

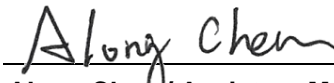
FCC Test Report

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 22 Subpart H
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:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FG090103P22	Rev. 01	Initial issue	Oct. 20, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 / 22.913(a)(5)	Effective Radiated Power	Power[dBm]: 26.10	Pass
2.1053 / 22.917(a)	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 / 22.917(a)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 / 22.917(a)	Band Edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
-	Peak to Average Ratio	Meet the requirement of limit	Pass
2.1055 / 22.355	Frequency Stability	Meet the requirement of limit	Pass

Declaration of Conformity:

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

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

Operating Frequency	LTE Band 5: Channel Bandwidth: 1.4MHz: 824.7 MHz ~ 848.3 MHz Channel Bandwidth: 3MHz: 825.5 MHz ~ 847.5 MHz Channel Bandwidth: 5MHz: 826.5 MHz ~ 846.5 MHz Channel Bandwidth: 10MHz: 829 MHz ~ 844 MHz
Modulation	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	5.79	7	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	<input checked="" type="checkbox"/> Vnom (24 Vdc)	<input checked="" type="checkbox"/> Vmax (28 Vdc)	<input checked="" type="checkbox"/> Vmin (10 Vdc)
Operational Climatic	<input checked="" type="checkbox"/> Tnom (20°C)	<input checked="" type="checkbox"/> Tmax (70°C)	<input checked="" type="checkbox"/> 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 5, CB: 1.4MHz	QPSK	0.392	1M08G7D
LTE Band 5, CB: 1.4MHz	16QAM	0.346	1M08W7D
LTE Band 5, CB: 3MHz	QPSK	0.394	2M68G7D
LTE Band 5, CB: 3MHz	16QAM	0.308	2M68W7D
LTE Band 5, CB: 5MHz	QPSK	0.405	4M47G7D
LTE Band 5, CB: 5MHz	16QAM	0.301	4M46W7D
LTE Band 5, CB: 10MHz	QPSK	0.407	8M92G7D
LTE Band 5, CB: 10MHz	16QAM	0.301	8M91W7D

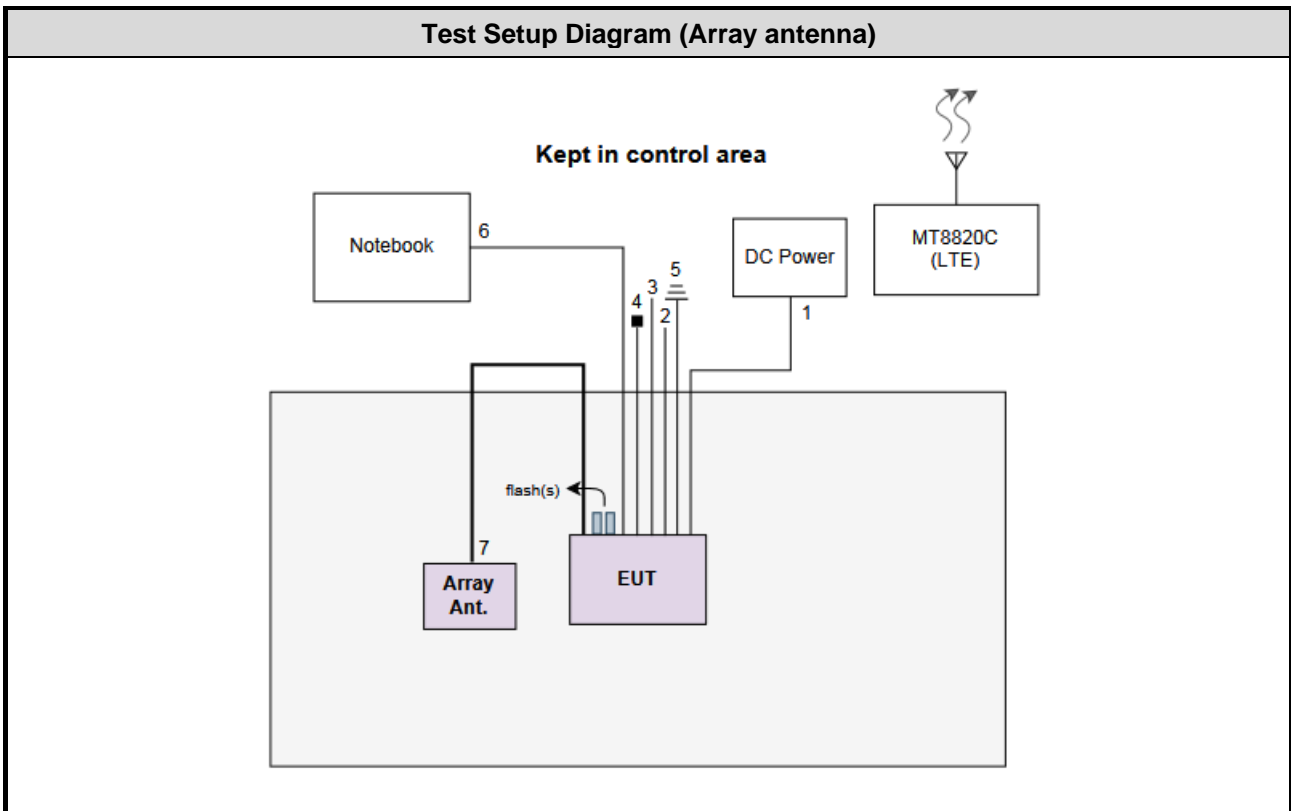
1.1.6 Operating Channel List

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

1.2 Local Support Equipment List

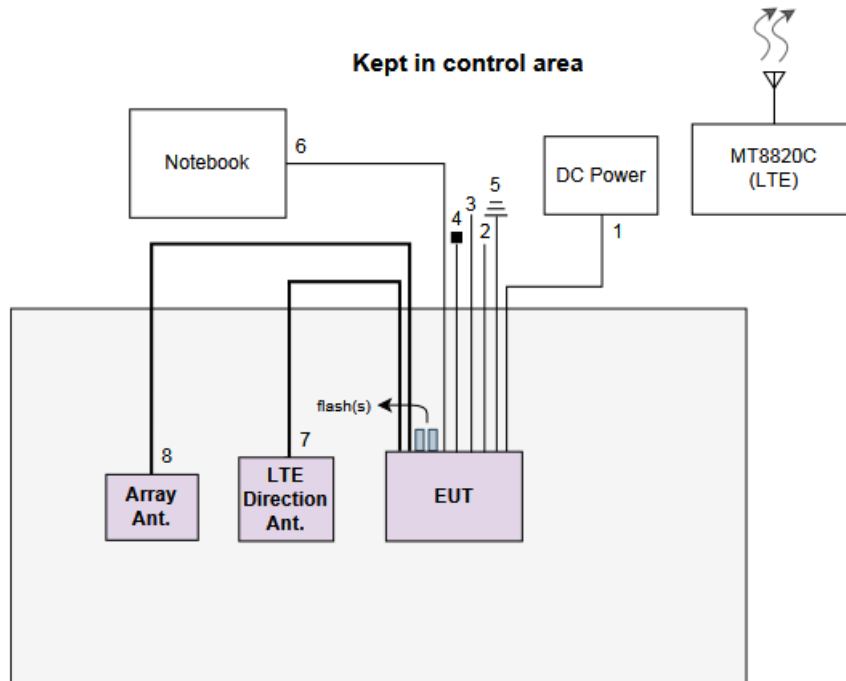
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5400	DoC	---
2	USB Flash	Kingston	DTSE9	---	---
3	USB Flash	Kingston	DTSE9	---	---
4	RJ45 Load	ICC	---	---	---
5	DC power	MEAN WELL	SDR-75-24	---	Provided by applicant.

