



FCC RADIO TEST REPORT

FCC ID : PKRISGFW3000
Equipment : Outdoor Fixed CPE
Brand Name : Inseego
Model Name : FW3000
Marketing Name : FW3000
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, 96

The product was received on Jul. 01, 2023 and testing was performed from Aug. 16, 2023 to Oct. 04, 2023. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in 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 (USA) Inc., the test report shall not be reproduced except in full.

Approved by: Abi Lin

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test	5
1.2 Modification of EUT	6
1.3 Testing Location	6
1.4 Applied Standards	6
2 Test Configuration of Equipment Under Test	7
2.1 Test Mode.....	7
2.2 Connection Diagram of Test System	8
2.3 Support Unit used in test configuration	8
2.4 Measurement Results Explanation Example	8
2.5 Frequency List of Low/Middle/High Channels.....	9
3 Conducted Test Items.....	11
3.1 Measuring Instruments.....	11
3.2 Conducted Output Power	12
3.3 Peak-to-Average Ratio	13
3.4 EIRP and Power Density.....	14
3.5 Occupied Bandwidth	15
3.6 Conducted Band Edge	16
3.7 Conducted Spurious Emission	17
3.8 Frequency Stability.....	18
4 Radiated Test Items	19
4.1 Measuring Instruments.....	19
4.2 Test Setup	19
4.3 Test Result of Radiated Test.....	20
4.4 Radiated Spurious Emission	21
5 List of Measuring Equipment.....	22
6 Measurement Uncertainty	23
Appendix A. Test Results of Conducted Test	
Appendix B. Test Results of Radiated Test	
Appendix C. Test Setup Photographs	



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046 RSS-192 8.6	Conducted Output Power	Reporting only	-
3.3	§96.41	Peak-to-Average Ratio	Pass	
3.4	§96.41	Effective Isotropic Radiated Power	Pass	-
		Power Density	Pass	-
3.5	§2.1049 §96.41	Occupied Bandwidth	Reporting only	-
3.6	§2.1051 §96.41	Conducted Band Edge Measurement	Pass	-
3.7	§2.1051 §96.41	Conducted Spurious Emission	Pass	
3.8	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	2.48 dB under the limit at 10705.00 MHz

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 Product Feature of Equipment Under Test

Product Feature	
General Specs 4G-LTE, 5G-FR1, Bluetooth-LE, and GNSS.	
Antenna Type WWAN: Fixed Internal Antenna Bluetooth-LE: Fixed Internal Antenna GPS / Glonass / BDS / Galileo: Fixed Internal Antenna	

Support Band and Evaluated Information	
Supported Band	B48
Evaluated and Tested Band	B48

TDD Band Power Class				
	PC3	PC2		
B48	V			

Antenna Information								
Band	Ant0	Ant1	Ant4	Ant6	Ant12	Ant13	Main Ant. #	Secondary Ant. #
B48			10.1				4	

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.



1.2 Modification of EUT

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

1.3 Testing Location

Test Site	Sporton International (USA) Inc.	
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300	
Test Site No.	Sporton Site No.	
	TH01-CA	03CH01-CA
Test Engineer	Venkata Kondepudi	Fu Chen
Temperature (°C)	24~24.3	19.2~23.8
Relative Humidity (%)	53.9~55.8	39.1~47.1

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

FCC Designation No.: US1250

1.4 Applied Standards

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

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ FCC 47 CFR Part 2, 96
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



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 three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (POE Adapter), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report..

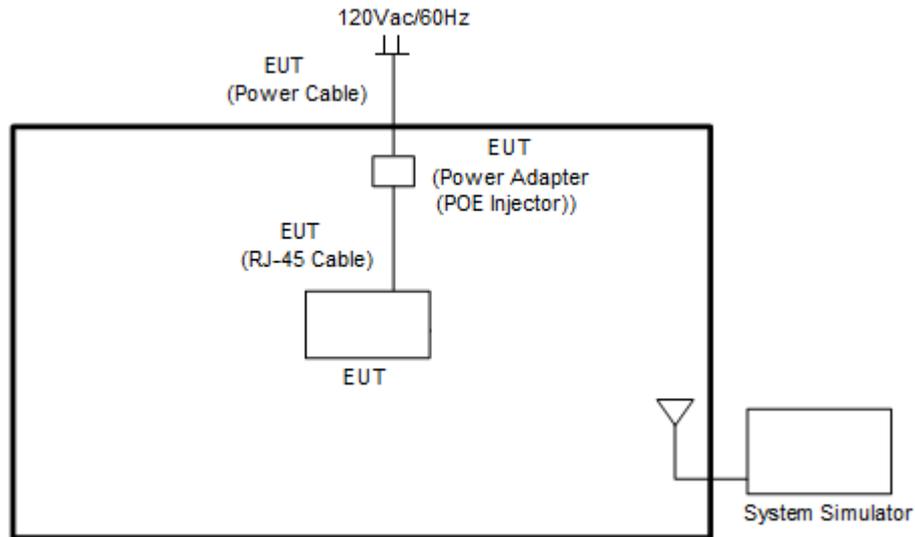
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B, C, D	All	1, Half, Full	L, M, H
EIRP	A, B, C, D	All	1, Half, Full	L, M, H
PAR	A, B, C, D	Maximum	Full	M
Bandwidth	A, B, C, D	All	Full	M
Mask (Part 96) (RSS-192)	A, B, C, D	All	1RB Full	L, M, H
CSE	A	10MHz (worst of 1RB power)	1RB	L, M, H
Frequency Stability	A	10 MHz or less	Full	M
RSE	A	20MHz (worst of EIRP)	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.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

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

2.4 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.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

$$\text{Offset(dB)} = \text{RF cable loss(dB)} + \text{attenuator factor(dB)}.$$

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$



2.5 Frequency List of Low/Middle/High Channels

LTE Band 48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	55340	55990	56640
	Frequency	3560.0	3625.0	3690.0
15	Channel	55315	55990	56665
	Frequency	3557.5	3625.0	3692.5
10	Channel	55290	55990	56690
	Frequency	3555.0	3625.0	3695.0
5	Channel	55265	55990	56715
	Frequency	3552.5	3625.0	3697.5



LTE Band 48C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	55340	55641	55942
		Frequency	3560	3590.1	3620.2
	SCC	Channel	55538	55839	56140
		Frequency	3579.8	3609.9	3640
20 + 15	PCC	Channel	55340	55667	55994
		Frequency	3560	3592.7	3625.4
	SCC	Channel	55511	55838	56165
		Frequency	3577.1	3609.8	3642.5
15 + 20	PCC	Channel	55315	55642	55969
		Frequency	3557.5	3590.2	3622.9
	SCC	Channel	55486	55813	56140
		Frequency	3574.6	3607.3	3640
20 + 10	PCC	Channel	55340	55693	56046
		Frequency	3560	3595.3	3630.6
	SCC	Channel	55484	55837	56190
		Frequency	3574.4	3609.7	3645
10 + 20	PCC	Channel	55290	55643	55996
		Frequency	3555	3590.3	3625.6
	SCC	Channel	55434	55787	56140
		Frequency	3569.4	3604.7	3640
20 + 5	PCC	Channel	55340	55719	56098
		Frequency	3560	3597.9	3635.8
	SCC	Channel	55457	55836	56215
		Frequency	3571.7	3609.6	3647.5
5 + 20	PCC	Channel	55265	55644	56023
		Frequency	3552.5	3590.4	3628.3
	SCC	Channel	55382	55761	56140
		Frequency	3564.2	3602.1	3640

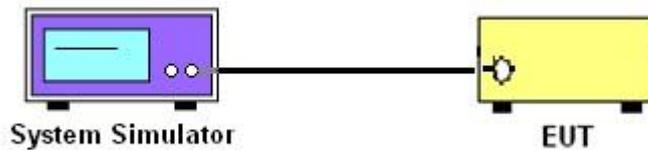
3 Conducted Test Items

3.1 Measuring Instruments

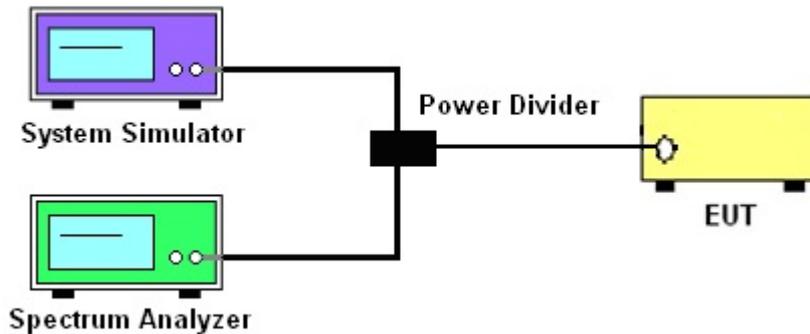
See list of measuring instruments of this test report.

3.1.1 Test Setup

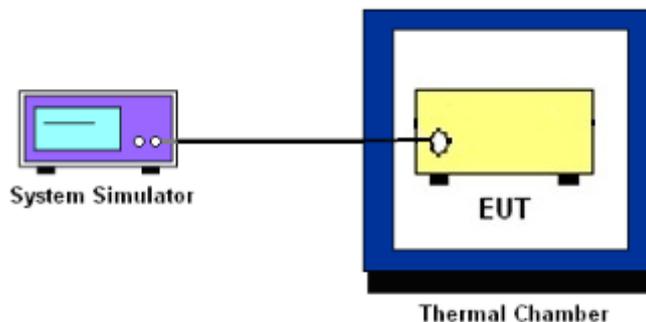
3.1.2 Conducted Output Power



3.1.3 EIRP, Power Density, Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge 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

3.2.1 Description of the Conducted Output Power 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.

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 EIRP and Power Density

3.4.1 Description of the EIRP and Power Density Measurement

The EIRP of mobile transmitters must not exceed 23 dBm /10 megahertz for LTE Band 42 and Band 43, and Band 48.

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, 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

EIRP and PSD limits for CBRS equipment as below table:

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a
Category A CBSD	30	20
Category B CBSD	47	37

3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.4.5

1. Set instrument center frequency to OBW center frequency.
2. Set span to at least 1.5 times the OBW.
3. Set the RBW to the specified reference bandwidth (often 1 MHz).
4. Set VBW $\geq 3 \times$ RBW.
5. Detector = RMS (power averaging).
6. Ensure that the number of measurement points in the sweep $\geq 2 \times$ span/RBW.
7. Sweep time = auto couple.
8. Employ trace averaging (RMS) mode over a minimum of 100 traces.
9. Use the peak marker function to determine the maximum amplitude level within the reference bandwidth (PSD).
10. Determine the EIRP by adding the effective antenna gain to the adjusted power level.



3.5 Occupied Bandwidth

3.5.1 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.

The occupied bandwidth shall not exceed the equipment's channel bandwidth, which is declared by the manufacturer.

3.5.2 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.



3.6 Conducted Band Edge

3.6.1 Description of Conducted Band Edge Measurement

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed -25 dBm/MHz.

3.6.2 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.



3.7 Conducted Spurious Emission

3.7.1 Description of Conducted Spurious Emission Measurement

96.41 (e)(2)

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

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 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.
6. Set spectrum analyzer with RMS detector.
7. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is -40dBm/MHz.



3.8 Frequency Stability

3.8.1 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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency

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 $25\pm 5^{\circ}\text{C}$ 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.

