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 27**
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: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR011605P27	Rev. 01	Initial issue	May 18, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 27.50(c)(10)	Effective Radiated Power	Power[dBm]: 10.43	Pass
2.1053 27.53(g)	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 27.53(g)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 27.53(g)	Band Edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
2.1055 / 27.54	Frequency Stability	Meet the requirement of limit	Pass
27.50(d)(5)	Peak to Average Ratio	Meet the requirement of limit	Pass

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

1 General Description

1.1 Information

1.1.1 Product Details

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	LTE Band 12 Channel Bandwidth: 1.4MHz: 699.7 MHz ~ 715.3 MHz Channel Bandwidth: 3MHz: 700.5 MHz ~ 714.5 MHz Channel Bandwidth: 5MHz: 701.5 MHz ~ 713.5 MHz Channel Bandwidth: 10MHz: 704 MHz ~ 711 MHz
Modulation Type	QPSK/16QAM/64QAM (Uplink) QPSK/16QAM/64QAM/256QAM (Downlink)
Duplex Mode	FDD
Release Version	10
UE category	Cat. 6

1.1.3 Antenna Details

Ant. No.	Type	Connector	Gain (dBi)	Remark
1	Monopole	No	-10.0	---

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
LTE Band 12, CB: 1.4MHz	QPSK	0.011	1M08G7D
LTE Band 12, CB: 1.4MHz	16QAM	0.009	1M08W7D
LTE Band 12, CB: 1.4MHz	64QAM	0.007	1M08W7D
LTE Band 12, CB: 3MHz	QPSK	0.011	2M68G7D
LTE Band 12, CB: 3MHz	16QAM	0.009	2M68W7D
LTE Band 12, CB: 3MHz	64QAM	0.007	2M68W7D
LTE Band 12, CB: 5MHz	QPSK	0.011	4M46G7D
LTE Band 12, CB: 5MHz	16QAM	0.009	4M46W7D
LTE Band 12, CB: 5MHz	64QAM	0.007	4M48W7D
LTE Band 12, CB: 10MHz	QPSK	0.011	8M93G7D
LTE Band 12, CB: 10MHz	16QAM	0.009	8M91W7D
LTE Band 12, CB: 10MHz	64QAM	0.007	8M93W7D

1.1.7 Operating Channel List

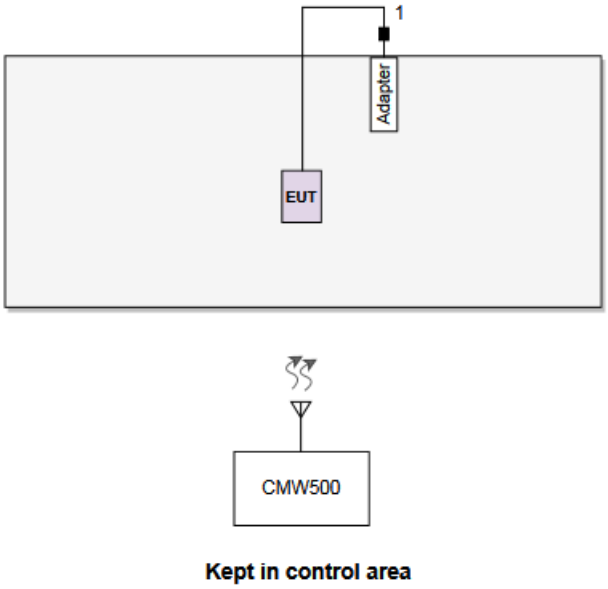
LTE Band 12		
Channel Bandwidth (MHz)	**Channel**	**Frequency (MHz)**
1.4	23017	699.7
1.4	23095	707.5
1.4	23173	715.3
3	23025	700.5
3	23095	707.5
3	23165	714.5
5	23035	701.5
5	23095	707.5
5	23155	713.5
10	23060	704.0
10	23095	707.5
10	23130	711.0

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 27
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

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2).

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.139 Hz
Conducted power	±0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Conducted emission	±2.680 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.8°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
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

LTE Band 12			
Test item	**Channel Bandwidths**	**Modulation**	**Test Frequency (MHz)**
E.R.P Conducted Emissions Occupied Bandwidth Peak to Average Ratio	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	699.7 / 707.5 / 715.3 700.5 / 707.5 / 714.5 701.5 / 707.5 / 713.5 704.0 / 707.5 / 711.0
Radiated Emission ≤ 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	699.7 700.5 701.5 704.0
Radiated Emission > 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	699.7 / 707.5 / 715.3 700.5 / 707.5 / 714.5 701.5 / 707.5 / 713.5 704.0 / 707.5 / 711.0
Band Edge	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	699.7 / 715.3 700.5 / 714.5 701.5 / 713.5 704.0 / 711.0
Frequency Stability	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	707.5 707.5 707.5 707.5
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

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

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.

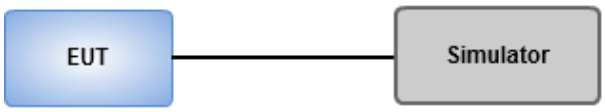
2. ERP = EIRP – 2.15 dB.

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 power (dBm)

Band / Channel Bandwidth			LTE Band 12 / CB: 1.4MHz		
Channel			23017	23095	23173
Frequency (MHz)			699.7	707.5	715.3
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.55	22.33	22.23
	1	3	22.53	22.41	22.24
	1	5	22.47	22.31	22.18
	3	0	22.54	22.37	22.26
	3	1	22.57	22.39	22.27
	3	3	22.50	22.35	22.22
	6	0	21.60	21.44	21.30
16QAM	1	0	21.84	21.70	21.53
	1	3	21.90	21.73	21.62
	1	5	21.80	21.65	21.52
	3	0	21.62	21.44	21.33
	3	1	21.64	21.49	21.37
	3	3	21.56	21.39	21.28
	6	0	20.69	20.51	20.39
64QAM	1	0	20.79	20.62	20.51
	1	3	20.82	20.65	20.51
	1	5	20.74	20.58	20.42
	3	0	20.75	20.57	20.44
	3	1	20.78	20.63	20.49
	3	3	20.70	20.56	20.43
	6	0	19.60	19.45	19.32

Band / Channel Bandwidth			LTE Band 12 / CB: 3MHz		
Channel			23025	23095	23165
Frequency (MHz)			700.5	707.5	714.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.56	22.41	22.32
	1	8	22.53	22.41	22.30
	1	14	22.43	22.33	22.20
	8	0	21.60	21.49	21.35
	8	4	21.58	21.45	21.35
	8	7	21.52	21.40	21.31
	15	0	21.58	21.42	21.33
16QAM	1	0	21.88	21.75	21.61
	1	8	21.81	21.65	21.59
	1	14	21.79	21.66	21.55
	8	0	20.68	20.53	20.41
	8	4	20.65	20.53	20.42
	8	7	20.62	20.47	20.36
	15	0	20.62	20.47	20.37
64QAM	1	0	20.82	20.68	20.54
	1	8	20.82	20.67	20.53
	1	14	20.71	20.57	20.44
	8	0	19.70	19.55	19.44
	8	4	19.67	19.52	19.41
	8	7	19.61	19.48	19.37
	15	0	19.65	19.46	19.39

Band / Channel Bandwidth			LTE Band 12 / CB: 5MHz		
Channel			23035	23095	23155
Frequency (MHz)			701.5	707.5	713.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.50	22.37	22.26
	1	12	22.43	22.31	22.29
	1	24	22.20	22.24	22.24
	12	0	21.57	21.46	21.37
	12	7	21.53	21.41	21.34
	12	13	21.59	21.46	21.35
	25	0	21.89	21.73	21.33
16QAM	1	0	21.71	21.66	21.53
	1	12	21.76	21.63	21.58
	1	24	20.65	20.50	21.56
	12	0	20.62	20.47	20.39
	12	7	20.54	20.43	20.35
	12	13	20.59	20.49	20.37
	25	0	20.85	20.66	20.34
64QAM	1	0	20.69	20.57	20.52
	1	12	20.69	20.63	20.53
	1	24	19.73	19.53	20.54
	12	0	19.65	19.52	19.46
	12	7	19.63	19.48	19.40
	12	13	19.60	19.49	19.41
	25	0	19.65	19.46	19.39

Band / Channel Bandwidth			LTE Band 12 / CB: 10MHz		
Channel			23060	23095	23130
Frequency (MHz)			704	707.5	711
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.58	22.37	22.32
	1	25	22.40	22.28	22.26
	1	49	22.38	22.33	22.26
	25	0	21.61	21.47	21.38
	25	12	21.58	21.50	21.44
	25	25	21.54	21.48	21.43
	50	0	21.60	21.52	21.46
16QAM	1	0	21.80	21.75	21.67
	1	25	21.74	21.65	21.62
	1	49	21.75	21.68	21.63
	25	0	20.62	20.42	20.40
	25	12	20.57	20.52	20.46
	25	25	20.52	20.46	20.40
	50	0	20.58	20.50	20.47
64QAM	1	0	20.69	20.68	20.56
	1	25	20.75	20.67	20.63
	1	49	20.68	20.67	20.58
	25	0	19.65	19.51	19.44
	25	12	19.62	19.55	19.52
	25	25	19.58	19.50	19.48
	50	0	19.61	19.53	19.48

3.1.5 Test Result of Effective Radiated Power (dBm)

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 12	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	22.57	0.181	10.42	0.01102
LTE_1.4MHz_Nss1,16QAM_1TX	21.90	0.155	9.75	0.00944
LTE_1.4MHz_Nss1,64QAM_1TX	20.82	0.121	8.67	0.00736
LTE_3MHz_Nss1,QPSK_1TX	22.56	0.180	10.41	0.01099
LTE_3MHz_Nss1,16QAM_1TX	21.88	0.154	9.73	0.00940
LTE_3MHz_Nss1,64QAM_1TX	20.82	0.121	8.67	0.00736
LTE_5MHz_Nss1,QPSK_1TX	22.50	0.178	10.35	0.01084
LTE_5MHz_Nss1,16QAM_1TX	21.76	0.150	9.61	0.00914
LTE_5MHz_Nss1,64QAM_1TX	20.69	0.117	8.54	0.00714
LTE_10MHz_Nss1,QPSK_1TX	22.58	0.181	10.43	0.01104
LTE_10MHz_Nss1,16QAM_1TX	21.80	0.151	9.65	0.00923
LTE_10MHz_Nss1,64QAM_1TX	20.75	0.119	8.60	0.00724

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 12_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
699.7MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.55	10.40	0.01096	3	22.55	0.180	Inf	22.55
699.7MHz_QPSK_RB 1,#RB 3	Pass	-10.00	12.53	10.38	0.01091	3	22.53	0.179	Inf	22.53
699.7MHz_QPSK_RB 1,#RB 5	Pass	-10.00	12.47	10.32	0.01076	3	22.47	0.177	Inf	22.47
699.7MHz_QPSK_RB 3,#RB 0	Pass	-10.00	12.54	10.39	0.01094	3	22.54	0.179	Inf	22.54
699.7MHz_QPSK_RB 3,#RB 1	Pass	-10.00	12.57	10.42	0.01102	3	22.57	0.181	Inf	22.57
699.7MHz_QPSK_RB 3,#RB 3	Pass	-10.00	12.50	10.35	0.01084	3	22.50	0.178	Inf	22.5
699.7MHz_QPSK_RB 6,#RB 0	Pass	-10.00	11.60	9.45	0.00881	3	21.60	0.145	Inf	21.6
707.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.33	10.18	0.01042	3	22.33	0.171	Inf	22.33
707.5MHz_QPSK_RB 1,#RB 3	Pass	-10.00	12.41	10.26	0.01062	3	22.41	0.174	Inf	22.41
707.5MHz_QPSK_RB 1,#RB 5	Pass	-10.00	12.31	10.16	0.01038	3	22.31	0.170	Inf	22.31
707.5MHz_QPSK_RB 3,#RB 0	Pass	-10.00	12.37	10.22	0.01052	3	22.37	0.173	Inf	22.37
707.5MHz_QPSK_RB 3,#RB 1	Pass	-10.00	12.39	10.24	0.01057	3	22.39	0.173	Inf	22.39
707.5MHz_QPSK_RB 3,#RB 3	Pass	-10.00	12.35	10.20	0.01047	3	22.35	0.172	Inf	22.35
707.5MHz_QPSK_RB 6,#RB 0	Pass	-10.00	11.44	9.29	0.00849	3	21.44	0.139	Inf	21.44
715.3MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.23	10.08	0.01019	3	22.23	0.167	Inf	22.23
715.3MHz_QPSK_RB 1,#RB 3	Pass	-10.00	12.24	10.09	0.01021	3	22.24	0.167	Inf	22.24

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
715.3MHz_QPSK_RB 1,#RB 5	Pass	-10.00	12.18	10.03	0.01007	3	22.18	0.165	Inf	22.18
715.3MHz_QPSK_RB 3,#RB 0	Pass	-10.00	12.26	10.11	0.01026	3	22.26	0.168	Inf	22.26
715.3MHz_QPSK_RB 3,#RB 1	Pass	-10.00	12.27	10.12	0.01028	3	22.27	0.169	Inf	22.27
715.3MHz_QPSK_RB 3,#RB 3	Pass	-10.00	12.22	10.07	0.01016	3	22.22	0.167	Inf	22.22
715.3MHz_QPSK_RB 6,#RB 0	Pass	-10.00	11.30	9.15	0.00822	3	21.30	0.135	Inf	21.3
699.7MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.84	9.69	0.00931	3	21.84	0.153	Inf	21.84
699.7MHz_16QAM_RB 1,#RB 3	Pass	-10.00	11.90	9.75	0.00944	3	21.90	0.155	Inf	21.9
699.7MHz_16QAM_RB 1,#RB 5	Pass	-10.00	11.80	9.65	0.00923	3	21.80	0.151	Inf	21.8
699.7MHz_16QAM_RB 3,#RB 0	Pass	-10.00	11.62	9.47	0.00885	3	21.62	0.145	Inf	21.62
699.7MHz_16QAM_RB 3,#RB 1	Pass	-10.00	11.64	9.49	0.00889	3	21.64	0.146	Inf	21.64
699.7MHz_16QAM_RB 3,#RB 3	Pass	-10.00	11.56	9.41	0.00873	3	21.56	0.143	Inf	21.56
699.7MHz_16QAM_RB 6,#RB 0	Pass	-10.00	10.69	8.54	0.00714	3	20.69	0.117	Inf	20.69
707.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.70	9.55	0.00902	3	21.70	0.148	Inf	21.7
707.5MHz_16QAM_RB 1,#RB 3	Pass	-10.00	11.73	9.58	0.00908	3	21.73	0.149	Inf	21.73
707.5MHz_16QAM_RB 1,#RB 5	Pass	-10.00	11.65	9.50	0.00891	3	21.65	0.146	Inf	21.65
707.5MHz_16QAM_RB 3,#RB 0	Pass	-10.00	11.44	9.29	0.00849	3	21.44	0.139	Inf	21.44
707.5MHz_16QAM_RB 3,#RB 1	Pass	-10.00	11.49	9.34	0.00859	3	21.49	0.141	Inf	21.49
707.5MHz_16QAM_RB 3,#RB 3	Pass	-10.00	11.39	9.24	0.00839	3	21.39	0.138	Inf	21.39
707.5MHz_16QAM_RB 6,#RB 0	Pass	-10.00	10.51	8.36	0.00685	3	20.51	0.112	Inf	20.51
715.3MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.53	9.38	0.00867	3	21.53	0.142	Inf	21.53
715.3MHz_16QAM_RB 1,#RB 3	Pass	-10.00	11.62	9.47	0.00885	3	21.62	0.145	Inf	21.62
715.3MHz_16QAM_RB 1,#RB 5	Pass	-10.00	11.52	9.37	0.00865	3	21.52	0.142	Inf	21.52
715.3MHz_16QAM_RB 3,#RB 0	Pass	-10.00	11.33	9.18	0.00828	3	21.33	0.136	Inf	21.33
715.3MHz_16QAM_RB 3,#RB 1	Pass	-10.00	11.37	9.22	0.00836	3	21.37	0.137	Inf	21.37
715.3MHz_16QAM_RB 3,#RB 3	Pass	-10.00	11.28	9.13	0.00818	3	21.28	0.134	Inf	21.28
715.3MHz_16QAM_RB 6,#RB 0	Pass	-10.00	10.39	8.24	0.00667	3	20.39	0.109	Inf	20.39
699.7MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.79	8.64	0.00731	3	20.79	0.120	Inf	20.79
699.7MHz_64QAM_RB 1,#RB 3	Pass	-10.00	10.82	8.67	0.00736	3	20.82	0.121	Inf	20.82
699.7MHz_64QAM_RB 1,#RB 5	Pass	-10.00	10.74	8.59	0.00723	3	20.74	0.119	Inf	20.74
699.7MHz_64QAM_RB 3,#RB 0	Pass	-10.00	10.75	8.60	0.00724	3	20.75	0.119	Inf	20.75
699.7MHz_64QAM_RB 3,#RB 1	Pass	-10.00	10.78	8.63	0.00729	3	20.78	0.120	Inf	20.78
699.7MHz_64QAM_RB 3,#RB 3	Pass	-10.00	10.70	8.55	0.00716	3	20.70	0.117	Inf	20.7
699.7MHz_64QAM_RB 6,#RB 0	Pass	-10.00	9.60	7.45	0.00556	3	19.60	0.091	Inf	19.6
707.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.62	8.47	0.00703	3	20.62	0.115	Inf	20.62
707.5MHz_64QAM_RB 1,#RB 3	Pass	-10.00	10.65	8.50	0.00708	3	20.65	0.116	Inf	20.65
707.5MHz_64QAM_RB 1,#RB 5	Pass	-10.00	10.58	8.43	0.00697	3	20.58	0.114	Inf	20.58
707.5MHz_64QAM_RB 3,#RB 0	Pass	-10.00	10.57	8.42	0.00695	3	20.57	0.114	Inf	20.57
707.5MHz_64QAM_RB 3,#RB 1	Pass	-10.00	10.63	8.48	0.00705	3	20.63	0.116	Inf	20.63

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
707.5MHz_64QAM_RB 3,#RB 3	Pass	-10.00	10.56	8.41	0.00693	3	20.56	0.114	Inf	20.56
707.5MHz_64QAM_RB 6,#RB 0	Pass	-10.00	9.45	7.30	0.00537	3	19.45	0.088	Inf	19.45
715.3MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.51	8.36	0.00685	3	20.51	0.112	Inf	20.51
715.3MHz_64QAM_RB 1,#RB 3	Pass	-10.00	10.51	8.36	0.00685	3	20.51	0.112	Inf	20.51
715.3MHz_64QAM_RB 1,#RB 5	Pass	-10.00	10.42	8.27	0.00671	3	20.42	0.110	Inf	20.42
715.3MHz_64QAM_RB 3,#RB 0	Pass	-10.00	10.44	8.29	0.00675	3	20.44	0.111	Inf	20.44
715.3MHz_64QAM_RB 3,#RB 1	Pass	-10.00	10.49	8.34	0.00682	3	20.49	0.112	Inf	20.49
715.3MHz_64QAM_RB 3,#RB 3	Pass	-10.00	10.43	8.28	0.00673	3	20.43	0.110	Inf	20.43
715.3MHz_64QAM_RB 6,#RB 0	Pass	-10.00	9.32	7.17	0.00521	3	19.32	0.086	Inf	19.32
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
700.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.56	10.41	0.01099	3	22.56	0.180	Inf	22.56
700.5MHz_QPSK_RB 1,#RB 8	Pass	-10.00	12.53	10.38	0.01091	3	22.53	0.179	Inf	22.53
700.5MHz_QPSK_RB 1,#RB 14	Pass	-10.00	12.43	10.28	0.01067	3	22.43	0.175	Inf	22.43
700.5MHz_QPSK_RB 8,#RB 0	Pass	-10.00	11.60	9.45	0.00881	3	21.60	0.145	Inf	21.6
700.5MHz_QPSK_RB 8,#RB 4	Pass	-10.00	11.58	9.43	0.00877	3	21.58	0.144	Inf	21.58
700.5MHz_QPSK_RB 8,#RB 7	Pass	-10.00	11.52	9.37	0.00865	3	21.52	0.142	Inf	21.52
700.5MHz_QPSK_RB 15,#RB 0	Pass	-10.00	11.58	9.43	0.00877	3	21.58	0.144	Inf	21.58
707.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.41	10.26	0.01062	3	22.41	0.174	Inf	22.41
707.5MHz_QPSK_RB 1,#RB 8	Pass	-10.00	12.41	10.26	0.01062	3	22.41	0.174	Inf	22.41
707.5MHz_QPSK_RB 1,#RB 14	Pass	-10.00	12.33	10.18	0.01042	3	22.33	0.171	Inf	22.33
707.5MHz_QPSK_RB 8,#RB 0	Pass	-10.00	11.49	9.34	0.00859	3	21.49	0.141	Inf	21.49
707.5MHz_QPSK_RB 8,#RB 4	Pass	-10.00	11.45	9.30	0.00851	3	21.45	0.140	Inf	21.45
707.5MHz_QPSK_RB 8,#RB 7	Pass	-10.00	11.40	9.25	0.00841	3	21.40	0.138	Inf	21.4
707.5MHz_QPSK_RB 15,#RB 0	Pass	-10.00	11.42	9.27	0.00845	3	21.42	0.139	Inf	21.42
714.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.32	10.17	0.01040	3	22.32	0.171	Inf	22.32
714.5MHz_QPSK_RB 1,#RB 8	Pass	-10.00	12.30	10.15	0.01035	3	22.30	0.170	Inf	22.3
714.5MHz_QPSK_RB 1,#RB 14	Pass	-10.00	12.20	10.05	0.01012	3	22.20	0.166	Inf	22.2
714.5MHz_QPSK_RB 8,#RB 0	Pass	-10.00	11.35	9.20	0.00832	3	21.35	0.136	Inf	21.35
714.5MHz_QPSK_RB 8,#RB 4	Pass	-10.00	11.35	9.20	0.00832	3	21.35	0.136	Inf	21.35
714.5MHz_QPSK_RB 8,#RB 7	Pass	-10.00	11.31	9.16	0.00824	3	21.31	0.135	Inf	21.31
714.5MHz_QPSK_RB 15,#RB 0	Pass	-10.00	11.33	9.18	0.00828	3	21.33	0.136	Inf	21.33
700.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.88	9.73	0.00940	3	21.88	0.154	Inf	21.88
700.5MHz_16QAM_RB 1,#RB 8	Pass	-10.00	11.81	9.66	0.00925	3	21.81	0.152	Inf	21.81
700.5MHz_16QAM_RB 1,#RB 14	Pass	-10.00	11.79	9.64	0.00920	3	21.79	0.151	Inf	21.79
700.5MHz_16QAM_RB 8,#RB 0	Pass	-10.00	10.68	8.53	0.00713	3	20.68	0.117	Inf	20.68
700.5MHz_16QAM_RB 8,#RB 4	Pass	-10.00	10.65	8.50	0.00708	3	20.65	0.116	Inf	20.65
700.5MHz_16QAM_RB 8,#RB 7	Pass	-10.00	10.62	8.47	0.00703	3	20.62	0.115	Inf	20.62
700.5MHz_16QAM_RB 15,#RB 0	Pass	-10.00	10.62	8.47	0.00703	3	20.62	0.115	Inf	20.62

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
707.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.75	9.60	0.00912	3	21.75	0.150	Inf	21.75
707.5MHz_16QAM_RB 1,#RB 8	Pass	-10.00	11.65	9.50	0.00891	3	21.65	0.146	Inf	21.65
707.5MHz_16QAM_RB 1,#RB 14	Pass	-10.00	11.66	9.51	0.00893	3	21.66	0.147	Inf	21.66
707.5MHz_16QAM_RB 8,#RB 0	Pass	-10.00	10.53	8.38	0.00689	3	20.53	0.113	Inf	20.53
707.5MHz_16QAM_RB 8,#RB 4	Pass	-10.00	10.53	8.38	0.00689	3	20.53	0.113	Inf	20.53
707.5MHz_16QAM_RB 8,#RB 7	Pass	-10.00	10.47	8.32	0.00679	3	20.47	0.111	Inf	20.47
707.5MHz_16QAM_RB 15,#RB 0	Pass	-10.00	10.47	8.32	0.00679	3	20.47	0.111	Inf	20.47
714.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.61	9.46	0.00883	3	21.61	0.145	Inf	21.61
714.5MHz_16QAM_RB 1,#RB 8	Pass	-10.00	11.59	9.44	0.00879	3	21.59	0.144	Inf	21.59
714.5MHz_16QAM_RB 1,#RB 14	Pass	-10.00	11.55	9.40	0.00871	3	21.55	0.143	Inf	21.55
714.5MHz_16QAM_RB 8,#RB 0	Pass	-10.00	10.41	8.26	0.00670	3	20.41	0.110	Inf	20.41
714.5MHz_16QAM_RB 8,#RB 4	Pass	-10.00	10.42	8.27	0.00671	3	20.42	0.110	Inf	20.42
714.5MHz_16QAM_RB 8,#RB 7	Pass	-10.00	10.36	8.21	0.00662	3	20.36	0.109	Inf	20.36
714.5MHz_16QAM_RB 15,#RB 0	Pass	-10.00	10.37	8.22	0.00664	3	20.37	0.109	Inf	20.37
700.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.82	8.67	0.00736	3	20.82	0.121	Inf	20.82
700.5MHz_64QAM_RB 1,#RB 8	Pass	-10.00	10.82	8.67	0.00736	3	20.82	0.121	Inf	20.82
700.5MHz_64QAM_RB 1,#RB 14	Pass	-10.00	10.71	8.56	0.00718	3	20.71	0.118	Inf	20.71
700.5MHz_64QAM_RB 8,#RB 0	Pass	-10.00	9.70	7.55	0.00569	3	19.70	0.093	Inf	19.7
700.5MHz_64QAM_RB 8,#RB 4	Pass	-10.00	9.67	7.52	0.00565	3	19.67	0.093	Inf	19.67
700.5MHz_64QAM_RB 8,#RB 7	Pass	-10.00	9.61	7.46	0.00557	3	19.61	0.091	Inf	19.61
700.5MHz_64QAM_RB 15,#RB 0	Pass	-10.00	9.65	7.50	0.00562	3	19.65	0.092	Inf	19.65
707.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.68	8.53	0.00713	3	20.68	0.117	Inf	20.68
707.5MHz_64QAM_RB 1,#RB 8	Pass	-10.00	10.67	8.52	0.00711	3	20.67	0.117	Inf	20.67
707.5MHz_64QAM_RB 1,#RB 14	Pass	-10.00	10.57	8.42	0.00695	3	20.57	0.114	Inf	20.57
707.5MHz_64QAM_RB 8,#RB 0	Pass	-10.00	9.55	7.40	0.00550	3	19.55	0.090	Inf	19.55
707.5MHz_64QAM_RB 8,#RB 4	Pass	-10.00	9.52	7.37	0.00546	3	19.52	0.090	Inf	19.52
707.5MHz_64QAM_RB 8,#RB 7	Pass	-10.00	9.48	7.33	0.00541	3	19.48	0.089	Inf	19.48
707.5MHz_64QAM_RB 15,#RB 0	Pass	-10.00	9.46	7.31	0.00538	3	19.46	0.088	Inf	19.46
714.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.54	8.39	0.00690	3	20.54	0.113	Inf	20.54
714.5MHz_64QAM_RB 1,#RB 8	Pass	-10.00	10.53	8.38	0.00689	3	20.53	0.113	Inf	20.53
714.5MHz_64QAM_RB 1,#RB 14	Pass	-10.00	10.44	8.29	0.00675	3	20.44	0.111	Inf	20.44
714.5MHz_64QAM_RB 8,#RB 0	Pass	-10.00	9.44	7.29	0.00536	3	19.44	0.088	Inf	19.44
714.5MHz_64QAM_RB 8,#RB 4	Pass	-10.00	9.41	7.26	0.00532	3	19.41	0.087	Inf	19.41
714.5MHz_64QAM_RB 8,#RB 7	Pass	-10.00	9.37	7.22	0.00527	3	19.37	0.086	Inf	19.37
714.5MHz_64QAM_RB 15,#RB 0	Pass	-10.00	9.39	7.24	0.00530	3	19.39	0.087	Inf	19.39
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
701.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.50	10.35	0.01084	3	22.50	0.178	Inf	22.5
701.5MHz_QPSK_RB 1,#RB 12	Pass	-10.00	12.43	10.28	0.01067	3	22.43	0.175	Inf	22.43

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
701.5MHz_QPSK_RB 1,#RB 24	Pass	-10.00	12.20	10.05	0.01012	3	22.20	0.166	Inf	22.2
701.5MHz_QPSK_RB 12,#RB 0	Pass	-10.00	11.57	9.42	0.00875	3	21.57	0.144	Inf	21.57
701.5MHz_QPSK_RB 12,#RB 7	Pass	-10.00	11.53	9.38	0.00867	3	21.53	0.142	Inf	21.53
701.5MHz_QPSK_RB 12,#RB 13	Pass	-10.00	11.59	9.44	0.00879	3	21.59	0.144	Inf	21.59
701.5MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.89	9.74	0.00942	3	21.89	0.155	Inf	21.89
707.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.37	10.22	0.01052	3	22.37	0.173	Inf	22.37
707.5MHz_QPSK_RB 1,#RB 12	Pass	-10.00	12.31	10.16	0.01038	3	22.31	0.170	Inf	22.31
707.5MHz_QPSK_RB 1,#RB 24	Pass	-10.00	12.24	10.09	0.01021	3	22.24	0.167	Inf	22.24
707.5MHz_QPSK_RB 12,#RB 0	Pass	-10.00	11.46	9.31	0.00853	3	21.46	0.140	Inf	21.46
707.5MHz_QPSK_RB 12,#RB 7	Pass	-10.00	11.41	9.26	0.00843	3	21.41	0.138	Inf	21.41
707.5MHz_QPSK_RB 12,#RB 13	Pass	-10.00	11.46	9.31	0.00853	3	21.46	0.140	Inf	21.46
707.5MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.73	9.58	0.00908	3	21.73	0.149	Inf	21.73
713.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.26	10.11	0.01026	3	22.26	0.168	Inf	22.26
713.5MHz_QPSK_RB 1,#RB 12	Pass	-10.00	12.29	10.14	0.01033	3	22.29	0.169	Inf	22.29
713.5MHz_QPSK_RB 1,#RB 24	Pass	-10.00	12.24	10.09	0.01021	3	22.24	0.167	Inf	22.24
713.5MHz_QPSK_RB 12,#RB 0	Pass	-10.00	11.37	9.22	0.00836	3	21.37	0.137	Inf	21.37
713.5MHz_QPSK_RB 12,#RB 7	Pass	-10.00	11.34	9.19	0.00830	3	21.34	0.136	Inf	21.34
713.5MHz_QPSK_RB 12,#RB 13	Pass	-10.00	11.35	9.20	0.00832	3	21.35	0.136	Inf	21.35
713.5MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.33	9.18	0.00828	3	21.33	0.136	Inf	21.33
701.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.71	9.56	0.00904	3	21.71	0.148	Inf	21.71
701.5MHz_16QAM_RB 1,#RB 12	Pass	-10.00	11.76	9.61	0.00914	3	21.76	0.150	Inf	21.76
701.5MHz_16QAM_RB 1,#RB 24	Pass	-10.00	10.65	8.50	0.00708	3	20.65	0.116	Inf	20.65
701.5MHz_16QAM_RB 12,#RB 0	Pass	-10.00	10.62	8.47	0.00703	3	20.62	0.115	Inf	20.62
701.5MHz_16QAM_RB 12,#RB 7	Pass	-10.00	10.54	8.39	0.00690	3	20.54	0.113	Inf	20.54
701.5MHz_16QAM_RB 12,#RB 13	Pass	-10.00	10.59	8.44	0.00698	3	20.59	0.115	Inf	20.59
701.5MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.85	8.70	0.00741	3	20.85	0.122	Inf	20.85
707.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.66	9.51	0.00893	3	21.66	0.147	Inf	21.66
707.5MHz_16QAM_RB 1,#RB 12	Pass	-10.00	11.63	9.48	0.00887	3	21.63	0.146	Inf	21.63
707.5MHz_16QAM_RB 1,#RB 24	Pass	-10.00	10.50	8.35	0.00684	3	20.50	0.112	Inf	20.5
707.5MHz_16QAM_RB 12,#RB 0	Pass	-10.00	10.47	8.32	0.00679	3	20.47	0.111	Inf	20.47
707.5MHz_16QAM_RB 12,#RB 7	Pass	-10.00	10.43	8.28	0.00673	3	20.43	0.110	Inf	20.43
707.5MHz_16QAM_RB 12,#RB 13	Pass	-10.00	10.49	8.34	0.00682	3	20.49	0.112	Inf	20.49
707.5MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.66	8.51	0.00710	3	20.66	0.116	Inf	20.66
713.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.53	9.38	0.00867	3	21.53	0.142	Inf	21.53
713.5MHz_16QAM_RB 1,#RB 12	Pass	-10.00	11.58	9.43	0.00877	3	21.58	0.144	Inf	21.58
713.5MHz_16QAM_RB 1,#RB 24	Pass	-10.00	11.56	9.41	0.00873	3	21.56	0.143	Inf	21.56
713.5MHz_16QAM_RB 12,#RB 0	Pass	-10.00	10.39	8.24	0.00667	3	20.39	0.109	Inf	20.39
713.5MHz_16QAM_RB 12,#RB 7	Pass	-10.00	10.35	8.20	0.00661	3	20.35	0.108	Inf	20.35

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
713.5MHz_16QAM_RB 12,#RB 13	Pass	-10.00	10.37	8.22	0.00664	3	20.37	0.109	Inf	20.37
713.5MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.34	8.19	0.00659	3	20.34	0.108	Inf	20.34
701.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.69	8.54	0.00714	3	20.69	0.117	Inf	20.69
701.5MHz_64QAM_RB 1,#RB 12	Pass	-10.00	10.69	8.54	0.00714	3	20.69	0.117	Inf	20.69
701.5MHz_64QAM_RB 1,#RB 24	Pass	-10.00	9.73	7.58	0.00573	3	19.73	0.094	Inf	19.73
701.5MHz_64QAM_RB 12,#RB 0	Pass	-10.00	9.65	7.50	0.00562	3	19.65	0.092	Inf	19.65
701.5MHz_64QAM_RB 12,#RB 7	Pass	-10.00	9.63	7.48	0.00560	3	19.63	0.092	Inf	19.63
701.5MHz_64QAM_RB 12,#RB 13	Pass	-10.00	9.60	7.45	0.00556	3	19.60	0.091	Inf	19.6
701.5MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.65	7.50	0.00562	3	19.65	0.092	Inf	19.65
707.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.57	8.42	0.00695	3	20.57	0.114	Inf	20.57
707.5MHz_64QAM_RB 1,#RB 12	Pass	-10.00	10.63	8.48	0.00705	3	20.63	0.116	Inf	20.63
707.5MHz_64QAM_RB 1,#RB 24	Pass	-10.00	9.53	7.38	0.00547	3	19.53	0.090	Inf	19.53
707.5MHz_64QAM_RB 12,#RB 0	Pass	-10.00	9.52	7.37	0.00546	3	19.52	0.090	Inf	19.52
707.5MHz_64QAM_RB 12,#RB 7	Pass	-10.00	9.48	7.33	0.00541	3	19.48	0.089	Inf	19.48
707.5MHz_64QAM_RB 12,#RB 13	Pass	-10.00	9.49	7.34	0.00542	3	19.49	0.089	Inf	19.49
707.5MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.46	7.31	0.00538	3	19.46	0.088	Inf	19.46
713.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.52	8.37	0.00687	3	20.52	0.113	Inf	20.52
713.5MHz_64QAM_RB 1,#RB 12	Pass	-10.00	10.53	8.38	0.00689	3	20.53	0.113	Inf	20.53
713.5MHz_64QAM_RB 1,#RB 24	Pass	-10.00	10.54	8.39	0.00690	3	20.54	0.113	Inf	20.54
713.5MHz_64QAM_RB 12,#RB 0	Pass	-10.00	9.46	7.31	0.00538	3	19.46	0.088	Inf	19.46
713.5MHz_64QAM_RB 12,#RB 7	Pass	-10.00	9.40	7.25	0.00531	3	19.40	0.087	Inf	19.4
713.5MHz_64QAM_RB 12,#RB 13	Pass	-10.00	9.41	7.26	0.00532	3	19.41	0.087	Inf	19.41
713.5MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.39	7.24	0.00530	3	19.39	0.087	Inf	19.39
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
704MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.58	10.43	0.01104	3	22.58	0.181	Inf	22.58
704MHz_QPSK_RB 1,#RB 25	Pass	-10.00	12.40	10.25	0.01059	3	22.40	0.174	Inf	22.4
704MHz_QPSK_RB 1,#RB 49	Pass	-10.00	12.38	10.23	0.01054	3	22.38	0.173	Inf	22.38
704MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.61	9.46	0.00883	3	21.61	0.145	Inf	21.61
704MHz_QPSK_RB 25,#RB 12	Pass	-10.00	11.58	9.43	0.00877	3	21.58	0.144	Inf	21.58
704MHz_QPSK_RB 25,#RB 25	Pass	-10.00	11.54	9.39	0.00869	3	21.54	0.143	Inf	21.54
704MHz_QPSK_RB 50,#RB 0	Pass	-10.00	11.60	9.45	0.00881	3	21.60	0.145	Inf	21.6
707.5MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.37	10.22	0.01052	3	22.37	0.173	Inf	22.37
707.5MHz_QPSK_RB 1,#RB 25	Pass	-10.00	12.28	10.13	0.01030	3	22.28	0.169	Inf	22.28
707.5MHz_QPSK_RB 1,#RB 49	Pass	-10.00	12.33	10.18	0.01042	3	22.33	0.171	Inf	22.33
707.5MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.47	9.32	0.00855	3	21.47	0.140	Inf	21.47
707.5MHz_QPSK_RB 25,#RB 12	Pass	-10.00	11.50	9.35	0.00861	3	21.50	0.141	Inf	21.5
707.5MHz_QPSK_RB 25,#RB 25	Pass	-10.00	11.48	9.33	0.00857	3	21.48	0.141	Inf	21.48
707.5MHz_QPSK_RB 50,#RB 0	Pass	-10.00	11.52	9.37	0.00865	3	21.52	0.142	Inf	21.52