1.3 Test Setup Chart



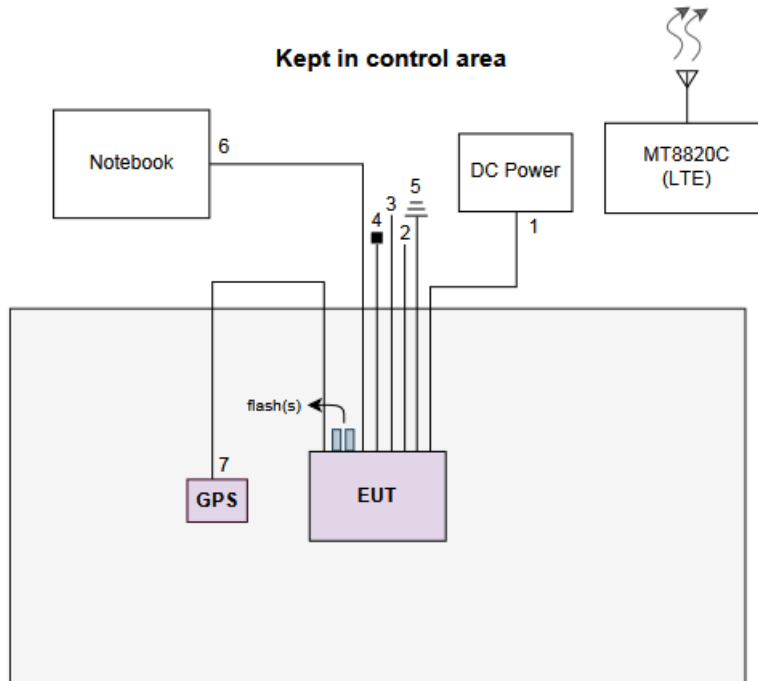
No.	Signal cable / Length (m)
1	DC cable, 10m(x2) non-shielded.
2	Data cable, 1.55m, unterminated. (Provided by applicant.)
3	Console cable, 1.75m shielded, unterminated. (Provided by applicant.)
4	RJ45, 1.3m non-shielded with load.
5	Ground cable, 2.3m non-shielded.
6	RJ45, 10m non-shielded.
7	RF cable,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

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 22 Subpart H
ANSI C63.26-2015

1.6 Reference Guidance

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

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	±1×10 ⁻⁹
Conducted emission	±2.715 dB
Radiated emission ≤ 1GHz	±3.96 dB
Radiated emission > 1GHz	±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
- ISED#: 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 5				
Test item	Channel Bandwidths	Modulation	Test channel	Configuration
Effective Radiated Power 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	20407 / 20525 / 20643 20415 / 20525 / 20635 20425 / 20525 / 20625 20450 / 20525 / 20600	1
Radiated Emission ≤ 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	20643 20635 20625 20600	1, 2, 3
Radiated Emission > 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	20407 / 20525 / 20643 20415 / 20525 / 20635 20425 / 20525 / 20625 20450 / 20525 / 20600	1, 2, 3
Band Edge	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	20407 / 20643 20415 / 20635 20425 / 20625 20450 / 20600	1
Frequency Stability	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	20407 / 20643 20415 / 20635 20425 / 20625 20450 / 20600	1

NOTE:

- 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.
- Test configurations are listed as below:
 - Configuration 1: Array antenna with antenna cable, Z-plane
 - Configuration 2: Directional antenna with antenna cable
 - Configuration 3: Individual antenna

3 Test Results

3.1 Effective Radiated Power

3.1.1 Limit of Effective Radiated Power

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

3.1.2 Test Procedures

For Conducted power measurement:

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

For ERP measurement:

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

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

3.1.3 Test Setup



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

Summary

Mode	Power (dBm)	Power (W)	ERP (dBm)	ERP (W)
Band 5	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	22.29	0.169	25.93	0.39174
LTE_1.4MHz_Nss1,16QAM_1TX	21.75	0.150	25.39	0.34594
LTE_3MHz_Nss1,QPSK_1TX	22.32	0.171	25.96	0.39446
LTE_3MHz_Nss1,16QAM_1TX	21.25	0.133	24.89	0.30832
LTE_5MHz_Nss1,QPSK_1TX	22.43	0.175	26.07	0.40458
LTE_5MHz_Nss1,16QAM_1TX	21.15	0.130	24.79	0.30130
LTE_10MHz_Nss1,QPSK_1TX	22.46	0.176	26.10	0.40738
LTE_10MHz_Nss1,16QAM_1TX	21.15	0.130	24.79	0.30130

