FCC RF Test Report

APPLICANT	:	Akteena
EQUIPMENT	:	Akteena LumosX AI Dashcam
BRAND NAME	:	Akteena
MODEL NAME	:	A9-2299D
FCC ID	:	2BL79-A922
STANDARD	:	47 CFR Part 27(M), 27(H), 27(F)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	Mar. 19, 2025 ~ Apr. 20, 2025

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4O2401C	Rev. 01	Initial issue of report	May 08, 2025

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)	ERP < 3 Watt	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7) (Band 38) (Band 41)	EIRP < 2Watt		-
3.5	N/A	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)	< 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)	< 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)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 18.40 dB at 1560.00 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

Akteena

Akteena INC, 41369 Vincenti Ct., Novi Michigan 48375, U.S.A

1.2 Manufacturer

VVDN Technologies Pvt Ltd

Plot No: CP-07, Sector-8,IMT Manesar, Gurugram-122050,Haryana,INDIA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Akteena LumosX AI Dashcam
Brand Name	Akteena
Model Name	A9-2299D
FCC ID	2BL79-A922
IMEI Code	Conducted: 357750172665241 Radiation: 357750172665239
HW Version	C1
SW Version	Thermal-DCV2.7
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The device supports Powered by 12Vdc and 24Vdc, for RF testing, we evaluate is not affect RF performance, so we choice 12Vdc power source to test.

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 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 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 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 7 : 23.05 dBm LTE Band 12 : 23.71 dBm LTE Band 13 : 23.73 dBm LTE Band 38 : 23.20 dBm LTE Band 41 : 23.21 dBm
Antenna Gain	LTE Band 7 : 2.2 dBi LTE Band 12 : -2.2 dBi LTE Band 13 : -2.2 dBi LTE Band 38 : 2.2 dBi LTE Band 41 : 2.2 dBi
Type of Modulation	QPSK / 16QAM

Note: There are Main Antenna (TX/RX) and Diversity Antenna (RX only), Main Antenna is provided antenna gain in the section 1.4. For Main antenna has four paths for each band, as below, we choice maximum conducted power of the path to test.

	Support Band	Ant. Type	Maximum power of the Path				Operating mode
			Path.1	Path.2	Path.3	Path.4	
Support Band	B7	FPC	-	-	-	v	SISO
	B12	FPC	v	-	-	-	SISO
	B13	FPC	-	-	-	v	SISO
	B38	FPC	v	-	-	-	SISO
	B41	FPC	v	-	-	-	SISO

Remark: “-” means, pre-test power. “v” means, the Maximum power

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	
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**
5	2502.5 ~ 2567.5	0.3112	4M51G7D	0.2317	4M49W7D
10	2505.0 ~ 2565.0	0.3083	9M05G7D	0.2388	8M93W7D
15	2507.5 ~ 2562.5	0.3350	13M4G7D	0.2438	13M4W7D
20	2510.0 ~ 2560.0	0.3251	17M9G7D	0.2355	17M9W7D

LTE Band 12		QPSK		16QAM	
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	0.0849	1M09G7D	0.0644	1M09W7D
3	700.5 ~ 714.5	0.0815	2M73G7D	0.0621	2M73W7D
5	701.5 ~ 713.5	0.0828	4M49G7D	0.0624	4M49W7D
10	704.0 ~ 711.0	0.0863	8M99G7D	0.0640	9M09W7D
LTE Band 13		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	779.5 ~ 784.5	0.0867	4M47G7D	0.0655	4M48W7D
10	782.0	0.0838	8M97G7D	0.0671	8M99W7D
LTE Band 38		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.3436	4M56G7D	0.2767	4M49W7D
10	2575.0 ~ 2615.0	0.3459	9M05G7D	0.2831	9M05W7D
15	2577.5 ~ 2612.5	0.3467	13M4G7D	0.2891	13M4W7D
20	2580.0 ~ 2610.0	0.3412	17M8G7D	0.2825	17M8W7D
LTE Band 41		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2498.5 ~ 2687.5	0.3475	4M56G7D	0.2999	4M49W7D
10	2501.0 ~ 2685.0	0.3342	9M05G7D	0.2884	9M05W7D
15	2503.5 ~ 2682.5	0.3404	13M4G7D	0.2938	13M4W7D
20	2506.0 ~ 2680.0	0.3281	17M8G7D	0.2748	17M8W7D

Note:

1. 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.
2. 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	Manufacturer	Name	Version
1.	TH01-KS	SPORTON	Part2224_Ver5.0 200330	5.0
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(M), 27(H), 27(F)
- 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

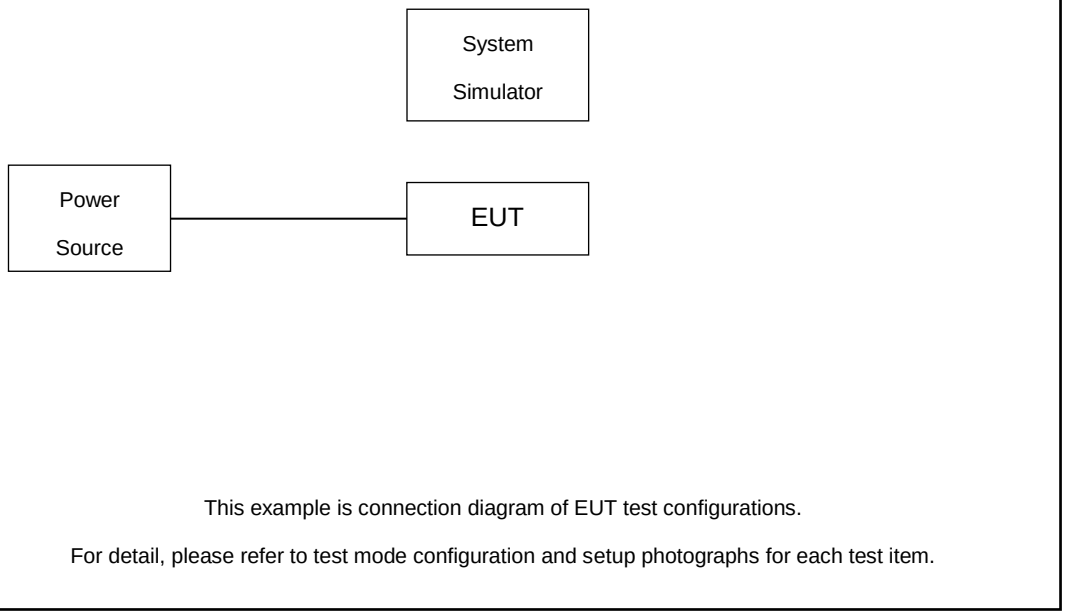
2.1 Test Mode

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	256QAM	1	Half	Full	L	M	H
Max. Output Power	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
	38	-	-	v	v	v	v	v	v	-	-	v		v	v	v	v
	41	-	-	v	v	v	v	v	v	-	-	v		v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	-	-			v		v	
	12				v	-	-	v	v	-	-			v		v	
	13	-	-		v	-	-	v	v	-	-			v		v	
	41	-	-				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
	12	v	v	v	v	-	-	v	v	-	-	v		v	v		v
	13	-	-	v	v	-	-	v	v	-	-	v		v	v		v
	41	-	-	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	
E.R.P / E.I.R.P	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
	38	-	-	v	v	v	v	v	v	-	-	v		v	v	v	v
	41	-	-	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.																

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	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 between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

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

Example :

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

= 5.8 (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 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

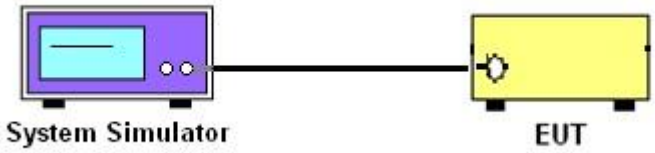
3 Conducted Test Items

3.1 Measuring Instruments

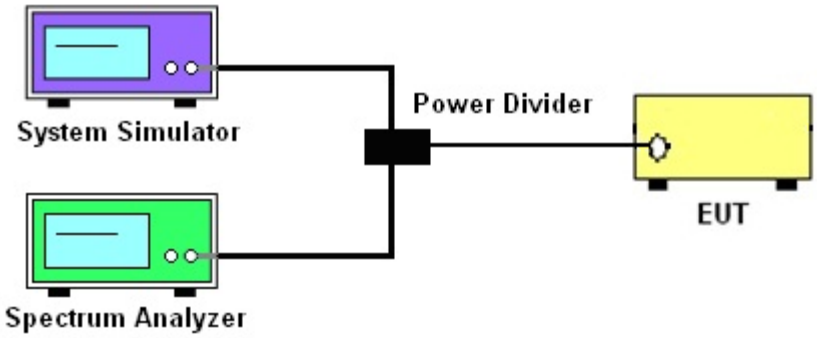
See list of measuring instruments of this test report.

3.2 Test Setup

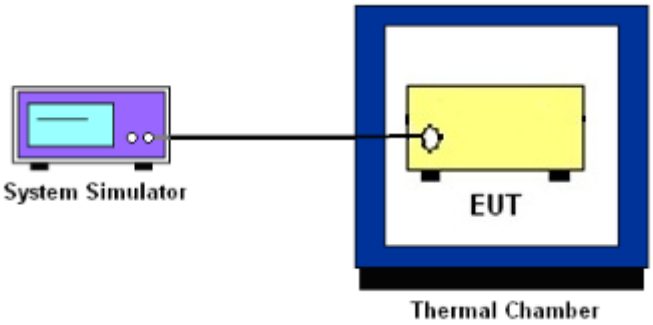
3.2.1 Conducted Output Power



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.

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.

3.5 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
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.

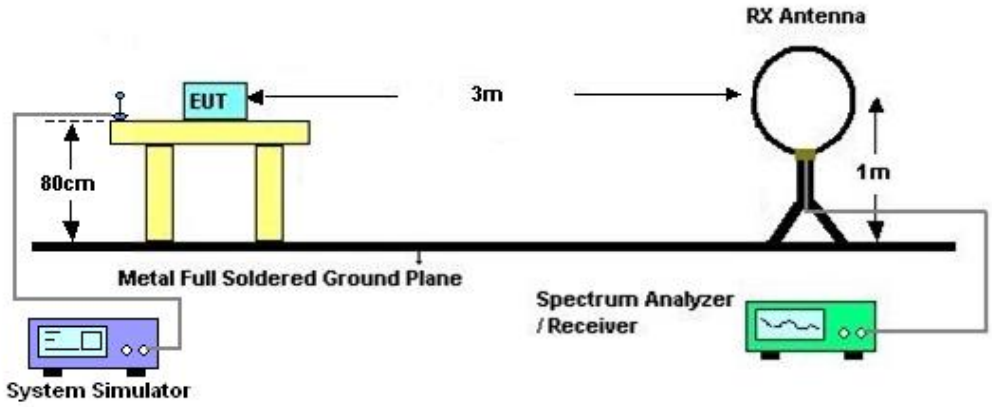
4 Radiated Test Items

4.1 Measuring Instruments

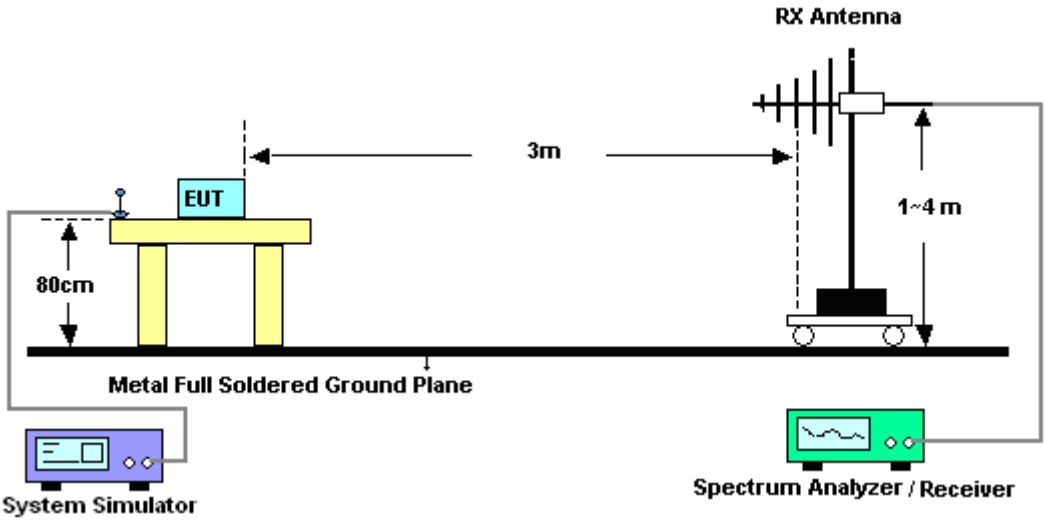
See list of measuring instruments of this test report.

4.2 Test Setup

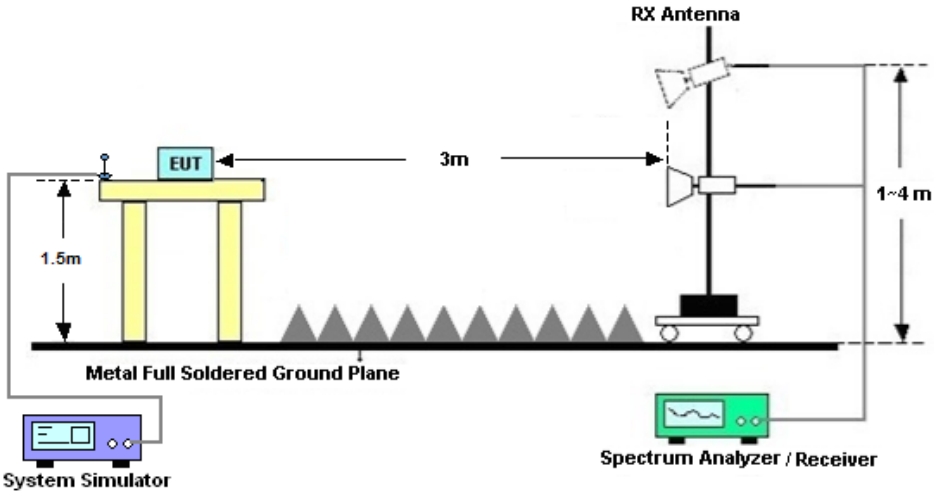
4.2.1 For radiated test below 30MHz



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
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Apr. 19, 2025~ Apr. 20, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Apr. 19, 2025~ Apr. 20, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Apr. 19, 2025~ Apr. 20, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 11, 2024	Mar. 19, 2025	Oct. 10, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Mar. 19, 2025	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Nov. 23, 2024	Mar. 19, 2025	Nov. 22, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Mar. 19, 2025	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Mar. 19, 2025	Oct. 21, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul. 03, 2024	Mar. 19, 2025	Jul. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060852	18~40GHz	Jan. 03, 2025	Mar. 19, 2025	Jan. 02, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 09, 2024	Mar. 19, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 09, 2024	Mar. 19, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 19, 2025	NCR	Radiation (03CH04-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

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Peak to Average Ratio	±0.46 dB
Frequency Stability	±0.4 Hz

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.30dB

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

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 :	Smile Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 7:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				20850	21100	21350	20850	21100	21350
Frequency (MHz)				2510	2535	2560	2510	2535	2560
20	QPSK	1	0	22.44	22.53	22.51	0.2911	0.2972	0.2958
20	QPSK	1	49	22.92	22.87	22.80	0.3251	0.3214	0.3162
20	QPSK	1	99	22.26	22.32	22.26	0.2793	0.2831	0.2793
20	QPSK	50	0	21.60	21.56	21.44	0.2399	0.2377	0.2312
20	QPSK	50	24	21.39	21.48	21.40	0.2286	0.2333	0.2291
20	QPSK	50	50	21.36	21.44	21.32	0.2270	0.2312	0.2249
20	QPSK	100	0	21.55	21.56	21.62	0.2371	0.2377	0.2410
20	16QAM	1	0	21.49	21.44	21.52	0.2339	0.2312	0.2355
20	16QAM	1	49	21.44	21.52	21.47	0.2312	0.2355	0.2328
20	16QAM	1	99	21.20	21.27	21.31	0.2188	0.2223	0.2244
20	16QAM	50	0	20.44	20.49	20.33	0.1837	0.1858	0.1791
20	16QAM	50	24	20.33	20.38	20.44	0.1791	0.1811	0.1837
20	16QAM	50	50	20.41	20.37	20.41	0.1824	0.1807	0.1824
20	16QAM	100	0	20.26	20.46	20.39	0.1762	0.1845	0.1816
Channel				20825	21100	21375	20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5	2507.5	2535	2562.5
15	QPSK	1	0	22.51	22.55	22.61	0.2958	0.2985	0.3027
15	QPSK	1	37	23.01	23.04	23.05	0.3319	0.3342	0.3350
15	QPSK	1	74	22.49	22.52	22.61	0.2944	0.2965	0.3027
15	QPSK	36	0	21.59	21.47	21.51	0.2393	0.2328	0.2350
15	QPSK	36	20	21.55	21.48	21.52	0.2371	0.2333	0.2355
15	QPSK	36	39	21.43	21.38	21.35	0.2307	0.2280	0.2265
15	QPSK	75	0	21.40	21.49	21.44	0.2291	0.2339	0.2312
15	16QAM	1	0	21.25	21.31	21.33	0.2213	0.2244	0.2254
15	16QAM	1	37	21.55	21.67	21.60	0.2371	0.2438	0.2399
15	16QAM	1	74	21.49	21.55	21.49	0.2339	0.2371	0.2339
15	16QAM	36	0	20.51	20.46	20.52	0.1866	0.1845	0.1871
15	16QAM	36	20	20.44	20.38	20.33	0.1837	0.1811	0.1791
15	16QAM	36	39	20.32	20.28	20.33	0.1786	0.1770	0.1791
15	16QAM	75	0	20.33	20.40	20.41	0.1791	0.1820	0.1824
Channel				20800	21100	21400	20800	21100	21400
Frequency (MHz)				2505	2535	2565	2505	2535	2565
10	QPSK	1	0	22.61	22.66	22.69	0.3027	0.3062	0.3083
10	QPSK	1	25	22.59	22.61	22.67	0.3013	0.3027	0.3069
10	QPSK	1	49	22.51	22.55	22.64	0.2958	0.2985	0.3048

10	QPSK	25	0	21.59	21.63	21.59	0.2393	0.2415	0.2393
10	QPSK	25	12	21.60	21.66	21.60	0.2399	0.2432	0.2399
10	QPSK	25	25	21.44	21.51	21.45	0.2312	0.2350	0.2317
10	QPSK	50	0	21.50	21.59	21.55	0.2344	0.2393	0.2371
10	16QAM	1	0	21.44	21.58	21.52	0.2312	0.2388	0.2355
10	16QAM	1	25	21.48	21.52	21.55	0.2333	0.2355	0.2371
10	16QAM	1	49	21.20	21.19	21.23	0.2188	0.2183	0.2203
10	16QAM	25	0	20.44	20.46	20.51	0.1837	0.1845	0.1866
10	16QAM	25	12	20.63	20.65	20.71	0.1919	0.1928	0.1954
10	16QAM	25	25	20.44	20.49	20.55	0.1837	0.1858	0.1884
10	16QAM	50	0	20.47	20.51	20.47	0.1849	0.1866	0.1849
Channel				20775	21100	21425	20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5	2502.5	2535	2567.5
5	QPSK	1	0	22.66	22.73	22.61	0.3062	0.3112	0.3027
5	QPSK	1	12	22.71	22.73	22.60	0.3097	0.3112	0.3020
5	QPSK	1	24	22.44	22.55	22.61	0.2911	0.2985	0.3027
5	QPSK	12	0	21.56	21.64	22.55	0.2377	0.2421	0.2985
5	QPSK	12	7	21.64	21.62	21.52	0.2421	0.2410	0.2355
5	QPSK	12	13	21.69	21.66	21.73	0.2449	0.2432	0.2472
5	QPSK	25	0	21.53	21.64	21.71	0.2360	0.2421	0.2460
5	16QAM	1	0	21.26	21.32	21.26	0.2218	0.2249	0.2218
5	16QAM	1	12	21.44	21.39	21.41	0.2312	0.2286	0.2296
5	16QAM	1	24	21.45	21.41	21.33	0.2317	0.2296	0.2254
5	16QAM	12	0	20.44	20.39	20.33	0.1837	0.1816	0.1791
5	16QAM	12	7	20.67	20.60	20.35	0.1936	0.1905	0.1799
5	16QAM	12	13	20.46	20.38	20.42	0.1845	0.1811	0.1828
5	16QAM	25	0	20.51	20.45	20.39	0.1866	0.1841	0.1816

