

FCC Test Report

FCC ID : 2AQYEFMP176
Equipment : Mobile Phone
Model No. : F-51A
Brand Name : FUJITSU
Applicant : FUJITSU CONNECTED TECHNOLOGIES Ltd.
Address : Chuorinkan 7-10-1 Yamato, Kanagawa
242-0007, Japan.
Standard : 47 CFR FCC Part 22 Subpart H
Received Date : Mar. 03, 2020
Tested Date : Mar. 11 ~ Apr. 17, 2020

We, International Certification Corp., 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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Release Record

Report No.	Version	Description	Issued Date
FR011605P22	Rev. 01	Initial issue	May 18, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 / 22.913(a)(5)	Effective Radiated Power	Power[dBm]: GSM: 21 WCDMA: 13.05 LTE: 13.83	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 Product Details

Product Name	Mobile Phone
Brand Name	FUJITSU
Model Name	F-51A
IMEI Code	353704110012010 / 353704110012127
H/W Version	v2.1.0
S/W Version	R047.4

1.1.2 Specification of the Equipment under Test (EUT)

Operating Frequency	GSM/GPRS 850: 824.2 MHz ~ 848.8 MHz WCDMA V: 826.4 MHz ~ 846.6 MHz LTE Band 5: Channel Bandwidth: 1.4MHz: 824.7 MHz ~ 848.3 MHz Channel Bandwidth: 3MHz: 825.5 MHz ~ 847.5 MHz Channel Bandwidth: 5MHz: 826.5 MHz ~ 846.5 MHz Channel Bandwidth: 10MHz: 829 MHz ~ 844 MHz
Modulation	GSM/GPRS: GMSK WCDMA / HSDPA / HSUPA: BPSK LTE: QPSK/16QAM/64QAM (Uplink) QPSK/16QAM/64QAM/256QAM (Downlink)
Multislot Class	11 for GPRS
Duplex Mode	FDD
Release Version	WCDMA: R9 LTE: 10
UE Category	WCDMA: Cat. 10 / Cat. 6 LTE: Cat. 6

1.1.3 Antenna Details

Ant. No.	Type	Connector	Gain (dBi)	Remark
1	Monopole	No	-8.0	---

1.1.4 EUT Operational Condition

Supply Voltage	3.83Vdc from battery: 9Vdc,1.5A from adapter (No bundle, support unit only)		
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (55°C)	☒ Tmin (-10°C)

1.1.5 Accessories

No.	Equipment	Description
1	Battery	Brand: FUJITSU CONNECTED TECHNOLOGIES LIMITED Model: CA54310-0079-A1 Rated: 4000mAh, 15.4Wh Typ. 4070mAh, 15.6Wh
2	Type-C <-> Earphone	9.5cm non-shielded without core

1.1.6 Maximum ERP and Emission Designator

Mode	Modulation	Maximum ERP (W)	Emission Designator
GPRS 850	GMSK	0.126	247KGXW
WCDMA V	BPSK	0.020	4M16F9W
LTE Band 5, CB: 1.4MHz	QPSK	0.024	1M08G7D
LTE Band 5, CB: 1.4MHz	16QAM	0.021	1M08W7D
LTE Band 5, CB: 1.4MHz	64QAM	0.016	1M08W7D
LTE Band 5, CB: 3MHz	QPSK	0.024	2M68G7D
LTE Band 5, CB: 3MHz	16QAM	0.020	2M68W7D
LTE Band 5, CB: 3MHz	64QAM	0.016	2M68W7D
LTE Band 5, CB: 5MHz	QPSK	0.024	4M47G7D
LTE Band 5, CB: 5MHz	16QAM	0.021	4M46W7D
LTE Band 5, CB: 5MHz	64QAM	0.016	4M47W7D
LTE Band 5, CB: 10MHz	QPSK	0.024	8M92G7D
LTE Band 5, CB: 10MHz	16QAM	0.021	8M93W7D
LTE Band 5, CB: 10MHz	64QAM	0.016	8M91W7D

1.1.7 Operating Channel List

GSM & GPRS		
	Channel	Frequency (MHz)
Low	128	824.2
Middle	189	836.4
High	251	848.8

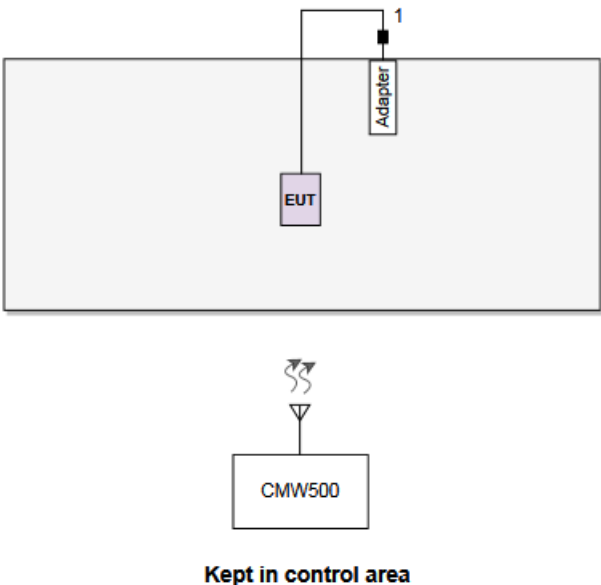
WCDMA V		
Channel Location	Channel	Frequency (MHz)
Low	4132	826.4
Middle	4182	836.4
High	4233	846.6

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	S/N	Remarks
1	AC Adapter	NTT docomo	AC Adapter 06	---	Provided by applicant.

1.3 Test Setup Chart

Test Setup Diagram	
	
No.	Signal cable / Length (m)
1	USB, 1.2m non-shielded with one core.

1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 06, 2020	Feb. 05, 2021
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 12, 2019	Dec. 11, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 2020
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)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 12, 2019	Dec. 11, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 06, 2020	Feb. 05, 2021
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 02, 2019	Dec. 01, 2020
Measurement Software	Sporton	SENSE-FCC_2G-4G	V5.10.5	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards.

47 CFR FCC Part 22 Subpart H

ANSI C63.4-2014

ANSI C63.26-2015

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 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	22-23°C / 65-69%	Roger Lu Akun Chung
RF Conducted	TH01-WS	17-25°C / 60-67%	Aska Huang

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

2.2 The Worst Test Modes and Channel Details

GPRS 850 / WCDMA V		
Test item	Mode	Test Frequency (MHz)
Effective Radiated Power	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 836.4 / 848.8 826.4 / 836.4 / 846.6
Radiated Emissions ≤ 1GHz	GPRS 1 Tx slot WCDMA_RMC 12.2K	848.8 846.6
Radiated Emissions > 1GHz	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 836.4 / 848.8 826.4 / 836.4 / 846.6
Conducted Emissions	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 836.4 / 848.8 826.4 / 836.4 / 846.6
Band Edge	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 848.8 826.4 / 846.6
Occupied Bandwidth	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 836.4 / 848.8 826.4 / 836.4 / 846.6
Peak to Average Ratio	GPRS 1 Tx slot WCDMA_RMC 12.2K	824.2 / 836.4 / 848.8 826.4 / 836.4 / 846.6
Frequency Stability	GPRS 1 Tx slot WCDMA_RMC 12.2K	836.4 836.4
NOTE:		
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Y-plane results were found as the worst case and were shown in this report.		

LTE Band 5			
Test item	Channel Bandwidths	Modulation	Test Frequency (MHz)
Effective Radiated Power	1.4 MHz	QPSK / 16QAM / 64QAM	824.7 / 836.5 / 848.3
Conducted Emissions	3 MHz	QPSK / 16QAM / 64QAM	825.5 / 836.5 / 847.5
Occupied Bandwidth	5 MHz	QPSK / 16QAM / 64QAM	826.5 / 836.5 / 846.5
Peak to Average Ratio	10 MHz	QPSK / 16QAM / 64QAM	829.0 / 836.5 / 844.0
Radiated Emission ≤ 1GHz	1.4 MHz	QPSK	836.5
	3 MHz	QPSK	836.5
	5 MHz	QPSK	836.5
	10 MHz	QPSK	844.0
Radiated Emission > 1GHz	1.4 MHz	QPSK	824.7 / 836.5 / 848.3
	3 MHz	QPSK	825.5 / 836.5 / 847.5
	5 MHz	QPSK	826.5 / 836.5 / 846.5
	10 MHz	QPSK	829.0 / 836.5 / 844.0
Band Edge	1.4 MHz	QPSK / 16QAM / 64QAM	824.7 / 848.3
	3 MHz	QPSK / 16QAM / 64QAM	825.5 / 847.5
	5 MHz	QPSK / 16QAM / 64QAM	826.5 / 846.5
	10 MHz	QPSK / 16QAM / 64QAM	829.0 / 844.0
Frequency Stability	1.4 MHz	QPSK	836.5
	3 MHz	QPSK	836.5
	5 MHz	QPSK	836.5
	10 MHz	QPSK	836.5
NOTE:			
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Y-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 E.R.P measurement

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

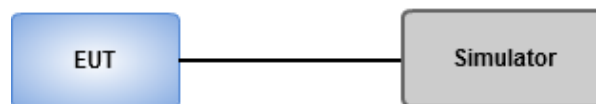
1. $EIRP = P_T + G_T - L_C$
 P_T = transmitter output power, in dBm.
 G_T = gain of the transmitting antenna, in dBi (EIRP).
 L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.
2. $ERP = EIRP - 2.15 \text{ dB}$.

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

Conducted Power Measurement



3.1.4 Test Result of Conducted Output Power (dBm)

Band		GSM 850		
Channel		128	189	251
Frequency (MHz)		824.2	836.4	848.8
GSM 1 Tx slot		30.88	31.08	31.09
GPRS 1 Tx slot		30.90	31.13	31.15
GPRS 2 Tx slots		28.68	28.94	29.00
GPRS 3 Tx slots		26.42	27.15	27.22
GPRS 4 Tx slots		25.14	25.50	25.60
DTM Multi-slot class 5	GSM 1 Tx slot	28.63	28.93	28.88
	GPRS 1 Tx slot	28.66	28.94	28.86
DTM Multi-slot class 9	GSM 1 Tx slot	28.62	28.91	28.82
	GPRS 1 Tx slot	28.65	28.92	28.83
DTM Multi-slot class 11	GSM 1 Tx slot	26.44	27.03	27.11
	GPRS 2 Tx slots	26.45	27.01	27.06

Band		WCDMA V		
Channel		4132	4182	4233
Frequency (MHz)		826.4	836.4	846.6
AMR 12.2Kbps		22.93	23.03	23.18
RMC 12.2Kbps		22.94	23.04	23.20
HSDPA Subtest-1		21.91	22.04	22.22
HSDPA Subtest-2		21.65	21.98	22.22
HSDPA Subtest-3		21.44	21.51	21.67
HSDPA Subtest-4		21.41	21.51	21.72
HSUPA Subtest-1		21.92	22.01	22.25
HSUPA Subtest-2		19.91	19.99	20.22
HSUPA Subtest-3		20.96	21.06	21.20
HSUPA Subtest-4		19.94	20.02	20.23
HSUPA Subtest-5		22.00	22.00	22.20

Band / Channel Bandwidth			LTE Band 5 / CB: 1.4MHz		
Channel			20407	20525	20643
Frequency (MHz)			824.7	836.5	848.3
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	23.76	23.85	23.08
	1	3	23.81	23.96	23.07
	1	5	23.69	23.86	23.10
	3	0	23.81	23.81	23.15
	3	1	23.83	23.89	23.16
	3	3	23.77	23.88	23.29
	6	0	22.85	22.97	22.24
16QAM	1	0	23.09	23.18	22.34
	1	3	23.13	23.27	22.50
	1	5	23.02	23.19	22.50
	3	0	22.87	22.95	22.28
	3	1	22.91	22.97	22.30
	3	3	22.84	22.97	22.37
	6	0	21.92	22.05	21.40
64QAM	1	0	21.79	22.06	20.53
	1	3	21.85	22.19	20.51
	1	5	21.79	22.11	20.52
	3	0	21.79	22.08	20.57
	3	1	21.84	22.09	20.53
	3	3	21.80	22.08	20.50
	6	0	20.65	21.02	19.52

Band / Channel Bandwidth			LTE Band 5 / CB: 3MHz		
Channel			20415	20525	20635
Frequency (MHz)			825.5	836.5	847.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	23.78	23.87	23.68
	1	8	23.75	23.92	23.15
	1	14	23.65	23.87	23.21
	8	0	22.89	22.88	22.38
	8	4	22.86	22.97	22.24
	8	7	22.79	22.93	22.17
	15	0	22.81	22.96	22.25
16QAM	1	0	23.15	23.16	22.83
	1	8	23.09	23.26	22.39
	1	14	23.02	23.18	22.43
	8	0	21.92	21.96	21.57
	8	4	21.91	22.05	21.34
	8	7	21.85	21.98	21.31
	15	0	21.87	21.97	21.40
64QAM	1	0	21.72	22.07	21.00
	1	8	21.96	22.15	20.63
	1	14	21.86	21.95	20.50
	8	0	20.64	20.96	19.81
	8	4	20.81	21.05	19.54
	8	7	20.86	21.00	19.50
	15	0	20.76	21.01	19.62

Band / Channel Bandwidth			LTE Band 5 / CB: 5MHz		
Channel			20425	20525	20625
Frequency (MHz)			826.5	836.5	846.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	23.89	23.88	23.91
	1	12	23.76	23.92	23.69
	1	24	23.78	23.91	23.31
	12	0	22.93	22.97	23.10
	12	7	22.88	23.00	22.77
	12	13	22.86	22.96	22.35
	25	0	22.86	23.04	22.81
16QAM	1	0	23.21	23.19	23.32
	1	12	23.11	23.21	23.12
	1	24	23.10	23.23	22.72
	12	0	21.97	21.98	22.12
	12	7	21.93	22.02	21.96
	12	13	21.87	21.98	21.52
	25	0	21.92	21.99	22.00
64QAM	1	0	21.78	22.13	21.81
	1	12	21.99	22.13	21.27
	1	24	22.06	21.76	20.68
	12	0	20.85	21.03	20.81
	12	7	20.91	21.04	20.22
	12	13	20.90	21.00	19.63
	25	0	20.76	21.05	20.17

Band / Channel Bandwidth			LTE Band 5 / CB: 10MHz		
Channel			20450	20525	20600
Frequency (MHz)			829	836.5	844
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	23.76	23.85	23.98
	1	25	23.71	23.83	23.97
	1	49	23.86	23.91	23.27
	25	0	22.84	22.98	22.99
	25	12	22.92	23.00	23.06
	25	25	22.97	23.07	23.06
	50	0	22.94	23.04	23.11
16QAM	1	0	23.11	23.22	23.25
	1	25	23.10	23.24	23.35
	1	49	23.19	23.30	22.49
	25	0	21.84	21.95	22.01
	25	12	21.95	21.95	22.07
	25	25	21.93	22.10	22.04
	50	0	21.92	22.02	22.06
64QAM	1	0	21.96	22.03	21.82
	1	25	22.02	22.13	21.93
	1	49	22.13	21.54	20.59
	25	0	20.89	21.00	20.72
	25	12	20.94	21.04	20.93
	25	25	21.00	20.93	20.41
	50	0	20.97	21.10	20.37

3.1.5 Test Result of Effective Radiated Power (dBm)

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
850	-	-	-	-
GPRS	31.15	1.303	21.00	0.12589

Result

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
850_GPRS_200kHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
824.2MHz_Slots 1	Pass	-8.00	22.90	20.75	0.11885	7	30.90	1.230	Inf	30.9
836.4MHz_Slots 1	Pass	-8.00	23.13	20.98	0.12531	7	31.13	1.297	Inf	31.13
848.8MHz_Slots 1	Pass	-8.00	23.15	21.00	0.12589	7	31.15	1.303	Inf	31.15

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

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 5	-	-	-	-
WCDMA_5MHz_Nss1_1TX	23.20	0.209	13.05	0.02018

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_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.4MHz	Pass	-8.00	14.94	12.79	0.01901	7	22.94	0.197	Inf	22.94
836.4MHz	Pass	-8.00	15.04	12.89	0.01945	7	23.04	0.201	Inf	23.04
846.6MHz	Pass	-8.00	15.20	13.05	0.02018	7	23.20	0.209	Inf	23.2

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

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 5	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	23.96	0.249	13.81	0.02404
LTE_1.4MHz_Nss1,16QAM_1TX	23.27	0.212	13.12	0.02051
LTE_1.4MHz_Nss1,64QAM_1TX	22.19	0.166	12.04	0.01600
LTE_3MHz_Nss1,QPSK_1TX	23.92	0.247	13.77	0.02382
LTE_3MHz_Nss1,16QAM_1TX	23.26	0.212	13.11	0.02046
LTE_3MHz_Nss1,64QAM_1TX	22.15	0.164	12.00	0.01585
LTE_5MHz_Nss1,QPSK_1TX	23.92	0.247	13.77	0.02382
LTE_5MHz_Nss1,16QAM_1TX	23.32	0.215	13.17	0.02075
LTE_5MHz_Nss1,64QAM_1TX	22.13	0.163	11.98	0.01578
LTE_10MHz_Nss1,QPSK_1TX	23.98	0.250	13.83	0.02415
LTE_10MHz_Nss1,16QAM_1TX	23.35	0.216	13.20	0.02089
LTE_10MHz_Nss1,64QAM_1TX	22.13	0.163	11.98	0.01578

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	-8.00	15.76	13.61	0.02296	7	23.76	0.238	Inf	23.76
824.7MHz_QPSK_RB 1,#RB 3	Pass	-8.00	15.81	13.66	0.02323	7	23.81	0.240	Inf	23.81
824.7MHz_QPSK_RB 1,#RB 5	Pass	-8.00	15.69	13.54	0.02259	7	23.69	0.234	Inf	23.69
824.7MHz_QPSK_RB 3,#RB 0	Pass	-8.00	15.81	13.66	0.02323	7	23.81	0.240	Inf	23.81
824.7MHz_QPSK_RB 3,#RB 1	Pass	-8.00	15.83	13.68	0.02333	7	23.83	0.242	Inf	23.83
824.7MHz_QPSK_RB 3,#RB 3	Pass	-8.00	15.77	13.62	0.02301	7	23.77	0.238	Inf	23.77
824.7MHz_QPSK_RB 6,#RB 0	Pass	-8.00	14.85	12.70	0.01862	7	22.85	0.193	Inf	22.85
836.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.85	13.70	0.02344	7	23.85	0.243	Inf	23.85
836.5MHz_QPSK_RB 1,#RB 3	Pass	-8.00	15.96	13.81	0.02404	7	23.96	0.249	Inf	23.96
836.5MHz_QPSK_RB 1,#RB 5	Pass	-8.00	15.86	13.71	0.02350	7	23.86	0.243	Inf	23.86
836.5MHz_QPSK_RB 3,#RB 0	Pass	-8.00	15.81	13.66	0.02323	7	23.81	0.240	Inf	23.81
836.5MHz_QPSK_RB 3,#RB 1	Pass	-8.00	15.89	13.74	0.02366	7	23.89	0.245	Inf	23.89
836.5MHz_QPSK_RB 3,#RB 3	Pass	-8.00	15.88	13.73	0.02360	7	23.88	0.244	Inf	23.88
836.5MHz_QPSK_RB 6,#RB 0	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
848.3MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.08	12.93	0.01963	7	23.08	0.203	Inf	23.08
848.3MHz_QPSK_RB 1,#RB 3	Pass	-8.00	15.07	12.92	0.01959	7	23.07	0.203	Inf	23.07
848.3MHz_QPSK_RB 1,#RB 5	Pass	-8.00	15.10	12.95	0.01972	7	23.10	0.204	Inf	23.1
848.3MHz_QPSK_RB 3,#RB 0	Pass	-8.00	15.15	13.00	0.01995	7	23.15	0.207	Inf	23.15
848.3MHz_QPSK_RB 3,#RB 1	Pass	-8.00	15.16	13.01	0.02000	7	23.16	0.207	Inf	23.16
848.3MHz_QPSK_RB 3,#RB 3	Pass	-8.00	15.29	13.14	0.02061	7	23.29	0.213	Inf	23.29
848.3MHz_QPSK_RB 6,#RB 0	Pass	-8.00	14.24	12.09	0.01618	7	22.24	0.167	Inf	22.24
824.7MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.09	12.94	0.01968	7	23.09	0.204	Inf	23.09
824.7MHz_16QAM_RB 1,#RB 3	Pass	-8.00	15.13	12.98	0.01986	7	23.13	0.206	Inf	23.13
824.7MHz_16QAM_RB 1,#RB 5	Pass	-8.00	15.02	12.87	0.01936	7	23.02	0.200	Inf	23.02
824.7MHz_16QAM_RB 3,#RB 0	Pass	-8.00	14.87	12.72	0.01871	7	22.87	0.194	Inf	22.87
824.7MHz_16QAM_RB 3,#RB 1	Pass	-8.00	14.91	12.76	0.01888	7	22.91	0.195	Inf	22.91
824.7MHz_16QAM_RB 3,#RB 3	Pass	-8.00	14.84	12.69	0.01858	7	22.84	0.192	Inf	22.84
824.7MHz_16QAM_RB 6,#RB 0	Pass	-8.00	13.92	11.77	0.01503	7	21.92	0.156	Inf	21.92
836.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.18	13.03	0.02009	7	23.18	0.208	Inf	23.18
836.5MHz_16QAM_RB 1,#RB 3	Pass	-8.00	15.27	13.12	0.02051	7	23.27	0.212	Inf	23.27
836.5MHz_16QAM_RB 1,#RB 5	Pass	-8.00	15.19	13.04	0.02014	7	23.19	0.208	Inf	23.19
836.5MHz_16QAM_RB 3,#RB 0	Pass	-8.00	14.95	12.80	0.01905	7	22.95	0.197	Inf	22.95
836.5MHz_16QAM_RB 3,#RB 1	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
836.5MHz_16QAM_RB 3,#RB 3	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
836.5MHz_16QAM_RB 6,#RB 0	Pass	-8.00	14.05	11.90	0.01549	7	22.05	0.160	Inf	22.05
848.3MHz_16QAM_RB 1,#RB 0	Pass	-8.00	14.34	12.19	0.01656	7	22.34	0.171	Inf	22.34

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	-8.00	14.50	12.35	0.01718	7	22.50	0.178	Inf	22.5
848.3MHz_16QAM_RB 1,#RB 5	Pass	-8.00	14.50	12.35	0.01718	7	22.50	0.178	Inf	22.5
848.3MHz_16QAM_RB 3,#RB 0	Pass	-8.00	14.28	12.13	0.01633	7	22.28	0.169	Inf	22.28
848.3MHz_16QAM_RB 3,#RB 1	Pass	-8.00	14.30	12.15	0.01641	7	22.30	0.170	Inf	22.3
848.3MHz_16QAM_RB 3,#RB 3	Pass	-8.00	14.37	12.22	0.01667	7	22.37	0.173	Inf	22.37
848.3MHz_16QAM_RB 6,#RB 0	Pass	-8.00	13.40	11.25	0.01334	7	21.40	0.138	Inf	21.4
824.7MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.79	11.64	0.01459	7	21.79	0.151	Inf	21.79
824.7MHz_64QAM_RB 1,#RB 3	Pass	-8.00	13.85	11.70	0.01479	7	21.85	0.153	Inf	21.85
824.7MHz_64QAM_RB 1,#RB 5	Pass	-8.00	13.79	11.64	0.01459	7	21.79	0.151	Inf	21.79
824.7MHz_64QAM_RB 3,#RB 0	Pass	-8.00	13.79	11.64	0.01459	7	21.79	0.151	Inf	21.79
824.7MHz_64QAM_RB 3,#RB 1	Pass	-8.00	13.84	11.69	0.01476	7	21.84	0.153	Inf	21.84
824.7MHz_64QAM_RB 3,#RB 3	Pass	-8.00	13.80	11.65	0.01462	7	21.80	0.151	Inf	21.8
824.7MHz_64QAM_RB 6,#RB 0	Pass	-8.00	12.65	10.50	0.01122	7	20.65	0.116	Inf	20.65
836.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	14.06	11.91	0.01552	7	22.06	0.161	Inf	22.06
836.5MHz_64QAM_RB 1,#RB 3	Pass	-8.00	14.19	12.04	0.01600	7	22.19	0.166	Inf	22.19
836.5MHz_64QAM_RB 1,#RB 5	Pass	-8.00	14.11	11.96	0.01570	7	22.11	0.163	Inf	22.11
836.5MHz_64QAM_RB 3,#RB 0	Pass	-8.00	14.08	11.93	0.01560	7	22.08	0.161	Inf	22.08
836.5MHz_64QAM_RB 3,#RB 1	Pass	-8.00	14.09	11.94	0.01563	7	22.09	0.162	Inf	22.09
836.5MHz_64QAM_RB 3,#RB 3	Pass	-8.00	14.08	11.93	0.01560	7	22.08	0.161	Inf	22.08
836.5MHz_64QAM_RB 6,#RB 0	Pass	-8.00	13.02	10.87	0.01222	7	21.02	0.126	Inf	21.02
848.3MHz_64QAM_RB 1,#RB 0	Pass	-8.00	12.53	10.38	0.01091	7	20.53	0.113	Inf	20.53
848.3MHz_64QAM_RB 1,#RB 3	Pass	-8.00	12.51	10.36	0.01086	7	20.51	0.112	Inf	20.51
848.3MHz_64QAM_RB 1,#RB 5	Pass	-8.00	12.52	10.37	0.01089	7	20.52	0.113	Inf	20.52
848.3MHz_64QAM_RB 3,#RB 0	Pass	-8.00	12.57	10.42	0.01102	7	20.57	0.114	Inf	20.57
848.3MHz_64QAM_RB 3,#RB 1	Pass	-8.00	12.53	10.38	0.01091	7	20.53	0.113	Inf	20.53
848.3MHz_64QAM_RB 3,#RB 3	Pass	-8.00	12.50	10.35	0.01084	7	20.50	0.112	Inf	20.5
848.3MHz_64QAM_RB 6,#RB 0	Pass	-8.00	11.52	9.37	0.00865	7	19.52	0.090	Inf	19.52
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
825.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.78	13.63	0.02307	7	23.78	0.239	Inf	23.78
825.5MHz_QPSK_RB 1,#RB 8	Pass	-8.00	15.75	13.60	0.02291	7	23.75	0.237	Inf	23.75
825.5MHz_QPSK_RB 1,#RB 14	Pass	-8.00	15.65	13.50	0.02239	7	23.65	0.232	Inf	23.65
825.5MHz_QPSK_RB 8,#RB 0	Pass	-8.00	14.89	12.74	0.01879	7	22.89	0.195	Inf	22.89
825.5MHz_QPSK_RB 8,#RB 4	Pass	-8.00	14.86	12.71	0.01866	7	22.86	0.193	Inf	22.86
825.5MHz_QPSK_RB 8,#RB 7	Pass	-8.00	14.79	12.64	0.01837	7	22.79	0.190	Inf	22.79
825.5MHz_QPSK_RB 15,#RB 0	Pass	-8.00	14.81	12.66	0.01845	7	22.81	0.191	Inf	22.81
836.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.87	13.72	0.02355	7	23.87	0.244	Inf	23.87
836.5MHz_QPSK_RB 1,#RB 8	Pass	-8.00	15.92	13.77	0.02382	7	23.92	0.247	Inf	23.92
836.5MHz_QPSK_RB 1,#RB 14	Pass	-8.00	15.87	13.72	0.02355	7	23.87	0.244	Inf	23.87

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_QPSK_RB 8,#RB 0	Pass	-8.00	14.88	12.73	0.01875	7	22.88	0.194	Inf	22.88
836.5MHz_QPSK_RB 8,#RB 4	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
836.5MHz_QPSK_RB 8,#RB 7	Pass	-8.00	14.93	12.78	0.01897	7	22.93	0.196	Inf	22.93
836.5MHz_QPSK_RB 15,#RB 0	Pass	-8.00	14.96	12.81	0.01910	7	22.96	0.198	Inf	22.96
847.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.68	13.53	0.02254	7	23.68	0.233	Inf	23.68
847.5MHz_QPSK_RB 1,#RB 8	Pass	-8.00	15.15	13.00	0.01995	7	23.15	0.207	Inf	23.15
847.5MHz_QPSK_RB 1,#RB 14	Pass	-8.00	15.21	13.06	0.02023	7	23.21	0.209	Inf	23.21
847.5MHz_QPSK_RB 8,#RB 0	Pass	-8.00	14.38	12.23	0.01671	7	22.38	0.173	Inf	22.38
847.5MHz_QPSK_RB 8,#RB 4	Pass	-8.00	14.24	12.09	0.01618	7	22.24	0.167	Inf	22.24
847.5MHz_QPSK_RB 8,#RB 7	Pass	-8.00	14.17	12.02	0.01592	7	22.17	0.165	Inf	22.17
847.5MHz_QPSK_RB 15,#RB 0	Pass	-8.00	14.25	12.10	0.01622	7	22.25	0.168	Inf	22.25
825.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.15	13.00	0.01995	7	23.15	0.207	Inf	23.15
825.5MHz_16QAM_RB 1,#RB 8	Pass	-8.00	15.09	12.94	0.01968	7	23.09	0.204	Inf	23.09
825.5MHz_16QAM_RB 1,#RB 14	Pass	-8.00	15.02	12.87	0.01936	7	23.02	0.200	Inf	23.02
825.5MHz_16QAM_RB 8,#RB 0	Pass	-8.00	13.92	11.77	0.01503	7	21.92	0.156	Inf	21.92
825.5MHz_16QAM_RB 8,#RB 4	Pass	-8.00	13.91	11.76	0.01500	7	21.91	0.155	Inf	21.91
825.5MHz_16QAM_RB 8,#RB 7	Pass	-8.00	13.85	11.70	0.01479	7	21.85	0.153	Inf	21.85
825.5MHz_16QAM_RB 15,#RB 0	Pass	-8.00	13.87	11.72	0.01486	7	21.87	0.154	Inf	21.87
836.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.16	13.01	0.02000	7	23.16	0.207	Inf	23.16
836.5MHz_16QAM_RB 1,#RB 8	Pass	-8.00	15.26	13.11	0.02046	7	23.26	0.212	Inf	23.26
836.5MHz_16QAM_RB 1,#RB 14	Pass	-8.00	15.18	13.03	0.02009	7	23.18	0.208	Inf	23.18
836.5MHz_16QAM_RB 8,#RB 0	Pass	-8.00	13.96	11.81	0.01517	7	21.96	0.157	Inf	21.96
836.5MHz_16QAM_RB 8,#RB 4	Pass	-8.00	14.05	11.90	0.01549	7	22.05	0.160	Inf	22.05
836.5MHz_16QAM_RB 8,#RB 7	Pass	-8.00	13.98	11.83	0.01524	7	21.98	0.158	Inf	21.98
836.5MHz_16QAM_RB 15,#RB 0	Pass	-8.00	13.97	11.82	0.01521	7	21.97	0.157	Inf	21.97
847.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	14.83	12.68	0.01854	7	22.83	0.192	Inf	22.83
847.5MHz_16QAM_RB 1,#RB 8	Pass	-8.00	14.39	12.24	0.01675	7	22.39	0.173	Inf	22.39
847.5MHz_16QAM_RB 1,#RB 14	Pass	-8.00	14.43	12.28	0.01690	7	22.43	0.175	Inf	22.43
847.5MHz_16QAM_RB 8,#RB 0	Pass	-8.00	13.57	11.42	0.01387	7	21.57	0.144	Inf	21.57
847.5MHz_16QAM_RB 8,#RB 4	Pass	-8.00	13.34	11.19	0.01315	7	21.34	0.136	Inf	21.34
847.5MHz_16QAM_RB 8,#RB 7	Pass	-8.00	13.31	11.16	0.01306	7	21.31	0.135	Inf	21.31
847.5MHz_16QAM_RB 15,#RB 0	Pass	-8.00	13.40	11.25	0.01334	7	21.40	0.138	Inf	21.4
825.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.72	11.57	0.01435	7	21.72	0.149	Inf	21.72
825.5MHz_64QAM_RB 1,#RB 8	Pass	-8.00	13.96	11.81	0.01517	7	21.96	0.157	Inf	21.96
825.5MHz_64QAM_RB 1,#RB 14	Pass	-8.00	13.86	11.71	0.01483	7	21.86	0.153	Inf	21.86
825.5MHz_64QAM_RB 8,#RB 0	Pass	-8.00	12.64	10.49	0.01119	7	20.64	0.116	Inf	20.64
825.5MHz_64QAM_RB 8,#RB 4	Pass	-8.00	12.81	10.66	0.01164	7	20.81	0.121	Inf	20.81
825.5MHz_64QAM_RB 8,#RB 7	Pass	-8.00	12.86	10.71	0.01178	7	20.86	0.122	Inf	20.86

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
825.5MHz_64QAM_RB 15,#RB 0	Pass	-8.00	12.76	10.61	0.01151	7	20.76	0.119	Inf	20.76
836.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	14.07	11.92	0.01556	7	22.07	0.161	Inf	22.07
836.5MHz_64QAM_RB 1,#RB 8	Pass	-8.00	14.15	12.00	0.01585	7	22.15	0.164	Inf	22.15
836.5MHz_64QAM_RB 1,#RB 14	Pass	-8.00	13.95	11.80	0.01514	7	21.95	0.157	Inf	21.95
836.5MHz_64QAM_RB 8,#RB 0	Pass	-8.00	12.96	10.81	0.01205	7	20.96	0.125	Inf	20.96
836.5MHz_64QAM_RB 8,#RB 4	Pass	-8.00	13.05	10.90	0.01230	7	21.05	0.127	Inf	21.05
836.5MHz_64QAM_RB 8,#RB 7	Pass	-8.00	13.00	10.85	0.01216	7	21.00	0.126	Inf	21
836.5MHz_64QAM_RB 15,#RB 0	Pass	-8.00	13.01	10.86	0.01219	7	21.01	0.126	Inf	21.01
847.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.00	10.85	0.01216	7	21.00	0.126	Inf	21
847.5MHz_64QAM_RB 1,#RB 8	Pass	-8.00	12.63	10.48	0.01117	7	20.63	0.116	Inf	20.63
847.5MHz_64QAM_RB 1,#RB 14	Pass	-8.00	12.50	10.35	0.01084	7	20.50	0.112	Inf	20.5
847.5MHz_64QAM_RB 8,#RB 0	Pass	-8.00	11.81	9.66	0.00925	7	19.81	0.096	Inf	19.81
847.5MHz_64QAM_RB 8,#RB 4	Pass	-8.00	11.54	9.39	0.00869	7	19.54	0.090	Inf	19.54
847.5MHz_64QAM_RB 8,#RB 7	Pass	-8.00	11.50	9.35	0.00861	7	19.50	0.089	Inf	19.5
847.5MHz_64QAM_RB 15,#RB 0	Pass	-8.00	11.62	9.47	0.00885	7	19.62	0.092	Inf	19.62
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.89	13.74	0.02366	7	23.89	0.245	Inf	23.89
826.5MHz_QPSK_RB 1,#RB 12	Pass	-8.00	15.76	13.61	0.02296	7	23.76	0.238	Inf	23.76
826.5MHz_QPSK_RB 1,#RB 24	Pass	-8.00	15.78	13.63	0.02307	7	23.78	0.239	Inf	23.78
826.5MHz_QPSK_RB 12,#RB 0	Pass	-8.00	14.93	12.78	0.01897	7	22.93	0.196	Inf	22.93
826.5MHz_QPSK_RB 12,#RB 7	Pass	-8.00	14.88	12.73	0.01875	7	22.88	0.194	Inf	22.88
826.5MHz_QPSK_RB 12,#RB 13	Pass	-8.00	14.86	12.71	0.01866	7	22.86	0.193	Inf	22.86
826.5MHz_QPSK_RB 25,#RB 0	Pass	-8.00	14.86	12.71	0.01866	7	22.86	0.193	Inf	22.86
836.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.88	13.73	0.02360	7	23.88	0.244	Inf	23.88
836.5MHz_QPSK_RB 1,#RB 12	Pass	-8.00	15.92	13.77	0.02382	7	23.92	0.247	Inf	23.92
836.5MHz_QPSK_RB 1,#RB 24	Pass	-8.00	15.91	13.76	0.02377	7	23.91	0.246	Inf	23.91
836.5MHz_QPSK_RB 12,#RB 0	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
836.5MHz_QPSK_RB 12,#RB 7	Pass	-8.00	15.00	12.85	0.01928	7	23.00	0.200	Inf	23
836.5MHz_QPSK_RB 12,#RB 13	Pass	-8.00	14.96	12.81	0.01910	7	22.96	0.198	Inf	22.96
836.5MHz_QPSK_RB 25,#RB 0	Pass	-8.00	15.04	12.89	0.01945	7	23.04	0.201	Inf	23.04
846.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.91	13.76	0.02377	7	23.91	0.246	Inf	23.91
846.5MHz_QPSK_RB 1,#RB 12	Pass	-8.00	15.69	13.54	0.02259	7	23.69	0.234	Inf	23.69
846.5MHz_QPSK_RB 1,#RB 24	Pass	-8.00	15.31	13.16	0.02070	7	23.31	0.214	Inf	23.31
846.5MHz_QPSK_RB 12,#RB 0	Pass	-8.00	15.10	12.95	0.01972	7	23.10	0.204	Inf	23.1
846.5MHz_QPSK_RB 12,#RB 7	Pass	-8.00	14.77	12.62	0.01828	7	22.77	0.189	Inf	22.77
846.5MHz_QPSK_RB 12,#RB 13	Pass	-8.00	14.35	12.20	0.01660	7	22.35	0.172	Inf	22.35
846.5MHz_QPSK_RB 25,#RB 0	Pass	-8.00	14.81	12.66	0.01845	7	22.81	0.191	Inf	22.81
826.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.21	13.06	0.02023	7	23.21	0.209	Inf	23.21

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 1,#RB 12	Pass	-8.00	15.11	12.96	0.01977	7	23.11	0.205	Inf	23.11
826.5MHz_16QAM_RB 1,#RB 24	Pass	-8.00	15.10	12.95	0.01972	7	23.10	0.204	Inf	23.1
826.5MHz_16QAM_RB 12,#RB 0	Pass	-8.00	13.97	11.82	0.01521	7	21.97	0.157	Inf	21.97
826.5MHz_16QAM_RB 12,#RB 7	Pass	-8.00	13.93	11.78	0.01507	7	21.93	0.156	Inf	21.93
826.5MHz_16QAM_RB 12,#RB 13	Pass	-8.00	13.87	11.72	0.01486	7	21.87	0.154	Inf	21.87
826.5MHz_16QAM_RB 25,#RB 0	Pass	-8.00	13.92	11.77	0.01503	7	21.92	0.156	Inf	21.92
836.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.19	13.04	0.02014	7	23.19	0.208	Inf	23.19
836.5MHz_16QAM_RB 1,#RB 12	Pass	-8.00	15.21	13.06	0.02023	7	23.21	0.209	Inf	23.21
836.5MHz_16QAM_RB 1,#RB 24	Pass	-8.00	15.23	13.08	0.02032	7	23.23	0.210	Inf	23.23
836.5MHz_16QAM_RB 12,#RB 0	Pass	-8.00	13.98	11.83	0.01524	7	21.98	0.158	Inf	21.98
836.5MHz_16QAM_RB 12,#RB 7	Pass	-8.00	14.02	11.87	0.01538	7	22.02	0.159	Inf	22.02
836.5MHz_16QAM_RB 12,#RB 13	Pass	-8.00	13.98	11.83	0.01524	7	21.98	0.158	Inf	21.98
836.5MHz_16QAM_RB 25,#RB 0	Pass	-8.00	13.99	11.84	0.01528	7	21.99	0.158	Inf	21.99
846.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.32	13.17	0.02075	7	23.32	0.215	Inf	23.32
846.5MHz_16QAM_RB 1,#RB 12	Pass	-8.00	15.12	12.97	0.01982	7	23.12	0.205	Inf	23.12
846.5MHz_16QAM_RB 1,#RB 24	Pass	-8.00	14.72	12.57	0.01807	7	22.72	0.187	Inf	22.72
846.5MHz_16QAM_RB 12,#RB 0	Pass	-8.00	14.12	11.97	0.01574	7	22.12	0.163	Inf	22.12
846.5MHz_16QAM_RB 12,#RB 7	Pass	-8.00	13.96	11.81	0.01517	7	21.96	0.157	Inf	21.96
846.5MHz_16QAM_RB 12,#RB 13	Pass	-8.00	13.52	11.37	0.01371	7	21.52	0.142	Inf	21.52
846.5MHz_16QAM_RB 25,#RB 0	Pass	-8.00	14.00	11.85	0.01531	7	22.00	0.158	Inf	22
826.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.78	11.63	0.01455	7	21.78	0.151	Inf	21.78
826.5MHz_64QAM_RB 1,#RB 12	Pass	-8.00	13.99	11.84	0.01528	7	21.99	0.158	Inf	21.99
826.5MHz_64QAM_RB 1,#RB 24	Pass	-8.00	14.06	11.91	0.01552	7	22.06	0.161	Inf	22.06
826.5MHz_64QAM_RB 12,#RB 0	Pass	-8.00	12.85	10.70	0.01175	7	20.85	0.122	Inf	20.85
826.5MHz_64QAM_RB 12,#RB 7	Pass	-8.00	12.91	10.76	0.01191	7	20.91	0.123	Inf	20.91
826.5MHz_64QAM_RB 12,#RB 13	Pass	-8.00	12.90	10.75	0.01189	7	20.90	0.123	Inf	20.9
826.5MHz_64QAM_RB 25,#RB 0	Pass	-8.00	12.76	10.61	0.01151	7	20.76	0.119	Inf	20.76
836.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	14.13	11.98	0.01578	7	22.13	0.163	Inf	22.13
836.5MHz_64QAM_RB 1,#RB 12	Pass	-8.00	14.13	11.98	0.01578	7	22.13	0.163	Inf	22.13
836.5MHz_64QAM_RB 1,#RB 24	Pass	-8.00	13.76	11.61	0.01449	7	21.76	0.150	Inf	21.76
836.5MHz_64QAM_RB 12,#RB 0	Pass	-8.00	13.03	10.88	0.01225	7	21.03	0.127	Inf	21.03
836.5MHz_64QAM_RB 12,#RB 7	Pass	-8.00	13.04	10.89	0.01227	7	21.04	0.127	Inf	21.04
836.5MHz_64QAM_RB 12,#RB 13	Pass	-8.00	13.00	10.85	0.01216	7	21.00	0.126	Inf	21
836.5MHz_64QAM_RB 25,#RB 0	Pass	-8.00	13.05	10.90	0.01230	7	21.05	0.127	Inf	21.05
846.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.81	11.66	0.01466	7	21.81	0.152	Inf	21.81
846.5MHz_64QAM_RB 1,#RB 12	Pass	-8.00	13.27	11.12	0.01294	7	21.27	0.134	Inf	21.27
846.5MHz_64QAM_RB 1,#RB 24	Pass	-8.00	12.68	10.53	0.01130	7	20.68	0.117	Inf	20.68
846.5MHz_64QAM_RB 12,#RB 0	Pass	-8.00	12.81	10.66	0.01164	7	20.81	0.121	Inf	20.81

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
846.5MHz_64QAM_RB 12,#RB 7	Pass	-8.00	12.22	10.07	0.01016	7	20.22	0.105	Inf	20.22
846.5MHz_64QAM_RB 12,#RB 13	Pass	-8.00	11.63	9.48	0.00887	7	19.63	0.092	Inf	19.63
846.5MHz_64QAM_RB 25,#RB 0	Pass	-8.00	12.17	10.02	0.01005	7	20.17	0.104	Inf	20.17
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
829MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.76	13.61	0.02296	7	23.76	0.238	Inf	23.76
829MHz_QPSK_RB 1,#RB 25	Pass	-8.00	15.71	13.56	0.02270	7	23.71	0.235	Inf	23.71
829MHz_QPSK_RB 1,#RB 49	Pass	-8.00	15.86	13.71	0.02350	7	23.86	0.243	Inf	23.86
829MHz_QPSK_RB 25,#RB 0	Pass	-8.00	14.84	12.69	0.01858	7	22.84	0.192	Inf	22.84
829MHz_QPSK_RB 25,#RB 12	Pass	-8.00	14.92	12.77	0.01892	7	22.92	0.196	Inf	22.92
829MHz_QPSK_RB 25,#RB 25	Pass	-8.00	14.97	12.82	0.01914	7	22.97	0.198	Inf	22.97
829MHz_QPSK_RB 50,#RB 0	Pass	-8.00	14.94	12.79	0.01901	7	22.94	0.197	Inf	22.94
836.5MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.85	13.70	0.02344	7	23.85	0.243	Inf	23.85
836.5MHz_QPSK_RB 1,#RB 25	Pass	-8.00	15.83	13.68	0.02333	7	23.83	0.242	Inf	23.83
836.5MHz_QPSK_RB 1,#RB 49	Pass	-8.00	15.91	13.76	0.02377	7	23.91	0.246	Inf	23.91
836.5MHz_QPSK_RB 25,#RB 0	Pass	-8.00	14.98	12.83	0.01919	7	22.98	0.199	Inf	22.98
836.5MHz_QPSK_RB 25,#RB 12	Pass	-8.00	15.00	12.85	0.01928	7	23.00	0.200	Inf	23
836.5MHz_QPSK_RB 25,#RB 25	Pass	-8.00	15.07	12.92	0.01959	7	23.07	0.203	Inf	23.07
836.5MHz_QPSK_RB 50,#RB 0	Pass	-8.00	15.04	12.89	0.01945	7	23.04	0.201	Inf	23.04
844MHz_QPSK_RB 1,#RB 0	Pass	-8.00	15.98	13.83	0.02415	7	23.98	0.250	Inf	23.98
844MHz_QPSK_RB 1,#RB 25	Pass	-8.00	15.97	13.82	0.02410	7	23.97	0.249	Inf	23.97
844MHz_QPSK_RB 1,#RB 49	Pass	-8.00	15.27	13.12	0.02051	7	23.27	0.212	Inf	23.27
844MHz_QPSK_RB 25,#RB 0	Pass	-8.00	14.99	12.84	0.01923	7	22.99	0.199	Inf	22.99
844MHz_QPSK_RB 25,#RB 12	Pass	-8.00	15.06	12.91	0.01954	7	23.06	0.202	Inf	23.06
844MHz_QPSK_RB 25,#RB 25	Pass	-8.00	15.06	12.91	0.01954	7	23.06	0.202	Inf	23.06
844MHz_QPSK_RB 50,#RB 0	Pass	-8.00	15.11	12.96	0.01977	7	23.11	0.205	Inf	23.11
829MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.11	12.96	0.01977	7	23.11	0.205	Inf	23.11
829MHz_16QAM_RB 1,#RB 25	Pass	-8.00	15.10	12.95	0.01972	7	23.10	0.204	Inf	23.1
829MHz_16QAM_RB 1,#RB 49	Pass	-8.00	15.19	13.04	0.02014	7	23.19	0.208	Inf	23.19
829MHz_16QAM_RB 25,#RB 0	Pass	-8.00	13.84	11.69	0.01476	7	21.84	0.153	Inf	21.84
829MHz_16QAM_RB 25,#RB 12	Pass	-8.00	13.95	11.80	0.01514	7	21.95	0.157	Inf	21.95
829MHz_16QAM_RB 25,#RB 25	Pass	-8.00	13.93	11.78	0.01507	7	21.93	0.156	Inf	21.93
829MHz_16QAM_RB 50,#RB 0	Pass	-8.00	13.92	11.77	0.01503	7	21.92	0.156	Inf	21.92
836.5MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.22	13.07	0.02028	7	23.22	0.210	Inf	23.22
836.5MHz_16QAM_RB 1,#RB 25	Pass	-8.00	15.24	13.09	0.02037	7	23.24	0.211	Inf	23.24
836.5MHz_16QAM_RB 1,#RB 49	Pass	-8.00	15.30	13.15	0.02065	7	23.30	0.214	Inf	23.3
836.5MHz_16QAM_RB 25,#RB 0	Pass	-8.00	13.95	11.80	0.01514	7	21.95	0.157	Inf	21.95
836.5MHz_16QAM_RB 25,#RB 12	Pass	-8.00	13.95	11.80	0.01514	7	21.95	0.157	Inf	21.95
836.5MHz_16QAM_RB 25,#RB 25	Pass	-8.00	14.10	11.95	0.01567	7	22.10	0.162	Inf	22.1