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
711MHz_QPSK_RB 1,#RB 0	Pass	-10.00	12.32	10.17	0.01040	3	22.32	0.171	Inf	22.32
711MHz_QPSK_RB 1,#RB 25	Pass	-10.00	12.26	10.11	0.01026	3	22.26	0.168	Inf	22.26
711MHz_QPSK_RB 1,#RB 49	Pass	-10.00	12.26	10.11	0.01026	3	22.26	0.168	Inf	22.26
711MHz_QPSK_RB 25,#RB 0	Pass	-10.00	11.38	9.23	0.00838	3	21.38	0.137	Inf	21.38
711MHz_QPSK_RB 25,#RB 12	Pass	-10.00	11.44	9.29	0.00849	3	21.44	0.139	Inf	21.44
711MHz_QPSK_RB 25,#RB 25	Pass	-10.00	11.43	9.28	0.00847	3	21.43	0.139	Inf	21.43
711MHz_QPSK_RB 50,#RB 0	Pass	-10.00	11.46	9.31	0.00853	3	21.46	0.140	Inf	21.46
704MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.80	9.65	0.00923	3	21.80	0.151	Inf	21.8
704MHz_16QAM_RB 1,#RB 25	Pass	-10.00	11.74	9.59	0.00910	3	21.74	0.149	Inf	21.74
704MHz_16QAM_RB 1,#RB 49	Pass	-10.00	11.75	9.60	0.00912	3	21.75	0.150	Inf	21.75
704MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.62	8.47	0.00703	3	20.62	0.115	Inf	20.62
704MHz_16QAM_RB 25,#RB 12	Pass	-10.00	10.57	8.42	0.00695	3	20.57	0.114	Inf	20.57
704MHz_16QAM_RB 25,#RB 25	Pass	-10.00	10.52	8.37	0.00687	3	20.52	0.113	Inf	20.52
704MHz_16QAM_RB 50,#RB 0	Pass	-10.00	10.58	8.43	0.00697	3	20.58	0.114	Inf	20.58
707.5MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.75	9.60	0.00912	3	21.75	0.150	Inf	21.75
707.5MHz_16QAM_RB 1,#RB 25	Pass	-10.00	11.65	9.50	0.00891	3	21.65	0.146	Inf	21.65
707.5MHz_16QAM_RB 1,#RB 49	Pass	-10.00	11.68	9.53	0.00897	3	21.68	0.147	Inf	21.68
707.5MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.42	8.27	0.00671	3	20.42	0.110	Inf	20.42
707.5MHz_16QAM_RB 25,#RB 12	Pass	-10.00	10.52	8.37	0.00687	3	20.52	0.113	Inf	20.52
707.5MHz_16QAM_RB 25,#RB 25	Pass	-10.00	10.46	8.31	0.00678	3	20.46	0.111	Inf	20.46
707.5MHz_16QAM_RB 50,#RB 0	Pass	-10.00	10.50	8.35	0.00684	3	20.50	0.112	Inf	20.5
711MHz_16QAM_RB 1,#RB 0	Pass	-10.00	11.67	9.52	0.00895	3	21.67	0.147	Inf	21.67
711MHz_16QAM_RB 1,#RB 25	Pass	-10.00	11.62	9.47	0.00885	3	21.62	0.145	Inf	21.62
711MHz_16QAM_RB 1,#RB 49	Pass	-10.00	11.63	9.48	0.00887	3	21.63	0.146	Inf	21.63
711MHz_16QAM_RB 25,#RB 0	Pass	-10.00	10.40	8.25	0.00668	3	20.40	0.110	Inf	20.4
711MHz_16QAM_RB 25,#RB 12	Pass	-10.00	10.46	8.31	0.00678	3	20.46	0.111	Inf	20.46
711MHz_16QAM_RB 25,#RB 25	Pass	-10.00	10.40	8.25	0.00668	3	20.40	0.110	Inf	20.4
711MHz_16QAM_RB 50,#RB 0	Pass	-10.00	10.47	8.32	0.00679	3	20.47	0.111	Inf	20.47
704MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.69	8.54	0.00714	3	20.69	0.117	Inf	20.69
704MHz_64QAM_RB 1,#RB 25	Pass	-10.00	10.75	8.60	0.00724	3	20.75	0.119	Inf	20.75
704MHz_64QAM_RB 1,#RB 49	Pass	-10.00	10.68	8.53	0.00713	3	20.68	0.117	Inf	20.68
704MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.65	7.50	0.00562	3	19.65	0.092	Inf	19.65
704MHz_64QAM_RB 25,#RB 12	Pass	-10.00	9.62	7.47	0.00558	3	19.62	0.092	Inf	19.62
704MHz_64QAM_RB 25,#RB 25	Pass	-10.00	9.58	7.43	0.00553	3	19.58	0.091	Inf	19.58
704MHz_64QAM_RB 50,#RB 0	Pass	-10.00	9.61	7.46	0.00557	3	19.61	0.091	Inf	19.61
707.5MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.68	8.53	0.00713	3	20.68	0.117	Inf	20.68
707.5MHz_64QAM_RB 1,#RB 25	Pass	-10.00	10.67	8.52	0.00711	3	20.67	0.117	Inf	20.67
707.5MHz_64QAM_RB 1,#RB 49	Pass	-10.00	10.67	8.52	0.00711	3	20.67	0.117	Inf	20.67

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
707.5MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.51	7.36	0.00545	3	19.51	0.089	Inf	19.51
707.5MHz_64QAM_RB 25,#RB 12	Pass	-10.00	9.55	7.40	0.00550	3	19.55	0.090	Inf	19.55
707.5MHz_64QAM_RB 25,#RB 25	Pass	-10.00	9.50	7.35	0.00543	3	19.50	0.089	Inf	19.5
707.5MHz_64QAM_RB 50,#RB 0	Pass	-10.00	9.53	7.38	0.00547	3	19.53	0.090	Inf	19.53
711MHz_64QAM_RB 1,#RB 0	Pass	-10.00	10.56	8.41	0.00693	3	20.56	0.114	Inf	20.56
711MHz_64QAM_RB 1,#RB 25	Pass	-10.00	10.63	8.48	0.00705	3	20.63	0.116	Inf	20.63
711MHz_64QAM_RB 1,#RB 49	Pass	-10.00	10.58	8.43	0.00697	3	20.58	0.114	Inf	20.58
711MHz_64QAM_RB 25,#RB 0	Pass	-10.00	9.44	7.29	0.00536	3	19.44	0.088	Inf	19.44
711MHz_64QAM_RB 25,#RB 12	Pass	-10.00	9.52	7.37	0.00546	3	19.52	0.090	Inf	19.52
711MHz_64QAM_RB 25,#RB 25	Pass	-10.00	9.48	7.33	0.00541	3	19.48	0.089	Inf	19.48
711MHz_64QAM_RB 50,#RB 0	Pass	-10.00	9.48	7.33	0.00541	3	19.48	0.089	Inf	19.48

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

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

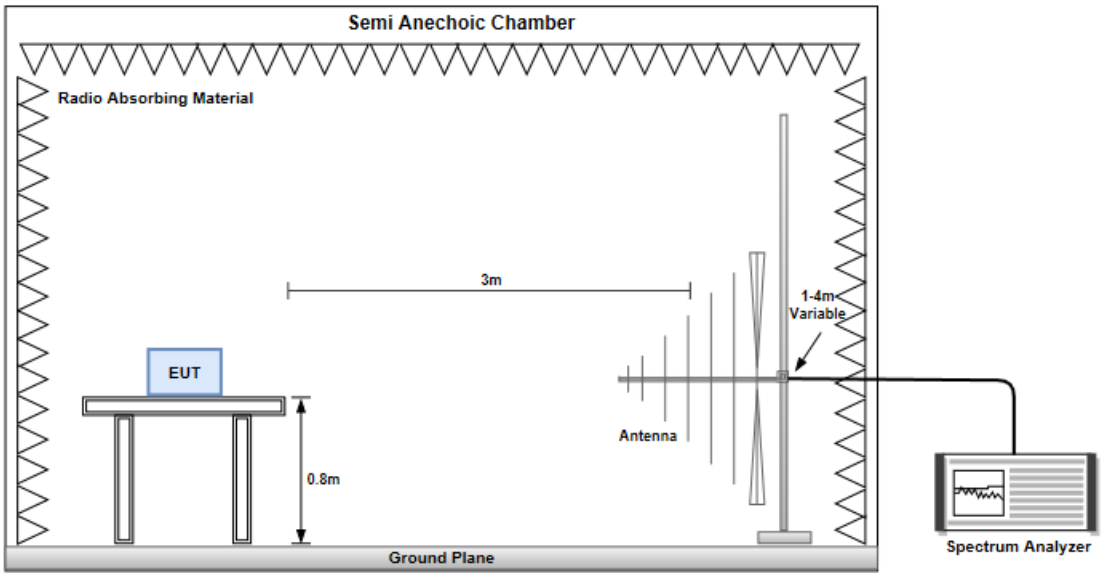
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB equal to -13dBm.

3.2.2 Test Procedures

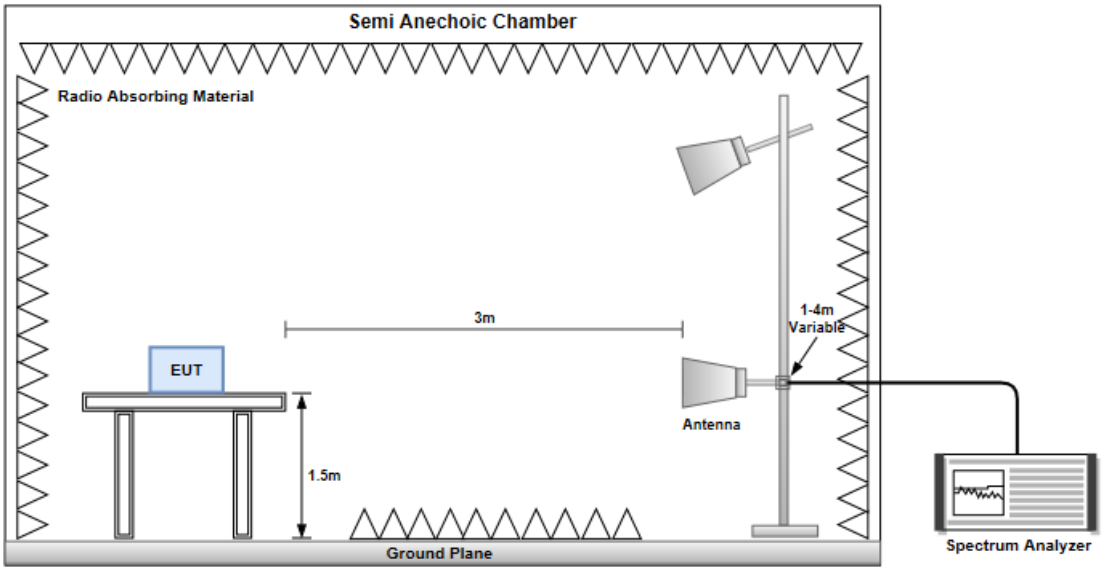
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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 and4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
   E.R.P = E.I.R.P –2.15dB.

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 12, QPSK, CB:1.4 MHz, 1 RB Offset 0, Channel: 23017						
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	-70.44	-13.00	-57.44	-76.42	-48.84	-19.45
90.14	H	-71.44	-13.00	-58.44	-67.22	-64.38	-4.91
98.87	H	-74.47	-13.00	-61.47	-70.58	-67.31	-5.01
267.65	H	-77.19	-13.00	-64.19	-72.63	-73.78	-1.26
345.25	H	-72.06	-13.00	-59.06	-71.54	-68.80	-1.11
959.26	H	-61.83	-13.00	-48.83	-70.76	-57.01	-2.67
36.79	V	-71.07	-13.00	-58.07	-64.57	-50.92	-18.00
48.43	V	-70.96	-13.00	-57.96	-66.32	-52.45	-16.36
90.14	V	-65.02	-13.00	-52.02	-60.55	-57.96	-4.91
939.86	V	-59.94	-13.00	-46.94	-70.70	-55.23	-2.56
953.44	V	-55.55	-13.00	-42.55	-66.35	-50.73	-2.67
959.26	V	-56.29	-13.00	-43.29	-67.11	-51.47	-2.67

Mode	LTE Band 12, QPSK, CB:3 MHz, 1 RB Offset 0, Channel: 23025						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
30.11	H	-70.78	-13.00	-57.78	-76.74	-49.21	-19.42
90.22	H	-71.47	-13.00	-58.47	-67.24	-64.41	-4.91
98.25	H	-74.40	-13.00	-61.40	-70.49	-67.25	-5.00
266.85	H	-77.38	-13.00	-64.38	-72.79	-73.97	-1.26
346.32	H	-72.25	-13.00	-59.25	-71.79	-69.00	-1.10
959.22	H	-62.02	-13.00	-49.02	-46.87	-57.20	-2.67
36.88	V	-71.10	-13.00	-58.10	-64.62	-50.96	-17.99
48.45	V	-71.08	-13.00	-58.08	-66.44	-52.57	-16.36
90.23	V	-65.10	-13.00	-52.10	-49.95	-58.04	-4.91
939.14	V	-60.01	-13.00	-47.01	-70.77	-55.31	-2.55
953.56	V	-56.15	-13.00	-43.15	-66.95	-51.33	-2.67
959.33	V	-56.38	-13.00	-43.38	-67.20	-51.56	-2.67

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

Mode	LTE Band 12, QPSK, CB:5 MHz, 1 RB Offset 0, Channel: 23095						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
30.23	H	-70.74	-13.00	-57.74	-76.68	-49.19	-19.40
90.17	H	-71.57	-13.00	-58.57	-67.35	-64.51	-4.91
98.33	H	-74.47	-13.00	-61.47	-70.56	-67.32	-5.00
266.74	H	-77.56	-13.00	-64.56	-72.97	-74.15	-1.26
345.80	H	-72.20	-13.00	-59.20	-71.71	-68.94	-1.11
959.23	H	-61.89	-13.00	-48.89	-70.82	-57.07	-2.67
36.74	V	-71.07	-13.00	-58.07	-64.57	-50.91	-18.01
48.41	V	-70.89	-13.00	-57.89	-66.25	-52.38	-16.36
90.33	V	-64.86	-13.00	-51.86	-60.37	-57.80	-4.91
939.29	V	-59.95	-13.00	-46.95	-70.71	-55.25	-2.55
953.22	V	-56.00	-13.00	-43.00	-66.80	-51.18	-2.67
959.63	V	-56.78	-13.00	-43.78	-67.60	-51.96	-2.67

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 0, Channel: 23060						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
30.11	H	-70.51	-13.00	-57.51	-76.47	-48.94	-19.42
90.23	H	-71.56	-13.00	-58.56	-67.33	-64.50	-4.91
98.74	H	-74.62	-13.00	-61.62	-70.72	-67.47	-5.00
266.80	H	-77.13	-13.00	-64.13	-72.54	-73.72	-1.26
344.95	H	-71.93	-13.00	-58.93	-71.39	-68.67	-1.11
959.33	H	-61.86	-13.00	-48.86	-70.79	-57.04	-2.67
36.82	V	-63.13	-13.00	-50.13	-56.64	-42.98	-18.00
48.44	V	-71.10	-13.00	-58.10	-66.46	-52.59	-16.36
90.23	V	-65.10	-13.00	-52.10	-60.61	-58.04	-4.91
939.44	V	-59.60	-13.00	-46.60	-70.36	-54.89	-2.56
953.42	V	-55.40	-13.00	-42.40	-66.20	-50.58	-2.67
959.63	V	-56.47	-13.00	-43.47	-67.29	-51.65	-2.67

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

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 12, QPSK, CB:1.4 MHz, 3 RB Offset 1, Channel: 23017						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1399.40	H	-51.40	-13.00	-38.40	-55.85	-53.17	3.92
2099.10	H	-42.12	-13.00	-29.12	-49.21	-45.51	5.54
2798.80	H	-54.64	-13.00	-41.64	-63.51	-58.81	6.32
1399.40	V	-50.82	-13.00	-37.82	-54.98	-52.59	3.92
2099.10	V	-39.68	-13.00	-26.68	-46.76	-43.07	5.54
2798.80	V	-54.52	-13.00	-41.52	-63.47	-58.69	6.32

Mode	LTE Band 12, QPSK, CB:1.4 MHz, 1 RB Offset 3, Channel: 23095						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1415.00	H	-49.68	-13.00	-36.68	-54.11	-51.57	4.04
2122.50	H	-42.06	-13.00	-29.06	-49.34	-45.28	5.37
2830.00	H	-54.52	-13.00	-41.52	-63.54	-58.72	6.35
1415.00	V	-49.26	-13.00	-36.26	-53.44	-51.15	4.04
2122.50	V	-39.45	-13.00	-26.45	-46.74	-42.67	5.37
2830.00	V	-54.63	-13.00	-41.63	-63.68	-58.83	6.35

Mode	LTE Band 12, QPSK, CB:1.4 MHz, 3 RB Offset 1, Channel: 23173						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1430.60	H	-51.58	-13.00	-38.58	-55.98	-53.60	4.17
2145.90	H	-43.60	-13.00	-30.60	-51.05	-46.66	5.21
2861.20	H	-54.51	-13.00	-41.51	-63.69	-58.75	6.39
1430.60	V	-51.34	-13.00	-38.34	-55.53	-53.36	4.17
2145.90	V	-41.73	-13.00	-28.73	-49.23	-44.79	5.21
2861.20	V	-54.41	-13.00	-41.41	-63.55	-58.65	6.39

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

Mode	LTE Band 12, QPSK, CB:3 MHz, 1 RB Offset 0, Channel: 23025						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1398.80	H	-52.03	-13.00	-39.03	-56.48	-53.81	3.93
2098.20	H	-42.74	-13.00	-29.74	-49.85	-46.11	5.52
2797.60	H	-54.59	-13.00	-41.59	-63.47	-58.76	6.32
1398.80	V	-51.29	-13.00	-38.29	-55.46	-53.07	3.93
2098.20	V	-40.15	-13.00	-27.15	-47.25	-43.52	5.52
2797.60	V	-54.37	-13.00	-41.37	-63.34	-58.54	6.32

Mode	LTE Band 12, QPSK, CB:3 MHz, 1 RB Offset 0, Channel: 23095						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1412.80	H	-50.13	-13.00	-37.13	-54.56	-52.02	4.04
2119.20	H	-42.57	-13.00	-29.57	-49.85	-45.79	5.37
2825.60	H	-54.39	-13.00	-41.39	-63.41	-58.59	6.35
1412.80	V	-49.81	-13.00	-36.81	-53.99	-51.70	4.04
2119.20	V	-39.83	-13.00	-26.83	-47.12	-43.05	5.37
2825.60	V	-54.45	-13.00	-41.45	-63.50	-58.65	6.35

Mode	LTE Band 12, QPSK, CB:3 MHz, 1 RB Offset 0, Channel: 23165						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1426.80	H	-51.97	-13.00	-38.97	-56.38	-53.98	4.16
2140.20	H	-43.89	-13.00	-30.89	-51.32	-46.96	5.22
2853.60	H	-54.40	-13.00	-41.40	-63.57	-58.64	6.39
1426.80	V	-51.67	-13.00	-38.67	-55.86	-53.68	4.16
2140.20	V	-42.28	-13.00	-29.28	-49.76	-45.35	5.22
2853.60	V	-54.30	-13.00	-41.30	-63.43	-58.54	6.39

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

Mode	LTE Band 12, QPSK, CB:5 MHz, 1 RB Offset 0, Channel: 23035						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1398.60	H	-52.10	-13.00	-39.10	-56.55	-53.89	3.94
2097.90	H	-42.98	-13.00	-29.98	-50.12	-46.33	5.50
2797.20	H	-54.54	-13.00	-41.54	-63.44	-58.72	6.33
1398.60	V	-51.71	-13.00	-38.71	-55.88	-53.50	3.94
2097.90	V	-40.43	-13.00	-27.43	-47.57	-43.78	5.50
2797.20	V	-54.71	-13.00	-41.71	-63.69	-58.89	6.33

Mode	LTE Band 12, QPSK, CB:5 MHz, 1 RB Offset 0, Channel: 23095						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1410.60	H	-50.69	-13.00	-37.69	-55.12	-52.58	4.04
2115.90	H	-43.00	-13.00	-30.00	-50.28	-46.22	5.37
2821.20	H	-54.33	-13.00	-41.33	-63.35	-58.53	6.35
1410.60	V	-50.20	-13.00	-37.20	-54.38	-52.09	4.04
2115.90	V	-40.30	-13.00	-27.30	-47.59	-43.52	5.37
2821.20	V	-54.40	-13.00	-41.40	-63.45	-58.60	6.35

Mode	LTE Band 12, QPSK, CB:5 MHz, 1 RB Offset 12, Channel: 23155						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1427.00	H	-53.04	-13.00	-40.04	-57.45	-55.03	4.14
2140.50	H	-44.57	-13.00	-31.57	-51.98	-47.67	5.25
2854.00	H	-54.27	-13.00	-41.27	-63.42	-58.50	6.38
1427.00	V	-52.19	-13.00	-39.19	-56.38	-54.18	4.14
2140.50	V	-42.88	-13.00	-29.88	-50.33	-45.98	5.25
2854.00	V	-54.25	-13.00	-41.25	-63.37	-58.48	6.38

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

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 0, Channel: 23060						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1399.20	H	-52.81	-13.00	-39.81	-57.26	-54.65	3.99
2098.80	H	-43.48	-13.00	-30.48	-50.67	-46.78	5.45
2798.40	H	-54.36	-13.00	-41.36	-63.32	-58.55	6.34
1399.20	V	-52.51	-13.00	-39.51	-56.69	-54.35	3.99
2098.80	V	-41.36	-13.00	-28.36	-48.56	-44.66	5.45
2798.40	V	-54.40	-13.00	-41.40	-63.41	-58.59	6.34

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 0, Channel: 23095						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1406.20	H	-51.69	-13.00	-38.69	-56.12	-53.58	4.04
2109.30	H	-43.17	-13.00	-30.17	-50.45	-46.39	5.37
2812.40	H	-54.45	-13.00	-41.45	-63.47	-58.65	6.35
1406.20	V	-51.38	-13.00	-38.38	-55.56	-53.27	4.04
2109.30	V	-40.92	-13.00	-27.92	-48.21	-44.14	5.37
2812.40	V	-54.47	-13.00	-41.47	-63.52	-58.67	6.35

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 0, Channel: 23130						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1413.20	H	-53.70	-13.00	-40.70	-58.12	-55.65	4.10
2119.80	H	-44.76	-13.00	-31.76	-52.12	-47.91	5.30
2826.40	H	-54.42	-13.00	-41.42	-63.52	-58.64	6.37
1413.20	V	-53.27	-13.00	-40.27	-57.45	-55.22	4.10
2119.80	V	-43.00	-13.00	-30.00	-50.39	-46.15	5.30
2826.40	V	-54.38	-13.00	-41.38	-63.47	-58.60	6.37

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

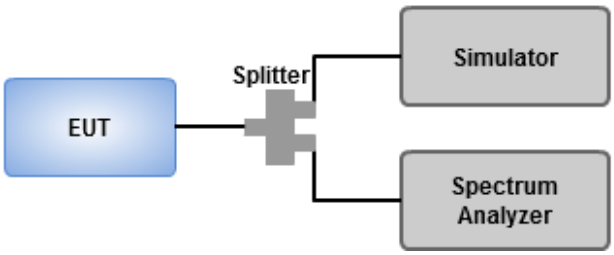
Out of band emission

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



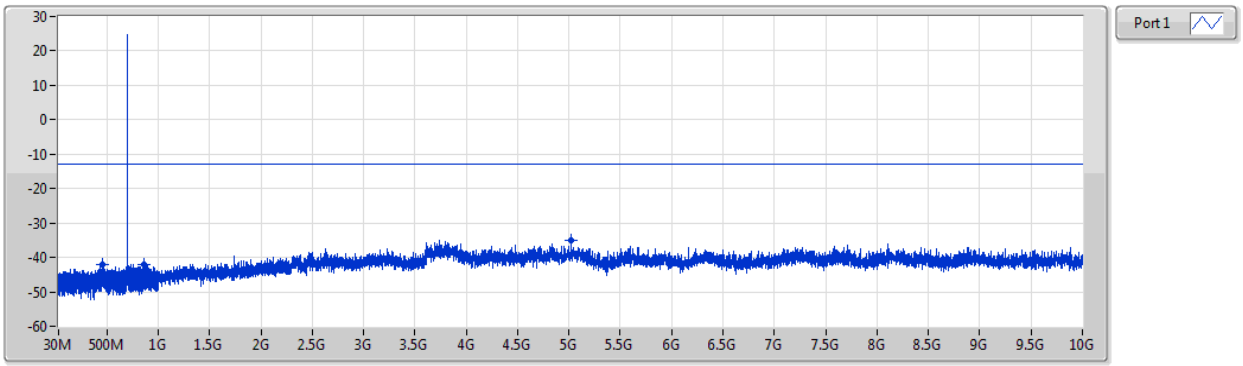
3.3.4 Test Result of Conducted Emissions & Band Edge

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)
Band 12	-	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.7828G	-34.83	-13.00	-21.83	1	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.754G	-34.35	-13.00	-21.35	1	-	-
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.6703G	-33.93	-13.00	-20.93	1	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	4.9618G	-34.27	-13.00	-21.27	1	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.808G	-34.21	-13.00	-21.21	1	-	-
LTE_3MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7342G	-34.32	-13.00	-21.32	1	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	3.9169G	-34.43	-13.00	-21.43	1	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7891G	-35.00	-13.00	-22.00	1	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.6964G	-34.30	-13.00	-21.30	1	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	Peak	4.9879G	-35.15	-13.00	-22.15	1	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7315G	-34.65	-13.00	-21.65	1	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	1G	10G	1M	3M	Peak	3.7477G	-34.77	-13.00	-21.77	1	-	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

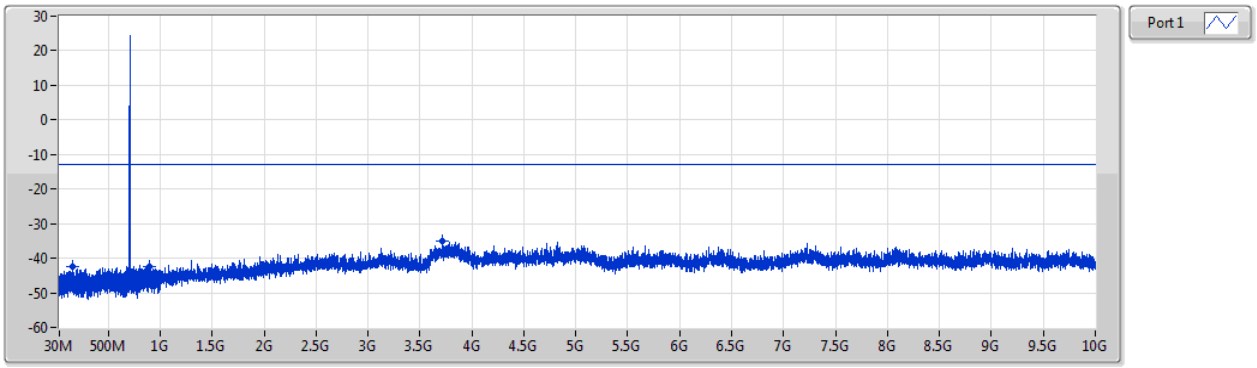
699.7MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	452.31M	-42.09	-13.00	-29.09	1	-
816M	1G	1M	3M	Peak	862M	-41.91	-13.00	-28.91	1	-
1G	10G	1M	3M	Peak	5.0194G	-34.88	-13.00	-21.88	1	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

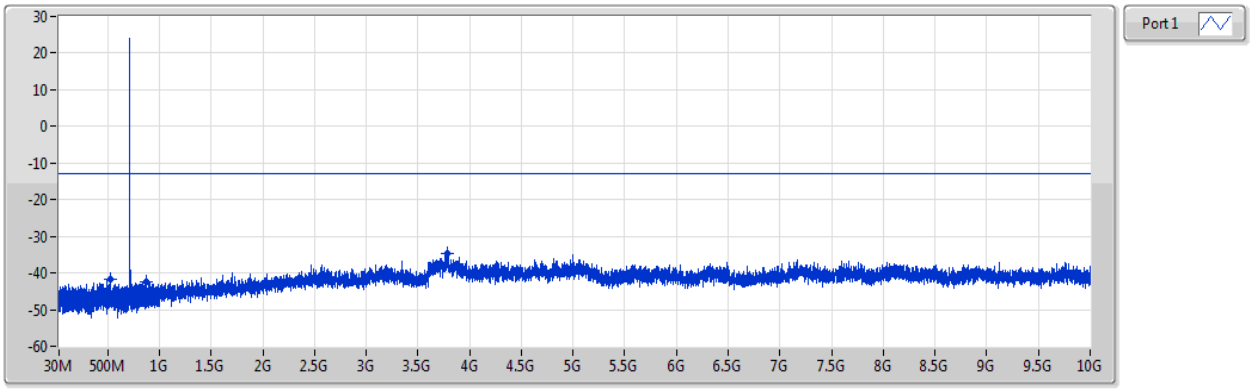
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	151.98M	-42.59	-13.00	-29.59	1	-
816M	1G	1M	3M	Peak	897.7M	-42.50	-13.00	-29.50	1	-
1G	10G	1M	3M	Peak	3.7153G	-35.06	-13.00	-22.06	1	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

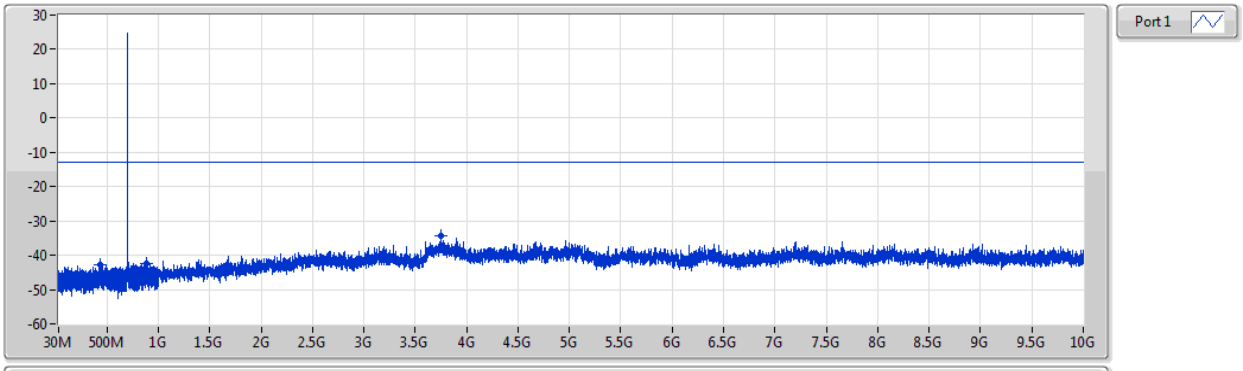
715.3MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	525.86M	-41.57	-13.00	-28.57	1	-
816M	1G	1M	3M	Peak	874.97M	-42.32	-13.00	-29.32	1	-
1G	10G	1M	3M	Peak	3.7828G	-34.83	-13.00	-21.83	1	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

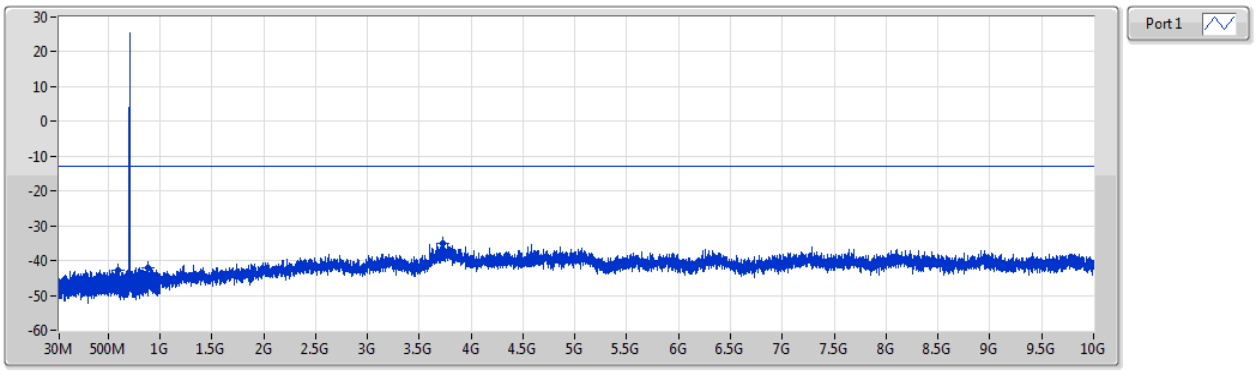
699.7MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	429.02M	-42.74	-13.00	-29.74	1	-
816M	1G	1M	3M	Peak	884.54M	-42.32	-13.00	-29.32	1	-
1G	10G	1M	3M	Peak	3.754G	-34.35	-13.00	-21.35	1	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

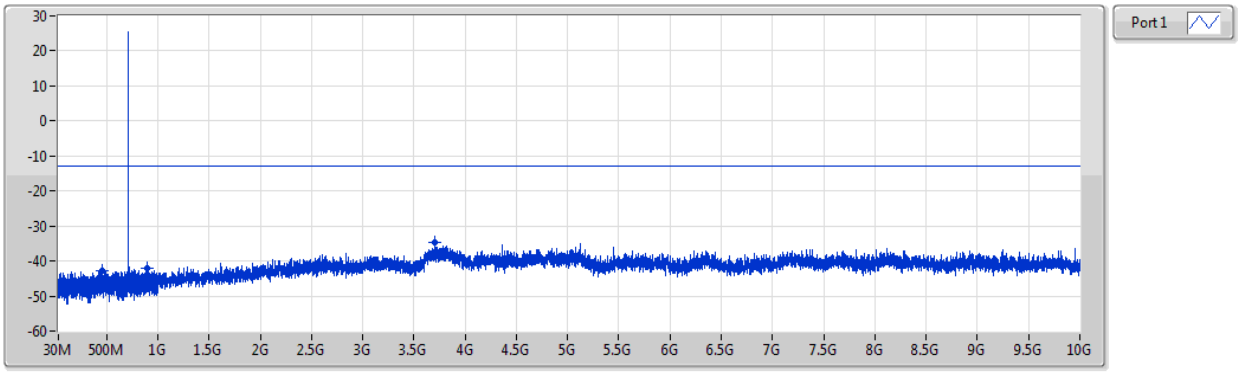
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	596.86M	-42.72	-13.00	-29.72	1	-
816M	1G	1M	3M	Peak	890.15M	-42.22	-13.00	-29.22	1	-
1G	10G	1M	3M	Peak	3.7297G	-35.10	-13.00	-22.10	1	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

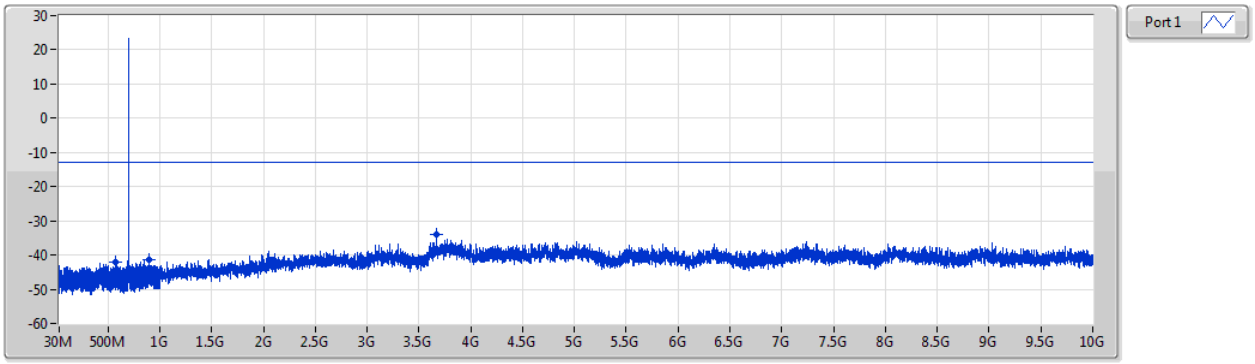
715.3MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	452.88M	-42.74	-13.00	-29.74	1	-
816M	1G	1M	3M	Peak	891.35M	-42.06	-13.00	-29.06	1	-
1G	10G	1M	3M	Peak	3.7045G	-34.65	-13.00	-21.65	1	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

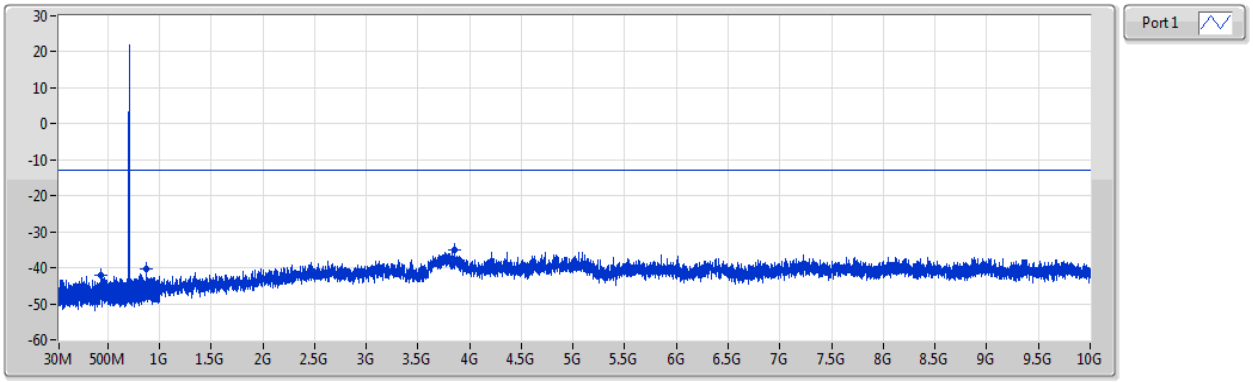
699.7MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	569.74M	-42.15	-13.00	-29.15	1	-
816M	1G	1M	3M	Peak	893.28M	-41.52	-13.00	-28.52	1	-
1G	10G	1M	3M	Peak	3.6703G	-33.93	-13.00	-20.93	1	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

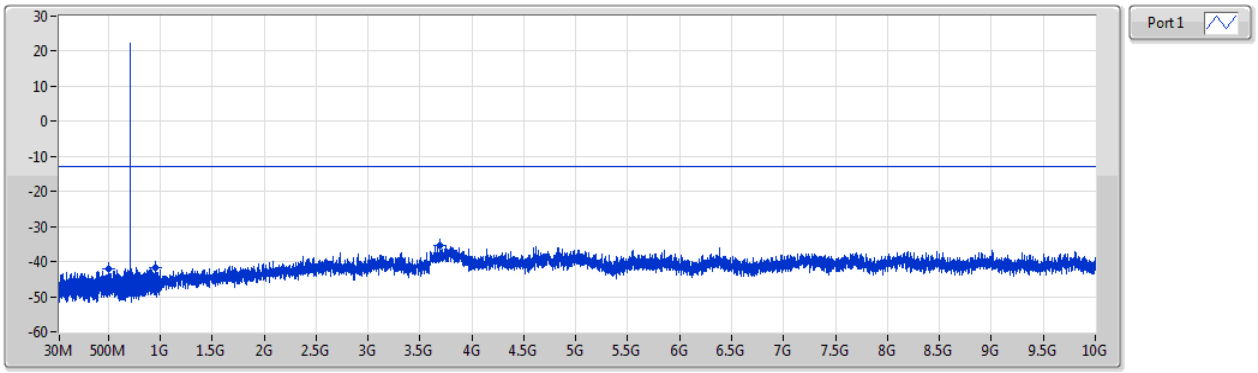
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	432.43M	-42.00	-13.00	-29.00	1	-
816M	1G	1M	3M	Peak	876.35M	-40.30	-13.00	-27.30	1	-
1G	10G	1M	3M	Peak	3.8584G	-35.19	-13.00	-22.19	1	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

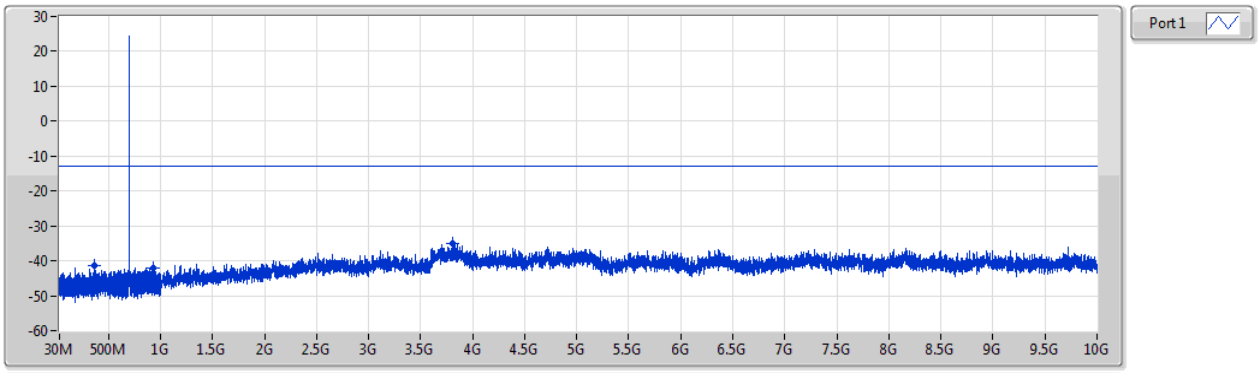
715.3MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	598M	1M	3M	Peak	509.39M	-42.22	-13.00	-29.22	1	-
816M	1G	1M	3M	Peak	949.49M	-41.69	-13.00	-28.69	1	-
1G	10G	1M	3M	Peak	3.6937G	-35.30	-13.00	-22.30	1	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

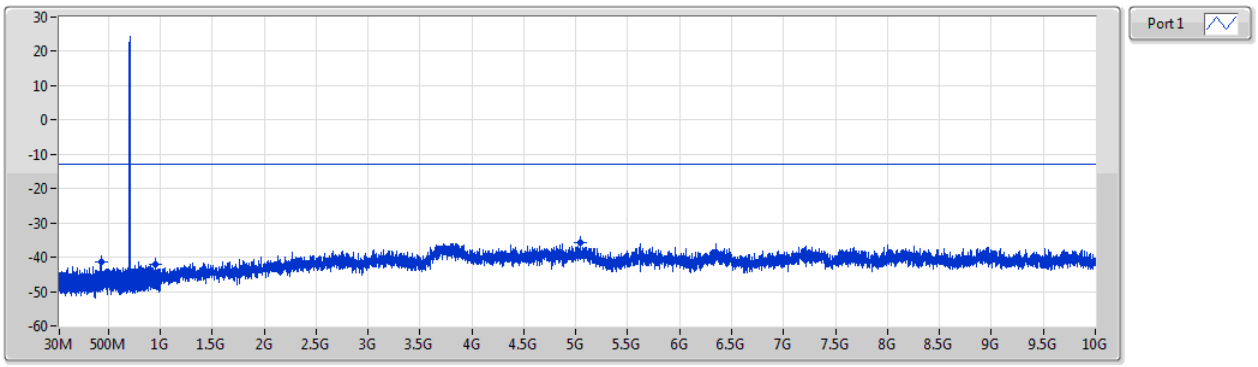
700.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	370.12M	-41.54	-13.00	-28.54	1	-
816M	1G	1M	3M	Peak	935.78M	-42.02	-13.00	-29.02	1	-
1G	10G	1M	3M	Peak	3.8062G	-34.97	-13.00	-21.97	1	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

