



# FCC RF Test Report

**APPLICANT** : Xiaomi Communications Co., Ltd.  
**EQUIPMENT** : Mobile Phone  
**BRAND NAME** : Xiaomi  
**MODEL NAME** : A301XM  
**FCC ID** : 2AFZZND5R  
**STANDARD** : 47 CFR Part 2, 24(E), 27(L), 27(M)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)  
**TEST DATE(S)** : Jun. 08, 2023 ~ Jun. 14, 2023

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...5
1.5 Modification of EUT...6
1.6 Maximum EIRP Power and Emission Designator...7
1.7 Testing Location...8
1.8 Test Software...8
1.9 Applicable Standards...9
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST...10
2.1 Test Mode...10
2.2 Connection Diagram of Test System...12
2.3 Support Unit used in test configuration and system...12
2.4 Measurement Results Explanation Example...12
2.5 Frequency List of Low/Middle/High Channels...13
3 CONDUCTED TEST ITEMS...16
3.1 Measuring Instruments...16
3.2 Test Setup...16
3.3 Test Result of Conducted Test...16
3.4 Conducted Output Power and EIRP...17
3.5 Peak-to-Average Ratio...18
3.6 Occupied Bandwidth...19
3.7 Conducted Band Edge...20
3.8 Conducted Spurious Emission...22
3.9 Frequency Stability...23
4 RADIATED TEST ITEMS...24
4.1 Measuring Instruments...24
4.2 Test Setup...24
4.3 Test Result of Radiated Test...25
4.4 Radiated Spurious Emission...26
5 LIST OF MEASURING EQUIPMENT...27
6 MEASUREMENT UNCERTAINTY...28
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
FG351205-01A	Rev. 01	Initial issue of report	Jul. 04, 2023



## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 7) (Band 41)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §24.238(a) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 41)	§27.53(m)(4)		
3.8	§2.1051 §24.238(a) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 41)	< 55+10log <sub>10</sub> (P[Watts])		
3.9	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4)	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 23.01 dB at 7752.27 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 41)	< 55+10log <sub>10</sub> (P[Watts])		

**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/manufacturer 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

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

## 1.2 Manufacturer

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	Xiaomi
Model Name	A301XM
FCC ID	2AFZZND5R
IMEI Code	Conducted: 869272060008443/869272060008450 Radiation: 869272060000721/869272060000739
HW Version	P2.0
SW Version	MIUI 14
EUT Stage	Identical Prototype

## 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 7 : 2500 MHz ~ 2570 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 7 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Ant. 1> LTE Band 41C : 23.31 dBm <Ant. 2> LTE Band 2 : 23.60 dBm LTE Band 4 : 24.52 dBm LTE Band 7 : 24.66 dBm LTE Band 41C : 24.87 dBm <Ant. 3>



	LTE Band 41C : 22.38 dBm <b>&lt;Ant. 4&gt;</b> : LTE Band 2 : 23.35 dBm LTE Band 4 : 24.36 dBm LTE Band 7 : 24.77 dBm LTE Band 41C : 24.84 dBm
Antenna Gain	<b>&lt;Ant. 1&gt;</b> : LTE Band 41 : -4.5 dBi <b>&lt;Ant. 2&gt;</b> : LTE Band 2 : -3.4 dBi LTE Band 4 : -3.5 dBi LTE Band 7 : -4.7 dBi LTE Band 41 : -4.7 dBi <b>&lt;Ant. 3&gt;</b> : LTE Band 41 : -6.2 dBi <b>&lt;Ant. 4&gt;</b> : LTE Band 2 : -6.1 dBi LTE Band 4 : -5 dBi LTE Band 7 : -1.5 dBi LTE Band 41 : -1.5 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM(Downlink Only)

**Note:** The maximum EIRP is calculated from max output power and max antenna gain, so only the maximum EIRP of Antenna 2 for LTE Band 2/4, and Antenna 4 for LTE Band 7/41C are shown in the report.

### 1.5 Modification of EUT

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



### 1.6 Maximum EIRP Power and Emission Designator

LTE Band 2		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	1860.0 ~ 1900.0	0.1047	17M9G7D	0.0902	17M9W7D
LTE Band 4		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	1720.0 ~ 1745.0	0.1265	17M9G7D	0.1023	17M9W7D
LTE Band 7		QPSK		16QAM/64QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	2510.0 ~ 2560.0	0.2123	17M8G7D	0.1656	17M9W7D

LTE Band 41 CA		QPSK		16QAM/64QAM	
BW (MHz)		Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20MHz+20MHz		0.2158	37M6G7D	0.1750	37M5W7D

**Note:** 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.

<b>Test Firm</b>	Sporton International Inc. (ShenZhen)		
<b>Test Site Location</b>	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		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	TH01-SZ	CN1256	421272

<b>Test Firm</b>	Sporton International Inc. (ShenZhen)		
<b>Test Site Location</b>	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	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, 24(E), 27(L), 27(M)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

### **Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

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

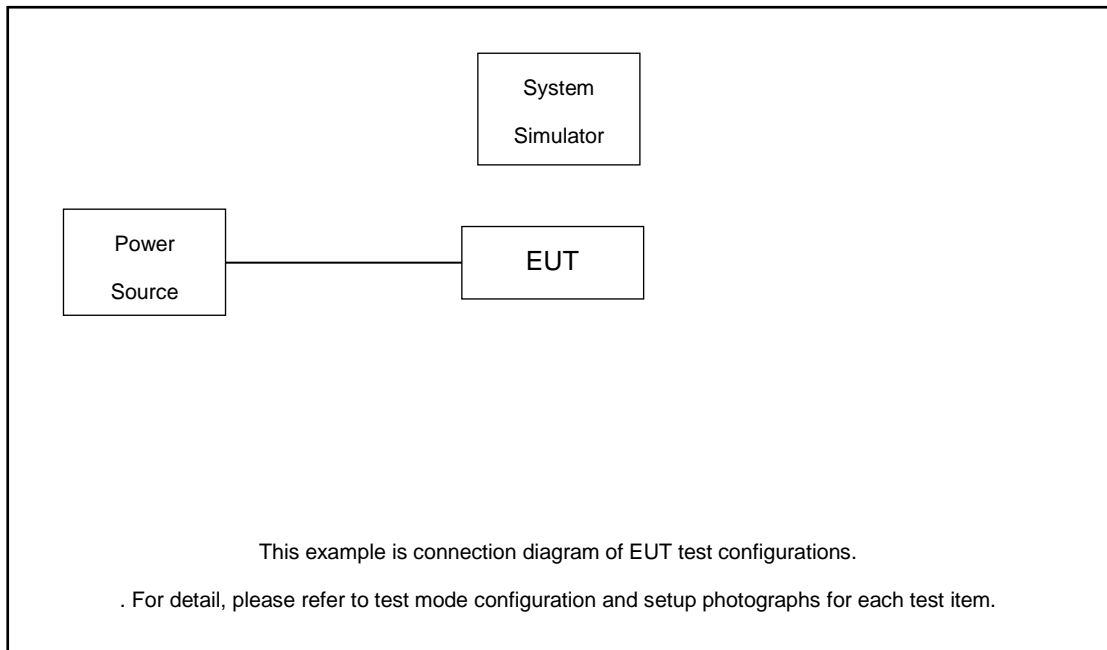
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	-	v	v	v	v	v	v
Peak-to-Average Ratio	2						v	v	v	v	-			v		v	
	4						v	v	v	v	-			v		v	
	7	-	-				v	v	v	v	-			v		v	
26dB and 99% Bandwidth	2						v	v	v		-			v		v	
	4						v	v	v		-			v		v	
	7	-	-				v	v	v		-			v		v	
Conducted Band Edge	2	v	v	v	v	v	v	v	v	v	-	v		v	v		v
	4	v	v	v	v	v	v	v	v	v	-	v		v	v		v
	7	-	-	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
	4	v	v	v	v	v	v	v			-	v			v	v	v
	7	-	-	v	v	v	v	v			-	v			v	v	v
Frequency Stability	2				v			v			-			v		v	
	4				v			v			-			v		v	
	7	-	-		v			v			-			v		v	
E.I.R.P	2	v	v	v	v	v	v	v	v	v	-	v			v	v	v
	4	v	v	v	v	v	v	v	v	v	-	v			v	v	v
	7	-	-	v	v	v	v	v	v	v	-	v			v	v	v
Radiated Spurious Emission	2	Worst Case													v	v	v
	4	Worst Case													v	v	v
	7	Worst Case													v	v	v



Test Items	Band	Bandwidth (MHz)										Modulation			RB #			Test Channel					
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H		
Max. Output Power	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		
26dB and 99% Bandwidth	41C_CA	v												v	v			v		v			
Conducted Band Edge	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		
Conducted Spurious Emission	41C_CA	v	v	v	v	v	v	v	v	v	v	v					v			v	v	v	
E.I.R.P.	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v	
Radiated Spurious Emission	41C_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.																						

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss 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.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

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

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.5 + 10 = 14.5 \text{ (dB)} \end{aligned}$$



### 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 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 41C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest	
20 + 20	PCC	Channel	39750	40521	41292
		Frequency	2506.0	2583.1	2660.2
	SCC	Channel	39948	40719	41490
		Frequency	2525.8	2602.9	2680.0
20 + 15	PCC	Channel	39750	40546	41341
		Frequency	2506.0	2585.6	2665.1
	SCC	Channel	39921	40717	41512
		Frequency	2523.1	2602.7	2682.2
15 + 20	PCC	Channel	39728	40523	41319
		Frequency	2503.8	2593.3	2662.9
	SCC	Channel	39899	40694	41490
		Frequency	2520.9	2600.4	2680.0
20 + 10	PCC	Channel	39750	40571	41391
		Frequency	2506.0	2588.1	2670.1
	SCC	Channel	39894	40715	41535
		Frequency	2520.4	2602.5	2684.5
10 + 20	PCC	Channel	39705	40526	41346
		Frequency	2501.5	2583.6	2665.6
	SCC	Channel	39849	40670	41490
		Frequency	2515.9	2598.0	2680.0



LTE Band 41C_CA Channel and Frequency List					
20 + 5	PCC	Channel	39750	40595	41440
		Frequency	2506.0	2590.5	2675.0
	SCC	Channel	39867	40712	41557
		Frequency	2517.7	2602.2	2686.7
5 + 20	PCC	Channel	39683	40528	41373
		Frequency	2499.3	2583.8	2668.3
	SCC	Channel	39800	40645	41490
		Frequency	2511.0	2595.5	2680.0
15 + 15	PCC	Channel	39725	40545	41365
		Frequency	2503.5	2585.5	2667.5
	SCC	Channel	39875	40695	41515
		Frequency	2518.5	2600.5	2682.5
10 + 15	PCC	Channel	39703	40549	41395
		Frequency	2501.3	2585.9	2670.5
	SCC	Channel	39823	40669	41515
		Frequency	2513.3	2597.9	2682.5
15 + 10	PCC	Channel	39725	40571	41417
		Frequency	2503.5	2588.1	2672.7
	SCC	Channel	39845	40691	41537
		Frequency	2515.5	2600.1	2684.7

### 3 Conducted Test Items

#### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.2 Test Setup

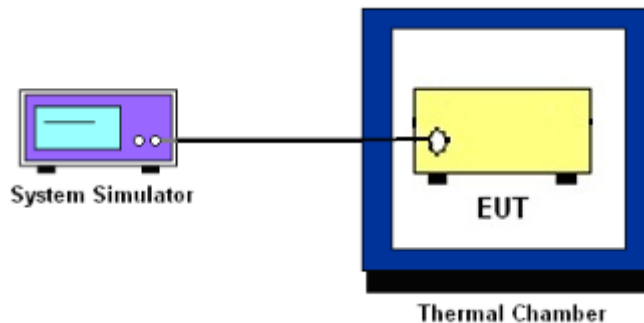
##### 3.2.1 Conducted Output Power



##### 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 EIRP

#### 3.4.1 Description of the Conducted Output Power Measurement and 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 EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 7 and Band 41.

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

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

#### 3.4.2 Test Procedures

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



## **3.5 Peak-to-Average Ratio**

### **3.5.1 Description of the PAR Measurement**

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

### **3.5.2 Test Procedures**

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



### 3.6 Occupied Bandwidth

#### 3.6.1 Description of Occupied Bandwidth Measurement

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

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

#### 3.6.2 Test Procedures

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



### 3.7 Conducted Band Edge

#### 3.7.1 Description of Conducted Band Edge Measurement

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  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.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.



### 3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
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  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
= P(W)- [43 + 10log(P)] (dB)  
= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

9. For LTE Band 7, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.
10. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.



### 3.8 Conducted Spurious Emission

#### 3.8.1 Description of Conducted Spurious Emission Measurement

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

For Band 7, 41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> 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.
11. For Band 7,41  
The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [55 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
 $= -25$ 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  $-30^{\circ}\text{C}$  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  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . 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.

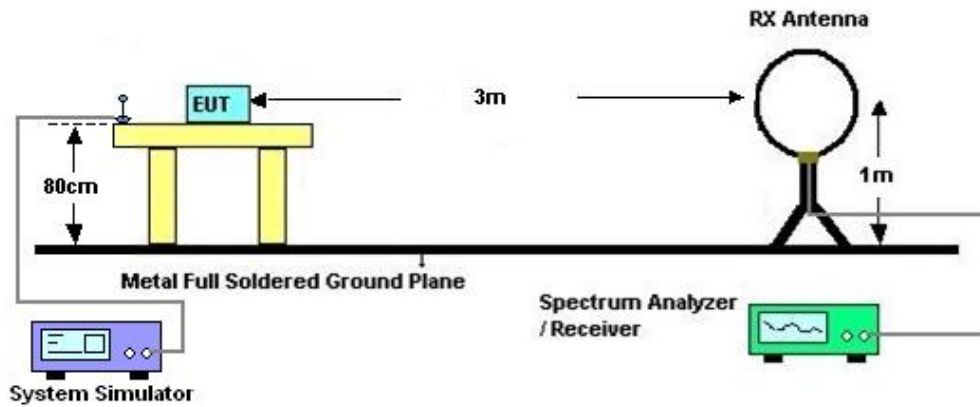
## 4 Radiated Test Items

### 4.1 Measuring Instruments

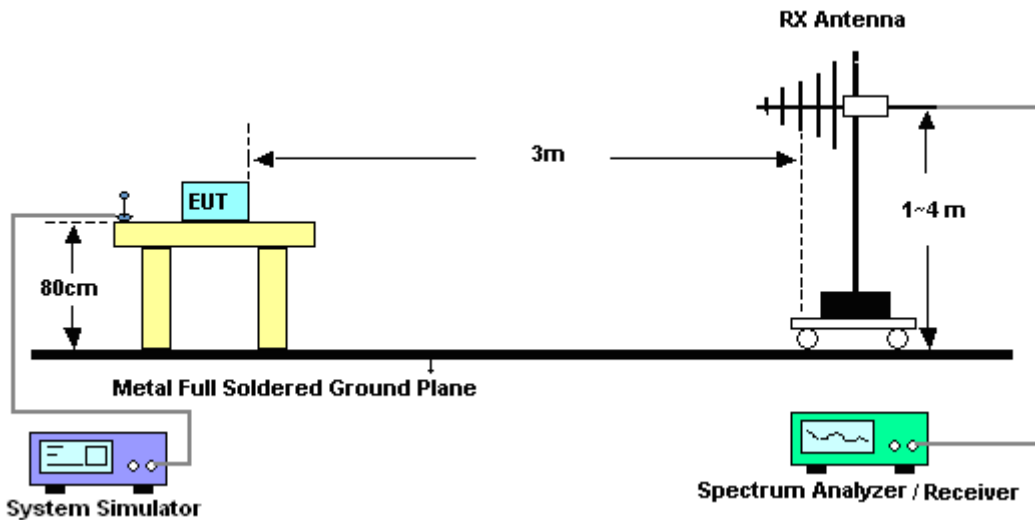
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test below 30MHz

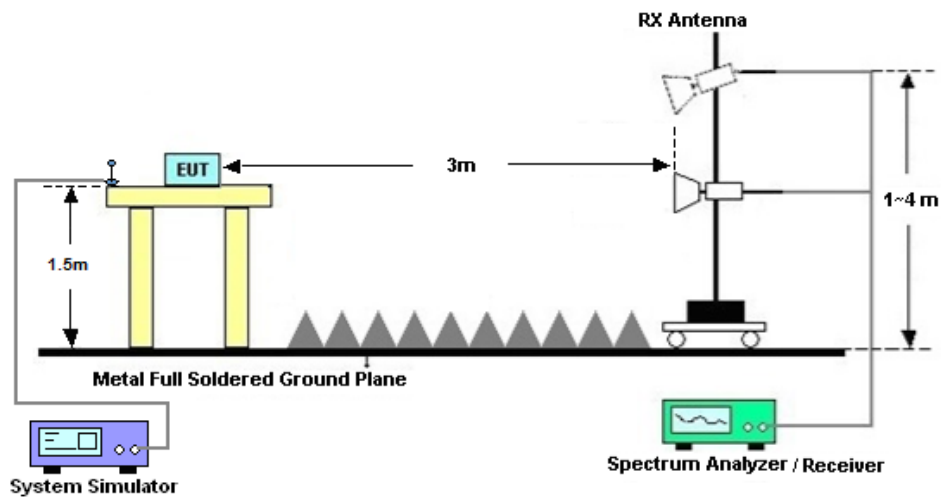


#### 4.2.2 For radiated test from 30MHz to 1GHz





#### 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.

For Band 7, 41

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

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

### 4.4.2 Test Procedures

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

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

13. For Band 7, 41:

The limit line is derived from  $55 + 10\log(P)$ dB below the transmitter power P(Watts)



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 06, 2023	Jun. 09, 2023~ Jun. 14, 2023	Apr. 05, 2024	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct. 17, 2022	Jun. 09, 2023~ Jun. 14, 2023	Oct. 16, 2023	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 25, 2022	Jun. 09, 2023~ Jun. 14, 2023	Dec. 24, 2023	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 07, 2022	Jun. 09, 2023~ Jun. 14, 2023	Jul. 06, 2023	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 26, 2022	Jun. 08, 2023	Dec. 25, 2023	Radiation (03CH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 07, 2022	Jun. 08, 2023	Jul. 06, 2023	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Jun. 08, 2023	Jul. 27, 2024	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Sep. 28, 2021	Jun. 08, 2023	Sep. 27, 2023	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 07, 2022	Jun. 08, 2023	Jul. 06, 2023	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 08, 2023	Jun. 08, 2023	Apr. 07, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 19, 2022	Jun. 08, 2023	Oct. 18, 2023	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 05, 2023	Jun. 08, 2023	Apr. 04, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 19, 2022	Jun. 08, 2023	Oct. 18, 2023	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 06, 2022	Jun. 08, 2023	Jul. 05, 2023	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	Nov. 10, 2022	Jun. 08, 2023	Nov. 09, 2023	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 08, 2023	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 08, 2023	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 Power	±1.34 dB
Conducted Emissions	±1.34 dB
Occupied Channel Bandwidth	±0.13 %

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

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

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

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

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

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



### Appendix A. Test Results of Conducted Test

Test Engineer :	Jason Zhang	Temperature :	24~26°C
		Relative Humidity :	50~53%

### Conducted Output Power(Average power)

#### LTE Band 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	23.54	23.60	23.47
20	QPSK	1	49	23.48	23.51	23.40
20	QPSK	1	99	23.40	23.47	23.45
20	QPSK	50	0	22.64	22.76	22.72
20	QPSK	50	24	22.57	22.69	22.55
20	QPSK	50	50	22.52	22.66	22.59
20	QPSK	100	0	22.62	22.75	22.71
20	16QAM	1	0	22.91	22.95	22.89
20	16QAM	1	49	22.67	22.73	22.61
20	16QAM	1	99	22.80	22.89	22.82
20	16QAM	50	0	21.60	21.73	21.62
20	16QAM	50	24	21.57	21.72	21.57
20	16QAM	50	50	21.67	21.74	21.61
20	16QAM	100	0	21.65	21.71	21.61
20	64QAM	1	0	21.81	21.94	21.84
20	64QAM	1	49	21.78	21.88	21.78
20	64QAM	1	99	21.81	21.92	21.83
20	64QAM	50	0	20.75	20.79	20.75
20	64QAM	50	24	20.56	20.70	20.61
20	64QAM	50	50	20.59	20.67	20.55
20	64QAM	100	0	20.59	20.69	20.55
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	23.43	23.49	23.40
15	QPSK	1	37	23.36	23.37	23.34
15	QPSK	1	74	23.30	23.42	23.30
15	QPSK	36	0	22.58	22.69	22.68
15	QPSK	36	20	22.48	22.60	22.48
15	QPSK	36	39	22.46	22.57	22.49
15	QPSK	75	0	22.57	22.60	22.59
15	16QAM	1	0	22.84	22.91	22.77
15	16QAM	1	37	22.56	22.67	22.49
15	16QAM	1	74	22.68	22.81	22.68
15	16QAM	36	0	21.57	21.59	21.48
15	16QAM	36	20	21.46	21.59	21.50



