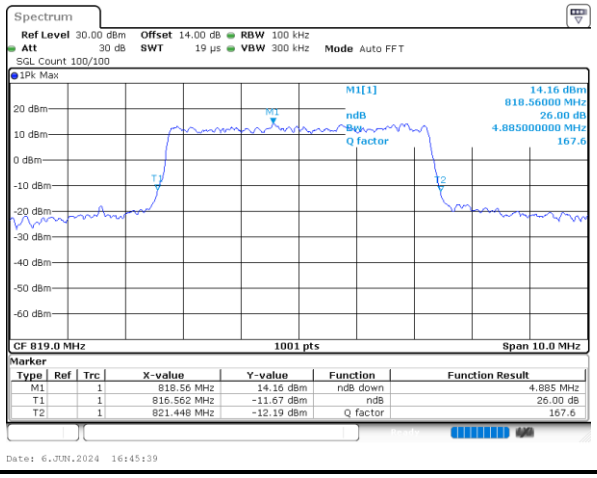
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK

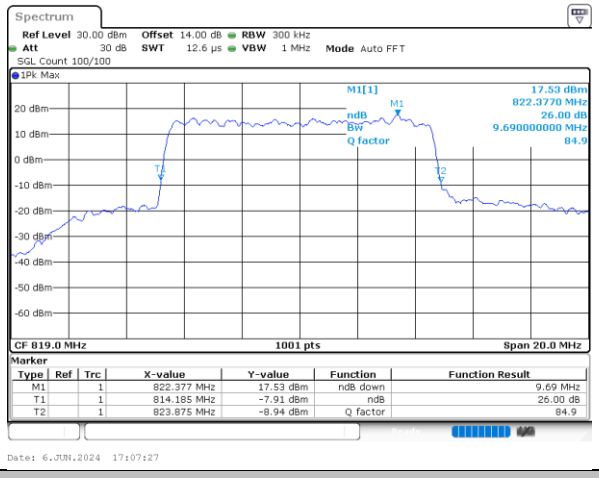


Middle Channel / 5MHz / 16QAM

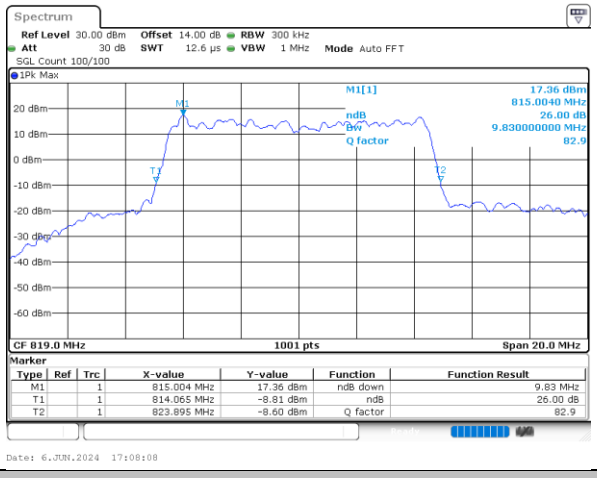


LTE Band 26

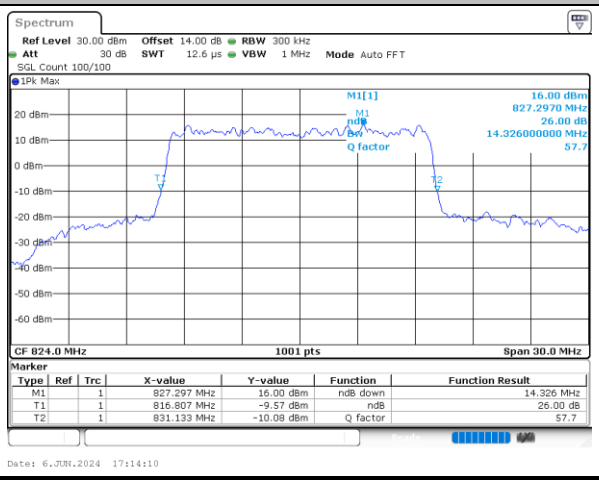
Middle Channel / 10MHz / QPSK



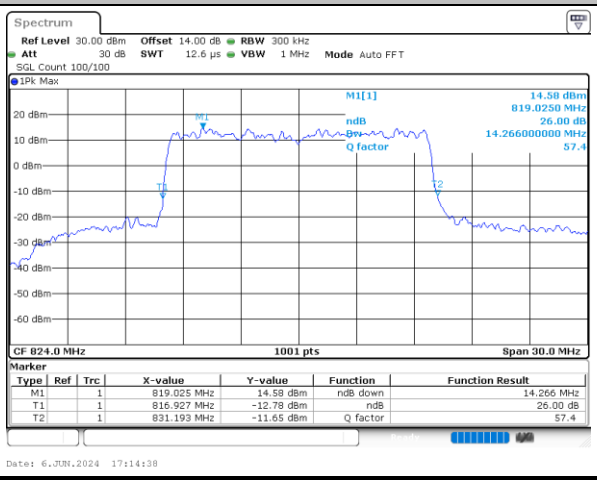
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM

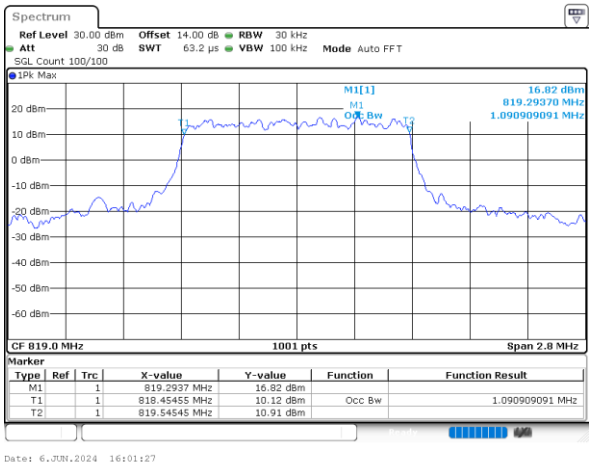


Occupied Bandwidth

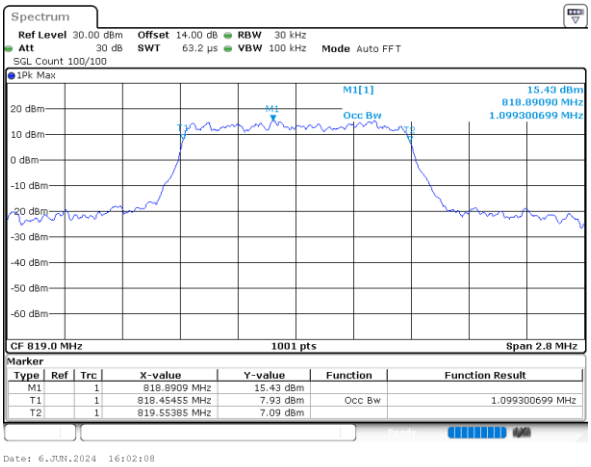
Mode	LTE Band 26 : 99%OBW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.10	2.72	2.73	4.49	4.49	9.03	9.03	13.46	13.43

LTE Band 26

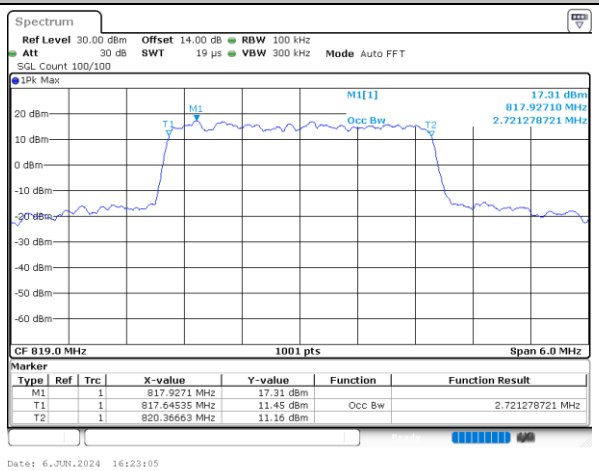
Middle Channel / 1.4MHz / QPSK



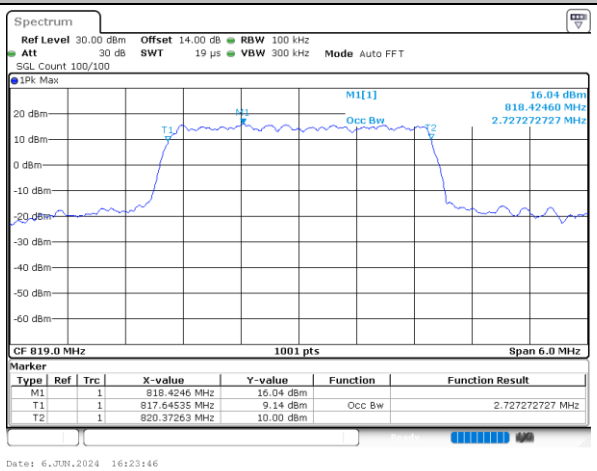
Middle Channel / 1.4MHz / 16QAM



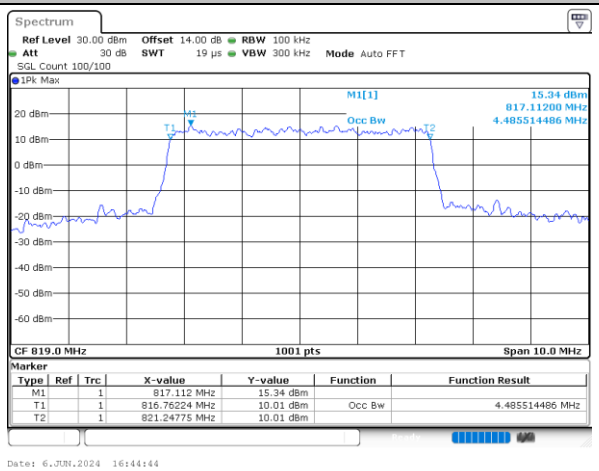
Middle Channel / 3MHz / QPSK



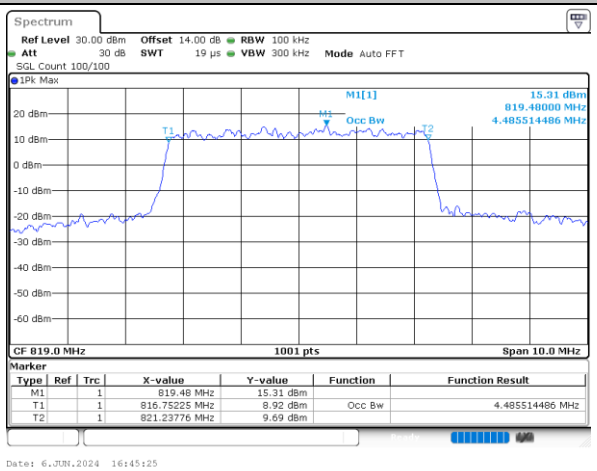
Middle Channel / 3MHz / 16QAM

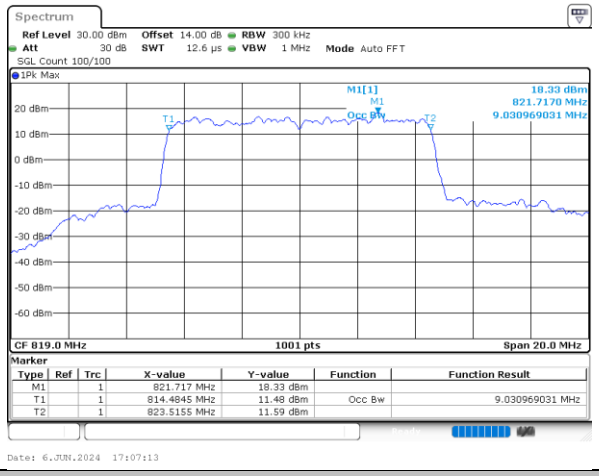
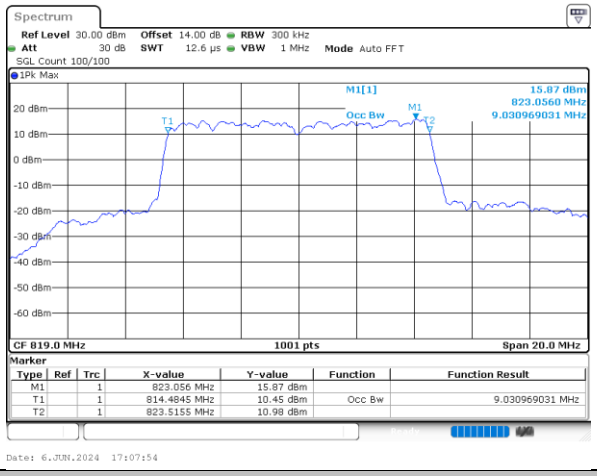
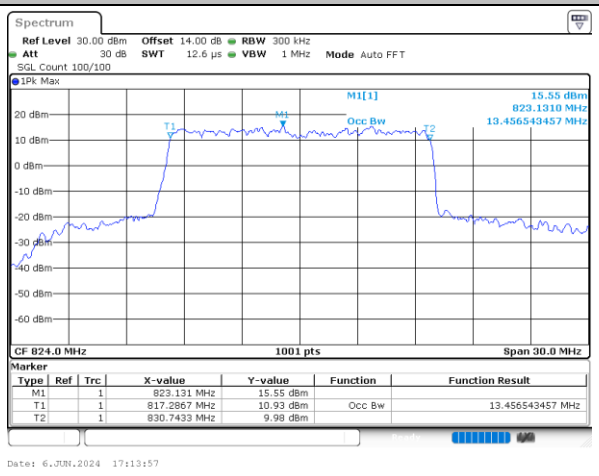
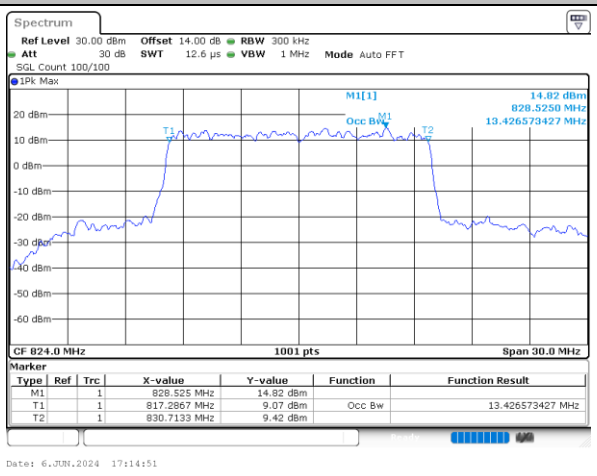


Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM

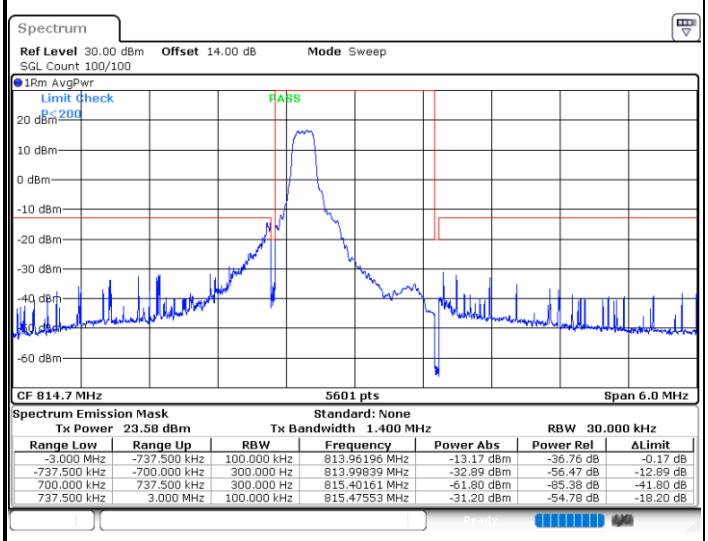


LTE Band 26	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	

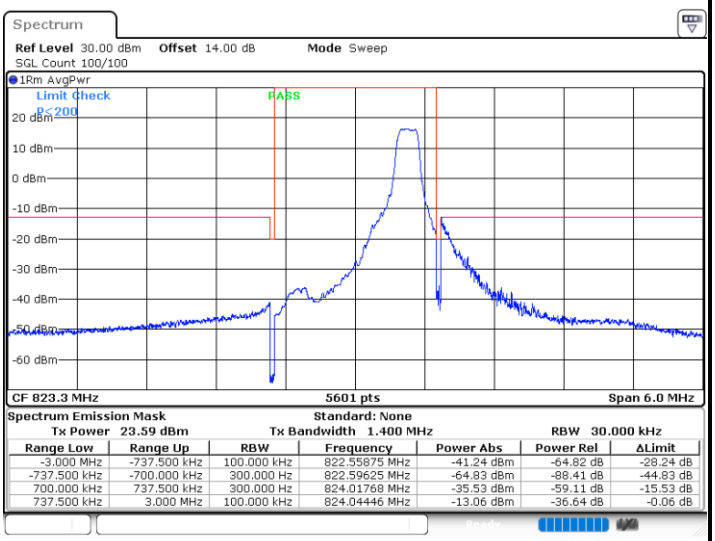
Emission masks – In-band emissions

LTE Band 26 / 1.4MHz / QPSK

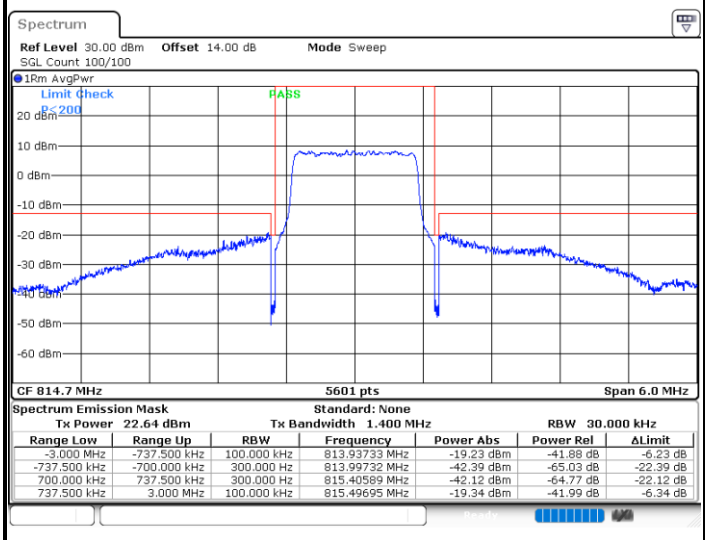
Lowest Band Edge / 1RB



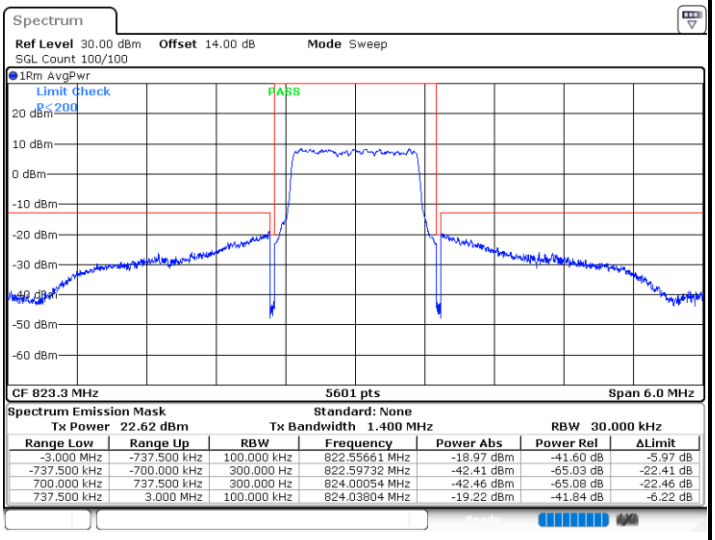
Highest Band Edge / 1RB



Lowest Band Edge / Full RB

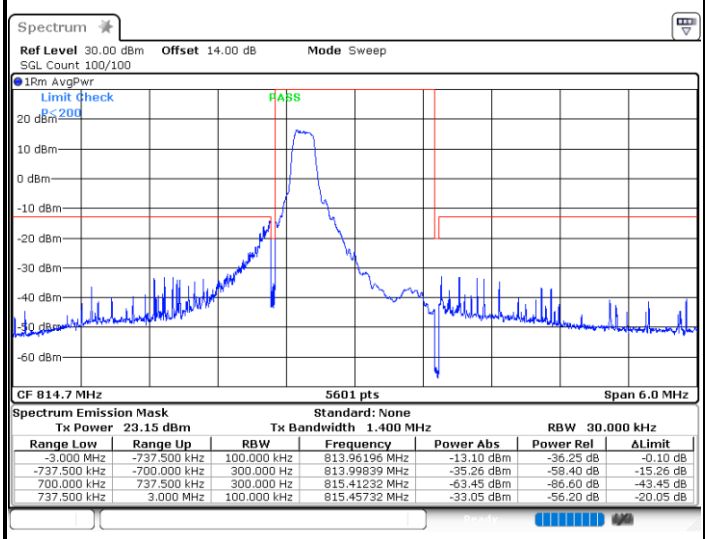


Highest Band Edge / Full RB

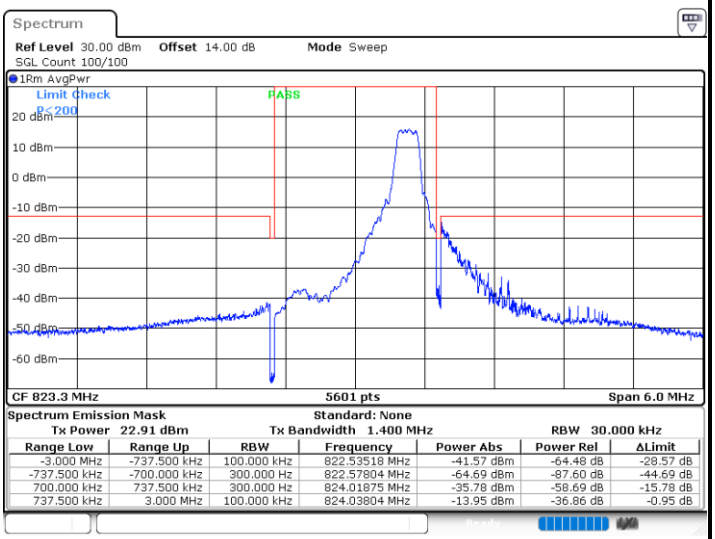


LTE Band 26 / 1.4MHz / 16QAM

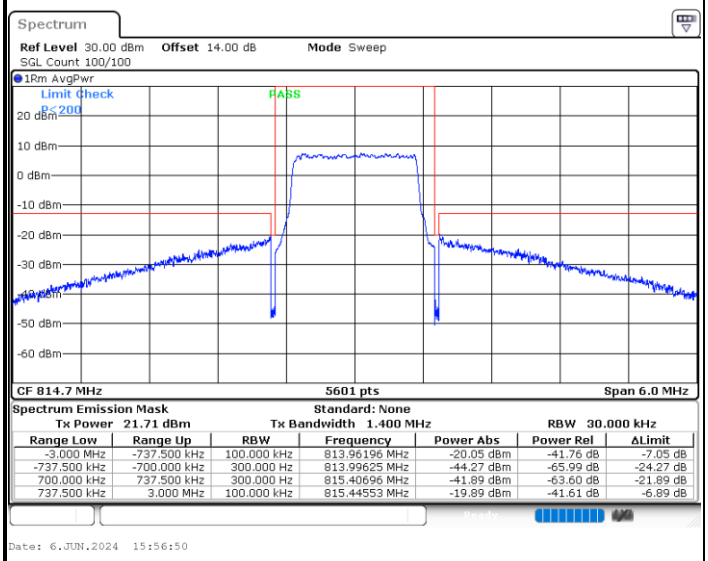
Lowest Band Edge / 1 RB



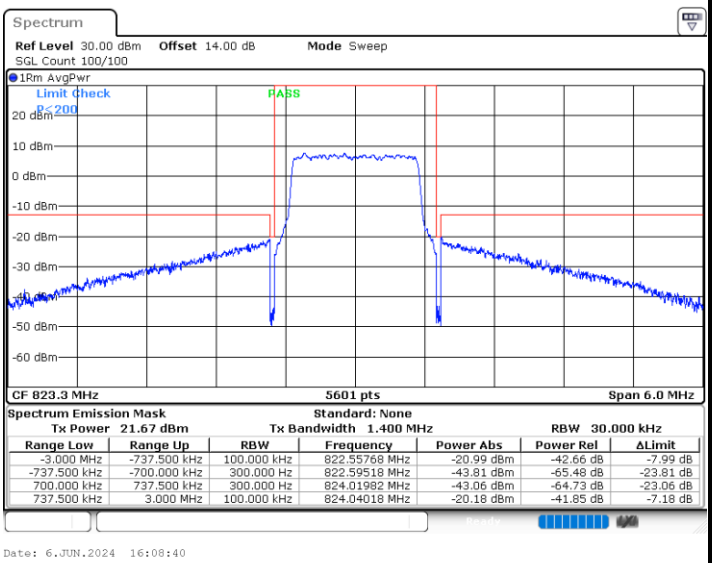
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

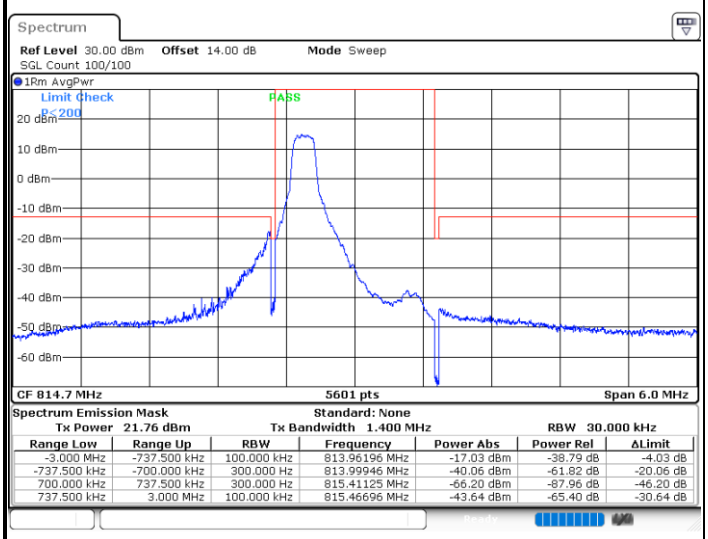


Highest Band Edge / Full RB



LTE Band 26 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB

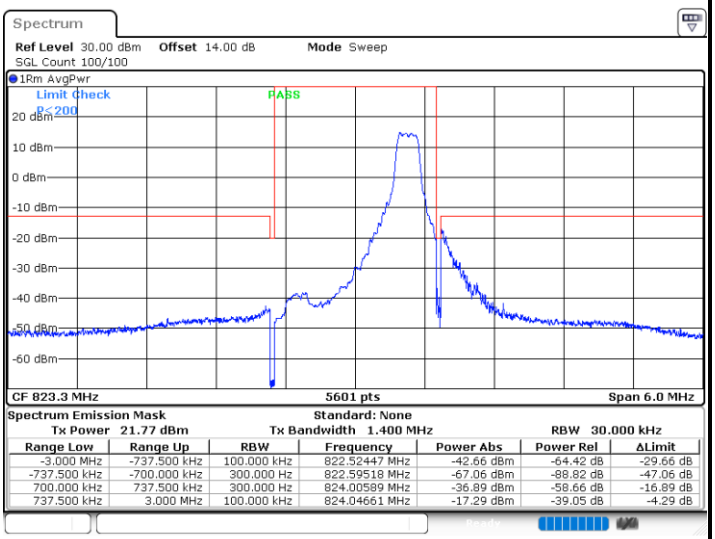


Spectrum Emission Mask Standard: None
Tx Power 21.76 dBm Tx Bandwidth 1.400 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	813.96196 MHz	-17.03 dBm	-38.79 dB	-4.03 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99946 MHz	-40.06 dBm	-61.82 dB	-20.06 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.41125 MHz	-66.20 dBm	-87.96 dB	-46.20 dB
737.500 kHz	3.000 MHz	100.000 kHz	815.46696 MHz	-43.64 dBm	-65.40 dB	-30.64 dB

