

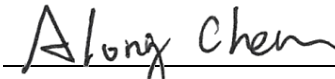
FCC Test Report

FCC ID : 2A7G3XS5G01
Equipment : 5G SOM
Model No. : XS5G01-GB0
(refer to item 1.1.1 for more details)
Brand Name : XSquare
Applicant : XSquare Communications Corporation
Address : NO.6 INNOVATION ROAD II, SCIENCE PARK,
HSINCHU 30076, TAIWAN, R.O.C
Standard : 47 CFR FCC Part 27
Received Date : Dec. 01, 2022
Tested Date : Dec. 23, 2022 ~ Feb. 09, 2023

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:


Along Chen / Assistant Manager

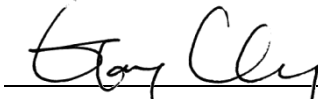

Gary Chang / Manager

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LTE BAND 12

APPENDIX A.1 TEST RESULTS FOR EFFECTIVE RADIATED POWER

APPENDIX B.1 TEST RESULTS FOR E RADIATED EMISSIONS

APPENDIX C.1 TEST RESULTS FOR OUT OF BAND EMISSIONS

APPENDIX C.2 TEST RESULTS FOR BAND EDGE

APPENDIX D.1 TEST RESULTS FOR OCCUPIED AND 26 dB BANDWIDTH

APPENDIX E.1 TEST RESULTS FOR PEAK TO AVERAGE POWER RATIO

APPENDIX F.1 TEST RESULTS FOR FREQUENCY STABILITY

LTE BAND 13

APPENDIX A.2 TEST RESULTS FOR EFFECTIVE RADIATED POWER

APPENDIX B.2 TEST RESULTS FOR E RADIATED EMISSIONS

APPENDIX C.3TEST RESULTS FOR OUT OF BAND EMISSIONS

APPENDIX C.4TEST RESULTS FOR BAND EDGE

APPENDIX D.2 TEST RESULTS FOR OCCUPIED AND 26 dB BANDWIDTH

APPENDIX E.2 TEST RESULTS FOR PEAK TO AVERAGE POWER RATIO

APPENDIX F.2 TEST RESULTS FOR FREQUENCY STABILITY

LTE BAND 17

APPENDIX A.3 TEST RESULTS FOR EFFECTIVE RADIATED POWER

Release Record

Report No.	Version	Description	Issued Date
FG132502-04P27H	Rev. 01	Initial issue	Apr. 18, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 27.50(b)(10) 27.50(c)(10) 27.50(d)(4)	Effective Radiated Power	LTE Band 12 Maximum ERP [dBm]: 19.92 LTE Band 13 Maximum ERP [dBm]: 20 LTE Band 17 Maximum ERP [dBm]: 19.91	Pass
2.1053 27.53(c) 27.53(g) 27.53(h)	Radiated Emissions	Meet the requirement of limit	Pass
2.1053 / 27.53(f)	Radiated Spurious Emission in the 1559-1610MHz band	Meet the requirement of limit	Pass
2.1051 27.53(c) 27.53(g) 27.53(h)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 27.53(c) 27.53(g) 27.53(h)	Band Edge	Meet the requirement of limit	Pass
2.1049 / 27.53(h)	Occupied Bandwidth	Meet the requirement of limit	Pass
2.1055 / 27.54	Frequency Stability	Meet the requirement of limit	Pass
27.50(d)(5)	Peak to Average Ratio	Meet the requirement of limit	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

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 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
XSquare	XS5G01-GB0	5G SOM	With GPS Component
	XS5G01-GBI		Without GPS Component
✦ The above models, model XS5G01-GB0 was selected as a representative one for the final test and only its data was recorded in this report.			

1.1.2 Specification of the Equipment under Test (EUT)

Operating Frequency	LTE Band 12 Channel Bandwidth: 1.4MHz: 699.7 MHz ~ 715.3 MHz Channel Bandwidth: 3MHz: 700.5 MHz ~ 714.5 MHz Channel Bandwidth: 5MHz: 701.5 MHz ~ 713.5 MHz Channel Bandwidth: 10MHz: 704 MHz ~ 711 MHz LTE Band 13 Channel Bandwidth: 5MHz: 779.5 ~ 784.5 MHz Channel Bandwidth: 10MHz: 782 MHz LTE Band 17 Channel Bandwidth: 5MHz: 706.5 ~ 713.5 MHz Channel Bandwidth: 10MHz: 709 ~ 711 MHz
Modulation	QPSK, 16QAM, 64QAM, 256QAM (Uplink) QPSK, 16QAM, 64QAM, 256QAM (Downlink)

1.1.3 Antenna Details

Brand	Model	Type	Connector	Gain (dBi)
Anjie	AELQ2S-B066L	Dipole	SMA	-0.7

1.1.4 Power Supply Type of Equipment under Test (EUT)

Supply Voltage	4 Vdc		
Operational Voltage	☒ Vnom (4 V)	☒ Vmax (4.2 V)	☒ Vmin (3.8 V)
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (70°C)	☒ Tmin (-30°C)

1.1.5 Accessories

N/A

1.1.6 Maximum Conducted Power and Emission Designator

LTE Band 12			
Channel Bandwidth	Modulation	Maximum Conducted Power (W)	Emission Designator
1.4 MHz	QPSK	0.188	1M09G7D
1.4 MHz	16QAM	0.154	1M09W7D
1.4 MHz	64QAM	0.129	1M09W7D
1.4 MHz	256QAM	0.065	1M08W7D
3 MHz	QPSK	0.187	2M68G7D
3 MHz	16QAM	0.153	2M68W7D
3 MHz	64QAM	0.129	2M68W7D
3 MHz	256QAM	0.065	2M68W7D
5 MHz	QPSK	0.187	4M47G7D
5 MHz	16QAM	0.155	4M47W7D
5 MHz	64QAM	0.129	4M48W7D
5 MHz	256QAM	0.064	4M47W7D
10 MHz	QPSK	0.189	8M94G7D
10 MHz	16QAM	0.154	8M92W7D
10 MHz	64QAM	0.130	8M93W7D
10 MHz	256QAM	0.064	8M94W7D

LTE Band 13			
Channel Bandwidth	Modulation	Maximum Conducted Power (W)	Emission Designator
5 MHz	QPSK	0.193	4M47G7D
5 MHz	16QAM	0.158	4M47W7D
5 MHz	64QAM	0.127	4M47W7D
5 MHz	256QAM	0.066	4M47W7D
10 MHz	QPSK	0.191	8M93G7D
10 MHz	16QAM	0.156	8M91W7D
10 MHz	64QAM	0.118	8M94W7D
10 MHz	256QAM	0.061	8M93W7D

LTE Band 17			
Channel Bandwidth	Modulation	Maximum Conducted Power (W)	Emission Designator
5 MHz	QPSK	0.188	4M47G7D
5 MHz	16QAM	0.154	4M47W7D
5 MHz	64QAM	0.127	4M48W7D
5 MHz	256QAM	0.067	4M47W7D
10 MHz	QPSK	0.189	8M94G7D
10 MHz	16QAM	0.156	8M92W7D
10 MHz	64QAM	0.127	8M93W7D
10 MHz	256QAM	0.063	8M94W7D

1.1.7 Operating Channel List

LTE Band 12		
Channel Bandwidth (MHz)	Channel	Frequency (MHz)
1.4	23017	699.7
1.4	23095	707.5
1.4	23173	715.3
3	23025	700.5
3	23095	707.5
3	23165	714.5
5	23035	701.5
5	23095	707.5
5	23155	713.5
10	23060	704.0
10	23095	707.5
10	23130	711.0

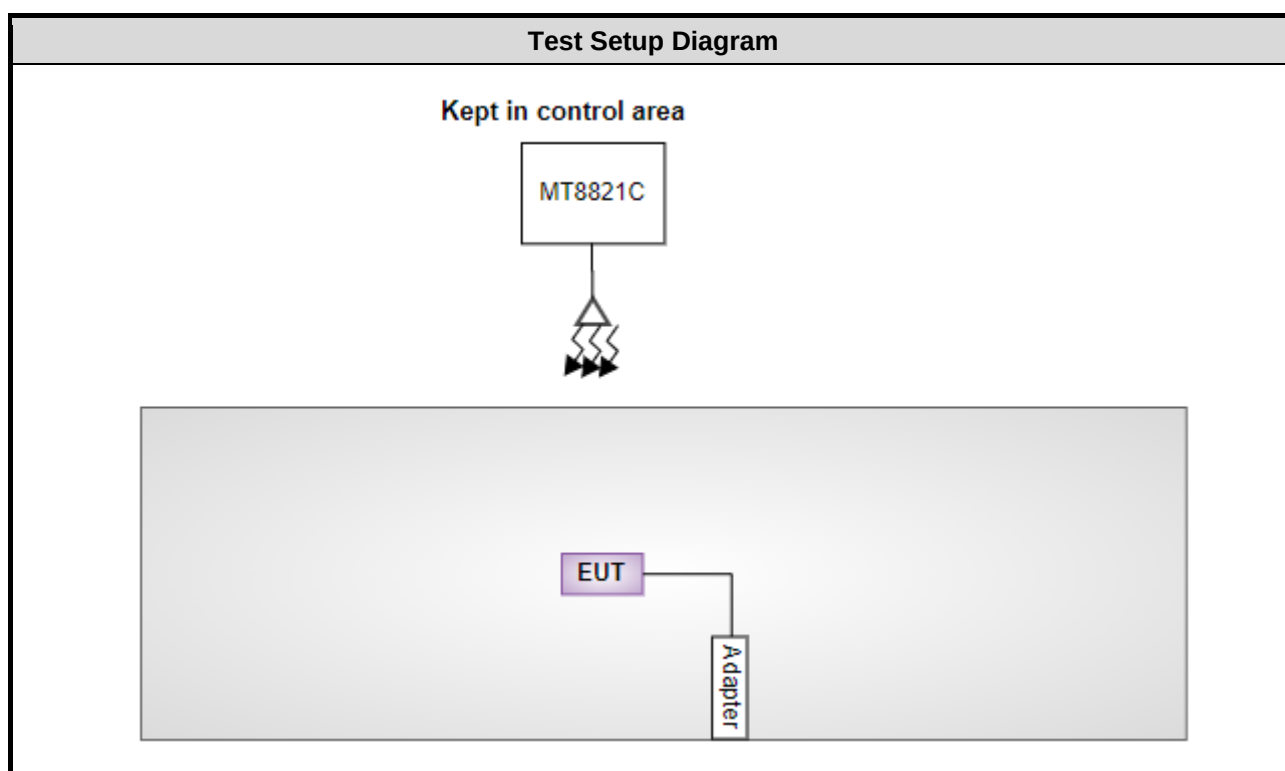
LTE Band 13		
Channel Bandwidth (MHz)	Channel	Frequency (MHz)
5	23205	779.5
5	23230	782.0
5	23255	784.5
10	23230	782.0

LTE Band 17		
Channel Bandwidth (MHz)	Channel	Frequency (MHz)
5	23755	706.5
5	23790	710
5	23825	713.5
10	23780	709
10	23790	710
10	23800	711

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Adapter	APD	WY-36C12FU	---	Provided by applicant.

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Feb. 06 ~ Feb. 09, 2023				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 03, 2022	Aug. 02, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 25, 2022	Nov. 24, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2022	Jun. 27, 2023
Preamplifier	EMC	EMC118A45SE	980898	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 04, 2022	Oct. 03, 2023
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 04, 2022	Oct. 03, 2023
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M- 8000	210920	Oct. 04, 2022	Oct. 03, 2023
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 04, 2022	Oct. 03, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Radio Communication Analyzer	Anritsu	MT8821C	6262149999	Sep. 12, 2022	Sep. 11, 2023
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 23, 2022 ~ Feb. 09, 2023				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101910	Apr. 08, 2022	Apr. 07, 2023
Spectrum Analyzer	Keysight	N9010A	MY54510374	Aug. 26, 2022	Aug. 25, 2023
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Jun. 22, 2022	Jun. 21, 2023
DC POWER SOURCE	GW INSTRON	GPC-6030D	GES855395	Oct. 31, 2022	Oct. 30, 2023
Measurement Software	Sporton	SENSE-FCC_2G-4G	V6.1.6	NA	NA
Radio Communication Analyzer	Anritsu	MT8821C	6262149999	Sep. 12, 2022	Sep. 11, 2023
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 27
ANSI C63.26-2015

1.6 Reference Guidance

FCC KDB 412172 D01 Determining ERP and EIRP v01r01
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.130 Hz
Conducted power	± 0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Conducted emission	± 2.715 dB
Radiated emission ≤ 1 GHz	± 3.41 dB
Radiated emission > 1 GHz	± 4.59 dB
Temperature	± 0.4 °C

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
Radiated Emissions	03CH01-WS	23-24°C / 65-66%	Brad Wu
RF Conducted	TH01-WS	23-25°C / 62-66%	Roger Lu

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISSED#: 10807A
- CAB identifier: TW2732

2.2 Testing Facility

Test Laboratory	International Certification Corp.
Test Site	03CH01-WS, TH01-WS
Address of Test Site	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 33381, Taiwan, R.O.C.

2.3 The Worst Test Modes and Channel Details

Test items	Band	Bandwidth(MHz)						Modulation				RB#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
peak-to-Average Ratio	12				v	-	-	v	v	v	v			v		v	
	13	-	-		v	-	-	v	v	v	v			v		v	
	17	Covered by LTE Band12															
26dB and 99% Bandwidth	12	v	v	v	v	-	-	v	v	v	v			v		v	
	13	-	-	v	v	-	-	v	v	v	v			v		v	
	17	Covered by LTE Band12															
Conducted Band edge	12	v	v	v	v	-	-	v	v	v	v	v		v	v		v
	13	-	-	v	v	-	-	v	v	v	v	v		v	v		v
	17	Covered by LTE Band12															
Conducted Spurious Emission	12	v	v	v	v	-	-	v				v			v	v	v
	13	-	-	v	v	-	-	v				v			v	v	v
	17	Covered by LTE Band12															
Frequency Stability	12				v	-	-	v						v		v	
	13	-	-		v	-	-	v						v		v	
	17	Covered by LTE Band12															
E.R.P	12	v	v	v	v	-	-	v	v	v	v	Max. power					
	13	-	-	v	v	-	-	v	v	v	v						
	17	-	-	v	v	-	-	v	v	v	v						
Radiated Spurious Emission	12	Worst Case													v	v	v
	13	Worst Case													v	v	v
	17	Covered by LTE Band12													v	v	v
Remark	1. "v": this configuration is for testing. 2. "-" :This bandwidth is not supported. 3. Frequency range of radiated measurement is from 30 MHz to 10th harmonic of fundamental frequency. 4. All spurious emissions below 1000 MHz are more than 20 dB below the limit. 5. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Z-plane results were found as the worst case and were shown in this report.																

3 Test Results

3.1 Effective Radiated Power

3.1.1 Limit of Effective Radiated Power

Portable stations (hand-held devices) are limited to 3 watts ERP.

3.1.2 Test Procedures

For E.R.P measurement

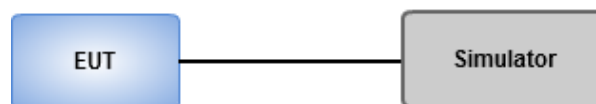
ERP can be calculated by below formula from KDB 412172 D01.

1. $EIRP = P_T + G_T - L_C$
 P_T = transmitter output power, in dBm.
 G_T = gain of the transmitting antenna, in dBi (EIRP).
 L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.
2. $ERP = EIRP - 2.15 \text{ dB}$.

For Conducted power measurement

1. The EUT links up with simulator and is set to maximum output power level at low / middel / high channel.
2. Measure the output power of low / middle / high channel of the EUT

3.1.3 Test Setup



3.1.4 Test Result of Effective Radiated Power and Conducted Power (dBm)

Refer to Appendix A1, A2, A3.

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

LTE Band 12 /13 / 17

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

LTE Band 13

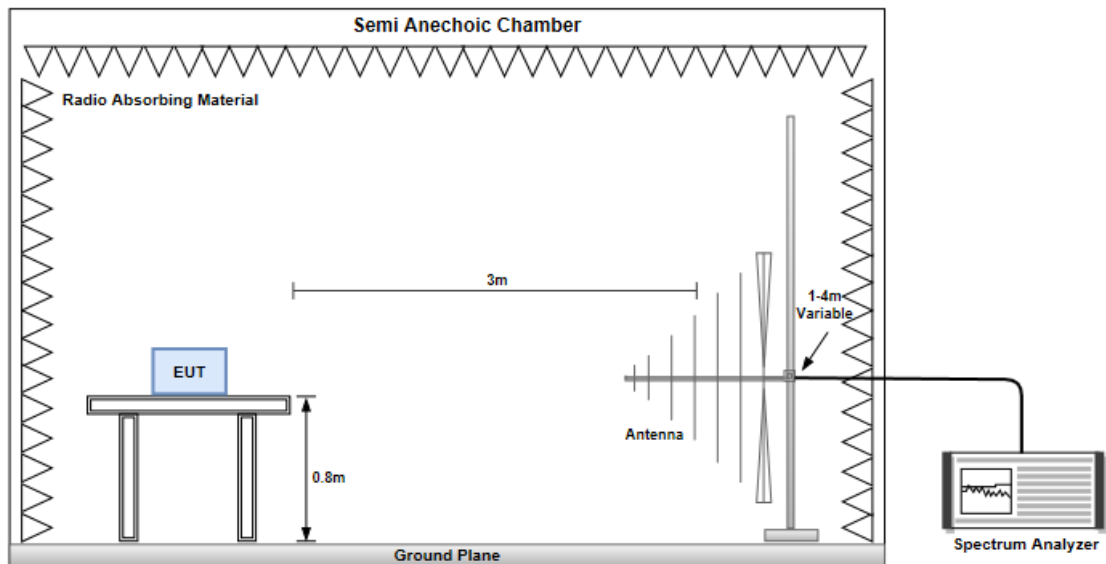
For operations in the 775-788 MHz emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

3.2.2 Test Procedures

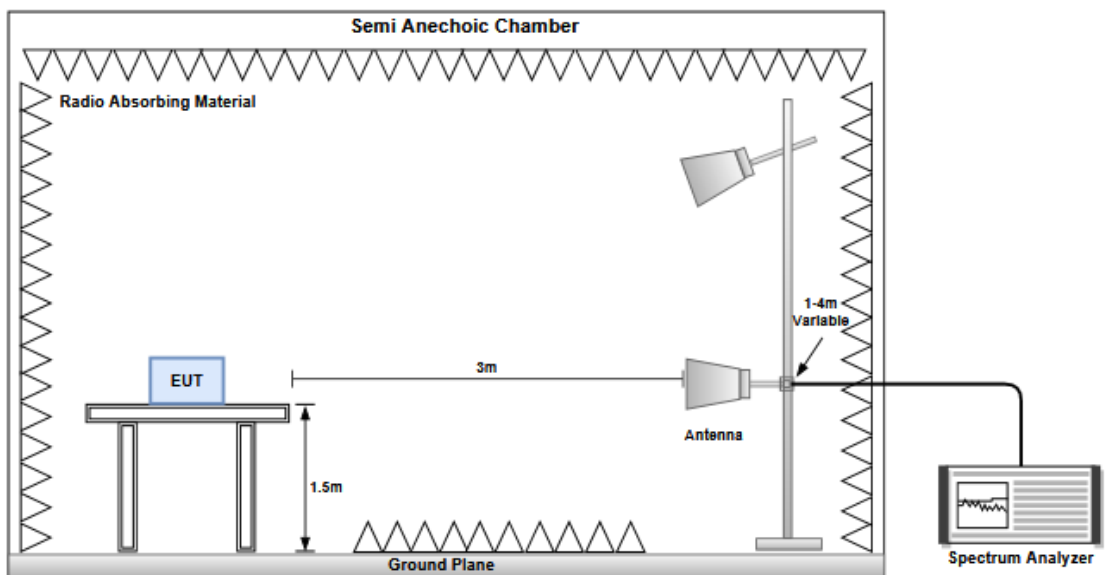
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
$$E.R.P = E.I.R.P - 2.15dB.$$

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions below 1GHz

Refer to Appendix B1, B2.

3.3 Out of Band Emissions& Band Edge

3.3.1 Limit of Out of Band Emissions& Band Edge

LTE Band 12 / 13 / 17

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

LTE Band 13

On all frequencies between 763 ~ 775 MHz and 793 ~ 805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

3.3.2 Test Procedures

Out of band emission

1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30 MHz ~ 10 GHz.
3. Set RBW = 100 kHz, VBW = 300kHz, detector = RMS, sweep time = auto.
4. Record the max trace value and capture the test plot of each sub frequency band.

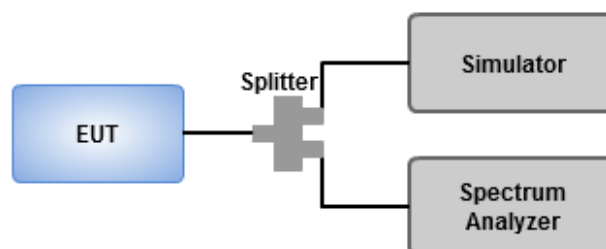
Band edge

1. Lowest and highest operating channels are tested for this item.
2. Set RBW = 1% of EBW, VBW = 3 x RBW, detector = RMS, sweep time = auto.
3. Record the max trace value and capture the test plot of each sub frequency band.

763 ~ 775 MHz / 793 ~ 805 MHz

1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 763 MHz ~ 806 MHz.
3. Set RBW = 10 kHz, VBW = 30 kHz, detector = rms, sweep time = auto.

3.3.3 Test Setup



3.3.4 Test Result of Out of Band Emissions & Band Edge

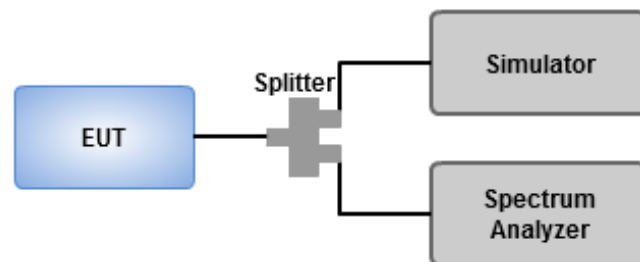
Refer to Appendix C.1, C.2, C3, C4.

3.4 Occupied Bandwidth and 26dB Bandwidth

3.4.1 Test Procedures

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Using occupied bandwidth measurement function of spectrum analyzer to measure occupied bandwidth
5. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 26dB relative to the maximum level measured in the fundamental emission.

3.4.2 Test Setup



3.4.3 Test Result of Occupied and 26 dB Bandwidth

Refer to Appendix D.1, D.2.

3.5 Peak to Average Power Ratio

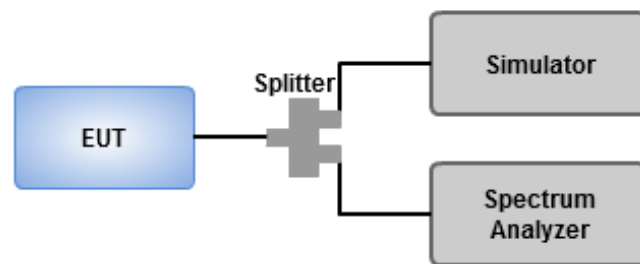
3.5.1 Limit of Peak to Average Power Ratio

The Peak-to-average power ratio of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Set the measurement interval to 1 ms.
4. Record the maximum PAPR level associated with a probability of 0.1%.

3.5.3 Test Setup



3.5.4 Test Result of Peak to Average Power Ratio

Refer to Appendix E.1, E.2.

3.6 Frequency Stability

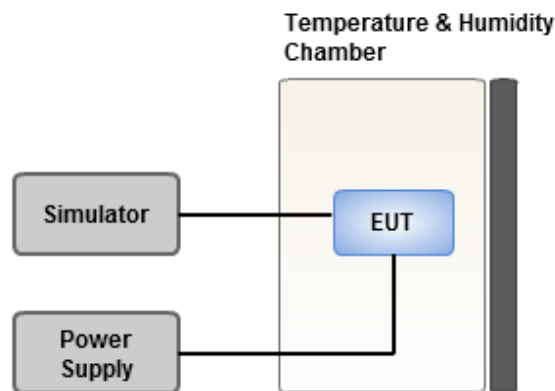
3.6.1 Limit of Frequency Stability

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation

3.6.2 Test Procedures

1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. The test shall be performed under normal and extreme condition for temperature and voltage.
4. Link up EUT and simulator. Confirm frequency drift value of simulator and record it.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Refer to Appendix F.1, F.2.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan
(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
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If you have any suggestion, please feel free to contact us as below information.

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==END==

Summary

Part27H LTE Band 12 Maximum Average Power [dBm](GT-LC= -0.7 dB)								
BW (MHz)	Modulation	RB Size	RB Offset	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
Channel				23060	23095	23130		
Frequency				704	707.5	711		
10	QPSK	1	0	22.77	22.68	22.75	19.92	0.0982
10	QPSK	1	49	22.69	22.67	22.71		
10	QPSK	50	0	21.83	21.79	21.75		
10	16QAM	1	0	21.88	21.81	21.86	19.03	0.0800
10	64QAM	1	0	21.14	20.86	20.97	18.29	0.0675
10	256QAM	1	0	18.01	18.03	18.05	15.2	0.0331
Channel				23035	23095	23155	ERP (dBm)	ERP (W)
Frequency				701.5	707.5	713.5		
5	QPSK	1	0	22.69	22.72	22.72	19.87	0.0971
5	QPSK	1	24	22.67	22.71	22.63		
5	QPSK	25	0	21.82	21.79	21.81		
5	16QAM	1	0	21.89	21.85	21.88	19.04	0.0802
5	64QAM	1	0	21.1	20.83	21.09	18.25	0.0668
5	256QAM	1	0	18.01	18.02	18.06	15.21	0.0332
Channel				23025	23095	23165	ERP (dBm)	ERP (W)
Frequency				700.5	707.5	714.5		
3	QPSK	1	0	22.71	22.7	22.68	19.86	0.0968
3	QPSK	1	14	22.68	22.65	22.61		
3	QPSK	15	0	21.71	21.74	21.76		
3	16QAM	1	0	21.85	21.82	21.81	19	0.0794
3	64QAM	1	0	21.09	21.06	20.93	18.24	0.0667
3	256QAM	1	0	18.02	18.11	18.01	15.26	0.0336



Channel				23017	23095	23173	ERP (dBm)	ERP (W)
Frequency				699.7	707.5	715.3		
1.4	QPSK	1	0	22.71	22.74	22.65	19.89	0.0975
1.4	QPSK	1	5	22.64	22.7	22.62		
1.4	QPSK	6	0	21.75	21.85	21.73		
1.4	16QAM	1	0	21.86	21.88	21.8	19.03	0.0800
1.4	64QAM	1	0	21.1	20.91	20.84	18.25	0.0668
1.4	256QAM	1	0	18.08	18.13	18.02	15.28	0.0337
Limit	ERP < 3 W			Result			Pass	



Summary

Part27F LTE Band 13 MaxiMum Average Power [dBm](GT-LC= -0.7 dB)								
BW (MHz)	Modulation	RB Size	RB Offset	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
Channel					23230			
Frequency					782			
10	QPSK	1	0		22.8		19.95	0.0989
10	QPSK	1	49		22.7			
10	QPSK	50	0		21.74			
10	16QAM	1	0		21.92		19.07	0.0807
10	64QAM	1	0		20.71		17.86	0.0611
10	256QAM	1	0		17.82		14.97	0.0314
Channel				23205	23230	23255	ERP (dBm)	ERP (W)
Frequency				779.5	782	784.5		
5	QPSK	1	0	22.85	22.85	22.84	20	0.1000
5	QPSK	1	24	22.7	22.77	22.81		
5	QPSK	25	0	21.71	21.79	21.75		
5	16QAM	1	0	21.95	21.99	21.93	19.14	0.0820
5	64QAM	1	0	20.89	20.85	21.04	18.19	0.0659
5	256QAM	1	0	18.21	17.67	17.95	15.36	0.0344
Limit	ERP < 3 W			Result			Pass	

Summary

Part27H LTE Band 17 MaxiMum Average Power [dBm](GT-LC= -0.7 dB)								
BW (MHz)	Modulation	RB Size	RB Offset	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
Channel				23780	23790	23800		
Frequency				709	710	711		
10	QPSK	1	0	22.73	22.76	22.72	19.91	0.0979
10	QPSK	1	49	22.67	22.73	22.65		
10	QPSK	50	0	21.79	21.79	21.82		
10	16QAM	1	0	21.9	21.92	21.91	19.07	0.0807
10	64QAM	1	0	20.96	21.03	20.93	18.18	0.0658
10	256QAM	1	0	18.02	17.93	18.02	15.17	0.0329
Channel				23755	23790	23825	ERP (dBm)	ERP (W)
Frequency				706.5	710	713.5		
5	QPSK	1	0	22.73	22.74	22.73	19.89	0.0975
5	QPSK	1	24	22.7	22.73	22.69		
5	QPSK	25	0	21.79	21.77	21.76		
5	16QAM	1	0	21.86	21.85	21.88	19.03	0.0800
5	64QAM	1	0	20.97	21.02	21.04	18.19	0.0659
5	256QAM	1	0	18.12	18.02	18.24	15.39	0.0346
Limit	ERP < 3 W			Result			Pass	

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB, Channel: 23060						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1399.2	H	-69.11	-13	-56.11	-71.57	-70.08	3.12
2098.8	H	-68.82	-13	-55.82	-72.53	-71.68	5.01
2798.4	H	-66.29	-13	-53.29	-72.28	-69.97	5.83
1399.2	V	-69.42	-13	-56.42	-71.51	-70.39	3.12
2098.8	V	-68.55	-13	-55.55	-72.47	-71.41	5.01
2798.4	V	-66.29	-13	-53.29	-72.21	-69.97	5.83

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB, Channel: 23095						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1406.2	H	-69.7	-13	-56.7	-72.15	-70.73	3.18
2109.3	H	-68.43	-13	-55.43	-72.24	-71.22	4.94
2812.4	H	-66.15	-13	-53.15	-72.16	-69.82	5.82
1406.2	V	-69.76	-13	-56.76	-71.86	-70.79	3.18
2109.3	V	-68.23	-13	-55.23	-72.26	-71.02	4.94
2812.4	V	-66.37	-13	-53.37	-72.32	-70.04	5.82

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB, Channel: 23130						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1413.2	H	-69.28	-13	-56.28	-71.71	-70.39	3.26
2119.8	H	-68.24	-13	-55.24	-72.14	-70.96	4.87
2826.4	H	-66.24	-13	-53.24	-72.26	-69.91	5.82
1413.2	V	-69.61	-13	-56.61	-71.71	-70.72	3.26
2119.8	V	-67.9	-13	-54.9	-72.05	-70.62	4.87
2826.4	V	-66.09	-13	-53.09	-72.05	-69.76	5.82

NOTE: ERP = S.G power value + correction factor – 2.15 dBi

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23205						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2331.9	H	-67.73	-13	-54.73	-72.56	-70.61	5.03
3109.2	H	-65.89	-13	-52.89	-72.36	-69.6	5.86
3886.5	H	-64.64	-13	-51.64	-72.11	-68.8	6.31
2331.9	V	-67.72	-13	-54.72	-72.46	-70.6	5.03
3109.2	V	-65.74	-13	-52.74	-72.22	-69.45	5.86
3886.5	V	-64.52	-13	-51.52	-72.01	-68.68	6.31

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2339.4	H	-67.61	-13	-54.61	-72.44	-70.53	5.07
3119.2	H	-65.88	-13	-52.88	-72.38	-69.6	5.87
3899	H	-64.52	-13	-51.52	-72	-68.67	6.3
2339.4	V	-67.63	-13	-54.63	-72.35	-70.55	5.07
3119.2	V	-65.93	-13	-52.93	-72.44	-69.65	5.87
3899	V	-64.49	-13	-51.49	-71.98	-68.64	6.3

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.9	H	-67.56	-13	-54.56	-72.41	-70.52	5.11
3129.2	H	-65.62	-13	-52.62	-72.17	-69.35	5.88
3911.5	H	-64.47	-13	-51.47	-71.95	-68.61	6.29
2346.9	V	-67.83	-13	-54.83	-72.54	-70.79	5.11
3129.2	V	-65.7	-13	-52.7	-72.25	-69.43	5.88
3911.5	V	-64.47	-13	-51.47	-71.96	-68.61	6.29

NOTE: ERP = S.G power value + correction factor – 2.15 dBi

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23205						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1554.6	H	-68.11	-40	-28.11	-72.36	-72.83	4.72
1554.6	V	-68.16	-40	-28.16	-72.56	-72.88	4.72

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1559.6	H	-67.75	-40	-27.75	-71.98	-72.52	4.77
1559.6	V	-67.74	-40	-27.74	-72.14	-72.51	4.77

Mode	LTE Band 13, QPSK, CB:5 MHz, 1 RB, Channel: 23255						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.6	H	-68.13	-40	-28.13	-72.36	-72.95	4.82
1564.6	V	-68.04	-40	-28.04	-72.45	-72.86	4.82

NOTE: EIRP = S.G power value + correction factor



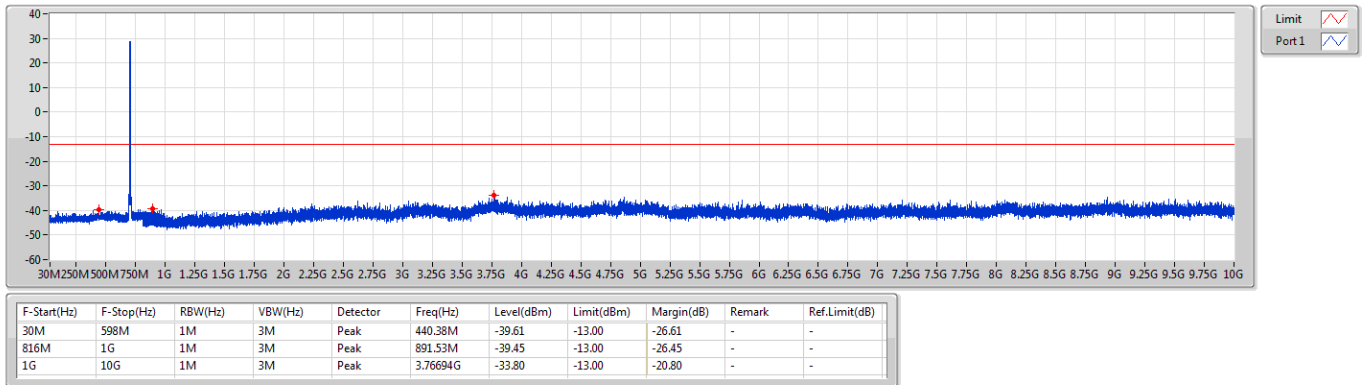
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 12	-	-	-	-	-	-	-	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.76694G	-33.80	-13.00	-20.80	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.75991G	-33.98	-13.00	-20.98	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.71744G	-34.63	-13.00	-21.63	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.83641G	-34.48	-13.00	-21.48	-	-



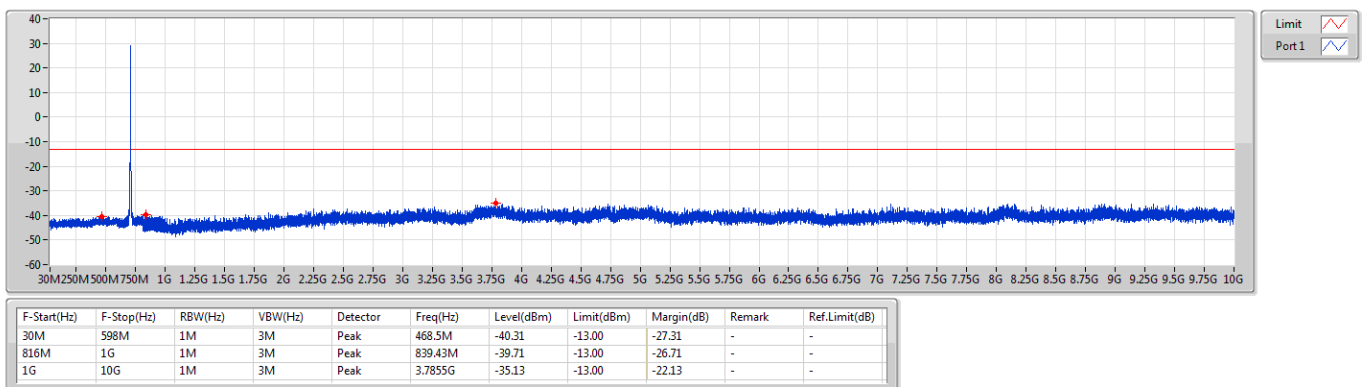
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CSE-TX-Sum



Band 12_LTE_10MHz_Nss1,QPSK_1TX
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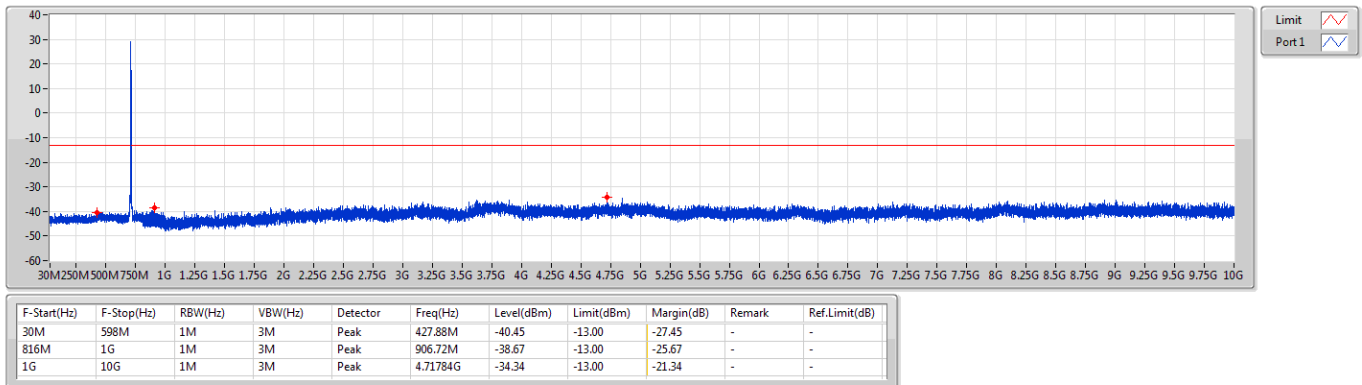
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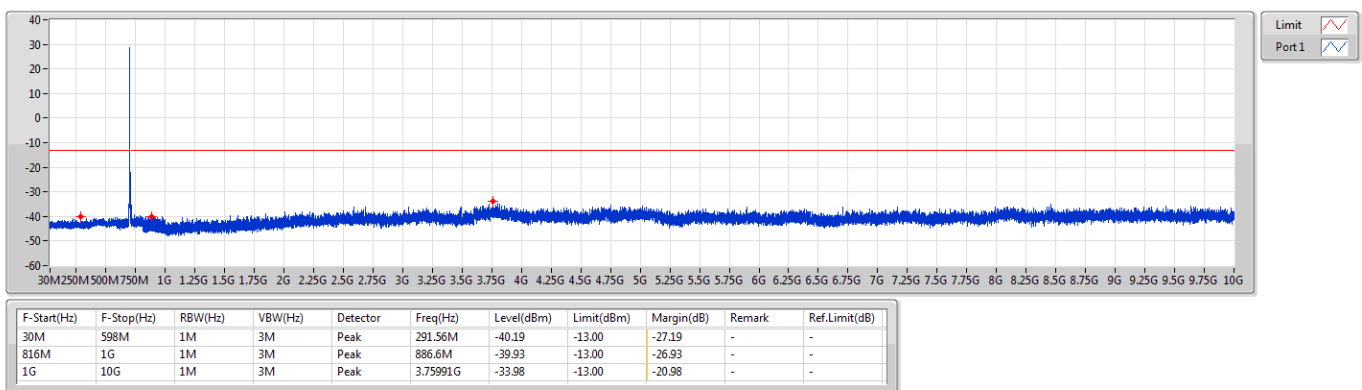
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CSE-TX-Sum



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CSE-TX-Sum

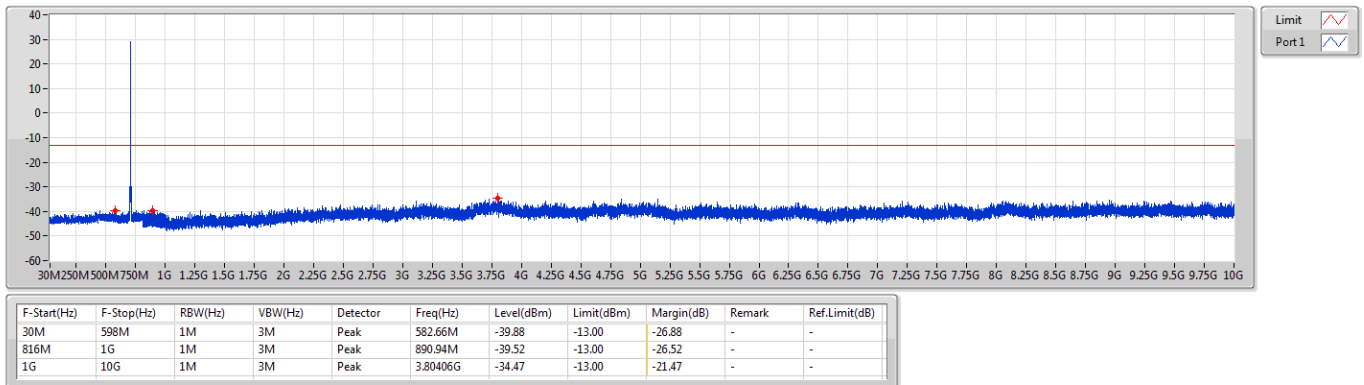




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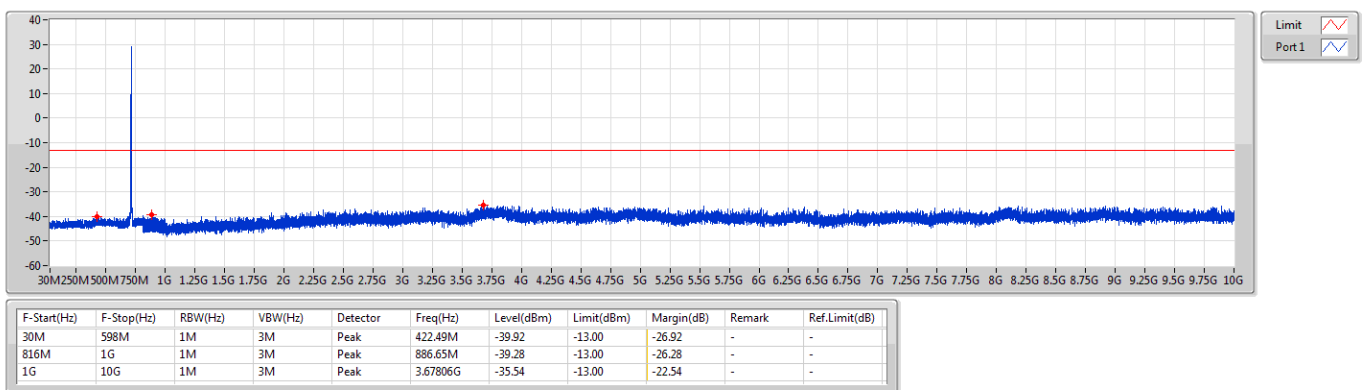
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Band 12_LTE_5MHz_Nss1,QPSK_1TX

