FCC RF Test Report

APPLICANT	**: Numera Systems US, Inc**
EQUIPMENT	**: Mobile Personal Emergency Response System**
BRAND NAME	**: Libris**
MODEL NAME	**: NUML3-AS1, NUML3-AG1, NUML3-AW1**
FCC ID	**: 2BN8B-L3**
STANDARD	**: 47 CFR Part 24(E), 27(L), 27(H)**
CLASSIFICATION	**: PCS Licensed Transmitter (PCB)**
TEST DATE(S)	**: Jun. 12, 2025 ~ Jun. 16, 2025**

This product installed a RF module (Brand Name: Quectel, Model Name: EG91-NA, FCC ID: XMR201807EG91NA) during the test, only the Frequency Stability LV/HV test results are leveraged from module RF report.

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.

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
FG552401B	Rev. 01	Initial issue of report	Jul. 18, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§27.50(c)(10)	Effective Radiated Power (Band 12)	ERP < 3 Watt	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §24.238(a) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 12)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §24.238(a) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 12)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	1
4.4	§2.1053 §24.238(a) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 12)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 27.67 dB at 3465.00 MHz

Remark 1:

The Frequency Stability LV/HV test items were leverage from module RF report which can refer to Report No.

R1805A0250-R2 (for LTE B2) & R1805A0250-R3 (for LTE B4/B12).

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

Numera Systems US, Inc
44 EAST BEAVER CREEK RD #16 RICHMOND HILL, ON, CANADA

1.2 Manufacturer

Numera Systems US, Inc
44 EAST BEAVER CREEK RD #16 RICHMOND HILL, ON, CANADA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Personal Emergency Response System
Brand Name	Libris
Model Name	NUML3-AS1, NUML3-AG1, NUML3-AW1
FCC ID	2BN8B-L3
IMEI Code	Conducted: 866229077403853 Radiation: 866229077403853
HW Version	V1.1
SW Version	V02
EUT Stage	Production Unit

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 differences between three model names are as below:

Model name	Description
NUML3-AS1	The appearance color is matte silver
NUML3-AG1	The appearance color is matte gold
NUML3-AW1	The appearance color is white

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 12 : 699 MHz ~ 716 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 12 : 729 MHz ~ 746 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.75 dBm LTE Band 4 : 22.86 dBm LTE Band 12 : 22.94 dBm
Antenna Gain	LTE Band 2 : 0.7 dBi LTE Band 4 : 0.6 dBi LTE Band 12 : -3.0 dBi
Type of Modulation	QPSK / 16QAM

Remark: This device support LTE category 1.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP and Emission Designator

LTE Band 2		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1909.3	0.2148	1M09G7D	0.2148	1M10W7D
3	1851.5 ~ 1908.5	0.2163	2M73G7D	0.1663	2M70W7D
5	1852.5 ~ 1907.5	0.2193	4M50G7D	0.1722	4M51W7D
10	1855.0 ~ 1905.0	0.2109	8M95G7D	0.1644	4M98W7D
15	1857.5 ~ 1902.5	0.2198	13M4G7D	0.1730	5M03W7D
20	1860.0 ~ 1900.0	0.2213	17M8G7D	0.1726	5M07W7D

LTE Band 4		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1754.3	0.2188	1M09G7D	0.1750	1M09W7D
3	1711.5 ~ 1753.5	0.2163	2M72G7D	0.1742	2M69W7D
5	1712.5 ~ 1752.5	0.2208	4M48G7D	0.1778	4M49W7D
10	1715.0 ~ 1750.0	0.2208	8M99G7D	0.1730	4M98W7D
15	1717.5 ~ 1747.5	0.2163	14M4G7D	0.1722	5M06W7D
20	1720.0 ~ 1745.0	0.2218	17M7G7D	0.1795	5M03W7D
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	0.0587	1M09G7D	0.0499	1M09W7D
3	700.5 ~ 714.5	0.0592	2M75G7D	0.0482	2M72W7D
5	701.5 ~ 713.5	0.0593	4M49G7D	0.0474	4M50W7D
10	704.0 ~ 711.0	0.0601	9M13G7D	0.0497	5M11W7D

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.**
	TH01-KS 03CH04-KS	CN1257	314309

1.8 Test Software

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

1.9 Applicable Standards

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

- 47 CFR Part 24(E), 27(L), 27(H)
- 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

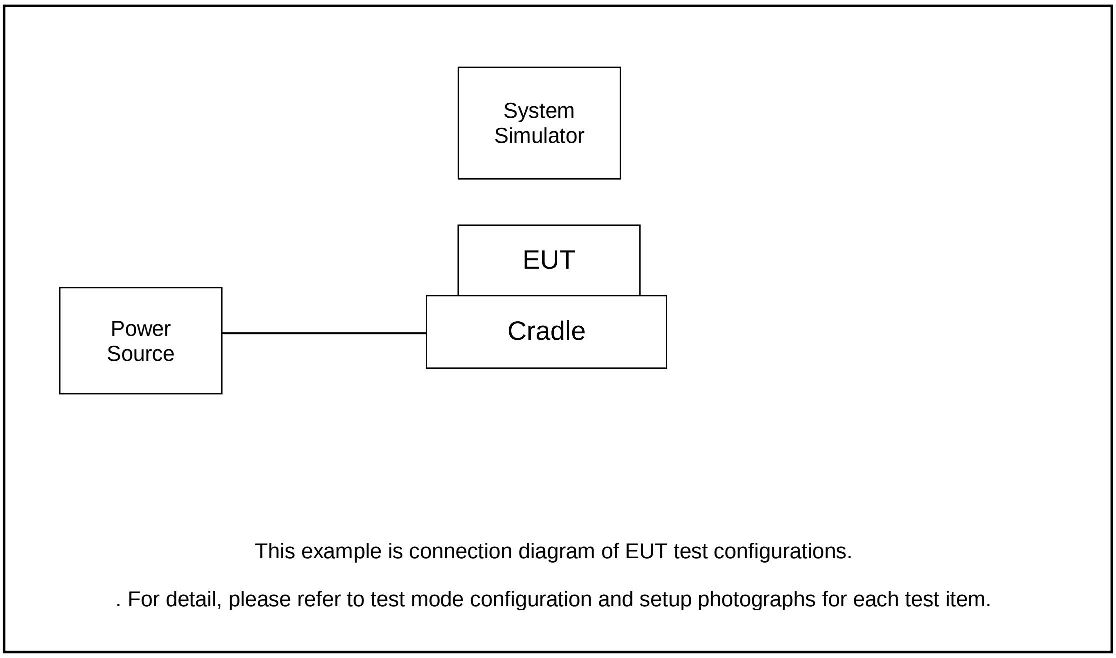
2.1 Test Mode

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	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	-	-	v		v	v	v	v
	4	v	v	v	v	v	v	v	v	-	-	v		v	v	v	v
	12	v	v	v	v	-	-	v	v	-	-	v		v	v	v	v
Peak-to-Average Ratio	2						v	v	v	-	-	v		v		v	
	4						v	v	v	-	-	v		v		v	
	12				v	-	-	v	v	-	-	v		v		v	
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v	-	-			v		v	
	4	v	v	v	v	v	v	v	v	-	-			v		v	
	12	v	v	v	v	-	-	v	v	-	-			v		v	
Conducted Band Edge	2	v	v	v	v	v	v	v	v	-	-	v		v	v		v
	4	v	v	v	v	v	v	v	v	-	-	v		v	v		v
	12	v	v	v	v	-	-	v	v	-	-	v		v	v		v
Conducted Spurious Emission	2	v	v	v	v	v	v	v	v	-	-	v			v	v	v
	4	v	v	v	v	v	v	v	v	-	-	v			v	v	v
	12	v	v	v	v	-	-	v	v	-	-	v			v	v	v
Frequency Stability	2				v			v		-	-			v		v	
	4				v			v		-	-			v		v	
	12				v	-	-	v		-	-			v		v	
E.R.P./E.I.R.P.	2	v	v	v	v	v	v	v	v	-	-	v		v	v	v	v
	4	v	v	v	v	v	v	v	v	-	-	v		v	v	v	v
	12	v	v	v	v	-	-	v	v	-	-	v		v	v	v	v
Radiated Spurious Emission	2	Worst Case													v	v	v
	4	Worst Case													v	v	v
	12	Worst Case													v	v	v
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																

2.2 Connection Diagram of Test System



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 5.5 dB.

Example :

Offset(dB) = RF cable loss(dB)

= 5.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

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

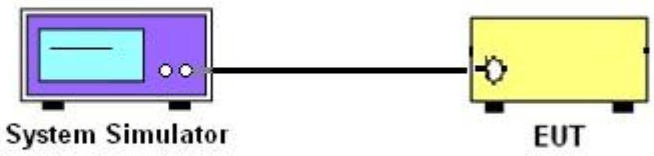
3 Conducted Test Items

3.1 Measuring Instruments

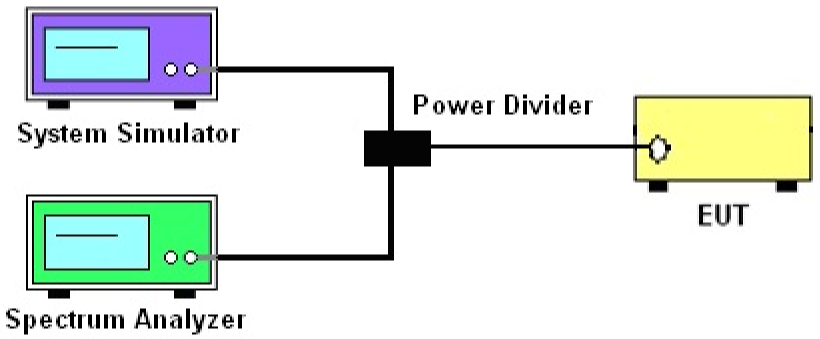
See list of measuring instruments of this test report.

3.2 Test Setup

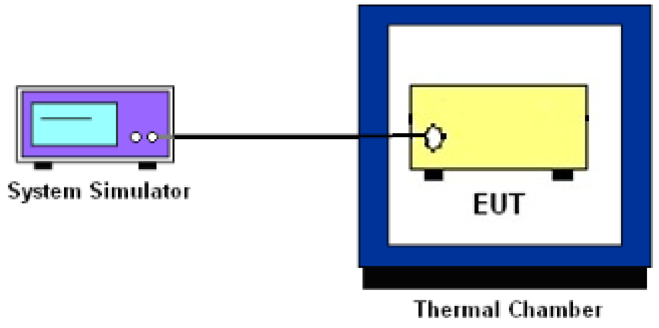
3.2.1 Conducted Output Power



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.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

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

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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.

   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.

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.

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.

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.

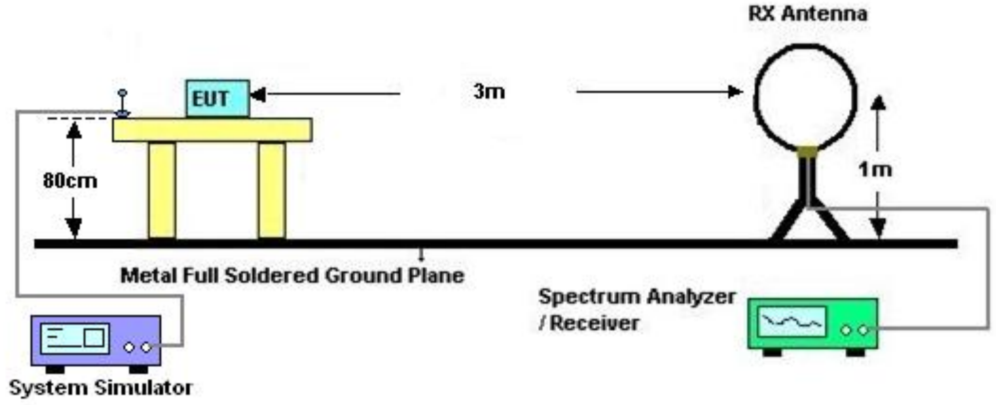
4 Radiated Test Items

4.1 Measuring Instruments

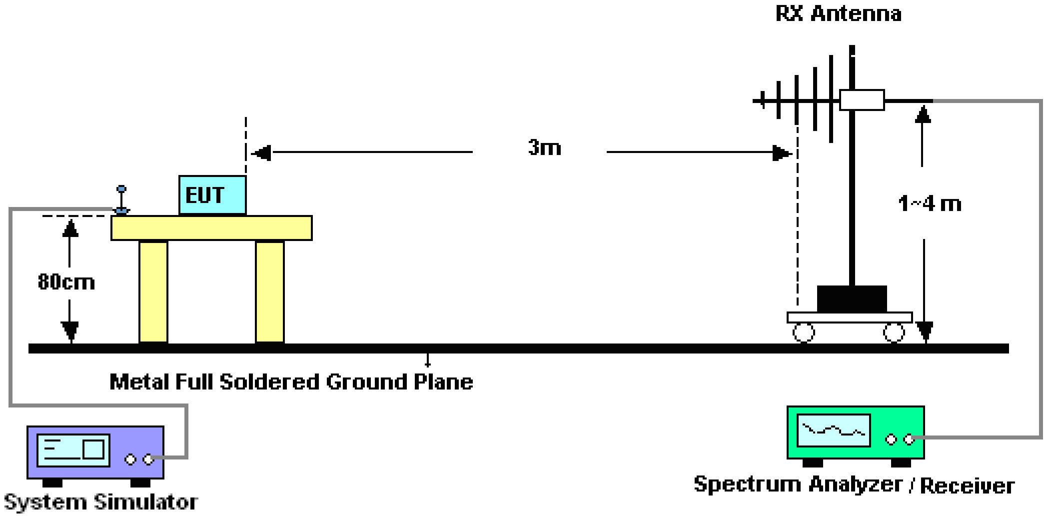
See list of measuring instruments of this test report.

4.2 Test Setup

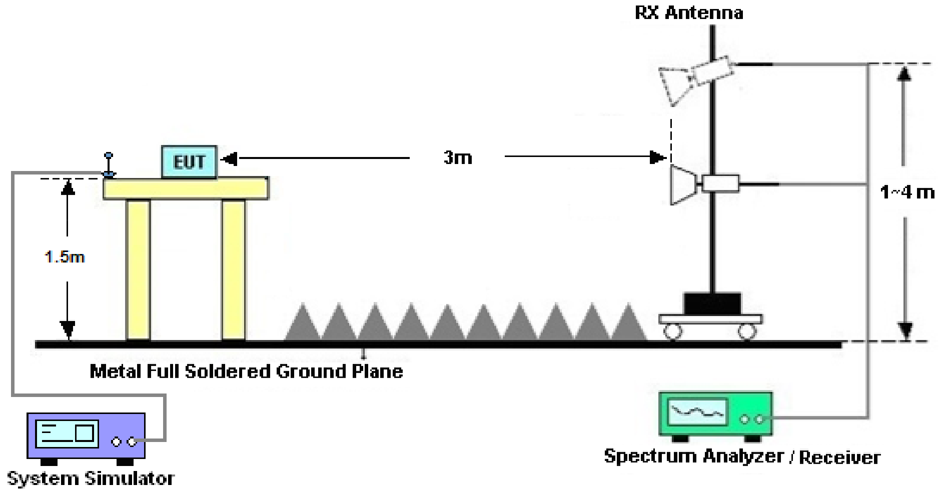
4.2.1 For radiated test below 30MHz



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.

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.

