FCC RF Test Report

APPLICANT	:	Magne AI Global tech limited
EQUIPMENT	:	MAG1
BRAND NAME	:	MaQ
MODEL NAME	:	MA1
FCC ID	:	2BVCPGC603606
STANDARD	:	47 CFR Part 27(F), 27(H), 27(M), 27(N)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Feb. 19, 2026 ~ Mar. 15, 2026

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

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

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

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

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG612311C	Rev. 01	Initial issue of report	Apr. 16, 2026

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)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)	ERP < 3 Watt	PASS	-
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (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) (Band 71)	< 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) (Band 71)	< 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 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(c)(2) §27.53(f) §27.53(g)	Radiated Spurious Emission (Band 12) (Band 13) (Band 17) (Band 71)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 15.34 dB at 10342.00 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

Magne AI Global tech limited

FLAT 1019B,10/F,LIVEN HOUSE,NO.61-63 KING YIP STREET KWUN TONG HK

1.2 Manufacturer

FIH Precision Electronics(Lang Fang)Co.,Ltd.

No. 18 Furao Road, Longhe High tech Industrial Development Zone, Anci District, Langfang City, Hebei Province

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	MAG1
Brand Name	MaQ
Model Name	MA1
FCC ID	2BVCPGC603606
IMEI Code	Conducted: 016813000002111/016813000002129 Radiation: 016813000003457
EUT Stage	Production Unit

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

1.4 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 LTE Band 71: 663 MHz ~ 698 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 LTE Band 71: 617 MHz ~ 652 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 LTE Band 71 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 7 : 23.27 dBm LTE Band 12 : 23.61 dBm LTE Band 13 : 23.46 dBm LTE Band 17 : 23.11 dBm LTE Band 38 : 23.12 dBm LTE Band 41 : 23.45 dBm LTE Band 71 : 23.74 dBm
Antenna Gain	LTE Band 7 : -4 dBi LTE Band 12 : -5 dBi LTE Band 13 : -5 dBi LTE Band 17 : -5 dBi LTE Band 38 : -4 dBi LTE Band 41 : -4 dBi LTE Band 71 : -8 dBi
Type of Modulation	QPSK / 16QAM / 64QAM

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	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.0838	4M49G7D	0.0610	4M51W7D
10	2505.0 ~ 2565.0	0.0834	9M05G7D	0.0603	8M97W7D
15	2507.5 ~ 2562.5	0.0820	13M4G7D	0.0611	13M5W7D
20	2510.0 ~ 2560.0	0.0845	17M9G7D	0.0618	17M9W7D
LTE Band 12		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	699.7 ~ 715.3	0.0429	1M09G7D	0.0308	1M09W7D
3	700.5 ~ 714.5	0.0439	2M70G7D	0.0391	2M70W7D
5	701.5 ~ 713.5	0.0436	4M49G7D	0.0385	4M49W7D
10	704.0 ~ 711.0	0.0443	9M09G7D	0.0394	9M03W7D
LTE Band 13		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	779.5 ~ 784.5	0.0419	4M50G7D	0.0330	4M50W7D
10	782.0	0.0428	9M03G7D	0.0336	9M01W7D
LTE Band 17		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	706.5 ~ 713.5	0.0387	4M49G7D	0.0347	4M49W7D
10	709.0 ~ 711.0	0.0394	9M09G7D	0.0352	9M03W7D
LTE Band 38		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.0811	4M49G7D	0.0587	4M48W7D
10	2575.0 ~ 2615.0	0.0809	9M01G7D	0.0592	9M03W7D
15	2577.5 ~ 2612.5	0.0802	13M3G7D	0.0592	13M4W7D
20	2580.0 ~ 2610.0	0.0817	18M0G7D	0.0596	17M7W7D

LTE Band 41		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2498.5 ~ 2687.5	0.0853	4M49G7D	0.0639	4M48W7D
10	2501.0 ~ 2685.0	0.0867	9M01G7D	0.0641	9M03W7D
15	2503.5 ~ 2682.5	0.0875	13M3G7D	0.0641	13M4W7D
20	2506.0 ~ 2680.0	0.0881	18M0G7D	0.0653	17M7W7D
LTE Band 71		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	665.5 ~ 695.5	0.0226	4M50G7D	0.0177	4M51W7D
10	668.0 ~ 693.0	0.0226	9M03G7D	0.0177	9M01W7D
15	670.5 ~ 690.5	0.0224	13M4G7D	0.0179	13M3W7D
20	673.0 ~ 688.0	0.0229	17M9G7D	0.0180	17M8W7D

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

1.7 Testing Location

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

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

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC LTE_Ver2.0 Auto_china_210503	2.0
2.	03CH04-KS	AUDIX	E3	210616

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 27(F), 27(H), 27(M), 27(N)
- 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

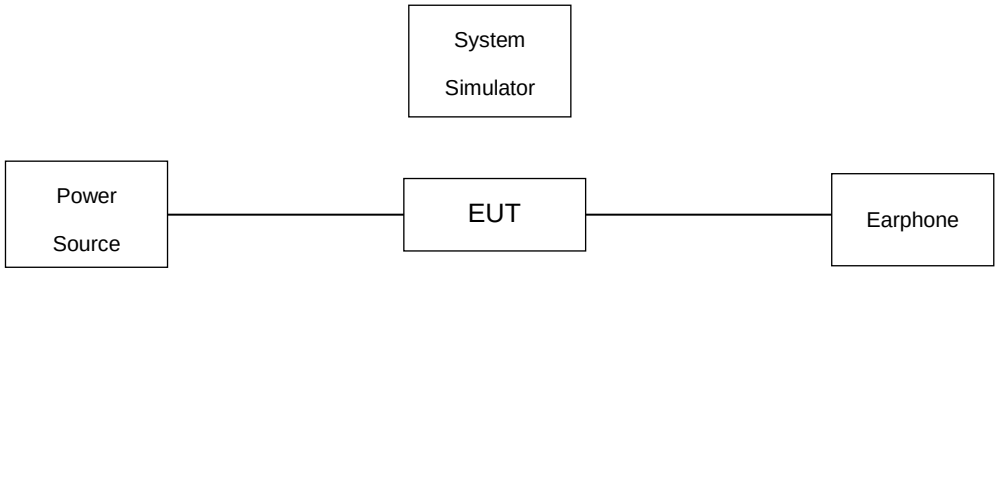
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

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

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	7	-	-	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
	13	-	-	v	v	-	-	v	v	v	v		v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v		v	v	v	v
	38			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
	71	-	-	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	
	71	-	-				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	
	71	-	-	v	v	v	v	v	v				v		v	
Conducted Band Edge	7	-	-	v	v	v	v	v	v		v		v	v		v
	12	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
	71	-	-	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

	71	-	-	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	
	71	-	-		v			v					v		v	
E.R.P / E.I.R.P	7	-	-	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
	13	-	-	v	v	-	-	v	v	v	v		v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v		v	v	v	v
	38			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
	71	-	-	v	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	7	Worst Case												v	v	v
	12	Worst Case												v	v	v
	13	Worst Case												v	v	v
	41	Worst Case												v	v	v
	71	Worst Case												v	v	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
3.	Earphone	N/A	N/A	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.8 dB and 10dB attenuator.

Example :

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

= 5.8 + 10 = 15.8 (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 71 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	133222	133322	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133272	133422
	Frequency	668.0	678.0	693.0
5	Channel	133147	133247	133447
	Frequency	665.5	675.5	695.5

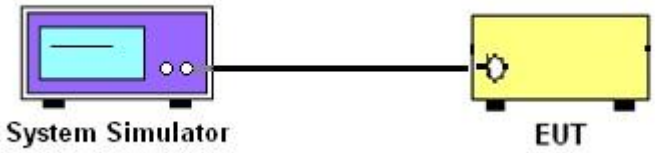
3 Conducted Test Items

3.1 Measuring Instruments

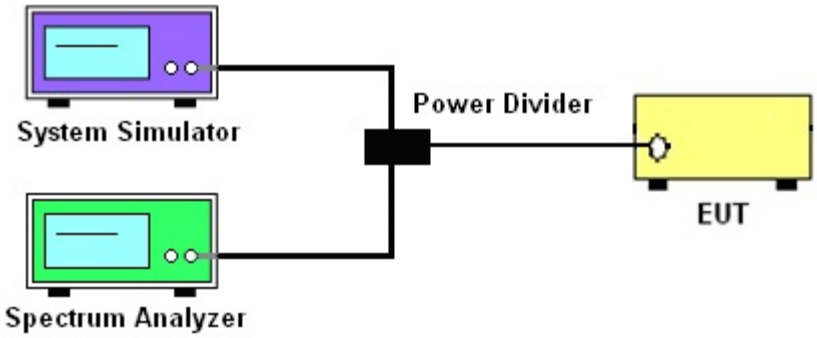
See list of measuring instruments of this test report.

3.2 Test Setup

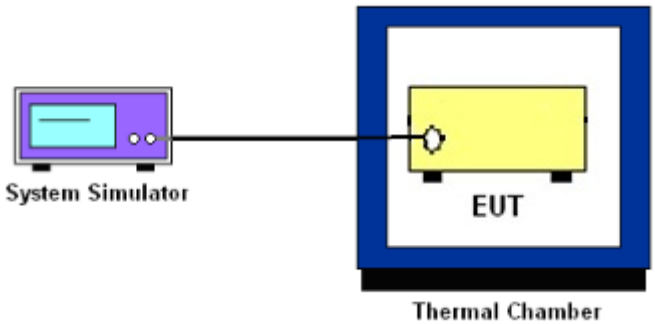
3.2.1 Conducted Output Power



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 12/13/17/71.

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

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.

3.5 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 + 10log$_{10}$(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
1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
5. Set spectrum analyzer with RMS detector.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. 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.
8. For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.
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.

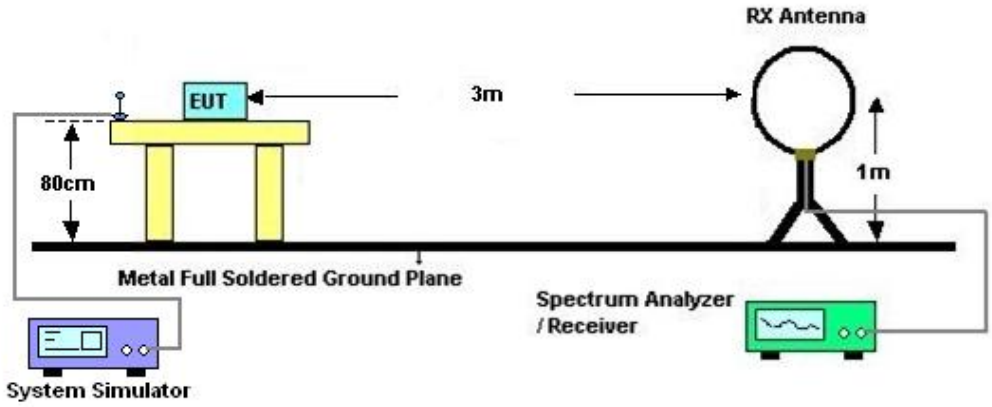
4 Radiated Test Items

4.1 Measuring Instruments

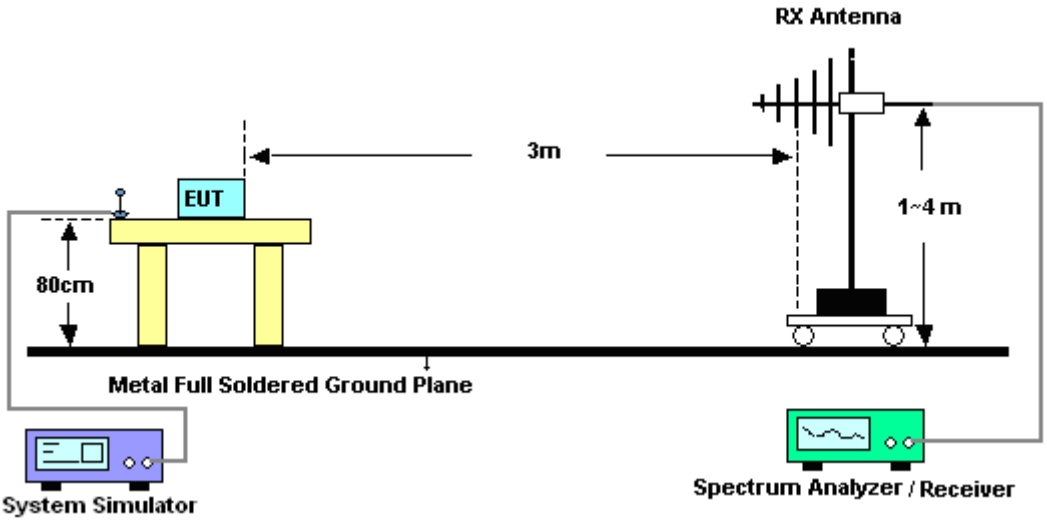
See list of measuring instruments of this test report.

4.2 Test Setup

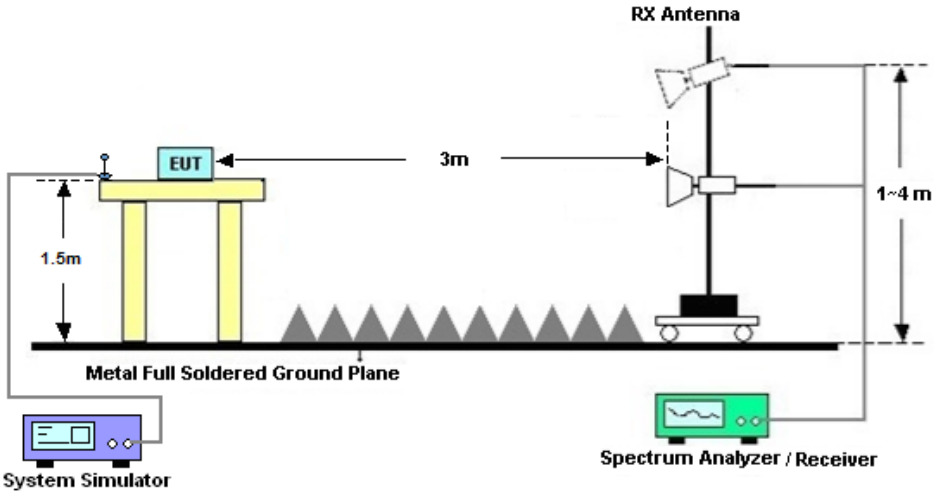
4.2.1 For radiated test below 30MHz



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
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 10, 2025	Mar. 15, 2026	Oct. 09, 2026	Radiation (03CH04-KS)
Active loop antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Aug. 10, 2025	Mar. 15, 2026	Aug. 09, 2026	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Nov. 22, 2025	Mar. 15, 2026	Nov. 21, 2026	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 22, 2025	Mar. 15, 2026	Aug. 21, 2026	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 10, 2026	Mar. 15, 2026	Jan. 09, 2027	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul. 02, 2025	Mar. 15, 2026	Jul. 01, 2026	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060852	18~40GHz	Dec. 24, 2025	Mar. 15, 2026	Dec. 23, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060890	1Ghz-18Ghz	May 23, 2025	Mar. 15, 2026	May 22, 2026	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 11, 2025	Mar. 15, 2026	Oct. 10, 2026	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 15, 2026	NCR	Radiation (03CH04-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Jul. 07, 2025	Feb. 19, 2026~ Feb. 28, 2026	Jul. 06, 2026	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Feb. 19, 2026~ Feb. 28, 2026	NCR	Conducted (TH01-KS)
Radio communication	Anritsu	MT8821C	6261806798	2G/3G/LTE band 1-46 ,48,65-70	Jul. 03, 2025	Feb. 19, 2026~ Feb. 28, 2026	Jul. 02, 2026	Conducted (TH01-KS)
Temperature & humidity	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 02, 2025	Feb. 19, 2026~ Feb. 28, 2026	Jul. 01, 2026	Conducted (TH01-KS)

NCR: No Calibration Required

6 Measurement Uncertainty

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

Uncertainty of Conducted Measurement

Conducted Spurious Emission & Bandedge	**±2.00 dB**
Occupied Channel Bandwidth	**±0.384%**
Conducted Power	**±0.90 dB**
Peak to Average Ratio	**±0.90 dB**
Frequency Stability	**±0.38 ppm**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.83dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.83dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.82dB**

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

Appendix A. Test Results of Conducted Test

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

Conducted Output Power(Average power) and ERP/EIRP

LTE Band7:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20850	20850	21350			
Frequency (MHz)				2510	2535	2560	L	M	H
20	QPSK	1	0	22.80	23.27	23.24	0.0759	0.0845	0.0839
20	QPSK	1	99	22.56	23.07	22.93	0.0718	0.0807	0.0782
20	QPSK	100	0	21.39	21.94	21.80	0.0548	0.0622	0.0603
20	16QAM	1	0	21.32	21.91	21.76	0.0540	0.0618	0.0597
20	64QAM	1	0	20.97	21.44	21.29	0.0498	0.0555	0.0536
Channel				20825	21100	21375	EIRP(W)		
Frequency (MHz)				2507.5	2535	2562.5	L	M	H
15	QPSK	1	0	22.75	23.14	23.12	0.0750	0.0820	0.0817
15	16QAM	1	0	21.18	21.86	21.67	0.0522	0.0611	0.0585
Channel				20800	21100	21400	EIRP(W)		
Frequency (MHz)				2505	2535	2565	L	M	H
10	QPSK	1	0	22.74	23.15	23.21	0.0748	0.0822	0.0834
10	16QAM	1	0	21.28	21.80	21.75	0.0535	0.0603	0.0596
Channel				20775	21100	21425	EIRP(W)		
Frequency (MHz)				2502.5	2535	2567.5	L	M	H
5	QPSK	1	0	22.70	23.23	23.19	0.0741	0.0838	0.0830
5	16QAM	1	0	21.26	21.85	21.72	0.0532	0.0610	0.0592

