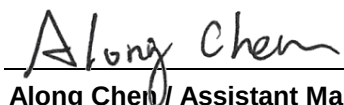


FCC Test Report

FCC ID : RF41539C
Equipment : Handheld Terminal
Model No. : DX-A400
Brand Name : KEYENCE
Applicant : KEYENCE CORPORATION
Address : 1-3-14 HIGASHI-NAKAJIMA, HIGASHI-YODOGAWA-KU, OSAKA, JAPAN
Standard : 47 CFR FCC Part 22 Subpart H
Received Date : Jun. 21, 2021
Tested Date : Jul. 23 ~ Aug. 11, 2021

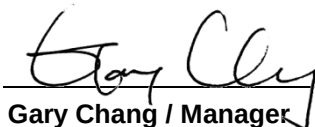
We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the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

Reviewed by:



Along Chen / Assistant Manager

Approved by:



Gary Chang / Manager



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APPENDIX A, G TEST RESULTS FOR EFFECTIVE RADIATED POWER

APPENDIX B, H TEST RESULTS FOR RADIATED EMISSIONS

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APPENDIX C.2, I.2 TEST RESULTS FOR BAND EDGE

APPENDIX D, J TEST RESULTS FOR OCCUPIED AND 26dB BANDWIDTH

APPENDIX E, K TEST RESULTS FOR PEAK TO AVERAGE POWER RATIO

APPENDIX F, L TEST RESULTS FOR FREQUENCY STABILITY

Release Record

Report No.	Version	Description	Issued Date
FG162103P22	Rev. 01	Initial issue	Nov. 16, 2021

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 / 22.913(a)(5)	Effective Radiated Power	Power[dBm] : WCDMA: 18.53 LTE: 18.20	Pass
2.1053 / 22.917(a)	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 / 22.917(a)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 / 22.917(a)	Band Edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
-	Peak to Average Ratio	Meet the requirement of limit	Pass
2.1055 / 22.355	Frequency Stability	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 Specification of the Equipment under Test (EUT)

Operating Frequency	WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 5: 824 MHz ~ 849 MHz
Modulation	WCDMA AMR / RMC / HSDPA / HSUPA: BPSK (Uplink) LTE: QPSK, 16QAM (Uplink)

1.1.2 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remark
1	PIFA	-2.89	No	---

1.1.3 Power Supply Type of Equipment under Test (EUT)

Supply Voltage	3.8Vdc		
Operational Voltage	☒ Vnom (3.8 V)	☒ Vmax (3.99 V)	☒ Vmin (3.61 V)
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (50°C)	☒ Tmin (-30°C)

1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	Battery	Brand: KEYENCE Model: DX-BQ3 Rating: 3.8Vdc (11.51Wh) 3030mAh

1.1.5 Maximum ERP and Emission Designator

Mode	Maximum ERP (W)	Emission Designator
WCDMA_5MHz_Nss1_1TX	0.071	4M18F9W
LTE_1.4MHz_Nss1,QPSK_1TX	0.065	1M08G7D
LTE_1.4MHz_Nss1,16QAM_1TX	0.056	1M08W7D
LTE_3MHz_Nss1,QPSK_1TX	0.064	2M68G7D
LTE_3MHz_Nss1,16QAM_1TX	0.055	2M67W7D
LTE_5MHz_Nss1,QPSK_1TX	0.066	4M46G7D
LTE_5MHz_Nss1,16QAM_1TX	0.057	4M47W7D
LTE_10MHz_Nss1,QPSK_1TX	0.065	8M93G7D
LTE_10MHz_Nss1,16QAM_1TX	0.056	8M92W7D

1.1.6 Operating Channel List

WCDMA Band V		
Channel Location	Channel	Frequency (MHz)
Low	4132	826.4
Middle	4182	836.4
High	4233	846.6

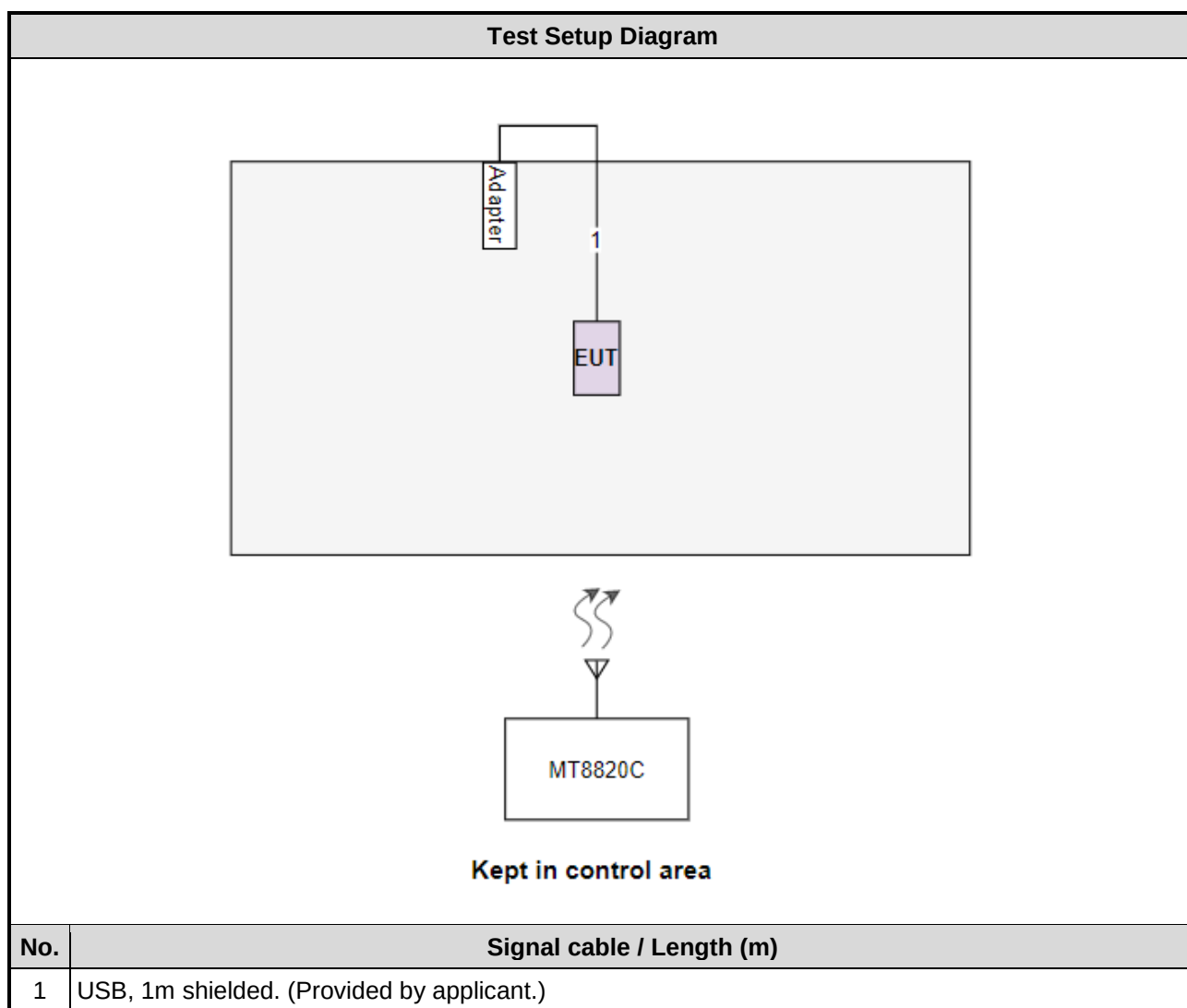
LTE Band 5		
Channel Bandwidths (MHz)	Channel	Frequency (MHz)
1.4	20407	824.7
1.4	20525	836.5
1.4	20643	848.3
3	20415	825.5
3	20525	836.5
3	20635	847.5
5	20425	826.5
5	20525	836.5
5	20625	846.5
10	20450	829.0
10	20525	836.5
10	20600	844.0

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Adapter	PHIHONG	PSA10F-050Q	---	Provided by applicant. Input: 100-240V~ 50/60Hz, 0.35A Output: 5.0V=2.0A, 10.0W

Note: Adapter is used for charging only.

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Aug. 10 ~ Aug. 11, 2021				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	May 26, 2021	May 25, 2022
Receiver	R&S	ESR3	101657	Mar. 12, 2021	Mar. 11, 2022
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2020	Dec. 03, 2021
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 17, 2020	Nov. 16, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jun. 30, 2021	Jun. 29, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 11, 2020	Dec. 10, 2021
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 06, 2020	Nov. 05, 2021
Preamplifier	EMC	EMC02325	980225	Jun. 29, 2021	Jun. 28, 2022
Preamplifier	Agilent	83017A	MY39501308	Sep. 26, 2020	Sep. 25, 2021
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 06, 2020	Oct. 05, 2021
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 06, 2020	Oct. 05, 2021
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 06, 2020	Oct. 05, 2021
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 06, 2020	Oct. 05, 2021
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Jul. 23 ~ Jul. 26, 2021				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	May 26, 2021	May 25, 2022
Spectrum Analyzer	Keysight	N9010A	MY54510374	Aug. 19, 2020	Aug. 18, 2021
Power Meter	Anritsu	ML2495A	1241002	Nov. 04, 2020	Nov. 03, 2021
Power Sensor	Anritsu	MA2411B	1207366	Nov. 04, 2020	Nov. 03, 2021
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Nov. 09, 2020	Nov. 08, 2021
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GTH-150-40-CP-AR-T	MAA1407-012	Sep. 10, 2020	Sep. 09, 2021
Measurement Software	-	SENSE-FCC_2G-4G	V5.10.5.4	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 22 Subpart H
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

Test Item	Test Site	Ambient Condition	Tested By
Radiated Emissions	03CH01-WS	24°C / 68-69%	Akun Chung
RF Conducted	TH01-WS	22 ~ 24°C / 62 ~ 65%	Aska Huang

- 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 333, Taiwan, R.O.C.

2.3 The Worst Test Modes and Channel Details

WCDMA Band V		
Test item	Mode	Test channel
Effective Radiated Power	WCDMA Band V	4132, 4182, 4233
Radiated Emissions ≤ 1GHz	WCDMA Band V	4233
Radiated Emissions > 1GHz	WCDMA Band V	4132, 4182, 4233
Conducted Emissions	WCDMA Band V	4132, 4182, 4233
Band Edge	WCDMA Band V	4132, 4233
Occupied Bandwidth	WCDMA Band V	4132, 4182, 4233
Peak to average ratio	WCDMA Band V	4132, 4182, 4233
Frequency Stability	WCDMA Band V	4132, 4233
NOTE:		
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.		

LTE Band 5			
Test item	Channel Bandwidths	Modulation	Test channel
Effective Radiated Power	1.4 MHz	QPSK / 16QAM	20407 / 20525 / 20643
Conducted Emissions	3 MHz	QPSK / 16QAM	20415 / 20525 / 20635
Occupied Bandwidth	5 MHz	QPSK / 16QAM	20425 / 20525 / 20625
Peak to Average Ratio	10 MHz	QPSK / 16QAM	20450 / 20525 / 20600
Radiated Emission $\leq$ 1GHz	1.4 MHz	QPSK	20407
	3 MHz	QPSK	20415
	5 MHz	QPSK	20425
	10 MHz	QPSK	20525
Radiated Emission $>$ 1GHz	1.4 MHz	QPSK	20407 / 20525 / 20643
	3 MHz	QPSK	20415 / 20525 / 20635
	5 MHz	QPSK	20425 / 20525 / 20625
	10 MHz	QPSK	20450 / 20525 / 20600
Band Edge	1.4 MHz	QPSK / 16QAM	20407 / 20643
	3 MHz	QPSK / 16QAM	20415 / 20635
	5 MHz	QPSK / 16QAM	20425 / 20625
	10 MHz	QPSK / 16QAM	20450 / 20600
Frequency Stability	1.4 MHz	QPSK	20407 / 20643
	3 MHz	QPSK	20415 / 20635
	5 MHz	QPSK	20425 / 20625
	10 MHz	QPSK	20450 / 20600
NOTE:			
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-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

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

3.1.2 Test Procedures

For Conducted power measurement:

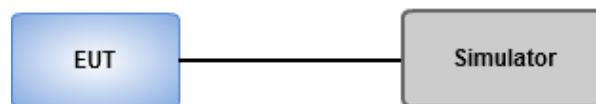
1. The EUT links up with simulator and is set to maximum output power level at low / middel / high channel.
2. Measure the output power of low / middle / high channel of the EUT.

For ERP 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. $ERP = EIRP - 2.15 \text{ dB}$.

3.1.3 Test Setup



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

Refer to Appendix A, G.

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

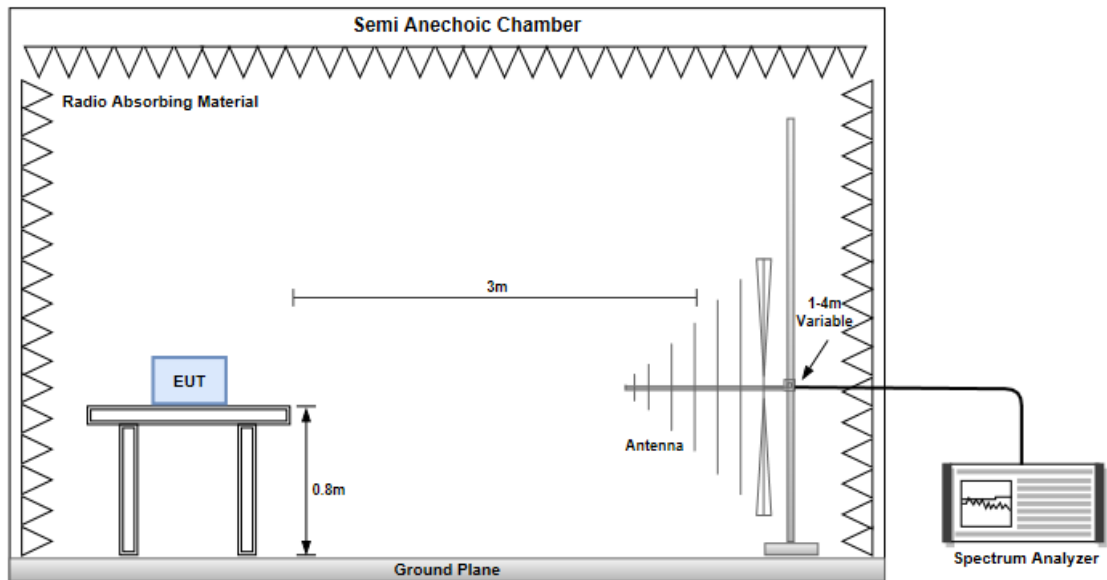
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

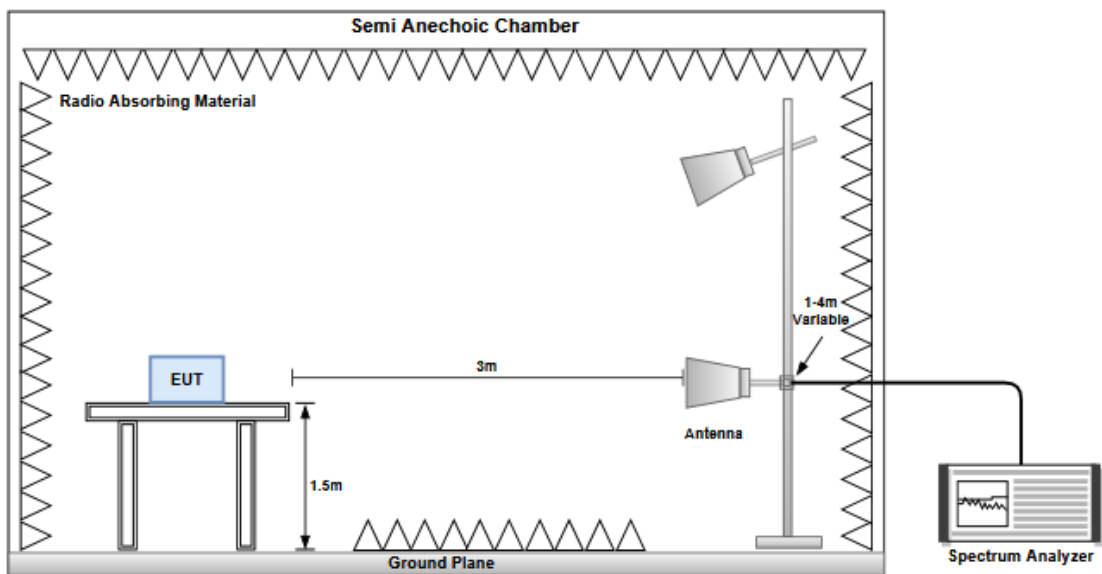
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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. $E.I.R.P = \text{output power of step 4} + \text{gain of substitution antenna} - \text{cable loss of RF cable}$. ERP can be calculated by below formula:
 $E.R.P = E.I.R.P - 2.15\text{dB}$.

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions

Refer to Appendix B, H.

3.3 Conducted Emissions & Band Edge

3.3.1 Limit of Conducted Emissions & Band Edge

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.

3.3.2 Test Procedures

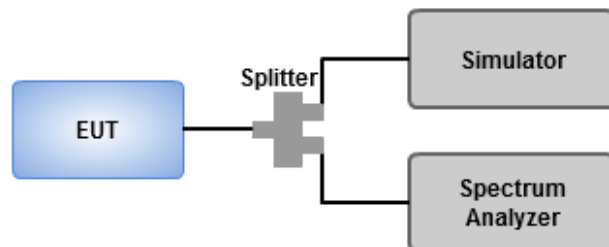
Out of band emission

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 = 1 MHz, VBW = 3 MHz, 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.

3.3.3 Test Setup



3.3.4 Test Result of Conducted Emissions & Band Edge

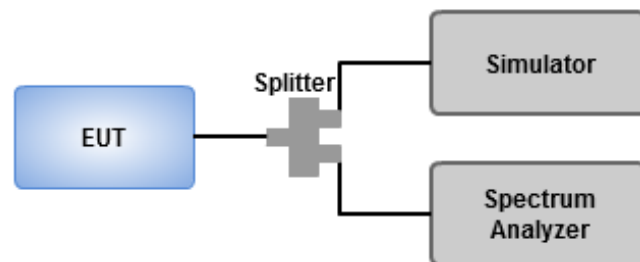
Refer to Appendix C.1, C.2, I.1, I.2.

3.4 Occupied 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 26dB Bandwidth

Refer to Appendix D, J.

3.5 Peak to Average Ratio

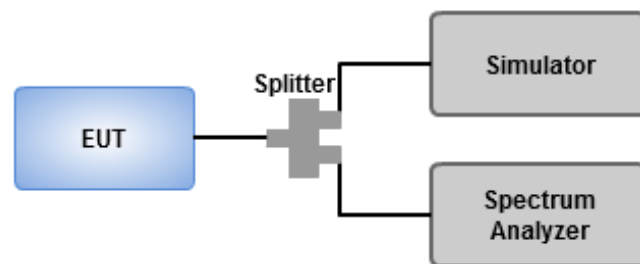
3.5.1 Limit of Peak to Average Ratio

Peak-to-average ratio (PAR) 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 Ratio

Refer to Appendix E, K.

3.6 Frequency Stability

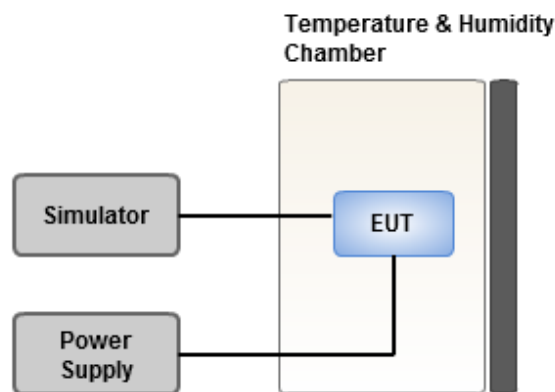
3.6.1 Limit of Frequency Stability

The frequency stability shall be less +/- 2.5ppm.

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. Tem 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, L.

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
St., Kwei Shan Dist., Tao Yuan
City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0345

Email: ICC_Service@icertifi.com.tw

==END==

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 5	-	-	-	-
WCDMA AMR_5MHz_Nss1_1TX	23.55	0.226	18.51	0.07096
WCDMA RMC_5MHz_Nss1_1TX	23.57	0.228	18.53	0.07129
WCDMA HSDPA Subtest-1_5MHz_Nss1_1TX	22.47	0.177	17.43	0.05534
WCDMA HSDPA Subtest-2_5MHz_Nss1_1TX	22.44	0.175	17.40	0.05495
WCDMA HSDPA Subtest-3_5MHz_Nss1_1TX	22.42	0.175	17.38	0.05470
WCDMA HSDPA Subtest-4_5MHz_Nss1_1TX	22.41	0.174	17.37	0.05458
WCDMA HSUPA Subtest-1_5MHz_Nss1_1TX	22.37	0.173	17.33	0.05408
WCDMA HSUPA Subtest-2_5MHz_Nss1_1TX	22.42	0.175	17.38	0.05470
WCDMA HSUPA Subtest-3_5MHz_Nss1_1TX	21.43	0.139	16.39	0.04355
WCDMA HSUPA Subtest-4_5MHz_Nss1_1TX	22.38	0.173	17.34	0.05420
WCDMA HSUPA Subtest-5_5MHz_Nss1_1TX	21.41	0.138	16.37	0.04335
WCDMA HSPA+(16QAM) Subtest-1_5MHz_Nss1_1TX	22.12	0.163	17.08	0.05105

Result

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
Band 5_WCDMA AMR_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	20.58	18.43	0.06966	7	23.47	0.222	Inf	23.47
836.4MHz	Pass	-2.89	20.65	18.50	0.07079	7	23.54	0.226	Inf	23.54
846.6MHz	Pass	-2.89	20.66	18.51	0.07096	7	23.55	0.226	Inf	23.55
Band 5_WCDMA RMC_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	20.59	18.44	0.06982	7	23.48	0.223	Inf	23.48
836.4MHz	Pass	-2.89	20.67	18.52	0.07112	7	23.56	0.227	Inf	23.56
846.6MHz	Pass	-2.89	20.68	18.53	0.07129	7	23.57	0.228	Inf	23.57
Band 5_WCDMA HSDPA Subtest-1_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.49	17.34	0.05420	7	22.38	0.173	Inf	22.38
836.4MHz	Pass	-2.89	19.56	17.41	0.05508	7	22.45	0.176	Inf	22.45
846.6MHz	Pass	-2.89	19.58	17.43	0.05534	7	22.47	0.177	Inf	22.47
Band 5_WCDMA HSDPA Subtest-2_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.47	17.32	0.05395	7	22.36	0.172	Inf	22.36
836.4MHz	Pass	-2.89	19.52	17.37	0.05458	7	22.41	0.174	Inf	22.41
846.6MHz	Pass	-2.89	19.55	17.40	0.05495	7	22.44	0.175	Inf	22.44
Band 5_WCDMA HSDPA Subtest-3_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.42	17.27	0.05333	7	22.31	0.170	Inf	22.31
836.4MHz	Pass	-2.89	19.46	17.31	0.05383	7	22.35	0.172	Inf	22.35
846.6MHz	Pass	-2.89	19.53	17.38	0.05470	7	22.42	0.175	Inf	22.42
Band 5_WCDMA HSDPA Subtest-4_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.43	17.28	0.05346	7	22.32	0.171	Inf	22.32
836.4MHz	Pass	-2.89	19.49	17.34	0.05420	7	22.38	0.173	Inf	22.38
846.6MHz	Pass	-2.89	19.52	17.37	0.05458	7	22.41	0.174	Inf	22.41
Band 5_WCDMA HSUPA Subtest-1_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.47	17.32	0.05395	7	22.36	0.172	Inf	22.36
836.4MHz	Pass	-2.89	19.48	17.33	0.05408	7	22.37	0.173	Inf	22.37
846.6MHz	Pass	-2.89	19.46	17.31	0.05383	7	22.35	0.172	Inf	22.35
Band 5_WCDMA HSUPA Subtest-2_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.46	17.31	0.05383	7	22.35	0.172	Inf	22.35

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
836.4MHz	Pass	-2.89	19.49	17.34	0.05420	7	22.38	0.173	Inf	22.38
846.6MHz	Pass	-2.89	19.53	17.38	0.05470	7	22.42	0.175	Inf	22.42
Band 5_WCDMA HSUPA Subtest-3_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	18.47	16.32	0.04285	7	21.36	0.137	Inf	21.36
836.4MHz	Pass	-2.89	18.44	16.29	0.04256	7	21.33	0.136	Inf	21.33
846.6MHz	Pass	-2.89	18.54	16.39	0.04355	7	21.43	0.139	Inf	21.43
Band 5_WCDMA HSUPA Subtest-4_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.39	17.24	0.05297	7	22.28	0.169	Inf	22.28
836.4MHz	Pass	-2.89	19.44	17.29	0.05358	7	22.33	0.171	Inf	22.33
846.6MHz	Pass	-2.89	19.49	17.34	0.05420	7	22.38	0.173	Inf	22.38
Band 5_WCDMA HSUPA Subtest-5_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	18.48	16.33	0.04295	7	21.37	0.137	Inf	21.37
836.4MHz	Pass	-2.89	18.49	16.34	0.04305	7	21.38	0.137	Inf	21.38
846.6MHz	Pass	-2.89	18.52	16.37	0.04335	7	21.41	0.138	Inf	21.41
Band 5_WCDMA HSPA+(16QAM) Subtest-1_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-2.89	19.12	16.97	0.04977	7	22.01	0.159	Inf	22.01
836.4MHz	Pass	-2.89	19.23	17.08	0.05105	7	22.12	0.163	Inf	22.12
846.6MHz	Pass	-2.89	19.19	17.04	0.05058	7	22.08	0.161	Inf	22.08

DG = Directional Gain; Port n = Port n output power

Test Result of Radiated Emissions below 1GHz

Mode	Mode: 3G WCDMA RMC, Band:5, Channel:4233						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.36	H	-70.61	-13.00	-57.61	-72.97	-49.07	-19.39
66.45	H	-74.31	-13.00	-61.31	-70.19	-60.28	-11.88
139.61	H	-79.18	-13.00	-66.18	-76.13	-70.12	-6.91
206.45	H	-72.44	-13.00	-59.44	-66.60	-67.49	-2.80
320.03	H	-78.16	-13.00	-65.16	-75.77	-74.73	-1.28
421.88	H	-75.78	-13.00	-62.78	-75.33	-72.18	-1.45
30.46	V	-68.47	-13.00	-55.47	-64.31	-46.95	-19.37
97.26	V	-71.37	-13.00	-58.37	-69.58	-64.35	-4.87
149.31	V	-73.27	-13.00	-60.27	-74.70	-64.43	-6.69
180.21	V	-68.59	-13.00	-55.59	-68.53	-61.57	-4.87
340.40	V	-75.44	-13.00	-62.44	-75.72	-72.04	-1.25
462.62	V	-73.23	-13.00	-60.23	-75.86	-69.61	-1.47

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

Test Result of Radiated Emissions above 1GHz

Mode	Mode: 3G WCDMA RMC, Band:5, Channel:4132						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1652.80	H	-48.91	-13.00	-35.91	-51.42	-51.86	5.10
2479.20	H	-55.54	-13.00	-42.54	-61.96	-58.69	5.30
6611.20	H	-53.82	-13.00	-40.82	-69.87	-55.81	4.14
1652.80	V	-55.65	-13.00	-42.65	-58.33	-58.60	5.10
2479.20	V	-60.07	-13.00	-47.07	-66.64	-63.22	5.30
6611.20	V	-51.18	-13.00	-38.18	-67.89	-53.17	4.14

Mode	Mode: 3G WCDMA RMC, Band:5, Channel:4182						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1672.80	H	-48.99	-13.00	-35.99	-51.61	-51.99	5.15
2509.20	H	-55.71	-13.00	-42.71	-62.21	-58.94	5.38
6691.20	H	-53.89	-13.00	-40.89	-70.25	-55.91	4.17
1672.80	V	-55.77	-13.00	-42.77	-58.51	-58.77	5.15
2509.20	V	-59.84	-13.00	-46.84	-66.39	-63.07	5.38
6691.20	V	-51.89	-13.00	-38.89	-68.58	-53.91	4.17

Mode	Mode: 3G WCDMA RMC, Band:5, Channel:4233						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1693.20	H	-48.14	-13.00	-35.14	-50.87	-51.18	5.19
2539.80	H	-55.00	-13.00	-42.00	-61.59	-58.31	5.46
6772.80	H	-52.55	-13.00	-39.55	-69.24	-54.59	4.19
1693.20	V	-55.36	-13.00	-42.36	-58.17	-58.40	5.19
2539.80	V	-59.33	-13.00	-46.33	-65.87	-62.64	5.46
6772.80	V	-51.01	-13.00	-38.01	-67.69	-53.05	4.19

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



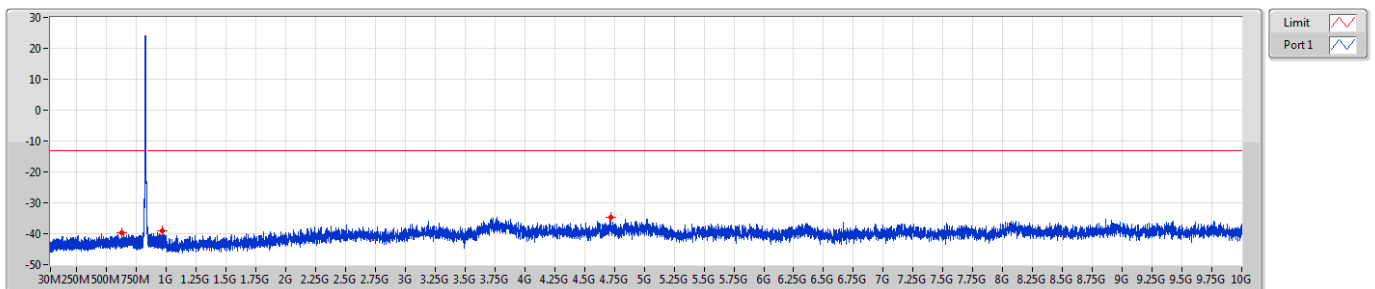
Summary

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 5	-	-	-	-	-	-	-	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	1G	10G	1M	3M	Peak	4.717G	-34.71	-13.00	-21.71	-	-

Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Sum

826.4MHz

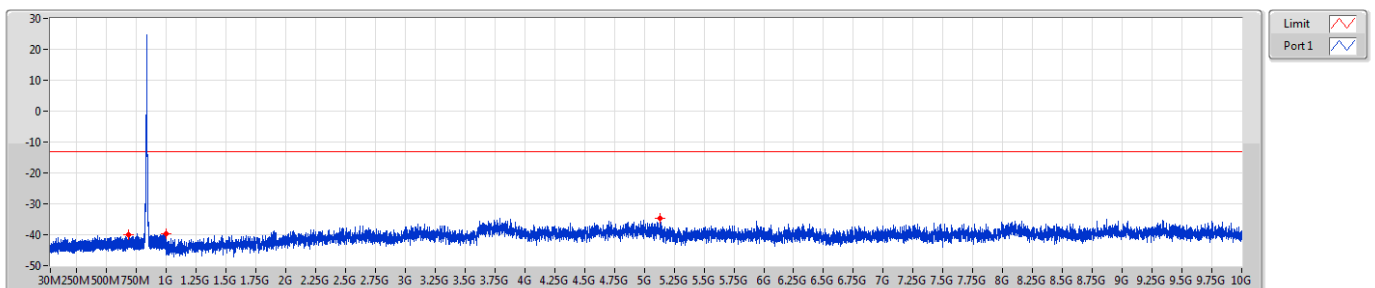


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	Peak	629.1M	-39.59	-13.00	-26.59	-	-
949M	1G	1M	3M	Peak	964.99M	-39.19	-13.00	-26.19	-	-
1G	10G	1M	3M	Peak	4.717G	-34.71	-13.00	-21.71	-	-

Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Sum

836.4MHz



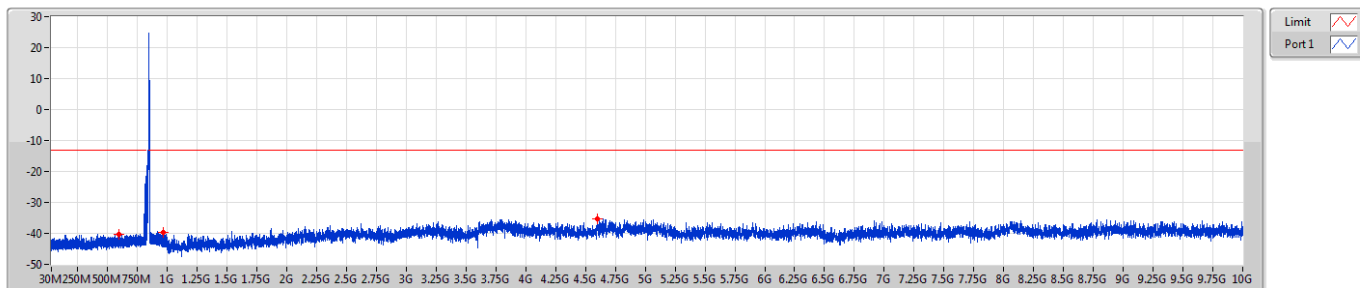
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	Peak	687.39M	-39.92	-13.00	-26.92	-	-
949M	1G	1M	3M	Peak	996.05M	-39.75	-13.00	-26.75	-	-
1G	10G	1M	3M	Peak	5.1355G	-34.72	-13.00	-21.72	-	-



Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Sum

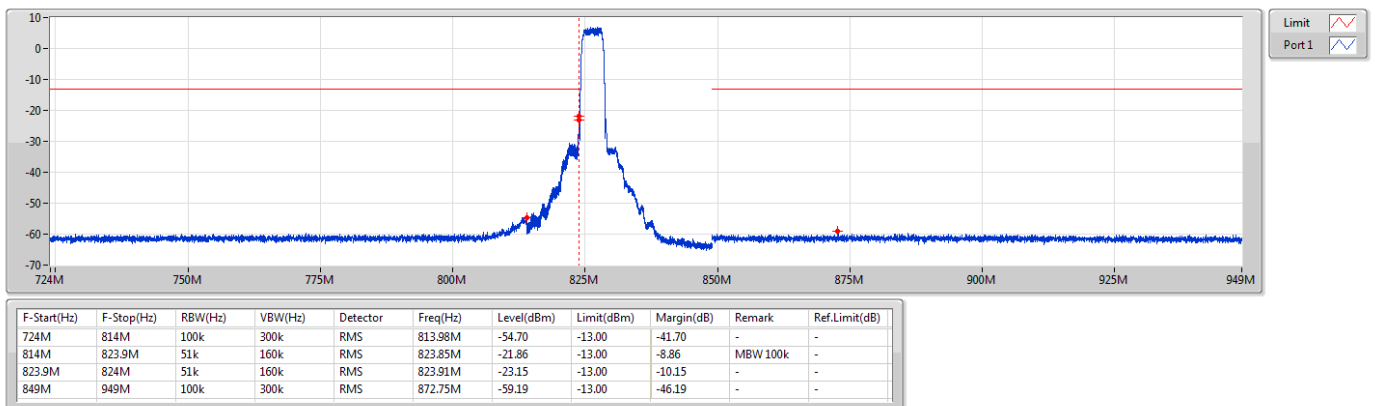
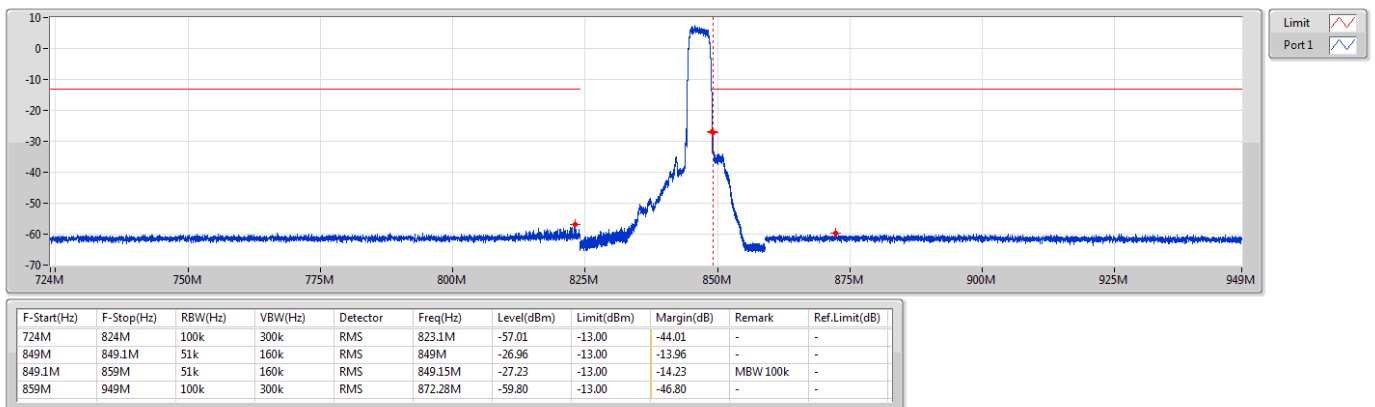
846.6MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	Peak	595.96M	-40.24	-13.00	-27.24	-	-
949M	1G	1M	3M	Peak	964.81M	-39.55	-13.00	-26.55	-	-
1G	10G	1M	3M	Peak	4.6027G	-35.26	-13.00	-22.26	-	-

**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 5	-	-	-	-	-	-	-	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	814M	823.9M	51k	160k	RMS	823.85M	-21.86	-13.00	-8.86	MBW 100k	-

Band 5_WCDMA_5MHz_Nss1_1TX**CSE-TX-Sum****826.4MHz****Band 5_WCDMA_5MHz_Nss1_1TX****CSE-TX-Sum****846.6MHz**

**Summary**

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 5	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	4.675M	4.179M	4M18F9W	4.644M	4.159M

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

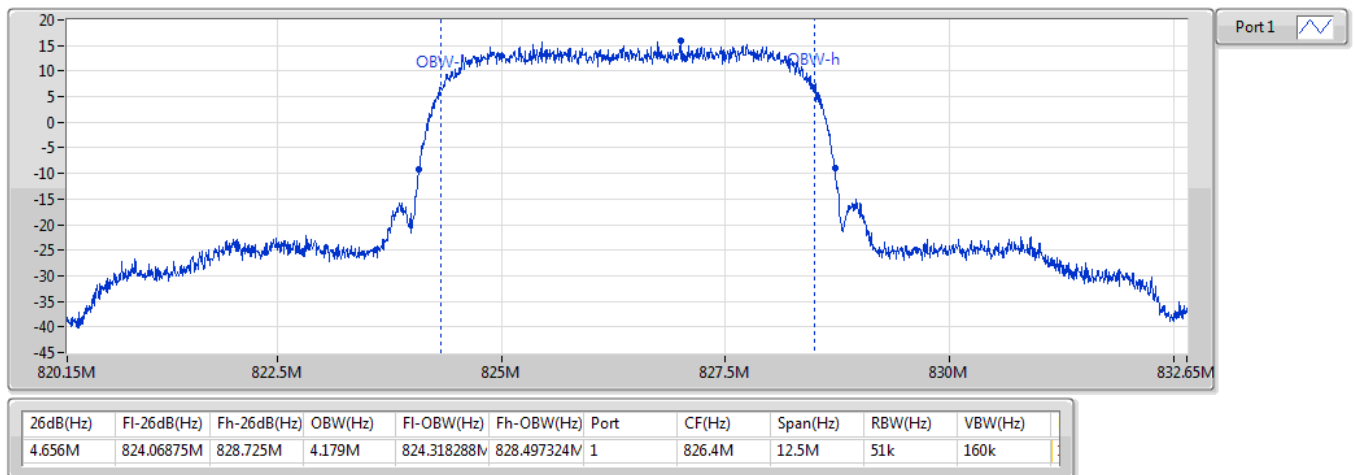
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 5_WCDMA_5MHz_Nss1_1TX	-	-	-	-
826.4MHz	Pass	Inf	4.656M	4.179M
836.4MHz	Pass	Inf	4.675M	4.175M
846.6MHz	Pass	Inf	4.644M	4.159M

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

Band 5_WCDMA_5MHz_Nss1_1TX

EBW

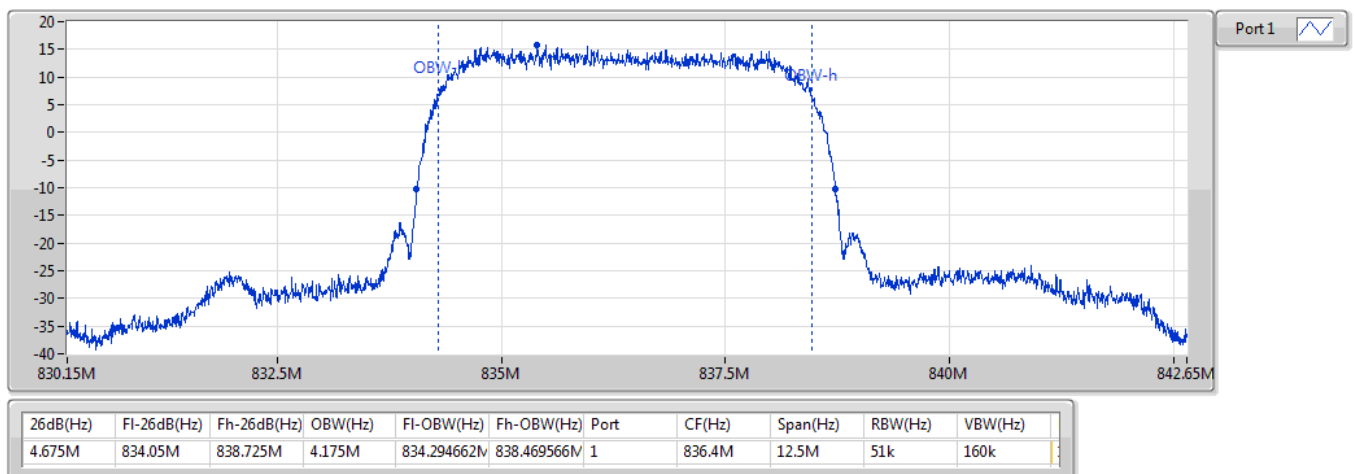
826.4MHz



Band 5_WCDMA_5MHz_Nss1_1TX

EBW

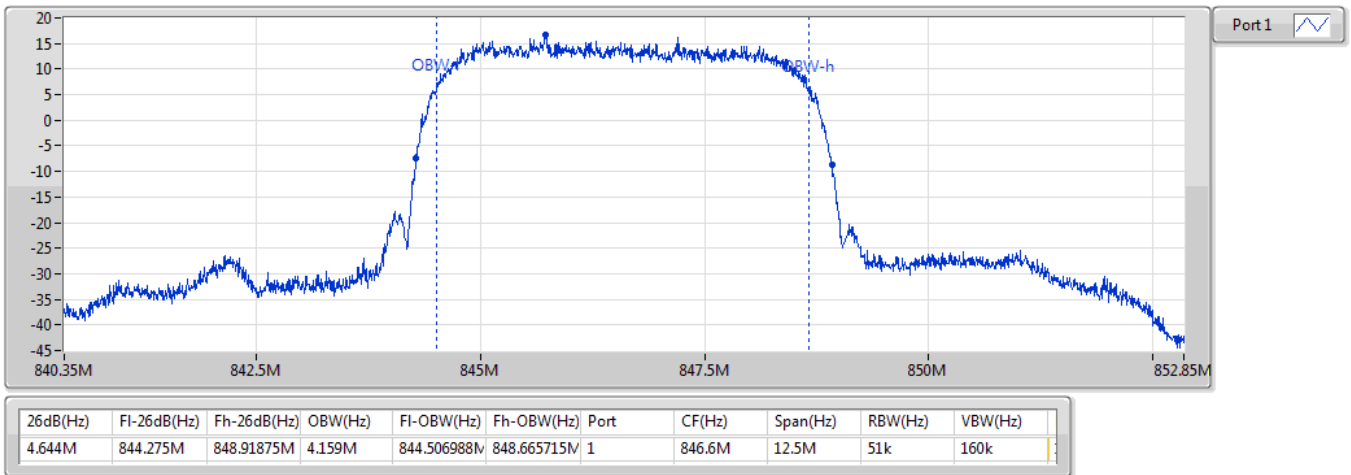
836.4MHz



Band 5_WCDMA_5MHz_Nss1_1TX

EBW

846.6MHz





Peak to Average Power Ratio

Appendix E

Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	826.4	13.00	3.35	1

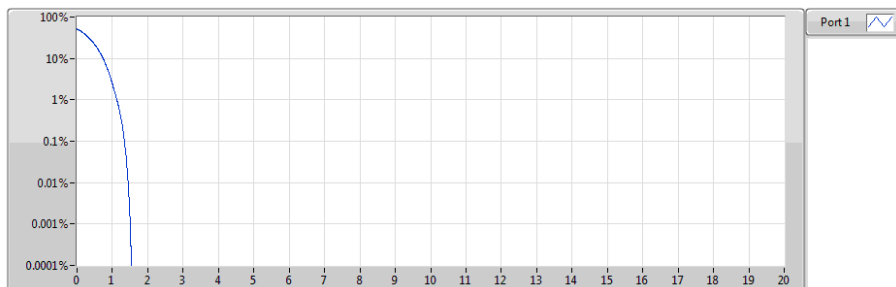
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5_WCDMA_5MHz_Nss1_1TX	-	-	-	-	-
826.4MHz	Pass	826.4	13.00	3.35	1
836.4MHz	Pass	836.4	13.00	3.02	1
846.6MHz	Pass	846.6	13.00	2.78	1

Band 5_WCDMA_5MHz_Nss1_1TX

PAR

826.4MHz

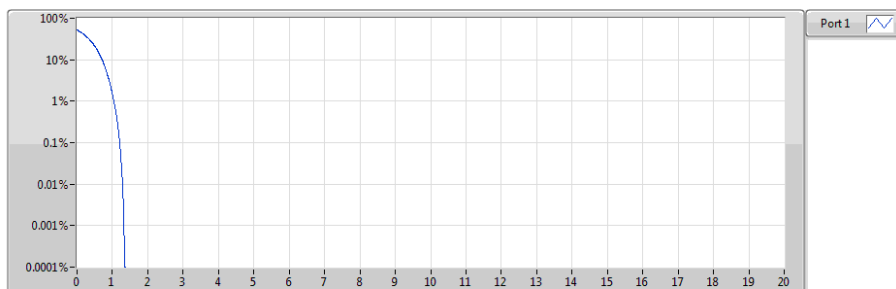


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
826.4	20M	3.35	-9.65	13.00	1

Band 5_WCDMA_5MHz_Nss1_1TX

PAR

836.4MHz

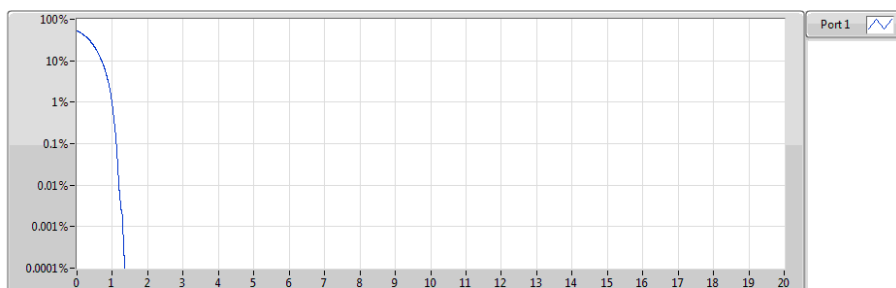


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.4	20M	3.02	-9.98	13.00	1

Band 5_WCDMA_5MHz_Nss1_1TX

PAR

846.6MHz



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
846.6	20M	2.78	-10.22	13.00	1

WCDMA Band V				
Temperature (°C)	826.4MHz		846.6MHz	
	Frequency Drift (ppm)	FL (MHz)	Frequency Drift (ppm)	FH (MHz)
T20°CVmax	0.017	824.318302	0.019	848.665731
T20°CVmin	0.018	824.318303	0.021	848.665733
T50°CVnom	0.019	824.318304	0.022	848.665734
T40°CVnom	0.019	824.318304	0.021	848.665733
T30°CVnom	0.018	824.318303	0.018	848.665730
T20°CVnom	0.017	824.318302	0.020	848.665732
T10°CVnom	0.018	824.318303	0.017	848.665729
T0°CVnom	0.016	824.318301	0.015	848.665728
T-10°CVnom	0.015	824.318300	0.018	848.665730
T-20°CVnom	0.013	824.318299	0.014	848.665727
T-30°CVnom	0.011	824.318297	0.013	848.665726
Limit	2.5 ppm	>824MHz	2.5 ppm	<849MHz

**Summary**

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 5	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	23.18	0.208	18.14	0.065
LTE_1.4MHz_Nss1,16QAM_1TX	22.51	0.178	17.47	0.056
LTE_3MHz_Nss1,QPSK_1TX	23.13	0.206	18.09	0.064
LTE_3MHz_Nss1,16QAM_1TX	22.48	0.177	17.44	0.055
LTE_5MHz_Nss1,QPSK_1TX	23.24	0.211	18.20	0.066
LTE_5MHz_Nss1,16QAM_1TX	22.61	0.182	17.57	0.057
LTE_10MHz_Nss1,QPSK_1TX	23.20	0.209	18.16	0.065
LTE_10MHz_Nss1,16QAM_1TX	22.51	0.178	17.47	0.056

Result

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
824.7MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.11	17.96	0.063	7	23.00	0.200	Inf	23.00
824.7MHz_QPSK_RB 1,#RB 3	Pass	-2.89	20.29	18.14	0.06516	7	23.18	0.208	Inf	23.18
824.7MHz_QPSK_RB 1,#RB 5	Pass	-2.89	20.18	18.03	0.064	7	23.07	0.203	Inf	23.07
824.7MHz_QPSK_RB 3,#RB 0	Pass	-2.89	20.21	18.06	0.064	7	23.10	0.204	Inf	23.10
824.7MHz_QPSK_RB 3,#RB 1	Pass	-2.89	20.28	18.13	0.065	7	23.17	0.207	Inf	23.17
824.7MHz_QPSK_RB 3,#RB 3	Pass	-2.89	20.20	18.05	0.064	7	23.09	0.204	Inf	23.09
824.7MHz_QPSK_RB 6,#RB 0	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
836.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.14	17.99	0.063	7	23.03	0.201	Inf	23.03
836.5MHz_QPSK_RB 1,#RB 3	Pass	-2.89	20.28	18.13	0.06501	7	23.17	0.207	Inf	23.17
836.5MHz_QPSK_RB 1,#RB 5	Pass	-2.89	20.14	17.99	0.063	7	23.03	0.201	Inf	23.03
836.5MHz_QPSK_RB 3,#RB 0	Pass	-2.89	20.23	18.08	0.064	7	23.12	0.205	Inf	23.12
836.5MHz_QPSK_RB 3,#RB 1	Pass	-2.89	20.27	18.12	0.065	7	23.16	0.207	Inf	23.16
836.5MHz_QPSK_RB 3,#RB 3	Pass	-2.89	20.23	18.08	0.064	7	23.12	0.205	Inf	23.12
836.5MHz_QPSK_RB 6,#RB 0	Pass	-2.89	19.25	17.10	0.051	7	22.14	0.164	Inf	22.14
848.3MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.13	17.98	0.063	7	23.02	0.200	Inf	23.02
848.3MHz_QPSK_RB 1,#RB 3	Pass	-2.89	20.29	18.14	0.06516	7	23.18	0.208	Inf	23.18
848.3MHz_QPSK_RB 1,#RB 5	Pass	-2.89	20.09	17.94	0.062	7	22.98	0.199	Inf	22.98
848.3MHz_QPSK_RB 3,#RB 0	Pass	-2.89	20.20	18.05	0.064	7	23.09	0.204	Inf	23.09
848.3MHz_QPSK_RB 3,#RB 1	Pass	-2.89	20.27	18.12	0.065	7	23.16	0.207	Inf	23.16
848.3MHz_QPSK_RB 3,#RB 3	Pass	-2.89	20.24	18.09	0.064	7	23.13	0.206	Inf	23.13
848.3MHz_QPSK_RB 6,#RB 0	Pass	-2.89	19.26	17.11	0.051	7	22.15	0.164	Inf	22.15
824.7MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.50	17.35	0.054	7	22.39	0.173	Inf	22.39
824.7MHz_16QAM_RB 1,#RB 3	Pass	-2.89	19.62	17.47	0.056	7	22.51	0.178	Inf	22.51
824.7MHz_16QAM_RB 1,#RB 5	Pass	-2.89	19.54	17.39	0.055	7	22.43	0.175	Inf	22.43
824.7MHz_16QAM_RB 3,#RB 0	Pass	-2.89	19.28	17.13	0.052	7	22.17	0.165	Inf	22.17
824.7MHz_16QAM_RB 3,#RB 1	Pass	-2.89	19.33	17.18	0.052	7	22.22	0.167	Inf	22.22
824.7MHz_16QAM_RB 3,#RB 3	Pass	-2.89	19.27	17.12	0.052	7	22.16	0.164	Inf	22.16
824.7MHz_16QAM_RB 6,#RB 0	Pass	-2.89	18.38	16.23	0.042	7	21.27	0.134	Inf	21.27
836.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.41	17.26	0.053	7	22.30	0.170	Inf	22.30
836.5MHz_16QAM_RB 1,#RB 3	Pass	-2.89	19.57	17.42	0.055	7	22.46	0.176	Inf	22.46
836.5MHz_16QAM_RB 1,#RB 5	Pass	-2.89	19.44	17.29	0.054	7	22.33	0.171	Inf	22.33
836.5MHz_16QAM_RB 3,#RB 0	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
836.5MHz_16QAM_RB 3,#RB 1	Pass	-2.89	19.30	17.15	0.052	7	22.19	0.166	Inf	22.19
836.5MHz_16QAM_RB 3,#RB 3	Pass	-2.89	19.23	17.08	0.051	7	22.12	0.163	Inf	22.12
836.5MHz_16QAM_RB 6,#RB 0	Pass	-2.89	18.35	16.20	0.042	7	21.24	0.133	Inf	21.24
848.3MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.32	17.17	0.052	7	22.21	0.166	Inf	22.21

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
848.3MHz_16QAM_RB 1,#RB 3	Pass	-2.89	19.43	17.28	0.053	7	22.32	0.171	Inf	22.32
848.3MHz_16QAM_RB 1,#RB 5	Pass	-2.89	19.34	17.19	0.052	7	22.23	0.167	Inf	22.23
848.3MHz_16QAM_RB 3,#RB 0	Pass	-2.89	19.15	17.00	0.050	7	22.04	0.160	Inf	22.04
848.3MHz_16QAM_RB 3,#RB 1	Pass	-2.89	19.23	17.08	0.051	7	22.12	0.163	Inf	22.12
848.3MHz_16QAM_RB 3,#RB 3	Pass	-2.89	19.18	17.03	0.050	7	22.07	0.161	Inf	22.07
848.3MHz_16QAM_RB 6,#RB 0	Pass	-2.89	18.34	16.19	0.042	7	21.23	0.133	Inf	21.23
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
825.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.19	18.04	0.064	7	23.08	0.203	Inf	23.08
825.5MHz_QPSK_RB 1,#RB 8	Pass	-2.89	20.24	18.09	0.064	7	23.13	0.206	Inf	23.13
825.5MHz_QPSK_RB 1,#RB 14	Pass	-2.89	20.19	18.04	0.064	7	23.08	0.203	Inf	23.08
825.5MHz_QPSK_RB 8,#RB 0	Pass	-2.89	19.20	17.05	0.051	7	22.09	0.162	Inf	22.09
825.5MHz_QPSK_RB 8,#RB 4	Pass	-2.89	19.27	17.12	0.052	7	22.16	0.164	Inf	22.16
825.5MHz_QPSK_RB 8,#RB 7	Pass	-2.89	19.22	17.07	0.051	7	22.11	0.163	Inf	22.11
825.5MHz_QPSK_RB 15,#RB 0	Pass	-2.89	19.18	17.03	0.050	7	22.07	0.161	Inf	22.07
836.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.17	18.02	0.063	7	23.06	0.202	Inf	23.06
836.5MHz_QPSK_RB 1,#RB 8	Pass	-2.89	20.18	18.03	0.064	7	23.07	0.203	Inf	23.07
836.5MHz_QPSK_RB 1,#RB 14	Pass	-2.89	20.16	18.01	0.063	7	23.05	0.202	Inf	23.05
836.5MHz_QPSK_RB 8,#RB 0	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
836.5MHz_QPSK_RB 8,#RB 4	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
836.5MHz_QPSK_RB 8,#RB 7	Pass	-2.89	19.21	17.06	0.051	7	22.10	0.162	Inf	22.10
836.5MHz_QPSK_RB 15,#RB 0	Pass	-2.89	19.22	17.07	0.051	7	22.11	0.163	Inf	22.11
847.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.16	18.01	0.063	7	23.05	0.202	Inf	23.05
847.5MHz_QPSK_RB 1,#RB 8	Pass	-2.89	20.19	18.04	0.064	7	23.08	0.203	Inf	23.08
847.5MHz_QPSK_RB 1,#RB 14	Pass	-2.89	20.15	18.00	0.063	7	23.04	0.201	Inf	23.04
847.5MHz_QPSK_RB 8,#RB 0	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
847.5MHz_QPSK_RB 8,#RB 4	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
847.5MHz_QPSK_RB 8,#RB 7	Pass	-2.89	19.20	17.05	0.051	7	22.09	0.162	Inf	22.09
847.5MHz_QPSK_RB 15,#RB 0	Pass	-2.89	19.26	17.11	0.051	7	22.15	0.164	Inf	22.15
825.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.55	17.40	0.055	7	22.44	0.175	Inf	22.44
825.5MHz_16QAM_RB 1,#RB 8	Pass	-2.89	19.59	17.44	0.055	7	22.48	0.177	Inf	22.48
825.5MHz_16QAM_RB 1,#RB 14	Pass	-2.89	19.52	17.37	0.055	7	22.41	0.174	Inf	22.41
825.5MHz_16QAM_RB 8,#RB 0	Pass	-2.89	18.33	16.18	0.041	7	21.22	0.132	Inf	21.22
825.5MHz_16QAM_RB 8,#RB 4	Pass	-2.89	18.39	16.24	0.042	7	21.28	0.134	Inf	21.28
825.5MHz_16QAM_RB 8,#RB 7	Pass	-2.89	18.32	16.17	0.041	7	21.21	0.132	Inf	21.21
825.5MHz_16QAM_RB 15,#RB 0	Pass	-2.89	18.24	16.09	0.041	7	21.13	0.130	Inf	21.13
836.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.43	17.28	0.053	7	22.32	0.171	Inf	22.32
836.5MHz_16QAM_RB 1,#RB 8	Pass	-2.89	19.47	17.32	0.054	7	22.36	0.172	Inf	22.36
836.5MHz_16QAM_RB 1,#RB 14	Pass	-2.89	19.49	17.34	0.054	7	22.38	0.173	Inf	22.38

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
836.5MHz_16QAM_RB 8,#RB 0	Pass	-2.89	18.29	16.14	0.041	7	21.18	0.131	Inf	21.18
836.5MHz_16QAM_RB 8,#RB 4	Pass	-2.89	18.32	16.17	0.041	7	21.21	0.132	Inf	21.21
836.5MHz_16QAM_RB 8,#RB 7	Pass	-2.89	18.30	16.15	0.041	7	21.19	0.132	Inf	21.19
836.5MHz_16QAM_RB 15,#RB 0	Pass	-2.89	18.24	16.09	0.041	7	21.13	0.130	Inf	21.13
847.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.40	17.25	0.053	7	22.29	0.169	Inf	22.29
847.5MHz_16QAM_RB 1,#RB 8	Pass	-2.89	19.37	17.22	0.053	7	22.26	0.168	Inf	22.26
847.5MHz_16QAM_RB 1,#RB 14	Pass	-2.89	19.37	17.22	0.053	7	22.26	0.168	Inf	22.26
847.5MHz_16QAM_RB 8,#RB 0	Pass	-2.89	18.29	16.14	0.041	7	21.18	0.131	Inf	21.18
847.5MHz_16QAM_RB 8,#RB 4	Pass	-2.89	18.30	16.15	0.041	7	21.19	0.132	Inf	21.19
847.5MHz_16QAM_RB 8,#RB 7	Pass	-2.89	18.23	16.08	0.041	7	21.12	0.129	Inf	21.12
847.5MHz_16QAM_RB 15,#RB 0	Pass	-2.89	18.24	16.09	0.041	7	21.13	0.130	Inf	21.13
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.09	17.94	0.062	7	22.98	0.199	Inf	22.98
826.5MHz_QPSK_RB 1,#RB 12	Pass	-2.89	20.35	18.20	0.066	7	23.24	0.211	Inf	23.24
826.5MHz_QPSK_RB 1,#RB 24	Pass	-2.89	20.10	17.95	0.062	7	22.99	0.199	Inf	22.99
826.5MHz_QPSK_RB 12,#RB 0	Pass	-2.89	19.16	17.01	0.050	7	22.05	0.160	Inf	22.05
826.5MHz_QPSK_RB 12,#RB 7	Pass	-2.89	19.25	17.10	0.051	7	22.14	0.164	Inf	22.14
826.5MHz_QPSK_RB 12,#RB 13	Pass	-2.89	19.27	17.12	0.052	7	22.16	0.164	Inf	22.16
826.5MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.19	17.04	0.051	7	22.08	0.161	Inf	22.08
836.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.08	17.93	0.062	7	22.97	0.198	Inf	22.97
836.5MHz_QPSK_RB 1,#RB 12	Pass	-2.89	20.31	18.16	0.065	7	23.20	0.209	Inf	23.20
836.5MHz_QPSK_RB 1,#RB 24	Pass	-2.89	20.09	17.94	0.062	7	22.98	0.199	Inf	22.98
836.5MHz_QPSK_RB 12,#RB 0	Pass	-2.89	19.29	17.14	0.052	7	22.18	0.165	Inf	22.18
836.5MHz_QPSK_RB 12,#RB 7	Pass	-2.89	19.28	17.13	0.052	7	22.17	0.165	Inf	22.17
836.5MHz_QPSK_RB 12,#RB 13	Pass	-2.89	19.17	17.02	0.050	7	22.06	0.161	Inf	22.06
836.5MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.23	17.08	0.051	7	22.12	0.163	Inf	22.12
846.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.09	17.94	0.062	7	22.98	0.199	Inf	22.98
846.5MHz_QPSK_RB 1,#RB 12	Pass	-2.89	20.33	18.18	0.066	7	23.22	0.210	Inf	23.22
846.5MHz_QPSK_RB 1,#RB 24	Pass	-2.89	20.04	17.89	0.062	7	22.93	0.196	Inf	22.93
846.5MHz_QPSK_RB 12,#RB 0	Pass	-2.89	19.24	17.09	0.051	7	22.13	0.163	Inf	22.13
846.5MHz_QPSK_RB 12,#RB 7	Pass	-2.89	19.28	17.13	0.052	7	22.17	0.165	Inf	22.17
846.5MHz_QPSK_RB 12,#RB 13	Pass	-2.89	19.13	16.98	0.050	7	22.02	0.159	Inf	22.02
846.5MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.18	17.03	0.050	7	22.07	0.161	Inf	22.07
826.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.46	17.31	0.054	7	22.35	0.172	Inf	22.35
826.5MHz_16QAM_RB 1,#RB 12	Pass	-2.89	19.72	17.57	0.057	7	22.61	0.182	Inf	22.61
826.5MHz_16QAM_RB 1,#RB 24	Pass	-2.89	19.40	17.25	0.053	7	22.29	0.169	Inf	22.29
826.5MHz_16QAM_RB 12,#RB 0	Pass	-2.89	18.19	16.04	0.040	7	21.08	0.128	Inf	21.08
826.5MHz_16QAM_RB 12,#RB 7	Pass	-2.89	18.29	16.14	0.041	7	21.18	0.131	Inf	21.18

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
826.5MHz_16QAM_RB 12,#RB 13	Pass	-2.89	18.29	16.14	0.041	7	21.18	0.131	Inf	21.18
826.5MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.24	16.09	0.041	7	21.13	0.130	Inf	21.13
836.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.33	17.18	0.052	7	22.22	0.167	Inf	22.22
836.5MHz_16QAM_RB 1,#RB 12	Pass	-2.89	19.62	17.47	0.056	7	22.51	0.178	Inf	22.51
836.5MHz_16QAM_RB 1,#RB 24	Pass	-2.89	19.43	17.28	0.053	7	22.32	0.171	Inf	22.32
836.5MHz_16QAM_RB 12,#RB 0	Pass	-2.89	18.26	16.11	0.041	7	21.15	0.130	Inf	21.15
836.5MHz_16QAM_RB 12,#RB 7	Pass	-2.89	18.27	16.12	0.041	7	21.16	0.131	Inf	21.16
836.5MHz_16QAM_RB 12,#RB 13	Pass	-2.89	18.19	16.04	0.040	7	21.08	0.128	Inf	21.08
836.5MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.25	16.10	0.041	7	21.14	0.130	Inf	21.14
846.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.39	17.24	0.053	7	22.28	0.169	Inf	22.28
846.5MHz_16QAM_RB 1,#RB 12	Pass	-2.89	19.57	17.42	0.055	7	22.46	0.176	Inf	22.46
846.5MHz_16QAM_RB 1,#RB 24	Pass	-2.89	19.28	17.13	0.052	7	22.17	0.165	Inf	22.17
846.5MHz_16QAM_RB 12,#RB 0	Pass	-2.89	18.23	16.08	0.041	7	21.12	0.129	Inf	21.12
846.5MHz_16QAM_RB 12,#RB 7	Pass	-2.89	18.26	16.11	0.041	7	21.15	0.130	Inf	21.15
846.5MHz_16QAM_RB 12,#RB 13	Pass	-2.89	18.10	15.95	0.039	7	20.99	0.126	Inf	20.99
846.5MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.17	16.02	0.040	7	21.06	0.128	Inf	21.06
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
829MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.17	18.02	0.063	7	23.06	0.202	Inf	23.06
829MHz_QPSK_RB 1,#RB 25	Pass	-2.89	20.30	18.15	0.065	7	23.19	0.208	Inf	23.19
829MHz_QPSK_RB 1,#RB 49	Pass	-2.89	20.10	17.95	0.062	7	22.99	0.199	Inf	22.99
829MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.12	16.97	0.050	7	22.01	0.159	Inf	22.01
829MHz_QPSK_RB 25,#RB 12	Pass	-2.89	19.21	17.06	0.051	7	22.10	0.162	Inf	22.10
829MHz_QPSK_RB 25,#RB 25	Pass	-2.89	19.26	17.11	0.051	7	22.15	0.164	Inf	22.15
829MHz_QPSK_RB 50,#RB 0	Pass	-2.89	19.18	17.03	0.050	7	22.07	0.161	Inf	22.07
836.5MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.11	17.96	0.063	7	23.00	0.200	Inf	23.00
836.5MHz_QPSK_RB 1,#RB 25	Pass	-2.89	20.31	18.16	0.065	7	23.20	0.209	Inf	23.20
836.5MHz_QPSK_RB 1,#RB 49	Pass	-2.89	20.19	18.04	0.064	7	23.08	0.203	Inf	23.08
836.5MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.34	17.19	0.052	7	22.23	0.167	Inf	22.23
836.5MHz_QPSK_RB 25,#RB 12	Pass	-2.89	19.27	17.12	0.052	7	22.16	0.164	Inf	22.16
836.5MHz_QPSK_RB 25,#RB 25	Pass	-2.89	19.17	17.02	0.050	7	22.06	0.161	Inf	22.06
836.5MHz_QPSK_RB 50,#RB 0	Pass	-2.89	19.29	17.14	0.052	7	22.18	0.165	Inf	22.18
844MHz_QPSK_RB 1,#RB 0	Pass	-2.89	20.15	18.00	0.063	7	23.04	0.201	Inf	23.04
844MHz_QPSK_RB 1,#RB 25	Pass	-2.89	20.30	18.15	0.065	7	23.19	0.208	Inf	23.19
844MHz_QPSK_RB 1,#RB 49	Pass	-2.89	20.11	17.96	0.063	7	23.00	0.200	Inf	23.00
844MHz_QPSK_RB 25,#RB 0	Pass	-2.89	19.21	17.06	0.051	7	22.10	0.162	Inf	22.10
844MHz_QPSK_RB 25,#RB 12	Pass	-2.89	19.27	17.12	0.052	7	22.16	0.164	Inf	22.16
844MHz_QPSK_RB 25,#RB 25	Pass	-2.89	19.17	17.02	0.050	7	22.06	0.161	Inf	22.06
844MHz_QPSK_RB 50,#RB 0	Pass	-2.89	19.17	17.02	0.050	7	22.06	0.161	Inf	22.06