15	16QAM	36	39	21.59	21.60	21.47
15	16QAM	75	0	21.53	21.61	21.55
15	64QAM	1	0	21.72	21.84	21.77
15	64QAM	1	37	21.63	21.82	21.64
15	64QAM	1	74	21.72	21.78	21.76
15	64QAM	36	0	20.71	20.64	20.61
15	64QAM	36	20	20.49	20.58	20.47
15	64QAM	36	39	20.48	20.53	20.46
15	64QAM	75	0	20.49	20.60	20.46
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	23.51	23.56	23.36
10	QPSK	1	25	23.34	23.41	23.35
10	QPSK	1	49	23.29	23.42	23.31
10	QPSK	25	0	22.50	22.69	22.65
10	QPSK	25	12	22.44	22.65	22.40
10	QPSK	25	25	22.48	22.53	22.47
10	QPSK	50	0	22.53	22.65	22.61
10	16QAM	1	0	22.84	22.84	22.78
10	16QAM	1	25	22.63	22.69	22.52
10	16QAM	1	49	22.76	22.79	22.73
10	16QAM	25	0	21.52	21.64	21.51
10	16QAM	25	12	21.49	21.66	21.43
10	16QAM	25	25	21.59	21.66	21.50
10	16QAM	50	0	21.55	21.63	21.51
10	64QAM	1	0	21.69	21.87	21.81
10	64QAM	1	25	21.75	21.74	21.73
10	64QAM	1	49	21.66	21.85	21.77
10	64QAM	25	0	20.69	20.73	20.64
10	64QAM	25	12	20.44	20.56	20.50
10	64QAM	25	25	20.53	20.63	20.46
10	64QAM	50	0	20.46	20.55	20.45
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	23.41	23.53	23.39
5	QPSK	1	12	23.36	23.39	23.32
5	QPSK	1	24	23.32	23.35	23.32
5	QPSK	12	0	22.55	22.67	22.62
5	QPSK	12	7	22.54	22.54	22.44
5	QPSK	12	13	22.42	22.54	22.54
5	QPSK	25	0	22.48	22.70	22.57
5	16QAM	1	0	22.83	22.89	22.84
5	16QAM	1	12	22.59	22.64	22.56
5	16QAM	1	24	22.69	22.77	22.77
5	16QAM	12	0	21.54	21.63	21.58
5	16QAM	12	7	21.45	21.60	21.45
5	16QAM	12	13	21.57	21.65	21.50
5	16QAM	25	0	21.53	21.64	21.52
5	64QAM	1	0	21.66	21.86	21.75
5	64QAM	1	12	21.71	21.79	21.70



5	64QAM	1	24	21.74	21.82	21.80
5	64QAM	12	0	20.61	20.74	20.69
5	64QAM	12	7	20.51	20.62	20.54
5	64QAM	12	13	20.53	20.54	20.43
5	64QAM	25	0	20.56	20.57	20.41
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	23.47	23.55	23.38
3	QPSK	1	8	23.40	23.39	23.28
3	QPSK	1	14	23.34	23.37	23.33
3	QPSK	8	0	22.57	22.62	22.68
3	QPSK	8	4	22.44	22.60	22.49
3	QPSK	8	7	22.37	22.59	22.53
3	QPSK	15	0	22.59	22.69	22.64
3	16QAM	1	0	22.83	22.88	22.78
3	16QAM	1	8	22.63	22.61	22.46
3	16QAM	1	14	22.73	22.76	22.72
3	16QAM	8	0	21.46	21.68	21.49
3	16QAM	8	4	21.42	21.58	21.47
3	16QAM	8	7	21.61	21.64	21.48
3	16QAM	15	0	21.52	21.66	21.56
3	64QAM	1	0	21.75	21.82	21.76
3	64QAM	1	8	21.69	21.74	21.73
3	64QAM	1	14	21.72	21.84	21.71
3	64QAM	8	0	20.64	20.67	20.71
3	64QAM	8	4	20.47	20.56	20.48
3	64QAM	8	7	20.53	20.63	20.50
3	64QAM	15	0	20.47	20.58	20.46
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	23.46	23.52	23.41
1.4	QPSK	1	3	23.33	23.40	23.35
1.4	QPSK	1	5	23.30	23.35	23.31
1.4	QPSK	3	0	23.41	23.49	23.35
1.4	QPSK	3	1	23.36	23.44	23.26
1.4	QPSK	3	3	23.25	23.34	23.39
1.4	QPSK	6	0	22.57	22.69	22.57
1.4	16QAM	1	0	22.49	22.55	22.41
1.4	16QAM	1	3	22.48	22.60	22.56
1.4	16QAM	1	5	22.52	22.71	22.64
1.4	16QAM	3	0	22.82	22.85	22.80
1.4	16QAM	3	1	22.56	22.58	22.53
1.4	16QAM	3	3	22.68	22.86	22.77
1.4	16QAM	6	0	21.49	21.58	21.54
1.4	64QAM	1	0	21.43	21.66	21.45
1.4	64QAM	1	3	21.62	21.71	21.48
1.4	64QAM	1	5	21.53	21.66	21.52
1.4	64QAM	3	0	21.74	21.85	21.73
1.4	64QAM	3	1	21.66	21.78	21.72
1.4	64QAM	3	3	21.66	21.79	21.76



1.4	64QAM	6	0	20.61	20.75	20.69
-----	-------	---	---	-------	-------	-------

LTE Band 4:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	24.42	24.52	24.46
20	QPSK	1	49	24.38	24.49	24.41
20	QPSK	1	99	24.34	24.46	24.37
20	QPSK	50	0	23.66	23.74	23.65
20	QPSK	50	24	23.53	23.63	23.55
20	QPSK	50	50	23.55	23.68	23.63
20	QPSK	100	0	23.57	23.65	23.62
20	16QAM	1	0	23.47	23.60	23.51
20	16QAM	1	49	23.45	23.59	23.49
20	16QAM	1	99	23.48	23.57	23.48
20	16QAM	50	0	22.66	22.73	22.67
20	16QAM	50	24	22.63	22.68	22.61
20	16QAM	50	50	22.56	22.71	22.58
20	16QAM	100	0	22.50	22.65	22.54
20	64QAM	1	0	22.51	22.58	22.53
20	64QAM	1	49	22.61	22.66	22.59
20	64QAM	1	99	22.69	22.74	22.65
20	64QAM	50	0	21.56	21.66	21.52
20	64QAM	50	24	21.57	21.69	21.54
20	64QAM	50	50	21.55	21.65	21.59
20	64QAM	100	0	21.52	21.66	21.54
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	24.31	24.47	24.36
15	QPSK	1	37	24.26	24.41	24.38
15	QPSK	1	74	24.28	24.39	24.28
15	QPSK	36	0	23.55	23.62	23.53
15	QPSK	36	20	23.45	23.53	23.46
15	QPSK	36	39	23.52	23.61	23.55
15	QPSK	75	0	23.51	23.52	23.49
15	16QAM	1	0	23.32	23.48	23.43
15	16QAM	1	37	23.35	23.51	23.41
15	16QAM	1	74	23.41	23.43	23.35
15	16QAM	36	0	22.60	22.63	22.55
15	16QAM	36	20	22.49	22.59	22.57
15	16QAM	36	39	22.44	22.65	22.54
15	16QAM	75	0	22.39	22.58	22.50
15	64QAM	1	0	22.44	22.50	22.42
15	64QAM	1	37	22.57	22.59	22.49
15	64QAM	1	74	22.61	22.63	22.51
15	64QAM	36	0	21.42	21.60	21.42
15	64QAM	36	20	21.43	21.63	21.41





15	64QAM	36	39	21.47	21.52	21.45
15	64QAM	75	0	21.47	21.52	21.42
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	24.30	24.44	24.33
10	QPSK	1	25	24.25	24.43	24.28
10	QPSK	1	49	24.28	24.37	24.24
10	QPSK	25	0	23.55	23.71	23.61
10	QPSK	25	12	23.48	23.54	23.42
10	QPSK	25	25	23.44	23.61	23.55
10	QPSK	50	0	23.44	23.56	23.57
10	16QAM	1	0	23.37	23.49	23.45
10	16QAM	1	25	23.35	23.52	23.44
10	16QAM	1	49	23.41	23.47	23.44
10	16QAM	25	0	22.53	22.61	22.55
10	16QAM	25	12	22.60	22.57	22.50
10	16QAM	25	25	22.50	22.60	22.51
10	16QAM	50	0	22.43	22.55	22.49
10	64QAM	1	0	22.46	22.55	22.40
10	64QAM	1	25	22.47	22.59	22.48
10	64QAM	1	49	22.59	22.59	22.56
10	64QAM	25	0	21.50	21.52	21.39
10	64QAM	25	12	21.42	21.57	21.46
10	64QAM	25	25	21.50	21.51	21.50
10	64QAM	50	0	21.45	21.58	21.46
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	24.30	24.42	24.32
5	QPSK	1	12	24.23	24.41	24.34
5	QPSK	1	24	24.23	24.31	24.31
5	QPSK	12	0	23.56	23.60	23.53
5	QPSK	12	7	23.41	23.52	23.46
5	QPSK	12	13	23.45	23.61	23.57
5	QPSK	25	0	23.52	23.50	23.47
5	16QAM	1	0	23.42	23.53	23.45
5	16QAM	1	12	23.37	23.52	23.37
5	16QAM	1	24	23.36	23.49	23.35
5	16QAM	12	0	22.56	22.68	22.55
5	16QAM	12	7	22.55	22.63	22.57
5	16QAM	12	13	22.41	22.64	22.51
5	16QAM	25	0	22.40	22.60	22.46
5	64QAM	1	0	22.37	22.44	22.49
5	64QAM	1	12	22.47	22.55	22.55
5	64QAM	1	24	22.59	22.64	22.55
5	64QAM	12	0	21.43	21.54	21.44
5	64QAM	12	7	21.51	21.65	21.51
5	64QAM	12	13	21.45	21.55	21.45
5	64QAM	25	0	21.49	21.55	21.42
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5



3	QPSK	1	0	24.38	24.49	24.35
3	QPSK	1	8	24.32	24.40	24.30
3	QPSK	1	14	24.24	24.37	24.30
3	QPSK	8	0	23.55	23.70	23.60
3	QPSK	8	4	23.50	23.50	23.51
3	QPSK	8	7	23.51	23.54	23.57
3	QPSK	15	0	23.45	23.60	23.54
3	16QAM	1	0	23.38	23.51	23.43
3	16QAM	1	8	23.38	23.45	23.46
3	16QAM	1	14	23.37	23.44	23.40
3	16QAM	8	0	22.52	22.62	22.61
3	16QAM	8	4	22.57	22.64	22.51
3	16QAM	8	7	22.52	22.64	22.50
3	16QAM	15	0	22.41	22.58	22.46
3	64QAM	1	0	22.46	22.47	22.42
3	64QAM	1	8	22.54	22.61	22.45
3	64QAM	1	14	22.54	22.61	22.62
3	64QAM	8	0	21.43	21.60	21.45
3	64QAM	8	4	21.42	21.56	21.45
3	64QAM	8	7	21.41	21.60	21.55
3	64QAM	15	0	21.43	21.60	21.46
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	24.36	24.48	24.36
1.4	QPSK	1	3	24.29	24.38	24.36
1.4	QPSK	1	5	24.28	24.33	24.28
1.4	QPSK	3	0	24.36	24.41	24.34
1.4	QPSK	3	1	24.29	24.42	24.29
1.4	QPSK	3	3	24.30	24.36	24.28
1.4	QPSK	6	0	23.56	23.61	23.61
1.4	16QAM	1	0	23.45	23.51	23.48
1.4	16QAM	1	3	23.44	23.54	23.52
1.4	16QAM	1	5	23.42	23.61	23.48
1.4	16QAM	3	0	23.33	23.47	23.43
1.4	16QAM	3	1	23.33	23.48	23.36
1.4	16QAM	3	3	23.43	23.52	23.36
1.4	16QAM	6	0	22.53	22.69	22.64
1.4	64QAM	1	0	22.58	22.62	22.56
1.4	64QAM	1	3	22.51	22.57	22.48
1.4	64QAM	1	5	22.45	22.53	22.46
1.4	64QAM	3	0	22.37	22.54	22.41
1.4	64QAM	3	1	22.48	22.62	22.50
1.4	64QAM	3	3	22.55	22.60	22.55
1.4	64QAM	6	0	21.48	21.60	21.41



LTE Band 7:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	24.72	24.77	24.68
20	QPSK	1	49	24.65	24.69	24.60
20	QPSK	1	99	24.61	24.64	24.51
20	QPSK	50	0	23.66	23.76	23.63
20	QPSK	50	24	23.61	23.70	23.62
20	QPSK	50	50	23.53	23.65	23.60
20	QPSK	100	0	23.64	23.71	23.65
20	16QAM	1	0	23.66	23.69	23.58
20	16QAM	1	49	23.54	23.63	23.57
20	16QAM	1	99	23.54	23.59	23.46
20	16QAM	50	0	22.75	22.85	22.73
20	16QAM	50	24	22.71	22.77	22.70
20	16QAM	50	50	22.77	22.81	22.74
20	16QAM	100	0	22.61	22.75	22.64
20	64QAM	1	0	22.84	22.91	22.85
20	64QAM	1	49	22.82	22.85	22.77
20	64QAM	1	99	22.76	22.81	22.75
20	64QAM	50	0	21.70	21.78	21.70
20	64QAM	50	24	21.62	21.69	21.62
20	64QAM	50	50	21.68	21.74	21.66
20	64QAM	100	0	21.60	21.66	21.52
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	24.65	24.72	24.60
15	QPSK	1	37	24.57	24.61	24.46
15	QPSK	1	74	24.51	24.50	24.39
15	QPSK	36	0	23.57	23.61	23.57
15	QPSK	36	20	23.57	23.61	23.55
15	QPSK	36	39	23.43	23.60	23.53
15	QPSK	75	0	23.60	23.66	23.58
15	16QAM	1	0	23.60	23.58	23.52
15	16QAM	1	37	23.48	23.51	23.48
15	16QAM	1	74	23.41	23.53	23.38
15	16QAM	36	0	22.71	22.73	22.66
15	16QAM	36	20	22.65	22.64	22.63
15	16QAM	36	39	22.70	22.70	22.68
15	16QAM	75	0	22.54	22.65	22.55
15	64QAM	1	0	22.71	22.83	22.72
15	64QAM	1	37	22.75	22.77	22.70
15	64QAM	1	74	22.71	22.67	22.69
15	64QAM	36	0	21.64	21.65	21.58
15	64QAM	36	20	21.54	21.65	21.51
15	64QAM	36	39	21.57	21.63	21.56
15	64QAM	75	0	21.49	21.58	21.41



Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	24.67	24.69	24.64
10	QPSK	1	25	24.54	24.59	24.46
10	QPSK	1	49	24.50	24.60	24.48
10	QPSK	25	0	23.59	23.64	23.57
10	QPSK	25	12	23.52	23.62	23.47
10	QPSK	25	25	23.49	23.51	23.47
10	QPSK	50	0	23.58	23.68	23.58
10	16QAM	1	0	23.56	23.58	23.53
10	16QAM	1	25	23.45	23.50	23.52
10	16QAM	1	49	23.43	23.49	23.36
10	16QAM	25	0	22.69	22.73	22.58
10	16QAM	25	12	22.59	22.66	22.58
10	16QAM	25	25	22.67	22.73	22.69
10	16QAM	50	0	22.52	22.70	22.57
10	64QAM	1	0	22.71	22.80	22.74
10	64QAM	1	25	22.69	22.71	22.71
10	64QAM	1	49	22.69	22.73	22.69
10	64QAM	25	0	21.64	21.74	21.57
10	64QAM	25	12	21.57	21.64	21.51
10	64QAM	25	25	21.57	21.67	21.58
10	64QAM	50	0	21.49	21.57	21.46
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	24.69	24.68	24.60
5	QPSK	1	12	24.54	24.55	24.48
5	QPSK	1	24	24.58	24.60	24.45
5	QPSK	12	0	23.53	23.69	23.54
5	QPSK	12	7	23.57	23.59	23.50
5	QPSK	12	13	23.42	23.59	23.48
5	QPSK	25	0	23.53	23.61	23.57
5	16QAM	1	0	23.57	23.60	23.51
5	16QAM	1	12	23.45	23.59	23.46
5	16QAM	1	24	23.42	23.51	23.31
5	16QAM	12	0	22.66	22.77	22.66
5	16QAM	12	7	22.59	22.74	22.60
5	16QAM	12	13	22.72	22.68	22.60
5	16QAM	25	0	22.52	22.63	22.53
5	64QAM	1	0	22.78	22.77	22.78
5	64QAM	1	12	22.79	22.72	22.68
5	64QAM	1	24	22.66	22.70	22.68
5	64QAM	12	0	21.62	21.64	21.62
5	64QAM	12	7	21.53	21.56	21.53
5	64QAM	12	13	21.55	21.61	21.57
5	64QAM	25	0	21.53	21.52	21.37



LTE Band 41C:

CA_41C_Ant 4								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	100	0	100	0	200	23.04
			1	0	1	99	2	16.27
			1	99	1	0	2	24.76
		16QAM	100	0	100	0	200	22.01
			1	0	1	99	2	16.26
			1	99	1	0	2	23.93
		64QAM	100	0	100	0	200	22.02
			1	0	1	99	2	16.09
			1	99	1	0	2	21.66
40521	40719	QPSK	100	0	100	0	200	22.95
			1	0	1	99	2	16.21
			1	99	1	0	2	24.84
		16QAM	100	0	100	0	200	21.97
			1	0	1	99	2	16.26
			1	99	1	0	2	23.62
		64QAM	100	0	100	0	200	21.98
			1	0	1	99	2	16.04
			1	99	1	0	2	21.43
41292	41490	QPSK	100	0	100	0	200	23.12
			1	0	1	99	2	16.18
			1	99	1	0	2	24.81
		16QAM	100	0	100	0	200	22.14
			1	0	1	99	2	16.04
			1	99	1	0	2	23.80
		64QAM	100	0	100	0	200	22.15
			1	0	1	99	2	15.97
			1	99	1	0	2	21.59
Combination 20MHz+15MHz (100RB+75RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39921	QPSK	100	0	75	0	175	22.92
			1	0	1	74	2	16.14
			1	99	1	0	2	24.66
		16QAM	100	0	75	0	175	21.89
			1	0	1	74	2	16.18
			1	99	1	0	2	23.76
		64QAM	100	0	75	0	175	21.85
			1	0	1	74	2	15.90
			1	99	1	0	2	21.55
40546	40717	QPSK	100	0	75	0	175	22.82
			1	0	1	74	2	16.04
			1	99	1	0	2	24.70
		16QAM	100	0	75	0	175	21.81
			1	0	1	74	2	16.09
			1	99	1	0	2	23.45
		64QAM	100	0	75	0	175	21.87
			1	0	1	74	2	15.84
			1	99	1	0	2	21.25
41341	41512	QPSK	100	0	75	0	175	22.98
			1	0	1	74	2	16.02



PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
<b>Combination 15MHz+20MHz (75RB+100RB)</b>									
39728	39899	16QAM	1	99	1	0	2	24.68	
			100	0	75	0	175	22.06	
			1	0	1	74	2	15.92	
		64QAM	1	99	1	0	2	23.66	
			100	0	75	0	175	22.04	
			1	0	1	74	2	15.82	
			1	99	1	0	2	21.44	
			QPSK	75	0	100	0	175	22.79
				1	0	1	99	2	15.98
				1	74	1	0	2	24.61
				75	0	100	0	175	21.69
				1	0	1	99	2	16.07
1	74	1		0	2	23.63			
16QAM	75	0	100	0	175	21.75			
	1	0	1	99	2	15.79			
	1	74	1	0	2	21.36			
	64QAM	75	0	100	0	175	22.72		
		1	0	1	99	2	15.90		
		1	74	1	0	2	24.15		
75		0	100	0	175	21.70			
1		0	1	99	2	15.95			
1		74	1	0	2	23.37			
16QAM	75	0	100	0	175	21.74			
	1	0	1	99	2	15.68			
	1	74	1	0	2	21.07			
	64QAM	75	0	100	0	175	22.81		
		1	0	1	99	2	15.92		
		1	74	1	0	2	24.58		
75		0	100	0	175	21.90			
1		0	1	99	2	15.74			
1		74	1	0	2	23.48			
16QAM	75	0	100	0	175	21.87			
	1	0	1	99	2	15.65			
	1	74	1	0	2	21.33			
	<b>Combination 20MHz+10MHz (100RB+50RB)</b>								
	PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
				RB Size	RB offset	RB Size	RB offset		
39750	39894	16QAM	100	0	50	0	175	22.76	
			1	0	1	49	2	16.02	
			1	99	1	0	2	24.54	
		64QAM	100	0	50	0	175	21.76	
			1	0	1	49	2	15.98	
			1	99	1	0	2	23.59	
			QPSK	100	0	50	0	175	21.74
				1	0	1	49	2	15.73
				1	99	1	0	2	21.40
		64QAM	100	0	50	0	175	22.62	
			1	0	1	49	2	15.84	
			1	99	1	0	2	24.20	
16QAM	100		0	50	0	175	21.67		
	1		0	1	49	2	15.92		
	1		99	1	0	2	23.35		
QPSK	100		0	50	0	175	21.76		
	1		0	1	49	2	15.92		
	1		99	1	0	2	23.35		



