FCC RF Test Report

APPLICANT	: Xiaomi Communications Co., Ltd.
EQUIPMENT	: Mobile Phone
BRAND NAME	: Xiaomi
MODEL NAME	: 2407FPN8EG
FCC ID	: 2AFZZPN8EG
STANDARD	: 47 CFR Part 2, 27(F), 27(H), 27(M)
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	: Apr. 20, 2024 ~ May. 10, 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

Sporton International Inc. (ShenZhen)

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

People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG441610C	Rev. 01	Initial issue of report	May 28, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§27.50(b)(10) §27.50(c)(10)	ERP (Band 12) (Band 13) (Band 17)	ERP < 3 Watt		-
	§27.50(h)(2)	EIRP (Band 7) (Band 38) (Band 41)	EIRP < 2Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §27.53(c)(2)(4) §27.53(g)	Conducted Band Edge Measurement (Band 12) (Band 13) (Band 17)	< 43+10log10(P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)	§27.53(m)(4)		
3.8	§2.1051 §27.53(c)(2) §27.53(g)	Conducted Spurious Emission (Band 12) (Band 13) (Band 17)	< 43+10log10(P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log$_{10}$(P[Watts])		
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §27.53(c)(2) §27.53(f) §27.53(g)	Radiated Spurious Emission (Band 12) (Band 13) (Band 17)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 22.54 dB at 1559.50 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log$_{10}$(P[Watts])		

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

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.2 Manufacturer

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	Xiaomi
Model Name	2407FPN8EG
FCC ID	2AFZZPN8EG
IMEI Code	Conducted: 869018070055282 Radiation: 869018070053741/869018070053758
HW Version	13520N12
SW Version	Xiaomi HyperOS 1.0
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 7 : 2500 MHz ~ 2570 MHz LTE Band 12 : 699 MHz ~ 716 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 17 : 704 MHz ~ 716 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Rx Frequency	LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 17 : 734 MHz ~ 746 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Bandwidth	LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz

Maximum Output Power to Antenna	<ANT0> LTE Band 12 : 24.17 dBm LTE Band 13 : 24.96 dBm LTE Band 17 : 23.99 dBm <ANT1> LTE Band 12 : 23.35 dBm LTE Band 13 : 24.46 dBm LTE Band 17 : 23.31 dBm <ANT2> LTE Band 7 : 25.51 dBm LTE CA_7C : 24.50 dBm LTE Band 38 : 25.51 dBm LTE CA_38C : 23.77 dBm LTE Band 41 : 25.53 dBm <ANT3> LTE Band 7 : 24.70 dBm LTE CA_7C : 23.17 dBm LTE Band 38 : 24.35 dBm LTE CA_38C : 22.84 dBm LTE Band 41 : 24.52 dBm <ANT4> LTE Band 7 : 22.59 dBm LTE CA_7C : 20.55 dBm LTE Band 38 : 22.35 dBm LTE CA_38C : 20.75 dBm LTE Band 41 : 22.50 dBm <ANT5> LTE Band 7 : 25.14 dBm LTE CA_7C : 23.82 dBm LTE Band 38 : 24.74 dBm LTE CA_38C : 23.36 dBm LTE Band 41 : 24.99 dBm
Antenna Gain	<ANT0> LTE Band 12/13/17 : -3.3 dBi <ANT1> LTE Band 12/13/17 : -3.8 dBi <ANT2> LTE Band 7 : -5.00 dBi LTE Band 38/41 : -1.94 dBi <ANT3> LTE Band 7 : -0.6 dBi LTE Band 38/41 : -0.6 dBi <ANT4> LTE Band 7 : -1.9 dBi LTE Band 38/41 : -1.9 dBi <ANT5> LTE Band 7 : -0.9 dBi LTE Band 38/41 : -0.9 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note: The maximum ERP/EIRP is calculated from max output power and max antenna gain, so only the maximum ERP/EIRP of Antenna 0 for LTE Band12/13/17, Antenna 5 for LTE Band7/7C/38/38C/41 are shown in the report.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power and Emission Designator

LTE Band 7		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2510.0 ~ 2560.0	0.2655	17M9G7D	0.2265	17M9W7D
LTE Band 12		**QPSK**		**16QAM/64QAM/256QAM**	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
10	704.0 ~ 711.0	0.0745	8M99G7D	0.0575	9M07W7D
LTE Band 13		**QPSK**		**16QAM/64QAM/256QAM**	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
10	782.0	0.0893	8M99G7D	0.0736	8M99W7D
LTE Band 17		**QPSK**		**16QAM/64QAM/256QAM**	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
10	709.0 ~ 711.0	0.0714	8M99G7D	0.0614	9M07W7D
LTE Band 38		**QPSK**		**16QAM/64QAM/256QAM**	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2580.0 ~ 2610.0	0.2421	17M9G7D	0.2014	17M9W7D
LTE Band 41		**QPSK**		**16QAM/64QAM/256QAM**	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2506.0 ~ 2680.0	0.2564	17M9G7D	0.2280	17M9W7D

LTE Band 7 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20MHz+20MHz	0.1959	37M4G7D	0.1644	37M2W7D

LTE Band 38 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20MHz+20MHz	0.1762	37M5G7D	0.1393	37M7W7D

Note:

1. LTE Band 12 overlaps the entire frequency range of LTE Band 17. Therefore, the test results provided in this report covers Band 12 as well as Band 17.
2. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.

1.7 Testing Location

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.
	03CH04-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-SZ	AUDIX	E3	6.2009-8-24

1.9 Applicable Standards

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

- 47 CFR Part 2, 27(F), 27(H), 27(M)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems 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.

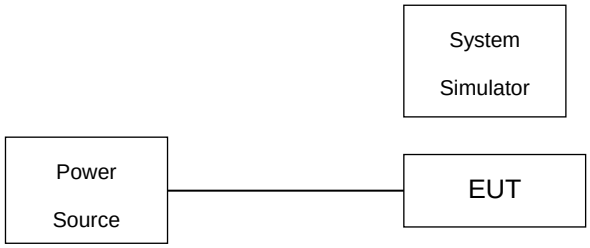
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (X/Z Plane)

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v				v		v	
	12				v	-	-	v	v	v				v		v	
	13	-	-		v	-	-	v	v	v				v		v	
	41	-	-				v	v	v	v				v		v	
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v					v		v	
	12	v	v	v	v	-	-	v	v					v		v	
	13	-	-	v	v	-	-	v	v					v		v	
	41	-	-	v	v	v	v	v	v					v		v	
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v		v		v	v		v
	12	v	v	v	v	-	-	v	v	v		v		v	v		v
	13	-	-	v	v	-	-	v	v	v		v		v	v		v
	41	-	-	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	7	-	-	v	v	v	v	v				v			v	v	v
	12	v	v	v	v	-	-	v				v			v	v	v
	13	-	-	v	v	-	-	v				v			v	v	v
	41	-	-	v	v	v	v	v				v			v	v	v
Frequency Stability	7	-	-		v			v						v		v	
	12				v	-	-	v						v		v	
	13	-	-		v	-	-	v						v		v	
	41	-	-		v			v						v		v	

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
E.R.P / E.I.R.P	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	7	Worst Case														v	
	12	Worst Case														v	
	13	Worst Case														v	
	41	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.																

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v	v	v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v					v		v	
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v					v		v	
Conducted Band Edge	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v		v		v	v		v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v		v		v	v		v
Conducted Spurious Emission	7C_CA	v	v	v	v	v	-	-	v	v	-	v				v			v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v				v			v	v	v
E.I.R.P.	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v	v	v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	7C_CA	Worst Case																		v	
	38C_CA	Worst Case																		v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																				

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

2.4 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.0 dB and 10dB attenuator.

Example :

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

= 5.0 + 10 = 15.0 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 7 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 12 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 13 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

LTE Band 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5

LTE Band 7C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7

LTE Band 38C_CA Channel and Frequency List					
BW [MHz]	**Channel/Frequency(MHz)**		**Lowest**	**Middle**	**Highest**
20 + 20	PCC	Channel	37850	37901	37952
		Frequency	2580.0	2585.1	2590.2
	SCC	Channel	38048	38099	38150
		Frequency	2599.8	2604.9	2610.0
15+ 15	PCC	Channel	37825	37925	38025
		Frequency	2577.5	2587.5	2597.5
	SCC	Channel	37975	38075	38175
		Frequency	2592.5	2602.5	2612.5

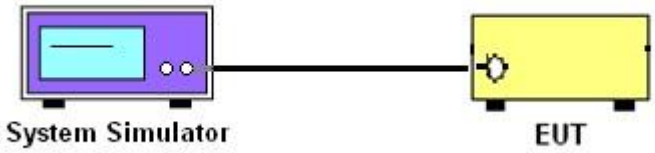
3 Conducted Test Items

3.1 Measuring Instruments

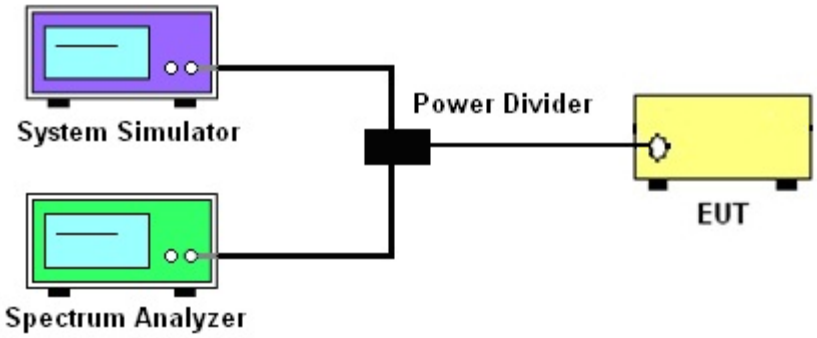
See list of measuring instruments of this test report.

3.2 Test Setup

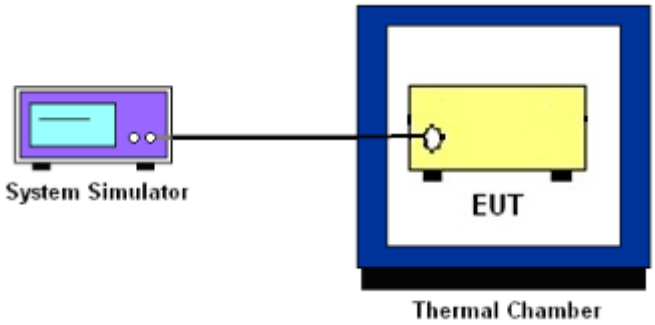
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted 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 and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP 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.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 17

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7 and Band 38 and Band 41.

According to KDB 412172 D01 Power Approach,

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

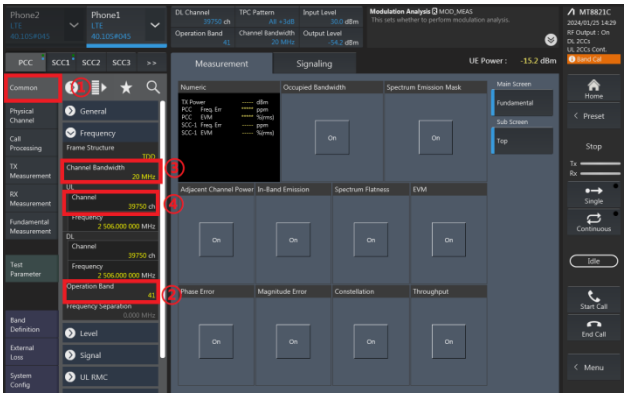
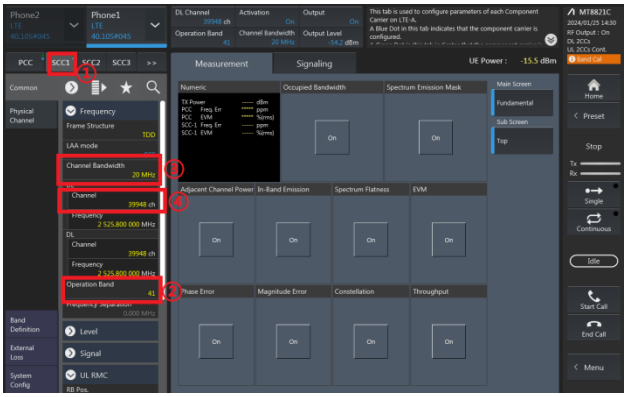
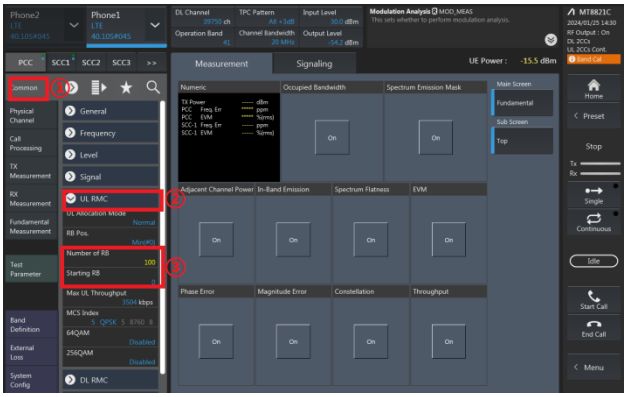
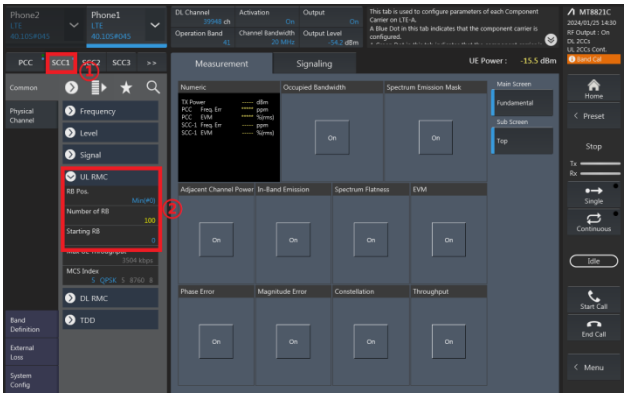
L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

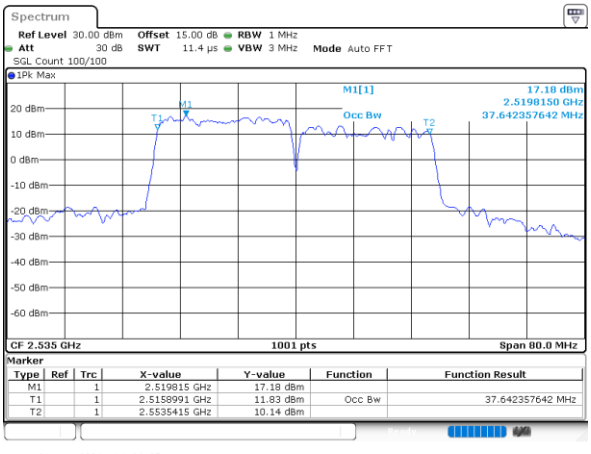
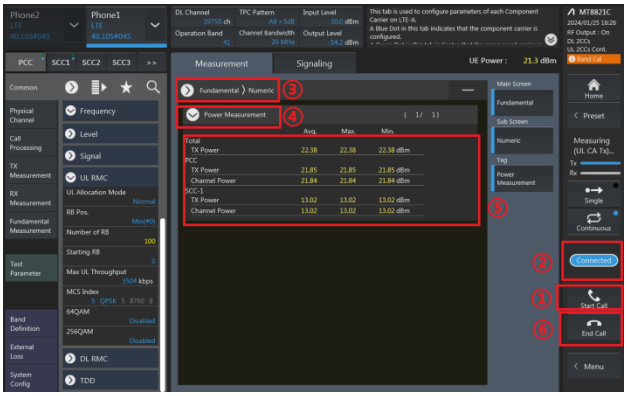
1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from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

3.4.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

PCC config_(Channel Bandwidth / Channel / Band)	SCC config_(Channel Bandwidth / Channel / Band)
	
PCC config_(Number of RB / Starting RB)	**SCC config_(Number of RB / Starting RB)**
	

4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)	Read the Total UL CA output power (PCC+SCC)
	

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 Occupied Bandwidth

3.6.1 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.

3.6.2 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.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53 (c)

For operations in the 776-788 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least 65 + 10 log10 p(watts), dB, for mobile and portable equipment.

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.7.2 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 in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
   Example:
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 7,38,41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

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 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. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. For Band 7, 38, 41
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [55+ 10log(P)] (dB)
    = [30+ 10log(P)] (dBm) - [55+ 10log(P)] (dB)
    = -25dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 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.

3.9.3 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.

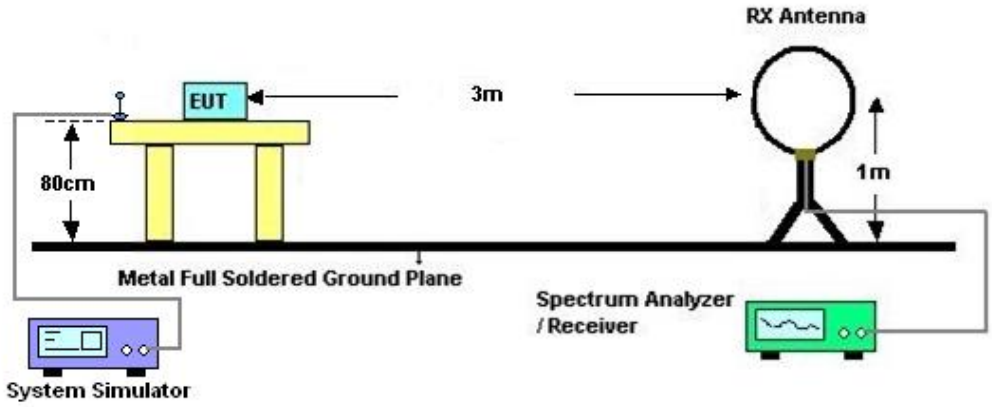
4 Radiated Test Items

4.1 Measuring Instruments

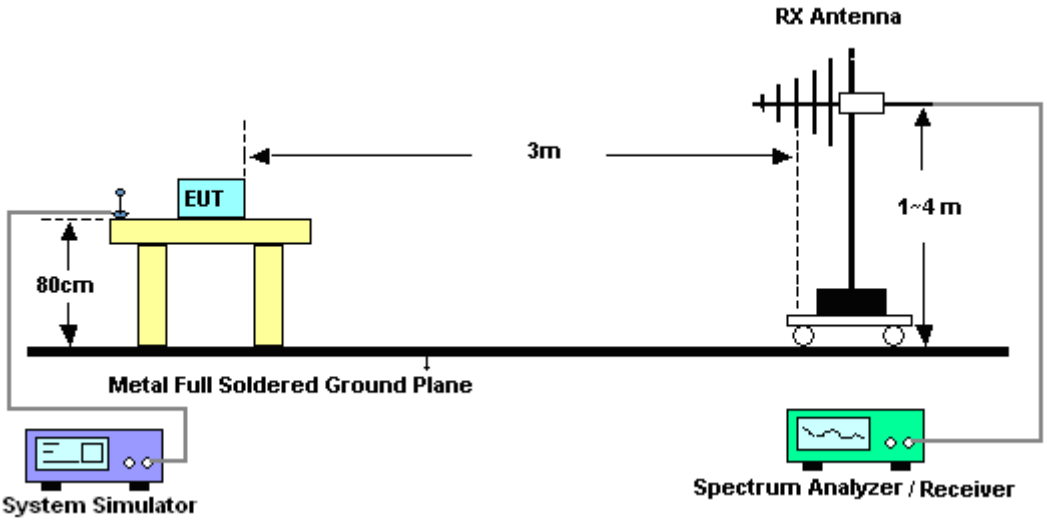
See list of measuring instruments of this test report.