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
829MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.52	17.37	0.055	7	22.41	0.174	Inf	22.41
829MHz_16QAM_RB 1,#RB 25	Pass	-2.89	19.60	17.45	0.056	7	22.49	0.177	Inf	22.49
829MHz_16QAM_RB 1,#RB 49	Pass	-2.89	19.35	17.20	0.052	7	22.24	0.167	Inf	22.24
829MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.15	16.00	0.040	7	21.04	0.127	Inf	21.04
829MHz_16QAM_RB 25,#RB 12	Pass	-2.89	18.24	16.09	0.041	7	21.13	0.130	Inf	21.13
829MHz_16QAM_RB 25,#RB 25	Pass	-2.89	18.28	16.13	0.041	7	21.17	0.131	Inf	21.17
829MHz_16QAM_RB 50,#RB 0	Pass	-2.89	18.18	16.03	0.040	7	21.07	0.128	Inf	21.07
836.5MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.38	17.23	0.053	7	22.27	0.169	Inf	22.27
836.5MHz_16QAM_RB 1,#RB 25	Pass	-2.89	19.60	17.45	0.056	7	22.49	0.177	Inf	22.49
836.5MHz_16QAM_RB 1,#RB 49	Pass	-2.89	19.54	17.39	0.055	7	22.43	0.175	Inf	22.43
836.5MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.34	16.19	0.042	7	21.23	0.133	Inf	21.23
836.5MHz_16QAM_RB 25,#RB 12	Pass	-2.89	18.28	16.13	0.041	7	21.17	0.131	Inf	21.17
836.5MHz_16QAM_RB 25,#RB 25	Pass	-2.89	18.20	16.05	0.040	7	21.09	0.129	Inf	21.09
836.5MHz_16QAM_RB 50,#RB 0	Pass	-2.89	18.28	16.13	0.041	7	21.17	0.131	Inf	21.17
844MHz_16QAM_RB 1,#RB 0	Pass	-2.89	19.52	17.37	0.055	7	22.41	0.174	Inf	22.41
844MHz_16QAM_RB 1,#RB 25	Pass	-2.89	19.62	17.47	0.056	7	22.51	0.178	Inf	22.51
844MHz_16QAM_RB 1,#RB 49	Pass	-2.89	19.32	17.17	0.052	7	22.21	0.166	Inf	22.21
844MHz_16QAM_RB 25,#RB 0	Pass	-2.89	18.26	16.11	0.041	7	21.15	0.130	Inf	21.15
844MHz_16QAM_RB 25,#RB 12	Pass	-2.89	18.30	16.15	0.041	7	21.19	0.132	Inf	21.19
844MHz_16QAM_RB 25,#RB 25	Pass	-2.89	18.19	16.04	0.040	7	21.08	0.128	Inf	21.08
844MHz_16QAM_RB 50,#RB 0	Pass	-2.89	18.21	16.06	0.040	7	21.10	0.129	Inf	21.10

DG = Directional Gain; **Port n** = Port n output power

Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 1 RB Offset 3, Channel: 20407						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.00	H	-69.66	-13.00	-56.66	-72.05	-48.03	-19.48
45.52	H	-72.99	-13.00	-59.99	-74.45	-53.94	-16.90
114.39	H	-78.30	-13.00	-65.30	-72.33	-70.29	-5.86
207.51	H	-73.34	-13.00	-60.34	-67.57	-68.42	-2.77
361.74	H	-77.01	-13.00	-64.01	-75.32	-73.58	-1.28
451.95	H	-73.45	-13.00	-60.45	-74.36	-69.82	-1.48
30.00	V	-69.17	-13.00	-56.17	-64.97	-47.54	-19.48
51.34	V	-69.49	-13.00	-56.49	-66.40	-51.41	-15.93
89.17	V	-70.99	-13.00	-57.99	-68.76	-63.72	-5.12
167.74	V	-71.60	-13.00	-58.60	-72.32	-63.62	-5.83
201.69	V	-72.26	-13.00	-59.26	-69.31	-67.15	-2.96
343.31	V	-74.84	-13.00	-61.84	-75.24	-71.45	-1.24

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 8, Channel: 20415						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.26	H	-70.27	-13.00	-57.27	-72.64	-48.70	-19.42
45.31	H	-71.43	-13.00	-58.43	-72.95	-52.35	-16.93
115.10	H	-76.44	-13.00	-63.44	-70.51	-68.39	-5.90
206.50	H	-74.79	-13.00	-61.79	-68.95	-69.84	-2.80
361.65	H	-74.52	-13.00	-61.52	-72.83	-71.09	-1.28
452.26	H	-72.56	-13.00	-59.56	-73.47	-68.93	-1.48
30.31	V	-68.73	-13.00	-55.73	-64.56	-47.17	-19.41
51.64	V	-70.38	-13.00	-57.38	-67.22	-52.36	-15.87
89.32	V	-71.43	-13.00	-58.43	-69.22	-64.19	-5.09
168.26	V	-69.63	-13.00	-56.63	-70.31	-61.69	-5.79
202.46	V	-73.61	-13.00	-60.61	-70.66	-68.52	-2.94
345.26	V	-75.56	-13.00	-62.56	-76.05	-72.17	-1.24

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

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 12, Channel: 20425						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.29	H	-70.52	-13.00	-57.52	-72.89	-48.96	-19.41
45.29	H	-71.63	-13.00	-58.63	-73.16	-52.55	-16.93
115.12	H	-77.79	-13.00	-64.79	-71.87	-69.74	-5.90
206.29	H	-72.49	-13.00	-59.49	-66.64	-67.53	-2.81
362.58	H	-77.43	-13.00	-64.43	-75.75	-74.00	-1.28
452.26	H	-72.54	-13.00	-59.54	-73.45	-68.91	-1.48
30.31	V	-69.43	-13.00	-56.43	-65.26	-47.87	-19.41
51.64	V	-68.74	-13.00	-55.74	-65.58	-50.72	-15.87
89.28	V	-68.79	-13.00	-55.79	-66.58	-61.55	-5.09
168.64	V	-72.63	-13.00	-59.63	-73.29	-64.72	-5.76
202.64	V	-71.33	-13.00	-58.33	-68.38	-66.25	-2.93
344.13	V	-75.76	-13.00	-62.76	-76.20	-72.37	-1.24

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 25, Channel: 20525						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.18	H	-68.79	-13.00	-55.79	-71.17	-47.20	-19.44
45.95	H	-73.79	-13.00	-60.79	-75.16	-54.81	-16.83
115.12	H	-77.31	-13.00	-64.31	-71.39	-69.26	-5.90
208.26	H	-72.61	-13.00	-59.61	-66.89	-67.72	-2.74
362.15	H	-75.63	-13.00	-62.63	-73.95	-72.20	-1.28
452.12	H	-74.61	-13.00	-61.61	-75.52	-70.98	-1.48
30.05	V	-69.96	-13.00	-56.96	-65.76	-48.34	-19.47
51.67	V	-68.33	-13.00	-55.33	-65.15	-50.32	-15.86
89.26	V	-69.79	-13.00	-56.79	-67.57	-62.54	-5.10
168.12	V	-72.74	-13.00	-59.74	-73.43	-64.79	-5.80
202.46	V	-73.82	-13.00	-60.82	-70.87	-68.73	-2.94
344.58	V	-75.81	-13.00	-62.81	-76.27	-72.42	-1.24

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

Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 1 RB Offset 3, Channel: 20407						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1649.40	H	-51.07	-13.00	-38.07	-53.57	-54.02	5.10
2474.10	H	-51.81	-13.00	-38.81	-58.21	-54.95	5.29
5772.90	H	-57.39	-13.00	-44.39	-71.89	-60.95	5.71
1649.40	V	-51.92	-13.00	-38.92	-54.59	-54.87	5.10
2474.10	V	-55.89	-13.00	-42.89	-62.45	-59.03	5.29
5772.90	V	-55.19	-13.00	-42.19	-69.45	-58.75	5.71

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 1 RB Offset 3, Channel: 20525						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-49.84	-13.00	-36.84	-52.46	-52.84	5.15
2509.50	H	-51.02	-13.00	-38.02	-57.52	-54.25	5.38
5855.50	H	-57.77	-13.00	-44.77	-72.50	-61.31	5.69
1673.00	V	-51.42	-13.00	-38.42	-54.17	-54.42	5.15
2509.50	V	-56.32	-13.00	-43.32	-62.87	-59.55	5.38
5855.50	V	-55.31	-13.00	-42.31	-69.80	-58.85	5.69

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 1 RB Offset 3, Channel: 20643						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1696.60	H	-50.14	-13.00	-37.14	-52.89	-53.19	5.20
2544.90	H	-51.66	-13.00	-38.66	-58.27	-54.98	5.47
5938.10	H	-57.18	-13.00	-44.18	-72.16	-60.70	5.67
1696.60	V	-51.73	-13.00	-38.73	-54.56	-54.78	5.20
2544.90	V	-55.62	-13.00	-42.62	-62.16	-58.94	5.47
5938.10	V	-55.17	-13.00	-42.17	-70.02	-58.69	5.67

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

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 8, Channel: 20415						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1651.00	H	-51.35	-13.00	-38.35	-53.85	-54.30	5.10
2476.50	H	-51.24	-13.00	-38.24	-57.64	-54.38	5.29
5778.50	H	-57.14	-13.00	-44.14	-71.66	-60.70	5.71
1651.00	V	-52.47	-13.00	-39.47	-55.14	-55.42	5.10
2476.50	V	-56.39	-13.00	-43.39	-62.95	-59.53	5.29
5778.50	V	-54.90	-13.00	-41.90	-69.16	-58.46	5.71

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 8, Channel: 20525						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-50.23	-13.00	-37.23	-52.85	-53.23	5.15
2509.50	H	-50.81	-13.00	-37.81	-57.31	-54.04	5.38
5855.50	H	-57.49	-13.00	-44.49	-72.22	-61.03	5.69
1673.00	V	-51.54	-13.00	-38.54	-54.29	-54.54	5.15
2509.50	V	-56.08	-13.00	-43.08	-62.63	-59.31	5.38
5855.50	V	-55.15	-13.00	-42.15	-69.64	-58.69	5.69

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 8, Channel: 20635						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1695.00	H	-49.80	-13.00	-36.80	-52.54	-52.84	5.19
2542.50	H	-52.01	-13.00	-39.01	-58.60	-55.33	5.47
5932.50	H	-57.38	-13.00	-44.38	-72.34	-60.90	5.67
1695.00	V	-57.04	-13.00	-44.04	-49.92	-60.08	5.19
2542.50	V	-64.53	-13.00	-51.53	-53.69	-67.85	5.47
5932.50	V	-71.99	-13.00	-58.99	-52.87	-75.51	5.67

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

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 12, Channel: 20425						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1653.00	H	-50.44	-13.00	-37.44	-52.95	-53.39	5.10
2479.50	H	-51.26	-13.00	-38.26	-57.68	-54.41	5.30
5785.50	H	-57.62	-13.00	-44.62	-72.15	-61.17	5.70
1653.00	V	-51.34	-13.00	-38.34	-54.02	-54.29	5.10
2479.50	V	-55.66	-13.00	-42.66	-62.23	-58.81	5.30
5785.50	V	-54.87	-13.00	-41.87	-69.12	-58.42	5.70

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 12, Channel: 20525						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-50.17	-13.00	-37.17	-52.79	-53.17	5.15
2509.50	H	-50.75	-13.00	-37.75	-57.25	-53.98	5.38
5855.50	H	-57.61	-13.00	-44.61	-72.34	-61.15	5.69
1673.00	V	-50.84	-13.00	-37.84	-53.59	-53.84	5.15
2509.50	V	-55.98	-13.00	-42.98	-62.53	-59.21	5.38
5855.50	V	-55.08	-13.00	-42.08	-69.57	-58.62	5.69

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 12, Channel: 20625						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1693.00	H	-50.72	-13.00	-37.72	-53.45	-53.76	5.19
2539.50	H	-52.06	-13.00	-39.06	-58.64	-55.37	5.46
5925.50	H	-57.52	-13.00	-44.52	-72.46	-61.04	5.67
1693.00	V	-52.14	-13.00	-39.14	-54.95	-55.18	5.19
2539.50	V	-55.84	-13.00	-42.84	-62.38	-59.15	5.46
5925.50	V	-55.03	-13.00	-42.03	-69.82	-58.55	5.67

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

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 25, Channel: 20450						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1658.00	H	-50.92	-13.00	-37.92	-53.46	-53.88	5.11
2487.00	H	-51.14	-13.00	-38.14	-57.58	-54.31	5.32
5803.00	H	-57.01	-13.00	-44.01	-71.59	-60.56	5.70
1658.00	V	-52.25	-13.00	-39.25	-54.95	-55.21	5.11
2487.00	V	-55.59	-13.00	-42.59	-62.15	-58.76	5.32
5803.00	V	-54.91	-13.00	-41.91	-69.18	-58.46	5.70

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 25, Channel: 20525						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-48.97	-13.00	-35.97	-51.59	-51.97	5.15
2509.50	H	-50.38	-13.00	-37.38	-56.88	-53.61	5.38
5855.50	H	-57.62	-13.00	-44.62	-72.35	-61.16	5.69
1673.00	V	-50.71	-13.00	-37.71	-53.46	-53.71	5.15
2509.50	V	-55.72	-13.00	-42.72	-62.27	-58.95	5.38
5855.50	V	-54.98	-13.00	-41.98	-69.48	-58.52	5.69

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 25, Channel: 20600						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1688.00	H	-50.58	-13.00	-37.58	-53.28	-53.61	5.18
2532.00	H	-52.71	-13.00	-39.71	-59.28	-56.00	5.44
5908.00	H	-57.67	-13.00	-44.67	-72.56	-61.19	5.67
1688.00	V	-50.88	-13.00	-37.88	-53.67	-53.91	5.18
2532.00	V	-55.99	-13.00	-42.99	-62.53	-59.28	5.44
5908.00	V	-54.96	-13.00	-41.96	-69.68	-58.48	5.67

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

**Summary**

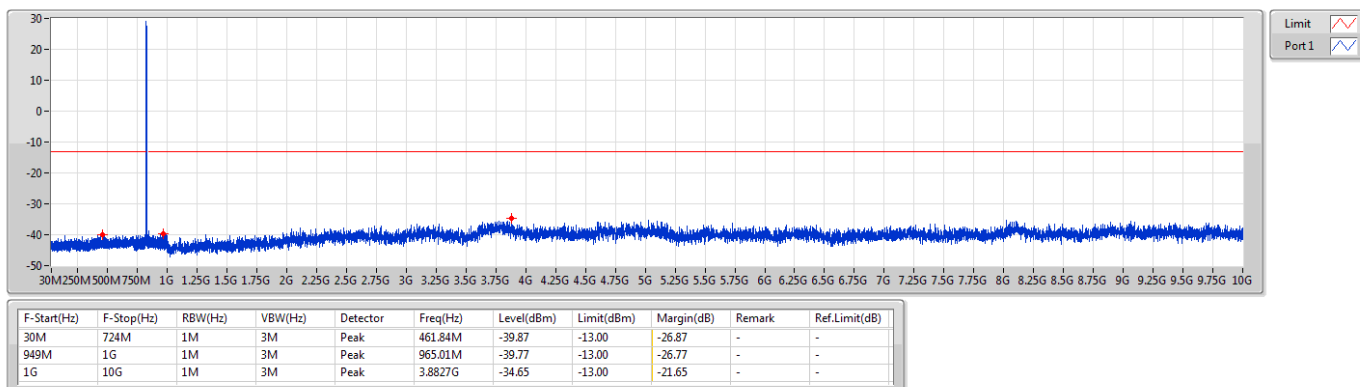
Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 5	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	4.7458G	-34.15	-13.00	-21.15	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7234G	-34.30	-13.00	-21.30	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	4.8808G	-34.46	-13.00	-21.46	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7243G	-34.14	-13.00	-21.14	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	4.8439G	-33.66	-13.00	-20.66	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.6784G	-34.54	-13.00	-21.54	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.8314G	-33.61	-13.00	-20.61	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.754G	-34.03	-13.00	-21.03	-	-



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

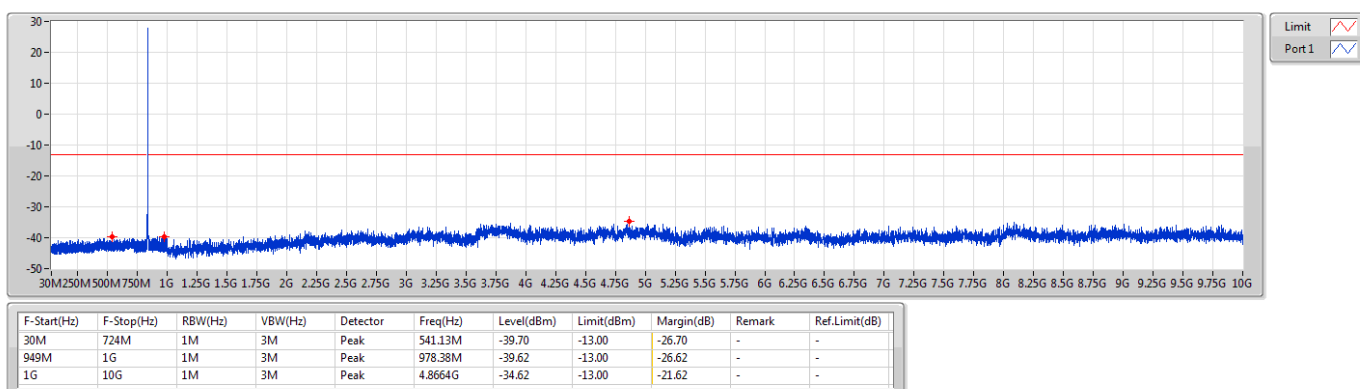
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Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

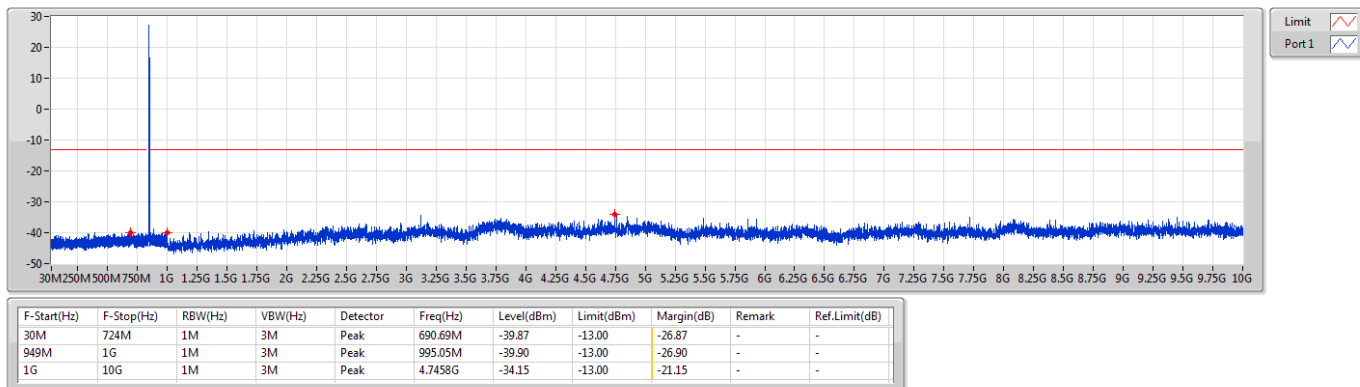
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Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

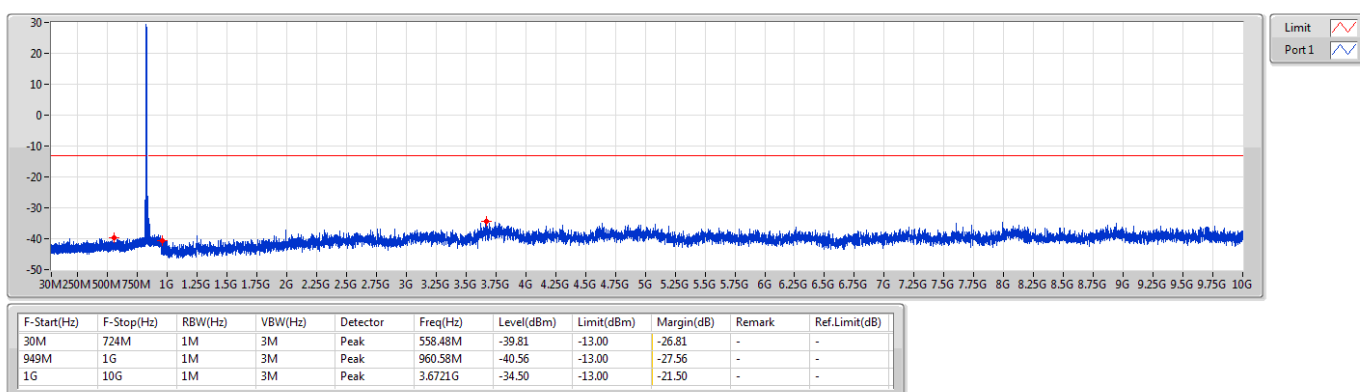
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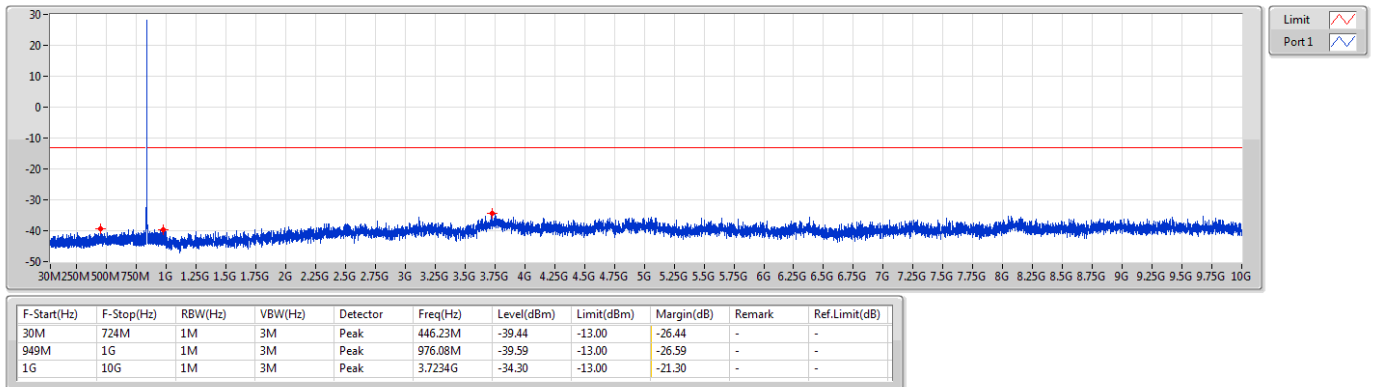
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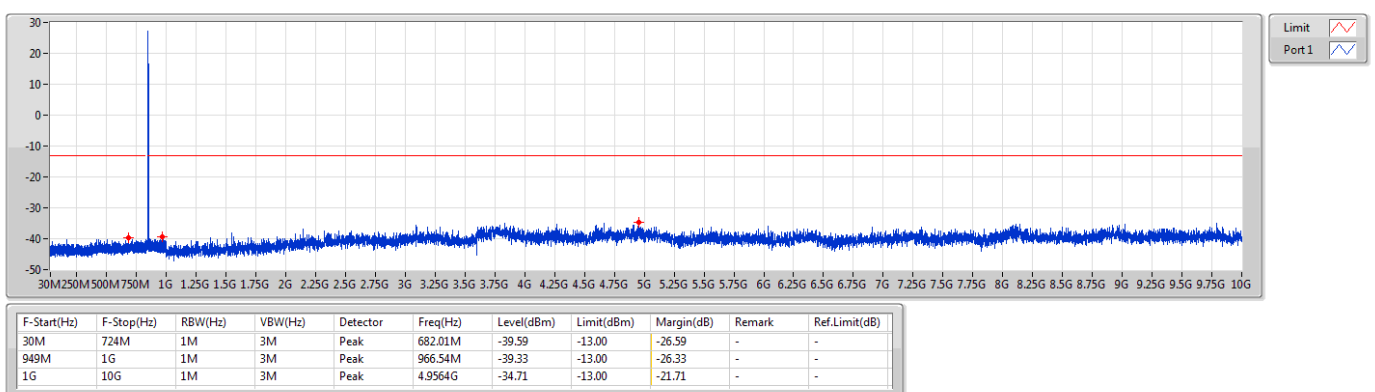
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836.5MHz_16QAM_RB 1,#RB 3

CSE-TX-Sum



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CSE-TX-Sum

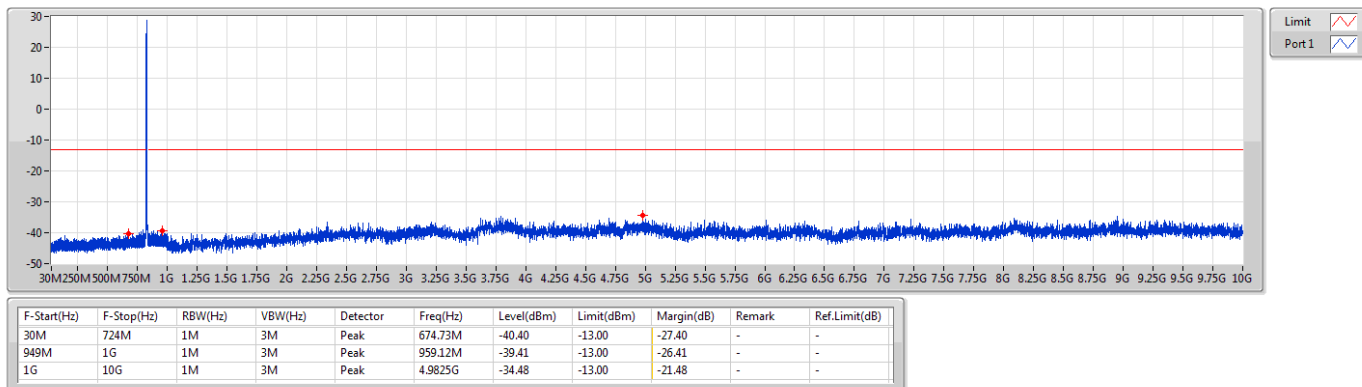




Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

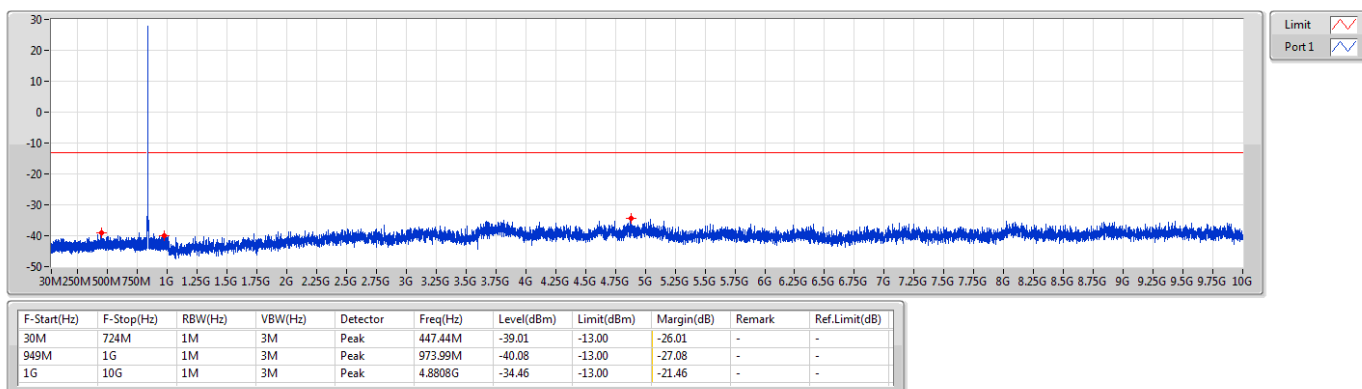
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Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

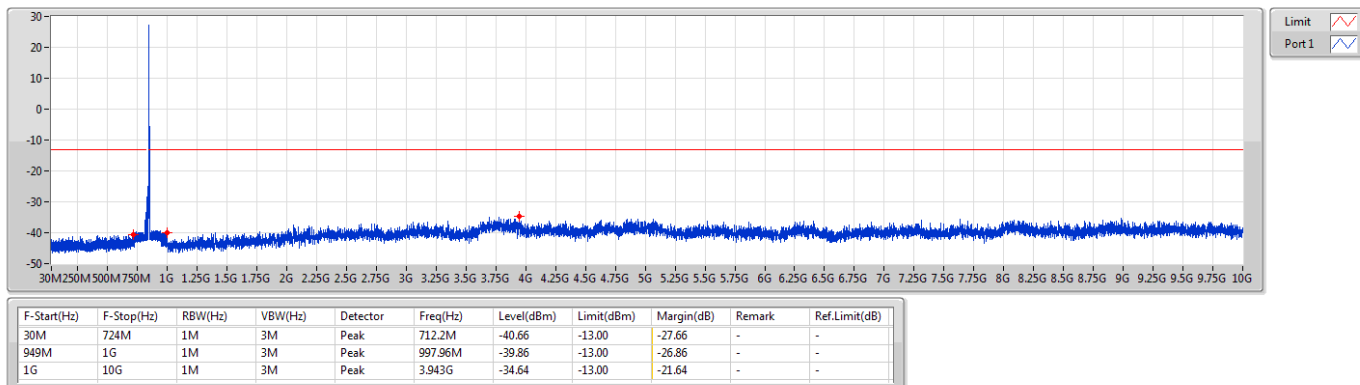
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Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

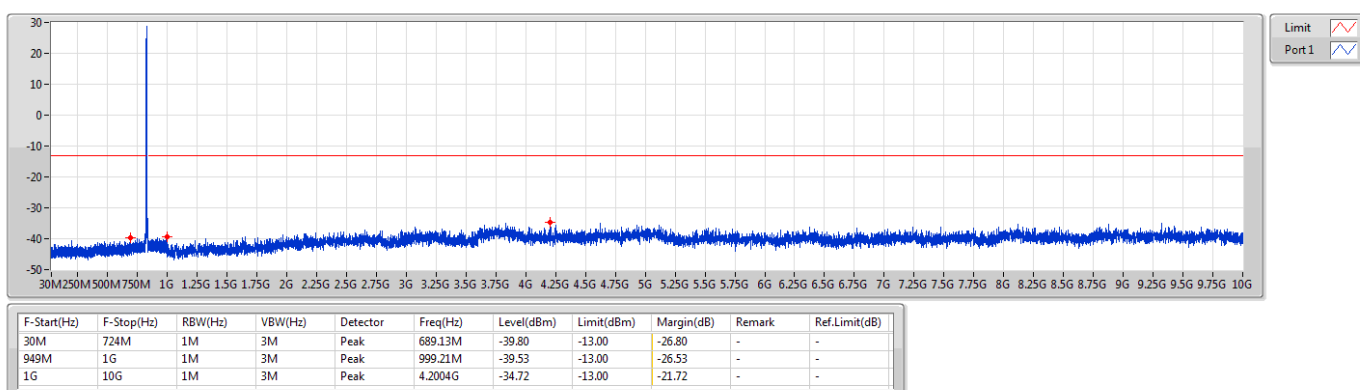
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Band 5_LTE_3MHz_Nss1,16QAM_1TX

