FCC RADIO TEST REPORT

FCC ID	:	**A4RGBDU9**
Equipment	:	**Wireless Device**
Model Name	:	**GBDU9**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC 47 CFR Part 2, 22(H), 24(E), 27,** **Part 90(S)**

The product was received on Nov. 13, 2023 and testing was performed from Feb. 23, 2024 to Mar. 06, 2024. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FG412509B	01	Initial issue of report	Apr. 24, 2024
FG412509B	02	Revise Appendix A, Appendix B and Section 4.2.1 This report is an updated version, replacing the report issued on Apr. 24, 2024.	Apr. 30, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
	§22.913 (a)(5) §90.635	Effective Radiated Power (Band 5) (Band 26)	Pass	
	§27.50 (b)(10) §27.50 (c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)		
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 25) (Band 7)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)		
3.3	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	Pass	-
3.4	§2.1049	Occupied Bandwidth	Reporting only	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2)(4) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7)		
3.6	§2.1051 §90.691	Emission masks (Band 26)	Pass	-
3.7	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (g) §27.53 (h) §90.691	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7)		
3.8	§2.1055 §22.355 §24.235 §27.54 §90.539 (e) §90.691	Frequency Stability Temperature & Voltage	Pass	-

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
4.2	§2.1053 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (f) §27.53 (g) §27.53 (h) §90.691	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	13.48 dB under the limit at 1560.00 MHz
	§2.1053 §27.53 (m)(4)	Radiated Spurious Emission (Band 7)		

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.

Reviewed by: Yun Huang

Report Producer: Ming Chen

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs WCDMA/LTE, Bluetooth, BLE, BLE (CH2-76), Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, NFC, UWB and GNSS. **Antenna Type** WWAN: <Ant.1>: PIFA Antenna <Ant.2>: Monopole Antenna

EUT Information List	
S/N	Performed Test Item
41301JEAVL0006	Conducted Measurement EIRP
41171JEAVL0008	Radiated Spurious Emission

Support band and evaluated information	
Supported band	B2, B4, B5, B7, B12, B13, B17, B25, B26, B66, B71
Evaluated and Tested band	B2, B4, B5, B7, B12, B13, B17, B25, B26, B66, B71
Band covered information	Wider operating frequency band range covers narrower one when the power is worse as follows: ■ B26 cover B5 (Part 22) ■ B25 cover B2 (Part 24) ■ B12 cover B17 (Part 27) ■ B66 cover B4 (Part 27)

Power Class		
	PC3	**PC2**
B2	V	-
B4	V	-
B5	V	-
B7	V	-
B12	V	-
B13	V	-
B17	V	-
B25	V	-
B26	V	-
B66	V	-
B71	V	-

Antenna information		
Band	Ant1	Ant2
B2	-8.1	-
B4	-6.8	-
B5	-	-10.4
B7	-6	-
B12	-	-9.9
B13	-	-11
B17	-	-10
B25	-8.1	-
B26	-	-10.4
B66	-6.8	-
B71	-	-9.5

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY
Test Engineer	Diego Huang
Temperature (℃)	22.7~23.9
Relative Humidity (%)	50.7~55.9

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH16-HY (TAF Code: 3786)
Test Engineer	Bill Chang, Gary Guo and Steven Wu
Temperature (℃)	19.1~22.3
Relative Humidity (%)	62.5~68.3
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

- ANSI C63.26-2015
- ANSI / TIA-603-E
- FCC 47 CFR Part 2, 22(H), 24(E), 27, Part 90(S)
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01.

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and X plane with Adapter for LTE Band 7, Band 12, Y plane with Adapter for LTE Band 4,Band 66, Band 26 (Part90S), Z plane with Adapter for LTE Band 2, Band 5, Band 12, Band 26(Part22H), Band 71 as worst plane.

Modulation Type	Modulation
A	QPSK
B	16QAM

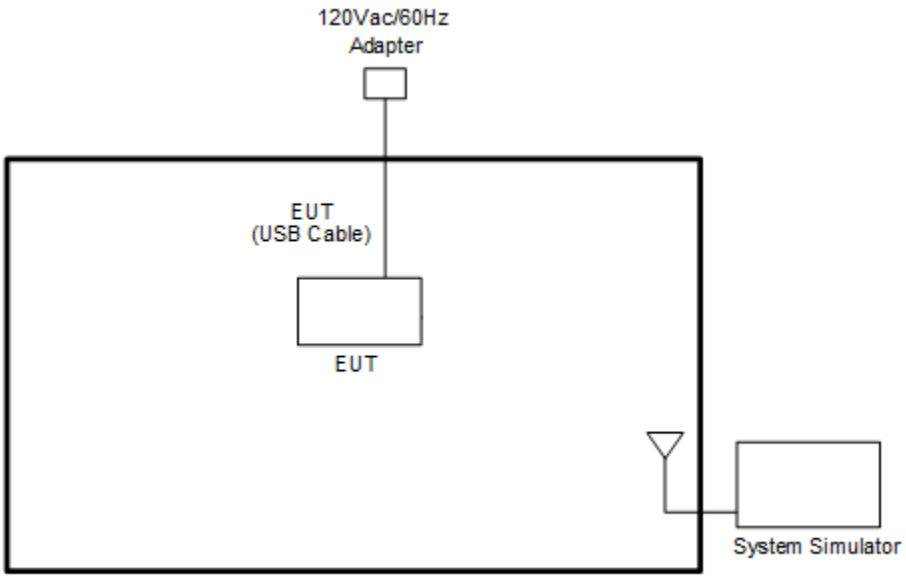
Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B	All	1, Half, Full	L, M, H
EIRP	A, B	All	1, Half, Full	L, M, H
PAR	A, B	20 MHz or less	Full	L, M, H
Bandwidth	A, B	All	Full	L, M, H
CBE	A, B	All	1RB Full	L, M, H
ACLR	A, B	All	1RB Full	L, M, H
CSE	A	Minimum	1RB	L, M, H
Frequency Stability	A	10 MHz or less	Full	L, M, H
RSE	A	20 MHz or less	1RB	L, M, H

Remark:

1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
2. During the RSE preliminary test, the standalone mode and charging modes (Adapter mode) were verified. It is determined that the adapter mode is the worst case for the official test.
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 maximum bandwidth 1RB0 QPSK emissions are reported when the tune up of all bandwidths is the same.
4. LTE Band 2/Band 4/Band 5 radiated spurious emission test were covered by LTE Band 25/Band 66/Band 26, respectively as LTE band 25/Band 66/Band 26 have same tune up/antenna gain but wider operating frequency range than LTE Band 2/Band 4/Band 5.
5. For One representative bandwidth is selected to perform PAR and frequency stability.
6. For Emission masks – In-band emission test, the single RB with the smallest BW will be the closest to the band edge limit, so only the smallest bandwidth of single RB is tested.
7. LTE Band26 transmit frequency for Part 22 rule is 824MHz-849MHz, for Part 90 rule is 814MHz-824MHz. Total ERP of 15MHz bandwidth across Part 22H and Part 90S complies the ERP limit line of Part 22 rule. Therefore, ERP of the partial frequency spectrum which falls within Part 22 also complies.

2.2 Connection Diagram of Test System

<EUT with Adapter>



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	AC Adapter	Aohai	G9BR1	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

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

= 4.2 + 10 = 14.2 (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 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

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

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

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

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

LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3

LTE Band 26 Channel and Frequency List (Part22H)				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829.0	836.5	844.0
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 26 Channel and Frequency List (Part90S)				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	26740	-
	Frequency	-	819	-
5	Channel	26715	26740	26765
	Frequency	816.5	819	821.5
3	Channel	26705	26740	26775
	Frequency	815.5	819	822.5
1.4	Channel	26697	26740	26783
	Frequency	814.7	819	823.3

LTE Band 26 Channel and Frequency List (Part90S)				
BW [MHz]	**Channel/Frequency(MHz)**	**cross-rule channels -**	**cross-rule channels**	**-**
15	Channel	26765	26790	-
	Frequency	821.5	824	-
10	Channel	-	26790	-
	Frequency	-	824	-
5	Channel	-	26790	-
	Frequency	-	824	-
3	Channel	-	26790	-
	Frequency	-	824	-
1.4	Channel	-	26790	-
	Frequency	-	824	-

LTE Band 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3

LTE Band 71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	133222	133297	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133297	133422
	Frequency	668.0	680.5	693.0
5	Channel	133147	133297	133447
	Frequency	665.5	680.5	695.5

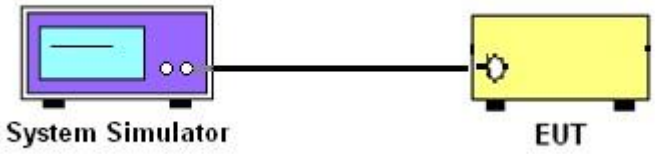
3 Conducted Test Items

3.1 Measuring Instruments

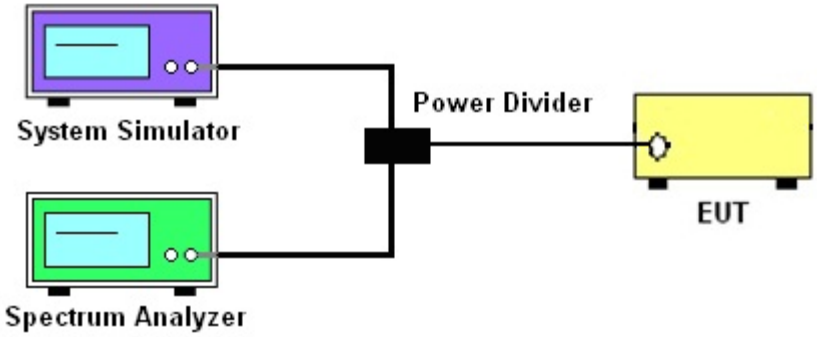
See list of measuring instruments of this test report.

3.1.1 Test Setup

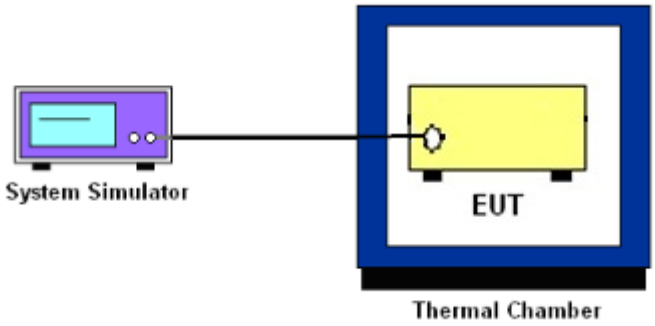
3.1.2 Conducted Output Power



3.1.3 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge, Emission Mask and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 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 7 Watts for LTE Band 5, Band 26 (Part 22H)

The output power of mobile transmitters must not exceed 100 Watts for LTE Band 26 (Part 90S)

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13, Band 17, Band 71

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2, Band 25, Band 7

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4, Band 66

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

3.2.2 Test Procedures

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

3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

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

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

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

3.4 Occupied Bandwidth

3.4.1 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.

3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. 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.
4. Set the detection mode to peak, and the trace mode to max hold.
5. 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)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. 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.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz 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.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + 10log10(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 (c)

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

27.53 (g)

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

27.53 (h)

For operations in the 1710 – 1755 MHz band, 1755-1780 MHz, the FCC limit is 43 + 10log10(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.

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.

3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
5. 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.
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   For LTE Band 7
   The other 40 dB, and 55 dB have additionally applied same calculation above.

3.6 Emission Mask

3.6.1 Description of Emissions Mask Measurement

For LTE Band 26

Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of FCC Part 90.691

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

3.6.2 Test Procedures

For LTE Band 26

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The emissions mask of low and high channels for the highest RF powers were measured.
3. Set RBW and VBW 3 times of RBW to make the measurement with the spectrum analyzer's, and according to KDB 971168 D02 Misc Rev Approve License Devices v02r01 standards, set RBW = 300 Hz to make offsets less than 37.5 kHz from a channel edge , RBW = 100 kHz to make offsets greater than 37.5 kHz, that is allowed.
4. The test results were shown below plots with a correction offset factor including cable loss, insertion loss of power divider.

3.7 Conducted Spurious Emission

3.7.1 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 LTE Band 7

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.

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 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.
3. The conducted spurious emission for the whole frequency range was taken.
4. Make the measurement with the spectrum analyzer's RBW = 100 kHz if the authorized frequency band/block is at or below 1 GHz and 1 MHz if the authorized frequency band/block is above 1 GH, VBW = 3 * RBW.
5. Set spectrum analyzer with RMS detector.
6. Taking the record of maximum spurious emission.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   For LTE Band 7
   The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

3.8 Frequency Stability

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

22.355

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.

24.235 & 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. 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.
3. 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.

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was placed in a temperature chamber at 20±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

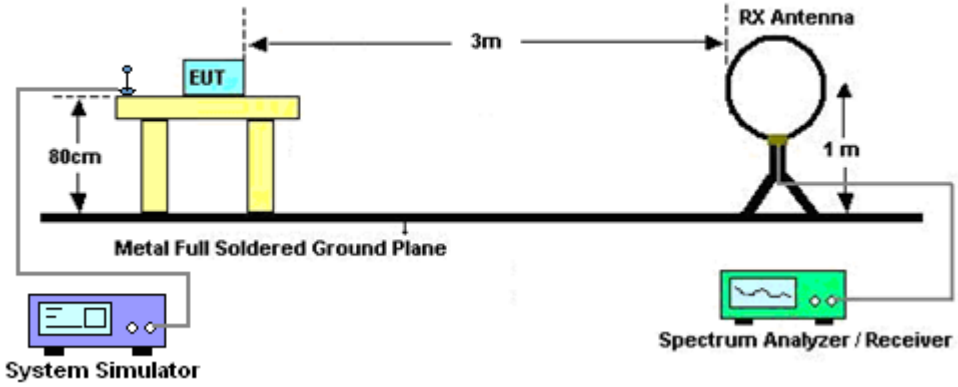
4 Radiated Test Items

4.1 Measuring Instruments

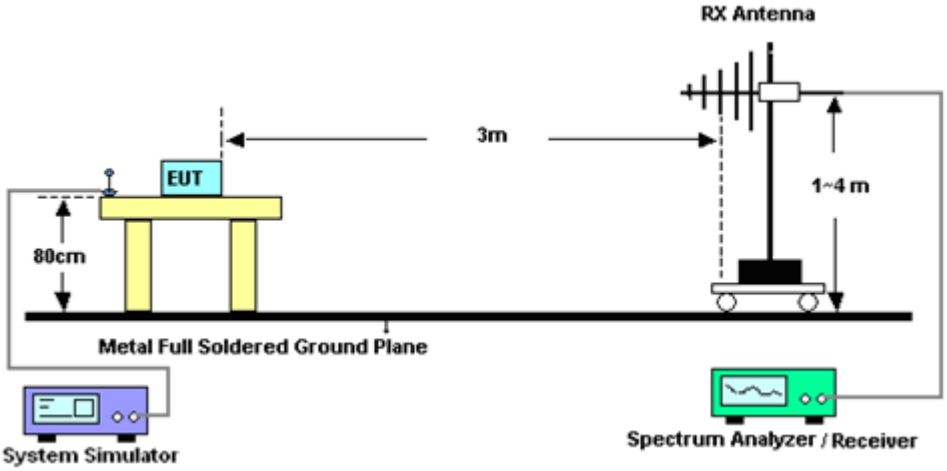
See list of measuring instruments of this test report.

4.1.1 Test Setup

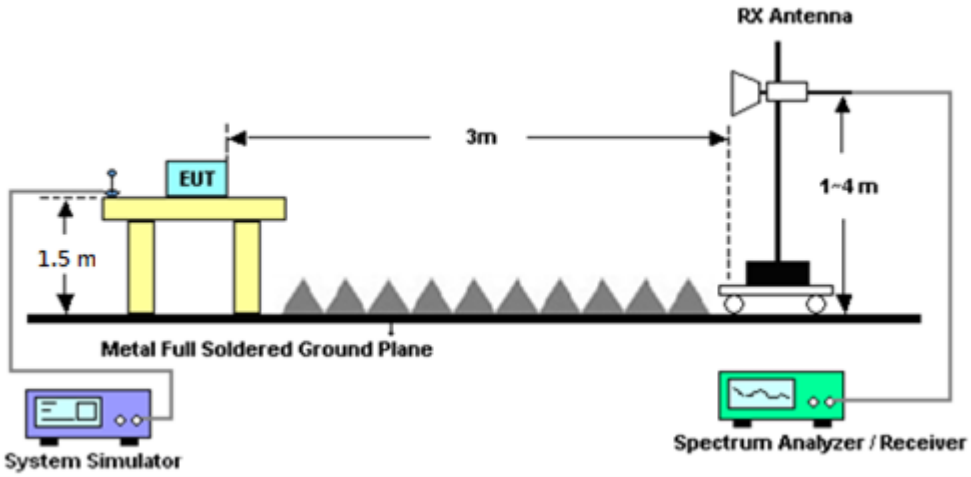
For radiated test below 30MHz



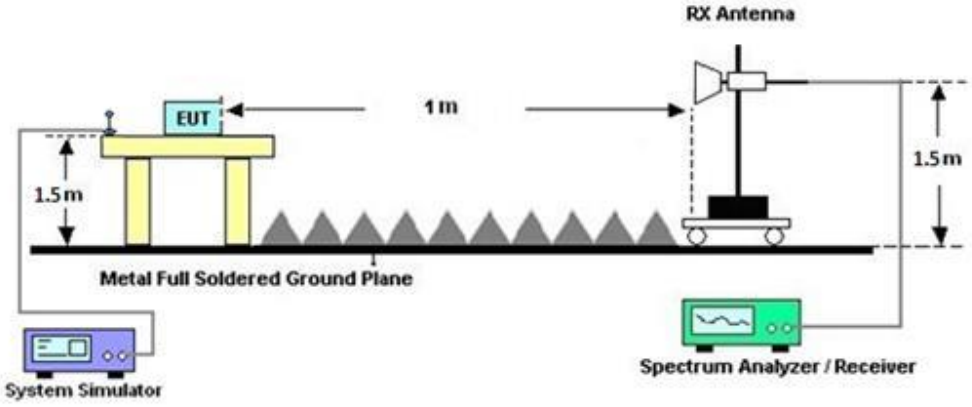
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE Band 7

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.

4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. To convert spectrum reading E(dBuV/m) to EIRP(dBm)

   EIRP(dBm) = Level (dBuV/m) + 20log(d) -104.77, where d is the distance at which filed strength limit is specified in the rules
7. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
8. ERP (dBm) = EIRP (dBm) - 2.15
9. 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)

5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Feb. 23, 2024~ Mar. 06, 2024	Sep. 11, 2024	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz-40GHz	Nov. 24, 2023	Feb. 23, 2024~ Mar. 06, 2024	Nov. 23, 2024	Radiation (03CH16-HY)
Signal Analyzer	Keysight	N9010B	MY60241055	3Hz~26.5GHz	Jul. 26, 2023	Feb. 23, 2024~ Mar. 06, 2024	Jul. 25, 2024	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 07, 2023	Feb. 23, 2024~ Mar. 06, 2024	Oct. 06, 2024	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 23, 2023	Feb. 23, 2024~ Mar. 06, 2024	Mar. 22, 2024	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jul. 03, 2023	Feb. 23, 2024~ Mar. 06, 2024	Jul. 02, 2024	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 07, 2023	Feb. 23, 2024~ Mar. 06, 2024	Dec. 06, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 25, 2023	Feb. 23, 2024~ Mar. 06, 2024	Dec. 24, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 07, 2023	Feb. 23, 2024~ Mar. 06, 2024	Dec. 06, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 15, 2024	Feb. 23, 2024~ Mar. 06, 2024	Jan. 14, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-900-1000-15000-60SS	SN9	1GHz High Pass Filter	Nov. 02, 2023	Feb. 23, 2024~ Mar. 06, 2024	Nov. 01, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN3	3GHz High Pass Filter	Jun. 29, 2023	Feb. 23, 2024~ Mar. 06, 2024	Jun. 28, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 07, 2023	Feb. 23, 2024~ Mar. 06, 2024	Mar. 06, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Feb. 23, 2024~ Mar. 06, 2024	Mar. 05, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 08, 2023	Feb. 23, 2024~ Mar. 06, 2024	Aug. 07, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40GHz	Jan. 02, 2024	Feb. 23, 2024~ Mar. 06, 2024	Jan. 01, 2025	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Feb. 23, 2024~ Mar. 06, 2024	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Feb. 23, 2024~ Mar. 06, 2024	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Feb. 23, 2024~ Mar. 06, 2024	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Feb. 23, 2024~ Mar. 06, 2024	N/A	Radiation (03CH16-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 03, 2023	Feb. 23, 2024~ Mar. 01, 2024	Oct. 02, 2024	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101906	10Hz~40GHz	Jul. 25, 2023	Feb. 23, 2024~ Mar. 01, 2024	Jul. 24, 2024	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SU-241	92003713	-30℃ ~95℃	May 17, 2023	Feb. 23, 2024~ Mar. 01, 2024	May 16, 2024	Conducted (TH03-HY)
DC Power Supply	GW Instek	GPP-2323	GES906037	0V~64V ; 0A~6A	Nov. 28, 2023	Feb. 23, 2024~ Mar. 01, 2024	Nov. 27, 2024	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 08, 2024	Feb. 23, 2024~ Mar. 01, 2024	Jan. 07, 2025	Conducted (TH03-HY)

6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.09 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.55 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.02 dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & ERP/EIRP)