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 50,#RB 0	Pass	-8.00	14.02	11.87	0.01538	7	22.02	0.159	Inf	22.02
844MHz_16QAM_RB 1,#RB 0	Pass	-8.00	15.25	13.10	0.02042	7	23.25	0.211	Inf	23.25
844MHz_16QAM_RB 1,#RB 25	Pass	-8.00	15.35	13.20	0.02089	7	23.35	0.216	Inf	23.35
844MHz_16QAM_RB 1,#RB 49	Pass	-8.00	14.49	12.34	0.01714	7	22.49	0.177	Inf	22.49
844MHz_16QAM_RB 25,#RB 0	Pass	-8.00	14.01	11.86	0.01535	7	22.01	0.159	Inf	22.01
844MHz_16QAM_RB 25,#RB 12	Pass	-8.00	14.07	11.92	0.01556	7	22.07	0.161	Inf	22.07
844MHz_16QAM_RB 25,#RB 25	Pass	-8.00	14.04	11.89	0.01545	7	22.04	0.160	Inf	22.04
844MHz_16QAM_RB 50,#RB 0	Pass	-8.00	14.06	11.91	0.01552	7	22.06	0.161	Inf	22.06
829MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.96	11.81	0.01517	7	21.96	0.157	Inf	21.96
829MHz_64QAM_RB 1,#RB 25	Pass	-8.00	14.02	11.87	0.01538	7	22.02	0.159	Inf	22.02
829MHz_64QAM_RB 1,#RB 49	Pass	-8.00	14.13	11.98	0.01578	7	22.13	0.163	Inf	22.13
829MHz_64QAM_RB 25,#RB 0	Pass	-8.00	12.89	10.74	0.01186	7	20.89	0.123	Inf	20.89
829MHz_64QAM_RB 25,#RB 12	Pass	-8.00	12.94	10.79	0.01199	7	20.94	0.124	Inf	20.94
829MHz_64QAM_RB 25,#RB 25	Pass	-8.00	13.00	10.85	0.01216	7	21.00	0.126	Inf	21
829MHz_64QAM_RB 50,#RB 0	Pass	-8.00	12.97	10.82	0.01208	7	20.97	0.125	Inf	20.97
836.5MHz_64QAM_RB 1,#RB 0	Pass	-8.00	14.03	11.88	0.01542	7	22.03	0.160	Inf	22.03
836.5MHz_64QAM_RB 1,#RB 25	Pass	-8.00	14.13	11.98	0.01578	7	22.13	0.163	Inf	22.13
836.5MHz_64QAM_RB 1,#RB 49	Pass	-8.00	13.54	11.39	0.01377	7	21.54	0.143	Inf	21.54
836.5MHz_64QAM_RB 25,#RB 0	Pass	-8.00	13.00	10.85	0.01216	7	21.00	0.126	Inf	21
836.5MHz_64QAM_RB 25,#RB 12	Pass	-8.00	13.04	10.89	0.01227	7	21.04	0.127	Inf	21.04
836.5MHz_64QAM_RB 25,#RB 25	Pass	-8.00	12.93	10.78	0.01197	7	20.93	0.124	Inf	20.93
836.5MHz_64QAM_RB 50,#RB 0	Pass	-8.00	13.10	10.95	0.01245	7	21.10	0.129	Inf	21.1
844MHz_64QAM_RB 1,#RB 0	Pass	-8.00	13.82	11.67	0.01469	7	21.82	0.152	Inf	21.82
844MHz_64QAM_RB 1,#RB 25	Pass	-8.00	13.93	11.78	0.01507	7	21.93	0.156	Inf	21.93
844MHz_64QAM_RB 1,#RB 49	Pass	-8.00	12.59	10.44	0.01107	7	20.59	0.115	Inf	20.59
844MHz_64QAM_RB 25,#RB 0	Pass	-8.00	12.72	10.57	0.01140	7	20.72	0.118	Inf	20.72
844MHz_64QAM_RB 25,#RB 12	Pass	-8.00	12.93	10.78	0.01197	7	20.93	0.124	Inf	20.93
844MHz_64QAM_RB 25,#RB 25	Pass	-8.00	12.41	10.26	0.01062	7	20.41	0.110	Inf	20.41
844MHz_64QAM_RB 50,#RB 0	Pass	-8.00	12.37	10.22	0.01052	7	20.37	0.109	Inf	20.37

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

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

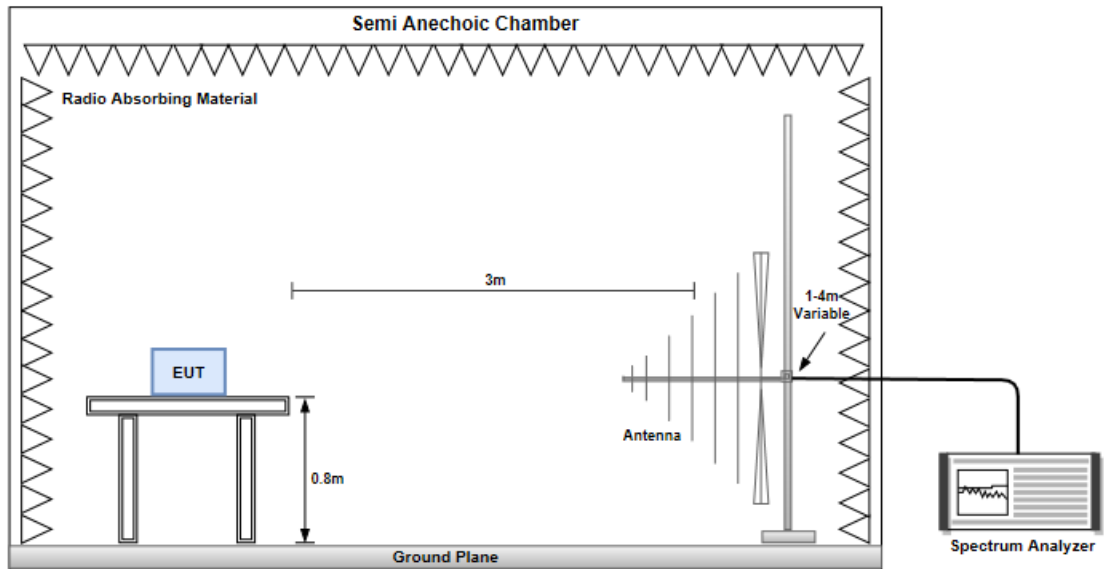
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

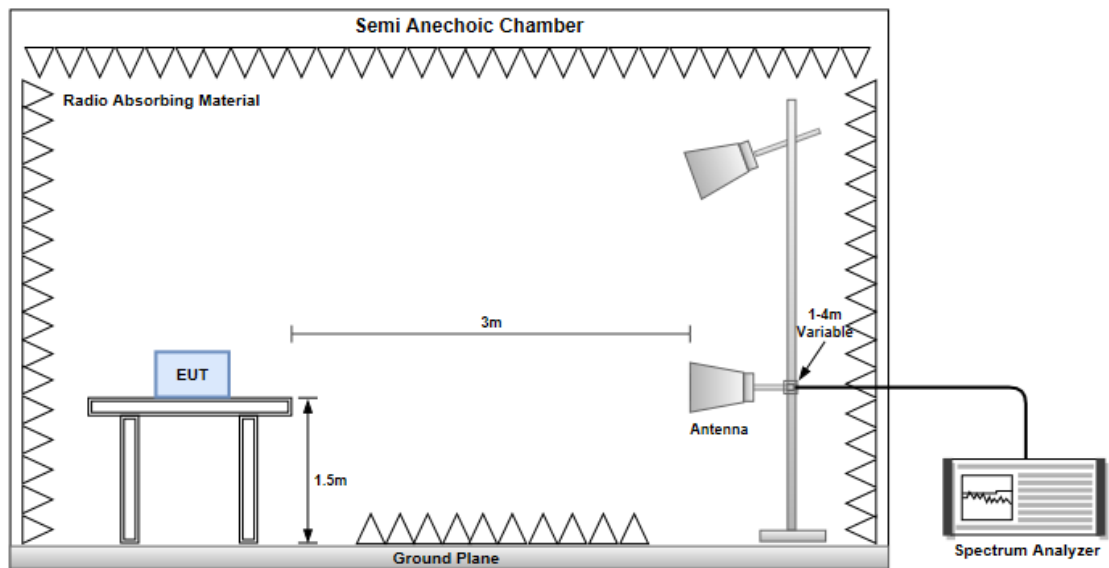
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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 below 1GHz

Mode	GPRS 1 Tx slot, Channel : 251						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
70.74	H	-73.32	-13.00	-60.32	-69.11	-60.86	-10.31
90.14	H	-71.55	-13.00	-58.55	-67.33	-64.49	-4.91
98.87	H	-73.29	-13.00	-60.29	-69.40	-66.13	-5.01
114.39	H	-72.08	-13.00	-59.08	-67.35	-64.16	-5.77
268.62	H	-68.99	-13.00	-55.99	-64.48	-65.58	-1.26
411.21	H	-72.67	-13.00	-59.67	-73.08	-69.27	-1.25
30.00	V	-70.24	-13.00	-57.24	-63.05	-48.64	-19.45
70.74	V	-59.33	-13.00	-46.33	-54.67	-46.87	-10.31
90.14	V	-67.42	-13.00	-54.42	-62.95	-60.36	-4.91
179.38	V	-72.33	-13.00	-59.33	-71.98	-65.36	-4.82
268.62	V	-68.92	-13.00	-55.92	-68.71	-65.51	-1.26
411.21	V	-72.60	-13.00	-59.60	-73.40	-69.20	-1.25

Mode	WCDMA RMC 12.2Kbps, 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)
30.00	H	-70.71	-13.00	-57.71	-76.69	-49.11	-19.45
48.43	H	-73.10	-13.00	-60.10	-76.09	-54.59	-16.36
90.14	H	-74.23	-13.00	-61.23	-70.01	-67.17	-4.91
98.87	H	-72.68	-13.00	-59.68	-68.79	-65.52	-5.01
155.22	H	-79.55	-13.00	-66.55	-76.67	-70.94	-6.46
439.34	H	-74.45	-13.00	-61.45	-75.25	-71.00	-1.30
46.49	V	-71.82	-13.00	-58.82	-66.95	-53.00	-16.67
70.74	V	-73.74	-13.00	-60.74	-69.08	-61.28	-10.31
90.14	V	-66.80	-13.00	-53.80	-62.33	-59.74	-4.91
98.87	V	-73.63	-13.00	-60.63	-69.39	-66.47	-5.01
240.49	V	-75.15	-13.00	-62.15	-74.54	-71.42	-1.58
454.86	V	-72.87	-13.00	-59.87	-74.42	-69.41	-1.31

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

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)
30.97	H	-69.26	-13.00	-56.26	-75.05	-47.90	-19.21
90.14	H	-69.99	-13.00	-56.99	-65.77	-62.93	-4.91
98.87	H	-73.42	-13.00	-60.42	-69.53	-66.26	-5.01
140.58	H	-76.95	-13.00	-63.95	-74.14	-68.05	-6.75
268.69	H	-73.02	-13.00	-60.02	-68.51	-69.61	-1.26
409.27	H	-74.37	-13.00	-61.37	-74.76	-70.97	-1.25
30.00	V	-73.62	-13.00	-60.62	-66.43	-52.02	-19.45
48.43	V	-71.18	-13.00	-58.18	-66.54	-52.67	-16.36
70.74	V	-73.84	-13.00	-60.84	-69.18	959.31	-1031.00
90.14	V	-66.75	-13.00	-53.75	-62.28	-59.69	-4.91
170.65	V	-69.65	-13.00	-56.65	-69.56	-62.03	-5.47
454.86	V	-72.39	-13.00	-59.39	-73.94	-68.93	-1.31

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)
30.55	H	-69.43	-13.00	-56.43	-75.30	-47.96	-19.32
90.25	H	-69.59	-13.00	-56.59	-65.36	-62.53	-4.91
98.95	H	-73.45	-13.00	-60.45	-69.55	-66.29	-5.01
140.25	H	-76.70	-13.00	-63.70	-73.89	-67.80	-6.75
268.44	H	-72.86	-13.00	-59.86	-68.34	-69.45	-1.26
409.39	H	-74.54	-13.00	-61.54	-74.93	-71.14	-1.25
30.11	V	-73.67	-13.00	-60.67	-66.49	-52.10	-19.42
48.52	V	-71.40	-13.00	-58.40	-66.77	-52.90	-16.35
70.52	V	-73.73	-13.00	-60.73	-69.02	-61.19	-10.39
90.23	V	-66.40	-13.00	-53.40	-61.91	-59.34	-4.91
170.66	V	-69.36	-13.00	-56.36	-69.27	-61.74	-5.47
455.25	V	-72.48	-13.00	-59.48	-74.04	-69.02	-1.31

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

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)
30.88	H	-69.41	-13.00	-56.41	-75.22	-48.02	-19.24
90.23	H	-70.26	-13.00	-57.26	-66.03	-63.20	-4.91
98.41	H	-73.48	-13.00	-60.48	-69.58	-66.33	-5.00
140.32	H	-76.71	-13.00	-63.71	-73.90	-67.81	-6.75
268.44	H	-72.97	-13.00	-59.97	-68.45	-69.56	-1.26
409.33	H	-74.26	-13.00	-61.26	-74.65	-70.86	-1.25
30.05	V	-73.37	-13.00	-60.37	-66.18	-51.78	-19.44
48.45	V	-71.26	-13.00	-58.26	-66.62	-52.75	-16.36
70.78	V	-73.60	-13.00	-60.60	-68.95	-61.15	-10.30
690.23	V	-67.01	-13.00	-54.01	-62.52	-59.95	-4.91
170.42	V	-70.26	-13.00	-57.26	-70.18	-62.62	-5.49
454.58	V	-72.26	-13.00	-59.26	-73.81	-68.80	-1.31

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 0, 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)
30.00	H	-68.59	-13.00	-55.59	-74.57	-46.99	-19.45
32.91	H	-68.78	-13.00	-55.78	-74.20	-47.89	-18.74
90.14	H	-75.09	-13.00	-62.09	-70.87	-68.03	-4.91
156.10	H	-79.28	-13.00	-66.28	-76.37	-70.76	-6.37
357.86	H	-77.12	-13.00	-64.12	-76.97	-73.86	-1.11
484.86	H	-74.56	-13.00	-61.56	-75.54	-71.10	-1.31
30.00	V	-69.71	-13.00	-56.71	-62.52	-48.11	-19.45
33.88	V	-74.08	-13.00	-61.08	-67.20	-53.43	-18.50
90.14	V	-65.19	-13.00	-52.19	-60.72	-58.13	-4.91
101.78	V	-73.83	-13.00	-60.83	-69.89	-66.57	-5.11
105.66	V	-74.00	-13.00	-61.00	-70.48	-66.54	-5.31
159.01	V	-75.87	-13.00	-62.87	-76.06	-67.43	-6.29

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

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode	GPRS 1 Tx slot, Channel : 128						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1648.40	H	-41.11	-13.00	-28.11	-45.25	-44.74	5.78
2472.60	H	-35.59	-13.00	-22.59	-43.29	-39.69	6.25
4121.00	H	-50.08	-13.00	-37.08	-62.31	-54.80	6.87
1648.40	V	-42.02	-13.00	-29.02	-46.26	-45.65	5.78
2472.60	V	-36.99	-13.00	-23.99	-44.87	-41.09	6.25
4121.00	V	-49.47	-13.00	-36.47	-61.72	-54.19	6.87

Mode	GPRS 1 Tx slot, Channel : 190						
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	-42.13	-13.00	-29.13	-46.39	-45.87	5.89
2509.20	H	-36.00	-13.00	-23.00	-43.87	-40.22	6.37
3345.60	H	-52.07	-13.00	-39.07	-63.02	-57.03	7.11
1672.80	V	-43.37	-13.00	-30.37	-47.67	-47.11	5.89
2509.20	V	-36.25	-13.00	-23.25	-44.16	-40.47	6.37
3345.60	V	-51.05	-13.00	-38.05	-62.03	-56.01	7.11

Mode	GPRS 1 Tx slot, Channel : 251						
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1697.60	H	-42.86	-13.00	-29.86	-47.25	-46.70	5.99
2546.40	H	-37.22	-13.00	-24.22	-45.26	-41.56	6.49
3395.20	H	-52.48	-13.00	-39.48	-63.55	-57.65	7.32
1697.60	V	-43.88	-13.00	-30.88	-48.26	-47.72	5.99
2546.40	V	-36.17	-13.00	-23.17	-44.11	-40.51	6.49
3395.20	V	-50.74	-13.00	-37.74	-61.87	-55.91	7.32

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

Mode	WCDMA RMC 12.2Kbps, 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	-53.73	-13.00	-40.73	-57.89	-57.38	5.80
2479.20	H	-53.74	-13.00	-40.74	-61.48	-57.86	6.27
3305.60	H	-51.26	-13.00	-38.26	-62.11	-56.05	6.94
1652.80	V	-54.30	-13.00	-41.30	-58.54	-57.95	5.80
2479.20	V	-53.70	-13.00	-40.70	-61.59	-57.82	6.27
3305.60	V	-51.66	-13.00	-38.66	-62.52	-56.45	6.94

Mode	WCDMA RMC 12.2Kbps, 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	-54.51	-13.00	-41.51	-58.77	-58.25	5.89
2509.20	H	-54.01	-13.00	-41.01	-61.88	-58.23	6.37
3345.60	H	-51.42	-13.00	-38.42	-62.37	-56.38	7.11
1672.80	V	-55.64	-13.00	-42.64	-59.94	-59.38	5.89
2509.20	V	-54.18	-13.00	-41.18	-62.09	-58.40	6.37
3345.60	V	-51.79	-13.00	-38.79	-62.77	-56.75	7.11

Mode	WCDMA RMC 12.2Kbps, Channel : 4233						
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1693.20	H	-54.03	-13.00	-41.03	-58.40	-57.86	5.98
2538.80	H	-53.25	-13.00	-40.25	-61.25	-57.57	6.47
3386.40	H	-51.09	-13.00	-38.09	-62.14	-56.22	7.28
1693.20	V	-54.27	-13.00	-41.27	-58.63	-58.10	5.98
2538.80	V	-53.94	-13.00	-40.94	-61.87	-58.26	6.47
3386.40	V	-51.37	-13.00	-38.37	-62.47	-56.50	7.28

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

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 3 RB Offset 1, 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	-49.71	-13.00	-36.71	-53.86	-53.34	5.78
2474.10	H	-44.70	-13.00	-31.70	-52.41	-48.81	6.26
4123.50	H	-44.45	-13.00	-31.45	-56.68	-49.17	6.87
1649.40	V	-51.56	-13.00	-38.56	-55.80	-55.19	5.78
2474.10	V	-45.68	-13.00	-32.68	-53.56	-49.79	6.26
4123.50	V	-47.00	-13.00	-34.00	-59.25	-51.72	6.87

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	-49.23	-13.00	-36.23	-53.49	-52.97	5.89
2509.50	H	-44.79	-13.00	-31.79	-52.66	-49.01	6.37
4182.50	H	-45.06	-13.00	-32.06	-57.31	-49.74	6.83
1673.00	V	-51.44	-13.00	-38.44	-55.74	-55.18	5.89
2509.50	V	-45.46	-13.00	-32.46	-53.37	-49.68	6.37
4182.50	V	-47.71	-13.00	-34.71	-59.92	-52.39	6.83

Mode	LTE Band 5, QPSK, CB:1.4 MHz, 3 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)
1697.80	H	-47.06	-13.00	-34.06	-51.45	-50.90	5.99
2546.70	H	-42.66	-13.00	-29.66	-50.69	-46.99	6.48
4244.50	H	-45.04	-13.00	-32.04	-57.43	-49.66	6.77
1697.80	V	-49.22	-13.00	-36.22	-53.60	-53.06	5.99
2546.70	V	-43.62	-13.00	-30.62	-51.56	-47.95	6.48
4244.50	V	-46.92	-13.00	-33.92	-59.26	-51.54	6.77

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

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 0, 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)
1648.80	H	-50.43	-13.00	-37.43	-54.58	-54.07	5.79
2473.20	H	-45.24	-13.00	-32.24	-52.96	-49.35	6.26
4122.00	H	-45.23	-13.00	-32.23	-57.46	-49.94	6.86
1648.80	V	-52.02	-13.00	-39.02	-56.26	-55.66	5.79
2473.20	V	-46.24	-13.00	-33.24	-54.12	-50.35	6.26
4122.00	V	-48.09	-13.00	-35.09	-60.34	-52.80	6.86

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	-49.59	-13.00	-36.59	-53.85	-53.33	5.89
2509.50	H	-45.41	-13.00	-32.41	-53.28	-49.63	6.37
4182.50	H	-45.70	-13.00	-32.70	-57.95	-50.38	6.83
1673.00	V	-52.07	-13.00	-39.07	-56.37	-55.81	5.89
2509.50	V	-46.05	-13.00	-33.05	-53.96	-50.27	6.37
4182.50	V	-48.76	-13.00	-35.76	-60.97	-53.44	6.83

Mode	LTE Band 5, QPSK, CB:3 MHz, 1 RB Offset 0, 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)
1692.80	H	-47.64	-13.00	-34.64	-52.01	-51.47	5.98
2539.20	H	-43.27	-13.00	-30.27	-51.28	-47.60	6.48
4232.00	H	-45.74	-13.00	-32.74	-58.12	-50.37	6.78
1692.80	V	-49.87	-13.00	-36.87	-54.24	-53.70	5.98
2539.20	V	-44.21	-13.00	-31.21	-52.14	-48.54	6.48
4232.00	V	-47.98	-13.00	-34.98	-60.31	-52.61	6.78

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

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 0, 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)
1648.60	H	-51.09	-13.00	-38.09	-55.25	-54.74	5.80
2472.90	H	-45.62	-13.00	-32.62	-53.36	-49.74	6.27
4121.50	H	-45.62	-13.00	-32.62	-57.85	-50.33	6.86
1648.60	V	-52.52	-13.00	-39.52	-56.76	-56.17	5.80
2472.90	V	-46.65	-13.00	-33.65	-54.54	-50.77	6.27
4121.50	V	-48.21	-13.00	-35.21	-60.45	-52.92	6.86

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	-50.00	-13.00	-37.00	-54.26	-53.74	5.89
2509.50	H	-45.71	-13.00	-32.71	-53.58	-49.93	6.37
4182.50	H	-46.04	-13.00	-33.04	-58.29	-50.72	6.83
1673.00	V	-52.57	-13.00	-39.57	-56.87	-56.31	5.89
2509.50	V	-47.00	-13.00	-34.00	-54.91	-51.22	6.37
4182.50	V	-49.24	-13.00	-36.24	-61.45	-53.92	6.83

Mode	LTE Band 5, QPSK, CB:5 MHz, 1 RB Offset 0, 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)
1688.60	H	-48.39	-13.00	-35.39	-52.75	-52.21	5.97
2532.90	H	-43.45	-13.00	-30.45	-51.45	-47.77	6.47
4221.50	H	-46.33	-13.00	-33.33	-58.69	-92.24	48.06
1688.60	V	-50.40	-13.00	-37.40	-54.76	-54.22	5.97
2532.90	V	-44.84	-13.00	-31.84	-52.77	-49.16	6.47
4221.50	V	-48.58	-13.00	-35.58	-60.89	-94.49	48.06

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

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 49, 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)
1666.80	H	-51.02	-13.00	-38.02	-55.21	-54.69	5.82
2500.20	H	-46.18	-13.00	-33.18	-53.95	-50.33	6.30
4167.00	H	-45.88	-13.00	-32.88	-58.12	-50.58	6.85
1666.80	V	-53.00	-13.00	-40.00	-57.26	-56.67	5.82
2500.20	V	-47.17	-13.00	-34.17	-55.06	-51.32	6.30
4167.00	V	-49.10	-13.00	-36.10	-61.34	-53.80	6.85

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 49, 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)
1681.80	H	-51.28	-13.00	-38.28	-55.54	-55.02	5.89
2522.70	H	-46.39	-13.00	-33.39	-54.26	-50.61	6.37
4204.50	H	-47.20	-13.00	-34.20	-59.45	-51.88	6.83
1681.80	V	-53.37	-13.00	-40.37	-57.67	-57.11	5.89
2522.70	V	-47.21	-13.00	-34.21	-55.12	-51.43	6.37
4204.50	V	-49.66	-13.00	-36.66	-61.87	-54.34	6.83

Mode	LTE Band 5, QPSK, CB:10 MHz, 1 RB Offset 0, 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)
1679.20	H	-49.22	-13.00	-36.22	-53.56	-52.96	5.89
2518.80	H	-44.59	-13.00	-31.59	-52.56	-48.81	6.37
4198.00	H	-46.80	-13.00	-33.80	-59.12	-51.48	6.83
1679.20	V	-51.54	-13.00	-38.54	-55.89	-55.28	5.89
2518.80	V	-45.28	-13.00	-32.28	-53.21	-49.50	6.37
4198.00	V	-49.04	-13.00	-36.04	-61.30	-53.72	6.83

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

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

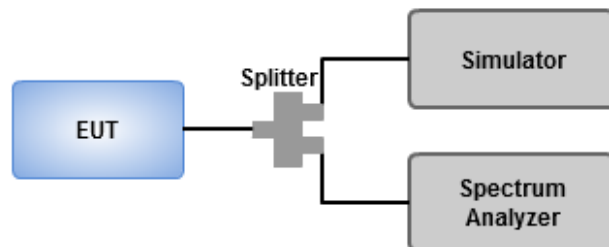
Out of band emission

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 = 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.

3.3.3 Test Setup



3.3.4 Test Result of Conducted Emissions & Band Edge

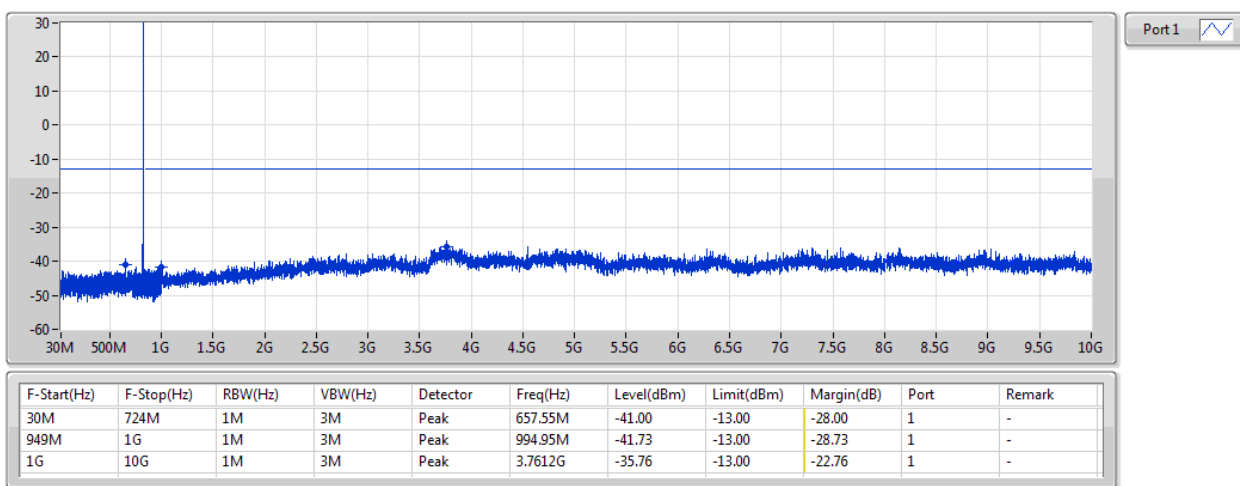
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
850	-	-	-	-	-	-	-	-	-	-	-	-	-
GPRS_200kHz_Nss1_1TX	Pass	1G	10G	1M	3M	Peak	5.0905G	-34.40	-13.00	-21.40	1	-	-

850

CSE-TX-Port

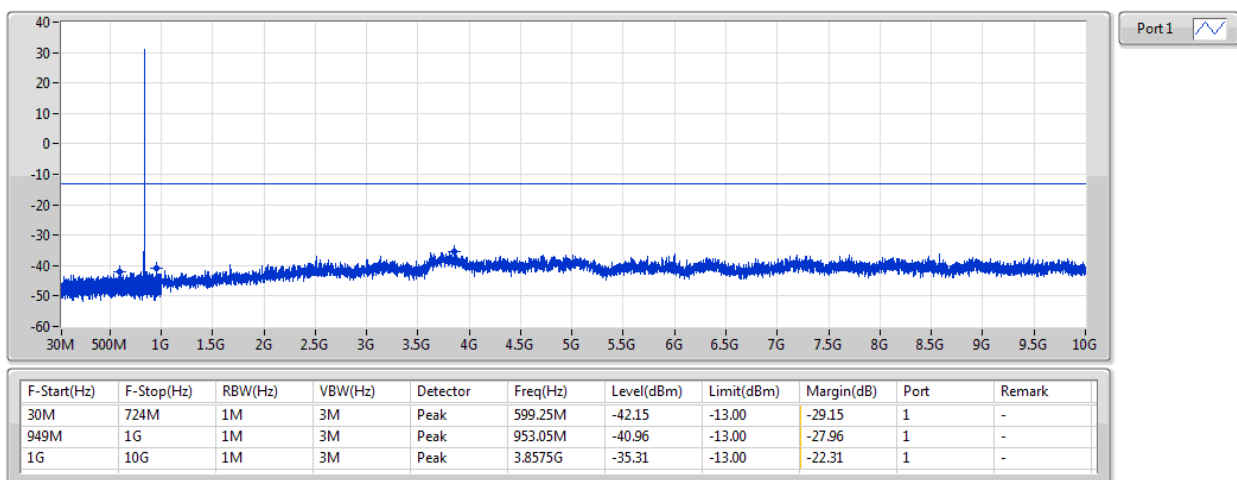
824.2MHz



850

CSE-TX-Port

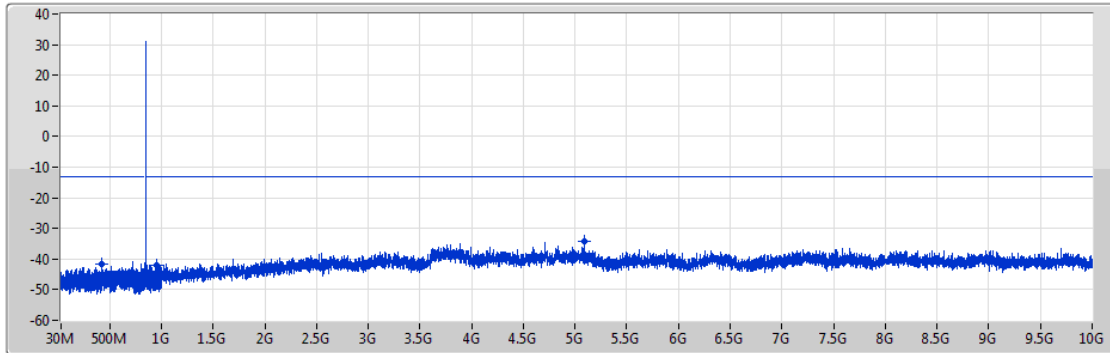
836.4MHz



850

CSE-TX-Port

848.8MHz



Port 1 

F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	724M	1M	3M	Peak	419.16M	-41.63	-13.00	-28.63	1	-
949M	1G	1M	3M	Peak	954.87M	-42.17	-13.00	-29.17	1	-
1G	10G	1M	3M	Peak	5.0905G	-34.40	-13.00	-21.40	1	-

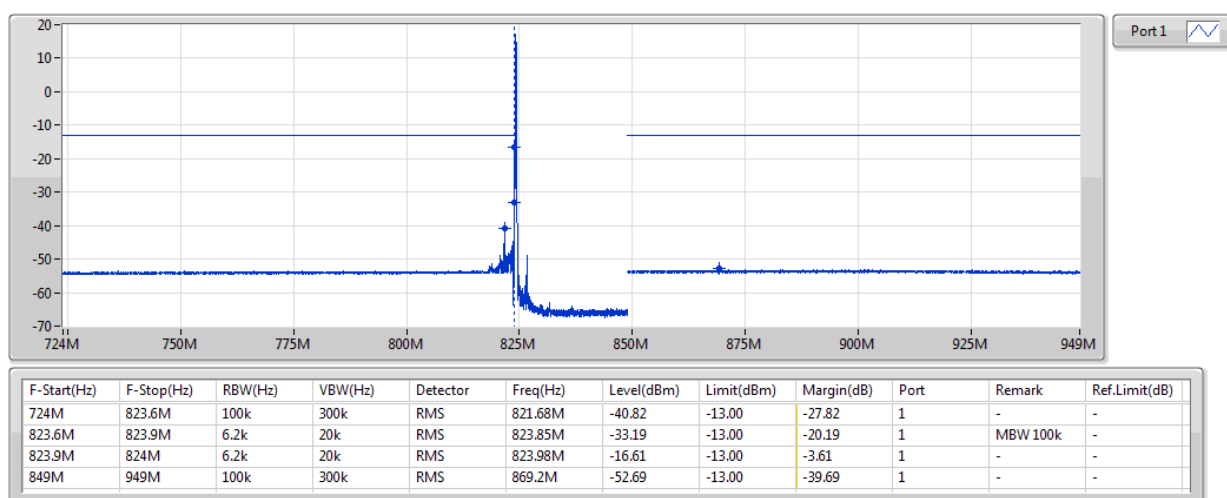
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
850	-	-	-	-	-	-	-	-	-	-	-	-	-
GPRS	Pass	849M	849.1M	6.2k	20k	RMS	849.02M	-15.85	-13.00	-2.85	1	-	-

850

CSE-TX-Port

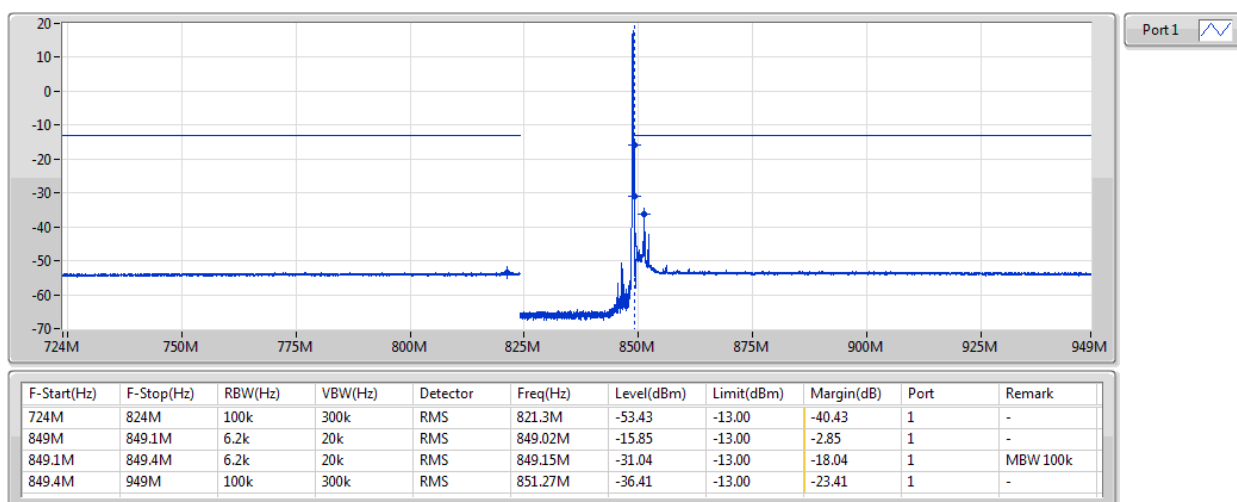
824.2MHz



850

CSE-TX-Port

848.8MHz



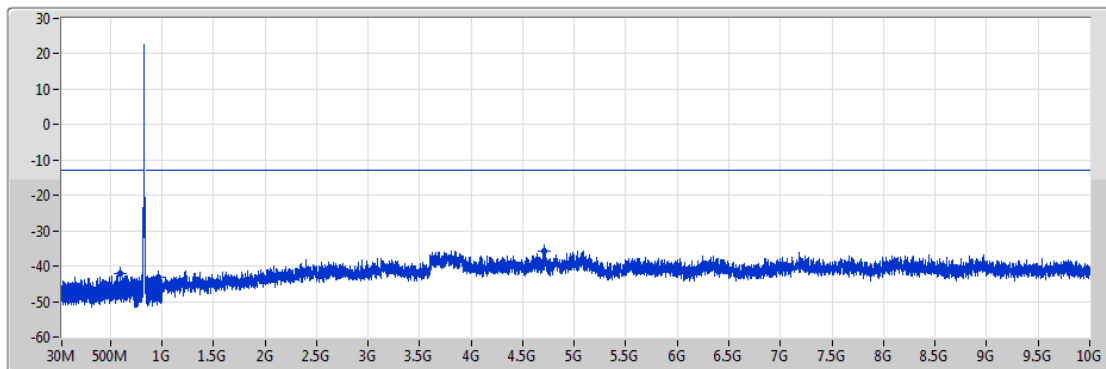
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 5	-	-	-	-	-	-	-	-	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	1G	10G	1M	3M	Peak	3.8089G	-34.50	-13.00	-21.50	1	-	-

Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Port

826.4MHz

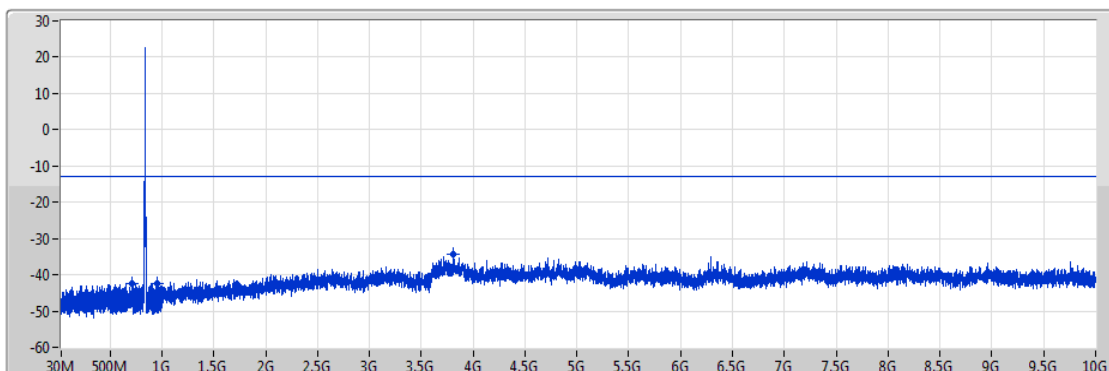


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	724M	1M	3M	Peak	597M	-42.18	-13.00	-29.18	1	-
949M	1G	1M	3M	Peak	961.39M	-42.97	-13.00	-29.97	1	-
1G	10G	1M	3M	Peak	4.7134G	-35.59	-13.00	-22.59	1	-

Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Port

836.4MHz

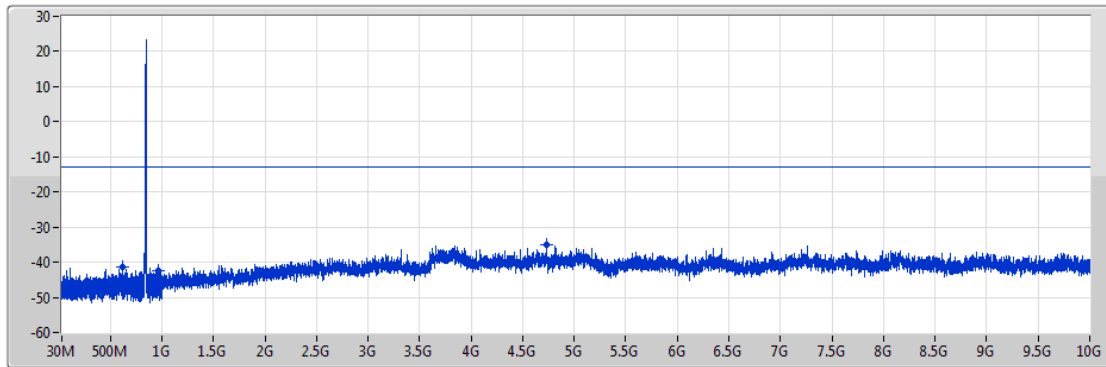


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	724M	1M	3M	Peak	716.54M	-42.43	-13.00	-29.43	1	-
949M	1G	1M	3M	Peak	950.89M	-42.37	-13.00	-29.37	1	-
1G	10G	1M	3M	Peak	3.8089G	-34.50	-13.00	-21.50	1	-

Band 5_WCDMA_5MHz_Nss1_1TX

CSE-TX-Port

846.6MHz



Port 1 

F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	724M	1M	3M	Peak	624.06M	-41.51	-13.00	-28.51	1	-
949M	1G	1M	3M	Peak	967.92M	-42.51	-13.00	-29.51	1	-
1G	10G	1M	3M	Peak	4.7278G	-35.11	-13.00	-22.11	1	-

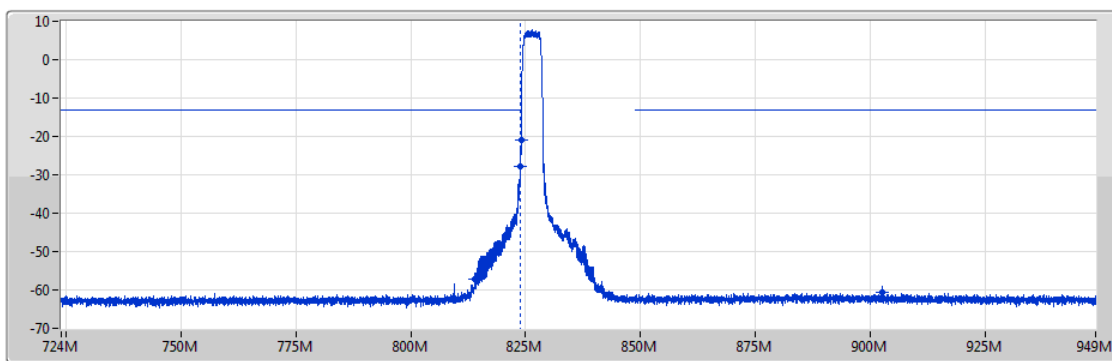
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 5	-	-	-	-	-	-	-	-	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	849M	849.1M	100k	300k	RMS	849M	-19.55	-13.00	-6.55	1	-	-

Band 5_WCDMA

CSE-TX-Port

826.4MHz

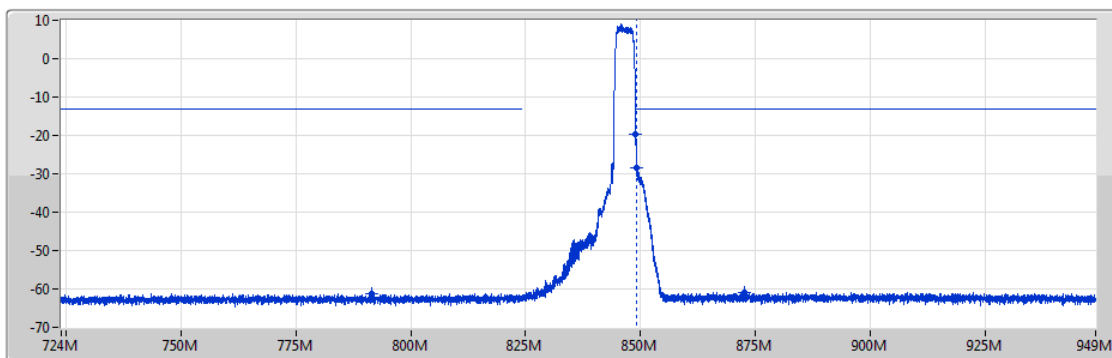


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	814M	100k	300k	RMS	813.98M	-57.25	-13.00	-44.25	1	-	-
814M	823.9M	100k	300k	RMS	823.85M	-27.90	-13.00	-14.90	1	MBW 100k	-
823.9M	824M	100k	300k	RMS	824M	-21.08	-13.00	-8.08	1	-	-
849M	949M	100k	300k	RMS	902.48M	-60.54	-13.00	-47.54	1	-	-

Band 5_WCDMA

CSE-TX-Port

846.6MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	791.55M	-61.15	-13.00	-48.15	1	-
849M	849.1M	100k	300k	RMS	849M	-19.55	-13.00	-6.55	1	-
849.1M	859M	100k	300k	RMS	849.15M	-28.29	-13.00	-15.29	1	MBW 100k
859M	949M	100k	300k	RMS	872.57M	-60.79	-13.00	-47.79	1	-

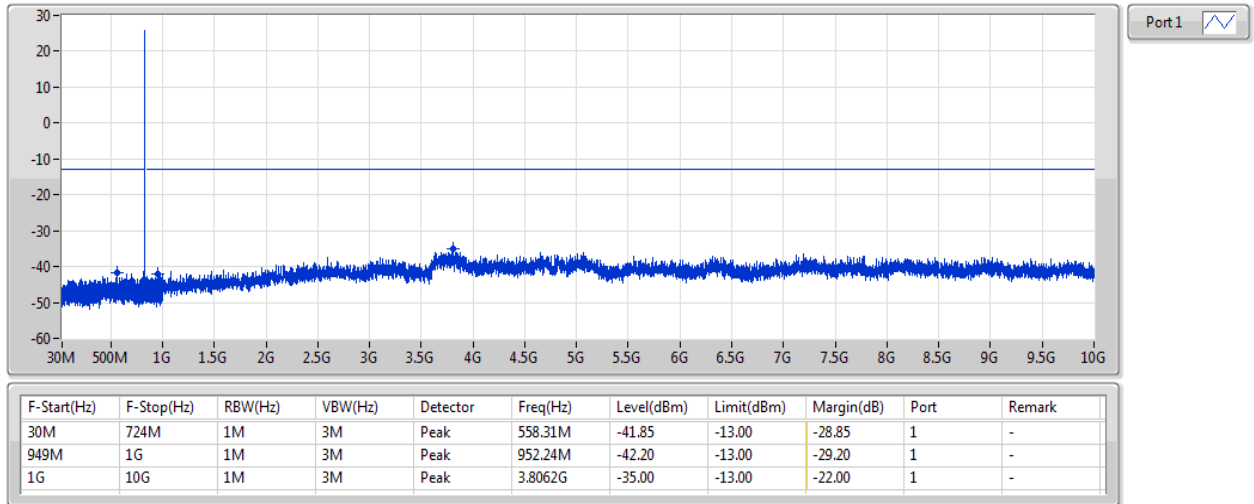
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 5	-	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.7774G	-34.71	-13.00	-21.71	1	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	5.0347G	-35.03	-13.00	-22.03	1	-	-
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.8044G	-34.25	-13.00	-21.25	1	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.8161G	-34.67	-13.00	-21.67	1	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	6.3451G	-35.39	-13.00	-22.39	1	-	-
LTE_3MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7765G	-34.68	-13.00	-21.68	1	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.8188G	-33.86	-13.00	-20.86	1	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.6838G	-34.84	-13.00	-21.84	1	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7792G	-34.89	-13.00	-21.89	1	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.7486G	-34.67	-13.00	-21.67	1	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.8683G	-34.61	-13.00	-21.61	1	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7414G	-34.30	-13.00	-21.30	1	-	-

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Port

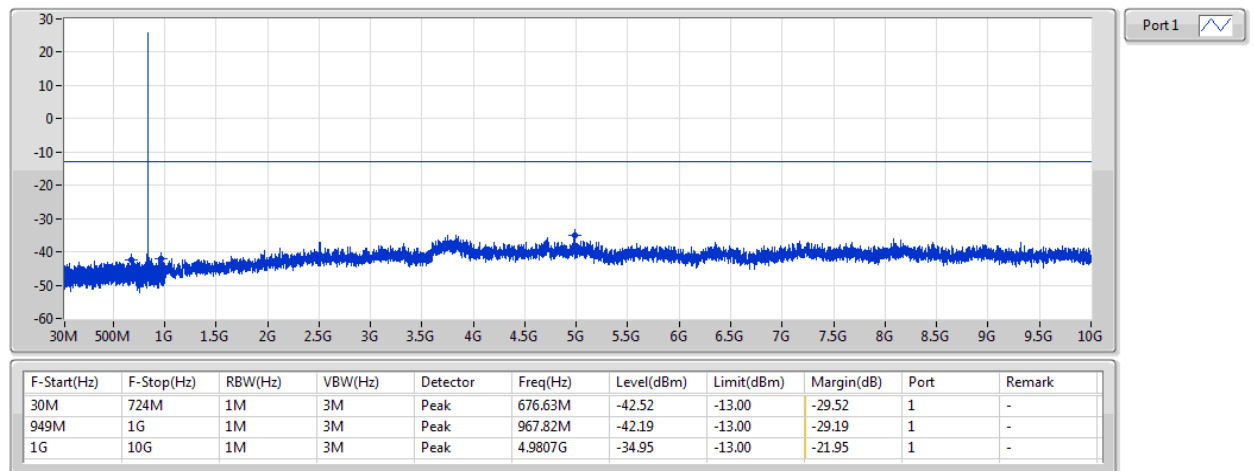
824.7MHz



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

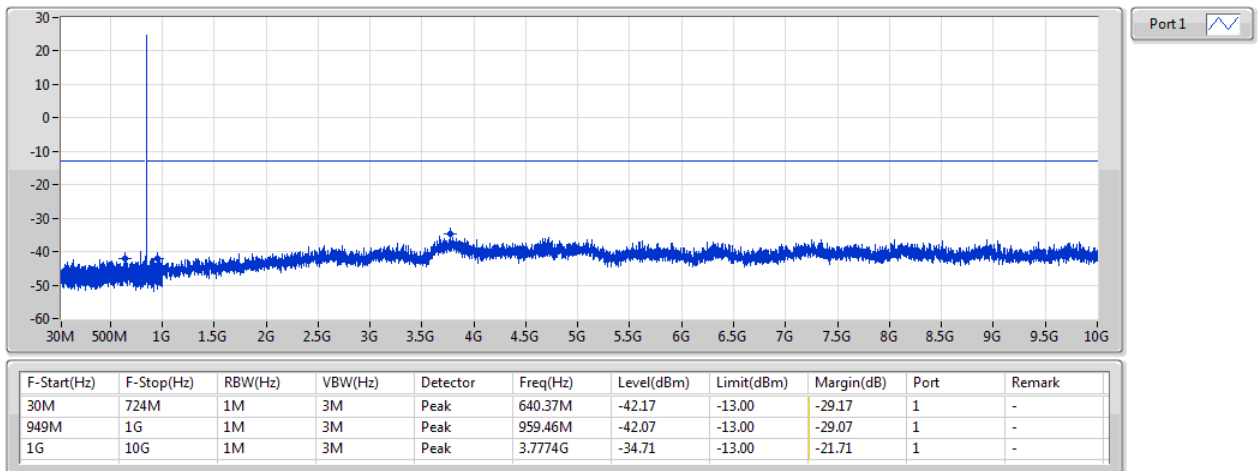
CSE-TX-Port

836.5MHz



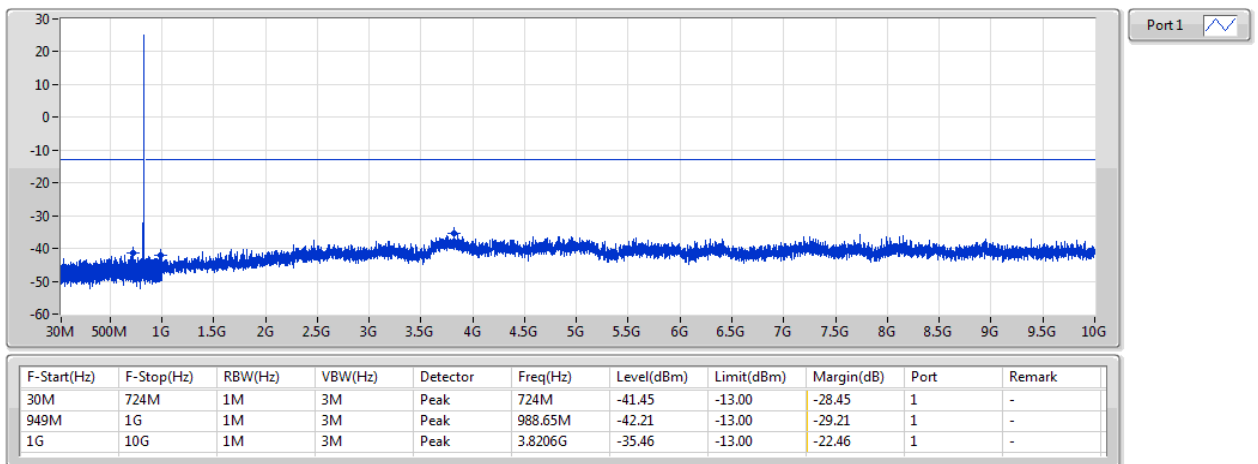
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz

