FCC RF Test Report

APPLICANT	:	Fibocom Wireless Inc.
EQUIPMENT	:	5G Module
BRAND NAME	:	Fibocom
MODEL NAME	:	FG190W-NA, FG190-NA
FCC ID	:	ZMOFG190WNA
STANDARD	:	47 CFR Part 27 Subpart Q
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	Aug. 09, 2024 ~ Aug. 18, 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)

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG472418G	Rev. 01	Initial issue of report	Sep. 04, 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 38.95 dB at 13964.00 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

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

1.2 Manufacturer

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

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Module
Brand Name	Fibocom
Model Name	FG190W-NA, FG190-NA
FCC ID	ZMOFG190WNA
IMEI Code	Conducted: 864410070003781 Radiation: 864410070004029
HW Version	V1.3
SW Version	99101.1000.00.01.06.23
EUT Stage	Production Unit

Remark: There are two types of EUT: Sample1(FG190W-NA) and Sample2(FG190-NA) . The difference between them is that Sample1 with RF interface while Sample2 without, all the others are the same. According to the difference, we only evaluated sample 1 to perform full test.

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	<Ant 2> LTE Band 42 : 24.37 dBm
Antenna Gain	<Ant 2> LTE Band 42 : -6.13 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 Conducted power and Emission Designator

LTE Band 42		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	3452.5 ~ 3547.5	0.2692	4M48G7D	0.2075	4M49W7D
10	3455 ~ 3545	0.2723	9M05G7D	0.2109	9M03W7D
15	3457.5 ~ 3542.5	0.2729	13M4G7D	0.2084	13M4W7D
20	3460 ~ 3540	0.2735	17M9G7D	0.2113	17M8W7D

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

1.7 Testing Site

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

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

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH03-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.

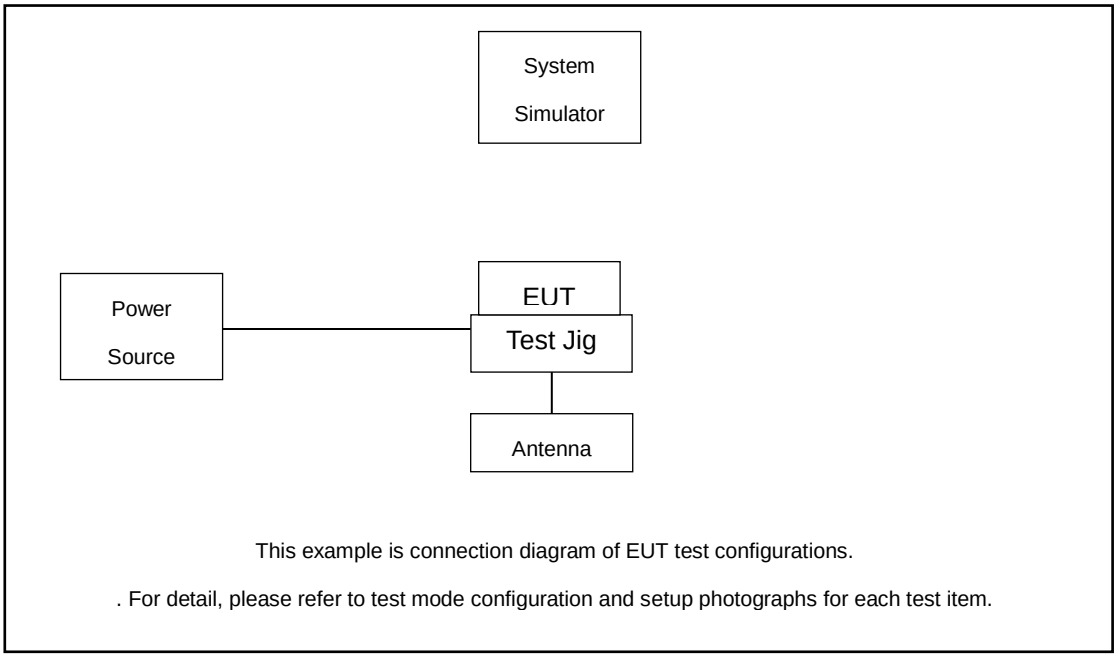
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (X Plane)

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.

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.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	Antenna	N/A	N/A	N/A	N/A	N/A
4.	Adapter	N/A	N/A	N/A	N/A	N/A
5.	Test Jig	N/A	N/A	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between 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

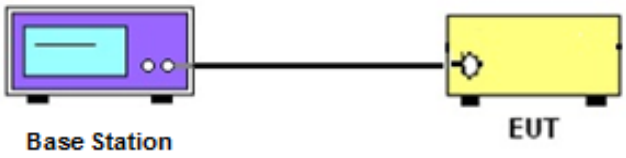
3 Conducted Test Items

3.1 Measuring Instruments

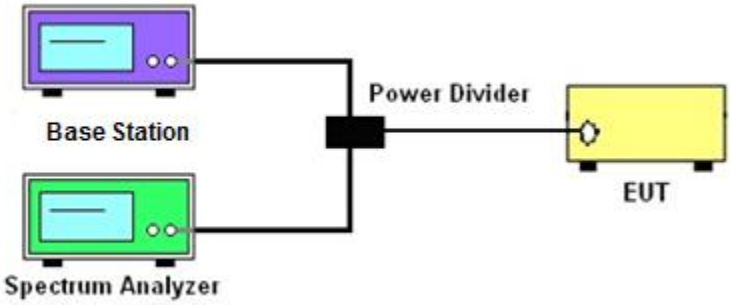
See list of measuring instruments of this test report.

3.2 Test Setup

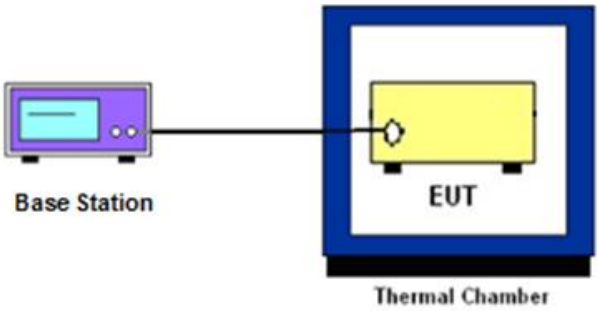
3.2.1 Conducted Output Power



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.

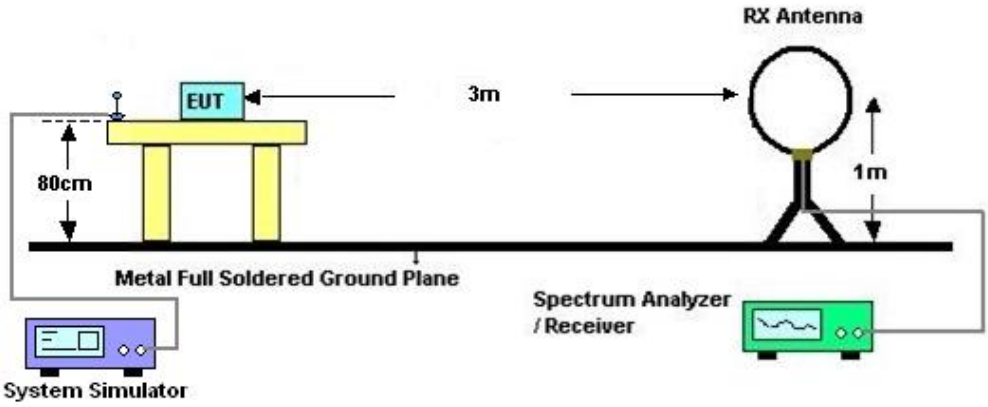
4 Radiated Test Items

4.1 Measuring Instruments

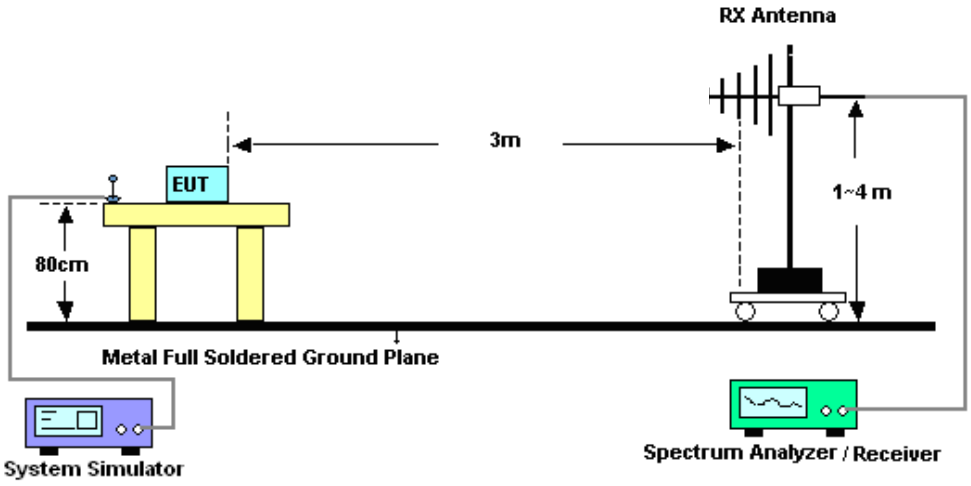
See list of measuring instruments of this test report.

4.2 Test Setup

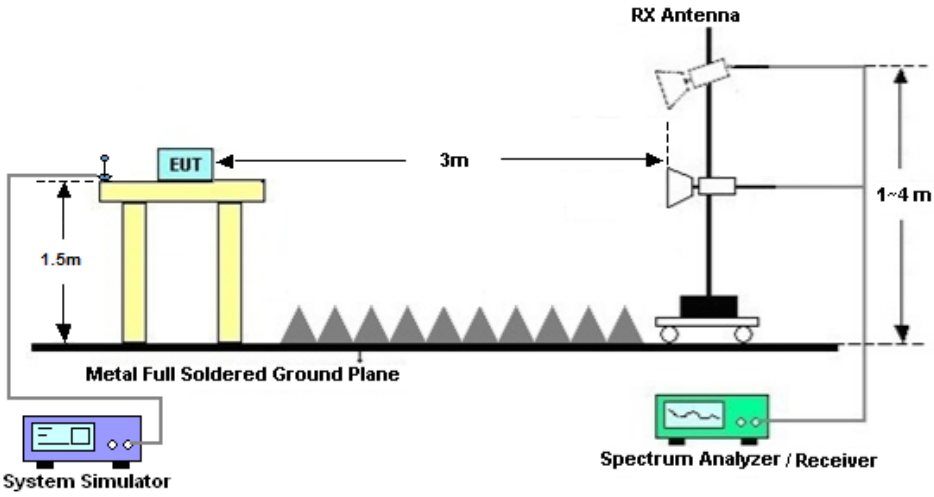
4.2.1 For radiated test below 30MHz



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	Aug. 09, 2024~ Aug. 18, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Aug. 09, 2024~ Aug. 18, 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	Aug. 09, 2024~ Aug. 18, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	Aug. 09, 2024~ Aug. 18, 2024	Jul. 02, 2025	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 09, 2024	Aug. 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 09, 2024	Aug. 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 29, 2023	Aug. 14, 2024	Dec. 28, 2024	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Aug. 20, 2023	Aug. 14, 2024	Aug. 19, 2025	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 09, 2024	Aug. 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2023	Aug. 14, 2024	Oct. 17, 2024	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2024	Aug. 14, 2024	Jul. 02, 2025	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Aug. 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 27, 2023	Aug. 14, 2024	Dec. 26, 2024	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	N/A	Oct. 18, 2023	Aug. 14, 2024	Oct. 17, 2024	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Aug. 14, 2024	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Aug. 14, 2024	NCR	Radiation (03CH03-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))	3.0 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.6 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.8 dB

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

Appendix A. Test Results of Conducted Test

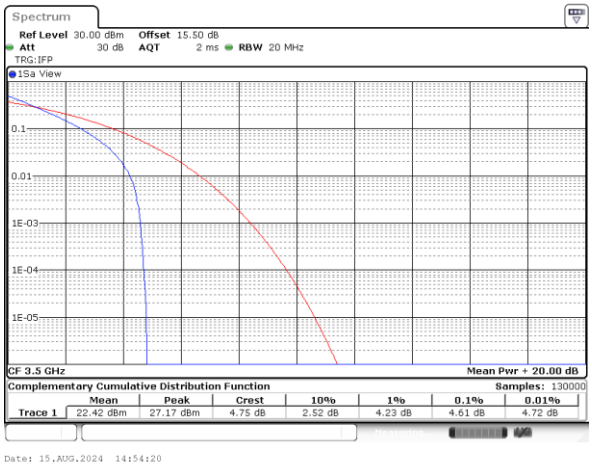
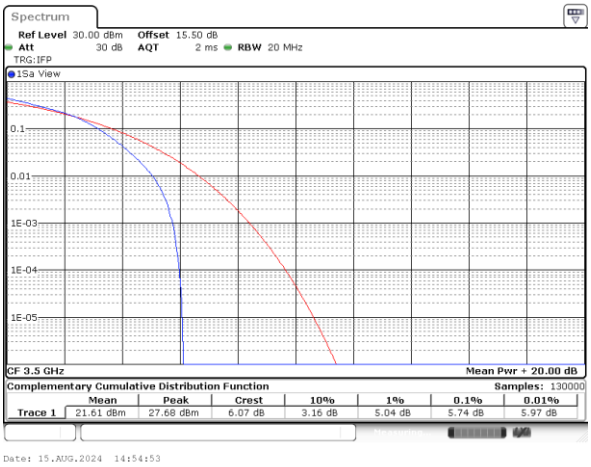
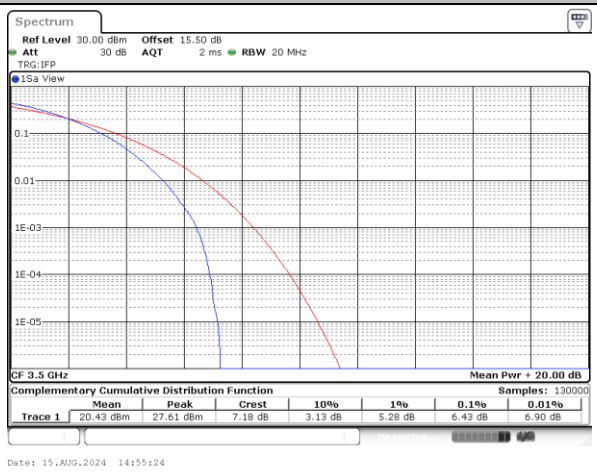
Test Engineer :	Fly	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

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	24.37	24.12	24.09	0.0667	0.0630	0.0625
20	QPSK	1	49	24.29	24.12	24.09	0.0655	0.0630	0.0625
20	QPSK	1	99	24.08	24.01	23.98	0.0624	0.0614	0.0610
20	QPSK	50	0	23.16	23.18	23.06	0.0505	0.0507	0.0493
20	QPSK	50	24	23.32	23.18	23.14	0.0524	0.0507	0.0502
20	QPSK	50	50	23.12	23.09	23.02	0.0500	0.0497	0.0489
20	QPSK	100	0	23.30	23.17	23.12	0.0521	0.0506	0.0500
20	16QAM	1	0	23.25	23.17	23.17	0.0515	0.0506	0.0506
20	64QAM	1	0	22.26	22.14	22.00	0.0410	0.0399	0.0386
20	256QAM	1	0	19.40	19.46	19.35	0.0212	0.0215	0.0210
Channel				42165	42590	43015	EIRP(W)		
Frequency (MHz)				3457.5	3500	3542.5	L	M	H
15	QPSK	1	0	24.36	24.07	23.97	0.0665	0.0622	0.0608
15	16QAM	1	0	23.19	23.13	23.15	0.0508	0.0501	0.0504
Channel				42140	42590	43040	EIRP(W)		
Frequency (MHz)				3455	3500	3545	L	M	H
10	QPSK	1	0	24.35	23.98	23.95	0.0664	0.0610	0.0605
10	16QAM	1	0	23.24	23.02	23.11	0.0514	0.0489	0.0499
Channel				42115	42590	43065	EIRP(W)		
Frequency (MHz)				3452.5	3500	3547.5	L	M	H
5	QPSK	1	0	24.30	24.05	24.06	0.0656	0.0619	0.0621
5	16QAM	1	0	23.17	23.06	23.06	0.0506	0.0493	0.0493