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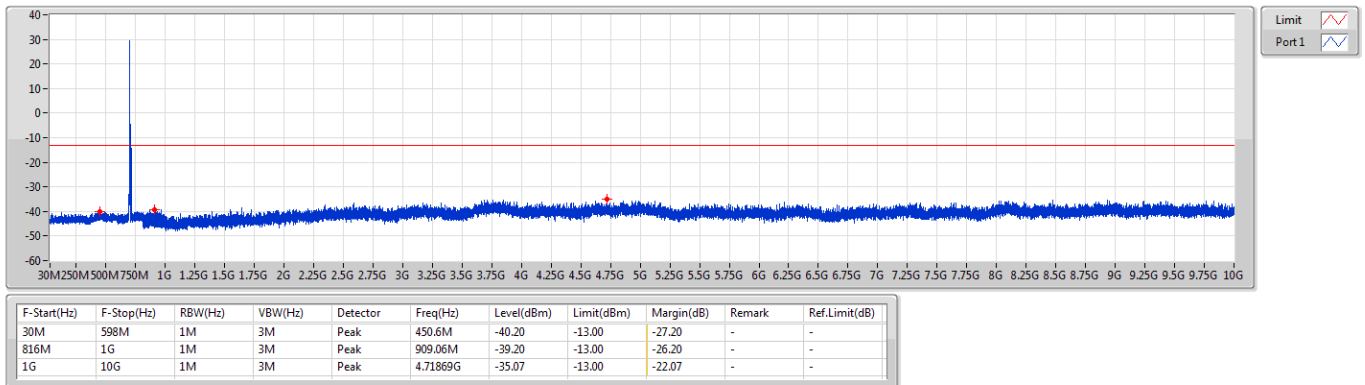
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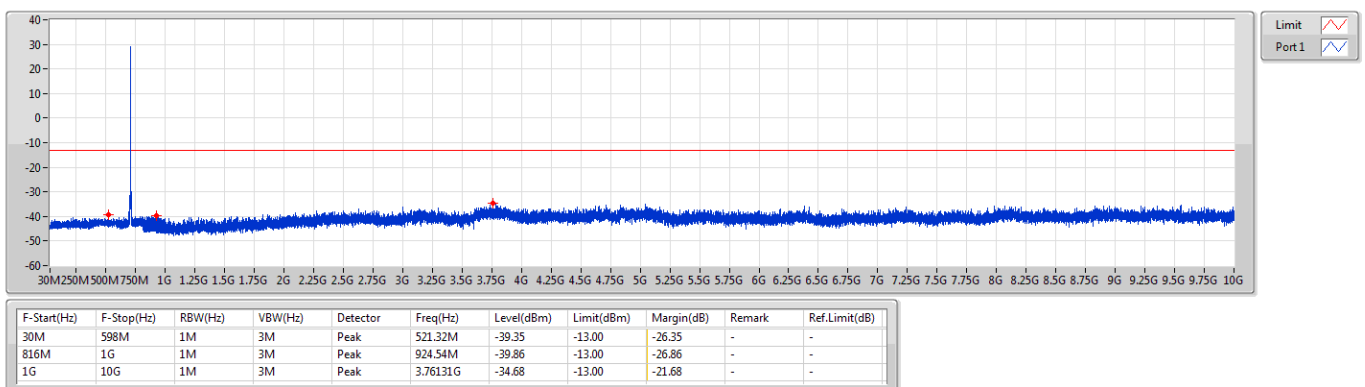
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Band 12_LTE_3MHz_Nss1,QPSK_1TX

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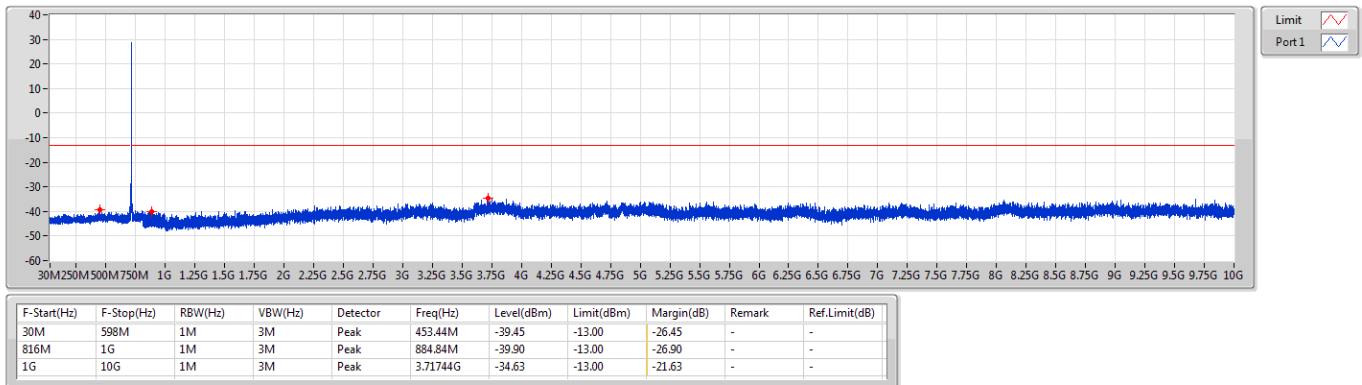




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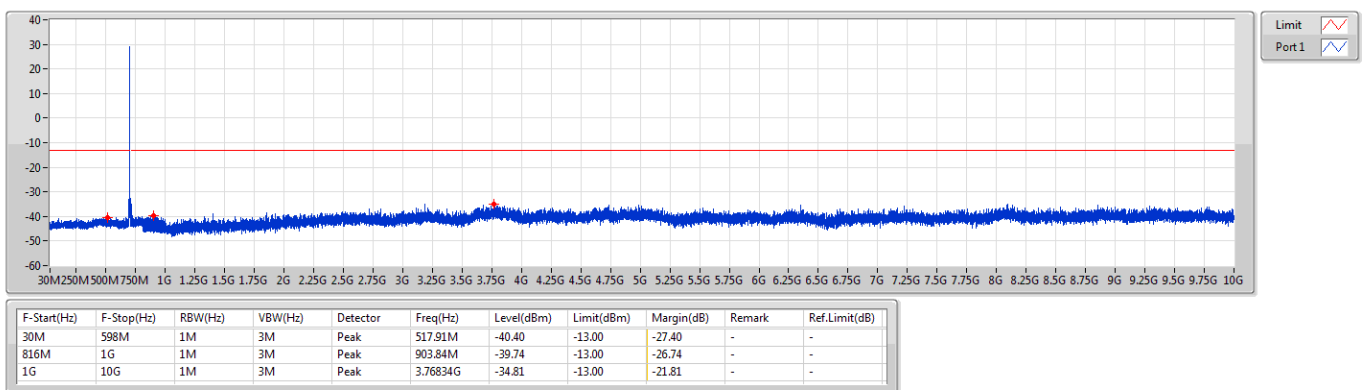
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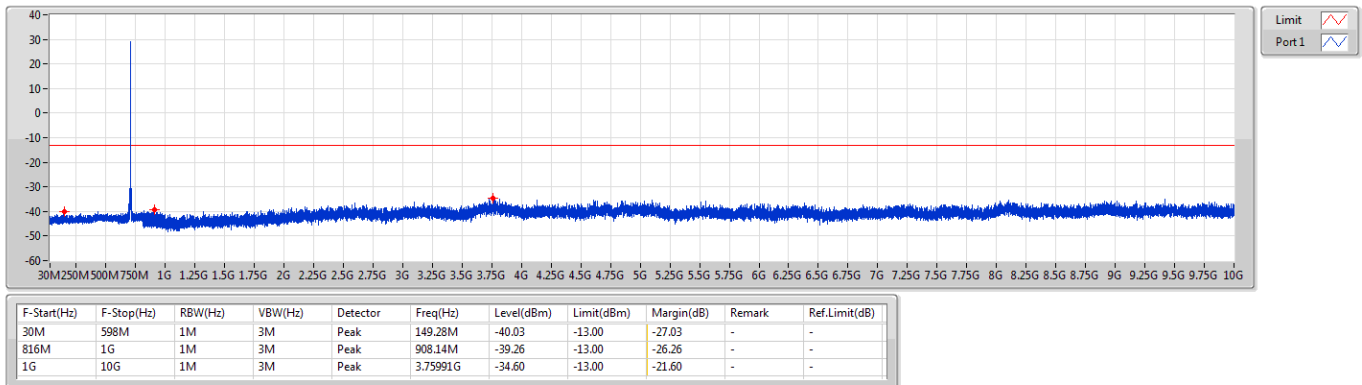
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Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

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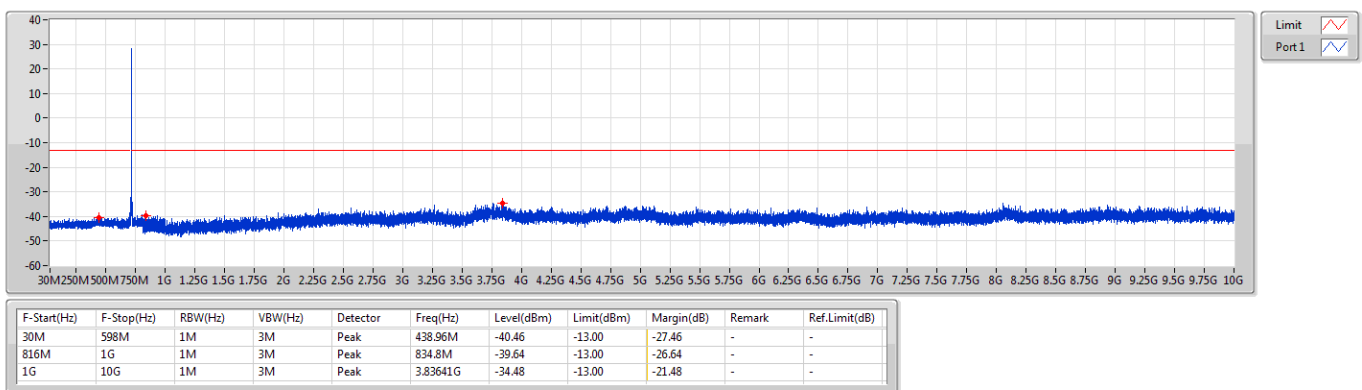
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Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

715.3MHz_QPSK_RB 1

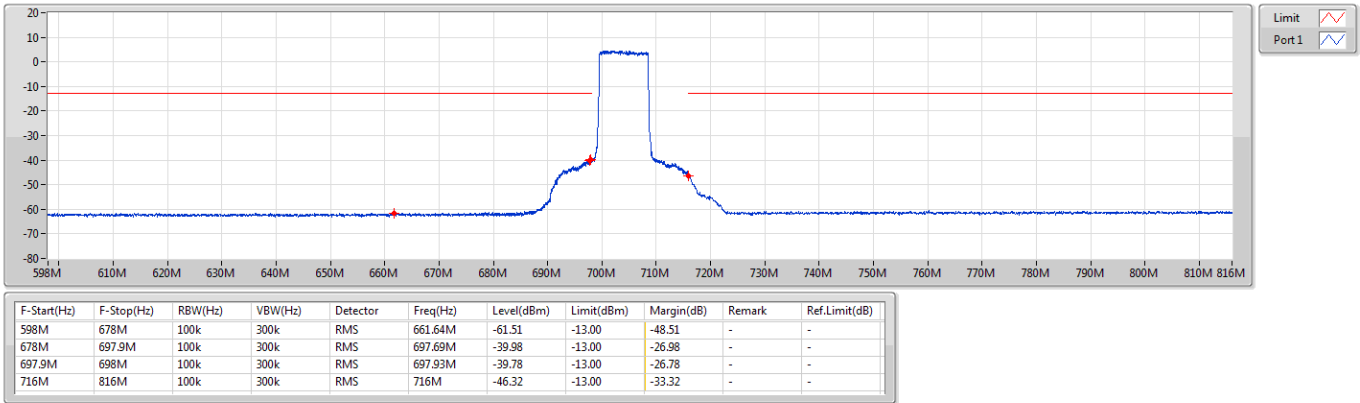


**Summary**

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 12	-	-	-	-	-	-	-	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	100k	300k	RMS	716.01M	-20.59	-13.00	-7.59	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716.02M	-20.26	-13.00	-7.26	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-22.34	-13.00	-9.34	-	-
LTE_10MHz_Nss1,256QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716.01M	-24.48	-13.00	-11.48	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	51k	200k	RMS	716M	-16.91	-13.00	-3.91	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	51k	200k	RMS	716M	-16.83	-13.00	-3.83	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	51k	200k	RMS	716M	-18.54	-13.00	-5.54	-	-
LTE_5MHz_Nss1,256QAM_1TX	Pass	716M	716.1M	51k	200k	RMS	716M	-21.83	-13.00	-8.83	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-18.88	-13.00	-5.88	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-20.17	-13.00	-7.17	-	-
LTE_3MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-21.17	-13.00	-8.17	-	-
LTE_3MHz_Nss1,256QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-24.53	-13.00	-11.53	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-18.55	-13.00	-5.55	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-19.10	-13.00	-6.10	-	-
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-20.51	-13.00	-7.51	-	-
LTE_1.4MHz_Nss1,256QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-24.24	-13.00	-11.24	-	-

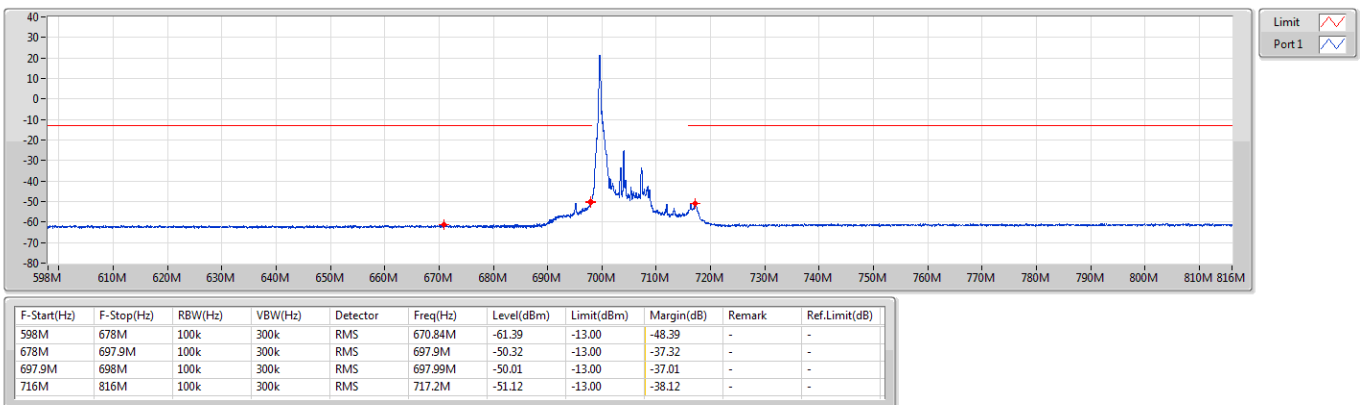
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CSE-TX-Sum



Band 12_LTE_10MHz_Nss1,QPSK_1TX
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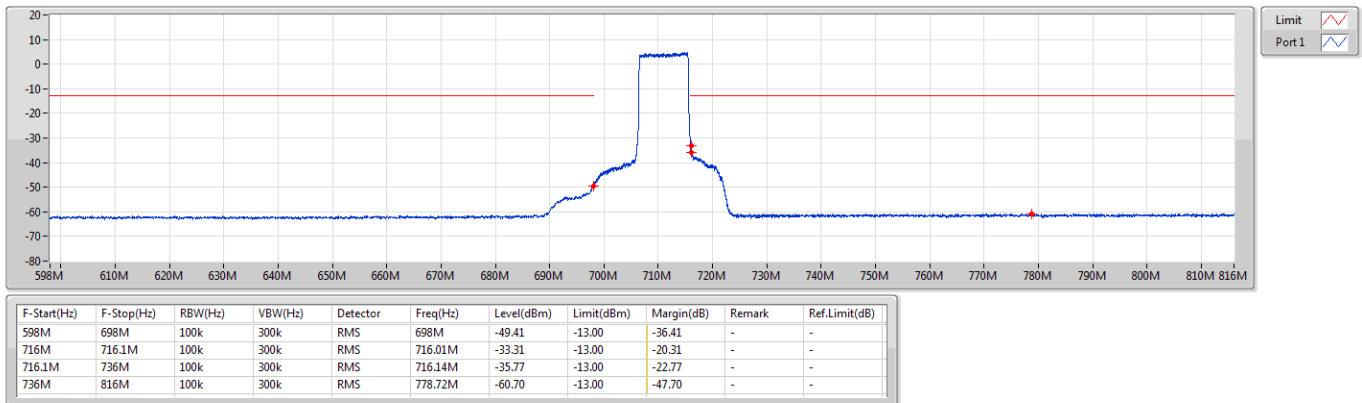
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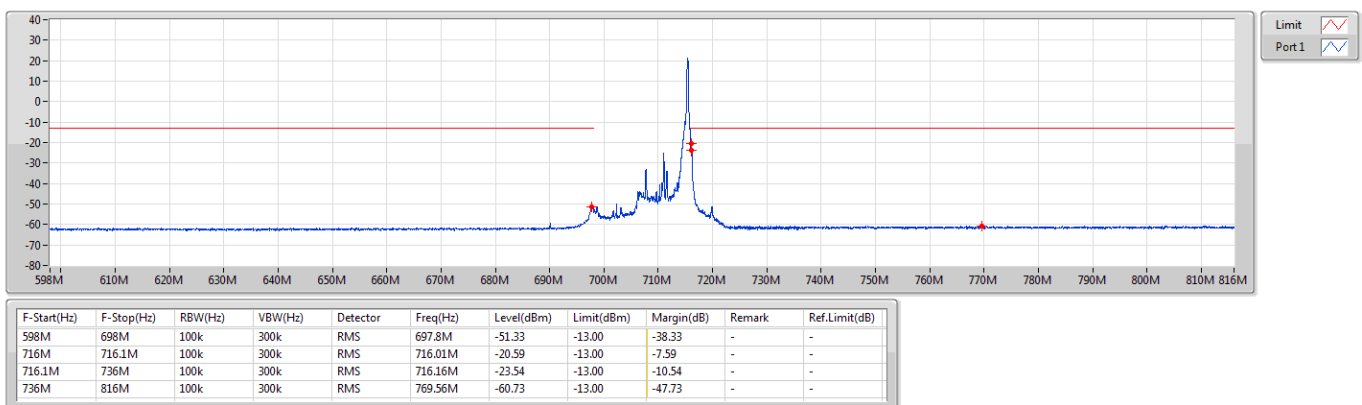
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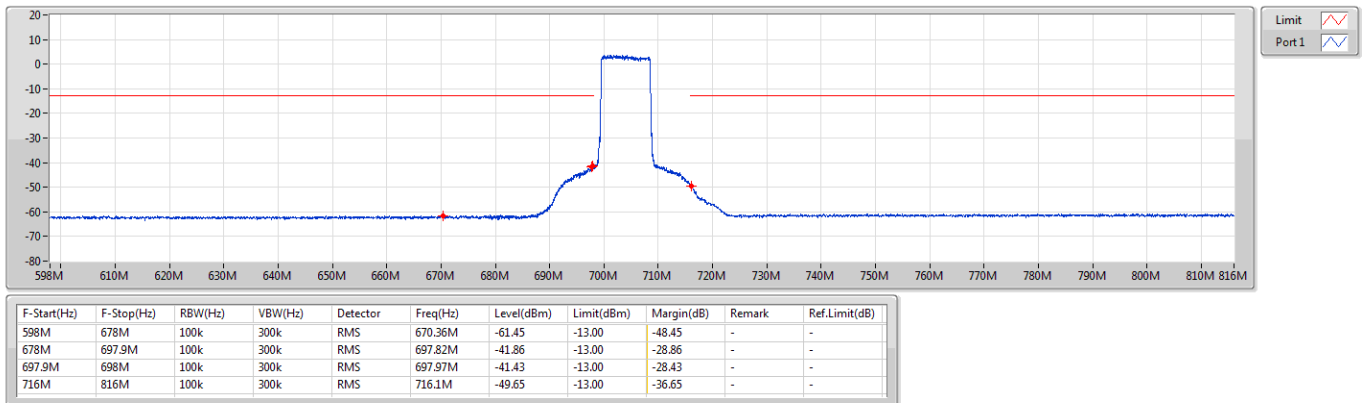
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CSE-TX-Sum



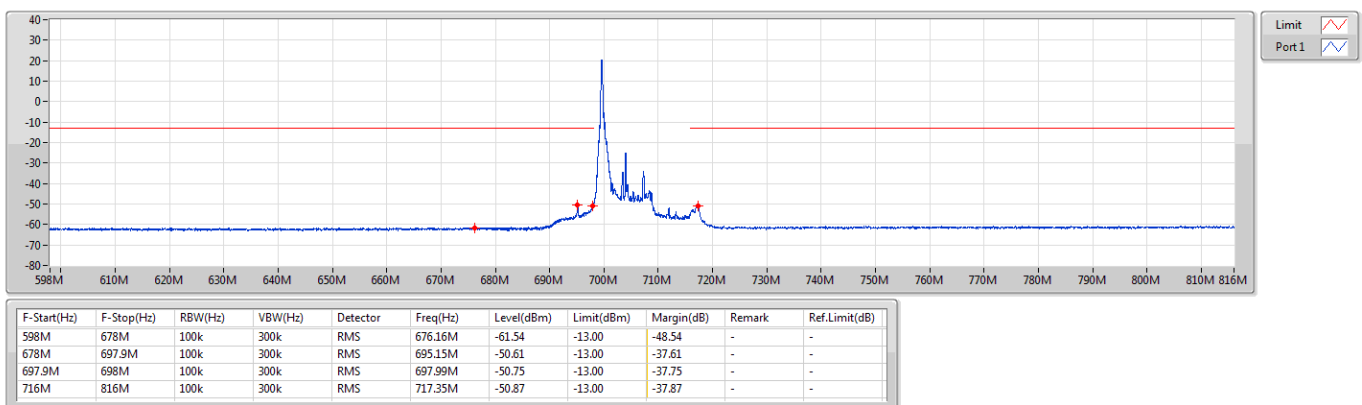
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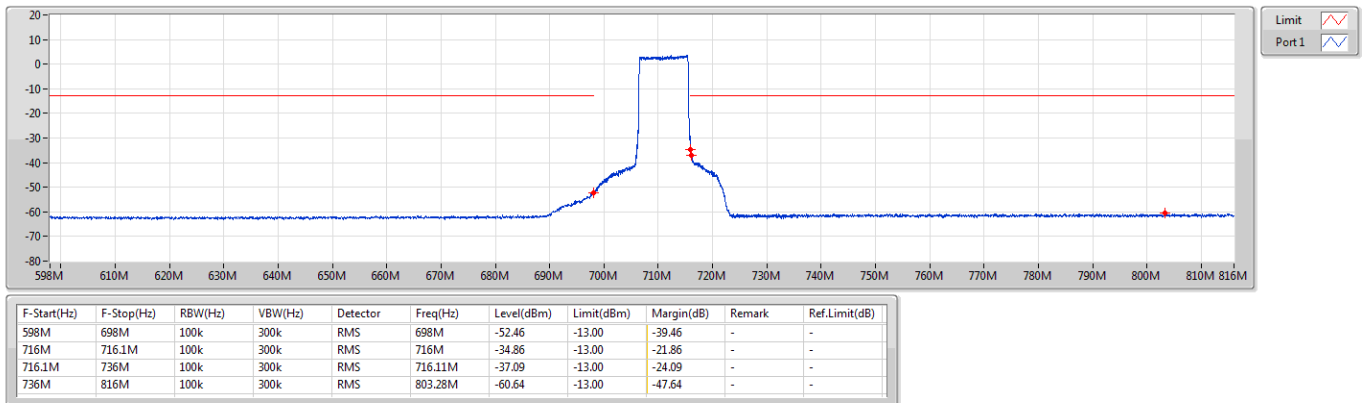
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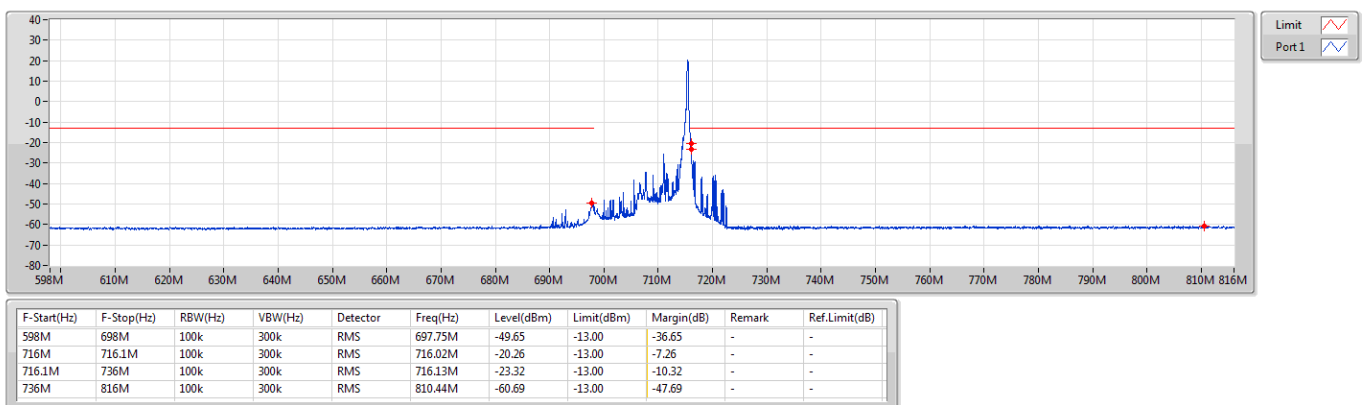
Band 12_LTE_10MHz_Nss1,16QAM_1TX
711MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



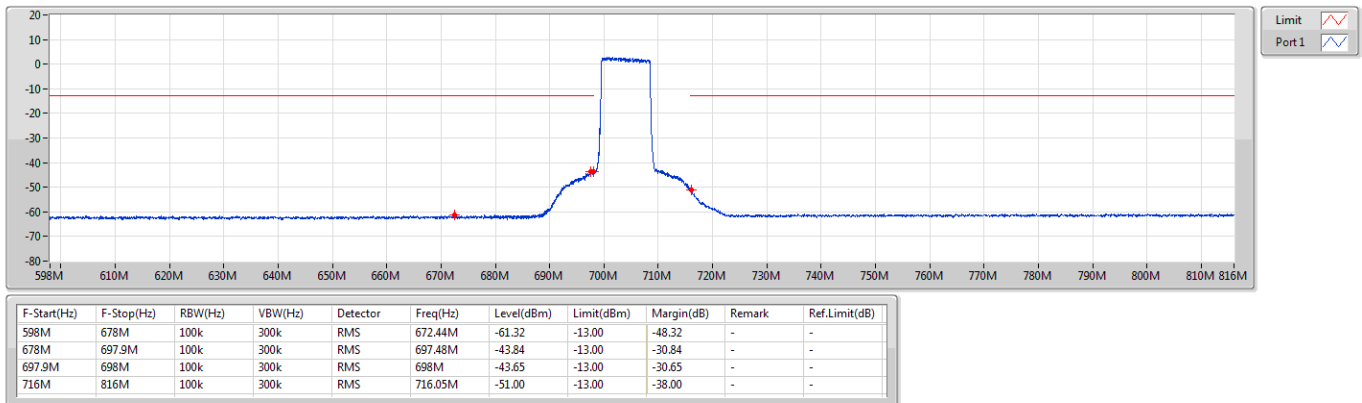
Band 12_LTE_10MHz_Nss1,16QAM_1TX
711MHz_16QAM_RB 1,#RB R

CSE-TX-Sum



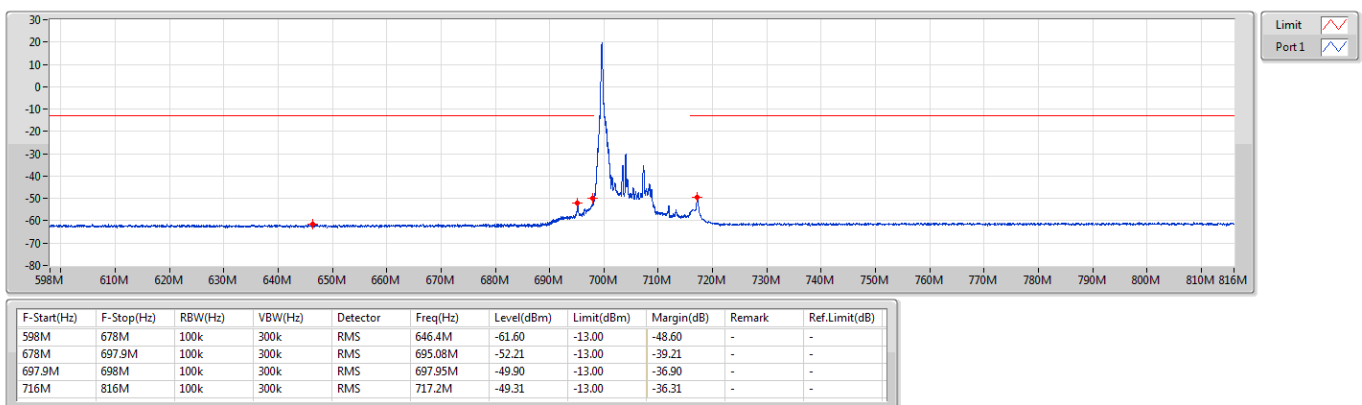
Band 12_LTE_10MHz_Nss1,64QAM_1TX
704MHz_64QAM_RB 50,#RB 0

CSE-TX-Sum



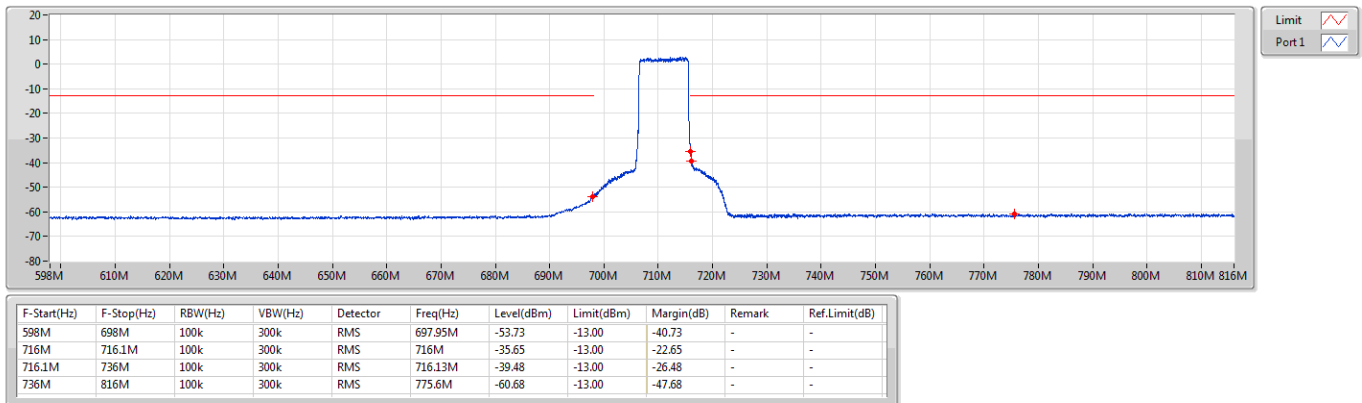
Band 12_LTE_10MHz_Nss1,64QAM_1TX
704MHz_64QAM_RB 1,#RB L

CSE-TX-Sum



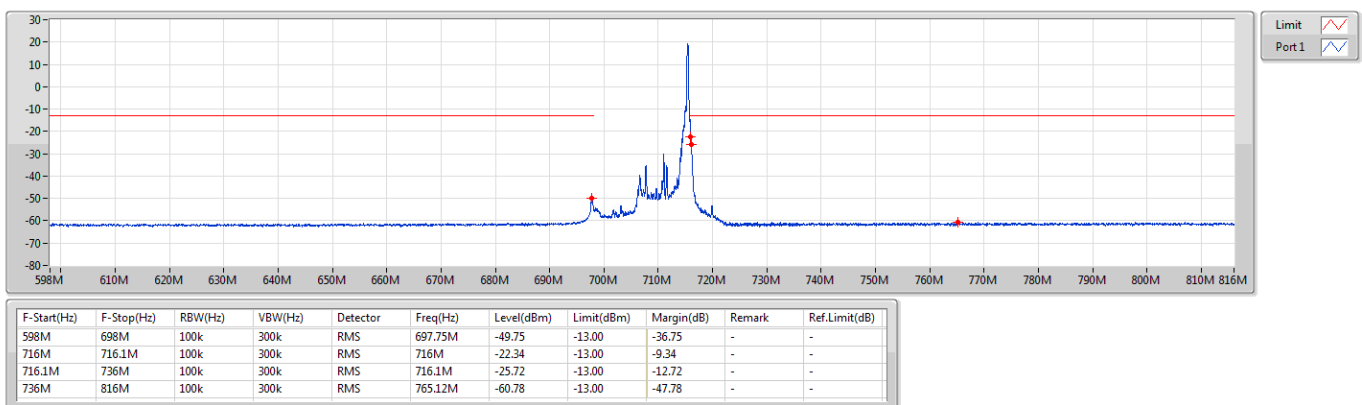
Band 12_LTE_10MHz_Nss1,64QAM_1TX
711MHz_64QAM_RB 50,#RB 0

CSE-TX-Sum



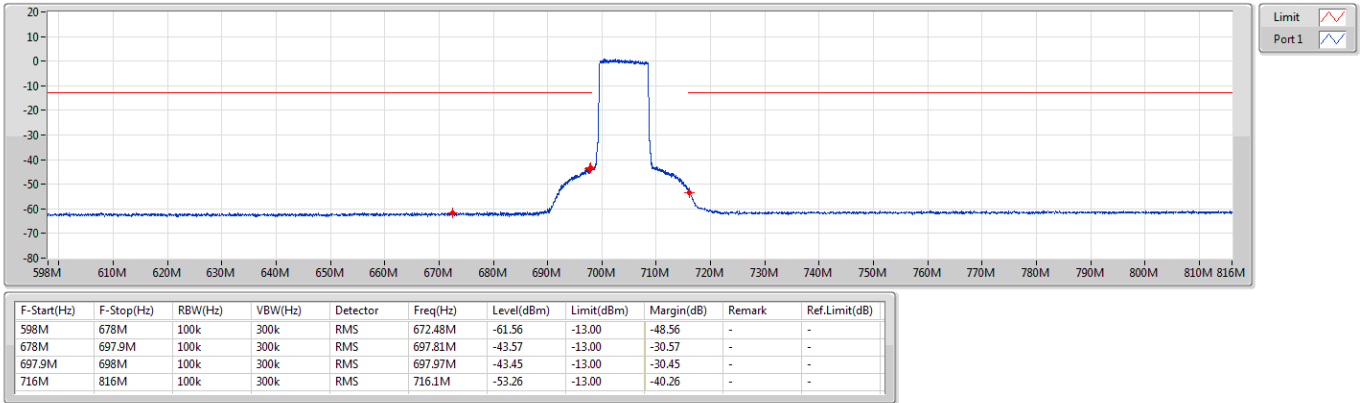
Band 12_LTE_10MHz_Nss1,64QAM_1TX
711MHz_64QAM_RB 1,#RB R

CSE-TX-Sum



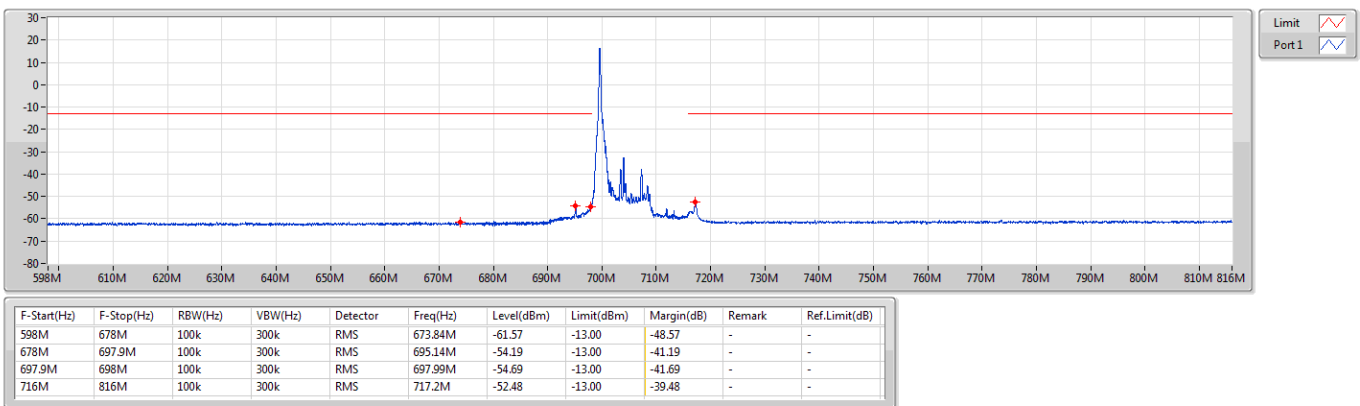
Band 12_LTE_10MHz_Nss1,256QAM_1TX
704MHz_256QAM_RB 50,#RB 0

CSE-TX-Sum



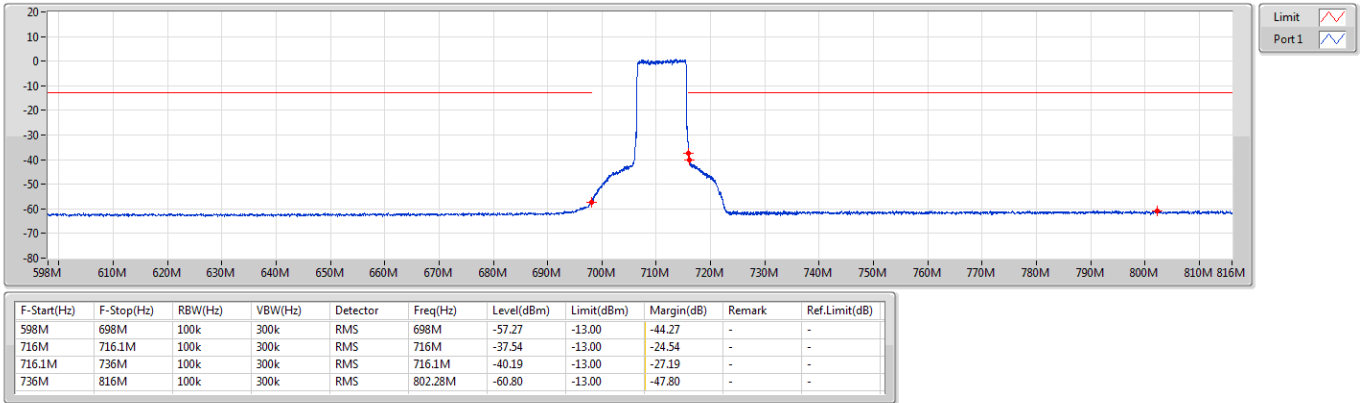
Band 12_LTE_10MHz_Nss1,256QAM_1TX
704MHz_256QAM_RB 1,#RB L

CSE-TX-Sum



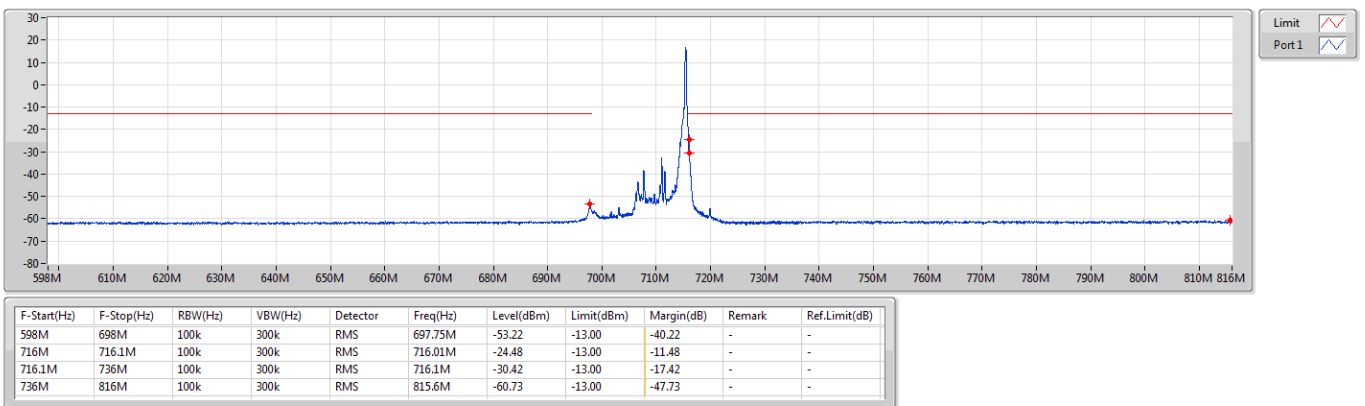
Band 12_LTE_10MHz_Nss1,256QAM_1TX
711MHz_256QAM_RB 50,#RB 0

CSE-TX-Sum



Band 12_LTE_10MHz_Nss1,256QAM_1TX
711MHz_256QAM_RB 1,#RB R

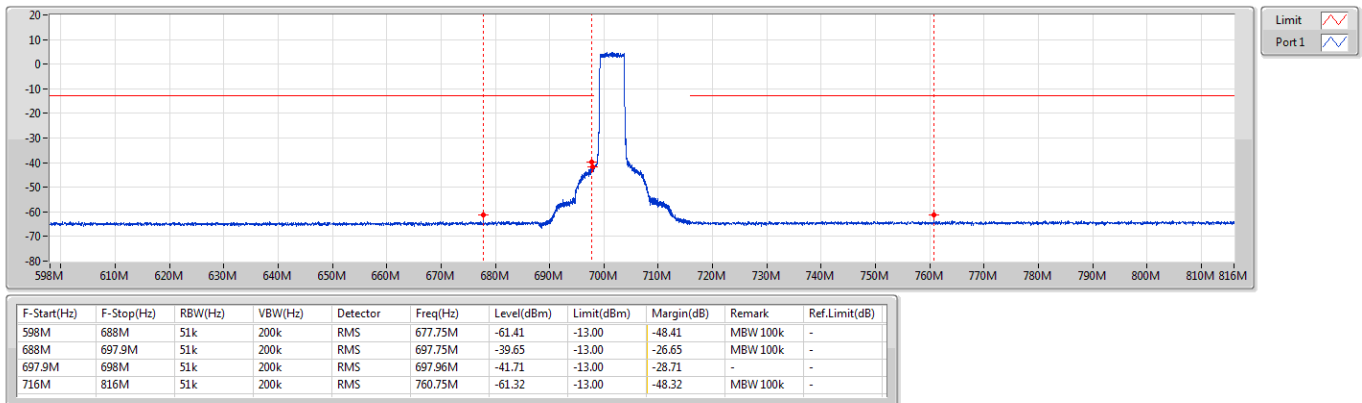
CSE-TX-Sum





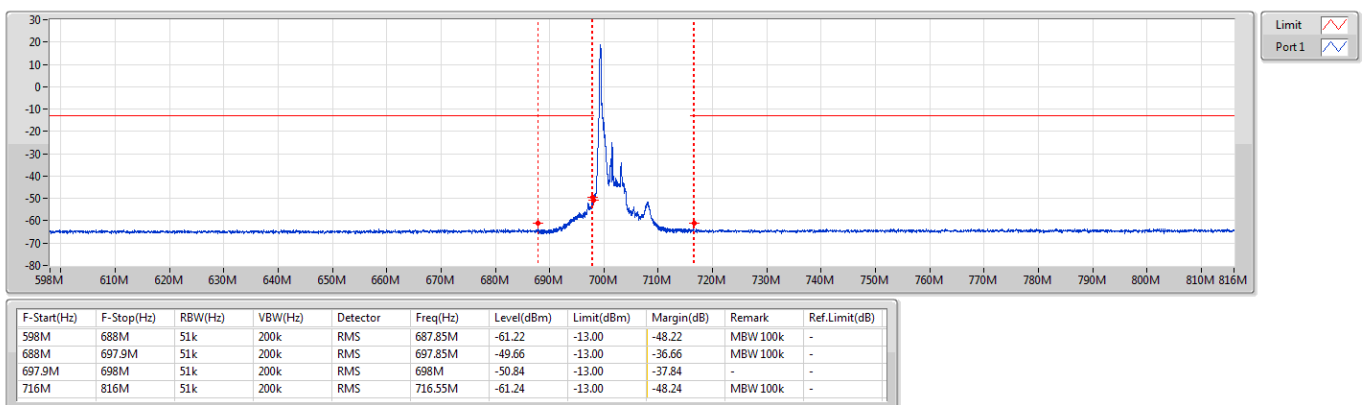
Band 12_LTE_5MHz_Nss1,QPSK_1TX
701.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