CSE-TX-Port



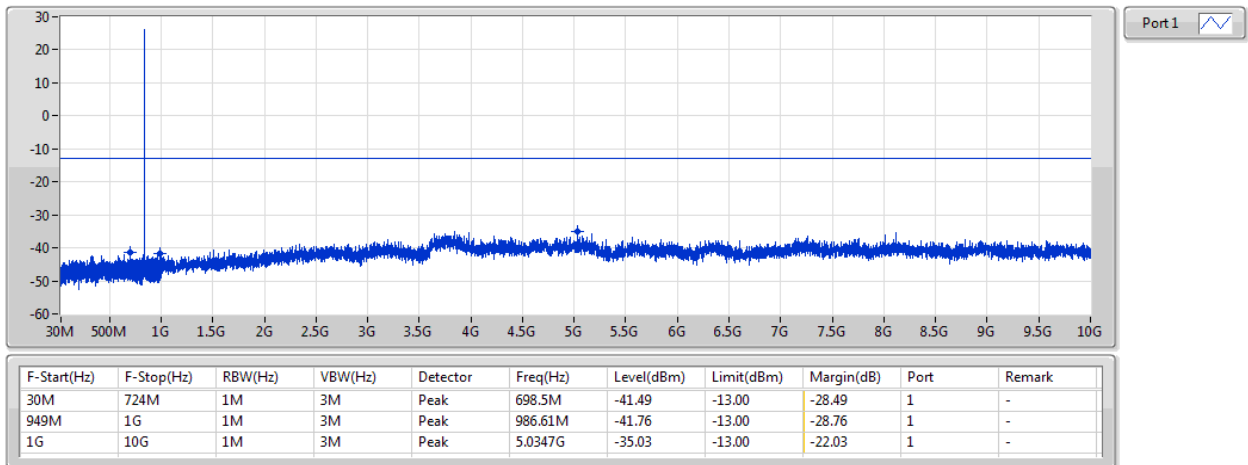
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz

CSE-TX-Port



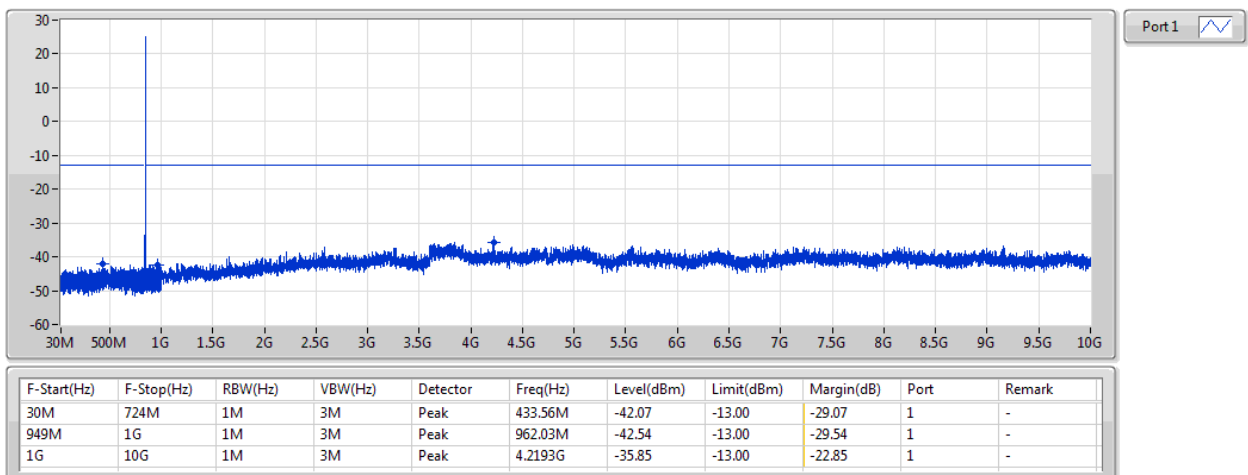
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
836.5MHz

