



FCC RF Test Report

APPLICANT : Rolling Wireless S.à r.l.
EQUIPMENT : Module
BRAND NAME : Rolling Wireless
MODEL NAME : RN932N
FCC ID : 2AX2URN932N
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Mar. 06, 2024 ~ Mar. 10, 2024

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

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen)

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

People's Republic of China



TABLE OF CONTENTS

REVISION HISTORY	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Product Feature of Equipment Under Test	5
1.4 Product Specification of Equipment Under Test	6
1.5 Modification of EUT	6
1.6 Maximum Conducted Power and Emission Designator	7
1.7 Testing Location	10
1.8 Test Software	10
1.9 Applicable Standards	11
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	12
2.1 Test Mode	12
2.2 Connection Diagram of Test System	15
2.3 Support Unit used in test configuration and system	15
2.4 Measurement Results Explanation Example	15
2.5 Frequency List of Low/Middle/High Channels	16
3 CONDUCTED TEST ITEMS	22
3.1 Measuring Instruments	22
3.2 Test Setup	22
3.3 Test Result of Conducted Test	22
3.4 Conducted Output Power and ERP/EIRP	23
3.5 Peak-to-Average Ratio	24
3.6 Occupied Bandwidth	25
3.7 Conducted Band Edge	26
3.8 Conducted Spurious Emission	27
3.9 Frequency Stability	28
4 RADIATED TEST ITEMS	29
4.1 Measuring Instruments	29
4.2 Test Setup	29
4.3 Test Result of Radiated Test	30
4.4 Radiated Spurious Emission	31
5 LIST OF MEASURING EQUIPMENT	32
6 MEASUREMENT UNCERTAINTY	33
APPENDIX A. TEST RESULTS OF CONDUCTED TEST	
APPENDIX B. TEST RESULTS OF RADIATED TEST	
APPENDIX C. TEST SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG420801B	Rev. 01	Initial issue of report	Apr. 15, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power (Band 5)	ERP < 7 Watt	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 41.25 dB at 6944.00 MHz

Conformity Assessment Condition:

- 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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Rolling Wireless S.à r.l.

15, rue Edward Steichen, 2540 Luxembourg

1.2 Manufacturer

Rolling Wireless S.à r.l.

15, rue Edward Steichen, 2540 Luxembourg

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Module
Brand Name	Rolling Wireless
Model Name	RN932N
FCC ID	2AX2URN932N
IMEI Code	Conducted: 359491640000061 Radiation: 359491640000038
HW Version	1
SW Version	AFPQ52XA_00.12.09.00
EUT Stage	Identical Prototype

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

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 66 : 2110 MHz~ 2200 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.33 dBm LTE CA_2C : 23.38 dBm LTE Band 4 : 23.33 dBm LTE Band 5 : 23.35 dBm LTE CA_5B : 23.45 dBm LTE Band 66 : 23.77 dBm LTE CA_66B : 23.38 dBm LTE CA_66C : 23.39 dBm
Antenna Type	Glue Stick Antenna
Antenna Gain	LTE Band 2 : 4.1 dBi LTE Band 4 : 5.0 dBi LTE Band 5 : -0.5 dBi LTE Band 66 : 5.0 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

1.5 Modification of EUT

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



1.6 Maximum Conducted Power and Emission Designator

LTE Band 2		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1909.3	0.2028	1M09G7D	0.1600	1M09W7D
3	1851.5 ~ 1908.5	0.1995	2M72G7D	0.1641	2M72W7D
5	1852.5 ~ 1907.5	0.2037	4M49G7D	0.1633	4M53W7D
10	1855.0 ~ 1905.0	0.2046	9M11G7D	0.1637	9M01W7D
15	1857.5 ~ 1902.5	0.2099	13M5G7D	0.1633	13M5W7D
20	1860.0 ~ 1900.0	0.2153	18M0G7D	0.1611	17M9W7D
LTE Band 4		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1754.3	0.1928	1M09G7D	0.1552	1M10W7D
3	1711.5 ~ 1753.5	0.2138	2M72G7D	0.1932	2M73W7D
5	1712.5 ~ 1752.5	0.2138	4M48G7D	0.1858	4M50W7D
10	1715.0 ~ 1750.0	0.2138	9M07G7D	0.1923	9M07W7D
15	1717.5 ~ 1747.5	0.2143	13M6G7D	0.1854	13M5W7D
20	1720.0 ~ 1745.0	0.2153	17M9G7D	0.1945	17M8W7D
LTE Band 5		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.2099	1M10G7D	0.1816	1M11W7D
3	825.5 ~ 847.5	0.2065	2M72G7D	0.1854	2M72W7D
5	826.5 ~ 846.5	0.2113	4M49G7D	0.1774	4M48W7D
10	829.0 ~ 844.0	0.2163	9M03G7D	0.1774	9M01W7D



LTE Band 66		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1779.3	0.2028	1M09G7D	0.1600	1M10W7D
3	1711.5 ~ 1778.5	0.2275	2M72G7D	0.1995	2M73W7D
5	1712.5 ~ 1777.5	0.2296	4M48G7D	0.1995	4M50W7D
10	1715.0 ~ 1775.0	0.2208	9M07G7D	0.2014	9M07W7D
15	1717.5 ~ 1772.5	0.2312	13M6G7D	0.1995	13M5W7D
20	1720.0 ~ 1770.0	0.2382	17M9G7D	0.2037	17M8W7D

LTE Band CA_2C		QPSK		16QAM/64QAM/256QAM	
BW (MHz)		Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5MHz+20MHz		0.2118	23M0G7D	0.1811	23M2W7D
10MHz+15MHz		0.2104	23M3G7D	0.1795	23M3W7D
10MHz+20MHz		0.2118	27M8G7D	0.1803	27M9W7D
15MHz+10MHz		0.2128	23M5G7D	0.1799	23M4W7D
15MHz+15MHz		0.2056	28M6G7D	0.1811	28M5W7D
15MHz+20MHz		0.2089	32M5G7D	0.1845	32M5W7D
20MHz+5MHz		0.2080	23M3G7D	0.1799	23M3W7D
20MHz+10MHz		0.2099	27M9G7D	0.1841	28M1W7D
20MHz+15MHz		0.2070	32M7G7D	0.1824	32M7W7D
20MHz+20MHz		0.2178	37M8G7D	0.1923	37M7W7D

LTE Band CA_5B		QPSK		16QAM/64QAM/256QAM	
BW (MHz)		Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
3MHz+5MHz		0.2158	7M56G7D	0.1849	7M51W7D
5MHz+3MHz		0.2153	7M54G7D	0.1841	7M59W7D
5MHz+10MHz		0.2163	13M8G7D	0.1832	13M9W7D
10MHz+5MHz		0.2153	13M9G7D	0.1820	13M9W7D
10MHz+10MHz		0.2213	18M8G7D	0.1905	18M8W7D



LTE Band CA_66B	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5MHz+5MHz	0.2138	9M33G7D	0.1854	9M37W7D
5MHz+10MHz	0.2148	13M9G7D	0.1862	13M9W7D
5MHz+15MHz	0.2163	18M1G7D	0.1832	18M2W7D
10MHz+5MHz	0.2158	13M9G7D	0.1849	13M9W7D
10MHz+10MHz	0.2178	18M7G7D	0.1884	18M7W7D
15MHz+5MHz	0.2143	18M1G7D	0.1849	18M2W7D

LTE Band CA_66C	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5MHz+20MHz	0.2118	23M4G7D	0.1795	23M1W7D
10MHz+15MHz	0.2158	23M4G7D	0.1807	23M1W7D
10MHz+20MHz	0.2168	28M1G7D	0.1824	28M1W7D
15MHz+10MHz	0.2143	23M4G7D	0.1799	23M5W7D
15MHz+15MHz	0.2143	28M5G7D	0.1799	28M5W7D
15MHz+20MHz	0.2138	32M9G7D	0.1811	32M6W7D
20MHz+5MHz	0.2148	23M3G7D	0.1782	23M4W7D
20MHz+10MHz	0.2153	27M9G7D	0.1803	28M1W7D
20MHz+15MHz	0.2143	32M9G7D	0.1832	32M7W7D
20MHz+20MHz	0.2183	37M5G7D	0.1897	37M6W7D

Note:

1. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
2. All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.



1.7 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ	CN1256	421272

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24



1.9 Applicable Standards

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

- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



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, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	2						v	v	v	v				v		v	
	5				v	-	-	v	v	v				v		v	
	66						v	v	v	v				v		v	
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v					v		v	
	5	v	v	v	v	-	-	v	v					v		v	
	66	v	v	v	v	v	v	v	v					v		v	
Conducted Band Edge	2	v	v	v	v	v	v	v	v	v		v		v	v		v
	5	v	v	v	v	-	-	v	v	v		v		v	v		v
	66	v	v	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	2	v	v	v	v	v	v	v				v			v	v	v
	5	v	v	v	v	-	-	v				v			v	v	v
	66	v	v	v	v	v	v	v				v			v	v	v
Frequency Stability	2				v			v						v		v	
	5				v	-	-	v						v		v	
	66				v			v						v		v	
E.R.P / E.I.R.P	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	2	Worst Case														v	
	5	Worst Case														v	
	66	Worst Case														v	



Note

1. The mark "v" means that this configuration is chosen for testing
2. The mark "-" means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.
4. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.

Test Items	Band	Bandwidth (MHz)										Modulation			RB #			Test Channel				
		20+20	20+15	20+10	20+5	15+20	15+15	15+10	10+20	10+15	5+20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H	
Max. Output Power	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v				v	v	v
26dB and 99% Bandwidth	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v						v		v	
Conducted Band Edge	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	2C_CA	v	v	v	v	v	v	v	v	v	v	v					v			v	v	v
E.I.R.P.	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2C_CA	Worst Case																			v	
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 3. All test items are based on engineering evaluation. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																					

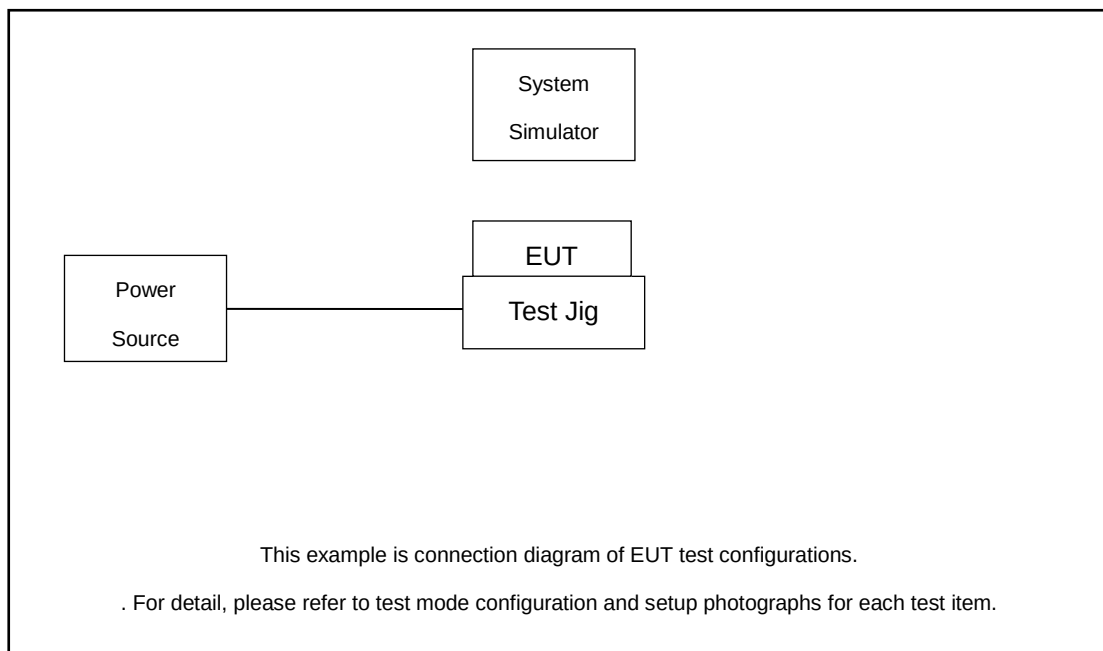
Test Items	Band	Bandwidth (MHz)								Modulation				RB #			Test Channel		
		10+10	15+5	5+15	10+5	5+10	5+5	5+3	3+5	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v			v	v	v
	66B_CA	v	v	v	v	v	v	-	-	v	v	v	v	v			v	v	v
26dB and 99% Bandwidth	5B_CA	v	-	-	v	v	-	v	v	v	v					v		v	
	66B_CA	v	v	v	v	v	v	-	-	v	v					v		v	
Conducted Band Edge	5B_CA	v	-	-	v	v	-	v	v	v	v	v		v		v	v		v
	66B_CA	v	v	v	v	v	v	-	-	v	v	v		v		v	v		v
Conducted Spurious Emission	5B_CA	v	-	-	v	v	-	v	v	v				v			v	v	v
	66B_CA	v	v	v	v	v	v	-	-	v				v			v	v	v
E.I.R.P.	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v			v	v	v
	66B_CA	v	v	v	v	v	v	-	-	v	v	v	v	v			v	v	v
Radiated	5B_CA	Worst Case																v	



Spurious Emission	66B_CA	Worst Case		v	
Note	1. The mark "v" means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation. 5. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power				

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	20+10	20+5	15+20	15+15	15+10	10+20	10+15	5+20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
26dB and 99% Bandwidth	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v					v		v	
Conducted Band Edge	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	66C_CA	v	v	v	v	v	v	v	v	v	v	v				v			v	v	v
E.I.R.P.	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	66C_CA	Worst Case																		v	
Note	1. The mark “v” means that this configuration is chosen for testing 2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 3. All test items are based on engineering evaluation. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																				

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	Base Station	Anritsu	MT8820C	Fcc DoC	N/A	Shielded, 1.5m
3.	Test Jig	N/A	N/A	N/A	N/A	N/A
4.	Adapter	N/A	N/A	N/A	N/A	N/A
5.	Antenna	N/A	N/A	N/A	N/A	N/A

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.5 dB and 10dB attenuator.

Example :

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

$$= 4.5 + 10 = 14.5 \text{ (dB)}$$

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 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 2C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 20	PCC	Channel	18633	18808	18983
		Frequency	1853.3	1870.8	1888.3
	SCC	Channel	18750	18925	19100
		Frequency	1865	1882.5	1900
20 + 5	PCC	Channel	18700	18875	19050
		Frequency	1860	1877.5	1895
	SCC	Channel	18817	18992	19167
		Frequency	1871.7	1889.2	1906.7
10 + 20	PCC	Channel	18655	18806	18956
		Frequency	1855.5	1870.6	1885.6
	SCC	Channel	18799	18950	19100
		Frequency	1869.9	1885	1900
20 + 10	PCC	Channel	18700	18851	19001
		Frequency	1860	1875.1	1890.1
	SCC	Channel	18844	18995	19145
		Frequency	1874.4	1889.5	1904.5
10 + 15	PCC	Channel	18653	18829	19005
		Frequency	1855.3	1872.9	1890.5
	SCC	Channel	18773	18949	19125
		Frequency	1867.3	1884.9	1902.5
15 + 10	PCC	Channel	18675	18851	19027
		Frequency	1857.5	1875.1	1892.7
	SCC	Channel	18795	18971	19147
		Frequency	1869.5	1887.1	1904.7
15 + 15	PCC	Channel	18675	18825	18975
		Frequency	1857.5	1872.5	1887.5
	SCC	Channel	18825	18975	19125
		Frequency	1872.5	1887.5	1902.5
15 + 20	PCC	Channel	18678	18803	18929
		Frequency	1857.8	1870.3	1882.9
	SCC	Channel	18849	18974	19100
		Frequency	1874.9	1887.4	1900
20 + 15	PCC	Channel	18700	18826	18951
		Frequency	1860	1872.6	1885.1

20 + 20	SCC	Channel	18871	18997	19122
		Frequency	1877.1	1889.7	1902.2
	PCC	Channel	18700	18801	18902
		Frequency	1860	1870.1	1880.2
	SCC	Channel	18898	18999	19100
		Frequency	1879.8	1889.9	1900

LTE Band 5B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
3 + 5	PCC	Channel	20416	20501	20586
		Frequency	825.6	834.1	842.6
	SCC	Channel	20455	20540	20625
		Frequency	829.5	838.0	846.5
5 + 3	PCC	Channel	20425	20510	20595
		Frequency	826.5	835.0	843.5
	SCC	Channel	20464	20549	20634
		Frequency	830.4	838.9	847.4
5 + 10	PCC	Channel	20428	20478	20528
		Frequency	826.8	831.8	836.8
	SCC	Channel	20500	20550	20600
		Frequency	834	839	844
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829	834	839
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844



LTE Band 66C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
10 + 15	PCC	Channel	132025	132351	132477
		Frequency	1715.3	1747.9	1760.5
	SCC	Channel	132145	132471	132597
		Frequency	1727.3	1759.9	1772.5
15 + 10	PCC	Channel	132047	132373	132499
		Frequency	1717.5	1750.1	1762.7
	SCC	Channel	132167	132493	132619
		Frequency	1729.5	1762.1	1774.7
10 + 20	PCC	Channel	132027	132328	132428
		Frequency	1715.5	1745.6	1755.6
	SCC	Channel	132171	132472	132572
		Frequency	1729.9	1760	1770
20 + 10	PCC	Channel	132072	132373	132473
		Frequency	1720	1750.1	1760.1
	SCC	Channel	132216	132517	132617
		Frequency	1734.4	1764.5	1774.5
15 + 15	PCC	Channel	132047	132347	132447
		Frequency	1717.5	1747.5	1757.5
	SCC	Channel	132197	132497	132597
		Frequency	1732.5	1762.5	1772.5
15 + 20	PCC	Channel	132050	132325	132401
		Frequency	1717.8	1745.3	1752.9
	SCC	Channel	132221	132496	132572
		Frequency	1734.9	1762.4	1770
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720	1747.6	1755.1
	SCC	Channel	132243	132519	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720	1752.5	1765
	SCC	Channel	132189	132514	132639
		Frequency	1731.7	1764.2	1776.7
5 + 20	PCC	Channel	132005	132330	132455



20 + 20	SCC	Frequency	1713.3	1745.8	1758.3
		Channel	132122	132447	132572
	PCC	Frequency	1725	1757.5	1770
		Channel	132072	132323	132374
	SCC	Frequency	1720	1745.1	1750.2
		Channel	132270	132521	132572
	SCC	Frequency	1739.8	1764.9	1770
		Channel	132270	132521	132572

LTE Band 66B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 5	PCC	Channel	131997	132398	132599
		Frequency	1712.5	1752.6	1772.7
	SCC	Channel	132045	132446	132647
		Frequency	1717.3	1757.4	1777.5
5 + 10	PCC	Channel	132000	132375	132550
		Frequency	1712.8	1750.3	1767.8
	SCC	Channel	132072	132447	132622
		Frequency	1720	1757.5	1775
10 + 5	PCC	Channel	132022	132397	132572
		Frequency	1715	1752.5	1770
	SCC	Channel	132094	132469	132644
		Frequency	1722.2	1759.7	1777.2
5 + 15	PCC	Channel	132002	132353	132504
		Frequency	1713	1748.1	1763.2
	SCC	Channel	132095	132446	132597
		Frequency	1722.3	1757.4	1772.5
15 + 5	PCC	Channel	132047	132398	132549
		Frequency	1717.5	1752.6	1767.7
	SCC	Channel	132140	132491	132642
		Frequency	1726.8	1761.9	1777
10 + 10	PCC	Channel	132022	132373	132523
		Frequency	1715	1750.1	1765.1
	SCC	Channel	132121	132472	132622
		Frequency	1724.9	1760	1775

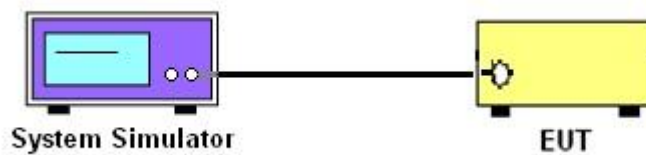
3 Conducted Test Items

3.1 Measuring Instruments

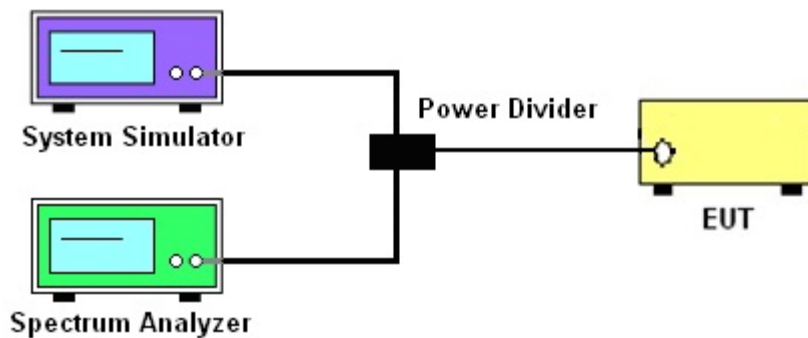
See list of measuring instruments of this test report.

