FCC RF Test Report

APPLICANT	:	Sonim Technologies, Inc.
EQUIPMENT	:	5G Feature Phone
BRAND NAME	:	Sonim
MODEL NAME	:	X320(S1303),X320(S1403),X320(S1301),X320(S1401), X320(S1302),X320(S1402),X320(S1304),X320(S1404), X320(S1305),X320(S1405),X320(S1310),X320(S1410)
FCC ID	:	WYPS13030
STANDARD	:	47 CFR Part 27 Subpart Q
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Jul. 11, 2024 ~ Aug. 14, 2024

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

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.01

Sporton International Inc. (ShenZhen)

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

People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG462605F	Rev. 01	Initial issue of report	Sep. 14, 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 27.53 dB at 6802.00 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

Sonim Technologies, Inc.
4445 Eastgate Mall, Suite 200, San Diego, CA 92121, USA

1.2 Manufacturer

Sonim Technologies, Inc.
4445 Eastgate Mall, Suite 200, San Diego, CA 92121, USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Feature Phone
Brand Name	Sonim
Model Name	X320(S1303),X320(S1403),X320(S1301),X320(S1401),X320(S1302), X320(S1402),X320(S1304),X320(S1404),X320(S1305),X320(S1405), X320(S1310),X320(S1410)
FCC ID	WYPS13030
IMEI Code	Conducted: 016562000005059 Radiation: 016562000018276/016562000025875
HW Version	V1.0
SW Version	X32.0-01-14.0-19.01.00
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	<ANT6> : LTE Band 42 : 22.98 dBm
Antenna Gain	<ANT6> : LTE Band 42 : 0.10 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	0.2000	4M51G7D	0.1514	4M52W7D
10	3455 ~ 3545	0.1977	9M03G7D	0.1528	9M09W7D
15	3457.5 ~ 3542.5	0.2009	13M5G7D	0.1517	13M5W7D
20	3460 ~ 3540	0.2032	17M9G7D	0.1570	17M9W7D

1.7 Testing Site

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

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

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

1.8 Test Software

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

1.9 Applied Standards

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

- 47 CFR Part 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.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

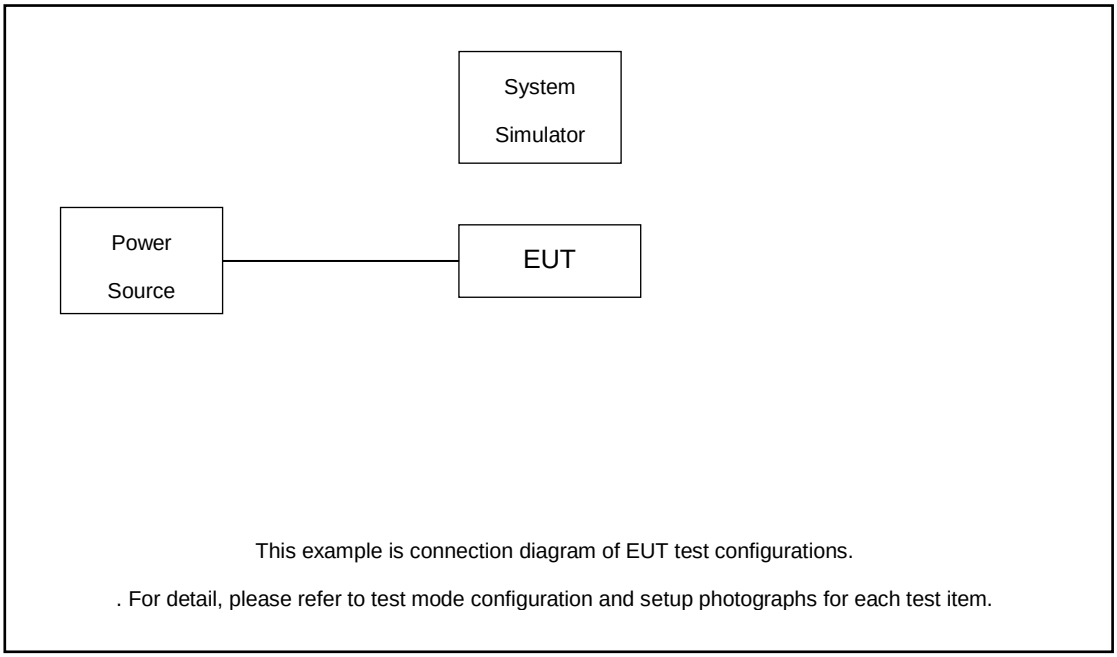
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Z 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, , Full RB	L, M, H
Peak-to-Average Ratio	LTE Band 42	20M	QPSK, 16QAM, 64QAM, 256QAM	Full RB	M
E.I.R.P	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, 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, 256QAM	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	5M	QPSK	1RB	M
Radiated Spurious Emission	LTE Band 42	Worst case from maximum power			L, M, H

Note:
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 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.	LTE Base Station	Anritsu	MT8821C	Fcc DoC	N/A	Unshielded, 1.5 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 5.0 dB and 10dB attenuator.

Example :

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

= 5.0 + 10 = 15.0 (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

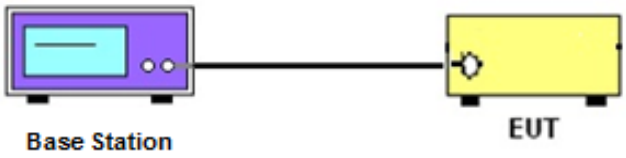
3 Conducted Test Items

3.1 Measuring Instruments

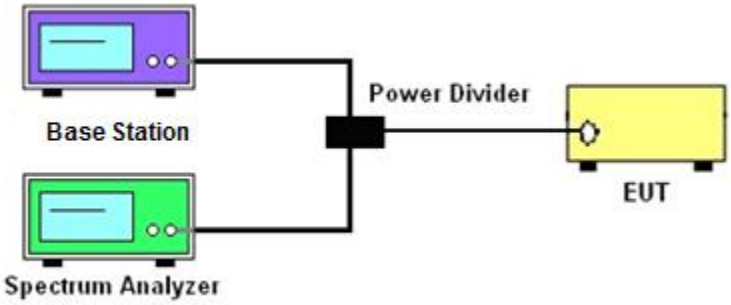
See list of measuring instruments of this test report.

3.2 Test Setup

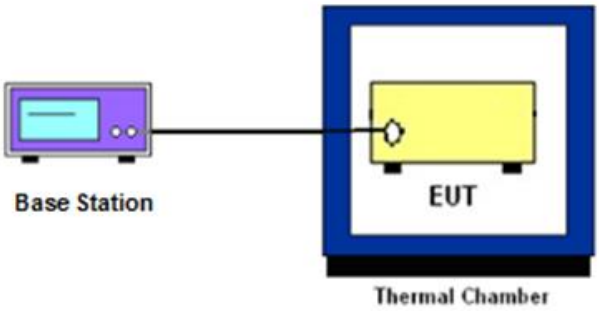
3.2.1 Conducted Output Power



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 10th 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.

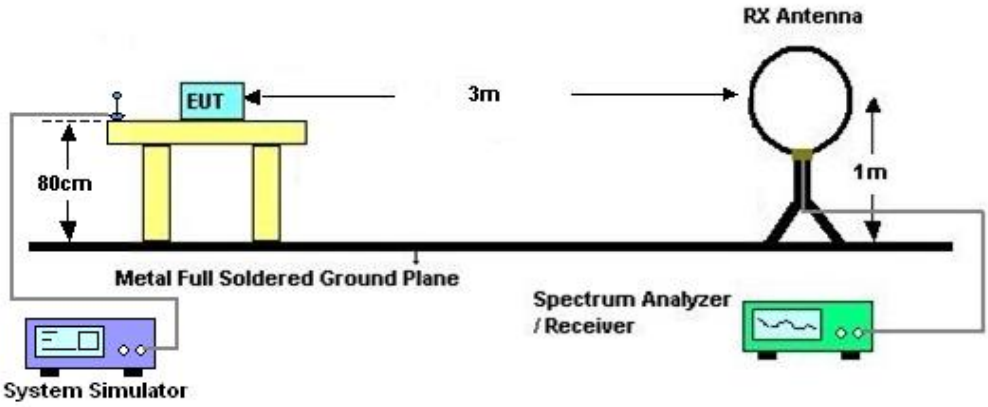
4 Radiated Test Items

4.1 Measuring Instruments

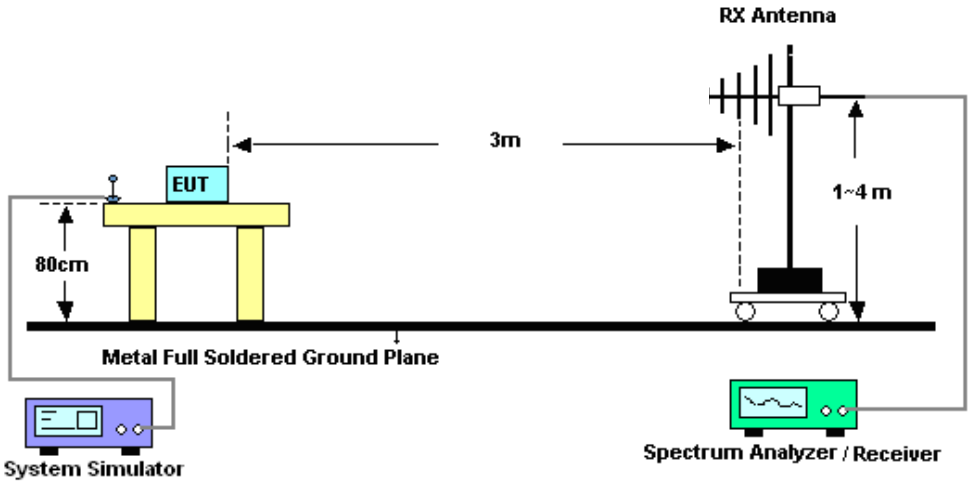
See list of measuring instruments of this test report.

4.2 Test Setup

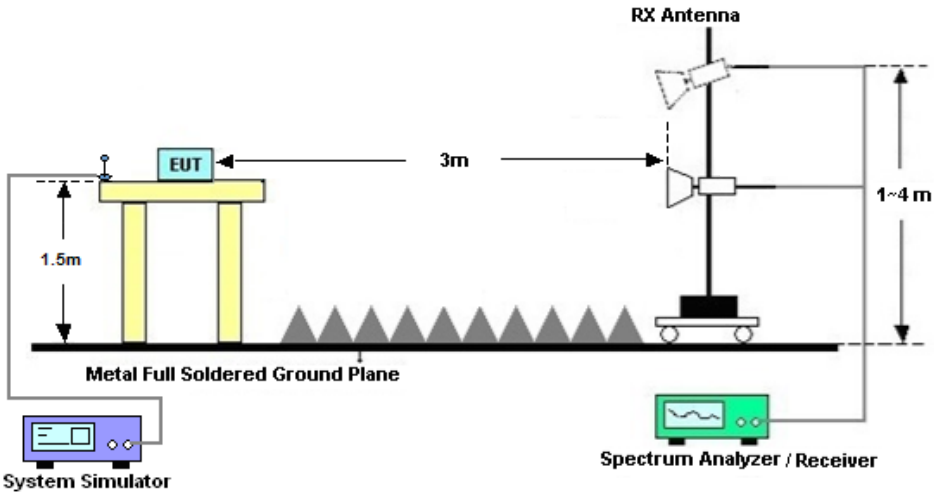
4.2.1 For radiated test below 30MHz



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 C63.26. 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. 09, 2024	Jul. 11, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Jul. 11, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2023	Jul. 11, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	Jul. 11, 2024	Jul. 02, 2025	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	Aug. 14, 2024	Dec. 26, 2024	Radiation (03CH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2024	Aug. 14, 2024	Jul. 02, 2025	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 29, 2023	Aug. 14, 2024	Dec. 28, 2024	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Aug. 14, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Aug. 14, 2024	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09,2024	Aug. 14, 2024	Apr. 08,2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	Aug. 14, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 18,2023	Aug. 14, 2024	Oct. 17,2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18,2023	Aug. 14, 2024	Oct. 17,2024	Radiation (03CH01-SZ
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2024	Aug. 14, 2024	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 18,2023	Aug. 14, 2024	Oct. 17,2024	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Aug. 14, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Aug. 14, 2024	NCR	Radiation (03CH01-SZ)

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 Hz

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

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

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

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

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

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

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

Appendix A. Test Results of Conducted Test

Test Engineer :	Fly Liang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

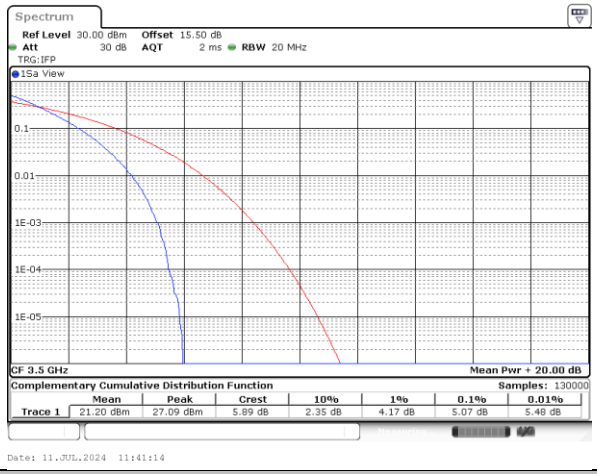
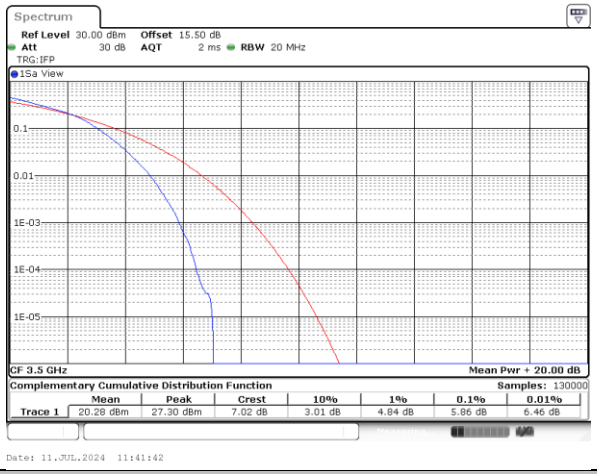
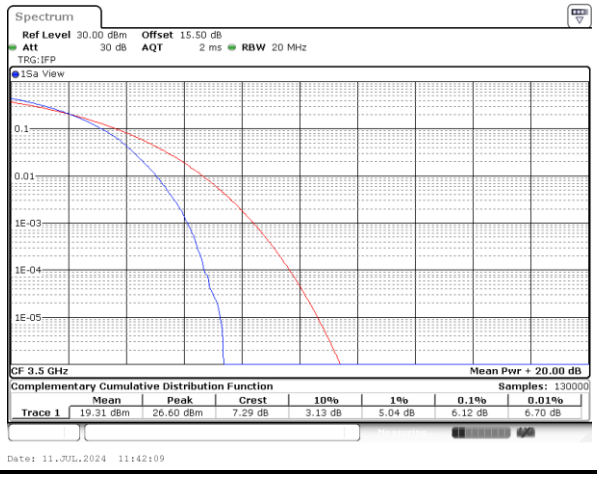
LTE Band 42_Ant 6

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	22.98	22.95	22.79	0.2032	0.2018	0.1945
20	QPSK	1	49	22.87	22.81	22.90	0.1982	0.1954	0.1995
20	QPSK	1	99	22.94	22.68	22.95	0.2014	0.1897	0.2018
20	QPSK	50	0	21.97	21.84	21.69	0.1611	0.1563	0.1510
20	QPSK	50	24	21.80	21.78	21.54	0.1549	0.1542	0.1459
20	QPSK	50	50	21.81	21.81	21.78	0.1552	0.1552	0.1542
20	QPSK	100	0	21.93	21.78	21.65	0.1596	0.1542	0.1496
20	16QAM	1	0	21.79	21.73	21.86	0.1545	0.1524	0.1570
20	64QAM	1	0	20.85	20.70	20.91	0.1245	0.1202	0.1262
20	256QAM	1	0	17.90	17.97	17.84	0.0631	0.0641	0.0622
Channel				42165	42590	43015	EIRP(W)		
Frequency (MHz)				3457.5	3500	3542.5	L	M	H
15	QPSK	1	0	22.93	22.79	22.70	0.2009	0.1945	0.1905
15	16QAM	1	0	21.69	21.67	21.71	0.1510	0.1503	0.1517
Channel				42140	42590	43040	EIRP(W)		
Frequency (MHz)				3455	3500	3545	L	M	H
10	QPSK	1	0	22.85	22.86	22.72	0.1972	0.1977	0.1914
10	16QAM	1	0	21.60	21.56	21.74	0.1479	0.1466	0.1528
Channel				42115	42590	43065	EIRP(W)		
Frequency (MHz)				3452.5	3500	3547.5	L	M	H
5	QPSK	1	0	22.90	22.91	22.70	0.1995	0.2000	0.1905
5	16QAM	1	0	21.59	21.68	21.70	0.1476	0.1507	0.1514