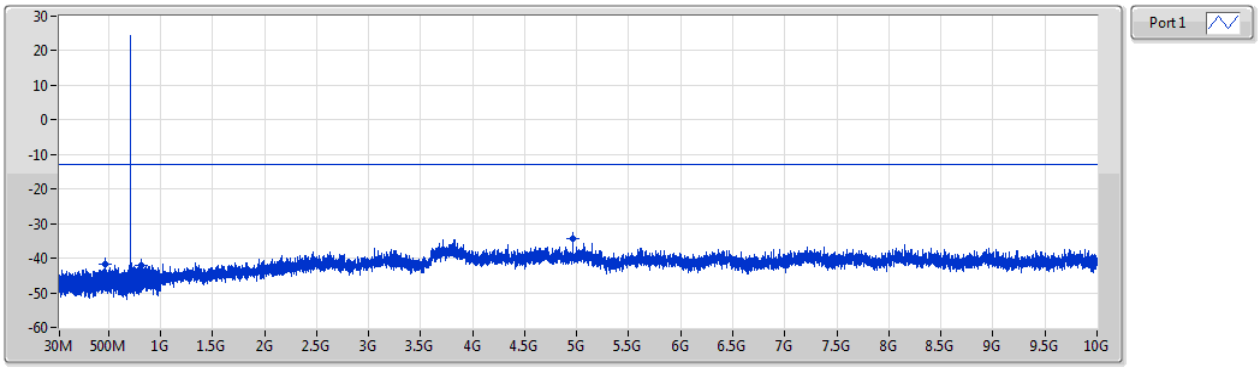
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	430.43M	-41.43	-13.00	-28.43	1	-
816M	1G	1M	3M	Peak	951.42M	-42.15	-13.00	-29.15	1	-
1G	10G	1M	3M	Peak	5.0419G	-35.69	-13.00	-22.69	1	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

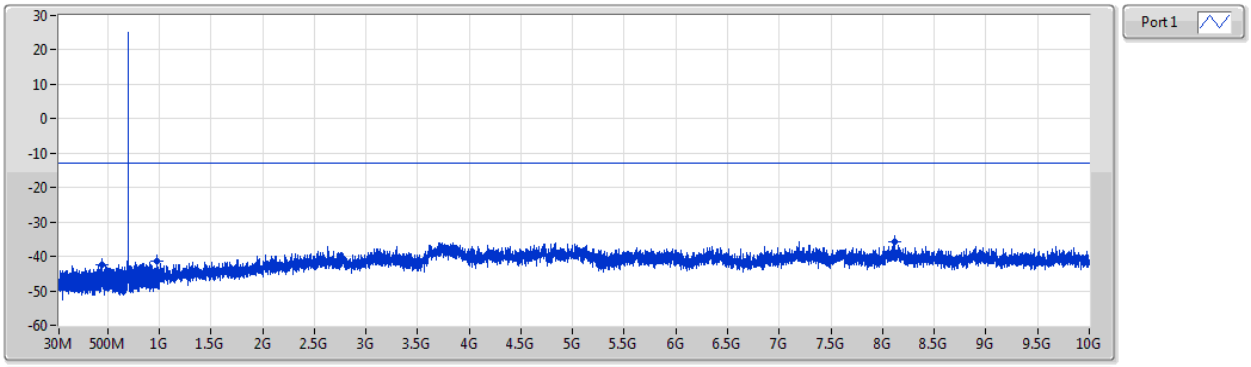
714.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	467.99M	-41.58	-13.00	-28.58	1	-
816M	1G	1M	3M	Peak	816.09M	-42.13	-13.00	-29.13	1	-
1G	10G	1M	3M	Peak	4.9618G	-34.27	-13.00	-21.27	1	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

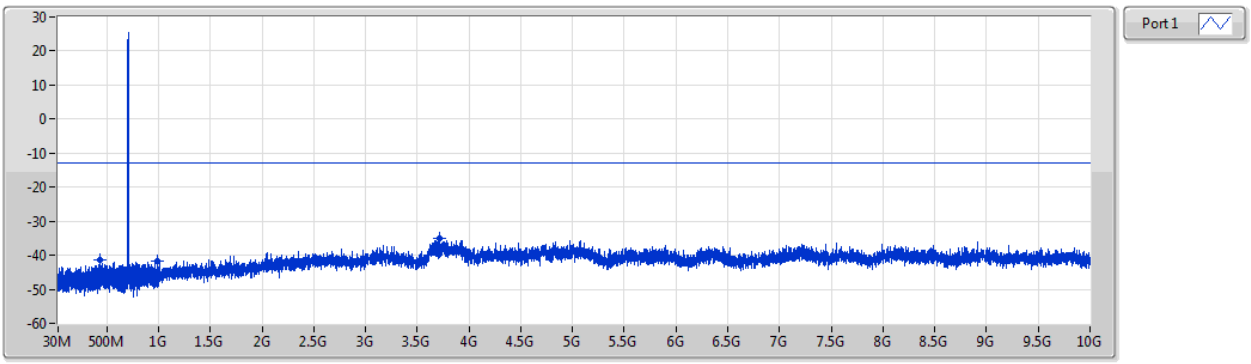
700.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	446.93M	-42.45	-13.00	-29.45	1	-
816M	1G	1M	3M	Peak	979.85M	-41.39	-13.00	-28.39	1	-
1G	10G	1M	3M	Peak	8.1163G	-35.85	-13.00	-22.85	1	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

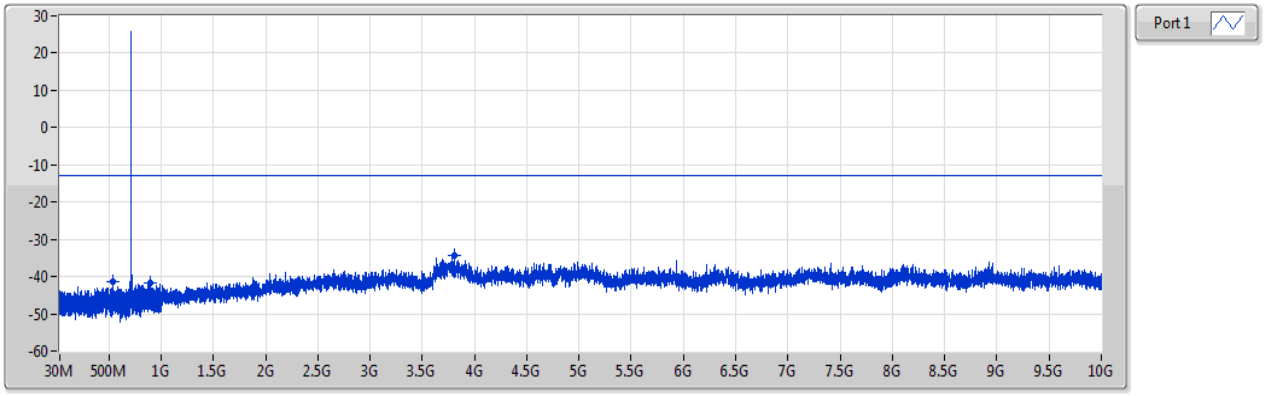
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	435.27M	-41.54	-13.00	-28.54	1	-
816M	1G	1M	3M	Peak	989.88M	-41.88	-13.00	-28.88	1	-
1G	10G	1M	3M	Peak	3.7144G	-35.16	-13.00	-22.16	1	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

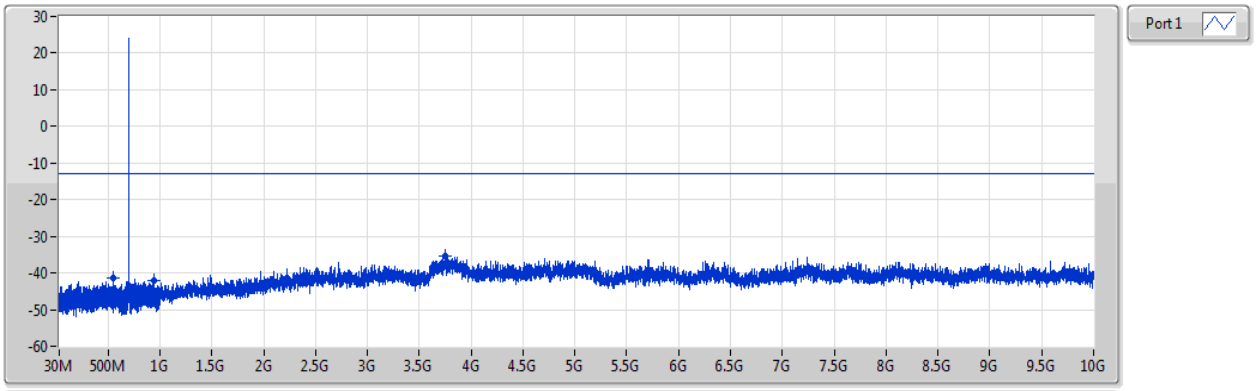
714.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	542.1M	-41.33	-13.00	-28.33	1	-
816M	1G	1M	3M	Peak	890.98M	-41.56	-13.00	-28.56	1	-
1G	10G	1M	3M	Peak	3.808G	-34.21	-13.00	-21.21	1	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

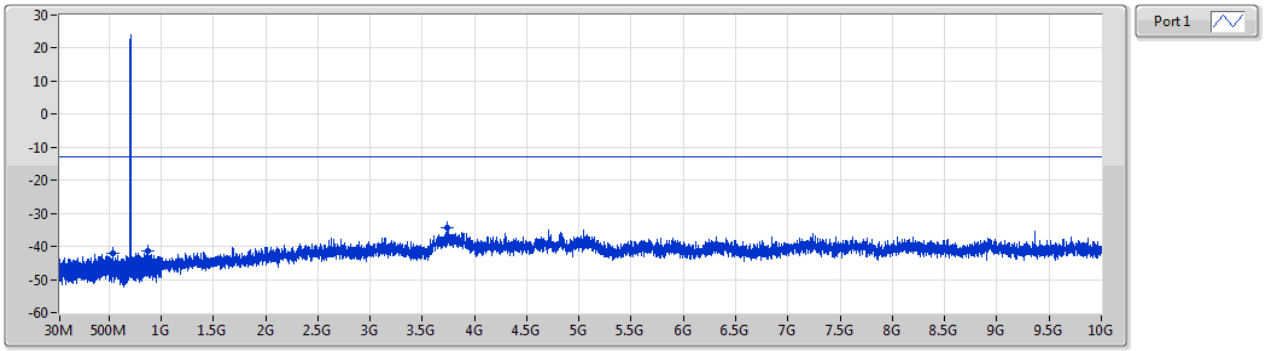
700.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	546.65M	-41.52	-13.00	-28.52	1	-
816M	1G	1M	3M	Peak	946M	-41.93	-13.00	-28.93	1	-
1G	10G	1M	3M	Peak	3.7504G	-35.49	-13.00	-22.49	1	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

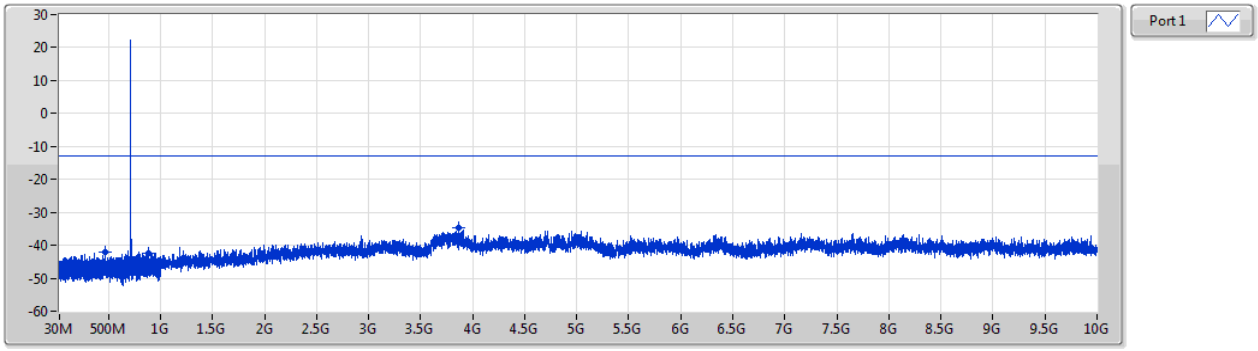
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	535.98M	-41.93	-13.00	-28.93	1	-
816M	1G	1M	3M	Peak	876.17M	-41.42	-13.00	-28.42	1	-
1G	10G	1M	3M	Peak	3.7342G	-34.32	-13.00	-21.32	1	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

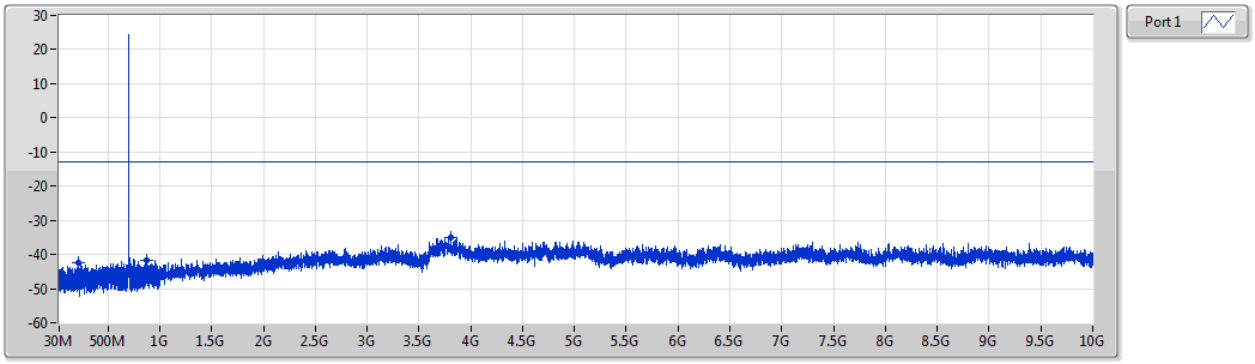
714.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	472.68M	-42.22	-13.00	-29.22	1	-
816M	1G	1M	3M	Peak	889.51M	-42.30	-13.00	-29.30	1	-
1G	10G	1M	3M	Peak	3.8656G	-34.64	-13.00	-21.64	1	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

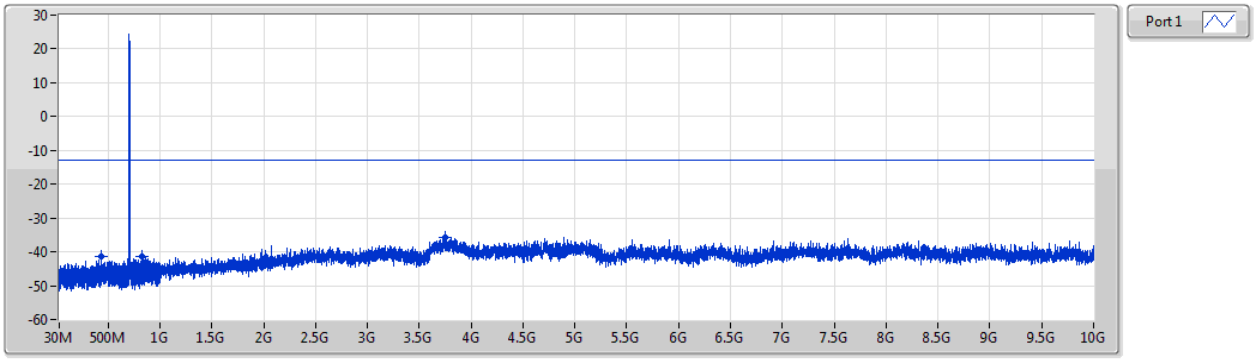
701.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	219.76M	-42.34	-13.00	-29.34	1	-
816M	1G	1M	3M	Peak	874.14M	-41.72	-13.00	-28.72	1	-
1G	10G	1M	3M	Peak	3.8116G	-35.16	-13.00	-22.16	1	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

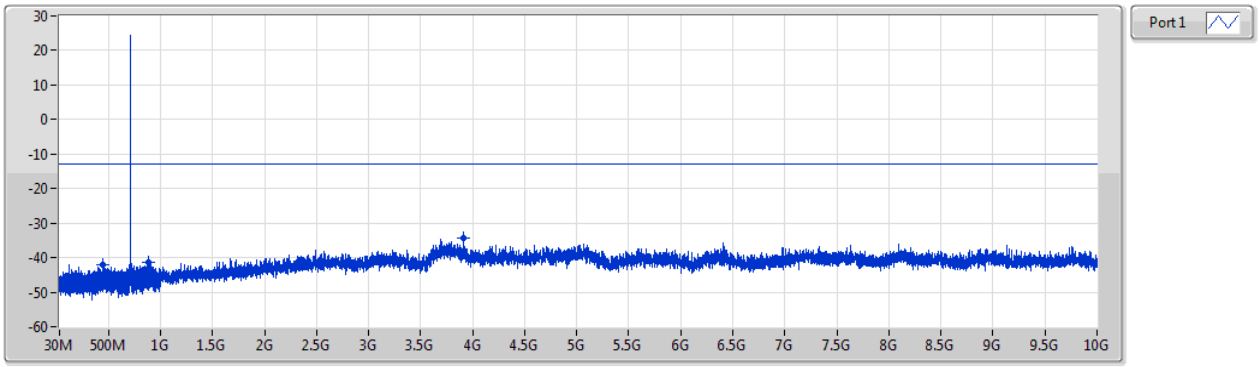
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	432.71M	-41.28	-13.00	-28.28	1	-
816M	1G	1M	3M	Peak	827.5M	-41.45	-13.00	-28.45	1	-
1G	10G	1M	3M	Peak	3.7504G	-35.62	-13.00	-22.62	1	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

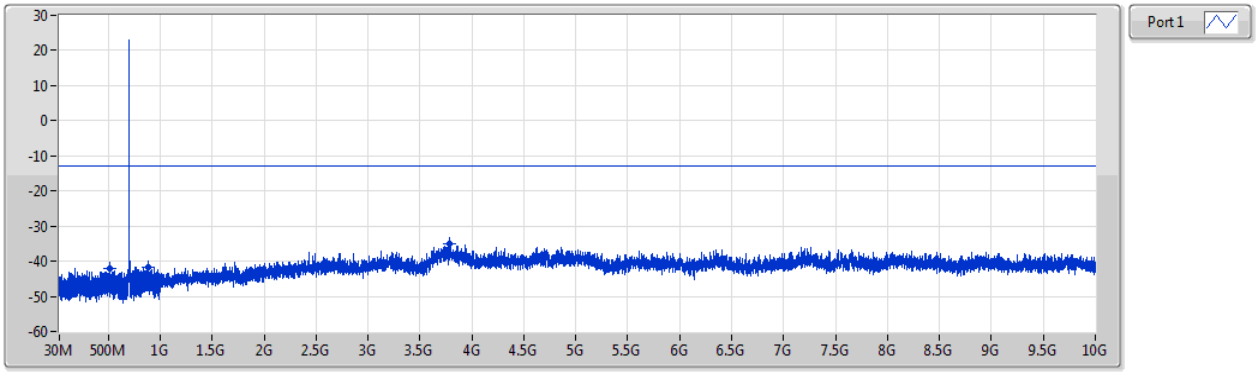
713.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	449.21M	-42.00	-13.00	-29.00	1	-
816M	1G	1M	3M	Peak	888.4M	-41.27	-13.00	-28.27	1	-
1G	10G	1M	3M	Peak	3.9169G	-34.43	-13.00	-21.43	1	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

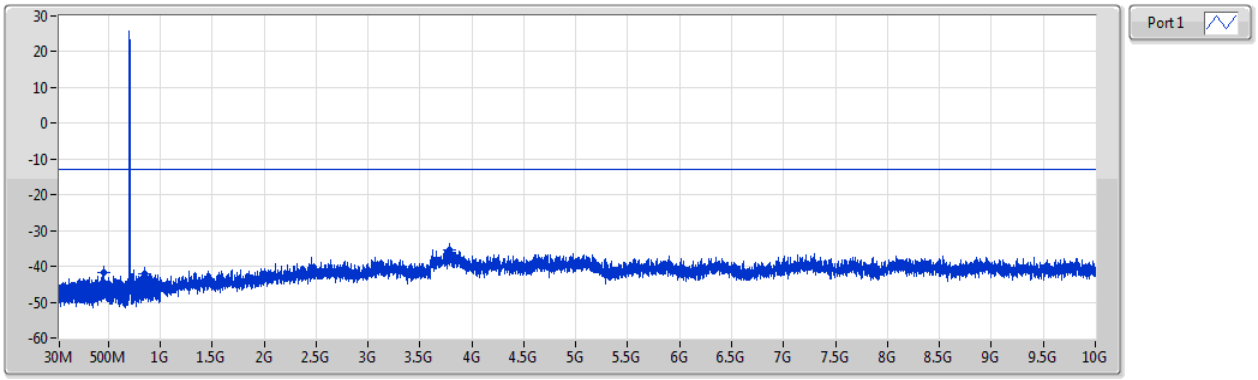
701.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	519.2M	-41.96	-13.00	-28.96	1	-
816M	1G	1M	3M	Peak	887.39M	-41.83	-13.00	-28.83	1	-
1G	10G	1M	3M	Peak	3.7891G	-35.00	-13.00	-22.00	1	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

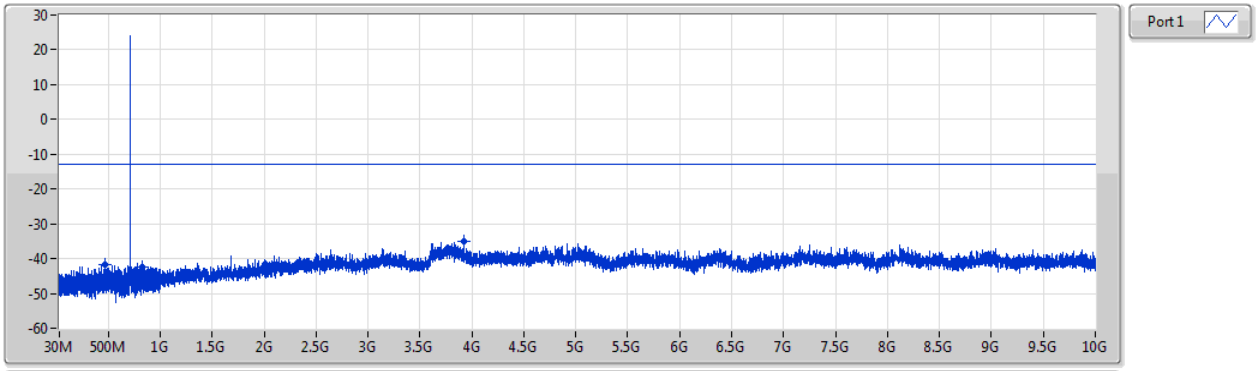
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	462.16M	-41.84	-13.00	-28.84	1	-
816M	1G	1M	3M	Peak	852.62M	-42.02	-13.00	-29.02	1	-
1G	10G	1M	3M	Peak	3.7864G	-35.52	-13.00	-22.52	1	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

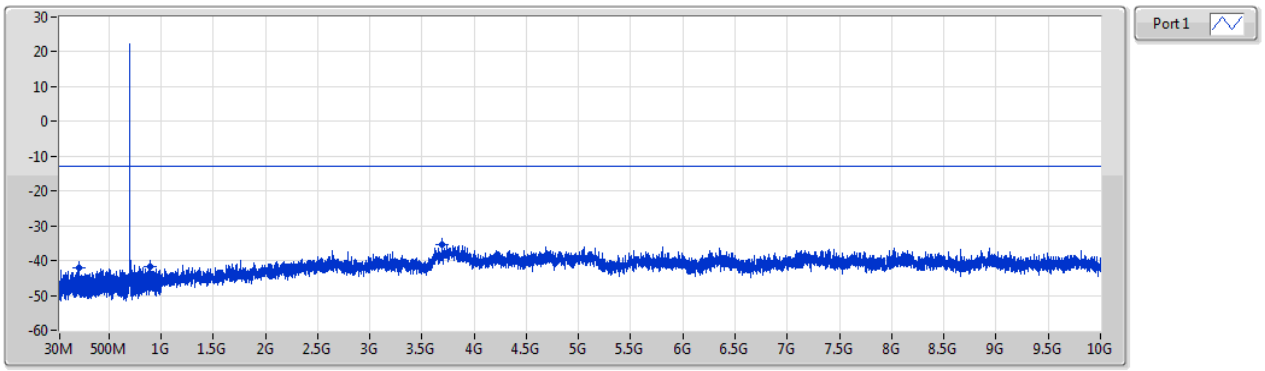
713.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	463.86M	-41.84	-13.00	-28.84	1	-
816M	1G	1M	3M	Peak	827.5M	-42.41	-13.00	-29.41	1	-
1G	10G	1M	3M	Peak	3.9178G	-35.03	-13.00	-22.03	1	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

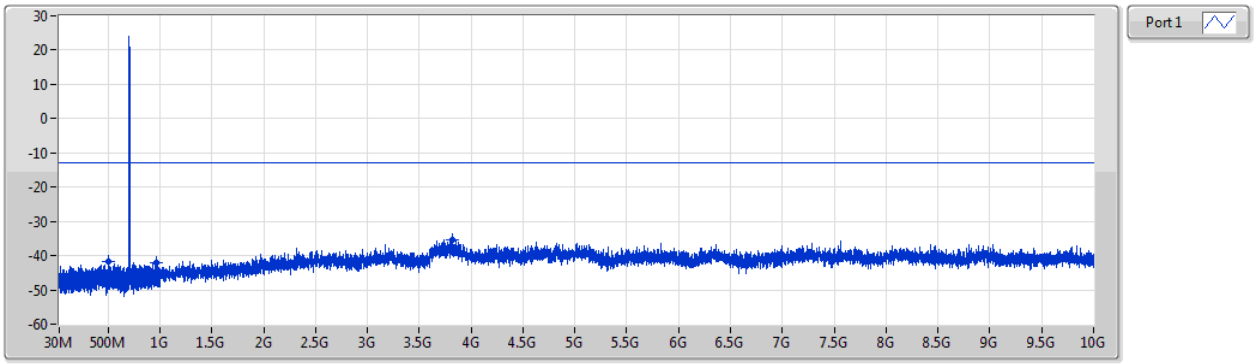
701.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	215.78M	-42.21	-13.00	-29.21	1	-
816M	1G	1M	3M	Peak	894.48M	-41.64	-13.00	-28.64	1	-
1G	10G	1M	3M	Peak	3.6928G	-35.30	-13.00	-22.30	1	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

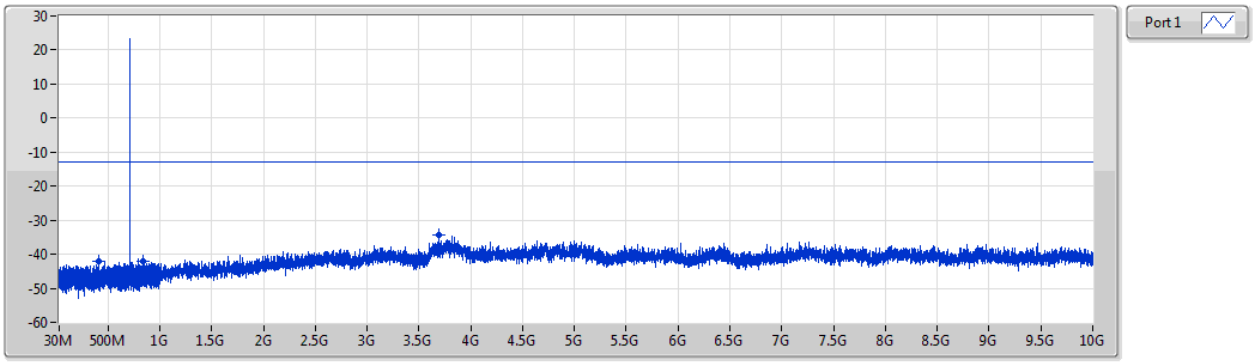
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	502.55M	-41.57	-13.00	-28.57	1	-
816M	1G	1M	3M	Peak	964.03M	-42.07	-13.00	-29.07	1	-
1G	10G	1M	3M	Peak	3.8215G	-35.37	-13.00	-22.37	1	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

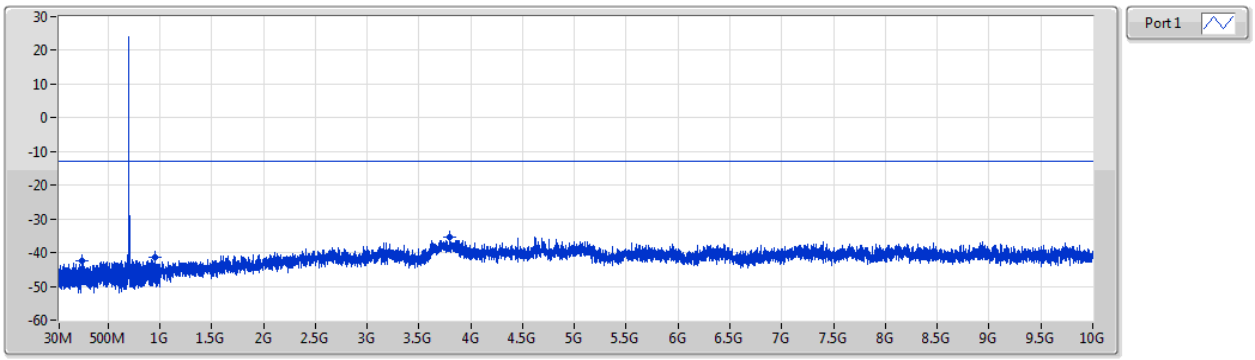
713.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	412.65M	-42.09	-13.00	-29.09	1	-
816M	1G	1M	3M	Peak	843.42M	-41.99	-13.00	-28.99	1	-
1G	10G	1M	3M	Peak	3.6964G	-34.30	-13.00	-21.30	1	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

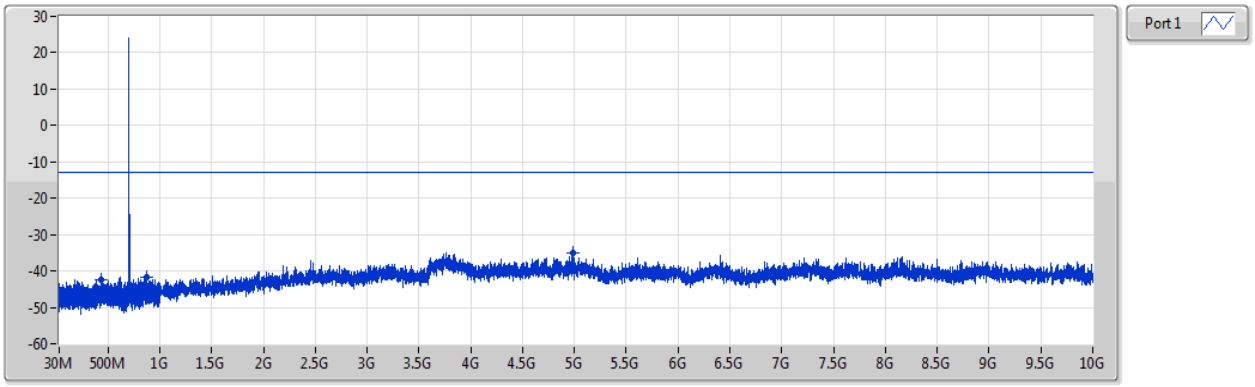
704MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	251.77M	-42.25	-13.00	-29.25	1	-
816M	1G	1M	3M	Peak	950.78M	-41.35	-13.00	-28.35	1	-
1G	10G	1M	3M	Peak	3.7954G	-35.54	-13.00	-22.54	1	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

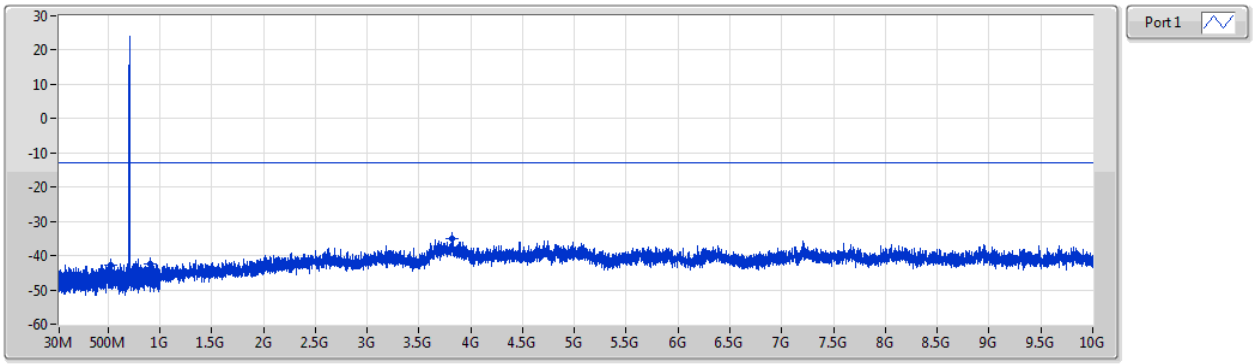
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	436.84M	-42.26	-13.00	-29.26	1	-
816M	1G	1M	3M	Peak	877M	-41.60	-13.00	-28.60	1	-
1G	10G	1M	3M	Peak	4.9879G	-35.15	-13.00	-22.15	1	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

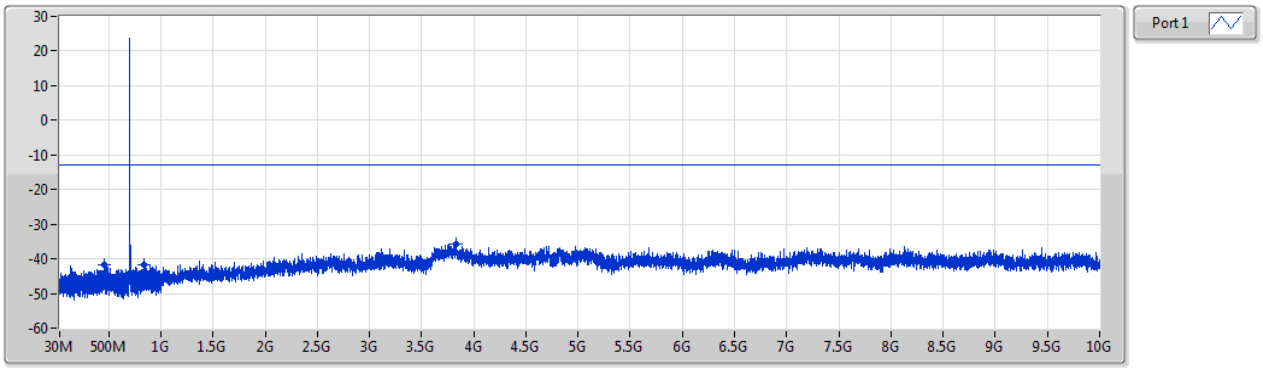
711MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	528.02M	-42.61	-13.00	-29.61	1	-
816M	1G	1M	3M	Peak	911.5M	-42.26	-13.00	-29.26	1	-
1G	10G	1M	3M	Peak	3.8179G	-35.17	-13.00	-22.17	1	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

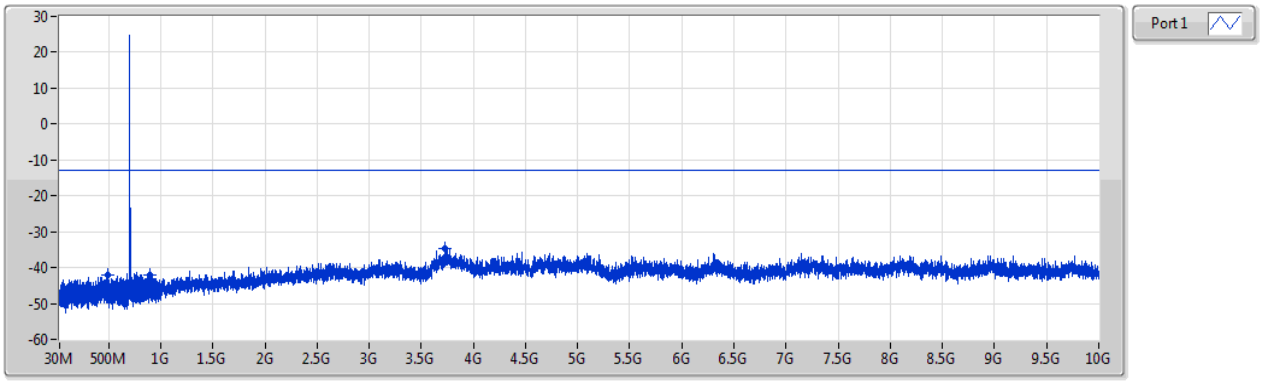
704MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	459.17M	-41.67	-13.00	-28.67	1	-
816M	1G	1M	3M	Peak	837.8M	-41.87	-13.00	-28.87	1	-
1G	10G	1M	3M	Peak	3.8359G	-35.64	-13.00	-22.64	1	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

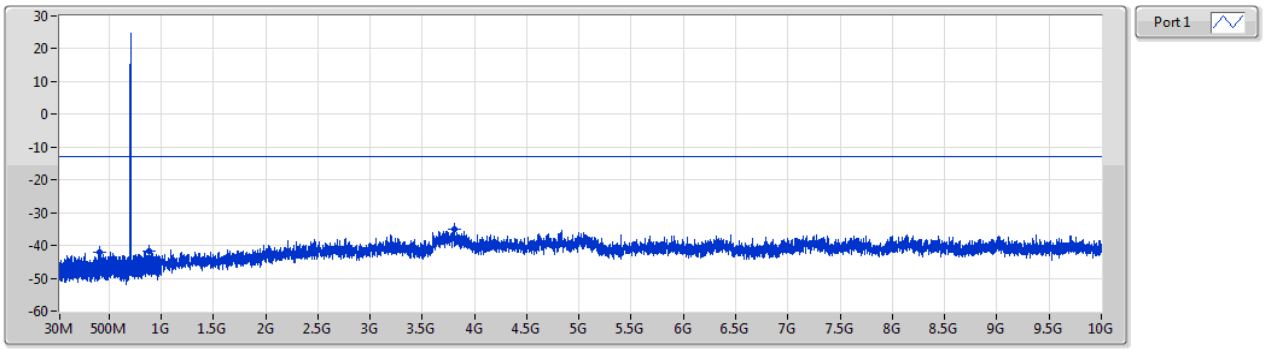
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	491.89M	-42.16	-13.00	-29.16	1	-
816M	1G	1M	3M	Peak	899.08M	-42.00	-13.00	-29.00	1	-
1G	10G	1M	3M	Peak	3.7315G	-34.65	-13.00	-21.65	1	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

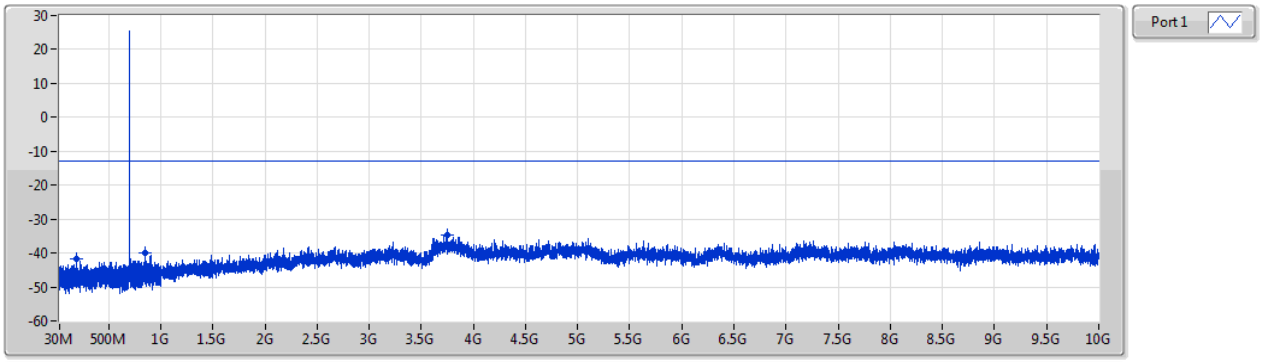
711MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	414.36M	-41.95	-13.00	-28.95	1	-
816M	1G	1M	3M	Peak	886.93M	-41.68	-13.00	-28.68	1	-
1G	10G	1M	3M	Peak	3.8044G	-34.97	-13.00	-21.97	1	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

