



# FCC RADIO TEST REPORT

**FCC ID** : 2AQ68T99W368M  
**Equipment** : 5G WWAN Module  
**Brand Name** : Foxconn  
**Model Name** : T99W368M  
**Applicant** : Hon Lin Technology Co., Ltd  
11F, No.32, Jihu Rd., Neihu Dist., Taipei City  
114, Taiwan R.O.C.  
**Manufacturer** : Hon Lin Technology Co., Ltd  
11F, No.32, Jihu Rd., Neihu Dist., Taipei City  
114, Taiwan R.O.C.  
**Standard** : FCC 47 CFR Part 2, and 90(S)

The product was received on Jul. 01, 2022 and testing was performed from Aug. 03, 2022 to Oct. 18, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

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

*Louis Wu*

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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### History of this test report

Report No.	Version	Description	Issue Date
FG262904G	01	Initial issue of report	Oct. 28, 2022



### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046 §90.635	Conducted Output Power and Effective Radiated Power	Pass	-
3.3	-	Peak-to-Average Ratio	Reporting only	-
3.4	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	Reporting only	-
3.5	§2.1051 §90.691	Emission masks – In-band emissions	Pass	-
3.6	§2.1051 §90.691	Emission masks – Out of band emissions	Pass	-
3.7	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	Pass	-
3.8	§2.1053 §90.691	Field Strength of Spurious Radiation	Pass	28.75 dB under the limit at 2452.000 MHz

**Declaration of Conformity:**

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.  
It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
- The measurement uncertainty please refer to report "Uncertainty of Evaluation".

**Comments and Explanations:**

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

**Reviewed by: Keven Cheng**

**Report Producer: Clio Lo**



# 1 General Description

## 1.1 Feature of Equipment Under Test

WCDMA/LTE/5G NR and GNSS

The following antennas were provided to the EUT

	Band	Brand	Model	Antenna Type	RF Exposure Max Antenna Gain(dBi)
LTE	26	WHA YU	C107-511721-A	PCB	3.5

**Remark:** The above EUT's information was declared by manufacturer and used for Radiated Spurious Emission test.

There are three different HW of T99W368M.

Brand	Model	HW
Foxconn	T99W368M	1. WCDMA+LTE+Sub6+mmWave+eSIM
		2. WCDMA+LTE+Sub6+mmWave w/o eSIM
		3. WCDMA+LTE+Sub6+mmWave +FPC connector on bottom w/o eSIM

**Note:** All the tests were performed with Sample 1.

## 1.2 Modification of EUT

No modifications made to the EUT during the testing.



### 1.3 Testing Site

<b>Test Site</b>	Sporton International Inc. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	TH03-HY
<b>Test Engineer</b>	Jacky Wang
<b>Temperature (°C)</b>	23.1~25.4
<b>Relative Humidity (%)</b>	55.3~58.2

<b>Test Site</b>	Sporton International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b>
	03CH11-HY (TAF Code: 3786)
<b>Test Engineer</b>	Yuan Lee and Troye Hsieh
<b>Temperature (°C)</b>	20.1~21.5
<b>Relative Humidity (%)</b>	55.8~68.3
<b>Remark</b>	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC Designation No.: TW1190 and TW3786



## 1.4 Applied Standards

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

- ♦ FCC 47 CFR Part 2, 90
- ♦ ANSI / TIA-603-E
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦ Interim Guidance for Equipment Authorization of Devices with Channel Bandwidths Combined Across Two Contiguous Service Rule Allocations OET/Lab/EACB, June 6, 2013

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
3. The TAF code is not including all the FCC KDB listed without accreditation.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level.

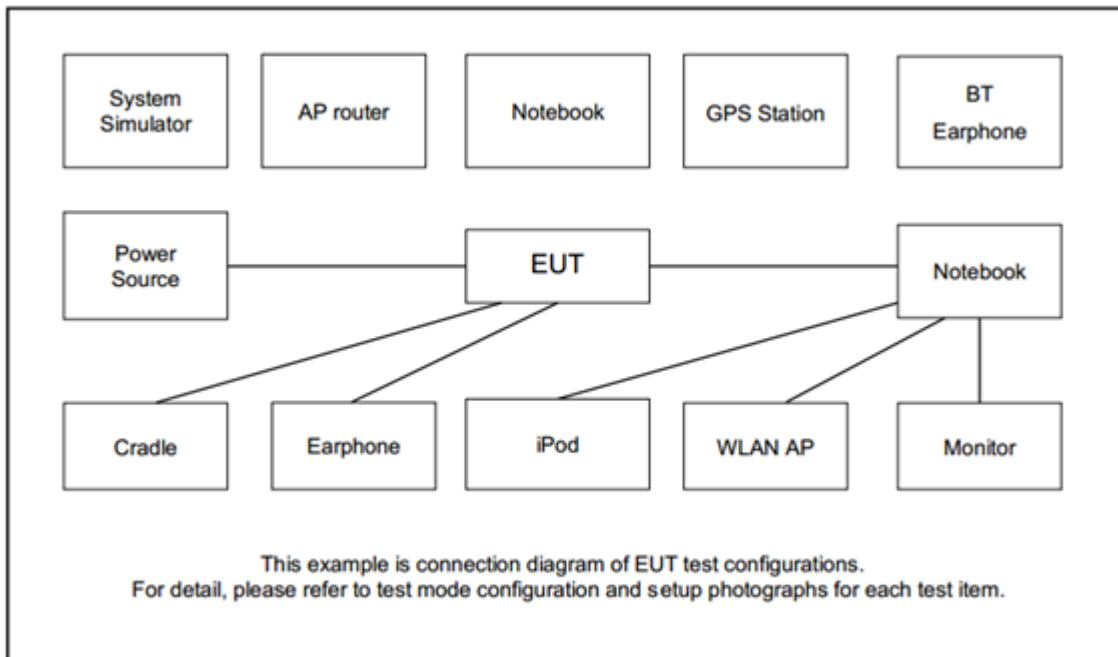
For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

Frequency range investigated for radiated emission is 30 MHz to 9000 MHz.

Conducted Test Cases	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel			
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H	
Max. Output Power	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	26				v		-	v	v	v	v			v			v	
26dB and 99% Bandwidth	26	v	v	v	v	v	-	v	v	v	v			v	v	v		
Emission masks In-band emissions	26	v	v	v	v	v	-	v	v	v	v	v		v	v			v
Emission masks – Out of band emissions	26	v	v	v	v	v	-	v					v			v	v	v
Frequency Stability	26				v	v	-	v						v	v	v		
E.R.P.	26	v	v	v	v	v	-	v	v	v	v	Max. Power						
Radiated Spurious Emission	26	Worst Case												v	v	v		
Remark	<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>LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz. ERP over 15MHz bandwidth complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies.</li> <li>One representative bandwidth is selected to perform PAR.</li> </ol>																	



## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	System Simulator	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
4.	Fixture	Foxconn	95.2580T00	N/A	N/A	N/A

## 2.4 Measurement Results Explanation Example

### For all conducted test items:

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

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

*Offset = RF cable loss + attenuator factor.*

The following shows an offset computation example with RF cable loss 4.2 dB and a 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset}(dB) &= \text{RF cable loss}(dB) + \text{attenuator factor}(dB). \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$



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

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

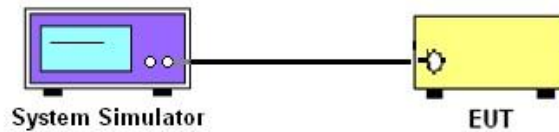
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

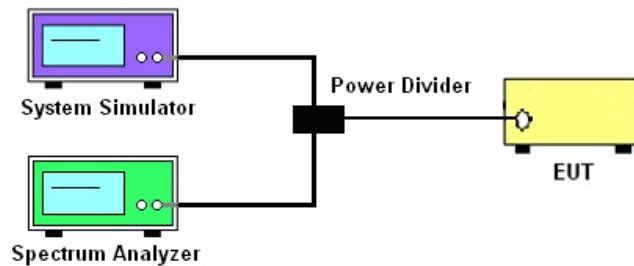
See list of measuring instruments of this test report.

##### 3.1.1 Test Setup

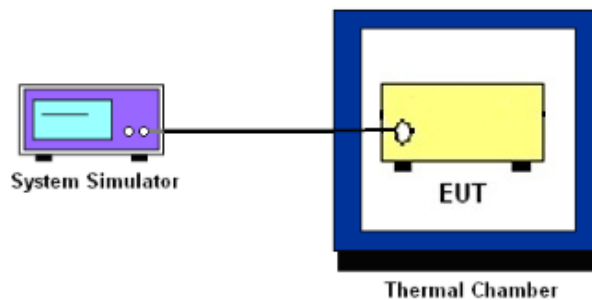
##### 3.1.2 Conducted Output Power



##### 3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge, Emission Mask, Emissions Mask – Out Of Band Emissions, and Conducted Spurious Emission



##### 3.1.4 Frequency Stability



##### 3.1.5 Test Result of Conducted Test

Please refer to Appendix A.



## 3.2 Conducted Output Power Measurement and ERP Measurement

### 3.2.1 Description of the Conducted Output Power Measurement and ERP Measurement

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

The output power of mobile transmitters must not exceed 100 Watts for LTE Band 26.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

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

### 3.2.2 Test Procedures

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



### **3.3 Peak-to-Average Ratio**

#### **3.3.1 Description of the PAR Measurement**

Reporting only

#### **3.3.2 Test Procedures**

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



## **3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement**

### **3.4.1 Description of (Occupied) Bandwidth Limitations Measurement**

The 99% 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 emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

### **3.4.2 Test Procedures**

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.



### 3.5 Emissions Mask Measurement

#### 3.5.1 Description of Emissions Mask Measurement

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

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

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

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

#### 3.5.2 Test Procedures

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



### 3.6 Emissions Mask – Out Of Band Emissions Measurement

#### 3.6.1 Description of Conducted Emissions Out of band emissions measurement

The power of any emission FCC Part 90.691 (a)(2) on any frequency removed from the assigned frequency by out of the authorized bandwidth at least  $43 + 10 \log (P)$  dB. It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> harmonic.

#### 3.6.2 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)





## **3.7 Frequency Stability Measurement**

### **3.7.1 Description of Frequency Stability Measurement**

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

### **3.7.2 Measuring Instruments**

The measuring equipment is listed in the section 4 of this test report.

### **3.7.3 Test Procedures for Temperature Variation**

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

### **3.7.4 Test Procedures for Voltage Variation**

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



## 3.8 Field Strength of Spurious Radiation Measurement

### 3.8.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

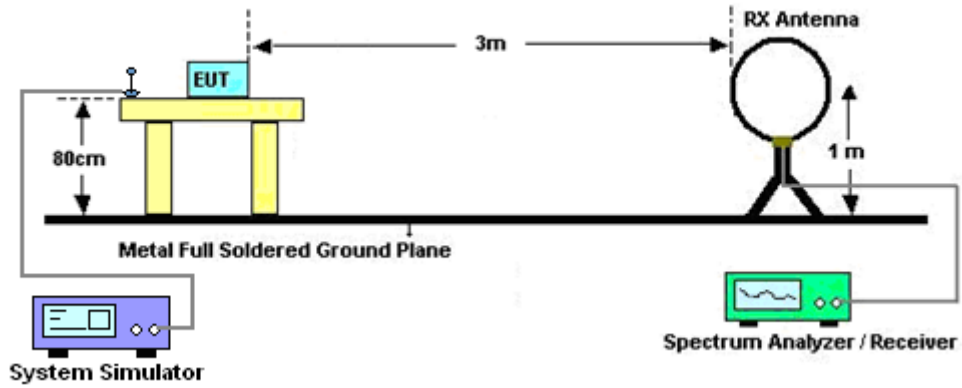
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43+10\log_{10}(P[\text{Watts}])$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### 3.8.2 Test Procedures

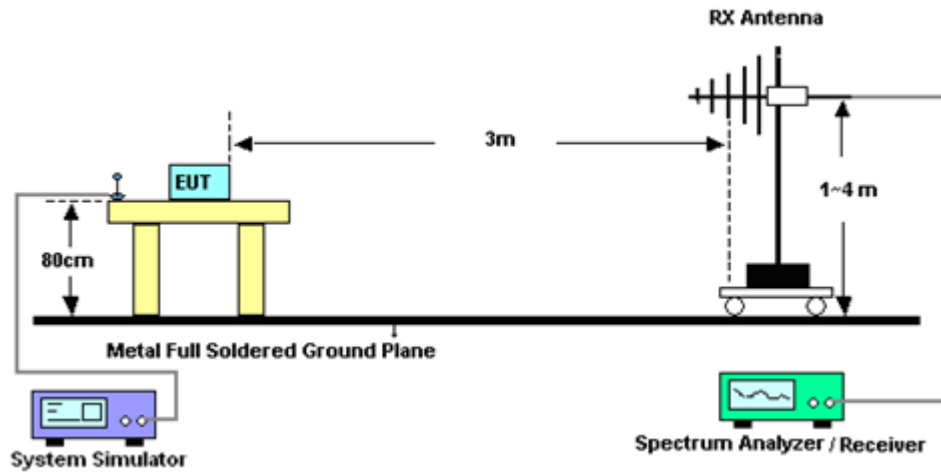
1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11.  $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
12.  $\text{ERP (dBm)} = \text{EIRP} - 2.15$
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)

### 3.8.3 Test Setup

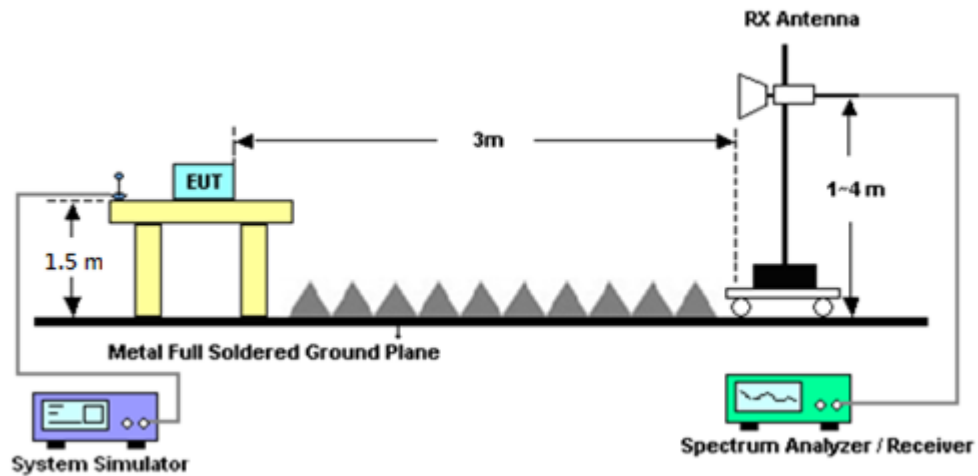
For radiated test below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



### 3.8.4 Test Result of Field Strength of Spurious Radiated

Please refer to Appendix B.