LTE Band 12:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP		
Channel				23060	23095	23130	23060	23095	23130
Frequency (MHz)				704	707.5	711	704	707.5	711
10	QPSK	1	0	23.33	23.24	23.48	0.0791	0.0774	0.0818
10	QPSK	1	25	23.51	23.71	23.55	0.0824	0.0863	0.0832
10	QPSK	1	49	23.15	23.12	23.19	0.0759	0.0753	0.0766
10	QPSK	25	0	22.17	22.29	22.13	0.0605	0.0622	0.0600
10	QPSK	25	12	22.25	22.22	22.18	0.0617	0.0612	0.0607
10	QPSK	25	25	22.11	22.08	22.13	0.0597	0.0593	0.0600
10	QPSK	50	0	22.17	22.24	22.16	0.0605	0.0615	0.0604
10	16QAM	1	0	22.14	22.08	22.13	0.0601	0.0593	0.0600
10	16QAM	1	25	22.35	22.36	22.41	0.0631	0.0632	0.0640
10	16QAM	1	49	21.88	21.86	21.95	0.0566	0.0564	0.0575
10	16QAM	25	0	21.25	21.17	21.23	0.0490	0.0481	0.0488
10	16QAM	25	12	21.10	21.19	21.22	0.0473	0.0483	0.0486
10	16QAM	25	25	21.10	21.09	21.14	0.0473	0.0472	0.0478
10	16QAM	50	0	21.14	21.25	21.20	0.0478	0.0490	0.0484
Channel				23035	23095	23155	23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5	701.5	707.5	713.5

5	QPSK	1	0	23.24	23.30	23.21	0.0774	0.0785	0.0769
5	QPSK	1	12	23.45	23.53	23.45	0.0813	0.0828	0.0813
5	QPSK	1	24	23.10	23.07	23.05	0.0750	0.0745	0.0741
5	QPSK	12	0	22.34	22.30	22.25	0.0630	0.0624	0.0617
5	QPSK	12	7	22.26	22.31	22.26	0.0618	0.0625	0.0618
5	QPSK	12	13	22.26	22.13	22.11	0.0618	0.0600	0.0597
5	QPSK	25	0	22.17	22.22	22.15	0.0605	0.0612	0.0603
5	16QAM	1	0	22.22	22.16	22.13	0.0612	0.0604	0.0600
5	16QAM	1	12	22.30	22.25	22.14	0.0624	0.0617	0.0601
5	16QAM	1	24	21.77	21.80	21.76	0.0552	0.0556	0.0551
5	16QAM	12	0	21.03	20.98	21.02	0.0466	0.0460	0.0465
5	16QAM	12	7	21.04	21.19	21.25	0.0467	0.0483	0.0490
5	16QAM	12	13	21.00	21.02	21.05	0.0462	0.0465	0.0468
5	16QAM	25	0	21.17	21.22	21.30	0.0481	0.0486	0.0495
Channel				23025	23095	23165	23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5	700.5	707.5	714.5
3	QPSK	1	0	23.11	23.22	23.17	0.0752	0.0771	0.0762
3	QPSK	1	8	23.33	23.46	23.35	0.0791	0.0815	0.0794
3	QPSK	1	14	23.31	23.26	23.34	0.0787	0.0778	0.0793
3	QPSK	8	0	22.41	22.38	22.35	0.0640	0.0635	0.0631
3	QPSK	8	4	22.34	22.31	22.33	0.0630	0.0625	0.0628
3	QPSK	8	7	22.26	22.33	22.34	0.0618	0.0628	0.0630
3	QPSK	15	0	22.31	22.27	22.21	0.0625	0.0619	0.0611
3	16QAM	1	0	22.20	22.28	22.20	0.0610	0.0621	0.0610
3	16QAM	1	8	22.01	22.10	22.05	0.0583	0.0596	0.0589
3	16QAM	1	14	22.15	22.02	21.95	0.0603	0.0585	0.0575
3	16QAM	8	0	21.15	21.27	21.32	0.0479	0.0492	0.0498
3	16QAM	8	4	21.14	21.19	21.22	0.0478	0.0483	0.0486
3	16QAM	8	7	21.25	21.27	21.33	0.0490	0.0492	0.0499
3	16QAM	15	0	21.24	21.26	21.34	0.0489	0.0491	0.0500
Channel				23017	23095	23173	23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3	699.7	707.5	715.3
1.4	QPSK	1	0	23.28	23.40	23.33	0.0782	0.0804	0.0791
1.4	QPSK	1	3	23.55	23.64	23.55	0.0832	0.0849	0.0832
1.4	QPSK	1	5	23.41	23.56	23.47	0.0805	0.0834	0.0817
1.4	QPSK	3	0	23.30	23.38	23.41	0.0785	0.0800	0.0805
1.4	QPSK	3	1	23.28	23.35	23.24	0.0782	0.0794	0.0774
1.4	QPSK	3	3	23.18	23.21	23.11	0.0764	0.0769	0.0752
1.4	QPSK	6	0	22.11	22.23	22.12	0.0597	0.0614	0.0598
1.4	16QAM	1	0	22.15	22.22	22.10	0.0603	0.0612	0.0596
1.4	16QAM	1	3	22.36	22.44	22.31	0.0632	0.0644	0.0625
1.4	16QAM	1	5	22.17	22.09	22.15	0.0605	0.0594	0.0603
1.4	16QAM	3	0	22.29	22.35	22.40	0.0622	0.0631	0.0638
1.4	16QAM	3	1	22.14	22.28	22.30	0.0601	0.0621	0.0624
1.4	16QAM	3	3	22.05	22.11	22.12	0.0589	0.0597	0.0598
1.4	16QAM	6	0	21.02	21.08	21.05	0.0465	0.0471	0.0468

LTE Band 13:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP		
Channel					23230			23230	
Frequency (MHz)					782			782	
10	QPSK	1	0		23.22			0.0771	
10	QPSK	1	25		23.58			0.0838	
10	QPSK	1	49		23.10			0.0750	
10	QPSK	25	0		22.30			0.0624	
10	QPSK	25	12		22.26			0.0618	
10	QPSK	25	25		22.15			0.0603	
10	QPSK	50	0		22.23			0.0614	
10	16QAM	1	0		22.19			0.0608	
10	16QAM	1	25		22.62			0.0671	
10	16QAM	1	49		22.08			0.0593	
10	16QAM	25	0		21.14			0.0478	
10	16QAM	25	12		21.20			0.0484	
10	16QAM	25	25		21.13			0.0476	
10	16QAM	50	0		21.18			0.0482	
Channel				23205	23230	23255	23205	23230	23255
Frequency (MHz)				779.5	782	784.5	779.5	782	784.5
5	QPSK	1	0	23.51	23.43	23.37	0.0824	0.0809	0.0798
5	QPSK	1	12	23.66	23.73	23.59	0.0853	0.0867	0.0839
5	QPSK	1	24	23.45	23.49	23.52	0.0813	0.0820	0.0826
5	QPSK	12	0	22.24	22.25	22.31	0.0615	0.0617	0.0625
5	QPSK	12	7	22.21	22.25	22.21	0.0611	0.0617	0.0611
5	QPSK	12	13	22.37	22.31	22.28	0.0634	0.0625	0.0621
5	QPSK	25	0	22.22	22.27	22.30	0.0612	0.0619	0.0624
5	16QAM	1	0	22.05	22.04	22.11	0.0589	0.0587	0.0597
5	16QAM	1	12	22.37	22.44	22.51	0.0634	0.0644	0.0655
5	16QAM	1	24	22.16	22.20	22.31	0.0604	0.0610	0.0625
5	16QAM	12	0	21.26	21.14	21.24	0.0491	0.0478	0.0489
5	16QAM	12	7	21.26	21.32	21.33	0.0491	0.0498	0.0499
5	16QAM	12	13	21.25	21.20	21.14	0.0490	0.0484	0.0478
5	16QAM	25	0	21.05	21.10	21.05	0.0468	0.0473	0.0468

LTE Band 38:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				37850	38000	38150	37850	38000	38150
Frequency (MHz)				2580	2595	2610	2580	2595	2610
20	QPSK	1	0	22.79	23.05	23.09	0.3155	0.3350	0.3381
20	QPSK	1	49	22.83	23.08	23.13	0.3184	0.3373	0.3412
20	QPSK	1	99	22.80	22.84	22.90	0.3162	0.3192	0.3236
20	QPSK	50	0	22.02	22.19	22.23	0.2642	0.2748	0.2773
20	QPSK	50	24	22.08	22.16	22.21	0.2679	0.2729	0.2761
20	QPSK	50	50	22.12	22.16	22.19	0.2704	0.2729	0.2748
20	QPSK	100	0	22.05	22.14	22.19	0.2661	0.2716	0.2748
20	16QAM	1	0	21.89	22.15	22.26	0.2564	0.2723	0.2793

20	16QAM	1	49	22.02	22.23	22.31	0.2642	0.2773	0.2825
20	16QAM	1	99	22.03	22.25	22.30	0.2649	0.2786	0.2818
20	16QAM	50	0	20.93	21.11	21.16	0.2056	0.2143	0.2168
20	16QAM	50	24	21.06	21.17	21.20	0.2118	0.2173	0.2188
20	16QAM	50	50	20.97	21.16	21.23	0.2075	0.2168	0.2203
20	16QAM	100	0	21.03	21.20	21.22	0.2104	0.2188	0.2198
Channel				37825	38000	38175	37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5	2577.5	2595	2612.5
15	QPSK	1	0	22.90	23.06	22.98	0.3236	0.3357	0.3296
15	QPSK	1	37	23.13	23.19	23.20	0.3412	0.3459	0.3467
15	QPSK	1	74	22.97	23.01	22.85	0.3289	0.3319	0.3199
15	QPSK	36	0	22.02	22.26	22.12	0.2642	0.2793	0.2704
15	QPSK	36	20	22.02	22.12	22.00	0.2642	0.2704	0.2630
15	QPSK	36	39	22.13	22.23	22.02	0.2710	0.2773	0.2642
15	QPSK	75	0	22.11	22.21	21.98	0.2698	0.2761	0.2618
15	16QAM	1	0	22.00	22.14	22.16	0.2630	0.2716	0.2729
15	16QAM	1	37	22.06	22.41	21.96	0.2667	0.2891	0.2606
15	16QAM	1	74	22.04	21.99	22.21	0.2655	0.2624	0.2761
15	16QAM	36	0	21.10	21.09	20.97	0.2138	0.2133	0.2075
15	16QAM	36	20	20.92	21.00	21.01	0.2051	0.2089	0.2094
15	16QAM	36	39	21.04	21.10	21.07	0.2109	0.2138	0.2123
15	16QAM	75	0	21.06	21.04	21.06	0.2118	0.2109	0.2118
Channel				37800	38000	38200	37800	38000	38200
Frequency (MHz)				2575	2595	2615	2575	2595	2615
10	QPSK	1	0	22.92	23.07	23.12	0.3251	0.3365	0.3404
10	QPSK	1	25	22.99	23.04	23.19	0.3304	0.3342	0.3459
10	QPSK	1	49	23.05	23.11	23.12	0.3350	0.3396	0.3404
10	QPSK	25	0	22.01	22.17	22.18	0.2636	0.2735	0.2742
10	QPSK	25	12	21.97	22.17	22.25	0.2612	0.2735	0.2786
10	QPSK	25	25	22.00	22.11	22.24	0.2630	0.2698	0.2780
10	QPSK	50	0	21.96	22.26	22.21	0.2606	0.2793	0.2761
10	16QAM	1	0	22.00	22.02	22.32	0.2630	0.2642	0.2831
10	16QAM	1	25	21.92	22.12	22.23	0.2582	0.2704	0.2773
10	16QAM	1	49	21.85	22.20	22.11	0.2541	0.2754	0.2698
10	16QAM	25	0	20.99	21.12	21.08	0.2084	0.2148	0.2128
10	16QAM	25	12	20.94	21.00	21.06	0.2061	0.2089	0.2118
10	16QAM	25	25	20.96	21.04	21.14	0.2070	0.2109	0.2158
10	16QAM	50	0	20.92	21.12	21.12	0.2051	0.2148	0.2148
Channel				37775	38000	38225	37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5	2572.5	2595	2617.5
5	QPSK	1	0	22.99	22.87	23.11	0.3304	0.3214	0.3396
5	QPSK	1	12	23.08	23.11	23.16	0.3373	0.3396	0.3436
5	QPSK	1	24	22.99	22.81	23.15	0.3304	0.3170	0.3428
5	QPSK	12	0	22.00	22.10	22.11	0.2630	0.2692	0.2698
5	QPSK	12	7	21.93	22.16	22.18	0.2588	0.2729	0.2742
5	QPSK	12	13	22.02	22.05	22.13	0.2642	0.2661	0.2710
5	QPSK	25	0	22.02	22.08	22.17	0.2642	0.2679	0.2735
5	16QAM	1	0	21.92	21.92	22.06	0.2582	0.2582	0.2667
5	16QAM	1	12	22.12	22.20	22.15	0.2704	0.2754	0.2723
5	16QAM	1	24	22.03	21.96	22.22	0.2649	0.2606	0.2767

5	16QAM	12	0	20.91	21.00	21.04	0.2046	0.2089	0.2109
5	16QAM	12	7	20.82	21.03	21.06	0.2004	0.2104	0.2118
5	16QAM	12	13	20.89	20.97	21.24	0.2037	0.2075	0.2208
5	16QAM	25	0	20.95	21.02	21.17	0.2065	0.2099	0.2173

LTE Band 41:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP		
Channel				39750	40620	41490	39750	40620	41490
Frequency (MHz)				2506	2593	2680	2506	2593	2680
20	QPSK	1	0	22.74	22.33	22.00	0.3119	0.2838	0.2630
20	QPSK	1	49	22.96	22.93	22.20	0.3281	0.3258	0.2754
20	QPSK	1	99	22.87	22.74	21.92	0.3214	0.3119	0.2582
20	QPSK	50	0	22.10	21.59	21.32	0.2692	0.2393	0.2249
20	QPSK	50	24	22.09	21.71	21.22	0.2685	0.2460	0.2198
20	QPSK	50	50	22.02	21.67	21.21	0.2642	0.2438	0.2193
20	QPSK	100	0	22.13	21.62	21.12	0.2710	0.2410	0.2148
20	16QAM	1	0	22.19	21.61	21.23	0.2748	0.2404	0.2203
20	16QAM	1	49	22.05	21.70	21.23	0.2661	0.2455	0.2203
20	16QAM	1	99	21.88	21.71	21.30	0.2559	0.2460	0.2239
20	16QAM	50	0	21.13	20.63	21.25	0.2153	0.1919	0.2213
20	16QAM	50	24	20.99	20.66	20.11	0.2084	0.1932	0.1702
20	16QAM	50	50	21.01	20.71	20.23	0.2094	0.1954	0.1750
20	16QAM	100	0	20.02	20.59	20.13	0.1667	0.1901	0.1710
Channel				39725	40620	41515	39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5	2503.5	2593	2682.5
15	QPSK	1	0	23.12	22.43	22.27	0.3404	0.2904	0.2799
15	QPSK	1	37	22.88	22.94	22.41	0.3221	0.3266	0.2891
15	QPSK	1	74	22.71	22.48	22.12	0.3097	0.2938	0.2704
15	QPSK	36	0	22.07	21.56	22.23	0.2673	0.2377	0.2773
15	QPSK	36	20	22.02	21.53	21.26	0.2642	0.2360	0.2218
15	QPSK	36	39	22.14	21.69	21.30	0.2716	0.2449	0.2239
15	QPSK	75	0	22.05	21.64	21.29	0.2661	0.2421	0.2234
15	16QAM	1	0	22.14	21.49	21.16	0.2716	0.2339	0.2168
15	16QAM	1	37	22.48	22.11	21.88	0.2938	0.2698	0.2559
15	16QAM	1	74	22.36	21.56	21.35	0.2858	0.2377	0.2265
15	16QAM	36	0	20.73	20.61	20.36	0.1963	0.1910	0.1803
15	16QAM	36	20	21.25	20.61	20.24	0.2213	0.1910	0.1754
15	16QAM	36	39	21.12	20.71	20.26	0.2148	0.1954	0.1762
15	16QAM	75	0	20.66	20.62	20.24	0.1932	0.1914	0.1754
Channel				39700	40620	41540	39700	40620	41540
Frequency (MHz)				2501	2593	2685	2501	2593	2685
10	QPSK	1	0	23.04	22.35	22.19	0.3342	0.2851	0.2748
10	QPSK	1	25	22.80	22.86	22.33	0.3162	0.3206	0.2838
10	QPSK	1	49	22.63	22.40	22.04	0.3041	0.2884	0.2655
10	QPSK	25	0	21.99	21.48	22.15	0.2624	0.2333	0.2723
10	QPSK	25	12	21.94	21.45	21.18	0.2594	0.2317	0.2178
10	QPSK	25	25	22.06	21.61	21.22	0.2667	0.2404	0.2198
10	QPSK	50	0	21.97	21.56	21.21	0.2612	0.2377	0.2193

10	16QAM	1	0	22.06	21.41	21.08	0.2667	0.2296	0.2128
10	16QAM	1	25	22.40	22.03	21.80	0.2884	0.2649	0.2512
10	16QAM	1	49	22.28	21.48	21.27	0.2805	0.2333	0.2223
10	16QAM	25	0	20.65	20.53	20.28	0.1928	0.1875	0.1770
10	16QAM	25	12	21.17	20.53	20.16	0.2173	0.1875	0.1722
10	16QAM	25	25	21.04	20.63	20.18	0.2109	0.1919	0.1730
10	16QAM	50	0	20.58	20.54	20.16	0.1897	0.1879	0.1722
Channel				39675	40620	41565	39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5	2498.5	2593	2687.5
5	QPSK	1	0	23.21	22.52	22.36	0.3475	0.2965	0.2858
5	QPSK	1	12	22.97	23.03	22.50	0.3289	0.3334	0.2951
5	QPSK	1	24	22.80	22.57	22.21	0.3162	0.2999	0.2761
5	QPSK	12	0	22.16	21.65	22.32	0.2729	0.2427	0.2831
5	QPSK	12	7	22.11	21.62	21.35	0.2698	0.2410	0.2265
5	QPSK	12	13	22.23	22.83	21.39	0.2773	0.3184	0.2286
5	QPSK	25	0	22.14	21.73	21.38	0.2716	0.2472	0.2280
5	16QAM	1	0	22.23	21.58	21.25	0.2773	0.2388	0.2213
5	16QAM	1	12	22.57	22.20	21.97	0.2999	0.2754	0.2612
5	16QAM	1	24	22.45	21.65	21.44	0.2917	0.2427	0.2312
5	16QAM	12	0	20.82	20.62	20.45	0.2004	0.1914	0.1841
5	16QAM	12	7	21.34	20.70	20.33	0.2259	0.1950	0.1791
5	16QAM	12	13	21.21	20.71	20.35	0.2193	0.1954	0.1799
5	16QAM	25	0	20.75	20.71	20.33	0.1972	0.1954	0.1791

