



FCC RADIO TEST REPORT

FCC ID : PKRISGRM4210
Equipment : WWAN LGA Radio Module
Brand Name : Inseego
Model Name : RM4210
Applicant : Inseego Corp.
9710 Scranton Road Suite 200, San Diego, CA 92121
Manufacturer : Inseego Corp.
9710 Scranton Road Suite 200, San Diego, CA 92121
Standard : FCC 47 CFR Part 2, 27, Part 90(R)

The product was received on Feb. 24, 2025 and testing was performed from Jun. 19, 2025 to Aug. 15 2025. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI and has been in compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FG4N2547-01A	01	Initial issue of report	Aug. 29, 2025
FG4N2547-01A	02	Revise Appendix A This report is an updated version, replacing the report issued on Aug. 29, 2025.	Sep. 01, 2025



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§27.50 (b)(9)	Effective Radiated Power (Band 13)	Pass	
	§27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 7)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 66) (Band 70)		
	§27.50 (a)(3)	Effective Isotropic Radiated Power (Band 30)		
	§90.542 (a)(6)	Effective Radiated Power (Band 14)		
3.3	§27.50 (d)(5)	Peak-to-Average Ratio	Pass	-
3.4	§2.1049	Occupied Bandwidth	Pass	-
3.5	§2.1051 §27.53 (c)(2)(4) §27.53 (h)	Conducted Band Edge Measurement (Band 13) (Band 66) (Band 70)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7)		
	§2.1051 §27.53 (a)(4)	Conducted Band Edge Measurement (Band 30)		
	§2.1051 §90.543 (e)(2)	Conducted Band Edge Measuremen (Band 14)		
3.6	§2.1051 §90.210 (n)	Emission Mask (Band 14)	Pass	-



Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.7	§2.1051 §27.53 (c)(2) §27.53 (h)	Conducted Spurious Emission (Band 13) (Band 66) (Band 70)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7)		
	§2.1051 §27.53 (a)(4)	Conducted Spurious Emission (Band 30)		
	§2.1051 §90.543 (e)(3)	Conducted Spurious Emission (Band 14)		
3.8	§2.1055 §27.54 §90.539 (e)	Frequency Stability Temperature & Voltage	Pass	-
4.2	§2.1053 §27.53 (c)(2) §27.53 (h)	Radiated Spurious Emission (Band 13) (Band 66) (Band 70)	Pass	-
	§2.1053 §27.53 (m)(4)	Radiated Spurious Emission (Band 7)		
	§2.1053 §27.53 (a)(4)	Radiated Spurious Emission (Band 30)		
	§2.1053 §90.543 (e)(3) §90.543 (f)	Radiated Spurious Emission (Band 14)		

Note: This is a variant report by adding LTE band 7, 13, 14, 30, 70, CA 66B, CA 66C via software. All the test cases were performed on original report which can be referred to Sporton Report Number FG4N2547B.

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/manufacture 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.

Reviewed by: Danny Lee

Report Producer: Clio Lo



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs 3G-WCDMA, 4G-LTE, 5G-FR1 and GNSS.

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.
2. Maximum allow antenna Gain: refer MPE Report FA4N2547-01.

Support band and evaluated information	
Supported band	B7, B13, B14, B30, B70
Evaluated and Tested band	B7, B13, B14, B30, B70

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. TH03-HY
Test Engineer	Wei Shun Hung
Temperature (°C)	22.2~23.6
Relative Humidity (%)	50.2~55.8

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. 03CH11-HY (TAF Code: 3786)
Test Engineer	Daniel Lee, Fu Chen and Troye Hsieh
Temperature (°C)	18.9~22.9
Relative Humidity (%)	50.1~66.9
Remark	The Radiated Spurious Emission test item for LTE Band 30 subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ FCC 47 CFR Part 2, 27, Part 90(R)
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in two config (Ant. Horizontal and Ant. Vertical), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

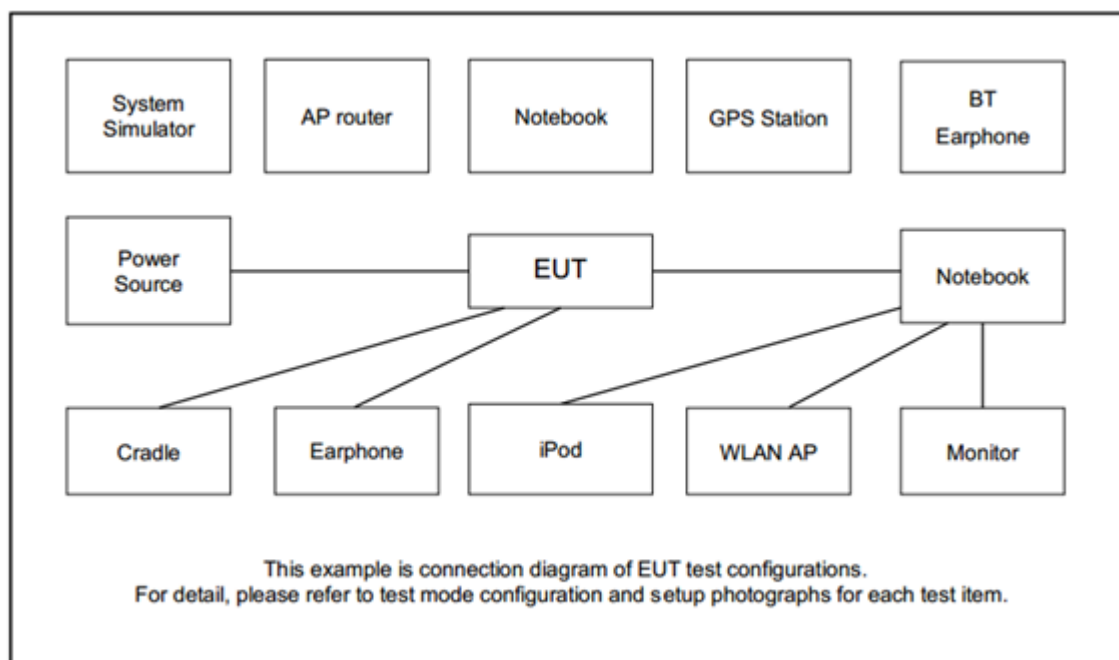
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B, C, D	All	1, Half, Full	L, M, H
ERP/EIRP	A, B, C, D	All	1, Half, Full	L, M, H
PAR	A, B, C, D	20 MHz or less	Full	M
Bandwidth	A, B	All	Full	M
CBE, Mask (Part 90)	A	All	1RB Full	L, M, H
CSE	A	All	1RB	L, M, H
Frequency Stability	A	10 MHz or less	Full	M
RSE	A	10 MHz or less	1RB	L, M, H

Remark:

1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst-case emissions are reported.
3. Inter-band ULCA modes 2A-5A, 2A-7A, 2A-13A, 2A-14A, 2A-71A, 4A-5A, 4A-7A, 4A-13A, 4A-71A, 5A-7A, 5A-30A, 5A-66A, 7A-12A, 12A-30A, 13A-66A, 14A-30A, 14A-66A, 66A-71A, are covered by each rule part of LTE single carrier mode with higher power.
4. Intra-band ULCA test cases are 66B and 66C.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

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 EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT 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 4.2 dB and 10dB attenuator.

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$



2.5 Frequency List of Low/Middle/High Channels

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

LTE Band 14 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23330	-
	Frequency	-	793	-
5	Channel	23305	23330	23355
	Frequency	790.5	793	795.5



LTE Band 30 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	27710	-
	Frequency	-	2310	-
5	Channel	27685	27710	27735
	Frequency	2307.5	2310	2312.5

LTE Band 70 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	-	133047	-
	Frequency	-	1702.5	-
10	Channel	133022	133047	133072
	Frequency	1700	1702.5	1705
5	Channel	132997	133047	133097
	Frequency	1697.5	1702.5	1707.5



LTE Band 66B Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 5	PCC	Channel	131997	132398	132599
		Frequency	1712.5	1752.6	1772.7
	SCC	Channel	132045	133346	132647
		Frequency	1717.3	1757.4	1777.5
5 + 10	PCC	Channel	132000	132375	132550
		Frequency	1712.8	1750.3	1767.8
	SCC	Channel	132072	133347	132622
		Frequency	1720.0	1757.5	1775.0
10 + 5	PCC	Channel	132022	132397	132572
		Frequency	1715.0	1752.5	1770.0
	SCC	Channel	132094	133369	132644
		Frequency	1722.2	1759.7	1777.2
5 + 15	PCC	Channel	132002	132353	132504
		Frequency	1713.0	1748.1	1763.2
	SCC	Channel	132095	133346	132597
		Frequency	1722.3	1757.4	1772.5
15 + 5	PCC	Channel	132047	132398	132549
		Frequency	1717.5	1752.6	1767.7
	SCC	Channel	132140	133391	132642
		Frequency	1726.8	1761.9	1777.0
10 + 10	PCC	Channel	132022	132373	135523
		Frequency	1715.0	1750.1	1765.1
	SCC	Channel	132121	133372	132622
		Frequency	1724.9	1760.0	1775.0



LTE Band 66C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
10 + 15	PCC	Channel	132025	132351	132477
		Frequency	1715.3	1747.9	1760.5
	SCC	Channel	132145	133371	132597
		Frequency	1727.3	1759.9	1772.5
15 + 10	PCC	Channel	132047	132373	132499
		Frequency	1717.5	1750.1	1762.7
	SCC	Channel	132167	132493	132619
		Frequency	1729.5	1762.1	1774.7
10 + 20	PCC	Channel	132027	132328	132428
		Frequency	1715.5	1745.6	1755.6
	SCC	Channel	131171	133372	132572
		Frequency	1729.9	1760.0	1770.0
20 + 10	PCC	Channel	132072	132373	132473
		Frequency	1720.0	1750.1	1760.1
	SCC	Channel	132216	133417	132617
		Frequency	1734.4	1764.5	1774.5
15 + 15	PCC	Channel	132047	132347	132447
		Frequency	1717.5	1747.5	1757.5
	SCC	Channel	132197	133397	132597
		Frequency	1732.5	1762.5	1772.5
15 + 20	PCC	Channel	132050	132325	132401
		Frequency	1717.8	1745.3	1752.9
	SCC	Channel	132221	133396	132572
		Frequency	1734.9	1762.4	1770.0
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720.0	1747.6	1755.1
	SCC	Channel	132243	133419	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720.0	1752.5	1765.0
	SCC	Channel	132189	133414	132639
		Frequency	1731.7	1764.2	1776.7



LTE Band 66C Channel and Frequency List_CA					
5 + 20	PCC	Channel	132005	132330	132455
		Frequency	1713.3	1745.8	1758.3
	SCC	Channel	132122	132447	132572
		Frequency	1725.0	1757.5	1770.0
20 + 20	PCC	Channel	132072	132323	132374
		Frequency	1720.0	1745.1	1750.2
	SCC	Channel	132270	133421	132572
		Frequency	1739.8	1764.9	1770.0

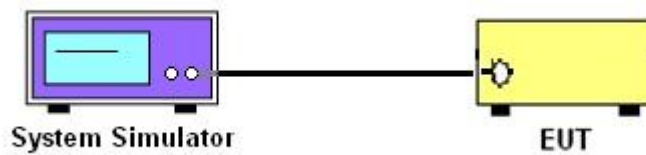
3 Conducted Test Items

3.1 Measuring Instruments

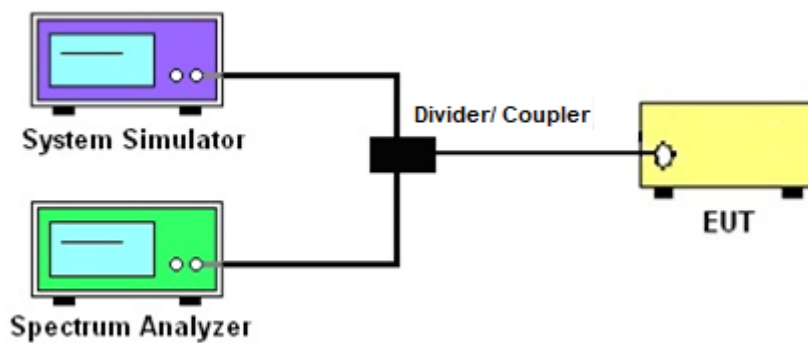
See list of measuring instruments of this test report.

3.1.1 Test Setup

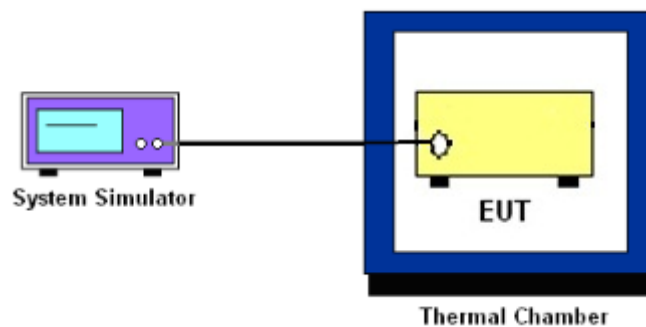
3.1.2 Conducted Output Power



3.1.3 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge, Emission Mask and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.



3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

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

The ERP of mobile transmitters must not exceed 30 Watts for LTE Band 13, Band 14

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 66, Band 70

The EIRP of mobile transmitters must not exceed 250mW/5MHz for LTE Band 30

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.2 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.



3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.



3.4 Occupied Bandwidth

3.4.1 Description of Occupied Bandwidth Measurement

The 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 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
4. Set the detection mode to peak, and the trace mode to max hold.
5. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

27.53 (c)

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

27.53 (h)

For operations in the 1710 – 1755 MHz band, 1755-1780 MHz, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(m)(4)

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

**27.53 (a)(4)**

For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz.
- (ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz.
- (iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

90.543(e)

- (1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB.

3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The band edges of low and high channels for the highest RF powers were measured.
- 3. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- 4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
- 5. Set spectrum analyzer with RMS detector.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 7. Checked that all the results comply with the emission limit line.



3.6 Emission Mask

3.6.1 Description of Emissions Mask Measurement

For LTE Band 14

Transmitters designed must meet the emission mask comply with the emission mask provisions of FCC Part 90.210(n).

3.6.2 Test Procedures

For LTE Band 14

The testing follows FCC KDB 971168 D01 v03r01 Section 6.0.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The power of the modulated signal was measured on a spectrum analyzer using an RMS and 10 second sweep time in order to maximize the level.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



3.7 Conducted Spurious Emission

3.7.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 30

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $70 + 10 \log (P)$ dB.

For LTE Band 7

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

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 conducted spurious emission for the whole frequency range was taken.
4. Make the measurement with the spectrum analyzer's RBW = 100 kHz if the authorized frequency band/block is at or below 1 GHz and 1 MHz if the authorized frequency band/block is above 1 GHz, VBW = 3 * RBW.
5. Set spectrum analyzer with RMS detector.
6. Taking the record of maximum spurious emission.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

For LTE Band 30

The limit line is derived from $70 + 10\log(P)$ dB below the transmitter power P(Watts)

For LTE Band 7

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)



3.8 Frequency Stability

3.8.1 Description of Frequency Stability Measurement

27.54,

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. 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.

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

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 measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

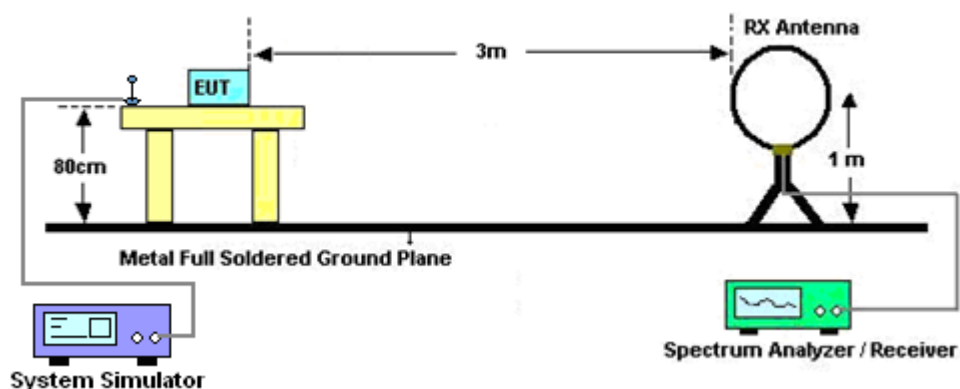
4 Radiated Test Items

4.1 Measuring Instruments

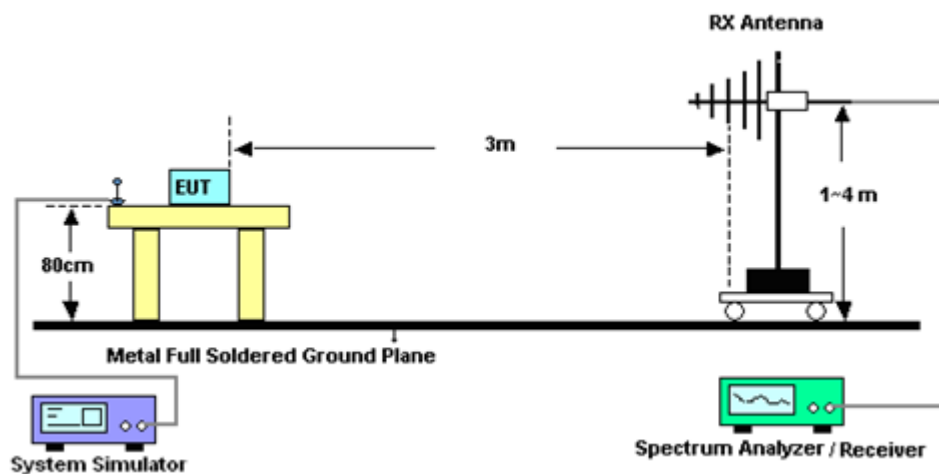
See list of measuring instruments of this test report.

4.1.1 Test Setup

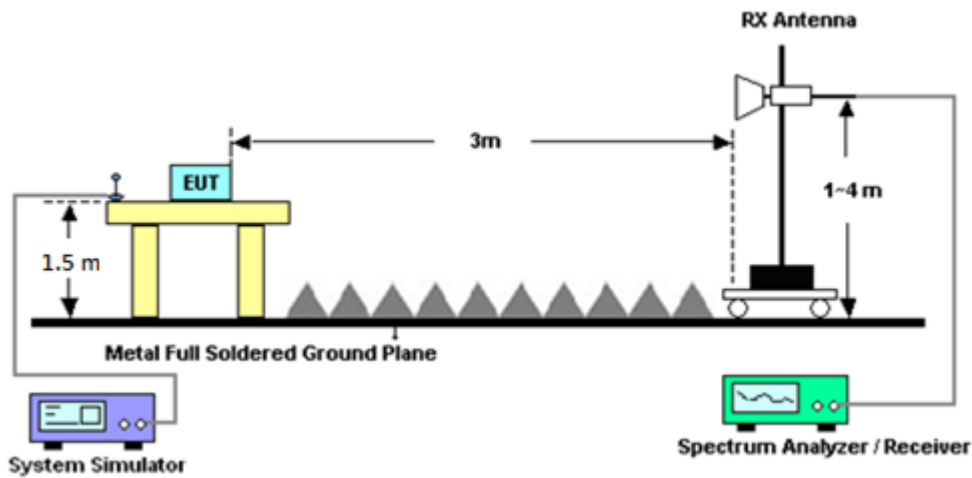
For radiated test below 30MHz



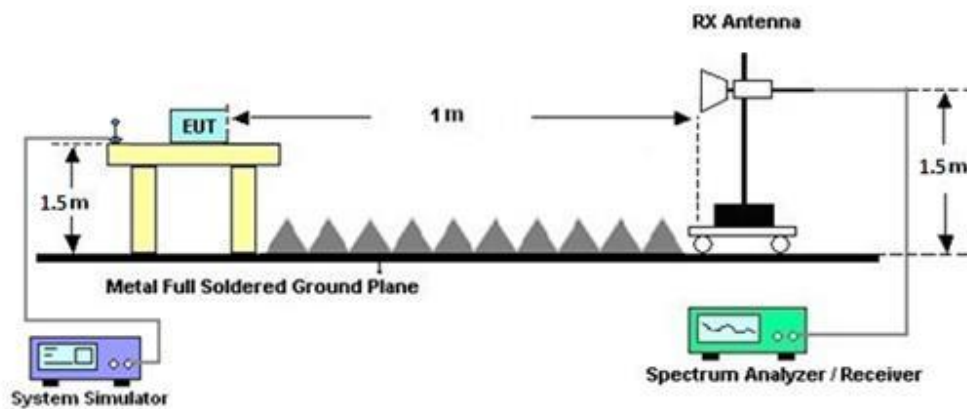
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.