41391	41535	QPSK	1	0	1	49	2	15.65
			1	99	1	0	2	21.13
			100	0	50	0	175	22.82
		16QAM	1	0	1	49	2	15.87
			1	99	1	0	2	24.56
			100	0	50	0	175	21.95
			1	0	1	49	2	15.77
			1	99	1	0	2	23.51
			100	0	50	0	175	21.93
64QAM	1	0	1	49	2	15.69		
	1	99	1	0	2	21.27		
	<b>Combination 10MHz+20MHz (50RB+100RB)</b>							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39705	39849	QPSK	50	0	100	0	150	22.74
			1	0	1	99	2	16.04
			1	49	1	0	2	24.59
		16QAM	50	0	100	0	150	21.80
			1	0	1	99	2	16.02
			1	49	1	0	2	23.63
		64QAM	50	0	100	0	150	21.72
			1	0	1	99	2	15.82
			1	49	1	0	2	21.41
40526	40670	QPSK	50	0	100	0	150	22.71
			1	0	1	99	2	15.92
			1	49	1	0	2	24.18
		16QAM	50	0	100	0	150	21.68
			1	0	1	99	2	15.99
			1	49	1	0	2	23.30
		64QAM	50	0	100	0	150	21.70
			1	0	1	99	2	15.65
			1	49	1	0	2	21.15
41346	41490	QPSK	50	0	100	0	150	22.85
			1	0	1	99	2	15.91
			1	49	1	0	2	24.52
		16QAM	50	0	100	0	150	21.86
			1	0	1	99	2	15.82
			1	49	1	0	2	23.52
		64QAM	50	0	100	0	150	21.84
			1	0	1	99	2	15.72
			1	49	1	0	2	21.27
<b>Combination 20MHz+5MHz (100RB+25RB)</b>								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39867	QPSK	100	0	25	0	125	22.82
			1	0	1	24	2	16.03
			1	99	1	0	2	24.60
		16QAM	100	0	25	0	125	21.72
			1	0	1	24	2	15.99
			1	99	1	0	2	23.61
		64QAM	100	0	25	0	125	21.68
			1	0	1	24	2	15.74
			1	99	1	0	2	21.37
40595	40712	QPSK	100	0	25	0	125	22.70
			1	0	1	24	2	15.86
			1	99	1	0	2	24.11



		16QAM	100	0	25	0	125	21.62
			1	0	1	24	2	15.99
			1	99	1	0	2	23.36
		64QAM	100	0	25	0	125	21.74
			1	0	1	24	2	15.66
			1	99	1	0	2	21.06
41440	41557	QPSK	100	0	25	0	125	22.84
			1	0	1	24	2	15.86
			1	99	1	0	2	24.49
		16QAM	100	0	25	0	125	21.90
			1	0	1	24	2	15.81
			1	99	1	0	2	23.54
		64QAM	100	0	25	0	125	21.87
			1	0	1	24	2	15.68
			1	99	1	0	2	21.29
<b>Combination 5MHz+20MHz (25RB+100RB)</b>								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39683	39800	QPSK	25	0	100	0	125	22.84
			1	0	1	99	2	15.95
			1	24	1	0	2	24.57
		16QAM	25	0	100	0	125	21.70
			1	0	1	99	2	16.03
			1	24	1	0	2	23.60
		64QAM	25	0	100	0	125	21.72
			1	0	1	99	2	15.72
			1	24	1	0	2	21.38
40528	40645	QPSK	25	0	100	0	125	22.69
			1	0	1	99	2	15.94
			1	24	1	0	2	24.14
		16QAM	25	0	100	0	125	21.65
			1	0	1	99	2	15.94
			1	24	1	0	2	23.35
		64QAM	25	0	100	0	125	21.69
			1	0	1	99	2	15.75
			1	24	1	0	2	21.14
41373	41490	QPSK	25	0	100	0	125	22.85
			1	0	1	99	2	15.90
			1	24	1	0	2	24.59
		16QAM	25	0	100	0	125	21.88
			1	0	1	99	2	15.72
			1	24	1	0	2	23.48
		64QAM	25	0	100	0	125	21.85
			1	0	1	99	2	15.73
			1	24	1	0	2	21.35
<b>Combination 15MHz+10MHz (75RB+50RB)</b>								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39725	39845	QPSK	75	0	50	0	125	22.82
		QPSK	1	0	1	49	2	15.85
		QPSK	1	74	1	0	2	24.3
		16QAM	75	0	50	0	125	21.69
		16QAM	1	0	1	49	2	15.95
		16QAM	1	74	1	0	2	23.46
		64QAM	75	0	50	0	125	21.7
		64QAM	1	0	1	49	2	15.52





40571	40691	64QAM	1	74	1	0	2	21.19
		QPSK	75	0	50	0	125	22.78
		QPSK	1	0	1	49	2	15.86
		QPSK	1	74	1	0	2	24.15
		16QAM	75	0	50	0	125	21.72
		16QAM	1	0	1	49	2	15.98
		16QAM	1	74	1	0	2	23.32
		64QAM	75	0	50	0	125	21.68
		64QAM	1	0	1	49	2	15.55
41417	41537	64QAM	1	74	1	0	2	21.22
		QPSK	75	0	50	0	125	22.68
		QPSK	1	0	1	49	2	15.78
		QPSK	1	74	1	0	2	24.13
		16QAM	75	0	50	0	125	21.71
		16QAM	1	0	1	49	2	15.94
		16QAM	1	74	1	0	2	23.35
		64QAM	75	0	50	0	125	21.63
		64QAM	1	0	1	49	2	15.6
<b>Combination 10MHz+15MHz (50RB+75RB)</b>								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39703	39823	QPSK	50	0	75	0	125	22.76
		QPSK	1	49	1	0	2	15.75
		QPSK	1	0	1	74	2	24.25
		16QAM	50	0	75	0	125	21.68
		16QAM	1	49	1	0	2	15.95
		16QAM	1	0	1	74	2	23.46
		64QAM	50	0	75	0	125	21.7
		64QAM	1	49	1	0	2	15.52
		64QAM	1	0	1	74	2	21.15
40549	40669	QPSK	50	0	75	0	125	22.78
		QPSK	1	49	1	0	2	15.84
		QPSK	1	0	1	74	2	24.15
		16QAM	50	0	75	0	125	21.72
		16QAM	1	49	1	0	2	15.98
		16QAM	1	0	1	74	2	23.32
		64QAM	50	0	75	0	125	21.68
		64QAM	1	49	1	0	2	15.55
		64QAM	1	0	1	74	2	21.25
41395	41515	QPSK	50	0	75	0	125	22.68
		QPSK	1	49	1	0	2	15.65
		QPSK	1	0	1	74	2	24.15
		16QAM	50	0	75	0	125	21.73
		16QAM	1	49	1	0	2	15.96
		16QAM	1	0	1	74	2	23.38
		64QAM	50	0	75	0	125	21.65
		64QAM	1	49	1	0	2	15.62
		64QAM	1	0	1	74	2	21.3
<b>Combination 15MHz+15MHz (75RB+75RB)</b>								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39725	39875	QPSK	75	0	75	0	150	22.83
		QPSK	1	0	1	74	2	15.9
		QPSK	1	74	1	0	2	24.28
		16QAM	75	0	75	0	150	21.67



		16QAM	1	0	1	74	2	15.98
		16QAM	1	74	1	0	2	23.54
		64QAM	75	0	75	0	150	21.75
		64QAM	1	0	1	74	2	15.55
		64QAM	1	74	1	0	2	21.26
40545	40695	QPSK	75	0	75	0	150	22.45
		QPSK	1	0	1	74	2	15.86
		QPSK	1	74	1	0	2	24.18
		16QAM	75	0	75	0	150	21.7
		16QAM	1	0	1	74	2	15.89
		16QAM	1	74	1	0	2	23.28
		64QAM	75	0	75	0	150	21.26
		64QAM	1	0	1	74	2	15.54
		64QAM	1	74	1	0	2	21.21
41365	41515	QPSK	75	0	75	0	150	22.7
		QPSK	1	0	1	74	2	15.75
		QPSK	1	74	1	0	2	24.12
		16QAM	75	0	75	0	150	21.79
		16QAM	1	0	1	74	2	15.95
		16QAM	1	74	1	0	2	23.35
		64QAM	75	0	75	0	150	21.65
		64QAM	1	0	1	74	2	15.64
		64QAM	1	74	1	0	2	21.29



**EIRP**

LTE Band 2 (GT - LC = -3.4 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	23.46	23.52	23.41	23.47	23.55	23.38	23.41	23.53	23.39
Conducted Power (Watts)	0.2218	0.2249	0.2193	0.2223	0.2265	0.2178	0.2193	0.2254	0.2183
EIRP(dBm)	20.06	20.12	20.01	20.07	20.15	19.98	20.01	20.13	19.99
EIRP(Watts)	0.1014	0.1028	0.1002	0.1016	0.1035	0.0995	0.1002	0.1030	0.0998

LTE Band 2 (GT - LC = -3.4 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	23.51	23.56	23.36	23.43	23.49	23.40	23.54	23.60	23.47
Conducted Power (Watts)	0.2244	0.2270	0.2168	0.2203	0.2234	0.2188	0.2259	0.2291	0.2223
EIRP(dBm)	20.11	20.16	19.96	20.03	20.09	20.00	20.14	20.20	20.07
EIRP(Watts)	0.1026	0.1038	0.0991	0.1007	0.1021	0.1000	0.1033	0.1047	0.1016



LTE Band 2 (GT - LC = -3.4 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.68	22.86	22.77	22.83	22.88	22.78	22.83	22.89	22.84
Conducted Power (Watts)	0.1854	0.1932	0.1892	0.1919	0.1941	0.1897	0.1919	0.1945	0.1923
EIRP(dBm)	19.28	19.46	19.37	19.43	19.48	19.38	19.43	19.49	19.44
EIRP(Watts)	0.0847	0.0883	0.0865	0.0877	0.0887	0.0867	0.0877	0.0889	0.0879

LTE Band 2 (GT - LC = -3.4 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	22.84	22.84	22.78	22.84	22.91	22.77	22.91	22.95	22.89
Conducted Power (Watts)	0.1923	0.1923	0.1897	0.1923	0.1954	0.1892	0.1954	0.1972	0.1945
EIRP(dBm)	19.44	19.44	19.38	19.44	19.51	19.37	19.51	19.55	19.49
EIRP(Watts)	0.0879	0.0879	0.0867	0.0879	0.0893	0.0865	0.0893	0.0902	0.0889



LTE Band 2 (GT - LC = -3.4 dB) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	21.74	21.85	21.73	21.72	21.84	21.71	21.66	21.86	21.75
Conducted Power (Watts)	0.1493	0.1531	0.1489	0.1486	0.1528	0.1483	0.1466	0.1535	0.1496
EIRP(dBm)	18.34	18.45	18.33	18.32	18.44	18.31	18.26	18.46	18.35
EIRP(Watts)	0.0682	0.0700	0.0681	0.0679	0.0698	0.0678	0.0670	0.0701	0.0684

LTE Band 2 (GT - LC = -3.4 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	21.69	21.87	21.81	21.72	21.84	21.77	21.81	21.94	21.84
Conducted Power (Watts)	0.1476	0.1538	0.1517	0.1486	0.1528	0.1503	0.1517	0.1563	0.1528
EIRP(dBm)	18.29	18.47	18.41	18.32	18.44	18.37	18.41	18.54	18.44
EIRP(Watts)	0.0675	0.0703	0.0693	0.0679	0.0698	0.0687	0.0693	0.0714	0.0698



LTE Band 4 (GT - LC = -3.5 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	24.36	24.48	24.36	24.38	24.49	24.35	24.30	24.42	24.32
Conducted Power (Watts)	0.2729	0.2805	0.2729	0.2742	0.2812	0.2723	0.2692	0.2767	0.2704
EIRP(dBm)	20.86	20.98	20.86	20.88	20.99	20.85	20.80	20.92	20.82
EIRP(Watts)	0.1219	0.1253	0.1219	0.1225	0.1256	0.1216	0.1202	0.1236	0.1208

LTE Band 4 (GT - LC = -3.5 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	24.30	24.44	24.33	24.31	24.47	24.36	24.42	24.52	24.46
Conducted Power (Watts)	0.2692	0.2780	0.2710	0.2698	0.2799	0.2729	0.2767	0.2831	0.2793
EIRP(dBm)	20.80	20.94	20.83	20.81	20.97	20.86	20.92	21.02	20.96
EIRP(Watts)	0.1202	0.1242	0.1211	0.1205	0.1250	0.1219	0.1236	0.1265	0.1247



LTE Band 4 (GT - LC = -3.5 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	23.42	23.61	23.48	23.38	23.51	23.43	23.42	23.53	23.45
Conducted Power (Watts)	0.2198	0.2296	0.2228	0.2178	0.2244	0.2203	0.2198	0.2254	0.2213
EIRP(dBm)	19.92	20.11	19.98	19.88	20.01	19.93	19.92	20.03	19.95
EIRP(Watts)	0.0982	0.1026	0.0995	0.0973	0.1002	0.0984	0.0982	0.1007	0.0989

LTE Band 4 (GT - LC = -3.5 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	23.35	23.52	23.44	23.35	23.51	23.41	23.47	23.60	23.51
Conducted Power (Watts)	0.2163	0.2249	0.2208	0.2163	0.2244	0.2193	0.2223	0.2291	0.2244
EIRP(dBm)	19.85	20.02	19.94	19.85	20.01	19.91	19.97	20.10	20.01
EIRP(Watts)	0.0966	0.1005	0.0986	0.0966	0.1002	0.0979	0.0993	0.1023	0.1002



LTE Band 4 (GT - LC = -3.5 dB) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	22.58	22.62	22.56	22.54	22.61	22.62	22.59	22.64	22.55
Conducted Power (Watts)	0.1811	0.1828	0.1803	0.1795	0.1824	0.1828	0.1816	0.1837	0.1799
EIRP(dBm)	19.08	19.12	19.06	19.04	19.11	19.12	19.09	19.14	19.05
EIRP(Watts)	0.0809	0.0817	0.0805	0.0802	0.0815	0.0817	0.0811	0.0820	0.0804

LTE Band 4 (GT - LC = -3.5 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	22.47	22.59	22.48	22.61	22.63	22.51	22.69	22.74	22.65
Conducted Power (Watts)	0.1766	0.1816	0.1770	0.1824	0.1832	0.1782	0.1858	0.1879	0.1841
EIRP(dBm)	18.97	19.09	18.98	19.11	19.13	19.01	19.19	19.24	19.15
EIRP(Watts)	0.0789	0.0811	0.0791	0.0815	0.0818	0.0796	0.0830	0.0839	0.0822





LTE Band 7 (GT - LC = -1.5 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	24.69	24.68	24.60
Conducted Power (Watts)	0.2944	0.2938	0.2884
EIRP(dBm)	23.19	23.18	23.10
EIRP(Watts)	0.2084	0.2080	0.2042

LTE Band 7 (GT - LC = -1.5 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	24.67	24.69	24.64	24.65	24.72	24.60	24.72	24.77	24.68
Conducted Power (Watts)	0.2931	0.2944	0.2911	0.2917	0.2965	0.2884	0.2965	0.2999	0.2938
EIRP(dBm)	23.17	23.19	23.14	23.15	23.22	23.10	23.22	23.27	23.18
EIRP(Watts)	0.2075	0.2084	0.2061	0.2065	0.2099	0.2042	0.2099	0.2123	0.2080



LTE Band 7 (GT - LC = -1.5 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
	Conducted Power (dBm)	23.57	23.60
Conducted Power (Watts)	0.2275	0.2291	0.2244
EIRP(dBm)	22.07	22.10	22.01
EIRP(Watts)	0.1611	0.1622	0.1589

LTE Band 7 (GT - LC = -1.5 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
	Conducted Power (dBm)	23.56	23.58	23.53	23.60	23.58	23.52	23.66	23.69
Conducted Power (Watts)	0.2270	0.2280	0.2254	0.2291	0.2280	0.2249	0.2323	0.2339	0.2280
EIRP(dBm)	22.06	22.08	22.03	22.10	22.08	22.02	22.16	22.19	22.08
EIRP(Watts)	0.1607	0.1614	0.1596	0.1622	0.1614	0.1592	0.1644	0.1656	0.1614



LTE Band 7 (GT - LC = -1.5 dB) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	22.79	22.72	22.68
Conducted Power (Watts)	0.1901	0.1871	0.1854
EIRP(dBm)	21.29	21.22	21.18
EIRP(Watts)	0.1346	0.1324	0.1312

LTE Band 7 (GT - LC = -1.5 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	22.71	22.80	22.74	22.71	22.83	22.72	22.84	22.91	22.85
Conducted Power (Watts)	0.1866	0.1905	0.1879	0.1866	0.1919	0.1871	0.1923	0.1954	0.1928
EIRP(dBm)	21.21	21.30	21.24	21.21	21.33	21.22	21.34	21.41	21.35
EIRP(Watts)	0.1321	0.1349	0.1330	0.1321	0.1358	0.1324	0.1361	0.1384	0.1365



**CA EIRP**

LTE Band 41 CA (GT - LC = -1.5 dB) QPSK									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.28	24.18	24.12	24.57	24.14	24.59	24.60	24.11	24.49
Conducted Power (Watts)	0.2679	0.2618	0.2582	0.2864	0.2594	0.2877	0.2884	0.2576	0.2812
EIRP(dBm)	22.78	22.68	22.62	23.07	22.64	23.09	23.10	22.61	22.99
EIRP(Watts)	0.1897	0.1854	0.1828	0.2028	0.1837	0.2037	0.2042	0.1824	0.1991

LTE Band 41 CA (GT - LC = -1.5 dB) QPSK									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.59	24.18	24.52	24.54	24.20	24.56	24.61	24.15	24.54
Conducted Power (Watts)	0.2877	0.2618	0.2831	0.2844	0.2630	0.2858	0.2891	0.2600	0.2844
EIRP(dBm)	23.09	22.68	23.02	23.04	22.70	23.06	23.11	22.65	23.04
EIRP(Watts)	0.2037	0.1854	0.2004	0.2014	0.1862	0.2023	0.2046	0.1841	0.2014



LTE Band 41 CA (GT - LC = -1.5 dB) QPSK						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.66	24.70	24.68	24.76	24.84	24.81
Conducted Power (Watts)	0.2924	0.2951	0.2938	0.2992	0.3048	0.3027
EIRP(dBm)	23.16	23.20	23.18	23.26	23.34	23.31
EIRP(Watts)	0.2070	0.2089	0.2080	0.2118	0.2158	0.2143

LTE Band 41 CA (GT - LC -1.5 dB) QPSK						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.30	24.15	24.13	24.25	24.15	24.15
Conducted Power (Watts)	0.2692	0.2600	0.2588	0.2661	0.2600	0.2600
EIRP(dBm)	22.80	22.65	22.63	22.75	22.65	22.65
EIRP(Watts)	0.1905	0.1841	0.1832	0.1884	0.1841	0.1841



LTE Band 41 CA (GT - LC = -1.5 dB) 16QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.54	23.28	23.35	23.60	23.35	23.48	23.61	23.36	23.54
Conducted Power (Watts)	0.2259	0.2128	0.2163	0.2291	0.2163	0.2228	0.2296	0.2168	0.2259
EIRP(dBm)	22.04	21.78	21.85	22.10	21.85	21.98	22.11	21.86	22.04
EIRP(Watts)	0.1600	0.1507	0.1531	0.1622	0.1531	0.1578	0.1626	0.1535	0.1600

LTE Band 41 CA (GT - LC = -1.5 dB) 16QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.63	23.30	23.52	23.59	23.35	23.51	23.63	23.37	23.48
Conducted Power (Watts)	0.2307	0.2138	0.2249	0.2286	0.2163	0.2244	0.2307	0.2173	0.2228
EIRP(dBm)	22.13	21.80	22.02	22.09	21.85	22.01	22.13	21.87	21.98
EIRP(Watts)	0.1633	0.1514	0.1592	0.1618	0.1531	0.1589	0.1633	0.1538	0.1578



LTE Band 41 CA (GT - LC =-1.5 dB) 16QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.76	23.45	23.66	23.93	23.62	23.80
Conducted Power (Watts)	0.2377	0.2213	0.2323	0.2472	0.2301	0.2399
EIRP(dBm)	22.26	21.95	22.16	22.43	22.12	22.30
EIRP(Watts)	0.1683	0.1567	0.1644	0.1750	0.1629	0.1698

LTE Band 41 CA (GT - LC = -1.5dB) 16QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.46	23.32	23.35	23.46	23.32	23.38
Conducted Power (Watts)	0.2218	0.2148	0.2163	0.2218	0.2148	0.2178
EIRP(dBm)	21.96	21.82	21.85	21.96	21.82	21.88
EIRP(Watts)	0.1570	0.1521	0.1531	0.1570	0.1521	0.1542