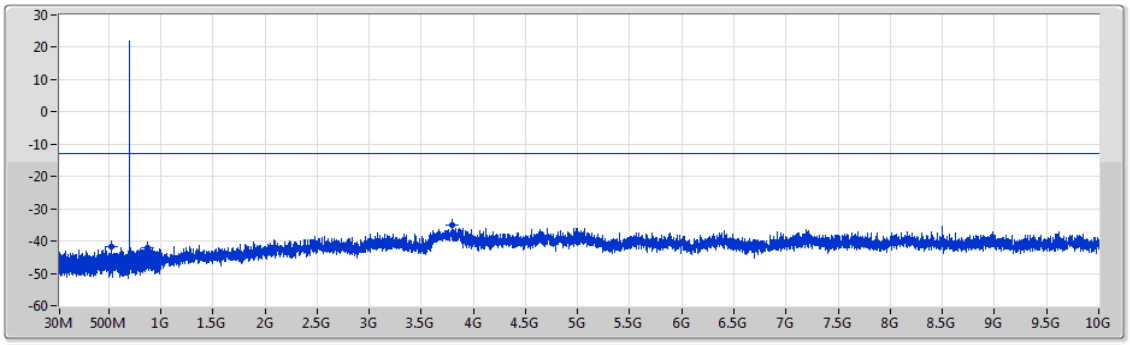
704MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	189.32M	-41.72	-13.00	-28.72	1	-
816M	1G	1M	3M	Peak	845.9M	-40.07	-13.00	-27.07	1	-
1G	10G	1M	3M	Peak	3.7477G	-34.77	-13.00	-21.77	1	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

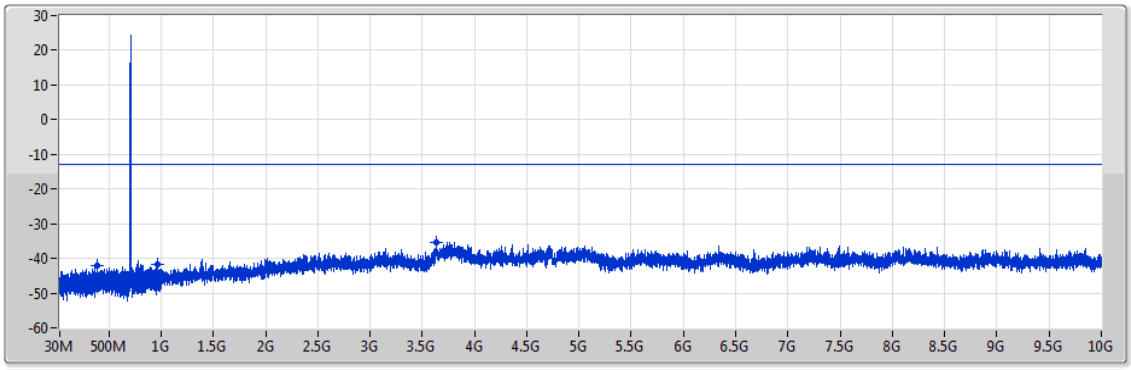
707.5MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	524.6M	-41.83	-13.00	-28.83	1	-
816M	1G	1M	3M	Peak	875.34M	-41.92	-13.00	-28.92	1	-
1G	10G	1M	3M	Peak	3.7963G	-35.02	-13.00	-22.02	1	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

711MHz



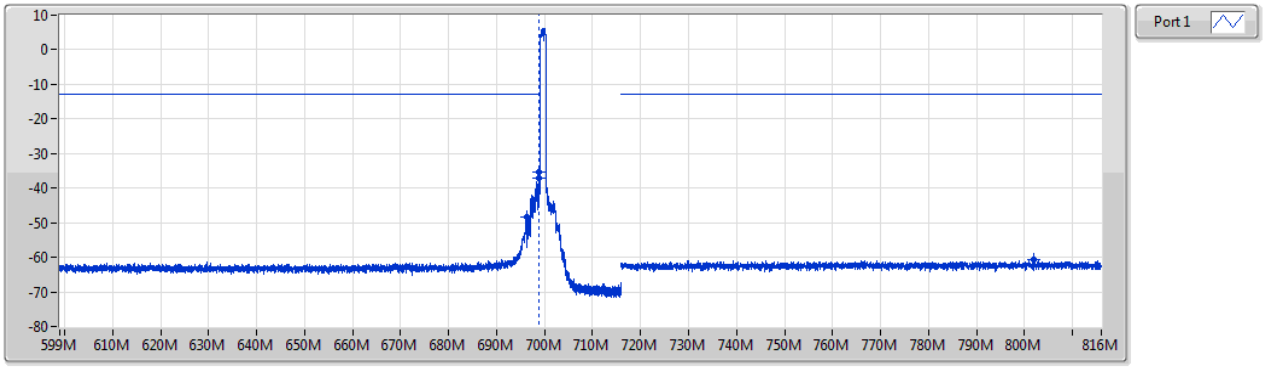
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
30M	599M	1M	3M	Peak	384.63M	-42.08	-13.00	-29.08	1	-
816M	1G	1M	3M	Peak	967.25M	-41.81	-13.00	-28.81	1	-
1G	10G	1M	3M	Peak	3.6343G	-35.22	-13.00	-22.22	1	-

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 12	-	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	716.1M	718.8M	30k	100k	RMS	716.15M	-25.59	-13.00	-12.59	1	MBW 100k	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	716.1M	718.8M	30k	100k	RMS	716.15M	-26.01	-13.00	-13.01	1	MBW 100k	-
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	716.1M	718.8M	30k	100k	RMS	716.15M	-26.18	-13.00	-13.18	1	MBW 100k	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-19.75	-13.00	-6.75	1	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-19.35	-13.00	-6.35	1	-	-
LTE_3MHz_Nss1,64QAM_1TX	Pass	698.9M	699M	30k	100k	RMS	699M	-24.42	-13.00	-11.42	1	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	698.9M	699M	51k	160k	RMS	699M	-24.24	-13.00	-11.24	1	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	51k	160k	RMS	716M	-24.89	-13.00	-11.89	1	-	-
LTE_5MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	51k	160k	RMS	716M	-26.83	-13.00	-13.83	1	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-30.87	-13.00	-17.87	1	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-31.15	-13.00	-18.15	1	-	-
LTE_10MHz_Nss1,64QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-33.30	-13.00	-20.30	1	-	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

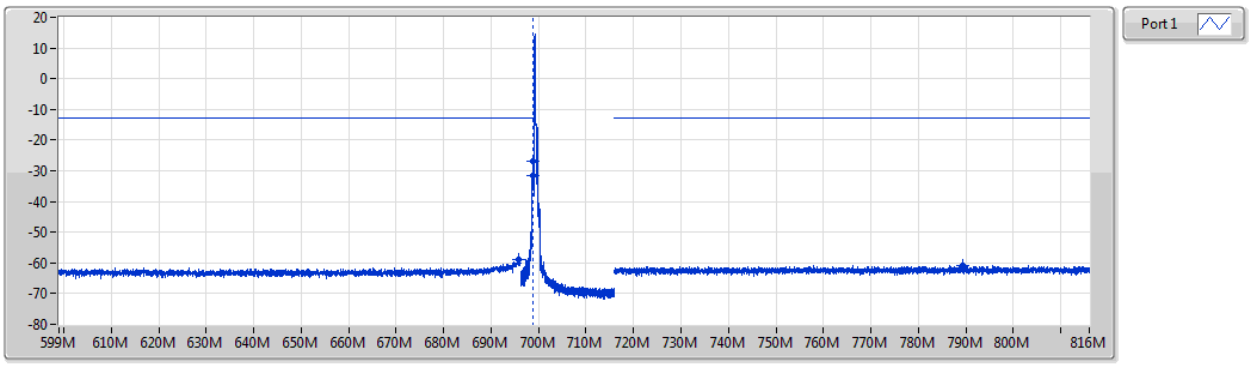
699.7MHz_QPSK_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	696.2M	-48.39	-13.00	-35.39	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-35.47	-13.00	-22.47	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-37.11	-13.00	-24.11	1	-	-
716M	816M	100k	300k	RMS	801.88M	-60.73	-13.00	-47.73	1	-	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

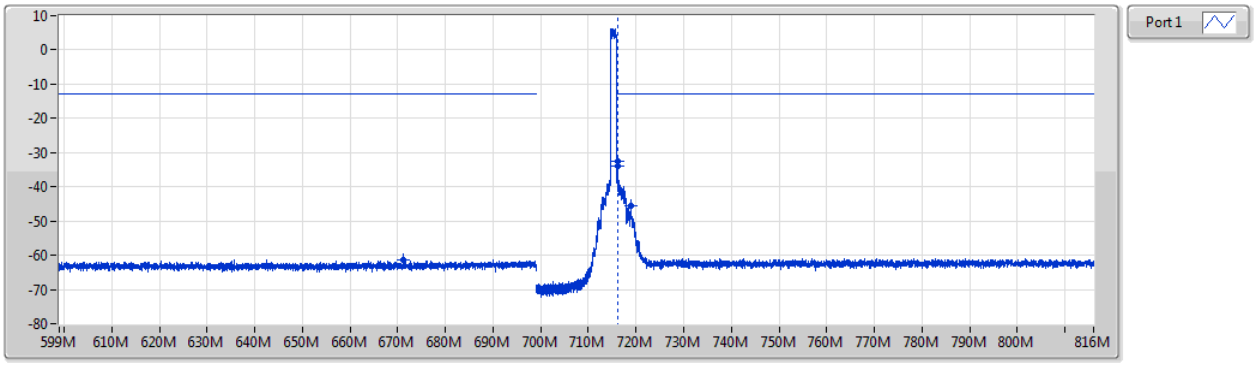
699.7MHz_QPSK_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	695.81M	-59.00	-13.00	-46.00	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-26.75	-13.00	-13.75	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.92M	-31.65	-13.00	-18.65	1	-	-
716M	816M	100k	300k	RMS	789.35M	-60.87	-13.00	-47.87	1	-	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

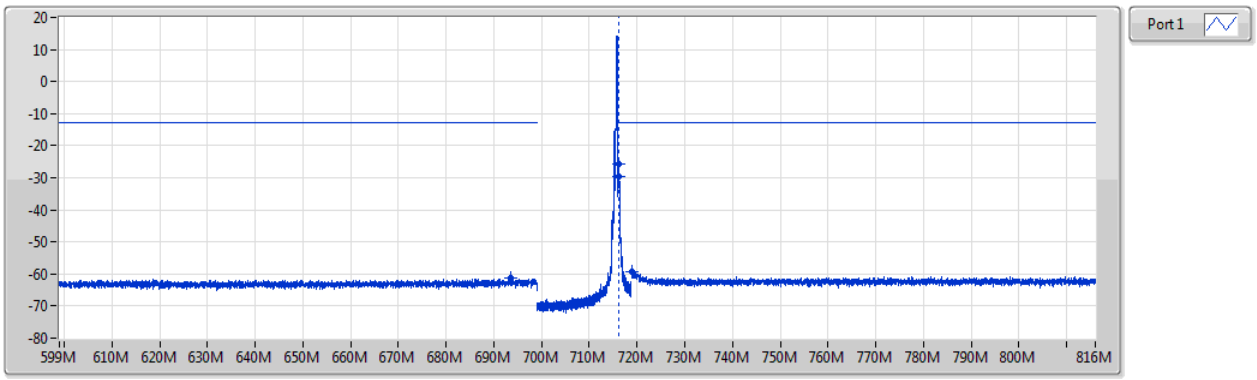
715.3MHz_QPSK_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	671.18M	-61.40	-13.00	-48.40	1	-
716M	716.1M	30k	100k	RMS	716.05M	-34.03	-13.00	-21.03	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-32.70	-13.00	-19.70	1	MBW 100k
718.8M	816M	100k	300k	RMS	718.82M	-45.46	-13.00	-32.46	1	-

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **CSE-TX-Port**

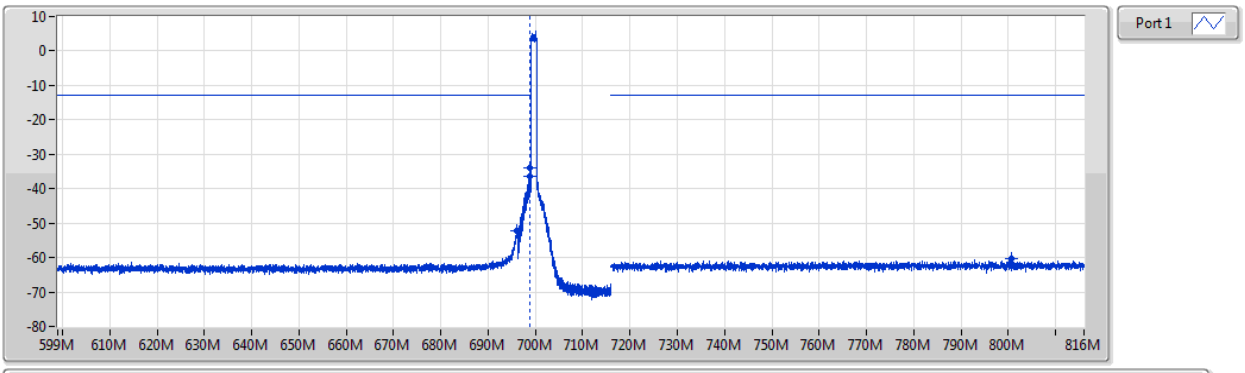
715.3MHz_QPSK_RB 1,#RB 5



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	693.48M	-61.40	-13.00	-48.40	1	-
716M	716.1M	30k	100k	RMS	716.1M	-29.58	-13.00	-16.58	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-25.59	-13.00	-12.59	1	MBW 100k
718.8M	816M	100k	300k	RMS	718.85M	-59.19	-13.00	-46.19	1	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

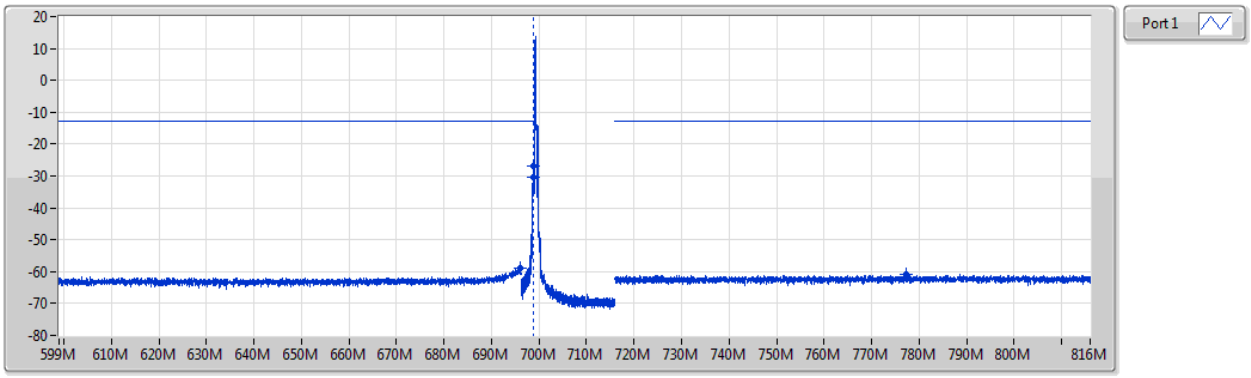
699.7MHz_16QAM_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	696.08M	-52.30	-13.00	-39.30	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-33.77	-13.00	-20.77	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-36.33	-13.00	-23.33	1	-	-
716M	816M	100k	300k	RMS	800.7M	-60.48	-13.00	-47.48	1	-	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

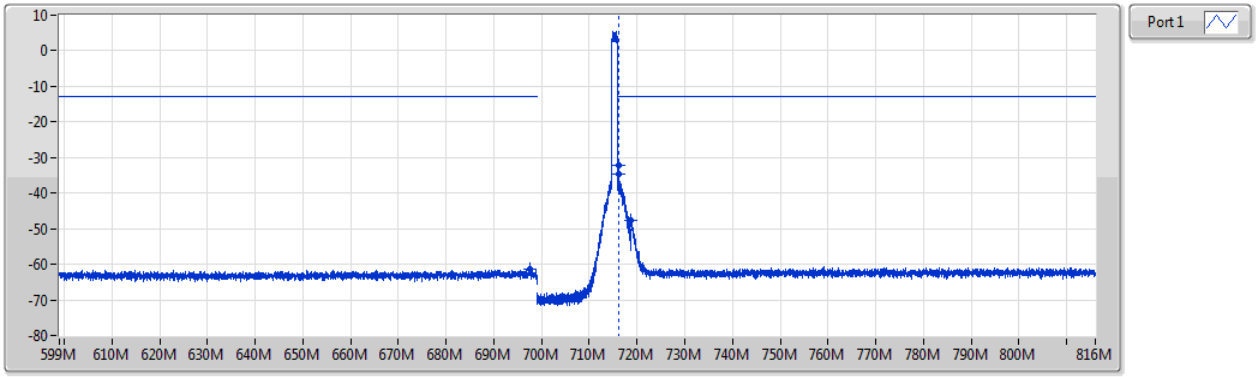
699.7MHz_16QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	696.03M	-59.07	-13.00	-46.07	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-26.87	-13.00	-13.87	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.9M	-30.49	-13.00	-17.49	1	-	-
716M	816M	100k	300k	RMS	777.38M	-60.94	-13.00	-47.94	1	-	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

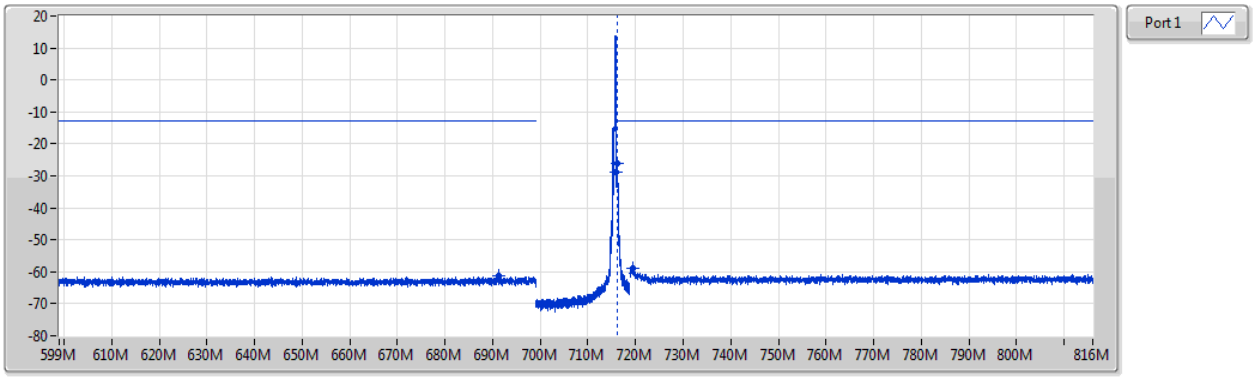
715.3MHz_16QAM_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	697.6M	-61.42	-13.00	-48.42	1	-
716M	716.1M	30k	100k	RMS	716.07M	-34.68	-13.00	-21.68	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-32.10	-13.00	-19.10	1	MBW 100k
718.8M	816M	100k	300k	RMS	718.8M	-47.67	-13.00	-34.67	1	-

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **CSE-TX-Port**

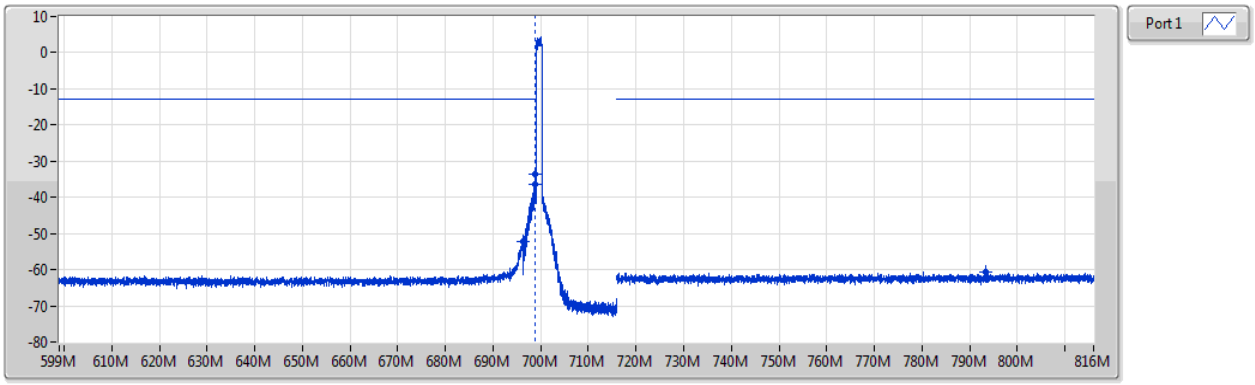
715.3MHz_16QAM_RB 1,#RB 5



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	691.23M	-61.31	-13.00	-48.31	1	-
716M	716.1M	30k	100k	RMS	716M	-28.84	-13.00	-15.84	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-26.01	-13.00	-13.01	1	MBW 100k
718.8M	816M	100k	300k	RMS	719.36M	-59.09	-13.00	-46.09	1	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

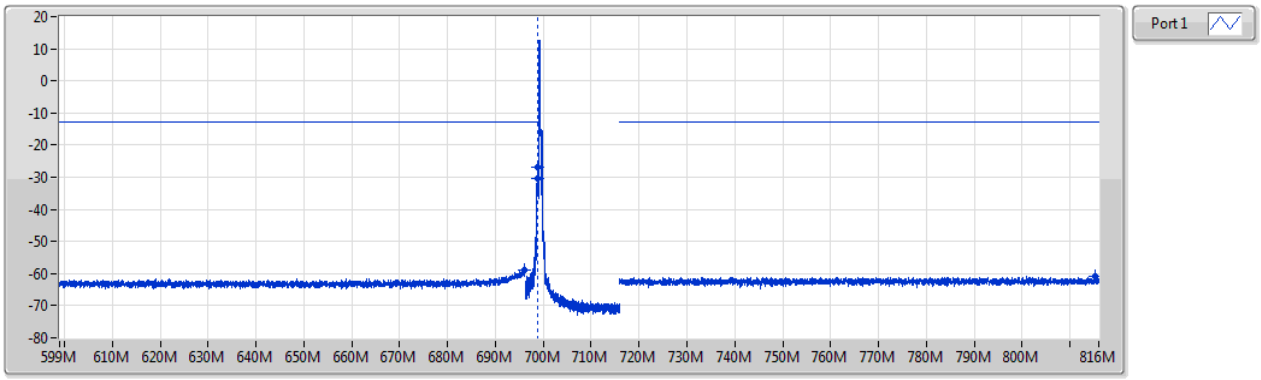
699.7MHz_64QAM_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	696.2M	-52.12	-13.00	-39.12	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-33.71	-13.00	-20.71	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-36.46	-13.00	-23.46	1	-	-
716M	816M	100k	300k	RMS	793.35M	-60.77	-13.00	-47.77	1	-	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

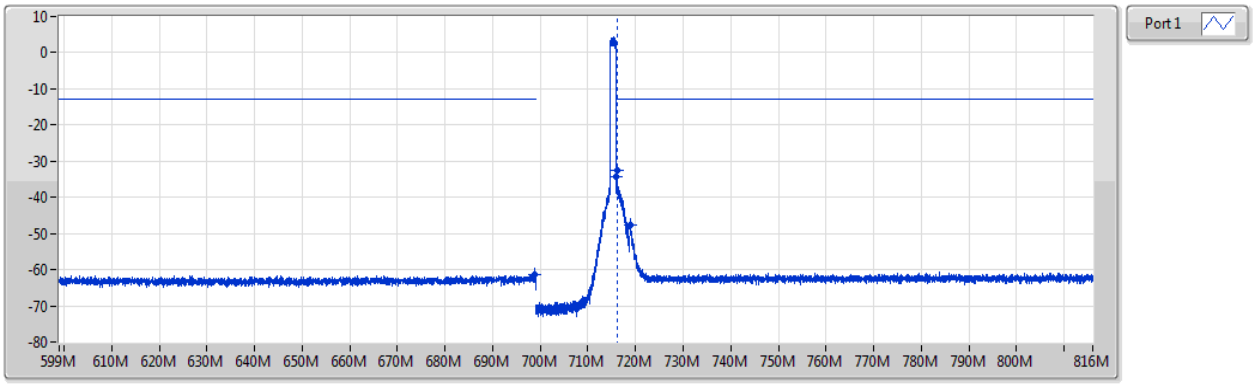
699.7MHz_64QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	696.2M	100k	300k	RMS	696.08M	-58.85	-13.00	-45.85	1	-	-
696.2M	698.9M	30k	100k	RMS	698.85M	-26.92	-13.00	-13.92	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.91M	-30.23	-13.00	-17.23	1	-	-
716M	816M	100k	300k	RMS	815.25M	-60.73	-13.00	-47.73	1	-	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

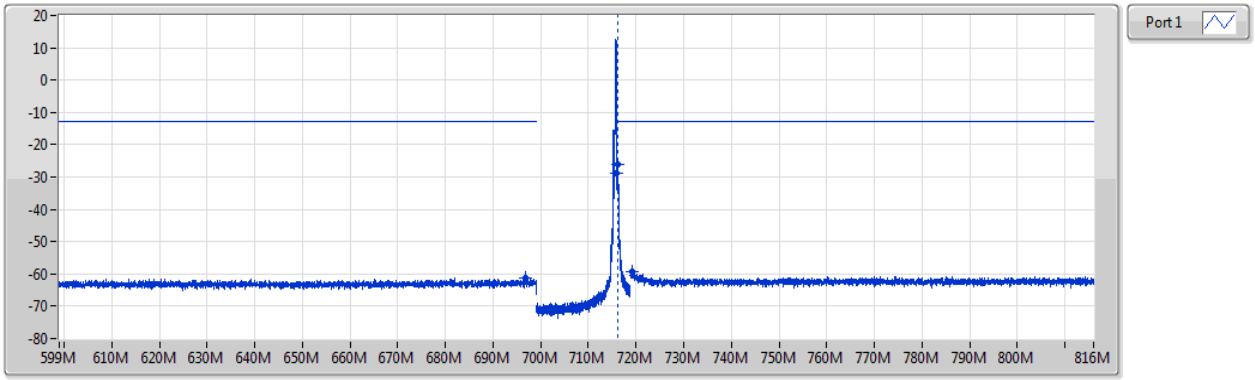
715.3MHz_64QAM_RB 6,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.7M	-61.41	-13.00	-48.41	1	-
716M	716.1M	30k	100k	RMS	716.03M	-34.37	-13.00	-21.37	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-32.40	-13.00	-19.40	1	MBW 100k
718.8M	816M	100k	300k	RMS	718.97M	-47.76	-13.00	-34.76	1	-

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **CSE-TX-Port**

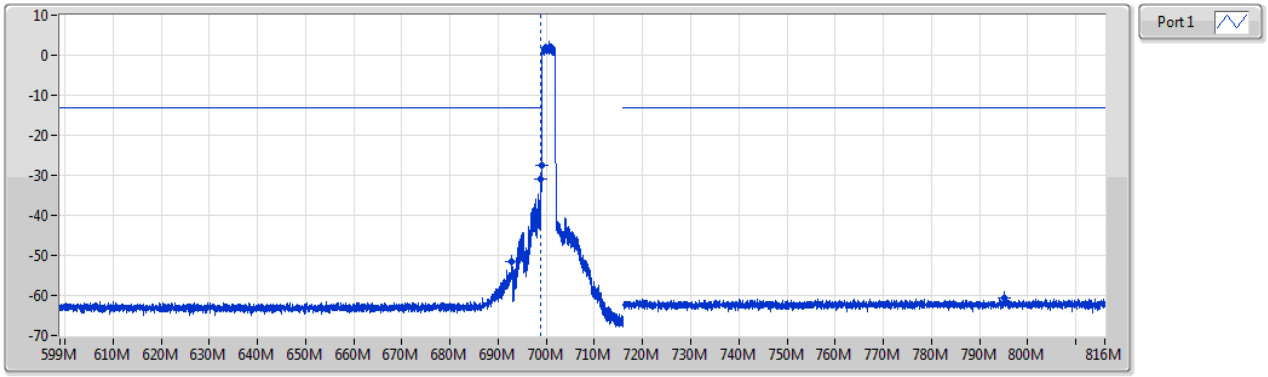
715.3MHz_64QAM_RB 1,#RB 5



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	696.7M	-61.27	-13.00	-48.27	1	-
716M	716.1M	30k	100k	RMS	716M	-28.83	-13.00	-15.83	1	-
716.1M	718.8M	30k	100k	RMS	716.15M	-26.18	-13.00	-13.18	1	MBW 100k
718.8M	816M	100k	300k	RMS	719.07M	-59.27	-13.00	-46.27	1	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

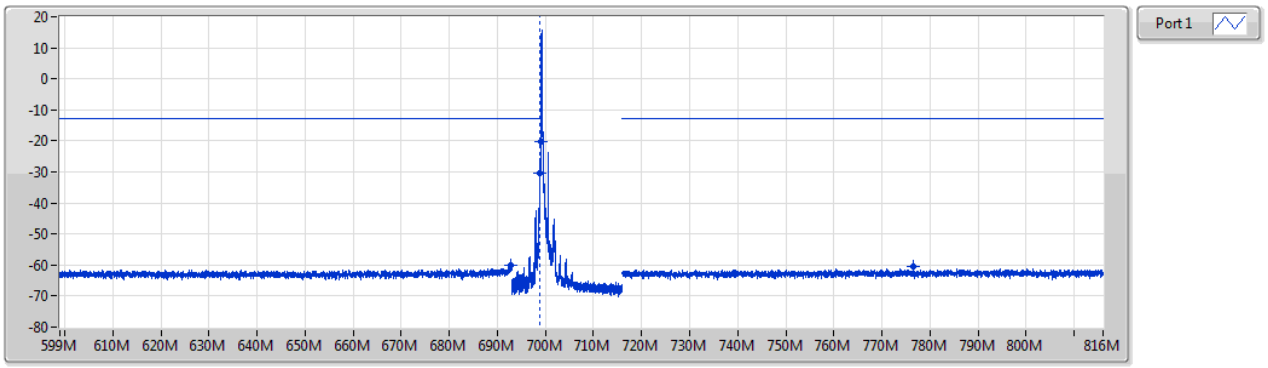
700.5MHz_QPSK_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	692.91M	-51.48	-13.00	-38.48	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-31.03	-13.00	-18.03	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-27.57	-13.00	-14.57	1	-	-
716M	816M	100k	300k	RMS	795.03M	-60.70	-13.00	-47.70	1	-	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

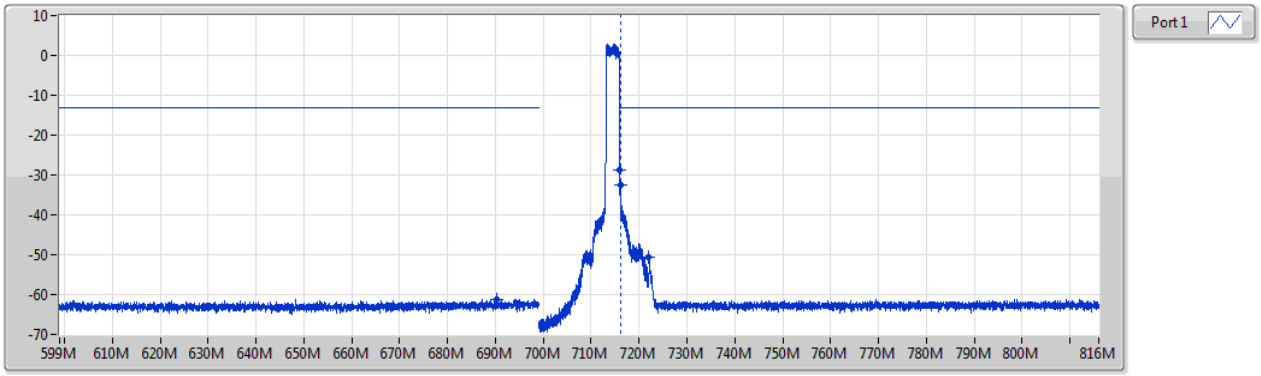
700.5MHz_QPSK_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	692.81M	-60.17	-13.00	-47.17	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-30.50	-13.00	-17.50	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-20.16	-13.00	-7.16	1	-	-
716M	816M	100k	300k	RMS	776.48M	-60.65	-13.00	-47.65	1	-	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

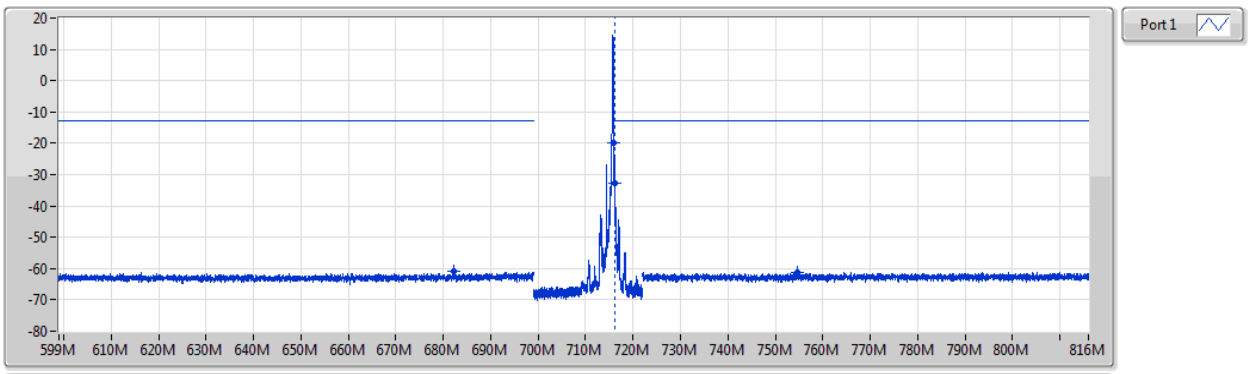
714.5MHz_QPSK_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	690.38M	-61.14	-13.00	-48.14	1	-
716M	716.1M	30k	100k	RMS	716M	-28.68	-13.00	-15.68	1	-
716.1M	722M	30k	100k	RMS	716.15M	-32.38	-13.00	-19.38	1	MBW 100k
722M	816M	100k	300k	RMS	722M	-50.48	-13.00	-37.48	1	-

Band 12_LTE_3MHz_Nss1,QPSK_1TX **CSE-TX-Port**

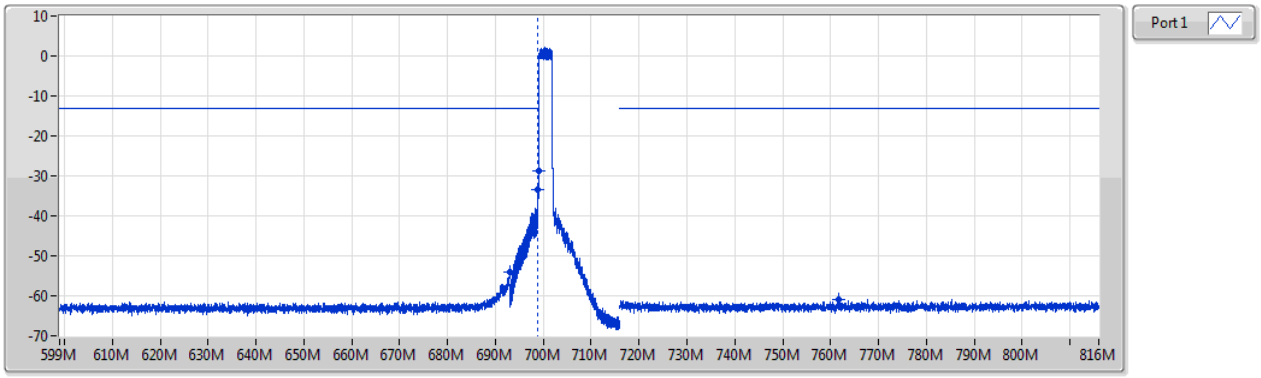
714.5MHz_QPSK_RB 1,#RB 14



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	682.23M	-61.03	-13.00	-48.03	1	-
716M	716.1M	30k	100k	RMS	716M	-19.75	-13.00	-6.75	1	-
716.1M	722M	30k	100k	RMS	716.15M	-32.71	-13.00	-19.71	1	MBW 100k
722M	816M	100k	300k	RMS	754.55M	-61.29	-13.00	-48.29	1	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

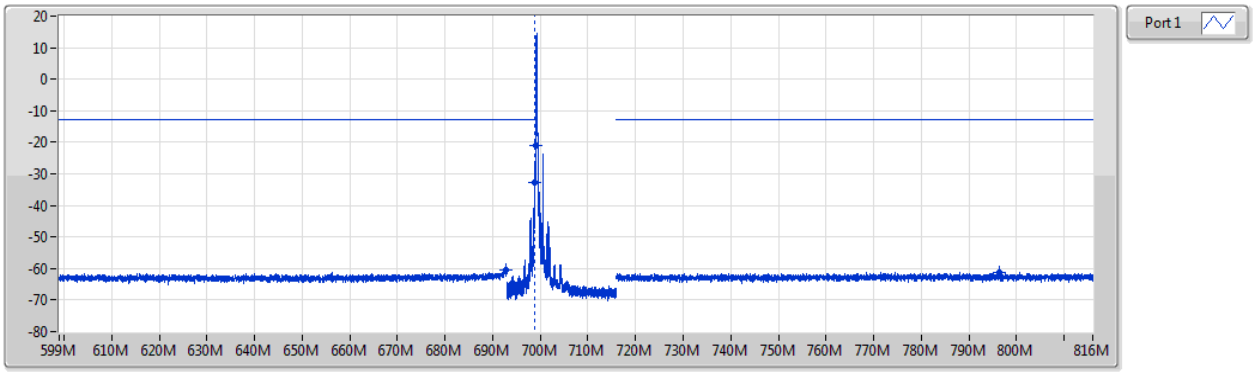
700.5MHz_16QAM_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	693M	-53.98	-13.00	-40.98	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-33.31	-13.00	-20.31	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-28.75	-13.00	-15.75	1	-	-
716M	816M	100k	300k	RMS	761.58M	-60.93	-13.00	-47.93	1	-	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

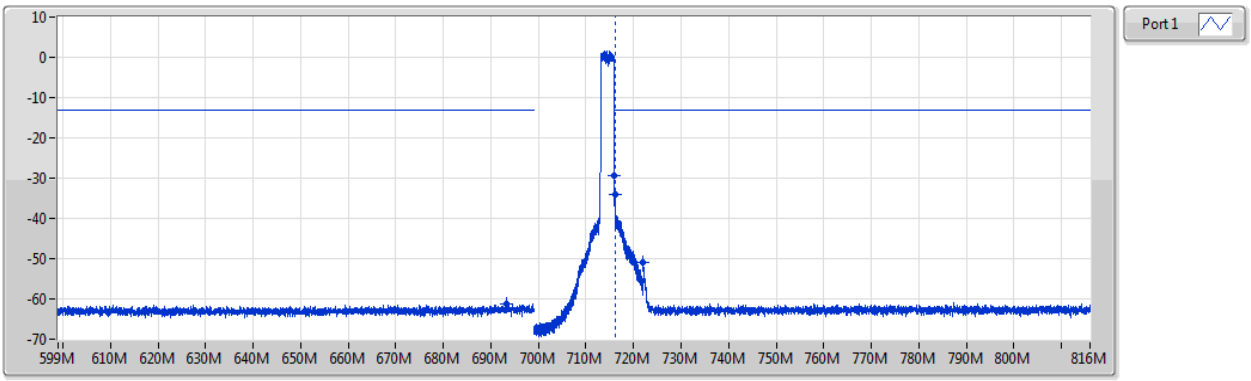
700.5MHz_16QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	692.81M	-60.61	-13.00	-47.61	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-32.67	-13.00	-19.67	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-20.97	-13.00	-7.97	1	-	-
716M	816M	100k	300k	RMS	796.48M	-61.15	-13.00	-48.15	1	-	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

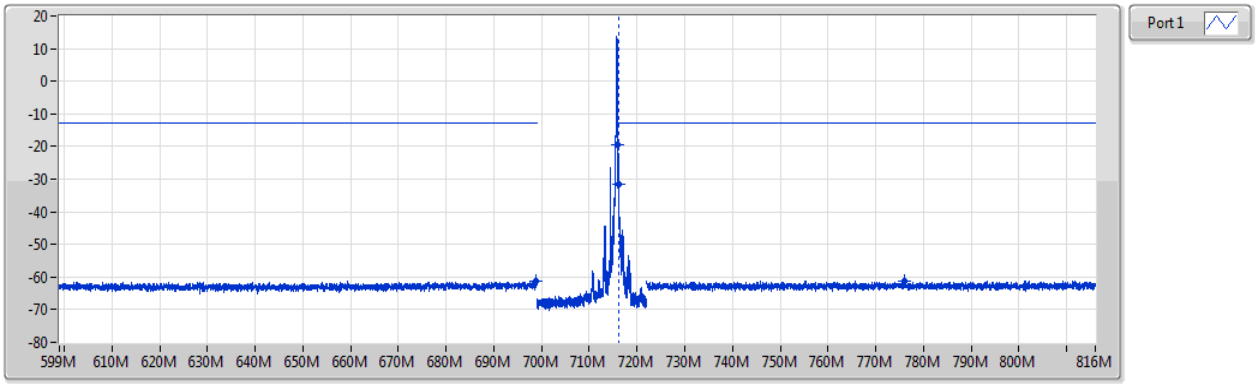
714.5MHz_16QAM_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	693.25M	-61.24	-13.00	-48.24	1	-
716M	716.1M	30k	100k	RMS	716M	-29.26	-13.00	-16.26	1	-
716.1M	722M	30k	100k	RMS	716.15M	-33.99	-13.00	-20.99	1	MBW 100k
722M	816M	100k	300k	RMS	722M	-51.04	-13.00	-38.04	1	-