**Note:**

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

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



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	Aug. 03, 2022~ Aug. 26, 2022	Jan. 06, 2023	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 09, 2021	Aug. 03, 2022~ Aug. 26, 2022	Oct. 08, 2022	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	Mar. 10, 2022	Aug. 03, 2022~ Aug. 26, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 10, 2021	Aug. 03, 2022~ Aug. 26, 2022	Dec. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2021	Aug. 03, 2022~ Aug. 26, 2022	Nov. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	1710001800 055007	1GHz~18GHz	Jun. 15, 2022	Aug. 03, 2022~ Aug. 26, 2022	Jun. 14, 2023	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 15, 2021	Aug. 03, 2022~ Aug. 26, 2022	Oct. 14, 2022	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	20MHz~8.4GHz	Oct. 21, 2021	Aug. 03, 2022~ Aug. 26, 2022	Oct. 20, 2022	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 03, 2022~ Aug. 26, 2022	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 03, 2022~ Aug. 26, 2022	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Aug. 03, 2022~ Aug. 26, 2022	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Aug. 03, 2022~ Aug. 26, 2022	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 10, 2022	Aug. 03, 2022~ Aug. 26, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 10, 2022	Aug. 03, 2022~ Aug. 26, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30MHz-18GHz	Mar. 10, 2022	Aug. 03, 2022~ Aug. 26, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	811852/4	30MHz-18GHz	Mar. 10, 2022	Aug. 03, 2022~ Aug. 26, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530 -8000-40SS	SN11	1.53G Low Pass	Sep. 13, 2021	Aug. 03, 2022~ Aug. 26, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3 000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 13, 2021	Aug. 03, 2022~ Aug. 26, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX8-5872.5-6 750-18000-40SS	SN3	6.75GHz High Pass Filter	Sep. 13, 2021	Aug. 03, 2022~ Aug. 26, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-900-10 00-15000-60SS	SN12	1GHz High Pass Filter	Nov. 04, 2021	Aug. 03, 2022~ Aug. 26, 2022	Nov. 03, 2022	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP140325	N/A	Nov. 26, 2021	Aug. 03, 2022~ Aug. 26, 2022	Nov. 25, 2022	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP200880	N/A	Sep. 30, 2021	Aug. 03, 2022~ Aug. 26, 2022	Sep. 29, 2022	Radiation (03CH11-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025280	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 29, 2021	Aug. 08, 2022~ Oct. 18, 2022	Oct. 28, 2022	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	Oct. 01, 2021	Aug. 08, 2022~ Sep. 26, 2022	Sep. 30, 2022	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	Sep. 27, 2022	Sep. 27, 2022~ Oct. 18, 2022	Sep. 26, 2023	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SH-641	92013720	-40°C ~90°C	Sep. 07, 2022	Sep. 08, 2022~ Oct. 18, 2022	Sep. 06, 2023	Conducted (TH03-HY)
DC Power Supply	GW Instek	GPP-2323	GES906037	0V~64V : 0A~6A	Jan. 06, 2022	Aug. 08, 2022~ Oct. 18, 2022	Jan. 05, 2023	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 07, 2022	Aug. 08, 2022~ Oct. 18, 2022	Jan. 06, 2023	Conducted (TH03-HY)



## 5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.15 dB
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.41 dB
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## Appendix A. Test Results of Conducted Test

### Conducted Output Power (Average power) & ERP

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	23.45	-	-	24.80	0.3020
15	1	37		23.44	-	-		
15	1	74		23.43	-	-		
15	36	0		22.54	-	-		
15	36	20		22.53	-	-		
15	36	39		22.52	-	-		
15	75	0		22.55	-	-		
15	1	0	16-QAM	22.76	-	-	24.13	0.2588
15	1	37		22.76	-	-		
15	1	74		22.78	-	-		
15	36	0		21.49	-	-		
15	36	20		21.55	-	-		
15	36	39		21.52	-	-		
15	75	0		21.54	-	-		
15	1	0	64-QAM	21.62	-	-	23.03	0.2009
15	1	37		21.62	-	-		
15	1	74		21.68	-	-		
15	36	0		20.45	-	-		
15	36	20		20.51	-	-		
15	36	39		20.52	-	-		
15	75	0		20.54	-	-		
15	1	0	256-QAM	19.11	-	-	20.46	0.1112
15	1	37		18.90	-	-		
15	1	74		19.01	-	-		
15	36	0		18.78	-	-		
15	36	20		18.85	-	-		
15	36	39		18.93	-	-		
15	75	0		18.91	-	-		
Limit	Power < 100W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	23.50	-	24.86	0.3062
10	1	25		-	23.51	-		
10	1	49		-	23.45	-		
10	25	0		-	22.59	-		
10	25	12		-	22.57	-		
10	25	25		-	22.62	-		
10	50	0		-	22.59	-		
10	1	0	16-QAM	-	22.96	-	24.33	0.2710
10	1	25		-	22.98	-		
10	1	49		-	22.93	-		
10	25	0		-	21.61	-		
10	25	12		-	21.61	-		
10	25	25		-	21.64	-		
10	50	0		-	21.57	-		
10	1	0	64-QAM	-	21.78	-	23.13	0.2056
10	1	25		-	21.74	-		
10	1	49		-	21.67	-		
10	25	0		-	20.61	-		
10	25	12		-	20.60	-		
10	25	25		-	20.64	-		
10	50	0		-	20.55	-		
10	1	0	256-QAM	-	19.12	-	20.47	0.1114
10	1	25		-	19.02	-		
10	1	49		-	19.02	-		
10	25	0		-	19.01	-		
10	25	12		-	18.84	-		
10	25	25		-	19.01	-		
10	50	0		-	18.95	-		
Limit	Power < 100W			Result			Pass	





LTE Band 26 Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.54	23.45	23.62	24.97	0.3141
5	1	12		23.55	23.61	23.54		
5	1	24		23.49	23.42	23.51		
5	12	0		22.50	22.58	22.40		
5	12	7		22.57	22.61	22.62		
5	12	13		22.55	22.61	22.55		
5	25	0		22.56	22.62	22.60		
5	1	0	16-QAM	22.93	22.92	22.91	24.32	0.2704
5	1	12		22.97	22.91	22.88		
5	1	24		22.80	22.75	22.76		
5	12	0		21.52	21.52	21.45		
5	12	7		21.62	21.67	21.64		
5	12	13		21.57	21.63	21.60		
5	25	0		21.58	21.56	21.68		
5	1	0	64-QAM	21.78	21.72	21.75	23.13	0.2056
5	1	12		21.66	21.56	21.66		
5	1	24		21.70	21.68	21.71		
5	12	0		20.50	20.54	20.41		
5	12	7		20.62	20.58	20.69		
5	12	13		20.56	20.57	20.47		
5	25	0		20.56	20.56	20.50		
5	1	0	256-QAM	19.01	19.08	19.05	20.43	0.1104
5	1	12		18.76	18.75	18.79		
5	1	24		18.85	18.79	18.94		
5	12	0		18.67	18.57	18.64		
5	12	7		18.72	18.68	18.62		
5	12	13		18.91	18.87	18.94		
5	25	0		18.80	18.75	18.76		
Limit	Power < 100W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.50	23.42	23.51	24.99	0.3155
3	1	8		23.57	23.60	23.64		
3	1	14		23.47	23.48	23.48		
3	8	0		22.60	22.67	22.68		
3	8	4		22.62	22.52	22.66		
3	8	7		22.58	22.50	22.56		
3	15	0		22.55	22.51	22.51		
3	1	0	16-QAM	22.83	22.90	22.79	24.38	0.2742
3	1	8		22.95	23.03	22.97		
3	1	14		22.84	22.77	22.84		
3	8	0		21.67	21.70	21.67		
3	8	4		21.66	21.69	21.56		
3	8	7		21.64	21.69	21.58		
3	15	0		21.59	21.66	21.55		
3	1	0	64-QAM	21.65	21.67	21.58	23.18	0.2080
3	1	8		21.73	21.73	21.83		
3	1	14		21.70	21.80	21.71		
3	8	0		20.58	20.49	20.52		
3	8	4		20.62	20.67	20.66		
3	8	7		20.58	20.63	20.50		
3	15	0		20.58	20.68	20.59		
3	1	0	256-QAM	19.07	19.11	19.06	20.46	0.1112
3	1	8		18.86	18.92	18.84		
3	1	14		18.97	18.94	18.90		
3	8	0		18.70	18.73	18.72		
3	8	4		18.71	18.69	18.79		
3	8	7		18.79	18.71	18.81		
3	15	0		18.82	18.78	18.75		
Limit	Power < 100W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.56	23.60	23.64	25.01	0.3170
1.4	1	3		23.59	23.53	23.66		
1.4	1	5		23.53	23.62	23.49		
1.4	3	0		23.59	23.58	23.61		
1.4	3	1		23.58	23.51	23.50		
1.4	3	3		23.57	23.49	23.47		
1.4	6	0		22.58	22.67	22.59		
1.4	1	0	16-QAM	22.88	22.96	22.93	24.34	0.2716
1.4	1	3		22.89	22.79	22.99		
1.4	1	5		22.85	22.84	22.89		
1.4	3	0		22.73	22.71	22.71		
1.4	3	1		22.69	22.71	22.65		
1.4	3	3		22.72	22.71	22.77		
1.4	6	0		21.62	21.58	21.71		
1.4	1	0	64-QAM	21.81	21.83	21.90	23.25	0.2113
1.4	1	3		21.81	21.88	21.83		
1.4	1	5		21.74	21.76	21.65		
1.4	3	0		21.69	21.75	21.76		
1.4	3	1		21.69	21.79	21.77		
1.4	3	3		21.65	21.68	21.62		
1.4	6	0		20.58	20.63	20.56		
1.4	1	0	256-QAM	19.09	19.13	19.16	20.51	0.1125
1.4	1	3		18.87	18.82	18.95		
1.4	1	5		18.93	19.02	18.92		
1.4	3	0		18.61	18.52	18.63		
1.4	3	1		18.79	18.87	18.85		
1.4	3	3		18.73	18.65	18.81		
1.4	6	0		18.82	18.73	18.74		
Limit	Power < 100W			Result			Pass	



LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	-	23.46	-	24.84	0.3048
15	1	37		-	23.49	-		
15	1	74		-	23.35	-		
15	36	0		-	22.60	-		
15	36	20		-	22.55	-		
15	36	39		-	22.47	-		
15	75	0		-	22.50	-		
15	1	0	16-QAM	-	22.73	-	24.15	0.2600
15	1	37		-	22.69	-		
15	1	74		-	22.80	-		
15	36	0		-	21.47	-		
15	36	20		-	21.59	-		
15	36	39		-	21.52	-		
15	75	0		-	21.48	-		
15	1	0	64-QAM	-	21.61	-	23.05	0.2018
15	1	37		-	21.62	-		
15	1	74		-	21.70	-		
15	36	0		-	20.40	-		
15	36	20		-	20.58	-		
15	36	39		-	20.53	-		
15	75	0		-	20.52	-		
15	1	0	256-QAM	-	19.17	-	20.52	0.1127
15	1	37		-	18.87	-		
15	1	74		-	19.02	-		
15	36	0		-	18.88	-		
15	36	20		-	18.76	-		
15	36	39		-	19.00	-		
15	75	0		-	18.93	-		
Limit	Reporting only			Result			N/A	



LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	23.47	-	24.82	0.3034
10	1	25		-	23.42	-		
10	1	49		-	23.39	-		
10	25	0		-	22.36	-		
10	25	12		-	22.59	-		
10	25	25		-	22.45	-		
10	50	0		-	22.57	-		
10	1	0	16-QAM	-	22.71	-	24.18	0.2618
10	1	25		-	22.83	-		
10	1	49		-	22.73	-		
10	25	0		-	21.50	-		
10	25	12		-	21.60	-		
10	25	25		-	21.55	-		
10	50	0		-	21.56	-		
10	1	0	64-QAM	-	21.72	-	23.07	0.2028
10	1	25		-	21.70	-		
10	1	49		-	21.55	-		
10	25	0		-	20.35	-		
10	25	12		-	20.50	-		
10	25	25		-	20.45	-		
10	50	0		-	20.56	-		
10	1	0	256-QAM	-	19.01	-	20.36	0.1086
10	1	25		-	18.67	-		
10	1	49		-	18.92	-		
10	25	0		-	18.64	-		
10	25	12		-	18.84	-		
10	25	25		-	18.96	-		
10	50	0		-	18.77	-		
Limit	Reporting only			Result			N/A	



LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	-	23.56	-	24.91	0.3097
5	1	12		-	23.53	-		
5	1	24		-	23.56	-		
5	12	0		-	22.41	-		
5	12	7		-	22.61	-		
5	12	13		-	22.58	-		
5	25	0		-	22.63	-		
5	1	0	16-QAM	-	22.94	-	24.34	0.2716
5	1	12		-	22.99	-		
5	1	24		-	22.89	-		
5	12	0		-	21.53	-		
5	12	7		-	21.60	-		
5	12	13		-	21.54	-		
5	25	0		-	21.56	-		
5	1	0	64-QAM	-	21.76	-	23.13	0.2056
5	1	12		-	21.60	-		
5	1	24		-	21.78	-		
5	12	0		-	20.59	-		
5	12	7		-	20.64	-		
5	12	13		-	20.59	-		
5	25	0		-	20.66	-		
5	1	0	256-QAM	-	19.06	-	20.41	0.1099
5	1	12		-	18.74	-		
5	1	24		-	18.93	-		
5	12	0		-	18.57	-		
5	12	7		-	18.62	-		
5	12	13		-	18.82	-		
5	25	0		-	18.86	-		
Limit	Reporting only			Result			N/A	



LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	-	23.48	-	24.98	0.3148
3	1	8		-	23.63	-		
3	1	14		-	23.49	-		
3	8	0		-	22.53	-		
3	8	4		-	22.66	-		
3	8	7		-	22.52	-		
3	15	0		-	22.51	-		
3	1	0	16-QAM	-	22.73	-	24.20	0.2630
3	1	8		-	22.85	-		
3	1	14		-	22.85	-		
3	8	0		-	21.62	-		
3	8	4		-	21.66	-		
3	8	7		-	21.63	-		
3	15	0		-	21.60	-		
3	1	0	64-QAM	-	21.68	-	23.06	0.2023
3	1	8		-	21.68	-		
3	1	14		-	21.71	-		
3	8	0		-	20.51	-		
3	8	4		-	20.70	-		
3	8	7		-	20.58	-		
3	15	0		-	20.59	-		
3	1	0	256-QAM	-	19.17	-	20.52	0.1127
3	1	8		-	18.76	-		
3	1	14		-	18.94	-		
3	8	0		-	18.78	-		
3	8	4		-	18.68	-		
3	8	7		-	18.88	-		
3	15	0		-	18.86	-		
Limit	Reporting only			Result			N/A	



LTE Band 26 Straddle Maximum Average Power [dBm] (GT - LC = 3.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	-	23.60	-	24.95	0.3126
1.4	1	3		-	23.55	-		
1.4	1	5		-	23.59	-		
1.4	3	0		-	23.50	-		
1.4	3	1		-	23.54	-		
1.4	3	3		-	23.59	-		
1.4	6	0		-	22.58	-		
1.4	1	0	16-QAM	-	22.94	-	24.29	0.2685
1.4	1	3		-	22.94	-		
1.4	1	5		-	22.78	-		
1.4	3	0		-	22.80	-		
1.4	3	1		-	22.63	-		
1.4	3	3		-	22.64	-		
1.4	6	0		-	21.69	-		
1.4	1	0	64-QAM	-	21.81	-	23.16	0.2070
1.4	1	3		-	21.75	-		
1.4	1	5		-	21.73	-		
1.4	3	0		-	21.78	-		
1.4	3	1		-	21.69	-		
1.4	3	3		-	21.66	-		
1.4	6	0		-	20.59	-		
1.4	1	0	256-QAM	-	19.05	-	20.40	0.1096
1.4	1	3		-	18.91	-		
1.4	1	5		-	18.86	-		
1.4	3	0		-	18.57	-		
1.4	3	1		-	18.78	-		
1.4	3	3		-	18.82	-		
1.4	6	0		-	18.92	-		
Limit	Reporting only			Result			N/A	