3.2 Test Setup

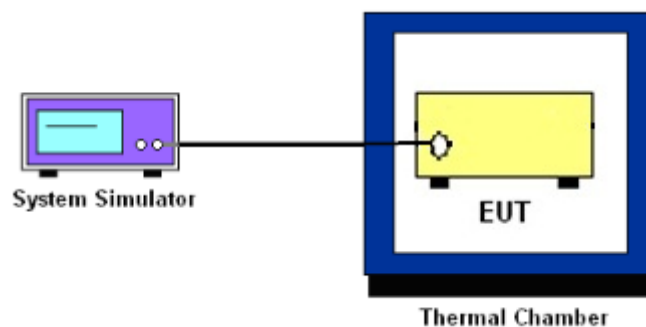
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

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

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5.

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

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ 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 $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ 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 (h)

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

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

The limit line is derived from $43 + 10\log(P)\text{dB}$ below the transmitter power $P(\text{Watts})$
 $= P(\text{W}) - [43 + 10\log(P)] (\text{dB})$
 $= [30 + 10\log(P)] (\text{dBm}) - [43 + 10\log(P)] (\text{dB}) = -13\text{dBm}.$

9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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

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

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

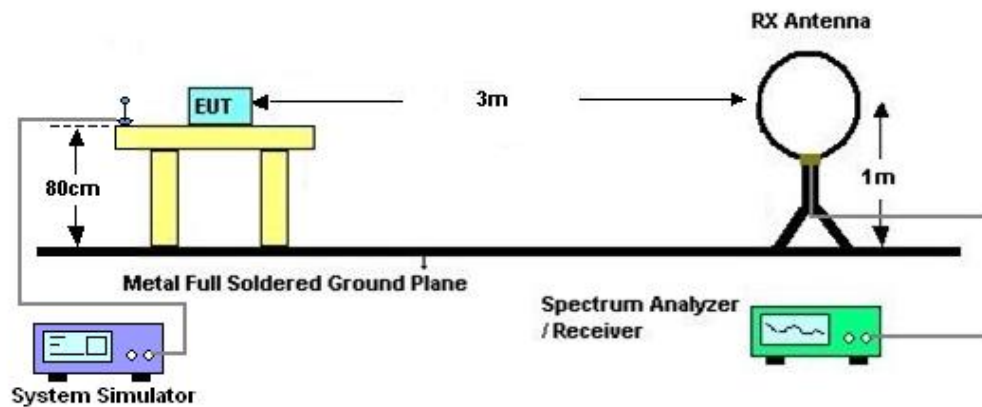
4 Radiated Test Items

4.1 Measuring Instruments

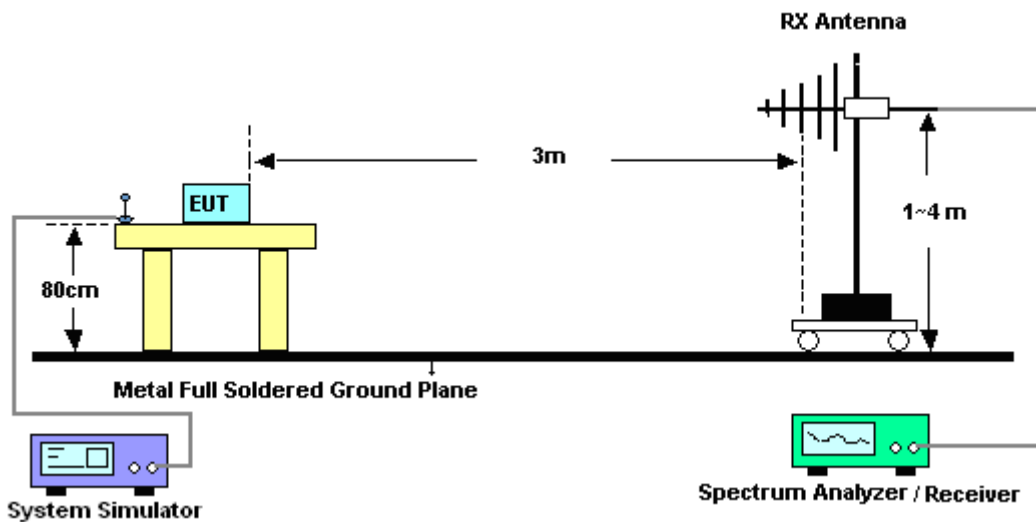
See list of measuring instruments of this test report.

4.2 Test Setup

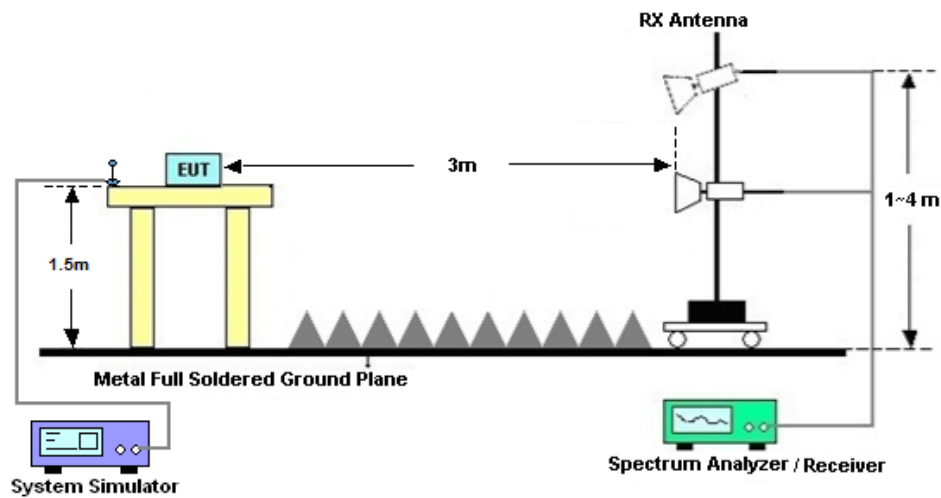
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$= P(W) - [43 + 10\log(P)] \text{ (dB)}$

$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$

$= -13\text{dBm}.$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 06, 2023	Mar. 06, 2024~ Mar. 09, 2024	Apr. 05, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2023	Mar. 06, 2024~ Mar. 09, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Mar. 06, 2024~ Mar. 09, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	Mar. 10, 2024	Dec. 26, 2024	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Mar. 10, 2024	Jul. 27, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2023	Mar. 10, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Mar. 10, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	Mar. 10, 2024	Jul. 07, 2024	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 08, 2023	Mar. 10, 2024	Apr. 07, 2024	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 04, 2023	Mar. 10, 2024	Apr. 03, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 18, 2023	Mar. 10, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	Mar. 10, 2024	Jul. 06, 2024	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	Oct. 18, 2023	Mar. 10, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Mar. 10, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Mar. 10, 2024	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

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

Uncertainty of Conducted Measurement

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53 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
---	---------

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



Appendix A. Test Results of Conducted Test

Test Engineer :	Hank Lin	Temperature :	24~26°C
		Relative Humidity :	50~53%

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18700	18900	19100			
Frequency (MHz)				1860	1880	1900	L	M	H
20	QPSK	1	0	23.16	23.06	23.06	0.5321	0.5200	0.5200
20	QPSK	1	49	22.98	22.97	22.94	0.5105	0.5093	0.5058
20	QPSK	1	99	23.33	23.12	23.03	0.5534	0.5272	0.5164
20	QPSK	50	0	22.94	22.96	22.96	0.5058	0.5082	0.5082
20	QPSK	50	24	22.66	22.40	22.56	0.4742	0.4467	0.4634
20	QPSK	50	50	22.19	22.27	21.77	0.4256	0.4335	0.3864
20	QPSK	100	0	22.10	22.22	22.22	0.4169	0.4285	0.4285
20	16QAM	1	0	22.07	21.95	22.04	0.4140	0.4027	0.4111
20	64QAM	1	0	21.73	21.62	21.72	0.3828	0.3733	0.3819
20	256QAM	1	0	18.28	18.40	18.29	0.1730	0.1778	0.1734
Channel				18675	18900	19125	EIRP(W)		
Frequency (MHz)				1857.5	1880	1902.5	L	M	H
15	QPSK	1	0	23.22	23.02	22.86	0.5395	0.5152	0.4966
15	16QAM	1	0	22.13	21.74	22.07	0.4198	0.3837	0.4140
Channel				18650	18900	19150	EIRP(W)		
Frequency (MHz)				1855	1880	1905	L	M	H
10	QPSK	1	0	23.00	23.08	23.11	0.5129	0.5224	0.5260
10	16QAM	1	0	22.14	21.86	21.84	0.4207	0.3945	0.3926
Channel				18625	18900	19175	EIRP(W)		
Frequency (MHz)				1852.5	1880	1907.5	L	M	H
5	QPSK	1	0	22.99	23.09	22.94	0.5117	0.5236	0.5058
5	16QAM	1	0	22.13	21.71	21.92	0.4198	0.3811	0.3999
Channel				18615	18900	19185	EIRP(W)		
Frequency (MHz)				1851.5	1880	1908.5	L	M	H
3	QPSK	1	0	22.90	22.89	23.00	0.5012	0.5000	0.5129
3	16QAM	1	0	22.15	21.97	22.07	0.4217	0.4046	0.4140
Channel				18607	18900	19193	EIRP(W)		
Frequency (MHz)				1850.7	1880	1909.3	L	M	H
1.4	QPSK	1	0	23.07	22.99	22.91	0.5212	0.5117	0.5023
1.4	16QAM	1	0	22.04	21.84	21.91	0.4111	0.3926	0.3990



LTE Band 4:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745	L	M	H
20	QPSK	1	0	23.33	23.31	23.31	0.6808	0.6776	0.6776
20	QPSK	1	49	23.31	23.23	23.10	0.6776	0.6653	0.6457
20	QPSK	1	99	23.31	23.30	23.15	0.6776	0.6761	0.6531
20	QPSK	50	0	22.44	22.30	22.32	0.5546	0.5370	0.5395
20	QPSK	50	24	22.42	22.36	22.27	0.5521	0.5445	0.5333
20	QPSK	50	50	22.31	22.23	22.28	0.5383	0.5284	0.5346
20	QPSK	100	0	22.36	22.37	22.18	0.5445	0.5458	0.5224
20	16QAM	1	0	22.89	22.10	22.78	0.6152	0.5129	0.5998
20	64QAM	1	0	22.10	22.01	22.16	0.5129	0.5023	0.5200
20	256QAM	1	0	18.30	18.42	18.40	0.2138	0.2198	0.2188
Channel				20025	20175	20325	EIRP(W)		
Frequency (MHz)				1717.5	1732.5	1747.5	L	M	H
15	QPSK	1	0	23.31	23.25	23.08	0.6776	0.6683	0.6427
15	16QAM	1	0	22.66	22.05	22.68	0.5834	0.5070	0.5861
Channel				20000	20175	20350	EIRP(W)		
Frequency (MHz)				1715	1732.5	1750	L	M	H
10	QPSK	1	0	23.14	23.14	23.30	0.6516	0.6516	0.6761
10	16QAM	1	0	22.61	21.92	22.84	0.5768	0.4920	0.6081
Channel				19975	20175	20375	EIRP(W)		
Frequency (MHz)				1712.5	1732.5	1752.5	L	M	H
5	QPSK	1	0	23.30	23.24	23.07	0.6761	0.6668	0.6412
5	16QAM	1	0	22.65	22.16	22.69	0.5821	0.5200	0.5875
Channel				19965	20175	20385	EIRP(W)		
Frequency (MHz)				1711.5	1732.5	1753.5	L	M	H
3	QPSK	1	0	23.25	23.30	23.12	0.6683	0.6761	0.6486
3	16QAM	1	0	22.86	21.92	22.74	0.6109	0.4920	0.5943
Channel				19950	20175	20393	EIRP(W)		
Frequency (MHz)				1710	1732.5	1754.3	L	M	H
1.4	QPSK	1	0	22.80	22.85	22.70	0.6026	0.6095	0.5888
1.4	16QAM	1	0	21.83	21.67	21.91	0.4819	0.4645	0.4909



LTE Band 5:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844	L	M	H
10	QPSK	1	0	23.11	23.28	23.03	0.1112	0.1156	0.1091
10	QPSK	1	25	23.03	23.17	23.12	0.1091	0.1127	0.1114
10	QPSK	1	49	23.04	23.35	22.78	0.1094	0.1175	0.1030
10	QPSK	25	0	22.26	22.33	22.09	0.0914	0.0929	0.0879
10	QPSK	25	12	22.33	22.19	22.13	0.0929	0.0899	0.0887
10	QPSK	25	25	22.25	22.21	22.06	0.0912	0.0904	0.0873
10	QPSK	50	0	22.09	22.03	22.24	0.0879	0.0867	0.0910
10	16QAM	1	0	22.26	22.49	22.36	0.0914	0.0964	0.0935
10	64QAM	1	0	21.73	21.14	21.51	0.0809	0.0706	0.0769
10	256QAM	1	0	18.13	18.30	18.15	0.0353	0.0367	0.0355
Channel				20425	20525	20625	ERP(W)		
Frequency (MHz)				826.5	836.5	846.5	L	M	H
5	QPSK	1	0	23.10	23.25	22.93	0.1109	0.1148	0.1067
5	16QAM	1	0	22.42	22.49	22.32	0.0948	0.0964	0.0927
Channel				20415	20525	20635	ERP(W)		
Frequency (MHz)				825.5	836.5	847.5	L	M	H
3	QPSK	1	0	23.15	22.98	22.91	0.1122	0.1079	0.1062
3	16QAM	1	0	22.36	22.68	22.21	0.0935	0.1007	0.0904
Channel				20407	20525	20643	ERP(W)		
Frequency (MHz)				824.7	836.5	848.3	L	M	H
1.4	QPSK	1	0	23.22	23.11	23.11	0.1140	0.1112	0.1112
1.4	16QAM	1	0	22.40	22.59	22.40	0.0944	0.0986	0.0944



LTE Band 66:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770	L	M	H
20	QPSK	1	0	23.51	23.58	23.66	0.7096	0.7211	0.7345
20	QPSK	1	49	23.77	23.61	23.58	0.7534	0.7261	0.7211
20	QPSK	1	99	23.49	23.44	23.34	0.7063	0.6982	0.6823
20	QPSK	50	0	22.77	22.63	22.55	0.5984	0.5794	0.5689
20	QPSK	50	24	22.59	22.60	22.69	0.5741	0.5754	0.5875
20	QPSK	50	50	22.47	22.62	22.64	0.5585	0.5781	0.5808
20	QPSK	100	0	22.51	22.61	22.71	0.5636	0.5768	0.5902
20	16QAM	1	0	23.09	22.87	23.04	0.6442	0.6124	0.6368
20	64QAM	1	0	21.69	21.85	21.55	0.4667	0.4842	0.4519
20	256QAM	1	0	18.01	18.35	17.97	0.2000	0.2163	0.1982
Channel				132047	132322	132597	EIRP(W)		
Frequency (MHz)				1717.5	1745	1772.5	L	M	H
15	QPSK	1	0	23.33	23.50	23.64	0.6808	0.7079	0.7311
15	16QAM	1	0	23.00	22.80	22.95	0.6310	0.6026	0.6237
Channel				132022	132322	132622	EIRP(W)		
Frequency (MHz)				1715	1745	1775	L	M	H
10	QPSK	1	0	23.26	23.44	23.42	0.6699	0.6982	0.6950
10	16QAM	1	0	22.90	22.77	23.04	0.6166	0.5984	0.6368
Channel				131997	132322	132647	EIRP(W)		
Frequency (MHz)				1712.5	1745	1777.5	L	M	H
5	QPSK	1	0	23.46	23.37	23.61	0.7015	0.6871	0.7261
5	16QAM	1	0	23.00	22.72	22.82	0.6310	0.5916	0.6053
Channel				131987	132322	132657	EIRP(W)		
Frequency (MHz)				1711.5	1745	1778.5	L	M	H
3	QPSK	1	0	23.57	23.40	23.49	0.7194	0.6918	0.7063
3	16QAM	1	0	23.00	22.63	22.84	0.6310	0.5794	0.6081
Channel				131979	132322	132665	EIRP(W)		
Frequency (MHz)				1710.7	1745	1779.3	L	M	H
1.4	QPSK	1	0	23.05	23.07	22.94	0.6383	0.6412	0.6223
1.4	16QAM	1	0	22.04	21.75	21.64	0.5058	0.4732	0.4613