4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015. 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 $43 + 10 \log (P)$ dB.

For LTE Band 7

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 $55 + 10 \log (P)$ dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

For LTE Band 30

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 $70 + 10 \log (P)$ dB.

For LTE Band 14

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.



4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

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.

1. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
2. The table was rotated 360 degrees to determine the position of the highest spurious emission.
3. 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.
4. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
5. To convert spectrum reading E(dBuV/m) to EIRP(dBm)
6. $EIRP(dBm) = Level(dBuV/m) + 20\log(d) - 104.77$, where d is the distance at which field strength limit is specified in the rules
7. $Field\ Strength\ Level(dBm) = Spectrum\ Reading(dBm) + Antenna\ Factor + Cable\ Loss + Read\ Level - Preamplifier\ Factor$.
8. $ERP(dBm) = EIRP(dBm) - 2.15$
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Nov. 27, 2024	Jul. 02, 2025~ Aug. 12, 2025	Nov. 26, 2025	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 18, 2024	Jul. 02, 2025~ Aug. 12, 2025	Dec. 17, 2025	Radiation (03CH11-HY)
Horn Antenna	SCHWARZB ECK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Aug. 28, 2024	Jul. 02, 2025~ Aug. 12, 2025	Aug. 27, 2025	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZB ECK	BBHA 9170	00994	18GHz~40GHz	Jan. 09, 2025	Jul. 02, 2025~ Aug. 12, 2025	Jan. 08, 2025	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Mar. 24, 2025	Jul. 02, 2025~ Aug. 12, 2025	Mar. 23, 2026	Radiation (03CH11-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900249	1GHz~18GHz	Jan. 21, 2025	Jul. 02, 2025~ Aug. 12, 2025	Jan. 20, 2026	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May 26, 2025	Jul. 02, 2025~ Aug. 12, 2025	May 25, 2026	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 14, 2024	Jul. 02, 2025~ Aug. 12, 2025	Oct. 13, 2025	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY53290053	20Hz~26.5GHz	Sep. 09, 2024	Jul. 02, 2025~ Aug. 12, 2025	Sep. 08, 2025	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Jul. 02, 2025~ Aug. 12, 2025	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jul. 02, 2025~ Aug. 12, 2025	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jul. 02, 2025~ Aug. 12, 2025	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Jul. 02, 2025~ Aug. 12, 2025	N/A	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP200880	N/A	Aug. 29, 2024	Jul. 02, 2025~ Aug. 12, 2025	Aug. 28, 2025	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804013/2	30M~40G	Mar. 05, 2025	Jul. 02, 2025~ Aug. 12, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 05, 2025	Jul. 02, 2025~ Aug. 12, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30M~40G	Mar. 05, 2025	Jul. 02, 2025~ Aug. 12, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	805139 2	30M~40G	May 10, 2025	Jul. 02, 2025~ Aug. 12, 2025	May 09, 2026	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 10, 2024	Jul. 02, 2025~ Aug. 12, 2025	Sep. 09, 2025	Radiation (03CH11-HY)
Attenuator	HONOVA	5910 SMA-50-005	0028	N/A	Sep. 10, 2024	Jul. 02, 2025~ Aug. 12, 2025	Sep. 09, 2025	Radiation (03CH11-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 01, 2024	Jun. 19, 2025~ Aug. 15, 2025	Sep. 30, 2025	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 06, 2024	Jun. 19, 2025~ Aug. 15, 2025	Sep. 05, 2025	Conducted (TH03-HY)
DC Power Supply	GW Instek	GPP-2323	GES906037	0V~64V : 0A~6A	Nov. 27, 2024	Jun. 19, 2025~ Aug. 15, 2025	Nov. 26, 2025	Conducted (TH03-HY)
Coupler+10dB+ RF cable	Warison + WoKen + E-Instrument	20dB 25W SMA Directional Coupler+ 10dB 18GHz_5W+S FL405_1.5M	#A+#1+#1+#7	1-18GHz	Jan. 03, 2025	Jun. 19, 2025~ Aug. 15, 2025	Jan. 02, 2026	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	Sep. 12, 2024	Jun. 19, 2025~ Aug. 15, 2025	Sep. 11, 2025	Conducted (TH03-HY)
Software	Sporton	LTE Conducted Test Tools	N/A	Conducted Test Item	N/A	Jun. 19, 2025~ Aug. 15, 2025	N/A	Conducted (TH03-HY)
Hygrometer	TECEPEL	DTM-303B	TP200886	-10 ~ 50℃ / 20 ~ 95%RH	Mar. 03, 2025	Jun. 19, 2025~ Aug. 15, 2025	Mar. 02, 2026	Conducted (TH03-HY)



6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.4 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 6 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1 dB
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Uncertainty of Radiated Emission Measurement (6 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power and ERP/EIRP)

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	23.77	23.50	23.37	32.84	1.9231
20	1	49		23.68	23.59	23.84		
20	1	99		23.68	23.50	23.81		
20	50	0		22.84	22.58	22.37		
20	50	24		22.78	22.63	22.36		
20	50	50		22.69	22.64	22.43		
20	100	0		22.70	22.59	22.37		
20	1	0	16-QAM	23.04	22.76	22.62	32.36	1.7219
20	1	49		23.36	22.82	22.43		
20	1	99		22.93	22.79	22.24		
20	50	0		21.89	21.60	21.37		
20	50	24		21.81	21.60	21.38		
20	50	50		21.76	21.65	21.44		
20	100	0		21.83	21.67	21.42		
20	1	0	64-QAM	21.84	21.56	21.52	31.18	1.3122
20	1	49		22.18	21.66	21.58		
20	1	99		21.91	21.57	21.63		
20	50	0		20.81	20.52	20.35		
20	50	24		20.78	20.62	20.37		
20	50	50		20.78	20.73	20.67		
20	100	0		20.73	20.56	20.32		
20	1	0	256-QAM	19.54	19.50	19.44	28.54	0.7145
20	1	49		19.51	19.47	19.41		
20	1	99		19.47	19.42	19.38		
20	50	0		18.89	18.86	18.77		
20	50	24		18.85	18.81	18.72		
20	50	50		18.79	18.74	18.70		
20	100	0		18.81	18.79	18.71		
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	23.81	23.60	23.32	32.81	1.9099
15	1	37		23.76	23.53	23.22		
15	1	74		23.81	23.56	23.38		
15	36	0		22.91	22.57	22.39		
15	36	20		22.88	22.61	22.39		
15	36	39		22.83	22.58	22.61		
15	75	0		22.90	22.60	22.38		
15	1	0	16-QAM	23.08	22.82	22.69	32.58	1.8113
15	1	37		23.40	23.13	22.72		
15	1	74		23.01	22.90	23.58		
15	36	0		21.94	21.67	21.41		
15	36	20		21.92	21.63	21.47		
15	36	39		21.81	21.67	22.50		
15	75	0		21.95	21.62	21.45		
15	1	0	64-QAM	21.93	21.70	22.07	31.07	1.2794
15	1	37		21.99	22.06	21.70		
15	1	74		22.05	21.72	21.51		
15	36	0		20.87	20.57	20.34		
15	36	20		20.98	21.03	20.53		
15	36	39		20.91	20.57	20.47		
15	75	0		20.92	20.71	20.52		
15	1	0	256-QAM	19.64	19.58	19.54	28.64	0.7311
15	1	37		19.58	19.55	19.52		
15	1	74		19.52	19.49	19.47		
15	36	0		18.88	18.79	18.76		
15	36	20		18.83	18.77	18.71		
15	36	39		18.80	18.73	18.71		
15	75	0		18.80	18.78	18.70		
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	23.72	23.45	23.46	32.74	1.8793
10	1	25		23.74	23.49	22.75		
10	1	49		23.70	23.46	23.10		
10	25	0		22.83	22.60	22.36		
10	25	12		22.78	22.57	23.18		
10	25	25		22.73	22.56	22.25		
10	50	0		22.76	22.60	23.37		
10	1	0	16-QAM	23.01	22.91	22.63	32.15	1.6406
10	1	25		22.99	22.85	23.15		
10	1	49		23.01	22.76	21.97		
10	25	0		21.83	21.62	21.30		
10	25	12		21.87	21.50	22.41		
10	25	25		21.82	21.58	21.31		
10	50	0		21.85	21.53	20.38		
10	1	0	64-QAM	21.76	21.60	21.40	31.19	1.3152
10	1	25		22.19	21.79	21.34		
10	1	49		21.95	21.71	21.38		
10	25	0		20.81	20.63	20.52		
10	25	12		20.86	20.64	20.33		
10	25	25		20.79	20.58	20.47		
10	50	0		20.88	20.53	20.30		
10	1	0	256-QAM	19.61	19.58	19.50	28.61	0.7261
10	1	25		19.57	19.52	19.47		
10	1	49		19.54	19.50	19.46		
10	25	0		18.88	18.81	18.77		
10	25	12		18.76	18.74	18.70		
10	25	25		18.73	18.70	18.70		
10	50	0		18.75	18.73	18.71		
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	23.76	23.47	23.24	32.89	1.9454
5	1	12		23.89	23.47	22.40		
5	1	24		23.80	23.39	23.34		
5	12	0		22.86	22.47	21.41		
5	12	7		22.88	22.53	23.12		
5	12	13		22.86	22.57	23.17		
5	25	0		22.86	22.52	23.27		
5	1	0	16-QAM	23.19	22.71	22.84	32.30	1.6982
5	1	12		23.30	22.68	22.86		
5	1	24		23.09	22.73	22.63		
5	12	0		22.00	21.61	21.87		
5	12	7		21.91	21.56	20.40		
5	12	13		21.86	21.60	22.01		
5	25	0		21.80	21.47	21.57		
5	1	0	64-QAM	21.88	21.52	21.49	31.04	1.2706
5	1	12		22.02	21.78	21.85		
5	1	24		22.04	21.62	21.26		
5	12	0		20.72	20.42	20.26		
5	12	7		20.90	20.49	20.41		
5	12	13		20.83	20.50	20.39		
5	25	0		20.83	20.47	20.29		
5	1	0	256-QAM	19.61	19.57	19.52	28.61	0.7261
5	1	12		19.56	19.55	19.51		
5	1	24		19.50	19.45	19.40		
5	12	0		18.84	18.80	18.76		
5	12	7		18.80	18.77	18.72		
5	12	13		18.76	18.74	18.71		
5	25	0		18.76	18.72	18.70		
Limit	EIRP < 2W			Result			Pass	

LTE Band 13 Maximum Average Power [dBm] (GT - LC = 8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	25.77	-	31.72	1.4859
10	1	25		-	25.75	-		
10	1	49		-	25.63	-		
10	25	0		-	25.18	-		
10	25	12		-	25.26	-		
10	25	25		-	25.13	-		
10	50	0		-	25.22	-		
10	1	0	16-QAM	-	25.26	-	31.38	1.3740
10	1	25		-	25.40	-		
10	1	49		-	25.43	-		
10	25	0		-	24.30	-		
10	25	12		-	24.34	-		
10	25	25		-	24.17	-		
10	50	0		-	24.23	-		
10	1	0	64-QAM	-	24.43	-	30.38	1.0914
10	1	25		-	24.12	-		
10	1	49		-	24.11	-		
10	25	0		-	23.27	-		
10	25	12		-	23.21	-		
10	25	25		-	23.11	-		
10	50	0		-	23.15	-		
10	1	0	256-QAM	-	21.25	-	27.27	0.5333
10	1	25		-	21.21	-		
10	1	49		-	21.02	-		
10	25	0		-	21.32	-		
10	25	12		-	21.31	-		
10	25	25		-	21.24	-		
10	50	0		-	21.31	-		
Limit	ERP < 30W			Result			Pass	

LTE Band 13 Maximum Average Power [dBm] (GT - LC = 8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	25.75	25.99	25.76	31.94	1.5631
5	1	12		25.95	25.82	25.72		
5	1	24		25.81	25.78	25.65		
5	12	0		25.26	25.13	25.13		
5	12	7		25.35	25.15	25.07		
5	12	13		25.20	25.04	25.05		
5	25	0		25.22	25.17	25.02		
5	1	0	16-QAM	25.80	25.74	25.60	31.79	1.5101
5	1	12		25.84	25.64	25.59		
5	1	24		25.66	25.62	25.53		
5	12	0		24.22	24.26	24.09		
5	12	7		24.42	24.26	24.12		
5	12	13		24.31	24.08	24.19		
5	25	0		24.16	24.19	24.02		
5	1	0	64-QAM	24.83	24.58	24.41	30.80	1.2023
5	1	12		24.74	24.78	24.29		
5	1	24		24.85	24.32	24.18		
5	12	0		23.17	23.13	23.07		
5	12	7		23.38	23.24	23.09		
5	12	13		23.17	23.17	23.15		
5	25	0		23.25	23.15	23.01		
5	1	0	256-QAM	21.27	21.31	21.17	27.37	0.5458
5	1	12		21.25	21.36	21.33		
5	1	24		21.15	21.23	21.25		
5	12	0		21.42	21.19	21.06		
5	12	7		21.37	21.26	21.16		
5	12	13		21.29	21.21	21.25		
5	25	0		21.34	21.28	21.16		
Limit	ERP < 30W			Result			Pass	

LTE Band 14 Maximum Average Power [dBm] (GT - LC = 8.2 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	25.68	-	31.76	1.4997
10	1	25		-	25.71	-		
10	1	49		-	25.55	-		
10	25	0		-	25.12	-		
10	25	12		-	25.03	-		
10	25	25		-	25.01	-		
10	50	0		-	24.99	-		
10	1	0	16-QAM	-	25.54	-	31.59	1.4421
10	1	25		-	25.36	-		
10	1	49		-	25.11	-		
10	25	0		-	24.06	-		
10	25	12		-	24.07	-		
10	25	25		-	24.05	-		
10	50	0		-	24.03	-		
10	1	0	64-QAM	-	24.39	-	30.44	1.1066
10	1	25		-	24.12	-		
10	1	49		-	24.02	-		
10	25	0		-	22.94	-		
10	25	12		-	23.04	-		
10	25	25		-	22.95	-		
10	50	0		-	23.00	-		
10	1	0	256-QAM	-	21.27	-	27.32	0.5395
10	1	25		-	21.24	-		
10	1	49		-	21.09	-		
10	25	0		-	21.12	-		
10	25	12		-	21.26	-		
10	25	25		-	21.17	-		
10	50	0		-	21.08	-		
Limit	ERP < 30W			Result			Pass	

LTE Band 14 Maximum Average Power [dBm] (GT - LC = 8.2 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	25.72	25.93	25.65	31.98	1.5776
5	1	12		25.76	25.75	25.78		
5	1	24		25.69	25.63	25.60		
5	12	0		25.11	25.04	25.06		
5	12	7		25.16	25.01	25.11		
5	12	13		25.06	24.95	24.92		
5	25	0		25.11	24.95	25.03		
5	1	0	16-QAM	25.37	25.59	25.42	31.72	1.4859
5	1	12		25.48	25.42	25.67		
5	1	24		25.46	25.38	25.18		
5	12	0		24.22	24.07	24.05		
5	12	7		24.19	24.02	24.12		
5	12	13		24.11	24.05	23.96		
5	25	0		24.14	24.04	24.05		
5	1	0	64-QAM	24.17	24.24	24.31	30.43	1.1041
5	1	12		24.26	24.29	24.38		
5	1	24		24.31	24.20	24.21		
5	12	0		23.16	23.05	23.05		
5	12	7		23.25	23.04	23.06		
5	12	13		23.11	22.86	22.89		
5	25	0		23.13	22.96	22.97		
5	1	0	256-QAM	21.37	21.18	21.03	27.42	0.5521
5	1	12		21.24	21.27	21.14		
5	1	24		21.16	21.03	21.09		
5	12	0		21.22	21.12	21.07		
5	12	7		21.26	21.15	21.11		
5	12	13		21.12	20.96	20.93		
5	25	0		21.17	21.09	21.07		
Limit	ERP < 30W			Result			Pass	

LTE Band 30 Maximum Average Power [dBm] (GT - LC = 1.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	-	21.81	-	23.86	0.2432
10	1	25		-	21.96	-		
10	1	49		-	21.81	-		
10	25	0		-	20.88	-		
10	25	12		-	20.86	-		
10	25	25		-	20.87	-		
10	50	0		-	20.88	-		
10	1	0	16-QAM	-	20.86	-	23.10	0.2042
10	1	25		-	21.20	-		
10	1	49		-	21.12	-		
10	25	0		-	19.83	-		
10	25	12		-	19.97	-		
10	25	25		-	19.88	-		
10	50	0		-	19.91	-		
10	1	0	64-QAM	-	20.33	-	22.23	0.1671
10	1	25		-	19.99	-		
10	1	49		-	19.86	-		
10	25	0		-	18.84	-		
10	25	12		-	18.90	-		
10	25	25		-	18.85	-		
10	50	0		-	18.87	-		
10	1	0	256-QAM	-	18.52	-	20.42	0.1102
10	1	25		-	18.41	-		
10	1	49		-	18.22	-		
10	25	0		-	17.96	-		
10	25	12		-	17.88	-		
10	25	25		-	17.81	-		
10	50	0		-	17.92	-		
Limit	EIRP < 250mW/5MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 250 mW/5MHz.

LTE Band 30 Maximum Average Power [dBm] (GT - LC = 1.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.78	21.90	21.93	23.87	0.2438
5	1	12		21.93	21.97	21.87		
5	1	24		21.91	21.82	21.88		
5	12	0		20.85	21.00	21.07		
5	12	7		20.98	20.97	21.02		
5	12	13		20.86	20.93	20.96		
5	25	0		20.87	20.92	20.99		
5	1	0	16-QAM	21.29	21.39	21.42	23.46	0.2218
5	1	12		21.56	21.54	21.38		
5	1	24		21.36	21.33	21.35		
5	12	0		19.85	20.05	20.08		
5	12	7		19.99	20.02	20.06		
5	12	13		19.96	20.06	19.94		
5	25	0		20.00	19.91	19.99		
5	1	0	64-QAM	20.41	20.23	20.30	22.34	0.1714
5	1	12		20.15	20.38	20.34		
5	1	24		20.44	20.31	20.17		
5	12	0		18.81	18.98	19.01		
5	12	7		19.03	18.94	19.01		
5	12	13		18.96	18.98	18.93		
5	25	0		18.89	18.92	19.00		
5	1	0	256-QAM	18.64	18.55	18.51	20.54	0.1132
5	1	12		18.61	18.50	18.50		
5	1	24		18.54	18.49	18.47		
5	12	0		17.94	17.92	17.87		
5	12	7		17.82	17.80	17.78		
5	12	13		17.80	17.76	17.71		
5	25	0		17.88	17.83	17.80		
Limit	EIRP < 250mW/5MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 250 mW/5MHz.