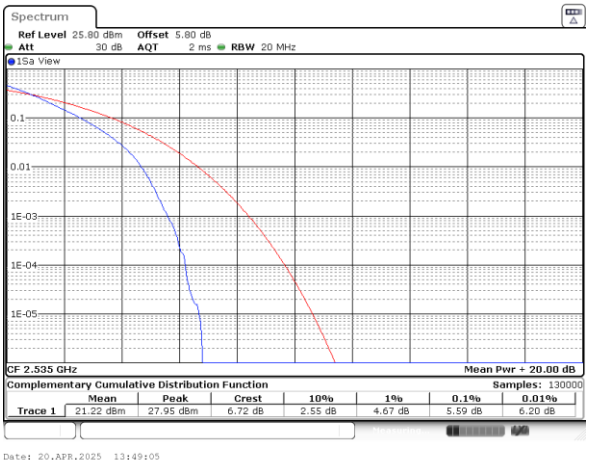
LTE Band 7

Peak-to-Average Ratio

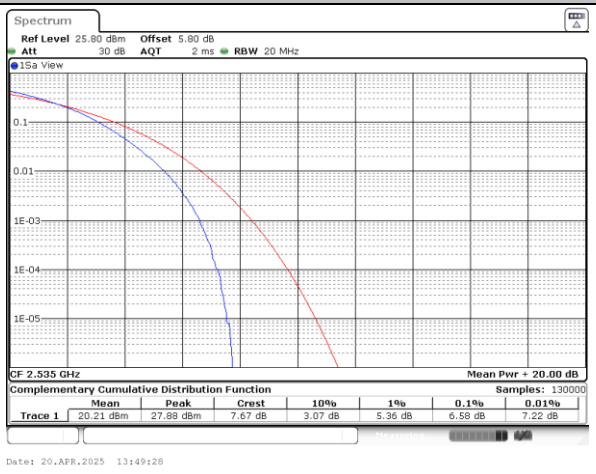
Mode	LTE Band 7 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.59	6.58	PASS

LTE Band 7 / 20MHz

Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

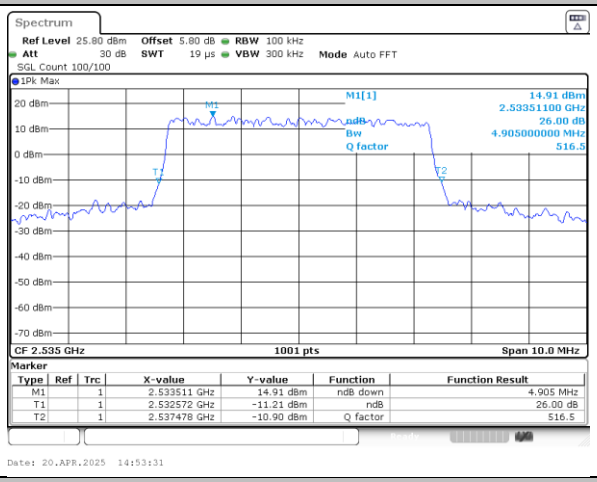


26dB Bandwidth

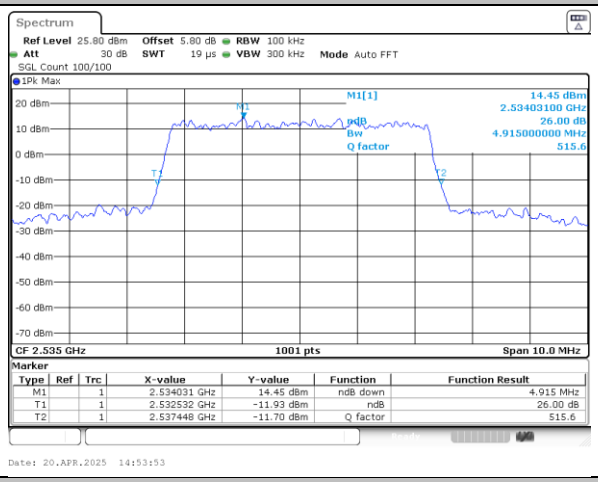
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.91	4.92	9.67	9.83	14.45	14.63	19.18	18.70

LTE Band 7

Middle Channel / 5MHz / QPSK

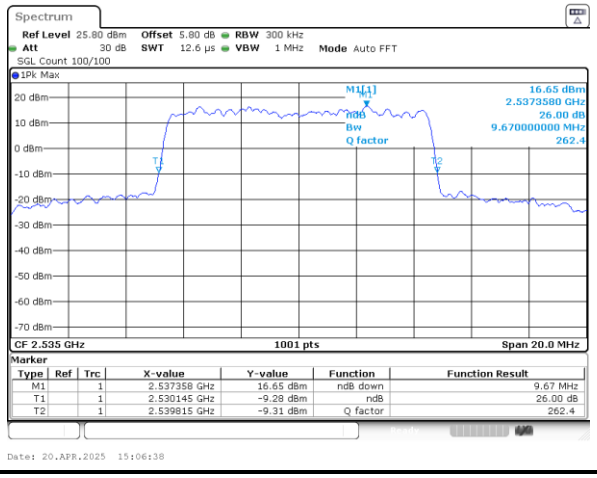


Middle Channel / 5MHz / 16QAM

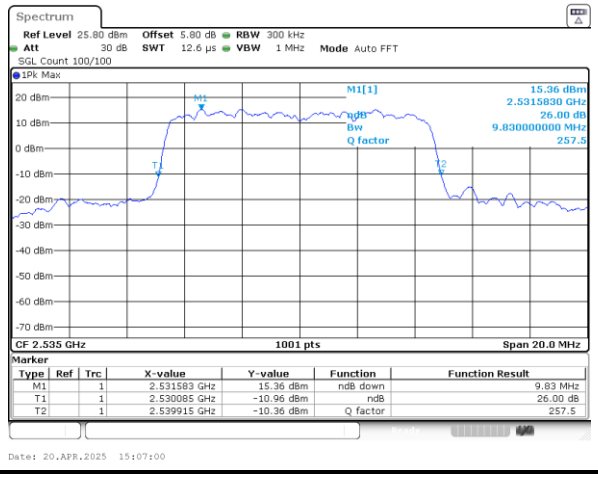


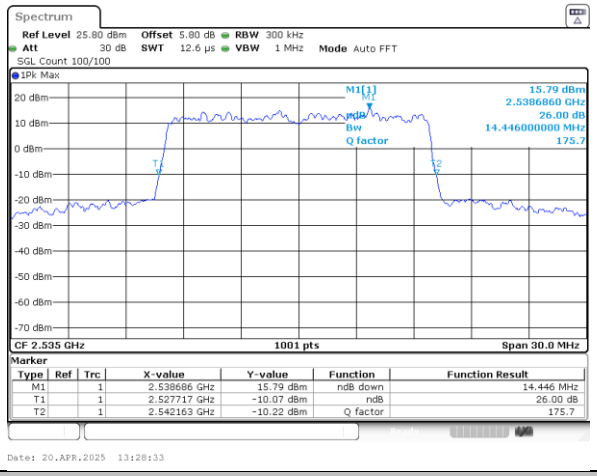
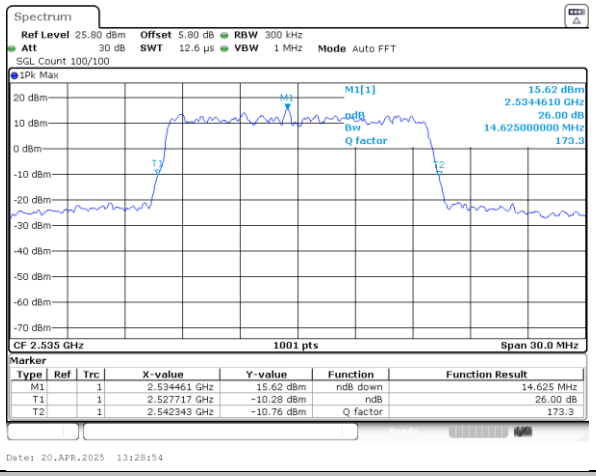
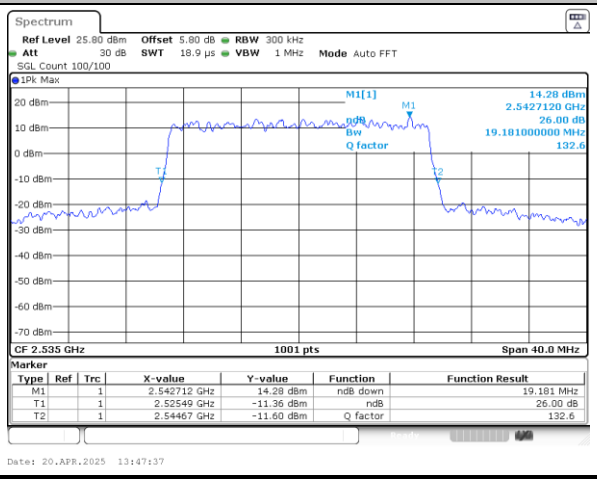
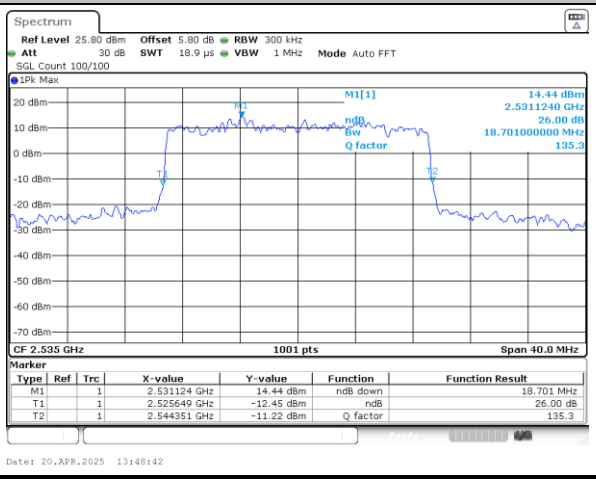
LTE Band 7

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



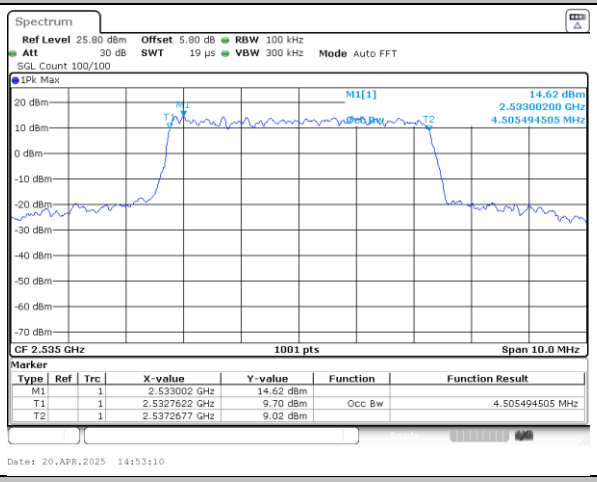
LTE Band 7	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
LTE Band 7	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Occupied Bandwidth

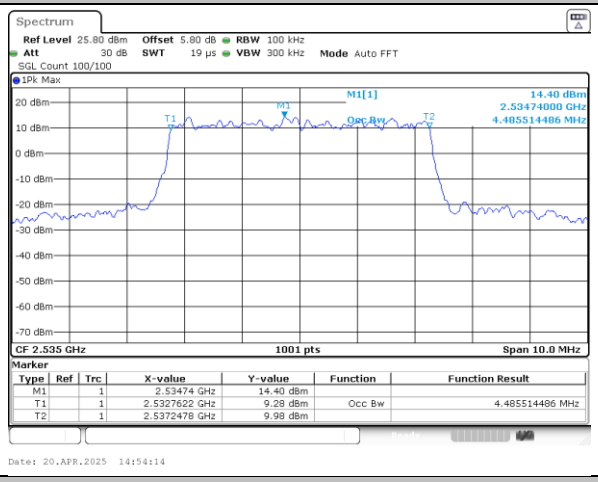
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.49	9.05	8.93	13.37	13.40	17.86	17.86

LTE Band 7

Middle Channel / 5MHz / QPSK

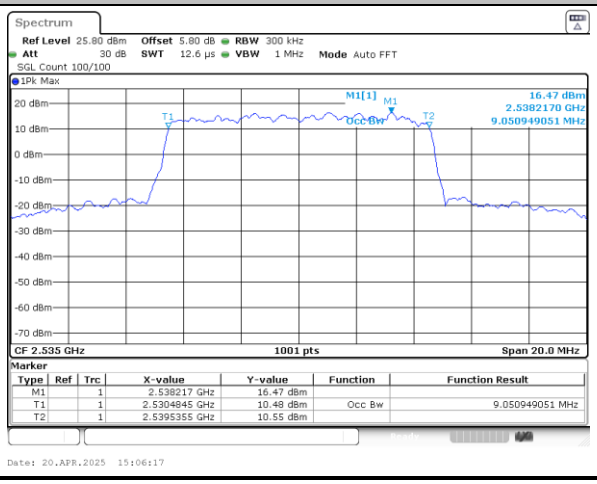


Middle Channel / 5MHz / 16QAM

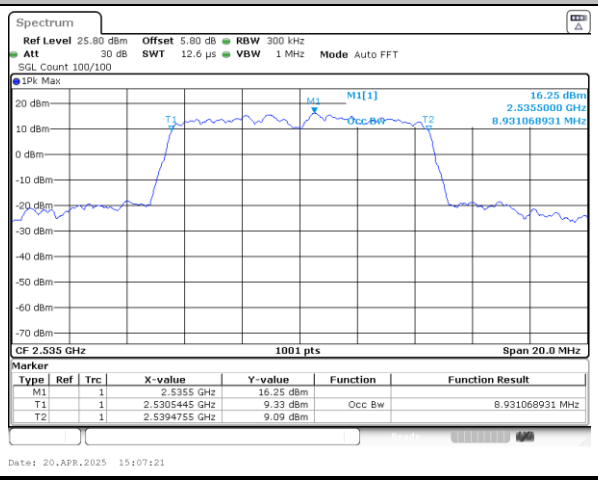


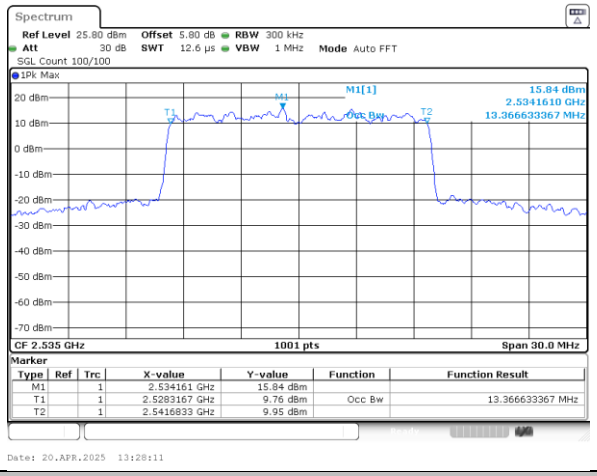
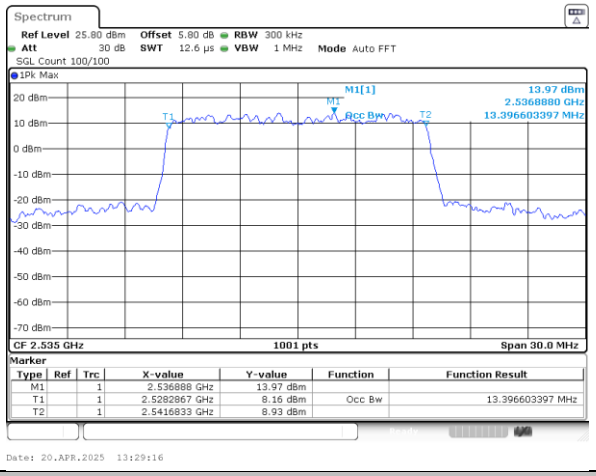
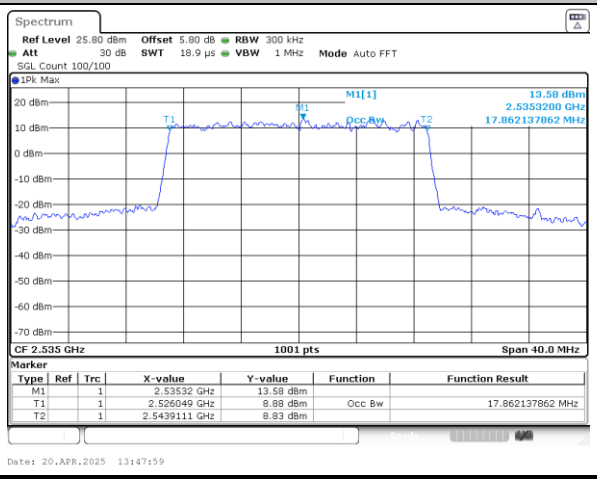
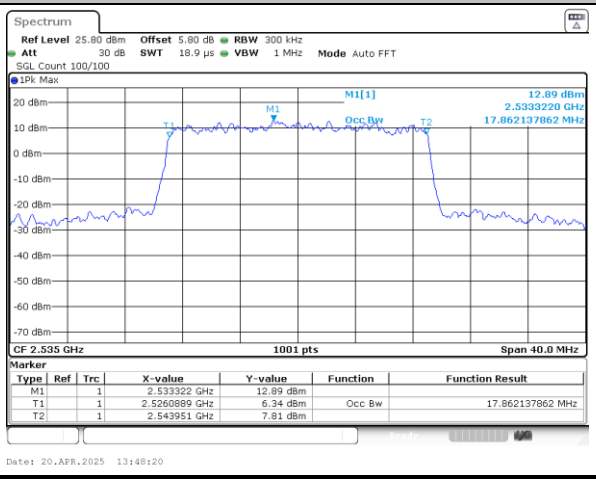
LTE Band 7

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

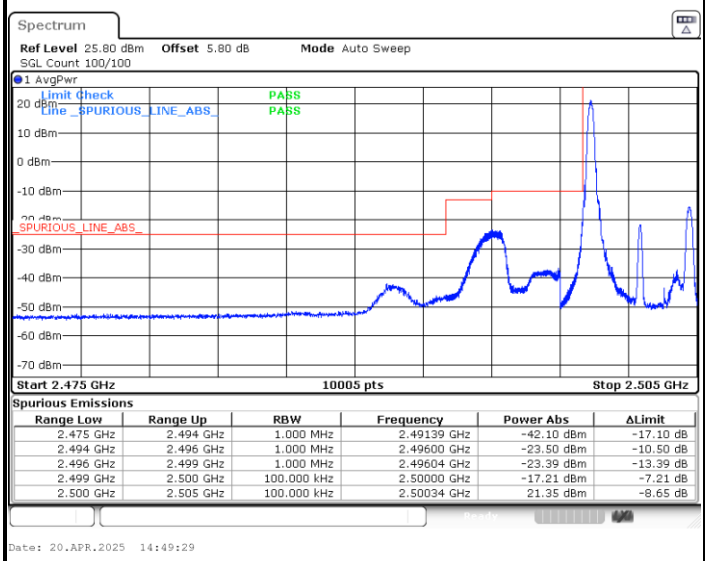


LTE Band 7	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
LTE Band 7	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB

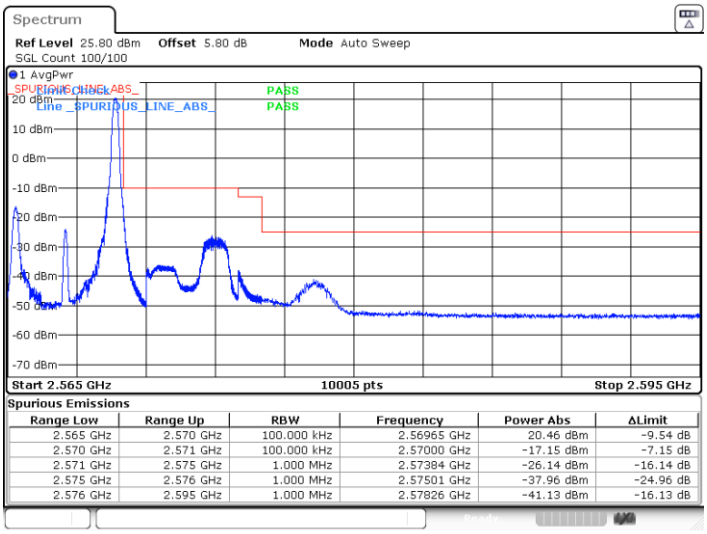


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49139 GHz	-42.10 dBm	-17.10 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49600 GHz	-23.50 dBm	-10.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49604 GHz	-23.39 dBm	-13.39 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-17.21 dBm	-7.21 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	21.35 dBm	-8.65 dB

