FCC RF Test Report

APPLICANT	**:**	**Inseego Corp.**
EQUIPMENT	**:**	**5G High Performance Sub6 & mmWave Outdoor CPE**
BRAND NAME	**:**	**Inseego**
MODEL NAME	**:**	**FW2010-1, FW2010e-1**
FCC ID	**:**	**PKRISGFW2010**
STANDARD	**:**	**47 CFR Part 2, 96**
CLASSIFICATION	**:**	**Citizens Band Category A and B Devices (CBD)**
EQUIPMENT TYPE	**:**	**CBSD (Category B)**

The product was received on Dec. 16, 2020 and completely tested on Mar. 25, 2021. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

This product installed a RF module (Brand Name: Inseego, Model Name: MD2000, FCC ID: PKRISGMD2000) during the test, only related conducted test items, ERP/EIRP and RSE test items are tested in this report, all the other test results are quoted on module RF report.

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

Reviewed by: Jason Jia / Supervisor

Approved by: Alex Wang / Manager

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FG0D1611C	01	Initial issue of report	Mar. 29, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
3.3	§96.41	Peak-to-Average Ratio	Pass	Not applicable for End User Devices
3.4	§96.41	Maximum E.I.R.P	Pass	-
		Maximum Power Spectral Density	Pass	Not applicable for End User Devices
-	§2.1049 §96.41	Occupied Bandwidth	Pass	1
3.5	§2.1051 §96.41	Conducted Band Edge Measurement	Pass	-
-	§2.1051 §96.41	Conducted Spurious Emission	Pass	1
-	§2.1055	Frequency Stability for Temperature & Voltage	Pass	1
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 13.89 dB at 10848.000 MHz

Remark 1:
1. All conducted test items were leveraged from module RF report which can refer to Report No. "FG090125G, FG090125-01C, FG090125-02A".
2. The maximum power of host is lower than and very close to the module, therefore, we chose higher power of the module to calculate the ERP/EIRP and show in the report.

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Applicant

Inseego Corp.
9710 Scranton Road, Suite 200 San Diego, CA 92121

1.2 Manufacturer

MeiG Smart Technology Co., Ltd
Floor 2, Office Building No.5, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G High Performance Sub6 & mmWave Outdoor CPE
Brand Name	Inseego
Model Name	FW2010-1, FW2010e-1
FCC ID	PKRISGFW2010
Tx Frequency	LTE Band 42 : 3550 MHz ~ 3600 MHz LTE Band 43 : 3600 MHz ~ 3700 MHz LTE Band 48 : 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 42 : 3550 MHz ~ 3600 MHz LTE Band 43 : 3600 MHz ~ 3700 MHz LTE Band 48 : 3550 MHz ~ 3700 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 48 :19.37 dBm LTE Band 48C_CA :19.18 dBm
Type of Modulation	QPSK / 16QAM / 64QAM
HW Version	4
SW Version	2.384
EUT Stage	Identical Prototype

Remark:
The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Maximum EIRP Power

LTE Band 48		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP (W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP (W)
20	3560~3690	-	-	0.4808	-	-	0.3899

LTE Band 48 CA	QPSK			16QAM		
BW (MHz) Frequency (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
20MHz+20MHz (3560 ~ 3690 MHz)	-	-	0.4603	-	-	0.4365

Note:

1. LTE Band 48 overlaps the entire frequency range of LTE Band 42/43 under Part 96 rule. Therefore, the test results of LTE Band 48 provided in this report covers Band 42/43.
2. Based on engineering evaluation, only the maximum bandwidth and the worst modulation test results are shown in the report.

1.5 Testing Site

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

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-KS TH01-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24a

1.7 Applied Standards

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

- ANSI C63.26-2015
- ANSI / TIA-603-E
- 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS v03
- 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

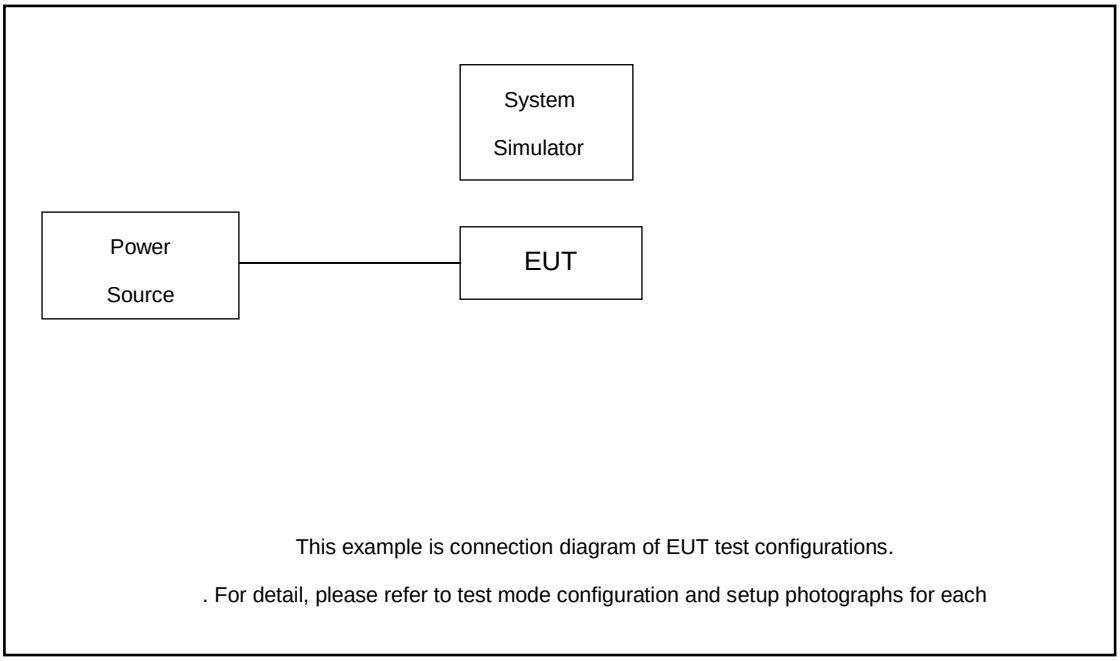
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	48	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak EIRP Density	48	-	-	v	v	v	v	v	v	v	v		v	v	v	v
Conducted Band Edge	48	-	-	v	v	v	v	v	v	v	v		v	v		v
Peak-to-Average Ratio	48	-	-				v	v	v	v	v		v		v	
E.R.P / E.I.R.P	48	-	-	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	48	Worst Case													v	
Remark	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															

Test Items	Band	Bandwidth (MHz)							Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	QPSK	16QAM	64QAM	-	1	Half	Full	L	M	H
Max. Output Power	48C	v	v	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
Peak EIRP Density	48C	v	v	v	v	v	v	v	v	v	v	–	v		v	v	v	v
Conducted Band Edge	48C	v	v	v	v	v	v	v	v	v	v	–	v		v	v	v	v
E.R.P / E.I.R.P	48C	v	v	v	v	v	v	v	v	v	v	-	v			v	v	v
Radiated Spurious Emission	48C	Worst Case															v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																	

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	POE Adapter	N/A	N/A	N/A	N/A	N/A
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss

Offset = RF cable loss.

Following shows an offset computation example with cable loss 8.72 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 8.72 (dB)

2.5 Frequency List of Low/Middle/High Channels

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

LTE Band 48C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 20	PCC	Channel	55273	55898	56523
		Frequency	3553.3	3615.8	3678.3
	SCC	Channel	55390	56015	56640
		Frequency	3565	3627.5	3690
20 + 5	PCC	Channel	55340	55965	56590
		Frequency	3560	3622.5	3685
	SCC	Channel	55457	56082	56707
		Frequency	3571.7	3634.2	3696.7
10 + 20	PCC	Channel	55295	55896	56496
		Frequency	3555.5	3615.6	3675.6
	SCC	Channel	55439	56040	56640
		Frequency	3569.9	3630	3690
20 + 10	PCC	Channel	55340	55941	56541
		Frequency	3560	3620.1	3680.1
	SCC	Channel	55484	56085	56685
		Frequency	3574.4	3634.5	3694.5
15 + 20	PCC	Channel	55318	55893	56469
		Frequency	3557.8	3615.3	3672.9
	SCC	Channel	55489	56064	56640
		Frequency	3574.9	3632.4	3690
20 + 15	PCC	Channel	55340	55916	56491
		Frequency	3560	3617.6	3675.1
	SCC	Channel	55511	56087	56662
		Frequency	3577.1	3634.7	3692.2
20 +20	PCC	Channel	55340	55891	56442
		Frequency	3560	3615.1	3670.2
	SCC	Channel	55538	56089	56640
		Frequency	3579.8	3634.9	3690

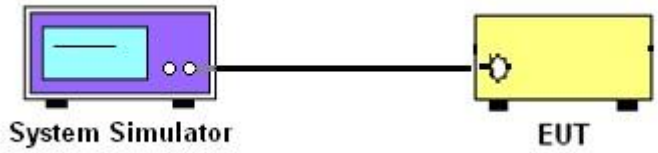
3 Conducted Test Items

3.1 Measuring Instruments

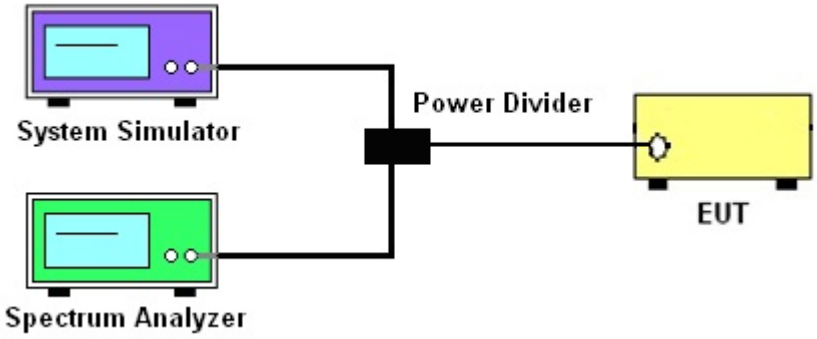
See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 PSD, Peak-to-Average Ratio, Conducted Band-Edge



3.1.4 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power Measurement

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

3.2.2 Test Procedures

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

3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

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

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

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

3.4 EIRP and PSD

3.4.1 Description of the EIRP and PSD Measurement

EIRP and PSD limits for CBRS equipment as below table:

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

Remark:

1. The worst case EIRP shown in this section is found with LTE operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for LTE Band 48 (i.e. 5, 10, 15, 20MHz)
2. Maximum PSD values are radiated. Measurements can be done conducted and add antenna gain back in.

3.4.2 Test Procedures for EIRP

1. Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)

2. Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)

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

3.4.3 Test Procedures for EIRP PSD

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

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

Part 96.41 (e) (1) (i)

For CBSD the emission limits outside the fundamental are as follows:

Within 0 MHz to 10 MHz above and below the assigned channel ≤ −13 dBm/MHz

Greater than 10 MHz above and below the assigned channel ≤ −25 dBm/MHz

Part 96.41 (e) (1) (ii)

For End User Devices the emission limits outside the fundamental are as follows:

Within 0 MHz to B MHz above and below the assigned channel ≤ −13 dBm/MHz

Greater than B MHz above and below the assigned channel ≤ −25 dBm/MHz

where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device.

Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

Part 96.41 (e) (2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed −25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz

3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
5. Offset has included the duty factor for LTE Band 48. Duty factor =10 log (1/x), where x is the measured duty cycle.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

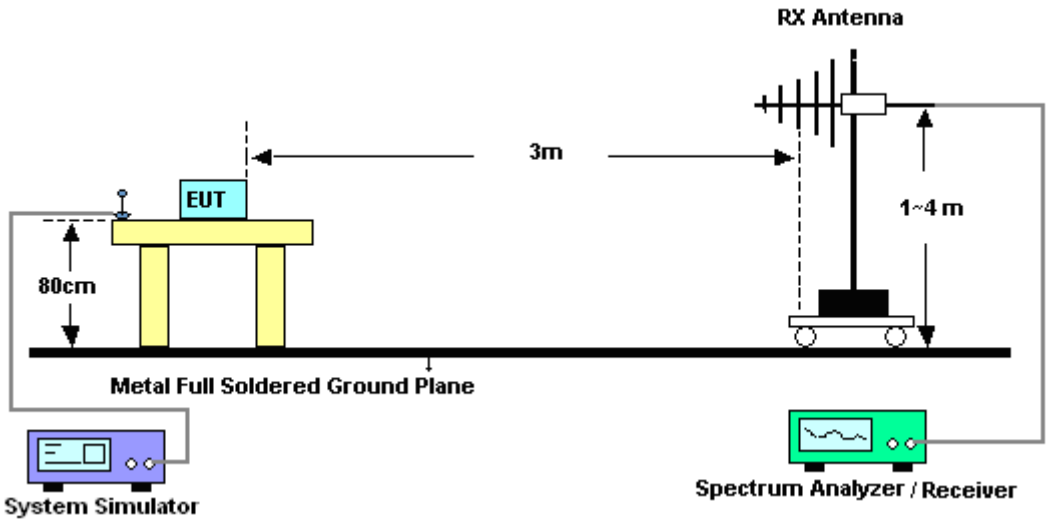
4 Radiated Test Items

4.1 Measuring Instruments

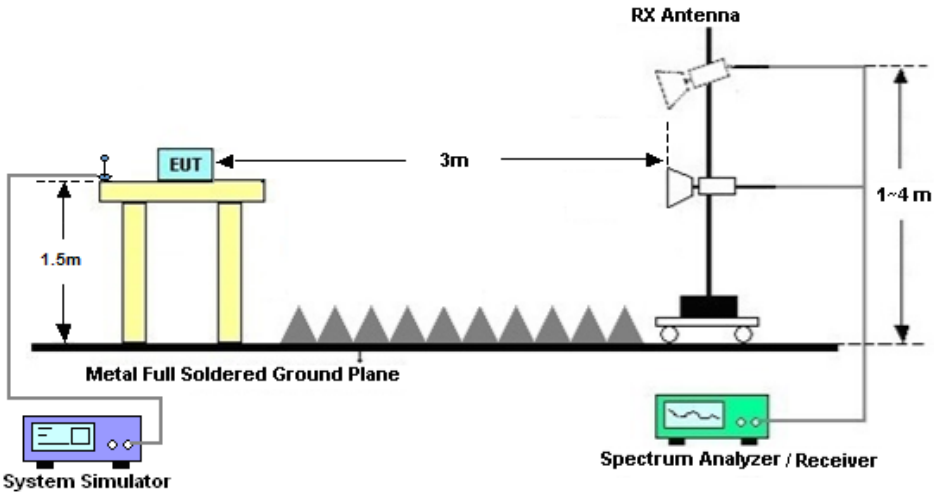
See list of measuring instruments of this test report.