CSE-TX-Port



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz

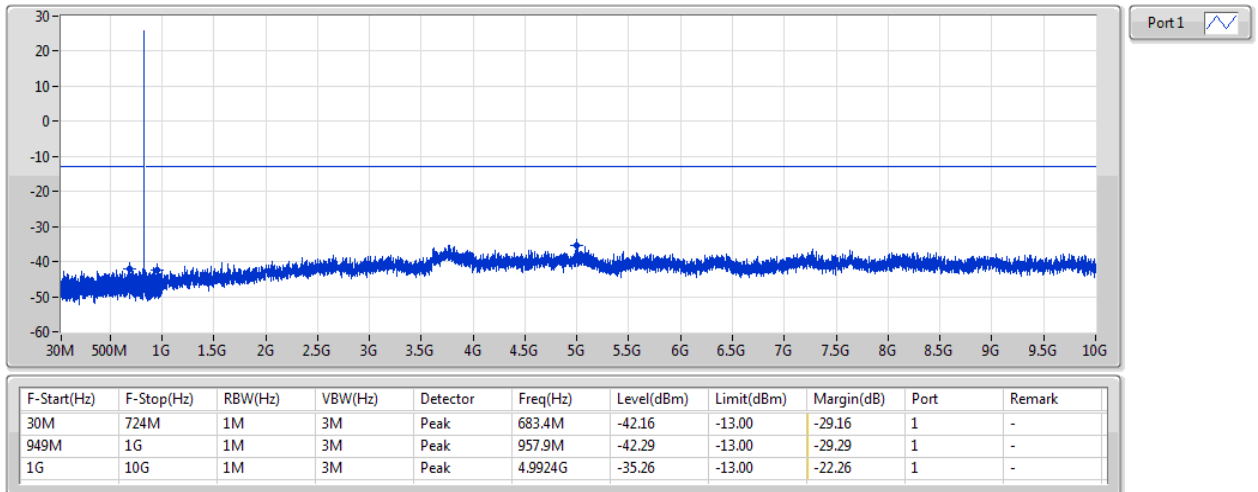
CSE-TX-Port



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

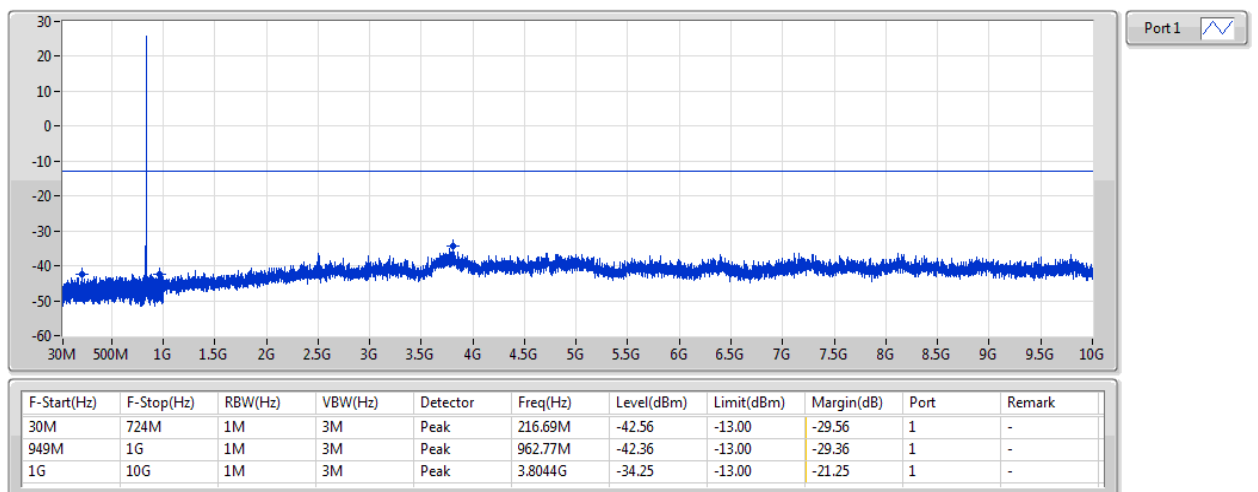
824.7MHz



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

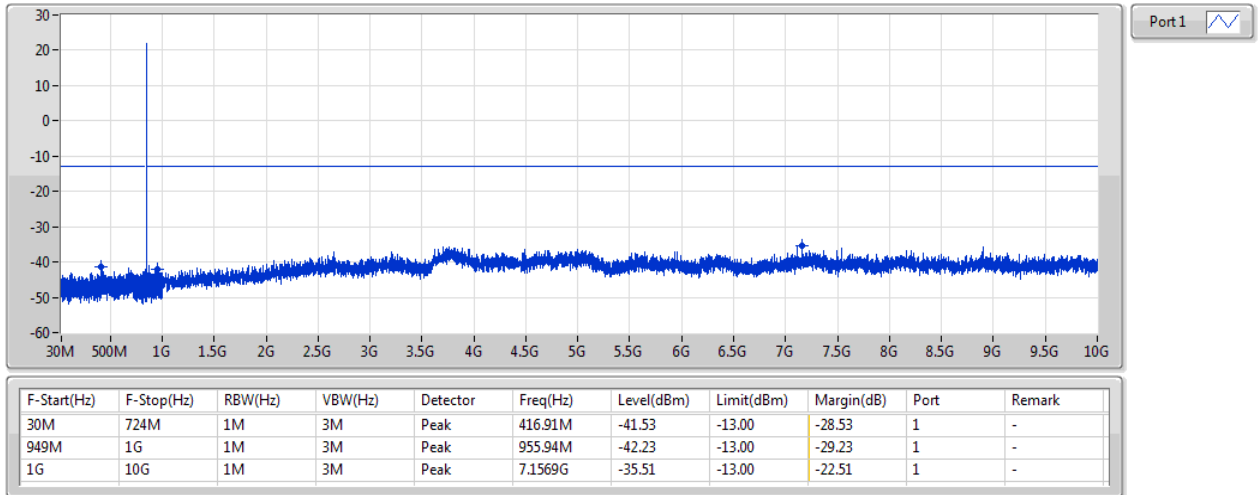
836.5MHz



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

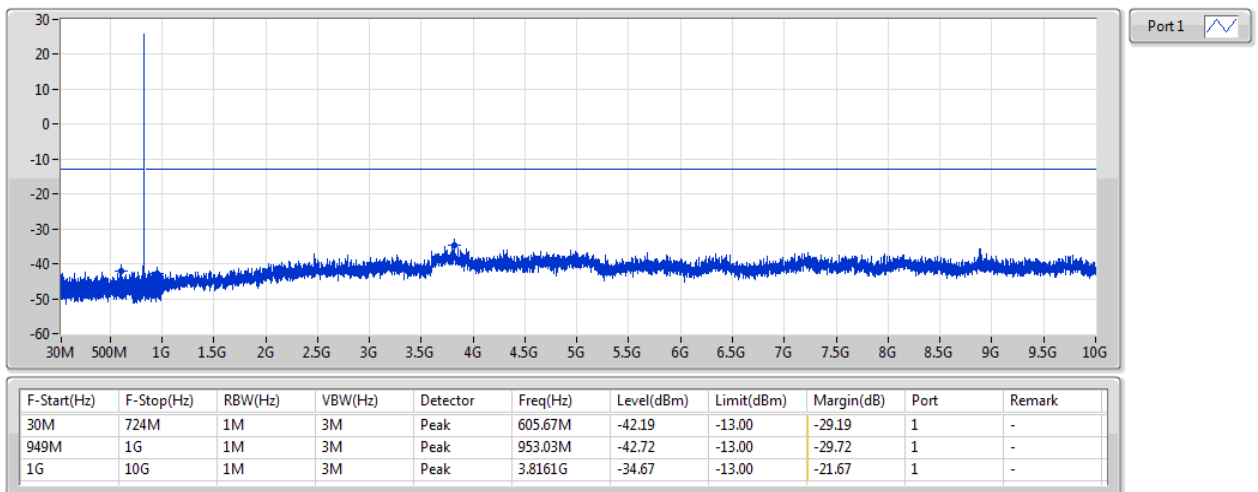
848.3MHz



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

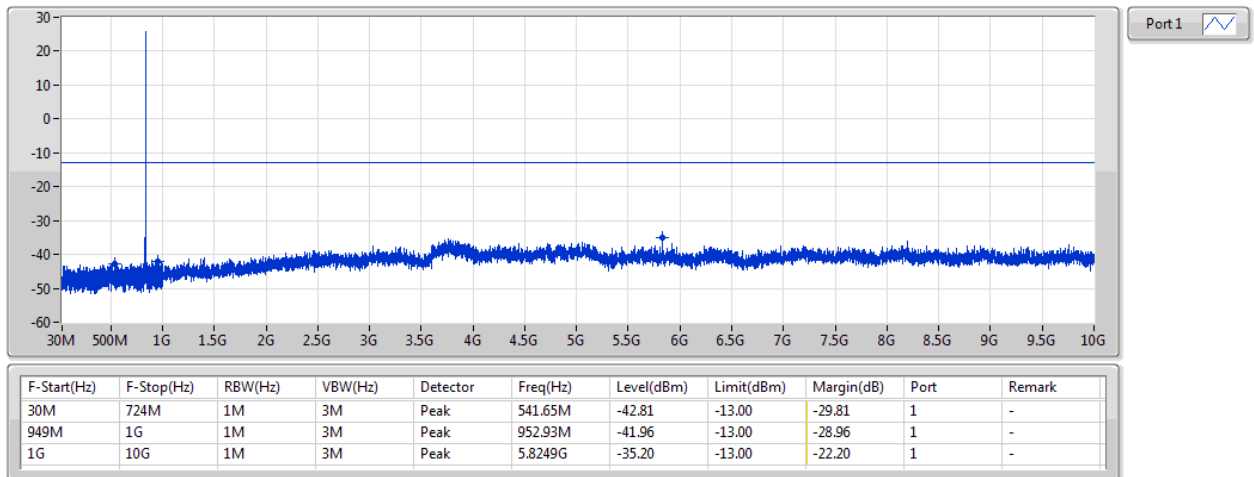
825.5MHz



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

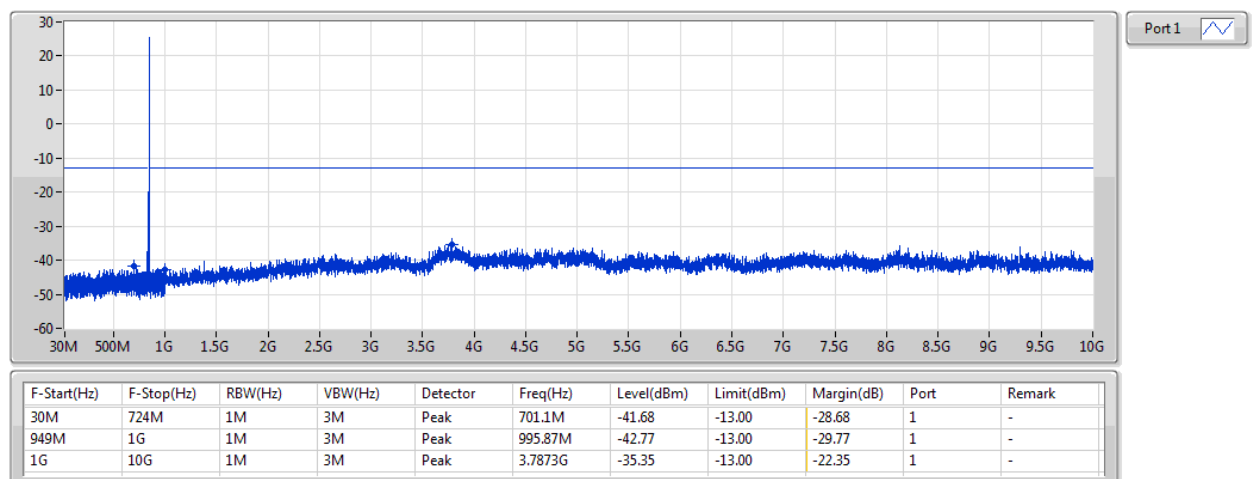
836.5MHz



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

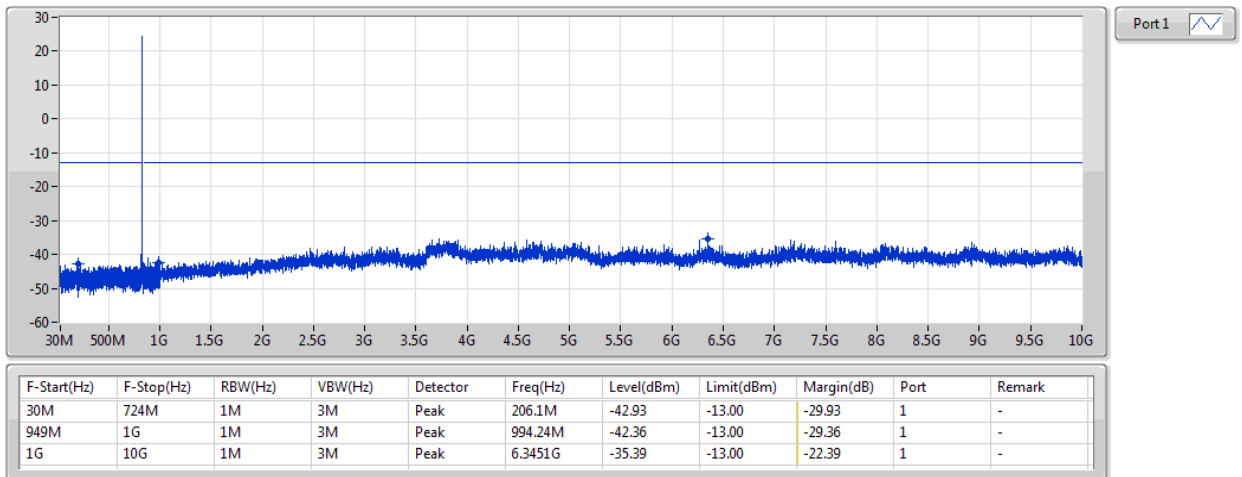
847.5MHz



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

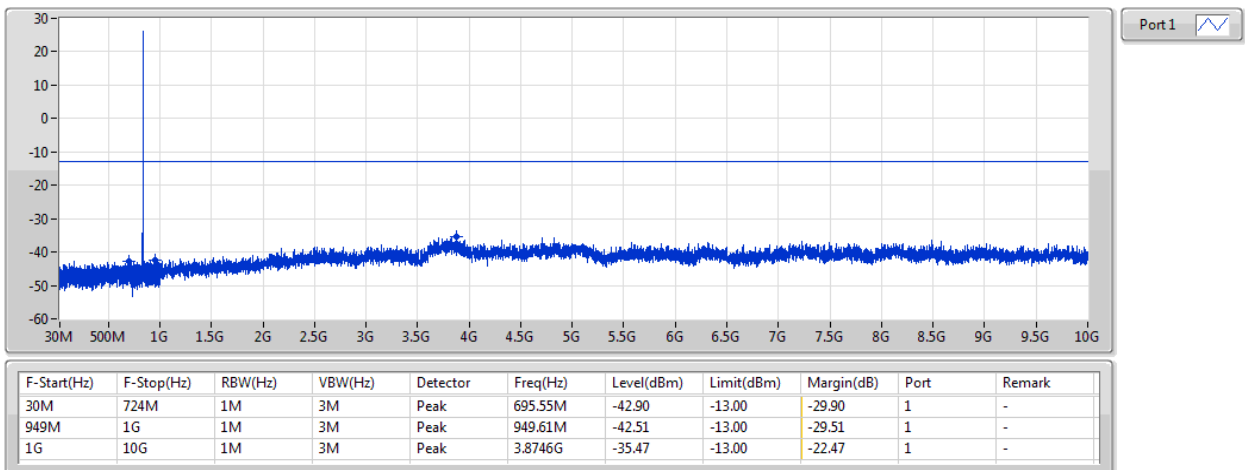
825.5MHz



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

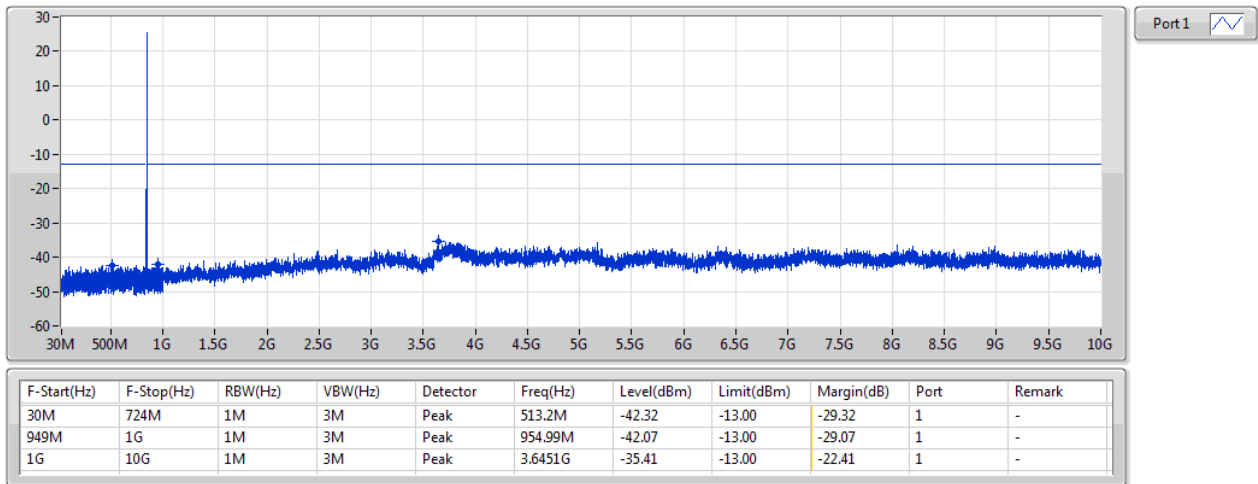
836.5MHz



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

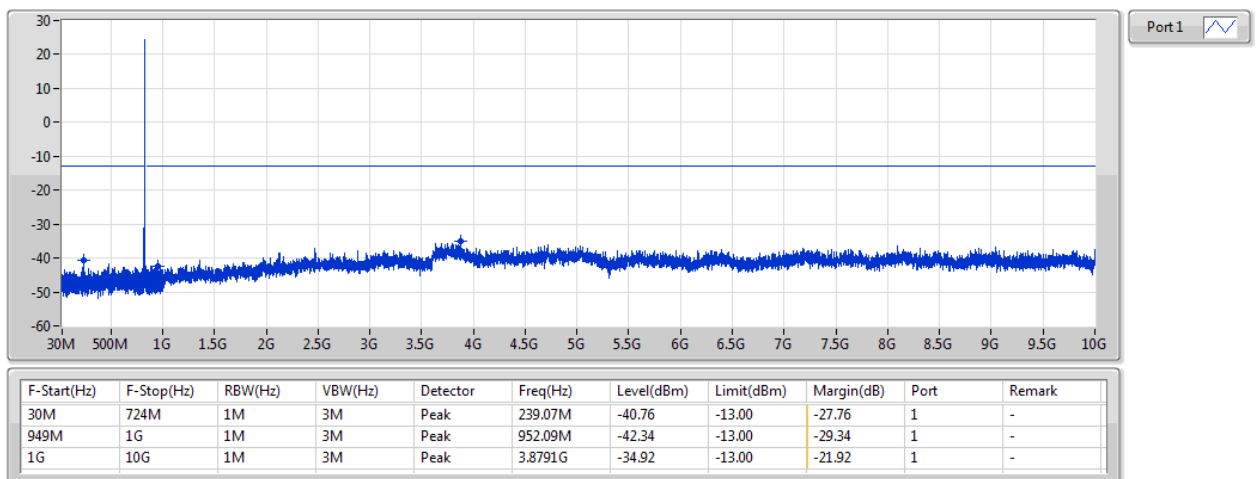
847.5MHz



Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

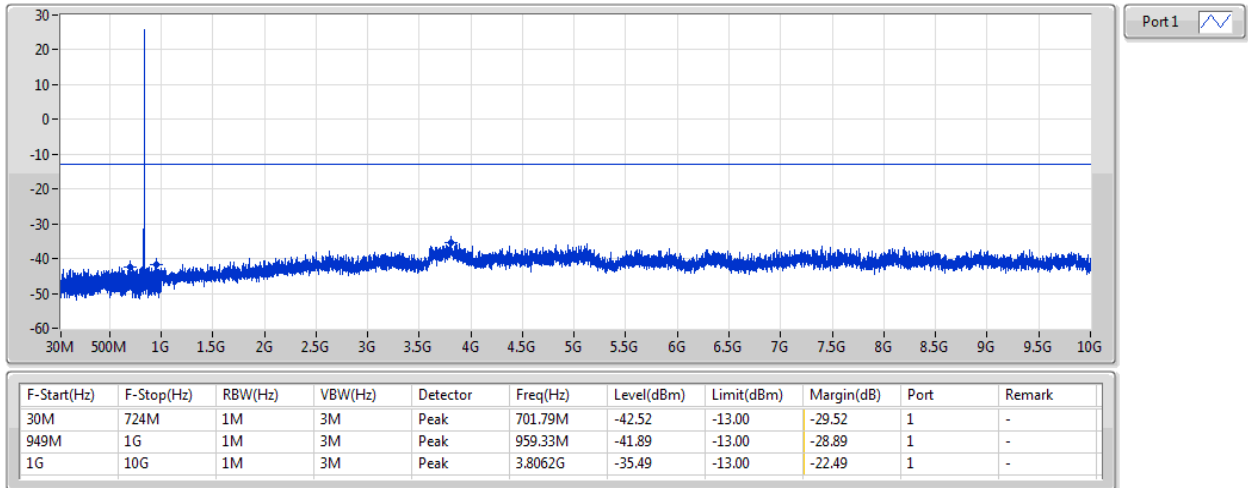
825.5MHz



Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

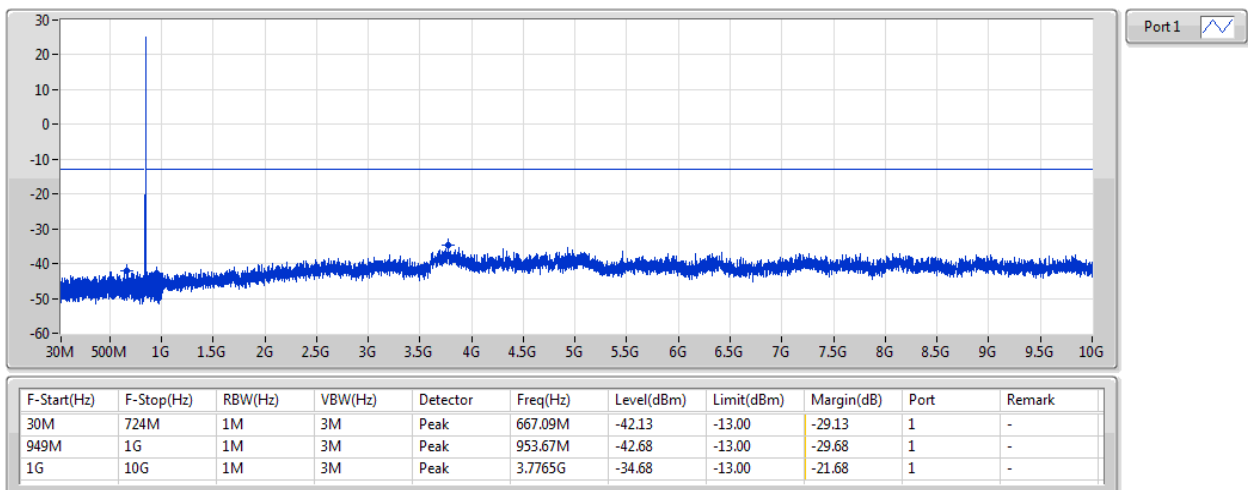
836.5MHz



Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

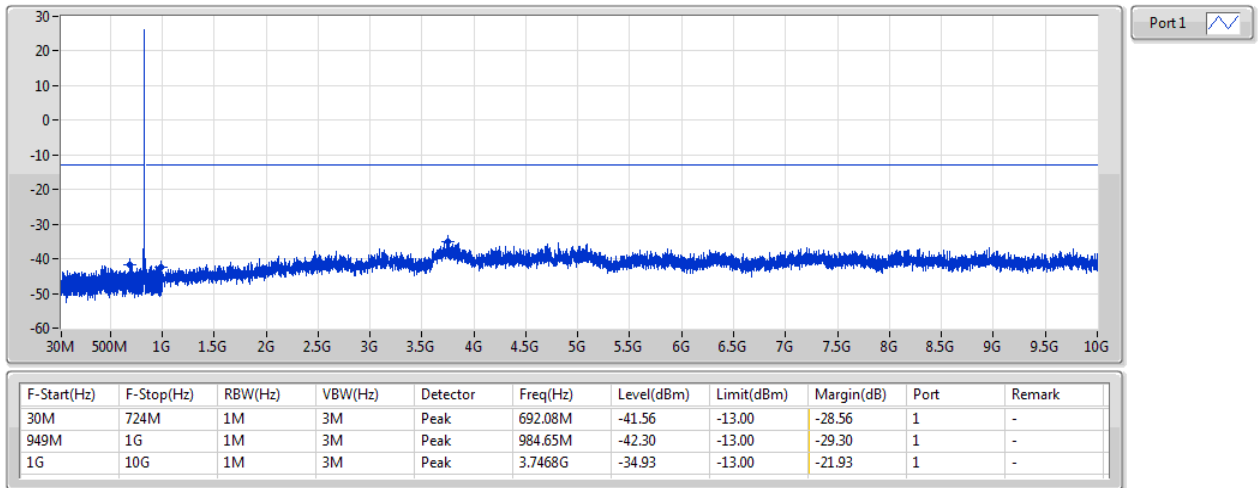
847.5MHz



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

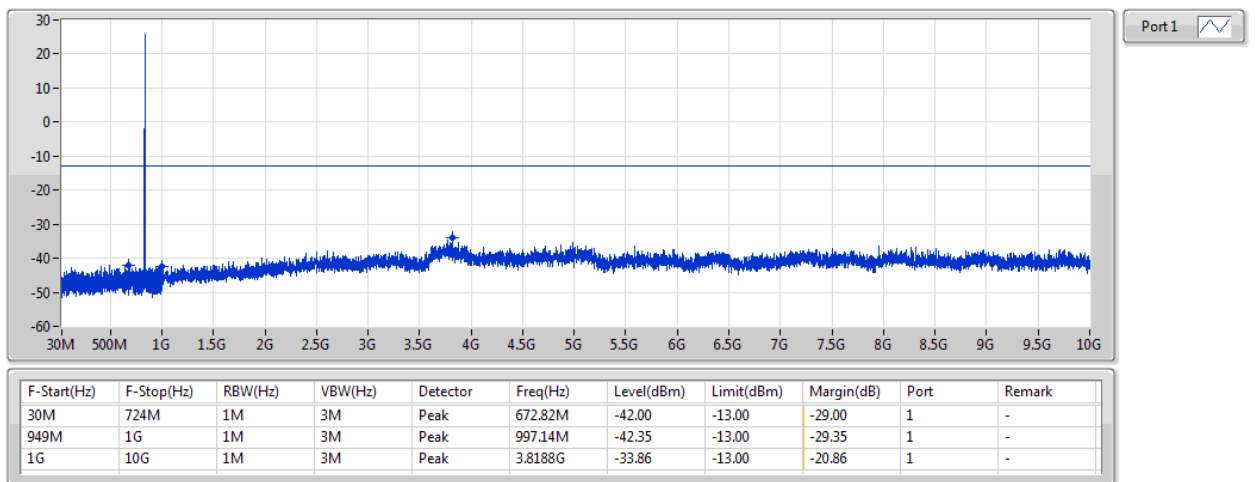
826.5MHz



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

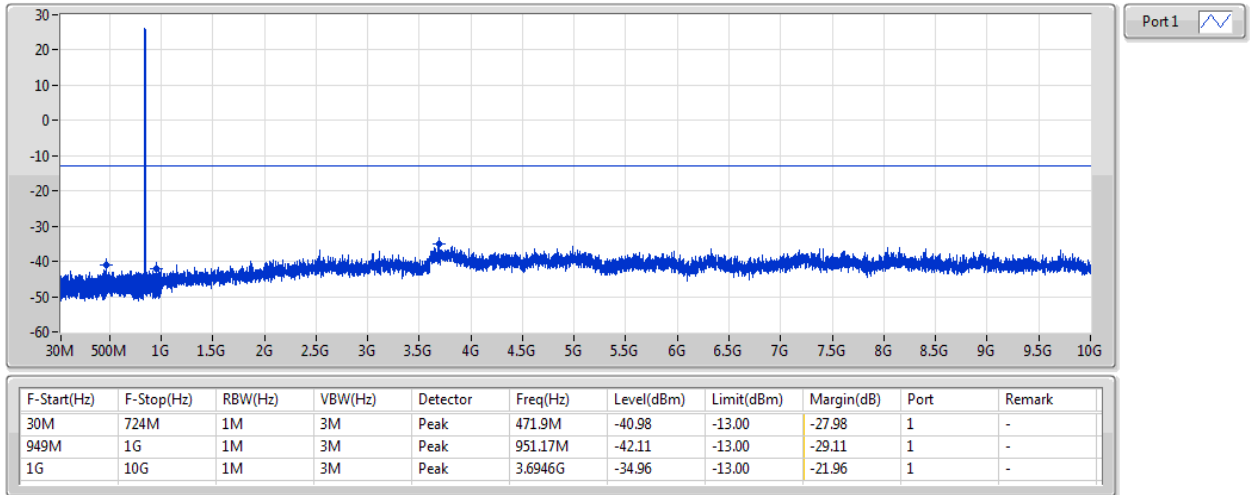
836.5MHz



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

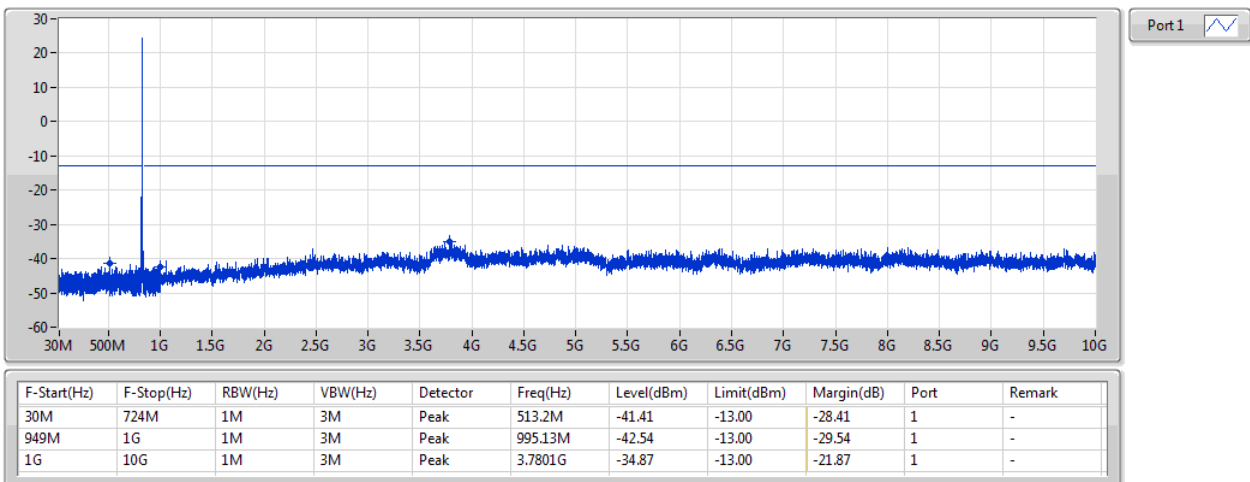
846.5MHz



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

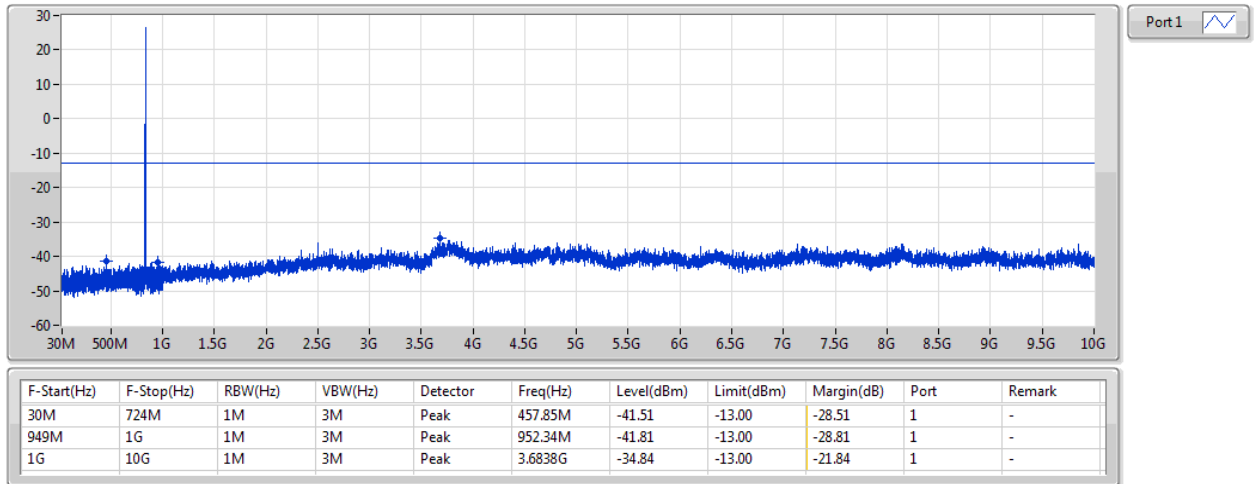
826.5MHz



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

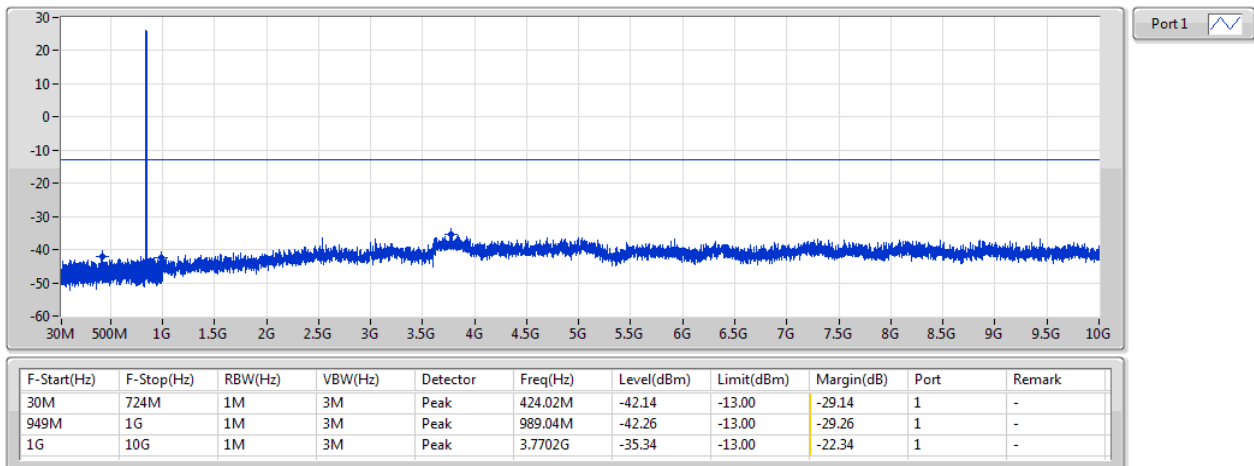
836.5MHz



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

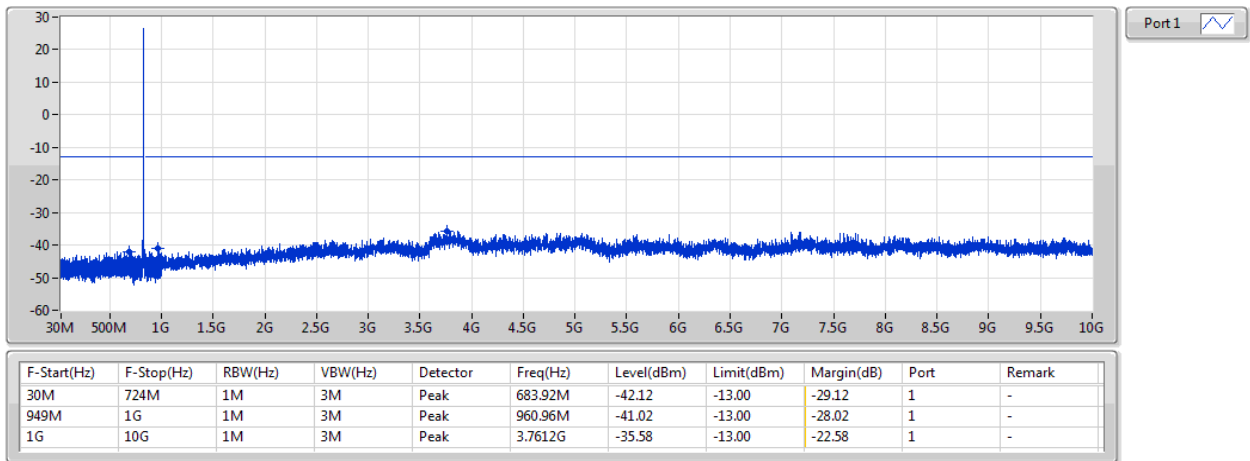
846.5MHz



Band 5_LTE_5MHz_Nss1,64QAM_1TX

CSE-TX-Port

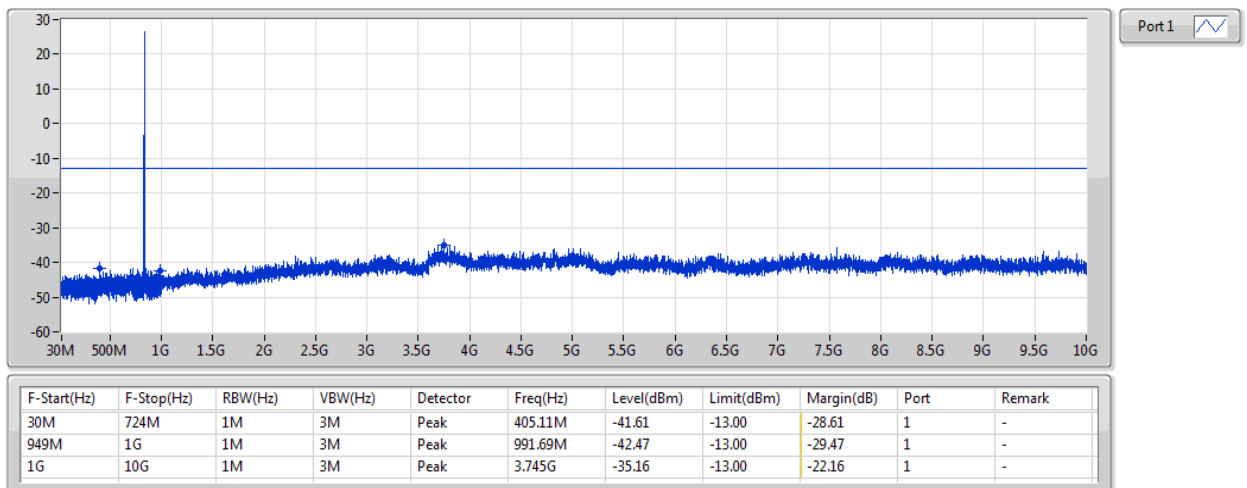
826.5MHz



Band 5_LTE_5MHz_Nss1,64QAM_1TX

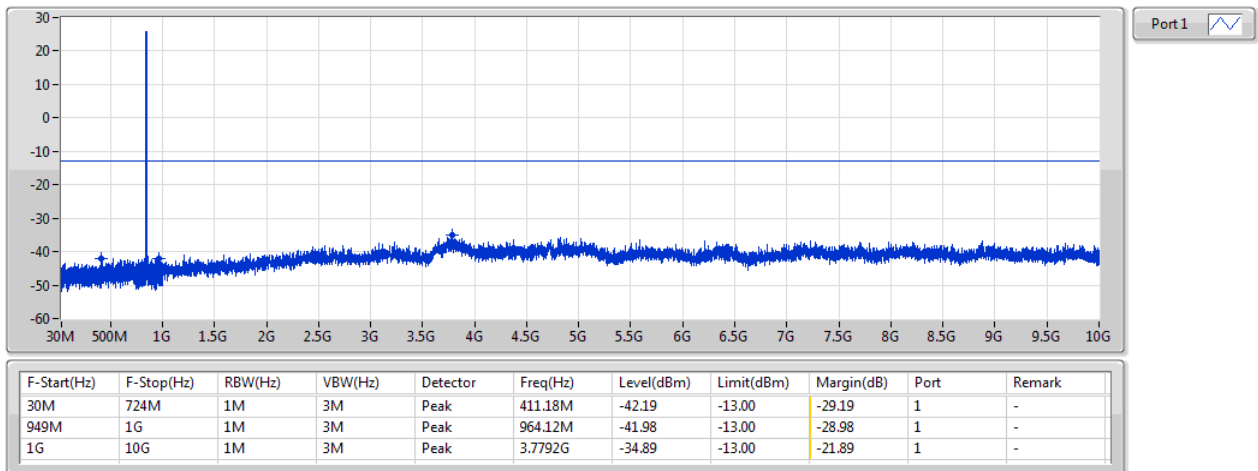
CSE-TX-Port

836.5MHz



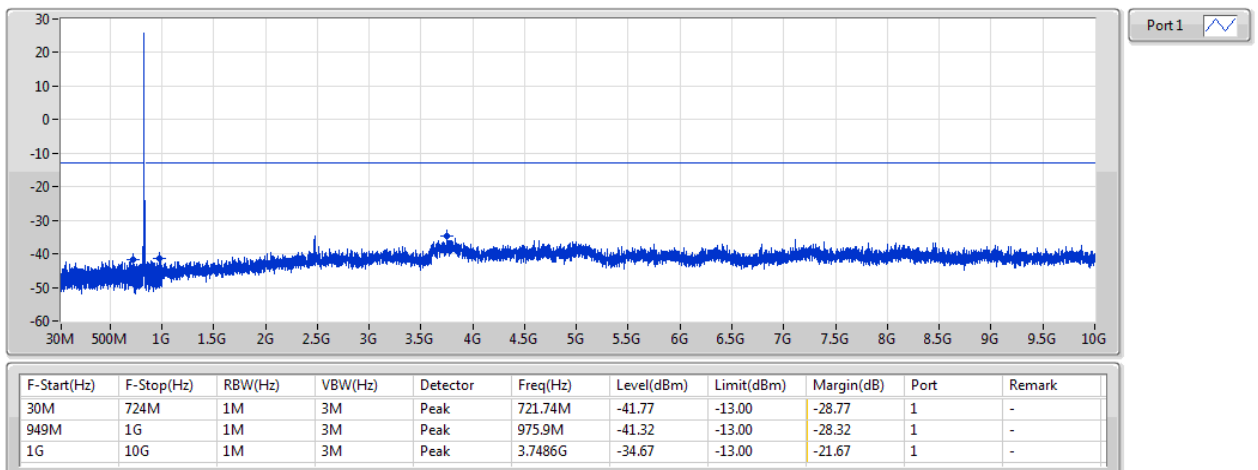
Band 5_LTE_5MHz_Nss1,64QAM_1TX
846.5MHz

CSE-TX-Port



Band 5_LTE_10MHz_Nss1,QPSK_1TX
829MHz

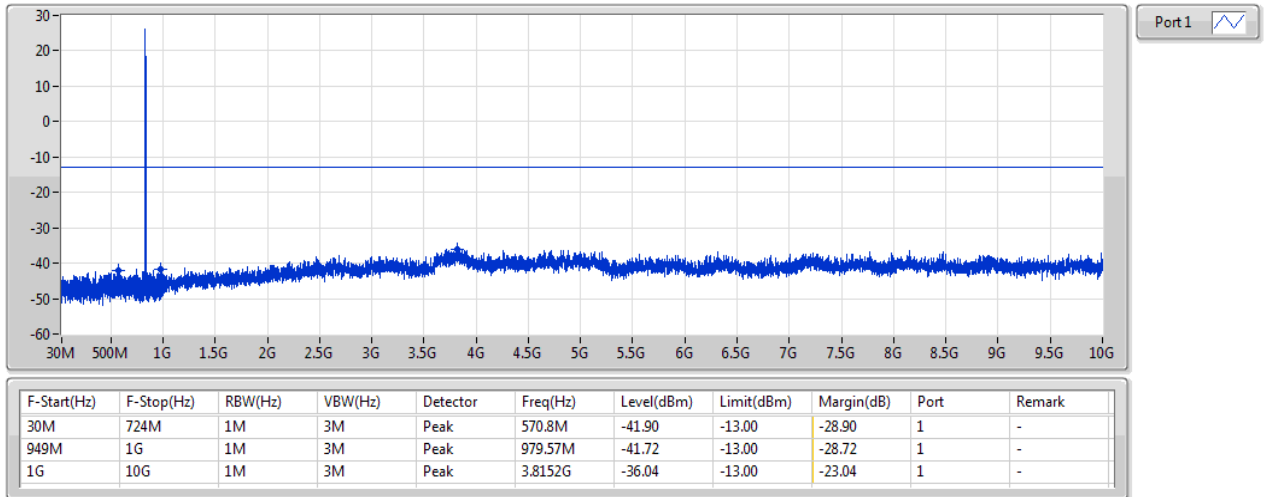
CSE-TX-Port



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

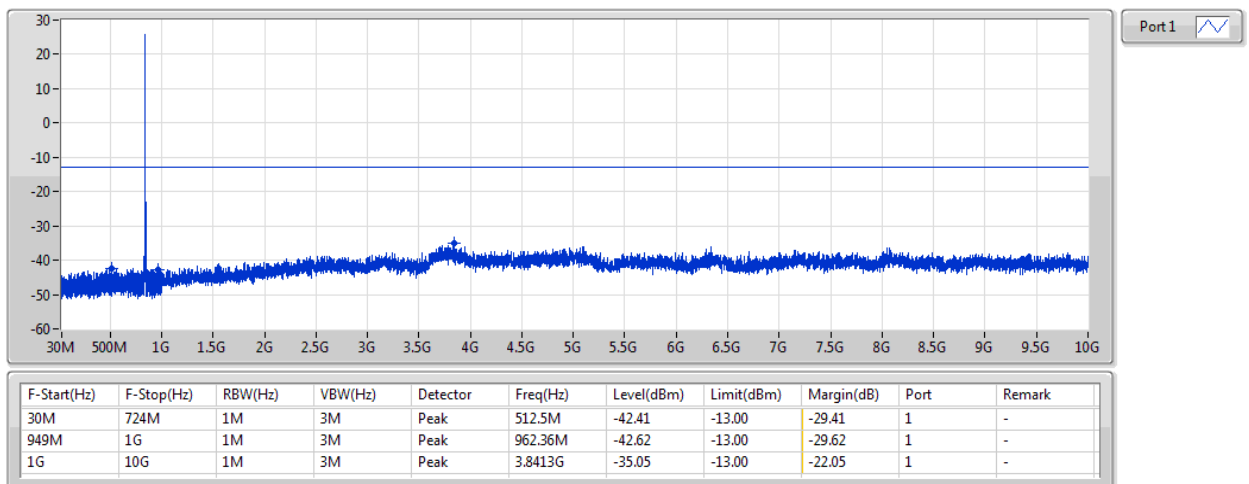
836.5MHz



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

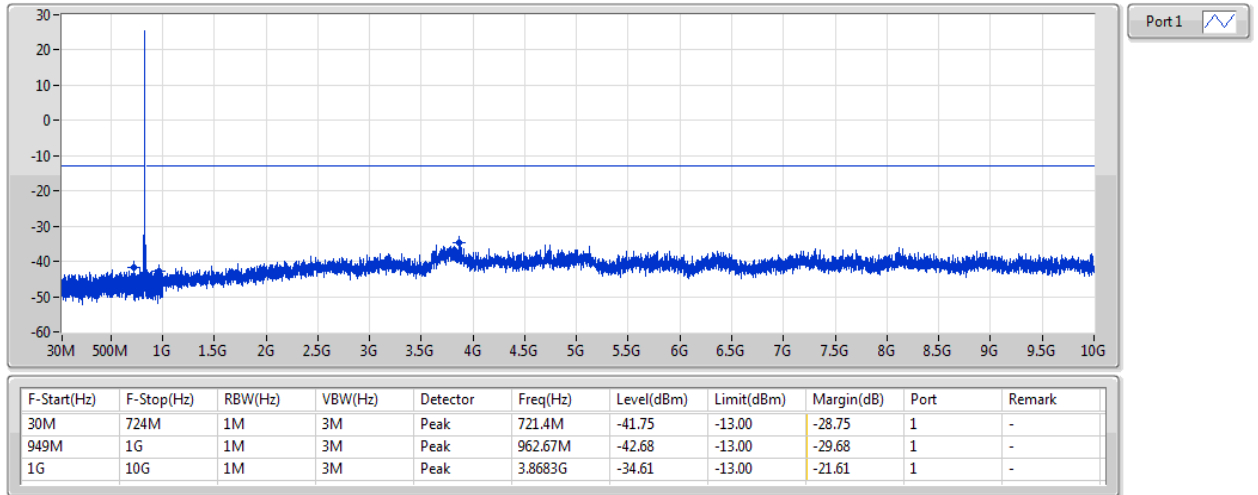
844MHz



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Port

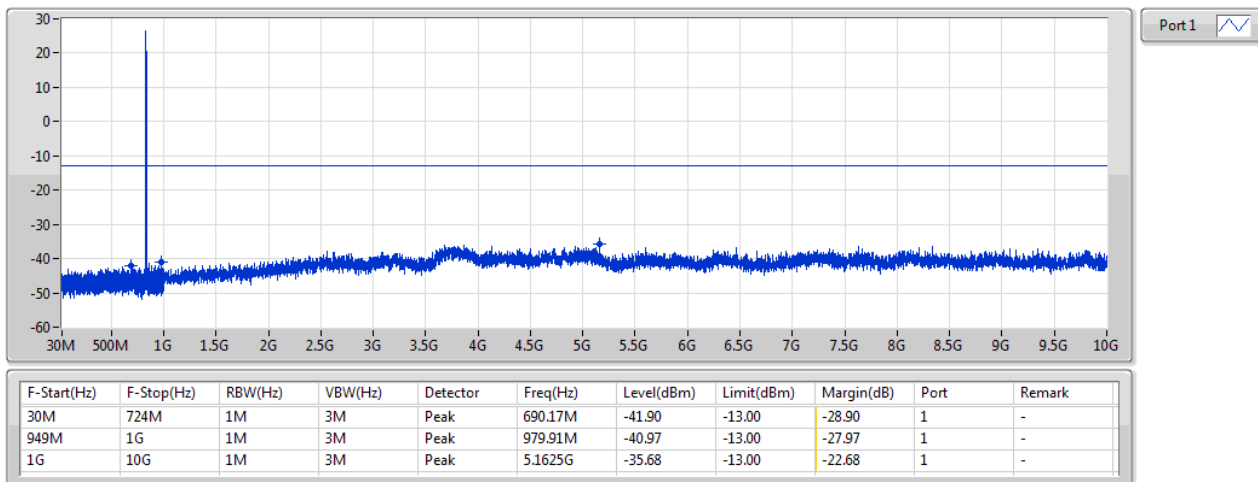
829MHz



Band 5_LTE_10MHz_Nss1,16QAM_1TX

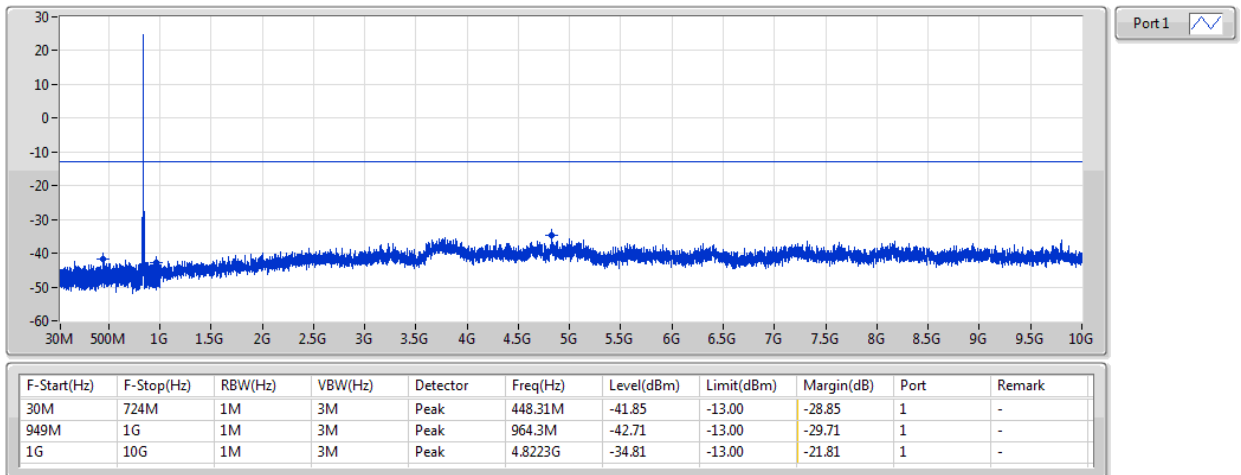
CSE-TX-Port

836.5MHz



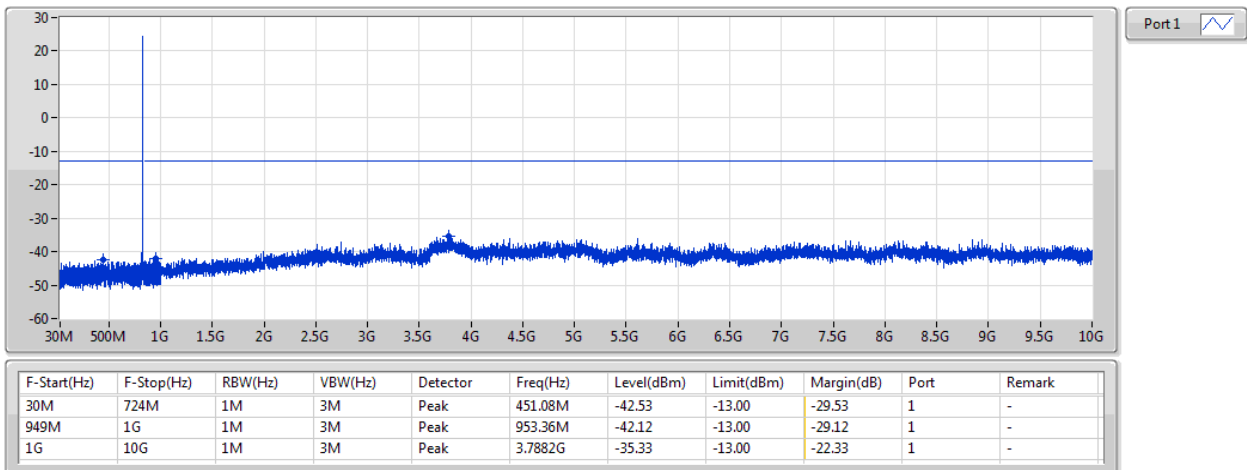
Band 5_LTE_10MHz_Nss1,16QAM_1TX
844MHz

CSE-TX-Port



Band 5_LTE_10MHz_Nss1,64QAM_1TX
829MHz

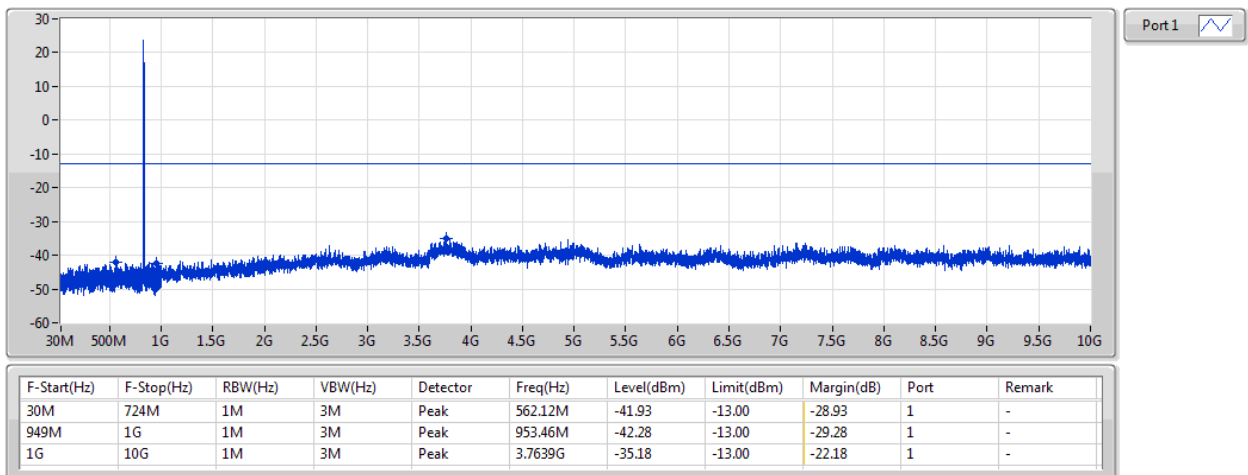
CSE-TX-Port



Band 5_LTE_10MHz_Nss1,64QAM_1TX

CSE-TX-Port

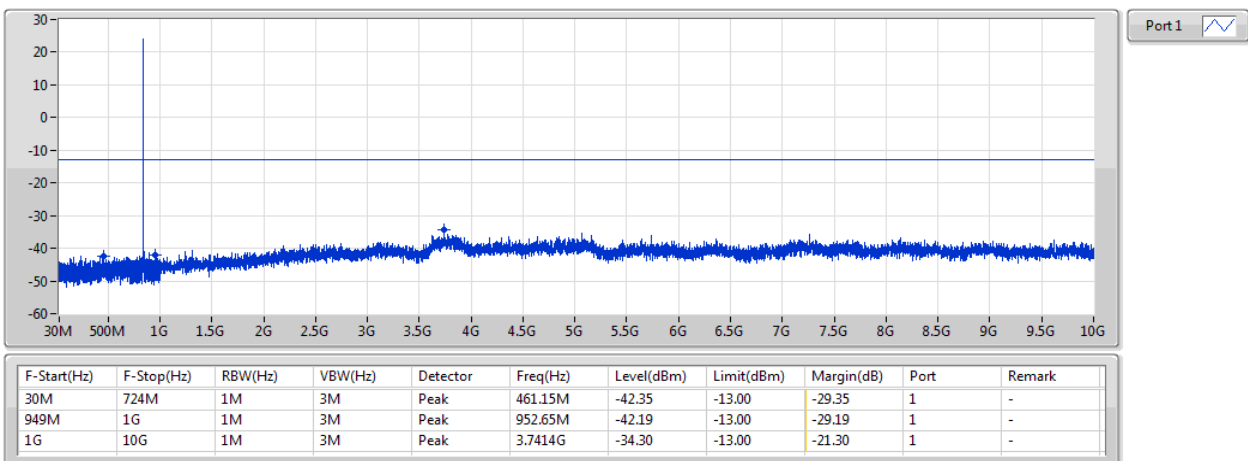
836.5MHz



Band 5_LTE_10MHz_Nss1,64QAM_1TX

CSE-TX-Port

844MHz



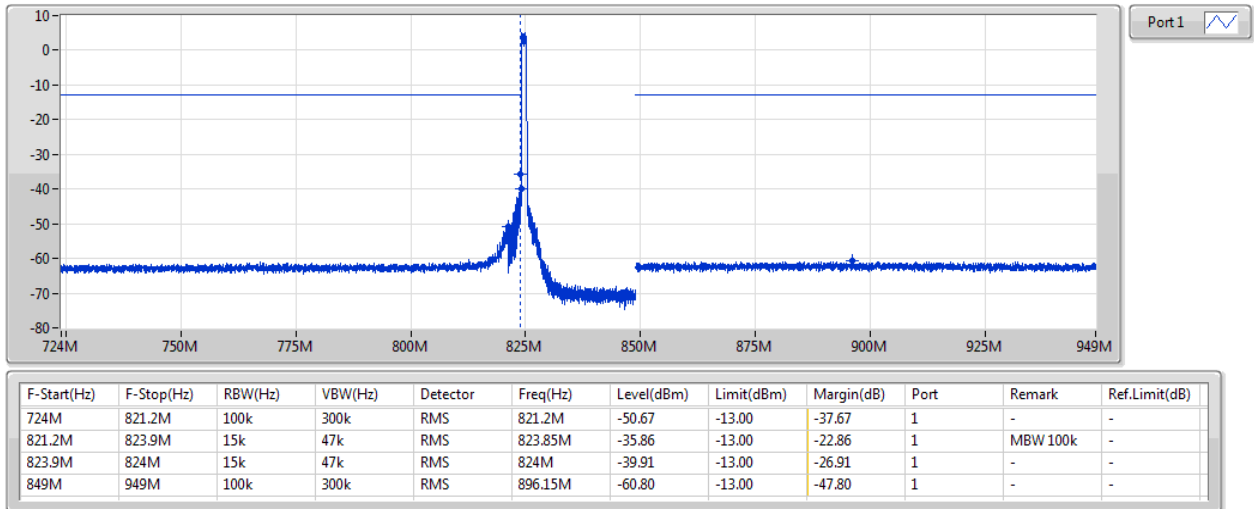
Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 5	-	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	849.1M	851.8M	15k	47k	RMS	849.15M	-28.70	-13.00	-15.70	1	MBW 100k	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	15k	47k	RMS	849M	-25.56	-13.00	-12.56	1	-	-
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	724M	824M	100k	300k	RMS	824M	-25.48	-13.00	-12.48	1	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	823.9M	824M	30k	100k	RMS	824M	-19.08	-13.00	-6.08	1	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-18.69	-13.00	-5.69	1	-	-
LTE_3MHz_Nss1,64QAM_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-24.22	-13.00	-11.22	1	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	51k	160k	RMS	849M	-22.02	-13.00	-9.02	1	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	823.9M	824M	51k	160k	RMS	824M	-22.08	-13.00	-9.08	1	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	823.9M	824M	51k	160k	RMS	824M	-26.48	-13.00	-13.48	1	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	100k	300k	RMS	849M	-31.46	-13.00	-18.46	1	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	823.9M	824M	100k	300k	RMS	824M	-30.40	-13.00	-17.40	1	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	823.9M	824M	100k	300k	RMS	824M	-34.66	-13.00	-21.66	1	-	-

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Port

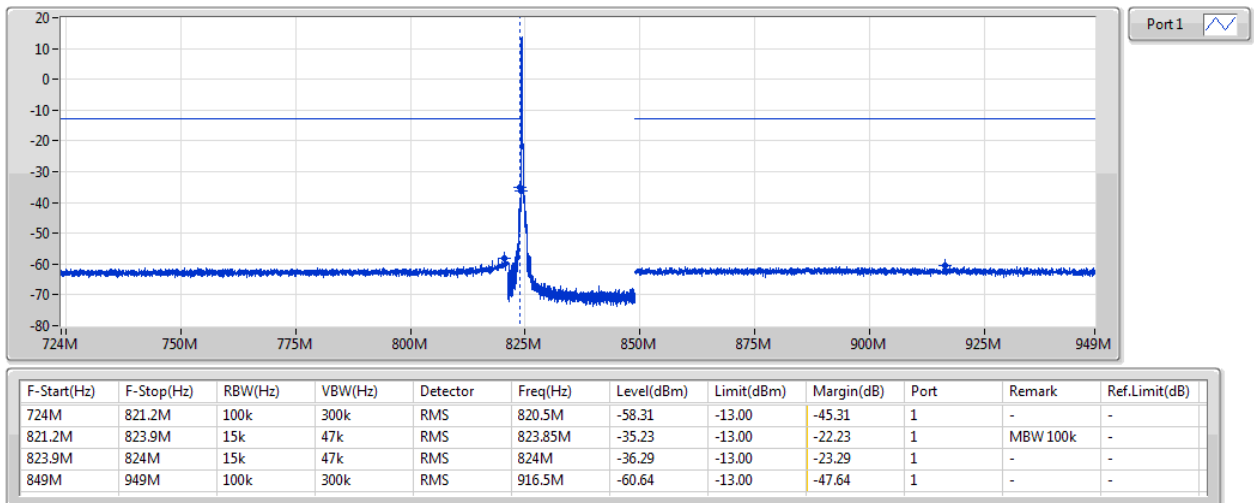
824.7MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Port

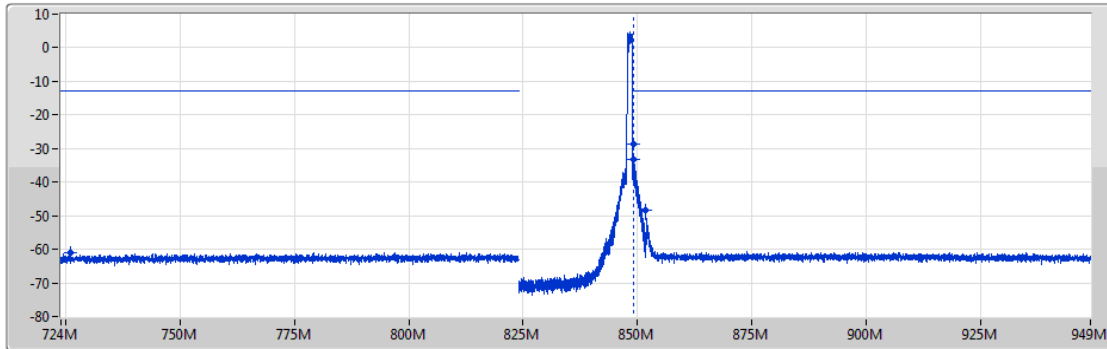
824.7MHz_QPSK_RB 1,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Port

848.3MHz_QPSK_RB 6,#RB 0

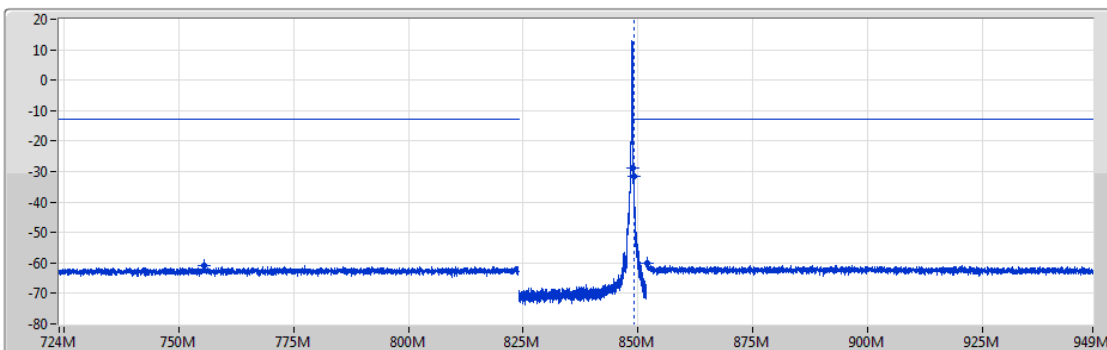


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	726M	-60.95	-13.00	-47.95	1	-
849M	849.1M	15k	47k	RMS	849.06M	-33.08	-13.00	-20.08	1	-
849.1M	851.8M	15k	47k	RMS	849.15M	-28.70	-13.00	-15.70	1	MBW 100k
851.8M	949M	100k	300k	RMS	851.8M	-48.53	-13.00	-35.53	1	-

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Port

848.3MHz_QPSK_RB 1,#RB 5

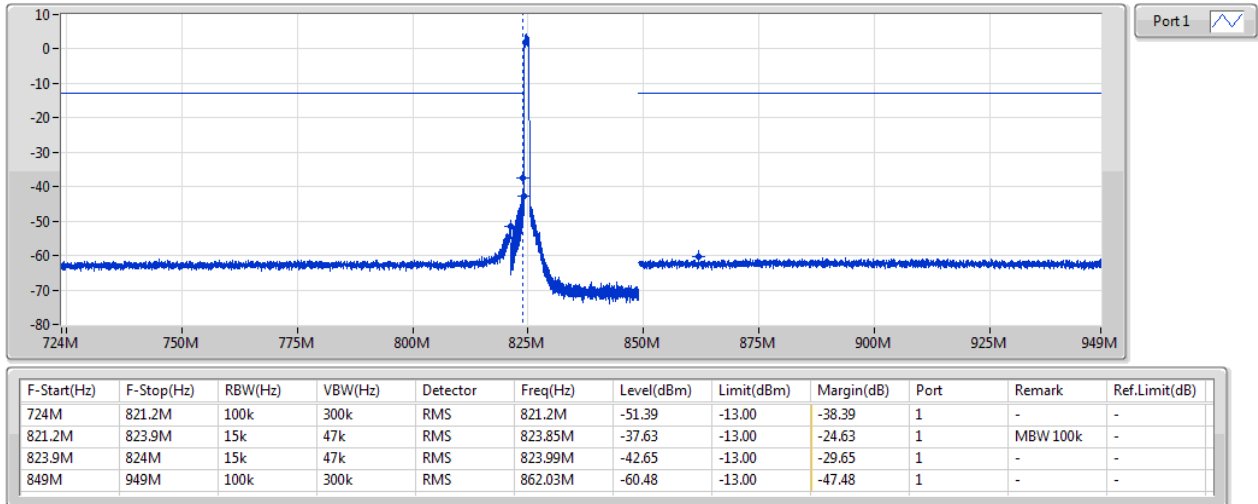


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	755.63M	-60.97	-13.00	-47.97	1	-
849M	849.1M	15k	47k	RMS	849.01M	-28.78	-13.00	-15.78	1	-
849.1M	851.8M	15k	47k	RMS	849.15M	-31.64	-13.00	-18.64	1	MBW 100k
851.8M	949M	100k	300k	RMS	851.95M	-60.21	-13.00	-47.21	1	-

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Port

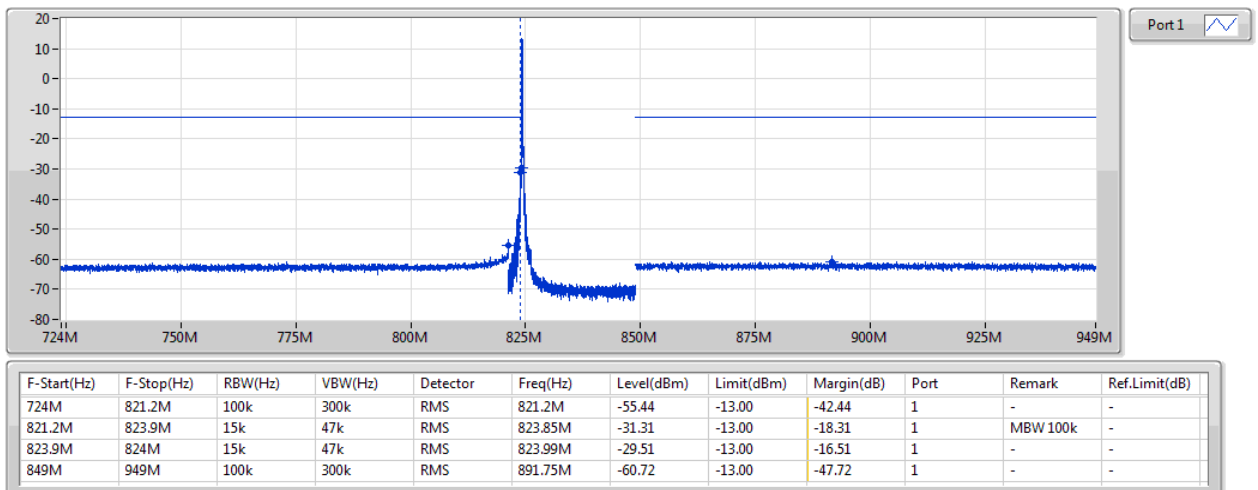
824.7MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Port

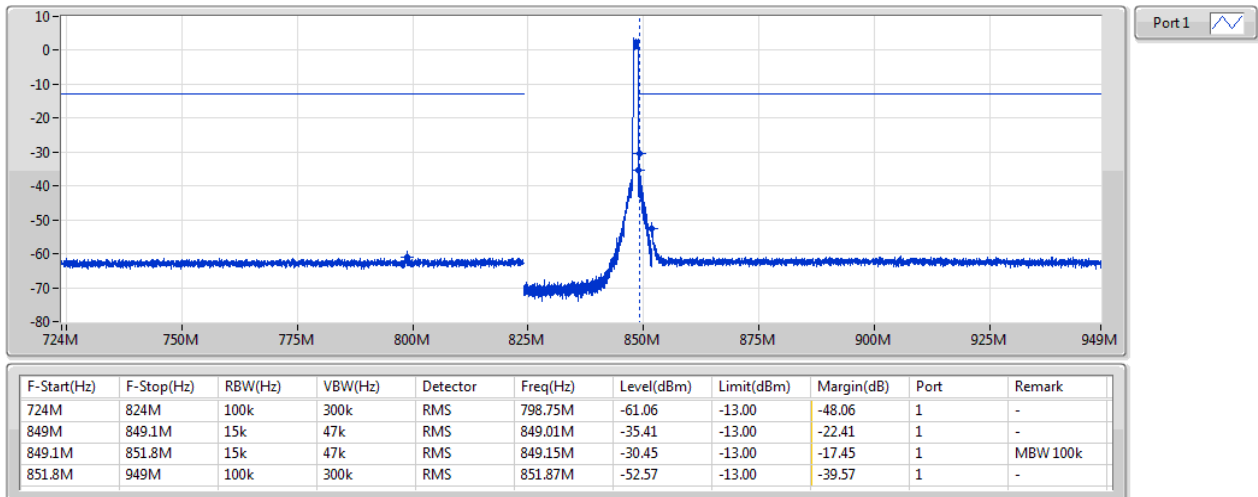
824.7MHz_16QAM_RB 1,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Port

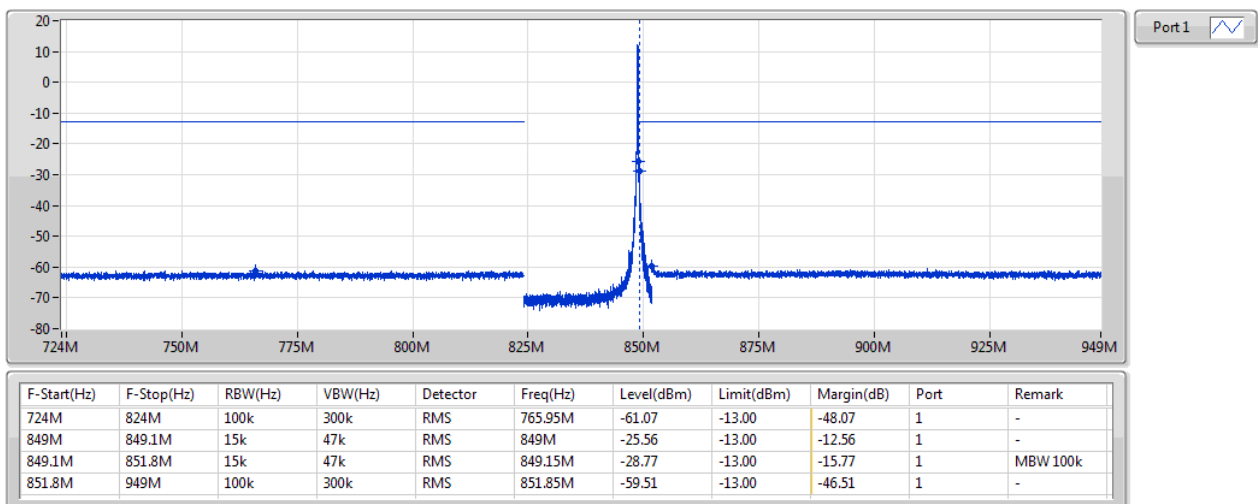
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Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Port

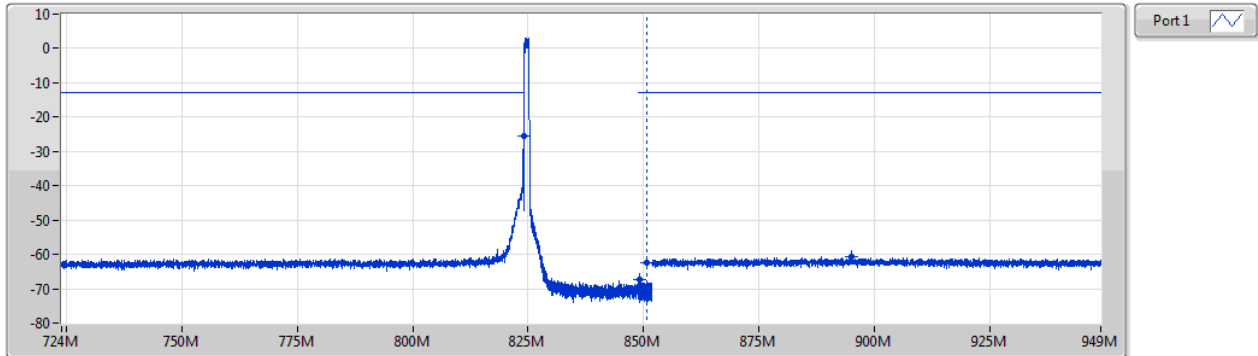
848.3MHz_16QAM_RB 1,#RB 5



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

824.7MHz_64QAM_RB 6,#RB 0

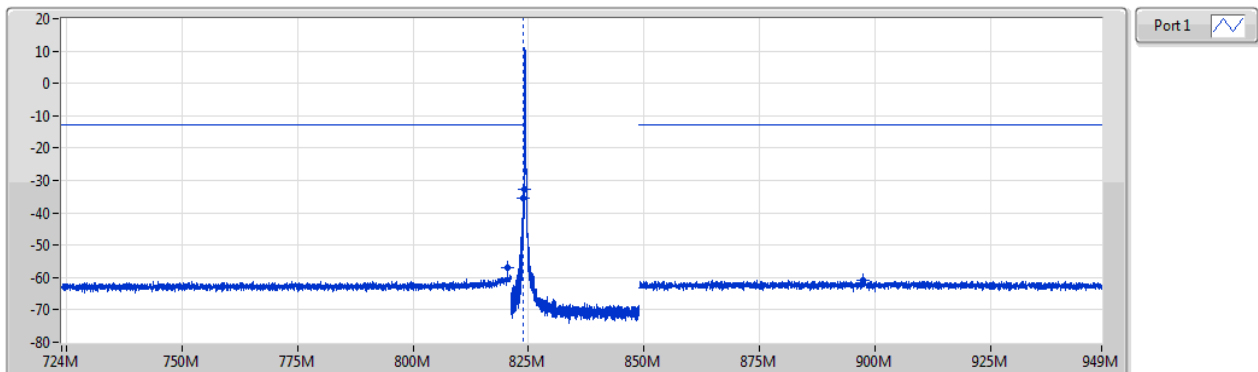


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	824M	-25.48	-13.00	-12.48	1	-
849M	849.1M	15k	47k	RMS	849.08M	-67.20	-13.00	-54.20	1	-
849.1M	851.8M	15k	47k	RMS	850.65M	-62.58	-13.00	-49.58	1	MBW 100k
851.8M	949M	100k	300k	RMS	895.15M	-60.73	-13.00	-47.73	1	-

Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

824.7MHz_64QAM_RB 1,#RB 0

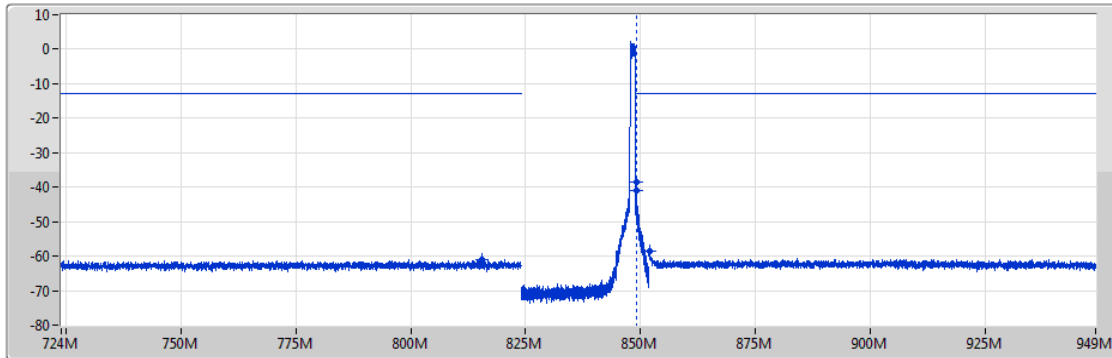


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	821.2M	100k	300k	RMS	820.45M	-56.95	-13.00	-43.95	1	-	-
821.2M	823.9M	15k	47k	RMS	823.85M	-35.29	-13.00	-22.29	1	MBW 100k	-
823.9M	824M	15k	47k	RMS	824M	-32.89	-13.00	-19.89	1	-	-
849M	949M	100k	300k	RMS	897.28M	-60.93	-13.00	-47.93	1	-	-

Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

848.3MHz_64QAM_RB 6,#RB 0

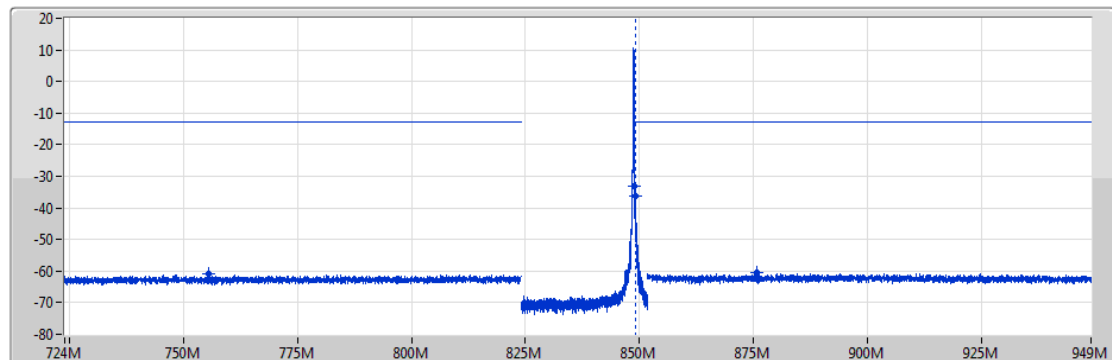


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	815.55M	-61.09	-13.00	-48.09	1	-
849M	849.1M	15k	47k	RMS	849.02M	-40.97	-13.00	-27.97	1	-
849.1M	851.8M	15k	47k	RMS	849.15M	-38.60	-13.00	-25.60	1	MBW 100k
851.8M	949M	100k	300k	RMS	851.95M	-58.39	-13.00	-45.39	1	-

Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

CSE-TX-Port

848.3MHz_64QAM_RB 1,#RB 5

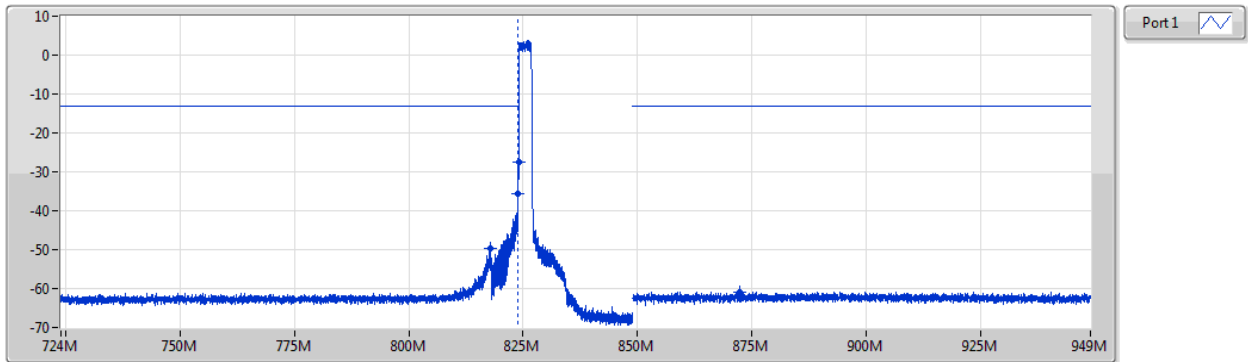


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	755.55M	-61.05	-13.00	-48.05	1	-
849M	849.1M	15k	47k	RMS	849.01M	-32.94	-13.00	-19.94	1	-
849.1M	851.8M	15k	47k	RMS	849.15M	-36.06	-13.00	-23.06	1	MBW 100k
851.8M	949M	100k	300k	RMS	875.61M	-60.53	-13.00	-47.53	1	-

Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

825.5MHz_QPSK_RB 15,#RB 0

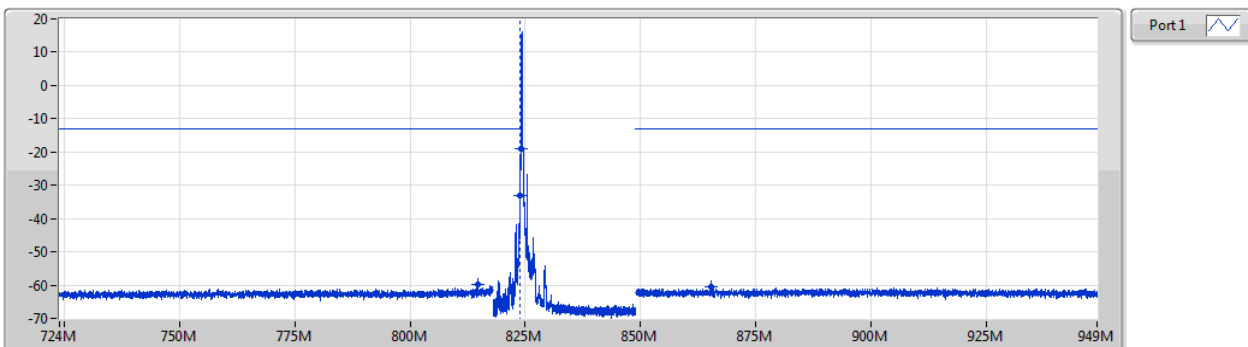


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	818M	100k	300k	RMS	817.98M	-49.77	-13.00	-36.77	1	-	-
818M	823.9M	30k	100k	RMS	823.85M	-35.71	-13.00	-22.71	1	MBW 100k	-
823.9M	824M	30k	100k	RMS	824M	-27.62	-13.00	-14.62	1	-	-
849M	949M	100k	300k	RMS	872.38M	-60.79	-13.00	-47.79	1	-	-

Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

825.5MHz_QPSK_RB 1,#RB 0

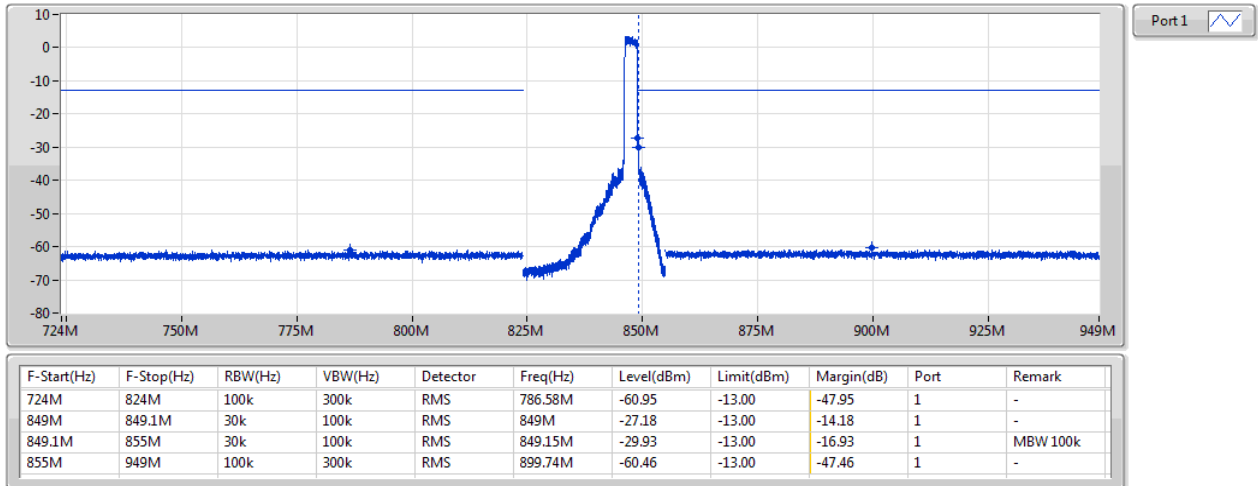


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	818M	100k	300k	RMS	814.8M	-59.93	-13.00	-46.93	1	-	-
818M	823.9M	30k	100k	RMS	823.85M	-33.17	-13.00	-20.17	1	MBW 100k	-
823.9M	824M	30k	100k	RMS	824M	-19.08	-13.00	-6.08	1	-	-
849M	949M	100k	300k	RMS	865.3M	-60.59	-13.00	-47.59	1	-	-

Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

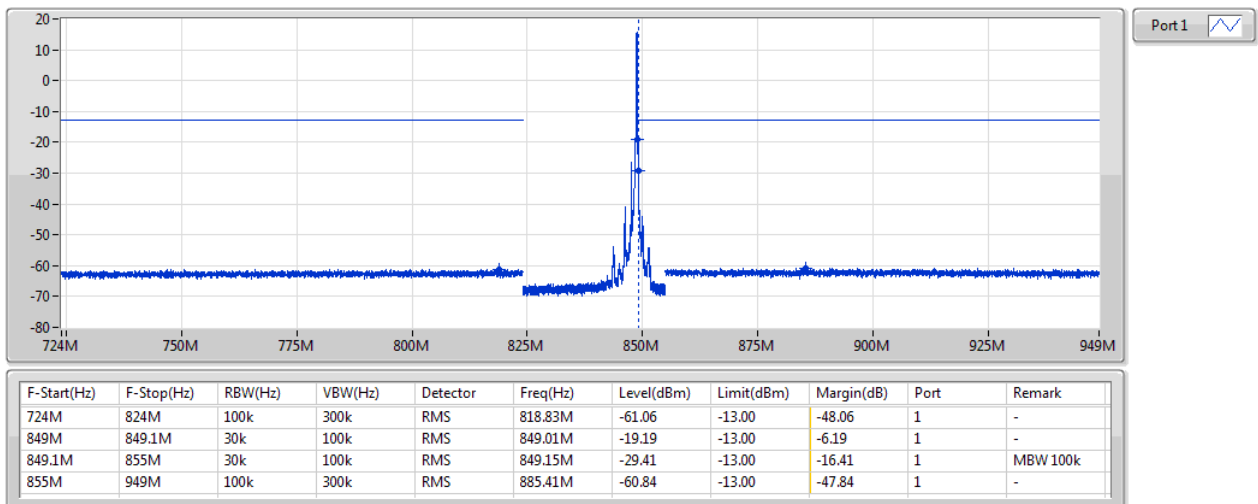
847.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Port

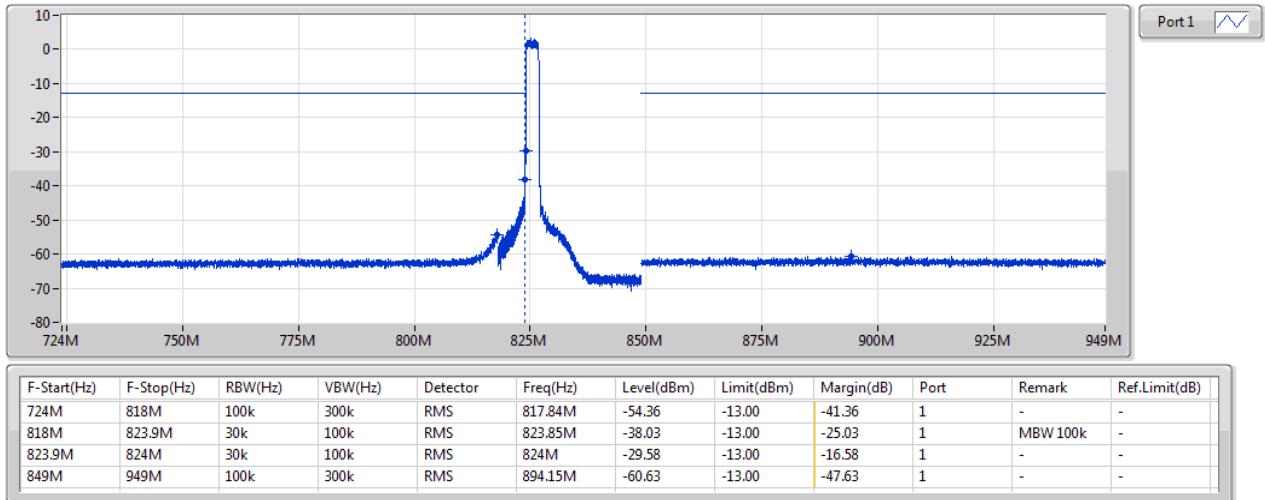
847.5MHz_QPSK_RB 1,#RB 14



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

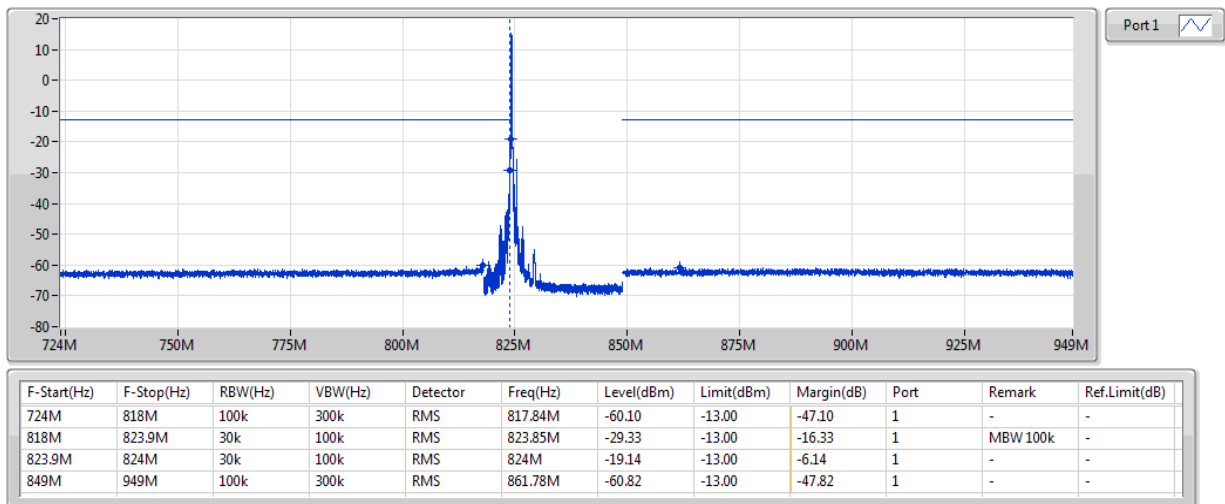
825.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