Date: 6.JUN.2024 15:54:18

Highest Band Edge / 1 RB

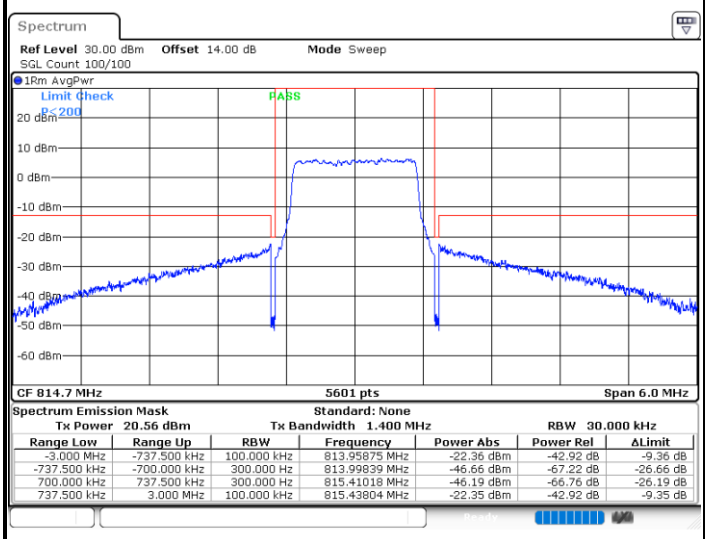


Spectrum Emission Mask Standard: None
Tx Power 21.77 dBm Tx Bandwidth 1.400 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	822.52447 MHz	-42.66 dBm	-64.42 dB	-29.66 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59518 MHz	-67.06 dBm	-88.82 dB	-47.06 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00589 MHz	-36.89 dBm	-58.66 dB	-16.89 dB
737.500 kHz	3.000 MHz	100.000 kHz	824.04661 MHz	-17.29 dBm	-39.05 dB	-4.29 dB

Date: 6.JUN.2024 16:06:09

Lowest Band Edge / Full RB

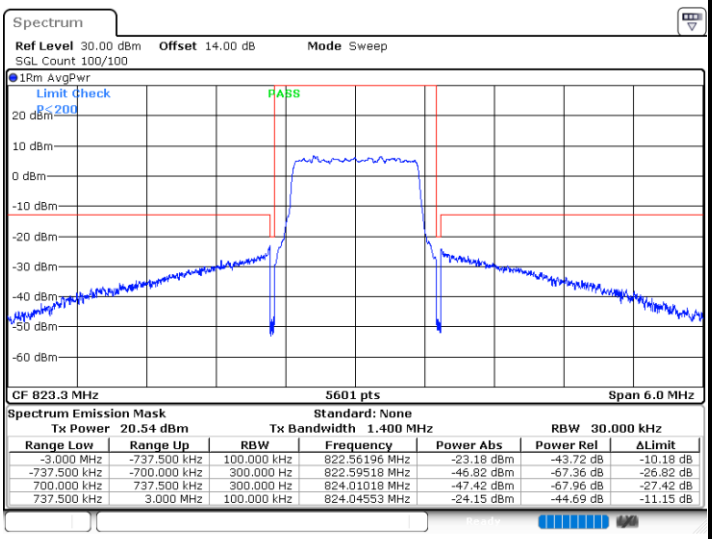


Spectrum Emission Mask Standard: None
Tx Power 20.56 dBm Tx Bandwidth 1.400 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	813.95875 MHz	-22.36 dBm	-42.92 dB	-9.36 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99839 MHz	-46.66 dBm	-67.22 dB	-26.66 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.41018 MHz	-46.19 dBm	-66.76 dB	-26.19 dB
737.500 kHz	3.000 MHz	100.000 kHz	815.43804 MHz	-22.35 dBm	-42.92 dB	-9.35 dB

Date: 6.JUN.2024 15:55:34

Highest Band Edge / Full RB



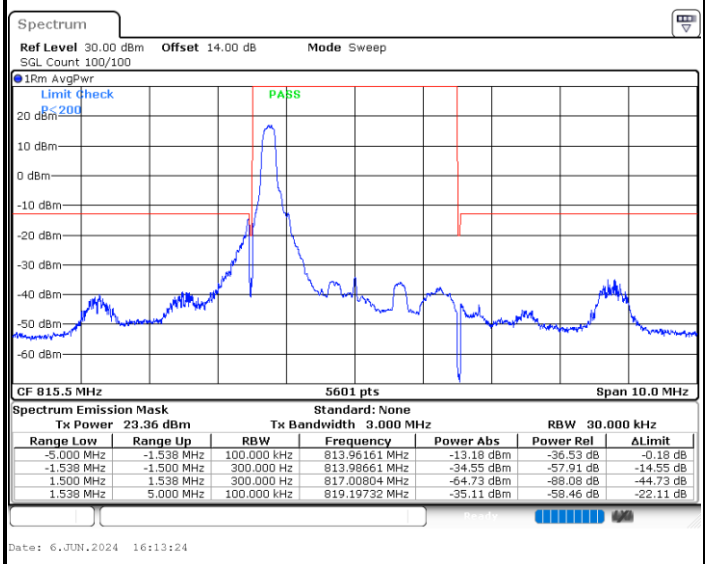
Spectrum Emission Mask Standard: None
Tx Power 20.54 dBm Tx Bandwidth 1.400 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	822.56196 MHz	-23.18 dBm	-43.72 dB	-10.18 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59518 MHz	-46.82 dBm	-67.36 dB	-26.82 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.01018 MHz	-47.42 dBm	-67.96 dB	-27.42 dB
737.500 kHz	3.000 MHz	100.000 kHz	824.04553 MHz	-24.15 dBm	-44.69 dB	-11.15 dB

Date: 6.JUN.2024 16:07:25

LTE Band 26 / 3MHz / QPSK

Lowest Band Edge / 1RB

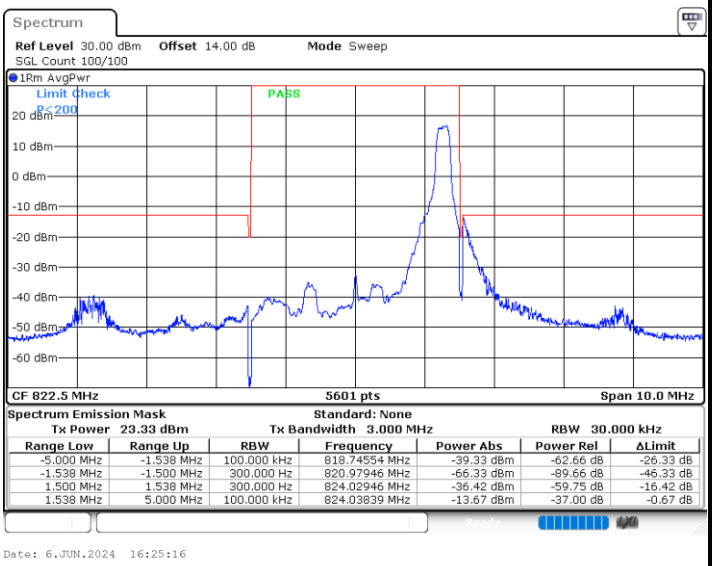


Spectrum Emission Mask Standard: None
Tx Power 23.36 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.96161 MHz	-13.18 dBm	-36.53 dB	-0.18 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.98661 MHz	-34.55 dBm	-57.91 dB	-14.55 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00804 MHz	-64.73 dBm	-88.08 dB	-44.73 dB
1.538 MHz	5.000 MHz	100.000 kHz	819.19732 MHz	-35.11 dBm	-58.46 dB	-22.11 dB

Date: 6.JUN.2024 16:13:24

Highest Band Edge / 1RB

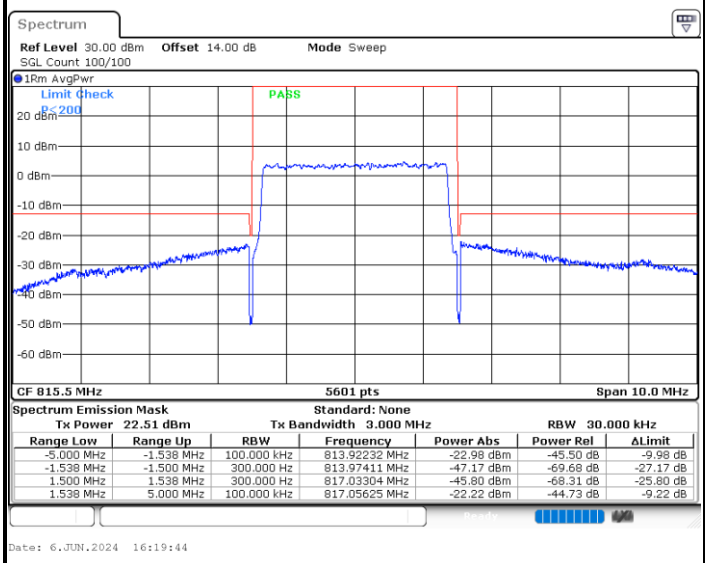


Spectrum Emission Mask Standard: None
Tx Power 23.33 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	818.74554 MHz	-39.33 dBm	-62.66 dB	-26.33 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.97946 MHz	-66.33 dBm	-89.66 dB	-46.33 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.02946 MHz	-36.42 dBm	-59.75 dB	-16.42 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-13.67 dBm	-37.00 dB	-0.67 dB

Date: 6.JUN.2024 16:25:16

Lowest Band Edge / Full RB

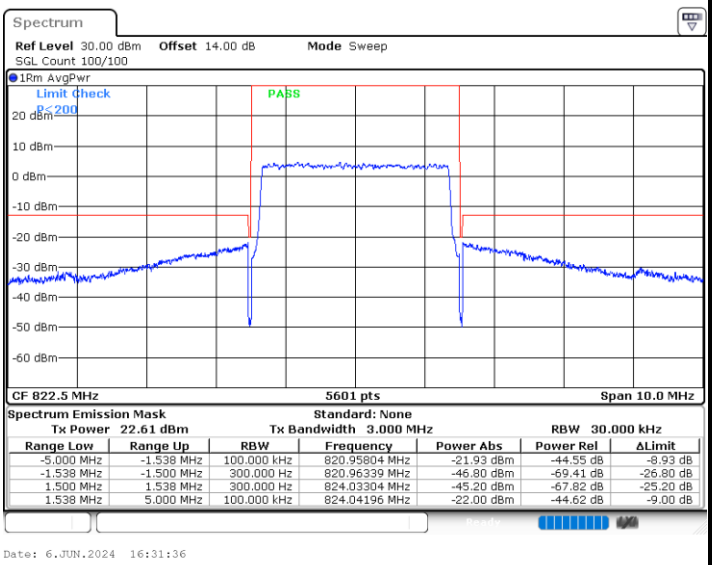


Spectrum Emission Mask Standard: None
Tx Power 22.51 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.92232 MHz	-22.98 dBm	-45.50 dB	-9.98 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.97411 MHz	-47.17 dBm	-69.68 dB	-27.17 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.03304 MHz	-45.80 dBm	-68.31 dB	-25.80 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.05625 MHz	-22.22 dBm	-44.73 dB	-9.22 dB

Date: 6.JUN.2024 16:19:44

Highest Band Edge / Full RB



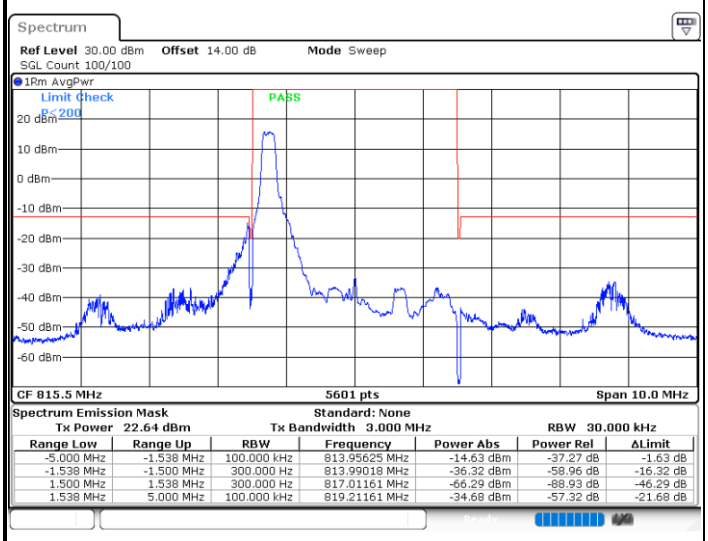
Spectrum Emission Mask Standard: None
Tx Power 22.61 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	820.95804 MHz	-21.93 dBm	-44.55 dB	-8.93 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.96339 MHz	-46.80 dBm	-69.41 dB	-26.80 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.03304 MHz	-45.20 dBm	-67.82 dB	-25.20 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.04196 MHz	-22.00 dBm	-44.62 dB	-9.00 dB

Date: 6.JUN.2024 16:31:36

LTE Band 26 / 3MHz / 16QAM

Lowest Band Edge / 1 RB

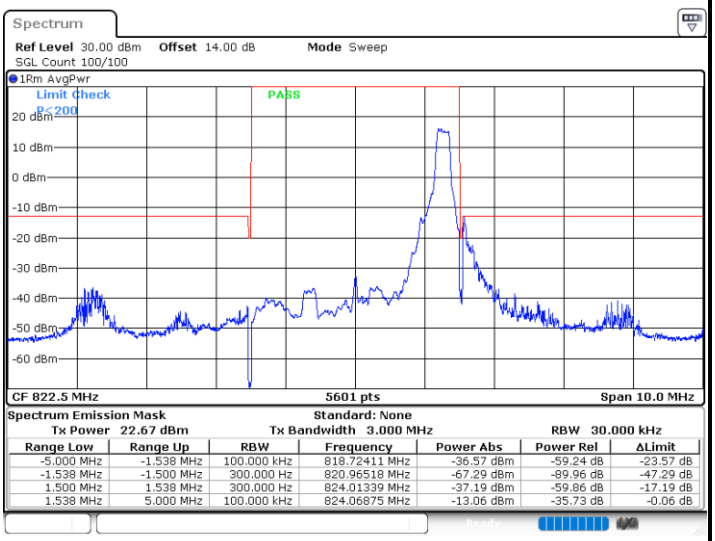


Spectrum Emission Mask Standard: None
Tx Power 22.64 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95625 MHz	-14.63 dBm	-37.27 dB	-1.63 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99018 MHz	-36.32 dBm	-58.96 dB	-16.32 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.01161 MHz	-66.29 dBm	-88.93 dB	-46.29 dB
1.538 MHz	5.000 MHz	100.000 kHz	819.21161 MHz	-34.68 dBm	-57.32 dB	-21.68 dB

