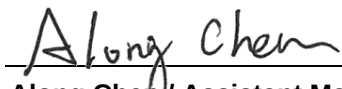


FCC Test Report

FCC ID : 2AIHD1041
Equipment : HW-IG41
Model No. : 010-1041
Brand Name : Samsara
Applicant : Samsara Networks Inc.
Address : 1990 Alameda Street, San Francisco, CA
94103, United States
Standard : 47 CFR FCC Part 27
Received Date : Sep. 01, 2020
Tested Date : Sep. 15 ~ Sep. 30, 2020

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

Reviewed by:



Along Chen / Assistant Manager

Approved by:



Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	8
1.3	Test Setup Chart	8
1.4	The Equipment List	11
1.5	Test Standards	12
1.6	Reference Guidance	12
1.7	Deviation from Test Standard and Measurement Procedure.....	12
1.8	Measurement Uncertainty	12
2	TEST CONFIGURATION.....	13
2.1	Testing Condition and Location Information.....	13
2.2	Testing Facility	13
2.3	The Worst Test Modes and Channel Details	14
3	TEST RESULTS	16
3.1	Effective Radiated Power	16
3.2	Radiated Emissions.....	26
3.3	Conducted Emissions & Band Edge	58
3.4	Occupied Bandwidth and 26dB Bandwidth	109
3.5	Peak to Average Ratio	129
3.6	Frequency Stability.....	144
4	TEST LABORATORY INFORMATION	151

Release Record

Report No.	Version	Description	Issued Date
FG090103P27-1	Rev. 01	Initial issue	Oct. 20, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 27.50(b)(10) 27.50(c)(10)	Effective Radiated Power	Power[dBm]: LTE Band 12: 26.92 LTE Band 13: 27.29	Pass
2.1053 27.53(c) 27.53(g)	Radiated Emissions	Meet the requirement of limit	Pass
2.1053 / 27.53(f)	Radiated Spurious Emission in the 1559-1610MHz band	Meet the requirement of limit	Pass
2.1051 27.53(c) 27.53(g)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 27.53(c) 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 Specification of the Equipment under Test (EUT)

Operating Frequency	LTE Band 12 Channel Bandwidth: 1.4MHz: 699.7 MHz ~ 715.3 MHz Channel Bandwidth: 3MHz: 700.5 MHz ~ 714.5 MHz Channel Bandwidth: 5MHz: 701.5 MHz ~ 713.5 MHz Channel Bandwidth: 10MHz: 704 MHz ~ 711 MHz LTE Band 13 Channel Bandwidth: 5MHz: 779.5 ~ 784.5 MHz Channel Bandwidth: 10MHz: 782 MHz
Modulation	QPSK, 16QAM (Uplink)
UE Category	Cat. 4
Release Version	9

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Ant. gain with cable loss (dBi)	Ant. gain (dBi)	Cable loss (dB)
1	Individual antenna (OA-DB-02-01-04-SE)	Dipole	SMA PLUG	0.9	0.9	-
2	LTE Directional (DA-LTEM-0712-CJ-SA)	Array	N Jack	6.79	8	1.21
3	Array antenna (OS-PENTA-014-01-SA)	PIFA	SMA PLUG	-0.7	0.5	1.2

Note: The antenna assembly includes Array antenna, Directional antenna and Individual antenna.

1.1.3 Power Supply Type of Equipment under Test (EUT)

Supply Voltage	24Vdc from DC power		
Operational Voltage	☒ Vnom (24 Vdc)	☒ Vmax (28 Vdc)	☒ Vmin (10 Vdc)
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (70°C)	☒ Tmin (-40°C)

Note: The above power supply is not bundled in market.

1.1.4 Accessories

N/A

1.1.5 Maximum ERP and Emission Designator

Mode	Modulation	Maximum ERP (W)	Emission Designator
LTE Band 12, CB: 1.4MHz	QPSK	0.466	1M08G7D
LTE Band 12, CB: 1.4MHz	16QAM	0.359	1M08W7D
LTE Band 12, CB: 3MHz	QPSK	0.465	2M68G7D
LTE Band 12, CB: 3MHz	16QAM	0.351	2M68W7D
LTE Band 12, CB: 5MHz	QPSK	0.492	4M48G7D
LTE Band 12, CB: 5MHz	16QAM	0.335	4M47W7D
LTE Band 12, CB: 10MHz	QPSK	0.478	8M94G7D
LTE Band 12, CB: 10MHz	16QAM	0.378	8M92W7D
LTE Band 13, CB: 5MHz	QPSK	0.536	4M46G7D
LTE Band 13, CB: 5MHz	16QAM	0.396	4M46W7D
LTE Band 13, CB: 10MHz	QPSK	0.509	8M89G7D
LTE Band 13, CB: 10MHz	16QAM	0.385	8M90W7D

1.1.6 Operating Channel List

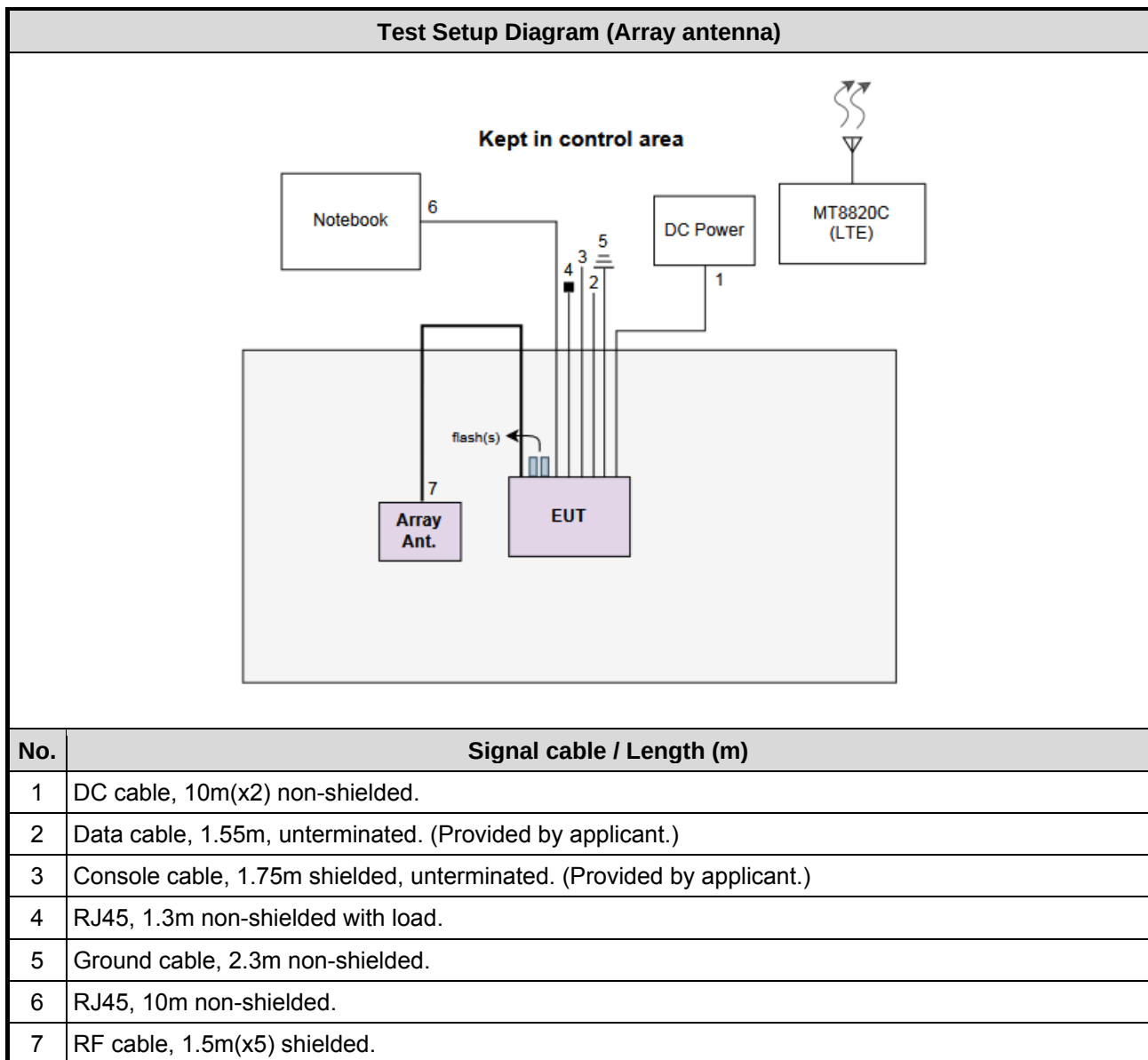
LTE Band 12		
Channel Bandwidth (MHz)	Channel	Frequency (MHz)
1.4	23017	699.7
1.4	23095	707.5
1.4	23173	715.3
3	23025	700.5
3	23095	707.5
3	23165	714.5
5	23035	701.5
5	23095	707.5
5	23155	713.5
10	23060	704.0
10	23095	707.5
10	23130	711.0

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

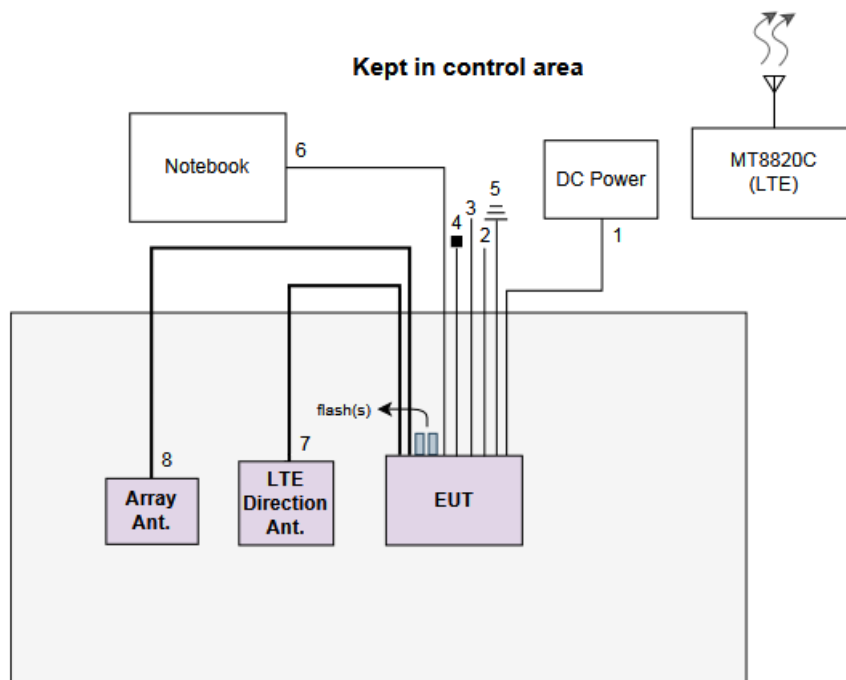
1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5400	DoC	---
2	USB Flash	Kingston	DTSE9	---	---
3	USB Flash	Kingston	DTSE9	---	---
4	RJ45 Load	ICC	---	---	---
5	DC power	MEAN WELL	SDR-75-24	---	Provided by applicant.

1.3 Test Setup Chart

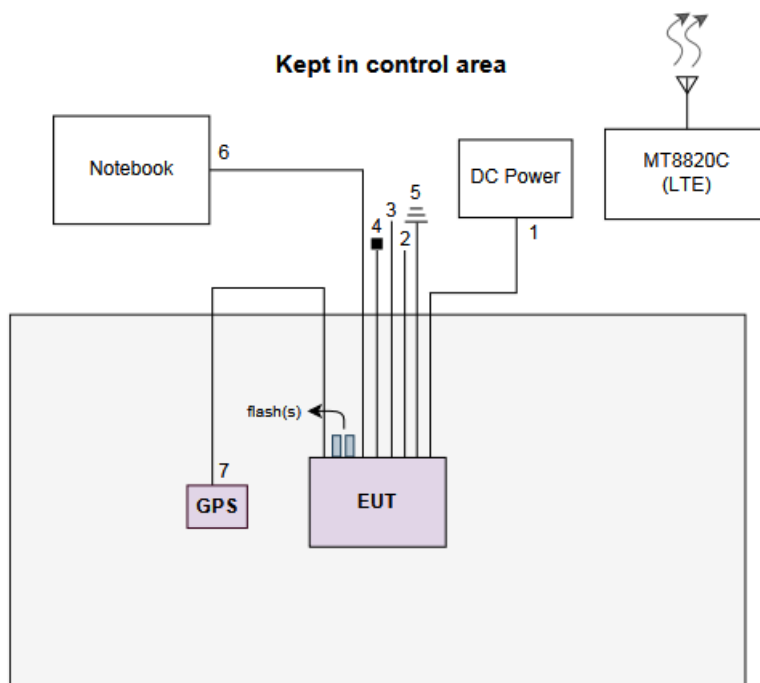


Test Setup Diagram (Directional antenna)



No.	Signal cable / Length (m)
1	DC cable, 10m(x2) non-shielded.
2	Data cable, 1.55m, unterminated. (Provided by applicant.)
3	Console cable, 1.75m shielded, unterminated. (Provided by applicant.)
4	RJ45, 1.3m non-shielded with load.
5	Ground cable, 2.3m non-shielded.
6	RJ45, 10m non-shielded.
7	RF cable, 7.5m(x2) shielded.
8	RF cable, 1.5m(x5) shielded.

Test Setup Diagram (Individual antenna)



No.	Signal cable / Length (m)
1	DC cable, 10m(x2) non-shielded.
2	Data cable, 1.55m, unterminated. (Provided by applicant.)
3	Console cable, 1.75m shielded, unterminated. (Provided by applicant.)
4	RJ45, 1.3m non-shielded with load.
5	Ground cable, 2.3m non-shielded.
6	RJ45, 10m non-shielded.
7	RF cable, 1.5m shielded.

1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Sep. 16 ~ Sep. 26, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	May 06, 2020	May 05, 2021
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 29, 2020	Apr. 28, 2021
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 27, 2019	Dec. 26, 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	980187	Aug. 05, 2020	Aug. 04, 2021
Preamplifier	Agilent	83017A	MY39501309	Sep. 02, 2020	Sep. 01, 2021
Preamplifier	EMC	EMC184045B	980192	Jul. 21, 2020	Jul. 20, 2021
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 27, 2019	Sep. 26, 2020
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 27, 2019	Sep. 26, 2020
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Sep. 27, 2019	Sep. 26, 2020
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 27, 2019	Sep. 26, 2020
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 27, 2019	Sep. 26, 2020
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 27, 2019	Sep. 26, 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)				
Tested Date	Sep. 15 ~ Sep. 30, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 12, 2019	Dec. 11, 2020
Measurement Software	ICC	SENSE-FCC_2G-4G	V5.10.5	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 27
ANSI C63.26-2015

1.6 Reference Guidance

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

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.130 Hz
Conducted power	± 0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Conducted emission	± 2.715 dB
Radiated emission ≤ 1 GHz	± 3.96 dB
Radiated emission > 1 GHz	± 4.51 dB
Temperature	± 0.4 °C

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
Radiated Emissions	03CH03-WS	23-25°C / 65-66%	Roger Lu / Brad Wu
RF Conducted	TH01-WS	22-26°C / 62-68%	Aska Huang

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISSED#: 10807A
- CAB identifier: TW2732

2.2 Testing Facility

Test Laboratory	International Certification Corp.
Test Site	TH01-WS
Address of Test Site	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.
Test Site	03CH03-WS
Address of Test Site	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

2.3 The Worst Test Modes and Channel Details

LTE Band 12				
Test item	Channel Bandwidths	Modulation	Test channel	Configuration
E.R.P Conducted Emissions Occupied Bandwidth Peak to Average Ratio	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	23017 / 23095 / 23173 23025 / 23095 / 23165 23035 / 23095 / 23155 23060 / 23095 / 23130	1
Radiated Emission ≤ 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	23173 23165 23155 23130	1, 2, 3
Radiated Emission > 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	23017 / 23095 / 23173 23025 / 23095 / 23165 23035 / 23095 / 23155 23060 / 23095 / 23130	1, 2, 3
Band Edge	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	23017 / 23173 23025 / 23165 23035 / 23155 23060 / 23130	1
Frequency Stability	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	23017 / 23173 23025 / 23165 23035 / 23155 23060 / 23130	1
NOTE: 1. The antenna assembly includes Array antenna, Directional antenna and Individual antenna. - Individual antenna without antenna cable. - Array antenna with antenna cable and need to be assessed with 3 orientations placed on the table for the radiated emission measurement– X, Y, and Z-plane. The Z-plane results were found as the worst case and were shown in this report. - Directional antenna with antenna cable. 2. Test configurations are listed as below: 1) Configuration 1: Array antenna with antenna cable, Z-plane 2) Configuration 2: Directional antenna with antenna cable 3) Configuration 3: Individual antenna				

LTE Band 13				
Test item	Channel Bandwidth	Modulation	Test channel	Configuration
E.R.P Conducted Emissions Occupied Bandwidth Peak to Average Ratio	5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM	23205 / 23230 / 23255 23230	1
Radiated Emission $\leq$ 1GHz	5 MHz 10 MHz	QPSK QPSK	23255 23230	1, 2, 3
Radiated Emission $>$ 1GHz	5 MHz 10 MHz	QPSK QPSK	23205 / 23230 / 23255 23230	1, 2, 3
Band Edge	5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM	23205 / 23255 23230	1
Frequency Stability	5 MHz 10 MHz	QPSK QPSK	23205 / 23255 23230	1
NOTE: 1. The antenna assembly includes Array antenna, Directional antenna and Individual antenna. - Individual antenna without antenna cable. - Array antenna with antenna cable and need to be assessed with 3 orientations placed on the table for the radiated emission measurement– X, Y, and Z-plane. The Z-plane results were found as the worst case and were shown in this report. - Directional antenna with antenna cable. 2. Test configurations are listed as below: 1) Configuration 1: Array antenna with antenna cable, Z-plane 2) Configuration 2: Directional antenna with antenna cable 3) Configuration 3: Individual antenna				

3 Test Results

3.1 Effective Radiated Power

3.1.1 Limit of Effective Radiated Power

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

3.1.2 Test Procedures

For E.R.P measurement

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

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

For Conducted power measurement

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

3.1.3 Test Setup



3.1.4 Test Result of Effective Radiated Power and Conducted Power (dBm) (Band 12)

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 12	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	22.04	0.160	26.68	0.46559
LTE_1.4MHz_Nss1,16QAM_1TX	20.91	0.123	25.55	0.35892
LTE_3MHz_Nss1,QPSK_1TX	22.03	0.160	26.67	0.46452
LTE_3MHz_Nss1,16QAM_1TX	20.81	0.121	25.45	0.35075
LTE_5MHz_Nss1,QPSK_1TX	22.28	0.169	26.92	0.49204
LTE_5MHz_Nss1,16QAM_1TX	20.61	0.115	25.25	0.33497
LTE_10MHz_Nss1,QPSK_1TX	22.15	0.164	26.79	0.47753
LTE_10MHz_Nss1,16QAM_1TX	21.13	0.130	25.77	0.37757

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	6.79	28.43	26.28	0.42462	3	21.64	0.146	Inf	21.64
699.7MHz_QPSK_RB 1,#RB 3	Pass	6.79	28.55	26.40	0.43652	3	21.76	0.150	Inf	21.76
699.7MHz_QPSK_RB 1,#RB 5	Pass	6.79	28.49	26.34	0.43053	3	21.70	0.148	Inf	21.7
699.7MHz_QPSK_RB 3,#RB 0	Pass	6.79	28.46	26.31	0.42756	3	21.67	0.147	Inf	21.67
699.7MHz_QPSK_RB 3,#RB 1	Pass	6.79	28.42	26.27	0.42364	3	21.63	0.146	Inf	21.63
699.7MHz_QPSK_RB 3,#RB 3	Pass	6.79	28.49	26.34	0.43053	3	21.70	0.148	Inf	21.7
699.7MHz_QPSK_RB 6,#RB 0	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75
707.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.72	26.57	0.45394	3	21.93	0.156	Inf	21.93
707.5MHz_QPSK_RB 1,#RB 3	Pass	6.79	28.78	26.63	0.46026	3	21.99	0.158	Inf	21.99
707.5MHz_QPSK_RB 1,#RB 5	Pass	6.79	28.81	26.66	0.46345	3	22.02	0.159	Inf	22.02
707.5MHz_QPSK_RB 3,#RB 0	Pass	6.79	28.75	26.60	0.45709	3	21.96	0.157	Inf	21.96
707.5MHz_QPSK_RB 3,#RB 1	Pass	6.79	28.73	26.58	0.45499	3	21.94	0.156	Inf	21.94
707.5MHz_QPSK_RB 3,#RB 3	Pass	6.79	28.71	26.56	0.45290	3	21.92	0.156	Inf	21.92
707.5MHz_QPSK_RB 6,#RB 0	Pass	6.79	27.70	25.55	0.35892	3	20.91	0.123	Inf	20.91
715.3MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.65	26.50	0.44668	3	21.86	0.153	Inf	21.86
715.3MHz_QPSK_RB 1,#RB 3	Pass	6.79	28.83	26.68	0.46559	3	22.04	0.160	Inf	22.04
715.3MHz_QPSK_RB 1,#RB 5	Pass	6.79	28.56	26.41	0.43752	3	21.77	0.150	Inf	21.77
715.3MHz_QPSK_RB 3,#RB 0	Pass	6.79	28.59	26.44	0.44055	3	21.80	0.151	Inf	21.8
715.3MHz_QPSK_RB 3,#RB 1	Pass	6.79	28.57	26.42	0.43853	3	21.78	0.151	Inf	21.78
715.3MHz_QPSK_RB 3,#RB 3	Pass	6.79	28.63	26.48	0.44463	3	21.84	0.153	Inf	21.84
715.3MHz_QPSK_RB 6,#RB 0	Pass	6.79	27.62	25.47	0.35237	3	20.83	0.121	Inf	20.83
699.7MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75
699.7MHz_16QAM_RB 1,#RB 3	Pass	6.79	27.70	25.55	0.35892	3	20.91	0.123	Inf	20.91
699.7MHz_16QAM_RB 1,#RB 5	Pass	6.79	27.56	25.41	0.34754	3	20.77	0.119	Inf	20.77
699.7MHz_16QAM_RB 3,#RB 0	Pass	6.79	27.45	25.30	0.33884	3	20.66	0.116	Inf	20.66
699.7MHz_16QAM_RB 3,#RB 1	Pass	6.79	27.51	25.36	0.34356	3	20.72	0.118	Inf	20.72
699.7MHz_16QAM_RB 3,#RB 3	Pass	6.79	27.35	25.20	0.33113	3	20.56	0.114	Inf	20.56
699.7MHz_16QAM_RB 6,#RB 0	Pass	6.79	26.35	24.20	0.26303	3	19.56	0.090	Inf	19.56
707.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.49	25.34	0.34198	3	20.70	0.117	Inf	20.7
707.5MHz_16QAM_RB 1,#RB 3	Pass	6.79	27.63	25.48	0.35318	3	20.84	0.121	Inf	20.84
707.5MHz_16QAM_RB 1,#RB 5	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
707.5MHz_16QAM_RB 3,#RB 0	Pass	6.79	27.49	25.34	0.34198	3	20.70	0.117	Inf	20.7
707.5MHz_16QAM_RB 3,#RB 1	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
707.5MHz_16QAM_RB 3,#RB 3	Pass	6.79	27.58	25.43	0.34914	3	20.79	0.120	Inf	20.79
707.5MHz_16QAM_RB 6,#RB 0	Pass	6.79	26.24	24.09	0.25645	3	19.45	0.088	Inf	19.45
715.3MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.44	25.29	0.33806	3	20.65	0.116	Inf	20.65

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_16QAM_RB 1,#RB 3	Pass	6.79	27.66	25.51	0.35563	3	20.87	0.122	Inf	20.87
715.3MHz_16QAM_RB 1,#RB 5	Pass	6.79	27.50	25.35	0.34277	3	20.71	0.118	Inf	20.71
715.3MHz_16QAM_RB 3,#RB 0	Pass	6.79	27.44	25.29	0.33806	3	20.65	0.116	Inf	20.65
715.3MHz_16QAM_RB 3,#RB 1	Pass	6.79	27.59	25.44	0.34995	3	20.80	0.120	Inf	20.8
715.3MHz_16QAM_RB 3,#RB 3	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
715.3MHz_16QAM_RB 6,#RB 0	Pass	6.79	26.03	23.88	0.24434	3	19.24	0.084	Inf	19.24
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
700.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.51	26.36	0.43251	3	21.72	0.149	Inf	21.72
700.5MHz_QPSK_RB 1,#RB 8	Pass	6.79	28.74	26.59	0.45604	3	21.95	0.157	Inf	21.95
700.5MHz_QPSK_RB 1,#RB 14	Pass	6.79	28.47	26.32	0.42855	3	21.68	0.147	Inf	21.68
700.5MHz_QPSK_RB 8,#RB 0	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
700.5MHz_QPSK_RB 8,#RB 4	Pass	6.79	27.60	25.45	0.35075	3	20.81	0.121	Inf	20.81
700.5MHz_QPSK_RB 8,#RB 7	Pass	6.79	27.44	25.29	0.33806	3	20.65	0.116	Inf	20.65
700.5MHz_QPSK_RB 15,#RB 0	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75
707.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.67	26.52	0.44875	3	21.88	0.154	Inf	21.88
707.5MHz_QPSK_RB 1,#RB 8	Pass	6.79	28.81	26.66	0.46345	3	22.02	0.159	Inf	22.02
707.5MHz_QPSK_RB 1,#RB 14	Pass	6.79	28.51	26.36	0.43251	3	21.72	0.149	Inf	21.72
707.5MHz_QPSK_RB 8,#RB 0	Pass	6.79	27.58	25.43	0.34914	3	20.79	0.120	Inf	20.79
707.5MHz_QPSK_RB 8,#RB 4	Pass	6.79	27.64	25.49	0.35400	3	20.85	0.122	Inf	20.85
707.5MHz_QPSK_RB 8,#RB 7	Pass	6.79	27.72	25.57	0.36058	3	20.93	0.124	Inf	20.93
707.5MHz_QPSK_RB 15,#RB 0	Pass	6.79	27.53	25.38	0.34514	3	20.74	0.119	Inf	20.74
714.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.61	26.46	0.44259	3	21.82	0.152	Inf	21.82
714.5MHz_QPSK_RB 1,#RB 8	Pass	6.79	28.82	26.67	0.46452	3	22.03	0.160	Inf	22.03
714.5MHz_QPSK_RB 1,#RB 14	Pass	6.79	28.61	26.46	0.44259	3	21.82	0.152	Inf	21.82
714.5MHz_QPSK_RB 8,#RB 0	Pass	6.79	27.76	25.61	0.36392	3	20.97	0.125	Inf	20.97
714.5MHz_QPSK_RB 8,#RB 4	Pass	6.79	27.60	25.45	0.35075	3	20.81	0.121	Inf	20.81
714.5MHz_QPSK_RB 8,#RB 7	Pass	6.79	27.52	25.37	0.34435	3	20.73	0.118	Inf	20.73
714.5MHz_QPSK_RB 15,#RB 0	Pass	6.79	27.50	25.35	0.34277	3	20.71	0.118	Inf	20.71
700.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.59	25.44	0.34995	3	20.80	0.120	Inf	20.8
700.5MHz_16QAM_RB 1,#RB 8	Pass	6.79	27.60	25.45	0.35075	3	20.81	0.121	Inf	20.81
700.5MHz_16QAM_RB 1,#RB 14	Pass	6.79	27.41	25.26	0.33574	3	20.62	0.115	Inf	20.62
700.5MHz_16QAM_RB 8,#RB 0	Pass	6.79	26.44	24.29	0.26853	3	19.65	0.092	Inf	19.65
700.5MHz_16QAM_RB 8,#RB 4	Pass	6.79	26.46	24.31	0.26977	3	19.67	0.093	Inf	19.67
700.5MHz_16QAM_RB 8,#RB 7	Pass	6.79	26.34	24.19	0.26242	3	19.55	0.090	Inf	19.55
700.5MHz_16QAM_RB 15,#RB 0	Pass	6.79	26.41	24.26	0.26669	3	19.62	0.092	Inf	19.62
707.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.31	25.16	0.32810	3	20.52	0.113	Inf	20.52
707.5MHz_16QAM_RB 1,#RB 8	Pass	6.79	27.49	25.34	0.34198	3	20.70	0.117	Inf	20.7
707.5MHz_16QAM_RB 1,#RB 14	Pass	6.79	27.44	25.29	0.33806	3	20.65	0.116	Inf	20.65

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 8,#RB 0	Pass	6.79	26.74	24.59	0.28774	3	19.95	0.099	Inf	19.95
707.5MHz_16QAM_RB 8,#RB 4	Pass	6.79	26.76	24.61	0.28907	3	19.97	0.099	Inf	19.97
707.5MHz_16QAM_RB 8,#RB 7	Pass	6.79	26.81	24.66	0.29242	3	20.02	0.100	Inf	20.02
707.5MHz_16QAM_RB 15,#RB 0	Pass	6.79	26.55	24.40	0.27542	3	19.76	0.095	Inf	19.76
714.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.42	25.27	0.33651	3	20.63	0.116	Inf	20.63
714.5MHz_16QAM_RB 1,#RB 8	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
714.5MHz_16QAM_RB 1,#RB 14	Pass	6.79	27.53	25.38	0.34514	3	20.74	0.119	Inf	20.74
714.5MHz_16QAM_RB 8,#RB 0	Pass	6.79	26.44	24.29	0.26853	3	19.65	0.092	Inf	19.65
714.5MHz_16QAM_RB 8,#RB 4	Pass	6.79	26.32	24.17	0.26122	3	19.53	0.090	Inf	19.53
714.5MHz_16QAM_RB 8,#RB 7	Pass	6.79	26.27	24.12	0.25823	3	19.48	0.089	Inf	19.48
714.5MHz_16QAM_RB 15,#RB 0	Pass	6.79	26.35	24.20	0.26303	3	19.56	0.090	Inf	19.56
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
701.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.70	26.55	0.45186	3	21.91	0.155	Inf	21.91
701.5MHz_QPSK_RB 1,#RB 12	Pass	6.79	28.92	26.77	0.47534	3	22.13	0.163	Inf	22.13
701.5MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.41	26.26	0.42267	3	21.62	0.145	Inf	21.62
701.5MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.62	25.47	0.35237	3	20.83	0.121	Inf	20.83
701.5MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.48	25.33	0.34119	3	20.69	0.117	Inf	20.69
701.5MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.44	25.29	0.33806	3	20.65	0.116	Inf	20.65
701.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75
707.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.51	26.36	0.43251	3	21.72	0.149	Inf	21.72
707.5MHz_QPSK_RB 1,#RB 12	Pass	6.79	29.05	26.90	0.48978	3	22.26	0.168	Inf	22.26
707.5MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.49	26.34	0.43053	3	21.70	0.148	Inf	21.7
707.5MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.53	25.38	0.34514	3	20.74	0.119	Inf	20.74
707.5MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.56	25.41	0.34754	3	20.77	0.119	Inf	20.77
707.5MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.60	25.45	0.35075	3	20.81	0.121	Inf	20.81
707.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.58	25.43	0.34914	3	20.79	0.120	Inf	20.79
713.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.73	26.58	0.45499	3	21.94	0.156	Inf	21.94
713.5MHz_QPSK_RB 1,#RB 12	Pass	6.79	29.07	26.92	0.49204	3	22.28	0.169	Inf	22.28
713.5MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.46	26.31	0.42756	3	21.67	0.147	Inf	21.67
713.5MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.57	25.42	0.34834	3	20.78	0.120	Inf	20.78
713.5MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75
713.5MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.45	25.30	0.33884	3	20.66	0.116	Inf	20.66
713.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.56	25.41	0.34754	3	20.77	0.119	Inf	20.77
701.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.34	25.19	0.33037	3	20.55	0.114	Inf	20.55
701.5MHz_16QAM_RB 1,#RB 12	Pass	6.79	27.40	25.25	0.33497	3	20.61	0.115	Inf	20.61
701.5MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.27	25.12	0.32509	3	20.48	0.112	Inf	20.48
701.5MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.47	24.32	0.27040	3	19.68	0.093	Inf	19.68
701.5MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.53	24.38	0.27416	3	19.74	0.094	Inf	19.74

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_16QAM_RB 12,#RB 13	Pass	6.79	26.44	24.29	0.26853	3	19.65	0.092	Inf	19.65
701.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.50	24.35	0.27227	3	19.71	0.094	Inf	19.71
707.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.22	25.07	0.32137	3	20.43	0.110	Inf	20.43
707.5MHz_16QAM_RB 1,#RB 12	Pass	6.79	27.34	25.19	0.33037	3	20.55	0.114	Inf	20.55
707.5MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.31	25.16	0.32810	3	20.52	0.113	Inf	20.52
707.5MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.54	24.39	0.27479	3	19.75	0.094	Inf	19.75
707.5MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.61	24.46	0.27925	3	19.82	0.096	Inf	19.82
707.5MHz_16QAM_RB 12,#RB 13	Pass	6.79	26.44	24.29	0.26853	3	19.65	0.092	Inf	19.65
707.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.66	24.51	0.28249	3	19.87	0.097	Inf	19.87
713.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.38	25.23	0.33343	3	20.59	0.115	Inf	20.59
713.5MHz_16QAM_RB 1,#RB 12	Pass	6.79	27.40	25.25	0.33497	3	20.61	0.115	Inf	20.61
713.5MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.33	25.18	0.32961	3	20.54	0.113	Inf	20.54
713.5MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.44	24.29	0.26853	3	19.65	0.092	Inf	19.65
713.5MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.39	24.24	0.26546	3	19.60	0.091	Inf	19.6
713.5MHz_16QAM_RB 12,#RB 13	Pass	6.79	26.45	24.30	0.26915	3	19.66	0.092	Inf	19.66
713.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.56	24.41	0.27606	3	19.77	0.095	Inf	19.77
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
704MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.63	26.48	0.44463	3	21.84	0.153	Inf	21.84
704MHz_QPSK_RB 1,#RB 25	Pass	6.79	28.64	26.49	0.44566	3	21.85	0.153	Inf	21.85
704MHz_QPSK_RB 1,#RB 49	Pass	6.79	28.59	26.44	0.44055	3	21.80	0.151	Inf	21.8
704MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.46	25.31	0.33963	3	20.67	0.117	Inf	20.67
704MHz_QPSK_RB 25,#RB 12	Pass	6.79	27.47	25.32	0.34041	3	20.68	0.117	Inf	20.68
704MHz_QPSK_RB 25,#RB 25	Pass	6.79	27.59	25.44	0.34995	3	20.80	0.120	Inf	20.8
704MHz_QPSK_RB 50,#RB 0	Pass	6.79	27.47	25.32	0.34041	3	20.68	0.117	Inf	20.68
707.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.51	26.36	0.43251	3	21.72	0.149	Inf	21.72
707.5MHz_QPSK_RB 1,#RB 25	Pass	6.79	28.93	26.78	0.47643	3	22.14	0.164	Inf	22.14
707.5MHz_QPSK_RB 1,#RB 49	Pass	6.79	28.67	26.52	0.44875	3	21.88	0.154	Inf	21.88
707.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.58	25.43	0.34914	3	20.79	0.120	Inf	20.79
707.5MHz_QPSK_RB 25,#RB 12	Pass	6.79	27.78	25.63	0.36559	3	20.99	0.126	Inf	20.99
707.5MHz_QPSK_RB 25,#RB 25	Pass	6.79	27.66	25.51	0.35563	3	20.87	0.122	Inf	20.87
707.5MHz_QPSK_RB 50,#RB 0	Pass	6.79	27.65	25.50	0.35481	3	20.86	0.122	Inf	20.86
711MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.62	26.47	0.44361	3	21.83	0.152	Inf	21.83
711MHz_QPSK_RB 1,#RB 25	Pass	6.79	28.94	26.79	0.47753	3	22.15	0.164	Inf	22.15
711MHz_QPSK_RB 1,#RB 49	Pass	6.79	28.60	26.45	0.44157	3	21.81	0.152	Inf	21.81
711MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.75	25.60	0.36308	3	20.96	0.125	Inf	20.96
711MHz_QPSK_RB 25,#RB 12	Pass	6.79	27.64	25.49	0.35400	3	20.85	0.122	Inf	20.85
711MHz_QPSK_RB 25,#RB 25	Pass	6.79	27.49	25.34	0.34198	3	20.70	0.117	Inf	20.7
711MHz_QPSK_RB 50,#RB 0	Pass	6.79	27.54	25.39	0.34594	3	20.75	0.119	Inf	20.75

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
704MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.24	25.09	0.32285	3	20.45	0.111	Inf	20.45
704MHz_16QAM_RB 1,#RB 25	Pass	6.79	27.59	25.44	0.34995	3	20.80	0.120	Inf	20.8
704MHz_16QAM_RB 1,#RB 49	Pass	6.79	27.43	25.28	0.33729	3	20.64	0.116	Inf	20.64
704MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.43	24.28	0.26792	3	19.64	0.092	Inf	19.64
704MHz_16QAM_RB 25,#RB 12	Pass	6.79	26.49	24.34	0.27164	3	19.70	0.093	Inf	19.7
704MHz_16QAM_RB 25,#RB 25	Pass	6.79	26.47	24.32	0.27040	3	19.68	0.093	Inf	19.68
704MHz_16QAM_RB 50,#RB 0	Pass	6.79	26.55	24.40	0.27542	3	19.76	0.095	Inf	19.76
707.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.34	25.19	0.33037	3	20.55	0.114	Inf	20.55
707.5MHz_16QAM_RB 1,#RB 25	Pass	6.79	27.77	25.62	0.36475	3	20.98	0.125	Inf	20.98
707.5MHz_16QAM_RB 1,#RB 49	Pass	6.79	27.35	25.20	0.33113	3	20.56	0.114	Inf	20.56
707.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.54	24.39	0.27479	3	19.75	0.094	Inf	19.75
707.5MHz_16QAM_RB 25,#RB 12	Pass	6.79	26.58	24.43	0.27733	3	19.79	0.095	Inf	19.79
707.5MHz_16QAM_RB 25,#RB 25	Pass	6.79	26.60	24.45	0.27861	3	19.81	0.096	Inf	19.81
707.5MHz_16QAM_RB 50,#RB 0	Pass	6.79	26.55	24.40	0.27542	3	19.76	0.095	Inf	19.76
711MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.55	25.40	0.34674	3	20.76	0.119	Inf	20.76
711MHz_16QAM_RB 1,#RB 25	Pass	6.79	27.92	25.77	0.37757	3	21.13	0.130	Inf	21.13
711MHz_16QAM_RB 1,#RB 49	Pass	6.79	27.30	25.15	0.32734	3	20.51	0.112	Inf	20.51
711MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.66	24.51	0.28249	3	19.87	0.097	Inf	19.87
711MHz_16QAM_RB 25,#RB 12	Pass	6.79	26.71	24.56	0.28576	3	19.92	0.098	Inf	19.92
711MHz_16QAM_RB 25,#RB 25	Pass	6.79	26.55	24.40	0.27542	3	19.76	0.095	Inf	19.76
711MHz_16QAM_RB 50,#RB 0	Pass	6.79	26.65	24.50	0.28184	3	19.86	0.097	Inf	19.86

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

3.1.5 Test Result of Effective Radiated Power and Conducted Power (dBm) (Band 13)

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 13	-	-	-	-
LTE_5MHz_Nss1,QPSK_1TX	22.65	0.184	27.29	0.53580
LTE_5MHz_Nss1,16QAM_1TX	21.34	0.136	25.98	0.39628
LTE_10MHz_Nss1,QPSK_1TX	22.43	0.175	27.07	0.50933
LTE_10MHz_Nss1,16QAM_1TX	21.22	0.132	25.86	0.38548

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 13_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
779.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.81	26.66	0.46345	3	22.02	0.159	Inf	22.02
779.5MHz_QPSK_RB 1,#RB 12	Pass	6.79	29.24	27.09	0.51168	3	22.45	0.176	Inf	22.45
779.5MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.63	26.48	0.44463	3	21.84	0.153	Inf	21.84
779.5MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.75	25.60	0.36308	3	20.96	0.125	Inf	20.96
779.5MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.95	25.80	0.38019	3	21.16	0.131	Inf	21.16
779.5MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.81	25.66	0.36813	3	21.02	0.126	Inf	21.02
779.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.87	25.72	0.37325	3	21.08	0.128	Inf	21.08
782MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.91	26.76	0.47424	3	22.12	0.163	Inf	22.12
782MHz_QPSK_RB 1,#RB 12	Pass	6.79	29.29	27.14	0.51761	3	22.50	0.178	Inf	22.5
782MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.98	26.83	0.48195	3	22.19	0.166	Inf	22.19
782MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.86	25.71	0.37239	3	21.07	0.128	Inf	21.07
782MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.91	25.76	0.37670	3	21.12	0.129	Inf	21.12
782MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.80	25.65	0.36728	3	21.01	0.126	Inf	21.01
782MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.87	25.72	0.37325	3	21.08	0.128	Inf	21.08
784.5MHz_QPSK_RB 1,#RB 0	Pass	6.79	28.80	26.65	0.46238	3	22.01	0.159	Inf	22.01
784.5MHz_QPSK_RB 1,#RB 12	Pass	6.79	29.44	27.29	0.53580	3	22.65	0.184	Inf	22.65
784.5MHz_QPSK_RB 1,#RB 24	Pass	6.79	28.78	26.63	0.46026	3	21.99	0.158	Inf	21.99
784.5MHz_QPSK_RB 12,#RB 0	Pass	6.79	27.85	25.70	0.37154	3	21.06	0.128	Inf	21.06
784.5MHz_QPSK_RB 12,#RB 7	Pass	6.79	27.96	25.81	0.38107	3	21.17	0.131	Inf	21.17
784.5MHz_QPSK_RB 12,#RB 13	Pass	6.79	27.91	25.76	0.37670	3	21.12	0.129	Inf	21.12
784.5MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.90	25.75	0.37584	3	21.11	0.129	Inf	21.11
779.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.77	25.62	0.36475	3	20.98	0.125	Inf	20.98
779.5MHz_16QAM_RB 1,#RB 12	Pass	6.79	28.13	25.98	0.39628	3	21.34	0.136	Inf	21.34
779.5MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.67	25.52	0.35645	3	20.88	0.122	Inf	20.88
779.5MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.55	24.40	0.27542	3	19.76	0.095	Inf	19.76
779.5MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.81	24.66	0.29242	3	20.02	0.100	Inf	20.02
779.5MHz_16QAM_RB 12,#RB 13	Pass	6.79	26.78	24.63	0.29040	3	19.99	0.100	Inf	19.99
779.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.81	24.66	0.29242	3	20.02	0.100	Inf	20.02
782MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.94	25.79	0.37931	3	21.15	0.130	Inf	21.15
782MHz_16QAM_RB 1,#RB 12	Pass	6.79	27.95	25.80	0.38019	3	21.16	0.131	Inf	21.16
782MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.45	25.30	0.33884	3	20.66	0.116	Inf	20.66
782MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.65	24.50	0.28184	3	19.86	0.097	Inf	19.86
782MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.73	24.58	0.28708	3	19.94	0.099	Inf	19.94
782MHz_16QAM_RB 12,#RB 13	Pass	6.79	26.80	24.65	0.29174	3	20.01	0.100	Inf	20.01
782MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.94	24.79	0.30130	3	20.15	0.104	Inf	20.15
784.5MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.56	25.41	0.34754	3	20.77	0.119	Inf	20.77

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
784.5MHz_16QAM_RB 1,#RB 12	Pass	6.79	27.65	25.50	0.35481	3	20.86	0.122	Inf	20.86
784.5MHz_16QAM_RB 1,#RB 24	Pass	6.79	27.59	25.44	0.34995	3	20.80	0.120	Inf	20.8
784.5MHz_16QAM_RB 12,#RB 0	Pass	6.79	26.72	24.57	0.28642	3	19.93	0.098	Inf	19.93
784.5MHz_16QAM_RB 12,#RB 7	Pass	6.79	26.80	24.65	0.29174	3	20.01	0.100	Inf	20.01
784.5MHz_16QAM_RB 12,#RB 13	Pass	6.79	26.65	24.50	0.28184	3	19.86	0.097	Inf	19.86
784.5MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.80	24.65	0.29174	3	20.01	0.100	Inf	20.01
Band 13_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
782MHz_QPSK_RB 1,#RB 0	Pass	6.79	29.12	26.97	0.49774	3	22.33	0.171	Inf	22.33
782MHz_QPSK_RB 1,#RB 25	Pass	6.79	29.22	27.07	0.50933	3	22.43	0.175	Inf	22.43
782MHz_QPSK_RB 1,#RB 49	Pass	6.79	28.88	26.73	0.47098	3	22.09	0.162	Inf	22.09
782MHz_QPSK_RB 25,#RB 0	Pass	6.79	27.92	25.77	0.37757	3	21.13	0.130	Inf	21.13
782MHz_QPSK_RB 25,#RB 12	Pass	6.79	27.90	25.75	0.37584	3	21.11	0.129	Inf	21.11
782MHz_QPSK_RB 25,#RB 25	Pass	6.79	27.81	25.66	0.36813	3	21.02	0.126	Inf	21.02
782MHz_QPSK_RB 50,#RB 0	Pass	6.79	27.81	25.66	0.36813	3	21.02	0.126	Inf	21.02
782MHz_16QAM_RB 1,#RB 0	Pass	6.79	27.75	25.60	0.36308	3	20.96	0.125	Inf	20.96
782MHz_16QAM_RB 1,#RB 25	Pass	6.79	28.01	25.86	0.38548	3	21.22	0.132	Inf	21.22
782MHz_16QAM_RB 1,#RB 49	Pass	6.79	27.66	25.51	0.35563	3	20.87	0.122	Inf	20.87
782MHz_16QAM_RB 25,#RB 0	Pass	6.79	26.75	24.60	0.28840	3	19.96	0.099	Inf	19.96
782MHz_16QAM_RB 25,#RB 12	Pass	6.79	26.65	24.50	0.28184	3	19.86	0.097	Inf	19.86
782MHz_16QAM_RB 25,#RB 25	Pass	6.79	26.75	24.60	0.28840	3	19.96	0.099	Inf	19.96
782MHz_16QAM_RB 50,#RB 0	Pass	6.79	26.93	24.78	0.30061	3	20.14	0.103	Inf	20.14