**CA Power****LTE CA_2C:**

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.37	0.5585
M	QPSK	1	Max	1	0	23.38	0.5598
H	QPSK	1	Max	1	0	23.36	0.5572
L	16QAM	1	Max	1	0	22.84	0.4943
M	16QAM	1	Max	1	0	22.78	0.4875
H	16QAM	1	Max	1	0	22.66	0.4742
L	64QAM	1	Max	1	0	22.56	0.4634
M	64QAM	1	Max	1	0	21.69	0.3793
H	64QAM	1	Max	1	0	21.81	0.3899
L	256QAM	1	Max	1	0	18.82	0.1959
M	256QAM	1	Max	1	0	18.88	0.1986
H	256QAM	1	Max	1	0	19.12	0.2099
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.16	0.5321
L	16QAM	1	Max	1	0	22.61	0.4688
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.20	0.5370
L	16QAM	1	Max	1	0	22.66	0.4742
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.13	0.5284
L	16QAM	1	Max	1	0	22.58	0.4656
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.22	0.5395
L	16QAM	1	Max	1	0	22.65	0.4732
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.26	0.5445
L	16QAM	1	Max	1	0	22.56	0.4634
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.28	0.5470
L	16QAM	1	Max	1	0	22.55	0.4624
Combination 10MHz+15MHz (50RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.23	0.5408
L	16QAM	1	Max	1	0	22.54	0.4613



Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.18	0.5346
L	16QAM	1	Max	1	0	22.55	0.4624
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.26	0.5445
L	16QAM	1	Max	1	0	22.58	0.4656

LTE CA_5B:

Combination 10MHz+10MHz (50RB+50RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	
		RB Size	RB offset	RB Size	RB offset			
L	QPSK	1	Max	1	0	23.37	0.1180	
M	QPSK	1	Max	1	0	23.45	0.1202	
H	QPSK	1	Max	1	0	23.40	0.1189	
L	16QAM	1	Max	1	0	22.80	0.1035	
M	16QAM	1	Max	1	0	22.75	0.1023	
H	16QAM	1	Max	1	0	22.75	0.1023	
L	64QAM	1	Max	1	0	21.72	0.0807	
M	64QAM	1	Max	1	0	21.86	0.0834	
H	64QAM	1	Max	1	0	21.88	0.0838	
L	256QAM	1	Max	1	0	18.88	0.0420	
M	256QAM	1	Max	1	0	18.90	0.0422	
H	256QAM	1	Max	1	0	18.79	0.0411	
Combination 10MHz+5MHz (50RB+25RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.33	0.1169	
L	16QAM	1	Max	1	0	22.60	0.0989	
Combination 5MHz+10MHz (25RB+50RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.35	0.1175	
L	16QAM	1	Max	1	0	22.63	0.0995	
Combination 5MHz+3MHz (25RB+15RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.33	0.1169	
L	16QAM	1	Max	1	0	22.65	0.1000	
Combination 3MHz+5MHz (15RB+25RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.34	0.1172	
L	16QAM	1	Max	1	0	22.67	0.1005	



LTE CA_66B:

Combination 10MHz+10MHz (50RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.32	0.6792
M	QPSK	1	Max	1	0	23.38	0.6887
H	QPSK	1	Max	1	0	23.32	0.6792
L	16QAM	1	Max	1	0	22.75	0.5957
M	16QAM	1	Max	1	0	22.68	0.5861
H	16QAM	1	Max	1	0	22.71	0.5902
L	64QAM	1	Max	1	0	21.81	0.4797
M	64QAM	1	Max	1	0	21.78	0.4764
H	64QAM	1	Max	1	0	21.74	0.4721
L	256QAM	1	Max	1	0	18.73	0.2360
M	256QAM	1	Max	1	0	18.69	0.2339
H	256QAM	1	Max	1	0	18.71	0.2350
Combination 15MHz+5MHz (75RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.31	0.6776
L	16QAM	1	Max	1	0	22.67	0.5848
Combination 5MHz+15MHz (25RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.35	0.6839
L	16QAM	1	Max	1	0	22.63	0.5794
Combination 10MHz+5MHz (50RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.34	0.6823
L	16QAM	1	Max	1	0	22.67	0.5848
Combination 5MHz+10MHz (25RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.32	0.6792
L	16QAM	1	Max	1	0	22.70	0.5888
Combination 5MHz+5MHz (25RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	23.30	0.6761
L	16QAM	1	Max	1	0	22.68	0.5861



LTE CA_66C:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.39	0.6902
M	QPSK	1	Max	1	0	23.32	0.6792
H	QPSK	1	Max	1	0	23.30	0.6761
L	16QAM	1	Max	1	0	22.76	0.5970
M	16QAM	1	Max	1	0	22.78	0.5998
H	16QAM	1	Max	1	0	22.69	0.5875
L	64QAM	1	Max	1	0	21.68	0.4656
M	64QAM	1	Max	1	0	21.73	0.4710
H	64QAM	1	Max	1	0	21.71	0.4688
L	256QAM	1	Max	1	0	18.71	0.2350
M	256QAM	1	Max	1	0	18.69	0.2339
H	256QAM	1	Max	1	0	18.67	0.2328
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.31	0.6776
M	16QAM	1	Max	1	0	22.63	0.5794
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.30	0.6761
M	16QAM	1	Max	1	0	22.58	0.5728
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.31	0.6776
M	16QAM	1	Max	1	0	22.55	0.5689
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.33	0.6808
M	16QAM	1	Max	1	0	22.56	0.5702
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.36	0.6855
M	16QAM	1	Max	1	0	22.61	0.5768
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.31	0.6776
M	16QAM	1	Max	1	0	22.55	0.5689
Combination 10MHz+15MHz (50RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		



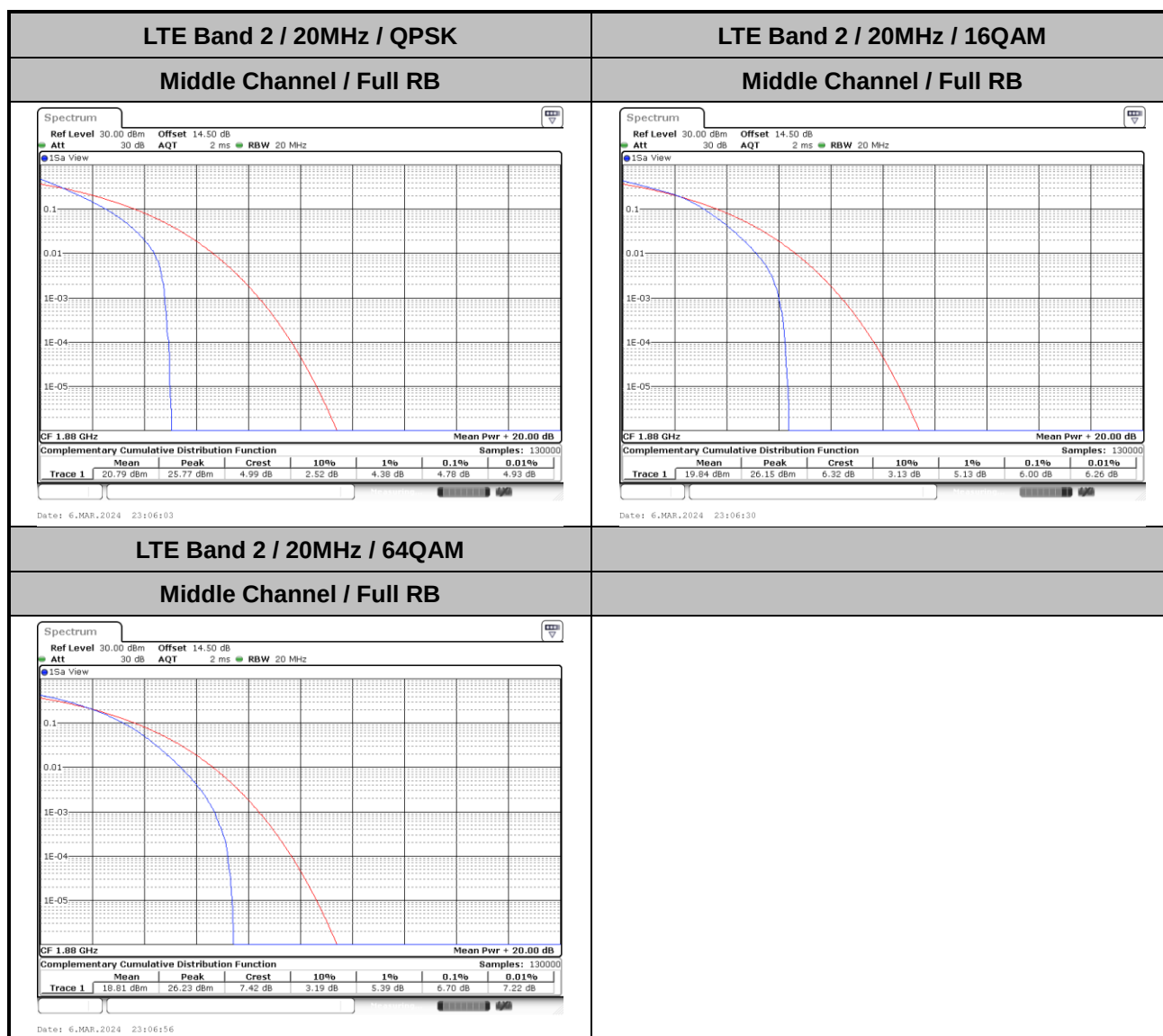
L	QPSK	1	Max	1	0	23.34	0.6823
M	16QAM	1	Max	1	0	22.57	0.5715
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.32	0.6792
M	16QAM	1	Max	1	0	22.51	0.5636
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.26	0.6699
M	16QAM	1	Max	1	0	22.54	0.5675



LTE Band 2

Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.78	6.00	6.70	PASS





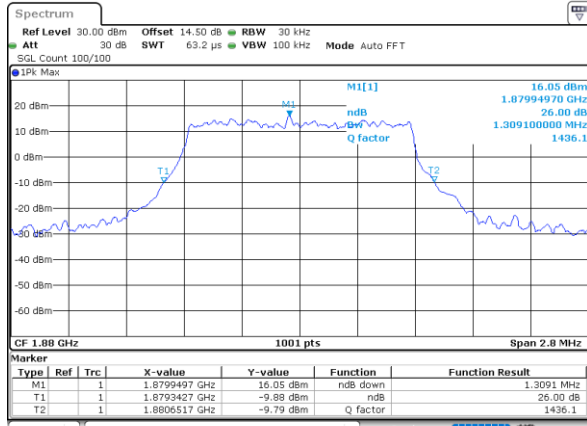
26dB Bandwidth

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	1.31	1.32	3.03	3.10	5.08	5.02	9.91	10.07	14.72	14.90	18.98	19.46



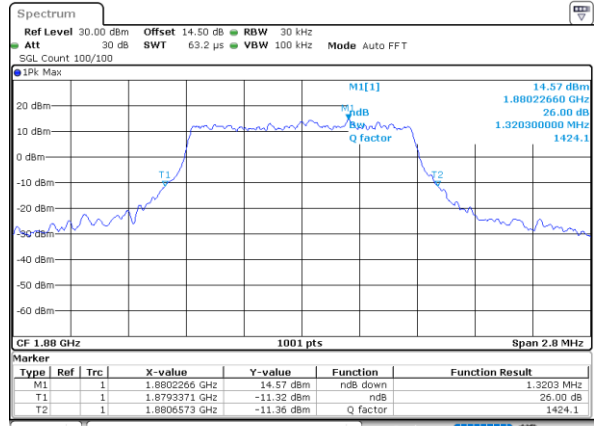
LTE Band 2

Middle Channel / 1.4MHz / QPSK



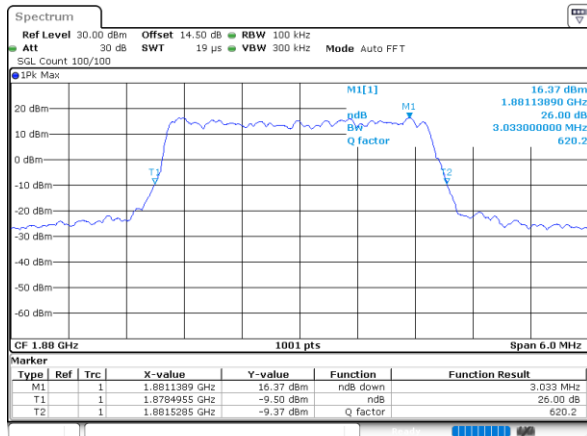
Date: 6,MAR,2024 20:53:25

Middle Channel / 1.4MHz / 16QAM



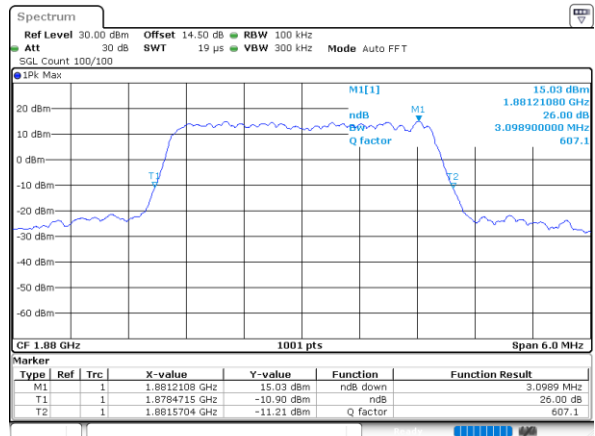
Date: 6,MAR,2024 20:54:05

Middle Channel / 3MHz / QPSK



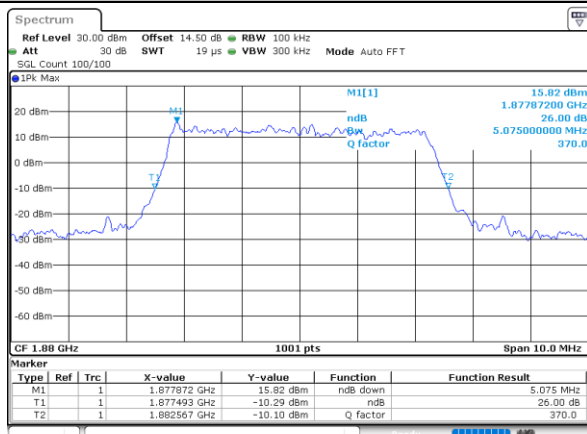
Date: 6,MAR,2024 21:53:37

Middle Channel / 3MHz / 16QAM



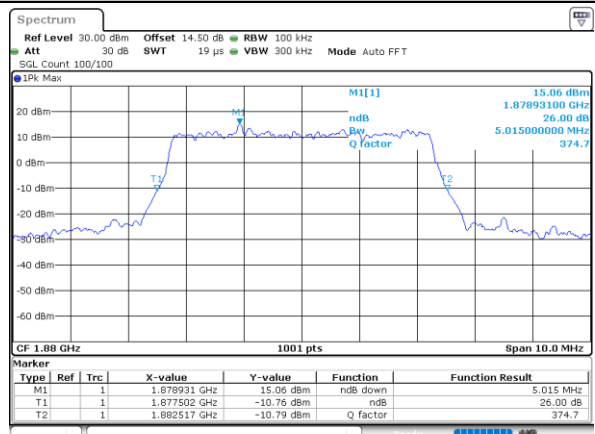
Date: 6,MAR,2024 21:53:16

Middle Channel / 5MHz / QPSK



Date: 6,MAR,2024 21:57:02

Middle Channel / 5MHz / 16QAM

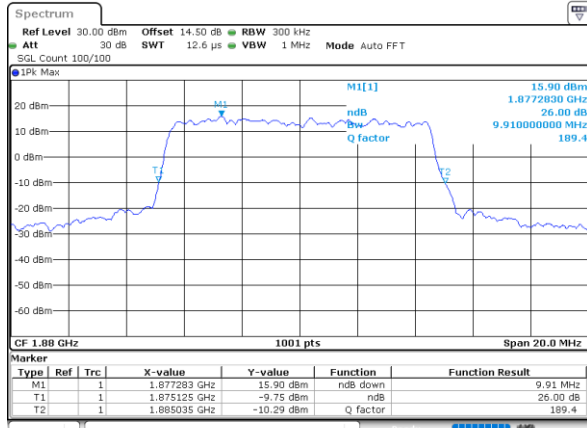


Date: 6,MAR,2024 21:57:42



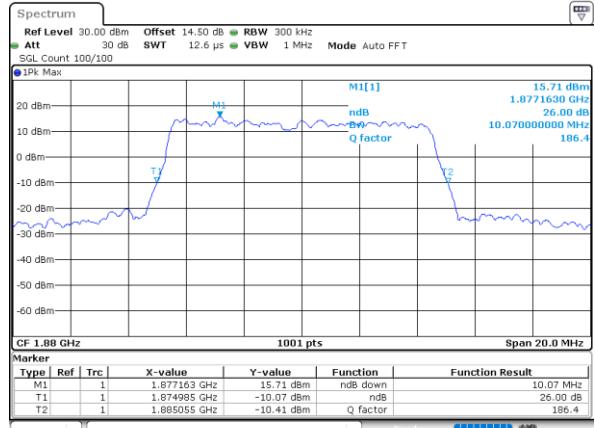
LTE Band 2

Middle Channel / 10MHz / QPSK



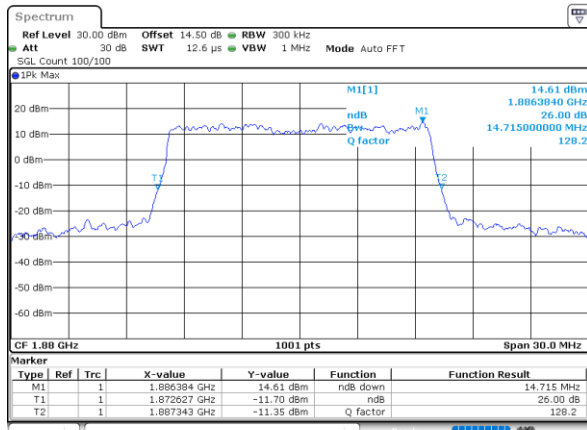
Date: 6,MAR,2024 22:18:39

Middle Channel / 10MHz / 16QAM



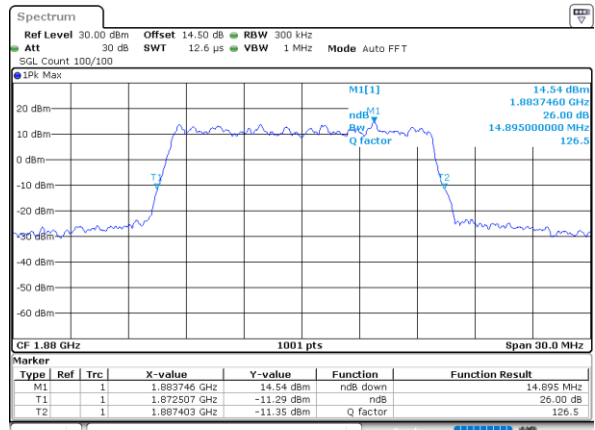
Date: 6,MAR,2024 22:19:19

Middle Channel / 15MHz / QPSK



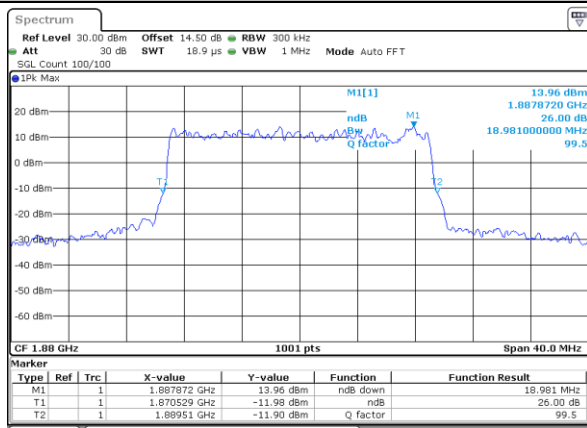
Date: 6,MAR,2024 23:37:28

Middle Channel / 15MHz / 16QAM



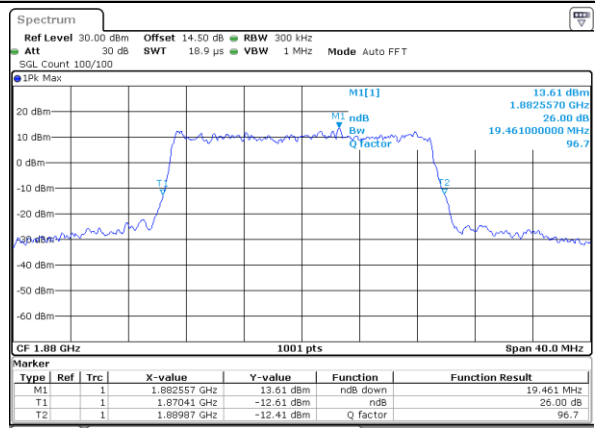
Date: 6,MAR,2024 23:38:07

Middle Channel / 20MHz / QPSK



Date: 6,MAR,2024 23:04:57

Middle Channel / 20MHz / 16QAM



Date: 6,MAR,2024 23:05:36



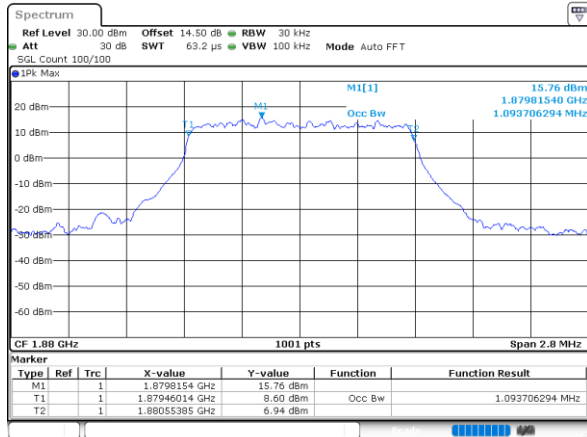
Occupied Bandwidth

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	1.09	1.09	2.72	2.72	4.49	4.53	9.11	9.01	13.46	13.49	17.98	17.94