Date: 7.JUN.2024 14:44:50

Highest Band Edge / 1 RB

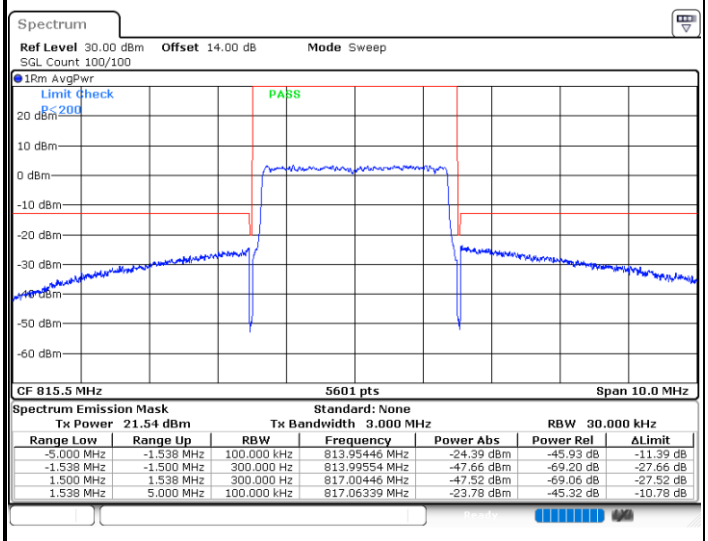


Spectrum Emission Mask Standard: None
Tx Power 22.67 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	818.72411 MHz	-36.57 dBm	-59.24 dB	-23.57 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.96518 MHz	-67.29 dBm	-89.96 dB	-47.29 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.01339 MHz	-37.19 dBm	-59.86 dB	-17.19 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.06875 MHz	-13.06 dBm	-35.73 dB	-0.06 dB

Date: 6.JUN.2024 16:26:32

Lowest Band Edge / Full RB

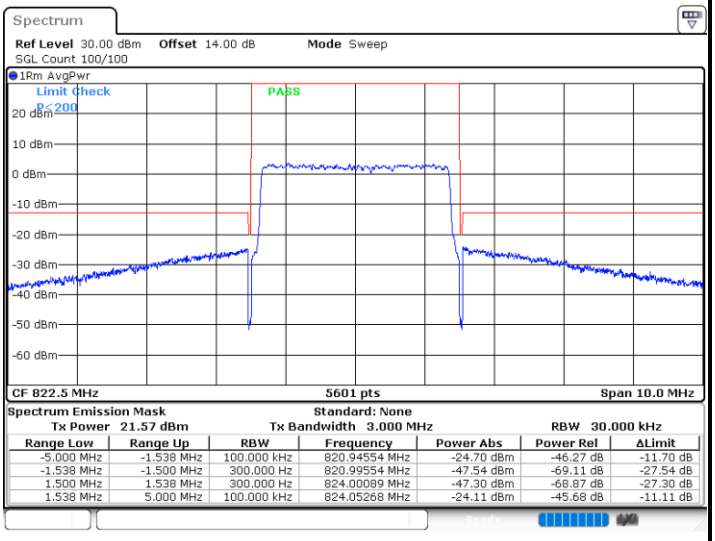


Spectrum Emission Mask Standard: None
Tx Power 21.54 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95446 MHz	-24.39 dBm	-45.93 dB	-11.39 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99554 MHz	-47.66 dBm	-69.20 dB	-27.66 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00446 MHz	-47.52 dBm	-69.06 dB	-27.52 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.06339 MHz	-23.78 dBm	-45.32 dB	-10.78 dB

Date: 6.JUN.2024 16:18:28

Highest Band Edge / Full RB



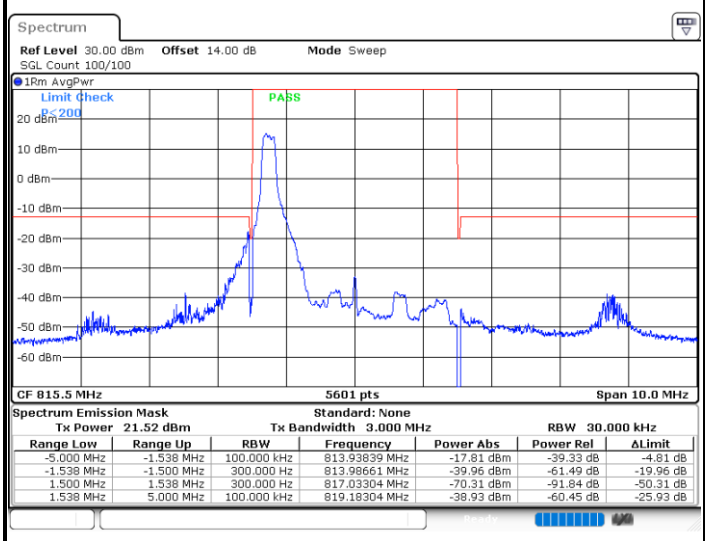
Spectrum Emission Mask Standard: None
Tx Power 21.57 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	820.94554 MHz	-24.70 dBm	-46.27 dB	-11.70 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99554 MHz	-47.54 dBm	-69.11 dB	-27.54 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00089 MHz	-47.30 dBm	-68.87 dB	-27.30 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.05268 MHz	-24.11 dBm	-45.68 dB	-11.11 dB

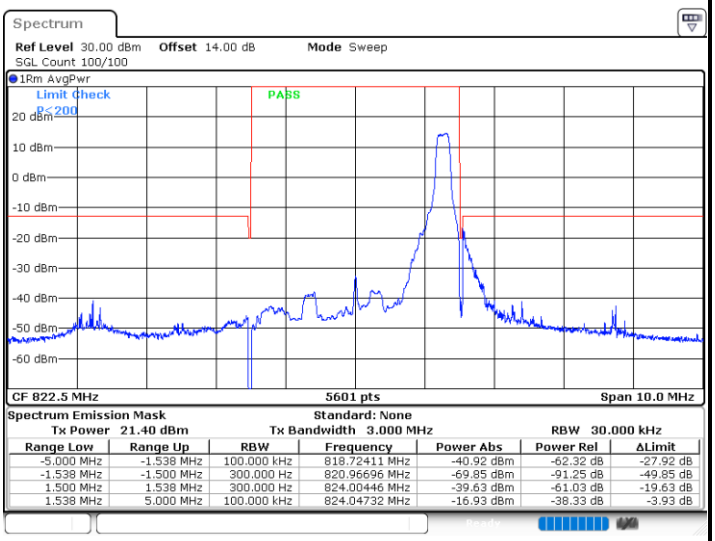
Date: 6.JUN.2024 16:30:20

LTE Band 26 / 3MHz / 64QAM

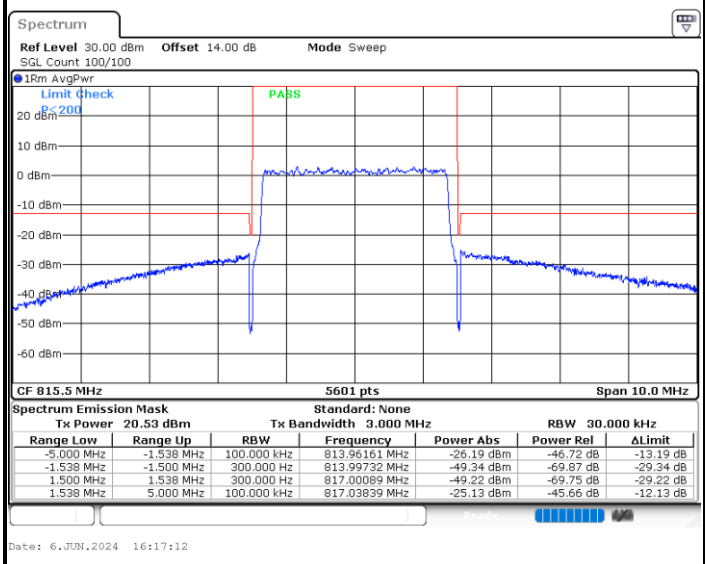
Lowest Band Edge / 1 RB



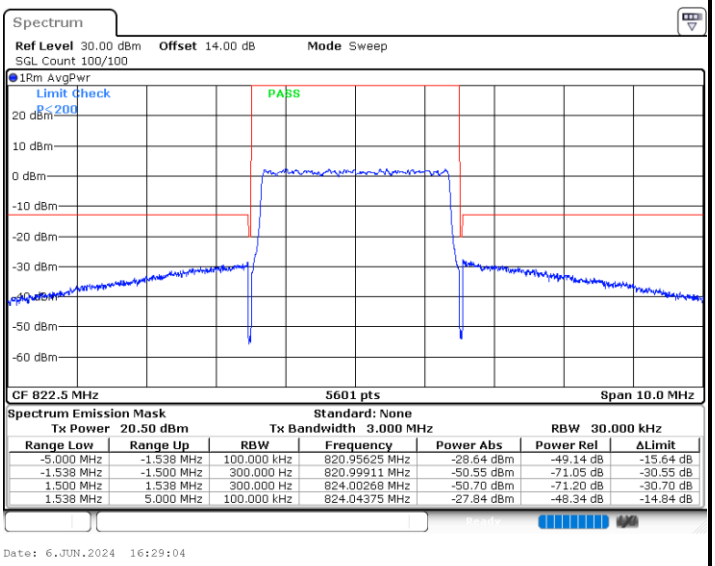
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

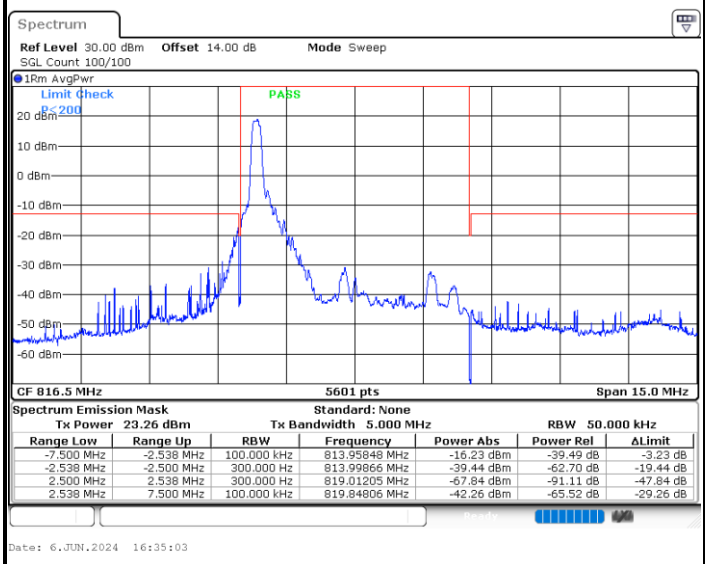


Highest Band Edge / Full RB



LTE Band 26 / 5MHz / QPSK

Lowest Band Edge / 1RB

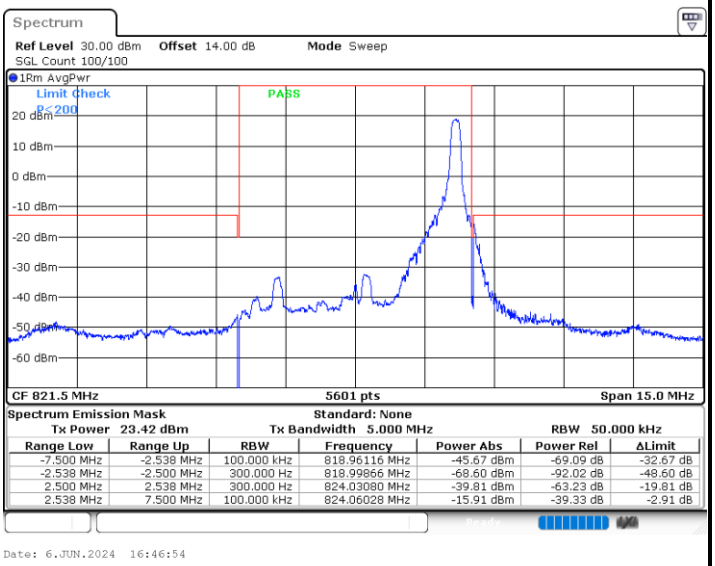


Spectrum Emission Mask Standard: None
Tx Power 23.26 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.95848 MHz	-16.23 dBm	-39.49 dB	-3.23 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99866 MHz	-39.44 dBm	-62.70 dB	-19.44 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.01205 MHz	-67.84 dBm	-91.11 dB	-47.84 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.84806 MHz	-42.26 dBm	-65.52 dB	-29.26 dB

Date: 6.JUN.2024 16:35:03

Highest Band Edge / 1RB

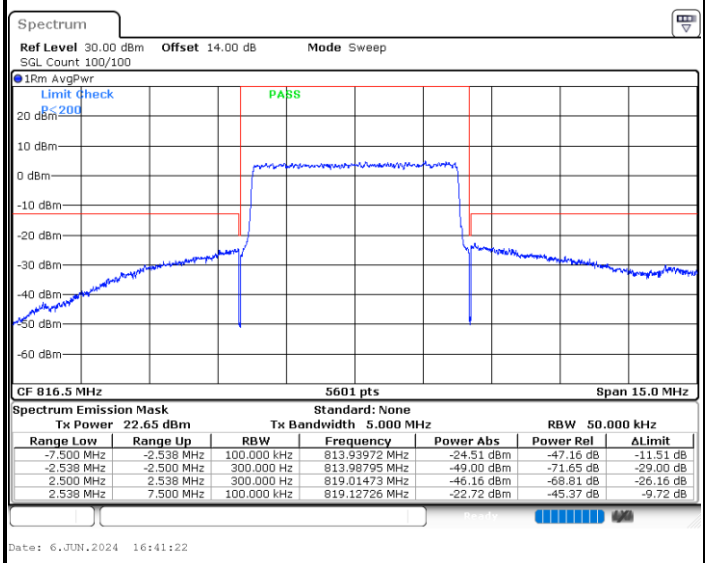


Spectrum Emission Mask Standard: None
Tx Power 23.42 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.96116 MHz	-45.67 dBm	-69.09 dB	-32.67 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.99866 MHz	-68.60 dBm	-92.02 dB	-48.60 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.03080 MHz	-39.81 dBm	-63.23 dB	-19.81 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.06028 MHz	-15.91 dBm	-39.33 dB	-2.91 dB