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

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

LTE Band 12 /13

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

LTE Band 13

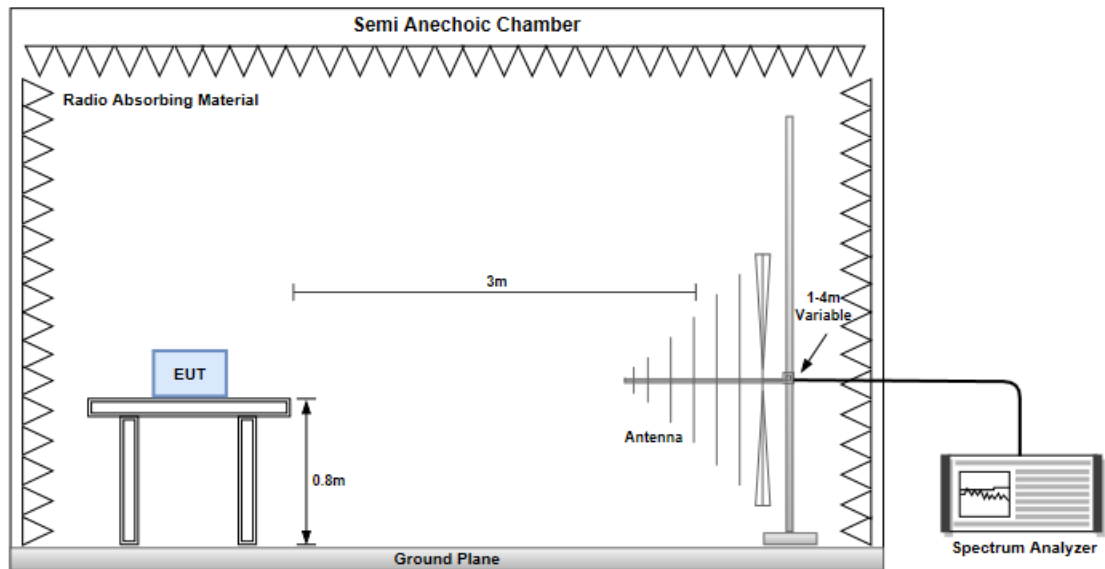
For operations in the 775-788 MHz emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

3.2.2 Test Procedures

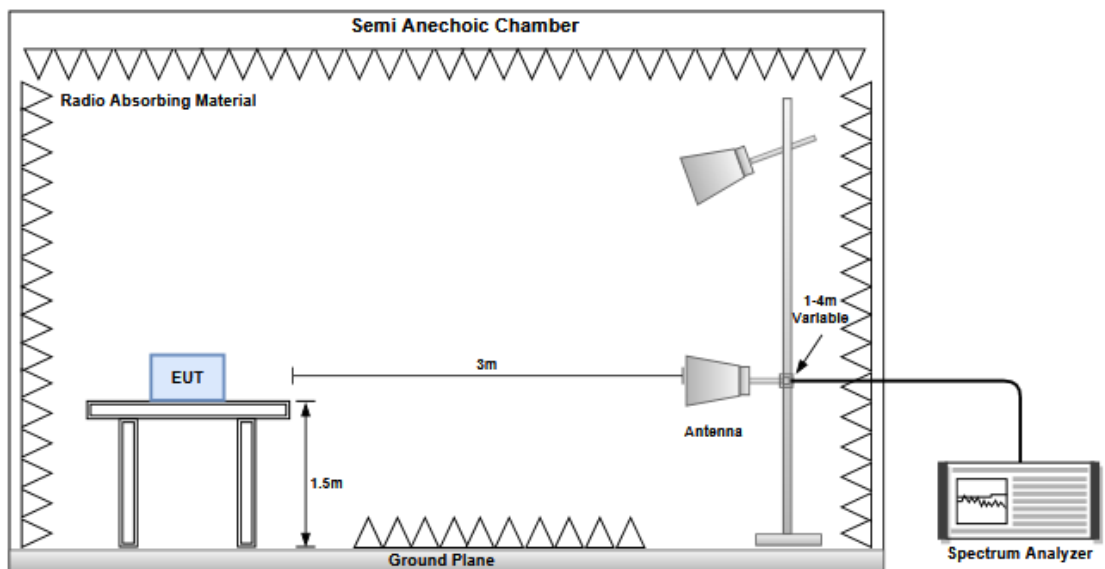
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



Configuration 1: Array antenna with antenna cable, Z-plane

3.2.4 Test Result of Radiated Emissions below 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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)
199.28	H	-64.07	-13.00	-51.07	-56.62	-59.37	-2.55
225.25	H	-59.77	-13.00	-46.77	-53.44	-55.64	-1.98
249.35	H	-62.63	-13.00	-49.63	-57.47	-58.99	-1.49
299.66	H	-58.08	-13.00	-45.08	-54.70	-54.47	-1.46
324.76	H	-62.58	-13.00	-49.58	-60.58	-59.03	-1.40
349.24	H	-57.50	-13.00	-44.50	-56.85	-54.02	-1.33
200.22	V	-62.46	-13.00	-49.46	-60.29	-57.83	-2.48
223.96	V	-56.67	-13.00	-43.67	-55.59	-52.52	-2.00
249.85	V	-57.46	-13.00	-44.46	-57.57	-53.83	-1.48
300.45	V	-59.77	-13.00	-46.77	-59.60	-56.16	-1.46
349.28	V	-60.90	-13.00	-47.90	-60.76	-57.42	-1.33
600.45	V	-57.06	-13.00	-44.06	-63.41	-53.03	-1.88

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
198.96	H	-63.97	-13.00	-50.97	-56.57	-59.24	-2.58
225.76	H	-59.77	-13.00	-46.77	-53.46	-55.66	-1.96
250.49	H	-62.32	-13.00	-49.32	-57.22	-58.69	-1.48
300.81	H	-57.48	-13.00	-44.48	-54.15	-53.87	-1.46
325.47	H	-62.64	-13.00	-49.64	-60.68	-59.10	-1.39
350.56	H	-57.63	-13.00	-44.63	-57.03	-54.15	-1.33
200.12	V	-62.43	-13.00	-49.43	-60.26	-57.80	-2.48
224.39	V	-56.31	-13.00	-43.31	-55.25	-52.17	-1.99
249.55	V	-56.53	-13.00	-43.53	-56.63	-52.89	-1.49
290.83	V	-60.48	-13.00	-47.48	-60.31	-56.87	-1.46
348.95	V	-60.60	-13.00	-47.60	-60.46	-57.12	-1.33
600.49	V	-56.14	-13.00	-43.14	-62.49	-52.11	-1.88

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

Mode	LTE Band 12, 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)
200.54	H	-63.09	-13.00	-50.09	-55.56	-58.47	-2.47
225.15	H	-60.61	-13.00	-47.61	-54.27	-56.48	-1.98
248.62	H	-63.08	-13.00	-50.08	-57.88	-59.42	-1.51
300.26	H	-57.13	-13.00	-44.13	-53.77	-53.52	-1.46
325.15	H	-63.70	-13.00	-50.70	-61.72	-60.16	-1.39
350.22	H	-57.54	-13.00	-44.54	-56.93	-54.06	-1.33
199.96	V	-62.46	-13.00	-49.46	-60.28	-57.83	-2.48
224.00	V	-56.63	-13.00	-43.63	-55.55	-52.48	-2.00
249.53	V	-57.49	-13.00	-44.49	-57.59	-53.85	-1.49
299.95	V	-59.77	-13.00	-46.77	-59.60	-56.16	-1.46
349.89	V	-61.09	-13.00	-48.09	-60.95	-57.61	-1.33
600.02	V	-56.81	-13.00	-43.81	-63.16	-52.78	-1.88

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 25, 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)
199.75	H	-63.76	-13.00	-50.76	-56.24	-59.11	-2.50
224.00	H	-60.03	-13.00	-47.03	-53.64	-55.88	-2.00
249.22	H	-62.42	-13.00	-49.42	-57.13	-58.77	-1.50
299.66	H	-57.97	-13.00	-44.97	-54.59	-54.36	-1.46
324.88	H	-63.00	-13.00	-50.00	-61.00	-59.45	-1.40
349.13	H	-57.42	-13.00	-44.42	56.76	-53.94	-1.33
199.70	V	-62.62	-13.00	-49.62	-60.45	-57.97	-2.50
224.00	V	-56.90	-13.00	-43.90	-55.82	-52.75	-2.00
249.22	V	-57.64	-13.00	-44.64	-57.72	-53.99	-1.50
299.66	V	-59.49	-13.00	-46.49	-59.32	-55.88	-1.46
349.13	V	-61.00	-13.00	-48.00	-60.86	-57.52	-1.33
600.36	V	-56.70	-13.00	-43.70	-63.05	-52.67	-1.88

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

3.2.5 Test Result of Radiated Emissions below 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.86	H	-64.64	-13.00	-51.64	-57.10	-60.00	-2.49
224.35	H	-59.71	-13.00	-46.71	-53.33	-55.57	-1.99
249.58	H	-62.38	-13.00	-49.38	-57.23	-58.74	-1.49
299.21	H	-56.74	-13.00	-43.74	-53.34	-53.13	-1.46
324.96	H	-63.13	-13.00	-50.13	-61.14	-59.58	-1.40
349.29	H	-58.11	-13.00	-45.11	-57.46	-54.63	-1.33
199.24	V	-62.50	-13.00	-49.50	-60.36	-57.80	-2.55
224.33	V	-57.07	-13.00	-44.07	-56.01	-52.93	-1.99
249.28	V	-57.53	-13.00	-44.53	-57.62	-53.89	-1.49
299.42	V	-59.56	-13.00	-46.56	-59.39	-55.95	-1.46
349.05	V	-59.80	-13.00	-46.80	-59.66	-56.32	-1.33
600.49	V	-57.03	-13.00	-44.03	-63.38	-53.00	-1.88

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.75	H	-64.42	-13.00	-51.42	-56.90	-59.77	-2.50
224.00	H	-59.87	-13.00	-46.87	-53.48	-55.72	-2.00
249.22	H	-62.84	-13.00	-49.84	-57.67	-59.19	-1.50
299.66	H	-56.87	-13.00	-43.87	-53.49	-53.26	-1.46
324.88	H	-63.27	-13.00	-50.27	-61.27	-59.72	-1.40
349.13	H	-57.87	-13.00	-44.87	-57.21	-54.39	-1.33
199.75	V	-62.66	-13.00	-49.66	-60.49	-58.01	-2.50
224.00	V	-59.91	-13.00	-46.91	-55.83	-55.76	-2.00
249.22	V	-57.76	-13.00	-44.76	-57.84	-54.11	-1.50
299.66	V	-59.80	-13.00	-46.80	-59.63	-56.19	-1.46
349.13	V	-60.15	-13.00	-47.15	-60.01	-56.67	-1.33
600.36	V	-56.73	-13.00	-43.73	-63.08	-52.70	-1.88

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

3.2.6 Test Result of Radiated Emissions above 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-53.50	-13.00	-40.50	-57.08	-55.29	3.94
2099.10	H	-36.89	-13.00	-23.89	-43.45	-40.31	5.57
4198.20	H	-51.30	-13.00	-38.30	-64.08	-56.19	7.04
1399.40	V	-47.64	-13.00	-34.64	-51.01	-49.43	3.94
2099.10	V	-39.66	-13.00	-26.66	-46.12	-43.08	5.57
4198.20	V	-56.25	-13.00	-43.25	-68.97	-61.14	7.04

Mode	LTE Band 12, 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	-57.82	-13.00	-44.82	-61.42	-59.74	4.07
2122.50	H	-40.01	-13.00	-27.01	-46.83	-43.24	5.38
4245.00	H	-48.14	-13.00	-35.14	-60.99	-52.97	6.98
1415.00	V	-51.57	-13.00	-38.57	-54.99	-53.49	4.07
2122.50	V	-42.68	-13.00	-29.68	-49.40	-45.91	5.38
4245.00	V	-54.96	-13.00	-41.96	-67.75	-59.79	6.98

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-59.17	-13.00	-46.17	-62.80	-61.22	4.20
2145.90	H	-42.30	-13.00	-29.30	-49.39	-45.35	5.20
4291.80	H	-50.23	-13.00	-37.23	-63.16	-55.00	6.92
1430.60	V	-54.46	-13.00	-41.46	-57.94	-56.51	4.20
2145.90	V	-45.18	-13.00	-32.18	-52.17	-48.23	5.20
4291.80	V	-55.97	-13.00	-42.97	-68.83	-60.74	6.92

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

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1401.00	H	-53.88	-13.00	-40.88	-57.46	-55.68	3.95
2101.50	H	-36.99	-13.00	-23.99	-43.58	-40.39	5.55
4203.00	H	-51.79	-13.00	-38.79	-64.57	-56.68	7.04
1401.00	V	-47.89	-13.00	-34.89	-51.26	-49.69	3.95
2101.50	V	-40.10	-13.00	-27.10	-46.59	-43.50	5.55
4203.00	V	-56.43	-13.00	-43.43	-69.15	-61.32	7.04

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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	-57.98	-13.00	-44.98	-61.58	-59.90	4.07
2122.50	H	-39.93	-13.00	-26.93	-46.75	-43.16	5.38
4245.00	H	-48.03	-13.00	-35.03	-60.88	-52.86	6.98
1415.00	V	-51.44	-13.00	-38.44	-54.86	-53.36	4.07
2122.50	V	-42.54	-13.00	-29.54	-49.26	-45.77	5.38
4245.00	V	-55.10	-13.00	-42.10	-67.89	-59.93	6.98

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1429.00	H	-59.02	-13.00	-46.02	-62.65	-61.05	4.18
2143.50	H	-42.42	-13.00	-29.42	-49.49	-45.49	5.22
4287.00	H	-49.66	-13.00	-36.66	-62.58	-54.43	6.92
1429.00	V	-54.18	-13.00	-41.18	-57.66	-56.21	4.18
2143.50	V	-45.52	-13.00	-32.52	-52.48	-48.59	5.22
4287.00	V	-55.68	-13.00	-42.68	-68.54	-60.45	6.92

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

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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)
1403.00	H	-53.70	-13.00	-40.70	-57.28	-55.52	3.97
2104.50	H	-36.96	-13.00	-23.96	-43.58	-40.33	5.52
4209.00	H	-51.45	-13.00	-38.45	-64.25	-56.33	7.03
1403.00	V	-48.07	-13.00	-35.07	-51.45	-49.89	3.97
2104.50	V	-39.96	-13.00	-26.96	-46.48	-43.33	5.52
4209.00	V	-56.14	-13.00	-43.14	-68.88	-61.02	7.03

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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	-57.98	-13.00	-44.98	-61.58	-59.90	4.07
2122.50	H	-39.93	-13.00	-26.93	-46.75	-43.16	5.38
4245.00	H	-47.96	-13.00	-34.96	-60.81	-52.79	6.98
1415.00	V	-51.29	-13.00	-38.29	-54.71	-53.21	4.07
2122.50	V	-42.53	-13.00	-29.53	-49.25	-45.76	5.38
4245.00	V	-54.55	-13.00	-41.55	-67.34	-59.38	6.98

Mode	LTE Band 12, 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	-58.92	-13.00	-45.92	-62.55	-60.94	4.17
2140.50	H	-42.72	-13.00	-29.72	-49.75	-45.81	5.24
4281.00	H	-49.74	-13.00	-36.74	-62.66	-54.52	6.93
1427.00	V	-54.65	-13.00	-41.65	-58.12	-56.67	4.17
2140.50	V	-45.58	-13.00	-32.58	-52.51	-48.67	5.24
4281.00	V	-55.61	-13.00	-42.61	-68.46	-60.39	6.93

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

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1408.00	H	-53.82	-13.00	-40.82	-57.41	-55.68	4.01
2112.00	H	-37.15	-13.00	-24.15	-43.86	-40.47	5.47
4224.00	H	-51.08	-13.00	-38.08	-63.90	-55.94	7.01
1408.00	V	-48.17	-13.00	-35.17	-51.57	-50.03	4.01
2112.00	V	-40.06	-13.00	-27.06	-46.67	-43.38	5.47
4224.00	V	-57.30	-13.00	-44.30	-70.06	-62.16	7.01

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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	-57.88	-13.00	-44.88	-61.48	-59.80	4.07
2122.50	H	-40.07	-13.00	-27.07	-46.89	-43.30	5.38
4245.00	H	-48.06	-13.00	-35.06	-60.91	-52.89	6.98
1415.00	V	-51.68	-13.00	-38.68	-55.10	-53.60	4.07
2122.50	V	-42.96	-13.00	-29.96	-49.68	-46.19	5.38
4245.00	V	-55.10	-13.00	-42.10	-67.89	-59.93	6.98

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1422.00	H	-59.83	-13.00	-46.83	-63.45	-61.80	4.12
2133.00	H	-41.89	-13.00	-28.89	-48.83	-45.04	5.30
4266.00	H	-50.02	-13.00	-37.02	-62.91	-54.82	6.95
1422.00	V	-54.71	-13.00	-41.71	-58.16	-56.68	4.12
2133.00	V	-44.17	-13.00	-31.17	-51.01	-47.32	5.30
4266.00	V	-56.18	-13.00	-43.18	-69.01	-60.98	6.95

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

3.2.7 Test Result of Radiated Emissions above 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2338.50	H	-30.33	-13.00	-17.33	-37.67	-33.84	5.66
3118.00	H	-62.16	-13.00	-49.16	-72.28	-66.55	6.54
3897.50	H	-41.74	-13.00	-28.74	-54.28	-46.59	7.00
2338.50	V	-38.73	-13.00	-25.73	-46.08	-42.24	5.66
3118.00	V	-62.21	-13.00	-49.21	-72.28	-66.60	6.54
3897.50	V	-44.79	-13.00	-31.79	-57.33	-49.64	7.00

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-28.88	-13.00	-15.88	-36.21	-32.44	5.71
3128.00	H	-62.17	-13.00	-49.17	-72.34	-66.57	6.55
3910.00	H	-39.13	-13.00	-26.13	-51.61	-43.99	7.01
2346.00	V	-37.31	-13.00	-24.31	-44.65	-40.87	5.71
3128.00	V	-62.49	-13.00	-49.49	-72.61	-66.89	6.55
3910.00	V	-41.92	-13.00	-28.92	-54.42	-46.78	7.01

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2353.50	H	-29.56	-13.00	-16.56	-36.86	-33.16	5.75
3138.00	H	-62.01	-13.00	-49.01	-72.21	-66.42	6.56
3922.50	H	-38.67	-13.00	-25.67	-51.11	-43.54	7.02
2353.50	V	-38.63	-13.00	-25.63	-45.95	-42.23	5.75
3138.00	V	-62.21	-13.00	-49.21	-72.38	-66.62	6.56
3922.50	V	-41.82	-13.00	-28.82	-54.30	-46.69	7.02

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

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-29.01	-13.00	-16.01	-36.34	-32.57	5.71
3128.00	H	-62.12	-13.00	-49.12	-72.29	-66.52	6.55
3910.00	H	-39.05	-13.00	-26.05	-51.53	-43.91	7.01
2346.00	V	-37.63	-13.00	-24.63	-44.97	-41.19	5.71
3128.00	V	-62.32	-13.00	-49.32	-72.44	-66.72	6.55
3910.00	V	-41.86	-13.00	-28.86	-54.36	-46.72	7.01

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

3.2.8 Test Result of Radiated Emissions in the 1559-1610MHz band (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1559.00	H	-63.94	-40.00	-23.94	-69.81	-69.22	5.28
1559.00	V	-64.07	-40.00	-24.07	-70.03	-69.35	5.28

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-64.02	-40.00	-24.02	-69.88	-69.34	5.32
1564.00	V	-64.04	-40.00	-24.04	-70.01	-69.36	5.32

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1569.00	H	-64.12	-40.00	-24.12	-69.98	-69.48	5.36
1569.00	V	-64.11	-40.00	-24.11	-70.08	-69.47	5.36

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 49, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-63.92	-40.00	-23.92	-69.78	-69.24	5.32
1564.00	V	-63.92	-40.00	-23.92	-69.89	-69.24	5.32

Note: EIRP = S.G Power value + Correction factor.

Configuration 2: Directional antenna with antenna cable

3.2.9 Test Result of Radiated Emissions below 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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)
200.16	H	-58.63	-13.00	-45.63	-51.08	-54.00	-2.48
224.35	H	-57.99	-13.00	-44.99	-51.61	-53.85	-1.99
249.46	H	-59.73	-13.00	-46.73	-54.57	-56.09	-1.49
299.35	H	-63.56	-13.00	-50.56	-60.17	-59.95	-1.46
324.88	H	-64.74	-13.00	-51.74	-62.74	-61.19	-1.40
400.15	H	-63.73	-13.00	-50.73	-64.23	-60.20	-1.38
199.95	V	-61.36	-13.00	-48.36	-59.18	-56.73	-2.48
225.25	V	-55.31	-13.00	-42.31	-54.29	-51.18	-1.98
250.35	V	-59.77	-13.00	-46.77	-59.90	-56.14	-1.48
300.42	V	-60.72	-13.00	-47.72	-60.55	-57.11	-1.46
325.28	V	-65.99	-13.00	-52.99	-65.83	-62.45	-1.39
349.45	V	-67.68	-13.00	-54.68	-67.54	-64.20	-1.33

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
199.16	H	-58.50	-13.00	-45.50	-51.07	-53.79	-2.56
224.54	H	-58.43	-13.00	-45.43	-52.06	-54.29	-1.99
250.36	H	-59.21	-13.00	-46.21	-54.10	-55.58	-1.48
299.56	H	-63.64	-13.00	-50.64	-60.25	-60.03	-1.46
327.77	H	-64.53	-13.00	-51.53	-62.53	-60.98	-1.40
400.46	H	-63.24	-13.00	-50.24	-63.75	-59.71	-1.38
199.55	V	-61.39	-13.00	-48.39	-59.24	-56.72	-2.52
224.16	V	-55.62	-13.00	-42.62	-54.55	-51.47	-2.00
249.22	V	-60.11	-13.00	-47.11	-60.19	-56.46	-1.50
299.91	V	-60.80	-13.00	-47.80	-60.63	-57.19	-1.46
325.45	V	-66.09	-13.00	-53.09	-65.93	-62.55	-1.39
349.55	V	-67.36	-13.00	-54.36	-67.22	-63.88	-1.33

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

Mode	LTE Band 12, 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)
200.31	H	-58.64	-13.00	-45.64	-51.09	-54.02	-2.47
223.98	H	-57.90	-13.00	-44.90	-51.51	-53.75	-2.00
249.38	H	-59.66	-13.00	-46.66	-54.50	-56.02	-1.49
299.42	H	-63.40	-13.00	-50.40	-60.01	-59.79	-1.46
324.99	H	-64.50	-13.00	-51.50	-62.51	-60.95	-1.40
399.42	H	-63.29	-13.00	-50.29	-63.78	-59.76	-1.38
199.84	V	-61.96	-13.00	-48.96	-59.79	-57.31	-2.50
225.23	V	-55.56	-13.00	-42.56	-54.54	-51.43	-1.98
249.25	V	-59.84	-13.00	-46.84	-59.93	-56.19	-1.50
299.47	V	-61.48	-13.00	-48.48	-61.31	-57.87	-1.46
325.56	V	-65.73	-13.00	-52.73	-65.57	-62.19	-1.39
348.95	V	-67.02	-13.00	-54.02	-66.88	-63.54	-1.33

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 25, 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)
199.75	H	-58.42	-13.00	-45.42	-50.90	-53.77	-2.50
224.00	H	-58.27	-13.00	-45.27	-51.88	-54.12	-2.00
249.22	H	-59.39	-13.00	-46.39	-54.22	-55.74	-1.50
299.66	H	-63.24	-13.00	-50.24	-59.86	-59.63	-1.46
324.88	H	-64.57	-13.00	-51.57	-62.57	-61.02	-1.40
399.57	H	-63.54	-13.00	-50.54	-64.03	-60.01	-1.38
199.75	V	-61.61	-13.00	-48.61	-59.44	-56.96	-2.50
224.00	V	-55.79	-13.00	-42.79	-54.71	-51.64	-2.00
249.22	V	-60.00	-13.00	-47.00	-60.08	-56.35	-1.50
299.66	V	-61.15	-13.00	-48.15	-60.98	-57.54	-1.46
324.88	V	-66.17	-13.00	-53.17	-66.02	-62.62	-1.40
349.13	V	-67.33	-13.00	-54.33	-67.19	-63.85	-1.33

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

3.2.10 Test Result of Radiated Emissions below 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.85	H	-58.36	-13.00	-45.36	-50.82	-53.72	-2.49
224.16	H	-57.61	-13.00	-44.61	-51.22	-53.46	-2.00
249.38	H	-58.39	-13.00	-45.39	-53.23	-54.75	-1.49
299.51	H	-63.29	-13.00	-50.29	-59.90	-59.68	-1.46
324.96	H	-64.73	-13.00	-51.73	-62.74	-61.18	-1.40
399.44	H	-63.17	-13.00	-50.17	-63.66	-59.64	-1.38
199.65	V	-61.55	-13.00	-48.55	-59.39	-56.89	-2.51
224.25	V	-54.50	-13.00	-41.50	-53.44	-50.35	-2.00
249.46	V	-59.36	-13.00	-46.36	-59.46	-55.72	-1.49
299.84	V	-59.81	-13.00	-46.81	-59.64	-56.20	-1.46
324.95	V	-65.83	-13.00	-52.83	-65.68	-62.28	-1.40
600.59	V	-60.61	-13.00	-47.61	-66.96	-56.58	-1.88

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.75	H	-58.20	-13.00	-45.20	-50.68	-53.55	-2.50
224.00	H	-57.68	-13.00	-44.68	-51.29	-53.53	-2.00
249.22	H	-58.69	-13.00	-45.69	-53.52	-55.04	-1.50
299.66	H	-63.17	-13.00	-50.17	59.79	-59.56	-1.46
324.88	H	-64.46	-13.00	-51.46	-62.46	-60.91	-1.40
399.57	H	-63.43	-13.00	-50.43	-63.92	-59.90	-1.38
199.75	V	-61.82	-13.00	-48.82	-59.65	-57.17	-2.50
224.00	V	-54.19	-13.00	-41.19	-53.11	-50.04	-2.00
249.22	V	-59.58	-13.00	-46.58	-59.66	-55.93	-1.50
299.66	V	-60.06	-13.00	-47.06	-59.89	-56.45	-1.46
324.88	V	-65.60	-13.00	-52.60	-65.45	-62.05	-1.40
600.36	V	-60.78	-13.00	-47.78	-67.11	-56.75	-1.88

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

3.2.11 Test Result of Radiated Emissions above 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-43.07	-13.00	-30.07	-46.65	-44.86	3.94
2099.10	H	-33.48	-13.00	-20.48	-40.04	-36.90	5.57
4198.20	H	-55.69	-13.00	-42.69	-68.47	-60.58	7.04
1399.40	V	-47.33	-13.00	-34.33	-50.70	-49.12	3.94
2099.10	V	-33.53	-13.00	-20.53	-39.99	-36.95	5.57
4198.20	V	-50.69	-13.00	-37.69	-63.41	-55.58	7.04

Mode	LTE Band 12, 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	-46.76	-13.00	-33.76	-50.36	-48.68	4.07
2122.50	H	-37.62	-13.00	-24.62	-44.44	-40.85	5.38
4245.00	H	-52.84	-13.00	-39.84	-65.69	-57.67	6.98
1415.00	V	-50.82	-13.00	-37.82	-54.24	-52.74	4.07
2122.50	V	-37.63	-13.00	-24.63	-44.35	-40.86	5.38
4245.00	V	-47.50	-13.00	-34.50	-60.29	-52.33	6.98

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-51.11	-13.00	-38.11	-54.74	-53.16	4.20
2145.90	H	-34.85	-13.00	-21.85	-41.94	-37.90	5.20
4291.80	H	-55.94	-13.00	-42.94	-68.87	-60.71	6.92
1430.60	V	-55.43	-13.00	-42.43	-58.91	-57.48	4.20
2145.90	V	-34.98	-13.00	-21.98	-41.97	-38.03	5.20
4291.80	V	-53.38	-13.00	-40.38	-66.24	-58.15	6.92

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

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1401.00	H	-43.00	-13.00	-30.00	-46.58	-44.80	3.95
2101.50	H	-33.95	-13.00	-20.95	-40.54	-37.35	5.55
4203.00	H	-56.07	-13.00	-43.07	-68.85	-60.96	7.04
1401.00	V	-47.09	-13.00	-34.09	-50.46	-48.89	3.95
2101.50	V	-33.77	-13.00	-20.77	-40.26	-37.17	5.55
4203.00	V	-50.86	-13.00	-37.86	-63.58	-55.75	7.04

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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	-46.97	-13.00	-33.97	-50.57	-48.89	4.07
2122.50	H	-37.74	-13.00	-24.74	-44.56	-40.97	5.38
4245.00	H	-53.02	-13.00	-40.02	-65.87	-57.85	6.98
1415.00	V	-50.97	-13.00	-37.97	-54.39	-52.89	4.07
2122.50	V	-37.43	-13.00	-24.43	-44.15	-40.66	5.38
4245.00	V	-47.63	-13.00	-34.63	-60.42	-52.46	6.98

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1429.00	H	-51.24	-13.00	-38.24	-54.87	-53.27	4.18
2143.50	H	-35.19	-13.00	-22.19	-42.26	-38.26	5.22
4287.00	H	-55.66	-13.00	-42.66	-68.58	-60.43	6.92
1429.00	V	-55.31	-13.00	-42.31	-58.79	-57.34	4.18
2143.50	V	-34.82	-13.00	-21.82	-41.78	-37.89	5.22
4287.00	V	-53.52	-13.00	-40.52	-66.38	-58.29	6.92

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

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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)
1403.00	H	-43.30	-13.00	-30.30	-46.88	-45.12	3.97
2104.50	H	-33.63	-13.00	-20.63	-40.25	-37.00	5.52
4209.00	H	-55.15	-13.00	-42.15	-67.95	-60.03	7.03
1403.00	V	-47.07	-13.00	-34.07	-50.45	-48.89	3.97
2104.50	V	-33.04	-13.00	-20.04	-39.56	-36.41	5.52
4209.00	V	-50.84	-13.00	-37.84	-63.58	-55.72	7.03

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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	-46.82	-13.00	-33.82	-50.42	-48.74	4.07
2122.50	H	-37.54	-13.00	-24.54	-44.36	-40.77	5.38
4245.00	H	-52.70	-13.00	-39.70	-65.55	-57.53	6.98
1415.00	V	-51.16	-13.00	-38.16	-54.58	-53.08	4.07
2122.50	V	-37.46	-13.00	-24.46	-44.18	-40.69	5.38
4245.00	V	-47.59	-13.00	-34.59	-60.38	-52.42	6.98

Mode	LTE Band 12, 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	-51.00	-13.00	-38.00	-54.63	-53.02	4.17
2140.50	H	-35.03	-13.00	-22.03	-42.06	-38.12	5.24
4281.00	H	-55.56	-13.00	-42.56	-68.48	-60.34	6.93
1427.00	V	-55.29	-13.00	-42.29	-58.76	-57.31	4.17
2140.50	V	-34.85	-13.00	-21.85	-41.78	-37.94	5.24
4281.00	V	-53.53	-13.00	-40.53	-66.38	-58.31	6.93

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

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1408.00	H	-43.79	-13.00	-30.79	-47.38	-45.65	4.01
2112.00	H	-33.41	-13.00	-20.41	-40.12	-36.73	5.47
4224.00	H	-55.51	-13.00	-42.51	-68.33	-60.37	7.01
1408.00	V	-48.19	-13.00	-35.19	-51.59	-50.05	4.01
2112.00	V	-33.57	-13.00	-20.57	-40.18	-36.89	5.47
4224.00	V	-50.47	-13.00	-37.47	-63.23	-55.33	7.01

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1408.00	H	-43.79	-13.00	-30.79	-47.38	-45.65	4.01
2112.00	H	-33.41	-13.00	-20.41	-40.12	-36.73	5.47
4224.00	H	-55.51	-13.00	-42.51	-68.33	-60.37	7.01
1408.00	V	-48.19	-13.00	-35.19	-51.59	-50.05	4.01
2112.00	V	-33.57	-13.00	-20.57	-40.18	-36.89	5.47
4224.00	V	-50.47	-13.00	-37.47	-63.23	-55.33	7.01

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1422.00	H	-51.04	-13.00	-38.04	-54.66	-53.01	4.12
2133.00	H	-35.10	-13.00	-22.10	-42.40	-38.25	5.30
4266.00	H	-50.91	-13.00	-37.91	-63.80	-55.71	6.95
1422.00	V	-55.10	-13.00	-42.10	-58.55	-57.07	4.12
2133.00	V	-35.20	-13.00	-22.20	-42.04	-38.35	5.30
4266.00	V	-47.12	-13.00	-34.12	-59.95	-51.92	6.95

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

3.2.12 Test Result of Radiated Emissions above 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2338.50	H	-33.73	-13.00	-20.73	-41.07	-37.24	5.66
3118.00	H	-61.55	-13.00	-48.55	-71.67	-65.94	6.54
3897.50	H	-53.82	-13.00	-40.82	-66.36	-58.67	7.00
2338.50	V	-32.05	-13.00	-19.05	-39.40	-35.56	5.66
3118.00	V	-62.11	-13.00	-49.11	-72.18	-66.50	6.54
3897.50	V	-50.35	-13.00	-37.35	-62.89	-55.20	7.00

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-33.05	-13.00	-20.05	-40.38	-36.61	5.71
3128.00	H	-62.24	-13.00	-49.24	-72.41	-66.64	6.55
3910.00	H	-52.42	-13.00	-39.42	-64.90	-57.28	7.01
2346.00	V	-31.50	-13.00	-18.50	-38.84	-35.06	5.71
3128.00	V	-62.36	-13.00	-49.36	-72.48	-66.76	6.55
3910.00	V	-50.92	-13.00	-37.92	-63.42	-55.78	7.01

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2353.50	H	-30.67	-13.00	-17.67	-37.97	-34.27	5.75
3138.00	H	-61.05	-13.00	-48.05	-71.25	-65.46	6.56
3922.50	H	-53.96	-13.00	-40.96	-66.40	-58.83	7.02
2353.50	V	-28.99	-13.00	-15.99	-36.31	-32.59	5.75
3138.00	V	-62.01	-13.00	-49.01	-72.18	-66.42	6.56
3922.50	V	-50.02	-13.00	-37.02	-62.50	-54.89	7.02

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

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-33.33	-13.00	-20.33	-40.66	-36.89	5.71
3128.00	H	-60.91	-13.00	-47.91	-71.08	-65.31	6.55
3910.00	H	-55.04	-13.00	-42.04	-67.52	-59.90	7.01
2346.00	V	-31.68	-13.00	-18.68	-39.02	-35.24	5.71
3128.00	V	-62.26	-13.00	-49.26	-72.38	-66.66	6.55
3910.00	V	-51.06	-13.00	-38.06	-63.56	-55.92	7.01

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

3.2.13 Test Result of Radiated Emissions in the 1559-1610MHz band (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1559.00	H	-66.04	-40.00	-26.04	-71.91	-71.32	5.28
1559.00	V	-64.69	-40.00	-24.69	-70.65	-69.97	5.28

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-64.16	-40.00	-24.16	-70.02	-69.48	5.32
1564.00	V	-64.74	-40.00	-24.74	-70.71	-70.06	5.32

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1569.00	H	-65.68	-40.00	-25.68	-71.54	-71.04	5.36
1569.00	V	-62.97	-40.00	-22.97	-68.94	-68.33	5.36

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-64.75	-40.00	-24.75	-70.61	-70.07	5.32
1564.00	V	-62.80	-40.00	-22.80	-68.77	-68.12	5.32

Note: EIRP = S.G Power value + Correction factor.

Configuration 3: Individual antenna

3.2.14 Test Result of Radiated Emissions below 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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)
200.25	H	-65.56	-13.00	-52.56	-58.01	-60.94	-2.47
224.38	H	-61.36	-13.00	-48.36	-54.99	-57.22	-1.99
249.22	H	-64.49	-13.00	-51.49	-59.32	-60.84	-1.50
275.39	H	-64.63	-13.00	-51.63	-60.40	-61.01	-1.47
300.41	H	-60.36	-13.00	-47.36	-57.01	-56.75	-1.46
400.29	H	-60.21	-13.00	-47.21	-60.71	-56.68	-1.38
199.43	V	-60.57	-13.00	-47.57	-58.42	-55.88	-2.54
223.29	V	-60.81	-13.00	-47.81	-59.70	-56.65	-2.01
248.61	V	-61.99	-13.00	-48.99	-62.05	-58.33	-1.51
274.53	V	-63.57	-13.00	-50.57	-63.55	-59.95	-1.47
299.81	V	-63.90	-13.00	-50.90	-63.73	-60.29	-1.46
400.13	V	-64.64	-13.00	-51.64	-65.63	-61.11	-1.38

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
199.24	H	-66.11	-13.00	-53.11	-58.67	-61.41	-2.55
225.54	H	-61.96	-13.00	-48.96	-55.64	-57.84	-1.97
250.86	H	-64.11	-13.00	-51.11	-59.02	-60.48	-1.48
275.85	H	-65.06	-13.00	-52.06	-60.84	-61.44	-1.47
299.26	H	-60.72	-13.00	-47.72	-57.32	-57.11	-1.46
398.65	H	-60.39	-13.00	-47.39	-60.86	-56.86	-1.38
200.61	V	-60.59	-13.00	-47.59	-58.44	-55.97	-2.47
223.62	V	-59.76	-13.00	-46.76	-58.67	-55.60	-2.01
249.22	V	-63.13	-13.00	-50.13	-63.21	-59.48	-1.50
275.83	V	-63.50	-13.00	-50.50	-63.47	-59.88	-1.47
300.59	V	-63.21	-13.00	-50.21	-63.04	-59.60	-1.46
399.12	V	-65.59	-13.00	-52.59	-66.56	-62.06	-1.38

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

Mode	LTE Band 12, 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)
199.81	H	-66.36	-13.00	-53.36	-58.83	-61.71	-2.50
223.95	H	-62.41	-13.00	-49.41	-56.01	-58.26	-2.00
248.50	H	-64.72	-13.00	-51.72	-59.52	-61.06	-1.51
275.86	H	-65.06	-13.00	-52.06	-60.84	-61.44	-1.47
300.44	H	-61.36	-13.00	-48.36	-58.01	-57.75	-1.46
398.42	H	-60.91	-13.00	-47.91	-61.38	-57.38	-1.38
198.63	V	-61.60	-13.00	-48.60	-59.50	-56.84	-2.61
224.34	V	-58.97	-13.00	-45.97	-57.91	-54.83	-1.99
248.69	V	-61.59	-13.00	-48.59	-61.65	-57.93	-1.51
274.26	V	-63.72	-13.00	-50.72	-63.70	-60.10	-1.47
299.59	V	59.44	-13.00	72.44	-63.57	63.05	-1.46
399.68	V	-64.27	-13.00	-51.27	-65.25	-60.74	-1.38

Mode	LTE Band 12, QPSK, CB:10 MHz, 1 RB Offset 25, 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)
199.75	H	-65.81	-13.00	-52.81	-58.29	-61.16	-2.50
224.00	H	-61.85	-13.00	-48.85	-55.46	-57.70	-2.00
249.22	H	-64.70	-13.00	-51.70	-59.53	-61.05	-1.50
274.44	H	-64.48	-13.00	-51.48	-60.22	-60.86	-1.47
299.66	H	-60.62	-13.00	-47.62	-57.24	-57.01	-1.46
399.57	H	-60.83	-13.00	-47.83	-61.32	-57.30	-1.38
199.75	V	-60.87	-13.00	-47.87	-58.70	-56.22	-2.50
224.00	V	-60.13	-13.00	-47.13	-59.05	-55.98	-2.00
249.22	V	-62.46	-13.00	-49.46	-62.54	-58.81	-1.50
274.44	V	-64.00	-13.00	-51.00	-63.98	-60.38	-1.47
299.66	V	-63.57	-13.00	-50.57	-63.40	-59.96	-1.46
399.57	V	-64.40	-13.00	-51.40	-65.38	-60.87	-1.38

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

3.2.15 Test Result of Radiated Emissions below 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
224.12	H	-60.99	-13.00	-47.99	-54.60	-56.84	-2.00
249.38	H	-62.60	-13.00	-49.60	-57.44	-58.96	-1.49
299.24	H	-59.61	-13.00	-46.61	-56.21	-56.00	-1.46
324.75	H	-62.66	-13.00	-49.66	-60.66	-59.11	-1.40
349.28	H	-65.09	-13.00	-52.09	-64.44	-61.61	-1.33
399.25	H	-61.12	-13.00	-48.12	-61.60	-57.59	-1.38
199.55	V	-60.51	-13.00	-47.51	-58.36	-55.84	-2.52
224.26	V	-60.26	-13.00	-47.26	-59.20	-56.12	-1.99
249.45	V	-61.76	-13.00	-48.76	-61.85	-58.12	-1.49
299.32	V	-63.60	-13.00	-50.60	-63.43	-59.99	-1.46
399.86	V	-63.39	-13.00	-50.39	-64.38	-59.86	-1.38
600.58	V	-59.60	-13.00	-46.60	-65.95	-55.57	-1.88

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
224.00	H	-61.14	-13.00	-48.14	-54.75	-56.99	-2.00
249.22	H	-62.86	-13.00	-49.86	-57.69	-59.21	-1.50
299.66	H	-59.86	-13.00	-46.86	-56.48	-56.25	-1.46
324.88	H	-62.87	-13.00	-49.87	-60.87	-59.32	-1.40
349.13	H	-64.43	-13.00	-51.43	-63.77	-60.95	-1.33
399.57	H	-60.82	-13.00	-47.82	-61.31	-57.29	-1.38
199.75	V	-60.23	-13.00	-47.23	-58.06	-55.58	-2.50
224.00	V	-60.43	-13.00	-47.43	-59.35	-56.28	-2.00
249.22	V	-62.09	-13.00	-49.09	-62.17	-58.44	-1.50
299.66	V	-63.36	-13.00	-50.36	-63.19	-59.75	-1.46
399.57	V	-63.98	-13.00	-50.98	-64.96	-60.45	-1.38
600.36	V	-59.94	-13.00	-46.94	-66.29	-55.91	-1.88

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

3.2.16 Test Result of Radiated Emissions above 1GHz (Band 12)

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-61.79	-13.00	-48.79	-65.37	-63.58	3.94
2099.10	H	-46.93	-13.00	-33.93	-53.49	-50.35	5.57
4198.20	H	-56.67	-13.00	-43.67	-69.45	-61.56	7.04
1399.40	V	-56.90	-13.00	-43.90	-60.27	-58.69	3.94
2099.10	V	-37.06	-13.00	-24.06	-43.52	-40.48	5.57
4198.20	V	-48.84	-13.00	-35.84	-61.56	-53.73	7.04

Mode	LTE Band 12, 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	-61.37	-13.00	-48.37	-64.97	-63.29	4.07
2122.50	H	-45.63	-13.00	-32.63	-52.45	-48.86	5.38
4245.00	H	-56.37	-13.00	-43.37	-69.22	-61.20	6.98
1415.00	V	-56.08	-13.00	-43.08	-59.50	-58.00	4.07
2122.50	V	-36.15	-13.00	-23.15	-42.87	-39.38	5.38
4245.00	V	-47.63	-13.00	-34.63	-60.42	-52.46	6.98

Mode	LTE Band 12, CB:1.4 MHz, 1 RB Offset 3, 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	-59.95	-13.00	-46.95	-63.58	-62.00	4.20
2145.90	H	-43.16	-13.00	-30.16	-50.25	-46.21	5.20
4291.80	H	-54.65	-13.00	-41.65	-67.58	-59.42	6.92
1430.60	V	-54.98	-13.00	-41.98	-58.46	-57.03	4.20
2145.90	V	-33.37	-13.00	-20.37	-40.36	-36.42	5.20
4291.80	V	-45.72	-13.00	-32.72	-58.58	-50.49	6.92

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

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1401.00	H	-61.67	-13.00	-48.67	-65.25	-63.47	3.95
2101.50	H	-47.00	-13.00	-34.00	-53.59	-50.40	5.55
4203.00	H	-56.79	-13.00	-43.79	-69.57	-61.68	7.04
1401.00	V	-57.11	-13.00	-44.11	-60.48	-58.91	3.95
2101.50	V	-37.01	-13.00	-24.01	-43.50	-40.41	5.55
4203.00	V	-48.73	-13.00	-35.73	-61.45	-53.62	7.04