Date: 20.APR.2025 14:49:29

Highest Band Edge / 1 RB

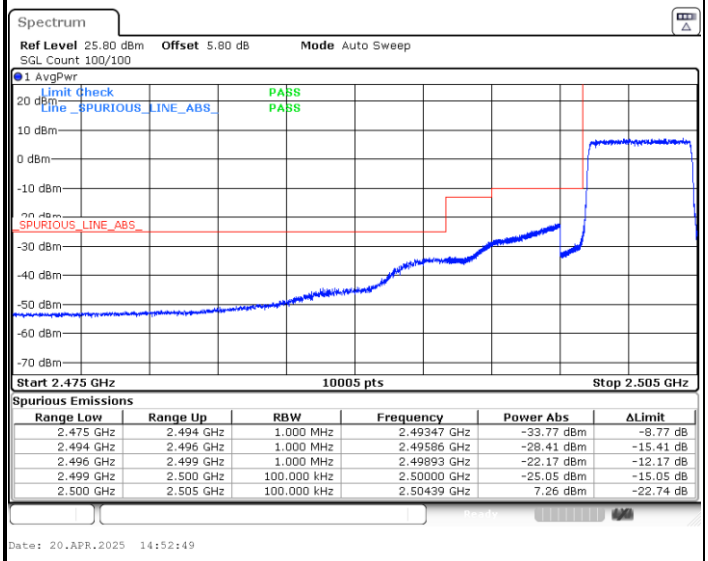


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56965 GHz	20.46 dBm	-9.54 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-17.15 dBm	-7.15 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57384 GHz	-26.14 dBm	-16.14 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57501 GHz	-37.96 dBm	-24.96 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57826 GHz	-41.13 dBm	-16.13 dB

Date: 20.APR.2025 14:57:15

Lowest Band Edge / Full RB

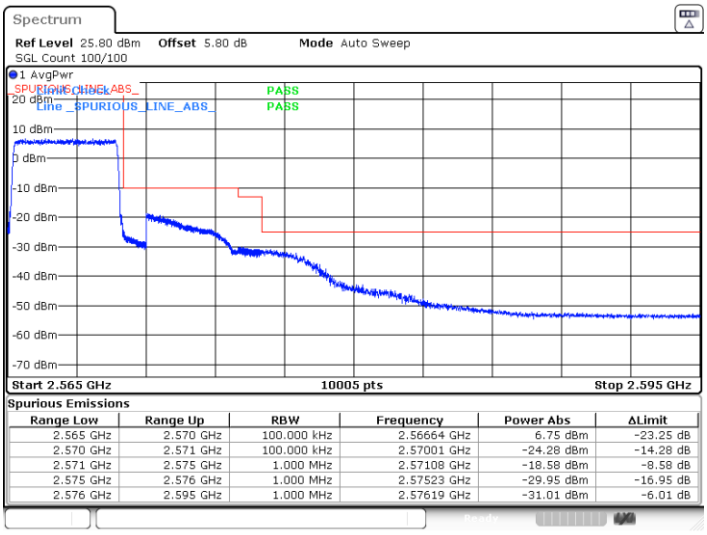


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49347 GHz	-33.77 dBm	-8.77 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49586 GHz	-28.41 dBm	-15.41 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49893 GHz	-22.17 dBm	-12.17 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-25.05 dBm	-15.05 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50439 GHz	7.26 dBm	-22.74 dB

Date: 20.APR.2025 14:52:49

Highest Band Edge / Full RB



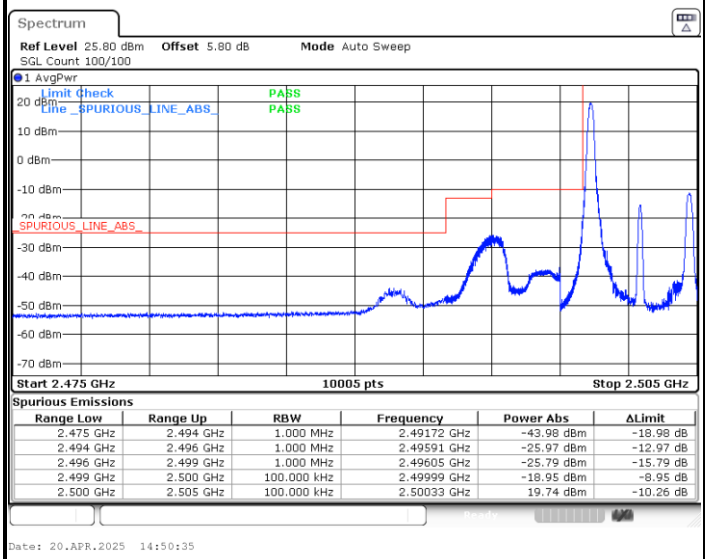
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56664 GHz	6.75 dBm	-23.25 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-24.28 dBm	-14.28 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57108 GHz	-18.58 dBm	-8.58 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57523 GHz	-29.95 dBm	-16.95 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57619 GHz	-31.01 dBm	-6.01 dB

Date: 20.APR.2025 15:00:32

LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB

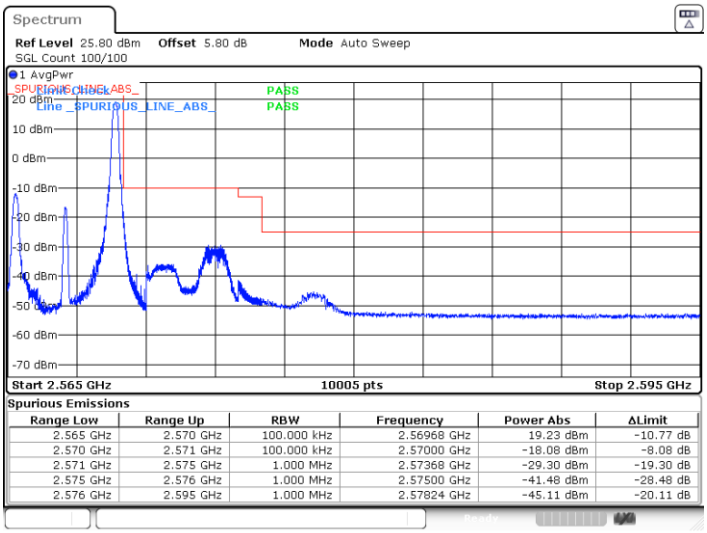


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49172 GHz	-43.98 dBm	-18.98 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49591 GHz	-25.97 dBm	-12.97 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49605 GHz	-25.79 dBm	-15.79 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-18.95 dBm	-8.95 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50033 GHz	19.74 dBm	-10.26 dB

Date: 20.APR.2025 14:50:35

Highest Band Edge / 1 RB

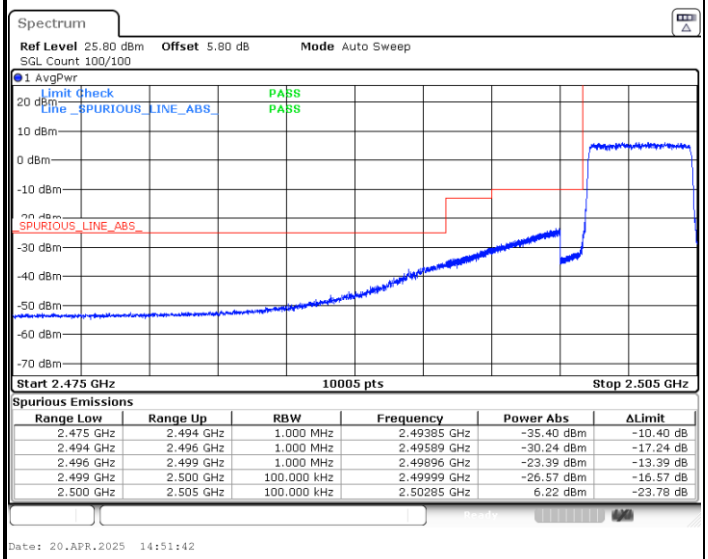


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56968 GHz	19.23 dBm	-10.77 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-18.08 dBm	-8.08 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57368 GHz	-29.30 dBm	-19.30 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57500 GHz	-41.48 dBm	-28.48 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57824 GHz	-45.11 dBm	-20.11 dB

Date: 20.APR.2025 14:58:21

Lowest Band Edge / Full RB

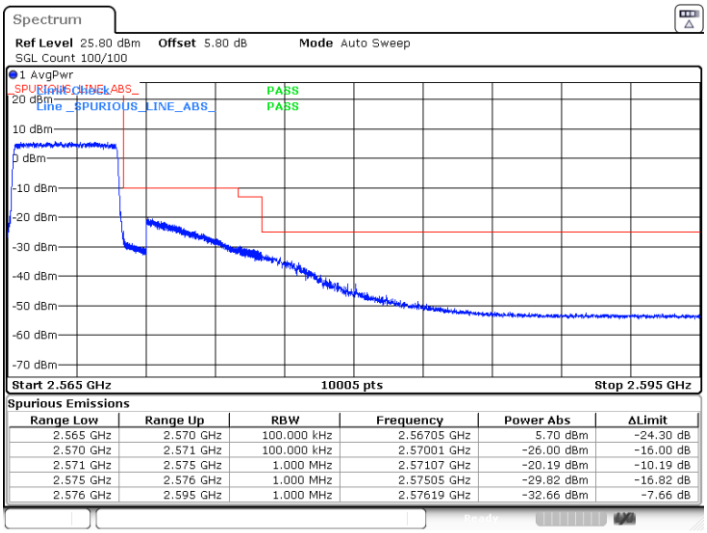


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49385 GHz	-35.40 dBm	-10.40 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49589 GHz	-30.24 dBm	-17.24 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-23.39 dBm	-13.39 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-26.57 dBm	-16.57 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50285 GHz	6.22 dBm	-23.78 dB

Date: 20.APR.2025 14:51:42

Highest Band Edge / Full RB



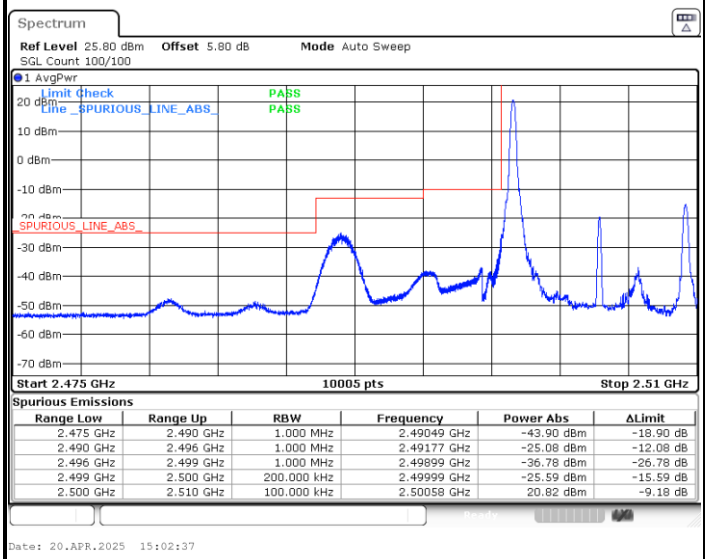
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56705 GHz	5.70 dBm	-24.30 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-26.00 dBm	-16.00 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57107 GHz	-20.19 dBm	-10.19 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57505 GHz	-29.82 dBm	-16.82 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57619 GHz	-32.66 dBm	-7.66 dB

Date: 20.APR.2025 14:59:27

LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

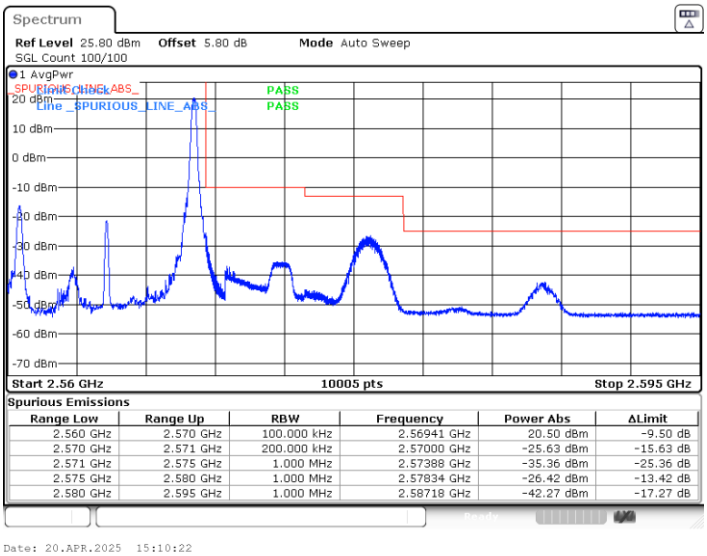


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49049 GHz	-43.90 dBm	-18.90 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49177 GHz	-25.08 dBm	-12.08 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-36.78 dBm	-26.78 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-25.59 dBm	-15.59 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50058 GHz	20.82 dBm	-9.18 dB

Date: 20.APR.2025 15:02:37

Highest Band Edge / 1 RB

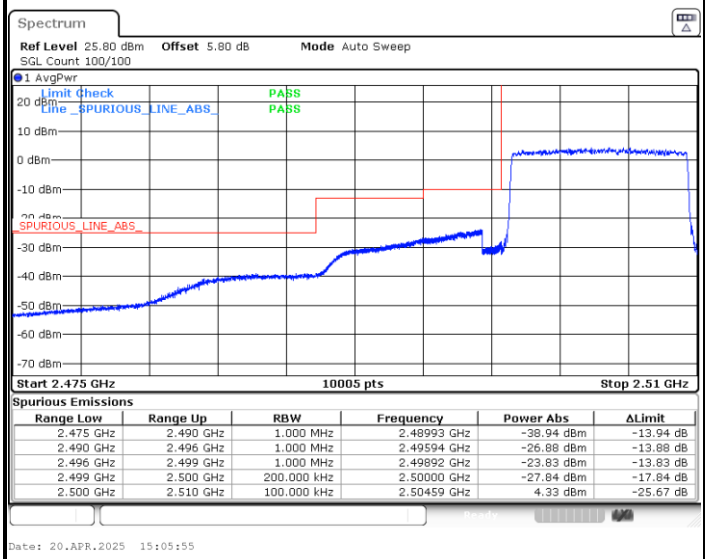


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56941 GHz	20.50 dBm	-9.50 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-25.63 dBm	-15.63 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57388 GHz	-35.36 dBm	-25.36 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57834 GHz	-26.42 dBm	-13.42 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58718 GHz	-42.27 dBm	-17.27 dB

Date: 20.APR.2025 15:10:22

Lowest Band Edge / Full RB

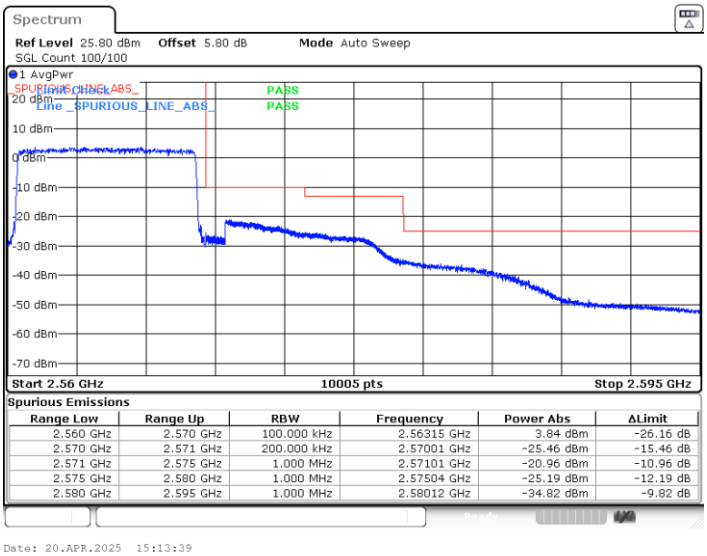


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48993 GHz	-38.94 dBm	-13.94 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49594 GHz	-26.88 dBm	-13.88 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49892 GHz	-23.83 dBm	-13.83 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-27.84 dBm	-17.84 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50459 GHz	4.33 dBm	-25.67 dB

Date: 20.APR.2025 15:05:55

Highest Band Edge / Full RB



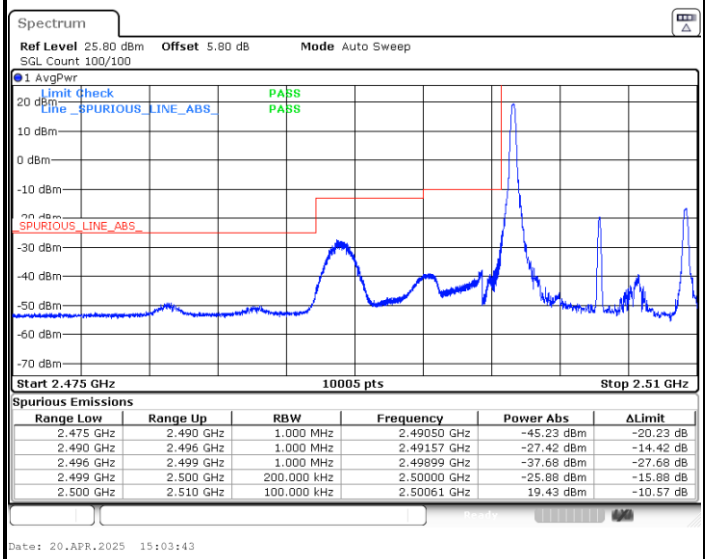
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56315 GHz	3.84 dBm	-26.16 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-25.46 dBm	-15.46 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-20.96 dBm	-10.96 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57504 GHz	-25.19 dBm	-12.19 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58012 GHz	-34.82 dBm	-9.82 dB

Date: 20.APR.2025 15:13:39

LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

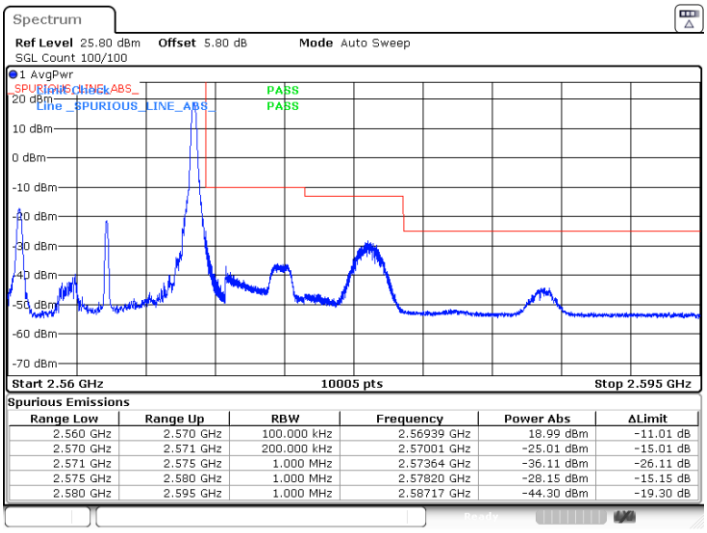


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49050 GHz	-45.23 dBm	-20.23 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49157 GHz	-27.42 dBm	-14.42 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-37.68 dBm	-27.68 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-25.88 dBm	-15.88 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50061 GHz	19.43 dBm	-10.57 dB

Date: 20.APR.2025 15:03:43

Highest Band Edge / 1 RB

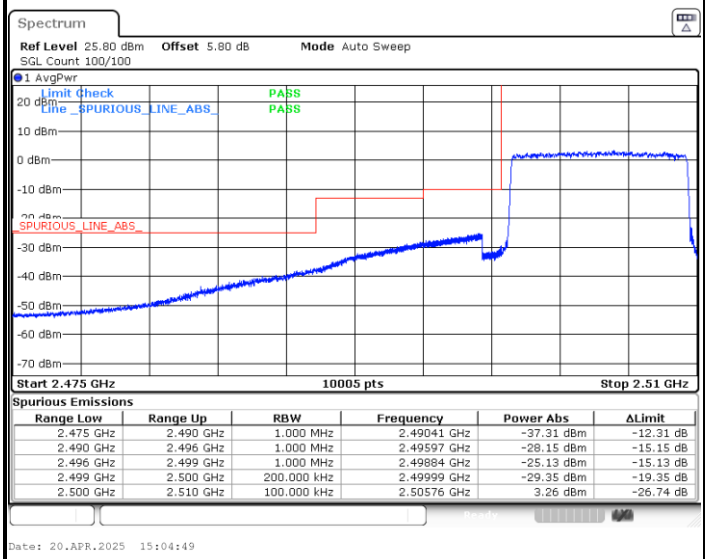


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56939 GHz	18.99 dBm	-11.01 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-25.01 dBm	-15.01 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57364 GHz	-36.11 dBm	-26.11 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57820 GHz	-28.15 dBm	-15.15 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58717 GHz	-44.30 dBm	-19.30 dB