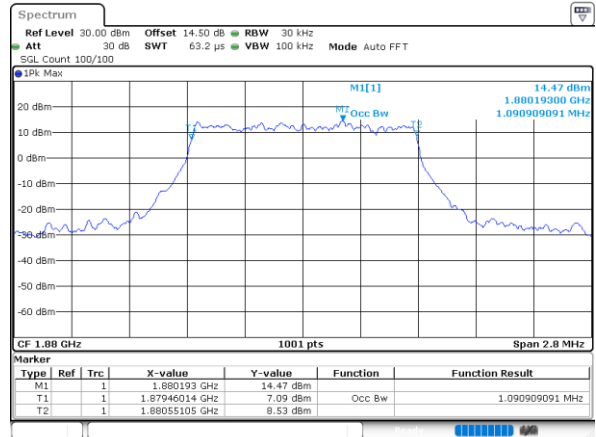


LTE Band 2

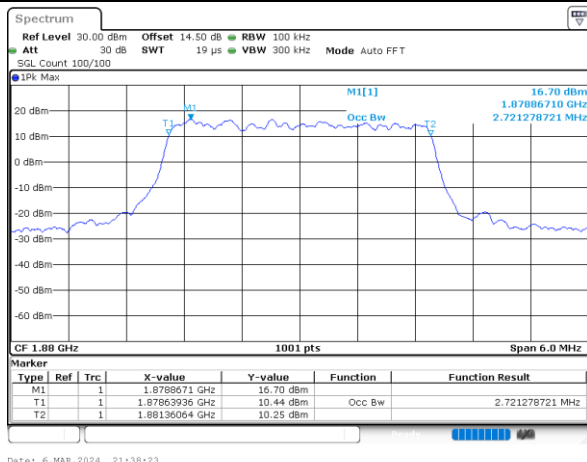
Middle Channel / 1.4MHz / QPSK



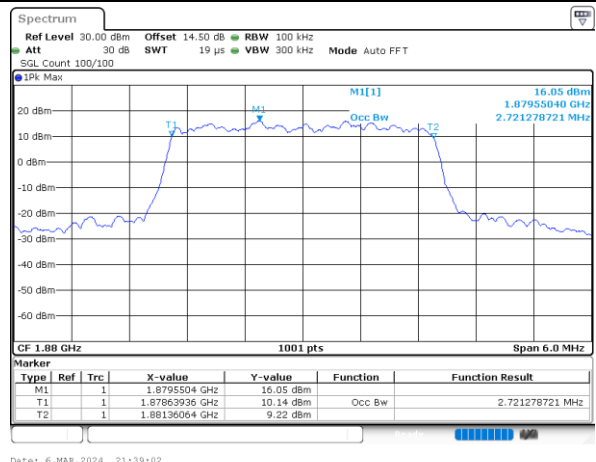
Middle Channel / 1.4MHz / 16QAM



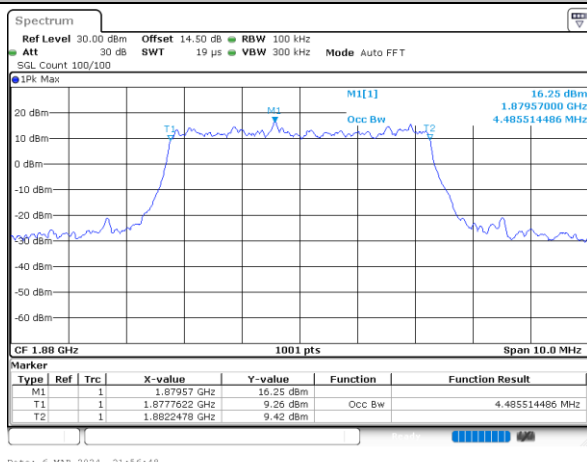
Middle Channel / 3MHz / QPSK



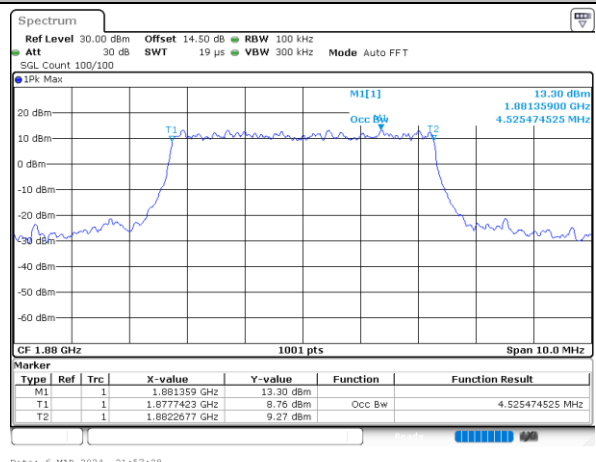
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



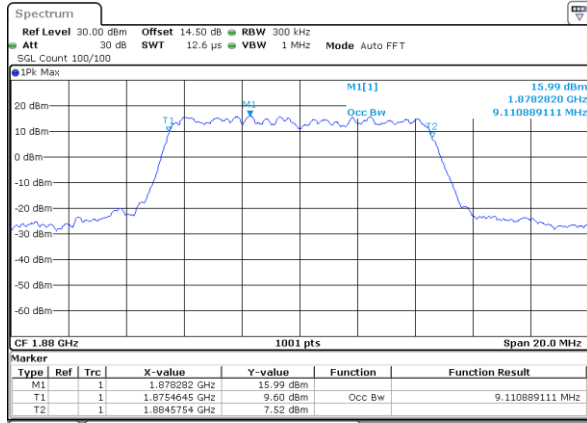
Middle Channel / 5MHz / 16QAM



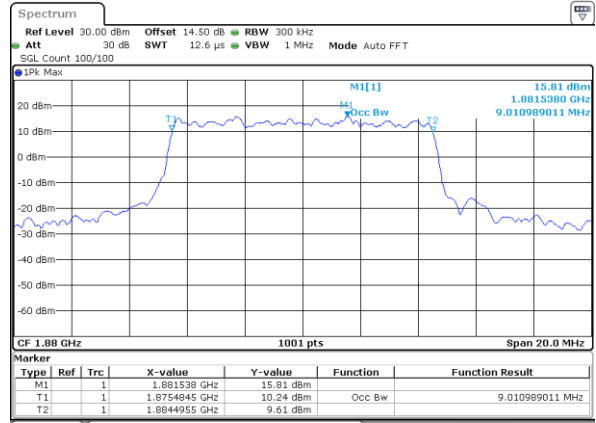


LTE Band 2

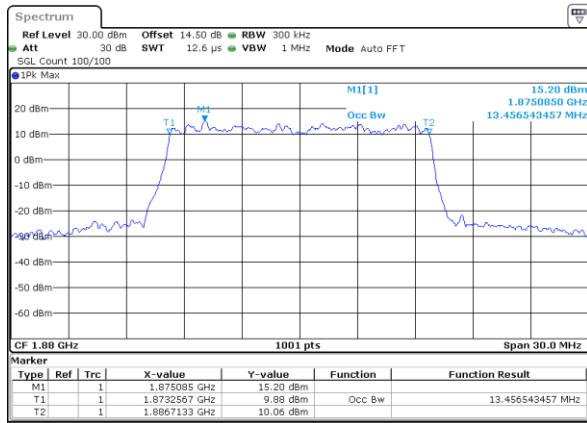
Middle Channel / 10MHz / QPSK



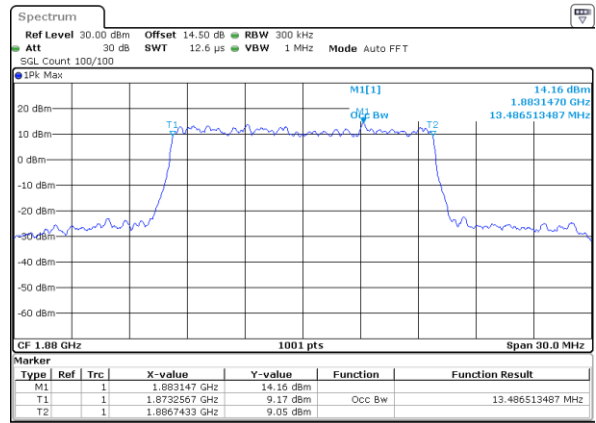
Middle Channel / 10MHz / 16QAM



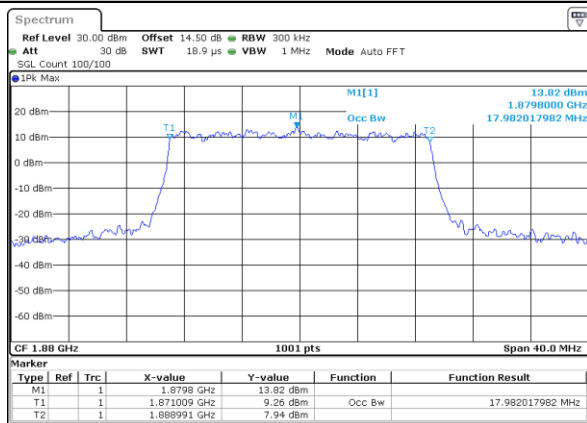
Middle Channel / 15MHz / QPSK



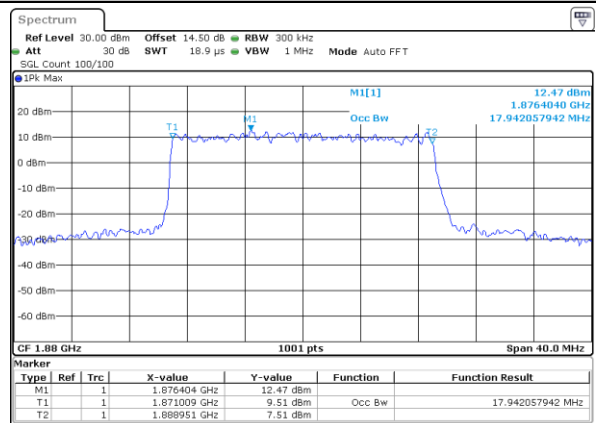
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

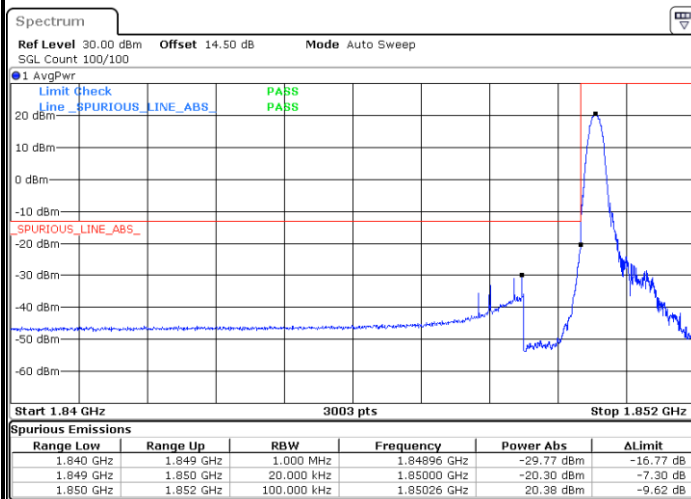




Conducted Band Edge

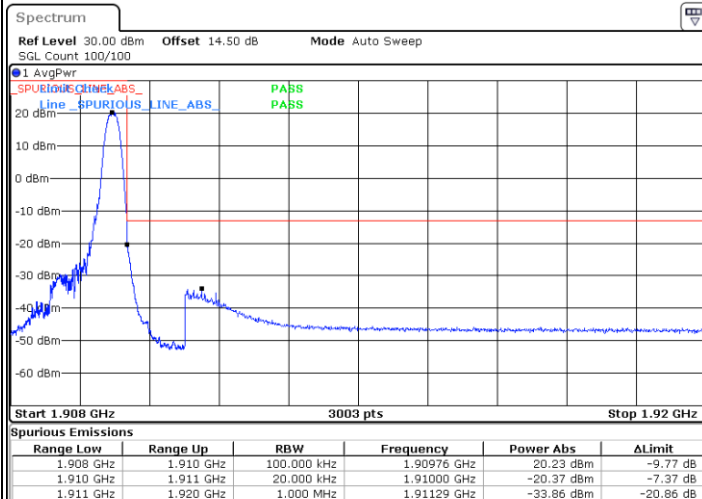
LTE Band 2 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



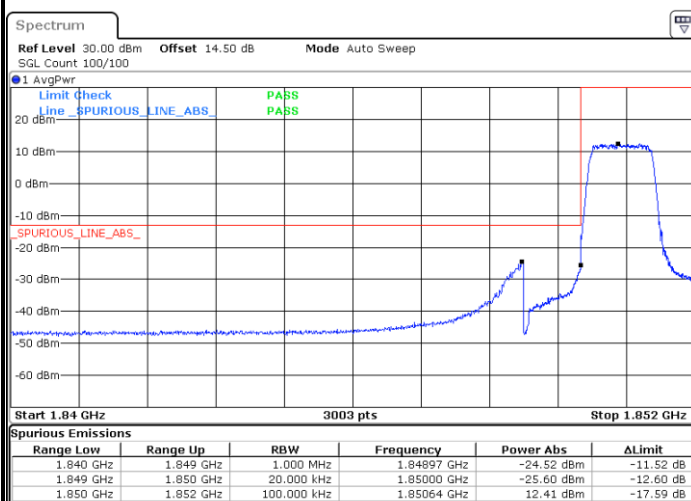
Date: 6.MAR.2024 20:46:57

Highest Band Edge / 1RB



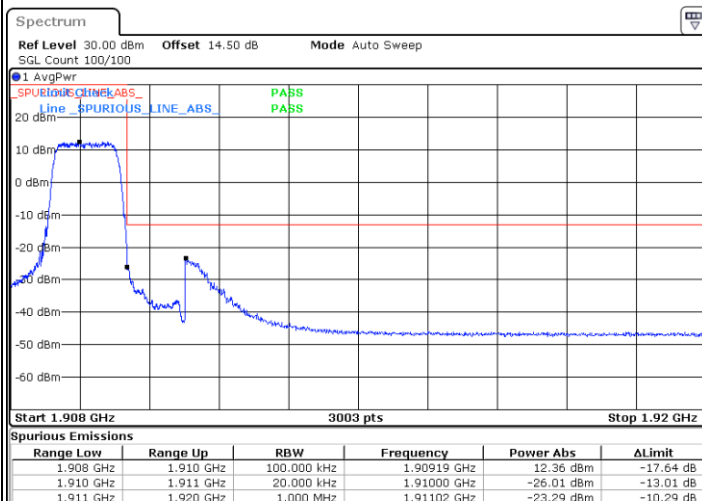
Date: 6.MAR.2024 20:54:49

Lowest Band Edge / Full RB



Date: 6.MAR.2024 20:50:14

Highest Band Edge / Full RB

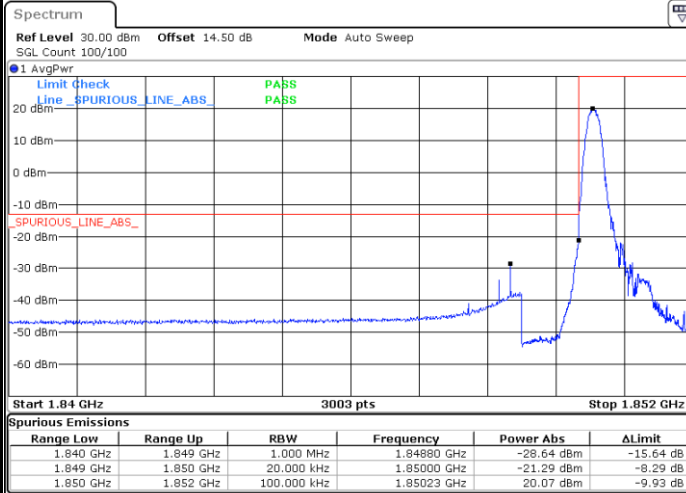


Date: 6.MAR.2024 20:58:06

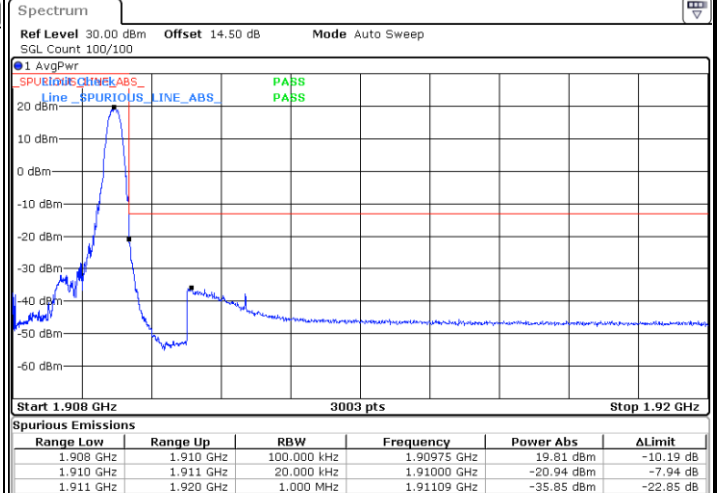


LTE Band 2 / 1.4MHz / 16QAM

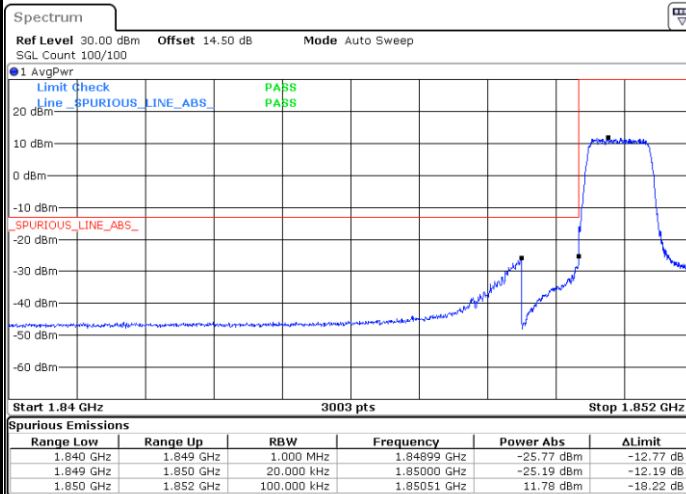
Lowest Band Edge / 1 RB



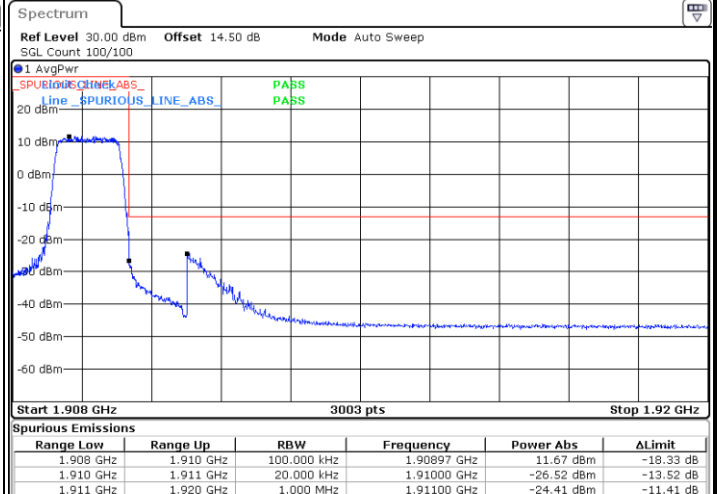
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