4.2 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least -40dBm / MHz.

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

4.4.2 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
   Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
   The limit line is −40dBm/MHz

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 01, 2020	Feb. 12, 2021~ Mar. 25, 2021	Oct. 31, 2021	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 15, 2020	Mar. 25, 2021	Apr. 14, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 08, 2020	Mar. 25, 2021	Jun. 07, 2021	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 20, 2020	Mar. 25, 2021	Apr. 19, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jan. 06, 2021	Mar. 25, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 06, 2021	Mar. 25, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 07, 2021	Mar. 25, 2021	Jan. 06, 2022	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 06, 2021	Mar. 25, 2021	Jan. 05, 2022	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Mar. 25, 2021	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 25, 2021	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 25, 2021	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 25, 2021	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.3dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.8dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.8dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)and EIRP

LTE Band 48

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				55340	55990	56640			
Frequency (MHz)				3560	3625	3690	L	M	H
20	QPSK	1	0	19.37	18.54	18.52	0.4808	0.3972	0.3954
20	QPSK	1	49	19.36	18.44	18.39	0.4797	0.3882	0.3837
20	QPSK	1	99	19.27	16.19	18.26	0.4699	0.2312	0.3724
20	QPSK	50	0	18.46	17.59	17.52	0.3899	0.3192	0.3141
20	QPSK	50	24	18.48	17.58	17.44	0.3917	0.3184	0.3083
20	QPSK	50	50	18.40	17.56	17.42	0.3846	0.3170	0.3069
20	QPSK	100	0	18.43	17.59	17.45	0.3873	0.3192	0.3090
20	16QAM	1	0	18.46	17.64	17.58	0.3899	0.3228	0.3184
20	64QAM	1	0	17.10	16.12	16.12	0.2851	0.2275	0.2275
Channel				55315	55990	56665	EIRP		
Frequency (MHz)				3557.5	3625	3692.5	L	M	H
15	QPSK	1	0	19.35	18.45	18.22	0.4786	0.3890	0.3690
15	16QAM	1	0	18.46	17.57	17.38	0.3899	0.3177	0.3041
Channel				55290	55990	56690	EIRP		
Frequency (MHz)				3555	3625	3695	L	M	H
10	QPSK	1	0	19.32	18.44	18.35	0.4753	0.3882	0.3802
10	16QAM	1	0	18.46	17.64	17.48	0.3899	0.3228	0.3112
Channel				55265	55990	56715	EIRP		
Frequency (MHz)				3552.5	3625	3697.5	L	M	H
5	QPSK	1	0	19.32	18.44	18.35	0.4753	0.3882	0.3802
5	16QAM	1	0	18.46	17.64	17.48	0.3899	0.3228	0.3112

LTE Band 48C_CA

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	18.95	0.4365
M	QPSK	1	Max	1	0	18.67	0.4093
H	QPSK	1	Max	1	0	19.18	0.4603
L	16QAM	1	Max	1	0	18.34	0.3793
M	16QAM	1	Max	1	0	17.91	0.3436
H	16QAM	1	Max	1	0	18.95	0.4365
L	64QAM	1	Max	1	0	16.86	0.2698
M	64QAM	1	Max	1	0	16.44	0.2449
H	64QAM	1	Max	1	0	16.87	0.2704
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	19.18	0.4603
H	16QAM	1	Max	1	0	18.95	0.4365
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	18.57	0.3999
H	16QAM	1	Max	1	0	18.88	0.4295
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	18.64	0.4064
H	16QAM	1	Max	1	0	18.45	0.3890
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	18.70	0.4121
H	16QAM	1	Max	1	0	18.64	0.4064
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	18.66	0.4083
H	16QAM	1	Max	1	0	18.63	0.4055
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP
		RB Size	RB offset	RB Size	RB offset		
H	QPSK	1	Max	1	0	18.73	0.4150
H	16QAM	1	Max	1	0	18.75	0.4169

LTE Band 48

EIRP Power Density

1RB0

Mode	LTE Band 48 : EIRP Power Density (dBm/1MHz)											
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64Q	64Q	64Q	64Q
Lowest CH	26.81	26.05	27.00	25.75	26.24	26.17	26.49	25.51	26.50	24.92	24.80	24.04
Middle CH	26.06	24.89	25.80	25.18	25.28	25.63	25.94	25.40	25.71	24.16	23.56	24.52
Highest CH	26.34	24.85	25.90	25.33	25.37	25.72	26.39	24.19	25.05	23.54	24.73	24.32
Gain	7.45 dBm											
Limit	37dBm /1MHz											
Result	pass											

1RB Max

Mode	LTE Band 48 : EIRP Power Density (dBm/1MHz)											
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64Q	64Q	64Q	64Q
Lowest CH	26.17	26.11	25.80	25.62	26.50	25.47	26.20	25.67	24.85	25.15	25.11	24.37
Middle CH	26.17	24.84	25.75	24.40	25.99	24.69	24.73	25.22	25.43	23.51	24.27	24.37
Highest CH	26.15	25.29	25.18	25.67	26.57	25.85	25.42	24.63	25.53	24.80	23.71	23.80
Gain	7.45 dBm											
Limit	37dBm /1MHz											
Result	pass											

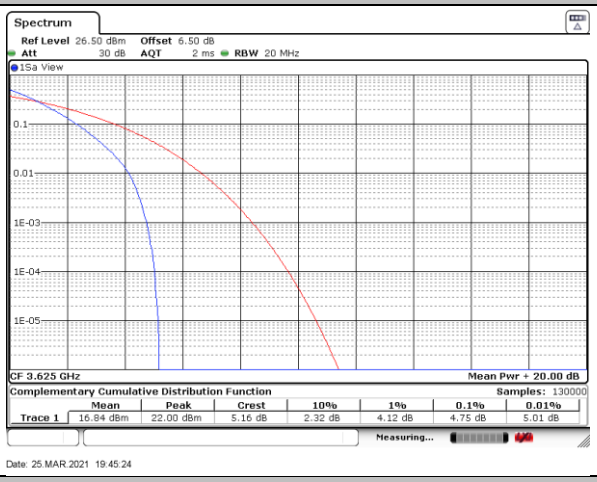
Full RB0

Mode	LTE Band 48 : EIRP Power Density (dBm/1MHz)											
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64Q	64Q	64Q	64Q
Lowest CH	20.24	18.75	17.38	16.49	15.53	14.29	13.84	13.06	19.34	16.23	13.32	11.87
Middle CH	19.02	18.15	16.00	15.59	14.64	13.87	11.45	12.42	18.76	14.95	12.48	11.44
Highest CH	19.45	18.19	16.2	15.41	14.64	13.86	13.72	12.59	18.12	14.57	12.86	11.72
	7.45 dBm											
Limit	37dBm /1MHz											
Result	pass											

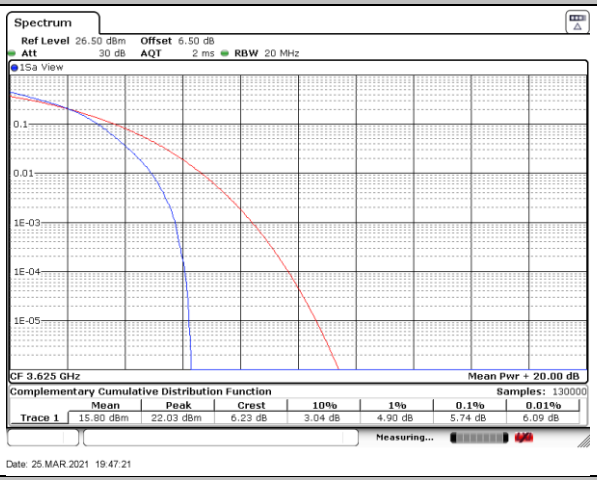
Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.75	5.74	5.68	PASS

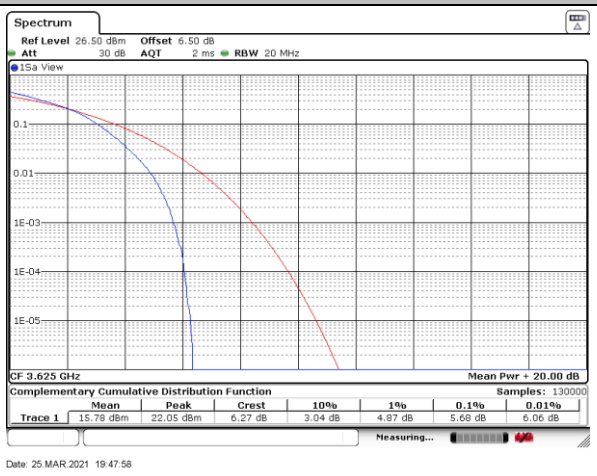
LTE Band 48 / 20MHz
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM

