FCC RF Test Report

APPLICANT	: Motorola Mobility LLC
EQUIPMENT	: Mobile Cellular Phone
BRAND NAME	: Motorola
MODEL NAME	: XT2401-1
FCC ID	: IHDT56AQ7
STANDARD	: 47 CFR Part 2, Part 27 Subpart Q
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	: Mar. 07, 2024 ~ Mar. 12, 2024

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

This report contains data that were produced under subcontract by Sporton International Inc. (Shenzhen).

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

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG420701E	Rev. 01	Initial issue of report	Mar. 29, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	—	Report Only	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 46.59 dB at 10476.00 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 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2401-1
FCC ID	IHDT56AQ7
IMEI Code	Conducted: 357505570025699/357505570025707 Radiation: 357505570026119/357505570026127
HW Version	DVT2
SW Version	UUV34.71
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	LTE Band 42: 3450 MHz ~ 3550 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 42 : 22.75 dBm LTE CA_42C : 22.81 dBm
Antenna Gain	LTE Band 42 : -0.8 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

LTE Band 42		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	3452.5 ~ 3547.5	0.1535	4M50G7D	0.1164	4M52W7D
10	3455 ~ 3545	0.1552	9M07G7D	0.1143	8M99W7D
15	3457.5 ~ 3542.5	0.1531	13M5G7D	0.1143	13M5W7D
20	3460 ~ 3540	0.1567	18M0G7D	0.1167	17M9W7D

LTE Band 42 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20MHz+20MHz	0.1589	37M5G7D	0.1230	37M7W7D
20MHz+15MHz	0.1585	32M7G7D	0.1211	32M9W7D
15MHz+20MHz	0.1567	32M4G7D	0.1213	32M7W7D
20MHz+10MHz	0.1556	28M0G7D	0.1227	28M2W7D
10MHz+20MHz	0.1549	28M0G7D	0.1208	28M1W7D
20MHz+5MHz	0.1578	23M3G7D	0.1216	23M3W7D
5MHz+20MHz	0.1563	22M9G7D	0.1211	23M1W7D

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

1.7 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-KS	CN1257	314309

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

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

Test data subcontracted: Conducted test case in section 3.4~3.10 of this report.

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-KS	AUDIX	E3	210616

1.9 Applied Standards

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

- 47 CFR Part 2, Part 27 Subpart Q
- ANSI C63.26-2015
- FCC KDB 971168 Power Meas License Digital Systems D01 v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
-

Remark:

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

1.10 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1251
AC Adapter 1(EU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1252
AC Adapter 1(UK)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1253
AC Adapter 1(AU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1255
AC Adapter 1(AR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1256
AC Adapter 1(BR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-1257
AC Adapter 2(US)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1251
AC Adapter 2(EU)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1252
AC Adapter 2(UK)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1253
AC Adapter 2(IN)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1254
AC Adapter 2(AU)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1255
AC Adapter 2(AR)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1256
AC Adapter 2(BR)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1257
AC Adapter 2(Chile)	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-1259
Battery	**Brand Name**	Motorola(ATL)	**Model Name**	QV45
USB Cable	**Brand Name**	Motorola(Saibao)	**Model Name**	SC18D71644
Wireless Earphone	**Brand Name**	Motorola	**Model Name**	XT2441-1
Wireless Charging dock	**Marketing Name**	Turbo Power 50W Wireless Charging Stand	**Model Name**	MW-02

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.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (X Plane)

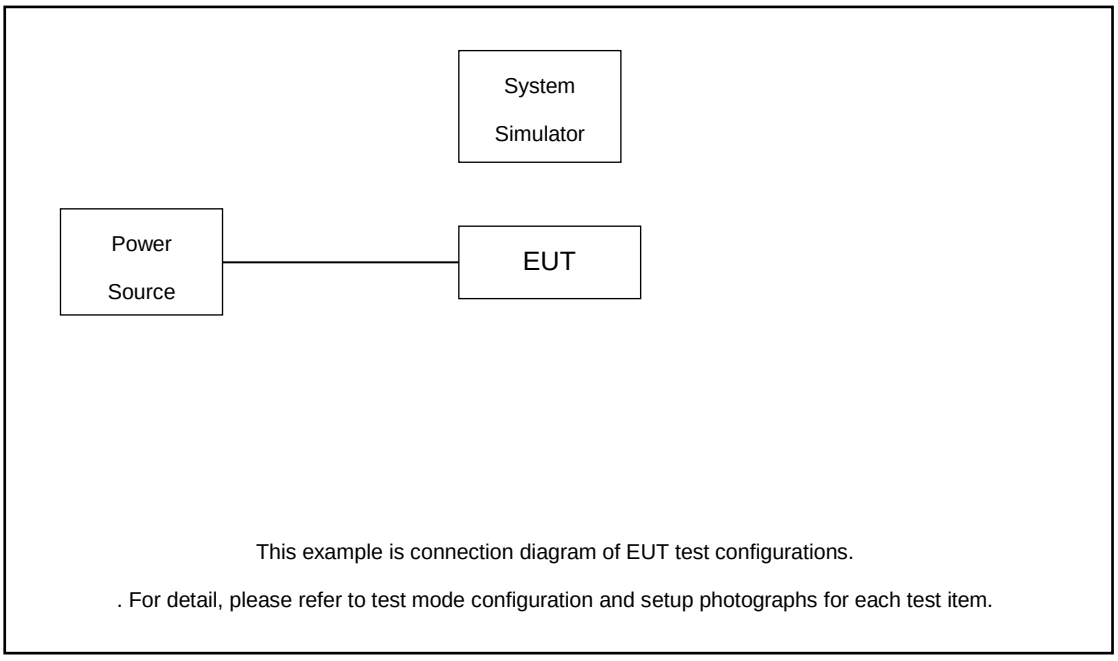
Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
Peak-to-Average Ratio	LTE Band 42	20M	QPSK, 16QAM, 64QAM	Full RB	M
E.I.R.P	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
26dB and 99% Bandwidth	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM	Full RB	M
Conducted Band Edge	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM	1RB, Full RB	L, H
Conducted Spurious Emission	LTE Band 42	5M, 10M, 15M, 20M	QPSK	1RB	L, M, H
Frequency Stability	LTE Band 42	10M	QPSK	1RB	M
Radiated Spurious Emission	LTE Band 42	Worst case from maximum power			M

Note:

1. 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. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power.

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v			v	v	v
26dB and 99% Bandwidth	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v					v		v	
Conducted Band Edge	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v		v		v	v		v
Conducted Spurious Emission	42C_CA	v	v	v	v	v	v	v	-	-	-	v				v			v	v	v
E.I.R.P.	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v			v	v	v
Radiated Spurious Emission	42C_CA	Worst Case																		v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. 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. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power.																				

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

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

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	Base Station	Anritsu	MT8820C	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 5.5 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 5.5 + 10 = 15.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 42 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	42190	42590	42990
	Frequency	3460	3500	3540
15	Channel	42165	42590	43015
	Frequency	3457.5	3500	3542.5
10	Channel	42140	42590	43040
	Frequency	3455	3500	3545
5	Channel	42115	42590	43065
	Frequency	3452.5	3500	3547.5

LTE Band 42C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	42190	42590	42792
		Frequency	3460	3500	3520.2
	SCC	Channel	42388	42788	42990
		Frequency	3479.8	3519.8	3540
20 + 15	PCC	Channel	42190	42590	42844
		Frequency	3460	3500	3525.4
	SCC	Channel	42361	42761	43015
		Frequency	3477.1	3517.1	3542.5
15 + 20	PCC	Channel	42165	42590	42819
		Frequency	3457.5	3500	3522.9
	SCC	Channel	42336	42761	42990
		Frequency	3474.6	3517.1	3540
20 + 10	PCC	Channel	42190	42590	42896
		Frequency	3460	3500	3530.6
	SCC	Channel	42334	42734	43040
		Frequency	3474.4	3514.4	3545
10 + 20	PCC	Channel	42140	42590	42846
		Frequency	3455	3500	3525.6
	SCC	Channel	42284	42734	42990
		Frequency	3469.4	3514.4	3540
20 + 5	PCC	Channel	42190	42590	42948
		Frequency	3460	3500	3535.8
	SCC	Channel	42307	42707	43065
		Frequency	3471.7	3511.7	3547.5
5 + 20	PCC	Channel	42115	42590	42873
		Frequency	3452.5	3500	3528.3
	SCC	Channel	42232	42707	42990
		Frequency	3464.2	3511.7	3540

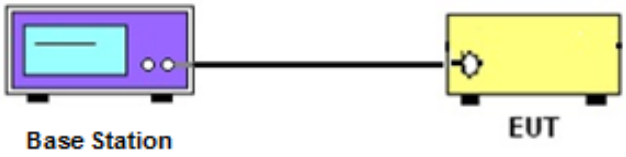
3 Conducted Test Items

3.1 Measuring Instruments

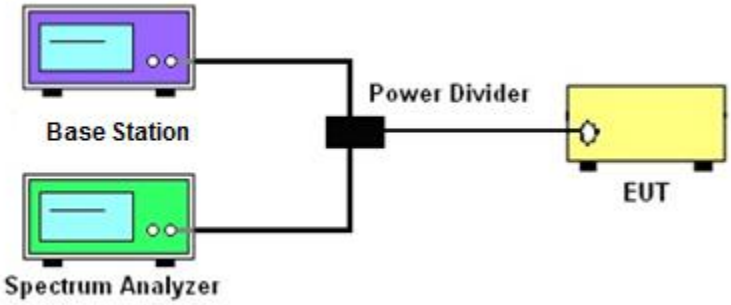
See list of measuring instruments of this test report.

3.2 Test Setup

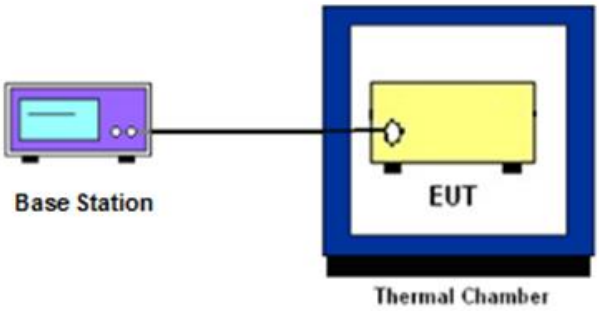
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied / 26dB Bandwidth, Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power Measurement

3.4.1 Description of the Conducted Output Power Measurement

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

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 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.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 EIRP

3.6.1 Description of EIRP Limit

§ 27.50 (k)(3)

Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications

3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. 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

3.7 Occupied Bandwidth

3.7.1 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.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. 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.
5. Set the detection mode to peak, and the trace mode to max hold.
6. 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)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. 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.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.8 Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

§ 27.53 (n)(2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW ≥ 1% EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW ≥ 500KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9 Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges shall not exceed −13 dBm/MHz.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10^{th} harmonic.

3.9.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. Checked that all the results comply with the emission limit line.

3.10 Frequency Stability Measurement

3.10.1 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.

3.10.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. 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.
4. 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.

3.10.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5.
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

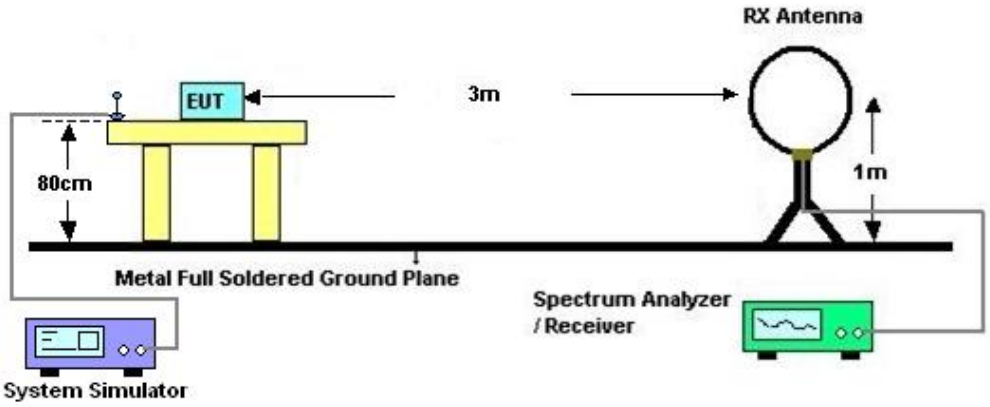
4 Radiated Test Items

4.1 Measuring Instruments

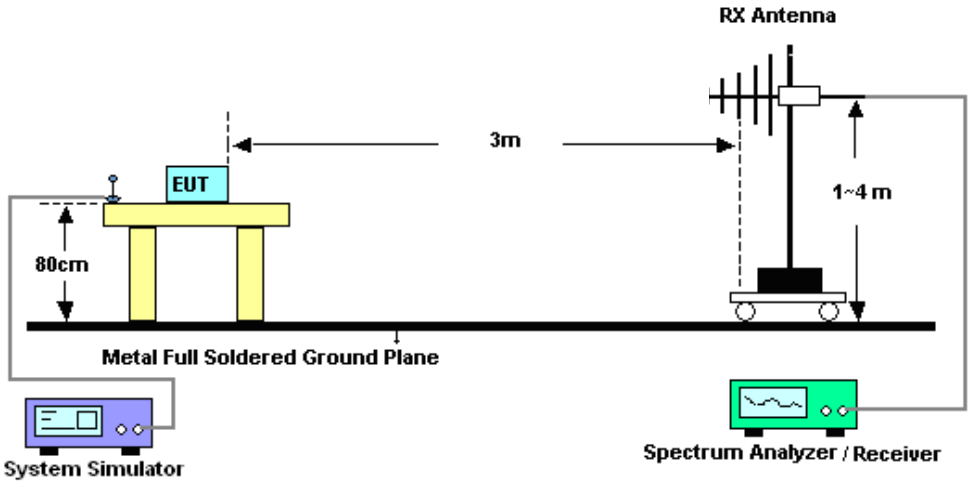
See list of measuring instruments of this test report.

4.2 Test Setup

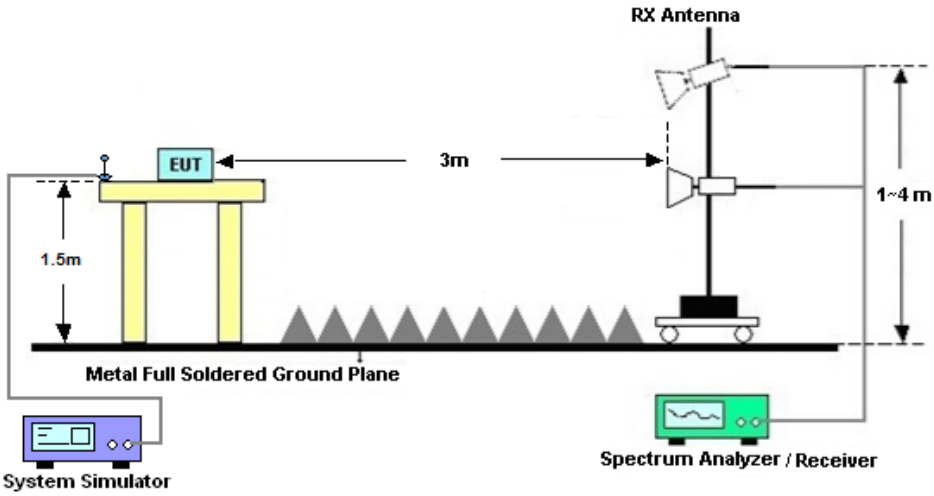
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission Measurement

4.4.1 Description of Radiated Spurious Emission

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 shall not exceed −13 dBm/MHz.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. 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.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 06, 2023	Mar. 07, 2024~ Mar. 08, 2024	Apr. 05, 2024	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Mar. 07, 2024~ Mar. 08, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 25, 2023	Mar. 07, 2024~ Mar. 08, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Mar. 07, 2024~ Mar. 08, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 10, 2023	Mar. 12, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	Mar. 12, 2024	Sep. 10, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Mar. 12, 2024	Apr. 08, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00251694	1GHz~18GHz	Jul. 12, 2023	Mar. 12, 2024	Jul. 11, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2024	Mar. 12, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 06, 2023	Mar. 12, 2024	Jul. 05, 2024	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2024	Mar. 12, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2023	Mar. 12, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 10, 2023	Mar. 12, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 12, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 12, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 12, 2024	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Measurement Uncertainty

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

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Peak to Average Ratio	±1.34 dB
Frequency Stability	±1.3 ppm

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	±3.82 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	±3.56 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	±3.54 dB

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

Appendix A. Test Results of Conducted Test

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

Conducted Output Power(Average power) and EIRP

LTE Band 42:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540	L	M	H
20	QPSK	1	0	22.68	22.75	22.73	0.1542	0.1567	0.1560
20	QPSK	1	49	22.53	22.70	22.53	0.1489	0.1549	0.1489
20	QPSK	1	99	22.63	22.57	22.65	0.1524	0.1503	0.1531
20	QPSK	50	0	21.63	21.74	21.59	0.1211	0.1242	0.1199
20	QPSK	50	24	21.67	21.66	21.60	0.1222	0.1219	0.1202
20	QPSK	50	50	21.58	21.57	21.45	0.1197	0.1194	0.1161
20	QPSK	100	0	21.64	21.73	21.63	0.1213	0.1239	0.1211
20	16QAM	1	0	21.37	21.47	21.44	0.1140	0.1167	0.1159
20	64QAM	1	0	20.60	20.64	20.72	0.0955	0.0964	0.0982
20	256QAM	1	0	17.64	17.57	17.73	0.0483	0.0475	0.0493
Channel				42165	42590	43015	EIRP(W)		
Frequency (MHz)				3457.5	3500	3542.5	L	M	H
15	QPSK	1	0	22.51	22.65	22.52	0.1483	0.1531	0.1486
15	16QAM	1	0	21.26	21.31	21.38	0.1112	0.1125	0.1143
Channel				42140	42590	43040	EIRP(W)		
Frequency (MHz)				3455	3500	3545	L	M	H
10	QPSK	1	0	22.54	22.71	22.57	0.1493	0.1552	0.1503
10	16QAM	1	0	21.27	21.31	21.38	0.1114	0.1125	0.1143
Channel				42115	42590	43065	EIRP(W)		
Frequency (MHz)				3452.5	3500	3547.5	L	M	H
5	QPSK	1	0	22.66	22.61	22.54	0.1535	0.1517	0.1493
5	16QAM	1	0	21.23	21.44	21.46	0.1104	0.1159	0.1164

