



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2215-1  
**FCC ID** : IHDT56AA5  
**STANDARD** : 47 CFR Part 2, 27(M)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)  
**TEST DATE(S)** : Dec. 24, 2021 ~ Jan. 09, 2022

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.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



**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 Specification of Accessory 6
1.7 Maximum EIRP Power and Emission Designator 6
1.8 Testing Location 7
1.9 Test Software 7
1.10 Applicable Standards 7
2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 8
2.1 Test Mode 8
2.2 Connection Diagram of Test System 9
2.3 Support Unit used in test configuration and system 9
2.4 Measurement Results Explanation Example 9
2.5 Frequency List of Low/Middle/High Channels 10
3. CONDUCTED TEST ITEMS 11
3.1 Measuring Instruments 11
3.2 Test Setup 11
3.3 Test Result of Conducted Test 11
3.4 Conducted Output Power and EIRP 12
3.5 Peak-to-Average Ratio 13
3.6 Occupied Bandwidth 14
3.7 Conducted Band Edge 15
3.8 Conducted Spurious Emission 16
3.9 Frequency Stability 17
4. RADIATED TEST ITEMS 18
4.1 Measuring Instruments 18
4.2 Test Setup 18
4.3 Test Result of Radiated Test 19
4.4 Radiated Spurious Emission 20
5. LIST OF MEASURING EQUIPMENT 21
6. UNCERTAINTY OF EVALUATION 22
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
FG1N0903-01A	Rev. 01	Initial issue of report	Feb. 18, 2022



### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Report Only	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7)	EIRP < 2Watt	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Report Only	PASS	-
3.7	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7)	§27.53(m)(4)	PASS	-
3.8	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7)	< 55+10log <sub>10</sub> (P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	< 55+10log <sub>10</sub> (P[Watts])	PASS	Under limit 25.44 dB at 10104.360 MHz

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and Explanations:</b>
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



# 1. General Description

## 1.1 Applicant

Motorola Mobility LLC  
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2215-1
FCC ID	IHDT56AA5
IMEI Code	Conducted : 351626420008754/351626420008754 Radiation : 351626420009141
HW Version	DVT2
SW Version	S1SD32.29
EUT Stage	Identical Prototype

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

## 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 7 : 2500 MHz ~ 2570 MHz
Rx Frequency	LTE Band 7 : 2620 MHz ~ 2690 MHz
Bandwidth	LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz
Antenna Gain	LTE Band 7: -6.1 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note: For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power.



### 1.5 Modification of EUT

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

### 1.6 Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	Motorola(Chenyang)	Model Name	MC-101
AC Adapter 2	Brand Name	Motorola(Salcomp)	Model Name	MC-101
AC Adapter 3	Brand Name	Motorola(AOHAI)	Model Name	MC-101
Battery	Brand Name	Motorola(ATL)	Model Name	MD50
USB Cable 1	Brand Name	Motorola(Saibao)	Model Name	SC18D22297
USB Cable 2	Brand Name	Motorola(Cabletech)	Model Name	SC18D22298
USB Cable 3	Brand Name	Motorola(Luxshare)	Model Name	SC18D22299

### 1.7 Maximum EIRP Power and Emission Designator

LTE Band 7		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.0498	4M51G7D	0.0436	4M51W7D
10	2505.0 ~ 2565.0	0.0491	9M05G7D	0.0442	9M05W7D
15	2507.5 ~ 2562.5	0.0494	13M5G7D	0.0450	13M5W7D
20	2510.0 ~ 2560.0	0.0506	17M9G7D	0.0449	18M0W7D

All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.



### 1.8 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>
	03CH03-SZ	CN1256	421272

### 1.9 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

### 1.10 Applicable Standards

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

- 47 CFR Part 2, 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

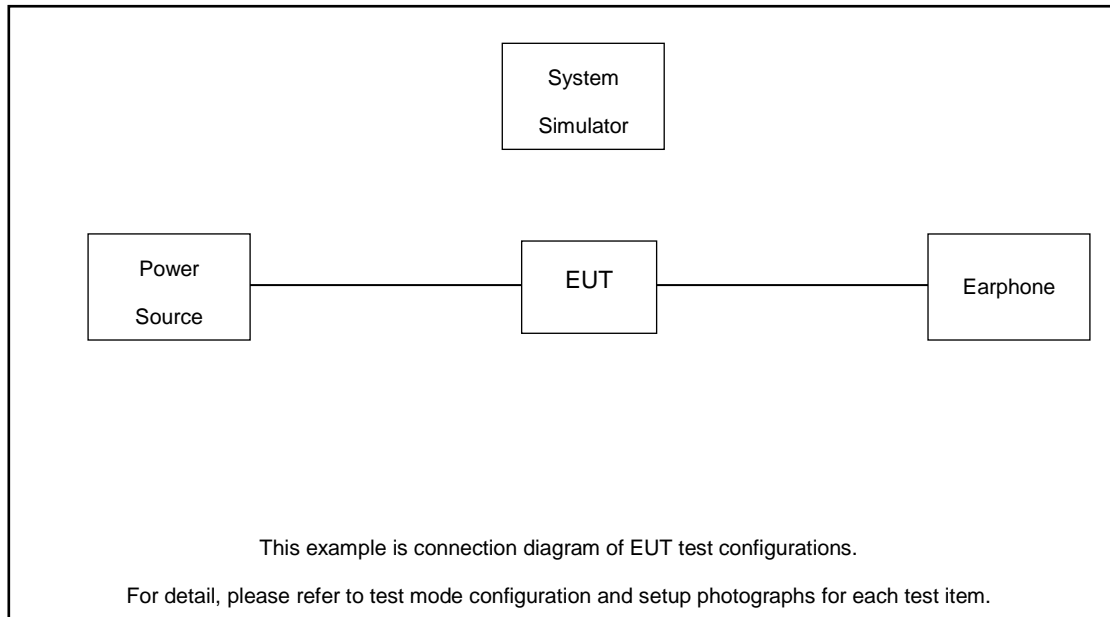
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

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	16QAM	64QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v		v		v	v	v	
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v	v				v	v	v	
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v		v		v	v	v	
Conducted Spurious Emission	7	-	-	v	v	v	v	v	v	v		v		v	v	v	
Frequency Stability	7	-	-		v			v						v		v	
E.R.P / E.I.R.P	7	-	-	v	v	v	v	v	v	v		v			v	v	
Radiated Spurious Emission	7	Worst Case														v	
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> </ol>																



## 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.	Earphone	MOTO	N/A	N/A	Unshielded, 1.2m	N/A
3.	Base Station	Anritsu	MT8820C	Fcc DoC	N/A	Shielded, 1.5m

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

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

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

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 5.0 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 5.0 + 10 = 15.0 \text{ (dB)} \end{aligned}$$



## 2.5 Frequency List of Low/Middle/High Channels

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

### 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 Band 7.

According to KDB 412172 D01 Power Approach,

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

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

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

#### 3.4.2 Test Procedures

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



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

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

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

### **3.5.2 Test Procedures**

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



### 3.6 Occupied Bandwidth

#### 3.6.1 Description of Occupied Bandwidth Measurement

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

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

#### 3.6.2 Test Procedures

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



### 3.7 Conducted Band Edge

#### 3.7.1 Description of Conducted Band Edge Measurement

27.53(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)  
=  $P(W) - [43 + 10\log(P)]$  (dB)  
=  $[30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB) = -13dBm.

9. For LTE Band 7, the other 40 dB, and 55 dB have additionally applied same calculation above.



### 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:

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  
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.

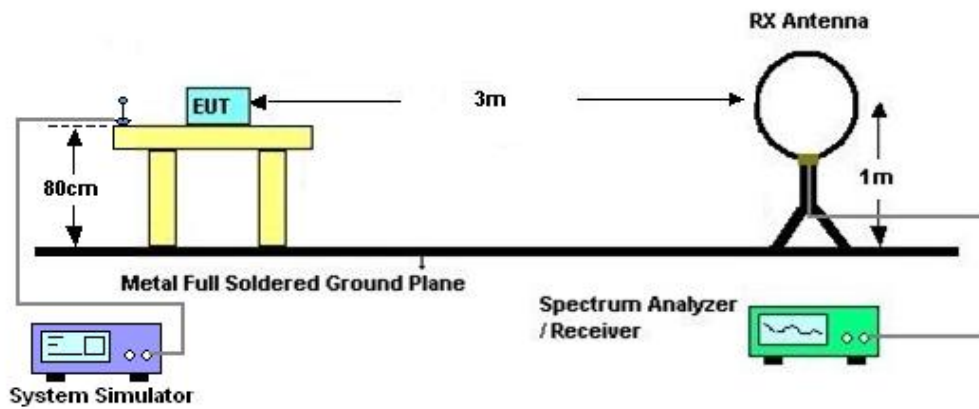
## 4. Radiated Test Items

### 4.1 Measuring Instruments

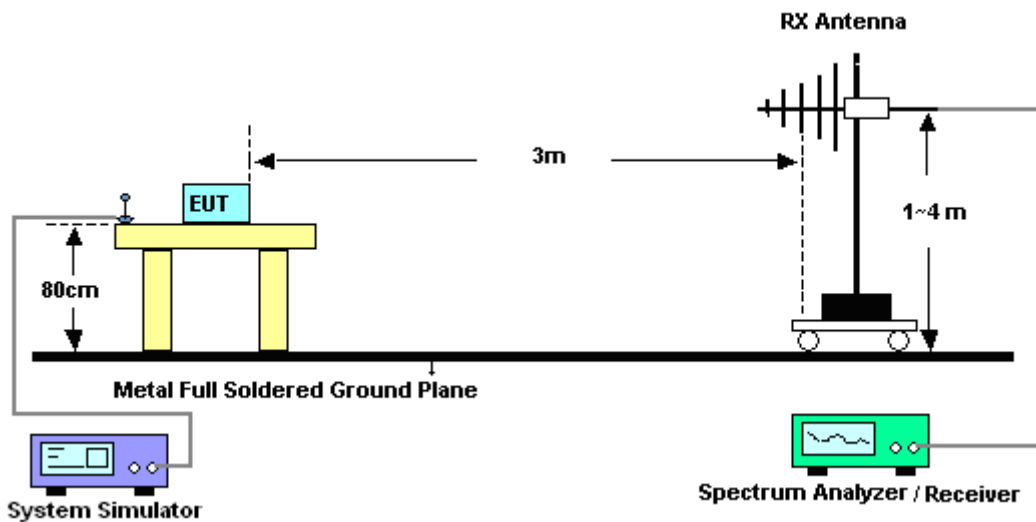
See list of measuring instruments of this test report.

### 4.2 Test Setup

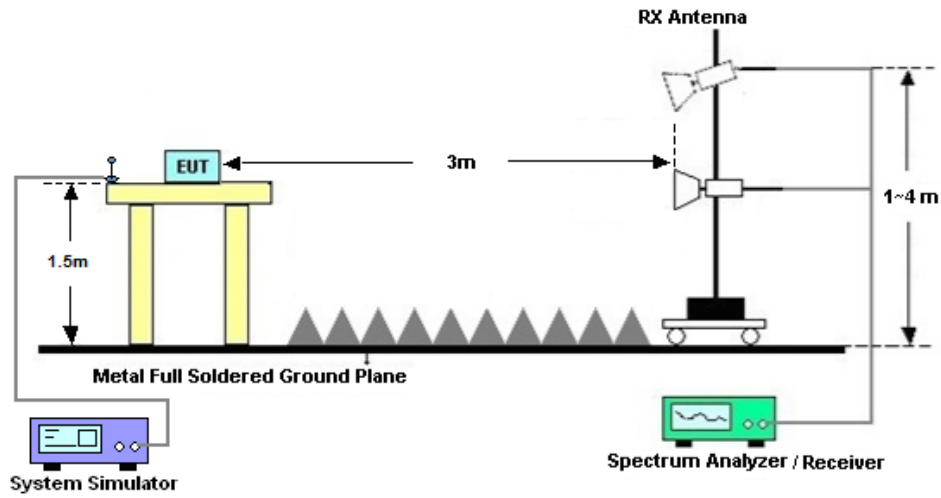
#### 4.2.1 For radiated test below 30MHz



#### 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

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:

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. 08, 2021	Dec. 24, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 26, 2020	Dec. 24, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Dec. 24, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 07, 2021	Jan. 09, 2022	Apr. 06, 2022	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Jan. 09, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 07, 2021	Jan. 09, 2022	Apr. 06, 2022	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2021	Jan. 09, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 25 2021	Jan. 09, 2022	Apr. 24, 2022	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 22, 2021	Jan. 09, 2022	Oct. 21, 2022	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Oct. 22, 2021	Jan. 09, 2022	Oct. 21, 2022	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Jan. 09, 2022	Apr. 10, 2022	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 30, 2021	Jan. 09, 2022	Dec. 29, 2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jan. 09, 2022	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 09, 2022	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jan. 09, 2022	NCR	Radiation (03CH03-SZ)

NCR: No Calibration Required



## 6. Uncertainty of Evaluation

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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.0dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.6dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.8dB
---	-------



### Appendix A. Test Results of Conducted Test

Test Engineer :	Yao Zhou	Temperature :	24~26°C
		Relative Humidity :	50~53%

### Conducted Output Power(Average power)

#### LTE Band 7:

BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	23.14	23.05	22.99
20	QPSK	1	49	22.90	22.97	22.92
20	QPSK	1	99	22.92	22.86	22.89
20	QPSK	50	0	22.32	22.21	22.26
20	QPSK	50	24	22.23	22.00	22.22
20	QPSK	50	50	22.06	21.85	22.20
20	QPSK	100	0	22.18	22.05	22.30
20	16QAM	1	0	22.62	22.50	22.52
20	16QAM	1	49	22.50	22.14	22.48
20	16QAM	1	99	22.18	22.22	22.42
20	16QAM	50	0	21.36	21.05	21.22
20	16QAM	50	24	21.30	21.00	21.23
20	16QAM	50	50	21.11	20.85	21.25
20	16QAM	100	0	21.18	20.96	21.22
20	64QAM	1	0	20.72	21.26	21.28
20	64QAM	1	49	20.80	21.13	21.22
20	64QAM	1	99	21.18	21.10	20.81
20	64QAM	50	0	19.77	20.07	20.30
20	64QAM	50	24	19.75	19.99	20.23
20	64QAM	50	50	20.07	19.96	19.80
20	64QAM	100	0	19.85	20.00	20.29
20	256QAM	1	0	17.89	17.69	17.83
20	256QAM	1	49	18.07	17.92	17.93



20	256QAM	1	99	17.79	17.82	18.04
20	256QAM	50	0	18.22	18.03	18.09
20	256QAM	50	24	18.13	18.06	17.99
20	256QAM	50	50	18.14	18.00	18.16
20	256QAM	100	0	18.10	18.09	18.13
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	23.01	23.04	22.92
15	QPSK	1	37	22.85	22.89	22.84
15	QPSK	1	74	22.91	22.74	22.80
15	QPSK	36	0	22.28	22.15	22.19
15	QPSK	36	20	22.18	21.87	22.16
15	QPSK	36	39	21.96	21.78	22.16
15	QPSK	75	0	22.09	22.01	22.19
15	16QAM	1	0	22.63	22.43	22.50
15	16QAM	1	37	22.38	22.11	22.43
15	16QAM	1	74	22.08	22.15	22.42
15	16QAM	36	0	21.26	20.92	21.10
15	16QAM	36	20	21.30	20.92	21.16
15	16QAM	36	39	21.03	20.84	21.18
15	16QAM	75	0	21.14	20.85	21.15
15	64QAM	1	0	20.65	21.27	21.17
15	64QAM	1	37	20.68	21.14	21.15
15	64QAM	1	74	21.16	21.01	20.79
15	64QAM	36	0	19.95	20.08	20.22
15	64QAM	36	20	19.76	19.89	20.18
15	64QAM	36	39	20.08	19.94	19.76
15	64QAM	75	0	19.80	19.96	20.26
15	256QAM	1	0	17.84	17.56	17.70
15	256QAM	1	37	17.98	17.82	17.93
15	256QAM	1	74	17.77	17.69	18.00
15	256QAM	36	0	18.12	18.03	18.10
15	256QAM	36	20	18.07	17.96	18.00
15	256QAM	36	39	18.13	17.94	18.11
15	256QAM	75	0	18.04	18.04	18.14
Channel				20800	21100	21400





Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	23.01	22.95	22.86
10	QPSK	1	25	22.83	22.85	22.82
10	QPSK	1	49	22.85	22.87	22.82
10	QPSK	25	0	22.23	22.17	22.21
10	QPSK	25	12	22.17	21.96	22.14
10	QPSK	25	25	21.94	21.79	22.07
10	QPSK	50	0	22.10	22.06	22.19
10	16QAM	1	0	22.55	22.46	22.53
10	16QAM	1	25	22.37	22.11	22.43
10	16QAM	1	49	22.17	22.09	22.41
10	16QAM	25	0	21.24	20.93	21.18
10	16QAM	25	12	21.30	20.89	21.19
10	16QAM	25	25	20.99	20.85	21.23
10	16QAM	50	0	21.14	20.90	21.22
10	64QAM	1	0	20.66	21.23	21.26
10	64QAM	1	25	20.68	21.12	21.17
10	64QAM	1	49	21.18	21.02	20.73
10	64QAM	25	0	19.96	20.01	20.30
10	64QAM	25	12	19.92	19.90	20.10
10	64QAM	25	25	19.95	19.83	19.91
10	64QAM	50	0	19.85	19.95	20.30
10	256QAM	1	0	17.86	17.57	17.73
10	256QAM	1	25	18.03	17.83	17.93
10	256QAM	1	49	17.70	17.79	18.03
10	256QAM	25	0	18.19	18.04	18.10
10	256QAM	25	12	18.10	17.96	17.98
10	256QAM	25	25	18.02	17.96	18.12
10	256QAM	50	0	18.02	17.99	18.13
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	23.07	22.96	22.92
5	QPSK	1	12	22.90	22.96	22.89
5	QPSK	1	24	22.90	22.75	22.82
5	QPSK	12	0	22.24	22.16	22.25
5	QPSK	12	7	22.12	21.91	22.11



5	QPSK	12	13	22.07	21.83	22.19
5	QPSK	25	0	22.14	22.01	22.23
5	16QAM	1	0	22.49	22.37	22.39
5	16QAM	1	12	22.39	22.12	22.42
5	16QAM	1	24	22.12	22.11	22.30
5	16QAM	12	0	21.32	21.04	21.10
5	16QAM	12	7	21.23	20.96	21.12
5	16QAM	12	13	21.05	20.74	21.20
5	16QAM	25	0	21.16	20.91	21.23
5	64QAM	1	0	20.69	21.24	21.26
5	64QAM	1	12	20.69	21.09	21.19
5	64QAM	1	24	21.05	21.10	20.74
5	64QAM	12	0	19.78	19.95	20.21
5	64QAM	12	7	19.71	20.00	20.20
5	64QAM	12	13	20.04	19.95	19.79
5	64QAM	25	0	19.79	19.92	20.19
5	256QAM	1	0	17.78	17.56	17.76
5	256QAM	1	12	18.06	17.88	17.92
5	256QAM	1	24	17.72	17.72	17.96
5	256QAM	12	0	18.10	17.98	18.02
5	256QAM	12	7	18.05	18.04	17.87
5	256QAM	12	13	18.09	17.88	18.10
5	256QAM	25	0	17.97	18.10	18.06



**EIRP**

LTE Band 7 (GT - LC =-6.1 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
	Conducted Power (dBm)	23.07	22.96
Conducted Power (Watts)	0.2028	0.1977	0.1959
EIRP(dBm)	16.97	16.86	16.82
EIRP(Watts)	0.0498	0.0485	0.0481

LTE Band 7 (GT - LC = -6.1 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 (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
	Conducted Power (dBm)	23.01	22.95	22.86	23.01	23.04	22.92	23.14	23.05
Conducted Power (Watts)	0.2000	0.1972	0.1932	0.2000	0.2014	0.1959	0.2061	0.2018	0.1991
EIRP(dBm)	16.91	16.85	16.76	16.91	16.94	16.82	17.04	16.95	16.89
EIRP(Watts)	0.0491	0.0484	0.0474	0.0491	0.0494	0.0481	0.0506	0.0495	0.0489



LTE Band 7 (GT - LC = -6.1 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
	Conducted Power (dBm)	22.49	22.37
Conducted Power (Watts)	0.1774	0.1726	0.1734
EIRP(dBm)	16.39	16.27	16.29
EIRP(Watts)	0.0436	0.0424	0.0426

LTE Band 7 (GT - LC = -6.1 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)	22.55	22.46	22.53	22.63	22.43	22.50	22.62	22.50
Conducted Power (Watts)	0.1799	0.1762	0.1791	0.1832	0.1750	0.1778	0.1828	0.1778	0.1786
EIRP(dBm)	16.45	16.36	16.43	16.53	16.33	16.40	16.52	16.40	16.42
EIRP(Watts)	0.0442	0.0433	0.0440	0.0450	0.0430	0.0437	0.0449	0.0437	0.0439



LTE Band 7 (GT - LC =-6.1 dB) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	20.69	21.24	21.26
Conducted Power (Watts)	0.1172	0.1330	0.1337
EIRP(dBm)	14.59	15.14	15.16
EIRP(Watts)	0.0288	0.0327	0.0328

LTE Band 7 (GT - LC = -6.1 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)	20.66	21.23	21.26	20.65	21.27	21.17	20.72	21.26	21.28
Conducted Power (Watts)	0.1164	0.1327	0.1337	0.1161	0.1340	0.1309	0.1180	0.1337	0.1343
EIRP(dBm)	14.56	15.13	15.16	14.55	15.17	15.07	14.62	15.16	15.18
EIRP(Watts)	0.0286	0.0326	0.0328	0.0285	0.0329	0.0321	0.0290	0.0328	0.0330



# LTE Band 7

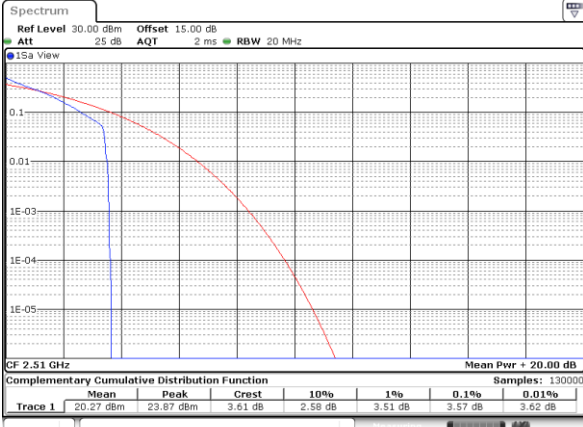
## Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.57	4.93	5.39	5.83	PASS
Middle CH	3.48	4.81	4.70	5.80	
Highest CH	3.65	5.07	5.54	5.91	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.16	5.83	-	-	PASS
Middle CH	4.90	5.74	-	-	
Highest CH	5.51	5.94	-	-	



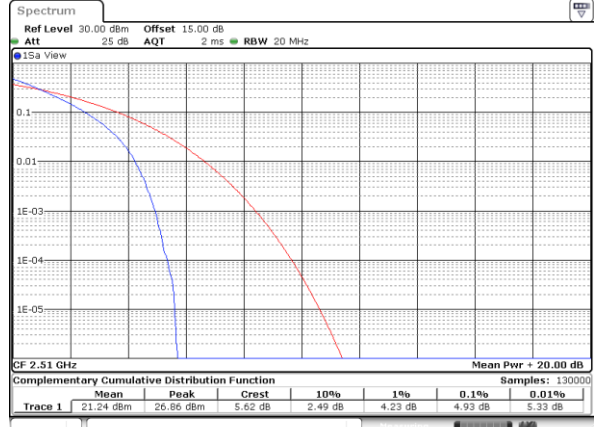
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



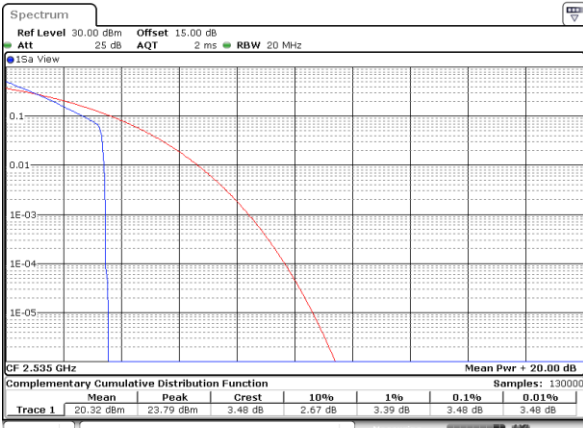
Date: 24.DEC.2021 17:55:27

Lowest Channel / Full RB



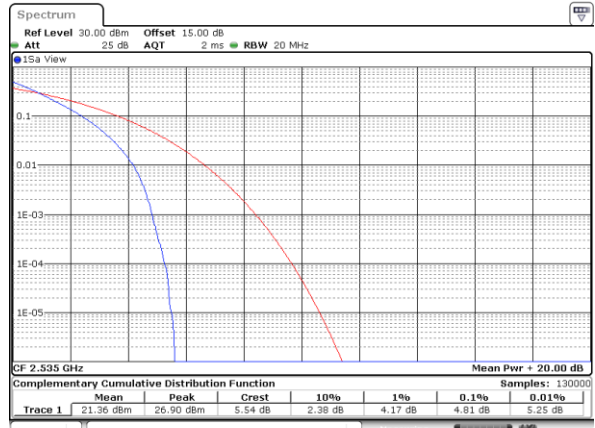
Date: 24.DEC.2021 17:55:39

Middle Channel / 1RB



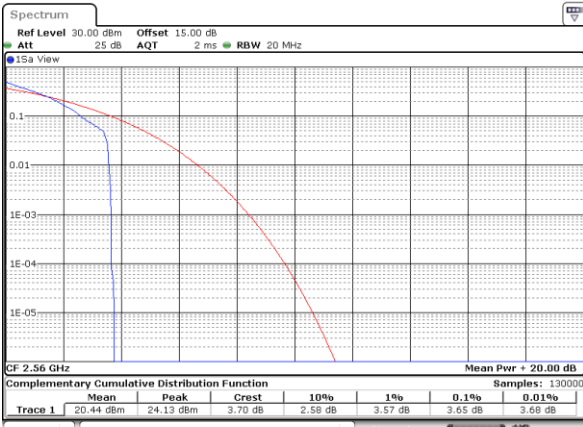
Date: 24.DEC.2021 17:55:55

Middle Channel / Full RB



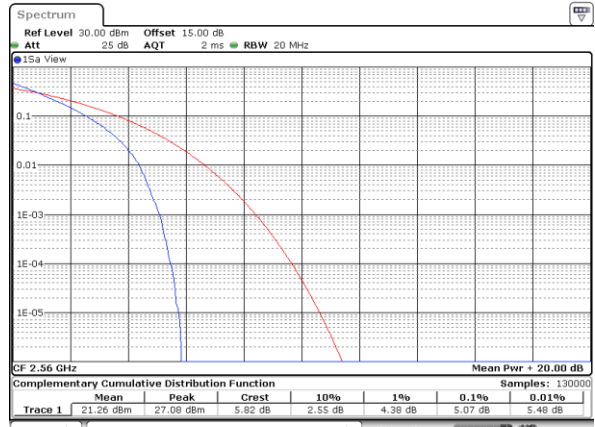
Date: 24.DEC.2021 17:56:16

Highest Channel / 1RB



Date: 24.DEC.2021 17:57:16

Highest Channel / Full RB

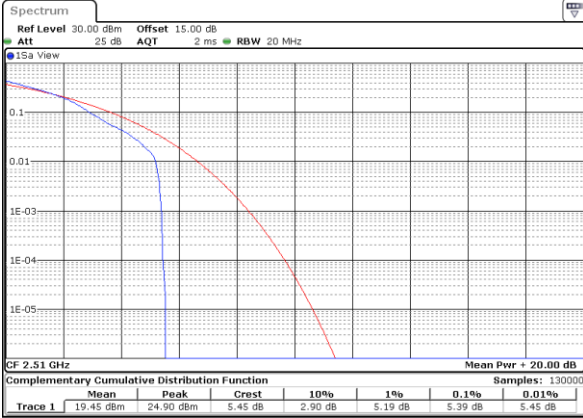


Date: 24.DEC.2021 17:58:50



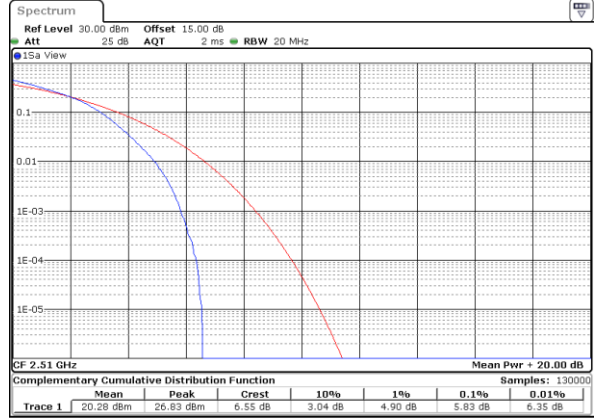
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



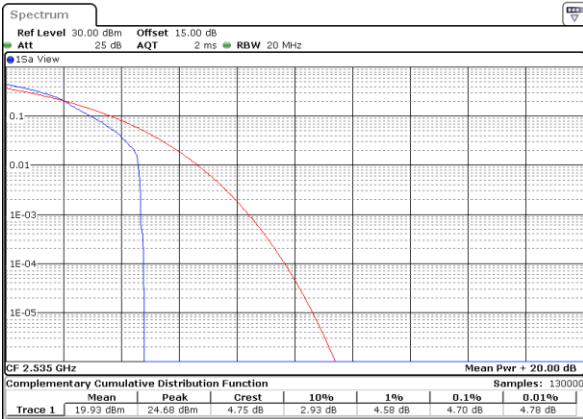
Date: 24.DEC.2021 17:41:38

Lowest Channel / Full RB



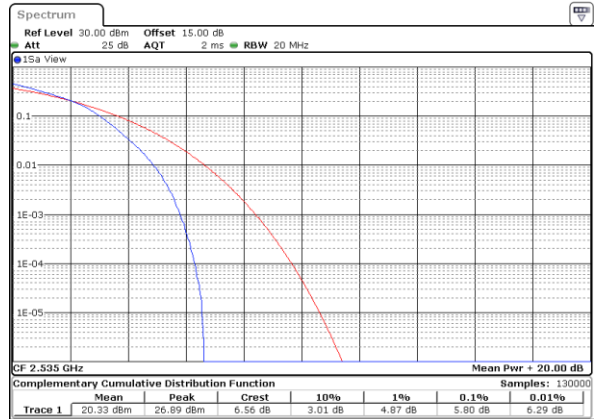
Date: 24.DEC.2021 17:42:00

Middle Channel / 1RB



Date: 24.DEC.2021 17:42:18

Middle Channel / Full RB



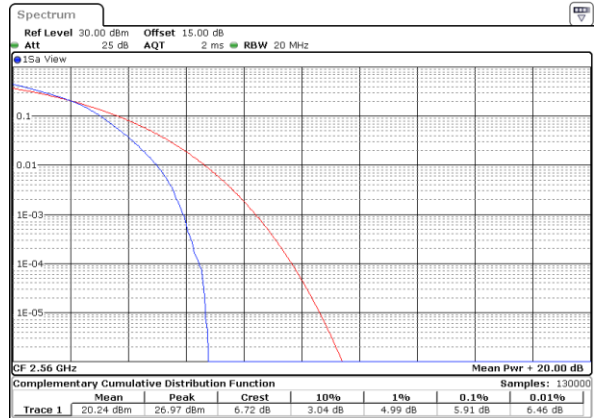
Date: 24.DEC.2021 17:42:28

Highest Channel / 1RB



Date: 24.DEC.2021 17:43:04

Highest Channel / Full RB



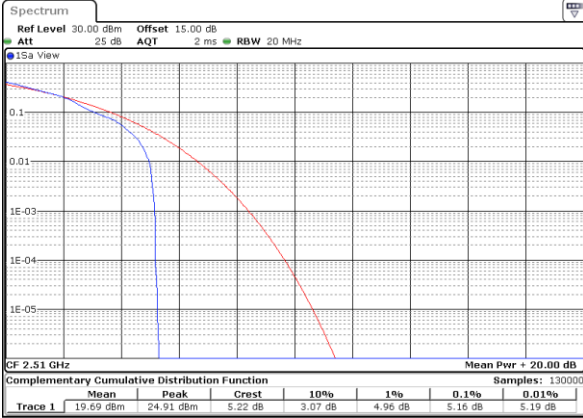
Date: 24.DEC.2021 17:43:44





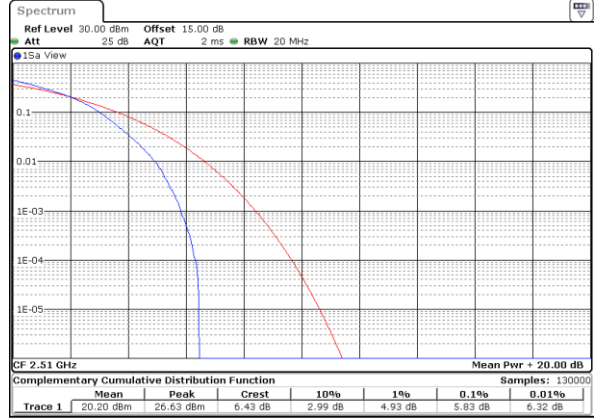
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