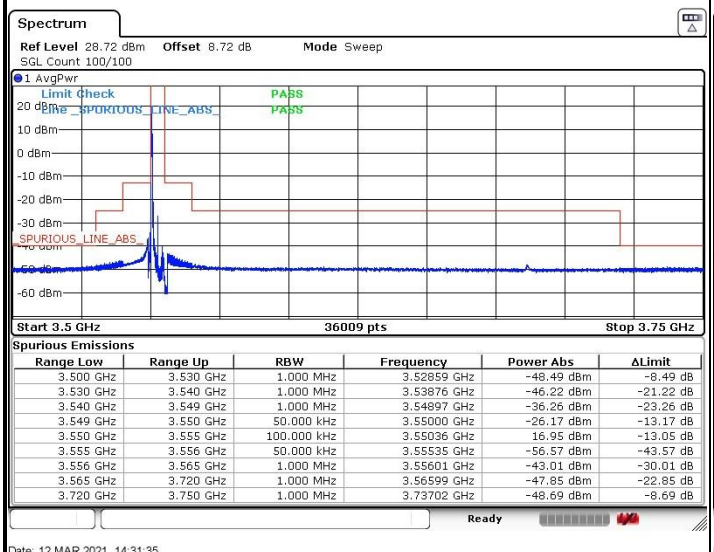


Conducted Band Edge

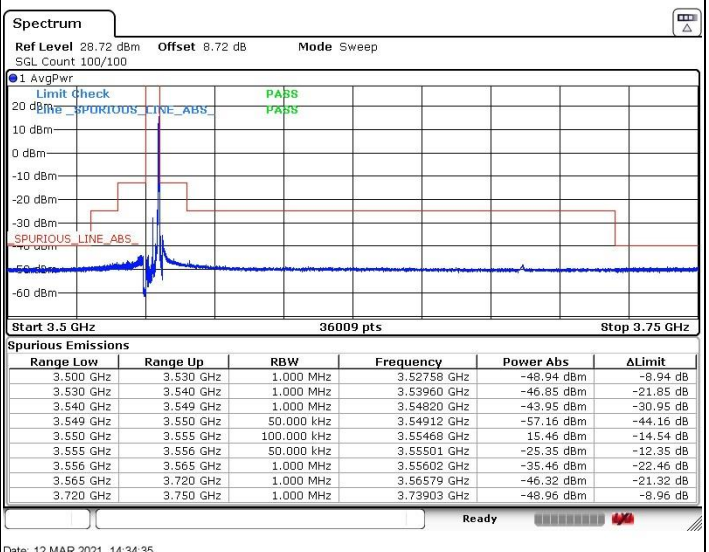
LTE Band 48 / 5MHz

QPSK

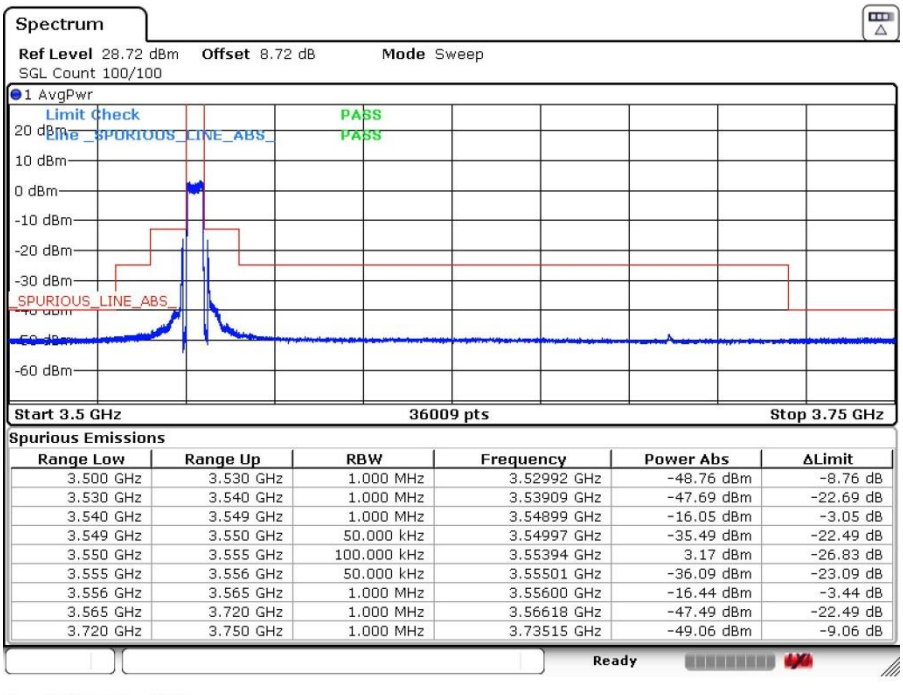
Lowest Channel / 1RB0



Lowest Channel / 1RBmax



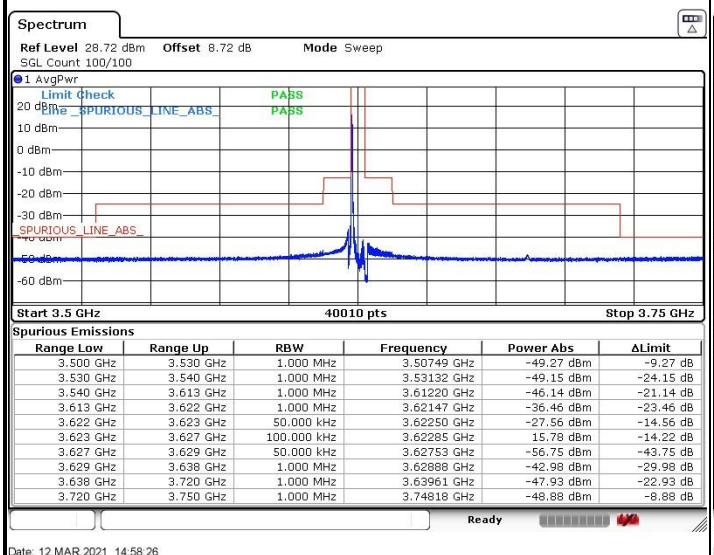
Lowest Channel / Full RB



LTE Band 48 / 5MHz

QPSK

Middle Channel / 1RB0



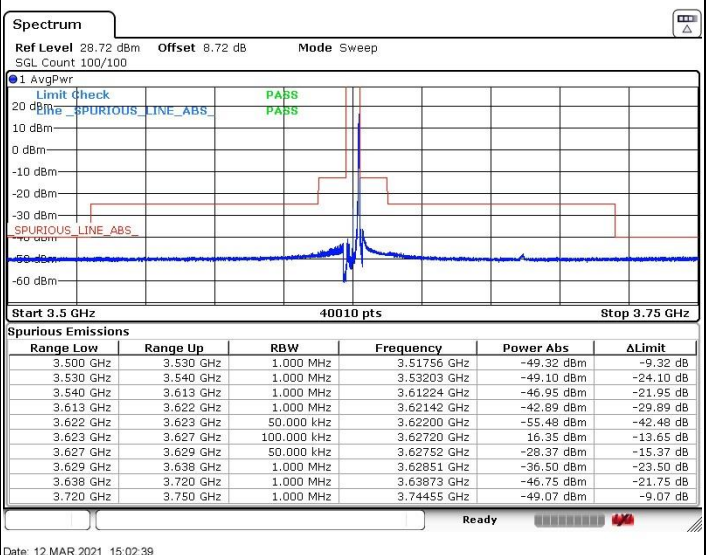
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50749 GHz	-49.27 dBm	-9.27 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53132 GHz	-49.15 dBm	-24.15 dB
3.540 GHz	3.613 GHz	1.000 MHz	3.61220 GHz	-46.14 dBm	-21.14 dB
3.613 GHz	3.622 GHz	1.000 MHz	3.62147 GHz	-36.46 dBm	-23.46 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62250 GHz	-27.56 dBm	-14.56 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62285 GHz	15.78 dBm	-14.22 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62753 GHz	-56.75 dBm	-43.75 dB
3.629 GHz	3.638 GHz	1.000 MHz	3.62888 GHz	-42.98 dBm	-29.98 dB
3.638 GHz	3.720 GHz	1.000 MHz	3.63961 GHz	-47.93 dBm	-22.93 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74818 GHz	-48.88 dBm	-8.88 dB

Ready

Date: 12.MAR.2021 14:58:26

Middle Channel / 1RBmax



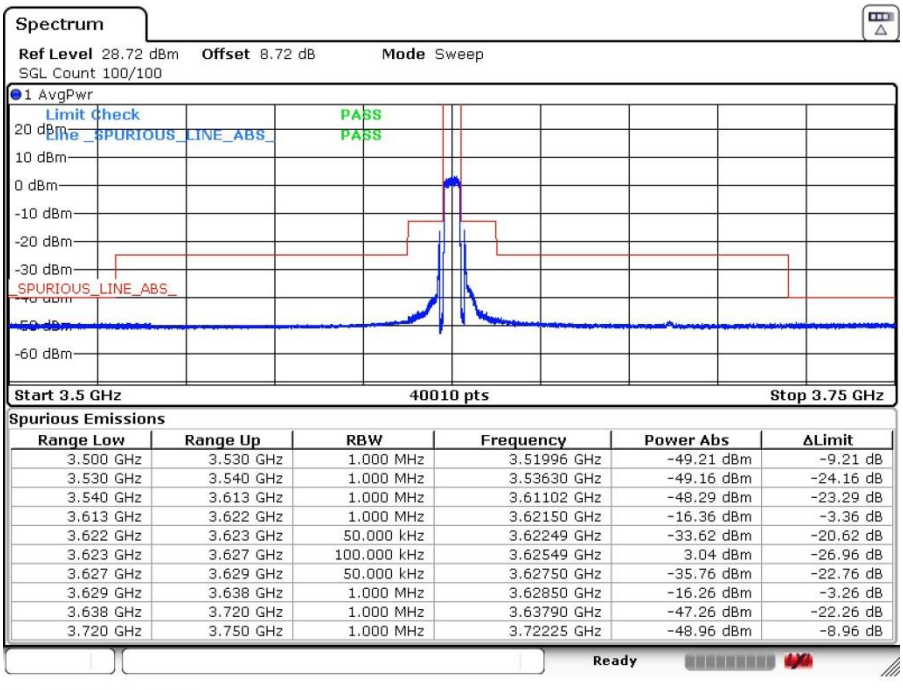
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51756 GHz	-49.32 dBm	-9.32 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53203 GHz	-49.10 dBm	-24.10 dB
3.540 GHz	3.613 GHz	1.000 MHz	3.61224 GHz	-46.95 dBm	-21.95 dB
3.613 GHz	3.622 GHz	1.000 MHz	3.62142 GHz	-42.89 dBm	-29.89 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62200 GHz	-55.48 dBm	-42.48 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62720 GHz	16.35 dBm	-13.65 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62752 GHz	-28.37 dBm	-15.37 dB
3.629 GHz	3.638 GHz	1.000 MHz	3.62851 GHz	-36.50 dBm	-23.50 dB
3.638 GHz	3.720 GHz	1.000 MHz	3.63873 GHz	-46.75 dBm	-21.75 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74455 GHz	-49.07 dBm	-9.07 dB

Ready

Date: 12.MAR.2021 15:02:39

Middle Channel / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51996 GHz	-49.21 dBm	-9.21 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53630 GHz	-49.16 dBm	-24.16 dB
3.540 GHz	3.613 GHz	1.000 MHz	3.61102 GHz	-48.29 dBm	-23.29 dB
3.613 GHz	3.622 GHz	1.000 MHz	3.62150 GHz	-16.36 dBm	-3.36 dB
3.622 GHz	3.623 GHz	50.000 kHz	3.62249 GHz	-33.62 dBm	-20.62 dB
3.623 GHz	3.627 GHz	100.000 kHz	3.62549 GHz	3.04 dBm	-26.96 dB
3.627 GHz	3.629 GHz	50.000 kHz	3.62750 GHz	-35.76 dBm	-22.76 dB
3.629 GHz	3.638 GHz	1.000 MHz	3.62850 GHz	-16.26 dBm	-3.26 dB
3.638 GHz	3.720 GHz	1.000 MHz	3.63790 GHz	-47.26 dBm	-22.26 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72225 GHz	-48.96 dBm	-8.96 dB

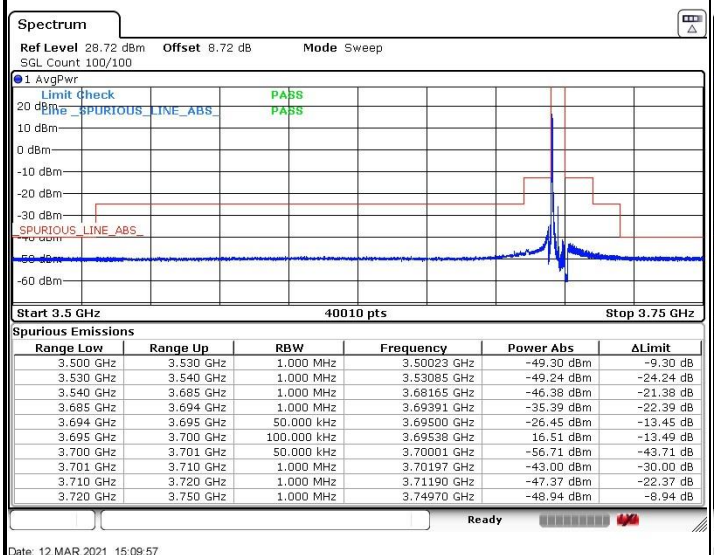
Ready

Date: 12.MAR.2021 14:53:09

LTE Band 48 / 5MHz

QPSK

Highest Channel / 1RB0



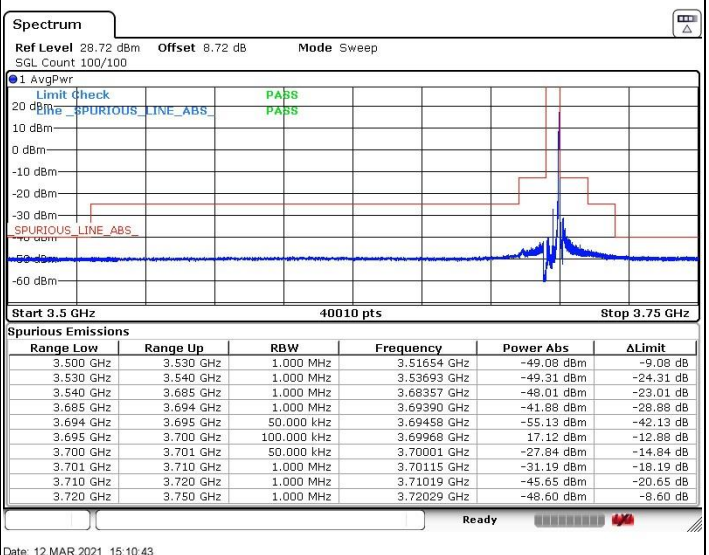
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50023 GHz	-49.30 dBm	-9.30 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53085 GHz	-49.24 dBm	-24.24 dB
3.540 GHz	3.685 GHz	1.000 MHz	3.68165 GHz	-46.38 dBm	-21.38 dB
3.685 GHz	3.694 GHz	1.000 MHz	3.69391 GHz	-35.39 dBm	-22.39 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69500 GHz	-26.45 dBm	-13.45 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69538 GHz	16.51 dBm	-13.49 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70001 GHz	-56.71 dBm	-43.71 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70197 GHz	-43.00 dBm	-30.00 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71190 GHz	-47.37 dBm	-22.37 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74970 GHz	-48.94 dBm	-8.94 dB