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.77	22.78	22.66	14.68	0.0294
20	1	49		22.73	22.74	22.67		
20	1	99		22.55	22.51	22.44		
20	50	0		21.97	21.93	21.86		
20	50	24		21.98	21.94	21.87		
20	50	50		21.88	21.84	21.77		
20	100	0		21.91	21.87	21.80		
20	1	0	16-QAM	21.86	21.82	21.75	13.94	0.0248
20	1	13		21.83	21.79	21.72		
20	1	26		22.04	22.00	21.93		
20	12	0		21.72	21.68	21.61		
20	12	7		21.87	21.83	21.76		
20	12	15		21.86	21.82	21.75		
20	27	0		21.16	21.12	21.05		
Limit	ERP < 100W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.76	22.73	22.64	14.66	0.0292
15	1	37		22.65	22.73	22.64		
15	1	74		22.46	22.49	22.41		
15	36	0		21.90	21.84	21.76		
15	36	20		21.88	21.84	21.83		
15	36	39		21.78	21.76	21.75		
15	75	0		21.89	21.85	21.78		
15	1	0	16-QAM	21.78	21.75	21.74	13.87	0.0244
15	1	13		21.78	21.79	21.63		
15	1	26		21.97	21.91	21.89		
15	12	0		21.70	21.66	21.55		
15	12	7		21.86	21.82	21.75		
15	12	15		21.81	21.77	21.65		
15	27	0		21.15	21.05	20.97		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.77	22.71	22.64	14.67	0.0293
10	1	25		22.63	22.74	22.66		
10	1	49		22.47	22.44	22.41		
10	25	0		21.94	21.85	21.84		
10	25	12		21.94	21.93	21.83		
10	25	25		21.79	21.82	21.67		
10	50	0		21.90	21.84	21.72		
10	1	0	16-QAM	21.78	21.72	21.65	13.92	0.0247
10	1	13		21.79	21.79	21.66		
10	1	26		22.02	21.99	21.85		
10	12	0		21.70	21.65	21.58		
10	12	7		21.85	21.79	21.74		
10	12	15		21.76	21.80	21.67		
10	27	0		21.06	21.12	21.04		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.71	22.69	22.62	14.61	0.0289
5	1	12		22.63	22.68	22.60		
5	1	24		22.50	22.47	22.43		
5	12	0		21.89	21.90	21.77		
5	12	7		21.90	21.91	21.82		
5	12	13		21.78	21.83	21.74		
5	25	0		21.91	21.84	21.77		
5	1	0	16-QAM	21.86	21.73	21.73	13.90	0.0245
5	1	12		21.80	21.73	21.67		
5	1	24		21.94	22.00	21.86		
5	12	0		21.70	21.59	21.58		
5	12	7		21.78	21.81	21.73		
5	12	13		21.82	21.77	21.69		
5	25	0		21.13	21.10	21.09		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.68	22.70	22.59	14.61	0.0289
3	1	8		22.71	22.69	22.58		
3	1	14		22.50	22.46	22.37		
3	8	0		21.92	21.91	21.84		
3	8	4		21.98	21.91	21.86		
3	8	7		21.80	21.84	21.67		
3	15	0		21.87	21.82	21.80		
3	1	0	16-QAM	21.79	21.73	21.74	13.93	0.0247
3	1	8		21.79	21.76	21.63		
3	1	14		22.03	21.94	21.90		
3	8	0		21.72	21.60	21.53		
3	8	4		21.79	21.78	21.75		
3	8	7		21.80	21.82	21.68		
3	15	0		21.11	21.09	21.08		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.68	22.70	22.59	14.61	0.0289
1.4	1	3		22.71	22.69	22.58		
1.4	1	5		22.50	22.46	22.37		
1.4	3	0		22.68	22.70	22.59		
1.4	3	1		22.71	22.69	22.58		
1.4	3	3		22.50	22.46	22.37		
1.4	6	0		21.92	21.91	21.84		
1.4	1	0	16-QAM	21.79	21.73	21.74	13.93	0.0247
1.4	1	3		21.79	21.76	21.63		
1.4	1	5		22.03	21.94	21.90		
1.4	3	0		21.79	21.73	21.74		
1.4	3	1		21.79	21.76	21.63		
1.4	3	3		22.03	21.94	21.90		
1.4	6	0		21.72	21.60	21.53		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.93	22.95	22.66	14.85	0.0305
20	1	49		22.78	22.80	22.51		
20	1	99		22.50	22.52	22.23		
20	50	0		21.94	21.96	21.67		
20	50	24		21.98	22.00	21.71		
20	50	50		21.83	21.85	21.56		
20	100	0		21.80	21.82	21.53		
20	1	0	16-QAM	22.07	22.09	21.80	14.20	0.0263
20	1	13		22.23	22.25	21.96		
20	1	26		22.28	22.30	22.01		
20	12	0		21.90	21.92	21.63		
20	12	7		21.96	21.98	21.69		
20	12	15		22.02	22.04	21.75		
20	27	0		21.06	21.08	21.02		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.83	22.92	22.66	14.82	0.0303
15	1	37		22.74	22.71	22.47		
15	1	74		22.45	22.50	22.20		
15	36	0		21.87	21.92	21.67		
15	36	20		21.90	21.93	21.62		
15	36	39		21.78	21.81	21.53		
15	75	0		21.73	21.74	21.51		
15	1	0	16-QAM	22.02	22.09	21.71	14.12	0.0258
15	1	13		22.20	22.21	21.87		
15	1	26		22.21	22.22	21.99		
15	12	0		21.82	21.89	21.60		
15	12	7		21.87	21.98	21.60		
15	12	15		21.97	21.99	21.74		
15	27	0		21.04	21.01	21.02		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.85	22.90	22.58	14.80	0.0302
10	1	25		22.71	22.71	22.47		
10	1	49		22.49	22.46	22.15		
10	25	0		21.85	21.94	21.64		
10	25	12		21.89	22.00	21.70		
10	25	25		21.83	21.80	21.47		
10	50	0		21.73	21.72	21.47		
10	1	0	16-QAM	22.02	22.06	21.77	14.18	0.0262
10	1	13		22.18	22.23	21.86		
10	1	26		22.28	22.20	21.98		
10	12	0		21.88	21.92	21.57		
10	12	7		21.86	21.88	21.68		
10	12	15		22.02	22.04	21.66		
10	27	0		21.03	21.00	21.15		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.87	22.87	22.59	14.77	0.0300
5	1	12		22.70	22.73	22.41		
5	1	24		22.46	22.49	22.18		
5	12	0		21.87	21.88	21.64		
5	12	7		21.96	21.91	21.62		
5	12	13		21.81	21.80	21.53		
5	25	0		21.77	21.82	21.49		
5	1	0	16-QAM	22.00	22.08	21.72	14.16	0.0261
5	1	12		22.15	22.22	21.90		
5	1	24		22.22	22.26	21.96		
5	12	0		21.82	21.87	21.60		
5	12	7		21.89	21.97	21.64		
5	12	13		21.96	21.97	21.71		
5	25	0		21.01	21.04	21.09		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.84	22.94	22.61	14.84	0.0305
3	1	8		22.72	22.70	22.51		
3	1	14		22.44	22.51	22.23		
3	8	0		21.89	21.89	21.66		
3	8	4		21.98	21.91	21.61		
3	8	7		21.78	21.78	21.54		
3	15	0		21.79	21.74	21.43		
3	1	0	16-QAM	22.02	22.09	21.75	14.20	0.0263
3	1	8		22.20	22.15	21.87		
3	1	14		22.27	22.30	21.94		
3	8	0		21.85	21.83	21.53		
3	8	4		21.91	21.95	21.62		
3	8	7		21.97	21.98	21.71		
3	15	0		21.00	21.00	21.06		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = -8.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.84	22.92	22.61	14.83	0.0304
1.4	1	3		22.72	22.70	22.51		
1.4	1	5		22.44	22.51	22.23		
1.4	3	0		22.84	22.93	22.61		
1.4	3	1		22.72	22.70	22.51		
1.4	3	3		22.44	22.51	22.23		
1.4	6	0		21.89	21.89	21.66		
1.4	1	0	16-QAM	22.02	22.09	21.75	14.20	0.0263
1.4	1	3		22.20	22.15	21.87		
1.4	1	5		22.27	22.30	21.94		
1.4	3	0		22.02	22.09	21.75		
1.4	3	1		22.20	22.15	21.87		
1.4	3	3		22.27	22.30	21.94		
1.4	6	0		21.85	21.83	21.53		
Limit	EIRP < 2W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.88	23.35	23.07	16.55	0.0452
20	1	49		23.17	23.00	23.03		
20	1	99		22.99	22.82	23.18		
20	50	0		22.31	22.14	22.50		
20	50	24		22.28	22.11	22.47		
20	50	50		22.37	22.20	22.56		
20	100	0		22.25	22.08	22.44		
20	1	0	16-QAM	22.28	22.11	22.47	15.79	0.0379
20	1	13		22.34	22.17	22.53		
20	1	26		22.15	21.98	22.34		
20	12	0		22.32	22.15	22.51		
20	12	7		22.25	22.08	22.44		
20	12	15		22.40	22.23	22.59		
20	27	0		21.22	21.05	21.41		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.78	23.31	23.07	16.51	0.0448
15	1	37		23.07	22.93	23.03		
15	1	74		22.95	22.82	23.14		
15	36	0		22.21	22.08	22.49		
15	36	20		22.26	22.09	22.39		
15	36	39		22.36	22.10	22.47		
15	75	0		22.24	22.07	22.40		
15	1	0	16-QAM	22.19	22.07	22.43	15.74	0.0375
15	1	13		22.32	22.16	22.50		
15	1	26		22.12	21.98	22.32		
15	12	0		22.27	22.09	22.41		
15	12	7		22.18	22.04	22.43		
15	12	15		22.34	22.21	22.54		
15	27	0		21.14	21.07	21.33		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.82	23.28	22.99	16.48	0.0445
10	1	25		23.16	22.91	22.95		
10	1	49		22.89	22.77	23.13		
10	25	0		22.25	22.06	22.50		
10	25	12		22.19	22.11	22.39		
10	25	25		22.34	22.18	22.55		
10	50	0		22.19	22.05	22.42		
10	1	0	16-QAM	22.23	22.03	22.46	15.73	0.0374
10	1	13		22.32	22.09	22.49		
10	1	26		22.09	21.96	22.30		
10	12	0		22.27	22.07	22.44		
10	12	7		22.15	22.08	22.40		
10	12	15		22.38	22.14	22.53		
10	27	0		21.16	21.09	21.33		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.88	23.29	22.99	16.49	0.0446
5	1	12		23.14	22.95	23.02		
5	1	24		22.94	22.80	23.09		
5	12	0		22.21	22.12	22.43		
5	12	7		22.25	22.11	22.47		
5	12	13		22.35	22.15	22.51		
5	25	0		22.15	21.98	22.36		
5	1	0	16-QAM	22.19	22.01	22.40	15.71	0.0372
5	1	12		22.33	22.12	22.46		
5	1	24		22.15	21.97	22.31		
5	12	0		22.26	22.07	22.44		
5	12	7		22.23	21.99	22.35		
5	12	13		22.37	22.23	22.51		
5	25	0		21.16	21.05	21.41		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.87	23.26	23.05	16.46	0.0443
3	1	8		23.14	22.93	23.02		
3	1	14		22.94	22.76	23.10		
3	8	0		22.26	22.11	22.45		
3	8	4		22.23	22.08	22.37		
3	8	7		22.35	22.19	22.49		
3	15	0		22.18	22.03	22.44		
3	1	0	16-QAM	22.26	22.04	22.46	15.72	0.0373
3	1	8		22.33	22.07	22.43		
3	1	14		22.07	21.92	22.26		
3	8	0		22.26	22.08	22.51		
3	8	4		22.21	22.08	22.36		
3	8	7		22.30	22.15	22.52		
3	15	0		21.17	21.04	21.32		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.88	23.30	23.07	16.50	0.0447
1.4	1	3		23.09	22.97	22.98		
1.4	1	5		22.96	22.73	23.11		
1.4	3	0		22.88	23.30	23.07		
1.4	3	1		23.09	22.97	22.98		
1.4	3	3		22.96	22.73	23.11		
1.4	6	0		22.26	22.07	22.41		
1.4	1	0	16-QAM	22.23	22.04	22.38	15.68	0.0370
1.4	1	3		22.34	22.07	22.48		
1.4	1	5		22.13	21.92	22.34		
1.4	3	0		22.23	22.04	22.38		
1.4	3	1		22.34	22.07	22.48		
1.4	3	3		22.13	21.92	22.34		
1.4	6	0		21.90	21.92	21.94		
Limit	EIRP < 1W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.79	22.74	23.06	10.51	0.0112
10	1	25		22.63	22.57	22.88		
10	1	49		22.97	22.98	22.90		
10	25	0		21.62	21.62	21.81		
10	25	12		21.78	21.62	21.88		
10	25	25		21.72	21.65	22.02		
10	50	0		21.71	21.63	21.78		
10	1	0	16-QAM	21.95	21.99	22.13	9.82	0.0096
10	1	13		21.67	21.92	21.86		
10	1	26		22.37	21.91	21.96		
10	12	0		21.73	21.50	21.87		
10	12	7		21.74	21.68	21.89		
10	12	15		21.67	21.62	21.88		
10	27	0		20.71	20.68	20.79		
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	22.78	22.57	22.81	10.26	0.0106
5	1	12		22.60	22.64	22.73		
5	1	24		22.71	22.63	22.81		
5	12	0		21.81	21.61	21.74		
5	12	7		21.77	21.64	21.79		
5	12	13		21.81	21.61	21.75		
5	25	0		21.85	21.63	21.70		
5	1	0	16-QAM	21.99	21.88	22.33	9.78	0.0095
5	1	12		22.15	22.25	22.08		
5	1	24		21.78	21.88	21.98		
5	12	0		20.81	20.57	20.71		
5	12	7		20.72	20.57	20.79		
5	12	13		20.74	20.67	20.70		
5	25	0		20.78	20.57	20.84		
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	22.88	22.61	23.00	10.45	0.0111
3	1	8		22.93	22.58	22.77		
3	1	14		22.68	22.57	22.74		
3	8	0		21.69	21.63	21.74		
3	8	4		21.70	21.61	21.76		
3	8	7		21.63	21.53	21.67		
3	15	0		21.79	21.58	21.77		
3	1	0	16-QAM	21.65	21.71	22.18	9.96	0.0099
3	1	8		22.51	21.76	22.09		
3	1	14		21.90	22.17	21.66		
3	8	0		20.80	20.66	20.79		
3	8	4		20.91	20.81	20.70		
3	8	7		20.76	20.80	20.91		
3	15	0		20.77	20.64	20.92		
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	22.69	22.73	22.72	10.25	0.0106
1.4	1	3		22.74	22.54	22.60		
1.4	1	5		22.59	22.55	22.64		
1.4	3	0		22.80	22.61	22.67		
1.4	3	1		22.72	22.62	22.70		
1.4	3	3		22.64	22.76	22.60		
1.4	6	0		21.75	21.60	21.66		
1.4	1	0	16-QAM	22.41	21.71	22.04	9.86	0.0097
1.4	1	3		22.36	22.09	22.41		
1.4	1	5		22.06	21.82	21.84		
1.4	3	0		21.65	21.66	21.87		
1.4	3	1		21.76	21.54	21.91		
1.4	3	3		21.70	21.75	21.55		
1.4	6	0		20.77	20.59	20.73		
Limit	ERP < 7W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = -6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.79	22.87	22.66	16.87	0.0486
20	1	49		22.53	22.61	22.40		
20	1	99		22.52	22.60	22.39		
20	50	0		21.94	22.02	21.81		
20	50	24		22.04	22.12	21.91		
20	50	50		21.92	22.00	21.79		
20	100	0		21.87	21.95	21.74		
20	1	0	16-QAM	22.27	22.35	22.14	16.35	0.0432
20	1	13		22.18	22.26	22.05		
20	1	26		21.99	22.07	21.86		
20	12	0		21.75	21.83	21.62		
20	12	7		22.08	22.16	21.95		
20	12	15		21.92	22.00	21.79		
20	27	0		21.00	21.03	21.01		
Limit	Power < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = -6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.78	22.86	22.63	16.86	0.0485
15	1	37		22.46	22.57	22.31		
15	1	74		22.52	22.60	22.33		
15	36	0		21.84	21.93	21.71		
15	36	20		21.94	22.03	21.83		
15	36	39		21.82	21.92	21.73		
15	75	0		21.78	21.95	21.70		
15	1	0	16-QAM	22.23	22.27	22.07	16.27	0.0424
15	1	13		22.14	22.17	22.03		
15	1	26		21.91	21.97	21.81		
15	12	0		21.69	21.80	21.58		
15	12	7		21.99	22.15	21.90		
15	12	15		21.87	21.93	21.71		
15	27	0		21.04	21.09	21.01		
Limit	Power < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = -6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.77	22.82	22.61	16.82	0.0481
10	1	25		22.44	22.52	22.36		
10	1	49		22.46	22.54	22.39		
10	25	0		21.86	22.02	21.74		
10	25	12		21.94	22.03	21.86		
10	25	25		21.87	21.99	21.72		
10	50	0		21.80	21.85	21.74		
10	1	0	16-QAM	22.23	22.25	22.07	16.25	0.0422
10	1	13		22.13	22.25	21.97		
10	1	26		21.98	21.97	21.83		
10	12	0		21.74	21.81	21.59		
10	12	7		22.02	22.11	21.94		
10	12	15		21.86	21.90	21.69		
10	27	0		21.04	21.00	21.01		
Limit	Power < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = -6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.76	22.78	22.62	16.78	0.0476
5	1	12		22.45	22.60	22.38		
5	1	24		22.49	22.55	22.38		
5	12	0		21.84	21.94	21.73		
5	12	7		21.97	22.05	21.81		
5	12	13		21.82	21.94	21.69		
5	25	0		21.87	21.85	21.73		
5	1	0	16-QAM	22.18	22.35	22.07	16.35	0.0432
5	1	12		22.13	22.24	21.98		
5	1	24		21.96	22.01	21.82		
5	12	0		21.66	21.81	21.56		
5	12	7		22.00	22.14	21.94		
5	12	13		21.86	21.99	21.77		
5	25	0		21.08	21.13	21.02		
Limit	Power < 2W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = -9.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.60	23.33	23.32	11.28	0.0134
10	1	25		23.05	22.95	23.00		
10	1	49		23.07	22.82	22.59		
10	25	0		22.08	22.09	22.05		
10	25	12		21.97	22.04	22.05		
10	25	25		22.07	21.95	21.59		
10	50	0		22.19	21.96	22.09		
10	1	0	16-QAM	22.10	22.27	22.36	10.84	0.0121
10	1	13		22.89	22.44	22.49		
10	1	26		22.62	21.99	22.30		
10	12	0		21.83	22.29	22.06		
10	12	7		22.50	22.03	22.13		
10	12	15		22.03	22.03	22.00		
10	27	0		21.30	21.05	21.05		
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = -9.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	22.76	22.96	22.85	11.26	0.0134
5	1	12		23.31	22.99	22.53		
5	1	24		23.08	22.85	22.96		
5	12	0		21.91	21.99	21.95		
5	12	7		22.05	22.01	22.26		
5	12	13		22.01	22.06	22.27		
5	25	0		22.01	21.89	22.22		
5	1	0	16-QAM	21.54	22.13	22.75	10.70	0.0117
5	1	12		22.49	22.20	21.70		
5	1	24		22.35	22.08	22.34		
5	12	0		21.33	20.88	20.60		
5	12	7		21.04	21.02	21.23		
5	12	13		21.11	21.02	21.27		
5	25	0		21.05	20.95	21.28		
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = -9.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	22.73	23.25	22.54	11.20	0.0132
3	1	8		22.95	23.06	22.60		
3	1	14		23.21	22.95	22.92		
3	8	0		21.66	22.10	21.94		
3	8	4		21.64	21.95	21.94		
3	8	7		22.02	21.93	22.19		
3	15	0		21.68	22.02	21.86		
3	1	0	16-QAM	21.67	22.43	21.61	10.69	0.0117
3	1	8		22.31	22.74	21.72		
3	1	14		22.10	22.23	21.92		
3	8	0		21.33	21.06	21.44		
3	8	4		20.86	21.09	21.10		
3	8	7		21.04	21.05	21.25		
3	15	0		21.35	20.95	20.91		
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = -9.9 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	22.64	23.06	22.62	11.07	0.0128
1.4	1	3		22.77	22.86	22.79		
1.4	1	5		22.76	22.88	22.92		
1.4	3	0		22.57	22.93	22.52		
1.4	3	1		22.64	23.07	22.65		
1.4	3	3		22.62	23.12	22.76		
1.4	6	0		22.26	21.97	21.44		
1.4	1	0	16-QAM	21.92	22.80	21.68	10.75	0.0119
1.4	1	3		22.21	22.68	22.26		
1.4	1	5		21.62	22.36	22.31		
1.4	3	0		21.57	21.83	21.63		
1.4	3	1		21.71	22.08	21.69		
1.4	3	3		21.51	22.00	21.86		
1.4	6	0		21.48	20.91	20.75		
Limit	ERP < 3W			Result			Pass	

LTE Band 13 Maximum Average Power [dBm] (GT - LC = -11 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	23.18	-	10.03	0.0101
10	1	25			23.11			
10	1	49			23.15			
10	25	0			22.20			
10	25	12			22.23			
10	25	25			22.01			
10	50	0			22.14			
10	1	0	16-QAM		22.33		9.26	0.0084
10	1	13			22.37			
10	1	26			22.41			
10	12	0			22.10			
10	12	7			22.19			
10	12	15			22.17			
10	27	0			21.11			
Limit	ERP < 3W			Result			Pass	