LTE Band 70 Maximum Average Power [dBm] (GT - LC = 4.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	-	25.31	-	29.98	0.9954
15	1	37		-	25.39	-		
15	1	74		-	25.48	-		
15	36	0		-	24.46	-		
15	36	20		-	24.56	-		
15	36	39		-	24.58	-		
15	75	0		-	24.50	-		
15	1	0	16-QAM	-	24.59	-	29.30	0.8511
15	1	37		-	24.74	-		
15	1	74		-	24.80	-		
15	36	0		-	23.51	-		
15	36	20		-	23.53	-		
15	36	39		-	23.64	-		
15	75	0		-	23.51	-		
15	1	0	64-QAM	-	23.84	-	28.50	0.7079
15	1	37		-	24.00	-		
15	1	74		-	23.70	-		
15	36	0		-	22.39	-		
15	36	20		-	22.55	-		
15	36	39		-	22.61	-		
15	75	0		-	22.52	-		
15	1	0	256-QAM	-	21.07	-	25.57	0.3606
15	1	37		-	20.83	-		
15	1	74		-	20.96	-		
15	36	0		-	20.57	-		
15	36	20		-	20.45	-		
15	36	39		-	20.77	-		
15	75	0		-	20.63	-		
Limit	EIRP < 1W			Result			Pass	

LTE Band 70 Maximum Average Power [dBm] (GT - LC = 4.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	25.21	25.38	25.34	29.91	0.9795
10	1	25		25.34	25.41	25.35		
10	1	49		25.41	25.35	25.41		
10	25	0		24.61	24.56	24.57		
10	25	12		23.93	24.60	24.60		
10	25	25		24.63	24.61	24.68		
10	50	0		25.23	24.57	24.57		
10	1	0	16-QAM	24.70	24.80	24.78	29.69	0.9311
10	1	25		24.72	24.96	25.19		
10	1	49		24.70	25.10	24.64		
10	25	0		23.55	23.60	23.61		
10	25	12		23.68	23.62	23.68		
10	25	25		23.56	23.67	23.73		
10	50	0		23.42	23.61	23.64		
10	1	0	64-QAM	23.53	23.62	23.69	28.51	0.7096
10	1	25		23.83	23.92	23.83		
10	1	49		24.01	23.76	23.78		
10	25	0		22.41	22.56	22.51		
10	25	12		22.58	22.69	22.67		
10	25	25		22.63	22.69	22.66		
10	50	0		22.57	22.63	22.60		
10	1	0	256-QAM	20.61	20.49	20.75	25.25	0.3350
10	1	25		20.56	20.72	20.64		
10	1	49		20.57	20.74	20.71		
10	25	0		20.53	20.58	20.64		
10	25	12		20.63	20.62	20.66		
10	25	25		20.58	20.67	20.72		
10	50	0		20.54	20.58	20.64		
Limit	EIRP < 1W			Result			Pass	

LTE Band 70 Maximum Average Power [dBm] (GT - LC = 4.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	25.32	25.41	25.41	29.91	0.9795
5	1	12		25.36	25.35	25.36		
5	1	24		25.39	25.38	25.37		
5	12	0		24.31	24.55	24.60		
5	12	7		24.51	24.62	24.73		
5	12	13		24.51	24.65	24.74		
5	25	0		24.42	24.56	24.63		
5	1	0	16-QAM	24.88	24.92	24.97	29.85	0.9661
5	1	12		25.04	25.16	25.35		
5	1	24		24.81	25.22	25.15		
5	12	0		23.46	23.56	23.65		
5	12	7		23.58	23.63	23.77		
5	12	13		23.57	23.74	23.70		
5	25	0		23.45	23.58	23.59		
5	1	0	64-QAM	23.47	23.58	23.96	28.63	0.7295
5	1	12		24.11	23.91	23.86		
5	1	24		23.55	23.69	24.13		
5	12	0		22.34	22.49	22.57		
5	12	7		22.66	22.59	22.74		
5	12	13		22.56	22.60	22.69		
5	25	0		22.48	22.53	22.64		
5	1	0	256-QAM	20.84	20.63	20.71	25.34	0.3420
5	1	12		20.71	20.57	20.62		
5	1	24		20.64	20.69	20.69		
5	12	0		20.43	20.45	20.57		
5	12	7		20.48	20.53	20.71		
5	12	13		20.59	20.66	20.61		
5	25	0		20.45	20.49	20.65		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66B_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
10+10	50	0	50	0	QPSK	22.60	22.28	22.10	29.42	0.8750
10+10	1	0	1	49		14.05	13.58	13.67		
10+10	1	49	1	0		24.58	24.92	24.23		
10+10	50	0	50	0	16-QAM	21.56	20.88	21.10	28.37	0.6871
10+10	1	0	1	49		14.34	13.89	13.87		
10+10	1	49	1	0		23.87	22.56	22.87		
10+10	50	0	50	0	64-QAM	21.67	21.25	21.84	26.34	0.4305
10+10	1	0	1	49		14.10	14.14	13.82		
10+10	1	49	1	0		21.77	21.45	21.21		
10+10	50	0	50	0	256-QAM	19.63	18.65	19.14	24.17	0.2612
10+10	1	0	1	49		14.23	13.98	13.60		
10+10	1	49	1	0		19.62	19.67	19.25		
15+5	75	0	25	0	QPSK	22.56	22.17	22.18	29.23	0.8375
15+5	1	0	1	24		14.02	13.65	13.69		
15+5	1	74	1	0		24.73	24.71	24.42		
15+5	75	0	25	0	16-QAM	21.53	21.21	21.29	28.48	0.7047
15+5	1	0	1	24		14.36	14.10	13.97		
15+5	1	74	1	0		23.71	22.79	23.98		
15+5	75	0	25	0	64-QAM	21.55	21.21	21.18	26.58	0.4550
15+5	1	0	1	24		14.24	13.93	14.04		
15+5	1	74	1	0		22.08	21.36	21.53		
15+5	75	0	25	0	256-QAM	19.56	19.23	18.38	24.27	0.2673
15+5	1	0	1	24		14.00	13.62	13.78		
15+5	1	74	1	0		19.77	19.14	19.38		
5+15	25	0	75	0	QPSK	22.61	22.30	22.09	28.69	0.7396
5+15	1	0	1	74		14.00	13.75	13.63		
5+15	1	24	1	0		24.19	24.16	24.08		
5+15	25	0	75	0	16-QAM	21.66	21.28	21.13	28.03	0.6353
5+15	1	0	1	74		14.49	13.97	13.91		
5+15	1	24	1	0		23.34	23.53	23.33		
5+15	25	0	75	0	64-QAM	21.59	21.30	20.20	26.32	0.4285
5+15	1	0	1	74		14.21	13.99	13.97		
5+15	1	24	1	0		21.82	21.16	21.71		
5+15	25	0	75	0	256-QAM	19.61	19.28	19.13	24.14	0.2594
5+15	1	0	1	74		14.20	13.87	13.92		
5+15	1	24	1	0		19.52	19.64	19.33		
Limit	EIRP < 1W					Result			Pass	

LTE Band 66B_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
10+5	50	0	25	0	QPSK	22.63	22.24	22.16	28.87	0.7709
10+5	1	0	1	24		14.61	14.35	14.25		
10+5	1	49	1	0		24.37	23.97	24.06		
10+5	50	0	25	0	16-QAM	21.69	21.28	21.19	28.34	0.6823
10+5	1	0	1	24		15.16	14.54	14.48		
10+5	1	49	1	0		23.84	23.53	23.27		
10+5	50	0	25	0	64-QAM	22.35	21.28	21.20	26.85	0.4842
10+5	1	0	1	24		15.24	14.53	14.43		
10+5	1	49	1	0		21.56	21.41	21.12		
10+5	50	0	25	0	256-QAM	19.68	19.30	19.26	24.48	0.2805
10+5	1	0	1	24		14.69	14.46	14.65		
10+5	1	49	1	0		19.98	19.35	19.37		
5+10	25	0	50	0	QPSK	22.61	22.22	22.03	29.40	0.8710
5+10	1	0	1	49		14.51	14.02	14.17		
5+10	1	24	1	0		24.90	23.83	23.86		
5+10	25	0	50	0	16-QAM	21.75	21.23	21.17	29.09	0.8110
5+10	1	0	1	49		14.76	14.50	14.75		
5+10	1	24	1	0		24.59	23.96	23.36		
5+10	25	0	50	0	64-QAM	21.56	21.20	21.14	26.35	0.4315
5+10	1	0	1	49		14.77	14.60	14.36		
5+10	1	24	1	0		21.85	21.61	21.23		
5+10	25	0	50	0	256-QAM	19.60	19.20	18.78	24.15	0.2600
5+10	1	0	1	49		14.66	14.44	14.43		
5+10	1	24	1	0		19.65	19.33	19.28		
5+5	25	0	25	0	QPSK	22.57	22.20	22.17	28.77	0.7534
5+5	1	0	1	24		14.60	14.17	13.93		
5+5	1	24	1	0		24.27	23.35	23.91		
5+5	25	0	25	0	16-QAM	21.63	21.39	21.18	28.45	0.6998
5+5	1	0	1	24		14.94	14.21	14.45		
5+5	1	24	1	0		23.95	22.63	23.28		
5+5	25	0	25	0	64-QAM	21.64	21.24	21.16	26.27	0.4236
5+5	1	0	1	24		14.86	14.42	14.34		
5+5	1	24	1	0		21.77	21.46	21.52		
5+5	25	0	25	0	256-QAM	19.59	19.20	19.19	24.28	0.2679
5+5	1	0	1	24		14.69	14.31	14.22		
5+5	1	24	1	0		19.78	18.43	19.22		
Limit	EIRP < 1W					Result			Pass	

LTE Band 66C_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	100	0	100	0	QPSK	22.70	22.50	22.44	29.03	0.7998
20+20	1	0	1	99		16.14	16.12	15.98		
20+20	1	99	1	0		24.43	24.53	24.27		
20+20	100	0	100	0	16-QAM	21.76	21.48	21.47	28.82	0.7621
20+20	1	0	1	99		16.50	16.37	16.12		
20+20	1	99	1	0		23.93	24.32	23.90		
20+20	100	0	100	0	64-QAM	21.38	21.54	21.31	26.58	0.4550
20+20	1	0	1	99		16.36	16.18	16.24		
20+20	1	99	1	0		22.08	21.73	21.59		
20+20	100	0	100	0	256-QAM	19.70	19.51	19.43	24.24	0.2655
20+20	1	0	1	99		16.18	15.90	16.11		
20+20	1	99	1	0		19.74	19.48	19.72		
20+15	100	0	75	0	QPSK	22.72	22.43	22.43	29.14	0.8204
20+15	1	0	1	74		16.20	16.01	15.92		
20+15	1	74	1	0		24.64	24.25	24.52		
20+15	100	0	75	0	16-QAM	21.73	21.46	21.46	28.47	0.7031
20+15	1	0	1	74		16.43	16.28	16.26		
20+15	1	74	1	0		23.97	23.59	23.35		
20+15	100	0	75	0	64-QAM	21.75	21.48	21.36	26.36	0.4325
20+15	1	0	1	74		16.46	16.37	16.38		
20+15	1	74	1	0		21.86	21.53	21.49		
20+15	100	0	75	0	256-QAM	19.70	19.46	19.44	24.36	0.2729
20+15	1	0	1	74		16.35	16.24	16.03		
20+15	1	74	1	0		19.86	19.45	19.31		
15+20	75	0	100	0	QPSK	22.80	22.50	22.41	29.31	0.8531
15+20	1	0	1	99		16.31	16.13	16.02		
15+20	1	74	1	0		24.81	23.84	24.12		
15+20	75	0	100	0	16-QAM	21.77	21.46	21.43	28.39	0.6902
15+20	1	0	1	99		16.22	16.59	16.26		
15+20	1	74	1	0		23.89	23.59	23.47		
15+20	75	0	100	0	64-QAM	21.73	21.52	21.42	26.56	0.4529
15+20	1	0	1	99		16.55	16.34	16.07		
15+20	1	74	1	0		22.06	21.27	21.24		
15+20	75	0	100	0	256-QAM	19.79	19.51	19.45	24.29	0.2685
15+20	1	0	1	99		16.56	16.59	16.21		
15+20	1	74	1	0		19.71	19.71	19.54		
Limit	EIRP < 1W					Result			Pass	

LTE Band 66C_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+10	100	0	50	0	QPSK	22.76	22.43	22.34	29.27	0.8453
20+10	1	0	1	49		16.27	16.06	15.90		
20+10	1	99	1	0		24.77	24.55	24.45		
20+10	100	0	50	0	16-QAM	21.79	21.45	21.38	28.43	0.6966
20+10	1	0	1	49		16.52	16.39	16.19		
20+10	1	99	1	0		23.93	23.56	23.47		
20+10	100	0	50	0	64-QAM	21.81	21.46	21.32	26.32	0.4285
20+10	1	0	1	49		16.77	16.30	16.40		
20+10	1	99	1	0		21.82	21.57	21.54		
20+10	100	0	50	0	256-QAM	19.76	19.46	19.37	24.26	0.2667
20+10	1	0	1	49		16.44	16.43	16.21		
20+10	1	99	1	0		14.19	19.73	19.49		
10+20	50	0	100	0	QPSK	22.80	22.46	21.95	29.33	0.8570
10+20	1	0	1	99		16.21	15.93	15.94		
10+20	1	49	1	0		24.67	24.83	24.30		
10+20	50	0	100	0	16-QAM	21.81	21.41	21.37	28.43	0.6966
10+20	1	0	1	99		16.54	16.48	15.98		
10+20	1	49	1	0		23.93	23.68	23.51		
10+20	50	0	100	0	64-QAM	21.80	21.50	21.35	26.50	0.4467
10+20	1	0	1	99		16.45	16.06	16.38		
10+20	1	49	1	0		22.00	21.77	21.43		
10+20	50	0	100	0	256-QAM	19.79	19.45	19.32	24.29	0.2685
10+20	1	0	1	99		16.42	16.58	16.12		
10+20	1	49	1	0		9.87	19.60	19.37		
20+5	100	0	25	0	QPSK	22.74	22.45	22.71	29.31	0.8531
20+5	1	0	1	24		16.21	15.81	15.67		
20+5	1	99	1	0		24.55	24.16	24.81		
20+5	100	0	25	0	16-QAM	21.77	21.38	21.33	28.63	0.7295
20+5	1	0	1	24		16.47	16.30	16.23		
20+5	1	99	1	0		24.13	23.57	23.41		
20+5	100	0	25	0	64-QAM	21.74	21.43	21.33	26.35	0.4315
20+5	1	0	1	24		16.38	16.25	15.96		
20+5	1	99	1	0		21.85	21.66	21.58		
20+5	100	0	25	0	256-QAM	19.74	19.40	19.28	24.35	0.2723
20+5	1	0	1	24		16.29	16.26	15.89		
20+5	1	99	1	0		19.85	19.53	19.41		
Limit	EIRP < 1W					Result			Pass	

LTE Band 66C_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
5+20	25	0	100	0	QPSK	22.82	22.49	22.35	29.15	0.8222
5+20	1	0	1	99		16.29	16.06	16.39		
5+20	1	24	1	0		24.65	24.37	24.16		
5+20	25	0	100	0	16-QAM	21.85	21.49	21.34	28.38	0.6887
5+20	1	0	1	99		16.63	16.35	16.15		
5+20	1	24	1	0		23.88	23.46	23.72		
5+20	25	0	100	0	64-QAM	21.87	21.55	21.55	26.44	0.4406
5+20	1	0	1	99		16.83	16.21	16.70		
5+20	1	24	1	0		21.94	21.89	21.51		
5+20	25	0	100	0	256-QAM	19.83	19.51	19.28	24.39	0.2748
5+20	1	0	1	99		16.45	16.14	16.23		
5+20	1	24	1	0		19.89	19.55	19.48		
Limit	EIRP < 1W					Result			Pass	