Date: 6.JUN.2024 16:46:54

Lowest Band Edge / Full RB

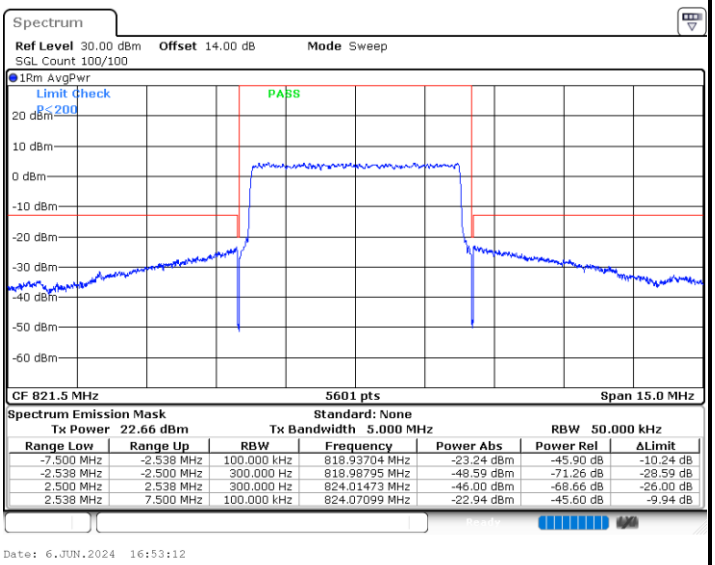


Spectrum Emission Mask Standard: None
Tx Power 22.65 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.93972 MHz	-24.51 dBm	-47.16 dB	-11.51 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.98795 MHz	-49.00 dBm	-71.65 dB	-29.00 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.01473 MHz	-46.16 dBm	-68.81 dB	-26.16 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.12726 MHz	-22.72 dBm	-45.37 dB	-9.72 dB

Date: 6.JUN.2024 16:41:22

Highest Band Edge / Full RB



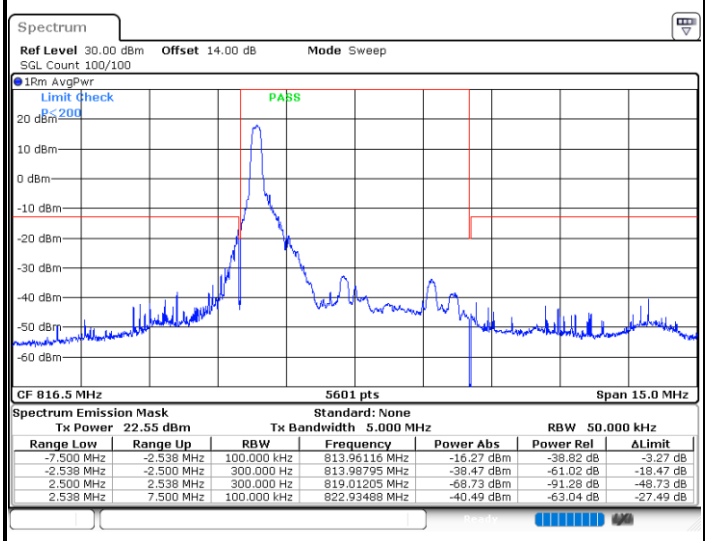
Spectrum Emission Mask Standard: None
Tx Power 22.66 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.93704 MHz	-23.24 dBm	-45.90 dB	-10.24 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.98795 MHz	-48.59 dBm	-71.26 dB	-28.59 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.01473 MHz	-46.00 dBm	-68.66 dB	-26.00 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.07099 MHz	-22.94 dBm	-45.60 dB	-9.94 dB

Date: 6.JUN.2024 16:53:12

LTE Band 26 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

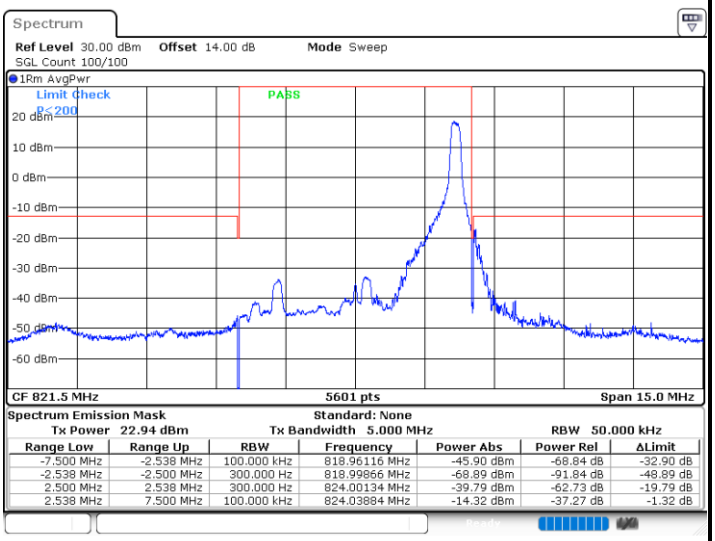


Spectrum Emission Mask Standard: None
Tx Power 22.55 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.96116 MHz	-16.27 dBm	-38.82 dB	-3.27 dB
-2.538 MHz	2.538 MHz	300.000 Hz	813.98795 MHz	-38.47 dBm	-61.02 dB	-18.47 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.01205 MHz	-68.73 dBm	-91.28 dB	-48.73 dB
2.538 MHz	7.500 MHz	100.000 kHz	822.93488 MHz	-40.49 dBm	-63.04 dB	-27.49 dB

Date: 6.JUN.2024 16:36:19

Highest Band Edge / 1 RB

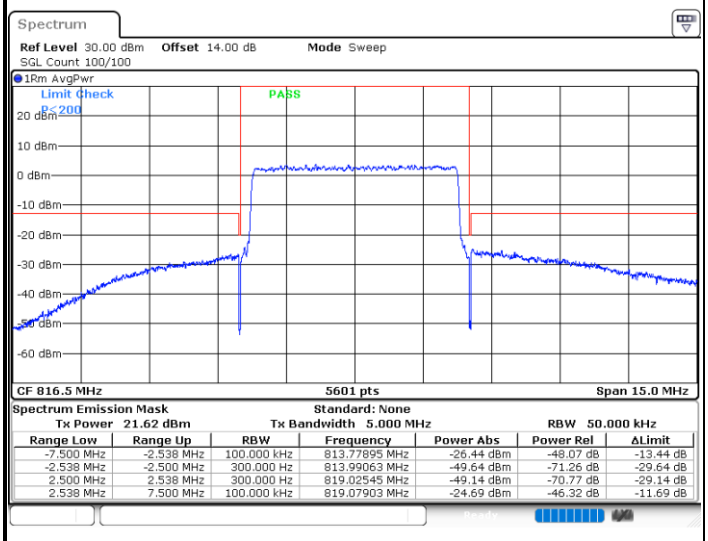


Spectrum Emission Mask Standard: None
Tx Power 22.94 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.96116 MHz	-45.90 dBm	-68.84 dB	-32.90 dB
-2.538 MHz	2.500 MHz	300.000 Hz	818.99866 MHz	-68.89 dBm	-91.84 dB	-48.89 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.00134 MHz	-39.79 dBm	-62.73 dB	-19.79 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.03884 MHz	-14.32 dBm	-37.27 dB	-1.32 dB

Date: 6.JUN.2024 16:48:09

Lowest Band Edge / Full RB

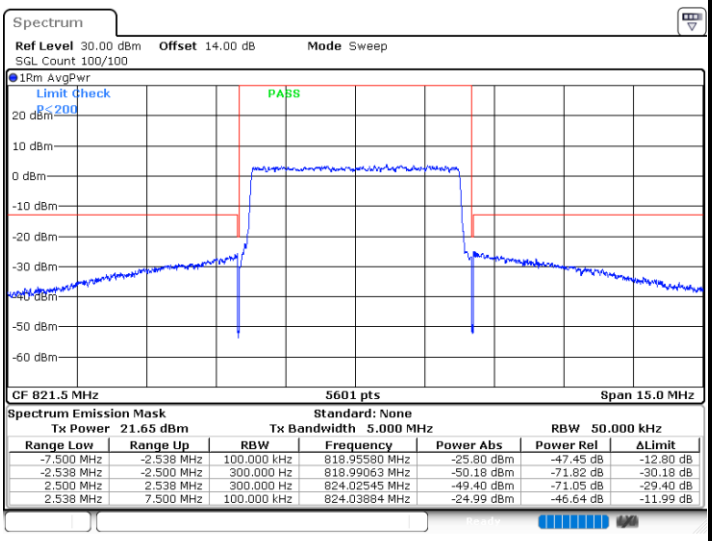


Spectrum Emission Mask Standard: None
Tx Power 21.62 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.77895 MHz	-26.44 dBm	-48.07 dB	-13.44 dB
-2.538 MHz	2.500 MHz	300.000 Hz	813.99063 MHz	-49.64 dBm	-71.26 dB	-29.64 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.02545 MHz	-49.14 dBm	-70.77 dB	-29.14 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.07903 MHz	-24.69 dBm	-46.32 dB	-11.69 dB

Date: 6.JUN.2024 16:40:06

Highest Band Edge / Full RB



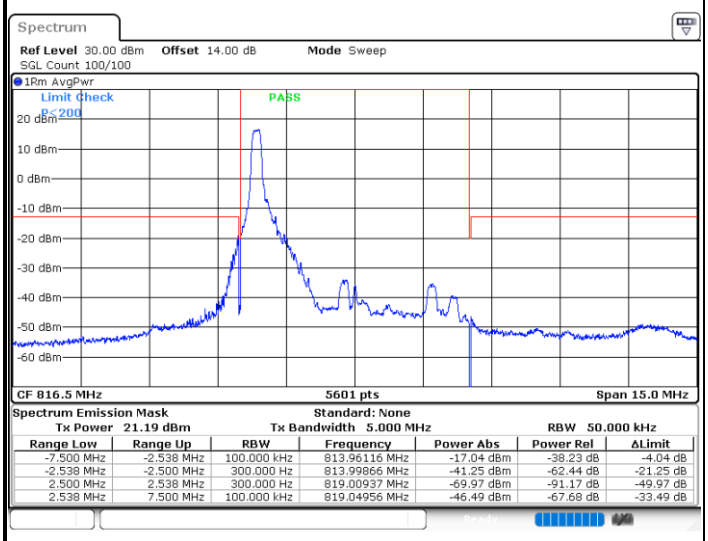
Spectrum Emission Mask Standard: None
Tx Power 21.65 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.95580 MHz	-25.80 dBm	-47.45 dB	-12.80 dB
-2.538 MHz	2.500 MHz	300.000 Hz	818.99063 MHz	-50.18 dBm	-71.82 dB	-30.18 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.02545 MHz	-49.40 dBm	-71.05 dB	-29.40 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.03884 MHz	-24.99 dBm	-46.64 dB	-11.99 dB

Date: 6.JUN.2024 16:51:57

LTE Band 26 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

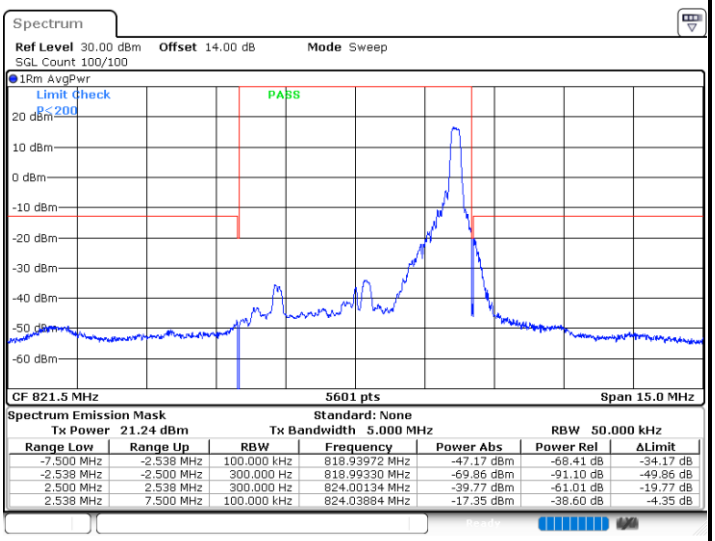


Spectrum Emission Mask Standard: None
Tx Power 21.19 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.96116 MHz	-17.04 dBm	-38.23 dB	-4.04 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99866 MHz	-41.25 dBm	-62.44 dB	-21.25 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.00937 MHz	-69.97 dBm	-91.17 dB	-49.97 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.04956 MHz	-46.49 dBm	-67.68 dB	-33.49 dB

Date: 6.JUN.2024 16:37:35

Highest Band Edge / 1 RB

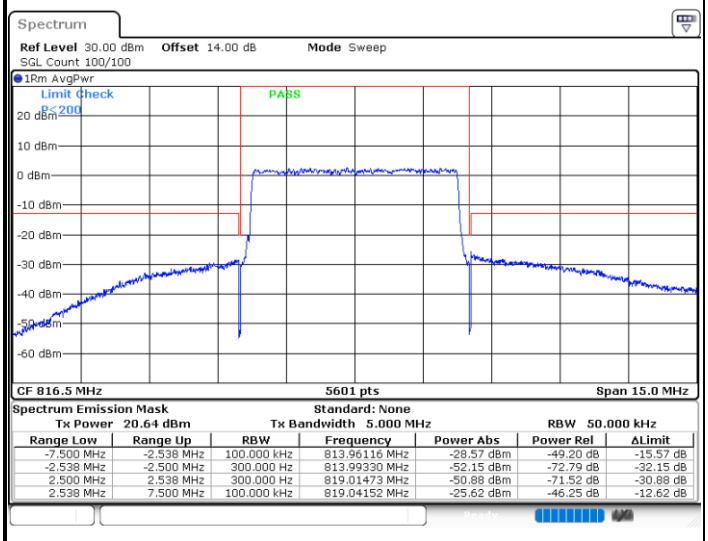


Spectrum Emission Mask Standard: None
Tx Power 21.24 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.93972 MHz	-47.17 dBm	-68.41 dB	-34.17 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.99330 MHz	-69.86 dBm	-91.10 dB	-49.86 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.00134 MHz	-39.77 dBm	-61.01 dB	-19.77 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.03884 MHz	-17.35 dBm	-38.60 dB	-4.35 dB