LTE Band 13 Maximum Average Power [dBm] (GT - LC = -11 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.14	23.10	23.16	10.01	0.0100
5	1	12		23.03	23.08	23.04		
5	1	24		23.12	23.11	23.11		
5	12	0		22.18	22.11	22.17		
5	12	7		22.13	22.20	22.13		
5	12	13		22.00	21.91	21.97		
5	25	0		22.13	22.12	22.04		
5	1	0	16-QAM	22.30	22.23	22.23	9.23	0.0084
5	1	12		22.36	22.29	22.37		
5	1	24		22.38	22.31	22.38		
5	12	0		22.02	22.07	22.02		
5	12	7		22.09	22.16	22.16		
5	12	13		22.10	22.16	22.14		
5	25	0		21.04	21.08	21.10		
Limit	ERP < 3W			Result			Pass	

LTE Band 17 Maximum Average Power [dBm] (GT - LC = -10 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.48	23.54	23.53	11.39	0.0138
10	1	25		23.20	23.25	23.26		
10	1	49		23.45	23.50	23.51		
10	25	0		22.36	22.43	22.42		
10	25	12		22.33	22.38	22.39		
10	25	25		22.38	22.42	22.41		
10	50	0		22.40	22.45	22.46		
10	1	0	16-QAM	22.75	22.80	22.81	10.66	0.0116
10	1	13		22.69	22.74	22.75		
10	1	26		22.62	22.67	22.68		
10	12	0		22.37	22.42	22.43		
10	12	7		22.31	22.36	22.37		
10	12	15		22.31	22.36	22.37		
10	27	0		21.38	21.43	21.44		
Limit	ERP < 3W			Result			Pass	

LTE Band 17 Maximum Average Power [dBm] (GT - LC = -10 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.48	23.46	23.48	11.33	0.0136
5	1	12		23.17	23.15	23.23		
5	1	24		23.45	23.48	23.46		
5	12	0		22.29	22.36	22.39		
5	12	7		22.32	22.32	22.35		
5	12	13		22.33	22.36	22.41		
5	25	0		22.39	22.44	22.36		
5	1	0	16-QAM	22.73	22.80	22.81	10.66	0.0116
5	1	12		22.68	22.69	22.69		
5	1	24		22.61	22.65	22.68		
5	12	0		22.35	22.34	22.37		
5	12	7		22.24	22.30	22.27		
5	12	13		22.22	22.31	22.27		
5	25	0		21.33	21.37	21.36		
Limit	ERP < 3W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	22.70	22.71	22.65	10.16	0.0104
15	1	37		22.59	22.49	22.59		
15	1	74		22.69	22.61	22.69		
15	36	0		21.67	21.68	21.66		
15	36	20		21.65	21.57	21.55		
15	36	39		21.66	21.56	21.56		
15	75	0		21.72	21.57	21.63		
15	1	0	16-QAM	22.00	22.32	21.64	9.77	0.0095
15	1	13		21.87	21.66	22.13		
15	1	26		21.93	22.12	21.76		
15	12	0		21.76	21.71	21.76		
15	12	7		21.71	21.58	21.69		
15	12	15		21.50	21.51	21.57		
15	27	0		20.50	20.59	20.64		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.48	22.53	22.47	10.05	0.0101
10	1	25		22.20	22.14	22.44		
10	1	49		22.60	22.46	22.56		
10	25	0		21.58	21.64	21.66		
10	25	12		21.29	21.40	21.49		
10	25	25		21.23	21.18	21.14		
10	50	0		21.36	21.46	21.53		
10	1	0	16-QAM	21.97	21.69	21.76	9.57	0.0091
10	1	13		21.69	22.06	22.12		
10	1	26		21.88	21.74	21.98		
10	12	0		21.69	21.75	21.53		
10	12	7		21.38	21.66	21.54		
10	12	15		21.69	21.74	21.79		
10	27	0		20.68	20.63	20.67		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	22.47	22.67	22.66	10.14	0.0103
5	1	12		22.65	22.30	22.69		
5	1	24		22.62	22.41	22.59		
5	12	0		21.60	21.61	21.67		
5	12	7		21.80	21.61	21.58		
5	12	13		21.76	21.53	21.55		
5	25	0		21.62	21.58	21.56		
5	1	0	16-QAM	22.11	21.53	21.77	9.56	0.0090
5	1	12		21.82	21.90	21.64		
5	1	24		21.82	22.03	22.01		
5	12	0		20.51	20.61	20.55		
5	12	7		20.65	20.46	20.62		
5	12	13		20.77	20.59	20.51		
5	25	0		20.58	20.65	20.62		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	22.49	22.63	22.65	10.10	0.0102
3	1	8		22.61	22.51	22.38		
3	1	14		22.52	22.51	22.28		
3	8	0		21.66	21.60	21.58		
3	8	4		21.70	21.58	21.57		
3	8	7		21.80	21.55	21.51		
3	15	0		21.41	21.47	21.61		
3	1	0	16-QAM	21.90	21.65	21.46	9.55	0.0090
3	1	8		22.06	21.88	21.38		
3	1	14		22.04	22.10	21.48		
3	8	0		20.52	20.73	20.55		
3	8	4		20.49	20.64	20.68		
3	8	7		20.80	20.58	20.62		
3	15	0		20.61	20.49	20.49		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	22.54	22.46	22.52	10.13	0.0103
1.4	1	3		22.61	22.45	22.39		
1.4	1	5		22.65	22.44	22.42		
1.4	3	0		22.52	22.52	22.44		
1.4	3	1		22.63	22.63	22.61		
1.4	3	3		22.68	22.48	22.44		
1.4	6	0		21.56	21.42	21.49		
1.4	1	0	16-QAM	22.07	21.71	22.17	9.79	0.0095
1.4	1	3		22.34	21.51	21.76		
1.4	1	5		22.14	21.65	21.84		
1.4	3	0		21.54	21.50	21.39		
1.4	3	1		21.53	21.62	21.62		
1.4	3	3		21.63	21.47	21.43		
1.4	6	0		20.63	20.32	20.80		
Limit	ERP < 7W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.92	23.43	22.88	16.63	0.0460
20	1	49		22.83	23.34	22.79		
20	1	99		22.49	23.00	22.45		
20	50	0		21.83	22.34	21.79		
20	50	24		21.96	22.47	21.92		
20	50	50		21.80	22.31	21.76		
20	100	0		21.76	22.27	21.72		
20	1	0	16-QAM	21.91	22.42	21.87	15.96	0.0394
20	1	13		22.03	22.54	21.99		
20	1	26		22.25	22.76	22.21		
20	12	0		21.53	22.04	21.49		
20	12	7		21.60	22.11	21.56		
20	12	15		21.84	22.35	21.80		
20	27	0		21.10	21.19	21.15		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.89	23.42	22.84	16.62	0.0459
15	1	37		22.73	23.24	22.69		
15	1	74		22.45	22.99	22.42		
15	36	0		21.78	22.30	21.77		
15	36	20		21.95	22.37	21.88		
15	36	39		21.77	22.23	21.72		
15	75	0		21.71	22.20	21.69		
15	1	0	16-QAM	21.88	22.37	21.85	15.94	0.0393
15	1	13		22.00	22.51	21.91		
15	1	26		22.23	22.74	22.11		
15	12	0		21.47	22.04	21.45		
15	12	7		21.56	22.04	21.51		
15	12	15		21.83	22.25	21.75		
15	27	0		21.08	21.14	21.07		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.90	23.40	22.88	16.60	0.0457
10	1	25		22.76	23.27	22.70		
10	1	49		22.46	22.95	22.42		
10	25	0		21.77	22.28	21.79		
10	25	12		21.93	22.41	21.89		
10	25	25		21.76	22.24	21.76		
10	50	0		21.75	22.26	21.69		
10	1	0	16-QAM	21.82	22.42	21.85	15.92	0.0391
10	1	13		21.94	22.49	21.96		
10	1	26		22.22	22.72	22.21		
10	12	0		21.46	21.96	21.44		
10	12	7		21.53	22.04	21.54		
10	12	15		21.84	22.33	21.74		
10	27	0		21.06	21.15	21.07		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.88	23.41	22.82	16.61	0.0458
5	1	12		22.75	23.27	22.77		
5	1	24		22.40	22.91	22.43		
5	12	0		21.73	22.24	21.74		
5	12	7		21.93	22.39	21.84		
5	12	13		21.79	22.30	21.76		
5	25	0		21.69	22.24	21.65		
5	1	0	16-QAM	21.90	22.38	21.87	15.91	0.0390
5	1	12		22.02	22.44	21.91		
5	1	24		22.18	22.71	22.17		
5	12	0		21.49	21.98	21.39		
5	12	7		21.60	22.05	21.55		
5	12	13		21.76	22.28	21.72		
5	25	0		21.01	21.09	21.08		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.88	23.34	22.86	16.54	0.0451
3	1	8		22.83	23.24	22.72		
3	1	14		22.46	22.99	22.38		
3	8	0		21.79	22.27	21.73		
3	8	4		21.94	22.37	21.84		
3	8	7		21.75	22.26	21.74		
3	15	0		21.75	22.22	21.70		
3	1	0	16-QAM	21.87	22.33	21.82	15.86	0.0385
3	1	8		21.96	22.46	21.89		
3	1	14		22.19	22.66	22.16		
3	8	0		21.53	21.97	21.42		
3	8	4		21.56	22.03	21.55		
3	8	7		21.84	22.35	21.74		
3	15	0		21.00	21.17	21.08		
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = -6.8 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.88	23.34	22.86	16.54	0.0451
1.4	1	3		22.83	23.24	22.72		
1.4	1	5		22.46	22.99	22.38		
1.4	3	0		22.88	23.34	22.86		
1.4	3	1		22.83	23.24	22.72		
1.4	3	3		22.46	22.99	22.38		
1.4	6	0		21.79	22.27	21.73		
1.4	1	0	16-QAM	21.87	22.33	21.82	15.86	0.0385
1.4	1	3		21.96	22.46	21.89		
1.4	1	5		22.19	22.66	22.16		
1.4	3	0		21.87	22.33	21.82		
1.4	3	1		21.96	22.46	21.89		
1.4	3	3		22.19	22.66	22.16		
1.4	6	0		21.53	21.97	21.42		
Limit	EIRP < 1W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = -9.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
20	1	0	QPSK	22.03	22.09	22.00	11.53	0.0142
20	1	49		23.18	22.68	22.93		
20	1	99		22.39	22.65	22.21		
20	50	0		21.55	21.47	21.33		
20	50	24		21.79	21.78	21.78		
20	50	50		21.71	21.78	21.75		
20	100	0		21.61	21.40	21.55		
20	1	0	16-QAM	21.11	21.01	21.17	10.19	0.0104
20	1	13		21.50	21.07	21.41		
20	1	26		21.74	21.33	21.84		
20	12	0		21.05	21.01	21.00		
20	12	7		21.13	21.00	21.03		
20	12	15		21.39	21.26	21.27		
20	27	0		20.09	20.10	20.04		
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = -9.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	22.60	22.47	22.25	11.36	0.0137
15	1	37		23.01	22.51	22.60		
15	1	74		22.60	22.64	22.68		
15	36	0		21.81	21.54	21.74		
15	36	20		22.04	21.75	21.83		
15	36	39		21.80	21.73	21.74		
15	75	0		21.92	21.64	21.73		
15	1	0	16-QAM	21.93	21.61	21.91	10.60	0.0115
15	1	13		21.79	21.56	21.87		
15	1	26		21.91	22.25	22.21		
15	12	0		21.67	21.54	21.56		
15	12	7		21.66	21.37	21.51		
15	12	15		21.82	21.66	21.78		
15	27	0		20.70	20.44	20.56		
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = -9.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.01	22.00	22.03	11.51	0.0142
10	1	25		22.84	22.70	22.98		
10	1	49		23.12	23.16	22.76		
10	25	0		21.99	21.62	21.62		
10	25	12		22.12	21.89	21.91		
10	25	25		22.01	21.95	21.89		
10	50	0		22.08	21.83	21.84		
10	1	0	16-QAM	21.35	21.08	21.04	10.88	0.0122
10	1	13		22.53	21.88	22.11		
10	1	26		22.17	22.13	22.05		
10	12	0		21.53	21.49	21.46		
10	12	7		22.00	22.12	21.77		
10	12	15		22.06	21.91	21.86		
10	27	0		20.95	20.74	20.55		
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = -9.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.08	22.95	23.00	11.49	0.0141
5	1	12		23.14	22.95	22.77		
5	1	24		23.13	22.68	22.74		
5	12	0		22.09	21.88	21.79		
5	12	7		22.20	21.81	21.83		
5	12	13		22.09	21.84	21.84		
5	25	0		22.34	21.93	21.86		
5	1	0	16-QAM	22.30	21.94	22.32	11.24	0.0133
5	1	12		22.52	22.12	22.45		
5	1	24		22.89	22.04	22.06		
5	12	0		21.16	20.84	20.73		
5	12	7		21.12	20.85	20.93		
5	12	13		21.16	20.70	20.85		
5	25	0		21.12	20.84	20.92		
Limit	ERP < 3W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	22.70	-	-	10.15	0.0104
15	1	37		22.59	-	-		
15	1	74		22.69	-	-		
15	36	0		21.67	-	-		
15	36	20		21.65	-	-		
15	36	39		21.66	-	-		
15	75	0		21.72	-	-		
15	1	0	16-QAM	22.00	-	-	9.45	0.0088
15	1	13		21.87	-	-		
15	1	26		21.93	-	-		
15	12	0		21.76	-	-		
15	12	7		21.71	-	-		
15	12	15		21.50	-	-		
15	27	0		20.50	-	-		
Limit	Power<100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	22.53	-	9.98	0.0100
10	1	25		-	22.14	-		
10	1	49		-	22.46	-		
10	25	0		-	21.64	-		
10	25	12		-	21.40	-		
10	25	25		-	21.18	-		
10	50	0		-	21.46	-		
10	1	0	16-QAM	-	21.69	-	9.51	0.0089
10	1	13		-	22.06	-		
10	1	26		-	21.74	-		
10	12	0		-	21.75	-		
10	12	7		-	21.66	-		
10	12	15		-	21.74	-		
10	27	0		-	20.63	-		
Limit	Power<100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	22.47	22.67	22.66	10.14	0.0103
5	1	12		22.65	22.30	22.69		
5	1	24		22.62	22.41	22.59		
5	12	0		21.60	21.61	21.67		
5	12	7		21.80	21.61	21.58		
5	12	13		21.76	21.53	21.55		
5	25	0		21.62	21.58	21.56		
5	1	0	16-QAM	22.11	21.53	21.77	9.56	0.0090
5	1	12		21.82	21.90	21.64		
5	1	24		21.82	22.03	22.01		
5	12	0		20.51	20.61	20.55		
5	12	7		20.65	20.46	20.62		
5	12	13		20.77	20.59	20.51		
5	25	0		20.58	20.65	20.62		
Limit	Power<100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	22.49	22.63	22.65	10.10	0.0102
3	1	8		22.61	22.51	22.38		
3	1	14		22.52	22.51	22.28		
3	8	0		21.66	21.60	21.58		
3	8	4		21.70	21.58	21.57		
3	8	7		21.80	21.55	21.51		
3	15	0		21.41	21.47	21.61		
3	1	0	16-QAM	21.90	21.65	21.46	9.55	0.0090
3	1	8		22.06	21.88	21.38		
3	1	14		22.04	22.10	21.48		
3	8	0		20.52	20.73	20.55		
3	8	4		20.49	20.64	20.68		
3	8	7		20.80	20.58	20.62		
3	15	0		20.61	20.49	20.49		
Limit	Power<100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	22.54	22.46	22.52	10.13	0.0103
1.4	1	3		22.61	22.45	22.39		
1.4	1	5		22.65	22.44	22.42		
1.4	3	0		22.52	22.52	22.44		
1.4	3	1		22.63	22.63	22.61		
1.4	3	3		22.68	22.48	22.44		
1.4	6	0		21.56	21.42	21.49		
1.4	1	0	16-QAM	22.07	21.71	22.17	9.79	0.0095
1.4	1	3		22.34	21.51	21.76		
1.4	1	5		22.14	21.65	21.84		
1.4	3	0		21.54	21.50	21.39		
1.4	3	1		21.53	21.62	21.62		
1.4	3	3		21.63	21.47	21.43		
1.4	6	0		20.63	20.32	20.80		
Limit	Power<100W			Result			Pass	

LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	-	22.76	-	10.21	0.0105
15	1	37		-	22.66	-		
15	1	74		-	22.70	-		
15	36	0		-	21.66	-		
15	36	20		-	21.67	-		
15	36	39		-	21.71	-		
15	75	0		-	21.77	-		
15	1	0	16-QAM	-	22.10	-	9.55	0.0090
15	1	13		-	21.97	-		
15	1	26		-	21.93	-		
15	12	0		-	21.67	-		
15	12	7		-	21.68	-		
15	12	15		-	21.45	-		
15	27	0		-	20.58	-		
Limit	Reporting only			Result			N/A	

LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	22.56	-	10.01	0.0100
10	1	25		-	22.23	-		
10	1	49		-	22.46	-		
10	25	0		-	21.55	-		
10	25	12		-	21.41	-		
10	25	25		-	21.22	-		
10	50	0		-	21.52	-		
10	1	0	16-QAM	-	21.67	-	9.41	0.0087
10	1	13		-	21.96	-		
10	1	26		-	21.69	-		
10	12	0		-	21.60	-		
10	12	7		-	21.55	-		
10	12	15		-	21.70	-		
10	27	0		-	20.59	-		
Limit	Reporting only			Result			N/A	

LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	-	22.72	-	10.17	0.0104
5	1	12		-	22.34	-		
5	1	24		-	22.25	-		
5	12	0		-	21.71	-		
5	12	7		-	21.50	-		
5	12	13		-	21.63	-		
5	25	0		-	21.61	-		
5	1	0	16-QAM	-	21.47	-	9.48	0.0089
5	1	12		-	22.03	-		
5	1	24		-	21.97	-		
5	12	0		-	20.45	-		
5	12	7		-	20.39	-		
5	12	13		-	20.59	-		
5	25	0		-	20.79	-		
Limit	Reporting only			Result			N/A	

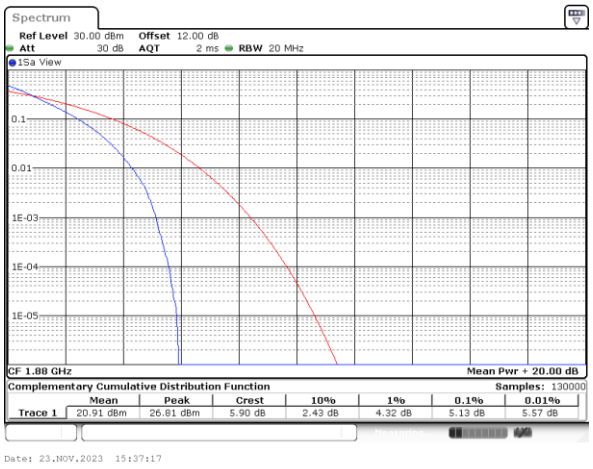
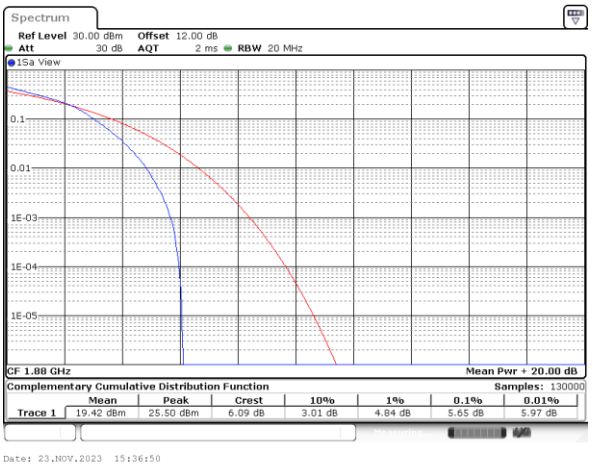
LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	-	22.62	-	10.07	0.0102
3	1	8		-	22.45	-		
3	1	14		-	22.35	-		
3	8	0		-	21.63	-		
3	8	4		-	21.51	-		
3	8	7		-	21.58	-		
3	15	0		-	21.61	-		
3	1	0	16-QAM	-	21.71	-	9.64	0.0092
3	1	8		-	21.92	-		
3	1	14		-	22.19	-		
3	8	0		-	20.75	-		
3	8	4		-	20.65	-		
3	8	7		-	20.56	-		
3	15	0		-	20.35	-		
Limit	Reporting only			Result			N/A	

LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = -10.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	-	22.43	-	10.11	0.0103
1.4	1	3		-	22.43	-		
1.4	1	5		-	22.46	-		
1.4	3	0		-	22.48	-		
1.4	3	1		-	22.66	-		
1.4	3	3		-	22.52	-		
1.4	6	0		-	21.43	-		
1.4	1	0	16-QAM	-	21.81	-	9.26	0.0084
1.4	1	3		-	21.45	-		
1.4	1	5		-	21.59	-		
1.4	3	0		-	21.66	-		
1.4	3	1		-	21.53	-		
1.4	3	3		-	21.43	-		
1.4	6	0		-	20.25	-		
Limit	Reporting only			Result			N/A	

LTE Band 2

Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27 RB	Result
Middle CH	5.13	5.65	PASS

LTE Band 2 / 20MHz / QPSK	LTE Band 2 / 20MHz / 16QAM
Middle Channel / Full RB	Middle Channel / 27 RB0
	