Band 12_LTE_3MHz_Nss1,16QAM_1TX **CSE-TX-Port**

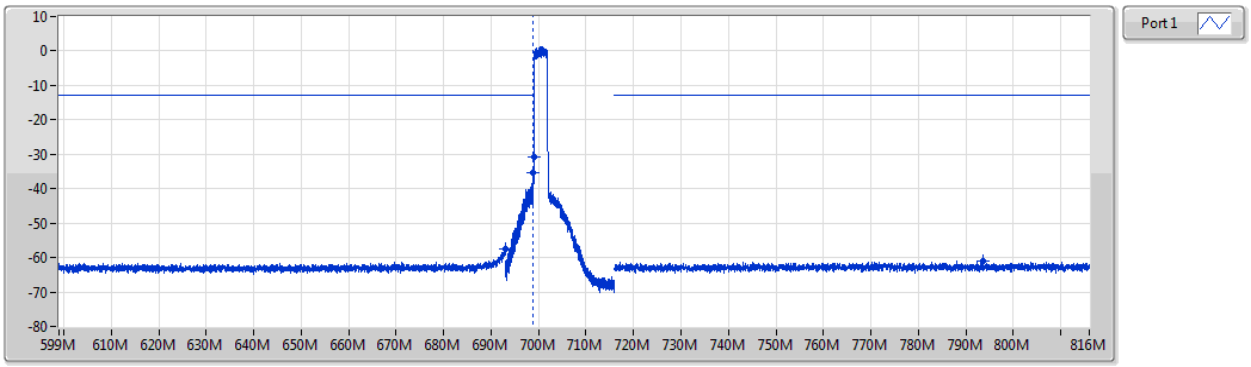
714.5MHz_16QAM_RB 1,#RB 14



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.75M	-61.37	-13.00	-48.37	1	-
716M	716.1M	30k	100k	RMS	716M	-19.35	-13.00	-6.35	1	-
716.1M	722M	30k	100k	RMS	716.15M	-31.57	-13.00	-18.57	1	MBW 100k
722M	816M	100k	300k	RMS	776.14M	-61.20	-13.00	-48.20	1	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

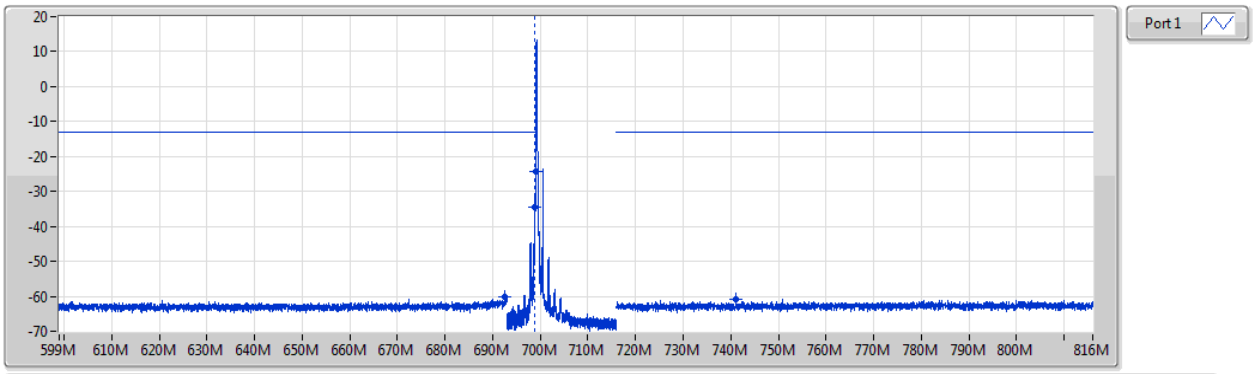
700.5MHz_64QAM_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	693M	-57.59	-13.00	-44.59	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-35.42	-13.00	-22.42	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-30.78	-13.00	-17.78	1	-	-
716M	816M	100k	300k	RMS	793.65M	-61.06	-13.00	-48.06	1	-	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

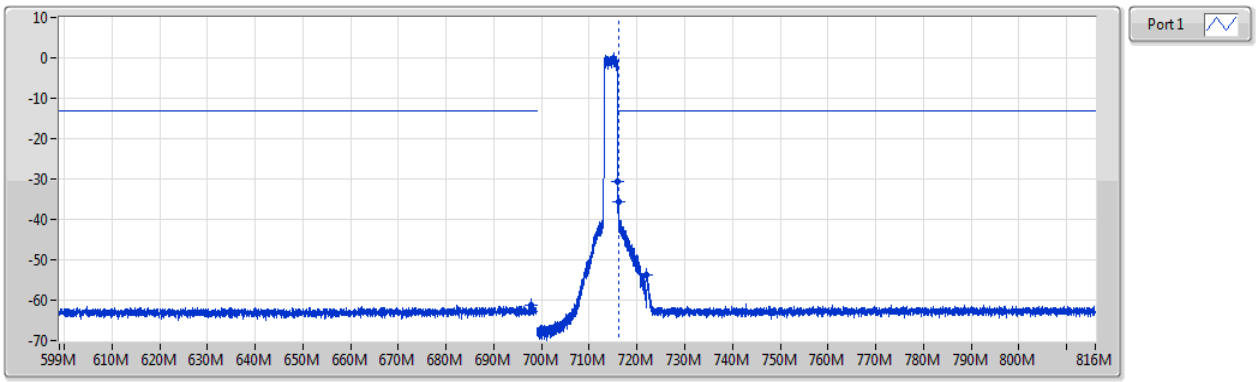
700.5MHz_64QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	693M	100k	300k	RMS	692.65M	-60.31	-13.00	-47.31	1	-	-
693M	698.9M	30k	100k	RMS	698.85M	-34.60	-13.00	-21.60	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-24.42	-13.00	-11.42	1	-	-
716M	816M	100k	300k	RMS	741.15M	-60.95	-13.00	-47.95	1	-	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

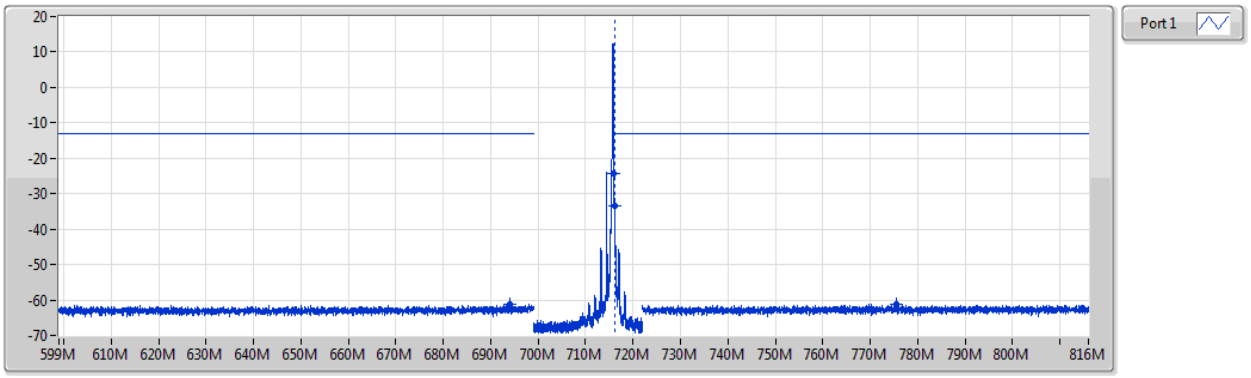
714.5MHz_64QAM_RB 15,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	697.85M	-61.28	-13.00	-48.28	1	-
716M	716.1M	30k	100k	RMS	716M	-30.76	-13.00	-17.76	1	-
716.1M	722M	30k	100k	RMS	716.15M	-35.73	-13.00	-22.73	1	MBW 100k
722M	816M	100k	300k	RMS	722.05M	-53.85	-13.00	-40.85	1	-

Band 12_LTE_3MHz_Nss1,64QAM_1TX **CSE-TX-Port**

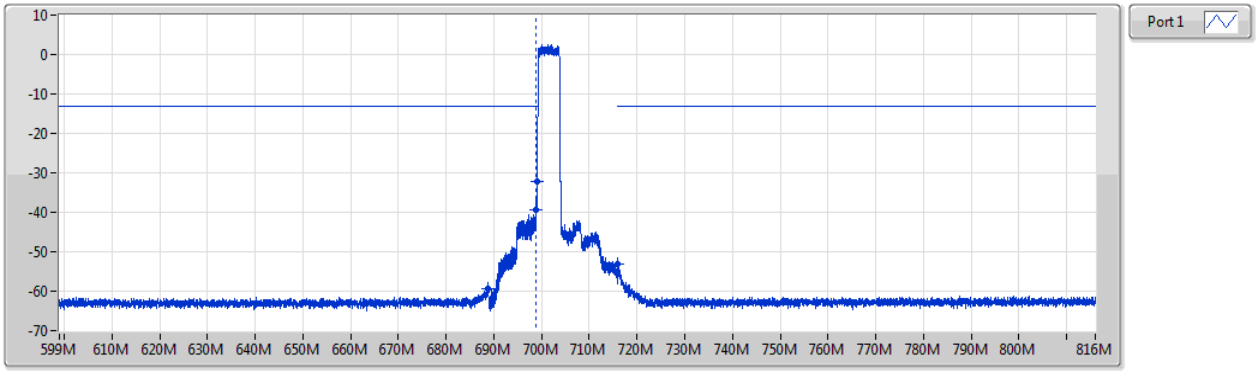
714.5MHz_64QAM_RB 1,#RB 14



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	694.13M	-61.17	-13.00	-48.17	1	-
716M	716.1M	30k	100k	RMS	716M	-24.47	-13.00	-11.47	1	-
716.1M	722M	30k	100k	RMS	716.15M	-33.39	-13.00	-20.39	1	MBW 100k
722M	816M	100k	300k	RMS	775.53M	-61.18	-13.00	-48.18	1	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

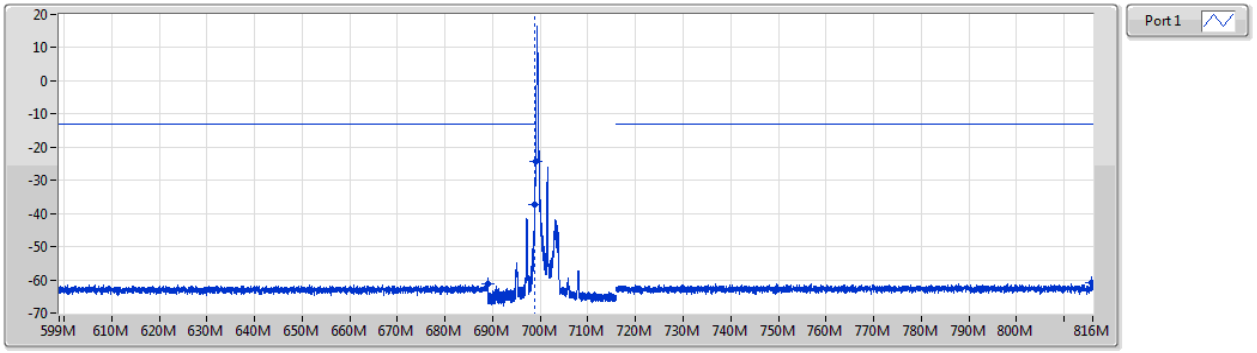
701.5MHz_QPSK_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	688.75M	-59.35	-13.00	-46.35	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-39.43	-13.00	-26.43	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-32.28	-13.00	-19.28	1	-	-
716M	816M	100k	300k	RMS	716.03M	-53.10	-13.00	-40.10	1	-	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

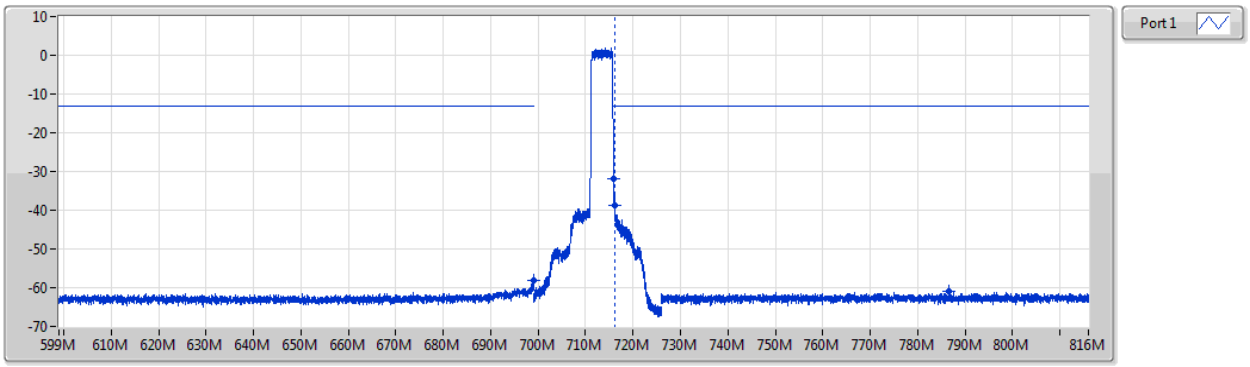
701.5MHz_QPSK_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	689M	-61.38	-13.00	-48.38	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-37.21	-13.00	-24.21	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-24.24	-13.00	-11.24	1	-	-
716M	816M	100k	300k	RMS	815.68M	-60.89	-13.00	-47.89	1	-	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

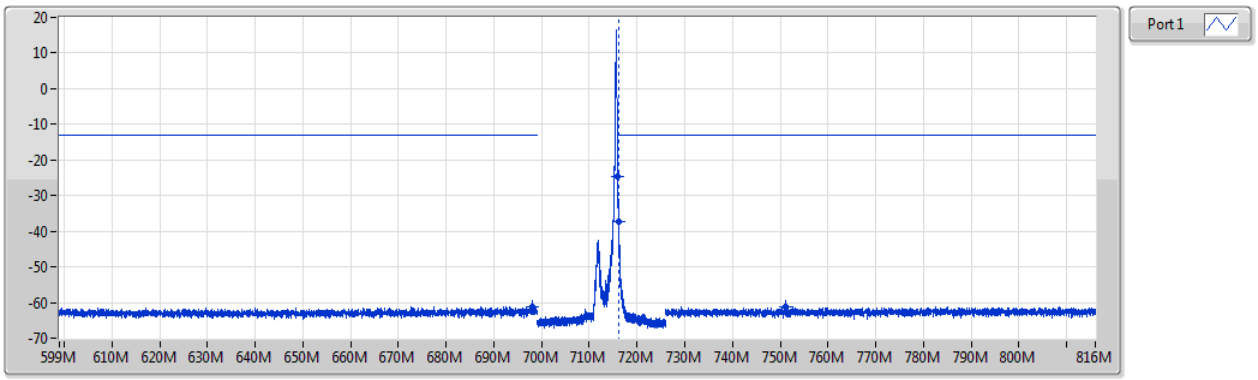
713.5MHz_QPSK_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	699M	-58.24	-13.00	-45.24	1	-
716M	716.1M	51k	160k	RMS	716M	-32.00	-13.00	-19.00	1	-
716.1M	726M	51k	160k	RMS	716.15M	-38.63	-13.00	-25.63	1	MBW 100k
726M	816M	100k	300k	RMS	786.64M	-61.09	-13.00	-48.09	1	-

Band 12_LTE_5MHz_Nss1,QPSK_1TX **CSE-TX-Port**

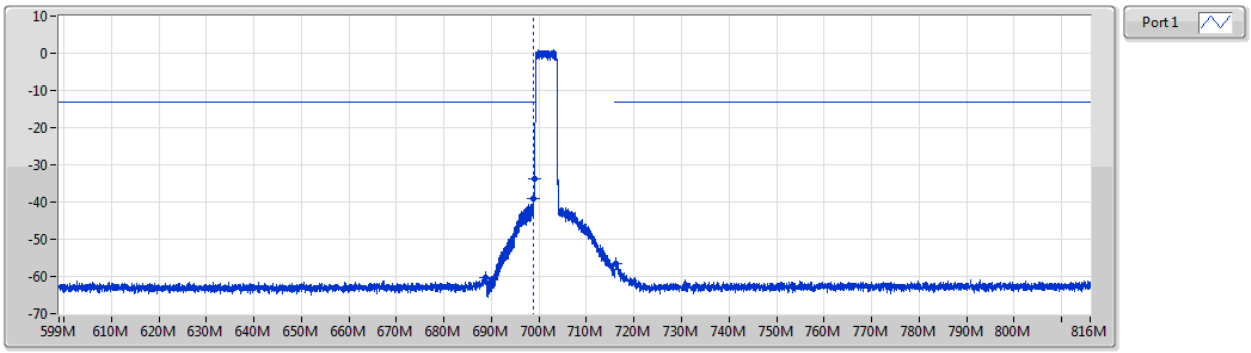
713.5MHz_QPSK_RB 1,#RB 24



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.08M	-61.13	-13.00	-48.13	1	-
716M	716.1M	51k	160k	RMS	716M	-24.48	-13.00	-11.48	1	-
716.1M	726M	51k	160k	RMS	716.15M	-37.15	-13.00	-24.15	1	MBW 100k
726M	816M	100k	300k	RMS	751.13M	-61.04	-13.00	-48.04	1	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

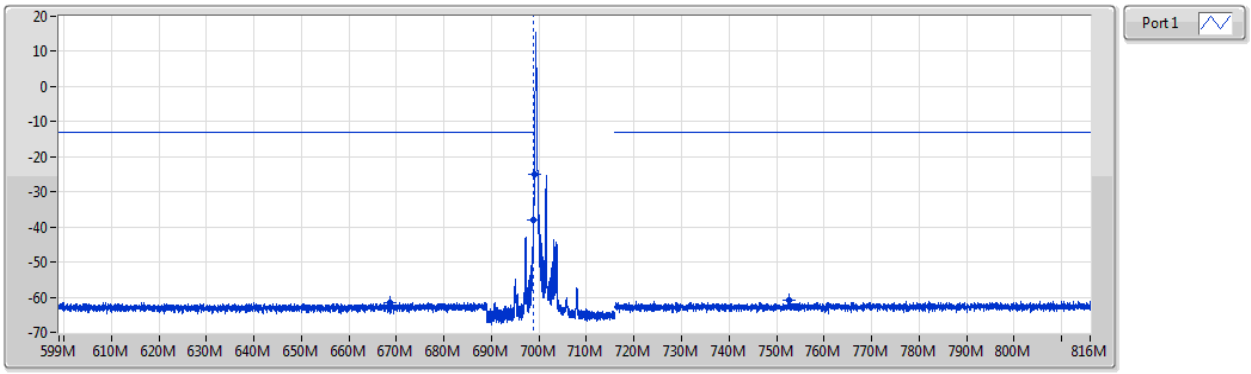
701.5MHz_16QAM_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	688.69M	-60.20	-13.00	-47.20	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-39.03	-13.00	-26.03	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-33.72	-13.00	-20.72	1	-	-
716M	816M	100k	300k	RMS	716.23M	-56.48	-13.00	-43.48	1	-	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

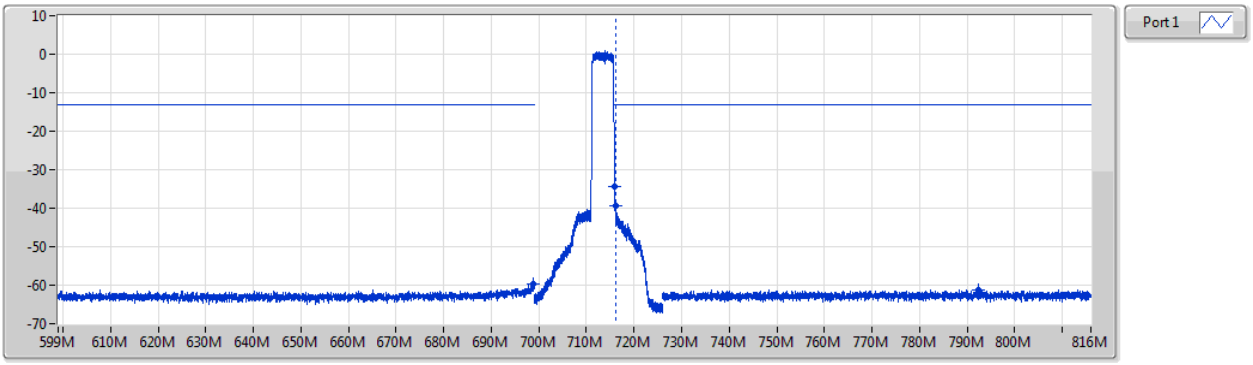
701.5MHz_16QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	668.64M	-61.46	-13.00	-48.46	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-37.99	-13.00	-24.99	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-25.01	-13.00	-12.01	1	-	-
716M	816M	100k	300k	RMS	752.73M	-60.96	-13.00	-47.96	1	-	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

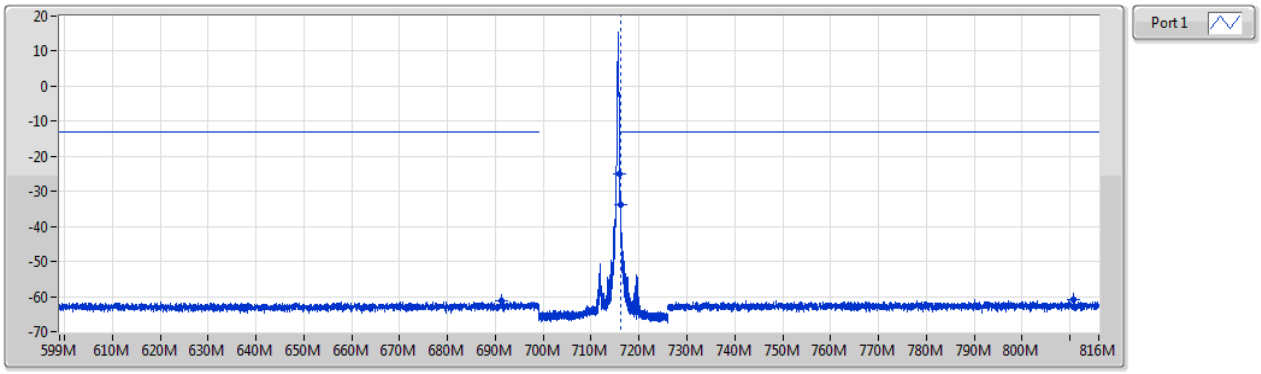
713.5MHz_16QAM_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.85M	-59.73	-13.00	-46.73	1	-
716M	716.1M	51k	160k	RMS	716M	-34.32	-13.00	-21.32	1	-
716.1M	726M	51k	160k	RMS	716.15M	-39.44	-13.00	-26.44	1	MBW 100k
726M	816M	100k	300k	RMS	792.26M	-61.17	-13.00	-48.17	1	-

Band 12_LTE_5MHz_Nss1,16QAM_1TX **CSE-TX-Port**

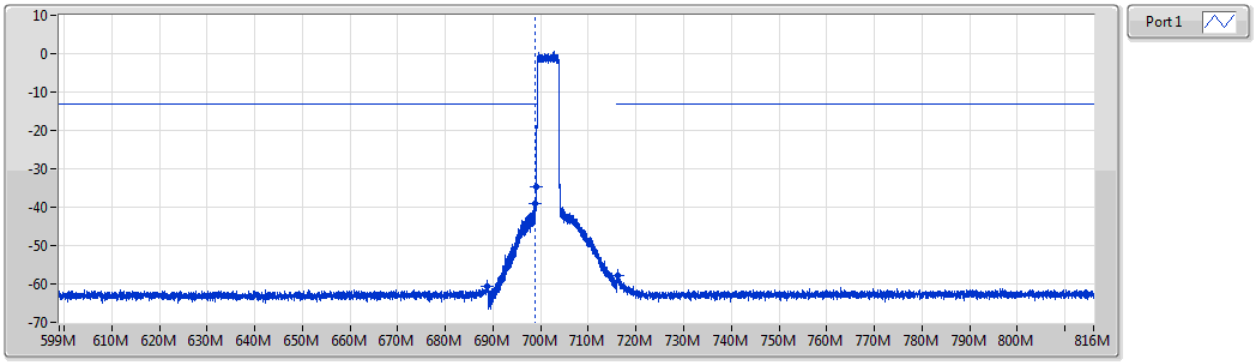
713.5MHz_16QAM_RB 1,#RB 24



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	691.23M	-61.30	-13.00	-48.30	1	-
716M	716.1M	51k	160k	RMS	716M	-24.89	-13.00	-11.89	1	-
716.1M	726M	51k	160k	RMS	716.15M	-33.83	-13.00	-20.83	1	MBW 100k
726M	816M	100k	300k	RMS	810.83M	-60.88	-13.00	-47.88	1	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

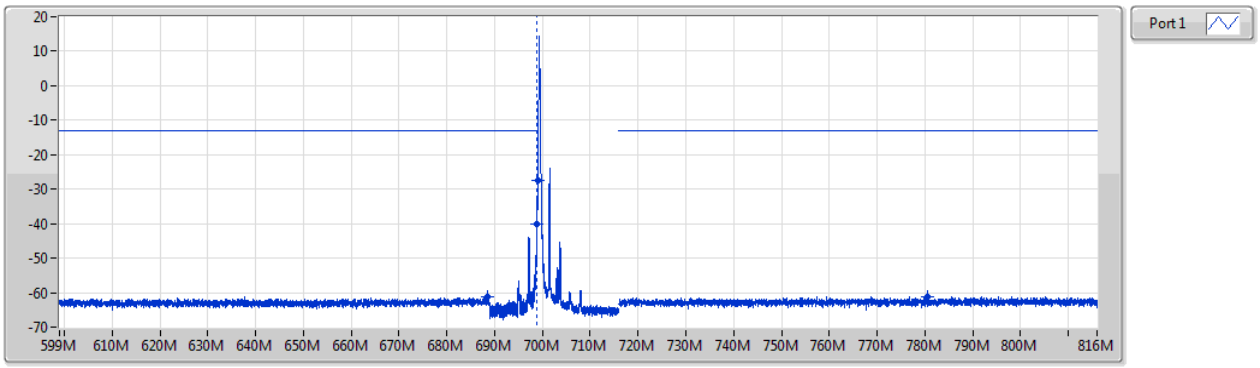
701.5MHz_64QAM_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	688.89M	-60.54	-13.00	-47.54	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-39.12	-13.00	-26.12	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-34.54	-13.00	-21.54	1	-	-
716M	816M	100k	300k	RMS	716.05M	-57.93	-13.00	-44.93	1	-	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

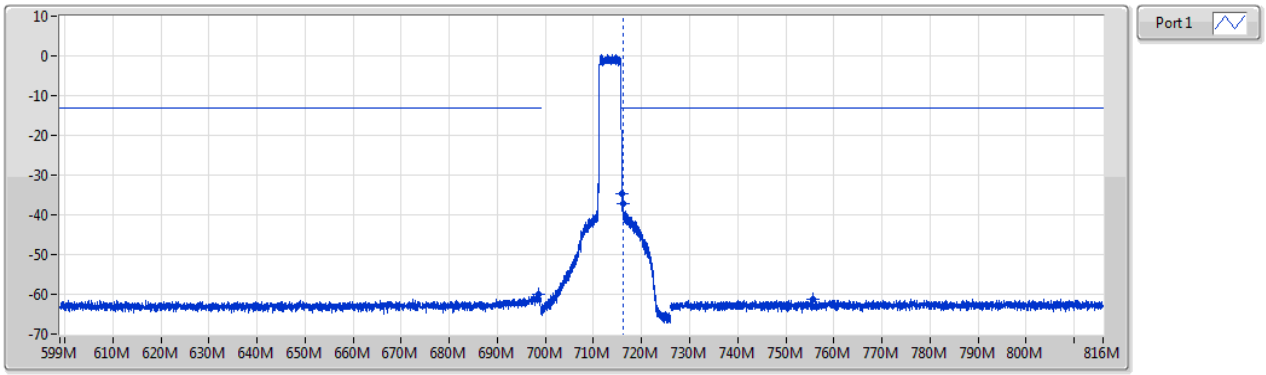
701.5MHz_64QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	689M	100k	300k	RMS	688.57M	-61.37	-13.00	-48.37	1	-	-
689M	698.9M	51k	160k	RMS	698.85M	-40.22	-13.00	-27.22	1	MBW 100k	-
698.9M	699M	51k	160k	RMS	699M	-27.47	-13.00	-14.47	1	-	-
716M	816M	100k	300k	RMS	780.53M	-61.14	-13.00	-48.14	1	-	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

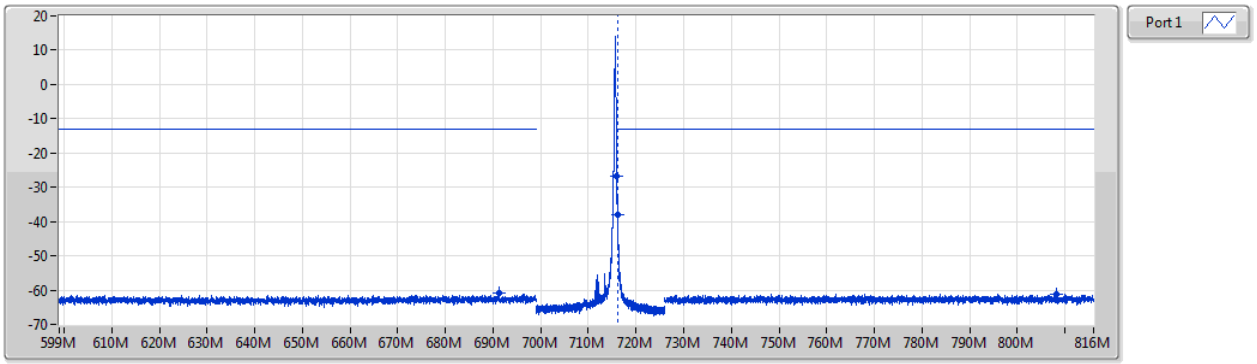
713.5MHz_64QAM_RB 25,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.53M	-59.90	-13.00	-46.90	1	-
716M	716.1M	51k	160k	RMS	716M	-34.77	-13.00	-21.77	1	-
716.1M	726M	51k	160k	RMS	716.15M	-37.33	-13.00	-24.33	1	MBW 100k
726M	816M	100k	300k	RMS	755.75M	-61.17	-13.00	-48.17	1	-

Band 12_LTE_5MHz_Nss1,64QAM_1TX **CSE-TX-Port**

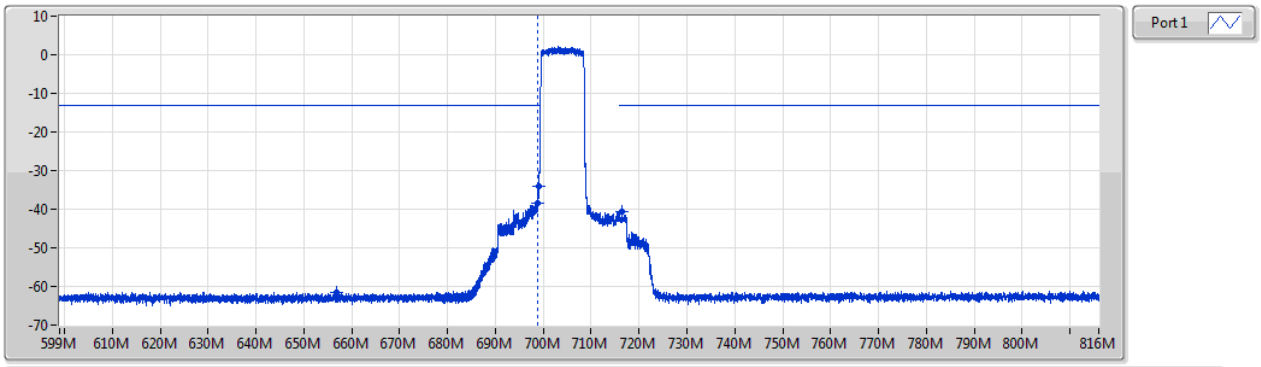
713.5MHz_64QAM_RB 1,#RB 24



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	691.18M	-60.78	-13.00	-47.78	1	-
716M	716.1M	51k	160k	RMS	716M	-26.83	-13.00	-13.83	1	-
716.1M	726M	51k	160k	RMS	716.15M	-38.12	-13.00	-25.12	1	MBW 100k
726M	816M	100k	300k	RMS	808.31M	-61.11	-13.00	-48.11	1	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

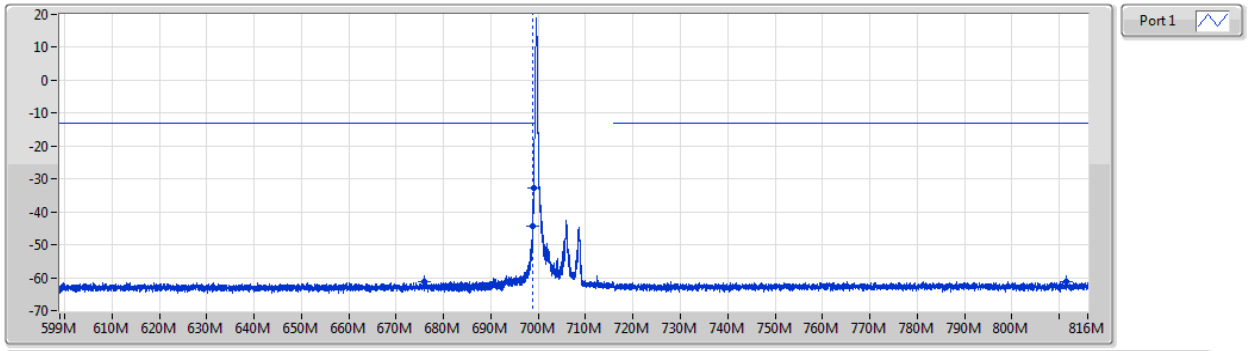
704MHz_QPSK_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	656.72M	-61.42	-13.00	-48.42	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-38.32	-13.00	-25.32	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	698.99M	-34.06	-13.00	-21.06	1	-	-
716M	816M	100k	300k	RMS	716.35M	-40.66	-13.00	-27.66	1	-	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

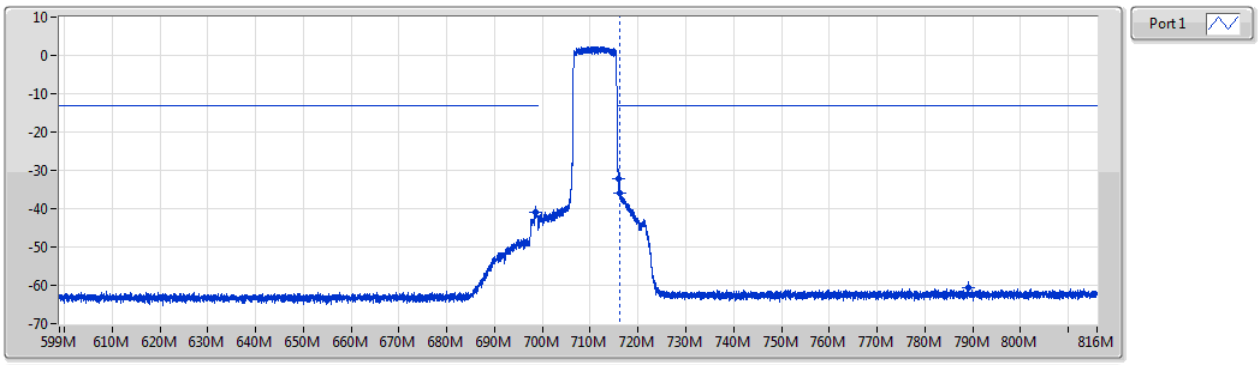
704MHz_QPSK_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	675.92M	-61.32	-13.00	-48.32	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-44.43	-13.00	-31.43	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	699M	-32.85	-13.00	-19.85	1	-	-
716M	816M	100k	300k	RMS	811.58M	-61.14	-13.00	-48.14	1	-	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

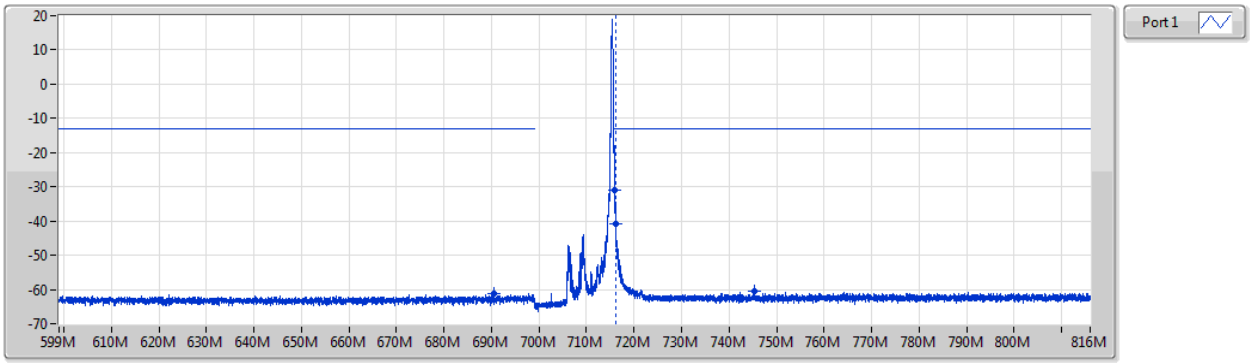
711MHz_QPSK_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.68M	-40.95	-13.00	-27.95	1	-
716M	716.1M	100k	300k	RMS	716.01M	-32.11	-13.00	-19.11	1	-
716.1M	736M	100k	300k	RMS	716.15M	-35.86	-13.00	-22.86	1	MBW 100k
736M	816M	100k	300k	RMS	789.08M	-60.76	-13.00	-47.76	1	-

Band 12_LTE_10MHz_Nss1,QPSK_1TX **CSE-TX-Port**

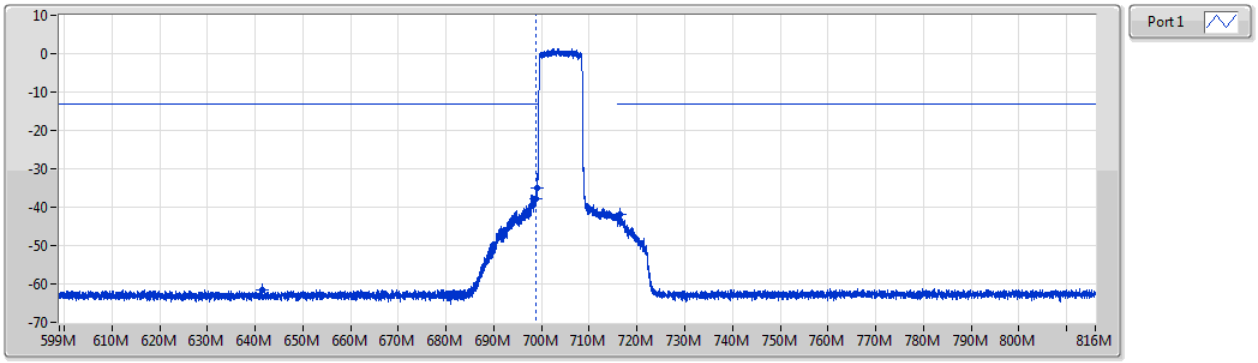
711MHz_QPSK_RB 1,#RB 49



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	690.6M	-61.12	-13.00	-48.12	1	-
716M	716.1M	100k	300k	RMS	716M	-30.87	-13.00	-17.87	1	-
716.1M	736M	100k	300k	RMS	716.15M	-40.72	-13.00	-27.72	1	MBW 100k
736M	816M	100k	300k	RMS	745.36M	-60.68	-13.00	-47.68	1	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