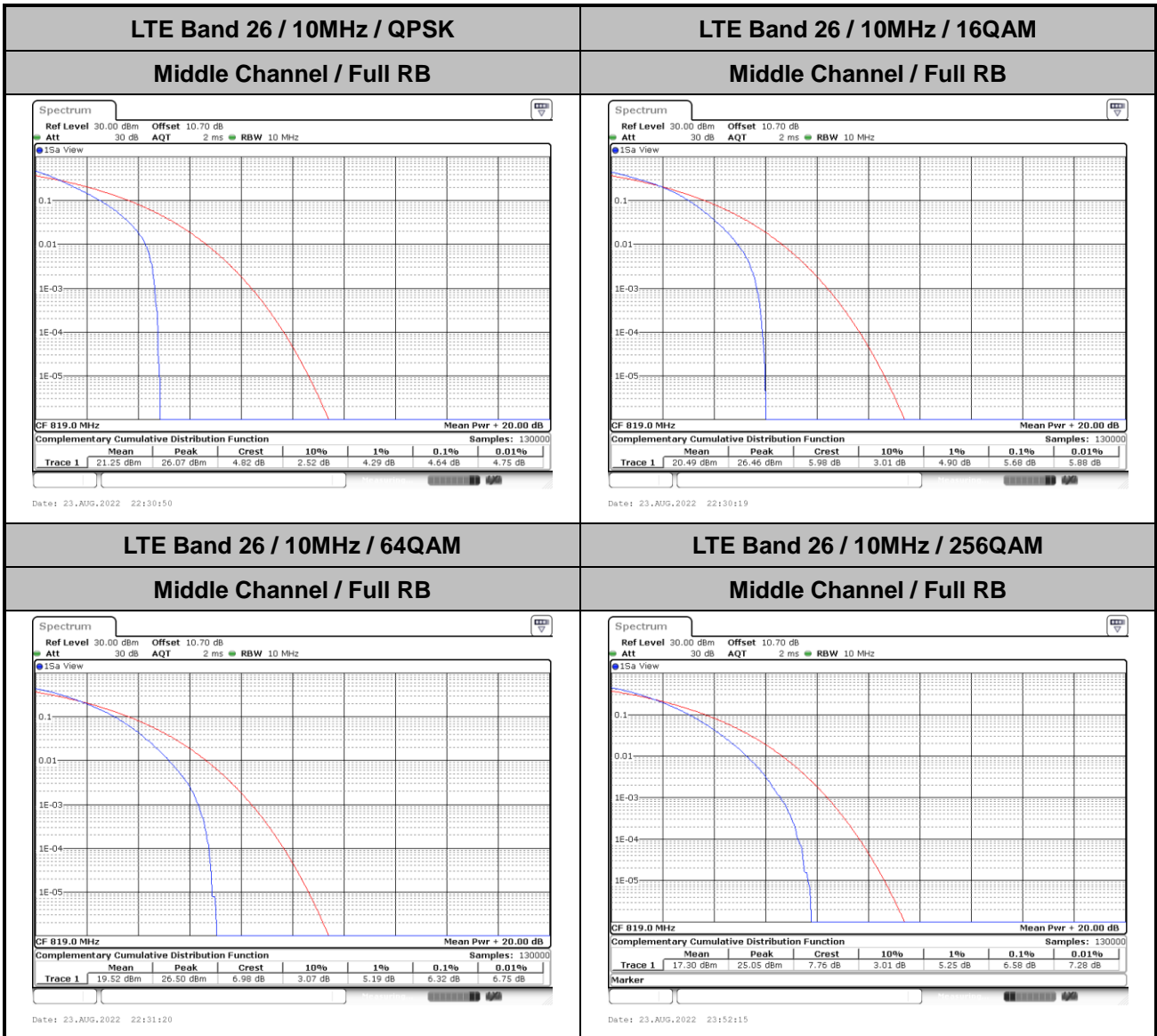




# LTE Band 26

## Peak-to-Average Ratio

Mode	LTE Band 26 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.68	6.32	6.58	PASS





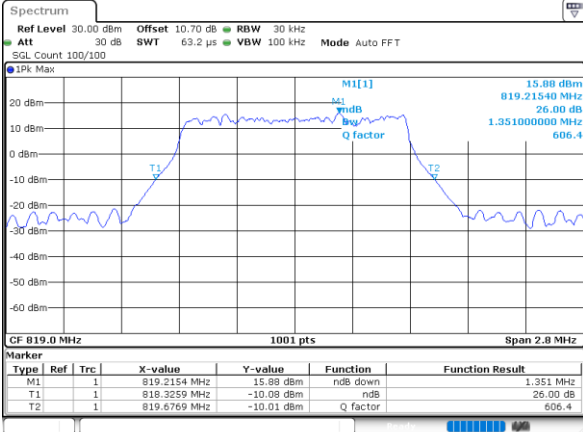
**26dB Bandwidth**

Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Low CH	-	-	-	-	-	-	-	-	14.99	14.42	-	-
Middle CH	1.35	1.30	3.07	3.05	4.98	4.99	9.87	9.95	-	-	-	-
Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Low CH	-	-	-	-	-	-	-	-	14.45	14.51	-	-
Middle CH	1.33	1.33	3.03	3.05	5.04	4.94	9.95	9.93	-	-	-	-



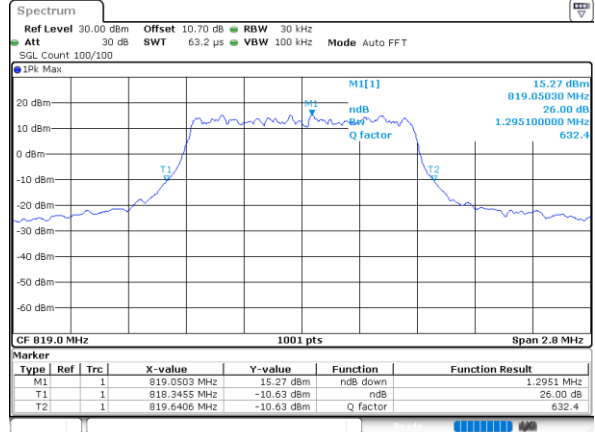
LTE Band 26

Middle Channel / 1.4MHz / QPSK



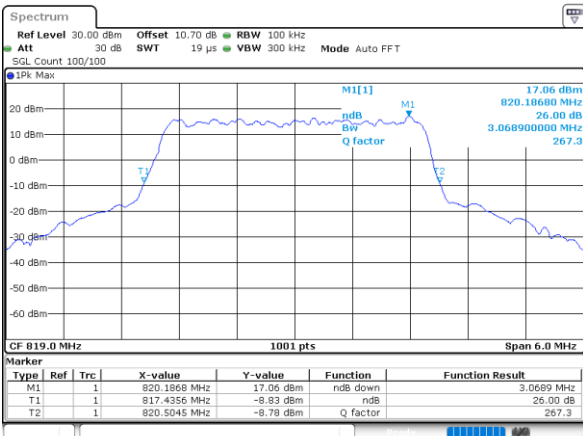
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Middle Channel / 1.4MHz / 16QAM



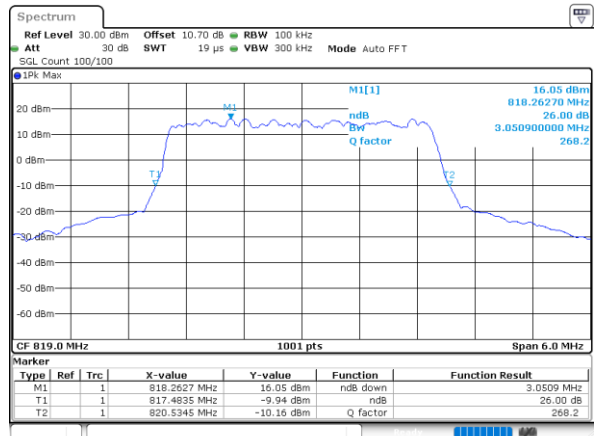
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Middle Channel / 3MHz / QPSK



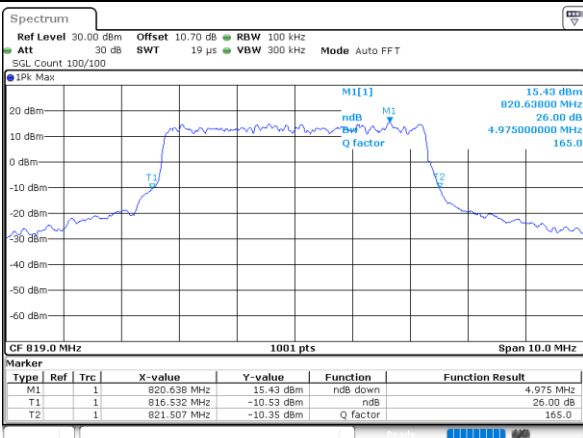
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Middle Channel / 3MHz / 16QAM