. 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	5.07	5.86	6.12	PASS

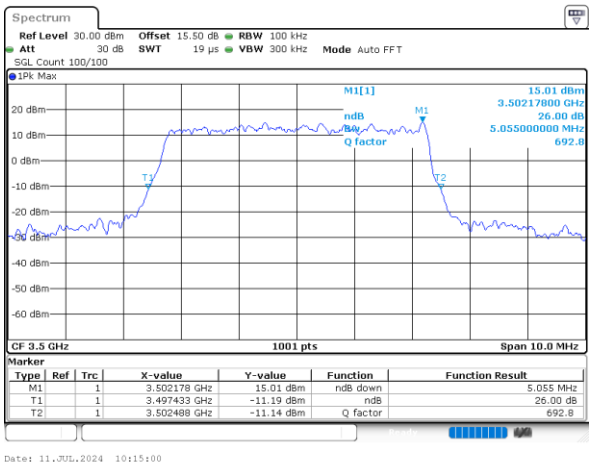
LTE Band 42 / 20MHz / QPSK	LTE Band 42 / 20MHz / 16QAM
Middle Channel / Full RB	Middle Channel / Full RB
	
LTE Band 42 / 20MHz / 64QAM	
Middle Channel / Full RB	
	NA

26dB Bandwidth

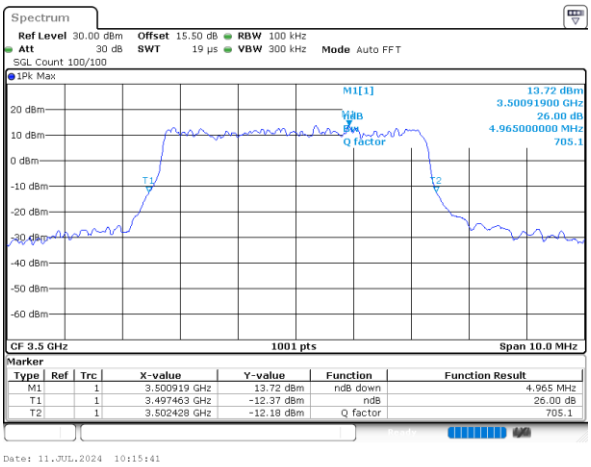
Mode	LTE Band 42 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.06	4.97	10.13	9.81	14.33	14.33	18.94	19.42

LTE Band 42

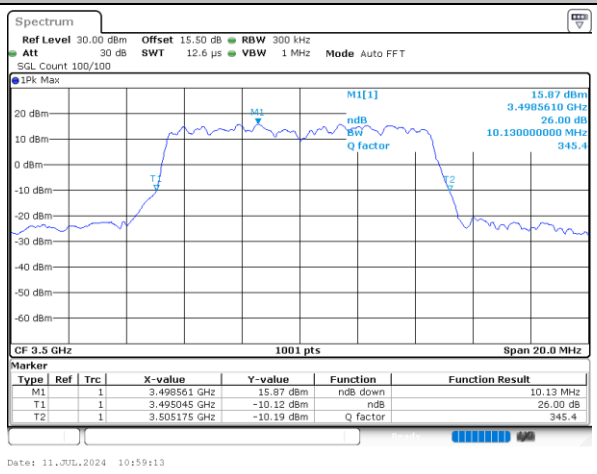
Middle Channel / 5MHz / QPSK



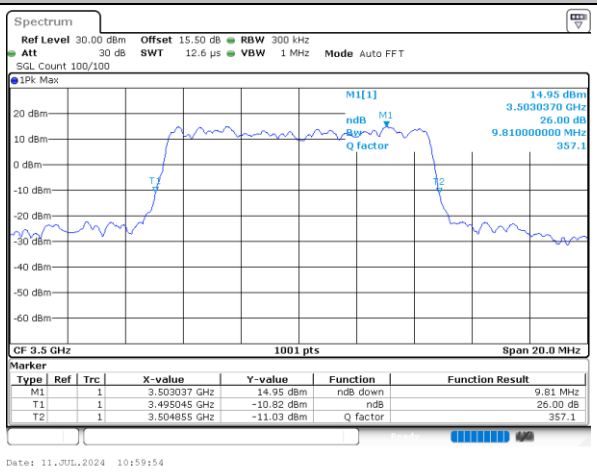
Middle Channel / 5MHz / 16QAM

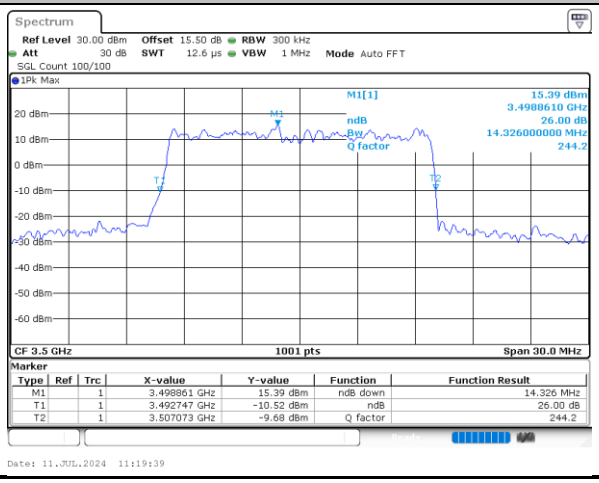
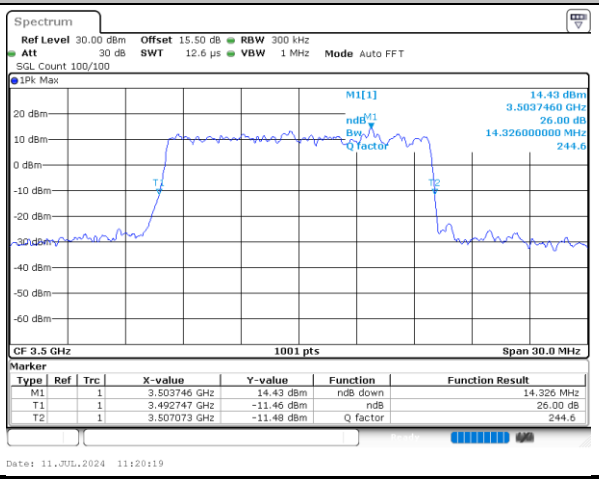


Middle Channel / 10MHz / QPSK

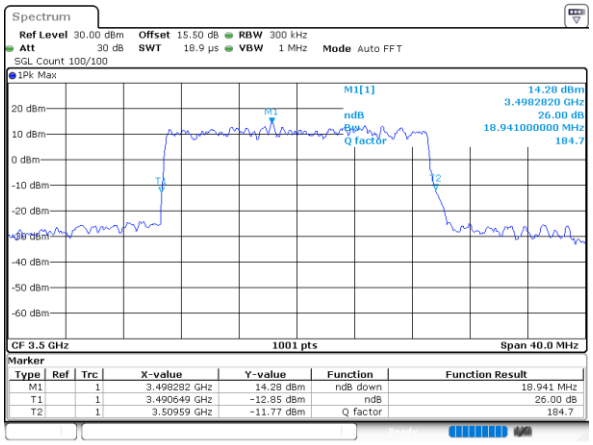
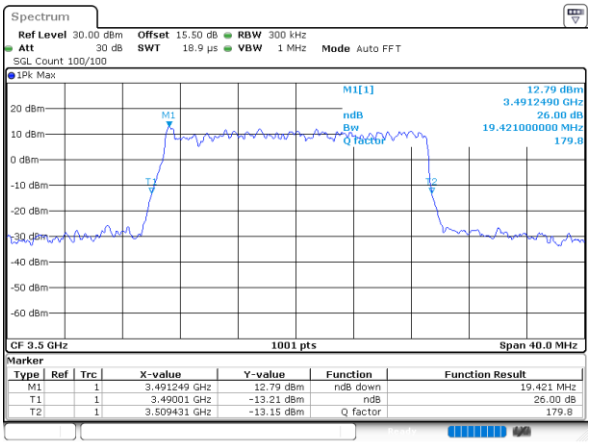


Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
	

LTE Band 42

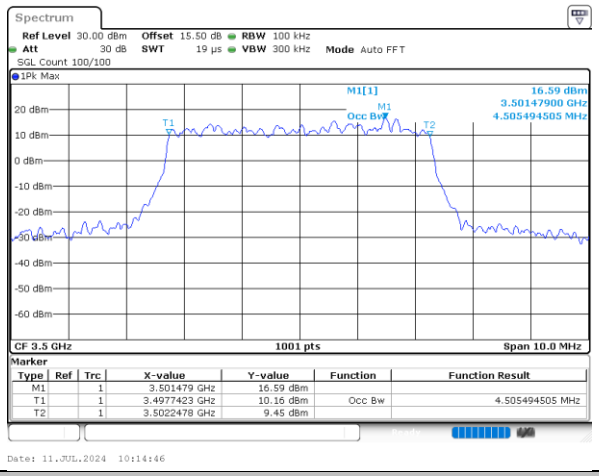
Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM
	

Occupied Bandwidth

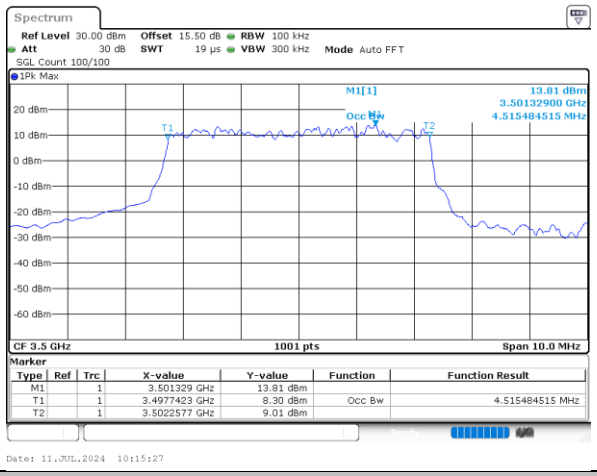
Mode	LTE Band 42 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.52	9.03	9.09	13.46	13.49	17.90	17.90

LTE Band 42

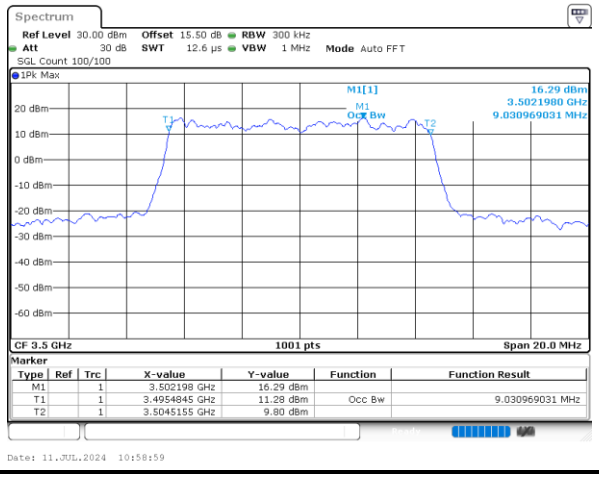
Middle Channel / 5MHz / QPSK



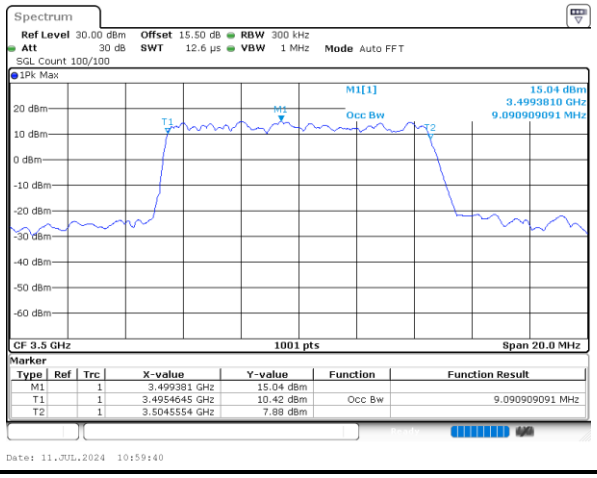
Middle Channel / 5MHz / 16QAM

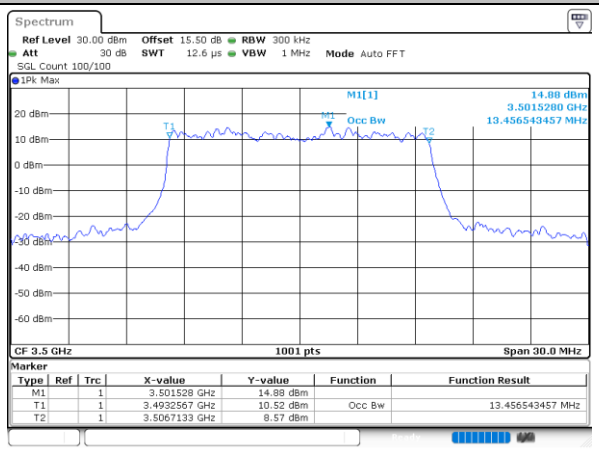
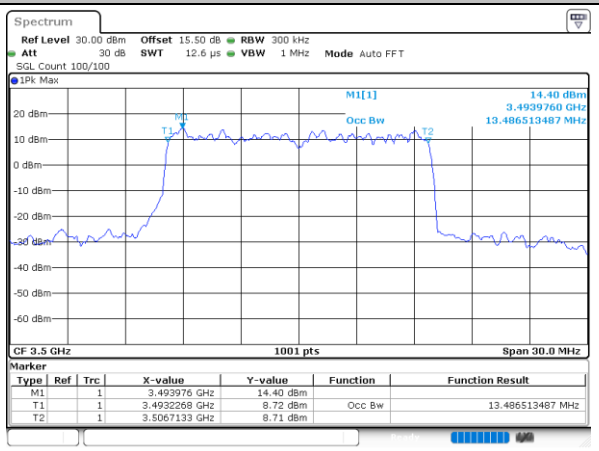


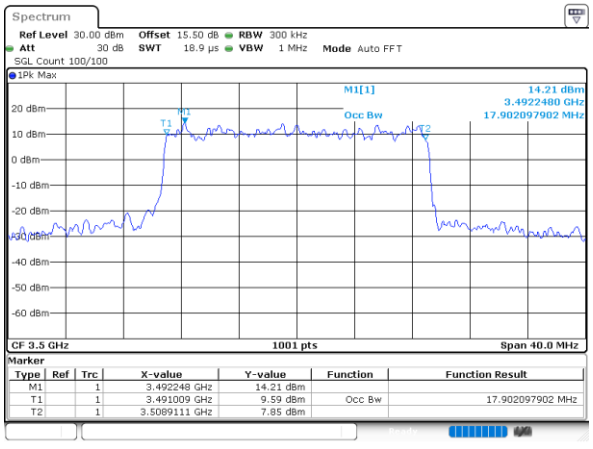
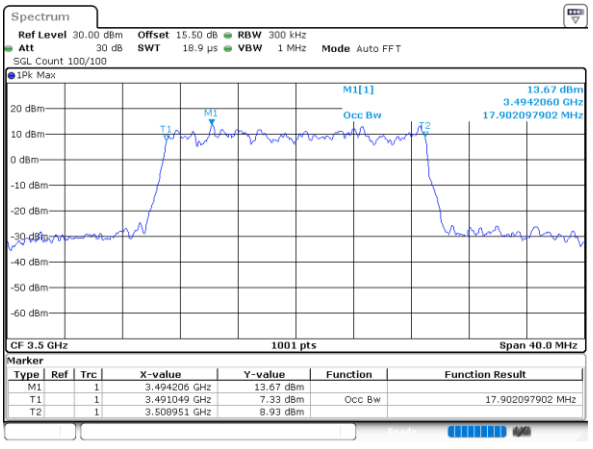
Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