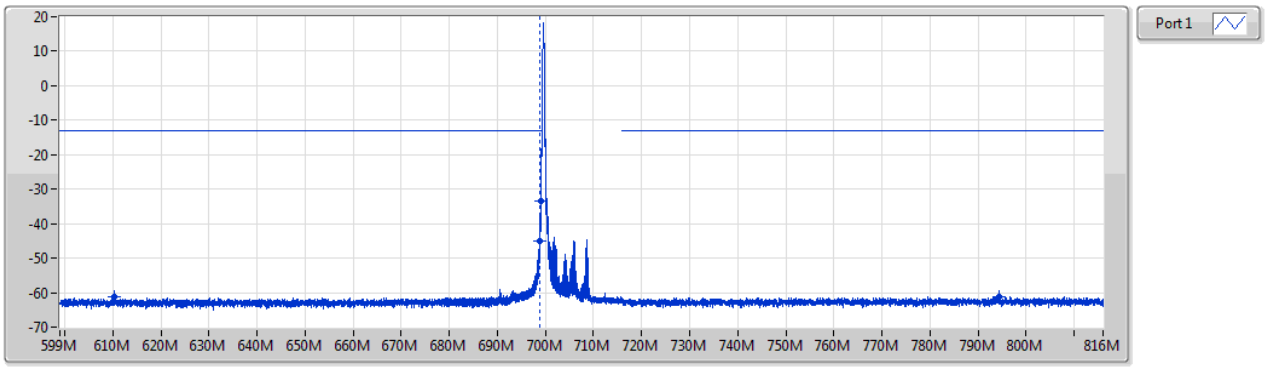
704MHz_16QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	641.46M	-61.43	-13.00	-48.43	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-37.92	-13.00	-24.92	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	699M	-35.06	-13.00	-22.06	1	-	-
716M	816M	100k	300k	RMS	716.5M	-41.75	-13.00	-28.75	1	-	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

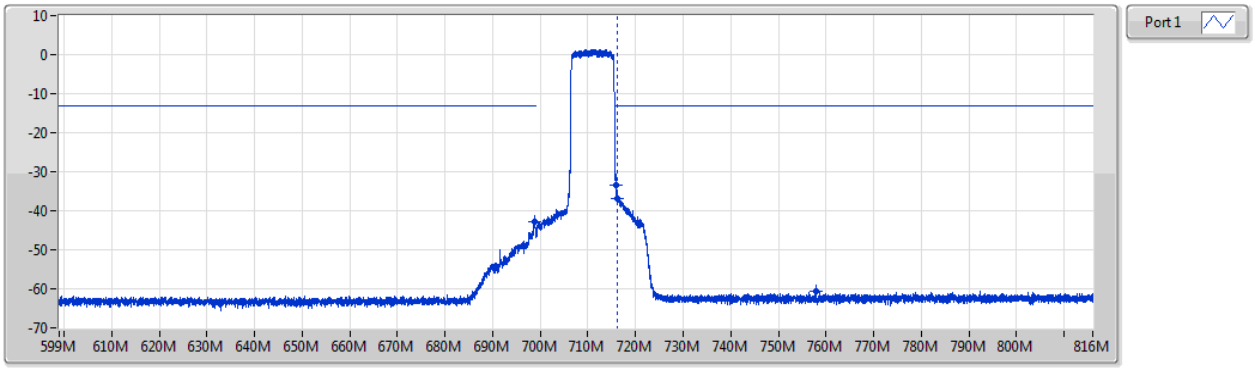
704MHz_16QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	610.36M	-61.36	-13.00	-48.36	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-45.12	-13.00	-32.12	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	699M	-33.31	-13.00	-20.31	1	-	-
716M	816M	100k	300k	RMS	794.38M	-61.22	-13.00	-48.22	1	-	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

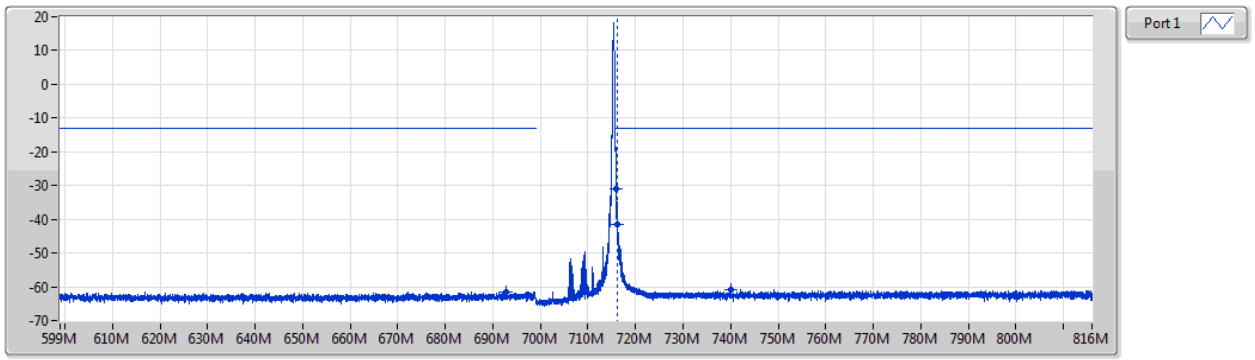
711MHz_16QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.88M	-42.76	-13.00	-29.76	1	-
716M	716.1M	100k	300k	RMS	716.01M	-33.39	-13.00	-20.39	1	-
716.1M	736M	100k	300k	RMS	716.15M	-36.78	-13.00	-23.78	1	MBW 100k
736M	816M	100k	300k	RMS	757.9M	-60.71	-13.00	-47.71	1	-

Band 12_LTE_10MHz_Nss1,16QAM_1TX **CSE-TX-Port**

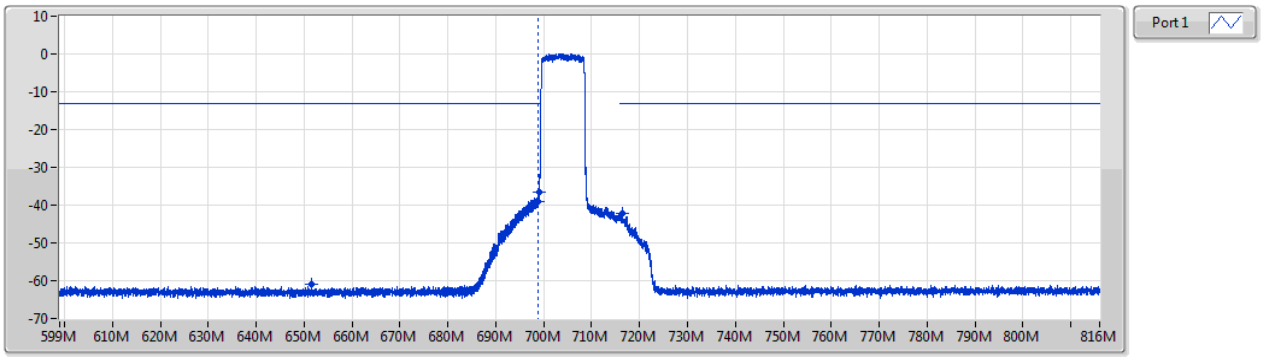
711MHz_16QAM_RB 1,#RB 49



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	692.7M	-61.41	-13.00	-48.41	1	-
716M	716.1M	100k	300k	RMS	716M	-31.15	-13.00	-18.15	1	-
716.1M	736M	100k	300k	RMS	716.15M	-41.45	-13.00	-28.45	1	MBW 100k
736M	816M	100k	300k	RMS	739.94M	-60.76	-13.00	-47.76	1	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

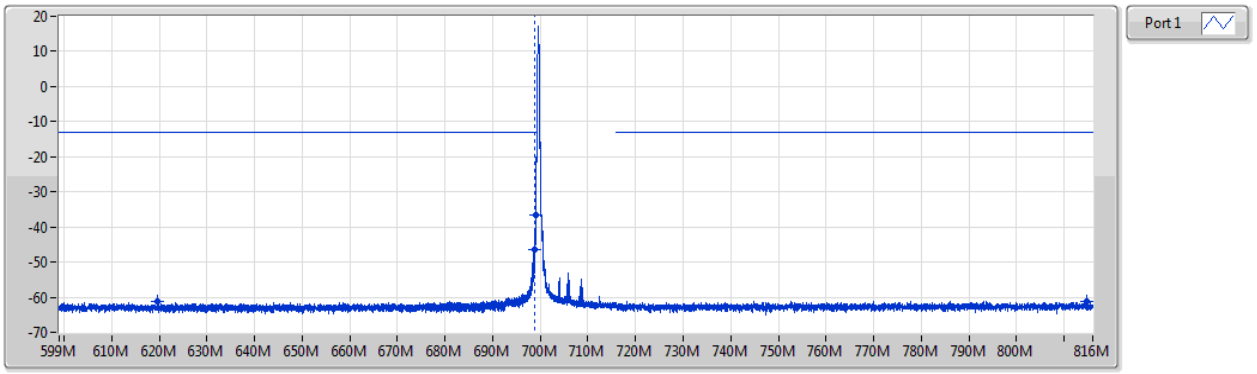
704MHz_64QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	651.48M	-61.05	-13.00	-48.05	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-38.97	-13.00	-25.97	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	699M	-36.57	-13.00	-23.57	1	-	-
716M	816M	100k	300k	RMS	716.45M	-42.29	-13.00	-29.29	1	-	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

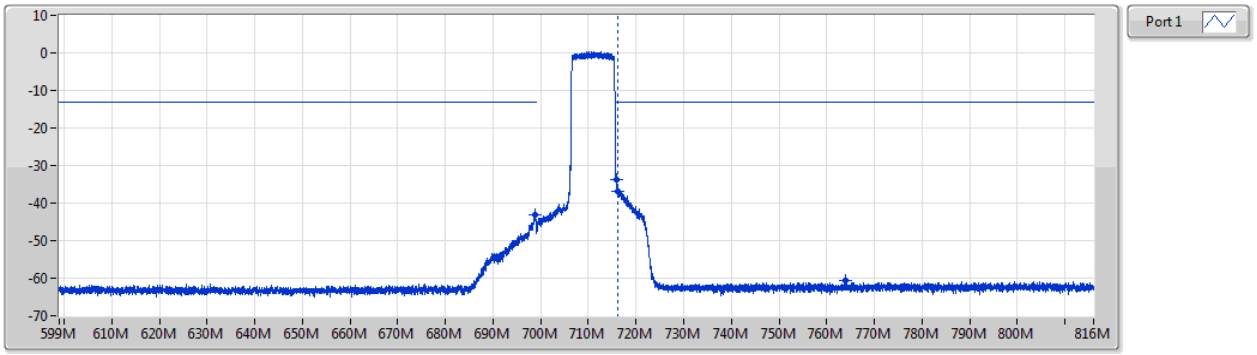
704MHz_64QAM_RB 1,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
599M	679M	100k	300k	RMS	619.74M	-61.12	-13.00	-48.12	1	-	-
679M	698.9M	100k	300k	RMS	698.85M	-46.57	-13.00	-33.57	1	MBW 100k	-
698.9M	699M	100k	300k	RMS	699M	-36.75	-13.00	-23.75	1	-	-
716M	816M	100k	300k	RMS	814.75M	-61.05	-13.00	-48.05	1	-	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

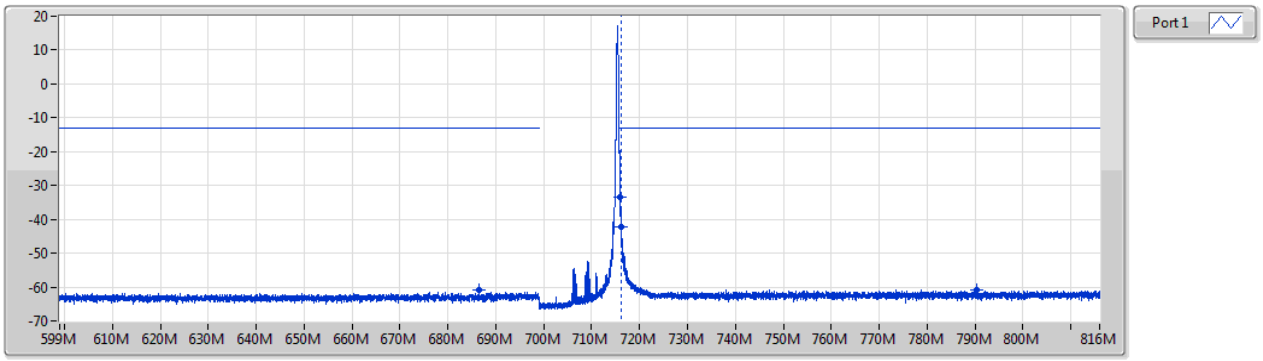
711MHz_64QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	698.78M	-43.18	-13.00	-30.18	1	-
716M	716.1M	100k	300k	RMS	716M	-33.67	-13.00	-20.67	1	-
716.1M	736M	100k	300k	RMS	716.15M	-36.99	-13.00	-23.99	1	MBW 100k
736M	816M	100k	300k	RMS	763.84M	-60.71	-13.00	-47.71	1	-

Band 12_LTE_10MHz_Nss1,64QAM_1TX **CSE-TX-Port**

711MHz_64QAM_RB 1,#RB 49



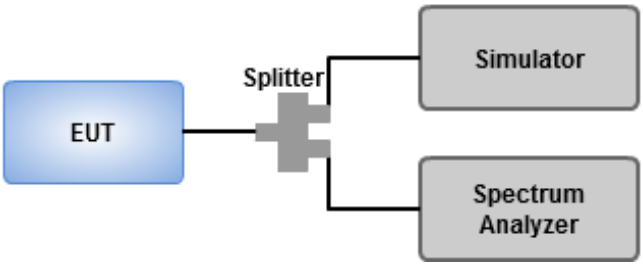
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark
599M	699M	100k	300k	RMS	686.58M	-60.98	-13.00	-47.98	1	-
716M	716.1M	100k	300k	RMS	716M	-33.30	-13.00	-20.30	1	-
716.1M	736M	100k	300k	RMS	716.15M	-42.24	-13.00	-29.24	1	MBW 100k
736M	816M	100k	300k	RMS	790.34M	-60.88	-13.00	-47.88	1	-

3.4 Occupied Bandwidth and 26dB Bandwidth

3.4.1 Test Procedures

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

3.4.2 Test Setup



3.4.3 Test Result of Occupied Bandwidth

Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 12	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	1.204M	1.079M	1M08G7D	1.194M	1.079M
LTE_1.4MHz_Nss1,16QAM_1TX	1.202M	1.079M	1M08W7D	1.202M	1.078M
LTE_1.4MHz_Nss1,64QAM_1TX	1.208M	1.078M	1M08W7D	1.195M	1.077M
LTE_3MHz_Nss1,QPSK_1TX	2.925M	2.675M	2M68G7D	2.899M	2.672M
LTE_3MHz_Nss1,16QAM_1TX	2.925M	2.679M	2M68W7D	2.921M	2.677M
LTE_3MHz_Nss1,64QAM_1TX	2.899M	2.68M	2M68W7D	2.884M	2.675M
LTE_5MHz_Nss1,QPSK_1TX	4.869M	4.461M	4M46G7D	4.838M	4.459M
LTE_5MHz_Nss1,16QAM_1TX	4.856M	4.464M	4M46W7D	4.794M	4.46M
LTE_5MHz_Nss1,64QAM_1TX	4.869M	4.476M	4M48W7D	4.831M	4.465M
LTE_10MHz_Nss1,QPSK_1TX	9.6M	8.926M	8M93G7D	9.563M	8.912M
LTE_10MHz_Nss1,16QAM_1TX	9.55M	8.91M	8M91W7D	9.463M	8.909M
LTE_10MHz_Nss1,64QAM_1TX	9.65M	8.926M	8M93W7D	9.563M	8.92M

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

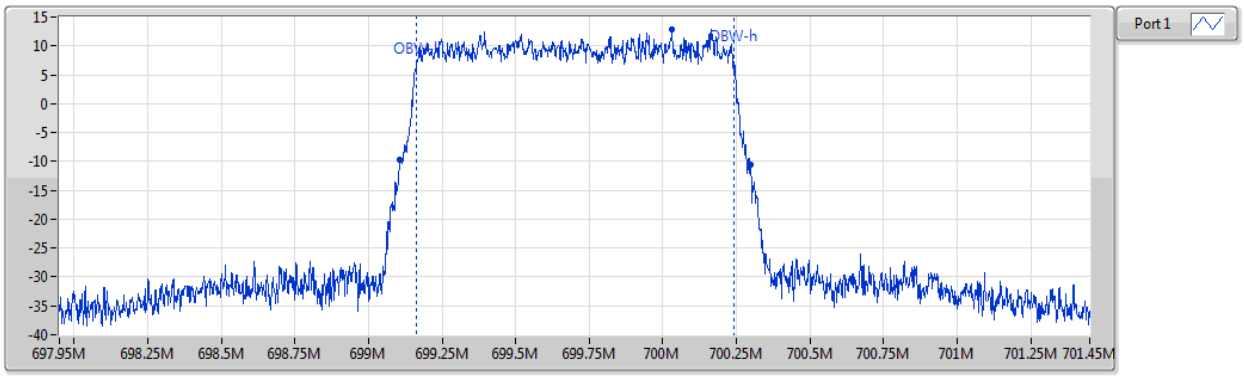
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 12_LTE_1.4MHz_Nss1_1TX	-	-	-	-
699.7MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.194M	1.079M
707.5MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.204M	1.079M
715.3MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.204M	1.079M
699.7MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.202M	1.078M
707.5MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.202M	1.078M
715.3MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.202M	1.079M
699.7MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.195M	1.077M
707.5MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.208M	1.077M
715.3MHz_64QAM_RB 6,#RB 0	Pass	Inf	1.202M	1.078M
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-
700.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.921M	2.673M
707.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.925M	2.675M
714.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.899M	2.672M
700.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.921M	2.677M
707.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.925M	2.679M
714.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.921M	2.677M
700.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.884M	2.675M
707.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.899M	2.677M
714.5MHz_64QAM_RB 15,#RB 0	Pass	Inf	2.895M	2.68M
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-
701.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.863M	4.459M
707.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.869M	4.46M
713.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.838M	4.461M
701.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.856M	4.46M
707.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.794M	4.461M
713.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.831M	4.464M
701.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.831M	4.469M
707.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.869M	4.465M
713.5MHz_64QAM_RB 25,#RB 0	Pass	Inf	4.844M	4.476M
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-
704MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.6M	8.921M
707.5MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.563M	8.912M
711MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.6M	8.926M
704MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.55M	8.91M

Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
707.5MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.463M	8.91M
711MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.538M	8.909M
704MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.65M	8.926M
707.5MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.575M	8.921M
711MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.563M	8.92M

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

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **EBW**

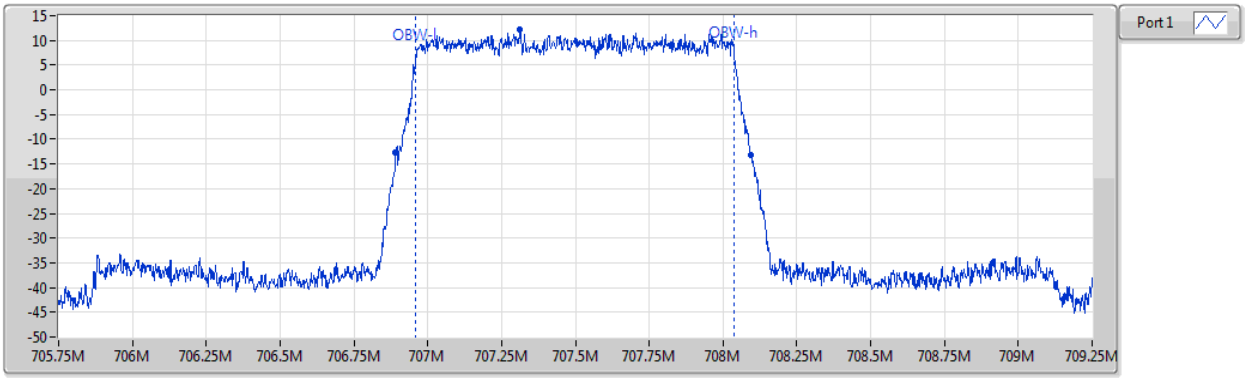
699.7MHz_QPSK_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.194M	699.105M	700.2985M	1.079M	699.161795M	700.241043M	1	699.7M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **EBW**

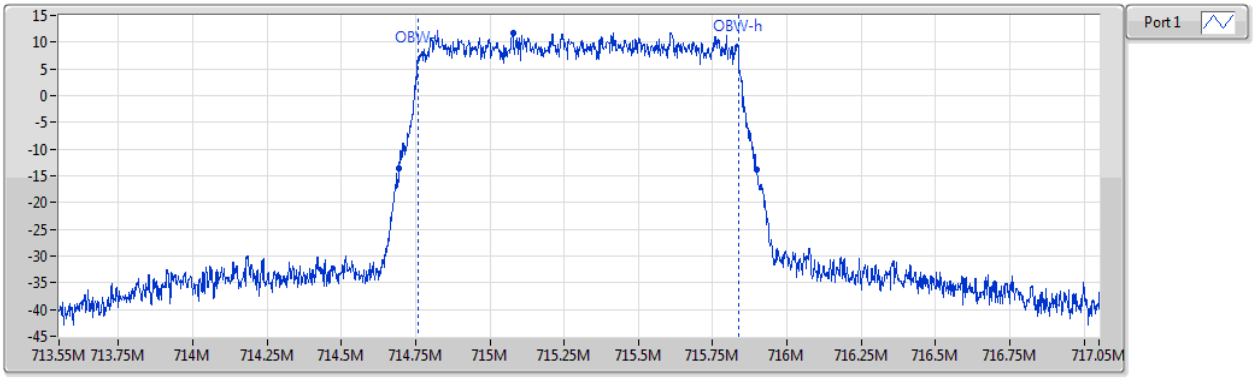
707.5MHz_QPSK_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.204M	706.891M	708.095M	1.079M	706.959564M	708.03861M	1	707.5M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **EBW**

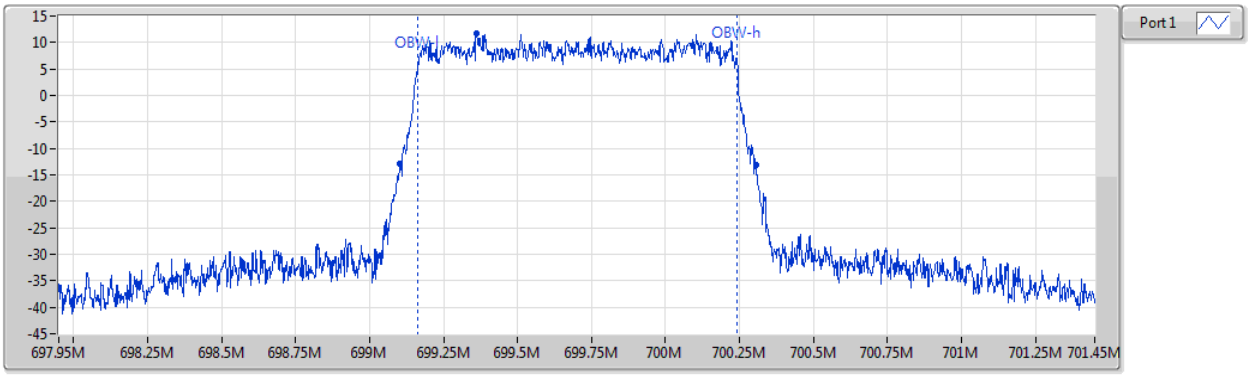
715.3MHz_QPSK_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.204M	714.6945M	715.8985M	1.079M	714.758513M	715.83754M	1	715.3M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **EBW**

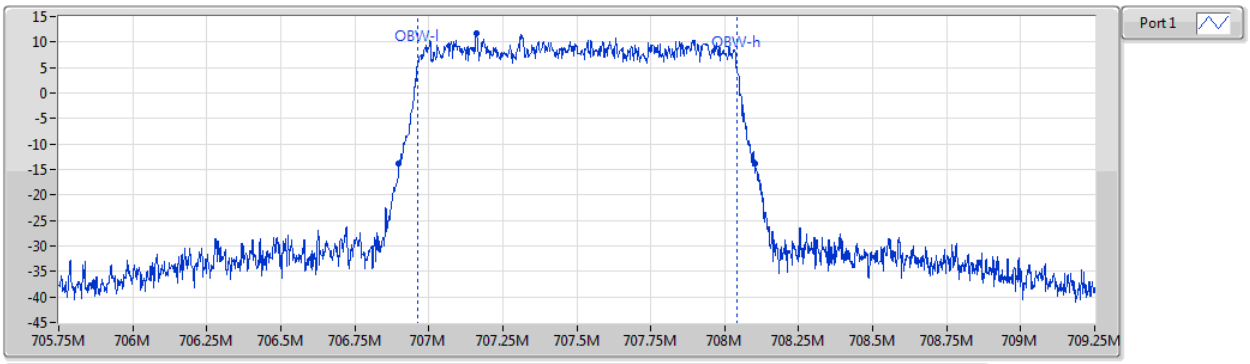
699.7MHz_16QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.202M	699.10325M	700.3055M	1.078M	699.162611M	700.240443M	1	699.7M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **EBW**

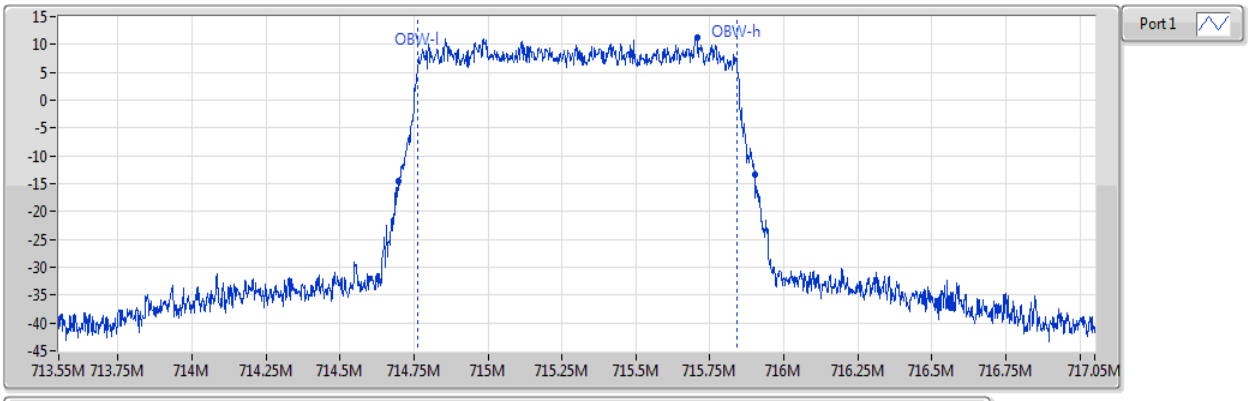
707.5MHz_16QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.202M	706.89975M	708.102M	1.078M	706.962466M	708.04025M	1	707.5M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **EBW**

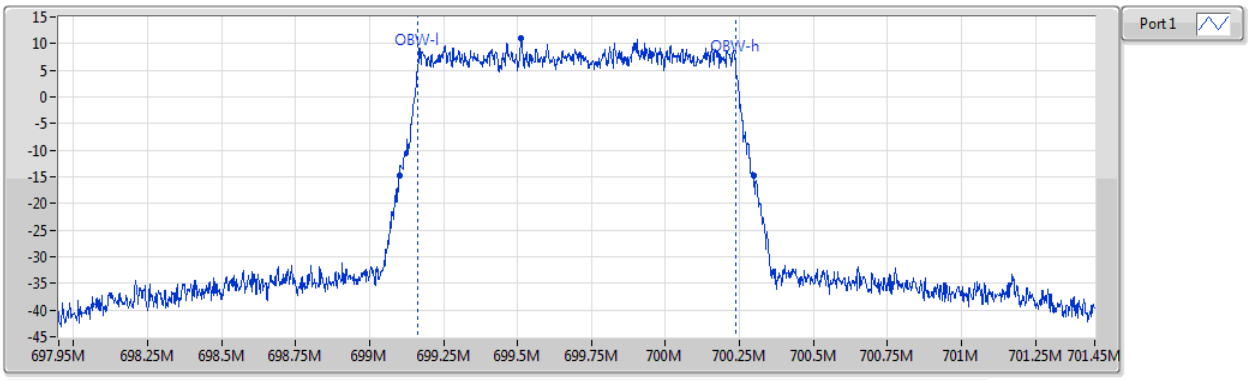
715.3MHz_16QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.202M	714.698M	715.90025M	1.079M	714.762228M	715.841262M	1	715.3M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **EBW**

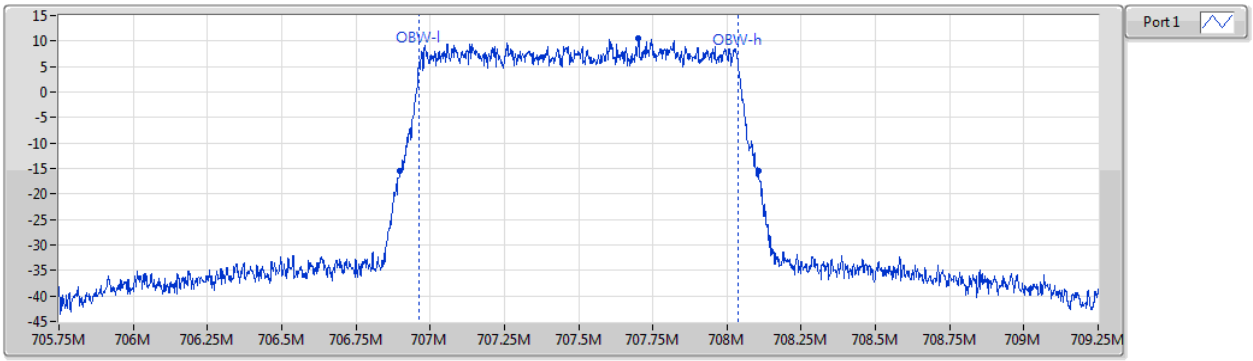
699.7MHz_64QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.195M	699.1015M	700.29675M	1.077M	699.162006M	700.238905M	1	699.7M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **EBW**

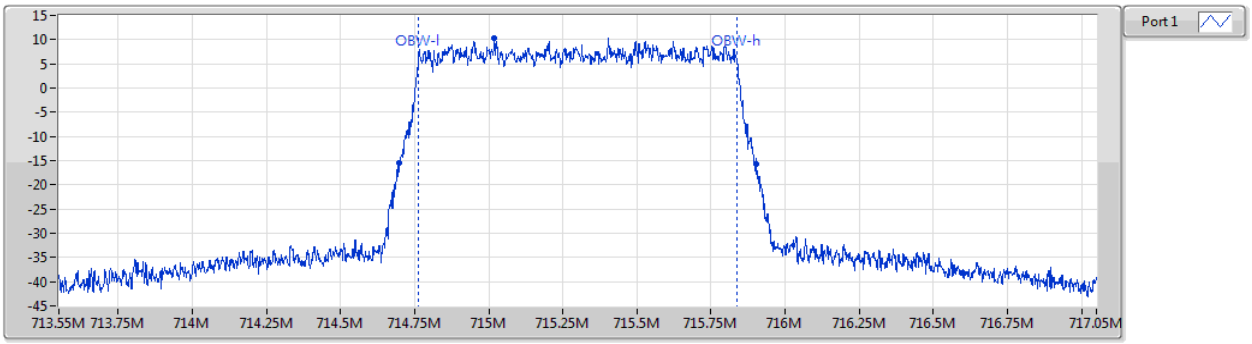
707.5MHz_64QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.208M	706.898M	708.1055M	1.077M	706.962074M	708.038871M	1	707.5M	3.5M	15k	47k

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **EBW**

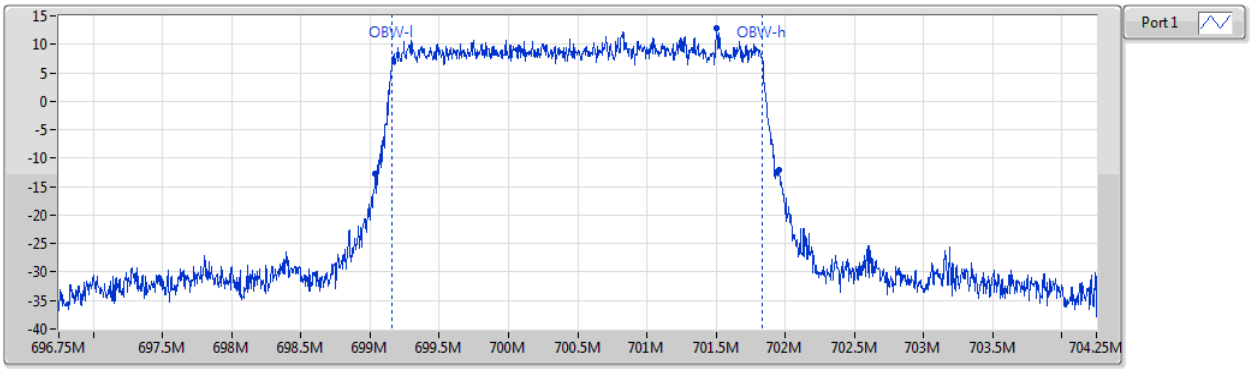
715.3MHz_64QAM_RB 6,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
1.202M	714.69975M	715.902M	1.078M	714.761088M	715.839168M	1	715.3M	3.5M	15k	47k

Band 12_LTE_3MHz_Nss1,QPSK_1TX **EBW**

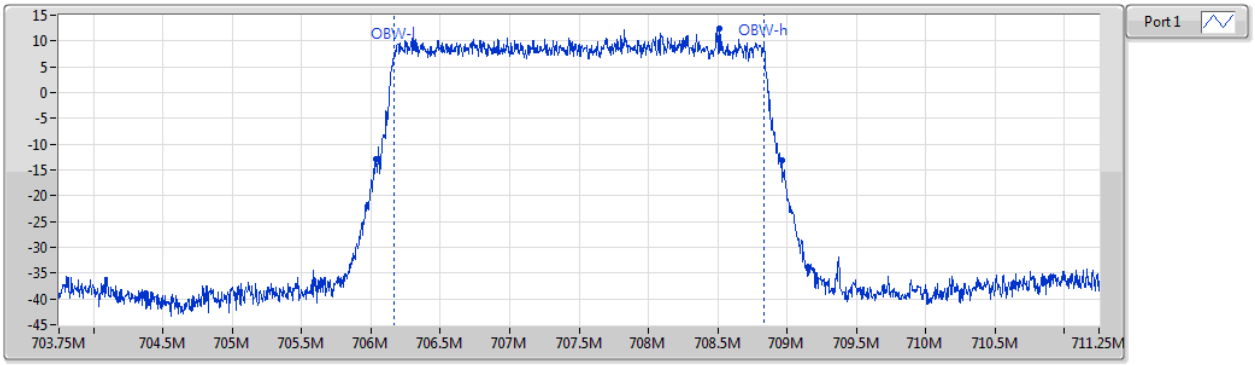
700.5MHz_QPSK_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.921M	699.0375M	701.95875M	2.673M	699.161122M	701.834148M	1	700.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,QPSK_1TX **EBW**

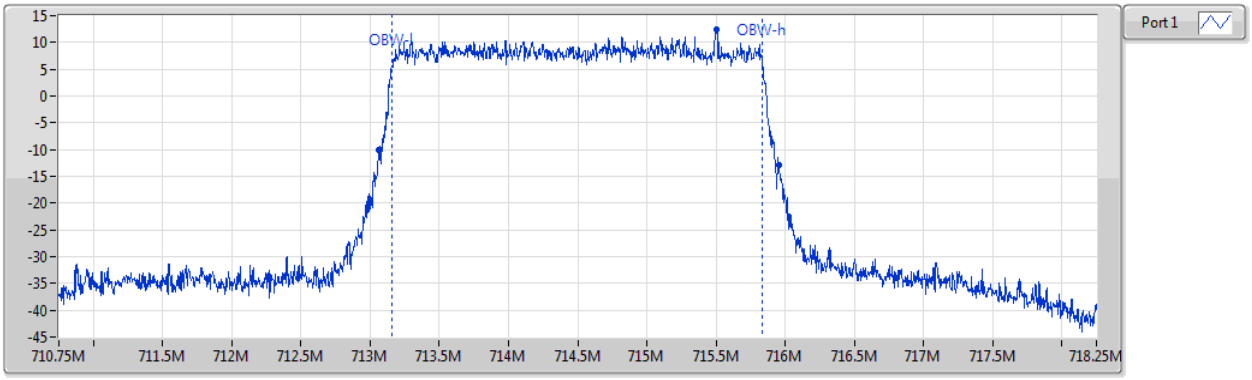
707.5MHz_QPSK_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.925M	706.0375M	708.9625M	2.675M	706.161682M	708.837022M	1	707.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,QPSK_1TX **EBW**

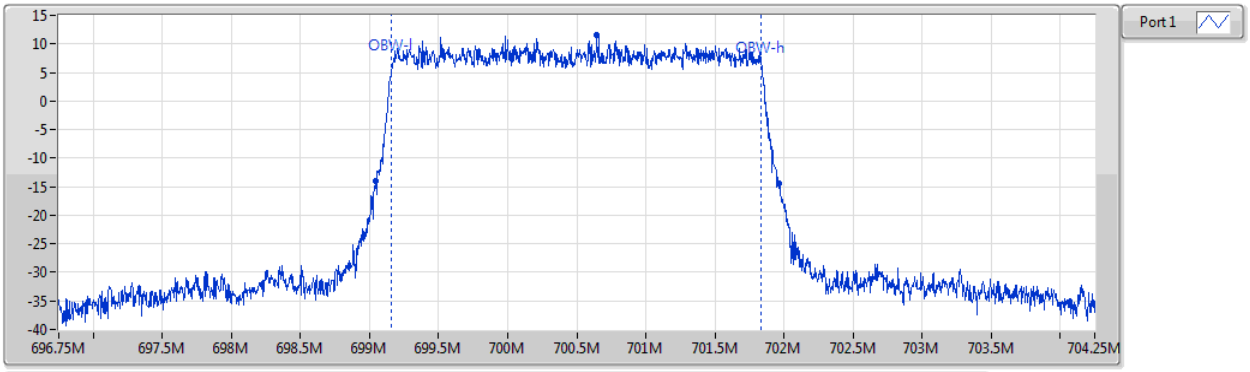
714.5MHz_QPSK_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.899M	713.06M	715.95875M	2.672M	713.160904M	715.832791M	1	714.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,16QAM_1TX **EBW**

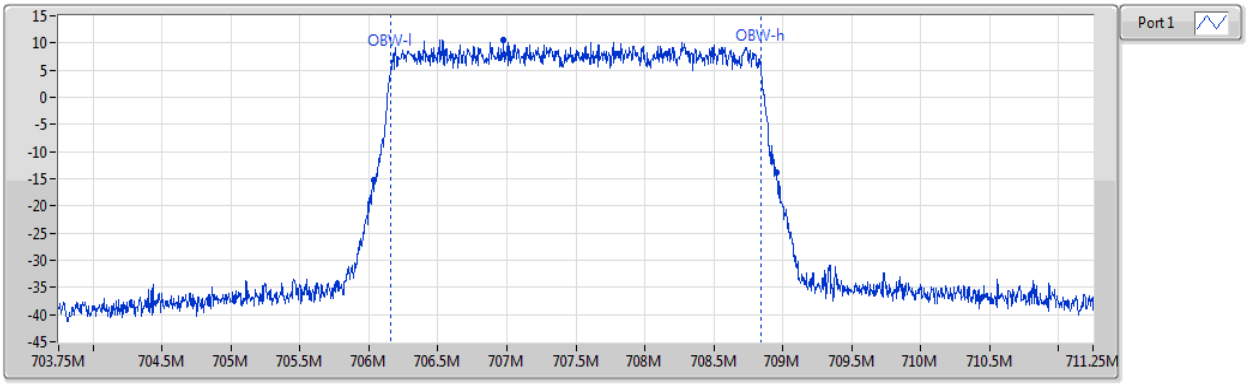
700.5MHz_16QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.921M	699.045M	701.96625M	2.677M	699.161177M	701.838323M	1	700.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,16QAM_1TX **EBW**

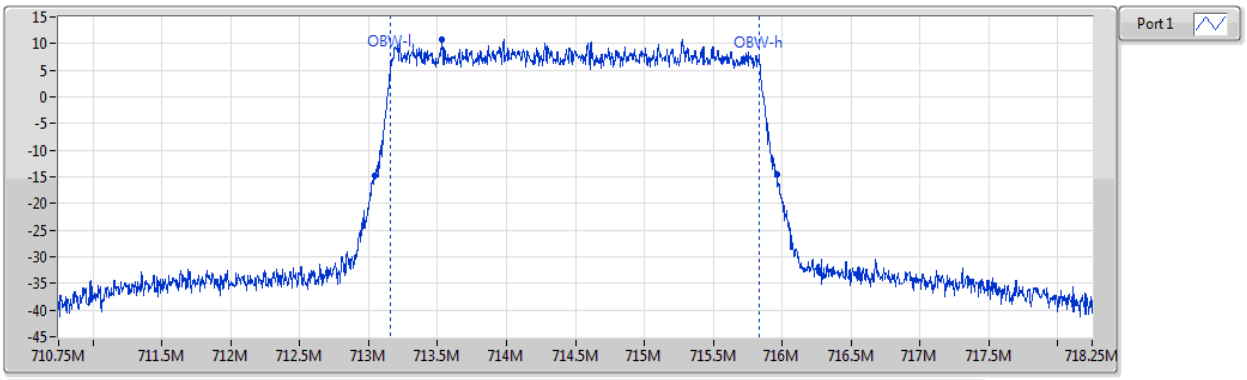
707.5MHz_16QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.925M	706.03375M	708.95875M	2.679M	706.160685M	708.839263M	1	707.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,16QAM_1TX **EBW**