4.2 Test Setup

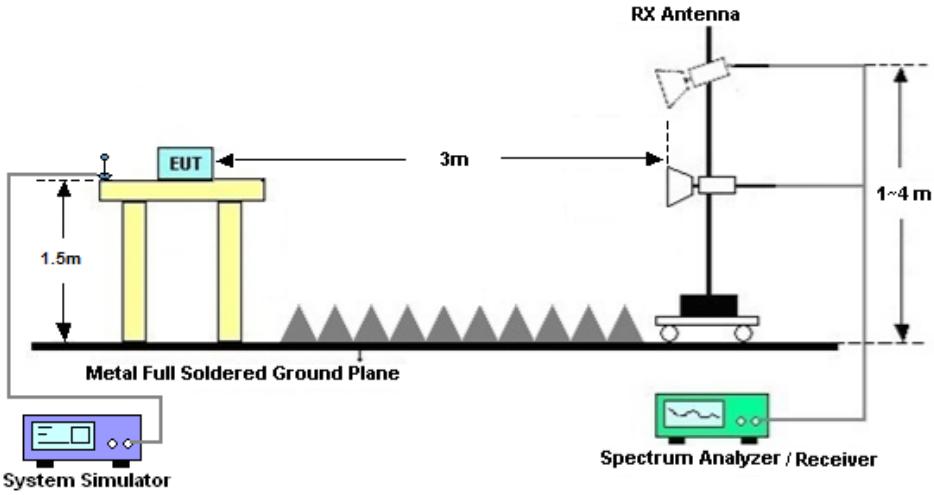
4.2.1 For radiated test below 30MHz



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

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 must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 7, 38, 41

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 55 + 10 log (P) dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For Band 7, 38, 41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

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	Apr. 20, 2024~ May 10, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Apr. 20, 2024~ May 10, 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	Apr. 20, 2024~ May 10, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Power Divider	SOLVANG TECHNOLOY	STI08-0055	-	Max 40GHz	Mar. 20, 2024	Apr. 20, 2024~ May 10, 2024	Mar. 19, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Apr. 20, 2024~ May 10, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 18, 2023	Apr. 23, 2024~ Apr. 24, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 28, 2022	Apr. 23, 2024~ Apr. 24, 2024	Jun. 27, 2024	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	May 14, 2023	Apr. 23, 2024~ Apr. 24, 2024	May 13, 2024	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Jul. 07, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 08, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jul. 07, 2024	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2023	Apr. 23, 2024~ Apr. 24, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 18, 2023	Apr. 23, 2024~ Apr. 24, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jul. 06, 2024	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY57280136	500MHz~26.5GHz	Aug. 21, 2023	Apr. 23, 2024~ Apr. 24, 2024	Aug. 20, 2024	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 18, 2023	Apr. 23, 2024~ Apr. 24, 2024	Oct. 17, 2024	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Apr. 23, 2024~ Apr. 24, 2024	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Apr. 23, 2024~ Apr. 24, 2024	NCR	Radiation (03CH04-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

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

Uncertainty of Conducted Measurement

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.1 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.9 dB

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

Appendix A. Test Results of Conducted Test

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

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 7_ANT.5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W) < 2W, Pass		
Channel				20850	20850	21350			
Frequency (MHz)				2510	2535	2560	L	M	H
20	QPSK	1	0	25.13	25.14	25.08	0.2649	0.2655	0.2618
20	QPSK	1	49	25.05	25.01	25.05	0.2600	0.2576	0.2600
20	QPSK	1	99	25.08	25.00	25.00	0.2618	0.2570	0.2570
20	QPSK	50	0	24.17	24.27	24.14	0.2123	0.2173	0.2109
20	QPSK	50	24	24.20	24.25	24.09	0.2138	0.2163	0.2084
20	QPSK	50	50	24.15	24.24	24.13	0.2113	0.2158	0.2104
20	QPSK	100	0	24.01	24.09	23.98	0.2046	0.2084	0.2032
20	16QAM	1	0	24.40	24.45	24.39	0.2239	0.2265	0.2234
20	64QAM	1	0	23.33	23.40	23.24	0.1750	0.1778	0.1714
20	256QAM	1	0	20.36	20.37	20.27	0.0883	0.0885	0.0865
Channel				20825	21100	21375	EIRP(W)		
Frequency (MHz)				2507.5	2535	2562.5	L	M	H
15	QPSK	1	0	25.06	25.07	25.06	0.2606	0.2612	0.2606
Channel				20800	21100	21400	EIRP(W)		
Frequency (MHz)				2505	2535	2565	L	M	H
10	QPSK	1	0	25.10	25.09	25.00	0.2630	0.2624	0.2570
Channel				20775	21100	21425	EIRP(W)		
Frequency (MHz)				2502.5	2535	2567.5	L	M	H
5	QPSK	1	0	25.08	25.12	25.01	0.2618	0.2642	0.2576

LTE Band 12_ANT.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W) < 3W, Pass		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	24.04	24.17	24.08	0.0723	0.0745	0.0729
10	QPSK	1	25	24.02	24.11	24.05	0.0719	0.0735	0.0724
10	QPSK	1	49	23.99	24.06	24.01	0.0714	0.0726	0.0718
10	QPSK	25	0	23.29	23.32	23.28	0.0608	0.0612	0.0607
10	QPSK	25	12	23.21	23.31	23.20	0.0597	0.0611	0.0596
10	QPSK	25	25	23.20	23.27	23.25	0.0596	0.0605	0.0603
10	QPSK	50	0	23.30	23.32	23.29	0.0610	0.0612	0.0608
10	16QAM	1	0	22.98	23.05	22.99	0.0566	0.0575	0.0568
10	64QAM	1	0	22.00	22.03	22.05	0.0452	0.0455	0.0457
10	256QAM	1	0	18.97	19.02	18.98	0.0225	0.0228	0.0225
Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	23.86	23.97	23.94	0.0693	0.0711	0.0706
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	23.93	24.06	23.90	0.0705	0.0726	0.0700
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	23.94	24.05	23.95	0.0706	0.0724	0.0708

LTE Band 13_ANT.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W) < 3W, Pass		
Channel					23230				
Frequency (MHz)					782			M	
10	QPSK	1	0		24.96			0.0893	
10	QPSK	1	25		24.88			0.0877	
10	QPSK	1	49		24.86			0.0873	
10	QPSK	25	0		24.07			0.0728	
10	QPSK	25	12		24.06			0.0726	
10	QPSK	25	25		24.05			0.0724	
10	QPSK	50	0		24.06			0.0726	
10	16QAM	1	0		24.12			0.0736	
10	64QAM	1	0		22.93			0.0560	
10	256QAM	1	0		19.89			0.0278	
Channel				23205	23230	23255	ERP(W)		
Frequency (MHz)				779.5	782	784.5	L	M	H
5	QPSK	1	0	24.90	24.95	24.86	0.0881	0.0891	0.0873

LTE Band 17_ANT.0

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W) < 3W, Pass		
Channel				23780	23790	23800			
Frequency (MHz)				709	710	711	L	M	H
10	QPSK	1	0	23.91	23.99	23.97	0.0701	0.0714	0.0711
10	QPSK	1	25	23.81	23.88	23.86	0.0685	0.0697	0.0693
10	QPSK	1	49	23.82	23.93	23.90	0.0687	0.0705	0.0700
10	QPSK	25	0	23.22	23.27	23.21	0.0598	0.0605	0.0597
10	QPSK	25	12	23.10	23.26	23.20	0.0582	0.0604	0.0596
10	QPSK	25	25	23.11	23.21	23.15	0.0583	0.0597	0.0589
10	QPSK	50	0	23.22	23.26	23.21	0.0598	0.0604	0.0597
10	16QAM	1	0	23.14	23.33	23.21	0.0587	0.0614	0.0597
10	64QAM	1	0	21.86	21.88	21.89	0.0438	0.0440	0.0441
10	256QAM	1	0	18.89	18.97	18.96	0.0221	0.0225	0.0224
Channel				23755	23790	23825	ERP(W)		
Frequency (MHz)				706.5	710	713.5	L	M	H
5	QPSK	1	0	23.81	23.87	23.79	0.0685	0.0695	0.0682

LTE Band 38_ANT.5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W) < 2W, Pass		
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610	L	M	H
20	QPSK	1	0	24.72	24.74	24.45	0.2410	0.2421	0.2265
20	QPSK	1	49	24.63	24.66	24.39	0.2360	0.2377	0.2234
20	QPSK	1	99	24.67	24.64	24.35	0.2382	0.2366	0.2213
20	QPSK	50	0	23.76	23.78	23.44	0.1932	0.1941	0.1795
20	QPSK	50	24	23.63	23.72	23.41	0.1875	0.1914	0.1782
20	QPSK	50	50	23.71	23.77	23.40	0.1910	0.1936	0.1778
20	QPSK	100	0	23.64	23.68	23.32	0.1879	0.1897	0.1746
20	16QAM	1	0	23.86	23.94	23.61	0.1977	0.2014	0.1866
20	64QAM	1	0	22.61	22.71	22.32	0.1483	0.1517	0.1387
20	256QAM	1	0	19.59	19.65	19.33	0.0740	0.0750	0.0697
Channel				37825	38000	38175	EIRP(W)		
Frequency (MHz)				2577.5	2595	2612.5	L	M	H
15	QPSK	1	0	24.63	24.65	24.39	0.2360	0.2371	0.2234
Channel				37800	38000	38200	EIRP(W)		
Frequency (MHz)				2575	2595	2615	L	M	H
10	QPSK	1	0	24.61	24.63	24.35	0.2350	0.2360	0.2213
Channel				37775	38000	38225	EIRP(W)		
Frequency (MHz)				2572.5	2595	2617.5	L	M	H
5	QPSK	1	0	24.61	24.65	24.37	0.2350	0.2371	0.2223

LTE Band 41_ANT.5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W) < 2W, Pass		
Channel				39750	40620	41490			
Frequency (MHz)				2506	2593	2680	L	M	H
20	QPSK	1	0	24.97	24.99	24.69	0.2553	0.2564	0.2393
20	QPSK	1	49	24.87	24.91	24.67	0.2495	0.2518	0.2382
20	QPSK	1	99	24.97	24.90	24.67	0.2553	0.2512	0.2382
20	QPSK	50	0	24.29	24.40	24.06	0.2183	0.2239	0.2070
20	QPSK	50	24	24.23	24.34	23.94	0.2153	0.2208	0.2014
20	QPSK	50	50	24.29	24.31	23.99	0.2183	0.2193	0.2037
20	QPSK	100	0	24.30	24.41	24.08	0.2188	0.2244	0.2080
20	16QAM	1	0	24.38	24.48	24.10	0.2228	0.2280	0.2089
20	64QAM	1	0	22.92	22.98	22.68	0.1592	0.1614	0.1507
20	256QAM	1	0	19.88	19.92	19.53	0.0791	0.0798	0.0729
Channel				39725	40620	41515	EIRP(W)		
Frequency (MHz)				2503.5	2593	2682.5	L	M	H
15	QPSK	1	0	24.92	24.96	24.63	0.2523	0.2547	0.2360
Channel				39700	40620	41540	EIRP(W)		
Frequency (MHz)				2501	2593	2685	L	M	H
10	QPSK	1	0	24.93	24.96	24.61	0.2529	0.2547	0.2350
Channel				39675	40620	41565	EIRP(W)		
Frequency (MHz)				2498.5	2593	2687.5	L	M	H
5	QPSK	1	0	24.91	24.96	24.63	0.2518	0.2547	0.2360

CA Power and EIRP

LTE CA_7C_ANT.5

EIRP(W) < 2W, Pass							
Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.59	0.1858
M	QPSK	1	Max	1	0	23.82	0.1959
H	QPSK	1	Max	1	0	23.49	0.1816
L	16QAM	1	Max	1	0	22.80	0.1549
M	16QAM	1	Max	1	0	22.94	0.1600
H	16QAM	1	Max	1	0	23.06	0.1644
L	64QAM	1	Max	1	0	20.42	0.0895
M	64QAM	1	Max	1	0	21.09	0.1045
H	64QAM	1	Max	1	0	20.74	0.0964
L	256QAM	1	Max	1	0	18.24	0.0542
M	256QAM	1	Max	1	0	18.90	0.0631
H	256QAM	1	Max	1	0	18.67	0.0598
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.67	0.1892
H	16QAM	1	Max	1	0	22.99	0.1618
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.74	0.1923
H	16QAM	1	Max	1	0	22.90	0.1585
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.68	0.1897
H	16QAM	1	Max	1	0	22.87	0.1574
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.67	0.1892
H	16QAM	1	Max	1	0	22.88	0.1578
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.76	0.1932
H	16QAM	1	Max	1	0	22.98	0.1614
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.63	0.1875
H	16QAM	1	Max	1	0	22.96	0.1607

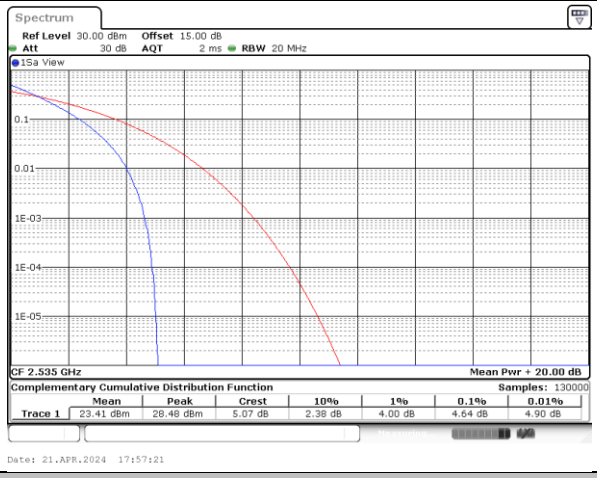
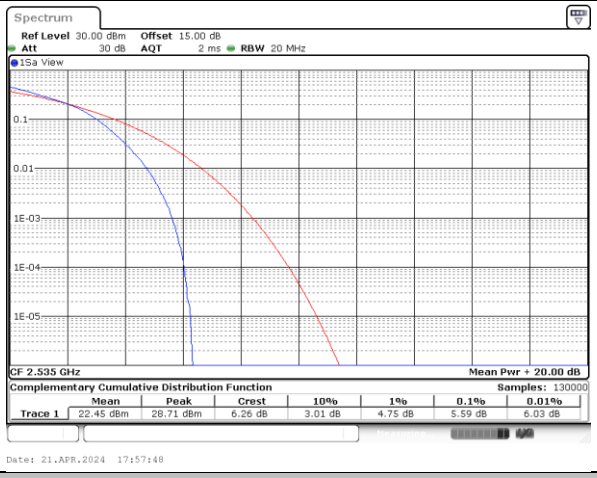
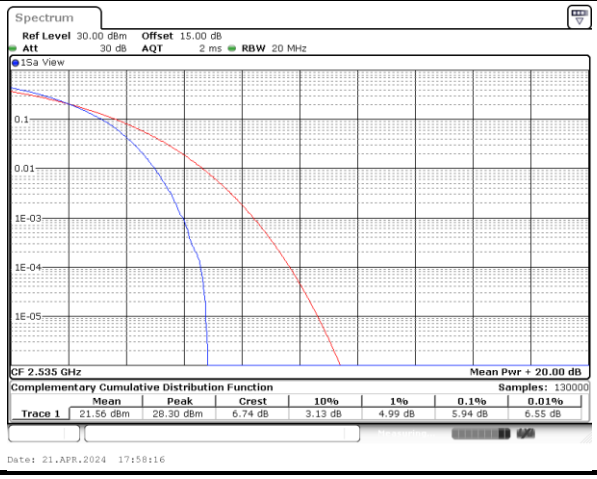
LTE CA_38C_ANT.5

EIRP(W) < 2W, Pass							
Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.17	0.1687
M	QPSK	1	Max	1	0	23.36	0.1762
H	QPSK	1	Max	1	0	23.29	0.1734
L	16QAM	1	Max	1	0	22.10	0.1318
M	16QAM	1	Max	1	0	22.34	0.1393
H	16QAM	1	Max	1	0	22.20	0.1349
L	64QAM	1	Max	1	0	19.76	0.0769
M	64QAM	1	Max	1	0	20.00	0.0813
H	64QAM	1	Max	1	0	20.01	0.0815
L	256QAM	1	Max	1	0	17.98	0.0511
M	256QAM	1	Max	1	0	18.26	0.0545
H	256QAM	1	Max	1	0	18.12	0.0527
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.32	0.1746
M	16QAM	1	Max	1	0	22.16	0.1337

LTE Band 7

Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.59	5.94	PASS

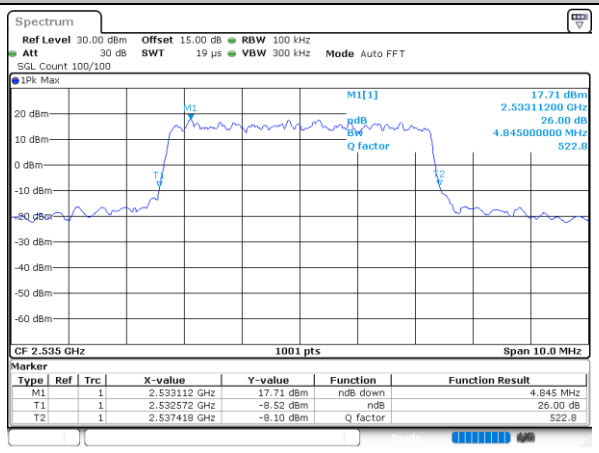
LTE Band 7 / 20MHz / QPSK	LTE Band 7 / 20MHz / 16QAM
Middle Channel / Full RB	Middle Channel / Full RB
	
LTE Band 7 / 20MHz / 64QAM	NA
Middle Channel / Full RB	
	

26dB Bandwidth

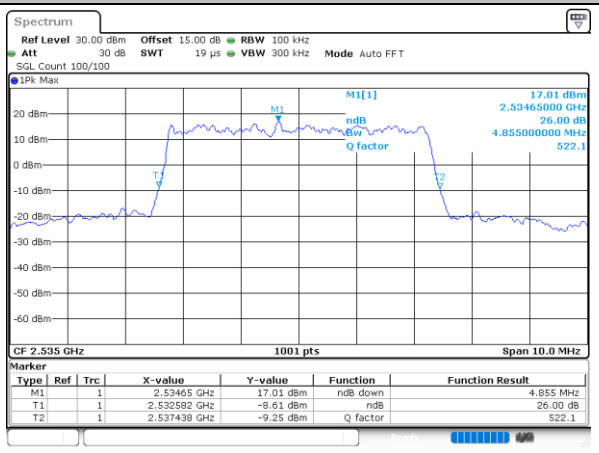
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.85	4.86	9.67	9.69	14.48	14.51	18.74	18.94