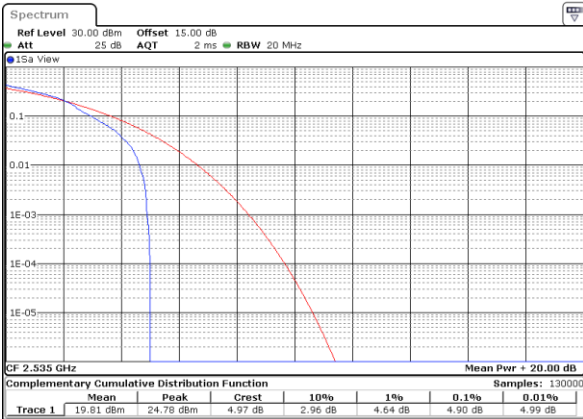
Date: 24.DEC.2021 17:59:00

Lowest Channel / Full RB



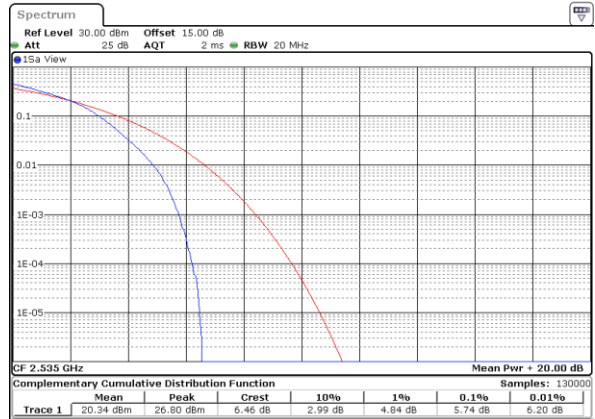
Date: 24.DEC.2021 17:59:12

Middle Channel / 1RB



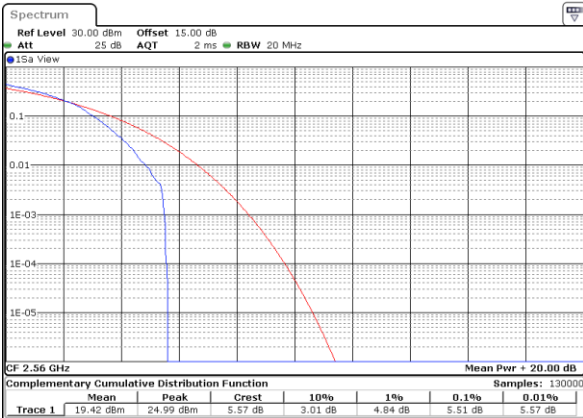
Date: 24.DEC.2021 17:59:24

Middle Channel / Full RB



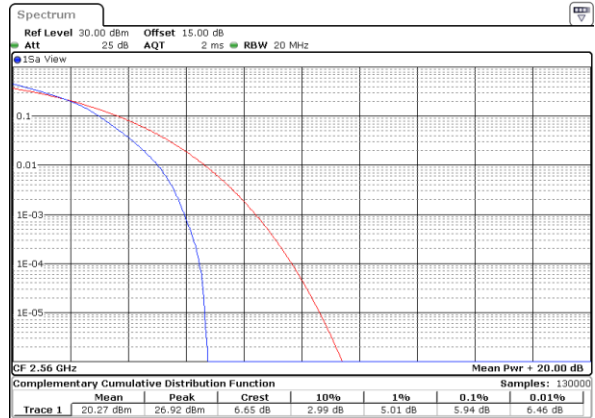
Date: 24.DEC.2021 17:59:36

Highest Channel / 1RB



Date: 24.DEC.2021 17:59:47

Highest Channel / Full RB



Date: 24.DEC.2021 18:00:03



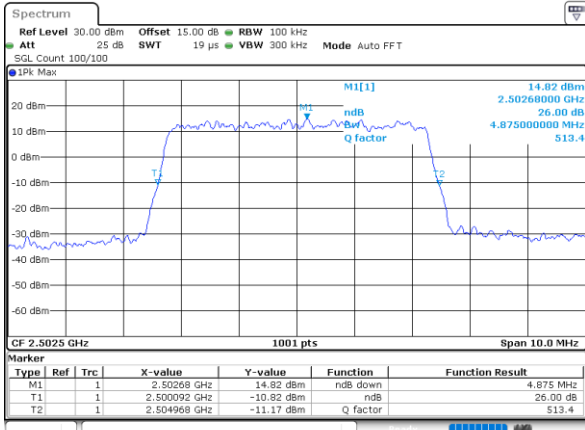
26dB Bandwidth

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.88	5.00	9.63	9.69	14.48	14.39	18.94	19.02
Middle CH	-	-	-	-	4.92	4.86	9.79	9.81	14.21	14.18	18.98	18.90
Highest CH	-	-	-	-	4.90	4.90	9.75	9.89	14.48	14.60	18.94	18.70
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.93	-	9.91	-	14.48	-	18.66	-
Middle CH	-	-	-	-	4.91	-	9.75	-	14.60	-	18.94	-
Highest CH	-	-	-	-	4.85	-	9.93	-	14.48	-	18.94	-