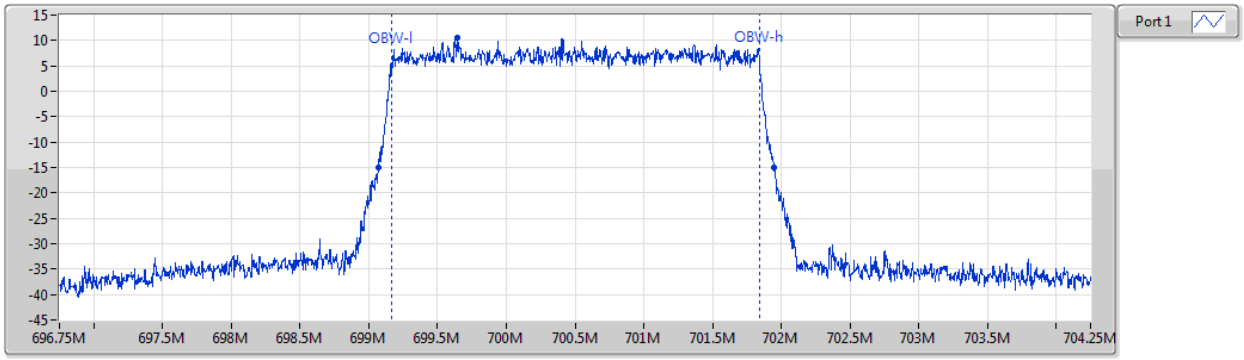
714.5MHz_16QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.921M	713.04125M	715.9625M	2.677M	713.161396M	715.838273M	1	714.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,64QAM_1TX **EBW**

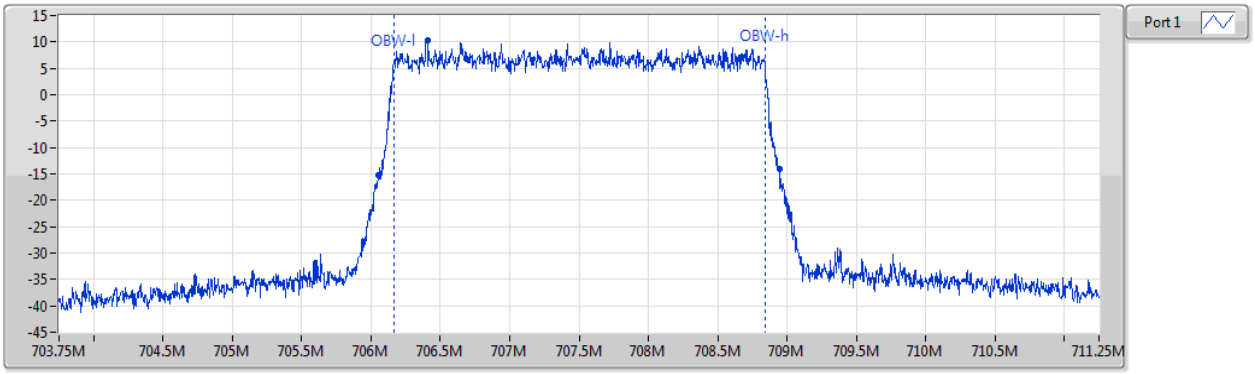
700.5MHz_64QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.884M	699.0675M	701.95125M	2.675M	699.164578M	701.839153M	1	700.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,64QAM_1TX **EBW**

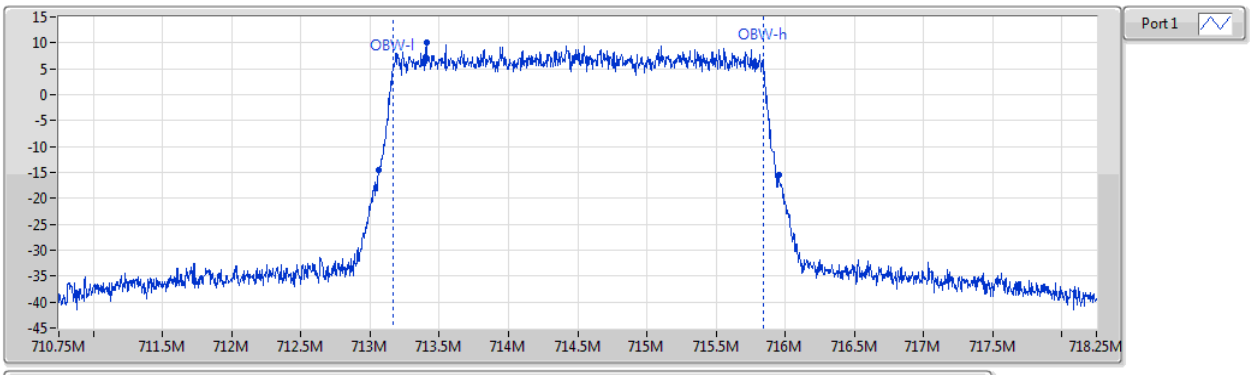
707.5MHz_64QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.899M	706.04875M	708.9475M	2.677M	706.162398M	708.838945M	1	707.5M	7.5M	30k	100k

Band 12_LTE_3MHz_Nss1,64QAM_1TX **EBW**

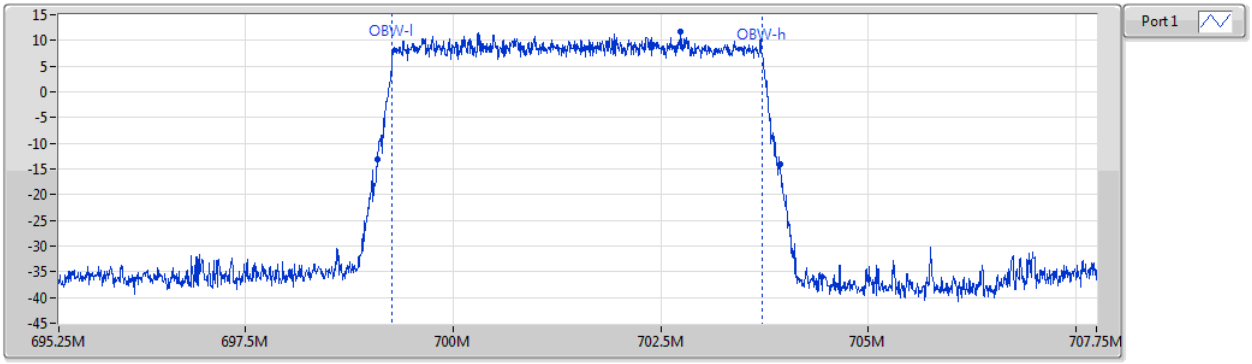
714.5MHz_64QAM_RB 15,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.895M	713.06M	715.955M	2.68M	713.163641M	715.843689M	1	714.5M	7.5M	30k	100k

Band 12_LTE_5MHz_Nss1,QPSK_1TX **EBW**

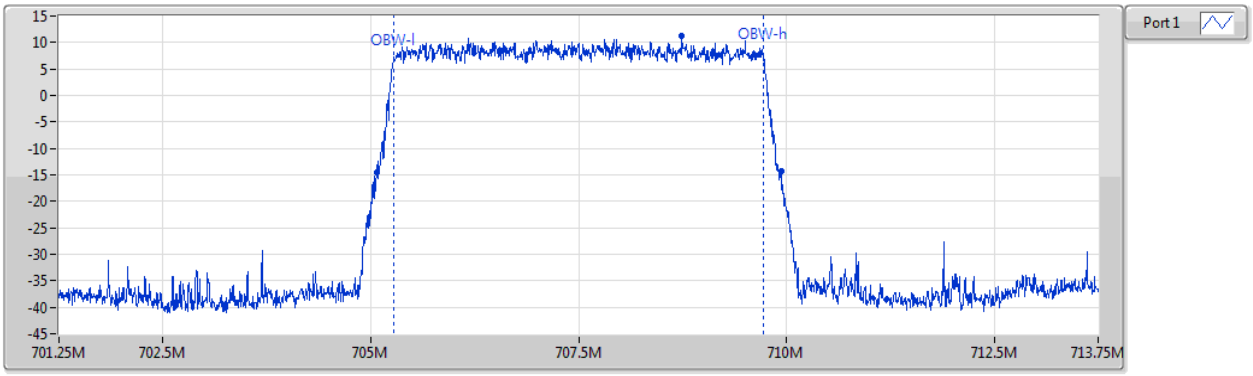
701.5MHz_QPSK_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.863M	699.08125M	703.94375M	4.459M	699.269001M	703.728177M	1	701.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,QPSK_1TX **EBW**

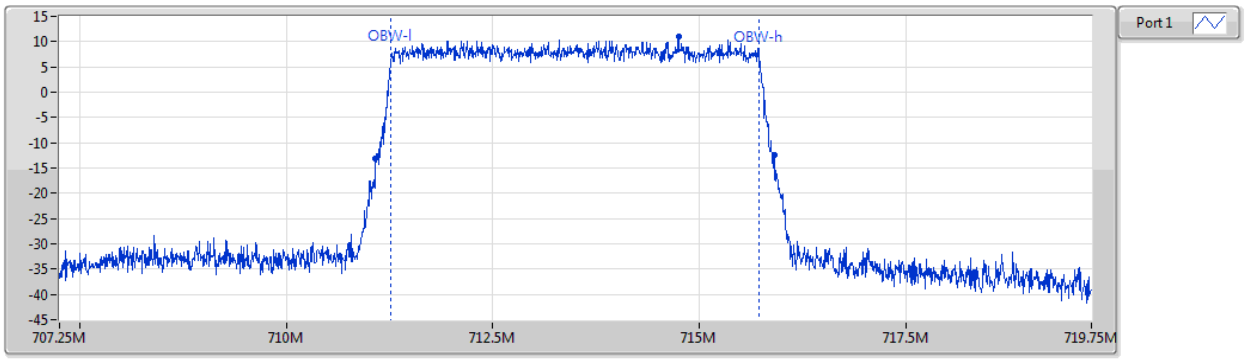
707.5MHz_QPSK_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.869M	705.06875M	709.9375M	4.46M	705.269974M	709.730006M	1	707.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,QPSK_1TX **EBW**

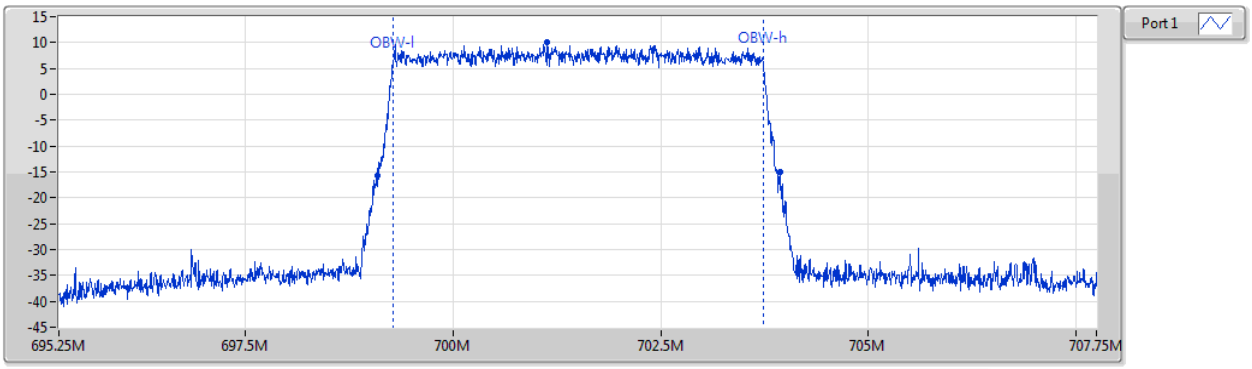
713.5MHz_QPSK_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.838M	711.075M	715.9125M	4.461M	711.268872M	715.729853M	1	713.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,16QAM_1TX **EBW**

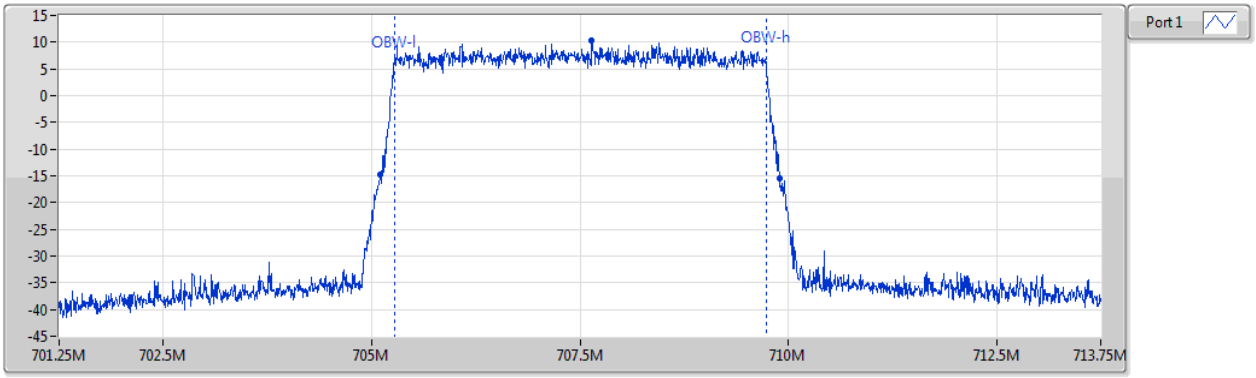
701.5MHz_16QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.856M	699.08125M	703.9375M	4.46M	699.273667M	703.733807M	1	701.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,16QAM_1TX **EBW**

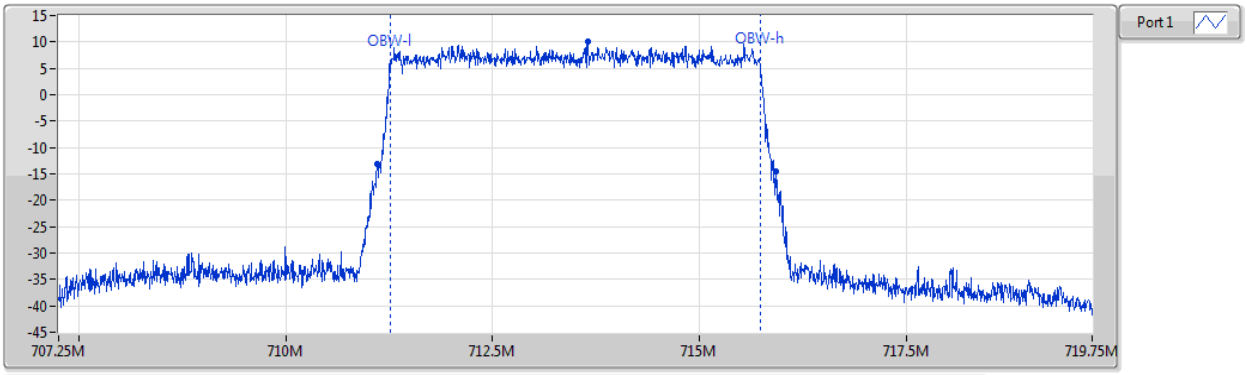
707.5MHz_16QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.794M	705.10625M	709.9M	4.461M	705.271395M	709.731903M	1	707.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,16QAM_1TX **EBW**

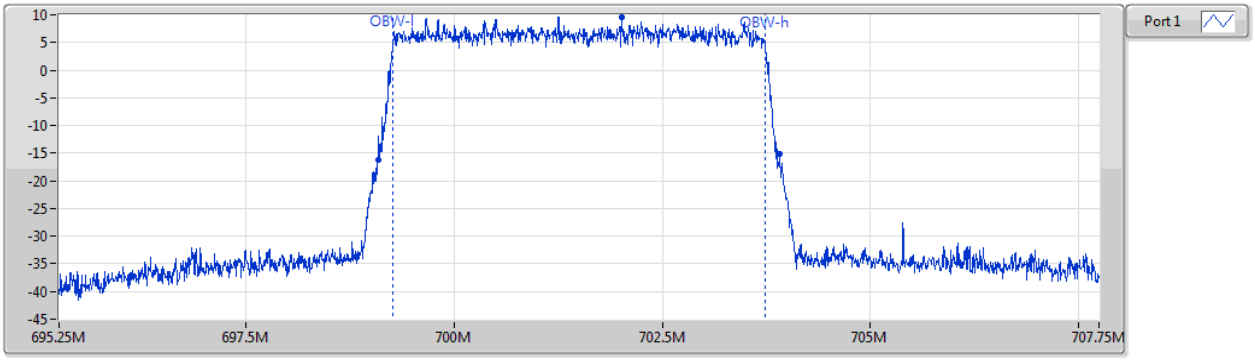
713.5MHz_16QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.831M	711.1M	715.93125M	4.464M	711.266585M	715.730663M	1	713.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,64QAM_1TX **EBW**

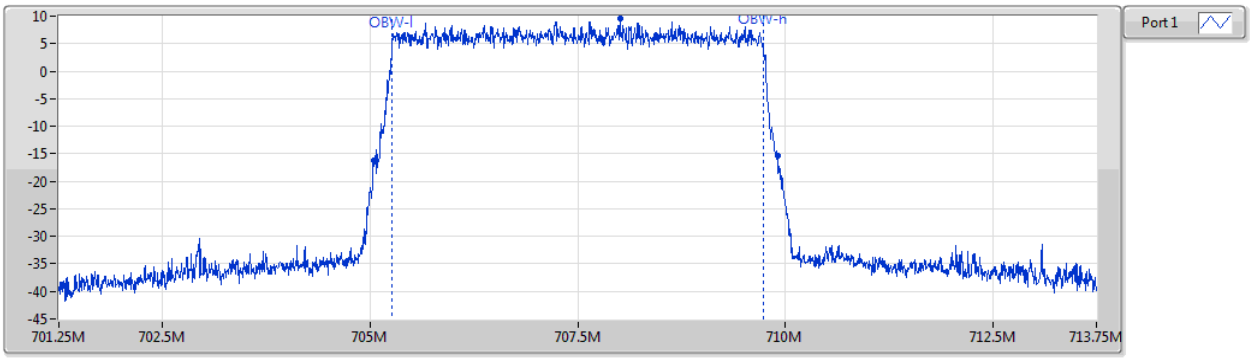
701.5MHz_64QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.831M	699.08125M	703.9125M	4.469M	699.266312M	703.735735M	1	701.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,64QAM_1TX **EBW**

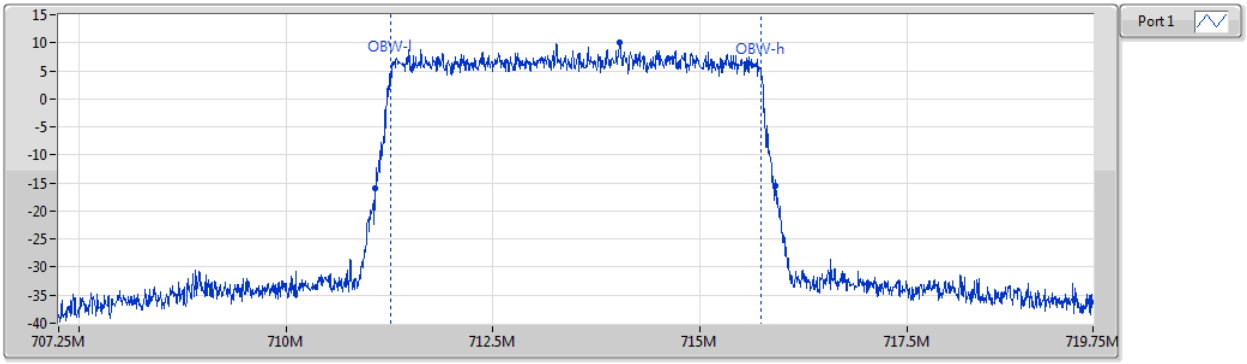
707.5MHz_64QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.869M	705.04375M	709.9125M	4.465M	705.26767M	709.732204M	1	707.5M	12.5M	51k	160k

Band 12_LTE_5MHz_Nss1,64QAM_1TX **EBW**

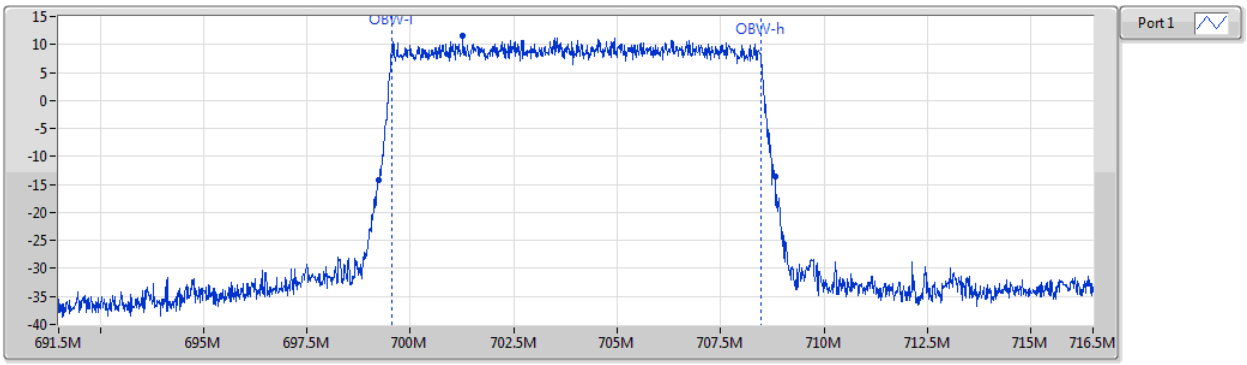
713.5MHz_64QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.844M	711.075M	715.91875M	4.476M	711.259987M	715.735597M	1	713.5M	12.5M	51k	160k

Band 12_LTE_10MHz_Nss1,QPSK_1TX **EBW**

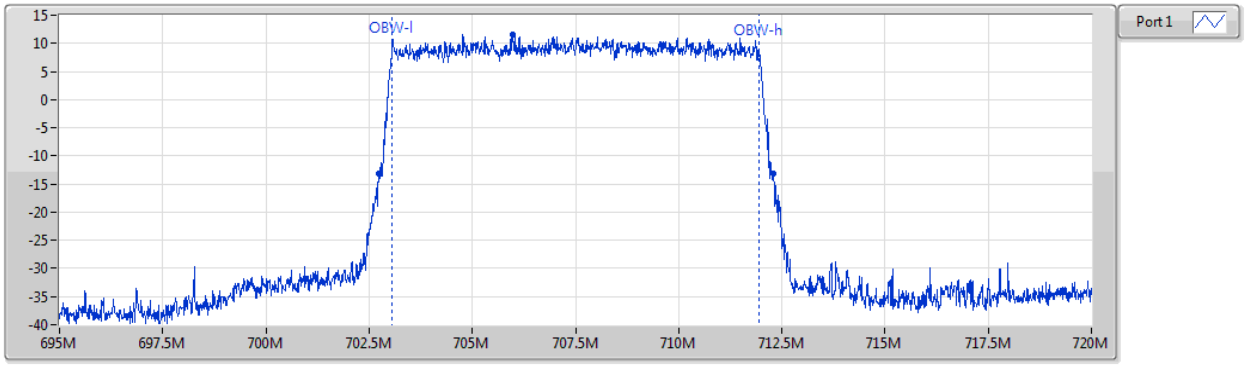
704MHz_QPSK_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.6M	699.225M	708.825M	8.921M	699.546745M	708.467589M	1	704M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,QPSK_1TX **EBW**

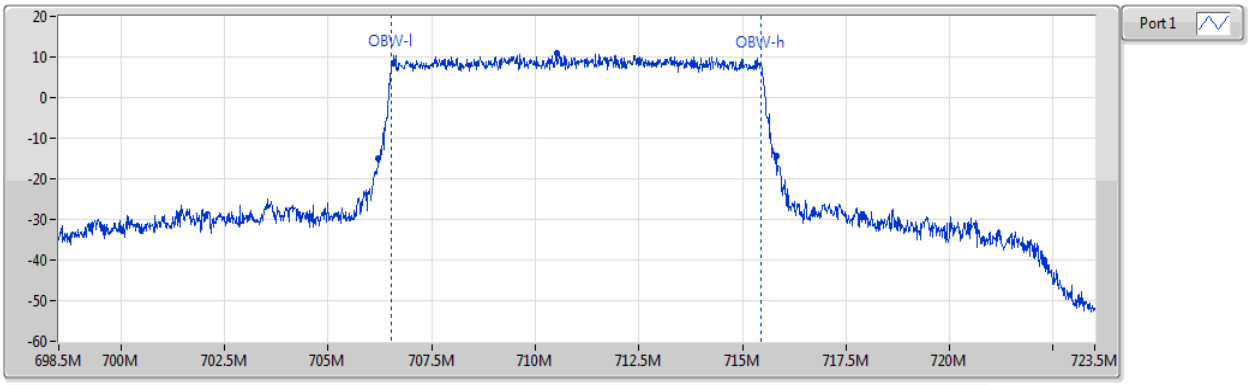
707.5MHz_QPSK_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.563M	702.7375M	712.3M	8.912M	703.048035M	711.960137M	1	707.5M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,QPSK_1TX **EBW**

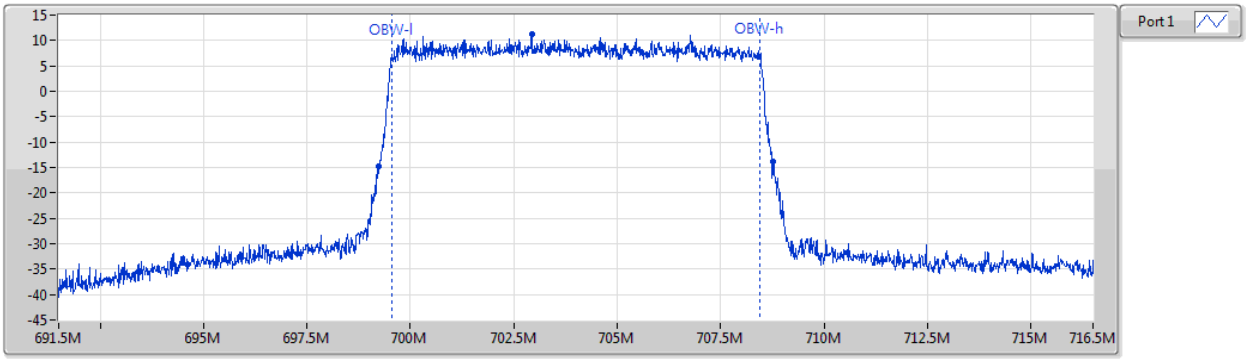
711MHz_QPSK_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.6M	706.2125M	715.8125M	8.926M	706.534924M	715.461084M	1	711M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,16QAM_1TX **EBW**

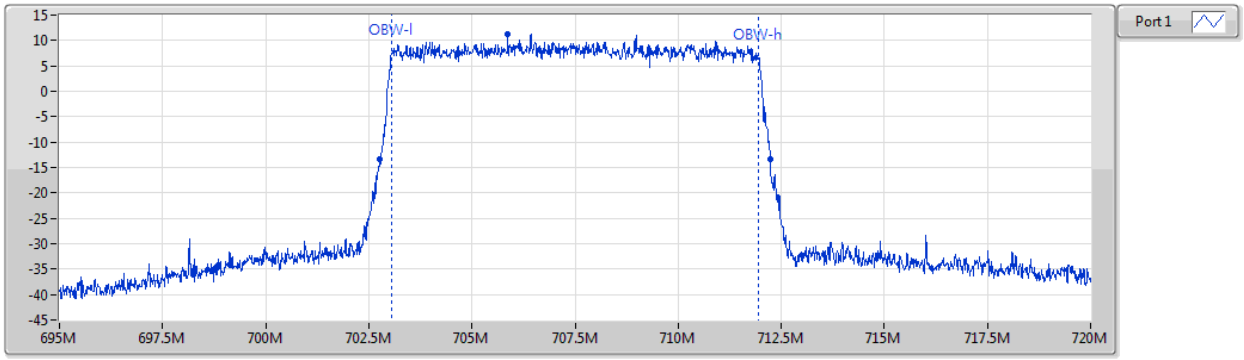
704MHz_16QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.55M	699.225M	708.775M	8.91M	699.549082M	708.458634M	1	704M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,16QAM_1TX **EBW**

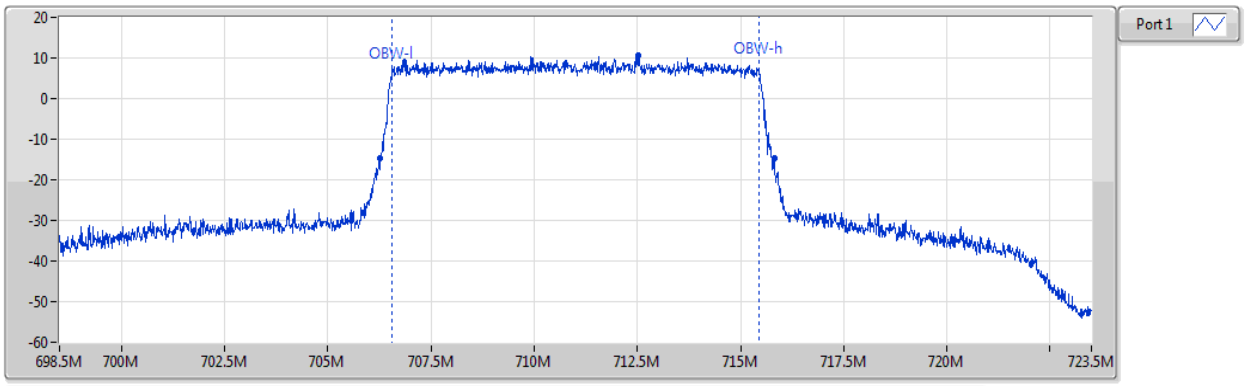
707.5MHz_16QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.463M	702.7625M	712.225M	8.91M	703.045921M	711.955585M	1	707.5M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,16QAM_1TX **EBW**

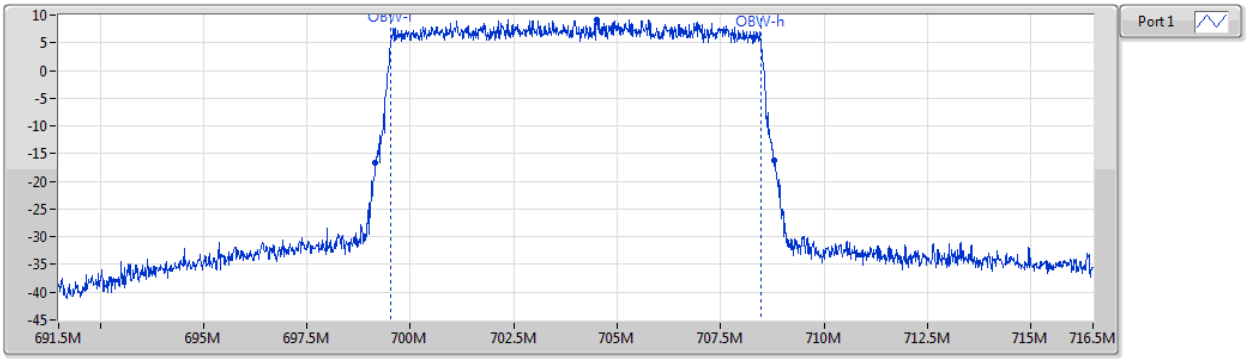
711MHz_16QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.538M	706.275M	715.8125M	8.909M	706.548978M	715.457625M	1	711M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,64QAM_1TX **EBW**

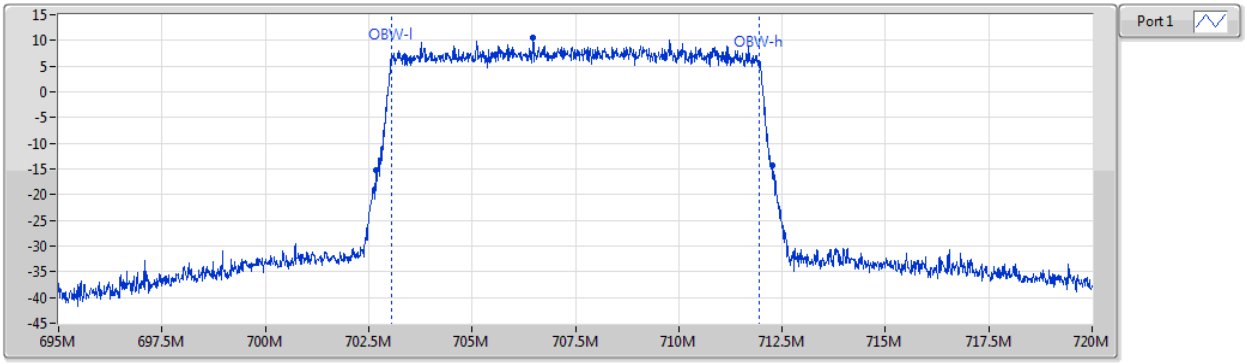
704MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.65M	699.15M	708.8M	8.926M	699.537568M	708.463192M	1	704M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,64QAM_1TX **EBW**

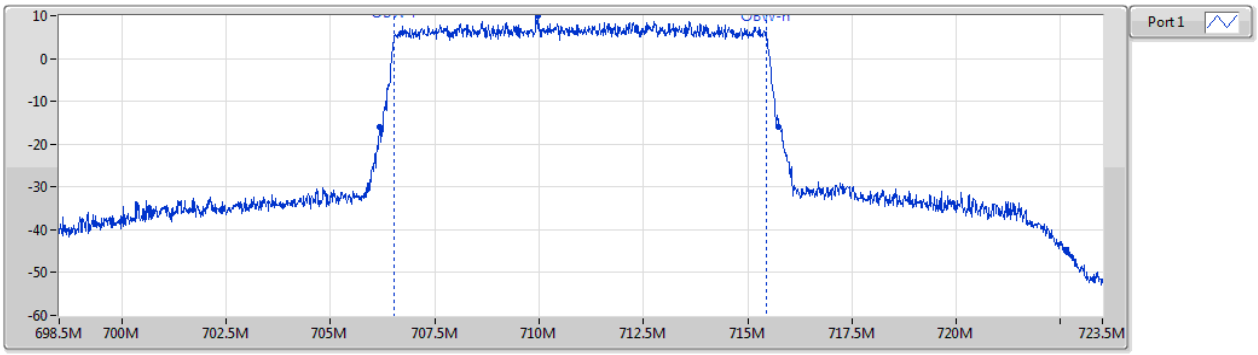
707.5MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.575M	702.6875M	712.2625M	8.921M	703.039839M	711.960363M	1	707.5M	25M	100k	300k

Band 12_LTE_10MHz_Nss1,64QAM_1TX **EBW**

711MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.563M	706.1875M	715.75M	8.92M	706.533057M	715.452879M	1	711M	25M	100k	300k

3.5 Peak to Average Ratio

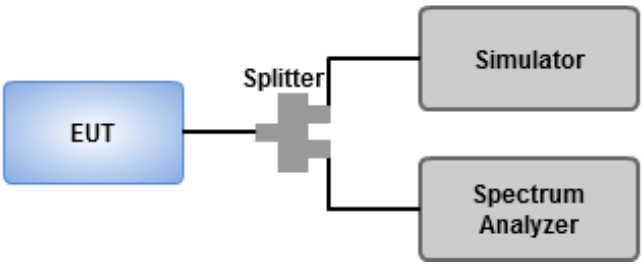
3.5.1 Limit of Peak to Average Ratio

The Peakto-average ratio (PAR) of the transmiss ion may not exceed 13 dB.