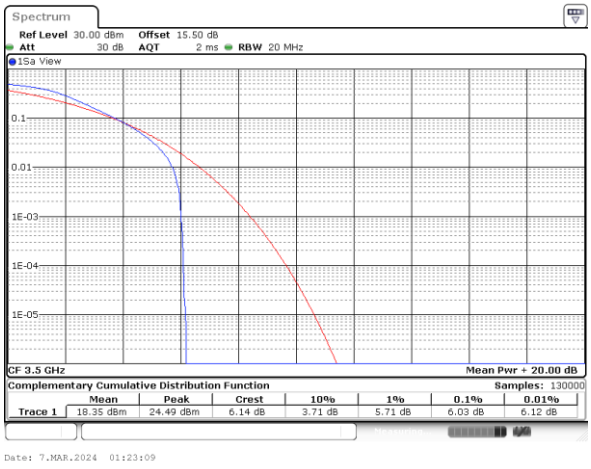
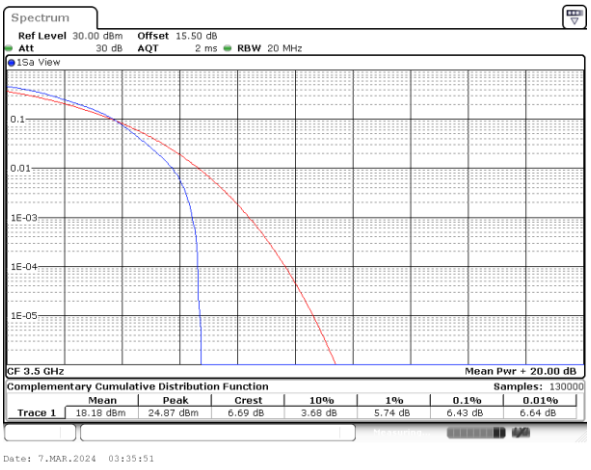
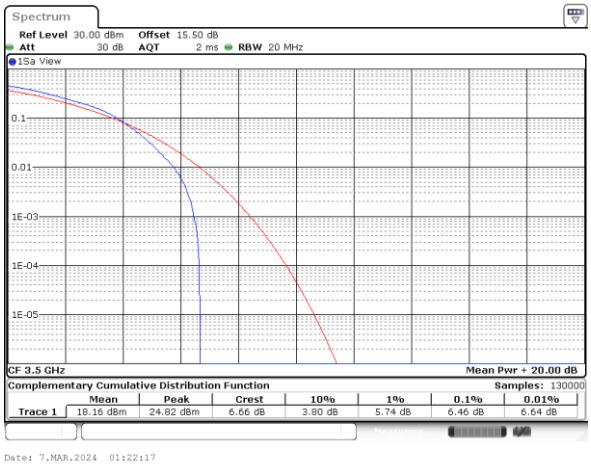
LTE CA_42C:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.76	0.1570
M	QPSK	1	Max	1	0	22.81	0.1589
H	QPSK	1	0	1	99	22.78	0.1578
L	16QAM	1	Max	1	0	21.65	0.1216
M	16QAM	1	Max	1	0	21.70	0.1230
H	16QAM	1	Max	1	0	21.67	0.1222
L	64QAM	1	Max	1	0	20.73	0.0984
M	64QAM	1	Max	1	0	20.78	0.0995
H	64QAM	1	Max	1	0	20.75	0.0989
L	256QAM	1	Max	1	0	17.72	0.0492
M	256QAM	1	Max	1	0	17.77	0.0498
H	256QAM	1	Max	1	0	17.74	0.0494
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.80	0.1585
M	16QAM	1	Max	1	0	21.63	0.1211
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.75	0.1567
M	16QAM	1	Max	1	0	21.64	0.1213
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.72	0.1556
M	16QAM	1	Max	1	0	21.69	0.1227
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.70	0.1549
M	16QAM	1	Max	1	0	21.62	0.1208
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.78	0.1578
M	16QAM	1	Max	1	0	21.65	0.1216
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.74	0.1563
M	16QAM	1	Max	1	0	21.63	0.1211

LTE Band 42

Peak-to-Average Ratio

Mode	LTE Band 42 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	6.03	6.43	6.46	PASS

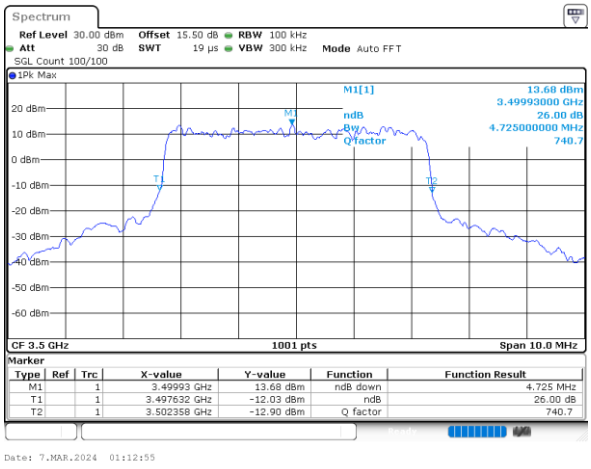
LTE Band 42 / 20MHz / QPSK	LTE Band 42 / 20MHz / 16QAM
Middle Channel / Full RB	**Middle Channel / Full RB**
	
LTE Band 42 / 20MHz / 64QAM	
Middle Channel / Full RB	
	

26dB Bandwidth

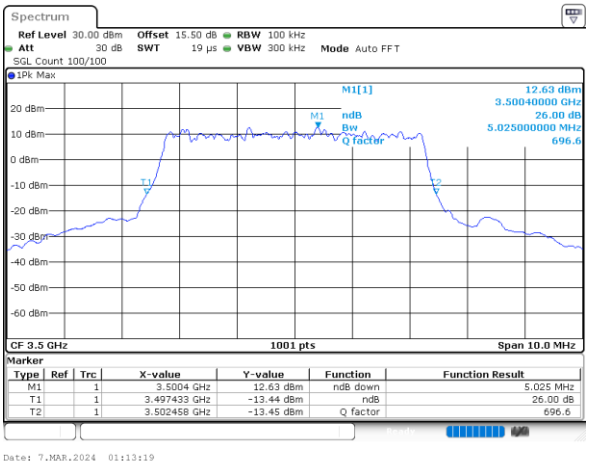
Mode	LTE Band 42 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.73	5.03	9.65	9.69	14.75	14.27	18.70	18.78

LTE Band 42

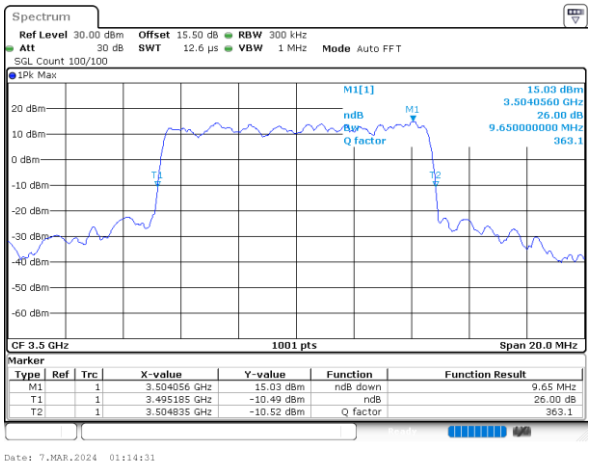
Middle Channel / 5MHz / QPSK



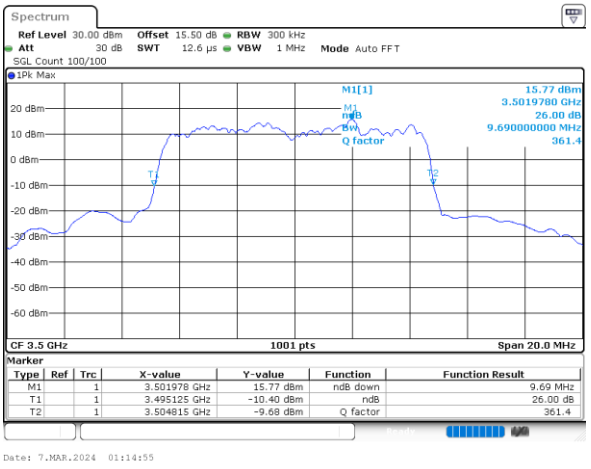
Middle Channel / 5MHz / 16QAM



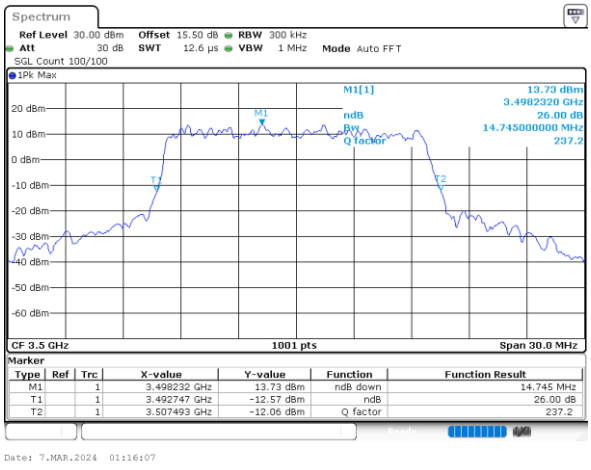
Middle Channel / 10MHz / QPSK



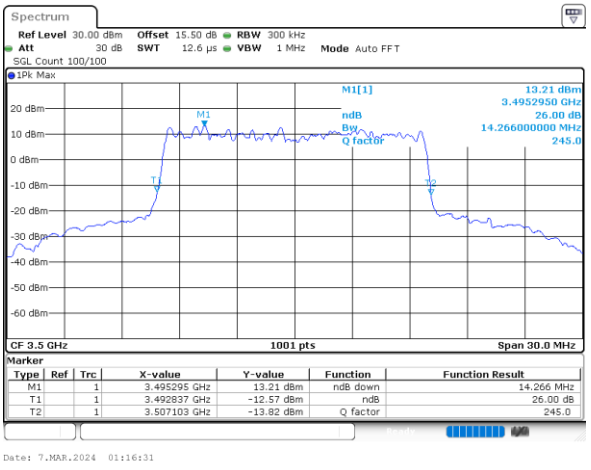
Middle Channel / 10MHz / 16QAM

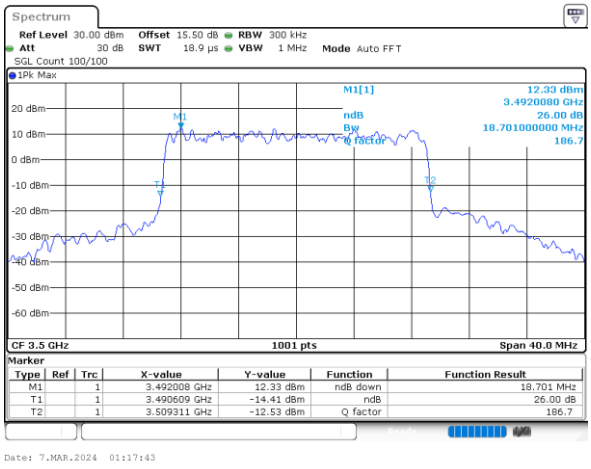
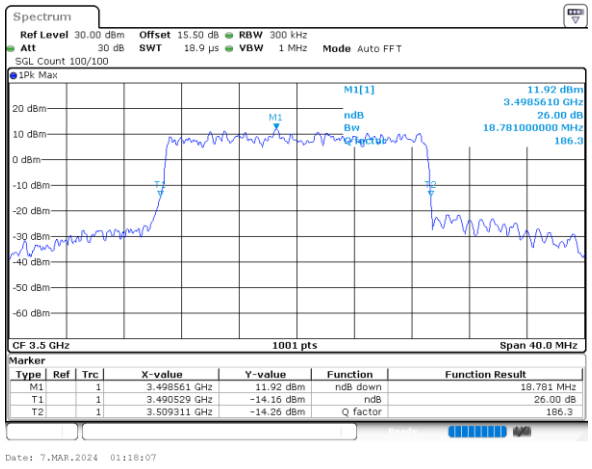


Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM



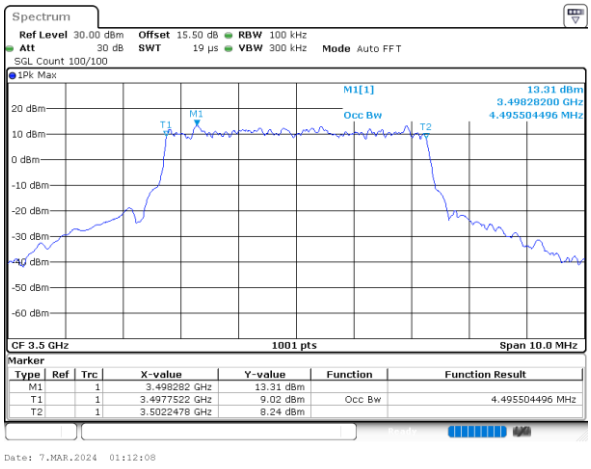
LTE Band 42	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Occupied Bandwidth

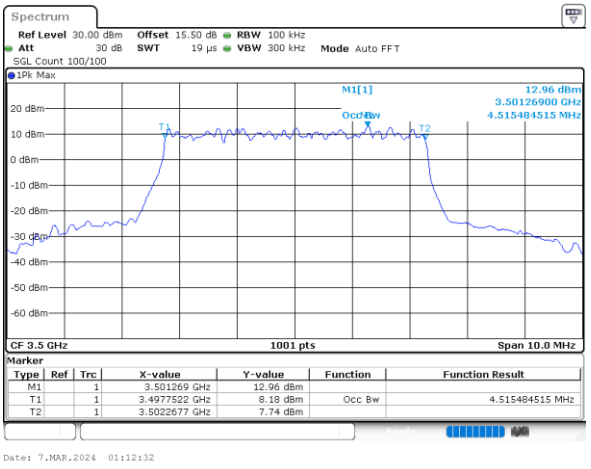
Mode	LTE Band 42 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.50	4.52	9.07	8.99	13.49	13.49	17.98	17.90

LTE Band 42

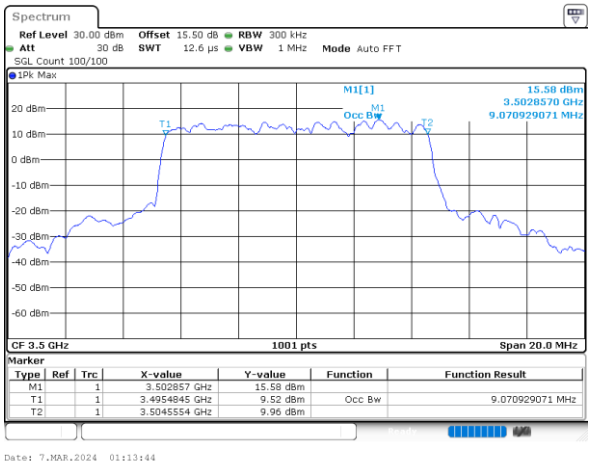
Middle Channel / 5MHz / QPSK



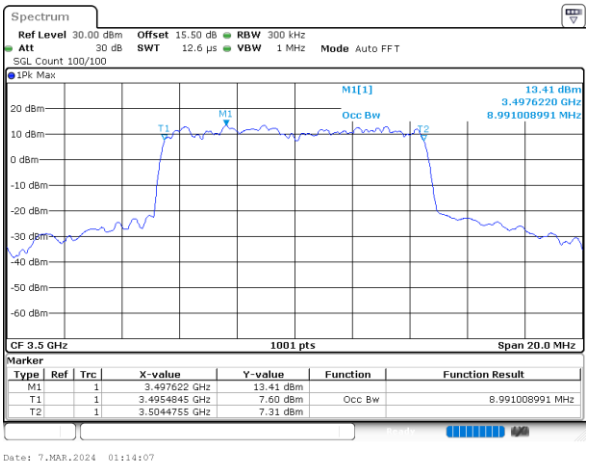
Middle Channel / 5MHz / 16QAM



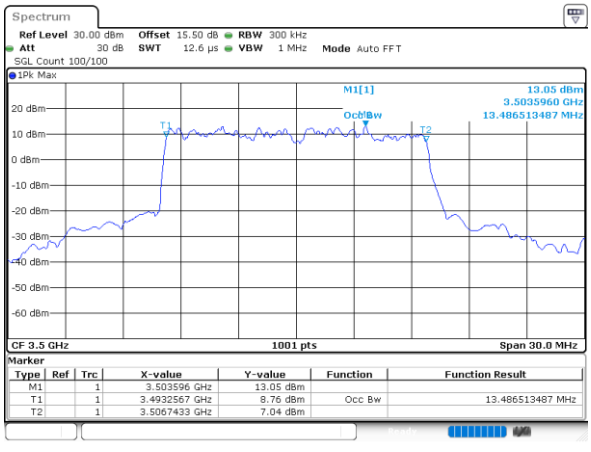
Middle Channel / 10MHz / QPSK



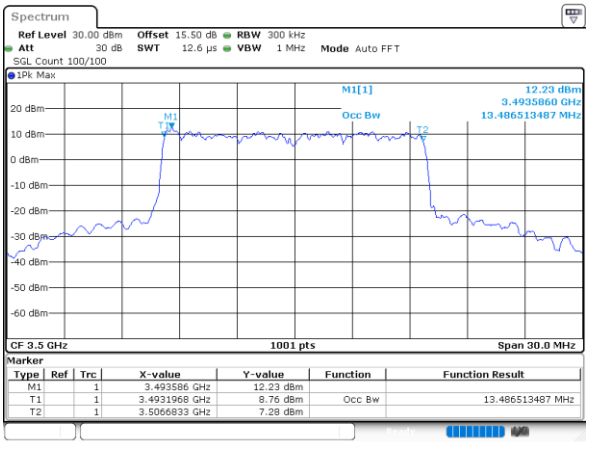
Middle Channel / 10MHz / 16QAM

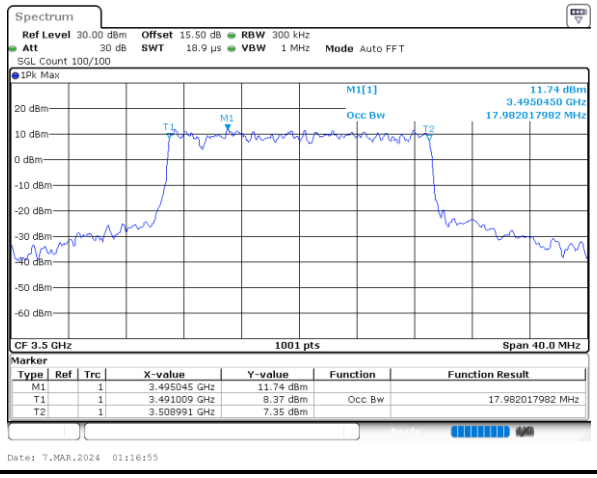
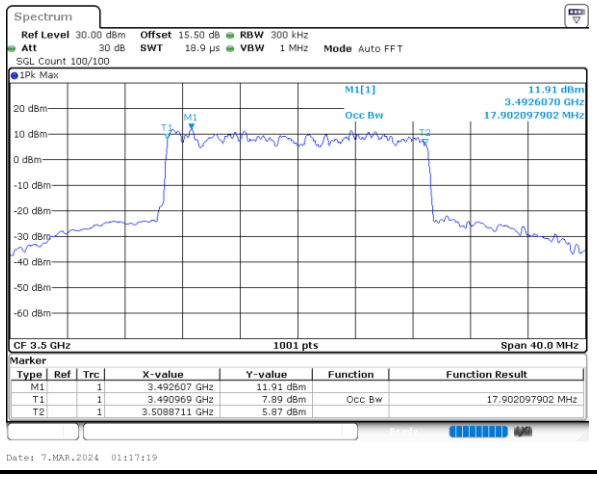


Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM

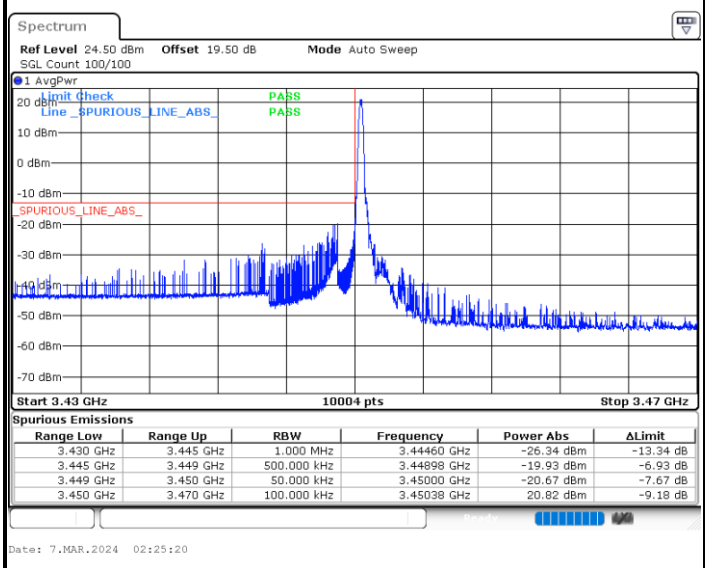


LTE Band 42	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Conducted Band Edge

LTE Band 42 / 5MHz / QPSK

Lowest Band Edge / 1 RB

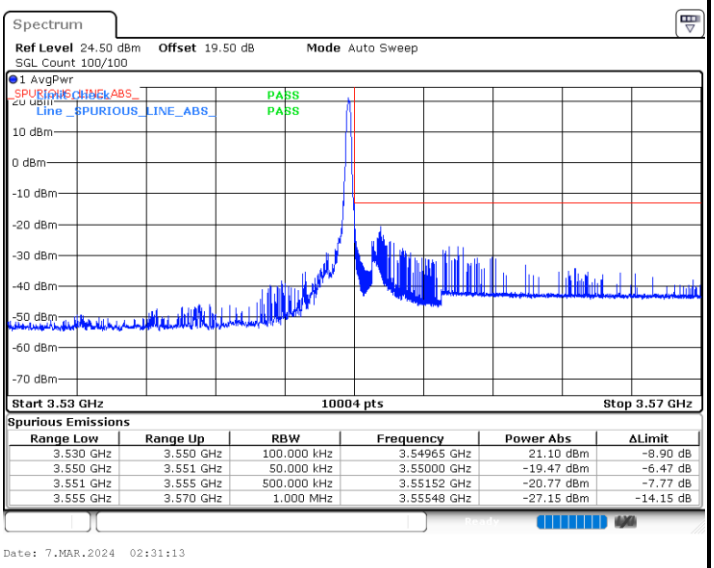


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44460 GHz	-26.34 dBm	-13.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44898 GHz	-19.93 dBm	-6.93 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-20.67 dBm	-7.67 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45038 GHz	20.82 dBm	-9.18 dB

Date: 7.MAR.2024 02:25:20

Highest Band Edge / 1 RB

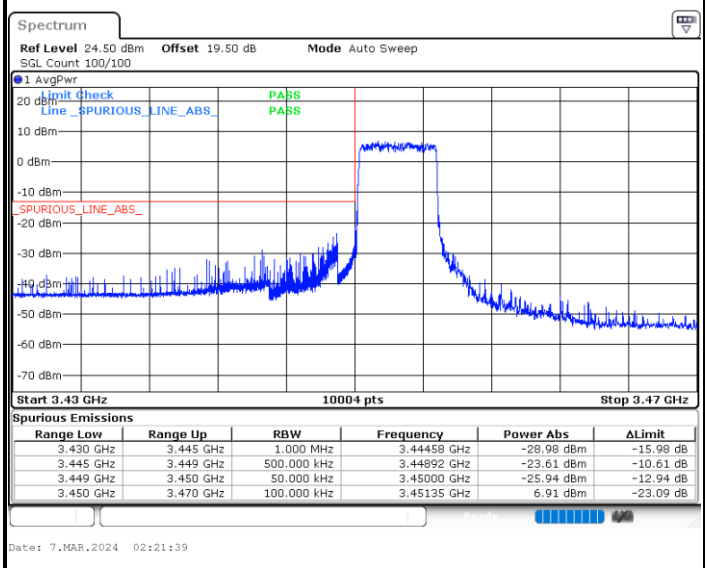


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54965 GHz	21.10 dBm	-8.90 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-19.47 dBm	-6.47 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55152 GHz	-20.77 dBm	-7.77 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55548 GHz	-27.15 dBm	-14.15 dB

Date: 7.MAR.2024 02:31:13

Lowest Band Edge / Full RB

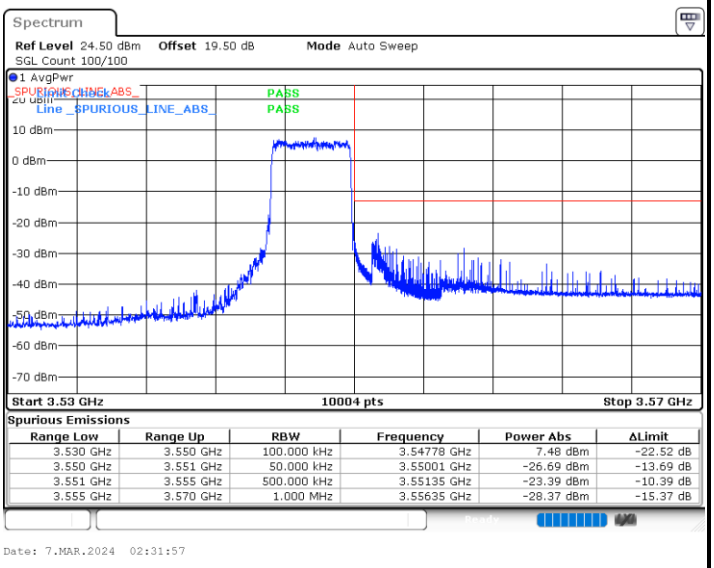


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44458 GHz	-28.98 dBm	-15.98 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44892 GHz	-23.61 dBm	-10.61 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-25.94 dBm	-12.94 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45135 GHz	6.91 dBm	-23.09 dB

Date: 7.MAR.2024 02:21:39

Highest Band Edge / Full RB



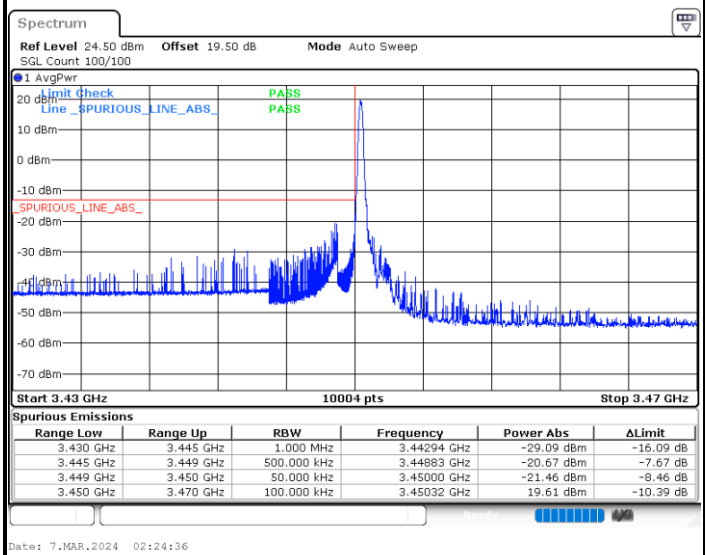
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54778 GHz	7.48 dBm	-22.52 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-26.69 dBm	-13.69 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55135 GHz	-23.39 dBm	-10.39 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55635 GHz	-28.37 dBm	-15.37 dB

Date: 7.MAR.2024 02:31:57

LTE Band 42 / 5MHz / 16QAM

Lowest Band Edge / 1RB

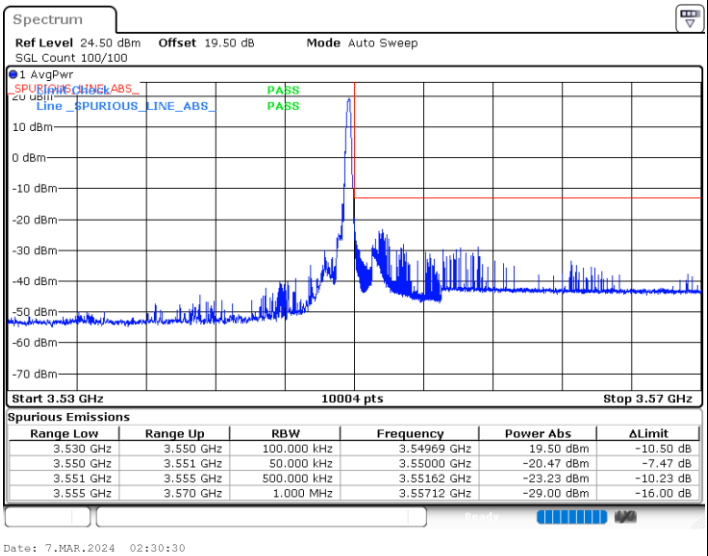


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44294 GHz	-29.09 dBm	-16.09 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44883 GHz	-20.67 dBm	-7.67 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-21.46 dBm	-8.46 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45032 GHz	19.61 dBm	-10.39 dB

Date: 7.MAR.2024 02:24:36

Highest Band Edge / 1 RB

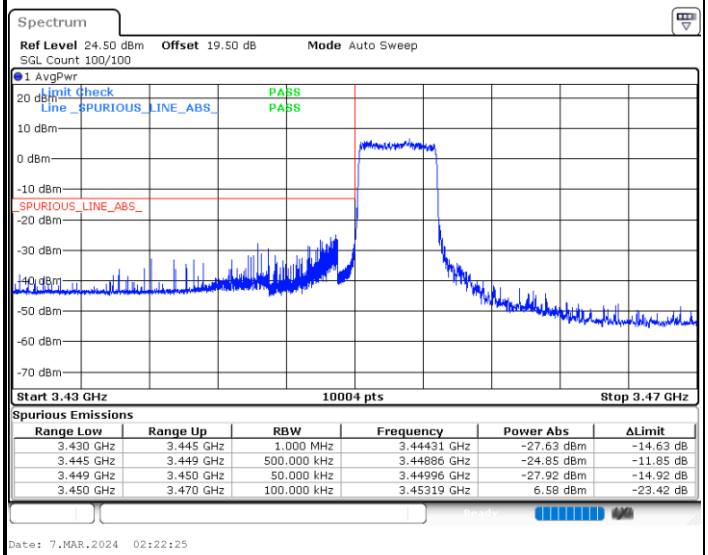


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54969 GHz	19.50 dBm	-10.50 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-20.47 dBm	-7.47 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55162 GHz	-23.23 dBm	-10.23 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55712 GHz	-29.00 dBm	-16.00 dB

Date: 7.MAR.2024 02:30:30

Lowest Band Edge / Full RB

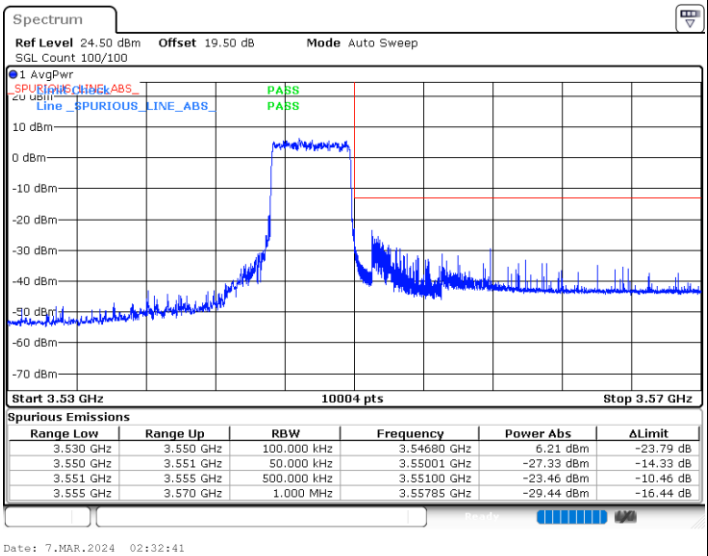


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44431 GHz	-27.63 dBm	-14.63 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44886 GHz	-24.85 dBm	-11.85 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44996 GHz	-27.92 dBm	-14.92 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45319 GHz	6.58 dBm	-23.42 dB

Date: 7.MAR.2024 02:22:25

Highest Band Edge / Full RB



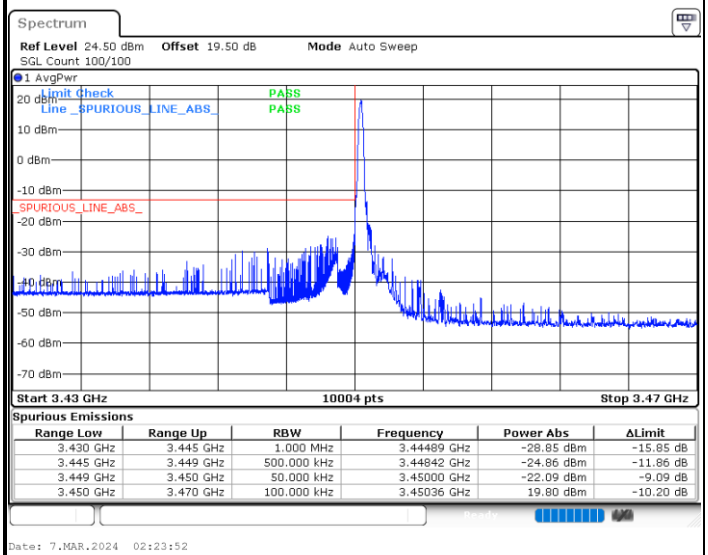
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54680 GHz	6.21 dBm	-23.79 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-27.33 dBm	-14.33 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55100 GHz	-23.46 dBm	-10.46 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55785 GHz	-29.44 dBm	-16.44 dB

Date: 7.MAR.2024 02:32:41

LTE Band 42 / 5MHz / 64QAM

Lowest Band Edge / 1RB

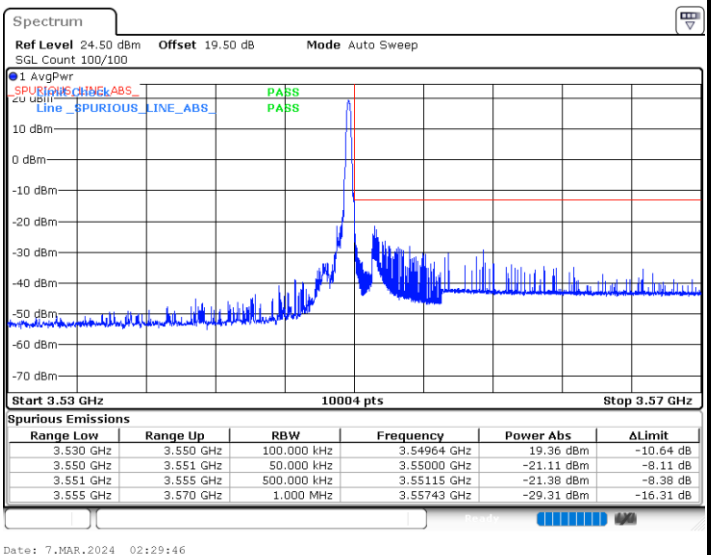


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44489 GHz	-28.85 dBm	-15.85 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44842 GHz	-24.86 dBm	-11.86 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-22.09 dBm	-9.09 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45036 GHz	19.80 dBm	-10.20 dB

Date: 7.MAR.2024 02:23:52

Highest Band Edge / 1 RB

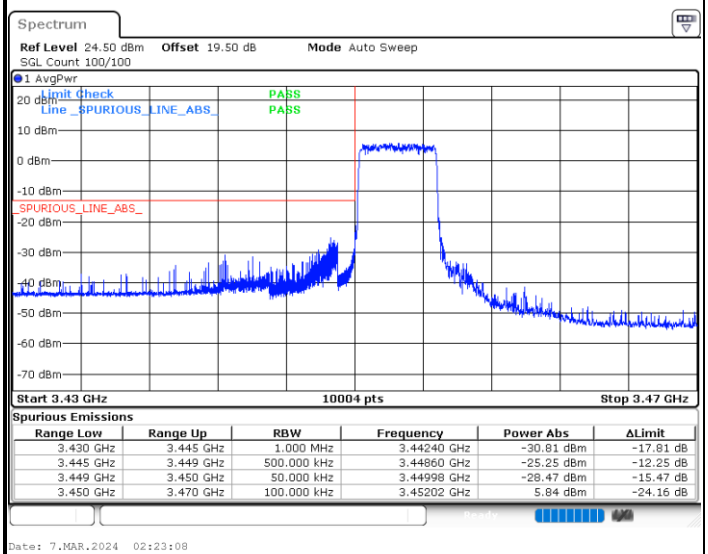


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54964 GHz	19.36 dBm	-10.64 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-21.11 dBm	-8.11 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55115 GHz	-21.38 dBm	-8.38 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55743 GHz	-29.31 dBm	-16.31 dB