Ready

Date: 12.MAR.2021 15:09:57

Highest Channel / 1RBmax



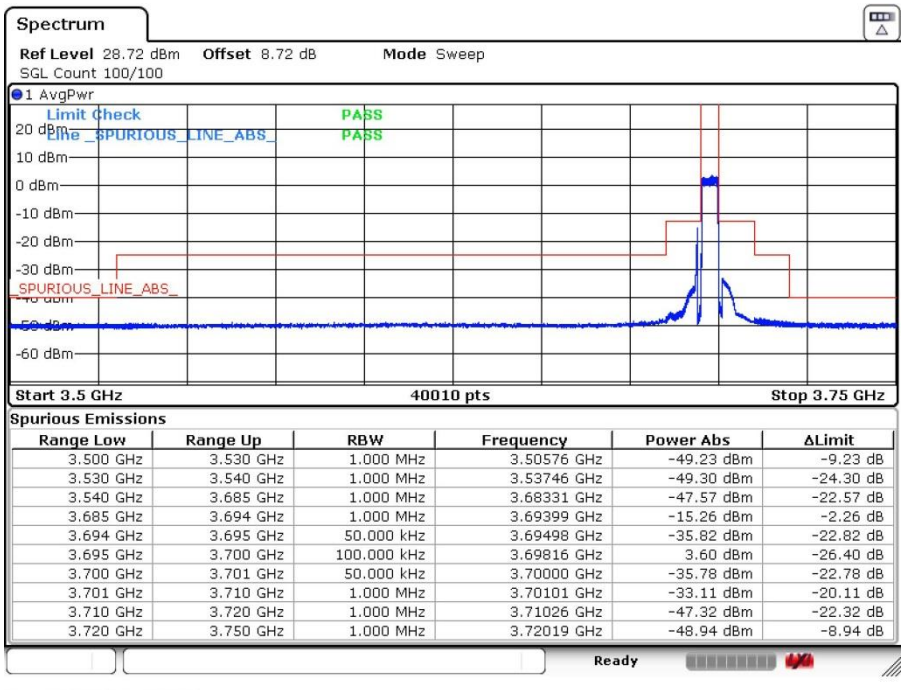
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51654 GHz	-49.08 dBm	-9.08 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53693 GHz	-49.31 dBm	-24.31 dB
3.540 GHz	3.685 GHz	1.000 MHz	3.68357 GHz	-48.01 dBm	-23.01 dB
3.685 GHz	3.694 GHz	1.000 MHz	3.69390 GHz	-41.88 dBm	-28.88 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69458 GHz	-55.13 dBm	-42.13 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69968 GHz	17.12 dBm	-12.88 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70001 GHz	-27.84 dBm	-14.84 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70115 GHz	-31.19 dBm	-18.19 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71019 GHz	-45.65 dBm	-20.65 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72029 GHz	-48.60 dBm	-8.60 dB

Ready

Date: 12.MAR.2021 15:10:43

Highest Channel / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50576 GHz	-49.23 dBm	-9.23 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53746 GHz	-49.30 dBm	-24.30 dB
3.540 GHz	3.685 GHz	1.000 MHz	3.68331 GHz	-47.57 dBm	-22.57 dB
3.685 GHz	3.694 GHz	1.000 MHz	3.69399 GHz	-15.26 dBm	-2.26 dB
3.694 GHz	3.695 GHz	50.000 kHz	3.69498 GHz	-35.82 dBm	-22.82 dB
3.695 GHz	3.700 GHz	100.000 kHz	3.69816 GHz	3.60 dBm	-26.40 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70000 GHz	-35.78 dBm	-22.78 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70101 GHz	-33.11 dBm	-20.11 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71026 GHz	-47.32 dBm	-22.32 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72019 GHz	-48.94 dBm	-8.94 dB

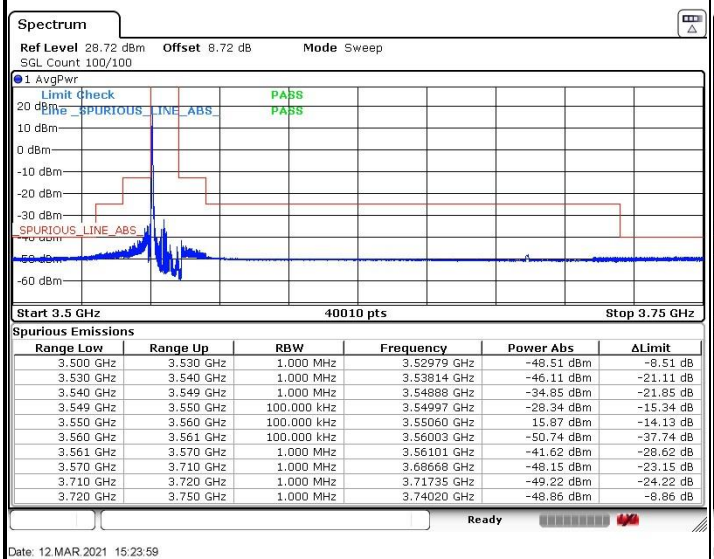
Ready

Date: 12.MAR.2021 15:06:07

LTE Band 48 / 10MHz

QPSK

Lowest Channel / 1RB0

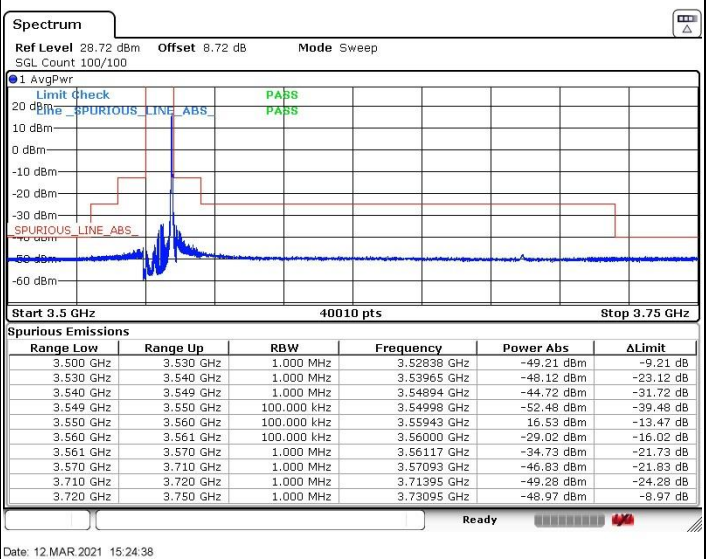


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52979 GHz	-48.51 dBm	-8.51 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53814 GHz	-46.11 dBm	-21.11 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54888 GHz	-34.85 dBm	-21.85 dB
3.549 GHz	3.550 GHz	100.000 kHz	3.54997 GHz	-28.34 dBm	-15.34 dB
3.550 GHz	3.560 GHz	100.000 kHz	3.55060 GHz	15.87 dBm	-14.13 dB
3.560 GHz	3.561 GHz	100.000 kHz	3.56003 GHz	-50.74 dBm	-37.74 dB
3.561 GHz	3.570 GHz	1.000 MHz	3.56101 GHz	-41.62 dBm	-28.62 dB
3.570 GHz	3.710 GHz	1.000 MHz	3.68668 GHz	-48.15 dBm	-23.15 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71735 GHz	-49.22 dBm	-24.22 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74020 GHz	-48.86 dBm	-8.86 dB

Date: 12.MAR.2021 15:23:59

Lowest Channel / 1RBmax

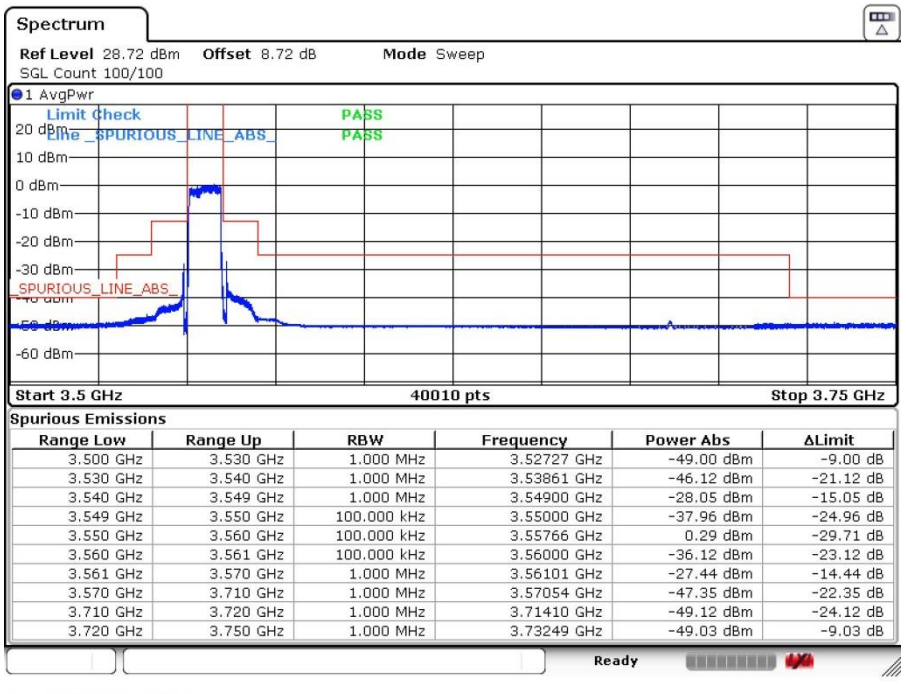


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52838 GHz	-49.21 dBm	-9.21 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53965 GHz	-48.12 dBm	-23.12 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54894 GHz	-44.72 dBm	-31.72 dB
3.549 GHz	3.550 GHz	100.000 kHz	3.54998 GHz	-52.48 dBm	-39.48 dB
3.550 GHz	3.560 GHz	100.000 kHz	3.55943 GHz	16.53 dBm	-13.47 dB
3.560 GHz	3.561 GHz	100.000 kHz	3.56000 GHz	-29.02 dBm	-16.02 dB
3.561 GHz	3.570 GHz	1.000 MHz	3.56117 GHz	-34.73 dBm	-21.73 dB
3.570 GHz	3.710 GHz	1.000 MHz	3.57093 GHz	-46.83 dBm	-21.83 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71395 GHz	-49.28 dBm	-24.28 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73095 GHz	-48.97 dBm	-8.97 dB

Date: 12.MAR.2021 15:24:38

Lowest Channel / Full RB



Spurious Emissions

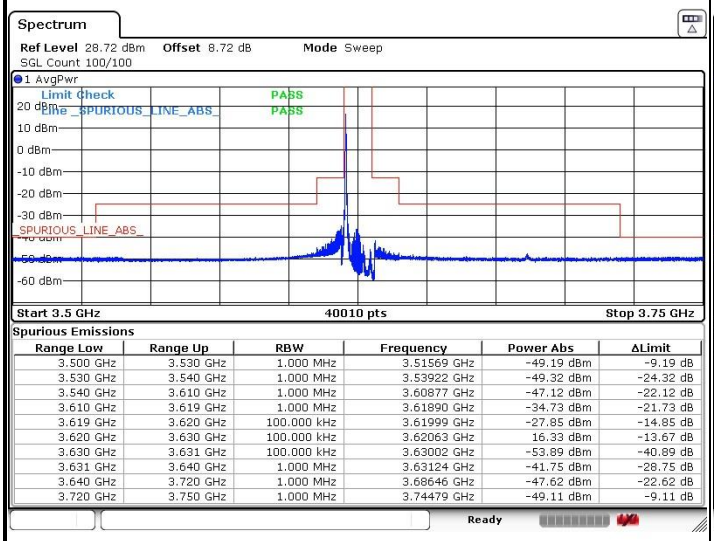
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52727 GHz	-49.00 dBm	-9.00 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53861 GHz	-46.12 dBm	-21.12 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54900 GHz	-28.05 dBm	-15.05 dB
3.549 GHz	3.550 GHz	100.000 kHz	3.55000 GHz	-37.96 dBm	-24.96 dB
3.550 GHz	3.560 GHz	100.000 kHz	3.55766 GHz	0.29 dBm	-29.71 dB
3.560 GHz	3.561 GHz	100.000 kHz	3.56000 GHz	-36.12 dBm	-23.12 dB
3.561 GHz	3.570 GHz	1.000 MHz	3.56101 GHz	-27.44 dBm	-14.44 dB
3.570 GHz	3.710 GHz	1.000 MHz	3.57054 GHz	-47.35 dBm	-22.35 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71410 GHz	-49.12 dBm	-24.12 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73249 GHz	-49.03 dBm	-9.03 dB