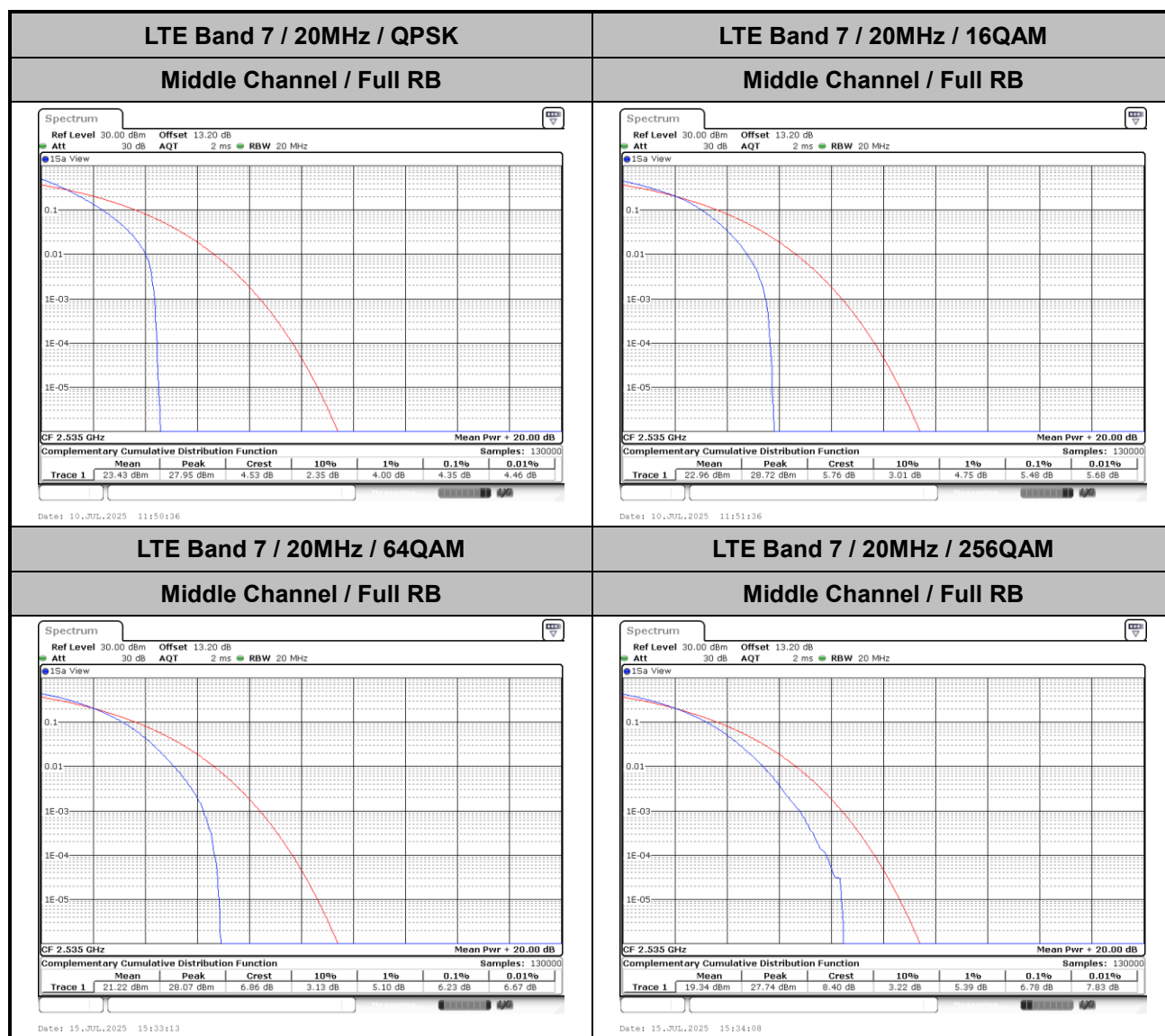
LTE Band 66C_CA Maximum Average Power [dBm] (GT - LC = 4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
15+10	75	0	50	0	QPSK	22.74	22.42	22.46	29.42	0.8750
15+10	1	0	1	49		16.31	16.04	15.67		
15+10	1	74	1	0		24.92	24.74	24.08		
15+10	75	0	50	0	16-QAM	21.76	21.39	21.27	28.54	0.7145
15+10	1	0	1	49		16.58	16.33	16.09		
15+10	1	74	1	0		24.04	23.63	23.71		
15+10	75	0	50	0	64-QAM	21.67	21.42	21.35	26.31	0.4276
15+10	1	0	1	49		16.28	16.01	16.05		
15+10	1	74	1	0		21.81	21.60	21.43		
15+10	75	0	50	0	256-QAM	19.80	19.42	19.32	24.49	0.2812
15+10	1	0	1	49		16.35	16.03	16.04		
15+10	1	74	1	0		19.99	19.49	19.53		
10+15	50	0	75	0	QPSK	22.73	22.48	22.30	29.10	0.8128
10+15	1	0	1	74		16.29	16.01	15.71		
10+15	1	49	1	0		24.60	24.26	24.08		
10+15	50	0	75	0	16-QAM	21.74	21.44	21.30	28.57	0.7194
10+15	1	0	1	74		16.43	16.28	16.11		
10+15	1	49	1	0		24.07	23.87	23.37		
10+15	50	0	75	0	64-QAM	21.75	21.51	21.30	26.54	0.4508
10+15	1	0	1	74		16.46	16.21	16.15		
10+15	1	49	1	0		22.04	21.63	21.44		
10+15	50	0	75	0	256-QAM	19.73	19.38	19.32	24.42	0.2767
10+15	1	0	1	74		16.54	16.25	16.30		
10+15	1	49	1	0		19.63	19.92	19.27		
15+15	75	0	75	0	QPSK	22.76	22.33	22.70	29.01	0.7962
15+15	1	0	1	74		16.28	15.96	15.78		
15+15	1	74	1	0		24.51	24.44	23.90		
15+15	75	0	75	0	16-QAM	21.73	21.39	21.30	28.54	0.7145
15+15	1	0	1	74		16.40	16.49	16.34		
15+15	1	74	1	0		24.04	23.72	23.67		
15+15	75	0	75	0	64-QAM	21.36	21.43	21.42	26.63	0.4603
15+15	1	0	1	74		16.46	16.40	16.04		
15+15	1	74	1	0		22.13	21.44	21.33		
15+15	75	0	75	0	256-QAM	19.73	19.43	19.37	24.39	0.2748
15+15	1	0	1	74		16.30	16.08	16.12		
15+15	1	74	1	0		19.89	19.46	19.62		
Limit	EIRP < 1W					Result			Pass	



LTE Band 7

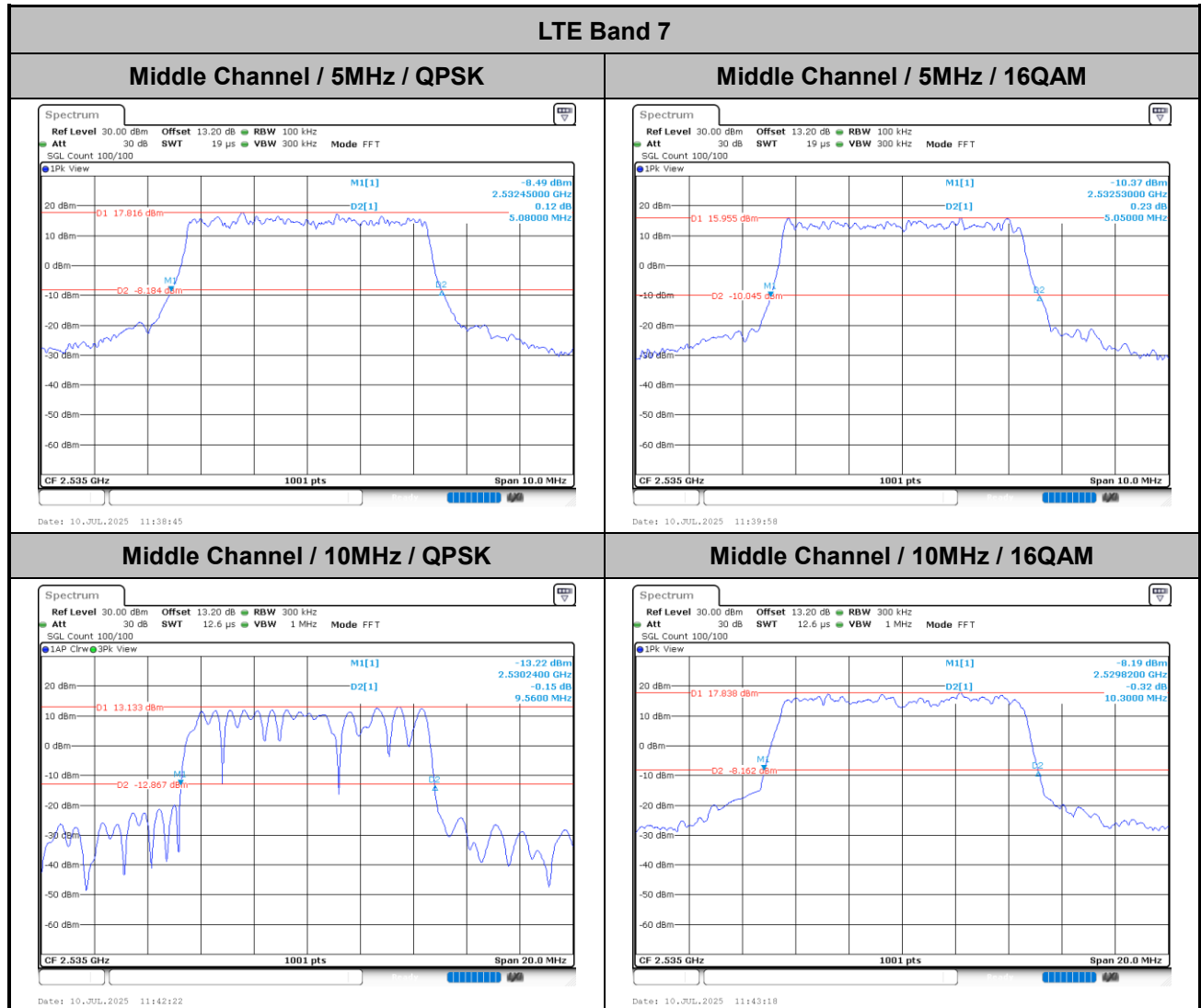
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.35	5.48	6.23	6.78	PASS



**26dB Bandwidth**

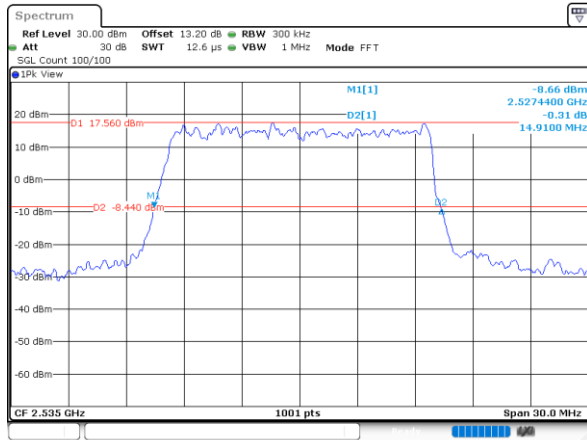
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.08	5.05	9.56	10.30	14.91	14.85	19.44	18.84



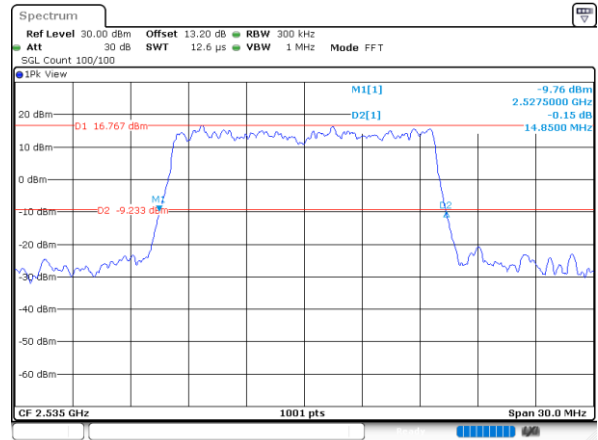


LTE Band 7

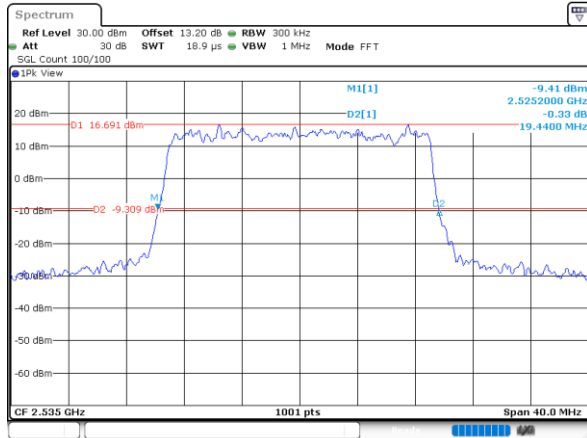
Middle Channel / 15MHz / QPSK



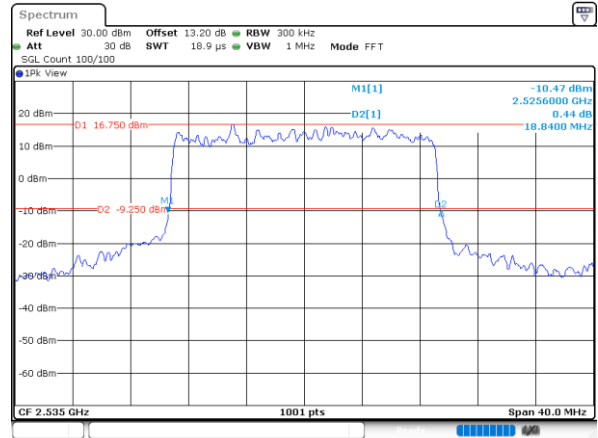
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



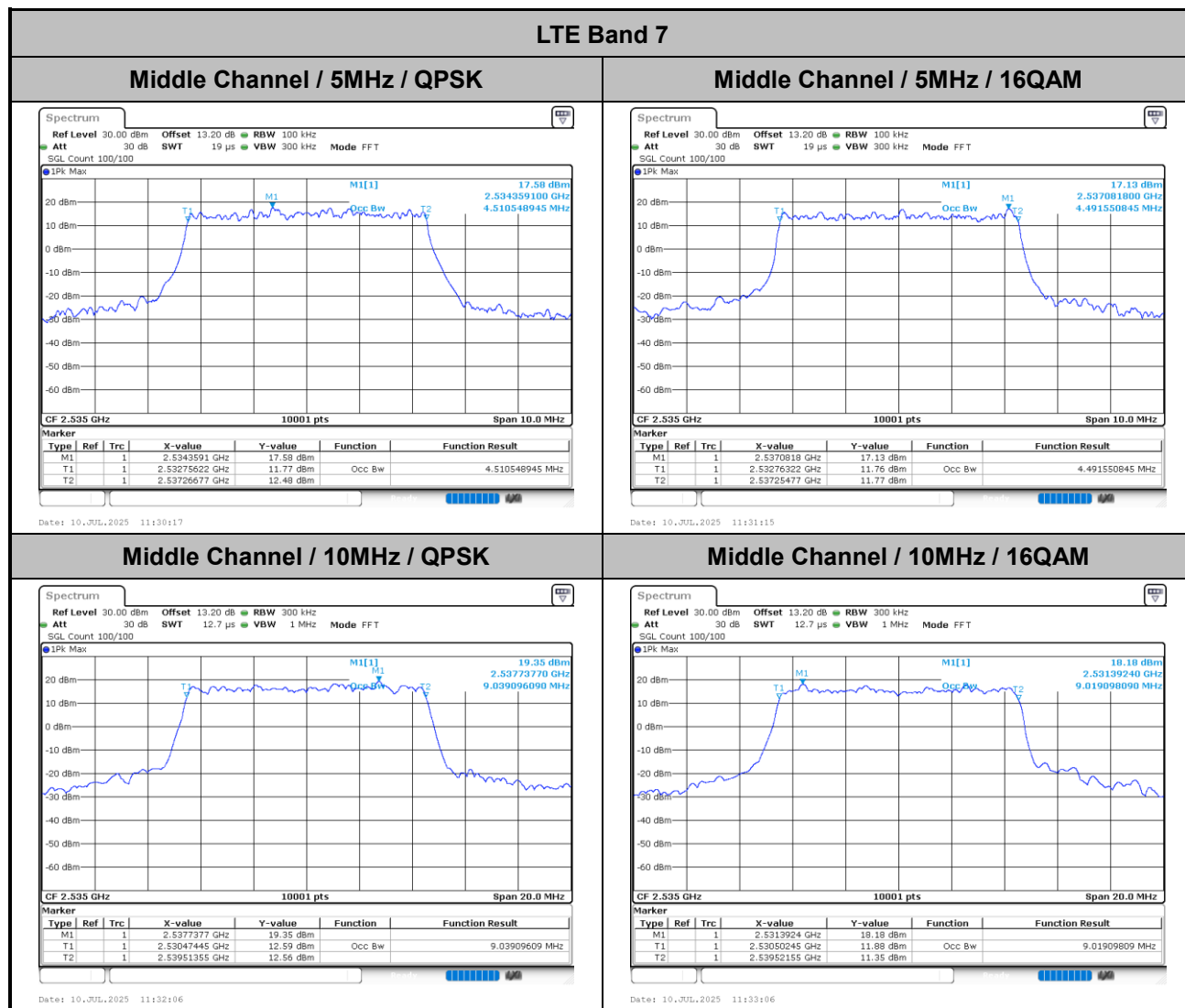
Middle Channel / 20MHz / 16QAM





Occupied Bandwidth

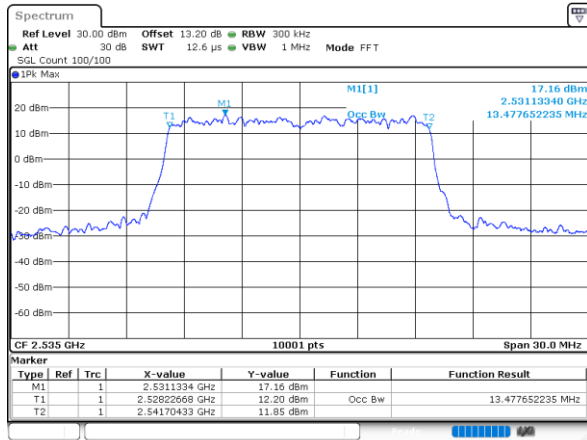
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.51	4.49	9.03	9.01	13.47	13.52	17.86	17.86



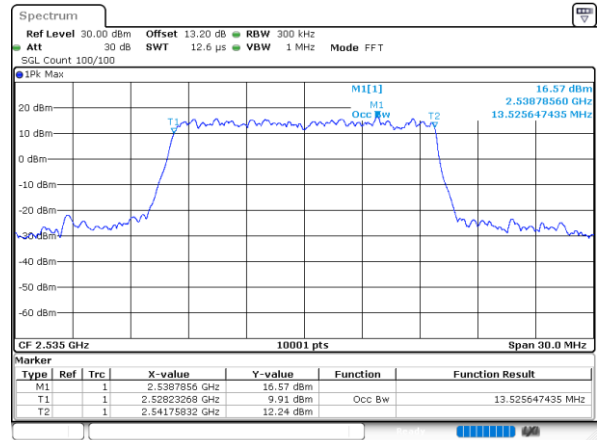


LTE Band 7

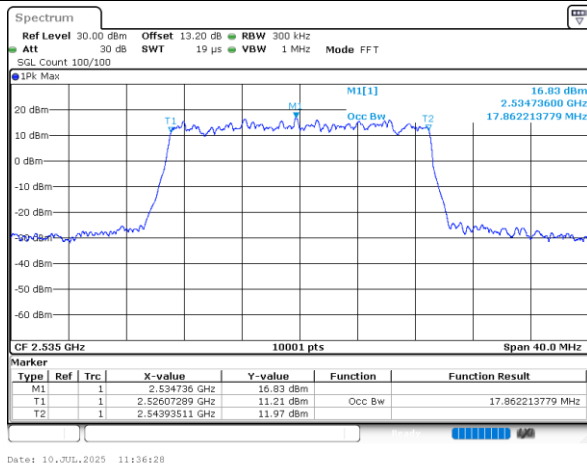
Middle Channel / 15MHz / QPSK



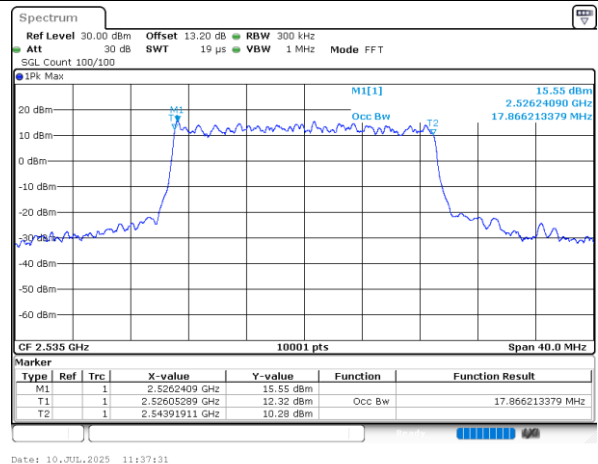
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