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	4.61	5.74	6.43	PASS

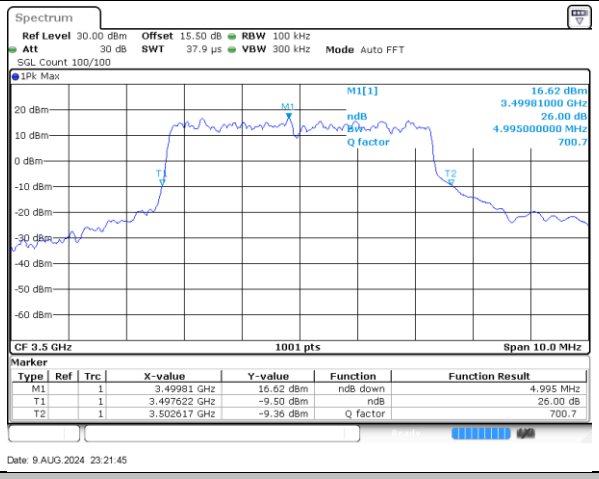
LTE Band 42 / 20MHz / QPSK	LTE Band 42 / 20MHz / 16QAM
Middle Channel / Full RB	Middle Channel / Full RB
	
LTE Band 42 / 20MHz / 64QAM	
Middle Channel / Full RB	
	

26dB Bandwidth

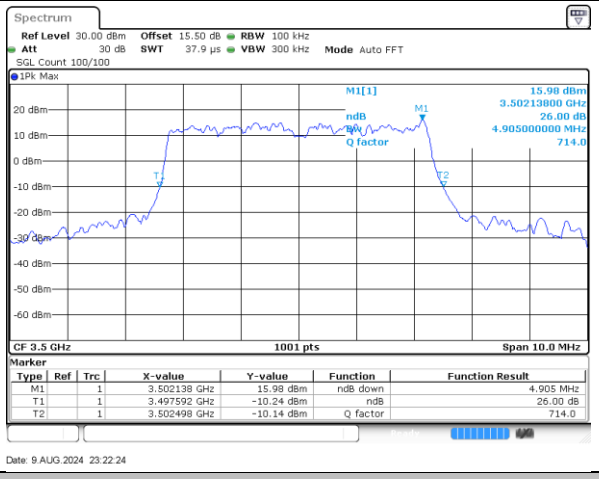
Mode	LTE Band 42 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.00	4.91	10.17	9.95	14.30	14.30	19.10	18.66

LTE Band 42

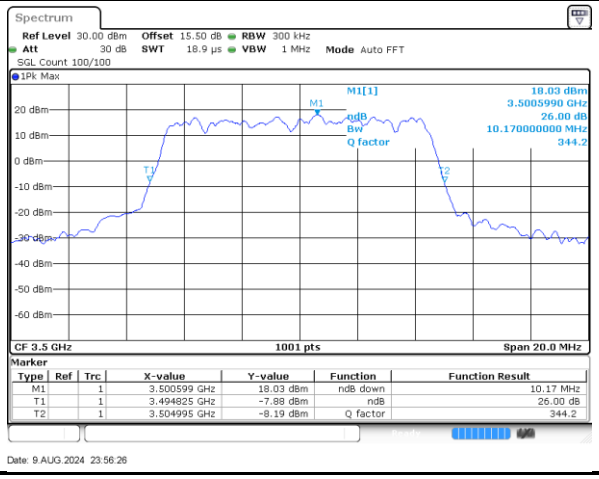
Middle Channel / 5MHz / QPSK



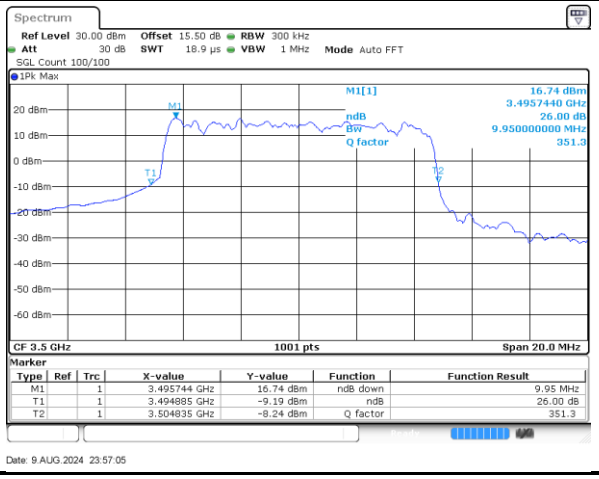
Middle Channel / 5MHz / 16QAM



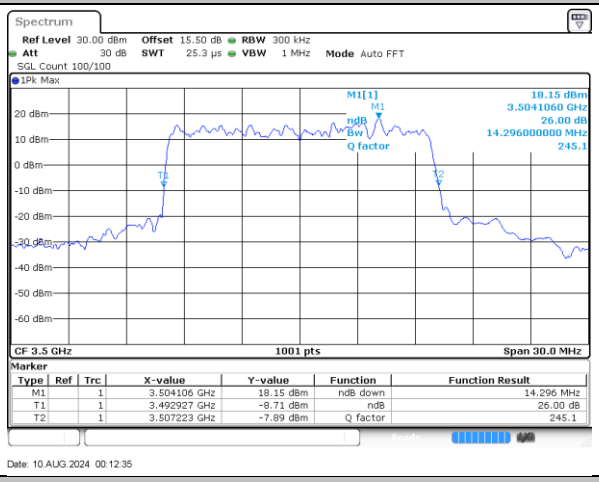
Middle Channel / 10MHz / QPSK



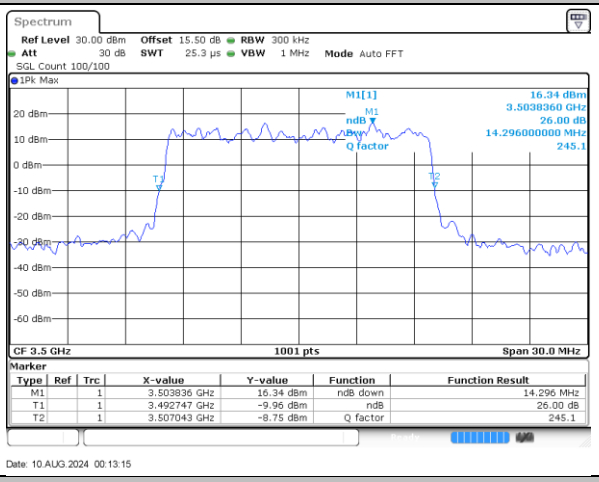
Middle Channel / 10MHz / 16QAM



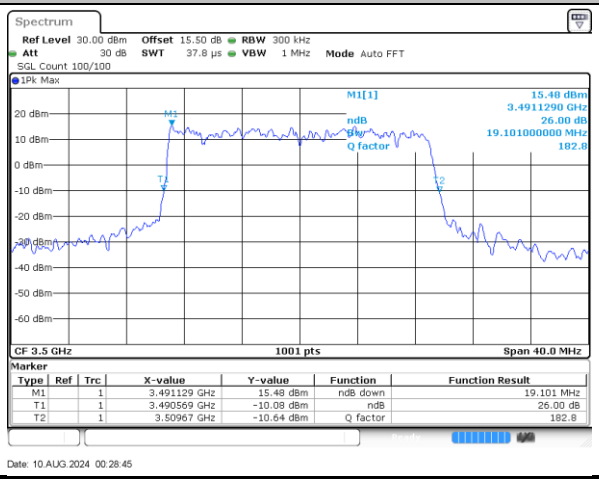
Middle Channel / 15MHz / QPSK



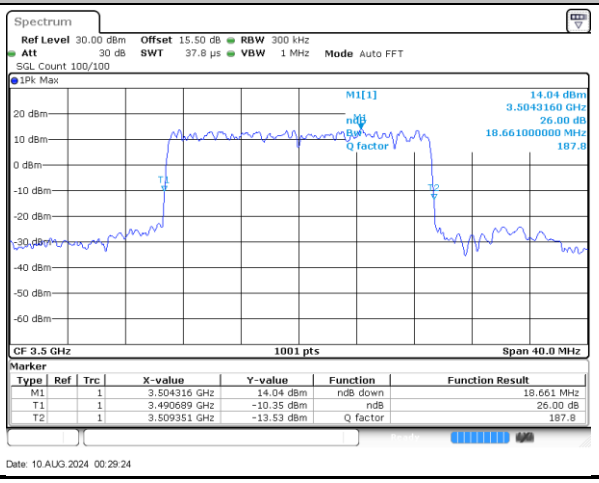
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

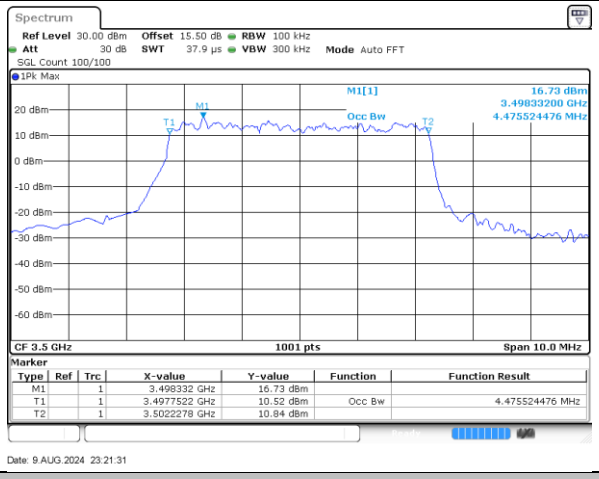


Occupied Bandwidth

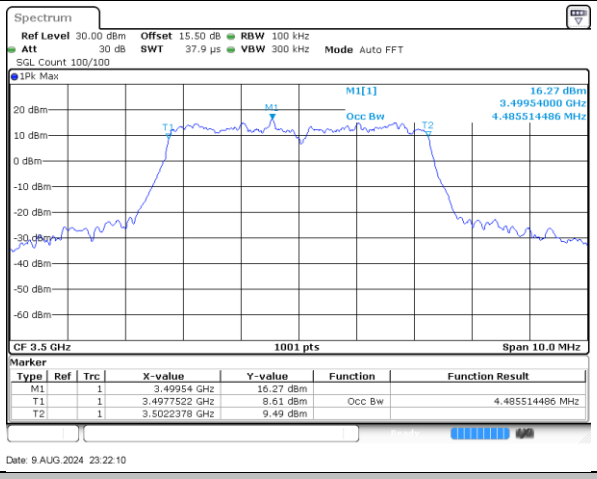
Mode	LTE Band 42 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.49	9.05	9.03	13.40	13.37	17.90	17.82

LTE Band 42

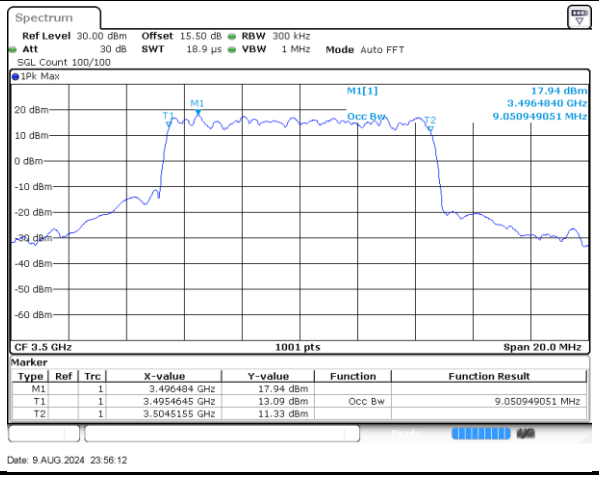
Middle Channel / 5MHz / QPSK



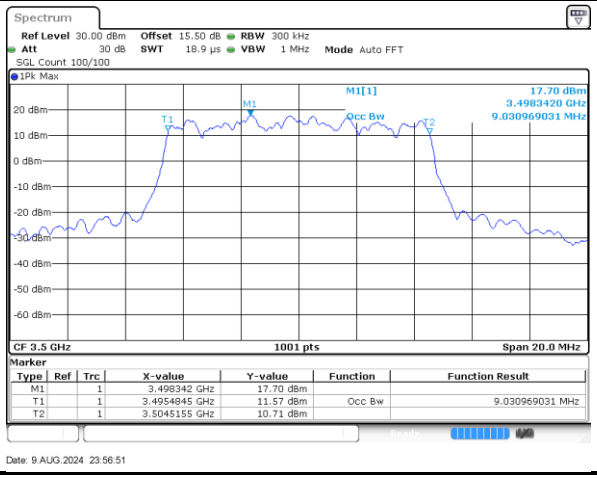
Middle Channel / 5MHz / 16QAM



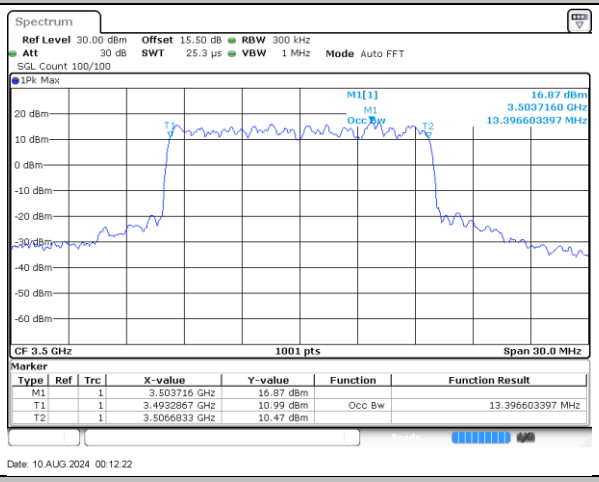
Middle Channel / 10MHz / QPSK



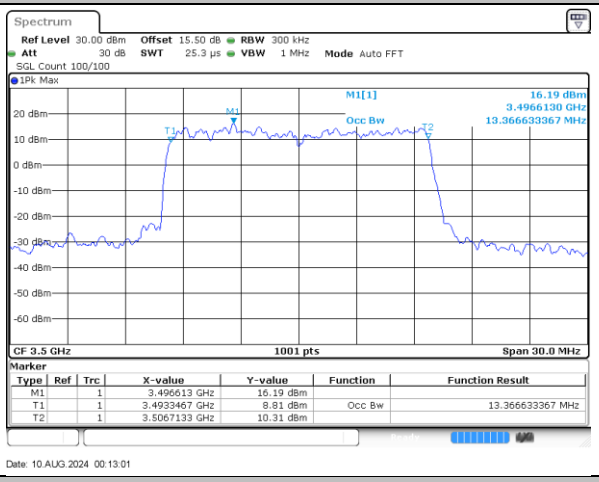
Middle Channel / 10MHz / 16QAM



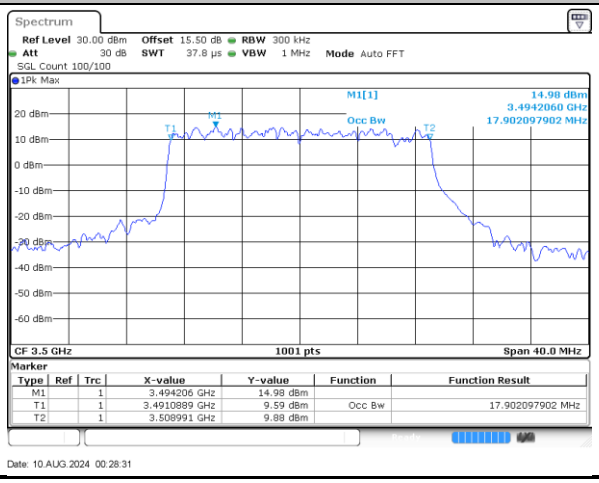
Middle Channel / 15MHz / QPSK



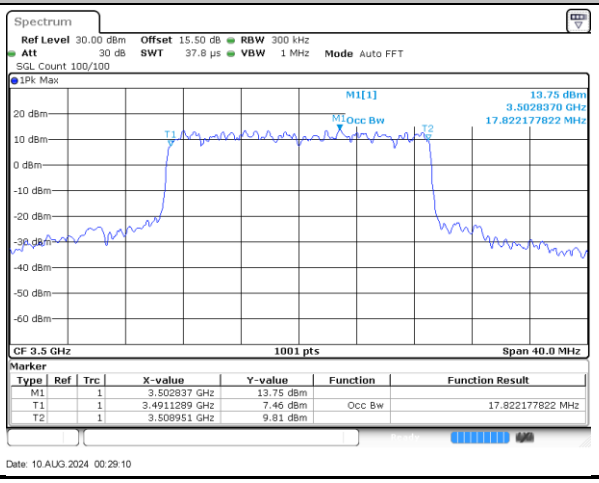
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