LTE Band 7

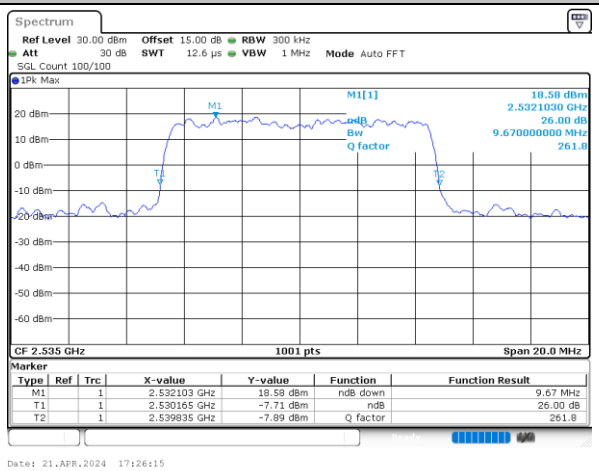
Middle Channel / 5MHz / QPSK



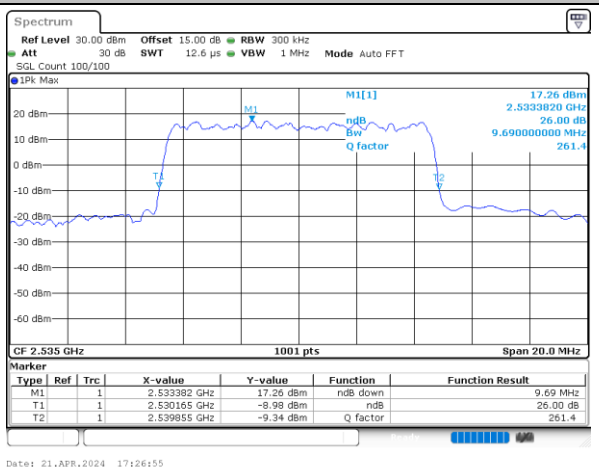
Middle Channel / 5MHz / 16QAM

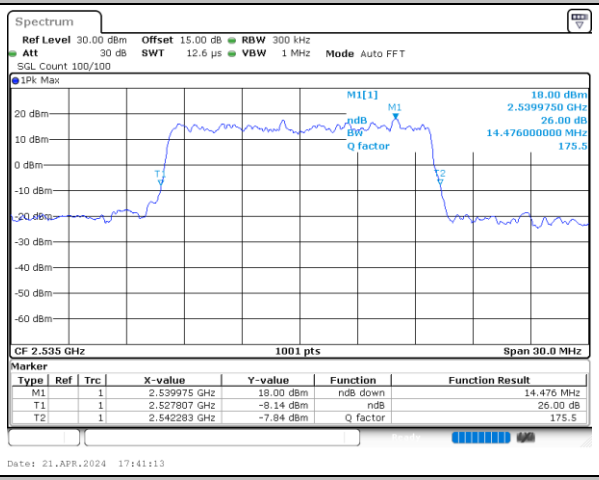
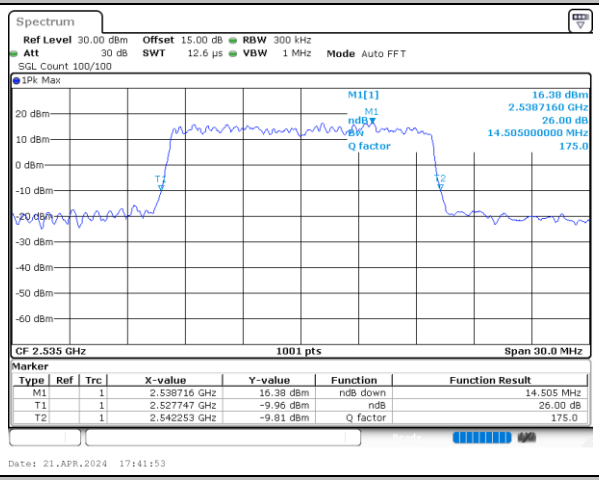


Middle Channel / 10MHz / QPSK

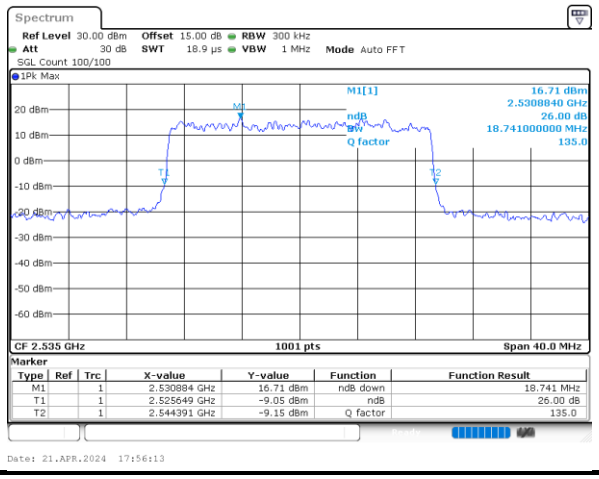
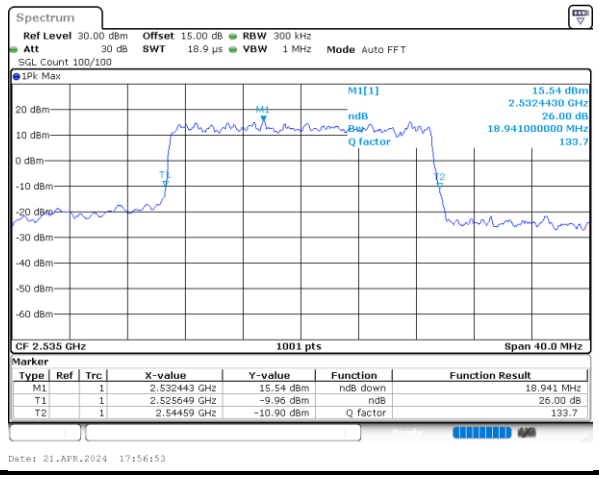


Middle Channel / 10MHz / 16QAM



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

LTE Band 7

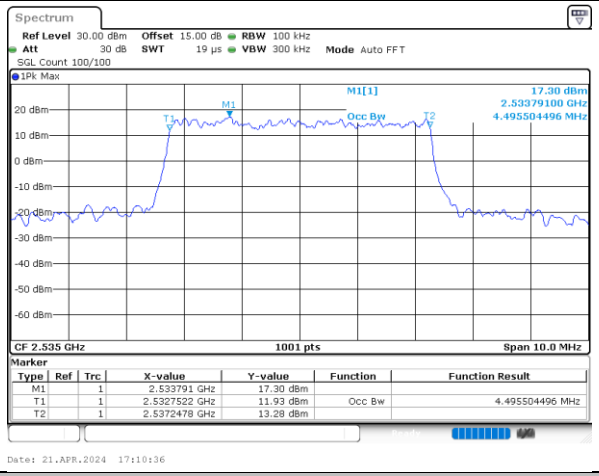
Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM
	

Occupied Bandwidth

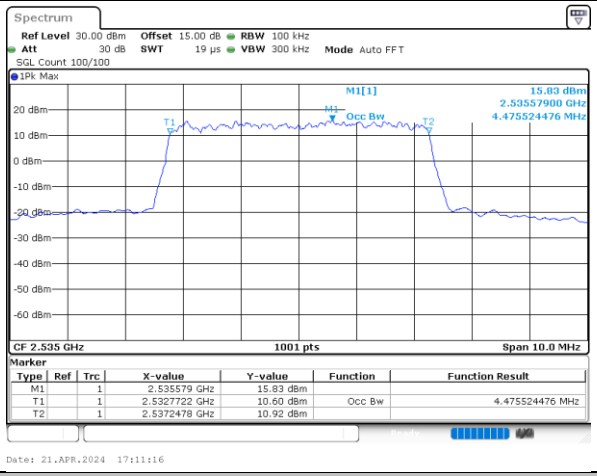
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.50	4.48	9.01	9.01	13.43	13.46	17.90	17.86

LTE Band 7

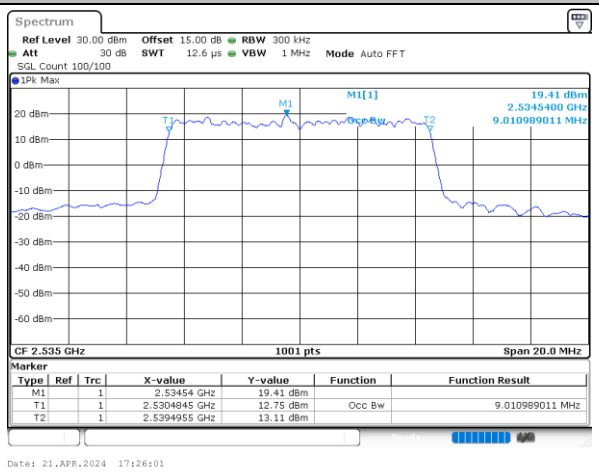
Middle Channel / 5MHz / QPSK



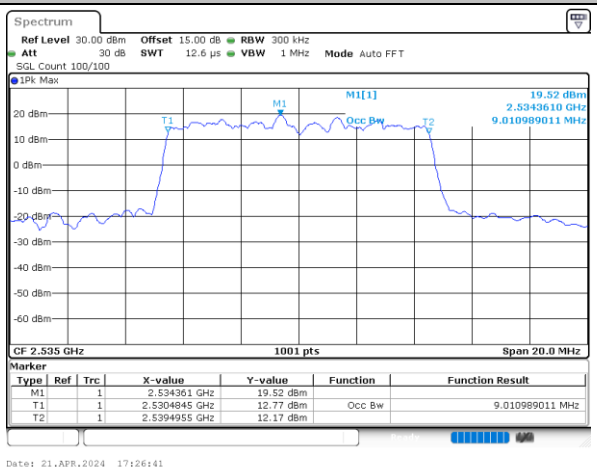
Middle Channel / 5MHz / 16QAM

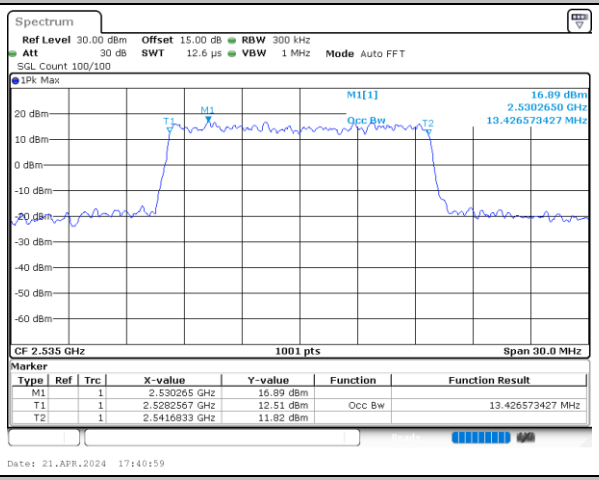
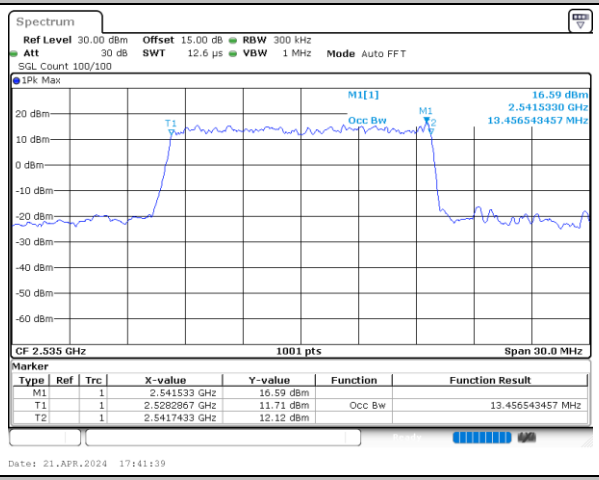


Middle Channel / 10MHz / QPSK

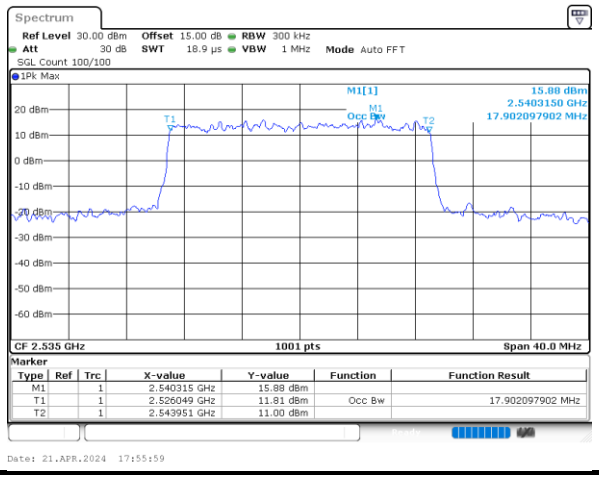
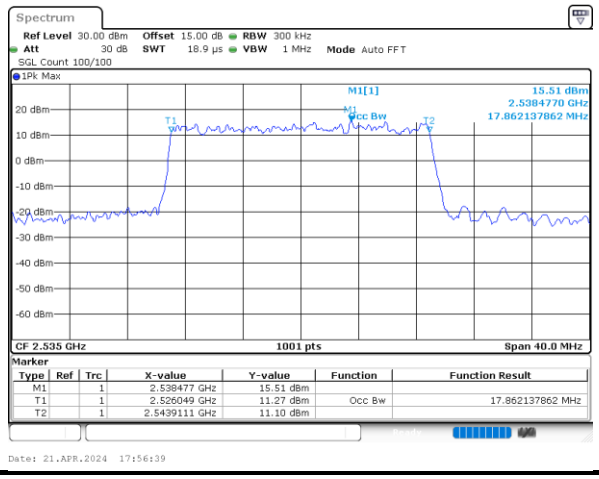


Middle Channel / 10MHz / 16QAM



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

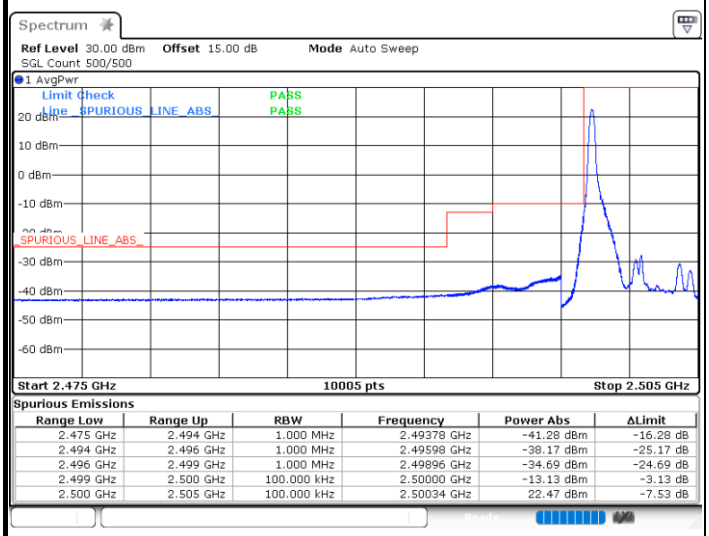
LTE Band 7

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

Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49378 GHz	-41.28 dBm	-16.28 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49598 GHz	-38.17 dBm	-25.17 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-34.69 dBm	-24.69 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-13.13 dBm	-3.13 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	22.47 dBm	-7.53 dB

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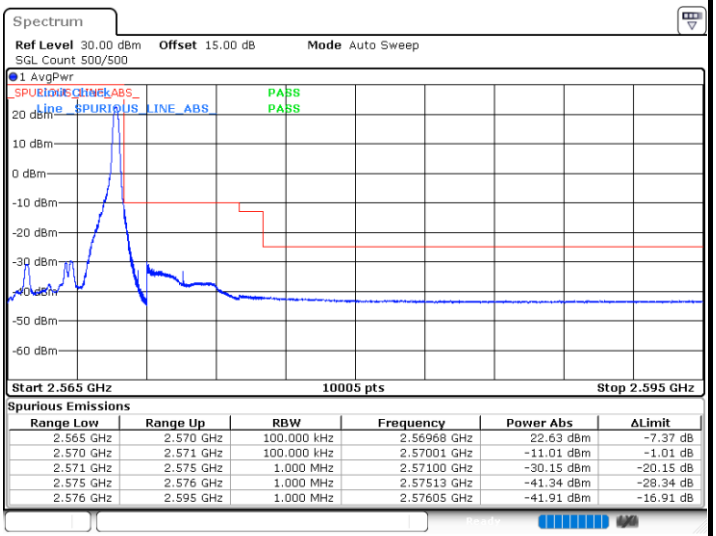
Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56968 GHz	22.63 dBm	-7.37 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-11.01 dBm	-1.01 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-30.15 dBm	-20.15 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57513 GHz	-41.34 dBm	-28.34 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57605 GHz	-41.91 dBm	-16.91 dB

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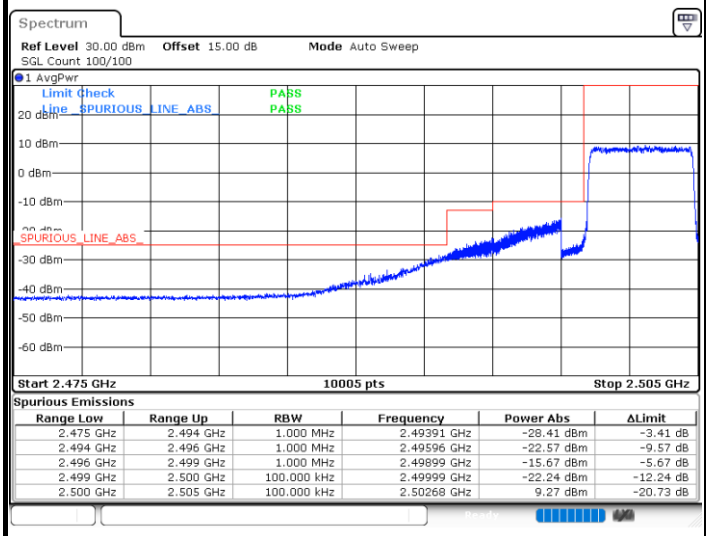
Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49391 GHz	-28.41 dBm	-3.41 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49596 GHz	-22.57 dBm	-9.57 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-15.67 dBm	-5.67 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-22.24 dBm	-12.24 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50268 GHz	9.27 dBm	-20.73 dB