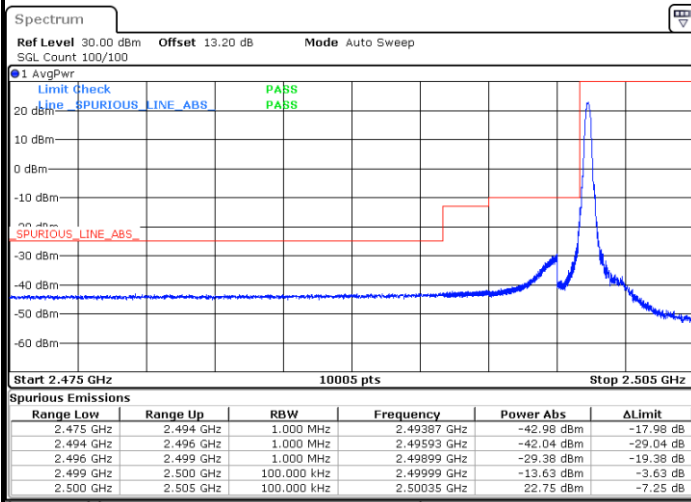




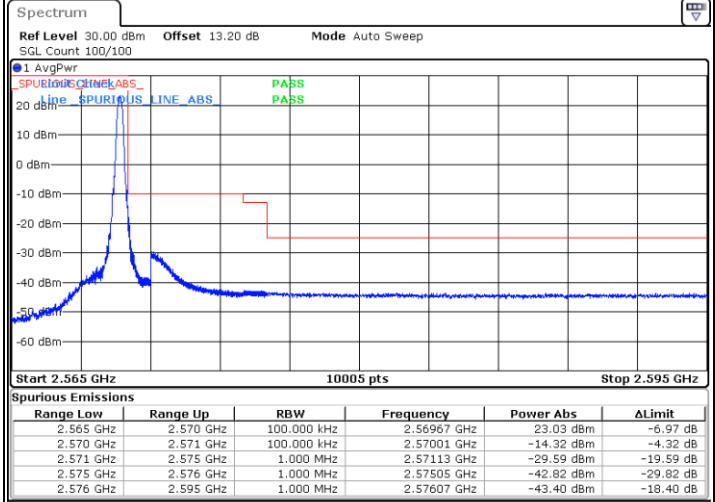
Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

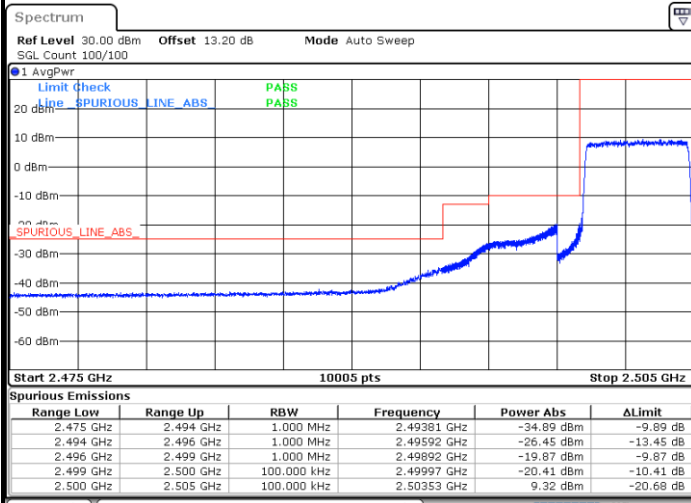
Lowest Band Edge / 1 RB



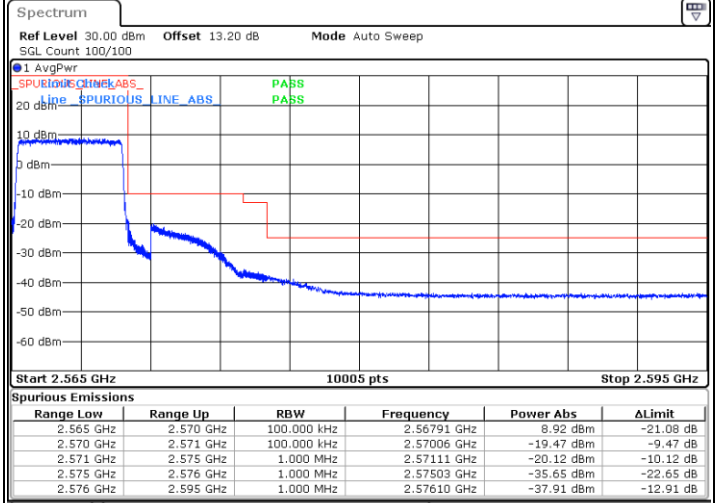
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



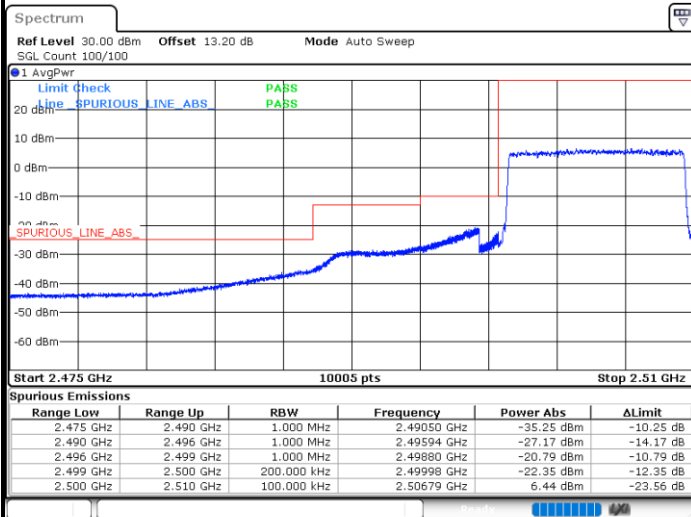
Highest Band Edge / Full RB



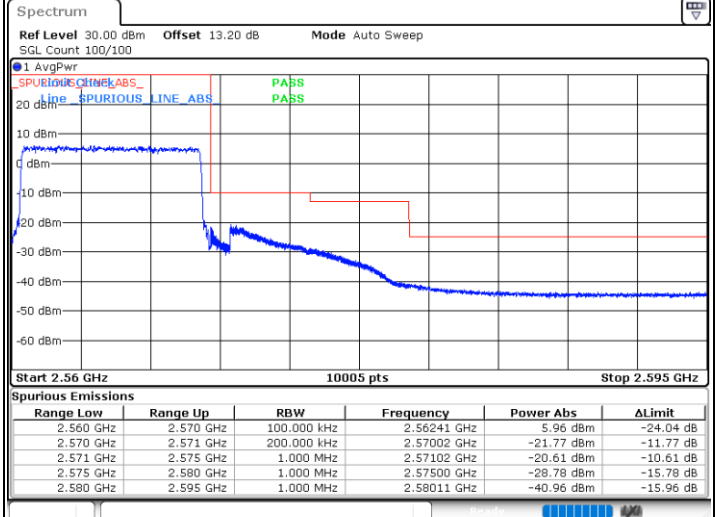


LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / Full RB

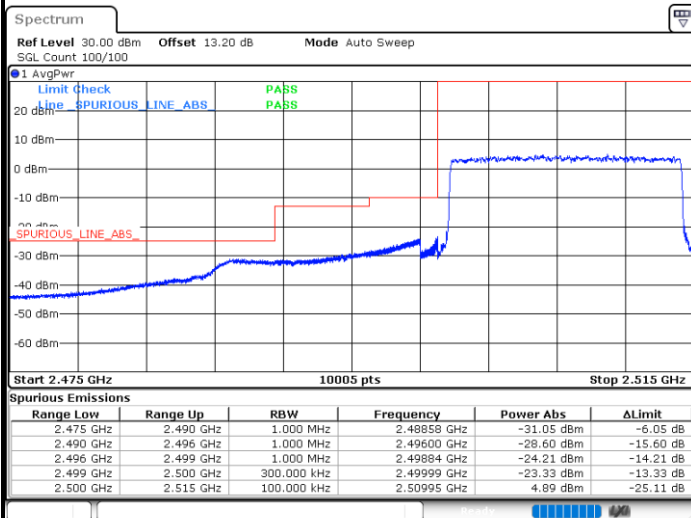


Highest Band Edge / Full RB

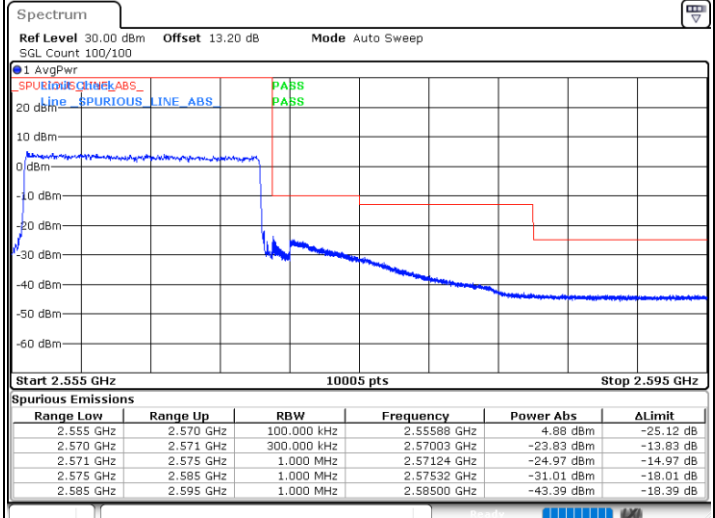


LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

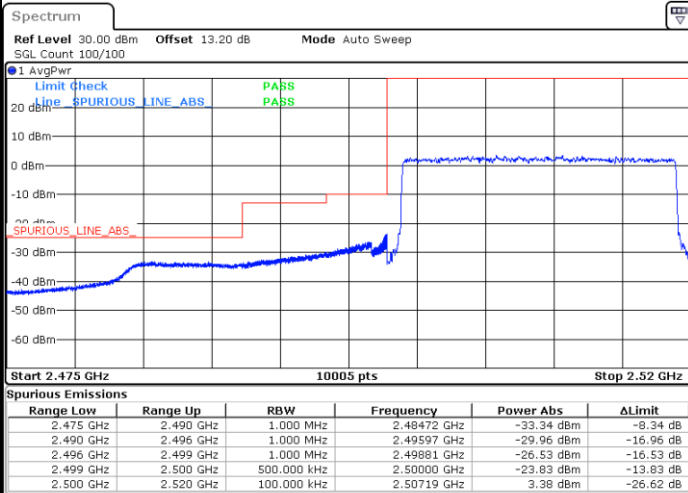




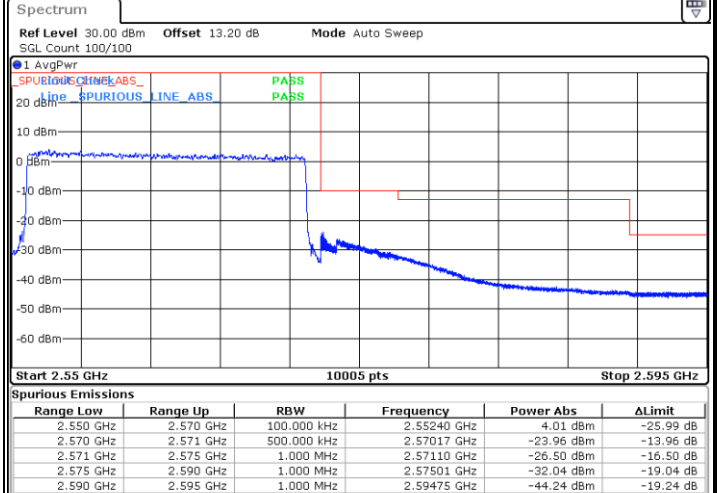
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.JUL.2025 12:06:06