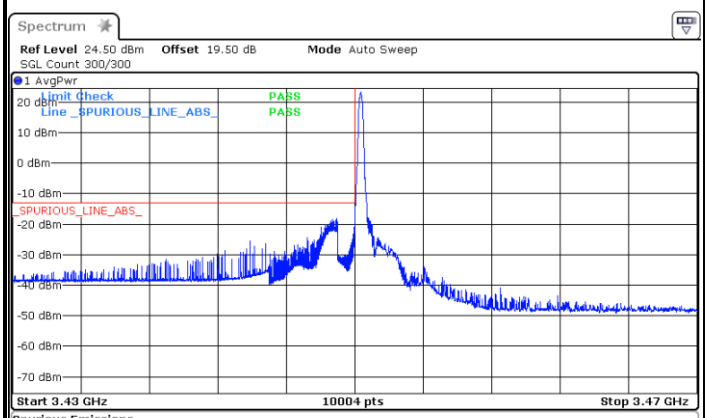
Middle Channel / 20MHz / 16QAM



Conducted Band Edge

LTE Band 42 / 5MHz / QPSK

Lowest Band Edge / 1 RB

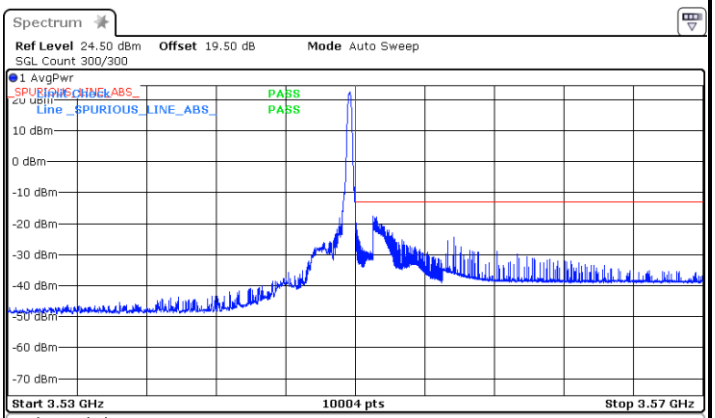


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44389 GHz	-25.60 dBm	-12.60 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44892 GHz	-18.07 dBm	-5.07 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-18.76 dBm	-5.76 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45035 GHz	23.35 dBm	-6.65 dB

Date: 18.AUG.2024 19:55:44

Highest Band Edge / 1 RB

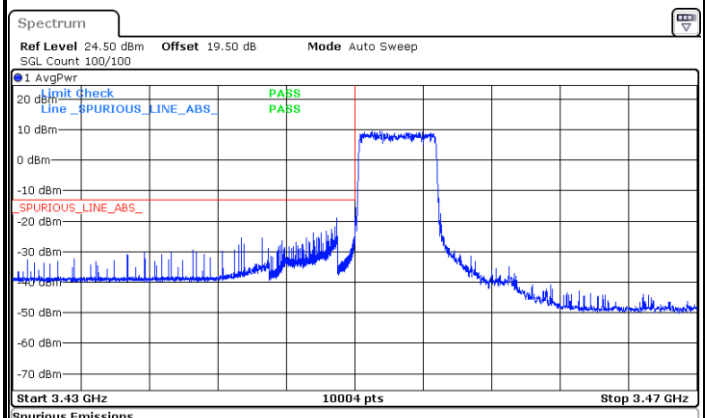


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54967 GHz	22.38 dBm	-7.62 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-18.15 dBm	-5.15 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55102 GHz	-17.50 dBm	-4.50 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55566 GHz	-24.34 dBm	-11.34 dB

Date: 18.AUG.2024 20:18:16

Lowest Band Edge / Full RB

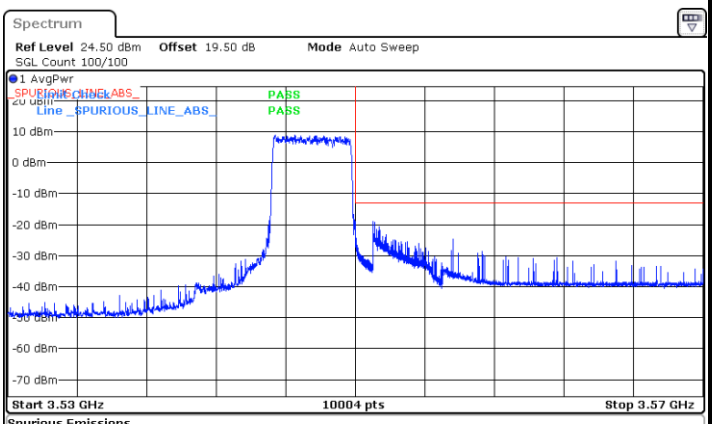


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44335 GHz	-25.48 dBm	-12.48 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44896 GHz	-19.10 dBm	-6.10 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-23.77 dBm	-10.77 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45147 GHz	9.58 dBm	-20.42 dB

Date: 9.AUG.2024 23:16:39

Highest Band Edge / Full RB



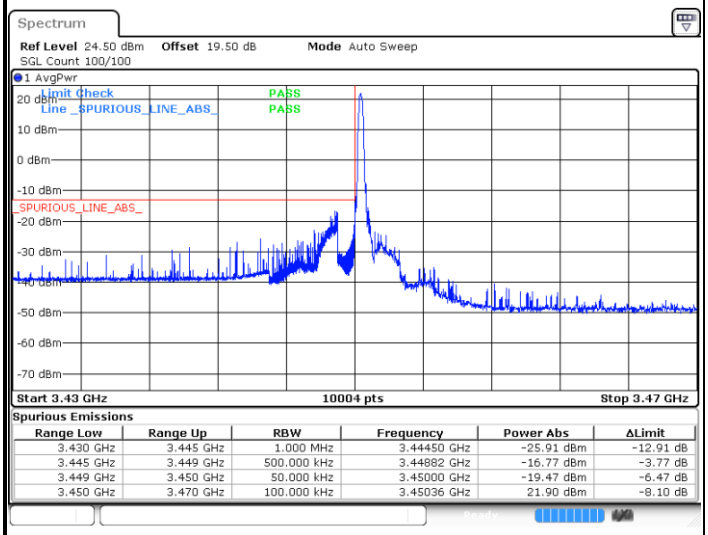
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54653 GHz	9.00 dBm	-21.00 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-24.13 dBm	-11.13 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55100 GHz	-18.90 dBm	-5.90 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55562 GHz	-24.76 dBm	-11.76 dB

Date: 9.AUG.2024 23:28:16

LTE Band 42 / 5MHz / 16QAM

Lowest Band Edge / 1RB

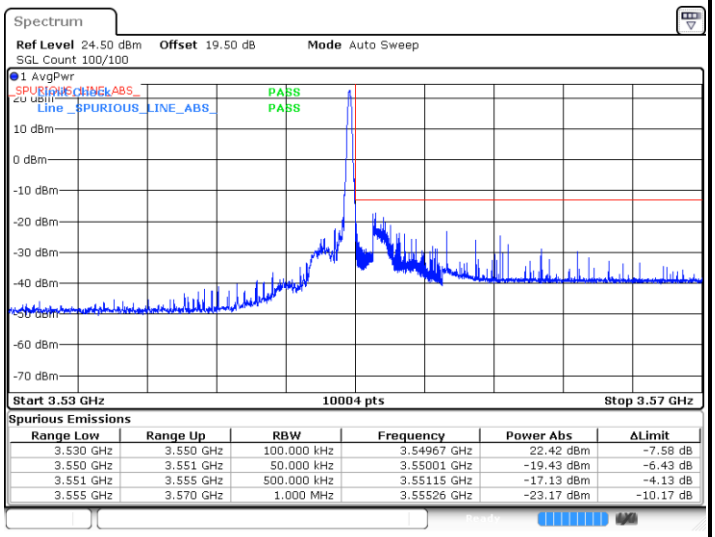


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44450 GHz	-25.91 dBm	-12.91 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44882 GHz	-16.77 dBm	-3.77 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.45000 GHz	-19.47 dBm	-6.47 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45036 GHz	21.90 dBm	-8.10 dB

Date: 9.AUG.2024 23:14:57

Highest Band Edge / 1 RB

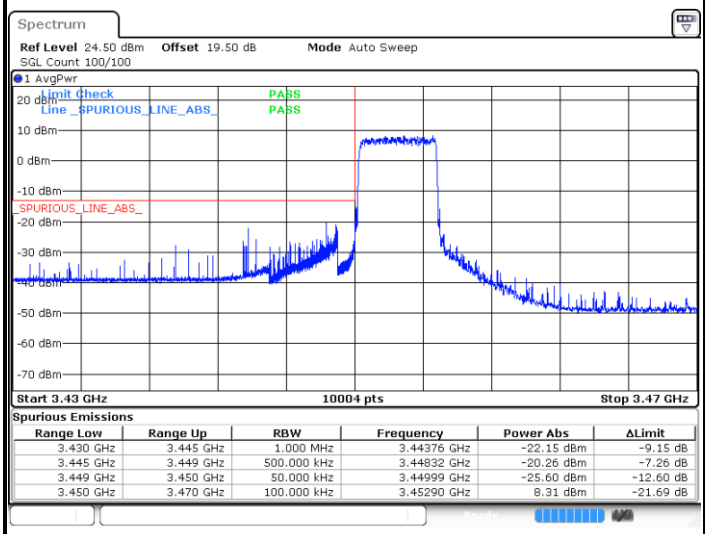


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54967 GHz	22.42 dBm	-7.58 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-19.43 dBm	-6.43 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55115 GHz	-17.13 dBm	-4.13 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55526 GHz	-23.17 dBm	-10.17 dB

Date: 9.AUG.2024 23:24:04

Lowest Band Edge / Full RB

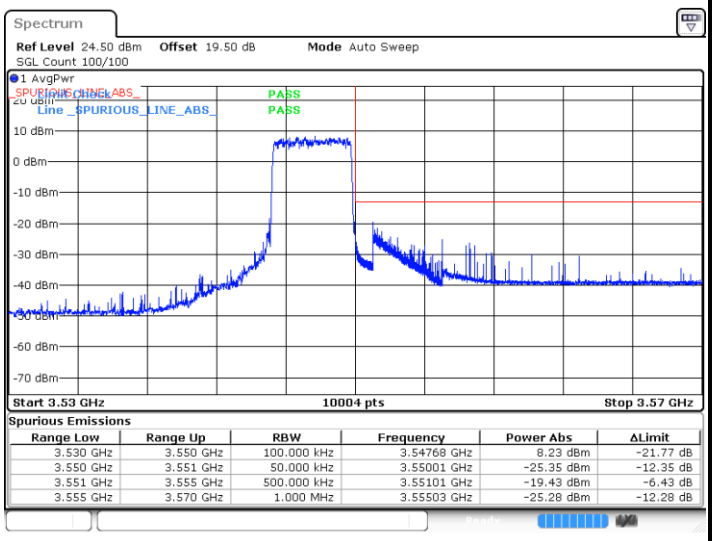


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44376 GHz	-22.15 dBm	-9.15 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44832 GHz	-20.26 dBm	-7.26 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44999 GHz	-25.60 dBm	-12.60 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45290 GHz	8.31 dBm	-21.69 dB

Date: 9.AUG.2024 23:17:30

Highest Band Edge / Full RB



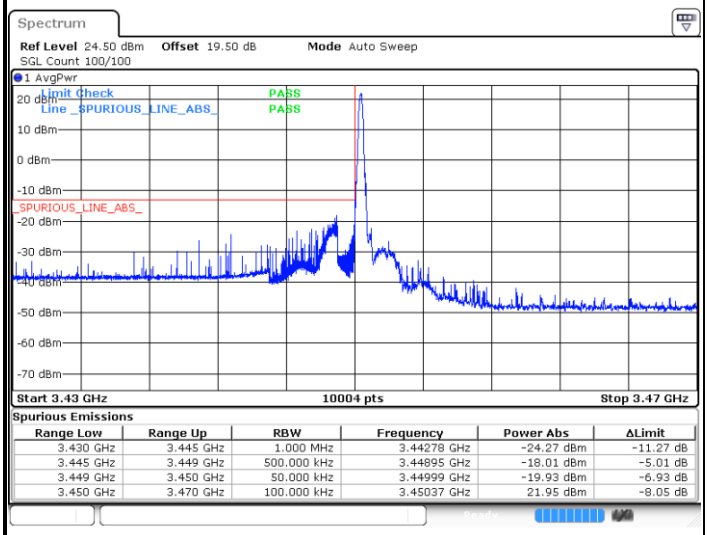
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54768 GHz	8.23 dBm	-21.77 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55001 GHz	-25.35 dBm	-12.35 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55101 GHz	-19.43 dBm	-6.43 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55503 GHz	-25.28 dBm	-12.28 dB

Date: 9.AUG.2024 23:29:07

LTE Band 42 / 5MHz / 64QAM

Lowest Band Edge / 1RB

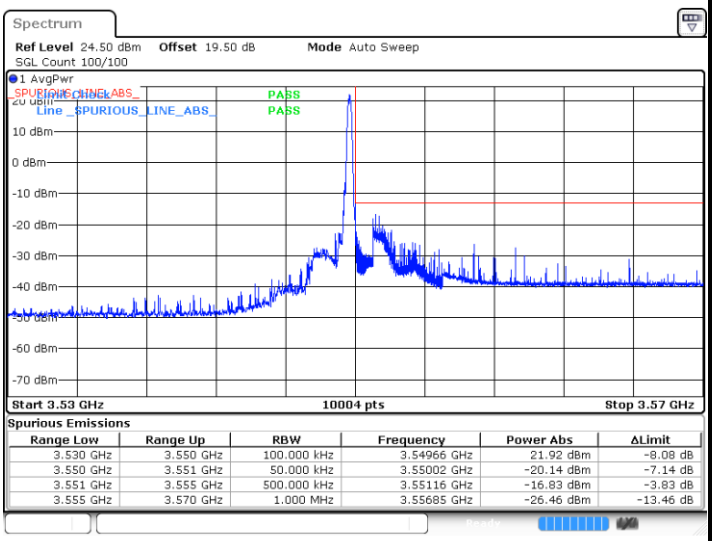


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44278 GHz	-24.27 dBm	-11.27 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44895 GHz	-18.01 dBm	-5.01 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44999 GHz	-19.93 dBm	-6.93 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45037 GHz	21.95 dBm	-8.05 dB

Date: 18.AUG.2024 19:57:54

Highest Band Edge / 1 RB

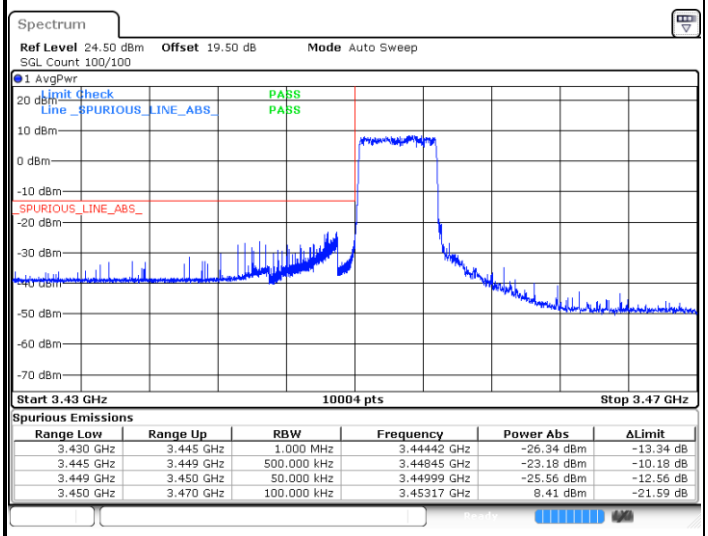


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54966 GHz	21.92 dBm	-8.08 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55002 GHz	-20.14 dBm	-7.14 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55116 GHz	-16.83 dBm	-3.83 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55685 GHz	-26.46 dBm	-13.46 dB