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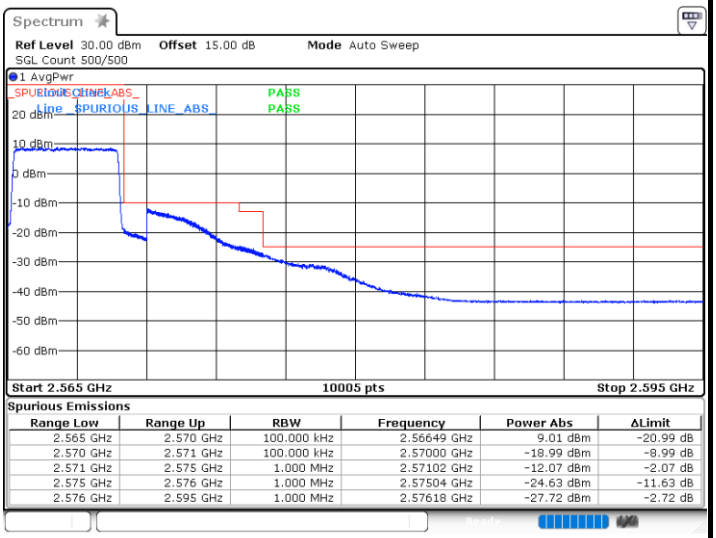
Highest Band Edge / Full RB



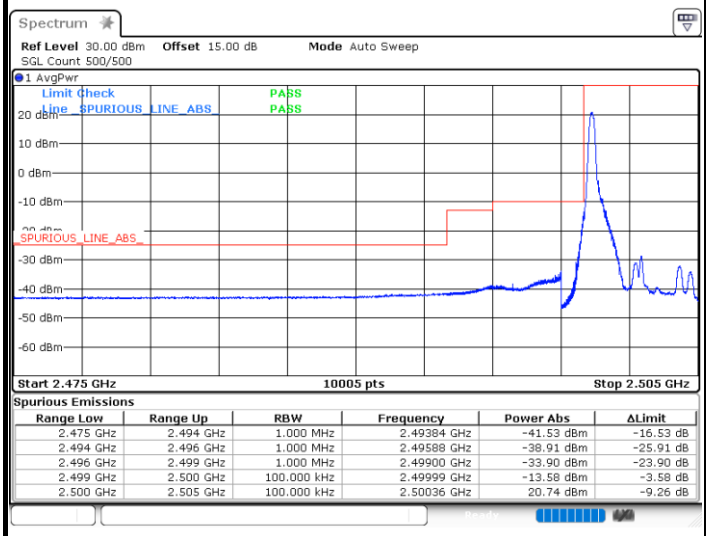
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56649 GHz	9.01 dBm	-20.99 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-18.99 dBm	-8.99 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57102 GHz	-12.07 dBm	-2.07 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57504 GHz	-24.63 dBm	-11.63 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57618 GHz	-27.72 dBm	-2.72 dB

Date: 23.APR.2024 16:34:20

LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB

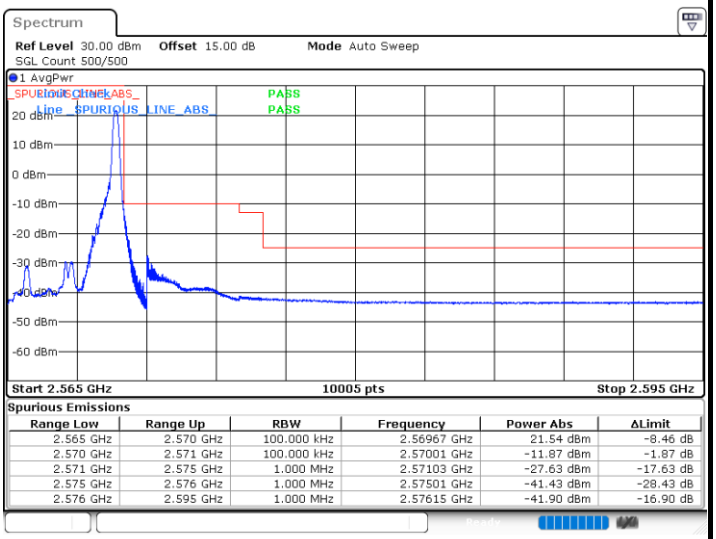


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49384 GHz	-41.53 dBm	-16.53 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49588 GHz	-38.91 dBm	-25.91 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49900 GHz	-33.90 dBm	-23.90 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-13.58 dBm	-3.58 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50036 GHz	20.74 dBm	-9.26 dB

Date: 23.APR.2024 16:12:58

Highest Band Edge / 1 RB

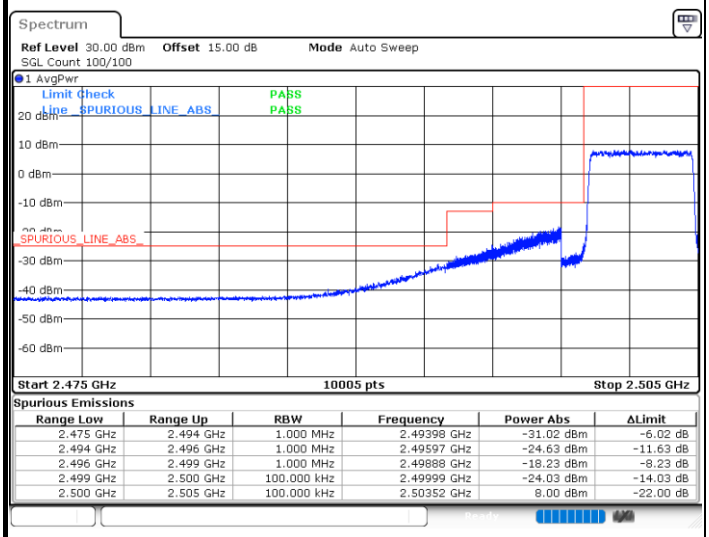


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56967 GHz	21.54 dBm	-8.46 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-11.87 dBm	-1.87 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57103 GHz	-27.63 dBm	-17.63 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57501 GHz	-41.43 dBm	-28.43 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57615 GHz	-41.90 dBm	-16.90 dB

Date: 23.APR.2024 16:27:39

Lowest Band Edge / Full RB

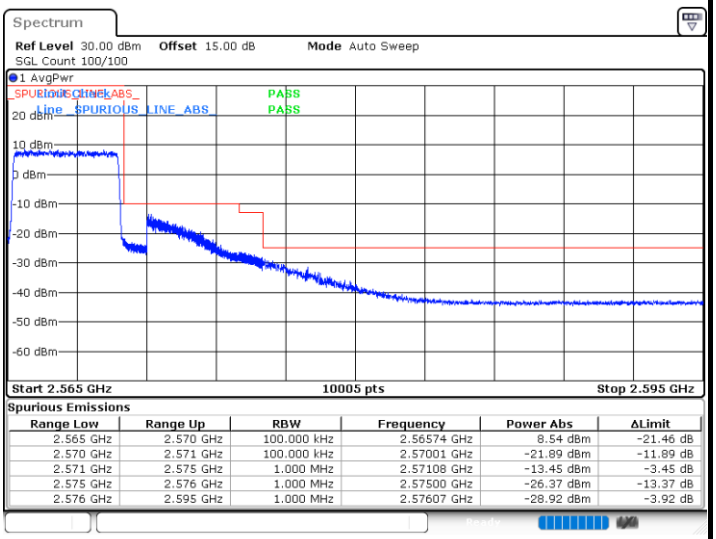


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49398 GHz	-31.02 dBm	-6.02 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-24.63 dBm	-11.63 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49888 GHz	-18.23 dBm	-8.23 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-24.03 dBm	-14.03 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50352 GHz	8.00 dBm	-22.00 dB

Date: 21.APR.2024 17:07:01

Highest Band Edge / Full RB



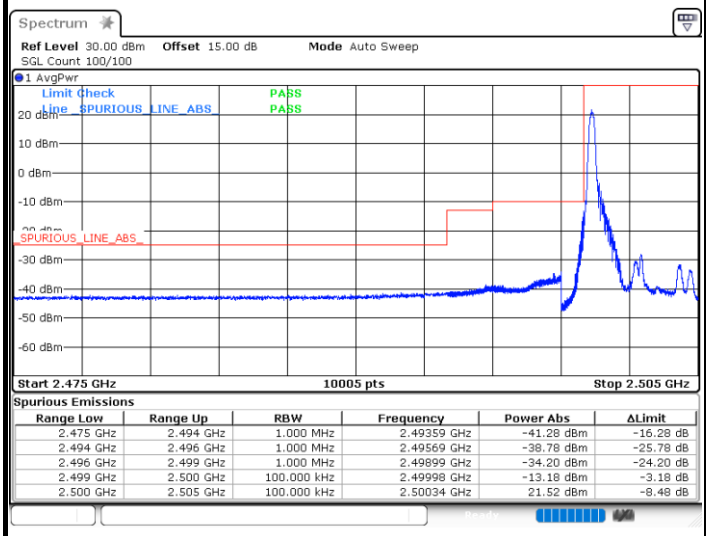
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56574 GHz	8.54 dBm	-21.46 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-21.89 dBm	-11.89 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57108 GHz	-13.45 dBm	-3.45 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57500 GHz	-26.37 dBm	-13.37 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57607 GHz	-28.92 dBm	-3.92 dB

Date: 21.APR.2024 17:15:22

LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB

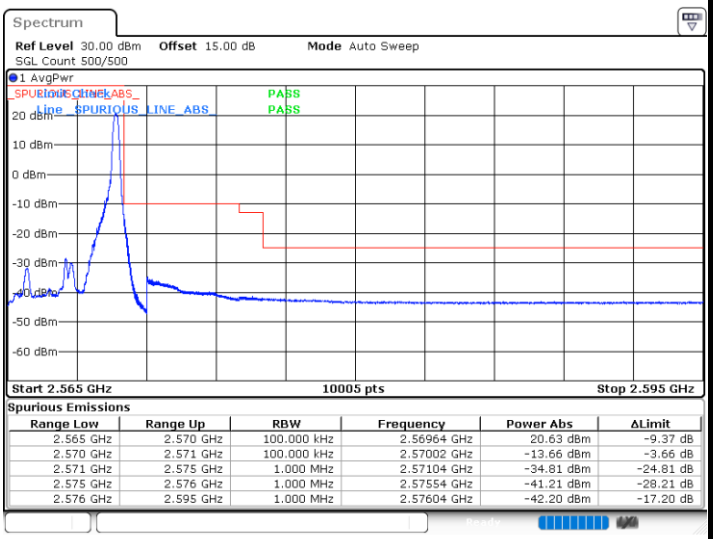


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49359 GHz	-41.28 dBm	-16.28 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49569 GHz	-38.78 dBm	-25.78 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-34.20 dBm	-24.20 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49998 GHz	-13.18 dBm	-3.18 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	21.52 dBm	-8.48 dB

Date: 23.APR.2024 16:14:42

Highest Band Edge / 1 RB

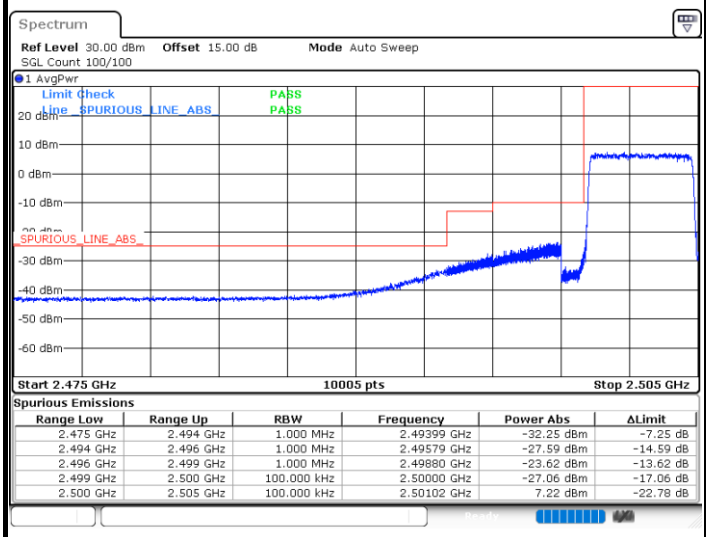


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56964 GHz	20.63 dBm	-9.37 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57002 GHz	-13.66 dBm	-3.66 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-34.81 dBm	-24.81 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57554 GHz	-41.21 dBm	-28.21 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57604 GHz	-42.20 dBm	-17.20 dB

Date: 23.APR.2024 16:28:25

Lowest Band Edge / Full RB

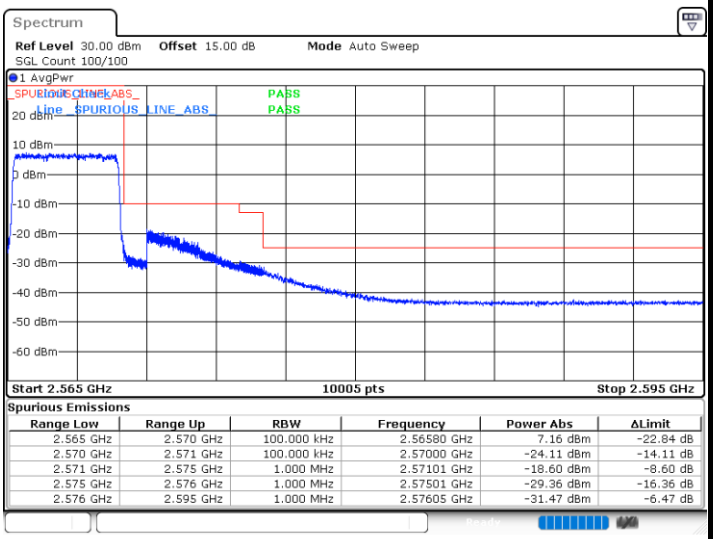


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49399 GHz	-32.25 dBm	-7.25 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49579 GHz	-27.59 dBm	-14.59 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49880 GHz	-23.62 dBm	-13.62 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-27.06 dBm	-17.06 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50102 GHz	7.22 dBm	-22.78 dB

Date: 21.APR.2024 17:07:48

Highest Band Edge / Full RB



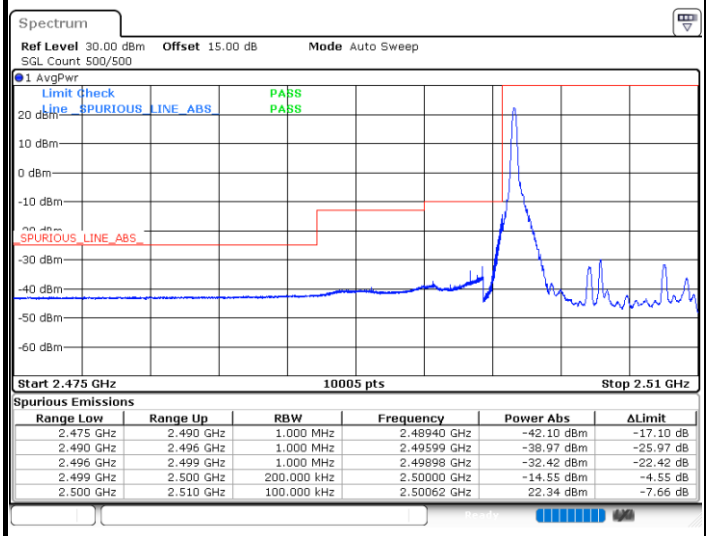
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56580 GHz	7.16 dBm	-22.84 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-24.11 dBm	-14.11 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-18.60 dBm	-8.60 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57501 GHz	-29.36 dBm	-16.36 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57605 GHz	-31.47 dBm	-6.47 dB

Date: 21.APR.2024 17:16:09

LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

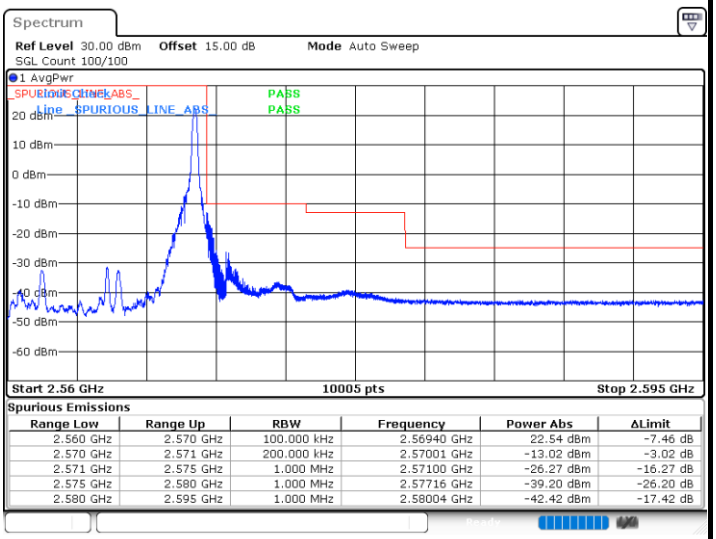


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48940 GHz	-42.10 dBm	-17.10 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49599 GHz	-38.97 dBm	-25.97 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-32.42 dBm	-22.42 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-14.55 dBm	-4.55 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50062 GHz	22.34 dBm	-7.66 dB

Date: 23.APR.2024 17:31:56

Highest Band Edge / 1 RB

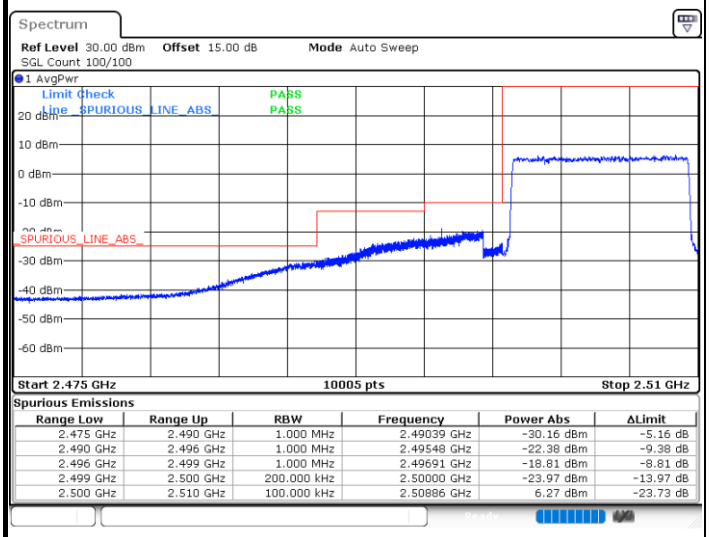


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56940 GHz	22.54 dBm	-7.46 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-13.02 dBm	-3.02 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-26.27 dBm	-16.27 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57716 GHz	-39.20 dBm	-26.20 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58004 GHz	-42.42 dBm	-17.42 dB