LTE Band 41 CA (GT - LC =-1.5 dB) 64QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.75	21.26	21.65	21.72	21.69	21.85	21.68	21.74	21.87
Conducted Power (Watts)	0.1496	0.1337	0.1462	0.1486	0.1476	0.1531	0.1472	0.1493	0.1538
EIRP(dBm)	20.25	19.76	20.15	20.22	20.19	20.35	20.18	20.24	20.37
EIRP(Watts)	0.1059	0.0946	0.1035	0.1052	0.1045	0.1084	0.1042	0.1057	0.1089

LTE Band 41 CA (GT - LC =-1.5 dB) 64QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.72	21.70	21.84	21.74	21.76	21.93	21.75	21.74	21.87
Conducted Power (Watts)	0.1486	0.1479	0.1528	0.1493	0.1500	0.1560	0.1496	0.1493	0.1538
EIRP(dBm)	20.22	20.20	20.34	20.24	20.26	20.43	20.25	20.24	20.37
EIRP(Watts)	0.1052	0.1047	0.1081	0.1057	0.1062	0.1104	0.1059	0.1057	0.1089

LTE Band 41 CA (GT - LC = -1.5 dB) 64QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.85	21.87	22.04	22.02	21.98	22.15
Conducted Power (Watts)	0.1531	0.1538	0.1600	0.1592	0.1578	0.1641
EIRP(dBm)	20.35	20.37	20.54	20.52	20.48	20.65
EIRP(Watts)	0.1084	0.1089	0.1132	0.1127	0.1117	0.1161





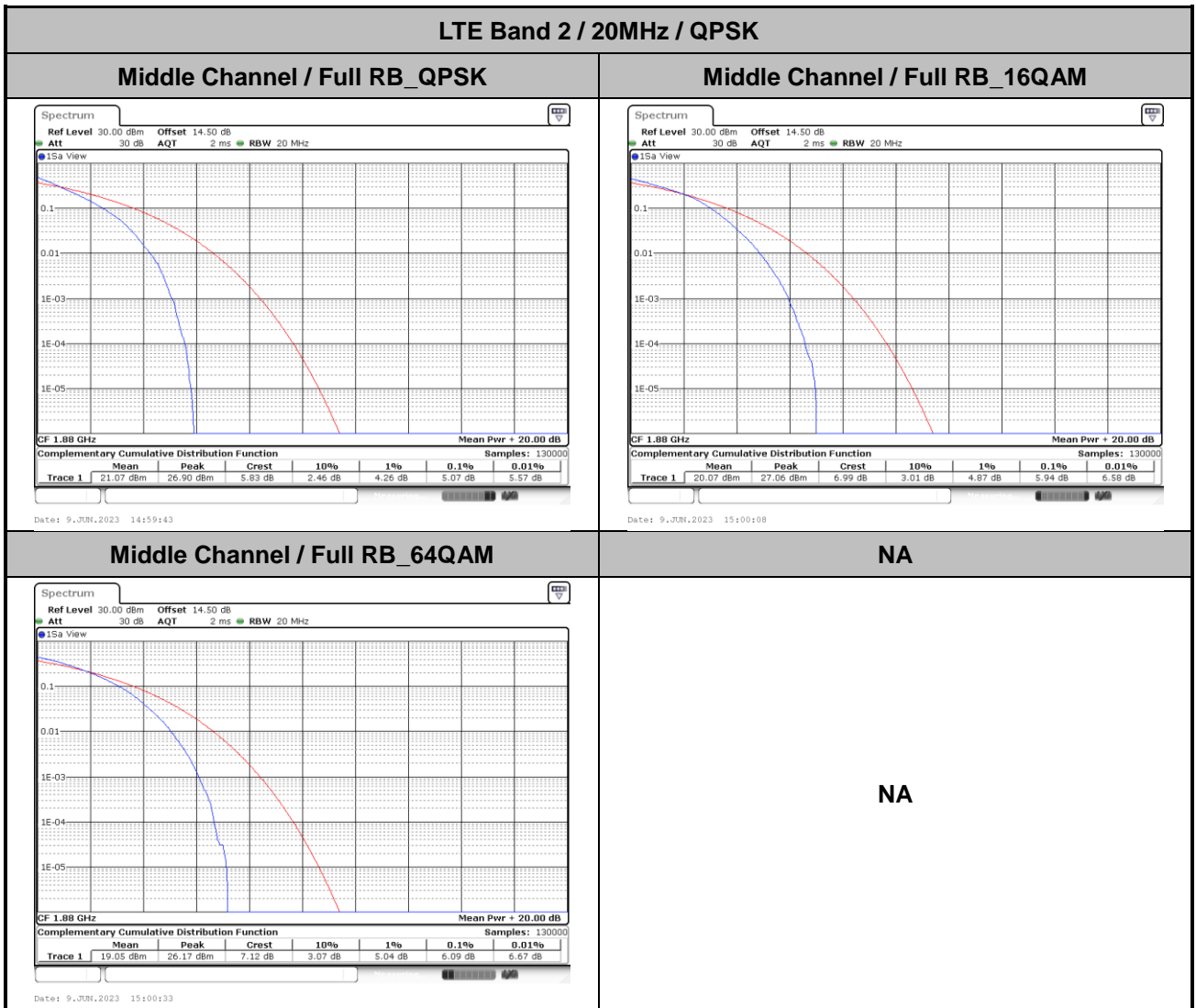
LTE Band 41 CA (GT - LC = -1.5 dB) 64QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.70	21.68	21.63	21.70	21.68	21.65
Conducted Power (Watts)	0.1479	0.1472	0.1455	0.1479	0.1472	0.1462
EIRP(dBm)	20.20	20.18	20.13	20.20	20.18	20.15
EIRP(Watts)	0.1047	0.1042	0.1030	0.1047	0.1042	0.1035



# LTE Band 2

## Peak-to-Average Ratio

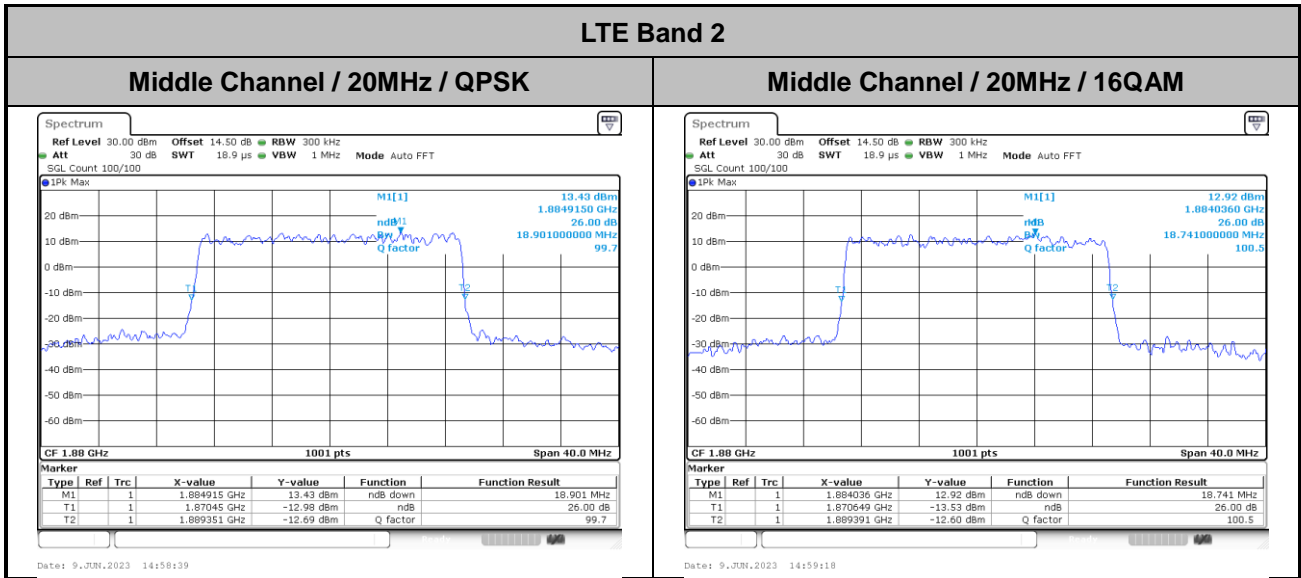
Mode	LTE Band 2 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.07	5.94	6.09	PASS





## 26dB Bandwidth

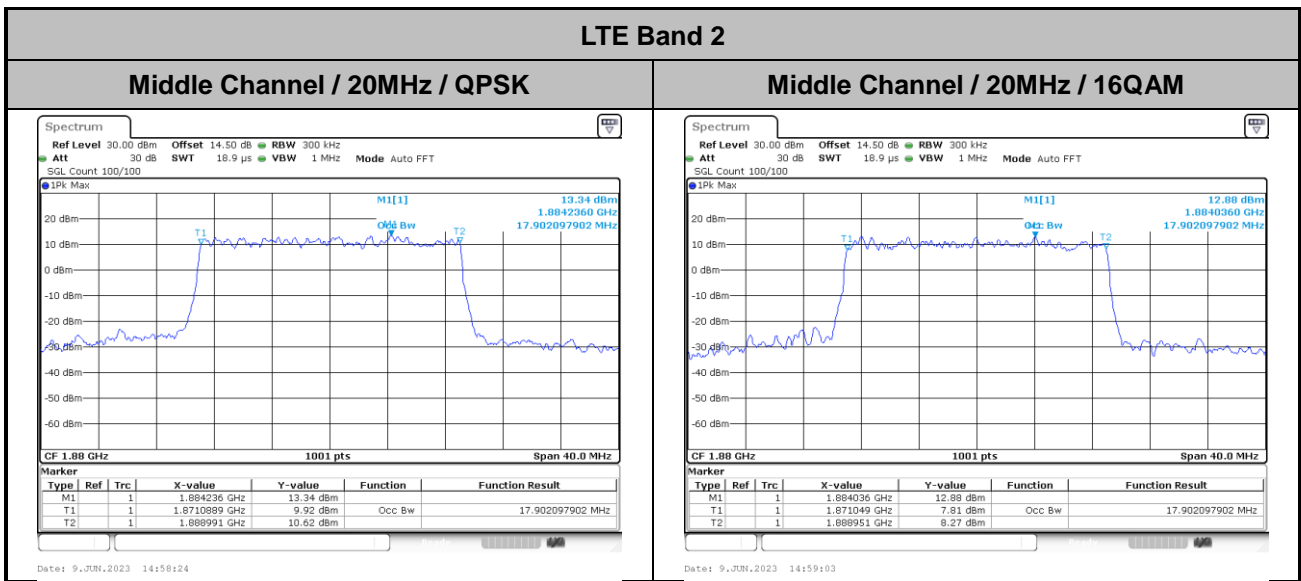
Mode	LTE Band 2 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.90	18.74





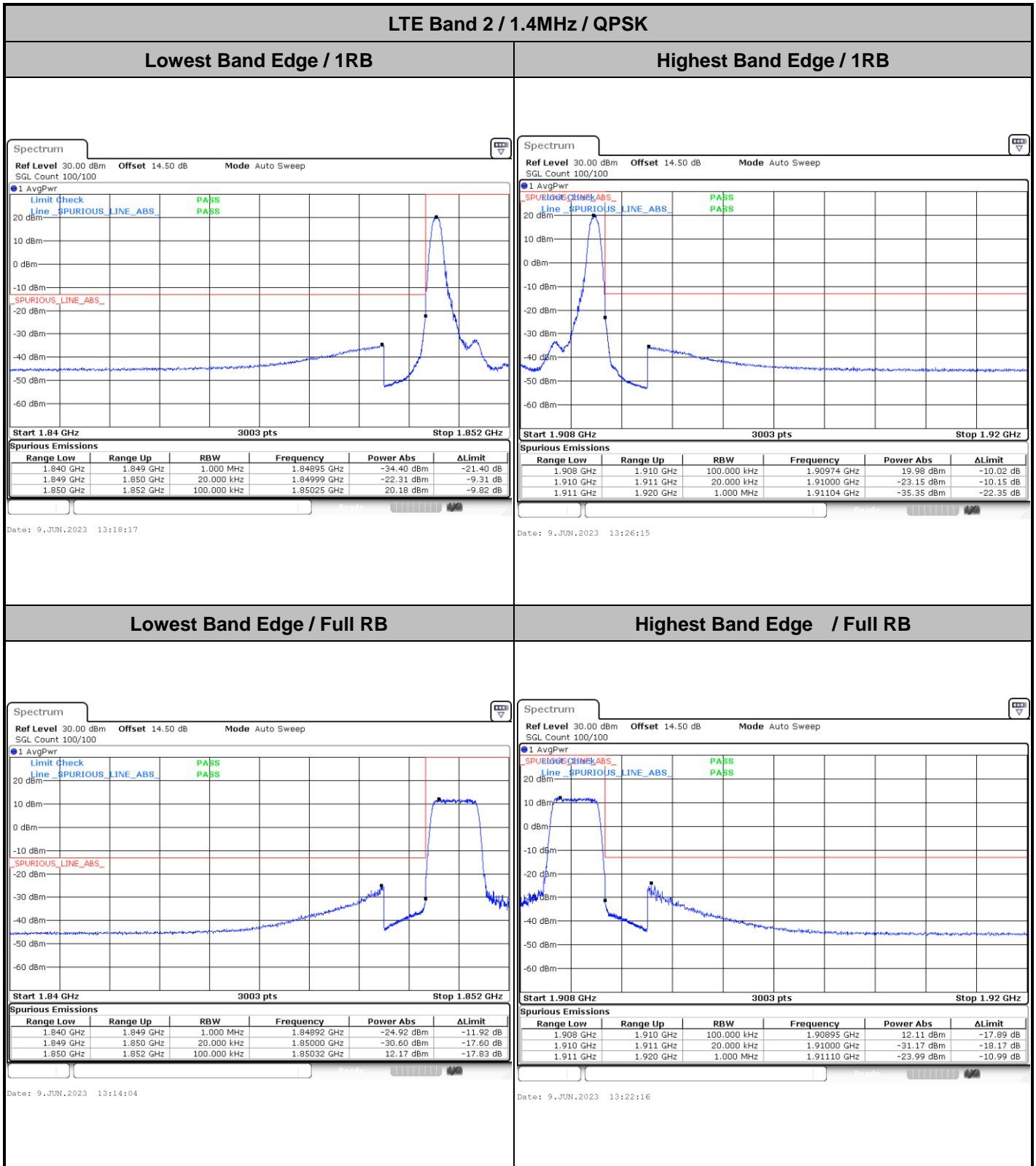
# Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.90





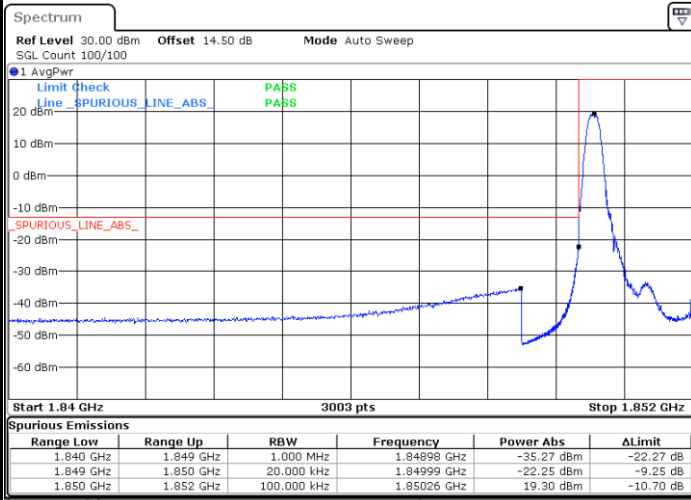
# Conducted Band Edge





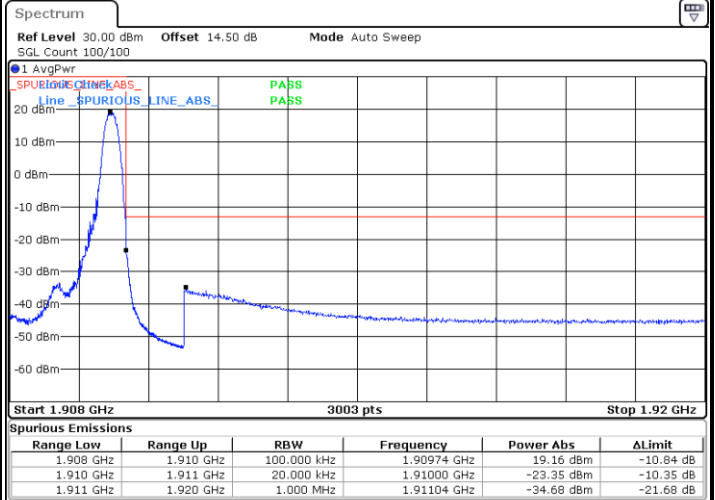
LTE Band 2 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



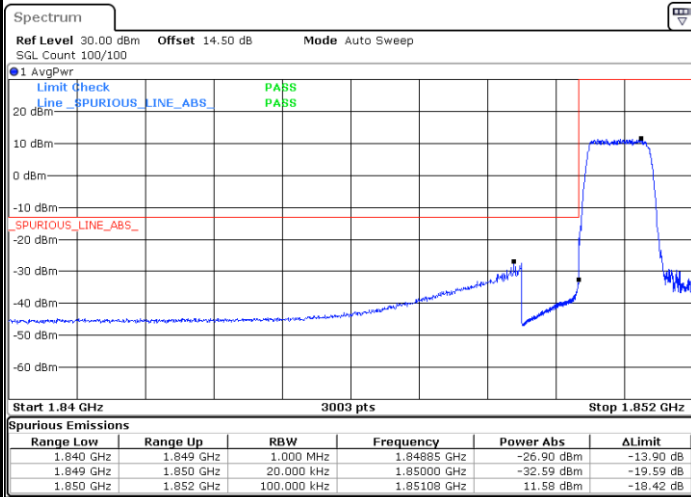
Date: 9 JUN, 2023 13:19:37

Highest Band Edge / 1 RB



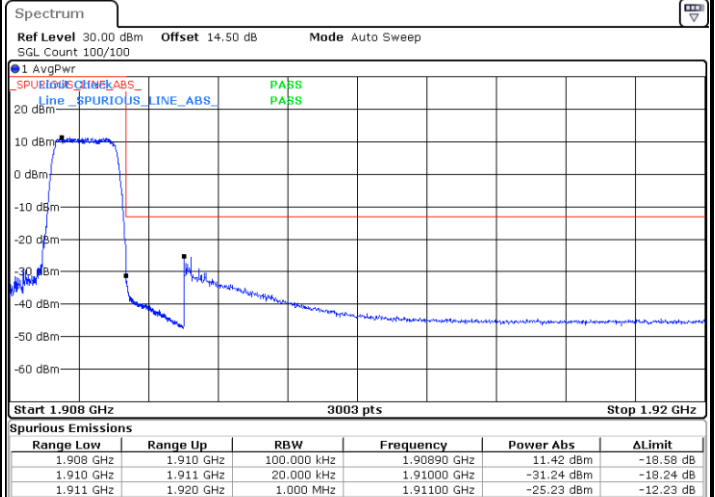
Date: 9 JUN, 2023 13:27:35

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:15:38

Highest Band Edge / Full RB

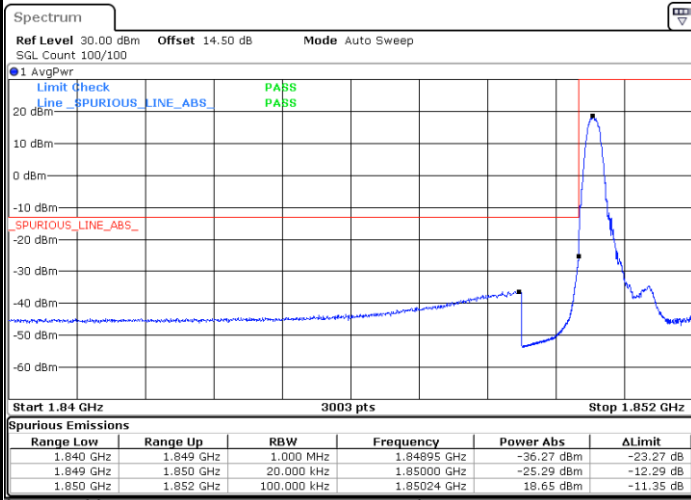


Date: 9 JUN, 2023 13:23:36



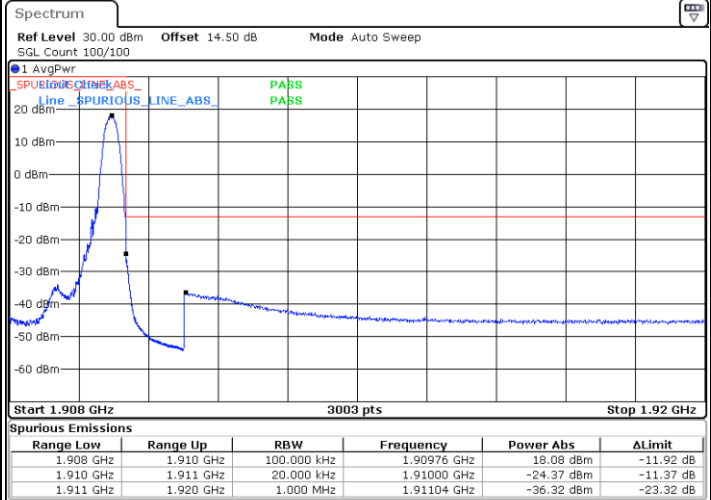
LTE Band 2 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