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	Jun. 12, 2025~ Jun. 13, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jun. 12, 2025~ Jun. 13, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jun. 12, 2025~ Jun. 13, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Dec. 03, 2024	Jun. 16, 2025	Dec. 02, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Jun. 16, 2025	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Nov. 23, 2024	Jun. 16, 2025	Nov. 22, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Jun. 16, 2025	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Jun. 16, 2025	Oct. 21, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz-1GHz	Jul. 03, 2024	Jun. 16, 2025	Jul. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060852	18~40GHz	Jan. 03, 2025	Jun. 16, 2025	Jan. 02, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 09, 2024	Jun. 16, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 09, 2024	Jun. 16, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 16, 2025	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 16, 2025	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 16, 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

Conducted Spurious Emission & Bandedge	**±2.22 dB**
Occupied Channel Bandwidth	**±0.1%**
Conducted Power	**±0.50 dB**
Peak to Average Ratio	**±0.50 dB**
Frequency Stability	**±0.04 ppm**

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

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

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

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

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

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

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

Appendix A. Test Results of Conducted Test

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

Conducted Output Power(Average power) and EIRP/ERP

LTE Band 2

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18700	18900	19100			
Frequency (MHz)				1860	1880	1900	L	M	H
20	QPSK	1	0	22.58	22.75	22.64	0.2128	0.2213	0.2158
20	QPSK	1	99	22.58	22.53	22.64	0.2128	0.2104	0.2158
20	QPSK	100	0	21.48	21.47	21.66	0.1652	0.1648	0.1722
20	16QAM	1	0	21.46	21.48	21.67	0.1644	0.1652	0.1726
Channel				18675	18900	19125	EIRP(W)		
Frequency (MHz)				1857.5	1880	1902.5	L	M	H
15	QPSK	1	0	22.55	22.72	22.60	0.2113	0.2198	0.2138
15	16QAM	1	0	21.42	21.37	21.68	0.1629	0.1611	0.1730
Channel				18650	18900	19150	EIRP(W)		
Frequency (MHz)				1855	1880	1905	L	M	H
10	QPSK	1	0	22.36	22.54	22.44	0.2023	0.2109	0.2061
10	16QAM	1	0	21.25	21.37	21.46	0.1567	0.1611	0.1644
Channel				18625	18900	19175	EIRP(W)		
Frequency (MHz)				1852.5	1880	1907.5	L	M	H
5	QPSK	1	0	22.58	22.71	22.48	0.2128	0.2193	0.2080
5	16QAM	1	0	21.39	21.49	21.66	0.1618	0.1656	0.1722
Channel				18615	18900	19185	EIRP(W)		
Frequency (MHz)				1851.5	1880	1908.5	L	M	H
3	QPSK	1	0	22.48	22.63	22.65	0.2080	0.2153	0.2163
3	16QAM	1	0	21.25	21.46	21.51	0.1567	0.1644	0.1663
Channel				18607	18900	19193	EIRP(W)		
Frequency (MHz)				1850.7	1880	1909.3	L	M	H
1.4	QPSK	1	0	22.57	22.62	22.52	0.2123	0.2148	0.2099
1.4	16QAM	1	0	22.57	22.62	22.52	0.2123	0.2148	0.2099

LTE Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745	L	M	H
20	QPSK	1	0	22.85	22.86	22.74	0.2213	0.2218	0.2158
20	QPSK	1	99	22.79	22.62	22.83	0.2183	0.2099	0.2203
20	QPSK	100	0	21.59	21.55	21.78	0.1656	0.1641	0.1730
20	16QAM	1	0	21.62	21.60	21.94	0.1667	0.1660	0.1795
Channel				20025	20175	20325	EIRP(W)		
Frequency (MHz)				1717.5	1732.5	1747.5	L	M	H
15	QPSK	1	0	22.64	22.75	22.61	0.2109	0.2163	0.2094
15	16QAM	1	0	21.43	21.54	21.76	0.1596	0.1637	0.1722
Channel				20000	20175	20350	EIRP(W)		
Frequency (MHz)				1715	1732.5	1750	L	M	H
10	QPSK	1	0	22.84	22.66	22.62	0.2208	0.2118	0.2099
10	16QAM	1	0	21.64	21.48	21.78	0.1675	0.1614	0.1730
Channel				19975	20175	20375	EIRP(W)		
Frequency (MHz)				1712.5	1732.5	1752.5	L	M	H
5	QPSK	1	0	22.77	22.84	22.61	0.2173	0.2208	0.2094
5	16QAM	1	0	21.54	21.43	21.90	0.1637	0.1596	0.1778
Channel				19965	20175	20385	EIRP(W)		
Frequency (MHz)				1711.5	1732.5	1753.5	L	M	H
3	QPSK	1	0	22.66	22.64	22.75	0.2118	0.2109	0.2163
3	16QAM	1	0	21.46	21.58	21.81	0.1607	0.1652	0.1742
Channel				19950	20175	20393	EIRP(W)		
Frequency (MHz)				1710	1732.5	1754.3	L	M	H
1.4	QPSK	1	0	22.76	22.80	22.71	0.2168	0.2188	0.2143
1.4	16QAM	1	0	21.60	21.50	21.83	0.1660	0.1622	0.1750

LTE Band 12

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	22.86	22.94	22.88	0.0590	0.0601	0.0593
10	QPSK	1	49	22.92	22.80	22.85	0.0598	0.0582	0.0589
10	QPSK	50	0	21.62	21.70	21.97	0.0444	0.0452	0.0481
10	16QAM	1	0	21.67	21.68	22.11	0.0449	0.0450	0.0497
Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	22.86	22.88	22.72	0.0590	0.0593	0.0571
5	16QAM	1	0	21.61	21.61	21.91	0.0443	0.0443	0.0474
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	22.73	22.76	22.87	0.0573	0.0577	0.0592
3	16QAM	1	0	21.81	21.80	21.98	0.0463	0.0462	0.0482
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	22.79	22.84	22.69	0.0581	0.0587	0.0568
1.4	16QAM	1	0	21.73	21.81	22.13	0.0455	0.0463	0.0499

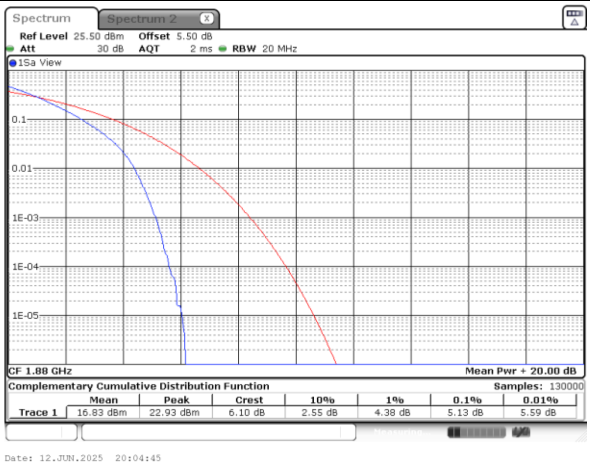
LTE Band 2

Peak-to-Average Ratio

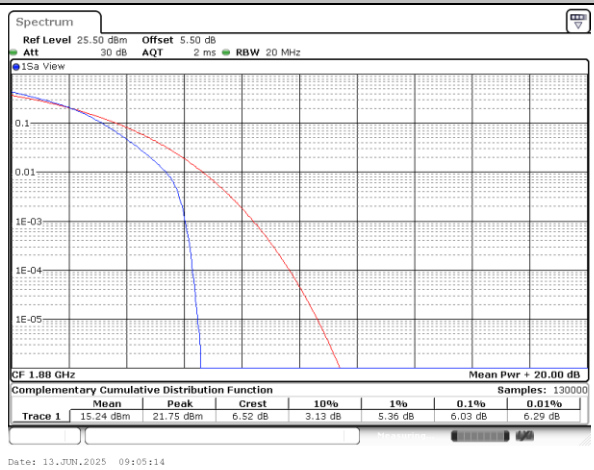
Mode	LTE Band 2 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.13	**6.03**	**PASS**

LTE Band 66 / 20MHz

Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

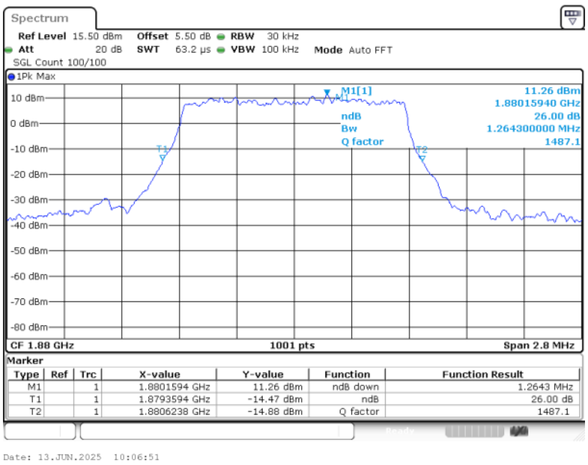


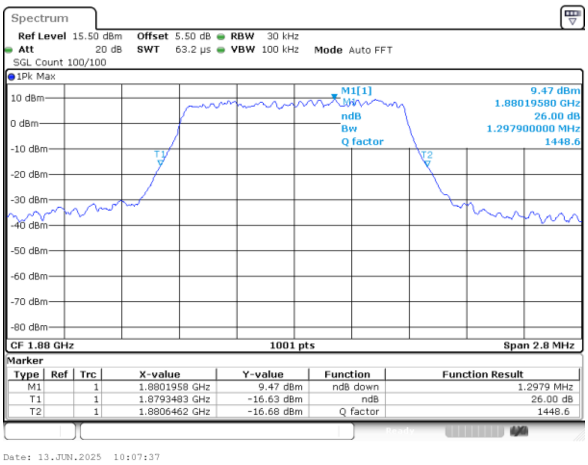
26dB Bandwidth

Mode	LTE Band 2 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.26	1.30
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.02	3.02
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.96	4.87
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.61	5.77
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.30	5.78
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.8	6.31

LTE Band 2

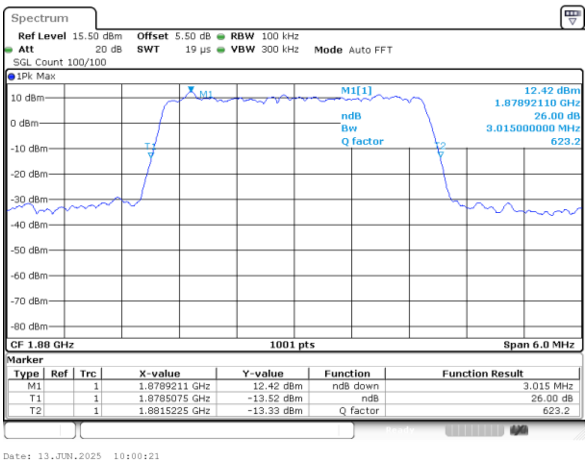
Middle Channel / 1.4MHz / QPSK	Middle Channel / 1.4MHz / 16QAM

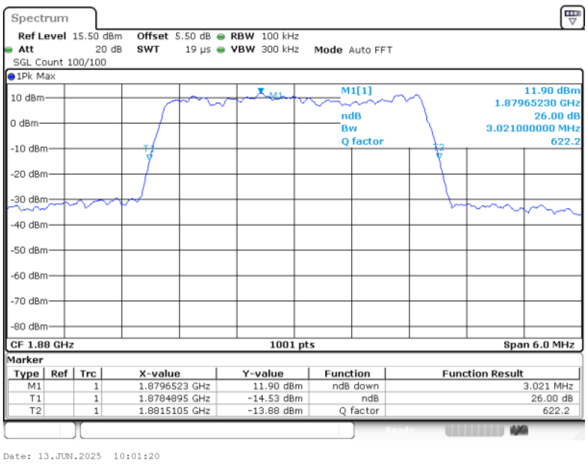




LTE Band 2

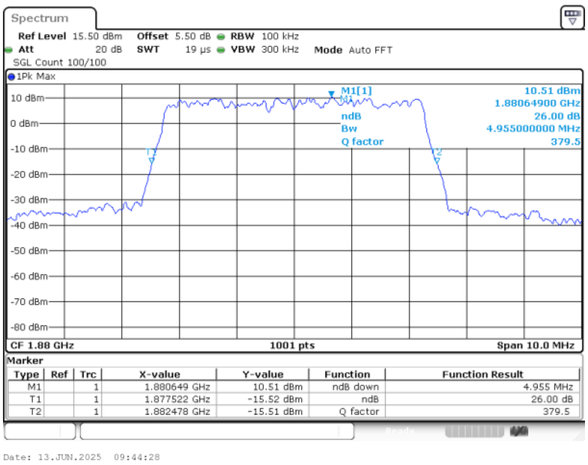
Middle Channel / 3MHz / QPSK	Middle Channel / 3MHz / 16QAM

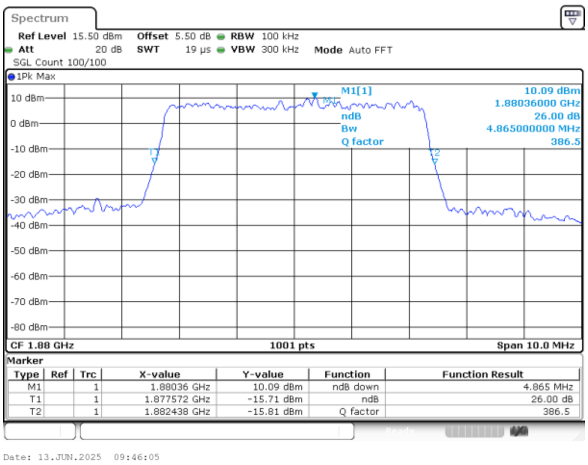




LTE Band 2

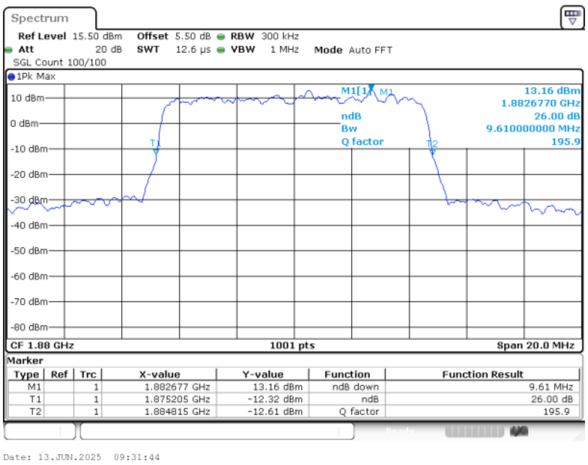
Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM



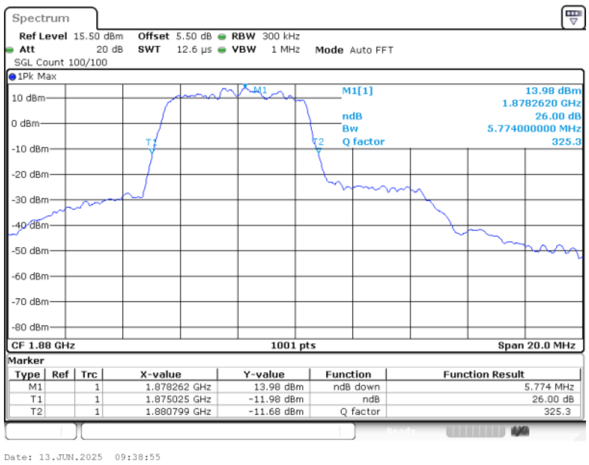


LTE Band 2

Middle Channel / 10MHz / QPSK

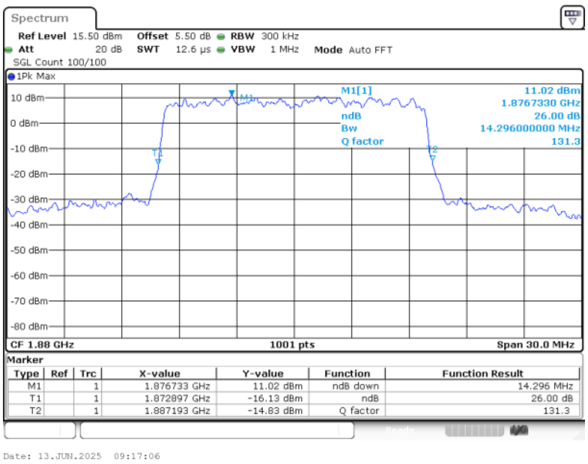


Middle Channel / 10MHz / 16QAM

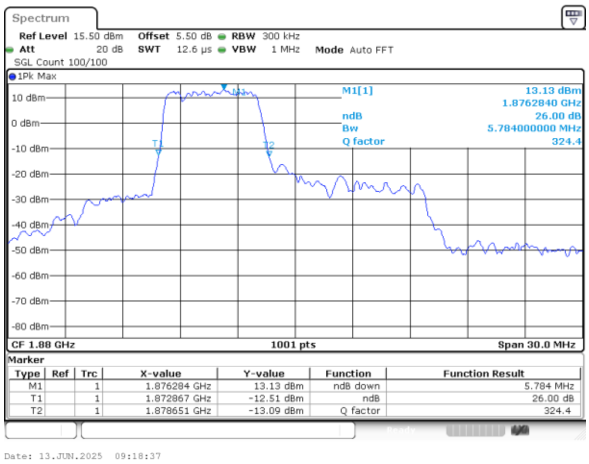


LTE Band 2

Middle Channel / 15MHz / QPSK

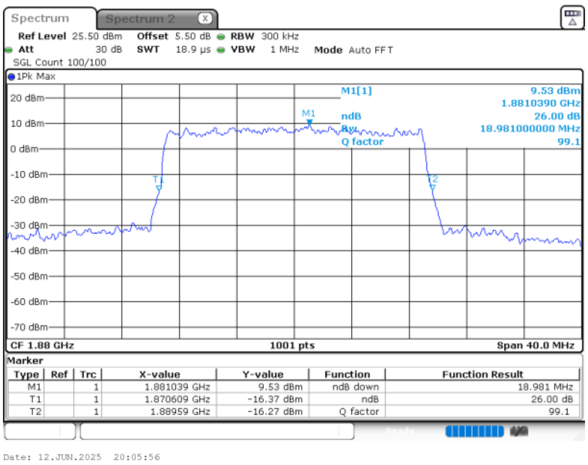


Middle Channel /15MHz / 16QAM

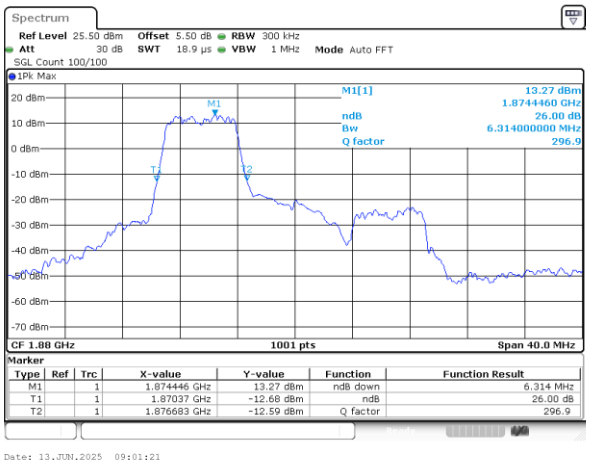


LTE Band 2

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

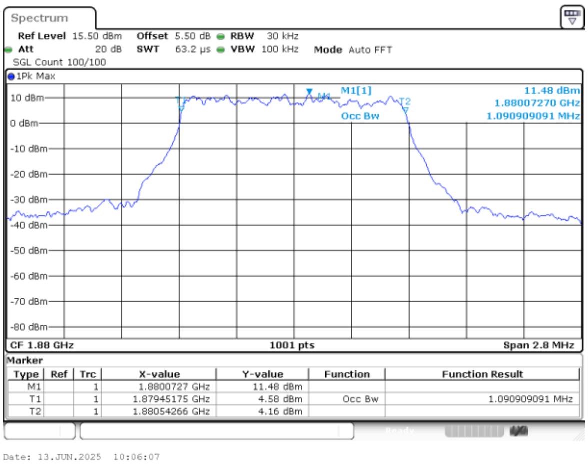


Occupied Bandwidth

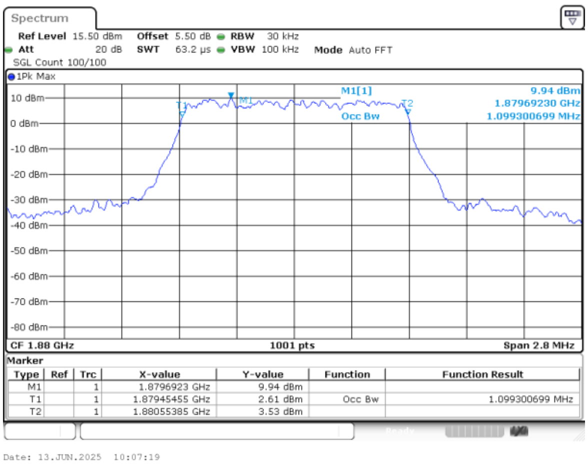
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.10
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.73	2.70
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.51
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.95	4.98
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.40	5.03
Mode	LTE Band 2 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	5.07