Date: 9.AUG.2024 23:27:25

Lowest Band Edge / Full RB

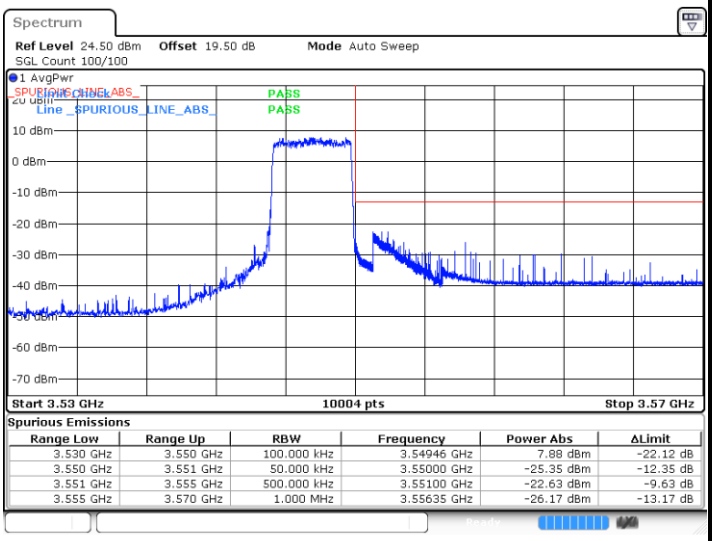


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44442 GHz	-26.34 dBm	-13.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44845 GHz	-23.18 dBm	-10.18 dB
3.449 GHz	3.450 GHz	50.000 kHz	3.44999 GHz	-25.56 dBm	-12.56 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45317 GHz	8.41 dBm	-21.59 dB

Date: 9.AUG.2024 23:18:21

Highest Band Edge / Full RB



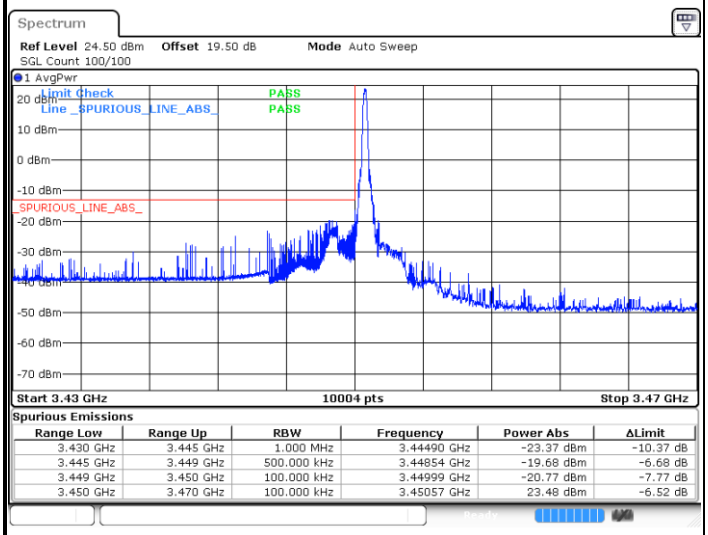
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54946 GHz	7.88 dBm	-22.12 dB
3.550 GHz	3.551 GHz	50.000 kHz	3.55000 GHz	-25.35 dBm	-12.35 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55100 GHz	-22.63 dBm	-9.63 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55635 GHz	-26.17 dBm	-13.17 dB

Date: 9.AUG.2024 23:29:57

LTE Band 42 / 10MHz / QPSK

Lowest Band Edge / 1 RB

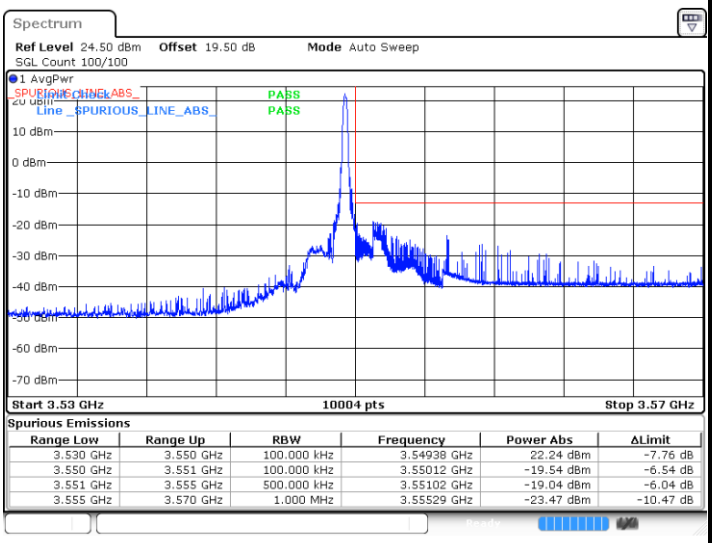


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44490 GHz	-23.37 dBm	-10.37 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44854 GHz	-19.68 dBm	-6.68 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-20.77 dBm	-7.77 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45057 GHz	23.48 dBm	-6.52 dB

Date: 9.AUG.2024 23:32:10

Highest Band Edge / 1 RB

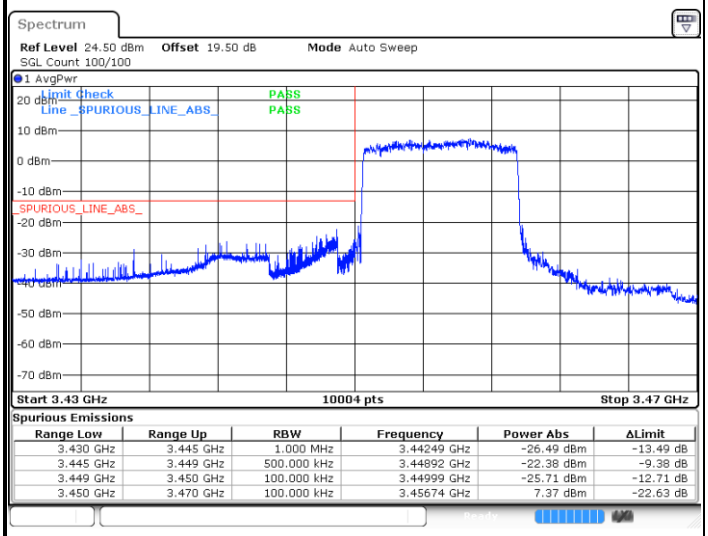


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54938 GHz	22.24 dBm	-7.76 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55012 GHz	-19.54 dBm	-6.54 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55102 GHz	-19.04 dBm	-6.04 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55529 GHz	-23.47 dBm	-10.47 dB

Date: 9.AUG.2024 23:57:54

Lowest Band Edge / Full RB

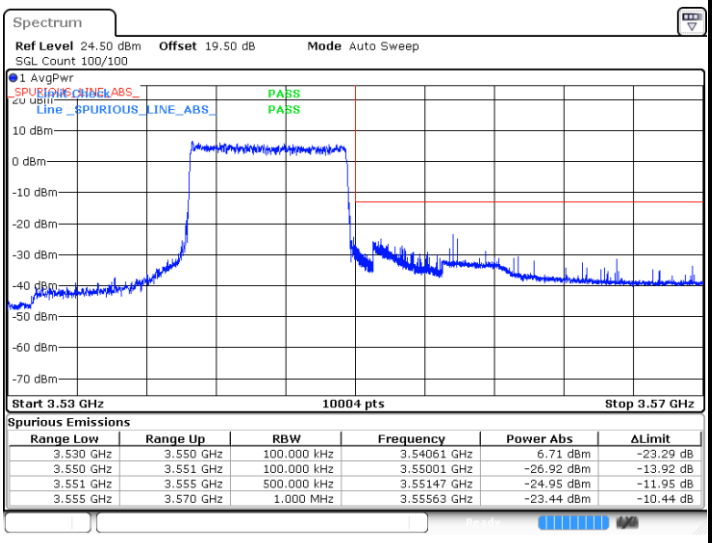


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44249 GHz	-26.49 dBm	-13.49 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44892 GHz	-22.38 dBm	-9.38 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44999 GHz	-25.71 dBm	-12.71 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45674 GHz	7.37 dBm	-22.63 dB

Date: 9.AUG.2024 23:34:43

Highest Band Edge / Full RB



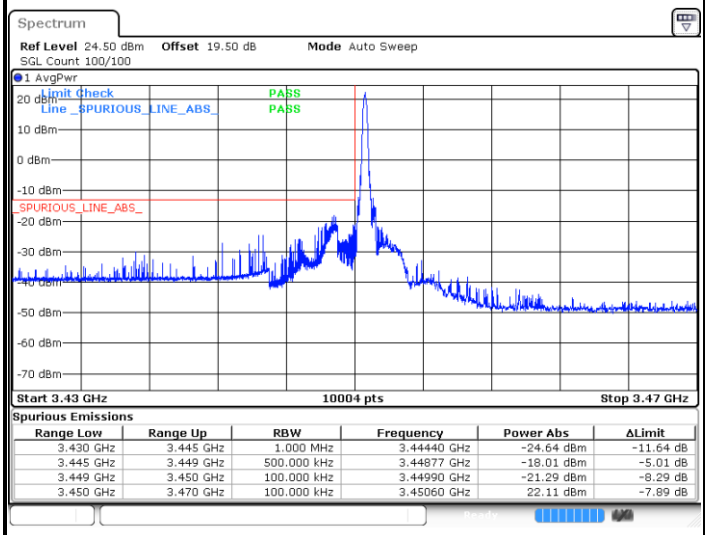
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54061 GHz	6.71 dBm	-23.29 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55001 GHz	-26.92 dBm	-13.92 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55147 GHz	-24.95 dBm	-11.95 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55563 GHz	-23.44 dBm	-10.44 dB

Date: 10.AUG.2024 00:00:27

LTE Band 42 / 10MHz / 16QAM

Lowest Band Edge / 1RB

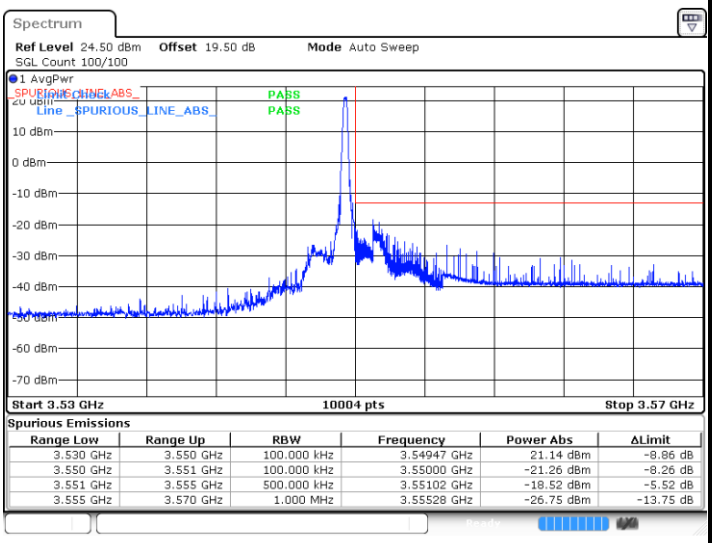


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44440 GHz	-24.64 dBm	-11.64 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44877 GHz	-18.01 dBm	-5.01 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44990 GHz	-21.29 dBm	-8.29 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45060 GHz	22.11 dBm	-7.89 dB

Date: 9.AUG.2024 23:33:01

Highest Band Edge / 1 RB

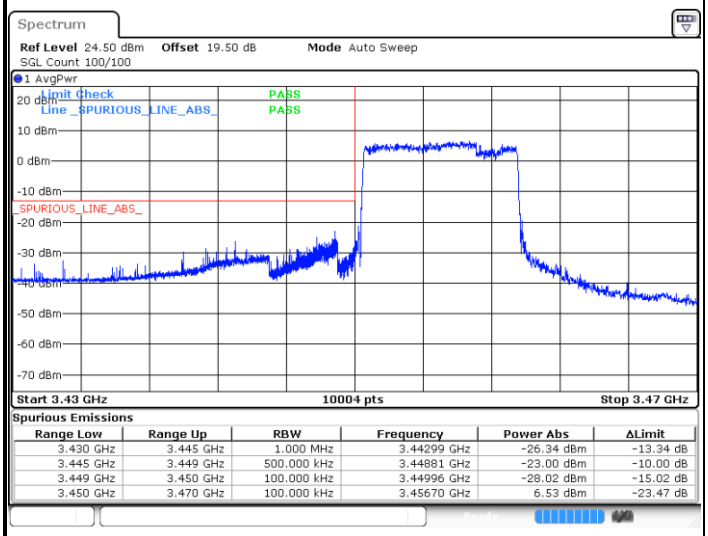


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54947 GHz	21.14 dBm	-8.86 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55000 GHz	-21.26 dBm	-8.26 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55102 GHz	-18.52 dBm	-5.52 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55528 GHz	-26.75 dBm	-13.75 dB

Date: 9.AUG.2024 23:58:45

Lowest Band Edge / Full RB

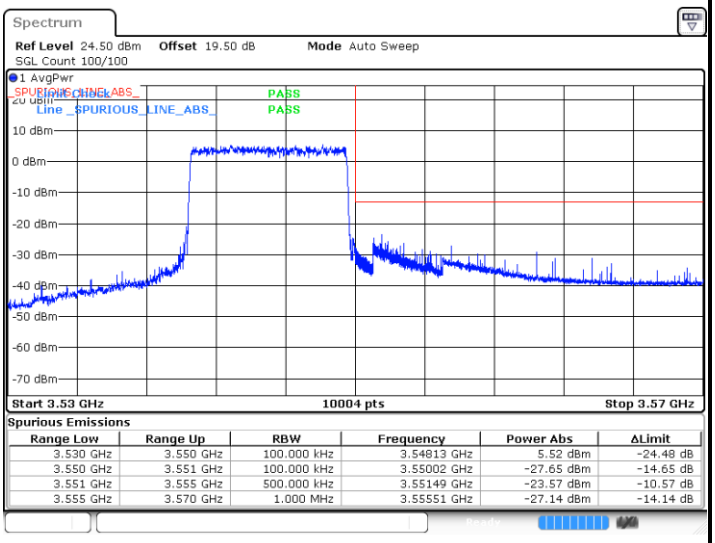


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44299 GHz	-26.34 dBm	-13.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44881 GHz	-23.00 dBm	-10.00 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44996 GHz	-28.02 dBm	-15.02 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45670 GHz	6.53 dBm	-23.47 dB

Date: 9.AUG.2024 23:35:34

Highest Band Edge / Full RB



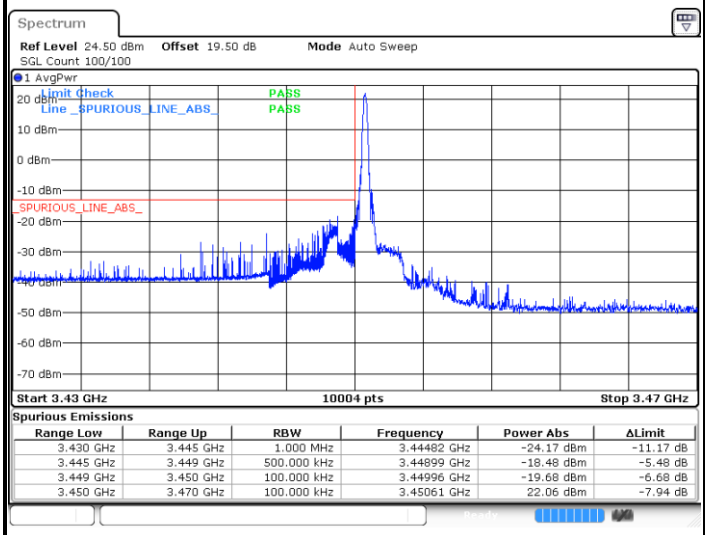
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54813 GHz	5.52 dBm	-24.48 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55002 GHz	-27.65 dBm	-14.65 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55149 GHz	-23.57 dBm	-10.57 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55551 GHz	-27.14 dBm	-14.14 dB

Date: 10.AUG.2024 00:01:18

LTE Band 42 / 10MHz / 64QAM

Lowest Band Edge / 1RB

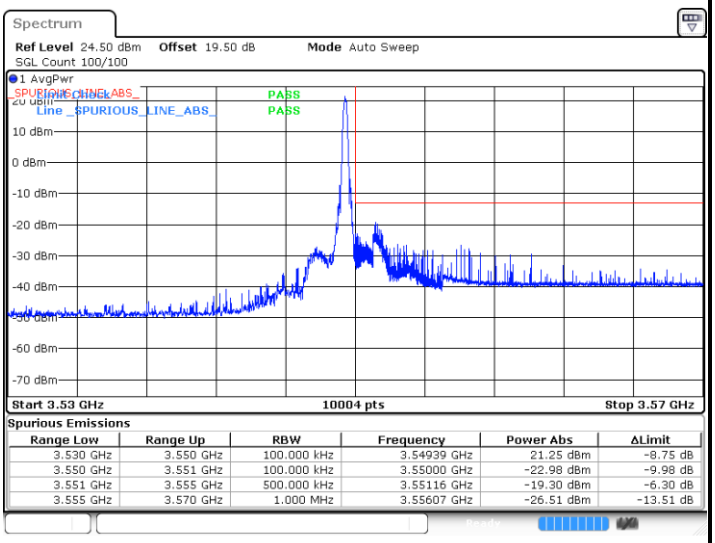


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44482 GHz	-24.17 dBm	-11.17 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44899 GHz	-18.48 dBm	-5.48 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44996 GHz	-19.68 dBm	-6.68 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45061 GHz	22.06 dBm	-7.94 dB