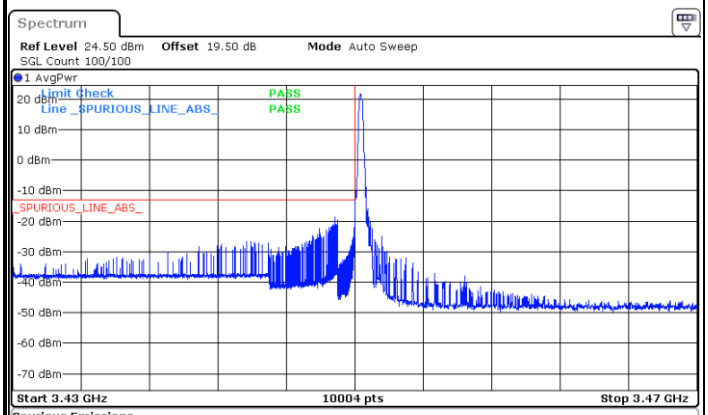
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
	

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

Conducted Band Edge

LTE Band 42 / 5MHz / QPSK

Lowest Band Edge / 1 RB

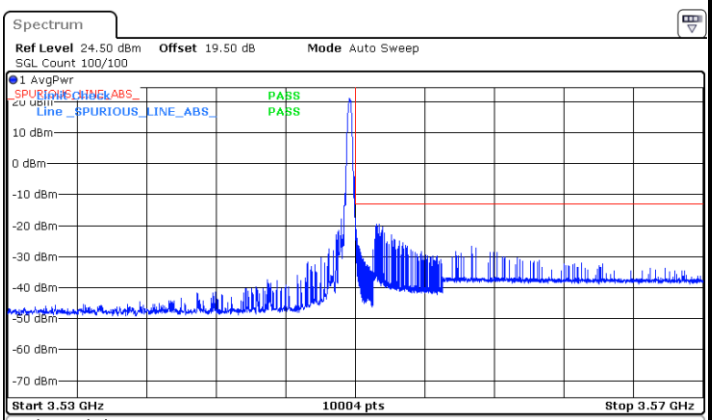


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44390 GHz	-26.63 dBm	-13.63 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44883 GHz	-18.69 dBm	-5.69 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-20.89 dBm	-7.89 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45033 GHz	21.80 dBm	-8.20 dB

Date: 11.JUL.2024 10:05:43

Highest Band Edge / 1 RB

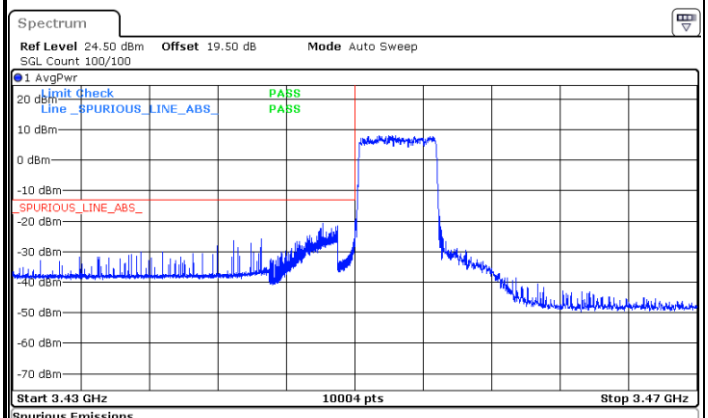


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54965 GHz	21.02 dBm	-8.98 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-18.99 dBm	-5.99 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55138 GHz	-19.53 dBm	-6.53 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55671 GHz	-26.77 dBm	-13.77 dB

Date: 11.JUL.2024 10:16:52

Lowest Band Edge / Full RB

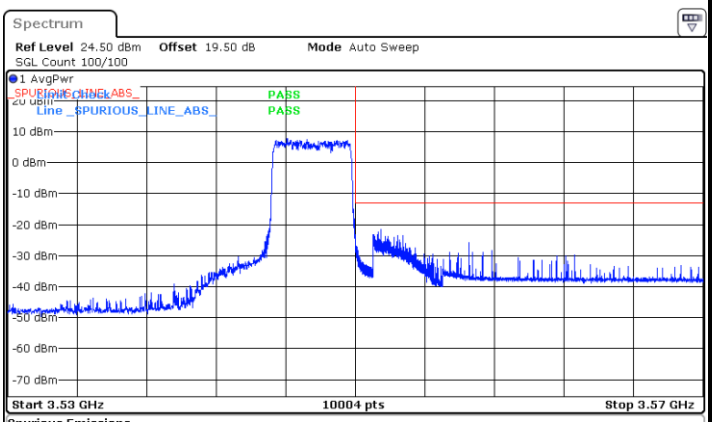


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44453 GHz	-25.75 dBm	-12.75 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44814 GHz	-20.79 dBm	-7.79 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44999 GHz	-24.25 dBm	-11.25 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45220 GHz	7.98 dBm	-22.02 dB

Date: 11.JUL.2024 10:09:17

Highest Band Edge / Full RB



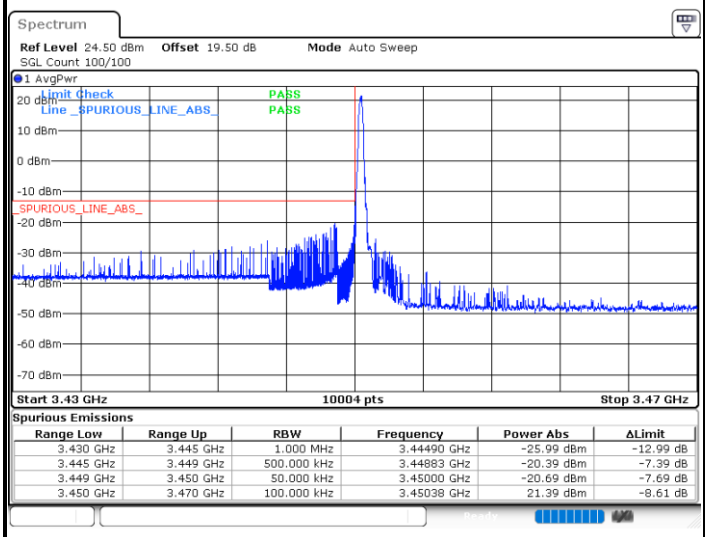
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54607 GHz	7.74 dBm	-22.26 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-24.71 dBm	-11.71 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55146 GHz	-21.48 dBm	-8.48 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55656 GHz	-25.79 dBm	-12.79 dB

Date: 11.JUL.2024 10:20:26

LTE Band 42 / 5MHz / 16QAM

Lowest Band Edge / 1RB

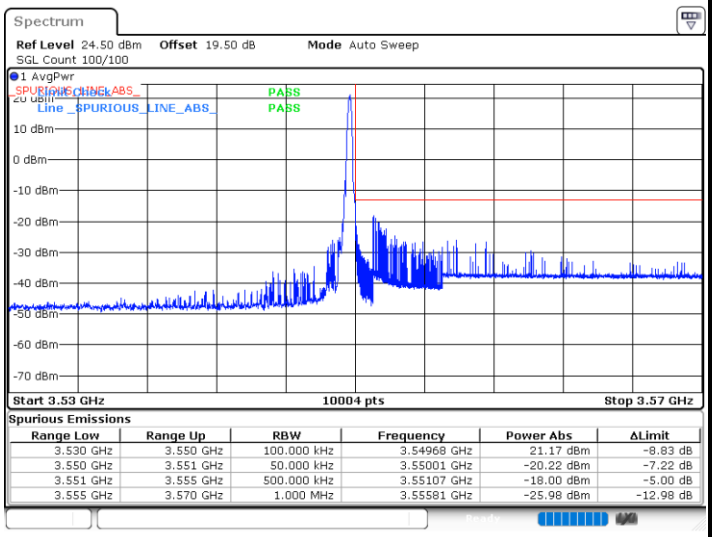


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44490 GHz	-25.99 dBm	-12.99 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44883 GHz	-20.39 dBm	-7.39 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-20.69 dBm	-7.69 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45038 GHz	21.39 dBm	-8.61 dB

Date: 11.JUL.2024 10:06:54

Highest Band Edge / 1 RB

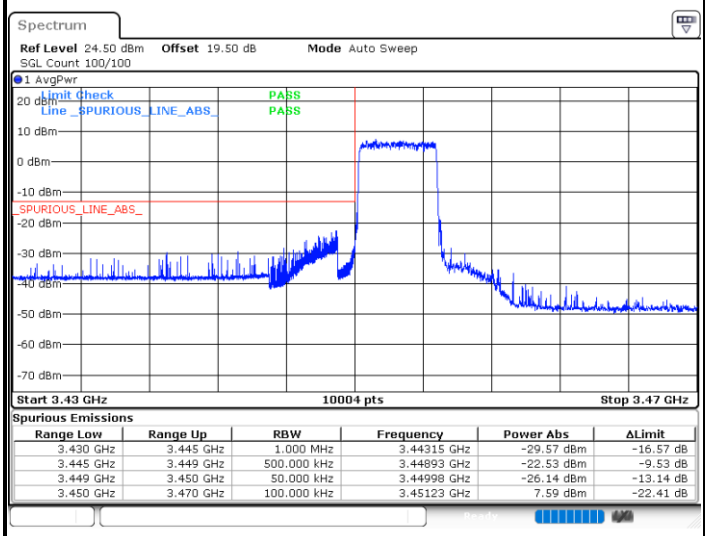


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54968 GHz	21.17 dBm	-8.83 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-20.22 dBm	-7.22 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55107 GHz	-18.00 dBm	-5.00 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55581 GHz	-25.98 dBm	-12.98 dB

Date: 11.JUL.2024 10:18:03

Lowest Band Edge / Full RB

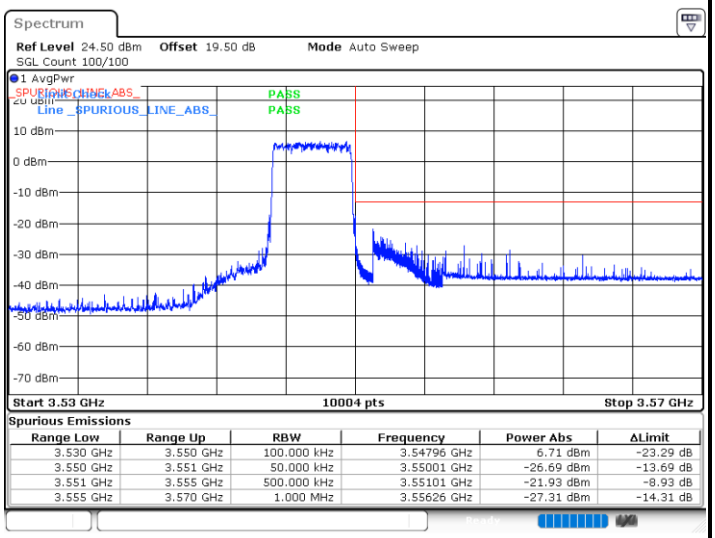


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44315 GHz	-29.57 dBm	-16.57 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44893 GHz	-22.53 dBm	-9.53 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44998 GHz	-26.14 dBm	-13.14 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45123 GHz	7.59 dBm	-22.41 dB

Date: 11.JUL.2024 10:10:28

Highest Band Edge / Full RB



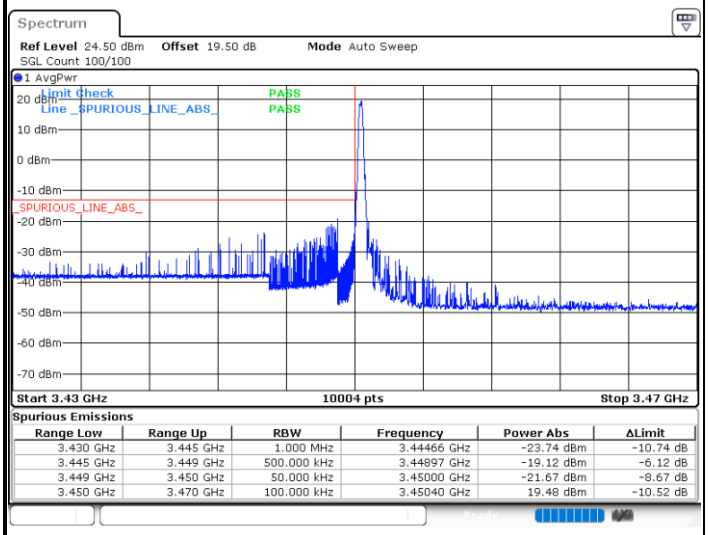
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54796 GHz	6.71 dBm	-23.29 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	3.55101 GHz	-21.93 dBm	-8.93 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55626 GHz	-27.31 dBm	-14.31 dB

Date: 11.JUL.2024 10:21:37

LTE Band 42 / 5MHz / 64QAM

Lowest Band Edge / 1RB

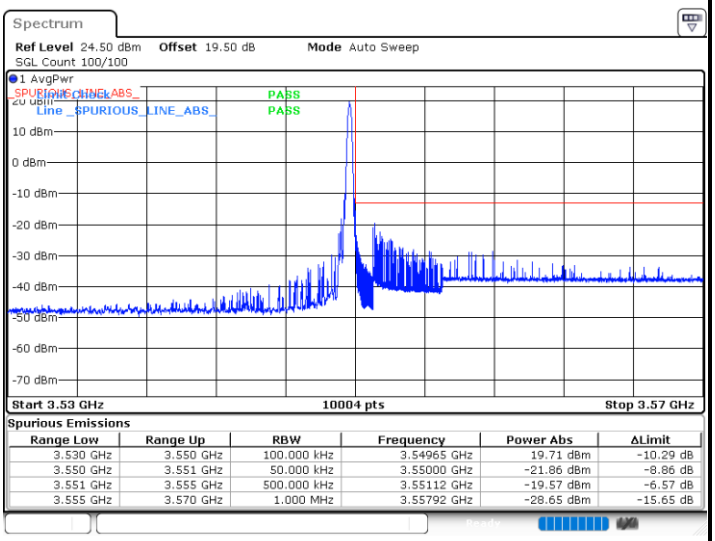


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44466 GHz	-23.74 dBm	-10.74 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44897 GHz	-19.12 dBm	-6.12 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-21.67 dBm	-8.67 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45040 GHz	19.48 dBm	-10.52 dB

Date: 11.JUL.2024 10:08:06

Highest Band Edge / 1 RB

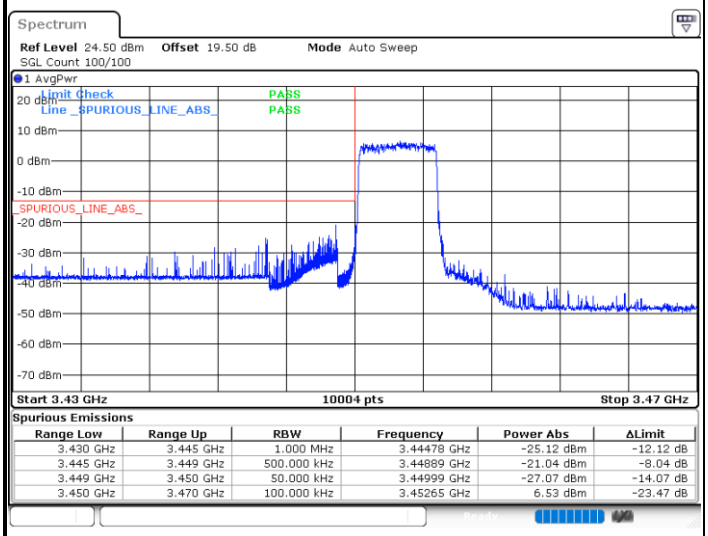


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54965 GHz	19.71 dBm	-10.29 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-21.86 dBm	-8.86 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55112 GHz	-19.57 dBm	-6.57 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55792 GHz	-28.65 dBm	-15.65 dB

Date: 11.JUL.2024 10:19:15

Lowest Band Edge / Full RB

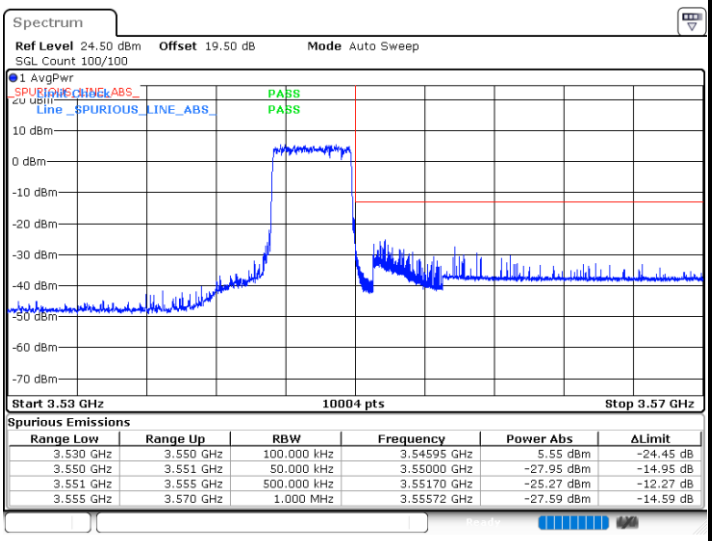


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44478 GHz	-25.12 dBm	-12.12 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44889 GHz	-21.04 dBm	-8.04 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44999 GHz	-27.07 dBm	-14.07 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45265 GHz	6.53 dBm	-23.47 dB