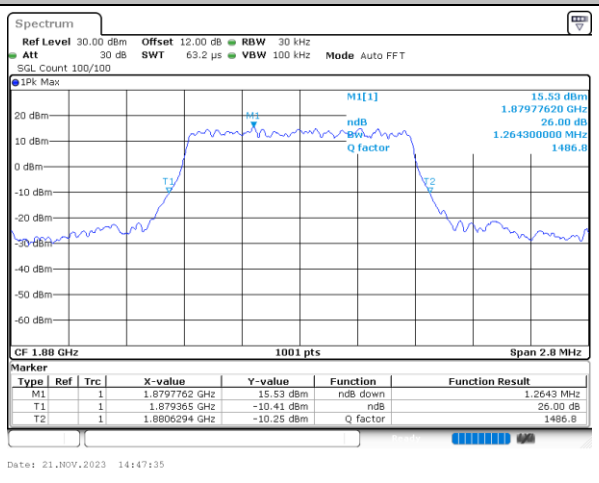
26dB Bandwidth

Mode	LTE Band 2 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.26	1.28	3.02	3.02	4.89	5.00	9.79	5.38	14.36	5.46	18.94	5.63

LTE Band 2

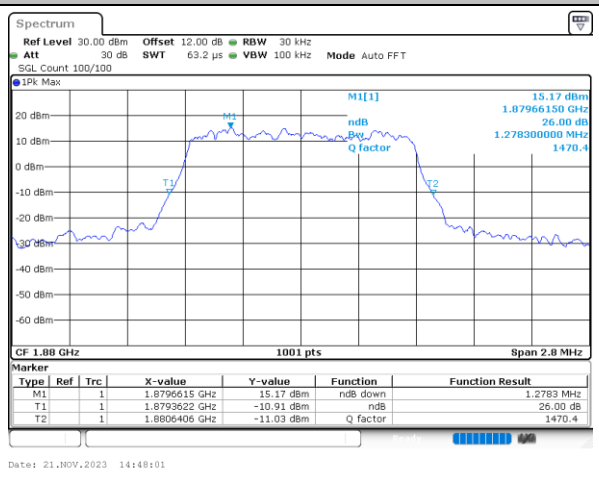
Middle Channel / 1.4MHz / QPSK

Middle Channel / Full RB



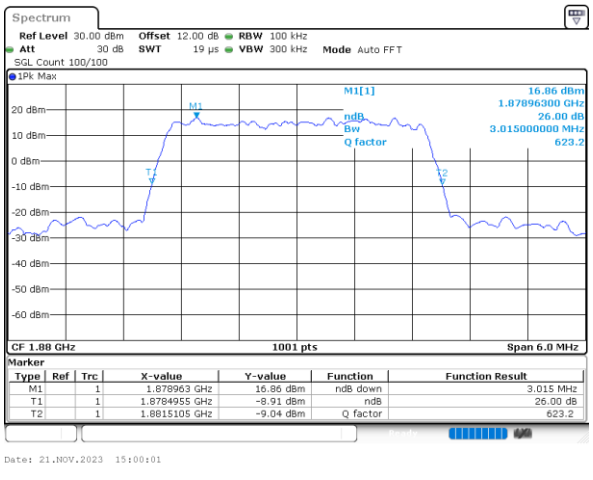
Middle Channel / 1.4MHz / 16QAM

Middle Channel / Full RB



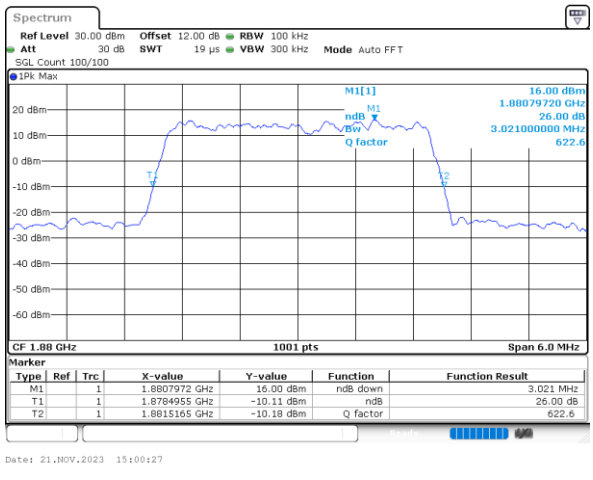
Middle Channel / 3MHz / QPSK

Middle Channel / Full RB

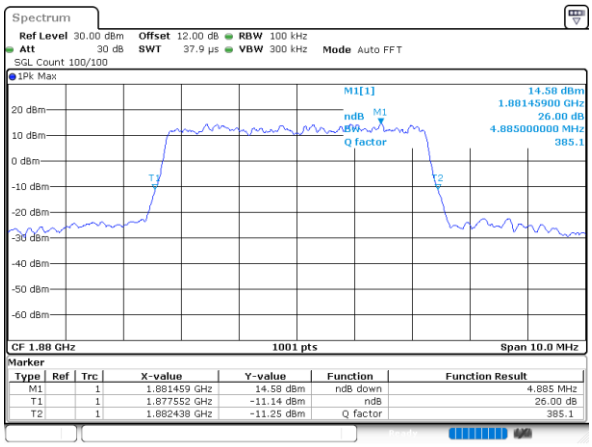


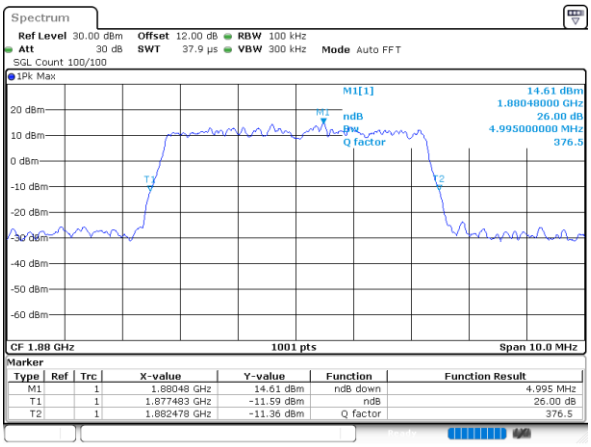
Middle Channel / 3MHz / 16QAM

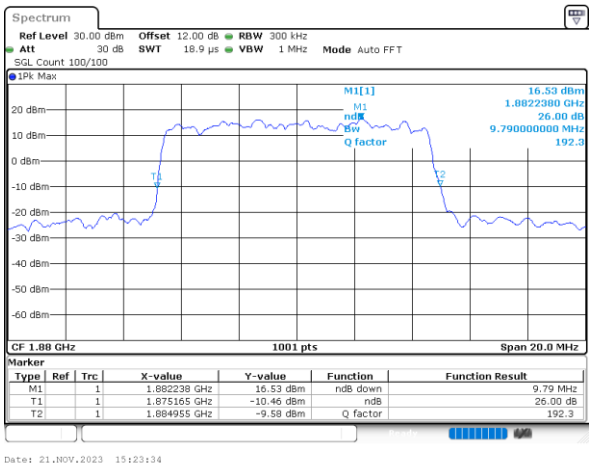
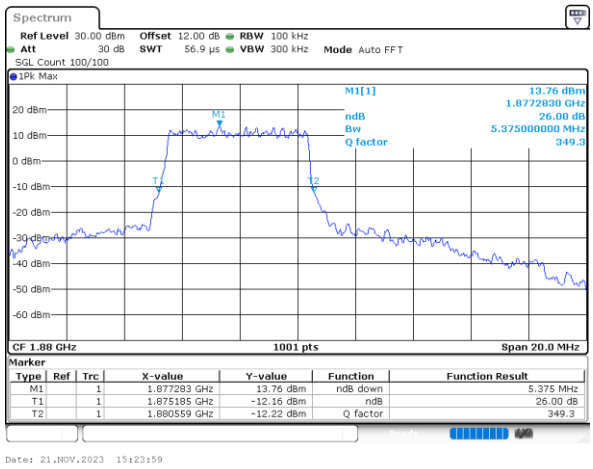
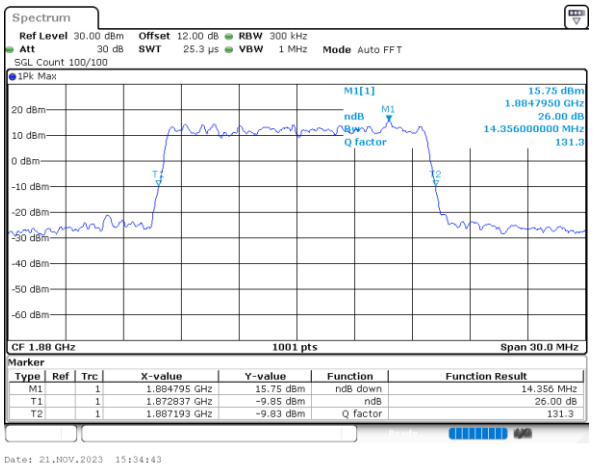
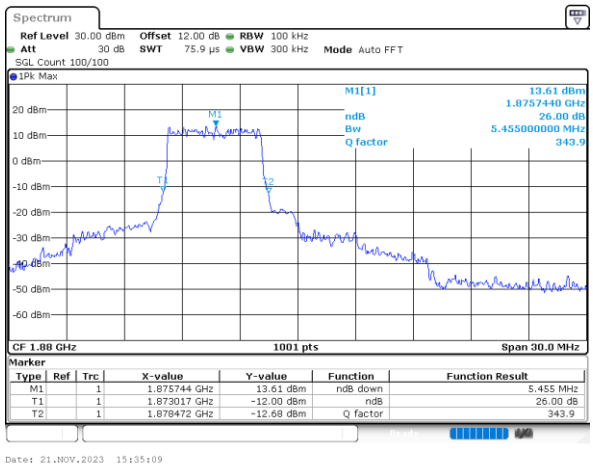
Middle Channel / Full RB

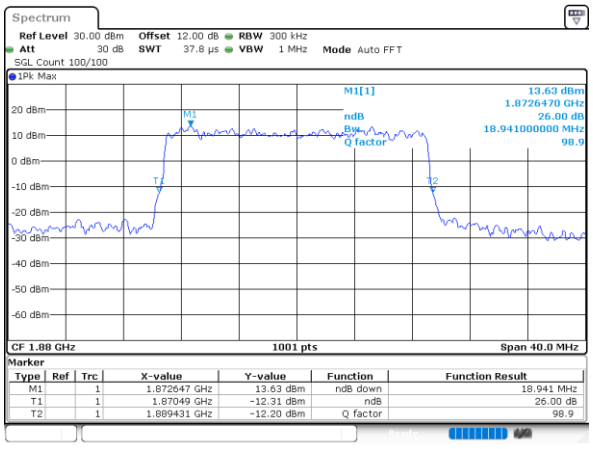
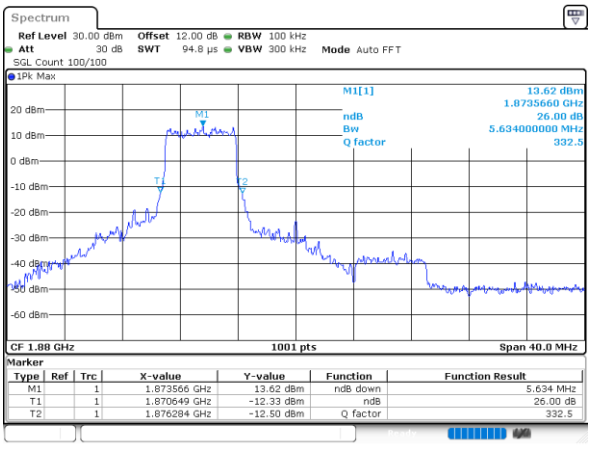


LTE Band 2	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / Full RB**





LTE Band 2	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	

LTE Band 2	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	

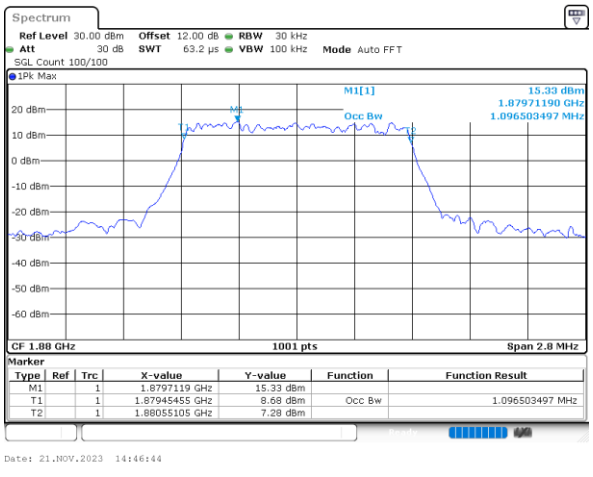
Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.09	2.73	2.71	4.50	4.49	8.97	4.88	13.43	4.86	17.98	4.84

LTE Band 2

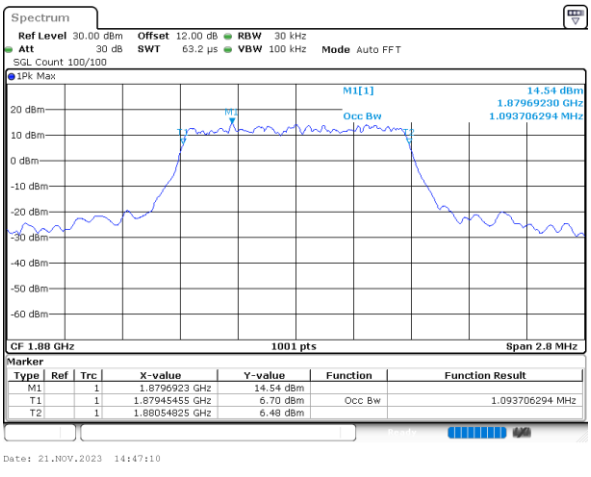
Middle Channel / 1.4MHz / QPSK

Middle Channel / Full RB



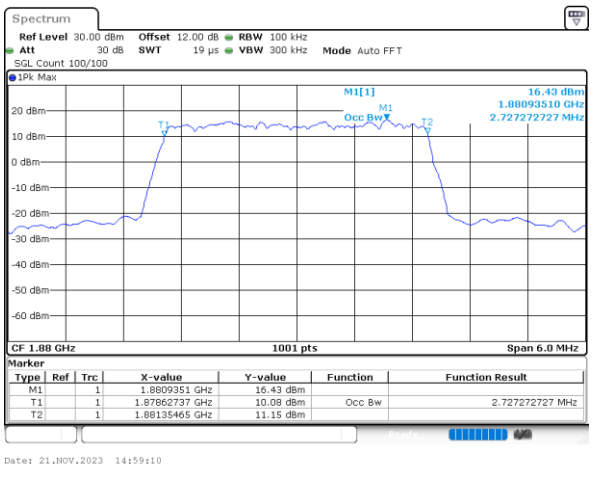
Middle Channel / 1.4MHz / 16QAM

Middle Channel / Full RB



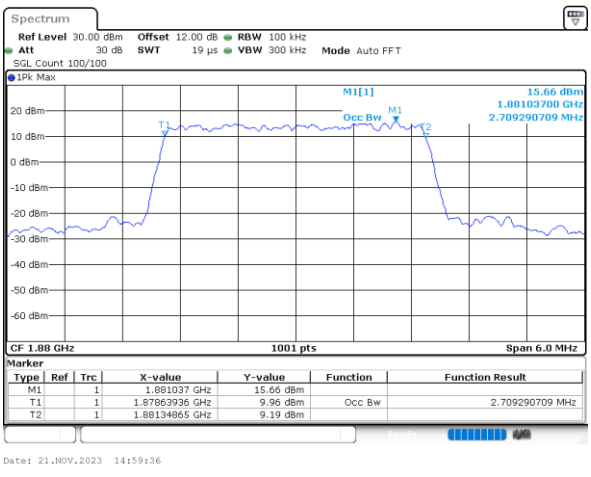
Middle Channel / 3MHz / QPSK

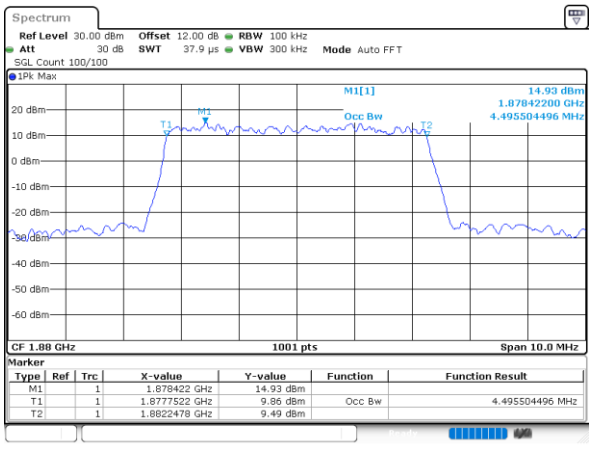
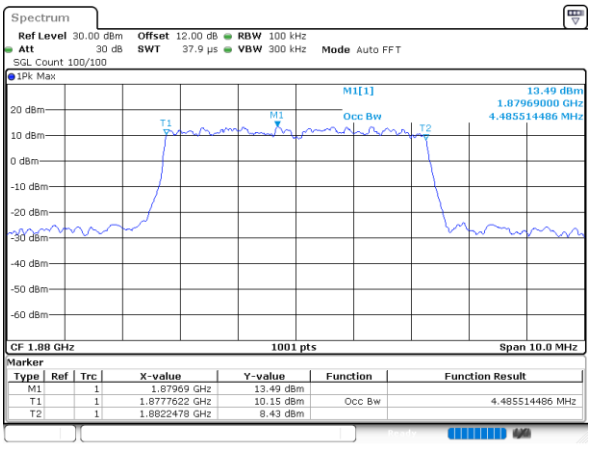
Middle Channel / Full RB

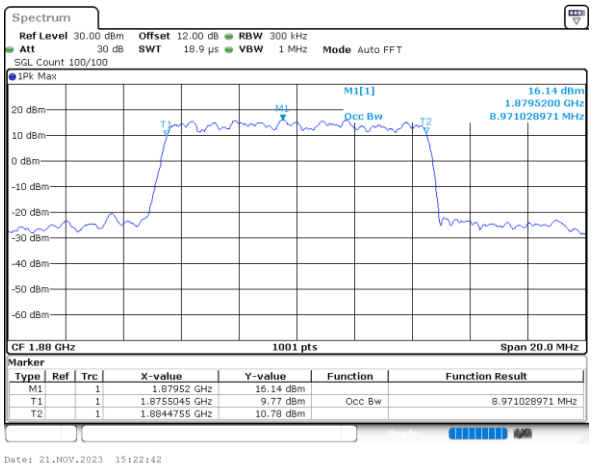
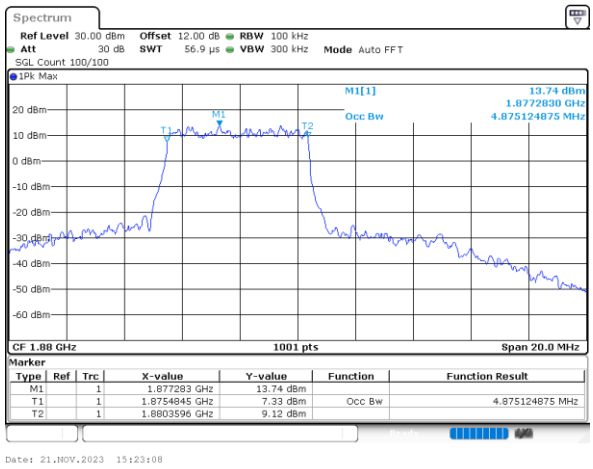
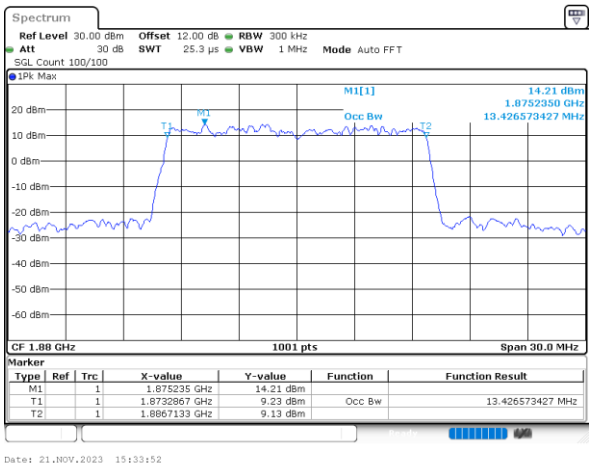
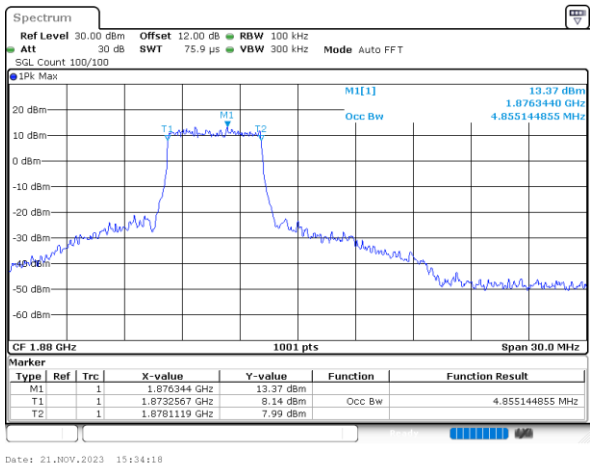