Result

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
824.7MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.99	25.84	0.38371	7	22.20	0.166	Inf	22.2
824.7MHz_QPSK_RB 1,#RB 3	Pass	5.79	28.07	25.92	0.39084	7	22.28	0.169	Inf	22.28
824.7MHz_QPSK_RB 1,#RB 5	Pass	5.79	28.00	25.85	0.38459	7	22.21	0.166	Inf	22.21
824.7MHz_QPSK_RB 3,#RB 0	Pass	5.79	27.88	25.73	0.37411	7	22.09	0.162	Inf	22.09
824.7MHz_QPSK_RB 3,#RB 1	Pass	5.79	28.03	25.88	0.38726	7	22.24	0.167	Inf	22.24
824.7MHz_QPSK_RB 3,#RB 3	Pass	5.79	28.00	25.85	0.38459	7	22.21	0.166	Inf	22.21
824.7MHz_QPSK_RB 6,#RB 0	Pass	5.79	27.02	24.87	0.30690	7	21.23	0.133	Inf	21.23
836.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.95	25.80	0.38019	7	22.16	0.164	Inf	22.16
836.5MHz_QPSK_RB 1,#RB 3	Pass	5.79	28.06	25.91	0.38994	7	22.27	0.169	Inf	22.27
836.5MHz_QPSK_RB 1,#RB 5	Pass	5.79	28.02	25.87	0.38637	7	22.23	0.167	Inf	22.23
836.5MHz_QPSK_RB 3,#RB 0	Pass	5.79	27.94	25.79	0.37931	7	22.15	0.164	Inf	22.15
836.5MHz_QPSK_RB 3,#RB 1	Pass	5.79	27.95	25.80	0.38019	7	22.16	0.164	Inf	22.16
836.5MHz_QPSK_RB 3,#RB 3	Pass	5.79	28.02	25.87	0.38637	7	22.23	0.167	Inf	22.23
836.5MHz_QPSK_RB 6,#RB 0	Pass	5.79	27.09	24.94	0.31189	7	21.30	0.135	Inf	21.3
848.3MHz_QPSK_RB 1,#RB 0	Pass	5.79	28.00	25.85	0.38459	7	22.21	0.166	Inf	22.21
848.3MHz_QPSK_RB 1,#RB 3	Pass	5.79	28.08	25.93	0.39174	7	22.29	0.169	Inf	22.29
848.3MHz_QPSK_RB 1,#RB 5	Pass	5.79	27.99	25.84	0.38371	7	22.20	0.166	Inf	22.2
848.3MHz_QPSK_RB 3,#RB 0	Pass	5.79	27.89	25.74	0.37497	7	22.10	0.162	Inf	22.1
848.3MHz_QPSK_RB 3,#RB 1	Pass	5.79	28.04	25.89	0.38815	7	22.25	0.168	Inf	22.25
848.3MHz_QPSK_RB 3,#RB 3	Pass	5.79	28.00	25.85	0.38459	7	22.21	0.166	Inf	22.21
848.3MHz_QPSK_RB 6,#RB 0	Pass	5.79	26.93	24.78	0.30061	7	21.14	0.130	Inf	21.14
824.7MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.80	24.65	0.29174	7	21.01	0.126	Inf	21.01
824.7MHz_16QAM_RB 1,#RB 3	Pass	5.79	26.96	24.81	0.30269	7	21.17	0.131	Inf	21.17
824.7MHz_16QAM_RB 1,#RB 5	Pass	5.79	26.86	24.71	0.29580	7	21.07	0.128	Inf	21.07
824.7MHz_16QAM_RB 3,#RB 0	Pass	5.79	26.75	24.60	0.28840	7	20.96	0.125	Inf	20.96
824.7MHz_16QAM_RB 3,#RB 1	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
824.7MHz_16QAM_RB 3,#RB 3	Pass	5.79	26.86	24.71	0.29580	7	21.07	0.128	Inf	21.07
824.7MHz_16QAM_RB 6,#RB 0	Pass	5.79	25.84	23.69	0.23388	7	20.05	0.101	Inf	20.05
836.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.88	24.73	0.29717	7	21.09	0.129	Inf	21.09
836.5MHz_16QAM_RB 1,#RB 3	Pass	5.79	26.94	24.79	0.30130	7	21.15	0.130	Inf	21.15
836.5MHz_16QAM_RB 1,#RB 5	Pass	5.79	26.96	24.81	0.30269	7	21.17	0.131	Inf	21.17
836.5MHz_16QAM_RB 3,#RB 0	Pass	5.79	26.90	24.75	0.29854	7	21.11	0.129	Inf	21.11
836.5MHz_16QAM_RB 3,#RB 1	Pass	5.79	26.94	24.79	0.30130	7	21.15	0.130	Inf	21.15
836.5MHz_16QAM_RB 3,#RB 3	Pass	5.79	26.96	24.81	0.30269	7	21.17	0.131	Inf	21.17
836.5MHz_16QAM_RB 6,#RB 0	Pass	5.79	26.04	23.89	0.24491	7	20.25	0.106	Inf	20.25
848.3MHz_16QAM_RB 1,#RB 0	Pass	5.79	27.47	25.32	0.34041	7	21.68	0.147	Inf	21.68
848.3MHz_16QAM_RB 1,#RB 3	Pass	5.79	27.54	25.39	0.34594	7	21.75	0.150	Inf	21.75
848.3MHz_16QAM_RB 1,#RB 5	Pass	5.79	27.44	25.29	0.33806	7	21.65	0.146	Inf	21.65
848.3MHz_16QAM_RB 3,#RB 0	Pass	5.79	27.19	25.04	0.31915	7	21.40	0.138	Inf	21.4

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
848.3MHz_16QAM_RB 3,#RB 1	Pass	5.79	27.14	24.99	0.31550	7	21.35	0.136	Inf	21.35
848.3MHz_16QAM_RB 3,#RB 3	Pass	5.79	26.95	24.80	0.30200	7	21.16	0.131	Inf	21.16
848.3MHz_16QAM_RB 6,#RB 0	Pass	5.79	25.80	23.65	0.23174	7	20.01	0.100	Inf	20.01
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
825.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.94	25.79	0.37931	7	22.15	0.164	Inf	22.15
825.5MHz_QPSK_RB 1,#RB 8	Pass	5.79	28.04	25.89	0.38815	7	22.25	0.168	Inf	22.25
825.5MHz_QPSK_RB 1,#RB 14	Pass	5.79	27.66	25.51	0.35563	7	21.87	0.154	Inf	21.87
825.5MHz_QPSK_RB 8,#RB 0	Pass	5.79	26.88	24.73	0.29717	7	21.09	0.129	Inf	21.09
825.5MHz_QPSK_RB 8,#RB 4	Pass	5.79	26.90	24.75	0.29854	7	21.11	0.129	Inf	21.11
825.5MHz_QPSK_RB 8,#RB 7	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
825.5MHz_QPSK_RB 15,#RB 0	Pass	5.79	26.95	24.80	0.30200	7	21.16	0.131	Inf	21.16
836.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.82	25.67	0.36898	7	22.03	0.160	Inf	22.03
836.5MHz_QPSK_RB 1,#RB 8	Pass	5.79	27.89	25.74	0.37497	7	22.10	0.162	Inf	22.1
836.5MHz_QPSK_RB 1,#RB 14	Pass	5.79	27.75	25.60	0.36308	7	21.96	0.157	Inf	21.96
836.5MHz_QPSK_RB 8,#RB 0	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
836.5MHz_QPSK_RB 8,#RB 4	Pass	5.79	27.08	24.93	0.31117	7	21.29	0.135	Inf	21.29
836.5MHz_QPSK_RB 8,#RB 7	Pass	5.79	27.07	24.92	0.31046	7	21.28	0.134	Inf	21.28
836.5MHz_QPSK_RB 15,#RB 0	Pass	5.79	26.84	24.69	0.29444	7	21.05	0.127	Inf	21.05
847.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.95	25.80	0.38019	7	22.16	0.164	Inf	22.16
847.5MHz_QPSK_RB 1,#RB 8	Pass	5.79	28.11	25.96	0.39446	7	22.32	0.171	Inf	22.32
847.5MHz_QPSK_RB 1,#RB 14	Pass	5.79	27.94	25.79	0.37931	7	22.15	0.164	Inf	22.15
847.5MHz_QPSK_RB 8,#RB 0	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
847.5MHz_QPSK_RB 8,#RB 4	Pass	5.79	26.93	24.78	0.30061	7	21.14	0.130	Inf	21.14
847.5MHz_QPSK_RB 8,#RB 7	Pass	5.79	26.95	24.80	0.30200	7	21.16	0.131	Inf	21.16
847.5MHz_QPSK_RB 15,#RB 0	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
825.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.84	24.69	0.29444	7	21.05	0.127	Inf	21.05
825.5MHz_16QAM_RB 1,#RB 8	Pass	5.79	26.94	24.79	0.30130	7	21.15	0.130	Inf	21.15
825.5MHz_16QAM_RB 1,#RB 14	Pass	5.79	26.70	24.55	0.28510	7	20.91	0.123	Inf	20.91
825.5MHz_16QAM_RB 8,#RB 0	Pass	5.79	26.03	23.88	0.24434	7	20.24	0.106	Inf	20.24
825.5MHz_16QAM_RB 8,#RB 4	Pass	5.79	26.01	23.86	0.24322	7	20.22	0.105	Inf	20.22
825.5MHz_16QAM_RB 8,#RB 7	Pass	5.79	26.00	23.85	0.24266	7	20.21	0.105	Inf	20.21
825.5MHz_16QAM_RB 15,#RB 0	Pass	5.79	25.81	23.66	0.23227	7	20.02	0.100	Inf	20.02
836.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.86	24.71	0.29580	7	21.07	0.128	Inf	21.07
836.5MHz_16QAM_RB 1,#RB 8	Pass	5.79	27.04	24.89	0.30832	7	21.25	0.133	Inf	21.25
836.5MHz_16QAM_RB 1,#RB 14	Pass	5.79	26.93	24.78	0.30061	7	21.14	0.130	Inf	21.14
836.5MHz_16QAM_RB 8,#RB 0	Pass	5.79	25.64	23.49	0.22336	7	19.85	0.097	Inf	19.85
836.5MHz_16QAM_RB 8,#RB 4	Pass	5.79	25.80	23.65	0.23174	7	20.01	0.100	Inf	20.01
836.5MHz_16QAM_RB 8,#RB 7	Pass	5.79	25.69	23.54	0.22594	7	19.90	0.098	Inf	19.9
836.5MHz_16QAM_RB 15,#RB 0	Pass	5.79	25.44	23.29	0.21330	7	19.65	0.092	Inf	19.65
847.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.55	24.40	0.27542	7	20.76	0.119	Inf	20.76
847.5MHz_16QAM_RB 1,#RB 8	Pass	5.79	26.71	24.56	0.28576	7	20.92	0.124	Inf	20.92