Date: 11.JUL.2024 10:11:40

Highest Band Edge / Full RB



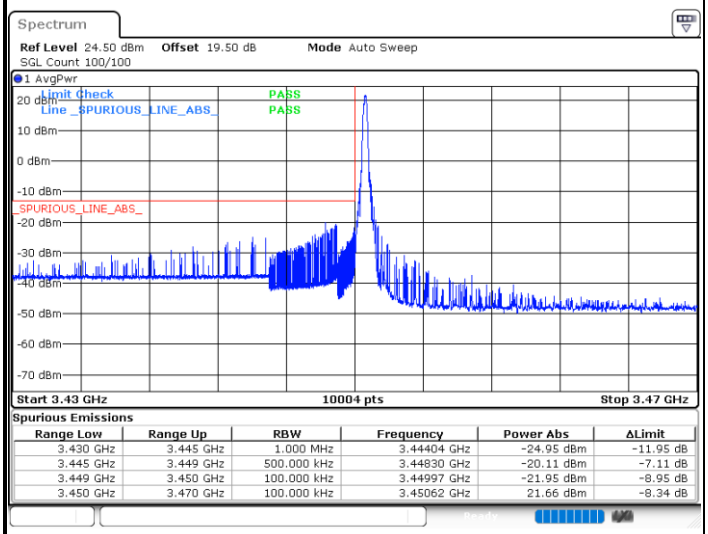
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54595 GHz	5.55 dBm	-24.45 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-27.95 dBm	-14.95 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55170 GHz	-25.27 dBm	-12.27 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55572 GHz	-27.59 dBm	-14.59 dB

Date: 11.JUL.2024 10:22:49

LTE Band 42 / 10MHz / QPSK

Lowest Band Edge / 1 RB

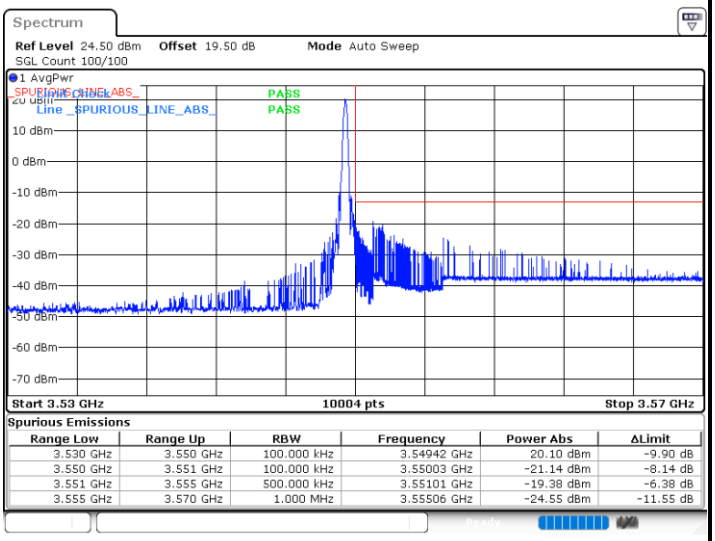


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44404 GHz	-24.95 dBm	-11.95 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44830 GHz	-20.11 dBm	-7.11 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44997 GHz	-21.95 dBm	-8.95 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45062 GHz	21.66 dBm	-8.34 dB

Date: 11.JUL.2024 10:26:09

Highest Band Edge / 1 RB

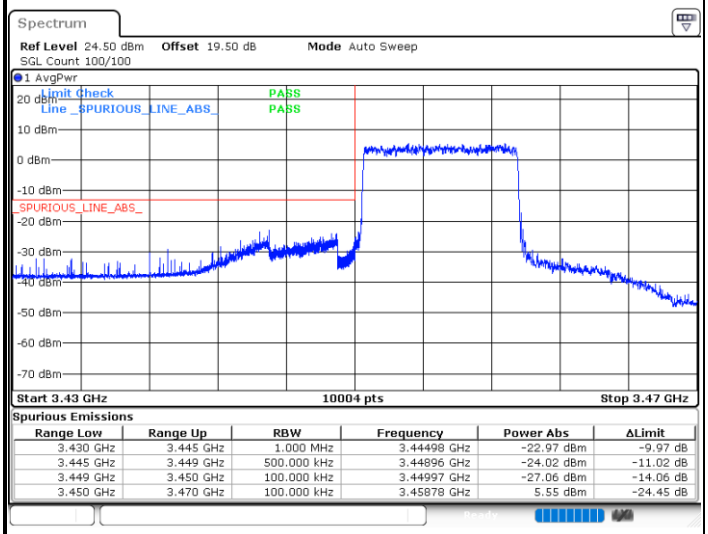


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54942 GHz	20.10 dBm	-9.90 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55003 GHz	-21.14 dBm	-8.14 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55101 GHz	-19.38 dBm	-6.38 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55506 GHz	-24.55 dBm	-11.55 dB

Date: 11.JUL.2024 11:01:04

Lowest Band Edge / Full RB

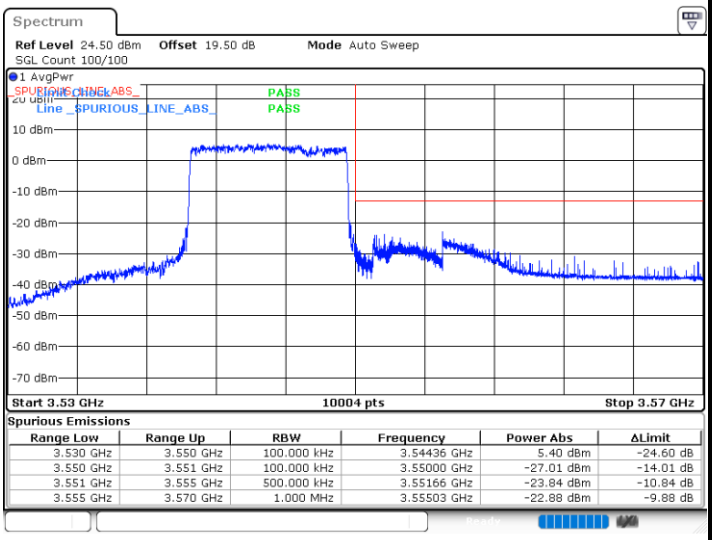


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44498 GHz	-22.97 dBm	-9.97 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44896 GHz	-24.02 dBm	-11.02 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44997 GHz	-27.06 dBm	-14.06 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45878 GHz	5.55 dBm	-24.45 dB

Date: 11.JUL.2024 10:29:44

Highest Band Edge / Full RB



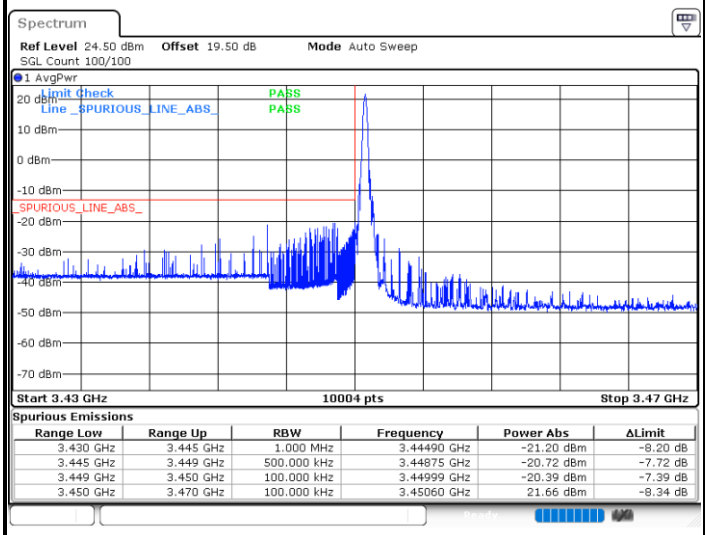
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54436 GHz	5.40 dBm	-24.60 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55000 GHz	-27.01 dBm	-14.01 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55166 GHz	-23.84 dBm	-10.84 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55503 GHz	-22.88 dBm	-9.88 dB

Date: 11.JUL.2024 11:04:38

LTE Band 42 / 10MHz / 16QAM

Lowest Band Edge / 1RB

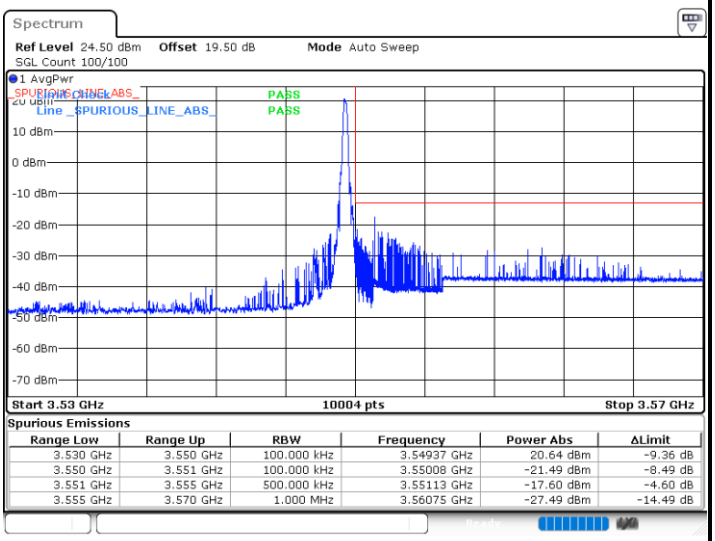


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44490 GHz	-21.20 dBm	-8.20 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44875 GHz	-20.72 dBm	-7.72 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-20.39 dBm	-7.39 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45060 GHz	21.66 dBm	-8.34 dB

Date: 11.JUL.2024 10:27:21

Highest Band Edge / 1 RB

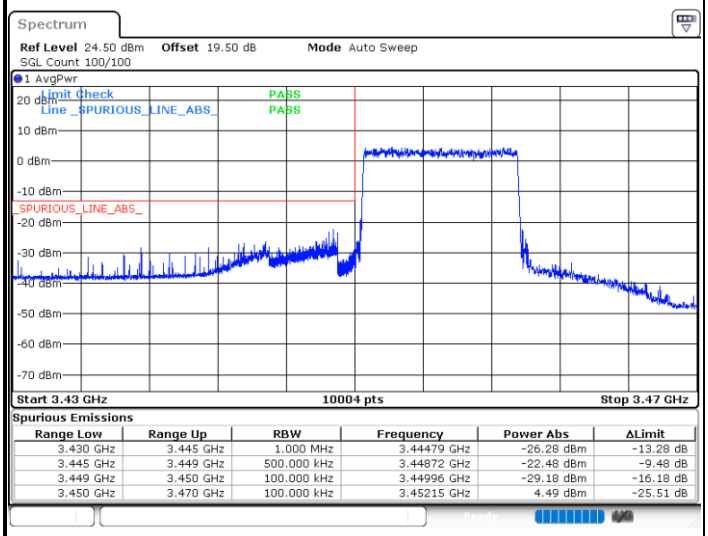


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54937 GHz	20.64 dBm	-9.36 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55008 GHz	-21.49 dBm	-8.49 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55113 GHz	-17.60 dBm	-4.60 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.56075 GHz	-27.49 dBm	-14.49 dB

Date: 11.JUL.2024 11:02:15

Lowest Band Edge / Full RB

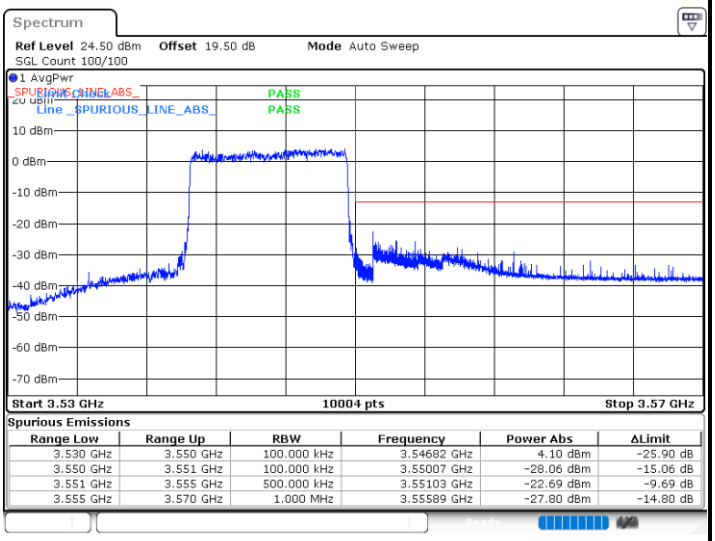


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44479 GHz	-26.28 dBm	-13.28 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44872 GHz	-22.48 dBm	-9.48 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44996 GHz	-29.18 dBm	-16.18 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45215 GHz	4.49 dBm	-25.51 dB

Date: 11.JUL.2024 10:30:56

Highest Band Edge / Full RB



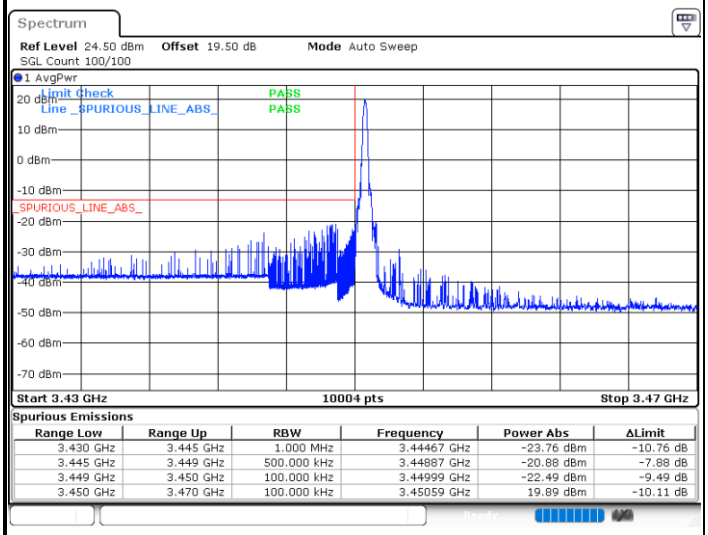
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54682 GHz	4.10 dBm	-25.90 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55007 GHz	-28.06 dBm	-15.06 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55103 GHz	-22.69 dBm	-9.69 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55589 GHz	-27.80 dBm	-14.80 dB

Date: 11.JUL.2024 11:05:49

LTE Band 42 / 10MHz / 64QAM

Lowest Band Edge / 1RB

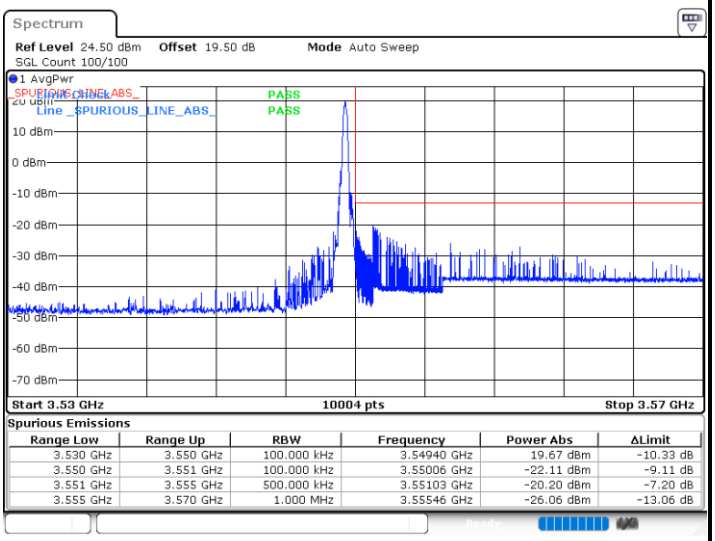


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44467 GHz	-23.76 dBm	-10.76 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44887 GHz	-20.88 dBm	-7.88 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-22.49 dBm	-9.49 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45059 GHz	19.89 dBm	-10.11 dB