Date: 20.APR.2025 15:11:28

Lowest Band Edge / Full RB

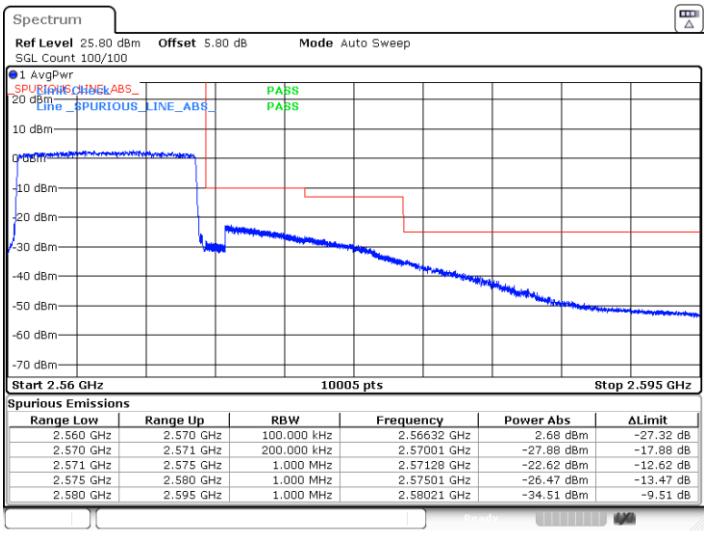


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49041 GHz	-37.31 dBm	-12.31 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-28.15 dBm	-15.15 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49884 GHz	-25.13 dBm	-15.13 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-29.35 dBm	-19.35 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50576 GHz	3.26 dBm	-26.74 dB

Date: 20.APR.2025 15:04:49

Highest Band Edge / Full RB



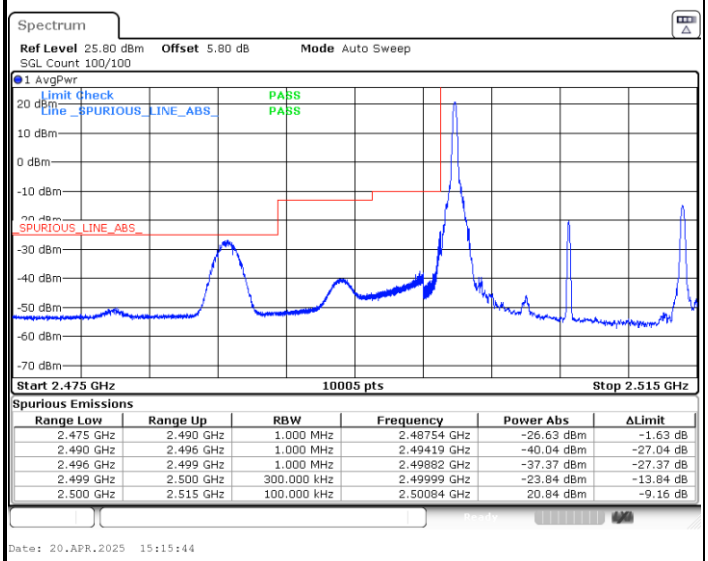
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56632 GHz	2.68 dBm	-27.32 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-27.88 dBm	-17.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57128 GHz	-22.62 dBm	-12.62 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57501 GHz	-26.47 dBm	-13.47 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58021 GHz	-34.51 dBm	-9.51 dB

Date: 20.APR.2025 15:12:34

LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB

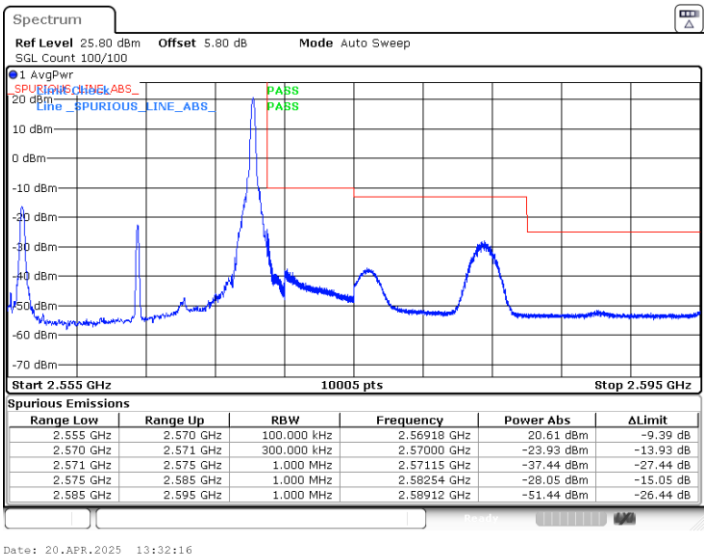


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48754 GHz	-26.63 dBm	-1.63 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49419 GHz	-40.04 dBm	-27.04 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49882 GHz	-37.37 dBm	-27.37 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-23.84 dBm	-13.84 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50084 GHz	20.84 dBm	-9.16 dB

Date: 20.APR.2025 15:15:44

Highest Band Edge / 1 RB

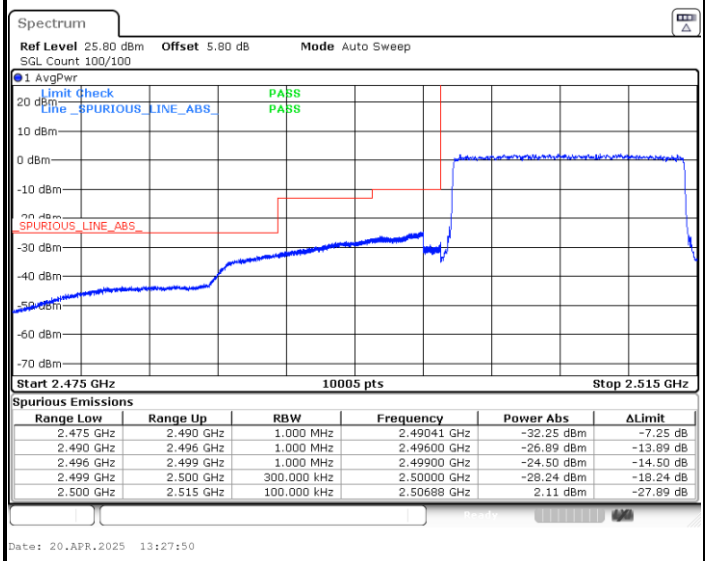


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56918 GHz	20.61 dBm	-9.39 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-23.93 dBm	-13.93 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57115 GHz	-37.44 dBm	-27.44 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.58254 GHz	-28.05 dBm	-15.05 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58912 GHz	-51.44 dBm	-26.44 dB

Date: 20.APR.2025 13:32:16

Lowest Band Edge / Full RB

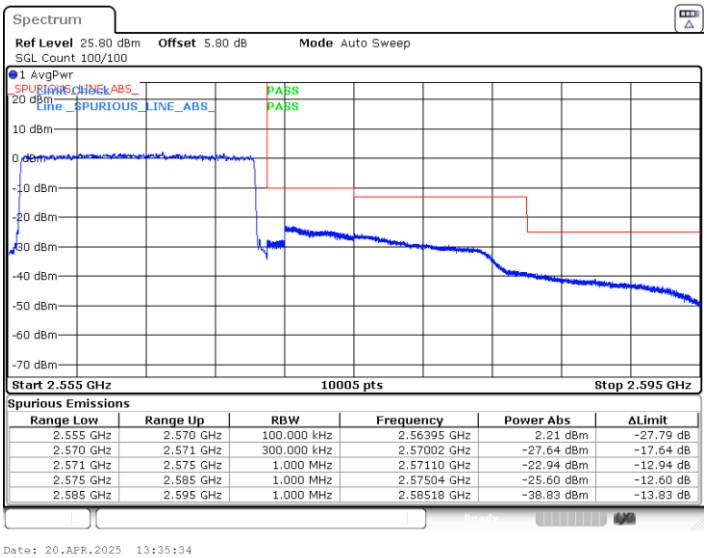


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49041 GHz	-32.25 dBm	-7.25 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49600 GHz	-26.89 dBm	-13.89 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49900 GHz	-24.50 dBm	-14.50 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-28.24 dBm	-18.24 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50688 GHz	2.11 dBm	-27.89 dB

Date: 20.APR.2025 13:27:50

Highest Band Edge / Full RB



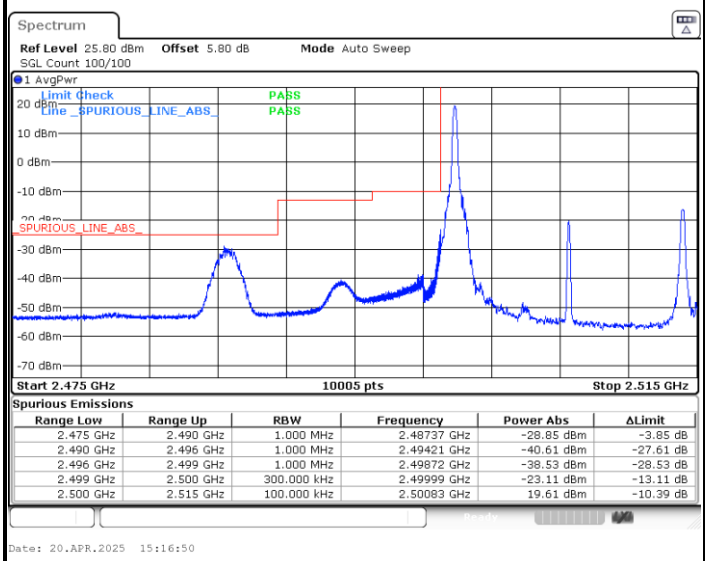
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56395 GHz	2.21 dBm	-27.79 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57002 GHz	-27.64 dBm	-17.64 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57110 GHz	-22.94 dBm	-12.94 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57504 GHz	-25.60 dBm	-12.60 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58518 GHz	-38.83 dBm	-13.83 dB

Date: 20.APR.2025 13:35:34

LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

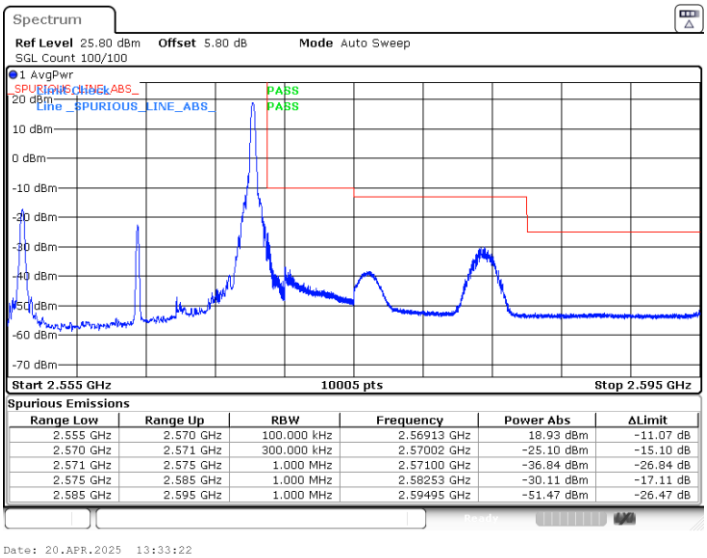


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48737 GHz	-28.85 dBm	-3.85 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49421 GHz	-40.61 dBm	-27.61 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49872 GHz	-38.53 dBm	-28.53 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-23.11 dBm	-13.11 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50083 GHz	19.61 dBm	-10.39 dB

Date: 20.APR.2025 15:16:50

Highest Band Edge / 1 RB

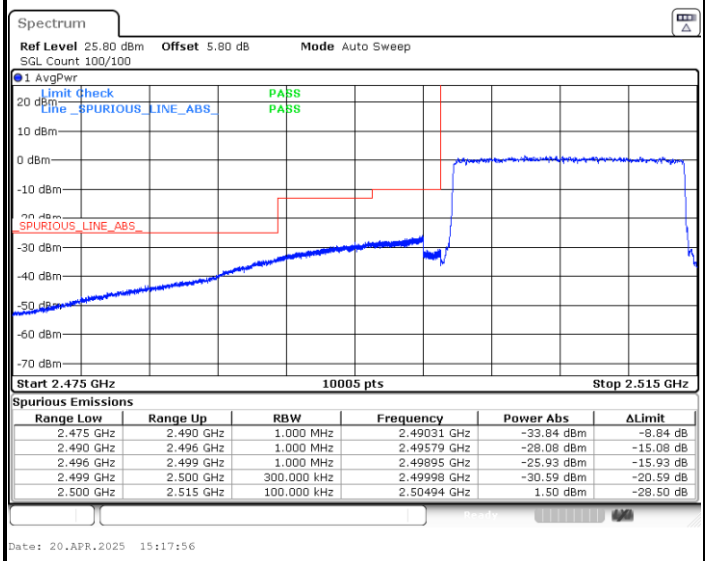


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56913 GHz	18.93 dBm	-11.07 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57002 GHz	-25.10 dBm	-15.10 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-36.84 dBm	-26.84 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.58253 GHz	-30.11 dBm	-17.11 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.59495 GHz	-51.47 dBm	-26.47 dB

Date: 20.APR.2025 13:33:22

Lowest Band Edge / Full RB

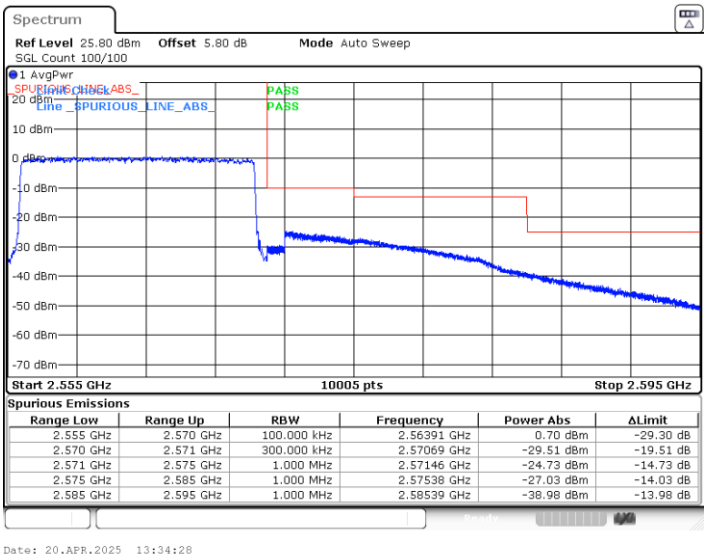


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49031 GHz	-33.84 dBm	-8.84 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49579 GHz	-28.08 dBm	-15.08 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49895 GHz	-25.93 dBm	-15.93 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49998 GHz	-30.59 dBm	-20.59 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50494 GHz	1.50 dBm	-28.50 dB

Date: 20.APR.2025 15:17:56

Highest Band Edge / Full RB



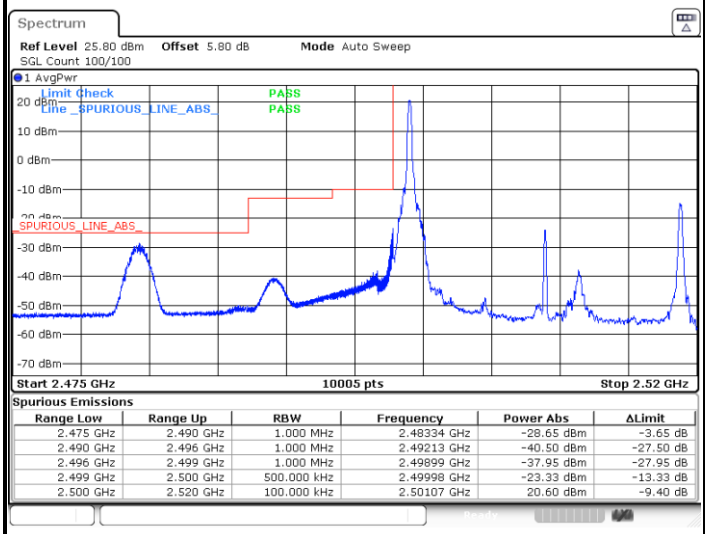
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56391 GHz	0.70 dBm	-29.30 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57069 GHz	-29.51 dBm	-19.51 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57146 GHz	-24.73 dBm	-14.73 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57538 GHz	-27.03 dBm	-14.03 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58539 GHz	-38.98 dBm	-13.98 dB

Date: 20.APR.2025 13:34:28

LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB

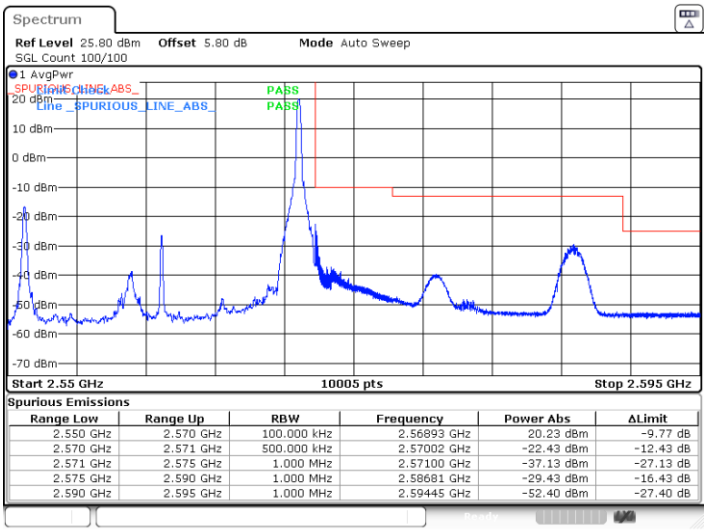


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48334 GHz	-28.65 dBm	-3.65 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49213 GHz	-40.50 dBm	-27.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-37.95 dBm	-27.95 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49998 GHz	-23.33 dBm	-13.33 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50107 GHz	20.60 dBm	-9.40 dB

Date: 20.APR.2025 13:37:39

Highest Band Edge / 1 RB

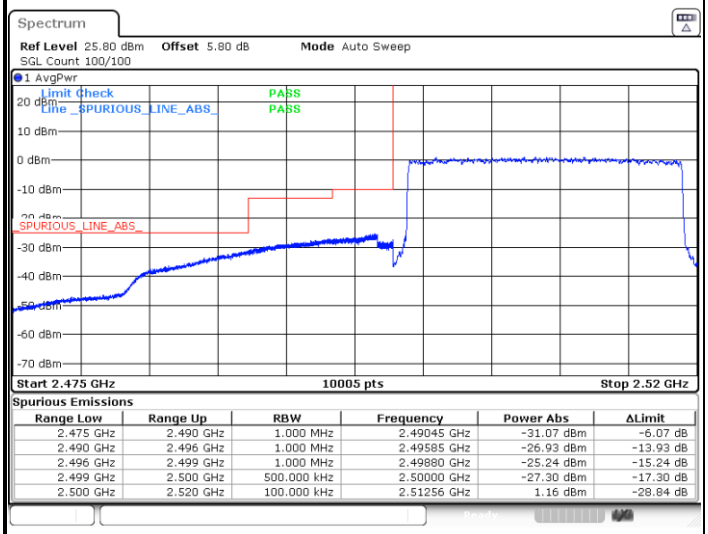


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56893 GHz	20.23 dBm	-9.77 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57002 GHz	-22.43 dBm	-12.43 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-37.13 dBm	-27.13 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.58681 GHz	-29.43 dBm	-16.43 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59445 GHz	-52.40 dBm	-27.40 dB