Date: 12.MAR.2021 15:20:12

LTE Band 48 / 10MHz

QPSK

Middle Channel / 1RB0

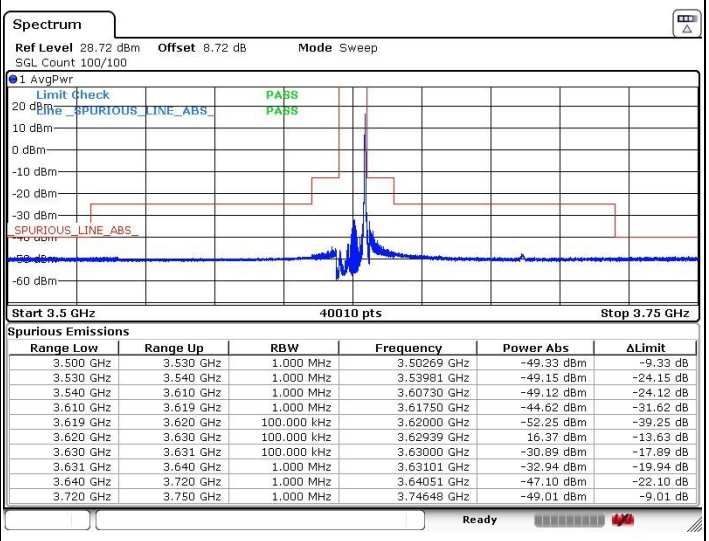


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51569 GHz	-49.19 dBm	-9.19 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53922 GHz	-49.32 dBm	-24.32 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60877 GHz	-47.12 dBm	-22.12 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61890 GHz	-34.73 dBm	-21.73 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.61999 GHz	-27.85 dBm	-14.85 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62063 GHz	16.33 dBm	-13.67 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63002 GHz	-53.89 dBm	-40.89 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63124 GHz	-41.75 dBm	-28.75 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.68646 GHz	-47.62 dBm	-22.62 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74479 GHz	-49.11 dBm	-9.11 dB

Date: 12.MAR.2021 15:36:31

Middle Channel / 1RBmax

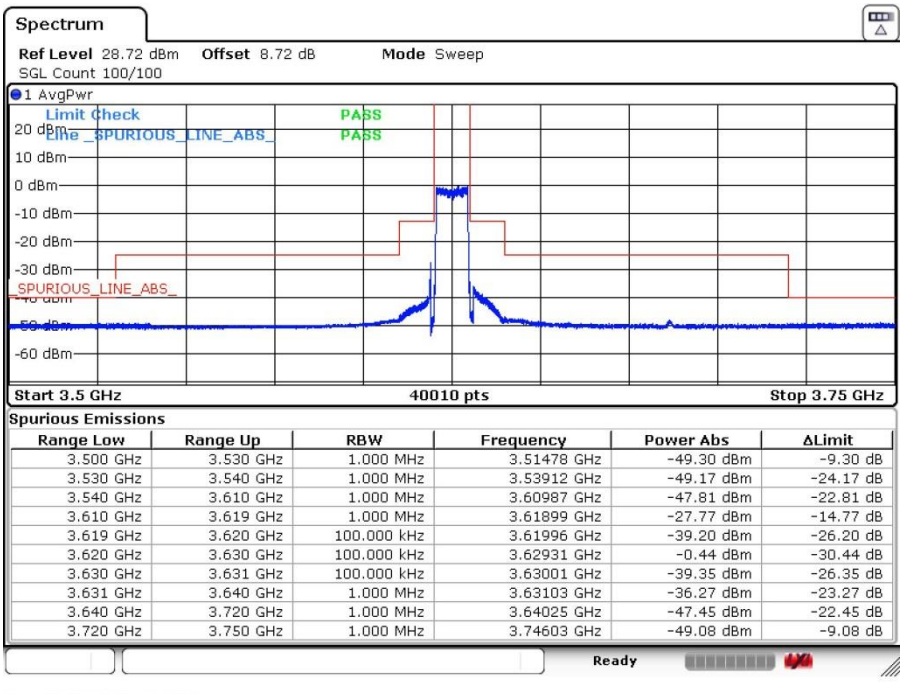


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50269 GHz	-49.33 dBm	-9.33 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53981 GHz	-49.15 dBm	-24.15 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60730 GHz	-49.12 dBm	-24.12 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61750 GHz	-44.62 dBm	-31.62 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.62000 GHz	-52.25 dBm	-39.25 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62939 GHz	16.37 dBm	-13.63 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63000 GHz	-30.89 dBm	-17.89 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63101 GHz	-32.94 dBm	-19.94 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64051 GHz	-47.10 dBm	-22.10 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74648 GHz	-49.01 dBm	-9.01 dB

Date: 12.MAR.2021 15:37:17

Middle Channel / Full RB



Spurious Emissions

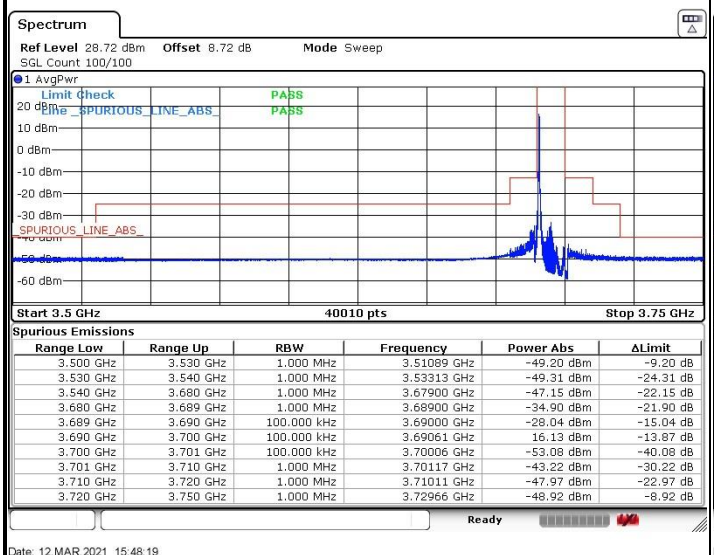
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51478 GHz	-49.30 dBm	-9.30 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53912 GHz	-49.17 dBm	-24.17 dB
3.540 GHz	3.610 GHz	1.000 MHz	3.60987 GHz	-47.81 dBm	-22.81 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61899 GHz	-27.77 dBm	-14.77 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.61996 GHz	-39.20 dBm	-26.20 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62931 GHz	-0.44 dBm	-30.44 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63001 GHz	-39.35 dBm	-26.35 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63103 GHz	-36.27 dBm	-23.27 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64025 GHz	-47.45 dBm	-22.45 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74603 GHz	-49.08 dBm	-9.08 dB

Date: 12.MAR.2021 15:32:20

LTE Band 48 / 10MHz

QPSK

Highest Channel / 1RB0

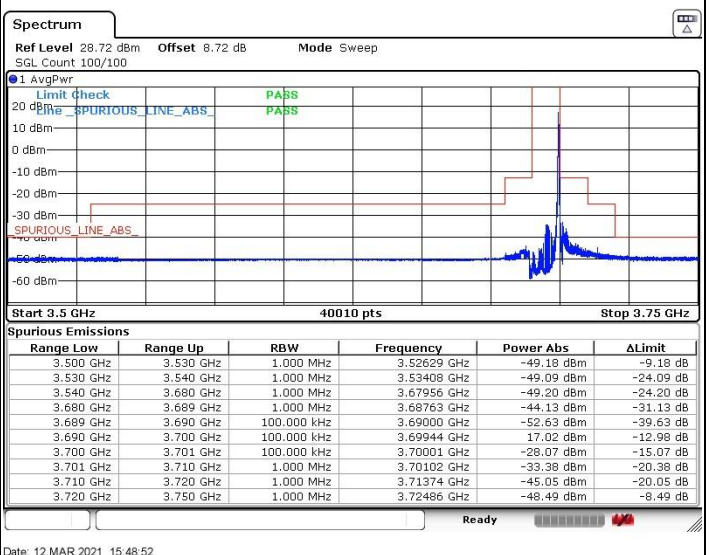


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51089 GHz	-49.20 dBm	-9.20 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53313 GHz	-49.31 dBm	-24.31 dB
3.540 GHz	3.680 GHz	1.000 MHz	3.67900 GHz	-47.15 dBm	-22.15 dB
3.680 GHz	3.689 GHz	1.000 MHz	3.68900 GHz	-34.90 dBm	-21.90 dB
3.689 GHz	3.690 GHz	100.000 kHz	3.69000 GHz	-28.04 dBm	-15.04 dB
3.690 GHz	3.700 GHz	100.000 kHz	3.69061 GHz	16.13 dBm	-13.87 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70006 GHz	-53.08 dBm	-40.08 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70117 GHz	-43.22 dBm	-30.22 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71011 GHz	-47.97 dBm	-22.97 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72966 GHz	-48.92 dBm	-8.92 dB

Date: 12.MAR.2021 15:48:19

Highest Channel / 1RBmax

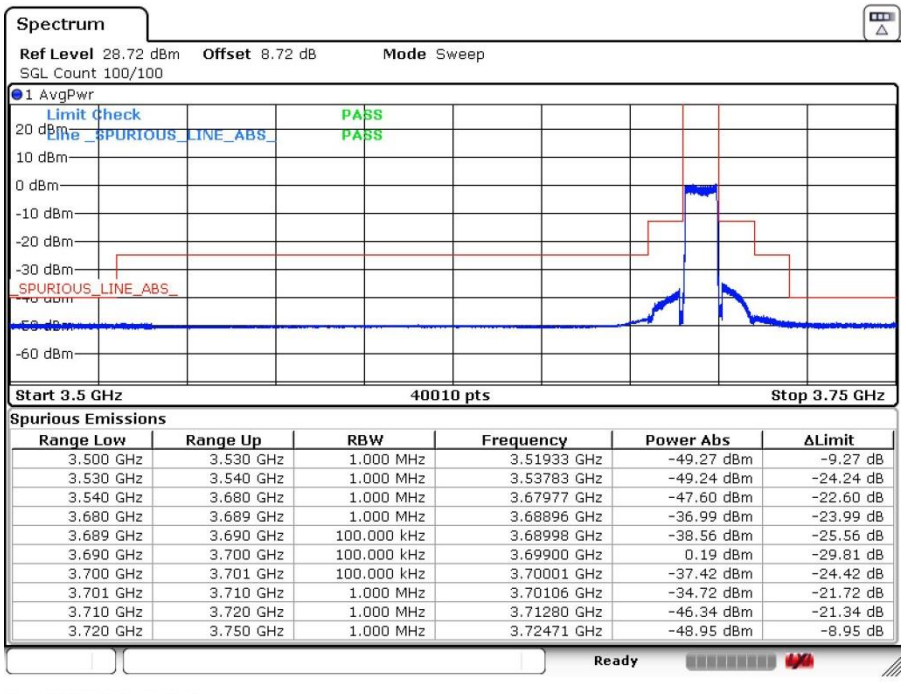


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52629 GHz	-49.18 dBm	-9.18 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53408 GHz	-49.09 dBm	-24.09 dB
3.540 GHz	3.680 GHz	1.000 MHz	3.67956 GHz	-49.20 dBm	-24.20 dB
3.680 GHz	3.689 GHz	1.000 MHz	3.68763 GHz	-44.13 dBm	-31.13 dB
3.689 GHz	3.690 GHz	100.000 kHz	3.69000 GHz	-52.63 dBm	-39.63 dB
3.690 GHz	3.700 GHz	100.000 kHz	3.69944 GHz	17.02 dBm	-12.98 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70001 GHz	-28.07 dBm	-15.07 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70102 GHz	-33.38 dBm	-20.38 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71374 GHz	-45.05 dBm	-20.05 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72486 GHz	-48.49 dBm	-8.49 dB

Date: 12.MAR.2021 15:48:52

Highest Channel / Full RB



Spurious Emissions

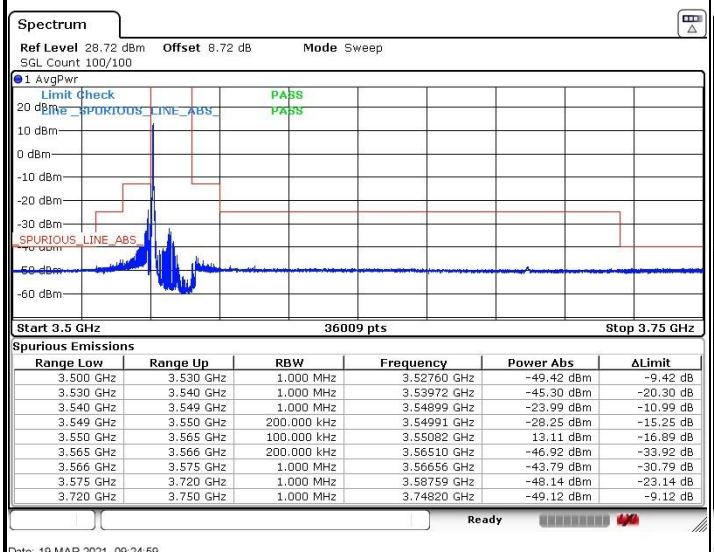
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51933 GHz	-49.27 dBm	-9.27 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53783 GHz	-49.24 dBm	-24.24 dB
3.540 GHz	3.680 GHz	1.000 MHz	3.67977 GHz	-47.60 dBm	-22.60 dB
3.680 GHz	3.689 GHz	1.000 MHz	3.68896 GHz	-36.99 dBm	-23.99 dB
3.689 GHz	3.690 GHz	100.000 kHz	3.68998 GHz	-38.56 dBm	-25.56 dB
3.690 GHz	3.700 GHz	100.000 kHz	3.69900 GHz	0.19 dBm	-29.81 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70001 GHz	-37.42 dBm	-24.42 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70106 GHz	-34.72 dBm	-21.72 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71280 GHz	-46.34 dBm	-21.34 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72471 GHz	-48.95 dBm	-8.95 dB