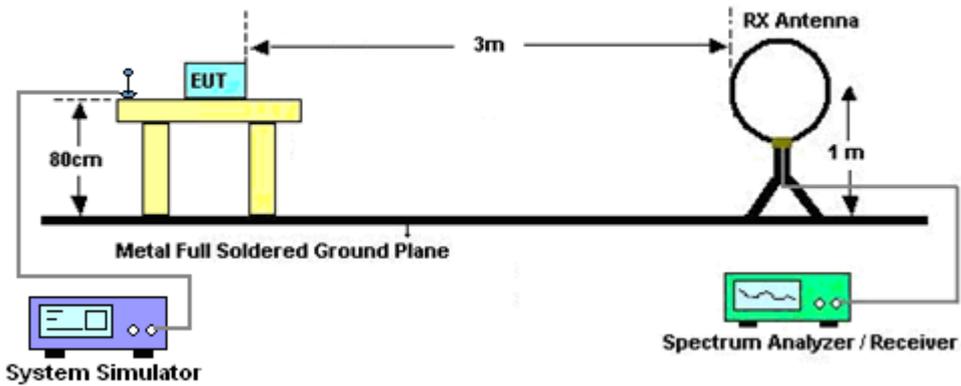
4 Radiated Test Items

4.1 Measuring Instruments

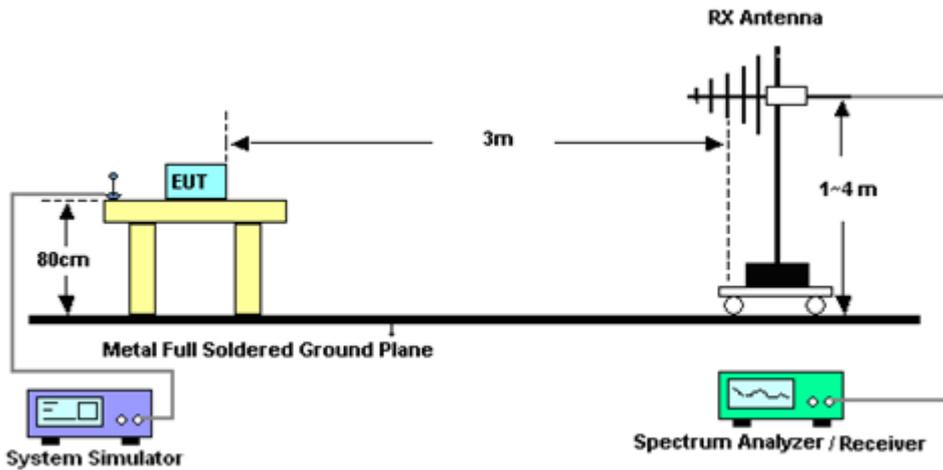
See list of measuring instruments of this test report.

4.2 Test Setup

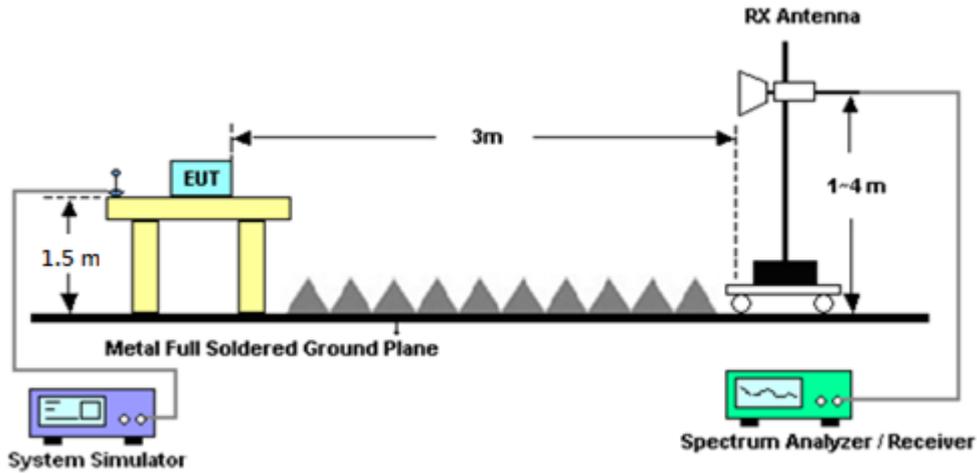
For radiated emissions below 30MHz



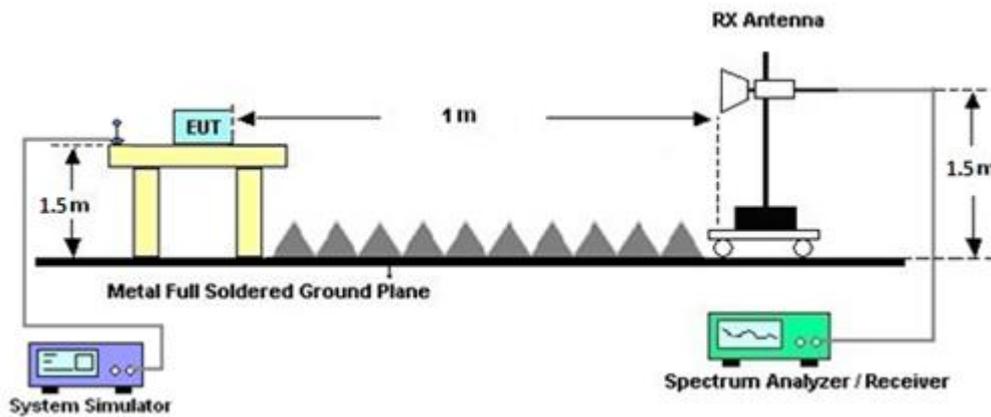
For radiated emissions from 30MHz to 1GHz



For radiated emissions from 1GHz to 18GHz



For radiated emissions above 18GHz



4.3 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.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. 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 -40dBm / MHz .
The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
8. 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
Hygrometer	Testo	608-H1	45141354	N/A	Jul. 26, 2023	Aug. 16, 2023~ Sep. 06, 2023	Jul. 25, 2024	Conducted (TH01-CA)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101089	10Hz-40GHz	May 22, 2023	Aug. 16, 2023~ Sep. 06, 2023	May 21, 2024	Conducted (TH01-CA)
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	168942	N/A	Jun. 01, 2023	Aug. 16, 2023~ Aug. 17, 2023	May 31, 2024	Conducted (TH01-CA)
Radio Communication Test Station	Anritsu	MT8821C	6262257889	N/A	Aug. 22, 2023	Sep. 05, 2023~ Sep. 06, 2023	Aug 21, 2024	Conducted (TH01-CA)
Signal Generator	Rohde & Schwarz	SMF100A	105544	9kHz~44GHz	May 23, 2023	Sep. 07, 2023~ Oct. 04, 2023	May 22, 2024	Radiation (03CH01-CA)
Loop Antenna	R&S	HFH2-Z2E	100840	9kHz~30MHz	Jun. 29, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jun. 28, 2024	Radiation (03CH01-CA)
Bilog Antenna	TESEQ	6111D	50391	30MHz~1GHz	Aug. 16, 2023	Sep. 07, 2023~ Oct. 04, 2023	Aug. 15, 2024	Radiation (03CH01-CA)
Bilog Antenna	TESEQ	6111D	54683	30MHz~1GHz	Nov. 01, 2022	Sep. 07, 2023~ Oct. 04, 2023	Oct. 31, 2023	Radiation (03CH01-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02115	1GHz~18GHz	Aug. 09, 2023	Sep. 07, 2023~ Oct. 04, 2023	Aug. 08, 2024	Radiation (03CH01-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02113	1GHz~18GHz	Jun. 07, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jun. 26, 2024	Radiation (03CH01-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00842	18GHz~40GHz	Jul. 17, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jul. 16, 2024	Radiation (03CH01-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00841	18GHz~40GHz	Aug. 22, 2023	Sep. 07, 2023~ Oct. 04, 2023	Aug. 11, 2024	Radiation (03CH01-CA)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN8	6.75GHz High Pass Filter	Jul. 05, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jul. 04, 2024	Radiation (03CH01-CA)
Preamplifier	EMEC	EMC18G40G	060725	18GHz~40GHz	May 04, 2023	Sep. 07, 2023~ Oct. 04, 2023	May 03, 2024	Radiation (03CH01-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	EC1900251	1GHz~18GHz	Jun. 27, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jun. 26, 2024	Radiation (03CH01-CA)
Spectrum Analyzer	Keysight	N9010B	MY63440343	10Hz - 44GHz	Jan. 15, 2023	Sep. 07, 2023~ Oct. 04, 2023	Jan. 14, 2024	Radiation (03CH01-CA)
EMI Test Receiver	R&S	ESU26	100049	20Hz~26.5GHz	May 02, 2023	Sep. 07, 2023~ Oct. 04, 2023	May 01, 2024	Radiation (03CH01-CA)
RF Cable	HUBER+SUHNER	SUCOFLEX 102	8015932/2, 8015762/2, 804938/2	N/A	Mar. 06, 2023	Sep. 07, 2023~ Oct. 04, 2023	Mar. 05, 2024	Radiation (03CH01-CA)
Hygrometer	TESTO	608-H1	45142559	N/A	Aug. 30, 2023	Sep. 07, 2023~ Oct. 04, 2023	Aug. 29, 2024	Radiation (03CH01-CA)
Controller	Chaintek	EM-1000	060881	Control Turn Table & Antenna Mast	N/A	Sep. 07, 2023~ Oct. 04, 2023	N/A	Radiation (03CH01-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Sep. 07, 2023~ Oct. 04, 2023	N/A	Radiation (03CH01-CA)
Test Software	Audix E3	E6.2009-8-24d	PK-002093	N/A	N/A	Sep. 07, 2023~ Oct. 04, 2023	N/A	Radiation (03CH01-CA)



6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.40 dB
---	---------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.60 dB
---	---------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.30 dB
---	---------



Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & EIRP)