Band 12_LTE_5MHz_Nss1,QPSK_1TX
701.5MHz_QPSK_RB 1,#RB L

CSE-TX-Sum

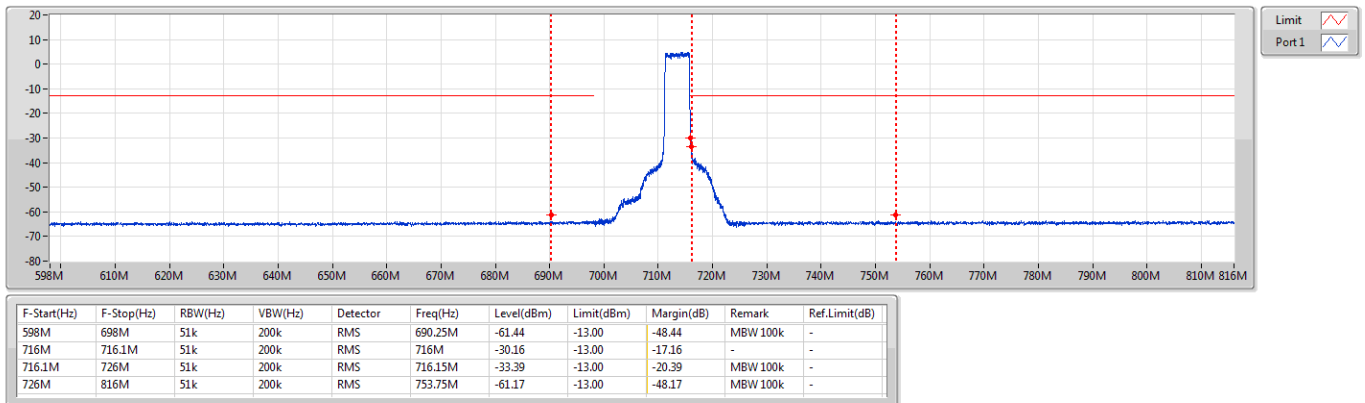




Band 12_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

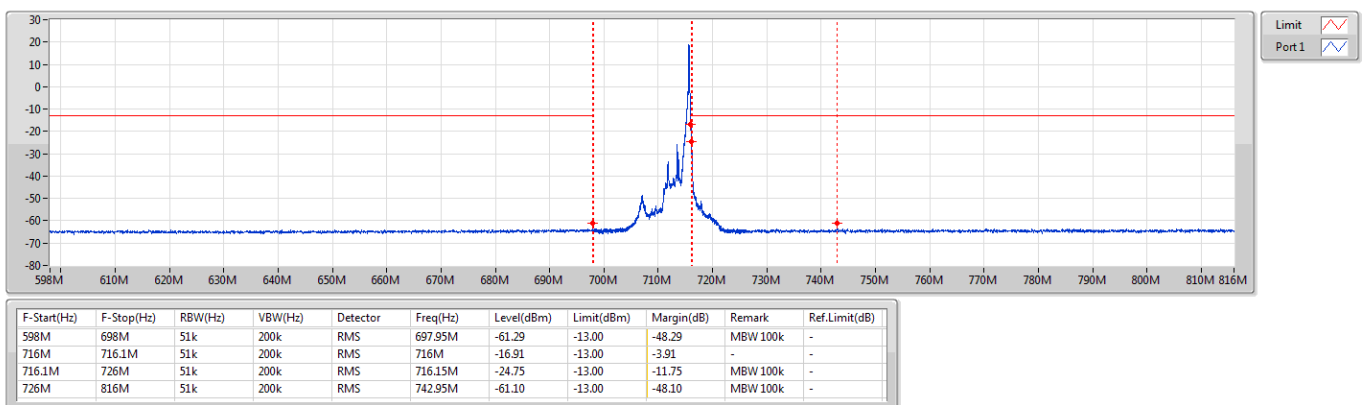
713.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

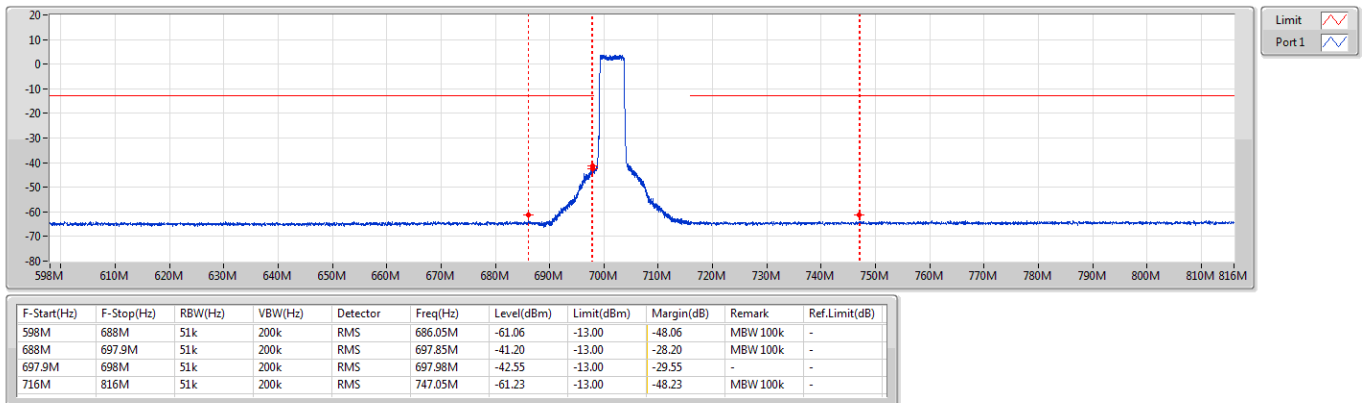
713.5MHz_QPSK_RB 1,#RB R





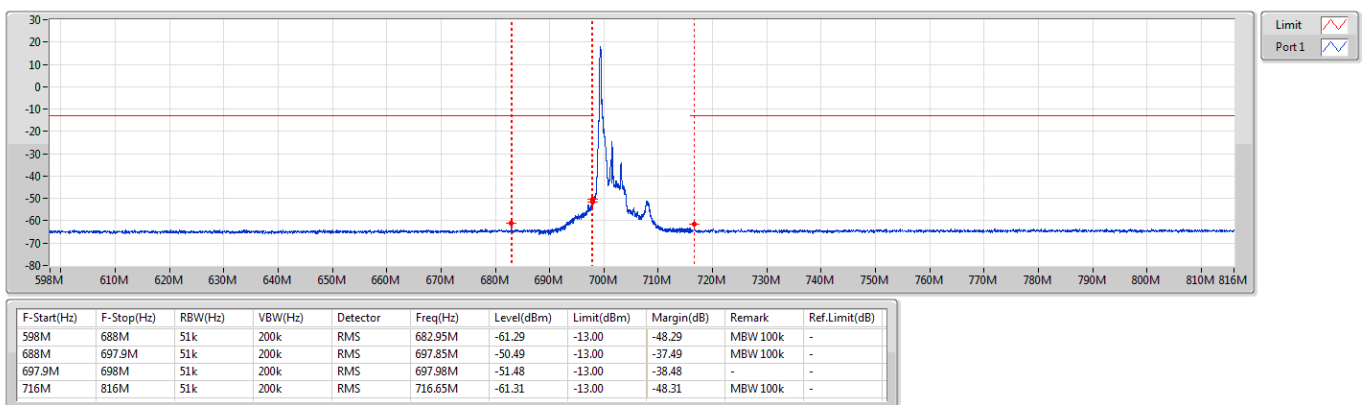
Band 12_LTE_5MHz_Nss1,16QAM_1TX
701.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



Band 12_LTE_5MHz_Nss1,16QAM_1TX
701.5MHz_16QAM_RB 1,#RB L

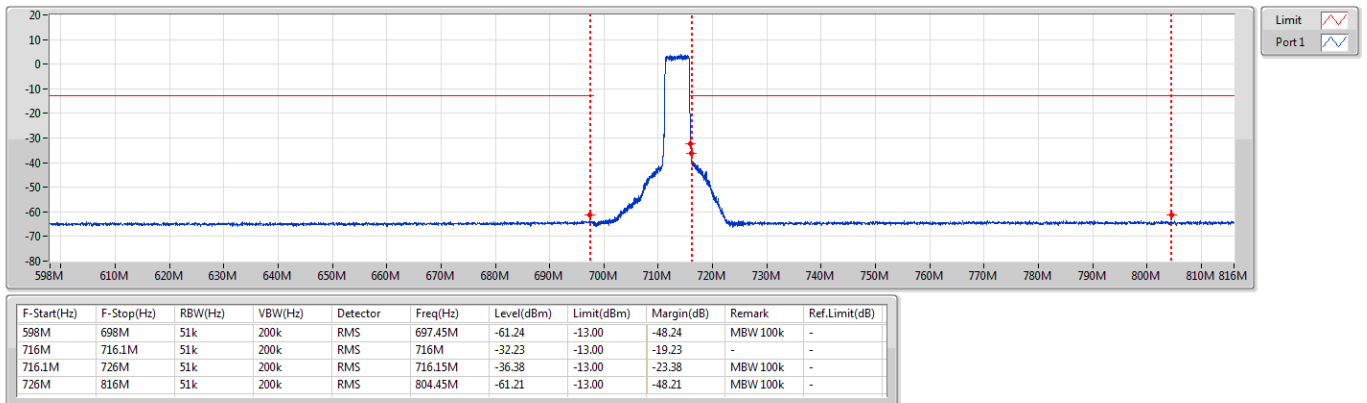
CSE-TX-Sum





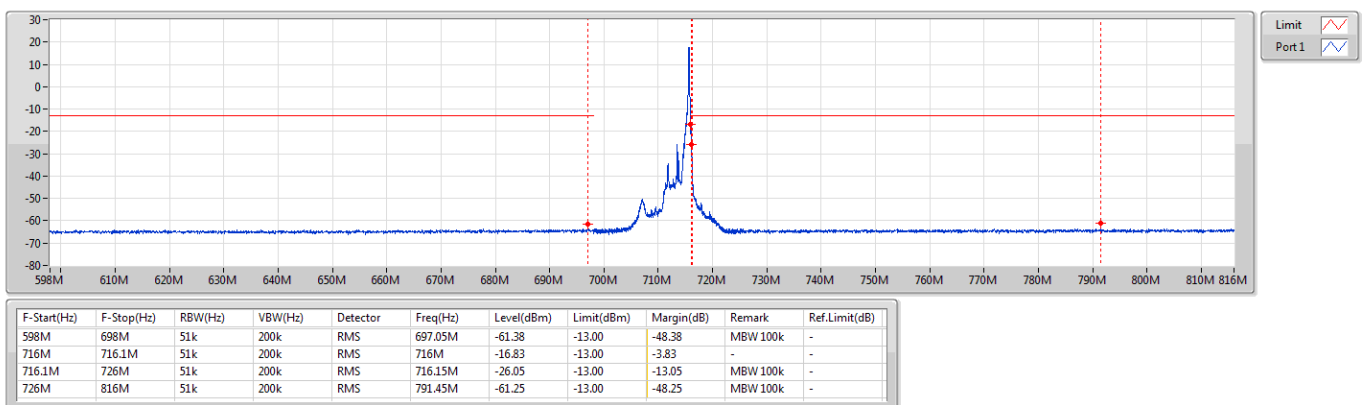
Band 12_LTE_5MHz_Nss1,16QAM_1TX
713.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



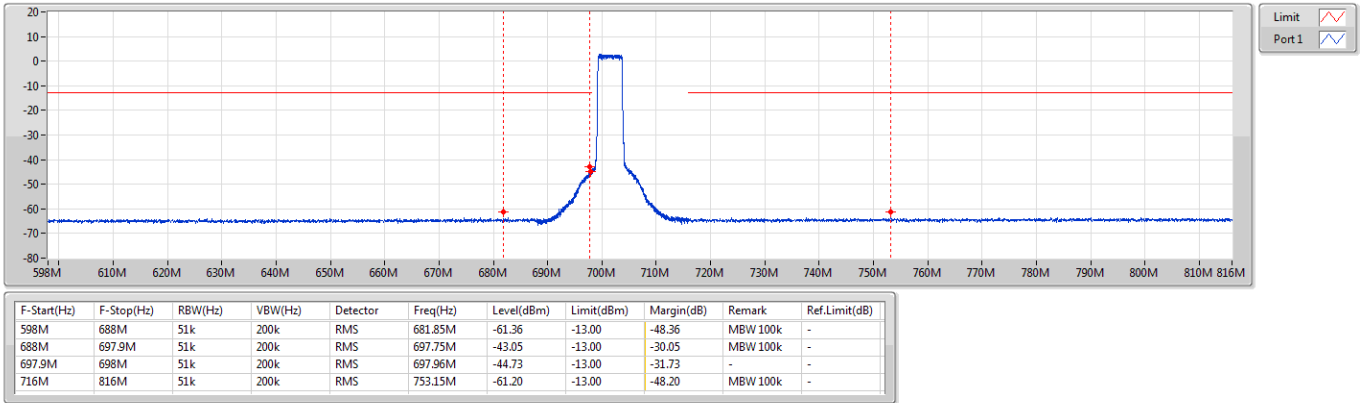
Band 12_LTE_5MHz_Nss1,16QAM_1TX
713.5MHz_16QAM_RB 1,#RB R

CSE-TX-Sum



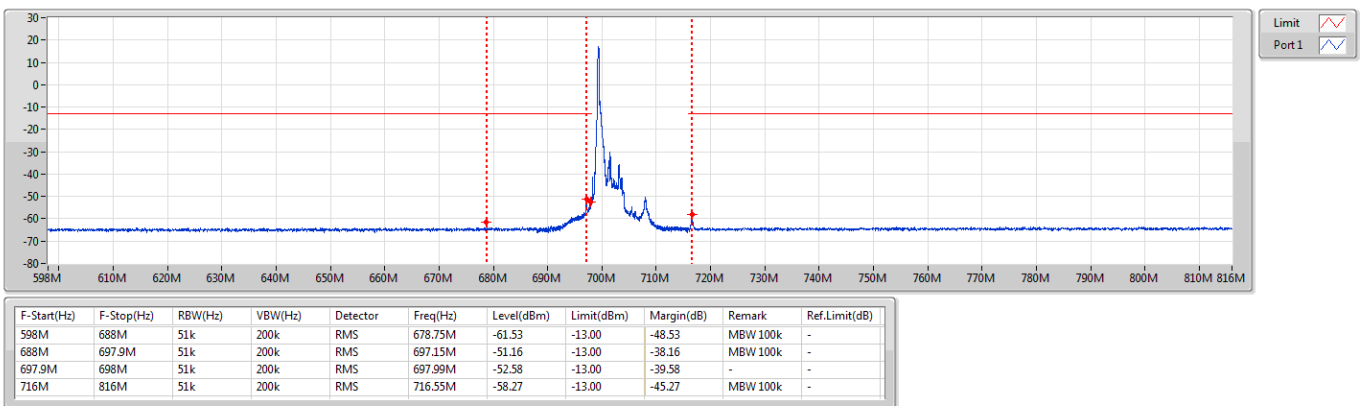
Band 12_LTE_5MHz_Nss1,64QAM_1TX
701.5MHz_64QAM_RB 25,#RB 0

CSE-TX-Sum



Band 12_LTE_5MHz_Nss1,64QAM_1TX
701.5MHz_64QAM_RB 1,#RB L

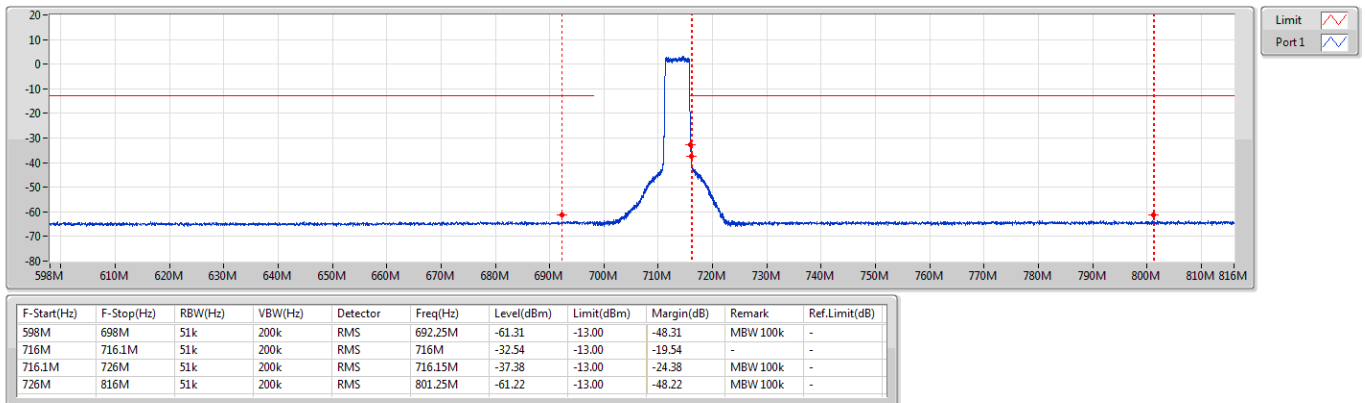
CSE-TX-Sum





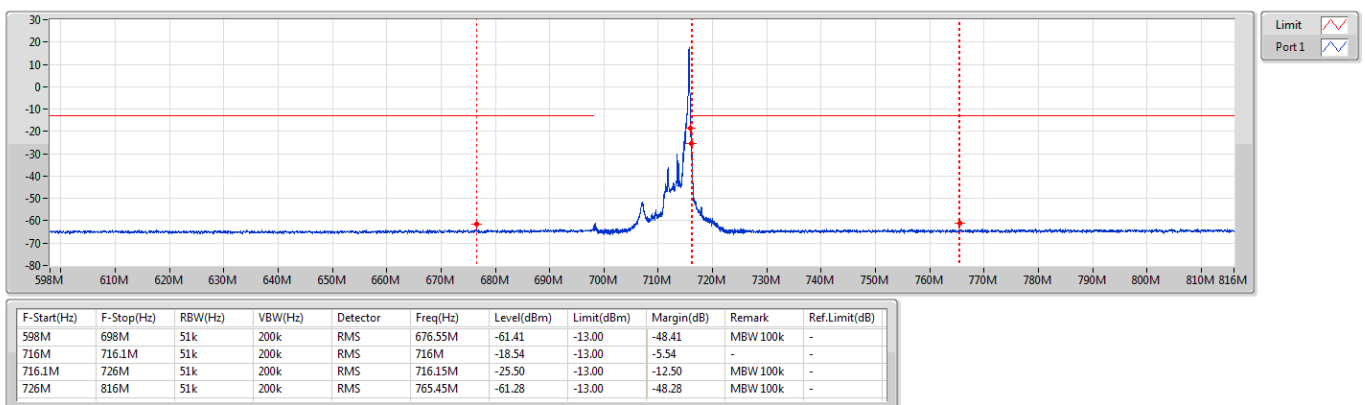
Band 12_LTE_5MHz_Nss1,64QAM_1TX
713.5MHz_64QAM_RB 25,#RB 0

CSE-TX-Sum



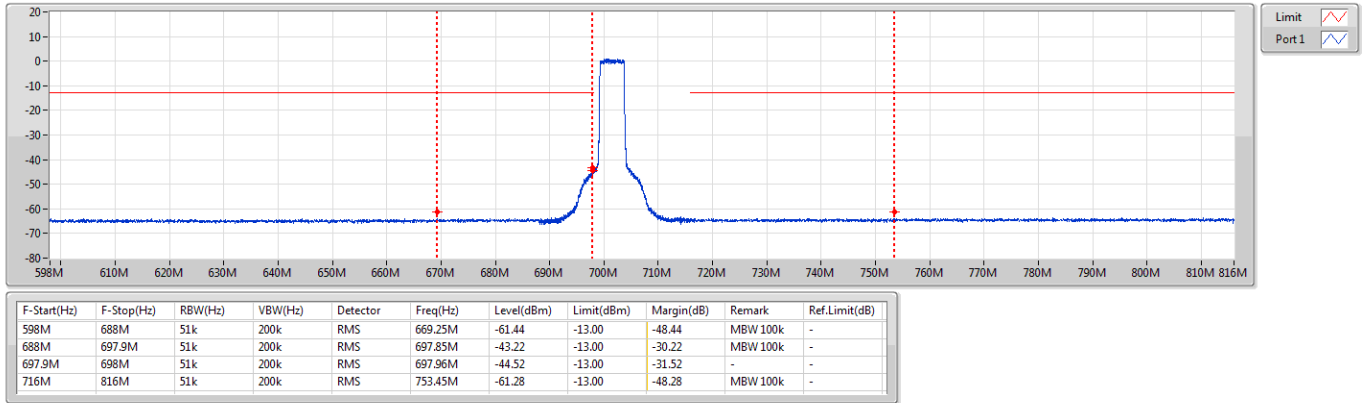
Band 12_LTE_5MHz_Nss1,64QAM_1TX
713.5MHz_64QAM_RB 1,#RB R

CSE-TX-Sum



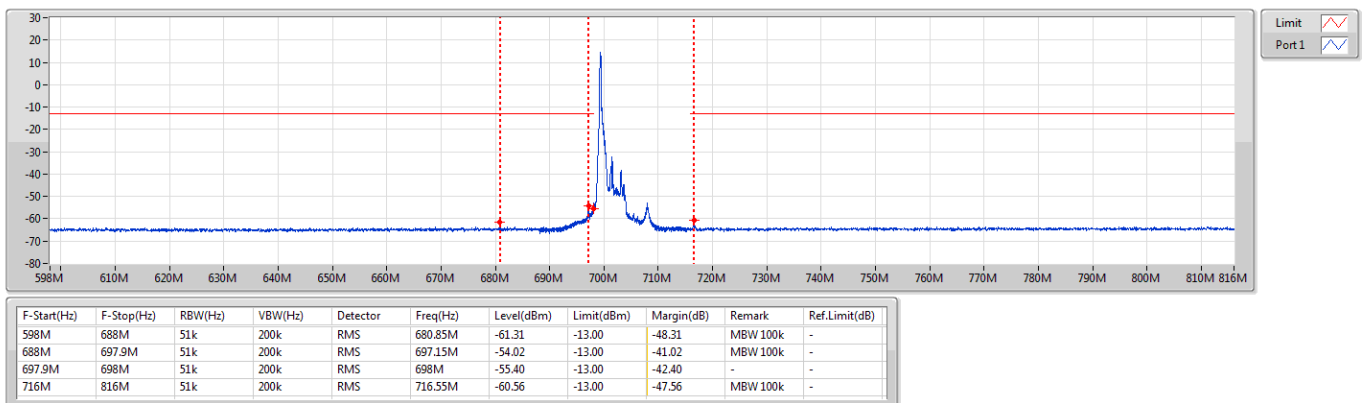
Band 12_LTE_5MHz_Nss1,256QAM_1TX
701.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



Band 12_LTE_5MHz_Nss1,256QAM_1TX
701.5MHz_256QAM_RB 1,#RB L

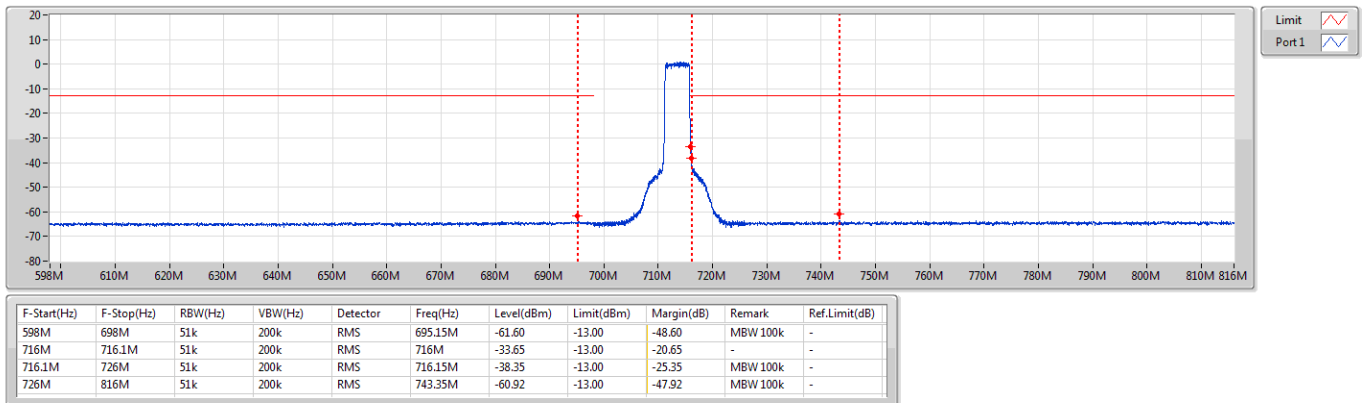
CSE-TX-Sum





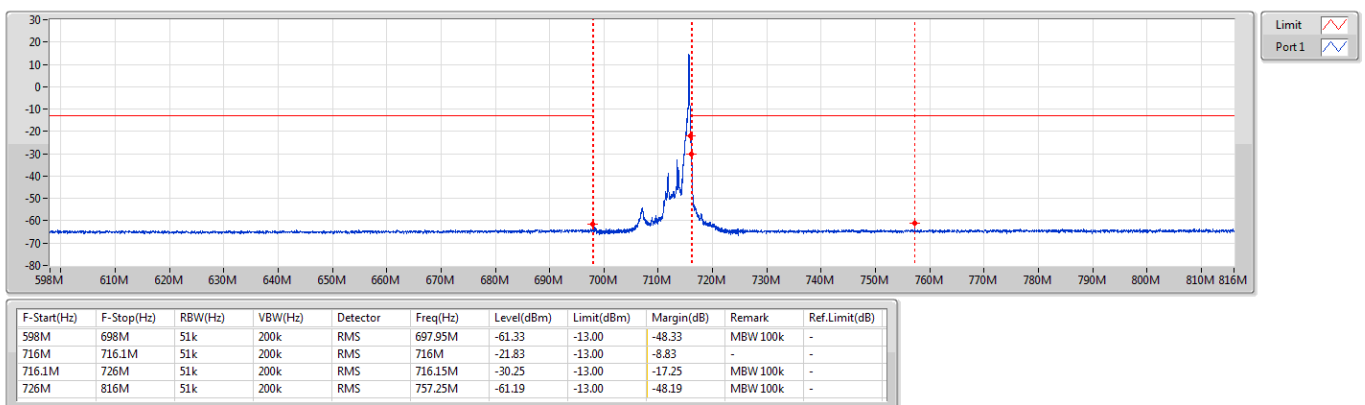
Band 12_LTE_5MHz_Nss1,256QAM_1TX
713.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



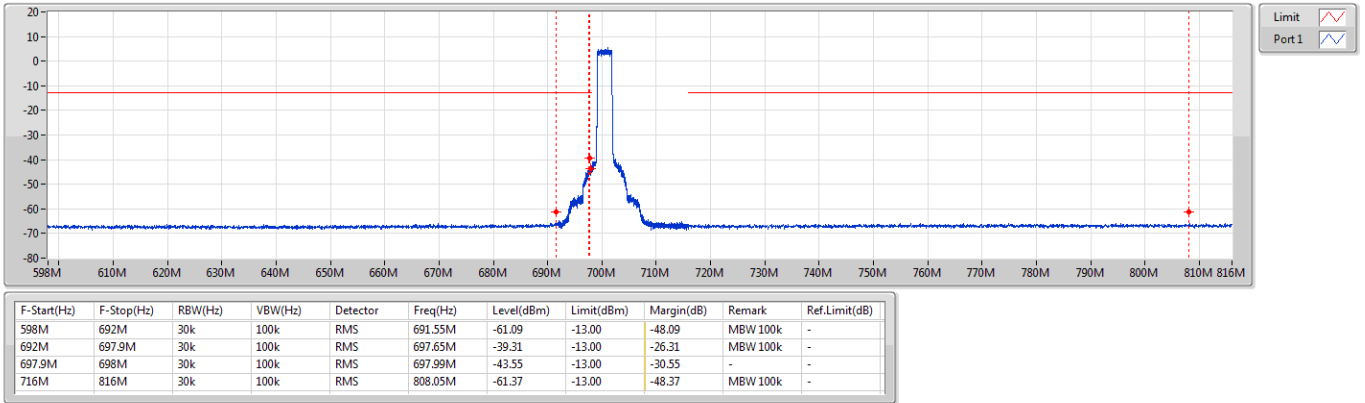
Band 12_LTE_5MHz_Nss1,256QAM_1TX
713.5MHz_256QAM_RB 1,#RB R

CSE-TX-Sum



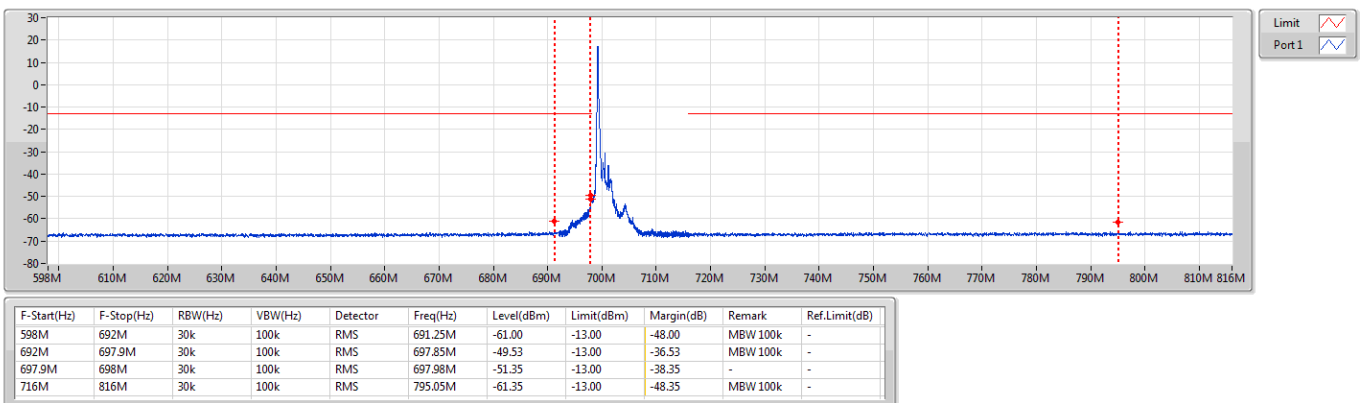
Band 12_LTE_3MHz_Nss1,QPSK_1TX
700.5MHz_QPSK_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,QPSK_1TX
700.5MHz_QPSK_RB 1,#RB L

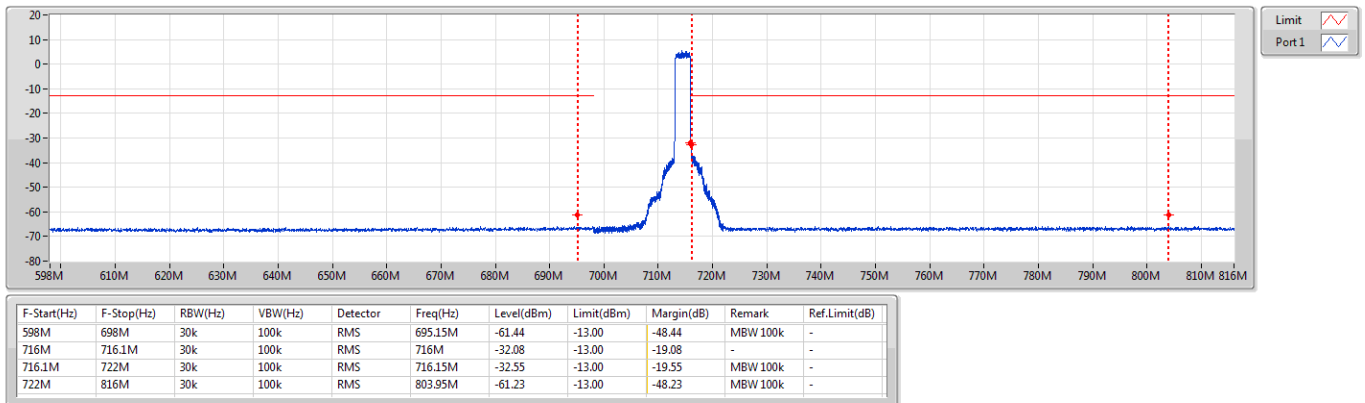
CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

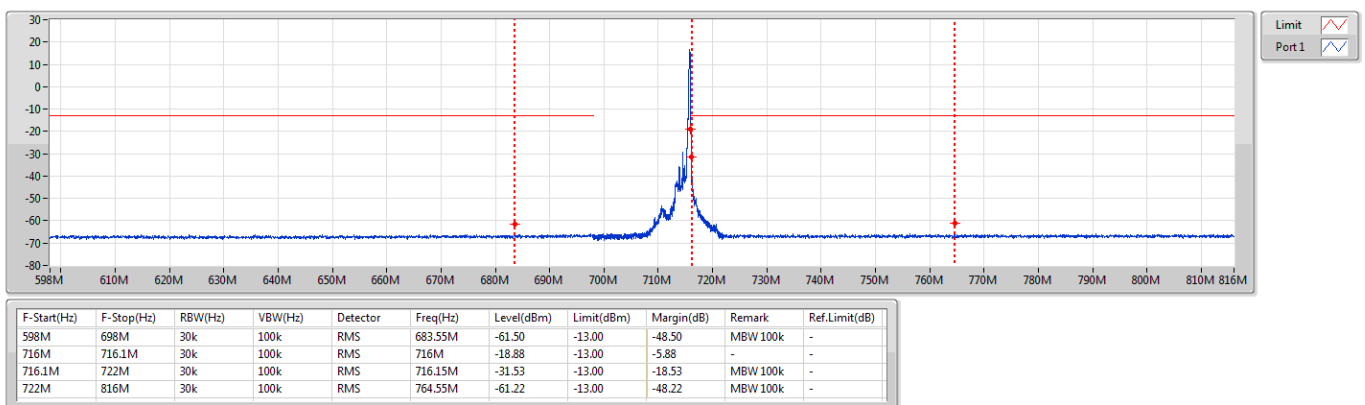
714.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

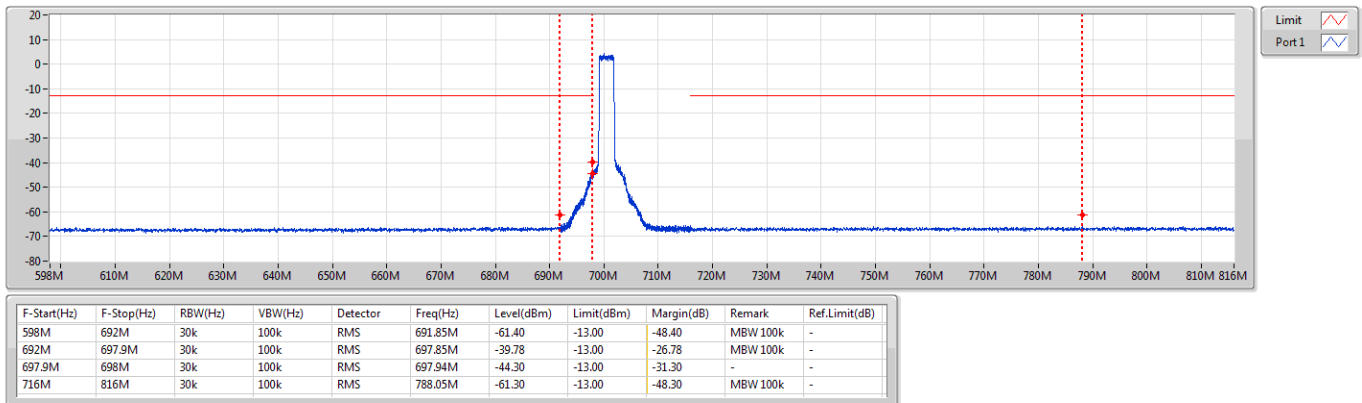
714.5MHz_QPSK_RB 1,#RB R





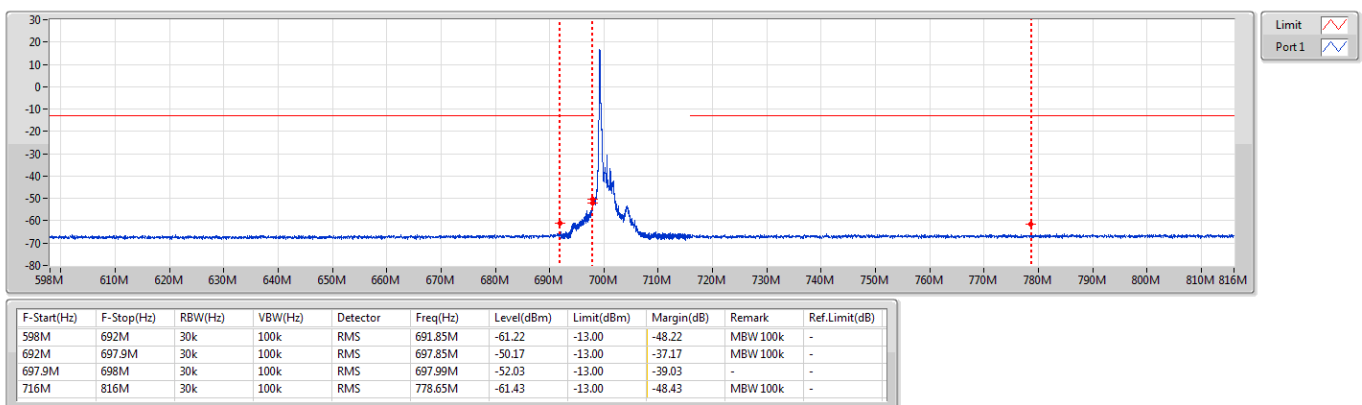
Band 12_LTE_3MHz_Nss1,16QAM_1TX
700.5MHz_16QAM_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,16QAM_1TX
700.5MHz_16QAM_RB 1,#RB L

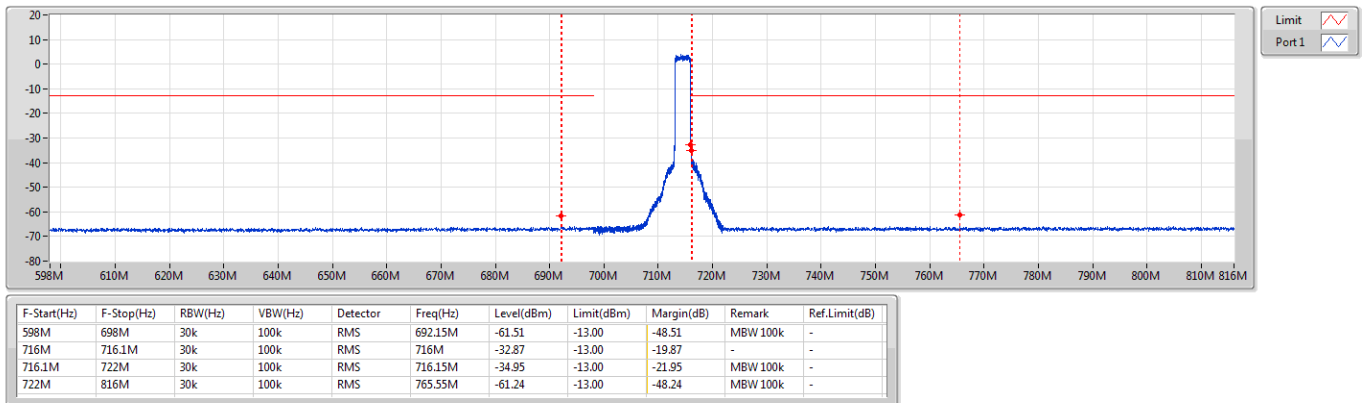
CSE-TX-Sum





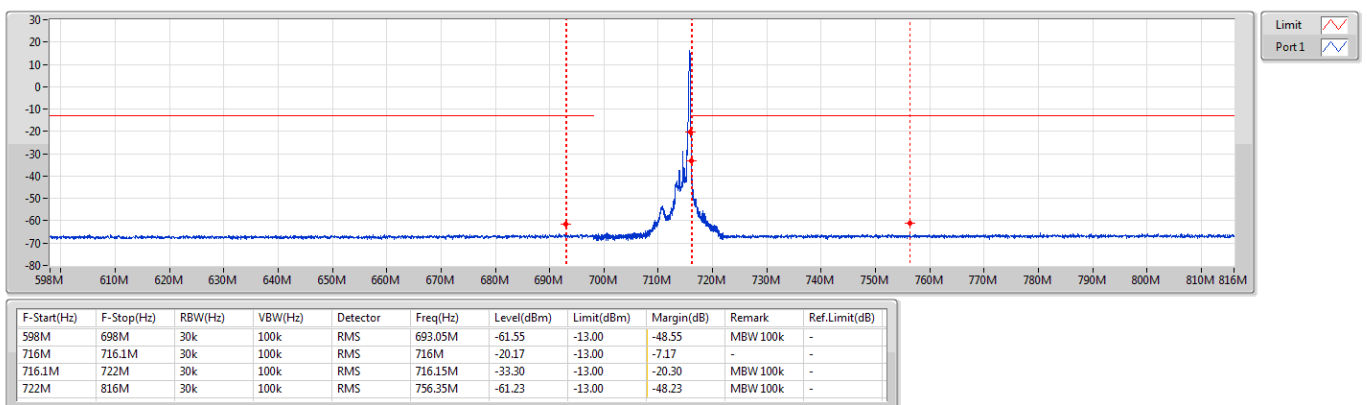
Band 12_LTE_3MHz_Nss1,16QAM_1TX
714.5MHz_16QAM_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,16QAM_1TX
714.5MHz_16QAM_RB 1,#RB R