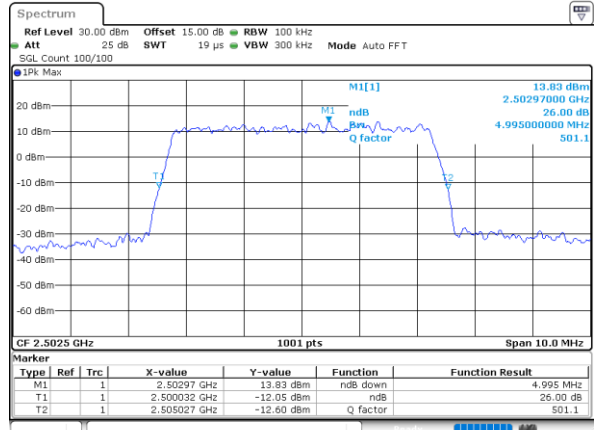
LTE Band 7

Lowest Channel / 5MHz / QPSK



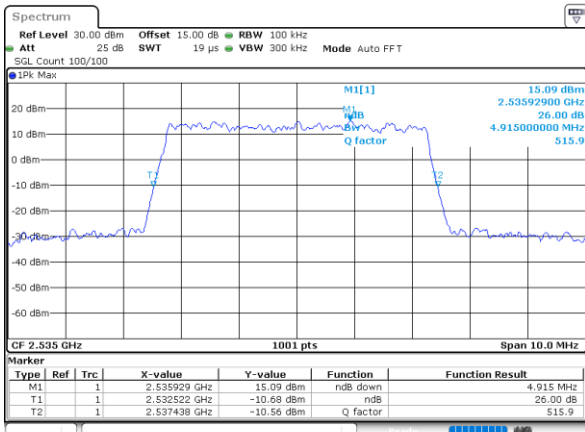
Date: 24. DEC. 2021 16:00:38

Lowest Channel / 5MHz / 16QAM



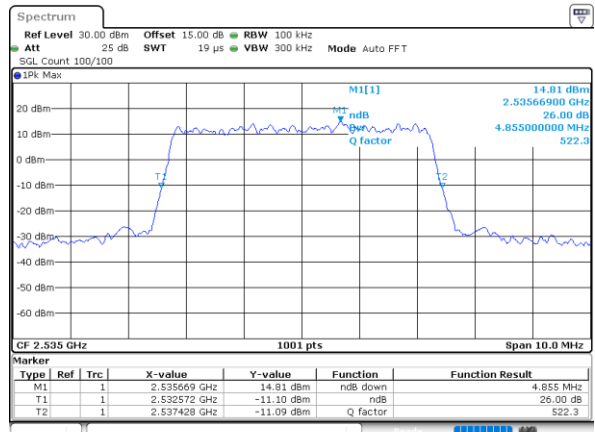
Date: 24. DEC. 2021 16:00:49

Middle Channel / 5MHz / QPSK



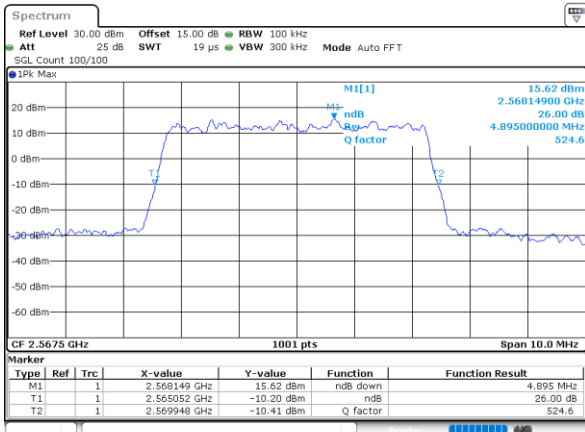
Date: 24. DEC. 2021 16:07:28

Middle Channel / 5MHz / 16QAM



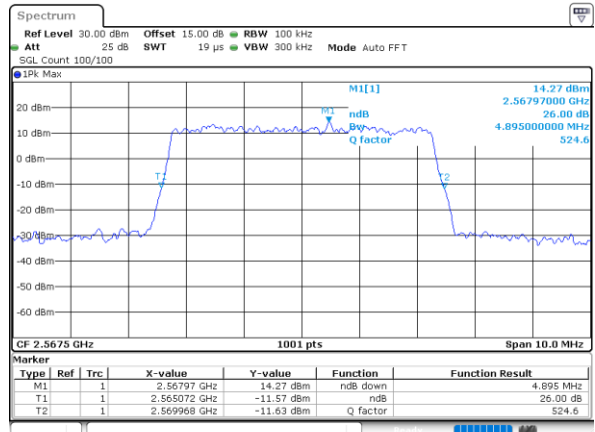
Date: 24. DEC. 2021 16:00:59

Highest Channel / 5MHz / QPSK



Date: 24. DEC. 2021 16:10:18

Highest Channel / 5MHz / 16QAM

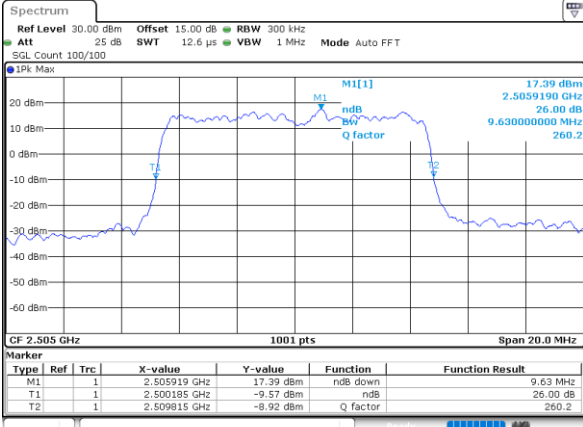


Date: 24. DEC. 2021 16:10:29



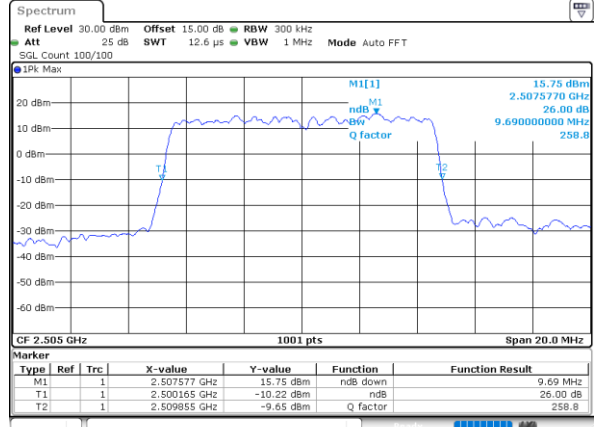
LTE Band 7

Lowest Channel / 10MHz / QPSK



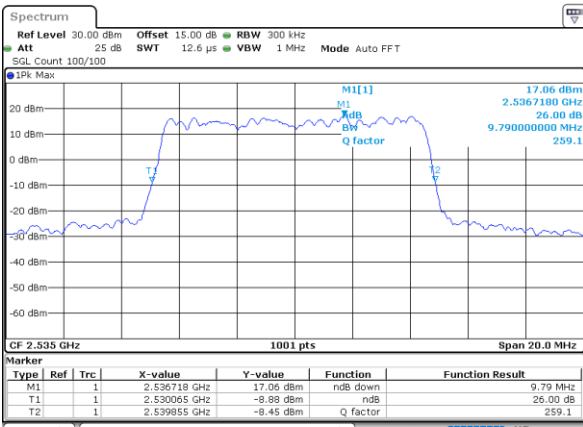
Date: 24. DEC. 2021 16:25:21

Lowest Channel / 10MHz / 16QAM



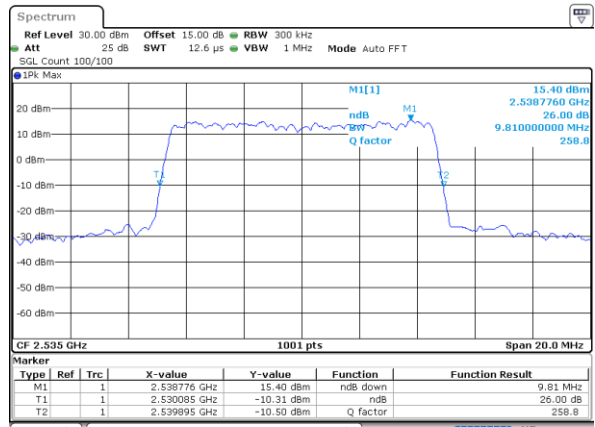
Date: 24. DEC. 2021 16:25:32

Middle Channel / 10MHz / QPSK



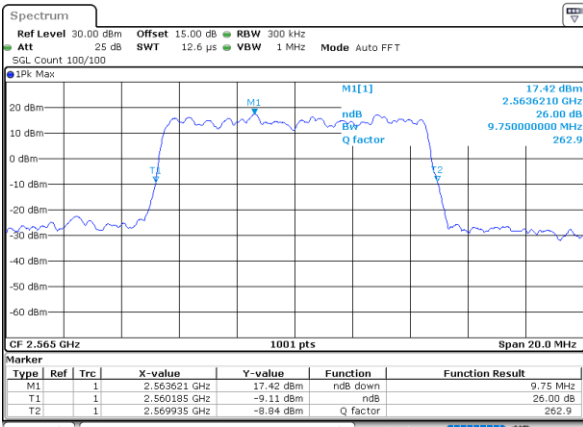
Date: 24. DEC. 2021 16:32:09

Middle Channel / 10MHz / 16QAM



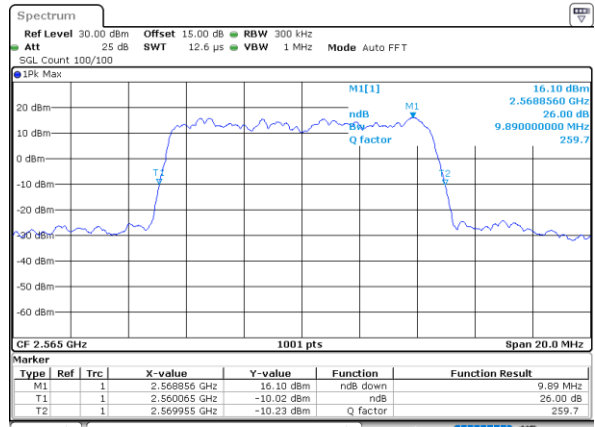
Date: 24. DEC. 2021 16:32:10

Highest Channel / 10MHz / QPSK



Date: 24. DEC. 2021 16:35:00

Highest Channel / 10MHz / 16QAM

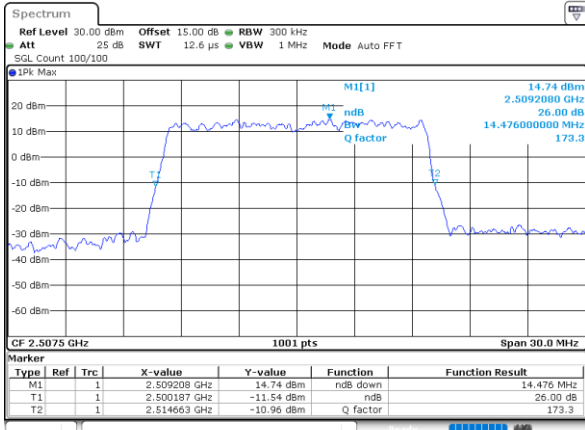


Date: 24. DEC. 2021 16:35:11



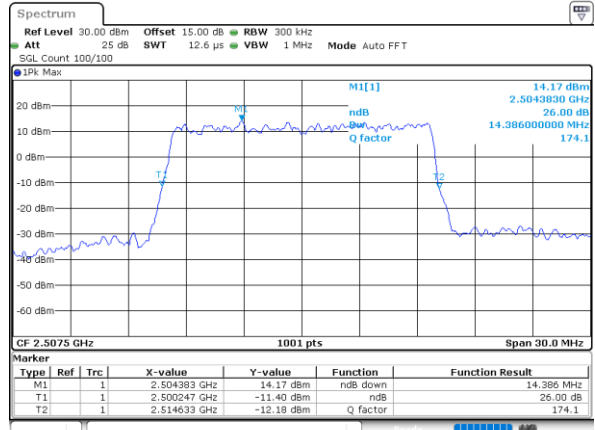
LTE Band 7

Lowest Channel / 15MHz / QPSK



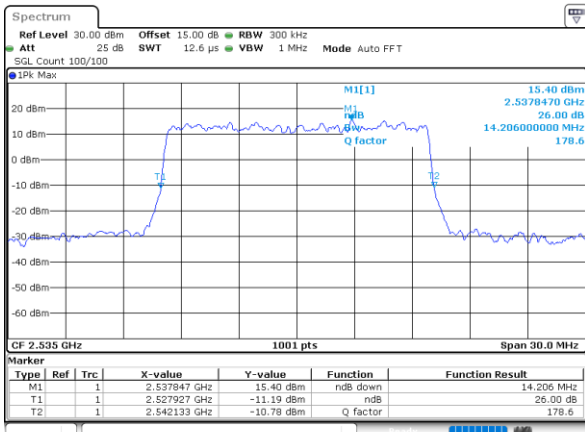
Date: 24. DEC. 2021 16:50:01

Lowest Channel / 15MHz / 16QAM



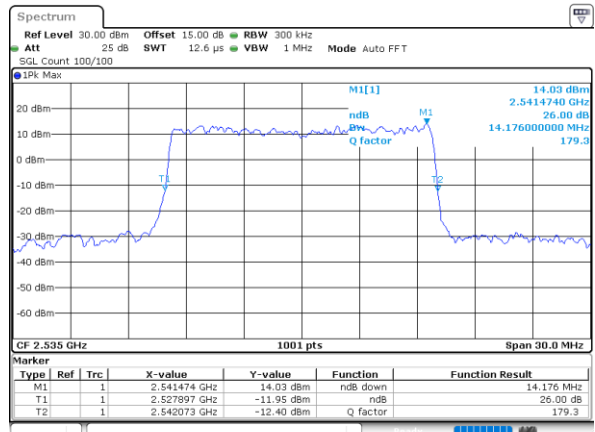
Date: 24. DEC. 2021 16:50:12

Middle Channel / 15MHz / QPSK



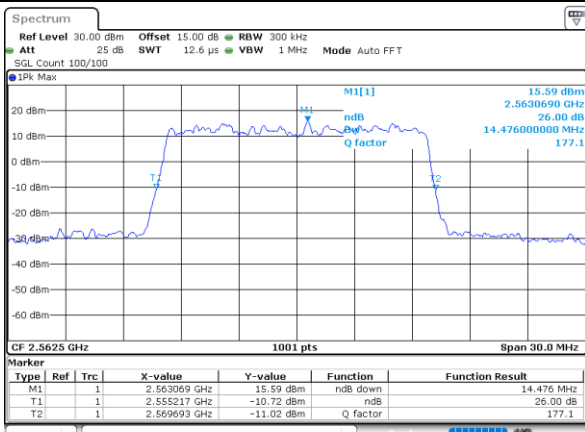
Date: 24. DEC. 2021 16:56:51

Middle Channel / 15MHz / 16QAM



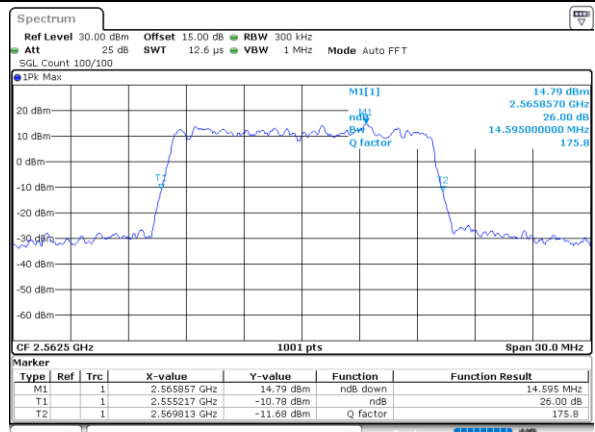
Date: 24. DEC. 2021 16:57:02

Highest Channel / 15MHz / QPSK



Date: 24. DEC. 2021 16:59:42

Highest Channel / 15MHz / 16QAM

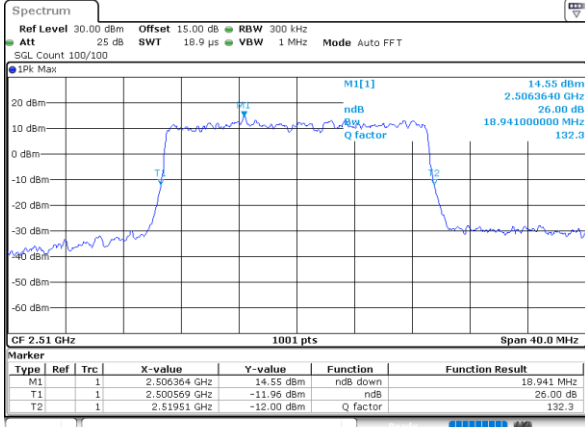


Date: 24. DEC. 2021 16:59:52



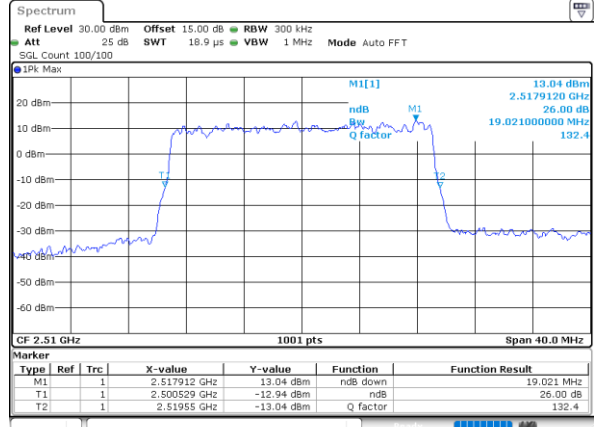
LTE Band 7

Lowest Channel / 20MHz / QPSK



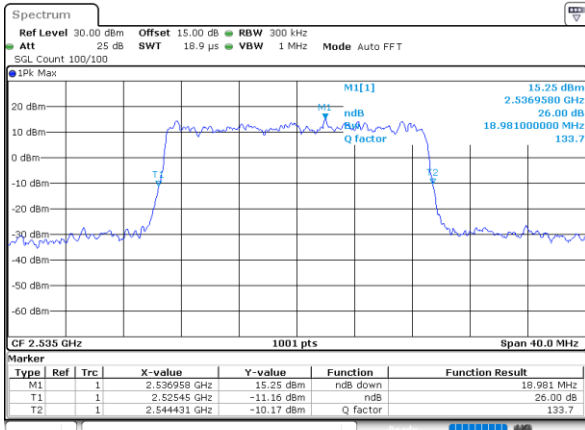
Date: 24. DEC. 2021 17:14:44

Lowest Channel / 20MHz / 16QAM