LTE Band 2

Middle Channel / 1.4MHz / QPSK

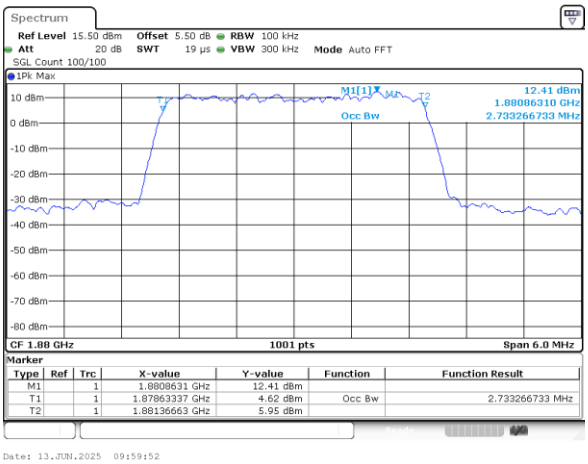


Middle Channel / 1.4MHz / 16QAM

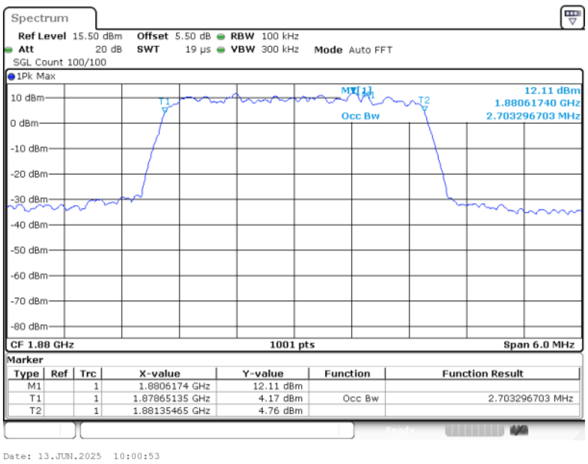


LTE Band 2

Middle Channel / 3MHz / QPSK

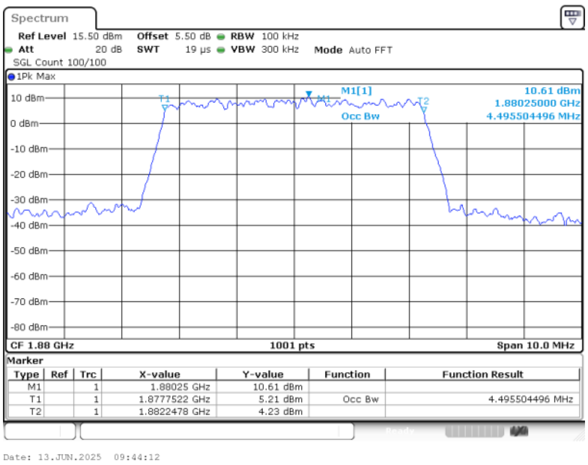


Middle Channel / 3MHz / 16QAM

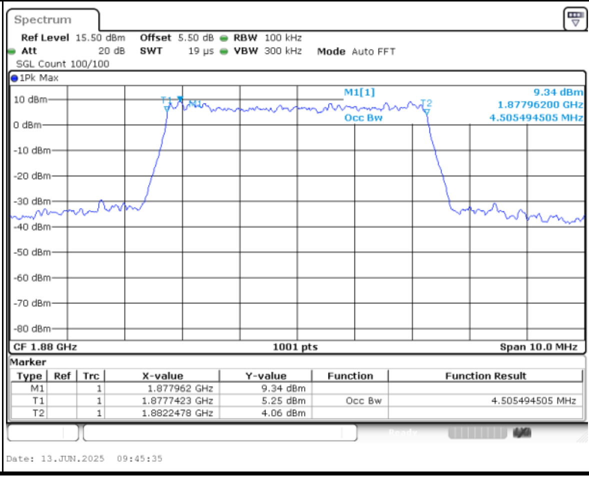


LTE Band 2

Middle Channel / 5MHz / QPSK

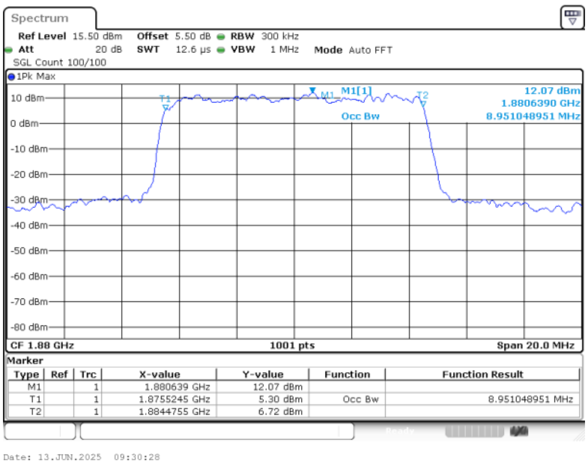


Middle Channel / 5MHz / 16QAM

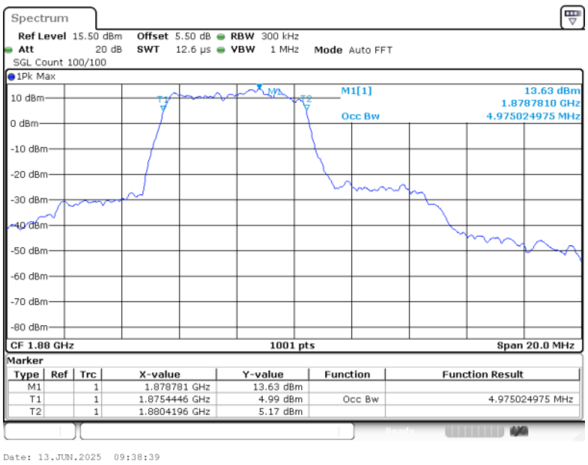


LTE Band 2

Middle Channel / 10MHz / QPSK

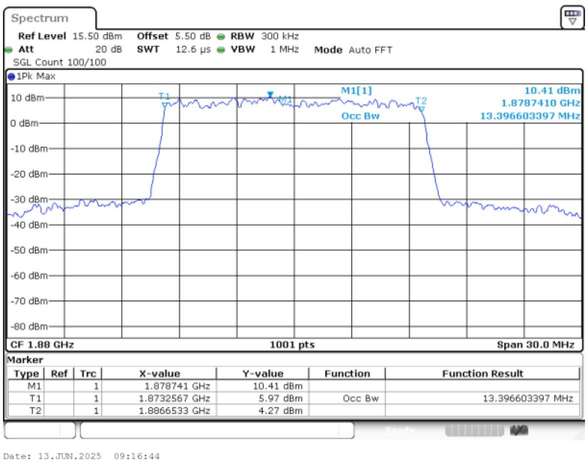


Middle Channel / 10MHz / 16QAM

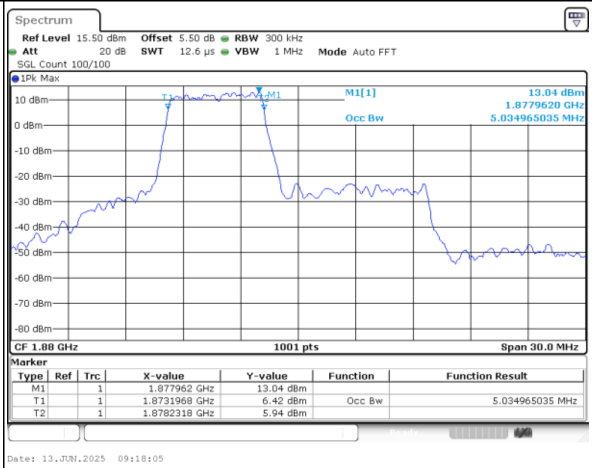


LTE Band 2

Middle Channel / 15MHz / QPSK

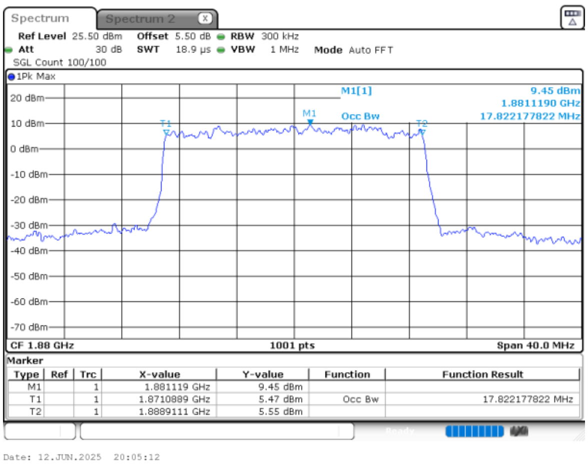


Middle Channel /15MHz / 16QAM

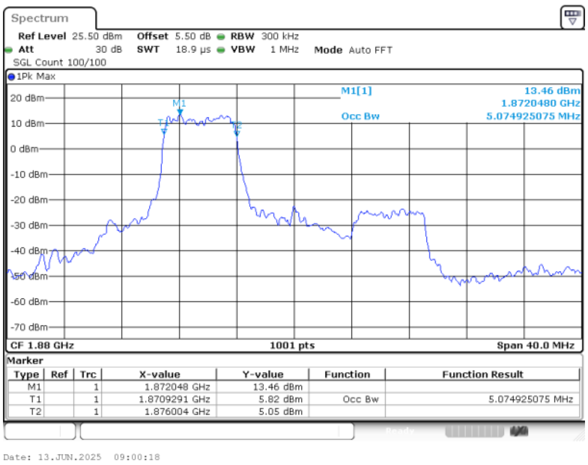


LTE Band 2

Middle Channel / 20MHz / QPSK



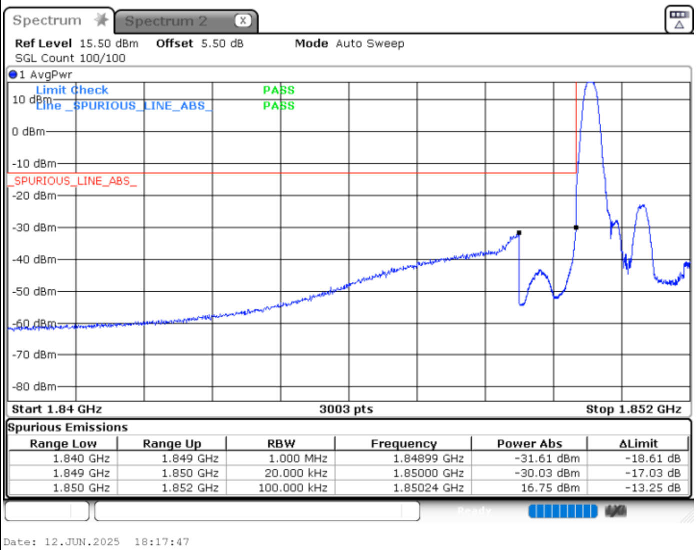
Middle Channel / 20MHz / 16QAM



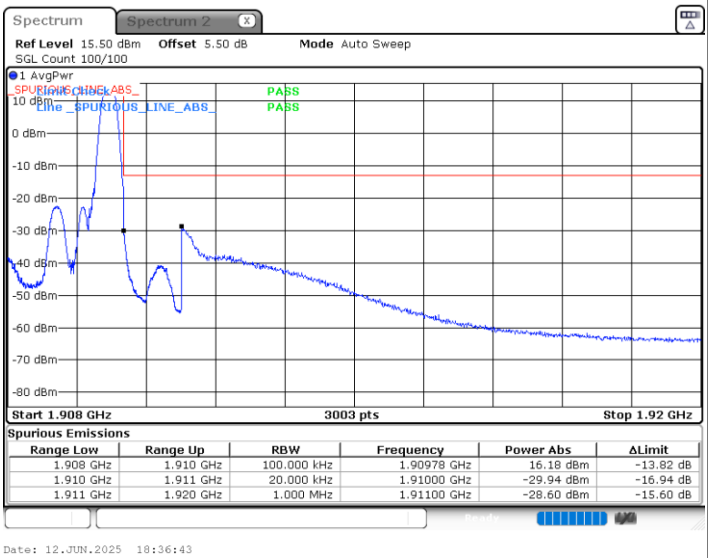
Conducted Band Edge

LTE Band 2 / 1.4MHz / QPSK

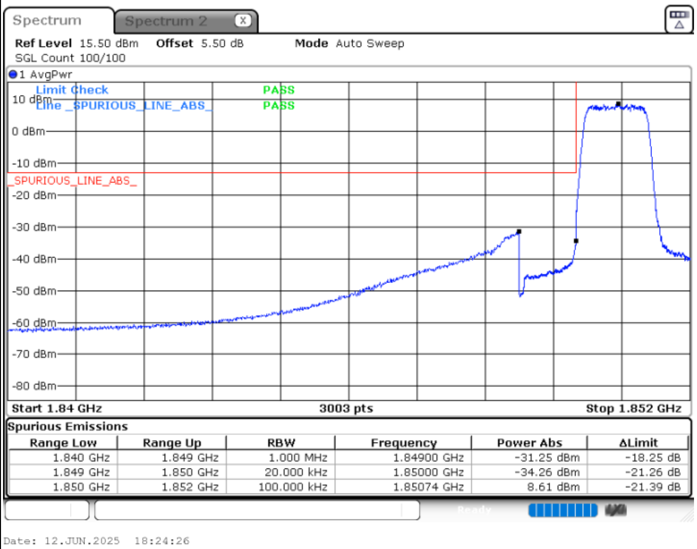
Lowest Band Edge / 1RB



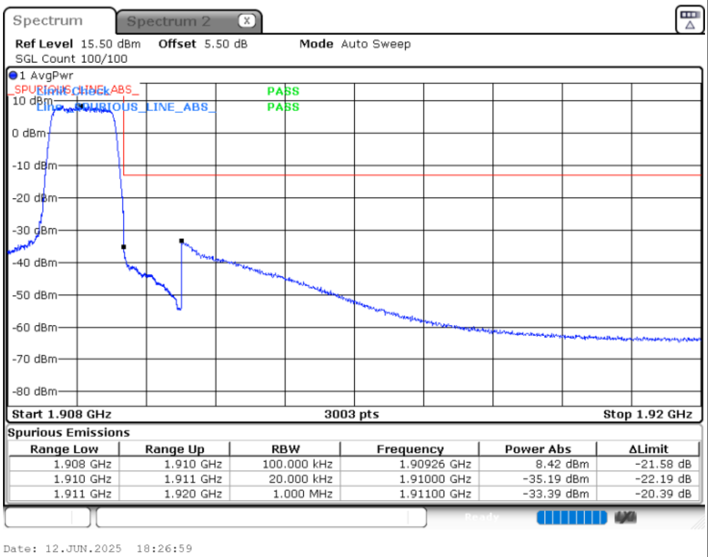
Highest Band Edge / 1RB

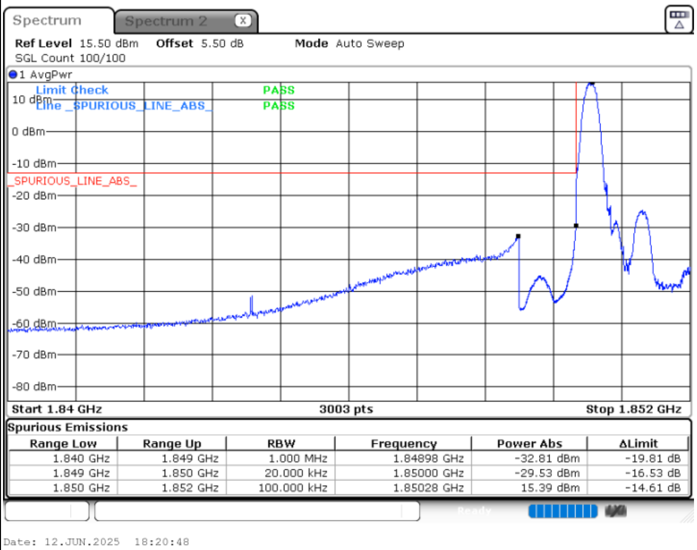
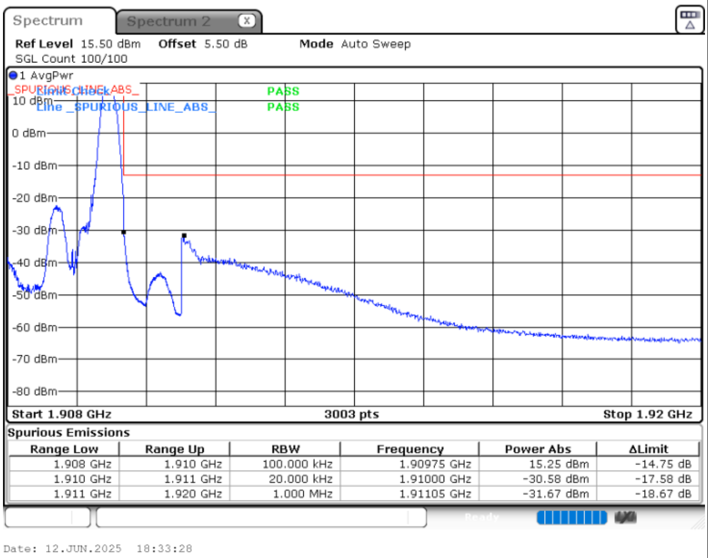
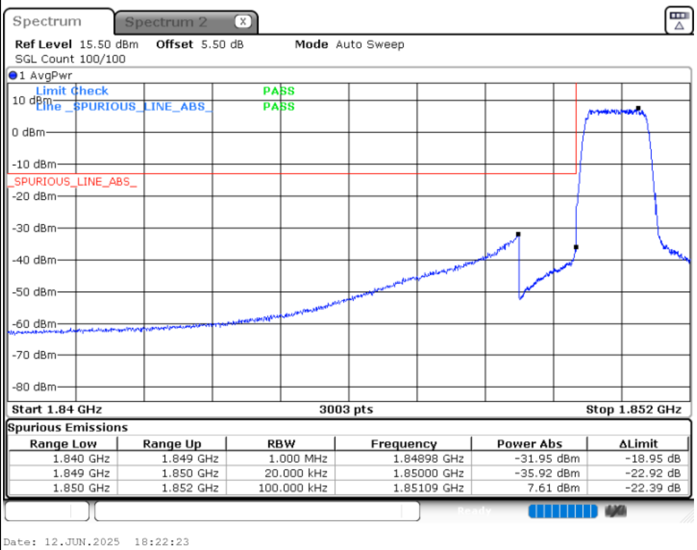
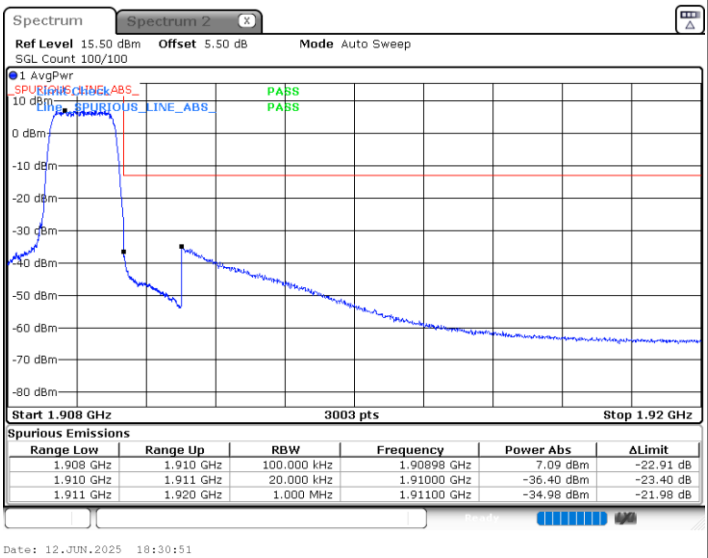


Lowest Band Edge / Full RB



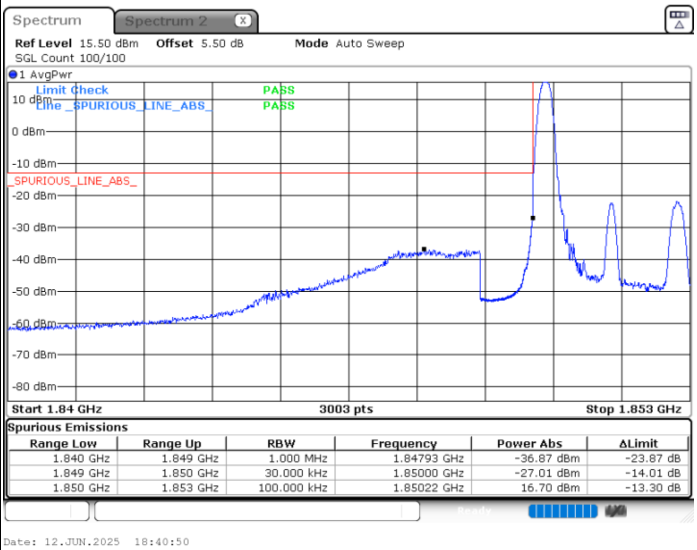
Highest Band Edge / Full RB



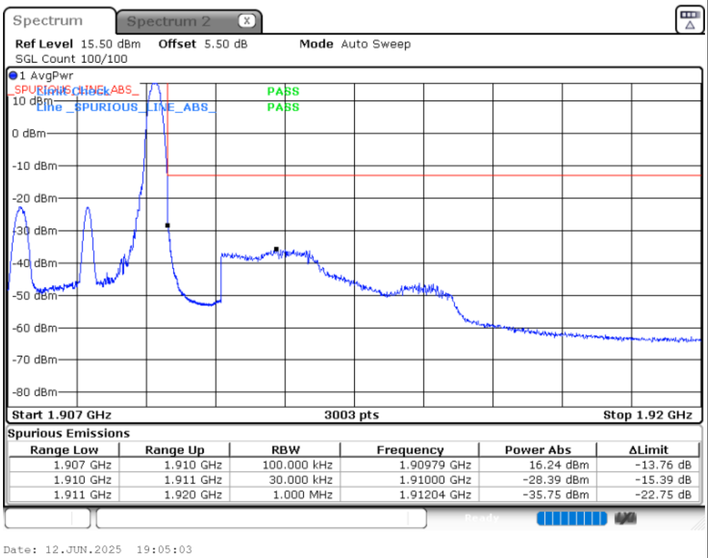
LTE Band 2 / 1.4MHz / 16QAM	
Lowest Band Edge / 1 RB	Highest Band Edge / 1 RB
	
Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

LTE Band 2 / 3MHz / QPSK

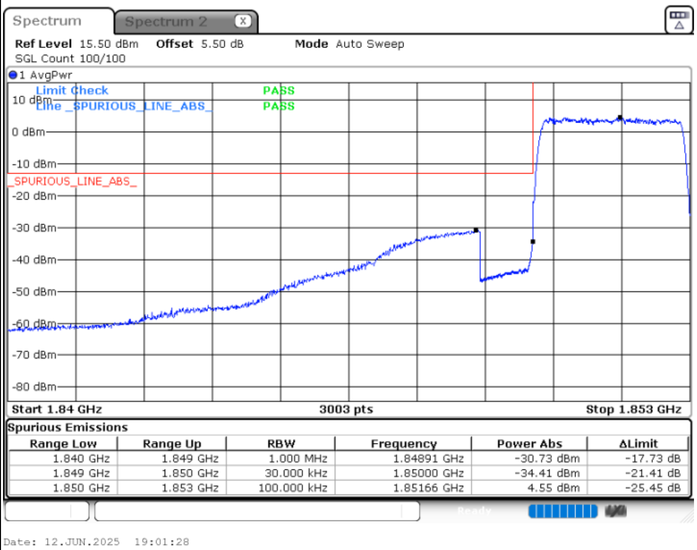
Lowest Band Edge / 1RB



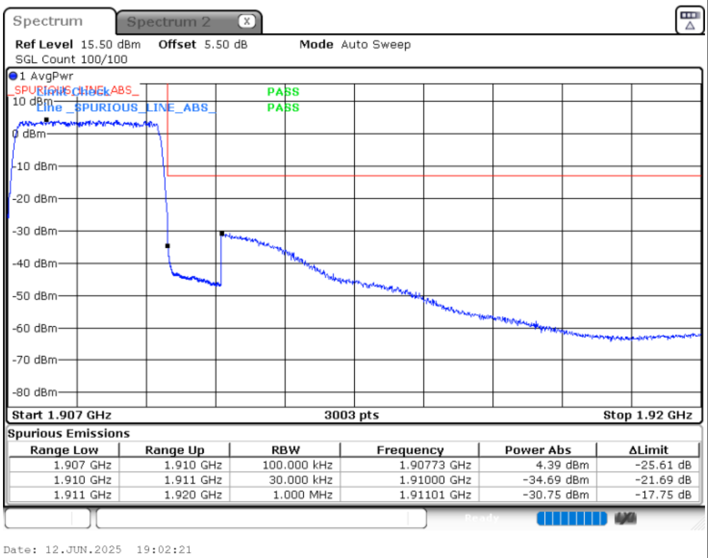
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

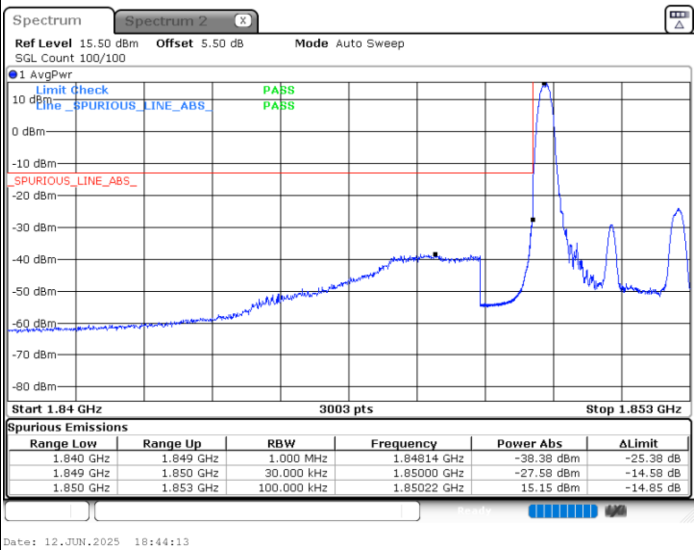


Highest Band Edge / Full RB

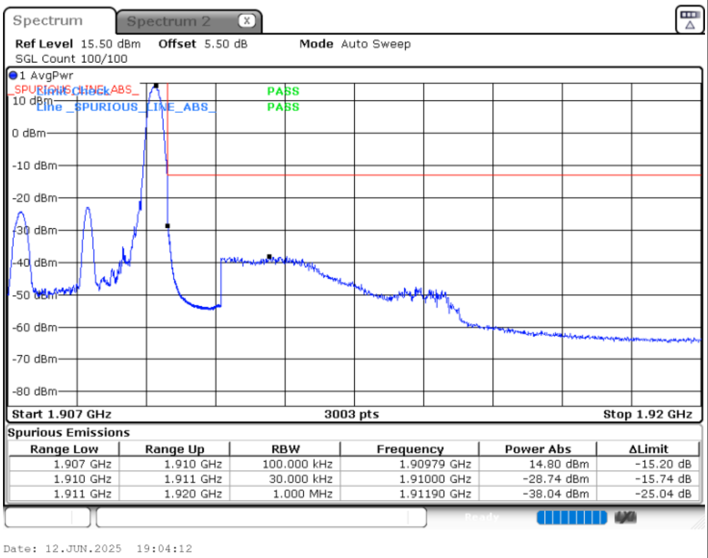


LTE Band 2 / 3MHz / 16QAM

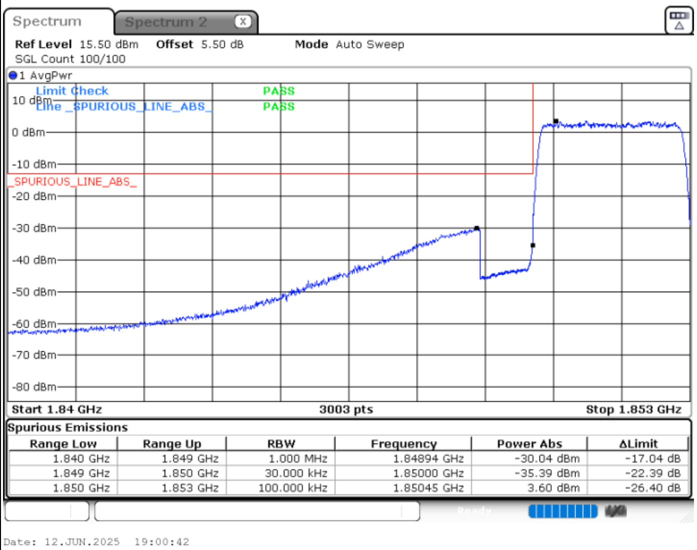
Lowest Band Edge / 1 RB



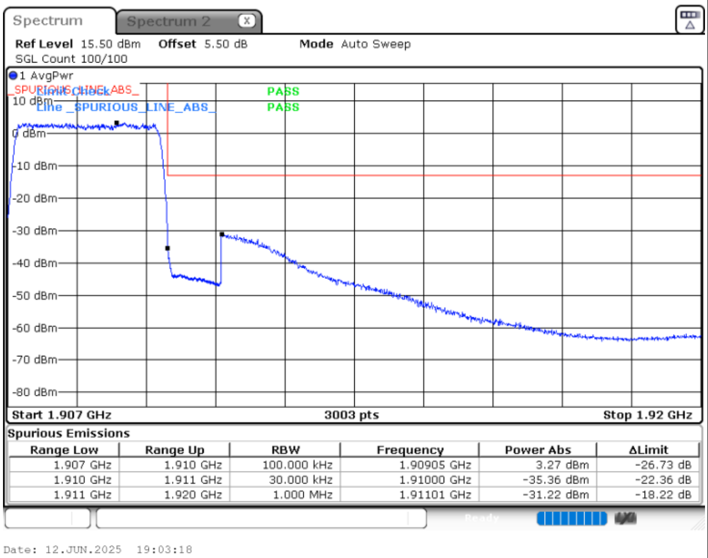
Highest Band Edge /1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