LTE Band 48 Maximum Average Power [dBm] (GT - LC = 10.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.13	24.66	21.54	35.09	3.2285
20	1	49		20.26	24.99	21.65		
20	1	99		20.08	24.78	21.44		
20	50	0		20.10	23.70	21.50		
20	50	24		20.16	23.73	21.54		
20	50	50		20.16	23.71	21.47		
20	100	0		20.15	23.71	21.50		
20	1	0	16-QAM	20.30	23.90	21.59	34.15	2.6002
20	1	49		20.48	24.05	21.75		
20	1	99		20.26	23.93	21.51		
20	50	0		20.10	22.71	21.52		
20	50	24		20.21	22.75	21.55		
20	50	50		20.19	22.73	21.48		
20	100	0		20.17	22.70	21.51		
20	1	0	64-QAM	20.30	23.08	21.72	33.18	2.0797
20	1	49		20.44	23.07	21.83		
20	1	99		20.41	22.96	21.68		
20	50	0		20.08	21.69	21.50		
20	50	24		20.15	21.76	21.56		
20	50	50		20.10	21.72	21.46		
20	100	0		20.13	21.70	21.50		
20	1	0	256-QAM	19.19	19.80	19.49	29.99	0.9977
20	1	49		19.23	19.89	19.58		
20	1	99		19.30	19.85	19.60		
20	50	0		19.08	19.74	19.51		
20	50	24		19.18	19.75	19.55		
20	50	50		19.10	19.77	19.43		
20	100	0		19.15	19.72	19.53		
Limit	EIRP < 47dBm/10MHz			Result			Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = 10.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	24.06	24.70	24.50	35.02	3.1769
15	1	37		24.29	24.92	24.47		
15	1	74		24.10	24.67	24.39		
15	36	0		23.11	23.72	23.50		
15	36	20		23.16	23.73	23.55		
15	36	39		23.19	23.71	23.46		
15	75	0		23.17	23.70	23.48		
15	1	0	16-QAM	23.23	23.85	23.64	34.06	2.5468
15	1	37		23.27	23.96	23.65		
15	1	74		23.21	23.85	23.54		
15	36	0		22.11	22.68	22.52		
15	36	20		22.20	22.74	22.56		
15	36	39		22.18	22.71	22.46		
15	75	0		22.18	22.72	22.53		
15	1	0	64-QAM	22.36	22.99	22.73	33.21	2.0941
15	1	37		22.38	23.11	22.82		
15	1	74		22.30	22.90	22.71		
15	36	0		21.10	21.71	21.49		
15	36	20		21.17	21.71	21.53		
15	36	39		21.16	21.74	21.47		
15	75	0		21.20	21.70	21.53		
15	1	0	256-QAM	19.17	19.70	19.57	30.08	1.0186
15	1	37		19.18	19.98	19.61		
15	1	74		19.23	19.73	19.55		
15	36	0		19.03	19.73	19.51		
15	36	20		19.15	19.74	19.54		
15	36	39		19.14	19.74	19.45		
15	75	0		19.15	19.76	19.54		
Limit	EIRP < 47dBm/10MHz			Result			Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = 10.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	24.32	24.99	24.60	35.09	3.2285
10	1	25		24.38	24.97	24.64		
10	1	49		24.33	24.96	24.60		
10	25	0		23.21	23.82	23.63		
10	25	12		23.31	23.89	23.67		
10	25	25		23.31	23.83	23.64		
10	50	0		23.30	23.88	23.60		
10	1	0	16-QAM	23.42	24.09	23.81	34.25	2.6607
10	1	25		23.50	24.15	23.86		
10	1	49		23.56	24.11	23.83		
10	25	0		22.22	22.91	22.60		
10	25	12		22.34	22.96	22.70		
10	25	25		22.32	22.86	22.66		
10	50	0		22.30	22.85	22.65		
10	1	0	64-QAM	22.56	23.16	22.89	33.32	2.1478
10	1	25		22.63	23.22	22.95		
10	1	49		22.59	23.11	22.91		
10	25	0		21.21	21.90	21.62		
10	25	12		21.32	21.93	21.69		
10	25	25		21.29	21.88	21.65		
10	50	0		21.26	21.85	21.65		
10	1	0	256-QAM	19.26	19.90	19.73	30.13	1.0304
10	1	25		19.39	20.03	19.78		
10	1	49		19.30	19.93	19.75		
10	25	0		19.17	19.84	19.65		
10	25	12		19.29	19.91	19.71		
10	25	25		19.24	19.87	19.69		
10	50	0		19.28	19.86	19.63		
Limit	EIRP < 47dBm/10MHz			Result			Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48 Maximum Average Power [dBm] (GT - LC = 10.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	24.21	24.83	24.58	35.07	3.2137
5	1	12		24.39	24.97	24.68		
5	1	24		24.25	24.89	24.61		
5	12	0		23.19	23.85	23.60		
5	12	7		23.32	23.90	23.65		
5	12	13		23.28	23.82	23.63		
5	25	0		23.28	23.85	23.59		
5	1	0	16-QAM	23.42	24.08	23.80	34.27	2.6730
5	1	12		23.54	24.17	23.89		
5	1	24		23.47	24.09	23.75		
5	12	0		22.21	22.92	22.61		
5	12	7		22.30	22.90	22.71		
5	12	13		22.33	22.89	22.65		
5	25	0		22.29	22.92	22.65		
5	1	0	64-QAM	22.42	23.13	22.90	33.38	2.1777
5	1	12		22.66	23.28	22.98		
5	1	24		22.55	23.14	22.86		
5	12	0		21.19	21.84	21.60		
5	12	7		21.33	21.91	21.66		
5	12	13		21.31	21.84	21.67		
5	25	0		21.29	21.87	21.64		
5	1	0	256-QAM	19.35	19.93	19.74	30.15	1.0351
5	1	12		19.38	20.05	19.74		
5	1	24		19.45	19.93	19.70		
5	12	0		19.17	19.83	19.67		
5	12	7		19.31	19.89	19.70		
5	12	13		19.22	19.90	19.61		
5	25	0		19.27	19.87	19.65		
Limit	EIRP < 47dBm/10MHz			Result			Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 10.1 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	17.55	23.12	22.95	33.22	2.0989
20+20	1	0	1	99		8.62	7.07	7.05		
20+20	1	99	1	0		8.45	7.05	6.85		
20+20	100	0	100	0	16-QAM	17.53	22.13	21.93	32.23	1.6711
20+20	1	0	1	99		8.56	7.02	6.98		
20+20	1	99	1	0		8.44	7.02	6.88		
20+20	100	0	100	0	64-QAM	17.57	22.16	21.95	32.26	1.6827
20+20	1	0	1	99		8.68	7.10	7.06		
20+20	1	99	1	0		8.51	7.12	6.96		
20+20	100	0	100	0	256-QAM	17.53	20.13	19.97	30.23	1.0544
20+20	1	0	1	99		8.61	7.00	7.01		
20+20	1	99	1	0		8.48	7.10	6.85		
20+15	100	0	75	0	QPSK	17.63	23.18	22.98	33.28	2.1281
20+15	1	0	1	74		7.66	8.20	8.11		
20+15	1	74	1	0		7.50	8.07	7.90		
20+15	100	0	75	0	16-QAM	17.62	22.17	22.00	32.27	1.6866
20+15	1	0	1	74		7.68	8.13	7.98		
20+15	1	74	1	0		7.51	8.11	7.87		
20+15	100	0	75	0	64-QAM	17.60	22.20	21.98	32.30	1.6982
20+15	1	0	1	74		7.73	8.20	8.08		
20+15	1	74	1	0		7.57	8.22	7.95		
20+15	100	0	75	0	256-QAM	17.63	20.21	20.00	30.31	1.0740
20+15	1	0	1	74		7.71	8.10	8.11		
20+15	1	74	1	0		7.56	8.14	7.91		
15+20	75	0	100	0	QPSK	17.62	23.18	23.00	33.28	2.1281
15+20	1	0	1	99		7.65	8.10	8.01		
15+20	1	74	1	0		7.52	8.09	7.92		
15+20	75	0	100	0	16-QAM	17.59	22.20	22.01	32.30	1.6982
15+20	1	0	1	99		7.64	8.12	8.06		
15+20	1	74	1	0		7.53	8.11	7.90		
15+20	75	0	100	0	64-QAM	17.58	22.19	22.05	32.29	1.6943
15+20	1	0	1	99		7.71	8.15	8.03		
15+20	1	74	1	0		7.65	8.22	8.06		
15+20	75	0	100	0	256-QAM	17.63	20.18	20.04	30.28	1.0666
15+20	1	0	1	99		7.66	8.05	8.00		
15+20	1	74	1	0		7.61	8.15	7.98		
Limit	EIRP < 47dBm/10MHz				Result				Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 10.1 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	18.63	23.21	23.01	33.31	2.1429
20+10	1	0	1	49		7.66	7.15	7.08		
20+10	1	99	1	0		7.52	7.12	6.89		
20+10	100	0	50	0	16-QAM	18.60	22.24	21.99	32.34	1.7140
20+10	1	0	1	49		7.60	7.09	6.99		
20+10	1	99	1	0		7.50	7.04	6.92		
20+10	100	0	50	0	64-QAM	18.61	22.22	21.97	32.32	1.7061
20+10	1	0	1	49		7.66	7.20	7.10		
20+10	1	99	1	0		7.61	7.17	7.00		
20+10	100	0	50	0	256-QAM	18.63	20.22	19.96	30.32	1.0765
20+10	1	0	1	49		7.62	7.10	7.04		
20+10	1	99	1	0		7.47	7.14	6.95		
10+20	50	0	100	0	QPSK	17.57	23.20	22.99	33.30	2.1380
10+20	1	0	1	99		7.64	8.11	8.09		
10+20	1	49	1	0		7.57	8.15	8.01		
10+20	50	0	100	0	16-QAM	17.60	22.20	22.01	32.30	1.6982
10+20	1	0	1	99		7.60	8.06	7.98		
10+20	1	49	1	0		7.55	8.16	8.00		
10+20	50	0	100	0	64-QAM	17.56	22.25	22.02	32.35	1.7179
10+20	1	0	1	99		7.68	8.15	8.08		
10+20	1	49	1	0		7.65	8.25	8.09		
10+20	50	0	100	0	256-QAM	17.57	20.20	20.00	30.30	1.0715
10+20	1	0	1	99		7.60	8.10	8.10		
10+20	1	49	1	0		7.58	8.20	8.03		
20+5	100	0	25	0	QPSK	20.65	23.24	22.99	33.34	2.1577
20+5	1	0	1	24		8.62	8.20	8.00		
20+5	1	99	1	0		8.56	8.16	7.95		
20+5	100	0	25	0	16-QAM	20.61	22.27	22.01	32.37	1.7258
20+5	1	0	1	24		8.58	8.16	7.96		
20+5	1	99	1	0		8.52	8.13	7.90		
20+5	100	0	25	0	64-QAM	20.65	22.26	21.98	32.36	1.7219
20+5	1	0	1	24		8.68	8.20	8.09		
20+5	1	99	1	0		8.66	8.26	8.02		
20+5	100	0	25	0	256-QAM	20.61	20.24	19.98	30.71	1.1776
20+5	1	0	1	24		8.61	8.18	7.98		
20+5	1	99	1	0		8.60	8.22	8.04		
Limit	EIRP < 47dBm/10MHz					Result			Pass	

Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 10.1 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	22.56	23.20	22.96	33.30	2.1380
5+20	1	0	1	99		8.54	8.15	7.96		
5+20	1	24	1	0		7.50	8.24	8.10		
5+20	25	0	100	0	16-QAM	21.57	22.23	21.99	32.33	1.7100
5+20	1	0	1	99		8.54	8.05	7.92		
5+20	1	24	1	0		8.62	8.20	8.07		
5+20	25	0	100	0	64-QAM	21.57	22.20	22.01	32.30	1.6982
5+20	1	0	1	99		8.66	8.17	8.05		
5+20	1	24	1	0		8.68	8.24	8.16		
5+20	25	0	100	0	256-QAM	19.57	20.22	20.01	30.32	1.0765
5+20	1	0	1	99		8.60	8.09	8.00		
5+20	1	24	1	0		8.64	8.20	7.95		
Limit	EIRP < 47dBm/10MHz					Result			Pass	