LTE Band12:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	23.38	23.24	23.61	0.0420	0.0406	0.0443
10	QPSK	1	49	23.16	23.13	23.44	0.0399	0.0396	0.0426
10	QPSK	50	0	22.65	22.60	22.82	0.0355	0.0351	0.0369
10	16QAM	1	0	22.91	22.85	23.11	0.0377	0.0372	0.0394
10	64QAM	1	0	22.90	22.89	22.96	0.0376	0.0375	0.0381

Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	23.31	23.16	23.54	0.0413	0.0399	0.0436
5	16QAM	1	0	22.87	22.71	23.01	0.0373	0.0360	0.0385
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	23.33	23.22	23.57	0.0415	0.0405	0.0439
3	16QAM	1	0	22.77	22.72	23.07	0.0365	0.0361	0.0391
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	23.23	23.22	23.47	0.0406	0.0405	0.0429
1.4	16QAM	1	0	21.87	21.82	22.04	0.0296	0.0293	0.0308

LTE Band13:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23230					
Frequency (MHz)				782				M	
10	QPSK	1	0		23.46			0.0428	
10	QPSK	1	49		23.41			0.0423	
10	QPSK	50	0		22.36			0.0332	
10	16QAM	1	0		22.41			0.0336	
10	64QAM	1	0		21.85			0.0295	
Channel				23205	23230	23255	ERP(W)		
Frequency (MHz)				779.5	782	784.5	L	M	H
5	QPSK	1	0	23.31	23.37	23.12	0.0413	0.0419	0.0395
5	16QAM	1	0	22.21	22.33	21.96	0.0321	0.0330	0.0303

LTE Band17:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23780	23790	23800			
Frequency (MHz)				709	710	711	L	M	H
10	QPSK	1	0	23.04	23.11	22.94	0.0388	0.0394	0.0379
10	QPSK	1	49	22.68	22.78	22.57	0.0357	0.0366	0.0348
10	QPSK	50	0	22.25	22.40	22.16	0.0324	0.0335	0.0317
10	16QAM	1	0	22.43	22.61	22.33	0.0337	0.0352	0.0330
10	64QAM	1	0	21.42	21.51	21.29	0.0267	0.0273	0.0259
Channel				23755	23790	23825	ERP(W)		
Frequency (MHz)				706.5	710	713.5	L	M	H
5	QPSK	1	0	22.96	23.03	22.84	0.0381	0.0387	0.0371
5	16QAM	1	0	22.35	22.55	22.32	0.0331	0.0347	0.0329

LTE Band38:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610	L	M	H
20	QPSK	1	0	22.87	23.12	22.79	0.0771	0.0817	0.0757
20	QPSK	1	99	22.35	22.73	22.36	0.0684	0.0746	0.0685
20	QPSK	100	0	21.52	21.91	21.58	0.0565	0.0618	0.0573
20	16QAM	1	0	21.44	21.75	21.31	0.0555	0.0596	0.0538
20	64QAM	1	0	20.65	20.94	20.50	0.0462	0.0494	0.0447
Channel				37825	38000	38175	EIRP(W)		
Frequency (MHz)				2577.5	2595	2612.5	L	M	H
15	QPSK	1	0	22.74	23.04	22.70	0.0748	0.0802	0.0741
15	16QAM	1	0	21.34	21.72	21.20	0.0542	0.0592	0.0525
Channel				37800	38000	38200	EIRP(W)		
Frequency (MHz)				2575	2595	2615	L	M	H
10	QPSK	1	0	22.78	23.08	22.70	0.0755	0.0809	0.0741
10	16QAM	1	0	21.29	21.72	21.24	0.0536	0.0592	0.0530
Channel				37775	38000	38225	EIRP(W)		
Frequency (MHz)				2572.5	2595	2617.5	L	M	H
5	QPSK	1	0	22.79	23.09	22.71	0.0757	0.0811	0.0743
5	16QAM	1	0	21.40	21.69	21.19	0.0550	0.0587	0.0524

LTE Band41:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				39750	40620	41490			
Frequency (MHz)				2506	2593	2680	L	M	H
20	QPSK	1	0	23.45	23.24	22.97	0.0881	0.0839	0.0789
20	QPSK	1	99	22.99	22.87	22.48	0.0793	0.0771	0.0705
20	QPSK	100	0	22.15	22.02	21.70	0.0653	0.0634	0.0589
20	16QAM	1	0	22.15	22.06	21.79	0.0653	0.0640	0.0601
20	64QAM	1	0	21.01	20.95	20.69	0.0502	0.0495	0.0467
Channel				39725	40620	41515	EIRP(W)		
Frequency (MHz)				2503.5	2593	2682.5	L	M	H
15	QPSK	1	0	23.42	23.12	22.91	0.0875	0.0817	0.0778
15	16QAM	1	0	22.07	21.96	21.76	0.0641	0.0625	0.0597
Channel				39700	40620	41540	EIRP(W)		
Frequency (MHz)				2501	2593	2685	L	M	H
10	QPSK	1	0	23.38	23.13	22.92	0.0867	0.0818	0.0780
10	16QAM	1	0	22.07	22.03	21.74	0.0641	0.0635	0.0594
Channel				39675	40620	41565	EIRP(W)		
Frequency (MHz)				2498.5	2593	2687.5	L	M	H
5	QPSK	1	0	23.31	23.11	22.93	0.0853	0.0815	0.0782
5	16QAM	1	0	22.05	21.98	21.65	0.0638	0.0628	0.0582

LTE Band71:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				133222	133322	133372			
Frequency (MHz)				673	683	688	L	M	H
20	QPSK	1	0	23.71	23.74	23.63	0.0227	0.0229	0.0223
20	QPSK	1	99	23.66	23.71	23.56	0.0224	0.0227	0.0219
20	QPSK	100	0	22.37	22.48	22.32	0.0167	0.0171	0.0165
20	16QAM	1	0	22.64	22.71	22.46	0.0177	0.0180	0.0170
20	64QAM	1	0	21.90	22.07	21.94	0.0150	0.0156	0.0151
Channel				133197	133297	133397	EIRP(W)		
Frequency (MHz)				670.5	680.5	690.5	L	M	H
15	QPSK	1	0	23.64	23.65	23.61	0.0223	0.0224	0.0222
15	16QAM	1	0	22.57	22.68	22.44	0.0175	0.0179	0.0169
Channel				133172	133272	133422	EIRP(W)		
Frequency (MHz)				668	678	693	L	M	H
10	QPSK	1	0	23.69	23.70	23.49	0.0226	0.0226	0.0216
10	16QAM	1	0	22.60	22.64	22.32	0.0176	0.0177	0.0165
Channel				133147	133247	133447	EIRP(W)		
Frequency (MHz)				665.5	675.5	695.5	L	M	H
5	QPSK	1	0	23.69	23.69	23.52	0.0226	0.0226	0.0217
5	16QAM	1	0	22.63	22.58	22.40	0.0177	0.0175	0.0168

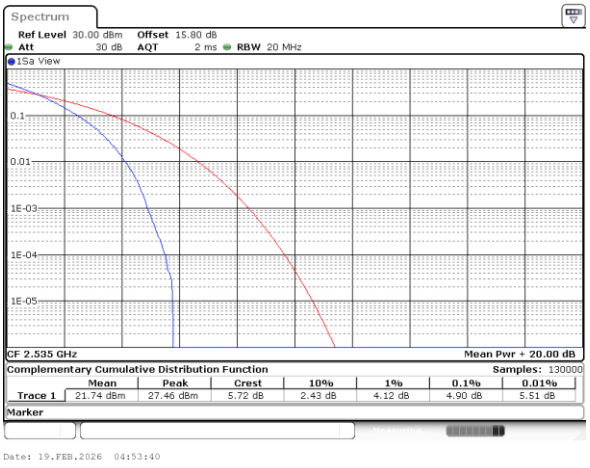
LTE Band 7

Peak-to-Average Ratio

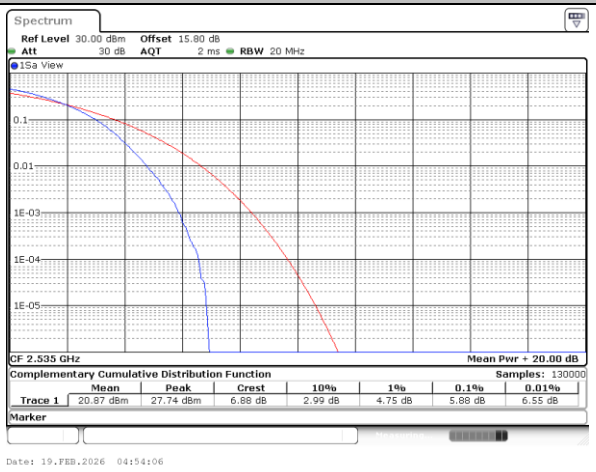
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.90	5.88	6.17	PASS

LTE Band 7 / 20MHz

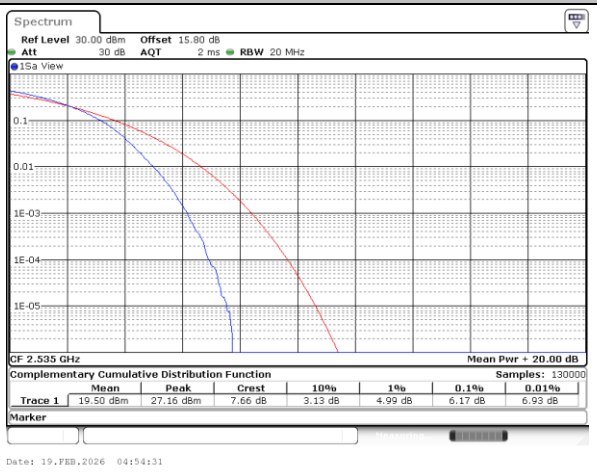
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM

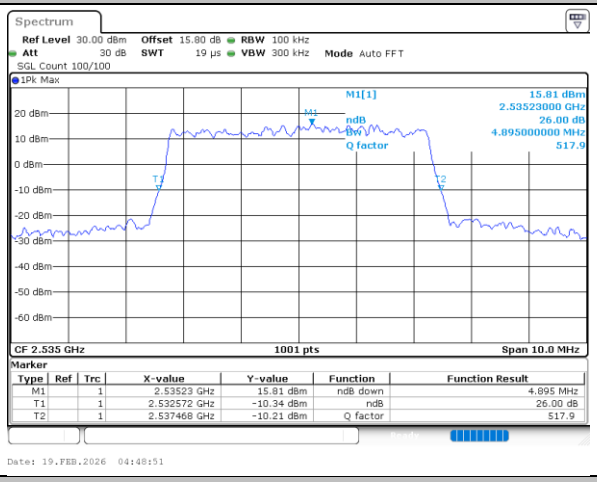


26dB Bandwidth

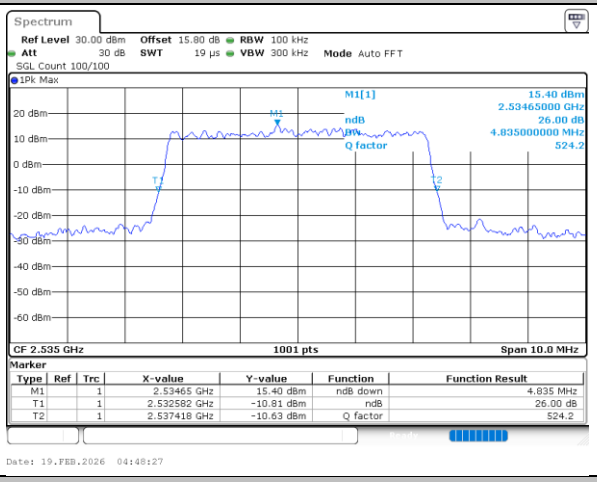
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.90	4.84	9.75	9.85	14.63	14.48	19.38	19.42

LTE Band 7

Middle Channel / 5MHz / QPSK

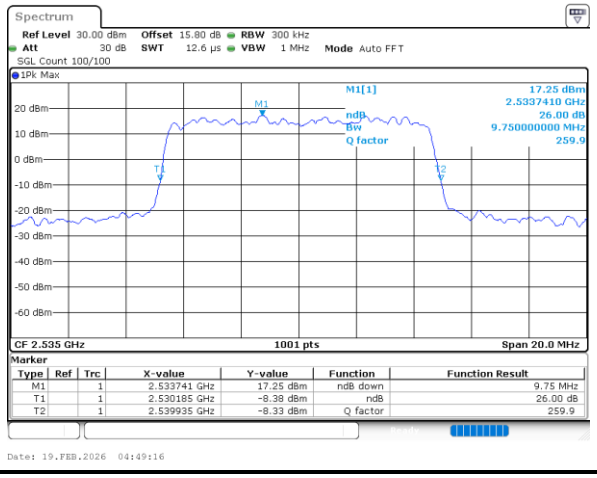


Middle Channel / 5MHz / 16QAM

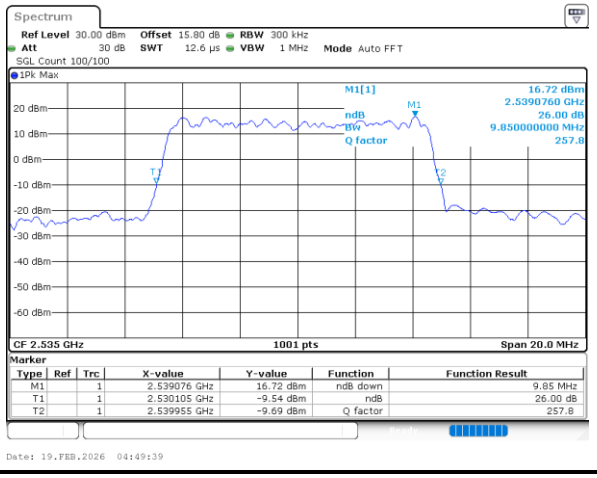


LTE Band 7

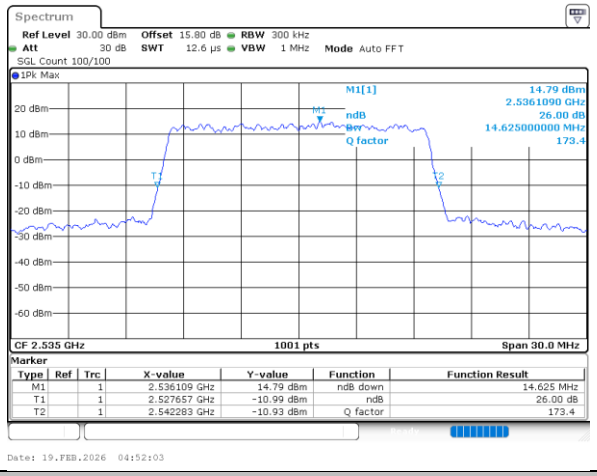
Middle Channel / 10MHz / QPSK

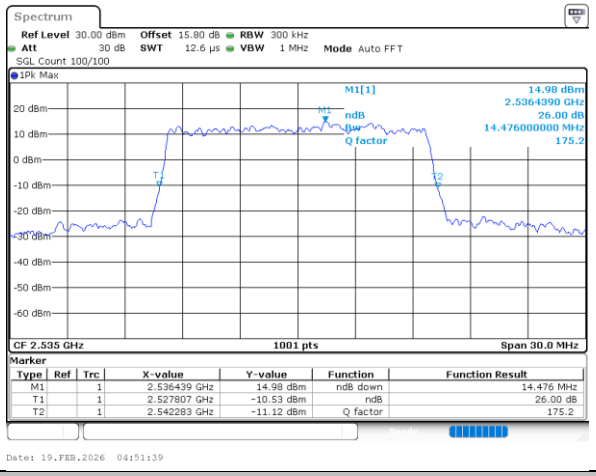


Middle Channel / 10MHz / 16QAM

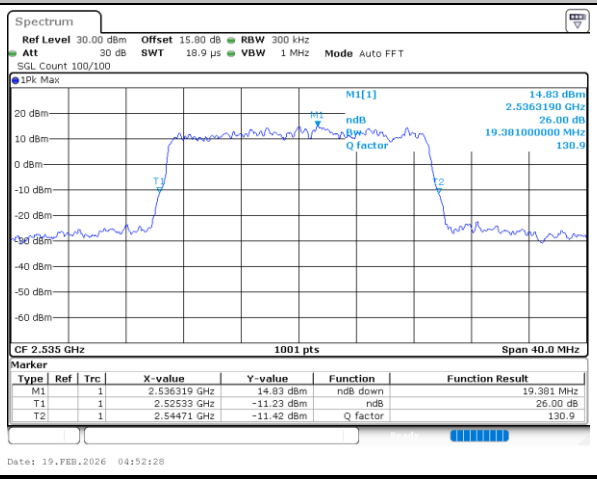


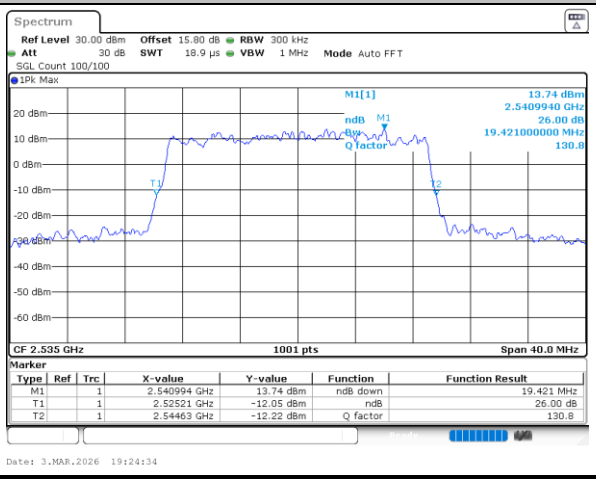
LTE Band 7	
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM