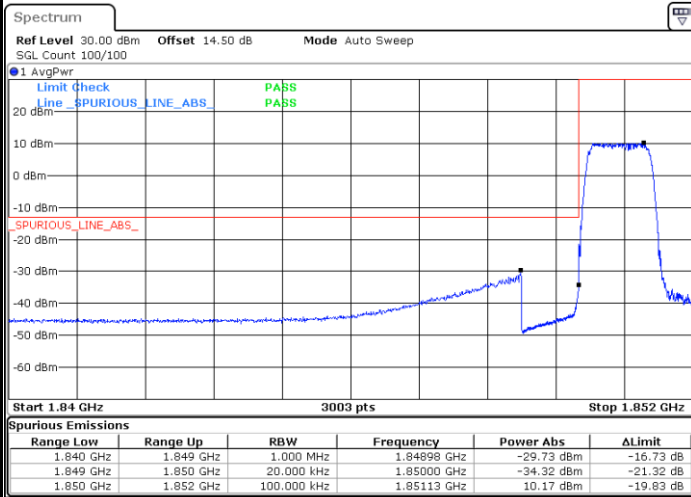
Date: 9 JUN, 2023 13:20:56

Highest Band Edge / 1 RB



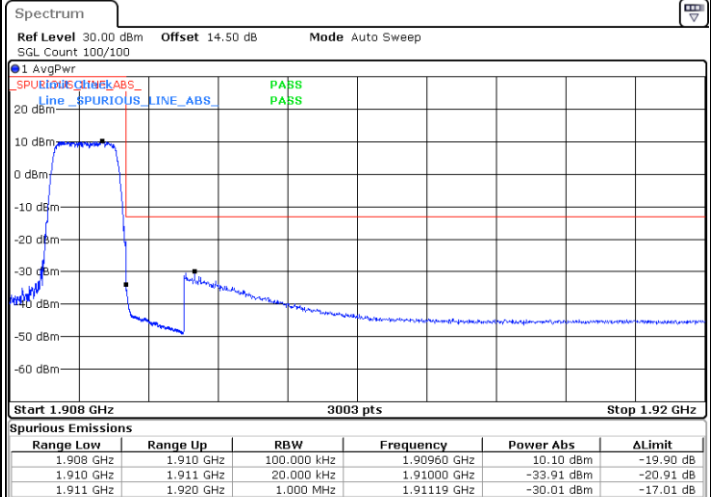
Date: 9 JUN, 2023 13:28:54

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:16:58

Highest Band Edge / Full RB

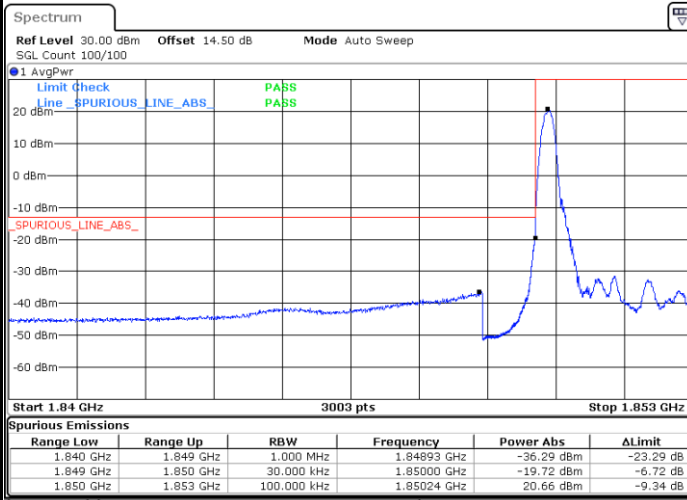


Date: 9 JUN, 2023 13:24:55



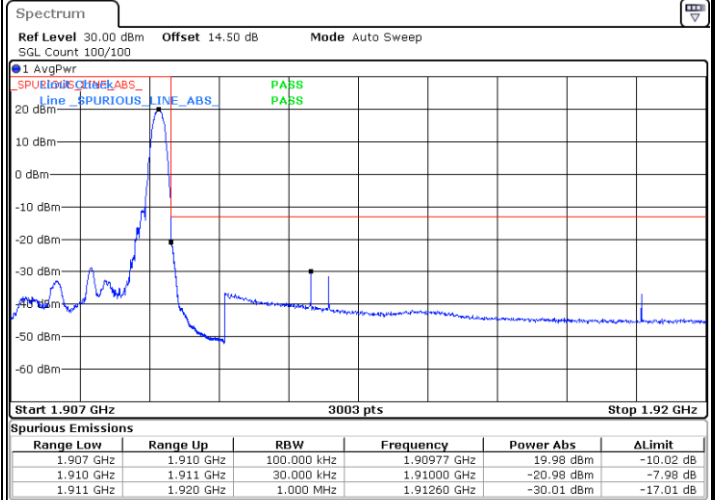
LTE Band 2 / 3MHz / QPSK

Lowest Band Edge / 1RB



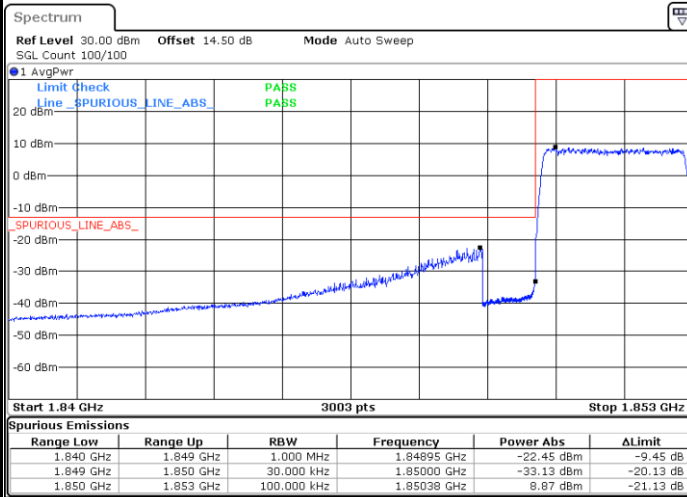
Date: 9 JUN.2023 13:38:53

Highest Band Edge / 1 RB



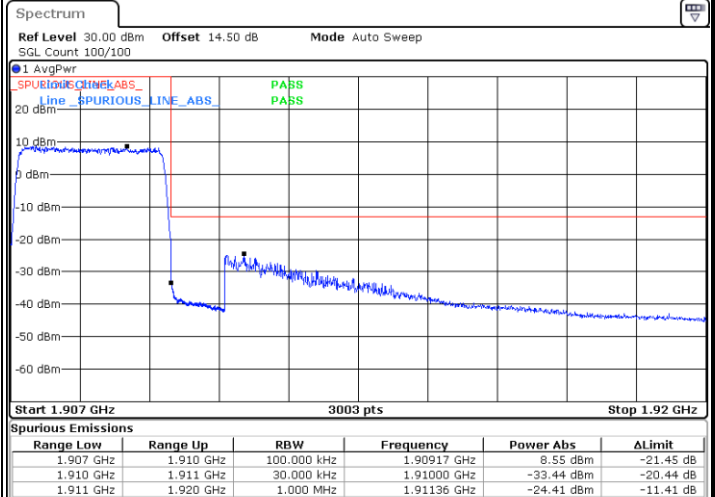
Date: 9 JUN.2023 13:46:47

Lowest Band Edge / Full RB



Date: 9 JUN.2023 13:34:57

Highest Band Edge / Full RB



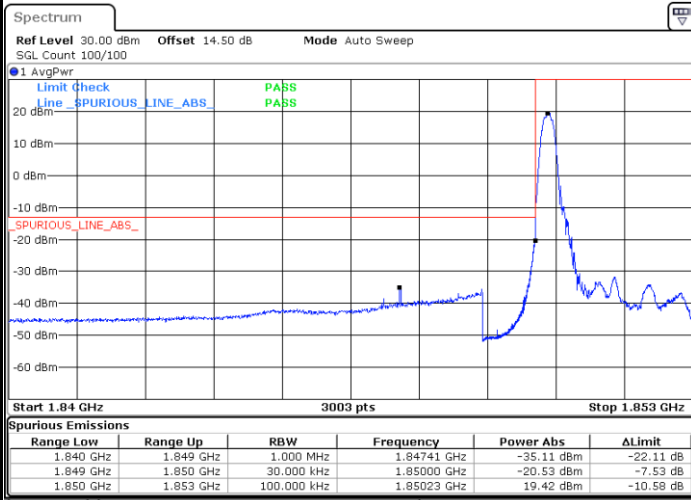
Date: 9 JUN.2023 13:42:51





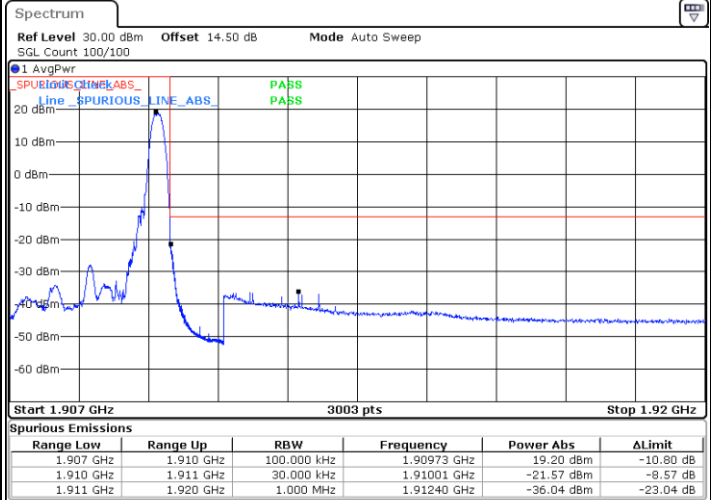
LTE Band 2 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



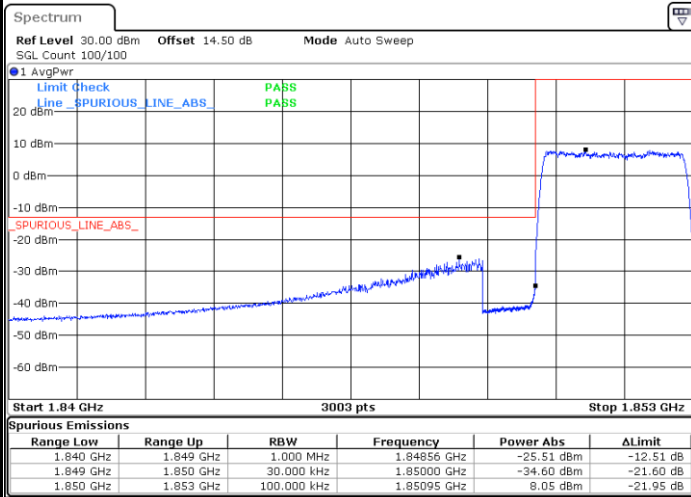
Date: 9 JUN.2023 13:40:12

Highest Band Edge / 1 RB



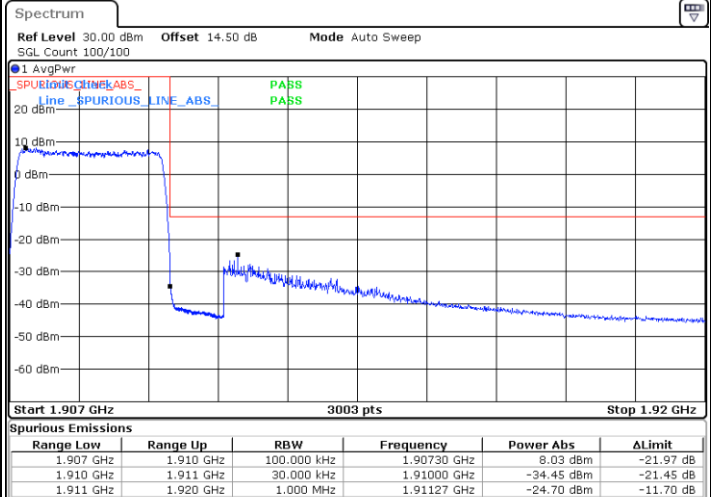
Date: 9 JUN.2023 13:48:06

Lowest Band Edge / Full RB



Date: 9 JUN.2023 13:36:15

Highest Band Edge / Full RB

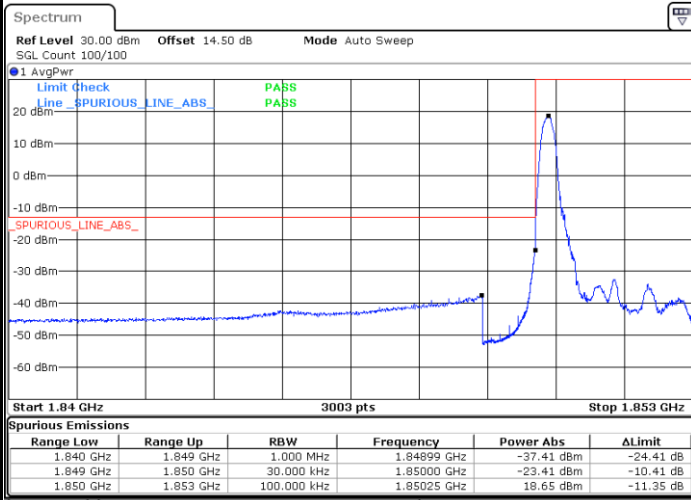


Date: 9 JUN.2023 13:44:09



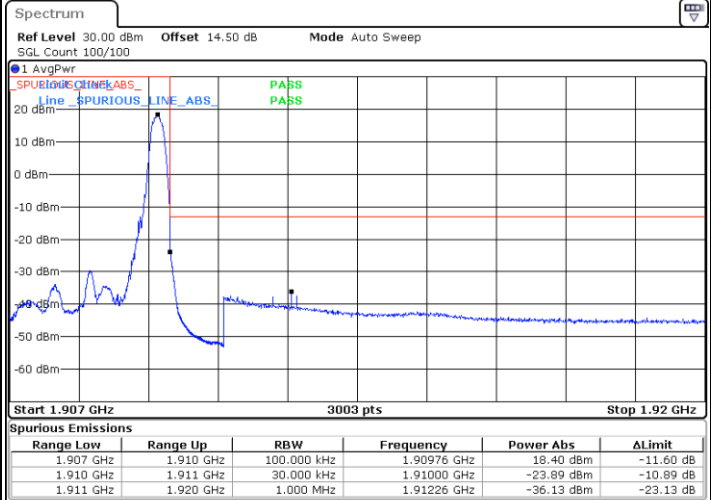
LTE Band 2 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