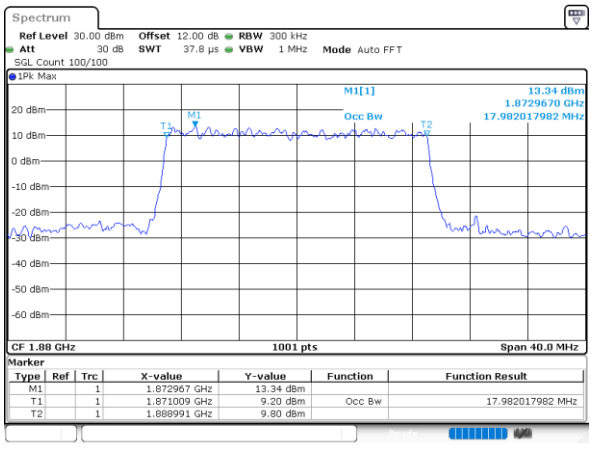
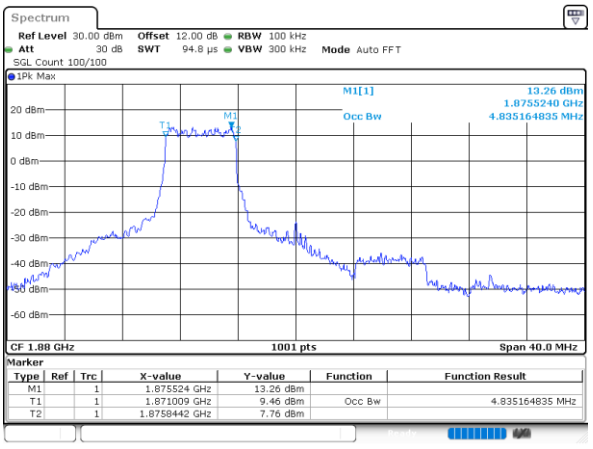
Middle Channel / 3MHz / 16QAM

Middle Channel / Full RB



LTE Band 2	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / Full RB**
	

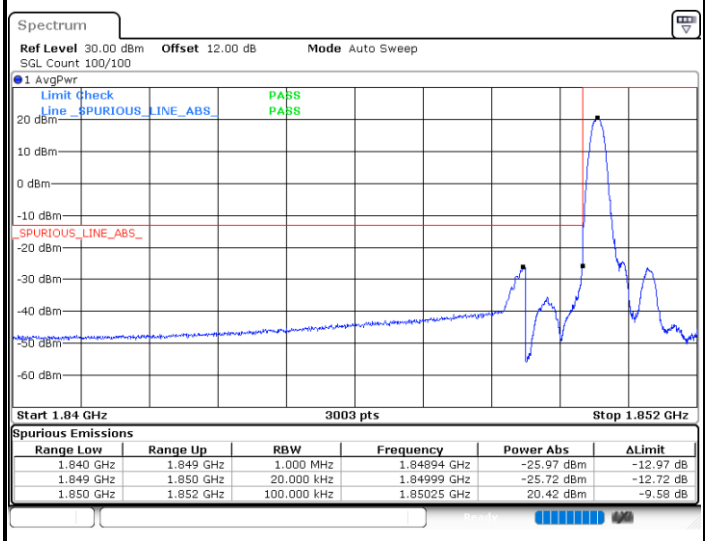
LTE Band 2	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	

LTE Band 2	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	

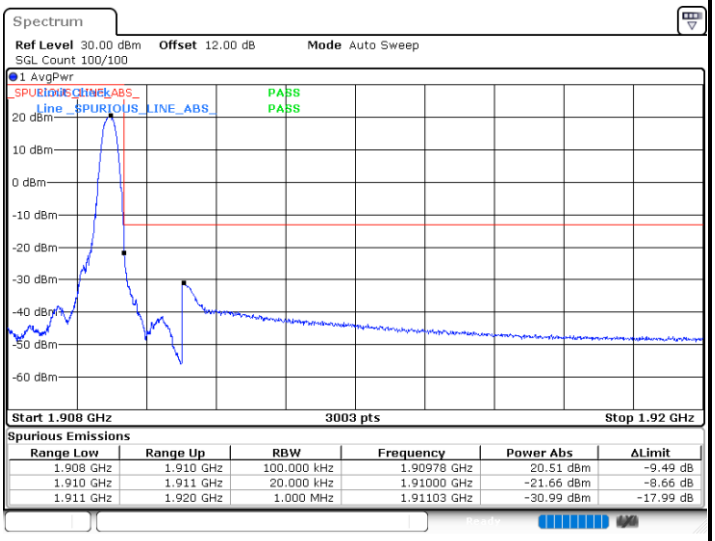
Conducted Band Edge

LTE Band 2 / 1.4MHz / QPSK

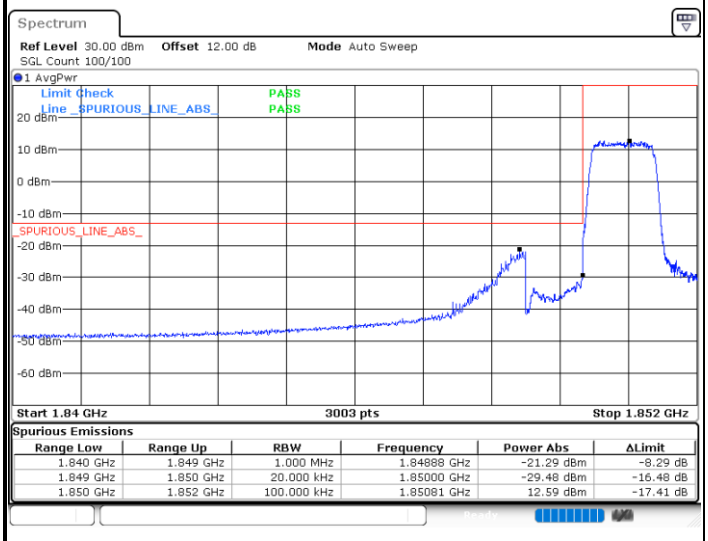
Lowest Band Edge / 1RB0



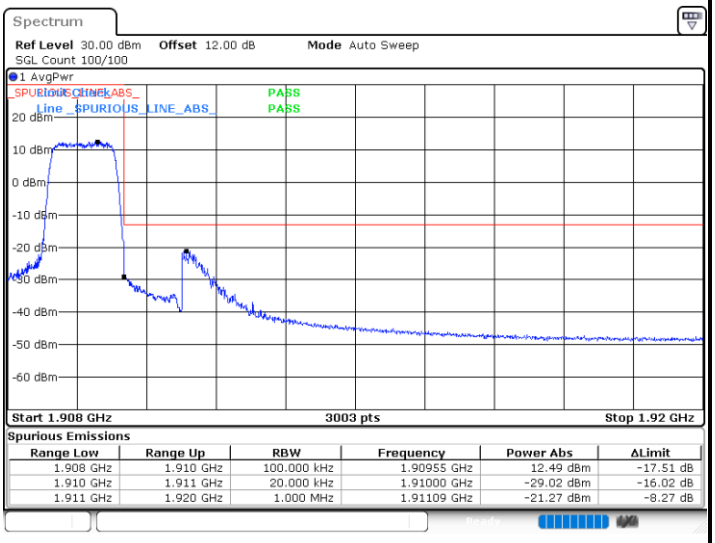
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

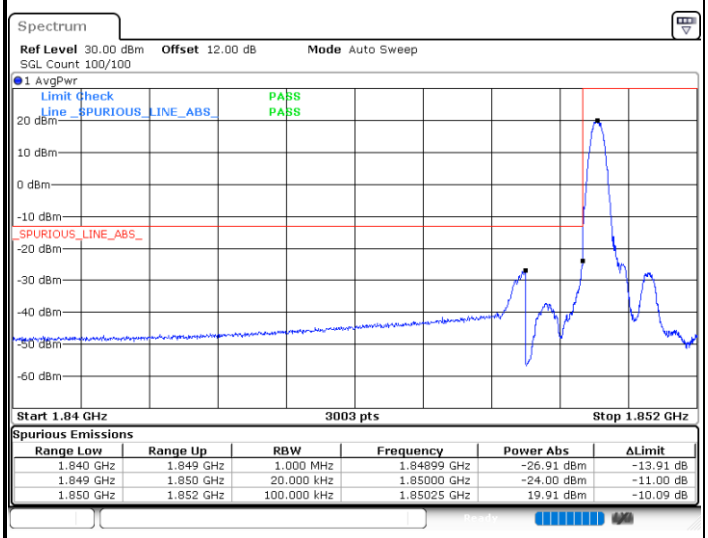


Highest Band Edge / Full RB

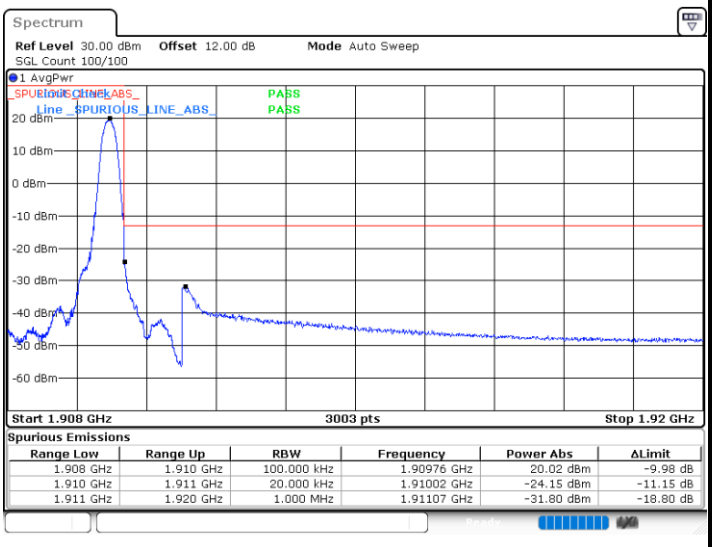


LTE Band 2 / 1.4MHz / 16QAM

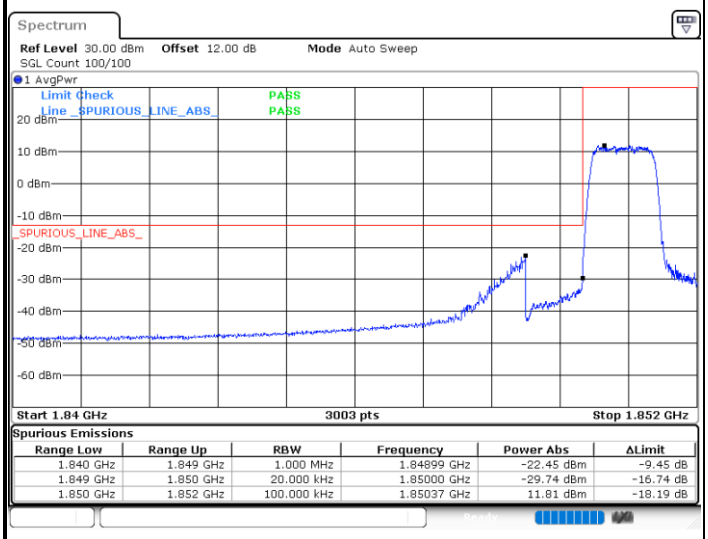
Lowest Band Edge / 1 RB0



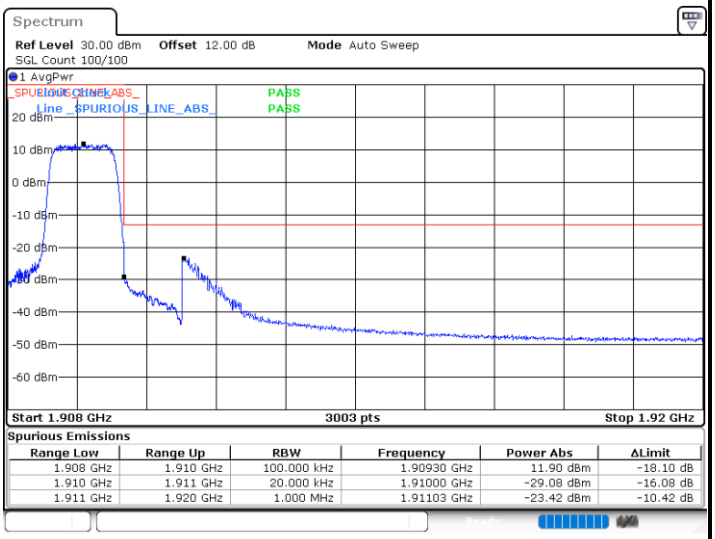
Highest Band Edge / 1 RBmax



Lowest Band Edge / Full RB

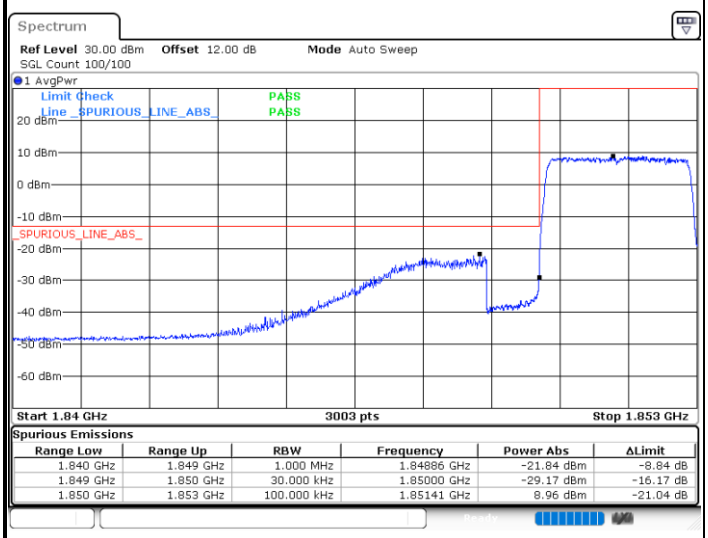


Highest Band Edge / Full RB



LTE Band 2 / 3MHz / QPSK

Lowest Band Edge / Full RB

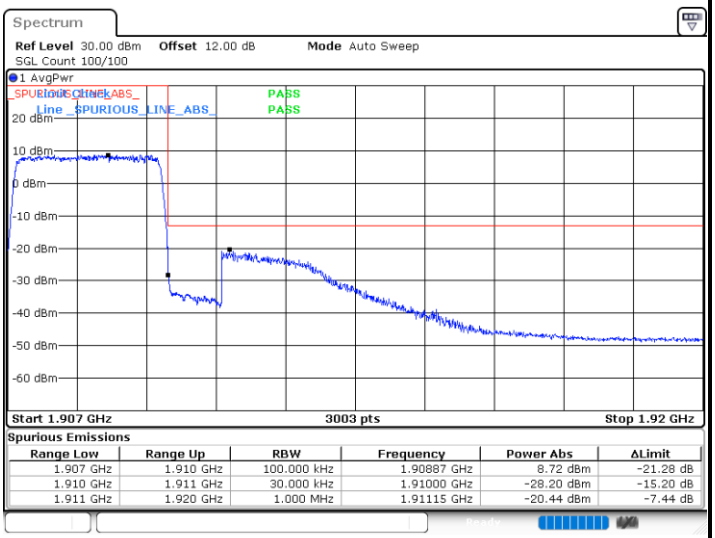


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84886 GHz	-21.84 dBm	-8.84 dB
1.849 GHz	1.850 GHz	30.000 kHz	1.85000 GHz	-29.17 dBm	-16.17 dB
1.850 GHz	1.853 GHz	100.000 kHz	1.85141 GHz	8.96 dBm	-21.04 dB

Date: 21.NOV.2023 14:57:28

Highest Band Edge / Full RB



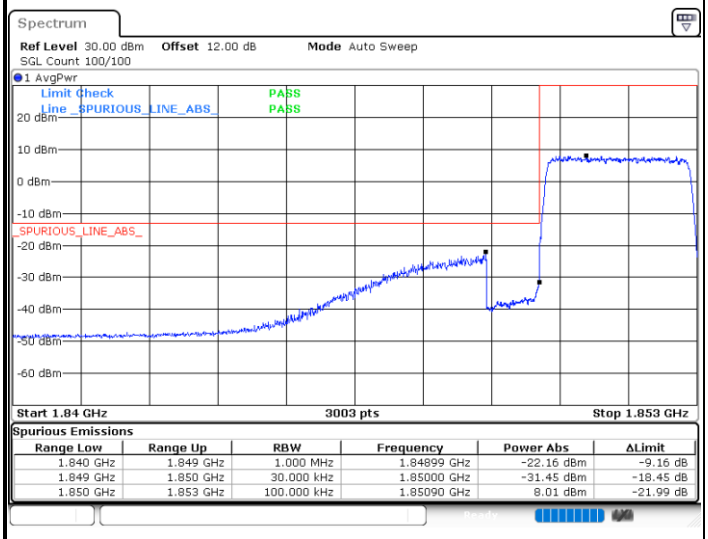
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.907 GHz	1.910 GHz	100.000 kHz	1.90887 GHz	8.72 dBm	-21.28 dB
1.910 GHz	1.911 GHz	30.000 kHz	1.91000 GHz	-28.20 dBm	-15.20 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91115 GHz	-20.44 dBm	-7.44 dB

Date: 21.NOV.2023 15:05:26

LTE Band 2 / 3MHz / 16QAM

Lowest Band Edge / Full RB

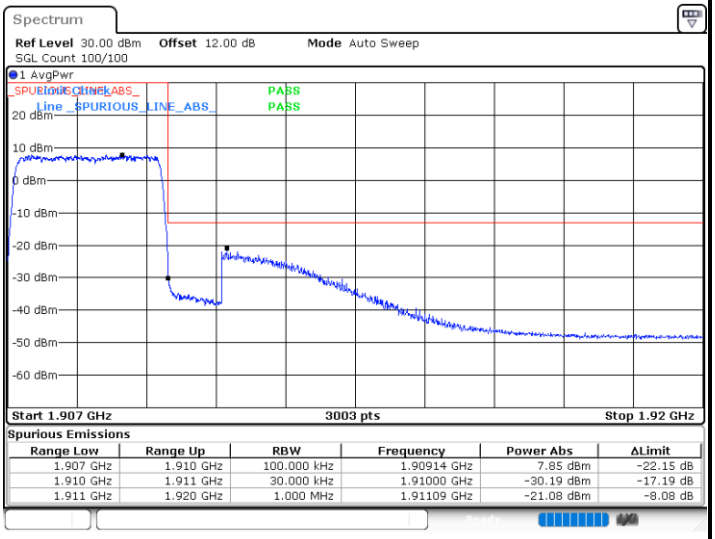


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84899 GHz	-22.16 dBm	-9.16 dB
1.849 GHz	1.850 GHz	30.000 kHz	1.85000 GHz	-31.45 dBm	-18.45 dB
1.850 GHz	1.853 GHz	100.000 kHz	1.85090 GHz	8.01 dBm	-21.99 dB

Date: 21.NOV.2023 14:58:44

Highest Band Edge / Full RB



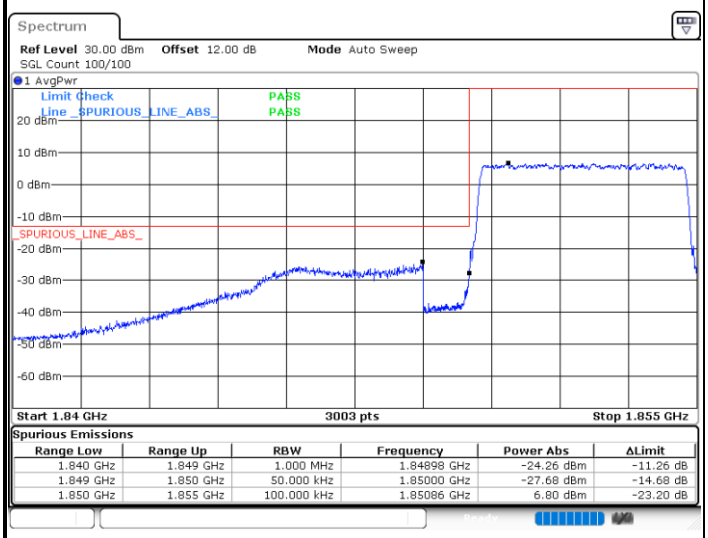
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.907 GHz	1.910 GHz	100.000 kHz	1.90914 GHz	7.85 dBm	-22.15 dB
1.910 GHz	1.911 GHz	30.000 kHz	1.91000 GHz	-30.19 dBm	-17.19 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91109 GHz	-21.08 dBm	-8.08 dB

Date: 21.NOV.2023 15:06:43

LTE Band 2 / 5MHz / QPSK

Lowest Band Edge / Full RB

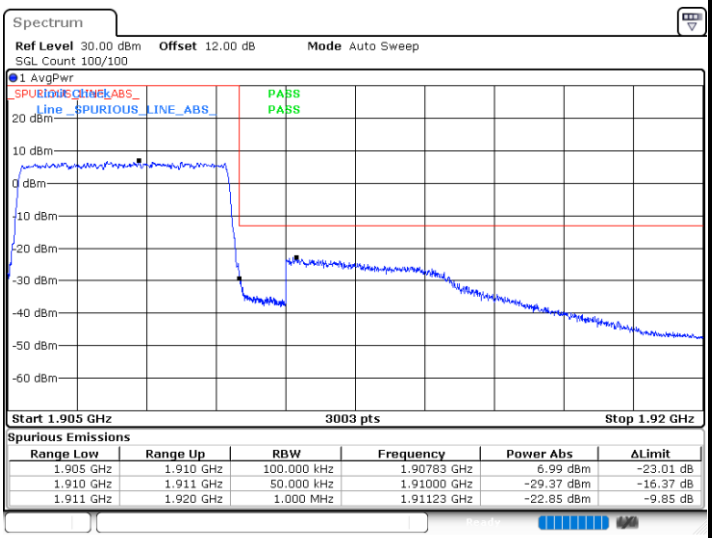


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84898 GHz	-24.26 dBm	-11.26 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-27.68 dBm	-14.68 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85086 GHz	6.80 dBm	-23.20 dB