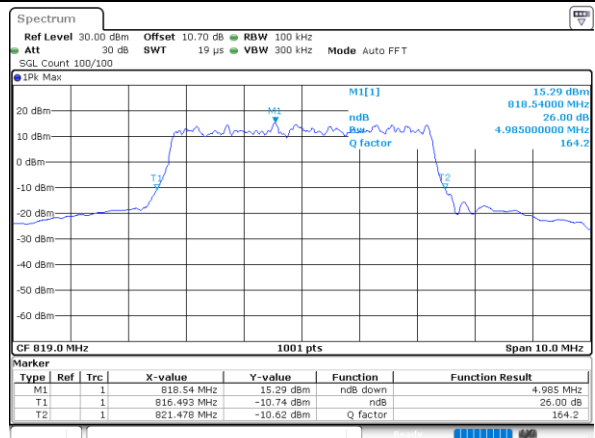
Date: 23\_AUG.2022 21:53:08

Middle Channel / 5MHz / QPSK



Date: 23\_AUG.2022 22:07:50

Middle Channel / 5MHz / 16QAM

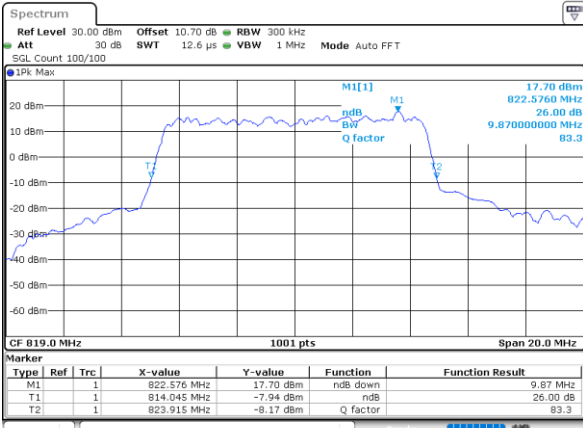


Date: 23\_AUG.2022 22:08:20



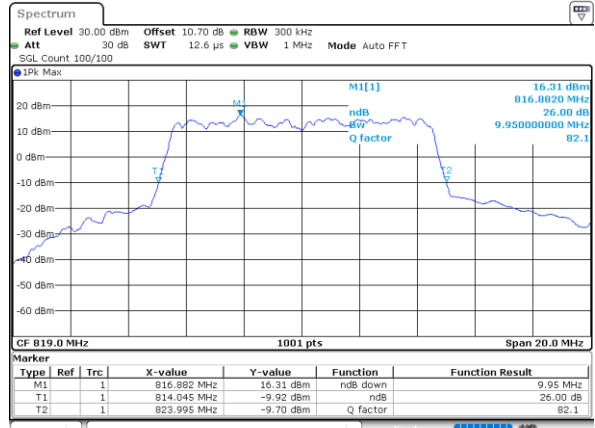
LTE Band 26

Middle Channel / 10MHz / QPSK



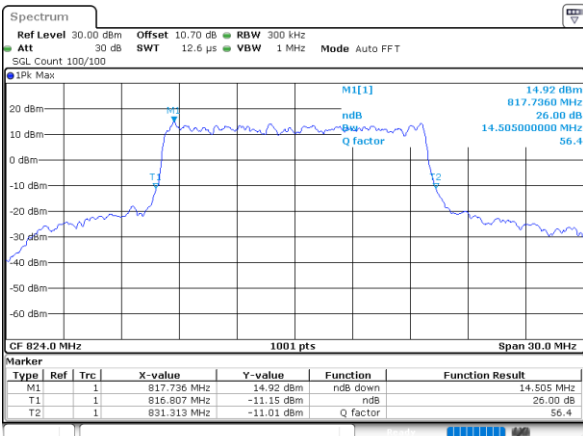
Date: 23.AUG.2022 22:27:59

Middle Channel / 10MHz / 16QAM



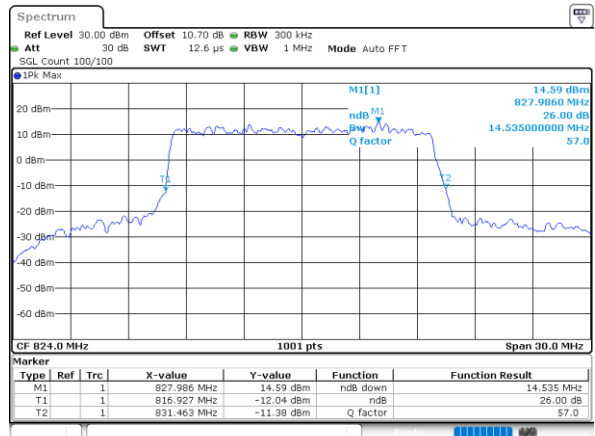
Date: 23.AUG.2022 22:12:18

Low Channel / 15MHz / QPSK



Date: 24.AUG.2022 00:49:54

Low Channel / 15MHz / 16QAM

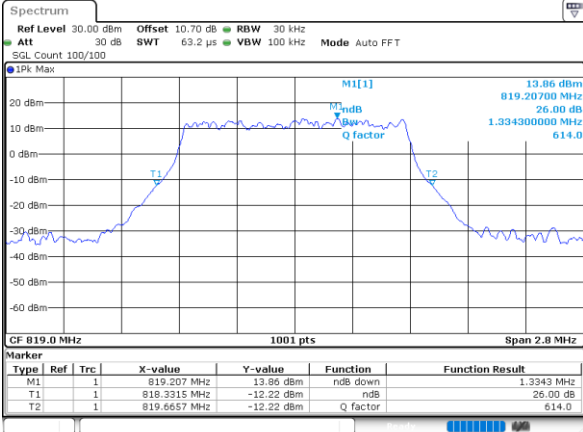


Date: 24.AUG.2022 00:50:23



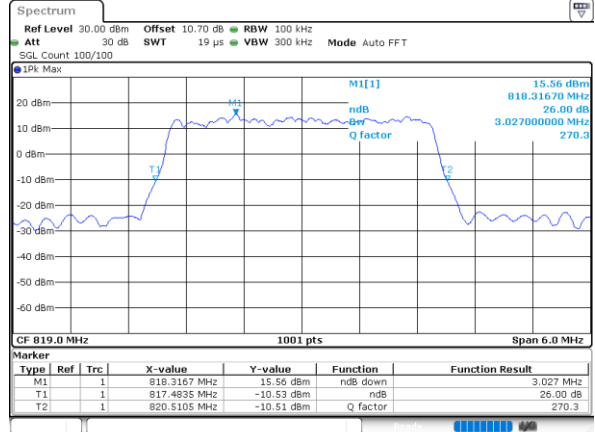
LTE Band 26

Middle Channel / 1.4MHz / 64QAM



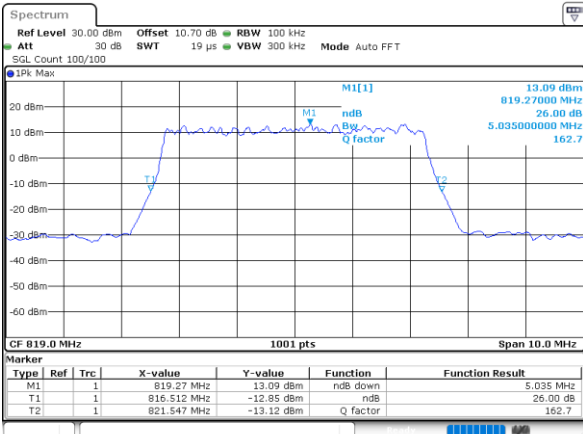
Date: 23\_AUG.2022 21:30:20

Middle Channel / 3MHz / 64QAM



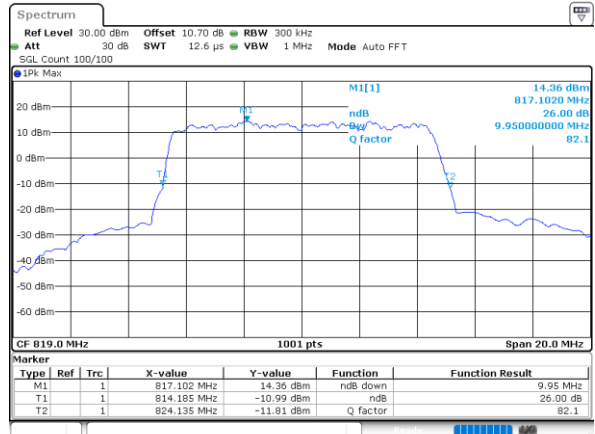
Date: 23\_AUG.2022 21:51:10

Middle Channel / 5MHz / 64QAM



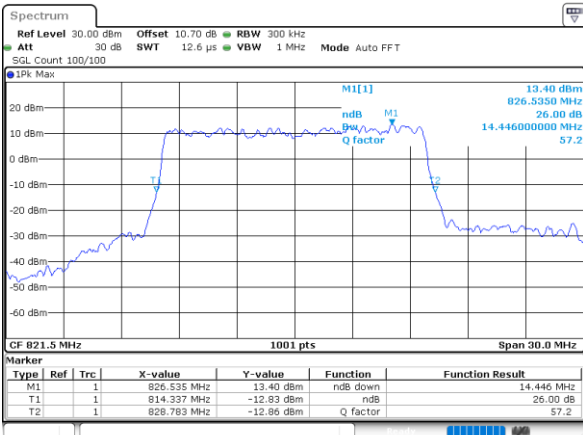
Date: 23\_AUG.2022 22:05:02

Middle Channel / 10MHz / 64QAM



Date: 23\_AUG.2022 22:26:30

Low Channel / 15MHz / 64QAM

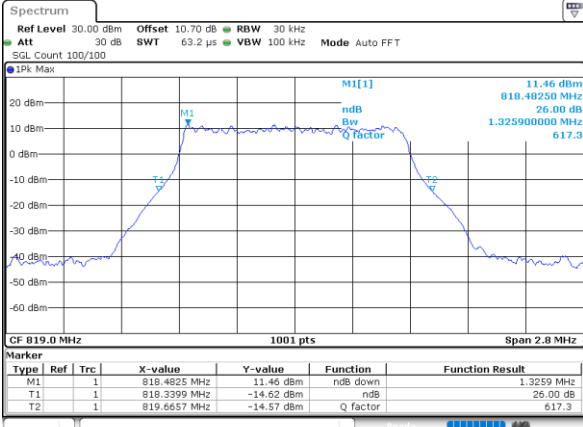


Date: 23\_AUG.2022 22:53:14



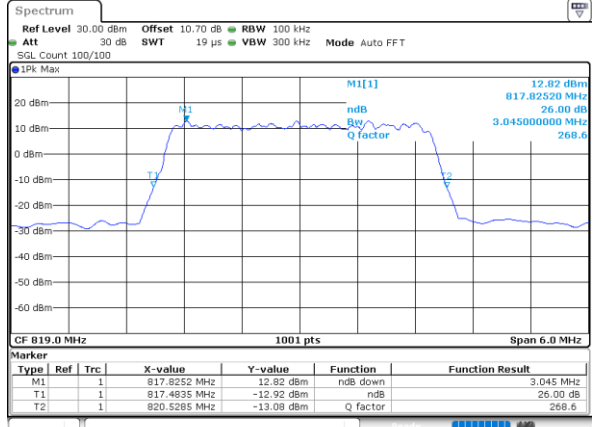
LTE Band 26

Middle Channel / 1.4MHz / 256QAM



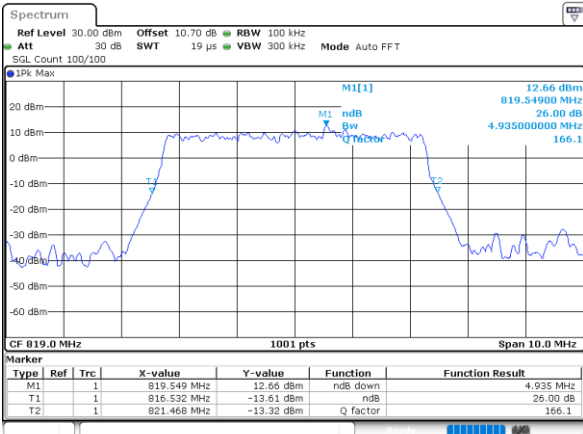
Date: 23\_AUG.2022 23:28:56

Middle Channel / 3MHz / 256QAM



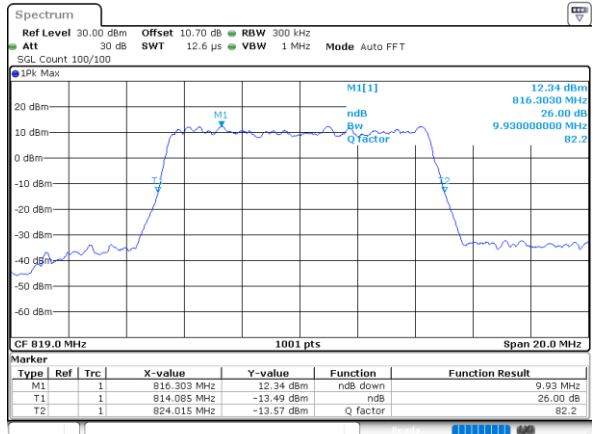
Date: 23\_AUG.2022 23:14:09

Middle Channel / 5MHz / 256QAM



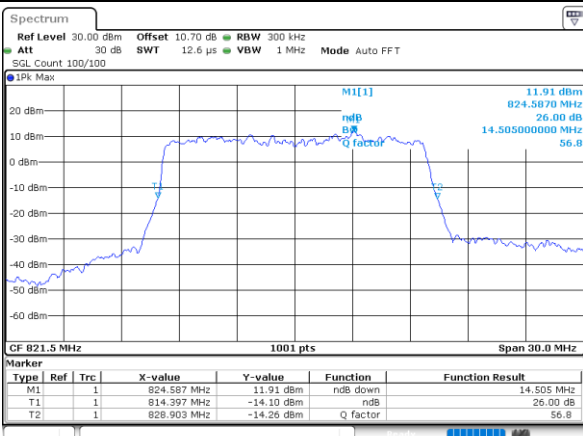
Date: 23\_AUG.2022 23:39:22

Middle Channel / 10MHz / 256QAM



Date: 23\_AUG.2022 23:44:34

Low Channel / 5MHz / 256QAM



Date: 23\_AUG.2022 23:51:39



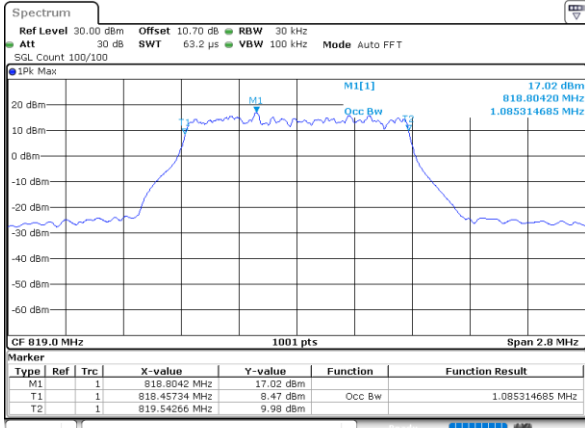
**Occupied Bandwidth**

Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Low CH	-	-	-	-	-	-	-	-	13.43	13.52	-	-
Middle CH	1.09	1.10	2.74	2.74	4.52	4.50	9.05	9.09	-	-	-	-
Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Low CH	-	-	-	-	-	-	-	-	13.52	13.43	-	-
Middle CH	1.10	1.09	2.71	2.73	4.51	4.50	9.05	9.05	-	-	-	-

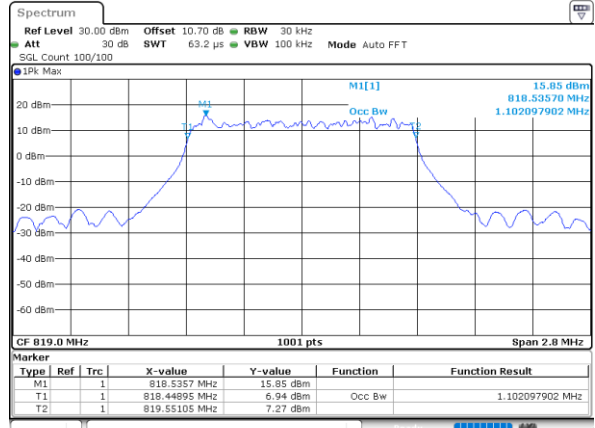


LTE Band 26

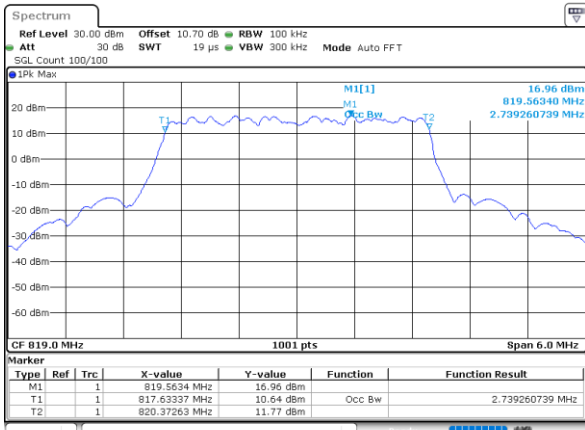
Middle Channel / 1.4MHz / QPSK



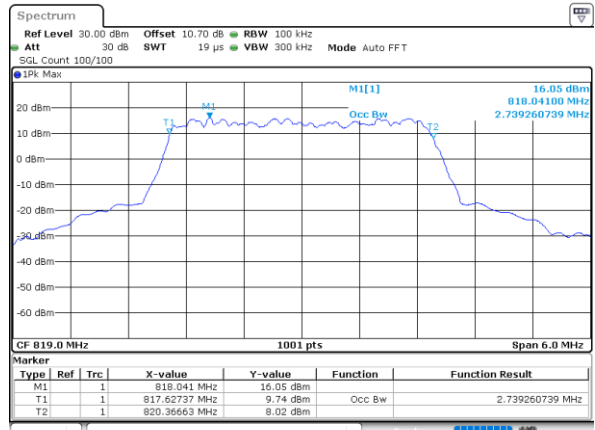
Middle Channel / 1.4MHz / 16QAM



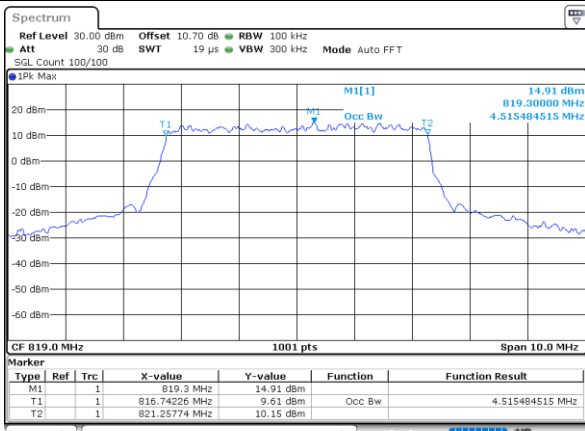
Middle Channel / 3MHz / QPSK



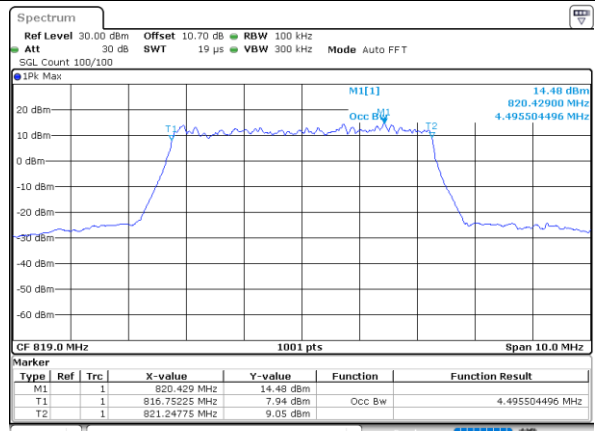
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM

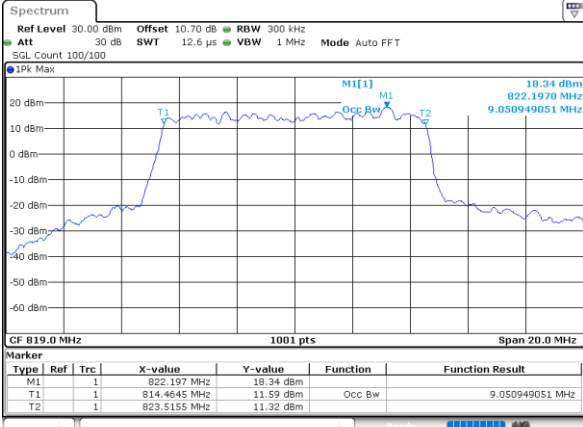






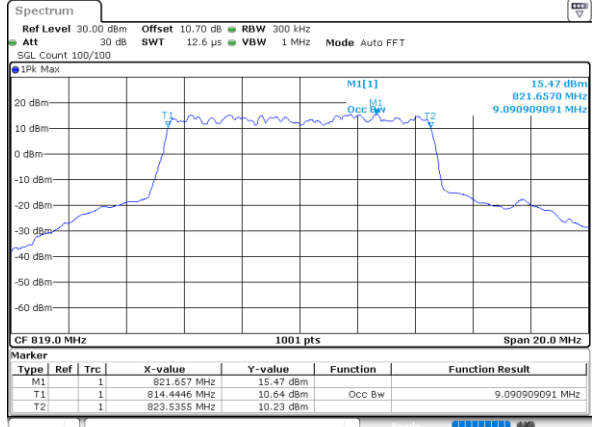
LTE Band 26

Middle Channel / 10MHz / QPSK



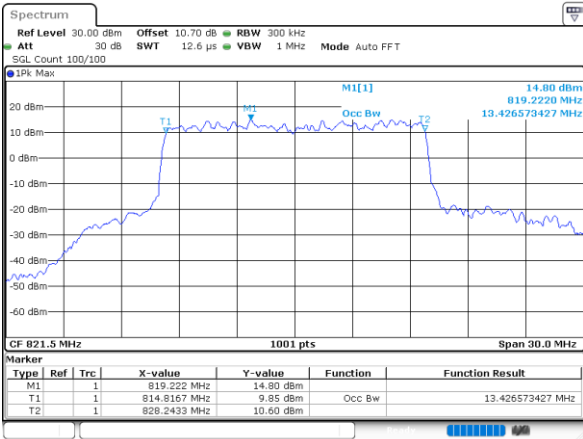
Date: 23\_AUG.2022 22:26:59

Middle Channel / 10MHz / 16QAM



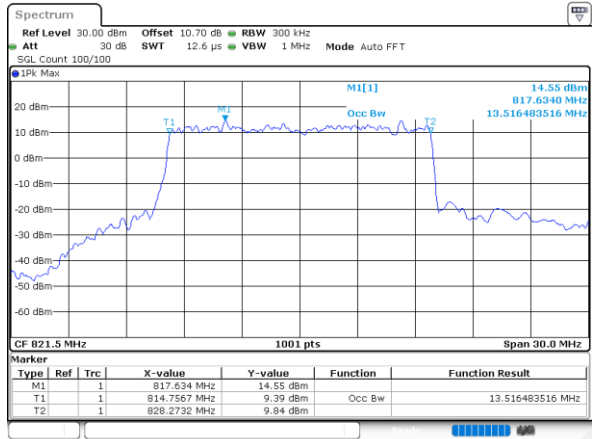
Date: 23\_AUG.2022 22:27:29

Low Channel / 15MHz / QPSK



Date: 23\_AUG.2022 22:54:28

Low Channel / 15MHz / 16QAM

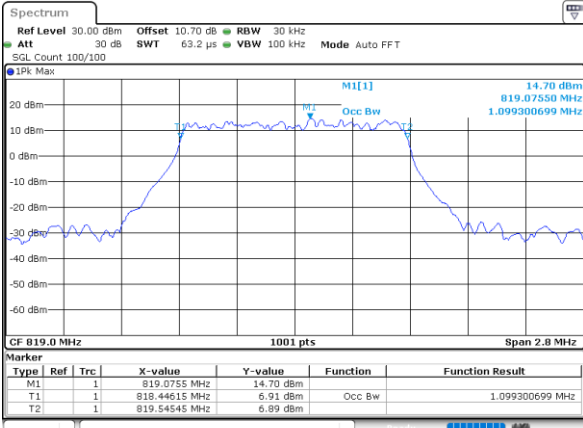


Date: 23\_AUG.2022 22:53:44

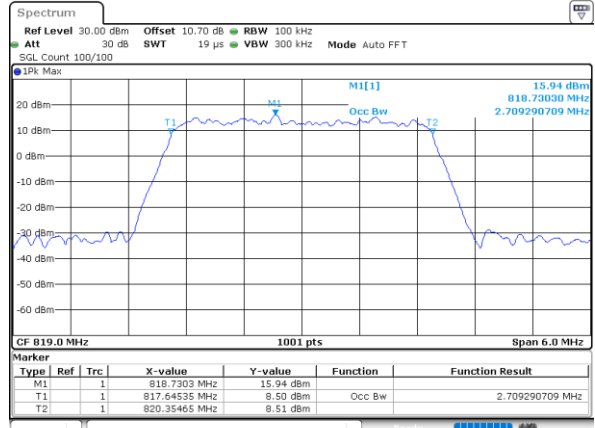


LTE Band 26

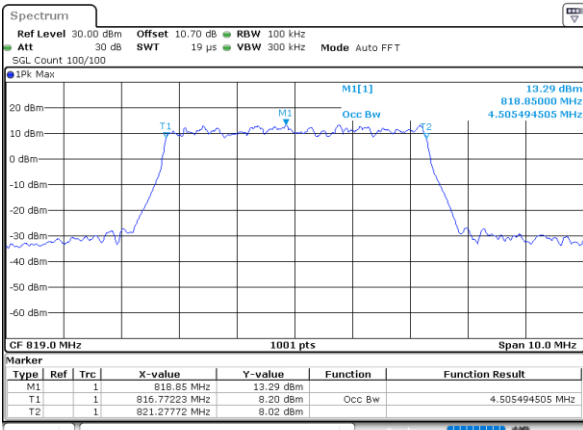
Middle Channel / 1.4MHz / 64QAM



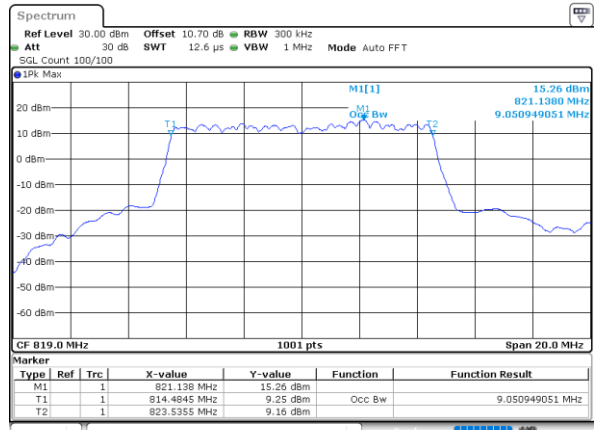
Middle Channel / 3MHz / 64QAM



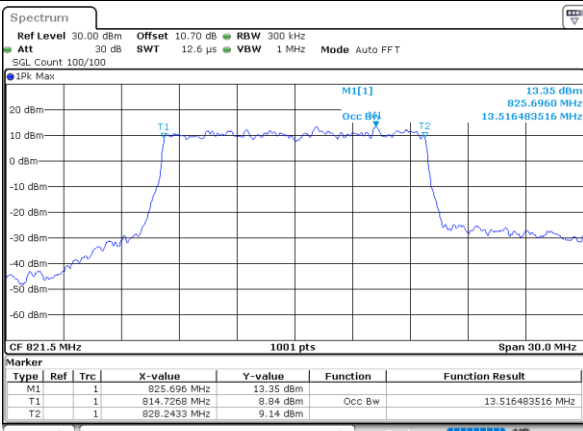
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



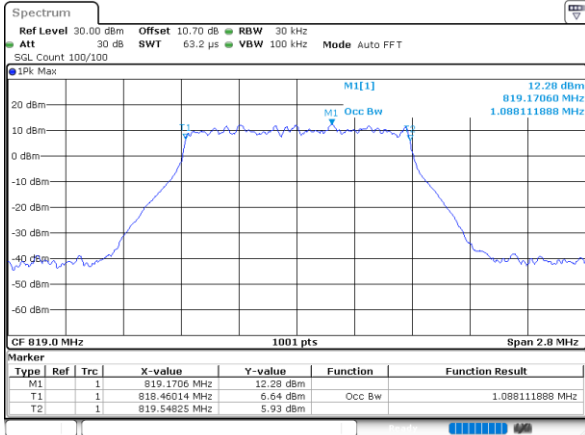
Low Channel / 5MHz / 64QAM





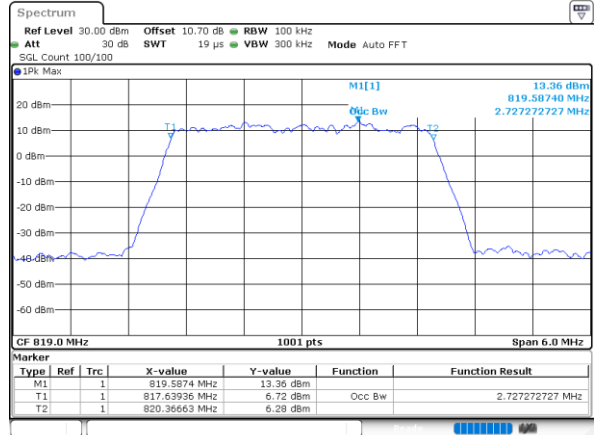
LTE Band 26

Middle Channel / 1.4MHz / 256QAM



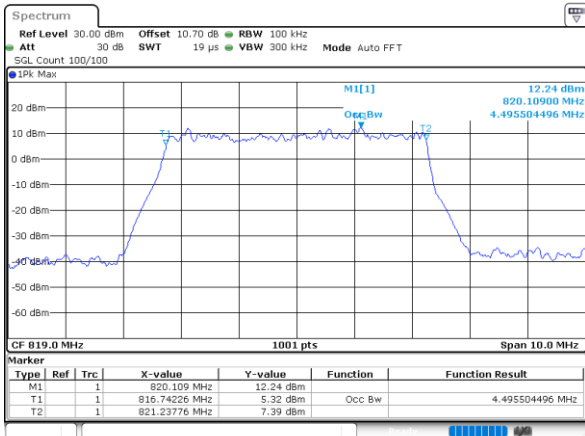
Date: 23\_AUG.2022 23:28:42

Middle Channel / 3MHz / 256QAM



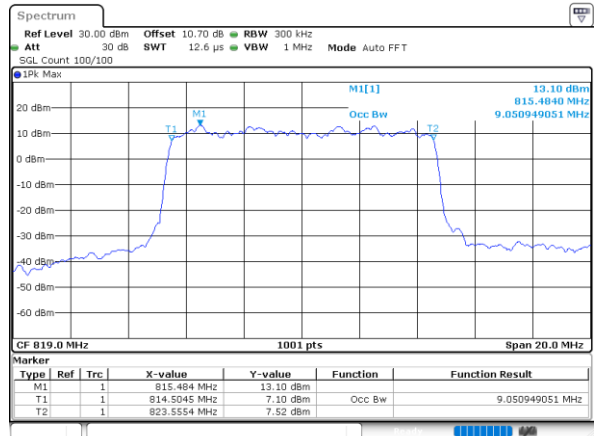
Date: 23\_AUG.2022 23:33:55

Middle Channel / 5MHz / 256QAM



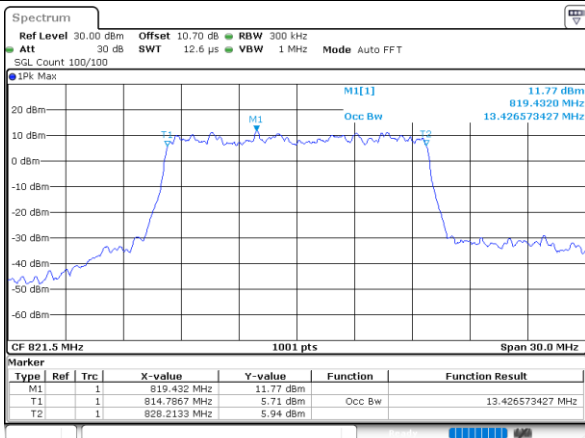
Date: 23\_AUG.2022 23:39:08

Middle Channel / 10MHz / 256QAM



Date: 23\_AUG.2022 23:44:20

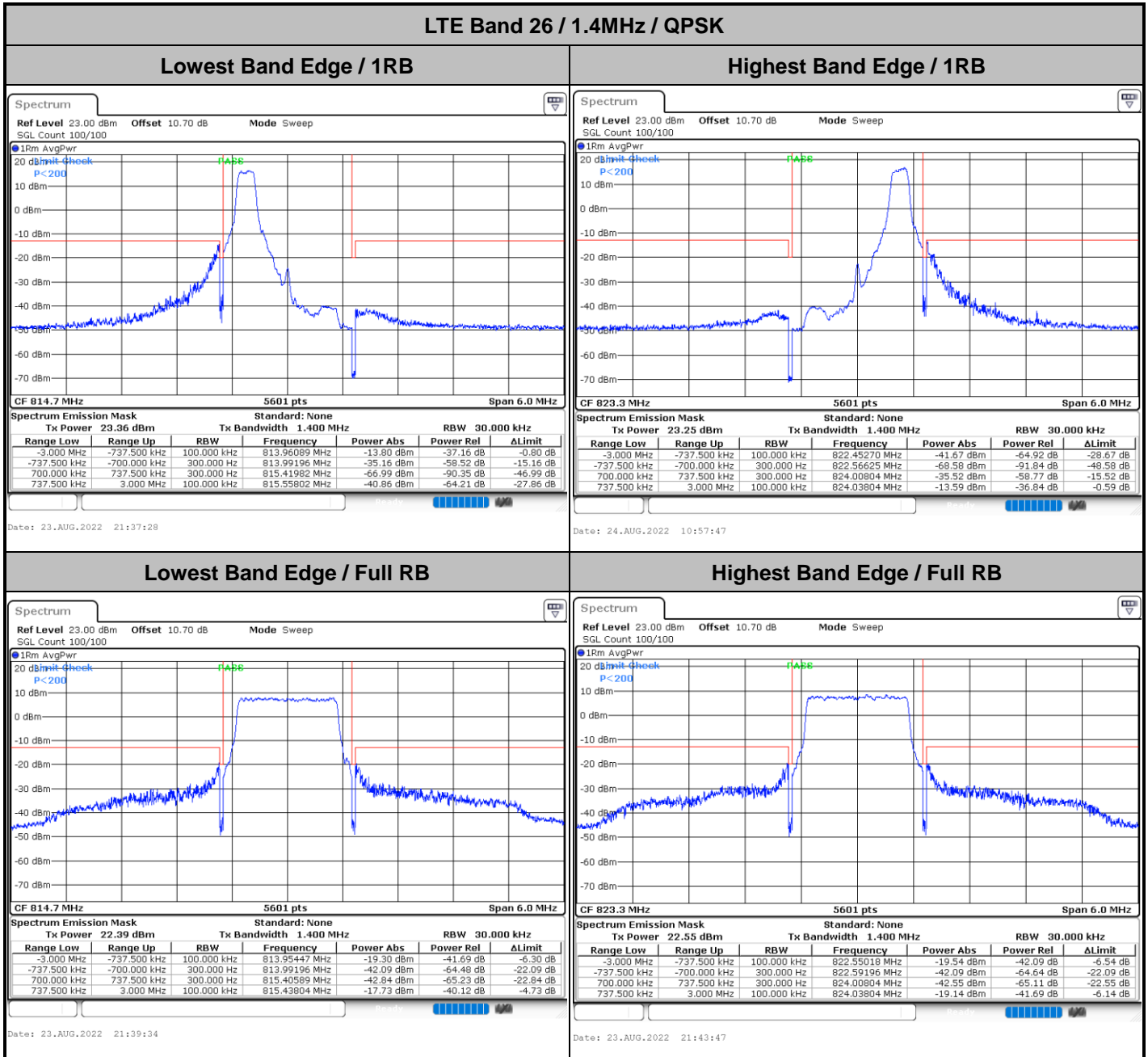
Low Channel / 15MHz / 256QAM



Date: 23\_AUG.2022 23:51:25



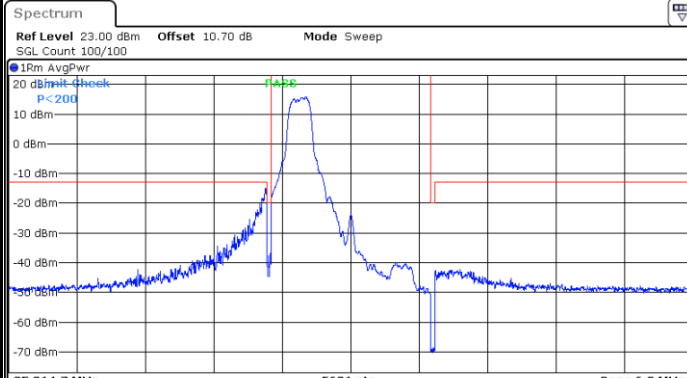
# Emission masks – In-band emissions





LTE Band 26 / 1.4MHz / 16QAM

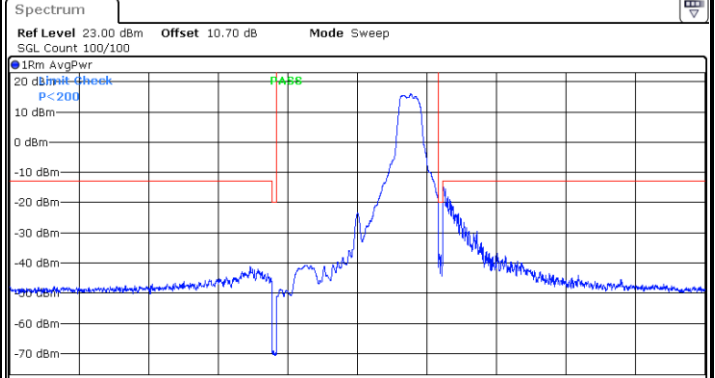
Lowest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	813.95125 MHz	-14.99 dBm	-37.49 dB	-1.99 dB
-737.500 kHz	-700.000 kHz	300.000 kHz	813.99625 MHz	-36.88 dBm	-59.38 dB	-16.88 dB
700.000 kHz	737.500 kHz	300.000 kHz	815.41962 MHz	-68.55 dBm	-91.05 dB	-48.55 dB
737.500 kHz	3.000 MHz	100.000 kHz	815.65872 MHz	-42.42 dBm	-64.93 dB	-29.42 dB

Date: 23.AUG.2022 21:38:31

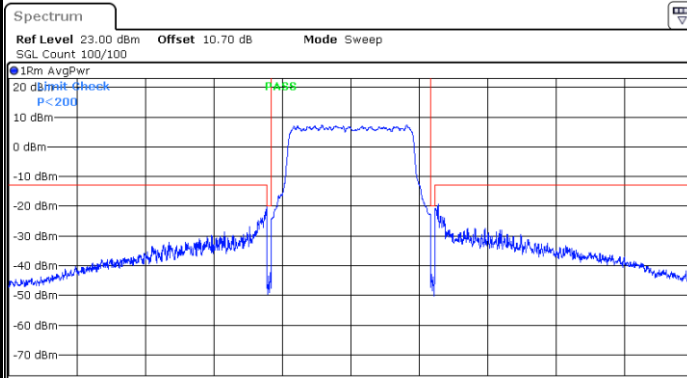
Highest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	822.37557 MHz	-41.24 dBm	-63.90 dB	-28.24 dB
-737.500 kHz	-700.000 kHz	300.000 kHz	822.58125 MHz	-69.14 dBm	-91.80 dB	-49.14 dB
700.000 kHz	737.500 kHz	300.000 kHz	824.00482 MHz	-37.00 dBm	-59.66 dB	-17.00 dB
737.500 kHz	3.000 MHz	100.000 kHz	824.04339 MHz	-14.93 dBm	-37.59 dB	-1.93 dB

Date: 23.AUG.2022 21:42:44

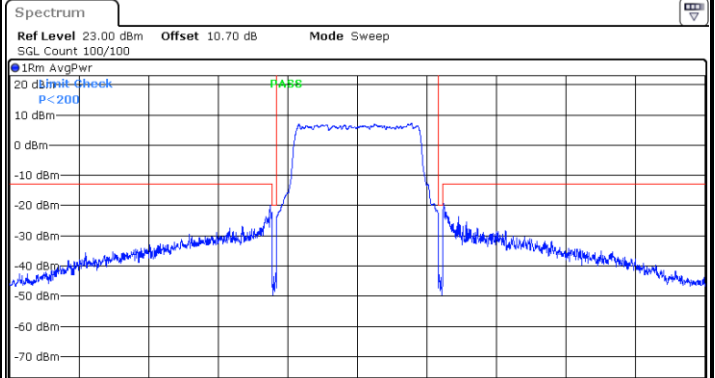
Lowest Band Edge / Full RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	813.96089 MHz	-19.98 dBm	-41.49 dB	-6.98 dB
-737.500 kHz	-700.000 kHz	300.000 kHz	813.99411 MHz	-42.44 dBm	-63.94 dB	-22.44 dB
700.000 kHz	737.500 kHz	300.000 kHz	815.40804 MHz	-42.78 dBm	-64.28 dB	-22.78 dB
737.500 kHz	3.000 MHz	100.000 kHz	815.46375 MHz	-19.38 dBm	-40.88 dB	-6.38 dB