3.5.2 Test Procedures

1. Set the number of counts to a value that stabilizes the measured CCDF curve.
2. Set the measurement interval to 1 ms.
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

Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 12	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.56	1
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	715.3	13.00	5.91	1
LTE_1.4MHz_Nss1,64QAM_1TX	Pass	707.5	13.00	6.67	1
LTE_3MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.29	1
LTE_3MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.09	1
LTE_3MHz_Nss1,64QAM_1TX	Pass	700.5	13.00	6.51	1
LTE_5MHz_Nss1,QPSK_1TX	Pass	701.5	13.00	5.33	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.00	1
LTE_5MHz_Nss1,64QAM_1TX	Pass	707.5	13.00	6.51	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	704	13.00	5.34	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	5.98	1
LTE_10MHz_Nss1,64QAM_1TX	Pass	704	13.00	6.47	1

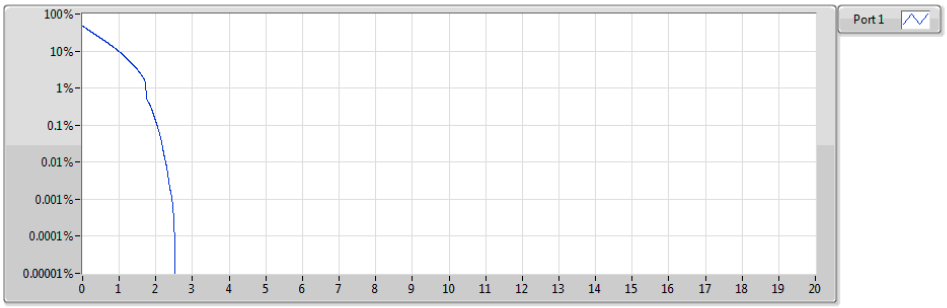
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 12_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-
699.7MHz_QPSK_RB 6,#RB 0	Pass	699.7	13.00	5.08	1
707.5MHz_QPSK_RB 6,#RB 0	Pass	707.5	13.00	5.56	1
715.3MHz_QPSK_RB 6,#RB 0	Pass	715.3	13.00	5.06	1
699.7MHz_16QAM_RB 6,#RB 0	Pass	699.7	13.00	5.34	1
707.5MHz_16QAM_RB 6,#RB 0	Pass	707.5	13.00	5.68	1
715.3MHz_16QAM_RB 6,#RB 0	Pass	715.3	13.00	5.91	1
699.7MHz_64QAM_RB 6,#RB 0	Pass	699.7	13.00	6.63	1
707.5MHz_64QAM_RB 6,#RB 0	Pass	707.5	13.00	6.67	1
715.3MHz_64QAM_RB 6,#RB 0	Pass	715.3	13.00	6.54	1
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-	-
700.5MHz_QPSK_RB 15,#RB 0	Pass	700.5	13.00	4.29	1
707.5MHz_QPSK_RB 15,#RB 0	Pass	707.5	13.00	5.29	1
714.5MHz_QPSK_RB 15,#RB 0	Pass	714.5	13.00	5.02	1
700.5MHz_16QAM_RB 15,#RB 0	Pass	700.5	13.00	5.28	1
707.5MHz_16QAM_RB 15,#RB 0	Pass	707.5	13.00	6.09	1
714.5MHz_16QAM_RB 15,#RB 0	Pass	714.5	13.00	5.90	1
700.5MHz_64QAM_RB 15,#RB 0	Pass	700.5	13.00	6.51	1
707.5MHz_64QAM_RB 15,#RB 0	Pass	707.5	13.00	6.51	1
714.5MHz_64QAM_RB 15,#RB 0	Pass	714.5	13.00	6.47	1
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-	-
701.5MHz_QPSK_RB 25,#RB 0	Pass	701.5	13.00	5.33	1
707.5MHz_QPSK_RB 25,#RB 0	Pass	707.5	13.00	5.33	1
713.5MHz_QPSK_RB 25,#RB 0	Pass	713.5	13.00	4.92	1
701.5MHz_16QAM_RB 25,#RB 0	Pass	701.5	13.00	5.98	1
707.5MHz_16QAM_RB 25,#RB 0	Pass	707.5	13.00	6.00	1
713.5MHz_16QAM_RB 25,#RB 0	Pass	713.5	13.00	5.81	1
701.5MHz_64QAM_RB 25,#RB 0	Pass	701.5	13.00	6.50	1
707.5MHz_64QAM_RB 25,#RB 0	Pass	707.5	13.00	6.51	1
713.5MHz_64QAM_RB 25,#RB 0	Pass	713.5	13.00	6.39	1
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-	-
704MHz_QPSK_RB 50,#RB 0	Pass	704	13.00	5.34	1
707.5MHz_QPSK_RB 50,#RB 0	Pass	707.5	13.00	5.33	1
711MHz_QPSK_RB 50,#RB 0	Pass	711	13.00	4.73	1
704MHz_16QAM_RB 50,#RB 0	Pass	704	13.00	5.97	1

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
707.5MHz_16QAM_RB 50,#RB 0	Pass	707.5	13.00	5.98	1
711MHz_16QAM_RB 50,#RB 0	Pass	711	13.00	5.64	1
704MHz_64QAM_RB 50,#RB 0	Pass	704	13.00	6.47	1
707.5MHz_64QAM_RB 50,#RB 0	Pass	707.5	13.00	6.44	1
711MHz_64QAM_RB 50,#RB 0	Pass	711	13.00	6.42	1

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **PAR**

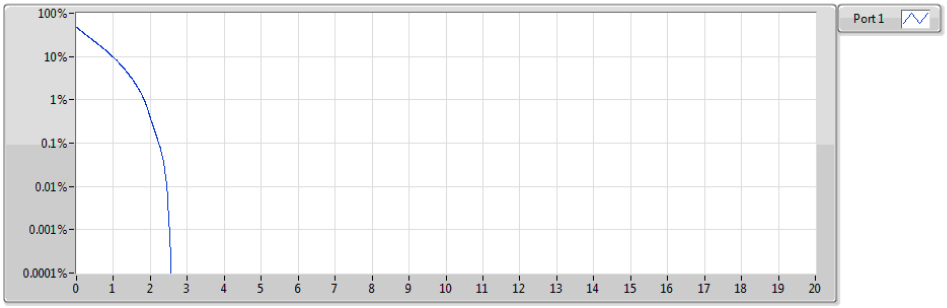
699.7MHz_QPSK_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
699.7	20M	5.08	-7.92	13.00	1

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **PAR**

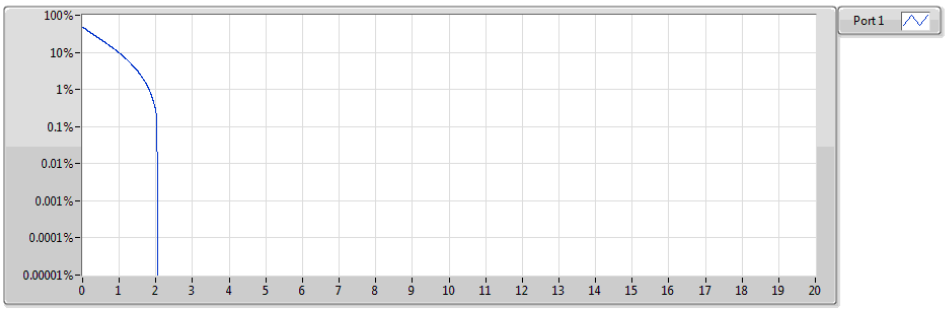
707.5MHz_QPSK_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.56	-7.44	13.00	1

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX **PAR**

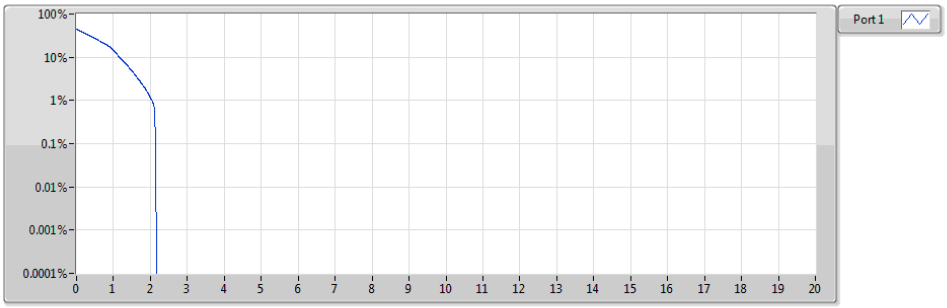
715.3MHz_QPSK_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
715.3	20M	5.06	-7.94	13.00	1

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **PAR**

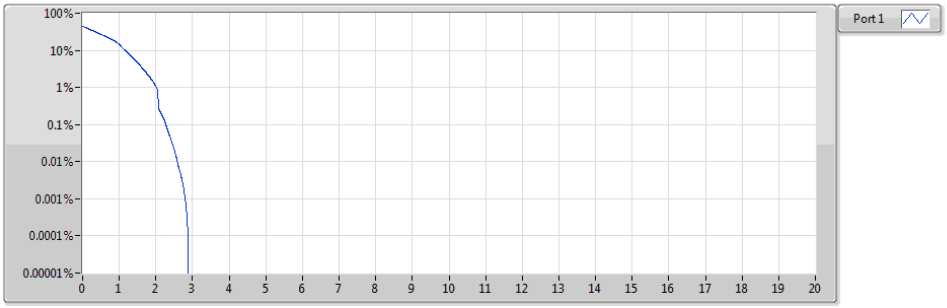
699.7MHz_16QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
699.7	20M	5.34	-7.66	13.00	1

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **PAR**

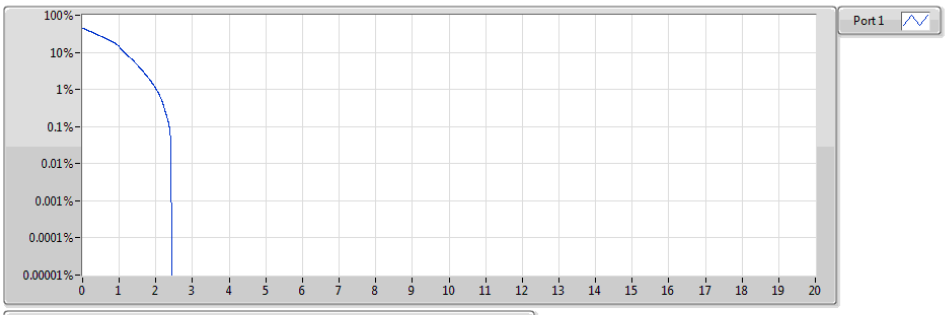
707.5MHz_16QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.68	-7.32	13.00	1

Band 12_LTE_1.4MHz_Nss1,16QAM_1TX **PAR**

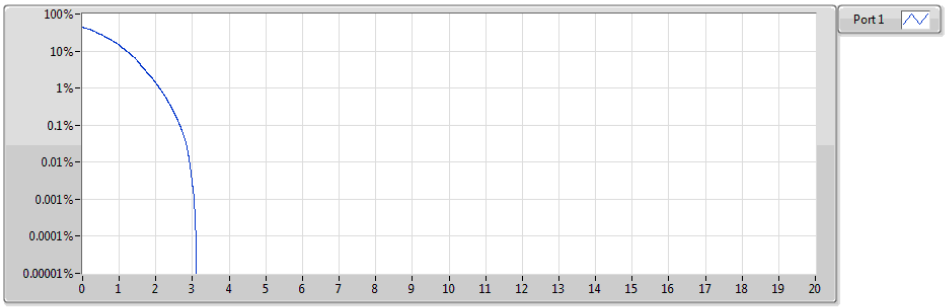
715.3MHz_16QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
715.3	20M	5.91	-7.09	13.00	1

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **PAR**

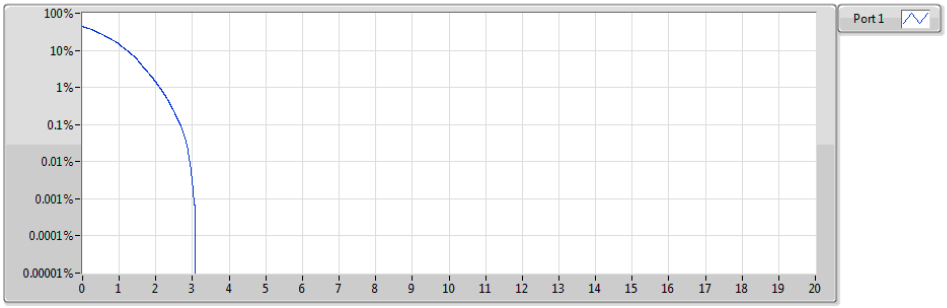
699.7MHz_64QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
699.7	20M	6.63	-6.37	13.00	1

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **PAR**

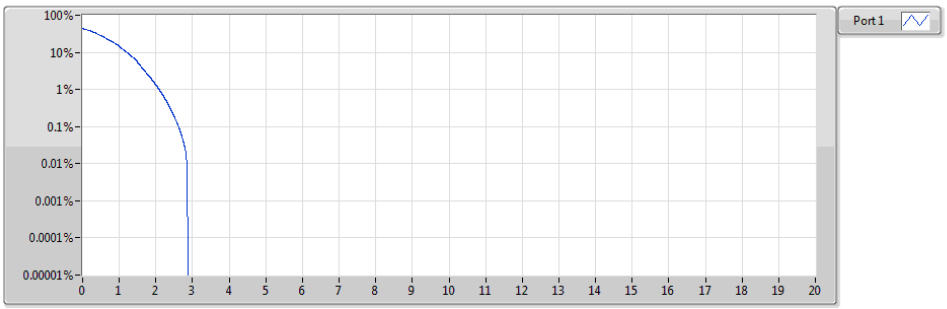
707.5MHz_64QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.67	-6.33	13.00	1

Band 12_LTE_1.4MHz_Nss1,64QAM_1TX **PAR**

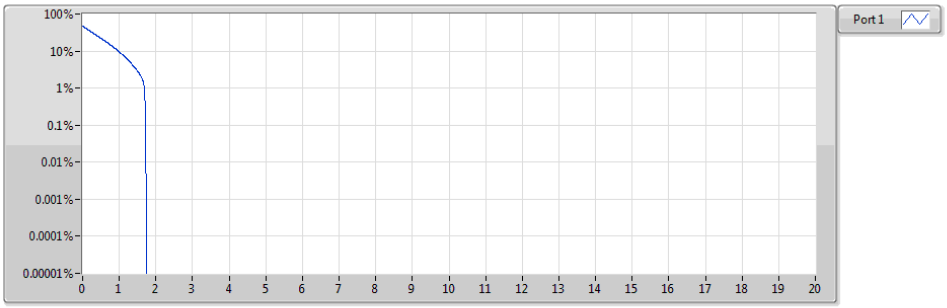
715.3MHz_64QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
715.3	20M	6.54	-6.46	13.00	1

Band 12_LTE_3MHz_Nss1,QPSK_1TX **PAR**

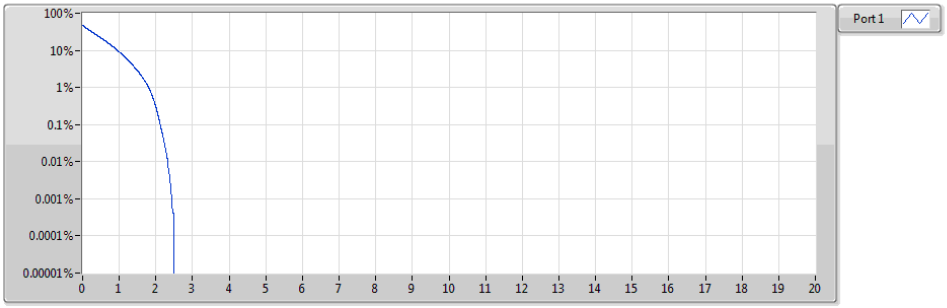
700.5MHz_QPSK_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
700.5	20M	4.29	-8.71	13.00	1

Band 12_LTE_3MHz_Nss1,QPSK_1TX **PAR**

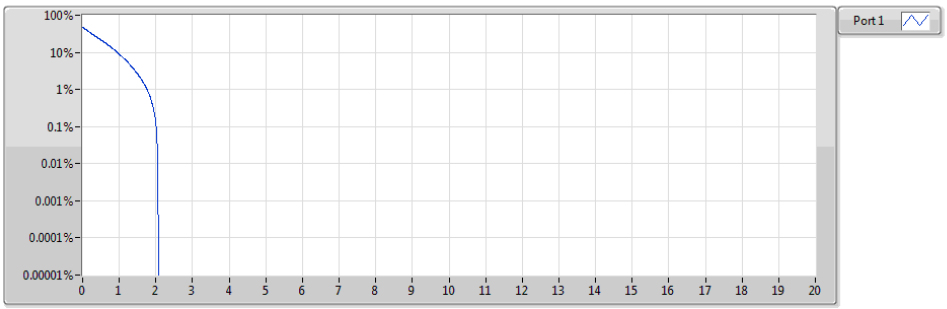
707.5MHz_QPSK_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.29	-7.71	13.00	1

Band 12_LTE_3MHz_Nss1,QPSK_1TX **PAR**

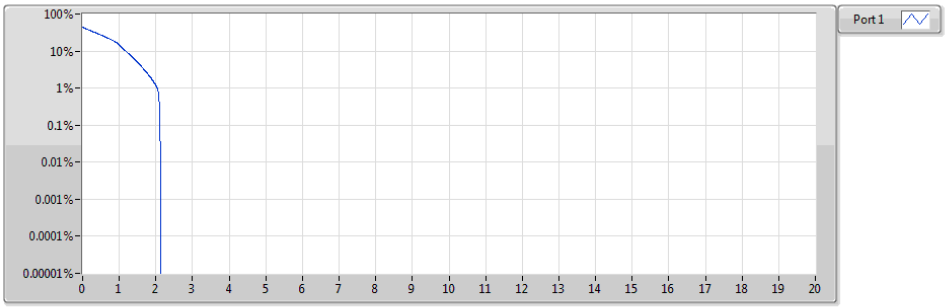
714.5MHz_QPSK_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
714.5	20M	5.02	-7.98	13.00	1

Band 12_LTE_3MHz_Nss1,16QAM_1TX **PAR**

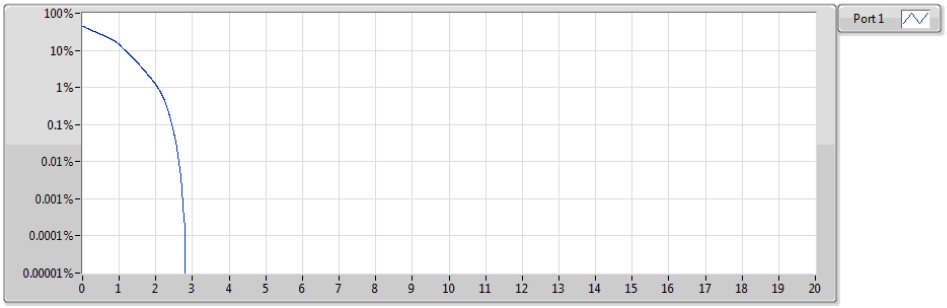
700.5MHz_16QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
700.5	20M	5.28	-7.72	13.00	1

Band 12_LTE_3MHz_Nss1,16QAM_1TX **PAR**

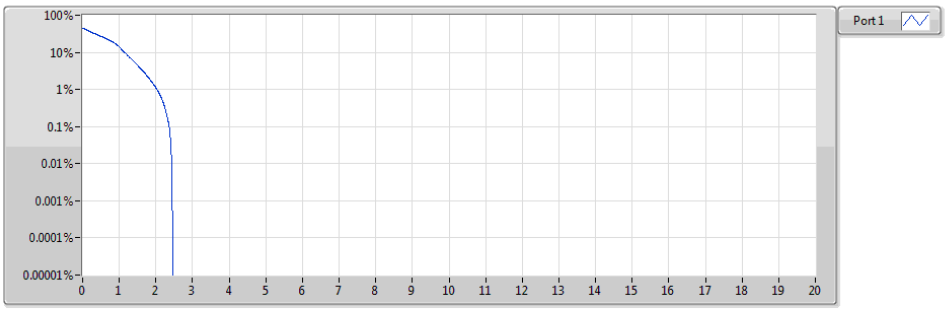
707.5MHz_16QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.09	-6.91	13.00	1

Band 12_LTE_3MHz_Nss1,16QAM_1TX **PAR**

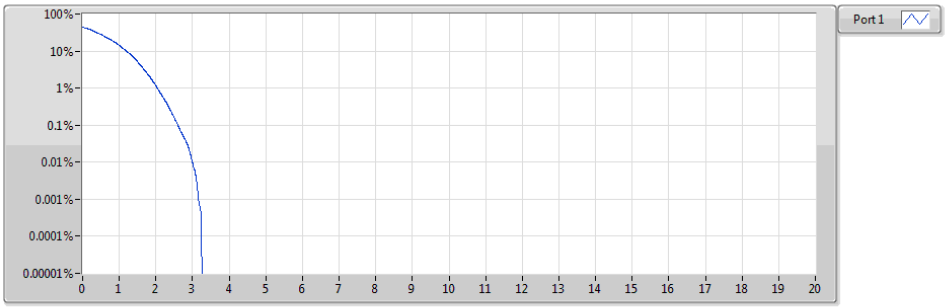
714.5MHz_16QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
714.5	20M	5.90	-7.10	13.00	1

Band 12_LTE_3MHz_Nss1,64QAM_1TX **PAR**

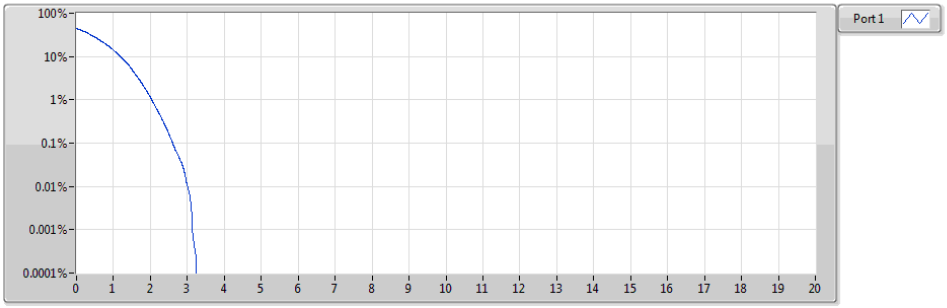
700.5MHz_64QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
700.5	20M	6.51	-6.49	13.00	1

Band 12_LTE_3MHz_Nss1,64QAM_1TX **PAR**

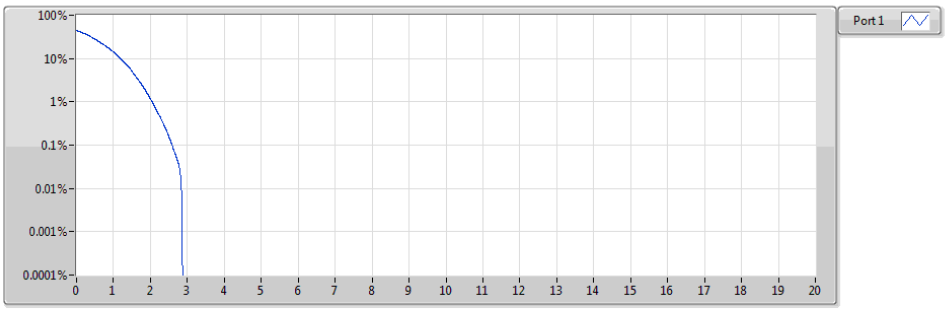
707.5MHz_64QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.51	-6.49	13.00	1

Band 12_LTE_3MHz_Nss1,64QAM_1TX **PAR**

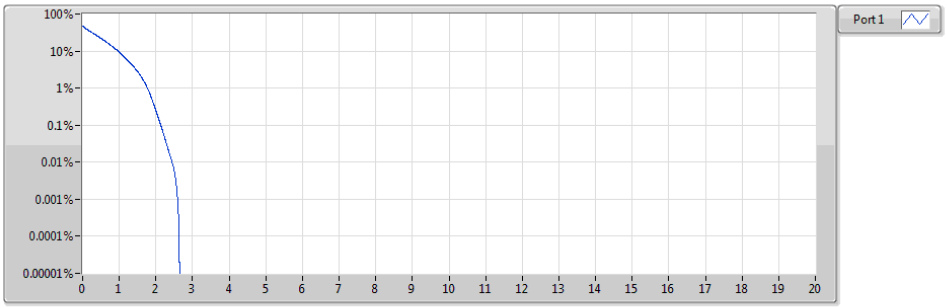
714.5MHz_64QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
714.5	20M	6.47	-6.53	13.00	1

Band 12_LTE_5MHz_Nss1,QPSK_1TX **PAR**

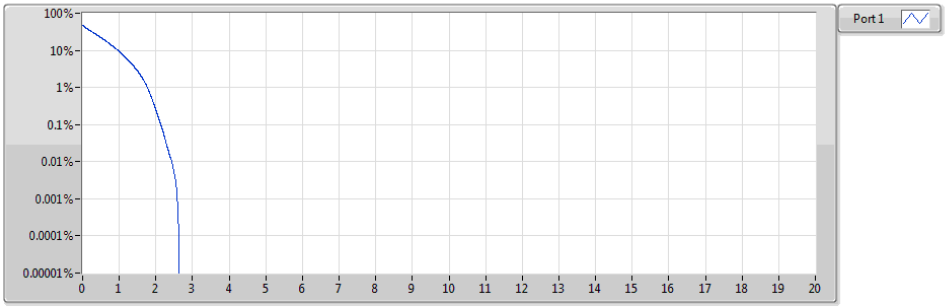
701.5MHz_QPSK_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
701.5	20M	5.33	-7.67	13.00	1

Band 12_LTE_5MHz_Nss1,QPSK_1TX **PAR**

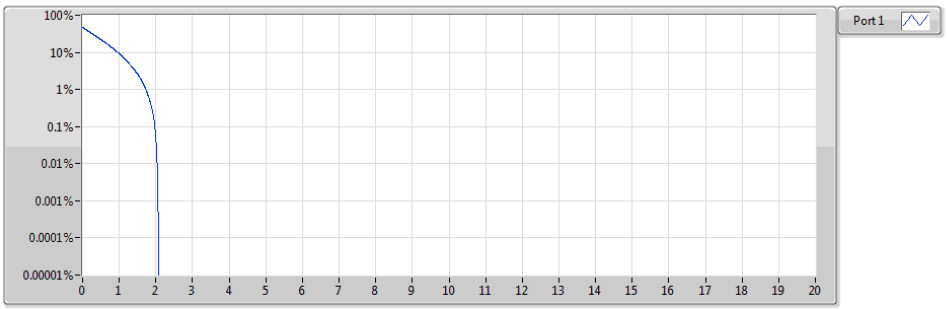
707.5MHz_QPSK_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.33	-7.67	13.00	1

Band 12_LTE_5MHz_Nss1,QPSK_1TX **PAR**

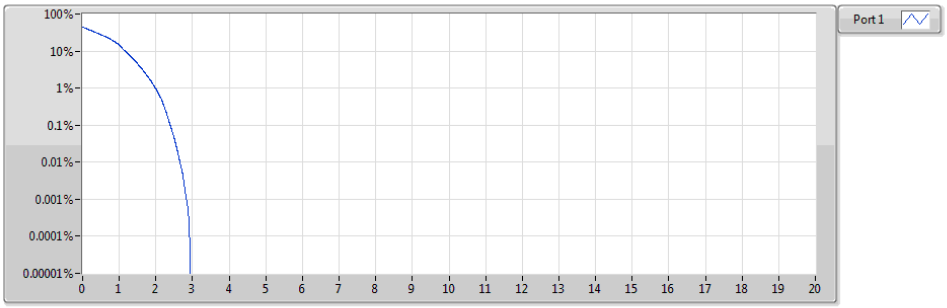
713.5MHz_QPSK_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
713.5	20M	4.92	-8.08	13.00	1

Band 12_LTE_5MHz_Nss1,16QAM_1TX **PAR**

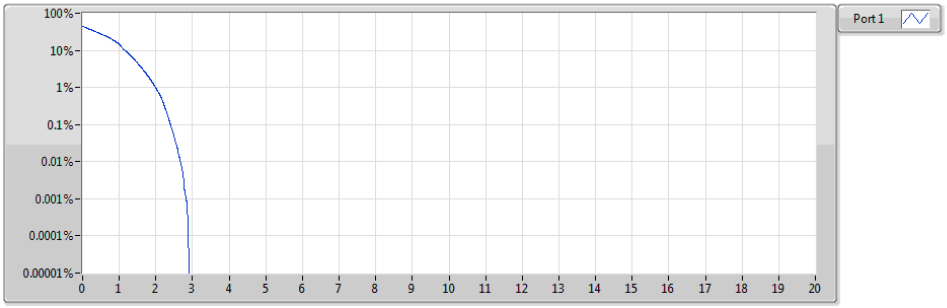
701.5MHz_16QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
701.5	20M	5.98	-7.02	13.00	1

Band 12_LTE_5MHz_Nss1,16QAM_1TX **PAR**

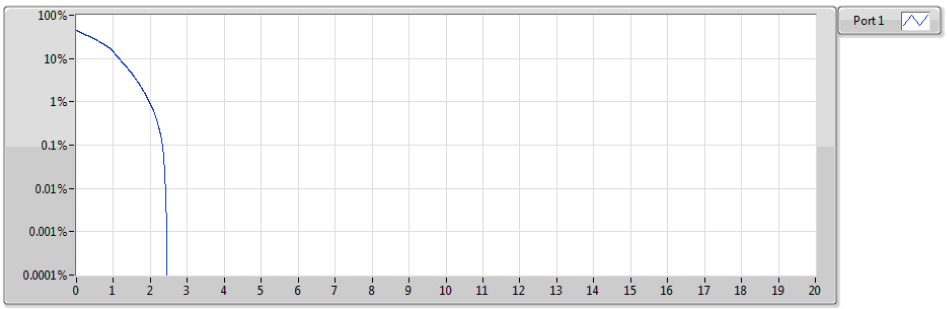
707.5MHz_16QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.00	-7.00	13.00	1

Band 12_LTE_5MHz_Nss1,16QAM_1TX **PAR**

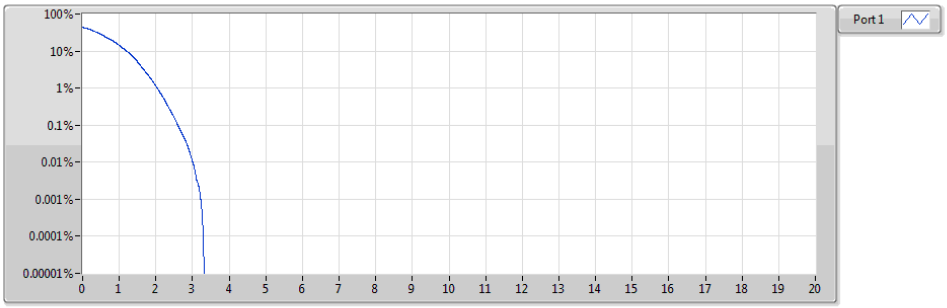
713.5MHz_16QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
713.5	20M	5.81	-7.19	13.00	1

Band 12_LTE_5MHz_Nss1,64QAM_1TX **PAR**

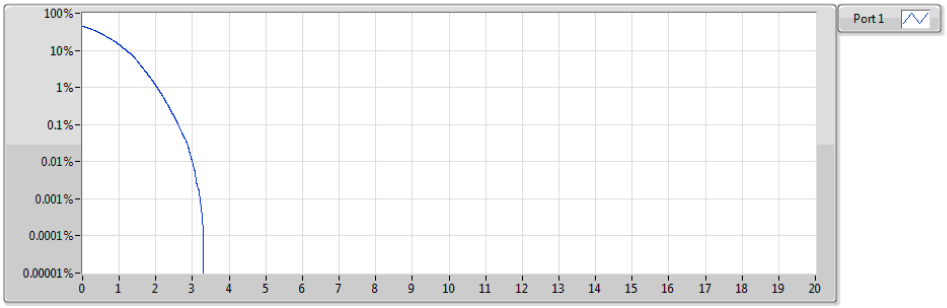
701.5MHz_64QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
701.5	20M	6.50	-6.50	13.00	1

Band 12_LTE_5MHz_Nss1,64QAM_1TX **PAR**

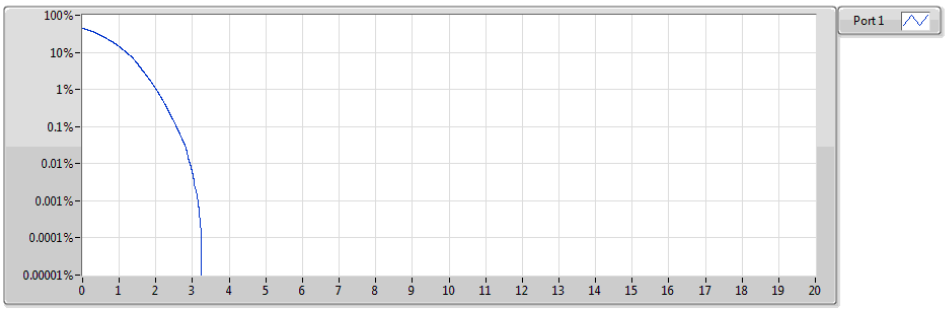
707.5MHz_64QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	6.51	-6.49	13.00	1

Band 12_LTE_5MHz_Nss1,64QAM_1TX **PAR**

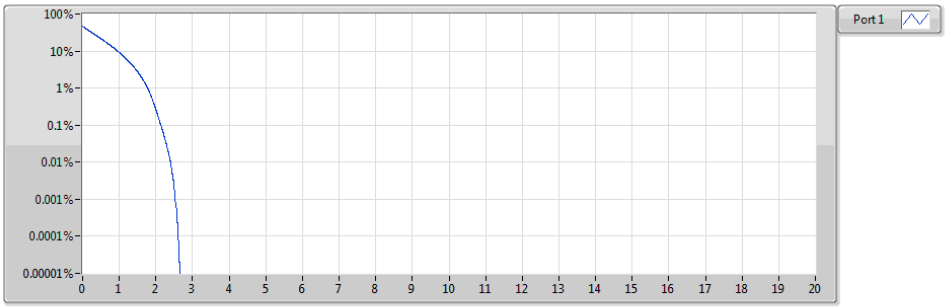
713.5MHz_64QAM_RB 25,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
713.5	20M	6.39	-6.61	13.00	1

Band 12_LTE_10MHz_Nss1,QPSK_1TX **PAR**

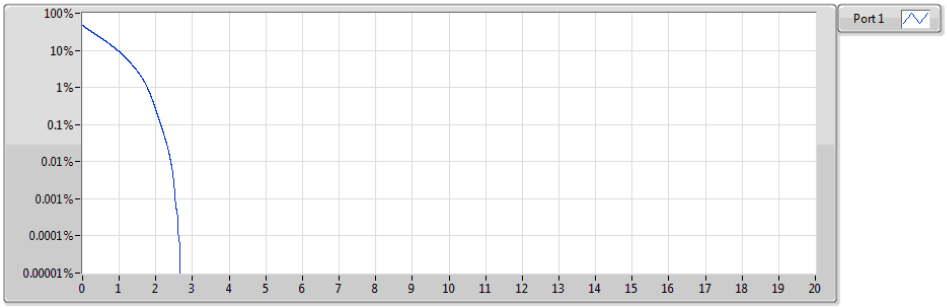
704MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
704	20M	5.34	-7.66	13.00	1

Band 12_LTE_10MHz_Nss1,QPSK_1TX **PAR**

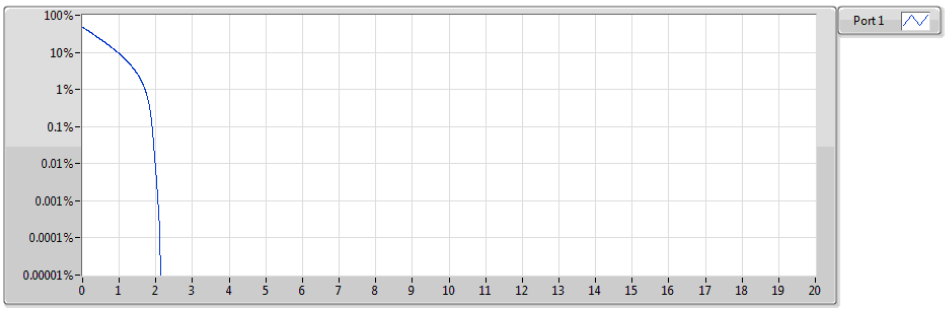
707.5MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.33	-7.67	13.00	1

Band 12_LTE_10MHz_Nss1,QPSK_1TX **PAR**

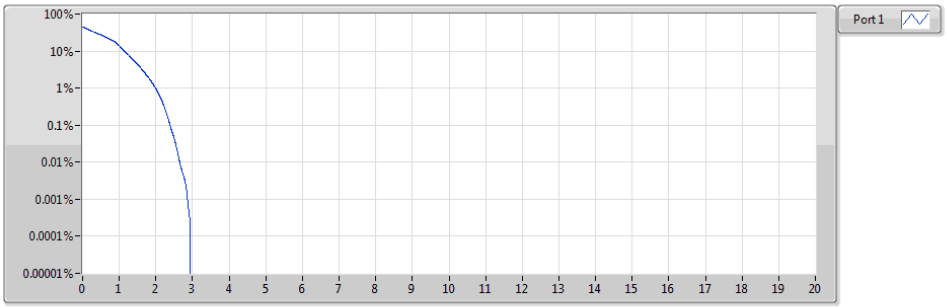
711MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
711	20M	4.73	-8.27	13.00	1

Band 12_LTE_10MHz_Nss1,16QAM_1TX **PAR**

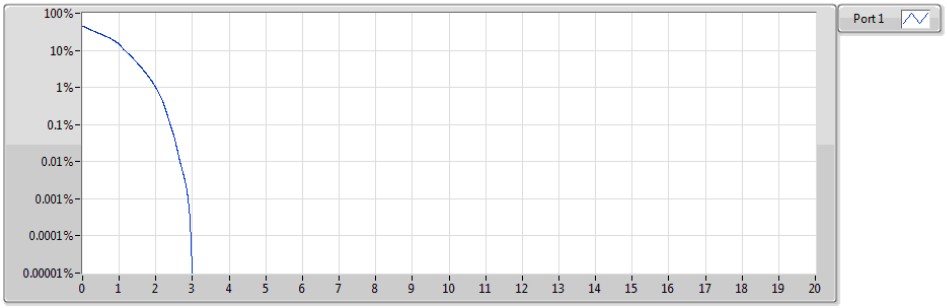
704MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
704	20M	5.97	-7.03	13.00	1

Band 12_LTE_10MHz_Nss1,16QAM_1TX **PAR**

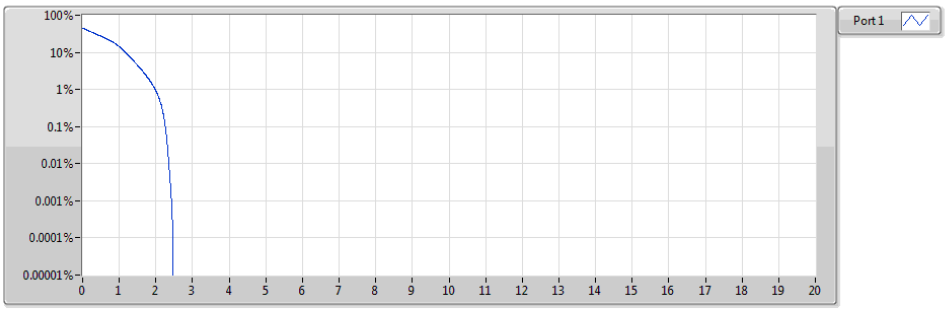
707.5MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
707.5	20M	5.98	-7.02	13.00	1

Band 12_LTE_10MHz_Nss1,16QAM_1TX **PAR**

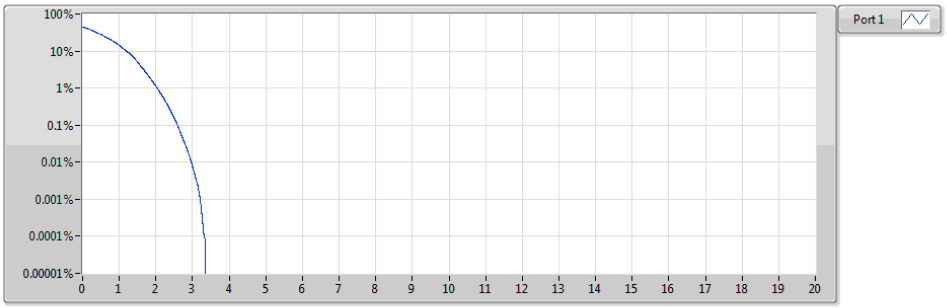
711MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
711	20M	5.64	-7.36	13.00	1

Band 12_LTE_10MHz_Nss1,64QAM_1TX **PAR**

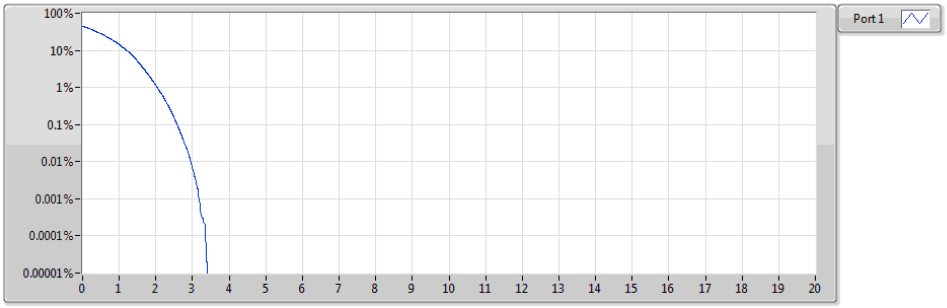
704MHz_64QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
704	20M	6.47	-6.53	13.00	1

Band 12_LTE_10MHz_Nss1,64QAM_1TX **PAR**

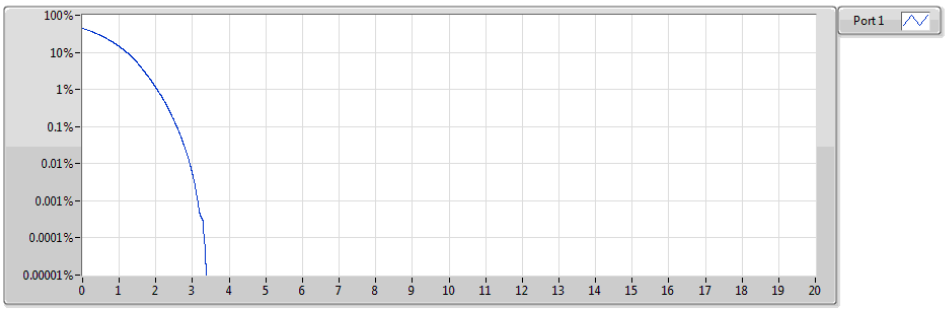
707.5MHz_64QAM_RB 50,#RB 0



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

Band 12_LTE_10MHz_Nss1,64QAM_1TX **PAR**

711MHz_64QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
711	20M	6.42	-6.58	13.00	1

3.6 Frequency Stability

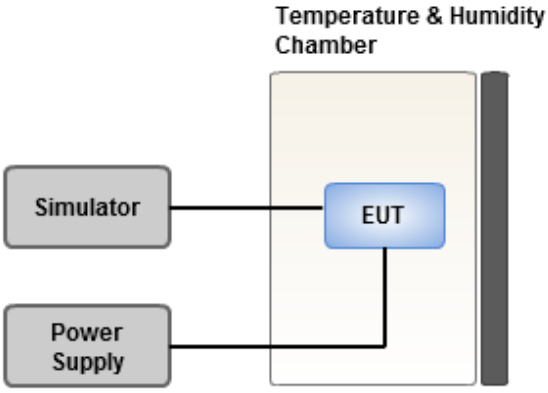
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

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

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

LTE Band 12, CB: 1.4MHz		
Temperature (^{o}C)	**Voltage (dc)**	**Frequency Drift (ppm)**
20	4.29	0.0013
20	3.51	0.0012
55	3.9	0.0021
50	3.9	0.0022
40	3.9	0.002
30	3.9	0.0019
20	3.9	0.0018
10	3.9	0.0018
0	3.9	0.0016
-10	3.9	0.0015
-20	3.9	0.0014
-30	3.9	0.0013

LTE Band 12, CB: 3MHz		
Temperature (^{o}C)	**Voltage (dc)**	**Frequency Drift (ppm)**
20	4.29	0.0012
20	3.51	0.0013
55	3.9	0.0022
50	3.9	0.0021
40	3.9	0.0019
30	3.9	0.002
20	3.9	0.0019
10	3.9	0.0018
0	3.9	0.0016
-10	3.9	0.0017
-20	3.9	0.0016
-30	3.9	0.0014

LTE Band 12, CB: 5MHz		
Temperature (^{o}C)	**Voltage (dc)**	**Frequency Drift (ppm)**
20	4.29	0.0012
20	3.51	0.0013
55	3.9	0.002
50	3.9	0.0019
40	3.9	0.0019
30	3.9	0.002
20	3.9	0.0019
10	3.9	0.0018
0	3.9	0.0018
-10	3.9	0.0017
-20	3.9	0.0016
-30	3.9	0.0016

LTE Band 12, CB: 10MHz		
Temperature (^{o}C)	**Voltage (dc)**	**Frequency Drift (ppm)**
20	4.29	0.0012
20	3.51	0.0012
55	3.9	0.0021
50	3.9	0.0022
40	3.9	0.0021
30	3.9	0.0018
20	3.9	0.0019
10	3.9	0.0017
0	3.9	0.0018
-10	3.9	0.0016
-20	3.9	0.0015
-30	3.9	0.0015

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	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	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

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

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