Date: 20.APR.2025 13:43:58

Lowest Band Edge / Full RB

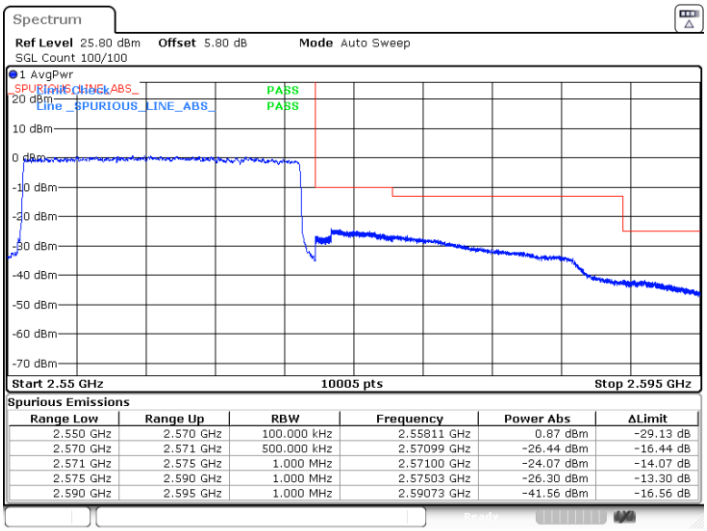


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49045 GHz	-31.07 dBm	-6.07 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49585 GHz	-26.93 dBm	-13.93 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49880 GHz	-25.24 dBm	-15.24 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.50000 GHz	-27.30 dBm	-17.30 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51256 GHz	1.16 dBm	-28.84 dB

Date: 20.APR.2025 13:40:57

Highest Band Edge / Full RB



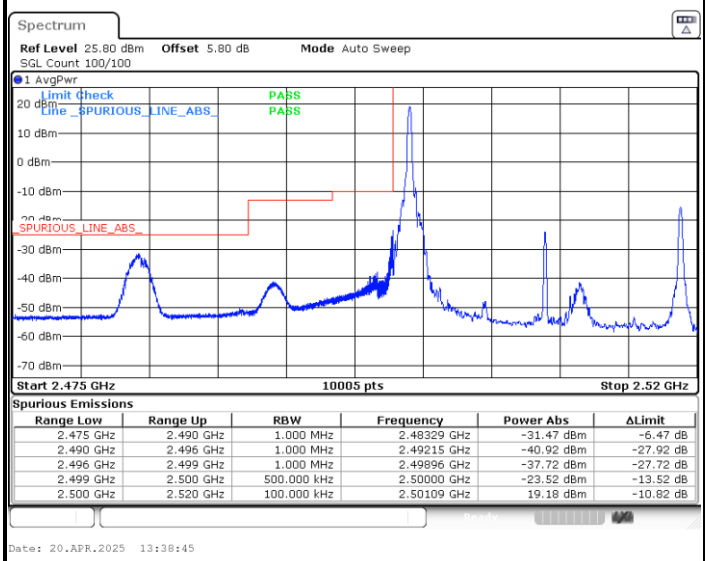
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55811 GHz	0.87 dBm	-29.13 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57099 GHz	-26.44 dBm	-16.44 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-24.07 dBm	-14.07 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57503 GHz	-26.30 dBm	-13.30 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59073 GHz	-41.56 dBm	-16.56 dB

Date: 20.APR.2025 13:47:16

LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

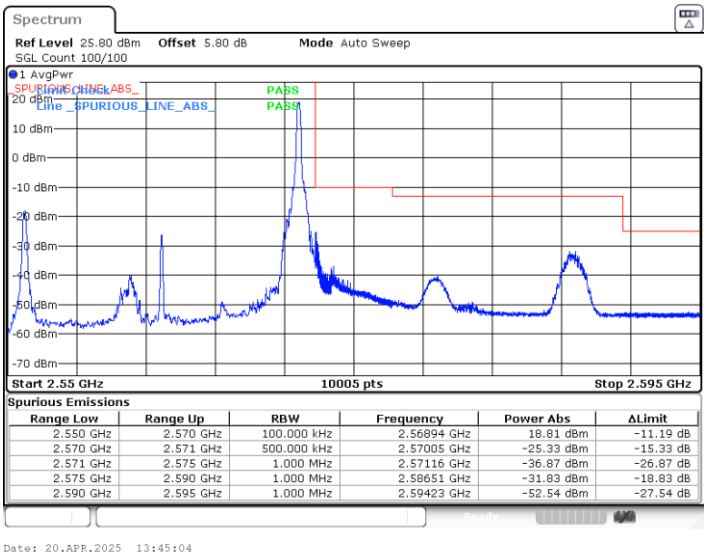


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48329 GHz	-31.47 dBm	-6.47 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49215 GHz	-40.92 dBm	-27.92 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-37.72 dBm	-27.72 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.50000 GHz	-23.52 dBm	-13.52 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.50109 GHz	19.18 dBm	-10.82 dB

Date: 20.APR.2025 13:38:45

Highest Band Edge / 1 RB

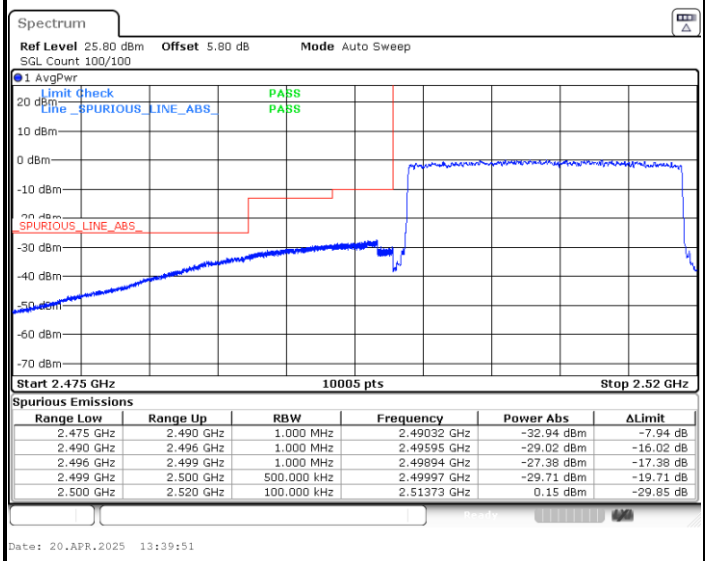


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.56894 GHz	18.81 dBm	-11.19 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57005 GHz	-25.33 dBm	-15.33 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57116 GHz	-36.87 dBm	-26.87 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.58651 GHz	-31.83 dBm	-18.83 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59423 GHz	-52.54 dBm	-27.54 dB

Date: 20.APR.2025 13:45:04

Lowest Band Edge / Full RB

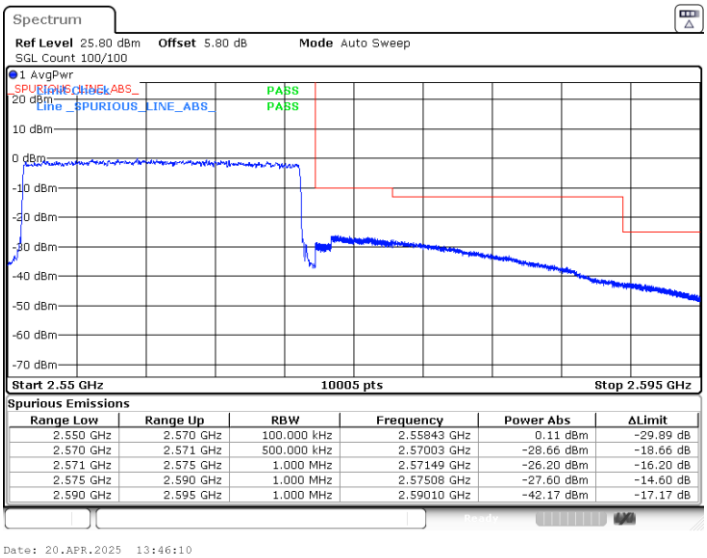


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49032 GHz	-32.94 dBm	-7.94 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49595 GHz	-29.02 dBm	-16.02 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49894 GHz	-27.38 dBm	-17.38 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49997 GHz	-29.71 dBm	-19.71 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51373 GHz	0.15 dBm	-29.85 dB

Date: 20.APR.2025 13:39:51

Highest Band Edge / Full RB



Spurious Emissions

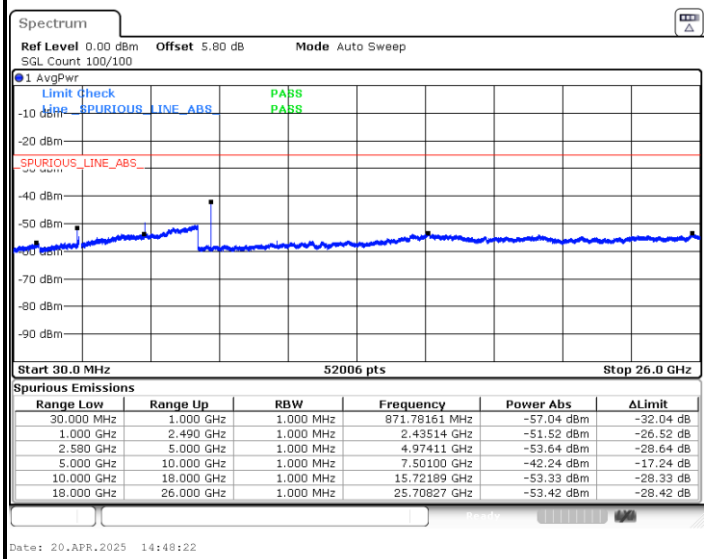
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55843 GHz	0.11 dBm	-29.89 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57003 GHz	-28.66 dBm	-18.66 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57149 GHz	-26.20 dBm	-16.20 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57508 GHz	-27.60 dBm	-14.60 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59010 GHz	-42.17 dBm	-17.17 dB

Date: 20.APR.2025 13:46:10

Conducted Spurious Emission

LTE Band 7 / 5MHz

Lowest Channel / QPSK

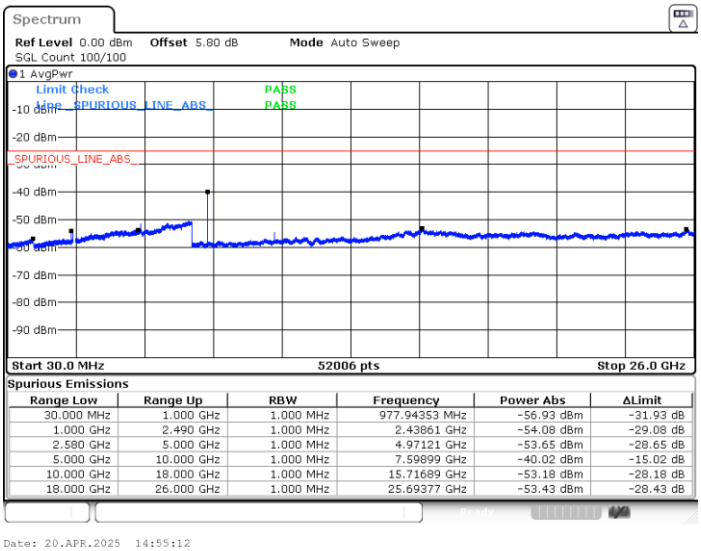


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	871.78161 MHz	-57.04 dBm	-32.04 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43514 GHz	-51.52 dBm	-26.52 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.97411 GHz	-53.64 dBm	-28.64 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.50100 GHz	-42.24 dBm	-17.24 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.72189 GHz	-53.33 dBm	-28.33 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.70827 GHz	-53.42 dBm	-28.42 dB

Date: 20.APR.2025 14:48:22

Middle Channel / QPSK

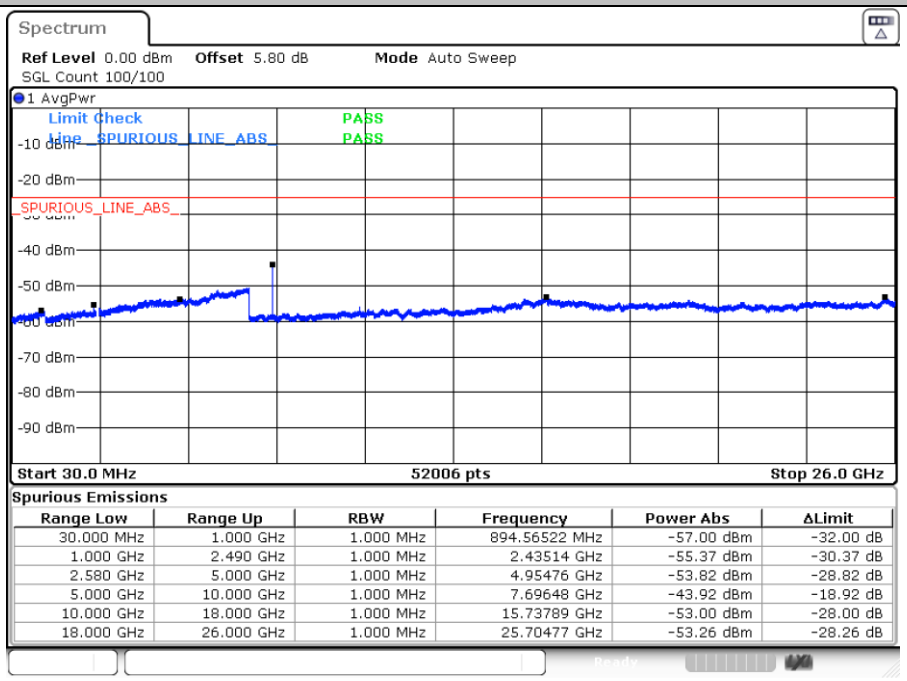


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	977.94353 MHz	-56.93 dBm	-31.93 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43861 GHz	-54.08 dBm	-29.08 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.97121 GHz	-53.65 dBm	-28.65 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.59899 GHz	-40.02 dBm	-15.02 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.71689 GHz	-53.18 dBm	-28.18 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.69377 GHz	-53.43 dBm	-28.43 dB

Date: 20.APR.2025 14:55:12

Highest Channel / QPSK



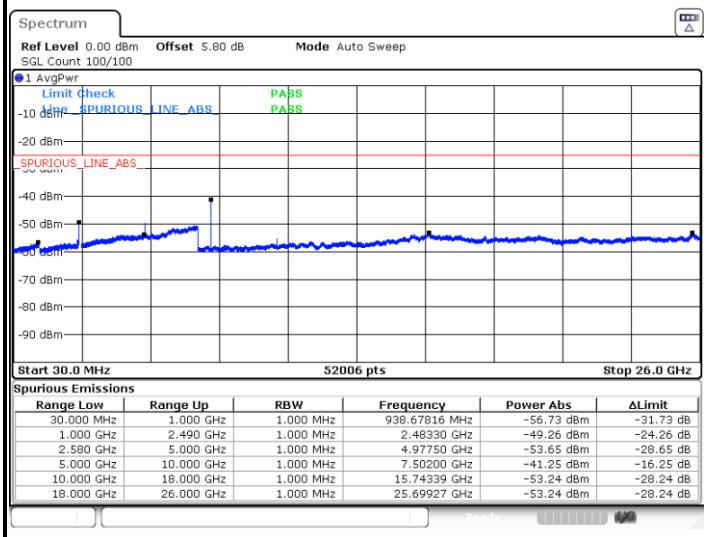
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	894.56522 MHz	-57.00 dBm	-32.00 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43514 GHz	-55.37 dBm	-30.37 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.95476 GHz	-53.82 dBm	-28.82 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.69648 GHz	-43.92 dBm	-18.92 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.73789 GHz	-53.00 dBm	-28.00 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.70477 GHz	-53.26 dBm	-28.26 dB

Date: 20.APR.2025 14:56:09

LTE Band 7 / 10MHz

Lowest Channel / QPSK

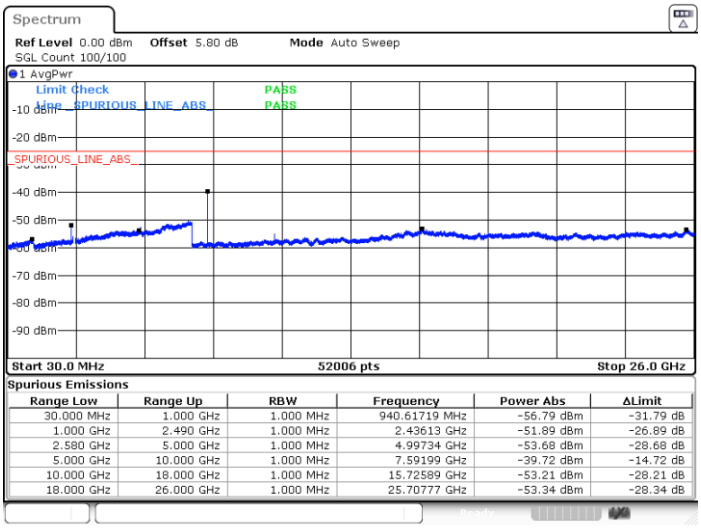


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	938.67816 MHz	-56.73 dBm	-31.73 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48330 GHz	-49.26 dBm	-24.26 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.97750 GHz	-53.65 dBm	-28.65 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.50200 GHz	-41.25 dBm	-16.25 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.74339 GHz	-53.24 dBm	-28.24 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.69927 GHz	-53.24 dBm	-28.24 dB

Date: 20.APR.2025 15:01:31

Middle Channel / QPSK

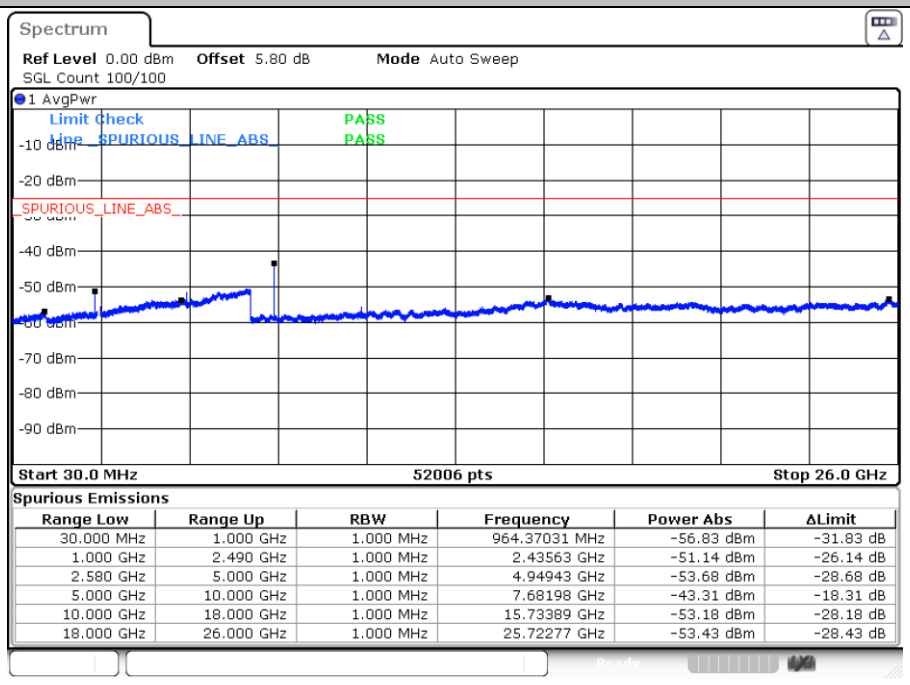


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	940.61719 MHz	-56.79 dBm	-31.79 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43613 GHz	-51.89 dBm	-26.89 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.99734 GHz	-53.68 dBm	-28.68 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.59199 GHz	-39.72 dBm	-14.72 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.72589 GHz	-53.21 dBm	-28.21 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.70777 GHz	-53.34 dBm	-28.34 dB

Date: 20.APR.2025 15:08:19

Highest Channel / QPSK



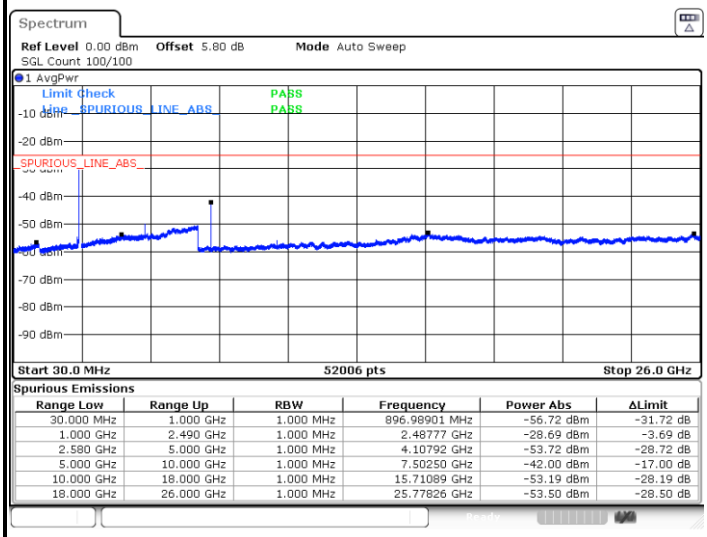
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.37031 MHz	-56.83 dBm	-31.83 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43563 GHz	-51.14 dBm	-26.14 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.94943 GHz	-53.68 dBm	-28.68 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.68198 GHz	-43.31 dBm	-18.31 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.73389 GHz	-53.18 dBm	-28.18 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.72277 GHz	-53.43 dBm	-28.43 dB