Date: 23.AUG.2022 21:40:37

Highest Band Edge / Full RB



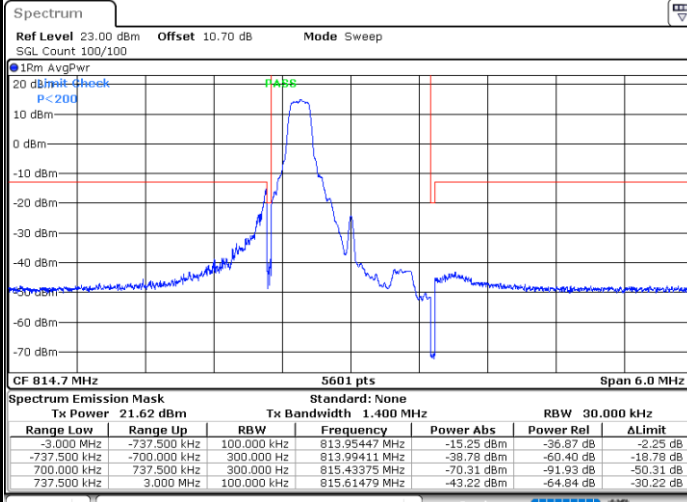
Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-737.500 kHz	100.000 kHz	822.54804 MHz	-19.86 dBm	-41.24 dB	-6.86 dB
-737.500 kHz	-700.000 kHz	300.000 kHz	822.59411 MHz	-42.23 dBm	-63.61 dB	-22.23 dB
700.000 kHz	737.500 kHz	300.000 kHz	824.00696 MHz	-42.94 dBm	-64.33 dB	-22.94 dB
737.500 kHz	3.000 MHz	100.000 kHz	824.04446 MHz	-19.28 dBm	-40.67 dB	-6.28 dB

Date: 23.AUG.2022 21:44:50



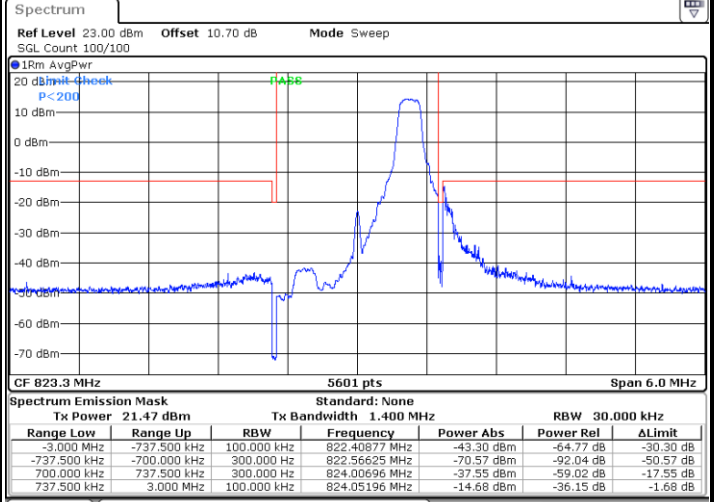
LTE Band 26 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



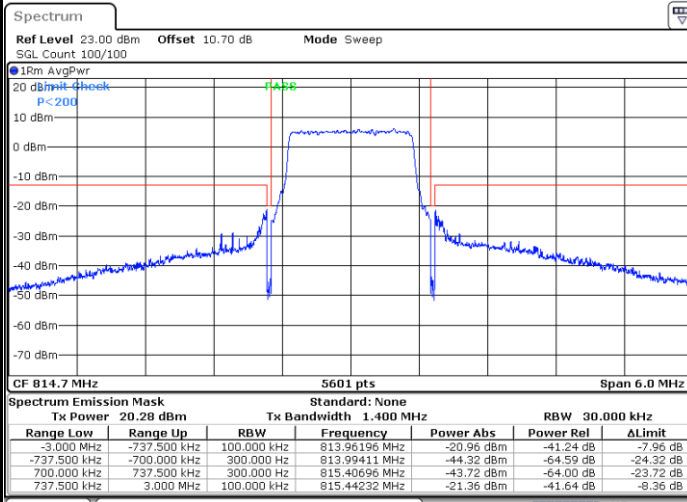
Date: 23.AUG.2022 21:45:52

Highest Band Edge / 1 RB



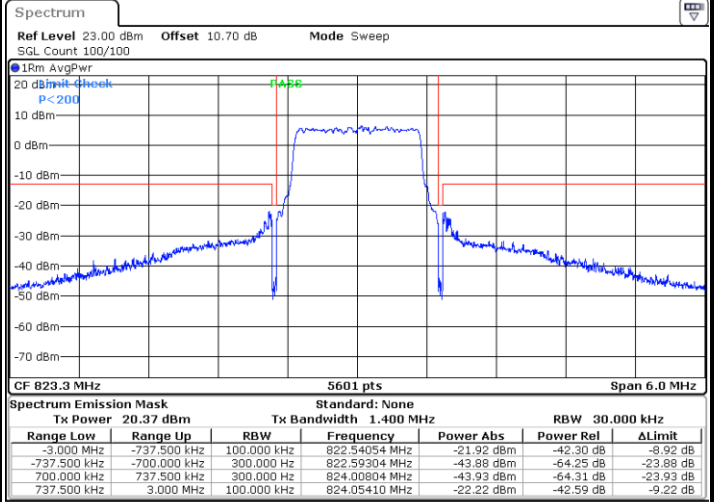
Date: 23.AUG.2022 21:47:58

Lowest Band Edge / Full RB



Date: 23.AUG.2022 21:46:55

Highest Band Edge / Full RB

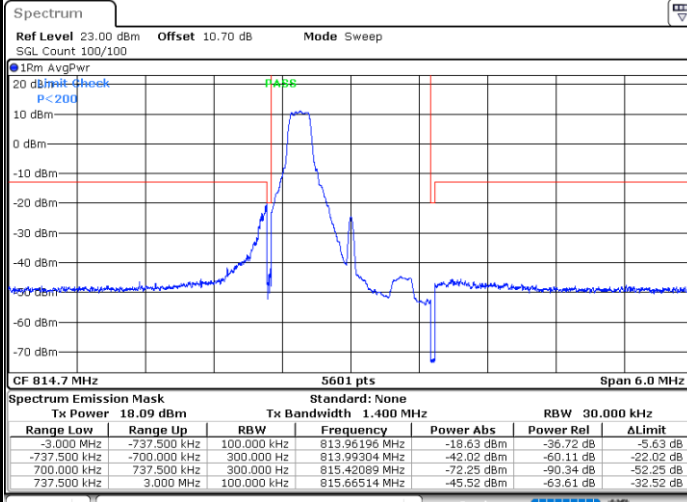


Date: 23.AUG.2022 21:49:01



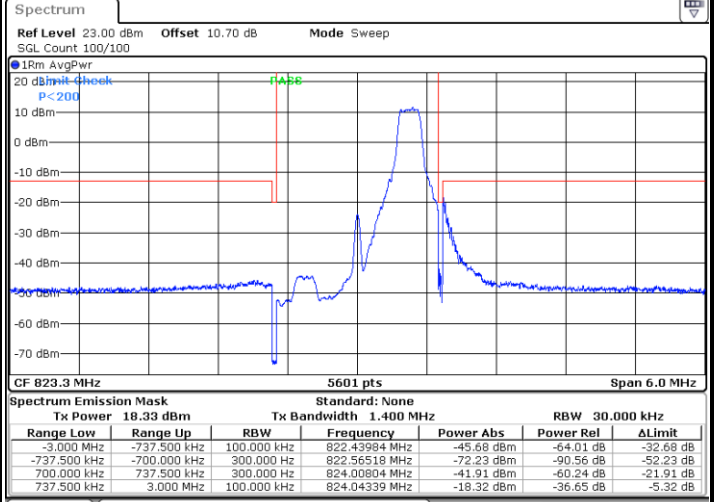
LTE Band 26 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



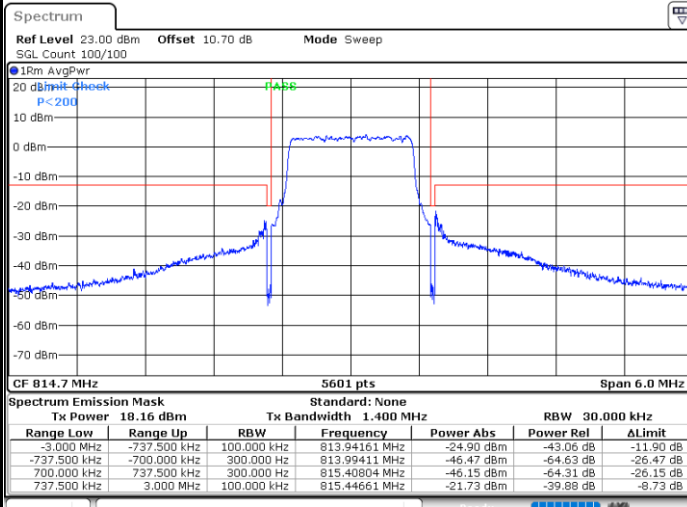
Date: 23.AUG.2022 23:30:02

Highest Band Edge / 1 RB



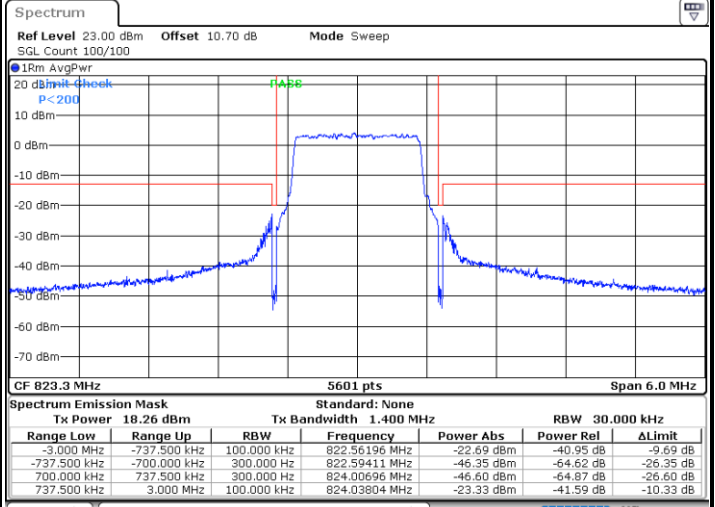
Date: 23.AUG.2022 23:32:14

Lowest Band Edge / Full RB



Date: 23.AUG.2022 23:31:08

Highest Band Edge / Full RB

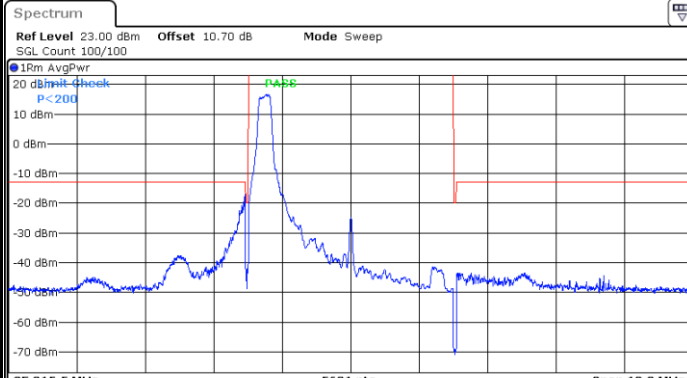


Date: 23.AUG.2022 23:33:20



LTE Band 26 / 3MHz / QPSK

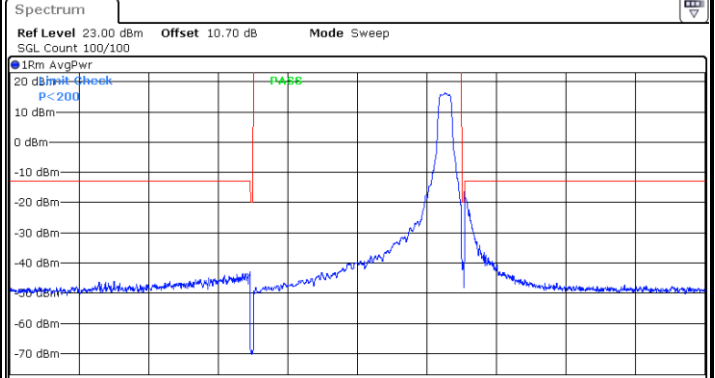
Lowest Band Edge / 1RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95268 MHz	-16.85 dBm	-40.10 dB	-3.85 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-40.69 dBm	-63.94 dB	-20.69 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00982 MHz	-68.98 dBm	-92.23 dB	-48.98 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.09018 MHz	-43.43 dBm	-66.69 dB	-30.43 dB

Date: 23.AUG.2022 21:56:51

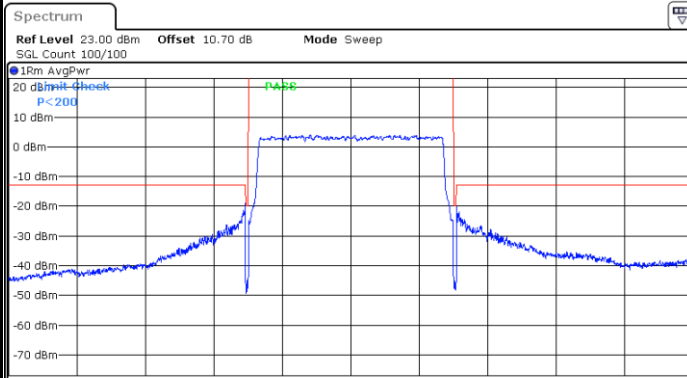
Highest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	820.95804 MHz	-42.76 dBm	-65.80 dB	-29.76 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.98661 MHz	-68.78 dBm	-91.82 dB	-48.78 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.01161 MHz	-38.83 dBm	-61.88 dB	-18.83 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-15.62 dBm	-38.66 dB	-2.62 dB

Date: 23.AUG.2022 22:01:04

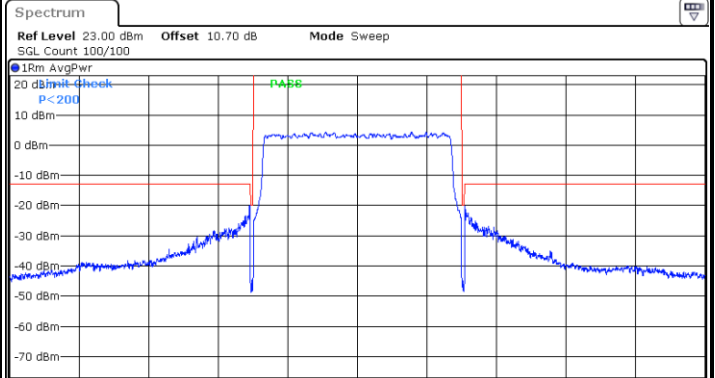
Lowest Band Edge / Full RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.96161 MHz	-18.87 dBm	-41.11 dB	-5.87 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-44.18 dBm	-66.42 dB	-24.18 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00268 MHz	-43.76 dBm	-66.00 dB	-23.76 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.03839 MHz	-20.07 dBm	-42.32 dB	-7.07 dB

Date: 23.AUG.2022 21:58:57

Highest Band Edge / Full RB



Spectrum Emission Mask		Standard: None				
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	820.96161 MHz	-19.97 dBm	-42.34 dB	-6.97 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99911 MHz	-44.04 dBm	-66.41 dB	-24.04 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00089 MHz	-43.97 dBm	-66.34 dB	-23.97 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-20.11 dBm	-42.48 dB	-7.11 dB