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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	-61.28	-13.00	-48.28	-64.88	-63.20	4.07
2122.50	H	-45.86	-13.00	-32.86	-52.68	-49.09	5.38
4245.00	H	-56.83	-13.00	-43.83	-69.68	-61.66	6.98
1415.00	V	-55.90	-13.00	-42.90	-59.32	-57.82	4.07
2122.50	V	-35.89	-13.00	-22.89	-42.61	-39.12	5.38
4245.00	V	-47.96	-13.00	-34.96	-60.75	-52.79	6.98

Mode	LTE Band 12, CB:3 MHz, 1 RB Offset 8, 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)
1429.00	H	-60.03	-13.00	-47.03	-63.66	-62.06	4.18
2143.50	H	-43.52	-13.00	-30.52	-50.59	-46.59	5.22
4287.00	H	-54.94	-13.00	-41.94	-67.86	-59.71	6.92
1429.00	V	-54.73	-13.00	-41.73	-58.21	-56.76	4.18
2143.50	V	-33.15	-13.00	-20.15	-40.11	-36.22	5.22
4287.00	V	-46.12	-13.00	-33.12	-58.98	-50.89	6.92

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

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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)
1403.00	H	-61.90	-13.00	-48.90	-65.48	-63.72	3.97
2104.50	H	-47.12	-13.00	-34.12	-53.74	-50.49	5.52
4209.00	H	-56.32	-13.00	-43.32	-69.12	-61.20	7.03
1403.00	V	-56.48	-13.00	-43.48	-59.86	-58.30	3.97
2104.50	V	-37.16	-13.00	-24.16	-43.68	-40.53	5.52
4209.00	V	-49.14	-13.00	-36.14	-61.88	-54.02	7.03

Mode	LTE Band 12, CB:5 MHz, 1 RB Offset 12, 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	-61.62	-13.00	-48.62	-65.22	-63.54	4.07
2122.50	H	-45.92	-13.00	-32.92	-52.74	-49.15	5.38
4245.00	H	-56.53	-13.00	-43.53	-69.38	-61.36	6.98
1415.00	V	-55.90	-13.00	-42.90	-59.32	-57.82	4.07
2122.50	V	-36.08	-13.00	-23.08	-42.80	-39.31	5.38
4245.00	V	-47.90	-13.00	-34.90	-60.69	-52.73	6.98

Mode	LTE Band 12, 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	-60.17	-13.00	-47.17	-63.80	-62.19	4.17
2140.50	H	-43.33	-13.00	-30.33	-50.36	-46.42	5.24
4281.00	H	-54.55	-13.00	-41.55	-67.47	-59.33	6.93
1427.00	V	-54.74	-13.00	-41.74	-58.21	-56.76	4.17
2140.50	V	-33.64	-13.00	-20.64	-40.57	-36.73	5.24
4281.00	V	-45.57	-13.00	-32.57	-58.42	-50.35	6.93

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

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1408.00	H	-61.67	-13.00	-48.67	-65.26	-63.53	4.01
2112.00	H	-46.74	-13.00	-33.74	-53.45	-50.06	5.47
4224.00	H	-57.63	-13.00	-44.63	-70.45	-62.49	7.01
1408.00	V	-56.91	-13.00	-43.91	-60.31	-58.77	4.01
2112.00	V	-36.86	-13.00	-23.86	-43.47	-40.18	5.47
4224.00	V	-48.92	-13.00	-35.92	-61.68	-53.78	7.01

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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	-60.73	-13.00	-47.73	-64.33	-62.65	4.07
2122.50	H	-46.73	-13.00	-33.73	-53.55	-49.96	5.38
4245.00	H	-56.63	-13.00	-43.63	-69.48	-61.46	6.98
1415.00	V	-56.00	-13.00	-43.00	-59.42	-57.92	4.07
2122.50	V	-35.93	-13.00	-22.93	-42.65	-39.16	5.38
4245.00	V	-47.52	-13.00	-34.52	60.31	-52.35	6.98

Mode	LTE Band 12, CB:10 MHz, 1 RB Offset 25, 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)
1422.00	H	-59.76	-13.00	-46.76	-63.38	-61.73	4.12
2133.00	H	-43.44	-13.00	-30.44	-50.38	-46.59	5.30
4266.00	H	-54.69	-13.00	-41.69	-67.58	-59.49	6.95
1422.00	V	-54.77	-13.00	-41.77	-58.22	-56.74	4.12
2133.00	V	-33.41	-13.00	-20.41	-40.25	-36.56	5.30
4266.00	V	-45.60	-13.00	-32.60	-58.43	-50.40	6.95

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

3.2.17 Test Result of Radiated Emissions above 1GHz (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2338.50	H	-38.88	-13.00	-25.88	-46.22	-42.39	5.66
3118.00	H	-65.06	-13.00	-52.06	-75.18	-69.45	6.54
3897.50	H	-53.85	-13.00	-40.85	-66.39	-58.70	7.00
2338.50	V	-32.79	-13.00	-19.79	-40.14	-36.30	5.66
3118.00	V	-65.14	-13.00	-52.14	-75.21	-69.53	6.54
3897.50	V	-45.58	-13.00	-32.58	-58.12	-50.43	7.00

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-38.93	-13.00	-25.93	-46.26	-42.49	5.71
3128.00	H	-64.93	-13.00	-51.93	-75.10	-69.33	6.55
3910.00	H	-53.45	-13.00	-40.45	-65.93	-58.31	7.01
2346.00	V	-32.56	-13.00	-19.56	-39.90	-36.12	5.71
3128.00	V	-64.93	-13.00	-51.93	-75.05	-69.33	6.55
3910.00	V	-45.34	-13.00	-32.34	-57.84	-50.20	7.01

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2353.50	H	-38.26	-13.00	-25.26	-45.56	-41.86	5.75
3138.00	H	-64.84	-13.00	-51.84	-75.04	-69.25	6.56
3922.50	H	-53.14	-13.00	-40.14	-65.58	-58.01	7.02
2353.50	V	-32.48	-13.00	-19.48	-39.80	-36.08	5.75
3138.00	V	-64.79	-13.00	-51.79	-74.96	-69.20	6.56
3922.50	V	-45.18	-13.00	-32.18	-57.66	-50.05	7.02

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

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-39.06	-13.00	-26.06	-46.39	-42.62	5.71
3128.00	H	-65.06	-13.00	-52.06	-75.23	-69.46	6.55
3910.00	H	-53.38	-13.00	-40.38	-65.86	-58.24	7.01
2346.00	V	-32.31	-13.00	-19.31	-39.65	-35.87	5.71
3128.00	V	-65.16	-13.00	-52.16	-75.28	-69.56	6.55
3910.00	V	-45.17	-13.00	-32.17	-57.67	-50.03	7.01

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

3.2.18 Test Result of Radiated Emissions in the 1559-1610MHz band (Band 13)

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1559.00	H	-61.44	-40.00	-21.44	-67.31	-66.72	5.28
1559.00	V	-62.30	-40.00	-22.30	-68.26	-67.58	5.28

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-60.46	-40.00	-20.46	-66.32	-65.78	5.32
1564.00	V	-61.95	-40.00	-21.95	-67.92	-67.27	5.32

Mode	LTE Band 13, CB: 5MHz, 1RB, Offset 12, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1569.00	H	-60.57	-40.00	-20.57	-66.43	-65.93	5.36
1569.00	V	-61.60	-40.00	-21.60	-67.57	-66.96	5.36

Mode	LTE Band 13, CB: 10MHz, 1RB, Offset 25, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-60.61	-40.00	-20.61	-66.47	-65.93	5.32
1564.00	V	-61.91	-40.00	-21.91	-67.88	-67.23	5.32

Note: EIRP = S.G Power value + Correction factor.

3.3 Conducted Emissions & Band Edge

3.3.1 Limit of Conducted Emissions & Band Edge

LTE Band 12 /13

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

LTE Band 13

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

3.3.2 Test Procedures

Out of band emission

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

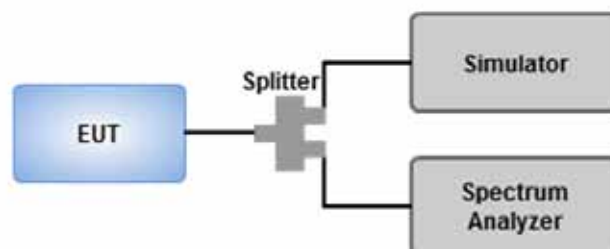
Band edge

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

763 ~ 775 MHz / 793 ~ 805 MHz

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

3.3.3 Test Setup



3.3.4 Test Result of Conducted Emissions & Band Edge (Band 12)

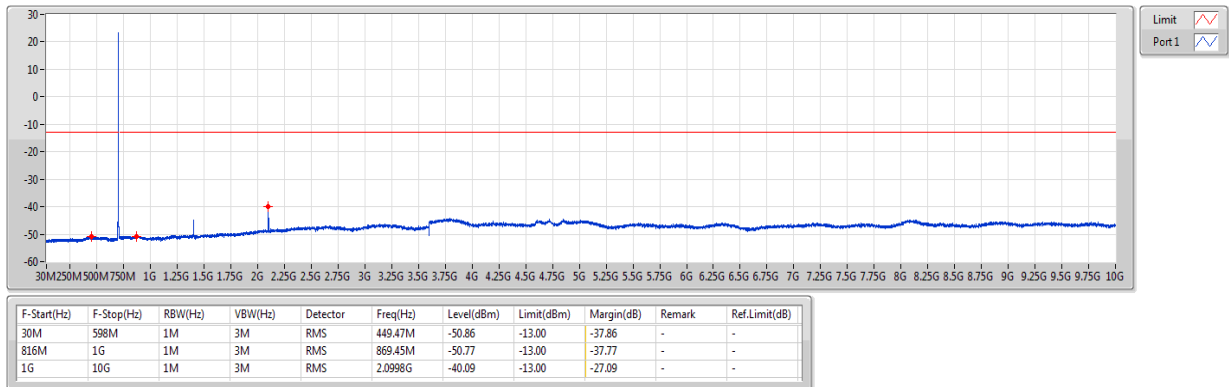
Out of band emission

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 12	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.1232G	-39.77	-13.00	-26.77	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.1457G	-41.15	-13.00	-28.15	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.1232G	-37.97	-13.00	-24.97	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.1025G	-40.34	-13.00	-27.34	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.1043G	-38.12	-13.00	-25.12	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.1403G	-40.50	-13.00	-27.50	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.1331G	-39.81	-13.00	-26.81	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.1331G	-39.49	-13.00	-26.49	-	-

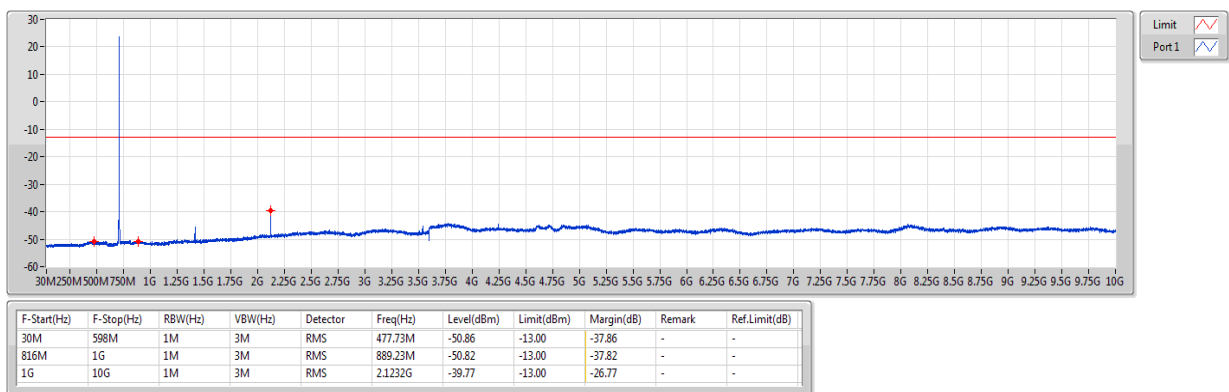
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
699.7MHz_QPSK_RB 1,#RB 3

CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
707.5MHz_QPSK_RB 1,#RB 3

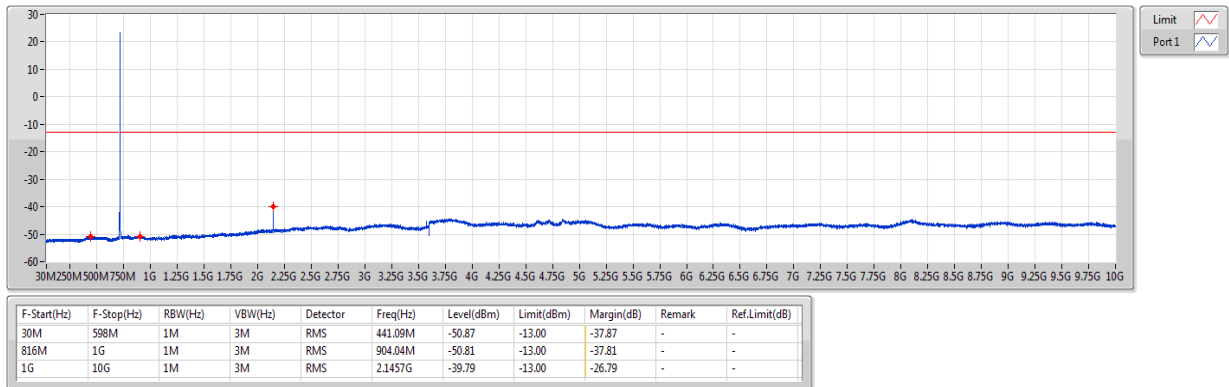
CSE-TX-Sum



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

CSE-TX-Sum

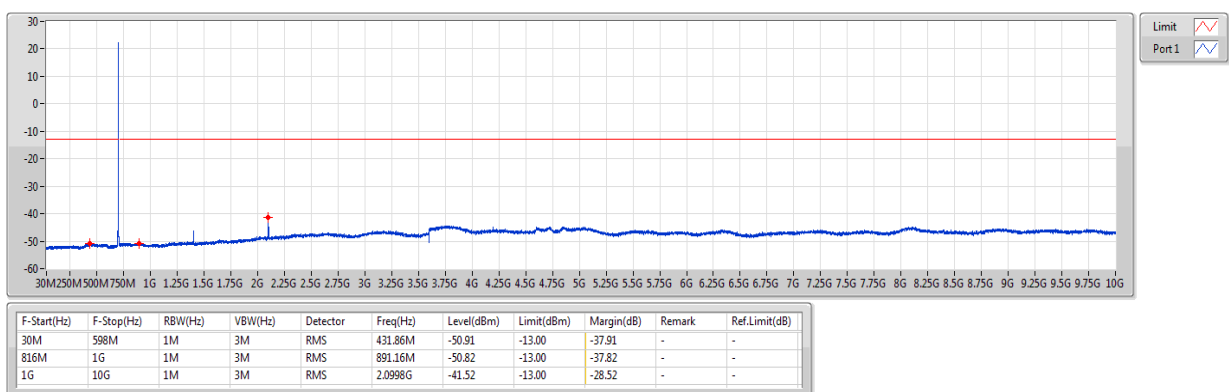
715.3MHz QPSK_RB 1,#RB 3



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

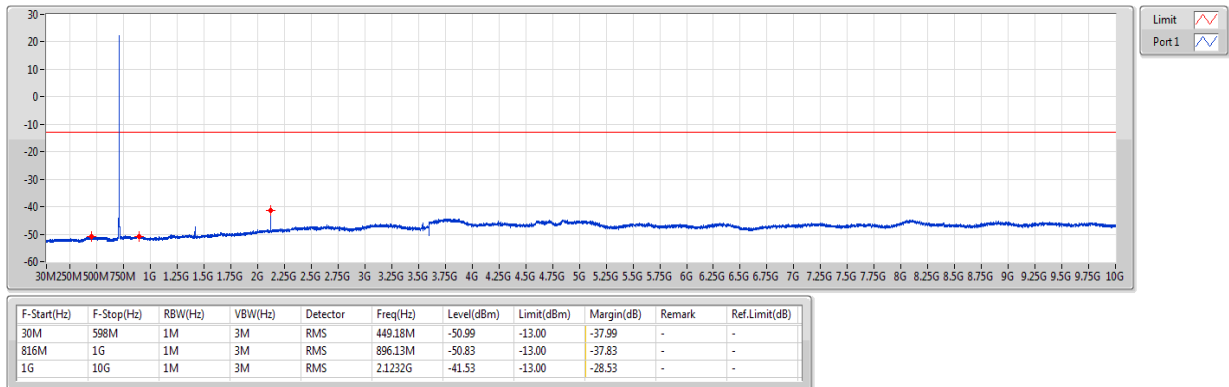
699.7MHz_16QAM_RB 1,#RB 3



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

CSE-TX-Sum

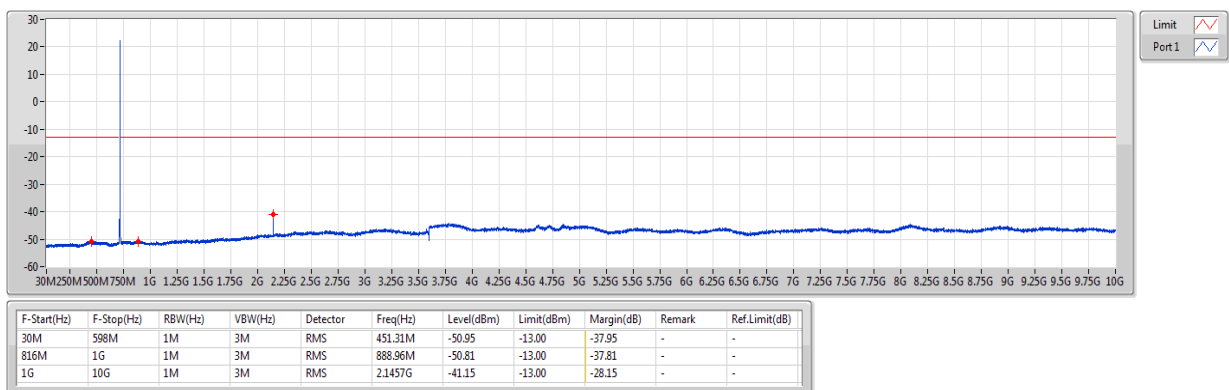
707.5MHz_16QAM_RB 1,#RB 3



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

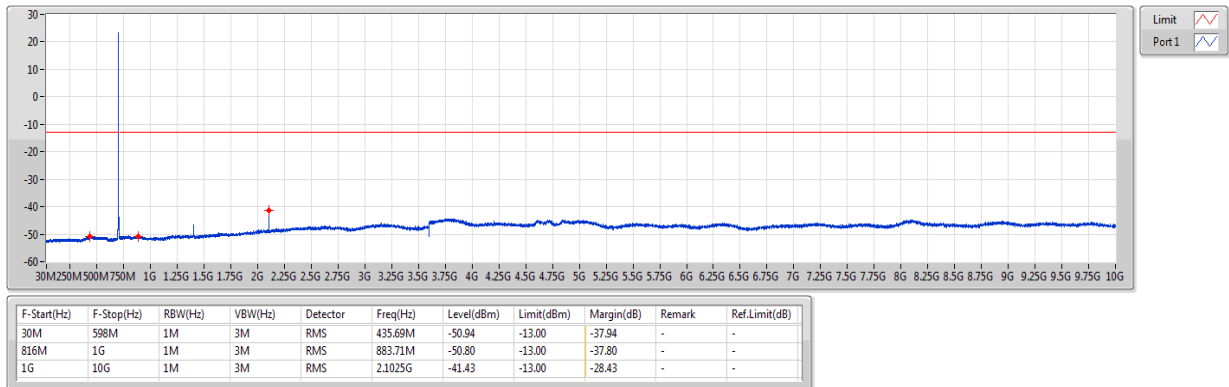
CSE-TX-Sum

715.3MHz_16QAM_RB 1,#RB 3



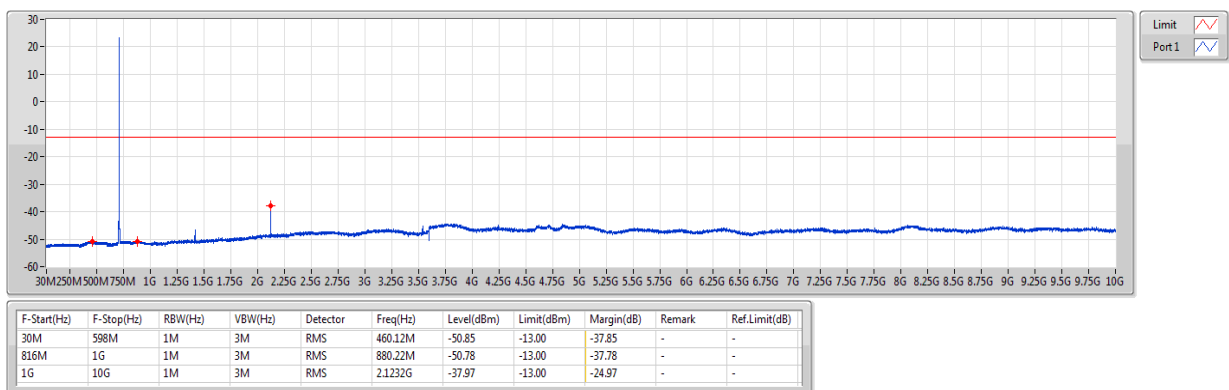
Band 12_LTE_3MHz_Nss1,QPSK_1TX
700.5MHz QPSK_RB 1,#RB 8

CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,QPSK_1TX
707.5MHz QPSK_RB 1,#RB 8

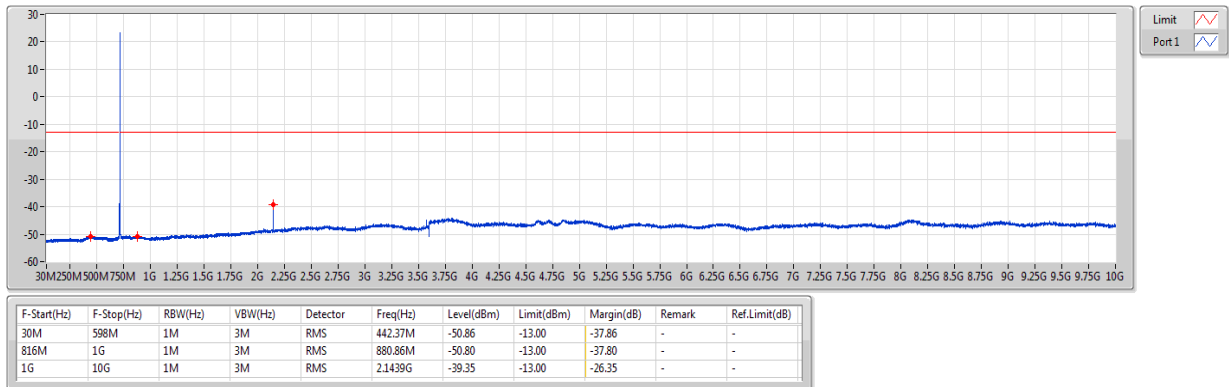
CSE-TX-Sum



Band 12_LTE_3MHz_Nss1,QPSK_1TX

CSE-TX-Sum

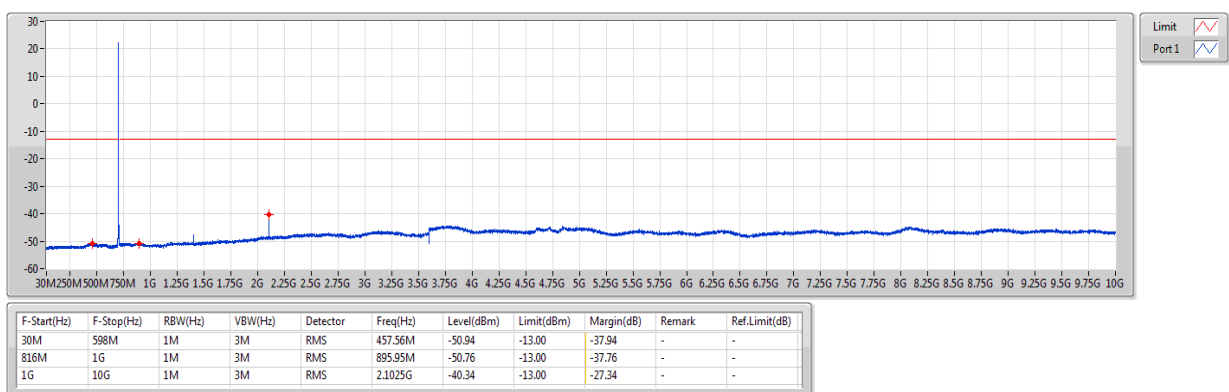
714.5MHz_QPSK_RB 1,#RB 8



Band 12_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

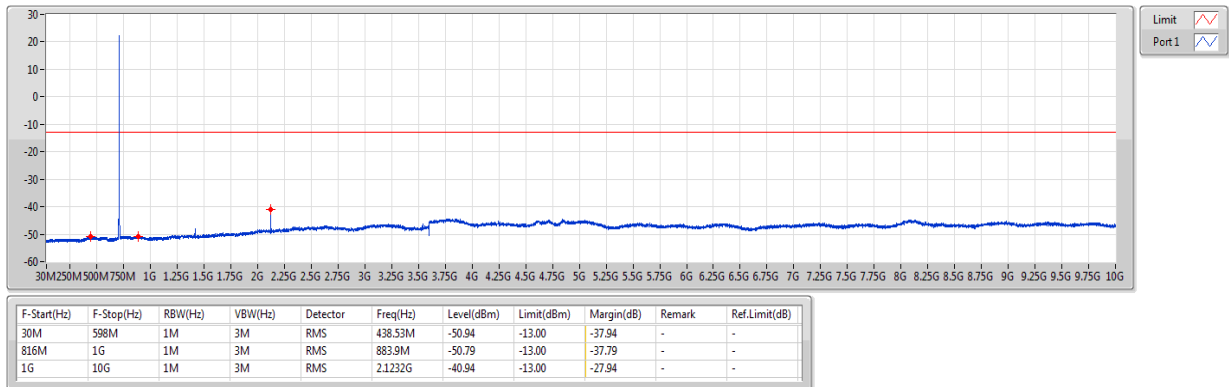
700.5MHz_16QAM_RB 1,#RB 8



Band 12_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

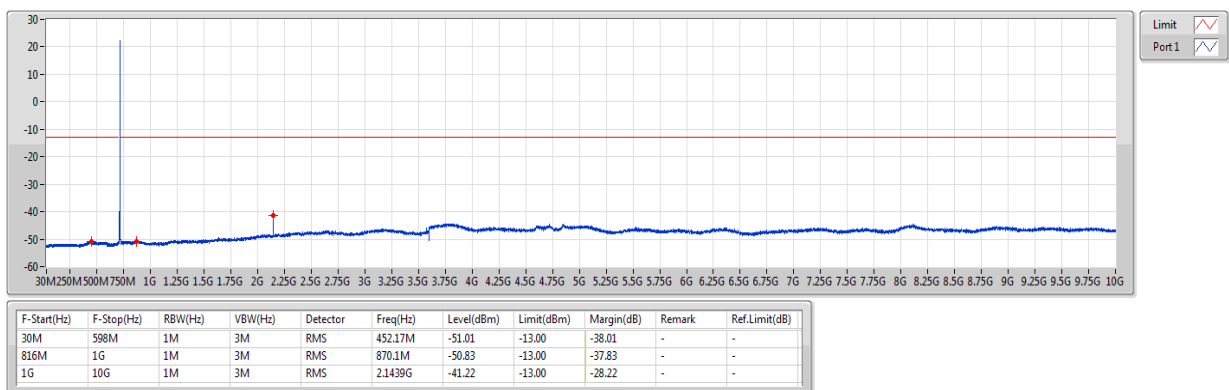
707.5MHz_16QAM_RB 1,#RB 8



Band 12_LTE_3MHz_Nss1,16QAM_1TX

CSE-TX-Sum

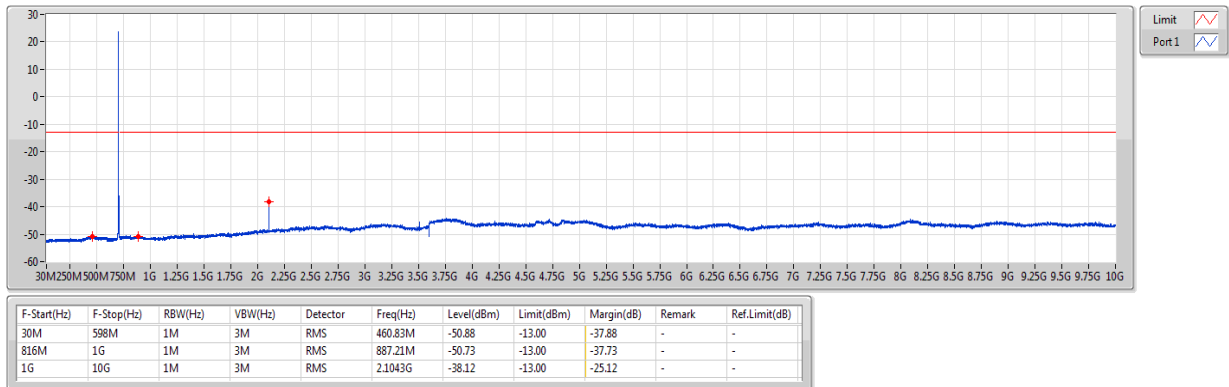
714.5MHz_16QAM_RB 1,#RB 8



Band 12_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

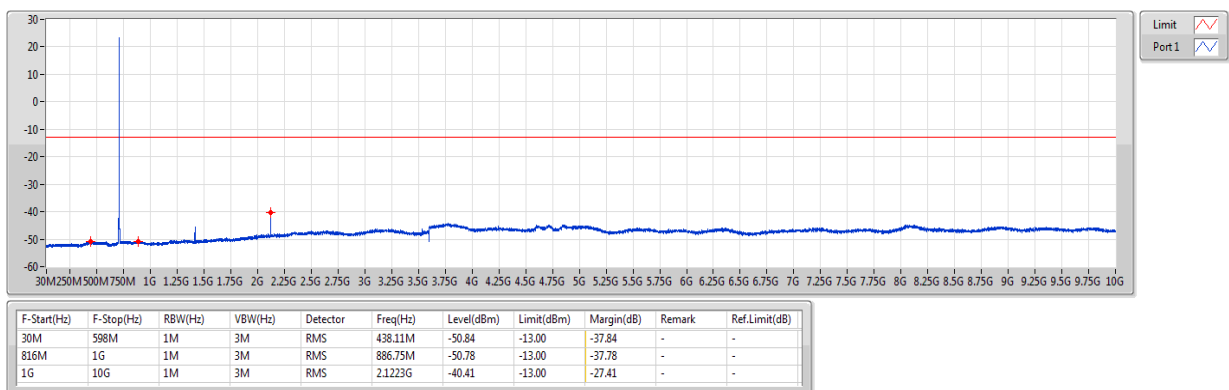
701.5MHz QPSK_RB 1,#RB 12



Band 12_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

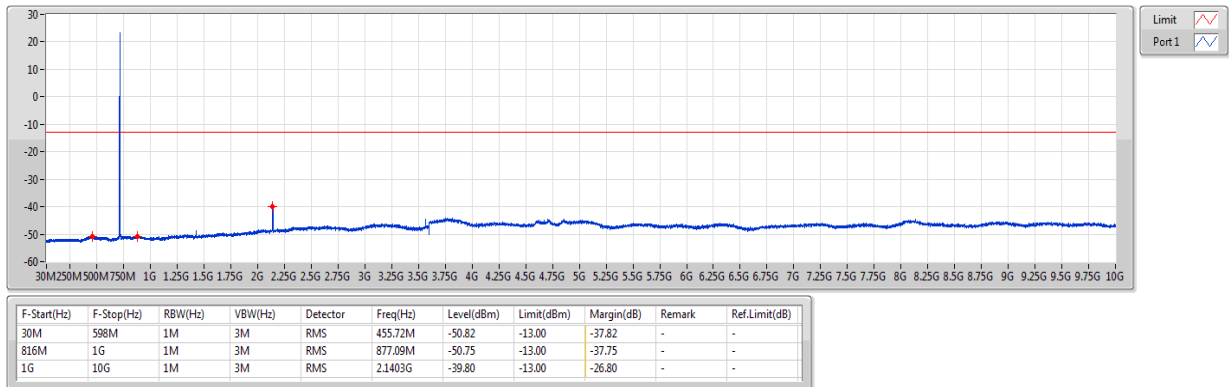
707.5MHz QPSK_RB 1,#RB 12



Band 12_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

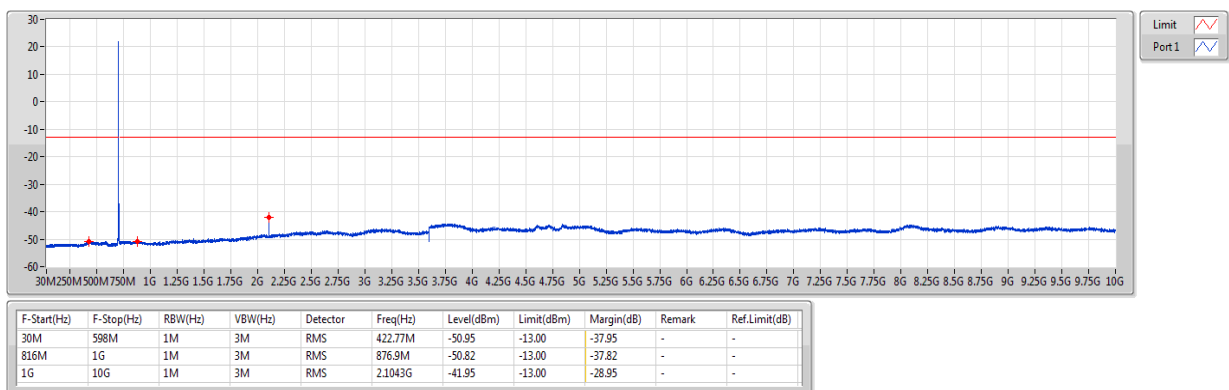
713.5MHz QPSK_RB 1,#RB 12



Band 12_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

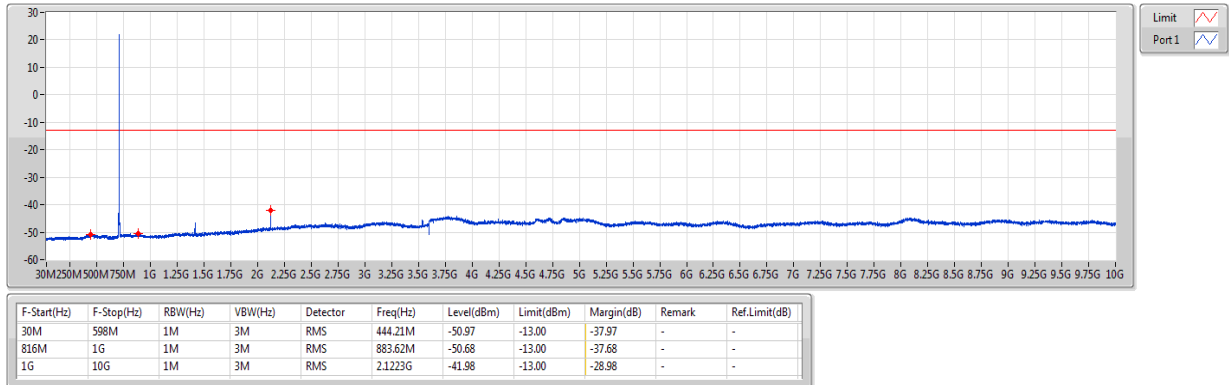
701.5MHz_16QAM_RB 1,#RB 12



Band 12_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

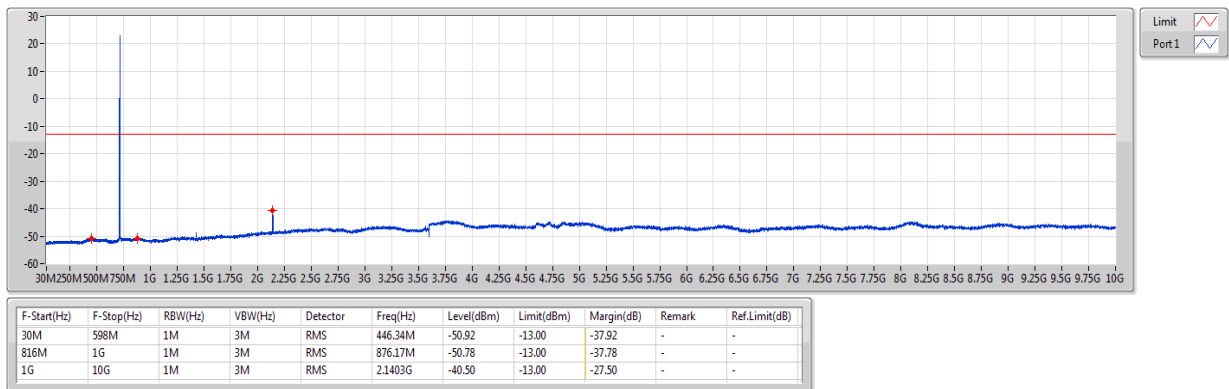
707.5MHz_16QAM_RB 1,#RB 12



Band 12_LTE_5MHz_Nss1,16QAM_1TX

CSE-TX-Sum

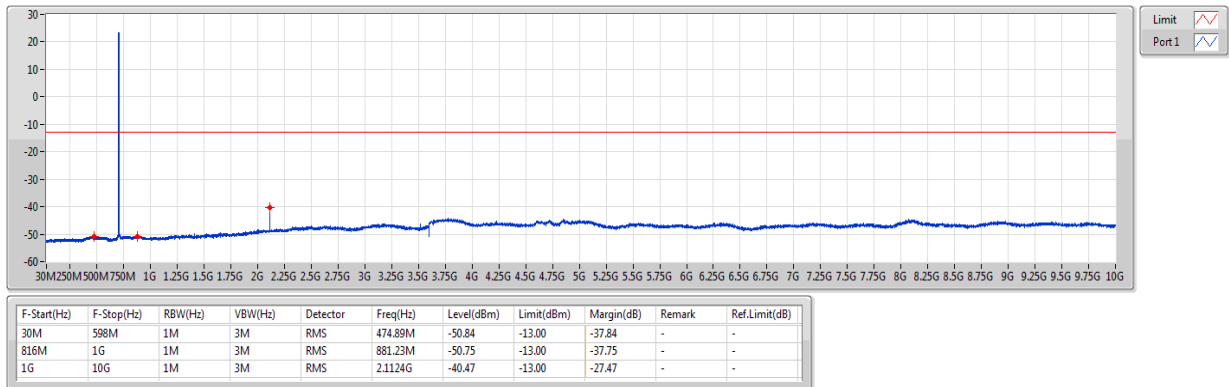
713.5MHz_16QAM_RB 1,#RB 12



Band 12_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

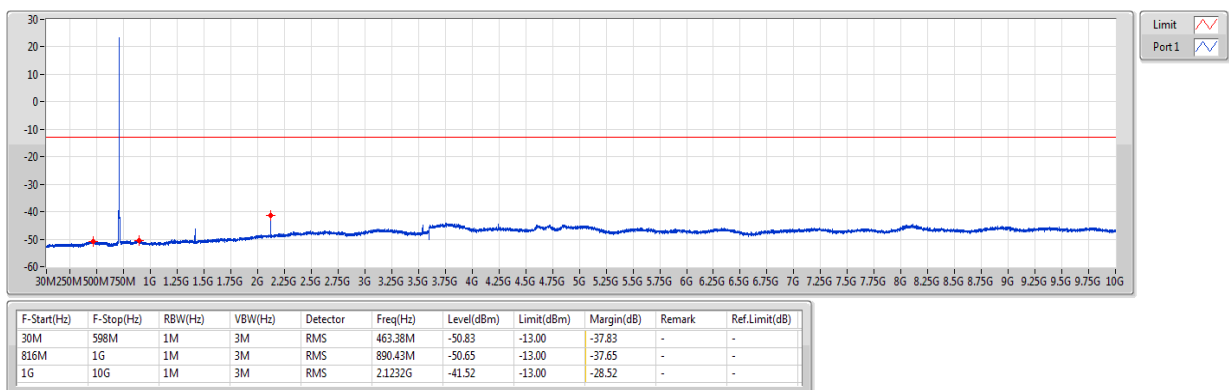
704MHz QPSK_RB 1,#RB 25



Band 12_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

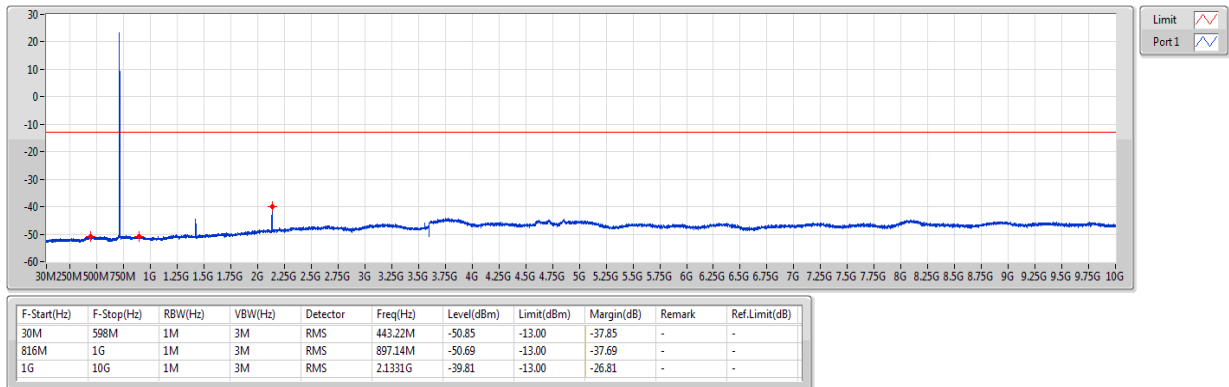
707.5MHz QPSK_RB 1,#RB 25



Band 12_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

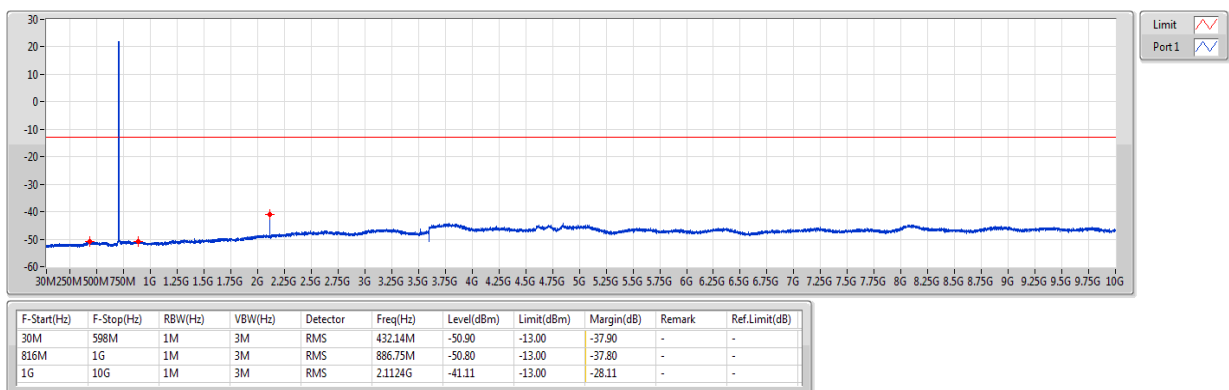
711MHz_QPSK_RB 1,#RB 25



Band 12_LTE_10MHz_Nss1,16QAM_1TX

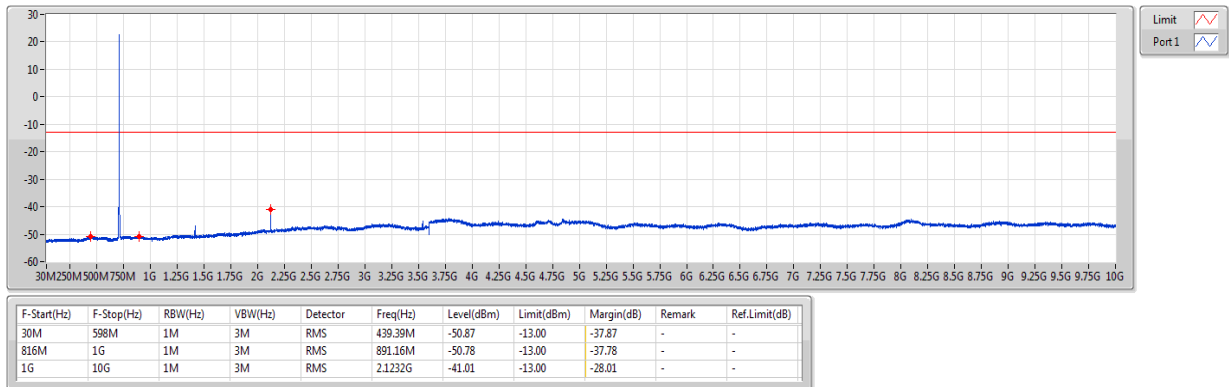
CSE-TX-Sum

704MHz_16QAM_RB 1,#RB 25



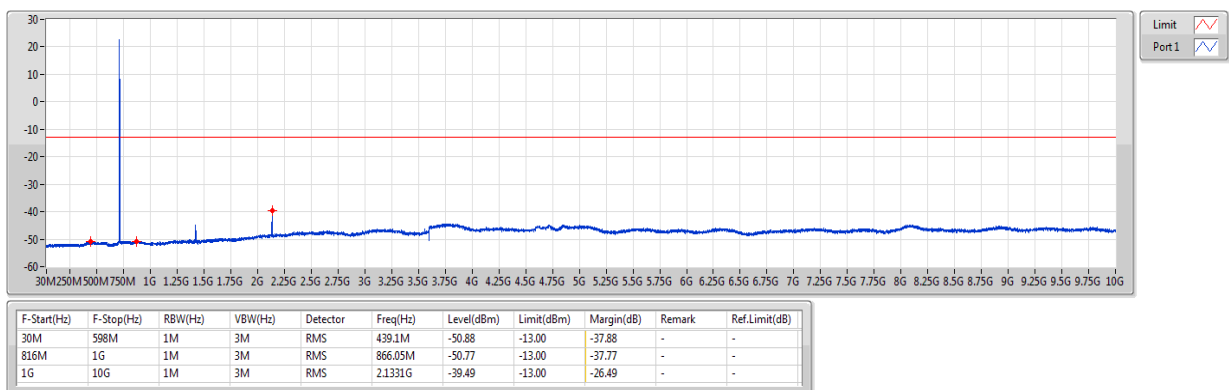
Band 12_LTE_10MHz_Nss1,16QAM_1TX
707.5MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum



Band 12_LTE_10MHz_Nss1,16QAM_1TX
711MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum

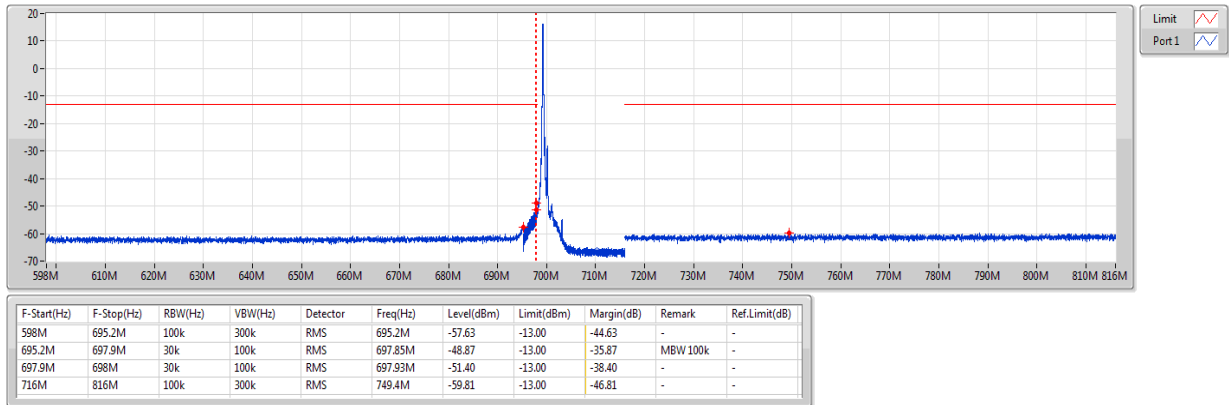


Band edge Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 12	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-19.13	-13.00	-6.13	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-18.97	-13.00	-5.97	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-19.99	-13.00	-6.99	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	30k	100k	RMS	716M	-20.08	-13.00	-7.08	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	51k	160k	RMS	716M	-20.75	-13.00	-7.75	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	51k	160k	RMS	716M	-21.06	-13.00	-8.06	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-30.69	-13.00	-17.69	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	716M	716.1M	100k	300k	RMS	716M	-28.26	-13.00	-15.26	-	-

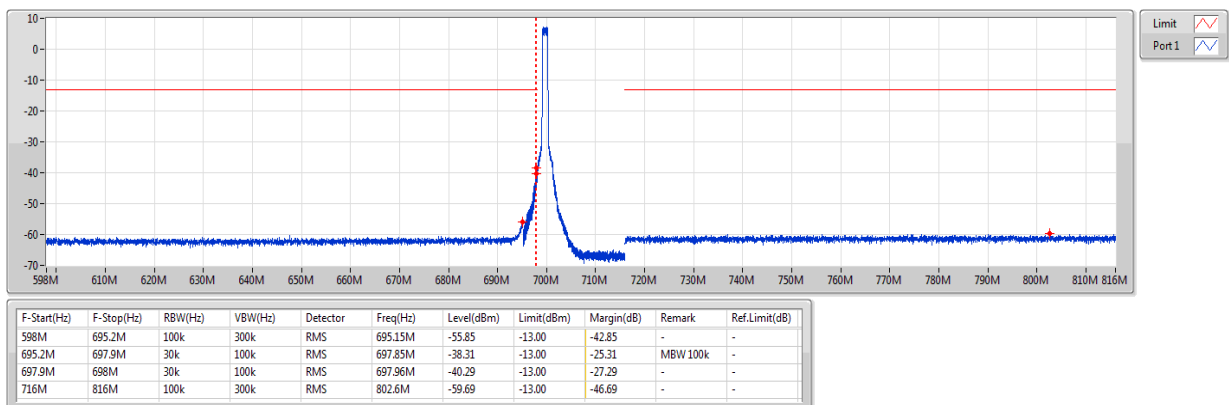
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
699.7MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



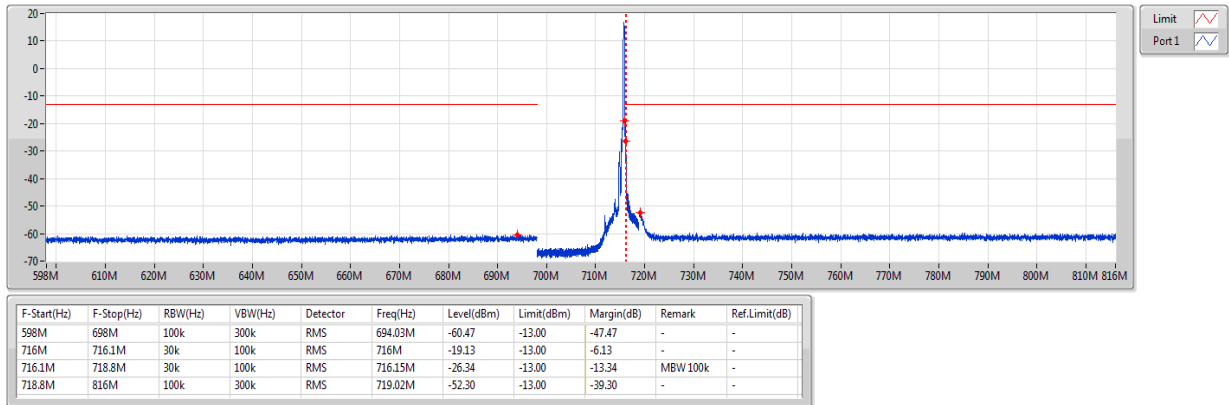
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
699.7MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



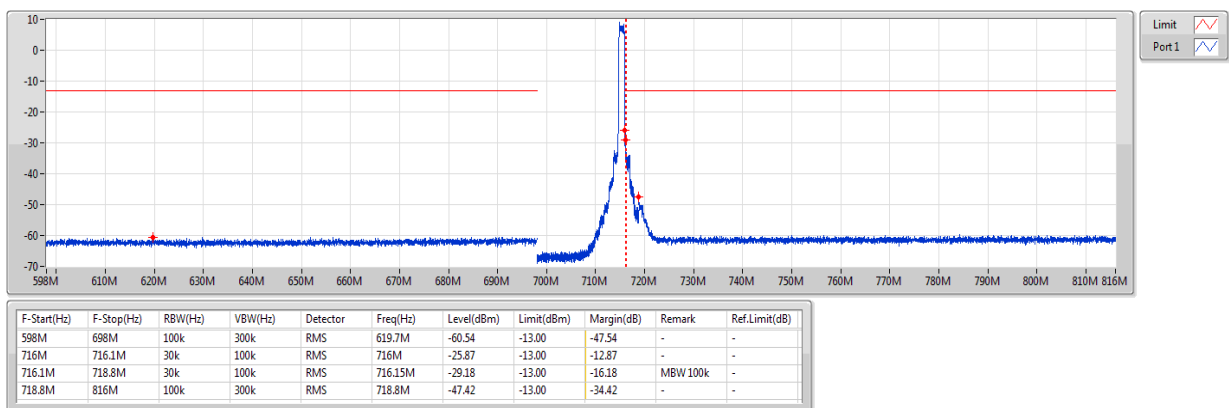
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
715.3MHz_QPSK_RB 1,#RB 5

CSE-TX-Sum



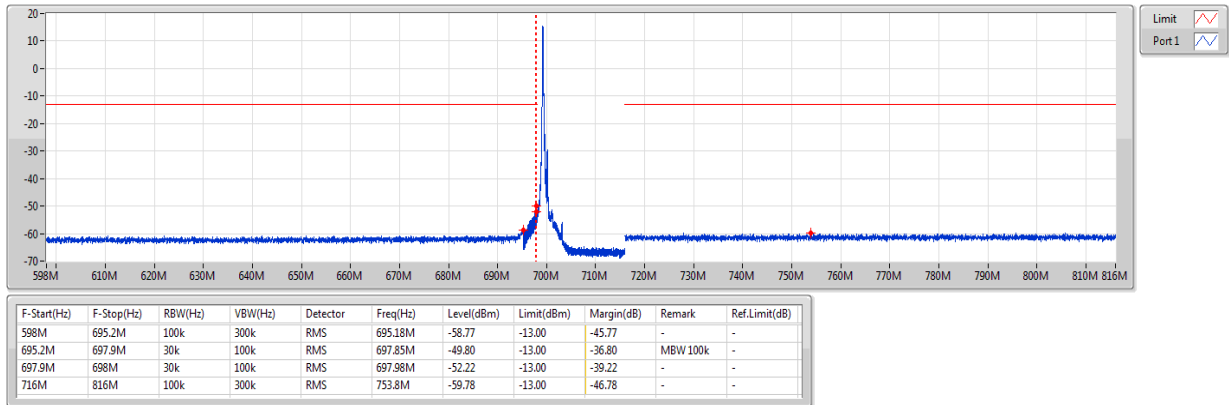
Band 12_LTE_1.4MHz_Nss1,QPSK_1TX
715.3MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



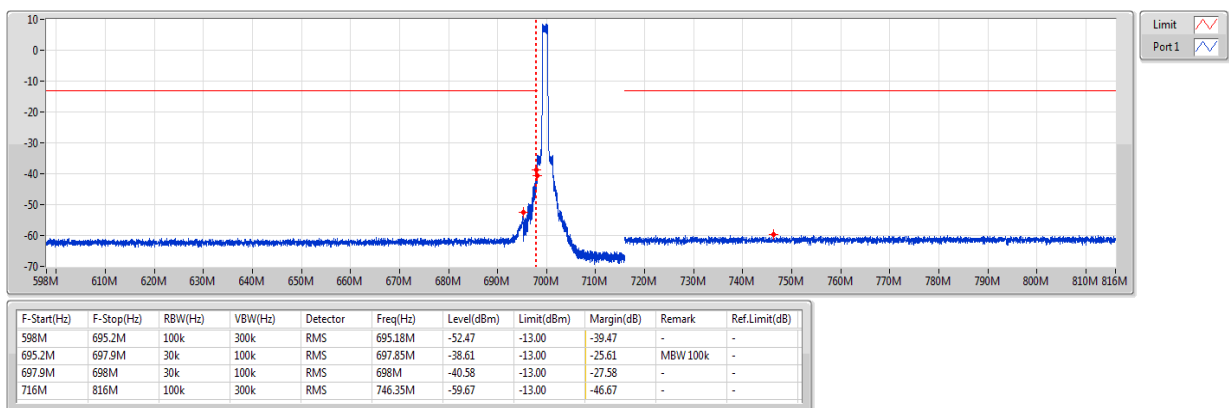
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
699.7MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



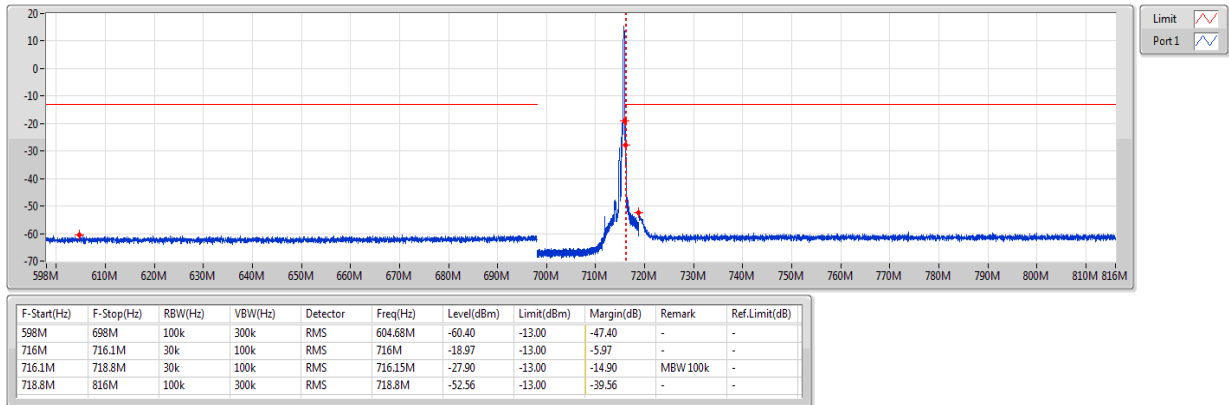
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
699.7MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



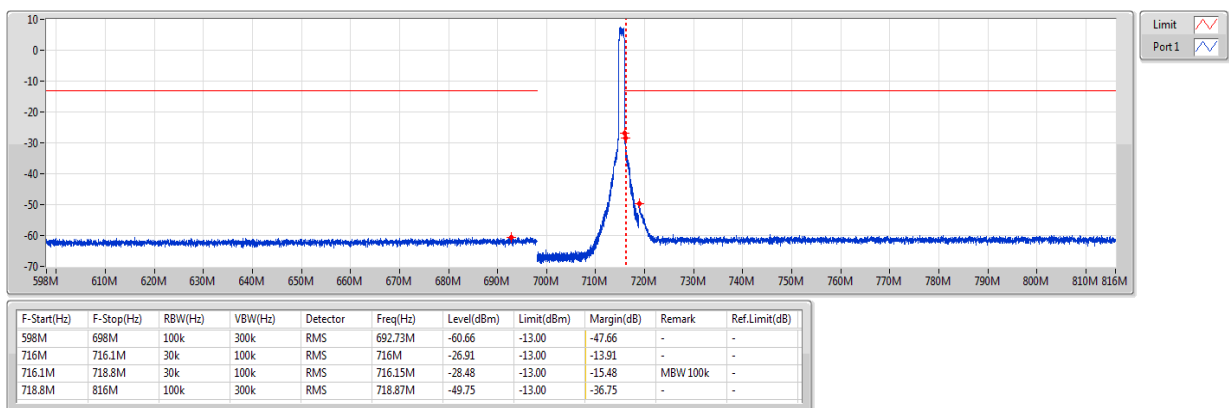
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
715.3MHz_16QAM_RB 1,#RB 5

CSE-TX-Sum



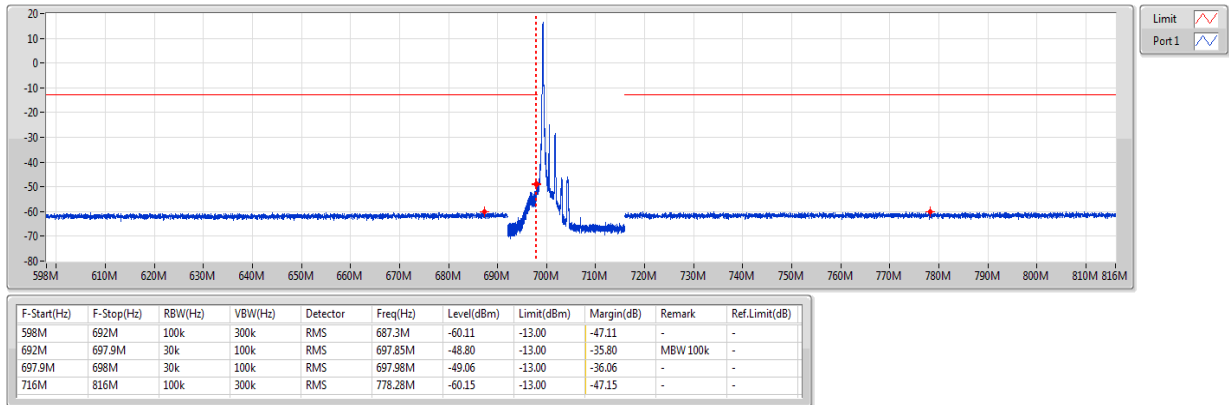
Band 12_LTE_1.4MHz_Nss1,16QAM_1TX
715.3MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



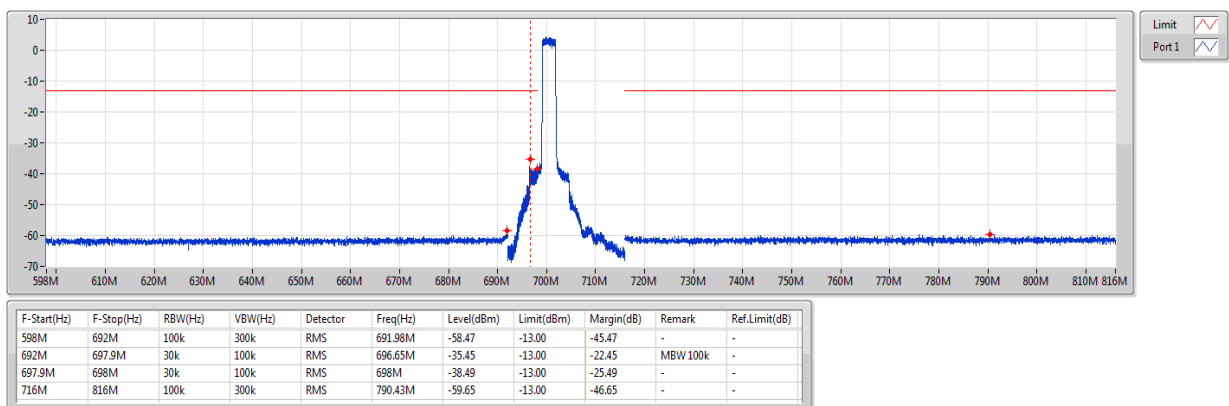
Band 12_LTE_3MHz_Nss1,QPSK_1TX
700.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



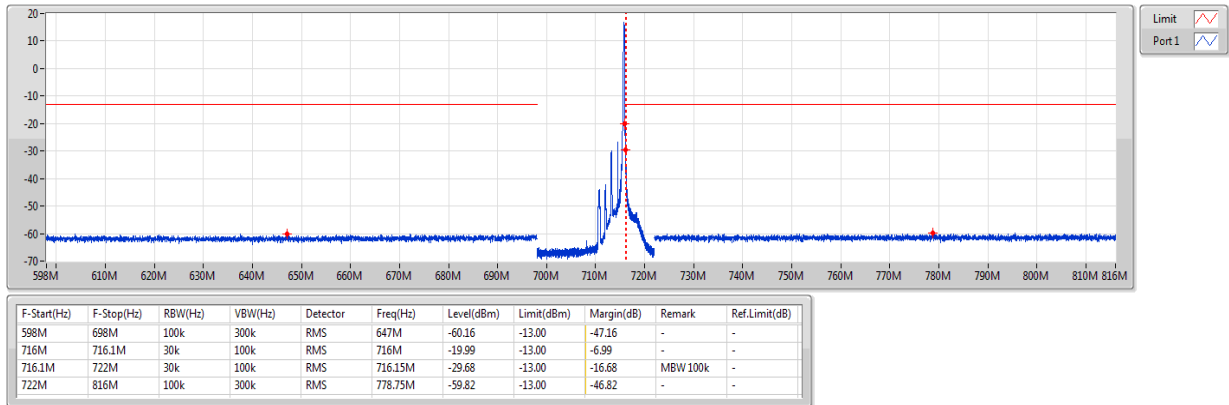
Band 12_LTE_3MHz_Nss1,QPSK_1TX
700.5MHz_QPSK_RB 15,#RB 0

CSE-TX-Sum



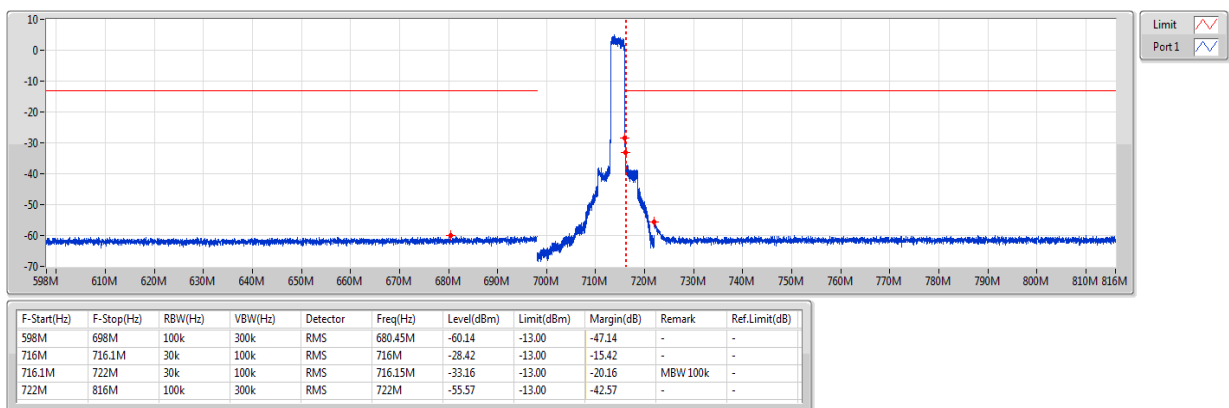
Band 12_LTE_3MHz_Nss1,QPSK_1TX
714.5MHz_QPSK_RB 1,#RB 14

CSE-TX-Sum



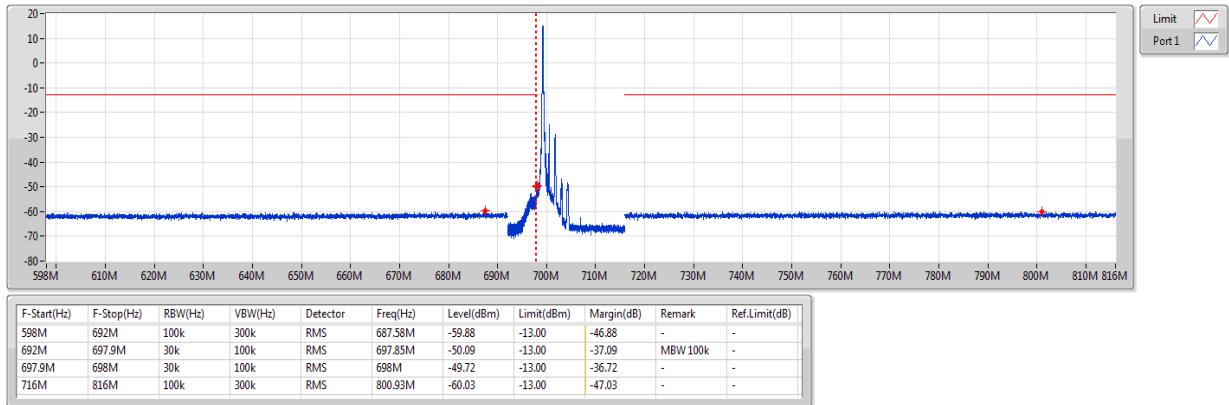
Band 12_LTE_3MHz_Nss1,QPSK_1TX
714.5MHz_QPSK_RB 15,#RB 0

CSE-TX-Sum



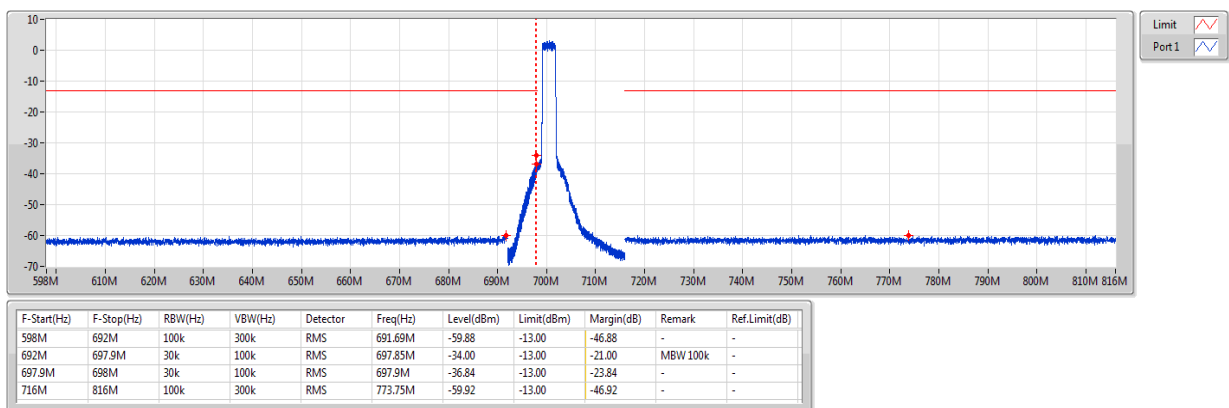
Band 12_LTE_3MHz_Nss1,16QAM_1TX
700.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



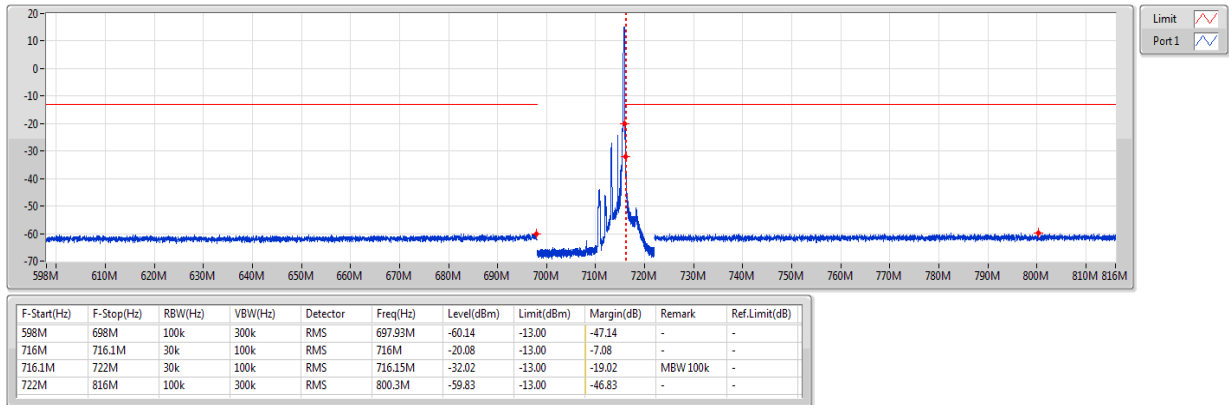
Band 12_LTE_3MHz_Nss1,16QAM_1TX
700.5MHz_16QAM_RB 15,#RB 0

CSE-TX-Sum



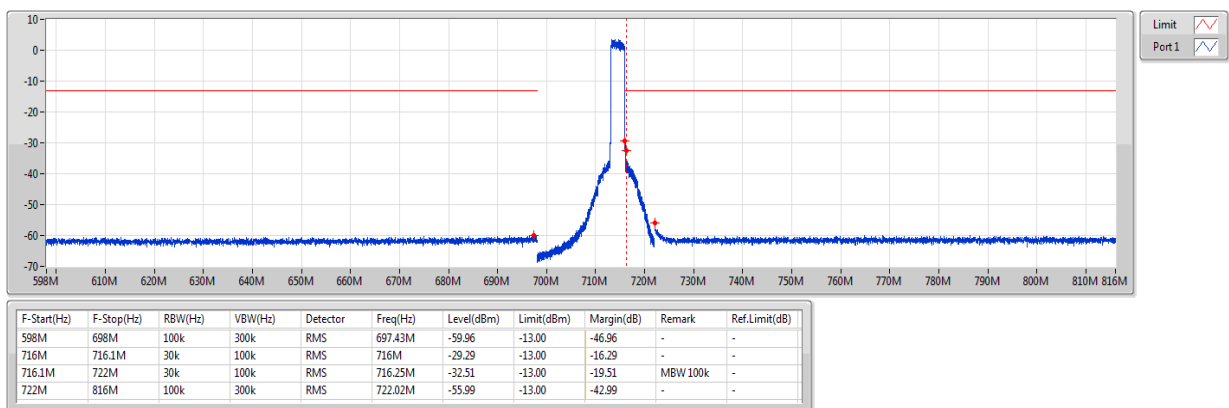
Band 12_LTE_3MHz_Nss1,16QAM_1TX
714.5MHz_16QAM_RB 1,#RB 14

CSE-TX-Sum



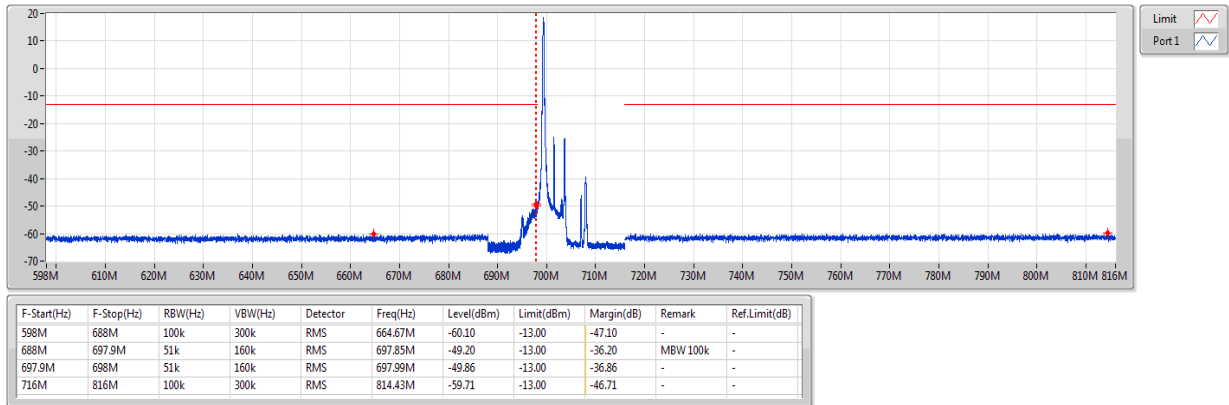
Band 12_LTE_3MHz_Nss1,16QAM_1TX
714.5MHz_16QAM_RB 15,#RB 0

CSE-TX-Sum



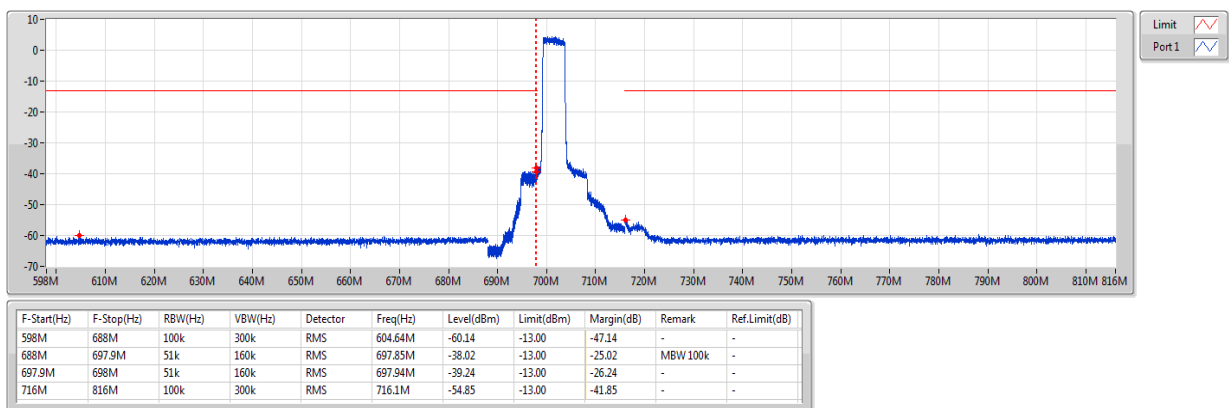
Band 12_LTE_5MHz_Nss1,QPSK_1TX
701.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



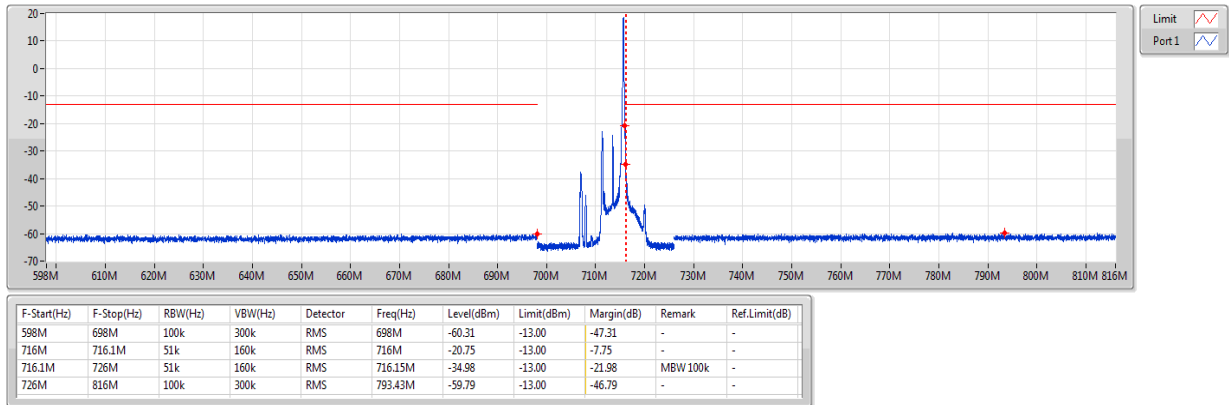
Band 12_LTE_5MHz_Nss1,QPSK_1TX
701.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



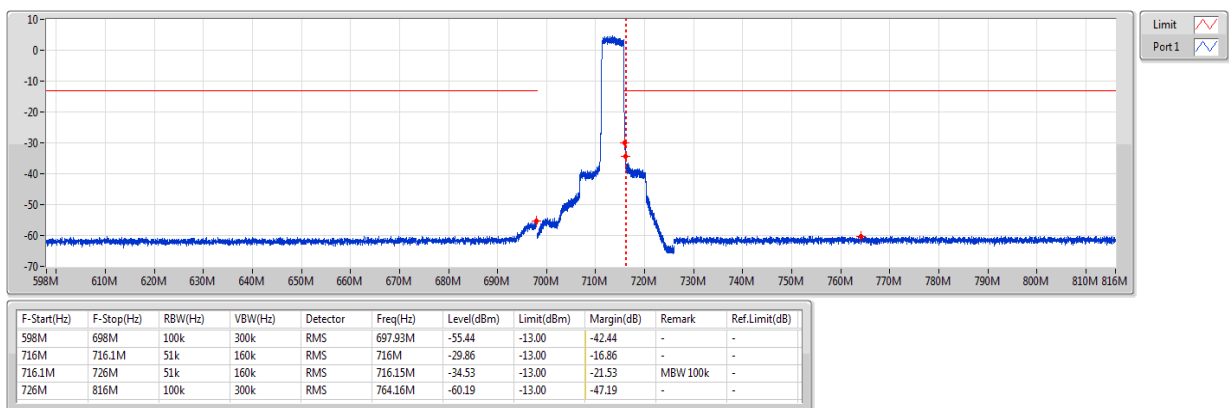
Band 12_LTE_5MHz_Nss1,QPSK_1TX
713.5MHz_QPSK_RB 1,#RB 24

CSE-TX-Sum



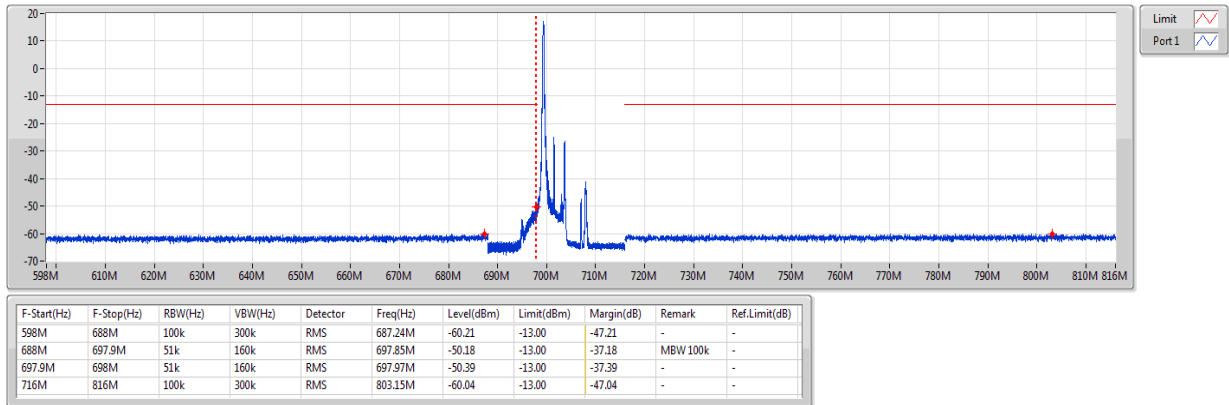
Band 12_LTE_5MHz_Nss1,QPSK_1TX
713.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



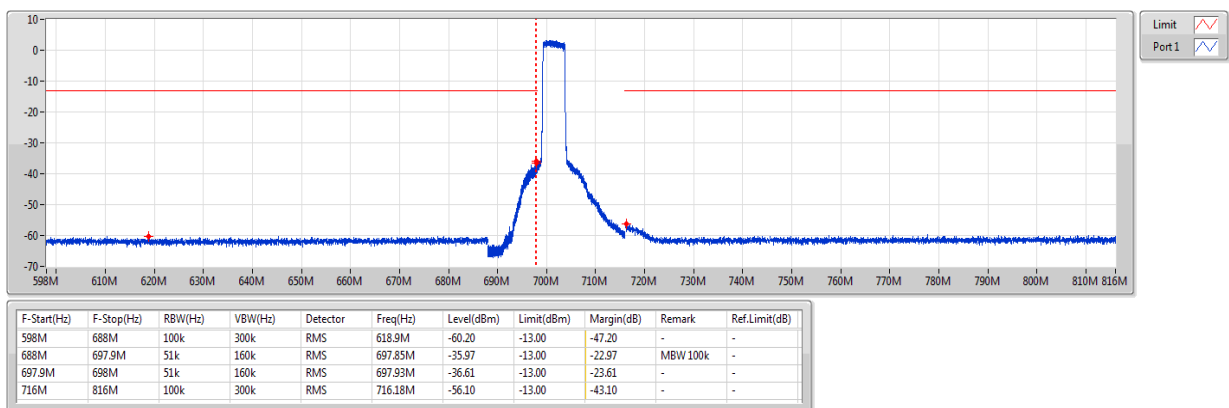
Band 12_LTE_5MHz_Nss1,16QAM_1TX
701.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



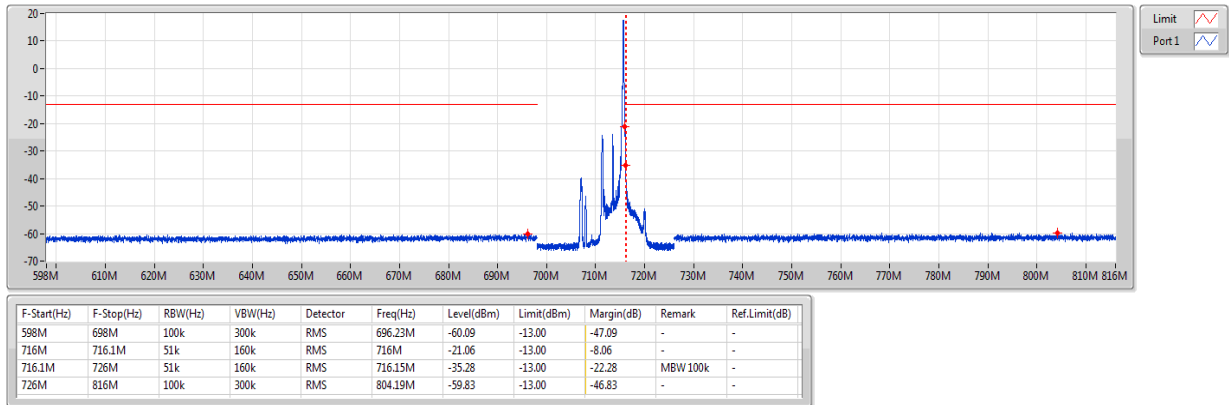
Band 12_LTE_5MHz_Nss1,16QAM_1TX
701.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



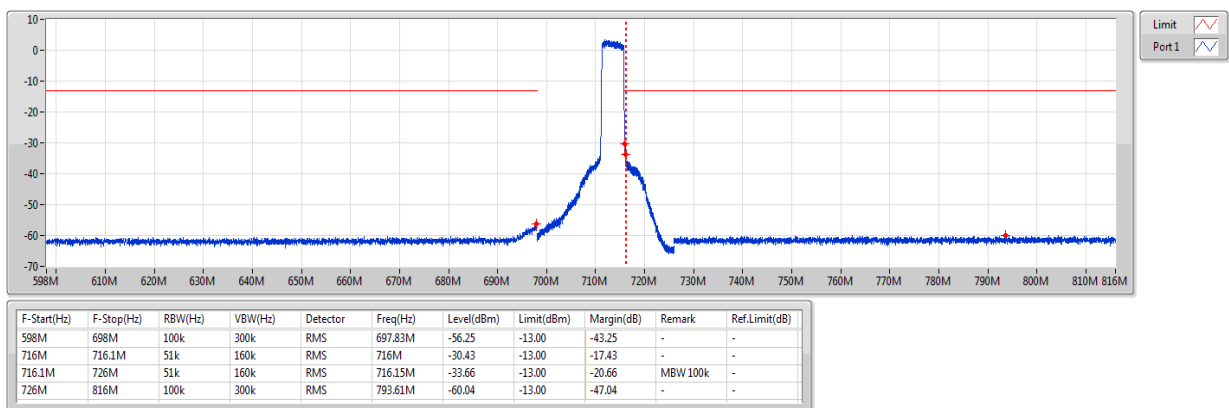
Band 12_LTE_5MHz_Nss1,16QAM_1TX
713.5MHz_16QAM_RB 1,#RB 24

CSE-TX-Sum



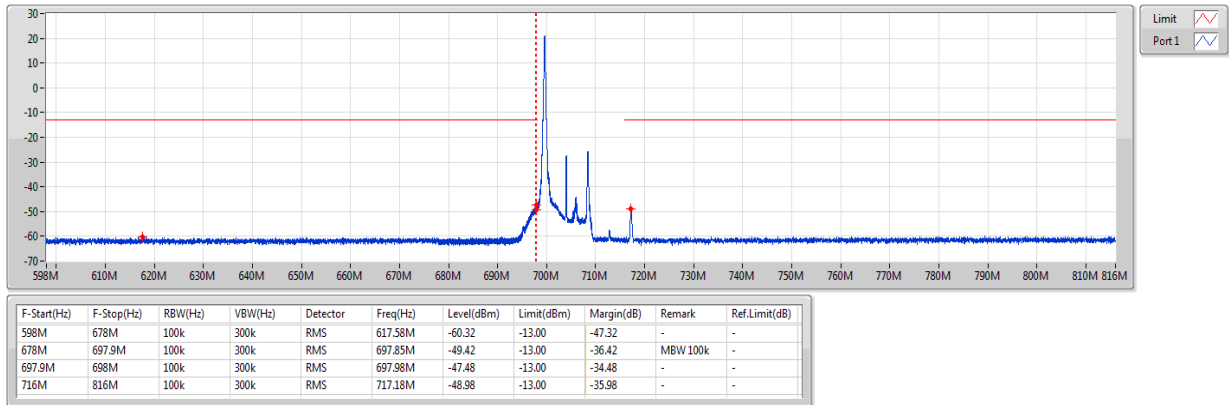
Band 12_LTE_5MHz_Nss1,16QAM_1TX
713.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



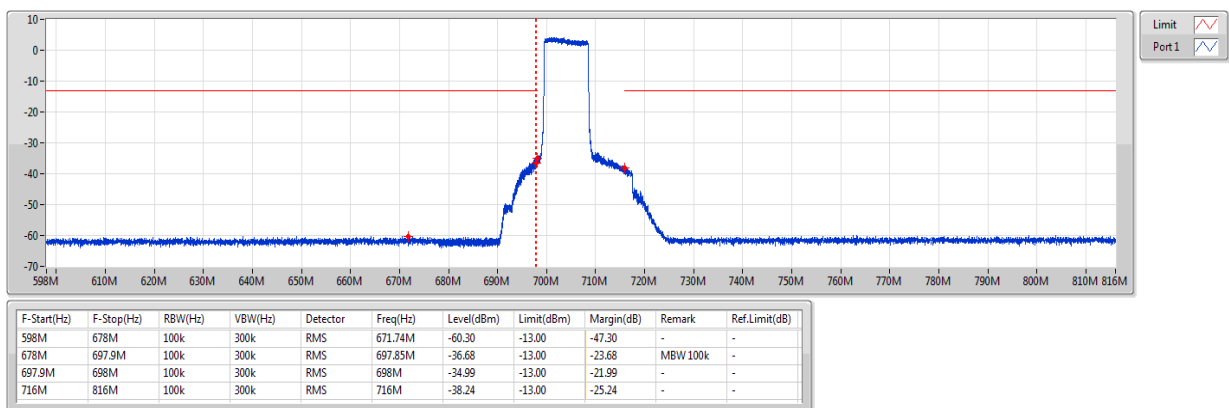
Band 12_LTE_10MHz_Nss1,QPSK_1TX
704MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