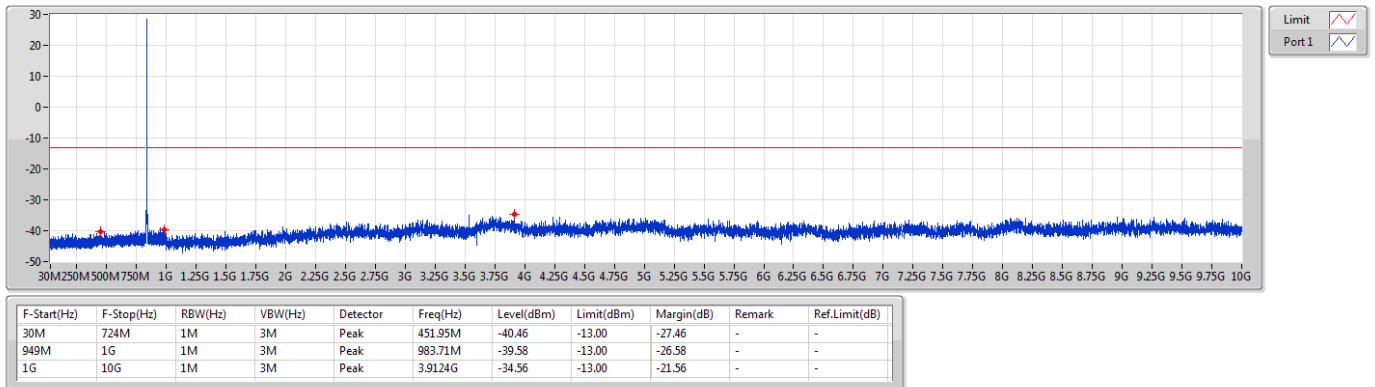
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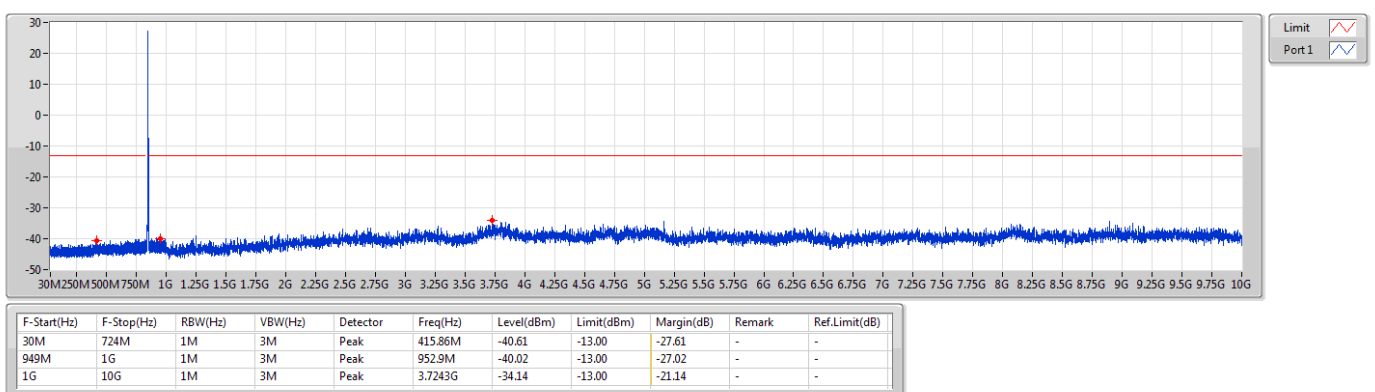
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CSE-TX-Sum



Band 5_LTE_3MHz_Nss1,16QAM_1TX
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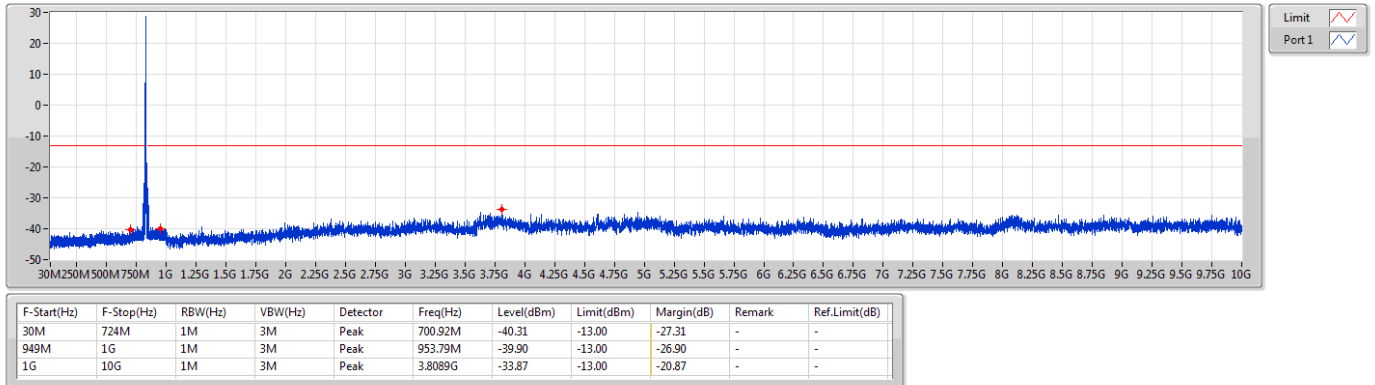
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Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

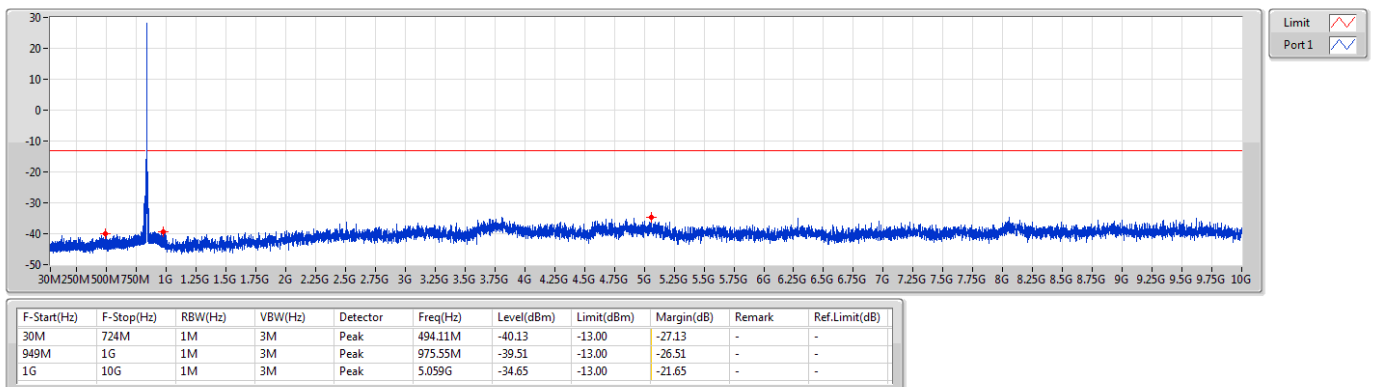
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Band 5_LTE_5MHz_Nss1,QPSK_1TX

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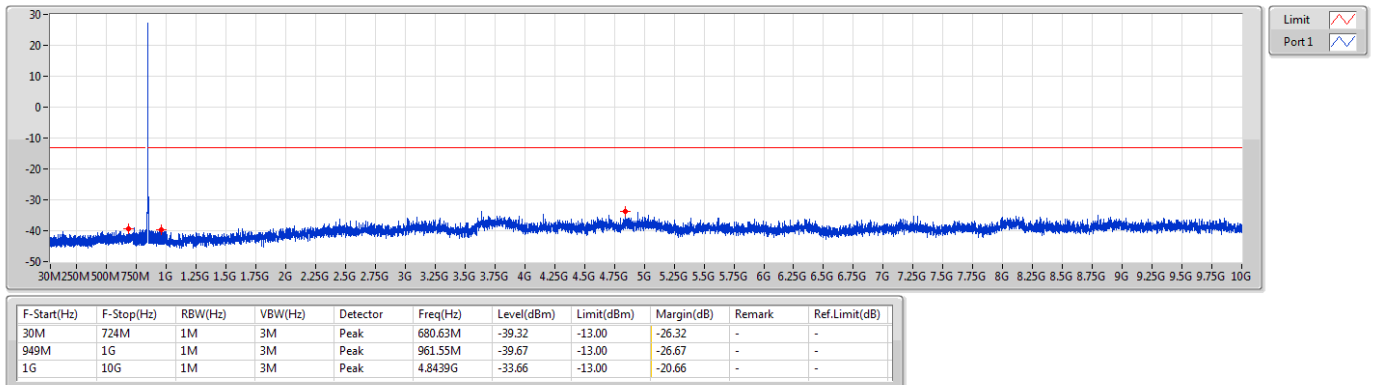
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Band 5_LTE_5MHz_Nss1,QPSK_1TX

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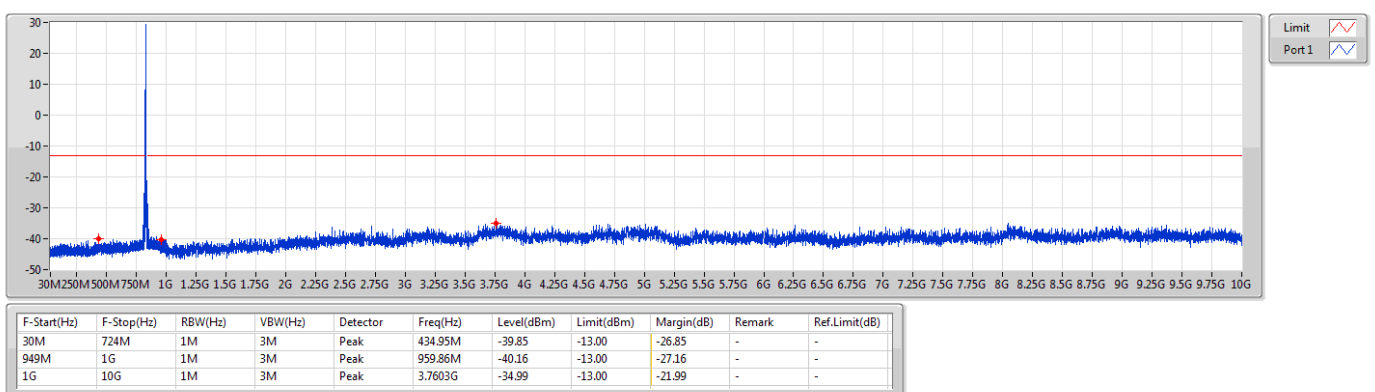
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Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

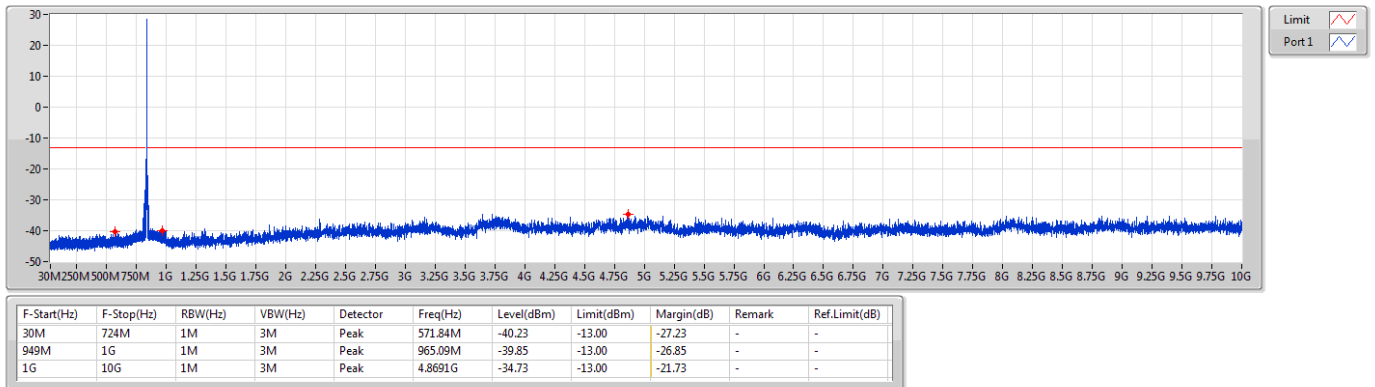
826.5MHz_16QAM_RB 1,#RB 12



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

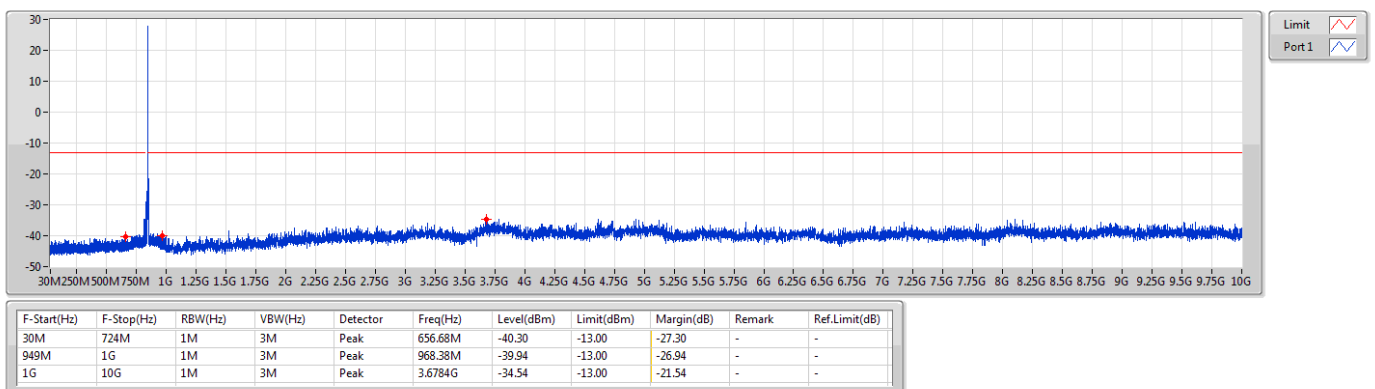
836.5MHz_16QAM_RB 1,#RB 12



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

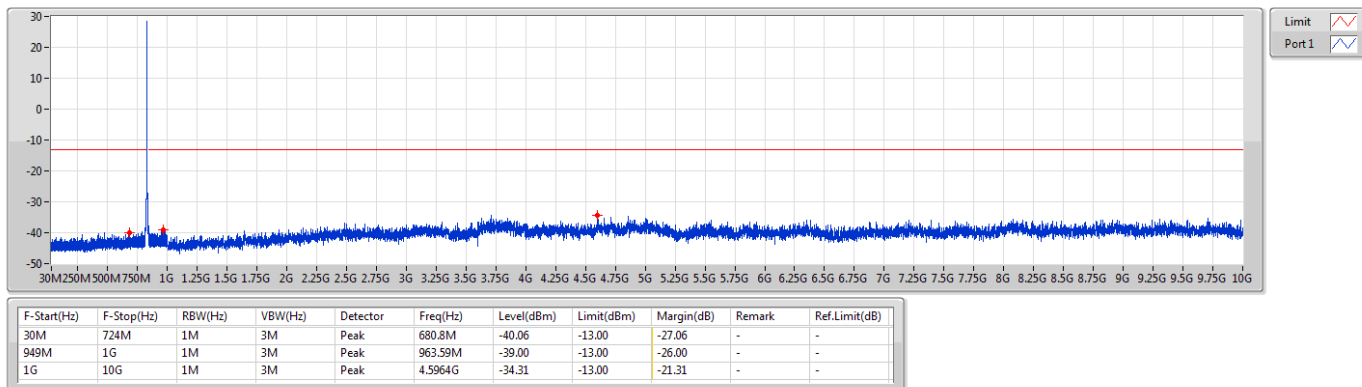
846.5MHz_16QAM_RB 1,#RB 12



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

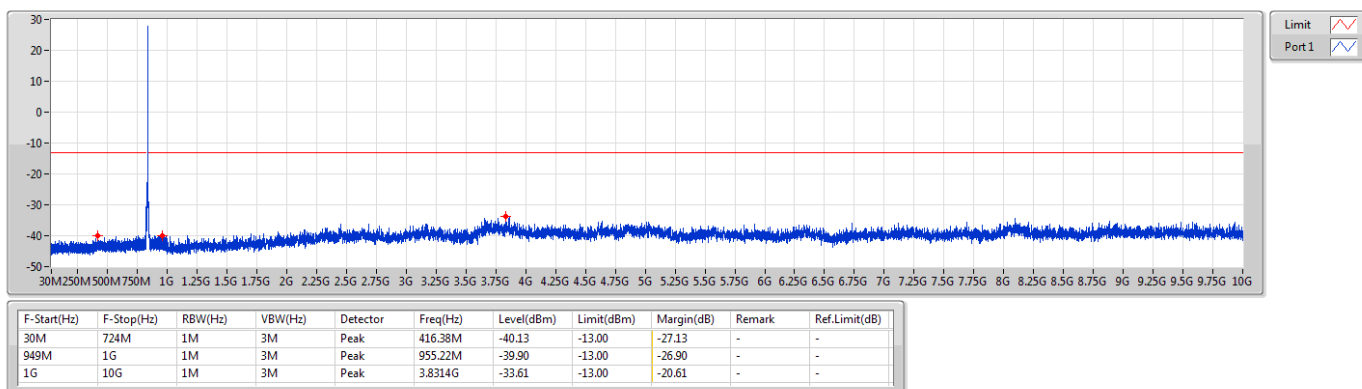
829MHz_QPSK_RB 1,#RB 25



Band 5_LTE_10MHz_Nss1,QPSK_1TX

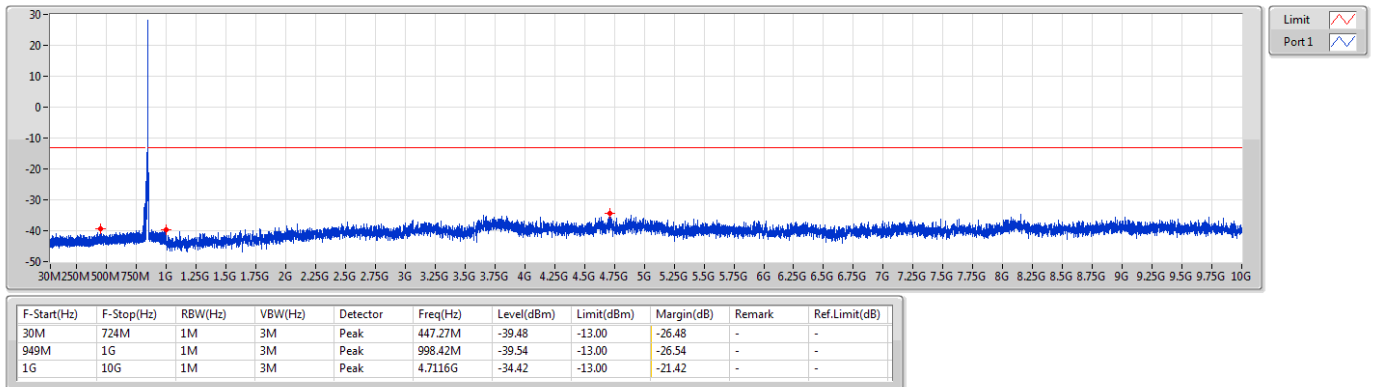
CSE-TX-Sum

836.5MHz_QPSK_RB 1,#RB 25



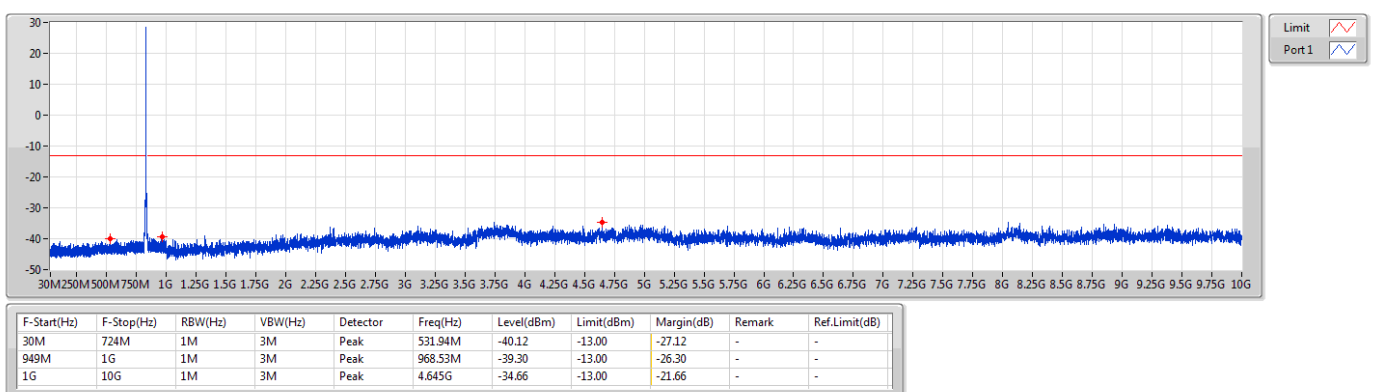
Band 5_LTE_10MHz_Nss1,QPSK_1TX
844MHz_QPSK_RB 1,#RB 25

CSE-TX-Sum



Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 1,#RB 25

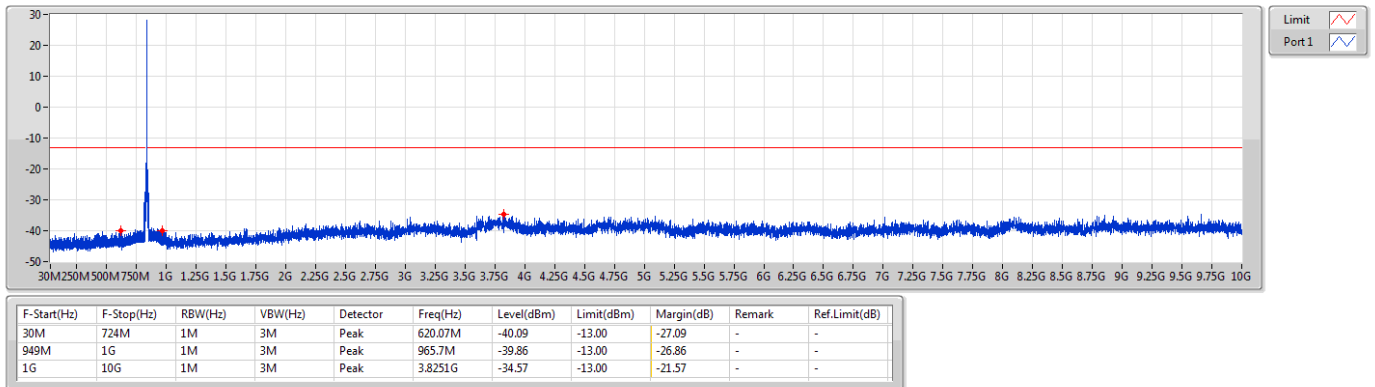
CSE-TX-Sum





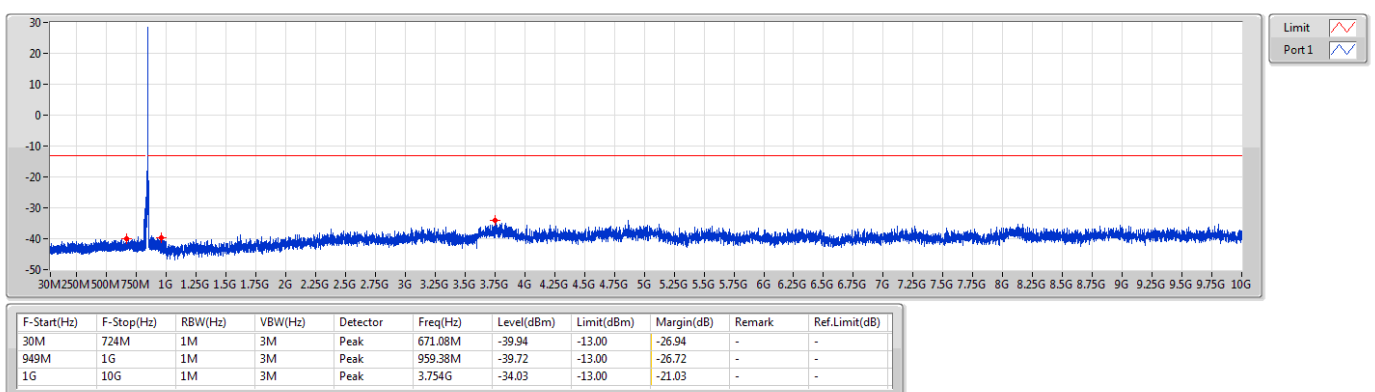
Band 5_LTE_10MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum



Band 5_LTE_10MHz_Nss1,16QAM_1TX
844MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum

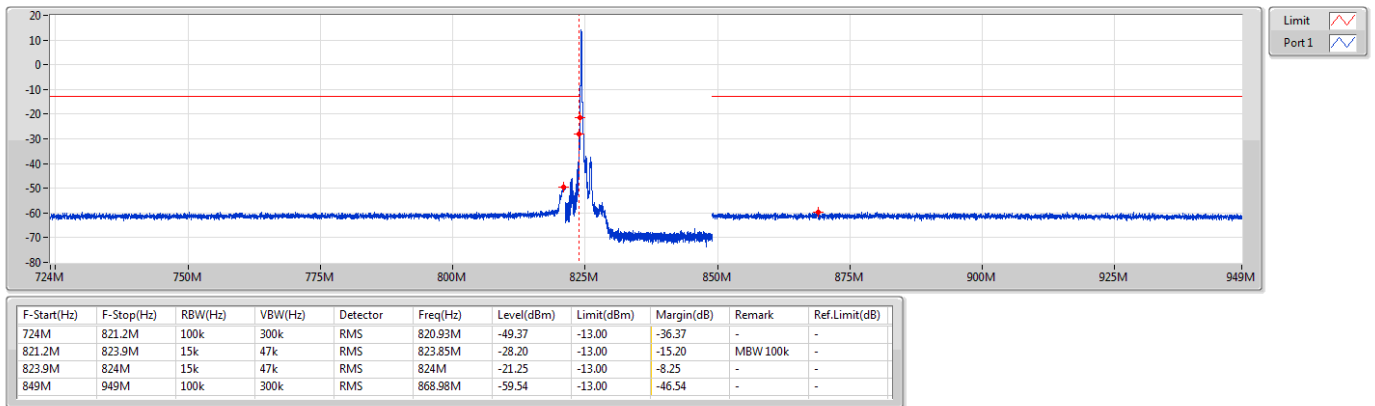


**Summary**

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 5	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	15k	47k	RMS	849M	-19.67	-13.00	-6.67	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	15k	47k	RMS	849M	-18.86	-13.00	-5.86	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-17.01	-13.00	-4.01	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-16.54	-13.00	-3.54	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	51k	160k	RMS	849M	-18.01	-13.00	-5.01	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	823.9M	824M	51k	160k	RMS	824M	-16.96	-13.00	-3.96	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	100k	300k	RMS	849M	-20.52	-13.00	-7.52	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	823.9M	824M	100k	300k	RMS	824M	-20.06	-13.00	-7.06	-	-

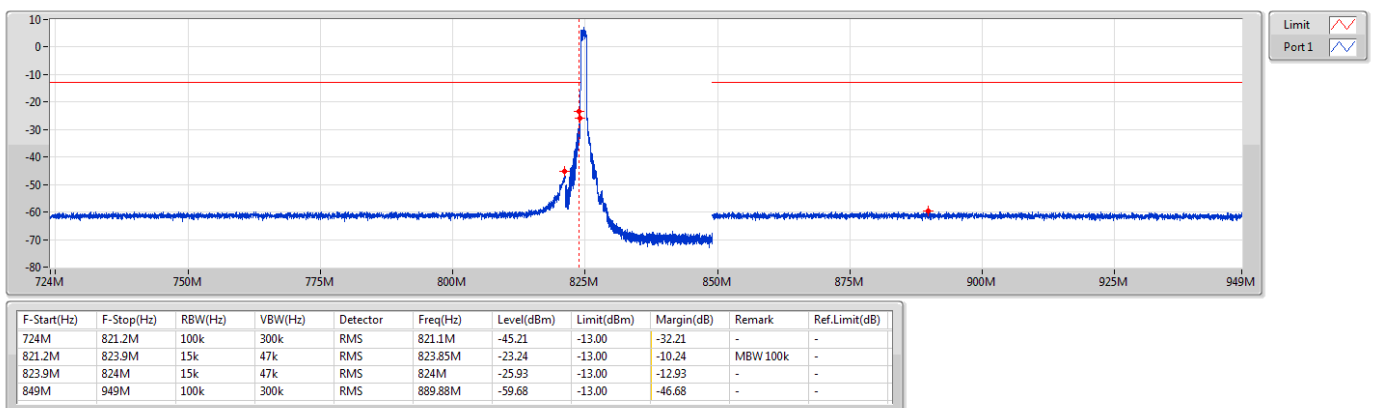
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum

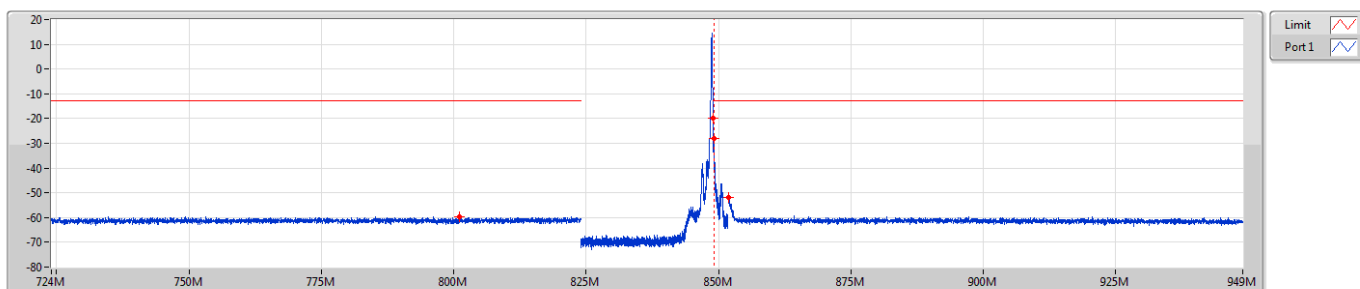




Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

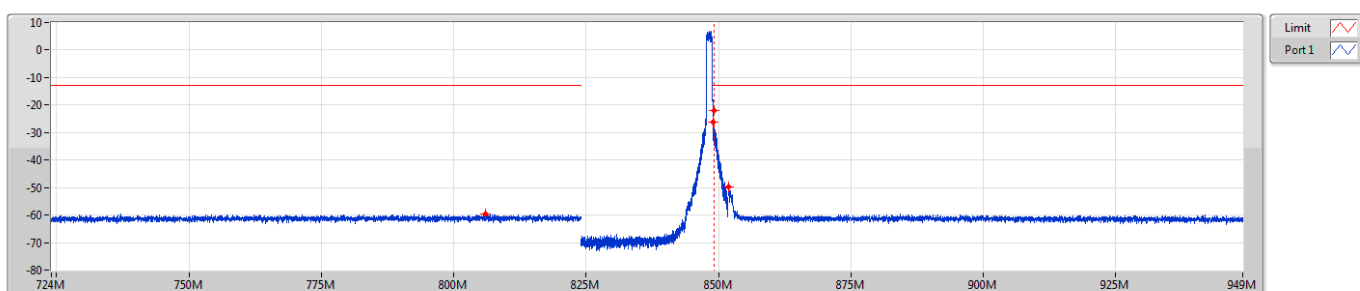
848.3MHz_QPSK_RB 1,#RB 5



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

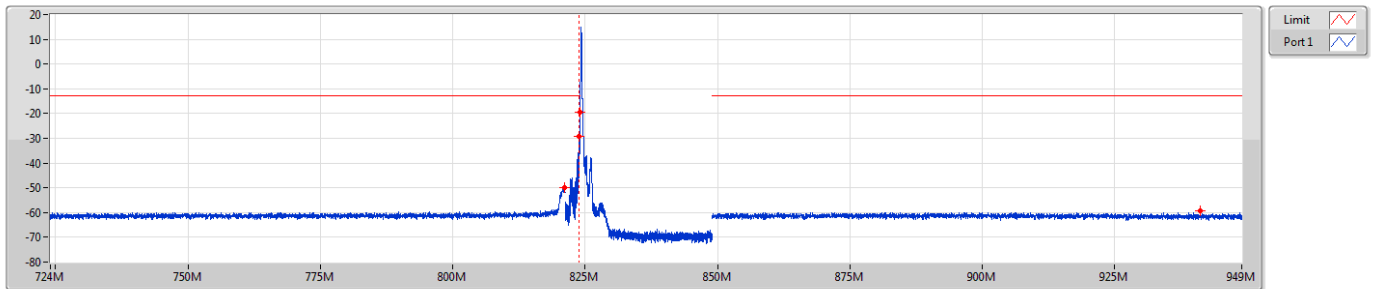
848.3MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

824.7MHz_16QAM_RB 1,#RB 0

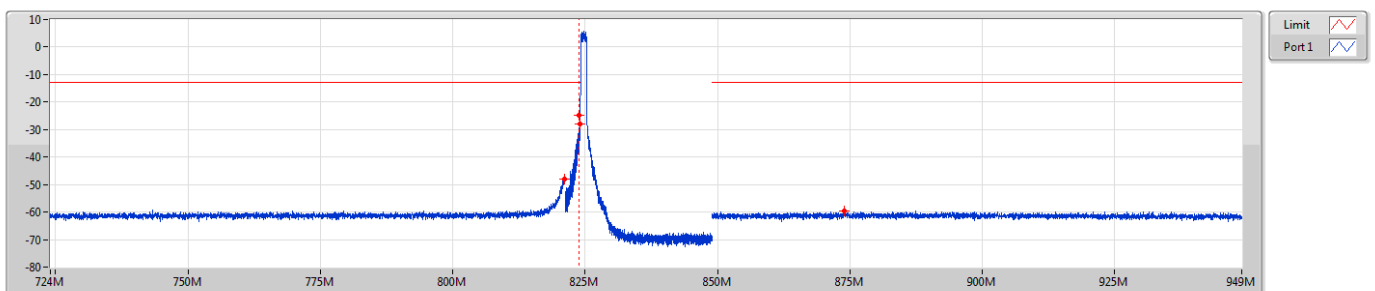


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	821.2M	100k	300k	RMS	821.05M	-49.81	-13.00	-36.81	-	-
821.2M	823.9M	15k	47k	RMS	823.85M	-29.15	-13.00	-16.15	MBW 100k	-
823.9M	824M	15k	47k	RMS	823.98M	-19.48	-13.00	-6.48	-	-
849M	949M	100k	300k	RMS	941.1M	-59.43	-13.00	-46.43	-	-