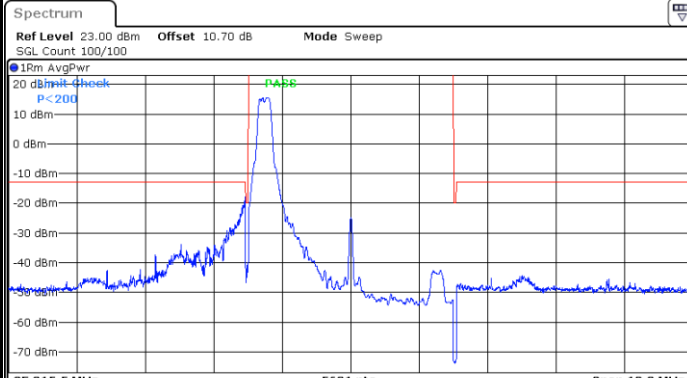
Date: 23.AUG.2022 22:03:10





LTE Band 26 / 3MHz / 16QAM

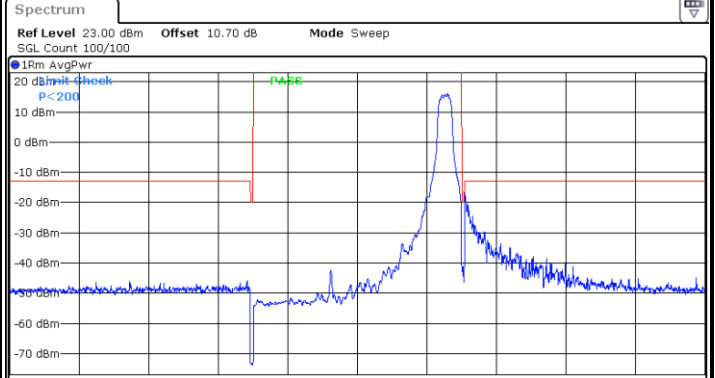
Lowest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-5.000 MHz	-1.538 MHz	100.000 kHz	813.96161 MHz	-17.94 dBm	-40.24 dB	-4.94 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-39.98 dBm	-62.28 dB	-19.98 dB	
1.500 MHz	1.538 MHz	300.000 Hz	817.02768 MHz	-72.73 dBm	-95.03 dB	-52.73 dB	
1.538 MHz	5.000 MHz	100.000 kHz	818.00268 MHz	-44.48 dBm	-66.78 dB	-31.48 dB	

Date: 23.AUG.2022 21:57:54

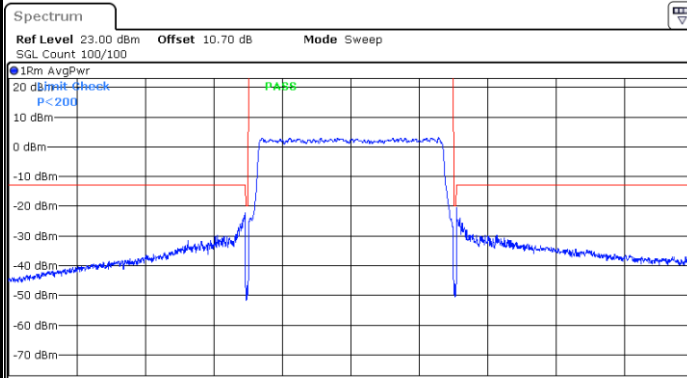
Highest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-5.000 MHz	-1.538 MHz	100.000 kHz	820.91339 MHz	-45.91 dBm	-68.34 dB	-32.91 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	820.98839 MHz	-72.87 dBm	-95.30 dB	-52.87 dB	
1.500 MHz	1.538 MHz	300.000 Hz	824.00089 MHz	-41.10 dBm	-63.53 dB	-21.10 dB	
1.538 MHz	5.000 MHz	100.000 kHz	824.04732 MHz	-16.60 dBm	-39.03 dB	-3.60 dB	

Date: 23.AUG.2022 22:02:07

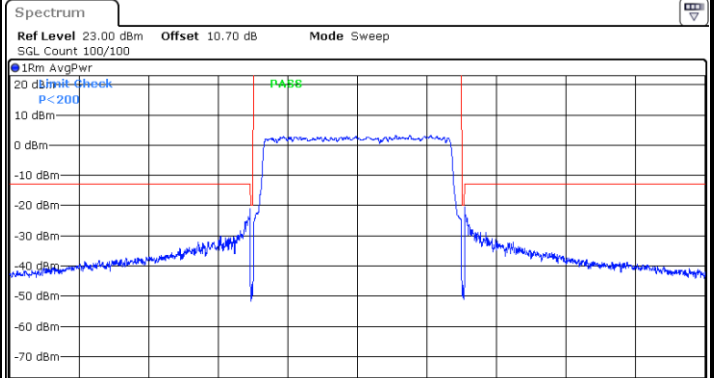
Lowest Band Edge / Full RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95804 MHz	-22.31 dBm	-43.62 dB	-9.31 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-45.33 dBm	-66.64 dB	-25.33 dB	
1.500 MHz	1.538 MHz	300.000 Hz	817.00268 MHz	-44.86 dBm	-66.16 dB	-24.86 dB	
1.538 MHz	5.000 MHz	100.000 kHz	817.04018 MHz	-20.54 dBm	-41.84 dB	-7.54 dB	

Date: 23.AUG.2022 22:00:00

Highest Band Edge / Full RB



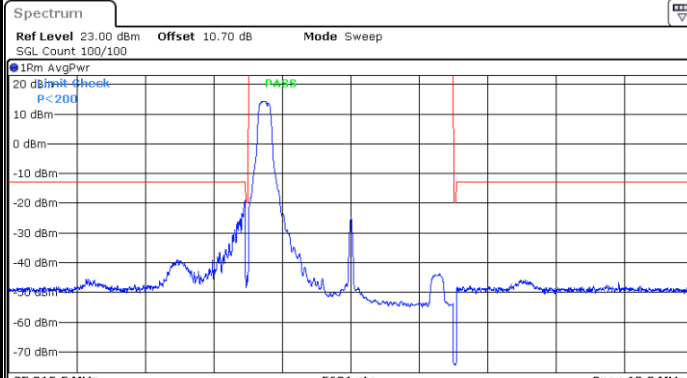
Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-5.000 MHz	-1.538 MHz	100.000 kHz	820.95625 MHz	-21.07 dBm	-42.41 dB	-8.07 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99911 MHz	-45.29 dBm	-66.63 dB	-25.29 dB	
1.500 MHz	1.538 MHz	300.000 Hz	824.00268 MHz	-44.88 dBm	-66.22 dB	-24.88 dB	
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-20.49 dBm	-41.83 dB	-7.49 dB	

Date: 23.AUG.2022 22:04:13



LTE Band 26 / 3MHz / 64QAM

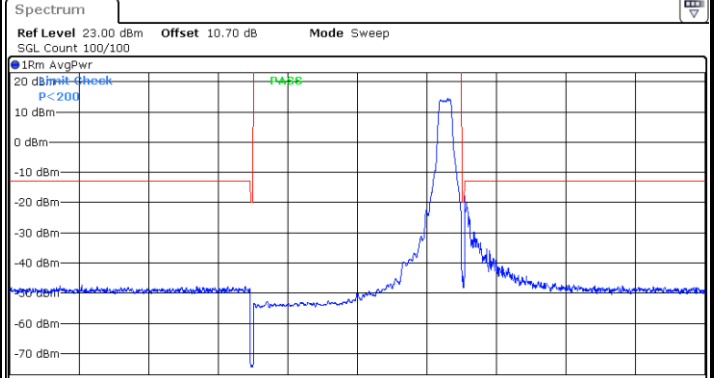
Lowest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	ΔLimit
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel		
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95625 MHz	-18.95 dBm	-40.01 dB	-5.95 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99732 MHz	-43.23 dBm	-64.30 dB	-23.23 dB	
1.500 MHz	1.538 MHz	300.000 Hz	817.01161 MHz	-73.73 dBm	-94.80 dB	-53.73 dB	
1.538 MHz	5.000 MHz	100.000 kHz	817.98304 MHz	-45.74 dBm	-66.81 dB	-32.74 dB	

Date: 23.AUG.2022 22:38:51

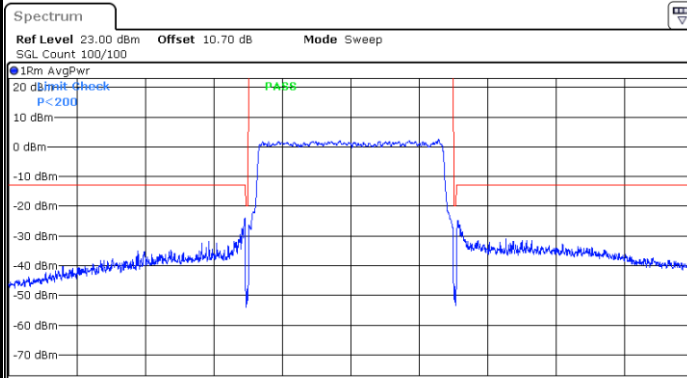
Highest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	ΔLimit
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel		
-5.000 MHz	-1.538 MHz	100.000 kHz	818.53482 MHz	-47.35 dBm	-68.55 dB	-34.35 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	820.96339 MHz	-73.60 dBm	-94.80 dB	-53.60 dB	
1.500 MHz	1.538 MHz	300.000 Hz	824.00446 MHz	-42.69 dBm	-63.89 dB	-22.69 dB	
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-17.81 dBm	-39.01 dB	-4.81 dB	

Date: 23.AUG.2022 22:40:57

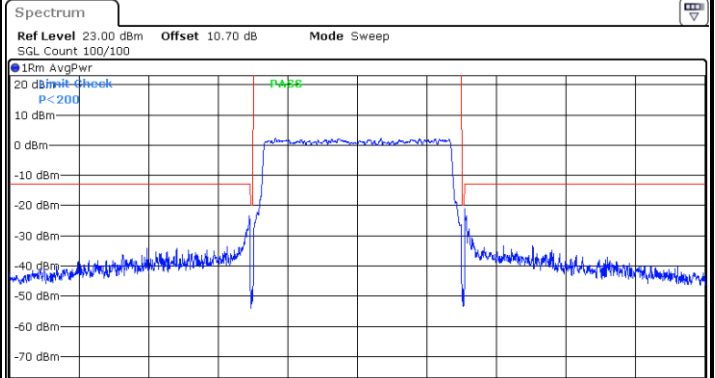
Lowest Band Edge / Full RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	ΔLimit
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel		
-5.000 MHz	-1.538 MHz	100.000 kHz	813.95089 MHz	-24.04 dBm	-44.27 dB	-11.04 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-46.70 dBm	-66.93 dB	-26.70 dB	
1.500 MHz	1.538 MHz	300.000 Hz	817.00089 MHz	-46.02 dBm	-66.23 dB	-26.02 dB	
1.538 MHz	5.000 MHz	100.000 kHz	817.06161 MHz	-24.82 dBm	-45.05 dB	-11.62 dB	

Date: 23.AUG.2022 22:39:54

Highest Band Edge / Full RB



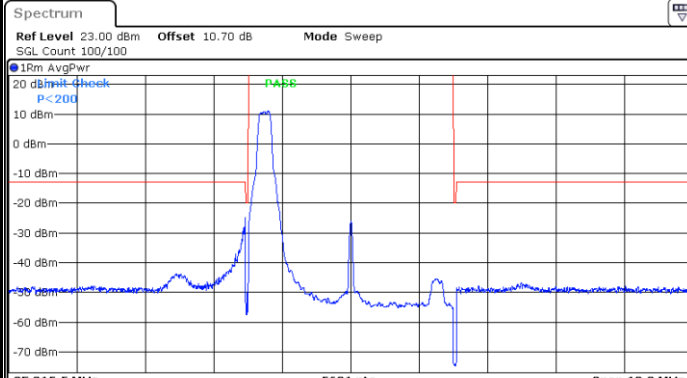
Spectrum Emission Mask		Standard: None		Tx Bandwidth 3.000 MHz		RBW 30.000 kHz	ΔLimit
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel		
-5.000 MHz	-1.538 MHz	100.000 kHz	820.94554 MHz	-23.47 dBm	-43.85 dB	-10.47 dB	
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99732 MHz	-46.78 dBm	-67.16 dB	-26.78 dB	
1.500 MHz	1.538 MHz	300.000 Hz	824.00268 MHz	-46.13 dBm	-66.51 dB	-26.13 dB	
1.538 MHz	5.000 MHz	100.000 kHz	824.03839 MHz	-20.97 dBm	-41.36 dB	-7.97 dB	

Date: 23.AUG.2022 22:42:01



LTE Band 26 / 3MHz / 256QAM

Lowest Band Edge / 1 RB

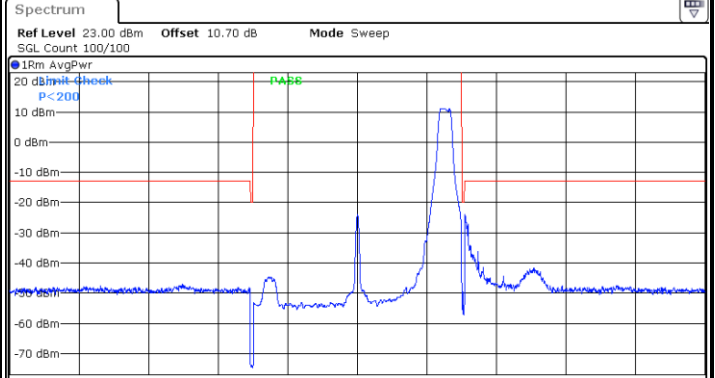


CF 815.5 MHz 5601 pts Span 10.0 MHz

Spectrum Emission Mask						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.96161 MHz	-24.86 dBm	-42.65 dB	-11.86 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-46.95 dBm	-64.74 dB	-26.95 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.03482 MHz	-73.92 dBm	-91.71 dB	-53.92 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.99018 MHz	-46.64 dBm	-64.43 dB	-33.64 dB

Date: 23.AUG.2022 23:35:14

Highest Band Edge / 1 RB

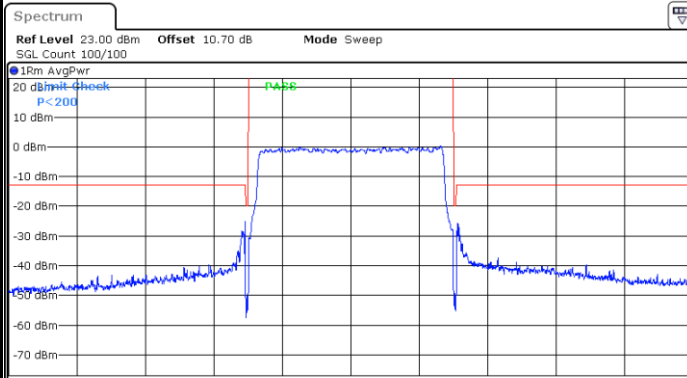


CF 822.5 MHz 5601 pts Span 10.0 MHz

Spectrum Emission Mask						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	819.98304 MHz	-46.90 dBm	-65.05 dB	-33.90 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.98482 MHz	-73.75 dBm	-91.89 dB	-53.75 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00268 MHz	-46.61 dBm	-64.75 dB	-26.61 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.04375 MHz	-24.03 dBm	-42.18 dB	-11.03 dB

Date: 23.AUG.2022 23:37:27

Lowest Band Edge / Full RB

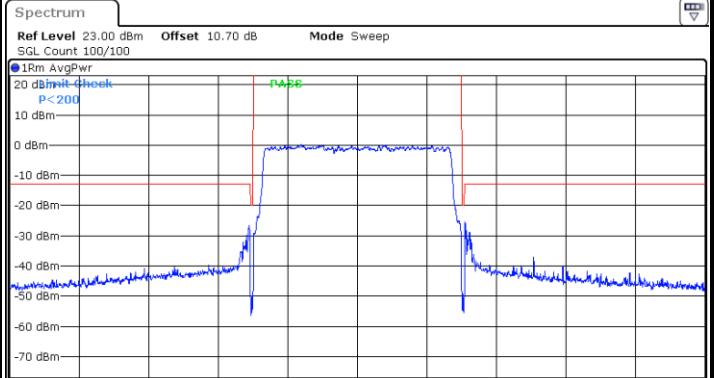


CF 815.5 MHz 5601 pts Span 10.0 MHz

Spectrum Emission Mask						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	813.96161 MHz	-25.00 dBm	-43.13 dB	-12.00 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99911 MHz	-49.21 dBm	-67.34 dB	-29.21 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00268 MHz	-48.54 dBm	-66.66 dB	-28.54 dB
1.538 MHz	5.000 MHz	100.000 kHz	817.06161 MHz	-25.68 dBm	-43.81 dB	-12.68 dB