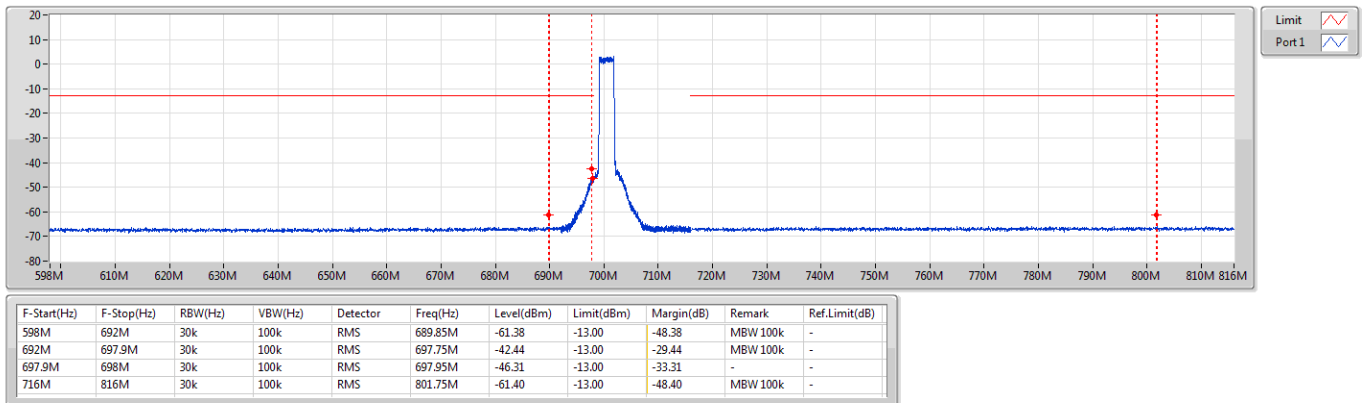
CSE-TX-Sum





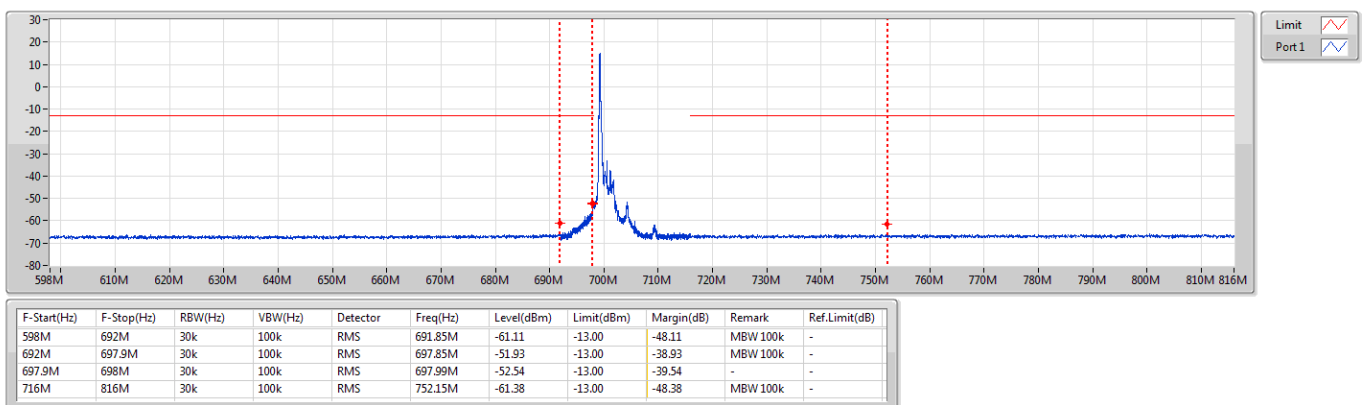
Band 12_LTE_3MHz_Nss1,64QAM_1TX
700.5MHz_64QAM_RB 15,#RB 0

CSE-TX-Sum



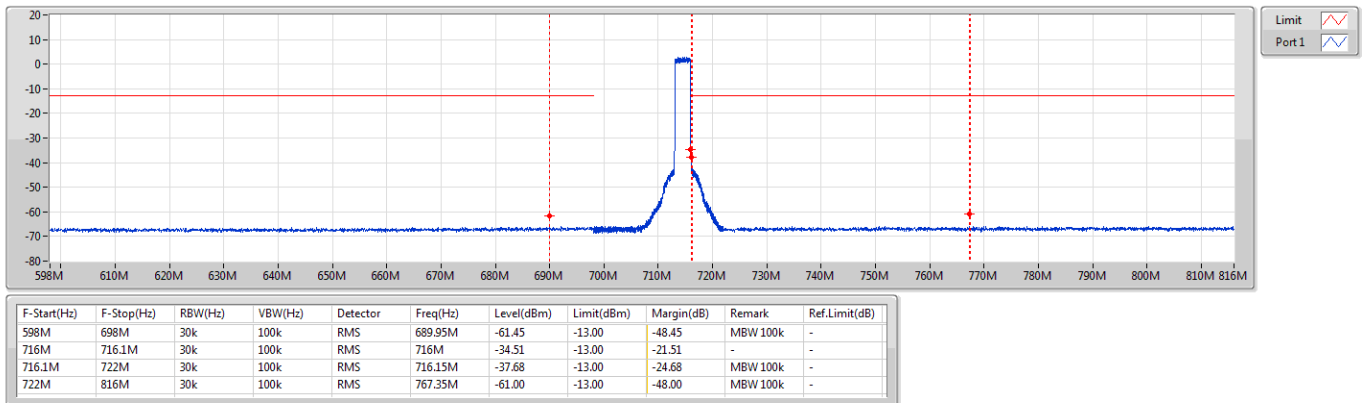
Band 12_LTE_3MHz_Nss1,64QAM_1TX
700.5MHz_64QAM_RB 1,#RB L

CSE-TX-Sum



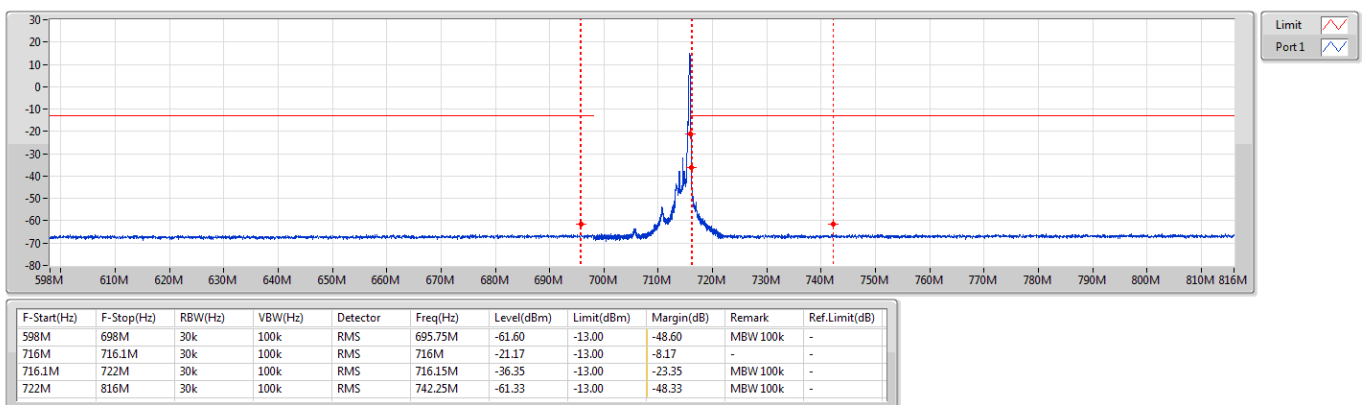
Band 12_LTE_3MHz_Nss1,64QAM_1TX
714.5MHz_64QAM_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,64QAM_1TX
714.5MHz_64QAM_RB 1,#RB R

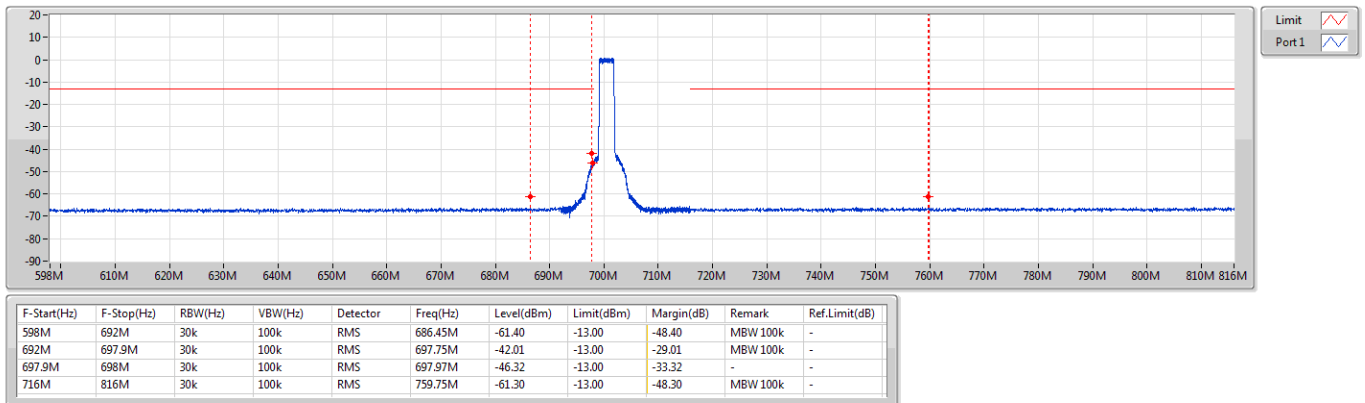
CSE-TX-Sum





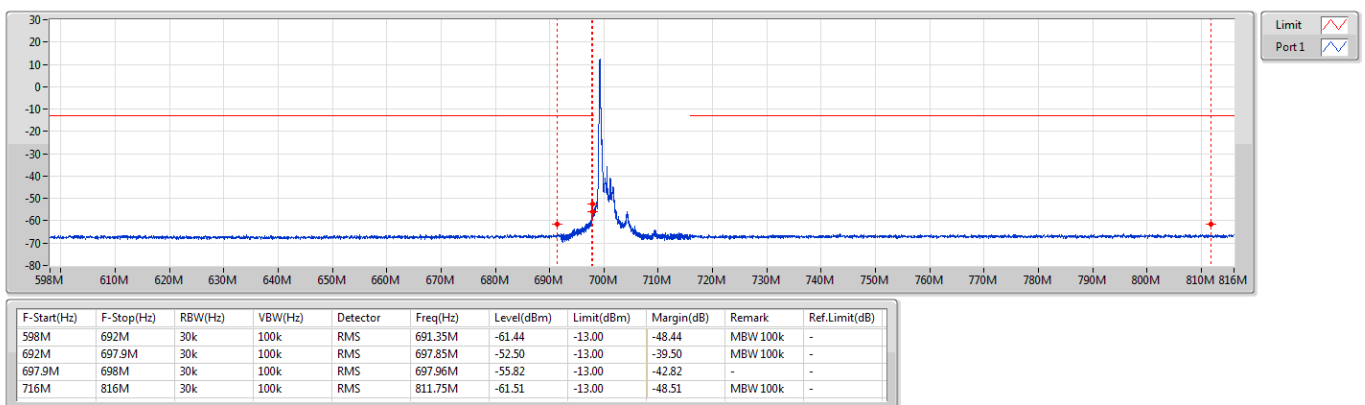
Band 12_LTE_3MHz_Nss1,256QAM_1TX
700.5MHz_256QAM_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,256QAM_1TX
700.5MHz_256QAM_RB 1,#RB L

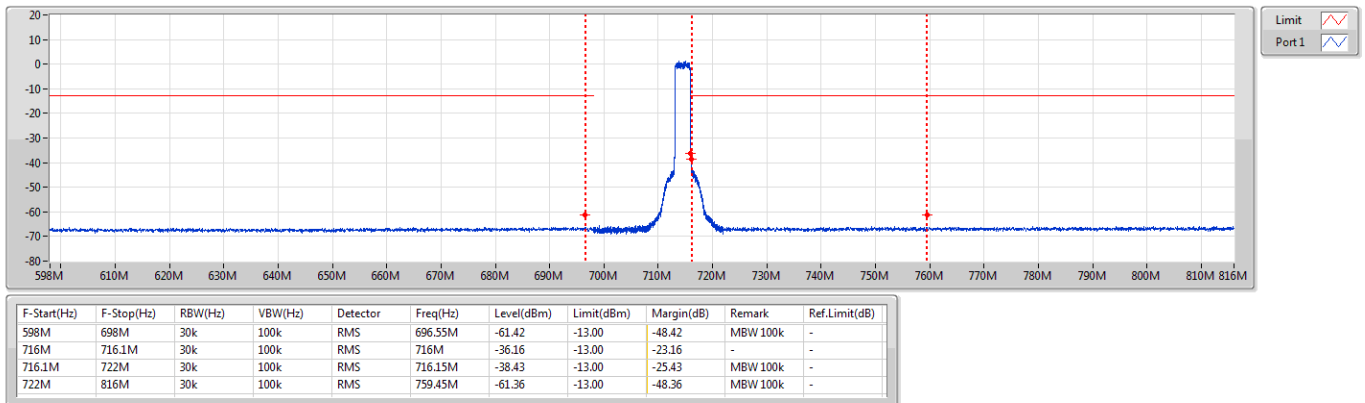
CSE-TX-Sum





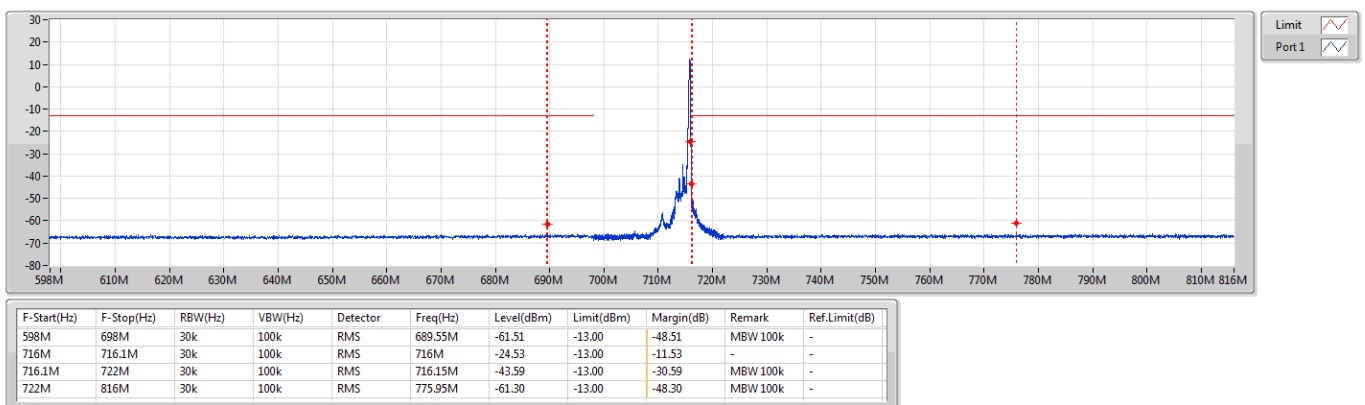
Band 12_LTE_3MHz_Nss1,256QAM_1TX
714.5MHz_256QAM_RB 15,#RB 0

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,256QAM_1TX
714.5MHz_256QAM_RB 1,#RB R

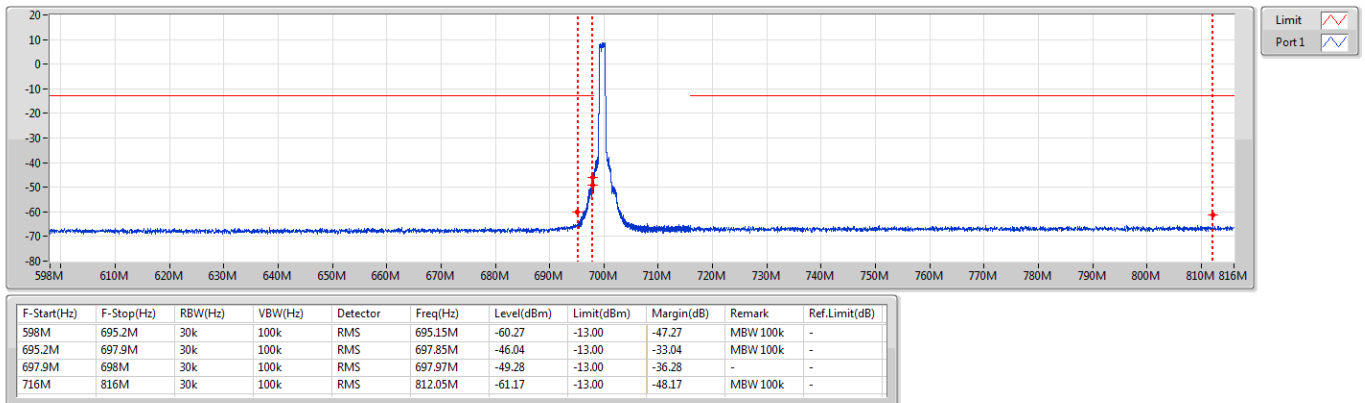
CSE-TX-Sum





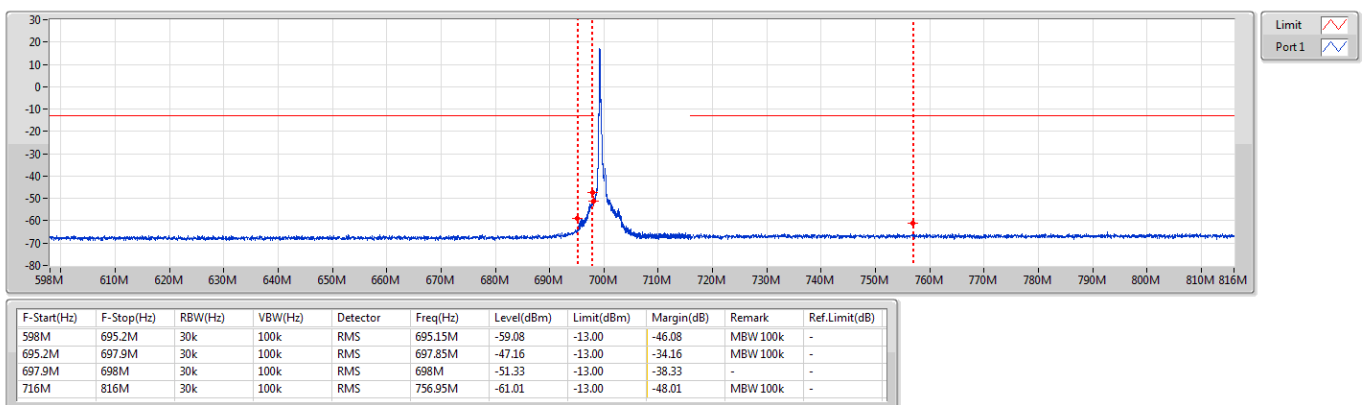
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
699.7MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



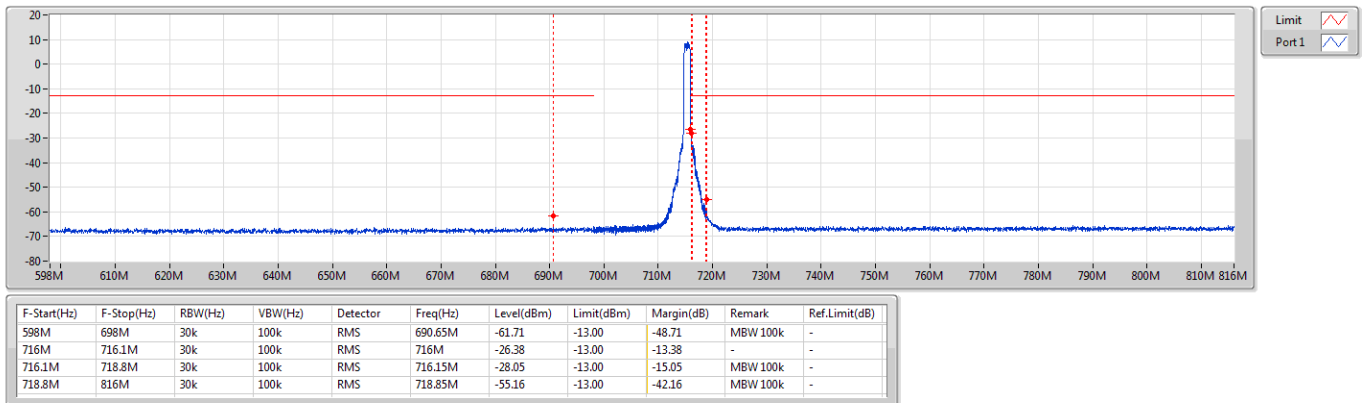
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
699.7MHz_QPSK_RB 1,#RB L

CSE-TX-Sum



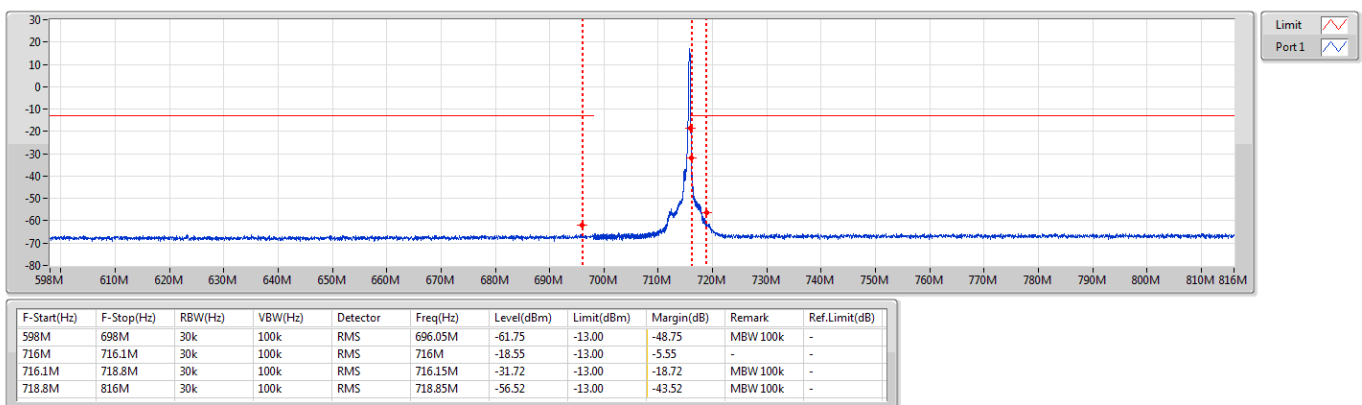
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
715.3MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
715.3MHz_QPSK_RB 1,#RB R

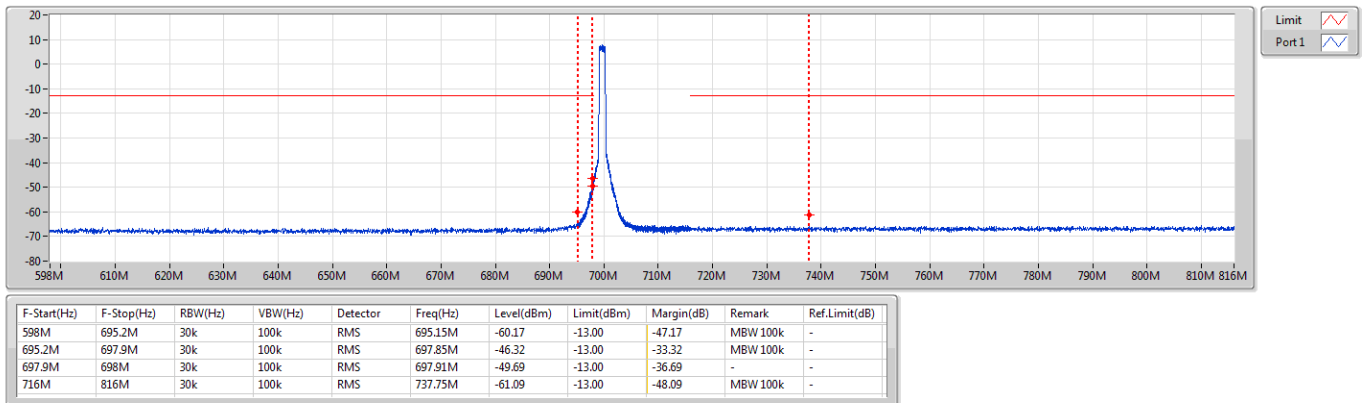
CSE-TX-Sum





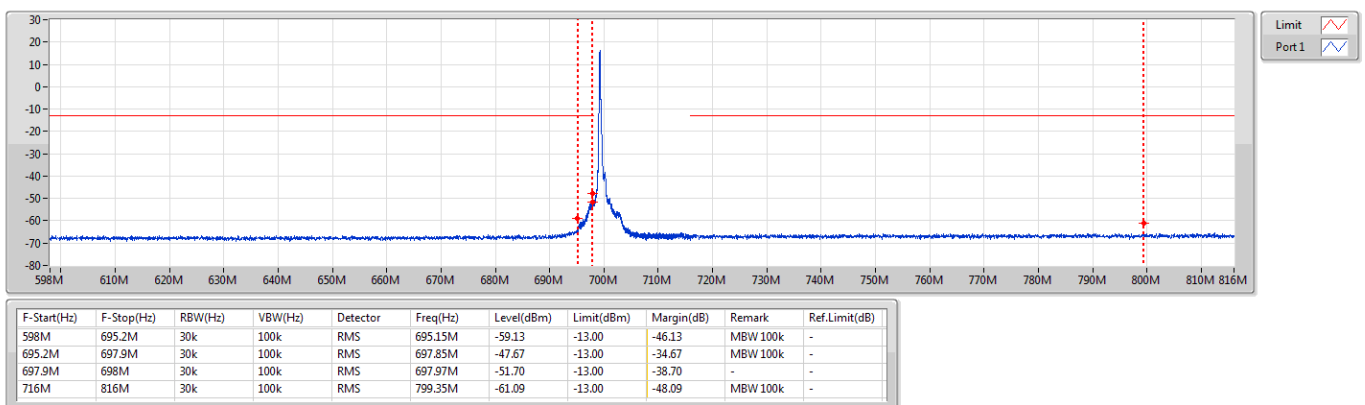
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
699.7MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
699.7MHz_16QAM_RB 1,#RB L

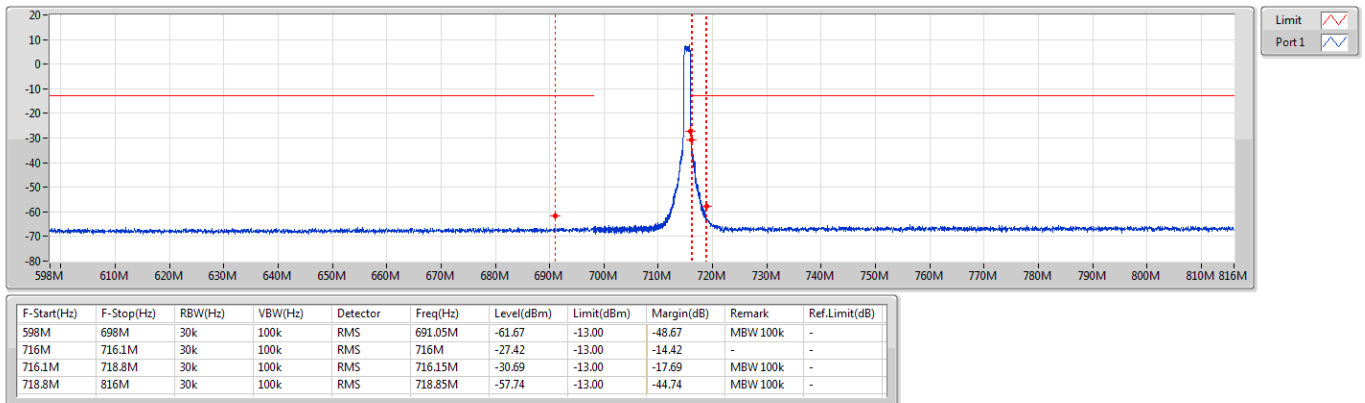
CSE-TX-Sum





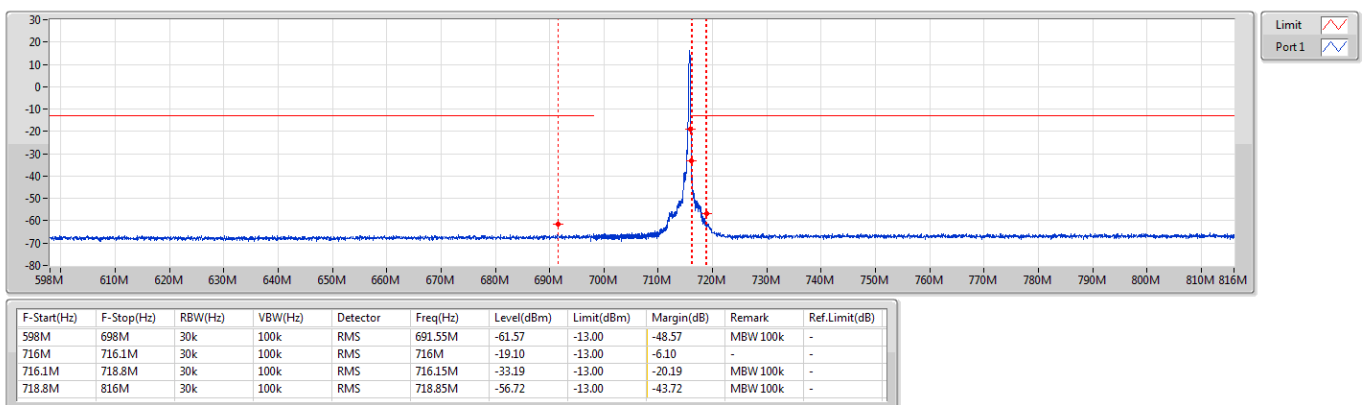
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
715.3MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
715.3MHz_16QAM_RB 1,#RB R

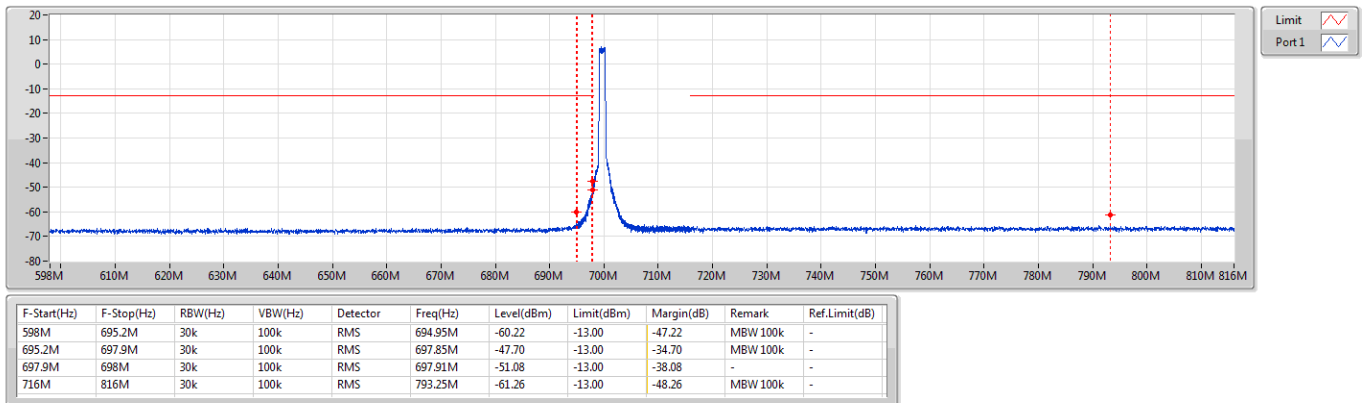
CSE-TX-Sum





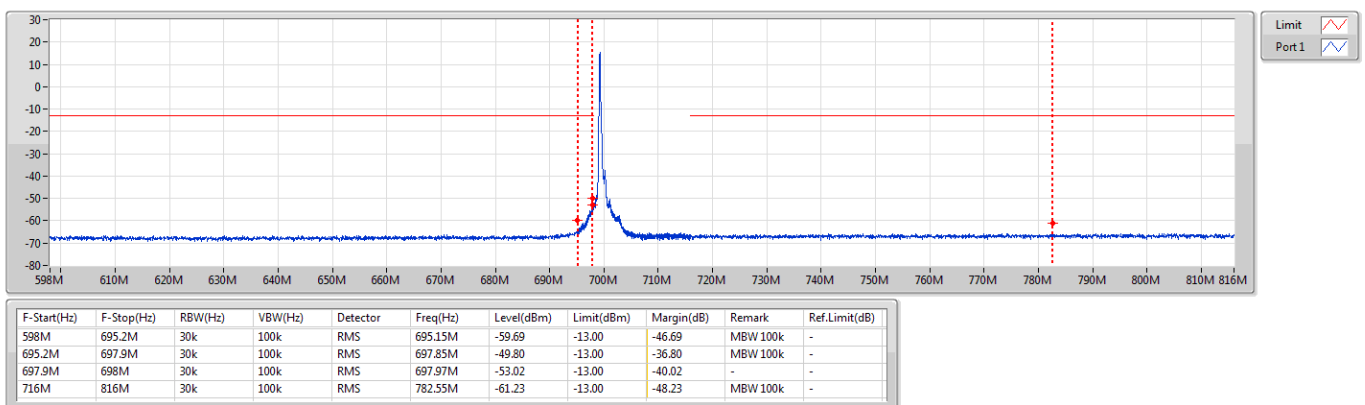
Band 12_LTE_1.4MHz_Nss1,64QAM_1TX
699.7MHz_64QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,64QAM_1TX
699.7MHz_64QAM_RB 1,#RB L

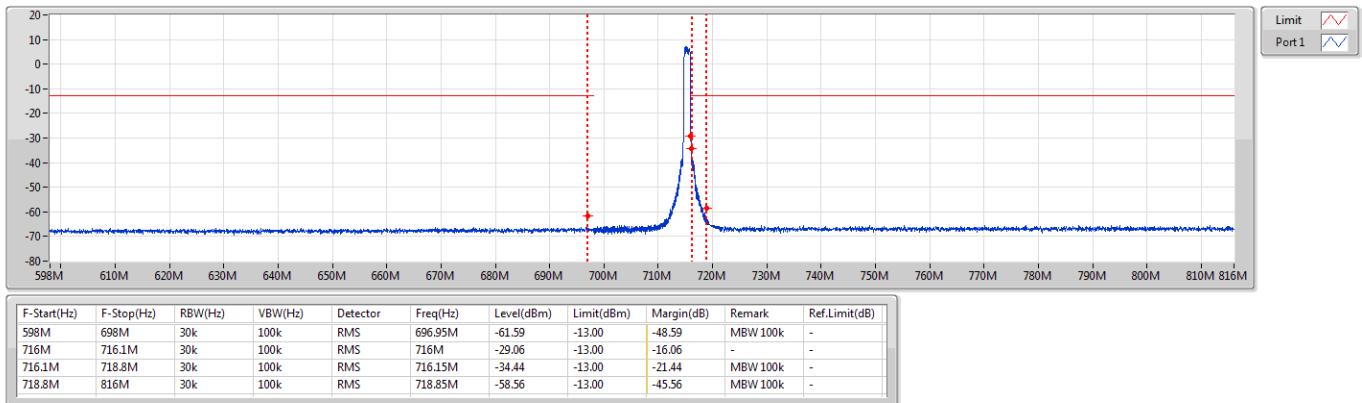
CSE-TX-Sum





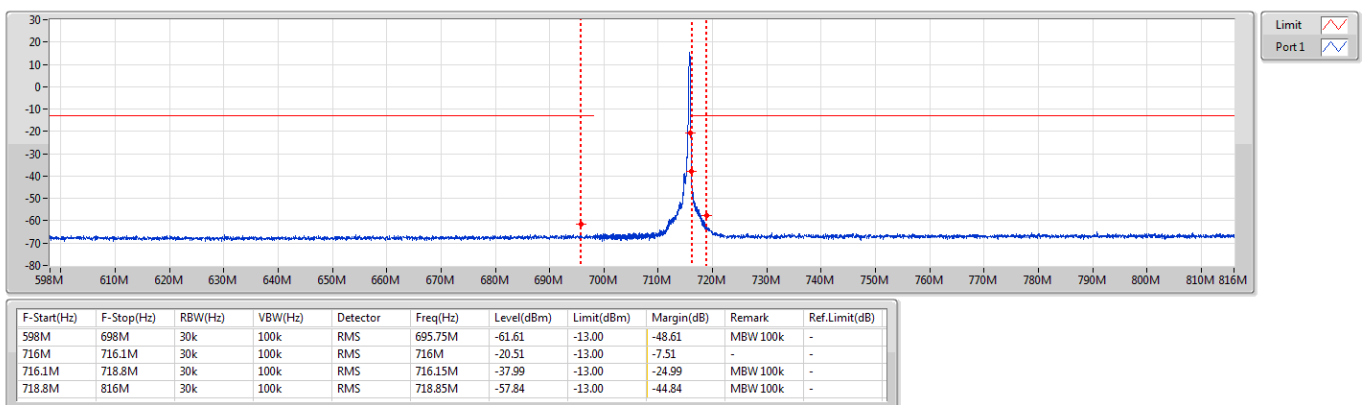
Band 12_LTE_1.4MHz_Nss1,64QAM_1TX
715.3MHz_64QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,64QAM_1TX
715.3MHz_64QAM_RB 1,#RB R

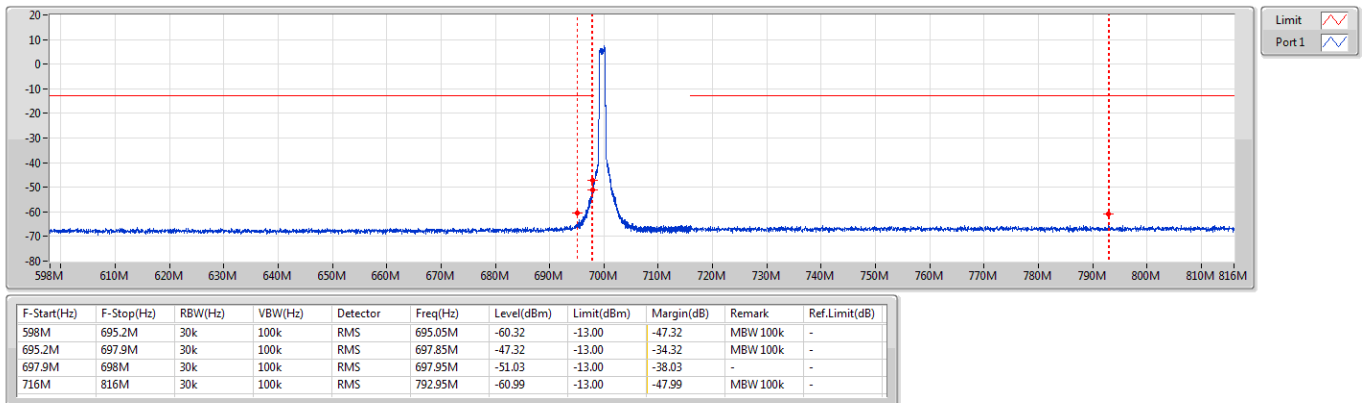
CSE-TX-Sum





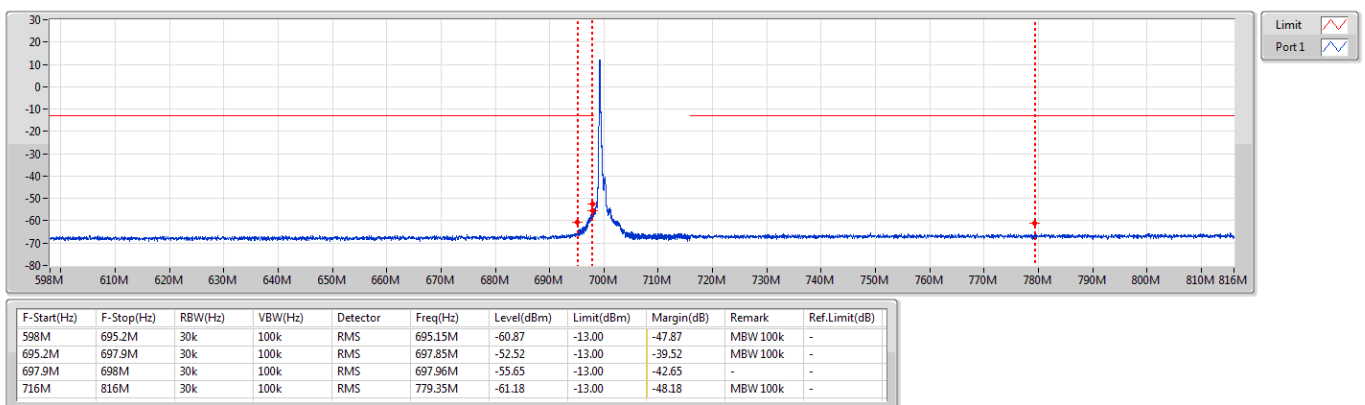
Band 12_LTE_1.4MHz_Nss1,256QAM_1TX
699.7MHz_256QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,256QAM_1TX
699.7MHz_256QAM_RB 1,#RB L

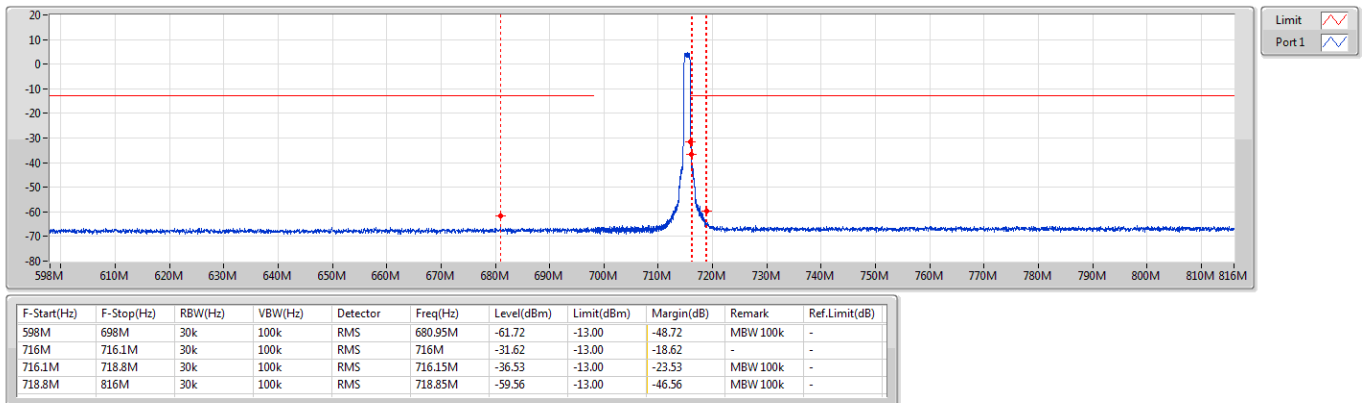
CSE-TX-Sum





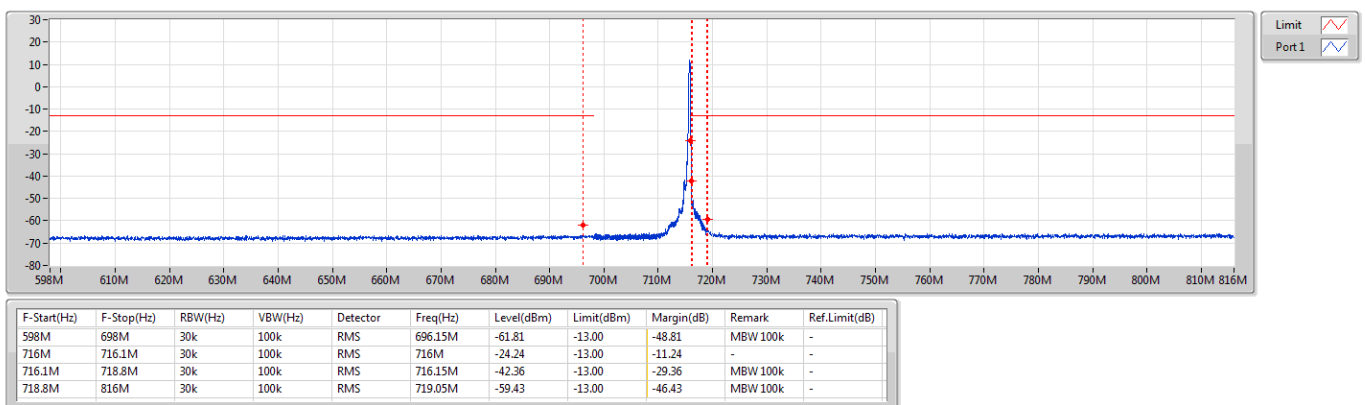
Band 12_LTE_1.4MHz_Nss1,256QAM_1TX
715.3MHz_256QAM_RB 6,#RB 0

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,256QAM_1TX
715.3MHz_256QAM_RB 1,#RB R