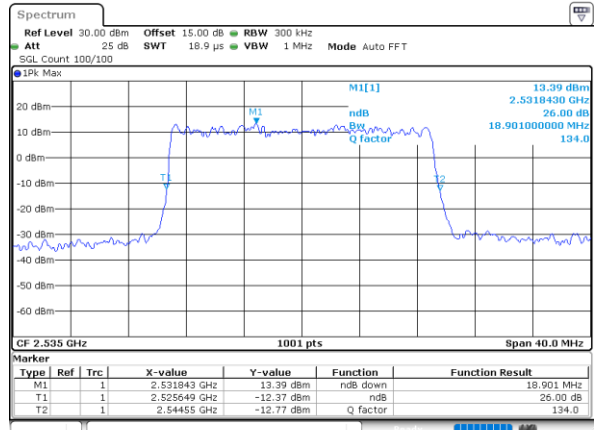
Date: 24. DEC. 2021 17:14:55

Middle Channel / 20MHz / QPSK



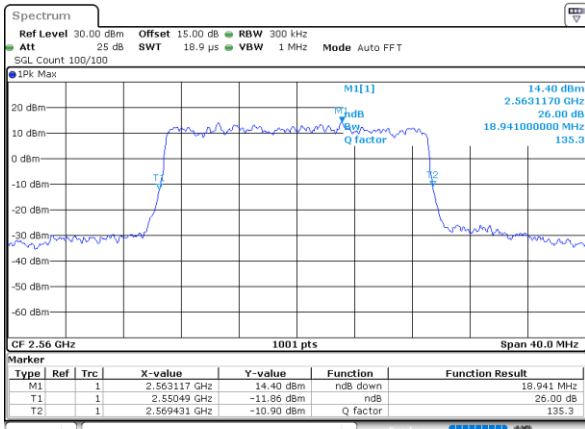
Date: 24. DEC. 2021 17:21:03

Middle Channel / 20MHz / 16QAM



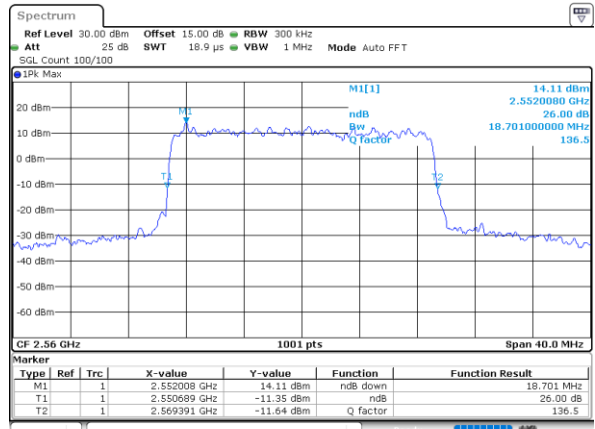
Date: 24. DEC. 2021 17:21:44

Highest Channel / 20MHz / QPSK



Date: 24. DEC. 2021 17:24:25

Highest Channel / 20MHz / 16QAM

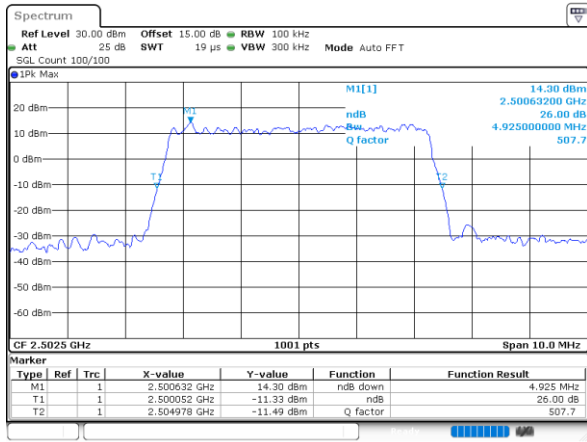


Date: 24. DEC. 2021 17:24:36



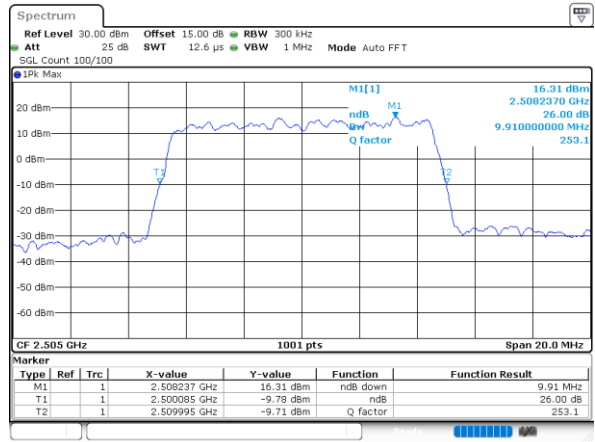
LTE Band 7

Lowest Channel / 5MHz / 64QAM



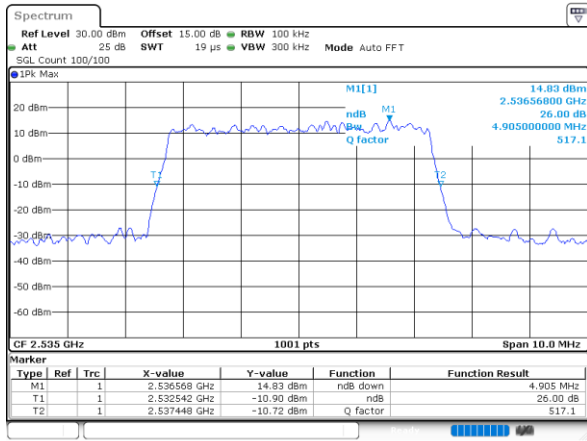
Date: 24.DEC.2021 16:16:56

Lowest Channel / 10MHz / 64QAM



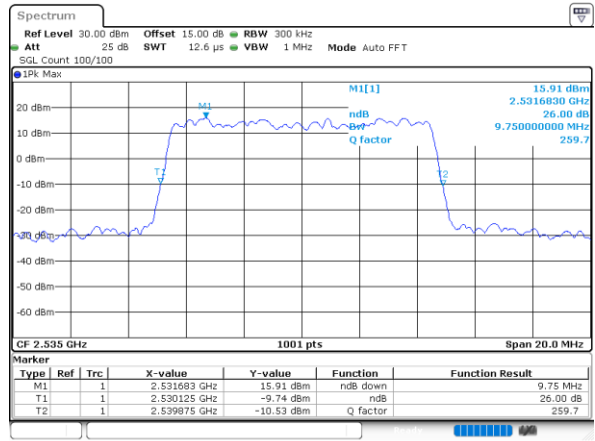
Date: 24.DEC.2021 16:41:37

Middle Channel / 5MHz / 64QAM



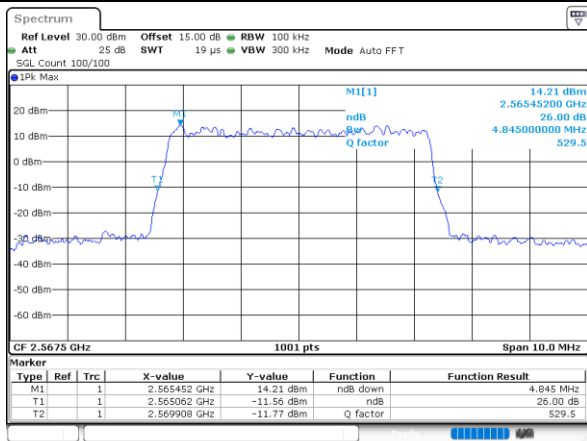
Date: 24.DEC.2021 16:20:20

Middle Channel / 10MHz / 64QAM



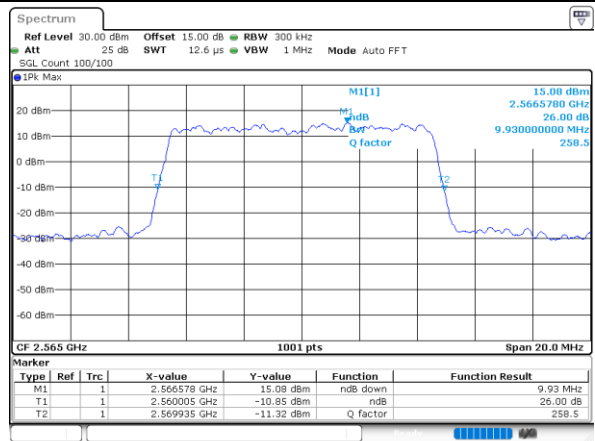
Date: 24.DEC.2021 16:45:01

Highest Channel / 5MHz / 64QAM



Date: 24.DEC.2021 16:21:46

Highest Channel / 10MHz / 64QAM

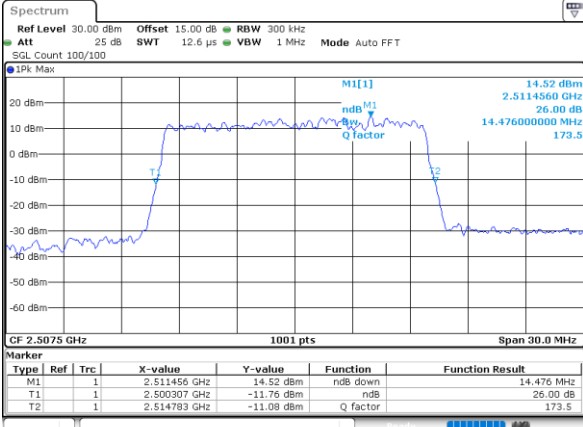


Date: 24.DEC.2021 16:46:26



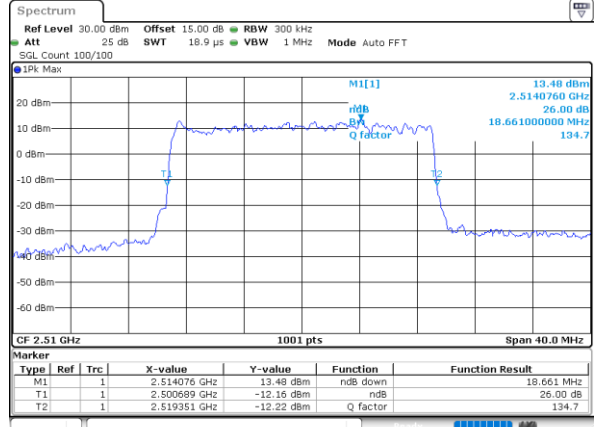
LTE Band 7

Lowest Channel / 15MHz / 64QAM



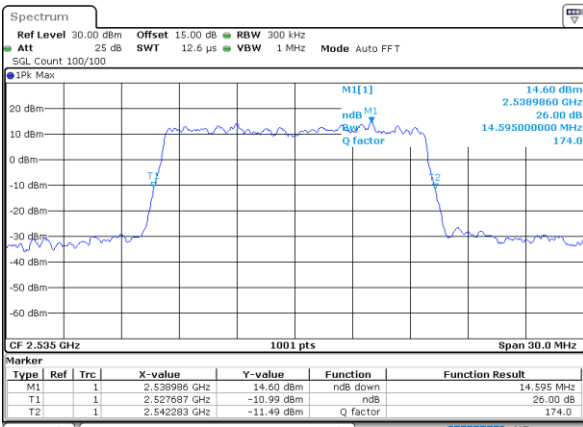
Date: 24. DEC. 2021 17:06:19

Lowest Channel / 20MHz / 64QAM



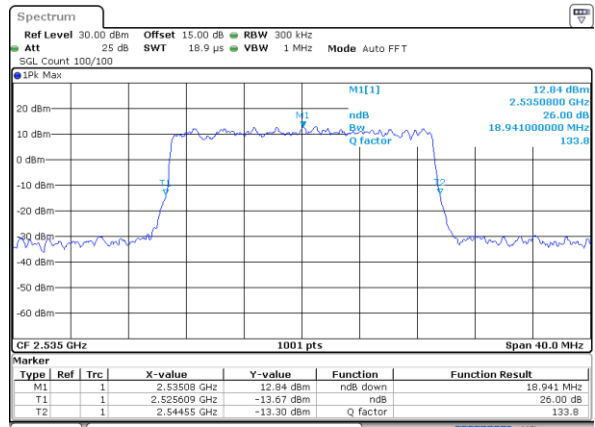
Date: 24. DEC. 2021 17:13:103

Middle Channel / 15MHz / 64QAM



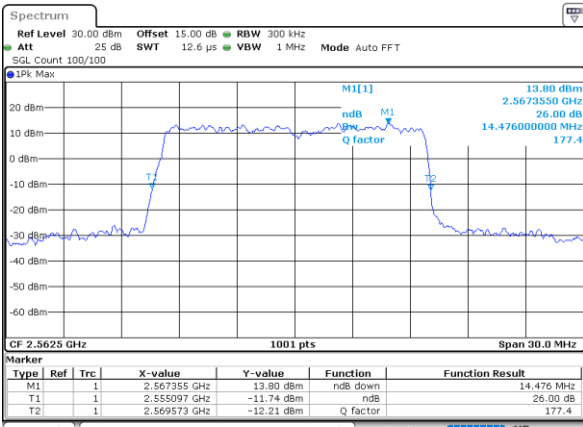
Date: 24. DEC. 2021 17:09:43

Middle Channel / 20MHz / 64QAM



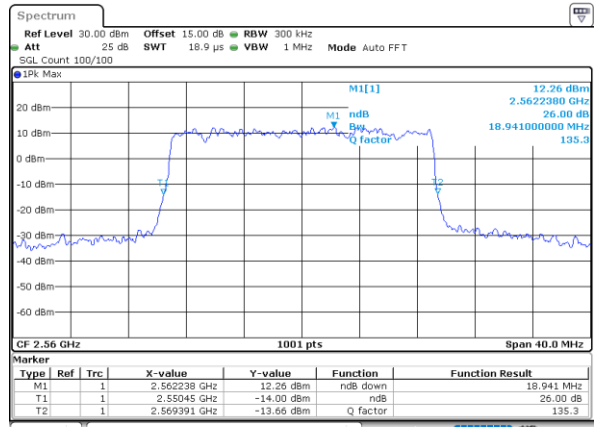
Date: 24. DEC. 2021 17:13:428

Highest Channel / 15MHz / 64QAM



Date: 24. DEC. 2021 17:11:09

Highest Channel / 20MHz / 64QAM



Date: 24. DEC. 2021 17:13:513





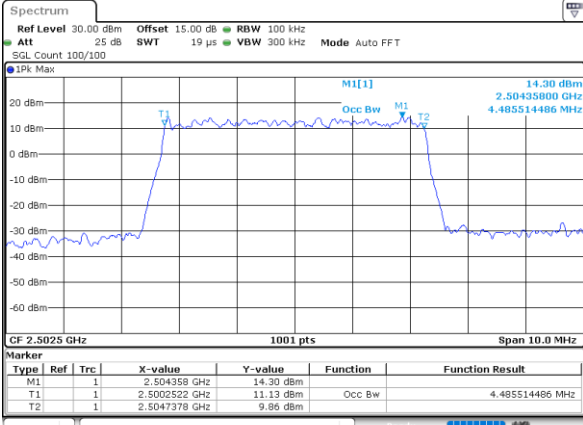
Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	9.05	9.05	13.46	13.43	17.86	17.86
Middle CH	-	-	-	-	4.51	4.51	9.03	9.03	13.40	13.37	17.94	17.90
Highest CH	-	-	-	-	4.48	4.50	9.01	9.05	13.46	13.46	17.94	17.98
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	8.99	-	13.49	-	17.86	-
Middle CH	-	-	-	-	4.50	-	9.03	-	13.52	-	17.90	-
Highest CH	-	-	-	-	4.49	-	9.03	-	13.40	-	17.86	-