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

824.7MHz_16QAM_RB 6,#RB 0

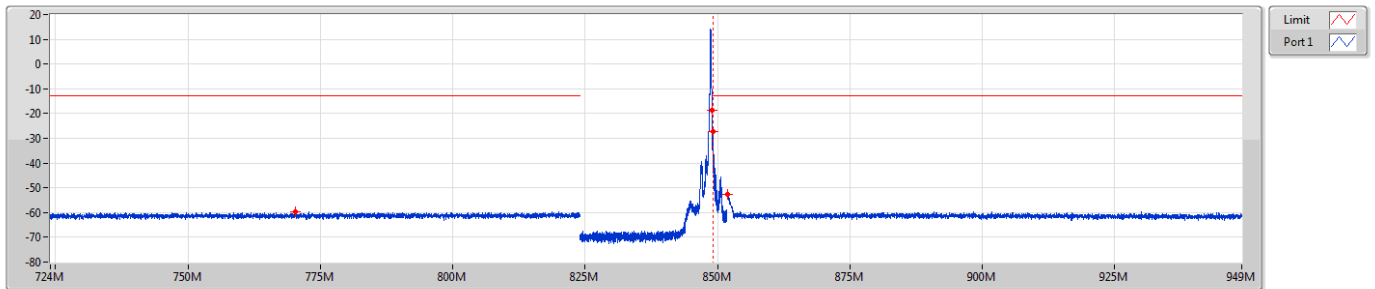


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	821.2M	100k	300k	RMS	821.03M	-48.01	-13.00	-35.01	-	-
821.2M	823.9M	15k	47k	RMS	823.85M	-24.66	-13.00	-11.66	MBW 100k	-
823.9M	824M	15k	47k	RMS	823.99M	-28.05	-13.00	-15.05	-	-
849M	949M	100k	300k	RMS	873.98M	-59.65	-13.00	-46.65	-	-

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

848.3MHz_16QAM_RB 1,#RB 5

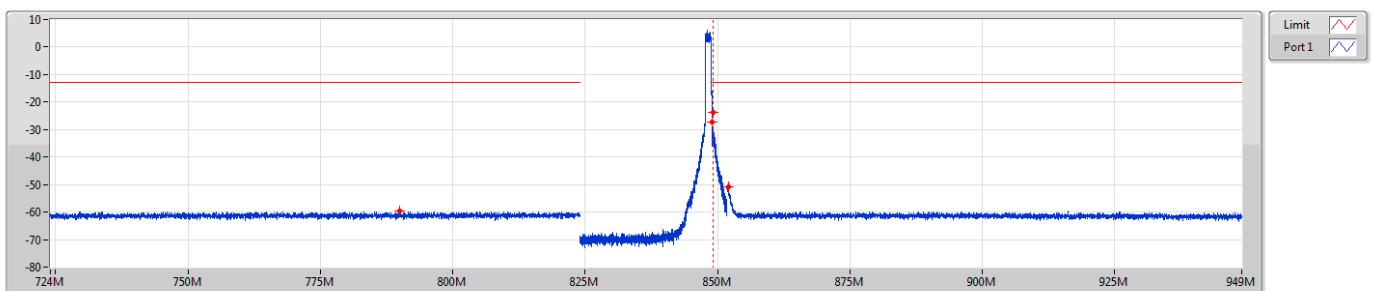


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	770.33M	-59.63	-13.00	-46.63	-	-
849M	849.1M	15k	47k	RMS	849M	-18.86	-13.00	-5.86	-	-
849.1M	851.8M	15k	47k	RMS	849.15M	-27.18	-13.00	-14.18	MBW 100k	-
851.8M	949M	100k	300k	RMS	851.9M	-52.65	-13.00	-39.65	-	-

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

848.3MHz_16QAM_RB 6,#RB 0

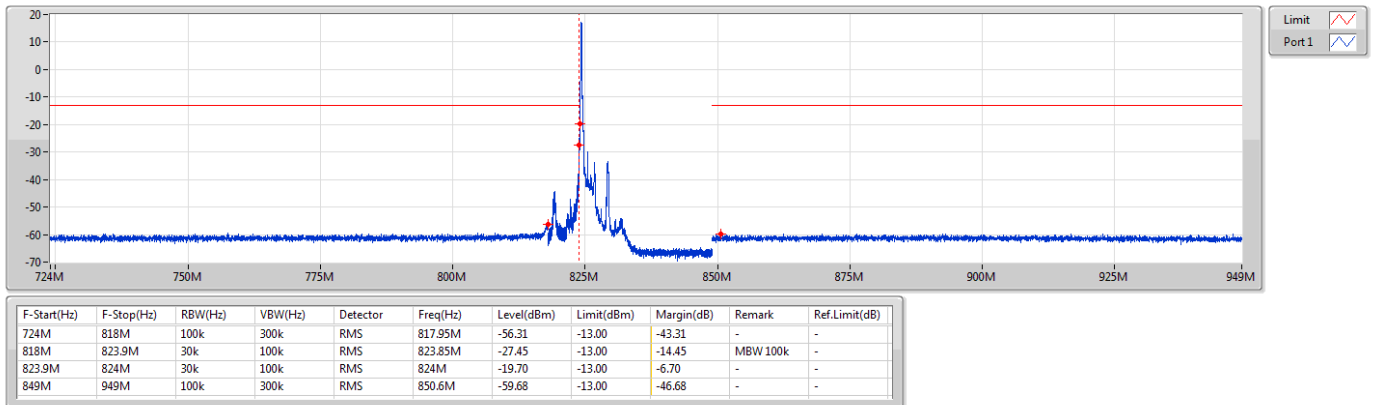


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	789.95M	-59.64	-13.00	-46.64	-	-
849M	849.1M	15k	47k	RMS	849M	-27.19	-13.00	-14.19	-	-
849.1M	851.8M	15k	47k	RMS	849.15M	-23.79	-13.00	-10.79	MBW 100k	-
851.8M	949M	100k	300k	RMS	852.02M	-50.75	-13.00	-37.75	-	-

Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

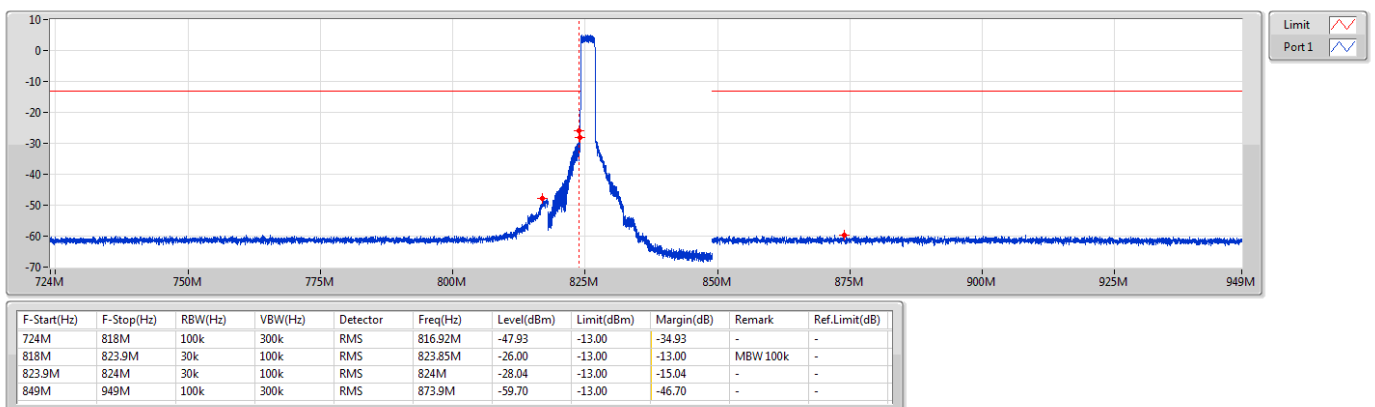
825.5MHz_QPSK_RB 1,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

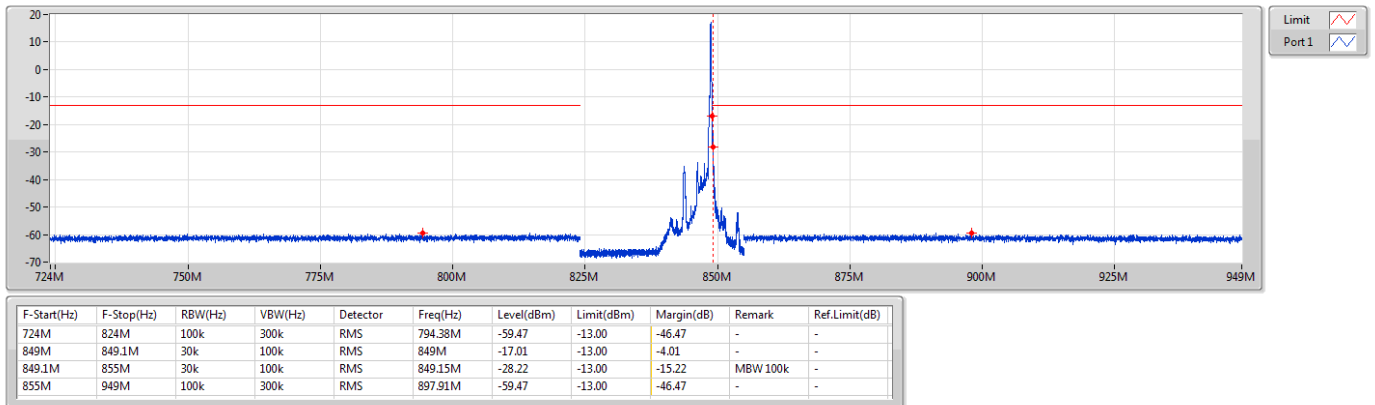
825.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

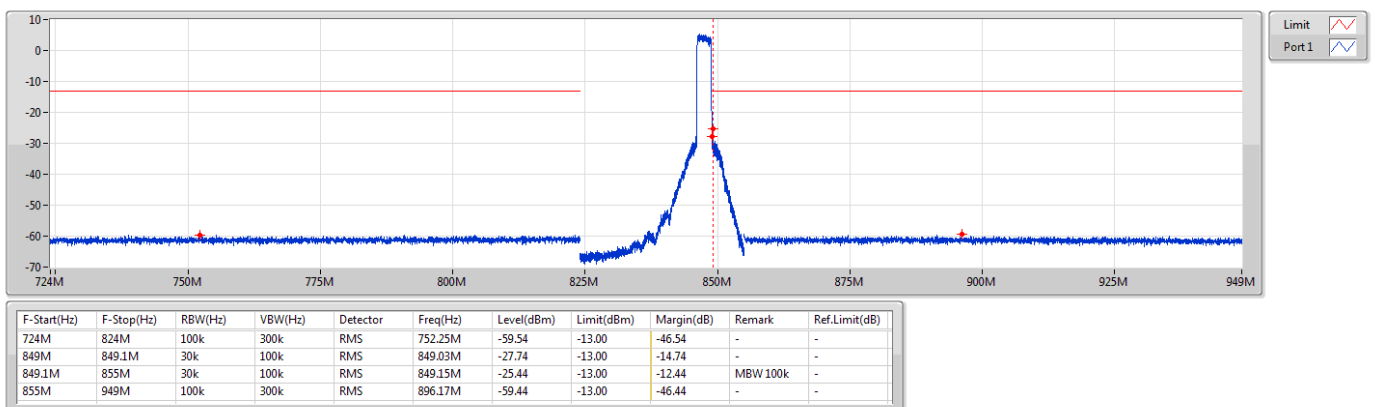
847.5MHz_QPSK_RB 1,#RB 14



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

847.5MHz_QPSK_RB 15,#RB 0

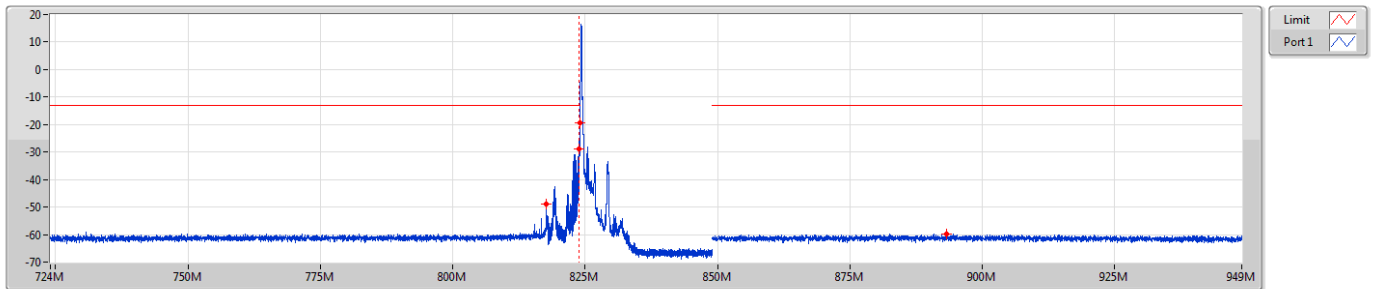




Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

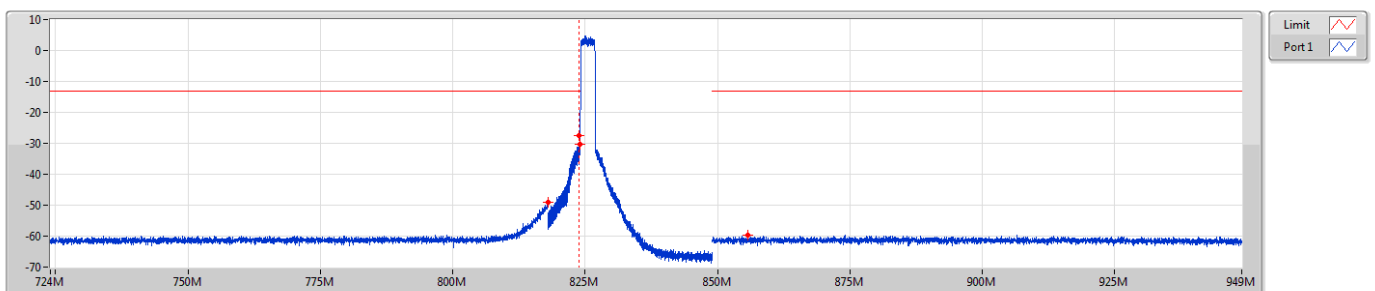
825.5MHz_16QAM_RB 1,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

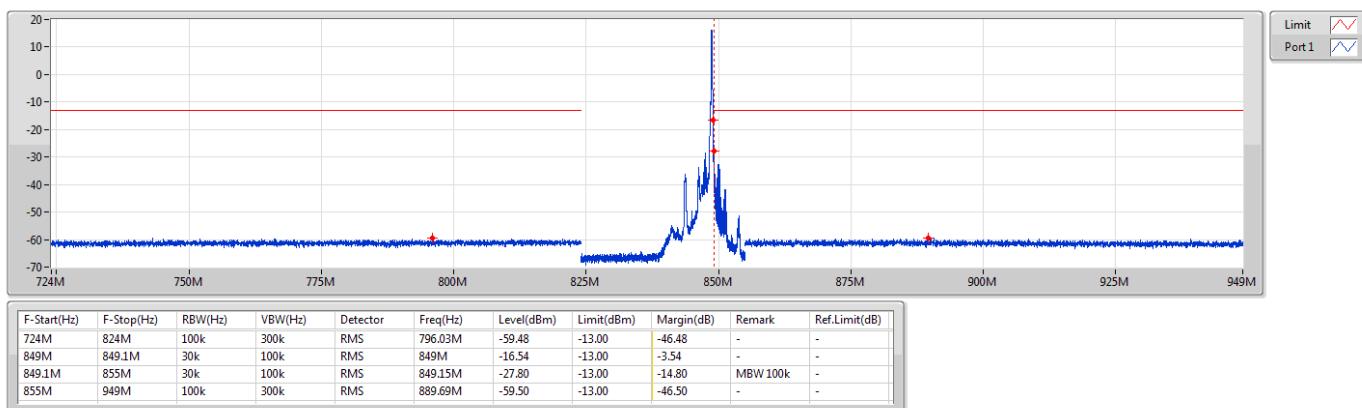
825.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

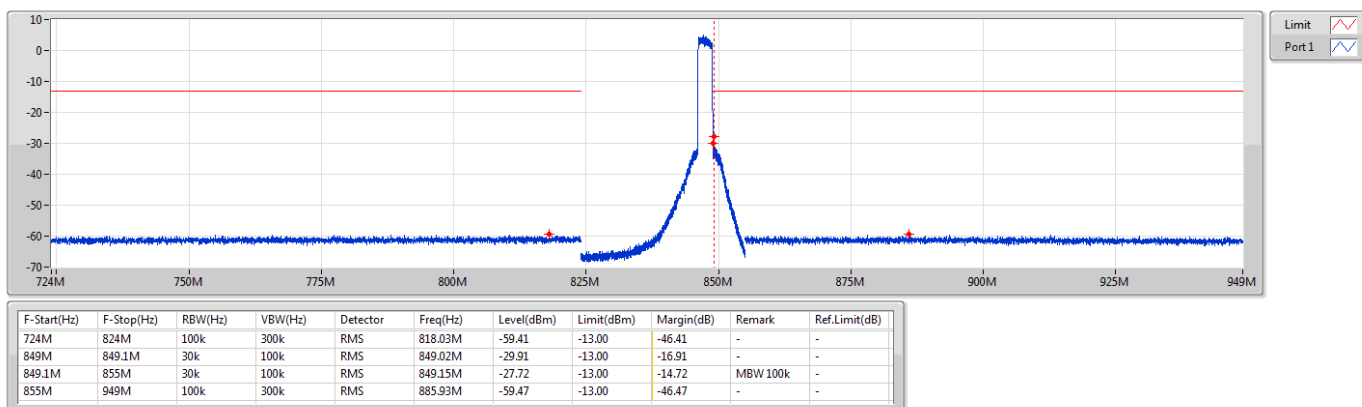
847.5MHz_16QAM_RB 1,#RB 14



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

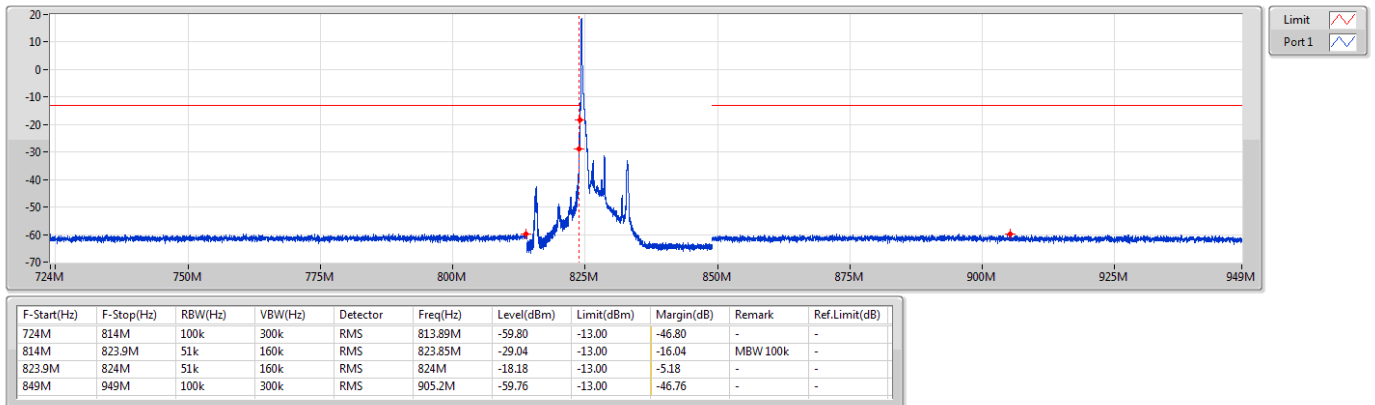
847.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

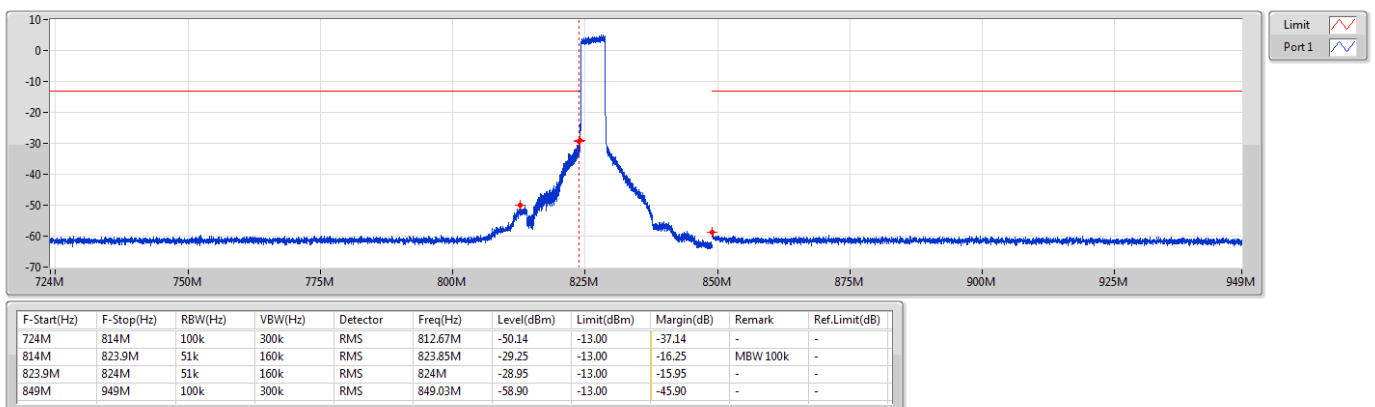
826.5MHz_QPSK_RB 1,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

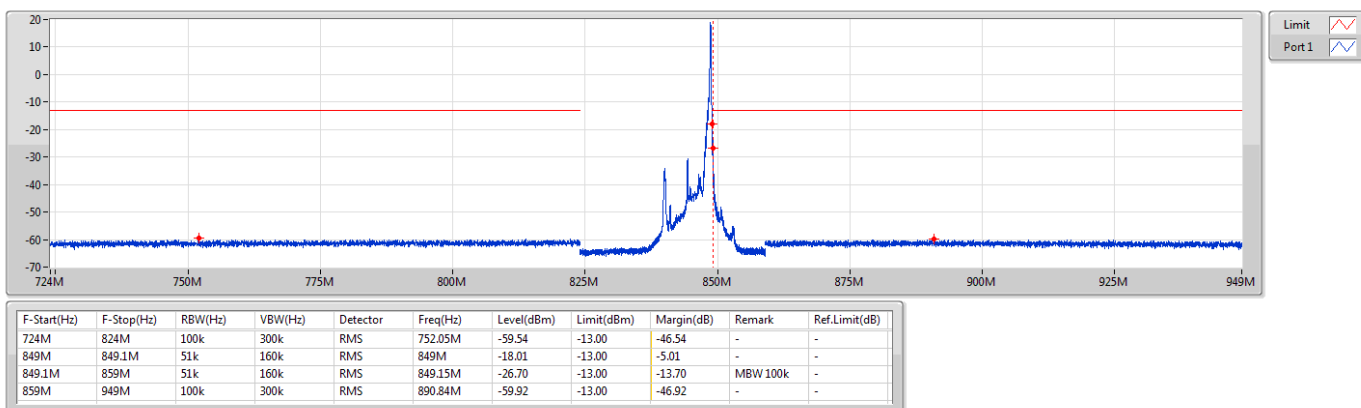
826.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

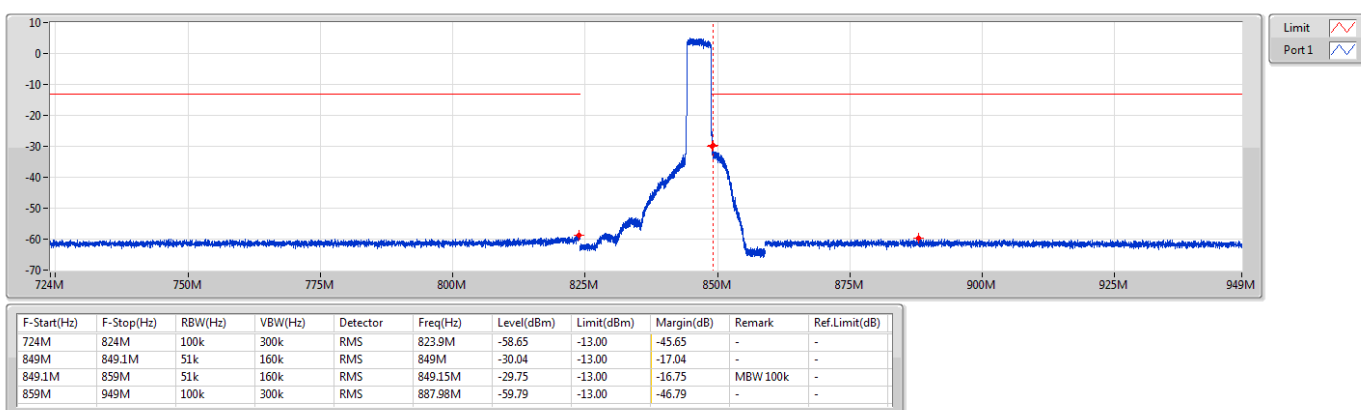
846.5MHz_QPSK_RB 1,#RB 24



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

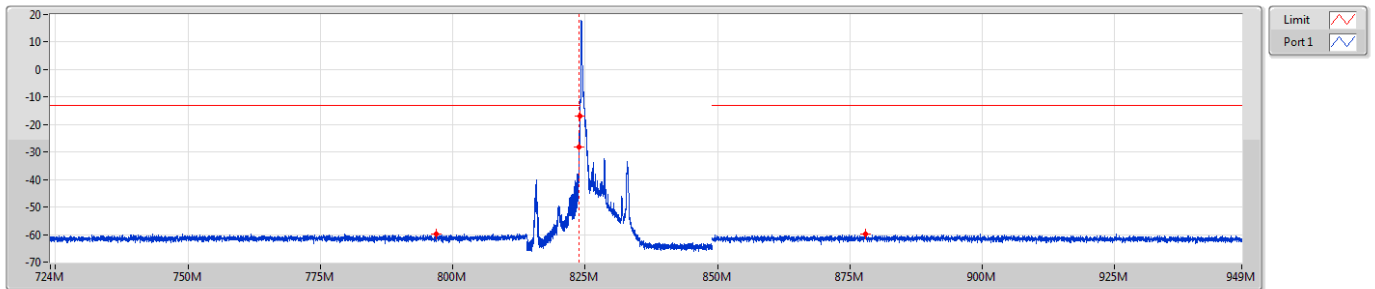
846.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

826.5MHz_16QAM_RB 1,#RB 0

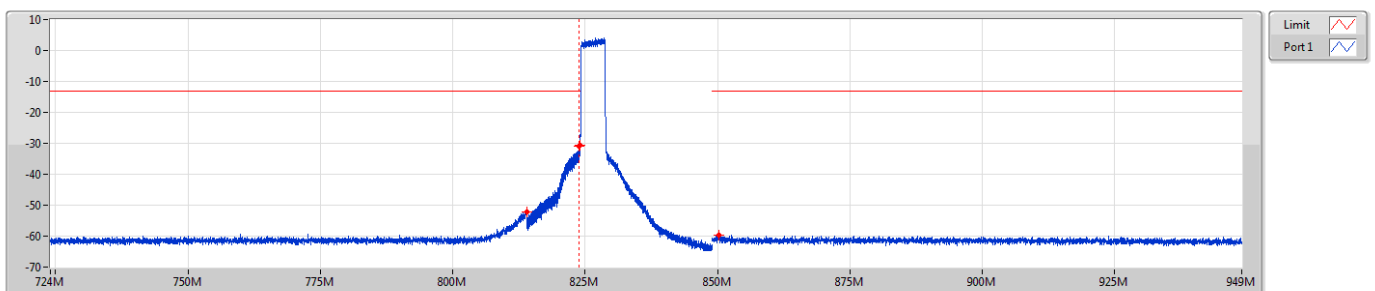


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	814M	100k	300k	RMS	796.88M	-59.78	-13.00	-46.78	-	-
814M	823.9M	51k	160k	RMS	823.85M	-28.10	-13.00	-15.10	MBW 100k	-
823.9M	824M	51k	160k	RMS	824M	-16.96	-13.00	-3.96	-	-
849M	949M	100k	300k	RMS	877.95M	-59.76	-13.00	-46.76	-	-

Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

826.5MHz_16QAM_RB 25,#RB 0

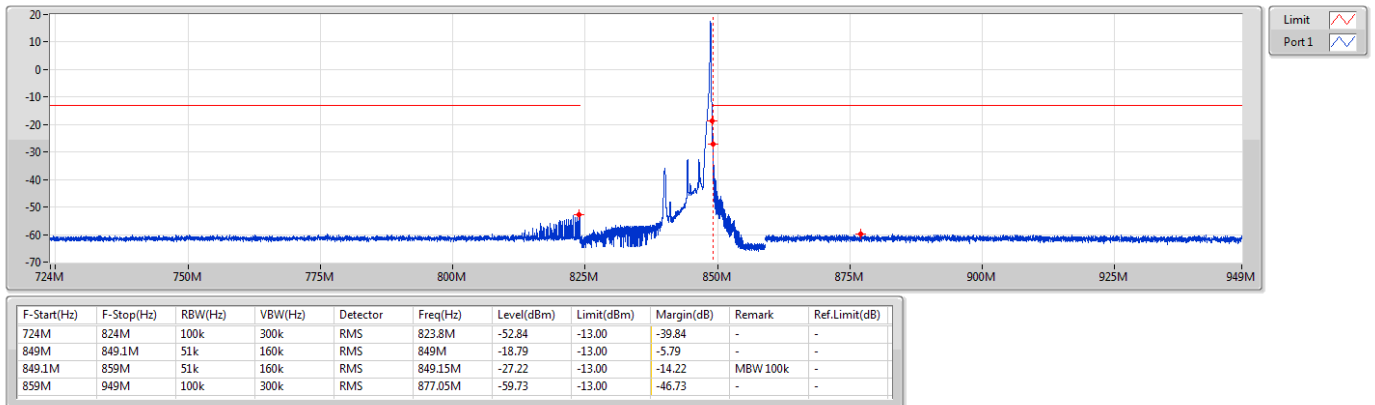


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	814M	100k	300k	RMS	813.98M	-52.14	-13.00	-39.14	-	-
814M	823.9M	51k	160k	RMS	823.85M	-31.09	-13.00	-18.09	MBW 100k	-
823.9M	824M	51k	160k	RMS	824M	-30.65	-13.00	-17.65	-	-
849M	949M	100k	300k	RMS	850.23M	-59.72	-13.00	-46.72	-	-

Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

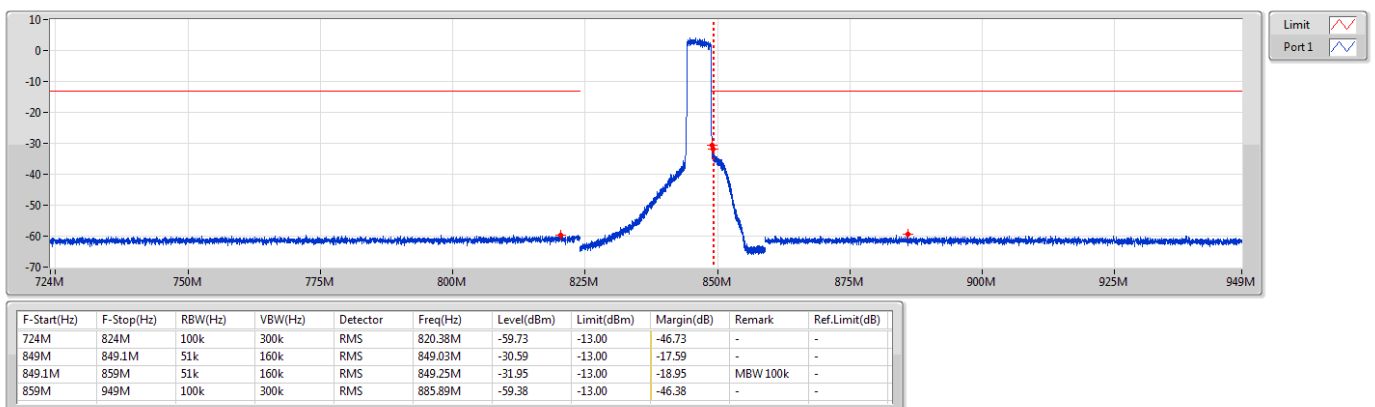
846.5MHz_16QAM_RB 1,#RB 24



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

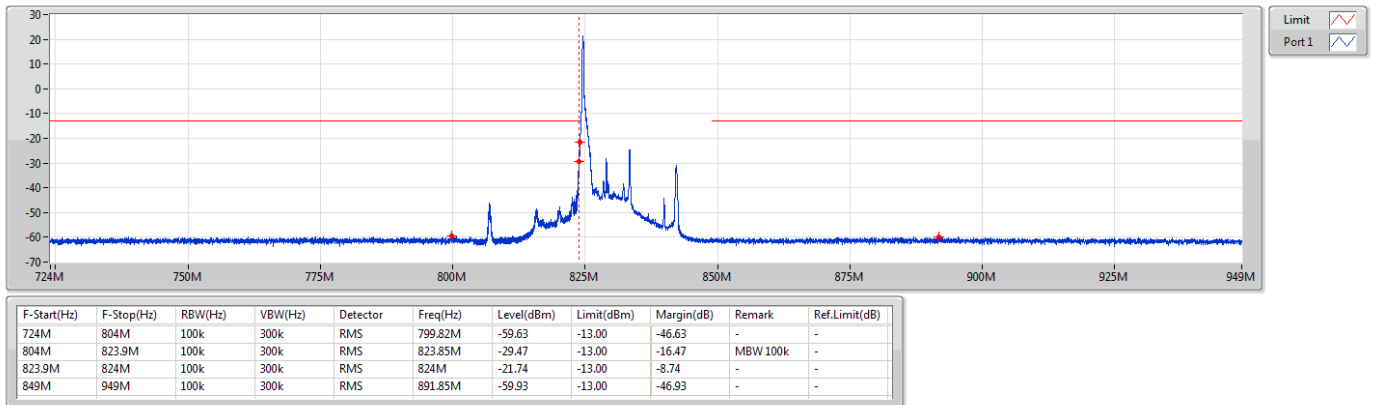
846.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