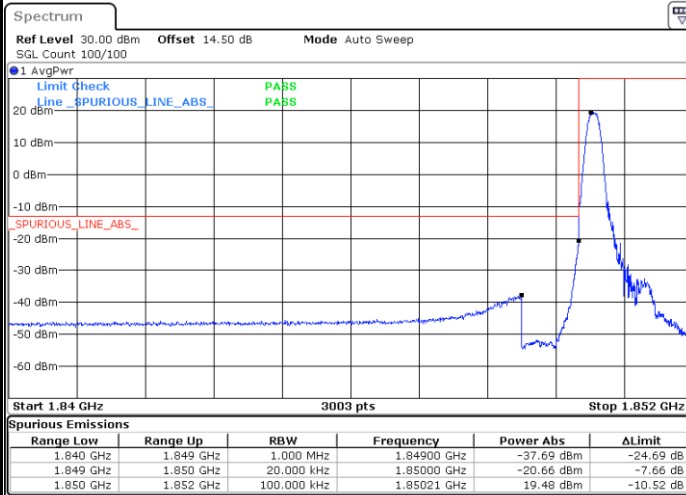
Highest Band Edge / Full RB



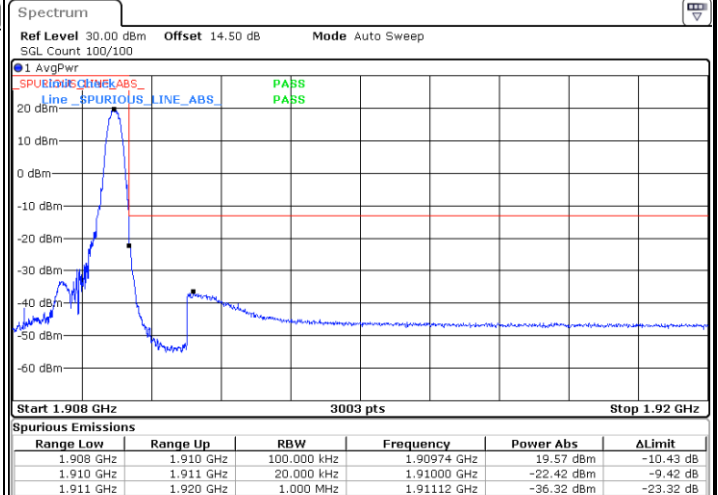


LTE Band 2 / 1.4MHz / 64QAM

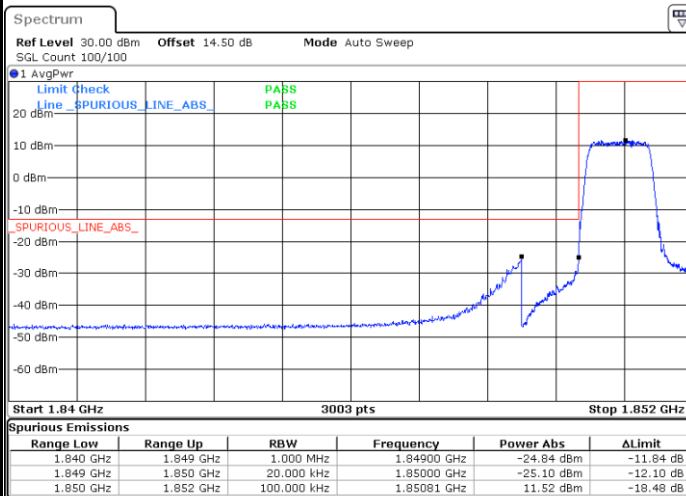
Lowest Band Edge / 1 RB



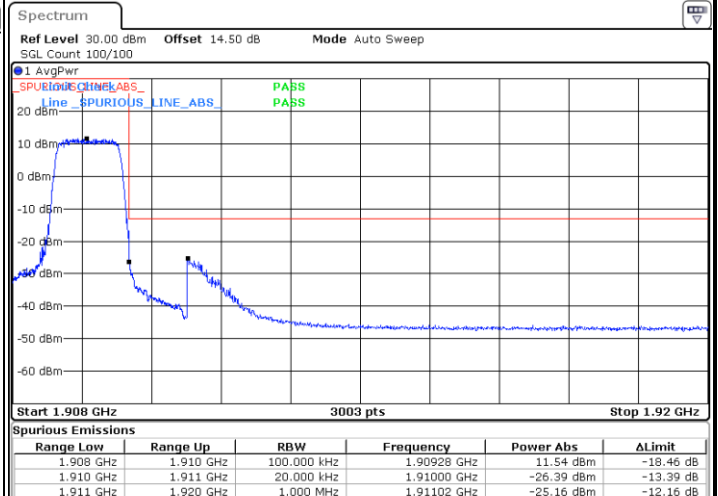
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



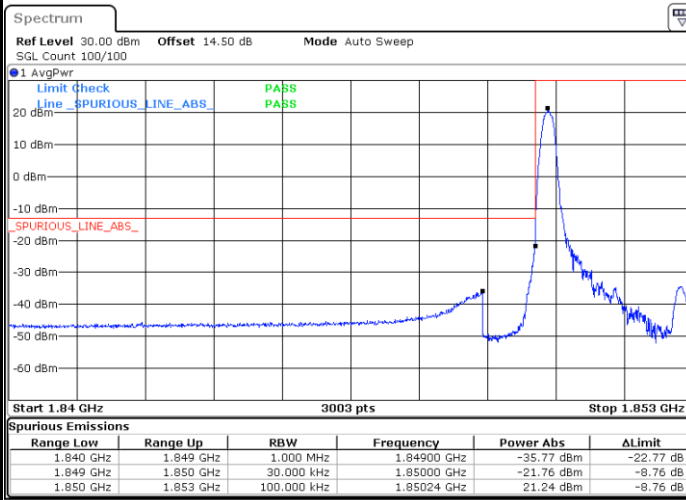
Highest Band Edge / Full RB



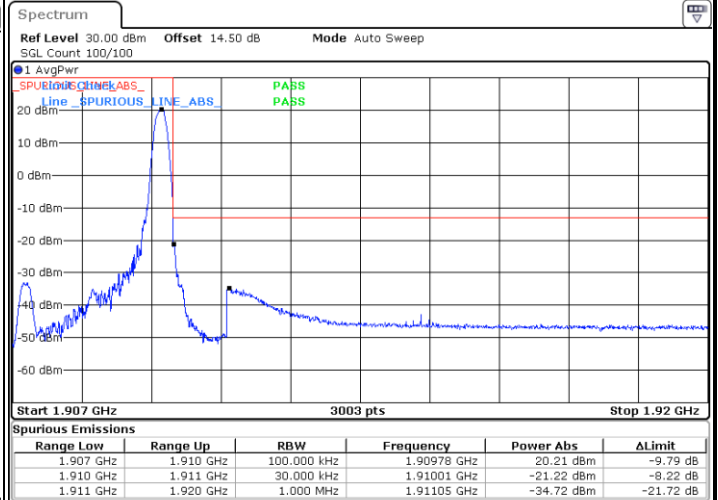


LTE Band 2 / 3MHz / QPSK

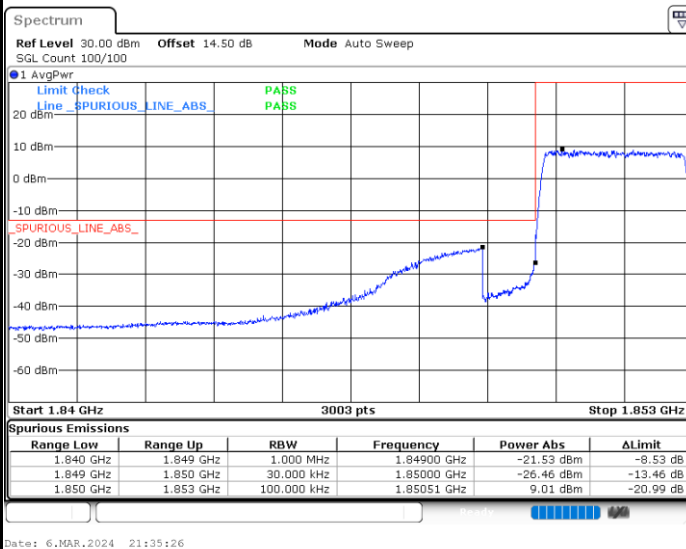
Lowest Band Edge / 1RB



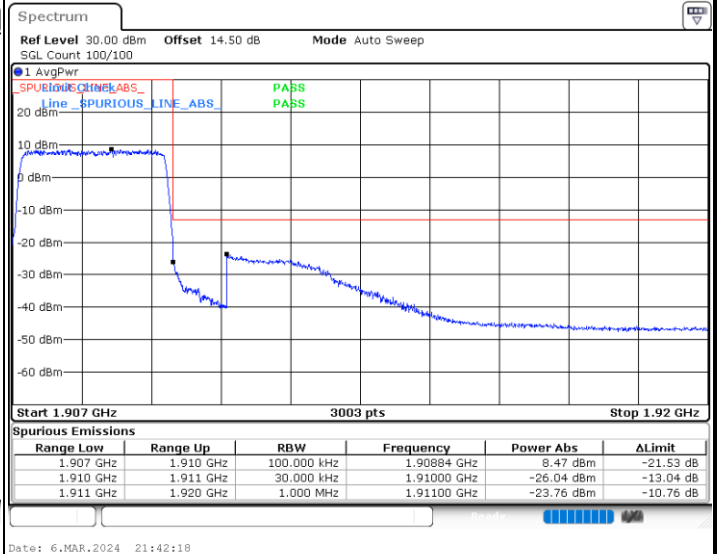
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



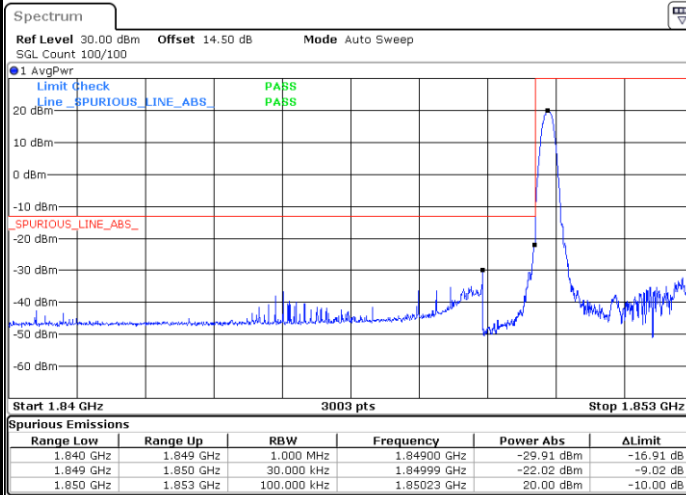
Highest Band Edge / Full RB



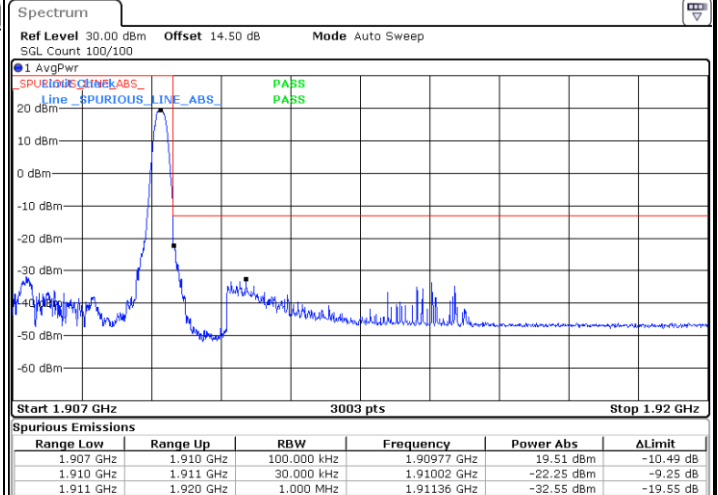


LTE Band 2 / 3MHz / 16QAM

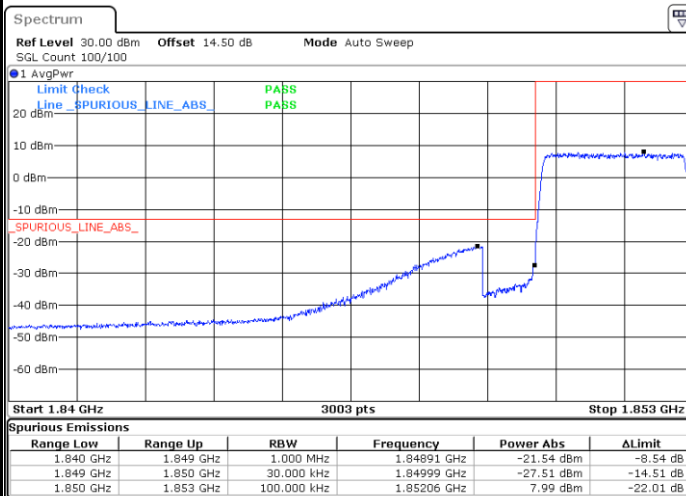
Lowest Band Edge / 1 RB



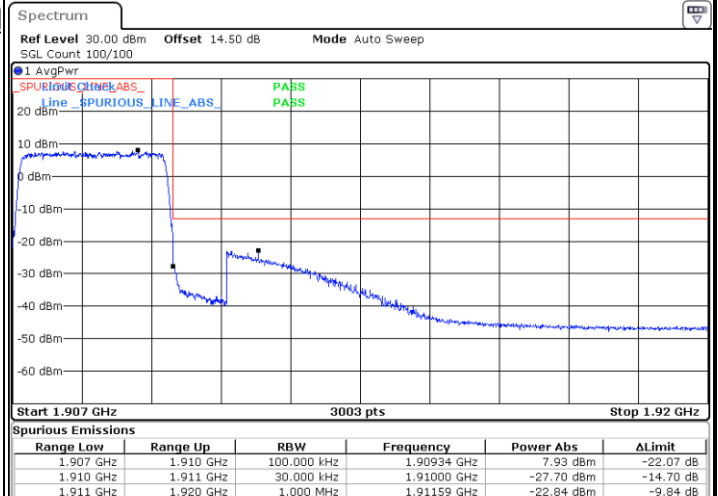
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