CSE-TX-Sum





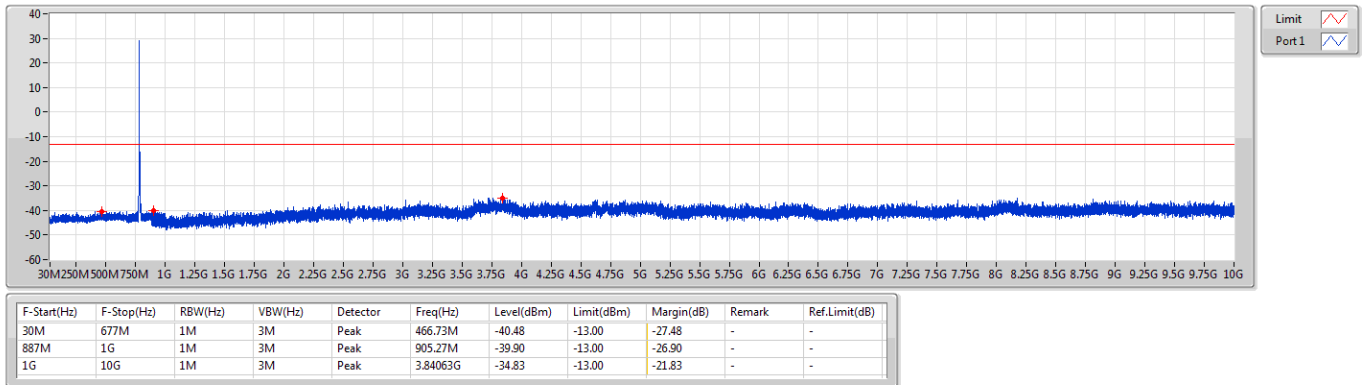
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 13	-	-	-	-	-	-	-	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.84063G	-34.83	-13.00	-21.83	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.86116G	-33.49	-13.00	-20.49	-	-



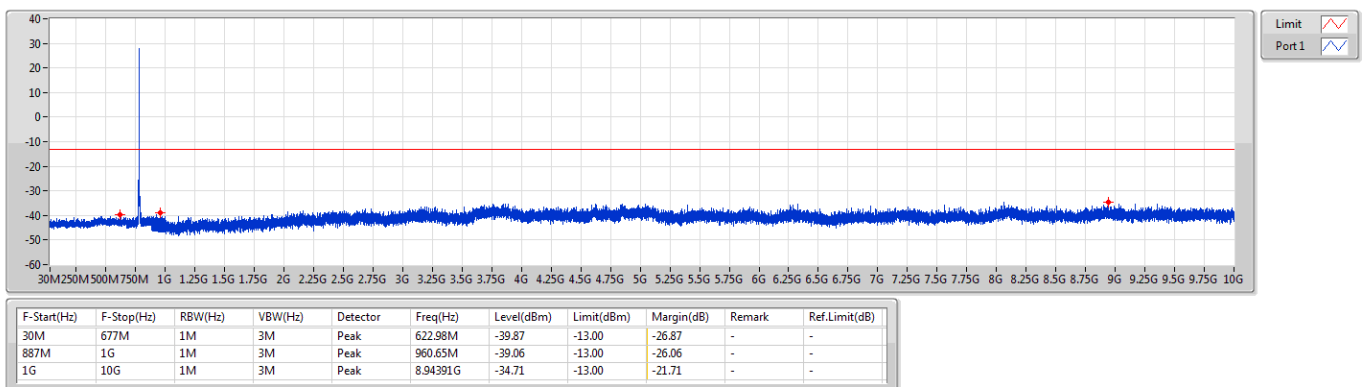
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1

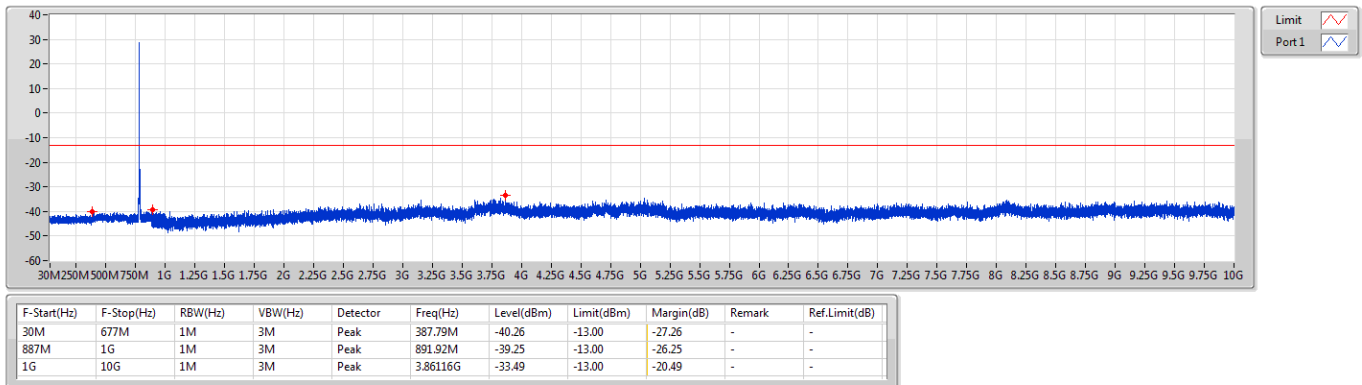
CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

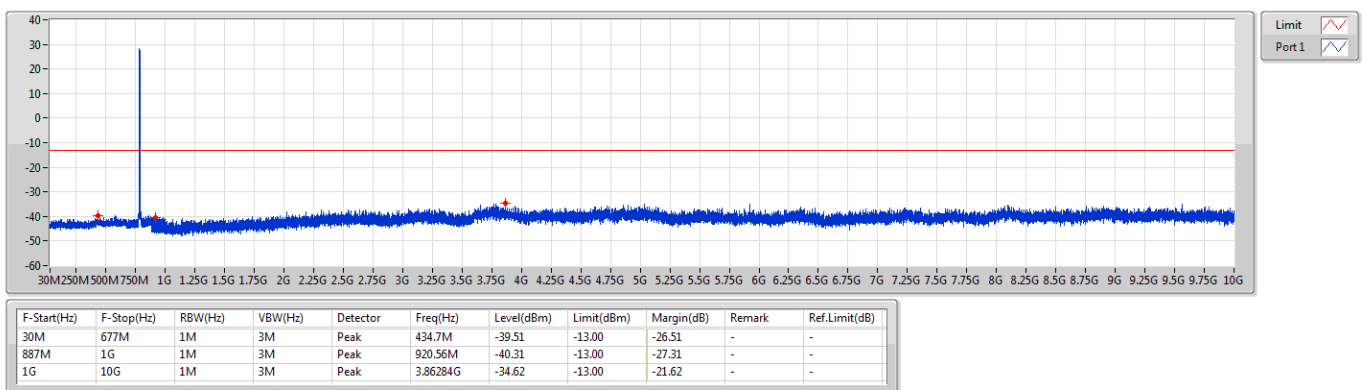
782MHz_QPSK_RB 1



Band 13_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

784.5MHz_QPSK_RB 1

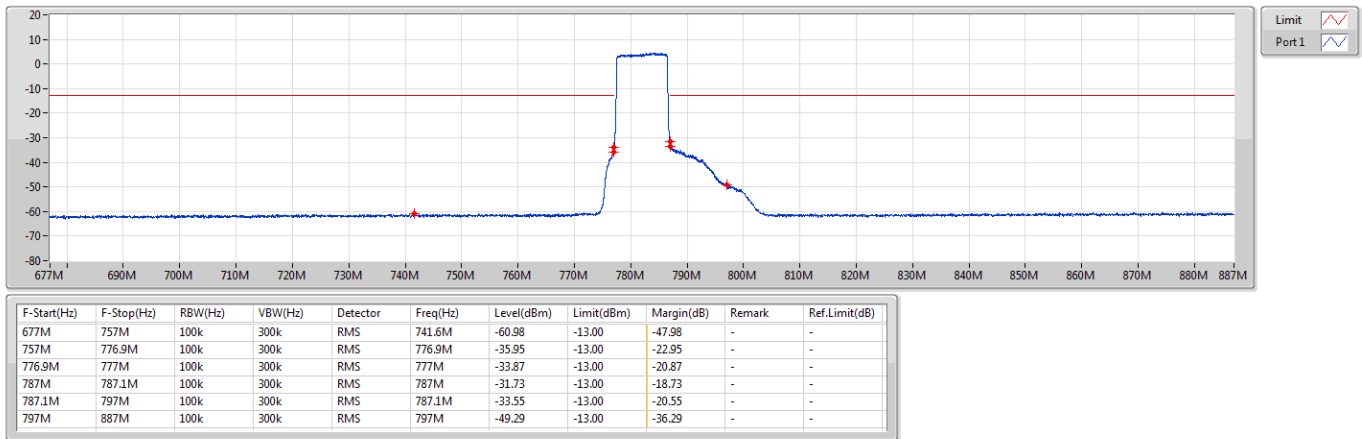


**Summary**

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 13	-	-	-	-	-	-	-	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	787M	787.1M	100k	300k	RMS	787M	-19.87	-13.00	-6.87	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	776.9M	777M	100k	300k	RMS	776.98M	-20.19	-13.00	-7.19	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	776.9M	777M	100k	300k	RMS	777M	-21.67	-13.00	-8.67	-	-
LTE_10MHz_Nss1,256QAM_1TX	Pass	787M	787.1M	100k	300k	RMS	787M	-24.33	-13.00	-11.33	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	776.9M	777M	51k	200k	RMS	777M	-16.90	-13.00	-3.90	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	776.9M	777M	51k	200k	RMS	777M	-17.43	-13.00	-4.43	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	787M	787.1M	51k	200k	RMS	787M	-17.65	-13.00	-4.65	-	-
LTE_5MHz_Nss1,256QAM_1TX	Pass	776.9M	777M	51k	200k	RMS	777M	-21.45	-13.00	-8.45	-	-

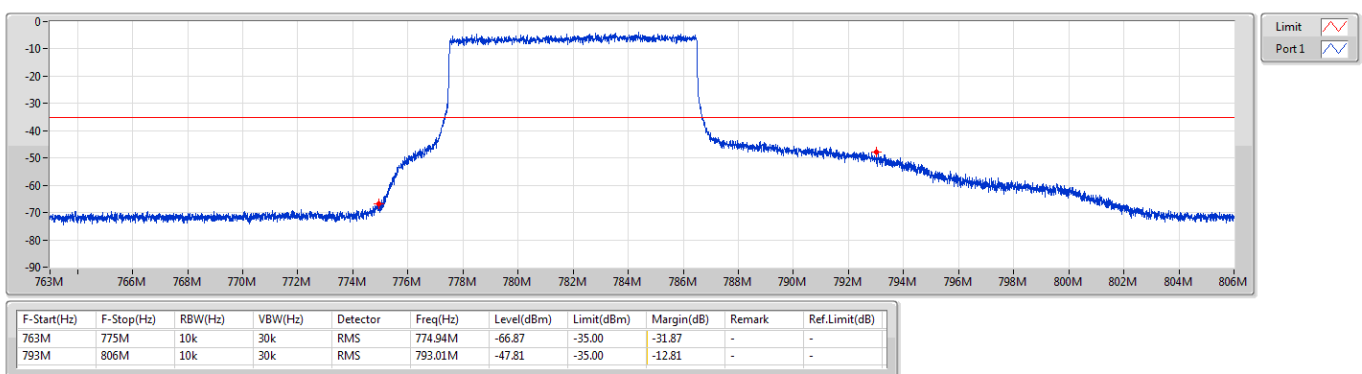
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



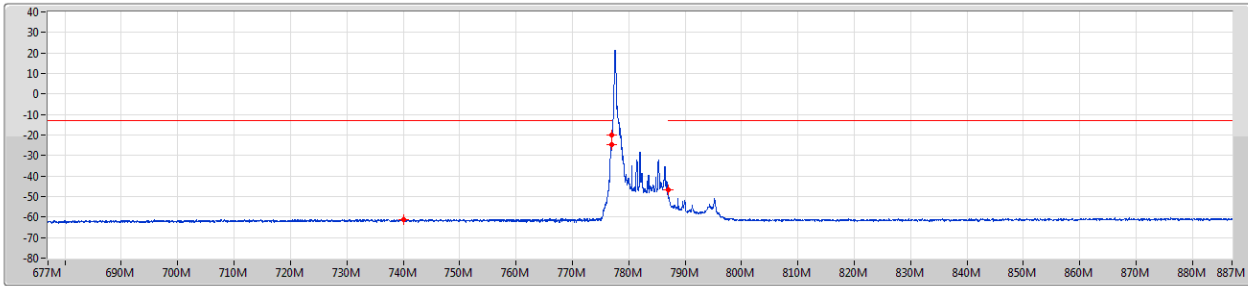
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB L

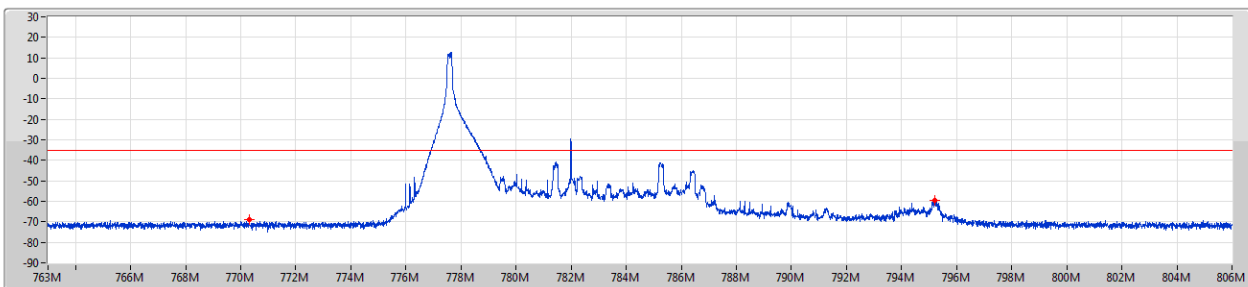
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	757M	100k	300k	RMS	740.16M	-61.06	-13.00	-48.06	-	-
757M	776.9M	100k	300k	RMS	776.9M	-24.78	-13.00	-11.78	-	-
776.9M	777M	100k	300k	RMS	776.98M	-20.21	-13.00	-7.21	-	-
787M	887M	100k	300k	RMS	787M	-46.71	-13.00	-33.71	-	-

Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB L

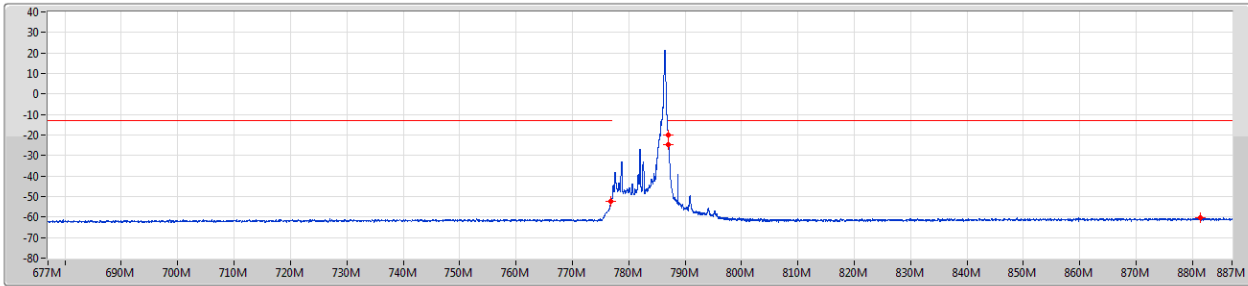
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	770.3M	-69.07	-35.00	-34.07	-	-
793M	806M	10k	30k	RMS	795.21M	-59.50	-35.00	-24.50	-	-

Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB R

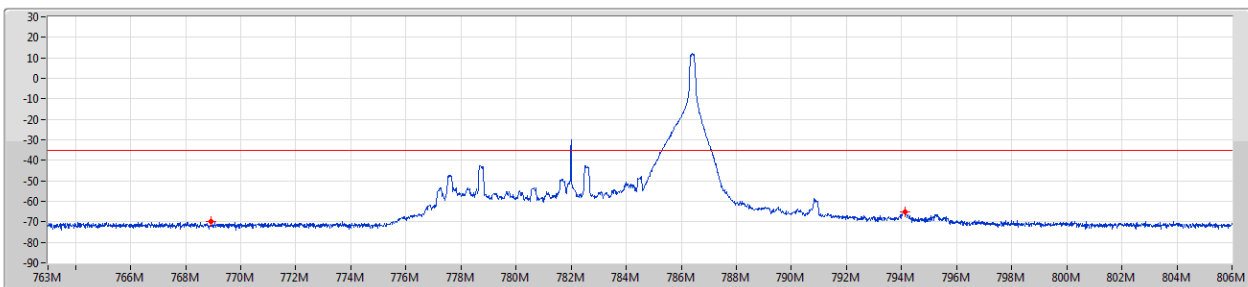
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	777M	100k	300k	RMS	776.85M	-52.46	-13.00	-39.46	-	-
787M	787.1M	100k	300k	RMS	787M	-19.87	-13.00	-6.87	-	-
787.1M	807M	100k	300k	RMS	787.1M	-24.59	-13.00	-11.59	-	-
807M	887M	100k	300k	RMS	881.32M	-60.36	-13.00	-47.36	-	-

Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB R

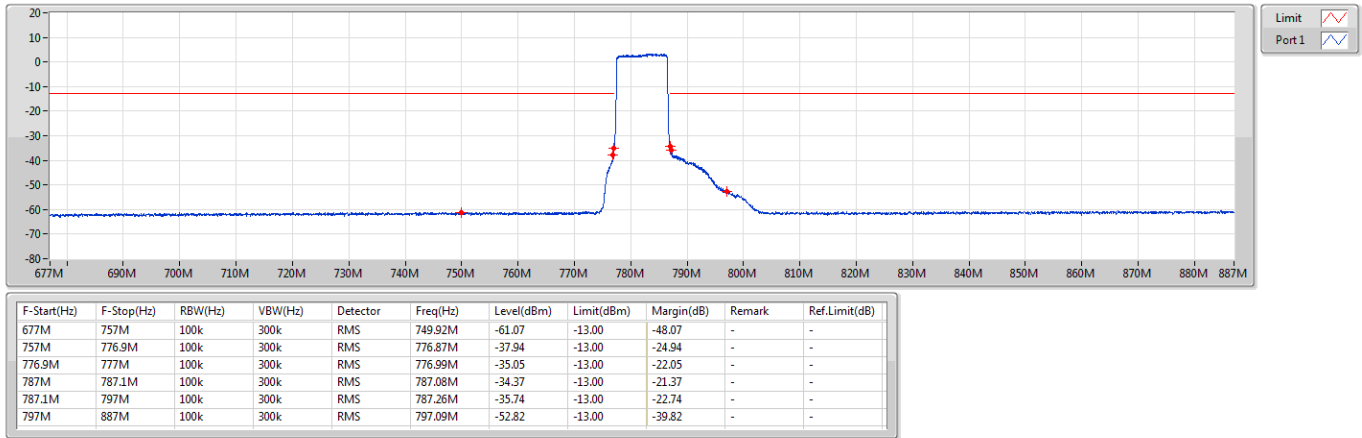
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	768.92M	-69.74	-35.00	-34.74	-	-
793M	806M	10k	30k	RMS	794.11M	-65.04	-35.00	-30.04	-	-

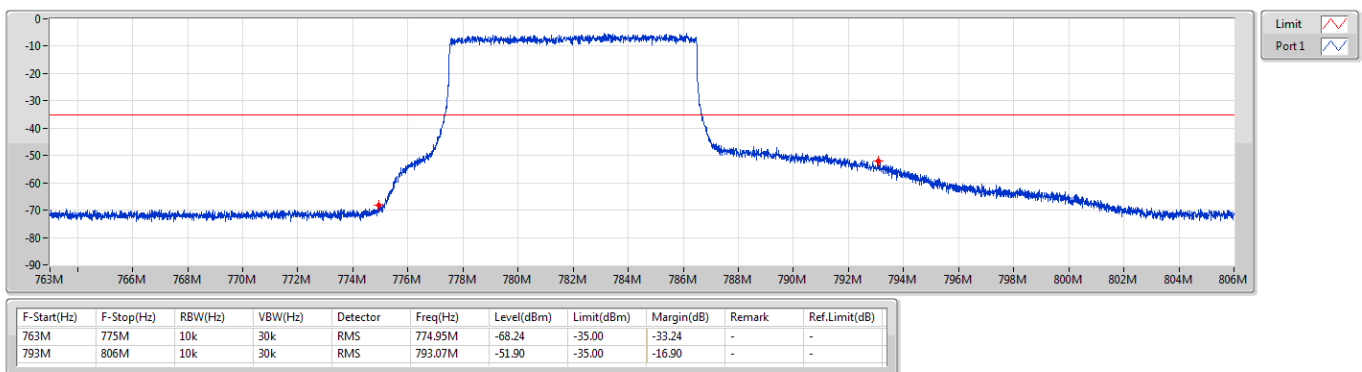
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



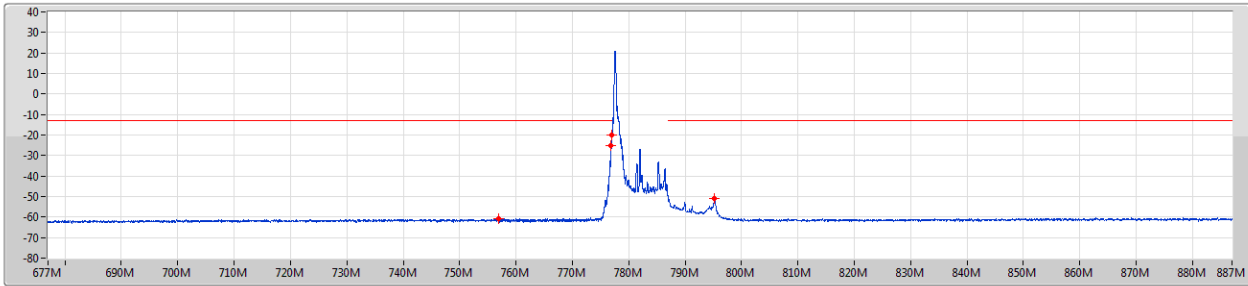
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB L

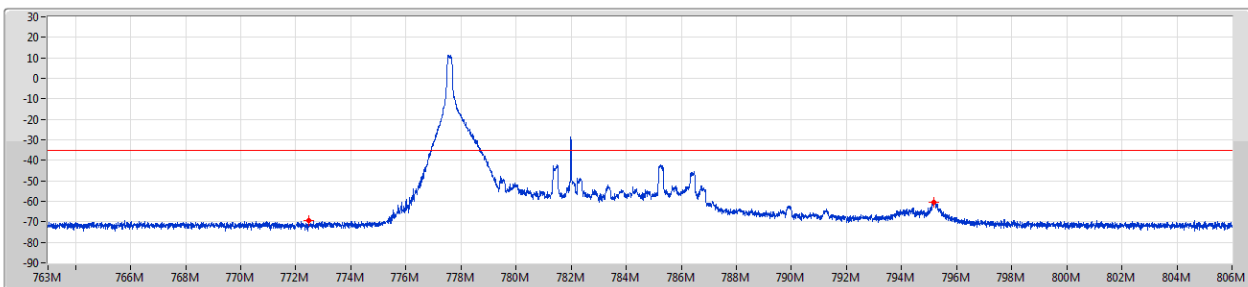
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	757M	100k	300k	RMS	756.88M	-60.91	-13.00	-47.91	-	-
757M	776.9M	100k	300k	RMS	776.87M	-24.93	-13.00	-11.93	-	-
776.9M	777M	100k	300k	RMS	776.98M	-20.19	-13.00	-7.19	-	-
787M	887M	100k	300k	RMS	795.2M	-51.11	-13.00	-38.11	-	-

Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB L

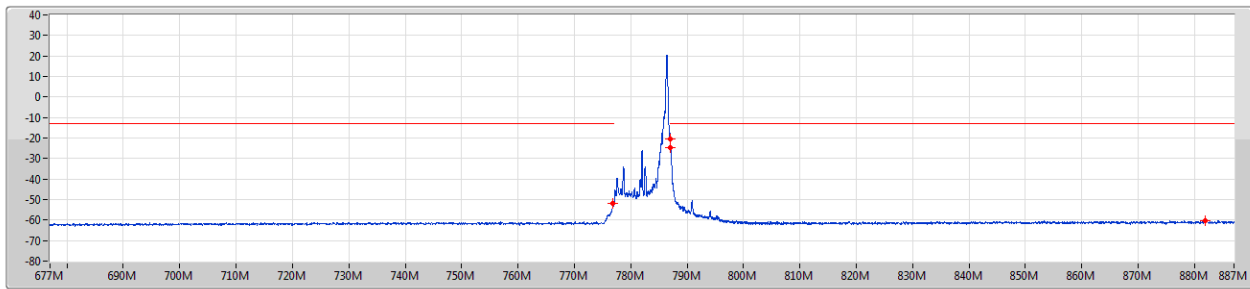
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	772.48M	-69.37	-35.00	-34.37	-	-
793M	806M	10k	30k	RMS	795.16M	-60.26	-35.00	-25.26	-	-

Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB R

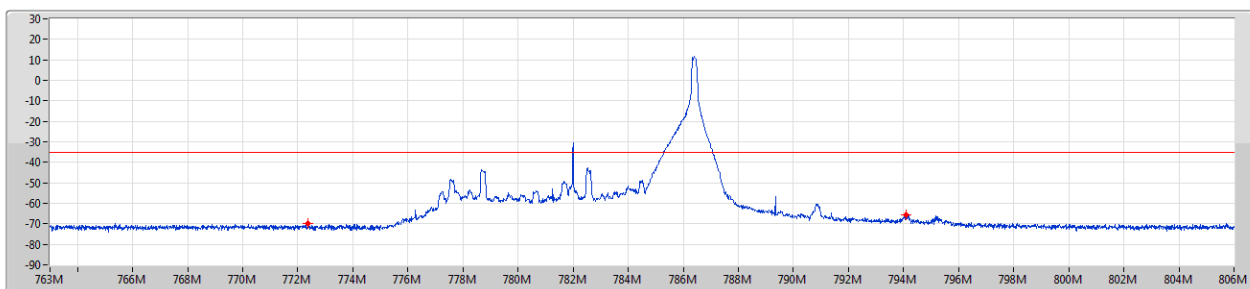
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	777M	100k	300k	RMS	776.85M	-51.99	-13.00	-38.99	-	-
787M	787.1M	100k	300k	RMS	787M	-20.38	-13.00	-7.38	-	-
787.1M	807M	100k	300k	RMS	787.1M	-24.87	-13.00	-11.87	-	-
807M	887M	100k	300k	RMS	881.96M	-60.42	-13.00	-47.42	-	-

Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB R

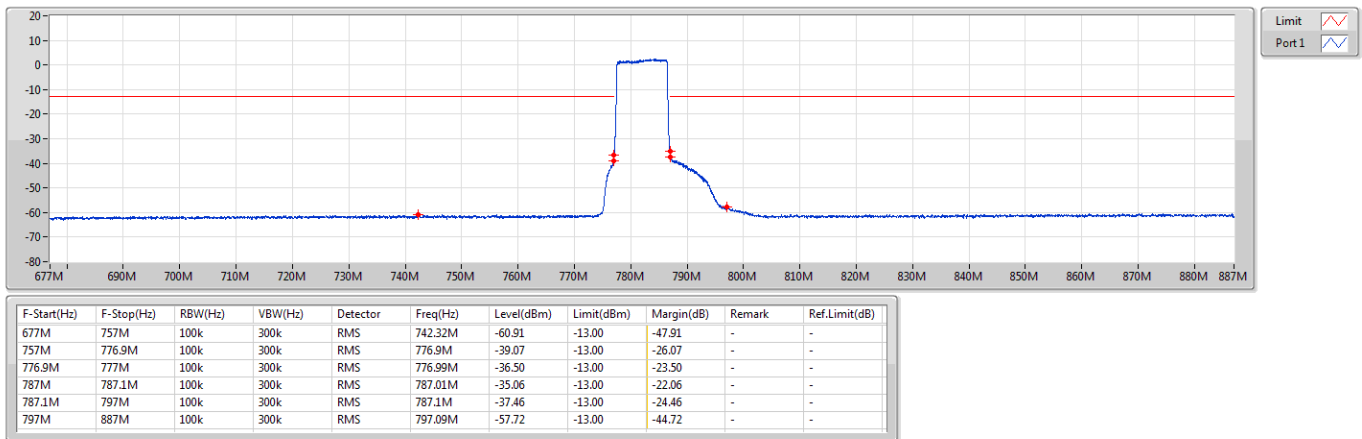
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	772.38M	-69.95	-35.00	-34.95	-	-
793M	806M	10k	30k	RMS	794.08M	-65.72	-35.00	-30.72	-	-

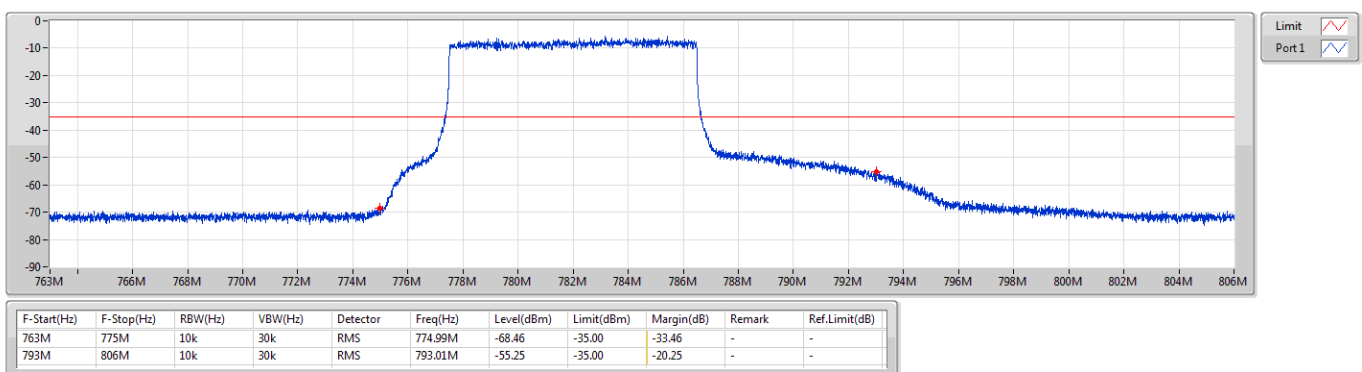
Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 50,#RB 0

CSE-TX-Sum



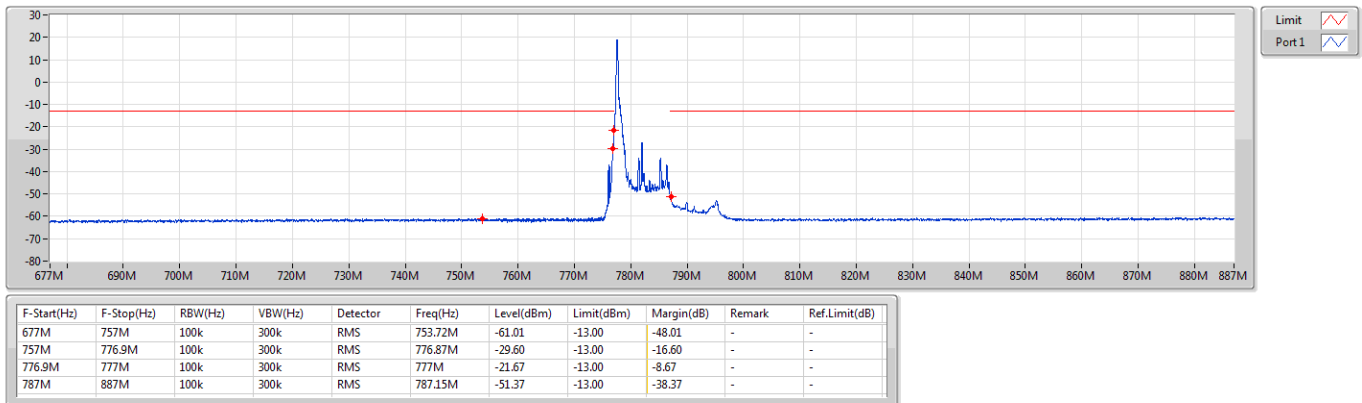
Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 50,#RB 0

CSE-TX-Sum



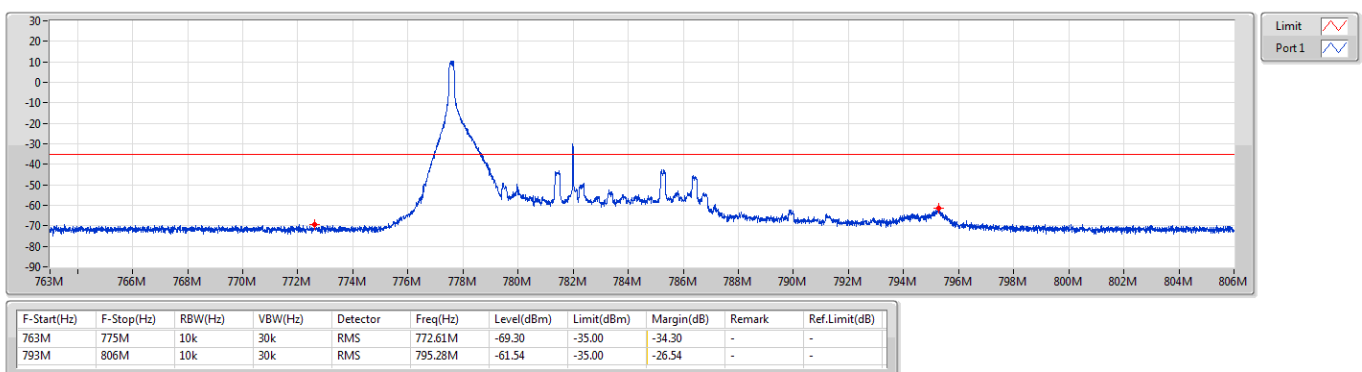
Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 1,#RB L

CSE-TX-Sum



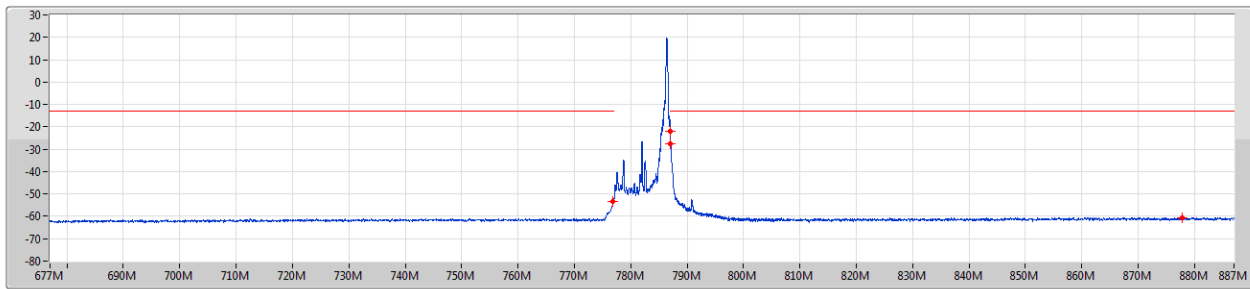
Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 1,#RB L

CSE-TX-Sum



Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 1,#RB R

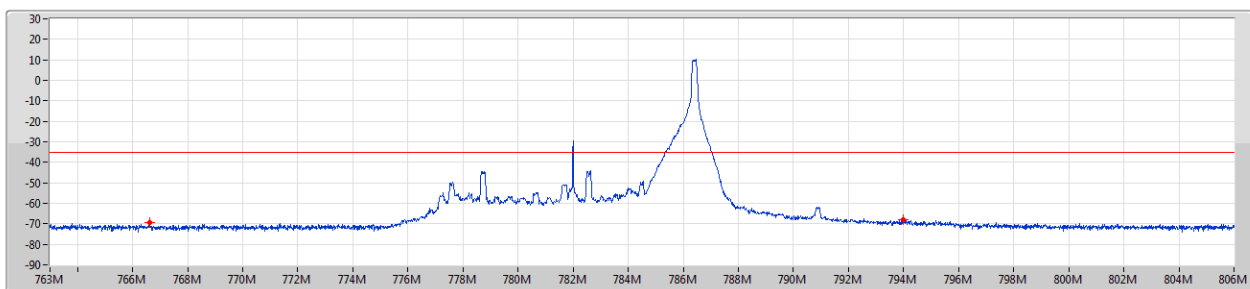
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	777M	100k	300k	RMS	776.85M	-53.29	-13.00	-40.29	-	-
787M	787.1M	100k	300k	RMS	787.02M	-21.82	-13.00	-8.82	-	-
787.1M	807M	100k	300k	RMS	787.1M	-27.53	-13.00	-14.53	-	-
807M	887M	100k	300k	RMS	877.76M	-60.51	-13.00	-47.51	-	-

Band 13_LTE_10MHz_Nss1,64QAM_1TX
782MHz_64QAM_RB 1,#RB R

CSE-TX-Sum

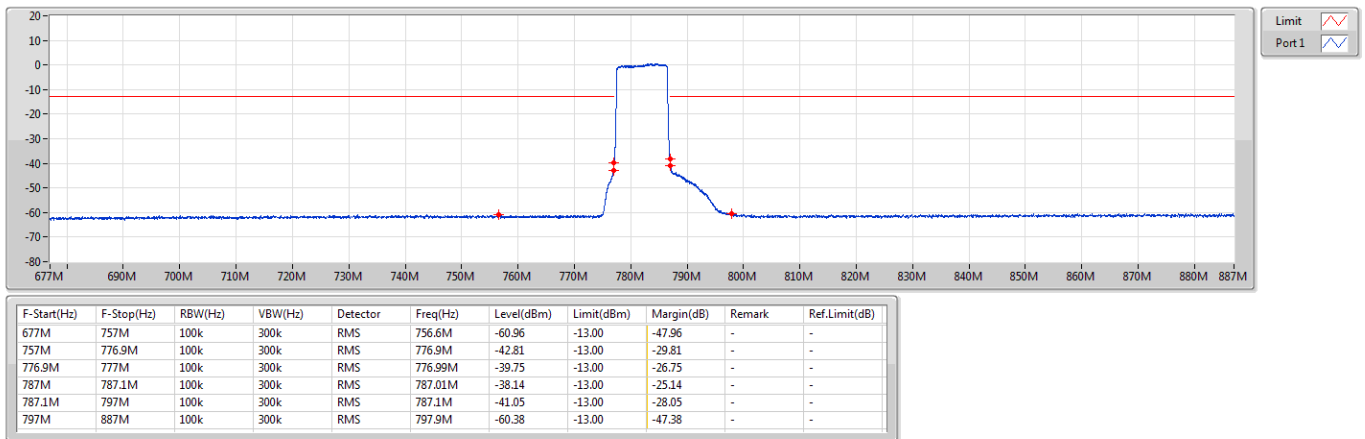


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	766.62M	-69.47	-35.00	-34.47	-	-
793M	806M	10k	30k	RMS	793.99M	-68.15	-35.00	-33.15	-	-



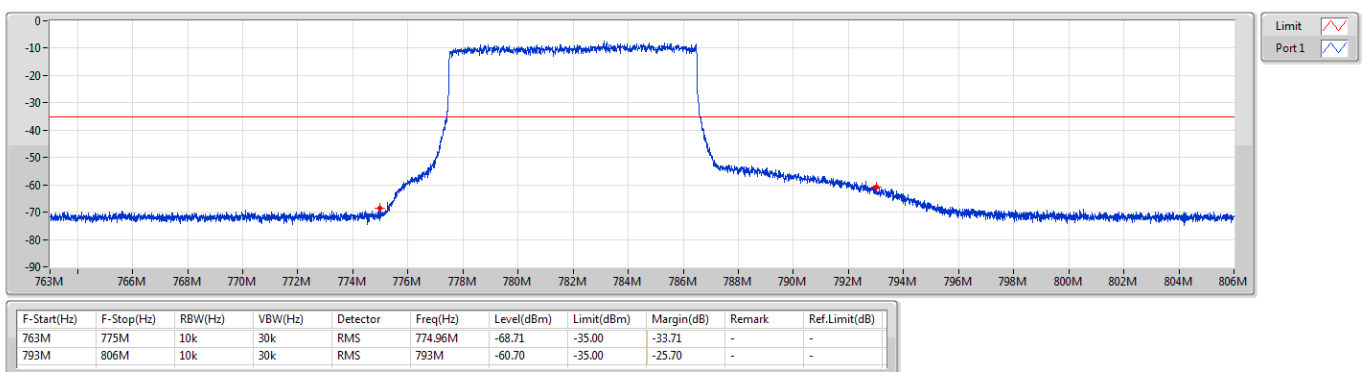
Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 50,#RB 0

CSE-TX-Sum



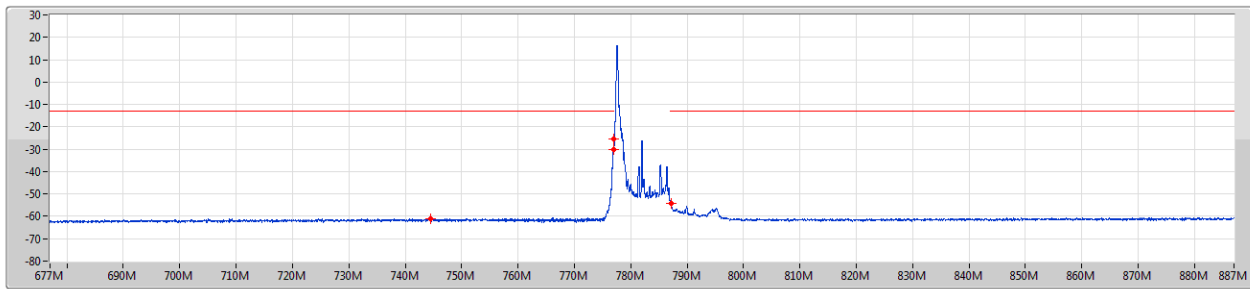
Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 50,#RB 0

CSE-TX-Sum



Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 1,#RB L

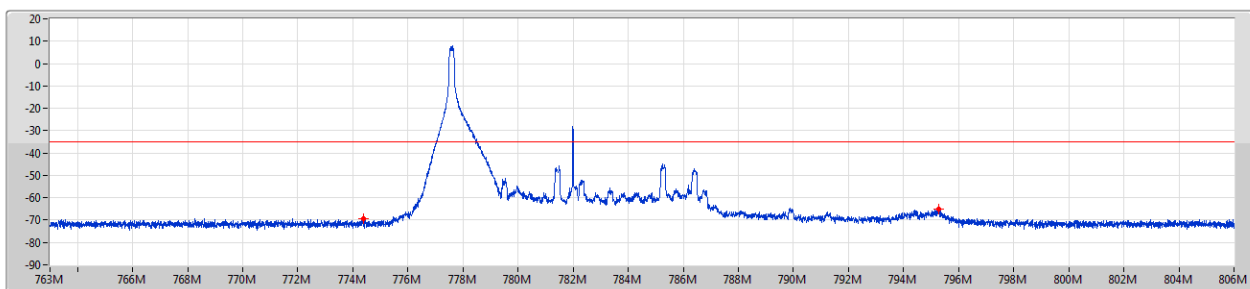
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	757M	100k	300k	RMS	744.56M	-61.01	-13.00	-48.01	-	-
757M	776.9M	100k	300k	RMS	776.9M	-30.15	-13.00	-17.15	-	-
776.9M	777M	100k	300k	RMS	776.98M	-25.36	-13.00	-12.36	-	-
787M	887M	100k	300k	RMS	787.15M	-54.29	-13.00	-41.29	-	-

Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 1,#RB L

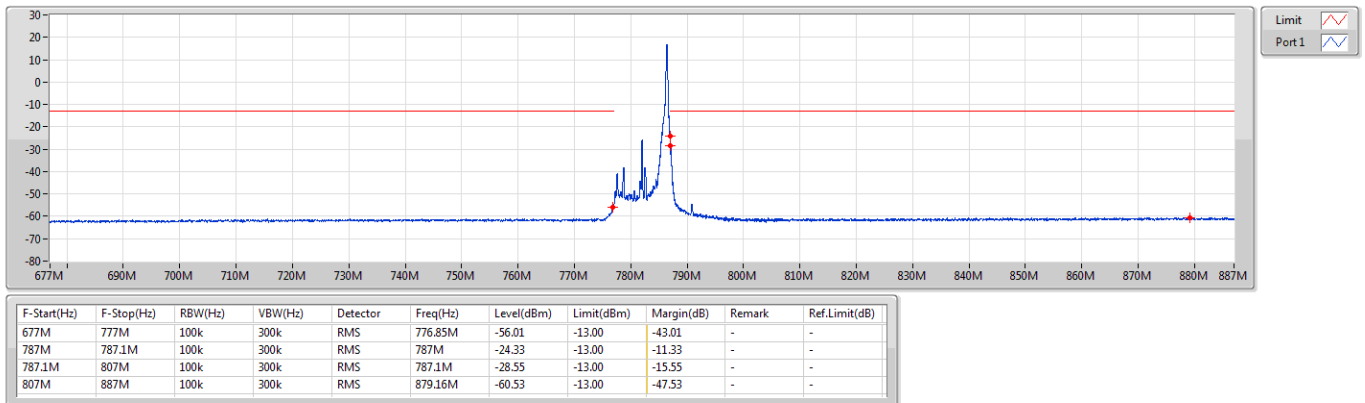
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.37M	-69.32	-35.00	-34.32	-	-
793M	806M	10k	30k	RMS	795.29M	-65.22	-35.00	-30.22	-	-

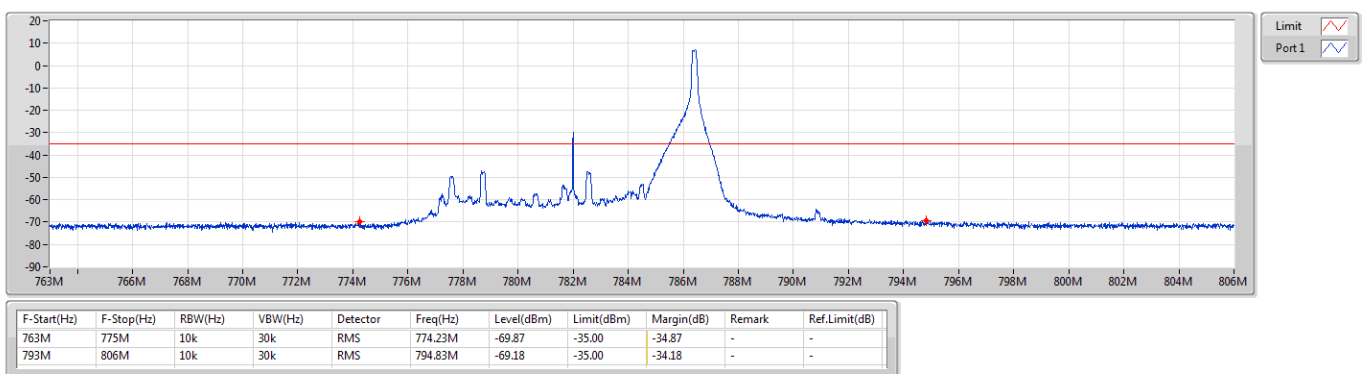
Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 1,#RB R

CSE-TX-Sum



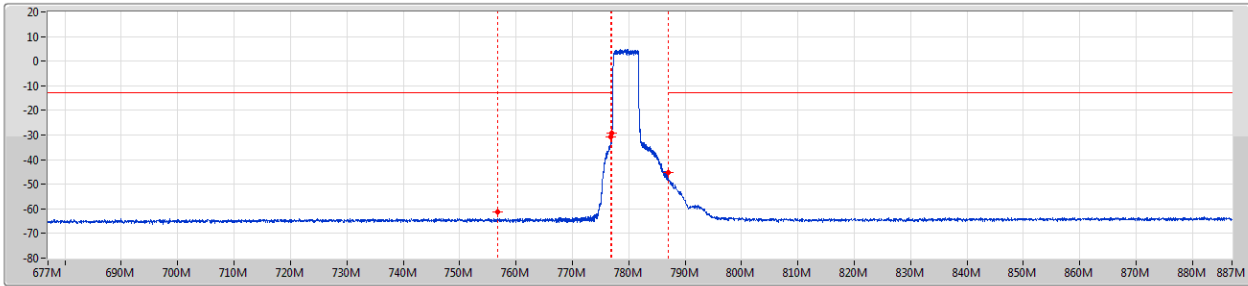
Band 13_LTE_10MHz_Nss1,256QAM_1TX
782MHz_256QAM_RB 1,#RB R

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 25,#RB 0

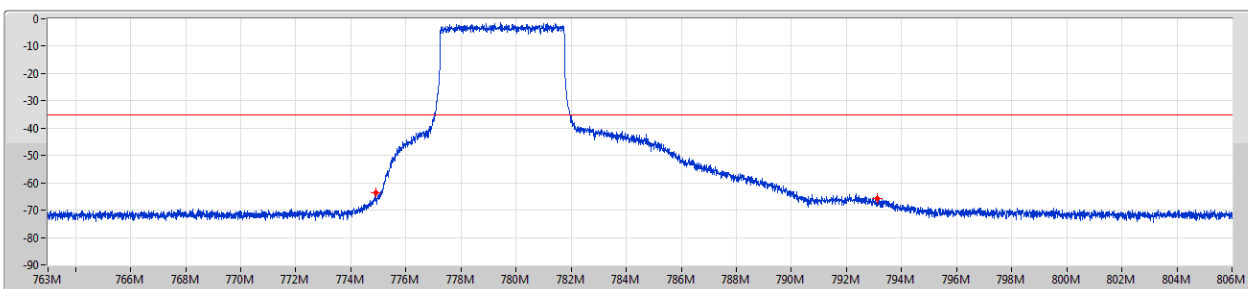
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	767M	51k	200k	RMS	756.75M	-61.38	-13.00	-48.38	MBW 100k	-
767M	776.9M	51k	200k	RMS	776.85M	-30.65	-13.00	-17.65	MBW 100k	-
776.9M	777M	51k	200k	RMS	776.99M	-29.20	-13.00	-16.20	-	-
787M	887M	51k	200k	RMS	787.05M	-45.09	-13.00	-32.09	MBW 100k	-

Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 25,#RB 0

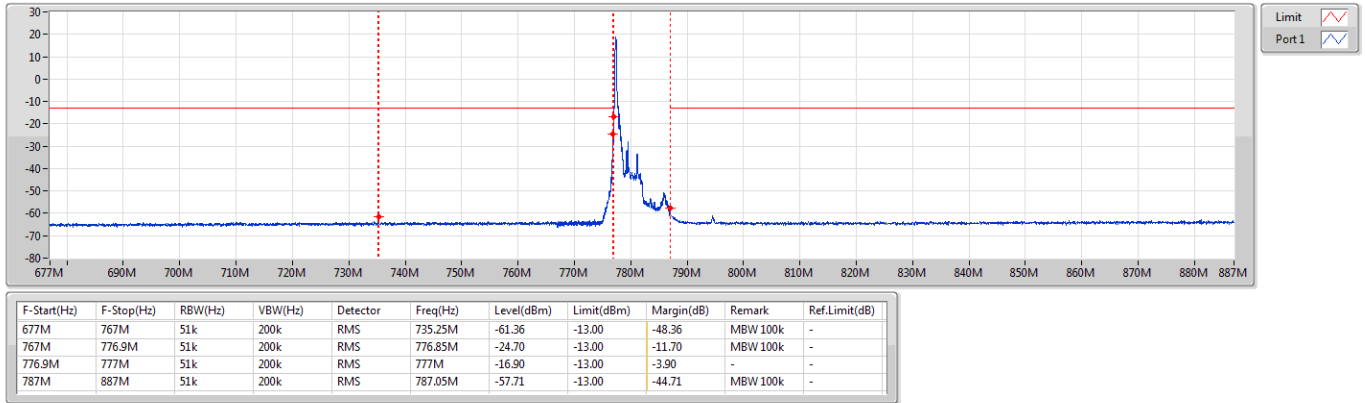
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.91M	-63.80	-35.00	-28.80	-	-
793M	806M	10k	30k	RMS	793.11M	-65.62	-35.00	-30.62	-	-

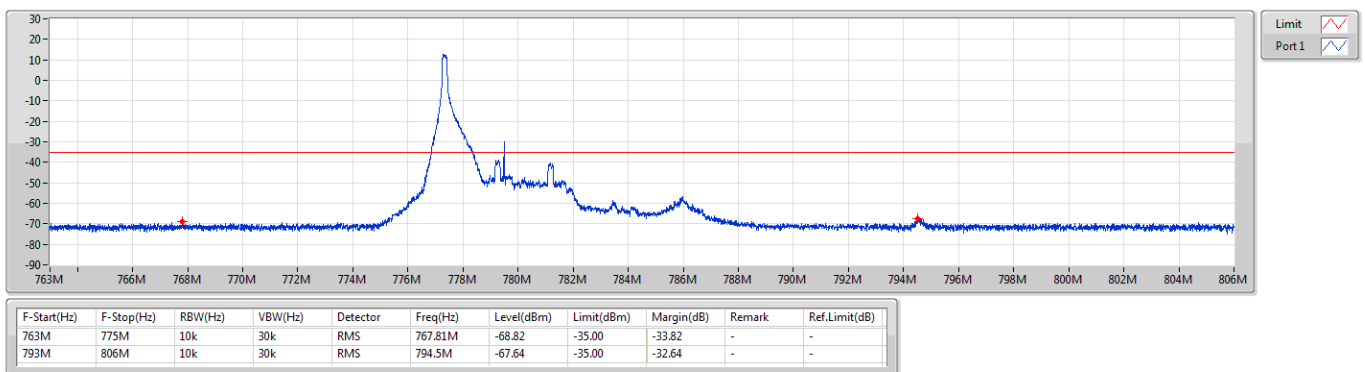
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1,#RB L

CSE-TX-Sum



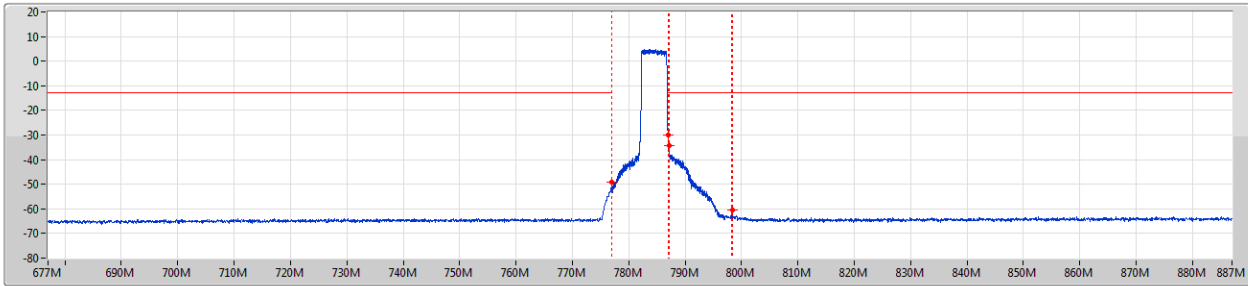
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1,#RB L

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 25,#RB 0

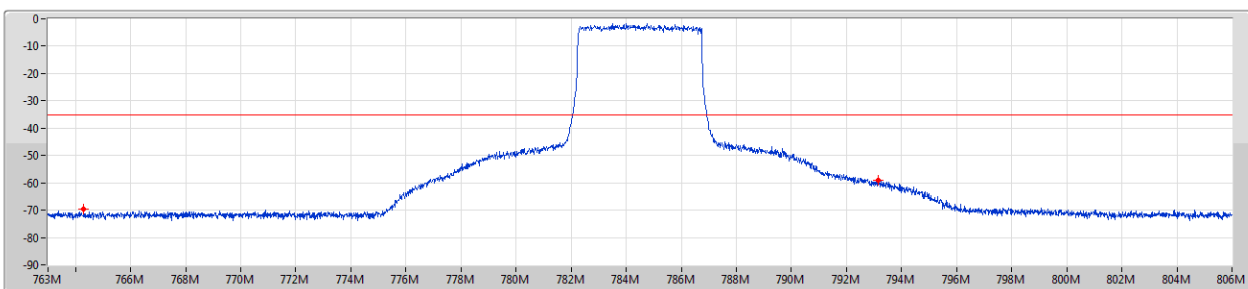
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	777M	51k	200k	RMS	776.95M	-49.11	-13.00	-36.11	MBW 100k	-
787M	787.1M	51k	200k	RMS	787.01M	-29.91	-13.00	-16.91	-	-
787.1M	797M	51k	200k	RMS	787.15M	-34.30	-13.00	-21.30	MBW 100k	-
797M	887M	51k	200k	RMS	798.35M	-60.33	-13.00	-47.33	MBW 100k	-

Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 25,#RB 0

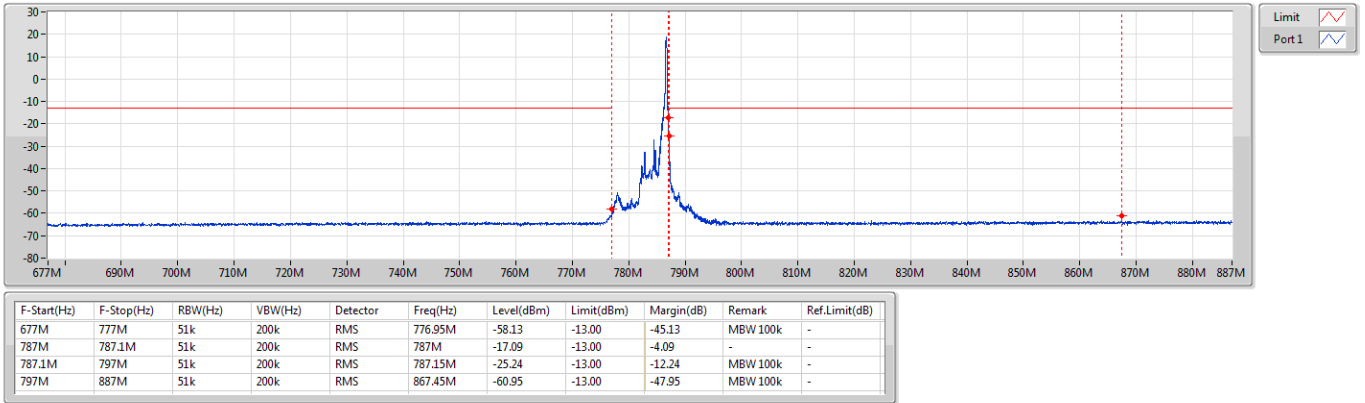
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	764.28M	-69.72	-35.00	-34.72	-	-
793M	806M	10k	30k	RMS	793.16M	-58.92	-35.00	-23.92	-	-

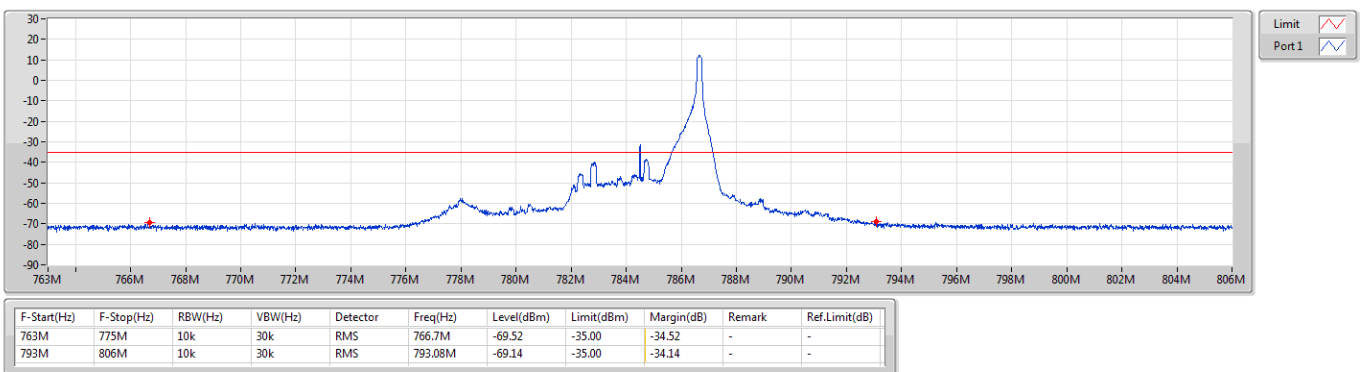
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 1,#RB R

CSE-TX-Sum



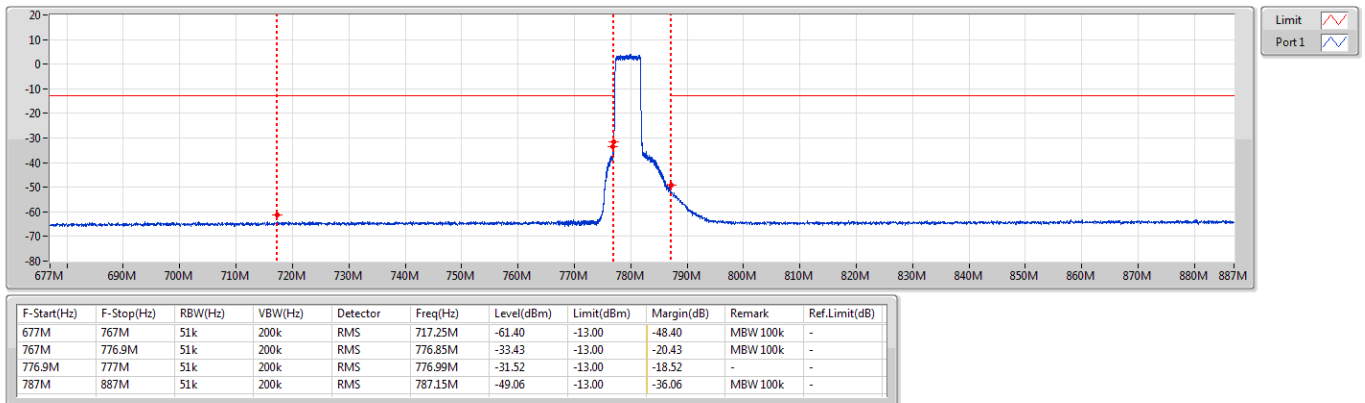
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 1,#RB R

CSE-TX-Sum



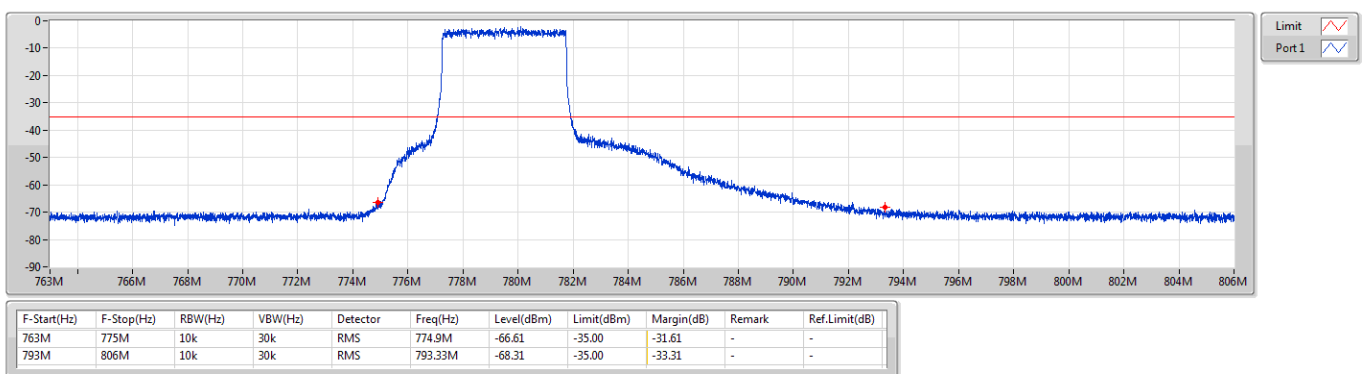
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



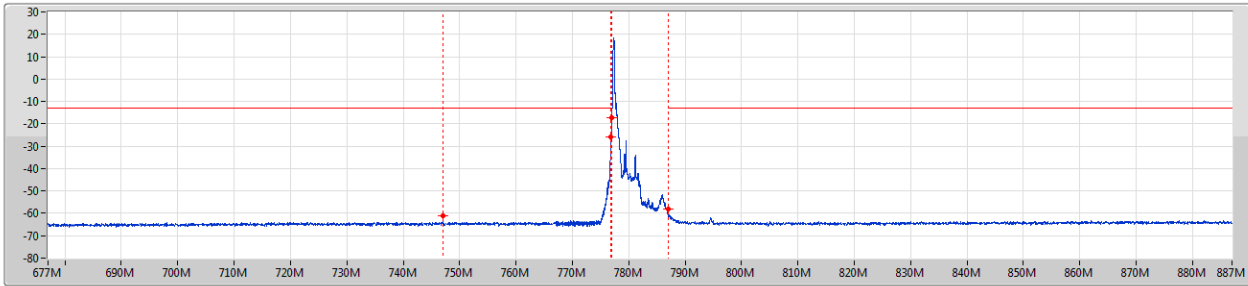
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 1,#RB L

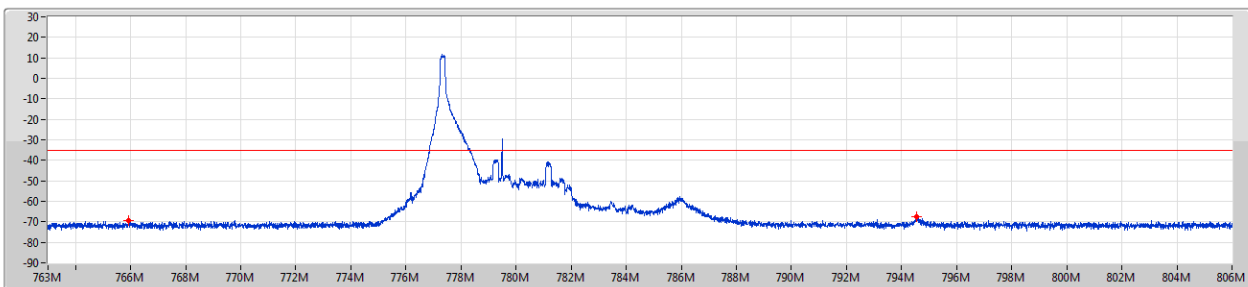
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	767M	51k	200k	RMS	747.05M	-61.18	-13.00	-48.18	MBW 100k	-
767M	776.9M	51k	200k	RMS	776.85M	-25.97	-13.00	-12.97	MBW 100k	-
776.9M	777M	51k	200k	RMS	777M	-17.43	-13.00	-4.43	-	-
787M	887M	51k	200k	RMS	787.05M	-58.03	-13.00	-45.03	MBW 100k	-

Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 1,#RB L

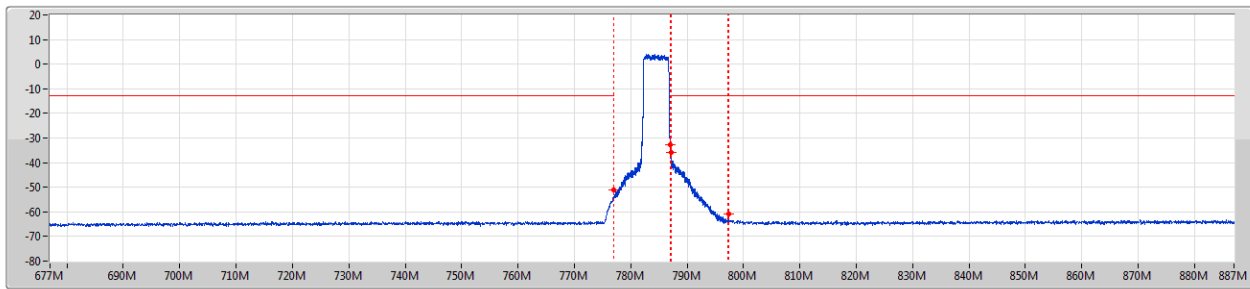
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	765.92M	-69.57	-35.00	-34.57	-	-
793M	806M	10k	30k	RMS	794.54M	-67.40	-35.00	-32.40	-	-

Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 25,#RB 0

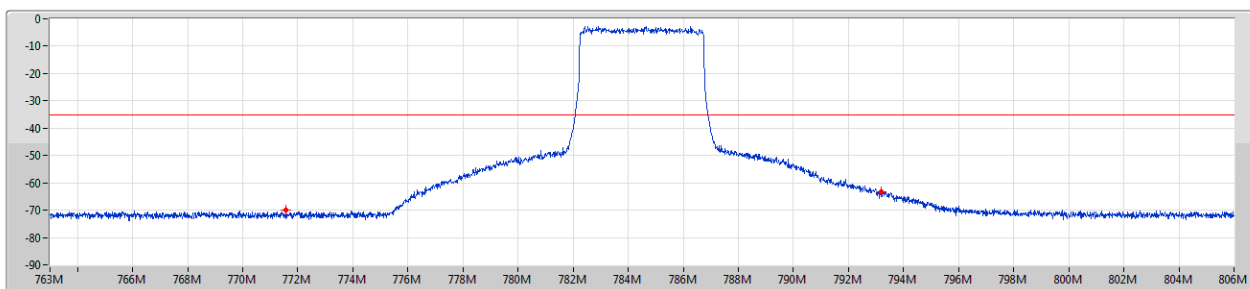
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	777M	51k	200k	RMS	776.95M	-51.19	-13.00	-38.19	MBW 100k	-
787M	787.1M	51k	200k	RMS	787.01M	-32.62	-13.00	-19.62	-	-
787.1M	797M	51k	200k	RMS	787.15M	-36.01	-13.00	-23.01	MBW 100k	-
797M	887M	51k	200k	RMS	797.35M	-60.77	-13.00	-47.77	MBW 100k	-

Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 25,#RB 0

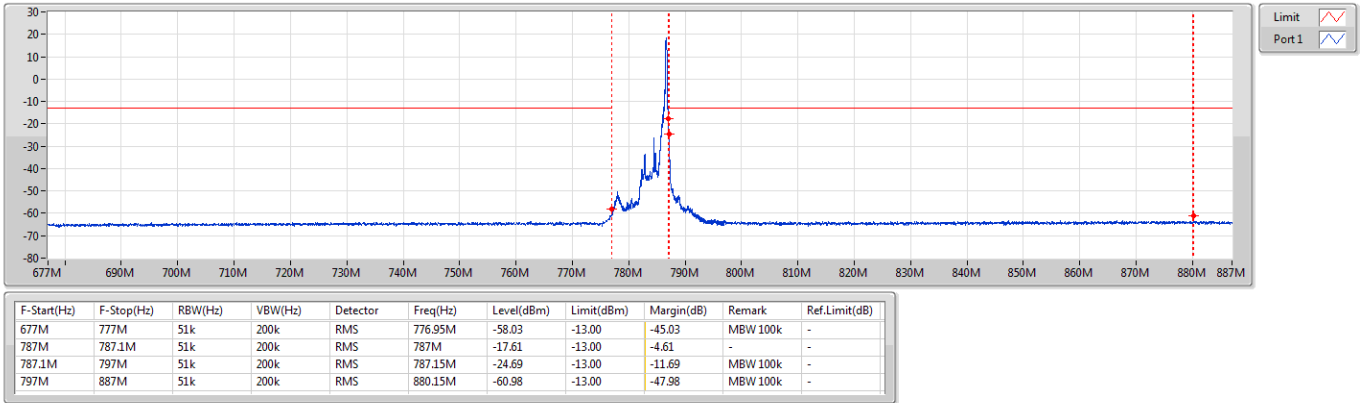
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	771.57M	-70.10	-35.00	-35.10	-	-
793M	806M	10k	30k	RMS	793.17M	-63.11	-35.00	-28.11	-	-

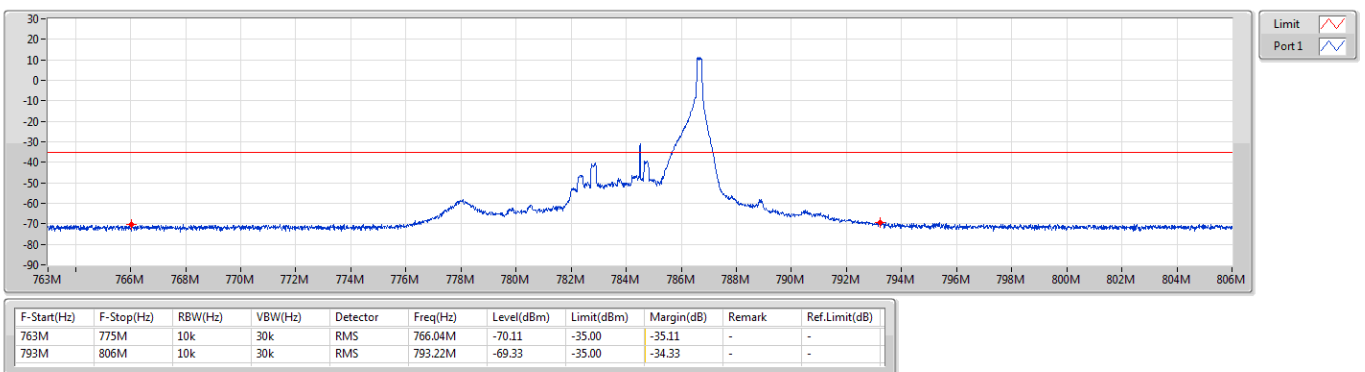
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 1,#RB R

CSE-TX-Sum



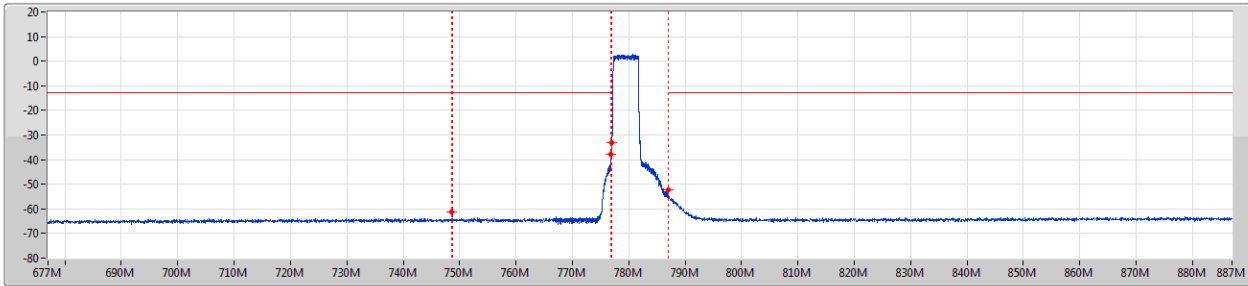
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 1,#RB R

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,64QAM_1TX
779.5MHz_64QAM_RB 25,#RB 0

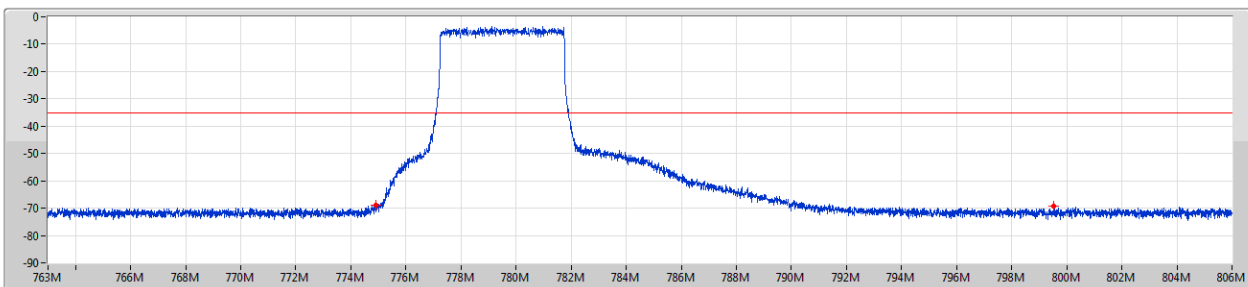
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	767M	51k	200k	RMS	748.65M	-61.30	-13.00	-48.30	MBW 100k	-
767M	776.9M	51k	200k	RMS	776.85M	-37.73	-13.00	-24.73	MBW 100k	-
776.9M	777M	51k	200k	RMS	777M	-33.10	-13.00	-20.10	-	-
787M	887M	51k	200k	RMS	787.05M	-52.10	-13.00	-39.10	MBW 100k	-

Band 13_LTE_5MHz_Nss1,64QAM_1TX
779.5MHz_64QAM_RB 25,#RB 0

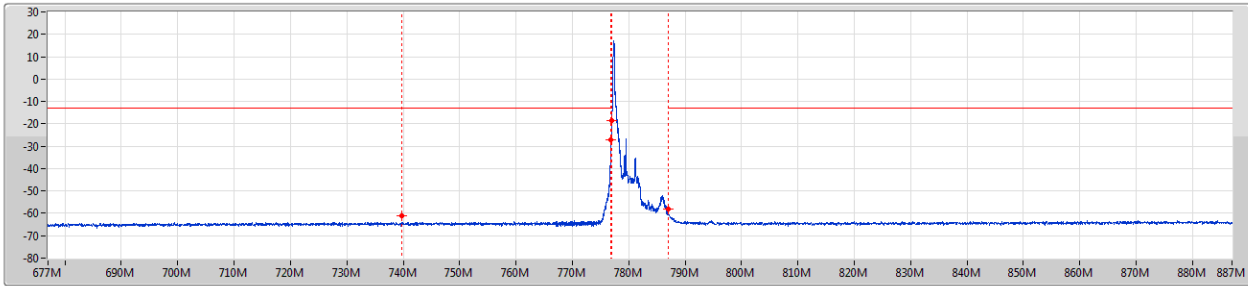
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.92M	-68.79	-35.00	-33.79	-	-
793M	806M	10k	30k	RMS	799.54M	-69.43	-35.00	-34.43	-	-

Band 13_LTE_5MHz_Nss1,64QAM_1TX
779.5MHz_64QAM_RB 1,#RB L

CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	767M	51k	200k	RMS	739.75M	-61.28	-13.00	-48.28	MBW 100k	-
767M	776.9M	51k	200k	RMS	776.85M	-27.00	-13.00	-14.00	MBW 100k	-
776.9M	777M	51k	200k	RMS	776.99M	-18.69	-13.00	-5.69	-	-
787M	887M	51k	200k	RMS	787.05M	-57.91	-13.00	-44.91	MBW 100k	-

Band 13_LTE_5MHz_Nss1,64QAM_1TX
779.5MHz_64QAM_RB 1,#RB L

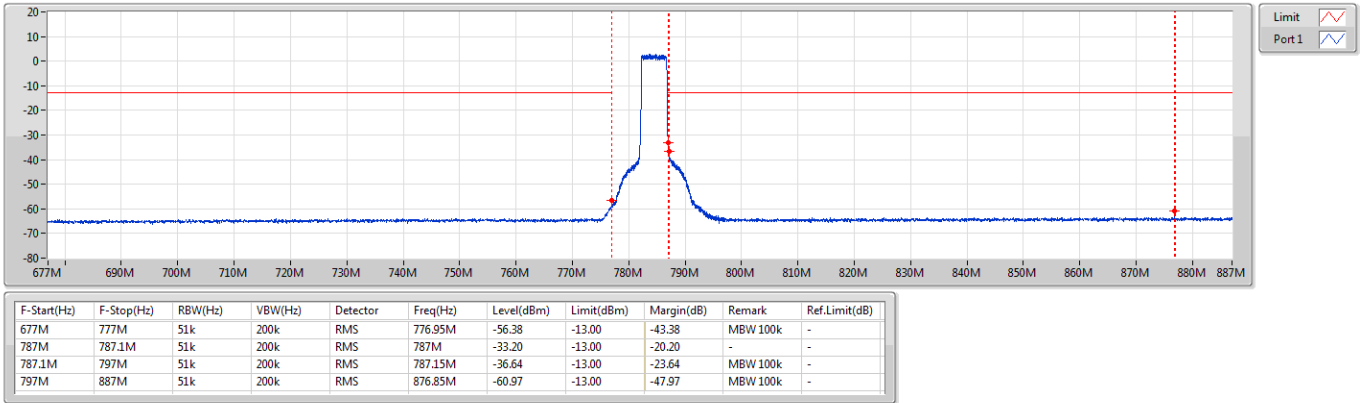
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.36M	-69.59	-35.00	-34.59	-	-
793M	806M	10k	30k	RMS	795.39M	-69.26	-35.00	-34.26	-	-

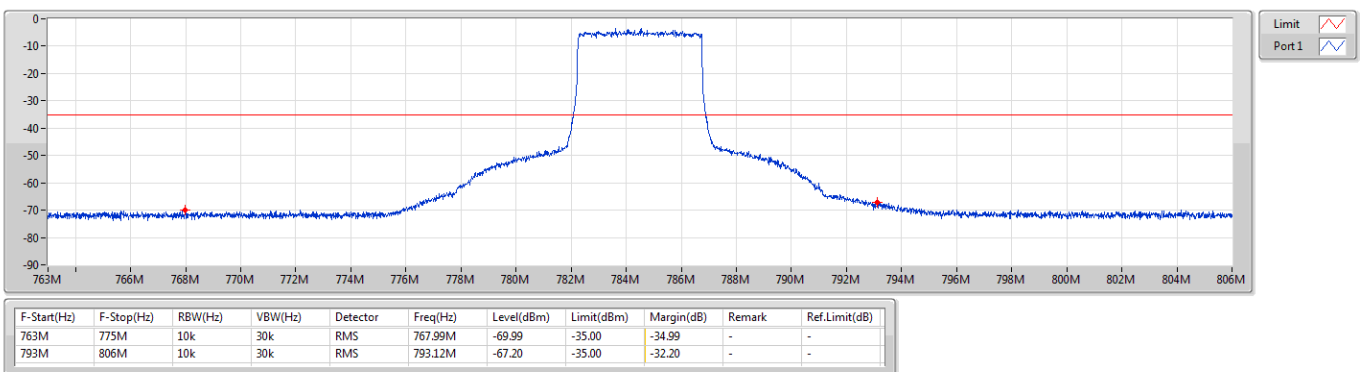
Band 13_LTE_5MHz_Nss1,64QAM_1TX
784.5MHz_64QAM_RB 25,#RB 0

CSE-TX-Sum



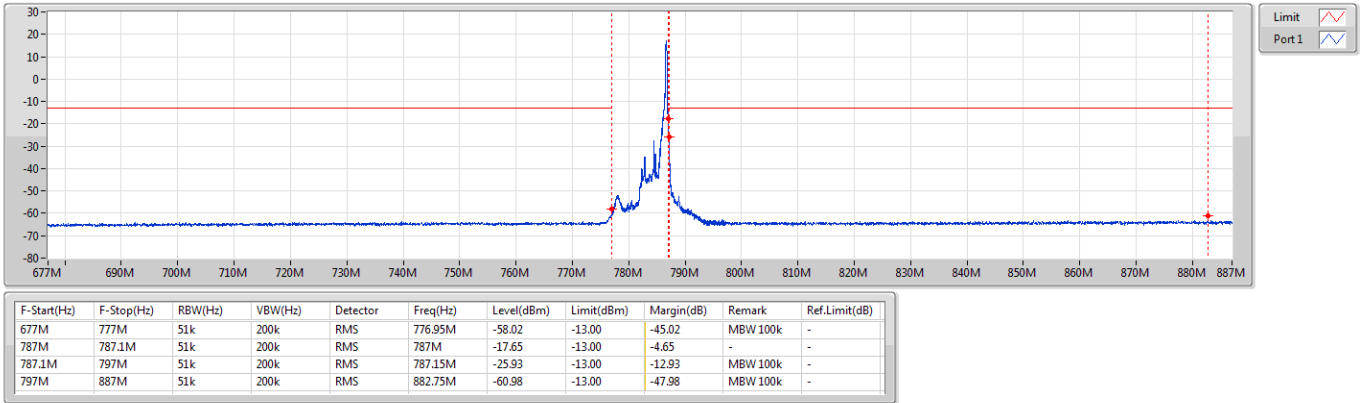
Band 13_LTE_5MHz_Nss1,64QAM_1TX
784.5MHz_64QAM_RB 25,#RB 0

CSE-TX-Sum



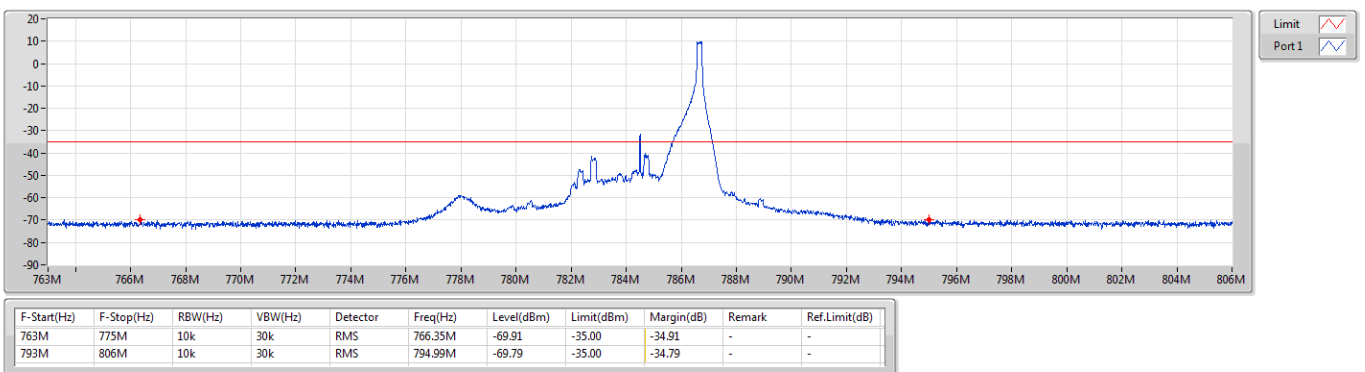
Band 13_LTE_5MHz_Nss1,64QAM_1TX
784.5MHz_64QAM_RB 1,#RB R

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,64QAM_1TX
784.5MHz_64QAM_RB 1,#RB R

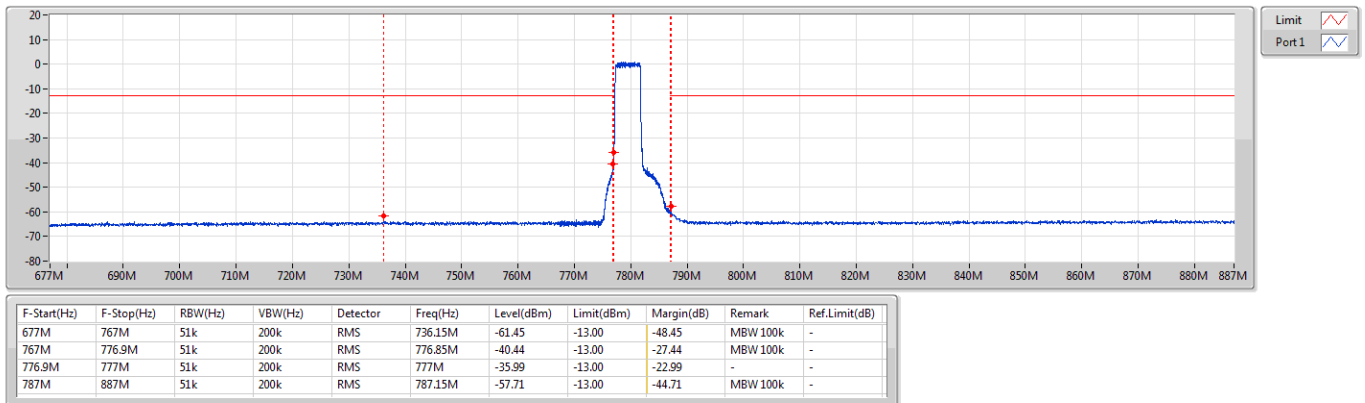
CSE-TX-Sum





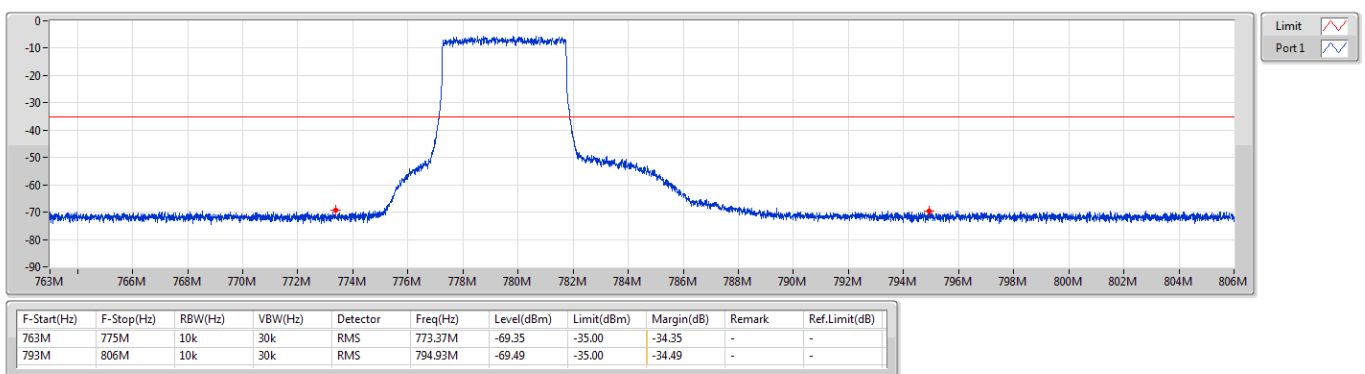
Band 13_LTE_5MHz_Nss1,256QAM_1TX
779.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