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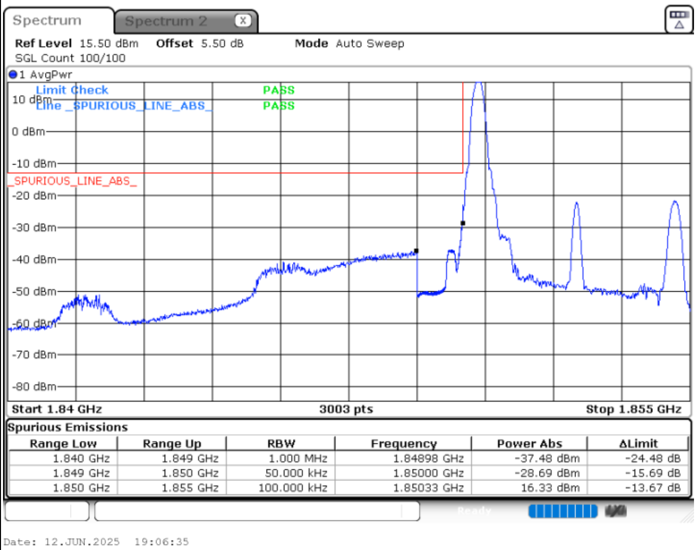

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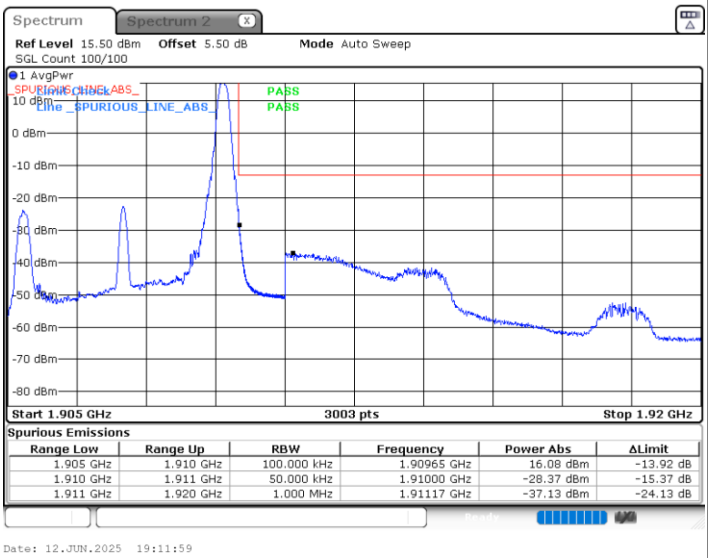

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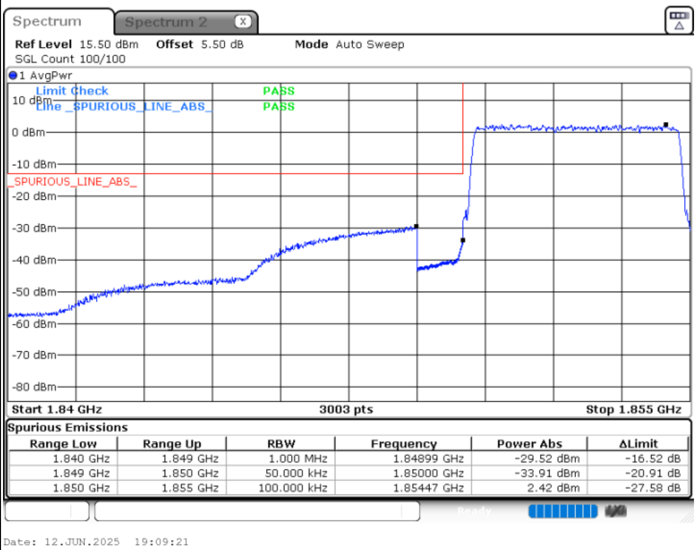
<tr><th>Lowest Band Edge / Full RB</th><th>Highest Band Edge / Full RB</th></tr>
<tr><td>



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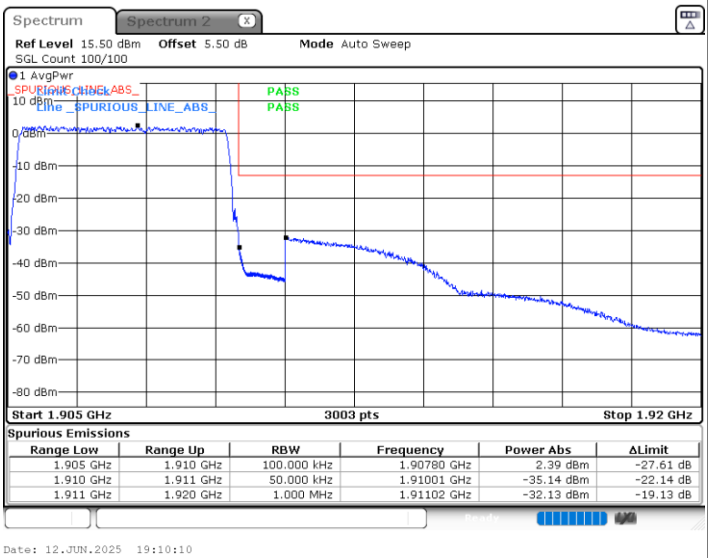

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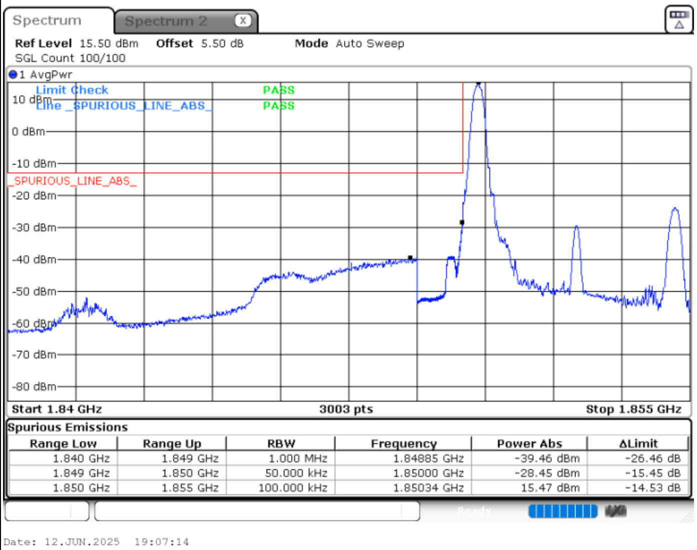
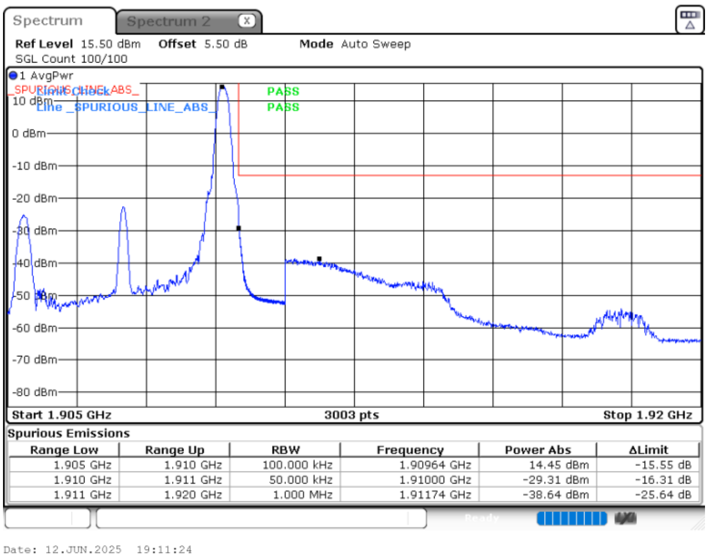
LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB



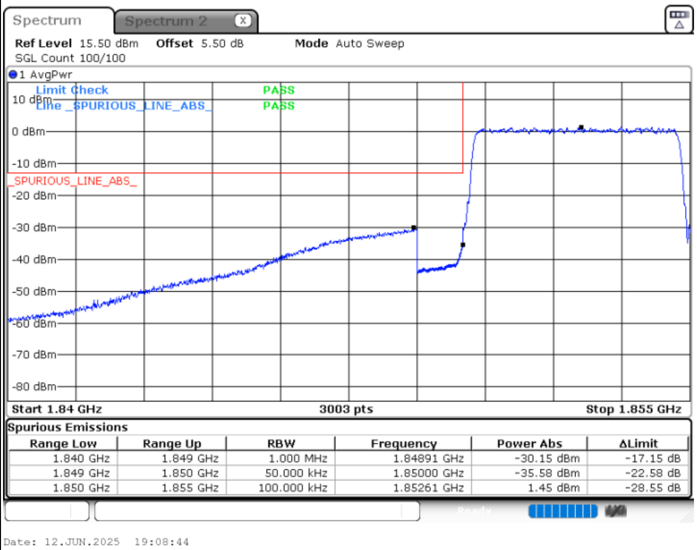
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84885 GHz	-39.46 dBm	-26.46 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-28.45 dBm	-15.45 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85034 GHz	15.47 dBm	-14.53 dB

Highest Band Edge / 1 RB



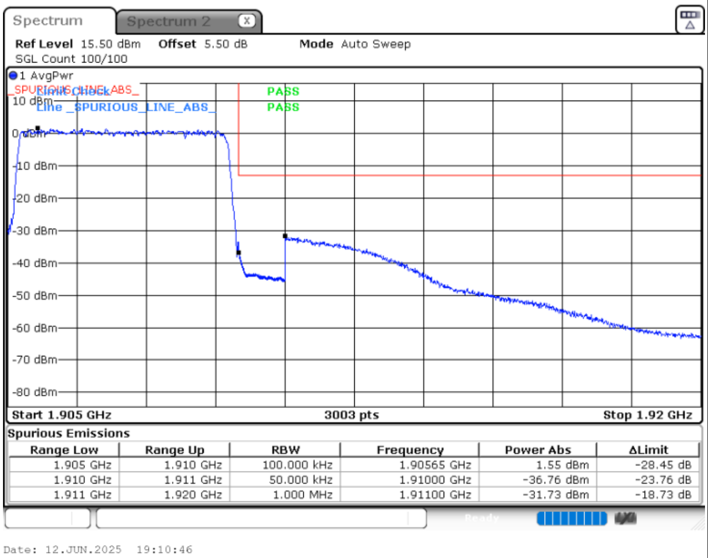
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90964 GHz	14.45 dBm	-15.55 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-29.31 dBm	-16.31 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91174 GHz	-38.64 dBm	-25.64 dB

Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84891 GHz	-30.15 dBm	-17.15 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-35.58 dBm	-22.58 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85261 GHz	1.45 dBm	-28.55 dB

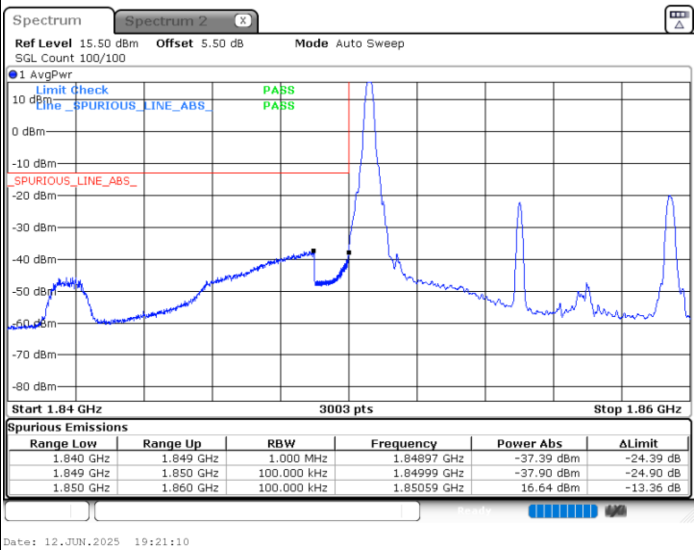
Highest Band Edge / Full RB



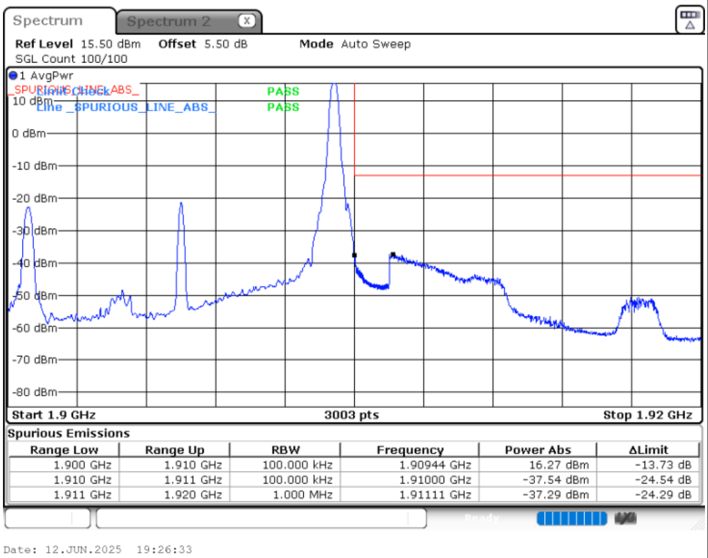
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90565 GHz	1.55 dBm	-28.45 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-36.76 dBm	-23.76 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91100 GHz	-31.73 dBm	-18.73 dB