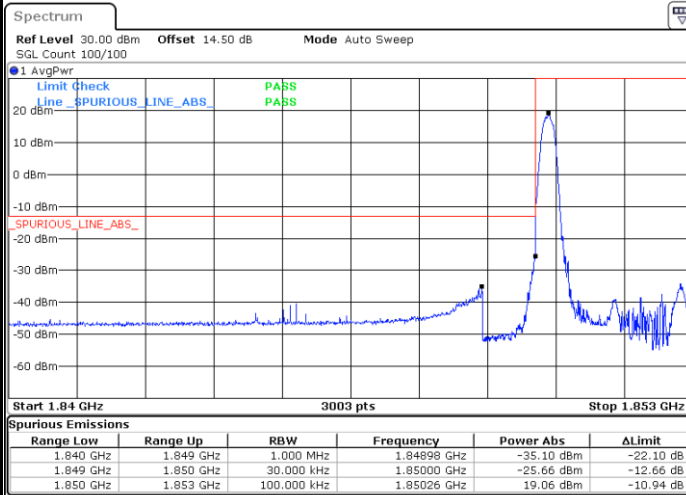
Highest Band Edge / Full RB



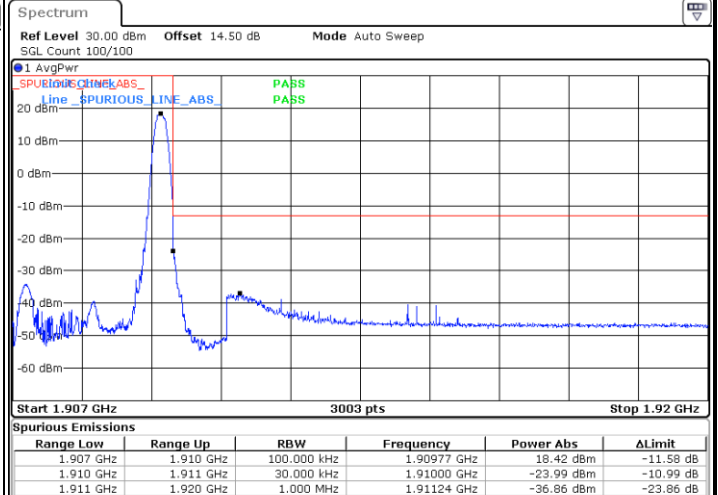


LTE Band 2 / 3MHz / 64QAM

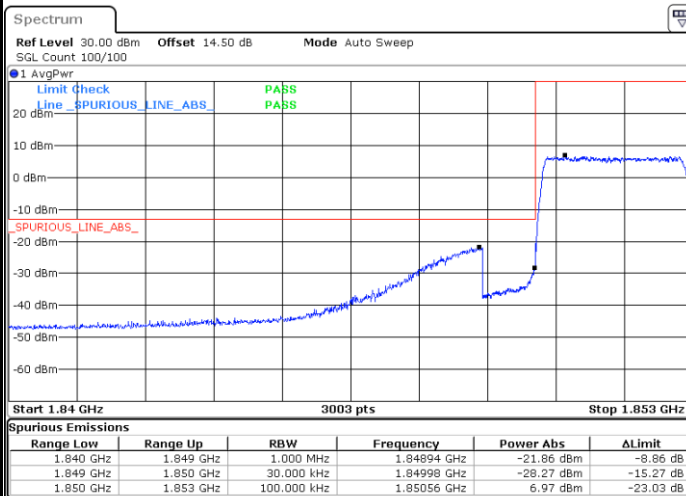
Lowest Band Edge / 1 RB



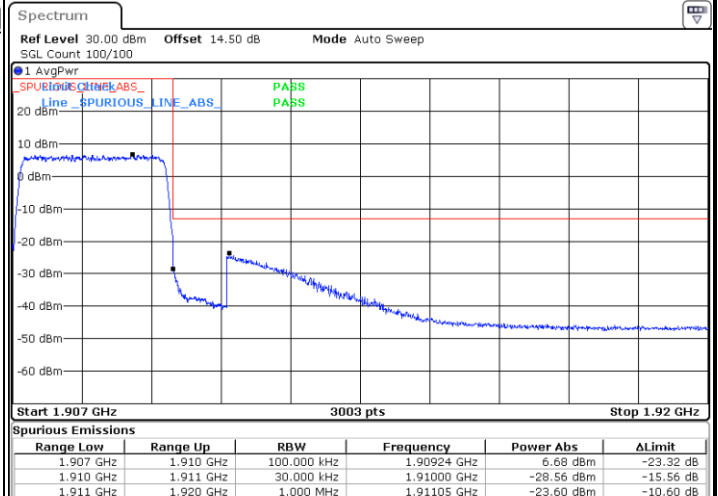
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



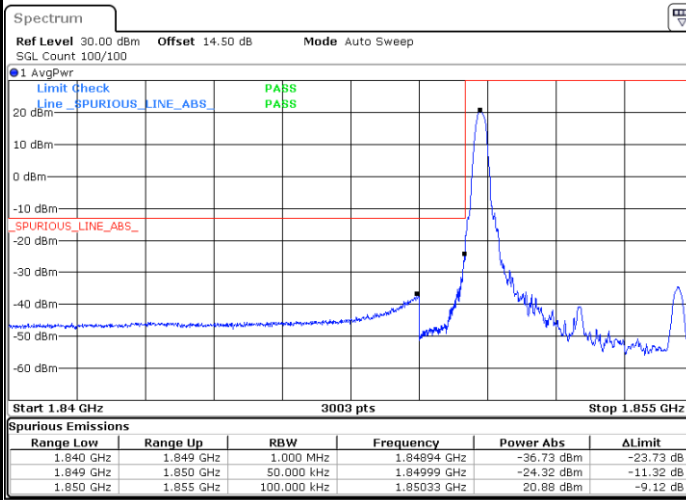
Highest Band Edge / Full RB



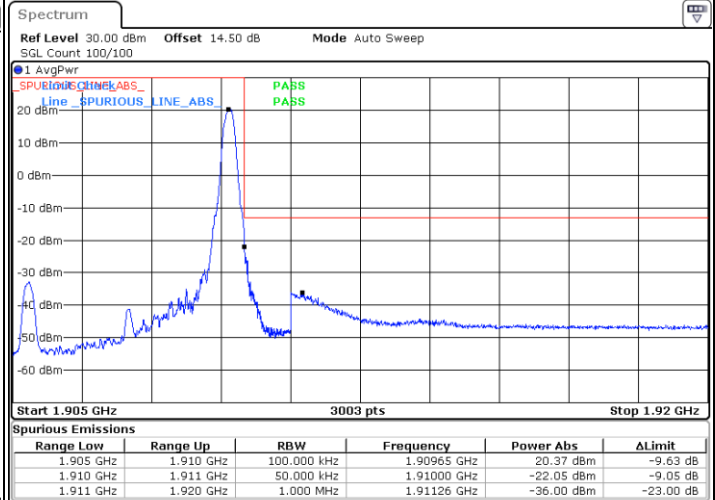


LTE Band 2 / 5MHz / QPSK

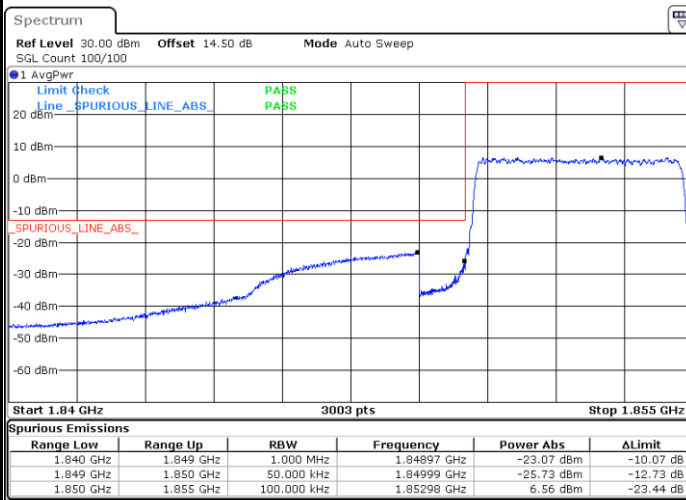
Lowest Band Edge / 1RB



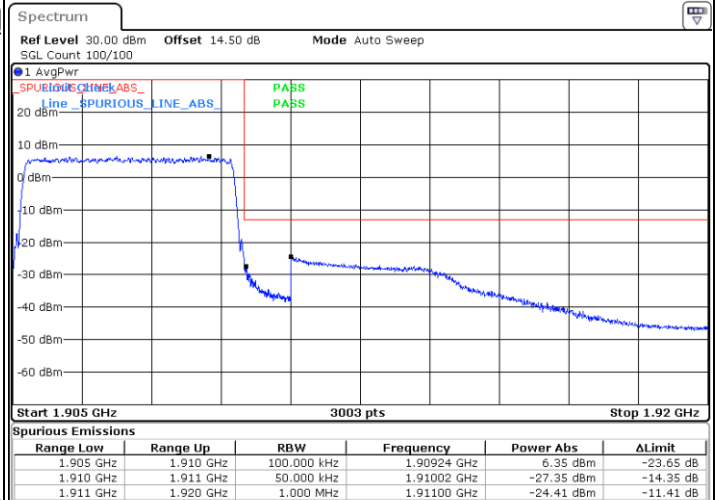
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



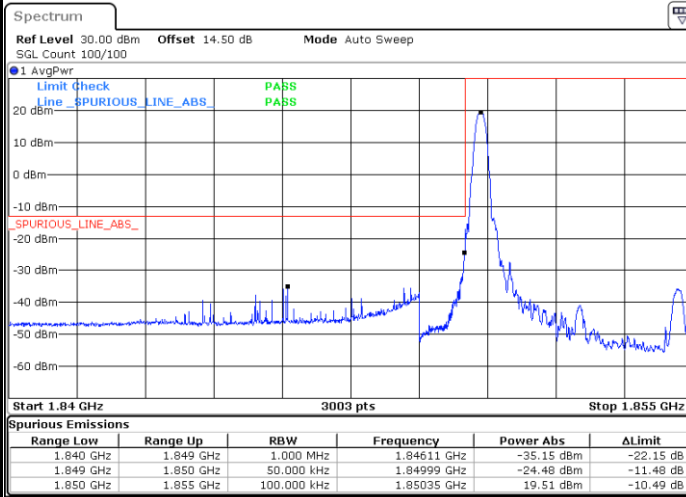
Highest Band Edge / Full RB



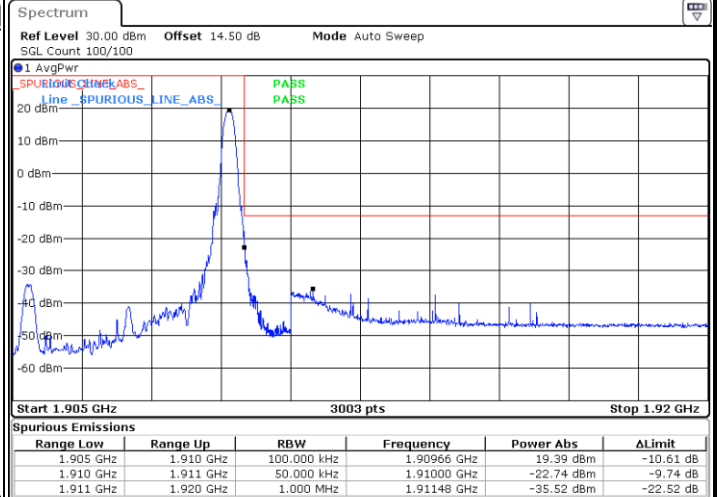


LTE Band 2 / 5MHz / 16QAM

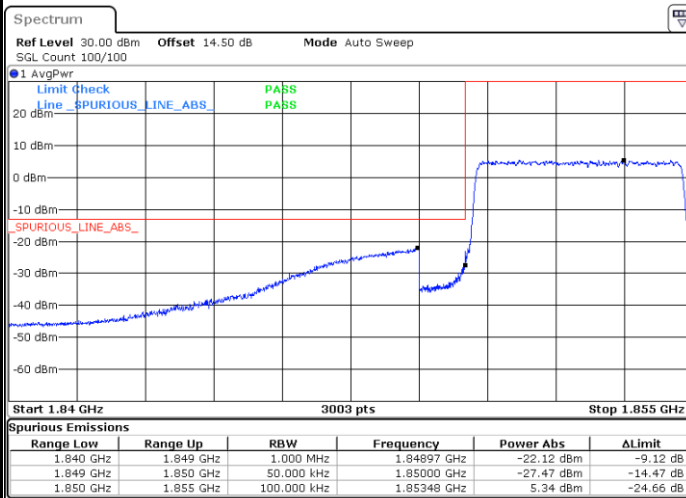
Lowest Band Edge / 1 RB



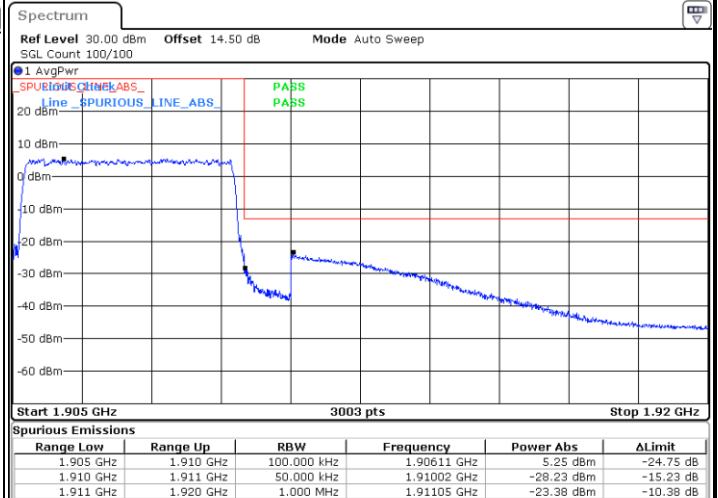
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



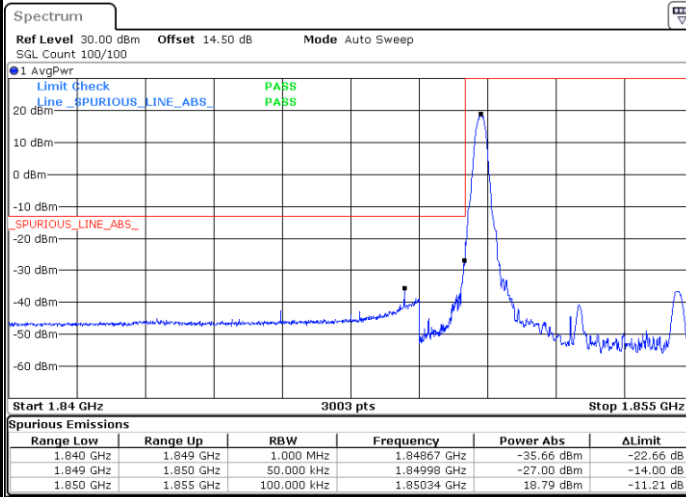
Highest Band Edge / Full RB



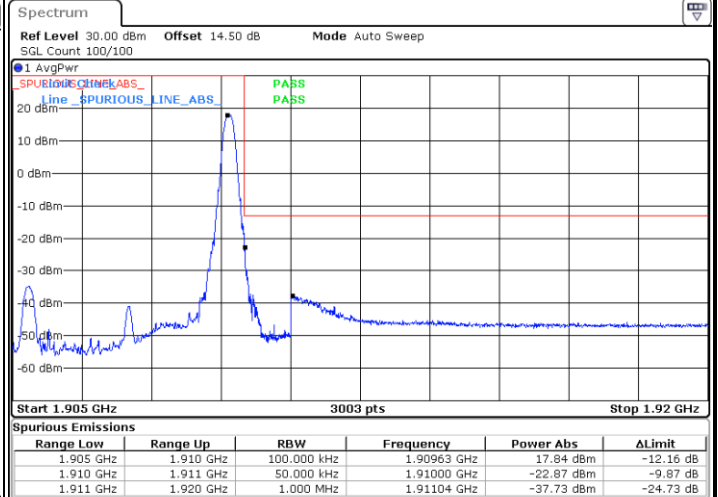


LTE Band 2 / 5MHz / 64QAM

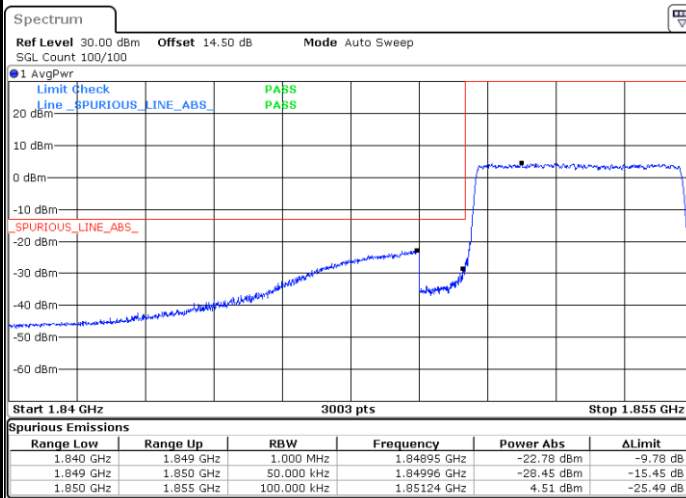
Lowest Band Edge / 1 RB



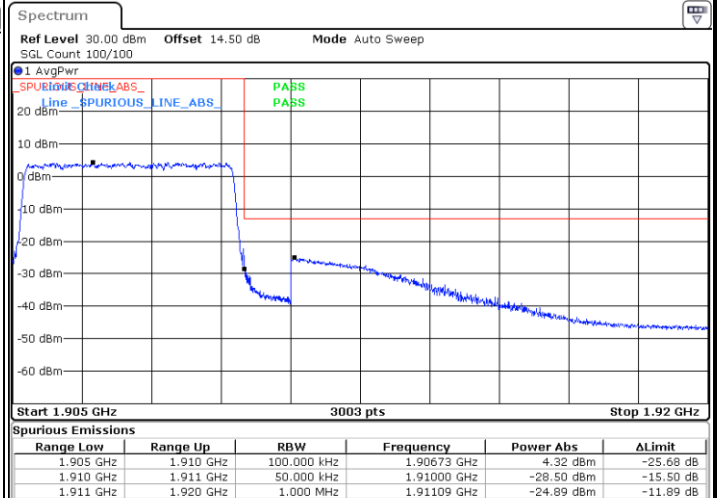
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



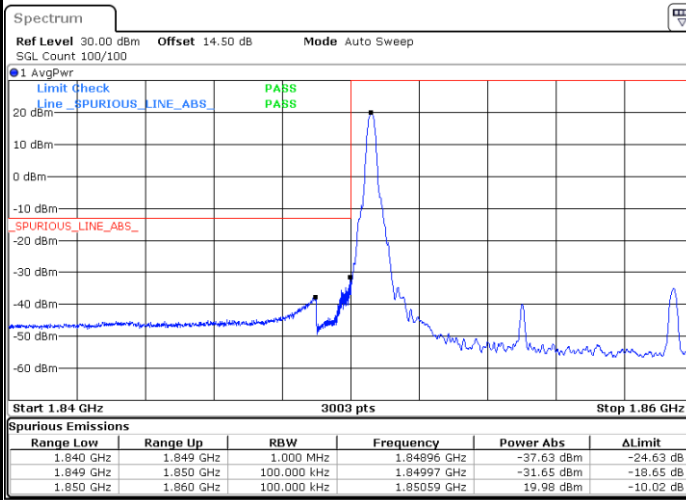
Highest Band Edge / Full RB



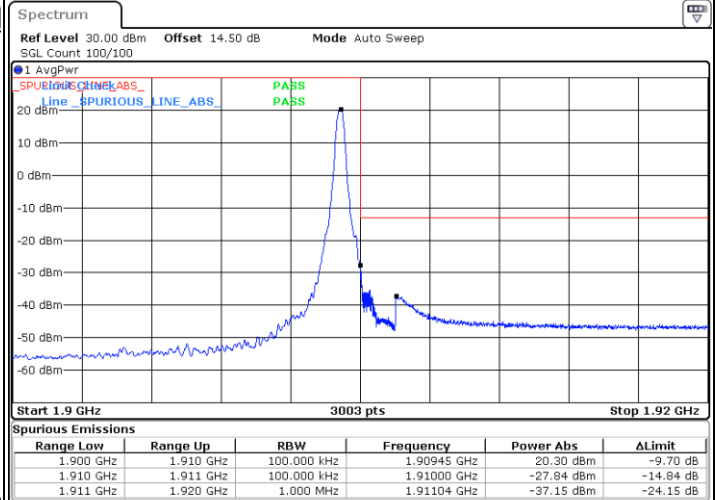


LTE Band 2 / 10MHz / QPSK

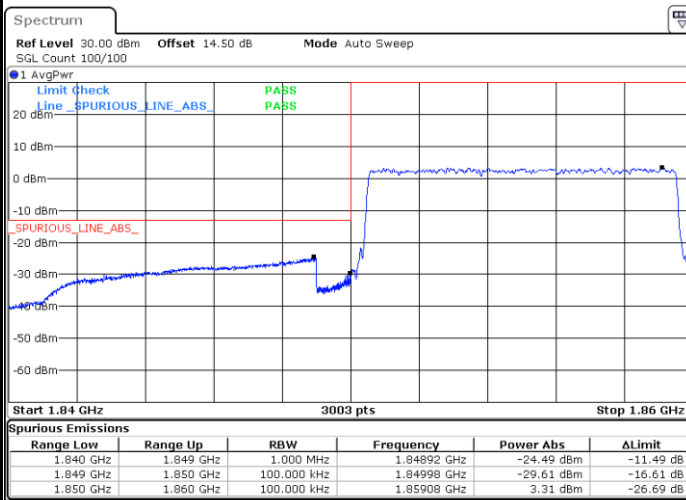
Lowest Band Edge / 1RB



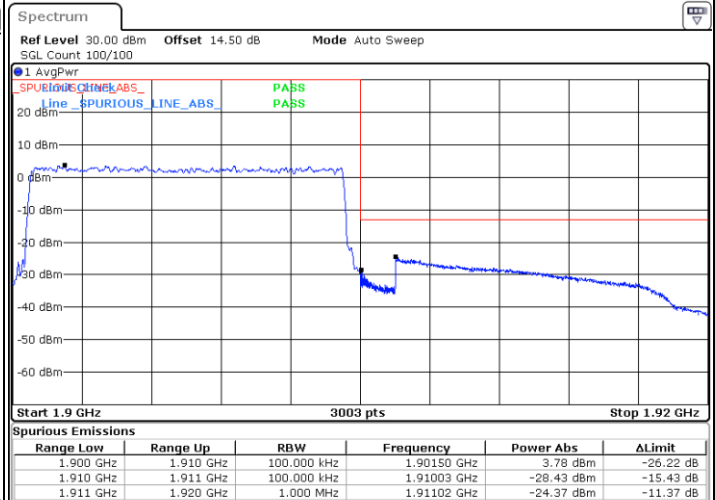
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