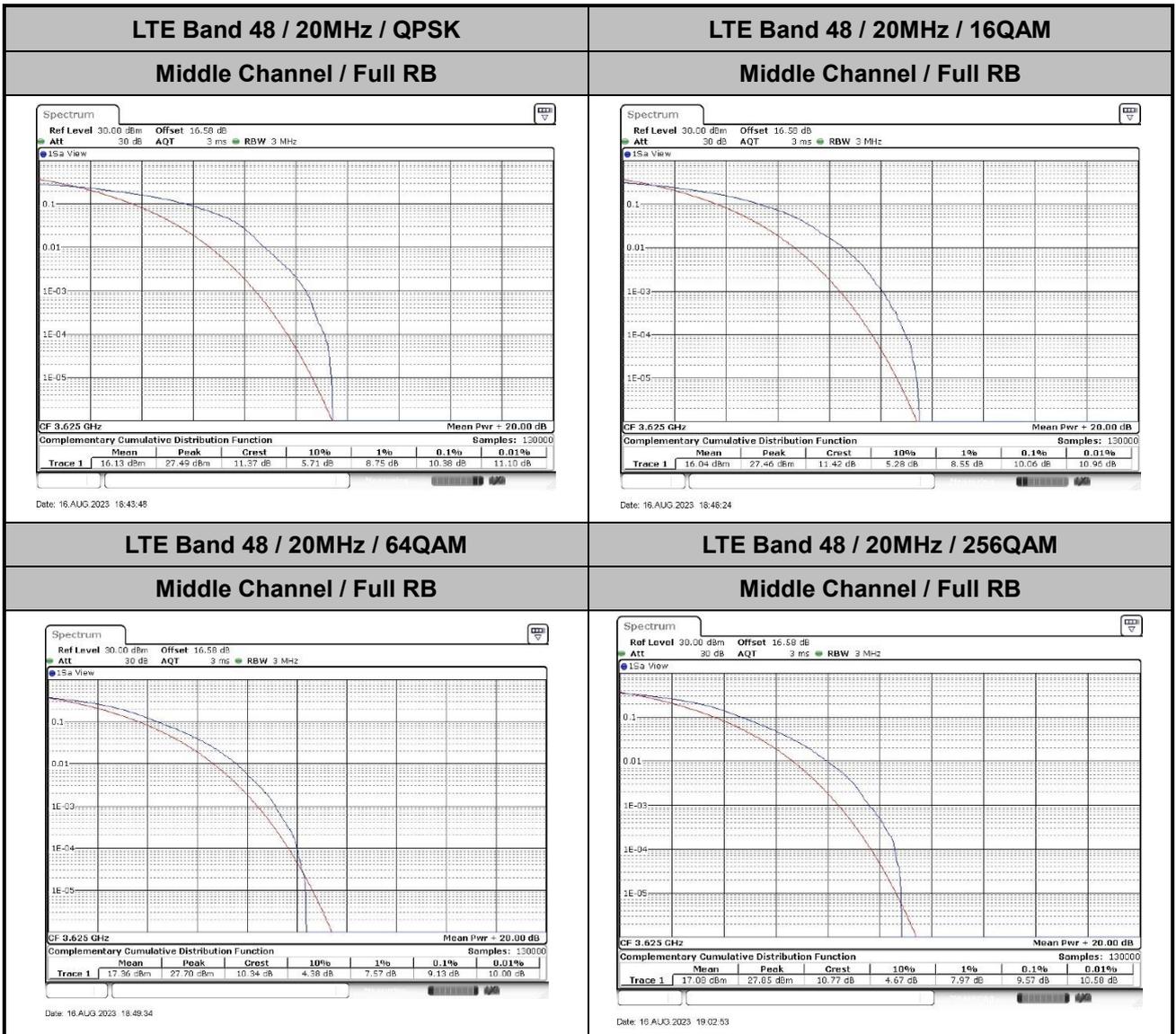
Total EIRP power is less than EIRP PSD limit 37 dBm/MHz.



LTE Band 48

Peak-to-Average Ratio

Mode	LTE Band 48 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	DATA_PAR_M_Full_QPSK	DATA_PAR_M_Full_16QAM	DATA_PAR_M_Full_64QAM	DATA_PAR_M_Full_256QAM	PASS





26dB Bandwidth

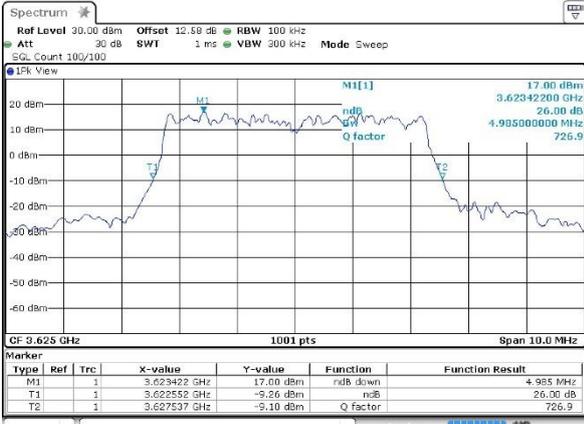
Mode	LTE Band 48 : 26dB BW(MHz)											
BW				5MHz		10MHz		15MHz		20MHz		
Mod.				QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Middle CH				4.985	5.035	9.81	9.69	14.685	14.206	18.981	18.861	

Mode	LTE Band 48 : 26dB BW(MHz)											
BW				5MHz		10MHz		15MHz		20MHz		
Mod.				64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	
Middle CH				4.965	4.975	9.95	9.63	14.416	14.565	18.701	18.981	