LTE Band 7	
Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM



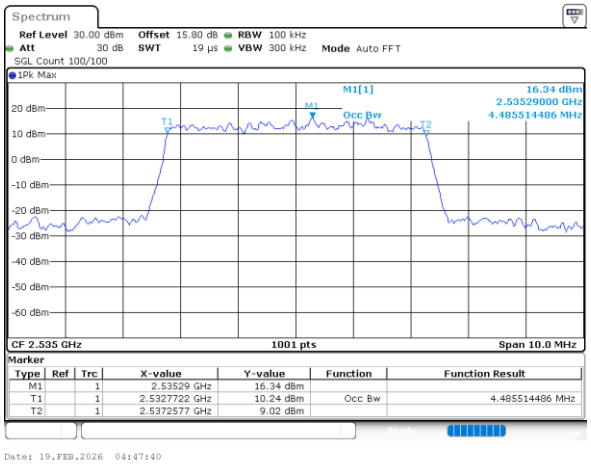


Occupied Bandwidth

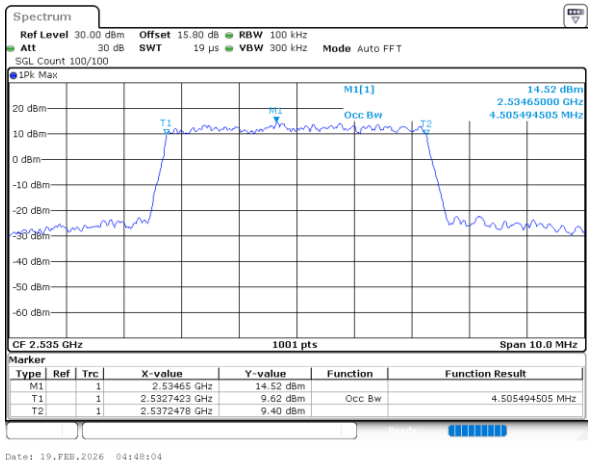
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.51	9.05	8.97	13.40	13.49	17.86	17.90

LTE Band 7

Middle Channel / 5MHz / QPSK

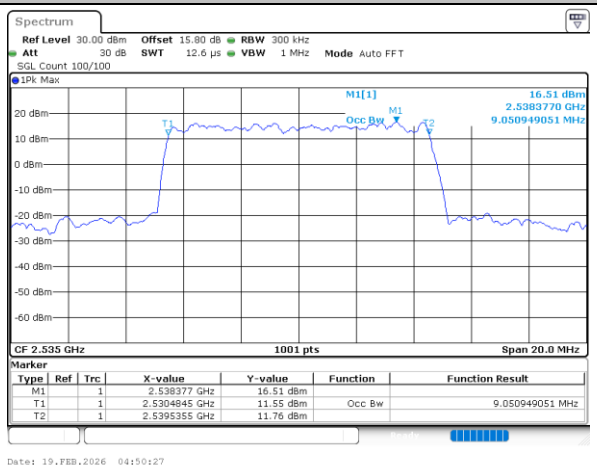


Middle Channel / 5MHz / 16QAM

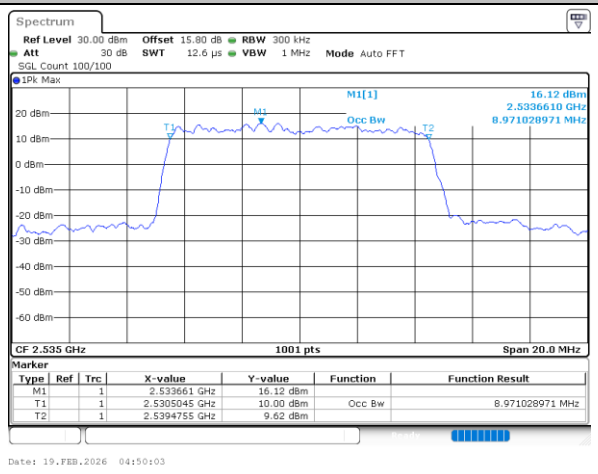


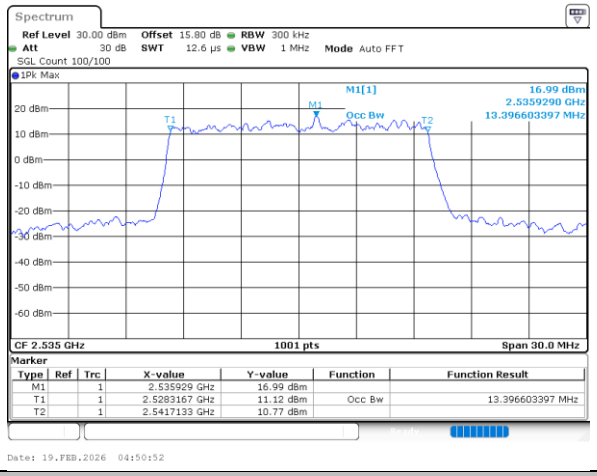
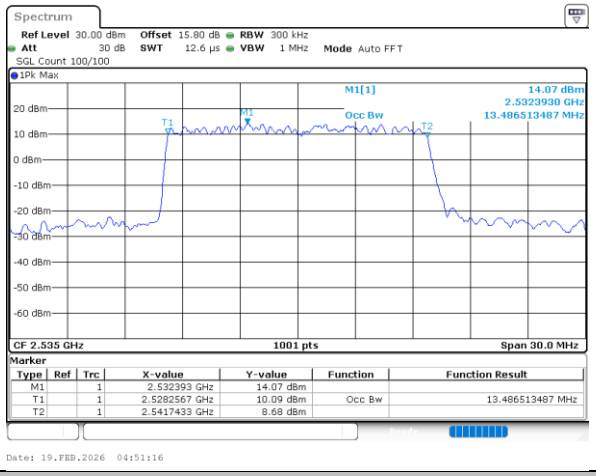
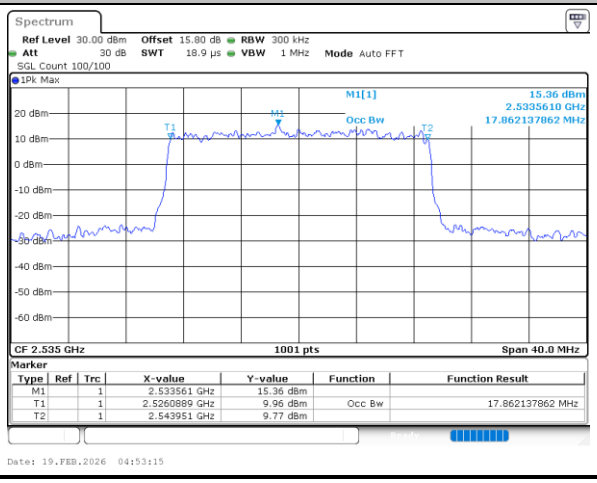
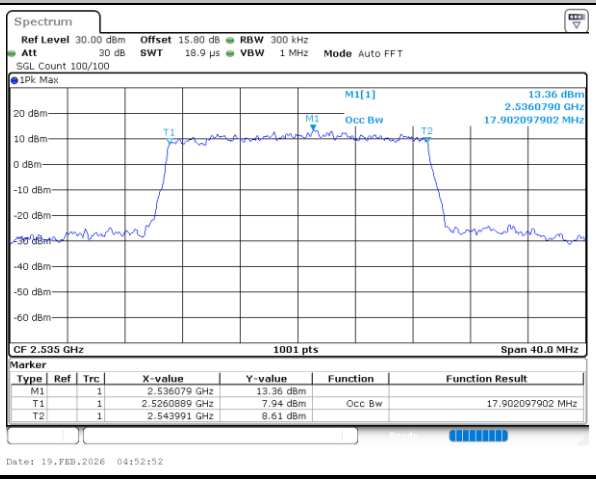
LTE Band 7

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

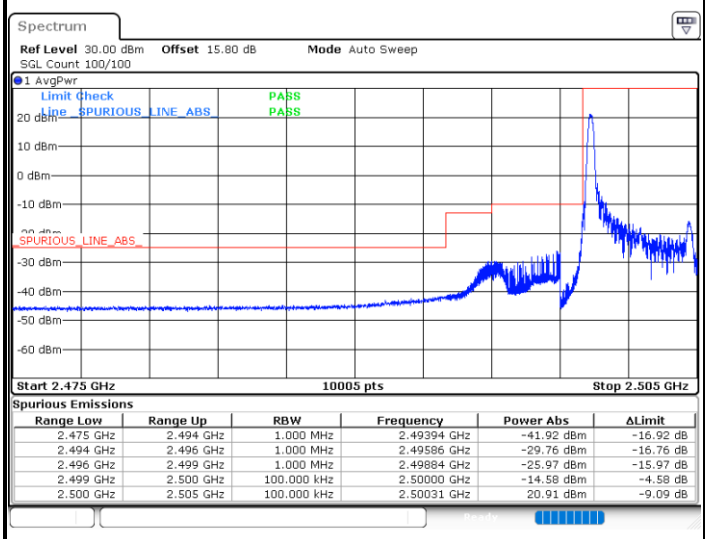


LTE Band 7	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
LTE Band 7	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB

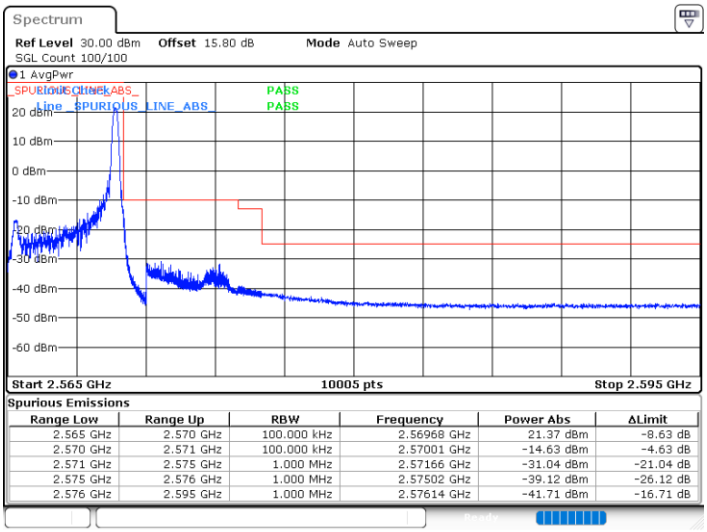


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49394 GHz	-41.92 dBm	-16.92 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49586 GHz	-29.76 dBm	-16.76 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49884 GHz	-25.97 dBm	-15.97 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-14.58 dBm	-4.58 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50031 GHz	20.91 dBm	-9.09 dB

Date: 19.FEB.2026 04:25:30

Highest Band Edge / 1 RB

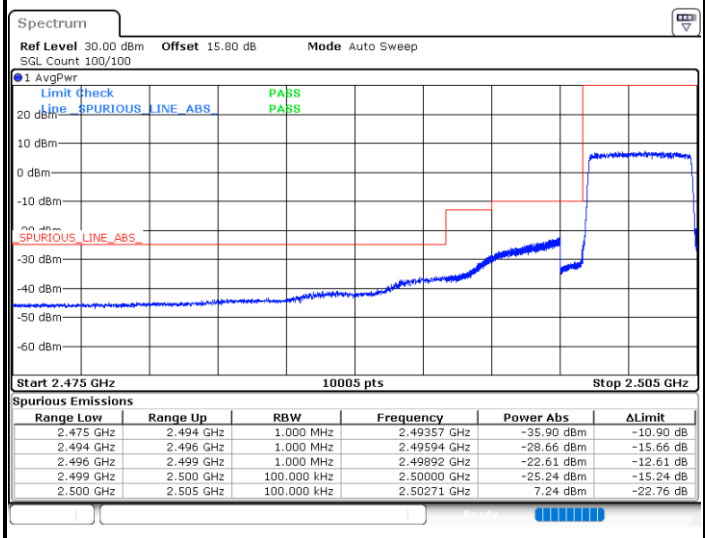


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56968 GHz	21.37 dBm	-8.63 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-14.63 dBm	-4.63 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57166 GHz	-31.04 dBm	-21.04 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57502 GHz	-39.12 dBm	-26.12 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57614 GHz	-41.71 dBm	-16.71 dB

Date: 19.FEB.2026 04:29:45

Lowest Band Edge / Full RB

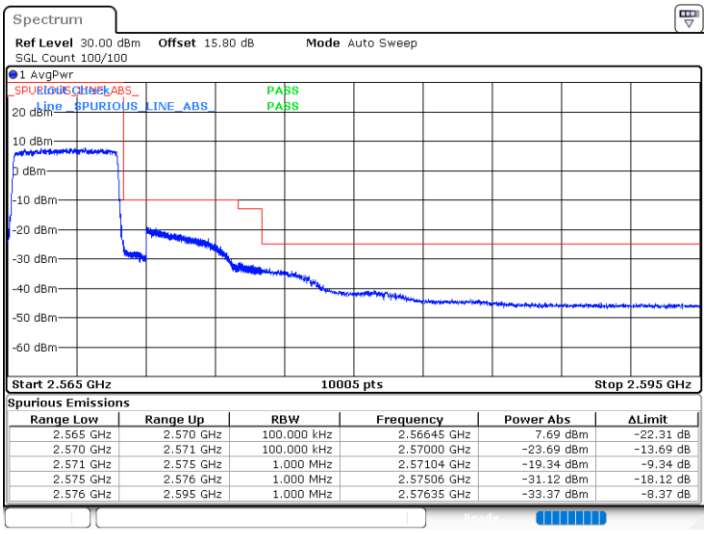


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49357 GHz	-35.90 dBm	-10.90 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49594 GHz	-28.66 dBm	-15.66 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49892 GHz	-22.61 dBm	-12.61 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-25.24 dBm	-15.24 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50271 GHz	7.24 dBm	-22.76 dB

Date: 19.FEB.2026 04:26:20

Highest Band Edge / Full RB

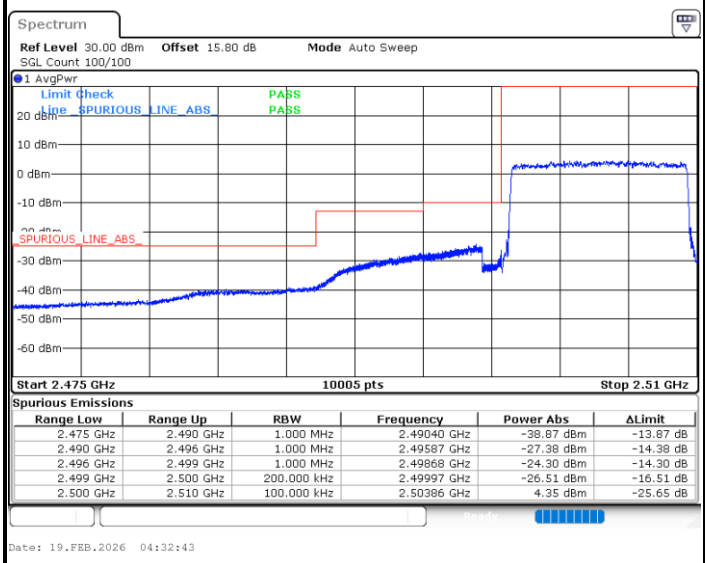


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56645 GHz	7.69 dBm	-22.31 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-23.69 dBm	-13.69 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-19.34 dBm	-9.34 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57506 GHz	-31.12 dBm	-18.12 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57635 GHz	-33.37 dBm	-8.37 dB

Date: 19.FEB.2026 04:30:35

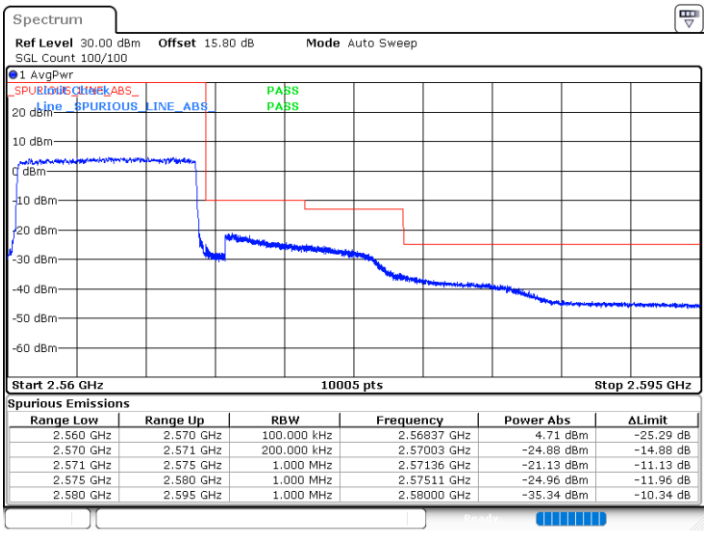
LTE Band 7 / 10MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49040 GHz	-38.87 dBm	-13.87 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49587 GHz	-27.38 dBm	-14.38 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49868 GHz	-24.30 dBm	-14.30 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49997 GHz	-26.51 dBm	-16.51 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50386 GHz	4.35 dBm	-25.65 dB

Date: 19.FEB.2026 04:32:43

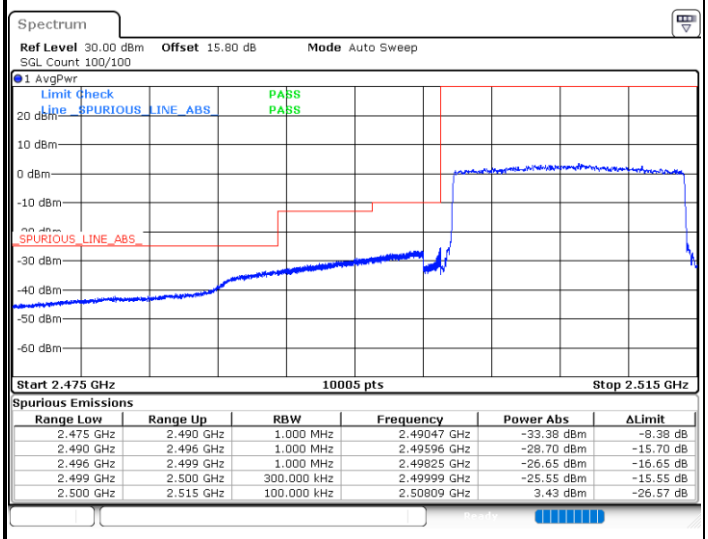


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56837 GHz	4.71 dBm	-25.29 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57003 GHz	-24.88 dBm	-14.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57136 GHz	-21.13 dBm	-11.13 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57511 GHz	-24.96 dBm	-11.96 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58000 GHz	-35.34 dBm	-10.34 dB