Date: 7.MAR.2024 02:29:46

Lowest Band Edge / Full RB

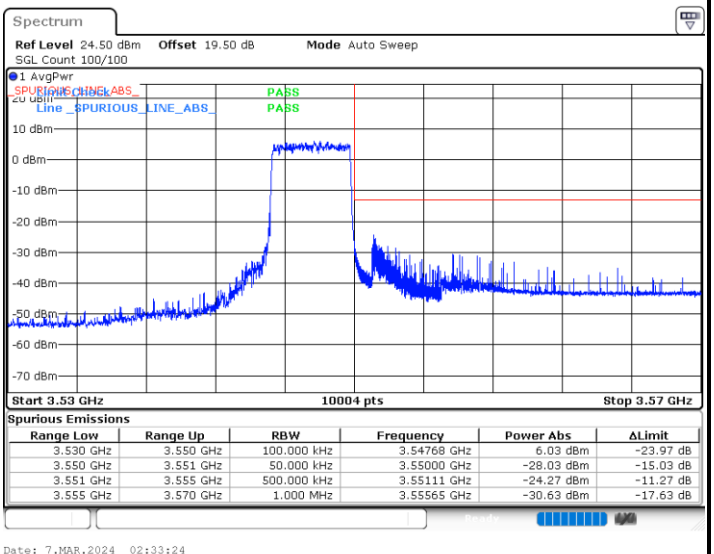


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44240 GHz	-30.81 dBm	-17.81 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44860 GHz	-25.25 dBm	-12.25 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44998 GHz	-28.47 dBm	-15.47 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45202 GHz	5.84 dBm	-24.16 dB

Date: 7.MAR.2024 02:23:08

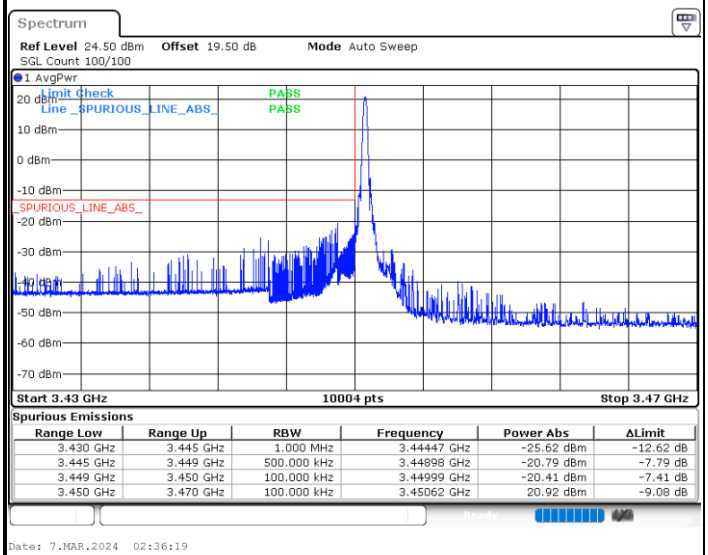
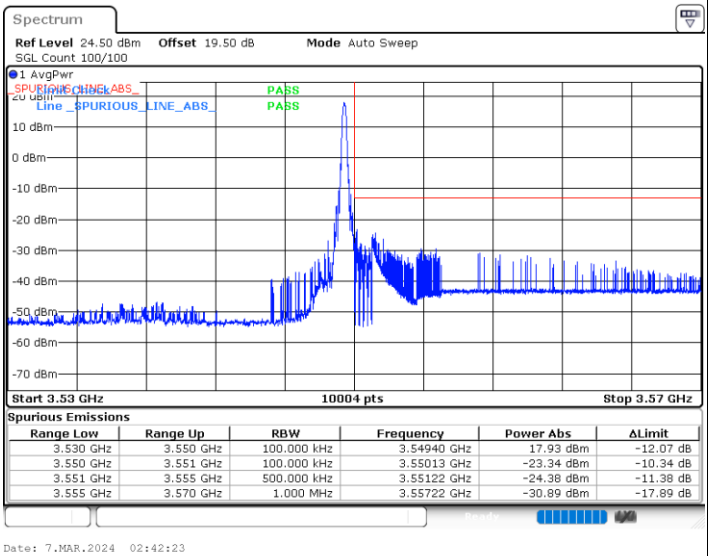
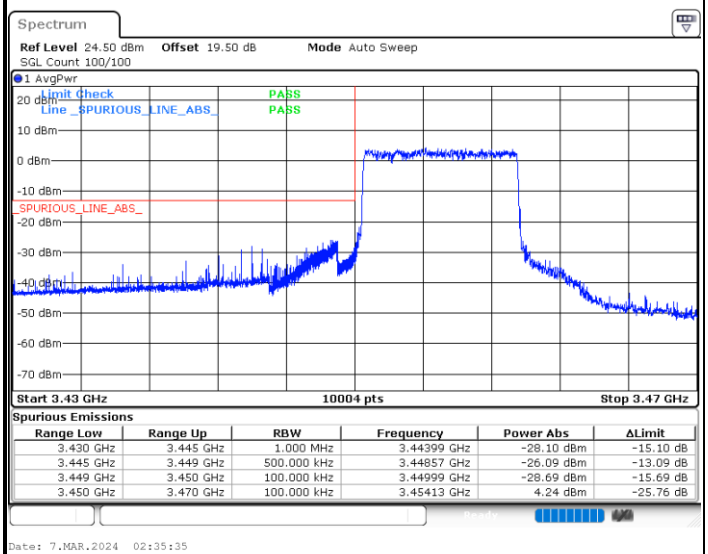
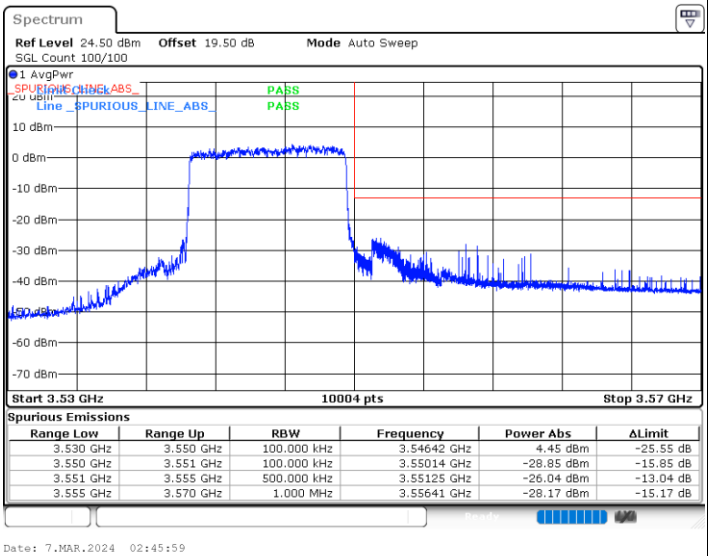
Highest Band Edge / Full RB



Spurious Emissions

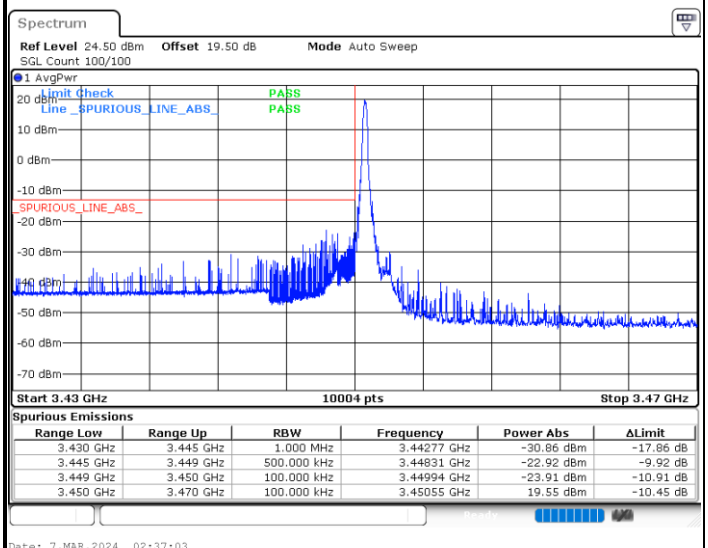
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54768 GHz	6.03 dBm	-23.97 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-28.03 dBm	-15.03 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55111 GHz	-24.27 dBm	-11.27 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55565 GHz	-30.63 dBm	-17.63 dB

Date: 7.MAR.2024 02:33:24

LTE Band 42 / 10MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

LTE Band 42 / 10MHz / 16QAM

Lowest Band Edge / 1RB

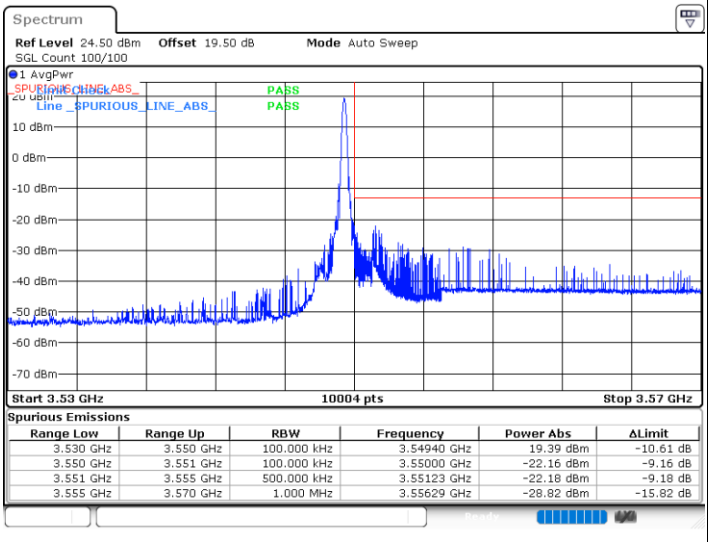


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44277 GHz	-30.86 dBm	-17.86 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44831 GHz	-22.92 dBm	-9.92 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44994 GHz	-23.91 dBm	-10.91 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45055 GHz	19.55 dBm	-10.45 dB

Date: 7.MAR.2024 02:37:03

Highest Band Edge / 1 RB

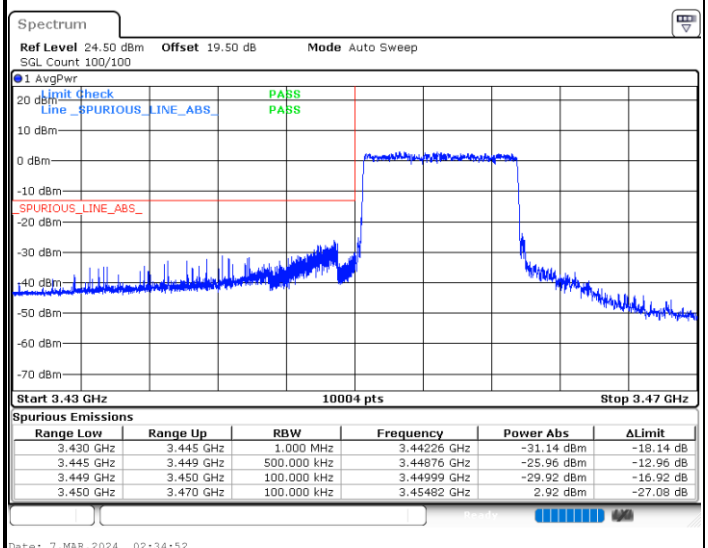


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54940 GHz	19.39 dBm	-10.61 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55000 GHz	-22.16 dBm	-9.16 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55123 GHz	-22.18 dBm	-9.18 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55629 GHz	-28.82 dBm	-15.82 dB

Date: 7.MAR.2024 02:43:06

Lowest Band Edge / Full RB

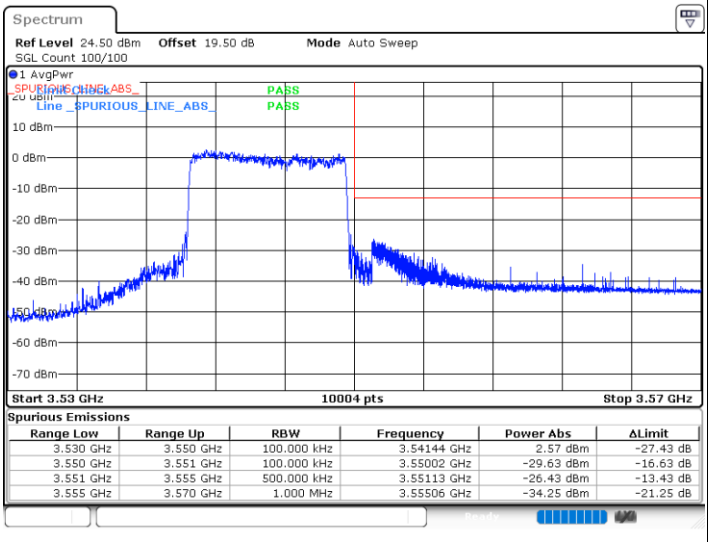


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44226 GHz	-31.14 dBm	-18.14 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44876 GHz	-25.96 dBm	-12.96 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-29.92 dBm	-16.92 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45482 GHz	2.92 dBm	-27.08 dB

Date: 7.MAR.2024 02:34:52

Highest Band Edge / Full RB



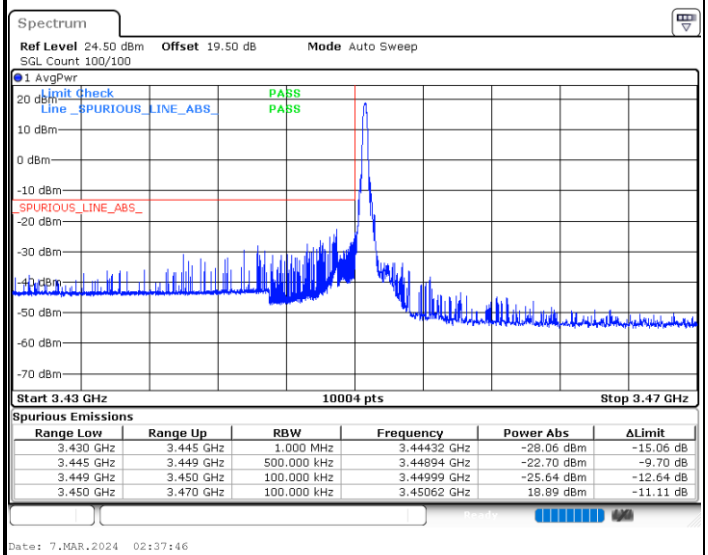
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54144 GHz	2.57 dBm	-27.43 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55002 GHz	-29.63 dBm	-16.63 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55113 GHz	-26.43 dBm	-13.43 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55506 GHz	-34.25 dBm	-21.25 dB

Date: 7.MAR.2024 02:45:16

LTE Band 42 / 10MHz / 64QAM

Lowest Band Edge / 1RB

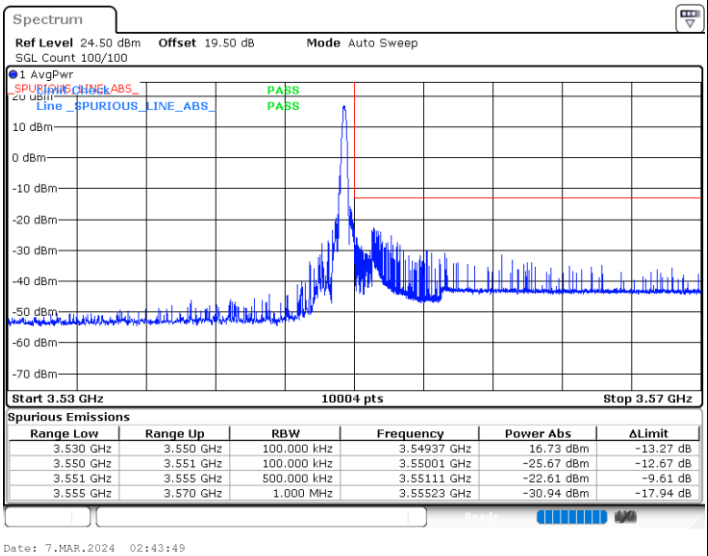


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44432 GHz	-28.06 dBm	-15.06 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44894 GHz	-22.70 dBm	-9.70 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-25.64 dBm	-12.64 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45062 GHz	18.89 dBm	-11.11 dB

Date: 7.MAR.2024 02:37:46

Highest Band Edge / 1 RB

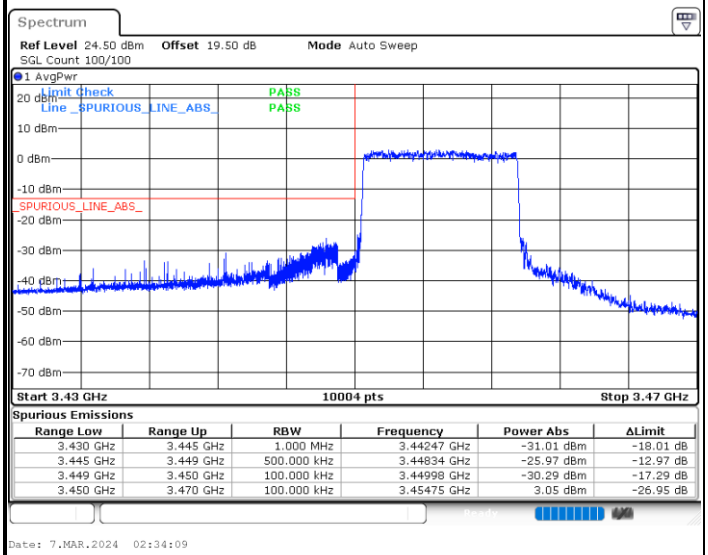


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54937 GHz	16.73 dBm	-13.27 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55001 GHz	-25.67 dBm	-12.67 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55111 GHz	-22.61 dBm	-9.61 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55523 GHz	-30.94 dBm	-17.94 dB