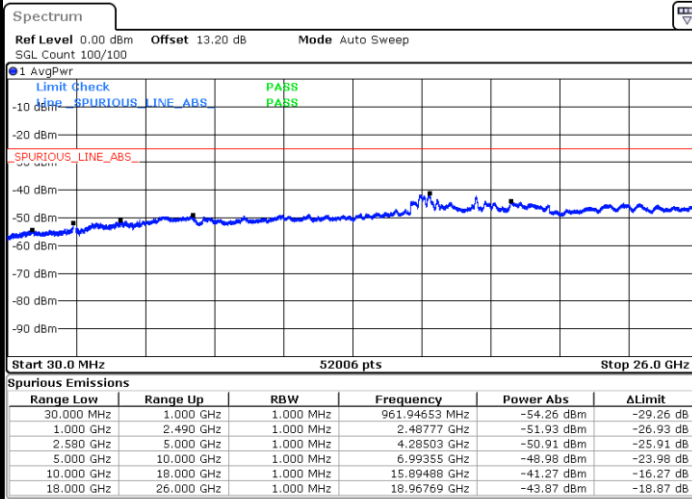
Date: 10.JUL.2025 12:07:58



Conducted Spurious Emission

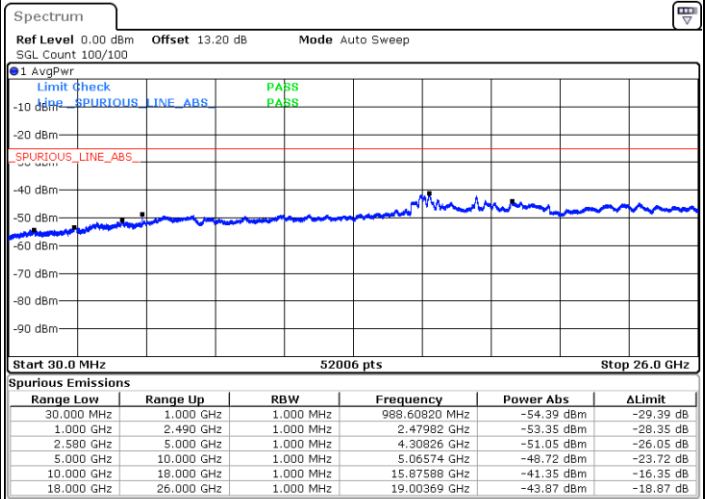
LTE Band 7 / 5MHz

Lowest Channel / QPSK



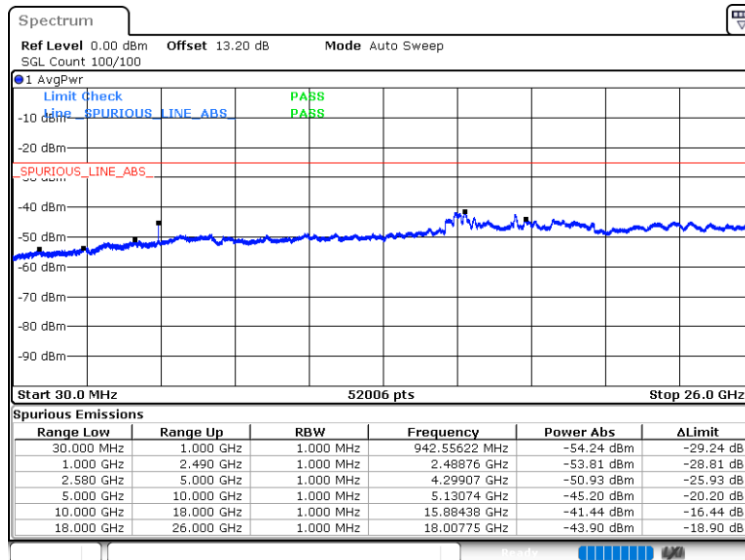
Date: 10.JUL.2025 12:09:49

Middle Channel / QPSK



Date: 10.JUL.2025 12:11:50

Highest Channel / QPSK

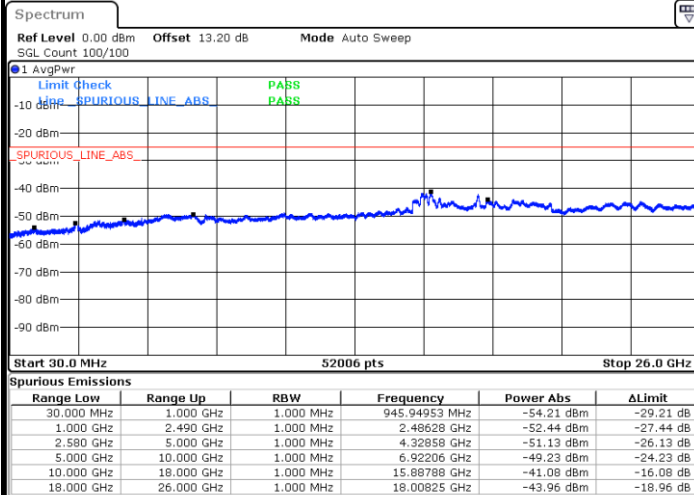


Date: 10.JUL.2025 13:01:18



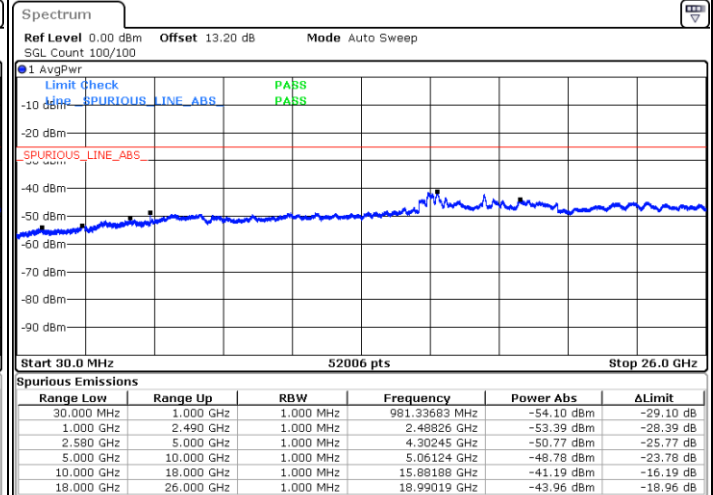
LTE Band 7 / 10MHz

Lowest Channel / QPSK



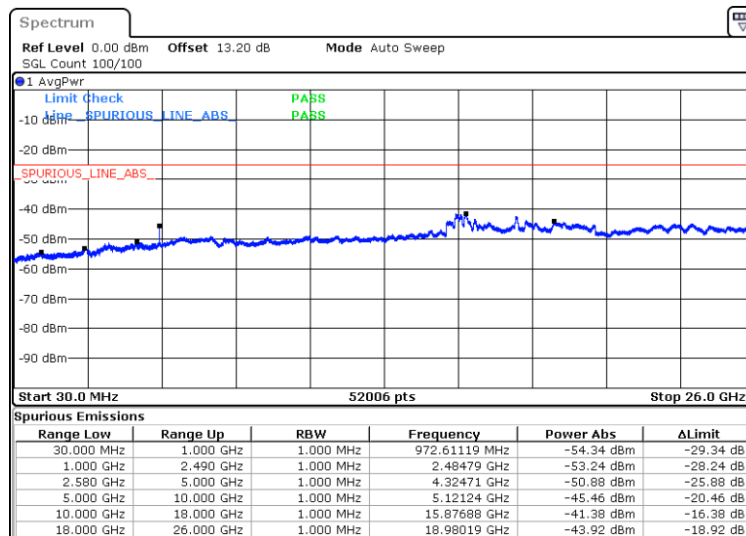
Date: 10.JUL.2025 13:03:24

Middle Channel / QPSK



Date: 10.JUL.2025 13:05:27

Highest Channel / QPSK

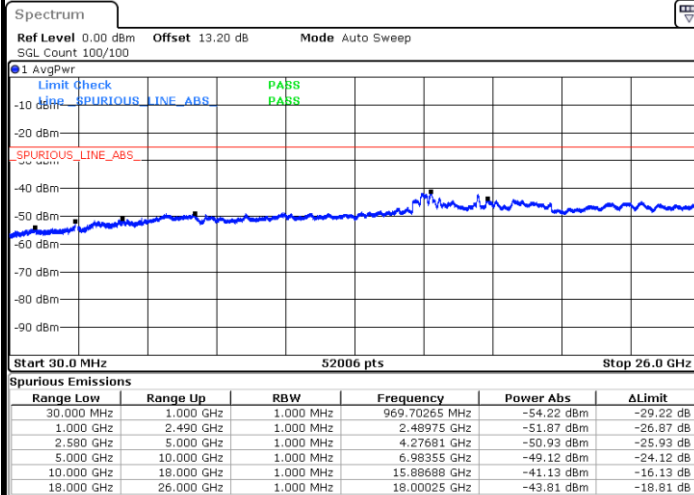


Date: 10.JUL.2025 13:07:35



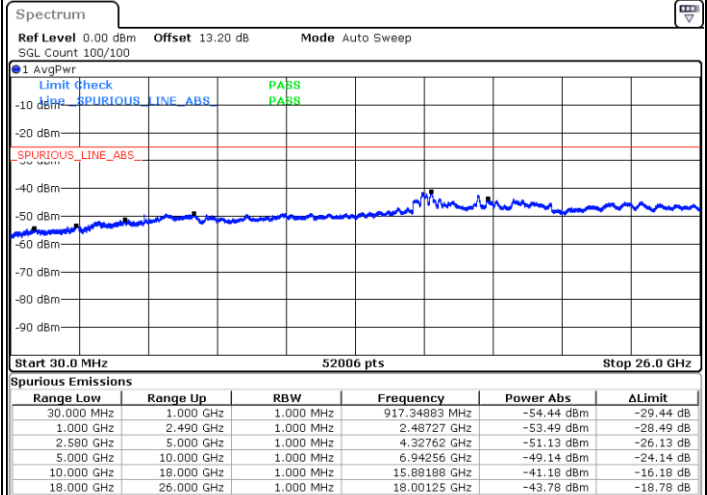
LTE Band 7 / 15MHz

Lowest Channel / QPSK



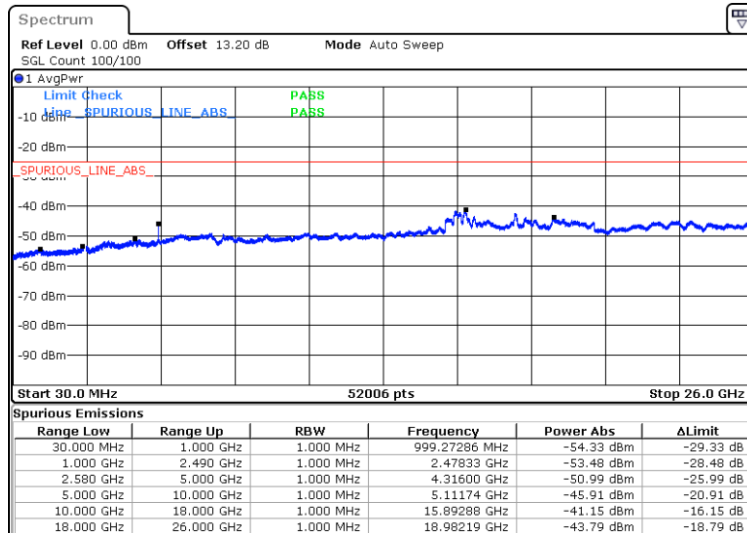
Date: 10.JUL.2025 13:09:33

Middle Channel / QPSK



Date: 10.JUL.2025 13:11:41

Highest Channel / QPSK

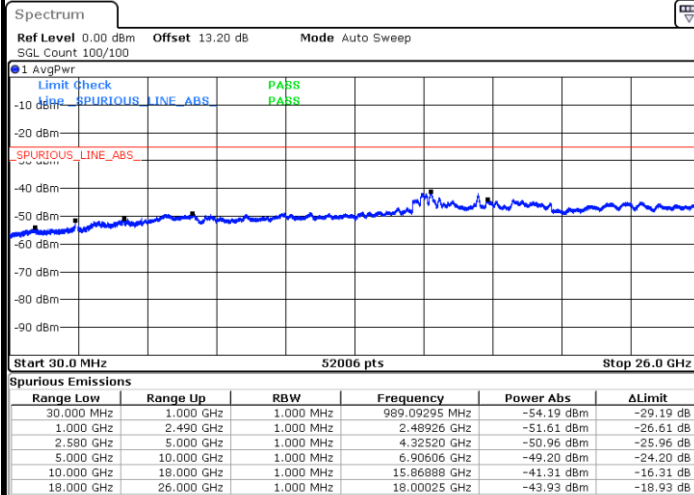


Date: 10.JUL.2025 13:13:43



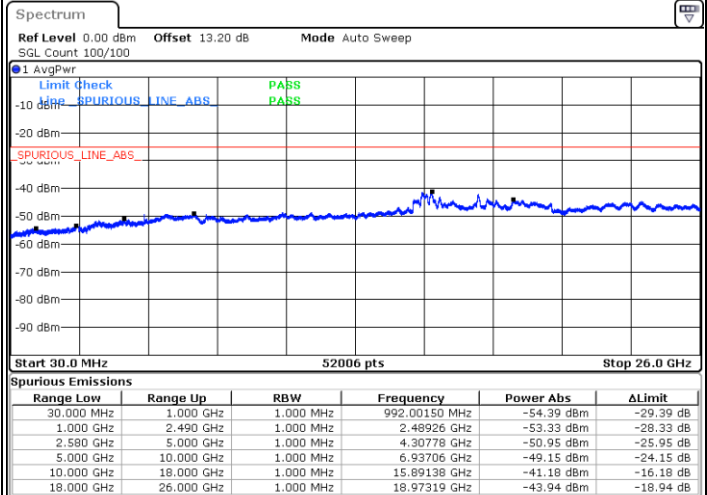
LTE Band 7 / 20MHz

Lowest Channel / QPSK



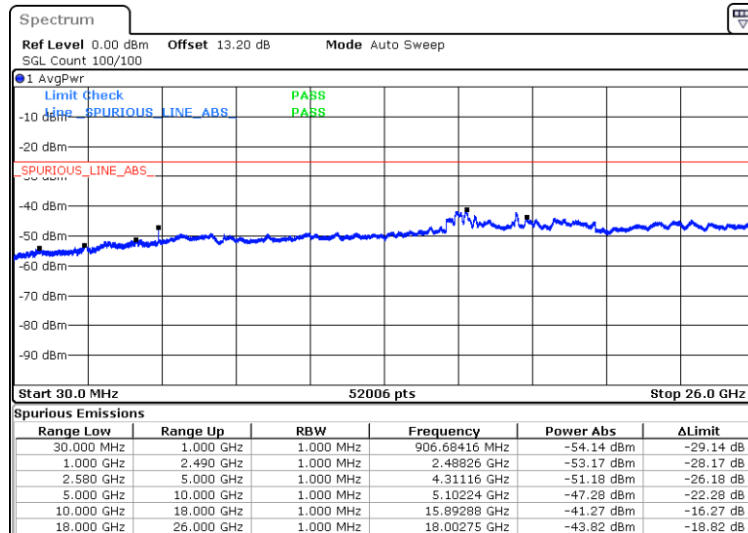
Date: 10.JUL.2025 13:15:42

Middle Channel / QPSK



Date: 10.JUL.2025 13:17:55

Highest Channel / QPSK



Date: 10.JUL.2025 13:21:29

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0042	-10.7	Yes	PASS
40	Normal Voltage	0.0015	3.8	Yes	
30	Normal Voltage	0.0001	0.2	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0005	-1.3	Yes	
0	Normal Voltage	0.0013	3.3	Yes	
-10	Normal Voltage	0.0006	1.4	Yes	
-20	Normal Voltage	0.0003	0.7	Yes	
-30	Normal Voltage	0.0002	-0.4	Yes	
20	Maximum Voltage	0.0013	-3.3	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0002	-0.4	Yes	

Note:

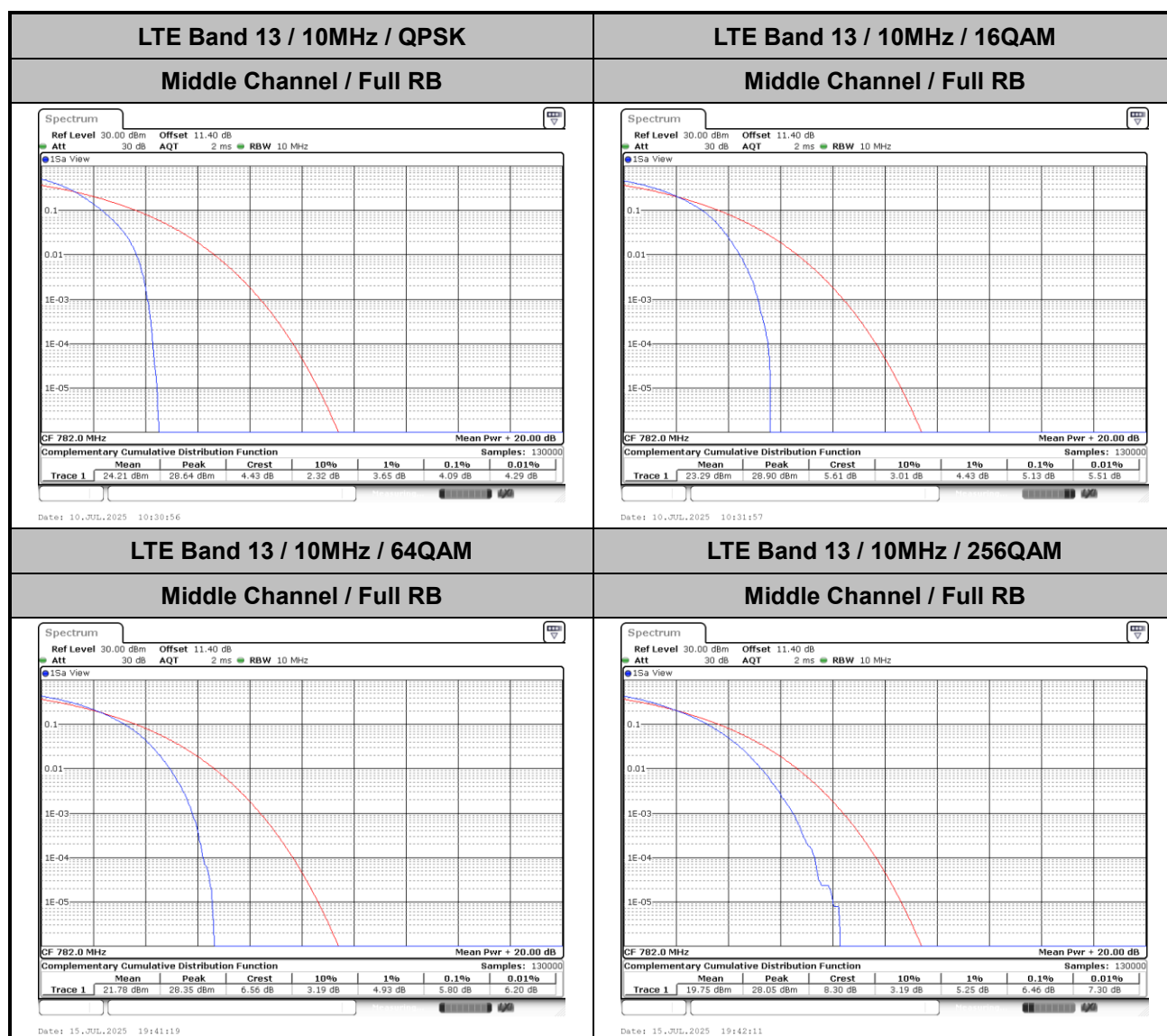
1. Normal Voltage = 3.85 V. ; Minimum Voltage = 3.3 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.



LTE Band 13

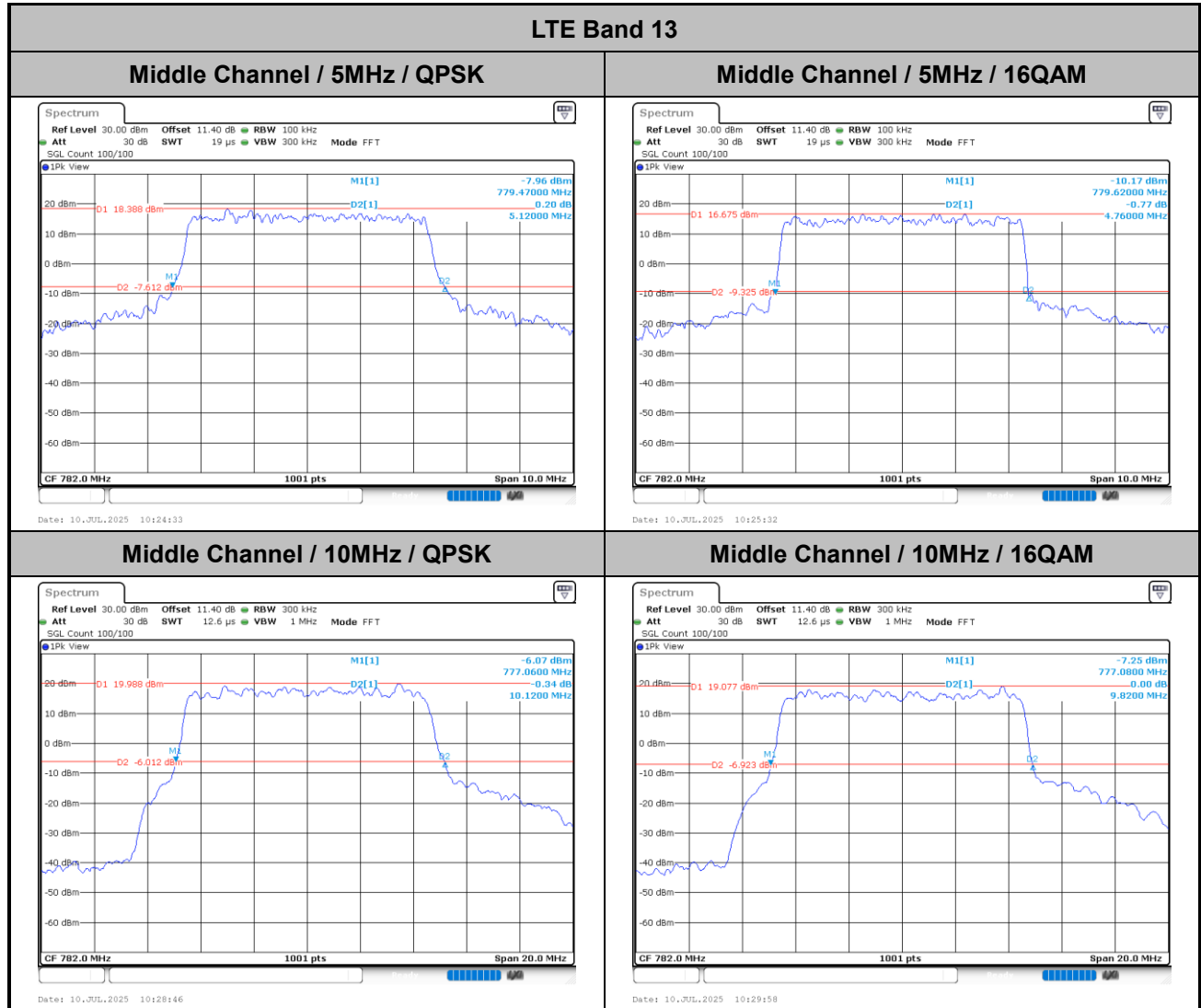
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.09	5.13	5.80	6.46	PASS



**26dB Bandwidth**

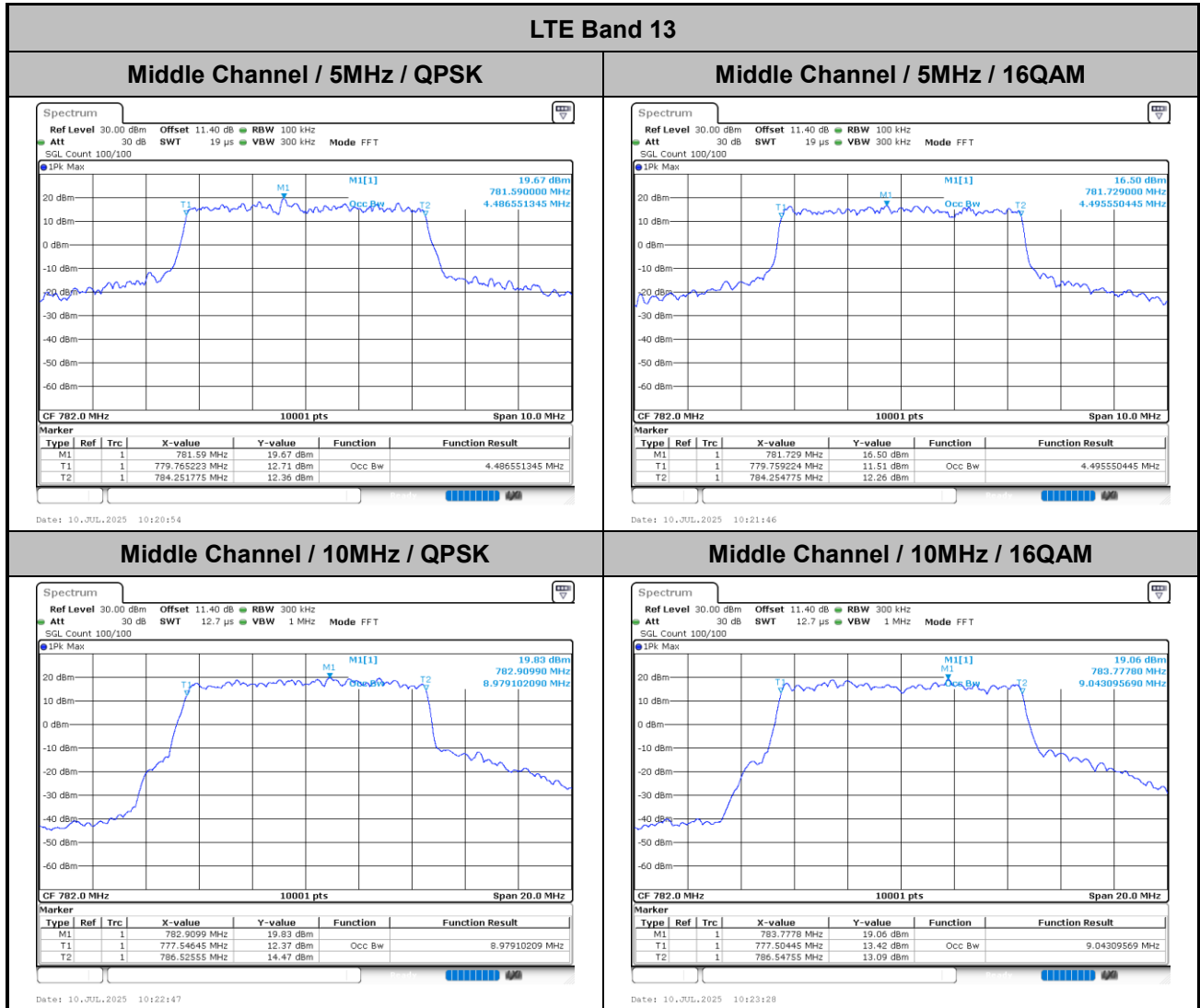
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.12	4.76	10.12	9.82	-	-	-	-