Date: 6.JUN.2024 16:49:25

Lowest Band Edge / Full RB

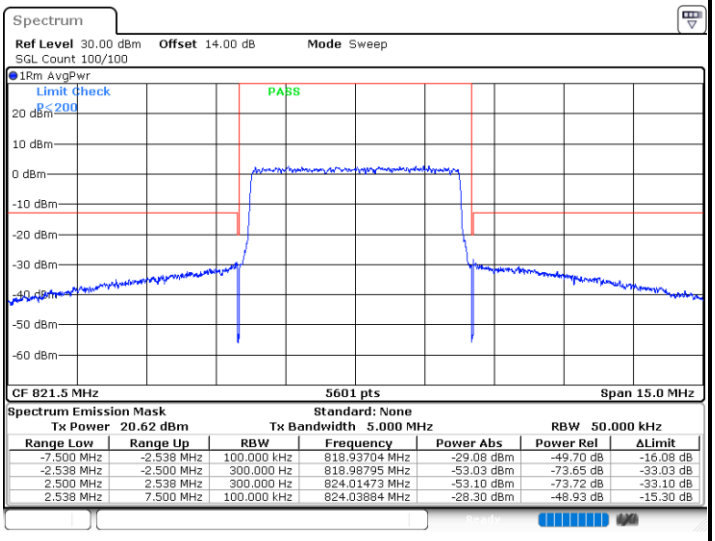


Spectrum Emission Mask Standard: None
Tx Power 20.64 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.96116 MHz	-28.57 dBm	-49.20 dB	-15.57 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99330 MHz	-52.15 dBm	-72.79 dB	-32.15 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.01473 MHz	-50.88 dBm	-71.52 dB	-30.88 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.04152 MHz	-25.62 dBm	-46.25 dB	-12.62 dB

Date: 6.JUN.2024 16:38:51

Highest Band Edge / Full RB



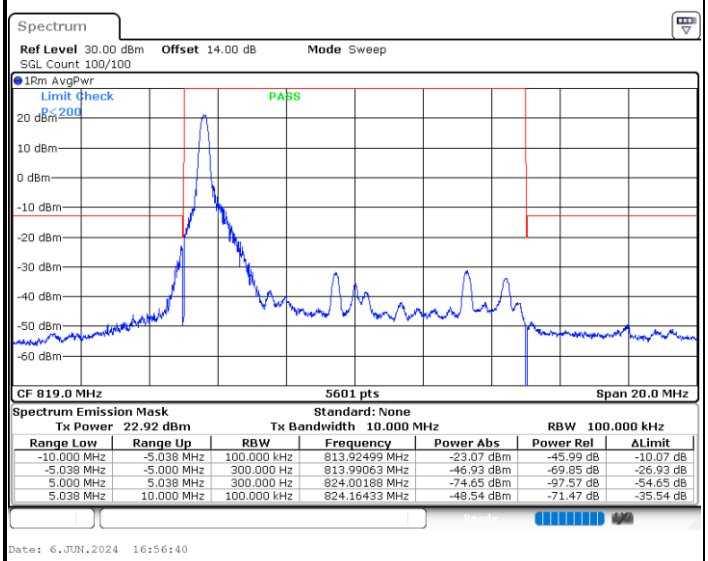
Spectrum Emission Mask Standard: None
Tx Power 20.62 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.93704 MHz	-29.08 dBm	-49.70 dB	-16.08 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.98795 MHz	-53.03 dBm	-73.65 dB	-33.03 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.01473 MHz	-53.10 dBm	-73.72 dB	-33.10 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.03884 MHz	-28.30 dBm	-48.93 dB	-15.30 dB