Date: 11.JUL.2024 10:28:32

Highest Band Edge / 1 RB

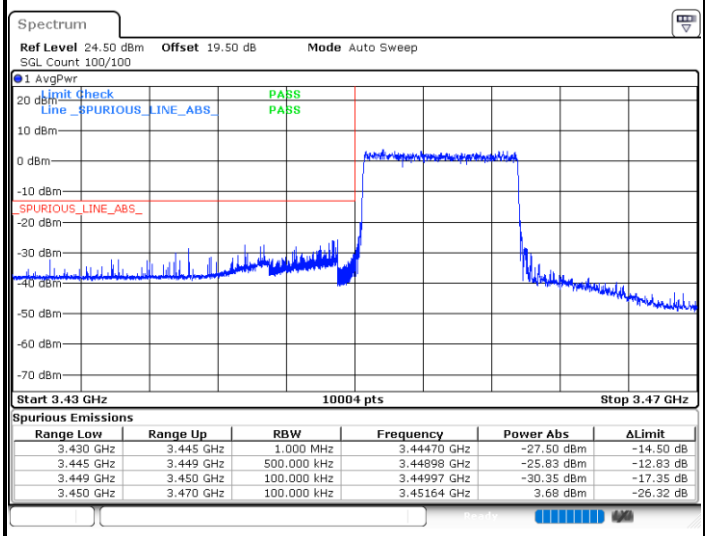


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54940 GHz	19.67 dBm	-10.33 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55006 GHz	-22.11 dBm	-9.11 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55103 GHz	-20.20 dBm	-7.20 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55546 GHz	-26.06 dBm	-13.06 dB

Date: 11.JUL.2024 11:03:27

Lowest Band Edge / Full RB

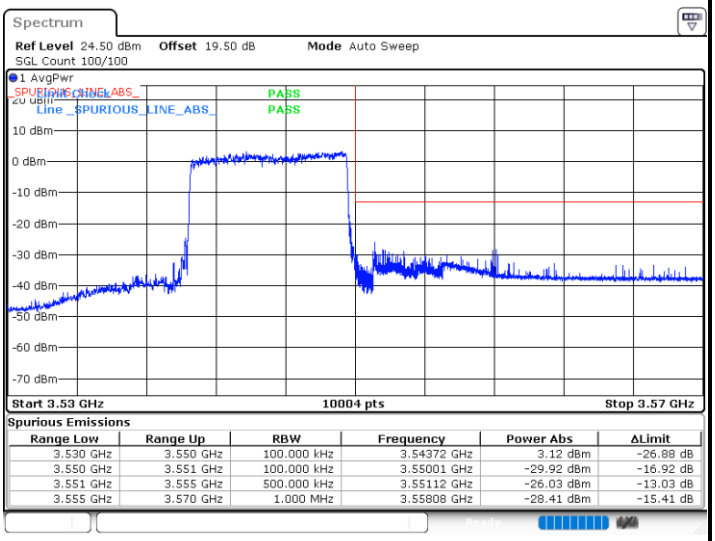


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44470 GHz	-27.50 dBm	-14.50 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44898 GHz	-25.83 dBm	-12.83 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44997 GHz	-30.35 dBm	-17.35 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45164 GHz	3.68 dBm	-26.32 dB

Date: 11.JUL.2024 10:32:07

Highest Band Edge / Full RB



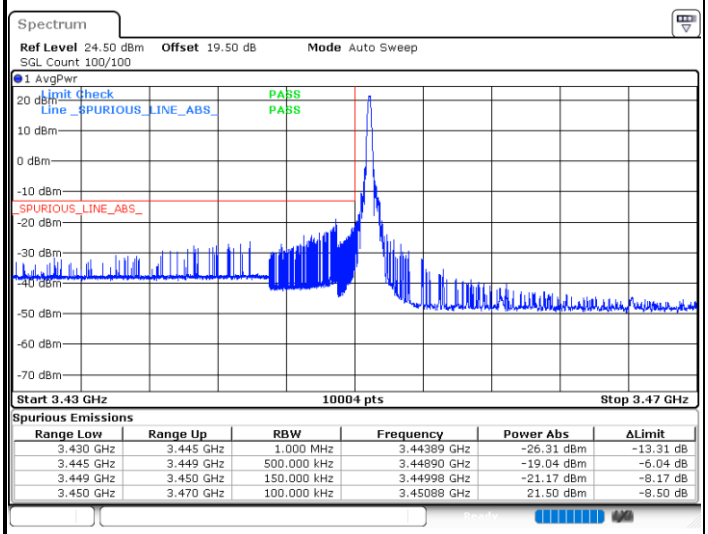
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54372 GHz	3.12 dBm	-26.88 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55001 GHz	-29.92 dBm	-16.92 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55112 GHz	-26.03 dBm	-13.03 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55808 GHz	-28.41 dBm	-15.41 dB

Date: 11.JUL.2024 11:07:00

LTE Band 42 / 15MHz / QPSK

Lowest Band Edge / 1 RB

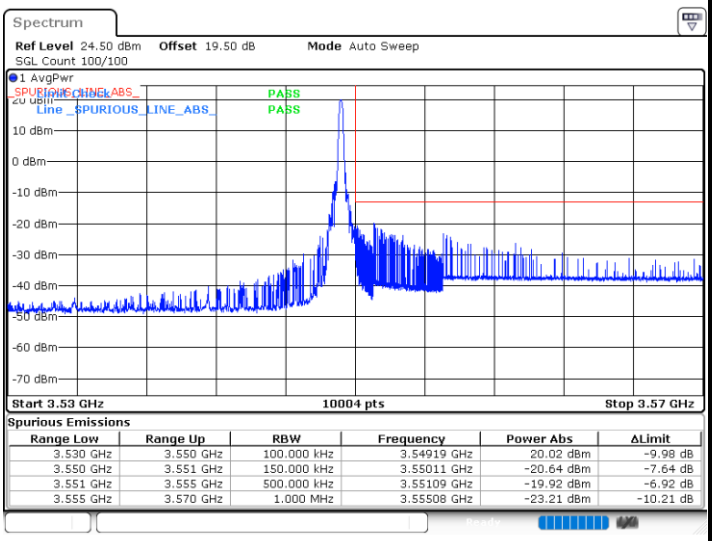


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44389 GHz	-26.31 dBm	-13.31 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44890 GHz	-19.04 dBm	-6.04 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44998 GHz	-21.17 dBm	-8.17 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45088 GHz	21.50 dBm	-8.50 dB

Date: 11.JUL.2024 11:10:21

Highest Band Edge / 1 RB

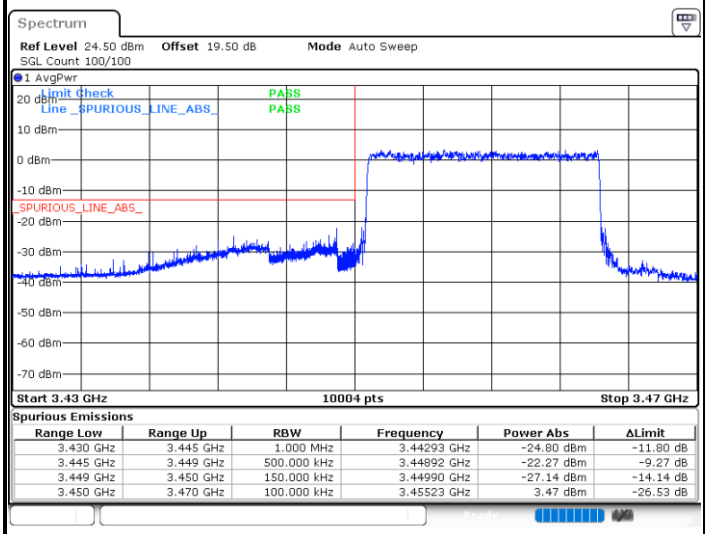


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54919 GHz	20.02 dBm	-9.98 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55011 GHz	-20.64 dBm	-7.64 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55109 GHz	-19.92 dBm	-6.92 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55508 GHz	-23.21 dBm	-10.21 dB

Date: 11.JUL.2024 11:21:30

Lowest Band Edge / Full RB

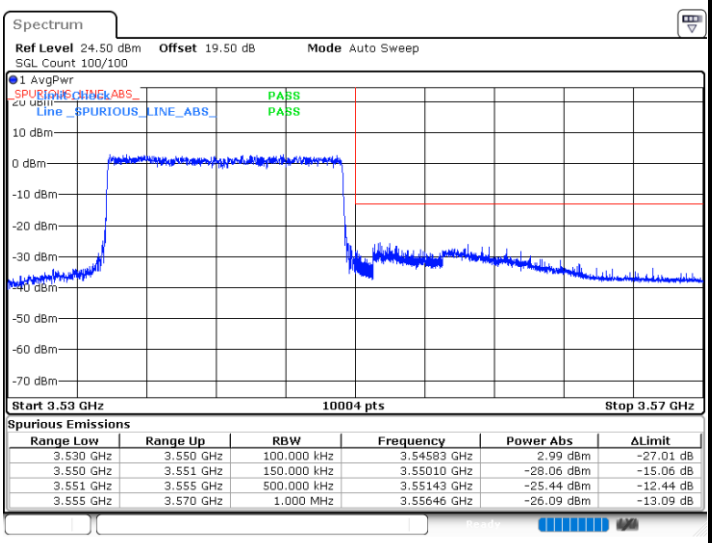


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44293 GHz	-24.80 dBm	-11.80 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44892 GHz	-22.27 dBm	-9.27 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44990 GHz	-27.14 dBm	-14.14 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45523 GHz	3.47 dBm	-26.53 dB

Date: 11.JUL.2024 11:13:55

Highest Band Edge / Full RB



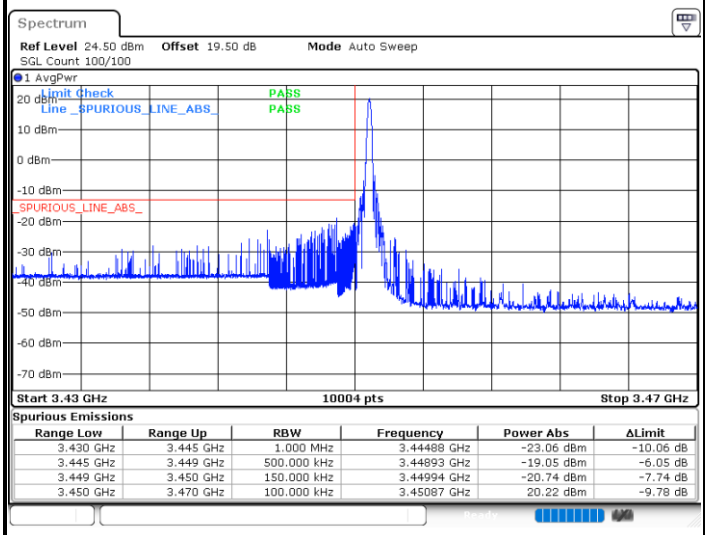
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54583 GHz	2.99 dBm	-27.01 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55010 GHz	-28.06 dBm	-15.06 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55143 GHz	-25.44 dBm	-12.44 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55646 GHz	-26.09 dBm	-13.09 dB

Date: 11.JUL.2024 11:25:04

LTE Band 42 / 15MHz / 16QAM

Lowest Band Edge / 1RB

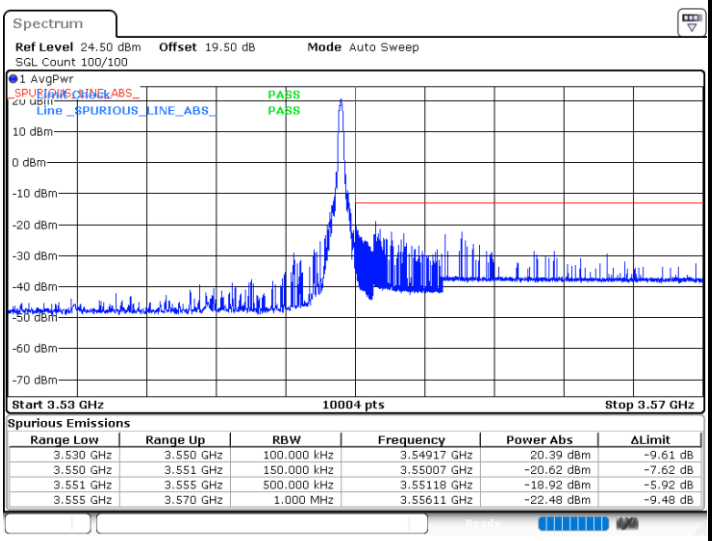


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44488 GHz	-23.06 dBm	-10.06 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44893 GHz	-19.05 dBm	-6.05 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44994 GHz	-20.74 dBm	-7.74 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45087 GHz	20.22 dBm	-9.78 dB

Date: 11.JUL.2024 11:11:32

Highest Band Edge / 1 RB

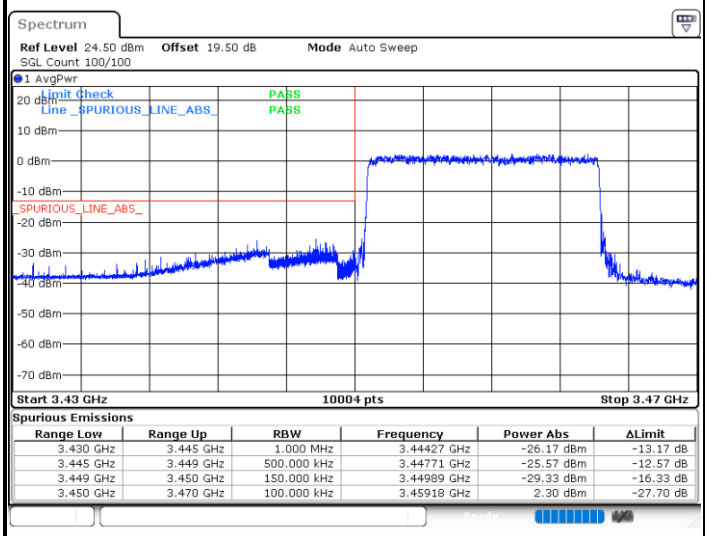


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54917 GHz	20.39 dBm	-9.61 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55007 GHz	-20.62 dBm	-7.62 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55118 GHz	-18.92 dBm	-5.92 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55611 GHz	-22.48 dBm	-9.48 dB

Date: 11.JUL.2024 11:22:41

Lowest Band Edge / Full RB

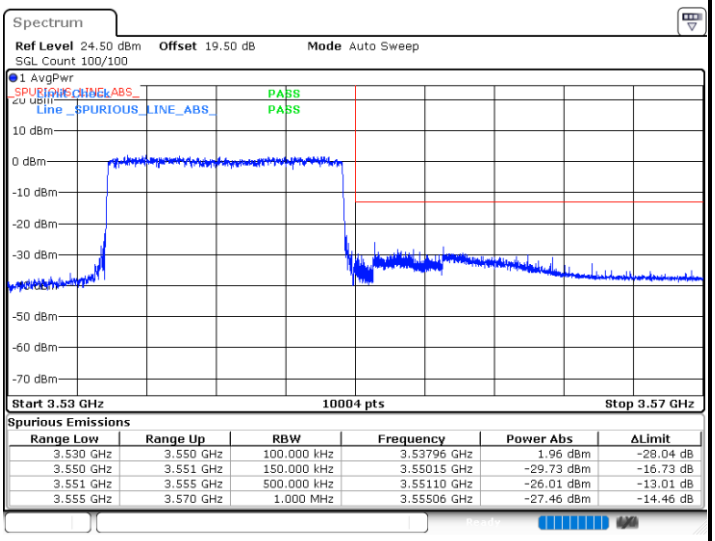


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44427 GHz	-26.17 dBm	-13.17 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44771 GHz	-25.57 dBm	-12.57 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44989 GHz	-29.33 dBm	-16.33 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45918 GHz	2.30 dBm	-27.70 dB