Date: 21.APR.2024 17:27:41

Lowest Band Edge / Full RB

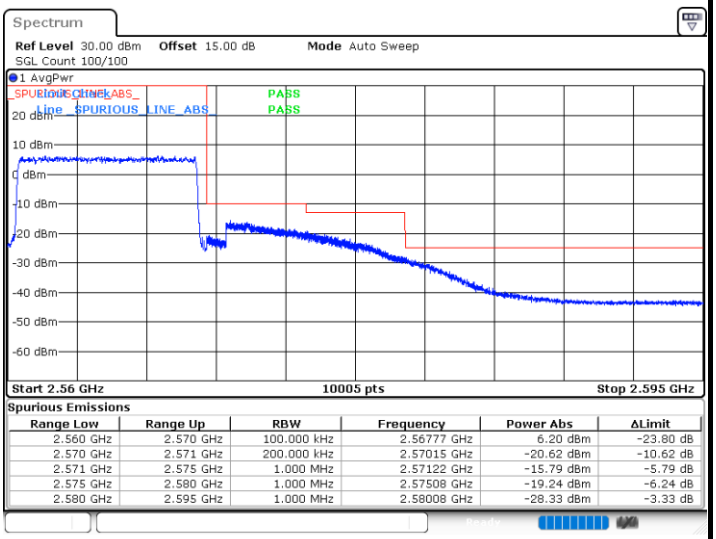


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49039 GHz	-30.16 dBm	-5.16 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49548 GHz	-22.38 dBm	-9.38 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49691 GHz	-18.81 dBm	-8.81 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-23.97 dBm	-13.97 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50886 GHz	6.27 dBm	-23.73 dB

Date: 21.APR.2024 17:21:40

Highest Band Edge / Full RB



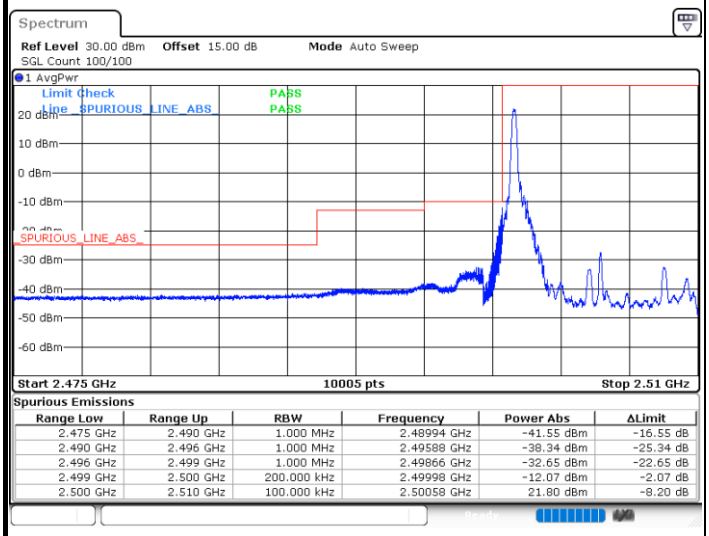
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56777 GHz	6.20 dBm	-23.80 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57015 GHz	-20.62 dBm	-10.62 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57122 GHz	-15.79 dBm	-5.79 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57508 GHz	-19.24 dBm	-6.24 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58008 GHz	-28.33 dBm	-3.33 dB

Date: 21.APR.2024 17:30:00

LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1RB

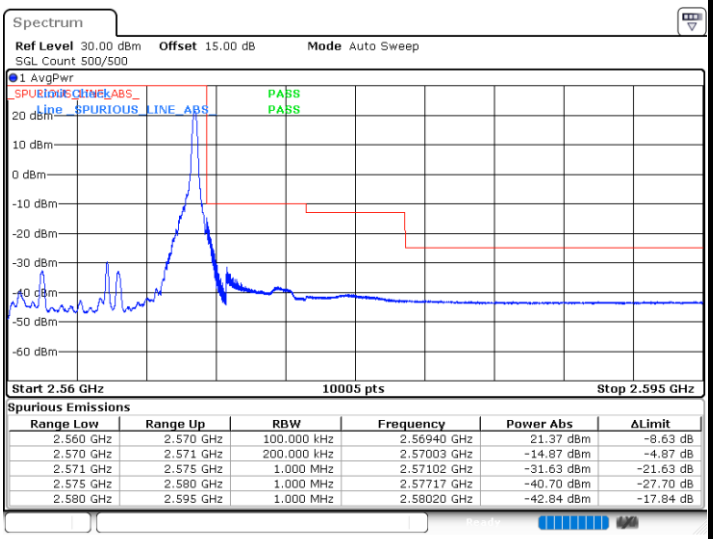


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48994 GHz	-41.55 dBm	-16.55 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49588 GHz	-38.34 dBm	-25.34 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49866 GHz	-32.65 dBm	-22.65 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-12.07 dBm	-2.07 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50058 GHz	21.80 dBm	-8.20 dB

Date: 21.APR.2024 17:20:07

Highest Band Edge / 1 RB

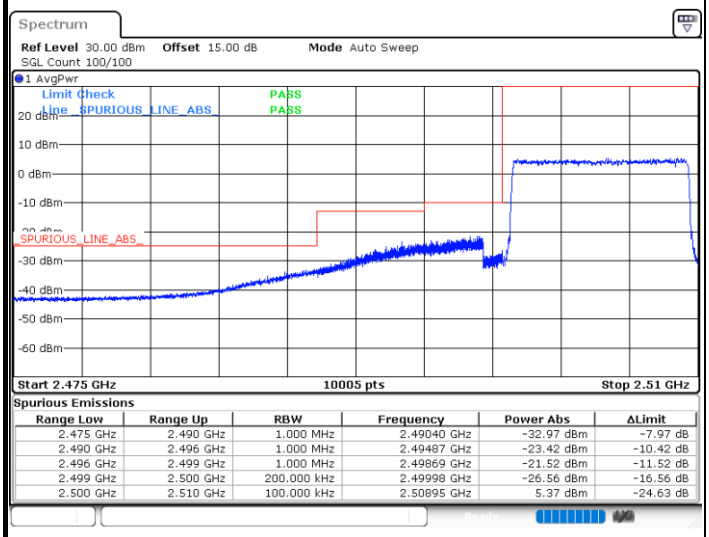


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56940 GHz	21.37 dBm	-8.63 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57003 GHz	-14.87 dBm	-4.87 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57102 GHz	-31.63 dBm	-21.63 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57717 GHz	-40.70 dBm	-27.70 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58020 GHz	-42.84 dBm	-17.84 dB

Date: 23.APR.2024 17:33:35

Lowest Band Edge / Full RB

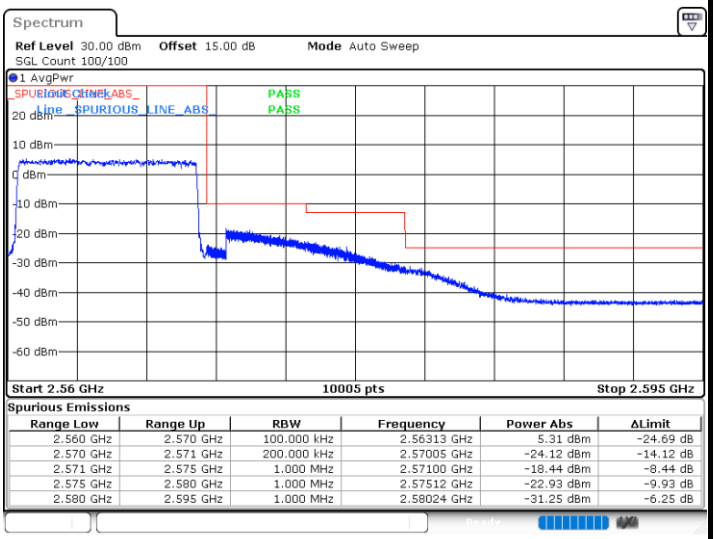


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49040 GHz	-32.97 dBm	-7.97 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49487 GHz	-23.42 dBm	-10.42 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49869 GHz	-21.52 dBm	-11.52 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-26.56 dBm	-16.56 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50895 GHz	5.37 dBm	-24.63 dB

Date: 21.APR.2024 17:22:27

Highest Band Edge / Full RB



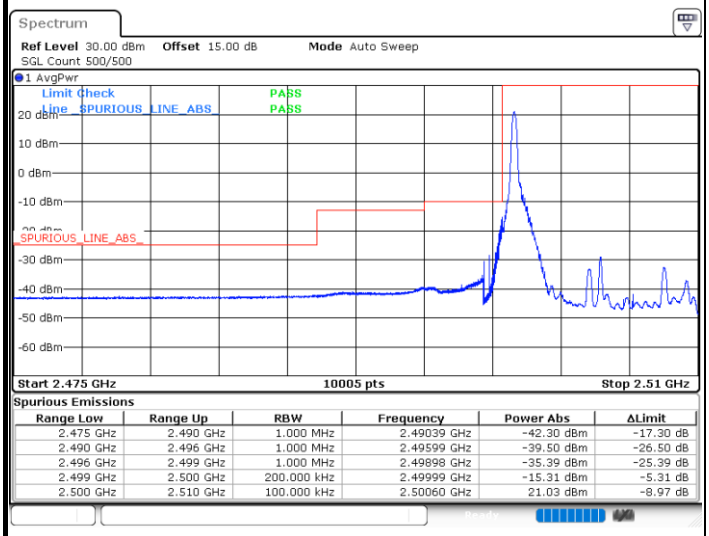
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56313 GHz	5.31 dBm	-24.69 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57005 GHz	-24.12 dBm	-14.12 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-18.44 dBm	-8.44 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57512 GHz	-22.93 dBm	-9.93 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58024 GHz	-31.25 dBm	-6.25 dB

Date: 21.APR.2024 17:30:46

LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1RB

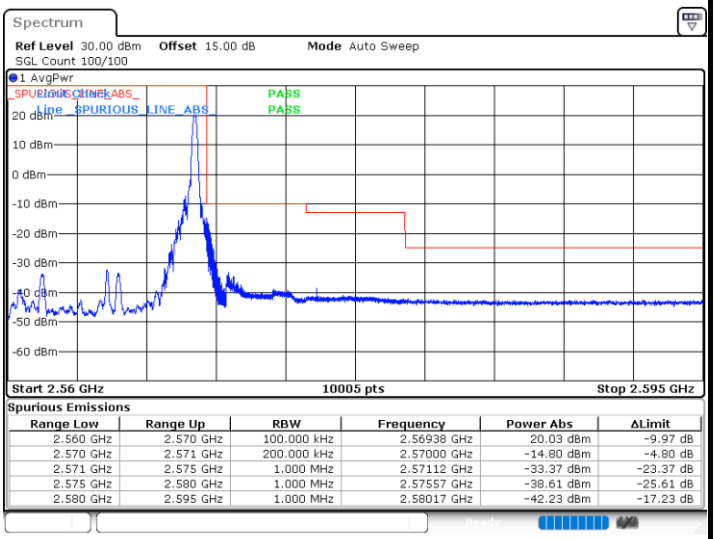


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49039 GHz	-42.30 dBm	-17.30 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49599 GHz	-39.50 dBm	-26.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-35.39 dBm	-25.39 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-15.31 dBm	-5.31 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50060 GHz	21.03 dBm	-8.97 dB

Date: 23.APR.2024 17:31:05

Highest Band Edge / 1 RB

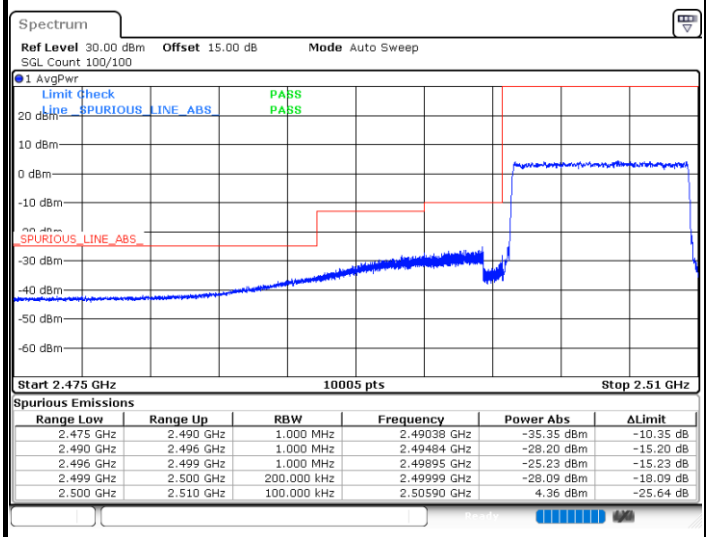


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56938 GHz	20.03 dBm	-9.97 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-14.80 dBm	-4.80 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57112 GHz	-33.37 dBm	-23.37 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57557 GHz	-38.61 dBm	-25.61 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58017 GHz	-42.23 dBm	-17.23 dB

Date: 21.APR.2024 17:29:13

Lowest Band Edge / Full RB

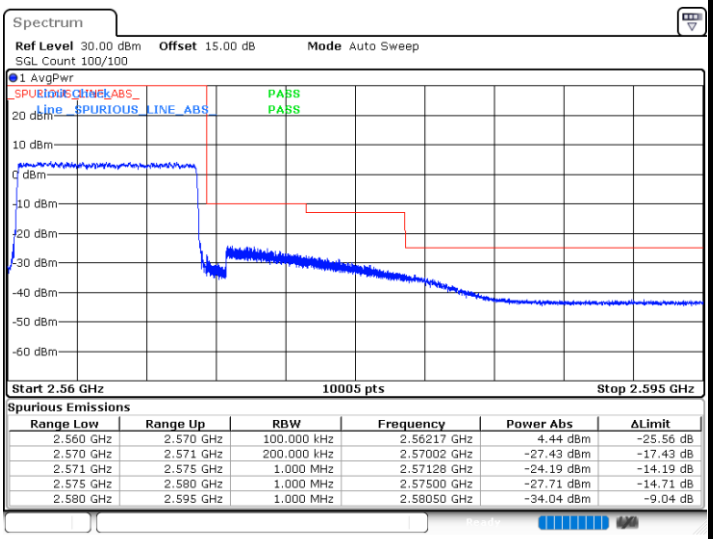


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49038 GHz	-35.35 dBm	-10.35 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49484 GHz	-28.20 dBm	-15.20 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49895 GHz	-25.23 dBm	-15.23 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-28.09 dBm	-18.09 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50590 GHz	4.36 dBm	-25.64 dB

Date: 21.APR.2024 17:23:13

Highest Band Edge / Full RB



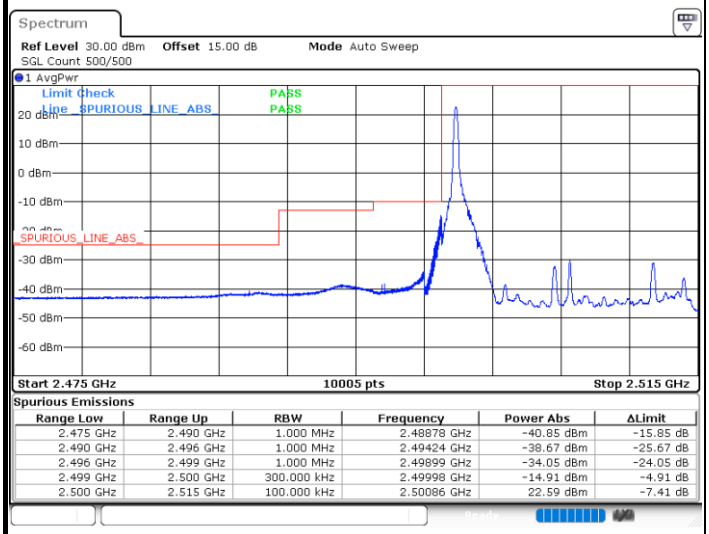
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56217 GHz	4.44 dBm	-25.56 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57002 GHz	-27.43 dBm	-17.43 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57128 GHz	-24.19 dBm	-14.19 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57500 GHz	-27.71 dBm	-14.71 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58050 GHz	-34.04 dBm	-9.04 dB

Date: 21.APR.2024 17:31:33

LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB

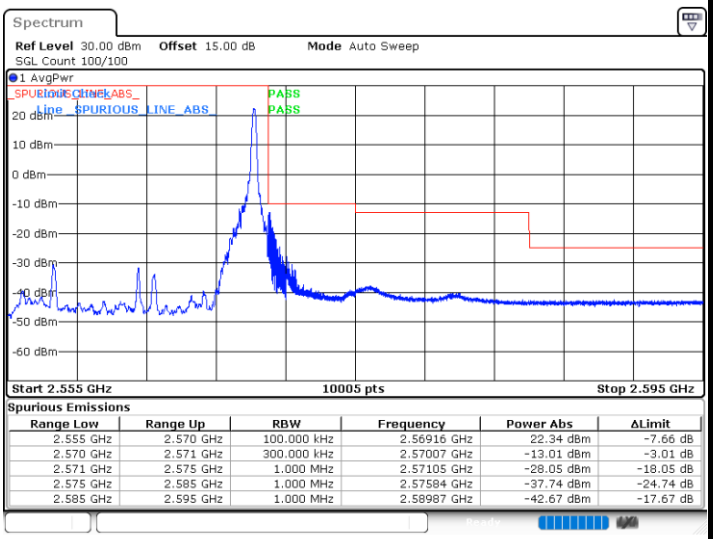


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48878 GHz	-40.85 dBm	-15.85 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49424 GHz	-38.67 dBm	-25.67 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-34.05 dBm	-24.05 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49998 GHz	-14.91 dBm	-4.91 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50086 GHz	22.59 dBm	-7.41 dB

Date: 23.APR.2024 17:35:24

Highest Band Edge / 1 RB

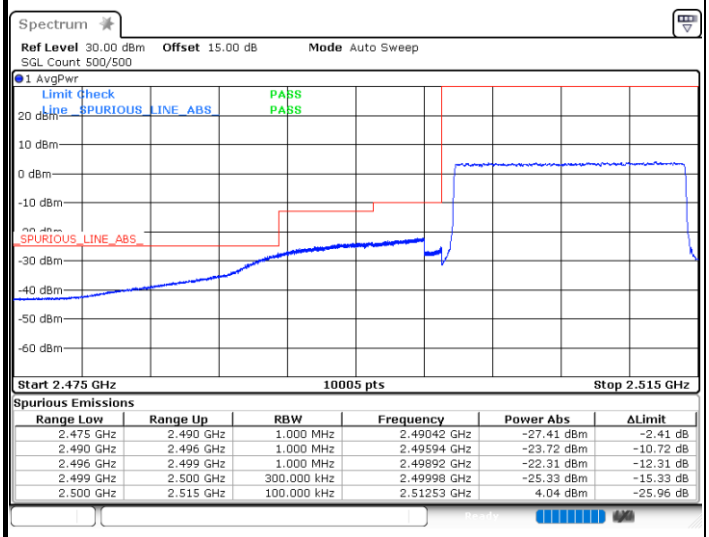


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56916 GHz	22.34 dBm	-7.66 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57007 GHz	-13.01 dBm	-3.01 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57105 GHz	-28.05 dBm	-18.05 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57584 GHz	-37.74 dBm	-24.74 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58987 GHz	-42.67 dBm	-17.67 dB