Date: 19.FEB.2026 04:36:08

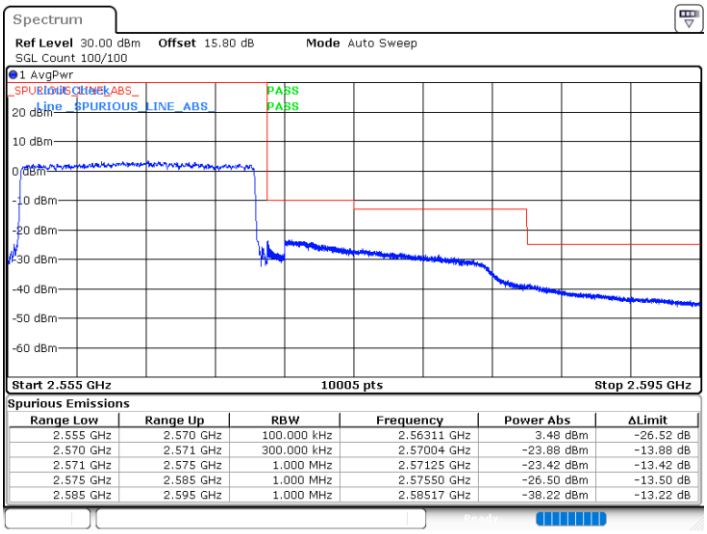
LTE Band 7 / 15MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49047 GHz	-33.38 dBm	-8.38 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49596 GHz	-28.70 dBm	-15.70 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49825 GHz	-26.65 dBm	-16.65 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-25.55 dBm	-15.55 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50809 GHz	3.43 dBm	-26.57 dB

Date: 19.FEB.2026 04:38:16

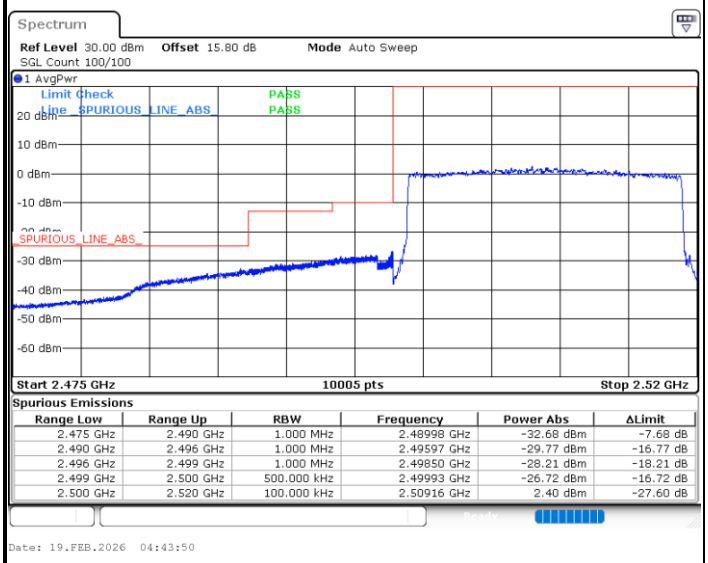


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56311 GHz	3.48 dBm	-26.52 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57004 GHz	-23.88 dBm	-13.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57125 GHz	-23.42 dBm	-13.42 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57550 GHz	-26.50 dBm	-13.50 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58517 GHz	-38.22 dBm	-13.22 dB

Date: 19.FEB.2026 04:41:41

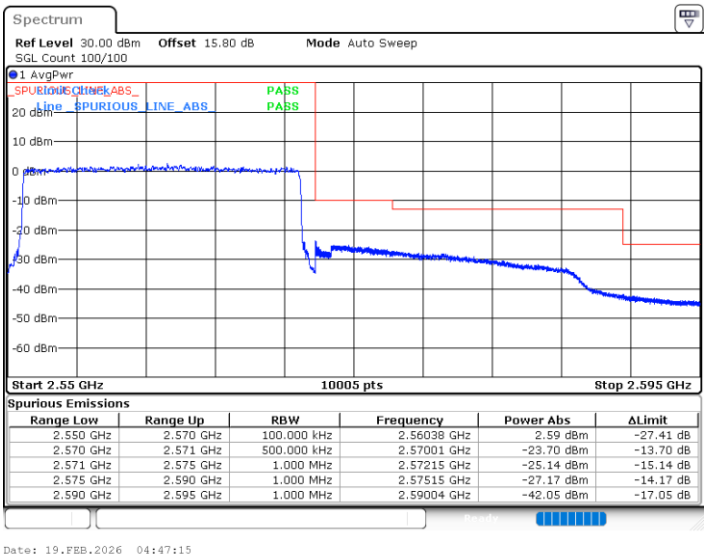
LTE Band 7 / 20MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48998 GHz	-32.68 dBm	-7.68 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-29.77 dBm	-16.77 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49850 GHz	-28.21 dBm	-18.21 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49993 GHz	-26.72 dBm	-16.72 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50916 GHz	2.40 dBm	-27.60 dB

Date: 19.FEB.2026 04:43:50



Spurious Emissions

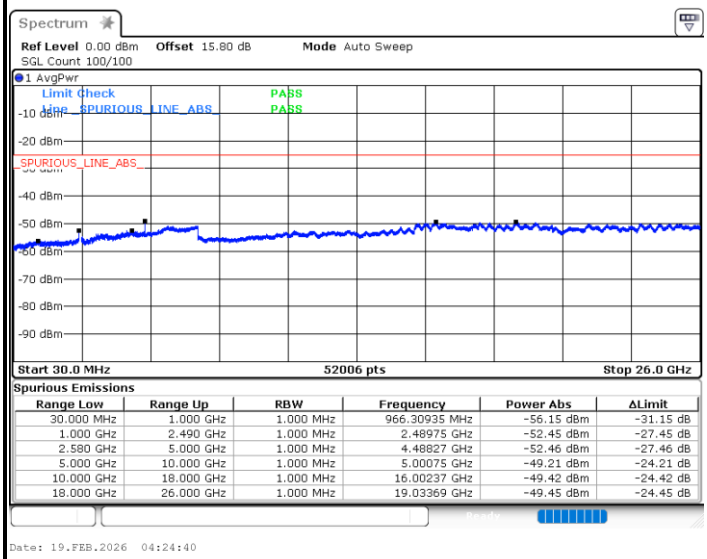
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56038 GHz	2.59 dBm	-27.41 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57001 GHz	-23.70 dBm	-13.70 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57215 GHz	-25.14 dBm	-15.14 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57515 GHz	-27.17 dBm	-14.17 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59004 GHz	-42.05 dBm	-17.05 dB

Date: 19.FEB.2026 04:47:15

Conducted Spurious Emission

LTE Band 7 / 5MHz

Lowest Channel / QPSK

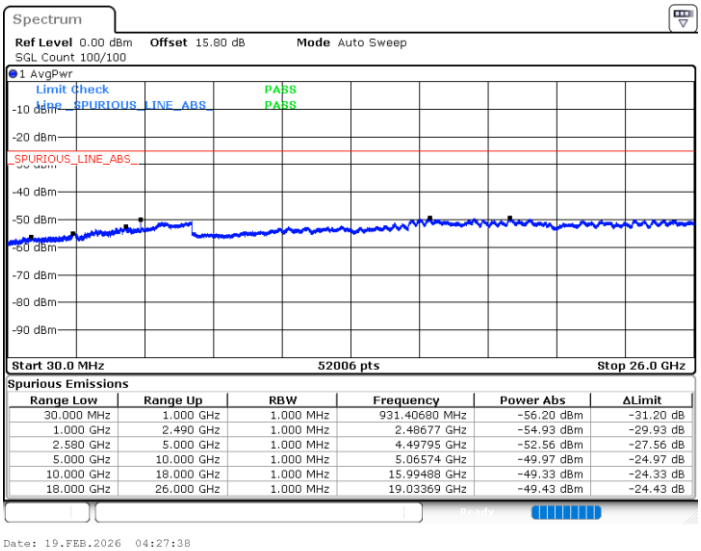


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.30935 MHz	-56.15 dBm	-31.15 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-52.45 dBm	-27.45 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.48827 GHz	-52.46 dBm	-27.46 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.00075 GHz	-49.21 dBm	-24.21 dB
10.000 GHz	18.000 GHz	1.000 MHz	16.00237 GHz	-49.42 dBm	-24.42 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.03369 GHz	-49.45 dBm	-24.45 dB

Date: 19.FEB.2026 04:24:40

Middle Channel / QPSK

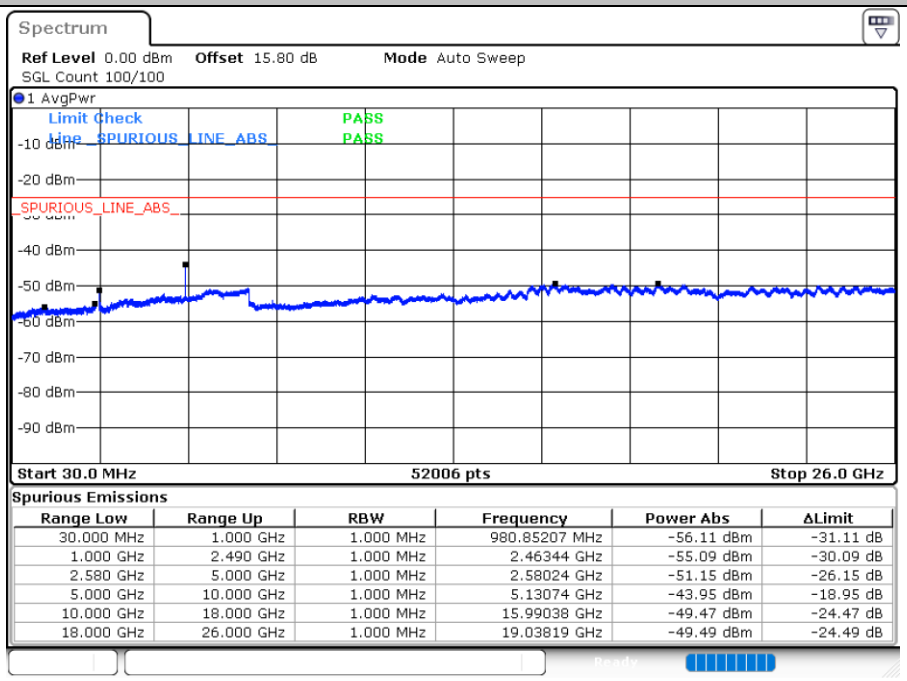


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	931.40680 MHz	-56.20 dBm	-31.20 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48677 GHz	-54.93 dBm	-29.93 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.49795 GHz	-52.56 dBm	-27.56 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.06574 GHz	-49.97 dBm	-24.97 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.99488 GHz	-49.33 dBm	-24.33 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.03369 GHz	-49.43 dBm	-24.43 dB

Date: 19.FEB.2026 04:27:38

Highest Channel / QPSK



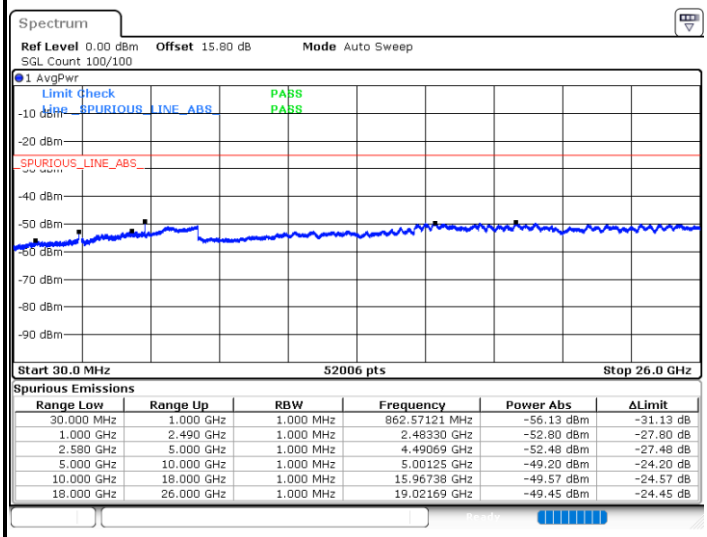
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	980.85207 MHz	-56.11 dBm	-31.11 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.46344 GHz	-55.09 dBm	-30.09 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58024 GHz	-51.15 dBm	-26.15 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.13074 GHz	-43.95 dBm	-18.95 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.99038 GHz	-49.47 dBm	-24.47 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.03819 GHz	-49.49 dBm	-24.49 dB

Date: 19.FEB.2026 04:28:56

LTE Band 7 / 10MHz

Lowest Channel / QPSK

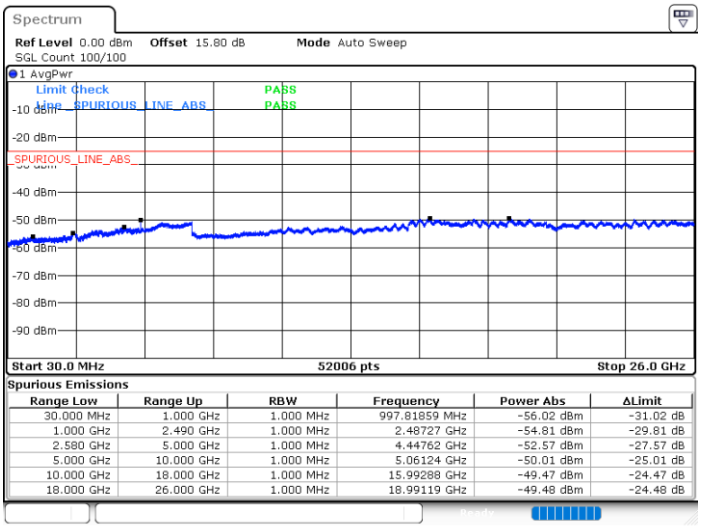


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	862.57121 MHz	-56.13 dBm	-31.13 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48330 GHz	-52.80 dBm	-27.80 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.49069 GHz	-52.48 dBm	-27.48 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.00125 GHz	-49.20 dBm	-24.20 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.96738 GHz	-49.57 dBm	-24.57 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.02169 GHz	-49.45 dBm	-24.45 dB

Date: 19.FEB.2026 04:31:53

Middle Channel / QPSK

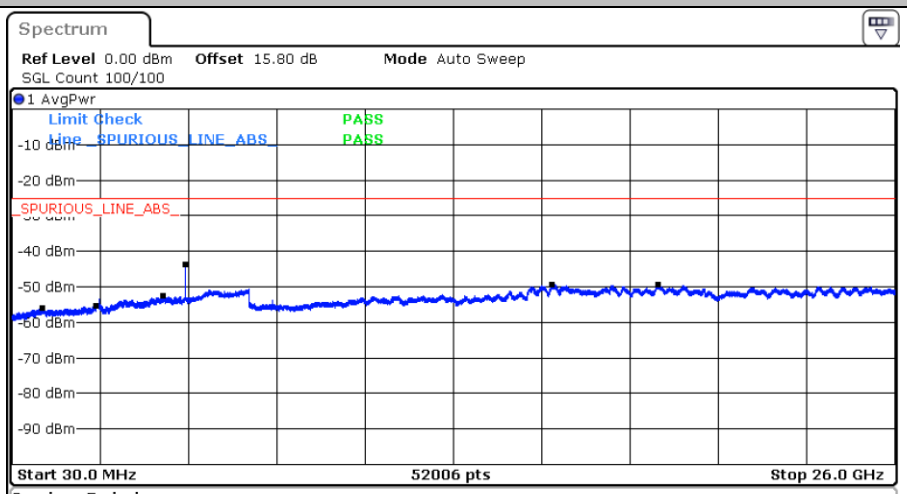


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	997.81859 MHz	-56.02 dBm	-31.02 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48727 GHz	-54.81 dBm	-29.81 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.44762 GHz	-52.57 dBm	-27.57 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.06124 GHz	-50.01 dBm	-25.01 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.99288 GHz	-49.47 dBm	-24.47 dB
18.000 GHz	26.000 GHz	1.000 MHz	18.99119 GHz	-49.48 dBm	-24.48 dB

Date: 19.FEB.2026 04:34:01

Highest Channel / QPSK



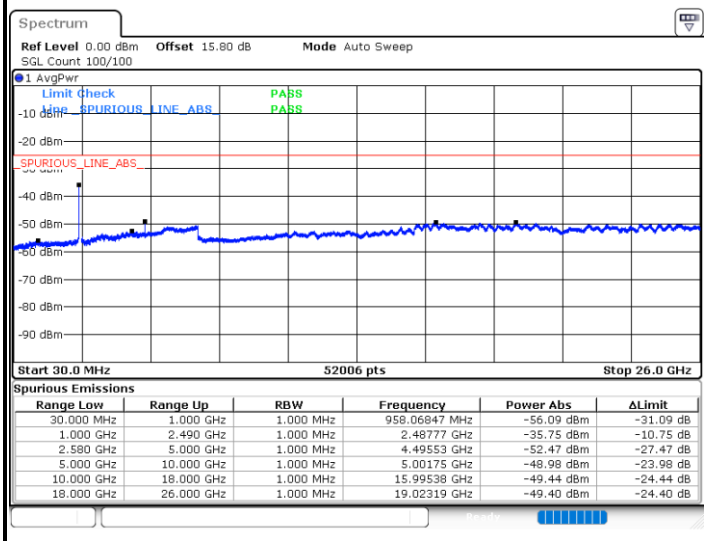
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	933.83058 MHz	-56.01 dBm	-31.01 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.47933 GHz	-55.21 dBm	-30.21 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.47666 GHz	-52.57 dBm	-27.57 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.12124 GHz	-43.77 dBm	-18.77 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.91188 GHz	-49.30 dBm	-24.30 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.03569 GHz	-49.48 dBm	-24.48 dB