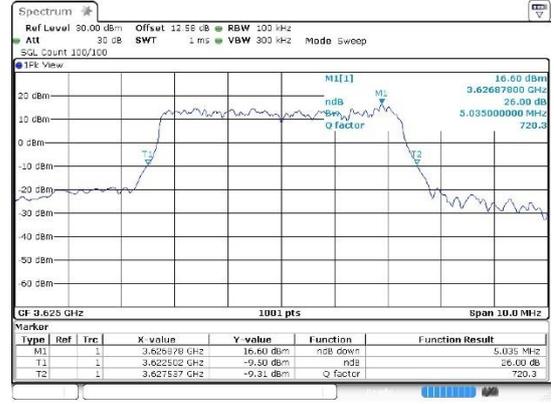
LTE Band 48

Middle Channel / 5MHz / QPSK



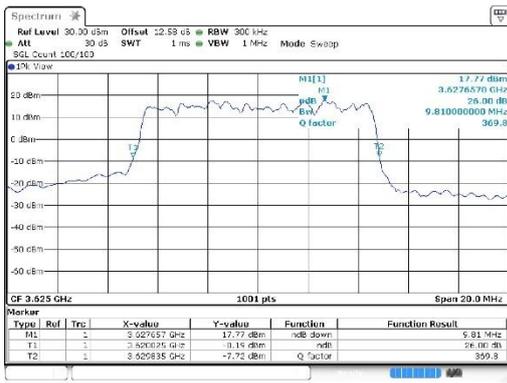
Date: 17 AUG 2023 01:53:39

Middle Channel / 5MHz / 16QAM



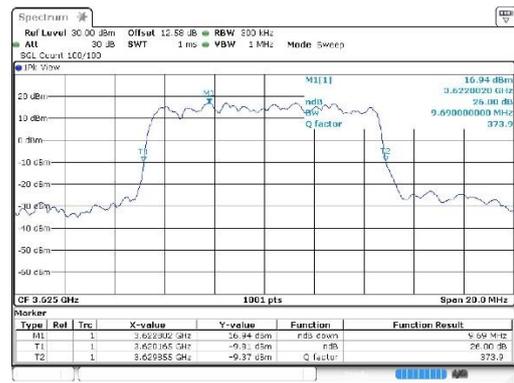
Date: 17 AUG 2023 01:54:28

Middle Channel / 10MHz / QPSK



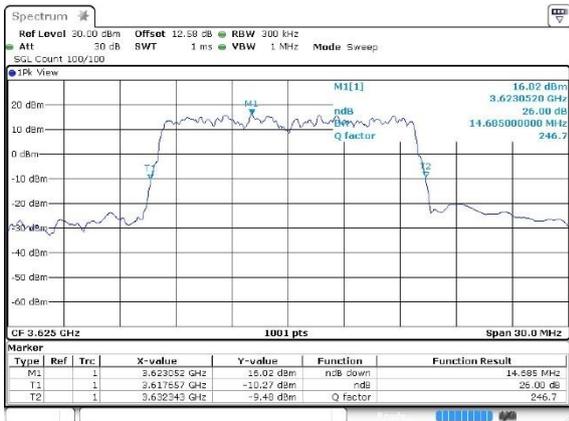
Date: 17 AUG 2023 02:08:21

Middle Channel / 10MHz / 16QAM



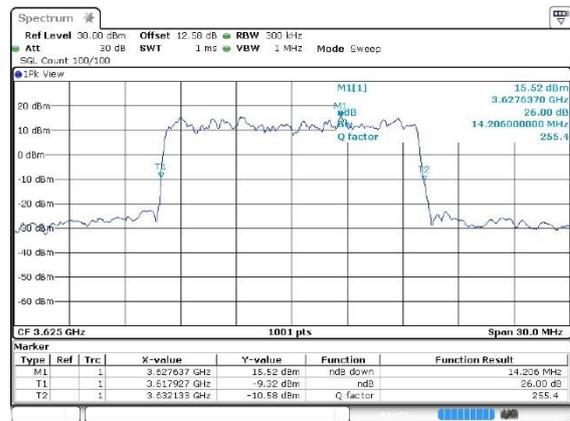
Date: 17 AUG 2023 02:08:11

Middle Channel / 15MHz / QPSK



Date: 17 AUG 2023 02:06:36

Middle Channel / 15MHz / 16QAM

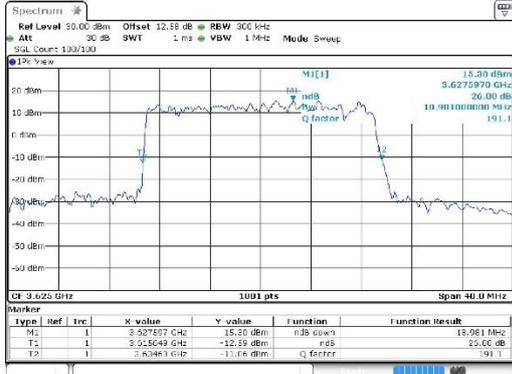


Date: 17 AUG 2023 02:11:14



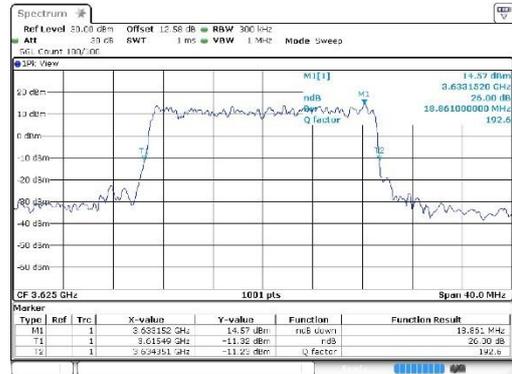
LTE Band 48

Middle Channel / 20MHz / QPSK



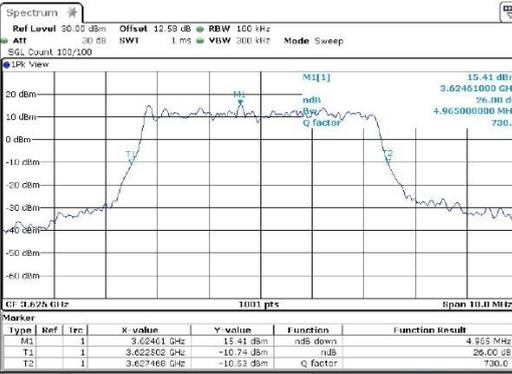
Date: 17 AUG 2023 02:18:43

Middle Channel / 20MHz / 16QAM



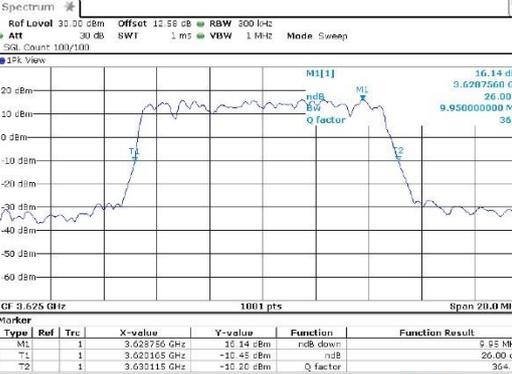
Date: 17 AUG 2023 02:17:44

Middle Channel / 5MHz / 64QAM



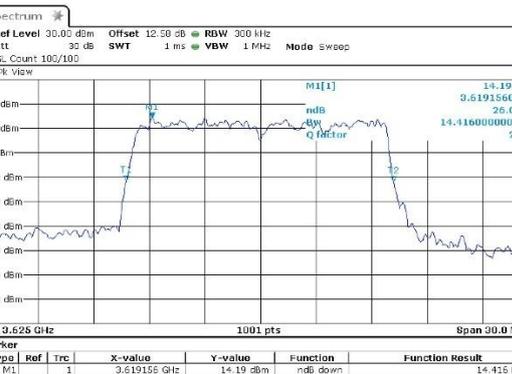
Date: 17 AUG 2023 01:50:27

Middle Channel / 10MHz / 64QAM



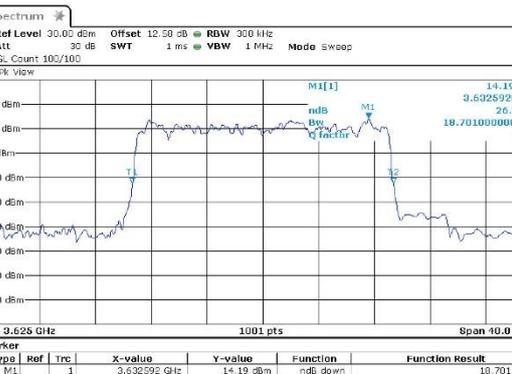
Date: 17 AUG 2023 02:03:27

Middle Channel / 15MHz / 64QAM



Date: 17 AUG 2023 02:11:55

Middle Channel / 20MHz / 64QAM

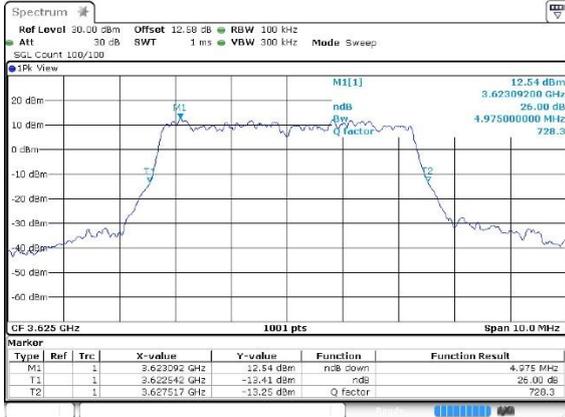


Date: 17 AUG 2023 02:17:03



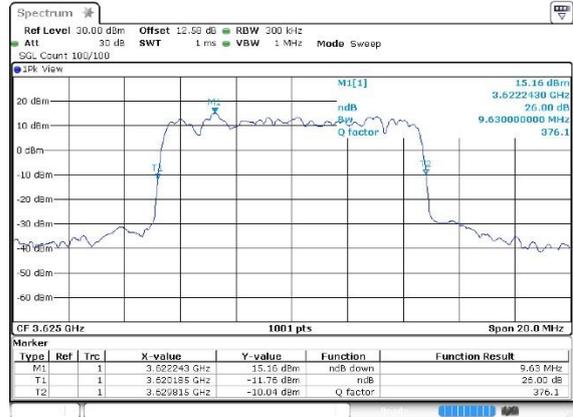
LTE Band 48

Middle Channel / 5MHz / 256QAM



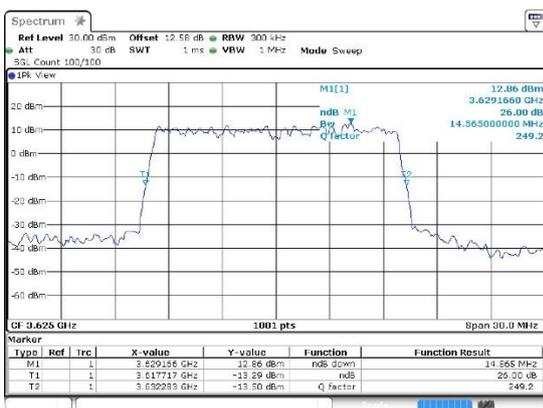
Date: 17.AUG.2023 01:57:42

Middle Channel / 10MHz / 256QAM



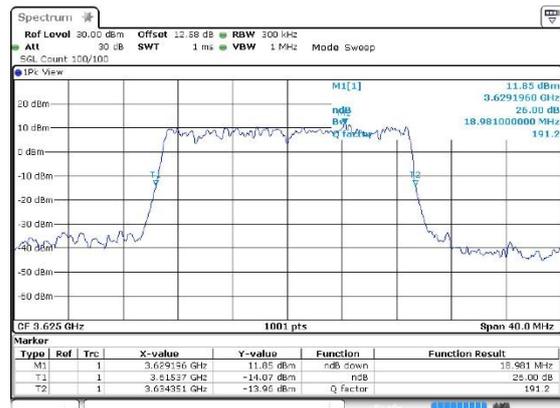
Date: 17.AUG.2023 02:02:45

Middle Channel / 15MHz / 256QAM



Date: 17.AUG.2023 02:13:20

Middle Channel / 20MHz / 256QAM



Date: 17.AUG.2023 02:15:27



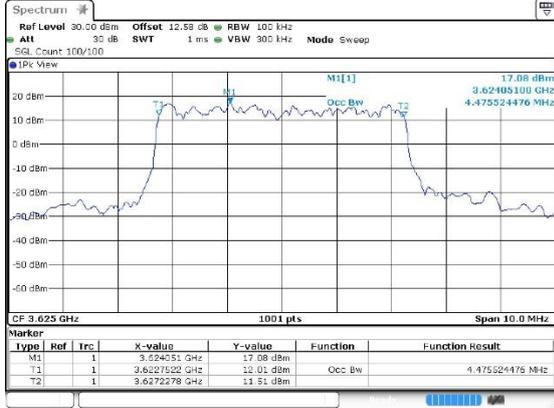
Occupied Bandwidth

Mode	LTE Band 48 : 99%OBW(MHz)											
BW				5MHz		10MHz		15MHz		20MHz		
Mod.				QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Middle CH				4.475	4.485	9.0909	9.070	13.396	13.456	17.8621	17.90209	
Mode	LTE Band 48 : 99%OBW(MHz)											
BW				5MHz		10MHz		15MHz		20MHz		
Mod.				64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	
Middle CH				4.515	4.515	9.0109	9.0109	13.426	13.426	17.94205	17.9820	