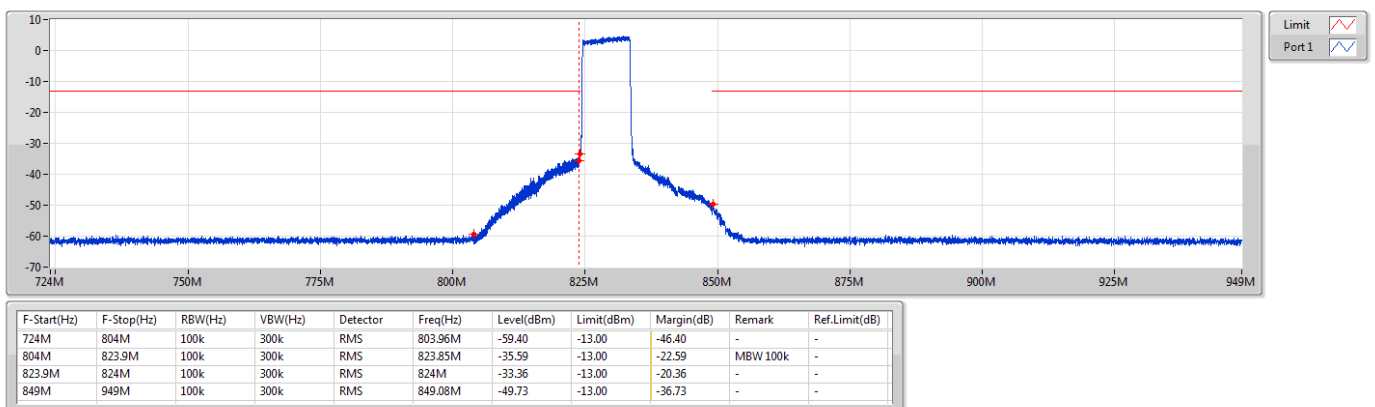
829MHz_QPSK_RB 1,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

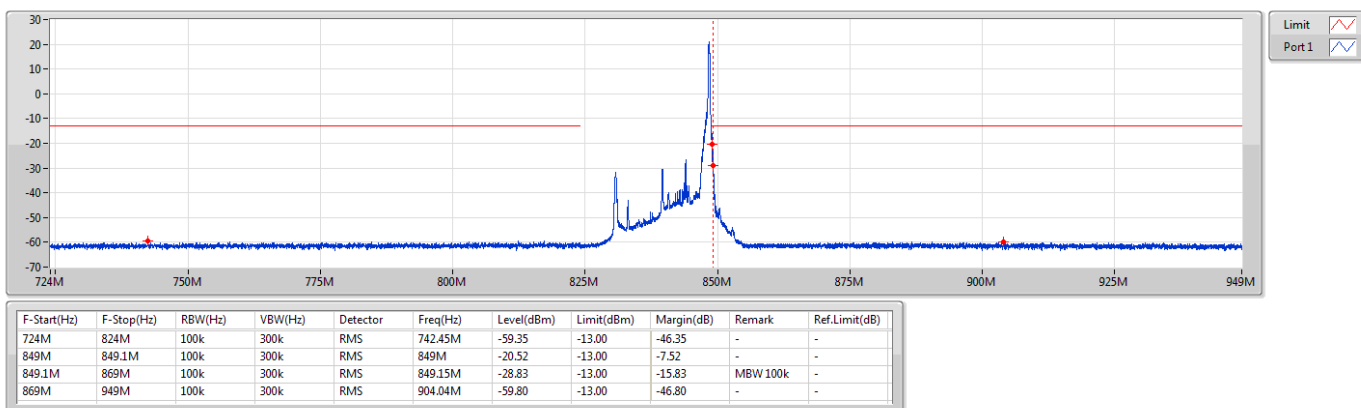
829MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

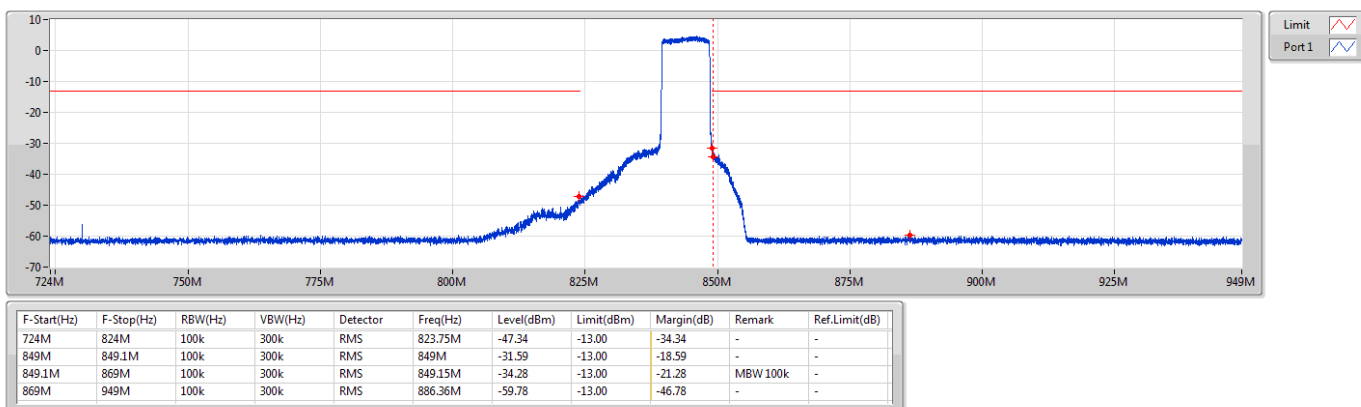
844MHz_QPSK_RB 1,#RB 49



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

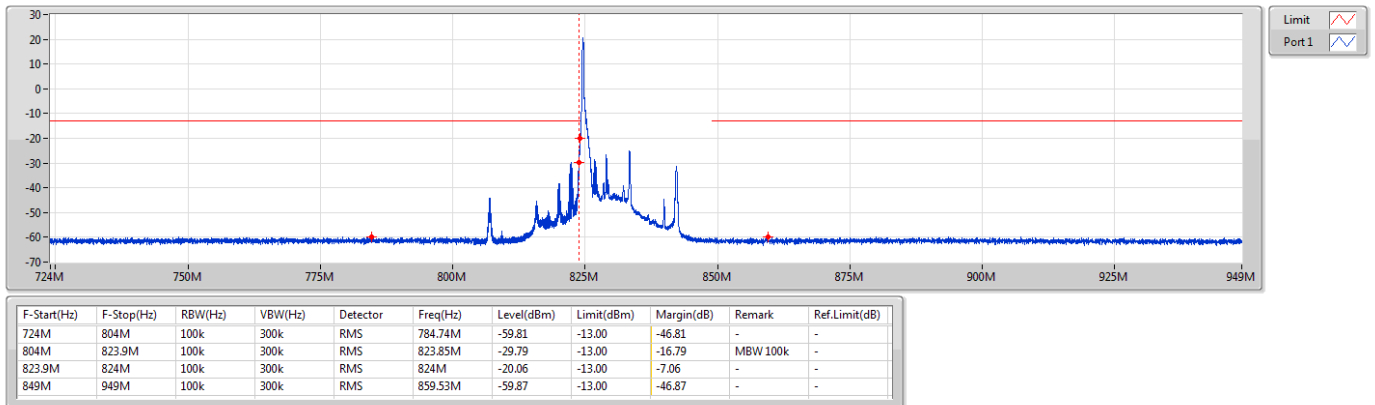
844MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Sum

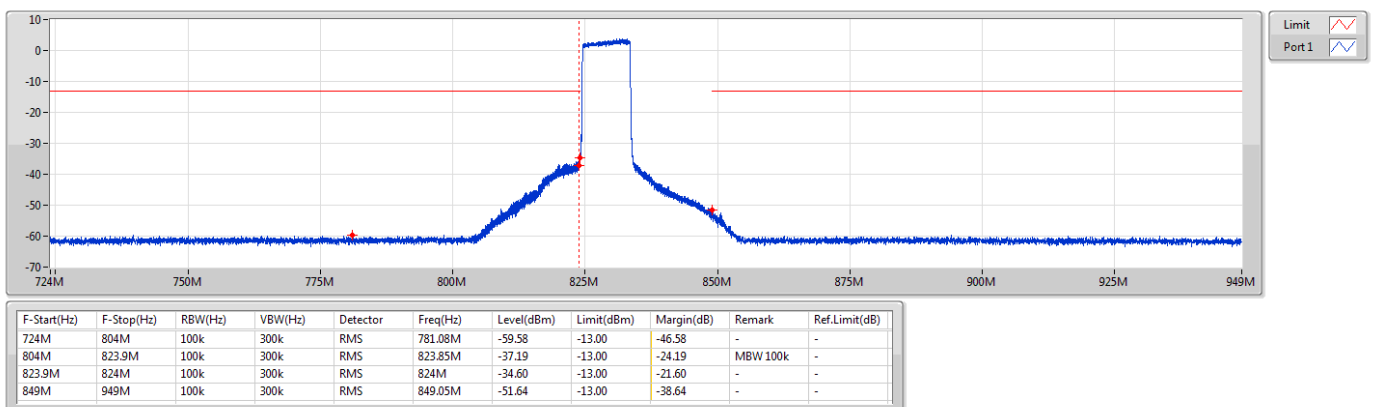
829MHz_16QAM_RB 1,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Sum

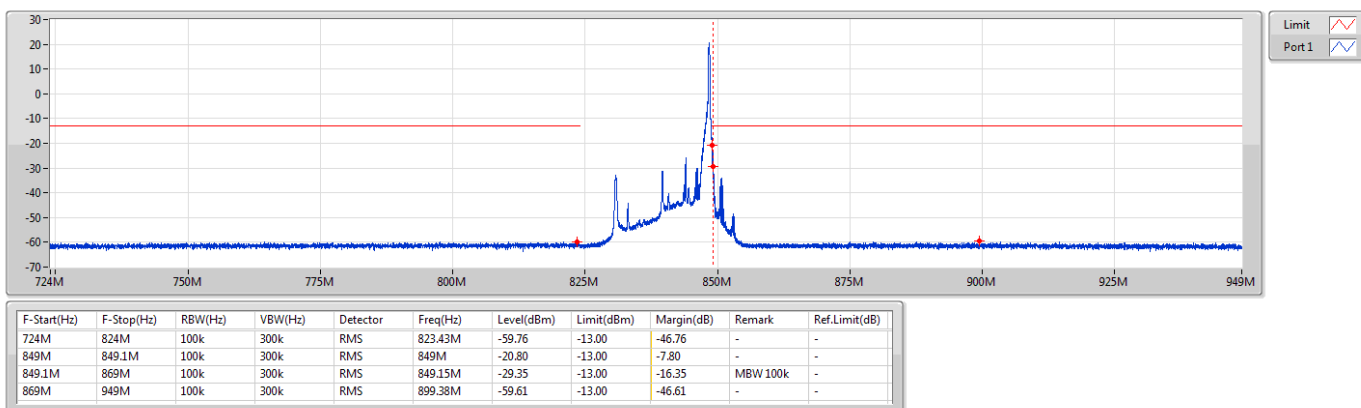
829MHz_16QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Sum

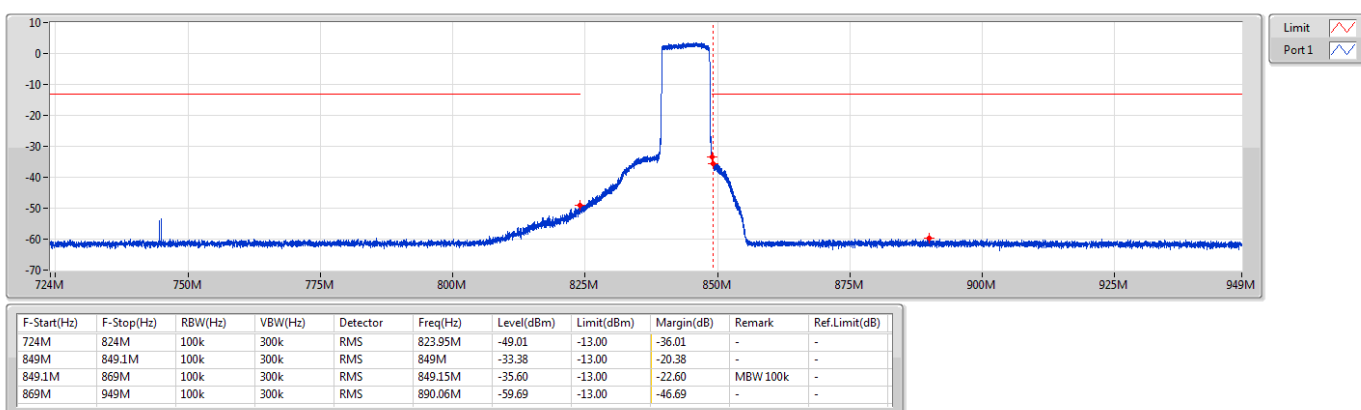
844MHz_16QAM_RB 1,#RB 49



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Sum

844MHz_16QAM_RB 50,#RB 0



Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	1.239M	1.08M	1M08G7D	1.223M	1.078M
LTE_1.4MHz_Nss1,16QAM_1TX	1.248M	1.078M	1M08W7D	1.234M	1.076M
LTE_3MHz_Nss1,QPSK_1TX	2.85M	2.675M	2M68G7D	2.839M	2.671M
LTE_3MHz_Nss1,16QAM_1TX	2.846M	2.673M	2M67W7D	2.831M	2.67M
LTE_5MHz_Nss1,QPSK_1TX	4.813M	4.462M	4M46G7D	4.8M	4.461M
LTE_5MHz_Nss1,16QAM_1TX	4.794M	4.465M	4M47W7D	4.763M	4.46M
LTE_10MHz_Nss1,QPSK_1TX	9.538M	8.929M	8M93G7D	9.475M	8.915M
LTE_10MHz_Nss1,16QAM_1TX	9.5M	8.923M	8M92W7D	9.413M	8.906M

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	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-
824.7MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.239M	1.078M
836.5MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.223M	1.078M
848.3MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.236M	1.08M
824.7MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.234M	1.076M
836.5MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.237M	1.078M
848.3MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.248M	1.078M
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.846M	2.675M
836.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.85M	2.672M
847.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.839M	2.671M
825.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.831M	2.67M
836.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.835M	2.671M
847.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.846M	2.673M
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.813M	4.461M
836.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.8M	4.461M
846.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.8M	4.462M
826.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.794M	4.463M
836.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.763M	4.465M
846.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.763M	4.46M
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-



Occupied and 26 dB Bandwidth

Appendix J

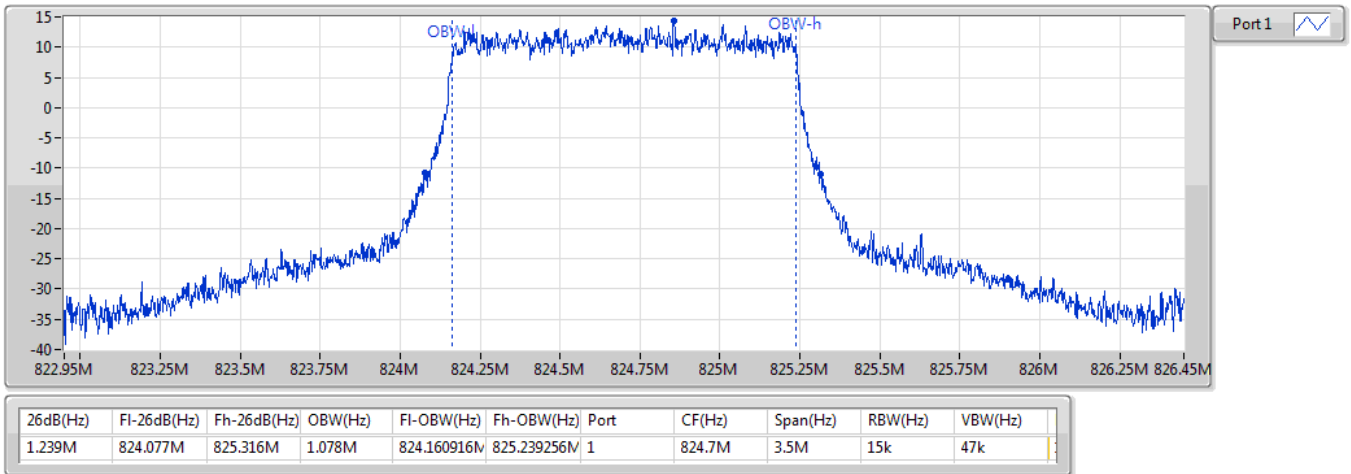
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
829MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.488M	8.924M
836.5MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.538M	8.929M
844MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.475M	8.915M
829MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.5M	8.909M
836.5MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.413M	8.923M
844MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.463M	8.906M

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

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

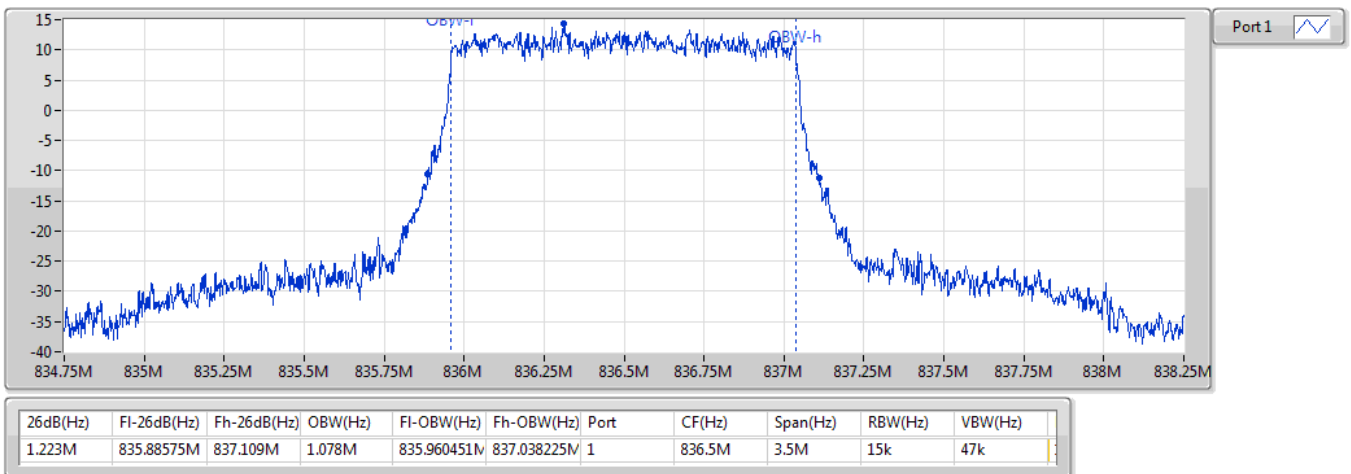
824.7MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

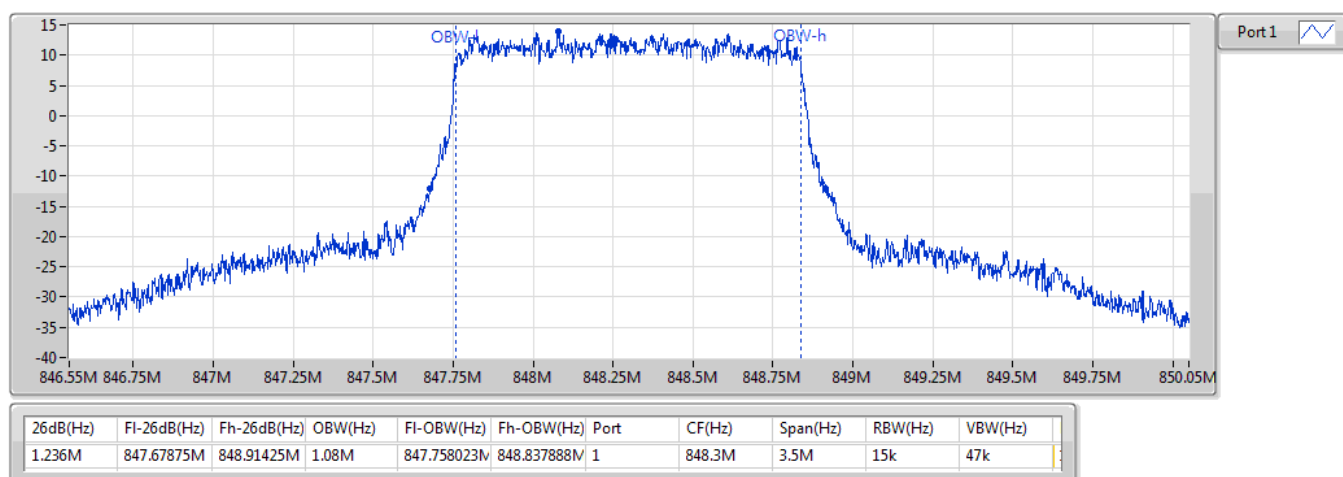
836.5MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

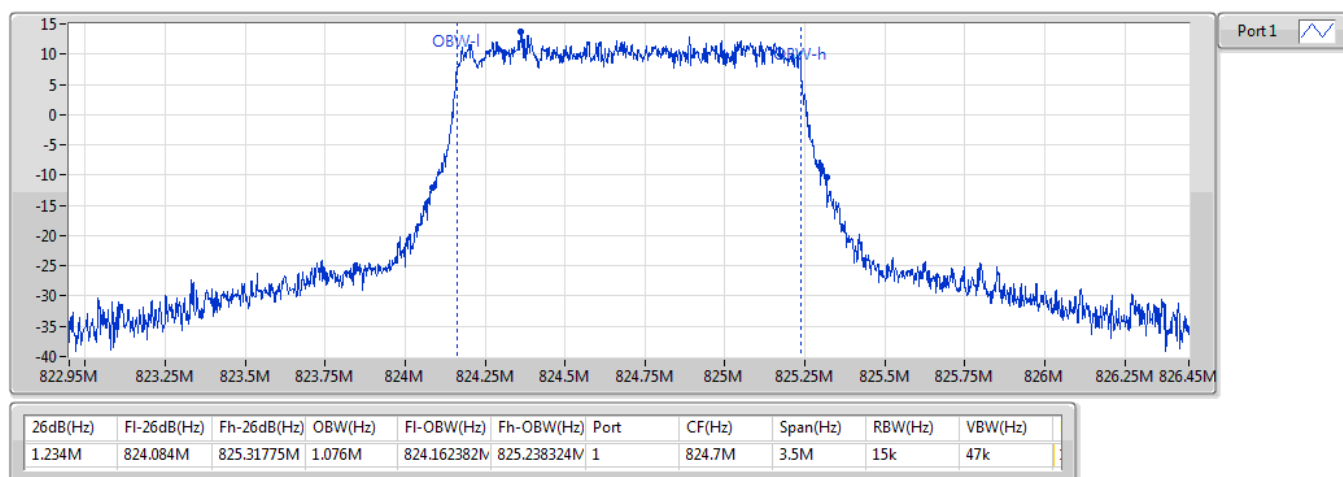
848.3MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

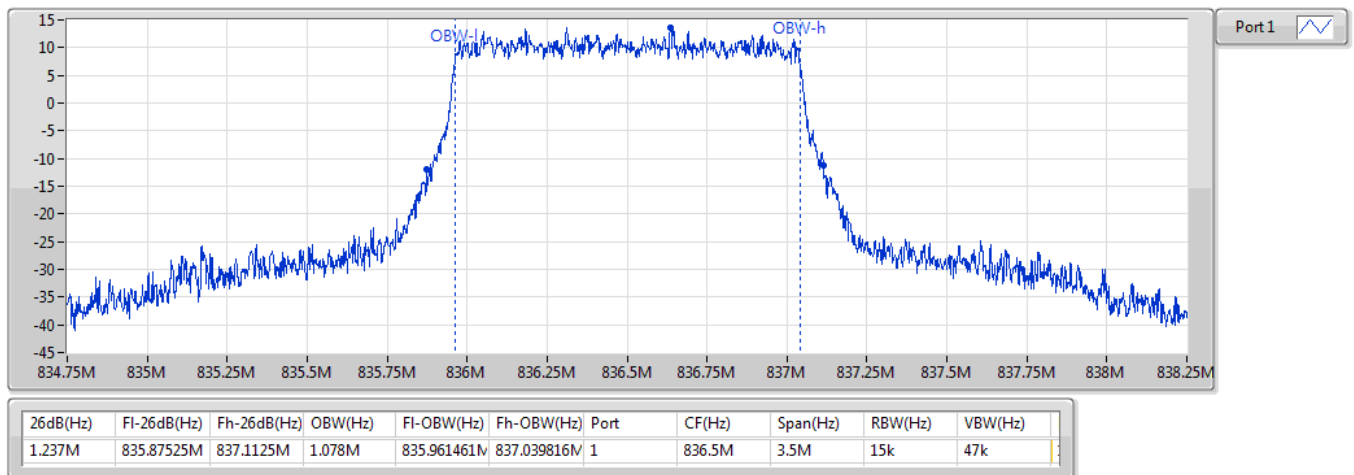
824.7MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

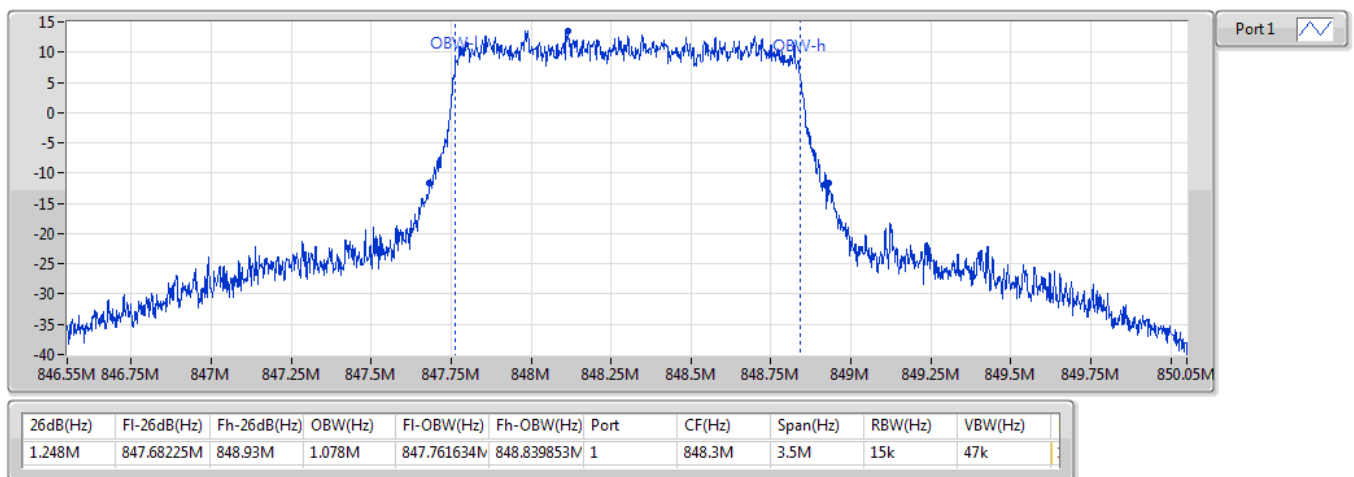
836.5MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

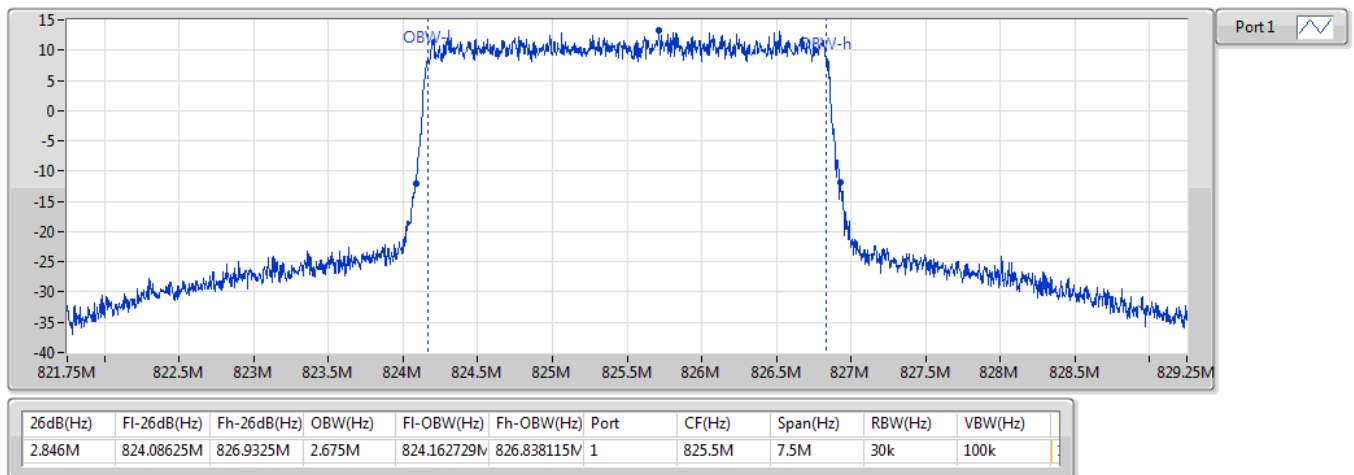
848.3MHz_16QAM_RB 6,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

EBW

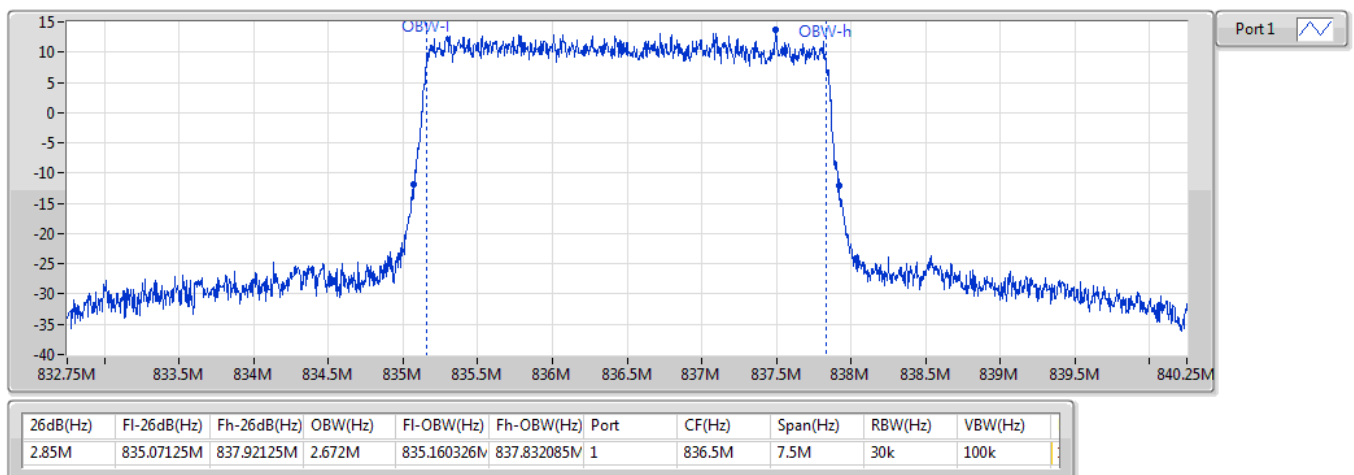
825.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

EBW

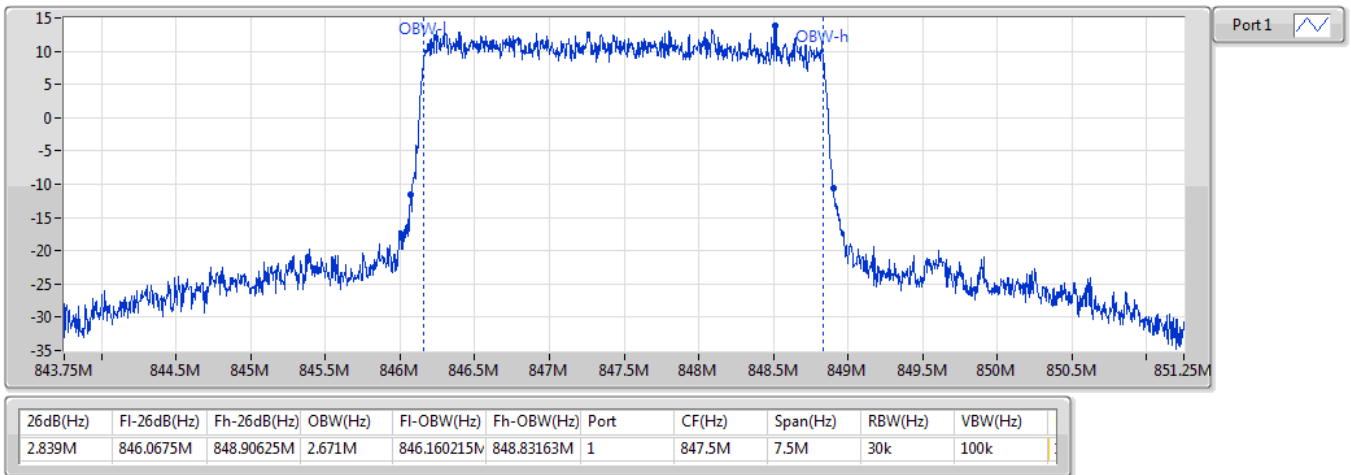
836.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