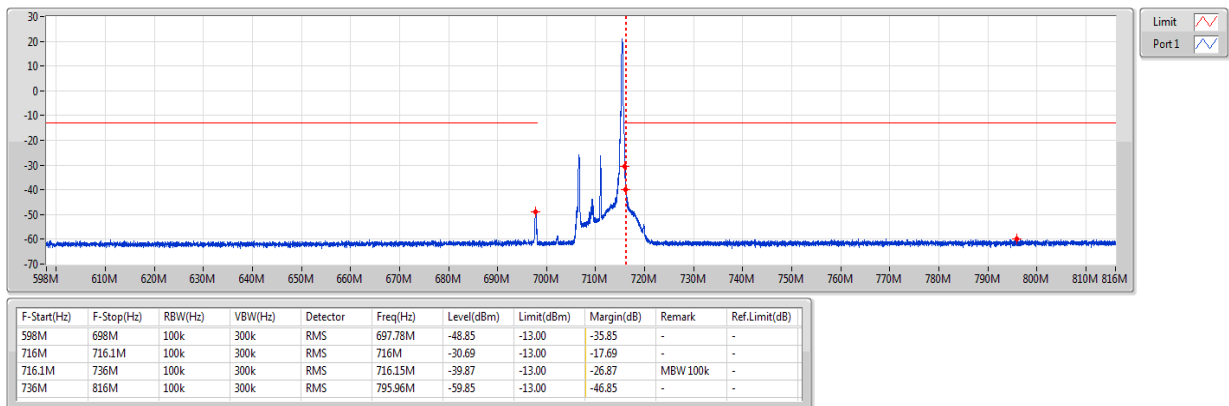
Band 12_LTE_10MHz_Nss1,QPSK_1TX
704MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



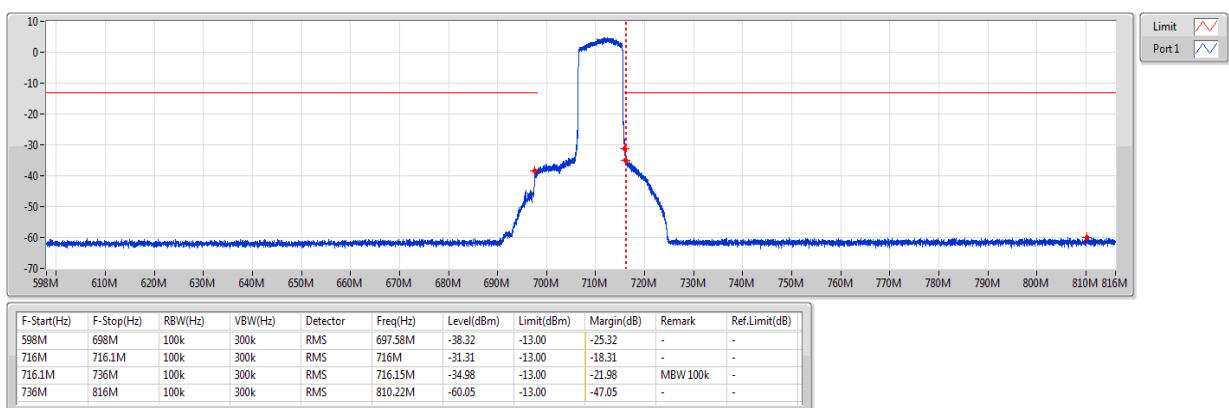
Band 12_LTE_10MHz_Nss1,QPSK_1TX
711MHz_QPSK_RB 1,#RB 49

CSE-TX-Sum



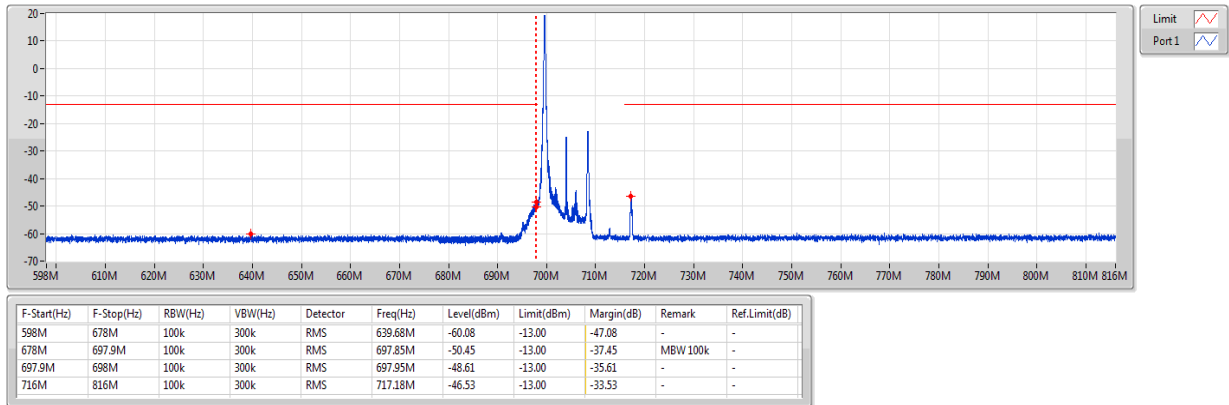
Band 12_LTE_10MHz_Nss1,QPSK_1TX
711MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



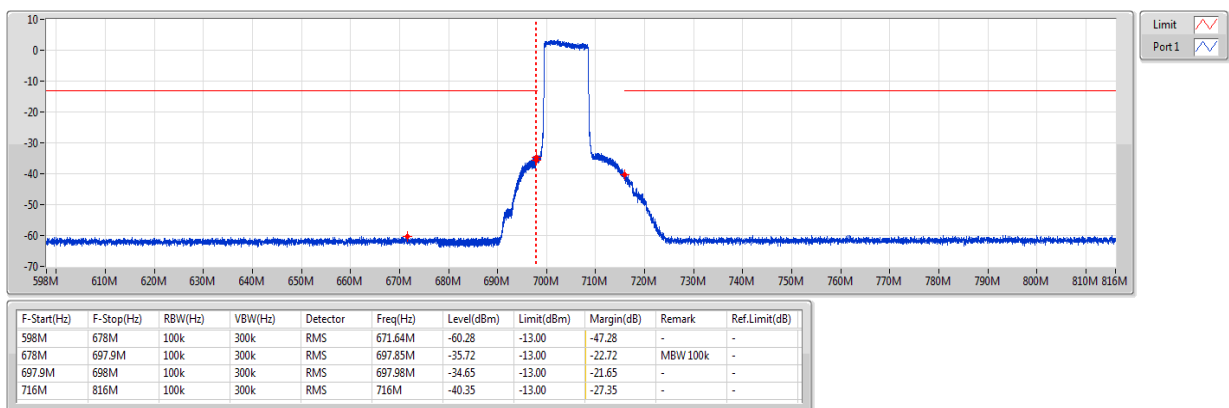
Band 12_LTE_10MHz_Nss1,16QAM_1TX
704MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



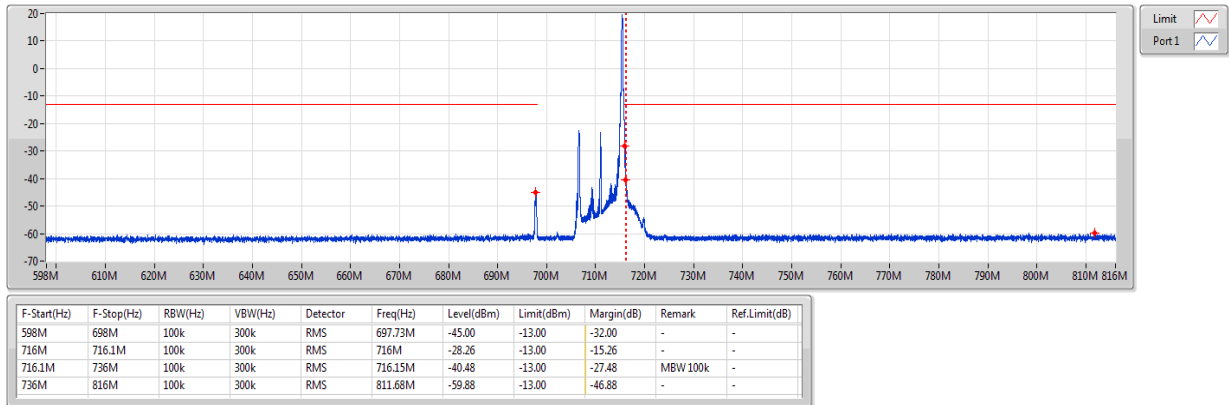
Band 12_LTE_10MHz_Nss1,16QAM_1TX
704MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



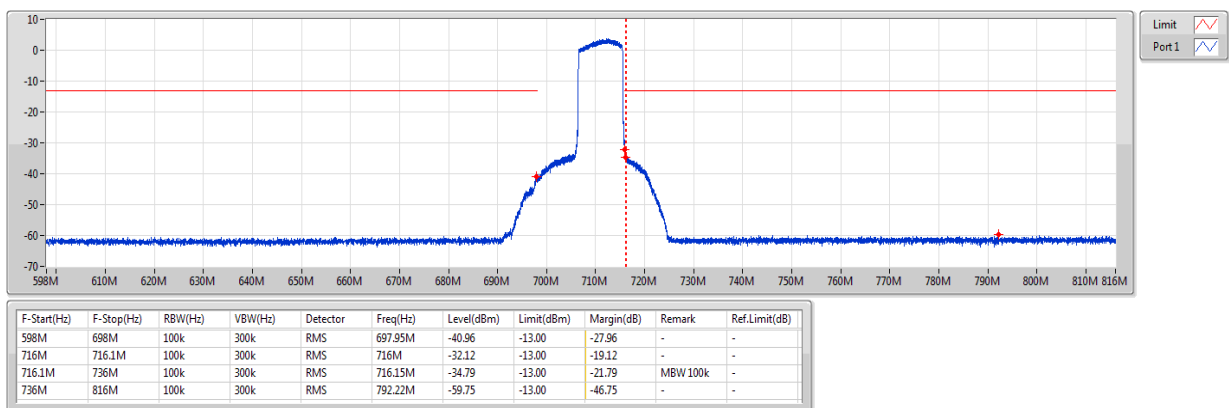
Band 12_LTE_10MHz_Nss1,16QAM_1TX
711MHz_16QAM_RB 1,#RB 49

CSE-TX-Sum



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

CSE-TX-Sum



3.3.5 Test Result of Conducted Emissions & Band Edge (Band 13)

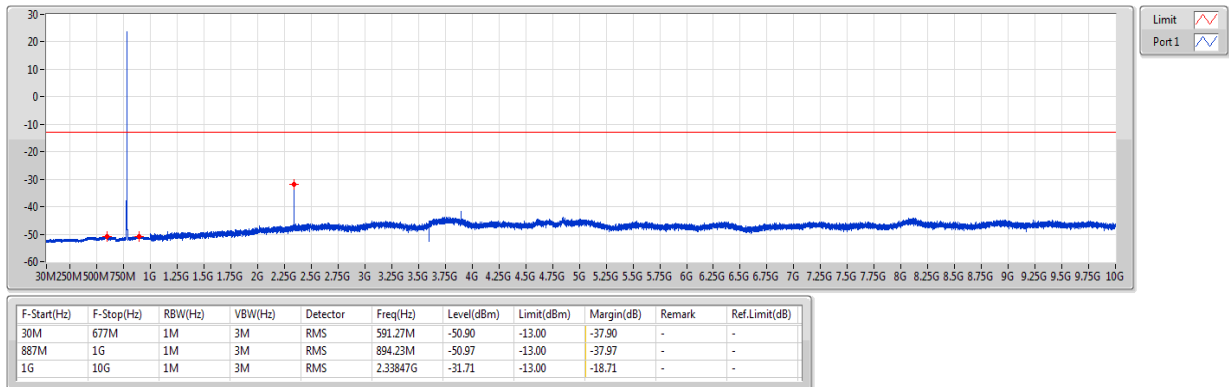
Out of band emission

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 13	-	-	-	-	-	-	-	-	-	-	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.34606G	-30.31	-13.00	-17.31	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.33875G	-34.13	-13.00	-21.13	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.34634G	-31.03	-13.00	-18.03	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.34634G	-35.71	-13.00	-22.71	-	-

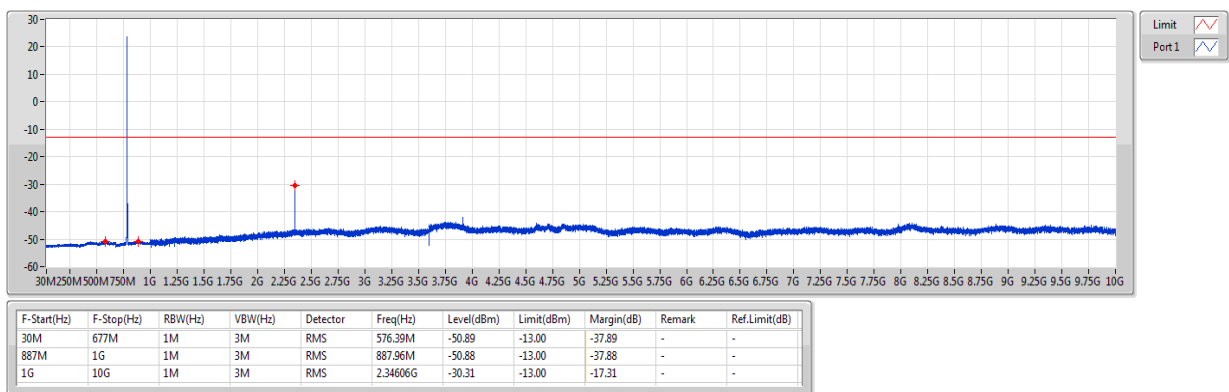
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1,#RB 12

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB 12

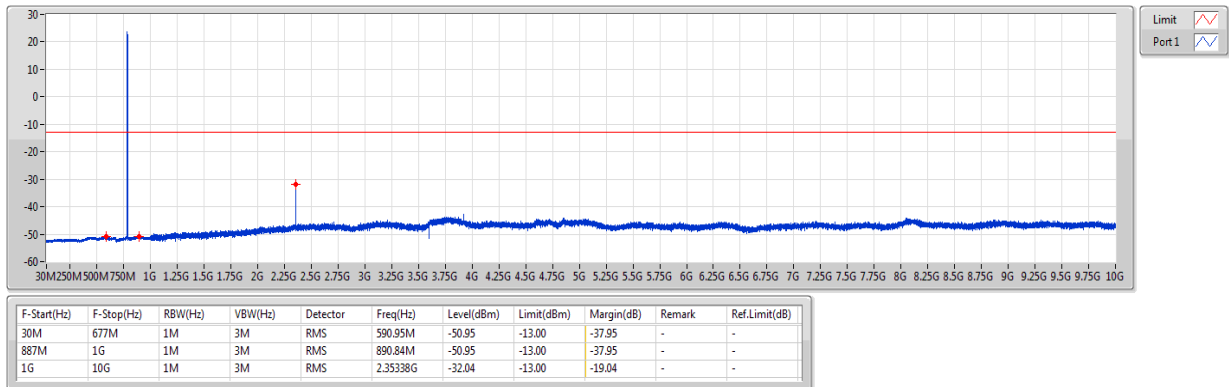
CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,QPSK_1TX

CSE-TX-Sum

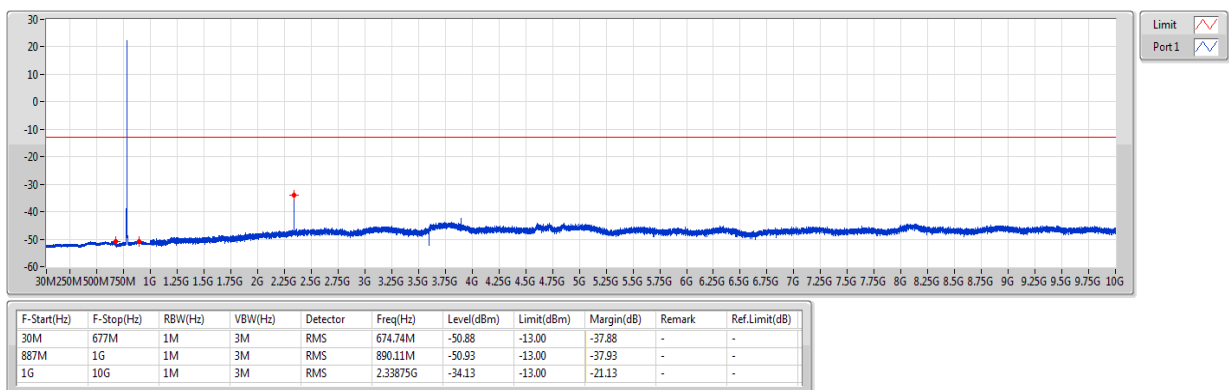
784.5MHz QPSK_RB 1,#RB 12



Band 13_LTE_5MHz_Nss1,16QAM_1TX

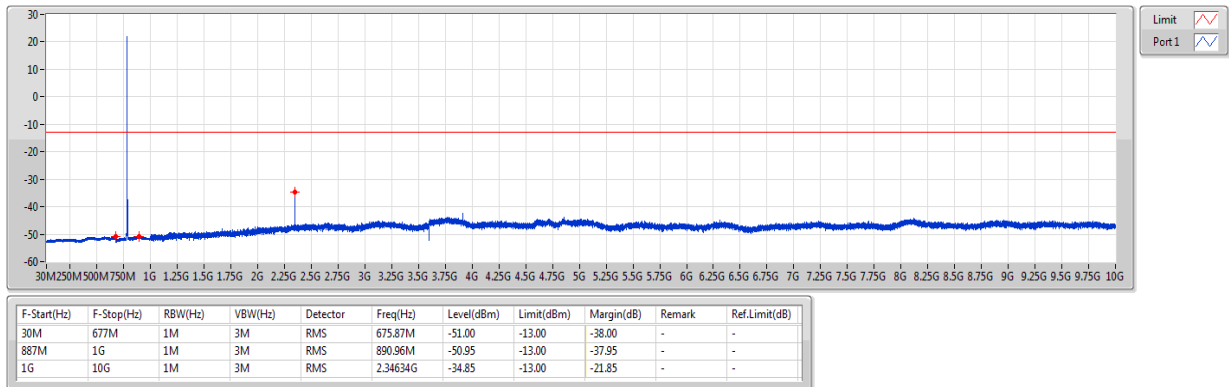
CSE-TX-Sum

779.5MHz_16QAM_RB 1,#RB 12



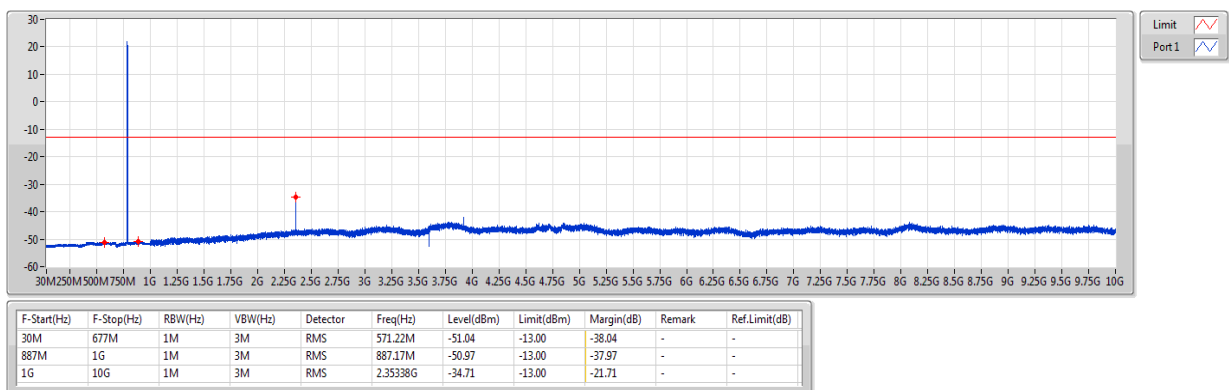
Band 13_LTE_5MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB 12

CSE-TX-Sum



Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 1,#RB 12

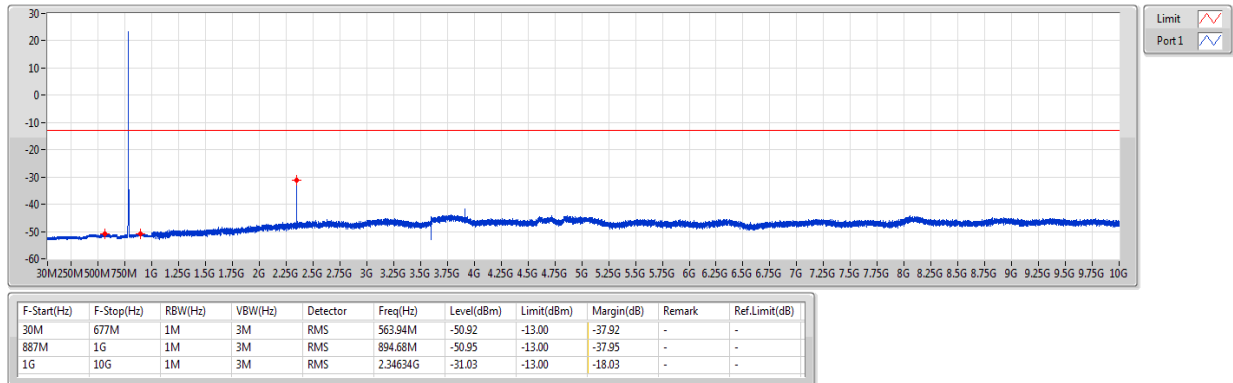
CSE-TX-Sum



Band 13_LTE_10MHz_Nss1,QPSK_1TX

CSE-TX-Sum

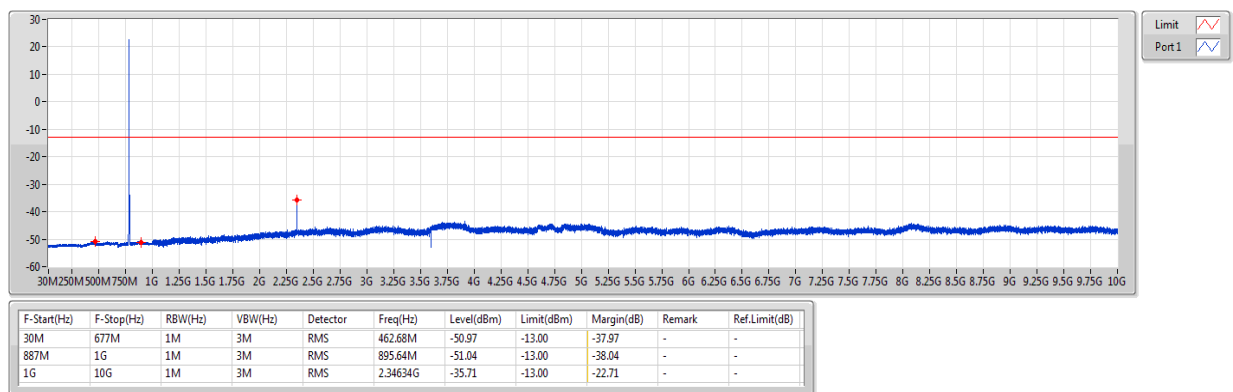
782MHz_QPSK_RB 1,#RB 25



Band 13_LTE_10MHz_Nss1,16QAM_1TX

CSE-TX-Sum

782MHz_16QAM_RB 1,#RB 25

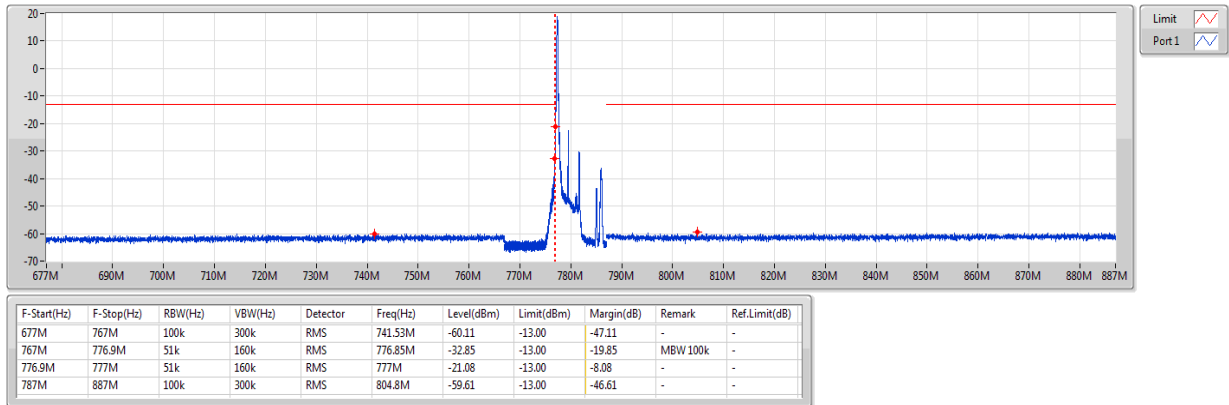


Band edge Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Remark	Ref.Limit (dB)
Band 13	-	-	-	-	-	-	-	-	-	-	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	787M	787.1M	51k	160k	RMS	787M	-19.93	-13.00	-6.93	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	787M	787.1M	51k	160k	RMS	787M	-21.31	-13.00	-8.31	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	776.9M	777M	100k	300k	RMS	777M	-30.55	-13.00	-17.55	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	787M	787.1M	100k	300k	RMS	787M	-27.73	-13.00	-14.73	-	-

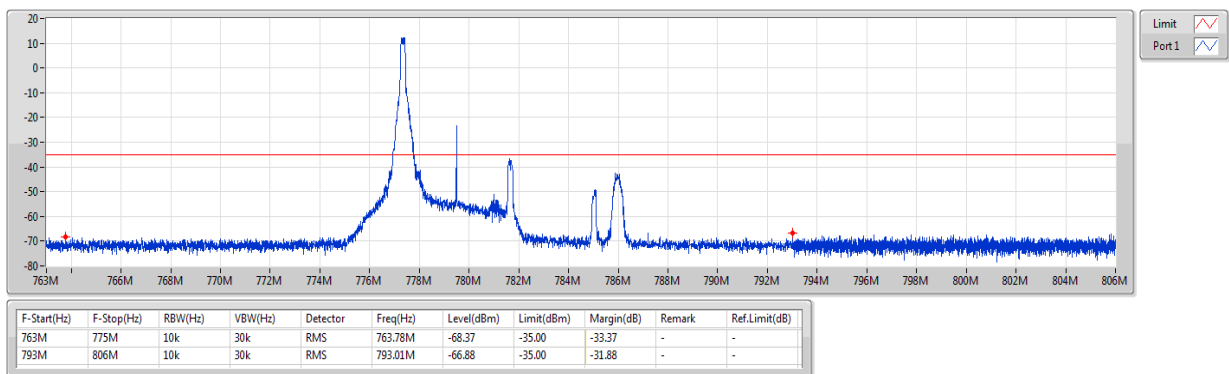
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



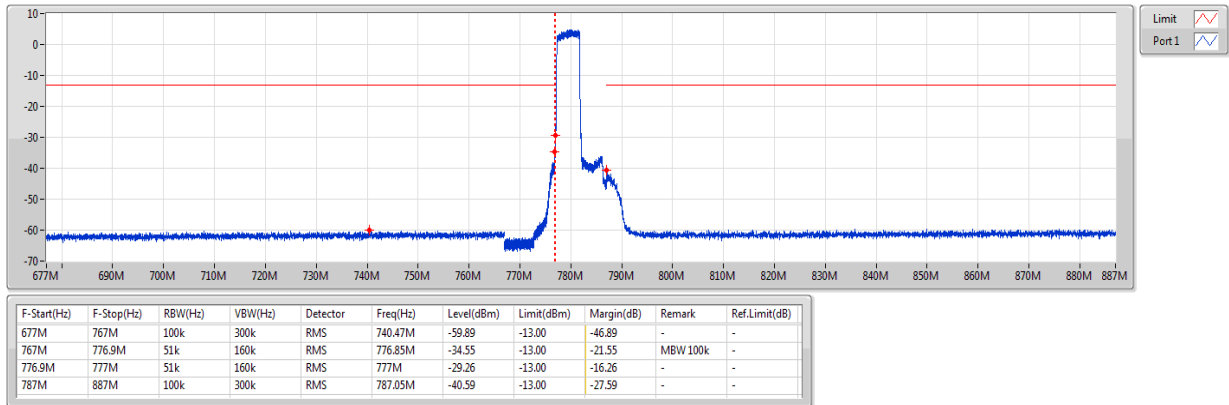
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



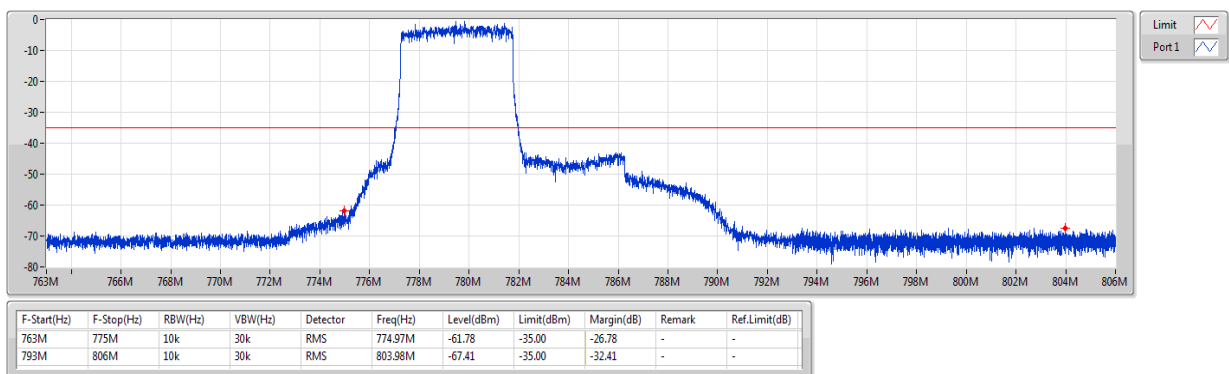
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



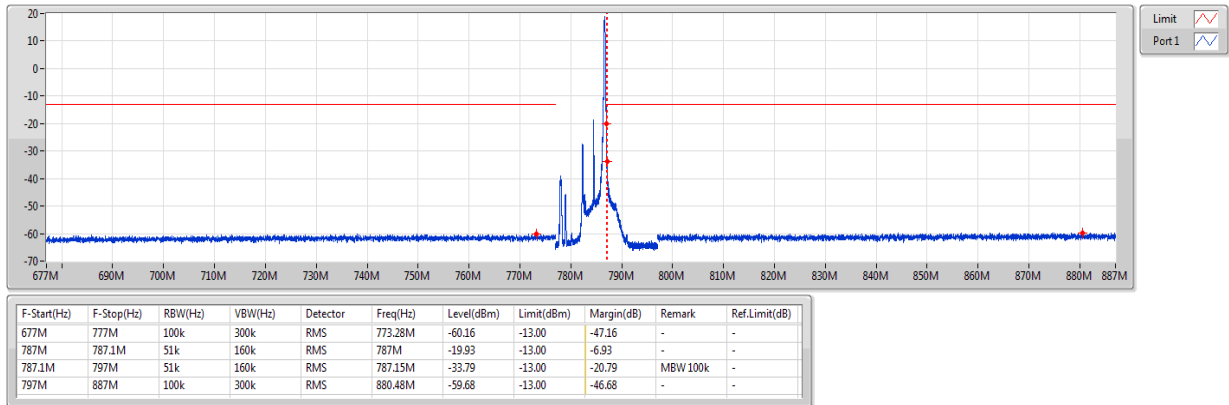
Band 13_LTE_5MHz_Nss1,QPSK_1TX
779.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



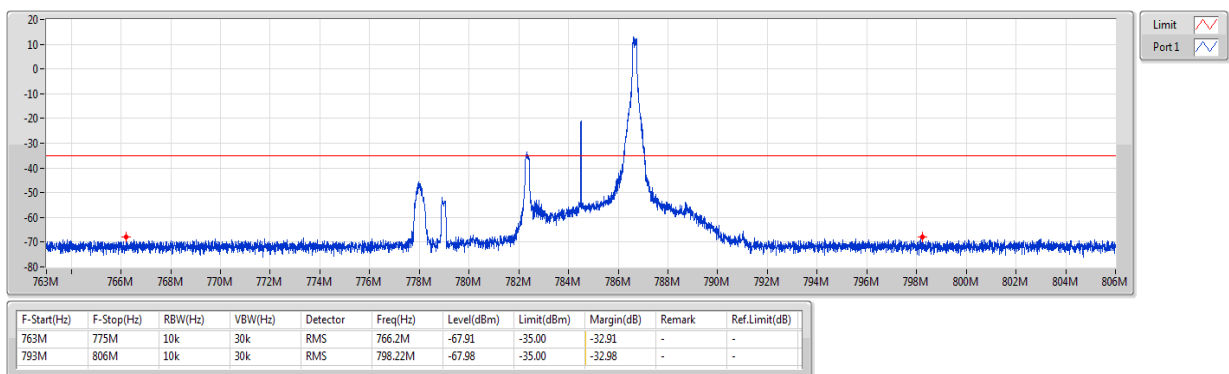
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 1,#RB 24

CSE-TX-Sum



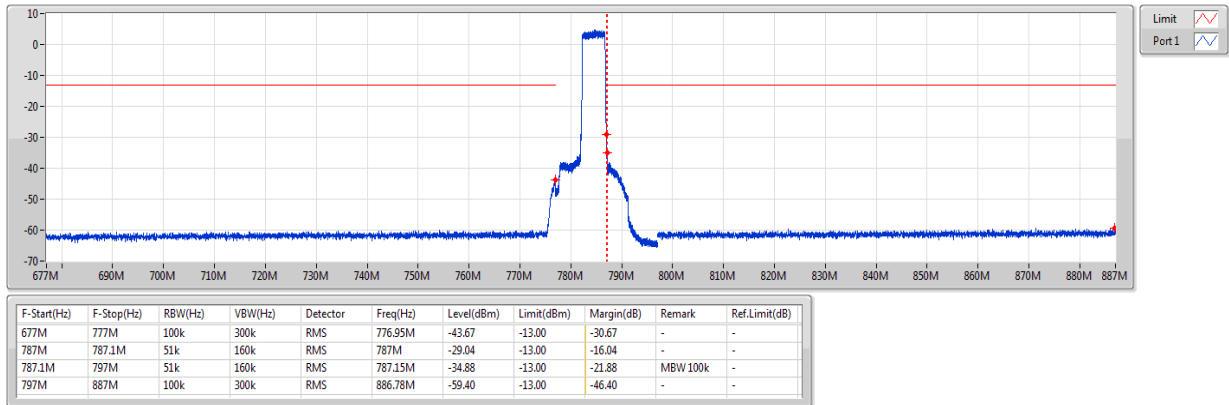
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 1,#RB 24

CSE-TX-Sum



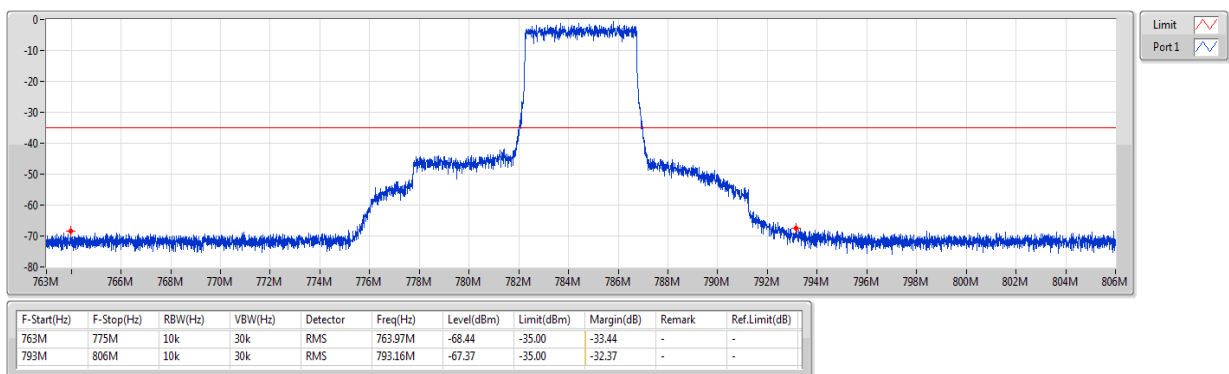
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



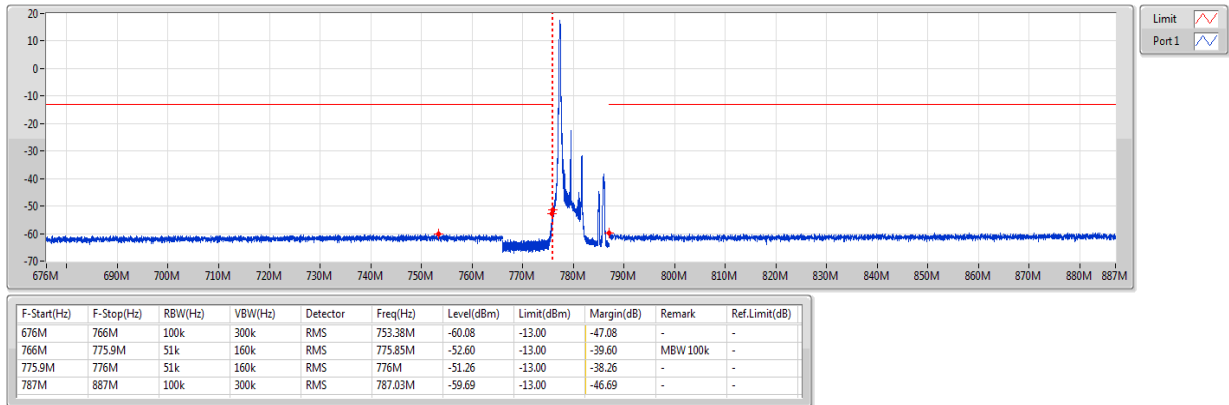
Band 13_LTE_5MHz_Nss1,QPSK_1TX
784.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



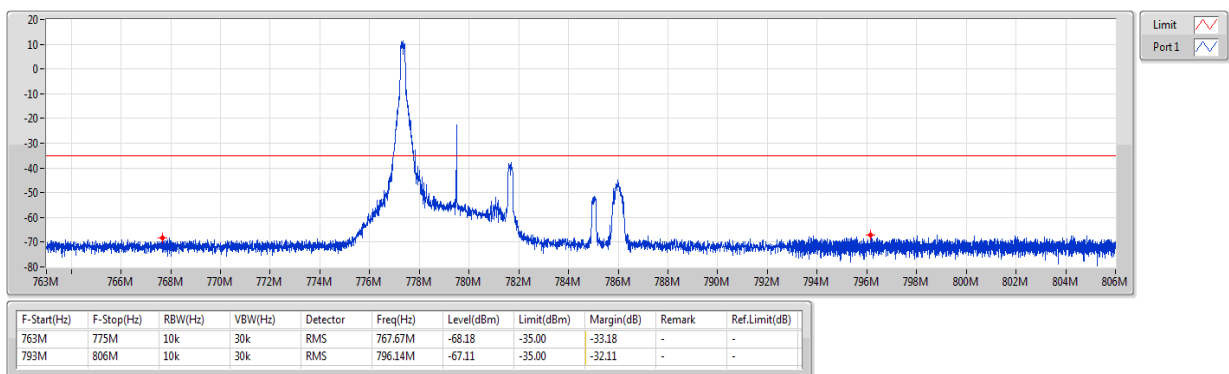
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



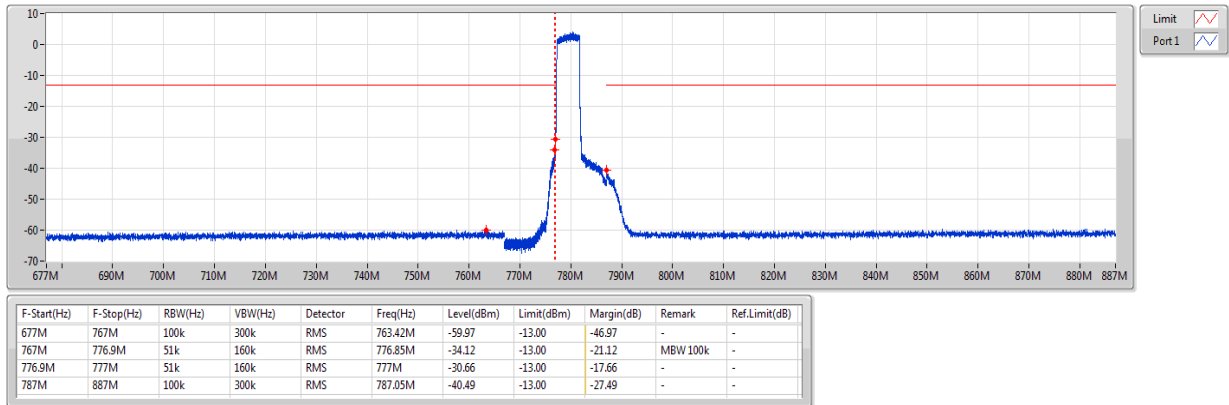
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



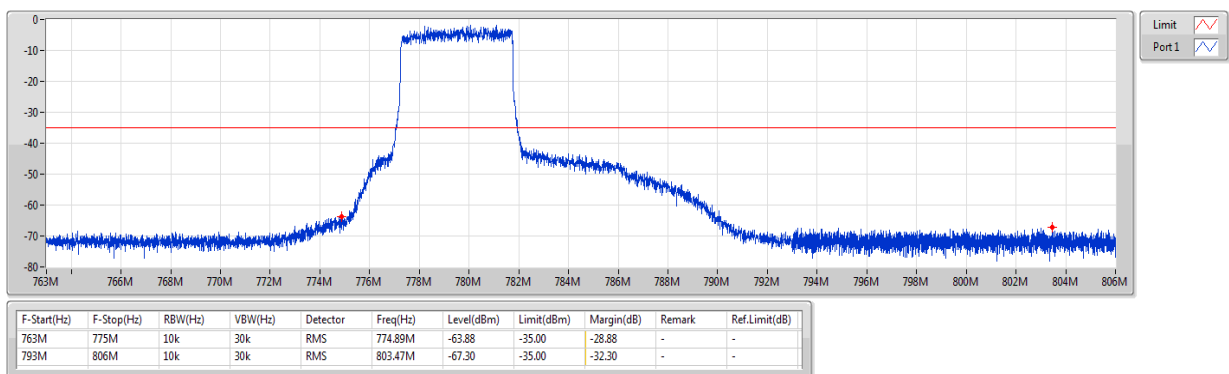
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



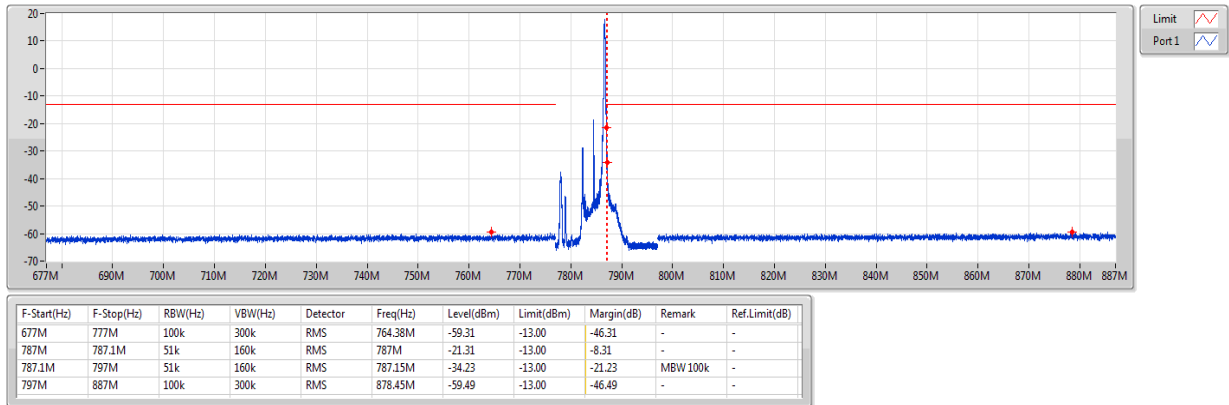
Band 13_LTE_5MHz_Nss1,16QAM_1TX
779.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