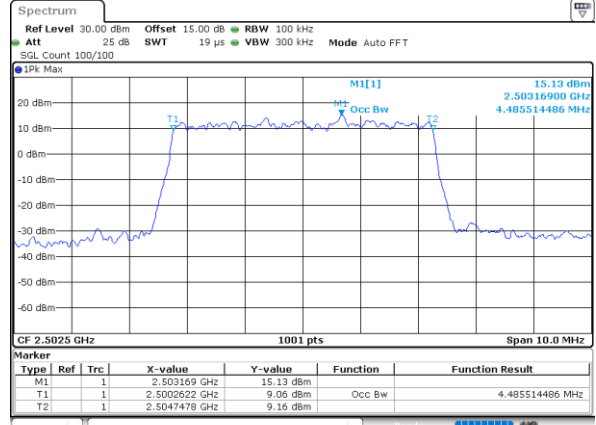
LTE Band 7

Lowest Channel / 5MHz / QPSK



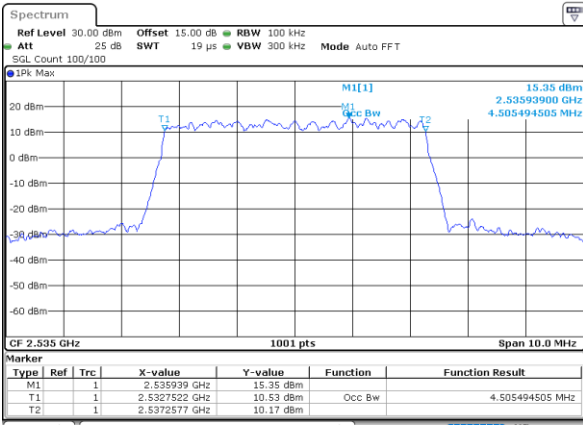
Date: 24. DEC. 2021 16:00:16

Lowest Channel / 5MHz / 16QAM



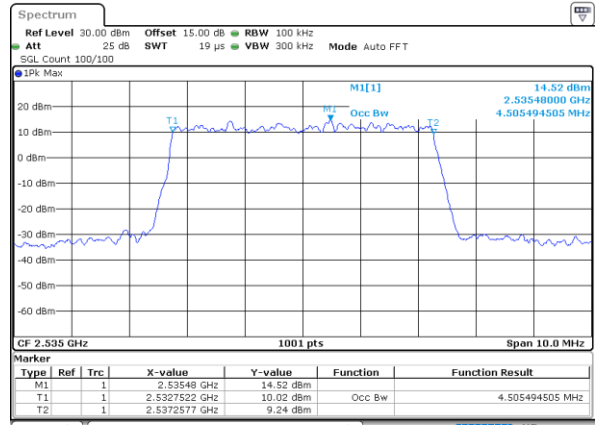
Date: 24. DEC. 2021 16:00:27

Middle Channel / 5MHz / QPSK



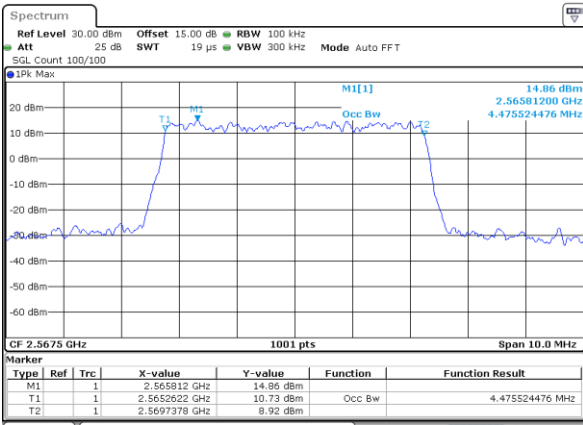
Date: 24. DEC. 2021 16:07:06

Middle Channel / 5MHz / 16QAM



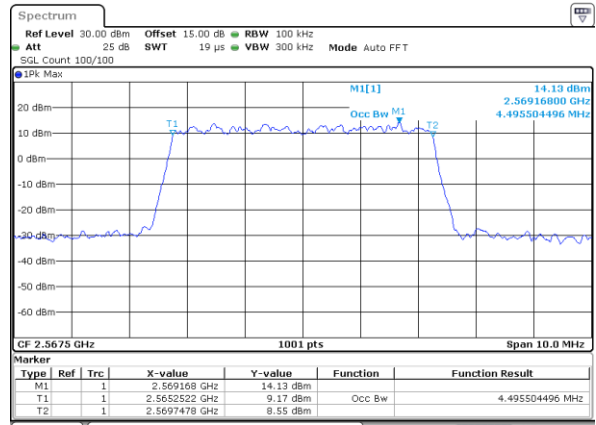
Date: 24. DEC. 2021 16:07:17

Highest Channel / 5MHz / QPSK



Date: 24. DEC. 2021 16:09:57

Highest Channel / 5MHz / 16QAM

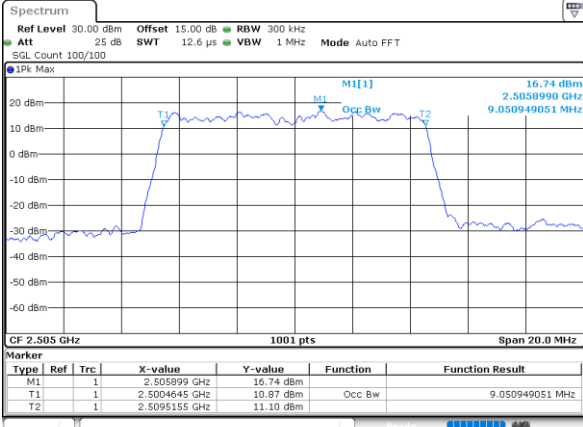


Date: 24. DEC. 2021 16:10:08



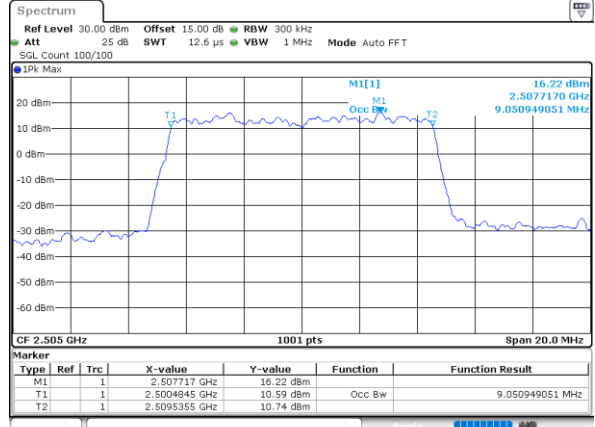
LTE Band 7

Lowest Channel / 10MHz / QPSK



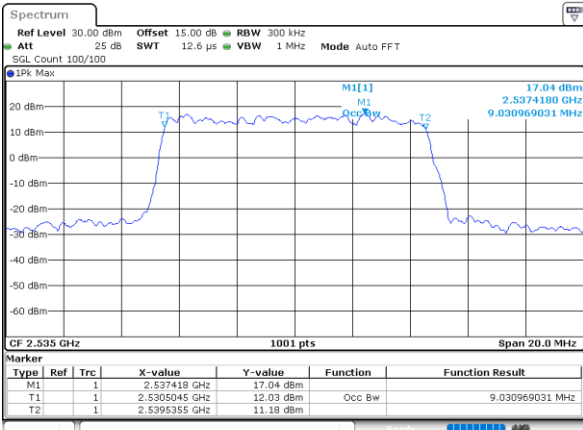
Date: 24.DEC.2021 16:24:59

Lowest Channel / 10MHz / 16QAM



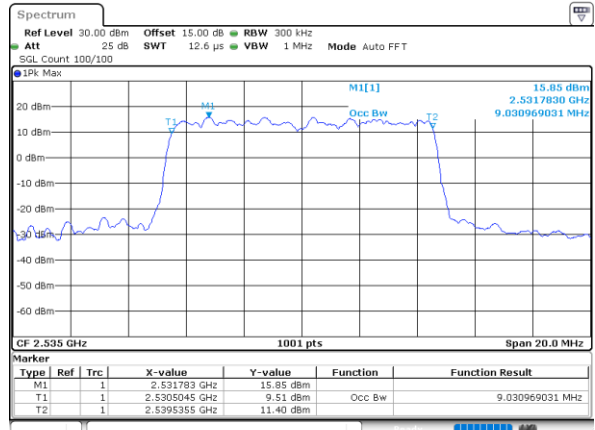
Date: 24.DEC.2021 16:25:10

Middle Channel / 10MHz / QPSK



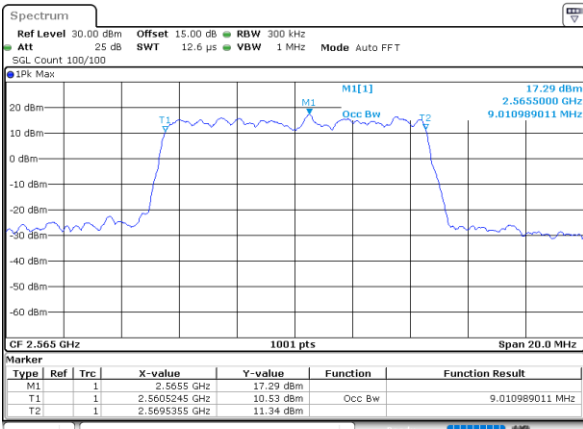
Date: 24.DEC.2021 16:31:47

Middle Channel / 10MHz / 16QAM



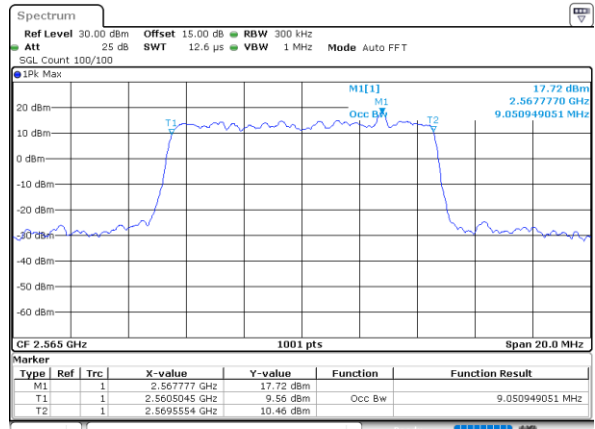
Date: 24.DEC.2021 16:31:58

Highest Channel / 10MHz / QPSK



Date: 24.DEC.2021 16:34:38

Highest Channel / 10MHz / 16QAM

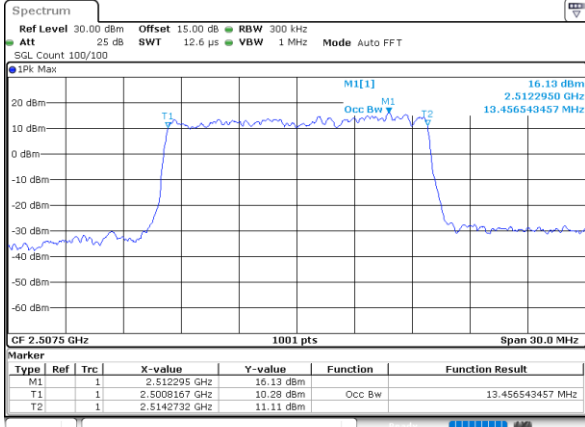


Date: 24.DEC.2021 16:34:49



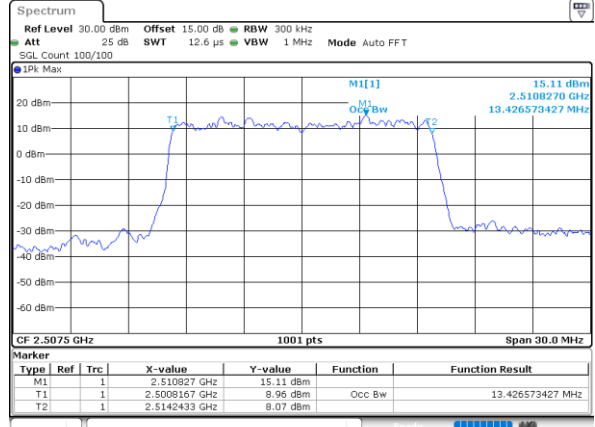
LTE Band 7

Lowest Channel / 15MHz / QPSK



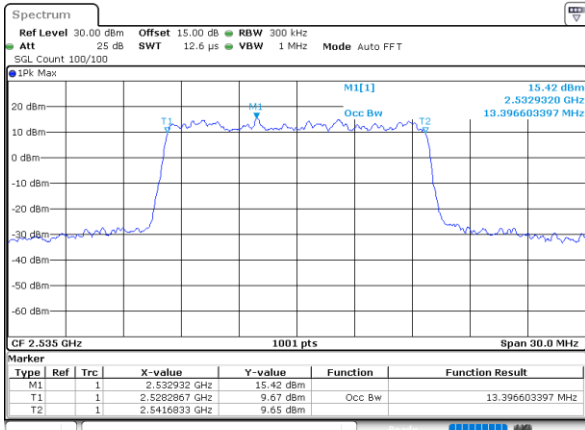
Date: 24. DEC. 2021 16:49:39

Lowest Channel / 15MHz / 16QAM



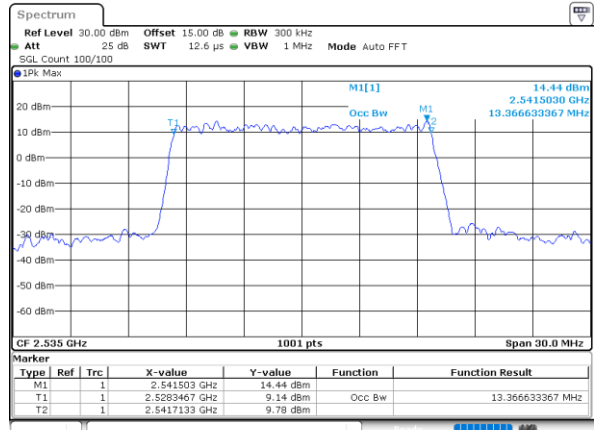
Date: 24. DEC. 2021 16:49:50

Middle Channel / 15MHz / QPSK



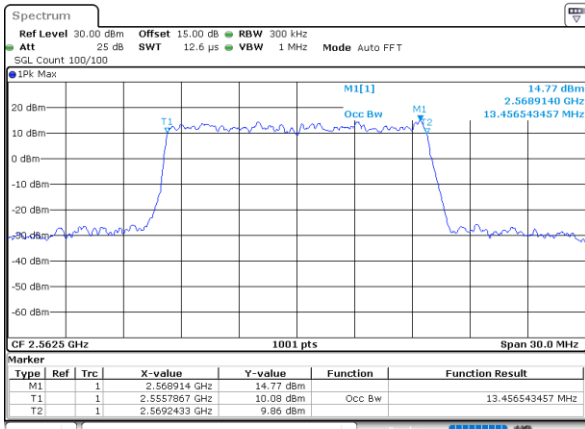
Date: 24. DEC. 2021 16:56:29

Middle Channel / 15MHz / 16QAM



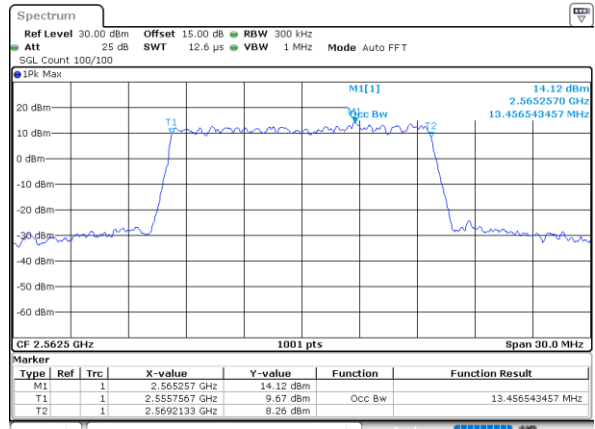
Date: 24. DEC. 2021 16:56:40

Highest Channel / 15MHz / QPSK



Date: 24. DEC. 2021 16:59:20

Highest Channel / 15MHz / 16QAM

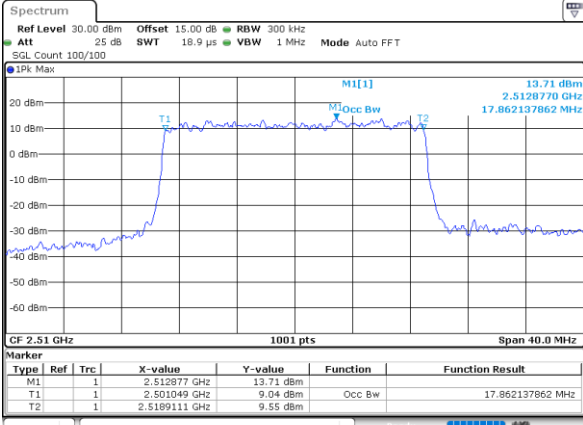


Date: 24. DEC. 2021 16:59:31



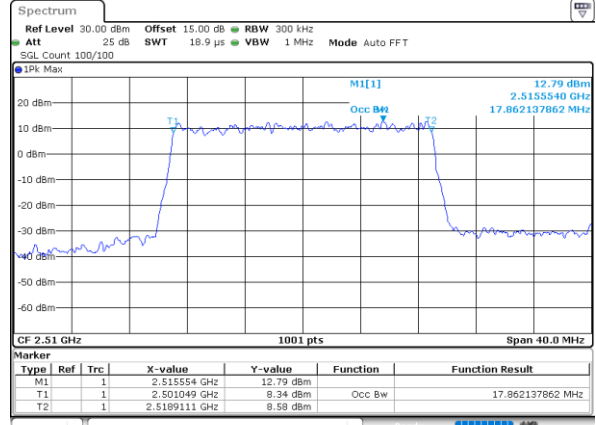
LTE Band 7

Lowest Channel / 20MHz / QPSK



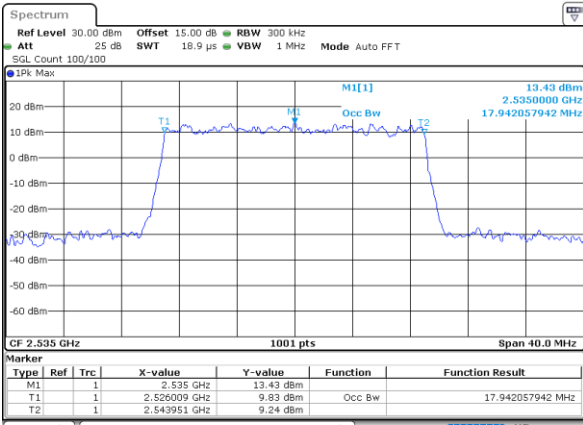
Date: 24. DEC. 2021 17:14:22

Lowest Channel / 20MHz / 16QAM



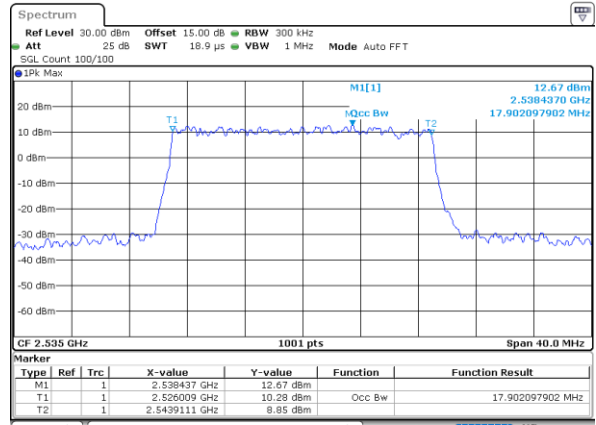
Date: 24. DEC. 2021 17:14:33

Middle Channel / 20MHz / QPSK



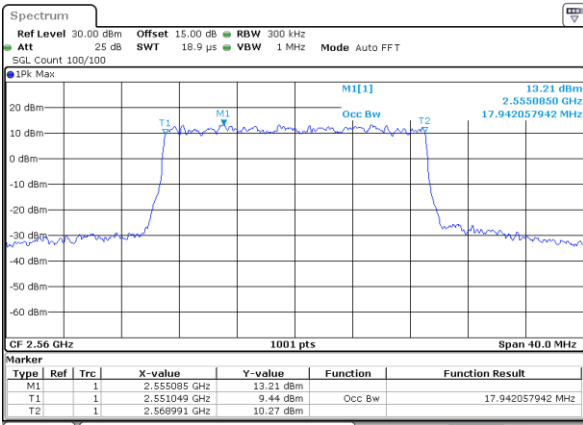
Date: 24. DEC. 2021 17:21:11