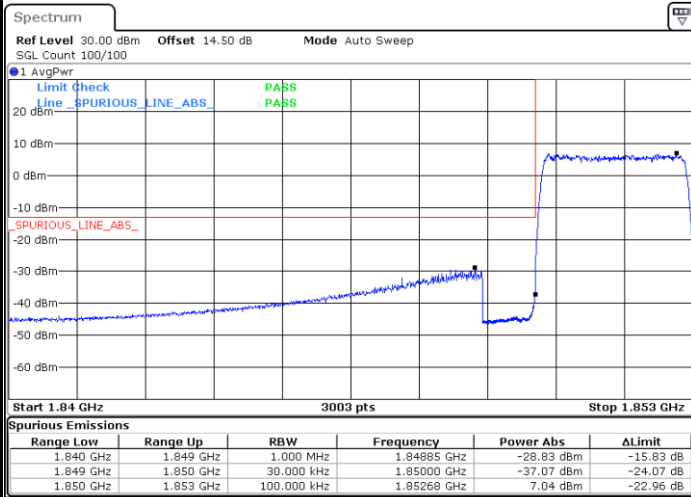
Date: 9 JUN, 2023 13:41:32

Highest Band Edge / 1 RB



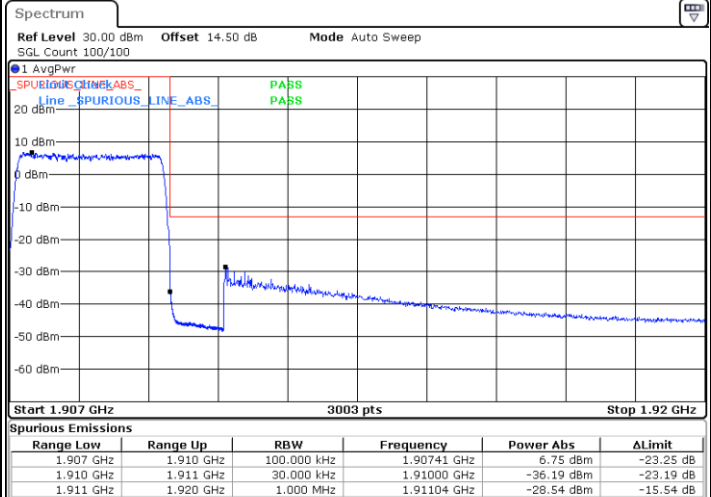
Date: 9 JUN, 2023 13:49:25

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:37:34

Highest Band Edge / Full RB

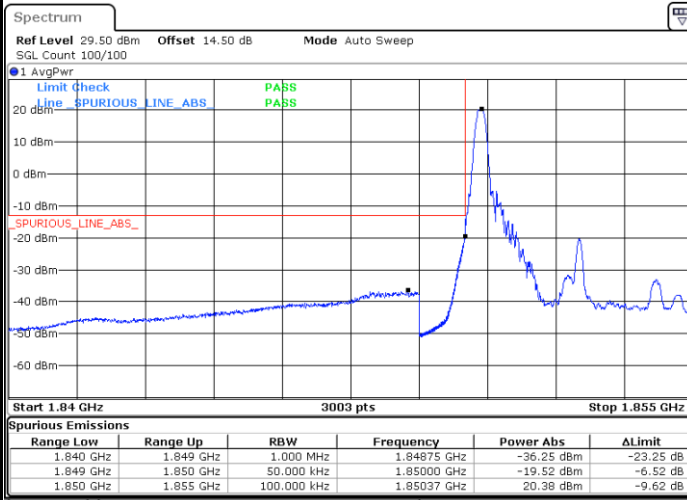


Date: 9 JUN, 2023 13:45:28



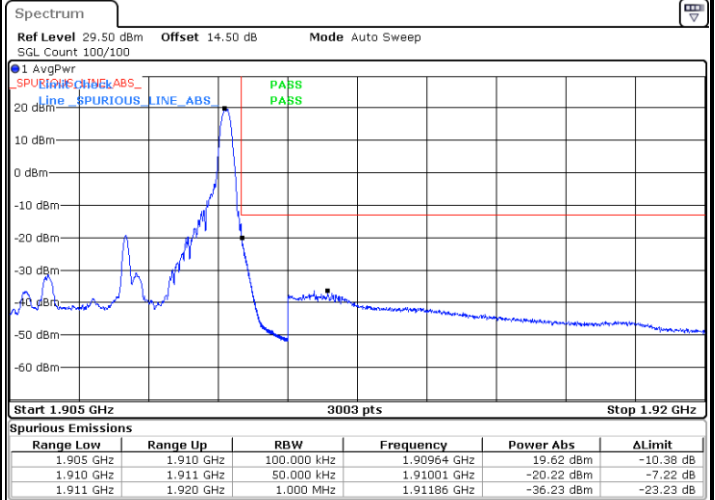
LTE Band 2 / 5MHz / QPSK

Lowest Band Edge / 1 RB



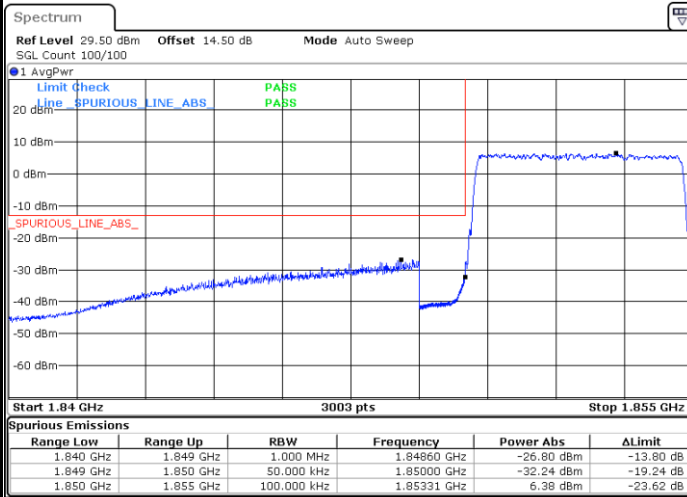
Date: 9 JUN, 2023 13:59:27

Highest Band Edge / 1 RB



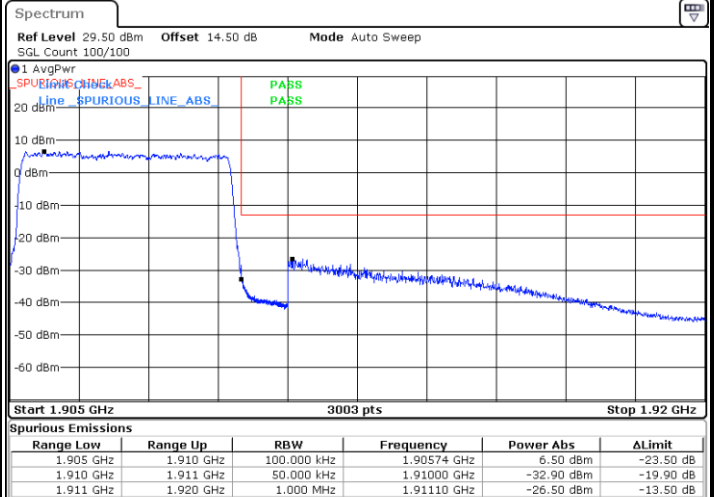
Date: 9 JUN, 2023 14:07:21

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:55:30

Highest Band Edge / Full RB

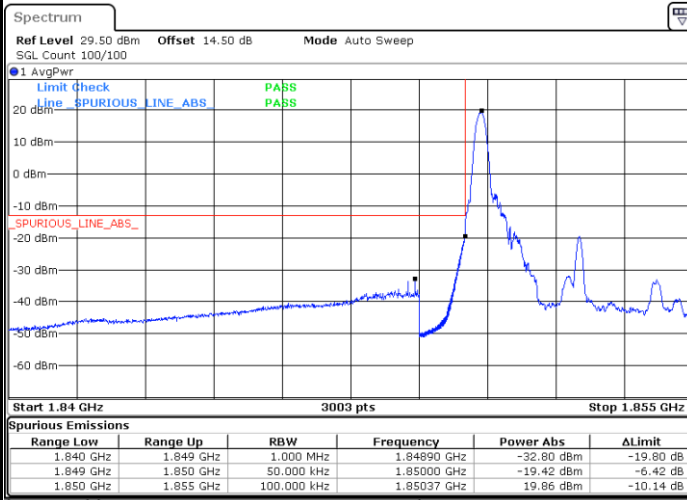


Date: 9 JUN, 2023 14:03:24



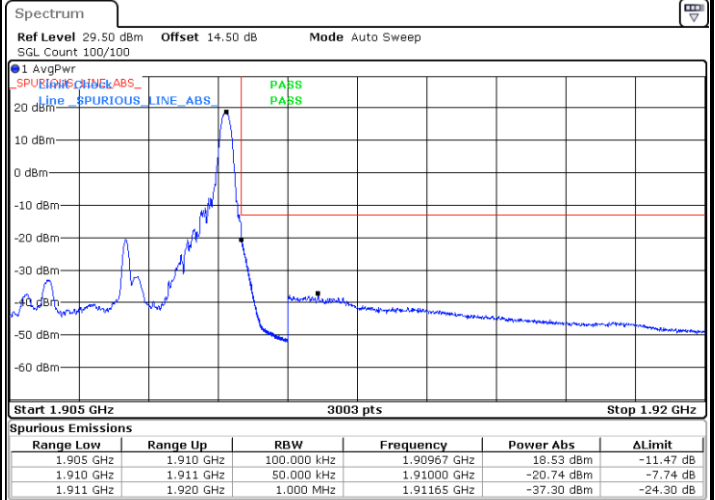
LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB



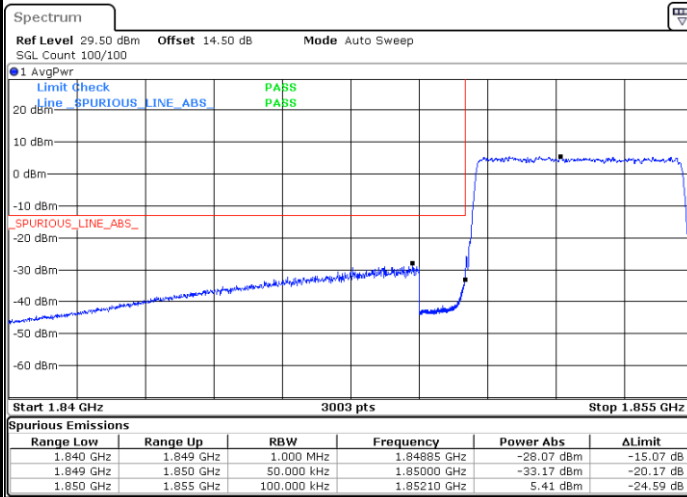
Date: 9 JUN, 2023 14:00:45

Highest Band Edge / 1 RB



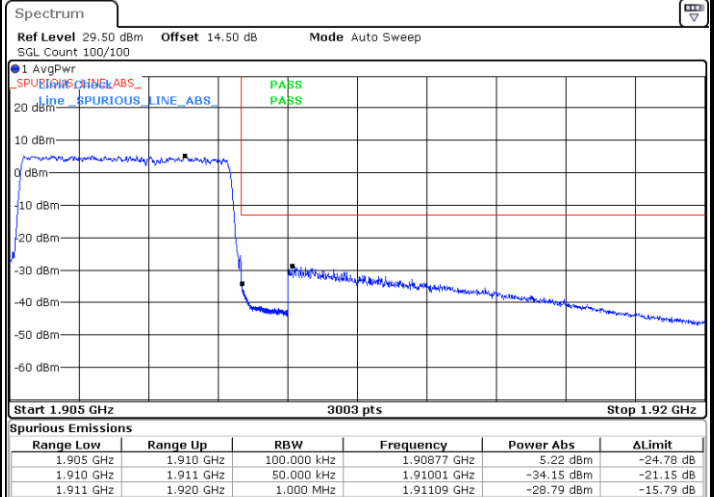
Date: 9 JUN, 2023 14:08:40

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:56:48

Highest Band Edge / Full RB

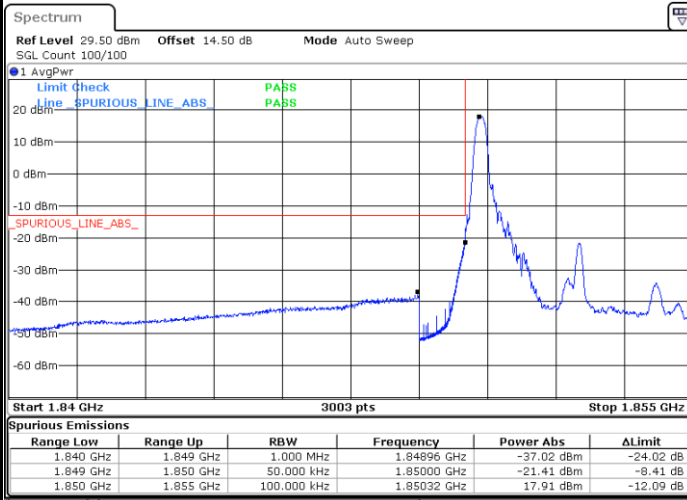


Date: 9 JUN, 2023 14:04:43



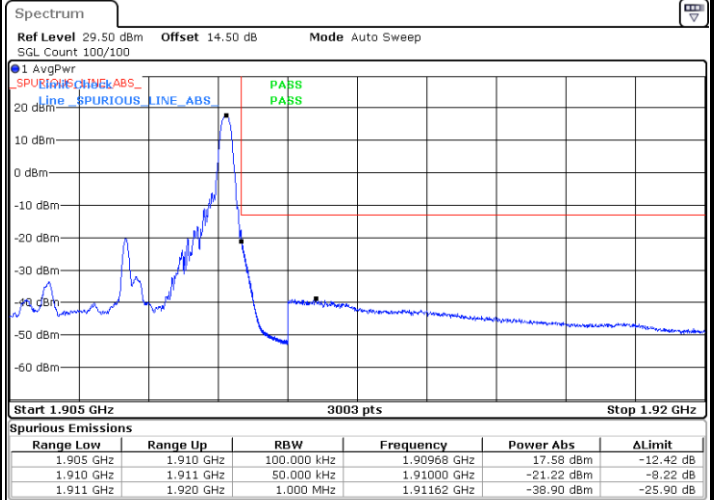
LTE Band 2 / 5MHz / 64QAM

Lowest Band Edge / 1RB



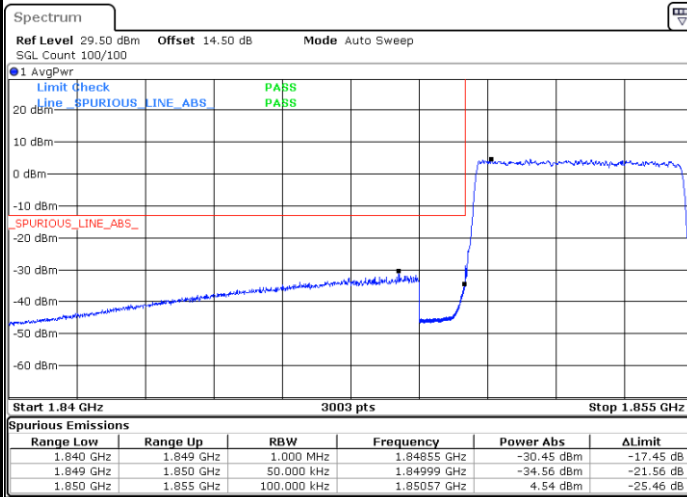
Date: 9 JUN, 2023 14:02:05

Highest Band Edge / 1 RB



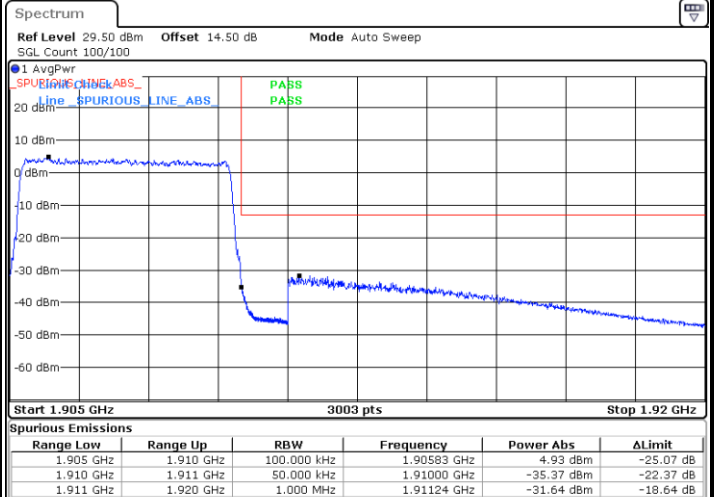
Date: 9 JUN, 2023 14:10:00

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 13:58:07

Highest Band Edge / Full RB

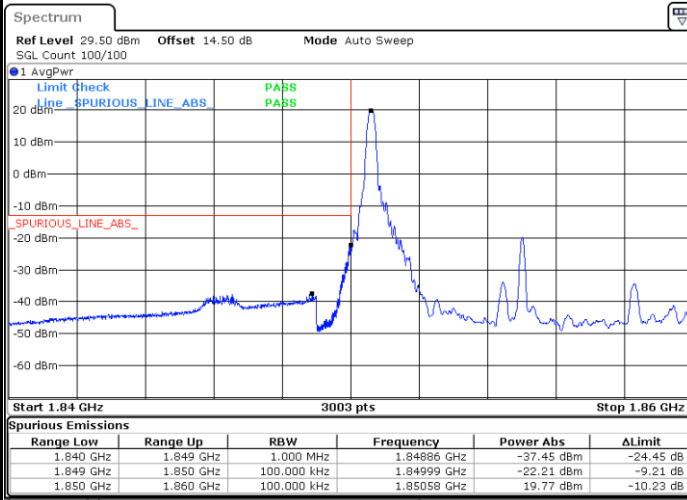


Date: 9 JUN, 2023 14:06:02



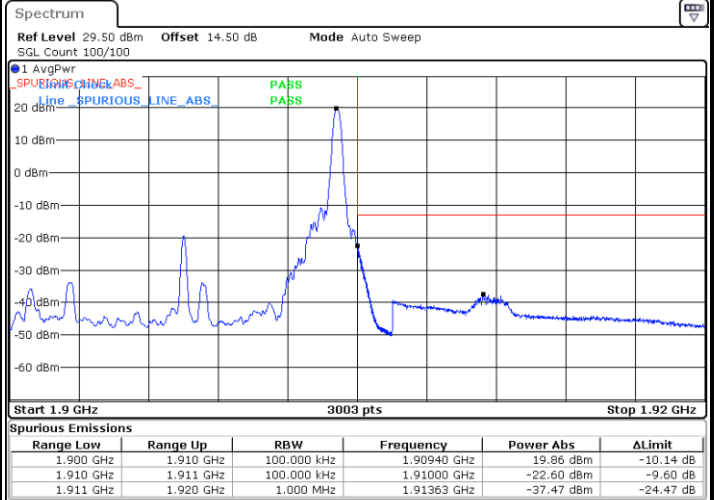
LTE Band 2 / 10MHz / QPSK

Lowest Band Edge / 1 RB



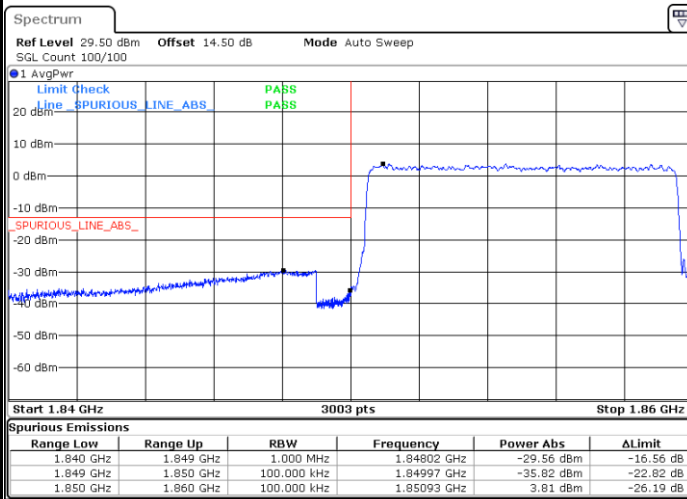
Date: 9 JUN, 2023 14:20:00

Highest Band Edge / 1 RB



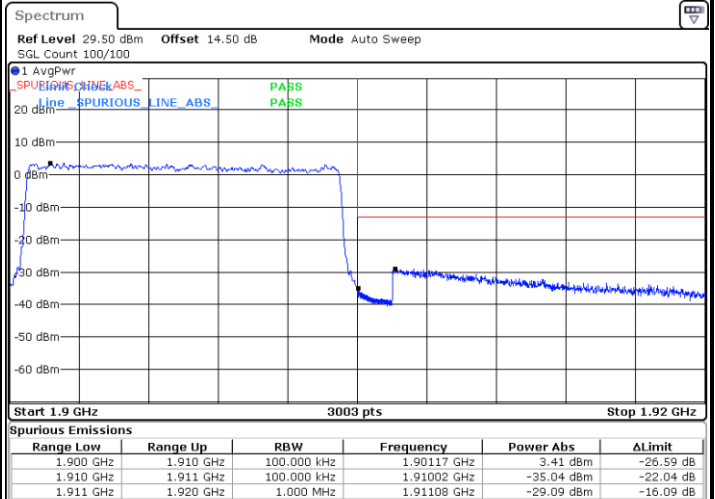
Date: 9 JUN, 2023 14:27:54

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 14:16:03

Highest Band Edge / Full RB

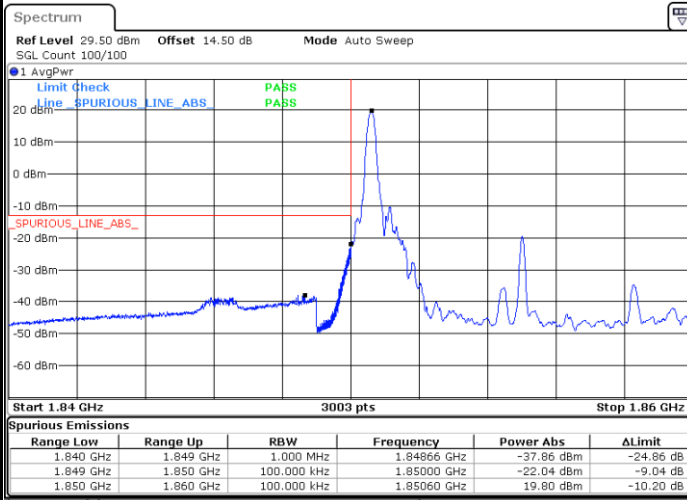


Date: 9 JUN, 2023 14:23:57



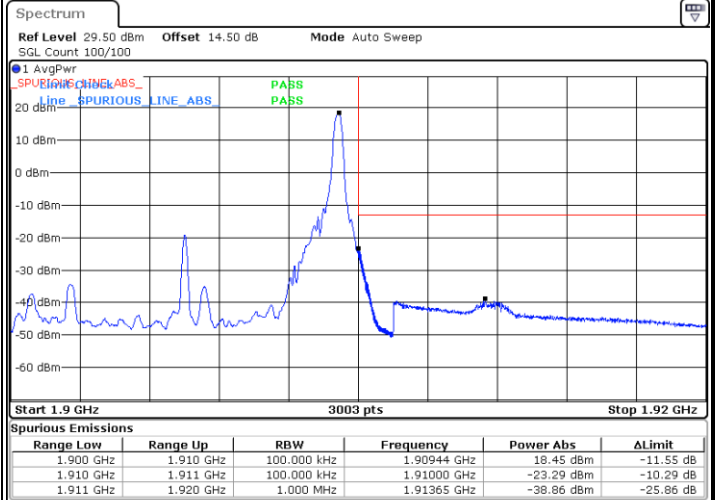
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



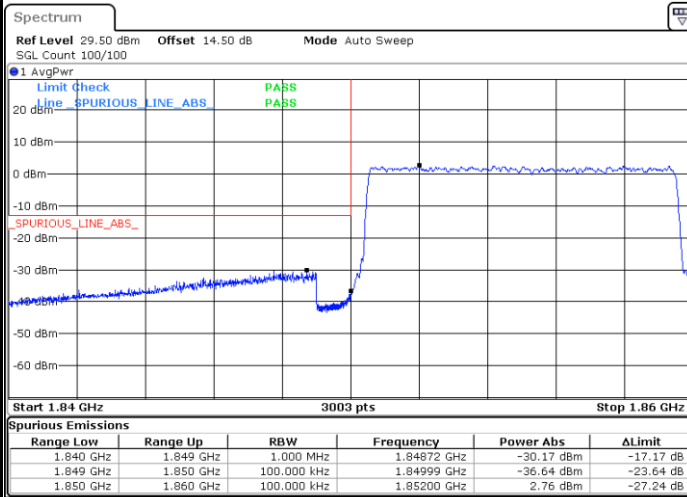
Date: 9 JUN.2023 14:21:19

Highest Band Edge / 1 RB



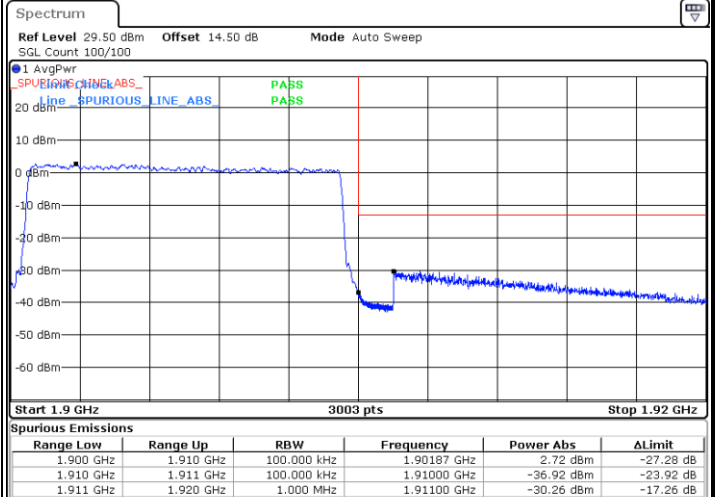
Date: 9 JUN.2023 14:29:13

Lowest Band Edge / Full RB



Date: 9 JUN.2023 14:17:22

Highest Band Edge / Full RB

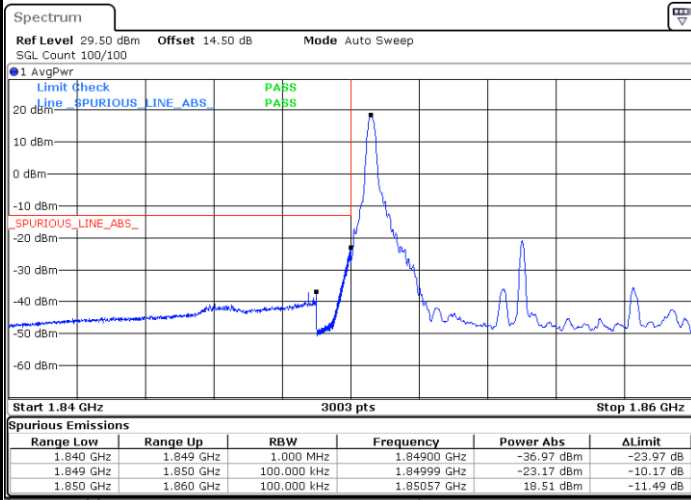


Date: 9 JUN.2023 14:25:16



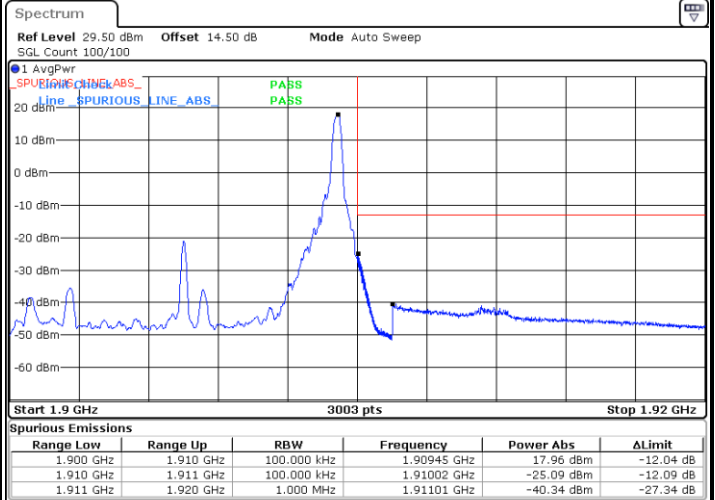
LTE Band 2 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