Date: 19.FEB.2026 04:35:18

LTE Band 7 / 15MHz

Lowest Channel / QPSK

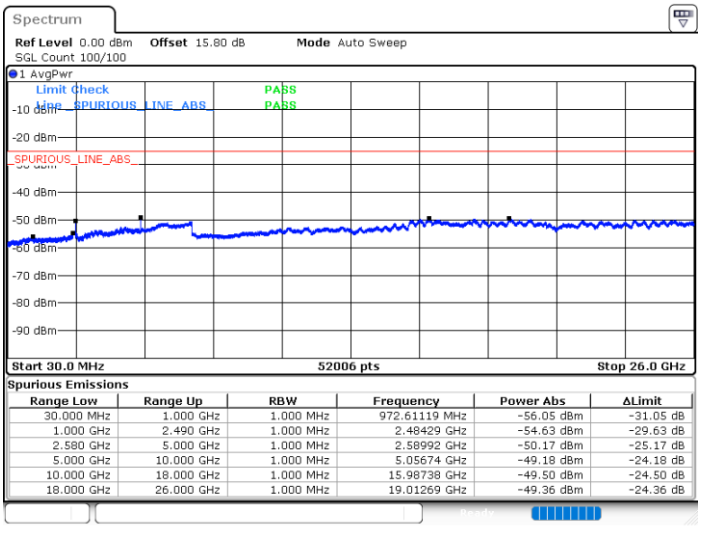


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-56.09 dBm	-31.09 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48777 GHz	-35.75 dBm	-10.75 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.49553 GHz	-52.47 dBm	-27.47 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.00175 GHz	-48.98 dBm	-23.98 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.99538 GHz	-49.44 dBm	-24.44 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.02319 GHz	-49.40 dBm	-24.40 dB

Date: 19.FEB.2026 04:37:26

Middle Channel / QPSK

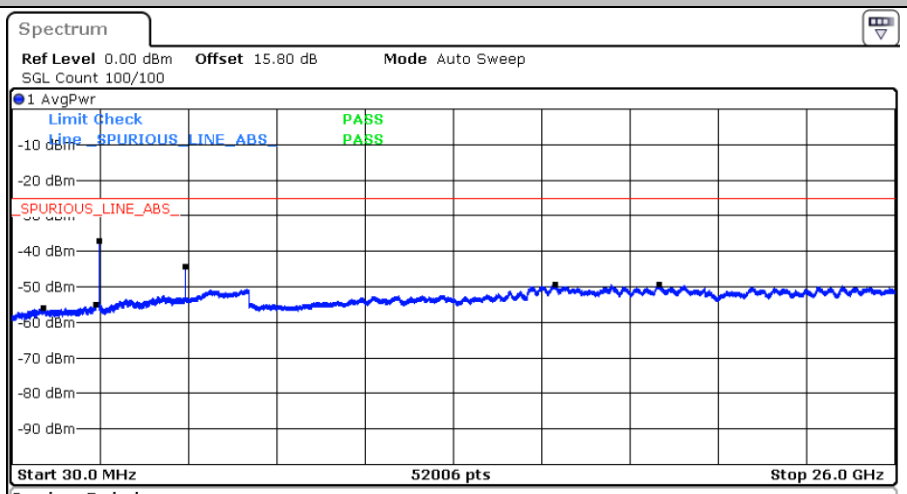


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	972.61119 MHz	-56.05 dBm	-31.05 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48429 GHz	-54.63 dBm	-29.63 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58992 GHz	-50.17 dBm	-25.17 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.05674 GHz	-49.18 dBm	-24.18 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.98738 GHz	-49.50 dBm	-24.50 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.01269 GHz	-49.36 dBm	-24.36 dB

Date: 19.FEB.2026 04:39:34

Highest Channel / QPSK



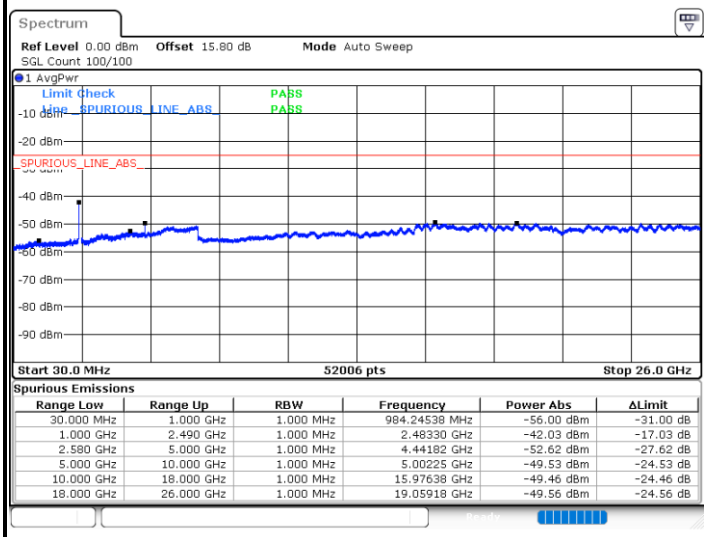
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	963.40080 MHz	-56.07 dBm	-31.07 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48727 GHz	-54.99 dBm	-29.99 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58266 GHz	-37.06 dBm	-12.06 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.11174 GHz	-44.43 dBm	-19.43 dB
10.000 GHz	18.000 GHz	1.000 MHz	16.01387 GHz	-49.39 dBm	-24.39 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.07418 GHz	-49.39 dBm	-24.39 dB

Date: 19.FEB.2026 04:40:52

LTE Band 7 / 20MHz

Lowest Channel / QPSK

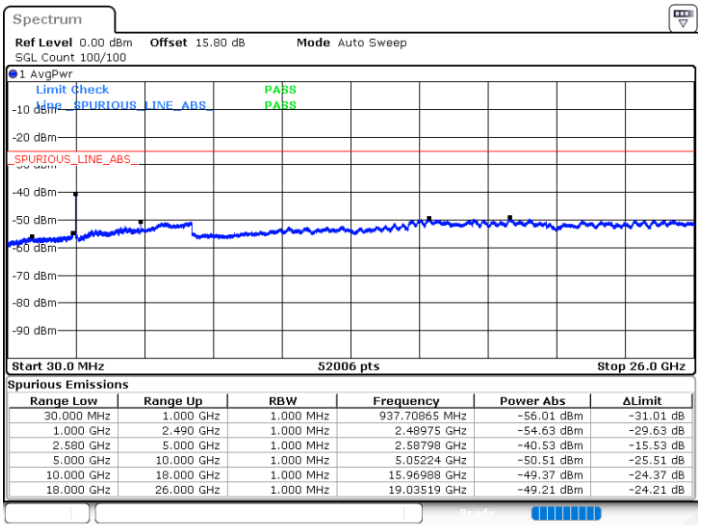


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	984.24538 MHz	-56.00 dBm	-31.00 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48330 GHz	-42.03 dBm	-17.03 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.44182 GHz	-52.62 dBm	-27.62 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.00225 GHz	-49.53 dBm	-24.53 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.97638 GHz	-49.46 dBm	-24.46 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.05918 GHz	-49.56 dBm	-24.56 dB

Date: 19.FEB.2026 04:43:00

Middle Channel / QPSK

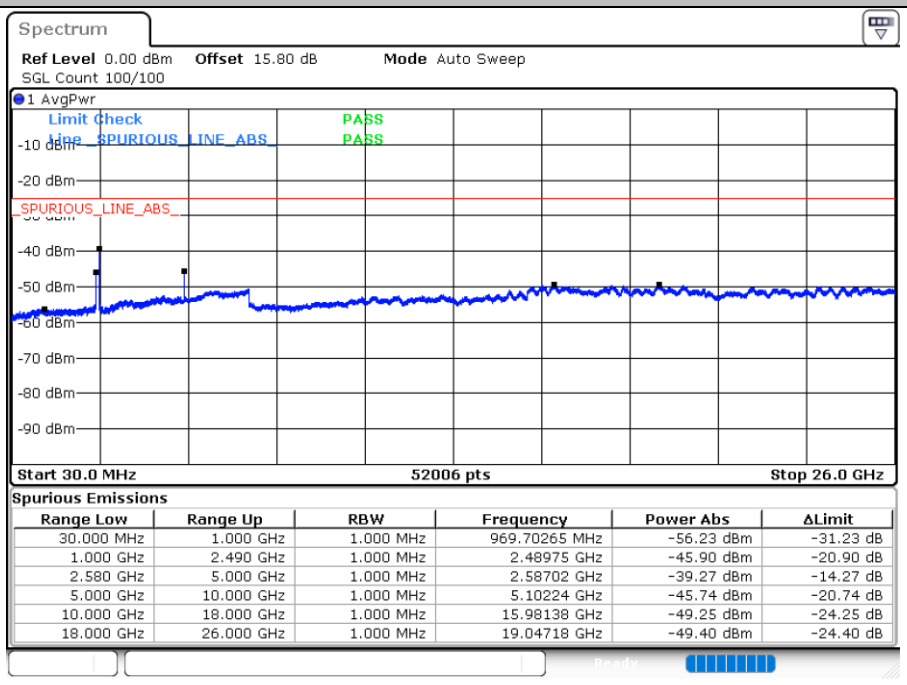


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	937.70865 MHz	-56.01 dBm	-31.01 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-54.63 dBm	-29.63 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58798 GHz	-40.53 dBm	-15.53 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.05224 GHz	-50.51 dBm	-25.51 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.96988 GHz	-49.37 dBm	-24.37 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.03519 GHz	-49.21 dBm	-24.21 dB

Date: 19.FEB.2026 04:45:07

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	969.70265 MHz	-56.23 dBm	-31.23 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-45.90 dBm	-20.90 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58702 GHz	-39.27 dBm	-14.27 dB
5.000 GHz	10.000 GHz	1.000 MHz	5.10224 GHz	-45.74 dBm	-20.74 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.98138 GHz	-49.25 dBm	-24.25 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.04718 GHz	-49.40 dBm	-24.40 dB

Date: 19.FEB.2026 04:46:25

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	0.0023	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0019	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

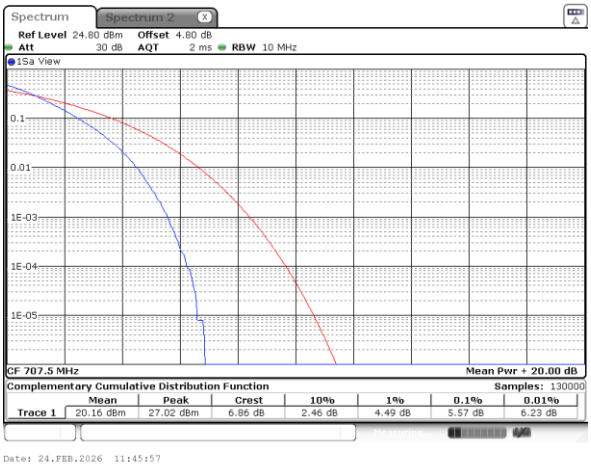
LTE Band 12

Peak-to-Average Ratio

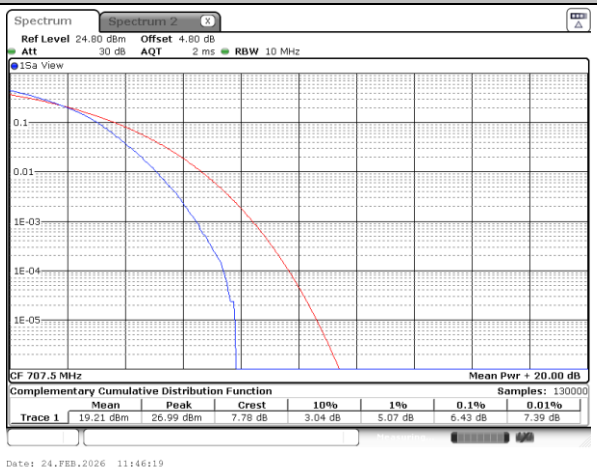
Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM		Limit: 13dB
RB Size	Full RB	Full RB	Full RB		Result
Middle CH	5.57	6.43	6.58		PASS

LTE Band 12 / 10MHz

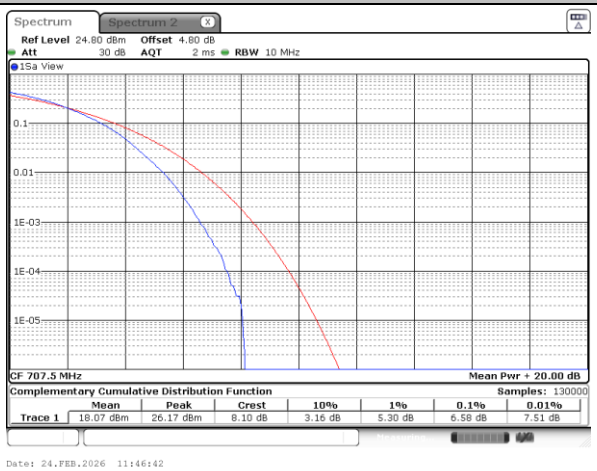
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

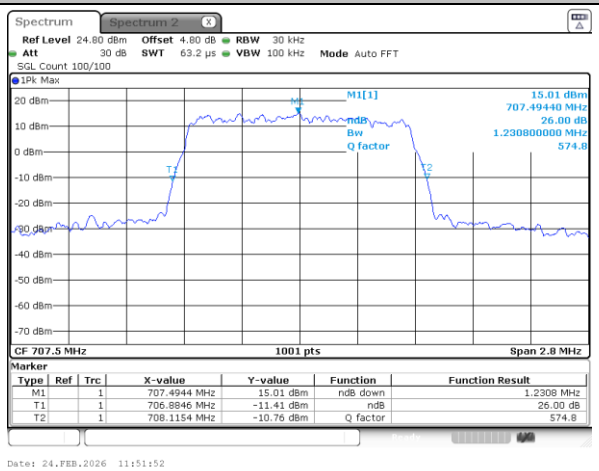
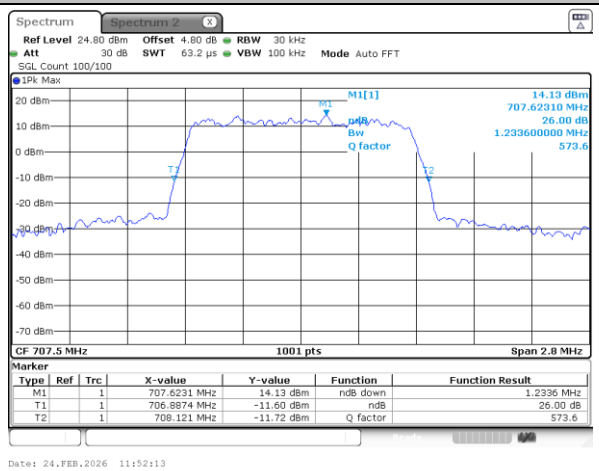