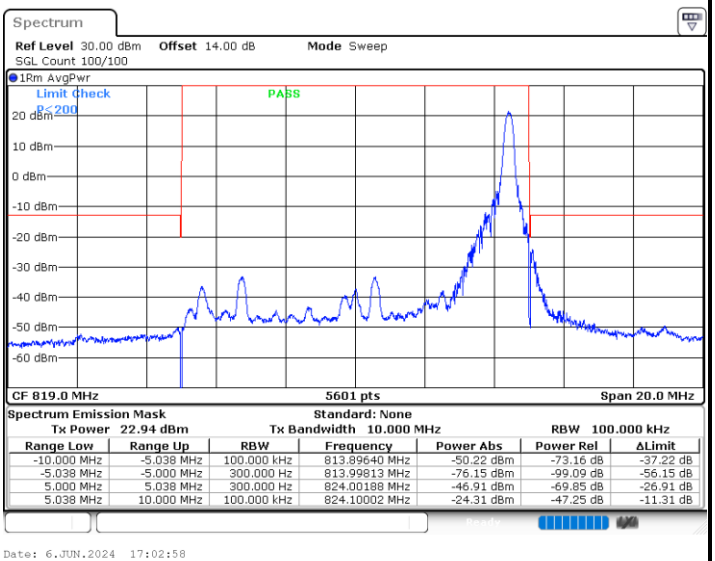
Date: 6.JUN.2024 16:50:41

LTE Band 26 / 10MHz / QPSK

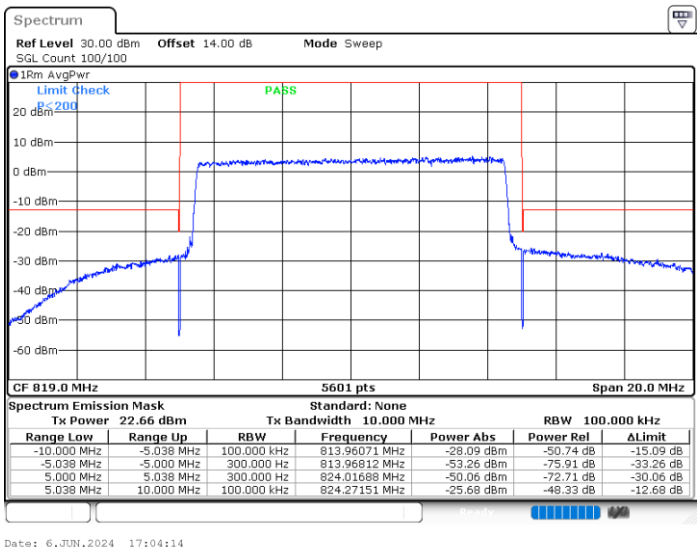
Lowest Band Edge / 1RB



Lowest Band Edge / 1RB

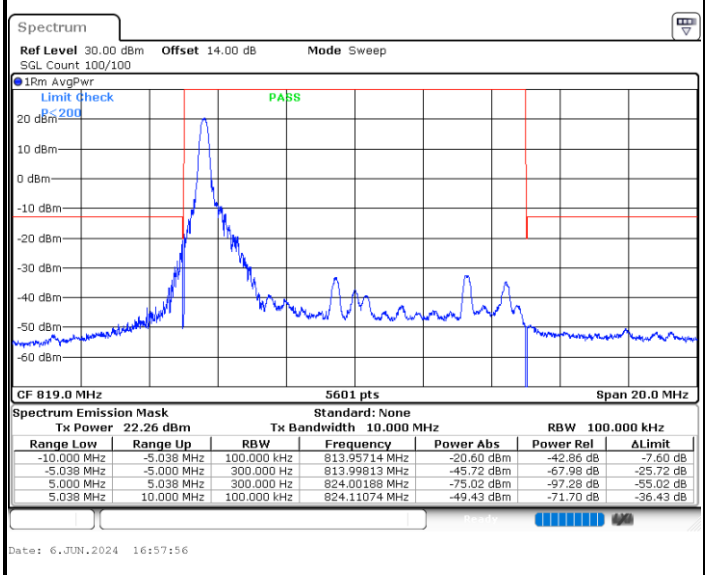


Lowest Band Edge / Full RB

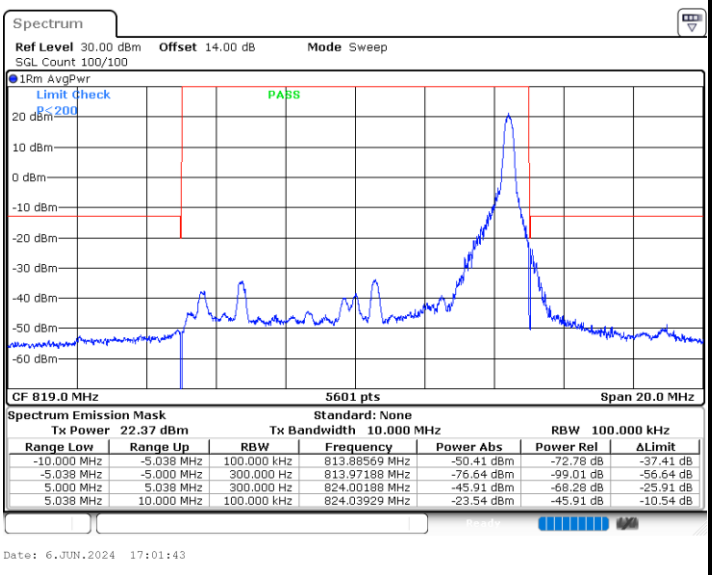


LTE Band 26 / 10MHz / 16QAM

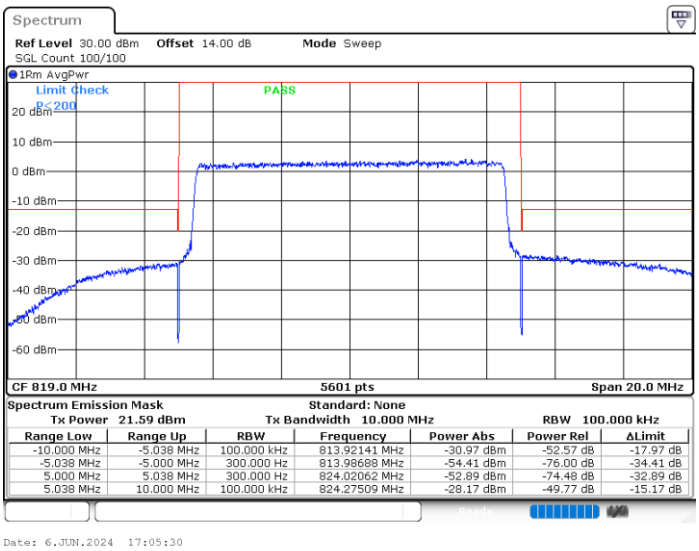
Lowest Band Edge / 1 RB



Lowest Band Edge / 1 RB

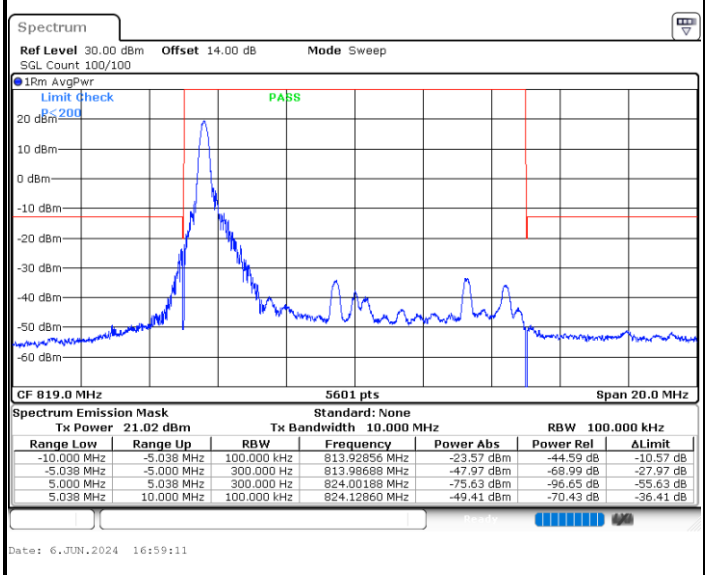


Lowest Band Edge / Full RB

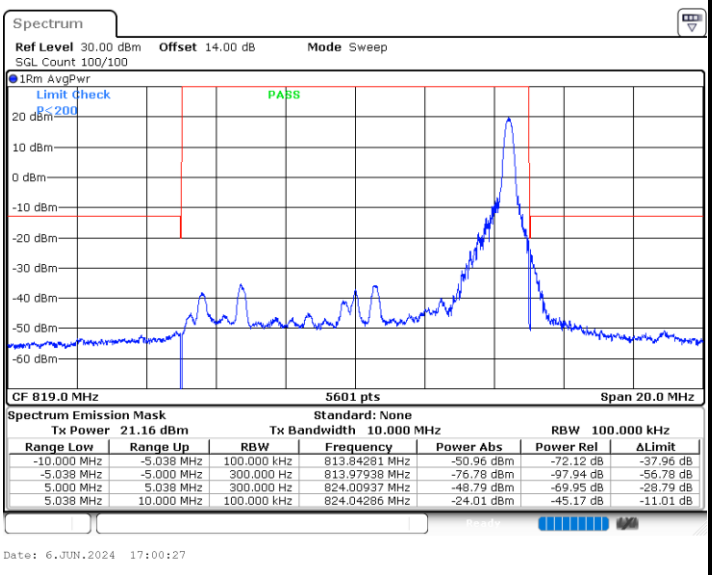


LTE Band 26 / 10MHz / 64QAM

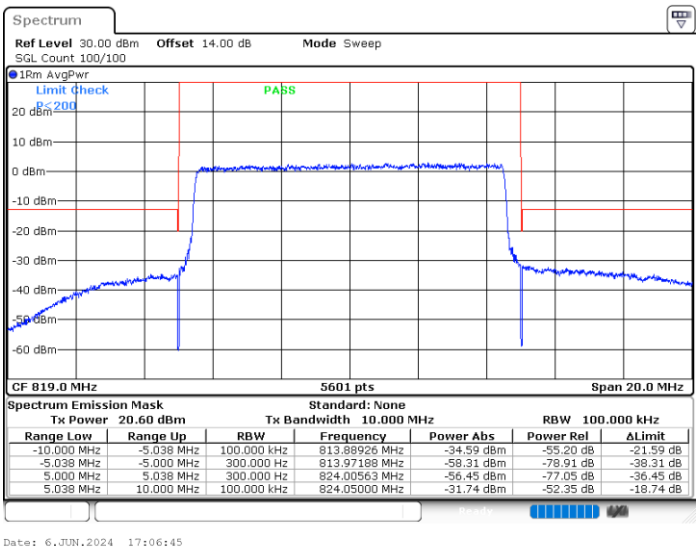
Lowest Band Edge / 1 RB



Lowest Band Edge / 1 RB

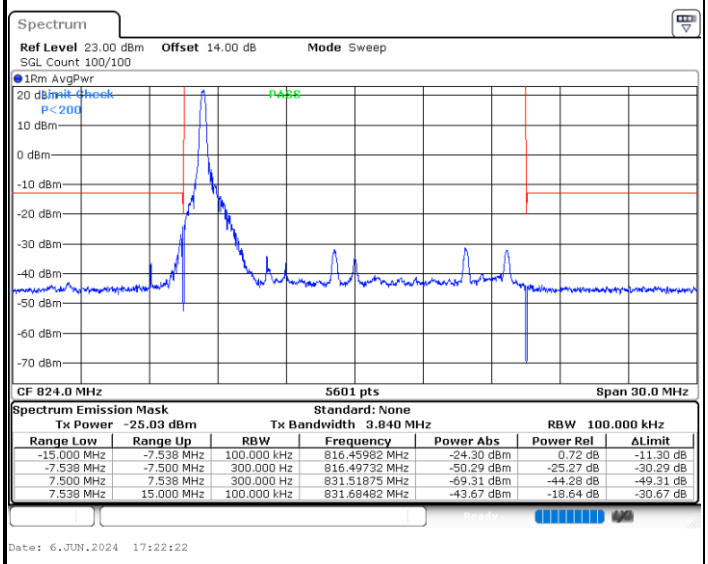


Lowest Band Edge / Full RB

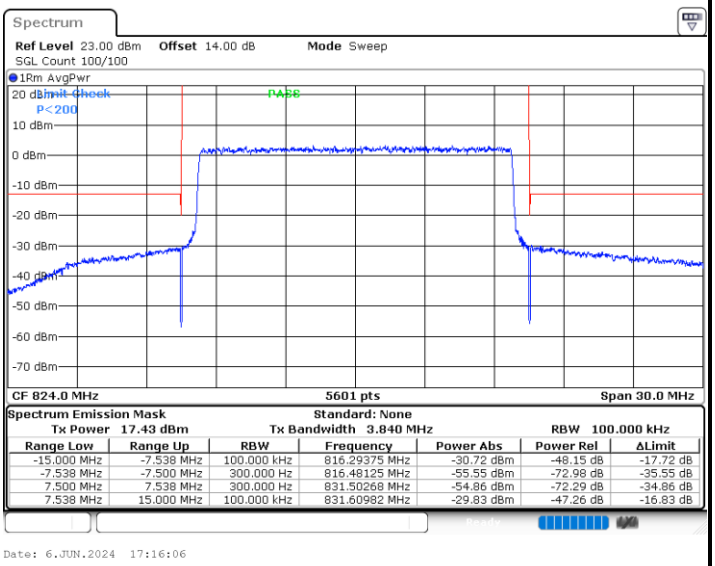


LTE Band 26 / 15MHz

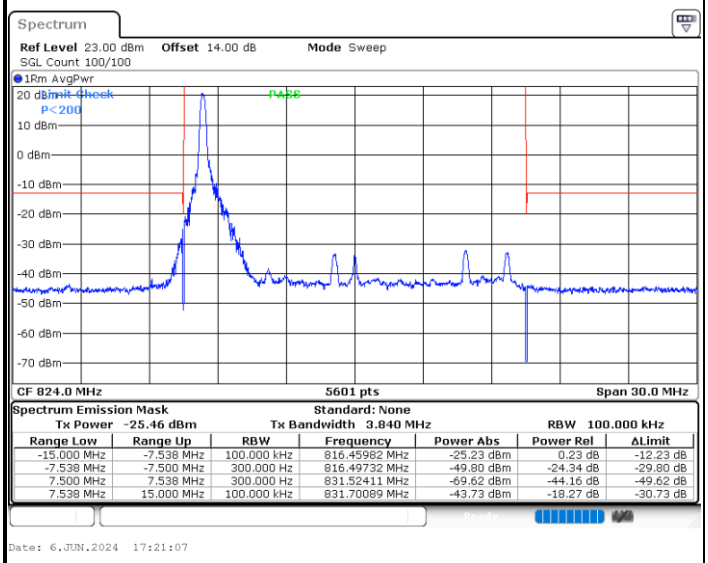
Highest Band Edge / 1RB QPSK



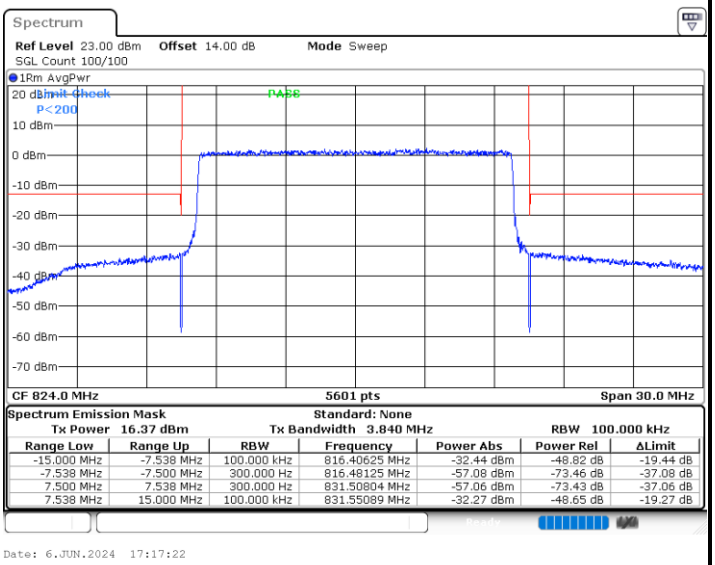
Highest Band Edge / Full RB QPSK



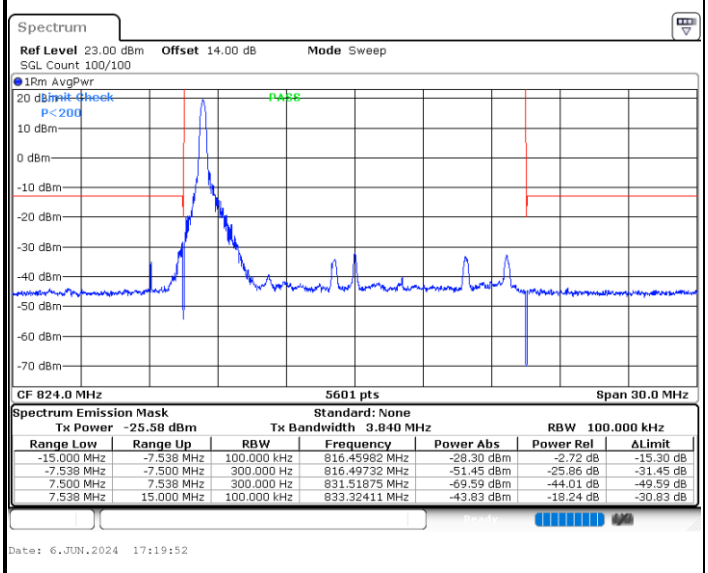
Highest Band Edge / 1 RB 16QAM

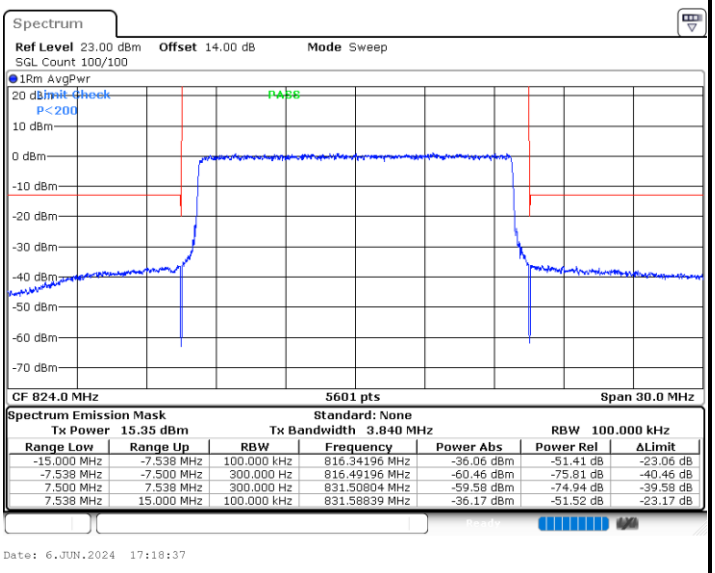


Highest Band Edge / Full RB 16QAM



LTE Band 26 / 15MHz	
Highest Band Edge / 1 RB 64QAM	**Highest Band Edge / Full RB 64QAM**

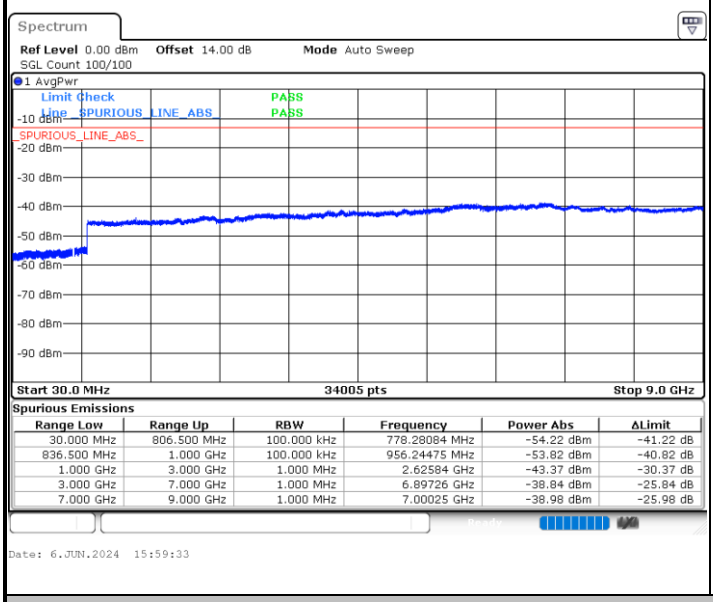




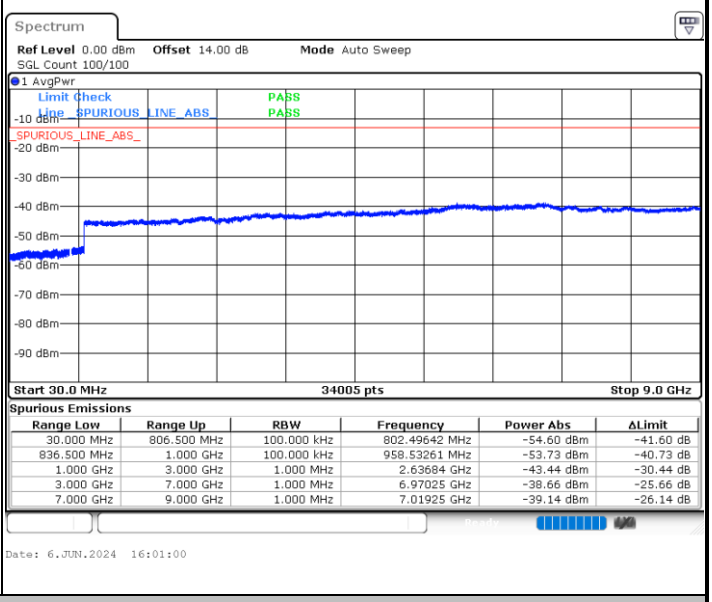
Emission masks – Out of band emissions

LTE Band 26 / 1.4MHz

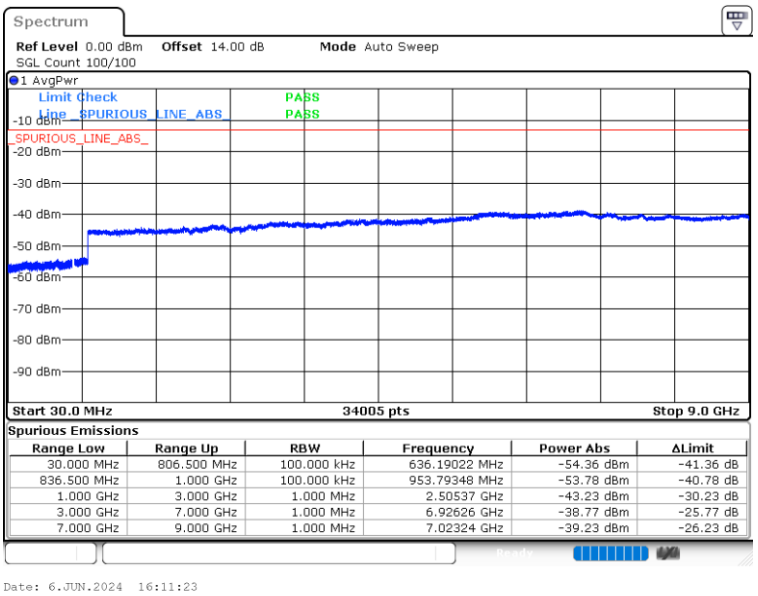
Lowest Channel / QPSK



Middle Channel / QPSK

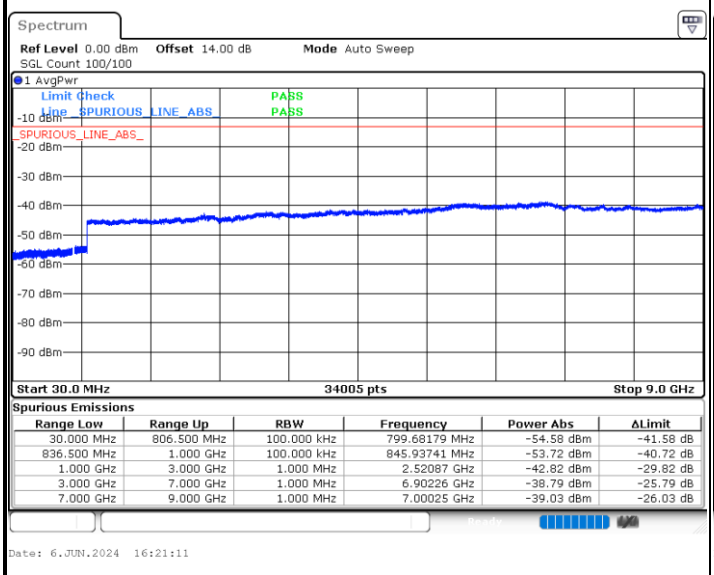


Highest Channel / QPSK



LTE Band 26 / 3MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	799.68179 MHz	-54.58 dBm	-41.58 dB
836.500 MHz	1.000 GHz	100.000 kHz	845.93741 MHz	-53.72 dBm	-40.72 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.52087 GHz	-42.82 dBm	-29.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90226 GHz	-38.79 dBm	-25.79 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00025 GHz	-39.03 dBm	-26.03 dB