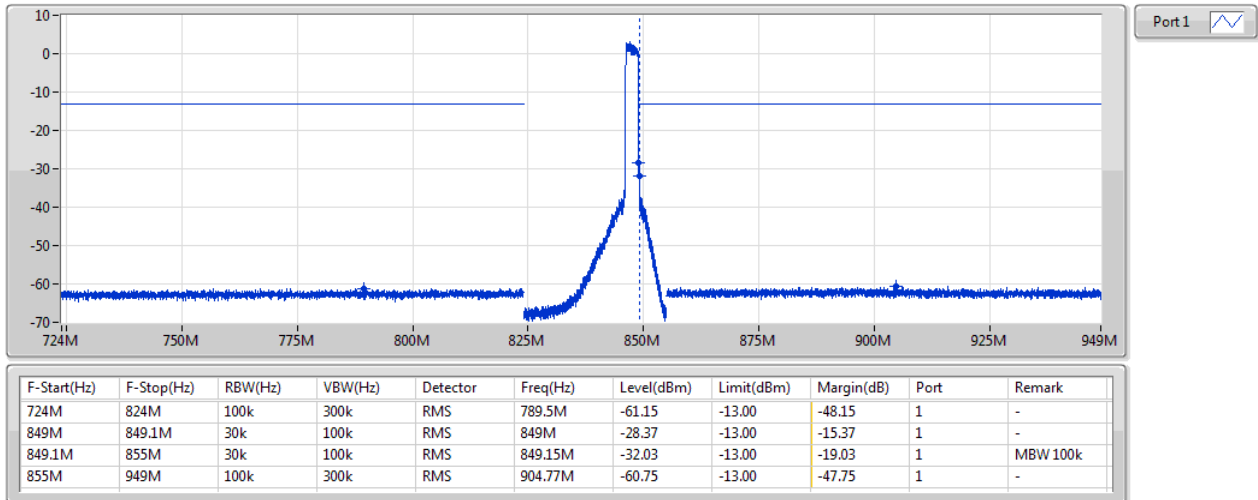
825.5MHz_16QAM_RB 1,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

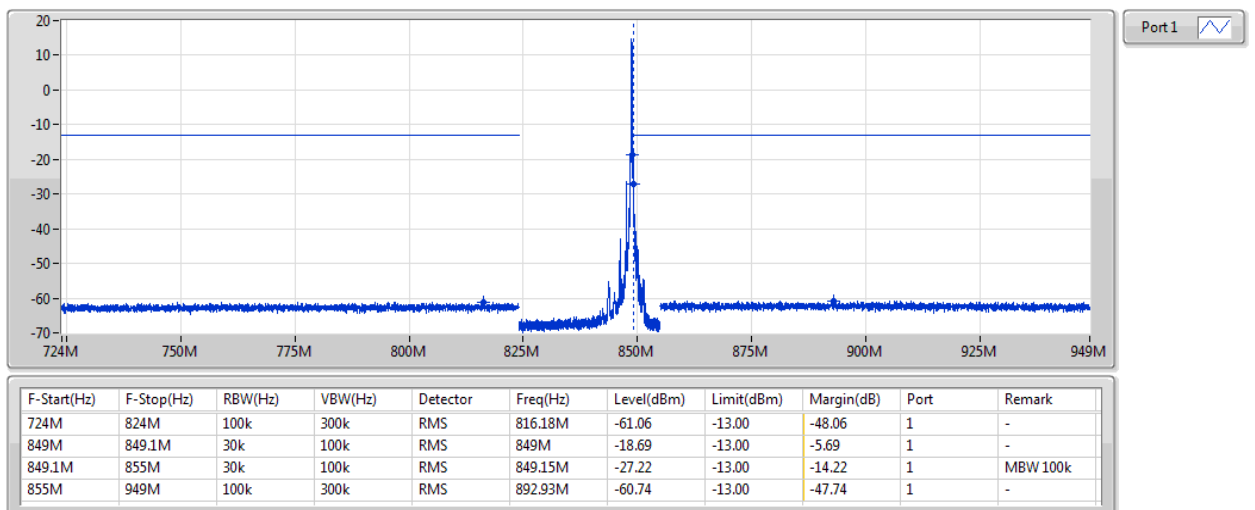
847.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Port

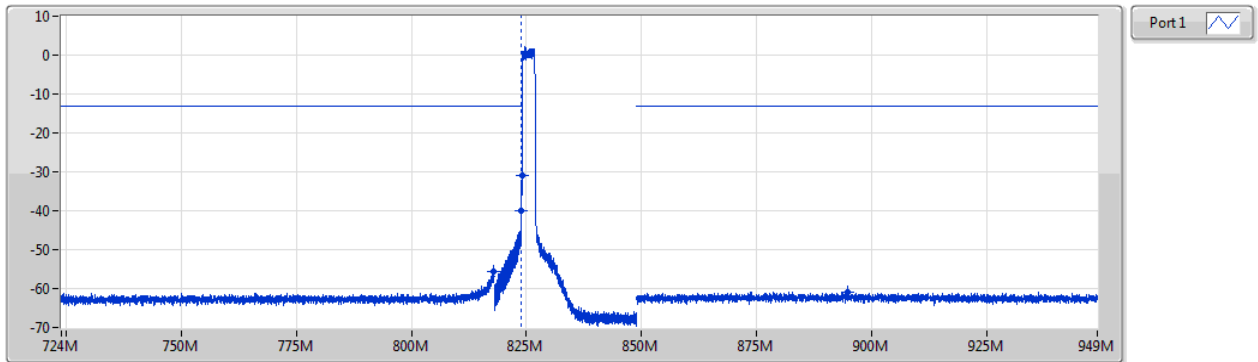
847.5MHz_16QAM_RB 1,#RB 14



Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

825.5MHz_64QAM_RB 15,#RB 0

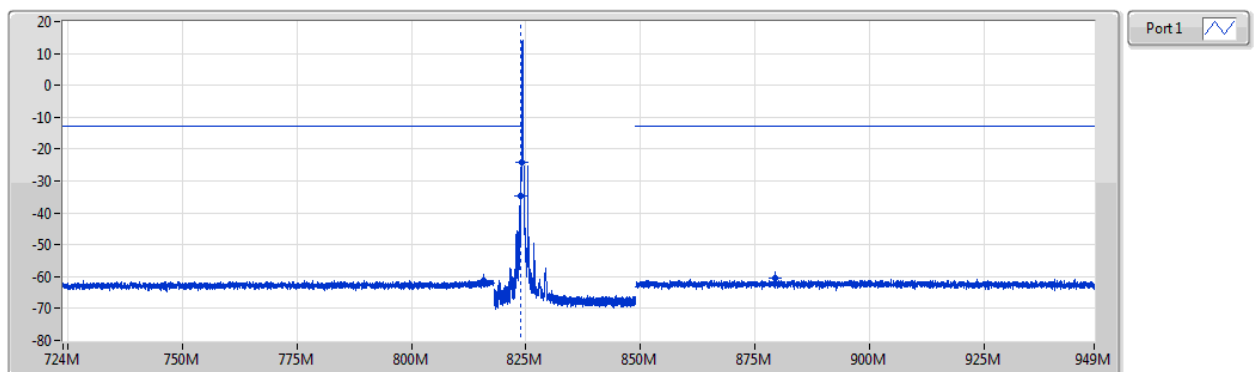


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	818M	100k	300k	RMS	817.86M	-55.72	-13.00	-42.72	1	-	-
818M	823.9M	30k	100k	RMS	823.85M	-40.02	-13.00	-27.02	1	MBW 100k	-
823.9M	824M	30k	100k	RMS	824M	-31.03	-13.00	-18.03	1	-	-
849M	949M	100k	300k	RMS	894.8M	-60.82	-13.00	-47.82	1	-	-

Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

825.5MHz_64QAM_RB 1,#RB 0

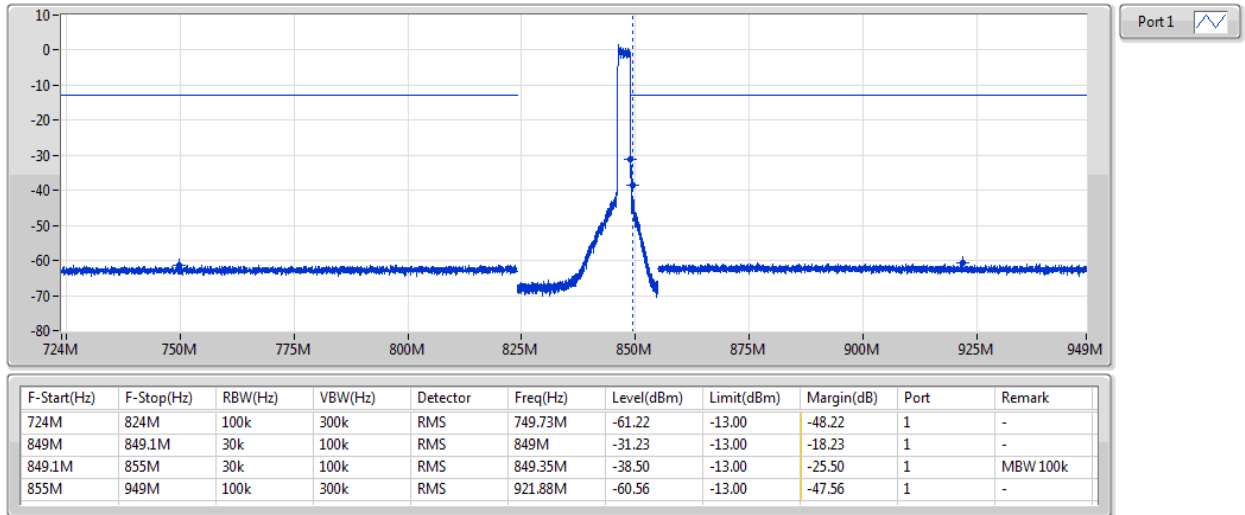


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	818M	100k	300k	RMS	815.72M	-61.14	-13.00	-48.14	1	-	-
818M	823.9M	30k	100k	RMS	823.85M	-34.87	-13.00	-21.87	1	MBW 100k	-
823.9M	824M	30k	100k	RMS	824M	-24.30	-13.00	-11.30	1	-	-
849M	949M	100k	300k	RMS	879.28M	-60.65	-13.00	-47.65	1	-	-

Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

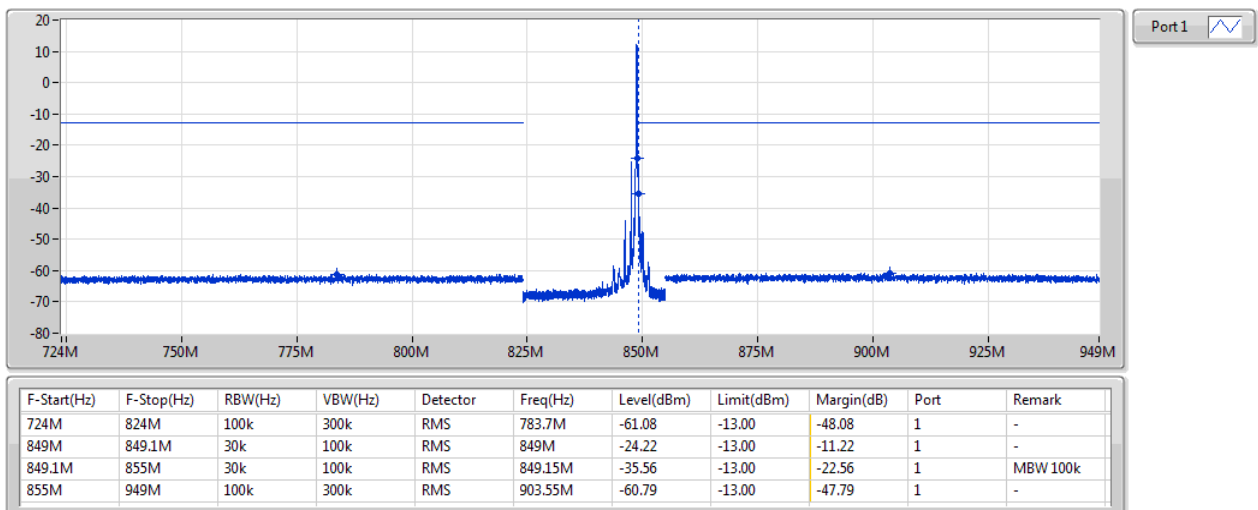
847.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

CSE-TX-Port

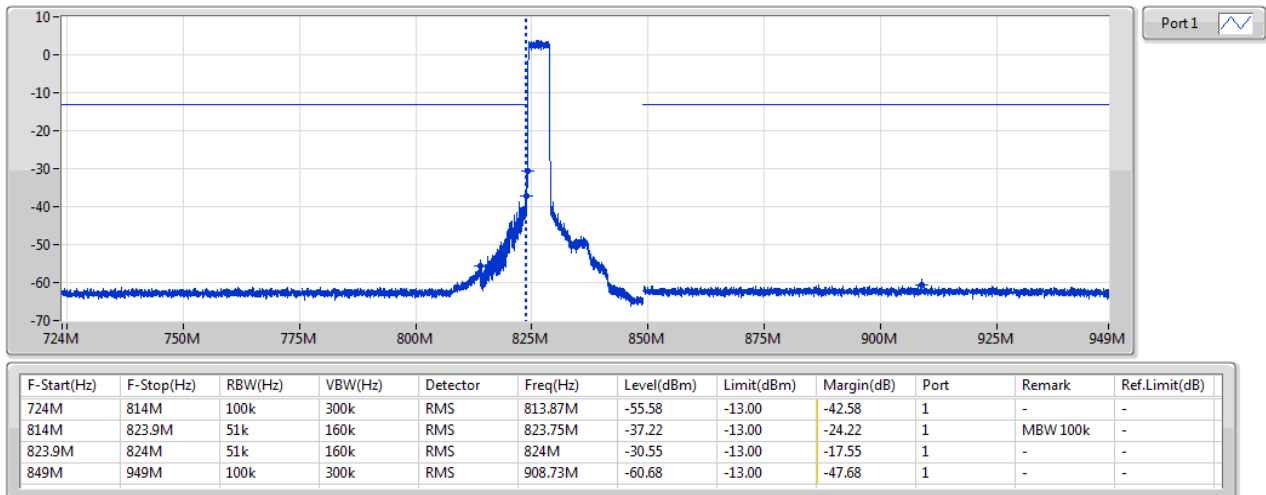
847.5MHz_64QAM_RB 1,#RB 14



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

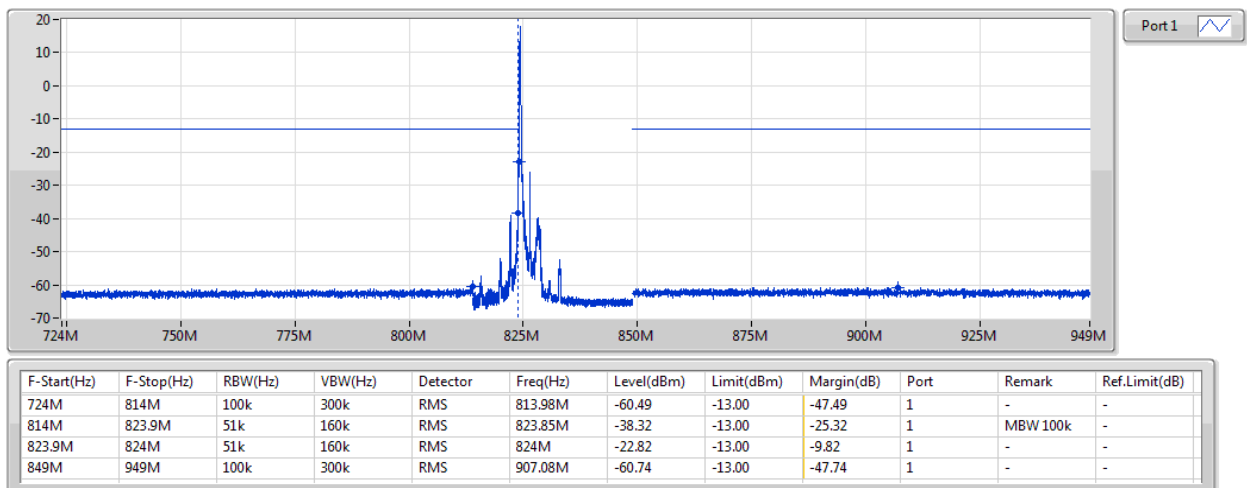
826.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

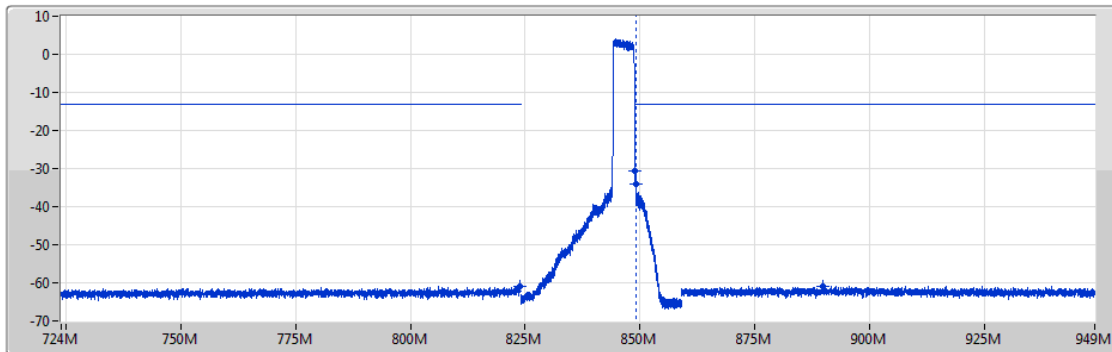
826.5MHz_QPSK_RB 1,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

846.5MHz_QPSK_RB 25,#RB 0

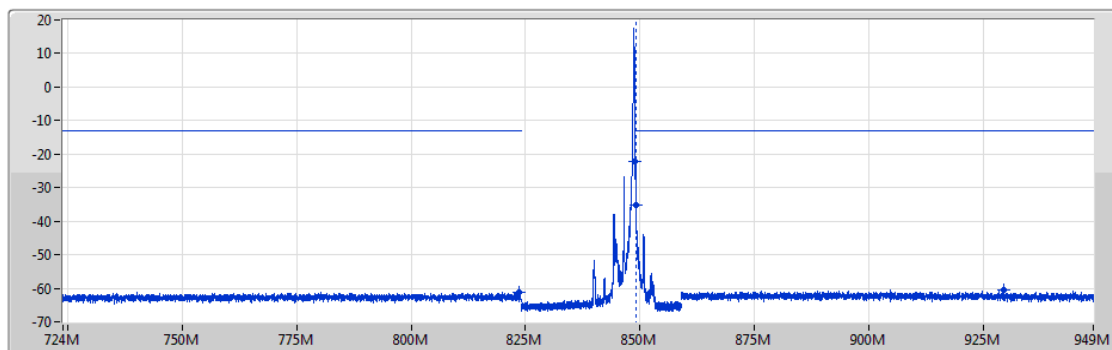


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	823.95M	-60.86	-13.00	-47.86	1	-
849M	849.1M	51k	160k	RMS	849M	-30.78	-13.00	-17.78	1	-
849.1M	859M	51k	160k	RMS	849.15M	-34.09	-13.00	-21.09	1	MBW 100k
859M	949M	100k	300k	RMS	889.76M	-60.87	-13.00	-47.87	1	-

Band 5_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Port

846.5MHz_QPSK_RB 1,#RB 24

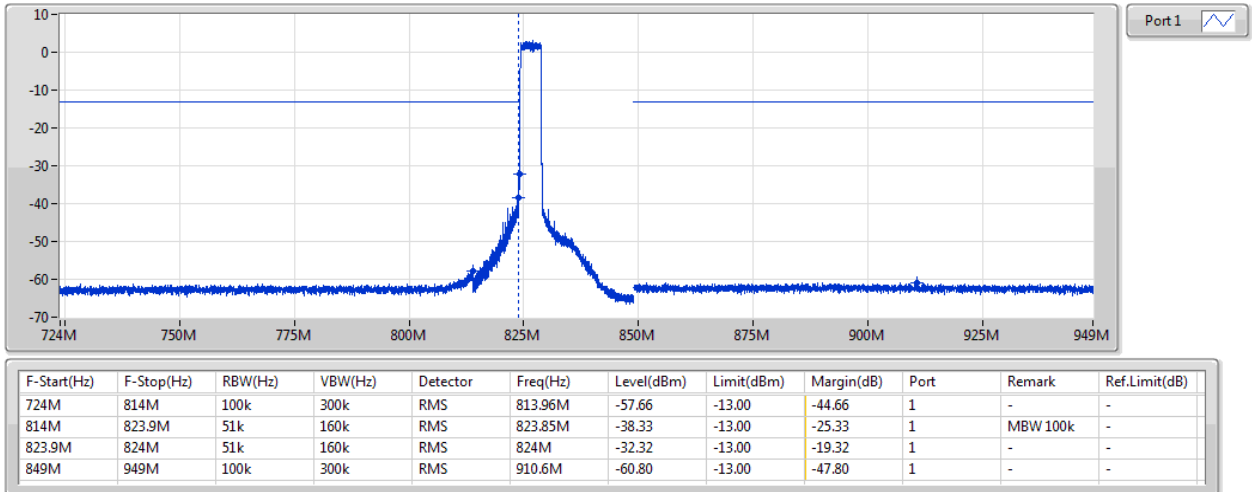


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	823.63M	-61.21	-13.00	-48.21	1	-
849M	849.1M	51k	160k	RMS	849M	-22.02	-13.00	-9.02	1	-
849.1M	859M	51k	160k	RMS	849.15M	-35.34	-13.00	-22.34	1	MBW 100k
859M	949M	100k	300k	RMS	929.54M	-60.39	-13.00	-47.39	1	-

Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

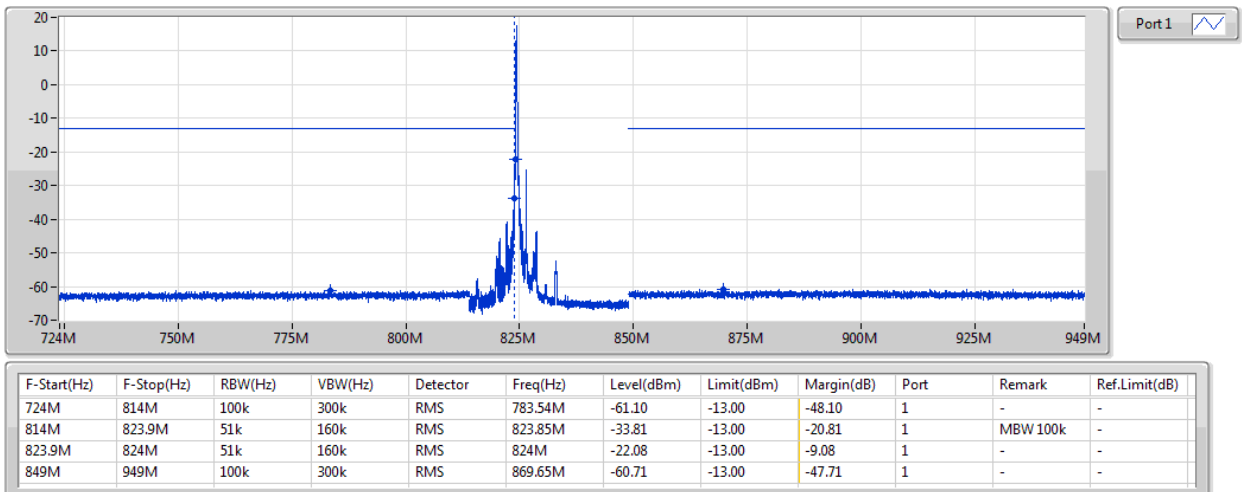
826.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

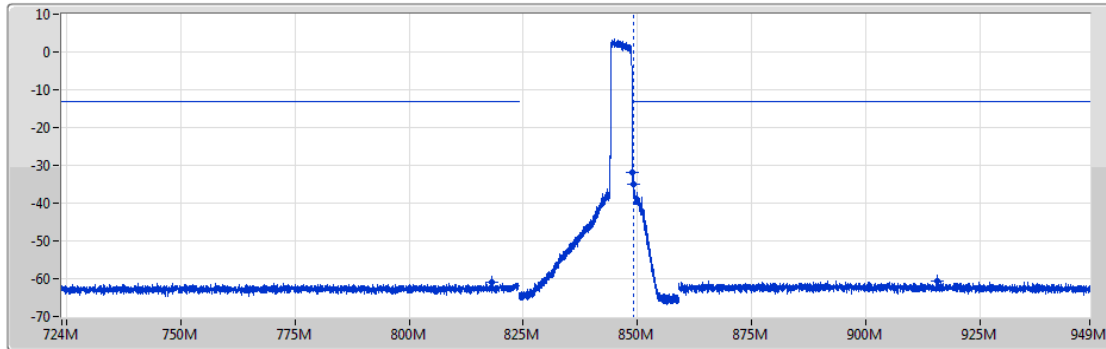
826.5MHz_16QAM_RB 1,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

846.5MHz_16QAM_RB 25,#RB 0

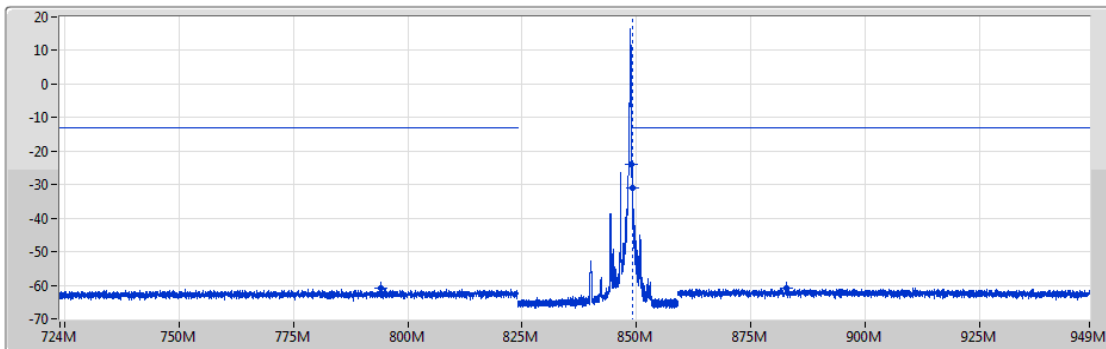


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	818.23M	-61.03	-13.00	-48.03	1	-
849M	849.1M	51k	160k	RMS	849M	-31.98	-13.00	-18.98	1	-
849.1M	859M	51k	160k	RMS	849.15M	-34.89	-13.00	-21.89	1	MBW 100k
859M	949M	100k	300k	RMS	915.59M	-60.56	-13.00	-47.56	1	-

Band 5_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Port

846.5MHz_16QAM_RB 1,#RB 24

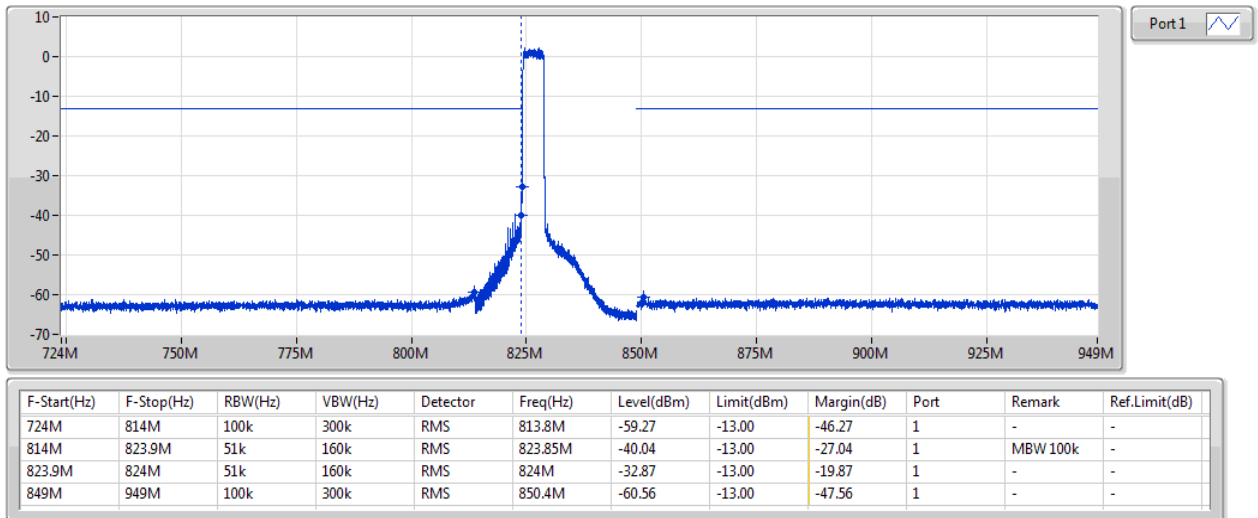


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	794.15M	-60.97	-13.00	-47.97	1	-
849M	849.1M	51k	160k	RMS	849M	-23.83	-13.00	-10.83	1	-
849.1M	859M	51k	160k	RMS	849.15M	-30.99	-13.00	-17.99	1	MBW 100k
859M	949M	100k	300k	RMS	882.78M	-60.89	-13.00	-47.89	1	-

Band 5_LTE_5MHz_Nss1,64QAM_1TX

CSE-TX-Port

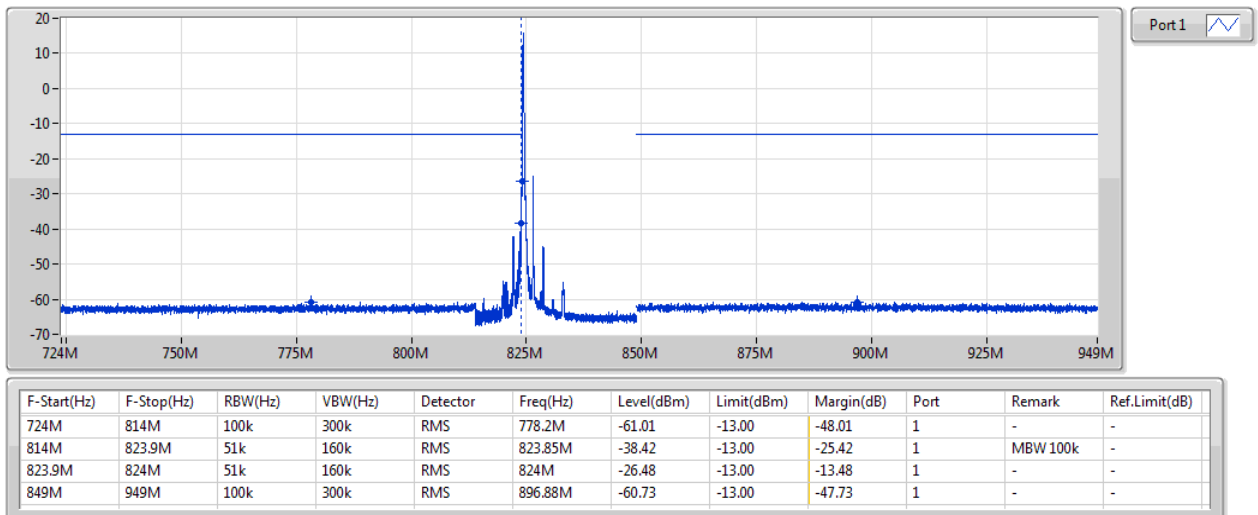
826.5MHz_64QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

CSE-TX-Port

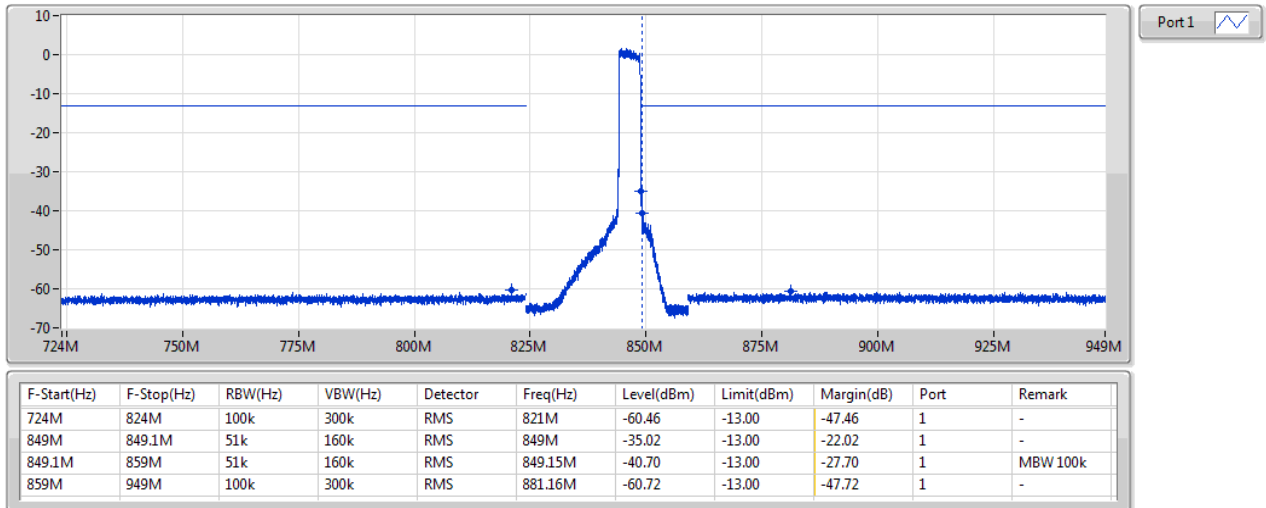
826.5MHz_64QAM_RB 1,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

CSE-TX-Port

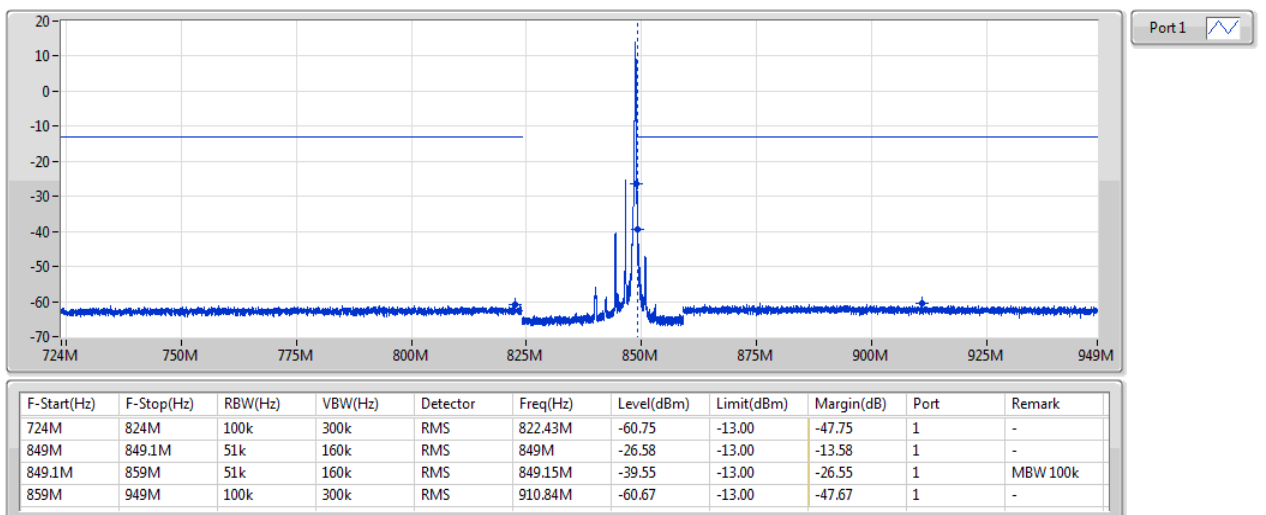
846.5MHz_64QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

CSE-TX-Port

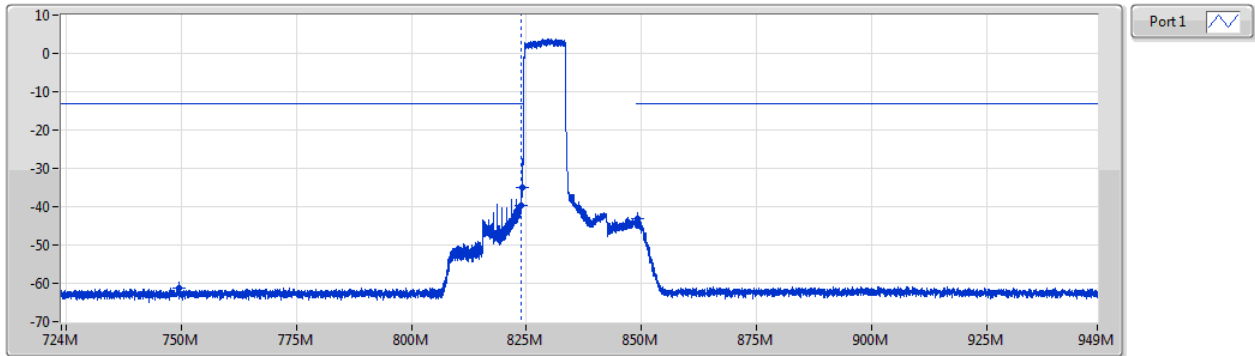
846.5MHz_64QAM_RB 1,#RB 24



Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

829MHz_QPSK_RB 50,#RB 0

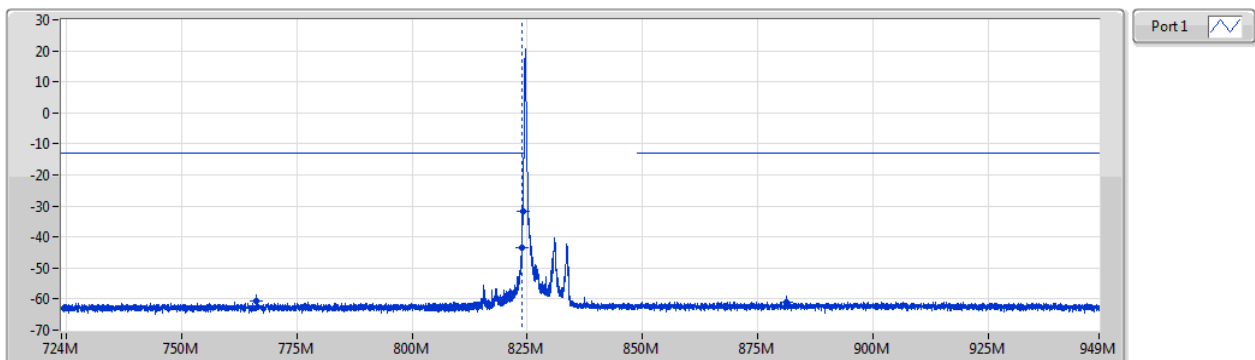


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	804M	100k	300k	RMS	749.66M	-61.11	-13.00	-48.11	1	-	-
804M	823.9M	100k	300k	RMS	823.85M	-39.70	-13.00	-26.70	1	MBW 100k	-
823.9M	824M	100k	300k	RMS	824M	-34.94	-13.00	-21.94	1	-	-
849M	949M	100k	300k	RMS	849.13M	-43.12	-13.00	-30.12	1	-	-

Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

829MHz_QPSK_RB 1,#RB 0

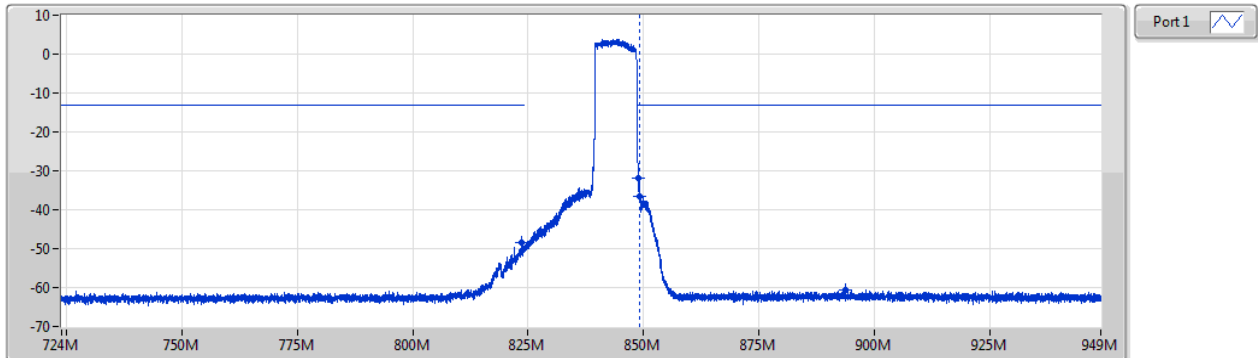


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
724M	804M	100k	300k	RMS	766.36M	-60.64	-13.00	-47.64	1	-	-
804M	823.9M	100k	300k	RMS	823.85M	-43.55	-13.00	-30.55	1	MBW 100k	-
823.9M	824M	100k	300k	RMS	824M	-31.55	-13.00	-18.55	1	-	-
849M	949M	100k	300k	RMS	881.15M	-60.84	-13.00	-47.84	1	-	-

Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

844MHz_QPSK_RB 50,#RB 0

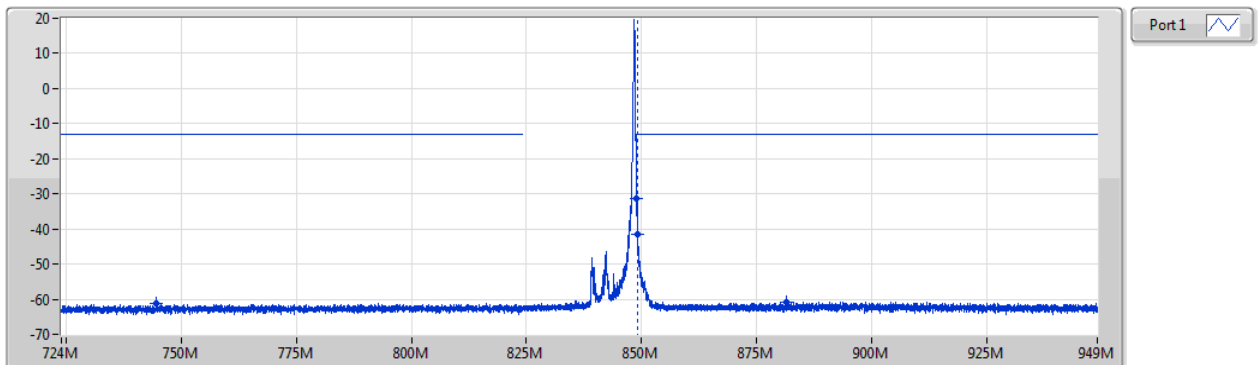


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	823.7M	-48.46	-13.00	-35.46	1	-
849M	849.1M	100k	300k	RMS	849M	-32.02	-13.00	-19.02	1	-
849.1M	869M	100k	300k	RMS	849.15M	-36.51	-13.00	-23.51	1	MBW 100k
869M	949M	100k	300k	RMS	893.78M	-60.60	-13.00	-47.60	1	-

Band 5_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Port

844MHz_QPSK_RB 1,#RB 49

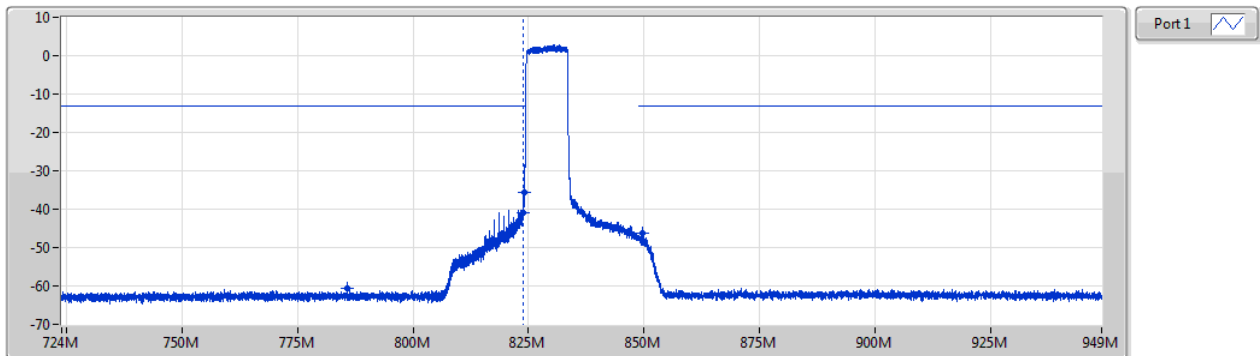


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	744.7M	-61.24	-13.00	-48.24	1	-
849M	849.1M	100k	300k	RMS	849M	-31.46	-13.00	-18.46	1	-
849.1M	869M	100k	300k	RMS	849.15M	-41.35	-13.00	-28.35	1	MBW 100k
869M	949M	100k	300k	RMS	881.5M	-60.76	-13.00	-47.76	1	-

Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Port

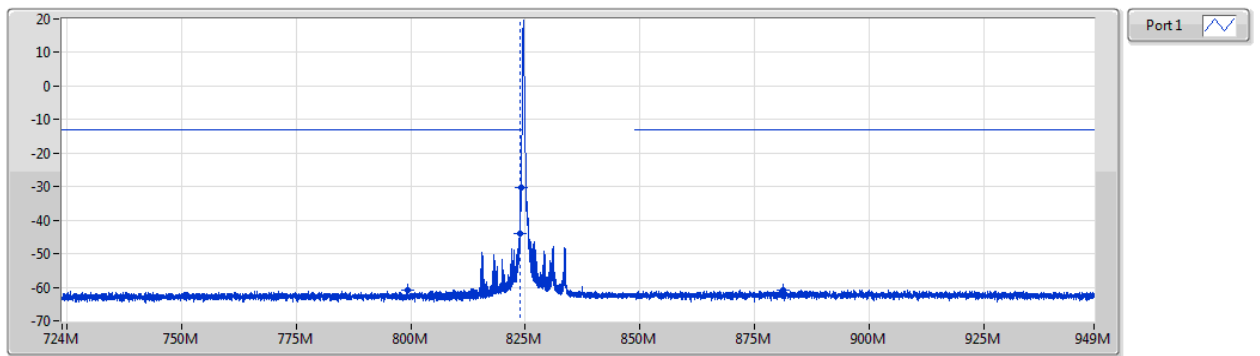
829MHz_16QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Port

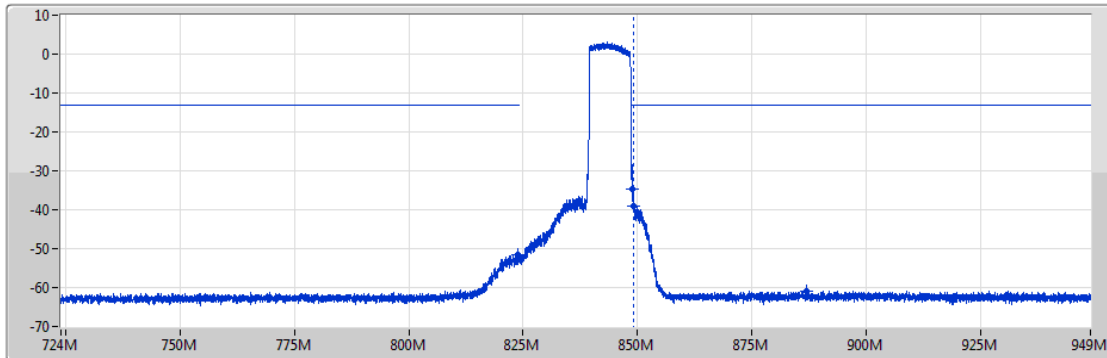
829MHz_16QAM_RB 1,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Port

844MHz_16QAM_RB 50,#RB 0

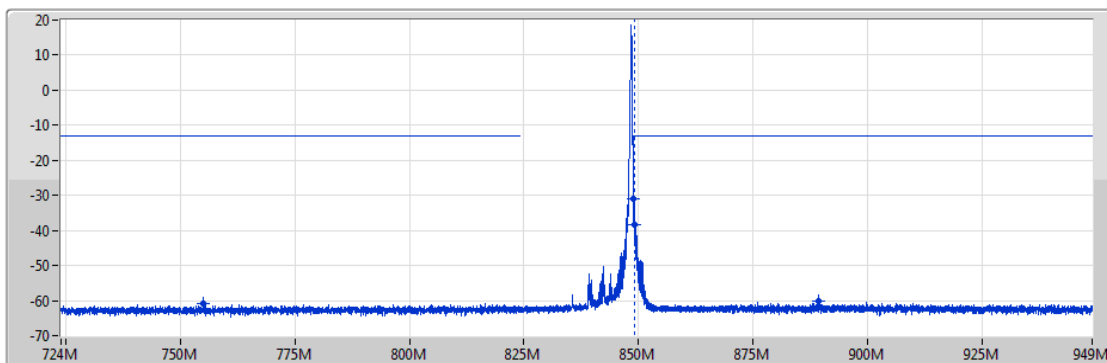


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	823.83M	-51.58	-13.00	-38.58	1	-
849M	849.1M	100k	300k	RMS	849.01M	-34.64	-13.00	-21.64	1	-
849.1M	869M	100k	300k	RMS	849.15M	-38.98	-13.00	-25.98	1	MBW 100k
869M	949M	100k	300k	RMS	886.98M	-60.87	-13.00	-47.87	1	-