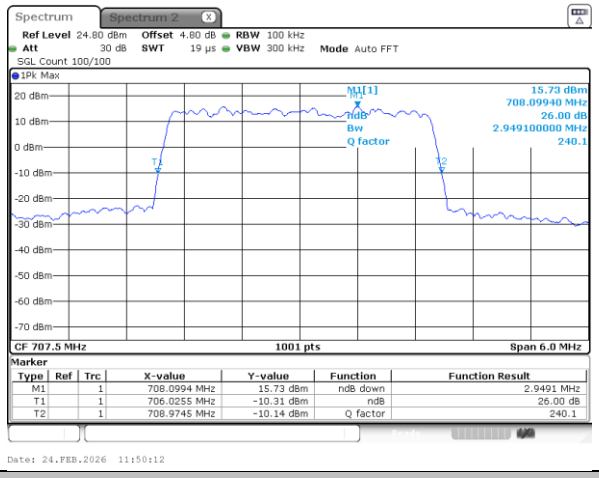
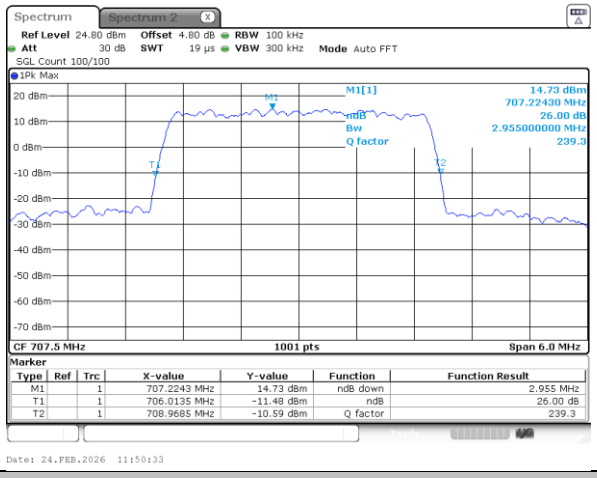
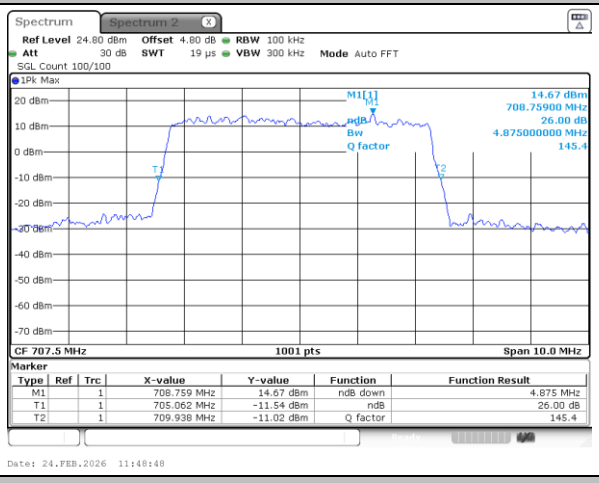
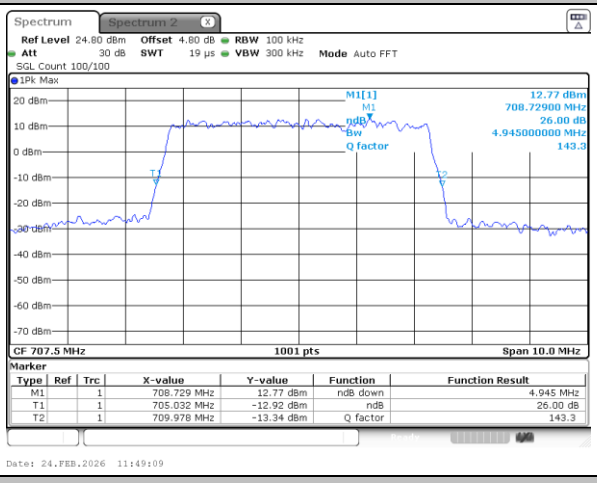
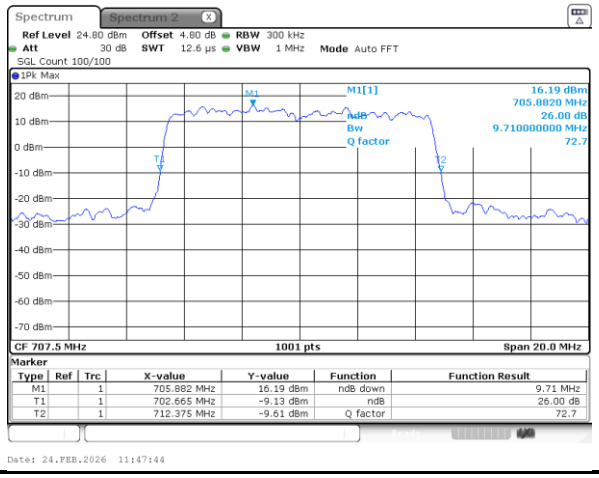
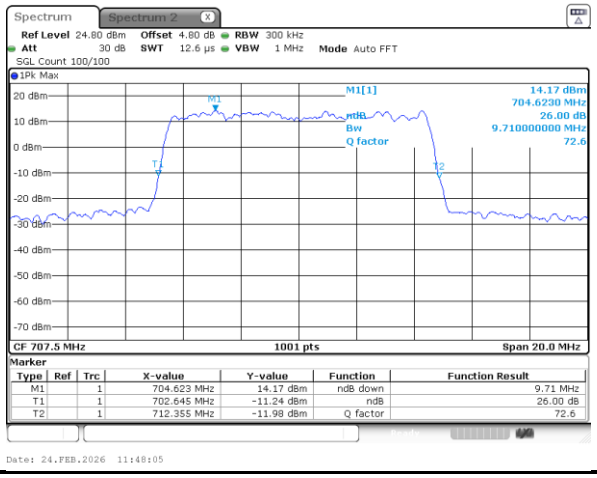
Middle Channel / Full RB/ 64QAM



26dB Bandwidth

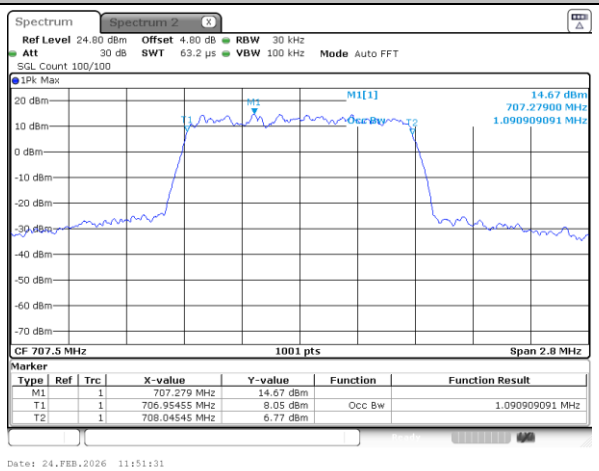
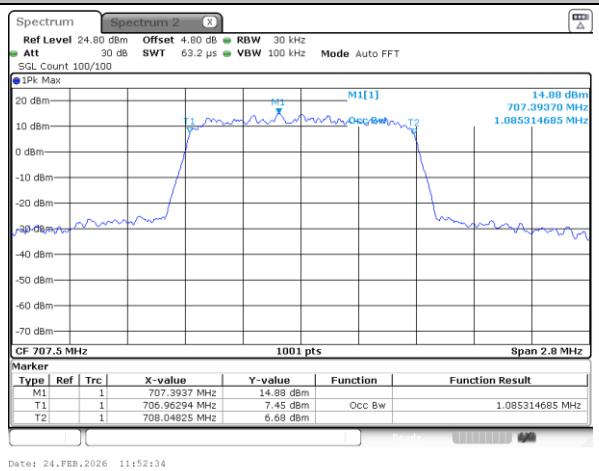
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1. 4MHz	
Mod.	QPSK	16QAM
Middle CH	1.23	1.23
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.95	2.96
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.88	4.95
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.71	9.71

LTE Band 12	
Middle Channel / 1.4MHz / QPSK	Middle Channel / 1.4MHz / 16QAM
	

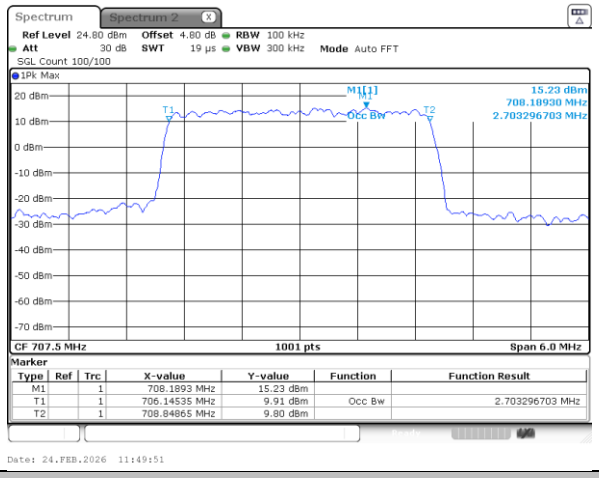
LTE Band 12	
Middle Channel / 3MHz / QPSK	**Middle Channel / 3MHz / 16QAM**
	
LTE Band 12	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
	
LTE Band 12	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

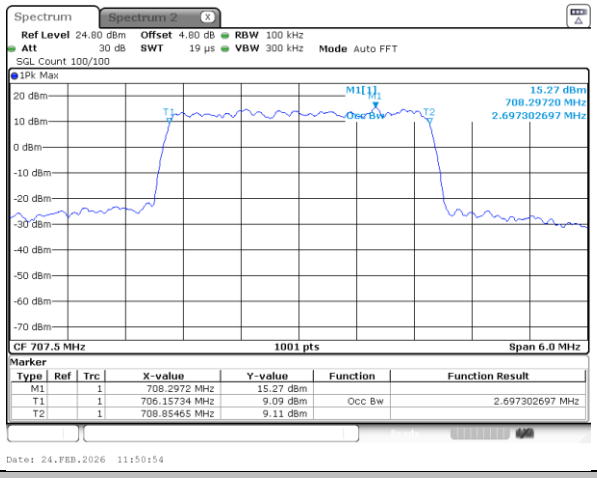
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1. 4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.70	2.70
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	.4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.09	9.03

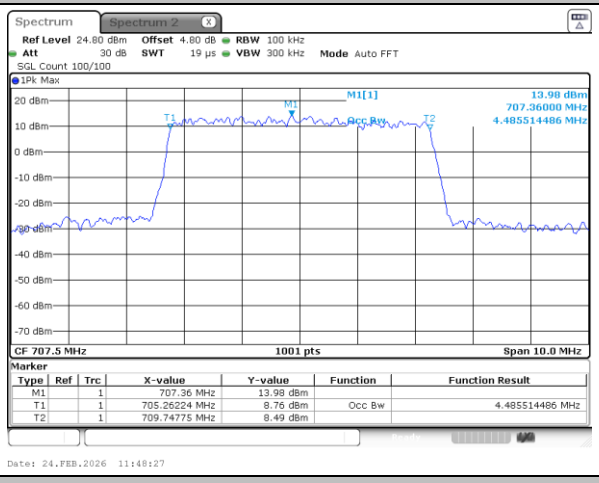
LTE Band 12	
Middle Channel / 1.4MHz / QPSK	Middle Channel / 1.4MHz / 16QAM
	

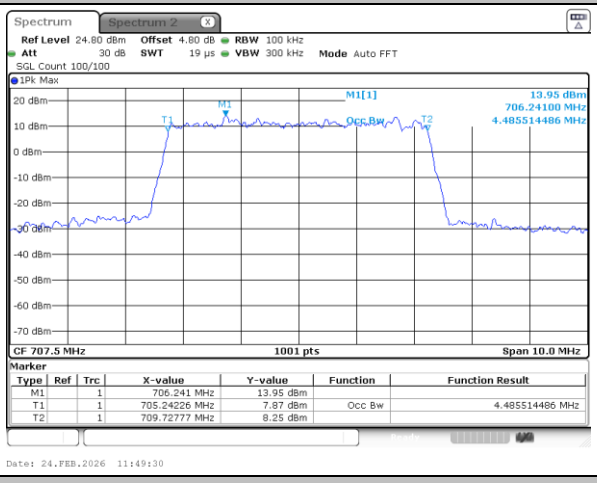
LTE Band 12	
Middle Channel / 3MHz / QPSK	Middle Channel / 3MHz / 16QAM



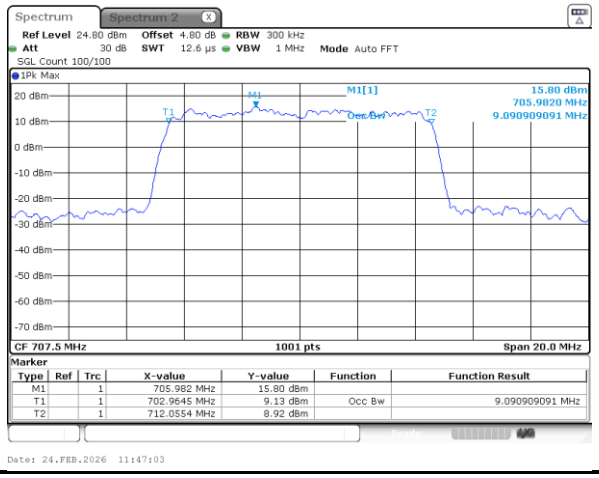


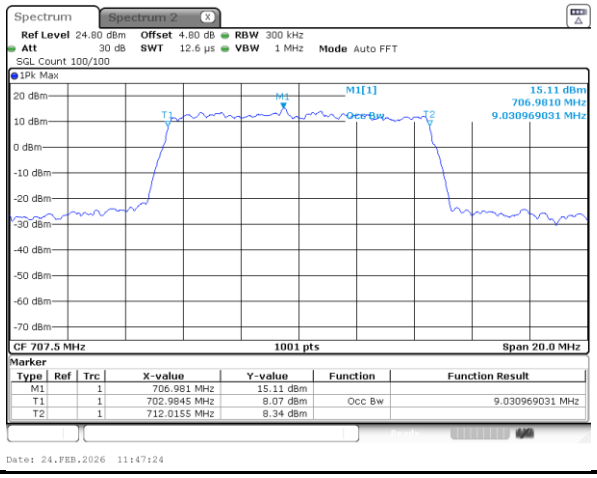
LTE Band 12	
Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM





LTE Band 12	
Middle Channel / 10MHz / QPSK	Middle Channel / 10MHz / 16QAM

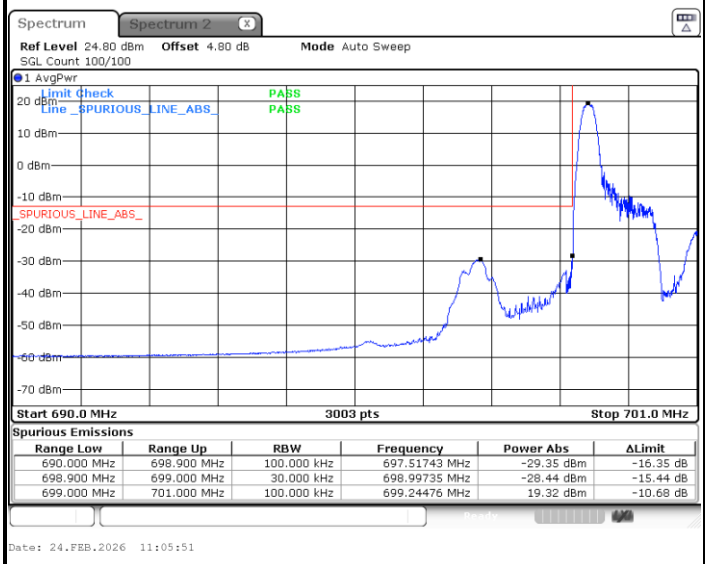




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

Lowest Band Edge / 1RB

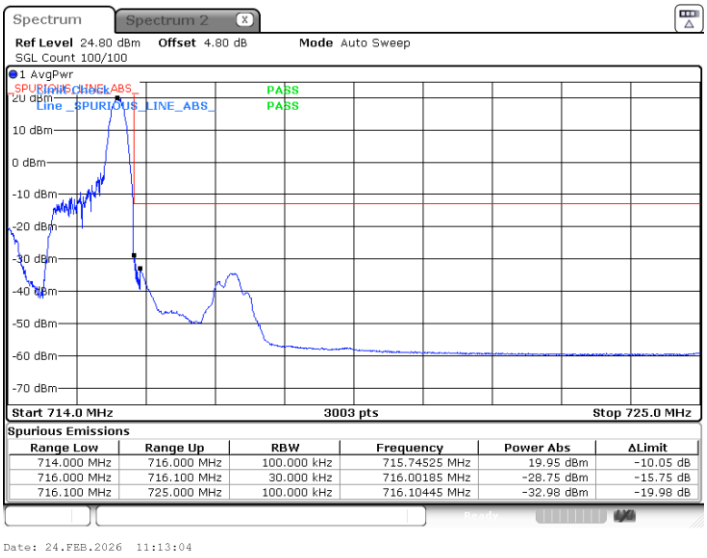


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	697.51743 MHz	-29.35 dBm	-16.35 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99735 MHz	-28.44 dBm	-15.44 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.24476 MHz	19.32 dBm	-10.68 dB

Date: 24.FEB.2026 11:05:51

Highest Band Edge / 1RB

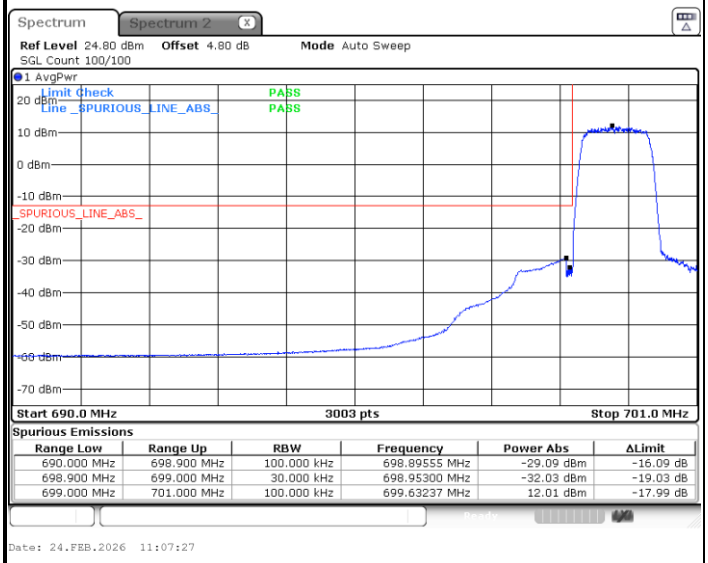


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.74525 MHz	19.95 dBm	-10.05 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00185 MHz	-28.75 dBm	-15.75 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-32.98 dBm	-19.98 dB

Date: 24.FEB.2026 11:13:04

Lowest Band Edge / Full RB

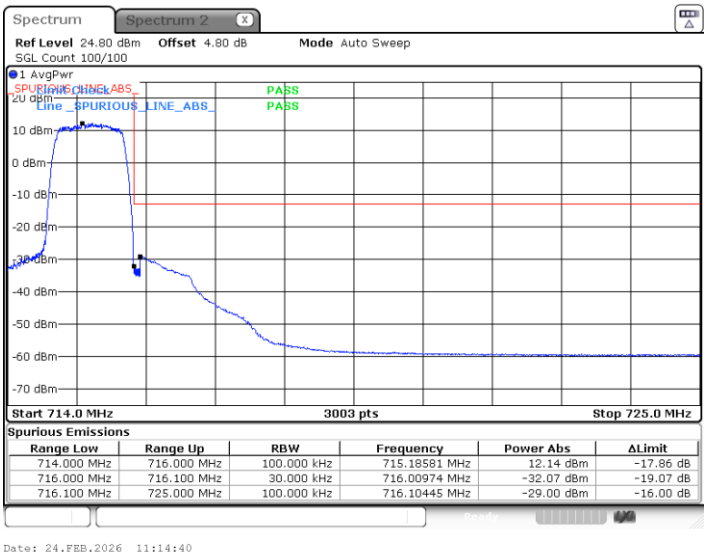


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-29.09 dBm	-16.09 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.95300 MHz	-32.03 dBm	-19.03 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.63237 MHz	12.01 dBm	-17.99 dB