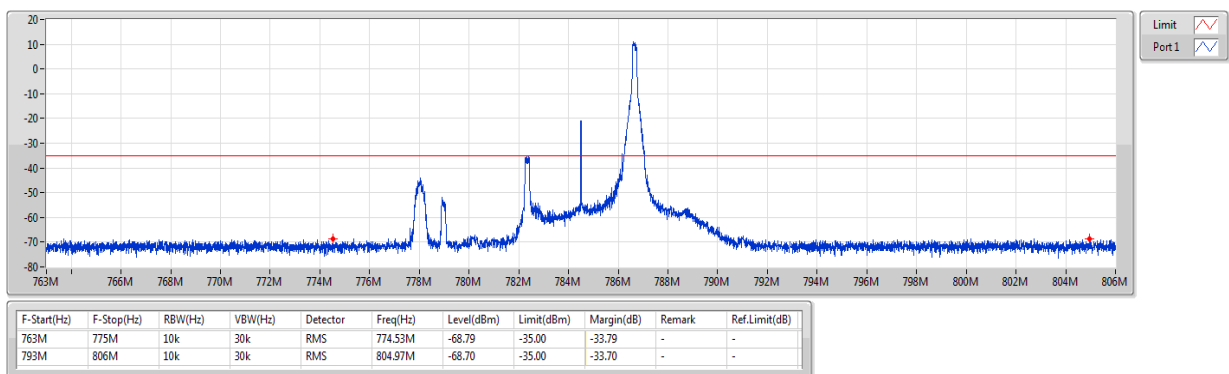
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 1,#RB 24

CSE-TX-Sum



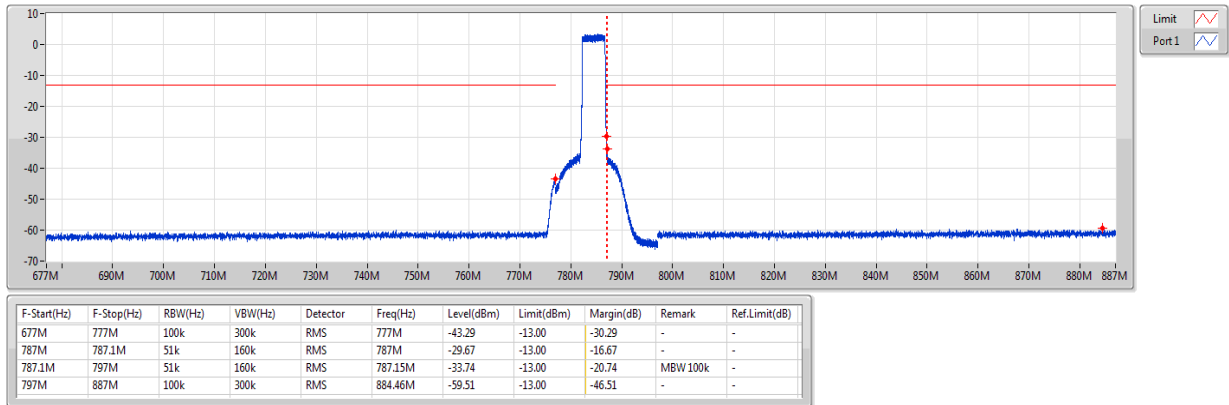
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 1,#RB 24

CSE-TX-Sum



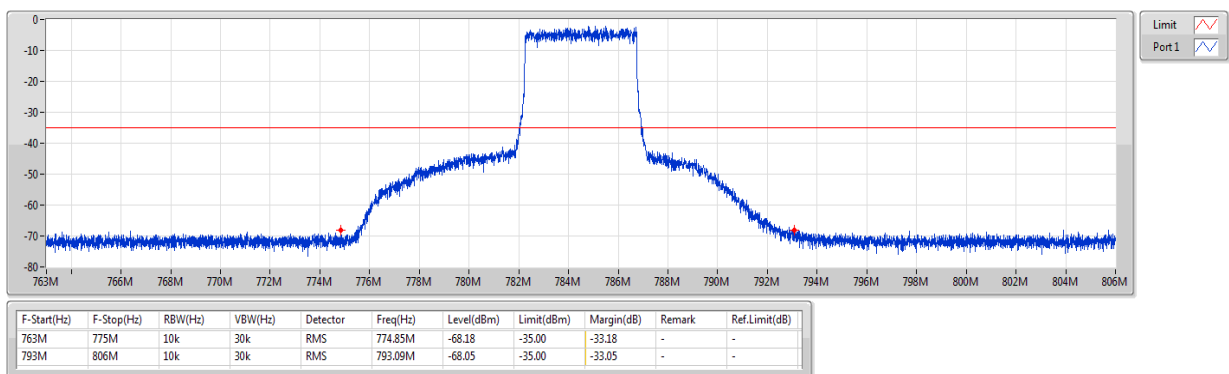
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



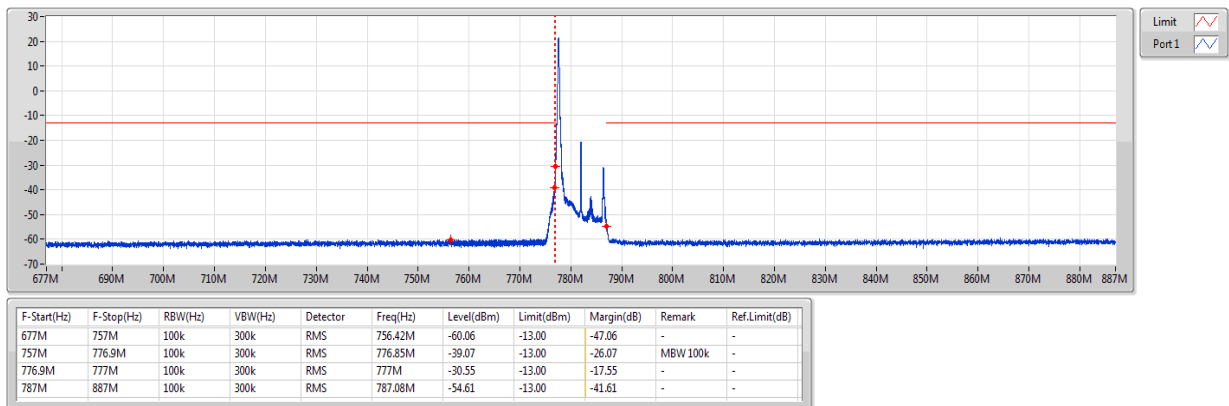
Band 13_LTE_5MHz_Nss1,16QAM_1TX
784.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



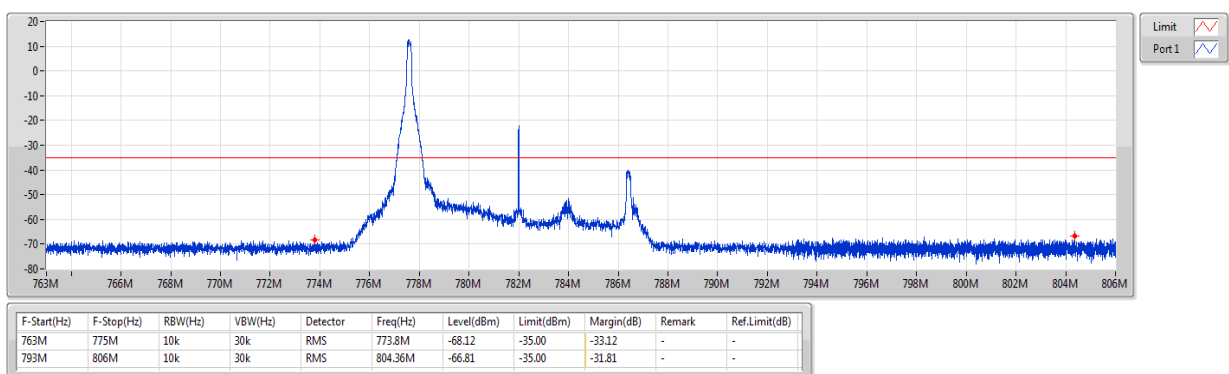
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



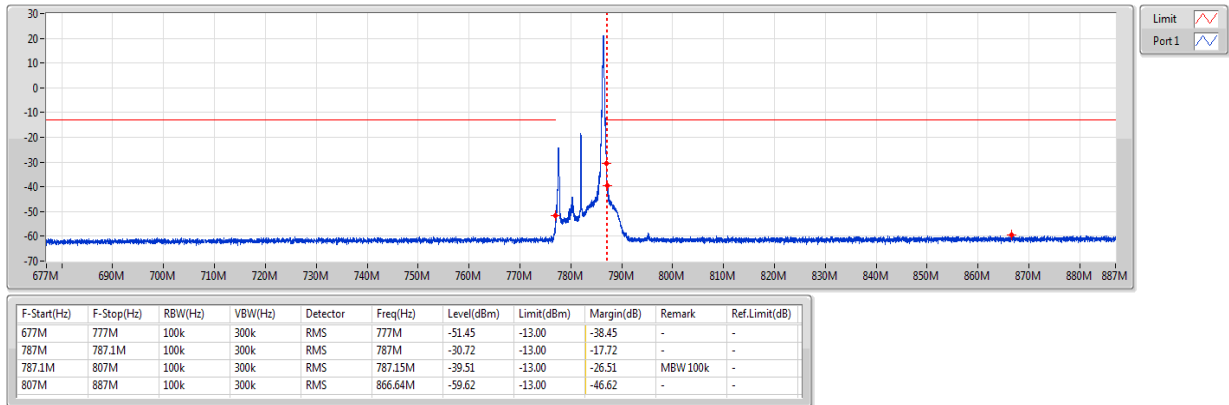
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



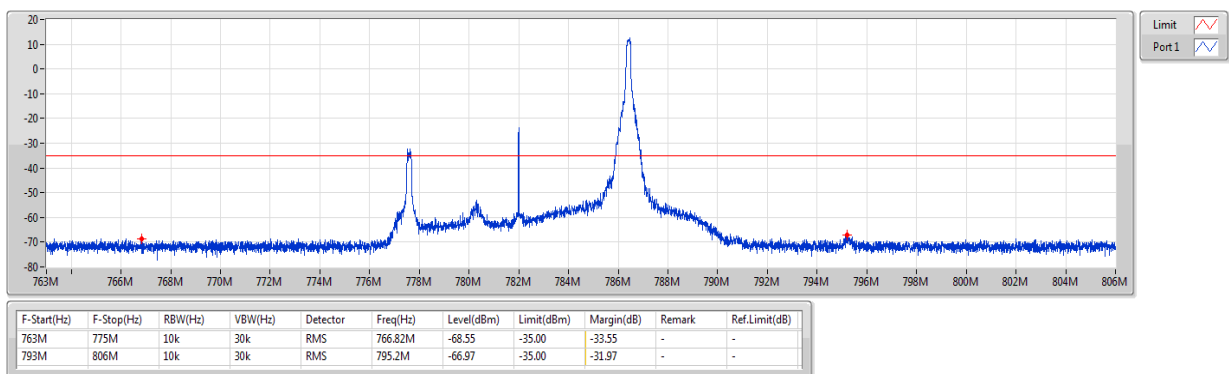
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB 49

CSE-TX-Sum



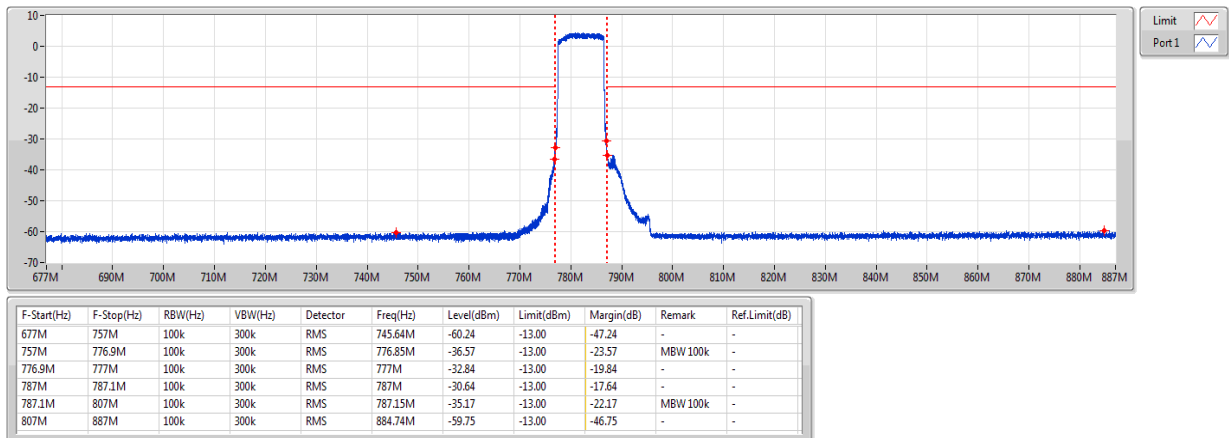
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 1,#RB 49

CSE-TX-Sum



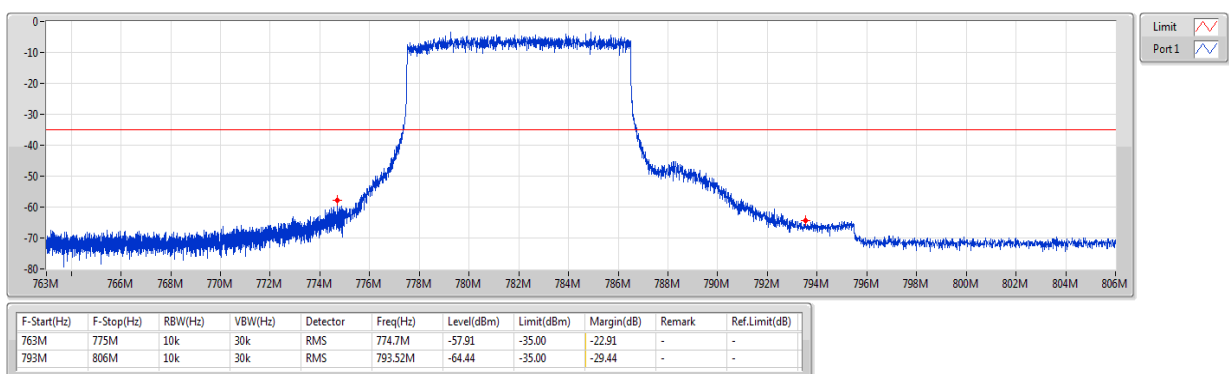
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



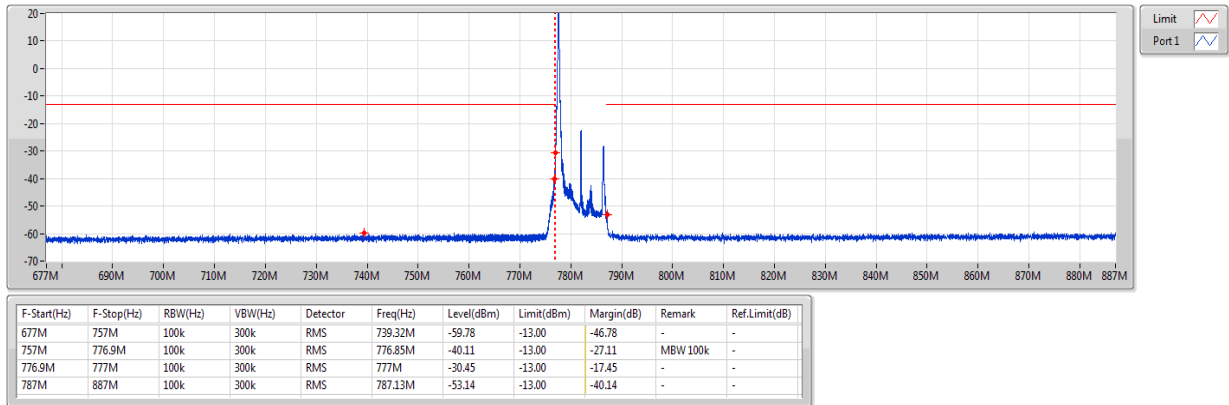
Band 13_LTE_10MHz_Nss1,QPSK_1TX
782MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



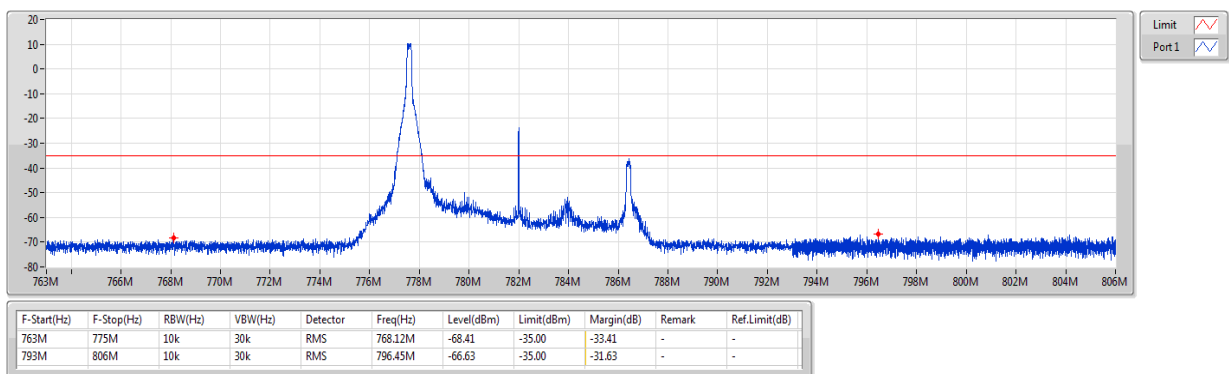
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



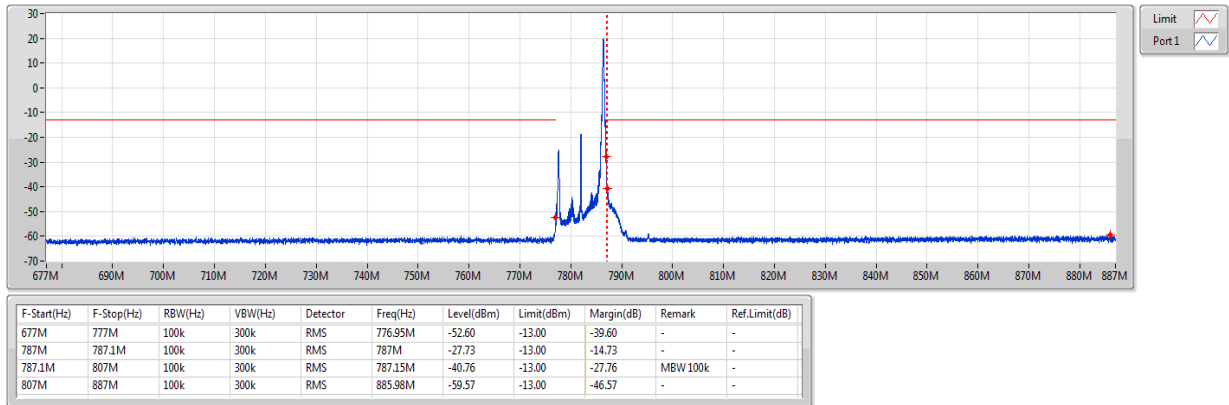
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



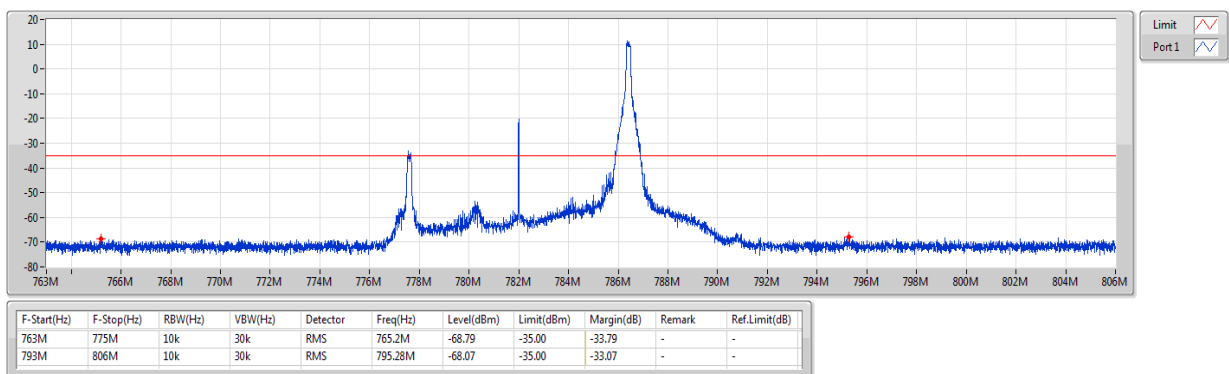
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB 49

CSE-TX-Sum



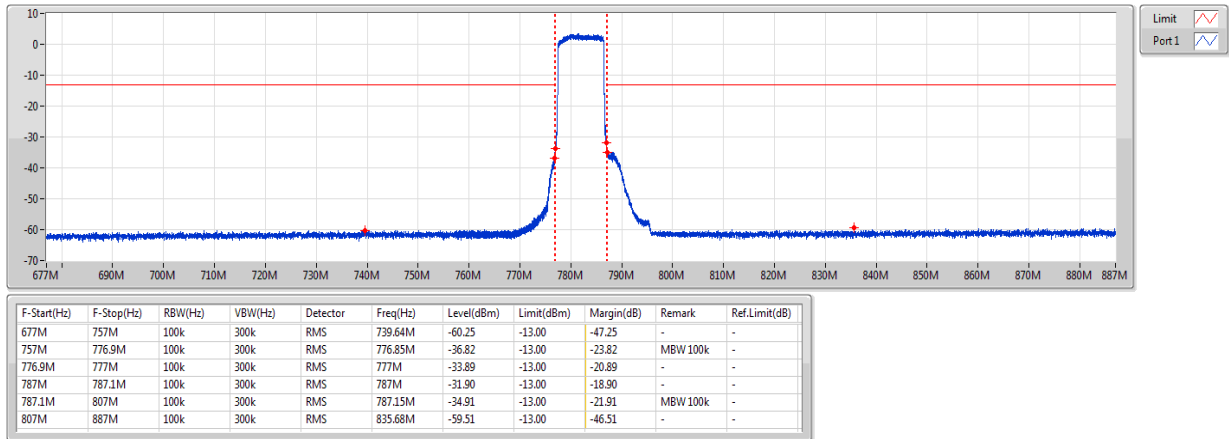
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 1,#RB 49

CSE-TX-Sum



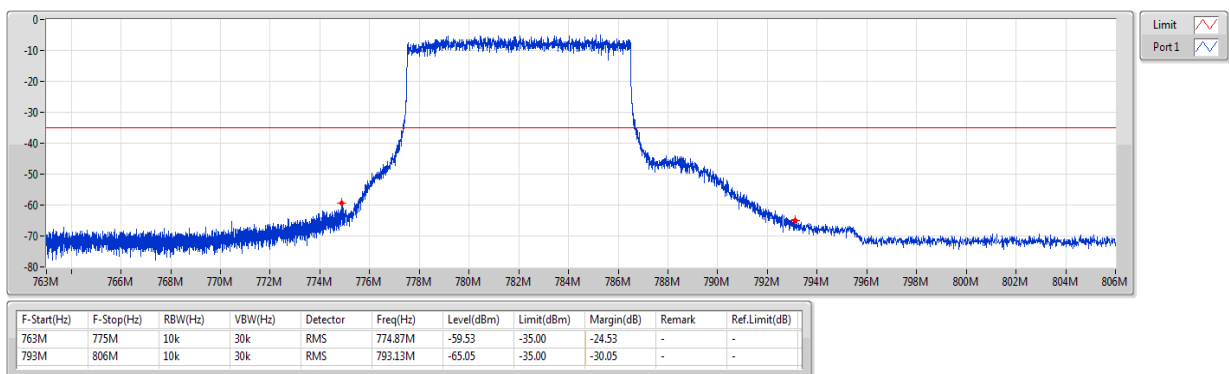
Band 13_LTE_10MHz_Nss1,16QAM_1TX
782MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



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

CSE-TX-Sum

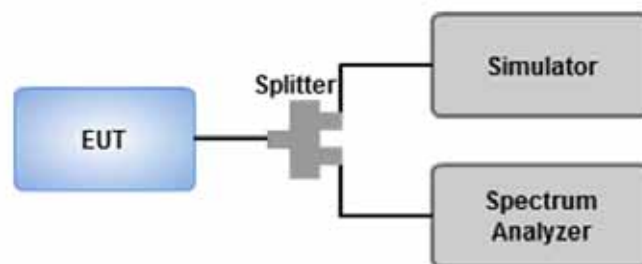


3.4 Occupied Bandwidth and 26dB Bandwidth

3.4.1 Test Procedures

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

3.4.2 Test Setup



3.4.3 Test Result of Occupied and 26 dB Bandwidth (Band 12)

Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 12	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	1.25M	1.082M	1M08G7D	1.236M	1.08M
LTE_1.4MHz_Nss1,16QAM_1TX	1.236M	1.081M	1M08W7D	1.229M	1.079M
LTE_3MHz_Nss1,QPSK_1TX	2.91M	2.678M	2M68G7D	2.895M	2.672M
LTE_3MHz_Nss1,16QAM_1TX	2.921M	2.684M	2M68W7D	2.899M	2.679M
LTE_5MHz_Nss1,QPSK_1TX	4.894M	4.475M	4M48G7D	4.888M	4.46M
LTE_5MHz_Nss1,16QAM_1TX	4.875M	4.469M	4M47W7D	4.863M	4.464M
LTE_10MHz_Nss1,QPSK_1TX	9.663M	8.937M	8M94G7D	9.538M	8.885M
LTE_10MHz_Nss1,16QAM_1TX	9.6M	8.923M	8M92W7D	9.525M	8.886M

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

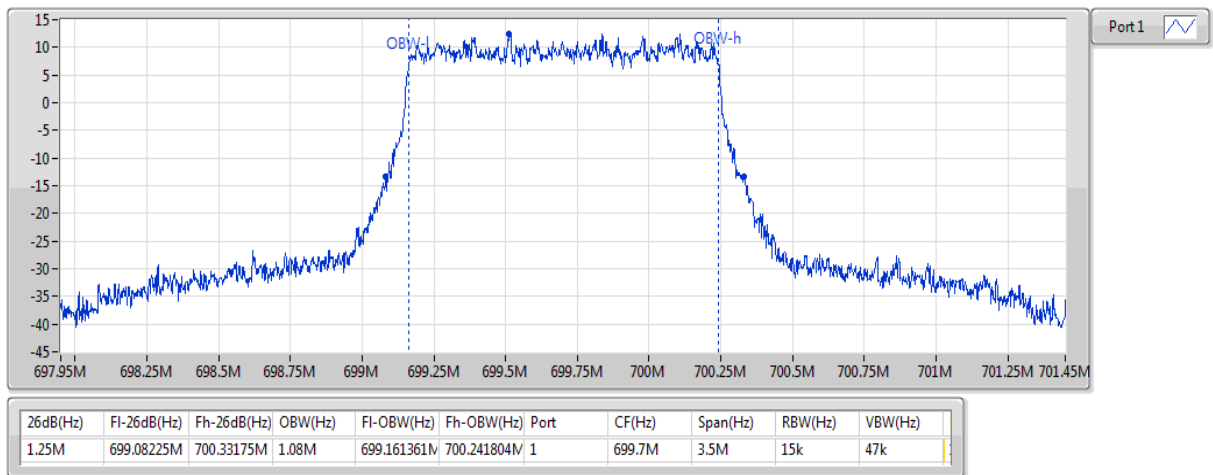
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 12_LTE_1.4MHz_Nss1_1TX	-	-	-	-
699.7MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.25M	1.08M
707.5MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.244M	1.082M
715.3MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.236M	1.08M
699.7MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.229M	1.079M
707.5MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.232M	1.08M
715.3MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.236M	1.081M
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-
700.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.906M	2.672M
707.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.895M	2.674M
714.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.91M	2.678M
700.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.918M	2.682M
707.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.921M	2.684M
714.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.899M	2.679M
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-
701.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.888M	4.46M
707.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.888M	4.475M
713.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.894M	4.463M
701.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.875M	4.464M
707.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.863M	4.468M
713.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.863M	4.469M
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-
704MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.663M	8.928M
707.5MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.663M	8.937M
711MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.538M	8.885M
704MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.6M	8.909M
707.5MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.6M	8.923M
711MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.525M	8.886M

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

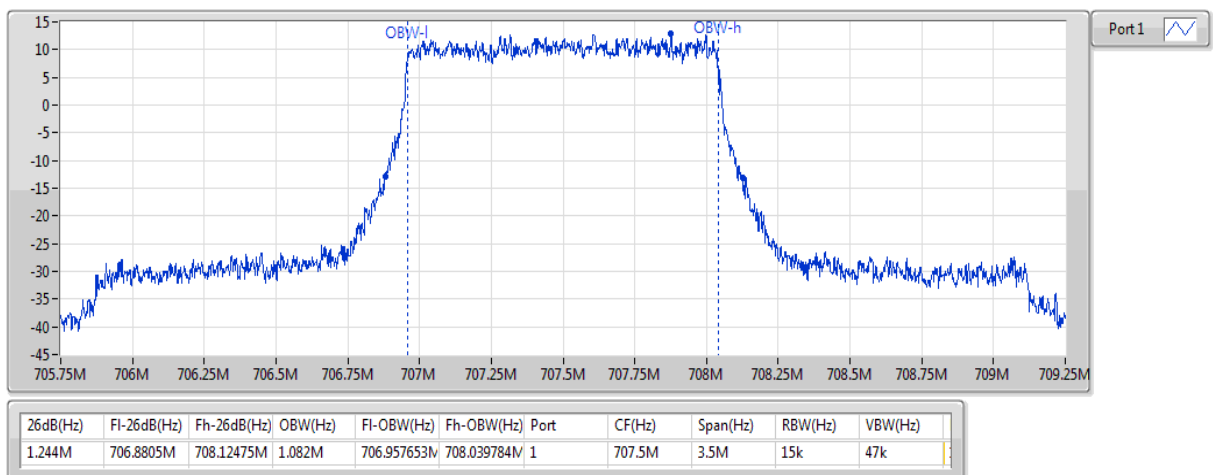
699.7MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

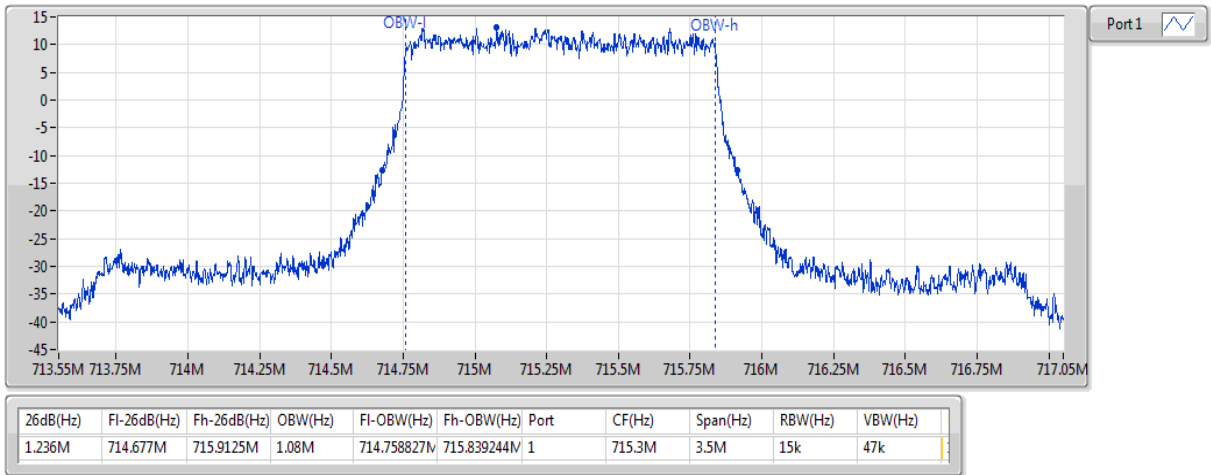
707.5MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

EBW

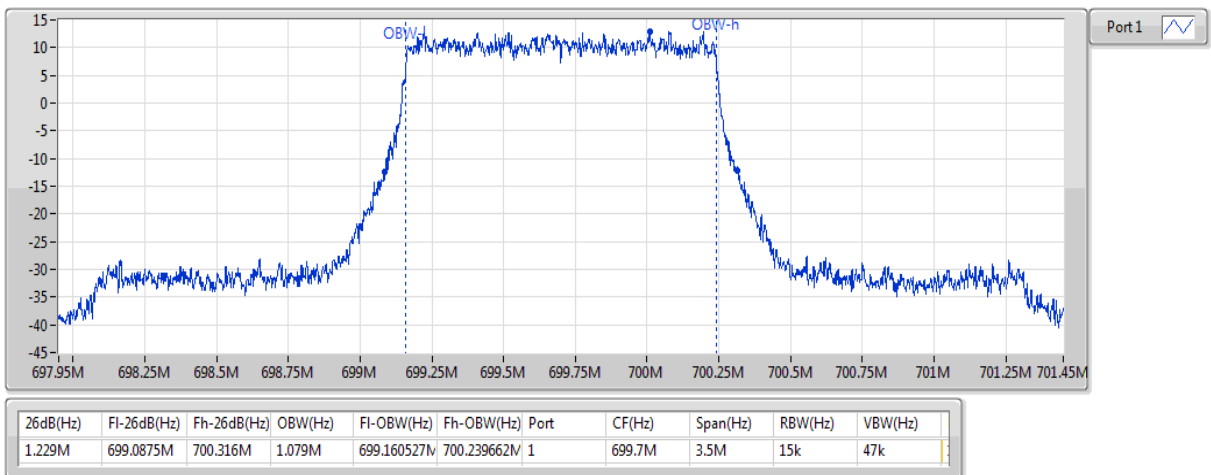
715.3MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

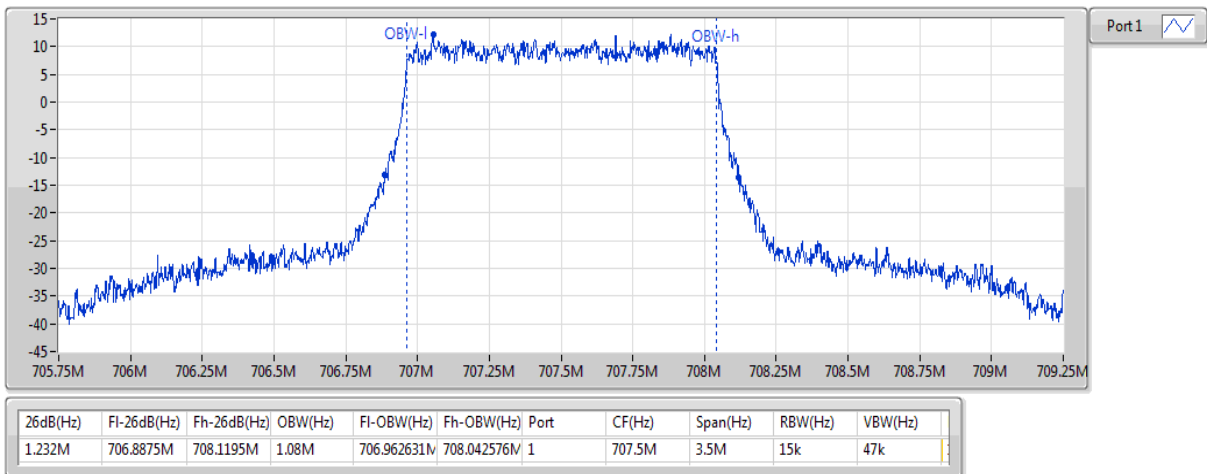
699.7MHz_16QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

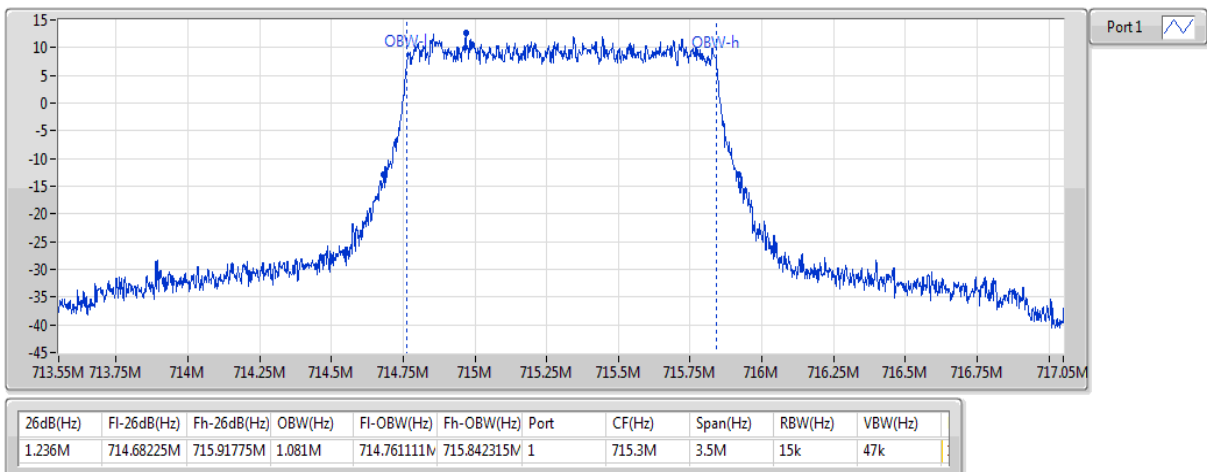
707.5MHz_16QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

EBW

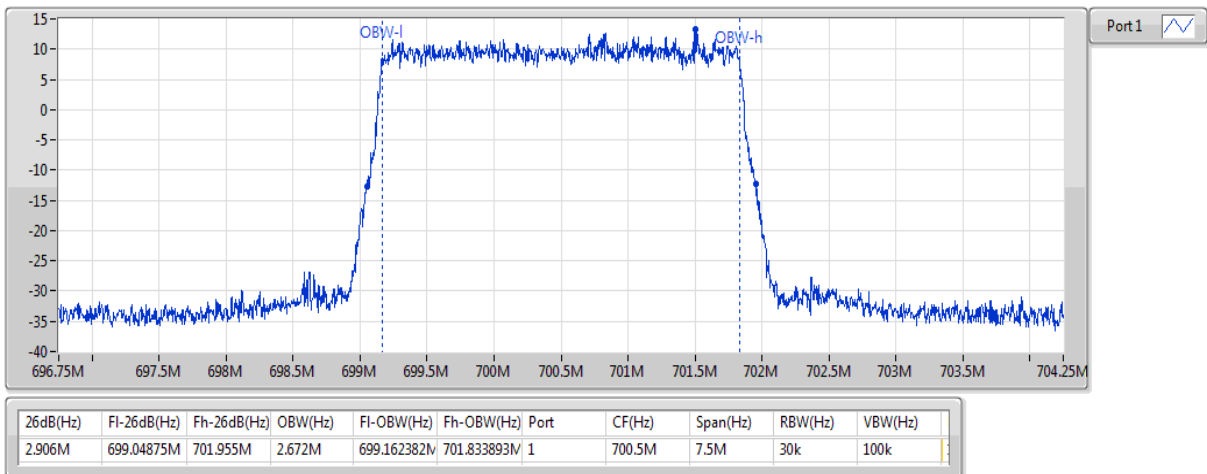
715.3MHz_16QAM_RB 6,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

EBW

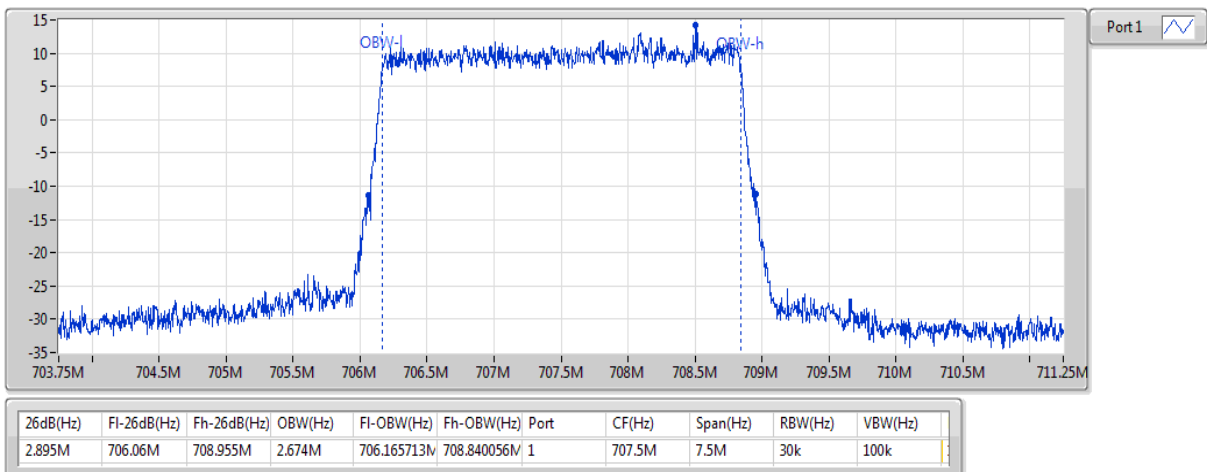
700.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

EBW

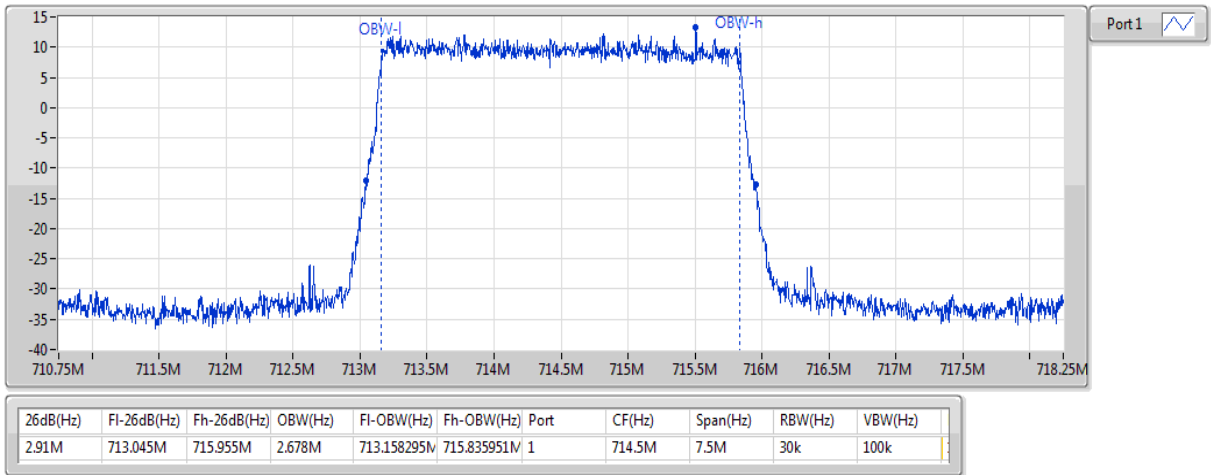
707.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

EBW

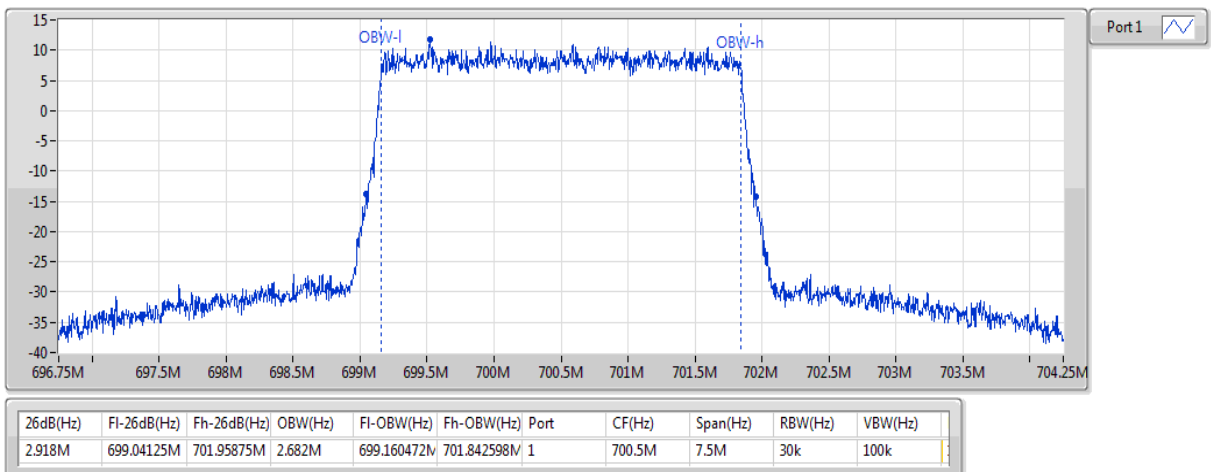
714.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

EBW

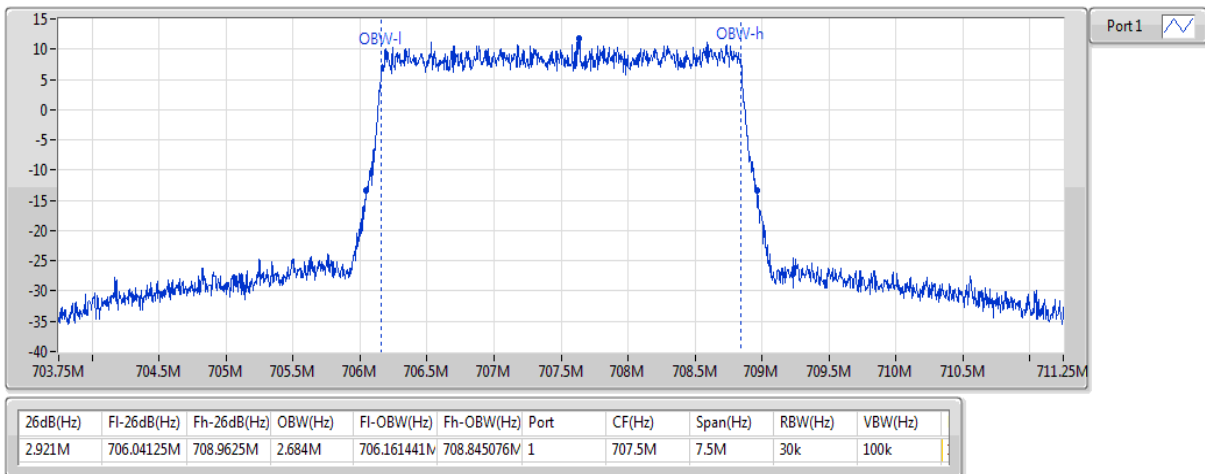
700.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