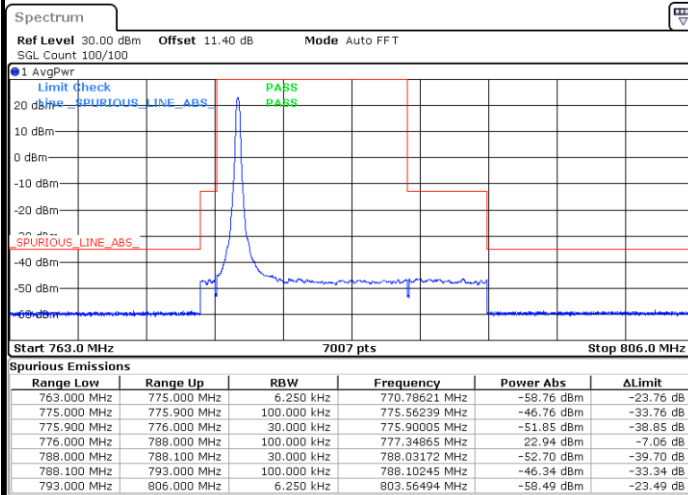
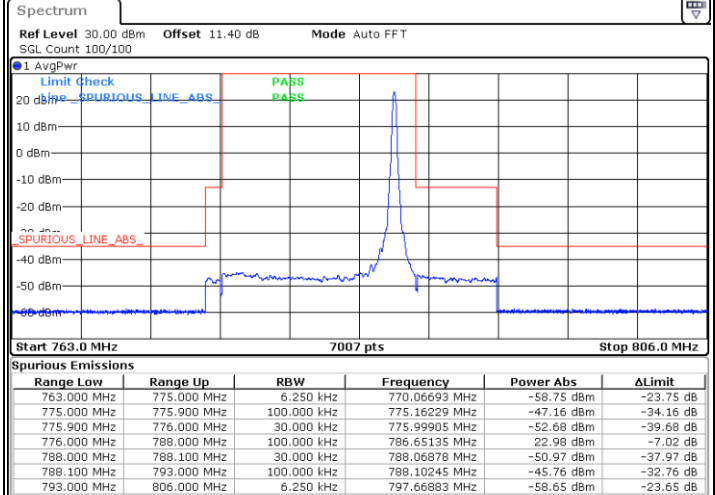
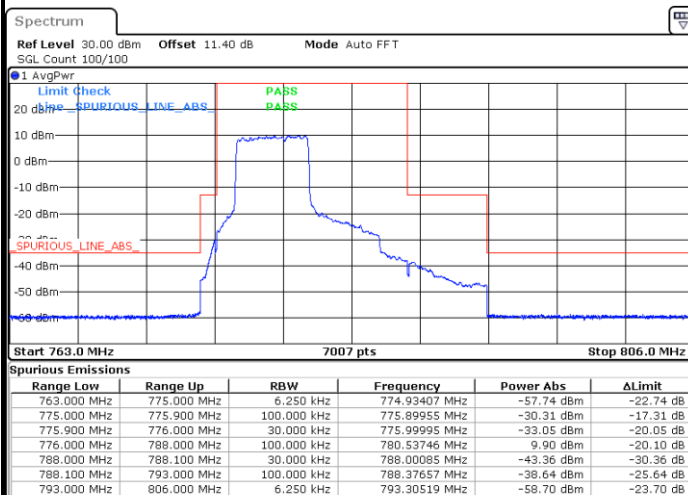
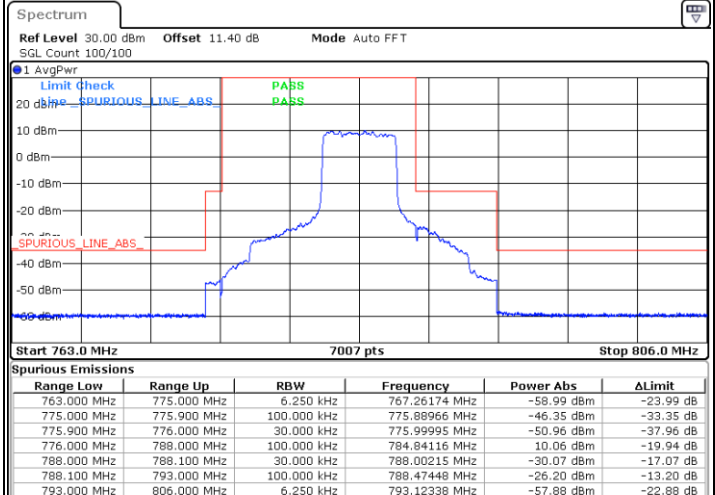


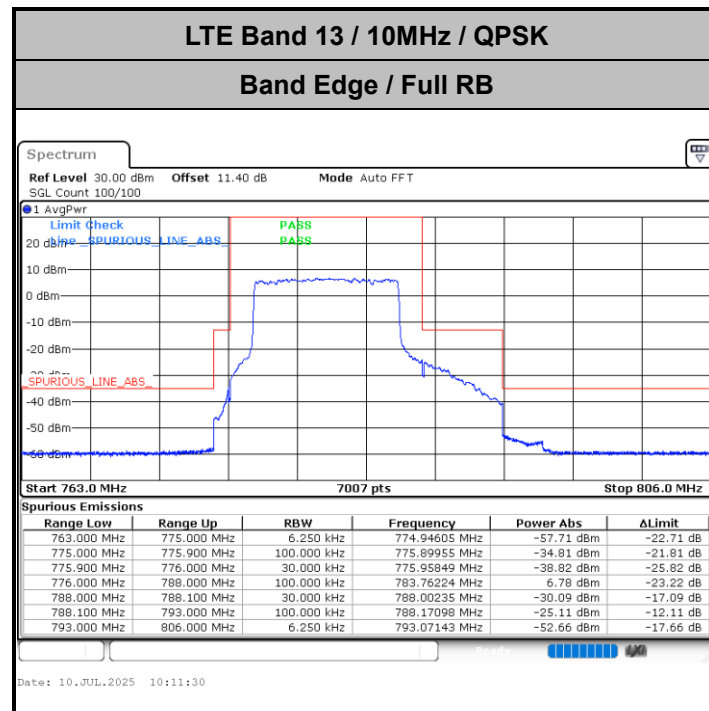


Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.49	8.97	9.04	-	-	-	-



**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

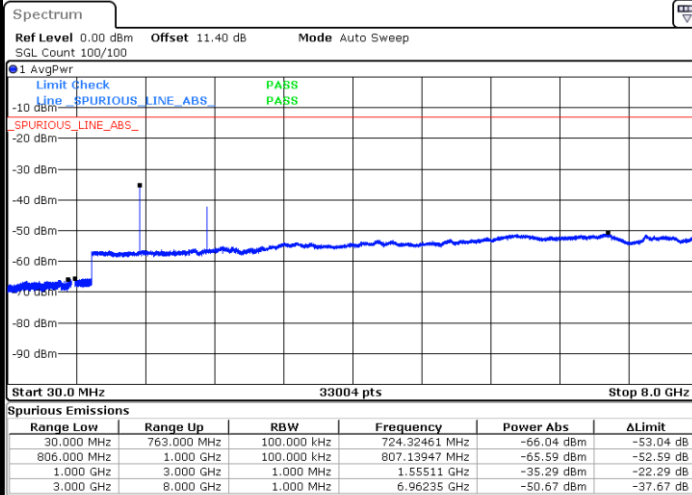




Conducted Spurious Emission

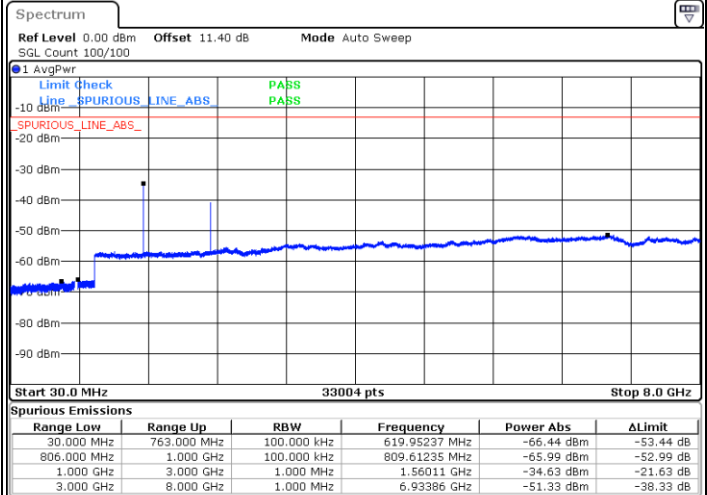
LTE Band 13 / 5MHz

Lowest Channel / QPSK



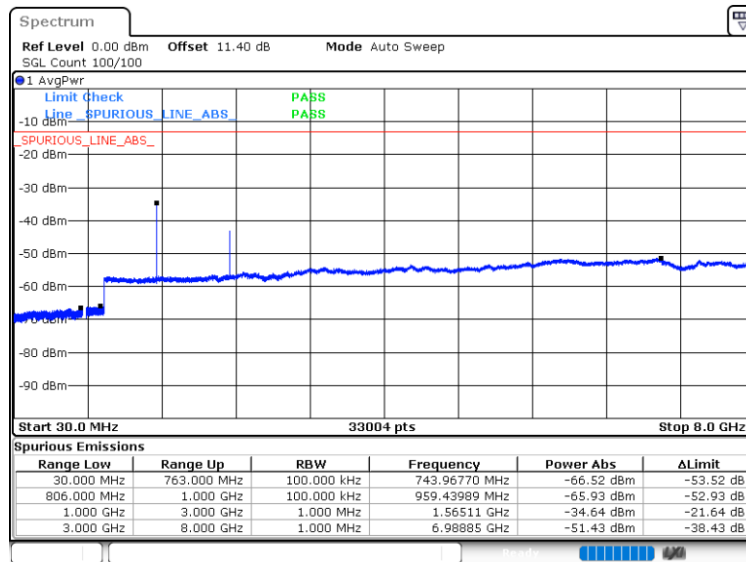
Date: 10.JUL.2025 10:13:30

Middle Channel / QPSK



Date: 16.JUL.2025 10:07:08

Highest Channel / QPSK

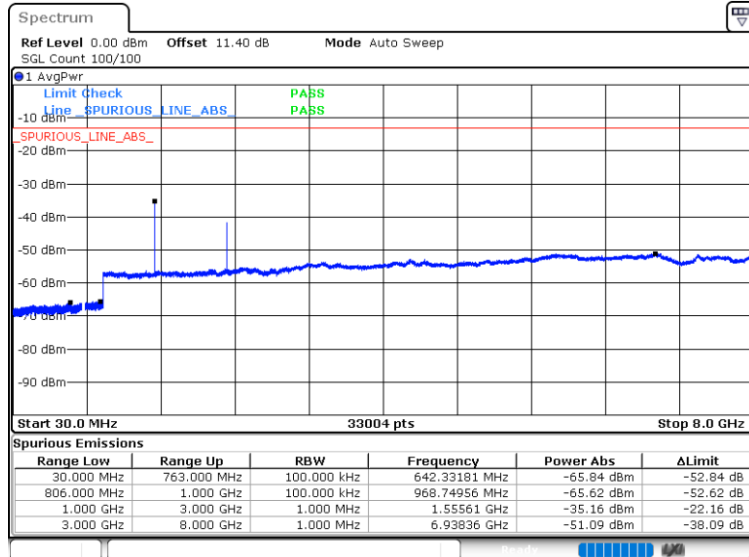


Date: 16.JUL.2025 10:08:56



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 10.JUL.2025 10:19:47

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel / BandWidth 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0083	6.5	Yes	PASS
40	Normal Voltage	0.0033	2.6	Yes	
30	Normal Voltage	0.0033	2.6	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0224	17.5	Yes	
0	Normal Voltage	0.0180	14.1	Yes	
-10	Normal Voltage	0.0003	0.2	Yes	
-20	Normal Voltage	0.0079	6.2	Yes	
-30	Normal Voltage	0.0003	-0.2	Yes	
20	Maximum Voltage	0.0183	14.3	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0180	14.1	Yes	

Note:

1. Normal Voltage = 3.85 V. ; Minimum Voltage = 3.3 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.



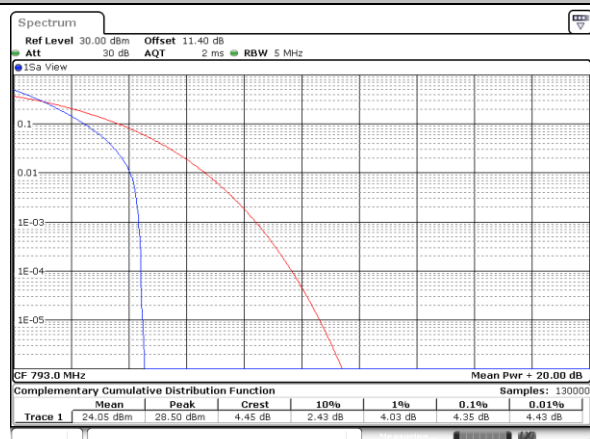
LTE Band 14

Peak-to-Average Ratio

Mode	LTE Band 14 / 5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.35	5.54	6.35	6.61	PASS
Mode	LTE Band 14 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.26	5.51	6.14	6.61	PASS