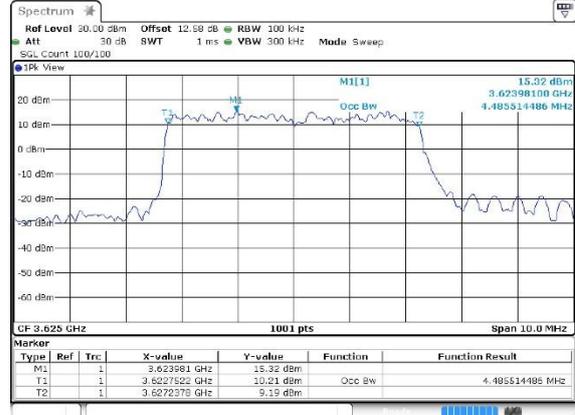
LTE Band 48

Middle Channel / 5MHz / QPSK



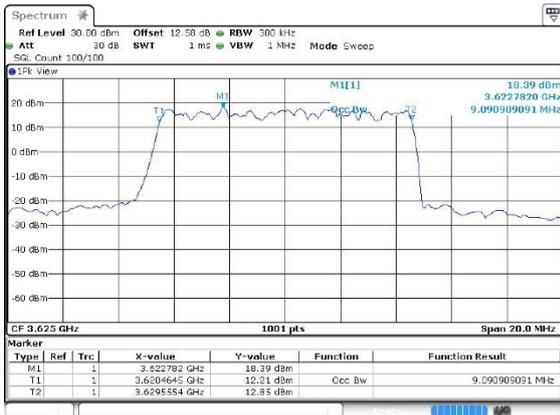
Date: 17.AUG.2023 01:52:05

Middle Channel / 5MHz / 16QAM



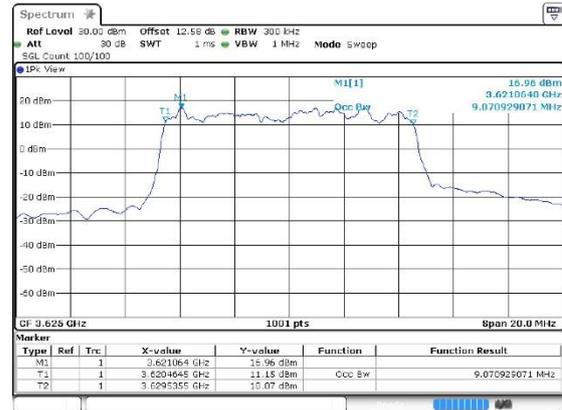
Date: 17.AUG.2023 01:55:05

Middle Channel / 10MHz / QPSK



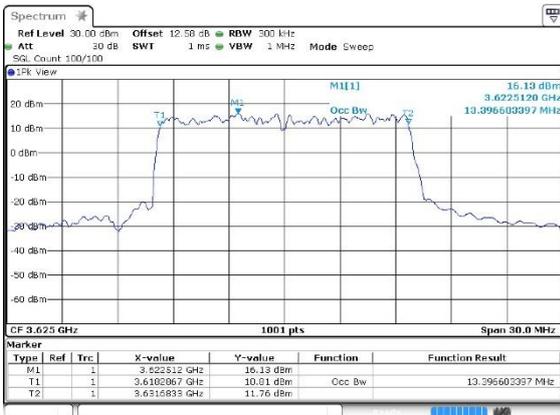
Date: 17.AUG.2023 02:05:54

Middle Channel / 10MHz / 16QAM



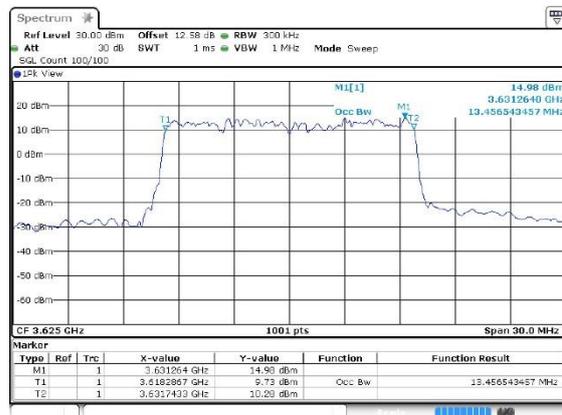
Date: 17.AUG.2023 02:04:35

Middle Channel / 15MHz / QPSK



Date: 17.AUG.2023 02:10:04

Middle Channel / 15MHz / 16QAM

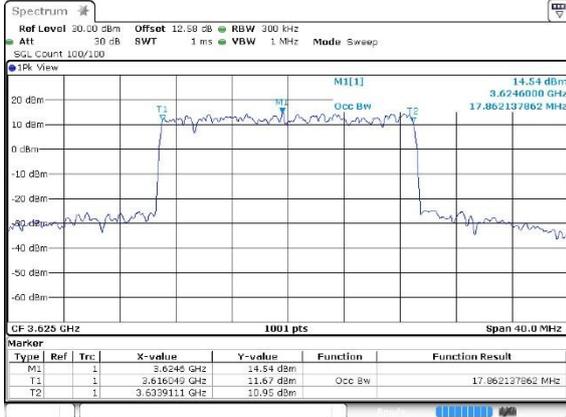


Date: 17.AUG.2023 02:10:45



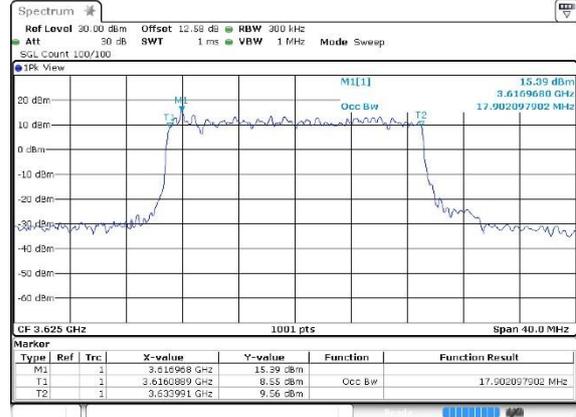
LTE Band 48

Middle Channel / 20MHz / QPSK



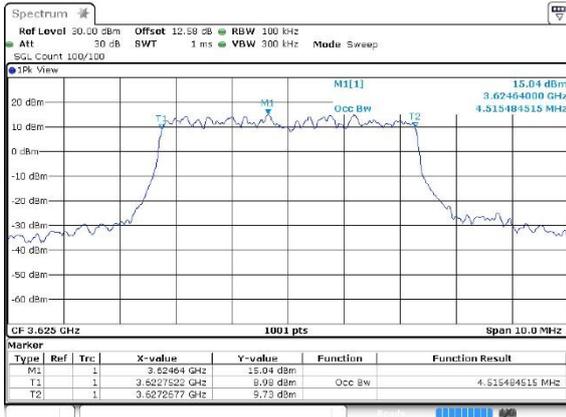
Date: 17.AUG.2023 02:18:13

Middle Channel / 20MHz / 16QAM



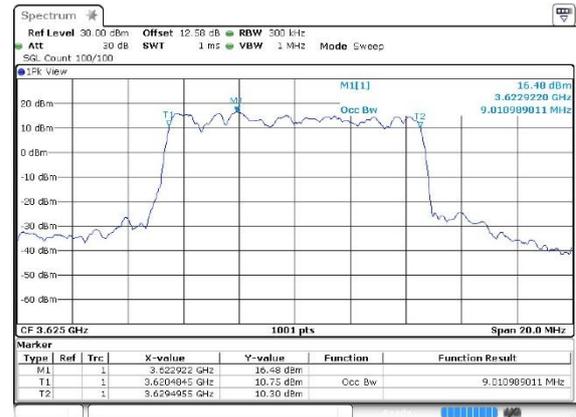
Date: 17.AUG.2023 02:18:34

Middle Channel / 5MHz / 64QAM



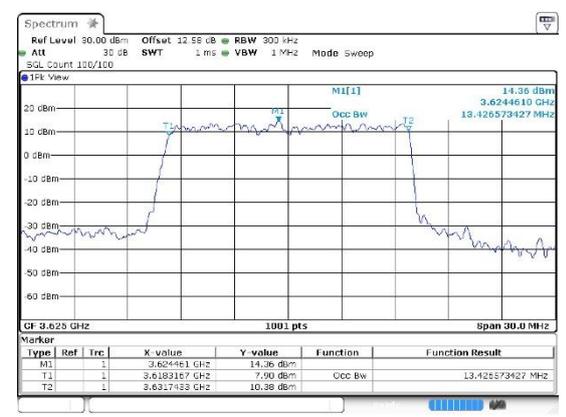
Date: 17.AUG.2023 01:55:57

Middle Channel / 10MHz / 64QAM



Date: 17.AUG.2023 02:03:55

Middle Channel / 15MHz / 64QAM



Date: 17.AUG.2023 02:12:20

Middle Channel / 20MHz / 64QAM

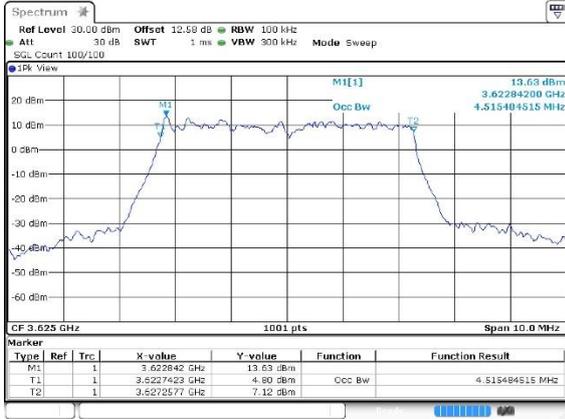


Date: 17.AUG.2023 02:16:35



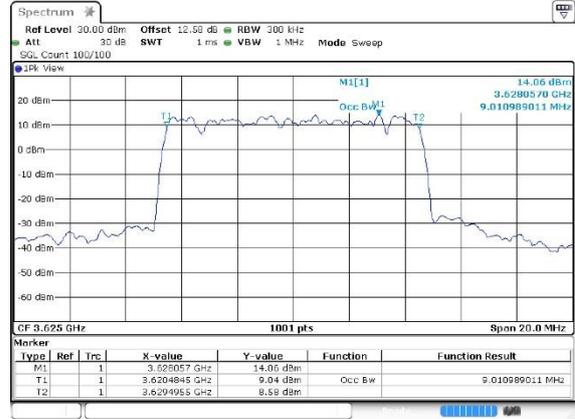
LTE Band 48

Middle Channel / 5MHz / 256QAM



Date: 17.AUG.2023 01:57:12

Middle Channel / 10MHz / 256QAM



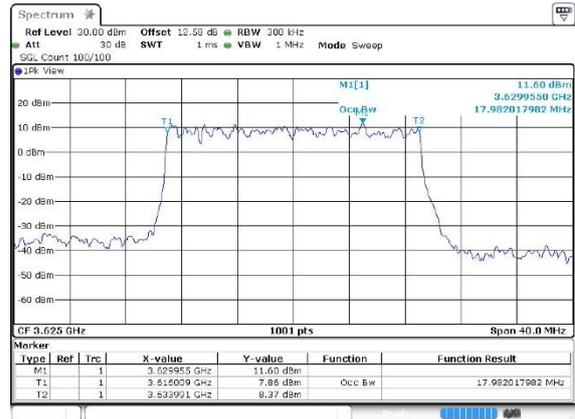
Date: 17.AUG.2023 02:02:02

Middle Channel / 15MHz / 256QAM



Date: 17.AUG.2023 02:12:55

Middle Channel / 20MHz / 256QAM



Date: 17.AUG.2023 02:15:56



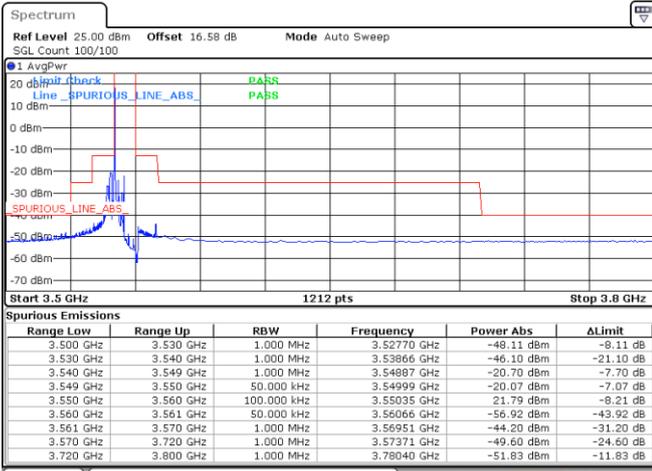
Conducted Band Edge

LTE Band 48 / 5MHz

QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

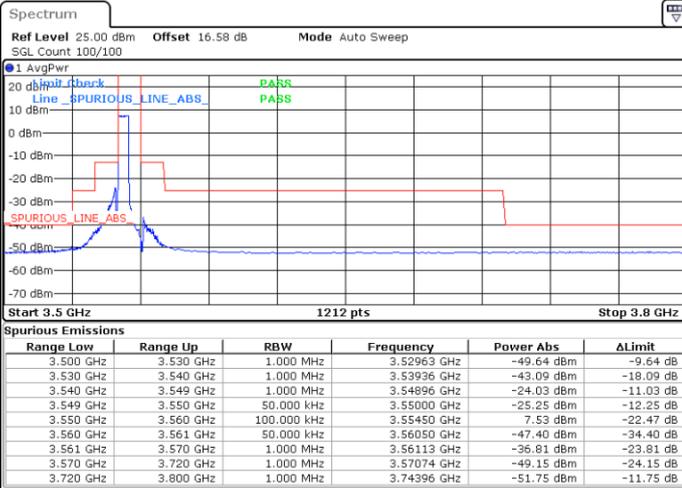


Date: 17 AUG 2023 00:50:40

Date: 17 AUG 2023 00:58:19

Lowest Channel / FullIRB

N/A



Date: 17 AUG 2023 00:39:29

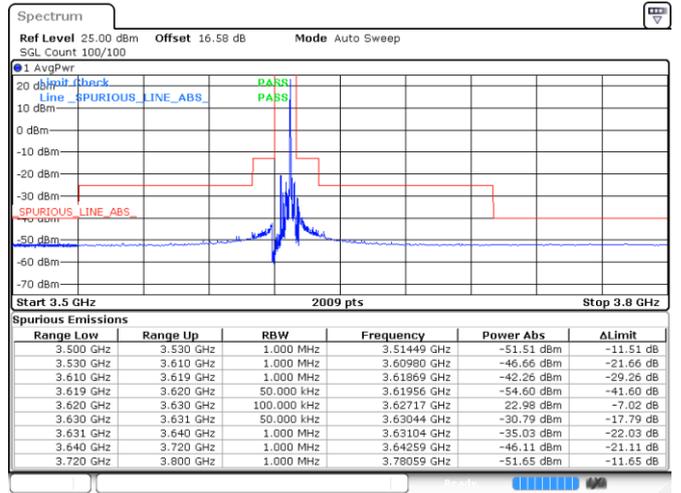
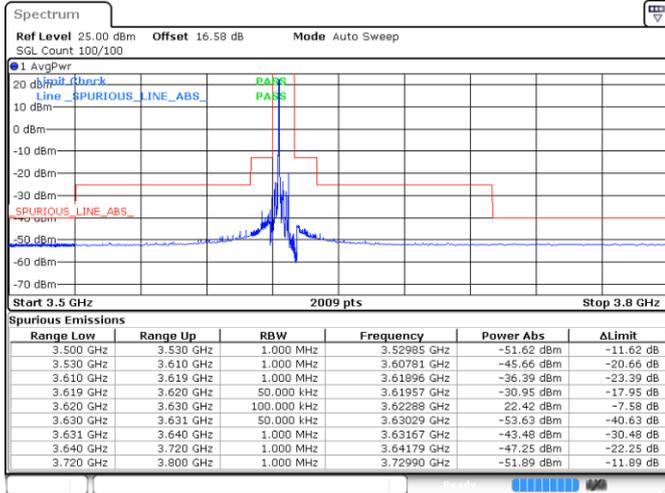