LTE Band 2 / 10MHz / QPSK

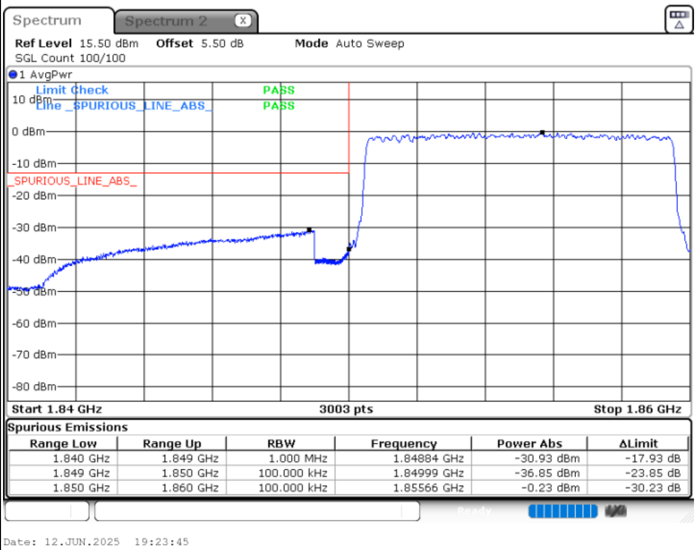
Lowest Band Edge / 1 RB



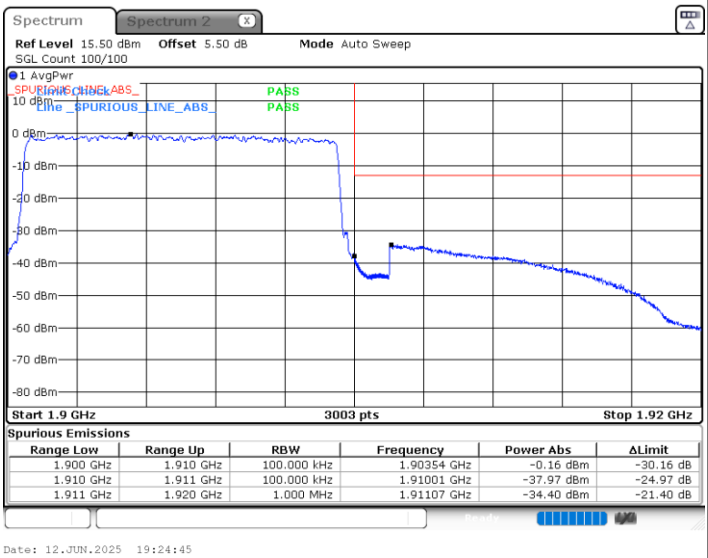
Highest Band Edge / 1 RB

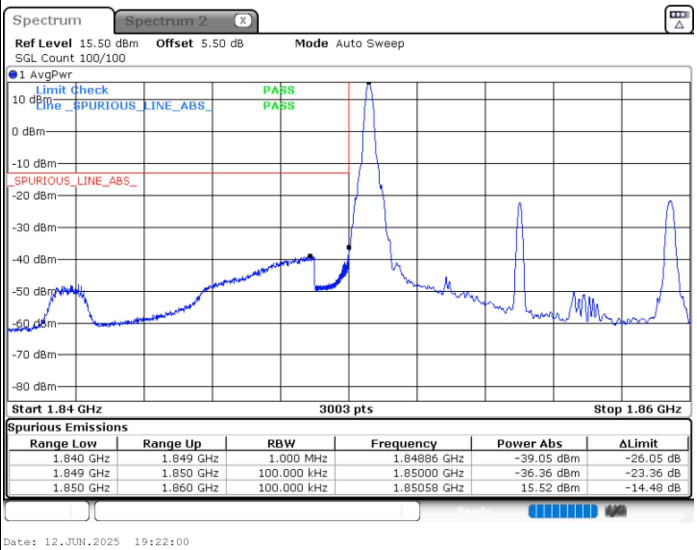
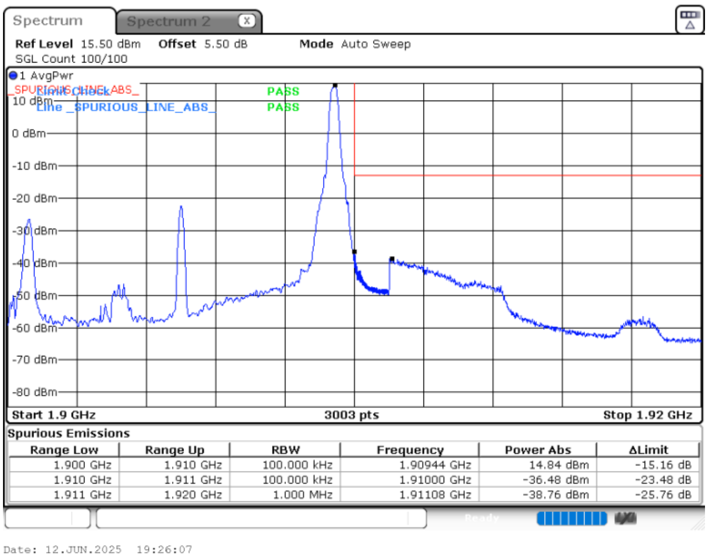
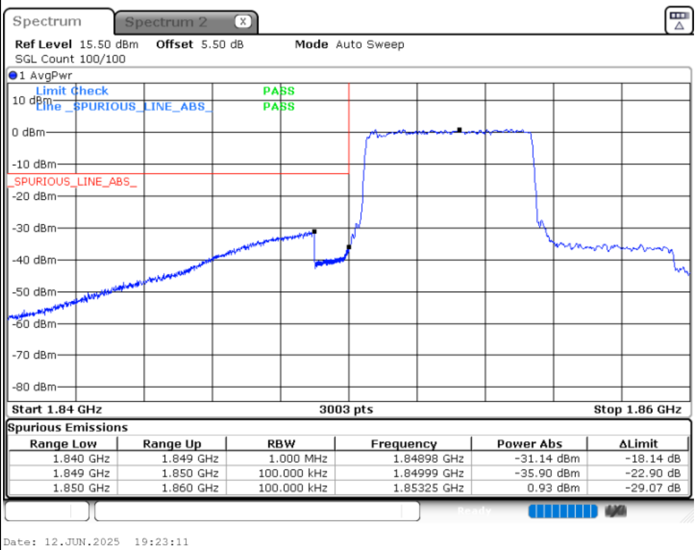
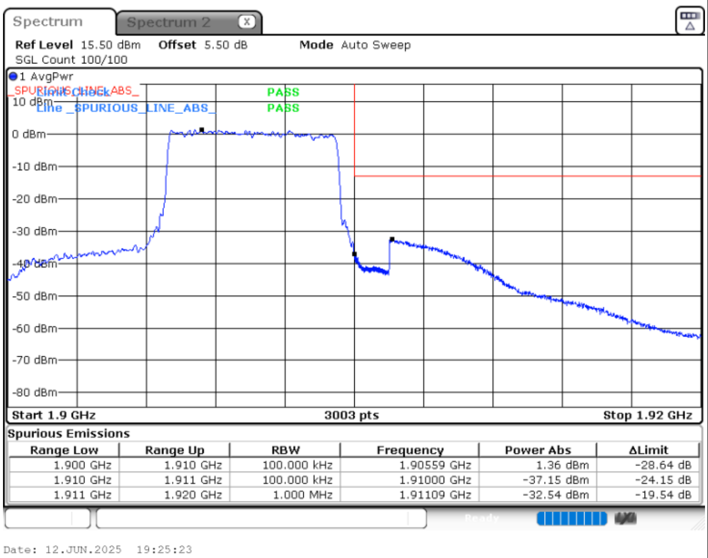


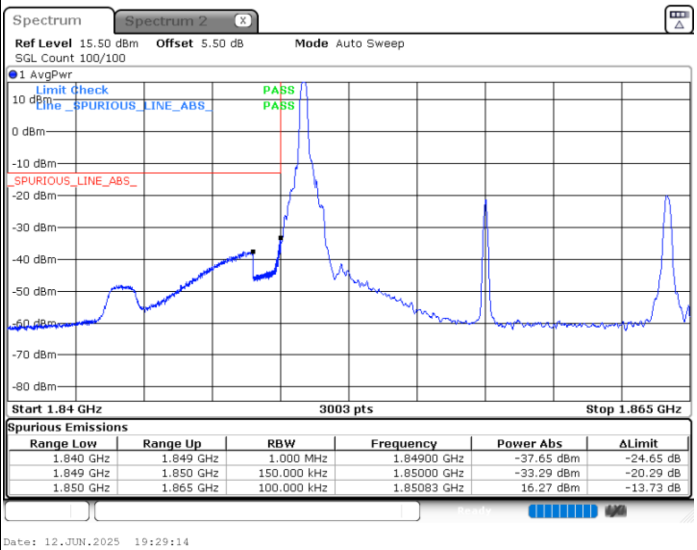
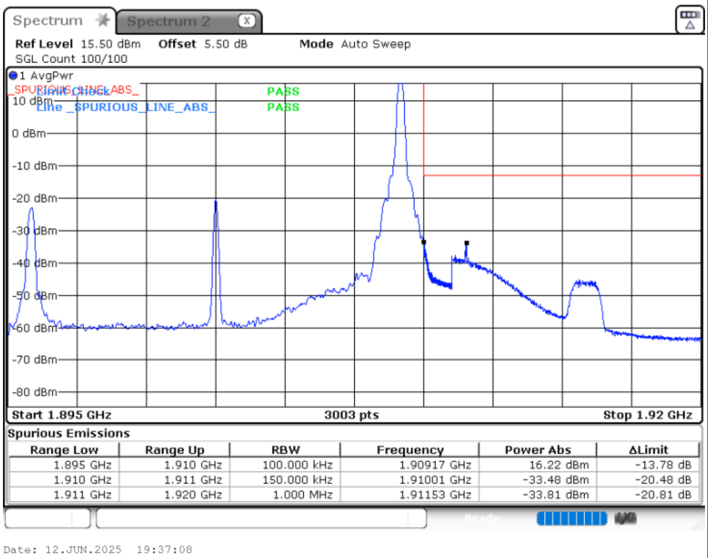
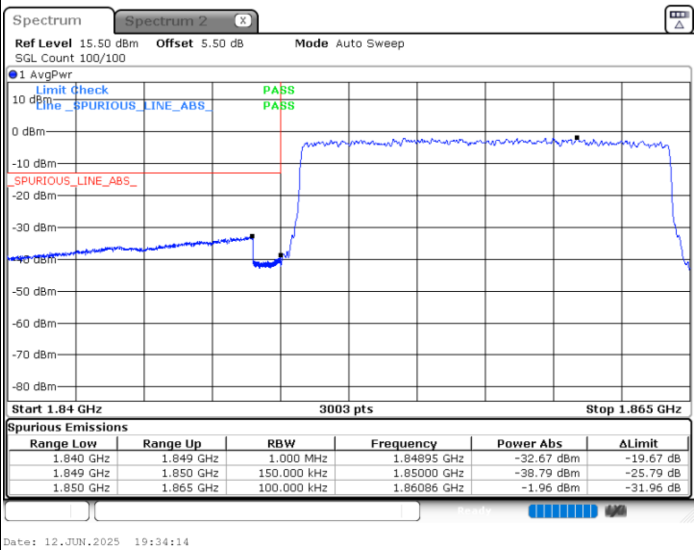
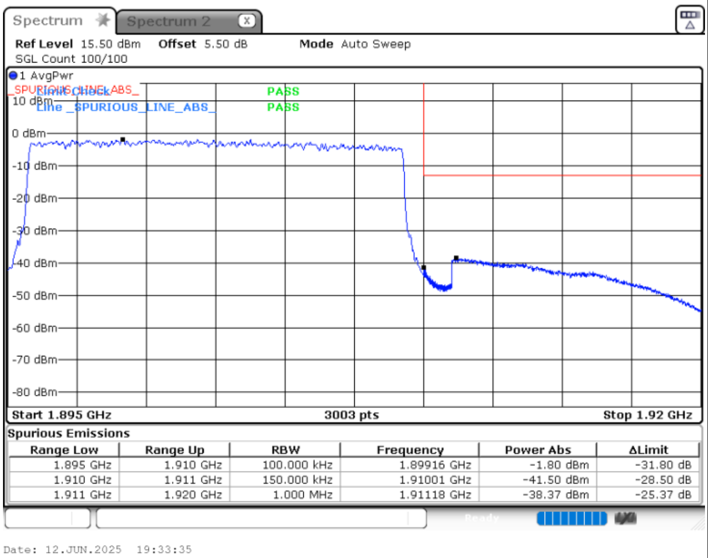
Lowest Band Edge / Full RB



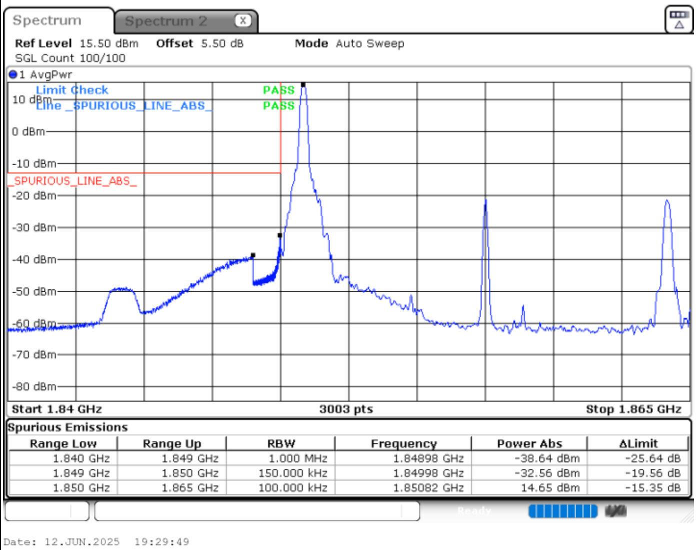
Highest Band Edge / Full RB

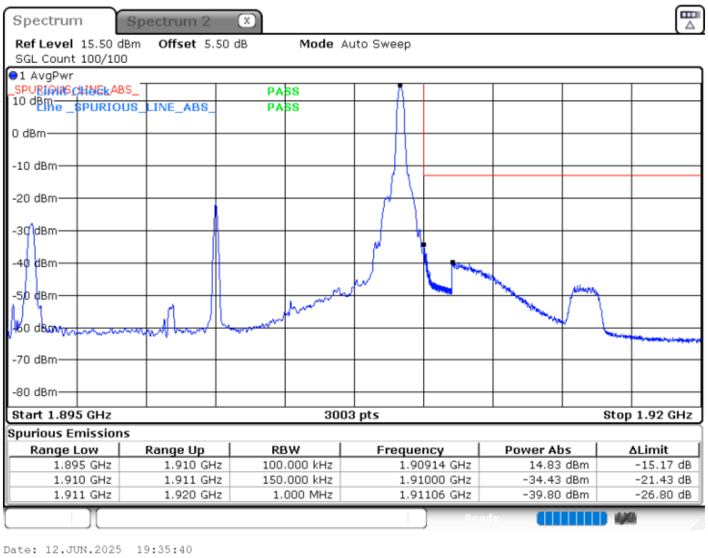


LTE Band 2 / 10MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge /27 RB	**Highest Band Edge / 27RB23**
	

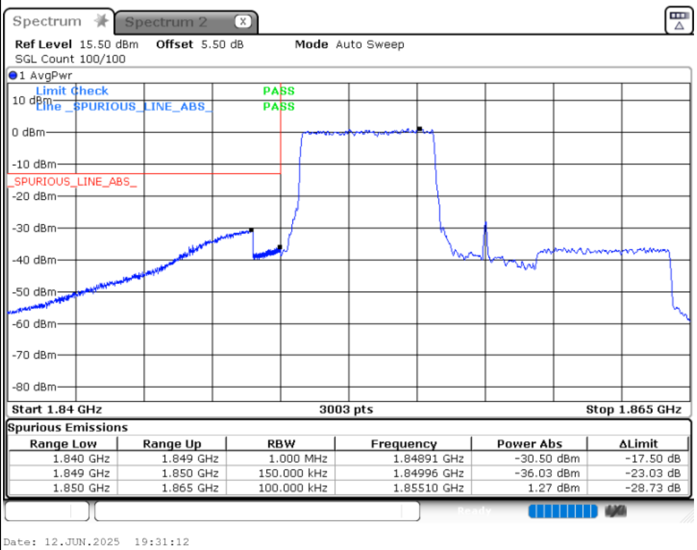
LTE Band 2 / 15MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

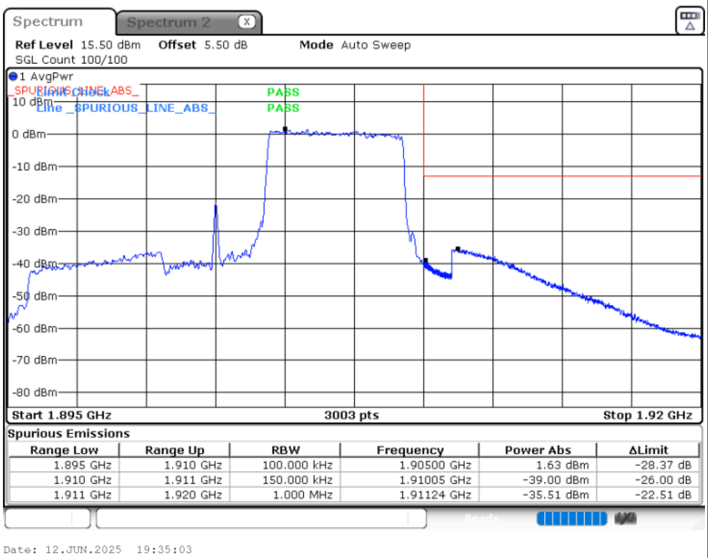
LTE Band 2 / 15MHz / 16QAM	
Lowest Band Edge / 1 RB	Highest Band Edge / 1 RB