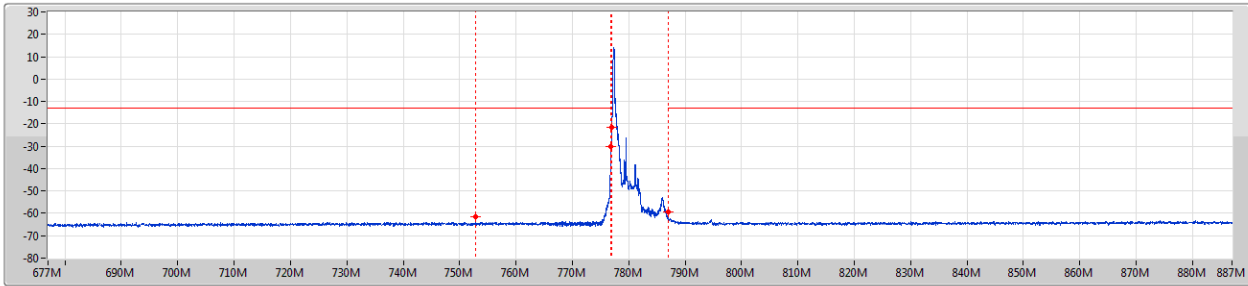
Band 13_LTE_5MHz_Nss1,256QAM_1TX
779.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,256QAM_1TX
779.5MHz_256QAM_RB 1,#RB L

CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
677M	767M	51k	200k	RMS	752.85M	-61.53	-13.00	-48.53	MBW 100k	-
767M	776.9M	51k	200k	RMS	776.85M	-30.36	-13.00	-17.36	MBW 100k	-
776.9M	777M	51k	200k	RMS	777M	-21.45	-13.00	-8.45	-	-
787M	887M	51k	200k	RMS	787.05M	-59.57	-13.00	-46.57	MBW 100k	-

Band 13_LTE_5MHz_Nss1,256QAM_1TX
779.5MHz_256QAM_RB 1,#RB L

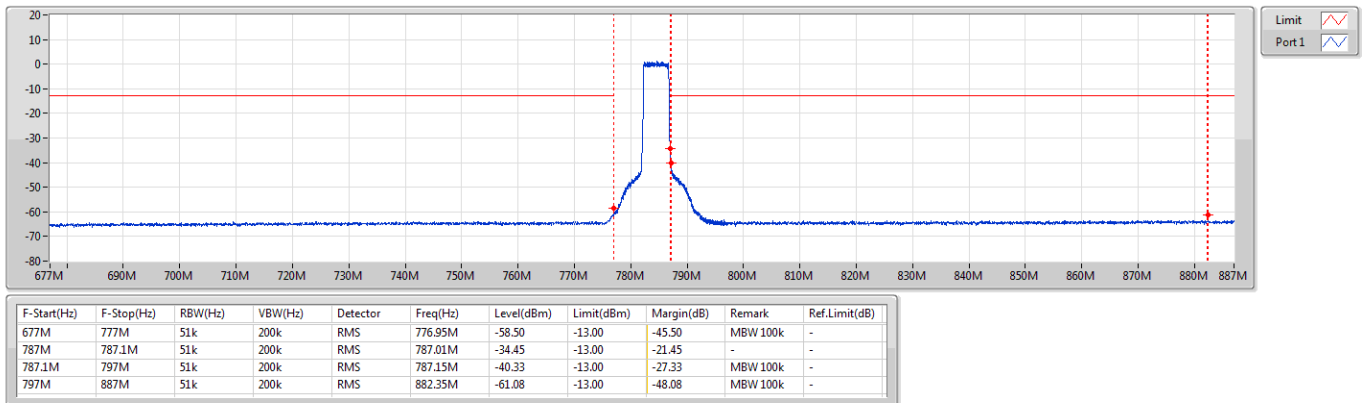
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	770.73M	-69.57	-35.00	-34.57	-	-
793M	806M	10k	30k	RMS	794.6M	-67.64	-35.00	-32.64	-	-

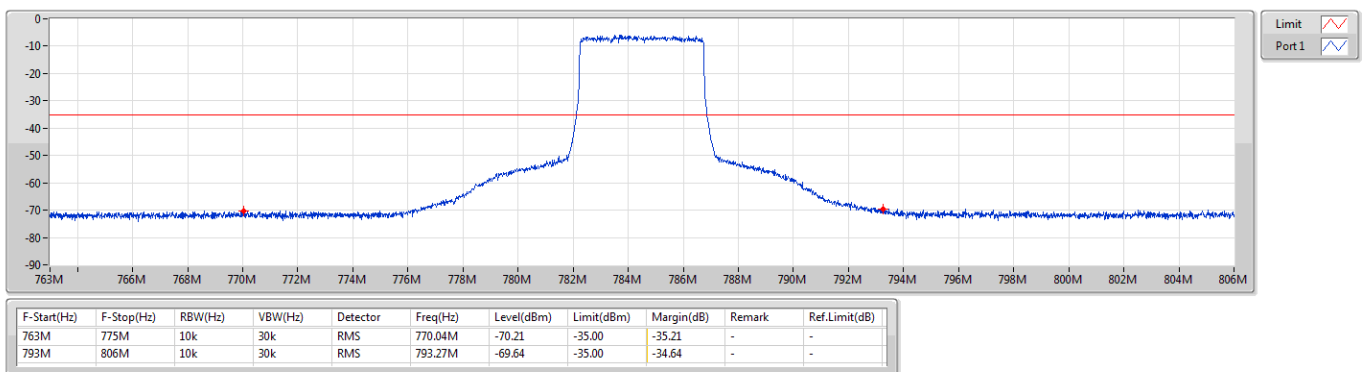
Band 13_LTE_5MHz_Nss1,256QAM_1TX
784.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



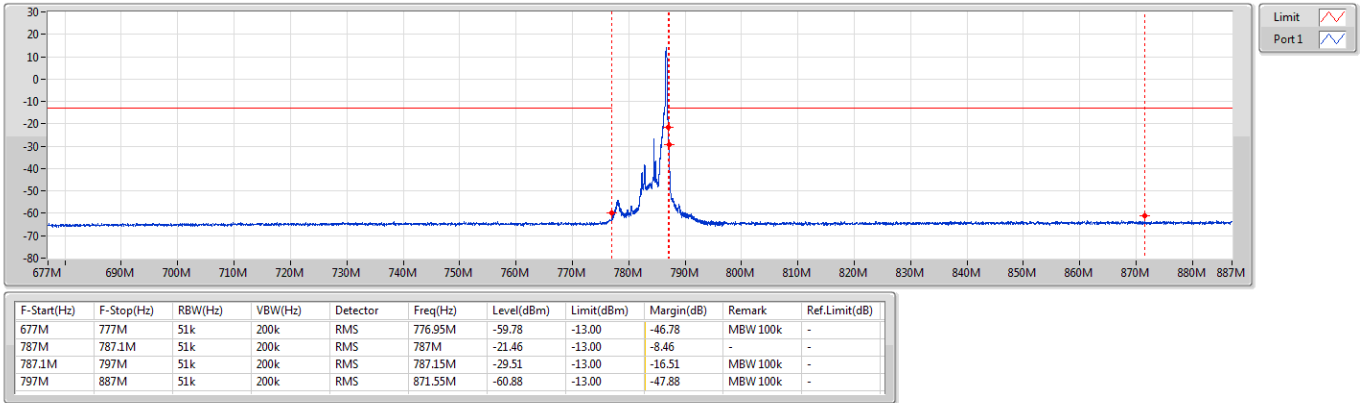
Band 13_LTE_5MHz_Nss1,256QAM_1TX
784.5MHz_256QAM_RB 25,#RB 0

CSE-TX-Sum



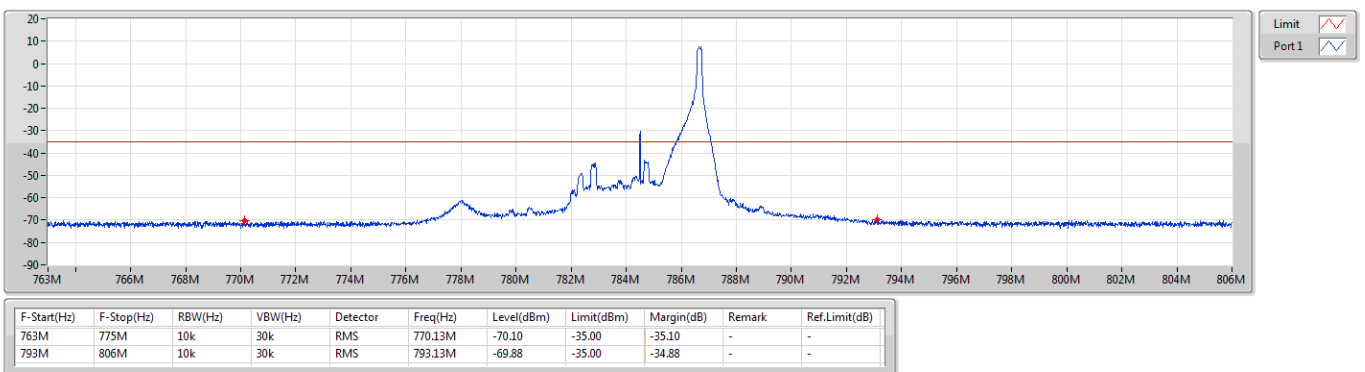
Band 13_LTE_5MHz_Nss1,256QAM_1TX
784.5MHz_256QAM_RB 1,#RB R

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,256QAM_1TX
784.5MHz_256QAM_RB 1,#RB R

CSE-TX-Sum



Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 12	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	9.55M	8.94M	8M94G7D	9.55M	8.94M
LTE_10MHz_Nss1,16QAM_1TX	9.538M	8.924M	8M92W7D	9.538M	8.924M
LTE_10MHz_Nss1,64QAM_1TX	9.538M	8.932M	8M93W7D	9.538M	8.932M
LTE_10MHz_Nss1,256QAM_1TX	9.525M	8.938M	8M94W7D	9.525M	8.938M
LTE_5MHz_Nss1,QPSK_1TX	4.844M	4.474M	4M47G7D	4.844M	4.474M
LTE_5MHz_Nss1,16QAM_1TX	4.769M	4.474M	4M47W7D	4.769M	4.474M
LTE_5MHz_Nss1,64QAM_1TX	4.863M	4.48M	4M48W7D	4.863M	4.48M
LTE_5MHz_Nss1,256QAM_1TX	4.819M	4.469M	4M47W7D	4.819M	4.469M
LTE_3MHz_Nss1,QPSK_1TX	2.839M	2.675M	2M68G7D	2.839M	2.675M
LTE_3MHz_Nss1,16QAM_1TX	2.869M	2.677M	2M68W7D	2.869M	2.677M
LTE_3MHz_Nss1,64QAM_1TX	2.865M	2.683M	2M68W7D	2.865M	2.683M
LTE_3MHz_Nss1,256QAM_1TX	2.876M	2.684M	2M68W7D	2.876M	2.684M
LTE_1.4MHz_Nss1,QPSK_1TX	1.246M	1.085M	1M09G7D	1.246M	1.085M
LTE_1.4MHz_Nss1,16QAM_1TX	1.257M	1.092M	1M09W7D	1.257M	1.092M
LTE_1.4MHz_Nss1,64QAM_1TX	1.246M	1.085M	1M09W7D	1.246M	1.085M
LTE_1.4MHz_Nss1,256QAM_1TX	1.248M	1.08M	1M08W7D	1.248M	1.08M

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

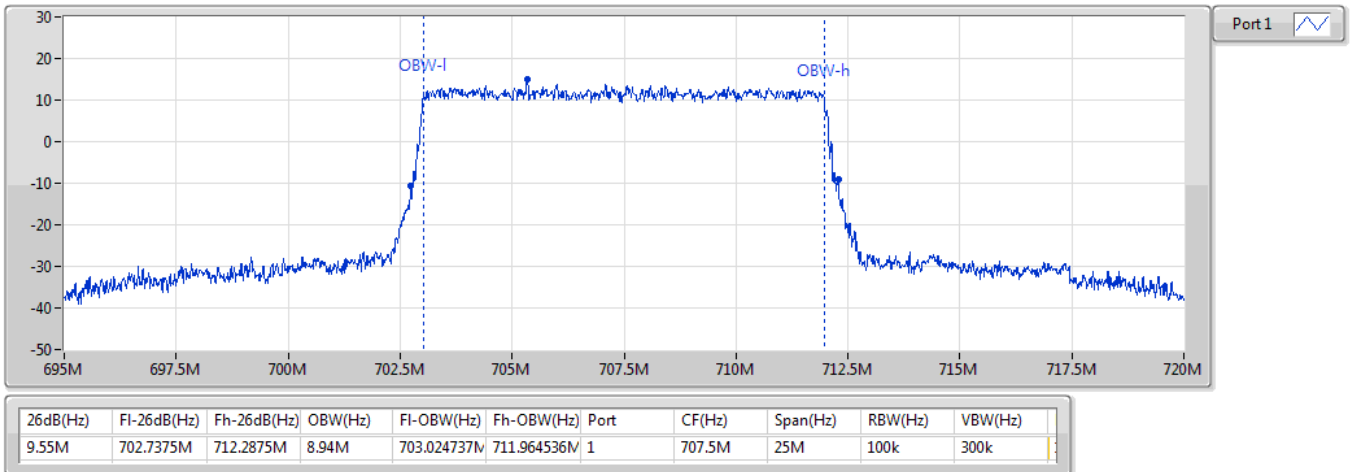
Mode	Result	Port 1-NdB (Hz)	Port 1-OBW (Hz)	Limit (Hz)
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-
707.5MHz_QPSK_RB 50,#RB 0	Pass	9.55M	8.94M	Inf
707.5MHz_16QAM_RB 50,#RB 0	Pass	9.538M	8.924M	Inf
707.5MHz_64QAM_RB 50,#RB 0	Pass	9.538M	8.932M	Inf
707.5MHz_256QAM_RB 50,#RB 0	Pass	9.525M	8.938M	Inf
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-
707.5MHz_QPSK_RB 25,#RB 0	Pass	4.844M	4.474M	Inf
707.5MHz_16QAM_RB 25,#RB 0	Pass	4.769M	4.474M	Inf
707.5MHz_64QAM_RB 25,#RB 0	Pass	4.863M	4.48M	Inf
707.5MHz_256QAM_RB 25,#RB 0	Pass	4.819M	4.469M	Inf
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-
707.5MHz_QPSK_RB 15,#RB 0	Pass	2.839M	2.675M	Inf
707.5MHz_16QAM_RB 15,#RB 0	Pass	2.869M	2.677M	Inf
707.5MHz_64QAM_RB 15,#RB 0	Pass	2.865M	2.683M	Inf
707.5MHz_256QAM_RB 15,#RB 0	Pass	2.876M	2.684M	Inf
Band 12_LTE_1.4MHz_Nss1_1TX	-	-	-	-
707.5MHz_QPSK_RB 6,#RB 0	Pass	1.246M	1.085M	Inf
707.5MHz_16QAM_RB 6,#RB 0	Pass	1.257M	1.092M	Inf
707.5MHz_64QAM_RB 6,#RB 0	Pass	1.246M	1.085M	Inf
707.5MHz_256QAM_RB 6,#RB 0	Pass	1.248M	1.08M	Inf

Port X-N dB = Port X 26dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

Band 12_LTE_10MHz_Nss1,QPSK_1TX

EBW

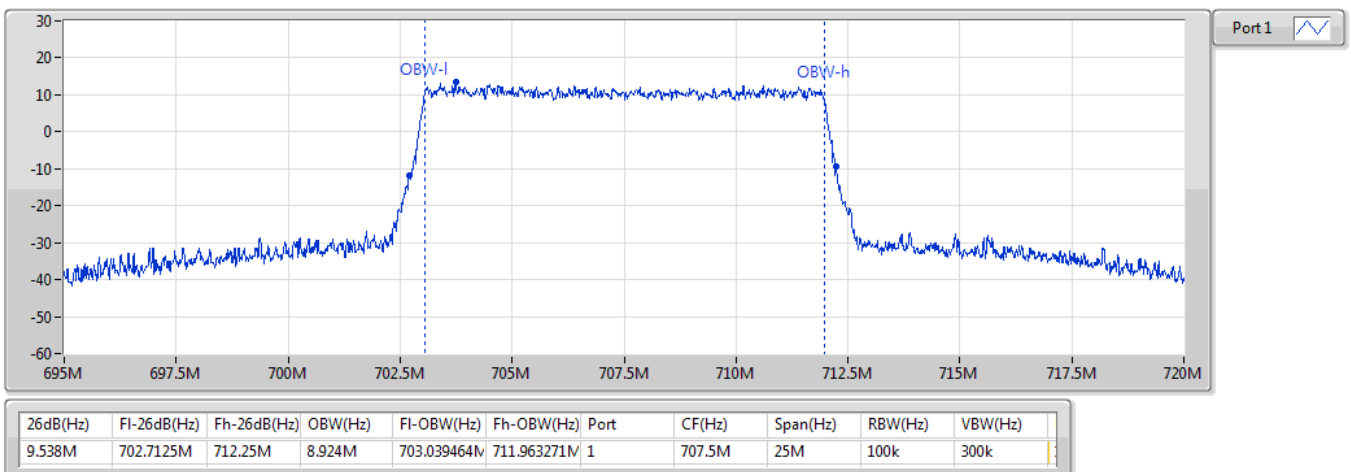
707.5MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

EBW

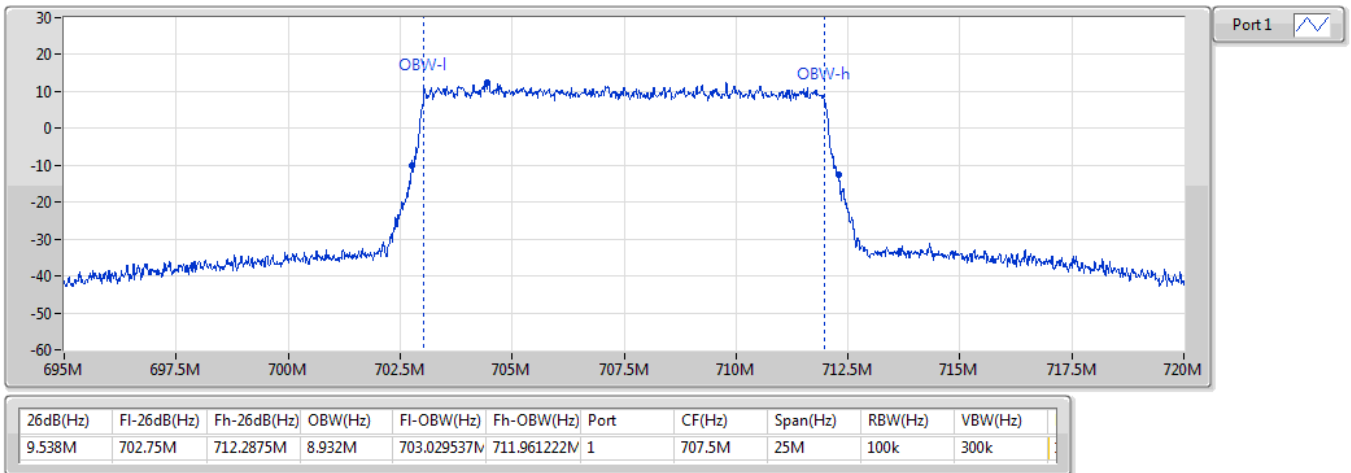
707.5MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,64QAM_1TX

EBW

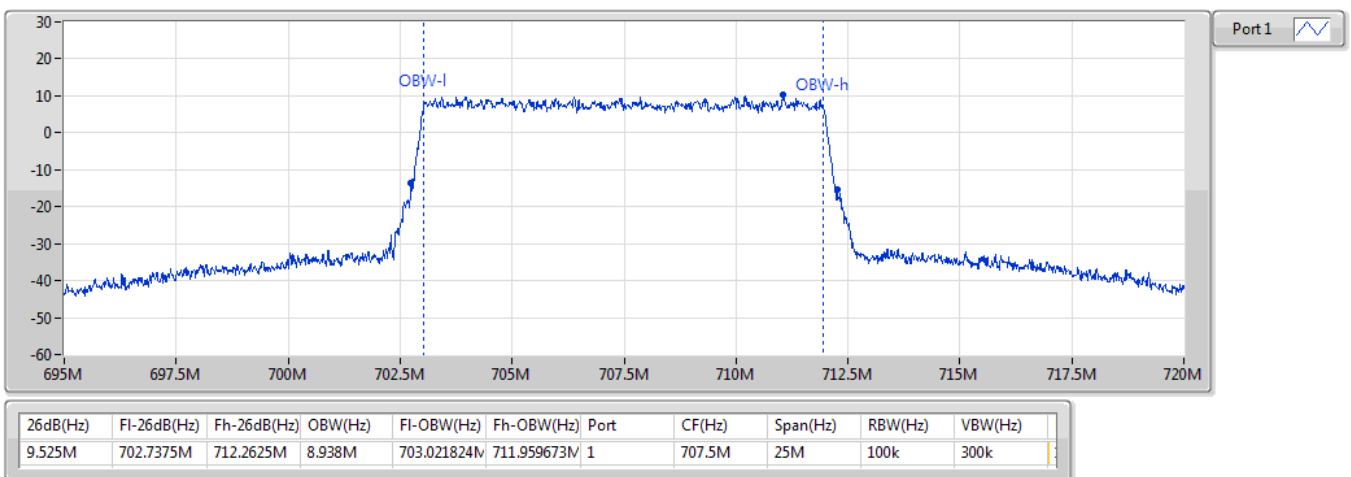
707.5MHz_64QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,256QAM_1TX

EBW

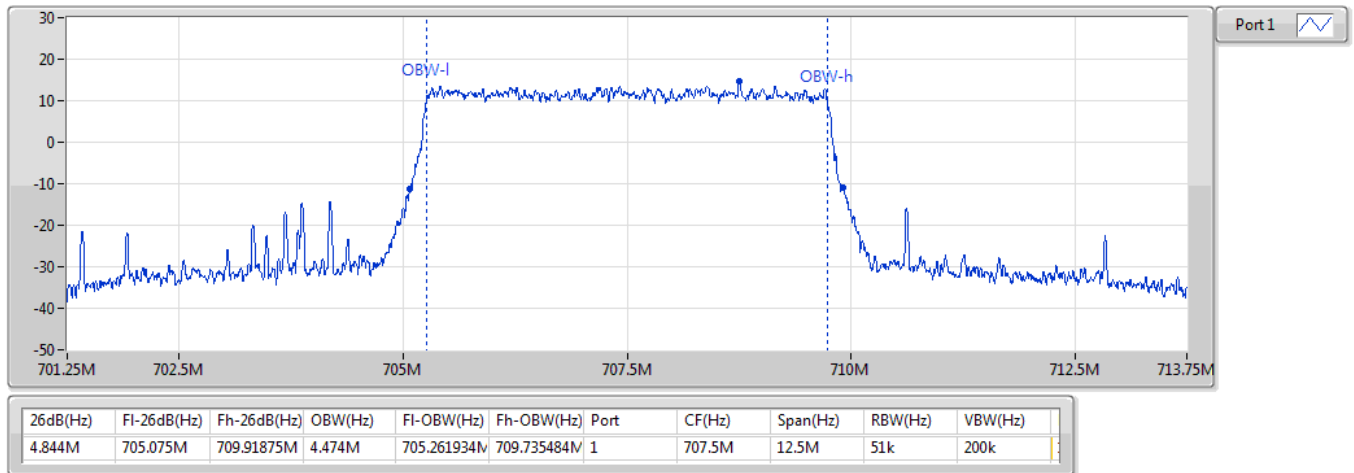
707.5MHz_256QAM_RB 50,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

EBW

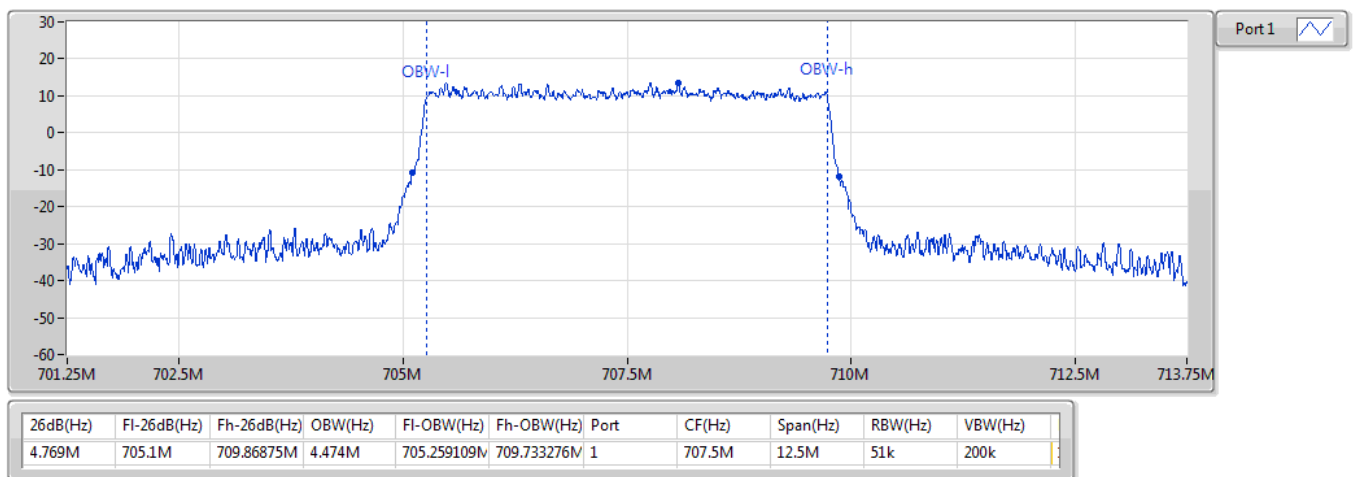
707.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

EBW

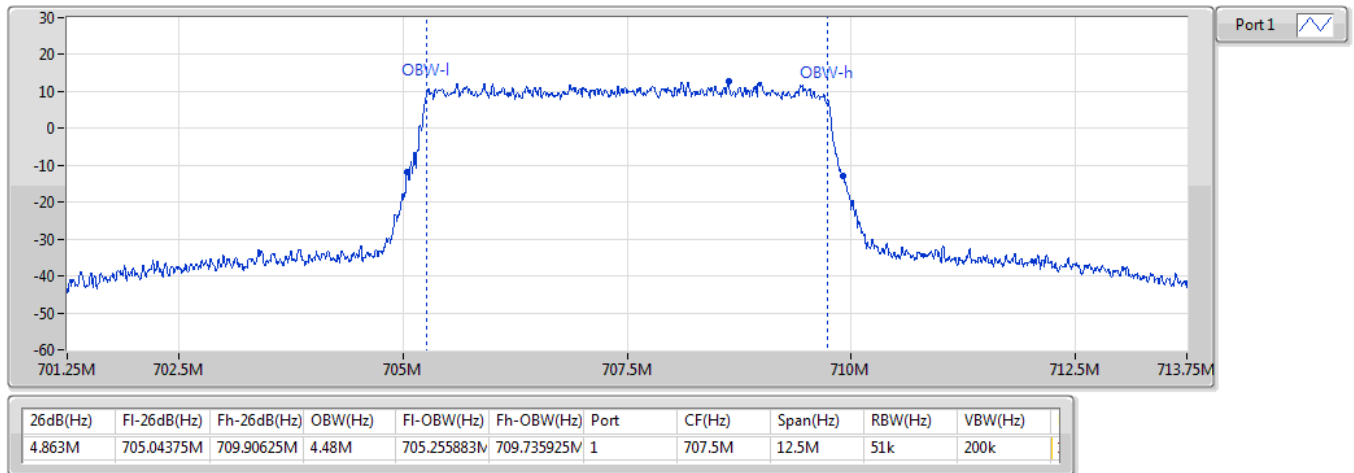
707.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,64QAM_1TX

EBW

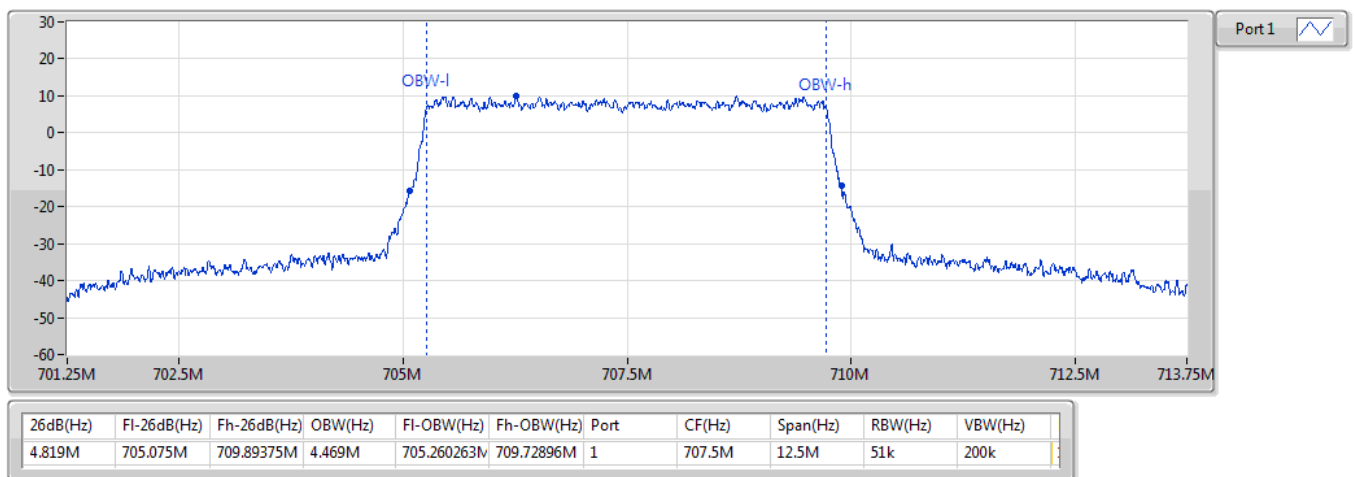
707.5MHz_64QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,256QAM_1TX

EBW

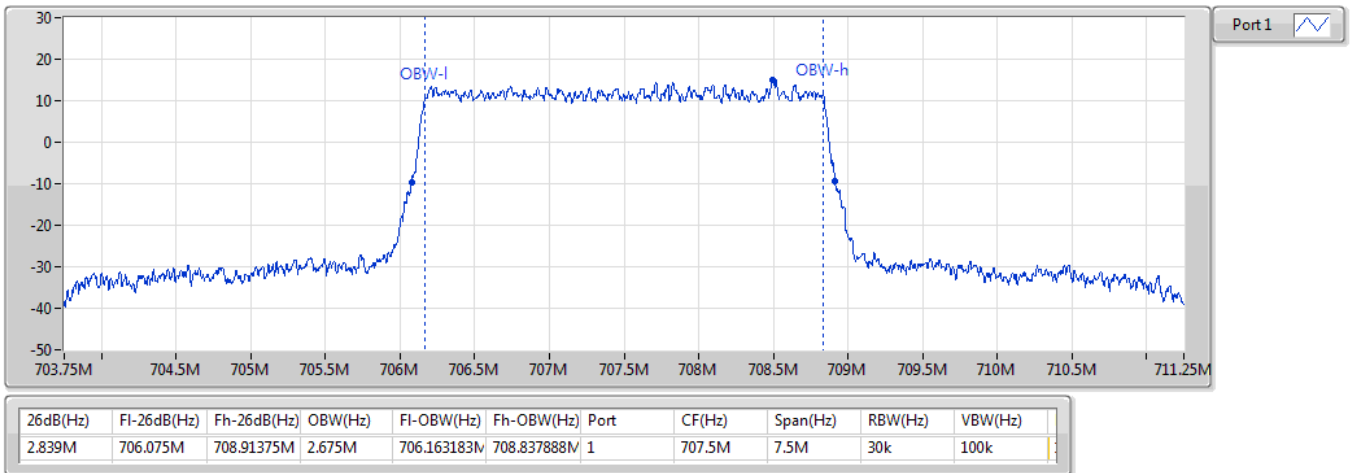
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Band 12_LTE_3MHz_Nss1,QPSK_1TX

EBW

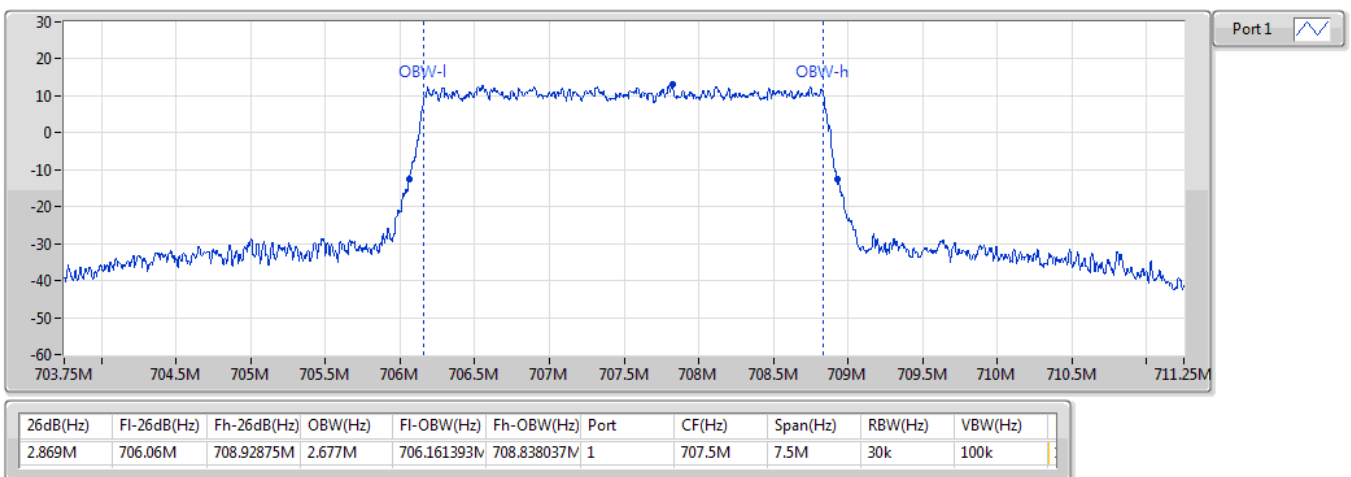
707.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

EBW

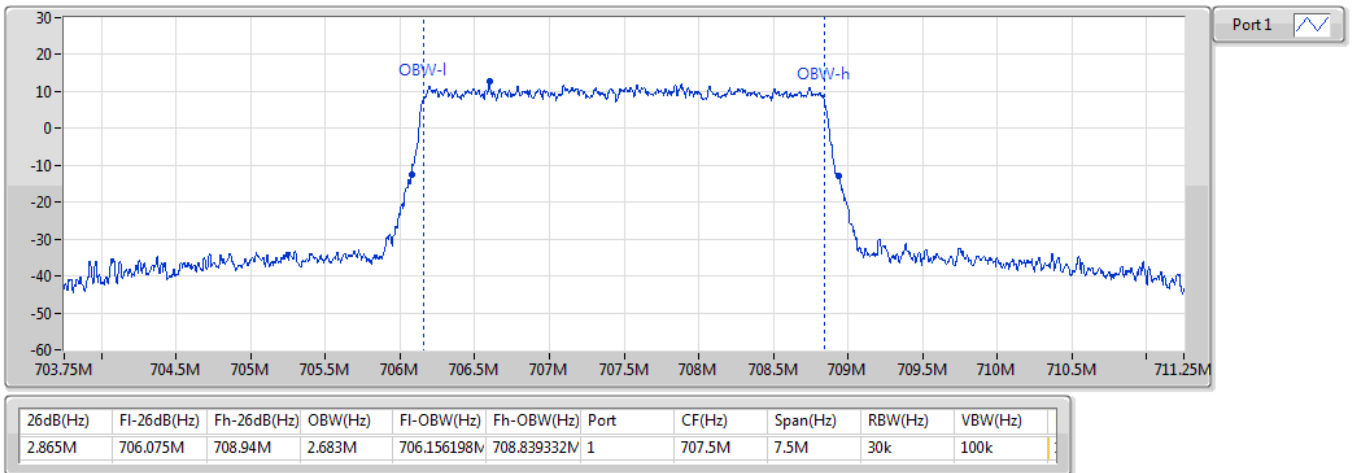
707.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,64QAM_1TX

EBW

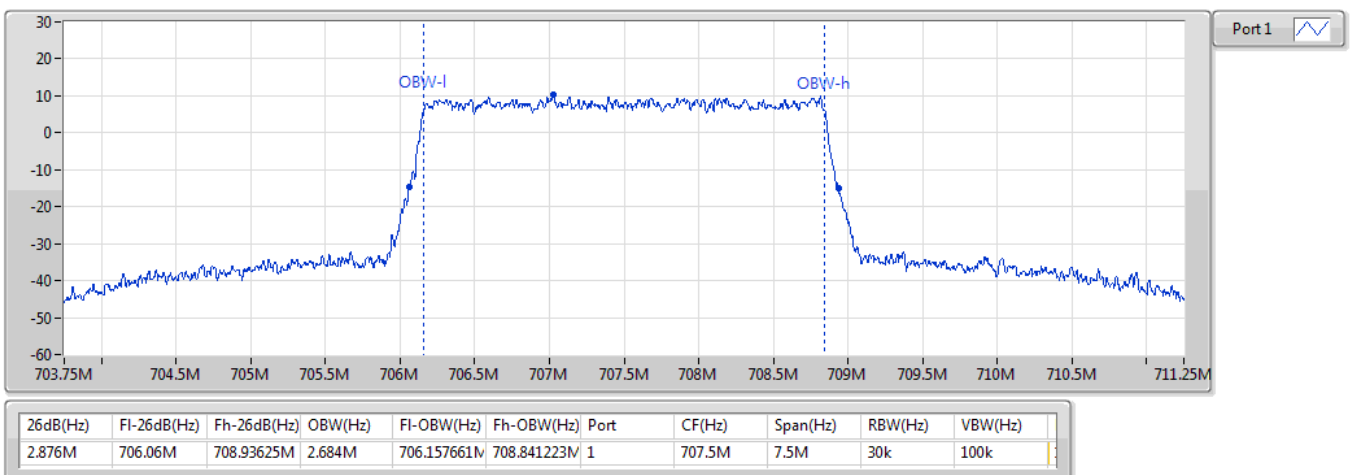
707.5MHz_64QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,256QAM_1TX

EBW

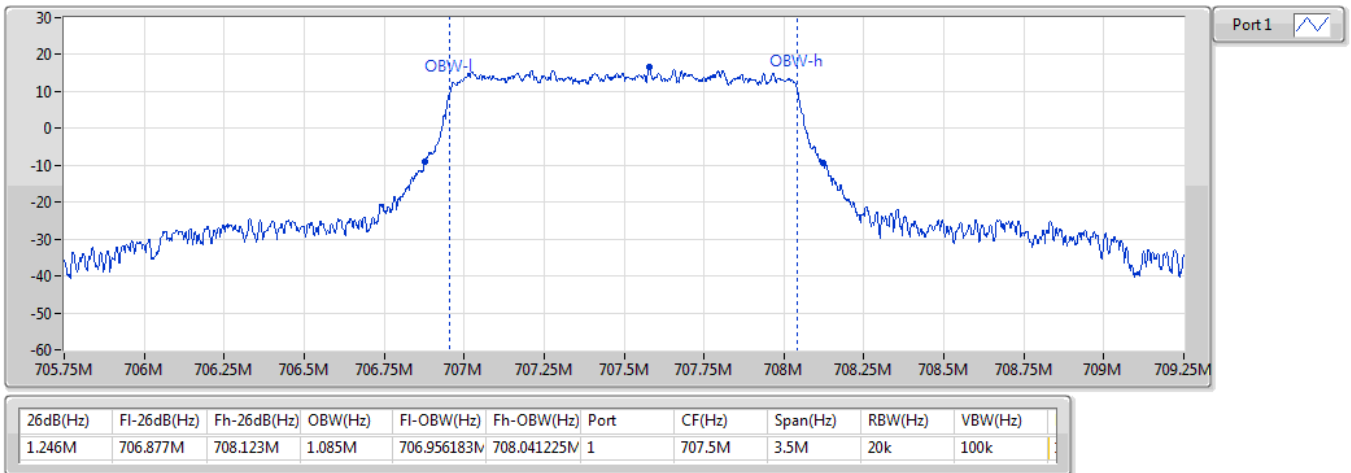
707.5MHz_256QAM_RB 15,#RB 0



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

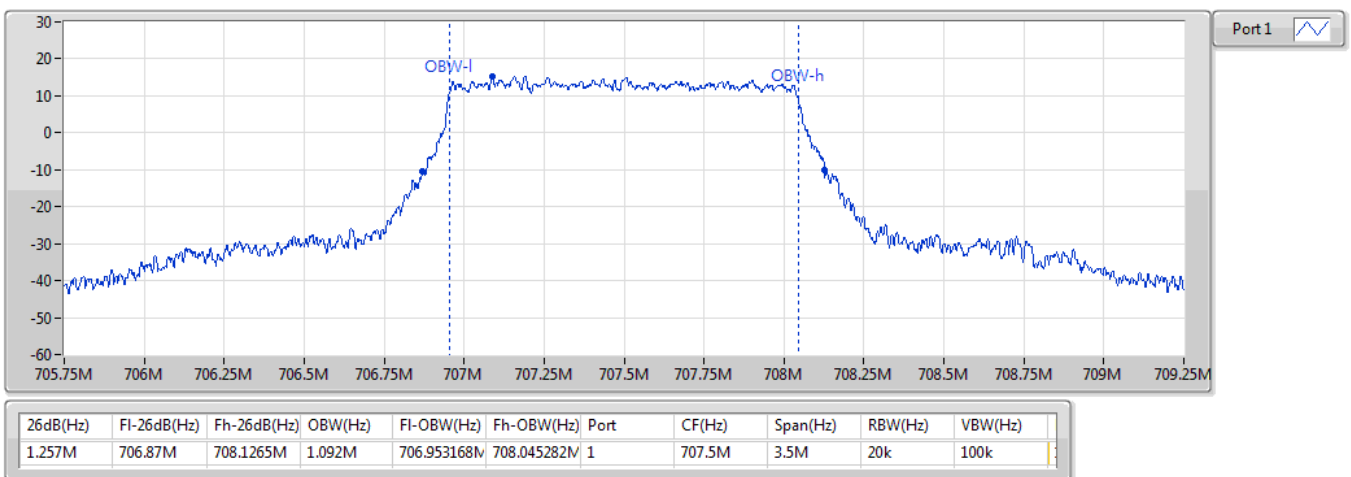
707.5MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