EBW

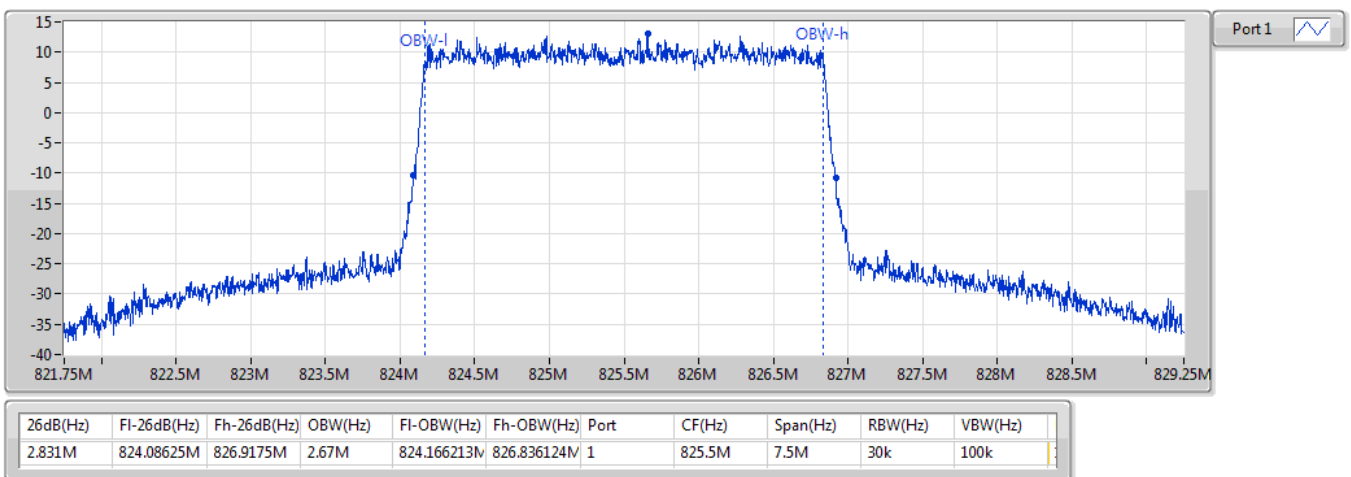
847.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

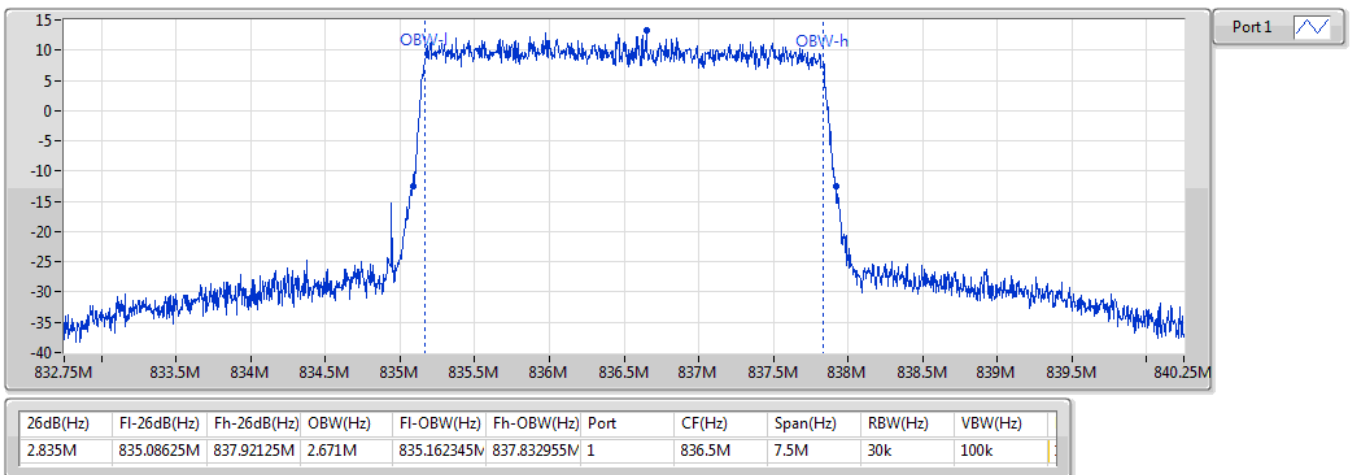
825.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

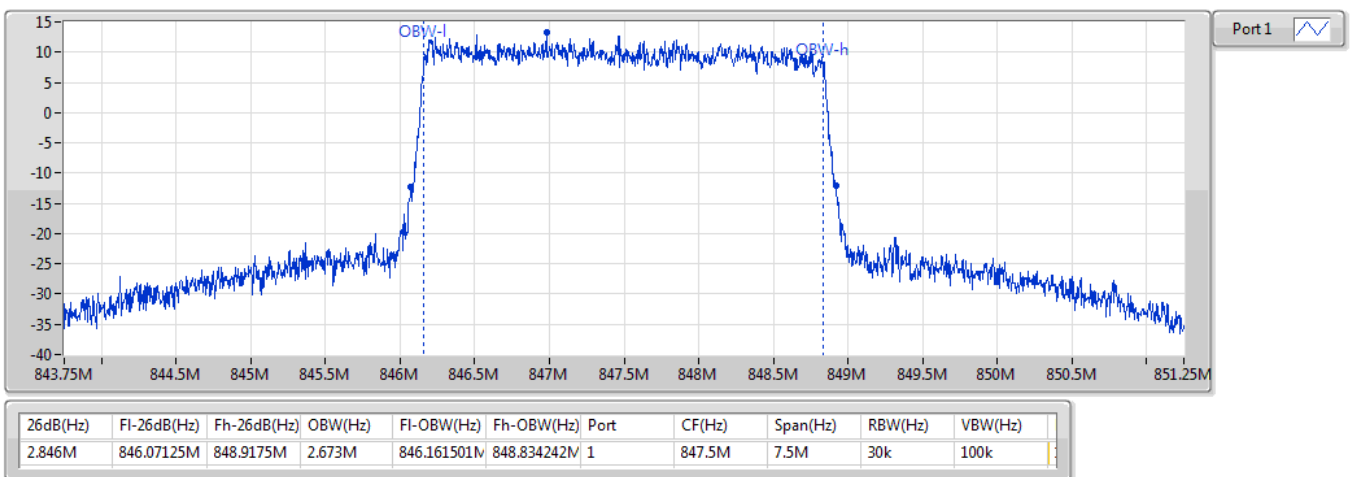
836.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

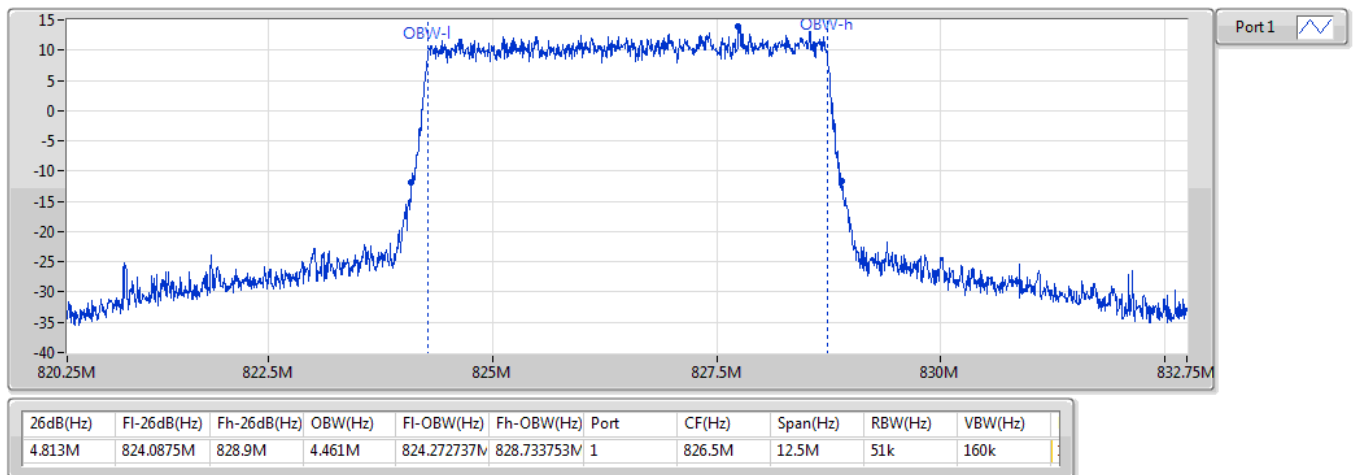
847.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

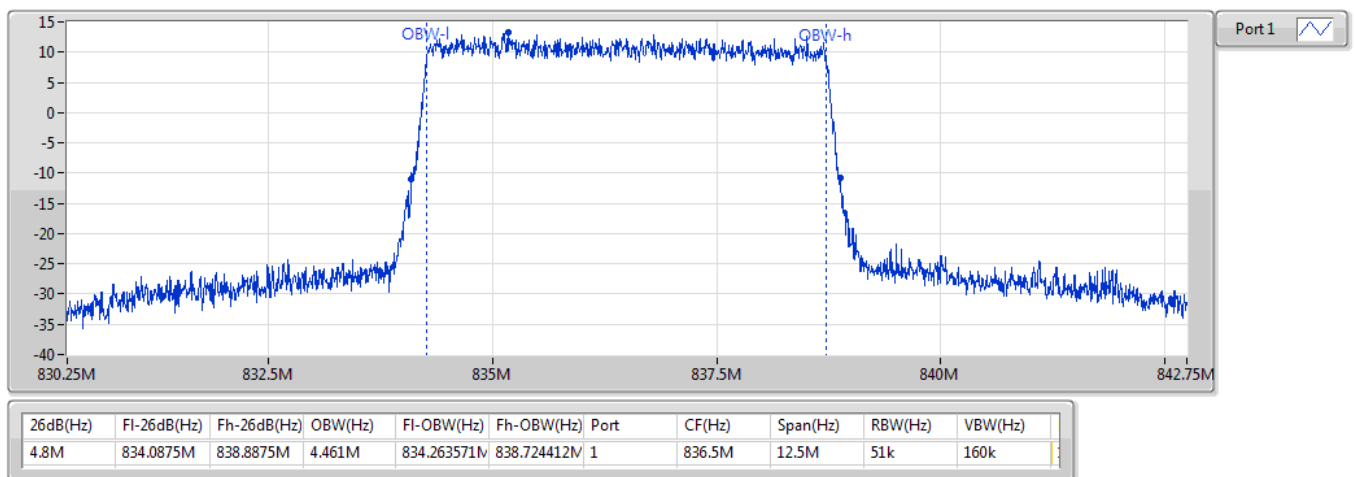
826.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

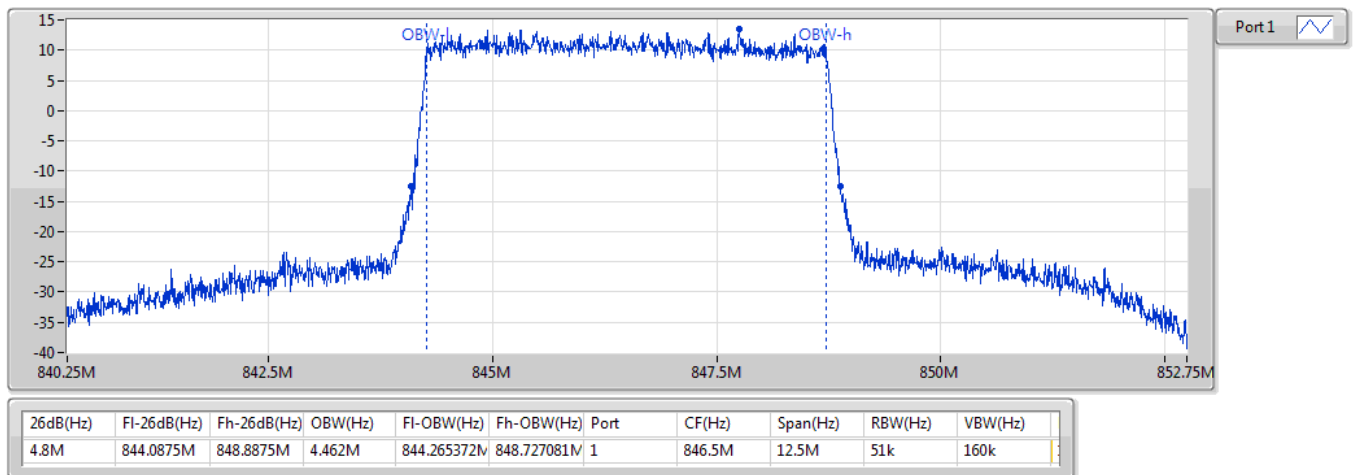
836.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

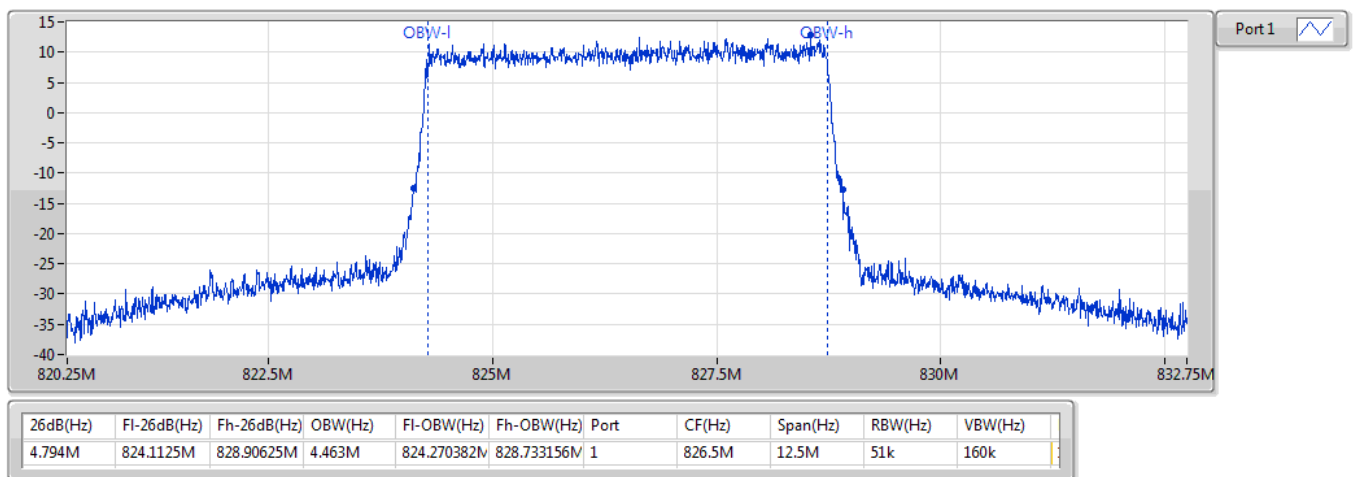
846.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

EBW

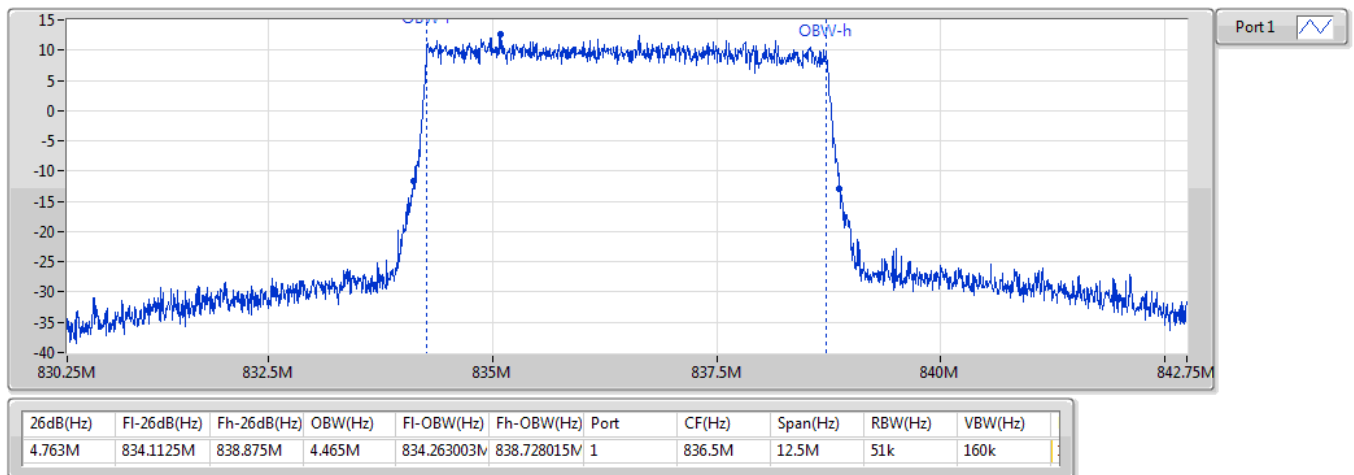
826.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

EBW

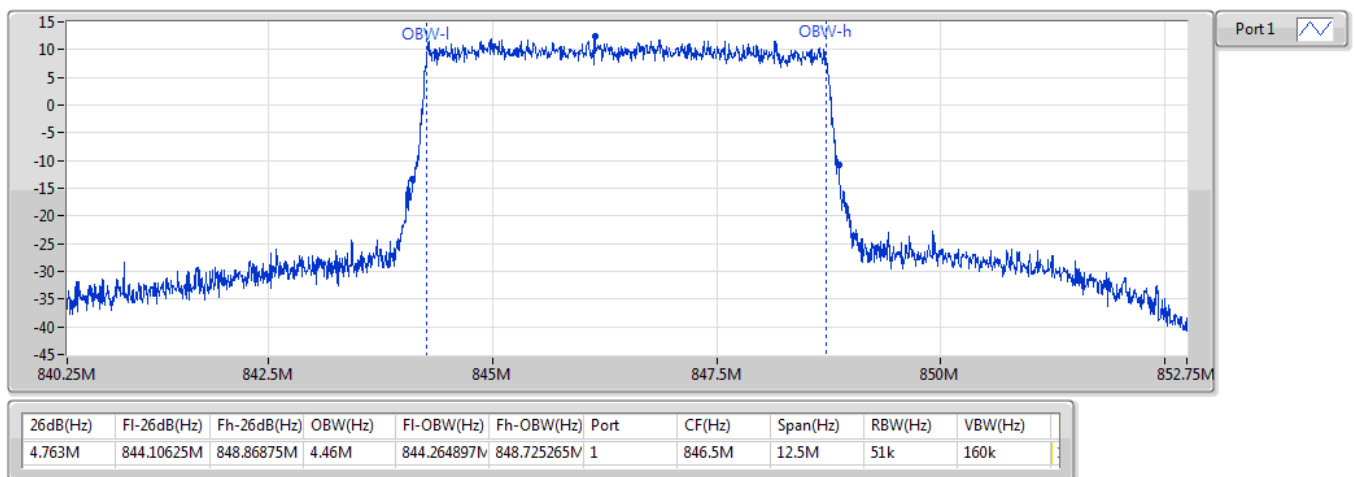
836.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

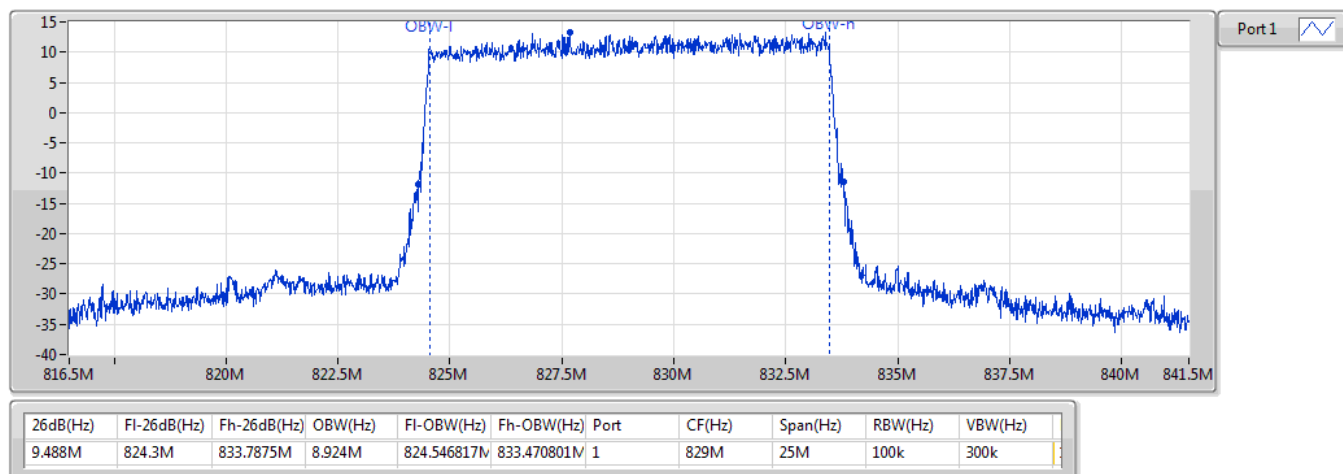
EBW

846.5MHz_16QAM_RB 25,#RB 0



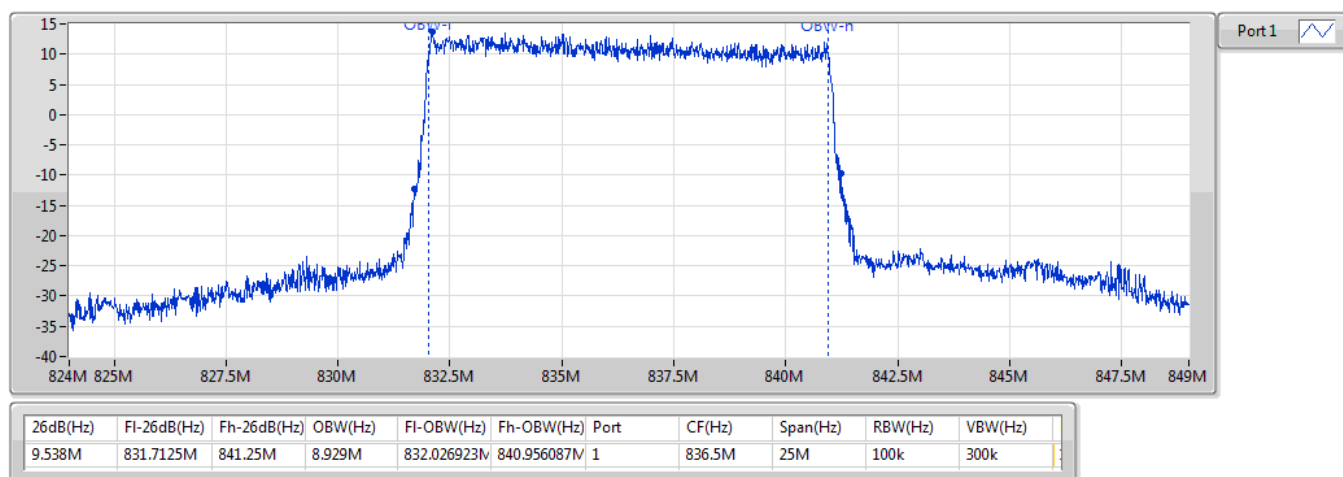
Band 5_LTE_10MHz_Nss1,QPSK_1TX
829MHz_QPSK_RB 50,#RB 0

EBW



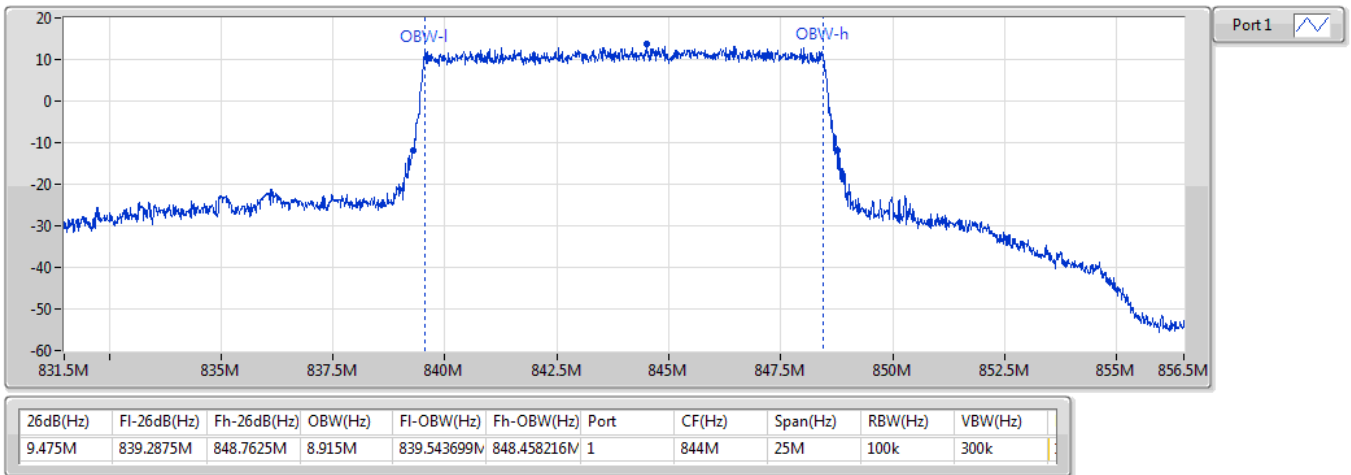
Band 5_LTE_10MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 50,#RB 0

EBW



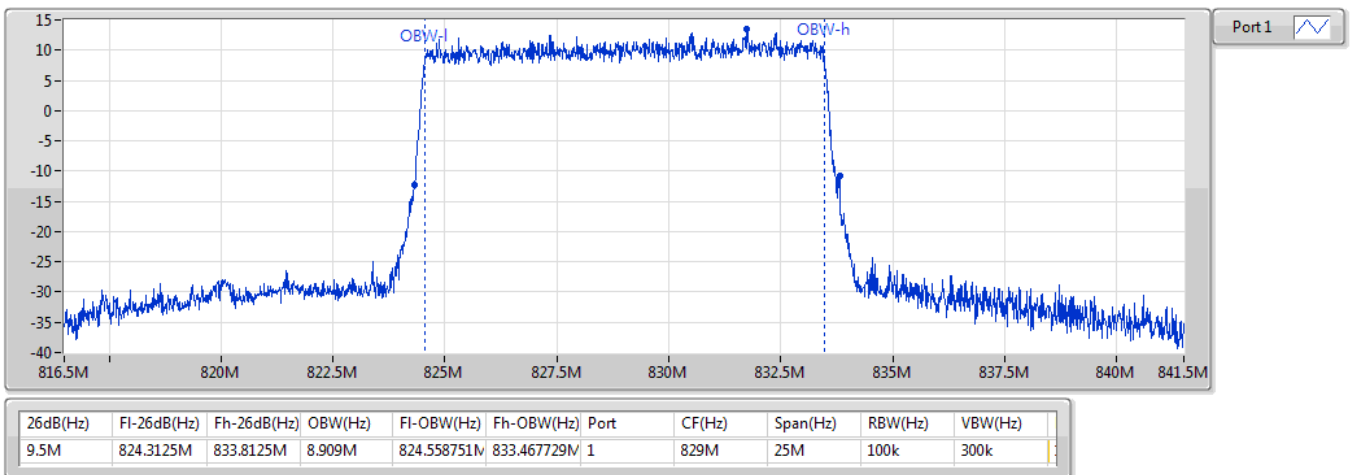
Band 5_LTE_10MHz_Nss1,QPSK_1TX
844MHz_QPSK_RB 50,#RB 0

EBW



Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 50,#RB 0

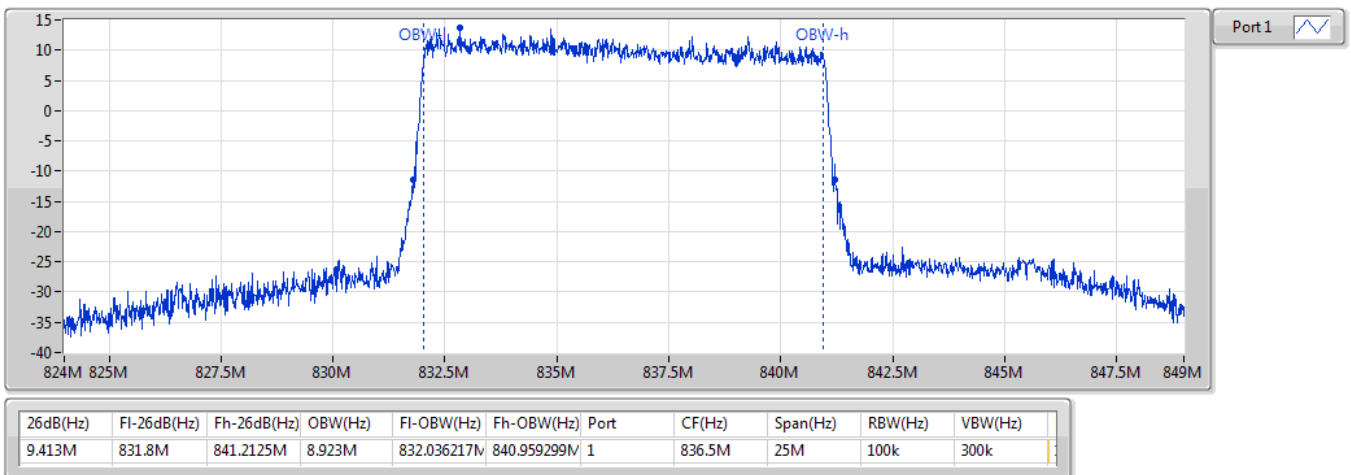
EBW



Band 5_LTE_10MHz_Nss1,16QAM_1TX

EBW

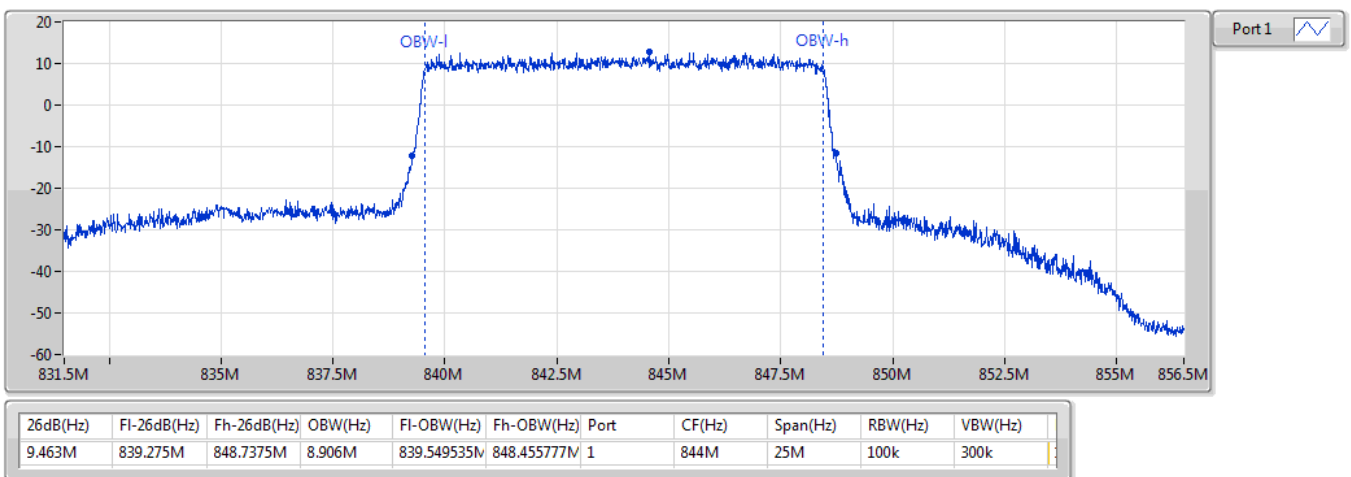
836.5MHz_16QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

EBW

844MHz_16QAM_RB 50,#RB 0



Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	824.7	13.00	6.12	1
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	824.7	13.00	6.84	1
LTE_3MHz_Nss1,QPSK_1TX	Pass	825.5	13.00	6.09	1
LTE_3MHz_Nss1,16QAM_1TX	Pass	825.5	13.00	6.87	1
LTE_5MHz_Nss1,QPSK_1TX	Pass	826.5	13.00	5.94	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	826.5	13.00	6.62	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	829	13.00	5.57	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	829	13.00	6.28	1

Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-
824.7MHz_QPSK_RB 6,#RB 0	Pass	824.7	13.00	6.12	1
836.5MHz_QPSK_RB 6,#RB 0	Pass	836.5	13.00	5.22	1
848.3MHz_QPSK_RB 6,#RB 0	Pass	848.3	13.00	4.39	1
824.7MHz_16QAM_RB 6,#RB 0	Pass	824.7	13.00	6.84	1
836.5MHz_16QAM_RB 6,#RB 0	Pass	836.5	13.00	5.98	1
848.3MHz_16QAM_RB 6,#RB 0	Pass	848.3	13.00	5.24	1
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	825.5	13.00	6.09	1
836.5MHz_QPSK_RB 15,#RB 0	Pass	836.5	13.00	5.23	1
847.5MHz_QPSK_RB 15,#RB 0	Pass	847.5	13.00	4.50	1
825.5MHz_16QAM_RB 15,#RB 0	Pass	825.5	13.00	6.87	1
836.5MHz_16QAM_RB 15,#RB 0	Pass	836.5	13.00	6.07	1
847.5MHz_16QAM_RB 15,#RB 0	Pass	847.5	13.00	5.40	1
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	826.5	13.00	5.94	1
836.5MHz_QPSK_RB 25,#RB 0	Pass	836.5	13.00	5.28	1
846.5MHz_QPSK_RB 25,#RB 0	Pass	846.5	13.00	4.87	1
826.5MHz_16QAM_RB 25,#RB 0	Pass	826.5	13.00	6.62	1
836.5MHz_16QAM_RB 25,#RB 0	Pass	836.5	13.00	6.03	1
846.5MHz_16QAM_RB 25,#RB 0	Pass	846.5	13.00	5.66	1
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-