LTE Band 48 / 5MHz

QPSK

Middle Channel / 1RB0

Middle Channel / 1RBmax

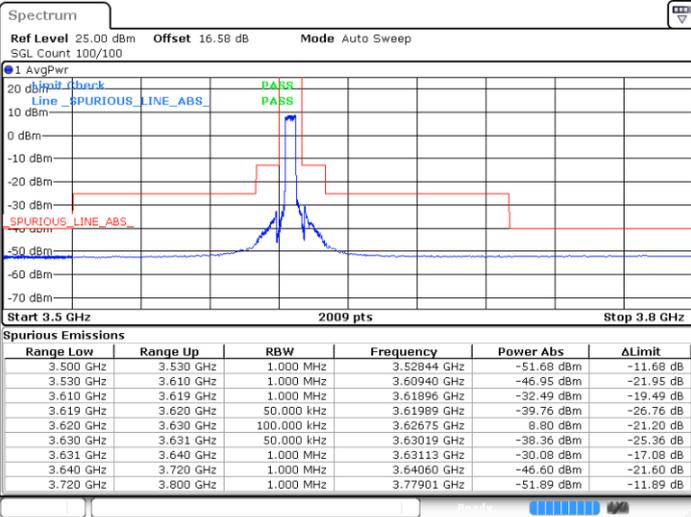


Date: 17.AUG.2023 01:01:05

Date: 17.AUG.2023 01:08:06

Middle Channel / FullIRB

N/A



Date: 17.AUG.2023 01:09:00

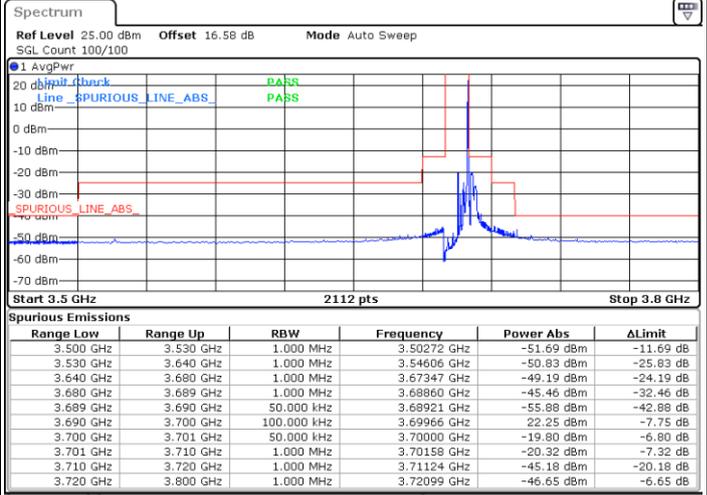
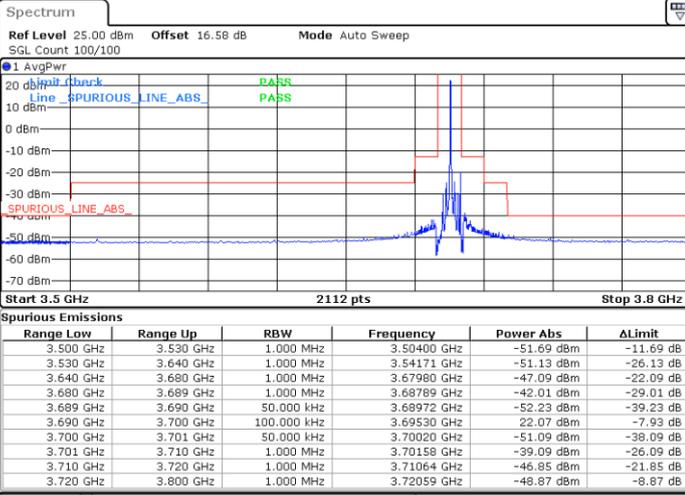


LTE Band 48 / 5MHz

QPSK

Highest Channel / 1RB0

Highest Channel / 1RBmax

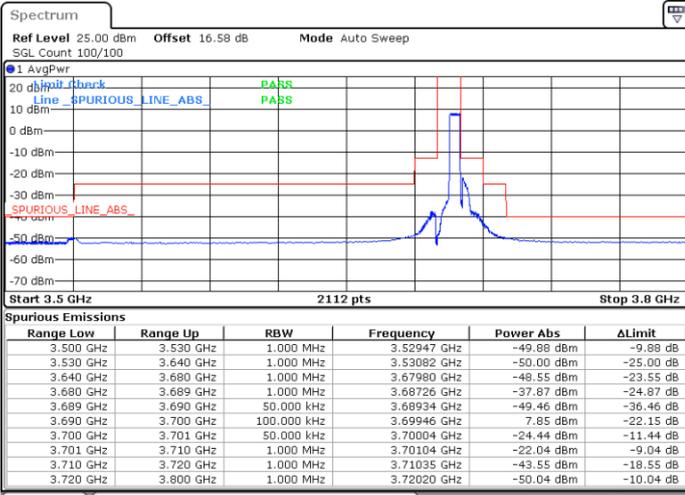


Date: 17.AUG.2023 01:24:43

Date: 17.AUG.2023 01:28:13

Highest Channel / FullRB

N/A



Date: 17.AUG.2023 01:13:59

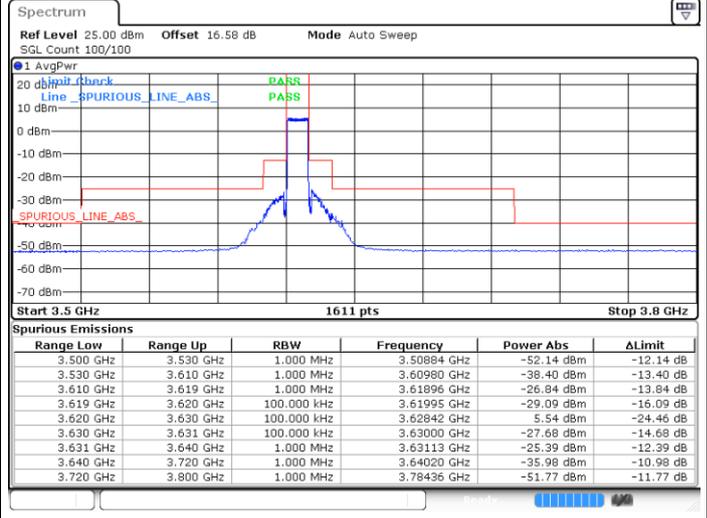
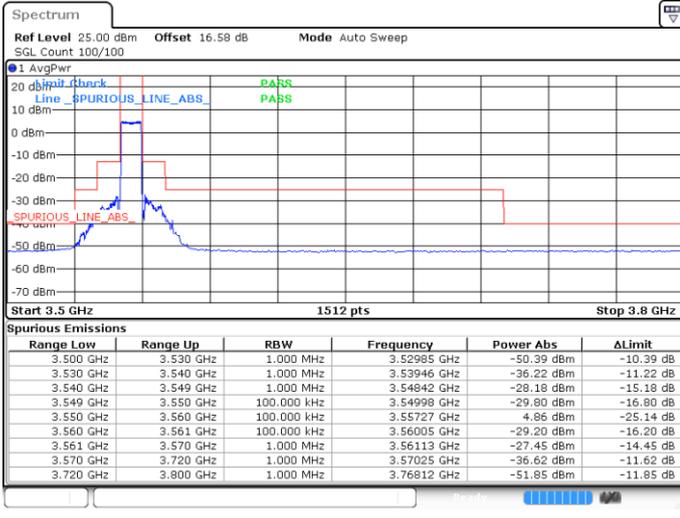


LTE Band 48 / 10MHz

QPSK

Lowest Channel / FullIRB

Middle Channel / FullIRB

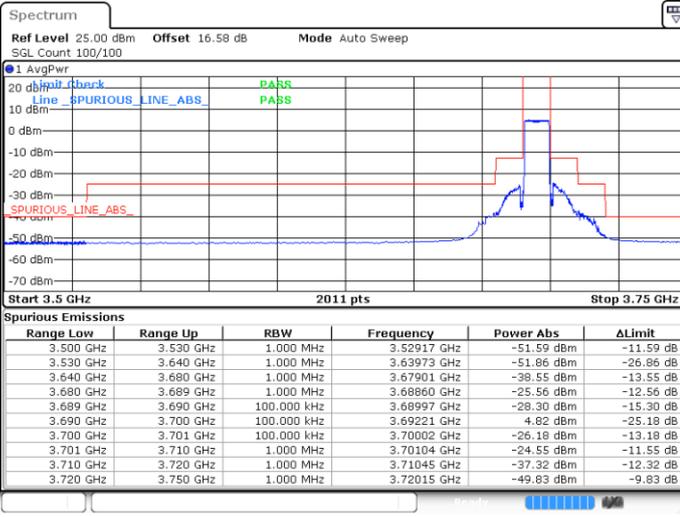


Date: 17.AUG.2023 00:04:34

Date: 17.AUG.2023 00:16:23

Highest Channel / FullIRB

N/A



Date: 17.AUG.2023 00:38:14

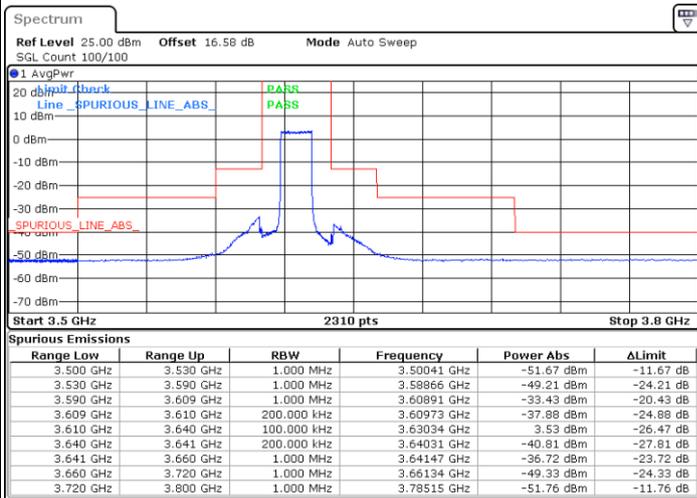
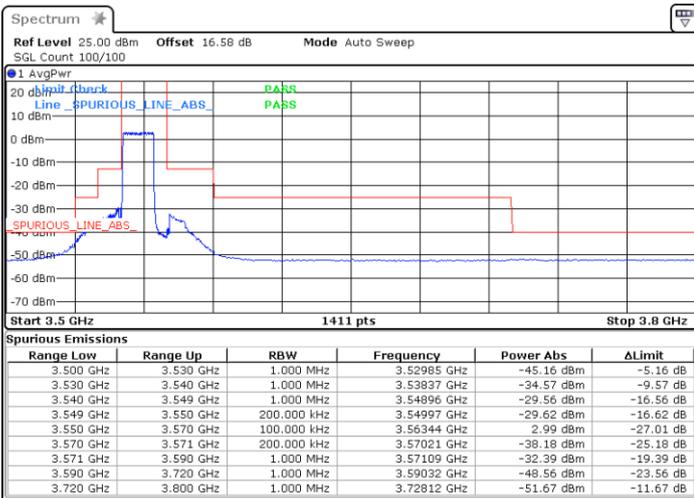


LTE Band 48 / 15MHz

QPSK

Lowest Channel / FullIRB

Middle Channel / FullIRB

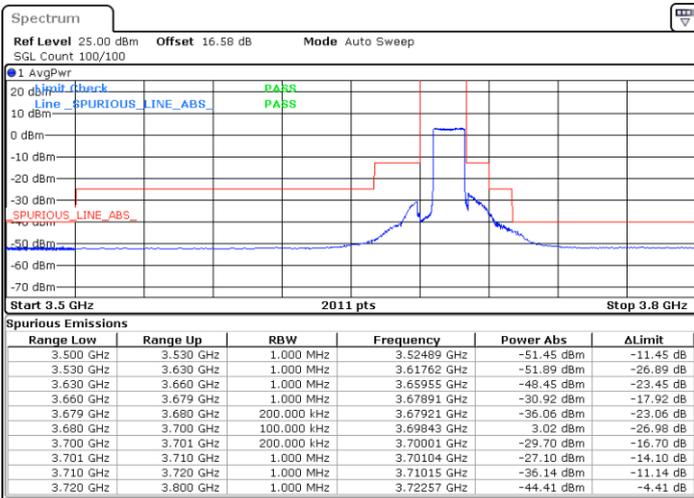


Date: 16 AUG 2023 23:46:45

Date: 16 AUG 2023 23:55:03

Highest Channel / FullIRB

N/A



Date: 16 AUG 2023 23:56:23

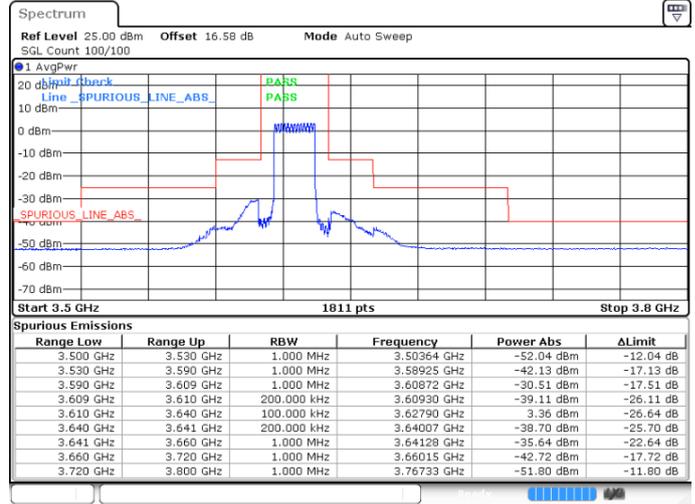
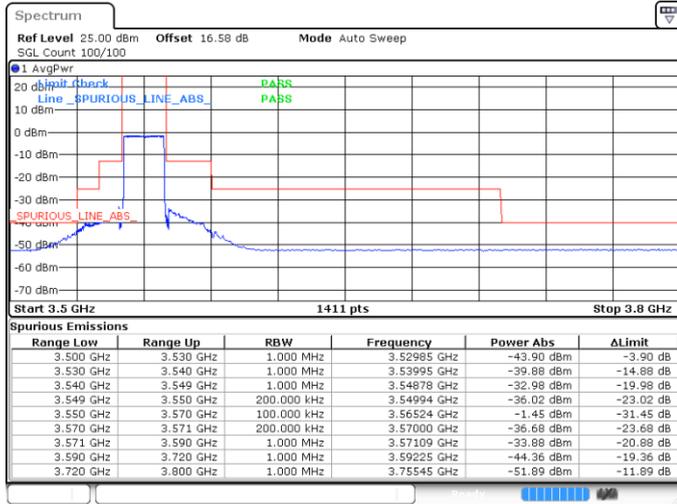