Date: 20.APR.2025 15:09:16

LTE Band 7 / 15MHz

Lowest Channel / QPSK

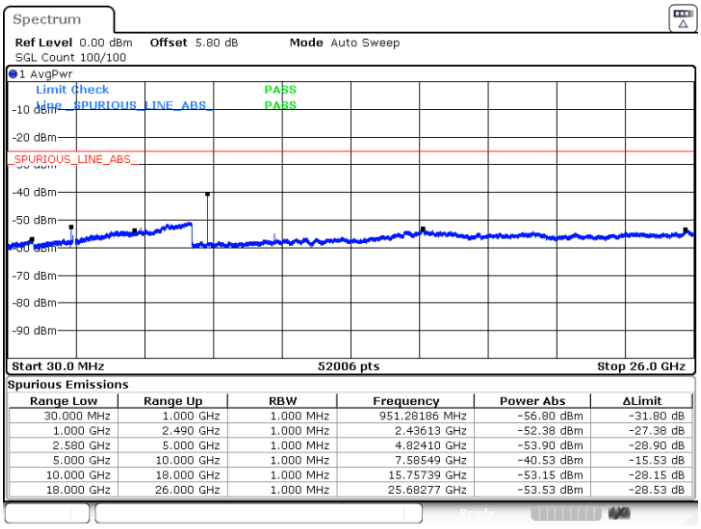


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	896.98901 MHz	-56.72 dBm	-31.72 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48777 GHz	-28.69 dBm	-3.69 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.10792 GHz	-53.72 dBm	-28.72 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.50250 GHz	-42.00 dBm	-17.00 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.71089 GHz	-53.19 dBm	-28.19 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.77826 GHz	-53.50 dBm	-28.50 dB

Date: 20.APR.2025 15:14:38

Middle Channel / QPSK

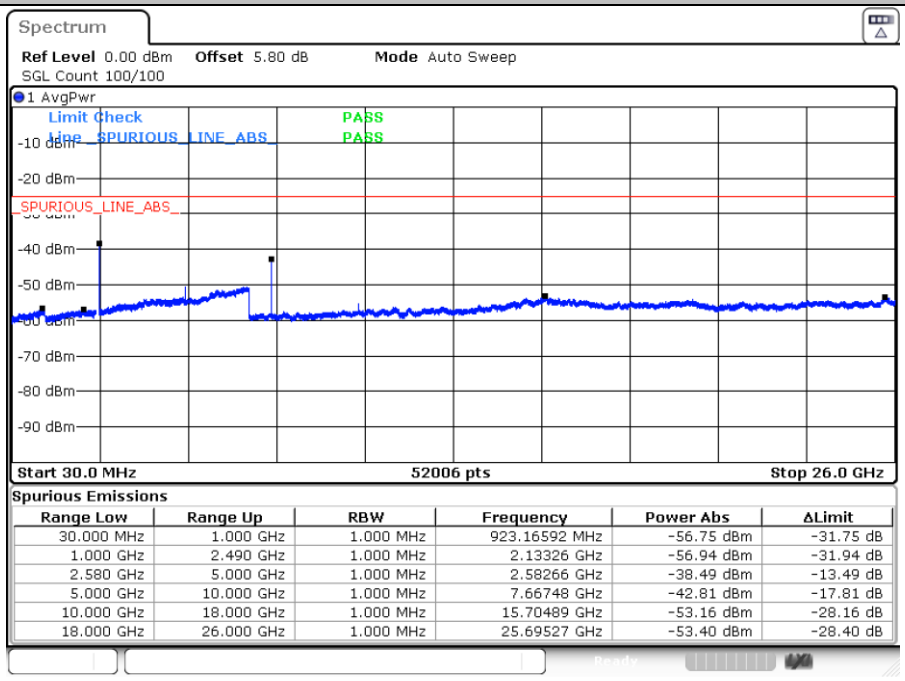


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	951.28186 MHz	-56.80 dBm	-31.80 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43613 GHz	-52.38 dBm	-27.38 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.82410 GHz	-53.90 dBm	-28.90 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.58549 GHz	-40.53 dBm	-15.53 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.75739 GHz	-53.15 dBm	-28.15 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.68277 GHz	-53.53 dBm	-28.53 dB

Date: 20.APR.2025 13:30:13

Highest Channel / QPSK



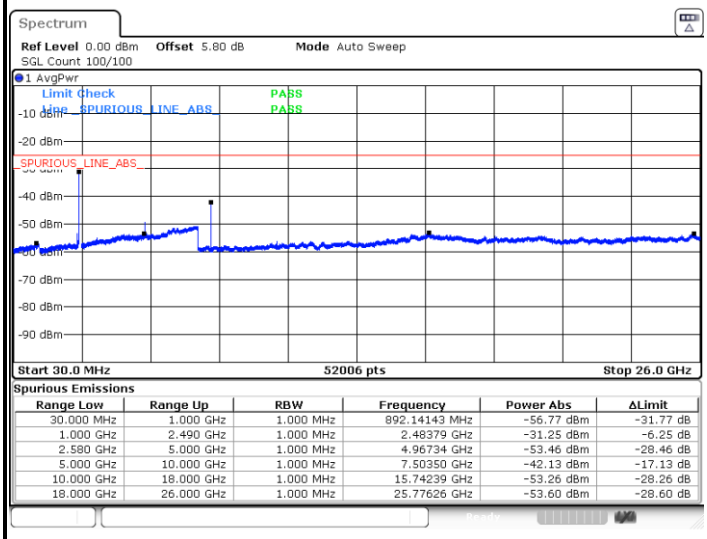
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.16592 MHz	-56.75 dBm	-31.75 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.13326 GHz	-56.94 dBm	-31.94 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58266 GHz	-38.49 dBm	-13.49 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.66748 GHz	-42.81 dBm	-17.81 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.70489 GHz	-53.16 dBm	-28.16 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.69527 GHz	-53.40 dBm	-28.40 dB

Date: 20.APR.2025 13:31:10

LTE Band 7 / 20MHz

Lowest Channel / QPSK

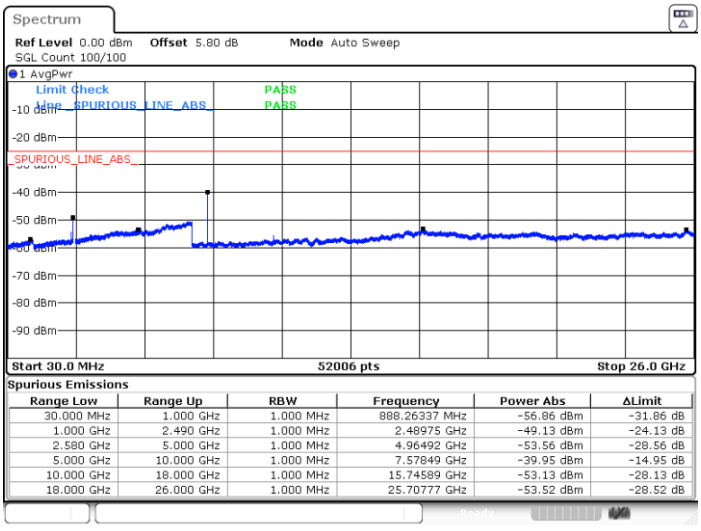


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	892.14143 MHz	-56.77 dBm	-31.77 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48379 GHz	-31.25 dBm	-6.25 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.96734 GHz	-53.46 dBm	-28.46 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.50350 GHz	-42.13 dBm	-17.13 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.74239 GHz	-53.26 dBm	-28.26 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.77626 GHz	-53.60 dBm	-28.60 dB

Date: 20.APR.2025 13:36:33

Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	888.26337 MHz	-56.86 dBm	-31.86 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-49.13 dBm	-24.13 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.96492 GHz	-53.56 dBm	-28.56 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.57849 GHz	-39.95 dBm	-14.95 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.74589 GHz	-53.13 dBm	-28.13 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.70777 GHz	-53.52 dBm	-28.52 dB

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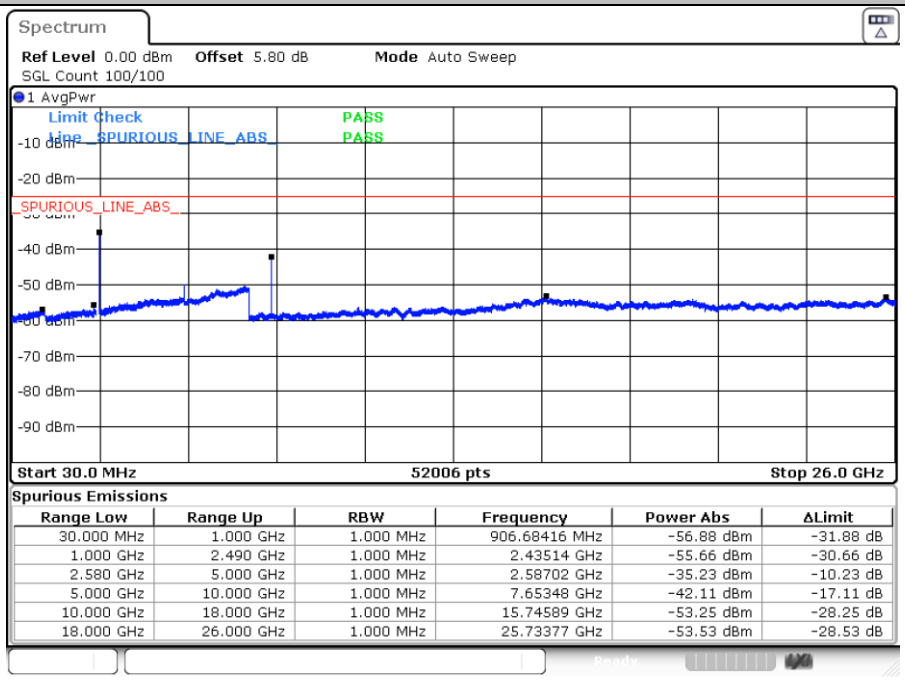
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	906.68416 MHz	-56.88 dBm	-31.88 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.43514 GHz	-55.66 dBm	-30.66 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58702 GHz	-35.23 dBm	-10.23 dB
5.000 GHz	10.000 GHz	1.000 MHz	7.65348 GHz	-42.11 dBm	-17.11 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.74589 GHz	-53.25 dBm	-28.25 dB
18.000 GHz	26.000 GHz	1.000 MHz	25.73377 GHz	-53.53 dBm	-28.53 dB

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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	0.0022	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0041	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0021	
20	Minimum Voltage	0.0024	

Note:

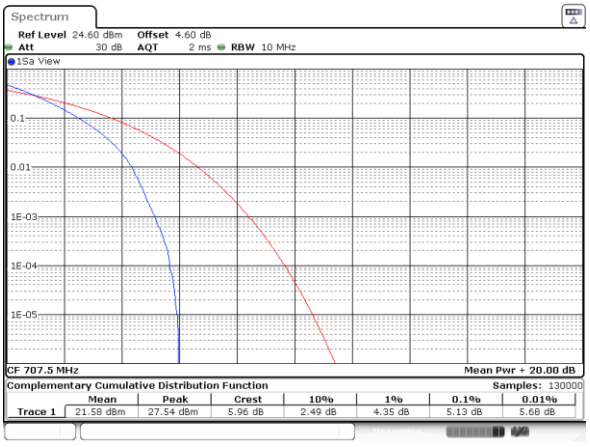
1. Normal Voltage =12 V. ; Minimum Voltage =10.8 V. ; Maximum Voltage =13.2V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 12

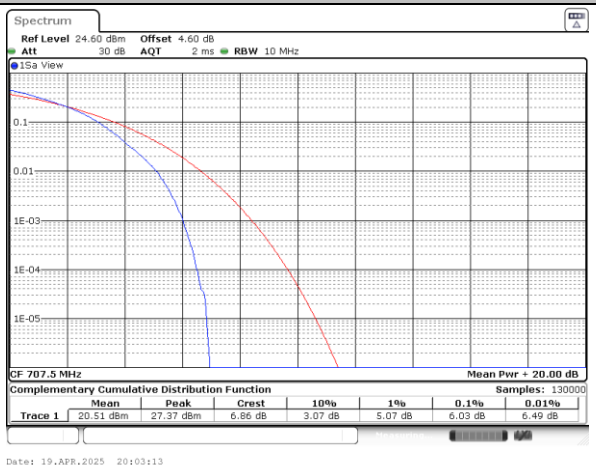
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.13	6.03	PASS

LTE Band 12 / 10MHz
Middle Channel / Full RB/ QPSK

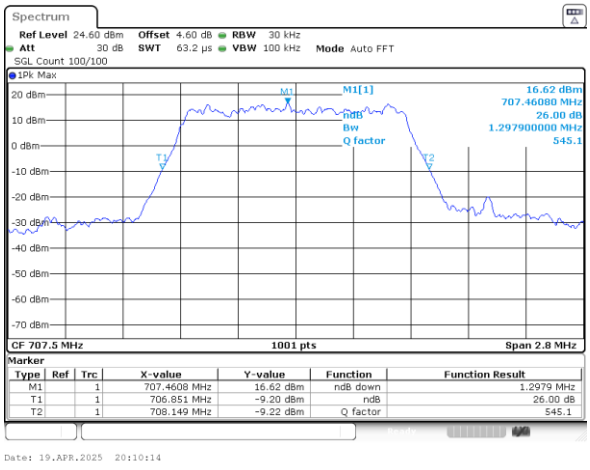
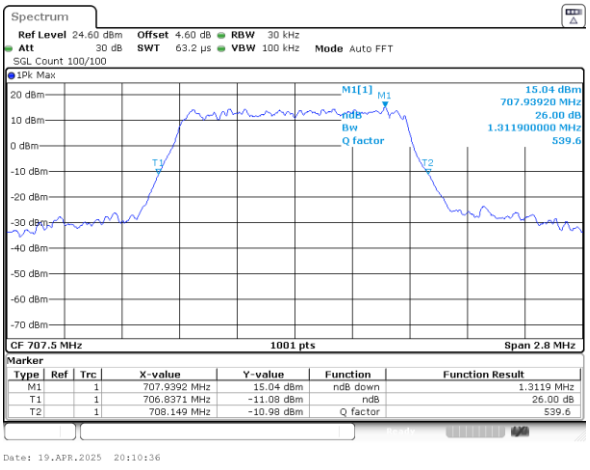


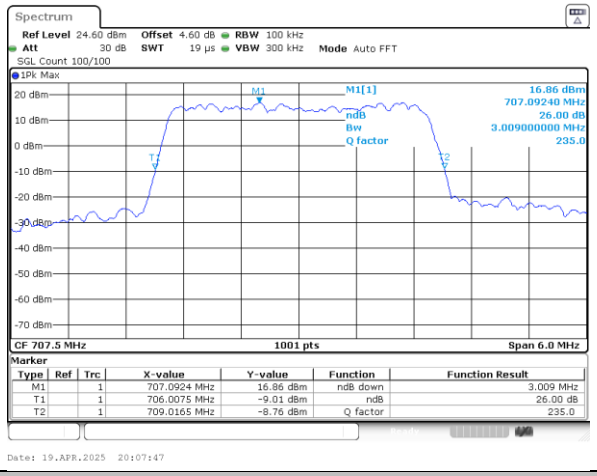
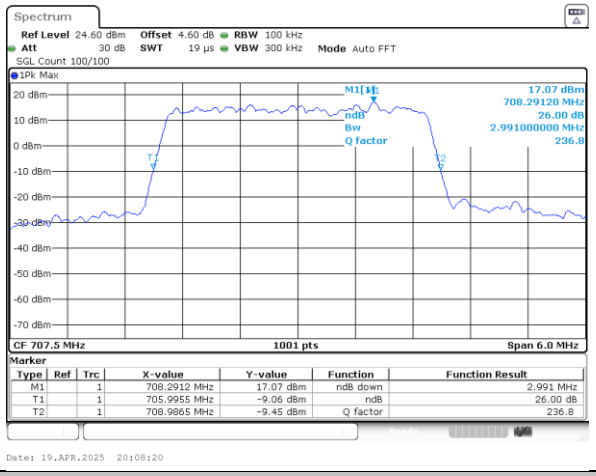
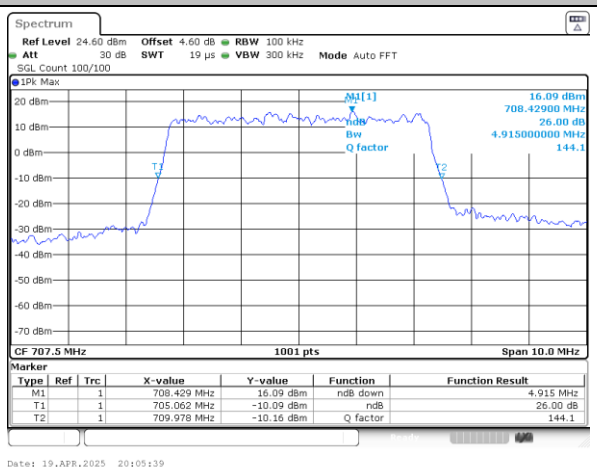
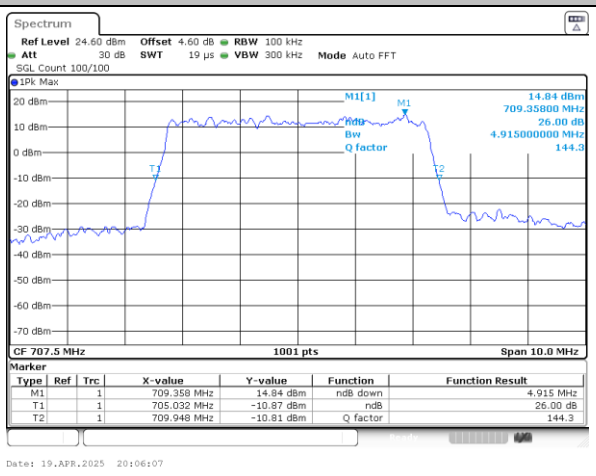
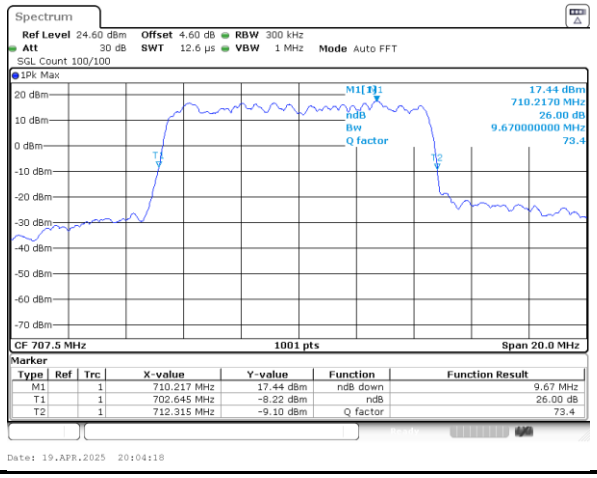
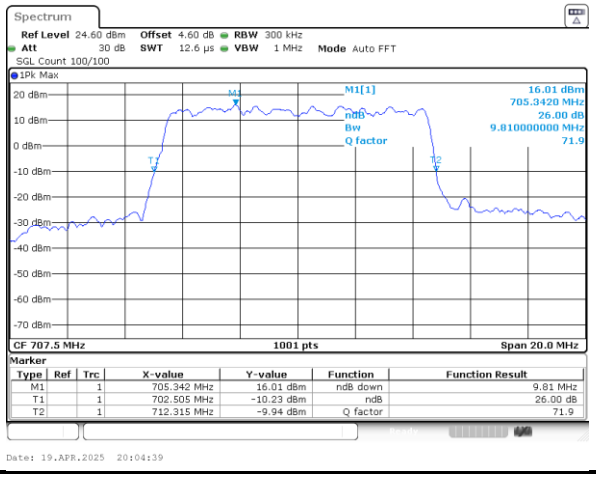
Middle Channel / Full RB/ 16QAM