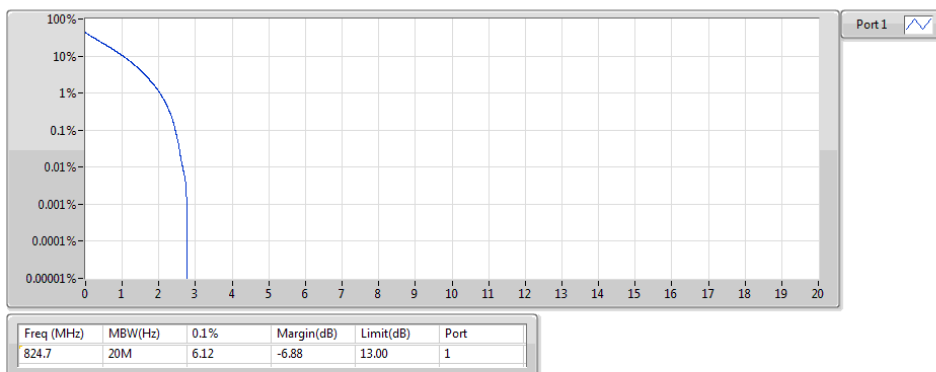
Peak to Average Power Ratio

Appendix E

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
829MHz_QPSK_RB 50,#RB 0	Pass	829	13.00	5.57	1
836.5MHz_QPSK_RB 50,#RB 0	Pass	836.5	13.00	5.37	1
844MHz_QPSK_RB 50,#RB 0	Pass	844	13.00	5.41	1
829MHz_16QAM_RB 50,#RB 0	Pass	829	13.00	6.28	1
836.5MHz_16QAM_RB 50,#RB 0	Pass	836.5	13.00	6.10	1
844MHz_16QAM_RB 50,#RB 0	Pass	844	13.00	6.19	1

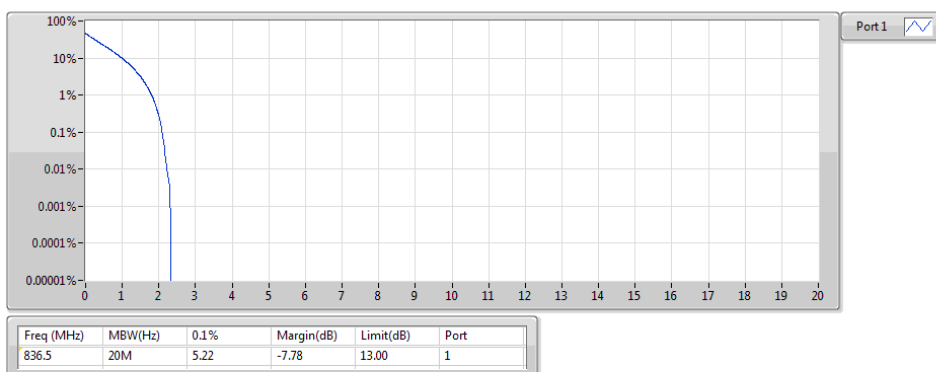
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 6,#RB 0

PAR



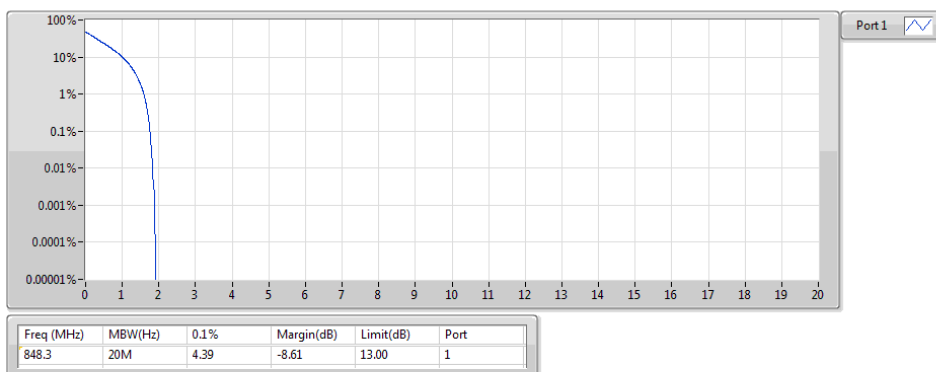
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 6,#RB 0

PAR



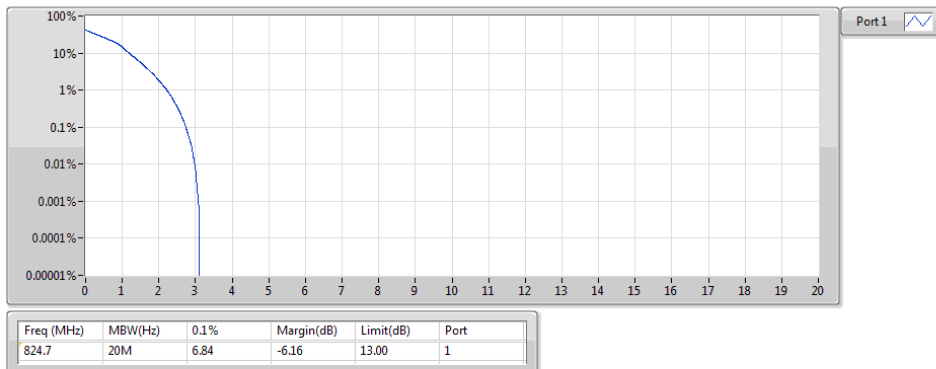
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz_QPSK_RB 6,#RB 0

PAR



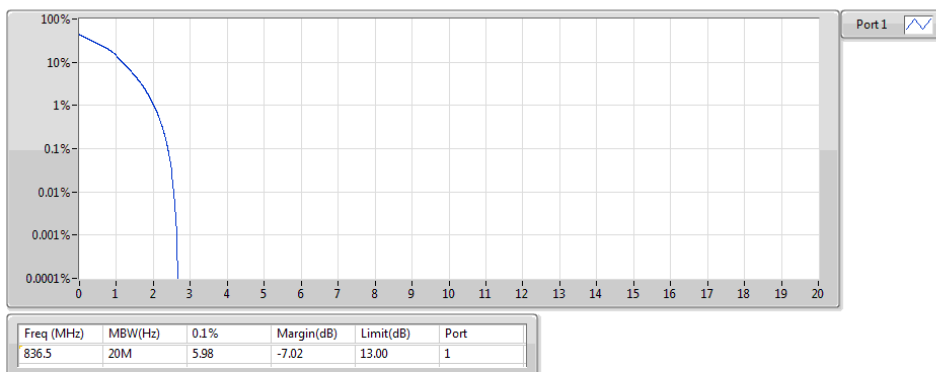
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz_16QAM_RB 6,#RB 0

PAR



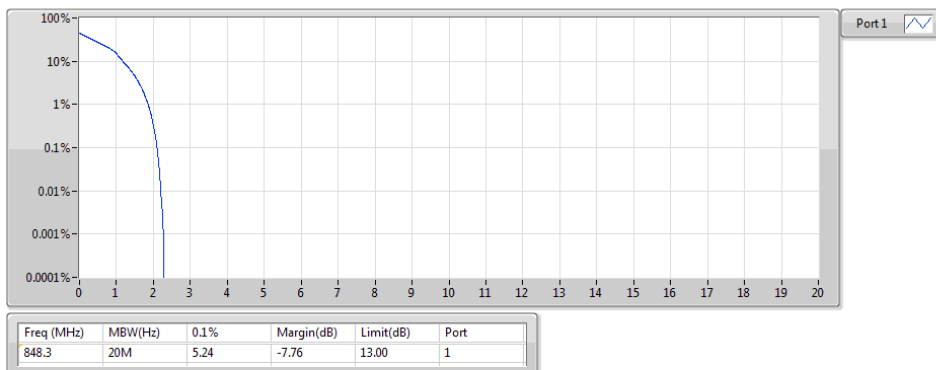
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 6,#RB 0

PAR



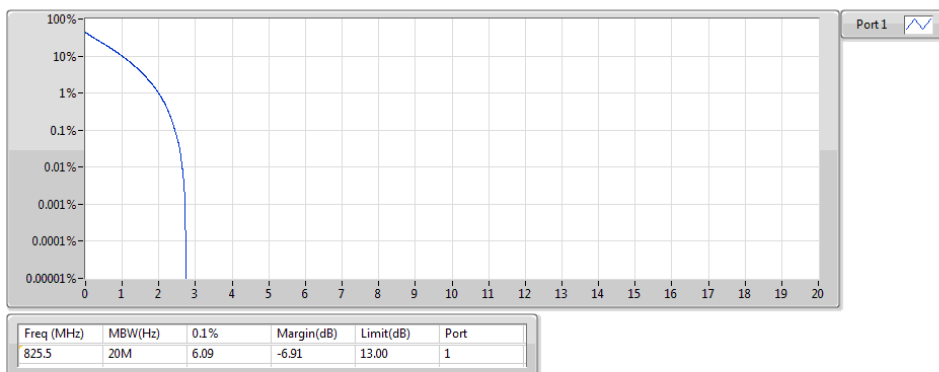
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz_16QAM_RB 6,#RB 0

PAR



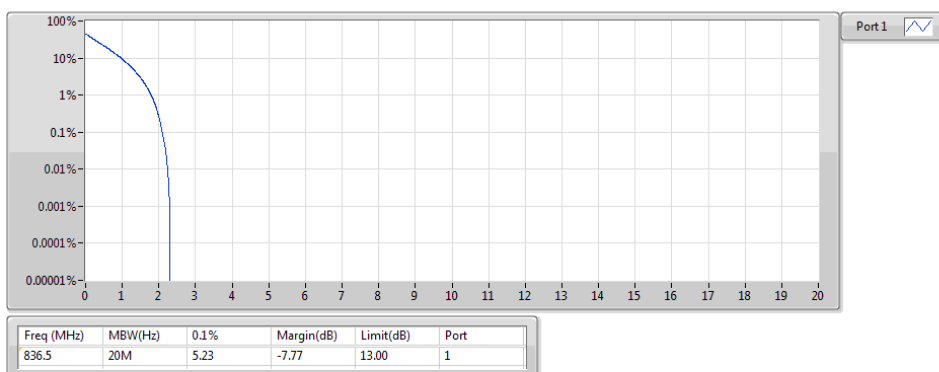
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 15,#RB 0

PAR



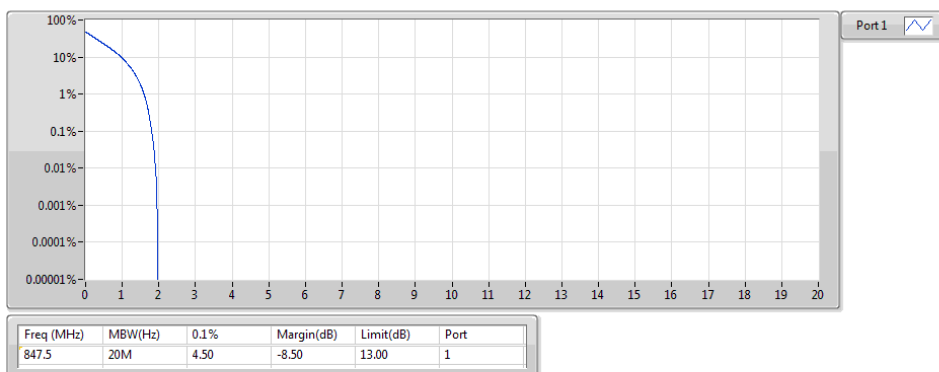
Band 5_LTE_3MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 15,#RB 0

PAR



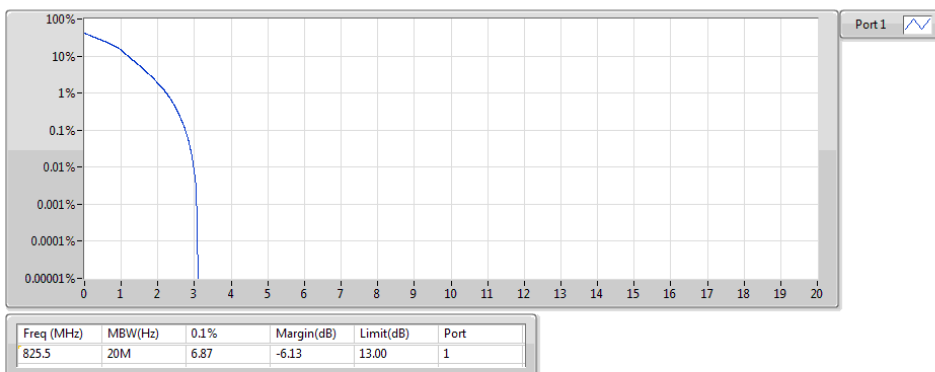
Band 5_LTE_3MHz_Nss1,QPSK_1TX
847.5MHz_QPSK_RB 15,#RB 0

PAR



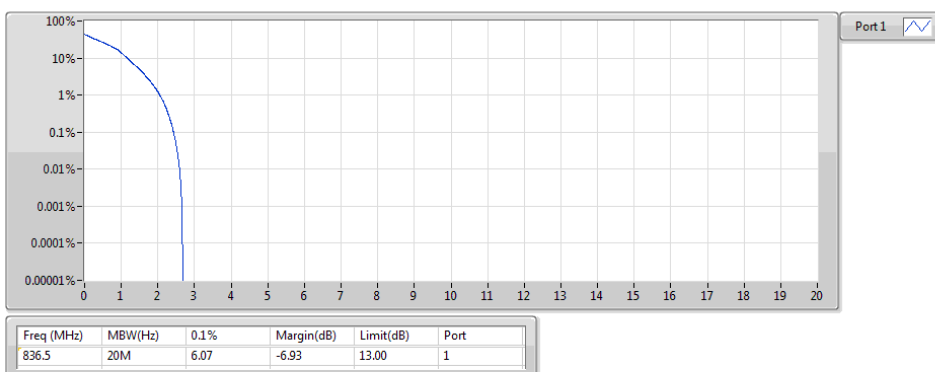
Band 5_LTE_3MHz_Nss1,16QAM_1TX
825.5MHz_16QAM_RB 15,#RB 0

PAR



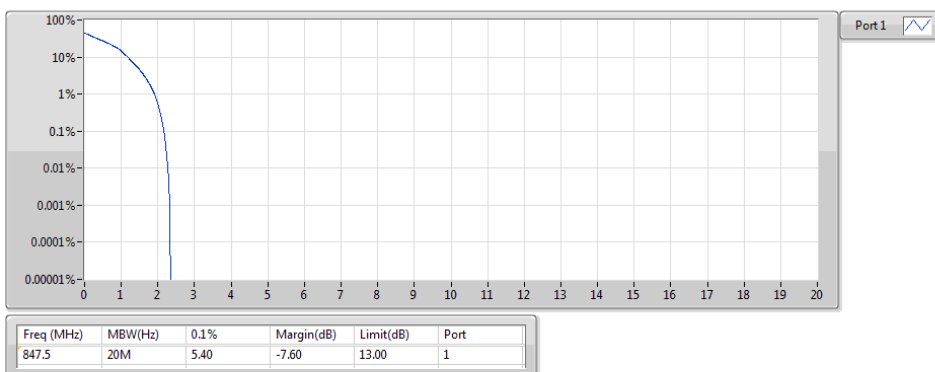
Band 5_LTE_3MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 15,#RB 0

PAR



Band 5_LTE_3MHz_Nss1,16QAM_1TX
847.5MHz_16QAM_RB 15,#RB 0

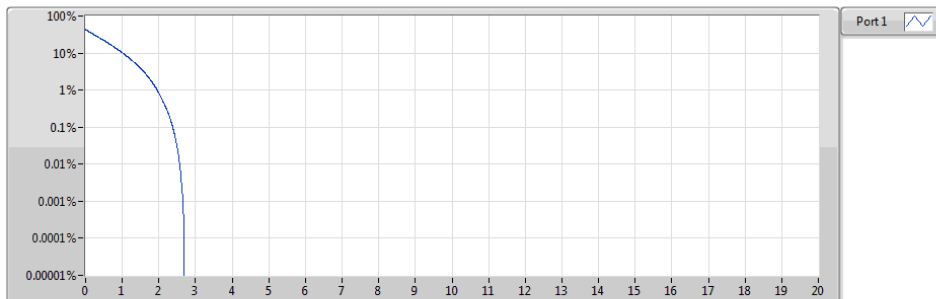
PAR



Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

826.5MHz_QPSK_RB 25,#RB 0

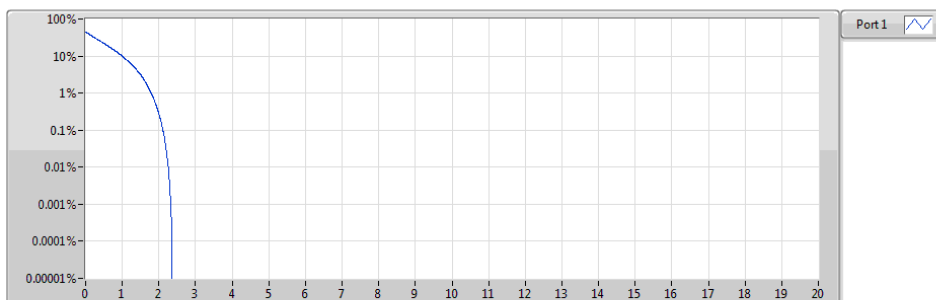


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
826.5	20M	5.94	-7.06	13.00	1

Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

836.5MHz_QPSK_RB 25,#RB 0

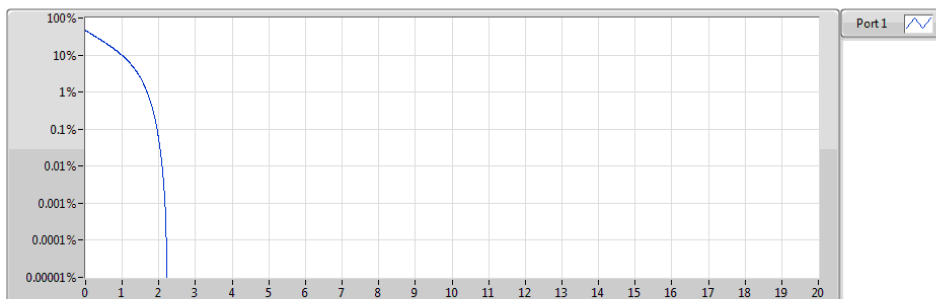


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	5.28	-7.72	13.00	1

Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

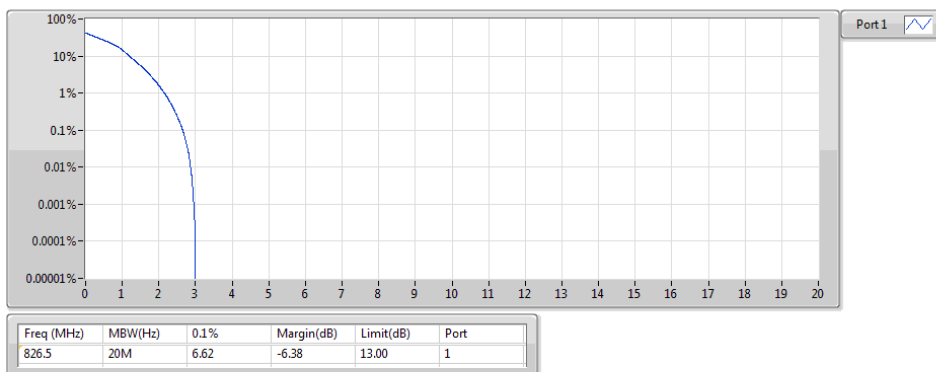
846.5MHz_QPSK_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
846.5	20M	4.87	-8.13	13.00	1

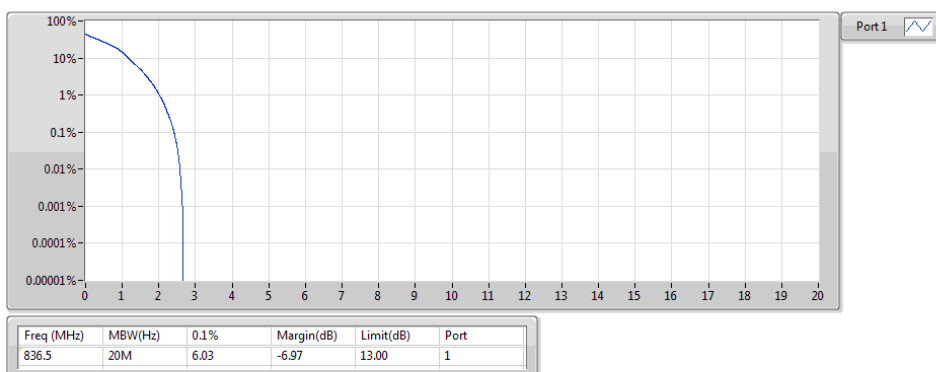
Band 5_LTE_5MHz_Nss1,16QAM_1TX
826.5MHz_16QAM_RB 25,#RB 0

PAR



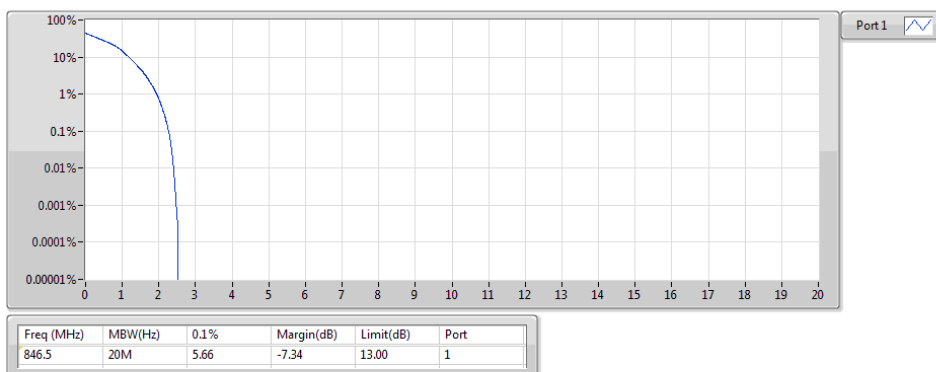
Band 5_LTE_5MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 25,#RB 0

PAR



Band 5_LTE_5MHz_Nss1,16QAM_1TX
846.5MHz_16QAM_RB 25,#RB 0

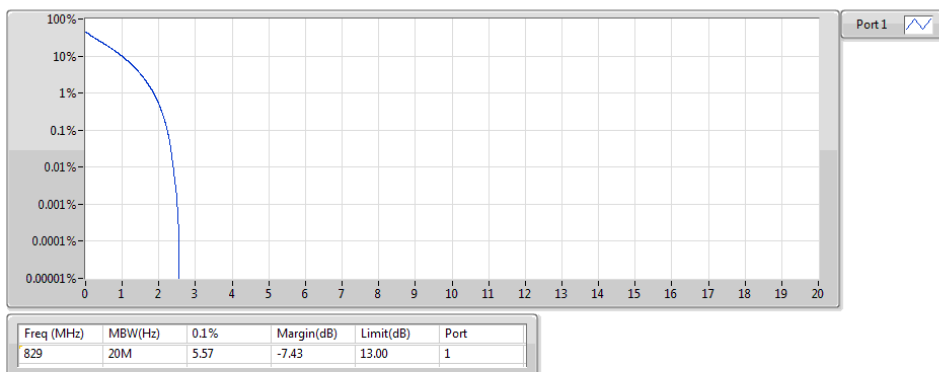
PAR



Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

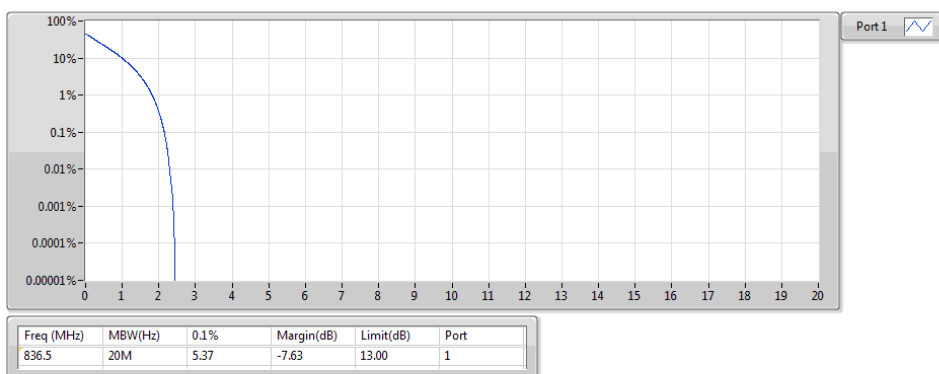
829MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

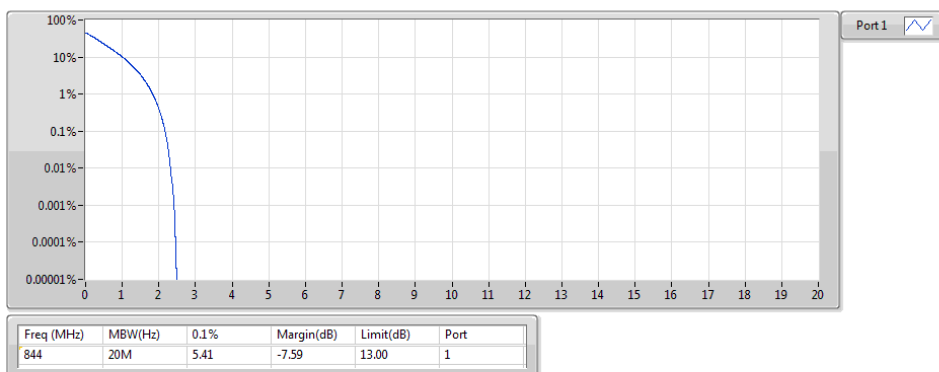
836.5MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

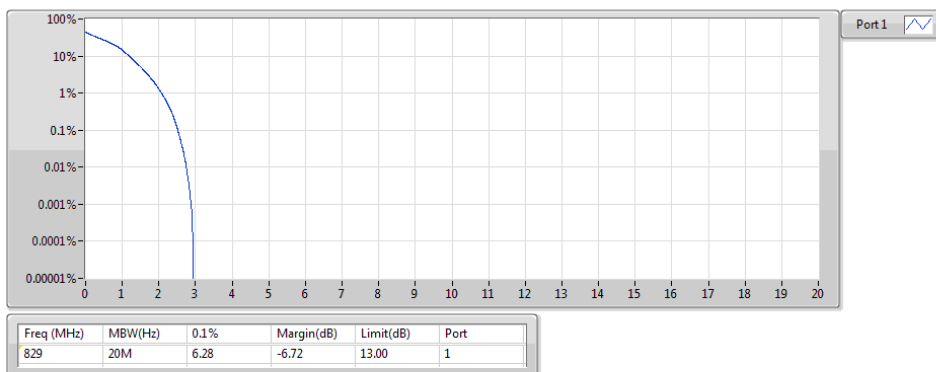
PAR

844MHz_QPSK_RB 50,#RB 0



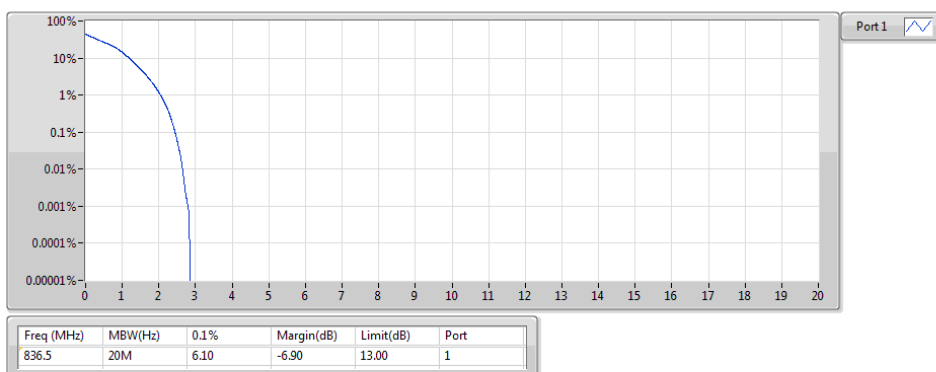
Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 50,#RB 0

PAR



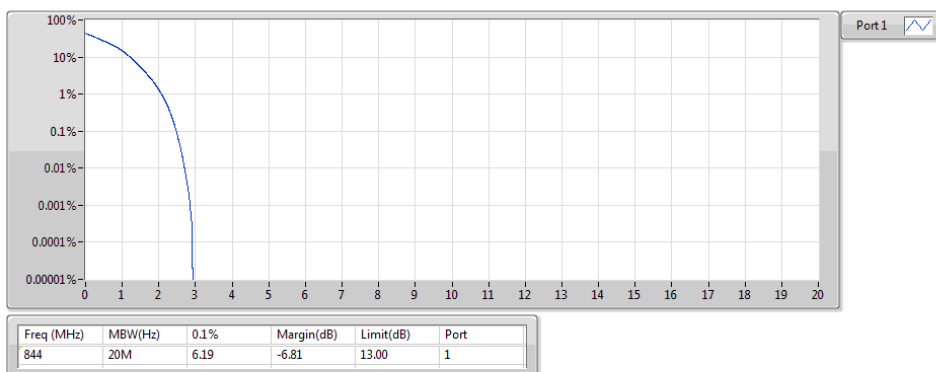
Band 5_LTE_10MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 50,#RB 0

PAR



Band 5_LTE_10MHz_Nss1,16QAM_1TX
844MHz_16QAM_RB 50,#RB 0

PAR



Band 5_LTE_1.4MHz_Nss1_1TX				
Temperature (°C)	824.7MHz		848.3MHz	
	Frequency Drift (ppm)	FL (MHz)	Frequency Drift (ppm)	FH (MHz)
T20°CVmax	-0.013	824.160905	-0.014	848.839841
T20°CVmin	-0.016	824.160903	-0.017	848.839839
T50°CVnom	-0.016	824.160903	-0.018	848.839838
T40°CVnom	-0.015	824.160904	-0.017	848.839839
T30°CVnom	-0.013	824.160905	-0.013	848.839842
T20°CVnom	-0.015	824.160904	-0.011	848.839844
T10°CVnom	-0.011	824.160907	-0.009	848.839845
T0°CVnom	-0.010	824.160908	-0.006	848.839848
T-10°CVnom	-0.007	824.160910	-0.008	848.839846
T-20°CVnom	-0.004	824.160913	-0.006	848.839848
T-30°CVnom	-0.004	824.160913	-0.007	848.839847
Limit	2.5 ppm	>824MHz	2.5 ppm	<849MHz

Band 5_LTE_3MHz_Nss1_1TX				
Temperature (°C)	825.5MHz		847.5MHz	
	Frequency Drift (ppm)	FL (MHz)	Frequency Drift (ppm)	FH (MHz)
T20°CVmax	-0.022	824.162711	-0.020	848.834225
T20°CVmin	-0.023	824.162710	-0.021	848.834224
T50°CVnom	-0.021	824.162712	-0.018	848.834227
T40°CVnom	-0.019	824.162713	-0.022	848.834223
T30°CVnom	-0.022	824.162711	-0.017	848.834228
T20°CVnom	-0.018	824.162714	-0.014	848.834230
T10°CVnom	-0.013	824.162718	-0.013	848.834231
T0°CVnom	-0.017	824.162715	-0.017	848.834228
T-10°CVnom	-0.015	824.162717	-0.015	848.834229
T-20°CVnom	-0.011	824.162720	-0.009	848.834234
T-30°CVnom	-0.007	824.162723	-0.011	848.834233
Limit	2.5 ppm	>824MHz	2.5 ppm	<849MHz

Band 5_LTE_5MHz_Nss1_1TX				
Temperature (°C)	826.5MHz		846.5MHz	
	Frequency Drift (ppm)	FL (MHz)	Frequency Drift (ppm)	FH (MHz)
T20°CVmax	-0.021	824.270365	-0.019	848.727065
T20°CVmin	-0.018	824.270367	-0.014	848.727069
T50°CVnom	-0.022	824.270364	-0.018	848.727066
T40°CVnom	-0.019	824.270366	-0.017	848.727067
T30°CVnom	-0.018	824.270367	-0.018	848.727066
T20°CVnom	-0.016	824.270369	-0.015	848.727068
T10°CVnom	-0.018	824.270367	-0.013	848.727070
T0°CVnom	-0.013	824.270371	-0.017	848.727067
T-10°CVnom	-0.011	824.270373	-0.018	848.727066
T-20°CVnom	-0.015	824.270370	-0.017	848.727067
T-30°CVnom	-0.010	824.270374	-0.013	848.727070
Limit	2.5 ppm	>824MHz	2.5 ppm	<849MHz

Band 5_LTE_10MHz_Nss1_1TX				
Temperature (°C)	829MHz		844MHz	
	Frequency Drift (ppm)	FL (MHz)	Frequency Drift (ppm)	FH (MHz)
T20°CVmax	-0.019	824.546801	-0.018	848.458201
T20°CVmin	-0.022	824.546799	-0.019	848.458200
T50°CVnom	-0.018	824.546802	-0.023	848.458197
T40°CVnom	-0.019	824.546801	-0.021	848.458198
T30°CVnom	-0.023	824.546798	-0.018	848.458201
T20°CVnom	-0.022	824.546799	-0.020	848.458199
T10°CVnom	-0.021	824.546800	-0.017	848.458202
T0°CVnom	-0.017	824.546803	-0.013	848.458205
T-10°CVnom	-0.014	824.546805	-0.015	848.458203
T-20°CVnom	-0.010	824.546809	-0.011	848.458207
T-30°CVnom	-0.011	824.546808	-0.014	848.458204
Limit	2.5 ppm	>824MHz	2.5 ppm	<849MHz