Date: 21.NOV.2023 15:09:39

Highest Band Edge / Full RB



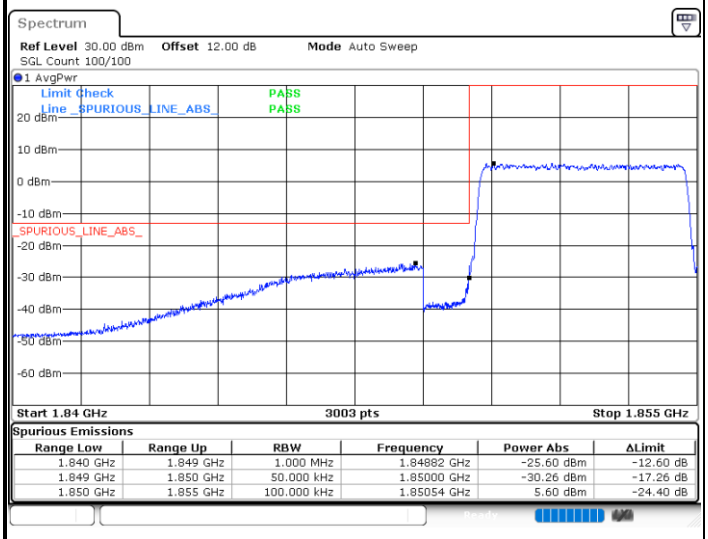
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90783 GHz	6.99 dBm	-23.01 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-29.37 dBm	-16.37 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91123 GHz	-22.85 dBm	-9.85 dB

Date: 21.NOV.2023 15:13:53

LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / Full RB

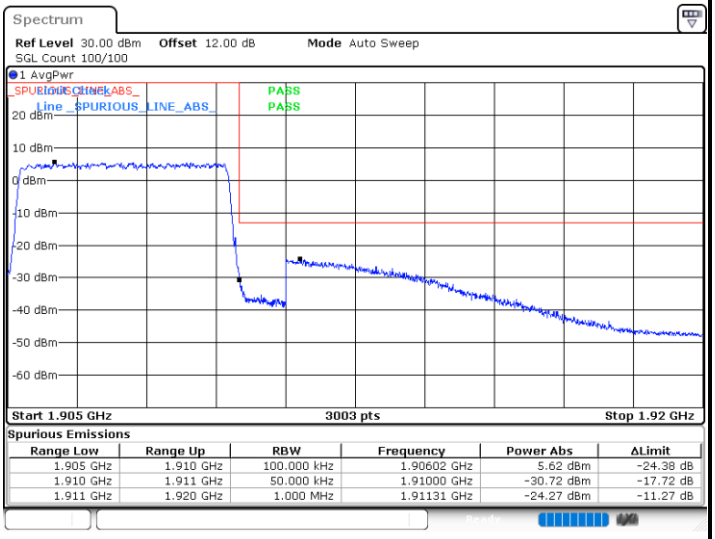


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84882 GHz	-25.60 dBm	-12.60 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-30.26 dBm	-17.26 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85054 GHz	5.60 dBm	-24.40 dB

Date: 21.NOV.2023 15:10:55

Highest Band Edge / Full RB



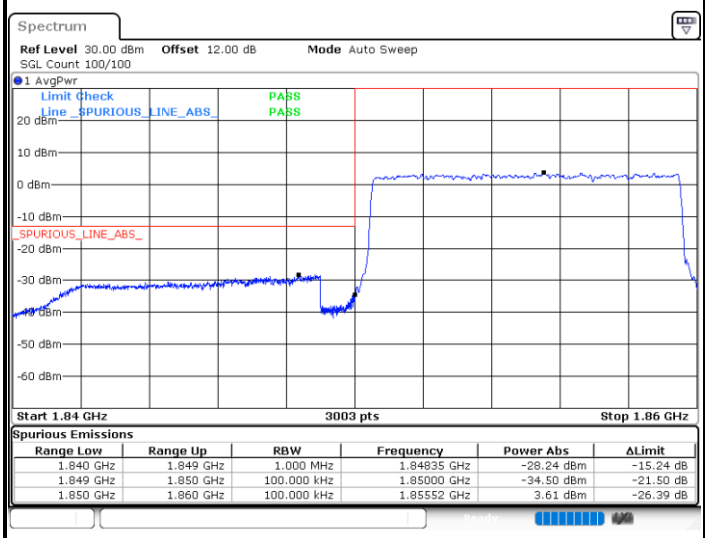
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90602 GHz	5.62 dBm	-24.38 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-30.72 dBm	-17.72 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91131 GHz	-24.27 dBm	-11.27 dB

Date: 21.NOV.2023 15:15:09

LTE Band 2 / 10MHz / QPSK

Lowest Band Edge / Full RB

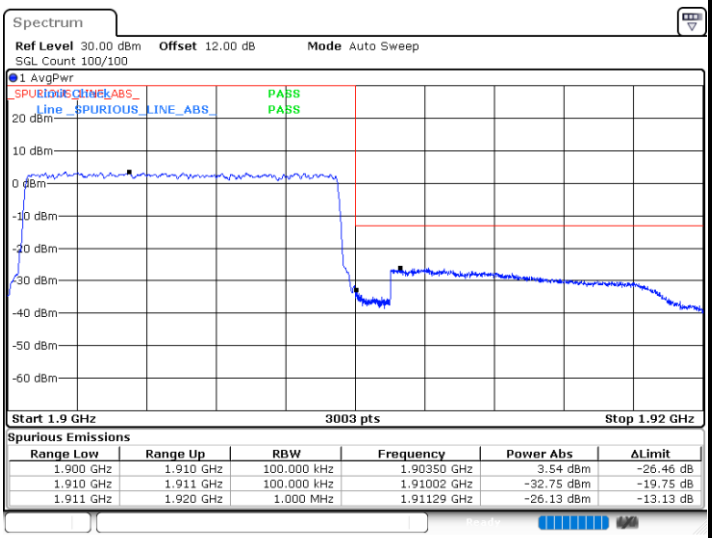


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84835 GHz	-28.24 dBm	-15.24 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.85000 GHz	-34.50 dBm	-21.50 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85552 GHz	3.61 dBm	-26.39 dB

Date: 21.NOV.2023 15:20:59

Highest Band Edge / Full RB



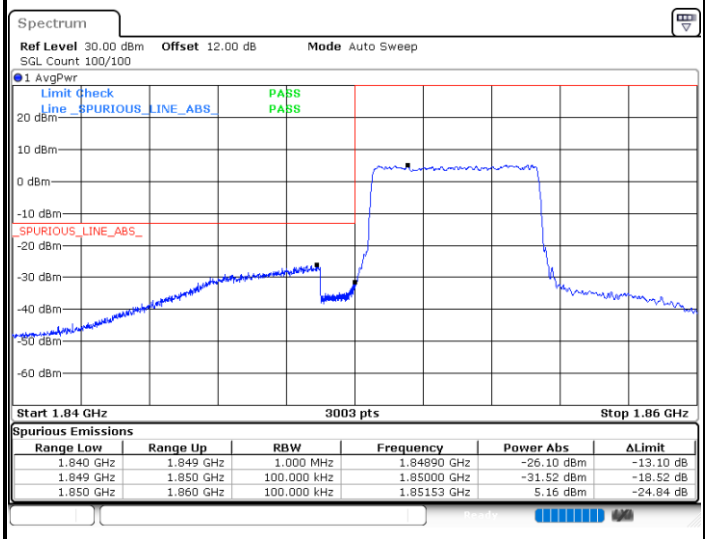
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.900 GHz	1.910 GHz	100.000 kHz	1.90350 GHz	3.54 dBm	-26.46 dB
1.910 GHz	1.911 GHz	100.000 kHz	1.91002 GHz	-32.75 dBm	-19.75 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91129 GHz	-26.13 dBm	-13.13 dB

Date: 21.NOV.2023 15:28:59

LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 27 RB0

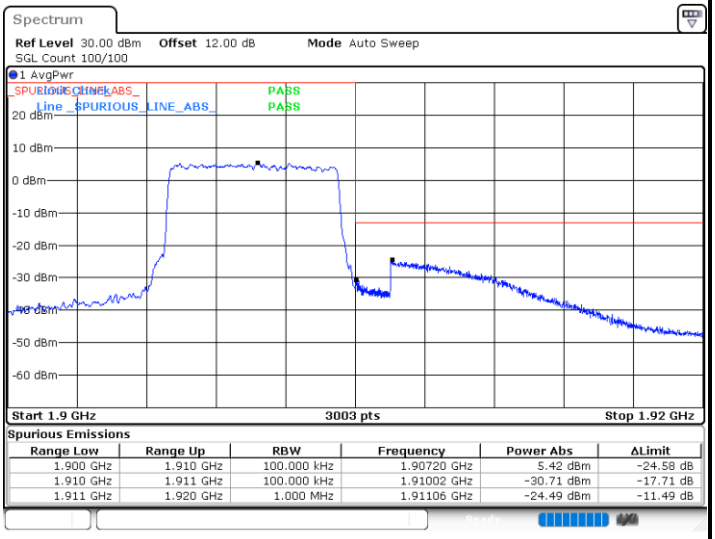


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84890 GHz	-26.10 dBm	-13.10 dB
1.849 GHz	1.850 GHz	100.000 kHz	1.85000 GHz	-31.52 dBm	-18.52 dB
1.850 GHz	1.860 GHz	100.000 kHz	1.85153 GHz	5.16 dBm	-24.84 dB

Date: 21.NOV.2023 15:22:15

Highest Band Edge / 27 RBmax



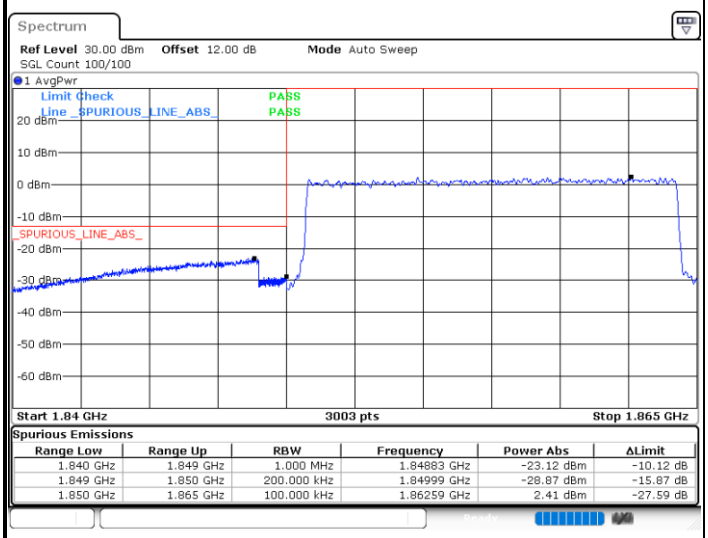
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.900 GHz	1.910 GHz	100.000 kHz	1.90720 GHz	5.42 dBm	-24.58 dB
1.910 GHz	1.911 GHz	100.000 kHz	1.91002 GHz	-30.71 dBm	-17.71 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91106 GHz	-24.49 dBm	-11.49 dB

Date: 21.NOV.2023 15:30:15

LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / Full RB

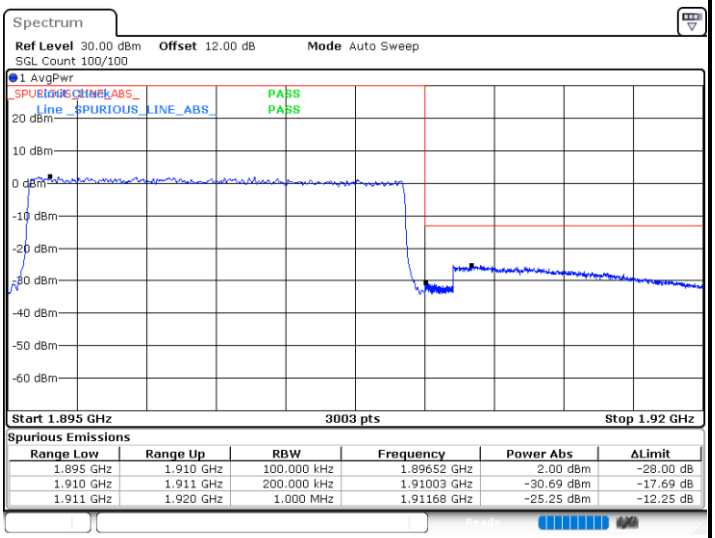


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84883 GHz	-23.12 dBm	-10.12 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84999 GHz	-28.87 dBm	-15.87 dB
1.850 GHz	1.865 GHz	100.000 kHz	1.86259 GHz	2.41 dBm	-27.59 dB

Date: 21.NOV.2023 15:32:09

Highest Band Edge / Full RB



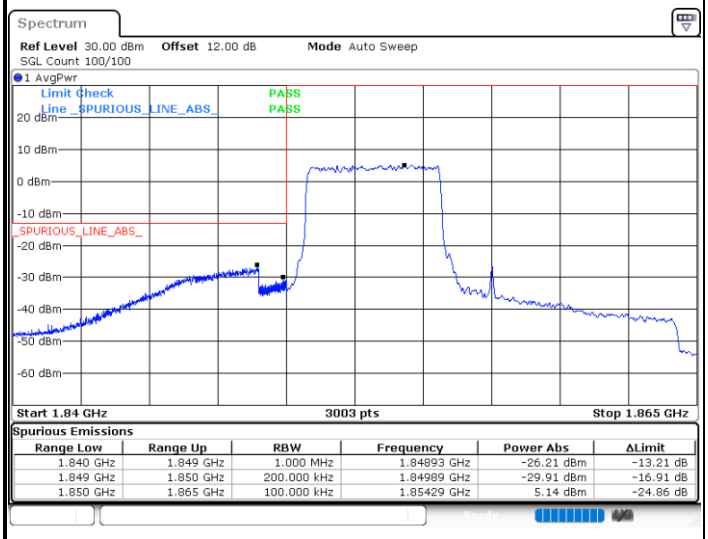
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.895 GHz	1.910 GHz	100.000 kHz	1.89652 GHz	2.00 dBm	-28.00 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91003 GHz	-30.69 dBm	-17.69 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91168 GHz	-25.25 dBm	-12.25 dB

Date: 21.NOV.2023 15:36:24

LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 27 RB0

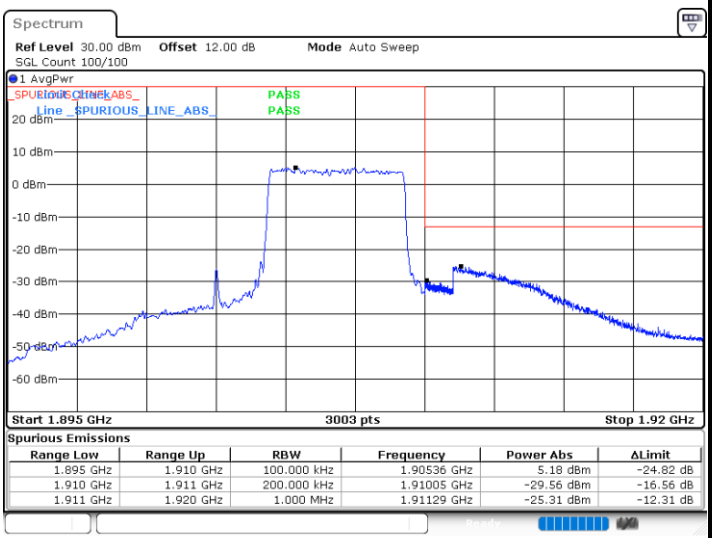


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84893 GHz	-26.21 dBm	-13.21 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84989 GHz	-29.91 dBm	-16.91 dB
1.850 GHz	1.865 GHz	100.000 kHz	1.85429 GHz	5.14 dBm	-24.86 dB

Date: 21.NOV.2023 15:33:25

Highest Band Edge / 27 RBmax



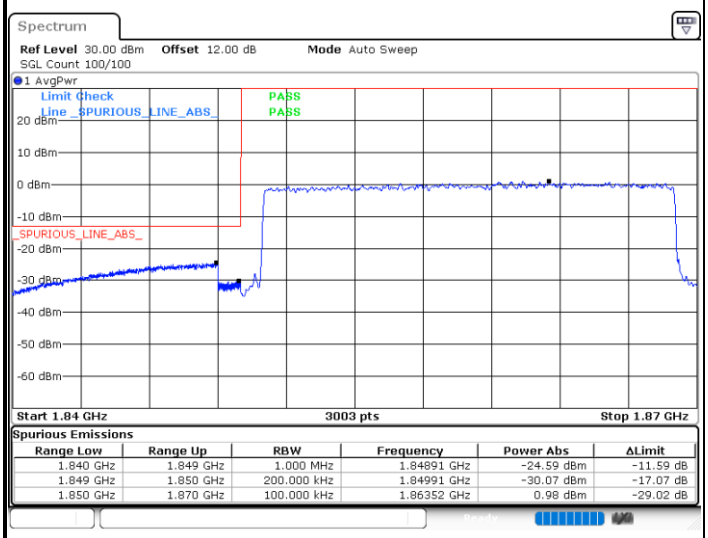
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.895 GHz	1.910 GHz	100.000 kHz	1.90536 GHz	5.18 dBm	-24.82 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91005 GHz	-29.56 dBm	-16.56 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91129 GHz	-25.31 dBm	-12.31 dB

Date: 21.NOV.2023 15:37:40

LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / Full RB

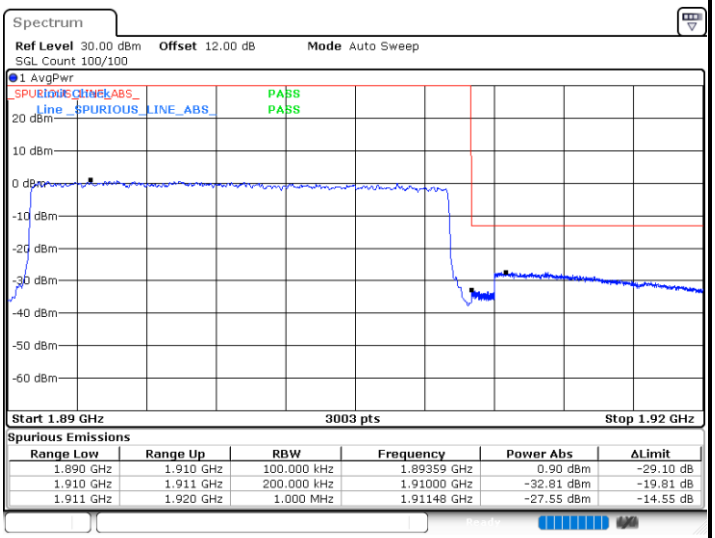


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84891 GHz	-24.59 dBm	-11.59 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84991 GHz	-30.07 dBm	-17.07 dB
1.850 GHz	1.870 GHz	100.000 kHz	1.86352 GHz	0.98 dBm	-29.02 dB

Date: 21.NOV.2023 15:43:11

Highest Band Edge / Full RB



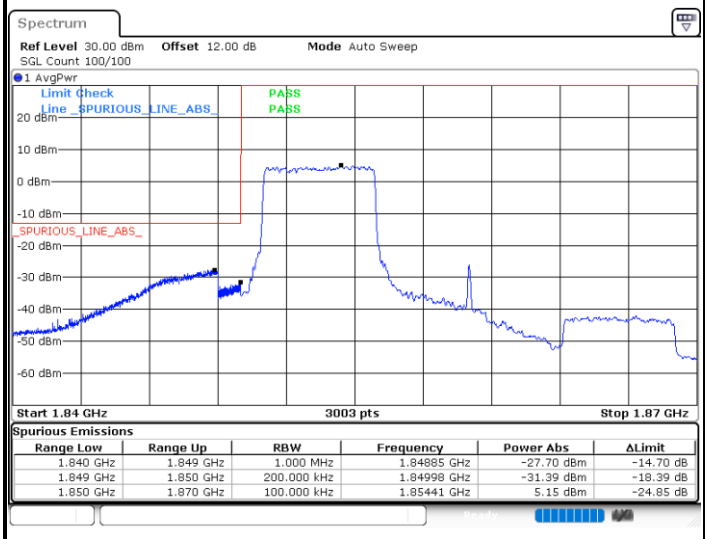
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.890 GHz	1.910 GHz	100.000 kHz	1.89359 GHz	0.90 dBm	-29.10 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91000 GHz	-32.81 dBm	-19.81 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91148 GHz	-27.55 dBm	-14.55 dB

Date: 21.NOV.2023 15:47:27

LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 27 RB0

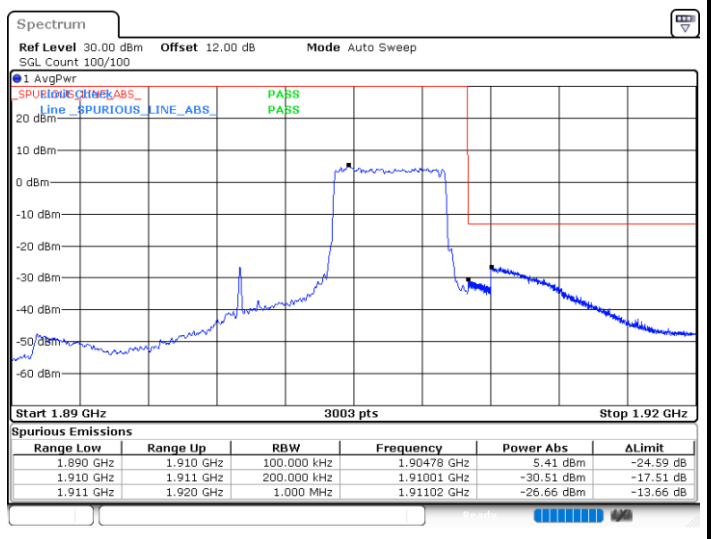


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84885 GHz	-27.70 dBm	-14.70 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84998 GHz	-31.39 dBm	-18.39 dB
1.850 GHz	1.870 GHz	100.000 kHz	1.85441 GHz	5.15 dBm	-24.85 dB