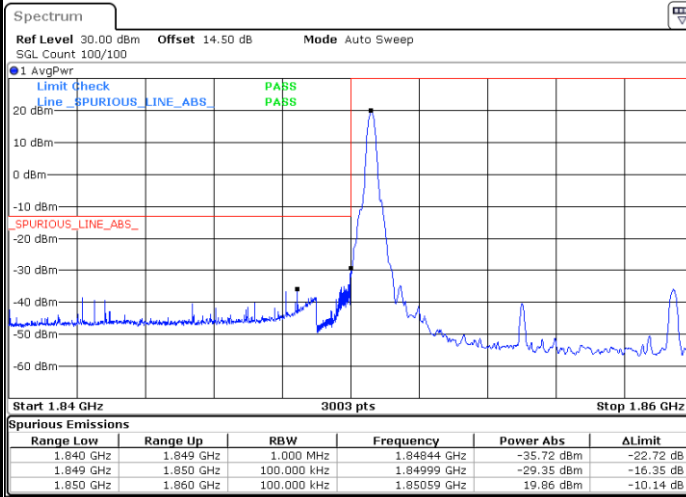
Highest Band Edge / Full RB



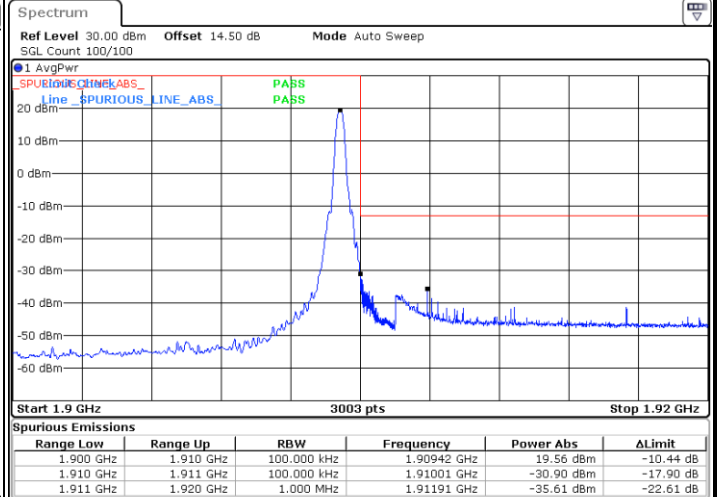


LTE Band 2 / 10MHz / 16QAM

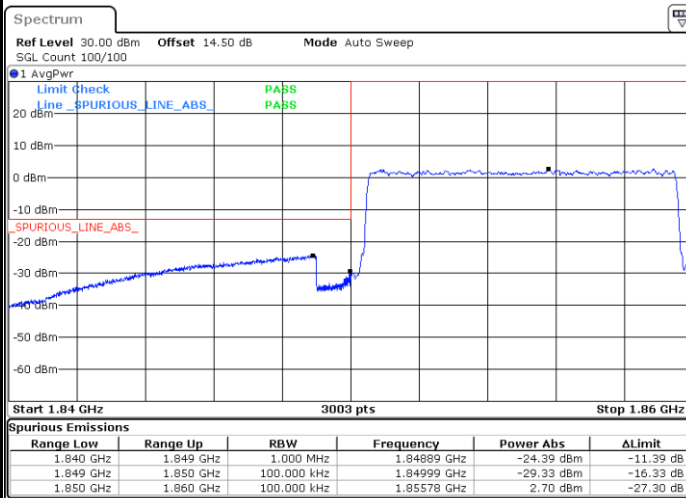
Lowest Band Edge / 1 RB



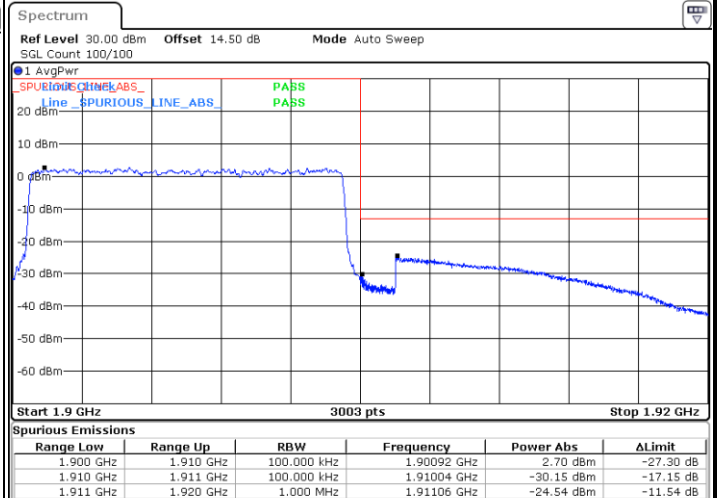
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



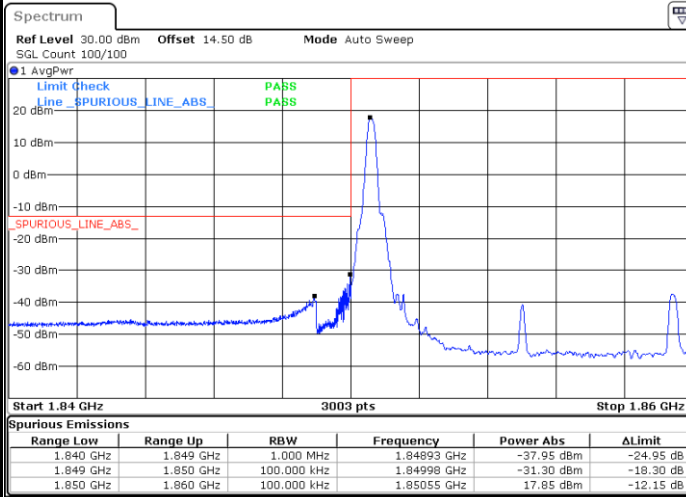
Highest Band Edge / Full RB



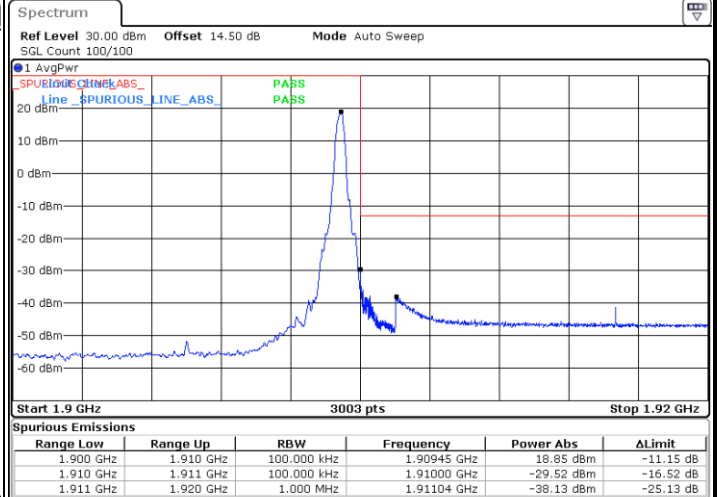


LTE Band 2 / 10MHz / 64QAM

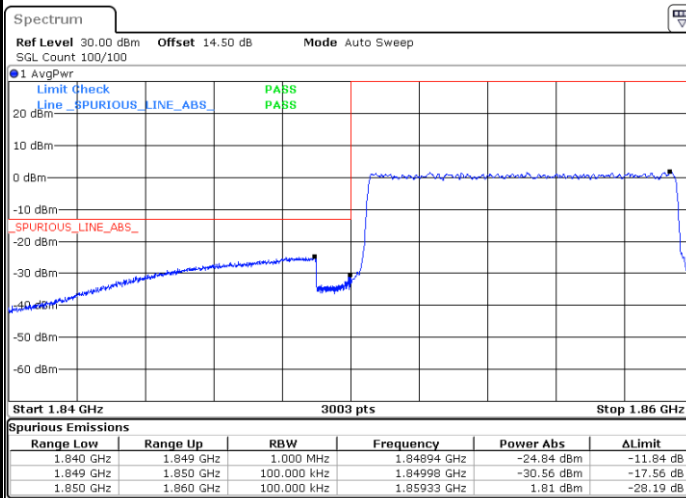
Lowest Band Edge / 1 RB



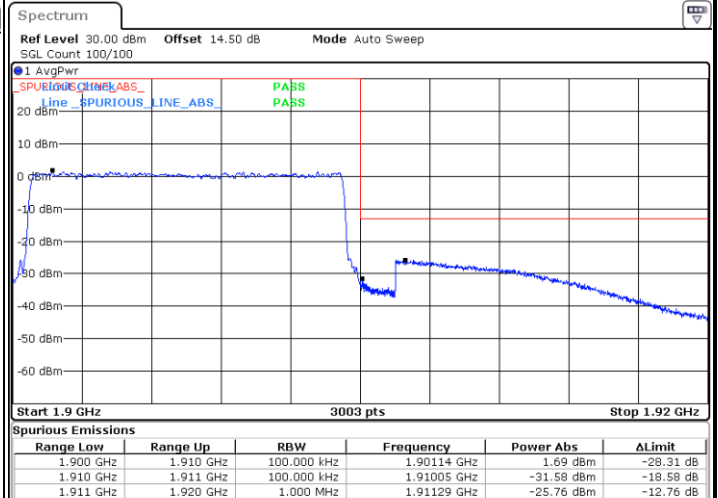
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



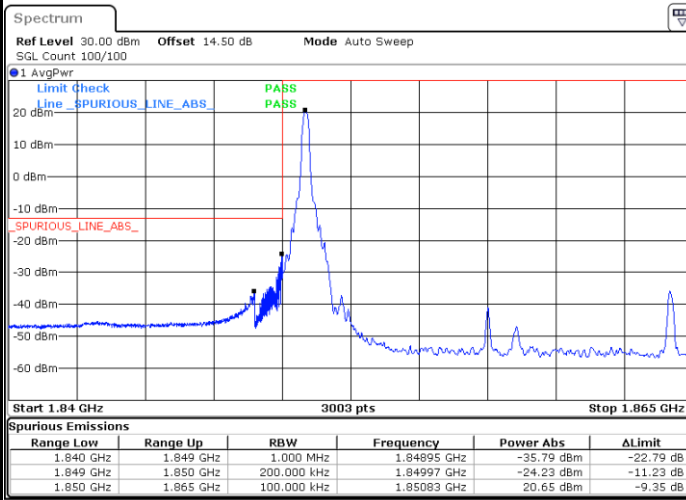
Highest Band Edge / Full RB





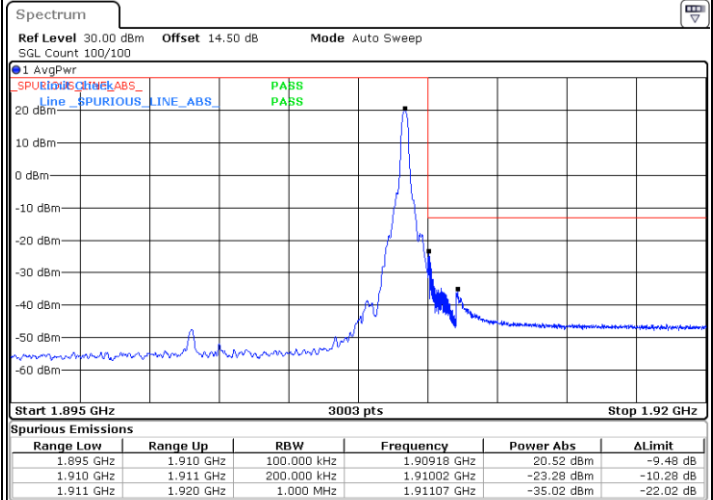
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1RB



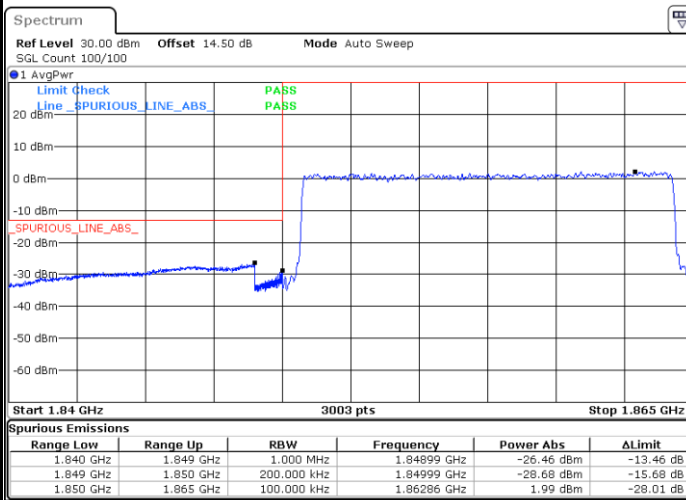
Date: 6.MAR.2024 23:30:59

Highest Band Edge / 1RB



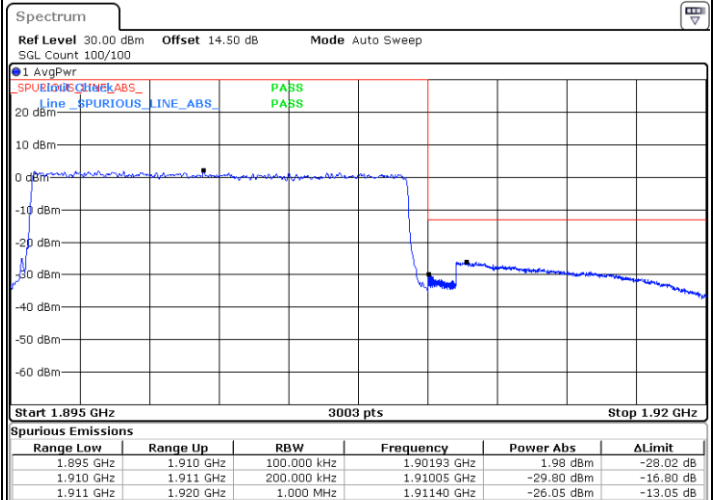
Date: 6.MAR.2024 23:38:52

Lowest Band Edge / Full RB



Date: 6.MAR.2024 23:33:16

Highest Band Edge / Full RB

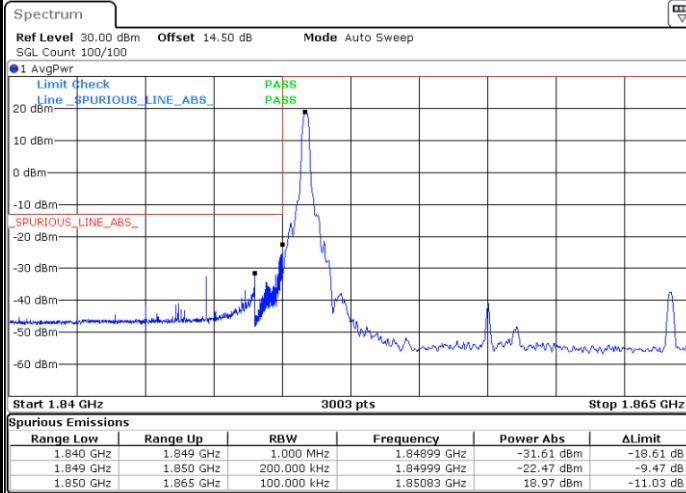


Date: 6.MAR.2024 23:41:09

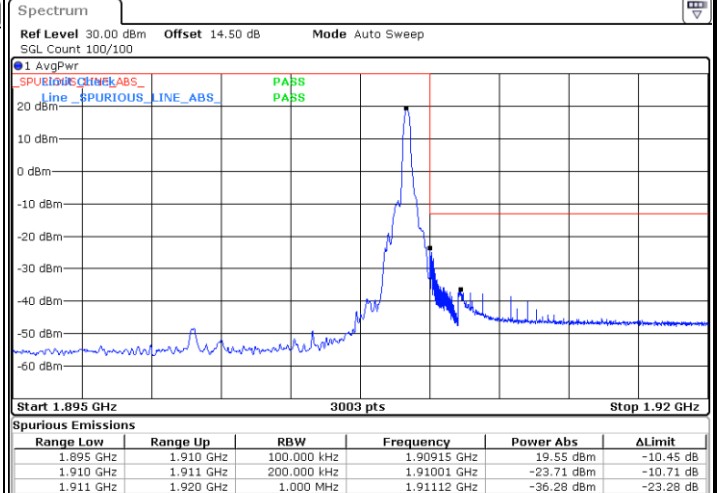


LTE Band 2 / 15MHz / 16QAM

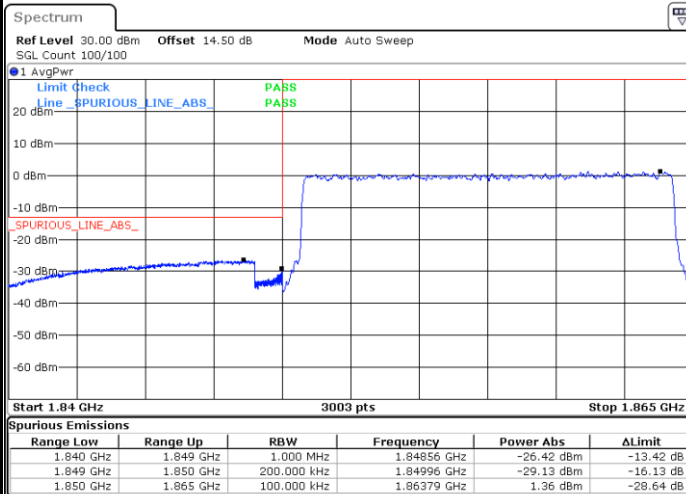
Lowest Band Edge / 1 RB



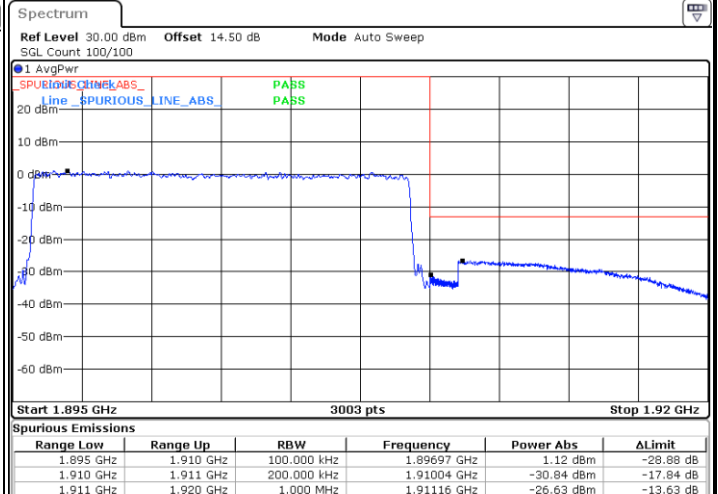
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