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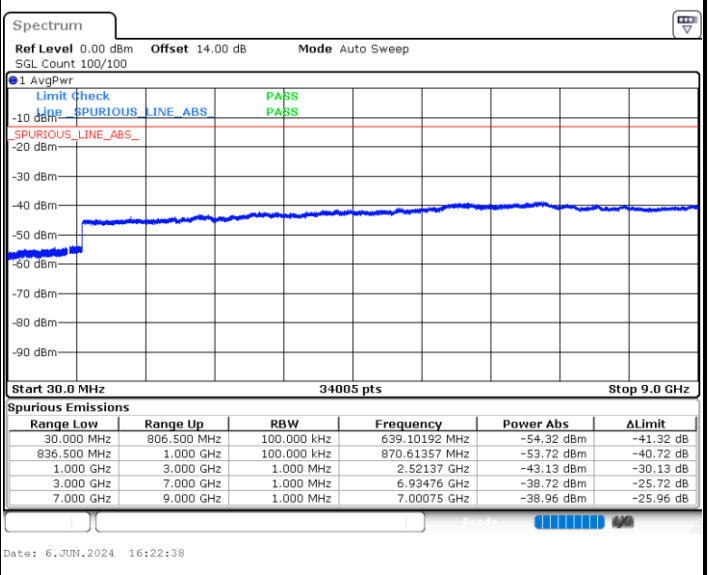
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	639.10192 MHz	-54.32 dBm	-41.32 dB
836.500 MHz	1.000 GHz	100.000 kHz	870.61357 MHz	-53.72 dBm	-40.72 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.52137 GHz	-43.13 dBm	-30.13 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93476 GHz	-38.72 dBm	-25.72 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00075 GHz	-38.96 dBm	-25.96 dB

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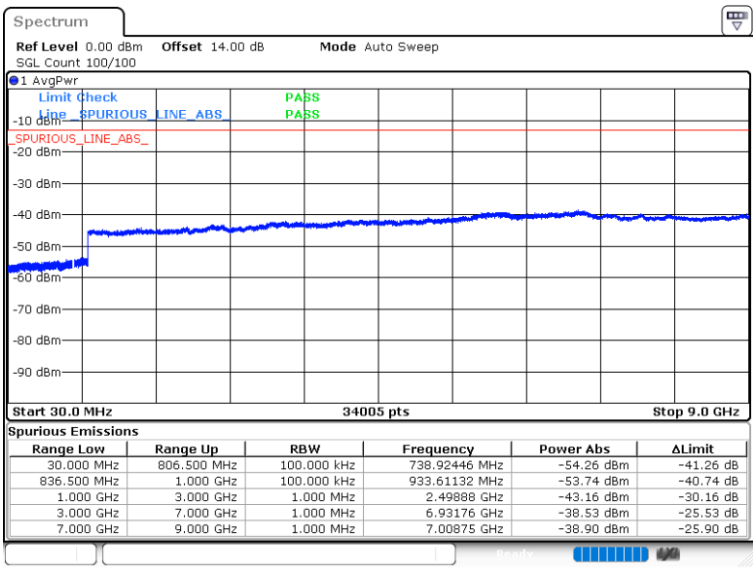
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	738.92446 MHz	-54.26 dBm	-41.26 dB
836.500 MHz	1.000 GHz	100.000 kHz	933.61132 MHz	-53.74 dBm	-40.74 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.49888 GHz	-43.16 dBm	-30.16 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93176 GHz	-38.53 dBm	-25.53 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00875 GHz	-38.90 dBm	-25.90 dB

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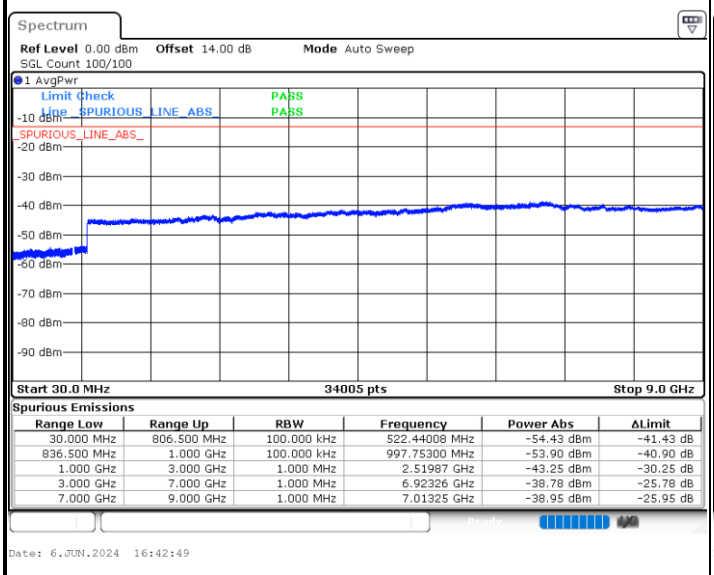
LTE Band 26 / 5MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	522.44008 MHz	-54.43 dBm	-41.43 dB
836.500 MHz	1.000 GHz	100.000 kHz	997.75300 MHz	-53.90 dBm	-40.90 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51987 GHz	-43.25 dBm	-30.25 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92326 GHz	-38.78 dBm	-25.78 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.01325 GHz	-38.95 dBm	-25.95 dB

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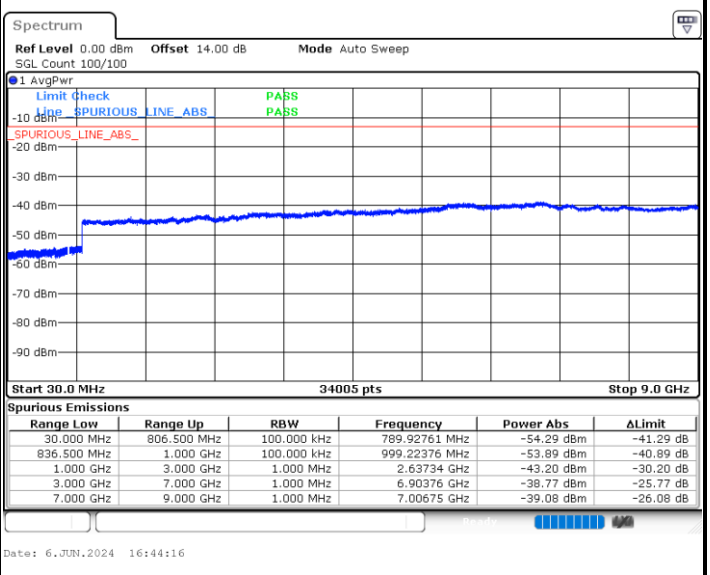
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	789.92761 MHz	-54.29 dBm	-41.29 dB
836.500 MHz	1.000 GHz	100.000 kHz	999.22376 MHz	-53.89 dBm	-40.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.63734 GHz	-43.20 dBm	-30.20 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90376 GHz	-38.77 dBm	-25.77 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00675 GHz	-39.08 dBm	-26.08 dB

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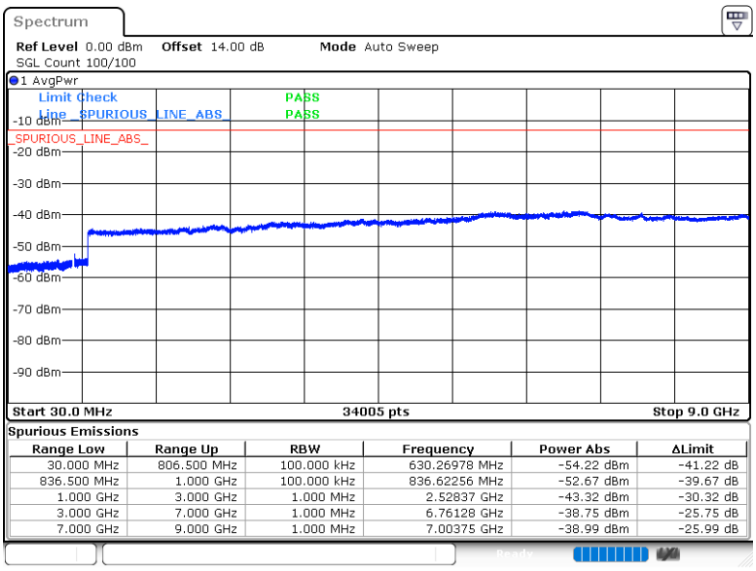
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	630.26978 MHz	-54.22 dBm	-41.22 dB
836.500 MHz	1.000 GHz	100.000 kHz	836.62256 MHz	-52.67 dBm	-39.67 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.52837 GHz	-43.32 dBm	-30.32 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.76128 GHz	-38.75 dBm	-25.75 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00375 GHz	-38.99 dBm	-25.99 dB

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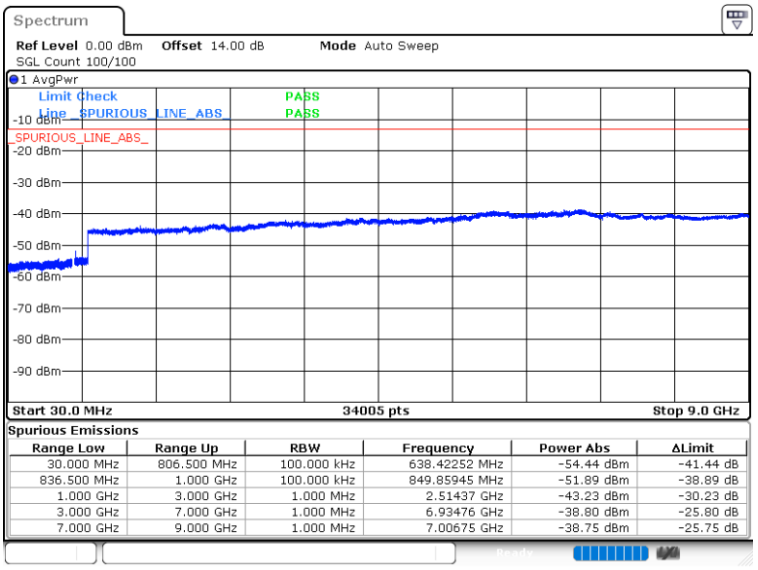
LTE Band 26 / 10MHz
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	638.42252 MHz	-54.44 dBm	-41.44 dB
836.500 MHz	1.000 GHz	100.000 kHz	849.85945 MHz	-51.89 dBm	-38.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51437 GHz	-43.23 dBm	-30.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93476 GHz	-38.80 dBm	-25.80 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00675 GHz	-38.75 dBm	-25.75 dB

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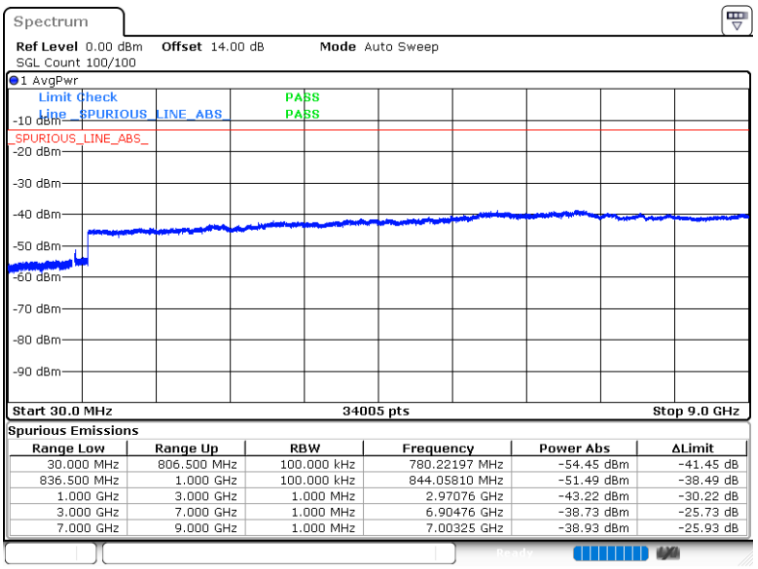
LTE Band 26 / 15MHz
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	806.500 MHz	100.000 kHz	780.22197 MHz	-54.45 dBm	-41.45 dB
836.500 MHz	1.000 GHz	100.000 kHz	844.05810 MHz	-51.49 dBm	-38.49 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97076 GHz	-43.22 dBm	-30.22 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90476 GHz	-38.73 dBm	-25.73 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.00325 GHz	-38.93 dBm	-25.93 dB

Date: 6.JUN.2024 17:23:37

Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0061	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0045	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0071	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0045	

Note: Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 4.4 V.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Zhaohui Liang	Temperature :	22~25℃
		Relative Humidity :	48~52%

LTE Band 26 / 5MHz / QPSK / Sample 1 & Monopole Antenna									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1633.5	-65.04	-13	-52.04	-77.07	-68.29	4.00	9.40	H
	2450.25	-58.81	-13	-45.81	-77.79	-62.38	4.88	10.60	H
	3267	-58.67	-13	-45.67	-79.53	-63.60	5.52	12.60	H
	1633.5	-64.33	-13	-51.33	-76.96	-67.58	4.00	9.40	V
	2450.25	-59.14	-13	-46.14	-78.56	-62.71	4.88	10.60	V
	3267	-57.31	-13	-44.31	-79.44	-62.24	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 10MHz / QPSK / Sample 1 & Monopole Antenna									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1629	-64.87	-13	-51.87	-76.90	-68.12	4.00	9.40	H
	2443.5	-59.22	-13	-46.22	-78.20	-62.79	4.88	10.60	H
	3258	-58.42	-13	-45.42	-79.28	-63.35	5.52	12.60	H
	1629	-64.20	-13	-51.20	-76.83	-67.45	4.00	9.40	V
	2443.5	-58.62	-13	-45.62	-78.04	-62.19	4.88	10.60	V
	3258	-57.21	-13	-44.21	-79.34	-62.14	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 15MHz / QPSK / Sample 1 & Monopole Antenna									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1634.5	-64.60	-13	-51.60	-76.63	-67.77	4.10	9.42	H
	2451.75	-59.40	-13	-46.40	-78.38	-62.98	4.90	10.63	H
	3269	-58.29	-13	-45.29	-79.15	-63.21	5.55	12.62	H
	1634.5	-63.74	-13	-50.74	-76.37	-66.91	4.10	9.42	V
	2451.75	-58.87	-13	-45.87	-78.29	-62.45	4.90	10.63	V
	3269	-57.37	-13	-44.37	-79.50	-62.29	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 10MHz / QPSK / Sample 2 & Monopole Antenna									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1629	-65.29	-13	-52.29	-77.49	-68.54	4.00	9.40	H
	2443.5	-59.91	-13	-46.91	-79.28	-63.48	4.88	10.60	H
	3258	-59.32	-13	-46.32	-80.57	-64.25	5.52	12.60	H
	1629	-64.75	-13	-51.75	-77.62	-68.00	4.00	9.40	V
	2443.5	-59.73	-13	-46.73	-79.36	-63.30	4.88	10.60	V
	3258	-58.63	-13	-45.63	-80.38	-63.56	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.