Date: 7.MAR.2024 02:43:49

Lowest Band Edge / Full RB

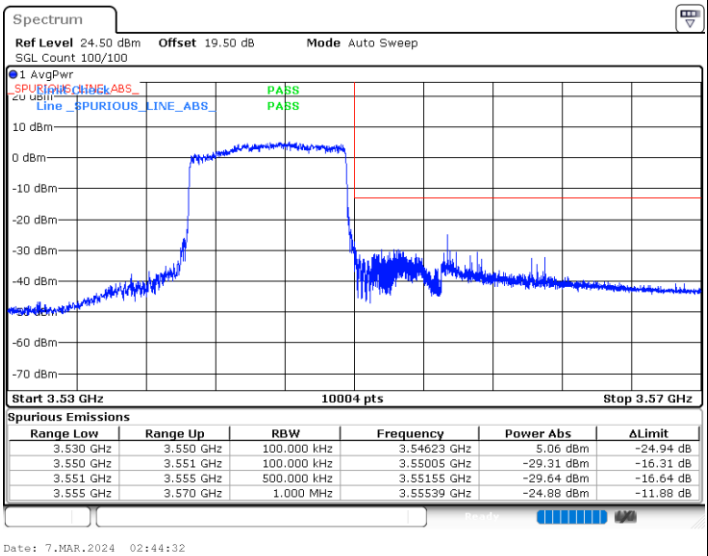


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44247 GHz	-31.01 dBm	-18.01 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44834 GHz	-25.97 dBm	-12.97 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44998 GHz	-30.29 dBm	-17.29 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45475 GHz	3.05 dBm	-26.95 dB

Date: 7.MAR.2024 02:34:09

Highest Band Edge / Full RB



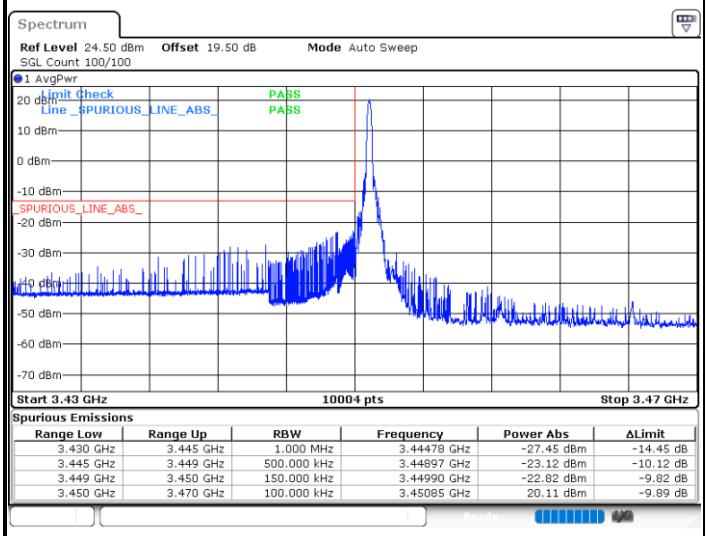
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54623 GHz	5.06 dBm	-24.94 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55005 GHz	-29.31 dBm	-16.31 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55155 GHz	-29.64 dBm	-16.64 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55539 GHz	-24.88 dBm	-11.88 dB

Date: 7.MAR.2024 02:44:32

LTE Band 42 / 15MHz / QPSK

Lowest Band Edge / 1 RB

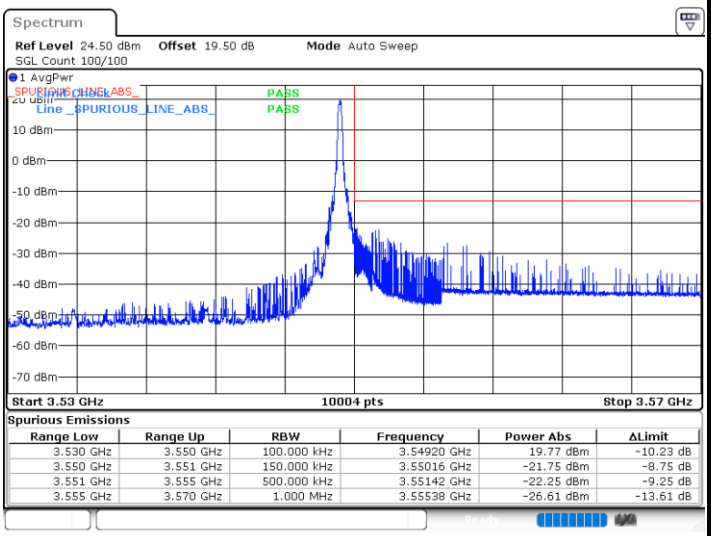


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44478 GHz	-27.45 dBm	-14.45 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44897 GHz	-23.12 dBm	-10.12 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44990 GHz	-22.82 dBm	-9.82 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45085 GHz	20.11 dBm	-9.89 dB

Date: 7.MAR.2024 02:50:21

Highest Band Edge / 1 RB

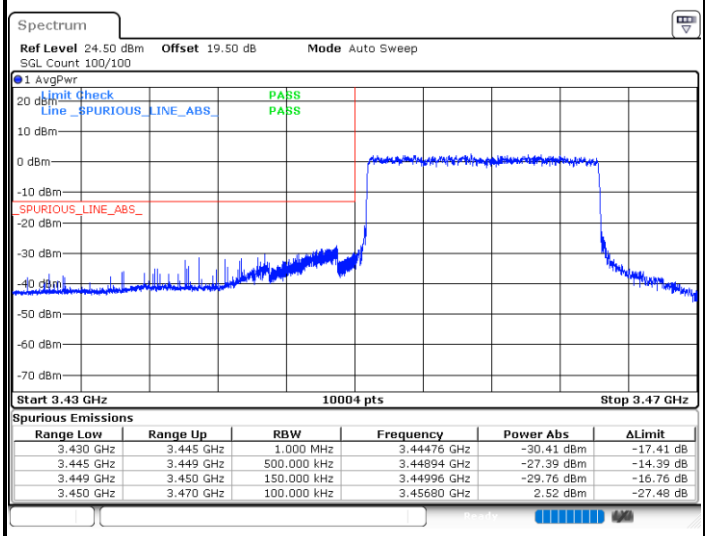


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54920 GHz	19.77 dBm	-10.23 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55016 GHz	-21.75 dBm	-8.75 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55142 GHz	-22.25 dBm	-9.25 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55538 GHz	-26.61 dBm	-13.61 dB

Date: 7.MAR.2024 02:56:16

Lowest Band Edge / Full RB

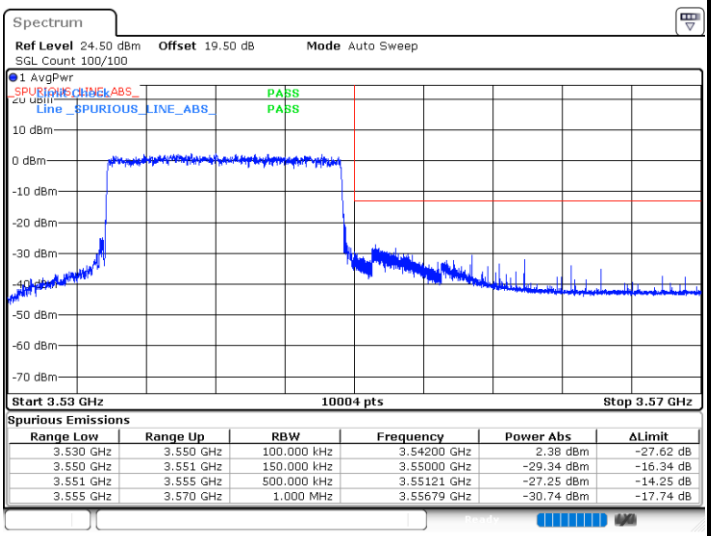


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44476 GHz	-30.41 dBm	-17.41 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44894 GHz	-27.39 dBm	-14.39 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44996 GHz	-29.76 dBm	-16.76 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45680 GHz	2.52 dBm	-27.48 dB

Date: 7.MAR.2024 02:46:43

Highest Band Edge / Full RB



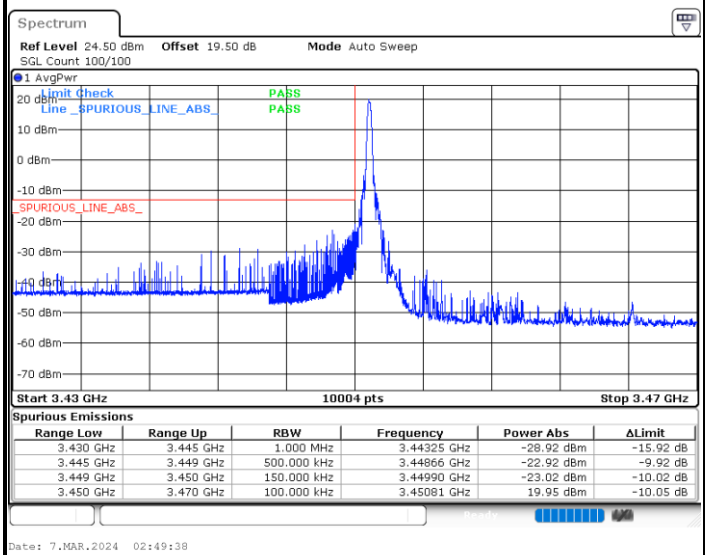
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54200 GHz	2.38 dBm	-27.62 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55000 GHz	-29.34 dBm	-16.34 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55121 GHz	-27.25 dBm	-14.25 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55679 GHz	-30.74 dBm	-17.74 dB

Date: 7.MAR.2024 02:56:59

LTE Band 42 / 15MHz / 16QAM

Lowest Band Edge / 1RB

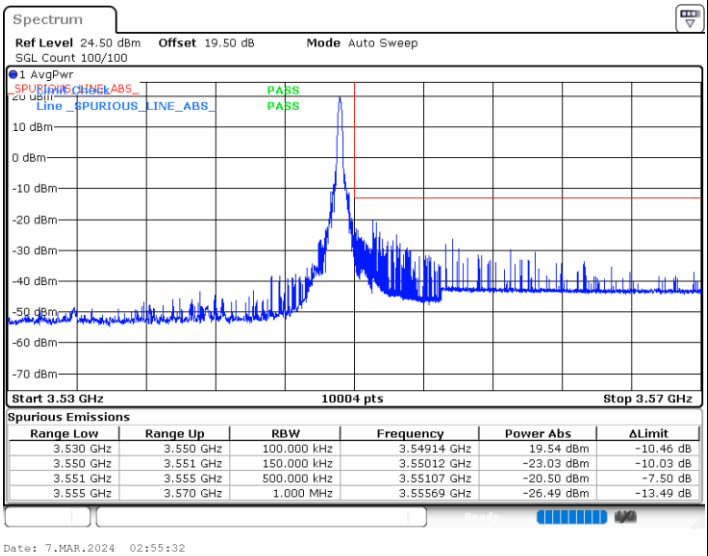


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44325 GHz	-28.92 dBm	-15.92 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44866 GHz	-22.92 dBm	-9.92 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44990 GHz	-23.02 dBm	-10.02 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45081 GHz	19.95 dBm	-10.05 dB

Date: 7.MAR.2024 02:49:38

Highest Band Edge / 1 RB

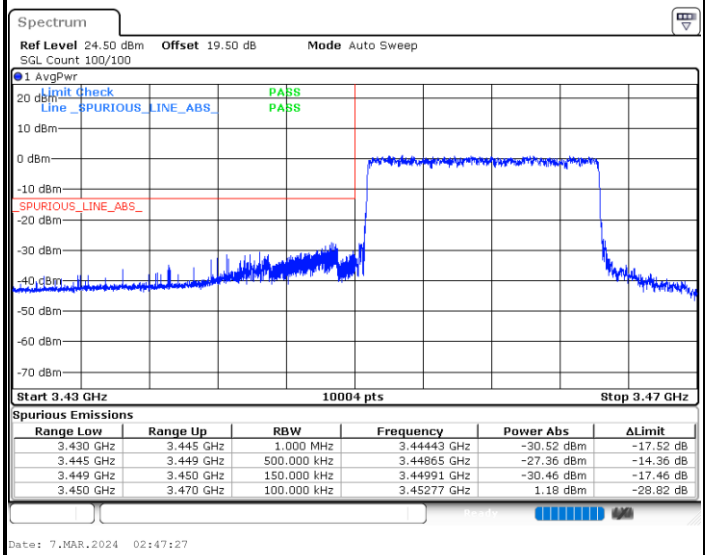


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54914 GHz	19.54 dBm	-10.46 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55012 GHz	-23.03 dBm	-10.03 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55107 GHz	-20.50 dBm	-7.50 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55569 GHz	-26.49 dBm	-13.49 dB

Date: 7.MAR.2024 02:55:32

Lowest Band Edge / Full RB

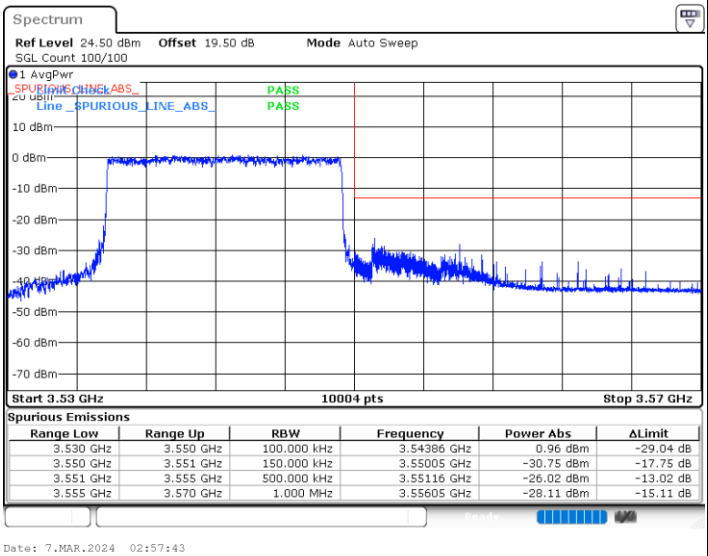


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44443 GHz	-30.52 dBm	-17.52 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44865 GHz	-27.36 dBm	-14.36 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44991 GHz	-30.46 dBm	-17.46 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45277 GHz	1.18 dBm	-28.82 dB

Date: 7.MAR.2024 02:47:27

Highest Band Edge / Full RB



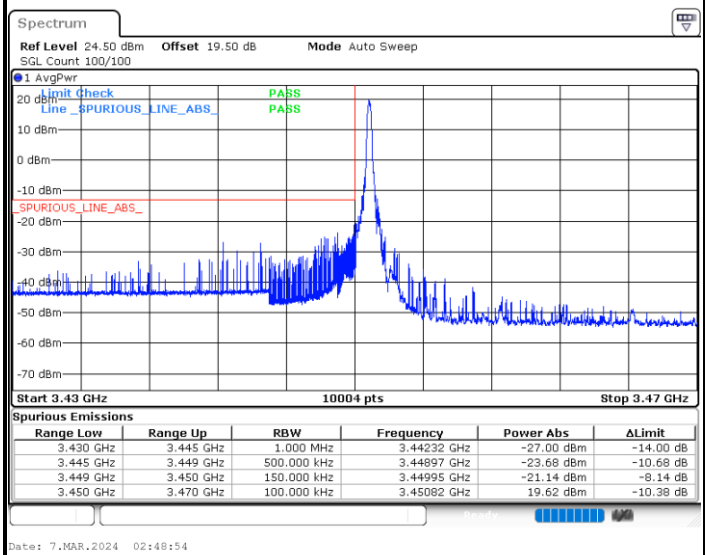
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54386 GHz	0.96 dBm	-29.04 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55005 GHz	-30.75 dBm	-17.75 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55116 GHz	-26.02 dBm	-13.02 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55605 GHz	-28.11 dBm	-15.11 dB

Date: 7.MAR.2024 02:57:43

LTE Band 42 / 15MHz / 64QAM

Lowest Band Edge / 1RB

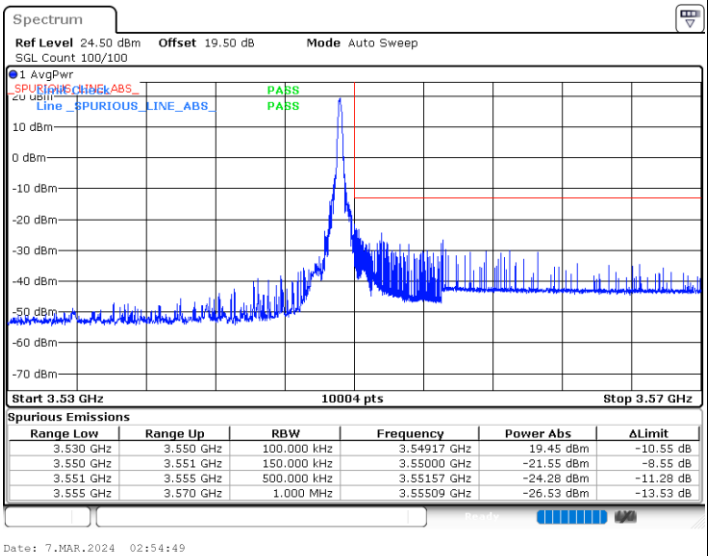


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44232 GHz	-27.00 dBm	-14.00 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44897 GHz	-23.68 dBm	-10.68 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44995 GHz	-21.14 dBm	-8.14 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45082 GHz	19.62 dBm	-10.38 dB

Date: 7.MAR.2024 02:48:54

Highest Band Edge / 1 RB

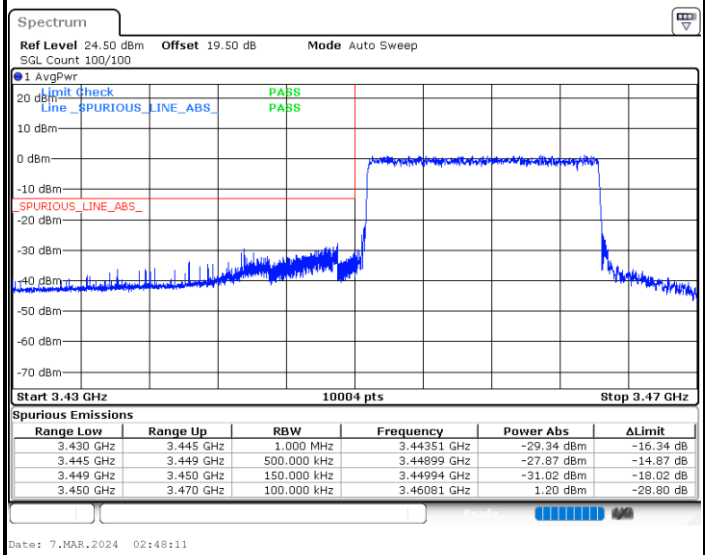


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54917 GHz	19.45 dBm	-10.55 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55000 GHz	-21.55 dBm	-8.55 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55157 GHz	-24.28 dBm	-11.28 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55509 GHz	-26.53 dBm	-13.53 dB