EBW

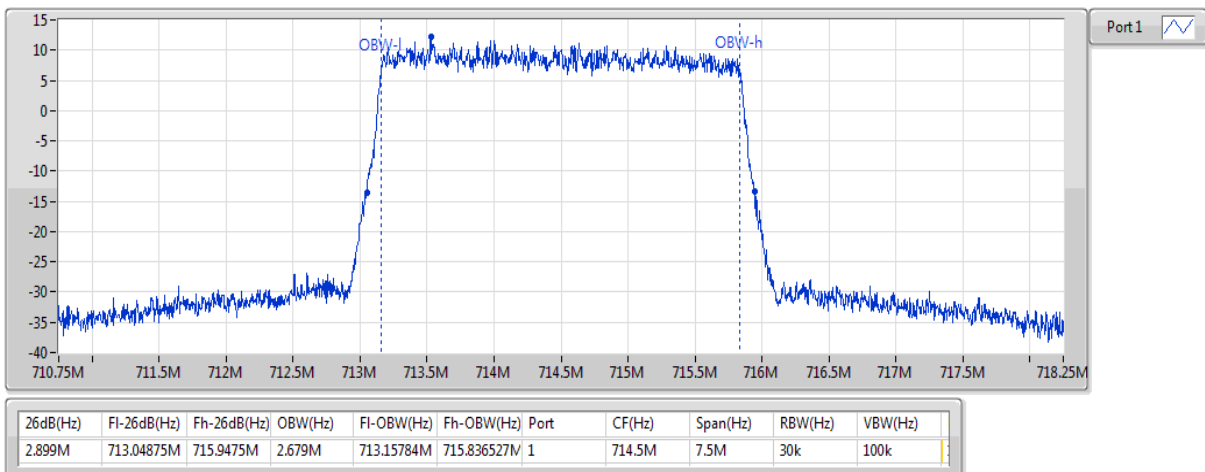
707.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

EBW

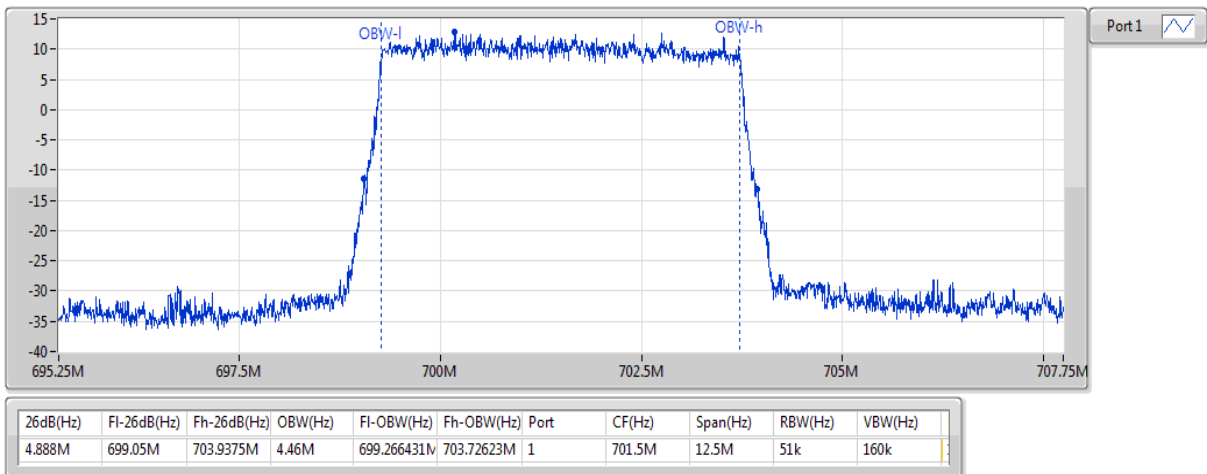
714.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

EBW

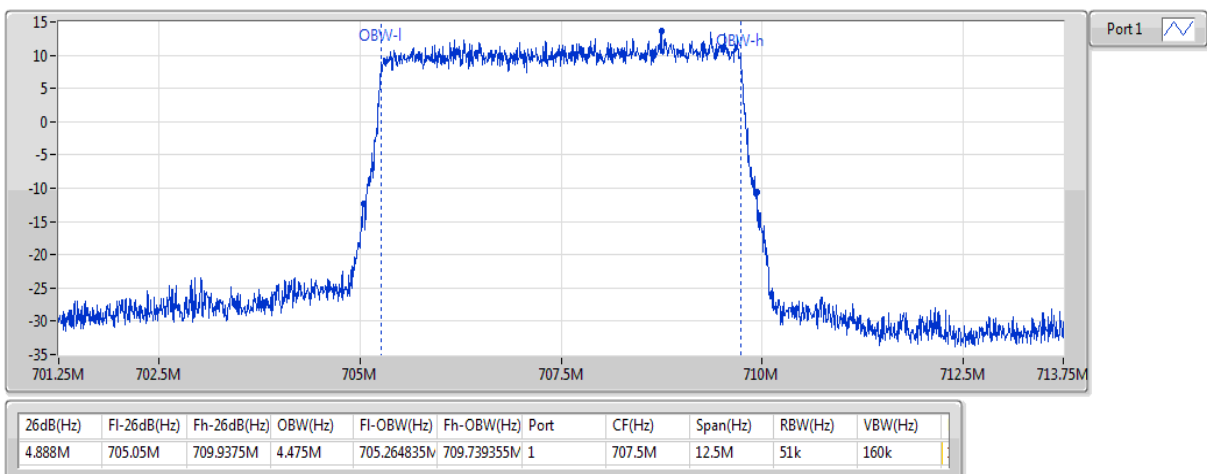
701.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

EBW

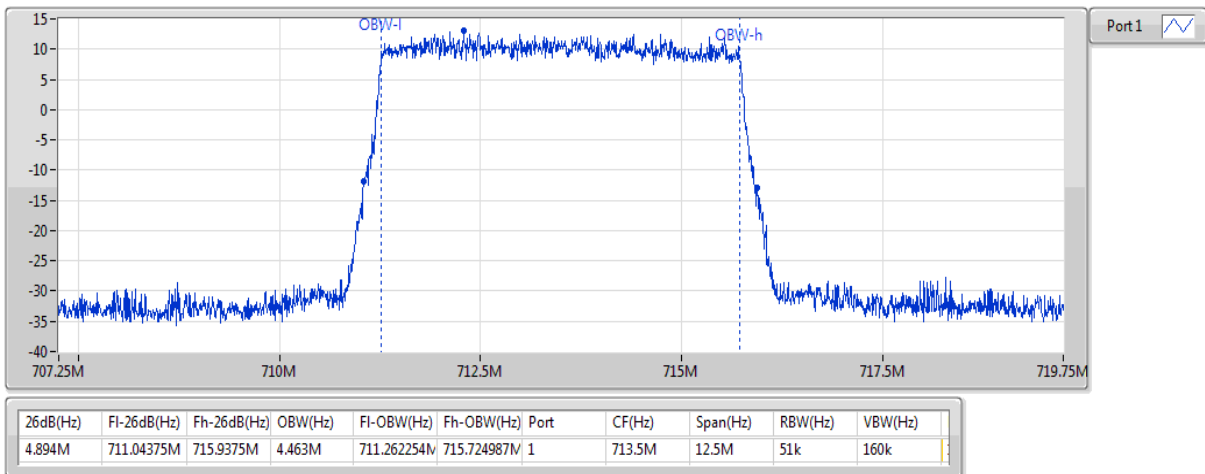
707.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

EBW

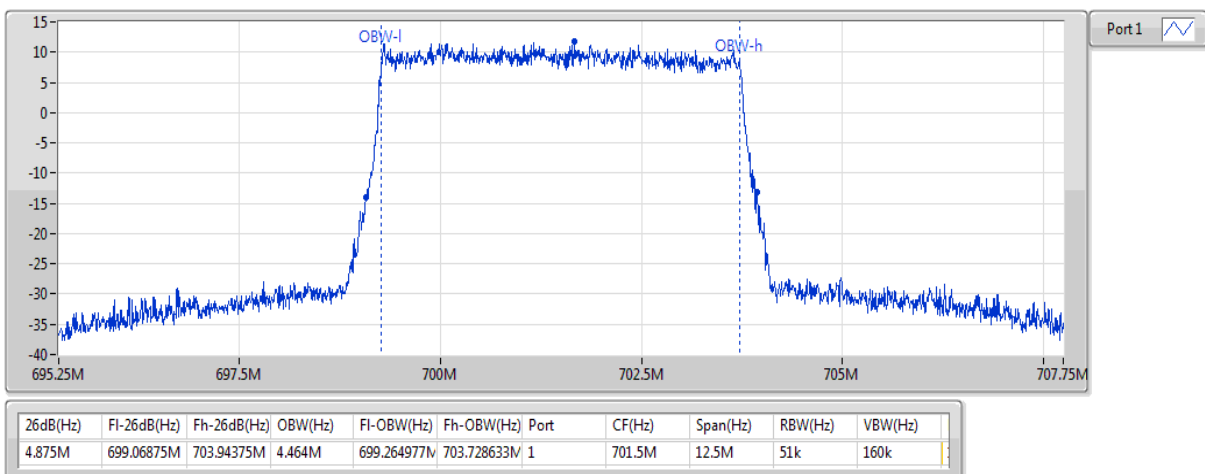
713.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

EBW

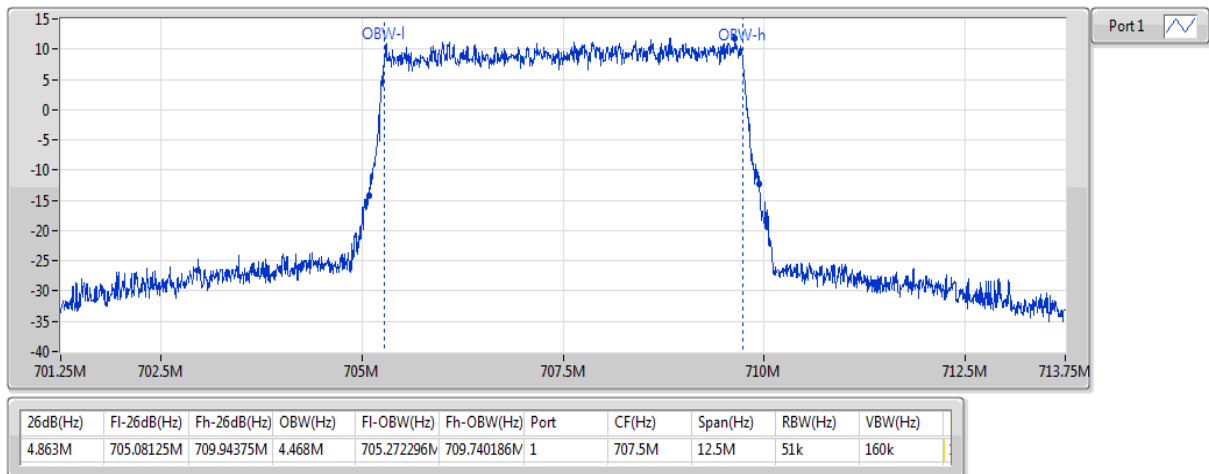
701.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

EBW

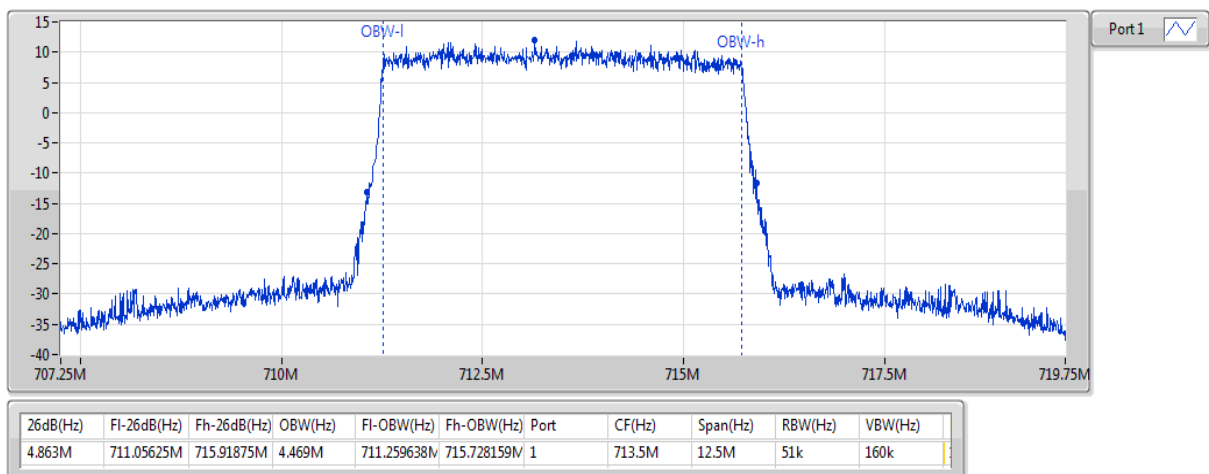
707.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

EBW

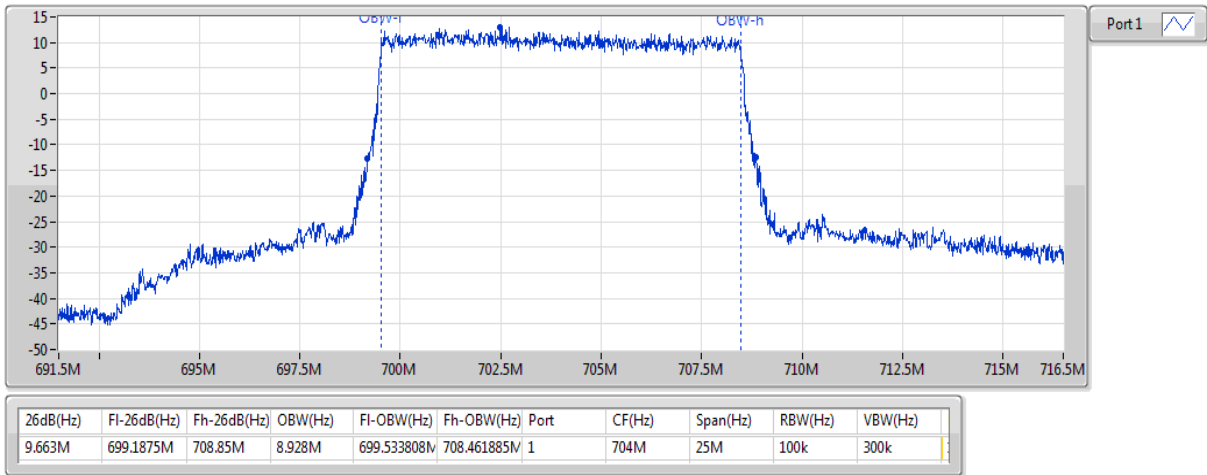
713.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

EBW

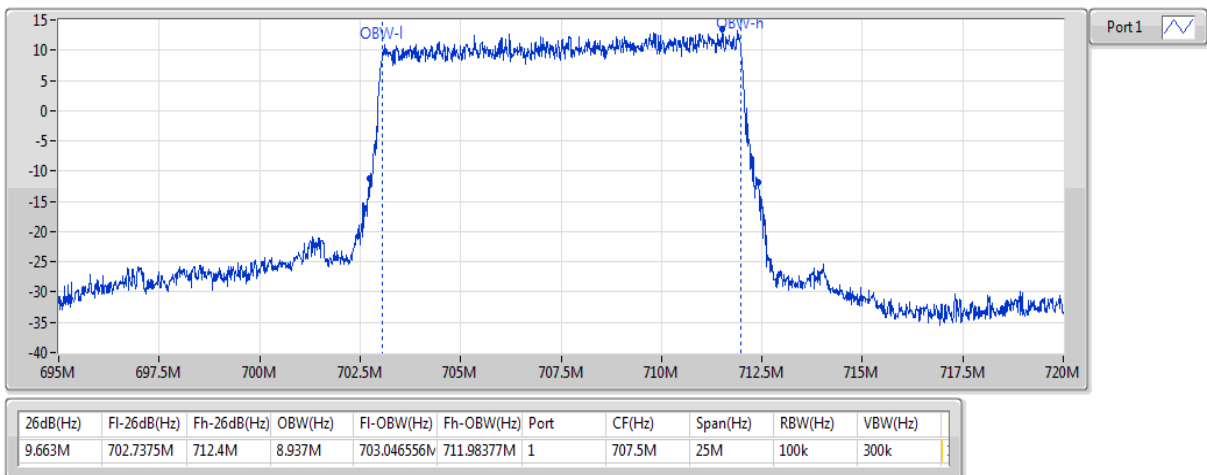
704MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

EBW

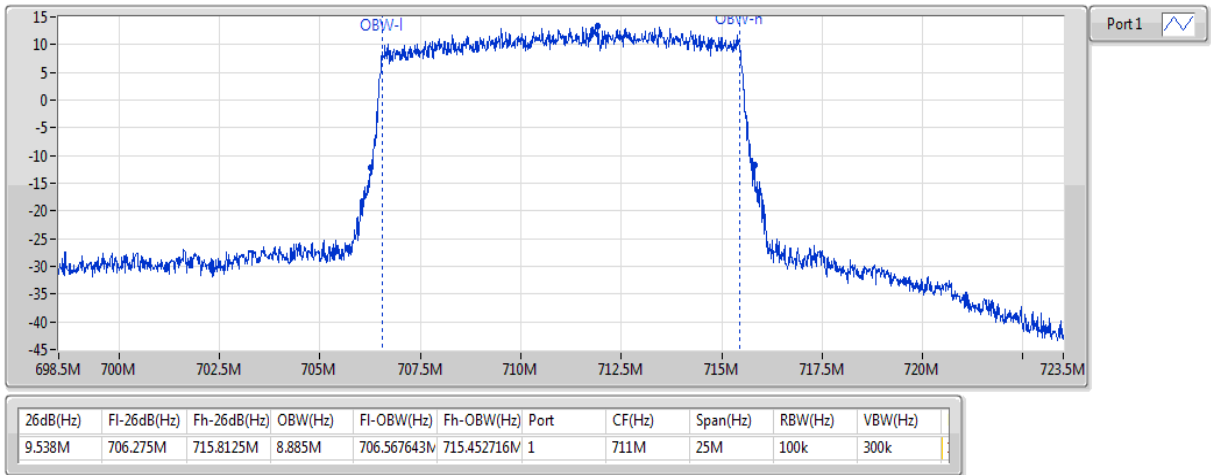
707.5MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

EBW

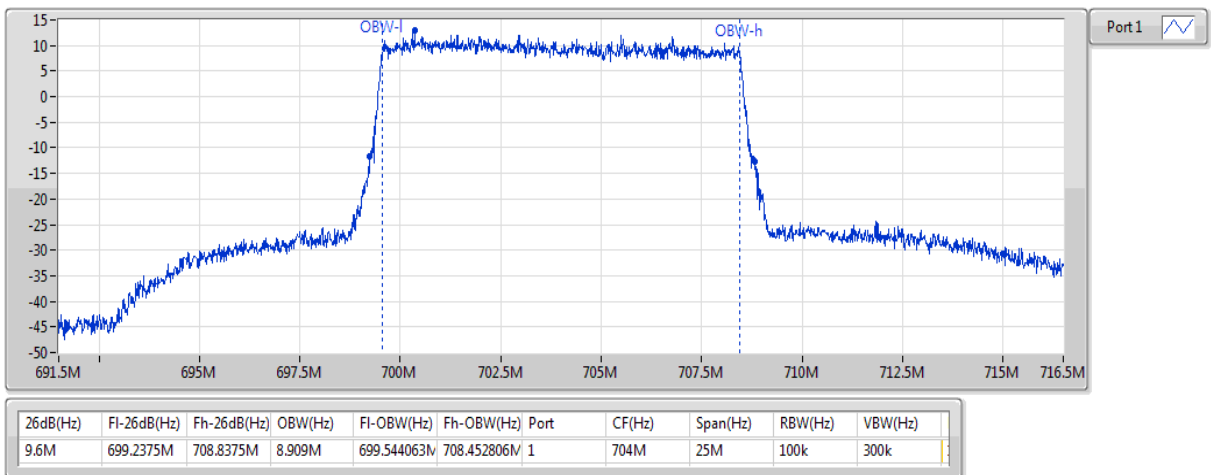
711MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

EBW

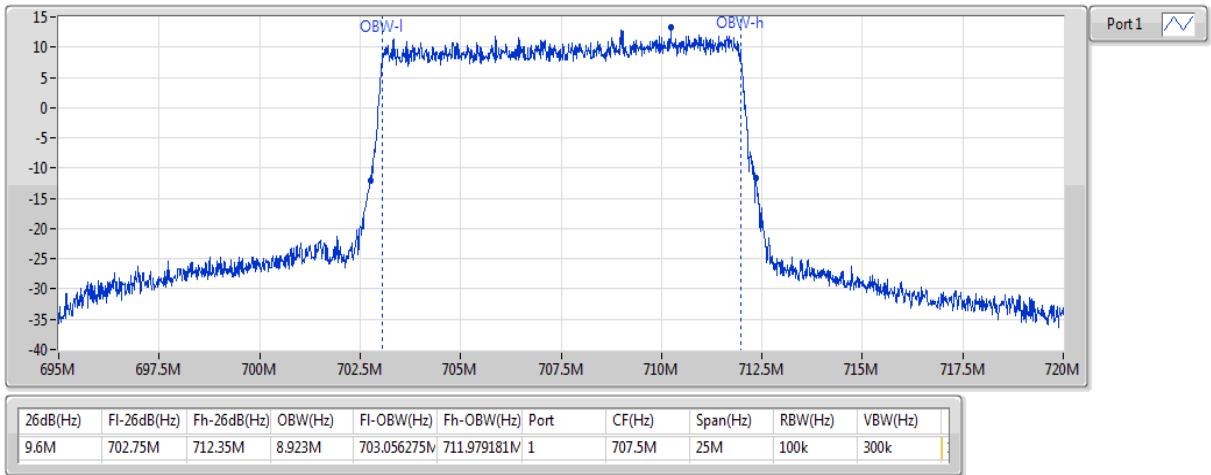
704MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

EBW

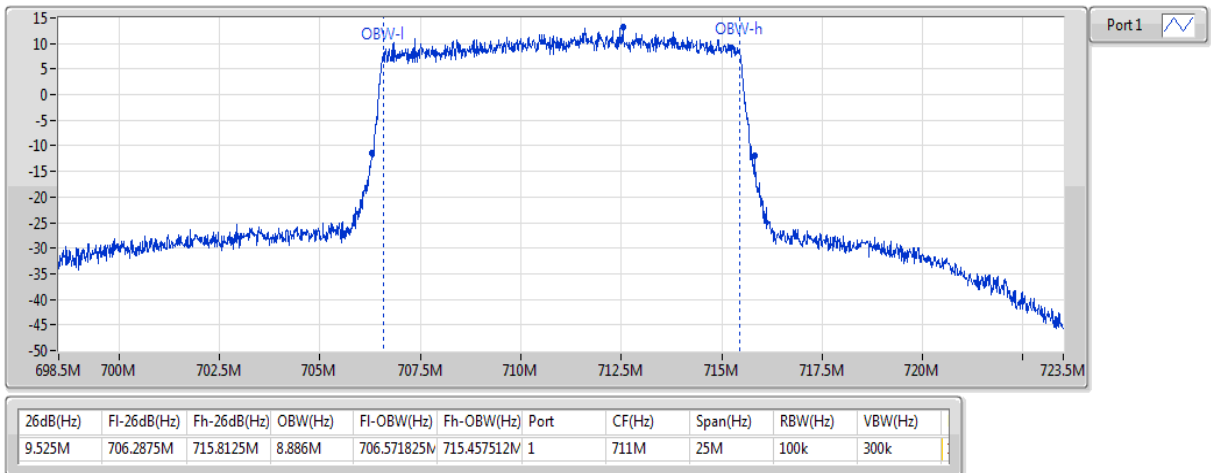
707.5MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

EBW

711MHz_16QAM_RB 50,#RB 0



3.4.4 Test Result of Occupied and 26 dB Bandwidth (Band 13)

Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 13	-	-	-	-	-
LTE_5MHz_Nss1,QPSK_1TX	4.925M	4.463M	4M46G7D	4.856M	4.461M
LTE_5MHz_Nss1,16QAM_1TX	4.925M	4.463M	4M46W7D	4.856M	4.456M
LTE_10MHz_Nss1,QPSK_1TX	9.575M	8.891M	8M89G7D	9.575M	8.891M
LTE_10MHz_Nss1,16QAM_1TX	9.575M	8.895M	8M90W7D	9.575M	8.895M

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

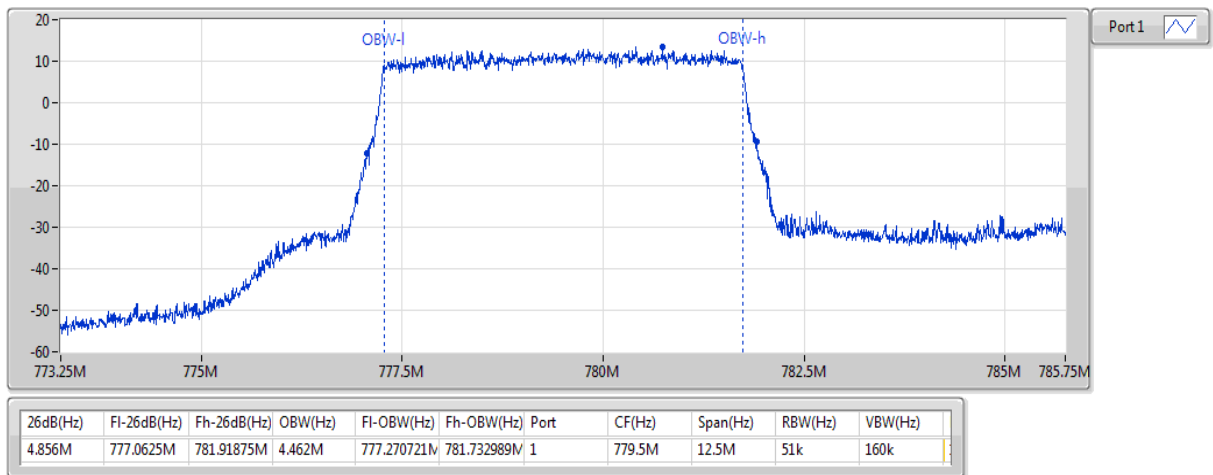
Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 13_LTE_5MHz_Nss1_1TX	-	-	-	-
779.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.856M	4.462M
782MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.888M	4.461M
784.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.925M	4.463M
779.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.856M	4.456M
782MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.925M	4.463M
784.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.894M	4.461M
Band 13_LTE_10MHz_Nss1_1TX	-	-	-	-
782MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.575M	8.891M
782MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.575M	8.895M

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

Band 13_LTE_5MHz_Nss1,QPSK_1TX

EBW

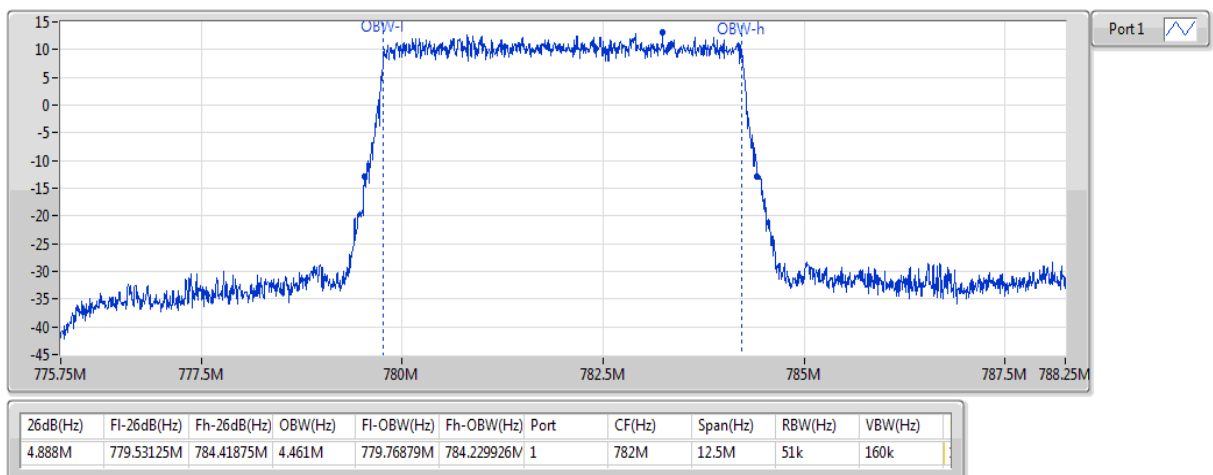
779.5MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,QPSK_1TX

EBW

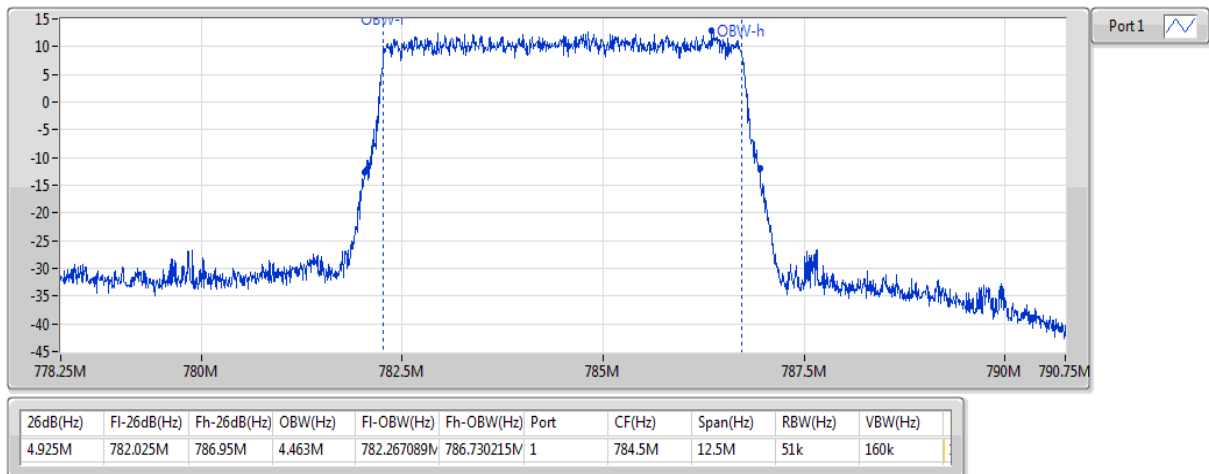
782MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,QPSK_1TX

EBW

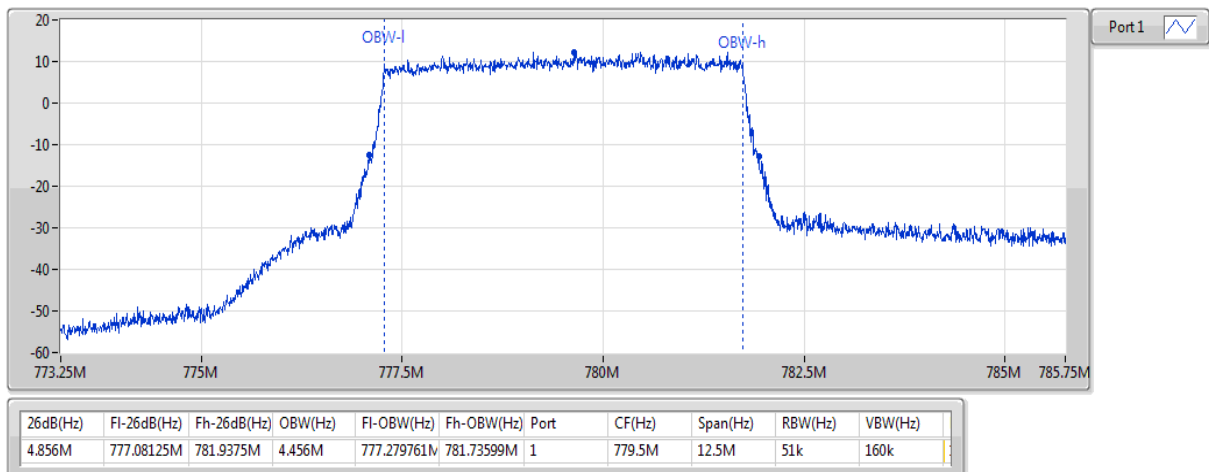
784.5MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

EBW

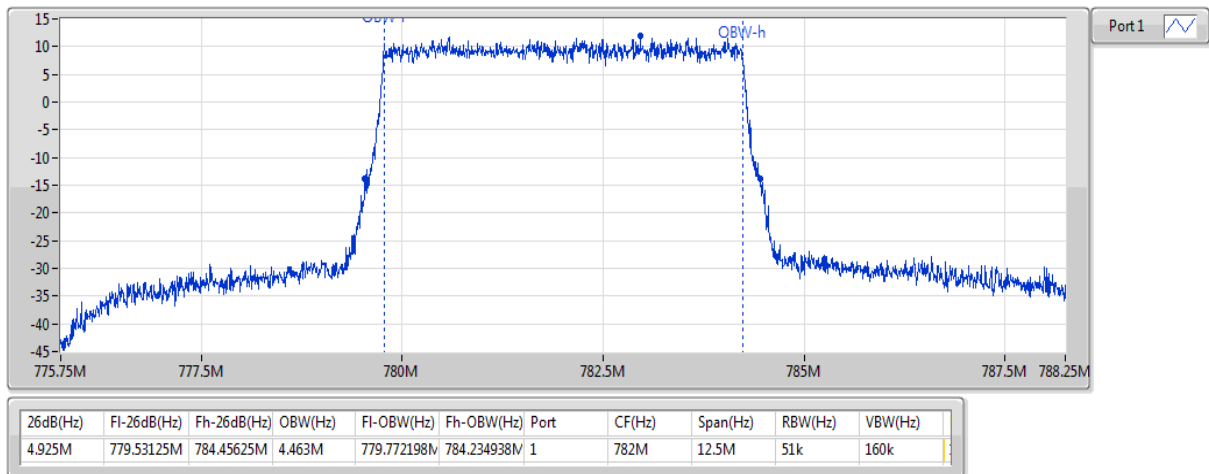
779.5MHz_16QAM_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

EBW

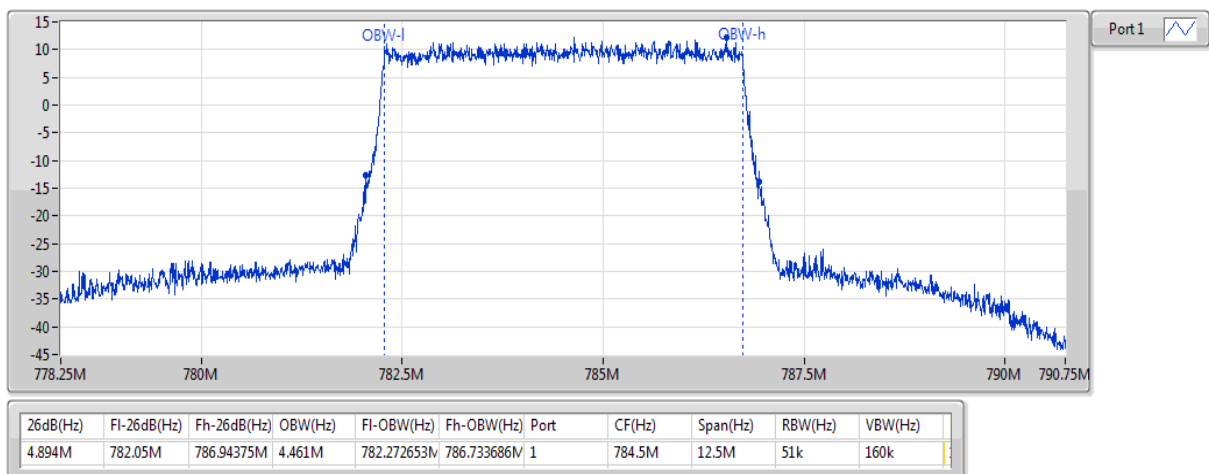
782MHz_16QAM_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

EBW

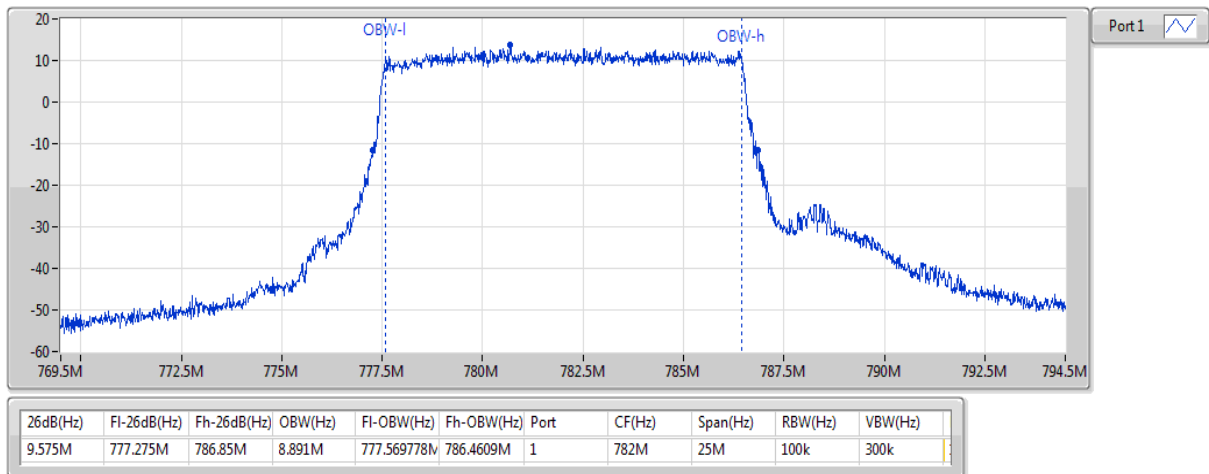
784.5MHz_16QAM_RB 25,#RB 0



Band 13_LTE_10MHz_Nss1,QPSK_1TX

EBW

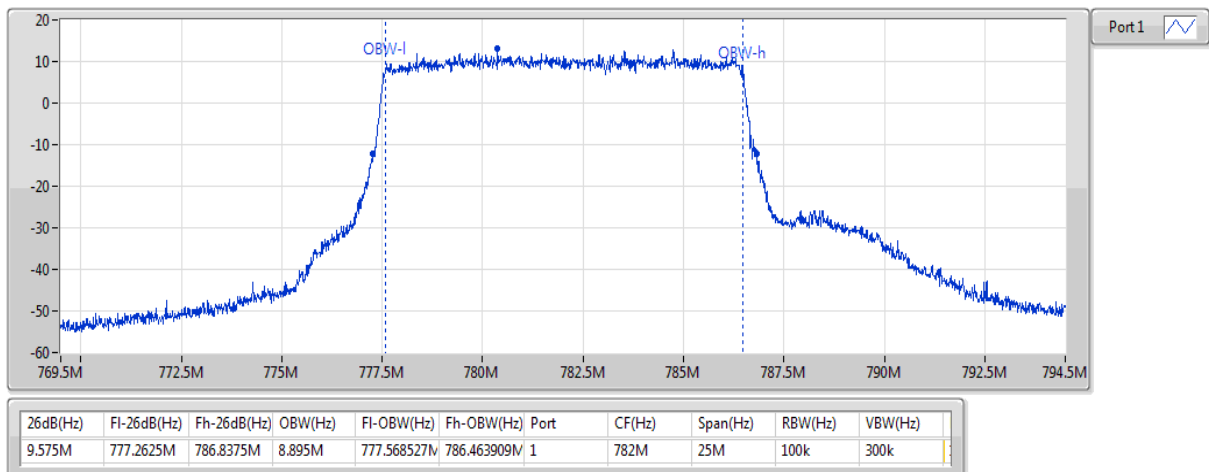
782MHz_QPSK_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,16QAM_1TX

EBW

782MHz_16QAM_RB 50,#RB 0



3.5 Peak to Average Ratio

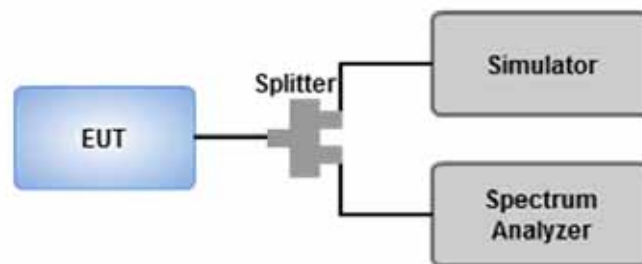
3.5.1 Limit of Peak to Average Ratio

The Peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

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

3.5.3 Test Setup



3.5.4 Test Result of Peak to Average Ratio (Band 12)

Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 12	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	699.7	13.00	5.90	1
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	5.99	1
LTE_3MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.27	1
LTE_3MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.12	1
LTE_5MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.22	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.01	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	707.5	13.00	5.34	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	707.5	13.00	6.10	1

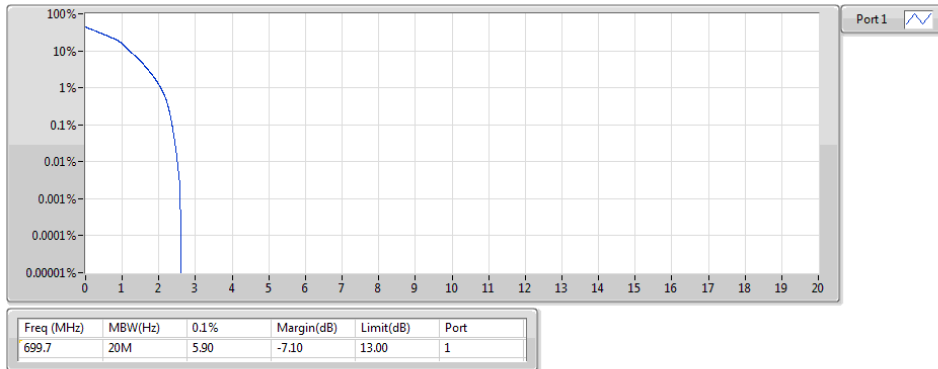
Result

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	5.90	1
707.5MHz_QPSK_RB 6,#RB 0	Pass	707.5	13.00	5.19	1
715.3MHz_QPSK_RB 6,#RB 0	Pass	715.3	13.00	5.00	1
699.7MHz_16QAM_RB 6,#RB 0	Pass	699.7	13.00	5.14	1
707.5MHz_16QAM_RB 6,#RB 0	Pass	707.5	13.00	5.99	1
715.3MHz_16QAM_RB 6,#RB 0	Pass	715.3	13.00	5.80	1
Band 12_LTE_3MHz_Nss1_1TX	-	-	-	-	-
700.5MHz_QPSK_RB 15,#RB 0	Pass	700.5	13.00	5.22	1
707.5MHz_QPSK_RB 15,#RB 0	Pass	707.5	13.00	5.27	1
714.5MHz_QPSK_RB 15,#RB 0	Pass	714.5	13.00	5.04	1
700.5MHz_16QAM_RB 15,#RB 0	Pass	700.5	13.00	6.04	1
707.5MHz_16QAM_RB 15,#RB 0	Pass	707.5	13.00	6.12	1
714.5MHz_16QAM_RB 15,#RB 0	Pass	714.5	13.00	5.95	1
Band 12_LTE_5MHz_Nss1_1TX	-	-	-	-	-
701.5MHz_QPSK_RB 25,#RB 0	Pass	701.5	13.00	5.04	1
707.5MHz_QPSK_RB 25,#RB 0	Pass	707.5	13.00	5.22	1
713.5MHz_QPSK_RB 25,#RB 0	Pass	713.5	13.00	5.08	1
701.5MHz_16QAM_RB 25,#RB 0	Pass	701.5	13.00	5.85	1
707.5MHz_16QAM_RB 25,#RB 0	Pass	707.5	13.00	6.01	1
713.5MHz_16QAM_RB 25,#RB 0	Pass	713.5	13.00	5.88	1
Band 12_LTE_10MHz_Nss1_1TX	-	-	-	-	-
704MHz_QPSK_RB 50,#RB 0	Pass	704	13.00	5.30	1
707.5MHz_QPSK_RB 50,#RB 0	Pass	707.5	13.00	5.34	1
711MHz_QPSK_RB 50,#RB 0	Pass	711	13.00	5.08	1
704MHz_16QAM_RB 50,#RB 0	Pass	704	13.00	6.01	1
707.5MHz_16QAM_RB 50,#RB 0	Pass	707.5	13.00	6.10	1
711MHz_16QAM_RB 50,#RB 0	Pass	711	13.00	5.92	1

Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

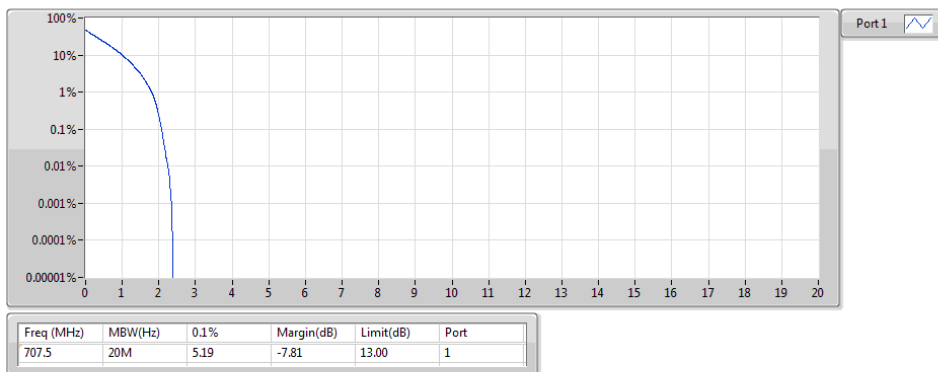
699.7MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

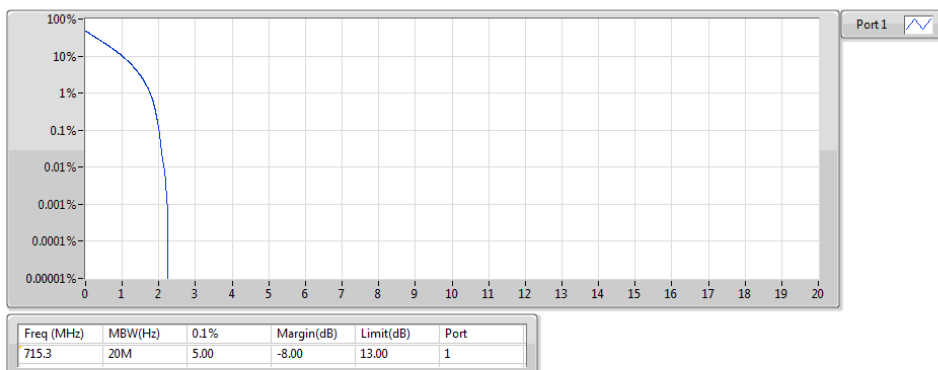
707.5MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

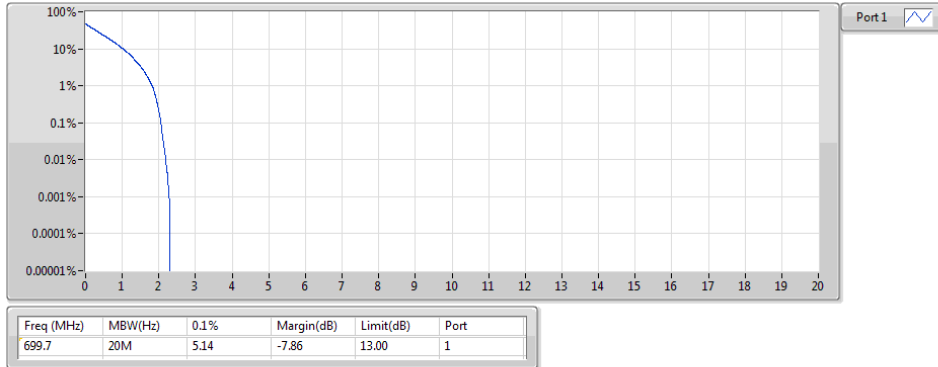
715.3MHz_QPSK_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

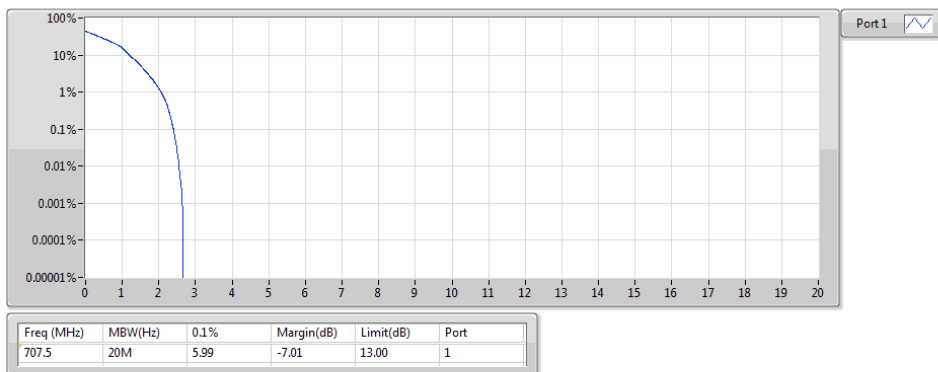
699.7MHz_16QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

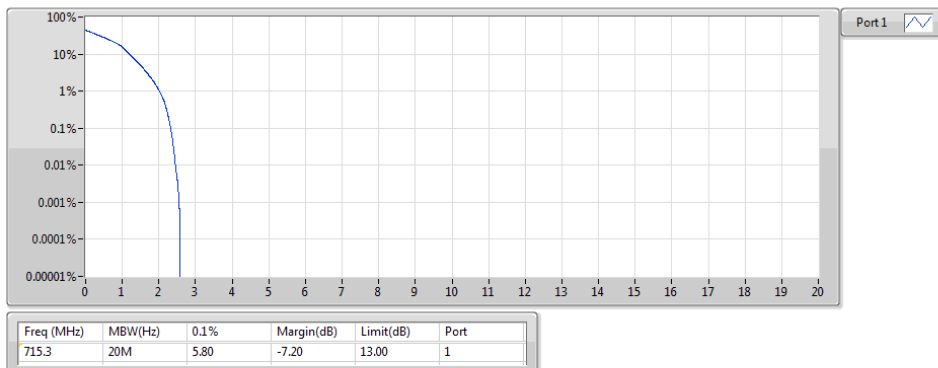
707.5MHz_16QAM_RB 6,#RB 0



Band 12_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

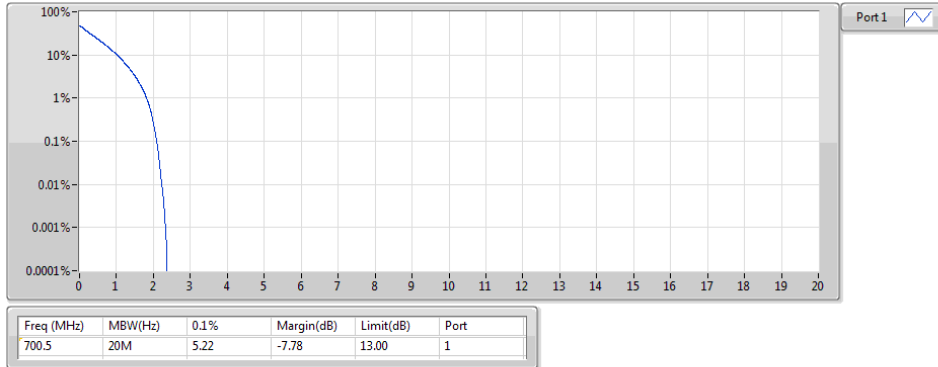
715.3MHz_16QAM_RB 6,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

PAR

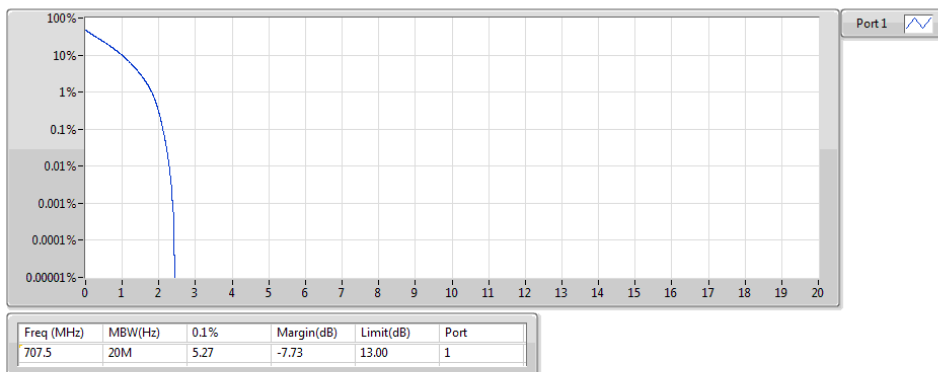
700.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

PAR

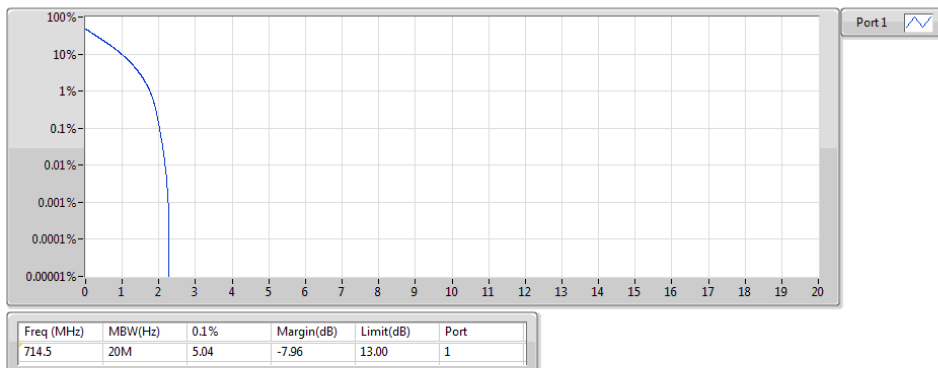
707.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,QPSK_1TX

PAR

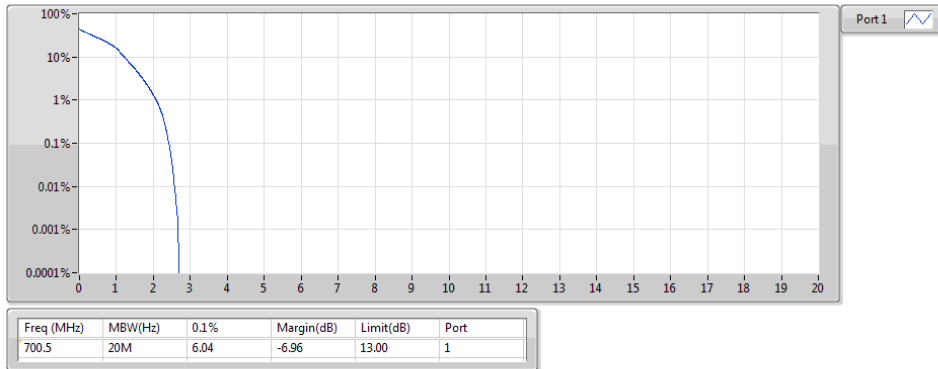
714.5MHz_QPSK_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

PAR

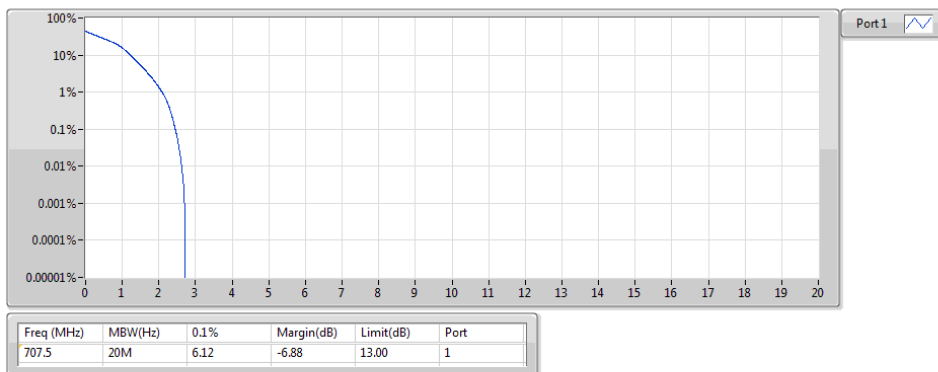
700.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

PAR

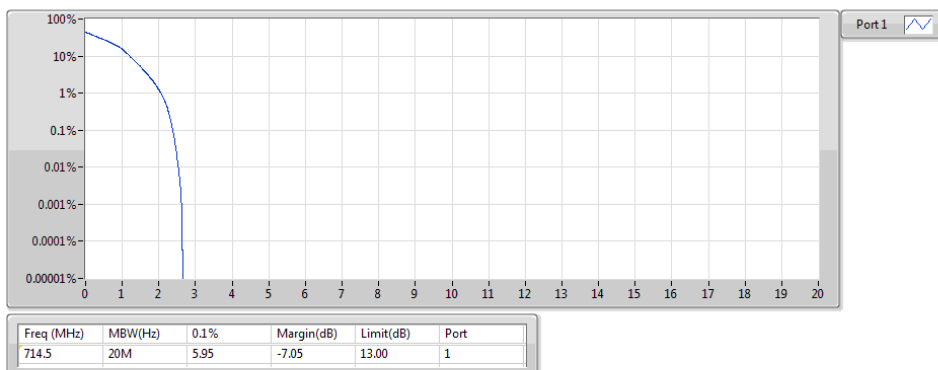
707.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_3MHz_Nss1,16QAM_1TX

PAR

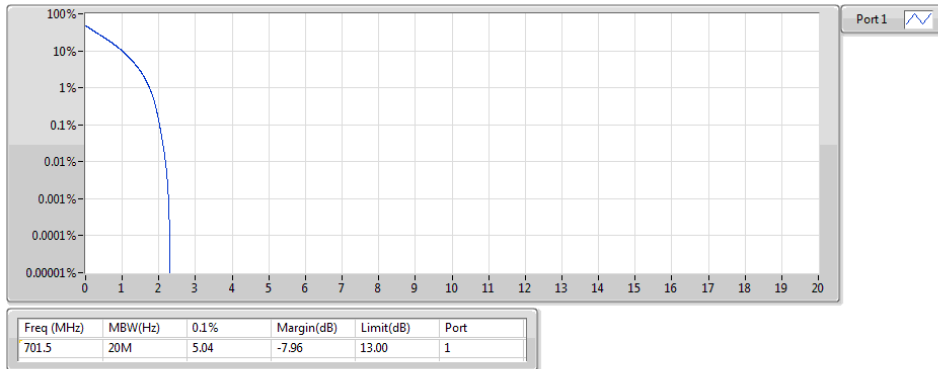
714.5MHz_16QAM_RB 15,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

PAR

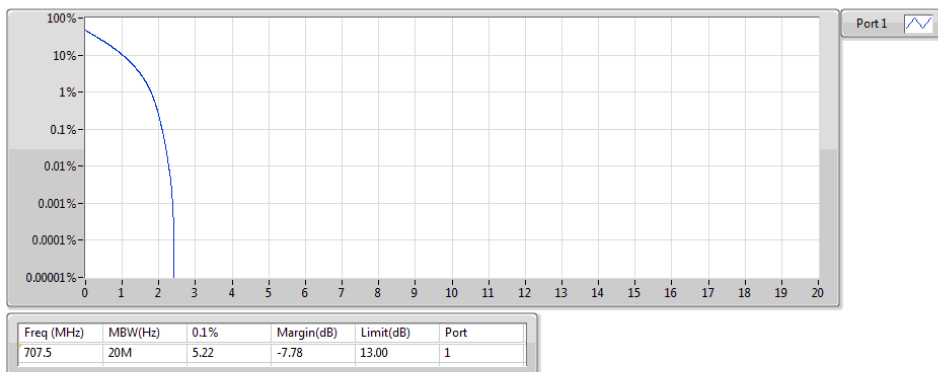
701.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

PAR

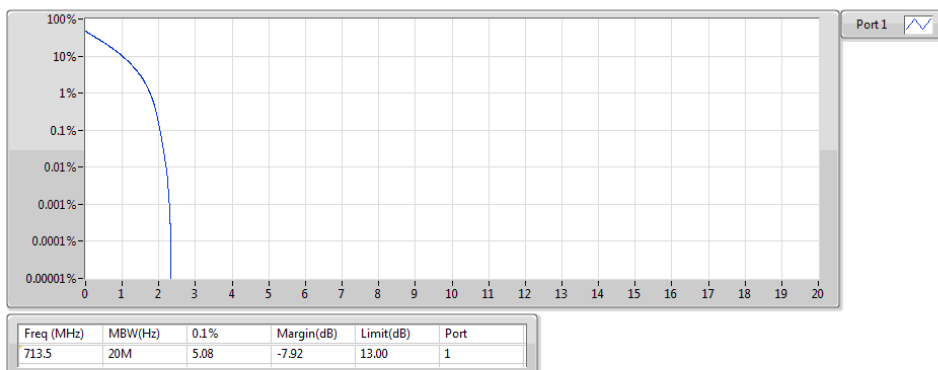
707.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,QPSK_1TX

PAR

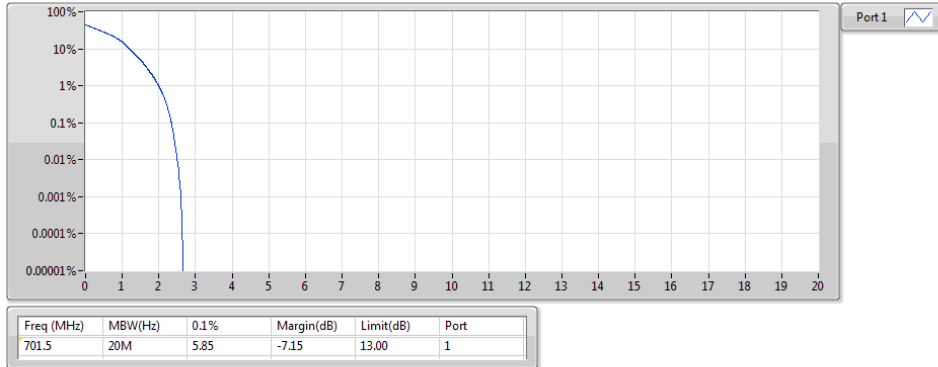
713.5MHz_QPSK_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

PAR

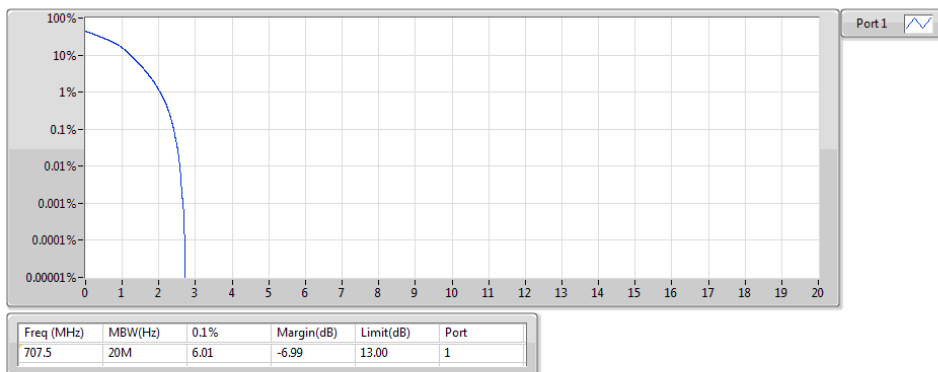
701.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

PAR

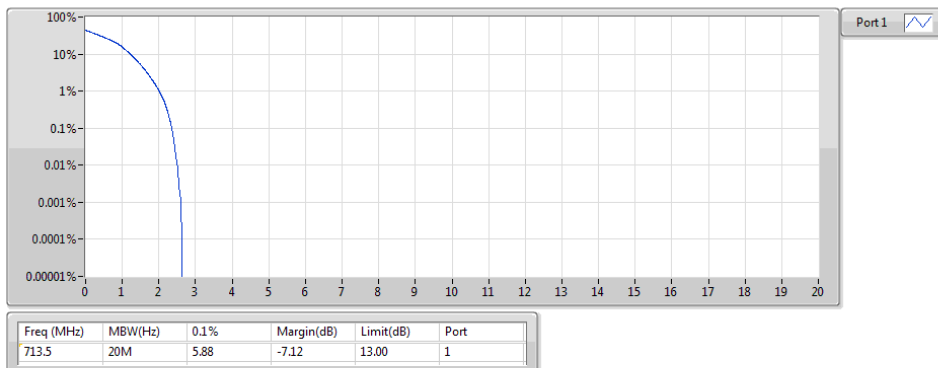
707.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_5MHz_Nss1,16QAM_1TX

PAR

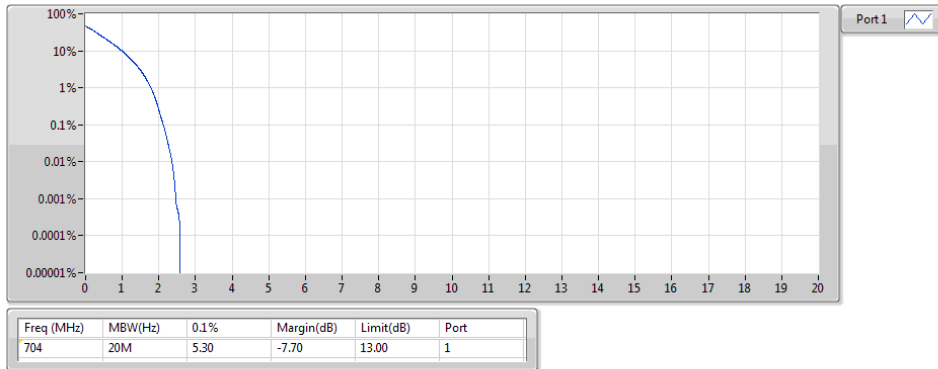
713.5MHz_16QAM_RB 25,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

PAR

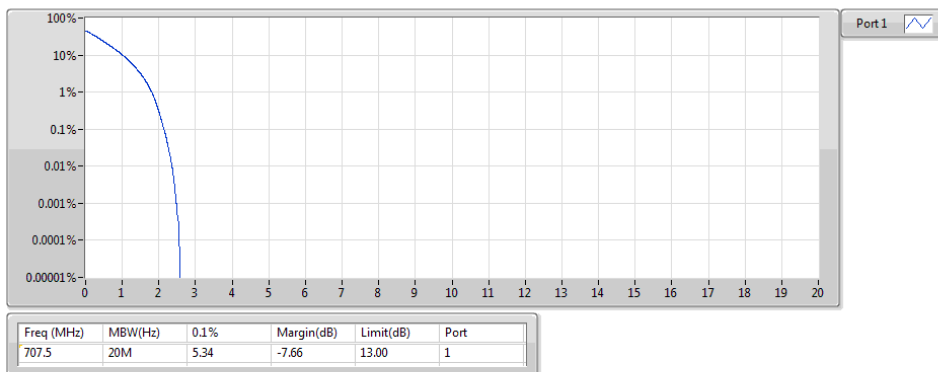
704MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

PAR

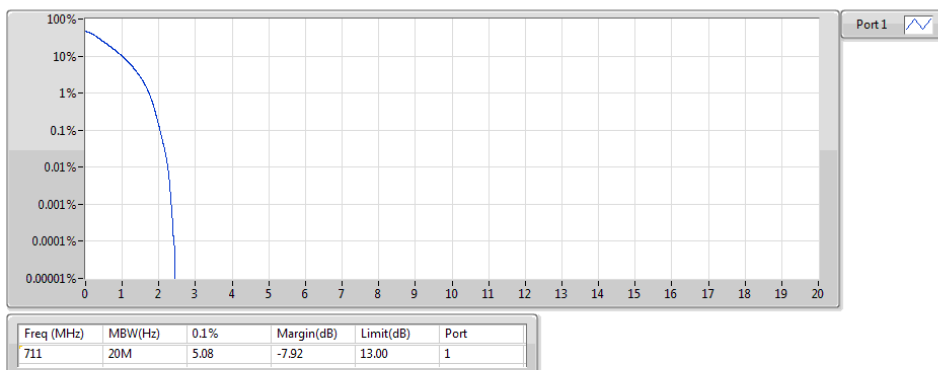
707.5MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,QPSK_1TX

PAR

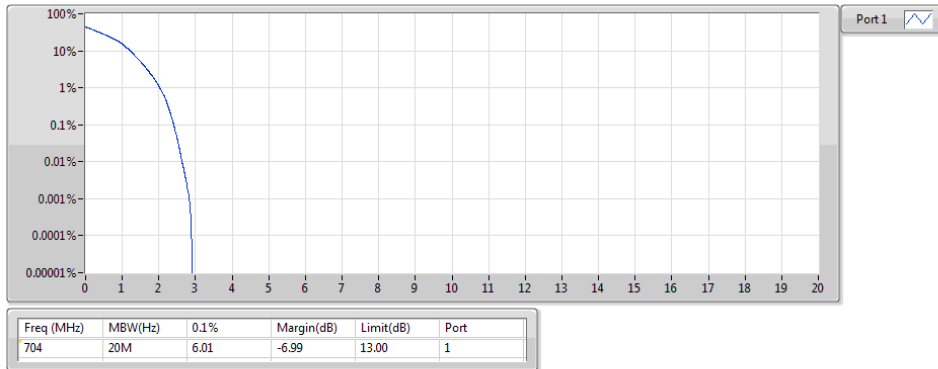
711MHz_QPSK_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

PAR

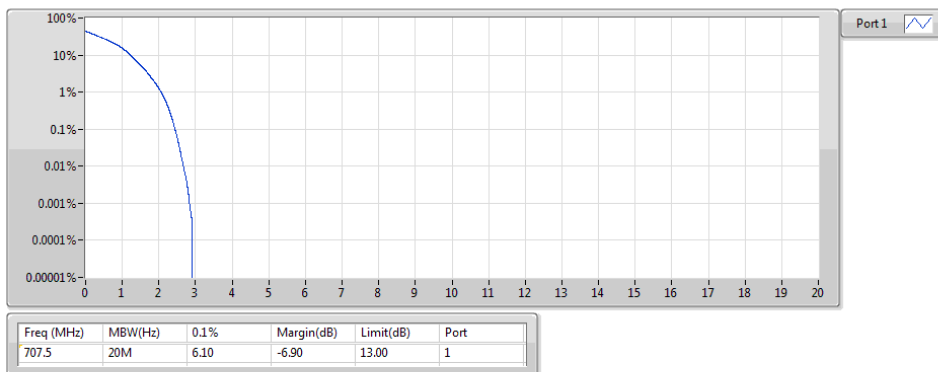
704MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

PAR

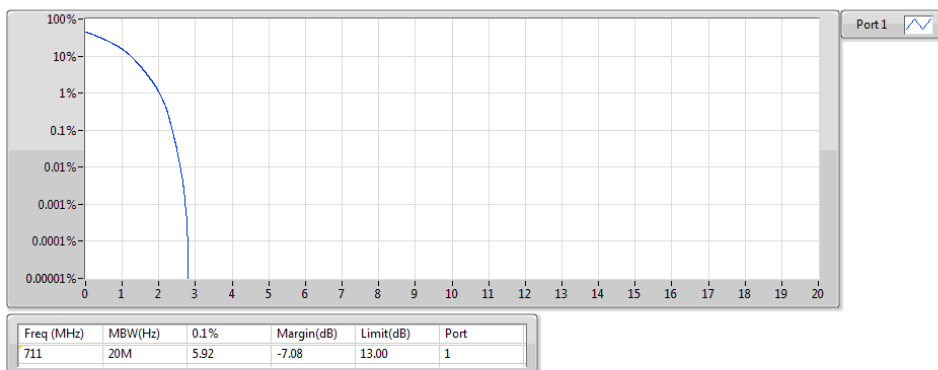
707.5MHz_16QAM_RB 50,#RB 0



Band 12_LTE_10MHz_Nss1,16QAM_1TX

PAR

711MHz_16QAM_RB 50,#RB 0



3.5.5 Test Result of Peak to Average Ratio (Band 13)

Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 13	-	-	-	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	782	13.00	5.04	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	782	13.00	5.82	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	782	13.00	5.08	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	782	13.00	5.91	1

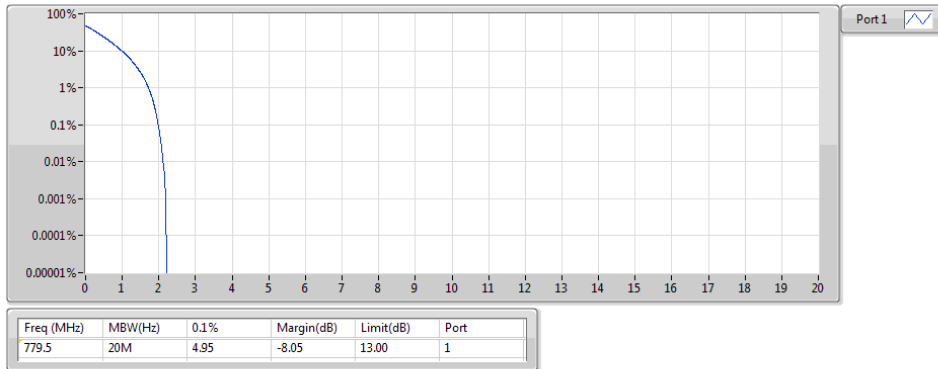
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 13_LTE_5MHz_Nss1_1TX	-	-	-	-	-
779.5MHz_QPSK_RB 25,#RB 0	Pass	779.5	13.00	4.95	1
782MHz_QPSK_RB 25,#RB 0	Pass	782	13.00	5.04	1
784.5MHz_QPSK_RB 25,#RB 0	Pass	784.5	13.00	4.98	1
779.5MHz_16QAM_RB 25,#RB 0	Pass	779.5	13.00	5.76	1
782MHz_16QAM_RB 25,#RB 0	Pass	782	13.00	5.82	1
784.5MHz_16QAM_RB 25,#RB 0	Pass	784.5	13.00	5.78	1
Band 13_LTE_10MHz_Nss1_1TX	-	-	-	-	-
782MHz_QPSK_RB 50,#RB 0	Pass	782	13.00	5.08	1
782MHz_16QAM_RB 50,#RB 0	Pass	782	13.00	5.91	1

Band 13_LTE_5MHz_Nss1,QPSK_1TX

PAR

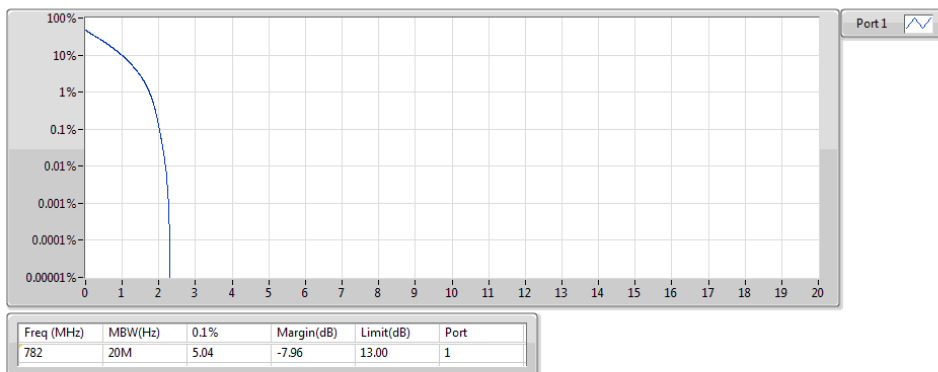
779.5MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,QPSK_1TX

PAR

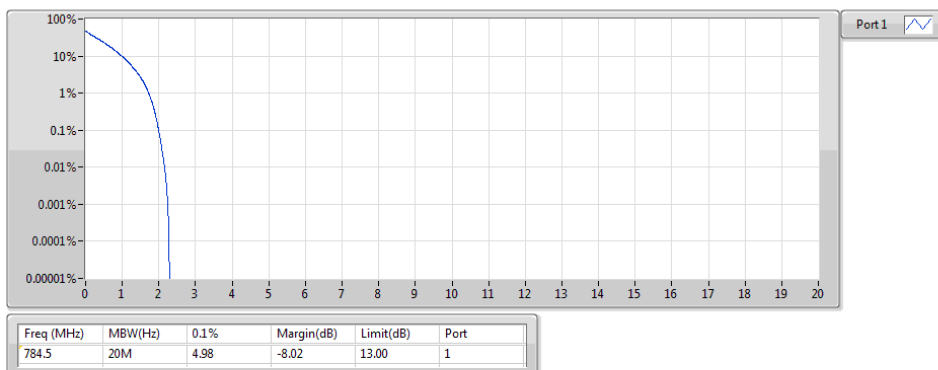
782MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,QPSK_1TX

PAR

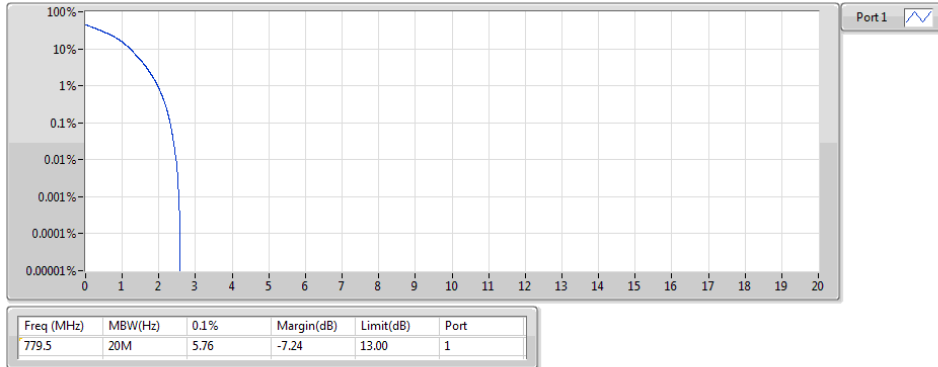
784.5MHz_QPSK_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

PAR

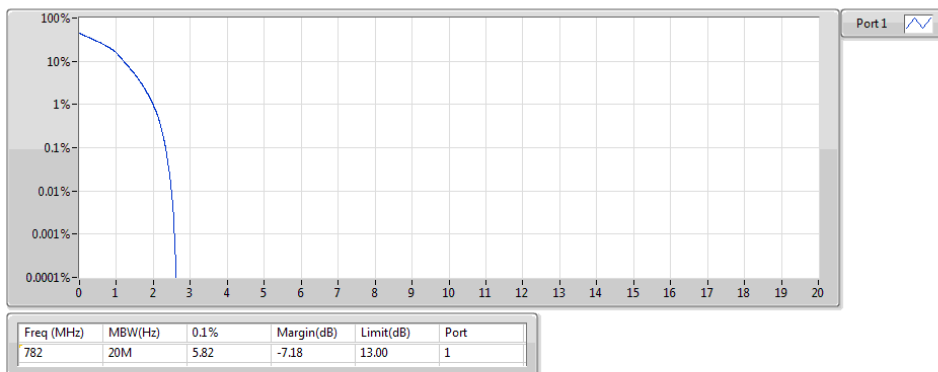
779.5MHz_16QAM_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

PAR

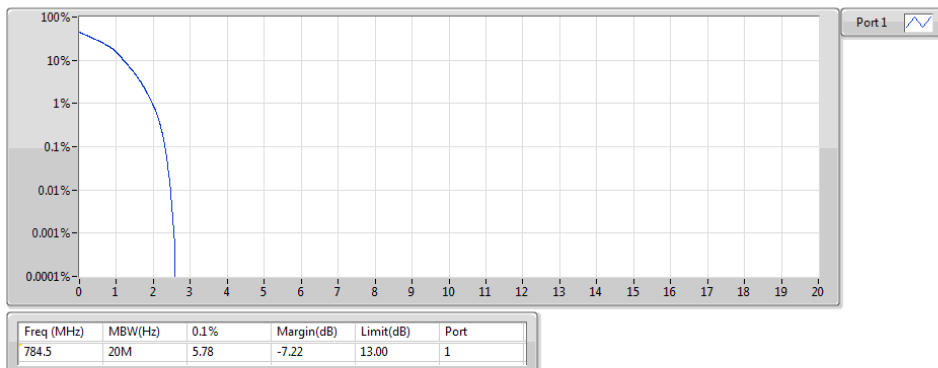
782MHz_16QAM_RB 25,#RB 0



Band 13_LTE_5MHz_Nss1,16QAM_1TX

PAR

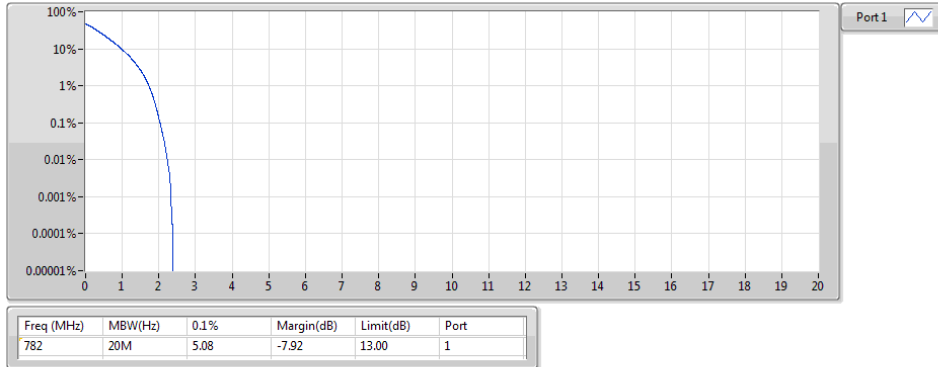
784.5MHz_16QAM_RB 25,#RB 0



Band 13_LTE_10MHz_Nss1,QPSK_1TX

PAR

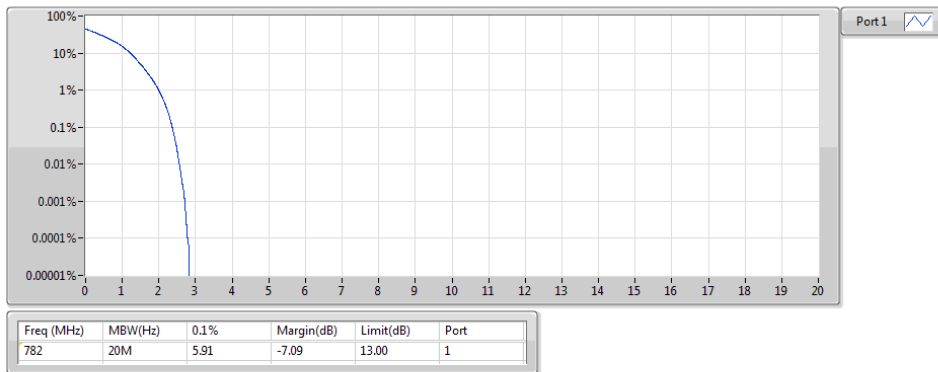
782MHz_QPSK_RB 50,#RB 0



Band 13_LTE_10MHz_Nss1,16QAM_1TX

PAR

782MHz_16QAM_RB 50,#RB 0



3.6 Frequency Stability

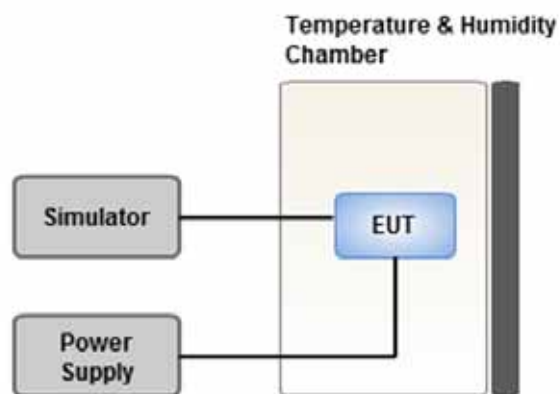
3.6.1 Limit of Frequency Stability

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 (Band 12)

CB: 1.4MHz				
Temperature (°C)	699.7MHz		715.3MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°C Vmax	0.007	699.161366	0.006	715.842319
T20°C Vmin	0.006	699.161365	0.006	715.842319
T70°C Vnom	0.004	699.161364	0.007	715.842320
T60°C Vnom	0.006	699.161365	0.006	715.842319
T50°C Vnom	0.007	699.161366	0.004	715.842318
T40°C Vnom	0.009	699.161367	0.006	715.842319
T30°C Vnom	0.006	699.161365	0.007	715.842320
T20°C Vnom	0.006	699.161365	0.008	715.842321
T10°C Vnom	0.007	699.161366	0.010	715.842322
T0°C Vnom	0.004	699.161364	0.007	715.842320
T-10°C Vnom	0.006	699.161365	0.006	715.842319
T-20°C Vnom	0.007	699.161366	0.006	715.842319
T-30°C Vnom	0.006	699.161365	0.004	715.842318
T-40°C Vnom	0.006	699.161365	0.007	715.842320
Limit	>698MHz		<716MHz	

CB: 3MHz

Temperature (°C)	700.5MHz		714.5MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°CVmax	0.004	699.160475	0.007	715.836532
T20°CVmin	0.007	699.160477	0.006	715.836531
T70°CVnom	0.006	699.160476	0.006	715.836531
T60°CVnom	0.004	699.160475	0.007	715.836532
T50°CVnom	0.006	699.160476	0.006	715.836531
T40°CVnom	0.007	699.160477	0.004	715.836530
T30°CVnom	0.007	699.160477	0.006	715.836531
T20°CVnom	0.004	699.160475	0.007	715.836532
T10°CVnom	0.006	699.160476	0.008	715.836533
T0°CVnom	0.007	699.160477	0.006	715.836531
T-10°CVnom	0.007	699.160477	0.007	715.836532
T-20°CVnom	0.006	699.160476	0.007	715.836532
T-30°CVnom	0.006	699.160476	0.006	715.836531
T-40°CVnom	0.009	699.160478	0.006	715.836531
Limit	>698MHz		<716MHz	

CB: 5MHz

Temperature (°C)	701.5MHz		713.5MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°CVmax	0.004	699.264984	0.007	715.728165
T20°CVmin	0.007	699.264985	0.004	715.728163
T70°CVnom	0.006	699.264984	0.006	715.728164
T60°CVnom	0.004	699.264985	0.004	715.728163
T50°CVnom	0.006	699.264984	0.007	715.728165
T40°CVnom	0.007	699.264984	0.004	715.728163
T30°CVnom	0.007	699.264985	0.006	715.728164
T20°CVnom	0.004	699.264985	0.007	715.728165
T10°CVnom	0.006	699.264984	0.007	715.728165
T0°CVnom	0.007	699.264984	0.006	715.728164
T-10°CVnom	0.007	699.264983	0.008	715.728166
T-20°CVnom	0.006	699.264984	0.006	715.728164
T-30°CVnom	0.006	699.264985	0.006	715.728164
T-40°CVnom	0.009	699.264984	0.008	715.728166
Limit	>698MHz		<716MHz	

CB: 10MHz

Temperature (°C)	704MHz		711MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°CVmax	0.004	699.533812	0.007	715.457517
T20°CVmin	0.007	699.533813	0.004	715.457515
T70°CVnom	0.006	699.533813	0.007	715.457517
T60°CVnom	0.004	699.533812	0.008	715.457518
T50°CVnom	0.006	699.533812	0.007	715.457517
T40°CVnom	0.007	699.533811	0.006	715.457516
T30°CVnom	0.007	699.533813	0.004	715.457515
T20°CVnom	0.004	699.533811	0.006	715.457516
T10°CVnom	0.006	699.533813	0.007	715.457517
T0°CVnom	0.007	699.533812	0.004	715.457515
T-10°CVnom	0.007	699.533813	0.006	715.457516
T-20°CVnom	0.006	699.533812	0.004	715.457515
T-30°CVnom	0.006	699.533811	0.007	715.457517
T-40°CVnom	0.009	699.533812	0.006	715.457516
Limit	>698MHz		<716MHz	

3.6.5 Test Result of Frequency Stability (Band 13)

CB: 5MHz				
Temperature (°C)	779.5MHz		784.4MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°C Vmax	0.006	777.270726	0.005	786.733690
T20°C Vmin	0.004	777.270724	0.006	786.733691
T70°C Vnom	0.005	777.270725	0.005	786.733690
T60°C Vnom	0.006	777.270726	0.005	786.733690
T50°C Vnom	0.005	777.270725	0.004	786.733689
T40°C Vnom	0.004	777.270724	0.005	786.733690
T30°C Vnom	0.003	777.270723	0.004	786.733689
T20°C Vnom	0.005	777.270725	0.005	786.733690
T10°C Vnom	0.004	777.270724	0.004	786.733689
T0°C Vnom	0.003	777.270723	0.004	786.733689
T-10°C Vnom	0.005	777.270725	0.003	786.733688
T-20°C Vnom	0.004	777.270724	0.005	786.733690
T-30°C Vnom	0.006	777.270726	0.003	786.733688
T-40°C Vnom	0.003	777.270723	0.005	786.733690
Limit	>776MHz		<788MHz	

CB: 10MHz

Temperature (°C)	782MHz		782MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°CVmax	0.005	777.568531	0.005	786.463913
T20°CVmin	0.004	777.568530	0.004	786.463912
T70°CVnom	0.004	777.568530	0.004	786.463912
T60°CVnom	0.005	777.568531	0.005	786.463913
T50°CVnom	0.006	777.568532	0.005	786.463913
T40°CVnom	0.005	777.568531	0.003	786.463911
T30°CVnom	0.004	777.568530	0.005	786.463913
T20°CVnom	0.004	777.568530	0.006	786.463914
T10°CVnom	0.006	777.568532	0.005	786.463913
T0°CVnom	0.005	777.568531	0.005	786.463913
T-10°CVnom	0.004	777.568530	0.004	786.463912
T-20°CVnom	0.003	777.568529	0.003	786.463911
T-30°CVnom	0.005	777.568531	0.005	786.463913
T-40°CVnom	0.004	777.568530	0.004	786.463912
Limit	>776MHz		<788MHz	

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

Tel: 886-2-2601-1640

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

Kwei Shan

Tel: 886-3-271-8666

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

Kwei Shan Site II

Tel: 886-3-271-8640

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

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==