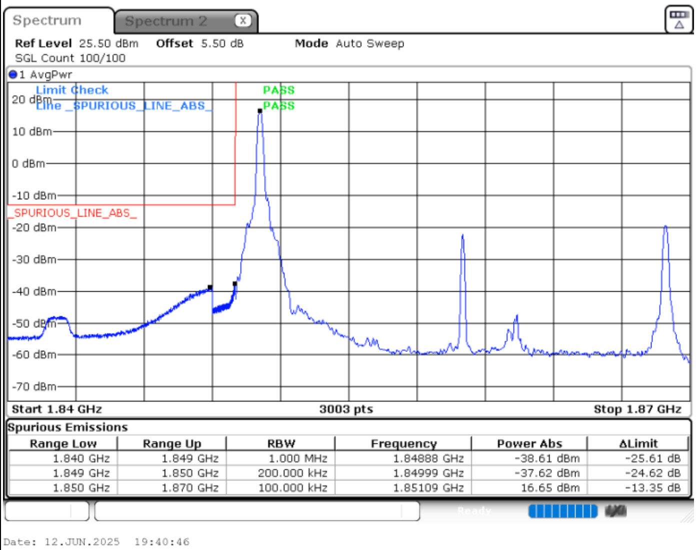
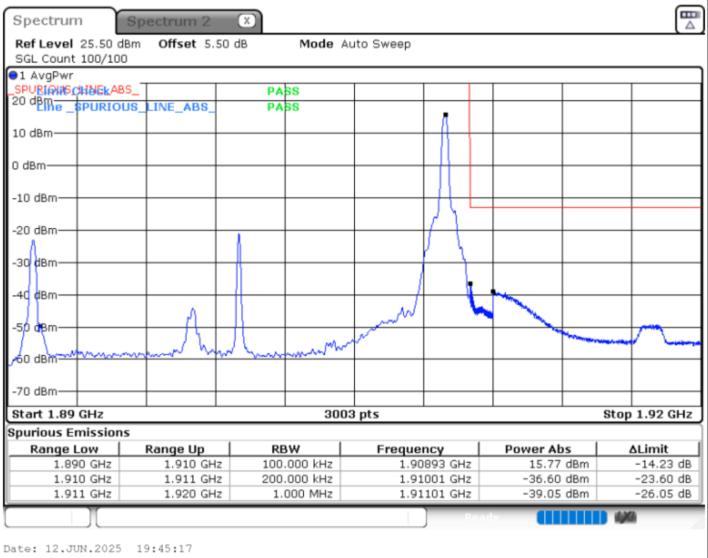
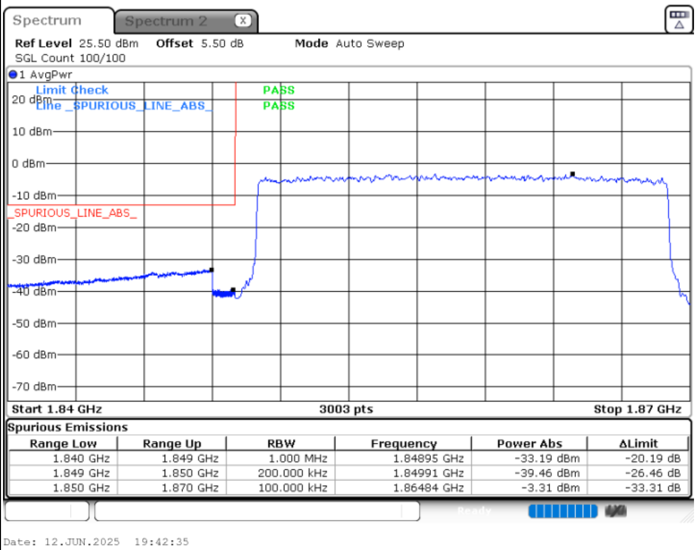
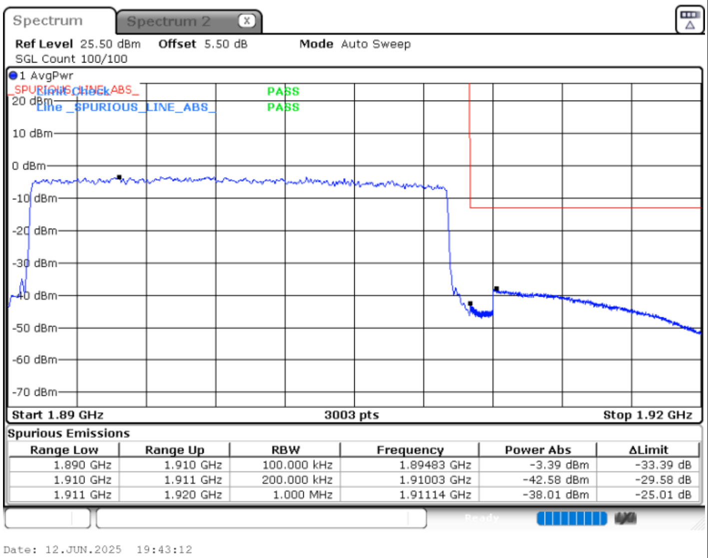




Lowest Band Edge /27 RB	Highest Band Edge / 27 RB48

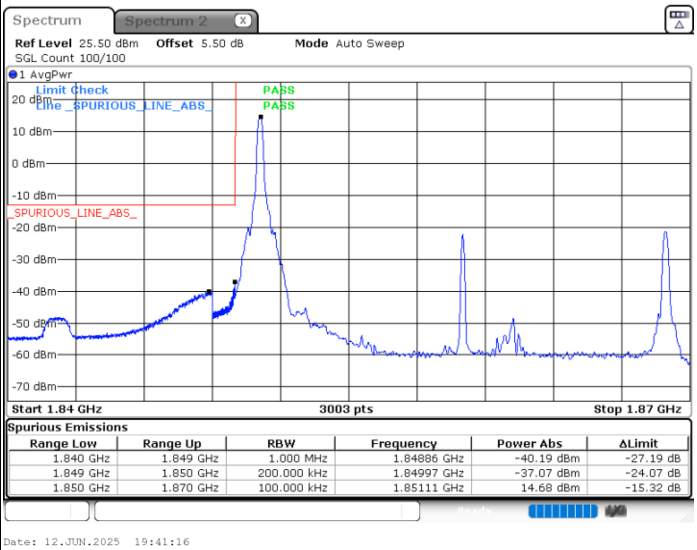




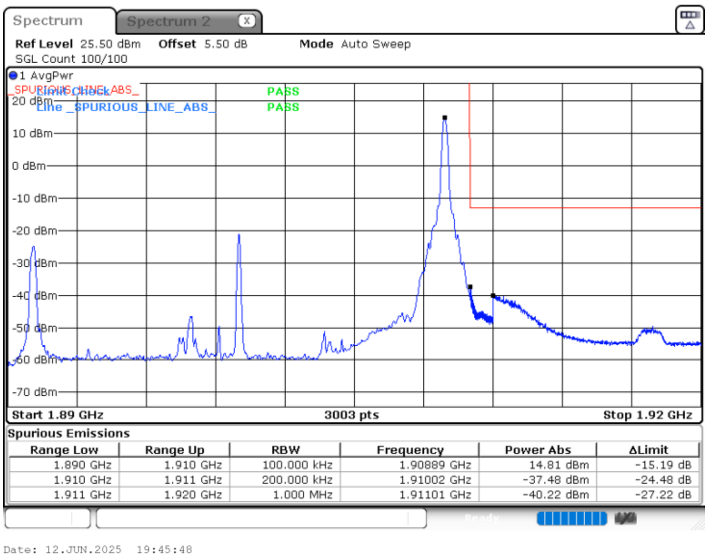
LTE Band 2 / 20MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

LTE Band 2 / 20MHz / 16QAM

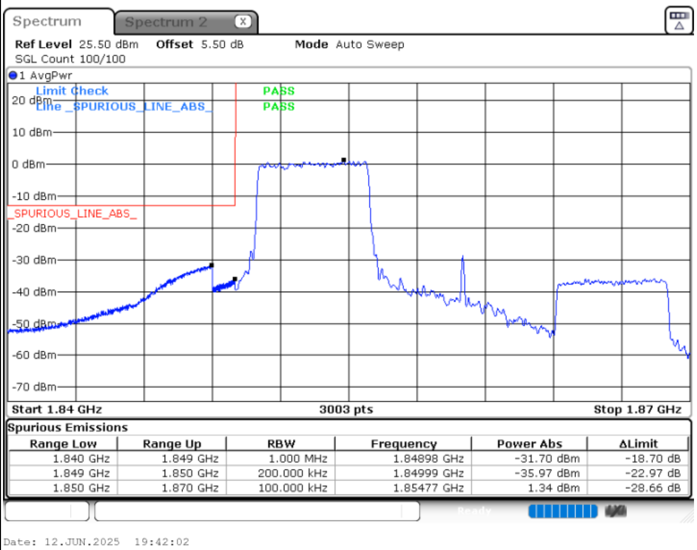
Lowest Band Edge / 1 RB



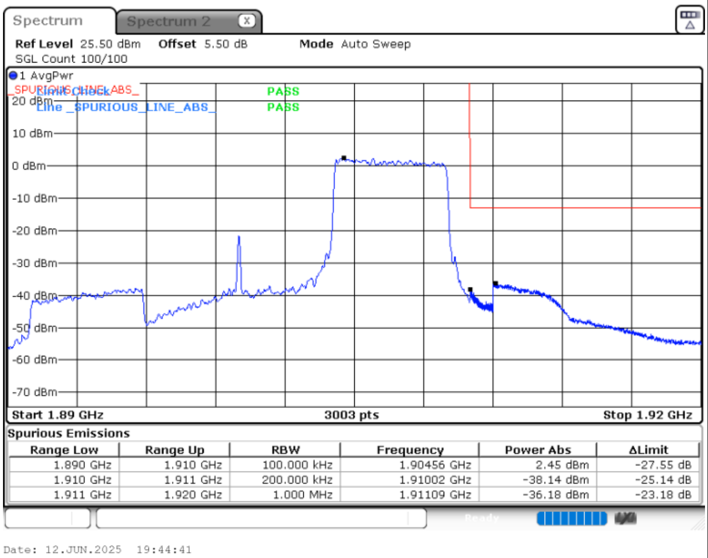
Highest Band Edge / 1 RB



Lowest Band Edge / 27 RB



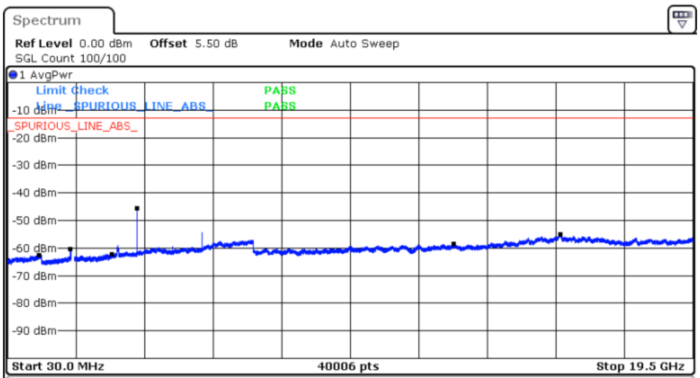
Highest Band Edge /27 RB73



Conducted Spurious Emission

LTE Band 2 / 1.4MHz

Lowest Channel / QPSK

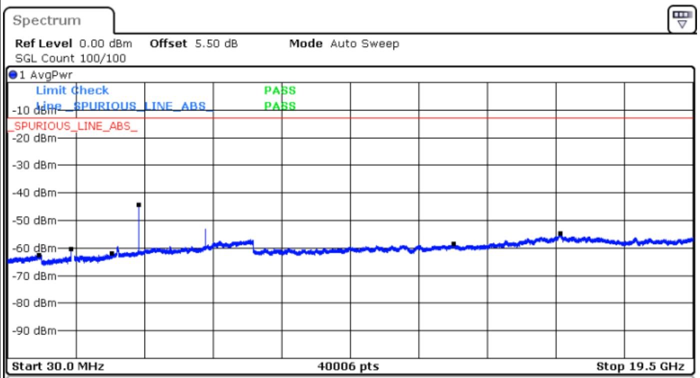


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	916.37931 MHz	-62.42 dBm	-49.42 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80537 GHz	-60.46 dBm	-47.46 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98471 GHz	-62.26 dBm	-49.26 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70069 GHz	-45.53 dBm	-32.53 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70529 GHz	-58.46 dBm	-45.46 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72804 GHz	-54.93 dBm	-41.93 dB

Date: 13.JUN.2025 10:03:30

Middle Channel / QPSK

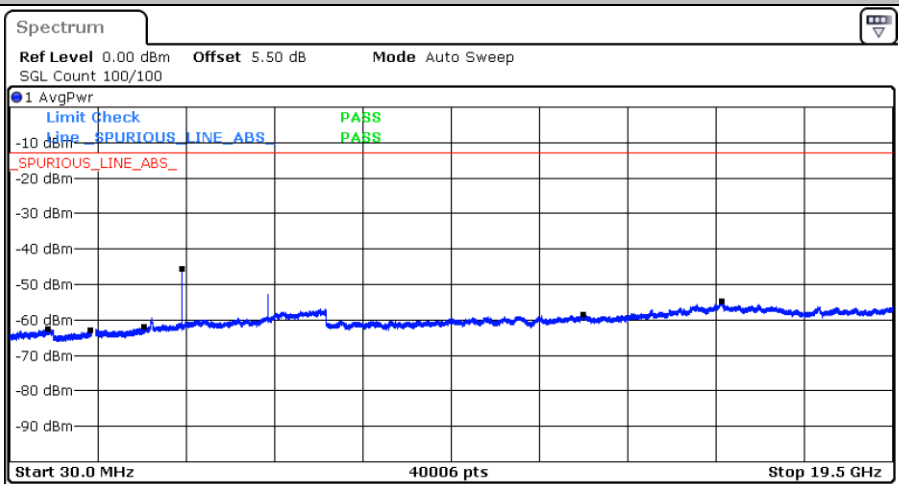


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.16892 MHz	-62.47 dBm	-49.47 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83475 GHz	-60.52 dBm	-47.52 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99874 GHz	-61.86 dBm	-48.86 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75919 GHz	-44.32 dBm	-31.32 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70079 GHz	-58.57 dBm	-45.57 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72304 GHz	-54.84 dBm	-41.84 dB

Date: 13.JUN.2025 10:05:35

Highest Channel / QPSK



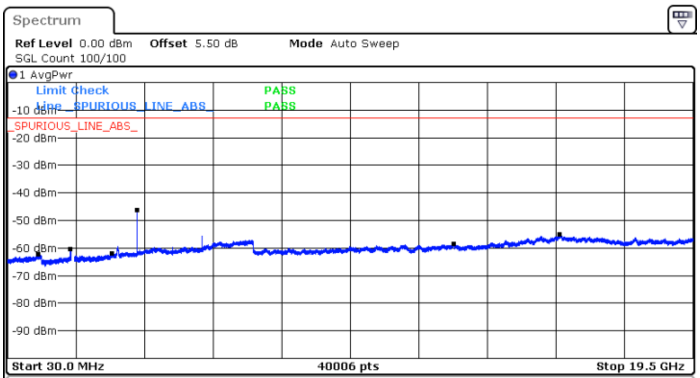
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	880.02249 MHz	-62.52 dBm	-49.52 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80747 GHz	-63.04 dBm	-50.04 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98111 GHz	-62.09 dBm	-49.09 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81768 GHz	-45.61 dBm	-32.61 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.66829 GHz	-58.57 dBm	-45.57 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72404 GHz	-54.64 dBm	-41.64 dB