Band 5_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Port

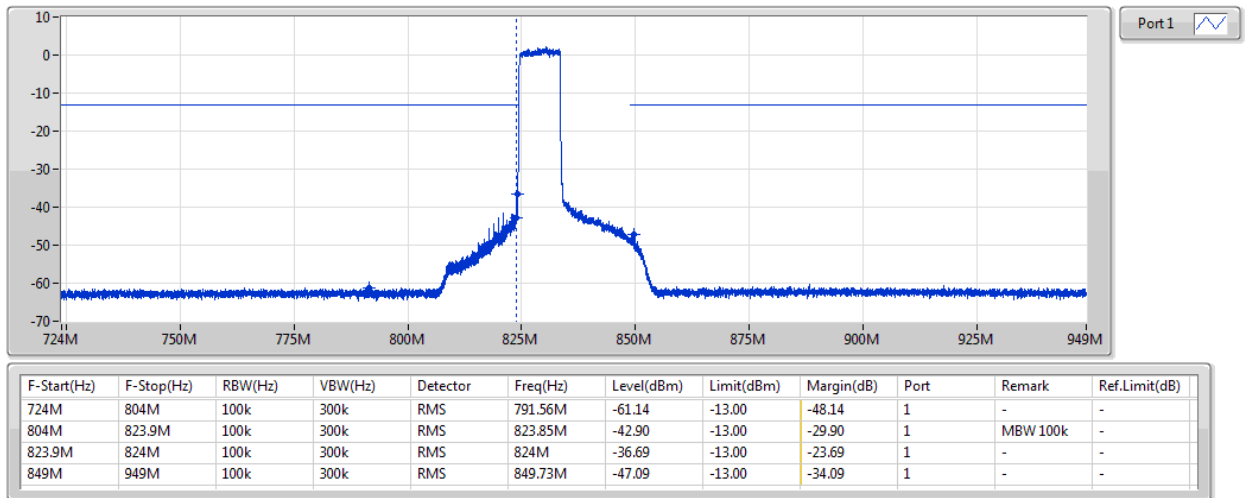
844MHz_16QAM_RB 1,#RB 49



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	754.98M	-60.76	-13.00	-47.76	1	-
849M	849.1M	100k	300k	RMS	849M	-30.84	-13.00	-17.84	1	-
849.1M	869M	100k	300k	RMS	849.15M	-38.32	-13.00	-25.32	1	MBW 100k
869M	949M	100k	300k	RMS	889.4M	-60.20	-13.00	-47.20	1	-

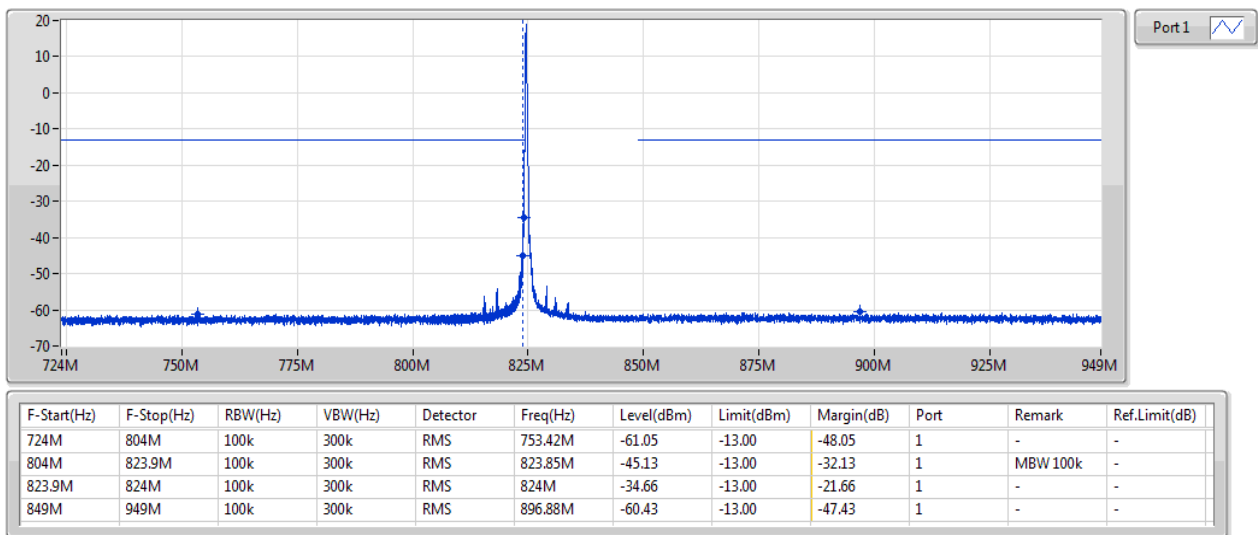
Band 5_LTE_10MHz_Nss1,64QAM_1TX
829MHz_64QAM_RB 50,#RB 0

CSE-TX-Port



Band 5_LTE_10MHz_Nss1,64QAM_1TX
829MHz_64QAM_RB 1,#RB 0

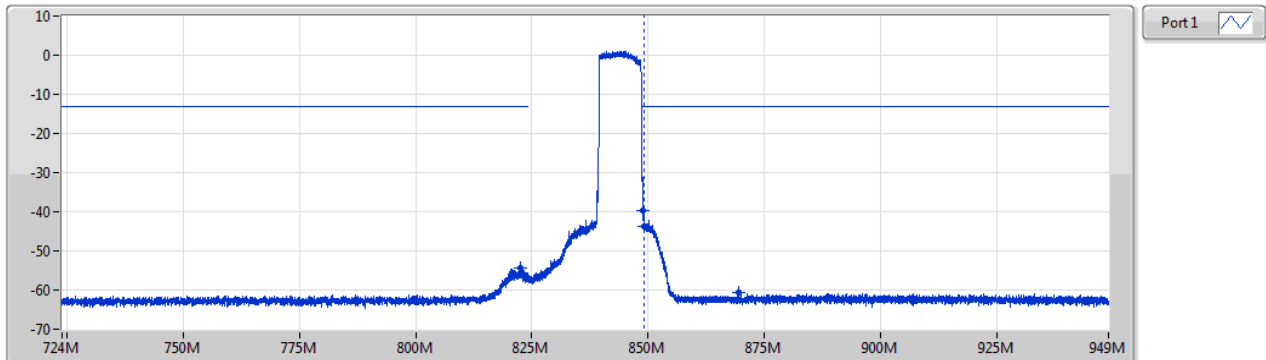
CSE-TX-Port



Band 5_LTE_10MHz_Nss1,64QAM_1TX

CSE-TX-Port

844MHz_64QAM_RB 50,#RB 0

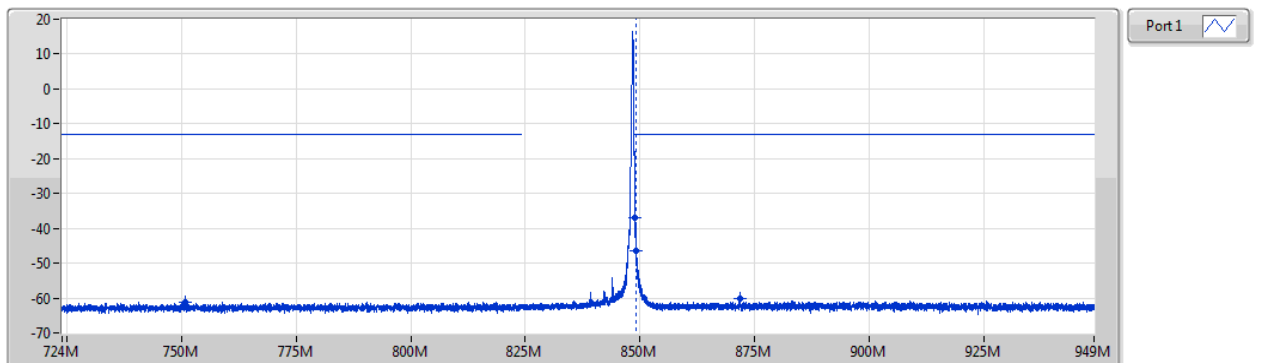


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	822.58M	-54.50	-13.00	-41.50	1	-
849M	849.1M	100k	300k	RMS	849.01M	-39.67	-13.00	-26.67	1	-
849.1M	869M	100k	300k	RMS	849.15M	-43.66	-13.00	-30.66	1	MBW 100k
869M	949M	100k	300k	RMS	869.52M	-60.76	-13.00	-47.76	1	-

Band 5_LTE_10MHz_Nss1,64QAM_1TX

CSE-TX-Port

844MHz_64QAM_RB 1,#RB 49



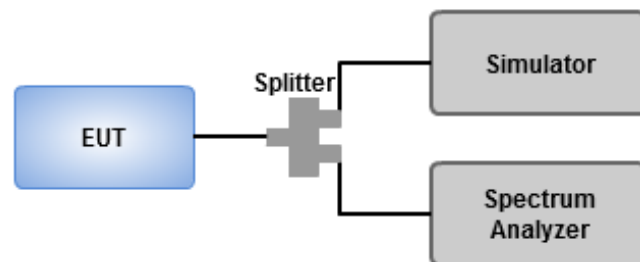
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
724M	824M	100k	300k	RMS	750.73M	-61.16	-13.00	-48.16	1	-
849M	849.1M	100k	300k	RMS	849M	-37.04	-13.00	-24.04	1	-
849.1M	869M	100k	300k	RMS	849.15M	-46.39	-13.00	-33.39	1	MBW 100k
869M	949M	100k	300k	RMS	871.82M	-60.26	-13.00	-47.26	1	-

3.4 Occupied and 26 dB 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 Bandwidth

Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
850	-	-	-	-	-
GPRS_200kHz_Nss1_1TX	321.5k	246.82k	247KGXW	313.75k	245.231k

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

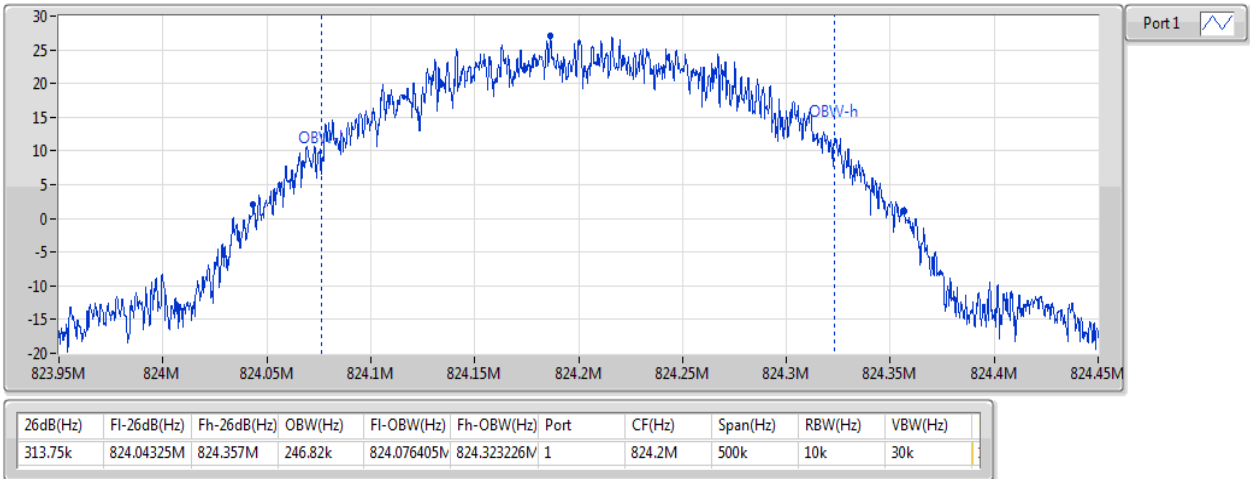
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
850_GPRS_200kHz_Nss1_1TX	-	-	-	-
824.2MHz	Pass	Inf	313.75k	246.82k
836.4MHz	Pass	Inf	315k	246.275k
848.8MHz	Pass	Inf	321.5k	245.231k

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

850_GPRS_200kHz_Nss1_1TX

EBW

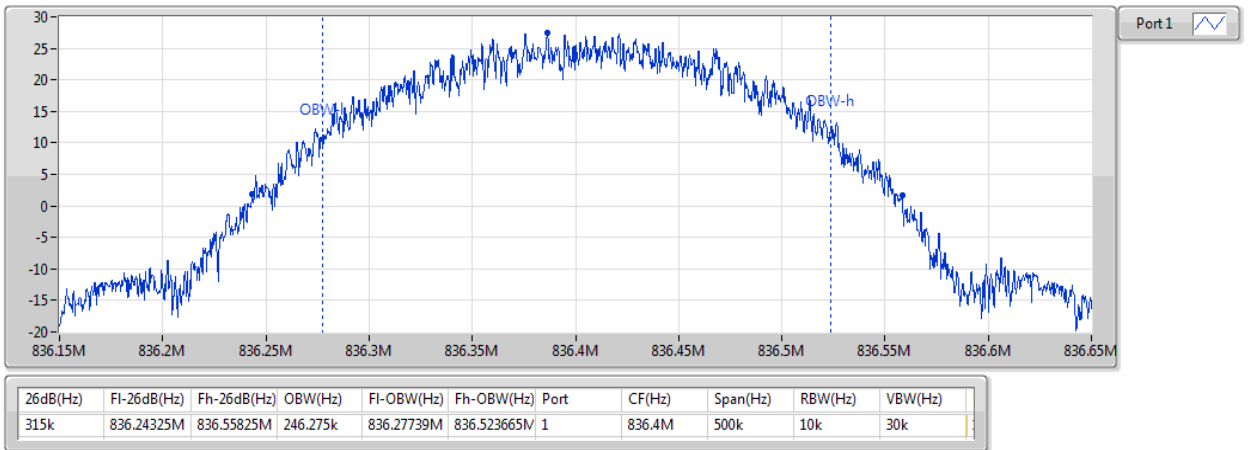
824.2MHz



850_GPRS_200kHz_Nss1_1TX

EBW

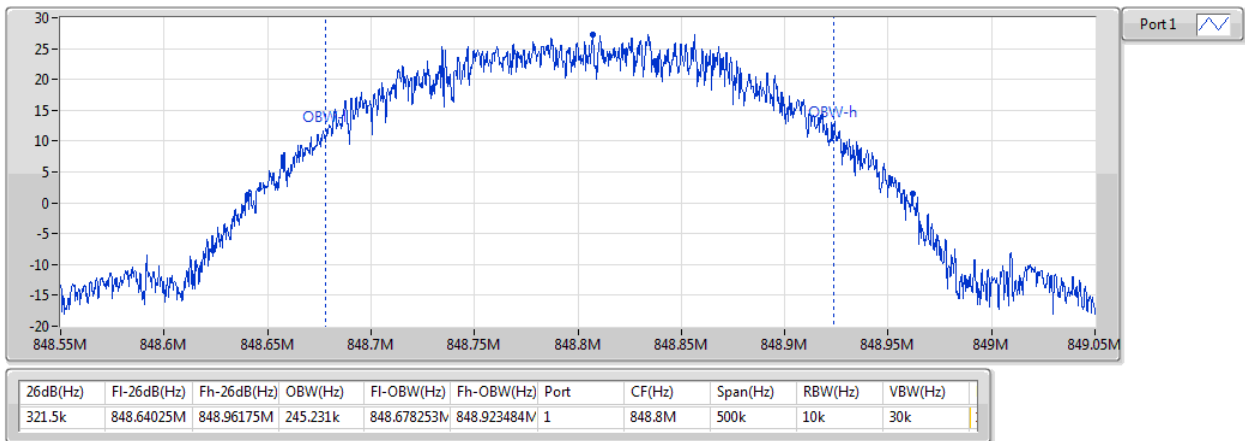
836.4MHz



850_GPRS_200kHz_Nss1_1TX

EBW

848.8MHz



Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 5	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	4.731M	4.155M	4M16F9W	4.7M	4.139M

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

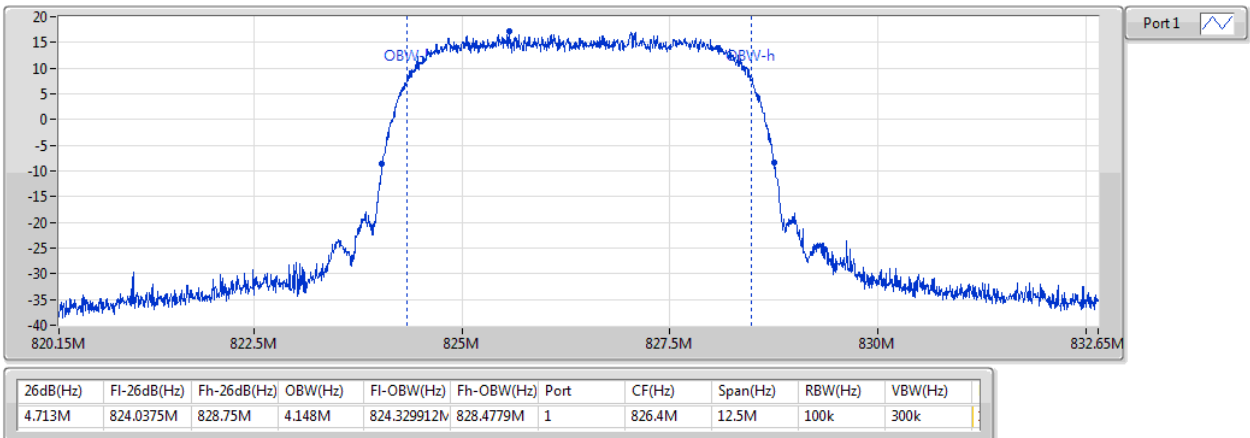
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 5_WCDMA_5MHz_Nss1_1TX	-	-	-	-
826.4MHz	Pass	Inf	4.713M	4.148M
836.4MHz	Pass	Inf	4.7M	4.139M
846.6MHz	Pass	Inf	4.731M	4.155M

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

Band 5_WCDMA

EBW

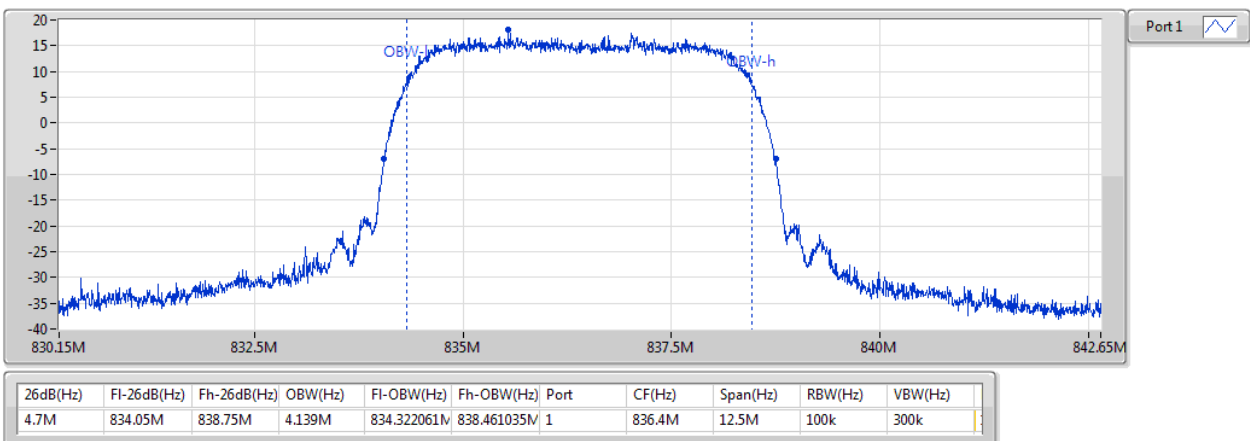
826.4MHz



Band 5_WCDMA

EBW

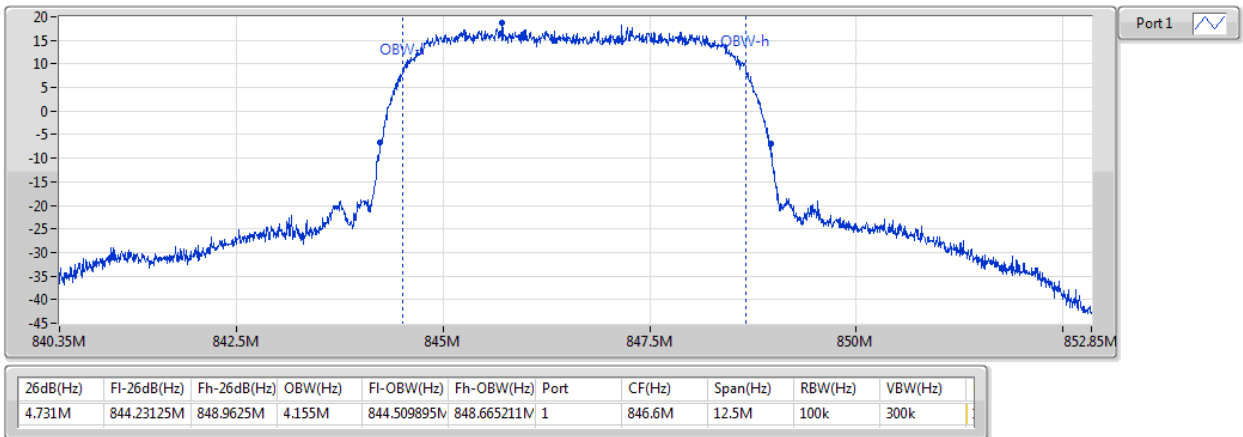
836.4MHz



Band 5_WCDMA

EBW

846.6MHz



Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	1.206M	1.081M	1M08G7D	1.195M	1.08M
LTE_1.4MHz_Nss1,16QAM_1TX	1.204M	1.078M	1M08W7D	1.201M	1.077M
LTE_1.4MHz_Nss1,64QAM_1TX	1.208M	1.078M	1M08W7D	1.201M	1.077M
LTE_3MHz_Nss1,QPSK_1TX	2.944M	2.68M	2M68G7D	2.906M	2.675M
LTE_3MHz_Nss1,16QAM_1TX	2.921M	2.677M	2M68W7D	2.918M	2.677M
LTE_3MHz_Nss1,64QAM_1TX	2.906M	2.676M	2M68W7D	2.903M	2.676M
LTE_5MHz_Nss1,QPSK_1TX	4.894M	4.469M	4M47G7D	4.875M	4.461M
LTE_5MHz_Nss1,16QAM_1TX	4.869M	4.463M	4M46W7D	4.838M	4.458M
LTE_5MHz_Nss1,64QAM_1TX	4.869M	4.474M	4M47W7D	4.831M	4.472M
LTE_10MHz_Nss1,QPSK_1TX	9.575M	8.918M	8M92G7D	9.538M	8.908M
LTE_10MHz_Nss1,16QAM_1TX	9.563M	8.931M	8M93W7D	9.513M	8.895M
LTE_10MHz_Nss1,64QAM_1TX	9.6M	8.911M	8M91W7D	9.538M	8.901M

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	1.204M	1.081M
836.5MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.195M	1.08M
848.3MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.206M	1.08M
824.7MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.201M	1.078M
836.5MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.202M	1.077M
848.3MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.204M	1.078M
824.7MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.208M	1.077M
836.5MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.201M	1.078M
848.3MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.206M	1.077M
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.906M	2.68M
836.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.921M	2.678M
847.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.944M	2.675M
825.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.918M	2.677M
836.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.921M	2.677M
847.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.921M	2.677M

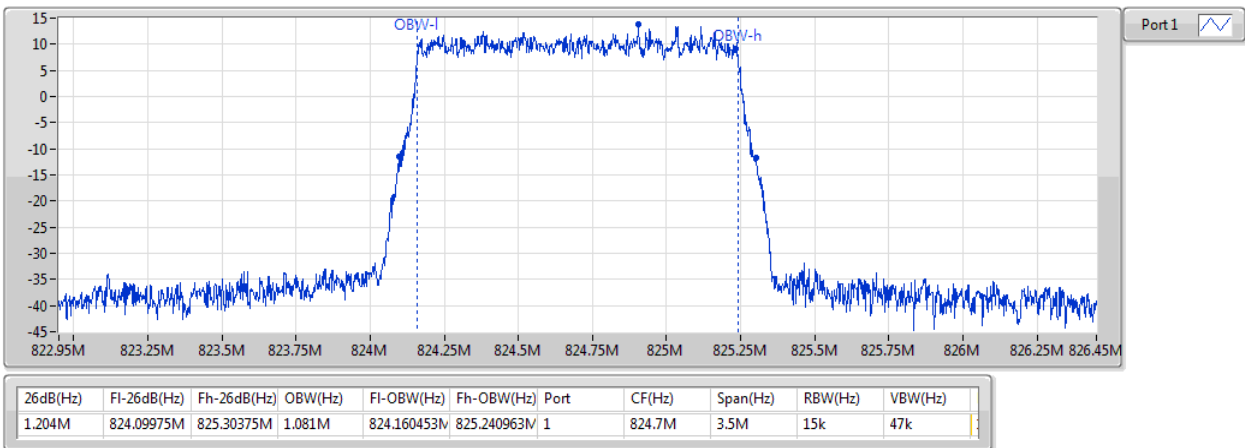
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
825.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.903M	2.676M
836.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.906M	2.676M
847.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.903M	2.676M
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.875M	4.463M
836.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.875M	4.461M
846.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.894M	4.469M
826.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.869M	4.458M
836.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.856M	4.463M
846.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.838M	4.463M
826.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.869M	4.472M
836.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.869M	4.474M
846.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.831M	4.472M
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-
829MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.538M	8.918M
836.5MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.538M	8.91M
844MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.575M	8.908M
829MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.563M	8.931M
836.5MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.513M	8.895M
844MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.538M	8.904M
829MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.6M	8.911M
836.5MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.563M	8.903M
844MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.538M	8.901M

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

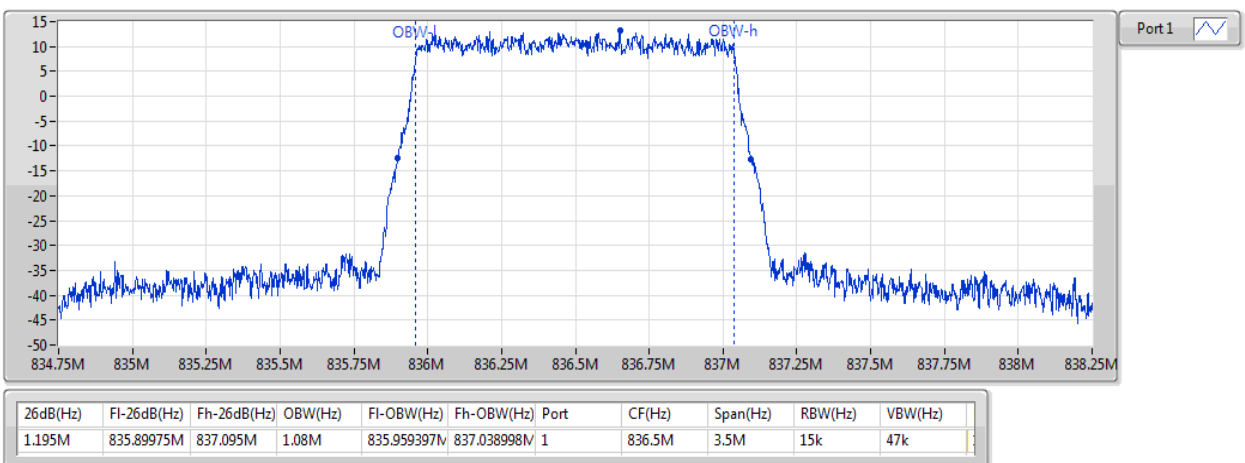
824.7MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

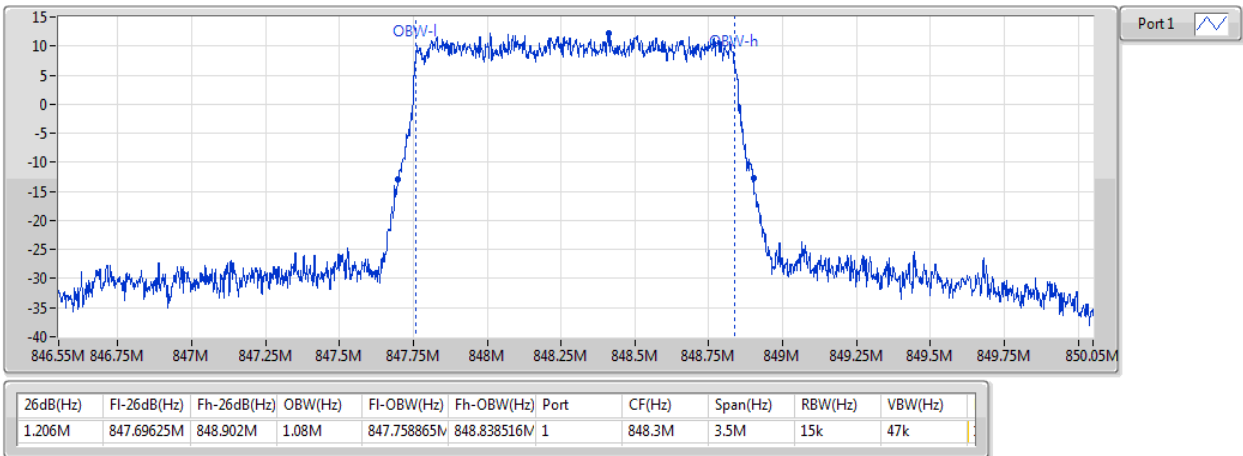
836.5MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

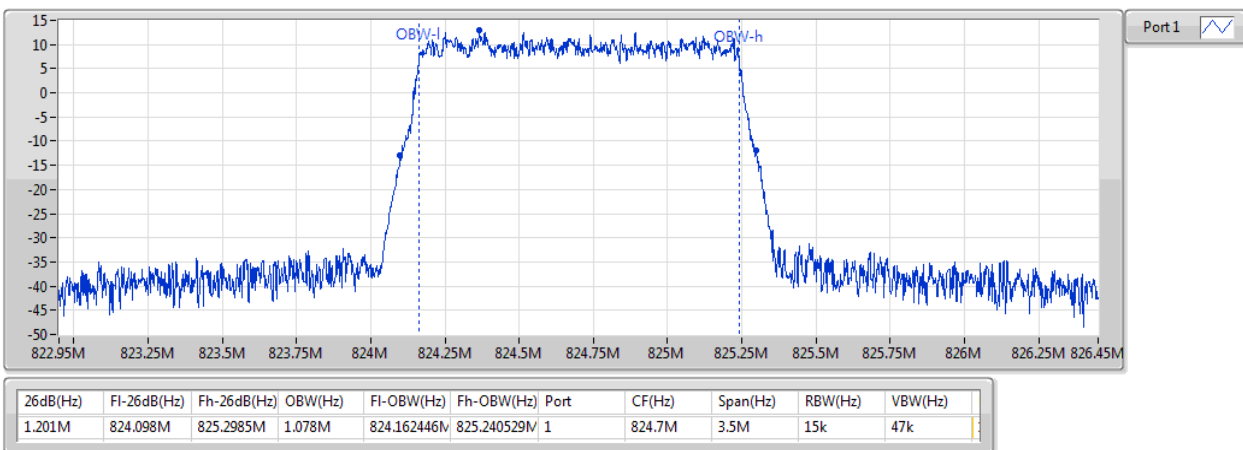
848.3MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

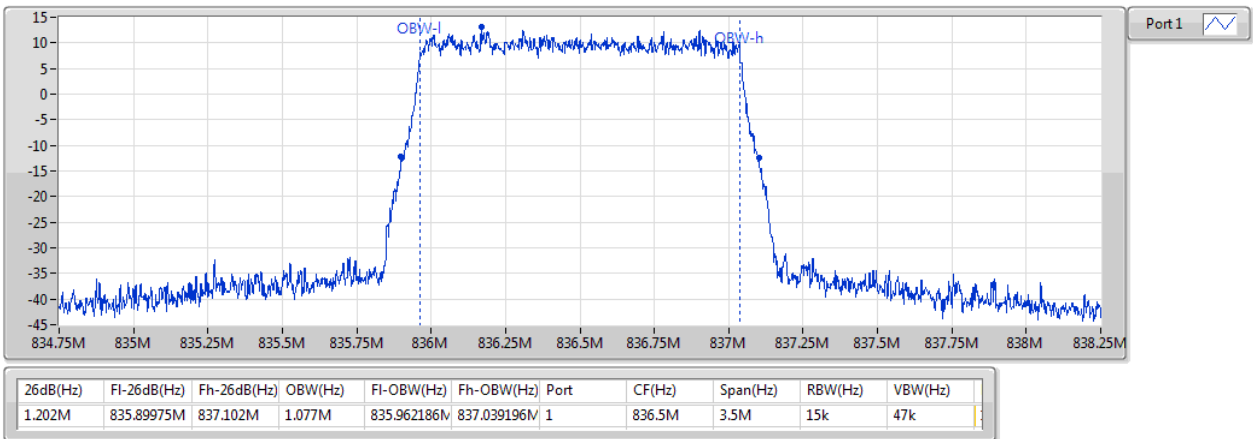
EBW

824.7MHz_16QAM_RB 6,#RB 0



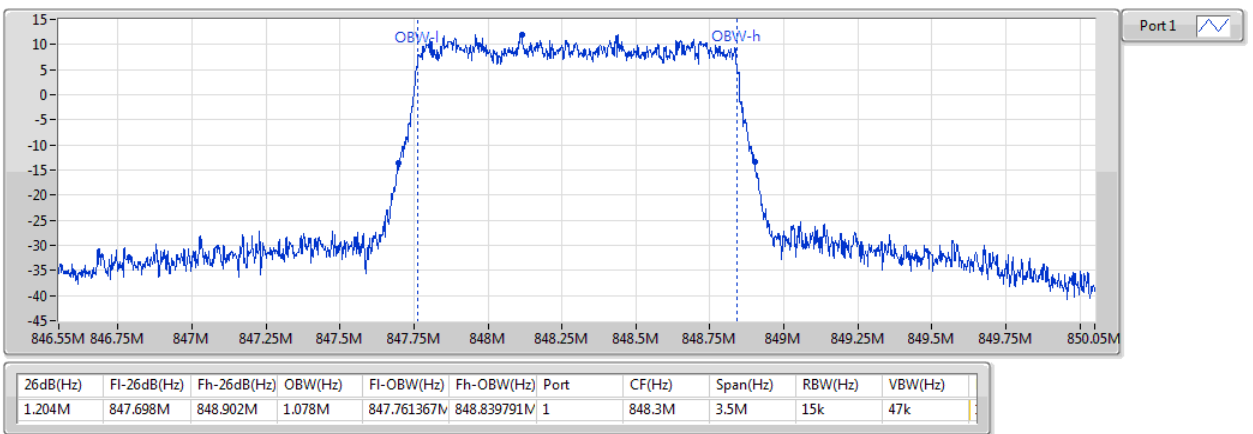
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 6,#RB 0

EBW



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

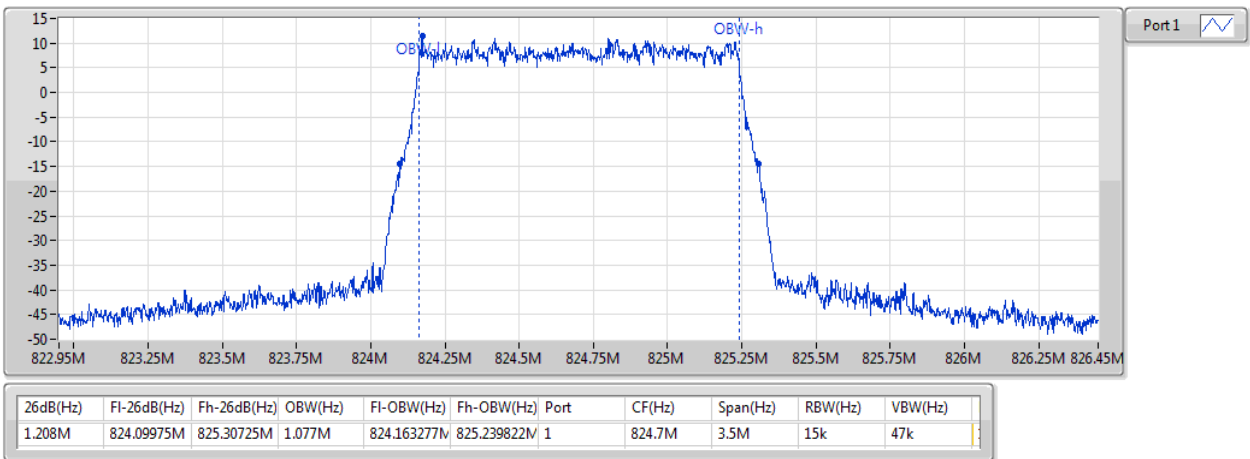
EBW



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

EBW

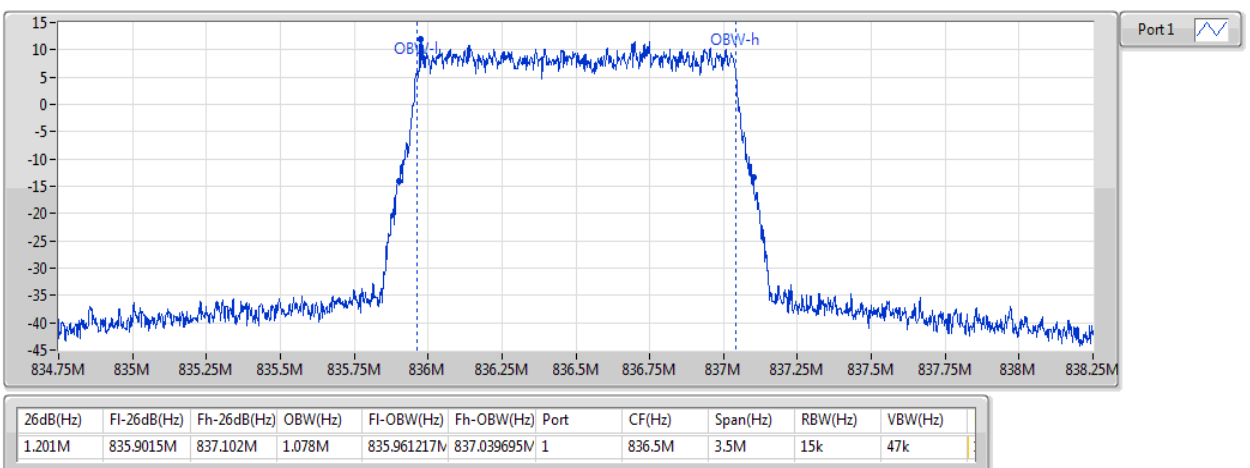
824.7MHz_64QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

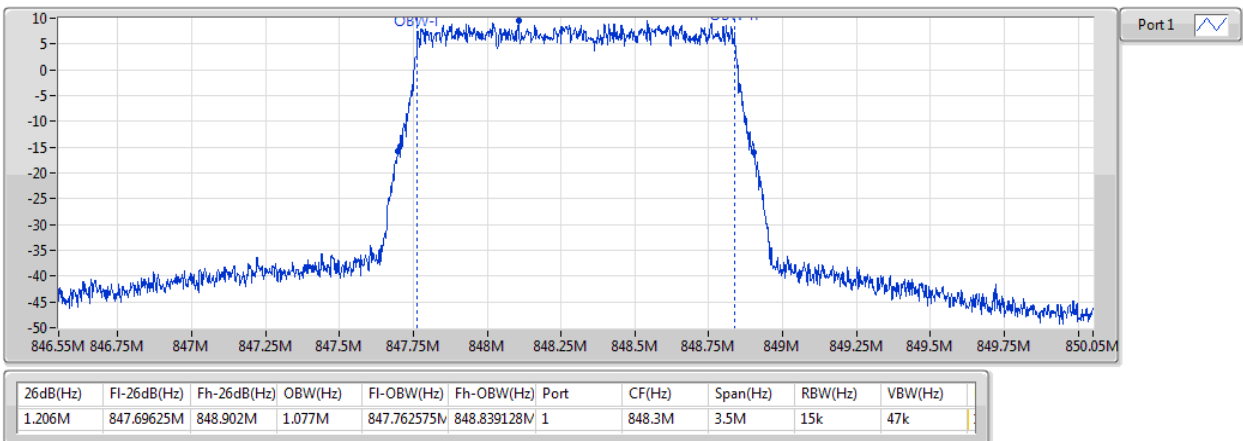
EBW

836.5MHz_64QAM_RB 6,#RB 0



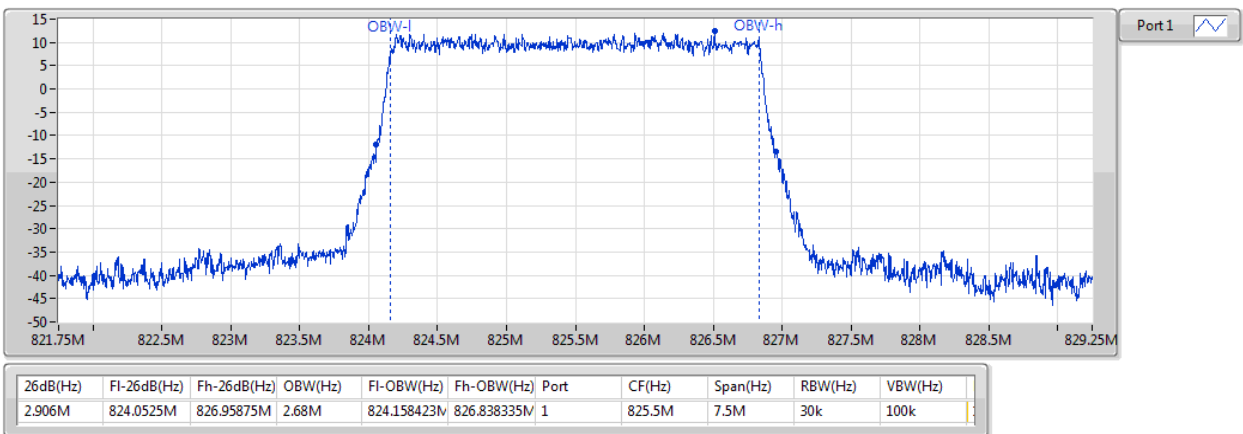
Band 5_LTE_1.4MHz_Nss1,64QAM_1TX
848.3MHz_64QAM_RB 6,#RB 0

EBW



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

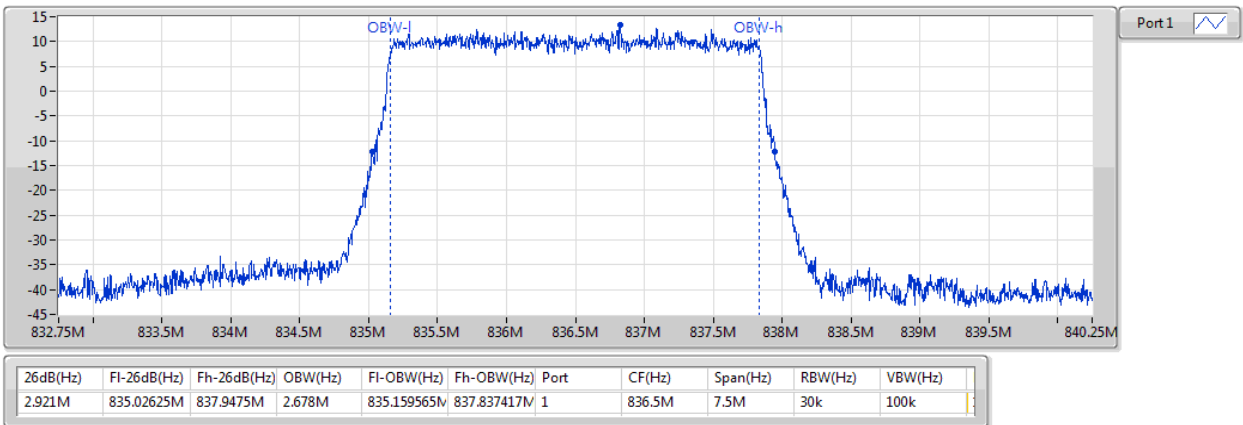
EBW



Band 5_LTE_3MHz_Nss1,QPSK_1TX

EBW

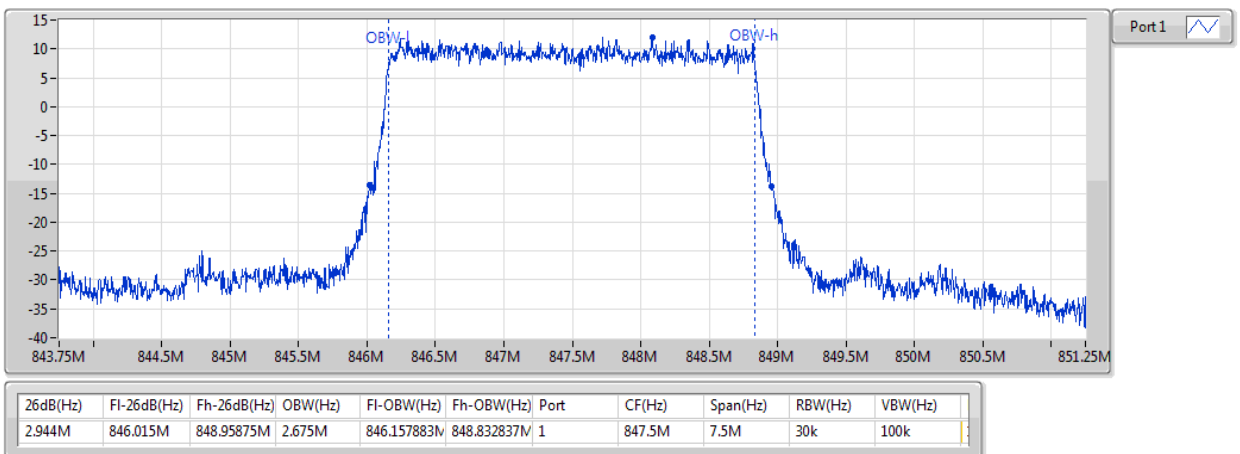
836.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

EBW

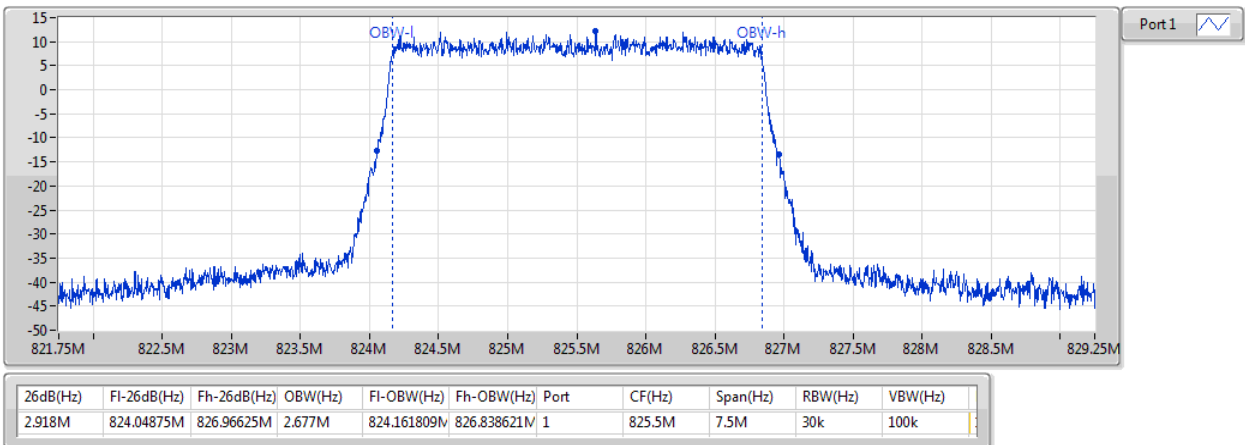
847.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

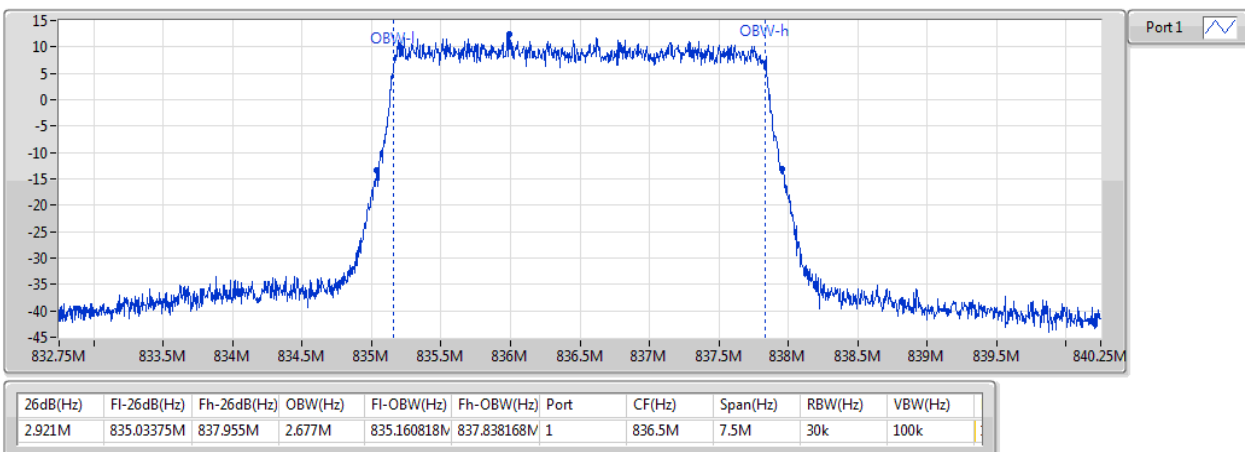
825.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

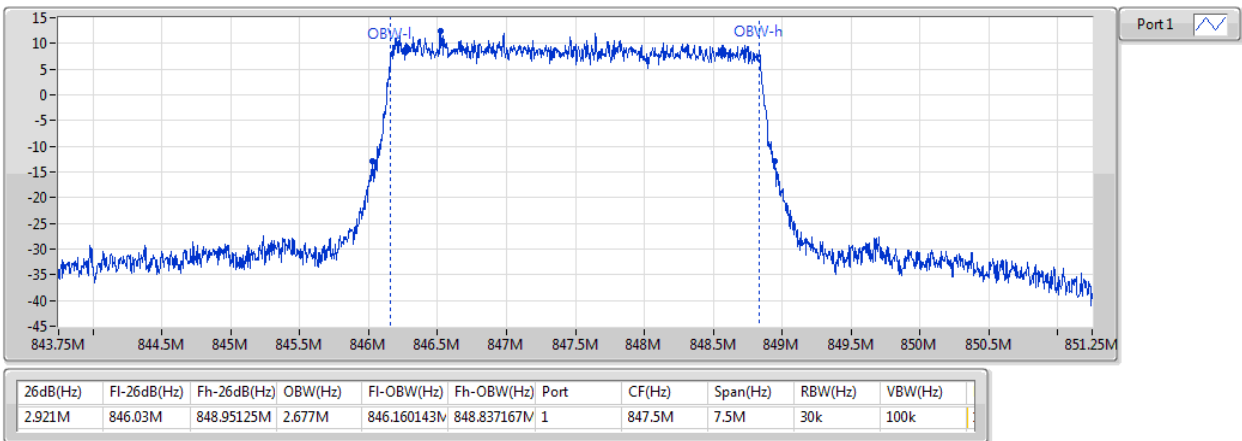
836.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