Date: 7.MAR.2024 02:54:49

Lowest Band Edge / Full RB

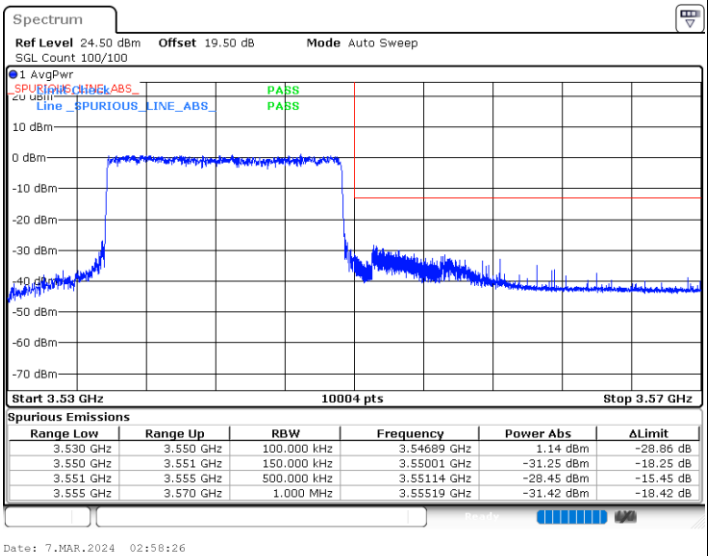


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44351 GHz	-29.34 dBm	-16.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44899 GHz	-27.87 dBm	-14.87 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44994 GHz	-31.02 dBm	-18.02 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.46081 GHz	1.20 dBm	-28.80 dB

Date: 7.MAR.2024 02:48:11

Highest Band Edge / Full RB



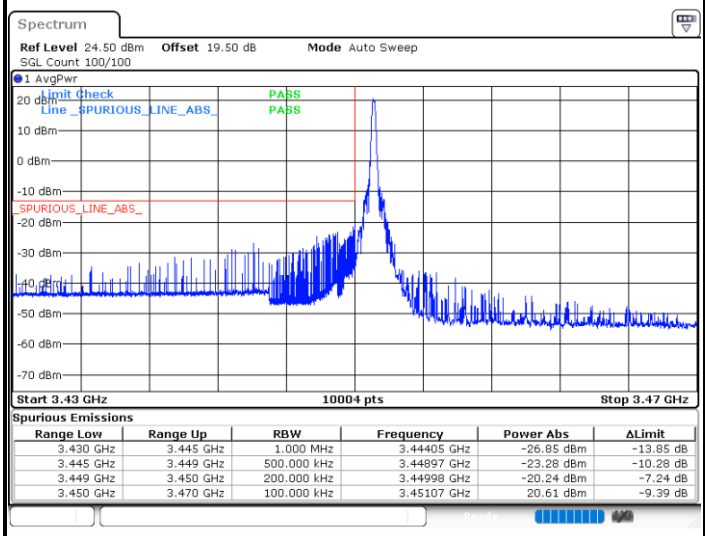
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54689 GHz	1.14 dBm	-28.86 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55001 GHz	-31.25 dBm	-18.25 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55114 GHz	-28.45 dBm	-15.45 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55519 GHz	-31.42 dBm	-18.42 dB

Date: 7.MAR.2024 02:58:26

LTE Band 42 / 20MHz / QPSK

Lowest Band Edge / 1 RB

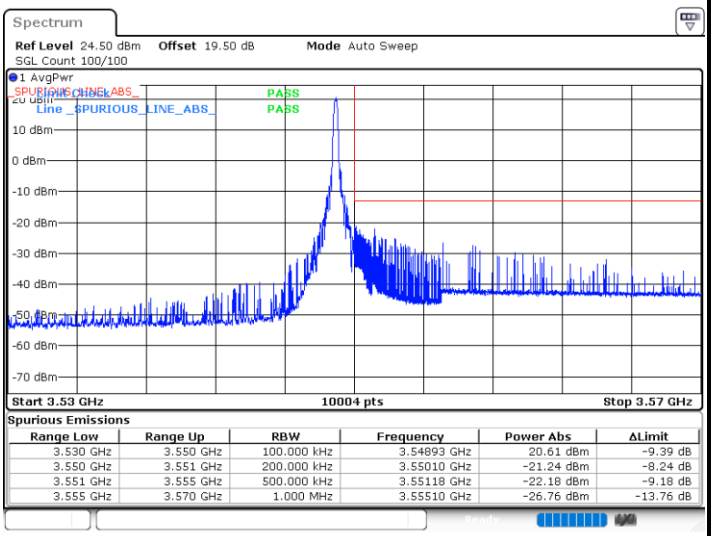


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44405 GHz	-26.85 dBm	-13.85 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44897 GHz	-23.28 dBm	-10.28 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44998 GHz	-20.24 dBm	-7.24 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45107 GHz	20.61 dBm	-9.39 dB

Date: 7.MAR.2024 03:01:22

Highest Band Edge / 1 RB

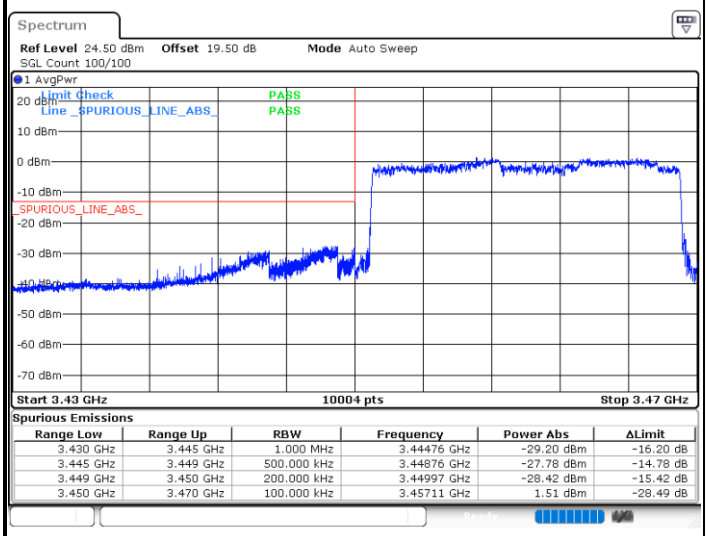


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54893 GHz	20.61 dBm	-9.39 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55010 GHz	-21.24 dBm	-8.24 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55118 GHz	-22.18 dBm	-9.18 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55510 GHz	-26.76 dBm	-13.76 dB

Date: 7.MAR.2024 03:05:50

Lowest Band Edge / Full RB

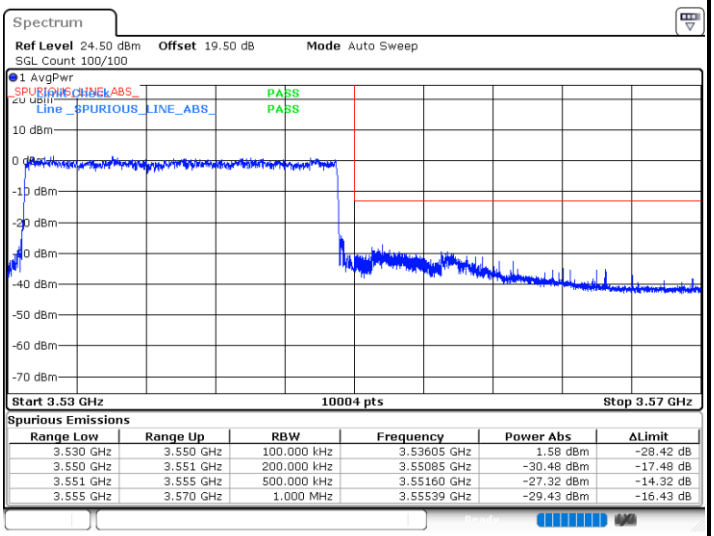


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44476 GHz	-29.20 dBm	-16.20 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44876 GHz	-27.78 dBm	-14.78 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44997 GHz	-28.42 dBm	-15.42 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45711 GHz	1.51 dBm	-28.49 dB

Date: 7.MAR.2024 03:00:38

Highest Band Edge / Full RB



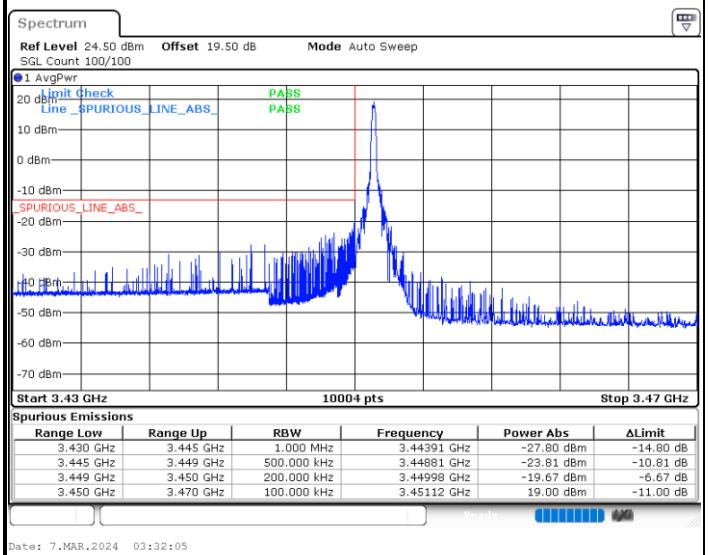
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53605 GHz	1.58 dBm	-28.42 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55085 GHz	-30.48 dBm	-17.48 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55160 GHz	-27.32 dBm	-14.32 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55539 GHz	-29.43 dBm	-16.43 dB

Date: 7.MAR.2024 03:09:28

LTE Band 42 / 20MHz / 16QAM

Lowest Band Edge / 1RB

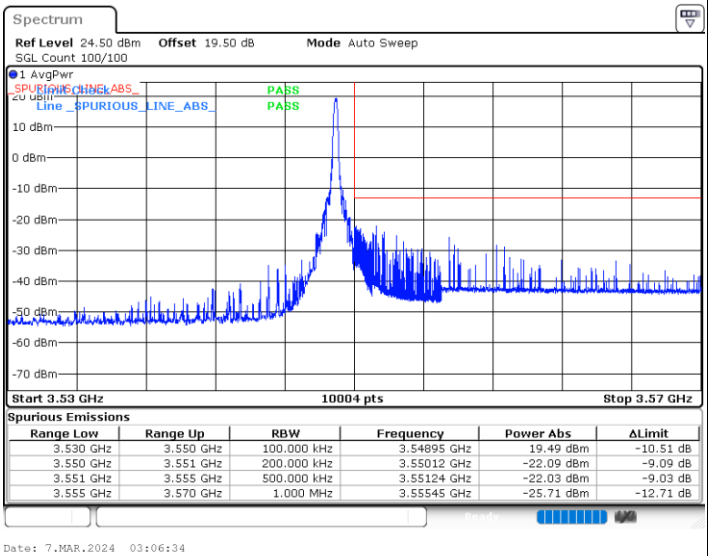


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44391 GHz	-27.80 dBm	-14.80 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44881 GHz	-23.81 dBm	-10.81 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44998 GHz	-19.67 dBm	-6.67 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45112 GHz	19.00 dBm	-11.00 dB

Date: 7.MAR.2024 03:32:05

Highest Band Edge / 1 RB

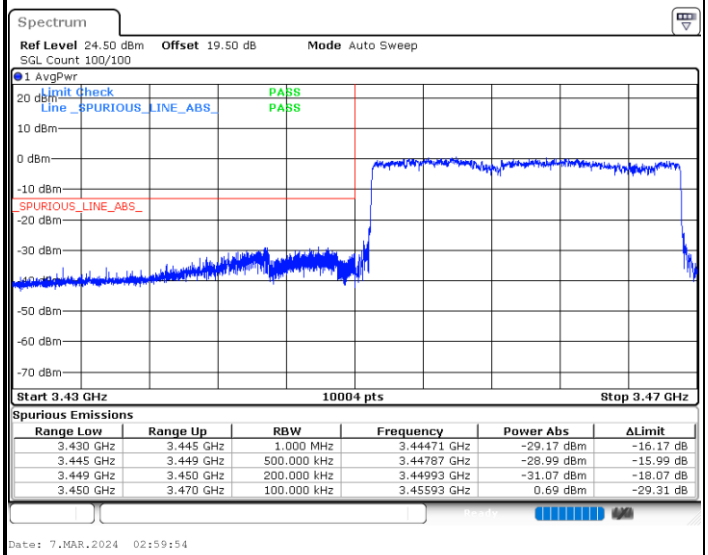


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54895 GHz	19.49 dBm	-10.51 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55012 GHz	-22.09 dBm	-9.09 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55124 GHz	-22.03 dBm	-9.03 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55545 GHz	-25.71 dBm	-12.71 dB

Date: 7.MAR.2024 03:06:34

Lowest Band Edge / Full RB

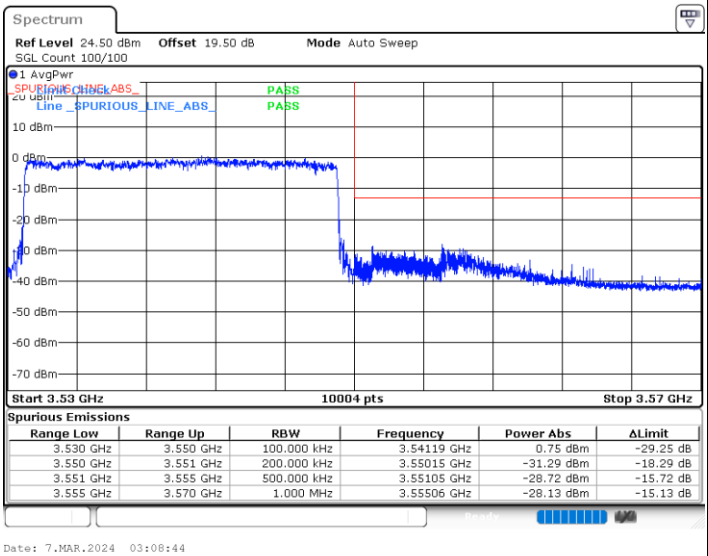


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44471 GHz	-29.17 dBm	-16.17 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44787 GHz	-28.99 dBm	-15.99 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44993 GHz	-31.07 dBm	-18.07 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45593 GHz	0.69 dBm	-29.31 dB

Date: 7.MAR.2024 02:59:54

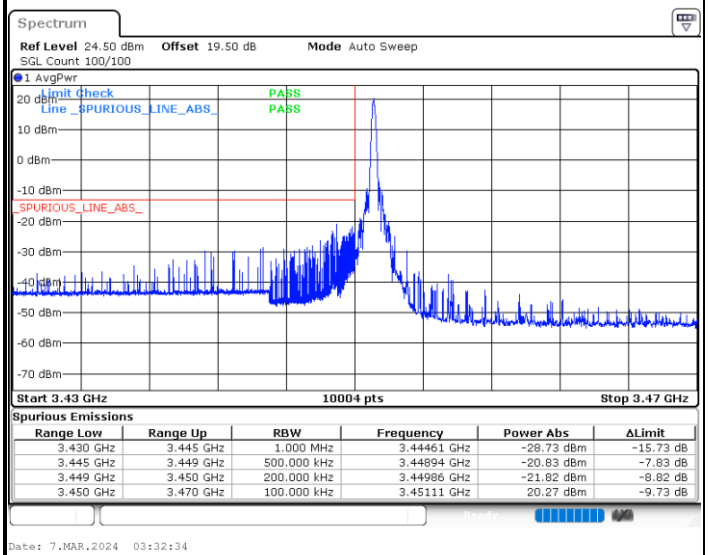
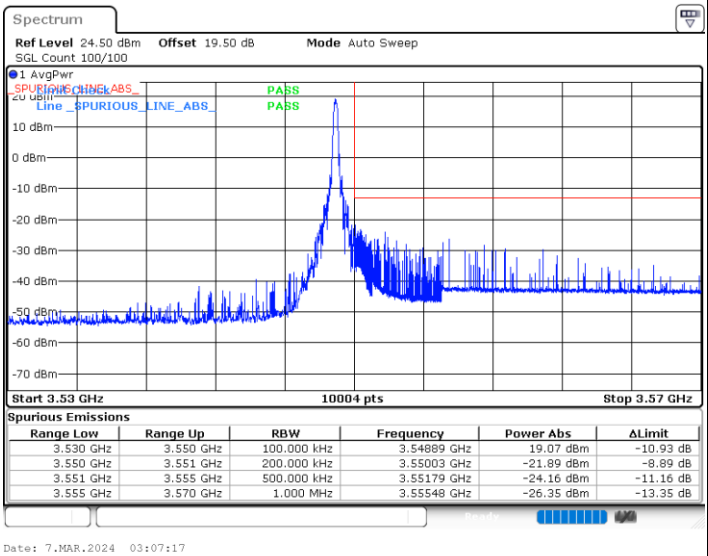
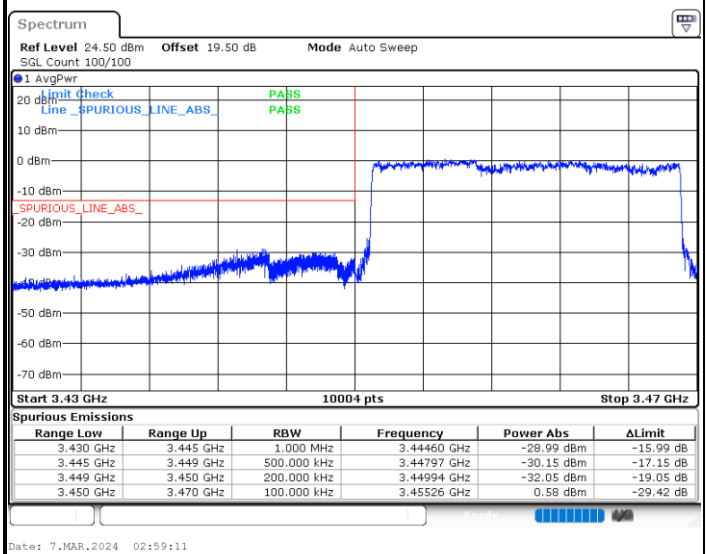
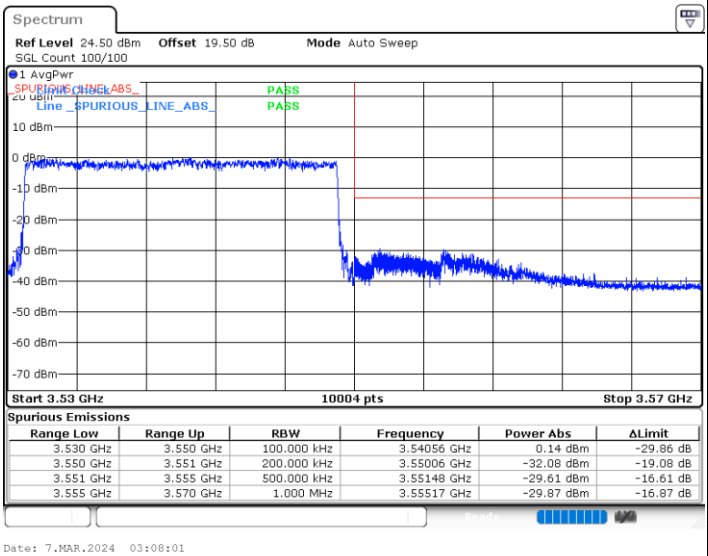
Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54119 GHz	0.75 dBm	-29.25 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55015 GHz	-31.29 dBm	-18.29 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55105 GHz	-28.72 dBm	-15.72 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55506 GHz	-28.13 dBm	-15.13 dB