Date: 12.MAR.2021 15:45:19

LTE Band 48 / 15MHz

QPSK

Lowest Channel / 1RB0



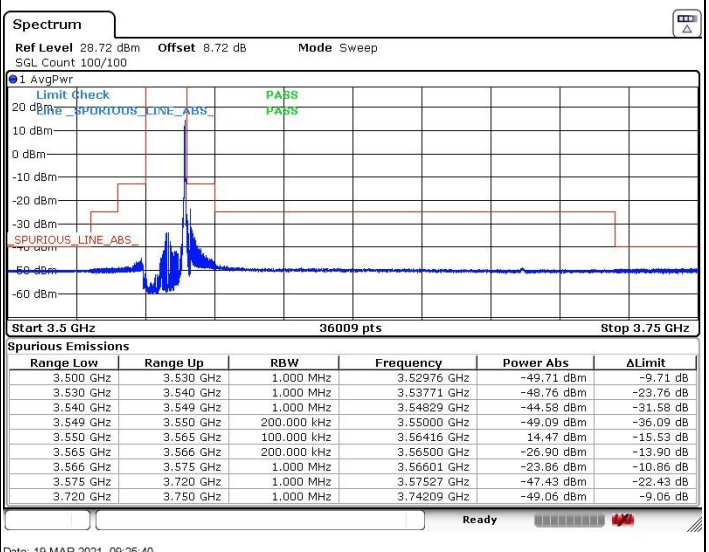
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52760 GHz	-49.42 dBm	-9.42 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53972 GHz	-45.30 dBm	-20.30 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54899 GHz	-23.99 dBm	-10.99 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.54991 GHz	-28.25 dBm	-15.25 dB
3.550 GHz	3.565 GHz	100.000 kHz	3.55082 GHz	13.11 dBm	-16.89 dB
3.565 GHz	3.566 GHz	200.000 kHz	3.56510 GHz	-46.92 dBm	-33.92 dB
3.566 GHz	3.575 GHz	1.000 MHz	3.56656 GHz	-43.79 dBm	-30.79 dB
3.575 GHz	3.720 GHz	1.000 MHz	3.58759 GHz	-48.14 dBm	-23.14 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74820 GHz	-49.12 dBm	-9.12 dB

Ready

Date: 19.MAR.2021 09:24:59

Lowest Channel / 1RBmax



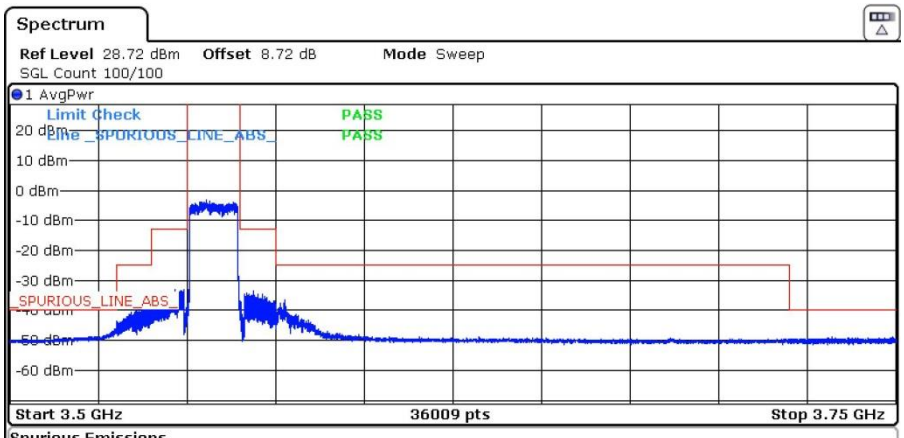
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52976 GHz	-49.71 dBm	-9.71 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53771 GHz	-48.76 dBm	-23.76 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54829 GHz	-44.58 dBm	-31.58 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.55000 GHz	-49.09 dBm	-36.09 dB
3.550 GHz	3.565 GHz	100.000 kHz	3.56416 GHz	14.47 dBm	-15.53 dB
3.565 GHz	3.566 GHz	200.000 kHz	3.56500 GHz	-26.90 dBm	-13.90 dB
3.566 GHz	3.575 GHz	1.000 MHz	3.56601 GHz	-23.86 dBm	-10.86 dB
3.575 GHz	3.720 GHz	1.000 MHz	3.57527 GHz	-47.43 dBm	-22.43 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74209 GHz	-49.06 dBm	-9.06 dB

Ready

Date: 19.MAR.2021 09:25:40

Lowest Channel / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52970 GHz	-46.13 dBm	-6.13 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53745 GHz	-38.27 dBm	-13.27 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54892 GHz	-32.93 dBm	-19.93 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.54994 GHz	-37.39 dBm	-24.39 dB
3.550 GHz	3.565 GHz	100.000 kHz	3.55553 GHz	-3.20 dBm	-33.20 dB
3.565 GHz	3.566 GHz	200.000 kHz	3.56501 GHz	-37.09 dBm	-24.09 dB
3.566 GHz	3.575 GHz	1.000 MHz	3.56880 GHz	-33.58 dBm	-20.58 dB
3.575 GHz	3.720 GHz	1.000 MHz	3.57755 GHz	-36.51 dBm	-11.51 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74908 GHz	-48.94 dBm	-8.94 dB

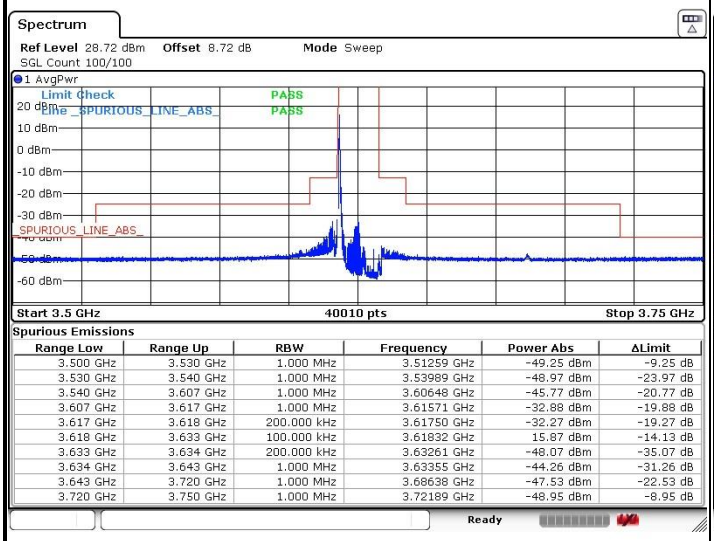
Ready

Date: 19.MAR.2021 09:21:57

LTE Band 48 / 15MHz

QPSK

Middle Channel / 1RB0



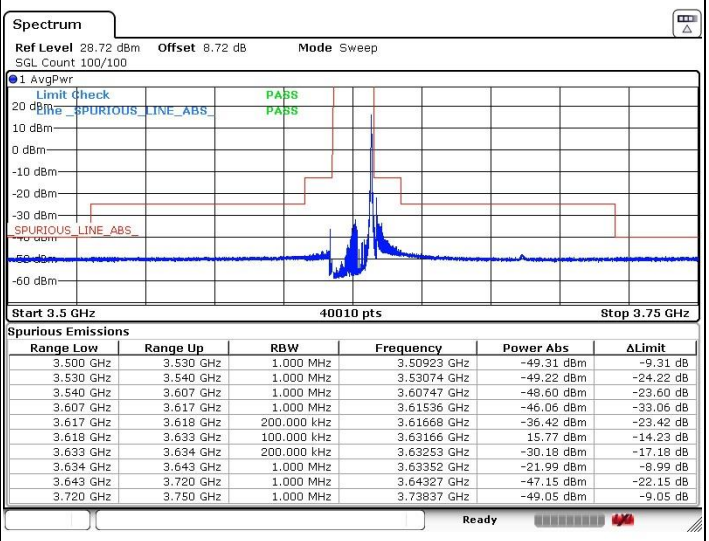
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51259 GHz	-49.25 dBm	-9.25 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53989 GHz	-48.97 dBm	-23.97 dB
3.540 GHz	3.607 GHz	1.000 MHz	3.60648 GHz	-45.77 dBm	-20.77 dB
3.607 GHz	3.617 GHz	1.000 MHz	3.61571 GHz	-32.88 dBm	-19.88 dB
3.617 GHz	3.618 GHz	200.000 kHz	3.61750 GHz	-32.27 dBm	-19.27 dB
3.618 GHz	3.633 GHz	100.000 kHz	3.61832 GHz	15.87 dBm	-14.13 dB
3.633 GHz	3.634 GHz	200.000 kHz	3.63261 GHz	-48.07 dBm	-35.07 dB
3.634 GHz	3.643 GHz	1.000 MHz	3.63355 GHz	-44.26 dBm	-31.26 dB
3.643 GHz	3.720 GHz	1.000 MHz	3.68638 GHz	-47.53 dBm	-22.53 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72189 GHz	-48.95 dBm	-8.95 dB

Ready

Date: 12.MAR.2021 16:23:43

Middle Channel / 1RBmax



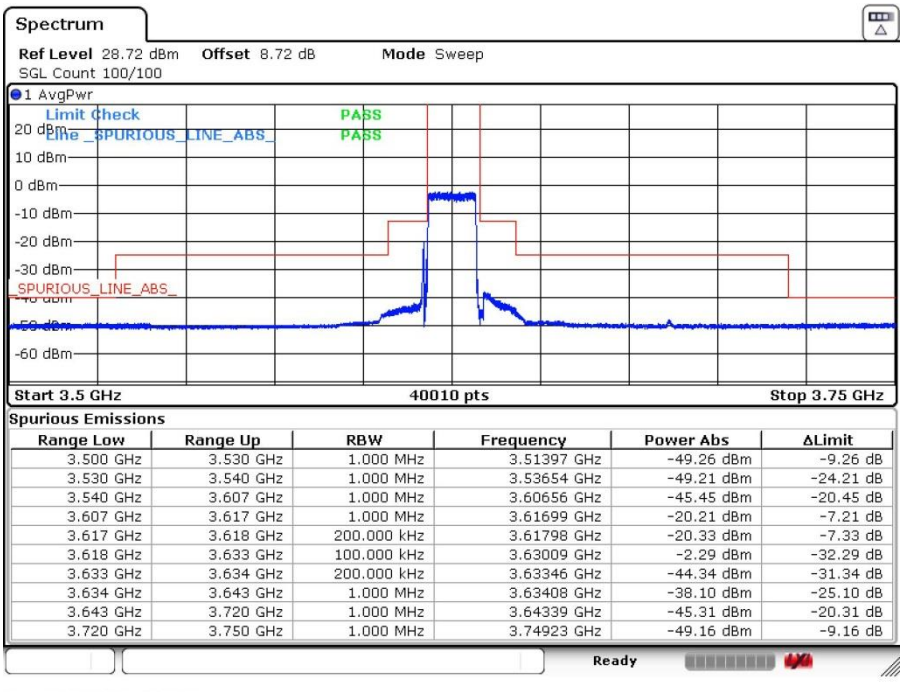
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50923 GHz	-49.31 dBm	-9.31 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53074 GHz	-49.22 dBm	-24.22 dB
3.540 GHz	3.607 GHz	1.000 MHz	3.60747 GHz	-48.60 dBm	-23.60 dB
3.607 GHz	3.617 GHz	1.000 MHz	3.61536 GHz	-46.06 dBm	-33.06 dB
3.617 GHz	3.618 GHz	200.000 kHz	3.61668 GHz	-36.42 dBm	-23.42 dB
3.618 GHz	3.633 GHz	100.000 kHz	3.63166 GHz	15.77 dBm	-14.23 dB
3.633 GHz	3.634 GHz	200.000 kHz	3.63253 GHz	-30.18 dBm	-17.18 dB
3.634 GHz	3.643 GHz	1.000 MHz	3.63352 GHz	-21.99 dBm	-8.99 dB
3.643 GHz	3.720 GHz	1.000 MHz	3.64327 GHz	-47.15 dBm	-22.15 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.73837 GHz	-49.05 dBm	-9.05 dB

Ready

Date: 12.MAR.2021 16:26:12

Middle Channel / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51397 GHz	-49.26 dBm	-9.26 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53654 GHz	-49.21 dBm	-24.21 dB
3.540 GHz	3.607 GHz	1.000 MHz	3.60656 GHz	-45.45 dBm	-20.45 dB
3.607 GHz	3.617 GHz	1.000 MHz	3.61699 GHz	-20.21 dBm	-7.21 dB
3.617 GHz	3.618 GHz	200.000 kHz	3.61798 GHz	-20.33 dBm	-7.33 dB
3.618 GHz	3.633 GHz	100.000 kHz	3.63009 GHz	-2.29 dBm	-32.29 dB
3.633 GHz	3.634 GHz	200.000 kHz	3.63346 GHz	-44.34 dBm	-31.34 dB
3.634 GHz	3.643 GHz	1.000 MHz	3.63408 GHz	-38.10 dBm	-25.10 dB
3.643 GHz	3.720 GHz	1.000 MHz	3.64339 GHz	-45.31 dBm	-20.31 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74923 GHz	-49.16 dBm	-9.16 dB