Middle Channel / 20MHz / 16QAM



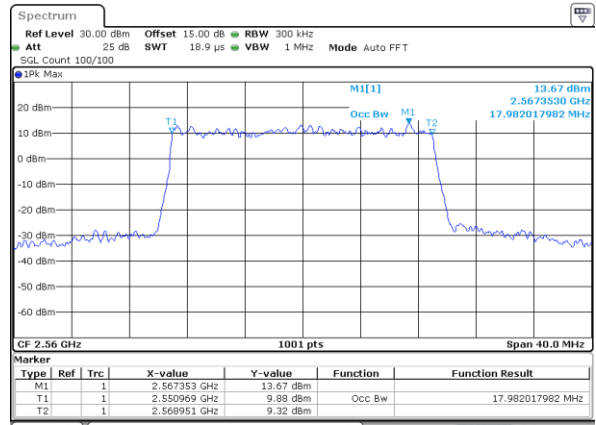
Date: 24. DEC. 2021 17:21:22

Highest Channel / 20MHz / QPSK



Date: 24. DEC. 2021 17:24:02

Highest Channel / 20MHz / 16QAM

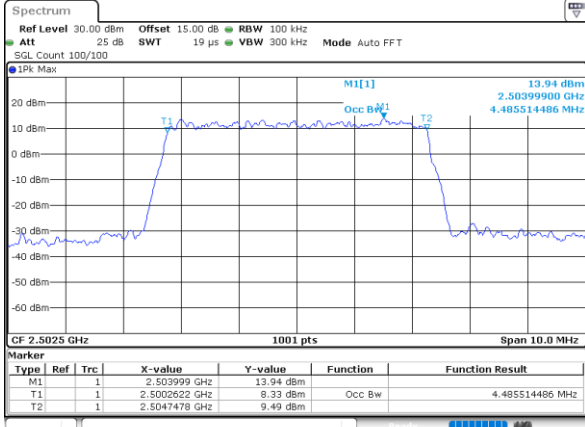


Date: 24. DEC. 2021 17:24:13



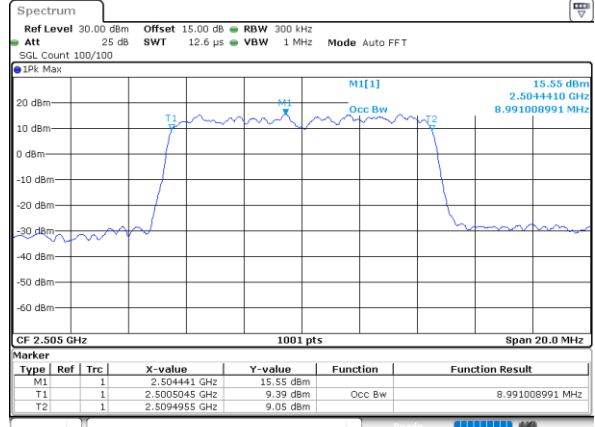
LTE Band 7

Lowest Channel / 5MHz / 64QAM



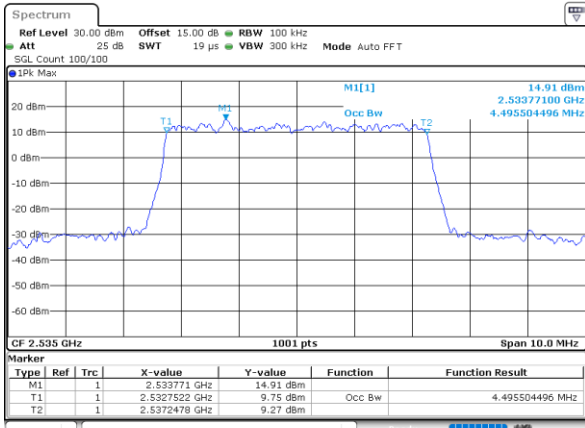
Date: 24. DEC. 2021 16:16:45

Lowest Channel / 10MHz / 64QAM



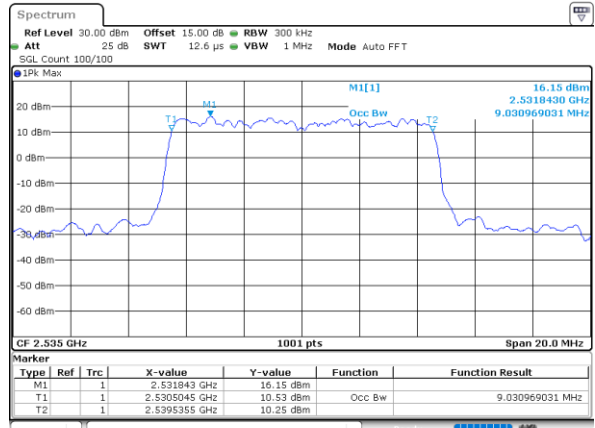
Date: 24. DEC. 2021 16:41:26

Middle Channel / 5MHz / 64QAM



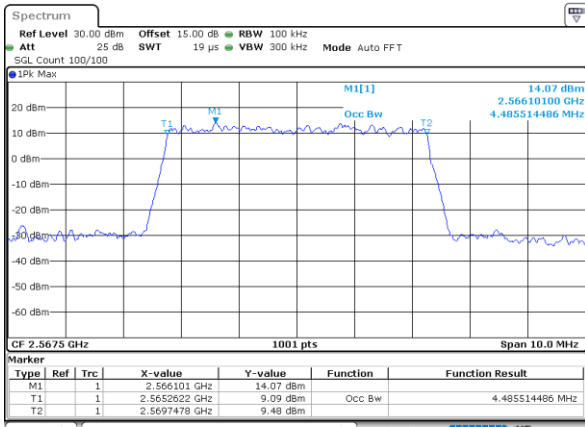
Date: 24. DEC. 2021 16:20:10

Middle Channel / 10MHz / 64QAM



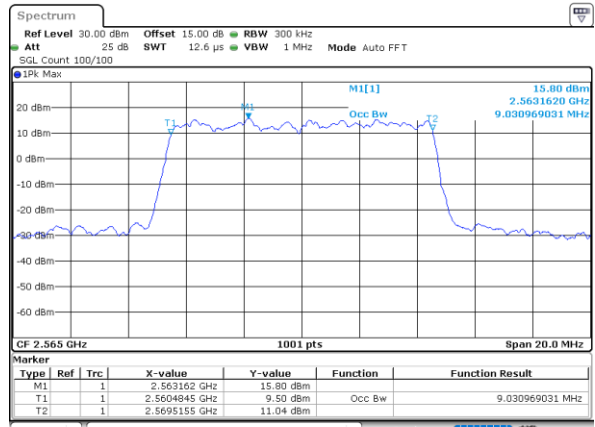
Date: 24. DEC. 2021 16:44:50

Highest Channel / 5MHz / 64QAM



Date: 24. DEC. 2021 16:21:35

Highest Channel / 10MHz / 64QAM

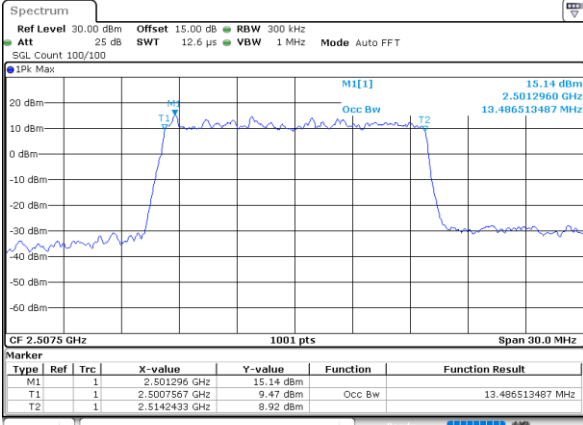


Date: 24. DEC. 2021 16:46:15



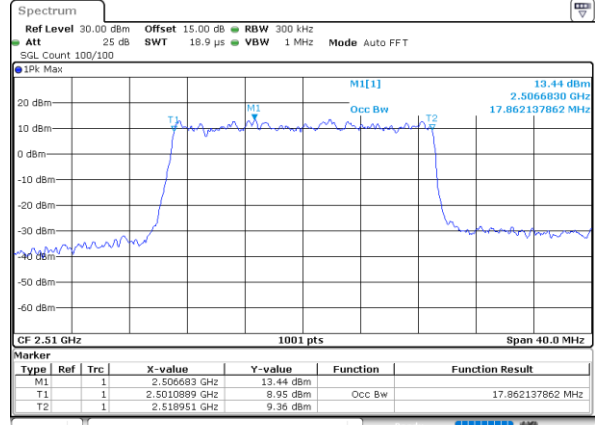
LTE Band 7

Lowest Channel / 15MHz / 64QAM



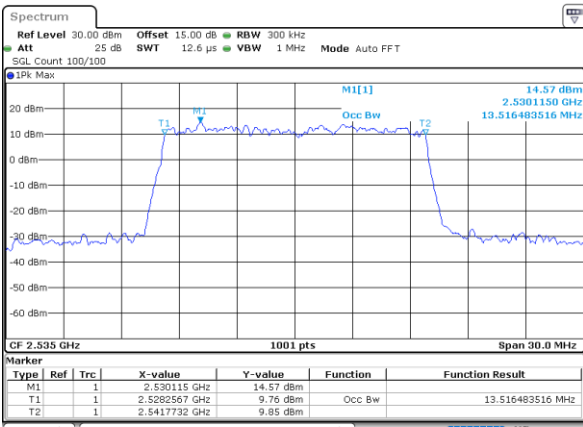
Date: 24. DEC. 2021 17:06:08

Lowest Channel / 20MHz / 64QAM



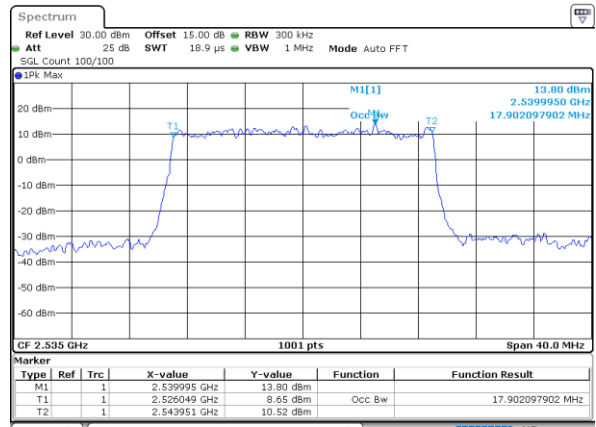
Date: 24. DEC. 2021 17:13:152

Middle Channel / 15MHz / 64QAM



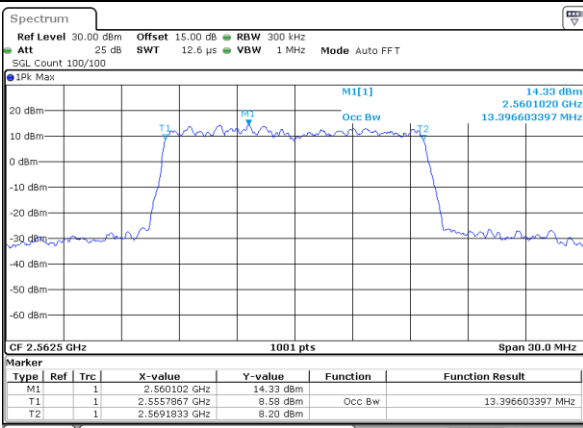
Date: 24. DEC. 2021 17:09:32

Middle Channel / 20MHz / 64QAM



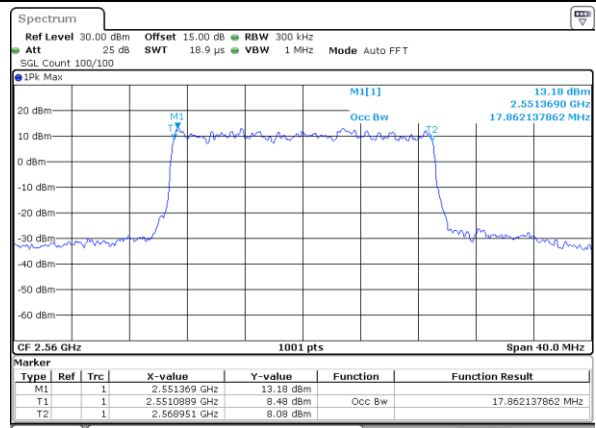
Date: 24. DEC. 2021 17:13:416

Highest Channel / 15MHz / 64QAM



Date: 24. DEC. 2021 17:10:58

Highest Channel / 20MHz / 64QAM



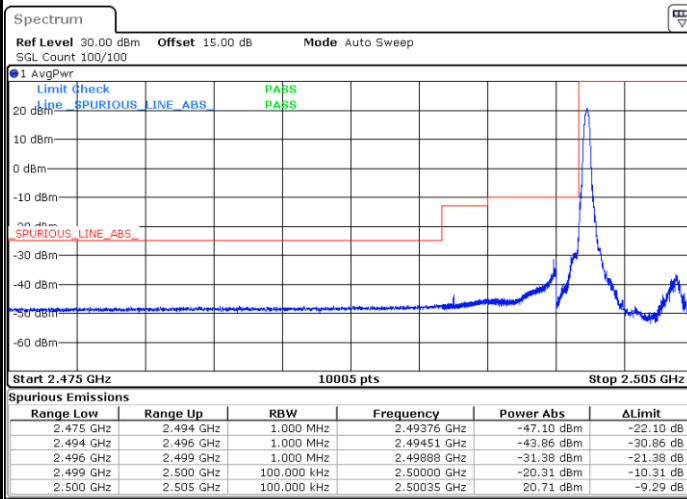
Date: 24. DEC. 2021 17:13:42



# Conducted Band Edge

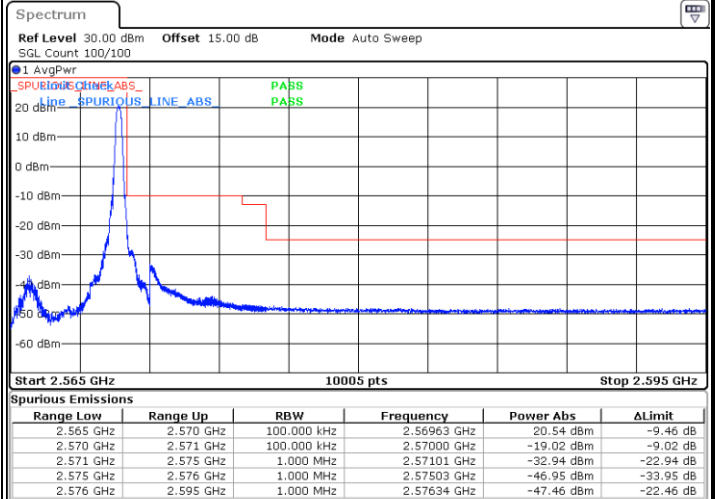
## LTE Band 7 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



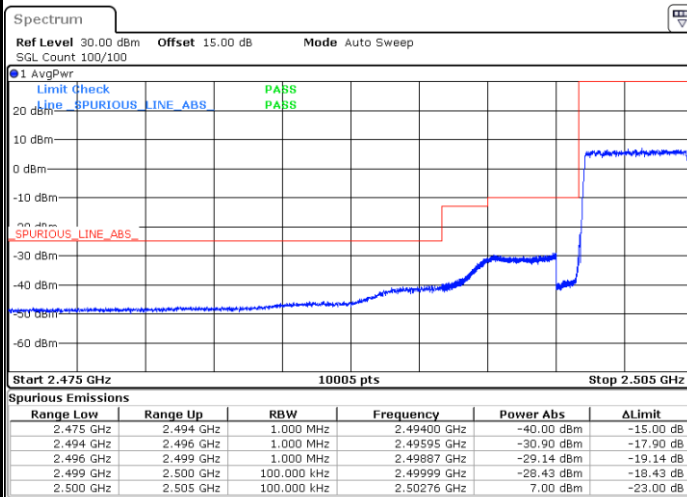
Date: 24.DEC.2021 16:01:49

### Highest Band Edge / 1 RB



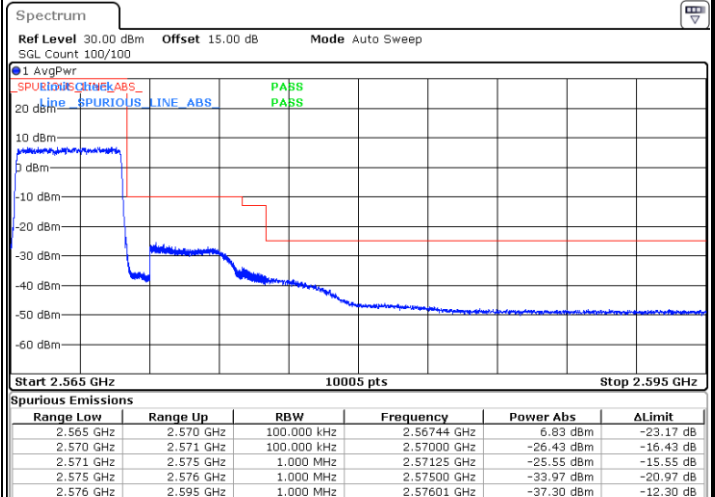
Date: 24.DEC.2021 16:11:29

### Lowest Band Edge / Full RB



Date: 24.DEC.2021 16:03:48

### Highest Band Edge / Full RB



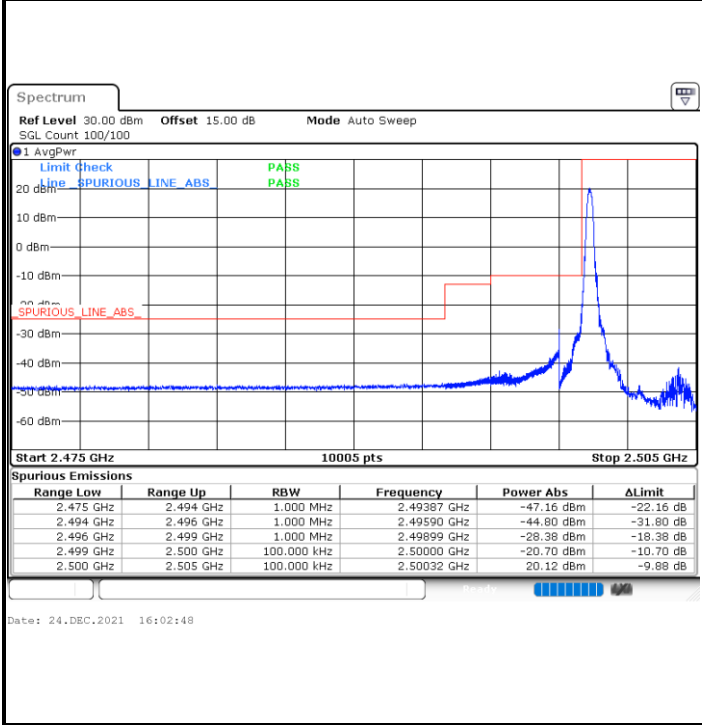
Date: 24.DEC.2021 16:13:27



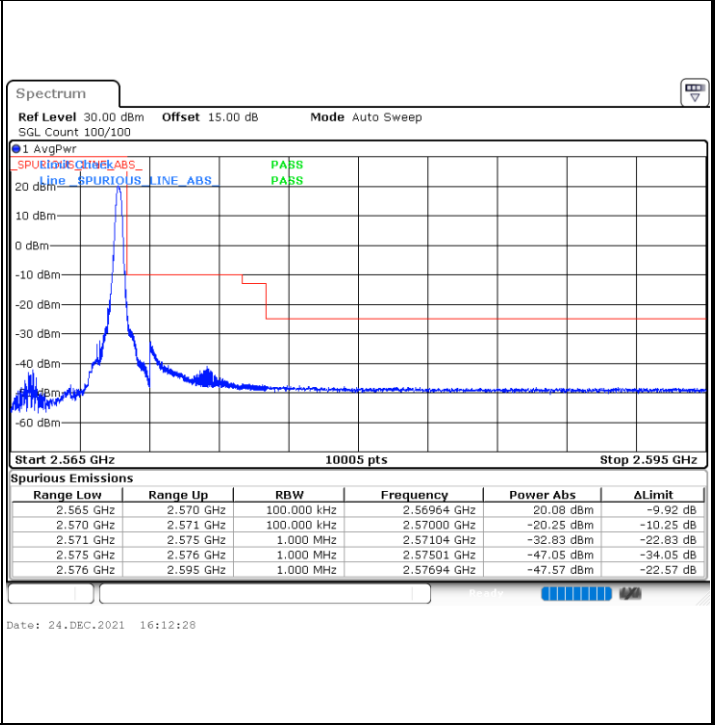


LTE Band 7 / 5MHz / 16QAM

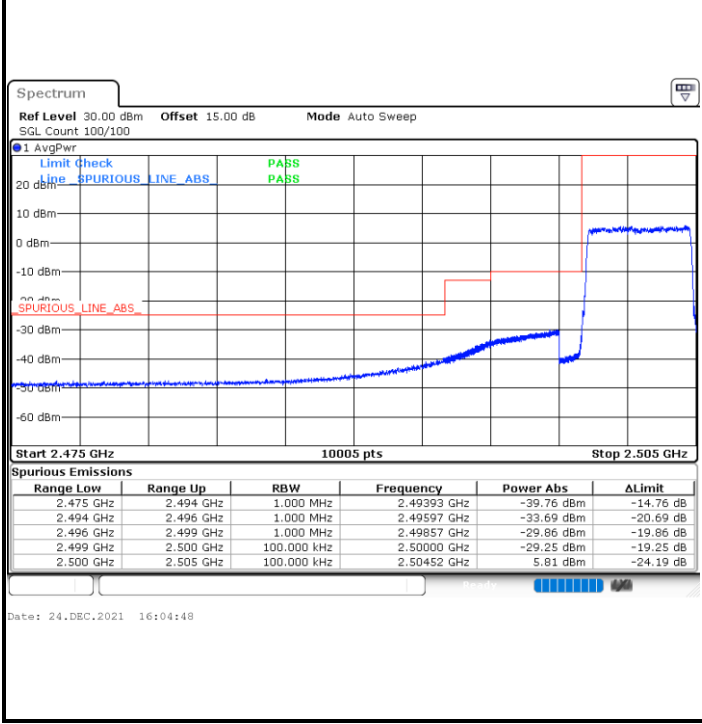
Lowest Band Edge / 1 RB



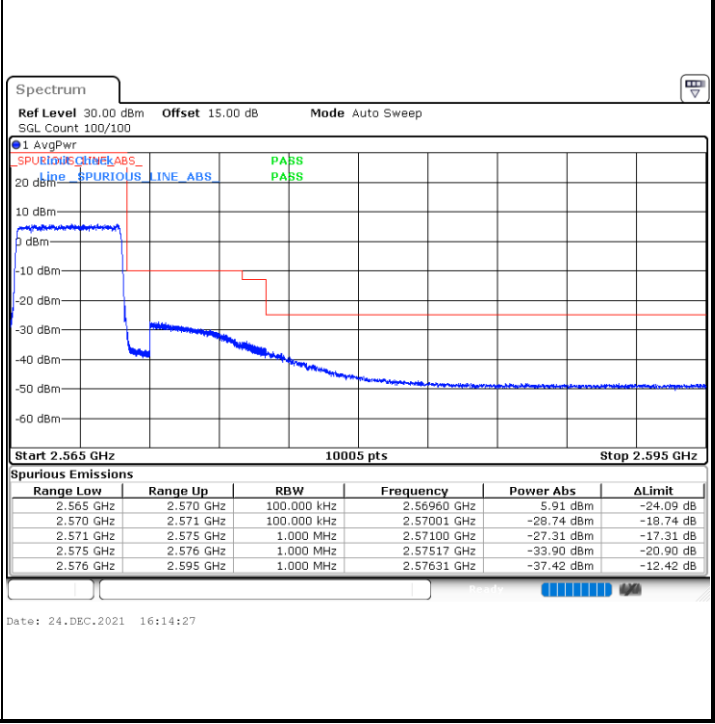
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