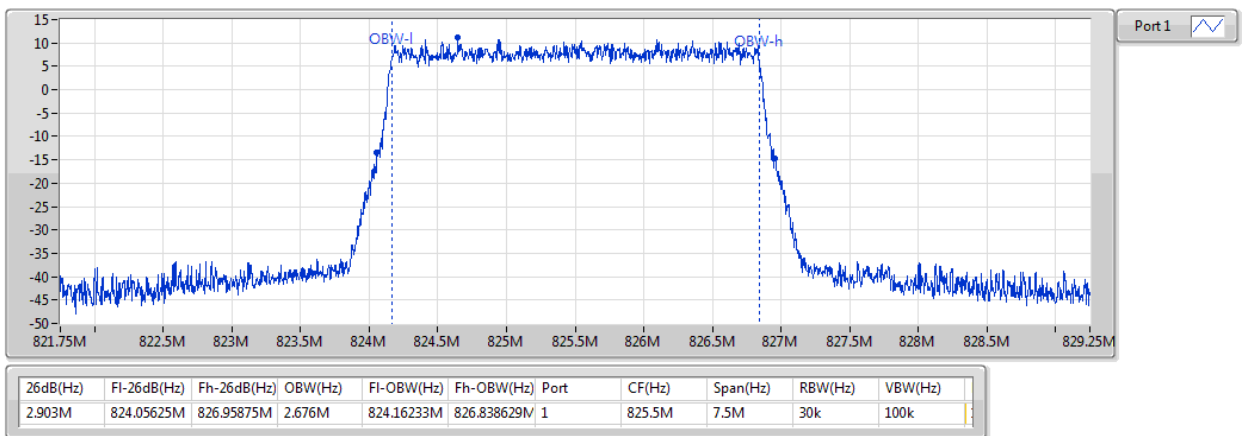
847.5MHz_16QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

EBW

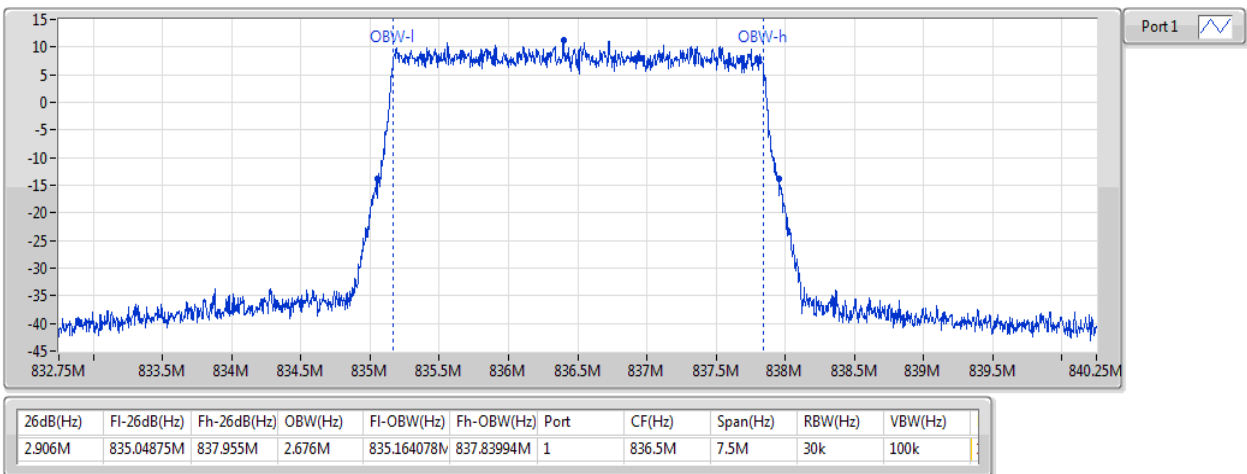
825.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

EBW

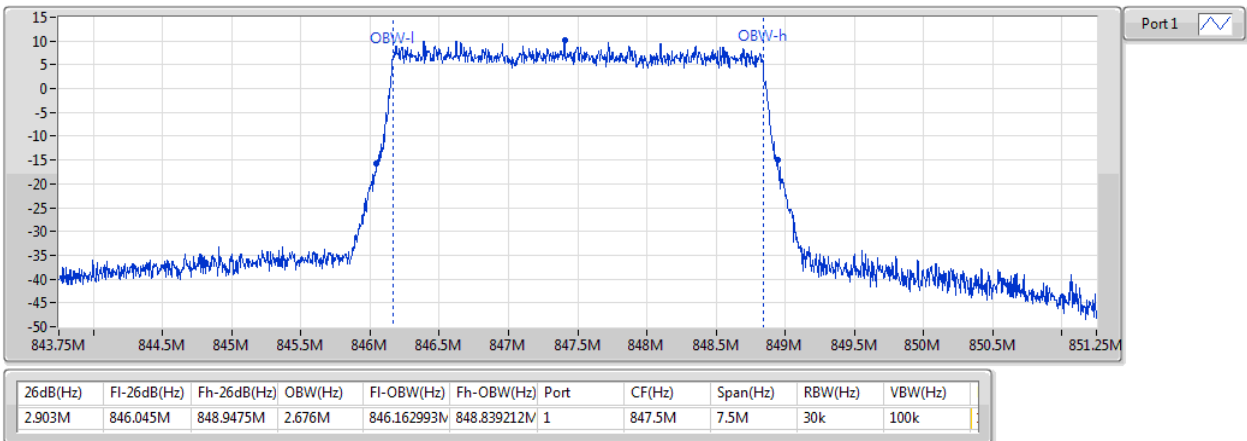
836.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

EBW

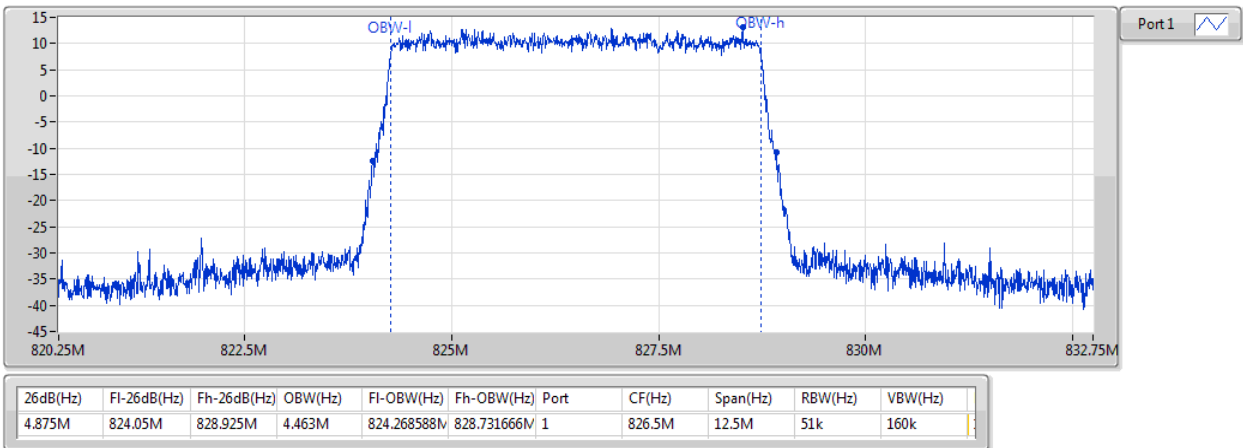
847.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

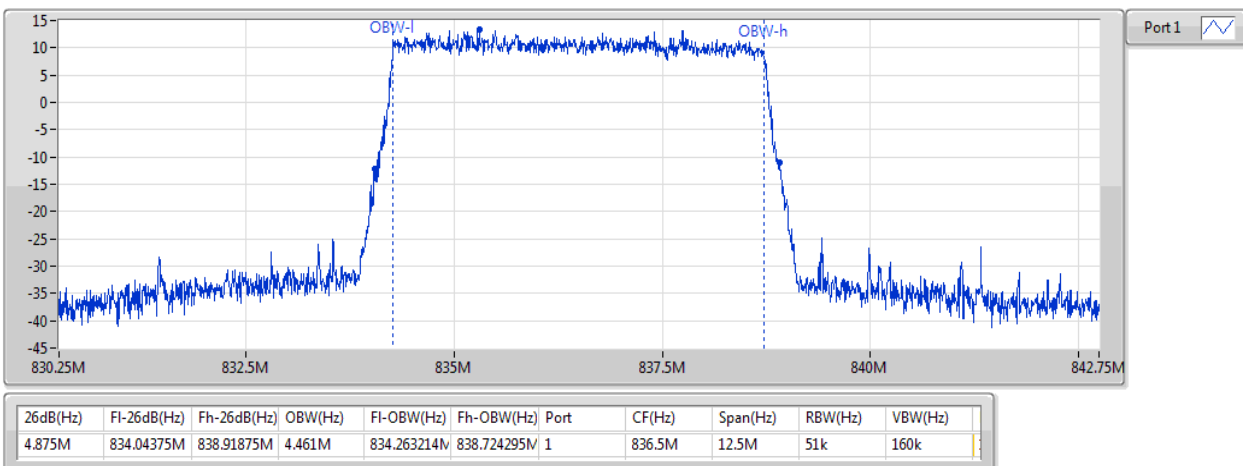
826.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

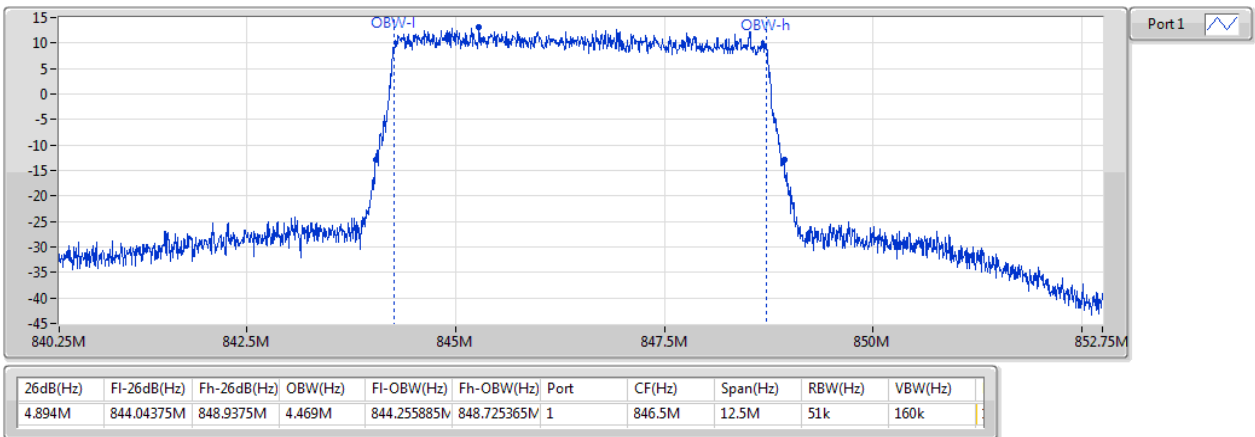
EBW

836.5MHz_QPSK_RB 25,#RB 0



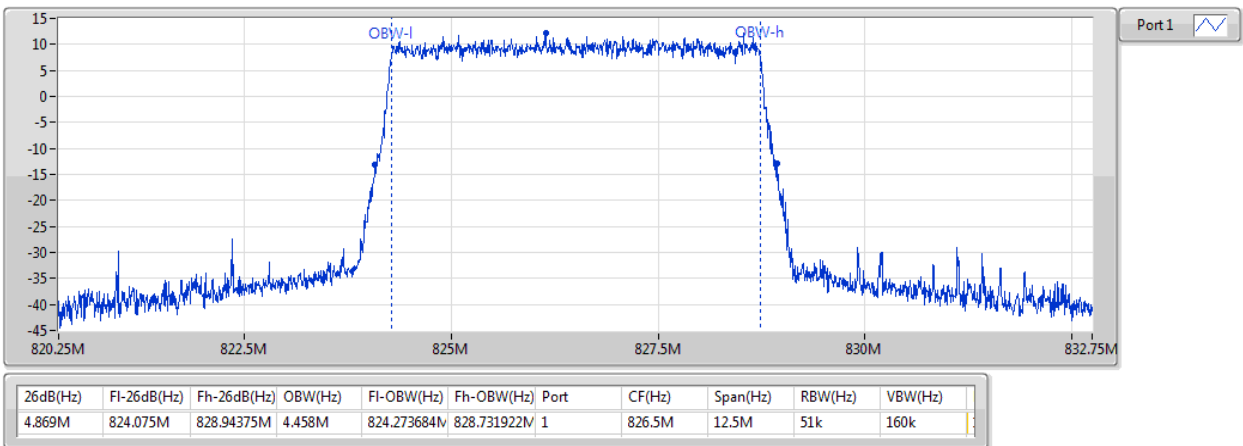
Band 5_LTE_5MHz_Nss1,QPSK_1TX
846.5MHz_QPSK_RB 25,#RB 0

EBW



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

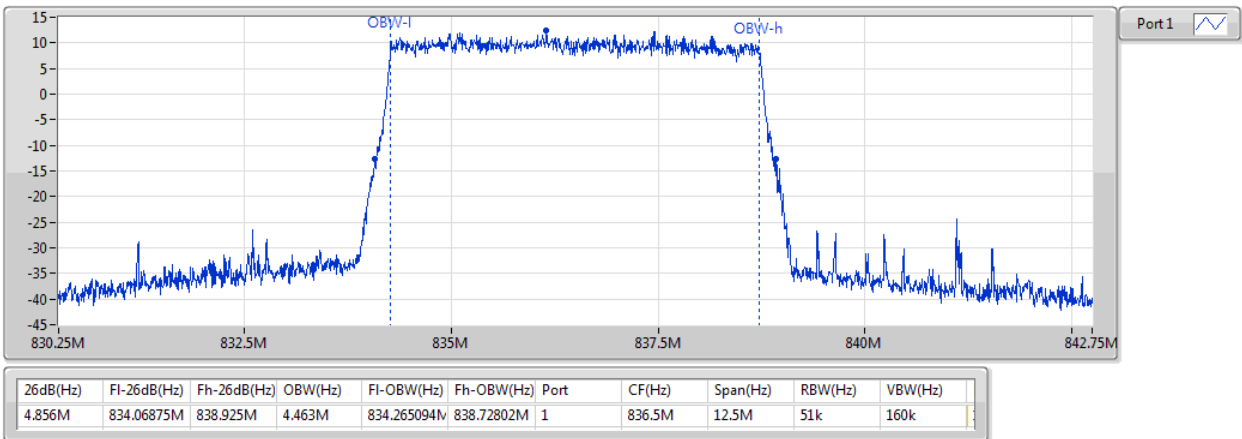
EBW



Band 5_LTE_5MHz_Nss1,16QAM_1TX

EBW

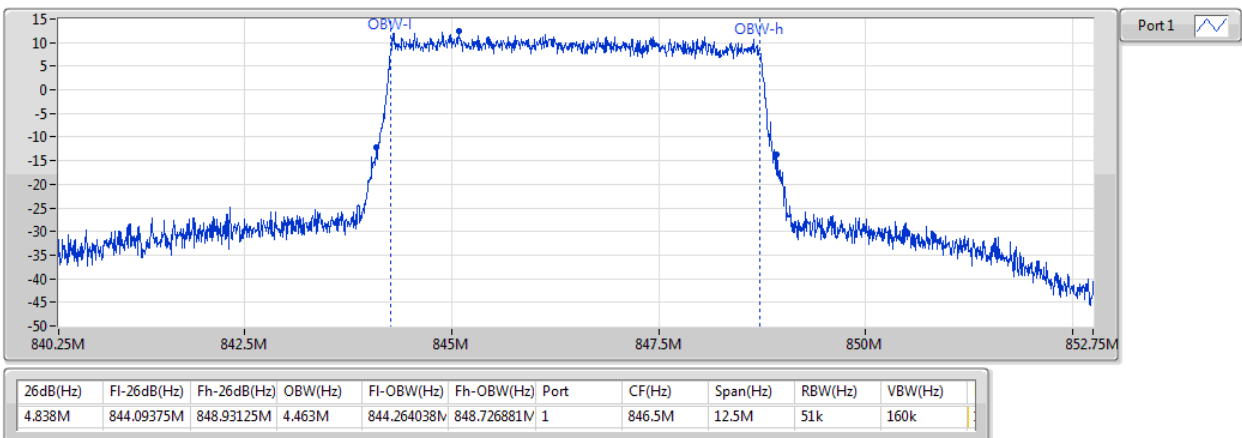
836.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

EBW

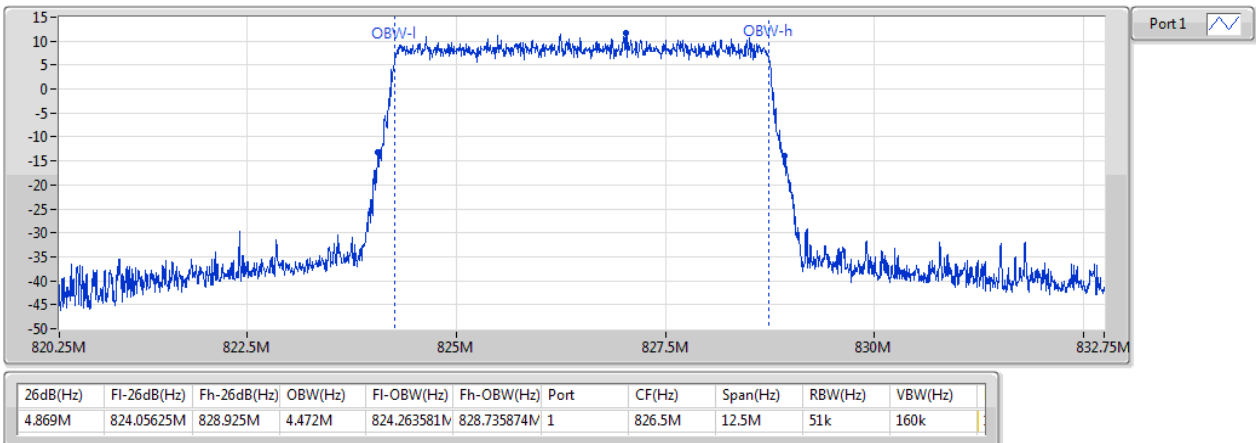
846.5MHz_16QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

EBW

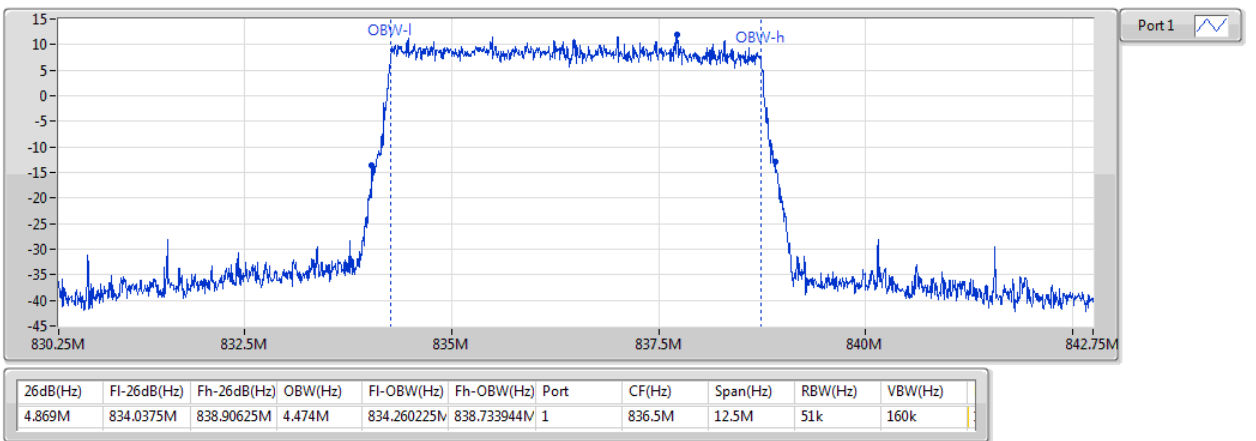
826.5MHz_64QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

EBW

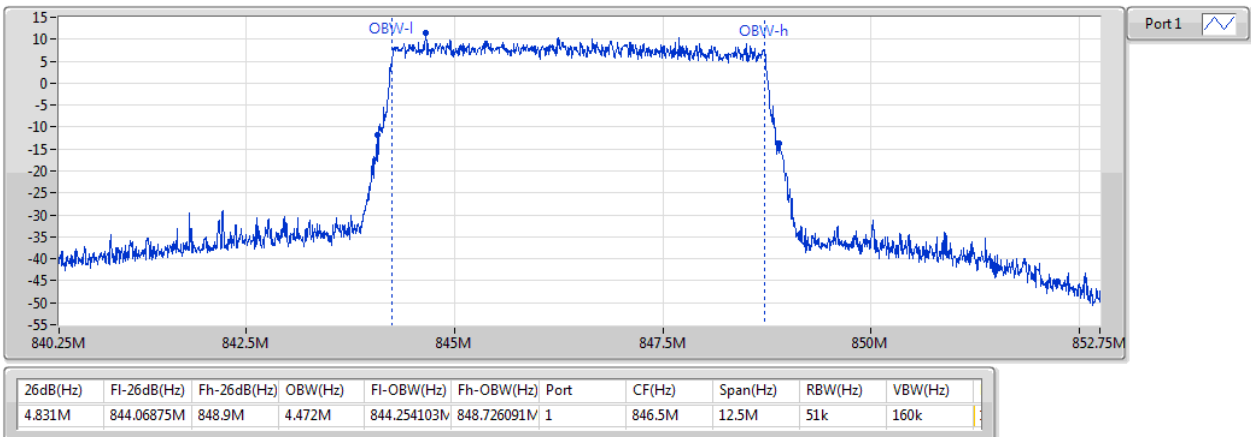
836.5MHz_64QAM_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,64QAM_1TX

EBW

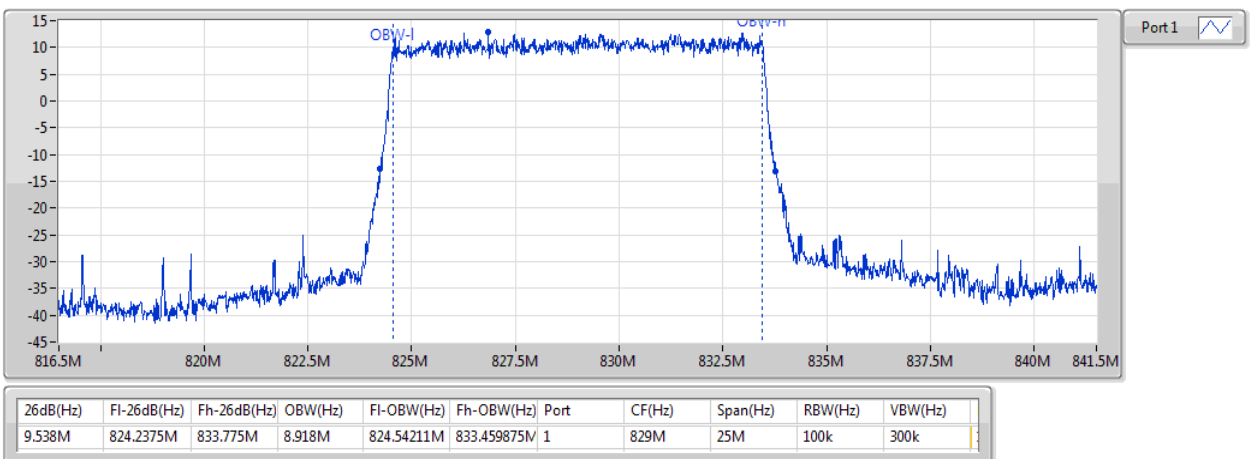
846.5MHz_64QAM_RB 25,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

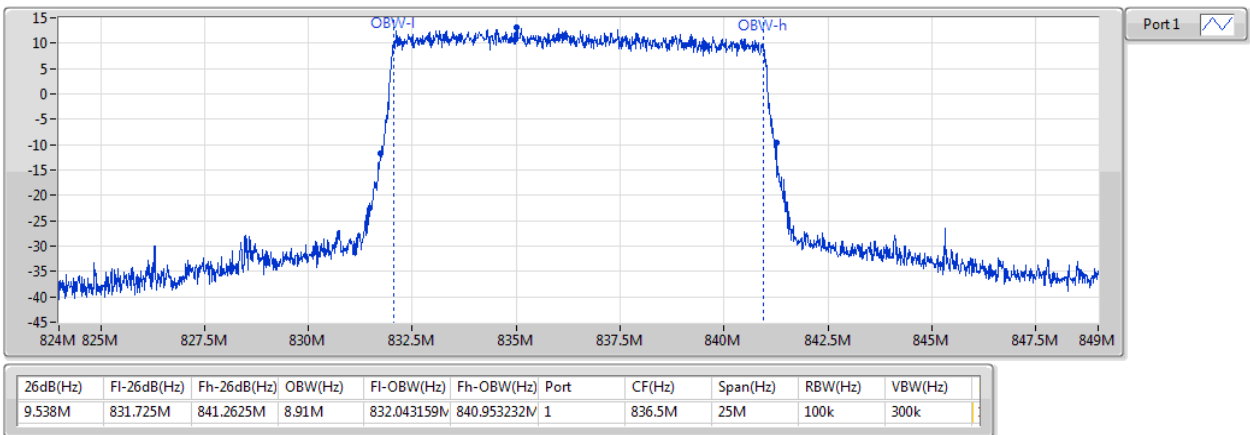
829MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

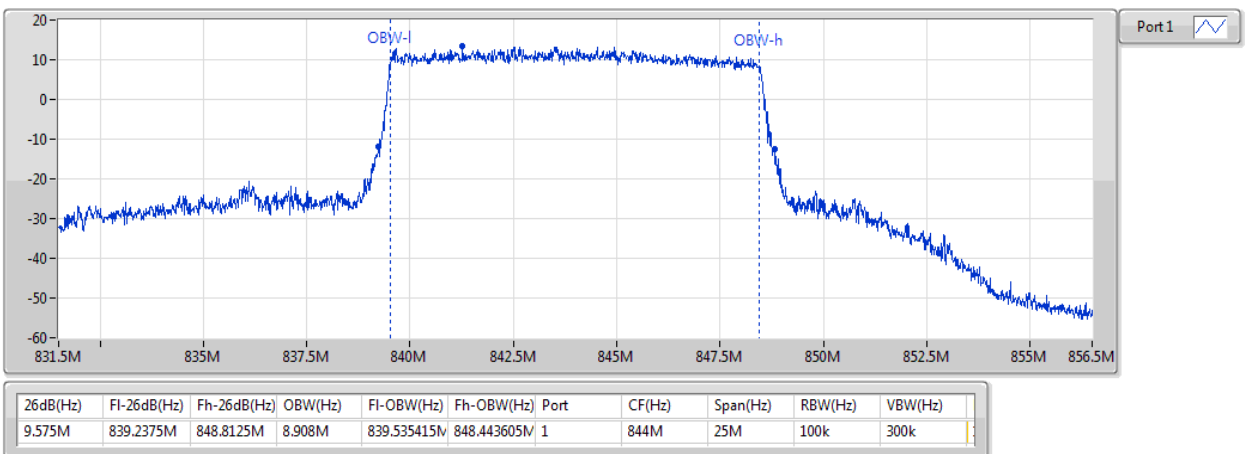
836.5MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

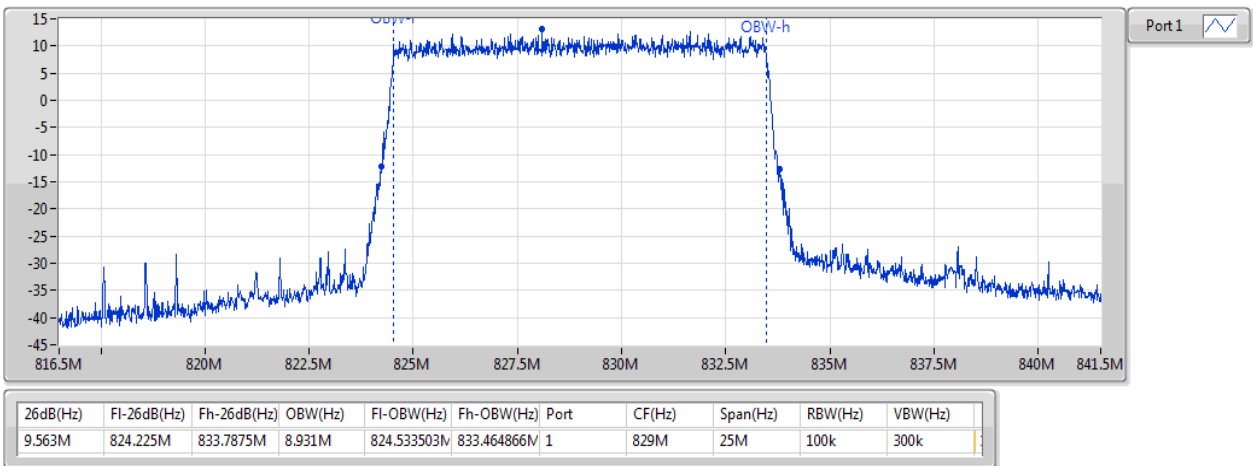
844MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

EBW

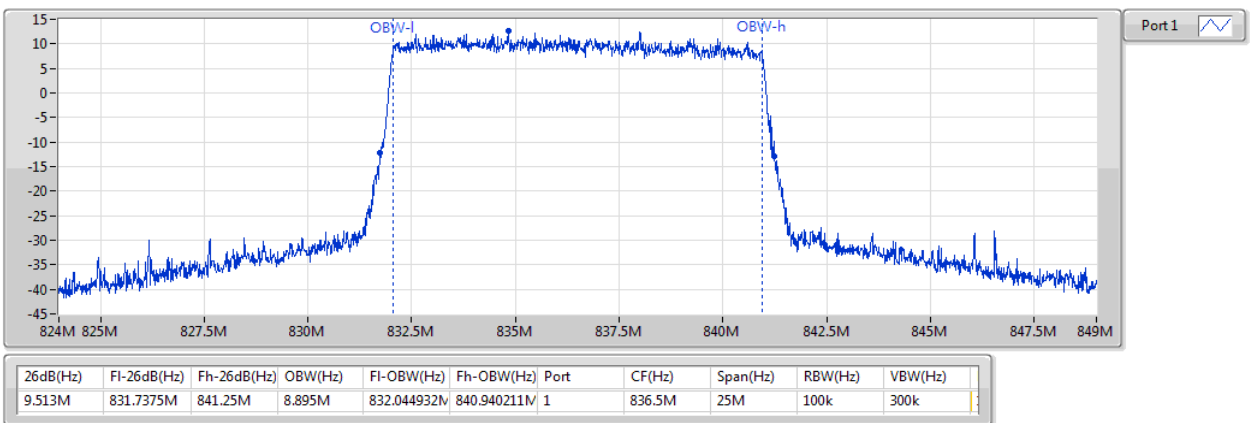
829MHz_16QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

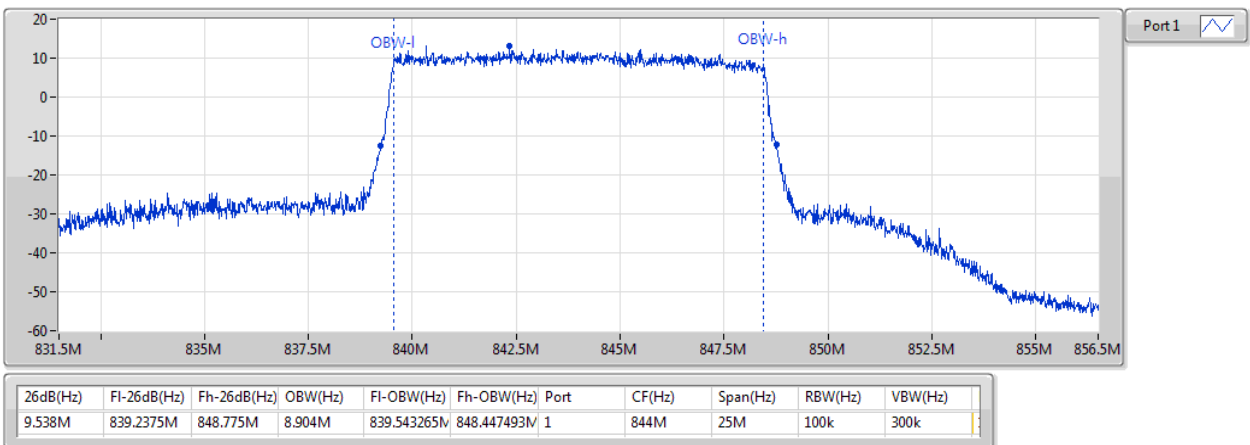
EBW

836.5MHz_16QAM_RB 50,#RB 0



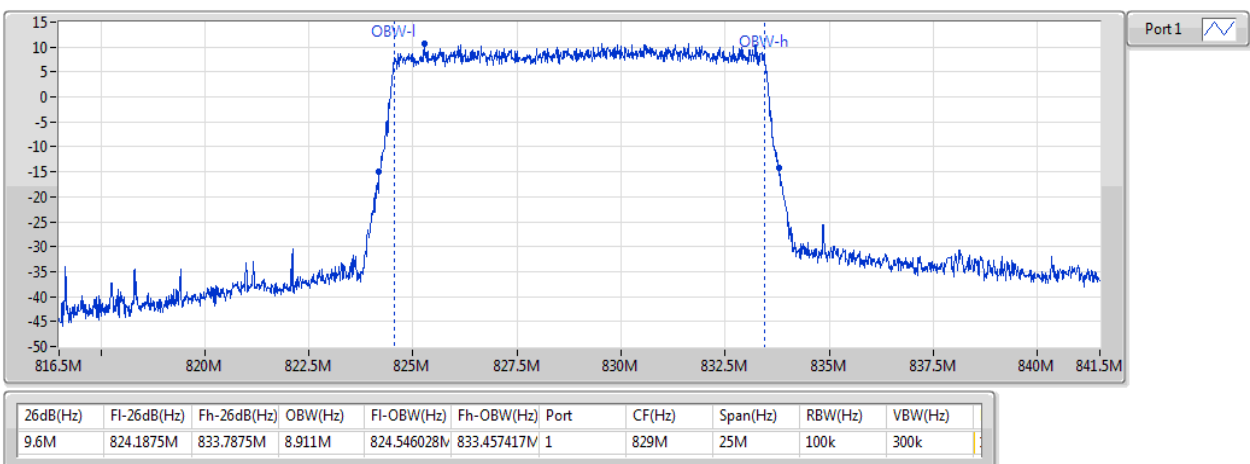
Band 5_LTE_10MHz_Nss1,16QAM_1TX
844MHz_16QAM_RB 50,#RB 0

EBW



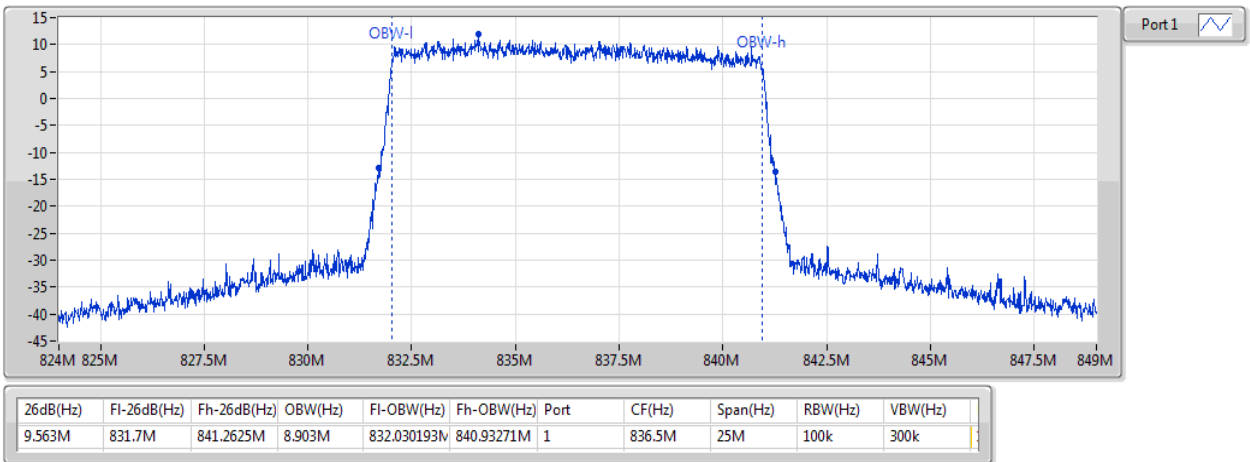
Band 5_LTE_10MHz_Nss1,64QAM_1TX
829MHz_64QAM_RB 50,#RB 0

EBW



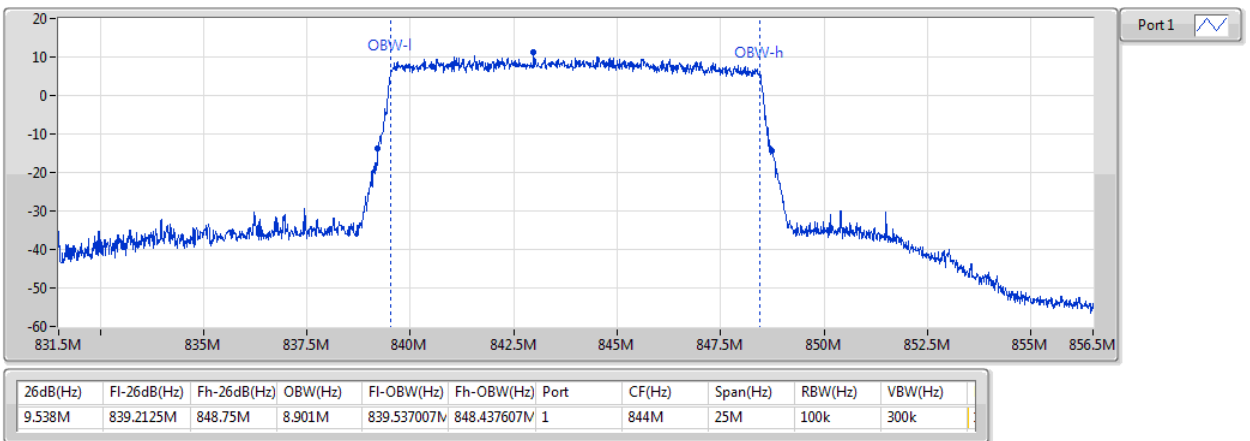
Band 5_LTE_10MHz_Nss1,64QAM_1TX
836.5MHz_64QAM_RB 50,#RB 0

EBW



Band 5_LTE_10MHz_Nss1,64QAM_1TX
844MHz_64QAM_RB 50,#RB 0

EBW



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

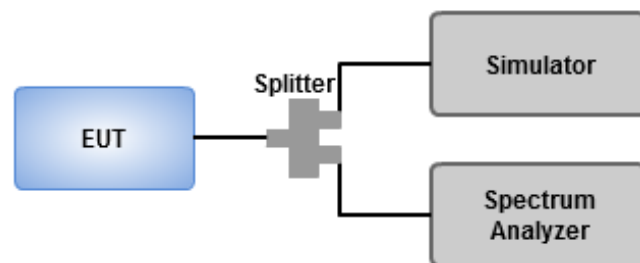
GSM mode

1. Set RBW=1MHz, RBW=3MHz, Peak detector in Trace 1
2. Set RBW=1MHz, RBW=3MHz, RMS detector in Trace 2
3. Trigger function is enabled for measuring signal at burst on time. Measure the difference between trace1 and trace 2.

WCDMA / LTE mode

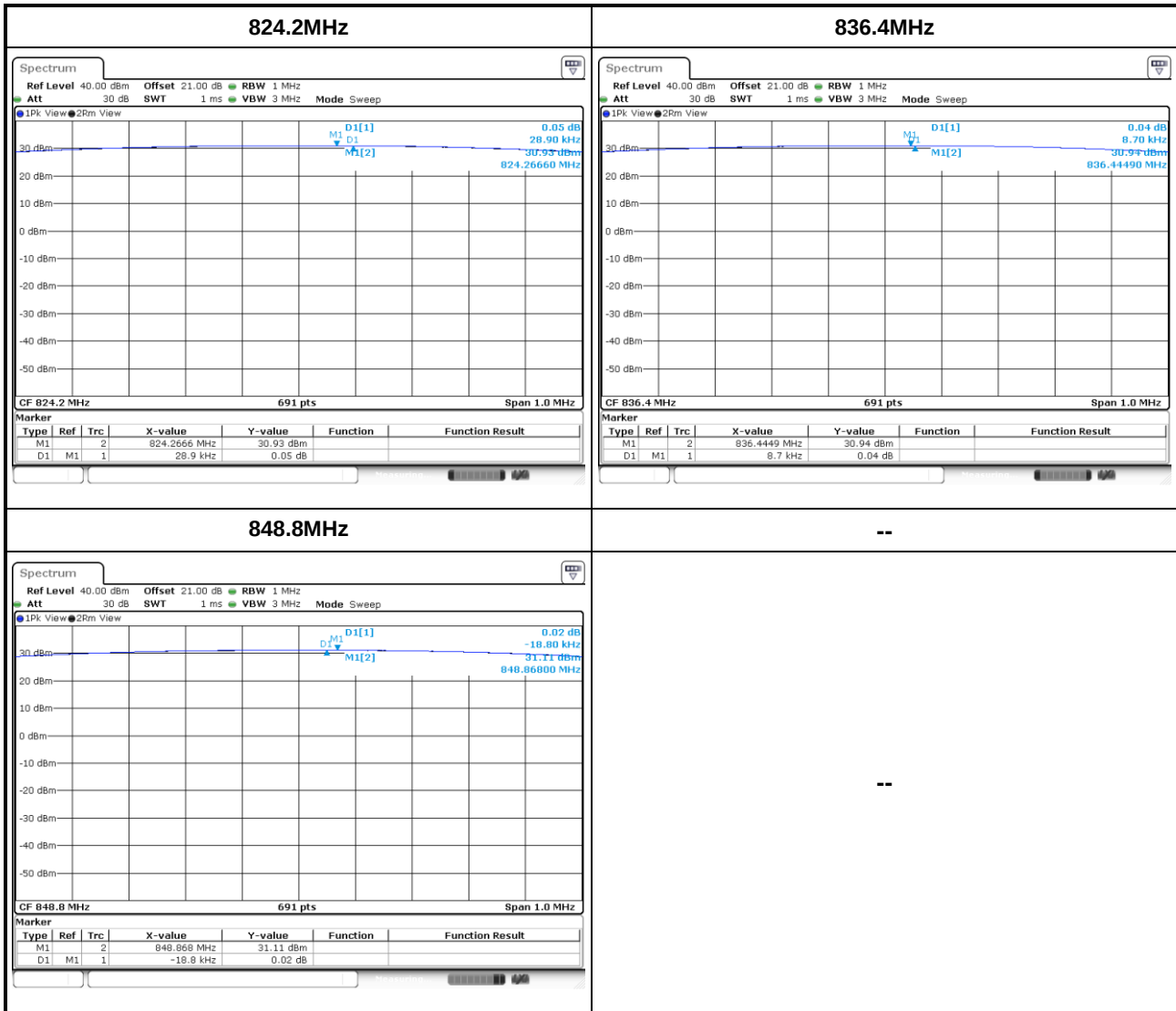
1. Enable CCDF function of spectrum analyzer and set RBW=10MHz.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.5.3 Test Setup



3.5.4 Test Result of Peak to Average Ratio

MODE	Frequency (MHz)	Peak to Average ratio (dB)	Result
850_GSM	824.2MHz	0.05	Pass
850_GSM	836.4MHz	0.04	Pass
850_GSM	848.8MHz	0.02	Pass



Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5	-	-	-	-	-
WCDMA_5MHz_Nss1_1TX	Pass	826.4	13.00	2.71	1

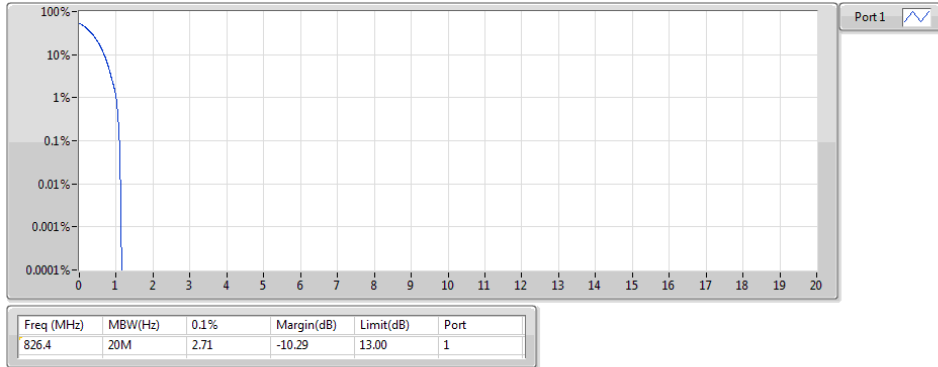
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5_WCDMA_5MHz_Nss1_1TX	-	-	-	-	-
826.4MHz	Pass	826.4	13.00	2.71	1
836.4MHz	Pass	836.4	13.00	2.64	1
846.6MHz	Pass	846.6	13.00	2.60	1

Band 5_WCDMA

PAR

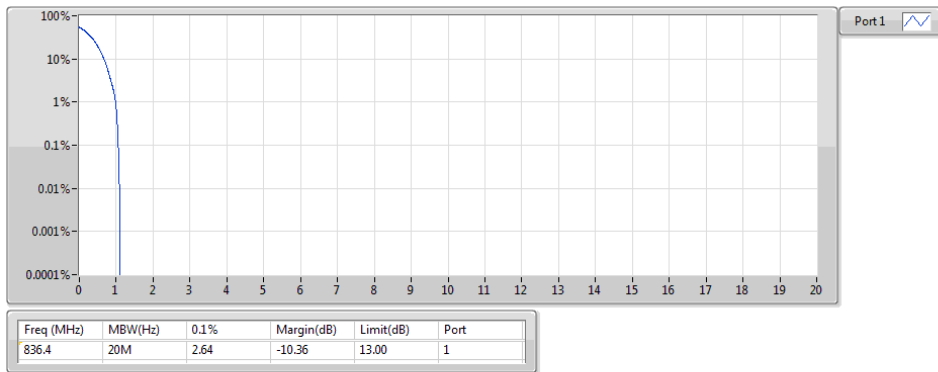
826.4MHz



Band 5_WCDMA

PAR

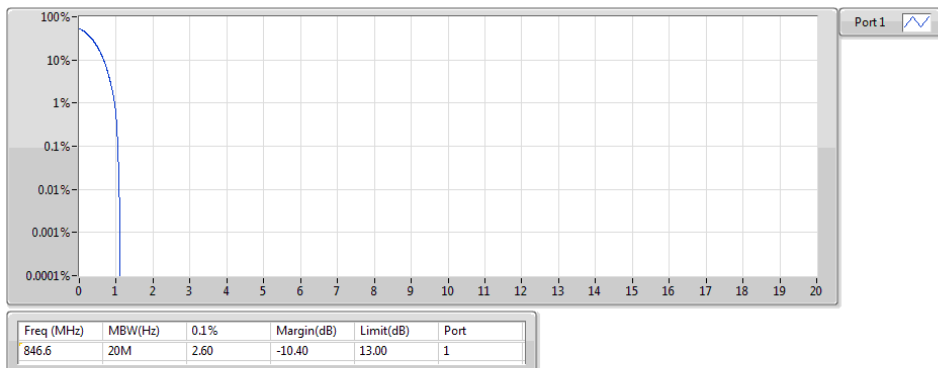
836.4MHz



Band 5_WCDMA

PAR

846.6MHz



Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	836.5	13.00	5.43	1
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	824.7	13.00	6.08	1
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	824.7	13.00	6.74	1
LTE_3MHz_Nss1,QPSK_1TX	Pass	836.5	13.00	5.25	1
LTE_3MHz_Nss1,16QAM_1TX	Pass	825.5	13.00	6.14	1
LTE_3MHz_Nss1,64QAM_1TX	Pass	825.5	13.00	6.67	1
LTE_5MHz_Nss1,QPSK_1TX	Pass	826.5	13.00	5.23	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	826.5	13.00	6.08	1
LTE_5MHz_Nss1,64QAM_1TX	Pass	826.5	13.00	6.64	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	829	13.00	5.33	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	829	13.00	6.06	1
LTE_10MHz_Nss1,64QAM_1TX	Pass	829	13.00	6.57	1