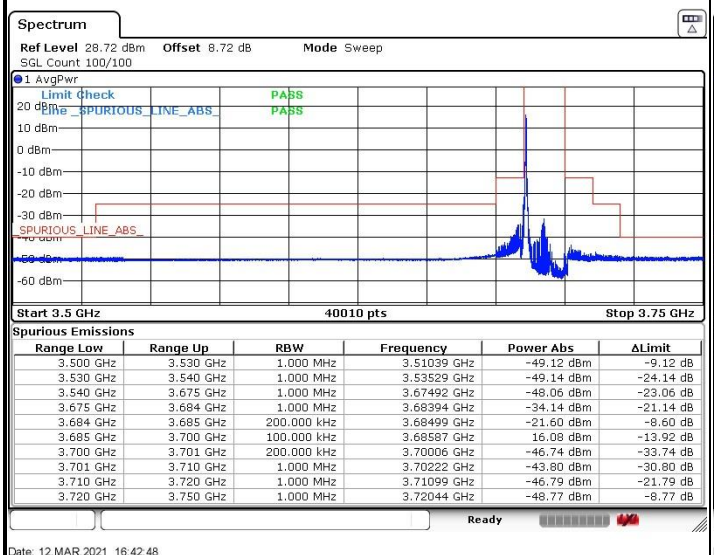
Ready

Date: 12.MAR.2021 16:14:35

LTE Band 48 / 15MHz

QPSK

Highest Channel / 1RB0

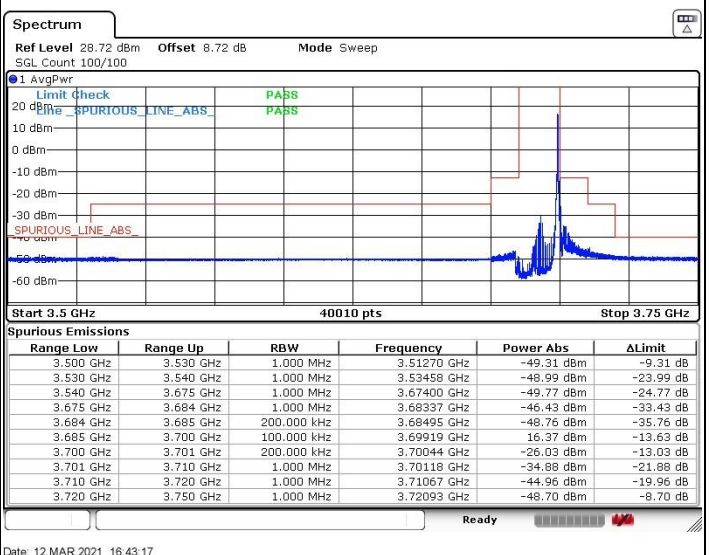


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51039 GHz	-49.12 dBm	-9.12 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53529 GHz	-49.14 dBm	-24.14 dB
3.540 GHz	3.675 GHz	1.000 MHz	3.67492 GHz	-48.06 dBm	-23.06 dB
3.675 GHz	3.684 GHz	1.000 MHz	3.68394 GHz	-34.14 dBm	-21.14 dB
3.684 GHz	3.685 GHz	200.000 kHz	3.68499 GHz	-21.60 dBm	-8.60 dB
3.685 GHz	3.700 GHz	100.000 kHz	3.68587 GHz	16.08 dBm	-13.92 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70006 GHz	-46.74 dBm	-33.74 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70222 GHz	-43.80 dBm	-30.80 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71099 GHz	-46.79 dBm	-21.79 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72044 GHz	-48.77 dBm	-8.77 dB

Date: 12.MAR.2021 16:42:48

Highest Channel / 1RBmax

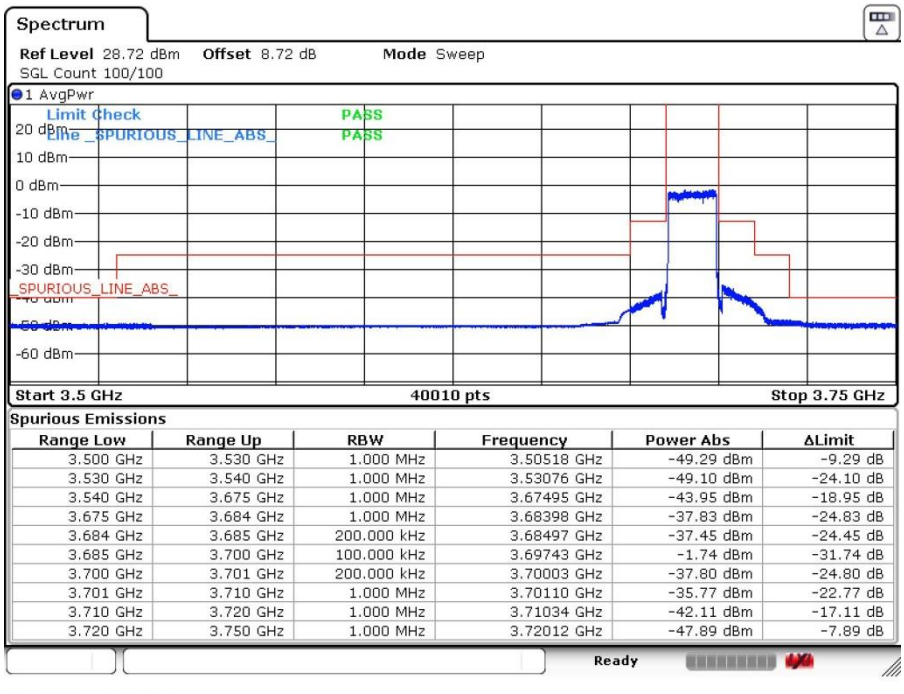


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51270 GHz	-49.31 dBm	-9.31 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53458 GHz	-48.99 dBm	-23.99 dB
3.540 GHz	3.675 GHz	1.000 MHz	3.67400 GHz	-49.77 dBm	-24.77 dB
3.675 GHz	3.684 GHz	1.000 MHz	3.68337 GHz	-46.43 dBm	-33.43 dB
3.684 GHz	3.685 GHz	200.000 kHz	3.68495 GHz	-48.76 dBm	-35.76 dB
3.685 GHz	3.700 GHz	100.000 kHz	3.69919 GHz	16.37 dBm	-13.63 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70044 GHz	-26.03 dBm	-13.03 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70118 GHz	-34.88 dBm	-21.88 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71067 GHz	-44.96 dBm	-19.96 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72093 GHz	-48.70 dBm	-8.70 dB

Date: 12.MAR.2021 16:43:17

Highest Channel / Full RB



Spurious Emissions

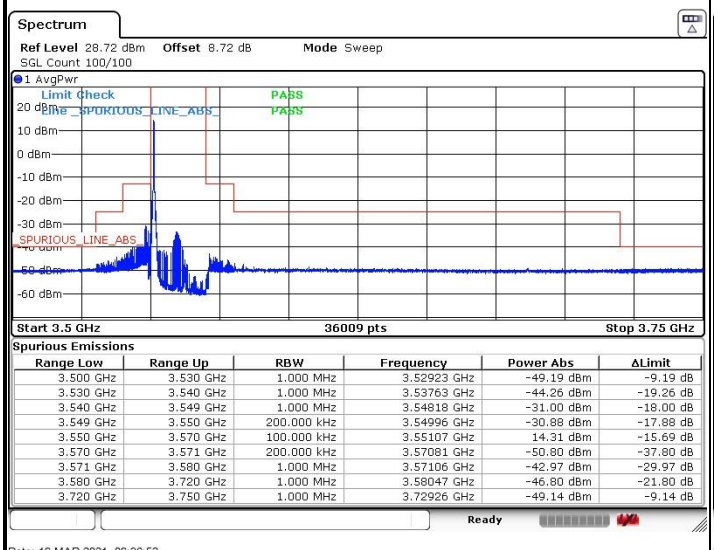
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.50518 GHz	-49.29 dBm	-9.29 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53076 GHz	-49.10 dBm	-24.10 dB
3.540 GHz	3.675 GHz	1.000 MHz	3.67495 GHz	-43.95 dBm	-18.95 dB
3.675 GHz	3.684 GHz	1.000 MHz	3.68398 GHz	-37.83 dBm	-24.83 dB
3.684 GHz	3.685 GHz	200.000 kHz	3.68497 GHz	-37.45 dBm	-24.45 dB
3.685 GHz	3.700 GHz	100.000 kHz	3.69743 GHz	-1.74 dBm	-31.74 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70003 GHz	-37.80 dBm	-24.80 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70110 GHz	-35.77 dBm	-22.77 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71034 GHz	-42.11 dBm	-17.11 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72012 GHz	-47.89 dBm	-7.89 dB