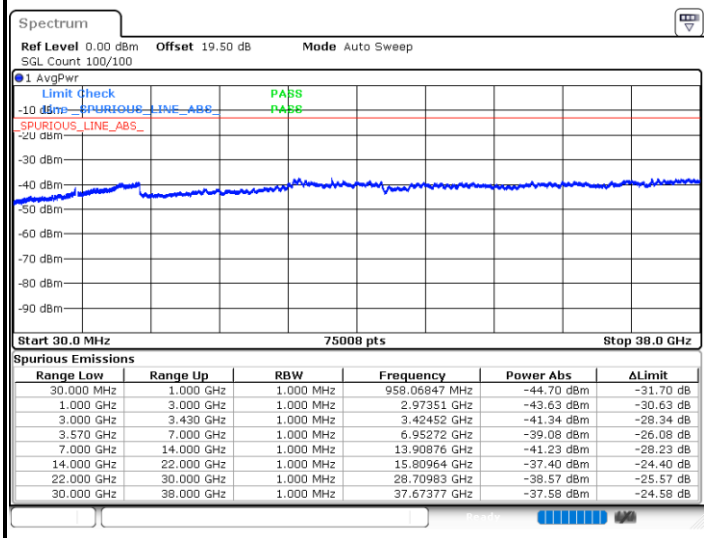
Date: 7.MAR.2024 03:08:44

LTE Band 42 / 20MHz / 64QAM	
Lowest Band Edge / 1RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

Conducted Spurious Emission

LTE Band 42 / 5MHz

Lowest Channel / QPSK

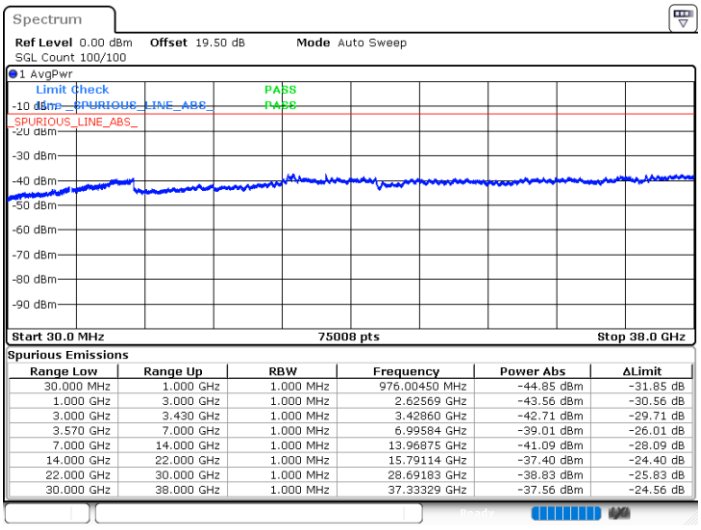


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-44.70 dBm	-31.70 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97351 GHz	-43.63 dBm	-30.63 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42452 GHz	-41.34 dBm	-28.34 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.95272 GHz	-39.08 dBm	-26.08 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.90876 GHz	-41.23 dBm	-28.23 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.80964 GHz	-37.40 dBm	-24.40 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.70983 GHz	-38.57 dBm	-25.57 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.67377 GHz	-37.58 dBm	-24.58 dB

Date: 7.MAR.2024 02:26:28

Middle Channel / QPSK

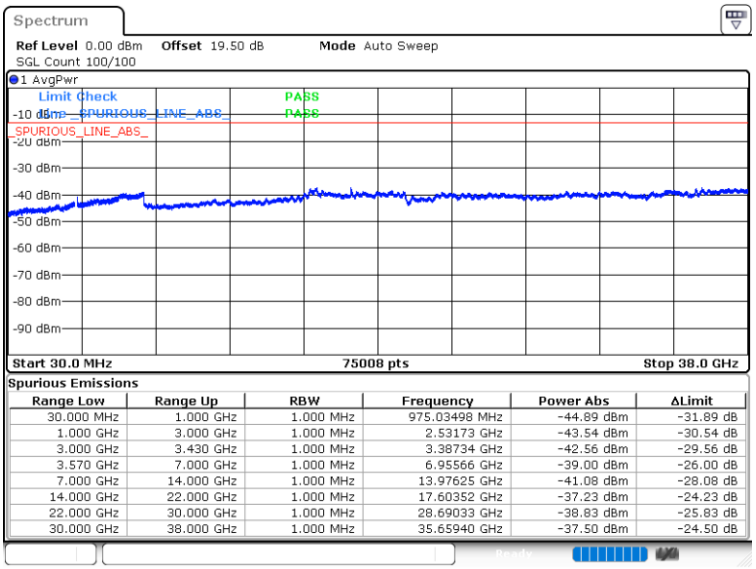


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	976.00450 MHz	-44.85 dBm	-31.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.62569 GHz	-43.56 dBm	-30.56 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42860 GHz	-42.71 dBm	-29.71 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99584 GHz	-39.01 dBm	-26.01 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.96875 GHz	-41.09 dBm	-28.09 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.79114 GHz	-37.40 dBm	-24.40 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69183 GHz	-38.83 dBm	-25.83 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.33329 GHz	-37.56 dBm	-24.56 dB

Date: 7.MAR.2024 02:27:45

Highest Channel / QPSK



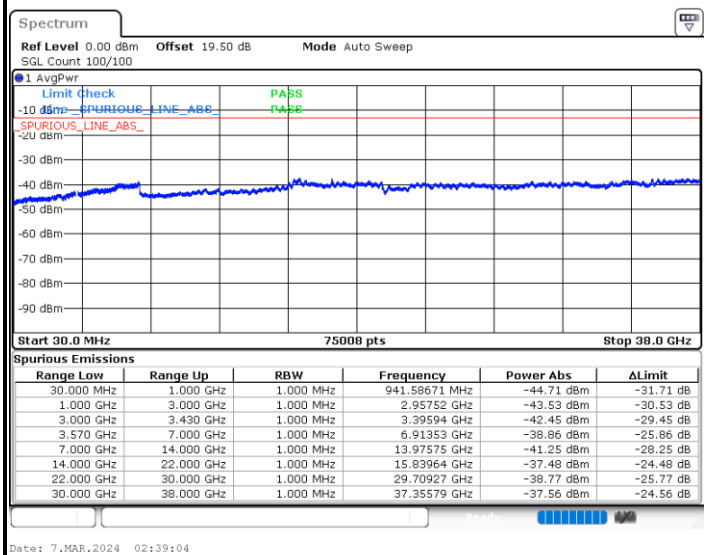
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.03498 MHz	-44.89 dBm	-31.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.53173 GHz	-43.54 dBm	-30.54 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.38734 GHz	-42.56 dBm	-29.56 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.95566 GHz	-39.00 dBm	-26.00 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.97625 GHz	-41.08 dBm	-28.08 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.60352 GHz	-37.23 dBm	-24.23 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69033 GHz	-38.83 dBm	-25.83 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.65940 GHz	-37.50 dBm	-24.50 dB

Date: 7.MAR.2024 02:29:03

LTE Band 42 / 10MHz

Lowest Channel / QPSK

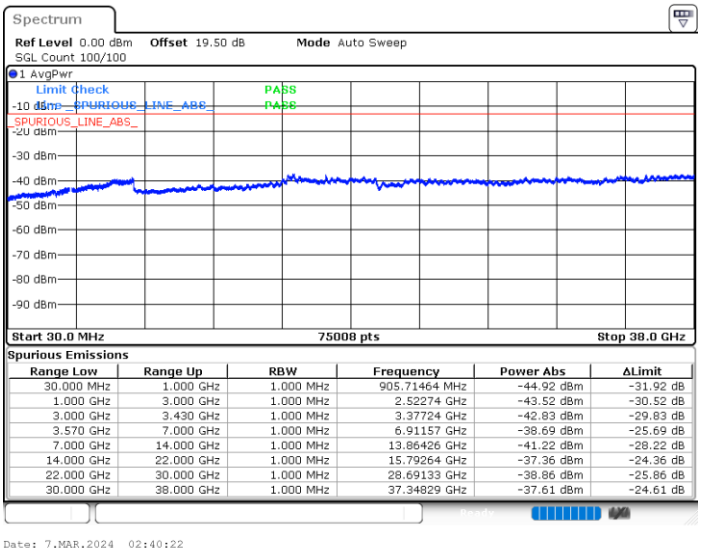


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	941.58671 MHz	-44.71 dBm	-31.71 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95752 GHz	-43.53 dBm	-30.53 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.39594 GHz	-42.45 dBm	-29.45 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.91353 GHz	-38.86 dBm	-25.86 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.97575 GHz	-41.25 dBm	-28.25 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.83964 GHz	-37.48 dBm	-24.48 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.70927 GHz	-38.77 dBm	-25.77 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.35579 GHz	-37.56 dBm	-24.56 dB

Date: 7.MAR.2024 02:39:04

Middle Channel / QPSK

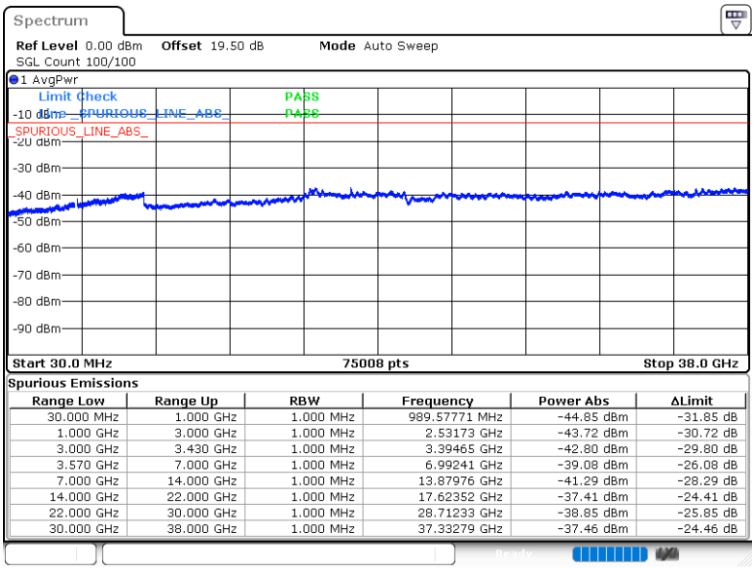


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	905.71464 MHz	-44.92 dBm	-31.92 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.52274 GHz	-43.52 dBm	-30.52 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37724 GHz	-42.83 dBm	-29.83 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.91157 GHz	-38.69 dBm	-25.69 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.86426 GHz	-41.22 dBm	-28.22 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.79264 GHz	-37.36 dBm	-24.36 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69133 GHz	-38.86 dBm	-25.86 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.34829 GHz	-37.61 dBm	-24.61 dB

Date: 7.MAR.2024 02:40:22

Highest Channel / QPSK



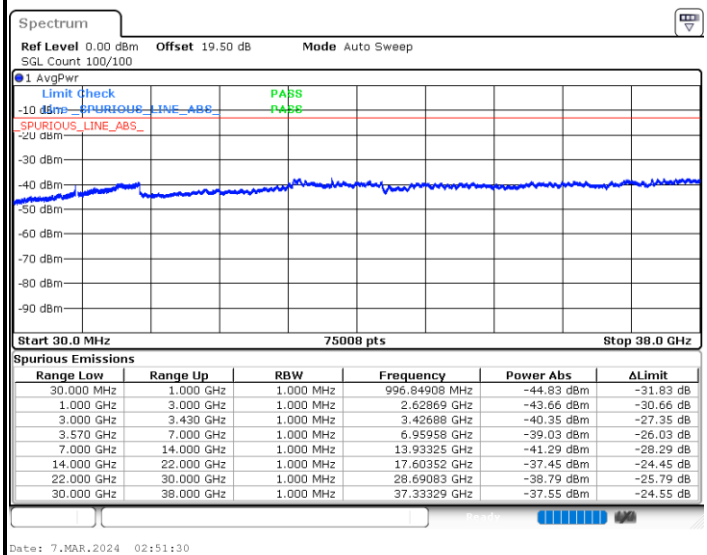
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	989.57771 MHz	-44.85 dBm	-31.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.53173 GHz	-43.72 dBm	-30.72 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.39465 GHz	-42.80 dBm	-29.80 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99241 GHz	-39.08 dBm	-26.08 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.87976 GHz	-41.29 dBm	-28.29 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.62352 GHz	-37.41 dBm	-24.41 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.71233 GHz	-38.85 dBm	-25.85 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.33279 GHz	-37.46 dBm	-24.46 dB

Date: 7.MAR.2024 02:41:40

LTE Band 42 / 15MHz

Lowest Channel / QPSK

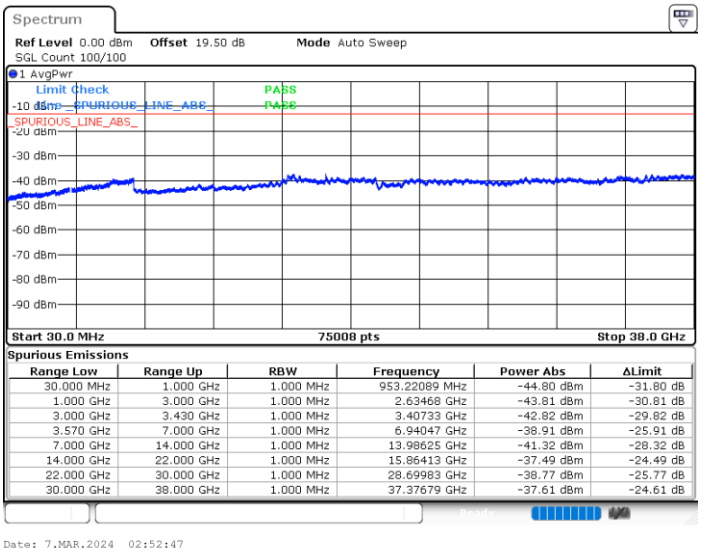


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	996.84908 MHz	-44.83 dBm	-31.83 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.62869 GHz	-43.66 dBm	-30.66 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42688 GHz	-40.35 dBm	-27.35 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.95958 GHz	-39.03 dBm	-26.03 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.93325 GHz	-41.29 dBm	-28.29 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.60352 GHz	-37.45 dBm	-24.45 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69083 GHz	-38.79 dBm	-25.79 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.33329 GHz	-37.55 dBm	-24.55 dB

Date: 7.MAR.2024 02:51:30

Middle Channel / QPSK

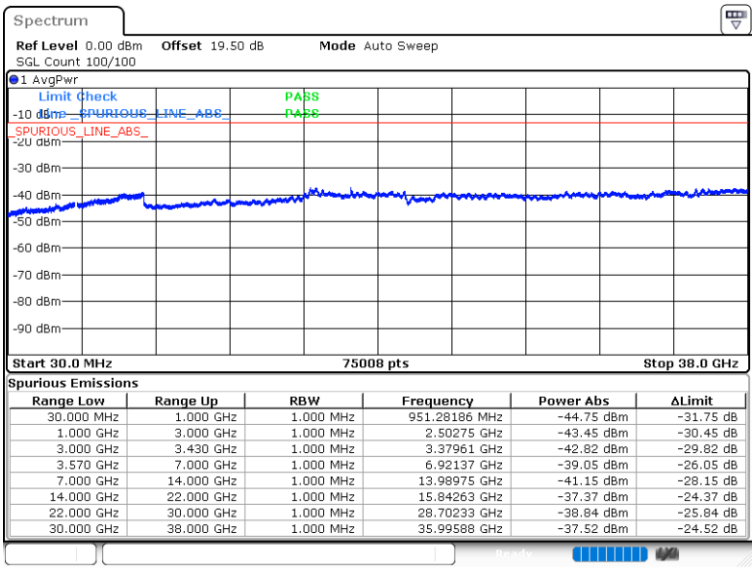


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	953.22089 MHz	-44.80 dBm	-31.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.63468 GHz	-43.81 dBm	-30.81 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.40733 GHz	-42.82 dBm	-29.82 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.94047 GHz	-38.91 dBm	-25.91 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.98625 GHz	-41.32 dBm	-28.32 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.86413 GHz	-37.49 dBm	-24.49 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69983 GHz	-38.77 dBm	-25.77 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.37679 GHz	-37.61 dBm	-24.61 dB