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
847.5MHz_16QAM_RB 1,#RB 14	Pass	5.79	26.60	24.45	0.27861	7	20.81	0.121	Inf	20.81
847.5MHz_16QAM_RB 8,#RB 0	Pass	5.79	25.44	23.29	0.21330	7	19.65	0.092	Inf	19.65
847.5MHz_16QAM_RB 8,#RB 4	Pass	5.79	25.65	23.50	0.22387	7	19.86	0.097	Inf	19.86
847.5MHz_16QAM_RB 8,#RB 7	Pass	5.79	25.75	23.60	0.22909	7	19.96	0.099	Inf	19.96
847.5MHz_16QAM_RB 15,#RB 0	Pass	5.79	25.64	23.49	0.22336	7	19.85	0.097	Inf	19.85
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
826.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.96	25.81	0.38107	7	22.17	0.165	Inf	22.17
826.5MHz_QPSK_RB 1,#RB 12	Pass	5.79	28.11	25.96	0.39446	7	22.32	0.171	Inf	22.32
826.5MHz_QPSK_RB 1,#RB 24	Pass	5.79	27.90	25.75	0.37584	7	22.11	0.163	Inf	22.11
826.5MHz_QPSK_RB 12,#RB 0	Pass	5.79	26.93	24.78	0.30061	7	21.14	0.130	Inf	21.14
826.5MHz_QPSK_RB 12,#RB 7	Pass	5.79	26.86	24.71	0.29580	7	21.07	0.128	Inf	21.07
826.5MHz_QPSK_RB 12,#RB 13	Pass	5.79	26.80	24.65	0.29174	7	21.01	0.126	Inf	21.01
826.5MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.84	24.69	0.29444	7	21.05	0.127	Inf	21.05
836.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.86	25.71	0.37239	7	22.07	0.161	Inf	22.07
836.5MHz_QPSK_RB 1,#RB 12	Pass	5.79	28.14	25.99	0.39719	7	22.35	0.172	Inf	22.35
836.5MHz_QPSK_RB 1,#RB 24	Pass	5.79	27.82	25.67	0.36898	7	22.03	0.160	Inf	22.03
836.5MHz_QPSK_RB 12,#RB 0	Pass	5.79	26.77	24.62	0.28973	7	20.98	0.125	Inf	20.98
836.5MHz_QPSK_RB 12,#RB 7	Pass	5.79	26.96	24.81	0.30269	7	21.17	0.131	Inf	21.17
836.5MHz_QPSK_RB 12,#RB 13	Pass	5.79	26.81	24.66	0.29242	7	21.02	0.126	Inf	21.02
836.5MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.81	24.66	0.29242	7	21.02	0.126	Inf	21.02
846.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.81	25.66	0.36813	7	22.02	0.159	Inf	22.02
846.5MHz_QPSK_RB 1,#RB 12	Pass	5.79	28.22	26.07	0.40458	7	22.43	0.175	Inf	22.43
846.5MHz_QPSK_RB 1,#RB 24	Pass	5.79	27.95	25.80	0.38019	7	22.16	0.164	Inf	22.16
846.5MHz_QPSK_RB 12,#RB 0	Pass	5.79	26.84	24.69	0.29444	7	21.05	0.127	Inf	21.05
846.5MHz_QPSK_RB 12,#RB 7	Pass	5.79	26.90	24.75	0.29854	7	21.11	0.129	Inf	21.11
846.5MHz_QPSK_RB 12,#RB 13	Pass	5.79	26.92	24.77	0.29992	7	21.13	0.130	Inf	21.13
846.5MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.85	24.70	0.29512	7	21.06	0.128	Inf	21.06
826.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.46	24.31	0.26977	7	20.67	0.117	Inf	20.67
826.5MHz_16QAM_RB 1,#RB 12	Pass	5.79	26.74	24.59	0.28774	7	20.95	0.124	Inf	20.95
826.5MHz_16QAM_RB 1,#RB 24	Pass	5.79	26.60	24.45	0.27861	7	20.81	0.121	Inf	20.81
826.5MHz_16QAM_RB 12,#RB 0	Pass	5.79	25.59	23.44	0.22080	7	19.80	0.095	Inf	19.8
826.5MHz_16QAM_RB 12,#RB 7	Pass	5.79	25.55	23.40	0.21878	7	19.76	0.095	Inf	19.76
826.5MHz_16QAM_RB 12,#RB 13	Pass	5.79	25.57	23.42	0.21979	7	19.78	0.095	Inf	19.78
826.5MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.61	23.46	0.22182	7	19.82	0.096	Inf	19.82
836.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.56	24.41	0.27606	7	20.77	0.119	Inf	20.77
836.5MHz_16QAM_RB 1,#RB 12	Pass	5.79	26.94	24.79	0.30130	7	21.15	0.130	Inf	21.15
836.5MHz_16QAM_RB 1,#RB 24	Pass	5.79	26.82	24.67	0.29309	7	21.03	0.127	Inf	21.03
836.5MHz_16QAM_RB 12,#RB 0	Pass	5.79	25.68	23.53	0.22542	7	19.89	0.097	Inf	19.89
836.5MHz_16QAM_RB 12,#RB 7	Pass	5.79	25.91	23.76	0.23768	7	20.12	0.103	Inf	20.12
836.5MHz_16QAM_RB 12,#RB 13	Pass	5.79	25.71	23.56	0.22699	7	19.92	0.098	Inf	19.92
836.5MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.68	23.53	0.22542	7	19.89	0.097	Inf	19.89