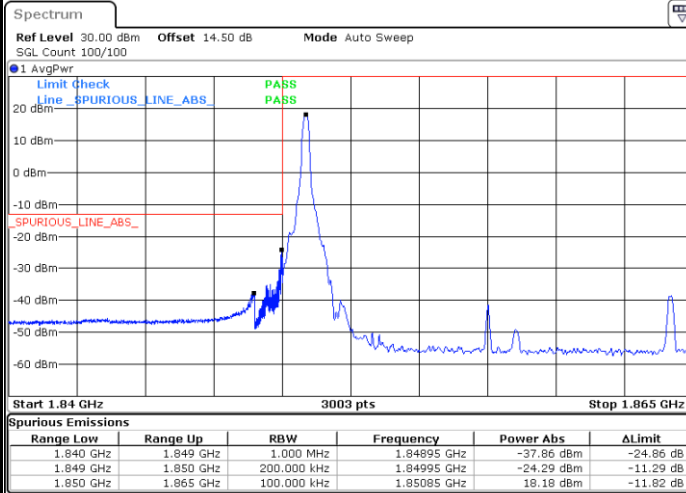
Highest Band Edge / Full RB



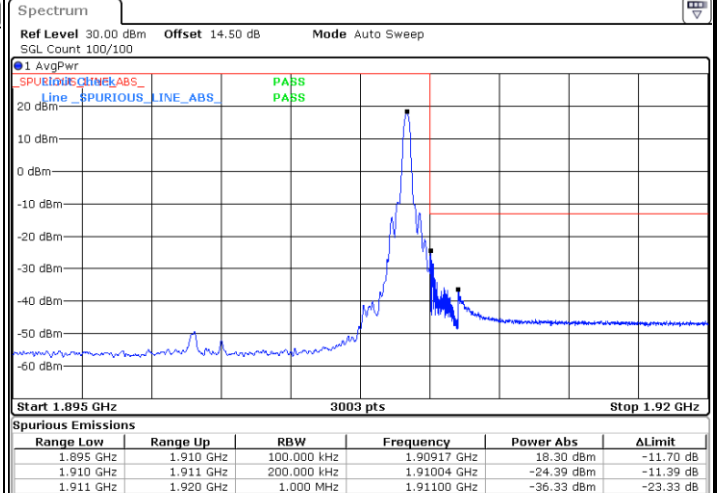


LTE Band 2 / 15MHz / 64QAM

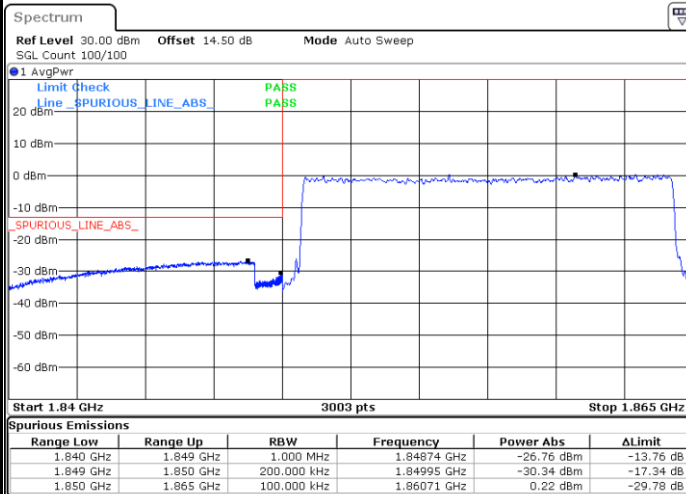
Lowest Band Edge / 1 RB



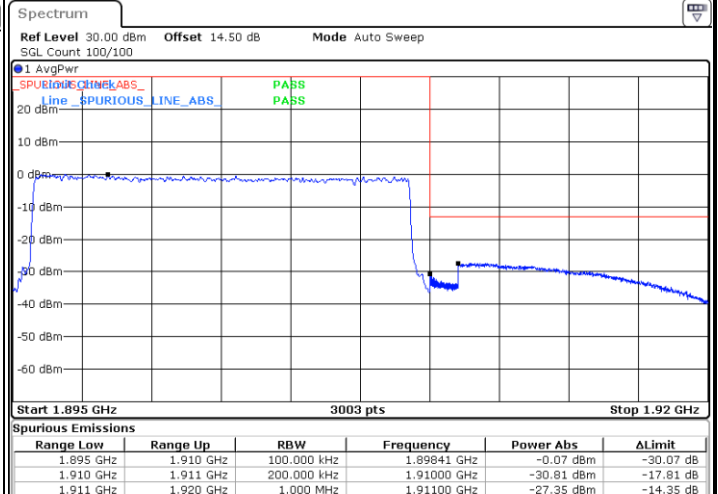
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



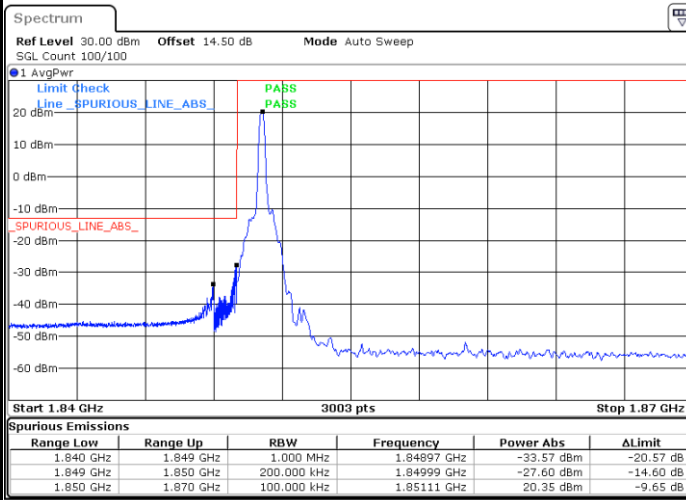
Highest Band Edge / Full RB



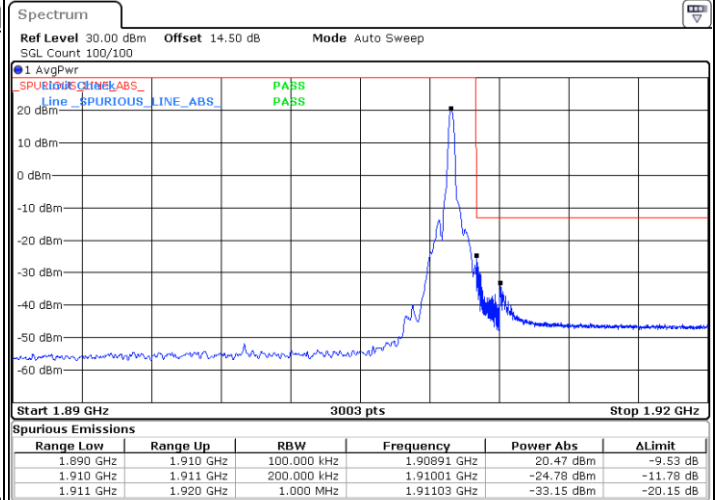


LTE Band 2 / 20MHz / QPSK

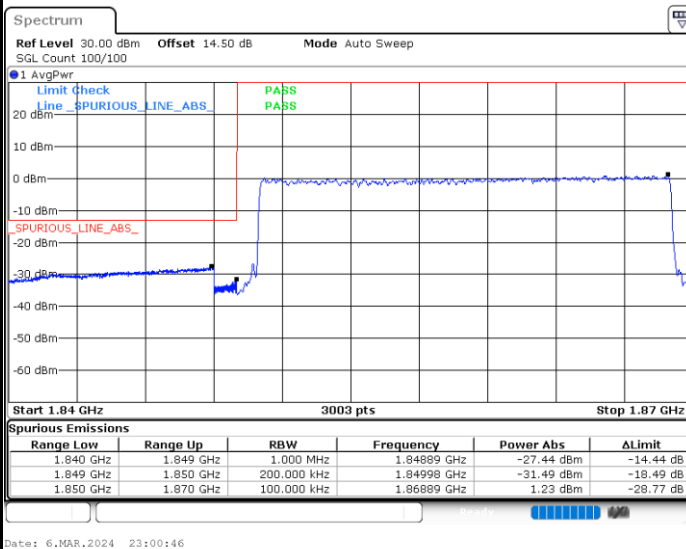
Lowest Band Edge / 1RB



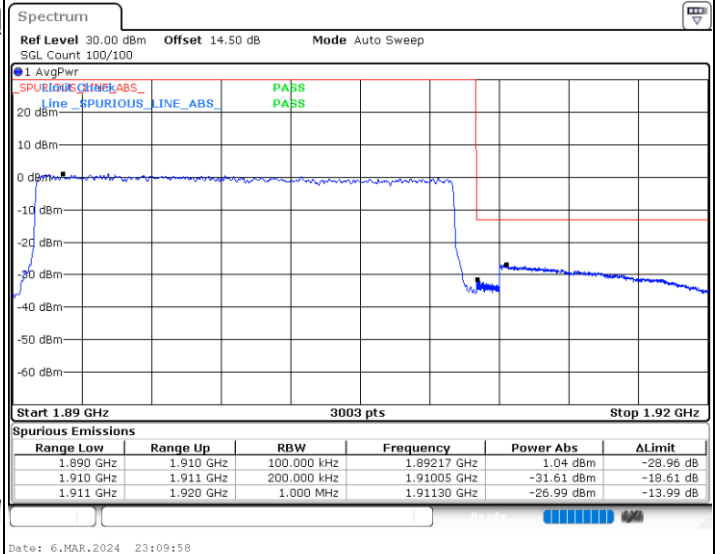
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



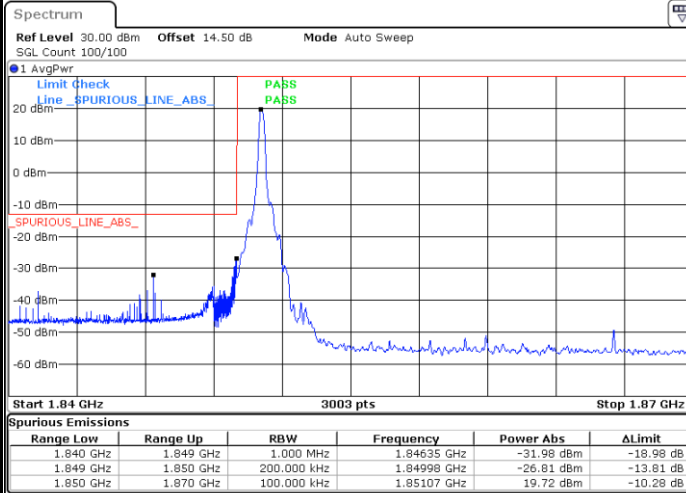
Highest Band Edge / Full RB



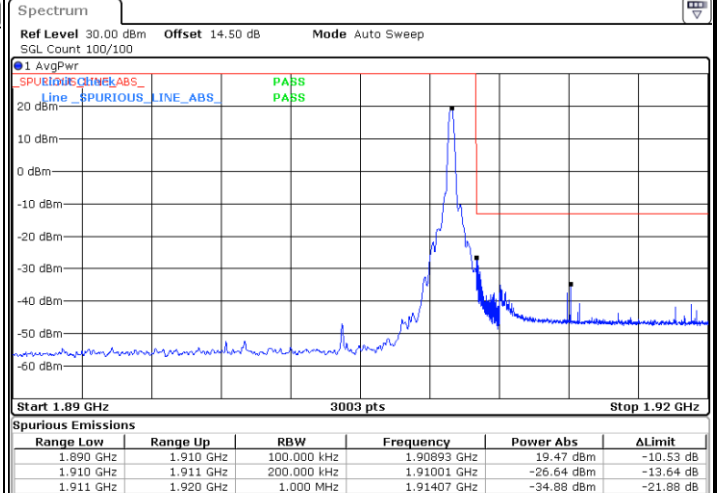


LTE Band 2 / 20MHz / 16QAM

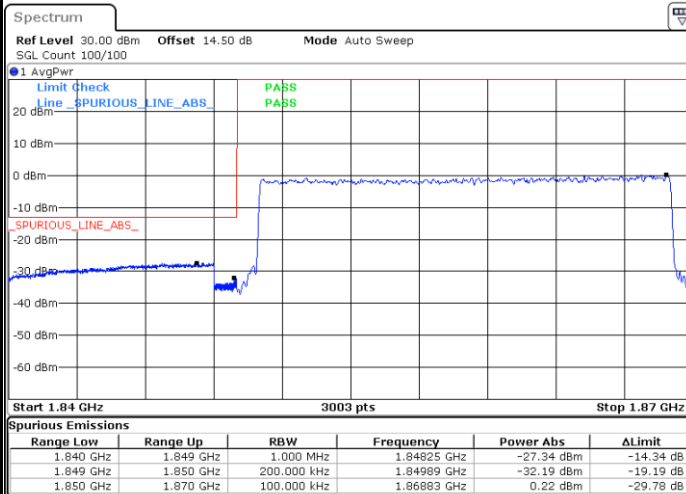
Lowest Band Edge / 1 RB



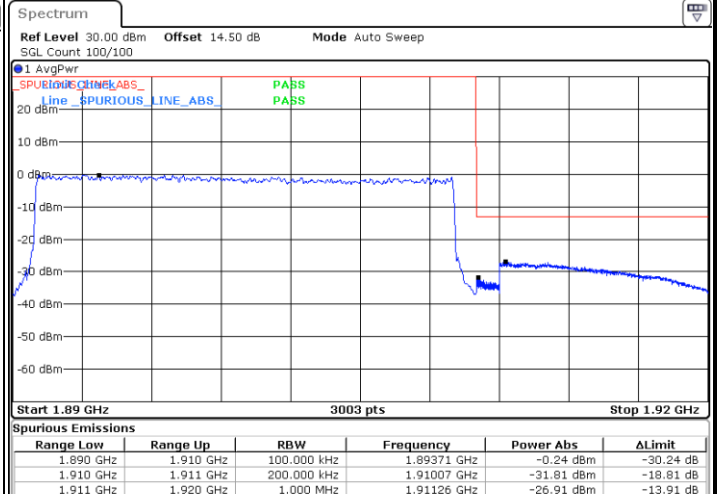
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



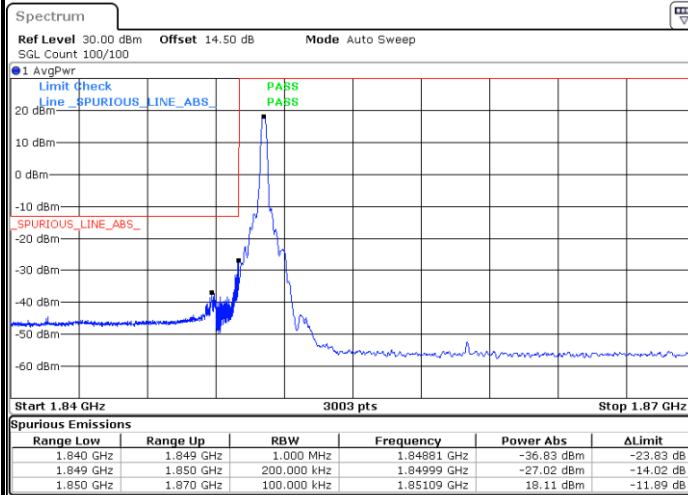
Highest Band Edge / Full RB



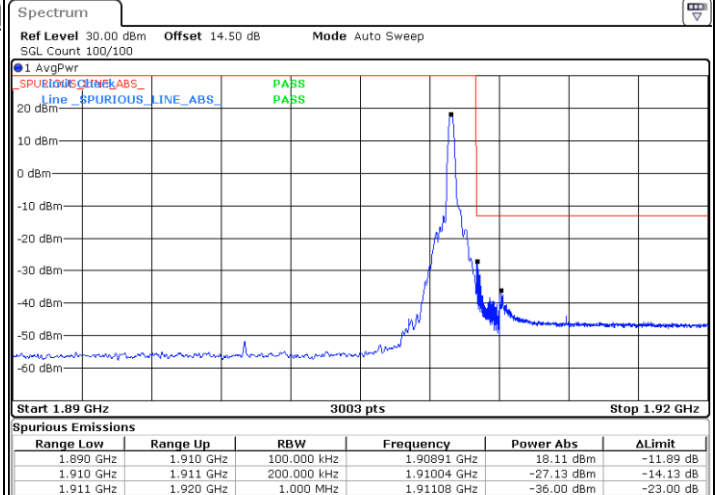


LTE Band 2 / 20MHz / 64QAM

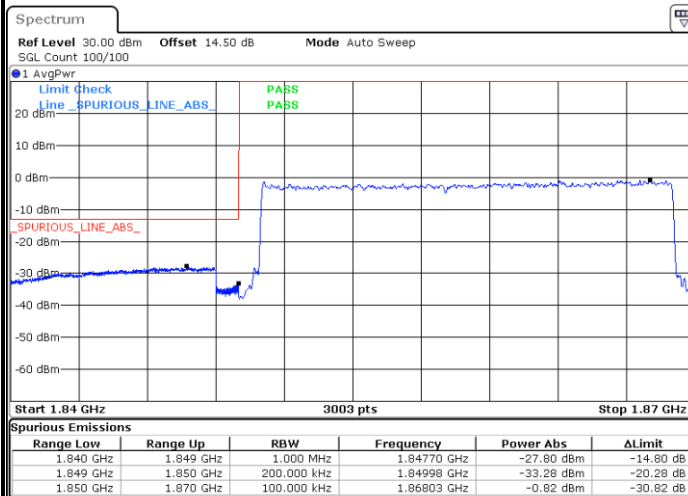
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