Date: 7.MAR.2024 02:52:47

Highest Channel / QPSK



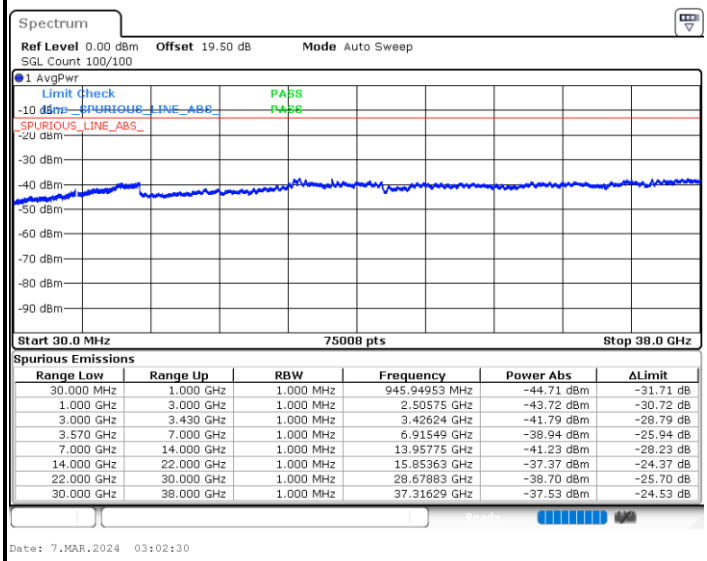
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	951.28186 MHz	-44.75 dBm	-31.75 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50275 GHz	-43.45 dBm	-30.45 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37961 GHz	-42.82 dBm	-29.82 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.92137 GHz	-39.05 dBm	-26.05 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.98975 GHz	-41.15 dBm	-28.15 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.84263 GHz	-37.37 dBm	-24.37 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.70233 GHz	-38.84 dBm	-25.84 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.99588 GHz	-37.52 dBm	-24.52 dB

Date: 7.MAR.2024 02:54:05

LTE Band 42 / 20MHz

Lowest Channel / QPSK

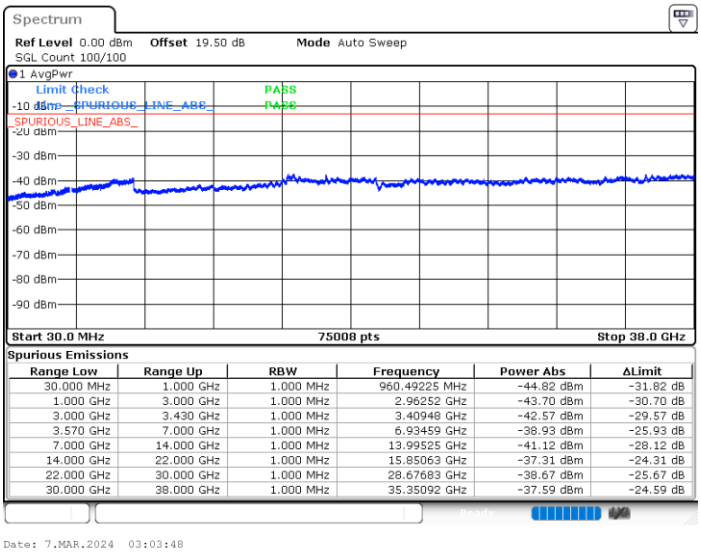


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	945.94953 MHz	-44.71 dBm	-31.71 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50575 GHz	-43.72 dBm	-30.72 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42624 GHz	-41.79 dBm	-28.79 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.91549 GHz	-38.94 dBm	-25.94 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.95775 GHz	-41.23 dBm	-28.23 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.85363 GHz	-37.37 dBm	-24.37 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.67883 GHz	-38.70 dBm	-25.70 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.31629 GHz	-37.53 dBm	-24.53 dB

Date: 7.MAR.2024 03:02:30

Middle Channel / QPSK

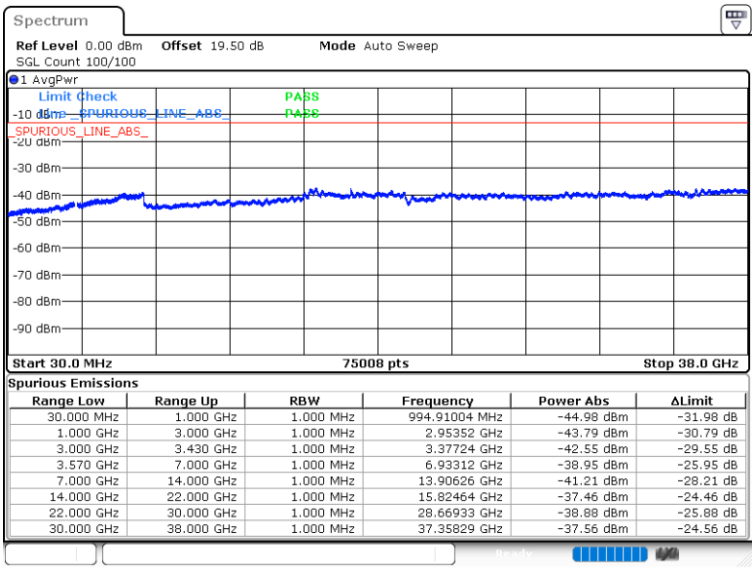


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.49225 MHz	-44.82 dBm	-31.82 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96252 GHz	-43.70 dBm	-30.70 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.40948 GHz	-42.57 dBm	-29.57 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.93459 GHz	-38.93 dBm	-25.93 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99525 GHz	-41.12 dBm	-28.12 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.85063 GHz	-37.31 dBm	-24.31 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.67683 GHz	-38.67 dBm	-25.67 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.35092 GHz	-37.59 dBm	-24.59 dB

Date: 7.MAR.2024 03:03:48

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	994.91004 MHz	-44.98 dBm	-31.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95352 GHz	-43.79 dBm	-30.79 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37724 GHz	-42.55 dBm	-29.55 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.93312 GHz	-38.95 dBm	-25.95 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.90626 GHz	-41.21 dBm	-28.21 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.82464 GHz	-37.46 dBm	-24.46 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.66933 GHz	-38.88 dBm	-25.88 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.35829 GHz	-37.56 dBm	-24.56 dB

Date: 7.MAR.2024 03:05:06

Frequency Stability

Test Conditions		LTE Band 42 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0030	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0030	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 42C

26dB Bandwidth

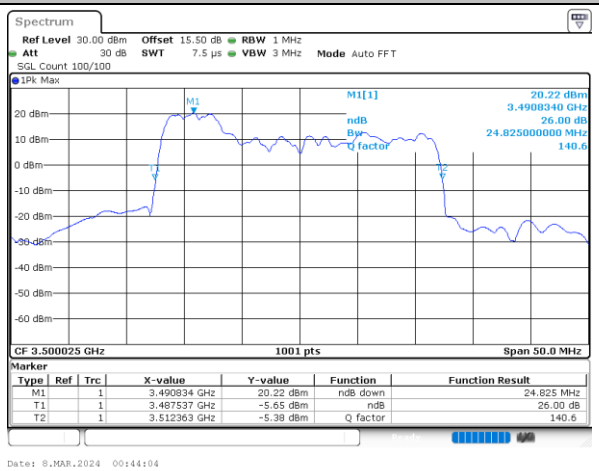
Mode	LTE Band 42C : 26dB BW(MHz)			
	QPSK			
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Middle CH	24.83	29.91	35.04	24.93
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	29.97	34.69	40.04	

Mode	LTE Band 42C : 26dB BW(MHz)			
	16QAM			
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Middle CH	24.68	29.67	34.83	24.88
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.15	34.97	39.96	

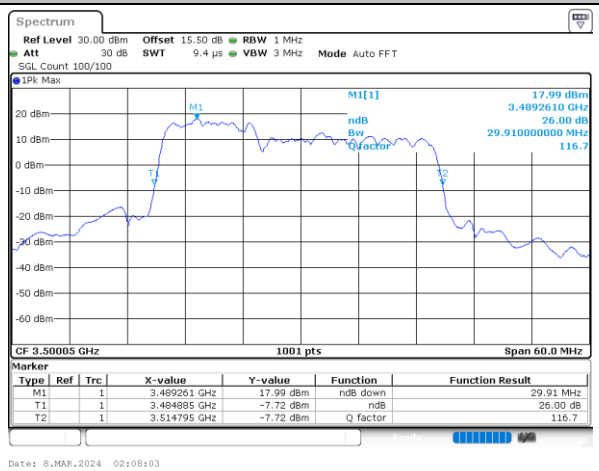
LTE Band 42C

QPSK

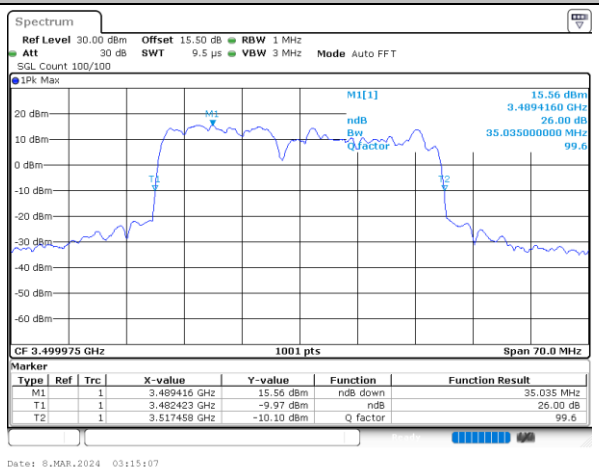
Middle Channel / 5MHz+20MHz



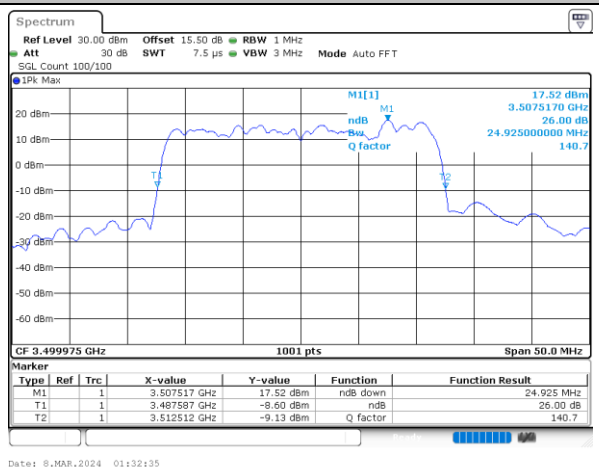
Middle Channel / 10MHz+20MHz



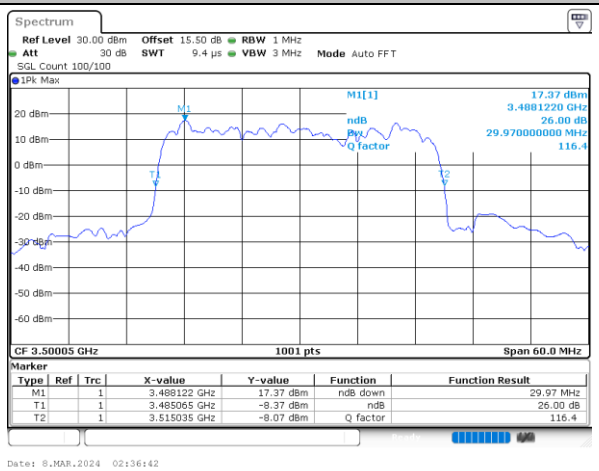
Middle Channel / 15MHz+20MHz



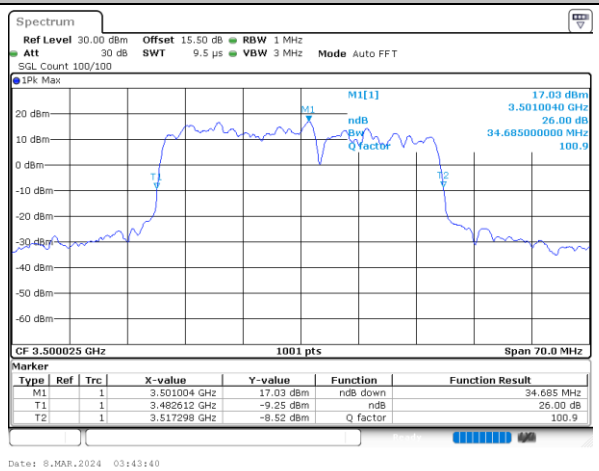
Middle Channel / 20MHz+5MHz

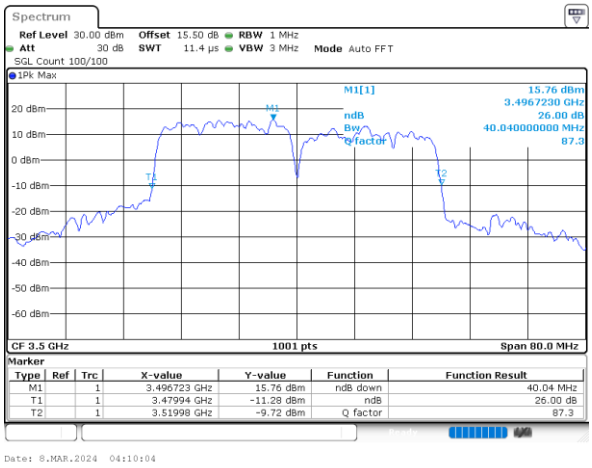


Middle Channel / 20MHz+10MHz



Middle Channel / 20MHz+15MHz

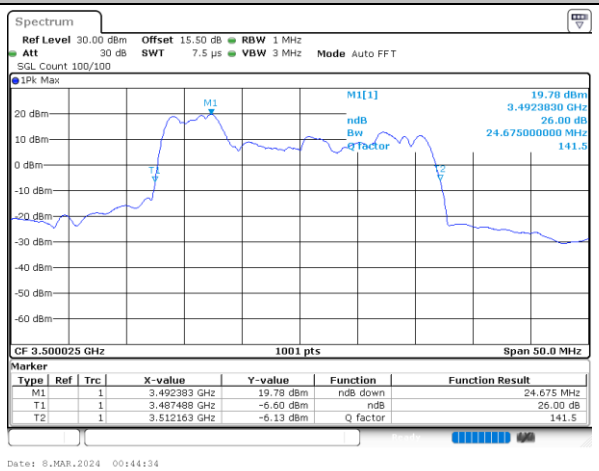


LTE Band 42C	
QPSK	
Middle Channel / 20MHz+20MHz	N/A
	

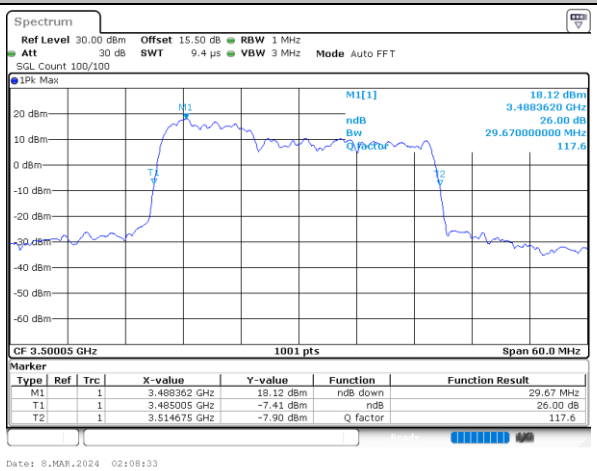
LTE Band 42C

16QAM

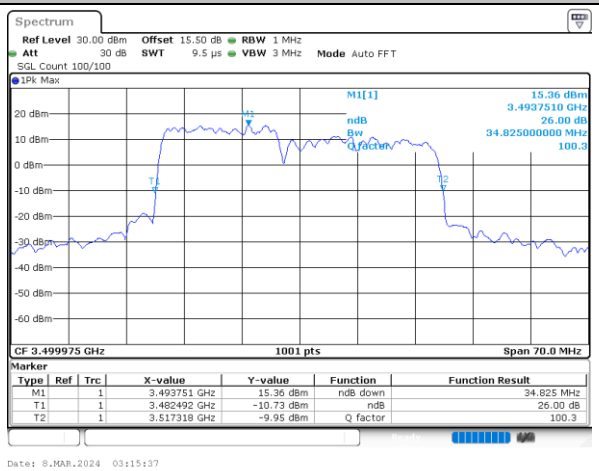
Middle Channel / 5MHz+20MHz



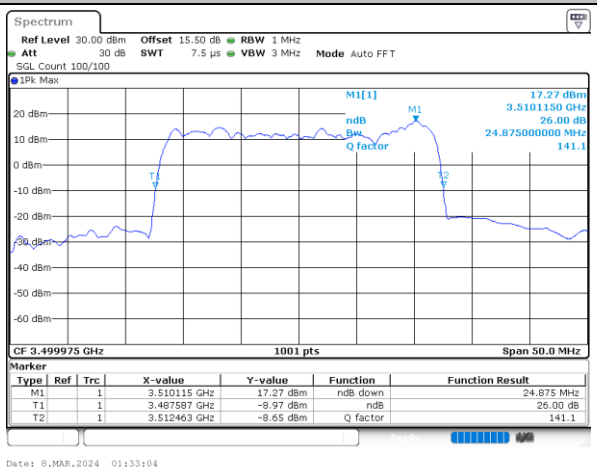
Middle Channel / 10MHz+20MHz



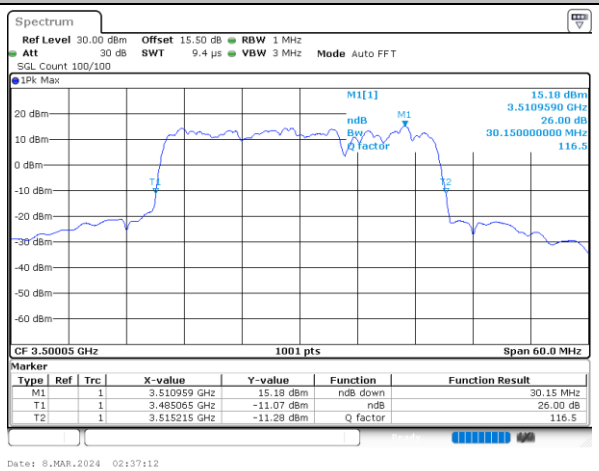
Middle Channel / 15MHz+20MHz



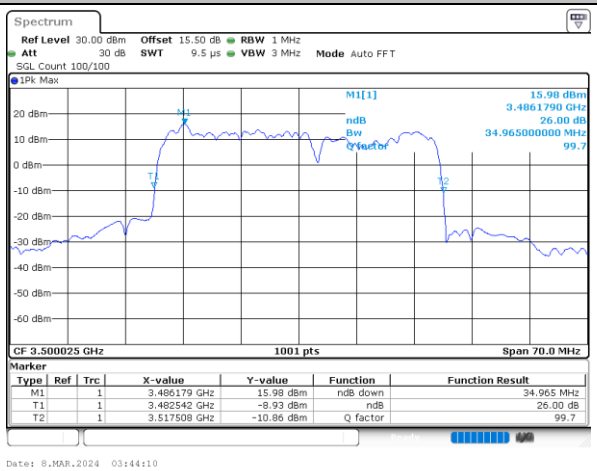
Middle Channel / 20MHz+5MHz



Middle Channel / 20MHz+10MHz



Middle Channel / 20MHz+15MHz



LTE Band 42C	
16QAM	
Middle Channel / 20MHz+20MHz	N/A