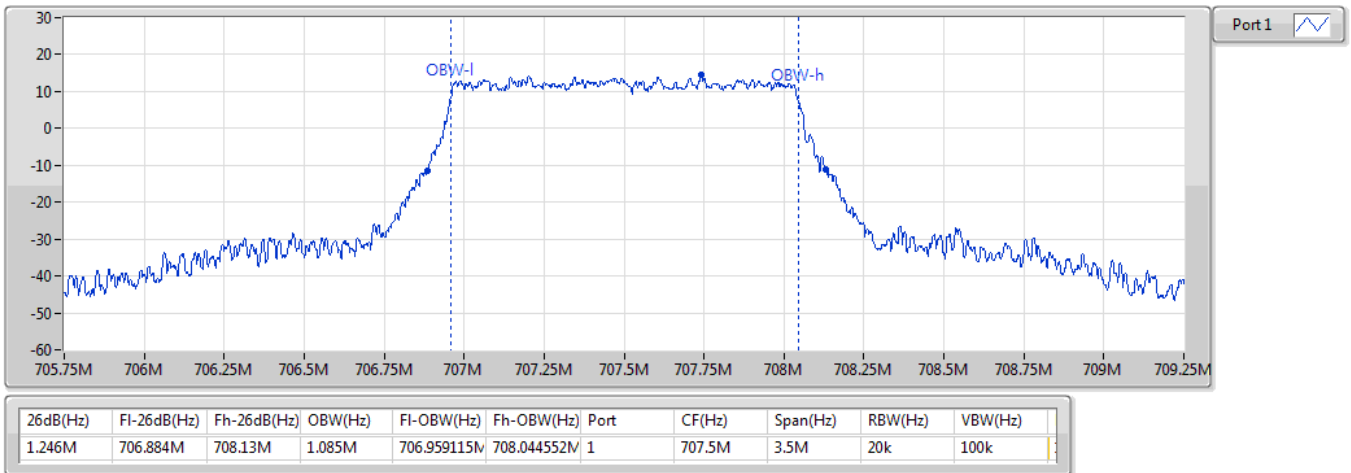
707.5MHz_16QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,64QAM_1TX

EBW

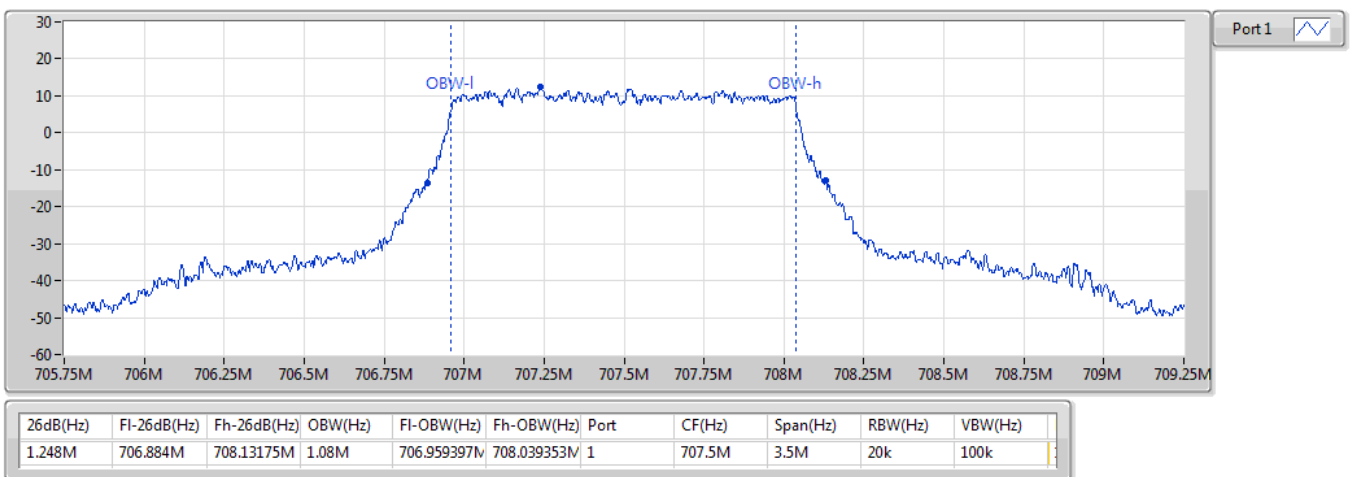
707.5MHz_64QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,256QAM_1TX

EBW

707.5MHz_256QAM_RB 6,#RB 0



Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 13	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	9.45M	8.925M	8M93G7D	9.45M	8.925M
LTE_10MHz_Nss1,16QAM_1TX	9.475M	8.906M	8M91W7D	9.475M	8.906M
LTE_10MHz_Nss1,64QAM_1TX	9.525M	8.937M	8M94W7D	9.525M	8.937M
LTE_10MHz_Nss1,256QAM_1TX	9.463M	8.925M	8M93W7D	9.463M	8.925M
LTE_5MHz_Nss1,QPSK_1TX	4.8M	4.473M	4M47G7D	4.8M	4.473M
LTE_5MHz_Nss1,16QAM_1TX	4.788M	4.466M	4M47W7D	4.788M	4.466M
LTE_5MHz_Nss1,64QAM_1TX	4.813M	4.473M	4M47W7D	4.813M	4.473M
LTE_5MHz_Nss1,256QAM_1TX	4.825M	4.467M	4M47W7D	4.825M	4.467M

Max-N dB = Maximum 26dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 26dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

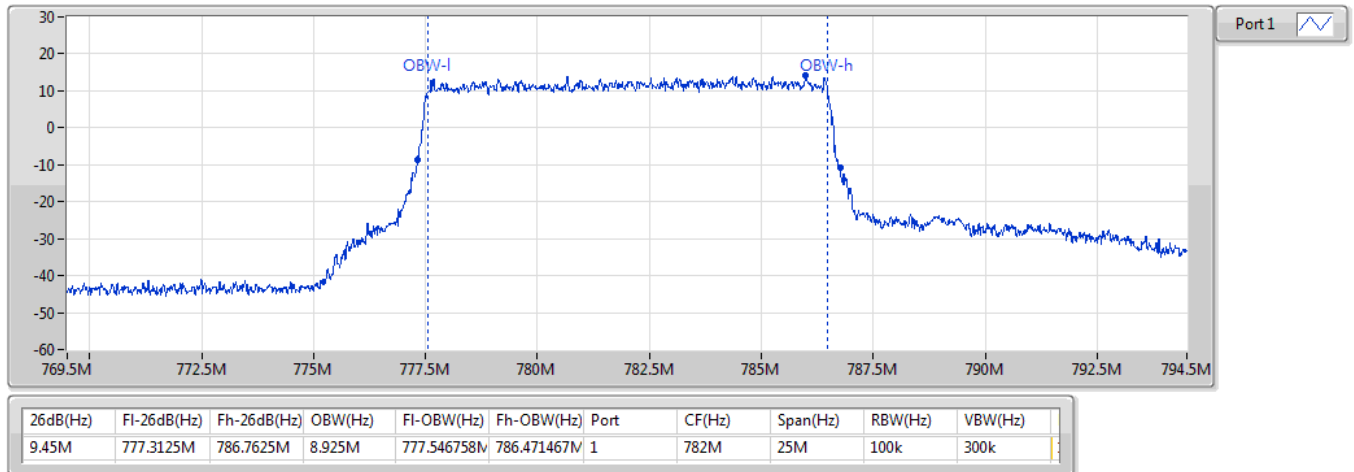
Mode	Result	Port 1-NdB (Hz)	Port 1-OBW (Hz)	Limit (Hz)
Band 13_LTE_10MHz_Nss1_1TX	-	-	-	-
782MHz_QPSK_RB 50,#RB 0	Pass	9.45M	8.925M	Inf
782MHz_16QAM_RB 50,#RB 0	Pass	9.475M	8.906M	Inf
782MHz_64QAM_RB 50,#RB 0	Pass	9.525M	8.937M	Inf
782MHz_256QAM_RB 50,#RB 0	Pass	9.463M	8.925M	Inf
Band 13_LTE_5MHz_Nss1_1TX	-	-	-	-
782MHz_QPSK_RB 25,#RB 0	Pass	4.8M	4.473M	Inf
782MHz_16QAM_RB 25,#RB 0	Pass	4.788M	4.466M	Inf
782MHz_64QAM_RB 25,#RB 0	Pass	4.813M	4.473M	Inf
782MHz_256QAM_RB 25,#RB 0	Pass	4.825M	4.467M	Inf

Port X-N dB = Port X 26dB down bandwidth;

Port X-OBW = Port X 99% occupied bandwidth

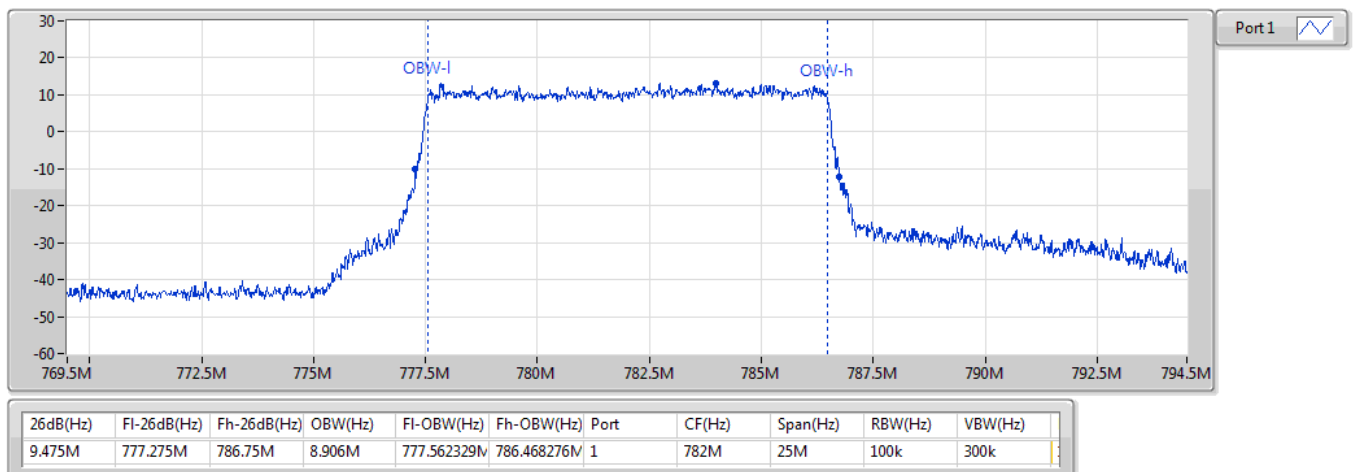
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 50,#RB 0

EBW



Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 50,#RB 0

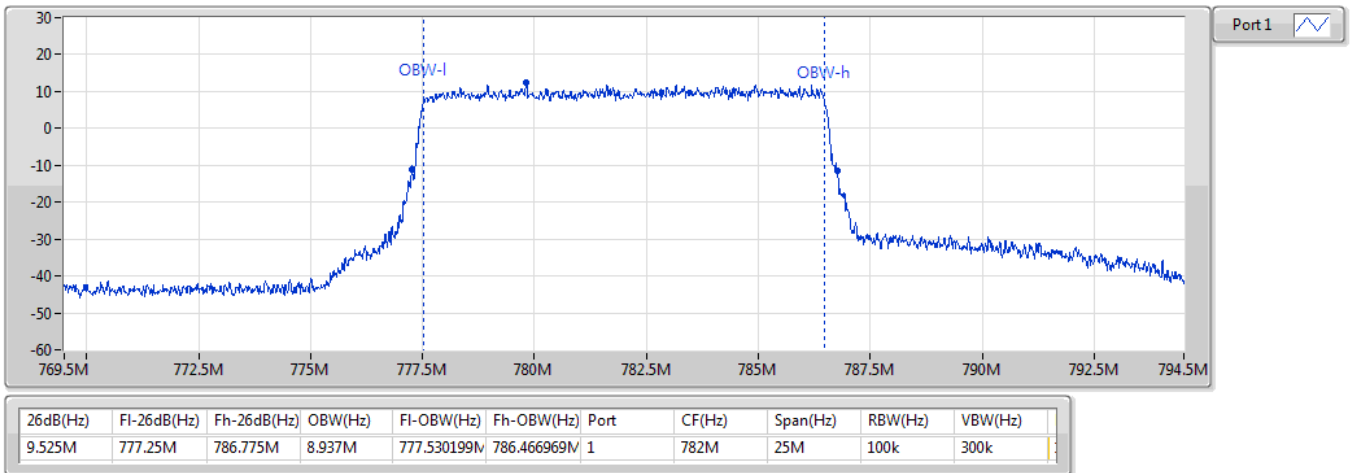
EBW



Band 13_LTE_10MHz_Nss1,64QAM_1TX

EBW

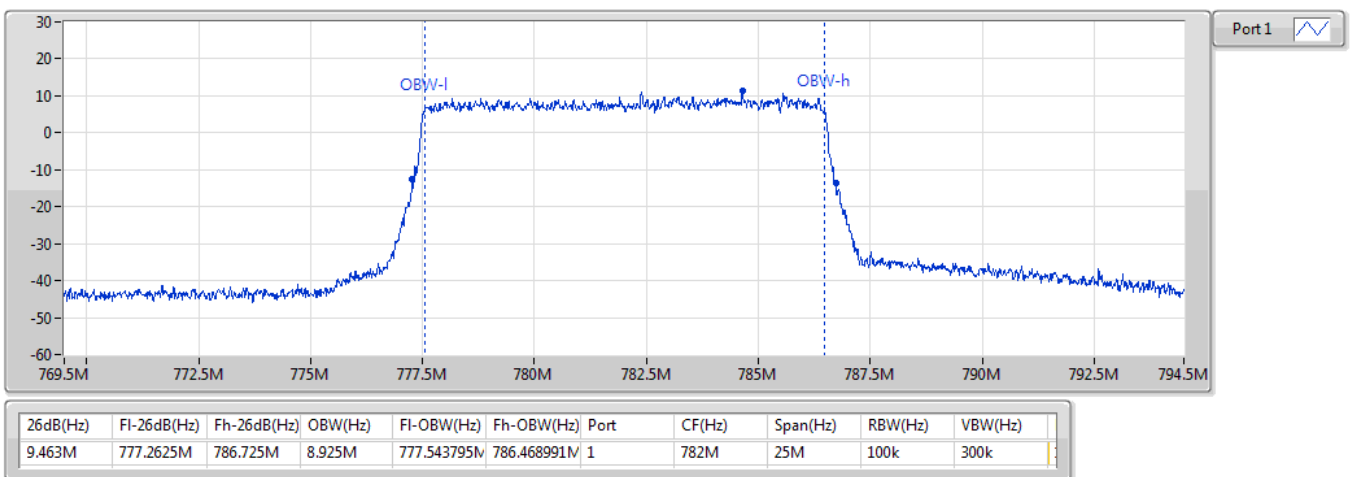
782MHz_64QAM_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,256QAM_1TX

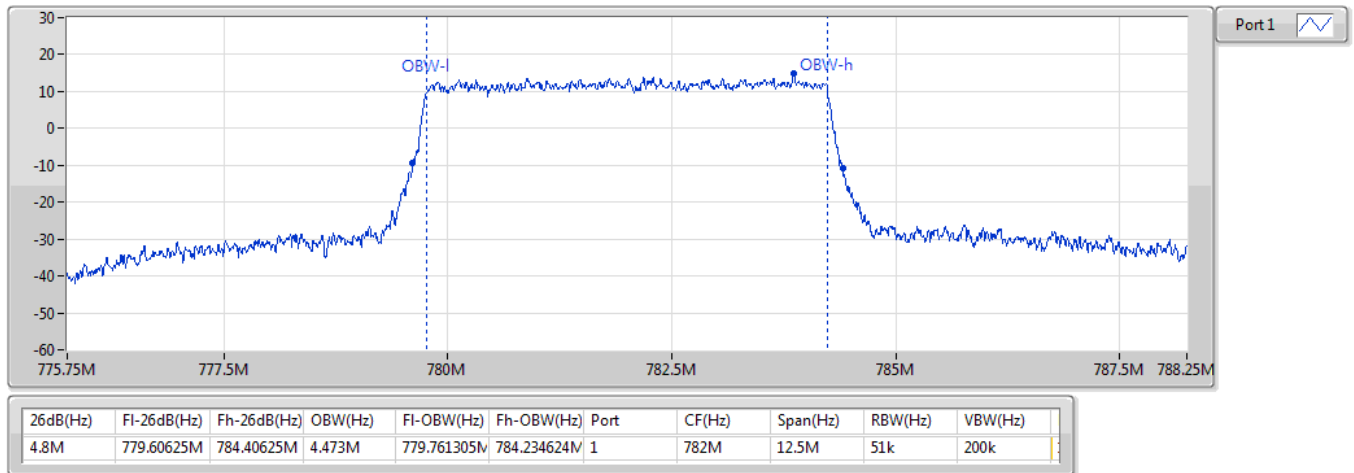
EBW

782MHz_256QAM_RB 50,#RB 0



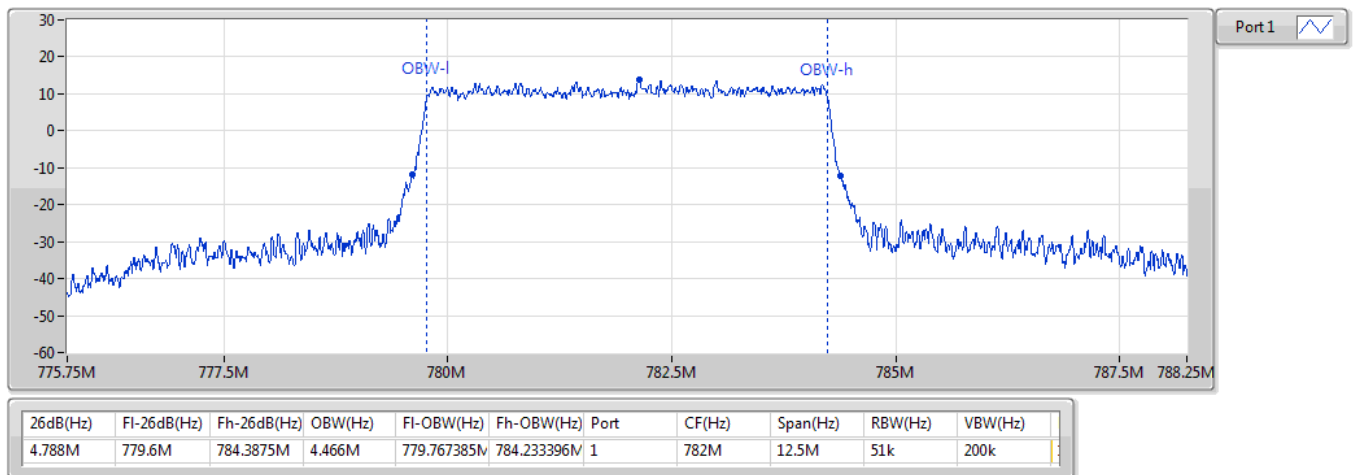
Band 13_LTE_5MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 25,#RB 0

EBW



Band 13_LTE_5MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 25,#RB 0

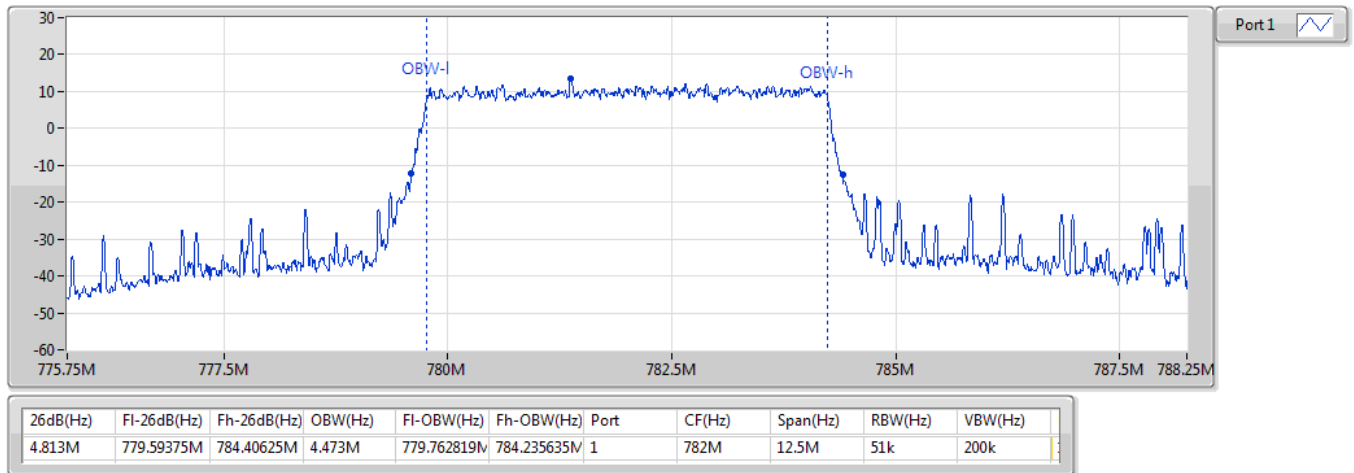
EBW



Band 13_LTE_5MHz_Nss1,64QAM_1TX

EBW

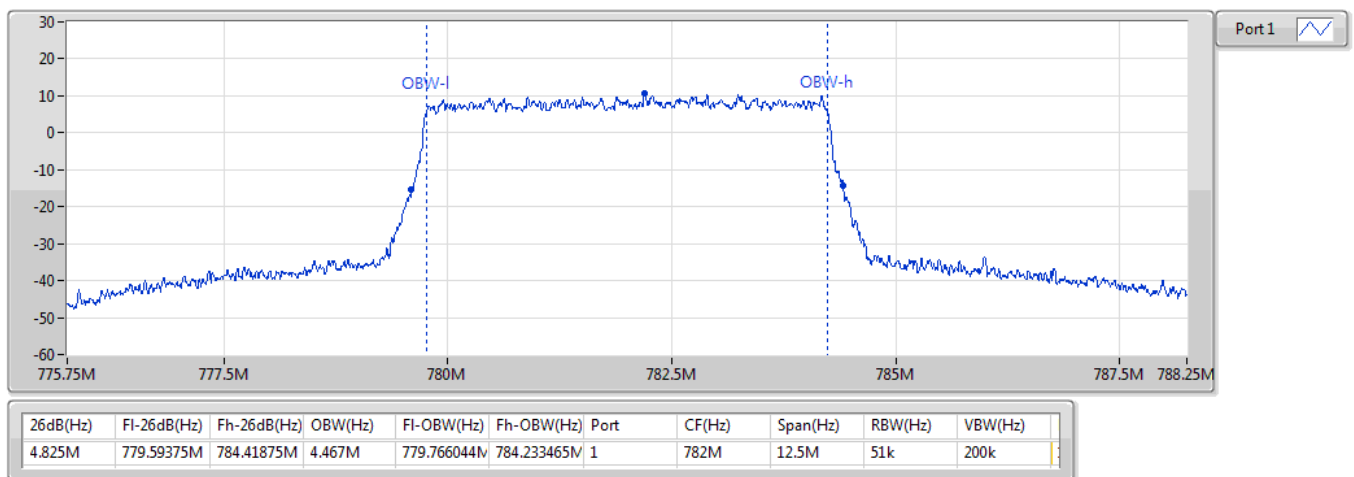
782MHz_64QAM_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,256QAM_1TX

EBW

782MHz_256QAM_RB 25,#RB 0



**Summary**

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 12	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.53	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.21	1
LTE_10MHz_Nss1,64QAM_1TX	Pass	707.5	13.00	6.44	1
LTE_10MHz_Nss1,256QAM_1TX	Pass	707.5	13.00	6.32	1

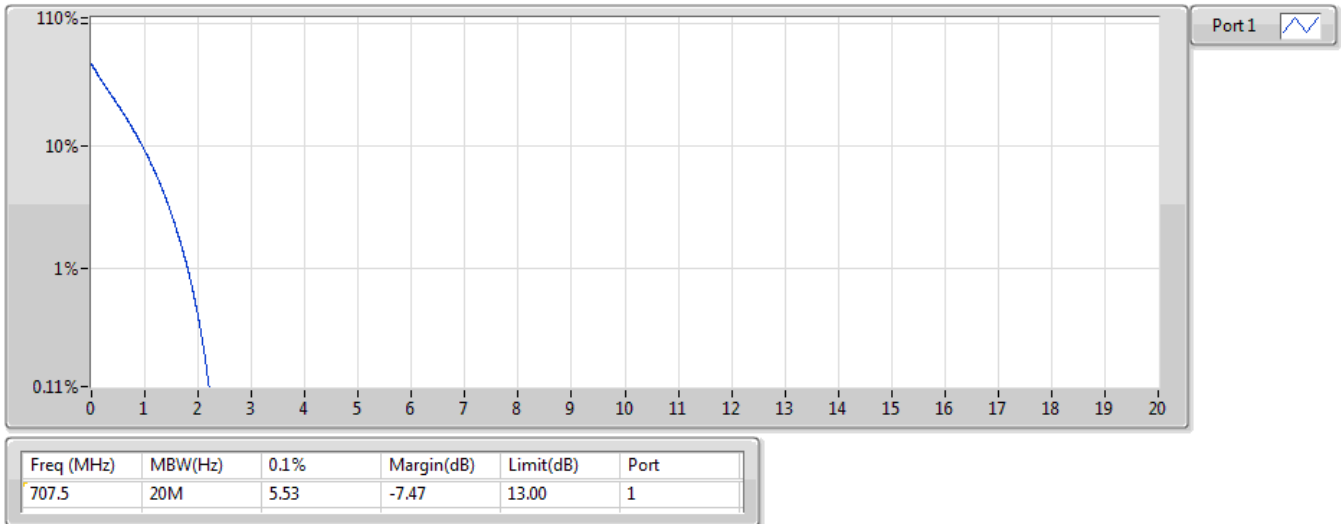
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-	-
707.5MHz_QPSK_RB 50,#RB 0	Pass	707.5	13.00	5.53	1
707.5MHz_16QAM_RB 50,#RB 0	Pass	707.5	13.00	6.21	1
707.5MHz_64QAM_RB 50,#RB 0	Pass	707.5	13.00	6.44	1
707.5MHz_256QAM_RB 50,#RB 0	Pass	707.5	13.00	6.32	1

Band 12_LTE_10MHz_Nss1,QPSK_1TX

PAPR

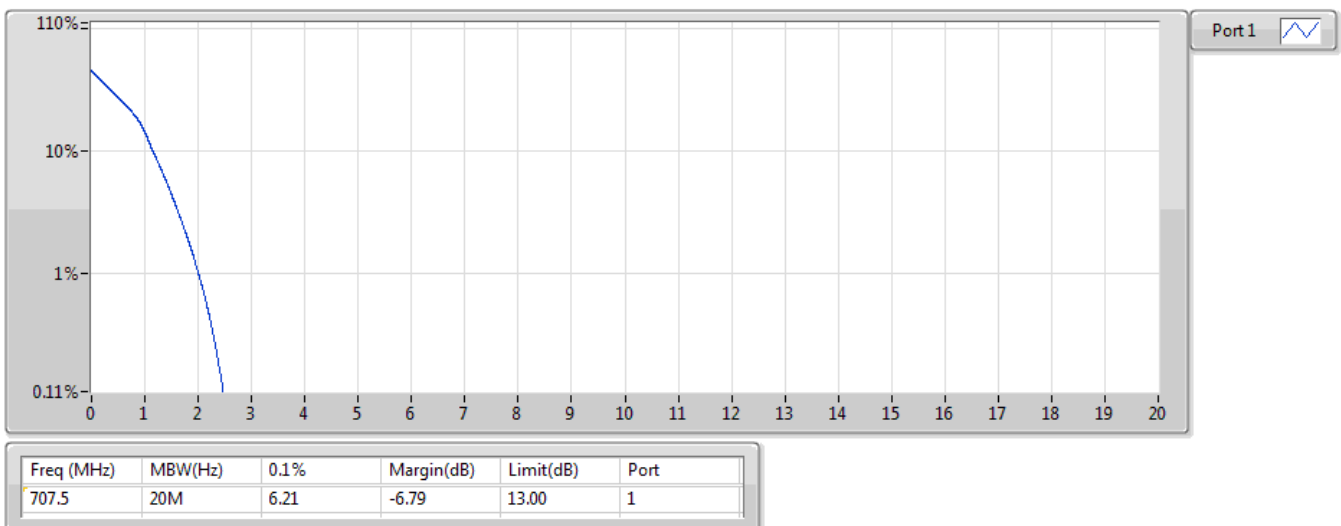
707.5MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

PAPR

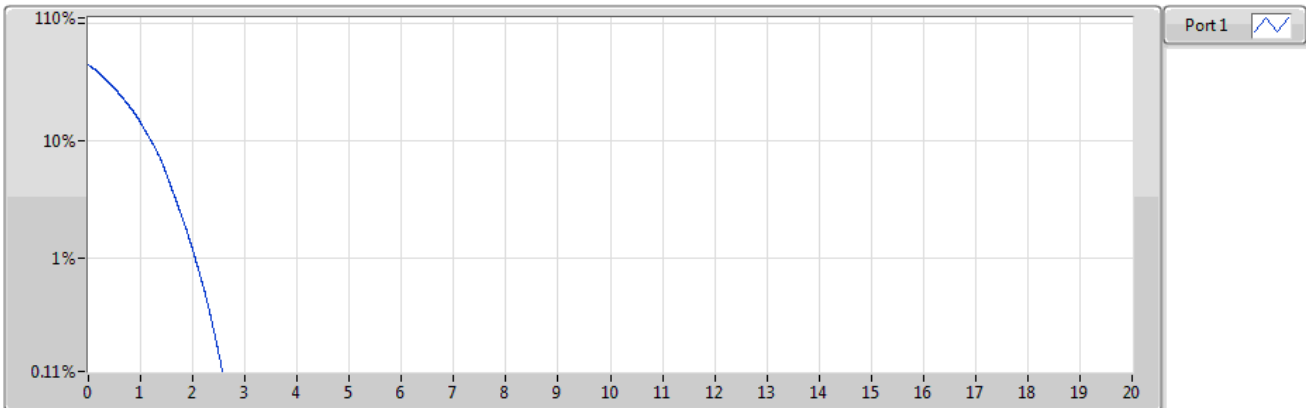
707.5MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,64QAM_1TX

PAPR

707.5MHz_64QAM_RB 50,#RB 0

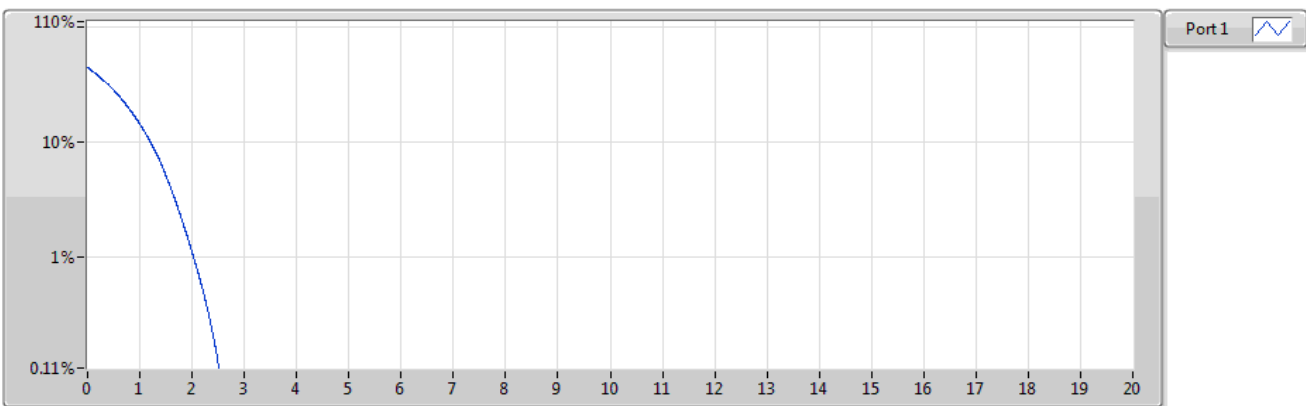


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.44	-6.56	13.00	1

Band 12_LTE_10MHz_Nss1,256QAM_1TX

PAPR

707.5MHz_256QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.32	-6.68	13.00	1

**Summary**

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 13	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	782	13.00	5.37	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	782	13.00	6.09	1
LTE_10MHz_Nss1,64QAM_1TX	Pass	782	13.00	6.26	1
LTE_10MHz_Nss1,256QAM_1TX	Pass	782	13.00	6.43	1

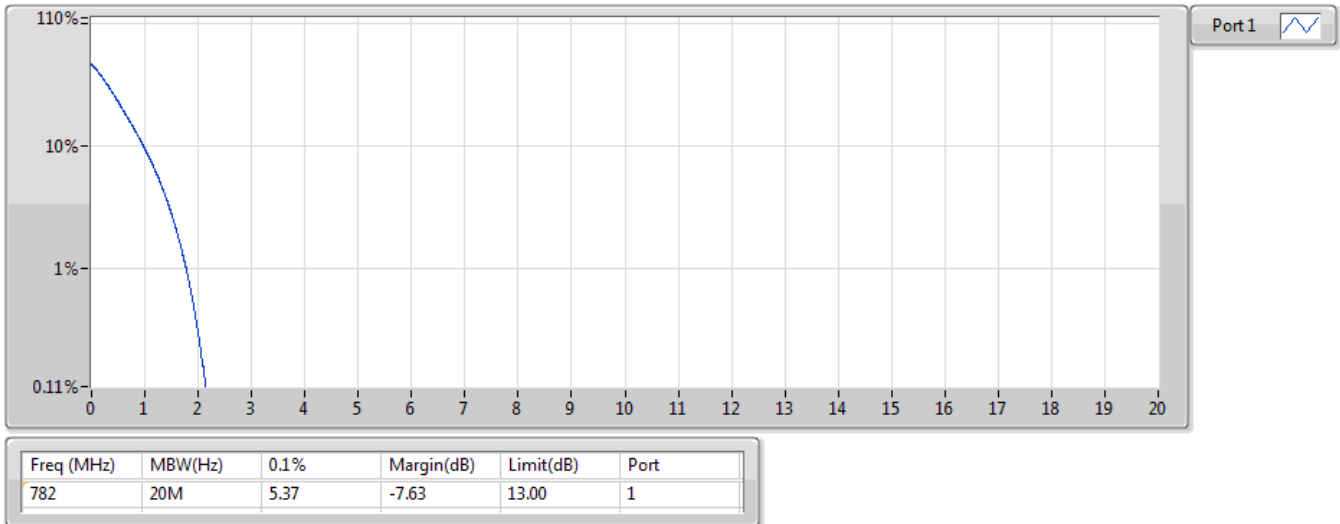
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 13_LTE_10MHz_Nss1_1TX	-	-	-	-	-
782MHz_QPSK_RB 50,#RB 0	Pass	782	13.00	5.37	1
782MHz_16QAM_RB 50,#RB 0	Pass	782	13.00	6.09	1
782MHz_64QAM_RB 50,#RB 0	Pass	782	13.00	6.26	1
782MHz_256QAM_RB 50,#RB 0	Pass	782	13.00	6.43	1

Band 13_LTE_10MHz_Nss1,QPSK_1TX

PAPR

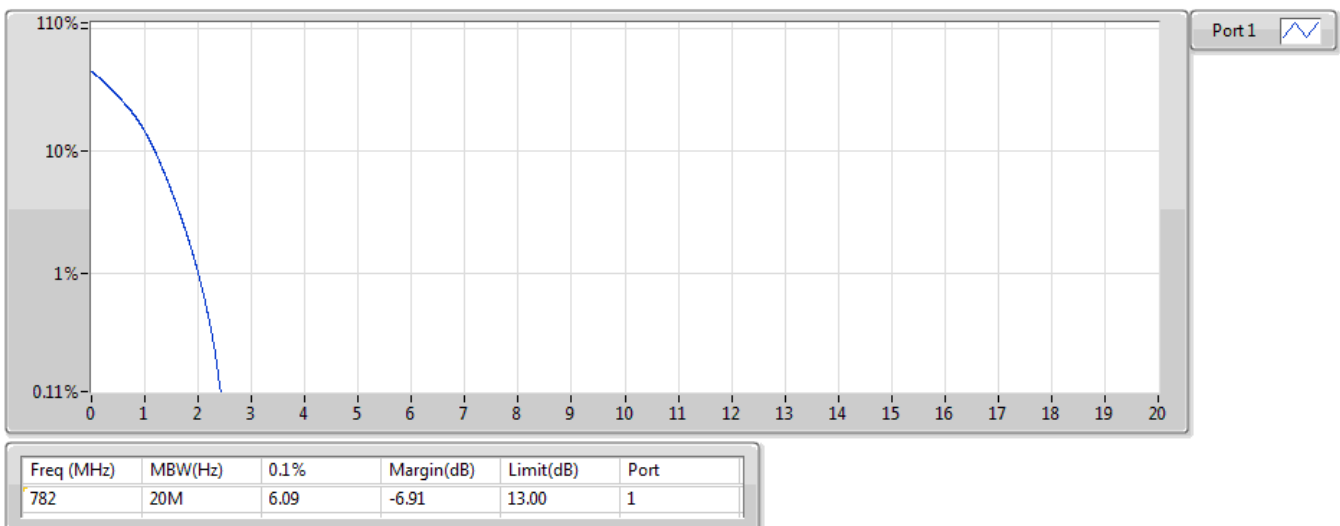
782MHz_QPSK_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,16QAM_1TX

PAPR

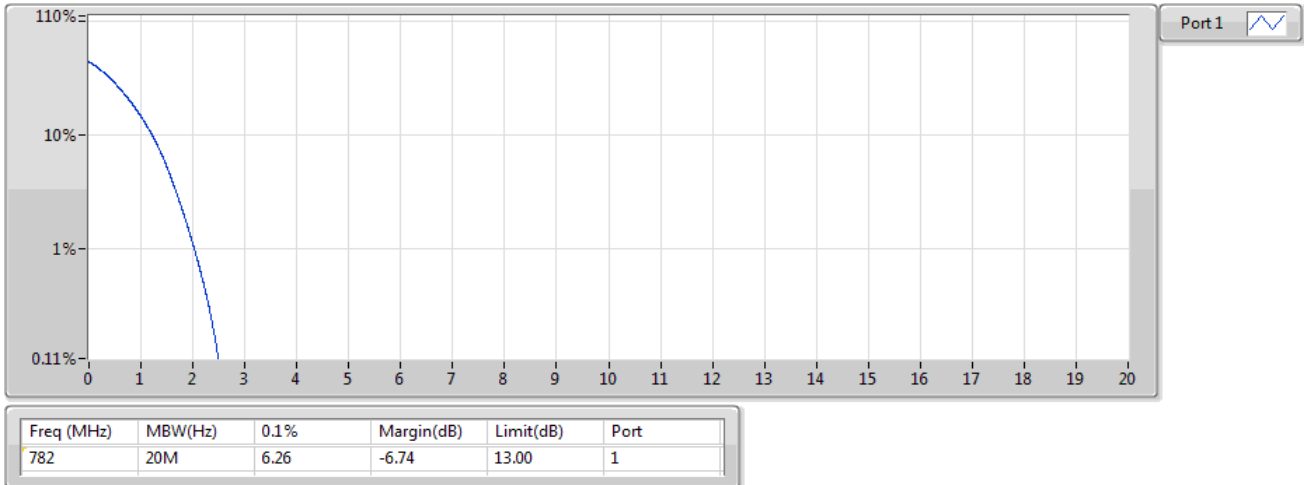
782MHz_16QAM_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,64QAM_1TX

PAPR

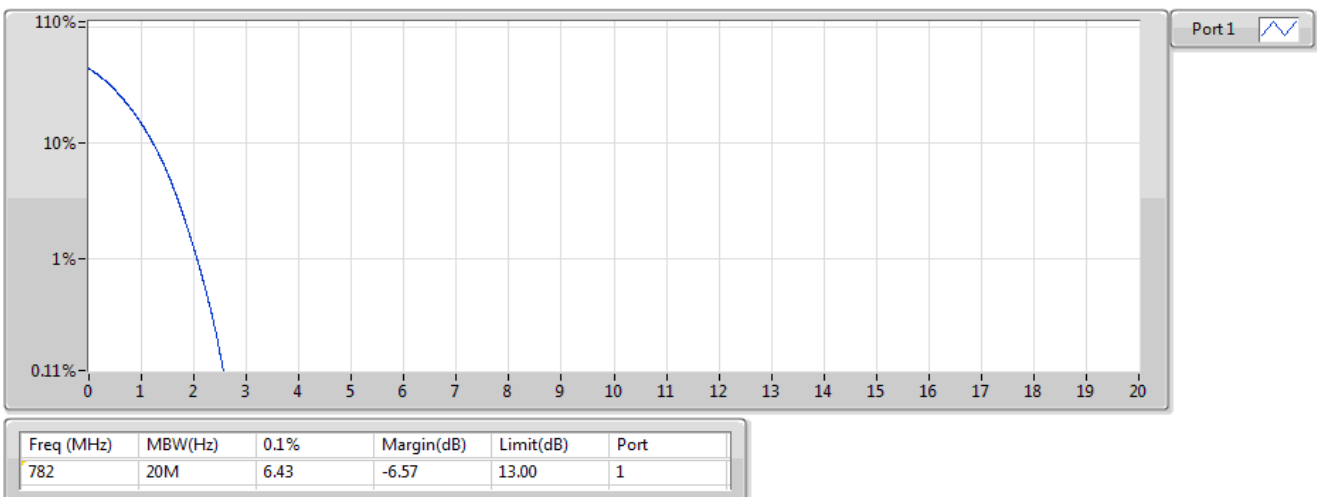
782MHz_64QAM_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,256QAM_1TX

PAPR

782MHz_256QAM_RB 50,#RB 0



Ref. Freq:	707.5MHz	
Test Conditions	LTE Band 12(QPSK) / Middle channel	
Temperature (°C)	Deviation (ppm)	Limit ^{Note 1}
		Result
T20°C Vmax	0.02	PASS
T20°C Vmin	0.02	
T70°C Vnom	0.06	
T60°C Vnom	0.06	
T50°C Vnom	0.06	
T40°C Vnom	0.05	
T30°C Vnom	0.03	
T20°C Vnom	0.02	
T10°C Vnom	0.03	
T0°C Vnom	0.03	
T-10°C Vnom	0.04	
T-20°C Vnom	0.05	
T-30°C Vnom	0.06	

Note:

1. The frequency fundamental emissions stay within the authorized frequency block.

Ref. Freq:	782MHz	
Test Conditions	LTE Band 13(QPSK) / Middle channel	
Temperature (°C)	Deviation (ppm)	Limit ^{Note 1}
		Result
T20°CVmax	0.02	PASS
T20°CVmin	0.02	
T70°CVnom	0.05	
T60°CVnom	0.05	
T50°CVnom	0.05	
T40°CVnom	0.04	
T30°CVnom	0.03	
T20°CVnom	0.02	
T10°CVnom	0.03	
T0°CVnom	0.03	
T-10°CVnom	0.04	
T-20°CVnom	0.04	
T-30°CVnom	0.05	

Note:

1. The frequency fundamental emissions stay within the authorized frequency block.