Date: 23.AUG.2022 23:36:21

Highest Band Edge / Full RB



CF 822.5 MHz 5601 pts Span 10.0 MHz

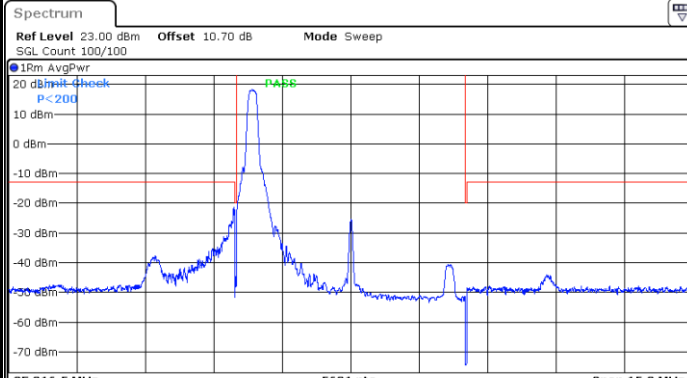
Spectrum Emission Mask						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-1.538 MHz	100.000 kHz	820.94375 MHz	-26.59 dBm	-44.76 dB	-13.59 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99911 MHz	-48.40 dBm	-66.56 dB	-28.40 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00089 MHz	-48.34 dBm	-66.51 dB	-28.34 dB
1.538 MHz	5.000 MHz	100.000 kHz	824.04911 MHz	-25.44 dBm	-43.61 dB	-12.44 dB

Date: 23.AUG.2022 23:38:33



LTE Band 26 / 5MHz / QPSK

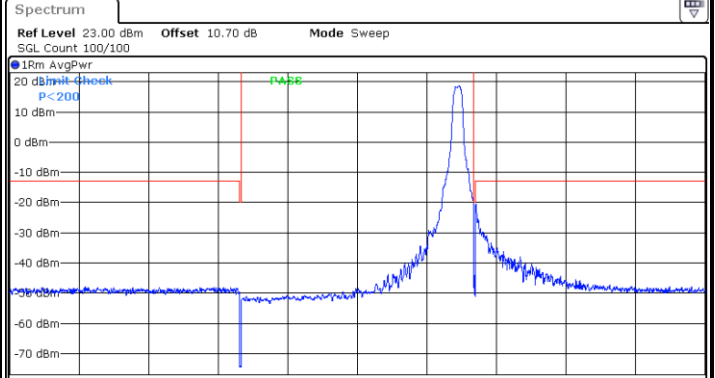
Lowest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-7.500 MHz	-2.538 MHz	100.000 kHz	813.93169 MHz	-21.40 dBm	-44.23 dB	-8.40 dB	
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99866 MHz	-41.50 dBm	-64.33 dB	-21.50 dB	
2.500 MHz	2.538 MHz	300.000 Hz	819.03616 MHz	-73.85 dBm	-96.68 dB	-53.85 dB	
2.538 MHz	7.500 MHz	100.000 kHz	820.79126 MHz	-44.12 dBm	-66.95 dB	-31.12 dB	

Date: 23.AUG.2022 22:12:02

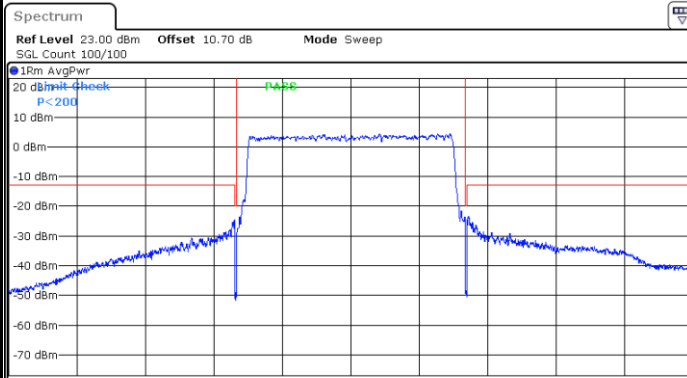
Highest Band Edge / 1 RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-7.500 MHz	-2.538 MHz	100.000 kHz	815.63586 MHz	-47.98 dBm	-71.07 dB	-34.98 dB	
-2.538 MHz	-2.500 MHz	300.000 Hz	818.97723 MHz	-74.01 dBm	-97.10 dB	-54.01 dB	
2.500 MHz	2.538 MHz	300.000 Hz	824.00134 MHz	-41.50 dBm	-64.59 dB	-21.50 dB	
2.538 MHz	7.500 MHz	100.000 kHz	824.05492 MHz	-20.44 dBm	-43.52 dB	-7.44 dB	

Date: 23.AUG.2022 22:16:14

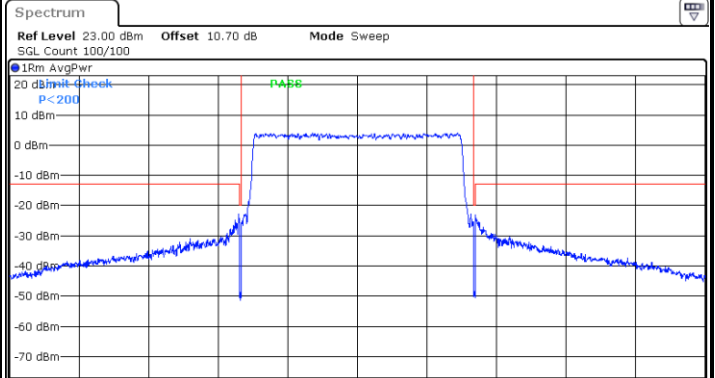
Lowest Band Edge / Full RB



Spectrum Emission Mask		Standard: None		Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-7.500 MHz	-2.538 MHz	100.000 kHz	813.94776 MHz	-24.58 dBm	-46.94 dB	-11.58 dB	
-2.538 MHz	-2.500 MHz	300.000 Hz	813.98795 MHz	-48.42 dBm	-70.78 dB	-28.42 dB	
2.500 MHz	2.538 MHz	300.000 Hz	819.00134 MHz	-47.66 dBm	-70.02 dB	-27.66 dB	
2.538 MHz	7.500 MHz	100.000 kHz	819.08439 MHz	-23.24 dBm	-45.60 dB	-10.24 dB	

Date: 23.AUG.2022 22:14:08

Highest Band Edge / Full RB



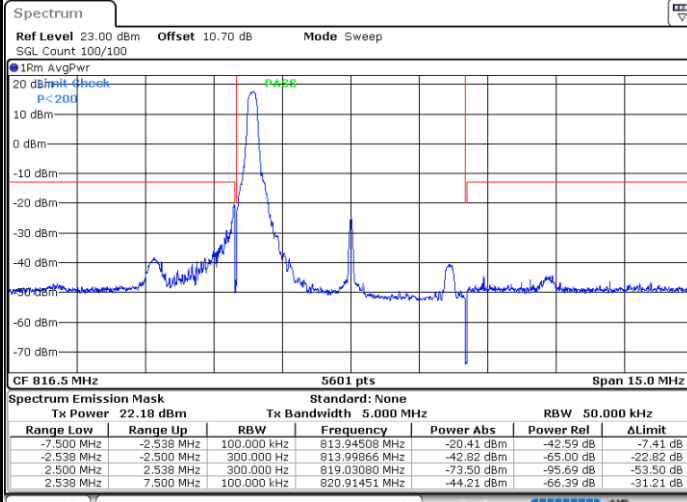
Spectrum Emission Mask		Standard: None		Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit	
-7.500 MHz	-2.538 MHz	100.000 kHz	818.94240 MHz	-22.89 dBm	-45.17 dB	-9.89 dB	
-2.538 MHz	-2.500 MHz	300.000 Hz	818.99866 MHz	-48.23 dBm	-70.51 dB	-28.23 dB	
2.500 MHz	2.538 MHz	300.000 Hz	824.00134 MHz	-47.89 dBm	-70.17 dB	-27.89 dB	
2.538 MHz	7.500 MHz	100.000 kHz	824.03884 MHz	-23.09 dBm	-45.37 dB	-10.09 dB	

Date: 23.AUG.2022 22:18:21



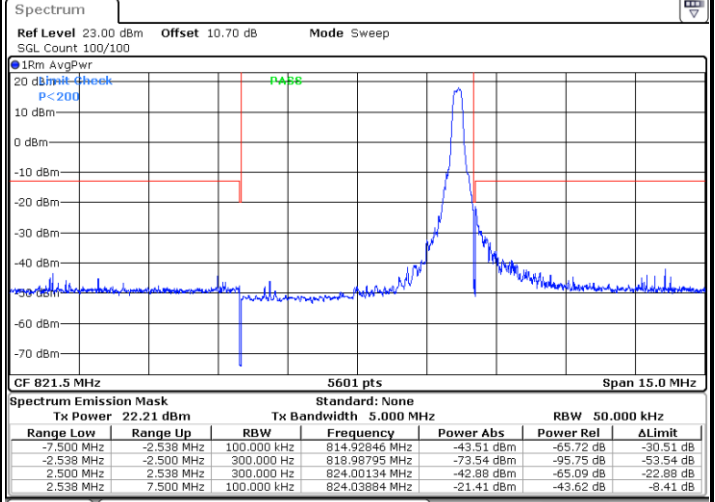
LTE Band 26 / 5MHz / 16QAM

Lowest Band Edge / 1RB



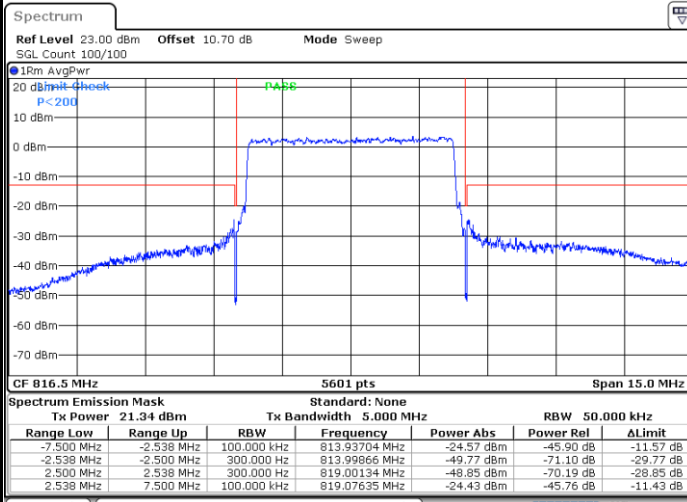
Date: 23.AUG.2022 22:13:05

Highest Band Edge / 1 RB



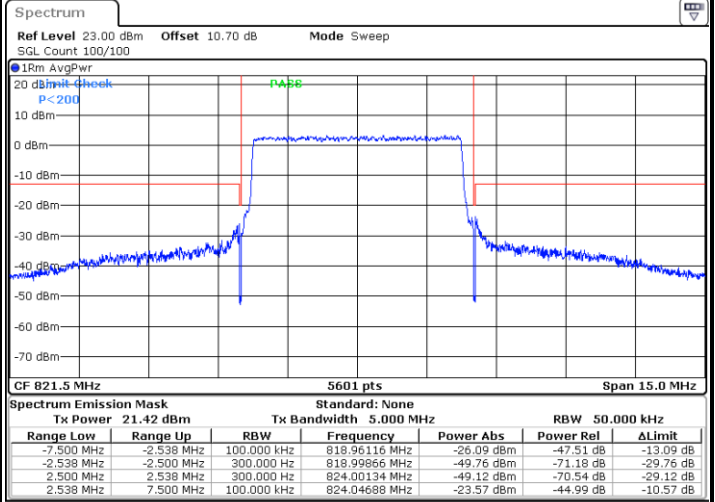
Date: 23.AUG.2022 22:17:17

Lowest Band Edge / Full RB



Date: 23.AUG.2022 22:15:11

Highest Band Edge / Full RB

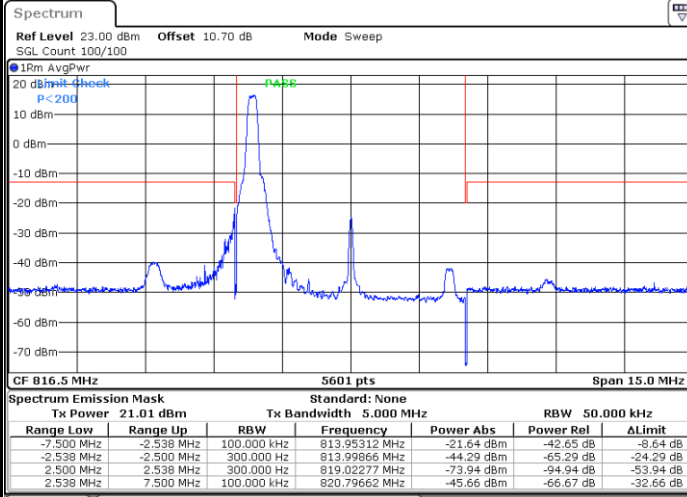


Date: 23.AUG.2022 22:19:23



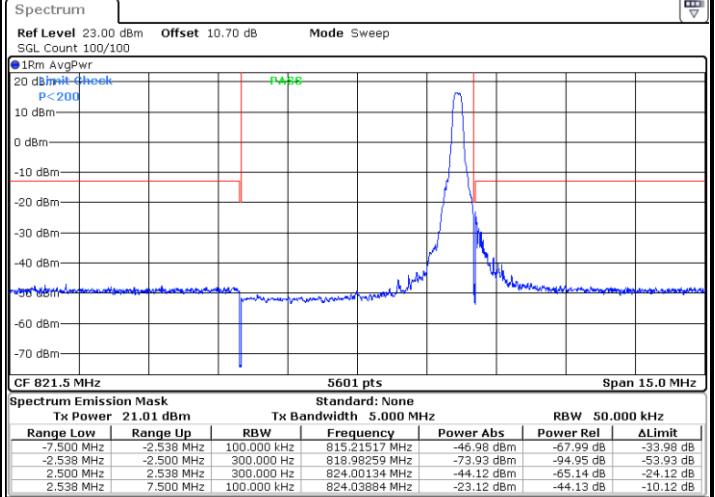
LTE Band 26 / 5MHz / 64QAM

Lowest Band Edge / 1RB



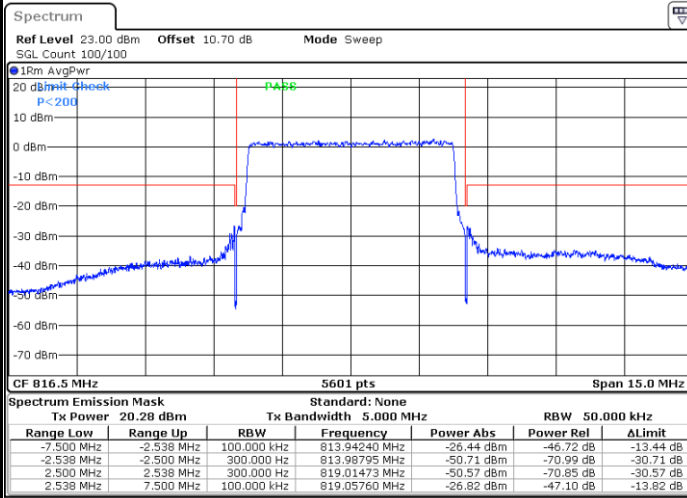
Date: 23.AUG.2022 22:43:09

Highest Band Edge / 1 RB



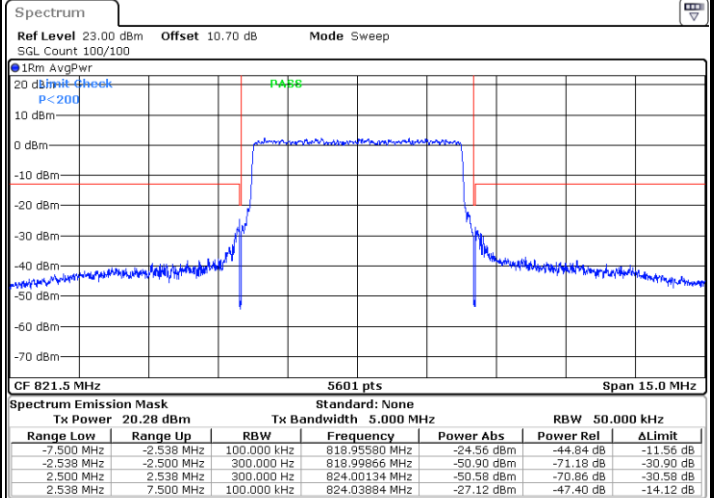
Date: 23.AUG.2022 22:45:15

Lowest Band Edge / Full RB



Date: 23.AUG.2022 22:44:11

Highest Band Edge / Full RB



Date: 23.AUG.2022 22:46:18