Date: 11.JUL.2024 11:15:06

Highest Band Edge / Full RB



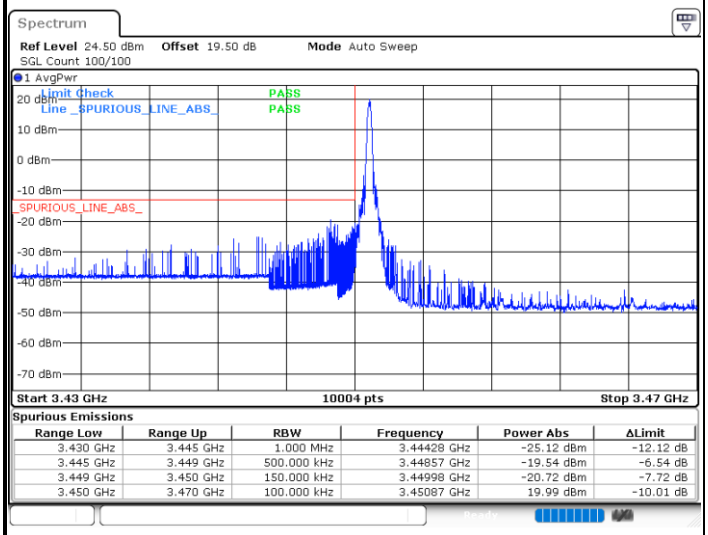
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53796 GHz	1.96 dBm	-28.04 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55015 GHz	-29.73 dBm	-16.73 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55110 GHz	-26.01 dBm	-13.01 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55506 GHz	-27.46 dBm	-14.46 dB

Date: 11.JUL.2024 11:26:15

LTE Band 42 / 15MHz / 64QAM

Lowest Band Edge / 1RB

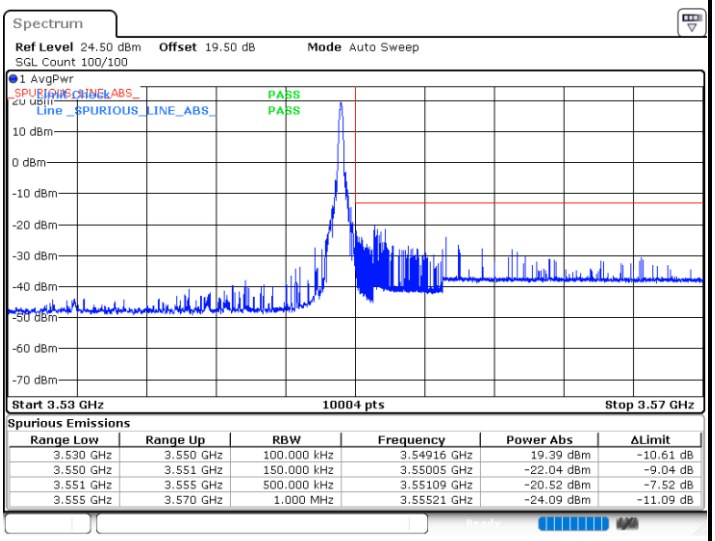


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44428 GHz	-25.12 dBm	-12.12 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44857 GHz	-19.54 dBm	-6.54 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44998 GHz	-20.72 dBm	-7.72 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45087 GHz	19.99 dBm	-10.01 dB

Date: 11.JUL.2024 11:12:43

Highest Band Edge / 1 RB

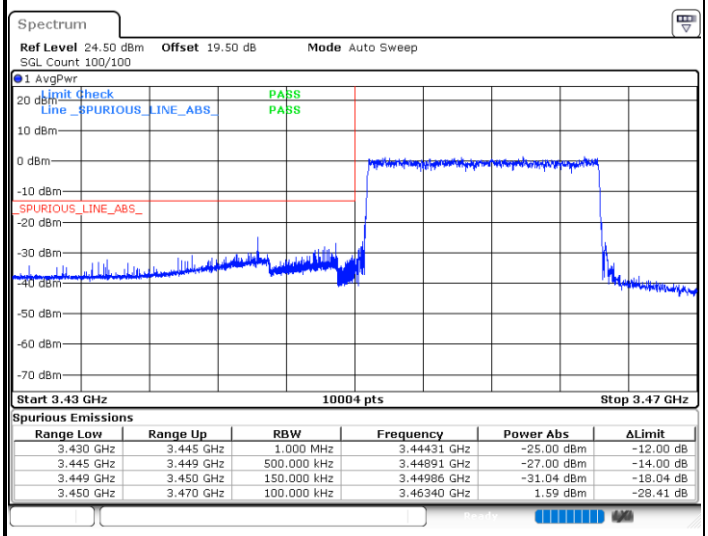


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54916 GHz	19.39 dBm	-10.61 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55005 GHz	-22.04 dBm	-9.04 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55109 GHz	-20.52 dBm	-7.52 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55521 GHz	-24.09 dBm	-11.09 dB

Date: 11.JUL.2024 11:23:53

Lowest Band Edge / Full RB

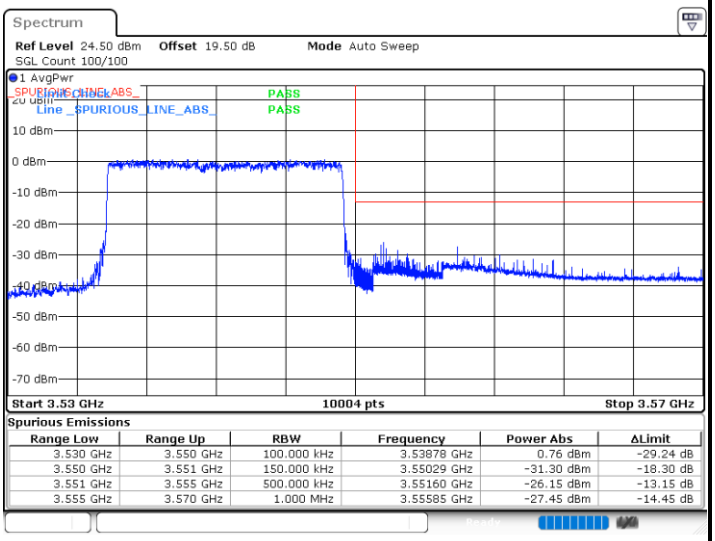


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44431 GHz	-25.00 dBm	-12.00 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44891 GHz	-27.00 dBm	-14.00 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44986 GHz	-31.04 dBm	-18.04 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.46340 GHz	1.59 dBm	-28.41 dB

Date: 11.JUL.2024 11:16:17

Highest Band Edge / Full RB



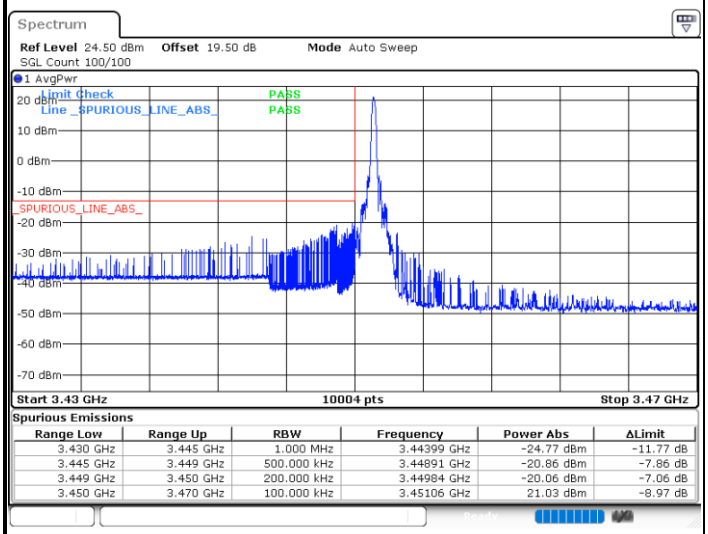
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53878 GHz	0.76 dBm	-29.24 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55029 GHz	-31.30 dBm	-18.30 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55160 GHz	-26.15 dBm	-13.15 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55585 GHz	-27.45 dBm	-14.45 dB

Date: 11.JUL.2024 11:27:26

LTE Band 42 / 20MHz / QPSK

Lowest Band Edge / 1 RB

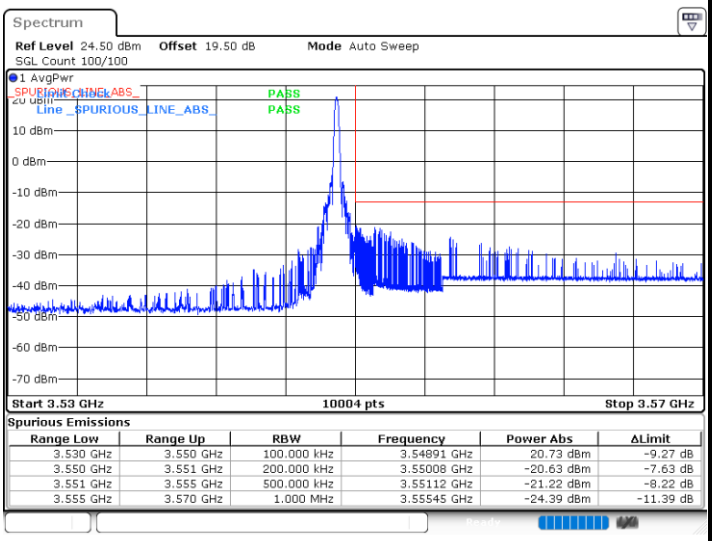


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44399 GHz	-24.77 dBm	-11.77 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44891 GHz	-20.86 dBm	-7.86 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44984 GHz	-20.06 dBm	-7.06 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45106 GHz	21.03 dBm	-8.97 dB

Date: 11.JUL.2024 11:30:47

Highest Band Edge / 1 RB

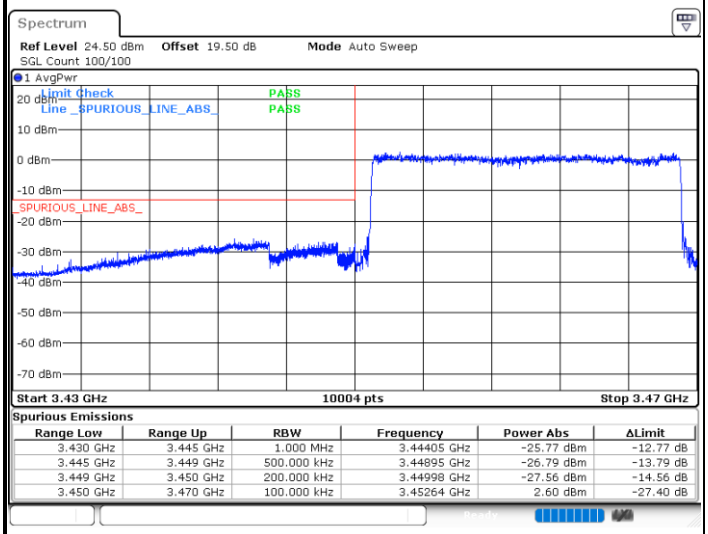


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54891 GHz	20.73 dBm	-9.27 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55008 GHz	-20.63 dBm	-7.63 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55112 GHz	-21.22 dBm	-8.22 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55545 GHz	-24.39 dBm	-11.39 dB

Date: 11.JUL.2024 11:43:20

Lowest Band Edge / Full RB

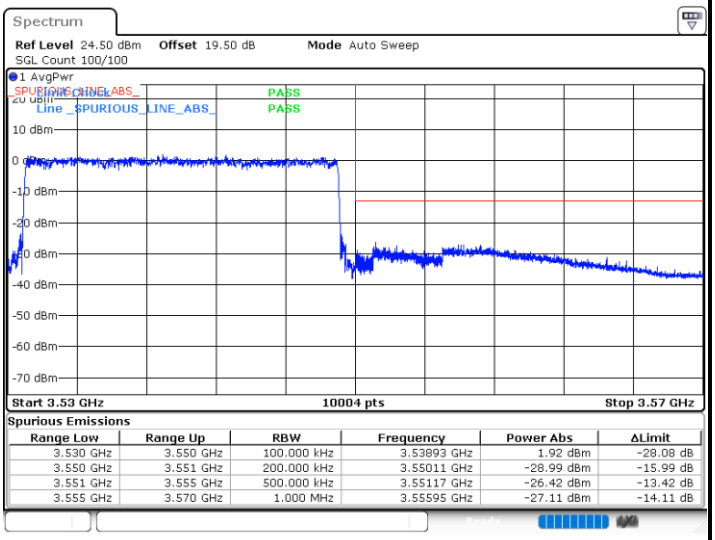


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44405 GHz	-25.77 dBm	-12.77 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44895 GHz	-26.79 dBm	-13.79 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44998 GHz	-27.56 dBm	-14.56 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45264 GHz	2.60 dBm	-27.40 dB

Date: 11.JUL.2024 11:34:21

Highest Band Edge / Full RB



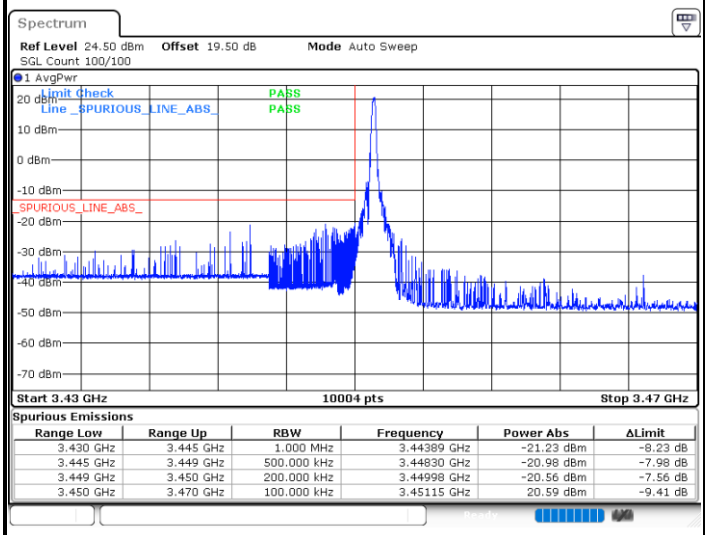
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53893 GHz	1.92 dBm	-28.08 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55011 GHz	-28.99 dBm	-15.99 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55117 GHz	-26.42 dBm	-13.42 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55595 GHz	-27.11 dBm	-14.11 dB

Date: 11.JUL.2024 11:46:55

LTE Band 42 / 20MHz / 16QAM

Lowest Band Edge / 1RB

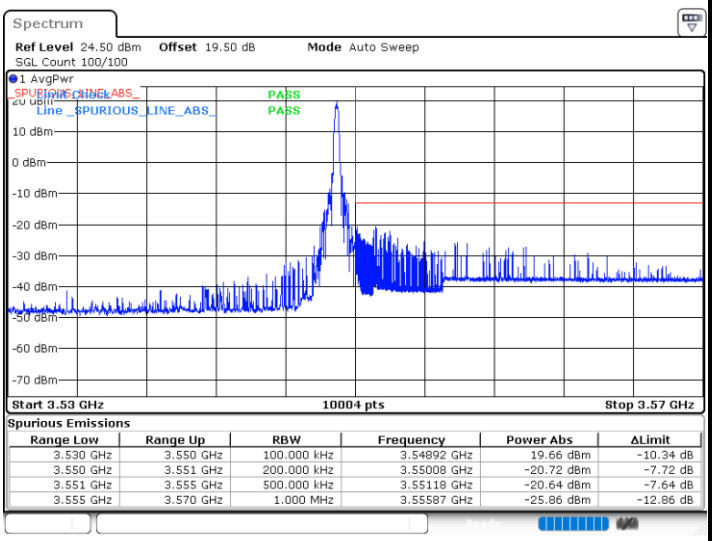


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44389 GHz	-21.23 dBm	-8.23 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44830 GHz	-20.98 dBm	-7.98 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44998 GHz	-20.56 dBm	-7.56 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45115 GHz	20.59 dBm	-9.41 dB

Date: 11.JUL.2024 11:31:58

Highest Band Edge / 1 RB

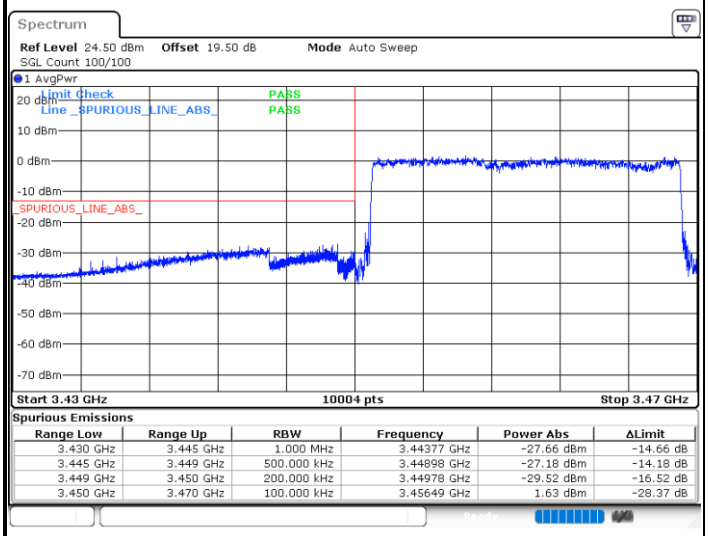


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54892 GHz	19.66 dBm	-10.34 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55008 GHz	-20.72 dBm	-7.72 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55118 GHz	-20.64 dBm	-7.64 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55587 GHz	-25.86 dBm	-12.86 dB