Result

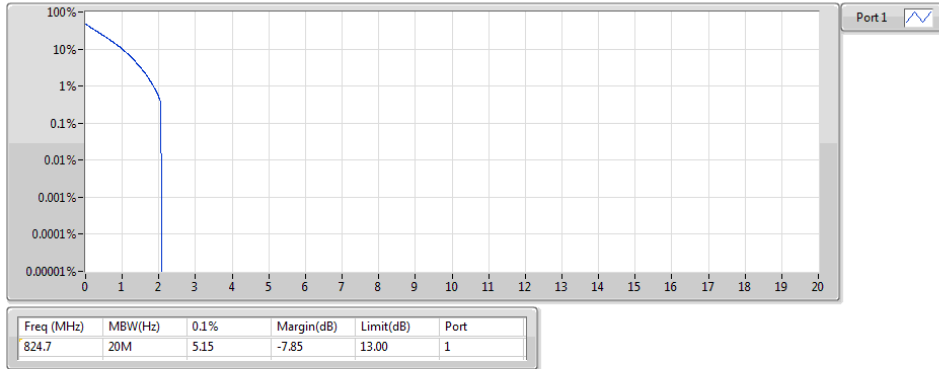
Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-
824.7MHz_QPSK_RB 6,#RB 0	Pass	824.7	13.00	5.15	1
836.5MHz_QPSK_RB 6,#RB 0	Pass	836.5	13.00	5.43	1
848.3MHz_QPSK_RB 6,#RB 0	Pass	848.3	13.00	4.40	1
824.7MHz_16QAM_RB 6,#RB 0	Pass	824.7	13.00	6.08	1
836.5MHz_16QAM_RB 6,#RB 0	Pass	836.5	13.00	6.03	1
848.3MHz_16QAM_RB 6,#RB 0	Pass	848.3	13.00	5.25	1
824.7MHz_64QAM_RB 6,#RB 0	Pass	824.7	13.00	6.74	1
836.5MHz_64QAM_RB 6,#RB 0	Pass	836.5	13.00	6.59	1
848.3MHz_64QAM_RB 6,#RB 0	Pass	848.3	13.00	6.62	1
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	825.5	13.00	5.14	1
836.5MHz_QPSK_RB 15,#RB 0	Pass	836.5	13.00	5.25	1
847.5MHz_QPSK_RB 15,#RB 0	Pass	847.5	13.00	4.45	1
825.5MHz_16QAM_RB 15,#RB 0	Pass	825.5	13.00	6.14	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	5.33	1
825.5MHz_64QAM_RB 15,#RB 0	Pass	825.5	13.00	6.67	1

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
836.5MHz_64QAM_RB 15,#RB 0	Pass	836.5	13.00	6.51	1
847.5MHz_64QAM_RB 15,#RB 0	Pass	847.5	13.00	6.53	1
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	826.5	13.00	5.23	1
836.5MHz_QPSK_RB 25,#RB 0	Pass	836.5	13.00	5.21	1
846.5MHz_QPSK_RB 25,#RB 0	Pass	846.5	13.00	4.59	1
826.5MHz_16QAM_RB 25,#RB 0	Pass	826.5	13.00	6.08	1
836.5MHz_16QAM_RB 25,#RB 0	Pass	836.5	13.00	5.96	1
846.5MHz_16QAM_RB 25,#RB 0	Pass	846.5	13.00	5.39	1
826.5MHz_64QAM_RB 25,#RB 0	Pass	826.5	13.00	6.64	1
836.5MHz_64QAM_RB 25,#RB 0	Pass	836.5	13.00	6.47	1
846.5MHz_64QAM_RB 25,#RB 0	Pass	846.5	13.00	6.49	1
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-
829MHz_QPSK_RB 50,#RB 0	Pass	829	13.00	5.33	1
836.5MHz_QPSK_RB 50,#RB 0	Pass	836.5	13.00	5.22	1
844MHz_QPSK_RB 50,#RB 0	Pass	844	13.00	4.62	1
829MHz_16QAM_RB 50,#RB 0	Pass	829	13.00	6.06	1
836.5MHz_16QAM_RB 50,#RB 0	Pass	836.5	13.00	6.02	1
844MHz_16QAM_RB 50,#RB 0	Pass	844	13.00	5.57	1
829MHz_64QAM_RB 50,#RB 0	Pass	829	13.00	6.57	1
836.5MHz_64QAM_RB 50,#RB 0	Pass	836.5	13.00	6.46	1
844MHz_64QAM_RB 50,#RB 0	Pass	844	13.00	6.44	1

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

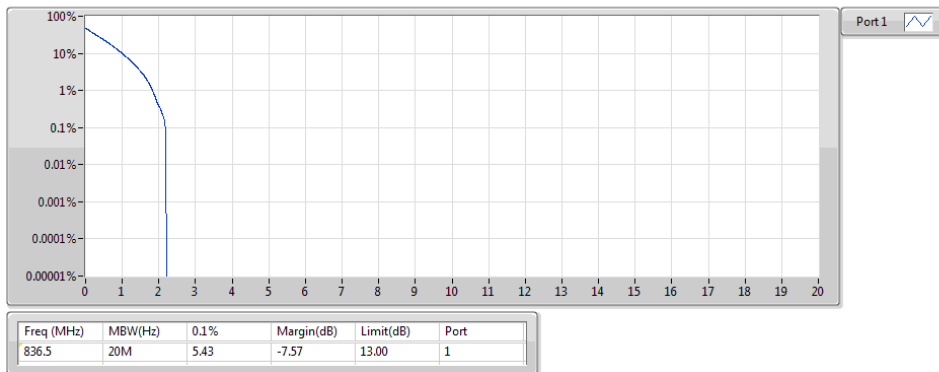
824.7MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

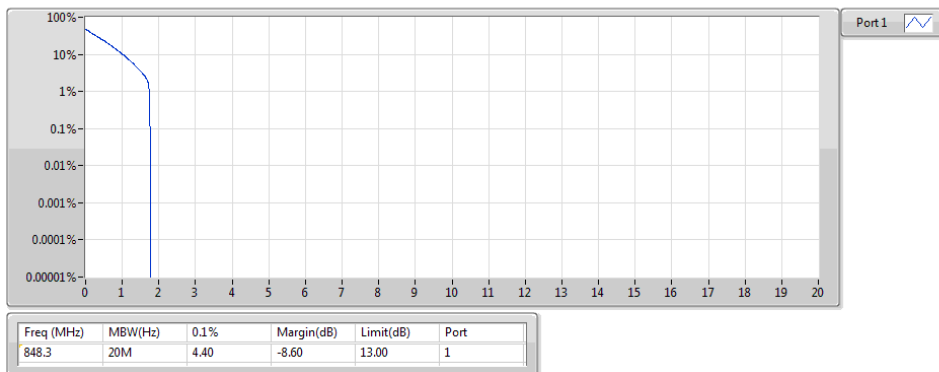
836.5MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

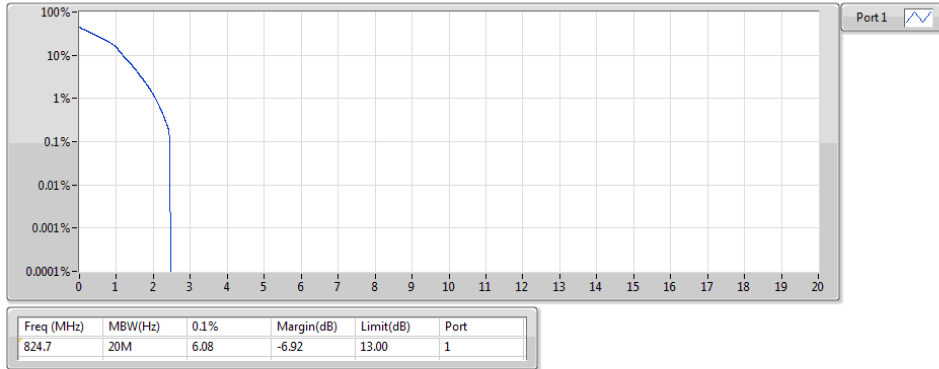
848.3MHz_QPSK_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

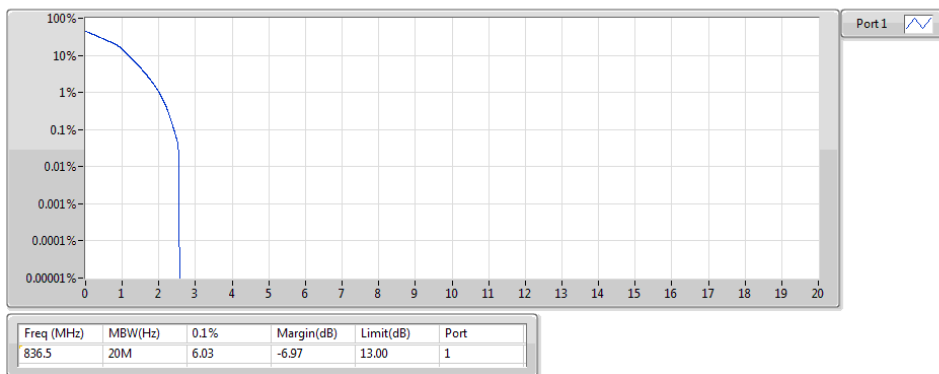
824.7MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

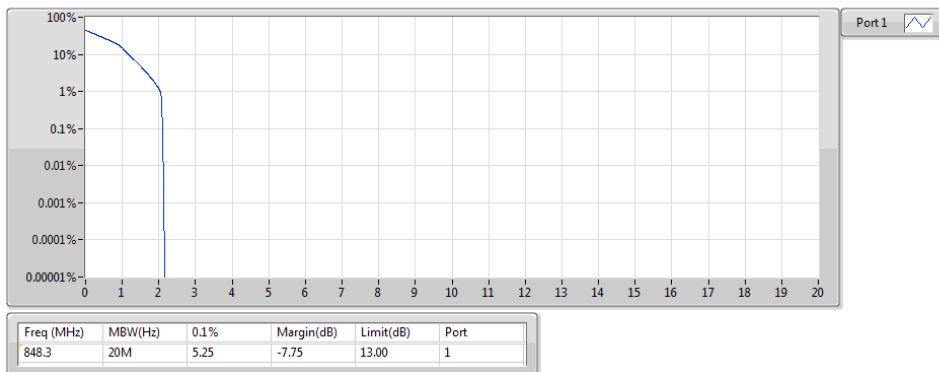
836.5MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

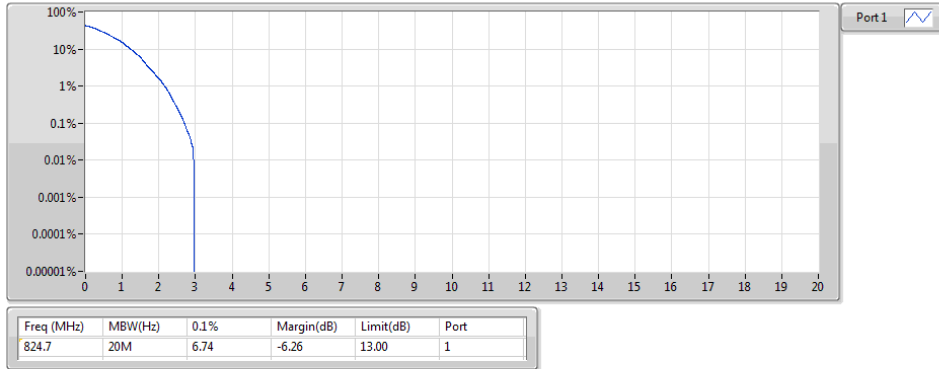
848.3MHz_16QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

PAR

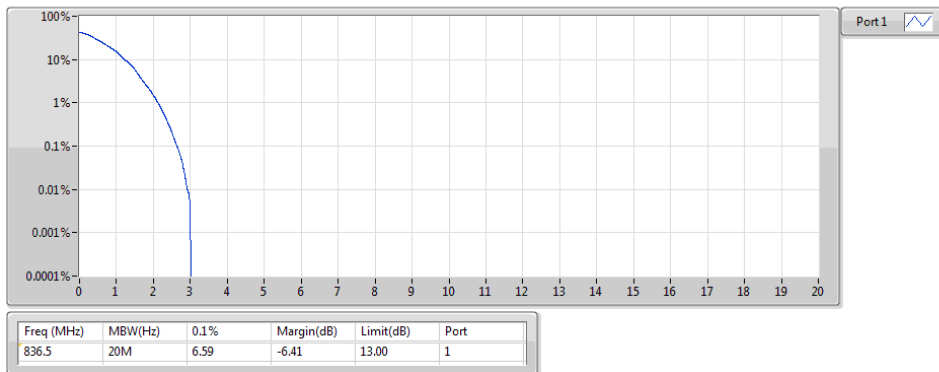
824.7MHz_64QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

PAR

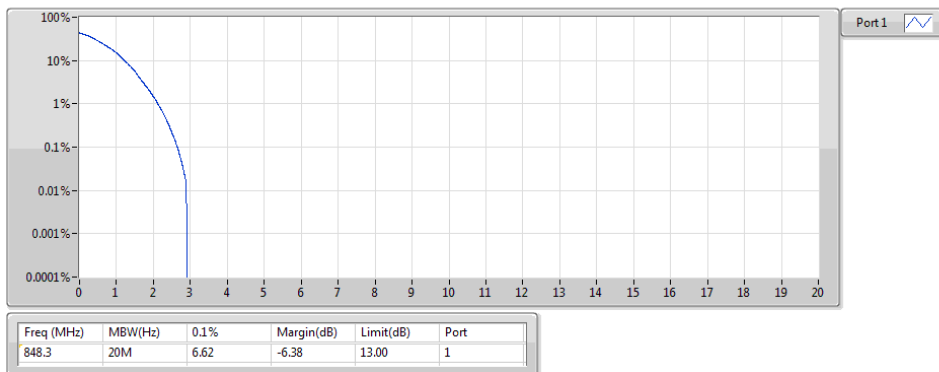
836.5MHz_64QAM_RB 6,#RB 0



Band 5_LTE_1.4MHz_Nss1,64QAM_1TX

PAR

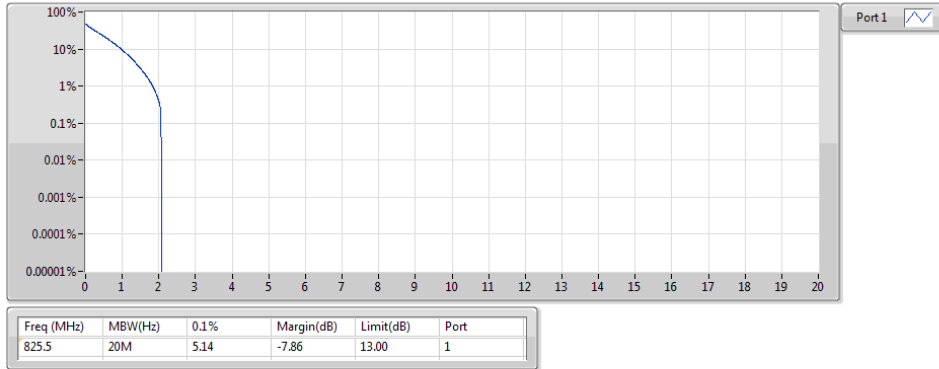
848.3MHz_64QAM_RB 6,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

PAR

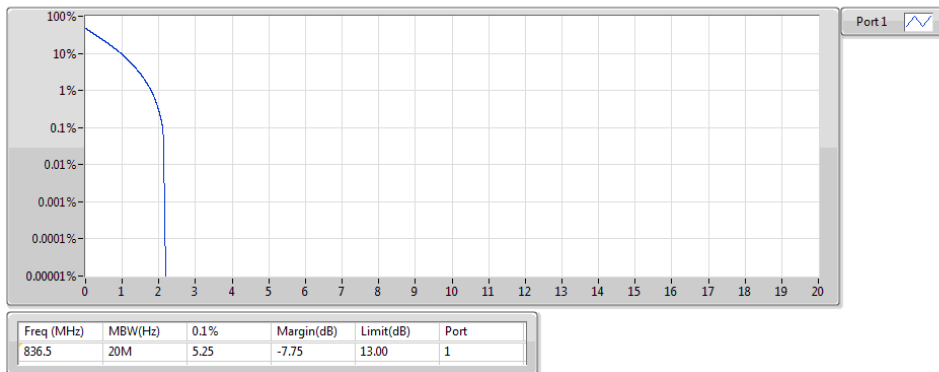
825.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

PAR

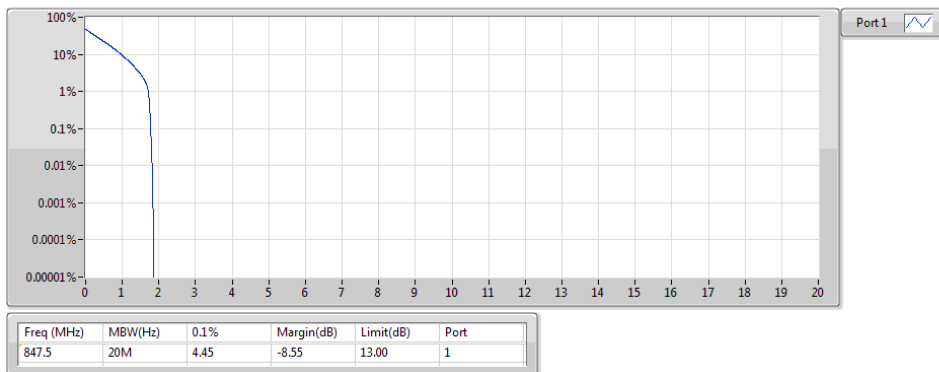
836.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,QPSK_1TX

PAR

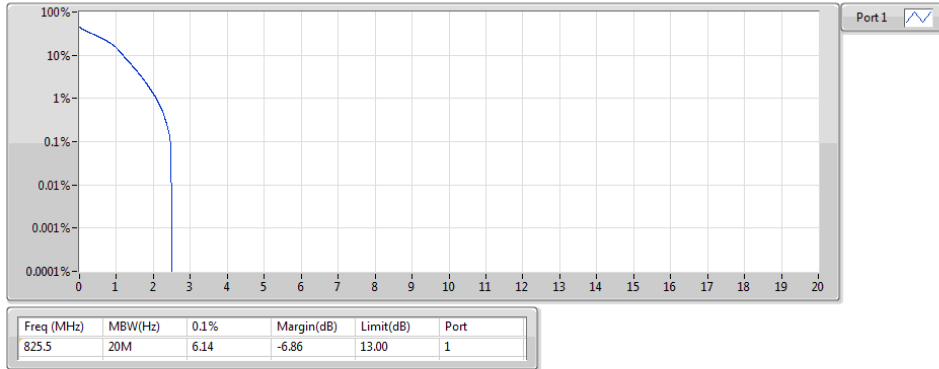
847.5MHz_QPSK_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

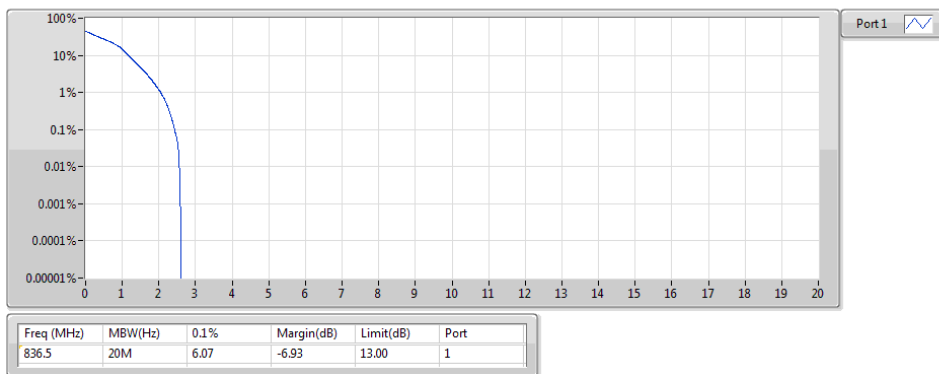
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Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

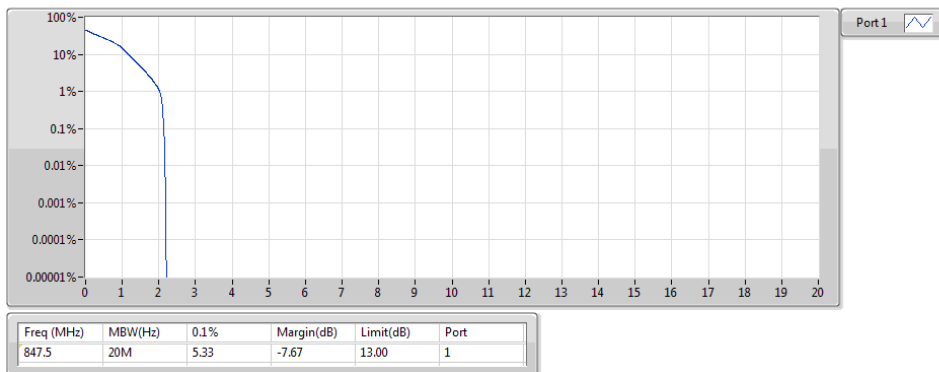
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Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

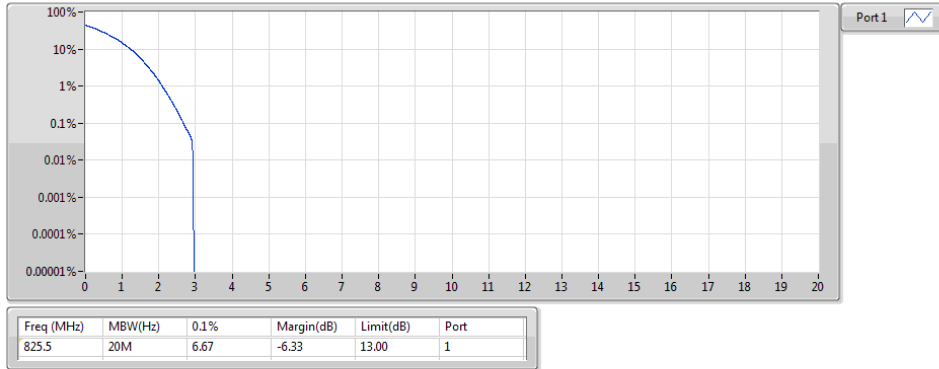
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Band 5_LTE_3MHz_Nss1,64QAM_1TX

PAR

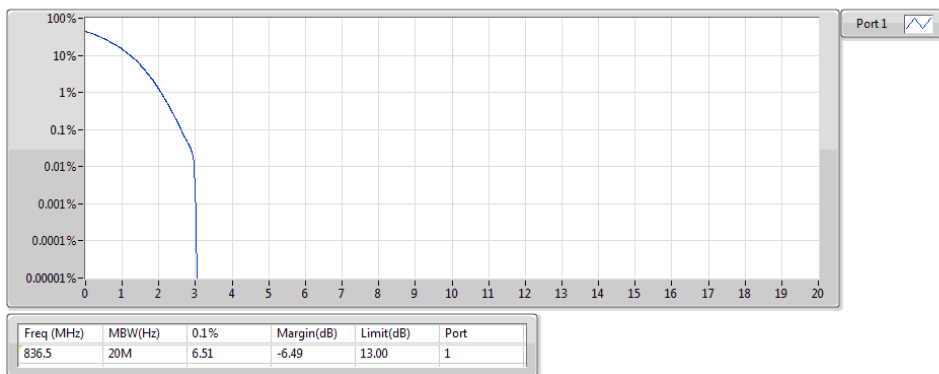
825.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

PAR

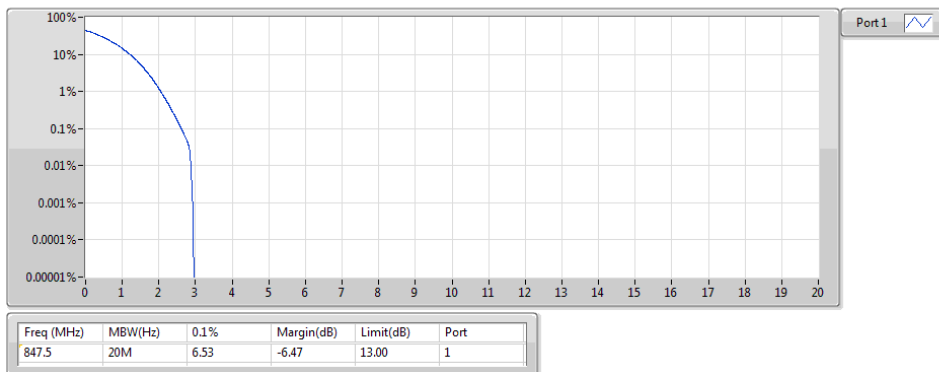
836.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_3MHz_Nss1,64QAM_1TX

PAR

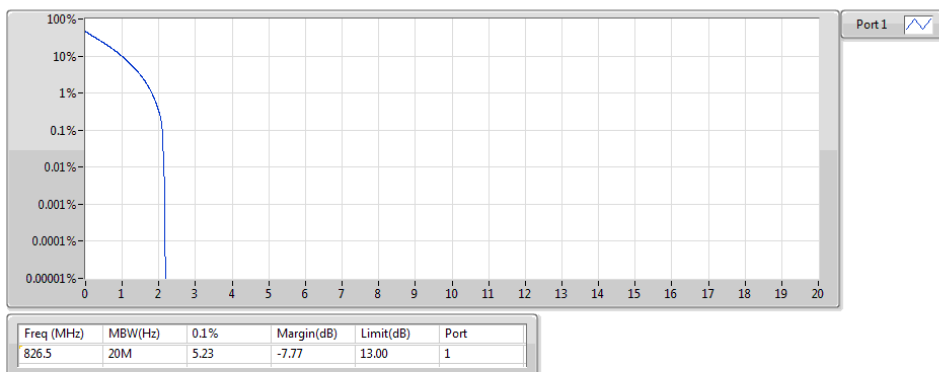
847.5MHz_64QAM_RB 15,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

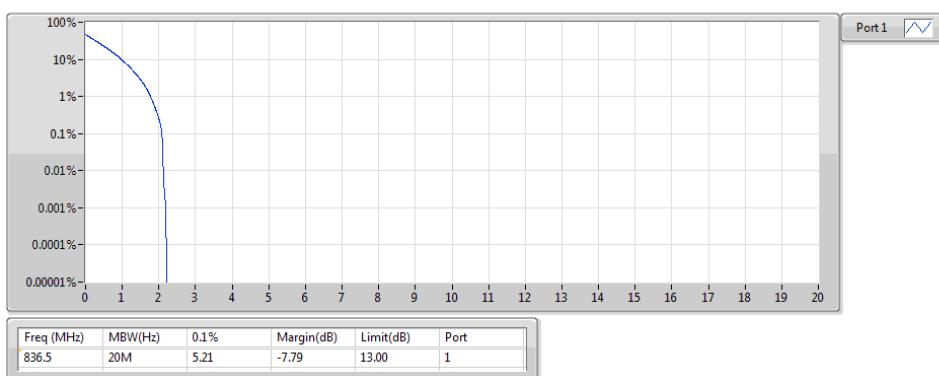
826.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

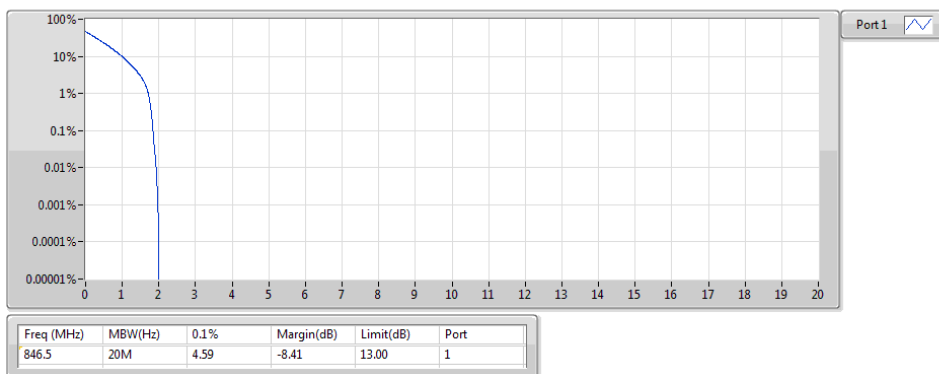
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Band 5_LTE_5MHz_Nss1,QPSK_1TX

PAR

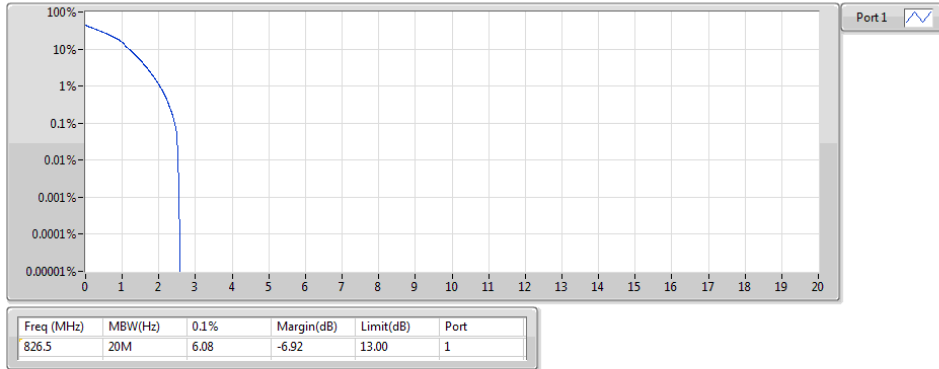
846.5MHz_QPSK_RB 25,#RB 0



Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

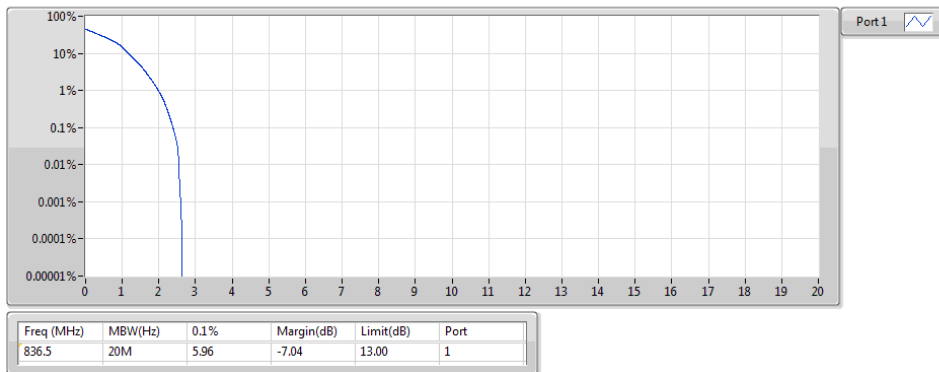
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Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

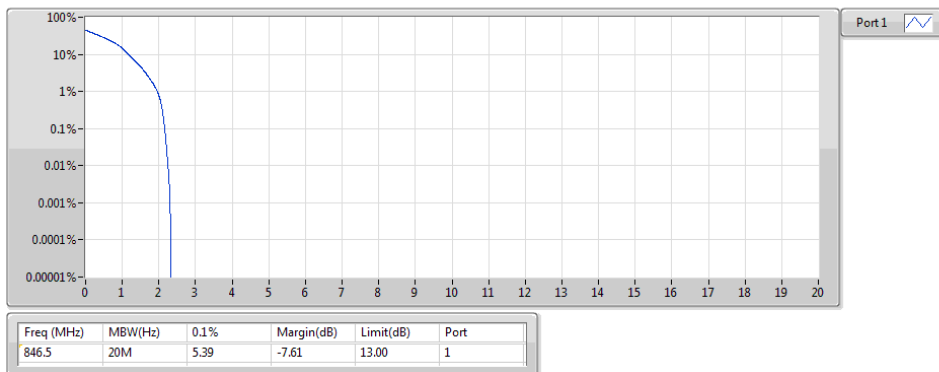
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Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

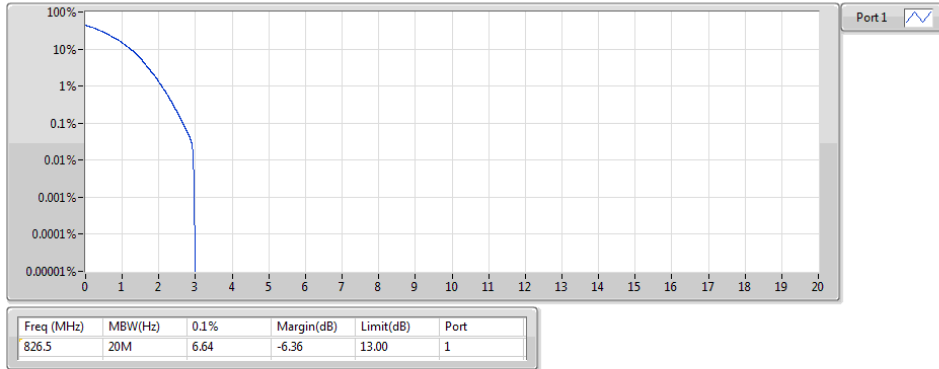
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Band 5_LTE_5MHz_Nss1,64QAM_1TX

PAR

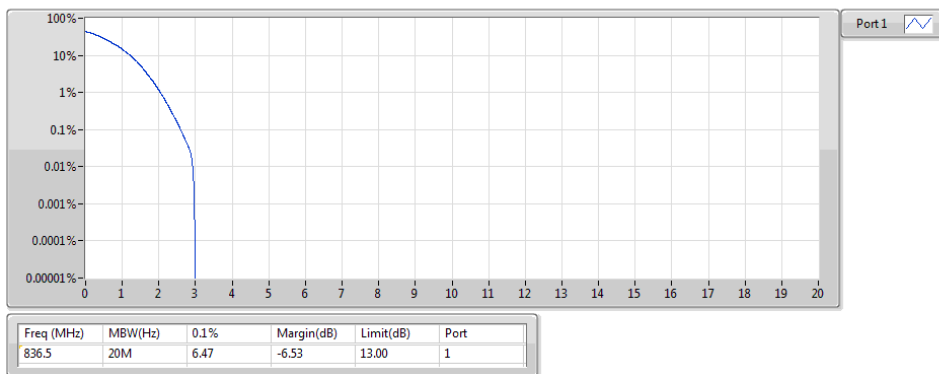
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Band 5_LTE_5MHz_Nss1,64QAM_1TX

PAR

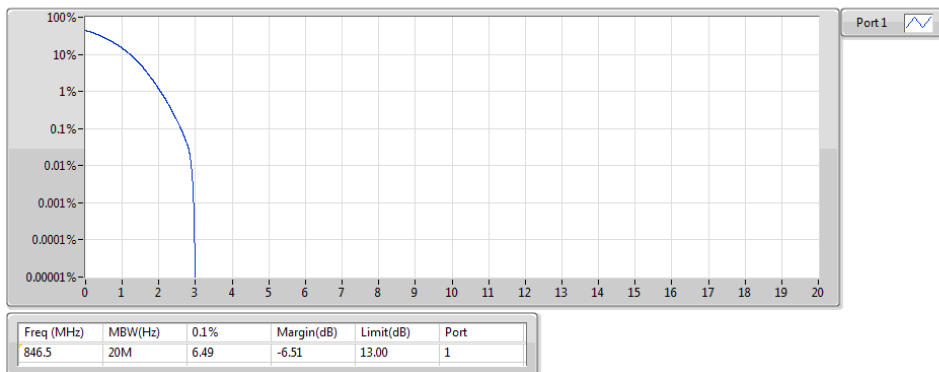
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Band 5_LTE_5MHz_Nss1,64QAM_1TX

PAR

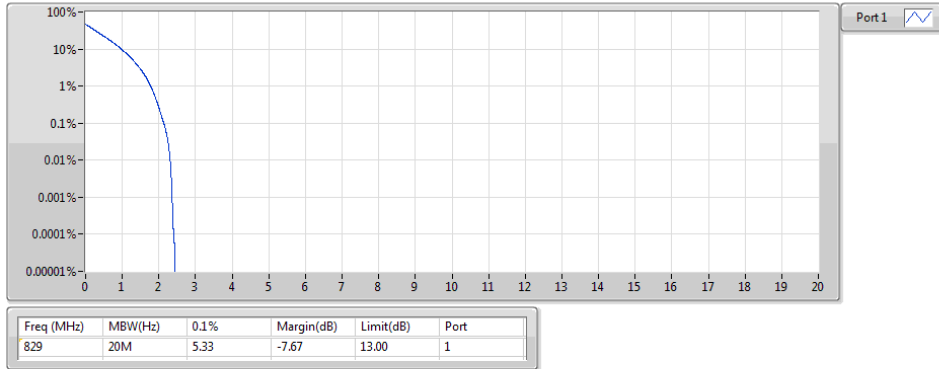
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Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

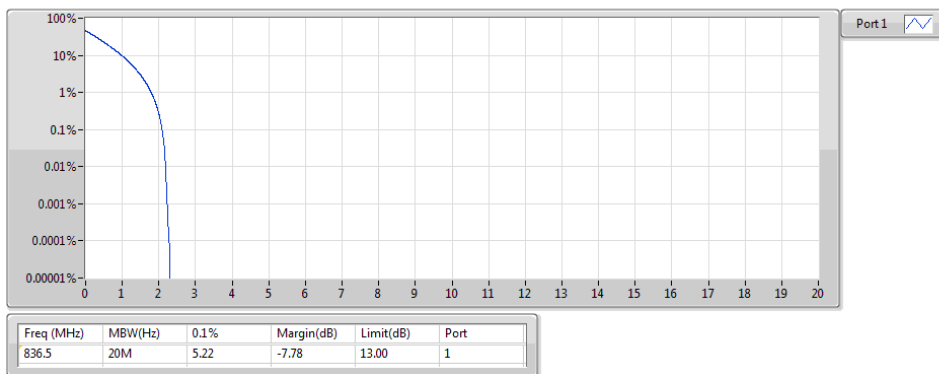
829MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

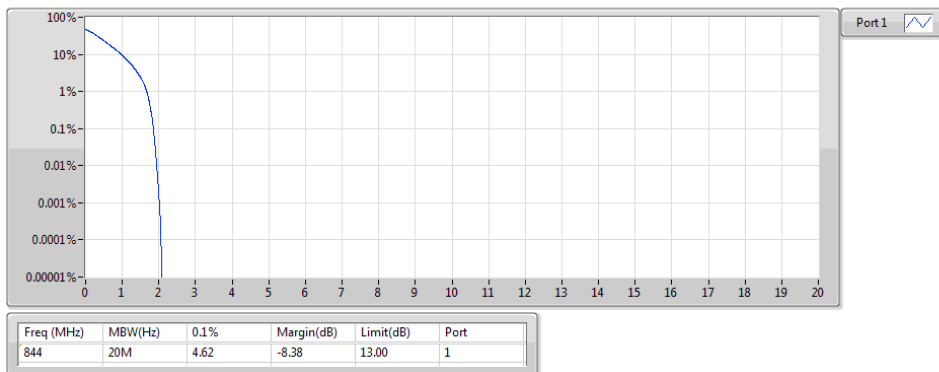
836.5MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

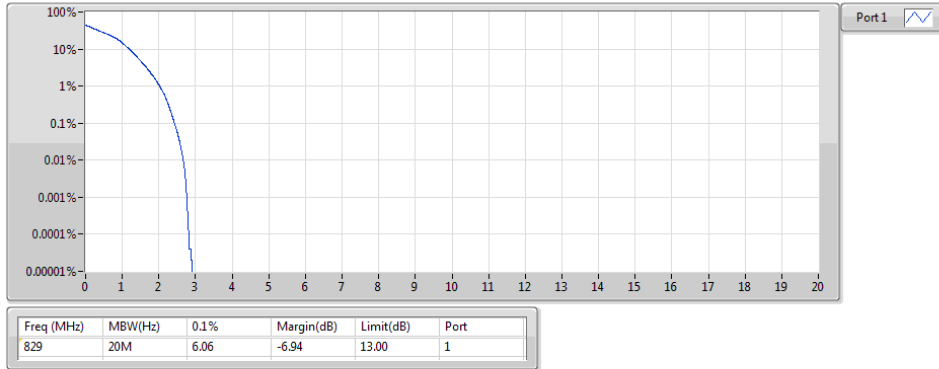
844MHz_QPSK_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,16QAM_1TX

PAR

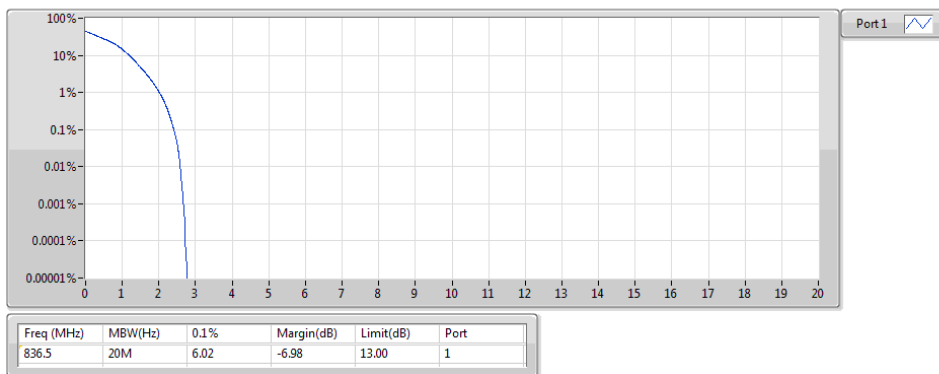
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Band 5_LTE_10MHz_Nss1,16QAM_1TX

PAR

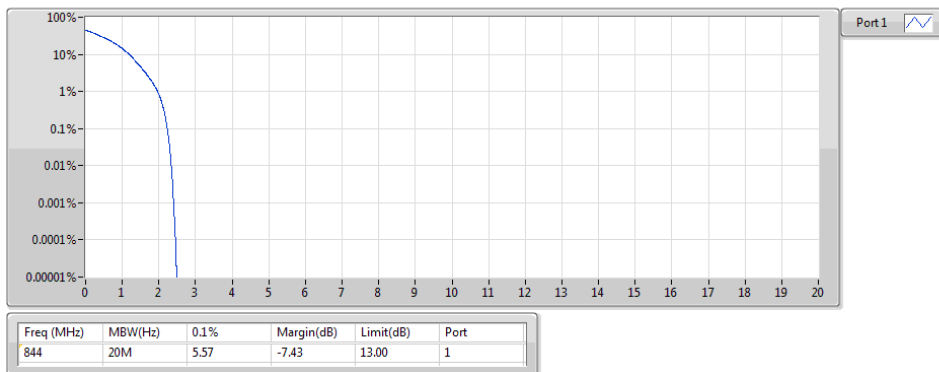
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Band 5_LTE_10MHz_Nss1,16QAM_1TX

PAR

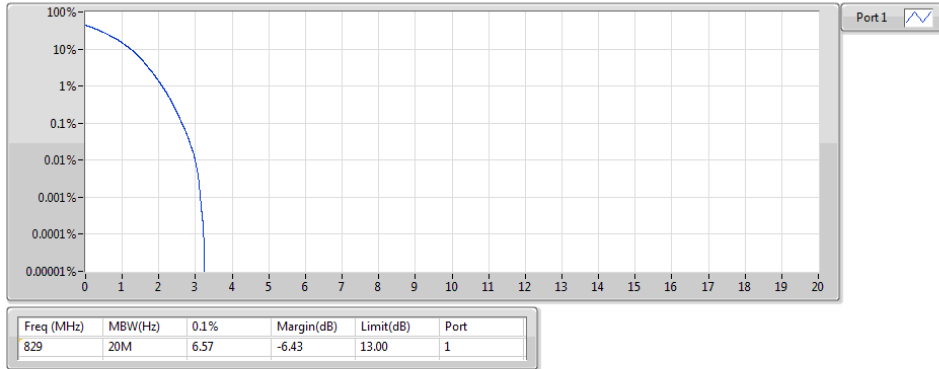
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Band 5_LTE_10MHz_Nss1,64QAM_1TX

PAR

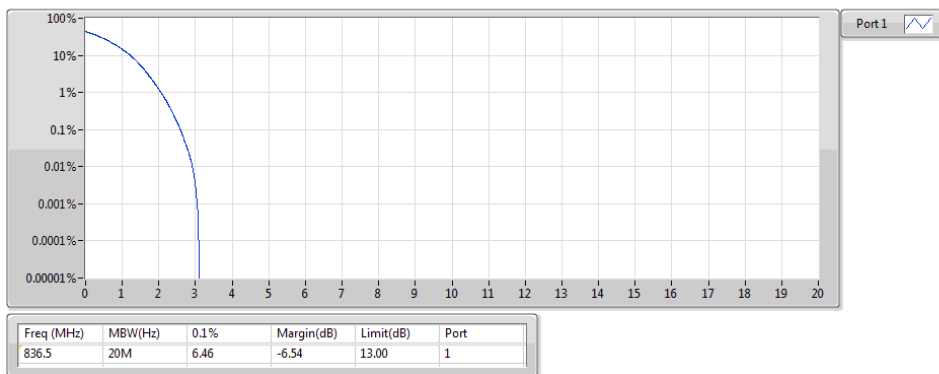
829MHz_64QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,64QAM_1TX

PAR

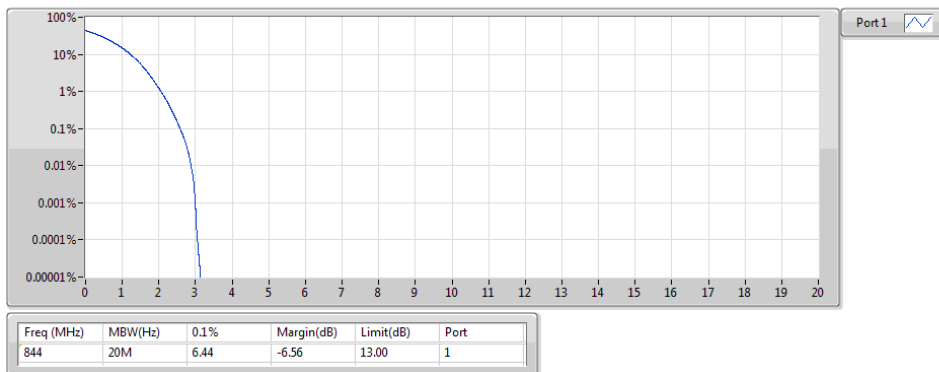
836.5MHz_64QAM_RB 50,#RB 0



Band 5_LTE_10MHz_Nss1,64QAM_1TX

PAR

844MHz_64QAM_RB 50,#RB 0



3.6 Frequency Stability

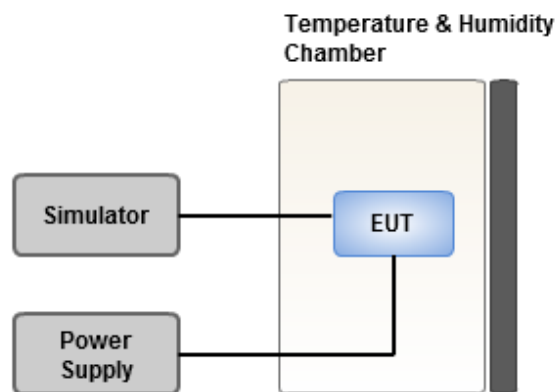
3.6.1 Limit of Frequency Stability

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. 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

850_GSM			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0016	2.5
T20°C Vmin	3.51	0.0015	2.5
T55°C Vnom	3.9	0.0022	2.5
T50°C Vnom	3.9	0.0021	2.5
T40°C Vnom	3.9	0.0020	2.5
T30°C Vnom	3.9	0.0020	2.5
T20°C Vnom	3.9	0.0018	2.5
T10°C Vnom	3.9	0.0018	2.5
T0°C Vnom	3.9	0.0019	2.5
T-10°C Vnom	3.9	0.0016	2.5
T-20°C Vnom	3.9	0.0018	2.5
T-30°C Vnom	3.9	0.0015	2.5

WCDMA V			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0015	2.5
T20°C Vmin	3.51	0.0016	2.5
T55°C Vnom	3.9	0.0021	2.5
T50°C Vnom	3.9	0.0018	2.5
T40°C Vnom	3.9	0.0018	2.5
T30°C Vnom	3.9	0.0019	2.5
T20°C Vnom	3.9	0.0017	2.5
T10°C Vnom	3.9	0.0016	2.5
T0°C Vnom	3.9	0.0016	2.5
T-10°C Vnom	3.9	0.0017	2.5
T-20°C Vnom	3.9	0.0016	2.5
T-30°C Vnom	3.9	0.0015	2.5

LTE Band 5, CB: 1.4MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0012	2.5
T20°C Vmin	3.51	0.0013	2.5
T55°C Vnom	3.9	0.0022	2.5
T50°C Vnom	3.9	0.0021	2.5
T40°C Vnom	3.9	0.0019	2.5
T30°C Vnom	3.9	0.0016	2.5
T20°C Vnom	3.9	0.0013	2.5
T10°C Vnom	3.9	0.0013	2.5
T0°C Vnom	3.9	0.0012	2.5
T-10°C Vnom	3.9	0.0011	2.5
T-20°C Vnom	3.9	0.0011	2.5
T-30°C Vnom	3.9	0.0012	2.5

LTE Band 5, CB: 3MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0013	2.5
T20°C Vmin	3.51	0.0012	2.5
T55°C Vnom	3.9	0.0021	2.5
T50°C Vnom	3.9	0.0022	2.5
T40°C Vnom	3.9	0.0021	2.5
T30°C Vnom	3.9	0.0018	2.5
T20°C Vnom	3.9	0.0015	2.5
T10°C Vnom	3.9	0.0016	2.5
T0°C Vnom	3.9	0.0014	2.5
T-10°C Vnom	3.9	0.0013	2.5
T-20°C Vnom	3.9	0.0012	2.5
T-30°C Vnom	3.9	0.0012	2.5

LTE Band 5, CB: 5MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0012	2.5
T20°C Vmin	3.51	0.0012	2.5
T55°C Vnom	3.9	0.002	2.5
T50°C Vnom	3.9	0.0021	2.5
T40°C Vnom	3.9	0.002	2.5
T30°C Vnom	3.9	0.0018	2.5
T20°C Vnom	3.9	0.0016	2.5
T10°C Vnom	3.9	0.0015	2.5
T0°C Vnom	3.9	0.0015	2.5
T-10°C Vnom	3.9	0.0014	2.5
T-20°C Vnom	3.9	0.0012	2.5
T-30°C Vnom	3.9	0.0013	2.5

LTE Band 5, CB: 10MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
T20°C Vmax	4.29	0.0012	2.5
T20°C Vmin	3.51	0.0012	2.5
T55°C Vnom	3.9	0.0016	2.5
T50°C Vnom	3.9	0.0018	2.5
T40°C Vnom	3.9	0.0018	2.5
T30°C Vnom	3.9	0.0016	2.5
T20°C Vnom	3.9	0.0015	2.5
T10°C Vnom	3.9	0.0014	2.5
T0°C Vnom	3.9	0.0014	2.5
T-10°C Vnom	3.9	0.0013	2.5
T-20°C Vnom	3.9	0.0013	2.5
T-30°C Vnom	3.9	0.0012	2.5

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 Corp (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

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Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St.,
Kwei Shan District, Tao Yuan City
333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan District, Tao Yuan
City 333, Taiwan, R.O.C.

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

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Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==