Date: 21.NOV.2023 15:44:28

Highest Band Edge / 27 RBmax



Spurious Emissions

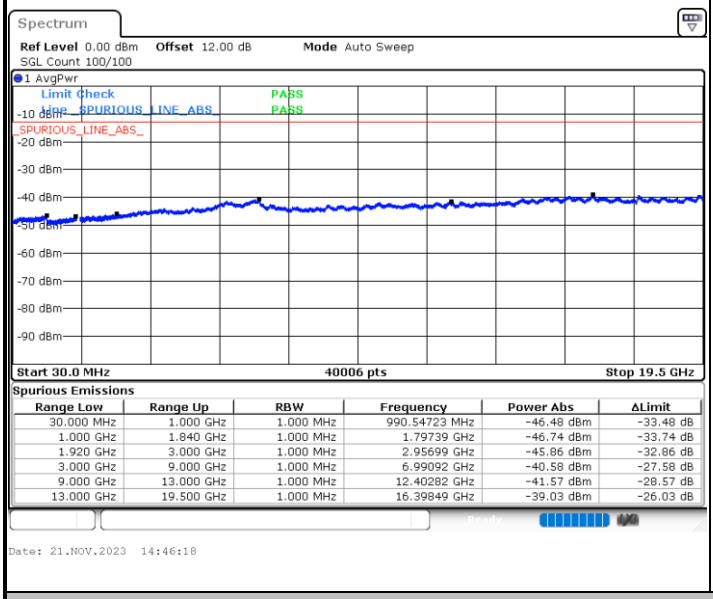
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.890 GHz	1.910 GHz	100.000 kHz	1.90478 GHz	5.41 dBm	-24.59 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91001 GHz	-30.51 dBm	-17.51 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91102 GHz	-26.66 dBm	-13.66 dB

Date: 21.NOV.2023 15:48:44

Conducted Spurious Emission

LTE Band 2 / 1.4MHz

Lowest Channel / QPSK

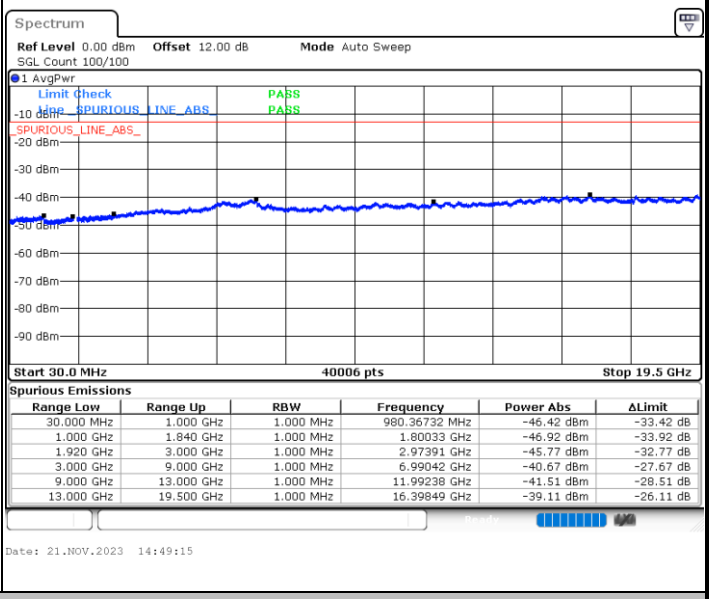


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	990.54723 MHz	-46.48 dBm	-33.48 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79739 GHz	-46.74 dBm	-33.74 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95699 GHz	-45.86 dBm	-32.86 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99092 GHz	-40.58 dBm	-27.58 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.40282 GHz	-41.57 dBm	-28.57 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.39849 GHz	-39.03 dBm	-26.03 dB

Date: 21.NOV.2023 14:46:18

Middle Channel / QPSK

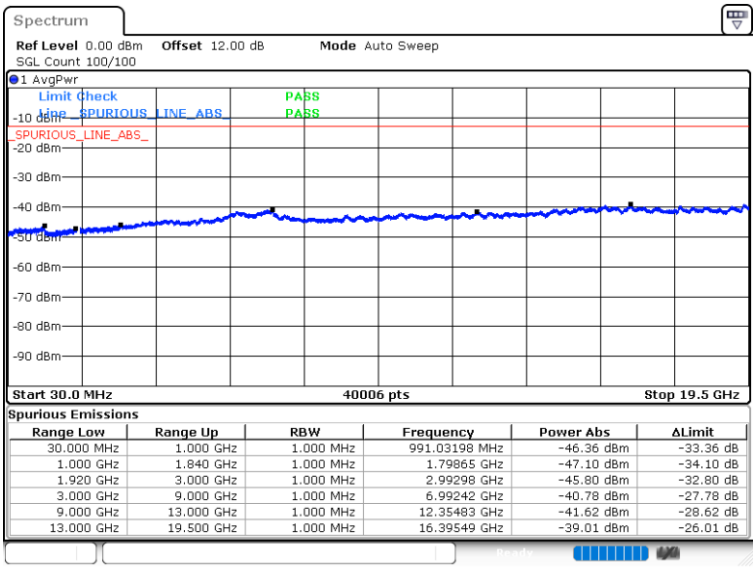


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	980.36732 MHz	-46.42 dBm	-33.42 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80033 GHz	-46.92 dBm	-33.92 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.97391 GHz	-45.77 dBm	-32.77 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99042 GHz	-40.67 dBm	-27.67 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.99238 GHz	-41.51 dBm	-28.51 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.39849 GHz	-39.11 dBm	-26.11 dB

Date: 21.NOV.2023 14:49:15

Highest Channel / QPSK



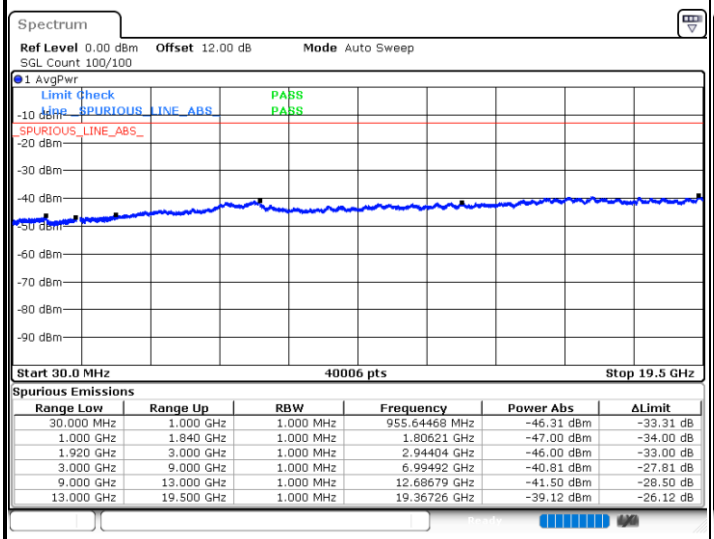
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.03198 MHz	-46.36 dBm	-33.36 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79865 GHz	-47.10 dBm	-34.10 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99298 GHz	-45.80 dBm	-32.80 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99242 GHz	-40.78 dBm	-27.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.35483 GHz	-41.62 dBm	-28.62 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.39549 GHz	-39.01 dBm	-26.01 dB

Date: 21.NOV.2023 14:55:35

LTE Band 2 / 3MHz

Lowest Channel / QPSK

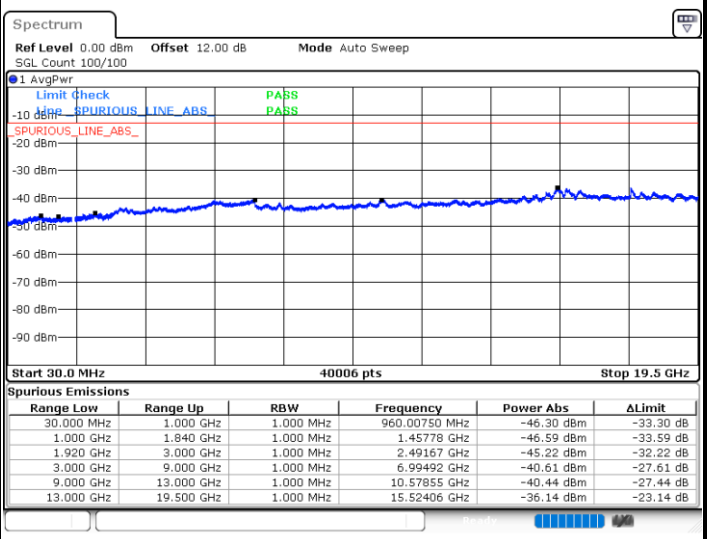


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	955.64468 MHz	-46.31 dBm	-33.31 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80621 GHz	-47.00 dBm	-34.00 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.94404 GHz	-46.00 dBm	-33.00 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99492 GHz	-40.81 dBm	-27.81 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.68679 GHz	-41.50 dBm	-28.50 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36726 GHz	-39.12 dBm	-26.12 dB

Date: 21.NOV.2023 15:01:41

Middle Channel / QPSK

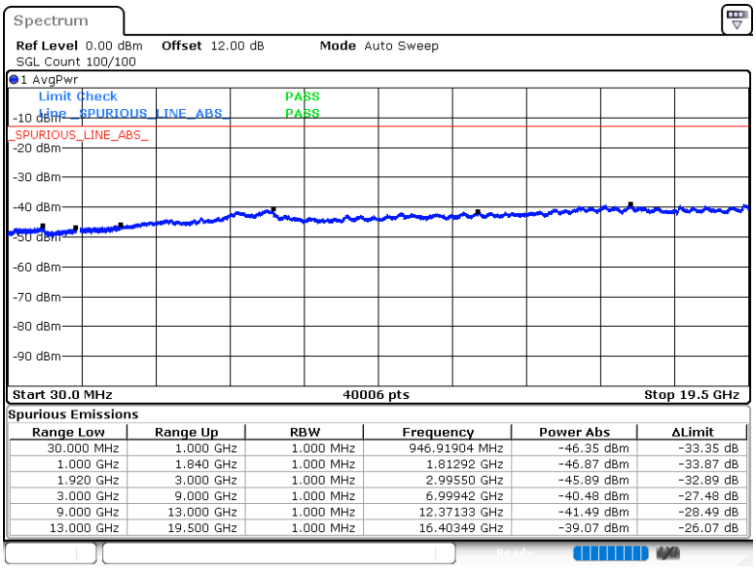


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.00750 MHz	-46.30 dBm	-33.30 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.45778 GHz	-46.59 dBm	-33.59 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.49167 GHz	-45.22 dBm	-32.22 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99492 GHz	-40.61 dBm	-27.61 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57855 GHz	-40.44 dBm	-27.44 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.52406 GHz	-36.14 dBm	-23.14 dB

Date: 23.NOV.2023 15:56:42

Highest Channel / QPSK



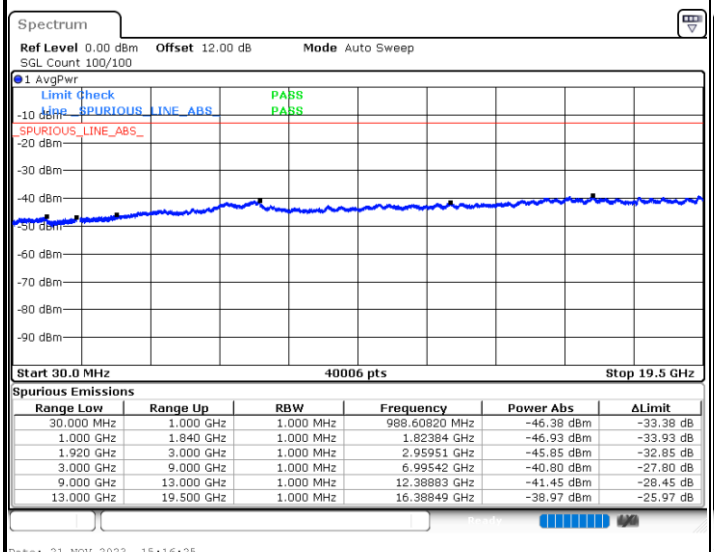
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	946.91904 MHz	-46.35 dBm	-33.35 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81292 GHz	-46.87 dBm	-33.87 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99550 GHz	-45.89 dBm	-32.89 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99942 GHz	-40.48 dBm	-27.48 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.37133 GHz	-41.49 dBm	-28.49 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.40349 GHz	-39.07 dBm	-26.07 dB

Date: 21.NOV.2023 15:04:11

LTE Band 2 / 5MHz

Lowest Channel / QPSK

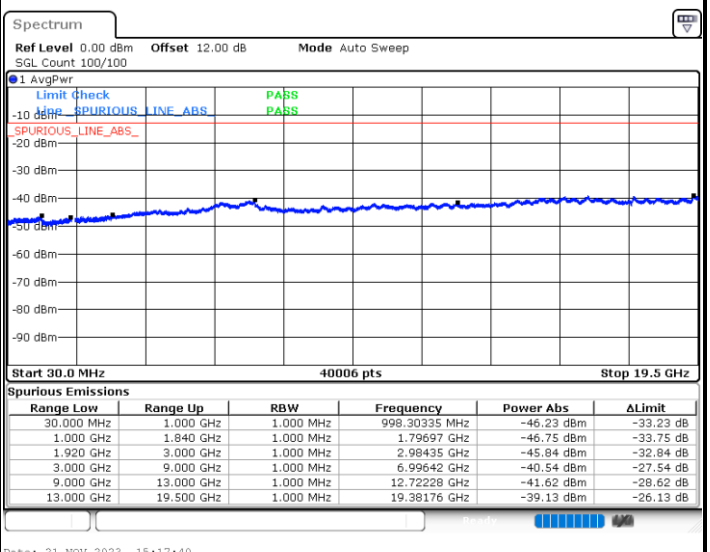


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.60820 MHz	-46.38 dBm	-33.38 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82384 GHz	-46.93 dBm	-33.93 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95951 GHz	-45.85 dBm	-32.85 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99542 GHz	-40.80 dBm	-27.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.38883 GHz	-41.45 dBm	-28.45 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.38849 GHz	-38.97 dBm	-25.97 dB

Date: 21.NOV.2023 15:16:25

Middle Channel / QPSK

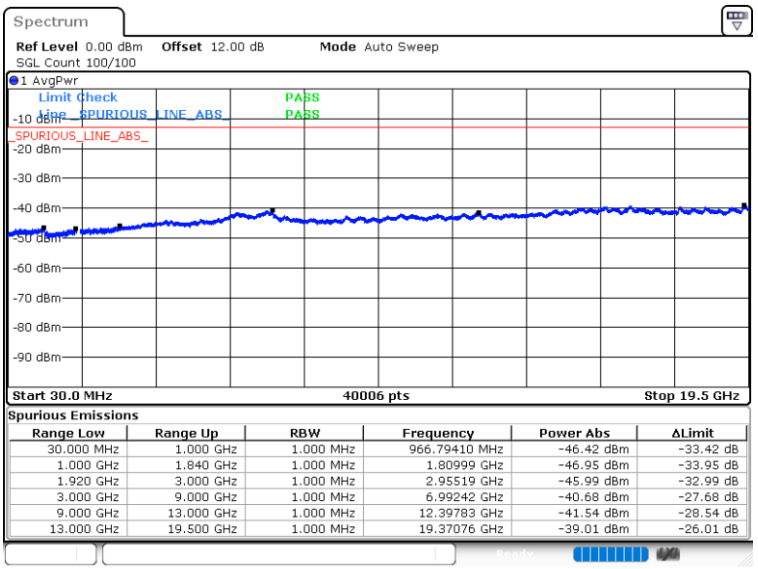


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.30335 MHz	-46.23 dBm	-33.23 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79697 GHz	-46.75 dBm	-33.75 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98435 GHz	-45.84 dBm	-32.84 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99642 GHz	-40.54 dBm	-27.54 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.72228 GHz	-41.62 dBm	-28.62 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.38176 GHz	-39.13 dBm	-26.13 dB

Date: 21.NOV.2023 15:17:40

Highest Channel / QPSK



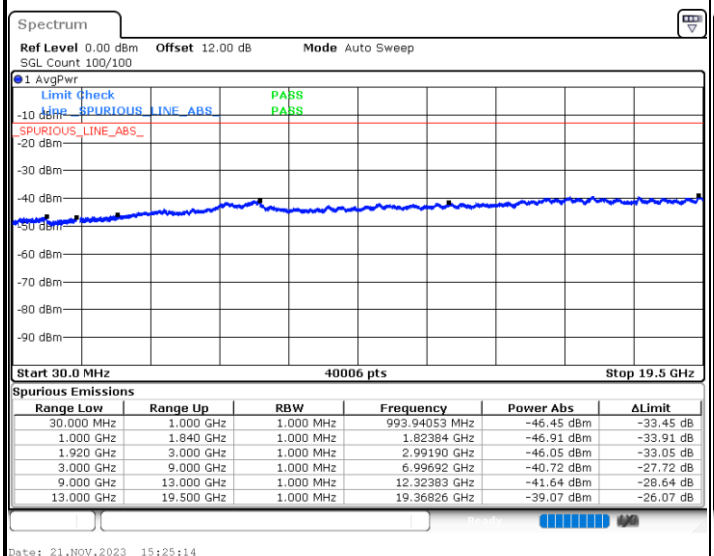
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.79410 MHz	-46.42 dBm	-33.42 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80999 GHz	-46.95 dBm	-33.95 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95519 GHz	-45.99 dBm	-32.99 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99242 GHz	-40.68 dBm	-27.68 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.39783 GHz	-41.54 dBm	-28.54 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.37076 GHz	-39.01 dBm	-26.01 dB

Date: 21.NOV.2023 15:18:55

LTE Band 2 / 10MHz

Lowest Channel / QPSK

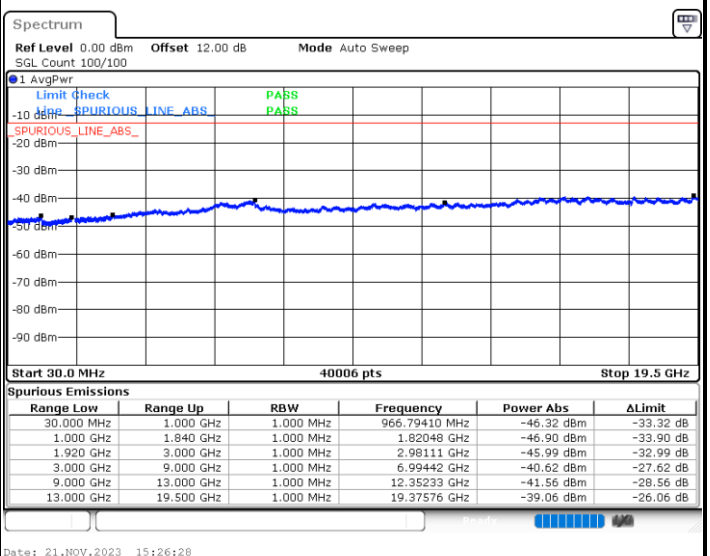


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	993.94053 MHz	-46.45 dBm	-33.45 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82384 GHz	-46.91 dBm	-33.91 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99190 GHz	-46.05 dBm	-33.05 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99692 GHz	-40.72 dBm	-27.72 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.32383 GHz	-41.64 dBm	-28.64 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36826 GHz	-39.07 dBm	-26.07 dB

Date: 21.NOV.2023 15:25:14

Middle Channel / QPSK

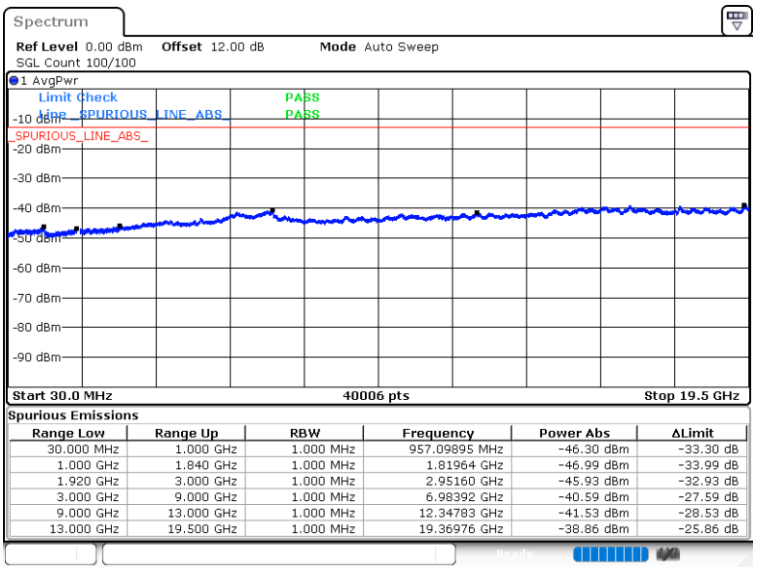


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.79410 MHz	-46.32 dBm	-33.32 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82048 GHz	-46.90 dBm	-33.90 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98111 GHz	-45.99 dBm	-32.99 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99442 GHz	-40.62 dBm	-27.62 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.35233 GHz	-41.56 dBm	-28.56 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.37576 GHz	-39.06 dBm	-26.06 dB