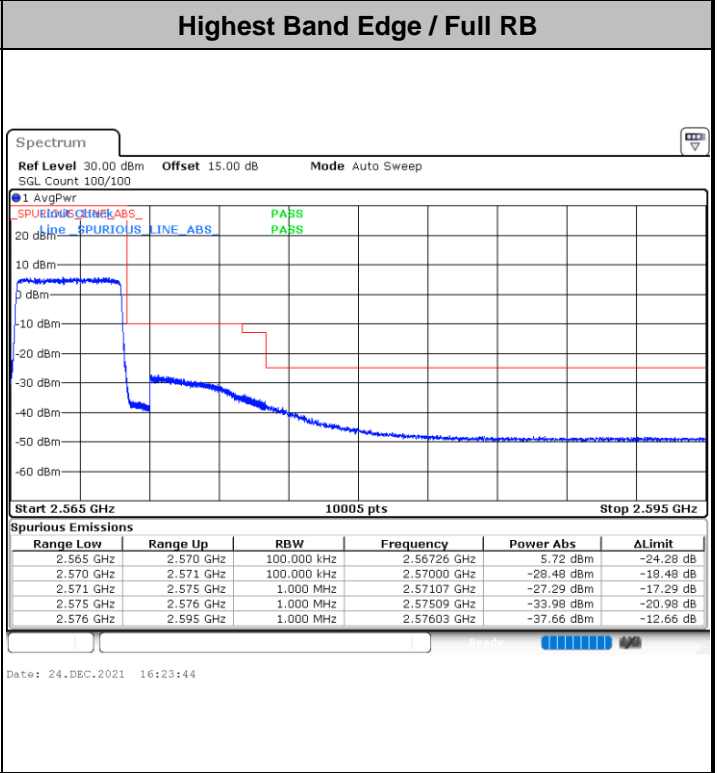
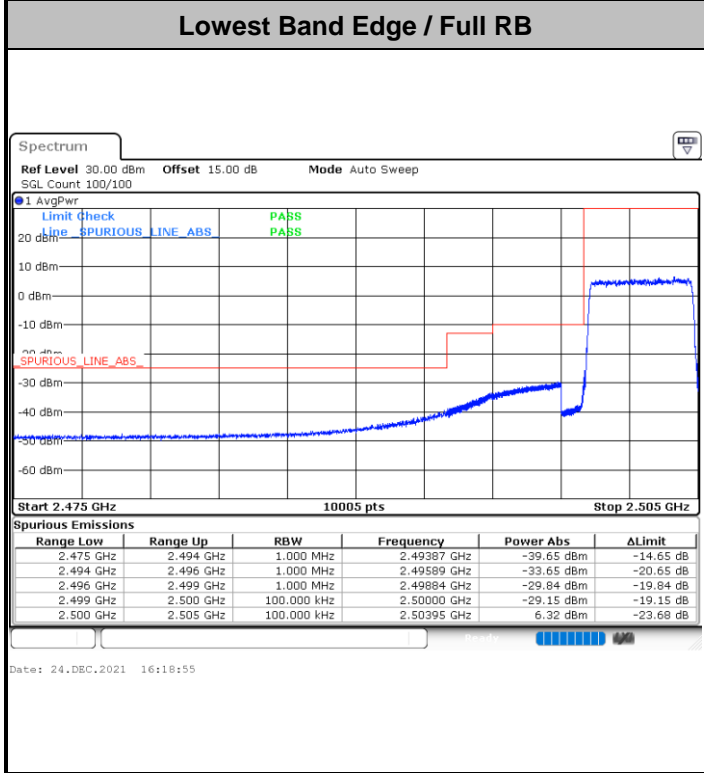
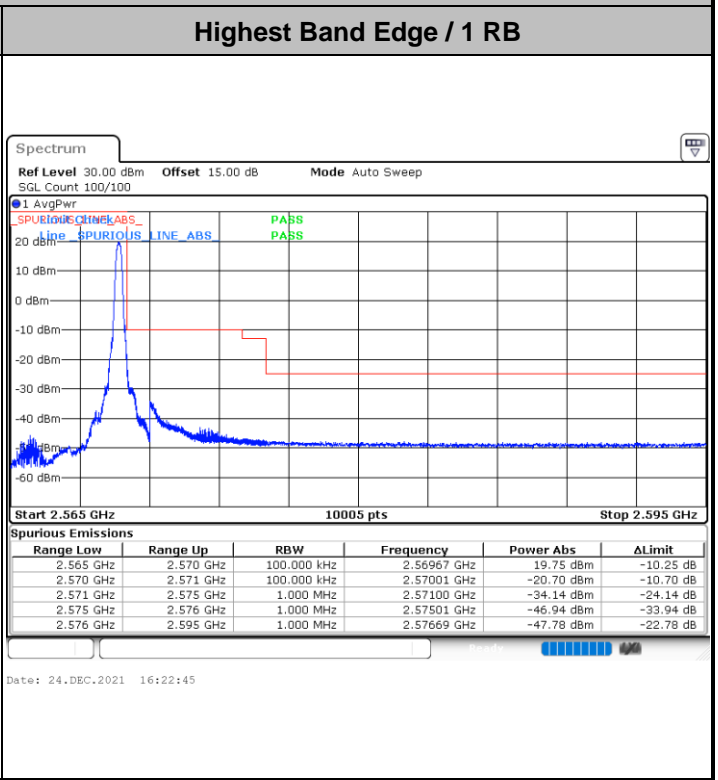
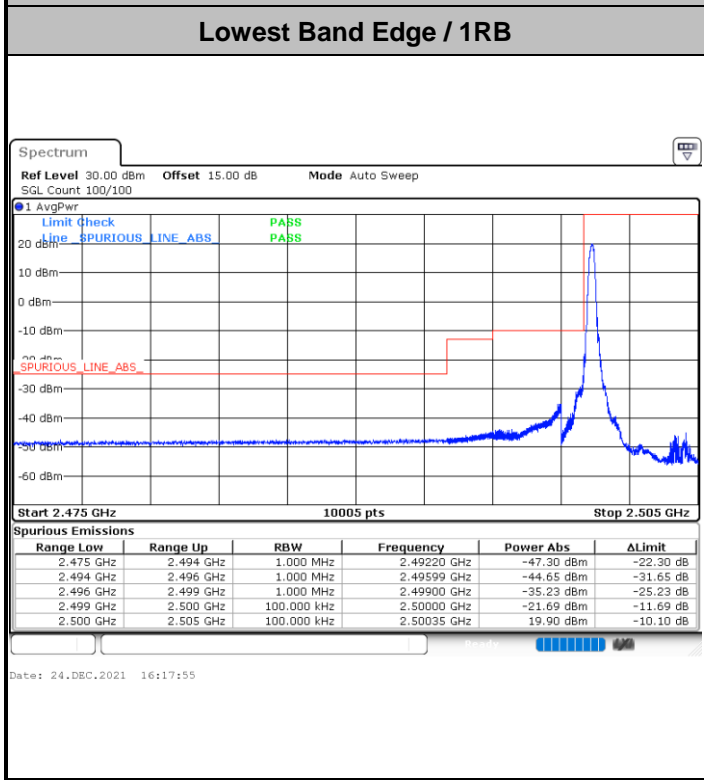


Highest Band Edge / Full RB





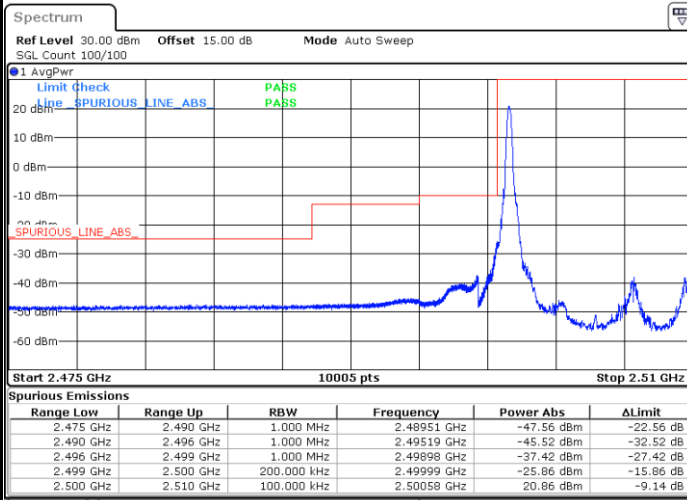
LTE Band 7 / 5MHz / 64QAM





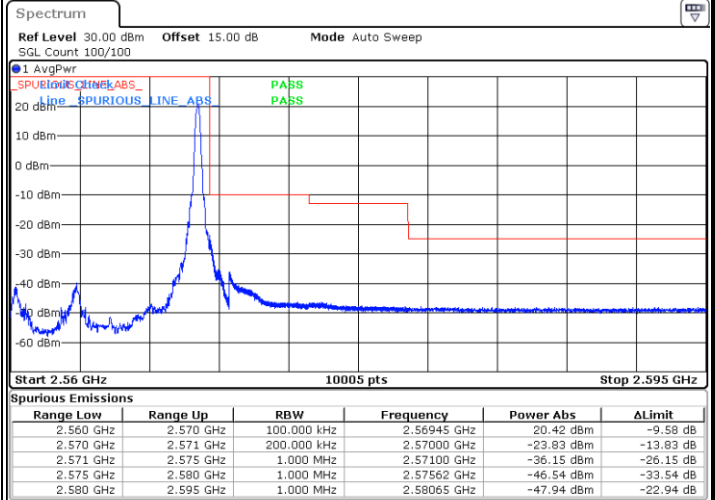
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



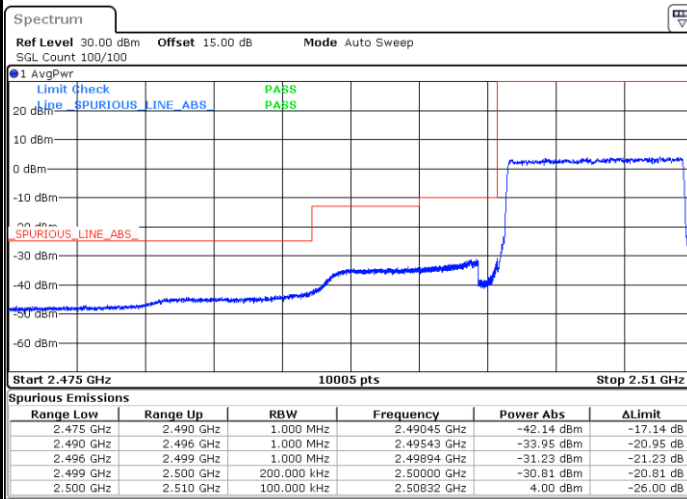
Date: 24.DEC.2021 18:05:02

Highest Band Edge / 1 RB



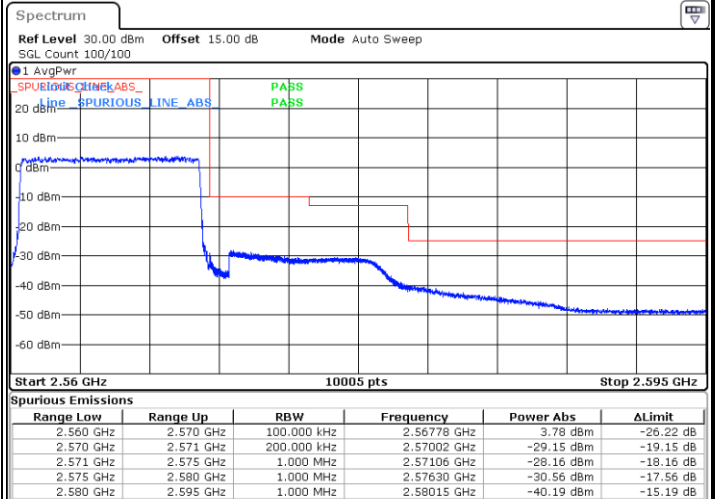
Date: 24.DEC.2021 16:36:10

Lowest Band Edge / Full RB



Date: 24.DEC.2021 16:28:30

Highest Band Edge / Full RB

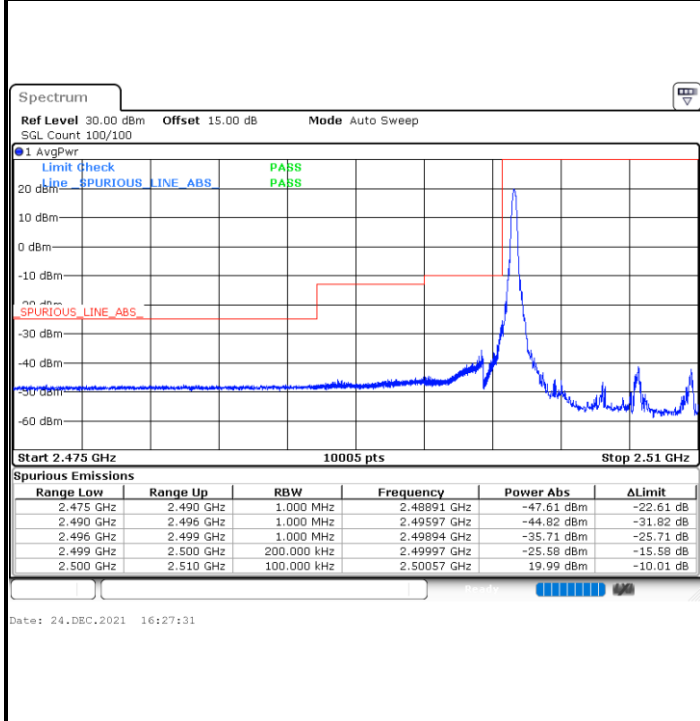


Date: 24.DEC.2021 16:38:09

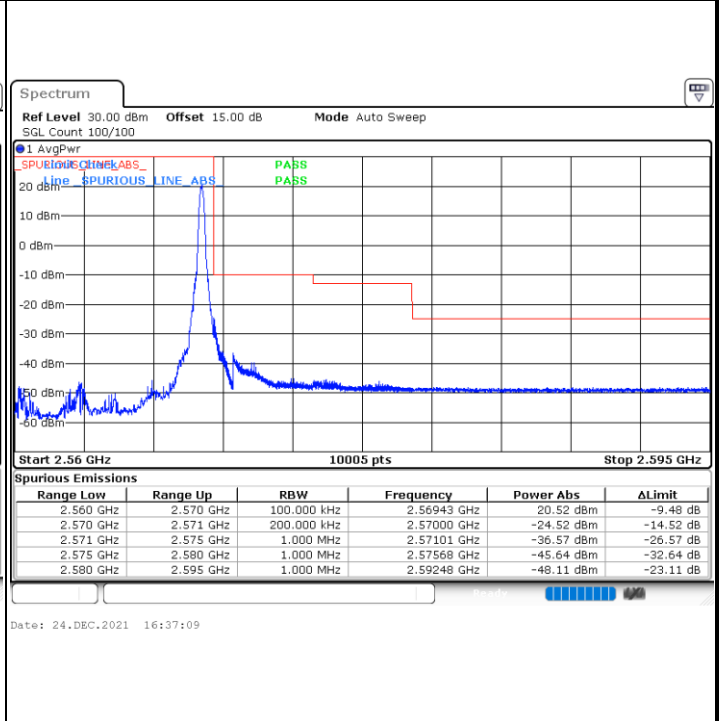


LTE Band 7 / 10MHz / 16QAM

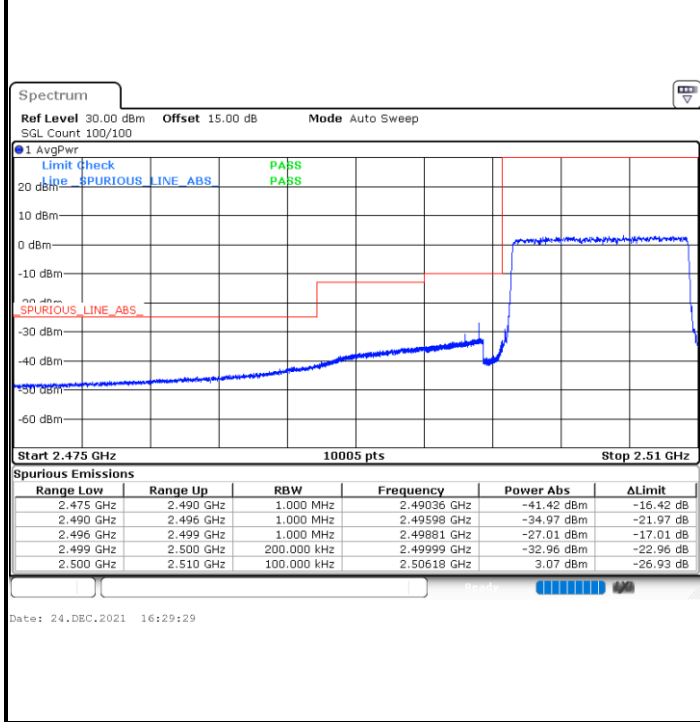
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