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
846.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.43	24.28	0.26792	7	20.64	0.116	Inf	20.64
846.5MHz_16QAM_RB 1,#RB 12	Pass	5.79	26.78	24.63	0.29040	7	20.99	0.126	Inf	20.99
846.5MHz_16QAM_RB 1,#RB 24	Pass	5.79	26.64	24.49	0.28119	7	20.85	0.122	Inf	20.85
846.5MHz_16QAM_RB 12,#RB 0	Pass	5.79	25.61	23.46	0.22182	7	19.82	0.096	Inf	19.82
846.5MHz_16QAM_RB 12,#RB 7	Pass	5.79	25.74	23.59	0.22856	7	19.95	0.099	Inf	19.95
846.5MHz_16QAM_RB 12,#RB 13	Pass	5.79	25.80	23.65	0.23174	7	20.01	0.100	Inf	20.01
846.5MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.84	23.69	0.23388	7	20.05	0.101	Inf	20.05
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-
829MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.90	25.75	0.37584	7	22.11	0.163	Inf	22.11
829MHz_QPSK_RB 1,#RB 25	Pass	5.79	27.95	25.80	0.38019	7	22.16	0.164	Inf	22.16
829MHz_QPSK_RB 1,#RB 49	Pass	5.79	27.83	25.68	0.36983	7	22.04	0.160	Inf	22.04
829MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.84	24.69	0.29444	7	21.05	0.127	Inf	21.05
829MHz_QPSK_RB 25,#RB 12	Pass	5.79	26.95	24.80	0.30200	7	21.16	0.131	Inf	21.16
829MHz_QPSK_RB 25,#RB 25	Pass	5.79	26.81	24.66	0.29242	7	21.02	0.126	Inf	21.02
829MHz_QPSK_RB 50,#RB 0	Pass	5.79	26.85	24.70	0.29512	7	21.06	0.128	Inf	21.06
836.5MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.93	25.78	0.37844	7	22.14	0.164	Inf	22.14
836.5MHz_QPSK_RB 1,#RB 25	Pass	5.79	27.88	25.73	0.37411	7	22.09	0.162	Inf	22.09
836.5MHz_QPSK_RB 1,#RB 49	Pass	5.79	27.97	25.82	0.38194	7	22.18	0.165	Inf	22.18
836.5MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.96	24.81	0.30269	7	21.17	0.131	Inf	21.17
836.5MHz_QPSK_RB 25,#RB 12	Pass	5.79	26.88	24.73	0.29717	7	21.09	0.129	Inf	21.09
836.5MHz_QPSK_RB 25,#RB 25	Pass	5.79	26.78	24.63	0.29040	7	20.99	0.126	Inf	20.99
836.5MHz_QPSK_RB 50,#RB 0	Pass	5.79	26.83	24.68	0.29376	7	21.04	0.127	Inf	21.04
844MHz_QPSK_RB 1,#RB 0	Pass	5.79	27.86	25.71	0.37239	7	22.07	0.161	Inf	22.07
844MHz_QPSK_RB 1,#RB 25	Pass	5.79	28.25	26.10	0.40738	7	22.46	0.176	Inf	22.46
844MHz_QPSK_RB 1,#RB 49	Pass	5.79	27.81	25.66	0.36813	7	22.02	0.159	Inf	22.02
844MHz_QPSK_RB 25,#RB 0	Pass	5.79	26.81	24.66	0.29242	7	21.02	0.126	Inf	21.02
844MHz_QPSK_RB 25,#RB 12	Pass	5.79	26.78	24.63	0.29040	7	20.99	0.126	Inf	20.99
844MHz_QPSK_RB 25,#RB 25	Pass	5.79	26.70	24.55	0.28510	7	20.91	0.123	Inf	20.91
844MHz_QPSK_RB 50,#RB 0	Pass	5.79	26.82	24.67	0.29309	7	21.03	0.127	Inf	21.03
829MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.65	24.50	0.28184	7	20.86	0.122	Inf	20.86
829MHz_16QAM_RB 1,#RB 25	Pass	5.79	26.94	24.79	0.30130	7	21.15	0.130	Inf	21.15
829MHz_16QAM_RB 1,#RB 49	Pass	5.79	26.60	24.45	0.27861	7	20.81	0.121	Inf	20.81
829MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.82	23.67	0.23281	7	20.03	0.101	Inf	20.03
829MHz_16QAM_RB 25,#RB 12	Pass	5.79	25.92	23.77	0.23823	7	20.13	0.103	Inf	20.13
829MHz_16QAM_RB 25,#RB 25	Pass	5.79	25.80	23.65	0.23174	7	20.01	0.100	Inf	20.01
829MHz_16QAM_RB 50,#RB 0	Pass	5.79	25.83	23.68	0.23335	7	20.04	0.101	Inf	20.04
836.5MHz_16QAM_RB 1,#RB 0	Pass	5.79	25.90	23.75	0.23714	7	20.11	0.103	Inf	20.11
836.5MHz_16QAM_RB 1,#RB 25	Pass	5.79	26.91	24.76	0.29923	7	21.12	0.129	Inf	21.12
836.5MHz_16QAM_RB 1,#RB 49	Pass	5.79	26.67	24.52	0.28314	7	20.88	0.122	Inf	20.88
836.5MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.75	23.60	0.22909	7	19.96	0.099	Inf	19.96
836.5MHz_16QAM_RB 25,#RB 12	Pass	5.79	25.81	23.66	0.23227	7	20.02	0.100	Inf	20.02

Mode	Result	DG (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	ERP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)
836.5MHz_16QAM_RB 25,#RB 25	Pass	5.79	25.76	23.61	0.22961	7	19.97	0.099	Inf	19.97
836.5MHz_16QAM_RB 50,#RB 0	Pass	5.79	25.72	23.57	0.22751	7	19.93	0.098	Inf	19.93
844MHz_16QAM_RB 1,#RB 0	Pass	5.79	26.50	24.35	0.27227	7	20.71	0.118	Inf	20.71
844MHz_16QAM_RB 1,#RB 25	Pass	5.79	26.64	24.49	0.28119	7	20.85	0.122	Inf	20.85
844MHz_16QAM_RB 1,#RB 49	Pass	5.79	26.56	24.41	0.27606	7	20.77	0.119	Inf	20.77
844MHz_16QAM_RB 25,#RB 0	Pass	5.79	25.65	23.50	0.22387	7	19.86	0.097	Inf	19.86
844MHz_16QAM_RB 25,#RB 12	Pass	5.79	25.62	23.47	0.22233	7	19.83	0.096	Inf	19.83
844MHz_16QAM_RB 25,#RB 25	Pass	5.79	25.81	23.66	0.23227	7	20.02	0.100	Inf	20.02
844MHz_16QAM_RB 50,#RB 0	Pass	5.79	25.76	23.61	0.22961	7	19.97	0.099	Inf	19.97

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

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

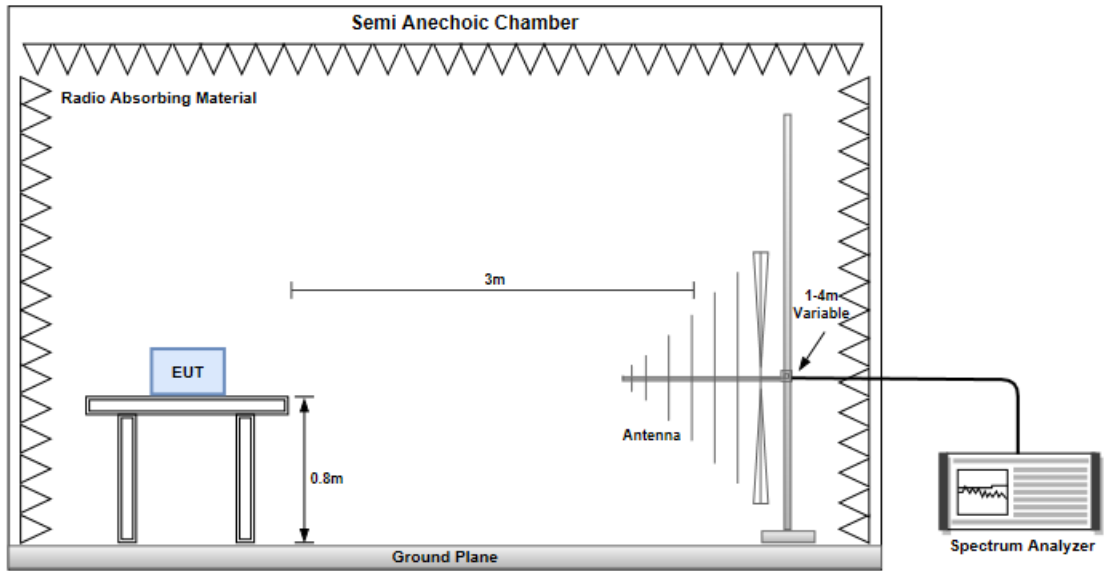
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