Date: 11.JUL.2024 11:44:32

Lowest Band Edge / Full RB

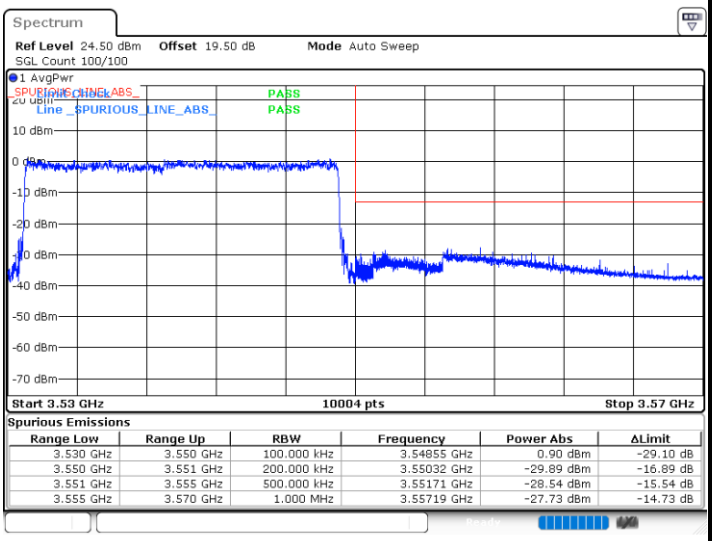


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44377 GHz	-27.66 dBm	-14.66 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44898 GHz	-27.18 dBm	-14.18 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44978 GHz	-29.52 dBm	-16.52 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45649 GHz	1.63 dBm	-28.37 dB

Date: 11.JUL.2024 11:35:32

Highest Band Edge / Full RB



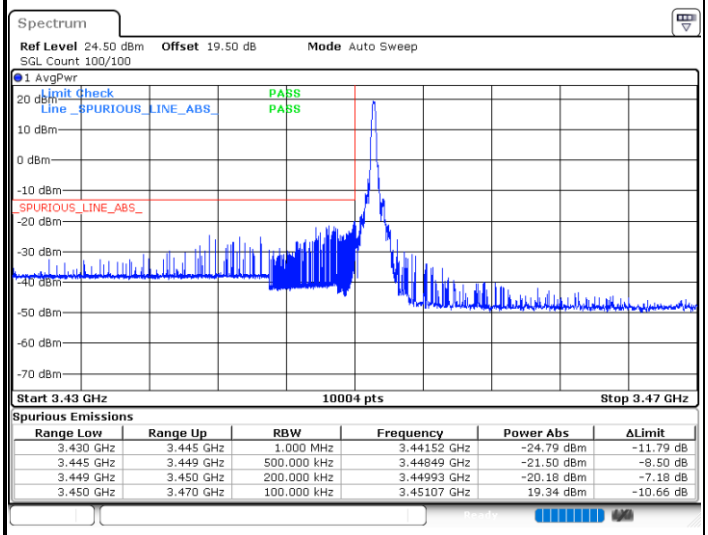
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54855 GHz	0.90 dBm	-29.10 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55032 GHz	-29.89 dBm	-16.89 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55171 GHz	-28.54 dBm	-15.54 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55719 GHz	-27.73 dBm	-14.73 dB

Date: 11.JUL.2024 11:48:06

LTE Band 42 / 20MHz / 64QAM

Lowest Band Edge / 1RB

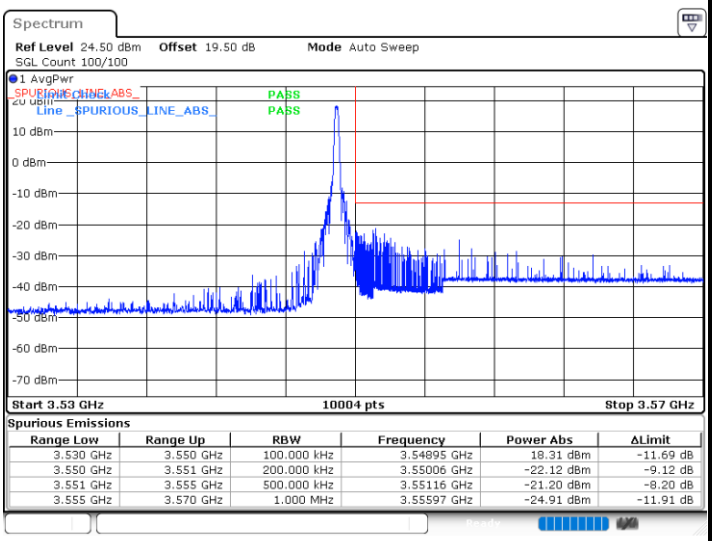


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44152 GHz	-24.79 dBm	-11.79 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44849 GHz	-21.50 dBm	-8.50 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44993 GHz	-20.18 dBm	-7.18 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45107 GHz	19.34 dBm	-10.66 dB

Date: 11.JUL.2024 11:33:09

Highest Band Edge / 1 RB

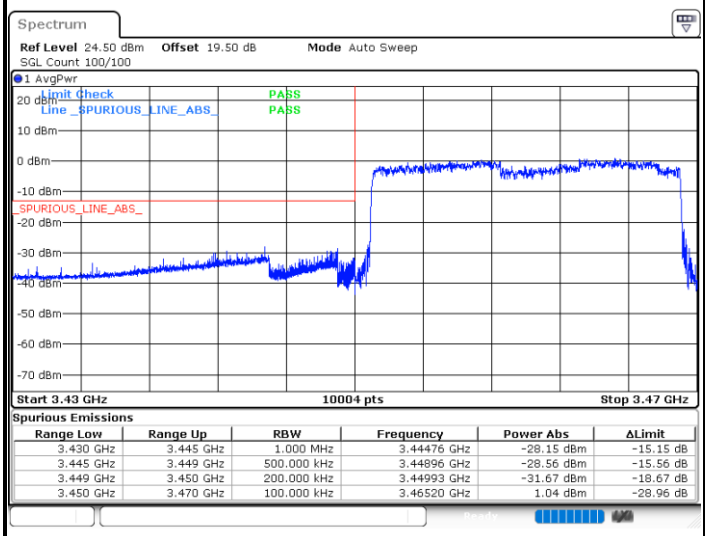


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54895 GHz	18.31 dBm	-11.69 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55006 GHz	-22.12 dBm	-9.12 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55116 GHz	-21.20 dBm	-8.20 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55597 GHz	-24.91 dBm	-11.91 dB

Date: 11.JUL.2024 11:45:43

Lowest Band Edge / Full RB

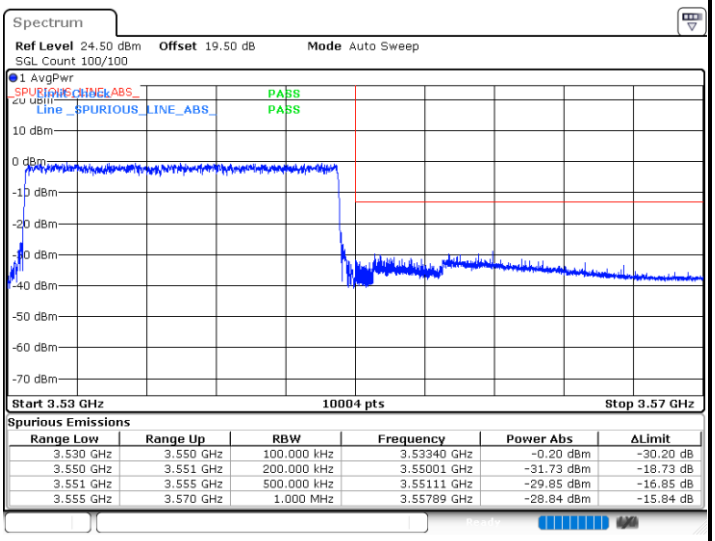


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44476 GHz	-28.15 dBm	-15.15 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44896 GHz	-28.56 dBm	-15.56 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44993 GHz	-31.67 dBm	-18.67 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.46520 GHz	1.04 dBm	-28.96 dB

Date: 11.JUL.2024 11:36:44

Highest Band Edge / Full RB



Spurious Emissions

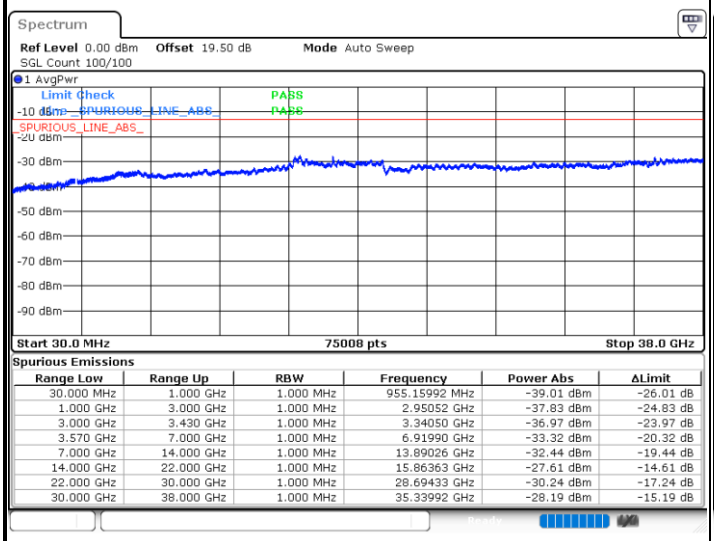
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53340 GHz	-0.20 dBm	-30.20 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55001 GHz	-31.73 dBm	-18.73 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55111 GHz	-29.85 dBm	-16.85 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55789 GHz	-28.84 dBm	-15.84 dB

Date: 11.JUL.2024 11:49:17

Conducted Spurious Emission

LTE Band 42 / 5MHz

Lowest Channel / QPSK

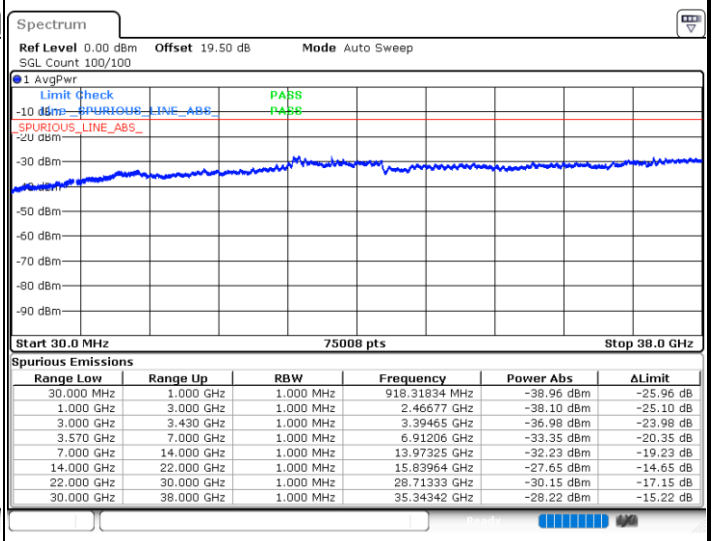


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	955.15992 MHz	-39.01 dBm	-26.01 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95052 GHz	-37.83 dBm	-24.83 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.34050 GHz	-36.97 dBm	-23.97 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.91990 GHz	-33.32 dBm	-20.32 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.89026 GHz	-32.44 dBm	-19.44 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.86363 GHz	-27.61 dBm	-14.61 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69433 GHz	-30.24 dBm	-17.24 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.33992 GHz	-28.19 dBm	-15.19 dB

Date: 13.JUL.2024 14:30:07

Middle Channel / QPSK

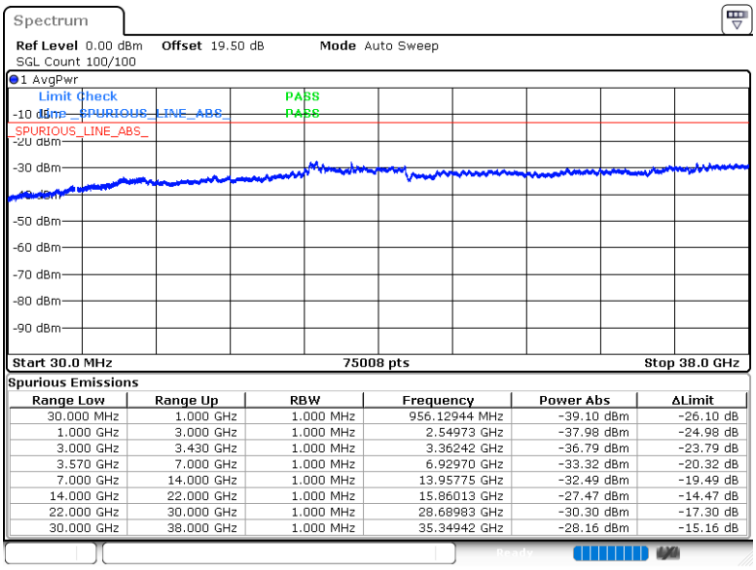


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	918.31834 MHz	-38.96 dBm	-25.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.46677 GHz	-38.10 dBm	-25.10 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.39465 GHz	-36.98 dBm	-23.98 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.91206 GHz	-33.35 dBm	-20.35 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.97325 GHz	-32.23 dBm	-19.23 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.83964 GHz	-27.65 dBm	-14.65 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.71333 GHz	-30.15 dBm	-17.15 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34342 GHz	-28.22 dBm	-15.22 dB

Date: 13.JUL.2024 14:31:32

Highest Channel / QPSK



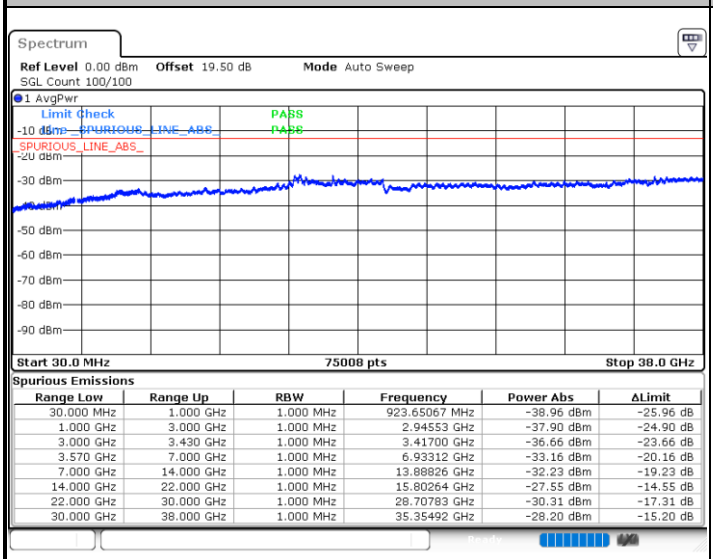
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	956.12944 MHz	-39.10 dBm	-26.10 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.54973 GHz	-37.98 dBm	-24.98 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.36242 GHz	-36.79 dBm	-23.79 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.92970 GHz	-33.32 dBm	-20.32 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.95775 GHz	-32.49 dBm	-19.49 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.86013 GHz	-27.47 dBm	-14.47 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.68983 GHz	-30.30 dBm	-17.30 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34942 GHz	-28.16 dBm	-15.16 dB