Date: 13.JUN.2025 10:04:39

LTE Band 2 / 3MHz

Lowest Channel / QPSK

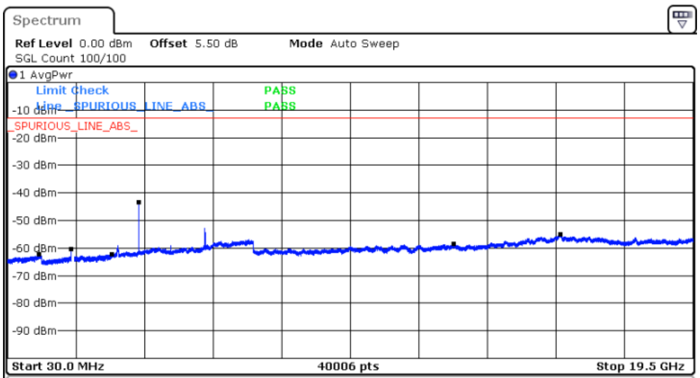


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	896.01949 MHz	-62.31 dBm	-49.31 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80537 GHz	-60.52 dBm	-47.52 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99370 GHz	-61.93 dBm	-48.93 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70069 GHz	-46.30 dBm	-33.30 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70479 GHz	-58.49 dBm	-45.49 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.70804 GHz	-54.90 dBm	-41.90 dB

Date: 13.JUN.2025 09:57:17

Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	906.19940 MHz	-62.26 dBm	-49.26 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83433 GHz	-60.26 dBm	-47.26 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99730 GHz	-62.26 dBm	-49.26 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75769 GHz	-43.42 dBm	-30.42 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70379 GHz	-58.54 dBm	-45.54 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73354 GHz	-54.90 dBm	-41.90 dB

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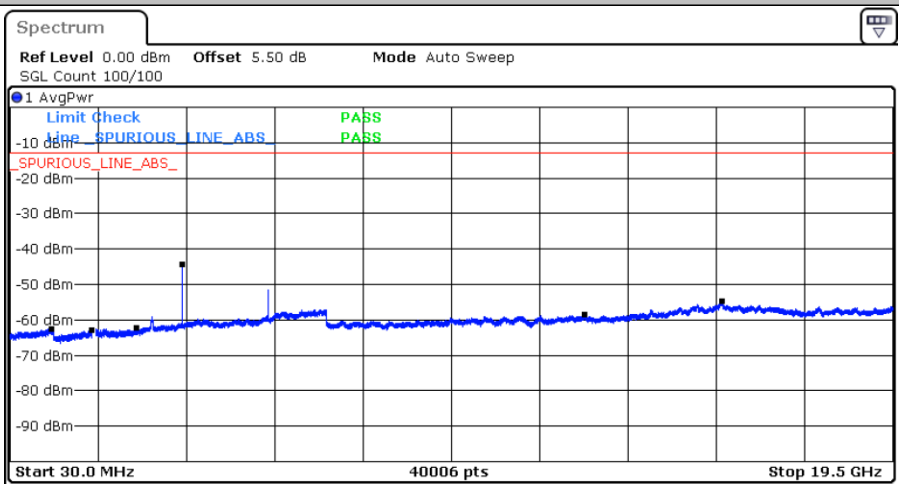
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	937.22389 MHz	-62.53 dBm	-49.53 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83811 GHz	-62.99 dBm	-49.99 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.82492 GHz	-62.25 dBm	-49.25 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81468 GHz	-44.23 dBm	-31.23 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.69479 GHz	-58.43 dBm	-45.43 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72104 GHz	-54.75 dBm	-41.75 dB

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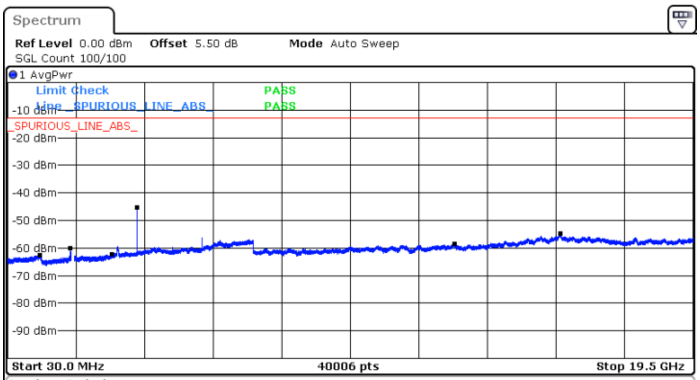
LTE Band 2 / 5MHz	
Lowest Channel / QPSK	**Middle Channel / QPSK**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	951.28186 MHz	-62.43 dBm	-49.43 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80579 GHz	-60.00 dBm	-47.00 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98147 GHz	-62.27 dBm	-49.27 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70069 GHz	-45.43 dBm	-32.43 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71029 GHz	-58.45 dBm	-45.45 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73154 GHz	-54.86 dBm	-41.86 dB

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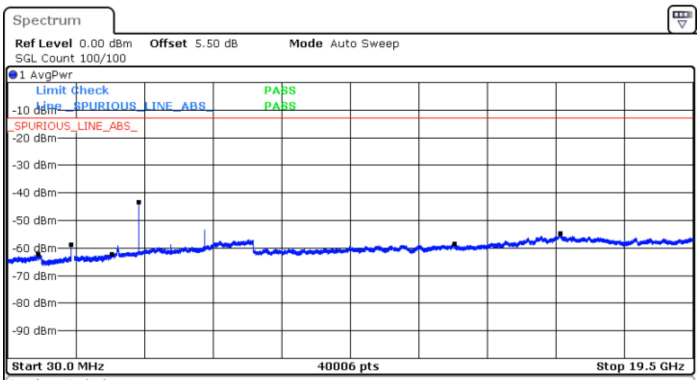

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	890.68716 MHz	-62.26 dBm	-49.26 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83307 GHz	-58.69 dBm	-45.69 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99910 GHz	-62.17 dBm	-49.17 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75569 GHz	-43.52 dBm	-30.52 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.71229 GHz	-58.42 dBm	-45.42 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73204 GHz	-54.62 dBm	-41.62 dB

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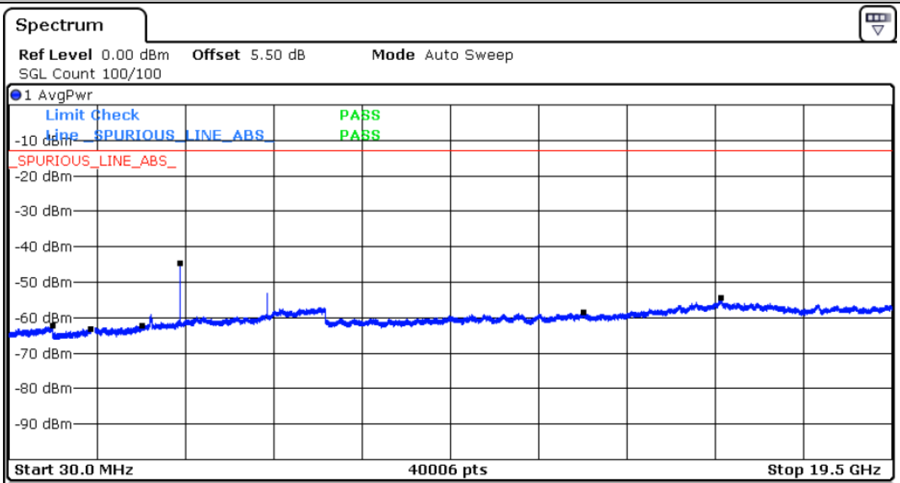
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.75762 MHz	-62.32 dBm	-49.32 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82720 GHz	-63.21 dBm	-50.21 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.96959 GHz	-62.22 dBm	-49.22 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81068 GHz	-44.53 dBm	-31.53 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.70629 GHz	-58.35 dBm	-45.35 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73504 GHz	-54.51 dBm	-41.51 dB

Ready

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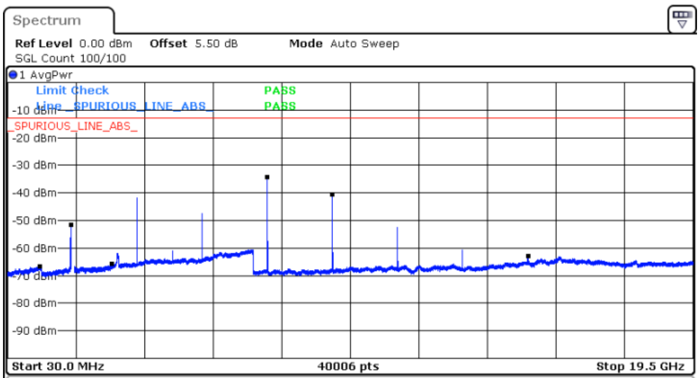
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	937.70865 MHz	-66.77 dBm	-53.77 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83349 GHz	-51.59 dBm	-38.59 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98399 GHz	-65.63 dBm	-52.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	7.40238 GHz	-34.20 dBm	-21.20 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.25322 GHz	-40.56 dBm	-27.56 dB
13.000 GHz	19.500 GHz	1.000 MHz	14.80511 GHz	-62.91 dBm	-49.91 dB

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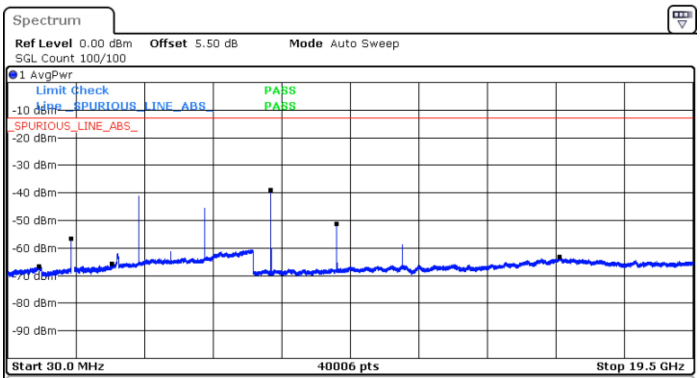
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	914.44028 MHz	-66.59 dBm	-53.59 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83097 GHz	-56.76 dBm	-43.76 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98542 GHz	-65.87 dBm	-52.87 dB
3.000 GHz	9.000 GHz	1.000 MHz	7.50237 GHz	-39.07 dBm	-26.07 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.37820 GHz	-51.15 dBm	-38.15 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.71654 GHz	-63.11 dBm	-50.11 dB

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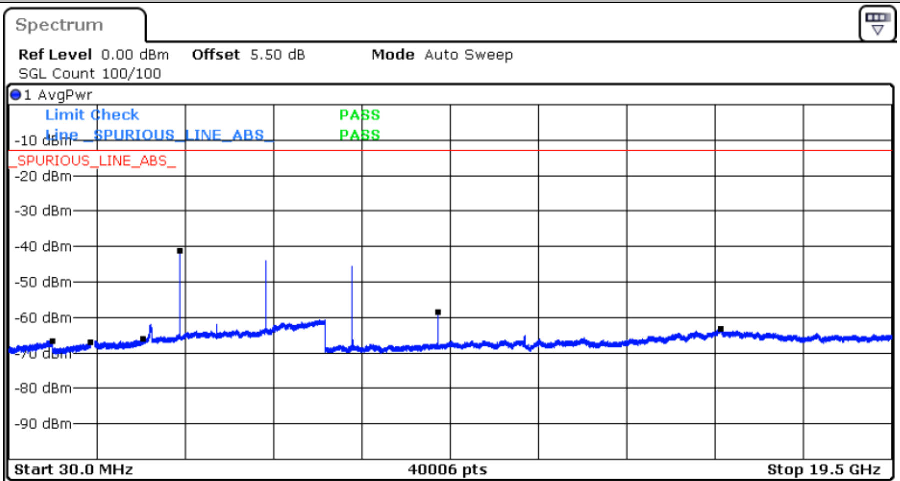
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	987.15392 MHz	-66.64 dBm	-53.64 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83853 GHz	-66.85 dBm	-53.85 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98255 GHz	-66.13 dBm	-53.13 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.80118 GHz	-41.14 dBm	-28.14 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.50319 GHz	-58.62 dBm	-45.62 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72904 GHz	-63.21 dBm	-50.21 dB

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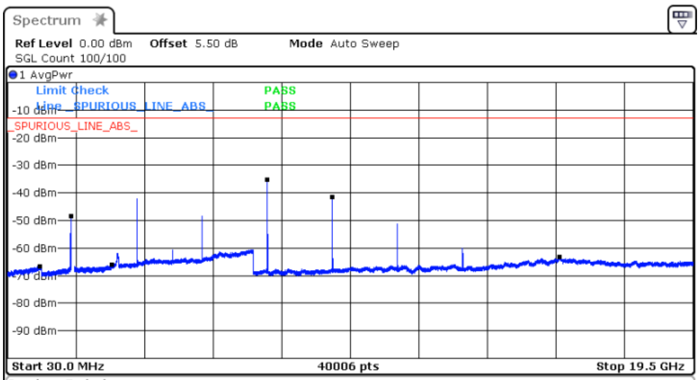
LTE Band 2 / 15MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	935.28486 MHz	-66.61 dBm	-53.61 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83769 GHz	-48.32 dBm	-35.32 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98902 GHz	-65.98 dBm	-52.98 dB
3.000 GHz	9.000 GHz	1.000 MHz	7.40338 GHz	-35.25 dBm	-22.25 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.25422 GHz	-41.42 dBm	-28.42 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.71004 GHz	-63.11 dBm	-50.11 dB

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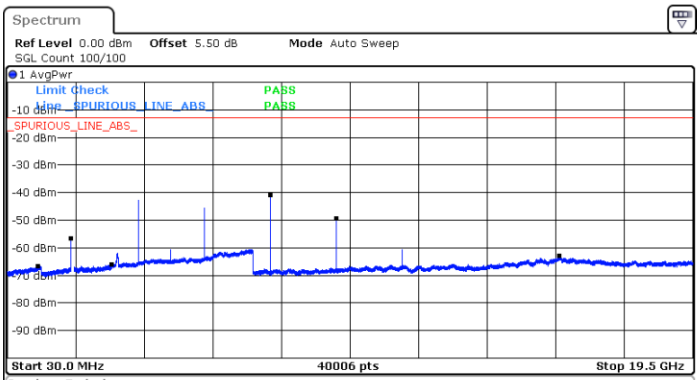
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	888.74813 MHz	-66.56 dBm	-53.56 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82888 GHz	-56.61 dBm	-43.61 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99766 GHz	-65.96 dBm	-52.96 dB
3.000 GHz	9.000 GHz	1.000 MHz	7.49338 GHz	-40.86 dBm	-27.86 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.36670 GHz	-49.44 dBm	-36.44 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.70954 GHz	-62.97 dBm	-49.97 dB

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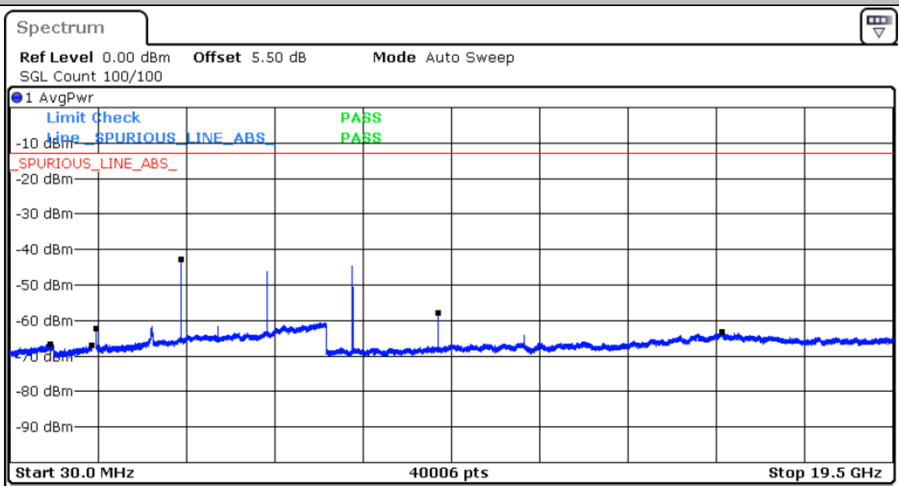
Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	912.50125 MHz	-66.62 dBm	-53.62 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83643 GHz	-66.84 dBm	-53.84 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.92270 GHz	-62.11 dBm	-49.11 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.79218 GHz	-42.77 dBm	-29.77 dB
9.000 GHz	13.000 GHz	1.000 MHz	9.47919 GHz	-57.97 dBm	-44.97 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.72304 GHz	-63.16 dBm	-50.16 dB

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