Date: 9.AUG.2024 23:33:52

Highest Band Edge / 1 RB

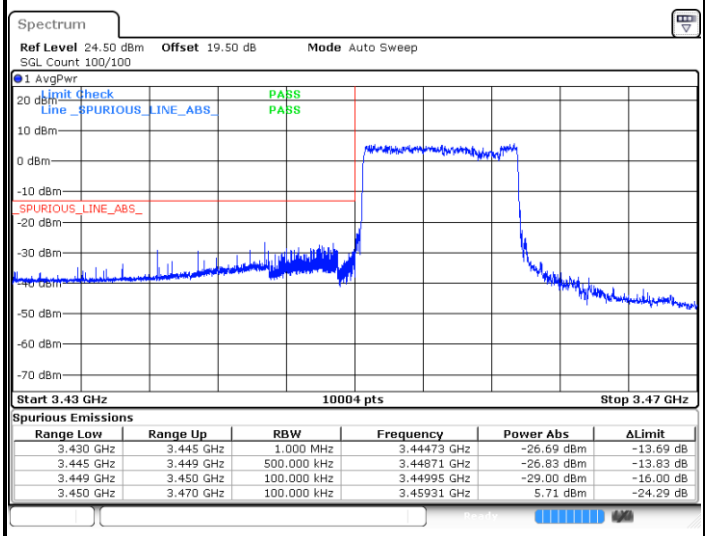


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54939 GHz	21.25 dBm	-8.75 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55000 GHz	-22.98 dBm	-9.98 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55116 GHz	-19.30 dBm	-6.30 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55607 GHz	-26.51 dBm	-13.51 dB

Date: 9.AUG.2024 23:59:36

Lowest Band Edge / Full RB

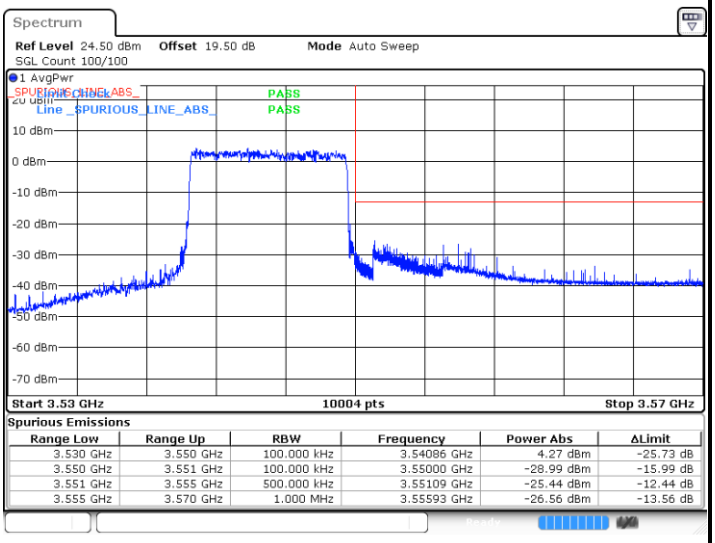


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44473 GHz	-26.69 dBm	-13.69 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44871 GHz	-26.83 dBm	-13.83 dB
3.449 GHz	3.450 GHz	100.000 kHz	3.44995 GHz	-29.00 dBm	-16.00 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45931 GHz	5.71 dBm	-24.29 dB

Date: 9.AUG.2024 23:53:08

Highest Band Edge / Full RB



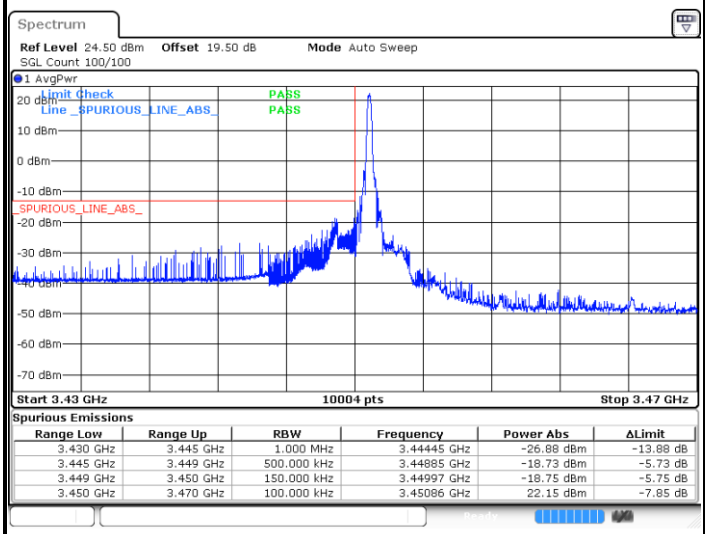
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54086 GHz	4.27 dBm	-25.73 dB
3.550 GHz	3.551 GHz	100.000 kHz	3.55000 GHz	-28.99 dBm	-15.99 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55109 GHz	-25.44 dBm	-12.44 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55593 GHz	-26.56 dBm	-13.56 dB

Date: 10.AUG.2024 00:02:10

LTE Band 42 / 15MHz / QPSK

Lowest Band Edge / 1 RB

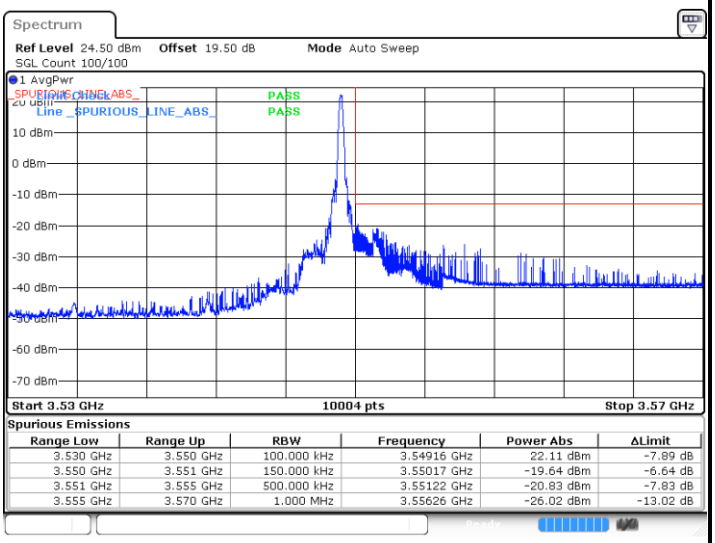


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44445 GHz	-26.88 dBm	-13.88 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44885 GHz	-18.73 dBm	-5.73 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44997 GHz	-18.75 dBm	-5.75 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45086 GHz	22.15 dBm	-7.85 dB

Date: 10.AUG.2024 00:05:03

Highest Band Edge / 1 RB

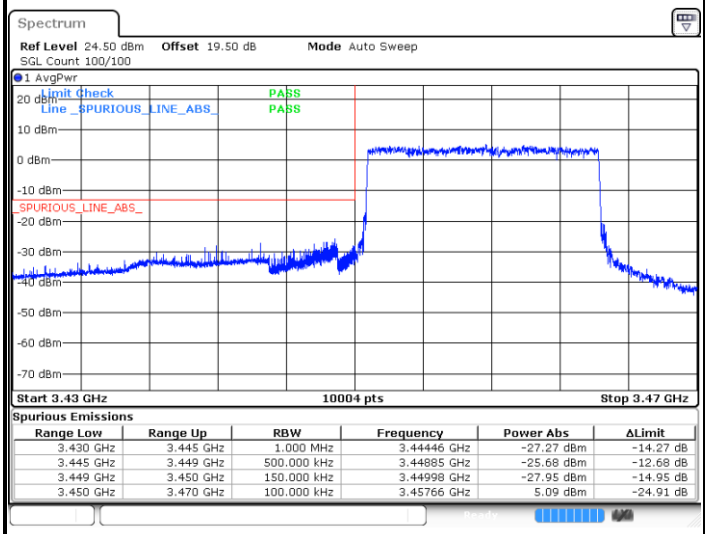


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54916 GHz	22.11 dBm	-7.89 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55017 GHz	-19.64 dBm	-6.64 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55122 GHz	-20.83 dBm	-7.83 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55626 GHz	-26.02 dBm	-13.02 dB

Date: 10.AUG.2024 00:14:04

Lowest Band Edge / Full RB

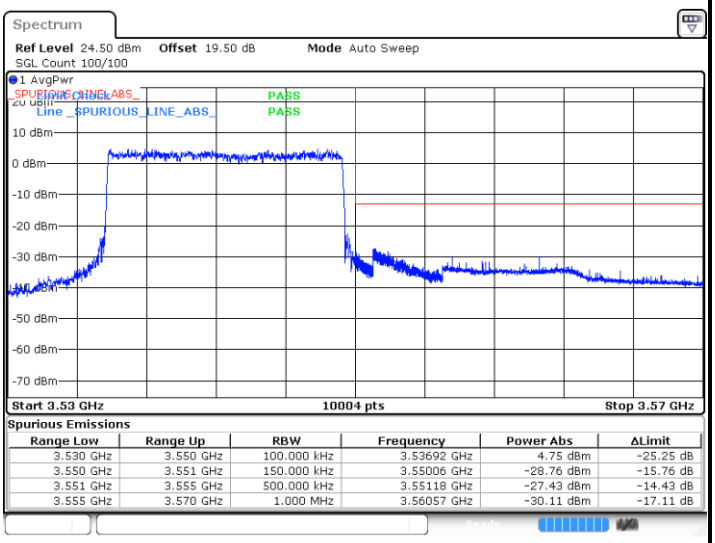


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44446 GHz	-27.27 dBm	-14.27 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44885 GHz	-25.68 dBm	-12.68 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44998 GHz	-27.95 dBm	-14.95 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45766 GHz	5.09 dBm	-24.91 dB

Date: 10.AUG.2024 00:07:36

Highest Band Edge / Full RB



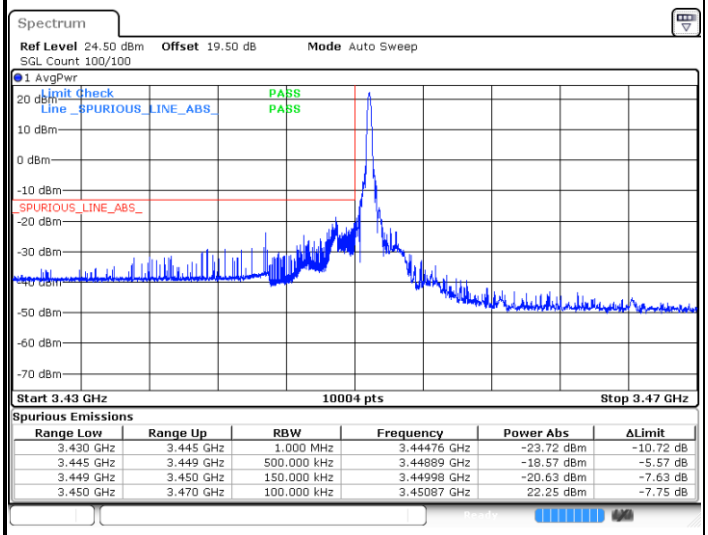
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53692 GHz	4.75 dBm	-25.25 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55006 GHz	-28.76 dBm	-15.76 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55118 GHz	-27.43 dBm	-14.43 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.56057 GHz	-30.11 dBm	-17.11 dB

Date: 10.AUG.2024 00:16:37

LTE Band 42 / 15MHz / 16QAM

Lowest Band Edge / 1RB

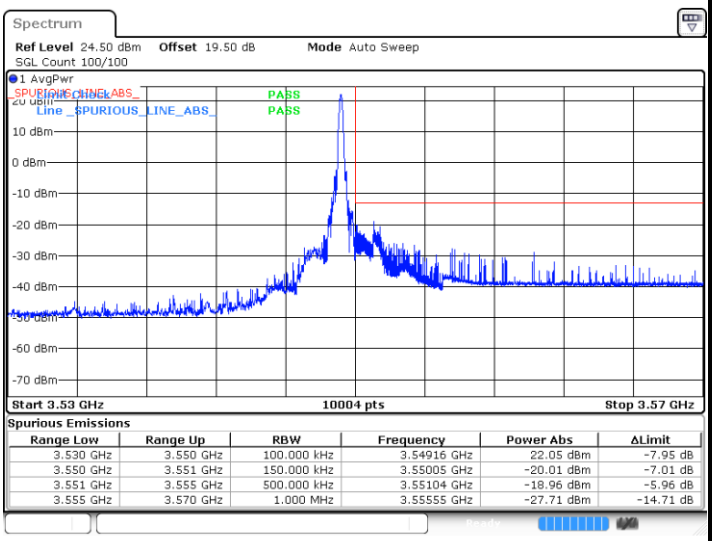


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44476 GHz	-23.72 dBm	-10.72 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44889 GHz	-18.57 dBm	-5.57 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44998 GHz	-20.63 dBm	-7.63 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45087 GHz	22.25 dBm	-7.75 dB

Date: 10.AUG.2024 00:05:54

Highest Band Edge / 1 RB

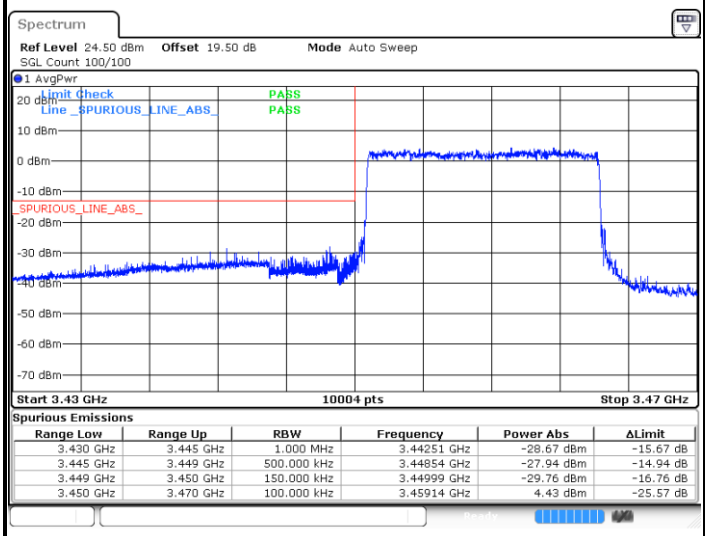


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54916 GHz	22.05 dBm	-7.95 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55005 GHz	-20.01 dBm	-7.01 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55104 GHz	-18.96 dBm	-5.96 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55555 GHz	-27.71 dBm	-14.71 dB

Date: 10.AUG.2024 00:14:55

Lowest Band Edge / Full RB

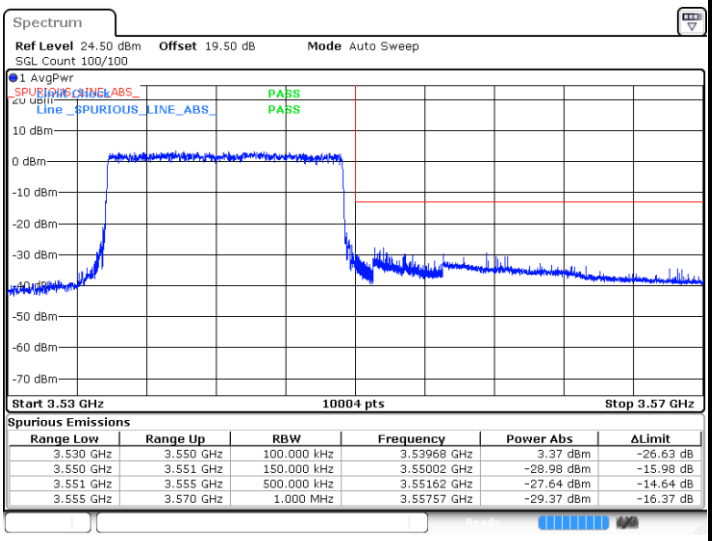


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44251 GHz	-28.67 dBm	-15.67 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44854 GHz	-27.94 dBm	-14.94 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44999 GHz	-29.76 dBm	-16.76 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45914 GHz	4.43 dBm	-25.57 dB