Date: 21.APR.2024 17:42:39

Lowest Band Edge / Full RB

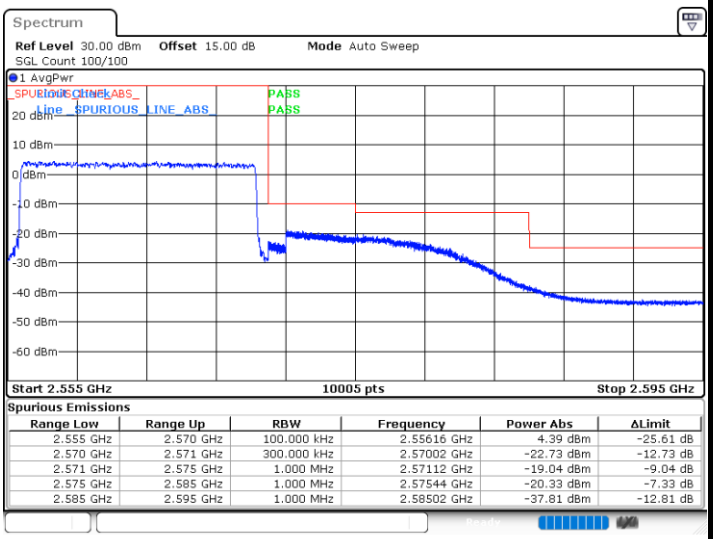


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49042 GHz	-27.41 dBm	-2.41 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49594 GHz	-23.72 dBm	-10.72 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49892 GHz	-22.31 dBm	-12.31 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49998 GHz	-25.33 dBm	-15.33 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.51253 GHz	4.04 dBm	-25.96 dB

Date: 23.APR.2024 17:37:20

Highest Band Edge / Full RB



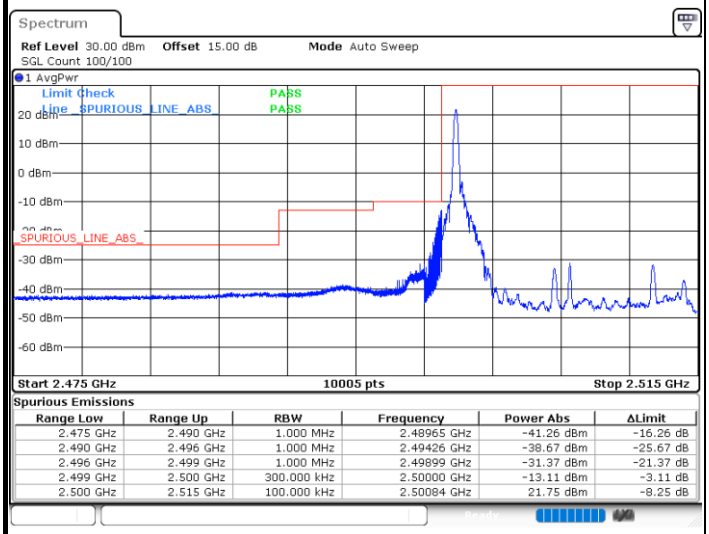
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.55616 GHz	4.39 dBm	-25.61 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57002 GHz	-22.73 dBm	-12.73 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57112 GHz	-19.04 dBm	-9.04 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57544 GHz	-20.33 dBm	-7.33 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58502 GHz	-37.81 dBm	-12.81 dB

Date: 21.APR.2024 17:44:58

LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1RB

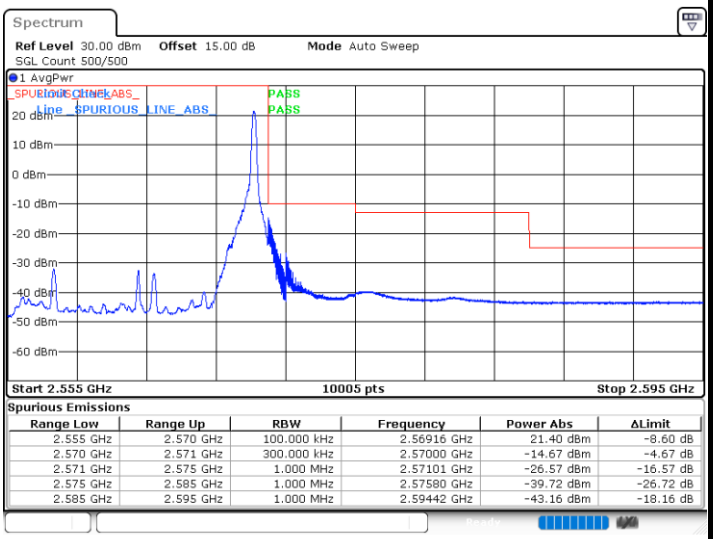


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48965 GHz	-41.26 dBm	-16.26 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49426 GHz	-38.67 dBm	-25.67 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-31.37 dBm	-21.37 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-13.11 dBm	-3.11 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50084 GHz	21.75 dBm	-8.25 dB

Date: 21.APR.2024 17:35:04

Highest Band Edge / 1 RB

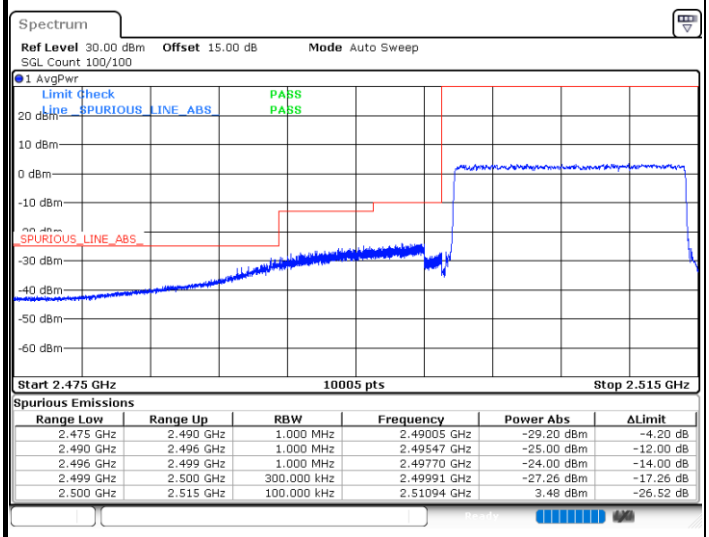


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56916 GHz	21.40 dBm	-8.60 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-14.67 dBm	-4.67 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-26.57 dBm	-16.57 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57580 GHz	-39.72 dBm	-26.72 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.59442 GHz	-43.16 dBm	-18.16 dB

Date: 23.APR.2024 17:39:04

Lowest Band Edge / Full RB

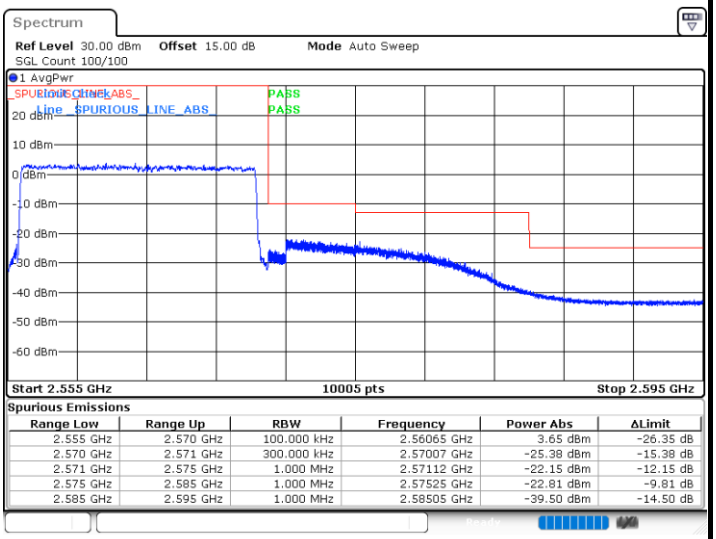


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49005 GHz	-29.20 dBm	-4.20 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49547 GHz	-25.00 dBm	-12.00 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49770 GHz	-24.00 dBm	-14.00 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49991 GHz	-27.26 dBm	-17.26 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.51094 GHz	3.48 dBm	-26.52 dB

Date: 21.APR.2024 17:37:24

Highest Band Edge / Full RB



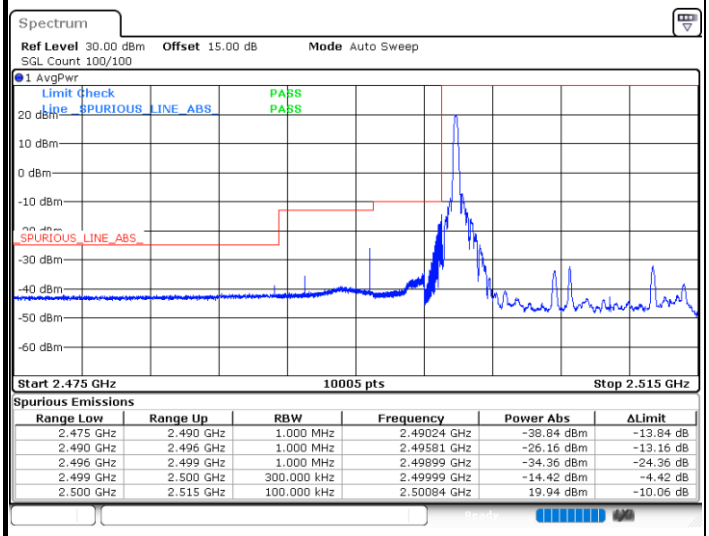
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56065 GHz	3.65 dBm	-26.35 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57007 GHz	-25.38 dBm	-15.38 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57112 GHz	-22.15 dBm	-12.15 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57525 GHz	-22.81 dBm	-9.81 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58505 GHz	-39.50 dBm	-14.50 dB

Date: 21.APR.2024 17:45:45

LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1RB

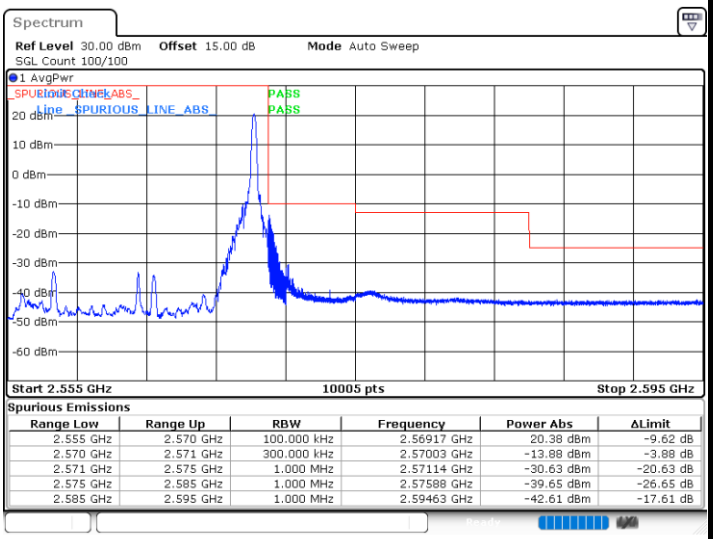


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49024 GHz	-38.84 dBm	-13.84 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49581 GHz	-26.16 dBm	-13.16 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-34.36 dBm	-24.36 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-14.42 dBm	-4.42 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50084 GHz	19.94 dBm	-10.06 dB

Date: 21.APR.2024 17:35:51

Highest Band Edge / 1 RB

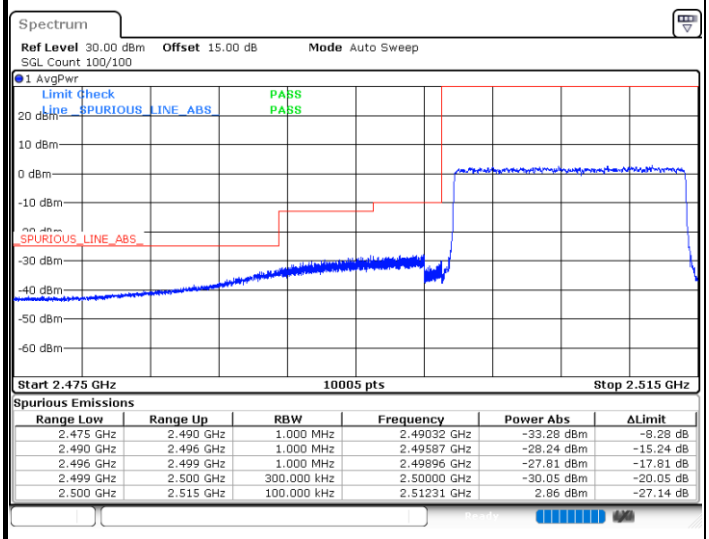


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56917 GHz	20.38 dBm	-9.62 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57003 GHz	-13.88 dBm	-3.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57114 GHz	-30.63 dBm	-20.63 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57588 GHz	-39.65 dBm	-26.65 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.59463 GHz	-42.61 dBm	-17.61 dB

Date: 21.APR.2024 17:44:12

Lowest Band Edge / Full RB

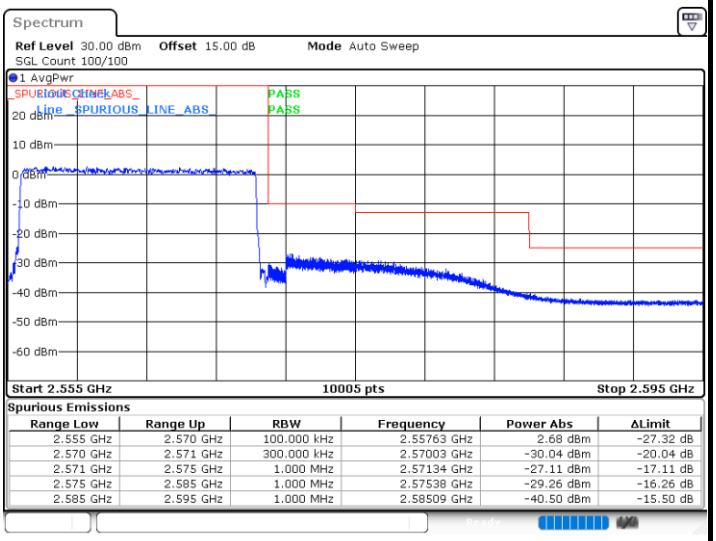


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49032 GHz	-33.28 dBm	-8.28 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49587 GHz	-28.24 dBm	-15.24 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-27.81 dBm	-17.81 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-30.05 dBm	-20.05 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.51231 GHz	2.86 dBm	-27.14 dB

Date: 21.APR.2024 17:38:11

Highest Band Edge / Full RB



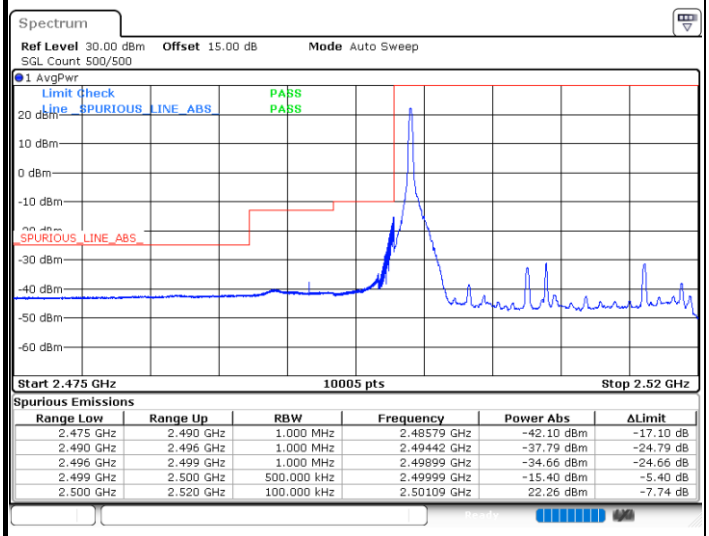
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.55763 GHz	2.68 dBm	-27.32 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57003 GHz	-30.04 dBm	-20.04 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57134 GHz	-27.11 dBm	-17.11 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57538 GHz	-29.26 dBm	-16.26 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58509 GHz	-40.50 dBm	-15.50 dB

Date: 21.APR.2024 17:46:32

LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB

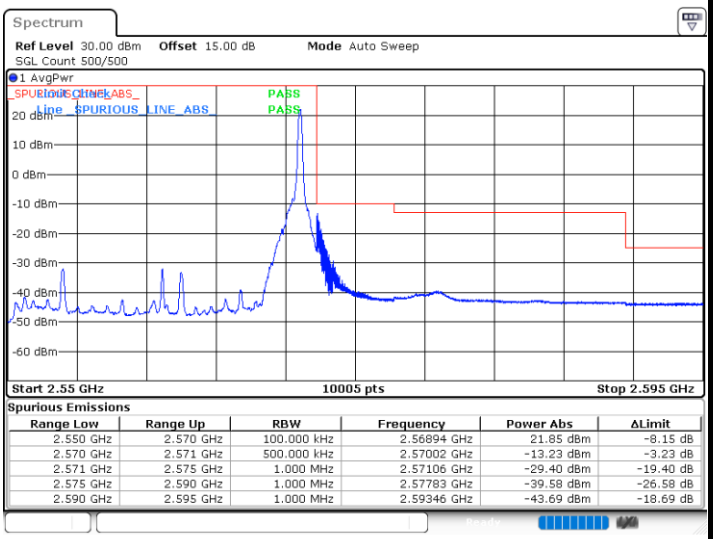


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48579 GHz	-42.10 dBm	-17.10 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49442 GHz	-37.79 dBm	-24.79 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-34.66 dBm	-24.66 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49999 GHz	-15.40 dBm	-5.40 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50109 GHz	22.26 dBm	-7.74 dB

Date: 23.APR.2024 17:53:45

Highest Band Edge / 1 RB

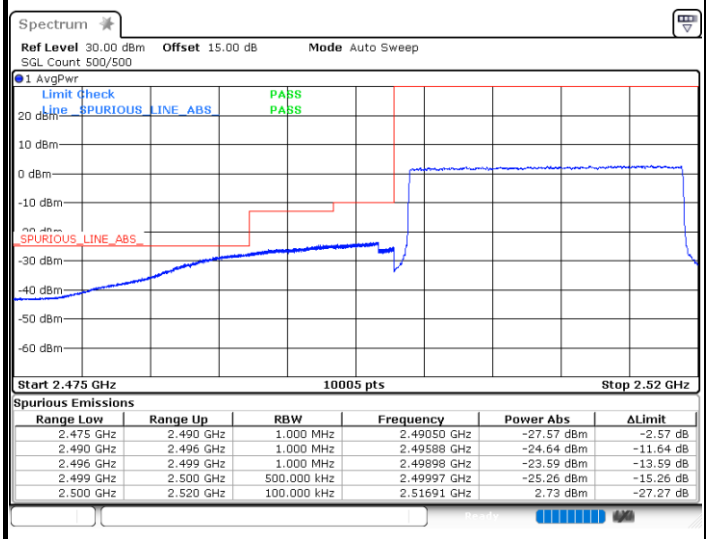


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56894 GHz	21.85 dBm	-8.15 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57002 GHz	-13.23 dBm	-3.23 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57106 GHz	-29.40 dBm	-19.40 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57783 GHz	-39.58 dBm	-26.58 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59346 GHz	-43.69 dBm	-18.69 dB