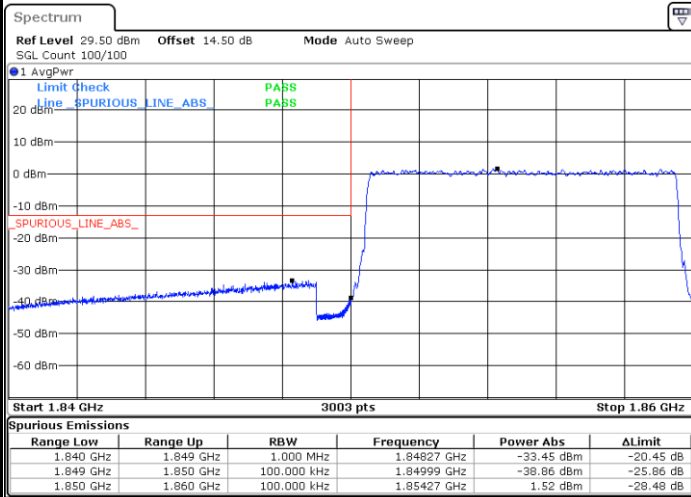
Date: 9 JUN, 2023 14:22:38

Highest Band Edge / 1 RB



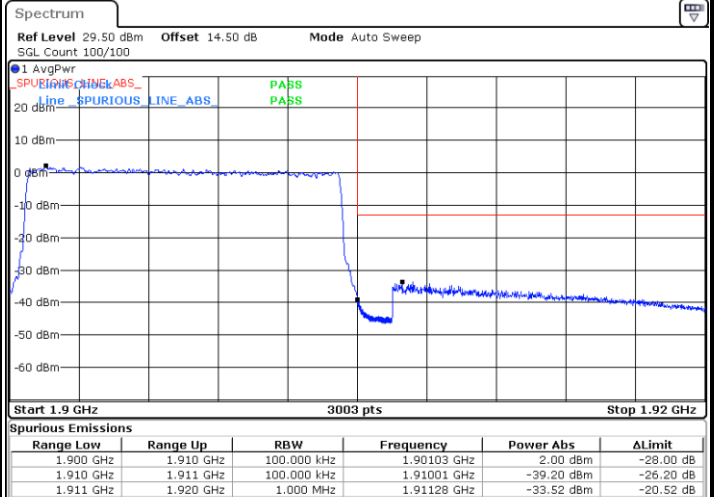
Date: 9 JUN, 2023 14:30:32

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 14:18:41

Highest Band Edge / Full RB



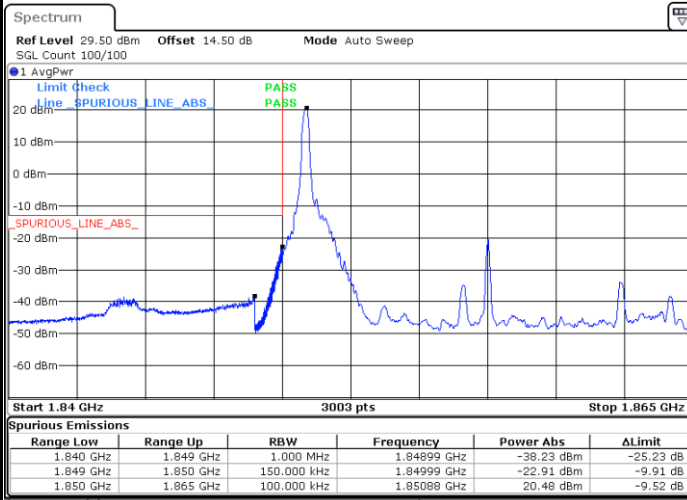
Date: 9 JUN, 2023 14:26:35





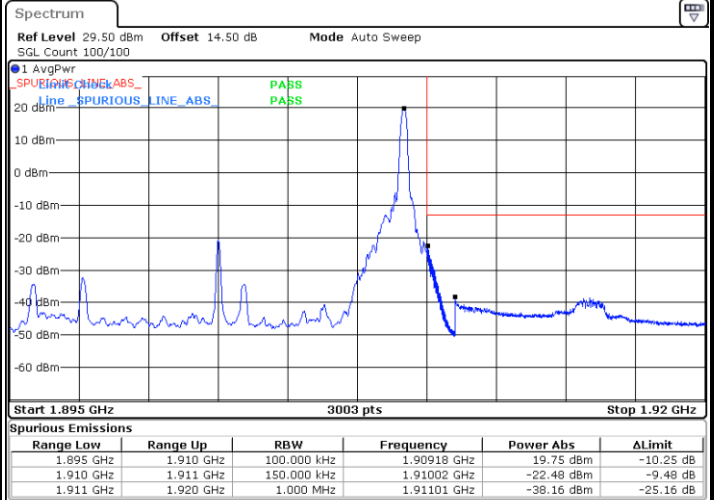
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB



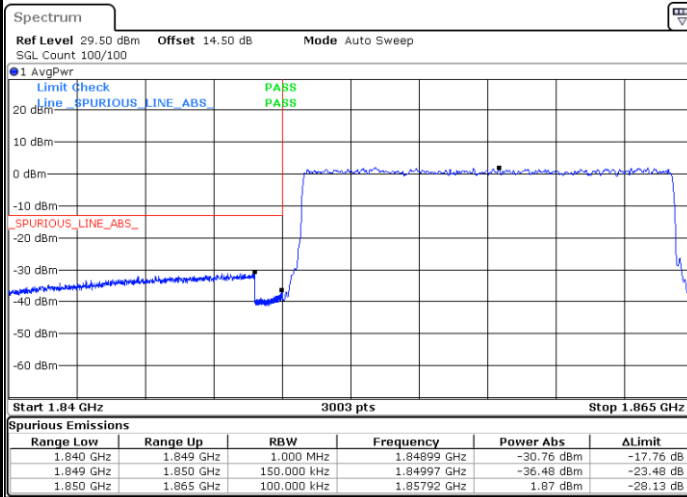
Date: 9 JUN, 2023 14:39:01

Highest Band Edge / 1 RB



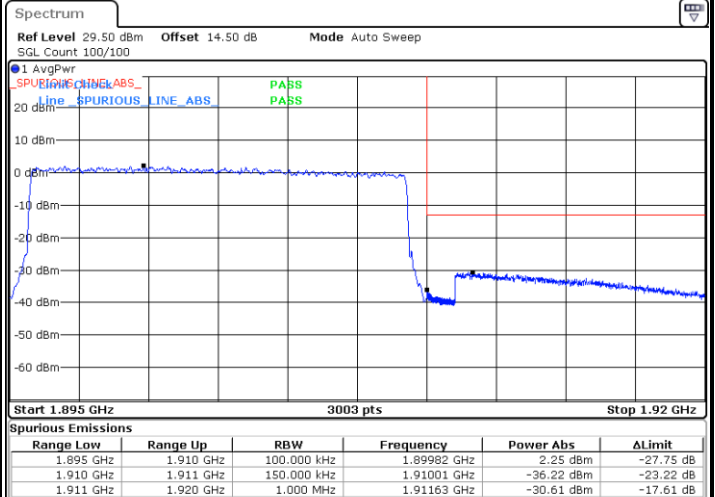
Date: 9 JUN, 2023 14:42:22

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 14:36:36

Highest Band Edge / Full RB

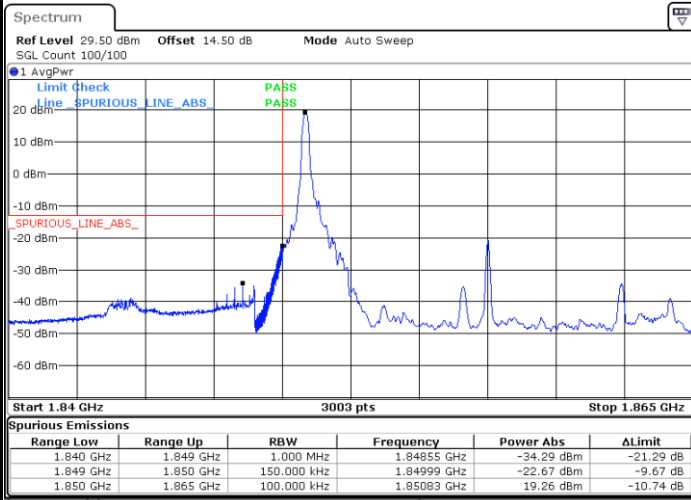


Date: 9 JUN, 2023 14:40:41

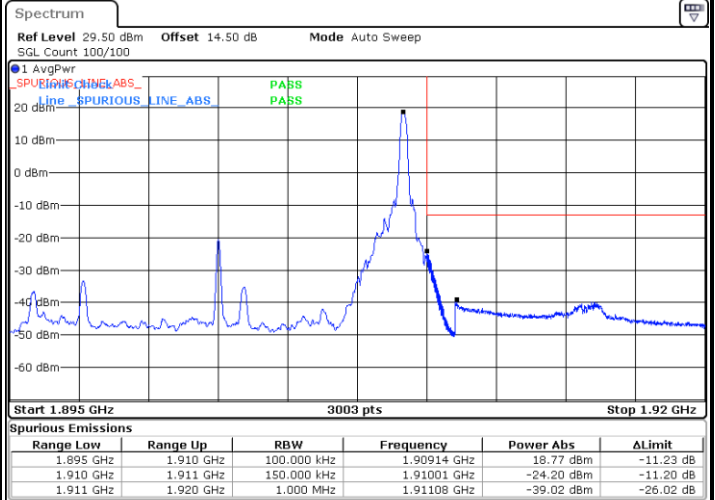


LTE Band 2 / 15MHz / 16QAM

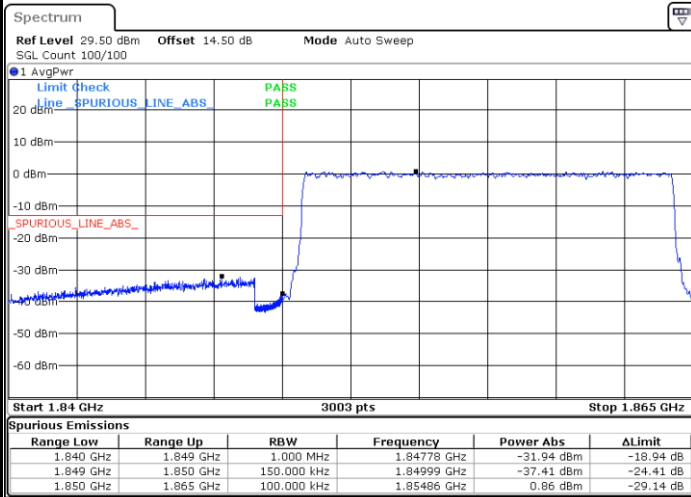
Lowest Band Edge / 1 RB



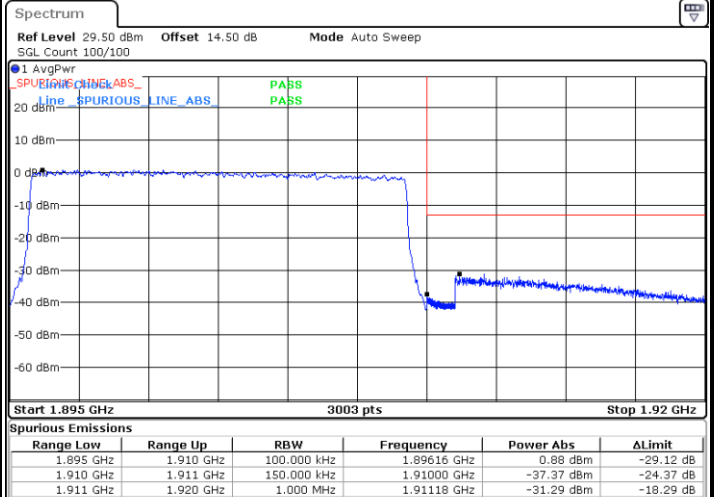
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



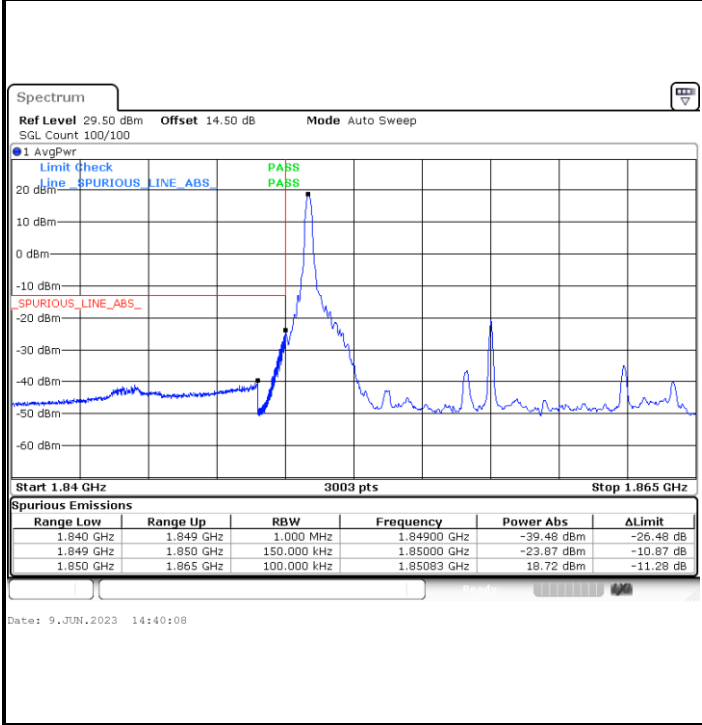
Highest Band Edge / Full RB



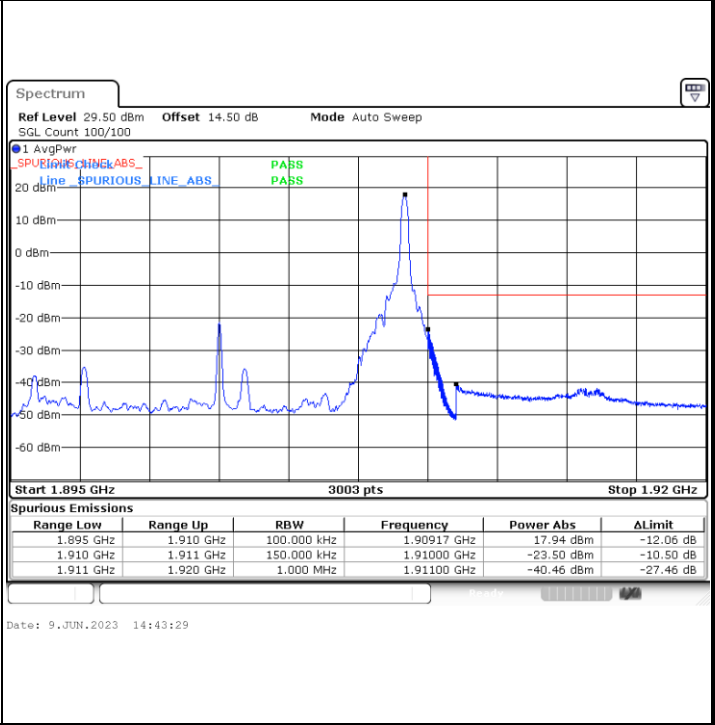


**LTE Band 2 / 15MHz / 64QAM**

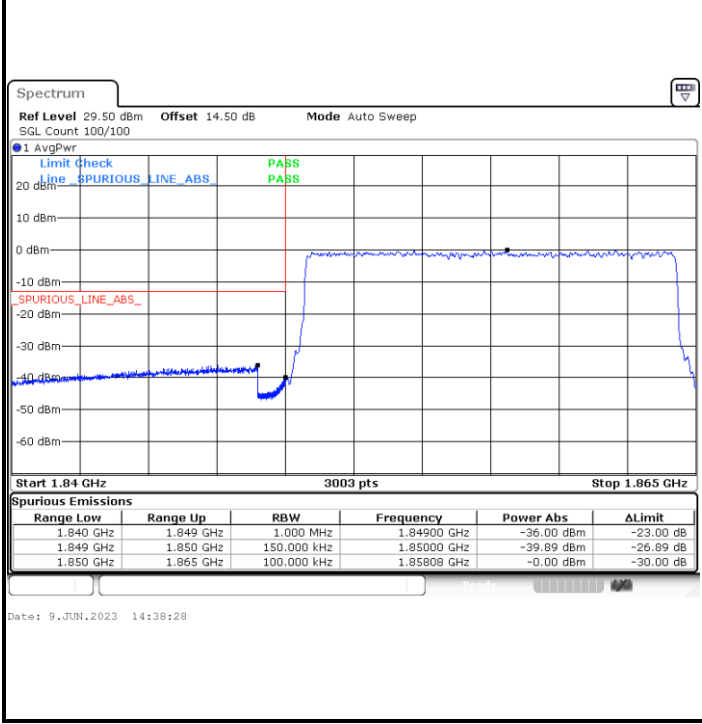
**Lowest Band Edge / 1 RB**



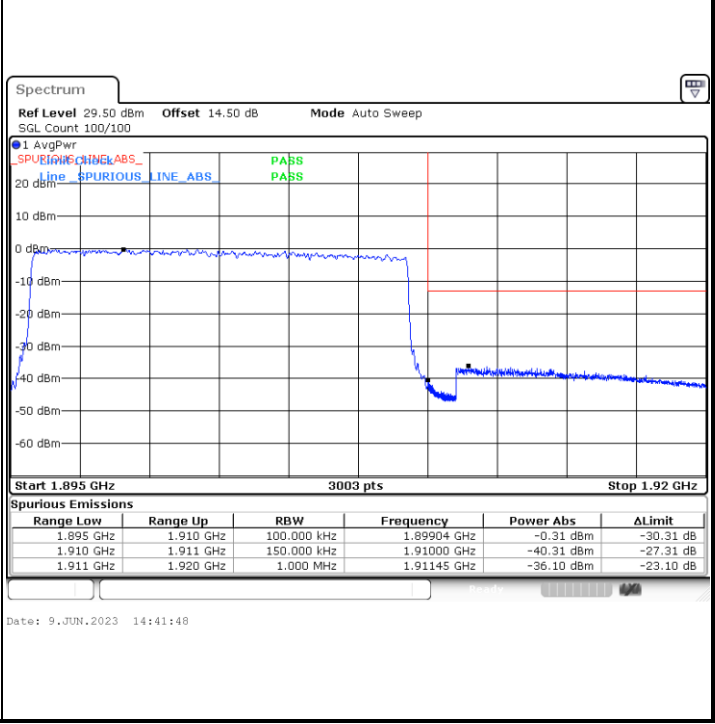
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