Date: 24.FEB.2026 11:07:27

Highest Band Edge / Full RB

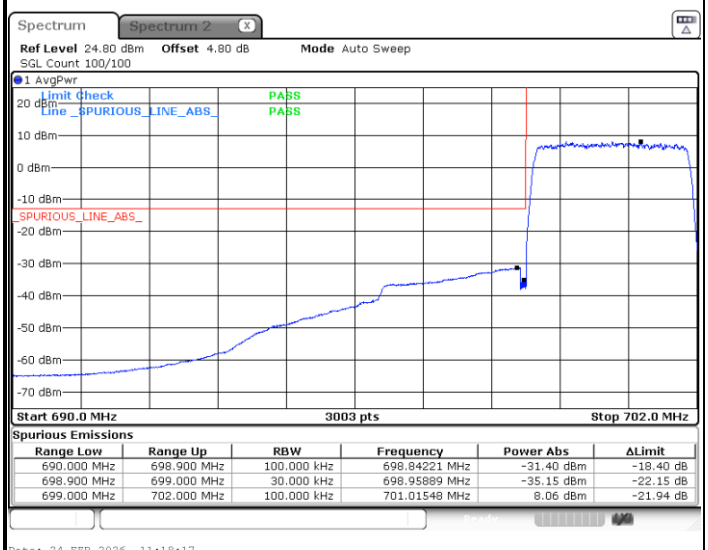


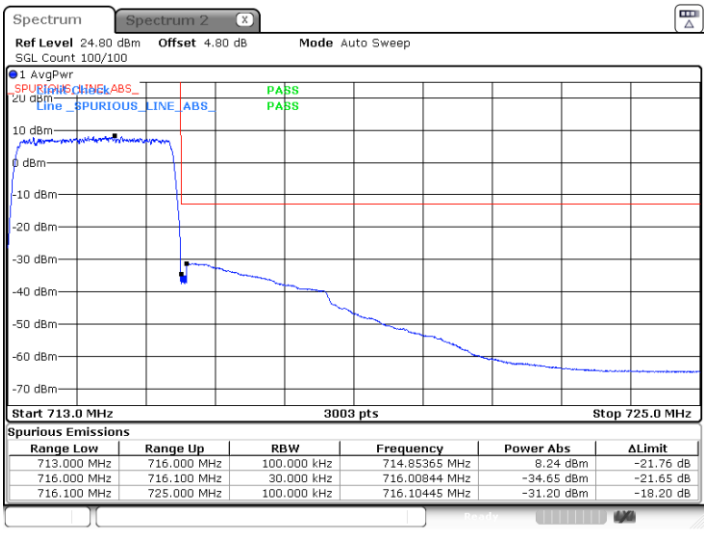
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.18581 MHz	12.14 dBm	-17.86 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00974 MHz	-32.07 dBm	-19.07 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-29.00 dBm	-16.00 dB

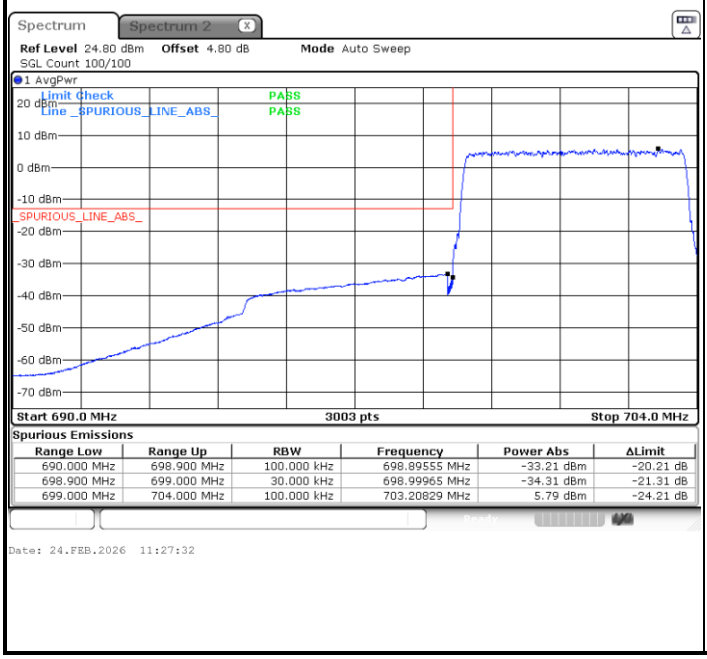
Date: 24.FEB.2026 11:14:40

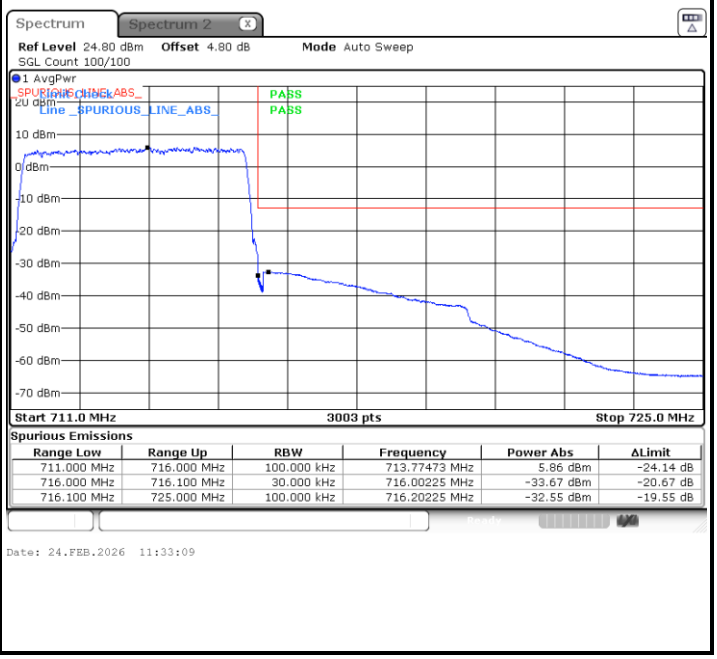
LTE Band 12 / 3MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**





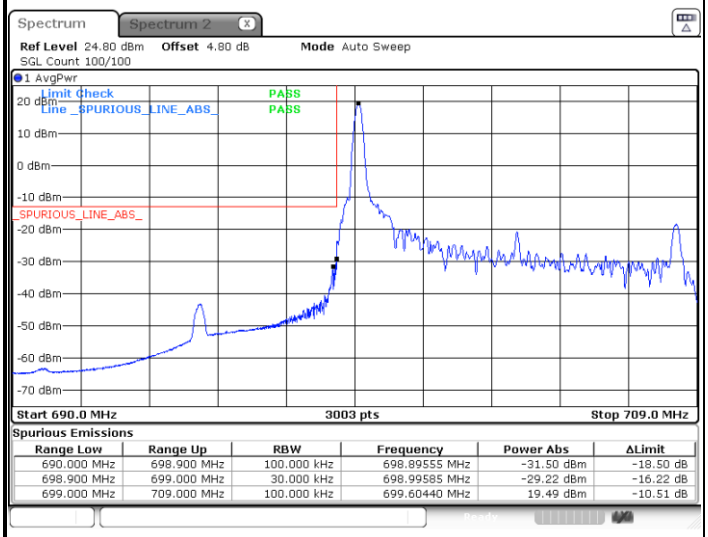
LTE Band 12 / 5MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**





LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB

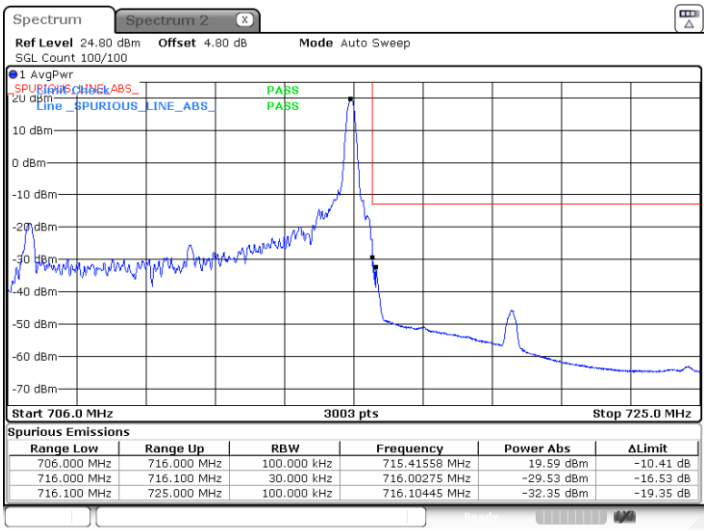


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-31.50 dBm	-18.50 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99585 MHz	-29.22 dBm	-16.22 dB
699.000 MHz	709.000 MHz	100.000 kHz	699.60440 MHz	19.49 dBm	-10.51 dB

Date: 24.FEB.2026 11:36:47

Highest Band Edge / 1 RB

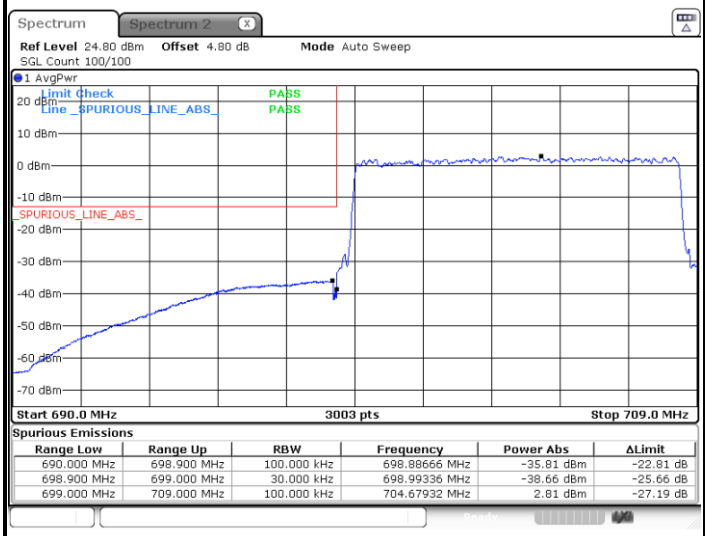


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	715.41558 MHz	19.59 dBm	-10.41 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00275 MHz	-29.53 dBm	-16.53 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-32.35 dBm	-19.35 dB

Date: 24.FEB.2026 11:43:59

Lowest Band Edge / Full RB

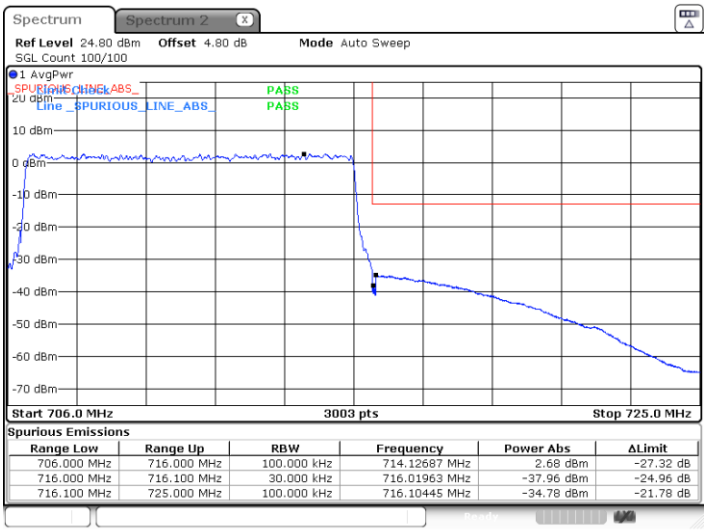


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.88666 MHz	-35.81 dBm	-22.81 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99336 MHz	-38.66 dBm	-25.66 dB
699.000 MHz	709.000 MHz	100.000 kHz	704.67932 MHz	2.81 dBm	-27.19 dB

Date: 24.FEB.2026 11:38:22

Highest Band Edge / Full RB



Spurious Emissions

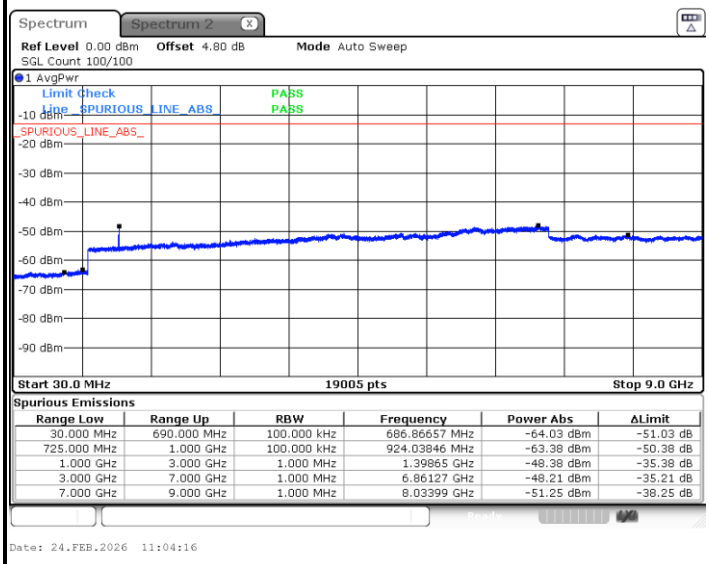
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	714.12687 MHz	2.68 dBm	-27.32 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.01963 MHz	-37.96 dBm	-24.96 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-34.78 dBm	-21.78 dB

Date: 24.FEB.2026 11:45:34

Conducted Spurious Emission

LTE Band 12 / 1.4MHz

Lowest Channel / QPSK

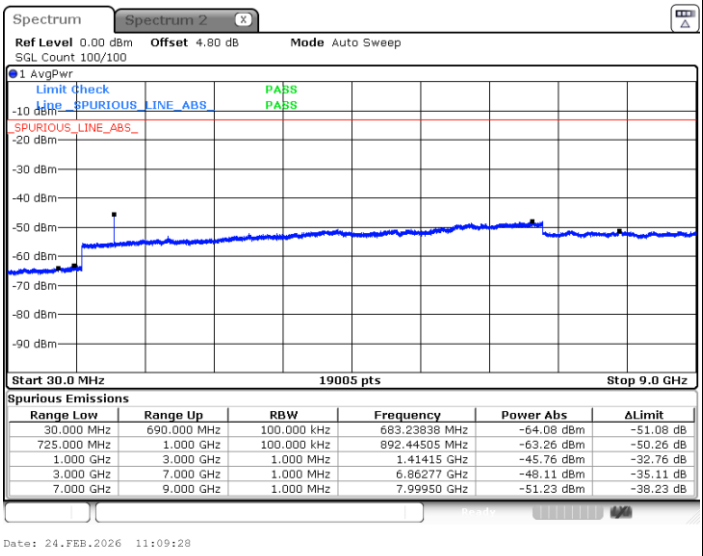


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	686.86657 MHz	-64.03 dBm	-51.03 dB
725.000 MHz	1.000 GHz	100.000 kHz	924.03846 MHz	-63.38 dBm	-50.38 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-48.38 dBm	-35.38 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.86127 GHz	-48.21 dBm	-35.21 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.03399 GHz	-51.25 dBm	-38.25 dB

Date: 24.FEB.2026 11:04:16

Middle Channel / QPSK

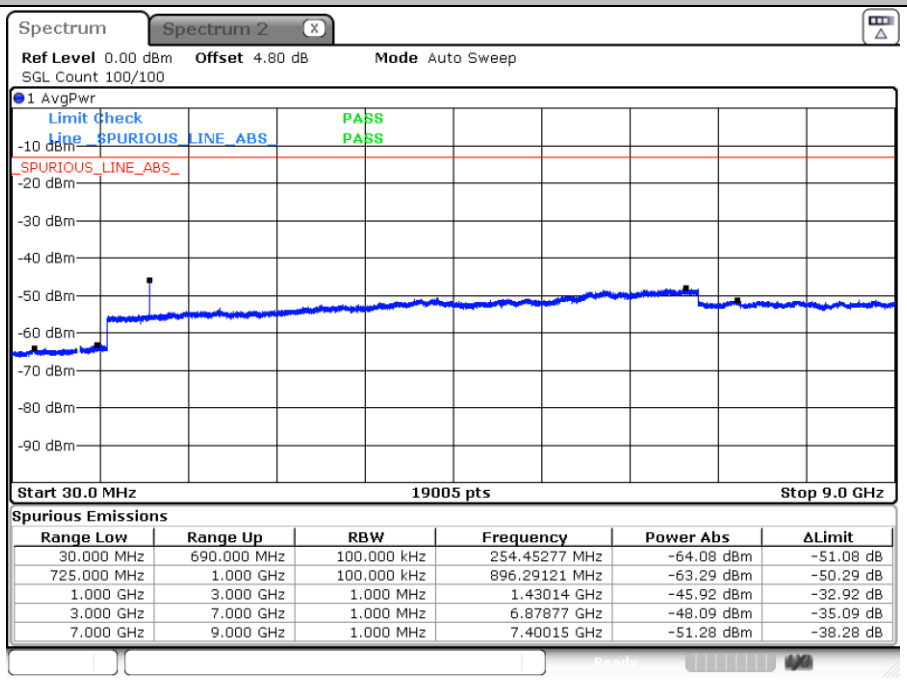


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	683.23838 MHz	-64.08 dBm	-51.08 dB
725.000 MHz	1.000 GHz	100.000 kHz	892.44505 MHz	-63.26 dBm	-50.26 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41415 GHz	-45.76 dBm	-32.76 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.86277 GHz	-48.11 dBm	-35.11 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.99950 GHz	-51.23 dBm	-38.23 dB