Date: 13.JUL.2024 14:32:57

LTE Band 42 / 10MHz

Lowest Channel / QPSK

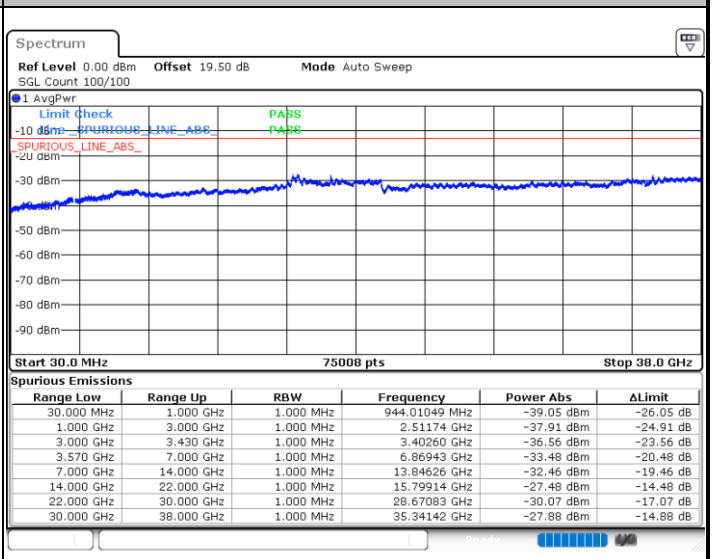


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-38.96 dBm	-25.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.94553 GHz	-37.90 dBm	-24.90 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.41700 GHz	-36.66 dBm	-23.66 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.93312 GHz	-33.16 dBm	-20.16 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.88826 GHz	-32.23 dBm	-19.23 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.80264 GHz	-27.55 dBm	-14.55 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.70783 GHz	-30.31 dBm	-17.31 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.35492 GHz	-28.20 dBm	-15.20 dB

Date: 11.JUL.2024 10:57:12

Middle Channel / QPSK

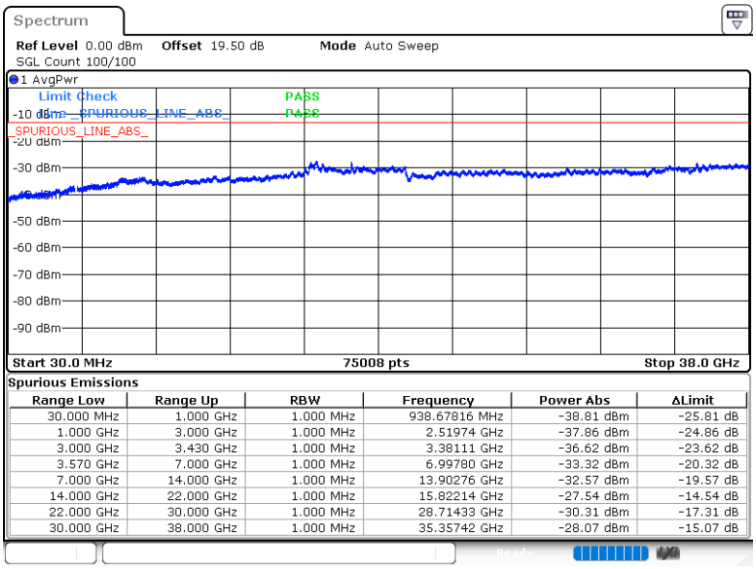


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.01049 MHz	-39.05 dBm	-26.05 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51174 GHz	-37.91 dBm	-24.91 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.40260 GHz	-36.56 dBm	-23.56 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.86943 GHz	-33.48 dBm	-20.48 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.84626 GHz	-32.46 dBm	-19.46 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.79914 GHz	-27.48 dBm	-14.48 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.67083 GHz	-30.07 dBm	-17.07 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34142 GHz	-27.88 dBm	-14.88 dB

Date: 11.JUL.2024 10:58:32

Highest Channel / QPSK



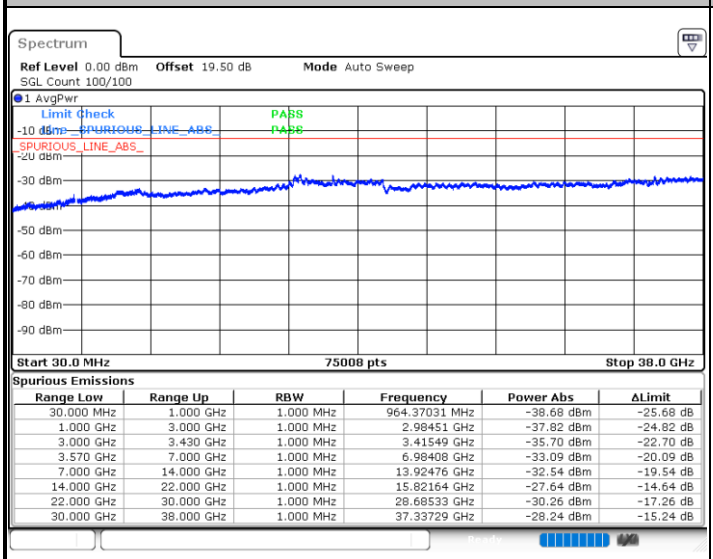
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	938.67816 MHz	-38.81 dBm	-25.81 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51974 GHz	-37.86 dBm	-24.86 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.38111 GHz	-36.62 dBm	-23.62 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99780 GHz	-33.32 dBm	-20.32 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.90276 GHz	-32.57 dBm	-19.57 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.82214 GHz	-27.54 dBm	-14.54 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.71433 GHz	-30.31 dBm	-17.31 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.35742 GHz	-28.07 dBm	-15.07 dB

Date: 11.JUL.2024 11:08:21

LTE Band 42 / 15MHz

Lowest Channel / QPSK

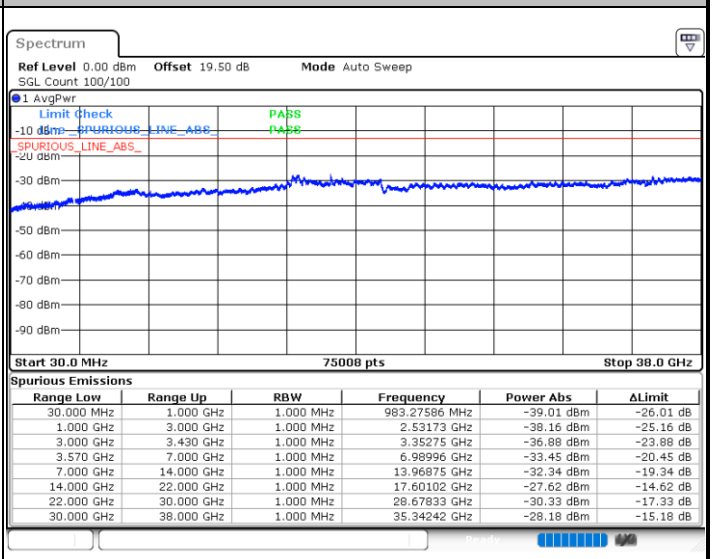


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.37031 MHz	-38.68 dBm	-25.68 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98451 GHz	-37.82 dBm	-24.82 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.41549 GHz	-35.70 dBm	-22.70 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.98408 GHz	-33.09 dBm	-20.09 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.92476 GHz	-32.54 dBm	-19.54 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.82164 GHz	-27.64 dBm	-14.64 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.68533 GHz	-30.26 dBm	-17.26 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.33729 GHz	-28.24 dBm	-15.24 dB

Date: 11.JUL.2024 11:17:38

Middle Channel / QPSK

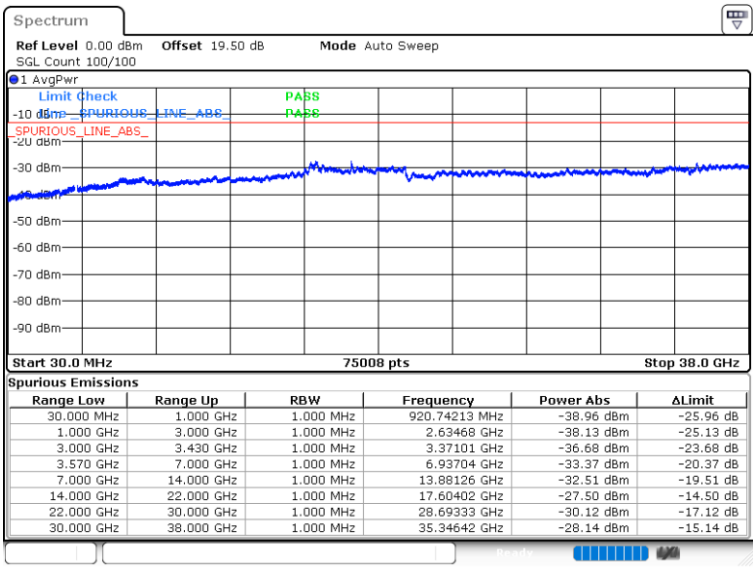


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	983.27586 MHz	-39.01 dBm	-26.01 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.53173 GHz	-38.16 dBm	-25.16 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.35275 GHz	-36.88 dBm	-23.88 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.98996 GHz	-33.45 dBm	-20.45 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.96875 GHz	-32.34 dBm	-19.34 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.60102 GHz	-27.62 dBm	-14.62 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.67833 GHz	-30.33 dBm	-17.33 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34242 GHz	-28.18 dBm	-15.18 dB

Date: 11.JUL.2024 11:18:58

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	920.74213 MHz	-38.96 dBm	-25.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.63468 GHz	-38.13 dBm	-25.13 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37101 GHz	-36.68 dBm	-23.68 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.93704 GHz	-33.37 dBm	-20.37 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.88126 GHz	-32.51 dBm	-19.51 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.60402 GHz	-27.50 dBm	-14.50 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69333 GHz	-30.12 dBm	-17.12 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34642 GHz	-28.14 dBm	-15.14 dB

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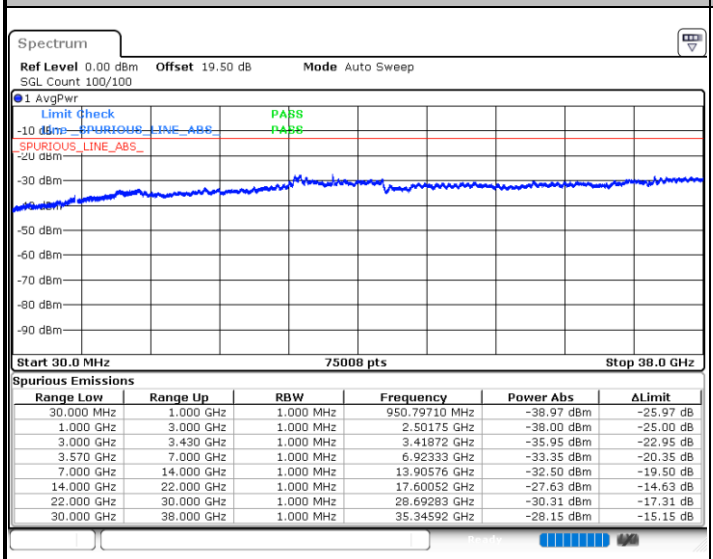
LTE Band 42 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	950.79710 MHz	-38.97 dBm	-25.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50175 GHz	-38.00 dBm	-25.00 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.41872 GHz	-35.95 dBm	-22.95 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.92333 GHz	-33.35 dBm	-20.35 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.90576 GHz	-32.50 dBm	-19.50 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.60052 GHz	-27.63 dBm	-14.63 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69283 GHz	-30.31 dBm	-17.31 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34592 GHz	-28.15 dBm	-15.15 dB

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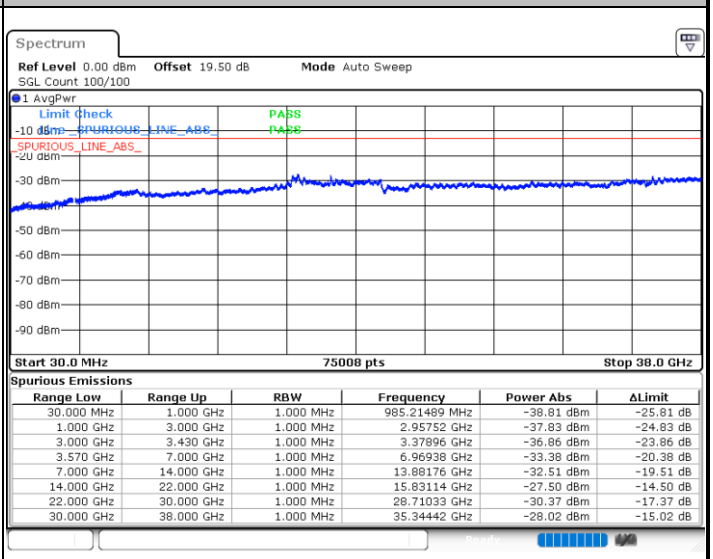
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	985.21489 MHz	-38.81 dBm	-25.81 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95752 GHz	-37.83 dBm	-24.83 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37896 GHz	-36.86 dBm	-23.86 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.96938 GHz	-33.38 dBm	-20.38 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.88176 GHz	-32.51 dBm	-19.51 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.83114 GHz	-27.50 dBm	-14.50 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.71033 GHz	-30.37 dBm	-17.37 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34442 GHz	-28.02 dBm	-15.02 dB

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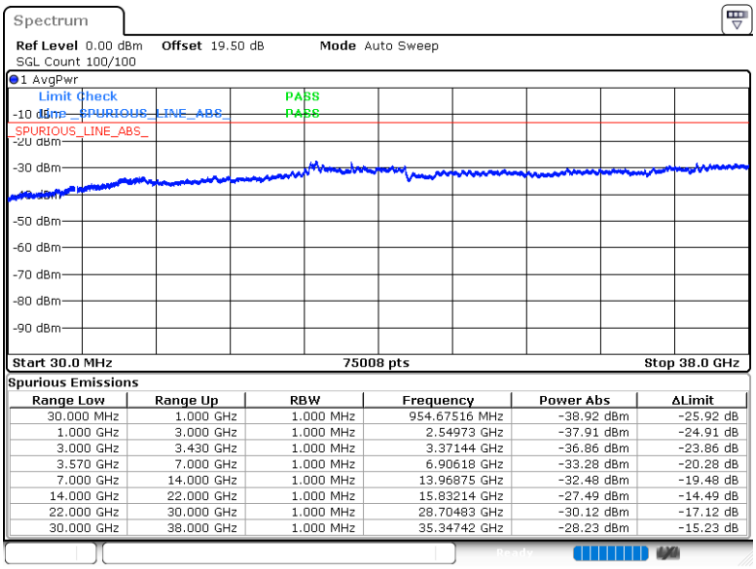
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	954.67516 MHz	-38.92 dBm	-25.92 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.54973 GHz	-37.91 dBm	-24.91 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.37144 GHz	-36.86 dBm	-23.86 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.90618 GHz	-33.28 dBm	-20.28 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.96875 GHz	-32.48 dBm	-19.48 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.83214 GHz	-27.49 dBm	-14.49 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.70483 GHz	-30.12 dBm	-17.12 dB
30.000 GHz	38.000 GHz	1.000 MHz	35.34742 GHz	-28.23 dBm	-15.23 dB

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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	0.0007	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0012	

Note:

1. Normal Voltage = 3.85 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Zhaohui Liang	Temperature :	23~25℃
		Relative Humidity :	41~42%

LTE Band 42 / 20MHz / QPSK / Ant. 6									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	6802.00	-40.53	-13	-27.53	-47.66	-43.86	8.25	11.58	H
	10203.00	-56.80	-13	-43.80	-68.64	-58.35	10.45	12.00	H
	13604.00	-53.23	-13	-40.23	-69.32	-54.94	11.74	13.45	H
	6802.00	-40.94	-13	-27.94	-50.45	-44.27	8.25	11.58	V
	10203.00	-55.44	-13	-42.44	-68.55	-56.99	10.45	12.00	V
	13604.00	-54.52	-13	-41.52	-69.01	-56.23	11.74	13.45	V
Middle	6982.00	-41.11	-13	-28.11	-48.83	-44.41	8.30	11.60	H
	10473.00	-56.09	-13	-43.09	-68.25	-57.61	10.48	12.00	H
	13964.00	-54.51	-13	-41.51	-70.16	-56.21	11.80	13.50	H
	6982.00	-50.02	-13	-37.02	-58.11	-53.32	8.30	11.60	V
	10473.00	-52.44	-13	-39.44	-66.81	-53.96	10.48	12.00	V
	13964.00	-55.29	-13	-42.29	-70.09	-56.99	11.80	13.50	V
Highest	7162.00	-53.29	-13	-40.29	-61.69	-56.59	8.32	11.62	H
	10743.00	-52.79	-13	-39.79	-66.05	-54.47	10.52	12.20	H
	14324.00	-53.09	-13	-40.09	-69.13	-54.79	11.85	13.55	H
	7162.00	-51.60	-13	-38.60	-61.64	-54.90	8.32	11.62	V
	10743.00	-50.21	-13	-37.21	-66	-51.89	10.52	12.20	V
	14324.00	-53.98	-13	-40.98	-69.50	-55.68	11.85	13.55	V

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