Date: 21.NOV.2023 15:26:28

Highest Channel / QPSK



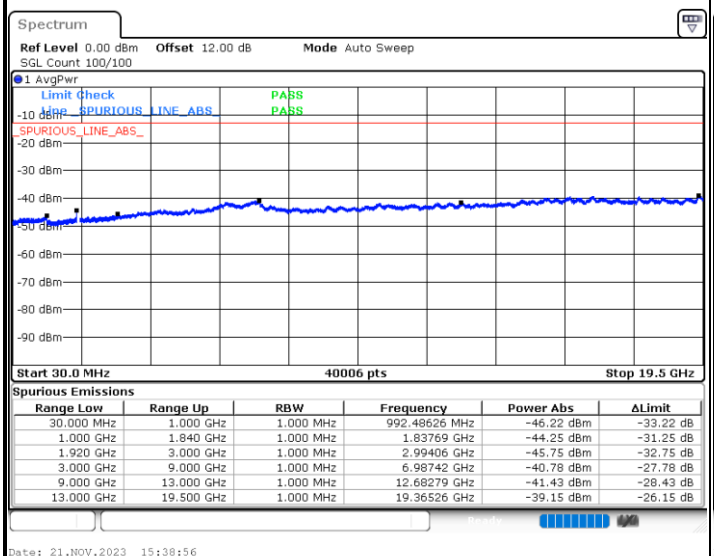
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.09895 MHz	-46.30 dBm	-33.30 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81964 GHz	-46.99 dBm	-33.99 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95160 GHz	-45.93 dBm	-32.93 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98392 GHz	-40.59 dBm	-27.59 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.34783 GHz	-41.53 dBm	-28.53 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36976 GHz	-38.86 dBm	-25.86 dB

Date: 21.NOV.2023 15:27:43

LTE Band 2 / 15MHz

Lowest Channel / QPSK

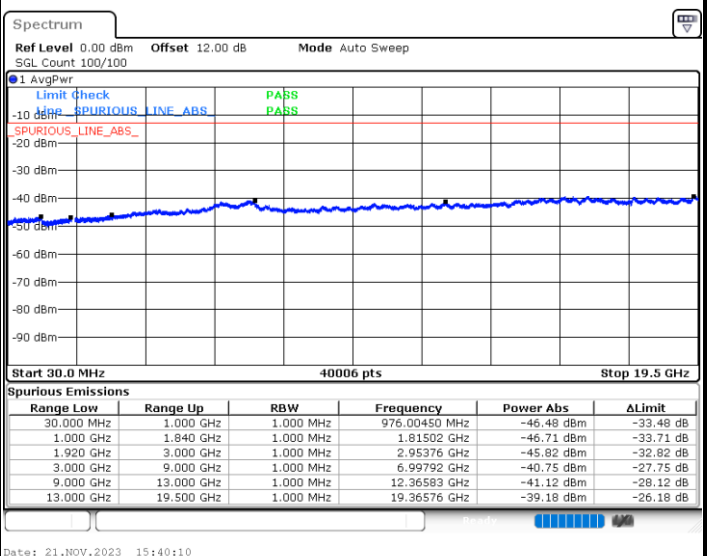


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.48626 MHz	-46.22 dBm	-33.22 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83769 GHz	-44.25 dBm	-31.25 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99406 GHz	-45.75 dBm	-32.75 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98742 GHz	-40.78 dBm	-27.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.68279 GHz	-41.43 dBm	-28.43 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36526 GHz	-39.15 dBm	-26.15 dB

Date: 21.NOV.2023 15:38:56

Middle Channel / QPSK

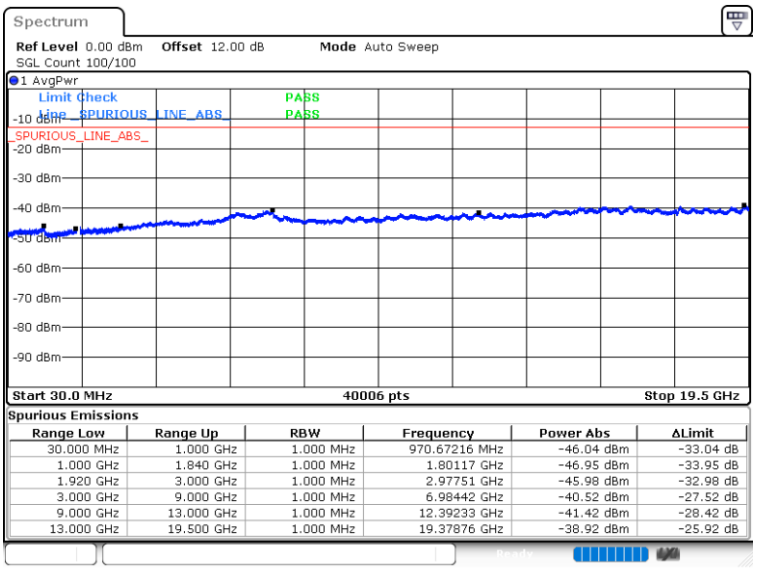


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	976.00450 MHz	-46.48 dBm	-33.48 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81502 GHz	-46.71 dBm	-33.71 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95376 GHz	-45.82 dBm	-32.82 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99792 GHz	-40.75 dBm	-27.75 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.36583 GHz	-41.12 dBm	-28.12 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36576 GHz	-39.18 dBm	-26.18 dB

Date: 21.NOV.2023 15:40:10

Highest Channel / QPSK



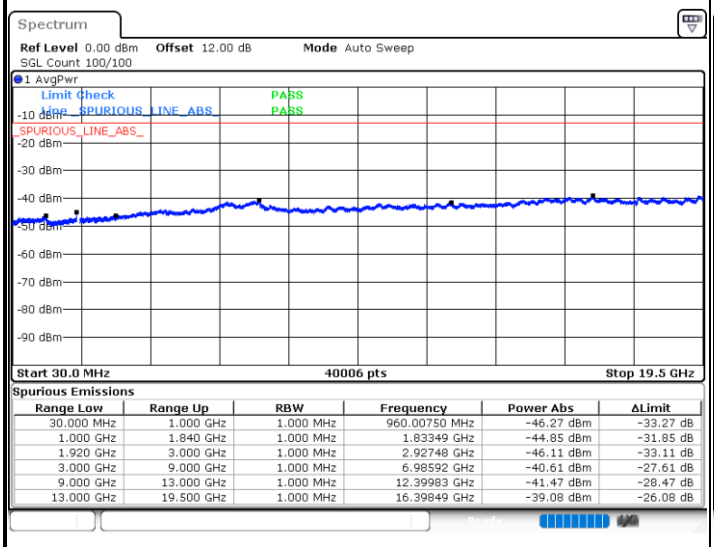
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	970.67216 MHz	-46.04 dBm	-33.04 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80117 GHz	-46.95 dBm	-33.95 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.97751 GHz	-45.98 dBm	-32.98 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98442 GHz	-40.52 dBm	-27.52 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.39233 GHz	-41.42 dBm	-28.42 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.37876 GHz	-38.92 dBm	-25.92 dB

Date: 21.NOV.2023 15:41:25

LTE Band 2 / 20MHz

Lowest Channel / QPSK

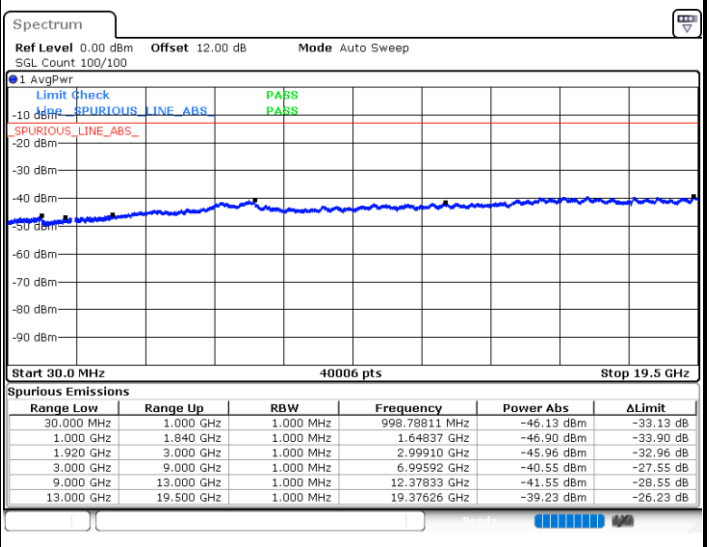


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.00750 MHz	-46.27 dBm	-33.27 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83349 GHz	-44.85 dBm	-31.85 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.92748 GHz	-46.11 dBm	-33.11 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98592 GHz	-40.61 dBm	-27.61 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.39983 GHz	-41.47 dBm	-28.47 dB
13.000 GHz	19.500 GHz	1.000 MHz	16.39849 GHz	-39.08 dBm	-26.08 dB

Date: 21.NOV.2023 15:50:53

Middle Channel / QPSK

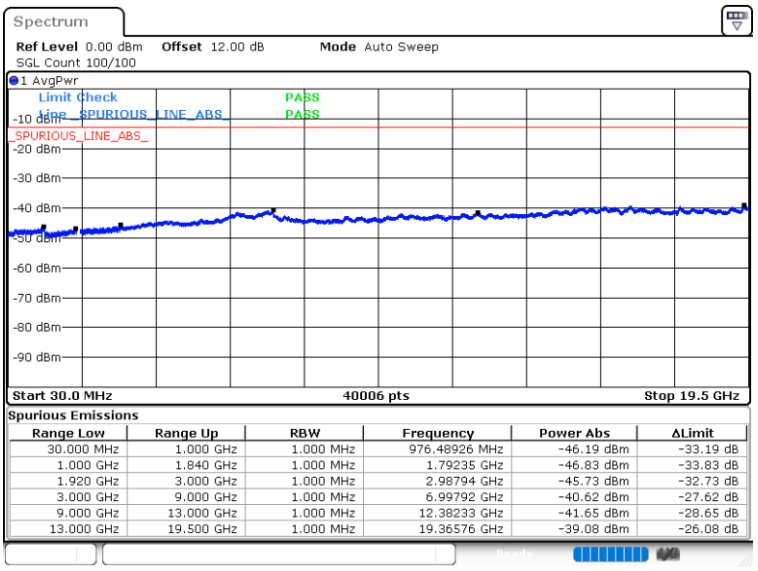


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.78811 MHz	-46.13 dBm	-33.13 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.64837 GHz	-46.90 dBm	-33.90 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99910 GHz	-45.96 dBm	-32.96 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99592 GHz	-40.55 dBm	-27.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.37833 GHz	-41.55 dBm	-28.55 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.37626 GHz	-39.23 dBm	-26.23 dB

Date: 21.NOV.2023 15:52:08

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	976.48926 MHz	-46.19 dBm	-33.19 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79235 GHz	-46.83 dBm	-33.83 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98794 GHz	-45.73 dBm	-32.73 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99792 GHz	-40.62 dBm	-27.62 dB
9.000 GHz	13.000 GHz	1.000 MHz	12.38233 GHz	-41.65 dBm	-28.65 dB
13.000 GHz	19.500 GHz	1.000 MHz	19.36576 GHz	-39.08 dBm	-26.08 dB

Date: 21.NOV.2023 15:53:22

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
35	Normal Voltage	0.0009	PASS
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0079	
0	Normal Voltage	0.0012	
20	Maximum Voltage	0.0035	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0030	

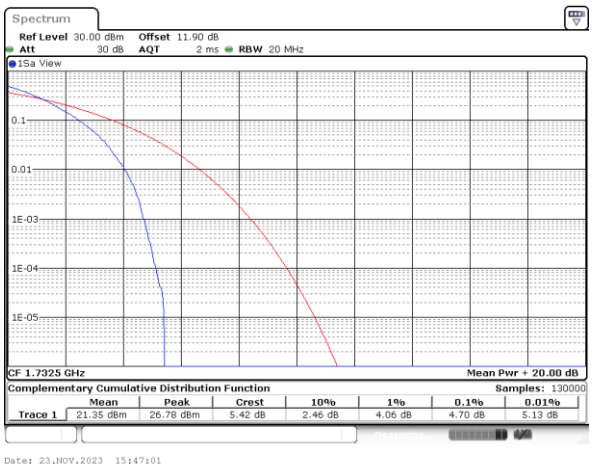
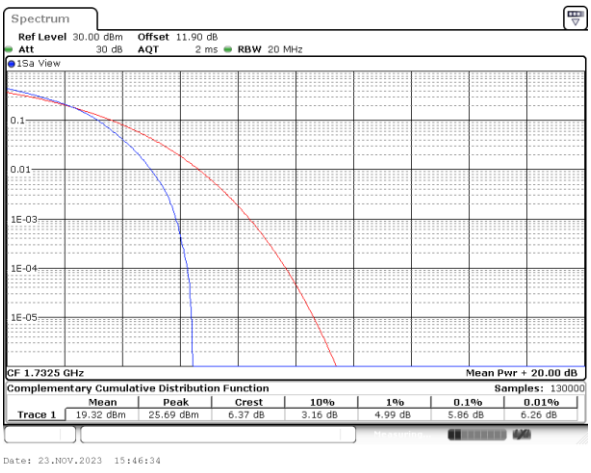
Note:

1. Normal Voltage = 3.88 V.；Battery End Point (BEP) = 3.6 V.；Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 4

Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27 RB	Result
Middle CH	4.70	5.86	PASS

LTE Band 4 / 20MHz / QPSK	LTE Band 4 / 20MHz / 16QAM
Middle Channel / Full RB	Middle Channel / 27 RB0
	

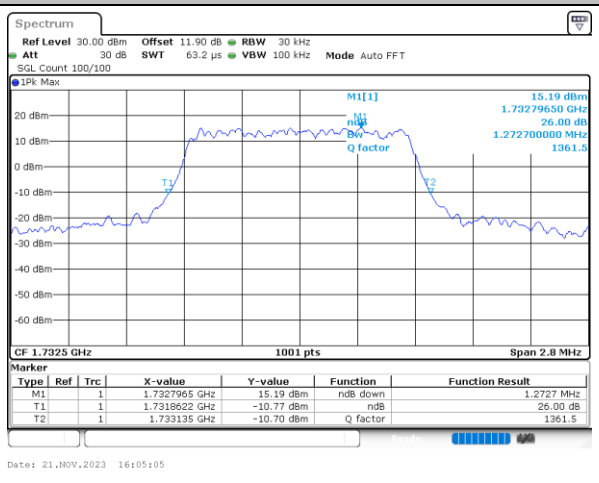
26dB Bandwidth

Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.27	1.28	3.04	2.96	4.93	4.98	9.71	5.67	14.36	5.69	18.82	5.36

LTE Band 4

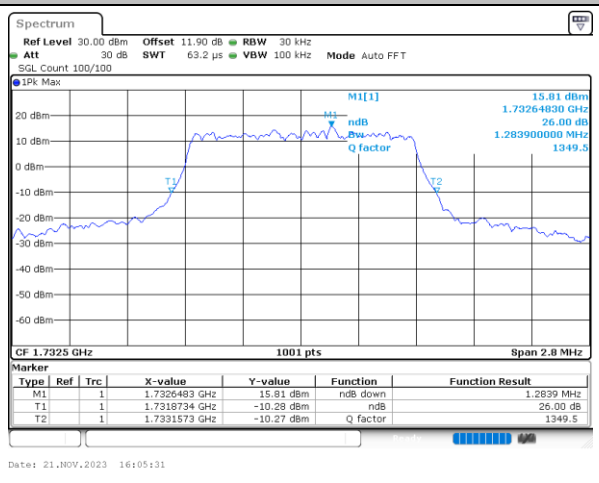
Middle Channel / 1.4MHz / QPSK

Middle Channel / Full RB



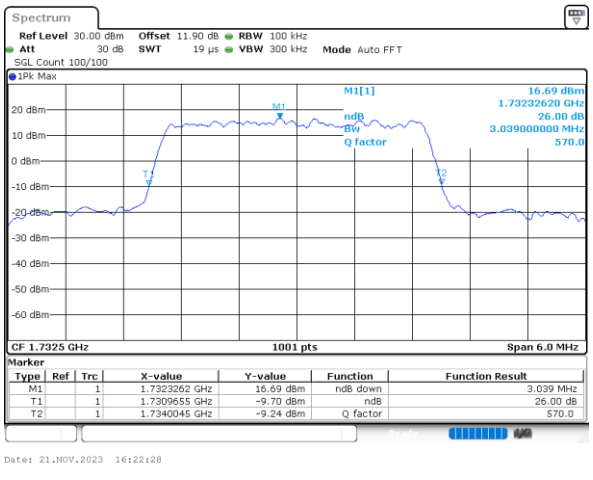
Middle Channel / 1.4MHz / 16QAM

Middle Channel / Full RB



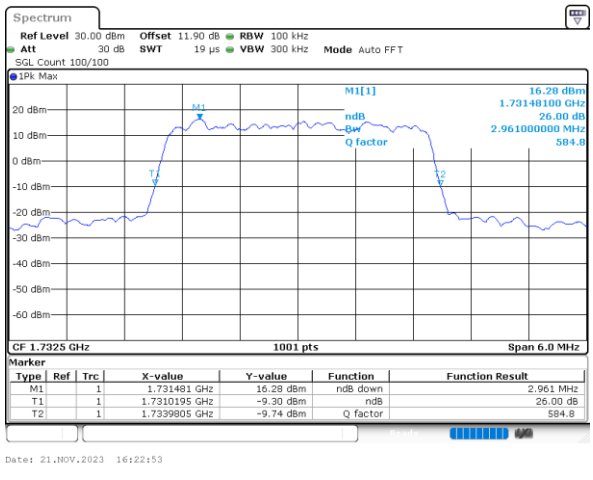
Middle Channel / 3MHz / QPSK

Middle Channel / Full RB

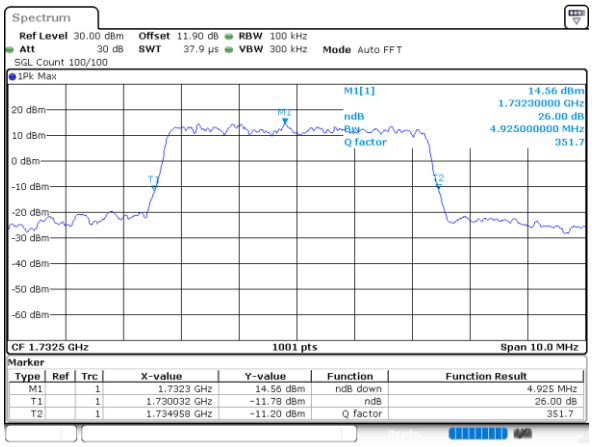


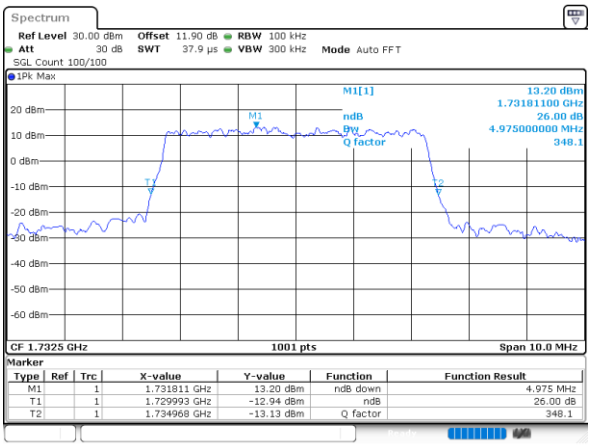
Middle Channel / 3MHz / 16QAM

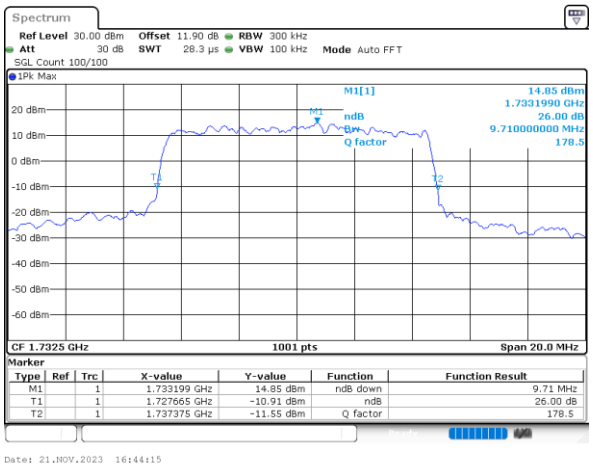
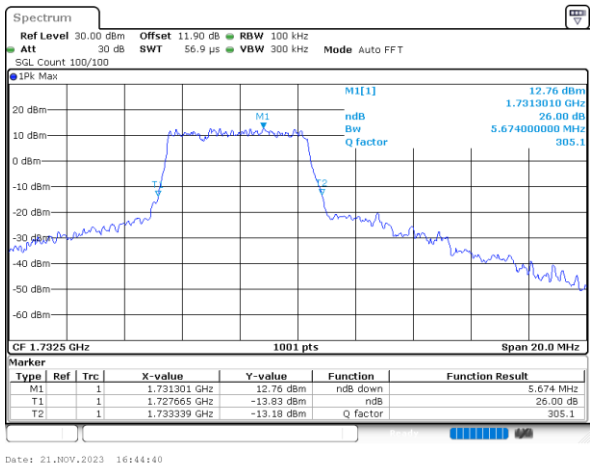
Middle Channel / Full RB



LTE Band 4	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / Full RB**





LTE Band 4	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
Middle Channel / Full RB	**Middle Channel / 27 RB0**