Date: 24.FEB.2026 11:09:28

Highest Channel / QPSK



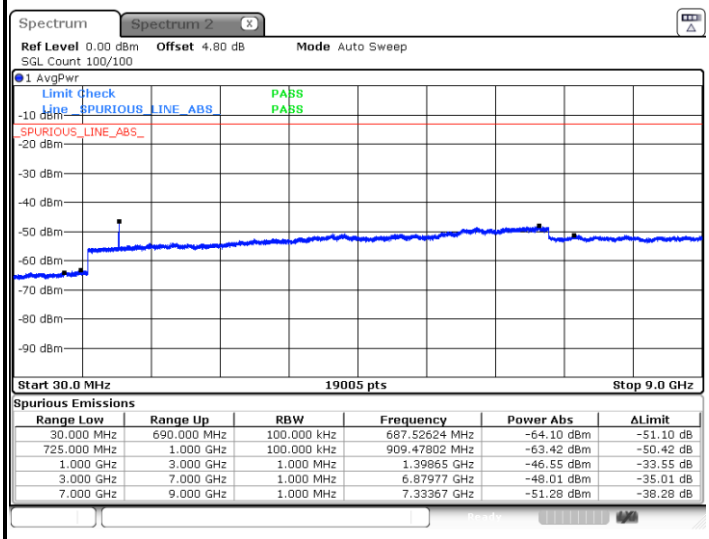
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	254.45277 MHz	-64.08 dBm	-51.08 dB
725.000 MHz	1.000 GHz	100.000 kHz	896.29121 MHz	-63.29 dBm	-50.29 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.43014 GHz	-45.92 dBm	-32.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.87877 GHz	-48.09 dBm	-35.09 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.40015 GHz	-51.28 dBm	-38.28 dB

Date: 24.FEB.2026 11:11:29

LTE Band 12 / 3MHz

Lowest Channel / QPSK

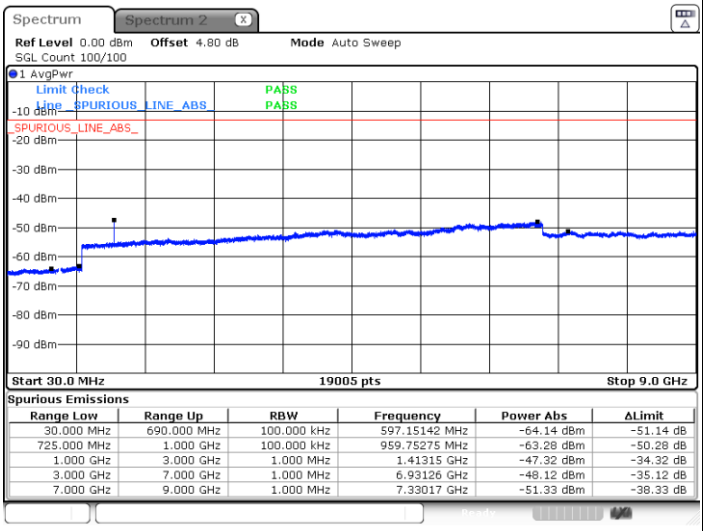


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	687.52624 MHz	-64.10 dBm	-51.10 dB
725.000 MHz	1.000 GHz	100.000 kHz	909.47802 MHz	-63.42 dBm	-50.42 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-46.55 dBm	-33.55 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.87977 GHz	-48.01 dBm	-35.01 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.33367 GHz	-51.28 dBm	-38.28 dB

Date: 24.FEB.2026 11:16:42

Middle Channel / QPSK

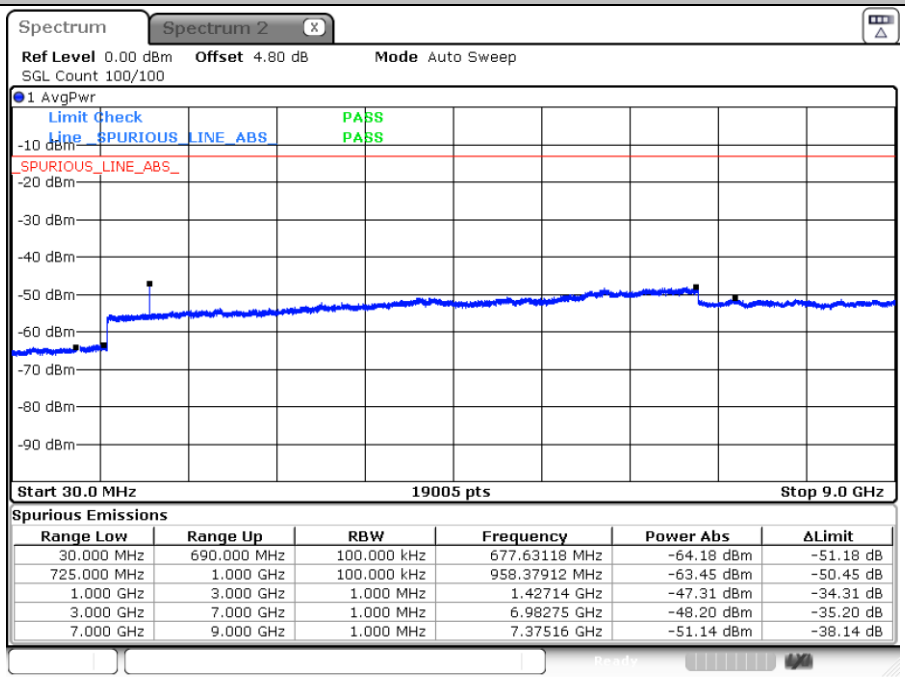


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	597.15142 MHz	-64.14 dBm	-51.14 dB
725.000 MHz	1.000 GHz	100.000 kHz	959.75275 MHz	-63.28 dBm	-50.28 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41315 GHz	-47.32 dBm	-34.32 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93126 GHz	-48.12 dBm	-35.12 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.33017 GHz	-51.33 dBm	-38.33 dB

Date: 24.FEB.2026 11:20:19

Highest Channel / QPSK



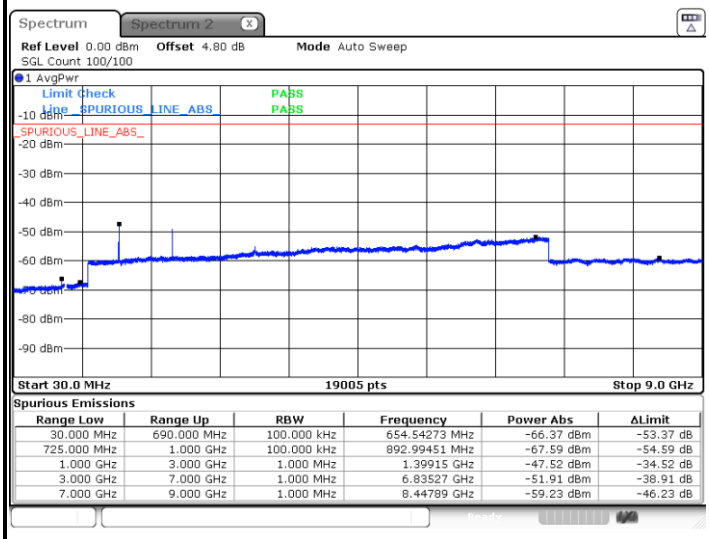
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	677.63118 MHz	-64.18 dBm	-51.18 dB
725.000 MHz	1.000 GHz	100.000 kHz	958.37912 MHz	-63.45 dBm	-50.45 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42714 GHz	-47.31 dBm	-34.31 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98275 GHz	-48.20 dBm	-35.20 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.37516 GHz	-51.14 dBm	-38.14 dB

Date: 24.FEB.2026 11:22:20

LTE Band 12 / 5MHz

Lowest Channel / QPSK

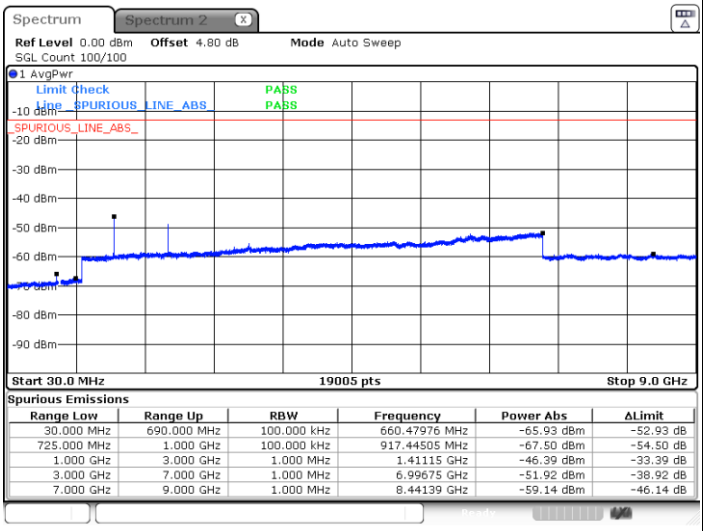


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	654.54273 MHz	-66.37 dBm	-53.37 dB
725.000 MHz	1.000 GHz	100.000 kHz	892.99451 MHz	-67.59 dBm	-54.59 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39915 GHz	-47.52 dBm	-34.52 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.83527 GHz	-51.91 dBm	-38.91 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.44789 GHz	-59.23 dBm	-46.23 dB

Date: 24.FEB.2026 11:25:57

Middle Channel / QPSK

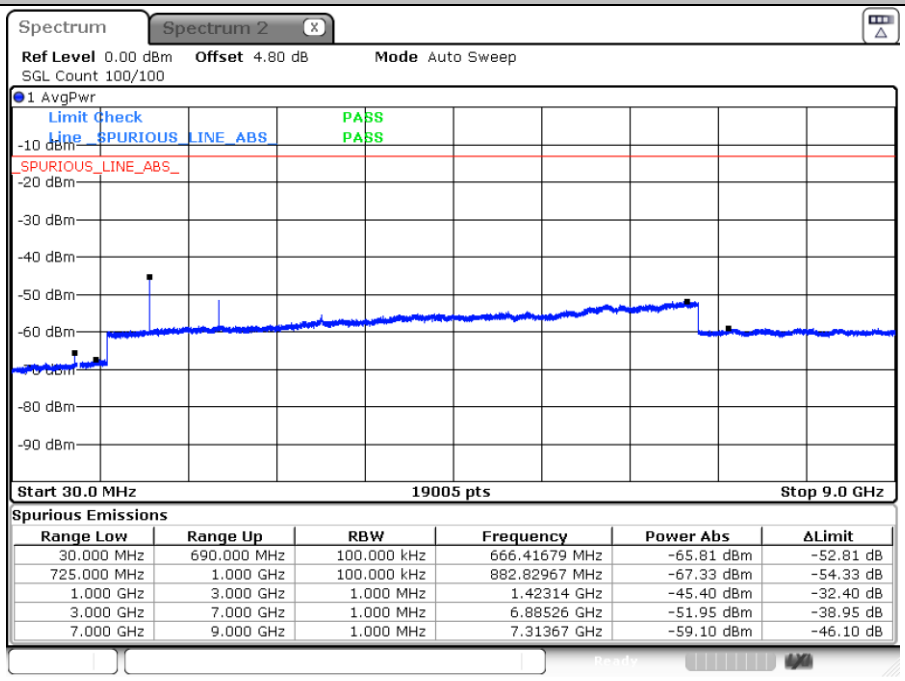


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	660.47976 MHz	-65.93 dBm	-52.93 dB
725.000 MHz	1.000 GHz	100.000 kHz	917.44505 MHz	-67.50 dBm	-54.50 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41115 GHz	-46.39 dBm	-33.39 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99675 GHz	-51.92 dBm	-38.92 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.44139 GHz	-59.14 dBm	-46.14 dB

Date: 24.FEB.2026 11:29:33

Highest Channel / QPSK



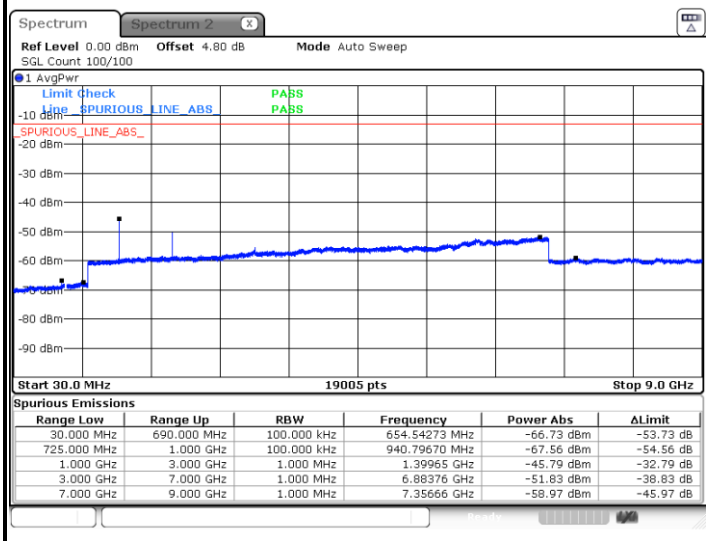
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	666.41679 MHz	-65.81 dBm	-52.81 dB
725.000 MHz	1.000 GHz	100.000 kHz	882.82967 MHz	-67.33 dBm	-54.33 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-45.40 dBm	-32.40 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.88526 GHz	-51.95 dBm	-38.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.31367 GHz	-59.10 dBm	-46.10 dB

Date: 24.FEB.2026 11:31:34

LTE Band 12 / 10MHz

Lowest Channel / QPSK

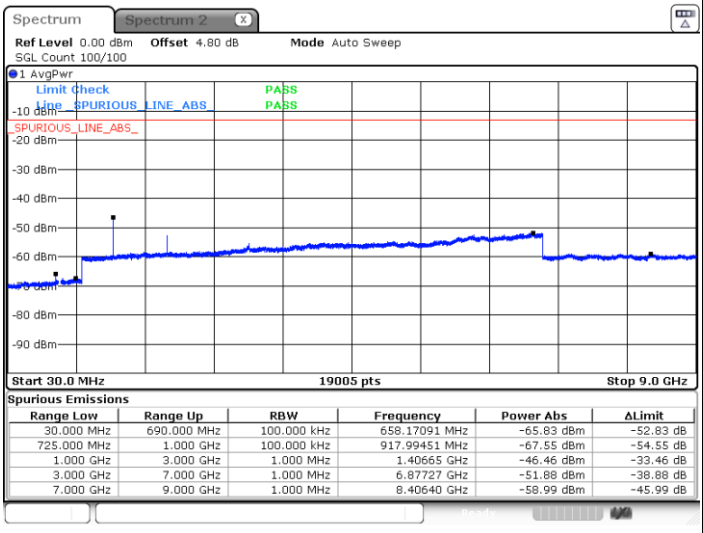


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	654.54273 MHz	-66.73 dBm	-53.73 dB
725.000 MHz	1.000 GHz	100.000 kHz	940.79670 MHz	-67.56 dBm	-54.56 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39965 GHz	-45.79 dBm	-32.79 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.88376 GHz	-51.83 dBm	-38.83 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.35666 GHz	-58.97 dBm	-45.97 dB

Date: 24.FEB.2026 11:35:11

Middle Channel / QPSK

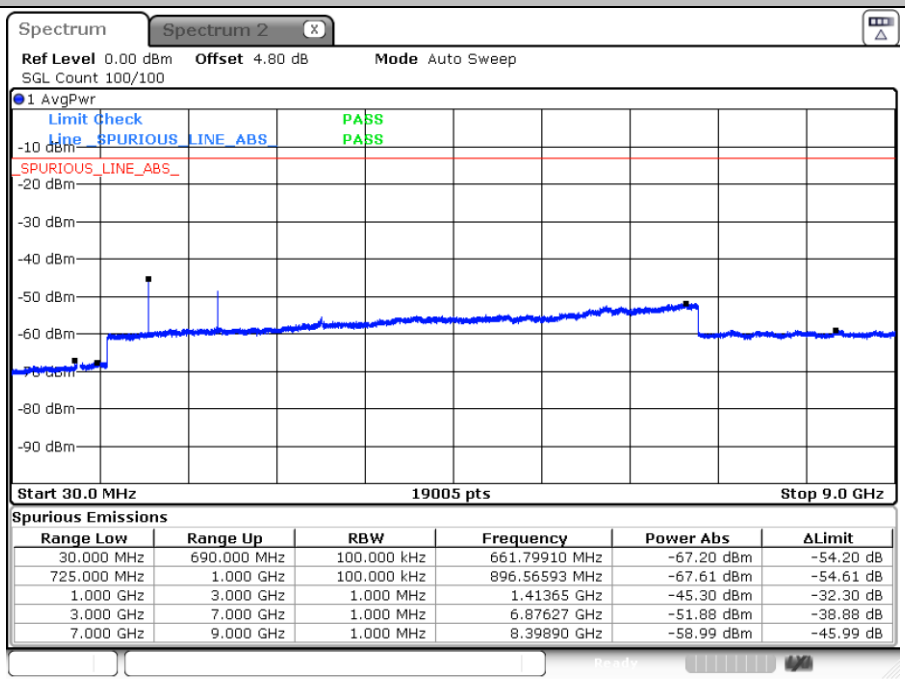


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	658.17091 MHz	-65.83 dBm	-52.83 dB
725.000 MHz	1.000 GHz	100.000 kHz	917.99451 MHz	-67.55 dBm	-54.55 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-46.46 dBm	-33.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.87727 GHz	-51.88 dBm	-38.88 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.40640 GHz	-58.99 dBm	-45.99 dB

Date: 24.FEB.2026 11:40:22

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	661.79910 MHz	-67.20 dBm	-54.20 dB
725.000 MHz	1.000 GHz	100.000 kHz	896.56593 MHz	-67.61 dBm	-54.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-45.30 dBm	-32.30 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.87627 GHz	-51.88 dBm	-38.88 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.39890 GHz	-58.99 dBm	-45.99 dB

Date: 24.FEB.2026 11:42:24

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0038	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0066	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0069	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.87 V.；Battery End Point (BEP) =3.5 V.；Maximum Voltage =4.45 V.

2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM		Limit: 13dB
RB Size	Full RB	Full RB	Full RB		Result
Middle CH	5.57	6.38	6.64		PASS

LTE Band 13 / 10MHz
Middle Channel / Full RB/ QPSK