26dB Bandwidth

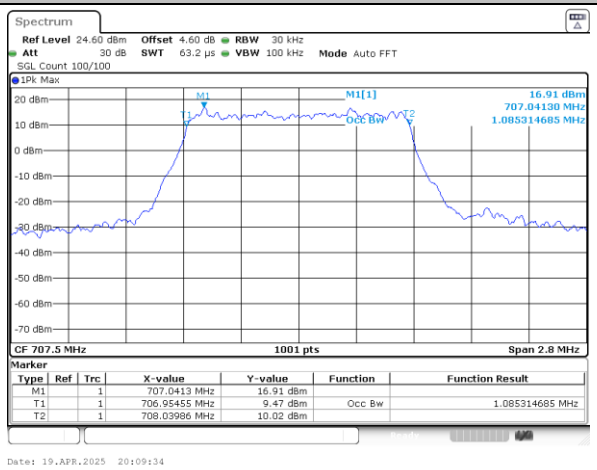
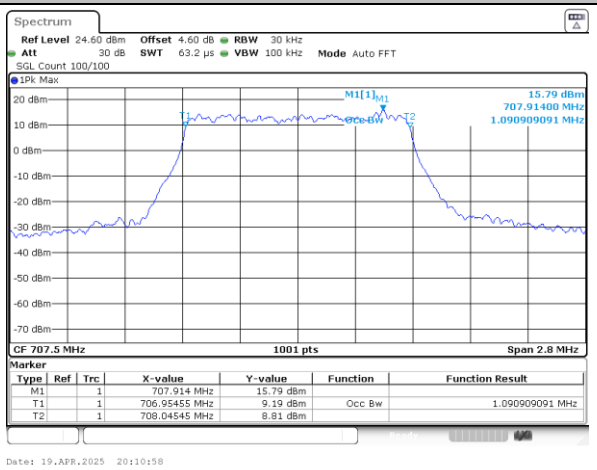
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.30	1.31
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.01	2.99
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.92	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.81

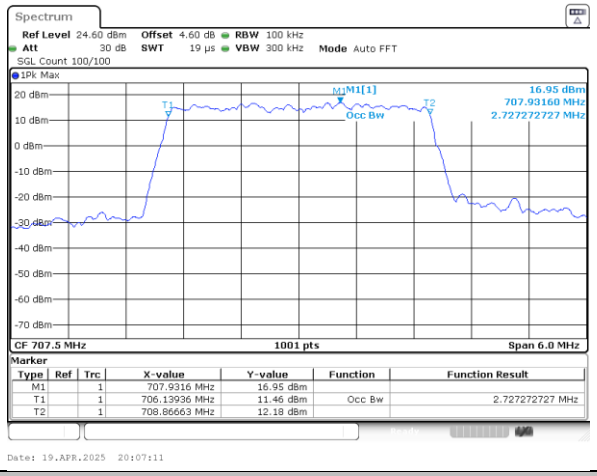
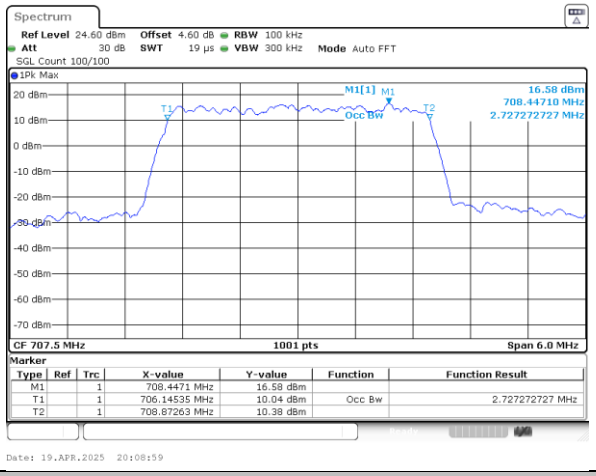
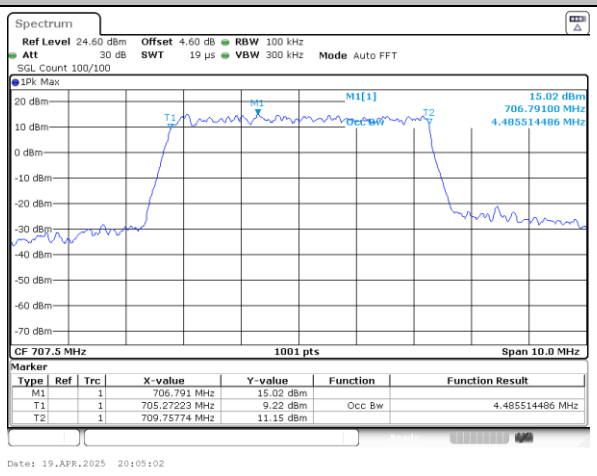
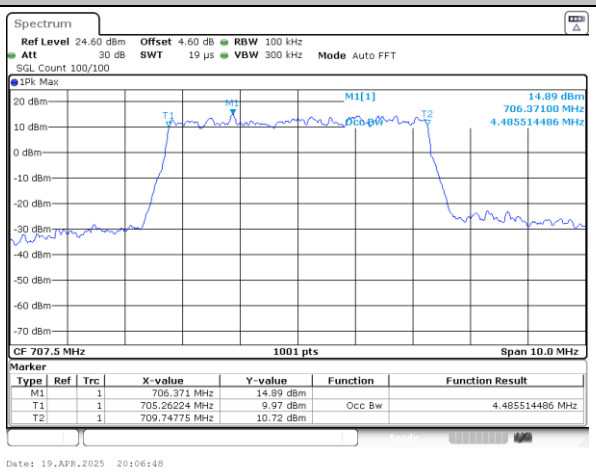
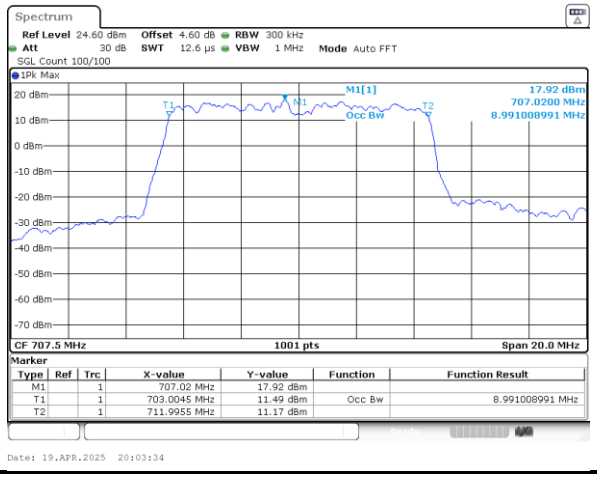
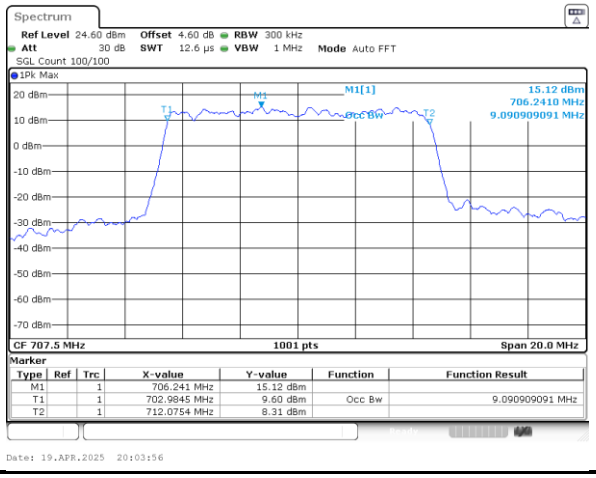
LTE Band 12	
Middle Channel / 1.4MHz / QPSK	Middle Channel /1.4MHz / 16QAM
	

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	2.73	2.73
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	9.09

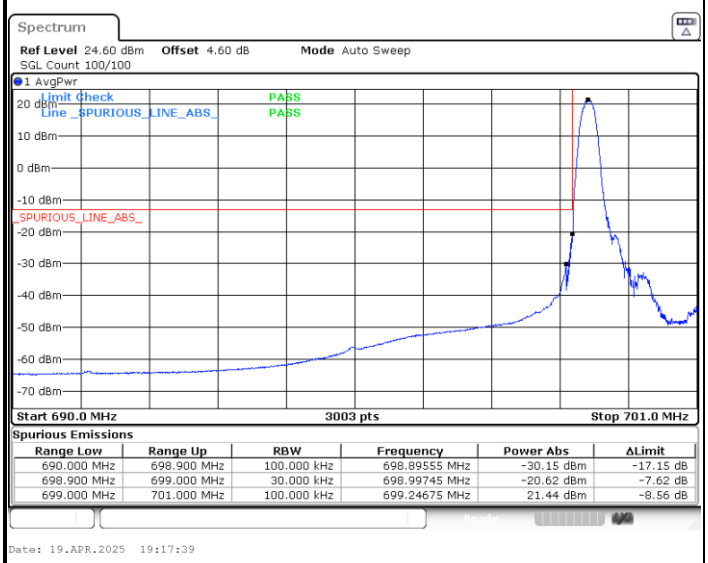
LTE Band 12	
Middle Channel / 1.4MHz / QPSK	Middle Channel / 1.4MHz / 16QAM
	

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

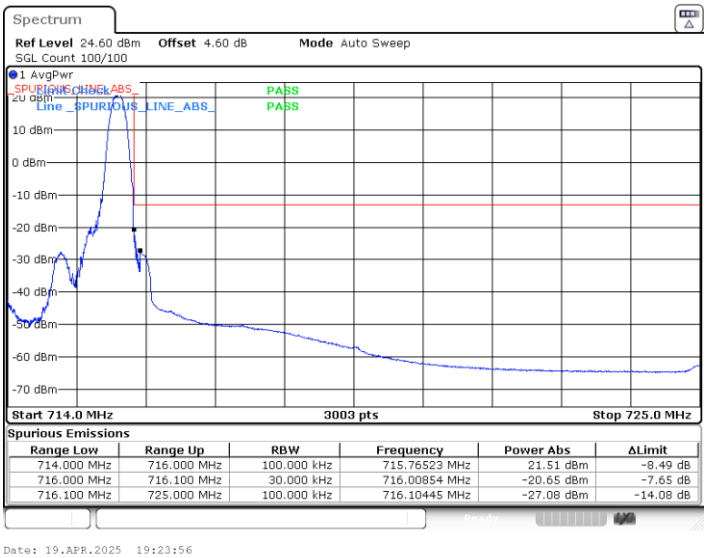


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-30.15 dBm	-17.15 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99745 MHz	-20.62 dBm	-7.62 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.24675 MHz	21.44 dBm	-8.56 dB

Date: 19.APR.2025 19:17:39

Highest Band Edge / 1RB

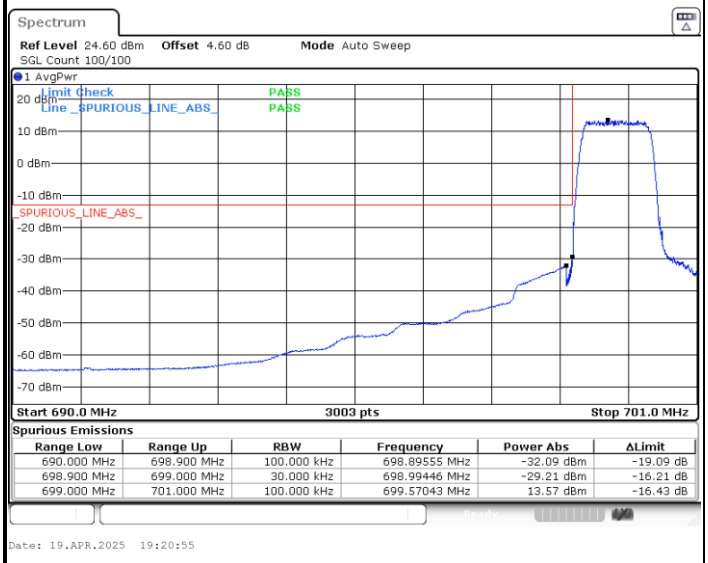


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.76523 MHz	21.51 dBm	-8.49 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00854 MHz	-20.65 dBm	-7.65 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-27.08 dBm	-14.08 dB

Date: 19.APR.2025 19:23:56

Lowest Band Edge / Full RB

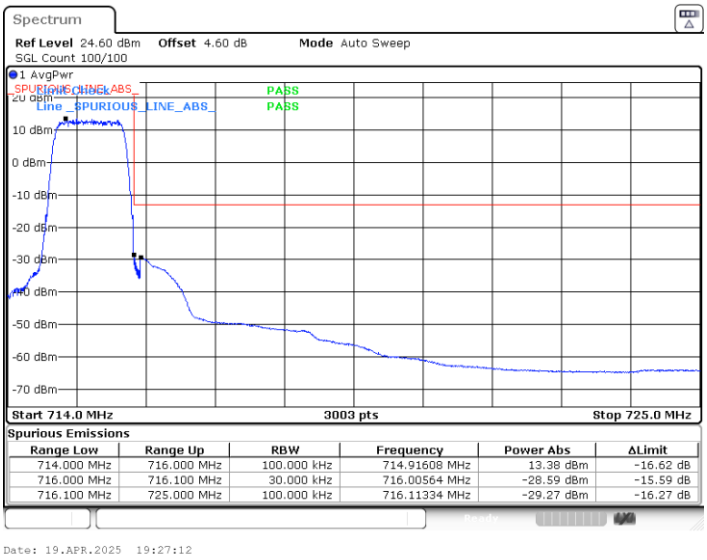


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-32.09 dBm	-19.09 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99446 MHz	-29.21 dBm	-16.21 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.57043 MHz	13.57 dBm	-16.43 dB

Date: 19.APR.2025 19:20:55

Highest Band Edge / Full RB



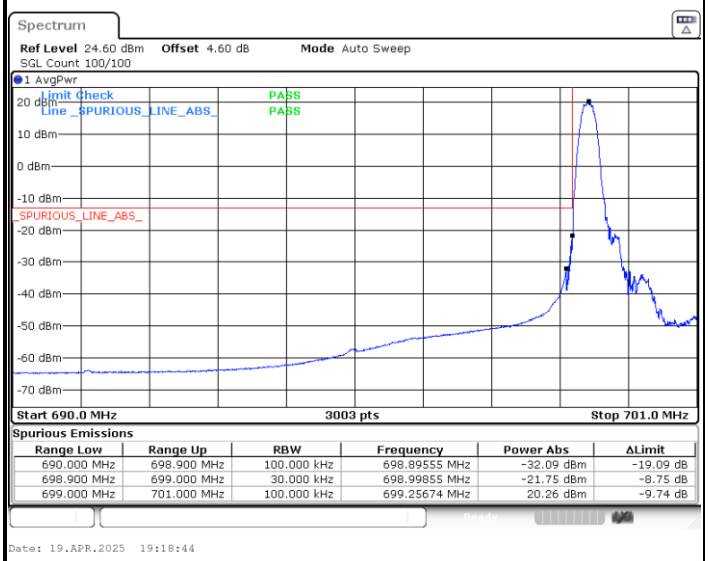
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	714.91608 MHz	13.38 dBm	-16.62 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00564 MHz	-28.59 dBm	-15.59 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.11334 MHz	-29.27 dBm	-16.27 dB

Date: 19.APR.2025 19:27:12

LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

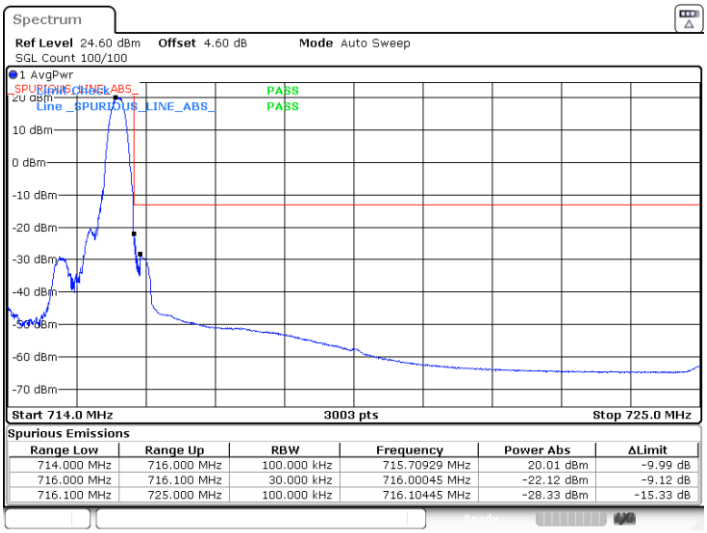


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-32.09 dBm	-19.09 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99855 MHz	-21.75 dBm	-8.75 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.25674 MHz	20.26 dBm	-9.74 dB

Date: 19.APR.2025 19:18:44

Highest Band Edge / 1 RB

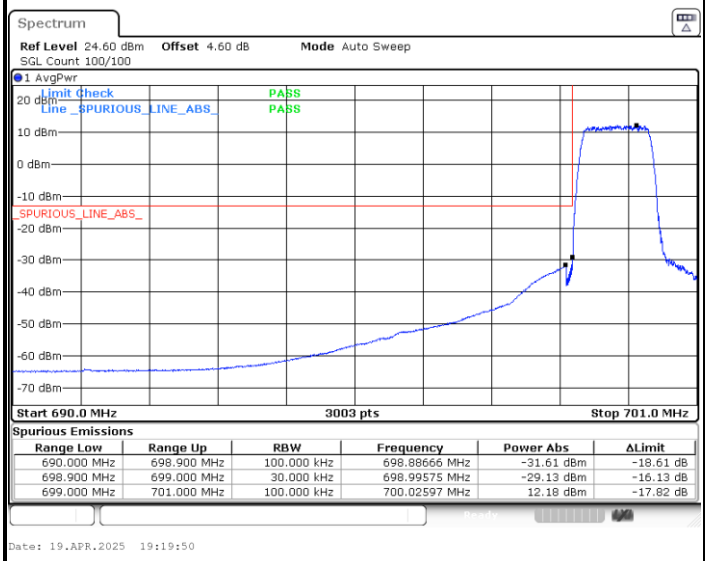


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.70929 MHz	20.01 dBm	-9.99 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00045 MHz	-22.12 dBm	-9.12 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-28.33 dBm	-15.33 dB

Date: 19.APR.2025 19:25:01

Lowest Band Edge / Full RB

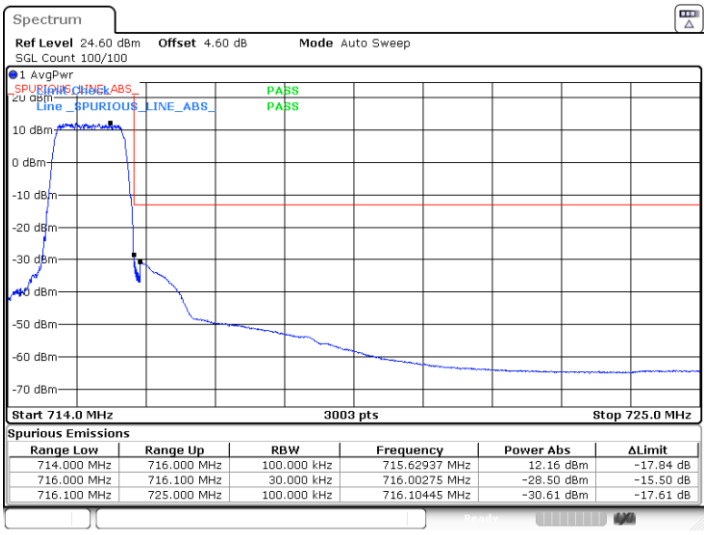


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.88666 MHz	-31.61 dBm	-18.61 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99575 MHz	-29.13 dBm	-16.13 dB
699.000 MHz	701.000 MHz	100.000 kHz	700.02597 MHz	12.18 dBm	-17.82 dB

Date: 19.APR.2025 19:19:50

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	715.62937 MHz	12.16 dBm	-17.84 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00275 MHz	-28.50 dBm	-15.50 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-30.61 dBm	-17.61 dB

Date: 19.APR.2025 19:26:07