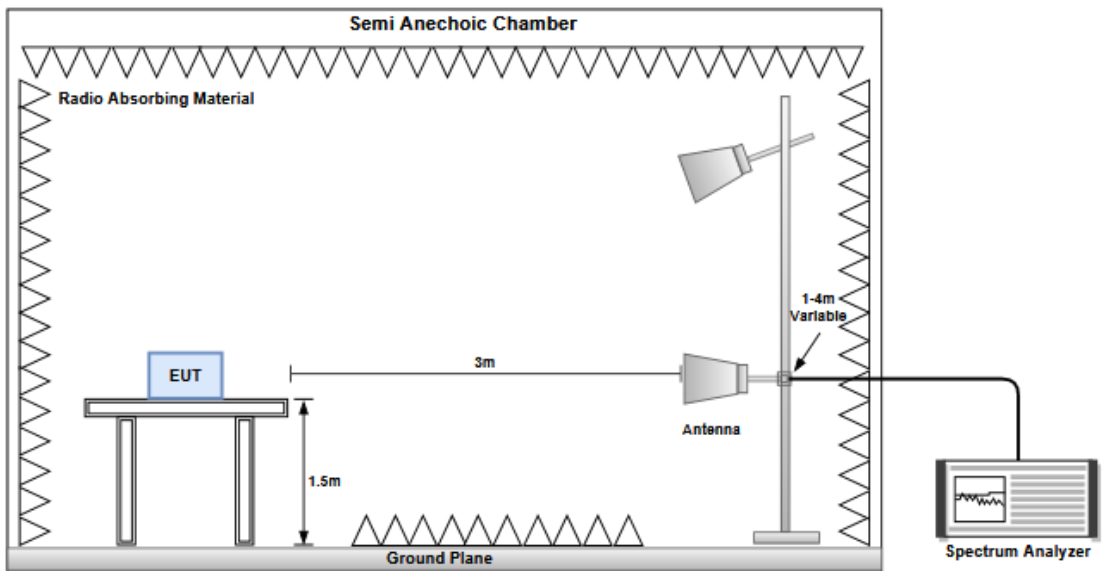
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Mode	LTE Band 5, CB:1.4MHz, 1RB, Offset 3, Channel: 20643						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
200.35	H	-64.10	-13.00	-51.10	-56.56	-59.48	-2.47
224.38	H	-59.36	-13.00	-46.36	-52.99	-55.22	-1.99
249.22	H	-62.50	-13.00	-49.50	-57.33	-58.85	-1.50
299.48	H	-57.61	-13.00	-44.61	-54.22	-54.00	-1.46
324.95	H	-62.73	-13.00	-49.73	-60.74	-59.18	-1.40
350.26	H	-58.23	-13.00	-45.23	-57.63	-54.75	-1.33
199.16	V	-62.64	-13.00	-49.64	-60.51	-57.93	-2.56
224.24	V	-57.43	-13.00	-44.43	-56.37	-53.28	-2.00
249.29	V	-58.10	-13.00	-45.10	-58.19	-54.46	-1.49
299.76	V	-60.76	-13.00	-47.76	-60.59	-57.15	-1.46
349.19	V	-60.31	-13.00	-47.31	-60.17	-56.83	-1.33
600.42	V	-57.06	-13.00	-44.06	-63.41	-56.79	1.88

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

Mode	LTE Band 5, CB:3MHz, 1RB, Offset 8, Channel: 20635						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.56	H	-63.63	-13.00	-50.63	-56.14	-58.96	-2.52
224.05	H	-59.44	-13.00	-46.44	-53.05	-55.29	-2.00
249.41	H	-62.50	-13.00	-49.50	-57.34	-58.86	-1.49
299.24	H	-57.64	-13.00	-44.64	-54.24	-54.03	-1.46
324.72	H	-63.08	-13.00	-50.08	-61.07	-59.53	-1.40
349.44	H	-57.28	-13.00	-44.28	-56.64	-53.80	-1.33
200.84	V	-63.10	-13.00	-50.10	-60.96	-58.49	-2.46
223.56	V	-57.64	-13.00	-44.64	-56.54	-53.48	-2.01
250.43	V	-57.77	-13.00	-44.77	-57.90	-54.14	-1.48
300.59	V	-60.97	-13.00	-47.97	-60.80	-57.36	-1.46
349.26	V	-60.61	-13.00	-47.61	-60.47	-57.13	-1.33
600.22	V	-57.08	-13.00	-44.08	-63.43	-53.05	-1.88

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

Mode	LTE Band 5, CB:5MHz, 1RB, Offset 12, Channel: 20625						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
200.65	H	-63.59	-13.00	-50.59	-56.06	-58.97	-2.47
224.48	H	-59.40	-13.00	-46.40	-53.03	-55.26	-1.99
250.33	H	-62.73	-13.00	-49.73	-57.62	-59.10	-1.48
299.74	H	-57.39	-13.00	-44.39	-54.01	-53.78	-1.46
324.77	H	-62.46	-13.00	-49.46	-60.46	-58.91	-1.40
350.29	H	-58.02	-13.00	-45.02	-57.42	-54.54	-1.33
199.27	V	-62.74	-13.00	-49.74	-60.60	-58.04	-2.55
225.15	V	-56.71	-13.00	-43.71	-55.69	-52.58	-1.98
249.47	V	-57.57	-13.00	-44.57	-57.67	-53.93	-1.49
300.28	V	-60.38	-13.00	-47.38	-60.21	-56.77	-1.46
349.45	V	-60.19	-13.00	-47.19	-60.05	-56.71	-1.33
600.12	V	-56.66	-13.00	-43.66	-63.01	-52.63	-1.88

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

Mode	LTE Band 5, CB:10MHz, 1RB, Offset 25, Channel: 20600						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.75	H	-64.02	-13.00	-51.02	-56.50	-59.37	-2.50
224.00	H	-59.63	-13.00	-46.63	-53.24	-55.48	-2.00
249.22	H	-62.29	-13.00	-49.29	-57.12	-58.64	-1.50
299.66	H	-57.72	-13.00	-44.72	-54.34	-54.11	-1.46
324.88	H	-62.60	-13.00	-49.60	-60.60	-59.05	-1.40
349.13	H	-58.11	-13.00	-45.11	-57.45	-54.63	-1.33
199.75	V	-62.54	-13.00	-49.54	-60.37	-57.89	-2.50
224.00	V	-57.19	-13.00	-44.19	-56.11	-53.04	-2.00
249.22	V	-57.95	-13.00	-44.95	-58.03	-54.30	-1.50
299.66	V	-60.72	-13.00	-47.72	-60.55	-57.11	-1.46
349.13	V	-60.38	-13.00	-47.38	-60.24	-56.90	-1.33
600.36	V	-56.90	-13.00	-43.90	-63.25	-52.87	-1.88