Date: 23.APR.2024 17:56:47

Lowest Band Edge / Full RB

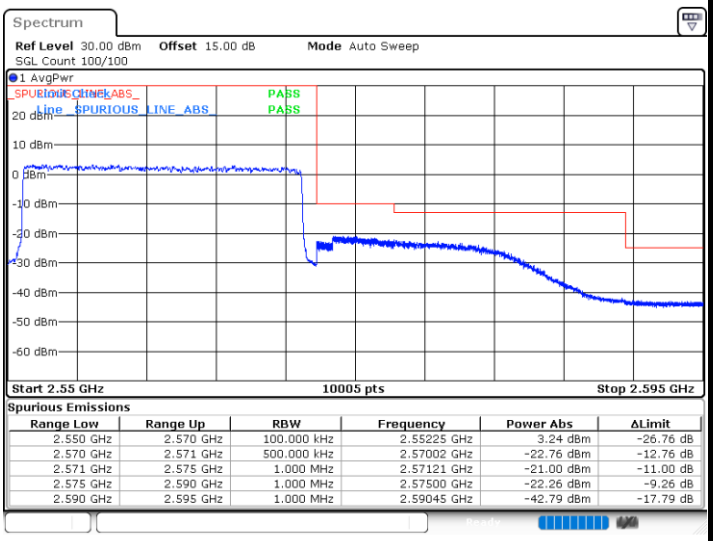


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49050 GHz	-27.57 dBm	-2.57 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49588 GHz	-24.64 dBm	-11.64 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-23.59 dBm	-13.59 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49997 GHz	-25.26 dBm	-15.26 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51691 GHz	2.73 dBm	-27.27 dB

Date: 23.APR.2024 17:58:08

Highest Band Edge / Full RB



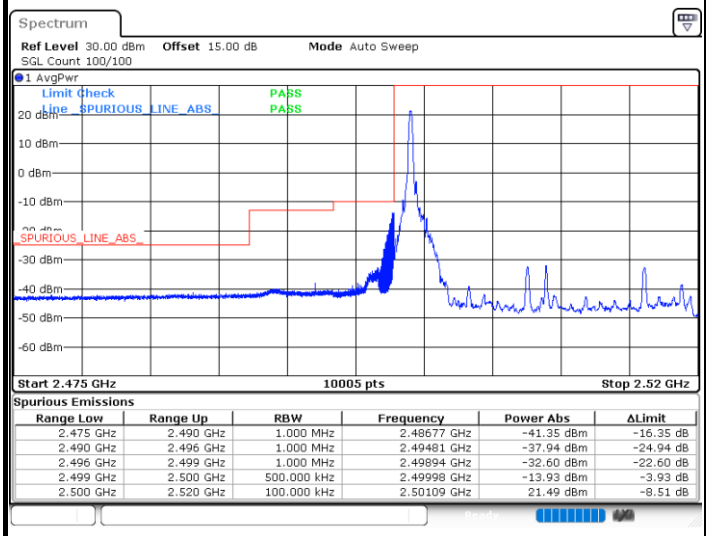
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55225 GHz	3.24 dBm	-26.76 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57002 GHz	-22.76 dBm	-12.76 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57121 GHz	-21.00 dBm	-11.00 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57500 GHz	-22.26 dBm	-9.26 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59045 GHz	-42.79 dBm	-17.79 dB

Date: 21.APR.2024 18:01:22

LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1RB

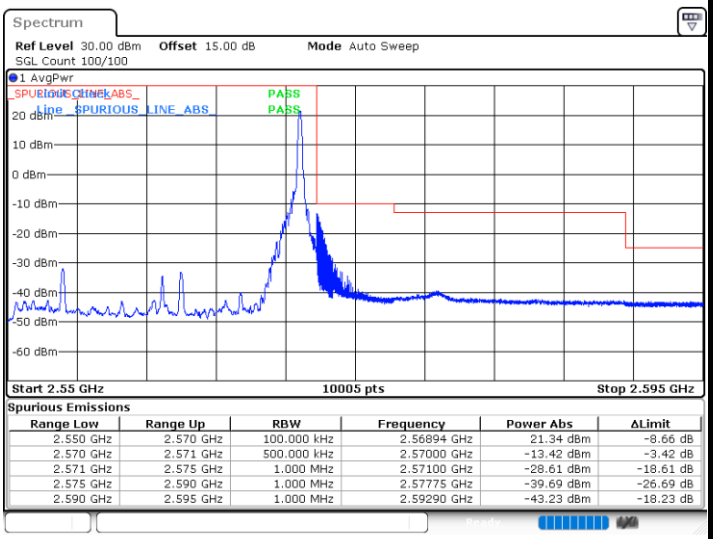


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48677 GHz	-41.35 dBm	-16.35 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49481 GHz	-37.94 dBm	-24.94 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49894 GHz	-32.60 dBm	-22.60 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49998 GHz	-13.93 dBm	-3.93 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50109 GHz	21.49 dBm	-8.51 dB

Date: 21.APR.2024 17:50:04

Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56894 GHz	21.34 dBm	-8.66 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57000 GHz	-13.42 dBm	-3.42 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-28.61 dBm	-18.61 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57775 GHz	-39.69 dBm	-26.69 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59290 GHz	-43.23 dBm	-18.23 dB

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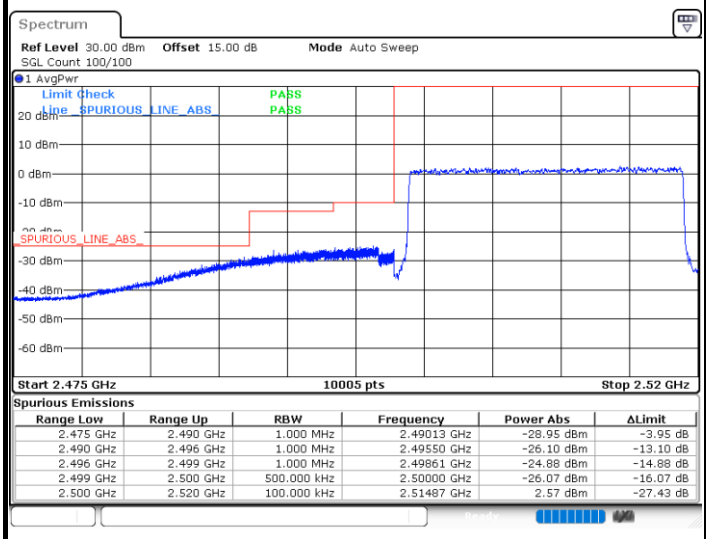
Lowest Band Edge / Full RB

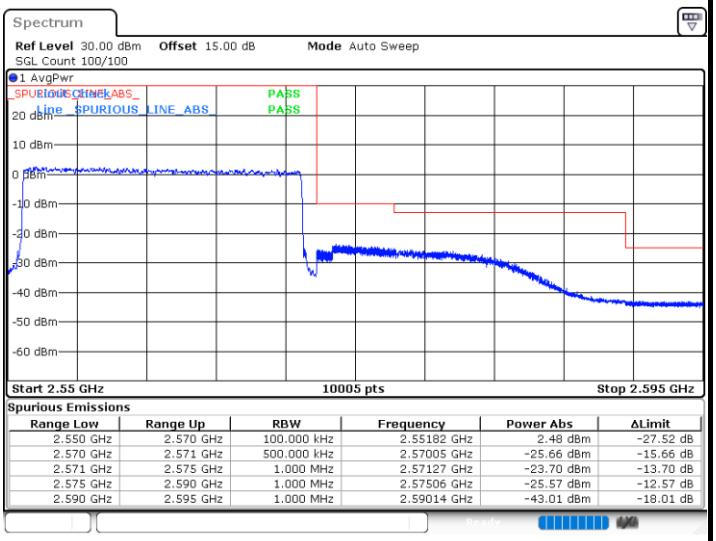


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49013 GHz	-28.95 dBm	-3.95 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49550 GHz	-26.10 dBm	-13.10 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49861 GHz	-24.88 dBm	-14.88 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.50000 GHz	-26.07 dBm	-16.07 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51487 GHz	2.57 dBm	-27.43 dB

Date: 21.APR.2024 17:52:24

Highest Band Edge / Full RB



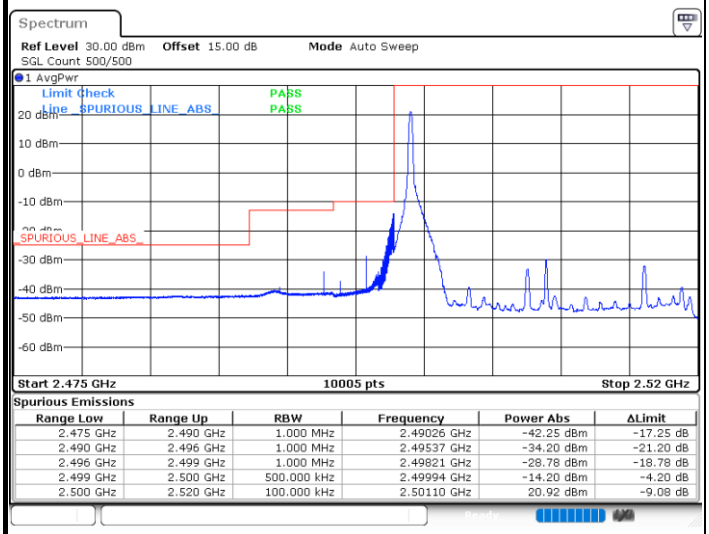
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55182 GHz	2.48 dBm	-27.52 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57005 GHz	-25.66 dBm	-15.66 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57127 GHz	-23.70 dBm	-13.70 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57506 GHz	-25.57 dBm	-12.57 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59014 GHz	-43.01 dBm	-18.01 dB

Date: 21.APR.2024 18:02:08

LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1RB

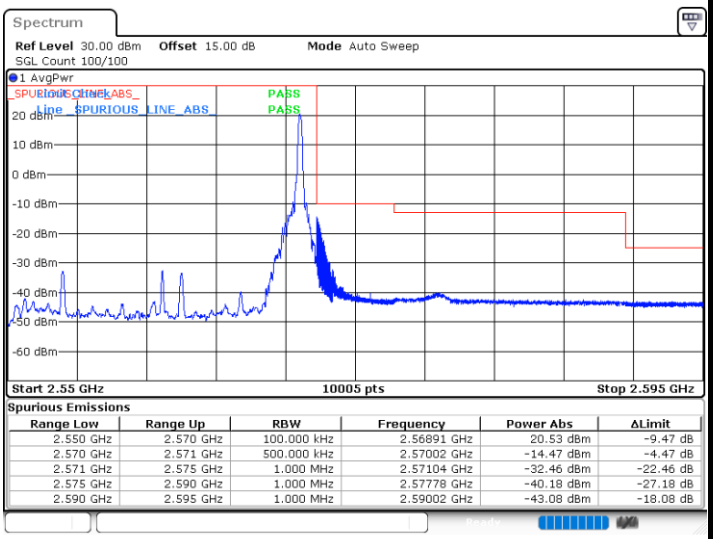


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49026 GHz	-42.25 dBm	-17.25 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49537 GHz	-34.20 dBm	-21.20 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49821 GHz	-28.78 dBm	-18.78 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49994 GHz	-14.20 dBm	-4.20 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50110 GHz	20.92 dBm	-9.08 dB

Date: 23.APR.2024 17:50:15

Highest Band Edge / 1 RB

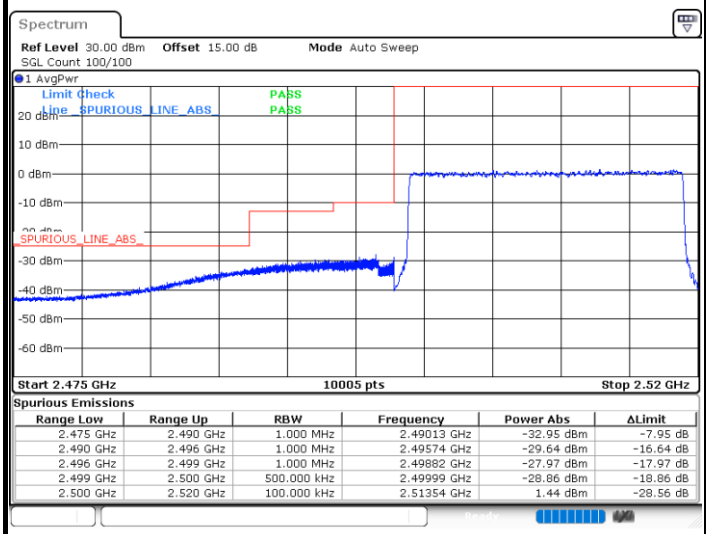


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56891 GHz	20.53 dBm	-9.47 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57002 GHz	-14.47 dBm	-4.47 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-32.46 dBm	-22.46 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57778 GHz	-40.18 dBm	-27.18 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59002 GHz	-43.08 dBm	-18.08 dB

Date: 21.APR.2024 18:00:35

Lowest Band Edge / Full RB

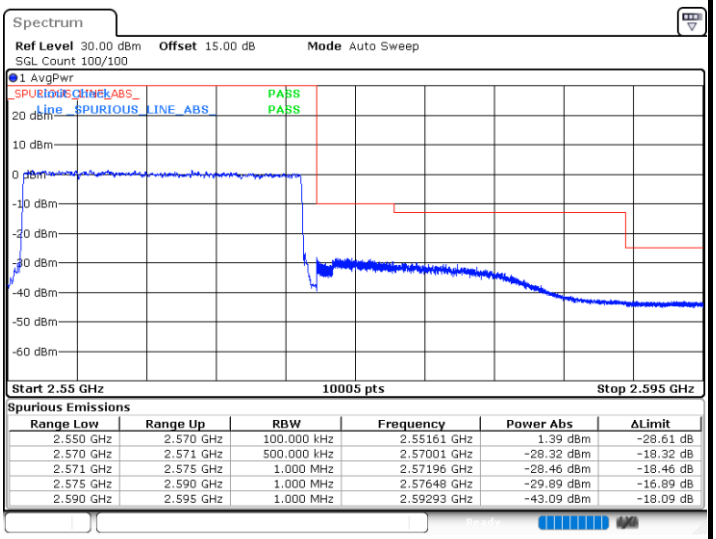


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49013 GHz	-32.95 dBm	-7.95 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49574 GHz	-29.64 dBm	-16.64 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49882 GHz	-27.97 dBm	-17.97 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49999 GHz	-28.86 dBm	-18.86 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51354 GHz	1.44 dBm	-28.56 dB

Date: 21.APR.2024 17:53:11

Highest Band Edge / Full RB



Spurious Emissions

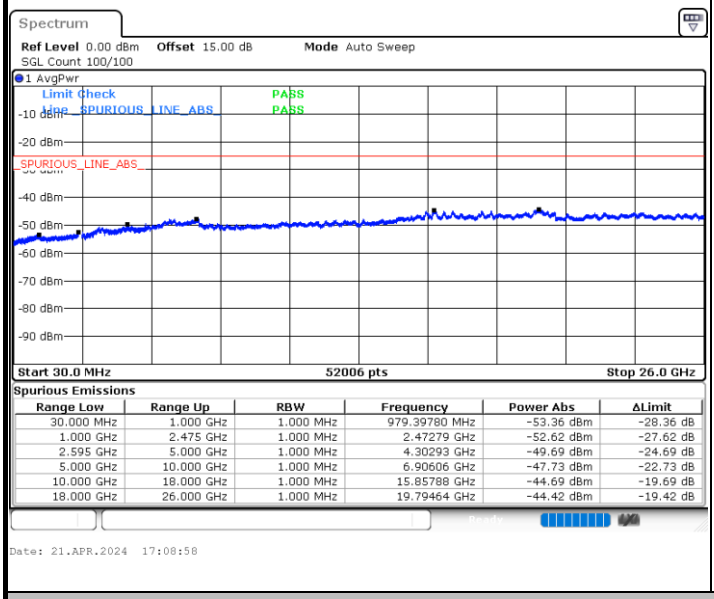
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55161 GHz	1.39 dBm	-28.61 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57001 GHz	-28.32 dBm	-18.32 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57196 GHz	-28.46 dBm	-18.46 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57648 GHz	-29.89 dBm	-16.89 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59293 GHz	-43.09 dBm	-18.09 dB

Date: 21.APR.2024 18:02:55

Conducted Spurious Emission

LTE Band 7 / 5MHz

Lowest Channel / QPSK

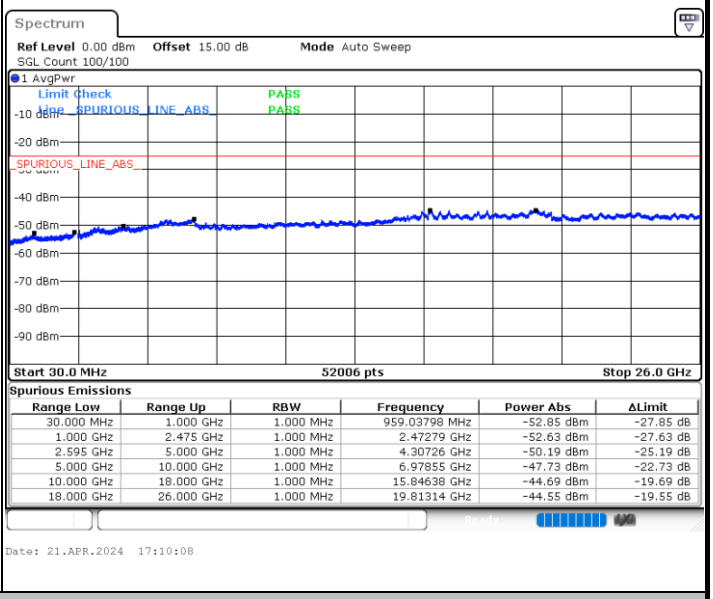


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	979.39780 MHz	-53.36 dBm	-28.36 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47279 GHz	-52.62 dBm	-27.62 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.30293 GHz	-49.69 dBm	-24.69 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.90606 GHz	-47.73 dBm	-22.73 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.85788 GHz	-44.69 dBm	-19.69 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.79464 GHz	-44.42 dBm	-19.42 dB