Date: 12.MAR.2021 16:40:01

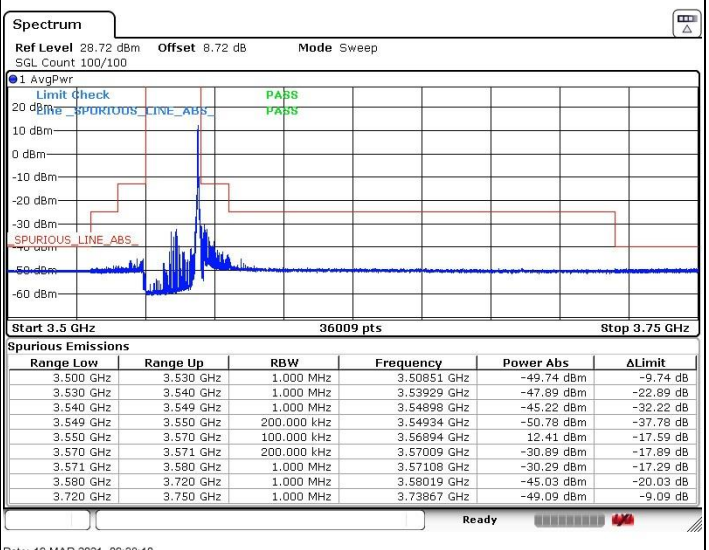
LTE Band 48 / 20MHz

QPSK

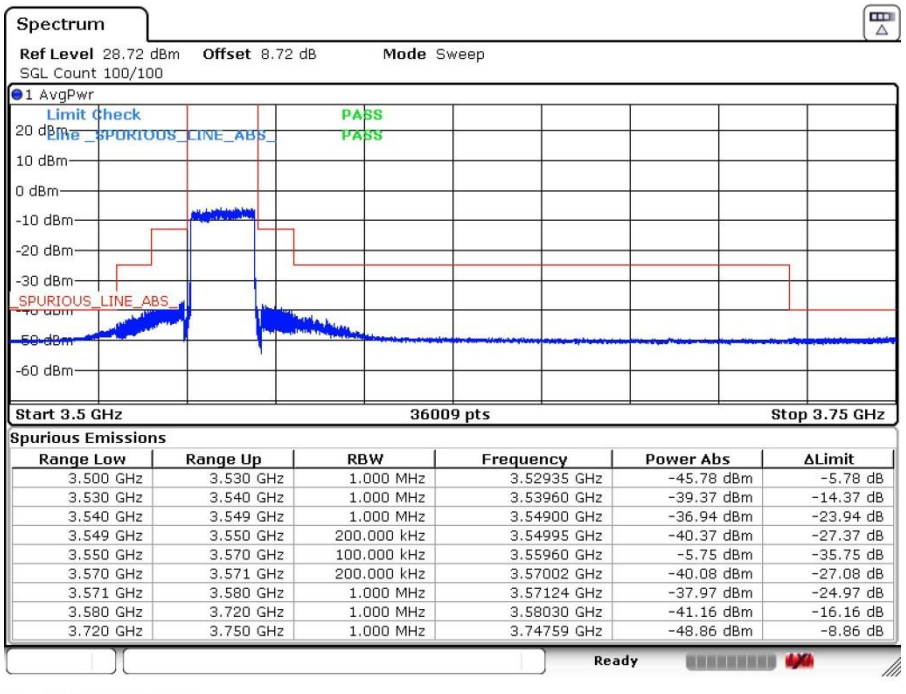
Lowest Channel / 1RB0



Lowest Channel / 1RBmax



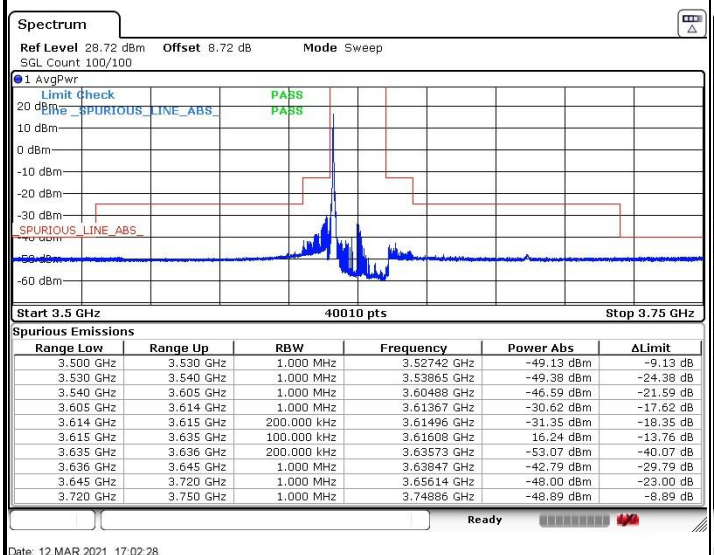
Lowest Channel / Full RB



LTE Band 48 / 20MHz

QPSK

Middle Channel / 1RB0

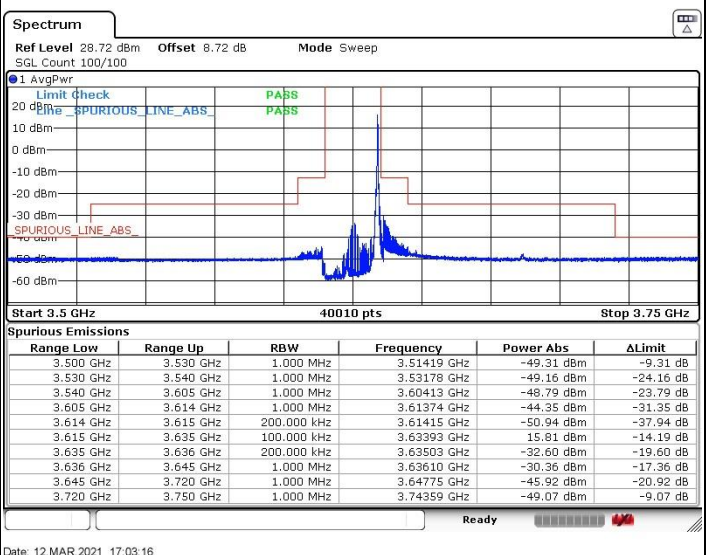


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52742 GHz	-49.13 dBm	-9.13 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53865 GHz	-49.38 dBm	-24.38 dB
3.540 GHz	3.605 GHz	1.000 MHz	3.60488 GHz	-46.59 dBm	-21.59 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.61367 GHz	-30.62 dBm	-17.62 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61496 GHz	-31.35 dBm	-18.35 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.61608 GHz	16.24 dBm	-13.76 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63573 GHz	-53.07 dBm	-40.07 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.63847 GHz	-42.79 dBm	-29.79 dB
3.645 GHz	3.720 GHz	1.000 MHz	3.65614 GHz	-48.00 dBm	-23.00 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74886 GHz	-48.89 dBm	-8.89 dB

Date: 12.MAR.2021 17:02:28

Middle Channel / 1RBmax

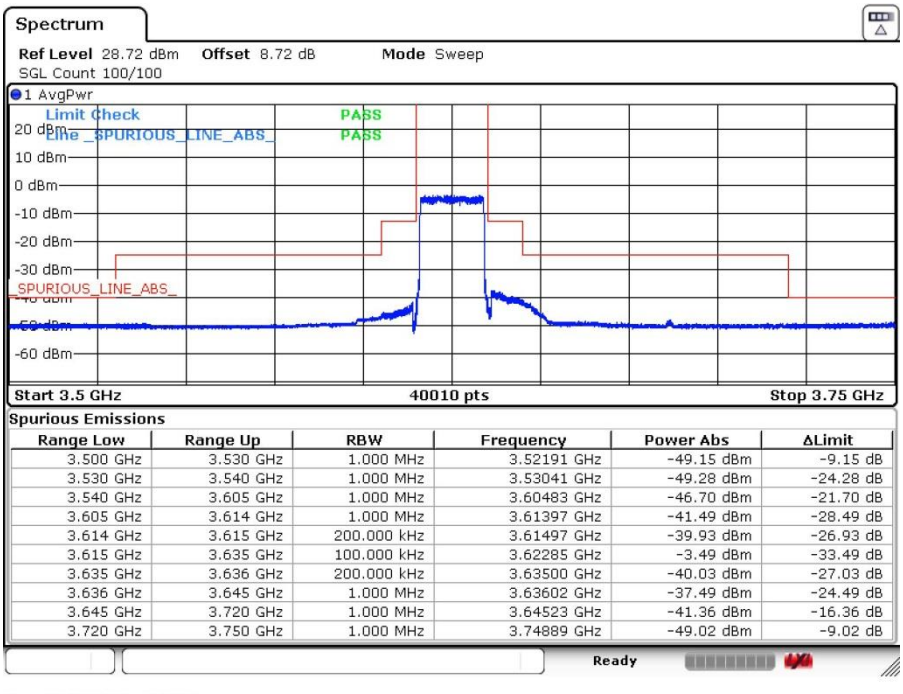


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51419 GHz	-49.31 dBm	-9.31 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53178 GHz	-49.16 dBm	-24.16 dB
3.540 GHz	3.605 GHz	1.000 MHz	3.60413 GHz	-48.79 dBm	-23.79 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.61374 GHz	-44.35 dBm	-31.35 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61415 GHz	-50.94 dBm	-37.94 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.63393 GHz	15.81 dBm	-14.19 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63503 GHz	-32.60 dBm	-19.60 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.63610 GHz	-30.36 dBm	-17.36 dB
3.645 GHz	3.720 GHz	1.000 MHz	3.64775 GHz	-45.92 dBm	-20.92 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74359 GHz	-49.07 dBm	-9.07 dB

Date: 12.MAR.2021 17:03:16

Middle Channel / Full RB



Spurious Emissions

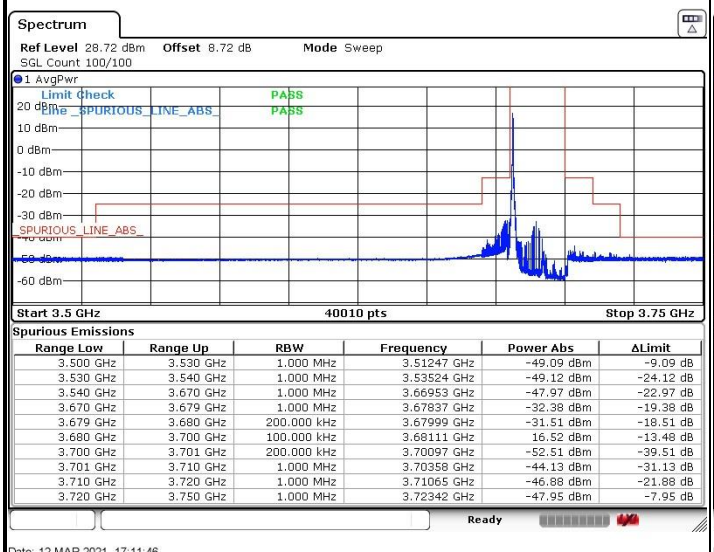
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52191 GHz	-49.15 dBm	-9.15 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53041 GHz	-49.28 dBm	-24.28 dB
3.540 GHz	3.605 GHz	1.000 MHz	3.60483 GHz	-46.70 dBm	-21.70 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.61397 GHz	-41.49 dBm	-28.49 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.61497 GHz	-39.93 dBm	-26.93 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.62285 GHz	-3.49 dBm	-33.49 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.63500 GHz	-40.03 dBm	-27.03 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.63602 GHz	-37.49 dBm	-24.49 dB
3.645 GHz	3.720 GHz	1.000 MHz	3.64523 GHz	-41.36 dBm	-16.36 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.74889 GHz	-49.02 dBm	-9.02 dB

Date: 12.MAR.2021 16:59:20

LTE Band 48 / 20MHz

QPSK

Highest Channel / 1RB0



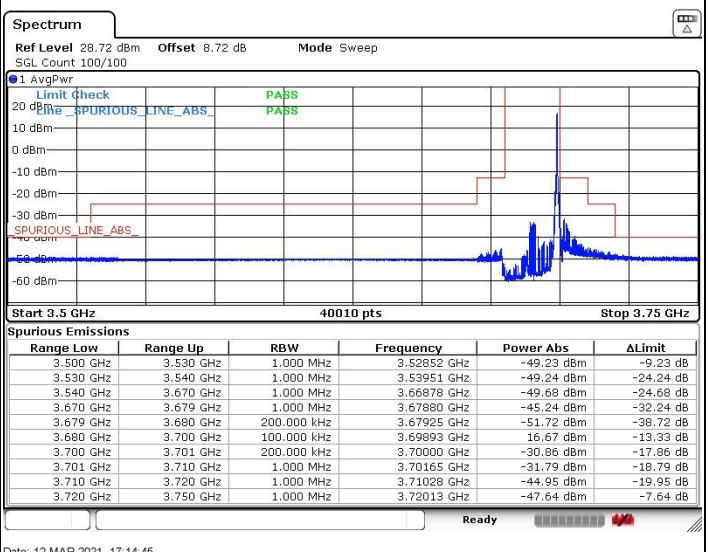
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.51247 GHz	-49.09 dBm	-9.09 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53524 GHz	-49.12 dBm	-24.12 dB
3.540 GHz	3.670 GHz	1.000 MHz	3.66953 GHz	-47.97 dBm	-22.97 dB
3.670 GHz	3.679 GHz	1.000 MHz	3.67837 GHz	-32.38 dBm	-19.38 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67999 GHz	-31.51 dBm	-18.51 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68111 GHz	16.52 dBm	-13.48 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70097 GHz	-52.51 dBm	-39.51 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70358 GHz	-44.13 dBm	-31.13 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71065 GHz	-46.88 dBm	-21.88 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72342 GHz	-47.95 dBm	-7.95 dB

Ready

Date: 12.MAR.2021 17:11:46

Highest Channel / 1RBmax



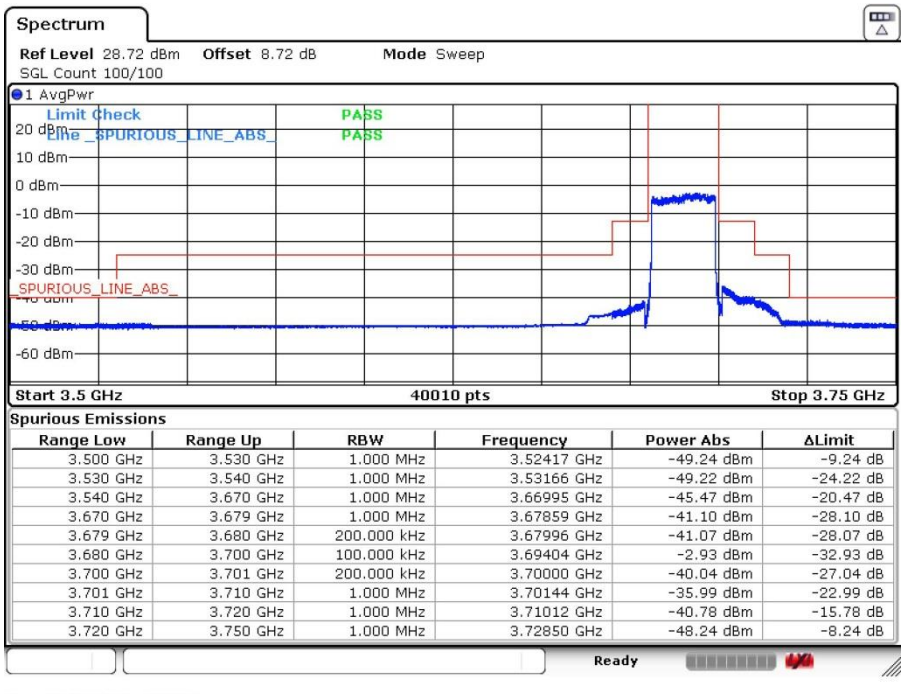
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52852 GHz	-49.23 dBm	-9.23 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53951 GHz	-49.24 dBm	-24.24 dB
3.540 GHz	3.670 GHz	1.000 MHz	3.66878 GHz	-49.68 dBm	-24.68 dB
3.670 GHz	3.679 GHz	1.000 MHz	3.67880 GHz	-45.24 dBm	-32.24 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67925 GHz	-51.72 dBm	-38.72 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.69893 GHz	16.67 dBm	-13.33 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70000 GHz	-30.86 dBm	-17.86 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70165 GHz	-31.79 dBm	-18.79 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71028 GHz	-44.95 dBm	-19.95 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72013 GHz	-47.64 dBm	-7.64 dB

Ready

Date: 12.MAR.2021 17:14:45

Highest Channel / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.500 GHz	3.530 GHz	1.000 MHz	3.52417 GHz	-49.24 dBm	-9.24 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53166 GHz	-49.22 dBm	-24.22 dB
3.540 GHz	3.670 GHz	1.000 MHz	3.66995 GHz	-45.47 dBm	-20.47 dB
3.670 GHz	3.679 GHz	1.000 MHz	3.67859 GHz	-41.10 dBm	-28.10 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67996 GHz	-41.07 dBm	-28.07 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.69404 GHz	-2.93 dBm	-32.93 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70000 GHz	-40.04 dBm	-27.04 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70144 GHz	-35.99 dBm	-22.99 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71012 GHz	-40.78 dBm	-15.78 dB
3.720 GHz	3.750 GHz	1.000 MHz	3.72850 GHz	-48.24 dBm	-8.24 dB

Ready

Date: 12.MAR.2021 17:08:00