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

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20407							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1649.40	H	-63.88	-13.00	-50.88	-67.86	-67.56	5.83
2474.10	H	-27.13	-13.00	-14.13	-34.84	-31.30	6.32
4123.50	H	-44.25	-13.00	-31.25	-56.78	-49.16	7.06
1649.40	V	-65.01	-13.00	-52.01	-69.11	-68.69	5.83
2474.10	V	-36.80	-13.00	-23.80	-44.54	-40.97	6.32
4123.50	V	-50.33	-13.00	-37.33	-62.89	-55.24	7.06

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-63.64	-13.00	-50.64	-67.76	-67.41	5.92
2509.50	H	-25.56	-13.00	-12.56	-33.53	-29.86	6.45
4182.50	H	-42.02	-13.00	-29.02	-54.75	-46.91	7.04
1673.00	V	-64.48	-13.00	-51.48	-68.69	-68.25	5.92
2509.50	V	-34.57	-13.00	-21.57	-42.55	-38.87	6.45
4182.50	V	-48.98	-13.00	-35.98	-61.66	-53.87	7.04

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20643							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1696.60	H	-62.21	-13.00	-49.21	-66.45	-66.08	6.02
2544.90	H	-27.87	-13.00	-14.87	-36.07	-32.30	6.58
4241.50	H	-41.20	-13.00	-28.20	-54.05	-46.03	6.98
1696.60	V	-33.47	-13.00	-20.47	-67.78	-37.34	6.02
2544.90	V	-38.31	-13.00	-25.31	-46.52	-42.74	6.58
4241.50	V	-47.90	-13.00	-34.90	-60.69	-52.73	6.98

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

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20415							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1651.00	H	-63.50	-13.00	-50.50	-67.49	-67.18	5.83
2476.50	H	-26.85	-13.00	-13.85	-34.57	-31.03	6.33
4127.50	H	-44.34	-13.00	-31.34	-56.89	-49.25	7.06
1651.00	V	-65.15	-13.00	-52.15	-69.25	-68.83	5.83
2476.50	V	-36.99	-13.00	-23.99	-44.74	-41.17	6.33
4127.50	V	-50.01	-13.00	-37.01	-62.57	-54.92	7.06

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-63.58	-13.00	-50.58	-67.70	-67.35	5.92
2509.50	H	-25.50	-13.00	-12.50	-33.47	-29.80	6.45
4182.50	H	-42.52	-13.00	-29.52	-55.25	-47.41	7.04
1673.00	V	-64.35	-13.00	-51.35	-68.56	-68.12	5.92
2509.50	V	-34.70	-13.00	-21.70	-42.68	-39.00	6.45
4182.50	V	-49.18	-13.00	-36.18	-61.86	-54.07	7.04

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20635							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1695.00	H	-61.97	-13.00	-48.97	-66.21	-65.83	6.01
2542.50	H	-28.29	-13.00	-15.29	-36.48	-32.71	6.57
4237.50	H	-41.42	-13.00	-28.42	-54.27	-46.26	6.99
1695.00	V	-63.58	-13.00	-50.58	-67.89	-67.44	6.01
2542.50	V	-38.28	-13.00	-25.28	-46.47	-42.70	6.57
4237.50	V	-48.17	-13.00	-35.17	-60.95	-53.01	6.99

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

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20425							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1653.00	H	-63.46	-13.00	-50.46	-67.46	-67.15	5.84
2479.50	H	-27.23	-13.00	-14.23	-34.98	-31.42	6.34
4132.50	H	-44.27	-13.00	-31.27	-56.84	-49.18	7.06
1653.00	V	-65.11	-13.00	-52.11	-69.23	-68.80	5.84
2479.50	V	-36.48	-13.00	-23.48	-44.26	-40.67	6.34
4132.50	V	-50.00	-13.00	-37.00	-62.58	-54.91	7.06

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-63.38	-13.00	-50.38	-67.50	-67.15	5.92
2509.50	H	-25.53	-13.00	-12.53	-33.50	-29.83	6.45
4182.50	H	-41.73	-13.00	-28.73	-54.46	-46.62	7.04
1673.00	V	-64.34	-13.00	-51.34	-68.55	-68.11	5.92
2509.50	V	-34.63	-13.00	-21.63	-42.61	-38.93	6.45
4182.50	V	-48.91	-13.00	-35.91	-61.59	-53.80	7.04

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20625							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1693.00	H	-61.98	-13.00	-48.98	-66.20	-65.84	6.01
2539.50	H	-28.04	-13.00	-15.04	-36.21	-32.45	6.56
4232.50	H	-41.38	-13.00	-28.38	-54.21	-46.23	7.00
1693.00	V	-63.18	-13.00	-50.18	-67.47	-67.04	6.01
2539.50	V	-38.20	-13.00	-25.20	-46.37	-42.61	6.56
4232.50	V	-48.12	-13.00	-35.12	-60.89	-52.97	7.00

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

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20450							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1658.00	H	-64.06	-13.00	-51.06	-68.09	-67.77	5.86
2487.00	H	-26.89	-13.00	-13.89	-34.69	-31.11	6.37
4145.00	H	-43.94	-13.00	-30.94	-56.55	-48.84	7.05
1658.00	V	-65.19	-13.00	-52.19	-69.33	-68.90	5.86
2487.00	V	-37.00	-13.00	-24.00	-44.83	-41.22	6.37
4145.00	V	-50.15	-13.00	-37.15	-62.76	-55.05	7.05

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-63.30	-13.00	-50.30	-67.42	-67.07	5.92
2509.50	H	-25.09	-13.00	-12.09	-33.06	-29.39	6.45
4182.50	H	-42.08	-13.00	-29.08	-54.81	-46.97	7.04
1673.00	V	-64.37	-13.00	-51.37	-68.58	-68.14	5.92
2509.50	V	-34.67	-13.00	-21.67	-42.65	-38.97	6.45
4182.50	V	-49.07	-13.00	-36.07	-61.75	-53.96	7.04

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20600							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1688.00	H	-62.11	-13.00	-49.11	-66.30	-65.95	5.99
2532.00	H	-27.74	-13.00	-14.74	-35.86	-32.12	6.53
4220.00	H	-40.96	-13.00	-27.96	-53.78	-45.82	7.01
1688.00	V	-63.23	-13.00	-50.23	-67.50	-67.07	5.99
2532.00	V	-38.35	-13.00	-25.35	-46.48	-42.73	6.53
4220.00	V	-48.07	-13.00	-35.07	-60.83	-52.93	7.01

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

Configuration 2: Directional antenna with antenna cable

3.2.6 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 5, CB:1.4MHz, 1RB, Offset 3, Channel: 20643						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
200.21	H	-58.60	-13.00	-45.60	-51.05	-53.97	-2.48
223.85	H	-58.50	-13.00	-45.50	-52.10	-54.35	-2.00
249.45	H	54.09	-13.00	67.09	-53.23	57.73	-1.49
299.57	H	-63.64	-13.00	-50.64	-60.26	-60.03	-1.46
324.93	H	-64.03	-13.00	-51.03	-62.04	-60.48	-1.40
399.42	H	-63.11	-13.00	-50.11	-63.60	-59.58	-1.38
199.23	V	-62.37	-13.00	-49.37	-60.23	-57.66	-2.56
224.34	V	-55.41	-13.00	-42.41	-54.35	-51.27	-1.99
249.22	V	-60.56	-13.00	-47.56	-60.64	-56.91	-1.50
299.47	V	-61.20	-13.00	-48.20	-61.03	-57.59	-1.46
325.59	V	-65.39	-13.00	-52.39	-65.23	-61.85	-1.39
600.44	V	-60.68	-13.00	-47.68	-67.03	-56.65	-1.88