Date: 21.APR.2024 17:08:58

Middle Channel / QPSK

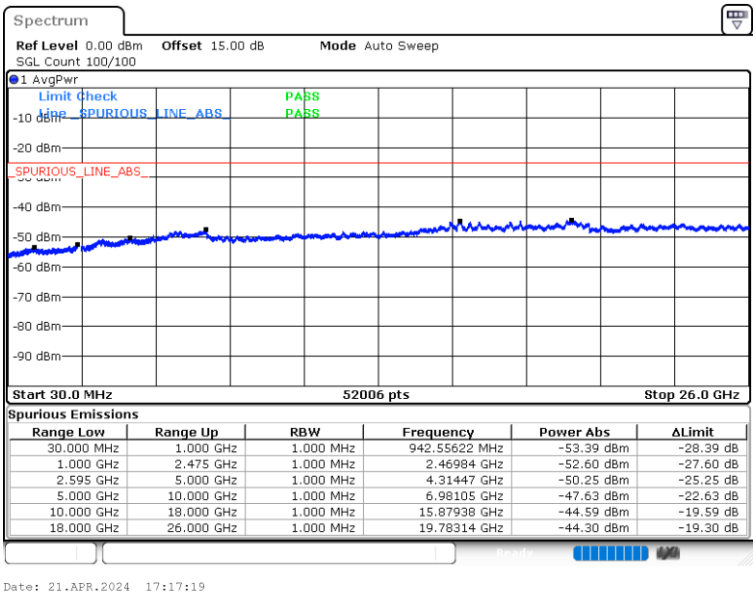


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	959.03798 MHz	-52.85 dBm	-27.85 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47279 GHz	-52.63 dBm	-27.63 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.30726 GHz	-50.19 dBm	-25.19 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.97855 GHz	-47.73 dBm	-22.73 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.84638 GHz	-44.69 dBm	-19.69 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.81314 GHz	-44.55 dBm	-19.55 dB

Date: 21.APR.2024 17:10:08

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	942.55622 MHz	-53.39 dBm	-28.39 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46984 GHz	-52.60 dBm	-27.60 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.31447 GHz	-50.25 dBm	-25.25 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.98105 GHz	-47.63 dBm	-22.63 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.87938 GHz	-44.59 dBm	-19.59 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.78314 GHz	-44.30 dBm	-19.30 dB

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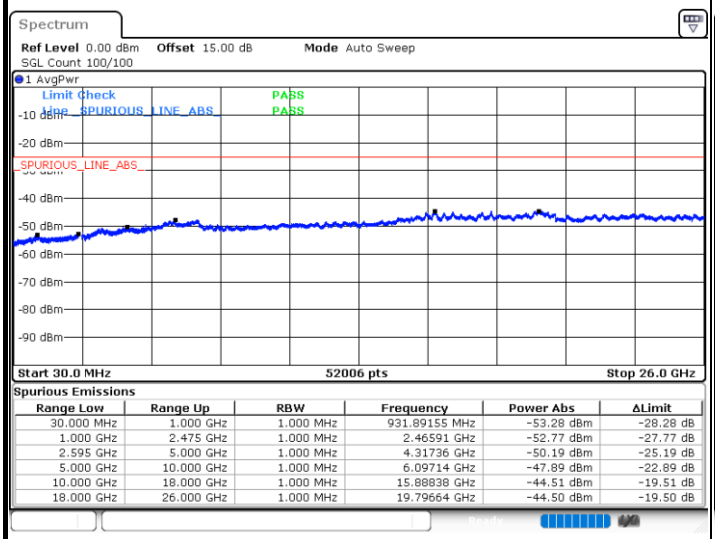
LTE Band 7 / 10MHz

Lowest 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	-53.28 dBm	-28.28 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46591 GHz	-52.77 dBm	-27.77 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.31736 GHz	-50.19 dBm	-25.19 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.09714 GHz	-47.89 dBm	-22.89 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.88838 GHz	-44.51 dBm	-19.51 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.79664 GHz	-44.50 dBm	-19.50 dB

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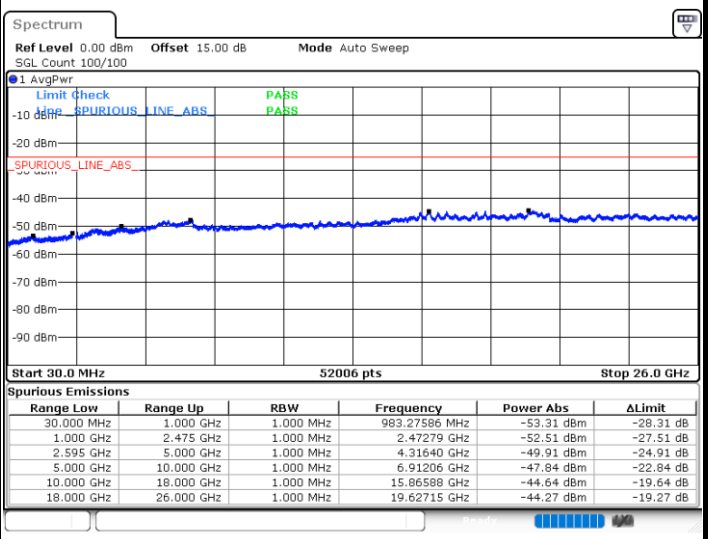
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	983.27586 MHz	-53.31 dBm	-28.31 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47279 GHz	-52.51 dBm	-27.51 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.31640 GHz	-49.91 dBm	-24.91 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.91206 GHz	-47.84 dBm	-22.84 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.86588 GHz	-44.64 dBm	-19.64 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.62715 GHz	-44.27 dBm	-19.27 dB

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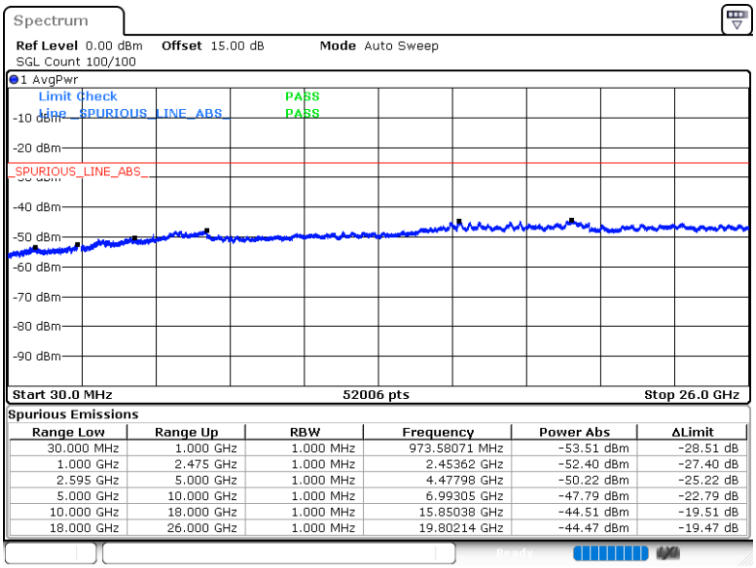
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	973.58071 MHz	-53.51 dBm	-28.51 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45362 GHz	-52.40 dBm	-27.40 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.47798 GHz	-50.22 dBm	-25.22 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.99305 GHz	-47.79 dBm	-22.79 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.85038 GHz	-44.51 dBm	-19.51 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.80214 GHz	-44.47 dBm	-19.47 dB

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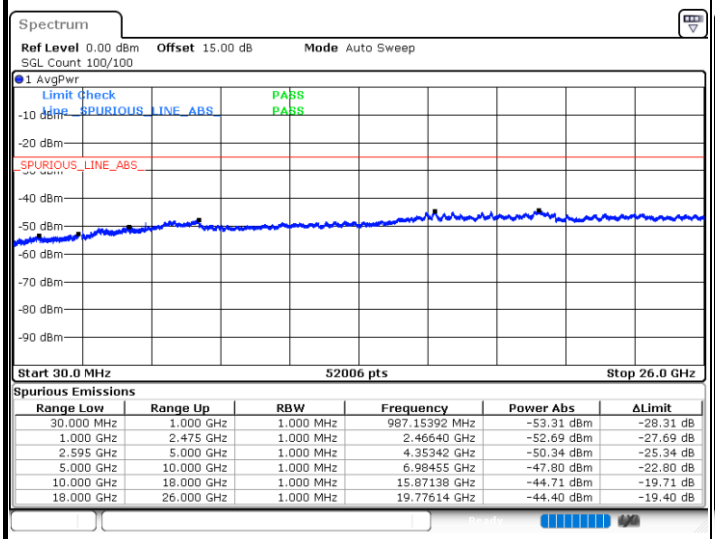
LTE Band 7 / 15MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	987.15392 MHz	-53.31 dBm	-28.31 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46640 GHz	-52.69 dBm	-27.69 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.35342 GHz	-50.34 dBm	-25.34 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.98455 GHz	-47.80 dBm	-22.80 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.87138 GHz	-44.71 dBm	-19.71 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.77614 GHz	-44.40 dBm	-19.40 dB

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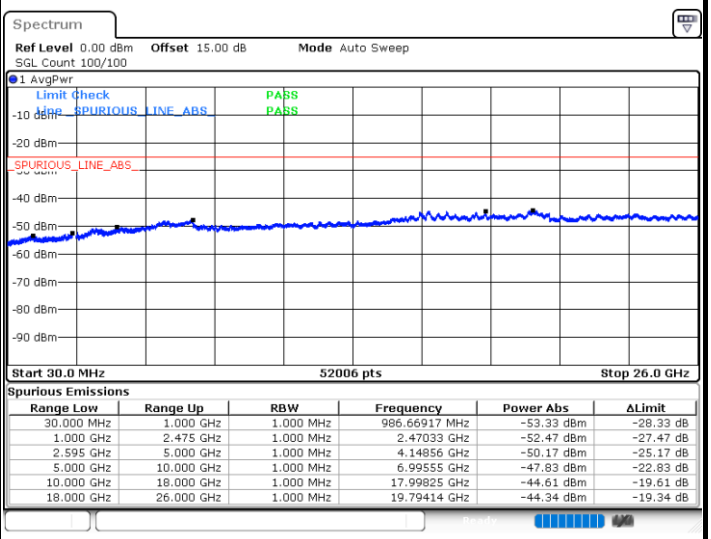
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.66917 MHz	-53.33 dBm	-28.33 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47033 GHz	-52.47 dBm	-27.47 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.14856 GHz	-50.17 dBm	-25.17 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.99555 GHz	-47.83 dBm	-22.83 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.99825 GHz	-44.61 dBm	-19.61 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.79414 GHz	-44.34 dBm	-19.34 dB

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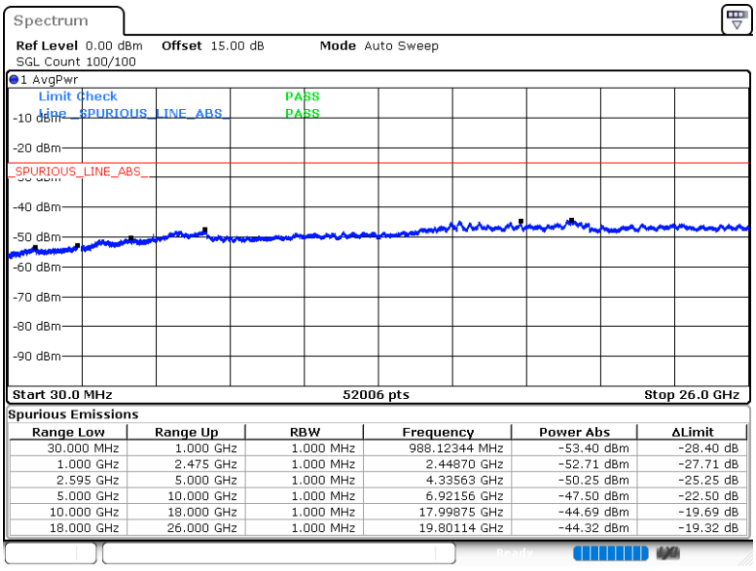
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.12344 MHz	-53.40 dBm	-28.40 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.44870 GHz	-52.71 dBm	-27.71 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.33563 GHz	-50.25 dBm	-25.25 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.92156 GHz	-47.50 dBm	-22.50 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.99875 GHz	-44.69 dBm	-19.69 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.80114 GHz	-44.32 dBm	-19.32 dB

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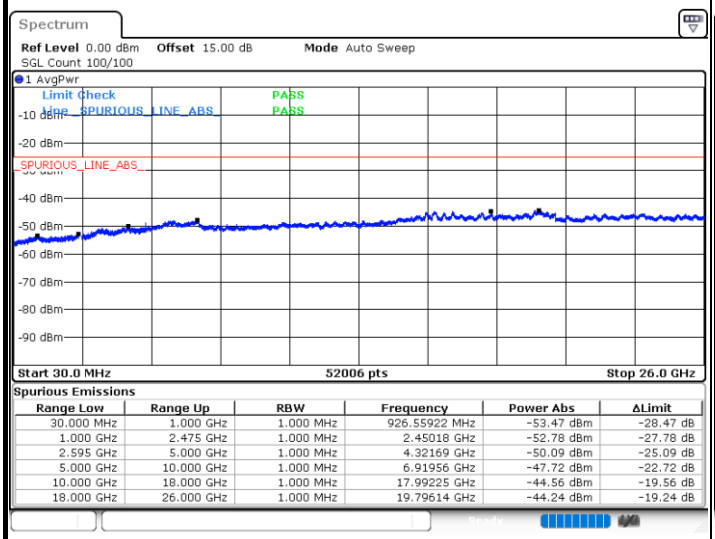
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	926.55922 MHz	-53.47 dBm	-28.47 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45018 GHz	-52.78 dBm	-27.78 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.32169 GHz	-50.09 dBm	-25.09 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.91956 GHz	-47.72 dBm	-22.72 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.99225 GHz	-44.56 dBm	-19.56 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.79614 GHz	-44.24 dBm	-19.24 dB

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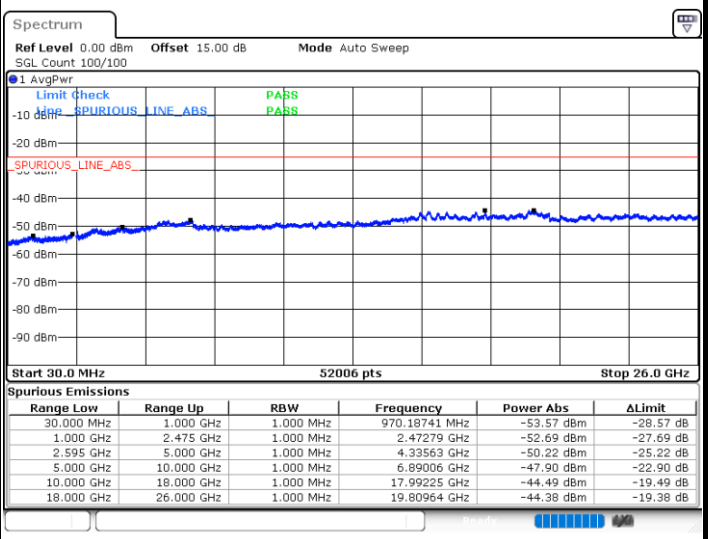
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	970.18741 MHz	-53.57 dBm	-28.57 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47279 GHz	-52.69 dBm	-27.69 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.33563 GHz	-50.22 dBm	-25.22 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.89006 GHz	-47.90 dBm	-22.90 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.99225 GHz	-44.49 dBm	-19.49 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.80964 GHz	-44.38 dBm	-19.38 dB

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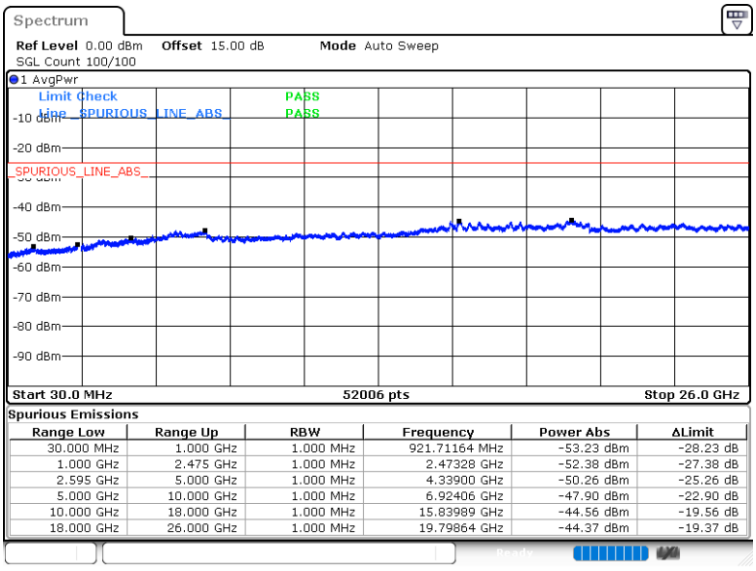
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	921.71164 MHz	-53.23 dBm	-28.23 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47328 GHz	-52.38 dBm	-27.38 dB
2.595 GHz	5.000 GHz	1.000 MHz	4.33900 GHz	-50.26 dBm	-25.26 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.92406 GHz	-47.90 dBm	-22.90 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.83989 GHz	-44.56 dBm	-19.56 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.79864 GHz	-44.37 dBm	-19.37 dB

Date: 21.APR.2024 18:04:06

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0003	

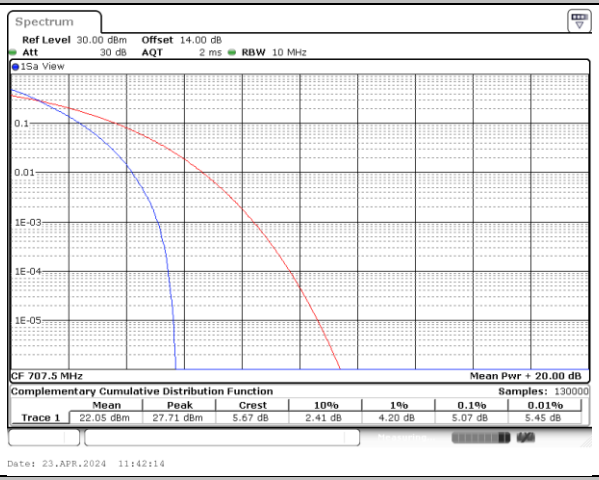
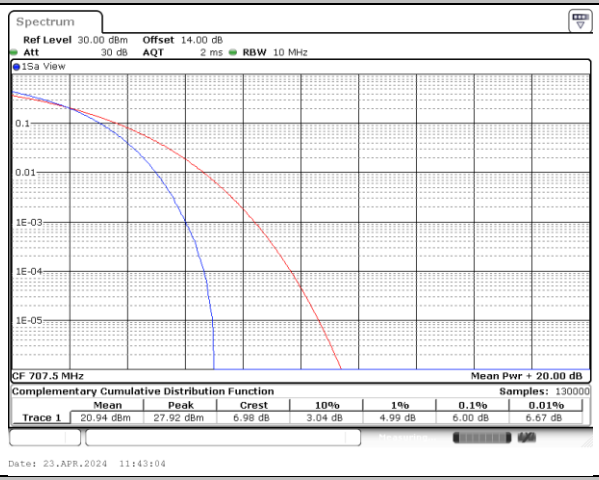
Note:

1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.07	6.00	6.23	PASS

LTE Band 12 / 10MHz / QPSK	LTE Band 12 / 10MHz / 16QAM
Middle Channel / Full RB	Middle Channel / Full RB
	
LTE Band 12 / 10MHz / 64QAM	NA
Middle Channel / Full RB