Date: 10.AUG.2024 00:08:27

Highest Band Edge / Full RB



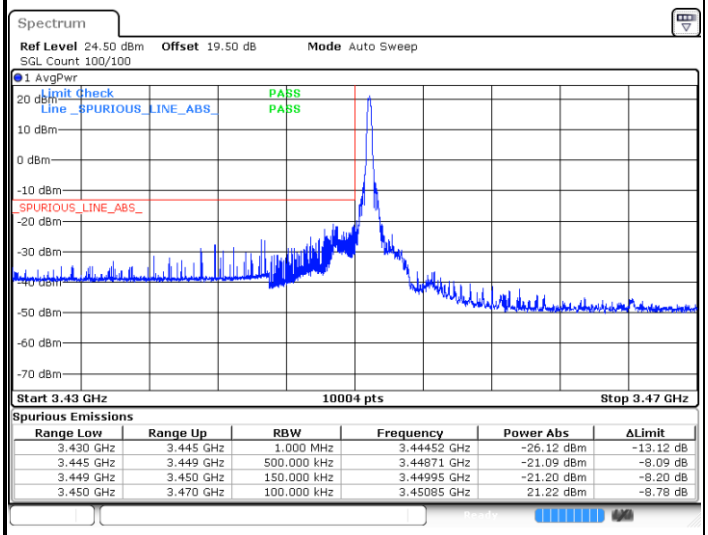
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53968 GHz	3.37 dBm	-26.63 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55002 GHz	-28.98 dBm	-15.98 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55162 GHz	-27.64 dBm	-14.64 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55757 GHz	-29.37 dBm	-16.37 dB

Date: 10.AUG.2024 00:17:28

LTE Band 42 / 15MHz / 64QAM

Lowest Band Edge / 1RB

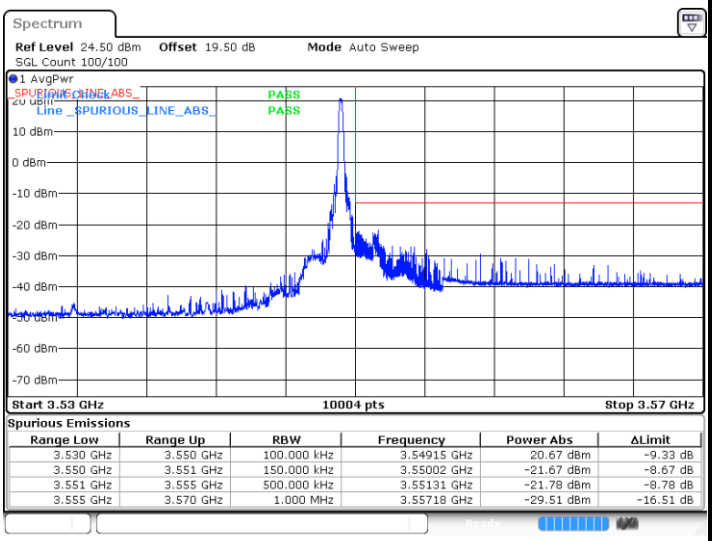


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44452 GHz	-26.12 dBm	-13.12 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44871 GHz	-21.09 dBm	-8.09 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44995 GHz	-21.20 dBm	-8.20 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45085 GHz	21.22 dBm	-8.78 dB

Date: 10.AUG.2024 00:06:44

Highest Band Edge / 1 RB

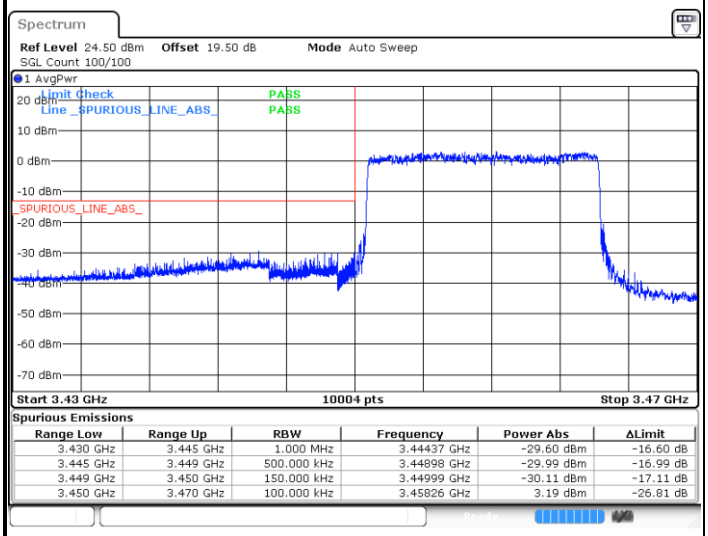


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54915 GHz	20.67 dBm	-9.33 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55002 GHz	-21.67 dBm	-8.67 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55131 GHz	-21.78 dBm	-8.78 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55718 GHz	-29.51 dBm	-16.51 dB

Date: 10.AUG.2024 00:15:46

Lowest Band Edge / Full RB

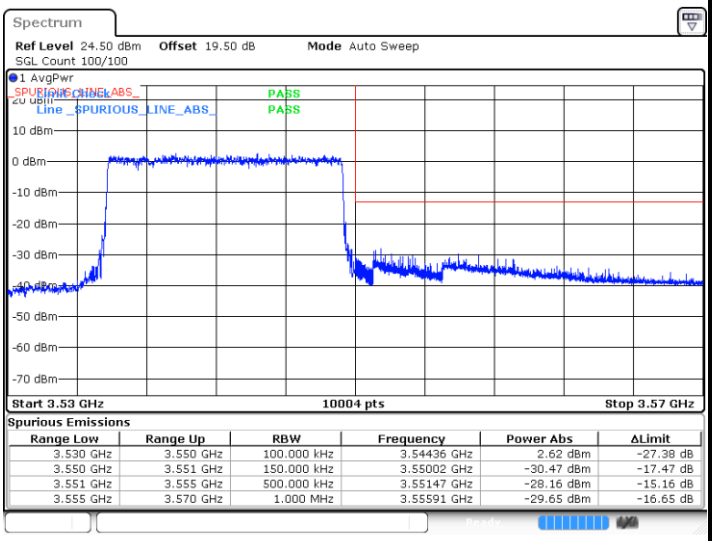


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44437 GHz	-29.60 dBm	-16.60 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44898 GHz	-29.99 dBm	-16.99 dB
3.449 GHz	3.450 GHz	150.000 kHz	3.44999 GHz	-30.11 dBm	-17.11 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45826 GHz	3.19 dBm	-26.81 dB

Date: 10.AUG.2024 00:09:17

Highest Band Edge / Full RB



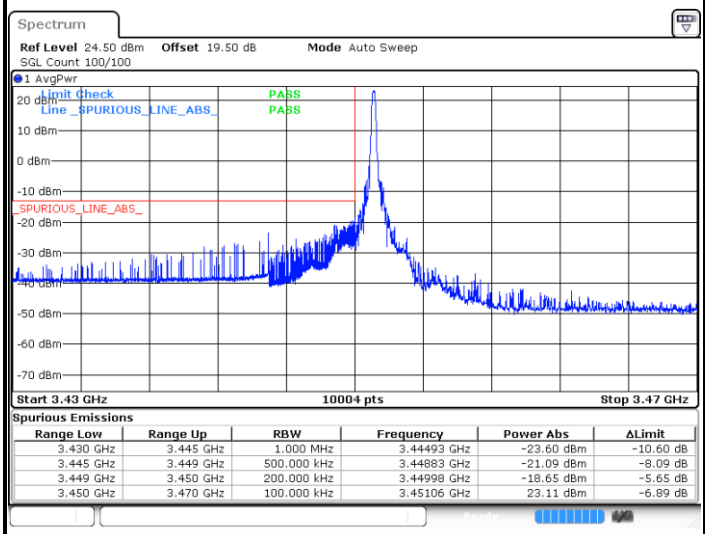
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54436 GHz	2.62 dBm	-27.38 dB
3.550 GHz	3.551 GHz	150.000 kHz	3.55002 GHz	-30.47 dBm	-17.47 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55147 GHz	-28.16 dBm	-15.16 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55591 GHz	-29.65 dBm	-16.65 dB

Date: 10.AUG.2024 00:18:19

LTE Band 42 / 20MHz / QPSK

Lowest Band Edge / 1 RB

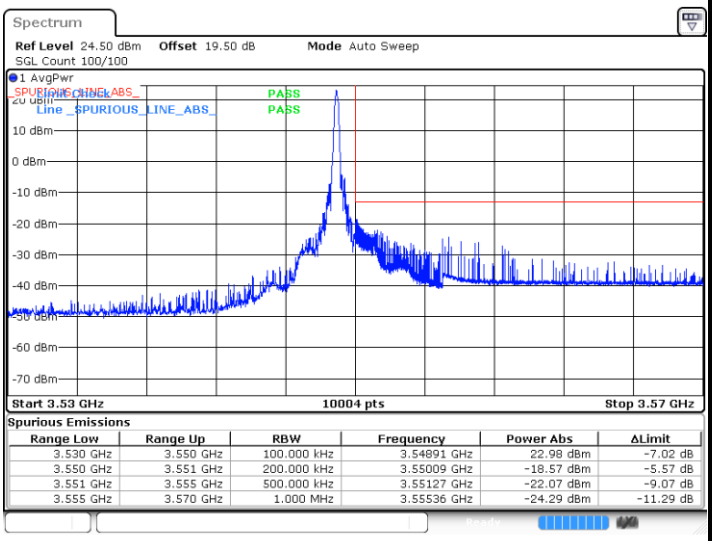


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44493 GHz	-23.60 dBm	-10.60 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44883 GHz	-21.09 dBm	-8.09 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44998 GHz	-18.65 dBm	-5.65 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45106 GHz	23.11 dBm	-6.89 dB

Date: 10.AUG.2024 00:21:12

Highest Band Edge / 1 RB

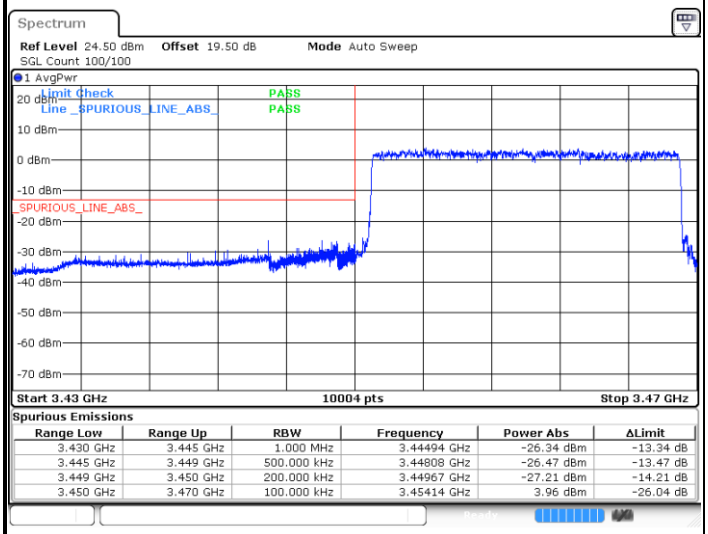


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54891 GHz	22.98 dBm	-7.02 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55009 GHz	-18.57 dBm	-5.57 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55127 GHz	-22.07 dBm	-9.07 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55536 GHz	-24.29 dBm	-11.29 dB

Date: 10.AUG.2024 00:31:36

Lowest Band Edge / Full RB

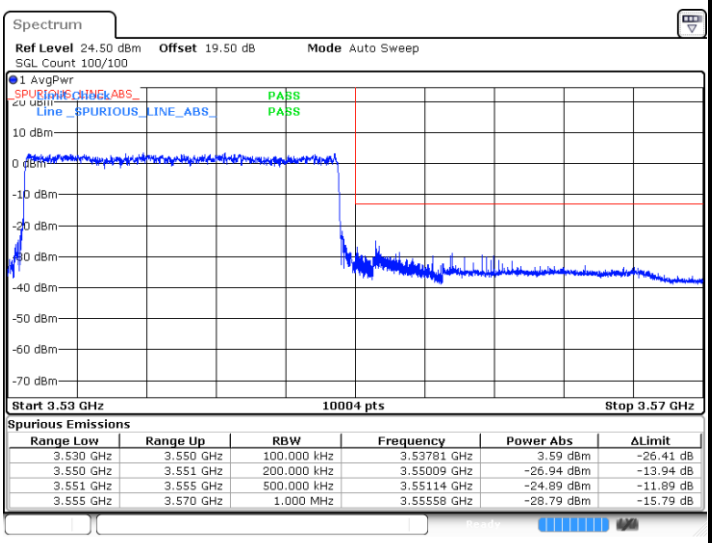


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44494 GHz	-26.34 dBm	-13.34 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44808 GHz	-26.47 dBm	-13.47 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44967 GHz	-27.21 dBm	-14.21 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45414 GHz	3.96 dBm	-26.04 dB

Date: 10.AUG.2024 00:23:45

Highest Band Edge / Full RB



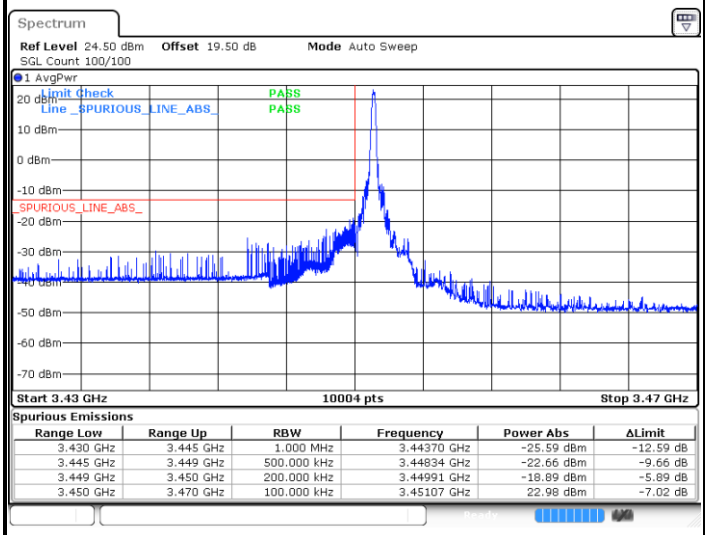
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53781 GHz	3.59 dBm	-26.41 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55009 GHz	-26.94 dBm	-13.94 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55114 GHz	-24.89 dBm	-11.89 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55558 GHz	-28.79 dBm	-15.79 dB

Date: 10.AUG.2024 00:34:09

LTE Band 42 / 20MHz / 16QAM

Lowest Band Edge / 1RB

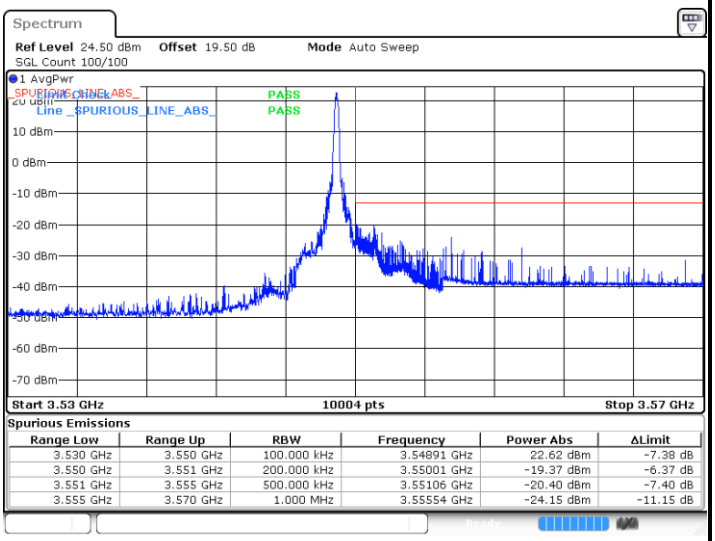


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44370 GHz	-25.59 dBm	-12.59 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44834 GHz	-22.66 dBm	-9.66 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44991 GHz	-18.89 dBm	-5.89 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45107 GHz	22.98 dBm	-7.02 dB