LTE Band 48 / 20MHz

QPSK

Lowest Channel / FullIRB

Middle Channel / FullIRB

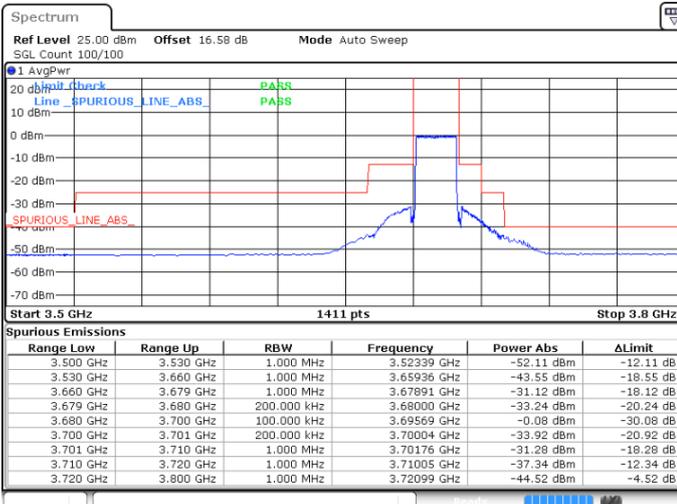


Date: 16.AUG.2023 23:20:40

Date: 16.AUG.2023 23:35:56

Highest Channel / FullIRB

N/A



Date: 16.AUG.2023 23:37:42



LTE Band 48 / 5MHz

16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



Date: 17.AUG.2023 00:51:41

Date: 17.AUG.2023 00:57:25

Lowest Channel / FullIRB

N/A



Date: 17.AUG.2023 00:40:19

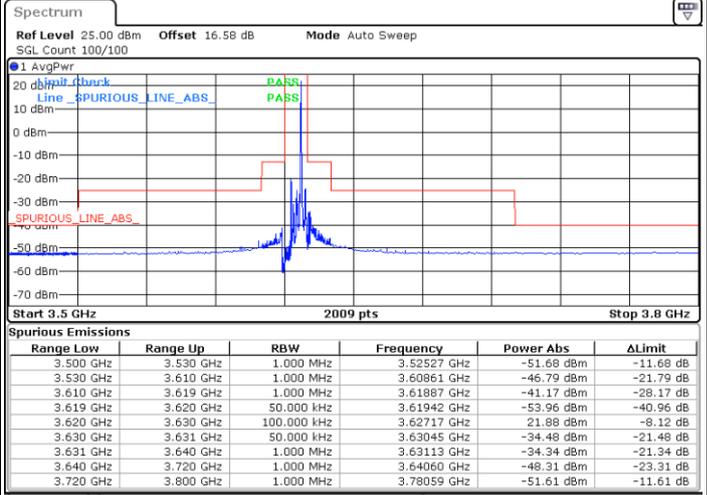
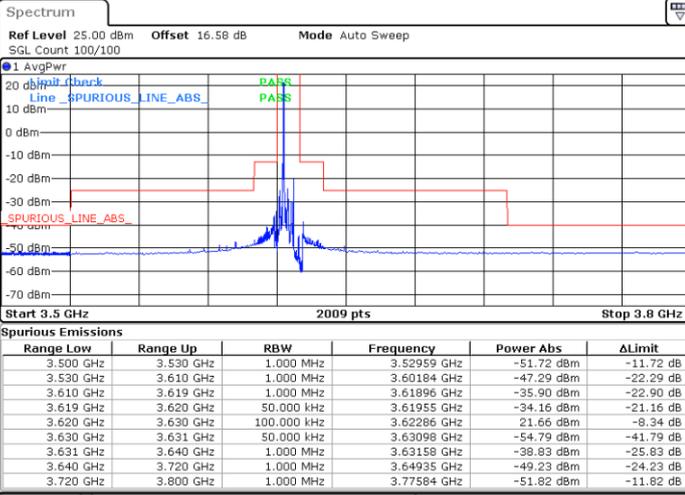


LTE Band 48 / 5MHz

16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

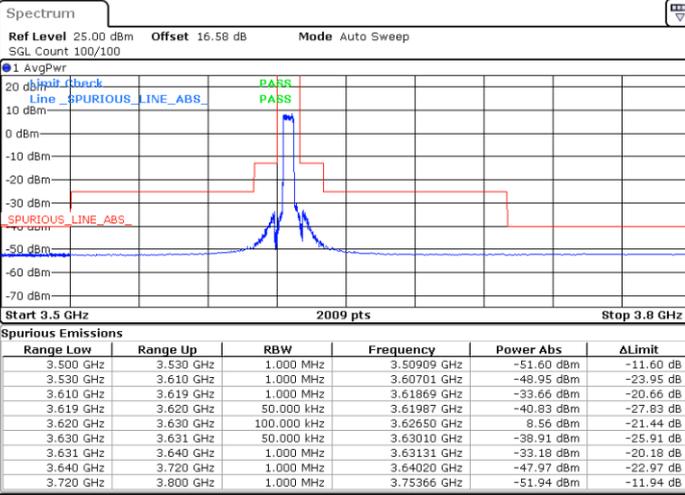


Date: 17.AUG.2023 01:01:56

Date: 17.AUG.2023 01:07:15

Middle Channel / FullIRB

N/A



Date: 17.AUG.2023 01:09:49

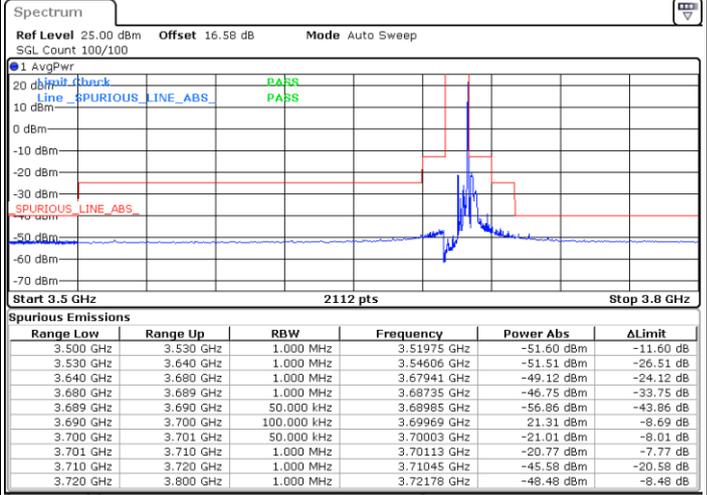
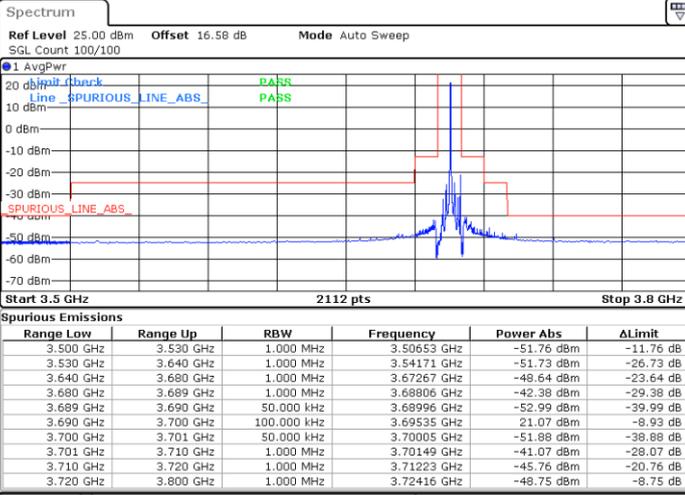


LTE Band 48 / 5MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

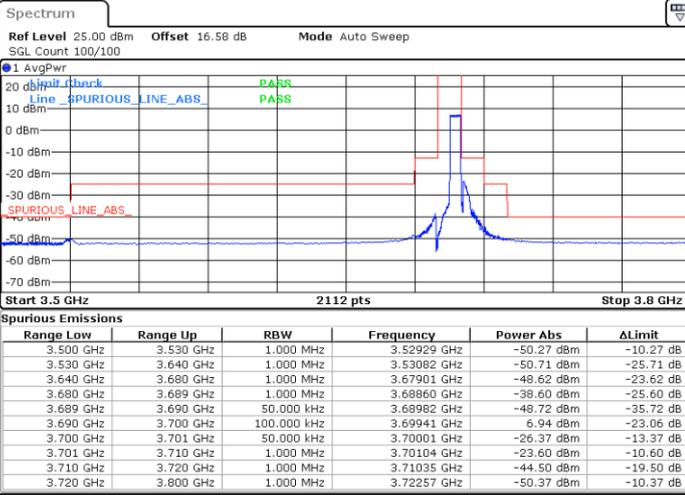


Date: 17.AUG.2023 01:23:51

Date: 17.AUG.2023 01:27:18

Highest Channel / FullIRB

N/A



Date: 17.AUG.2023 01:14:50



LTE Band 48 / 10MHz

16QAM

Lowest Channel / FullIRB

Middle Channel / FullIRB

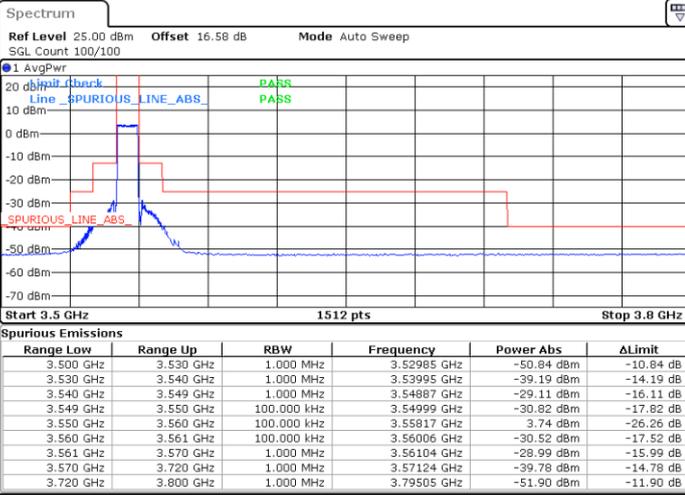


Date: 17.AUG.2023 00:07:59

Date: 17.AUG.2023 00:14:16

Highest Channel / FullIRB

N/A



Date: 17.AUG.2023 00:03:36