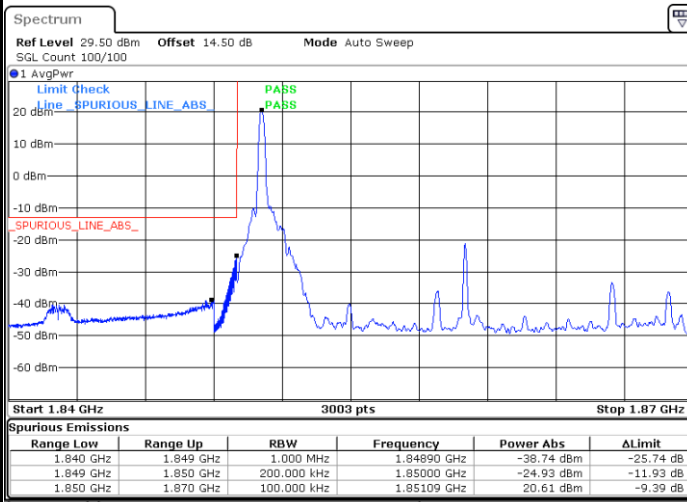
**Highest Band Edge / Full RB**





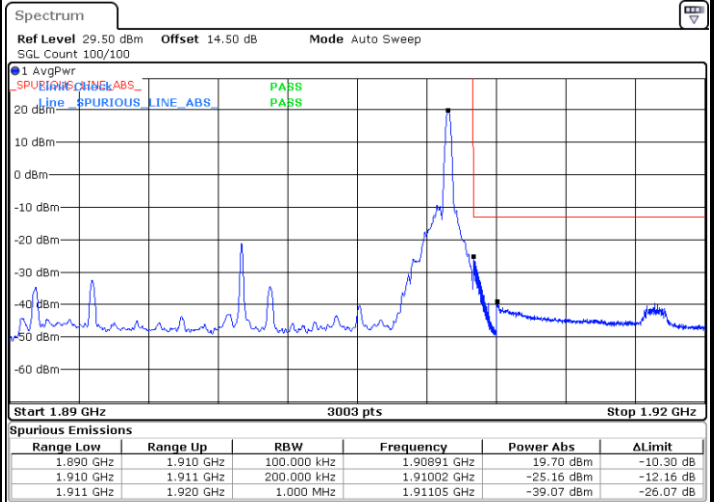
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



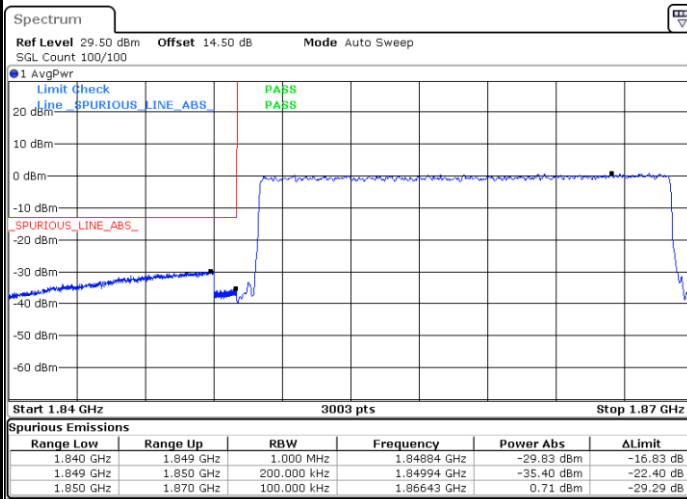
Date: 9 JUN, 2023 14:49:48

Highest Band Edge / 1 RB



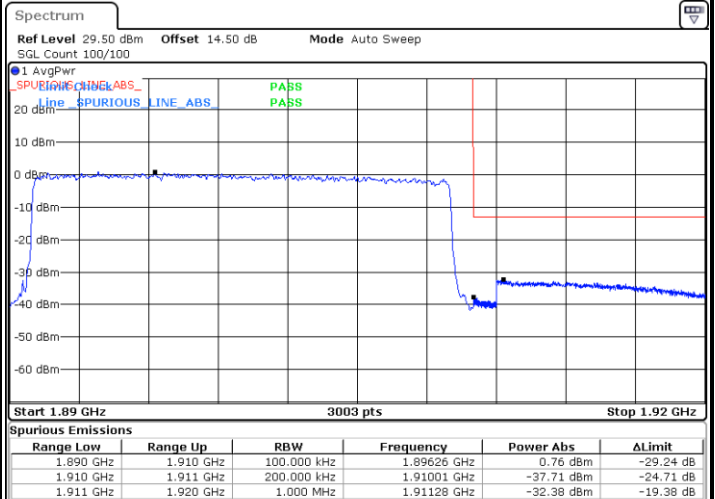
Date: 9 JUN, 2023 14:53:08

Lowest Band Edge / Full RB



Date: 9 JUN, 2023 14:48:08

Highest Band Edge / Full RB

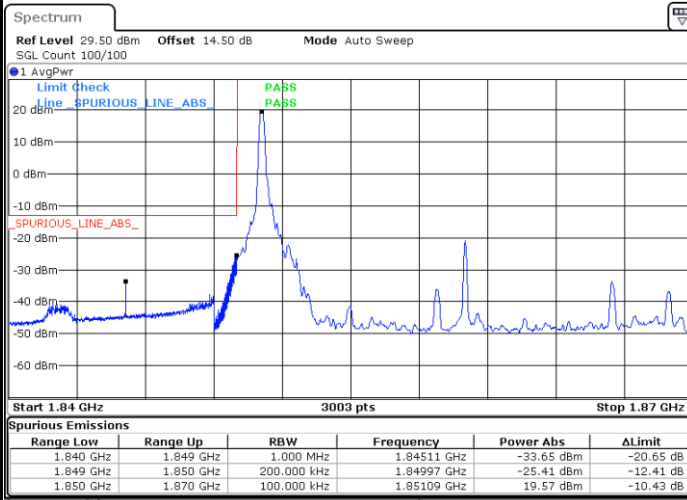


Date: 9 JUN, 2023 14:51:28



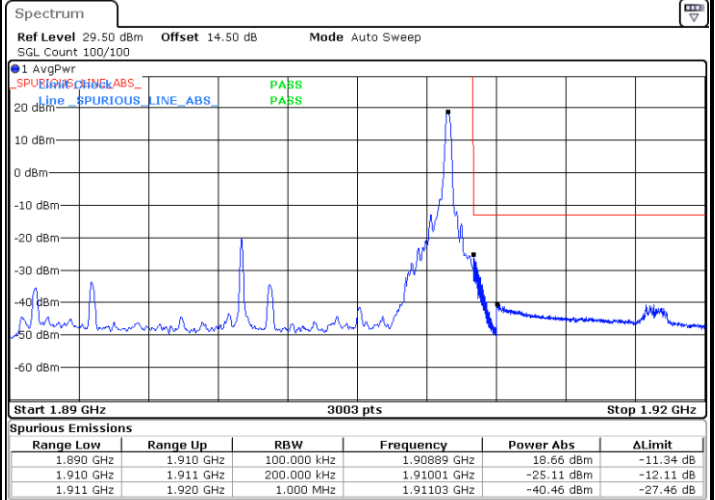
LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



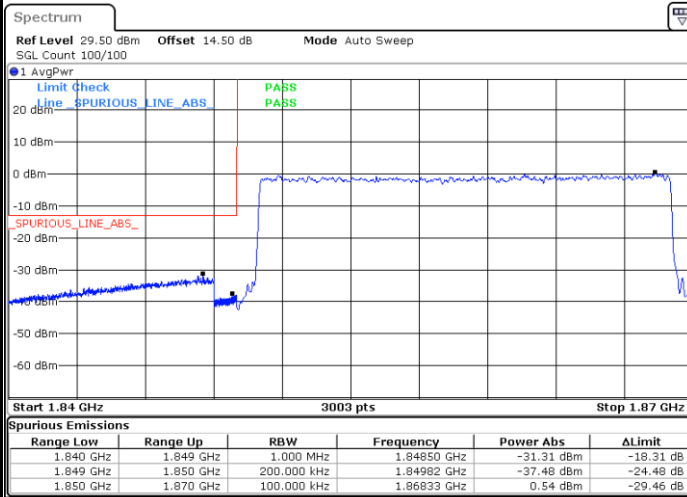
Date: 9 JUN.2023 14:50:21

Highest Band Edge / 1 RB



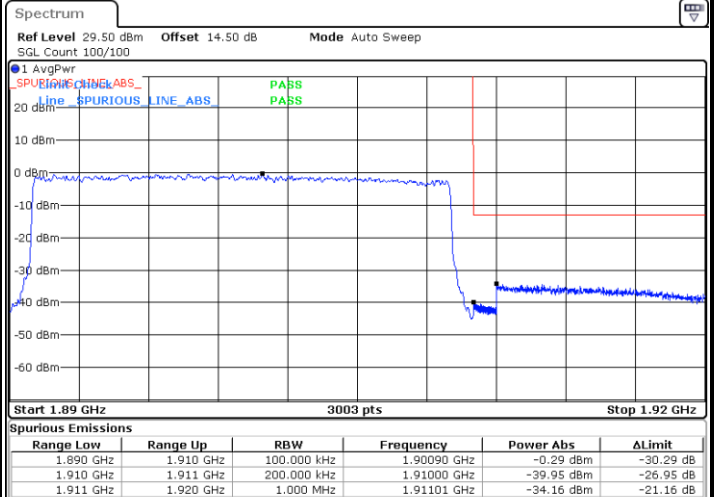
Date: 9 JUN.2023 14:53:42

Lowest Band Edge / Full RB



Date: 9 JUN.2023 14:48:41

Highest Band Edge / Full RB

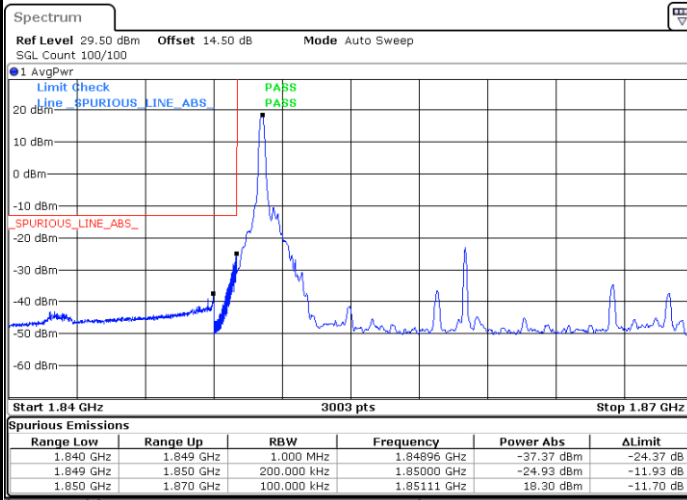


Date: 9 JUN.2023 14:52:01



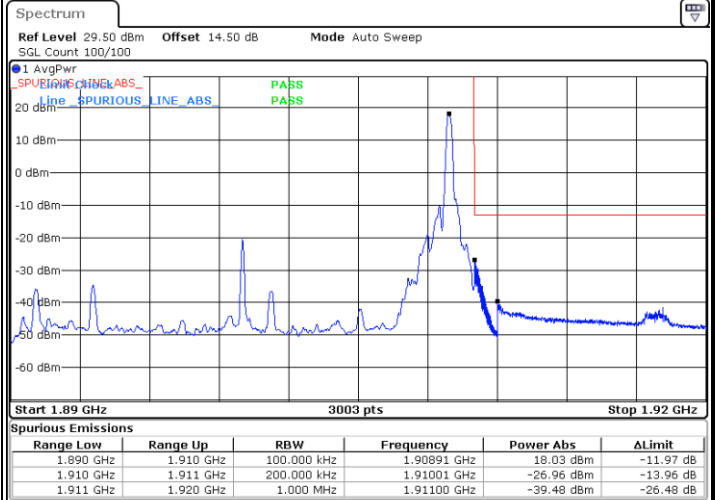
LTE Band 2 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



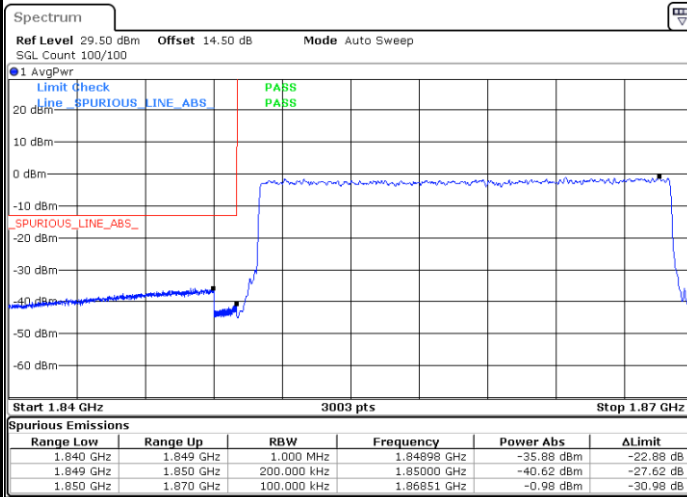
Date: 9 JUN.2023 14:50:54

Highest Band Edge / 1 RB



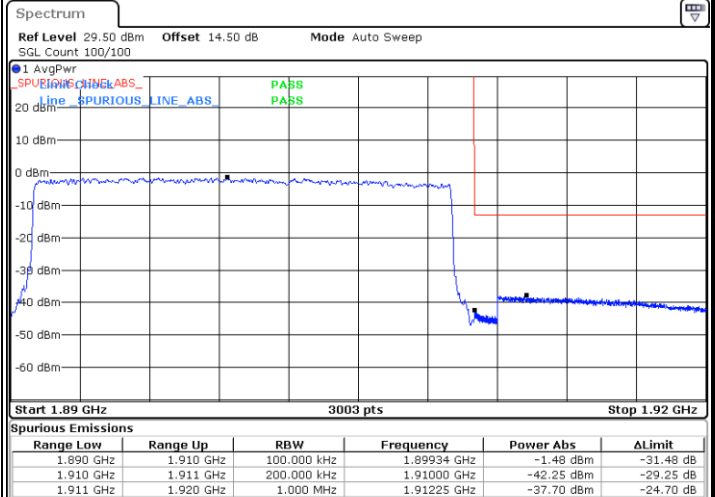
Date: 9 JUN.2023 14:54:15

Lowest Band Edge / Full RB



Date: 9 JUN.2023 14:49:14

Highest Band Edge / Full RB



Date: 9 JUN.2023 14:52:35

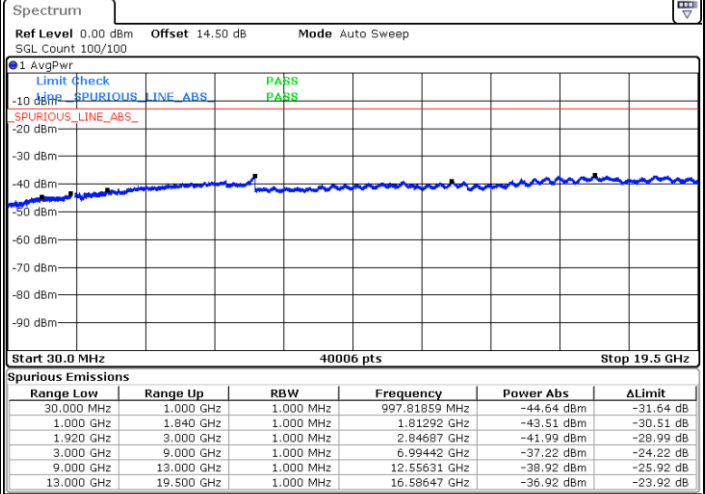
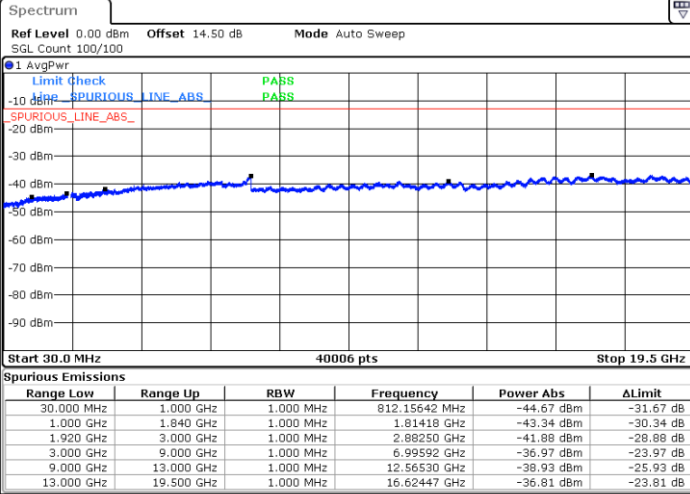


# Conducted Spurious Emission

## LTE Band 2

### Lowest Channel / QPSK\_1.4MHz

### Lowest Channel / QPSK\_3MHz

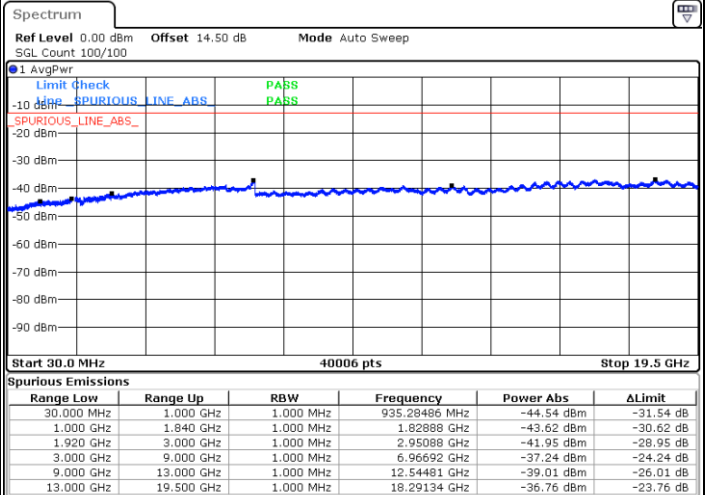
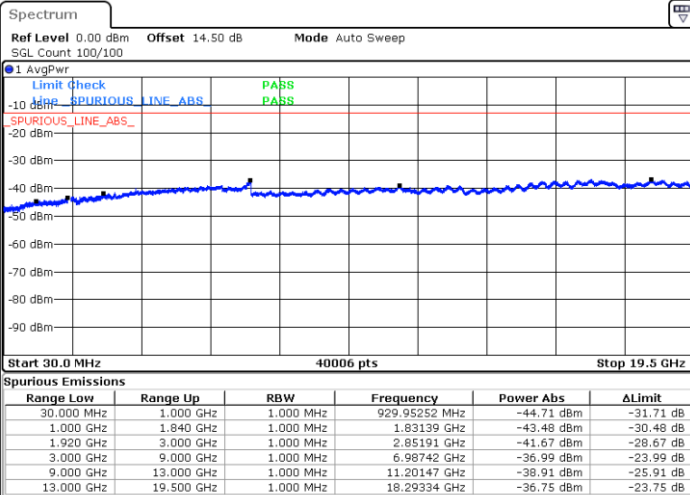


Date: 9 JUN.2023 13:30:28

Date: 9 JUN.2023 13:51:00

### Middle Channel / QPSK\_1.4MHz

### Middle Channel / QPSK\_3MHz



Date: 9 JUN.2023 13:32:02

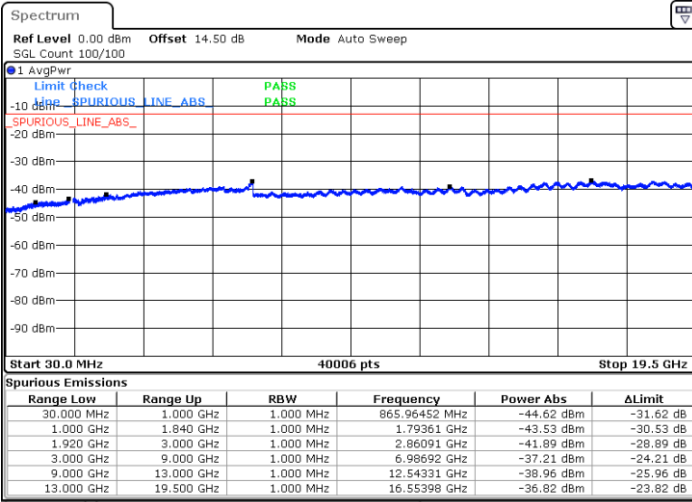
Date: 9 JUN.2023 13:52:35



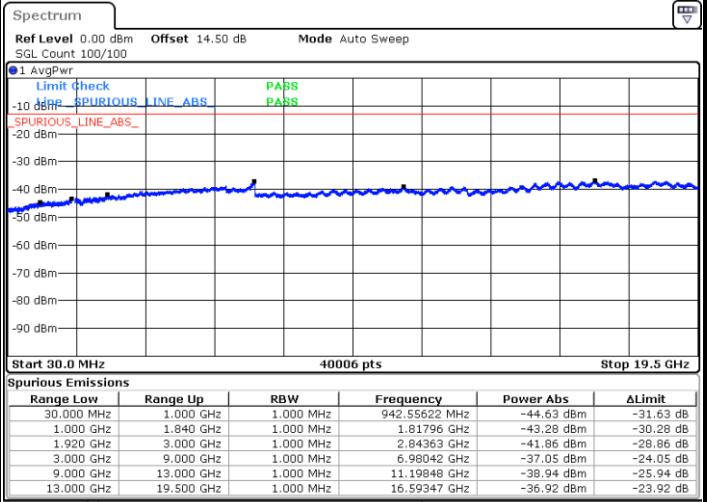
LTE Band 2

Highest Channel / QPSK\_1.4MHz

Highest Channel / QPSK\_3MHz



Date: 9 JUN 2023 13:33:37



Date: 9 JUN 2023 13:54:10