Date: 10.AUG.2024 00:22:03

Highest Band Edge / 1 RB

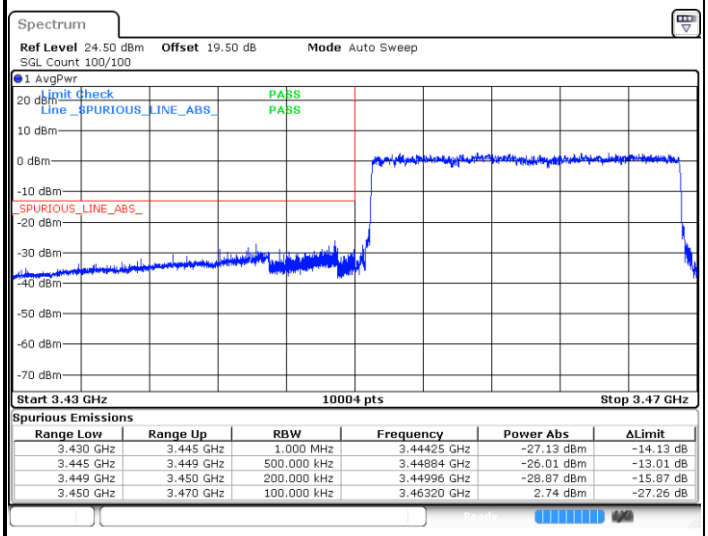


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54891 GHz	22.62 dBm	-7.38 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55001 GHz	-19.37 dBm	-6.37 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55106 GHz	-20.40 dBm	-7.40 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55554 GHz	-24.15 dBm	-11.15 dB

Date: 10.AUG.2024 00:32:27

Lowest Band Edge / Full RB

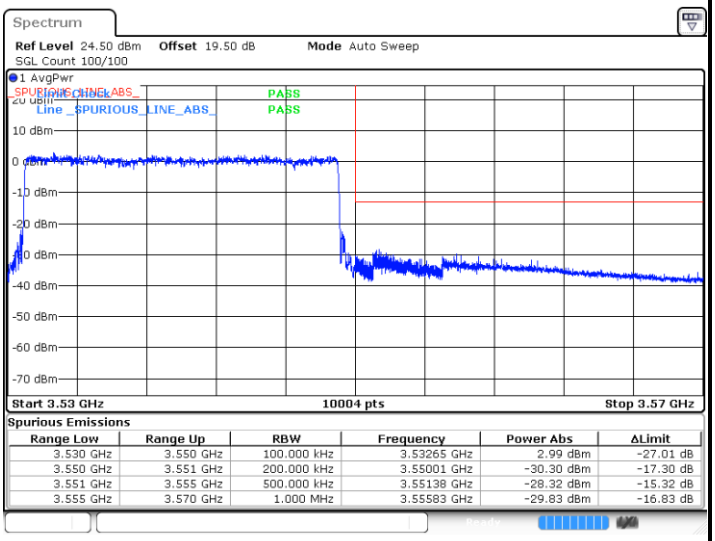


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44425 GHz	-27.13 dBm	-14.13 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44884 GHz	-26.01 dBm	-13.01 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44996 GHz	-28.87 dBm	-15.87 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.46320 GHz	2.74 dBm	-27.26 dB

Date: 10.AUG.2024 00:24:36

Highest Band Edge / Full RB



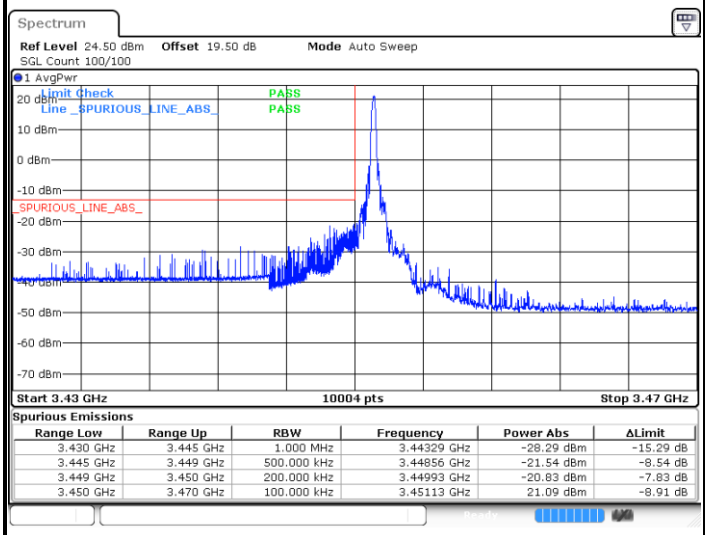
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53265 GHz	2.99 dBm	-27.01 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55001 GHz	-30.30 dBm	-17.30 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55138 GHz	-28.32 dBm	-15.32 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55583 GHz	-29.83 dBm	-16.83 dB

Date: 10.AUG.2024 00:34:59

LTE Band 42 / 20MHz / 64QAM

Lowest Band Edge / 1RB

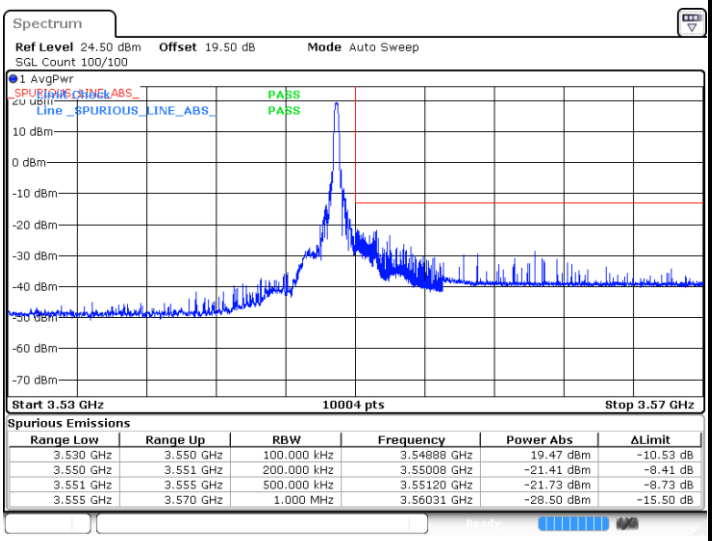


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44329 GHz	-28.29 dBm	-15.29 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44856 GHz	-21.54 dBm	-8.54 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44993 GHz	-20.83 dBm	-7.83 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45113 GHz	21.09 dBm	-8.91 dB

Date: 10.AUG.2024 00:22:54

Highest Band Edge / 1 RB

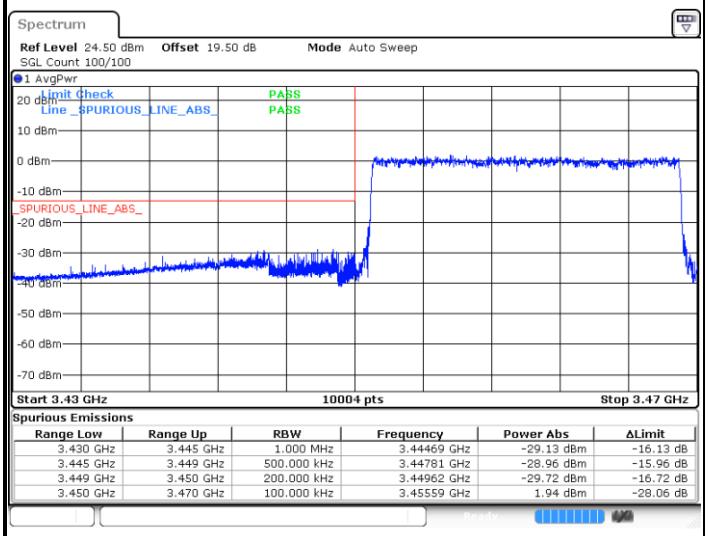


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.54888 GHz	19.47 dBm	-10.53 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55008 GHz	-21.41 dBm	-8.41 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55120 GHz	-21.73 dBm	-8.73 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.56031 GHz	-28.50 dBm	-15.50 dB

Date: 10.AUG.2024 00:33:18

Lowest Band Edge / Full RB

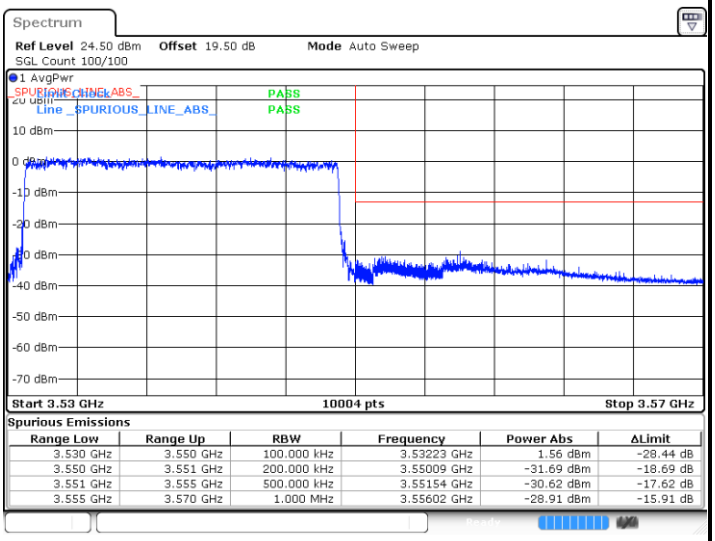


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.44469 GHz	-29.13 dBm	-16.13 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44781 GHz	-28.96 dBm	-15.96 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44962 GHz	-29.72 dBm	-16.72 dB
3.450 GHz	3.470 GHz	100.000 kHz	3.45559 GHz	1.94 dBm	-28.06 dB

Date: 10.AUG.2024 00:25:26

Highest Band Edge / Full RB



Spurious Emissions

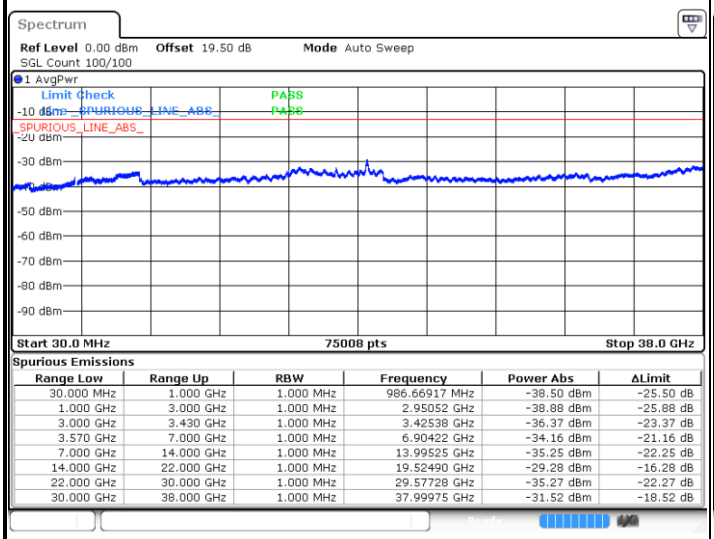
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.530 GHz	3.550 GHz	100.000 kHz	3.53223 GHz	1.56 dBm	-28.44 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55009 GHz	-31.69 dBm	-18.69 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55154 GHz	-30.62 dBm	-17.62 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.55602 GHz	-28.91 dBm	-15.91 dB

Date: 10.AUG.2024 00:35:50

Conducted Spurious Emission

LTE Band 42 / 5MHz

Lowest Channel / QPSK

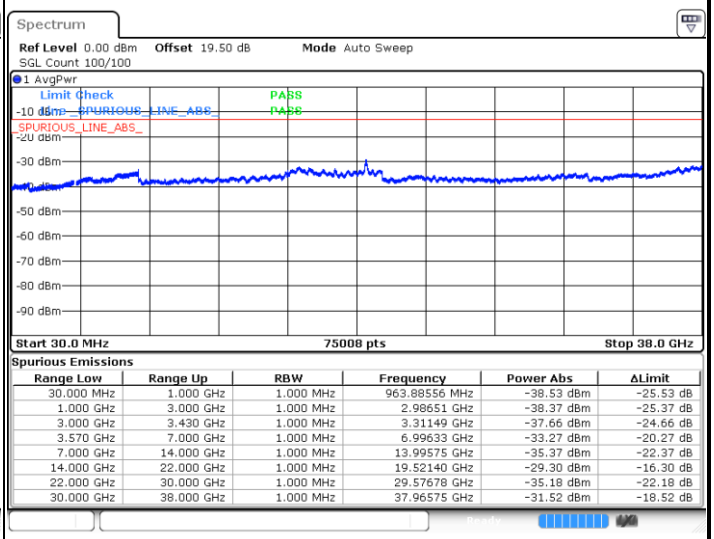


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.66917 MHz	-38.50 dBm	-25.50 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95052 GHz	-38.88 dBm	-25.88 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42538 GHz	-36.37 dBm	-23.37 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.90422 GHz	-34.16 dBm	-21.16 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99525 GHz	-35.25 dBm	-22.25 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.52490 GHz	-29.28 dBm	-16.28 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.57728 GHz	-35.27 dBm	-22.27 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99975 GHz	-31.52 dBm	-18.52 dB

Date: 18.AUG.2024 20:00:53

Middle Channel / QPSK

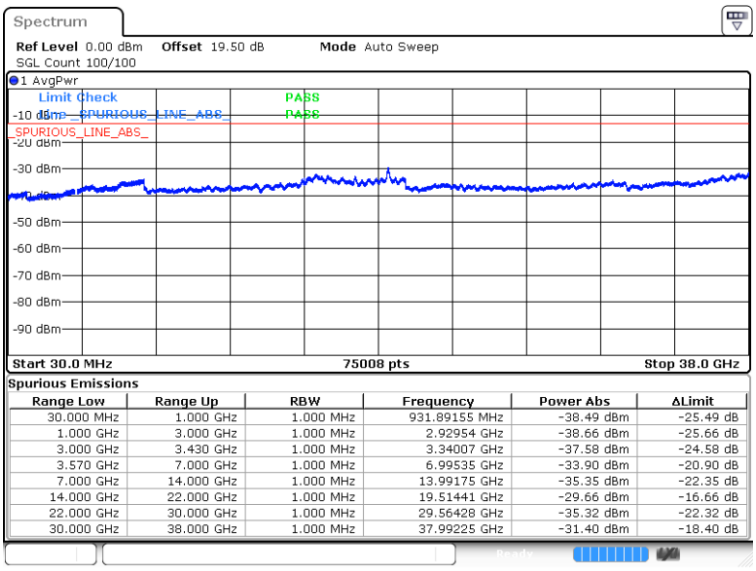


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	963.88556 MHz	-38.53 dBm	-25.53 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98651 GHz	-38.37 dBm	-25.37 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.31149 GHz	-37.66 dBm	-24.66 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99633 GHz	-33.27 dBm	-20.27 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99575 GHz	-35.37 dBm	-22.37 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.52140 GHz	-29.30 dBm	-16.30 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.57678 GHz	-35.18 dBm	-22.18 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.96575 GHz	-31.52 dBm	-18.52 dB

Date: 18.AUG.2024 20:13:29

Highest Channel / QPSK



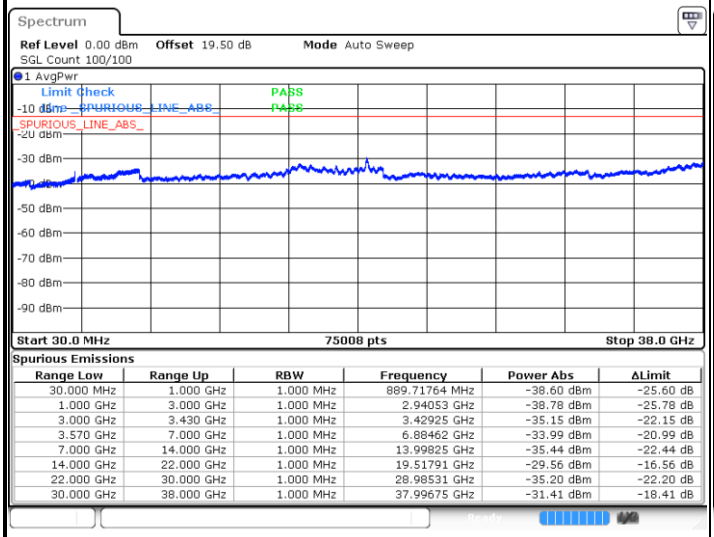
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	931.89155 MHz	-38.49 dBm	-25.49 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.92954 GHz	-38.66 dBm	-25.66 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.34007 GHz	-37.58 dBm	-24.58 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99535 GHz	-33.90 dBm	-20.90 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99175 GHz	-35.35 dBm	-22.35 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51441 GHz	-29.66 dBm	-16.66 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.56428 GHz	-35.32 dBm	-22.32 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99225 GHz	-31.40 dBm	-18.40 dB