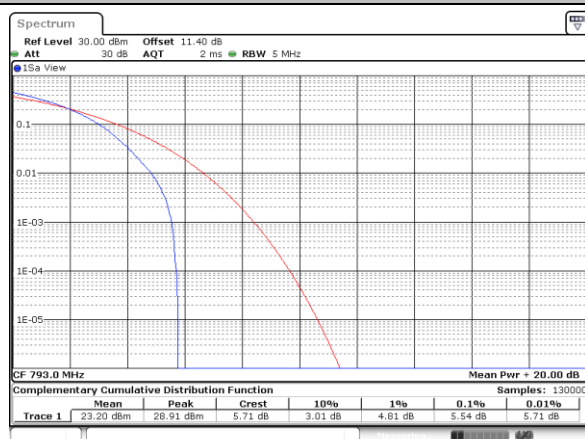
LTE Band 14 / 5MHz / QPSK

Middle Channel / Full RB



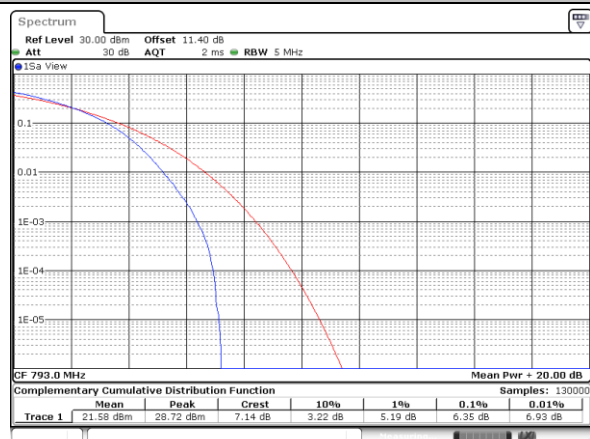
LTE Band 14 / 5MHz / 16QAM

Middle Channel / Full RB



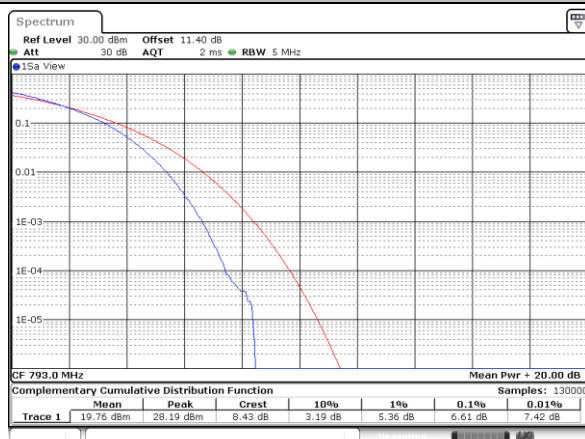
LTE Band 14 / 5MHz / 64QAM

Middle Channel / Full RB



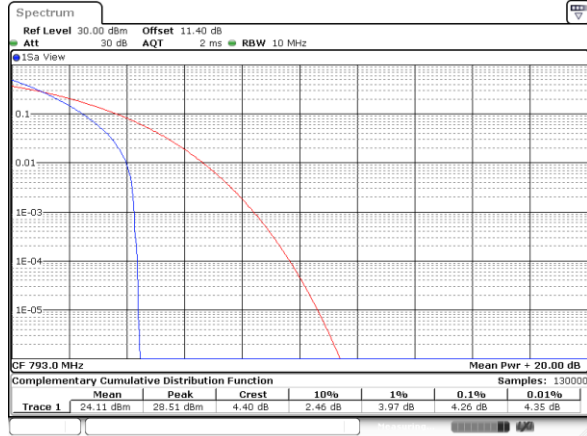
LTE Band 14 / 5MHz / 256QAM

Middle Channel / Full RB



LTE Band 14 / 10MHz / QPSK

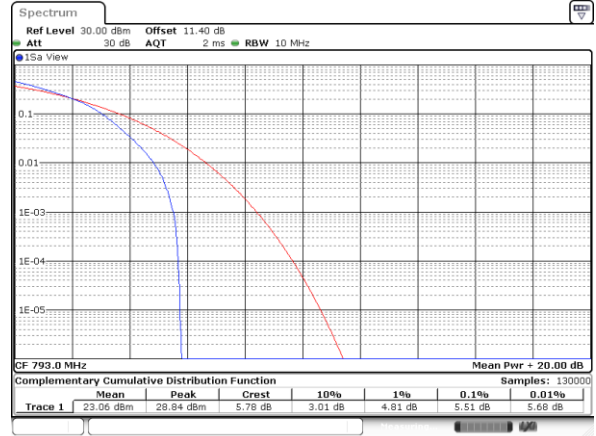
Middle Channel / Full RB



Date: 10.JUL.2025 10:51:35

LTE Band 14 / 10MHz / 16QAM

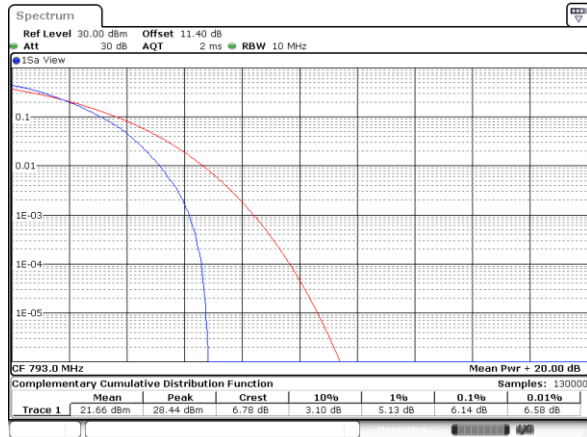
Middle Channel / Full RB



Date: 10.JUL.2025 10:52:35

LTE Band 14 / 10MHz / 64QAM

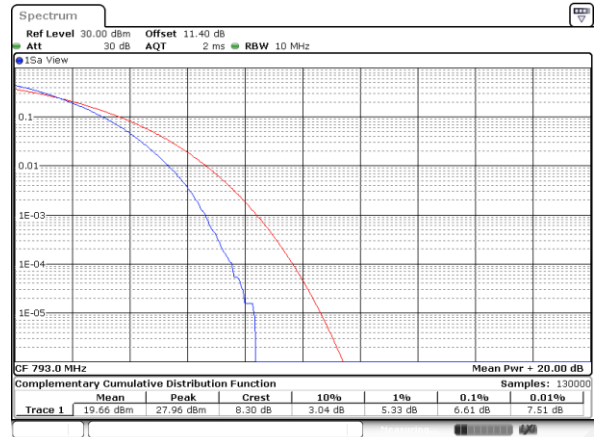
Middle Channel / Full RB



Date: 15.JUL.2025 19:50:54

LTE Band 14 / 10MHz / 256QAM

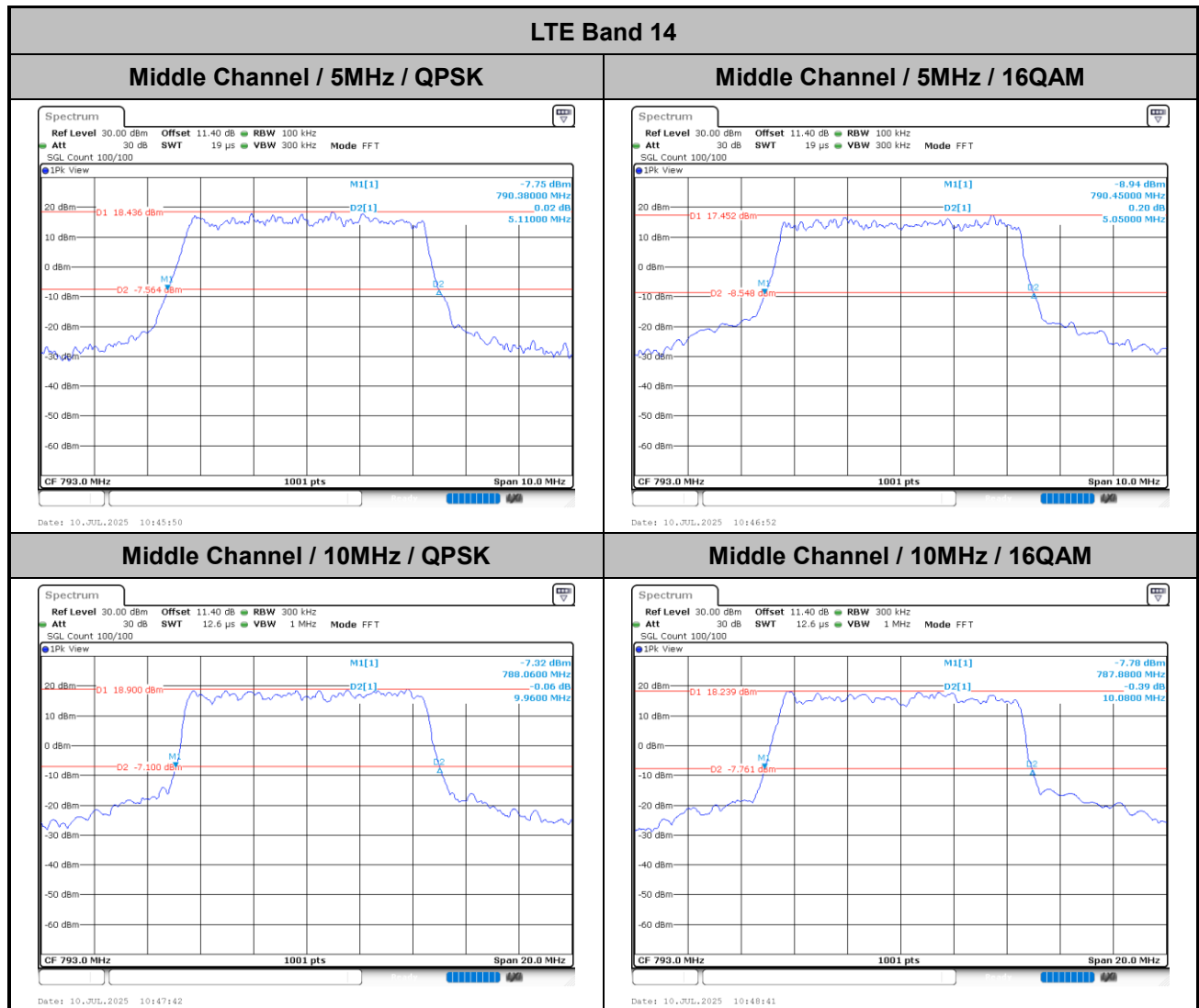
Middle Channel / Full RB



Date: 15.JUL.2025 19:52:10

**26dB Bandwidth**

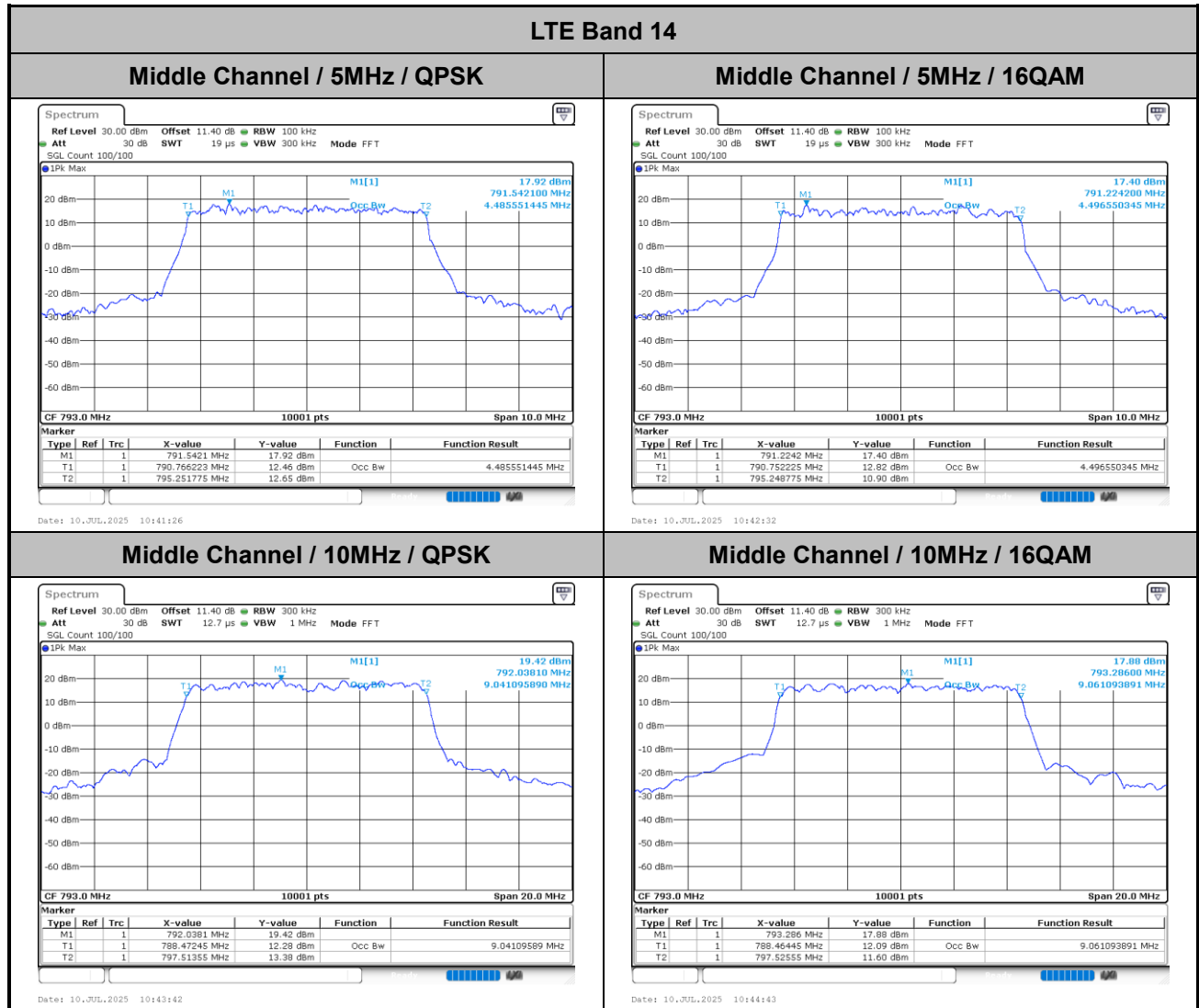
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.11	5.05	9.96	10.08	-	-	-	-





Occupied Bandwidth

Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.49	9.04	9.06	-	-	-	-

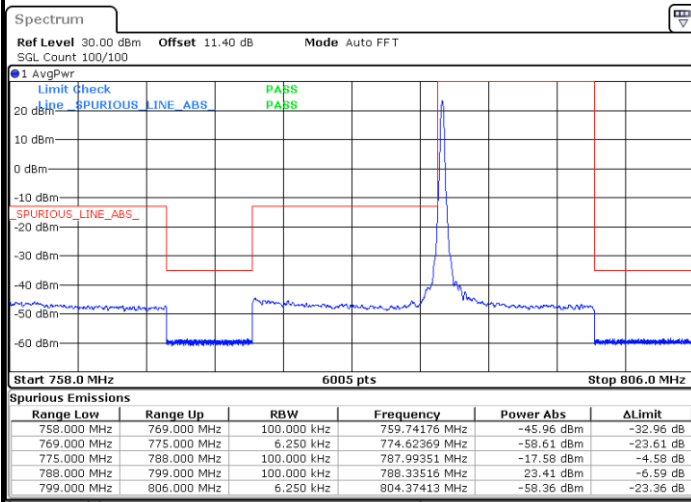




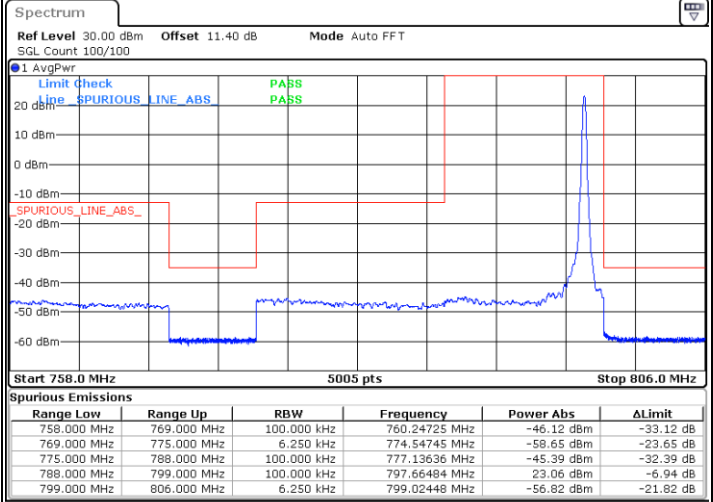
Conducted Band Edge

LTE Band 14 / 5MHz / QPSK

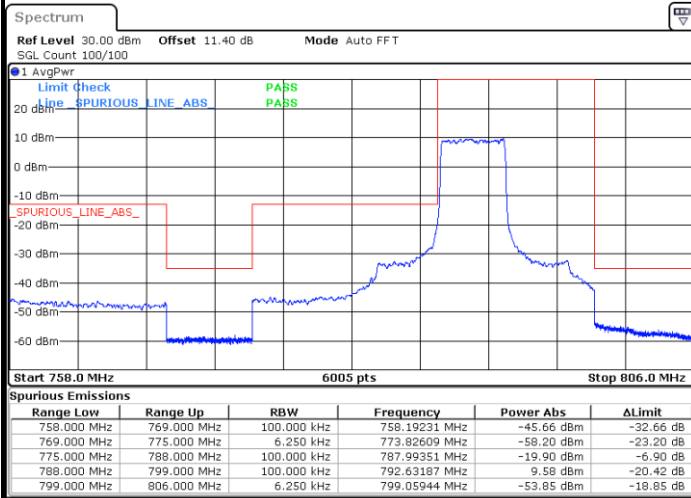
Lowest Band Edge / 1 RB



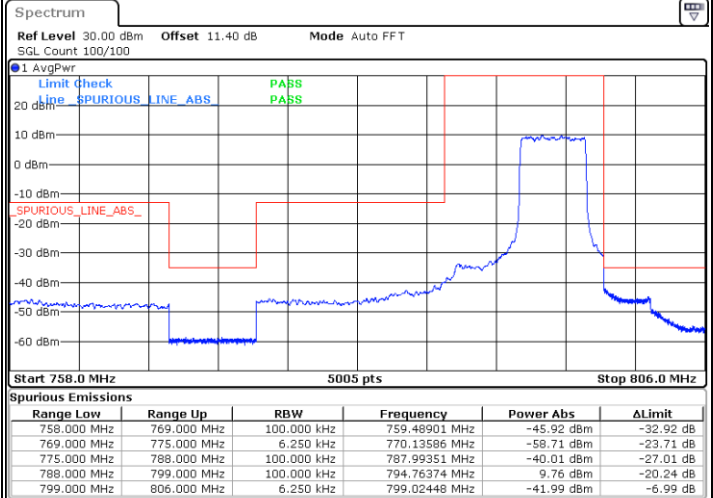
Highest Band Edge / 1 RB

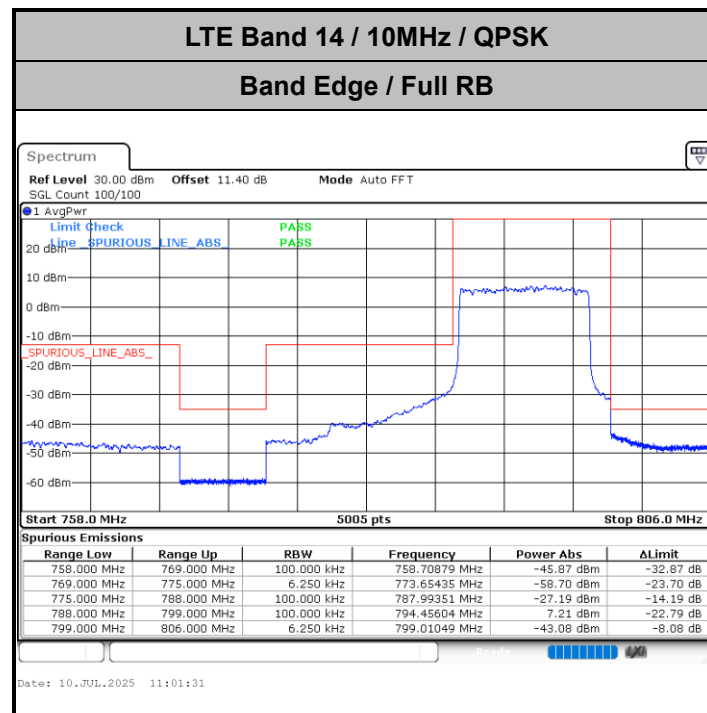


Lowest Band Edge / Full RB



Highest Band Edge / Full RB



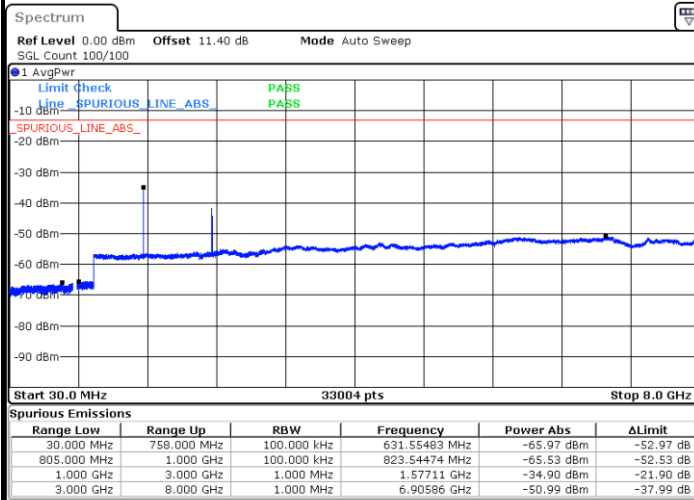




Conducted Spurious Emission

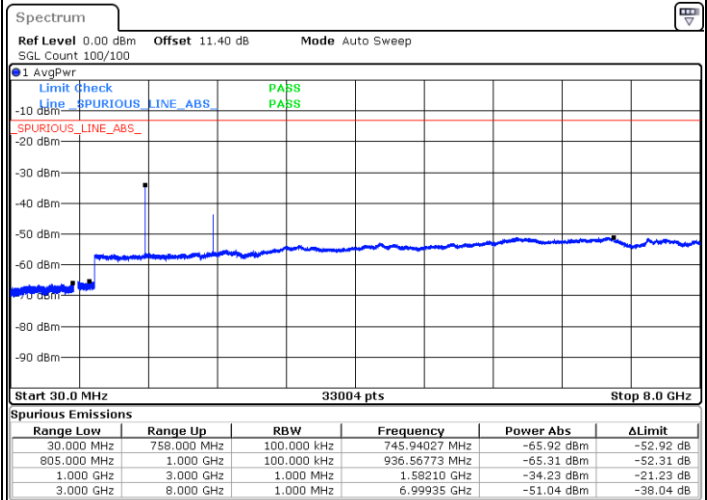
LTE Band 14 / 5MHz

Lowest Channel / QPSK



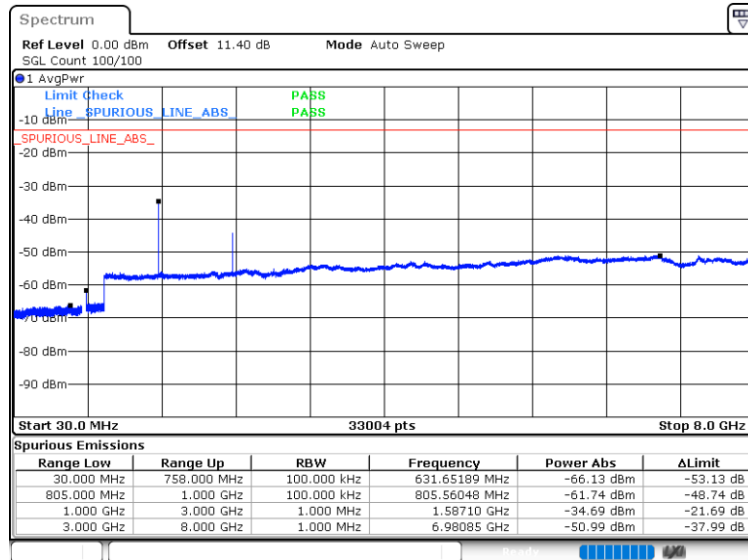
Date: 10.JUL.2025 11:21:02

Middle Channel / QPSK



Date: 10.JUL.2025 11:22:52

Highest Channel / QPSK

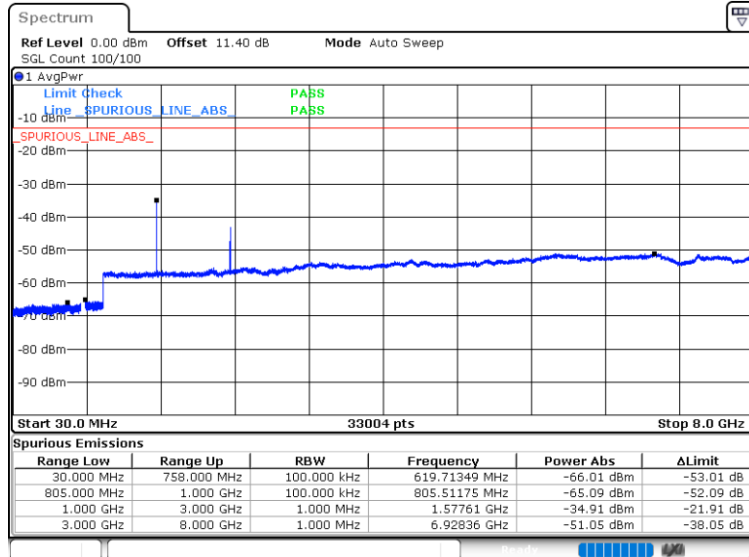


Date: 10.JUL.2025 11:24:58



LTE Band 14 / 10MHz

Middle Channel / QPSK



Date: 10.JUL.2025 11:26:49