Date: 18.AUG.2024 20:16:28

LTE Band 42 / 10MHz

Lowest Channel / QPSK

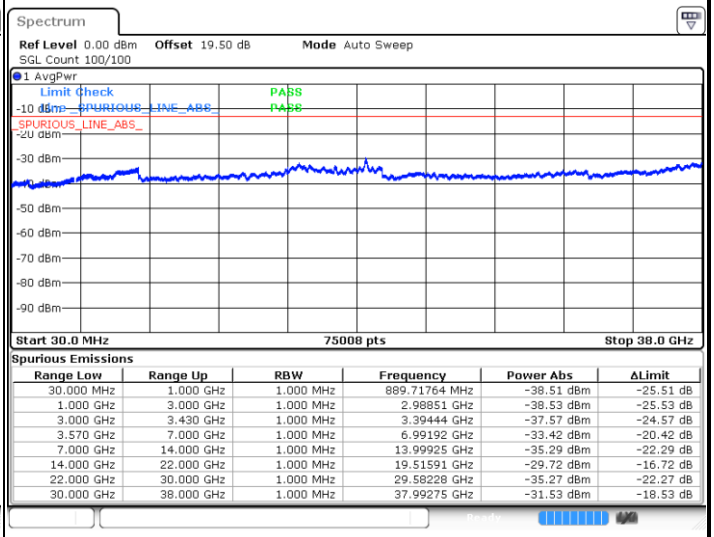


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	889.71764 MHz	-38.60 dBm	-25.60 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.94053 GHz	-38.78 dBm	-25.78 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42925 GHz	-35.15 dBm	-22.15 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.88462 GHz	-33.99 dBm	-20.99 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99825 GHz	-35.44 dBm	-22.44 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51791 GHz	-29.56 dBm	-16.56 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.98531 GHz	-35.20 dBm	-22.20 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99675 GHz	-31.41 dBm	-18.41 dB

Date: 18.AUG.2024 20:21:59

Middle Channel / QPSK

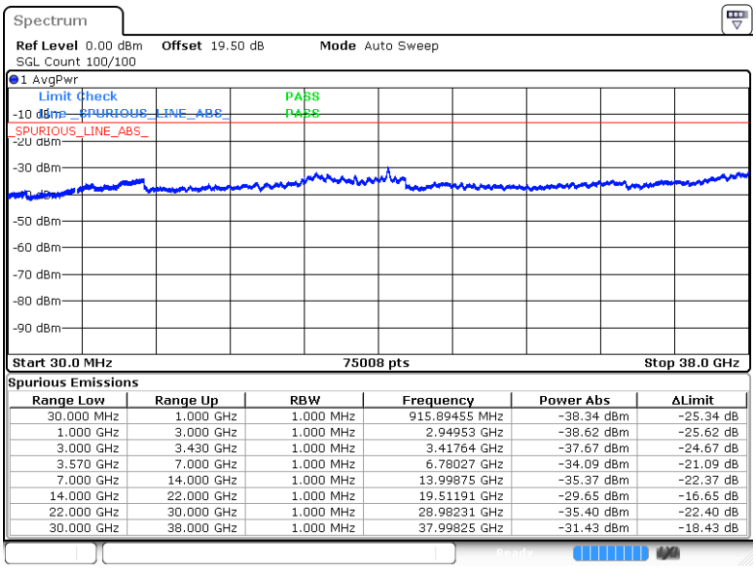


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	889.71764 MHz	-38.51 dBm	-25.51 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98851 GHz	-38.53 dBm	-25.53 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.39444 GHz	-37.57 dBm	-24.57 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99192 GHz	-33.42 dBm	-20.42 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99925 GHz	-35.29 dBm	-22.29 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51591 GHz	-29.72 dBm	-16.72 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.58228 GHz	-35.27 dBm	-22.27 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99275 GHz	-31.53 dBm	-18.53 dB

Date: 18.AUG.2024 20:23:23

Highest Channel / QPSK



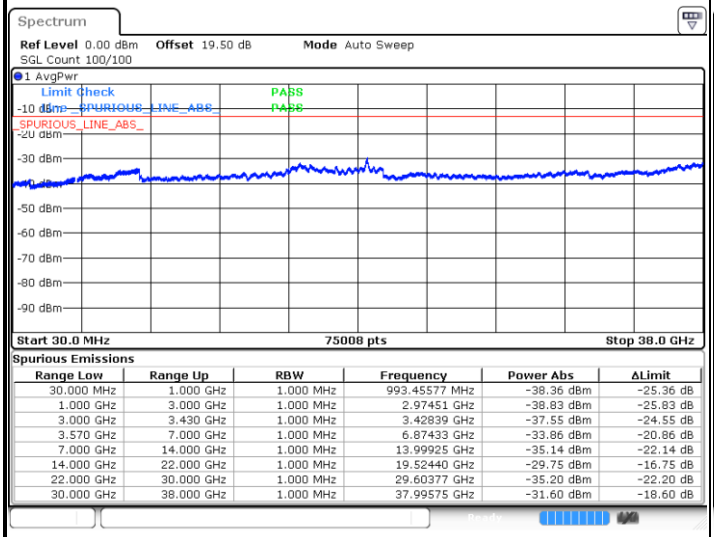
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.89455 MHz	-38.34 dBm	-25.34 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.94953 GHz	-38.62 dBm	-25.62 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.41764 GHz	-37.67 dBm	-24.67 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.78027 GHz	-34.09 dBm	-21.09 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99875 GHz	-35.37 dBm	-22.37 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51191 GHz	-29.65 dBm	-16.65 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.98231 GHz	-35.40 dBm	-22.40 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99825 GHz	-31.43 dBm	-18.43 dB

Date: 18.AUG.2024 20:31:44

LTE Band 42 / 15MHz

Lowest Channel / QPSK

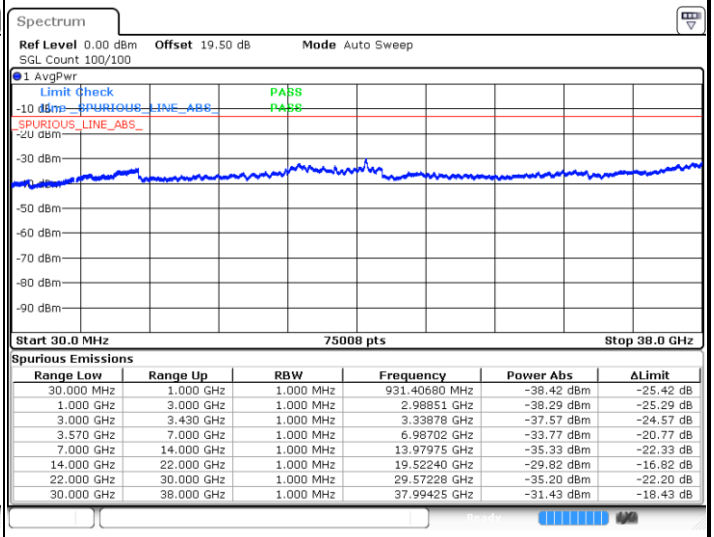


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	993.45577 MHz	-38.36 dBm	-25.36 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97451 GHz	-38.83 dBm	-25.83 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42839 GHz	-37.55 dBm	-24.55 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.87433 GHz	-33.86 dBm	-20.86 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99925 GHz	-35.14 dBm	-22.14 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.52440 GHz	-29.75 dBm	-16.75 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.60377 GHz	-35.20 dBm	-22.20 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99575 GHz	-31.60 dBm	-18.60 dB

Date: 18.AUG.2024 20:56:41

Middle Channel / QPSK

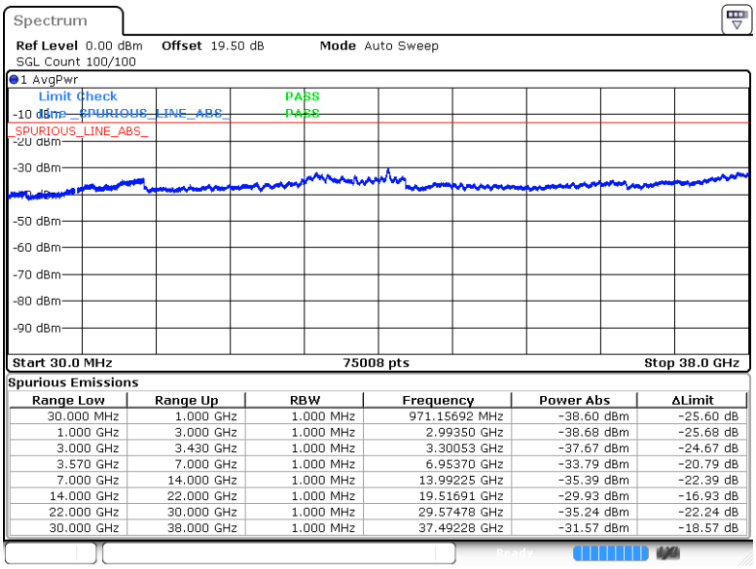


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	931.40680 MHz	-38.42 dBm	-25.42 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98851 GHz	-38.29 dBm	-25.29 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.33878 GHz	-37.57 dBm	-24.57 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.98702 GHz	-33.77 dBm	-20.77 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.97975 GHz	-35.33 dBm	-22.33 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.52240 GHz	-29.82 dBm	-16.82 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.57228 GHz	-35.20 dBm	-22.20 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99425 GHz	-31.43 dBm	-18.43 dB

Date: 18.AUG.2024 20:58:01

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	971.15692 MHz	-38.60 dBm	-25.60 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99350 GHz	-38.68 dBm	-25.68 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.30053 GHz	-37.67 dBm	-24.67 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.95370 GHz	-33.79 dBm	-20.79 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99225 GHz	-35.39 dBm	-22.39 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51691 GHz	-29.93 dBm	-16.93 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.57478 GHz	-35.24 dBm	-22.24 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.49228 GHz	-31.57 dBm	-18.57 dB

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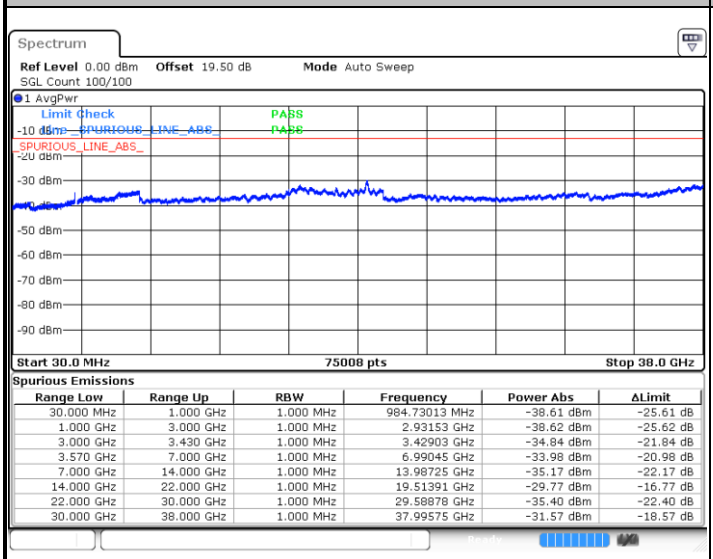
LTE Band 42 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	984.73013 MHz	-38.61 dBm	-25.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.93153 GHz	-38.62 dBm	-25.62 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.42903 GHz	-34.84 dBm	-21.84 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.99045 GHz	-33.98 dBm	-20.98 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.98725 GHz	-35.17 dBm	-22.17 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51391 GHz	-29.77 dBm	-16.77 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.58878 GHz	-35.40 dBm	-22.40 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99575 GHz	-31.57 dBm	-18.57 dB

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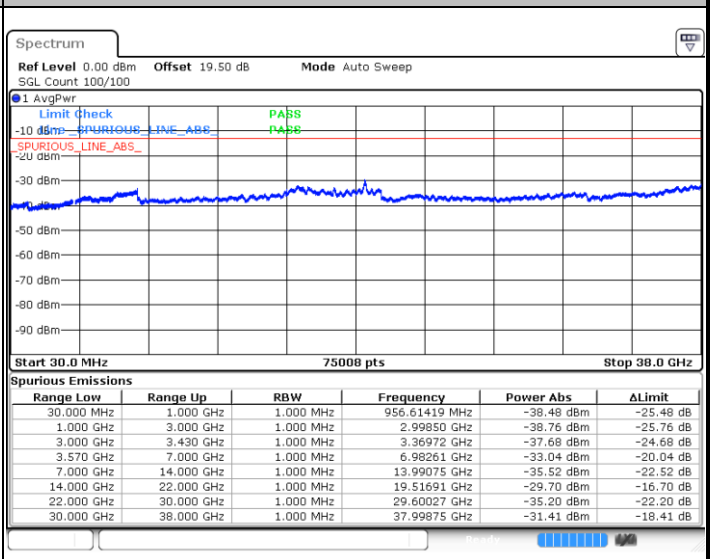
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	956.61419 MHz	-38.48 dBm	-25.48 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99850 GHz	-38.76 dBm	-25.76 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.36972 GHz	-37.68 dBm	-24.68 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.98261 GHz	-33.04 dBm	-20.04 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99075 GHz	-35.52 dBm	-22.52 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51691 GHz	-29.70 dBm	-16.70 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.60027 GHz	-35.20 dBm	-22.20 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99875 GHz	-31.41 dBm	-18.41 dB

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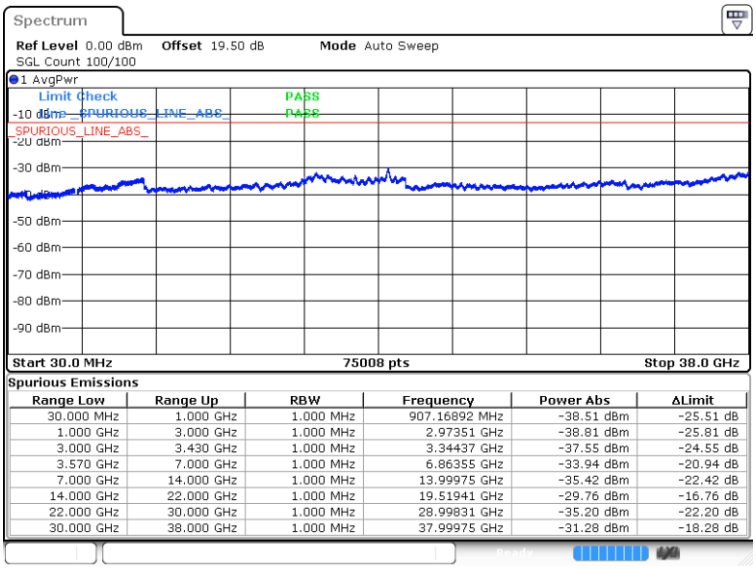
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.16892 MHz	-38.51 dBm	-25.51 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97351 GHz	-38.81 dBm	-25.81 dB
3.000 GHz	3.430 GHz	1.000 MHz	3.34437 GHz	-37.55 dBm	-24.55 dB
3.570 GHz	7.000 GHz	1.000 MHz	6.86355 GHz	-33.94 dBm	-20.94 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99975 GHz	-35.42 dBm	-22.42 dB
14.000 GHz	22.000 GHz	1.000 MHz	19.51941 GHz	-29.76 dBm	-16.76 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.99831 GHz	-35.20 dBm	-22.20 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.99975 GHz	-31.28 dBm	-18.28 dB

Date: 18.AUG.2024 21:04:01

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	0.0004	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0002	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0004	
20	Minimum Voltage	0.0004	

Note:

1. Normal Voltage = 3.8 V. ; Minimum Voltage = 3.3 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 :	Shunping You	Temperature :	22~25℃
		Relative Humidity :	48~52%

LTE Band 42 / 20MHz / QPSK / Ant. 2									
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)
Middle	6982.00	-58.10	-13	-45.10	-47.60	-61.40	8.30	11.60	H
	10473.00	-57.30	-13	-44.30	-52.54	-58.82	10.48	12.00	H
	13964.00	-51.95	-13	-38.95	-53.69	-53.65	11.80	13.50	H
	6982.00	-55.81	-13	-42.81	-45.47	-59.11	8.30	11.60	V
	10473.00	-52.41	-13	-39.41	-47.57	-53.93	10.48	12.00	V
	13964.00	-52.36	-13	-39.36	-53.73	-54.06	11.80	13.50	V

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