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

Mode	LTE Band 5, CB:3MHz, 1RB, Offset 8, Channel: 20635						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
200.06	H	-57.63	-13.00	-44.63	-50.07	-53.00	-2.48
224.33	H	-58.36	-13.00	-45.36	-51.98	-54.22	-1.99
250.36	H	-58.73	-13.00	-45.73	-53.62	-55.10	-1.48
300.36	H	-63.60	-13.00	-50.60	-60.25	-59.99	-1.46
325.47	H	-64.04	-13.00	-51.04	-62.08	-60.50	-1.39
400.15	H	-62.39	-13.00	-49.39	-62.89	-58.86	-1.38
199.68	V	-61.86	-13.00	-48.86	-59.70	-57.20	-2.51
223.87	V	-55.67	-13.00	-42.67	-54.59	-51.52	-2.00
249.45	V	-59.44	-13.00	-46.44	-59.53	-55.80	-1.49
299.28	V	-60.79	-13.00	-47.79	-60.62	-57.18	-1.46
324.95	V	-66.54	-13.00	-53.54	-66.39	-62.99	-1.40
600.59	V	-60.28	-13.00	-47.28	-66.63	-56.25	-1.88

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

Mode	LTE Band 5, CB:5MHz, 1RB, Offset 12, Channel: 20625						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
200.52	H	-58.59	-13.00	-45.59	-51.06	-53.97	-2.47
224.94	H	-59.06	-13.00	-46.06	-52.71	-54.93	-1.98
249.83	H	-58.60	-13.00	-45.60	-53.46	-54.97	-1.48
299.92	H	-63.17	-13.00	-50.17	-59.80	-59.56	-1.46
324.75	H	-64.49	-13.00	-51.49	-62.49	-60.94	-1.40
399.64	H	-63.10	-13.00	-50.10	-63.59	-59.57	-1.38
199.58	V	-61.90	-13.00	-48.90	-59.74	-57.23	-2.52
223.92	V	-55.79	-13.00	-42.79	-54.71	-51.64	-2.00
249.51	V	-59.83	-13.00	-46.83	-59.93	-56.19	-1.49
299.95	V	-60.57	-13.00	-47.57	-60.40	-56.96	-1.46
324.60	V	-65.98	-13.00	-52.98	-65.83	-62.43	-1.40
600.15	V	-60.40	-13.00	-47.40	-66.75	-56.37	-1.88

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

Mode	LTE Band 5, CB:10MHz, 1RB, Offset 25, Channel: 20600						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.75	H	-58.24	-13.00	-45.24	-50.72	-53.59	-2.50
224.00	H	-58.74	-13.00	-45.74	-52.35	-54.59	-2.00
249.22	H	-58.84	-13.00	-45.84	-53.67	-55.19	-1.50
299.66	H	-63.44	-13.00	-50.44	-60.06	-59.83	-1.46
324.88	H	-64.17	-13.00	-51.17	-62.17	-60.62	-1.40
399.57	H	-62.87	-13.00	-49.87	-63.36	-59.34	-1.38
199.75	V	-62.00	-13.00	-49.00	-59.83	-57.35	-2.50
24.00	V	-55.61	-13.00	-42.61	-54.53	-51.46	-2.00
249.22	V	-60.05	-13.00	-47.05	-60.13	-56.40	-1.50
299.66	V	-60.74	-13.00	-47.74	-60.57	-57.13	-1.46
324.88	V	-66.14	-13.00	-53.14	-65.99	-62.59	-1.40
600.36	V	-60.96	-13.00	-47.96	-67.31	-56.93	-1.88

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

3.2.7 Test Result of Radiated Emissions above 1GHz

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20407							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1649.40	H	-55.12	-13.00	-42.12	-59.10	-58.80	5.83
2474.10	H	-24.23	-13.00	-11.23	-31.94	-28.40	6.32
4123.50	H	-48.22	-13.00	-35.22	-60.75	-53.13	7.06
1649.40	V	-55.63	-13.00	-42.63	-59.73	-59.31	5.83
2474.10	V	-24.29	-13.00	-11.29	-32.03	-28.46	6.32
4123.50	V	-46.63	-13.00	-33.63	-59.19	-51.54	7.06

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-62.23	-13.00	-49.23	-66.35	-66.00	5.92
2509.50	H	-25.17	-13.00	-12.17	-33.14	-29.47	6.45
4182.50	H	-52.57	-13.00	-39.57	-65.30	-57.46	7.04
1673.00	V	-61.98	-13.00	-48.98	-66.19	-65.75	5.92
2509.50	V	-26.09	-13.00	-13.09	-34.07	-30.39	6.45
4182.50	V	-49.55	-13.00	-36.55	-62.23	-54.44	7.04

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20643							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1696.60	H	-58.83	-13.00	-45.83	-63.07	-62.70	6.02
2544.90	H	-22.10	-13.00	-9.10	-30.30	-26.53	6.58
4241.50	H	-46.23	-13.00	-33.23	-59.08	-51.06	6.98
1696.60	V	-59.92	-13.00	-46.92	-64.23	-63.79	6.02
2544.90	V	-24.52	-13.00	-11.52	-32.73	-28.95	6.58
4241.50	V	-42.43	-13.00	-29.43	-55.22	-47.26	6.98

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

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20415							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1651.00	H	-55.49	-13.00	-42.49	-59.48	-59.17	5.83
2476.50	H	-24.08	-13.00	-11.08	-31.80	-28.26	6.33
4127.50	H	-47.67	-13.00	-34.67	-60.22	-52.58	7.06
1651.00	V	-55.53	-13.00	-42.53	-59.63	-59.21	5.83
2476.50	V	-24.83	-13.00	-11.83	-32.58	-29.01	6.33
4127.50	V	-46.71	-13.00	-33.71	-59.27	-51.62	7.06

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-62.37	-13.00	-49.37	-66.49	-66.14	5.92
2509.50	H	-25.42	-13.00	-12.42	-33.39	-29.72	6.45
4182.50	H	-52.52	-13.00	-39.52	-65.25	-57.41	7.04
1673.00	V	-62.14	-13.00	-49.14	-66.35	-65.91	5.92
2509.50	V	-26.50	-13.00	-13.50	-34.48	-30.80	6.45
4182.50	V	-49.81	-13.00	-36.81	-62.49	-54.70	7.04

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20635							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1695.00	H	-59.04	-13.00	-46.04	-63.28	-62.90	6.01
2542.50	H	-23.06	-13.00	-10.06	-31.25	-27.48	6.57
4237.50	H	-46.61	-13.00	-33.61	-59.46	-51.45	6.99
1695.00	V	-60.17	-13.00	-47.17	-64.48	-64.03	6.01
2542.50	V	-24.41	-13.00	-11.41	-32.60	-28.83	6.57
4237.50	V	-42.71	-13.00	-29.71	-55.49	-47.55	6.99

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

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20425							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1653.00	H	-55.42	-13.00	-42.42	-59.42	-59.11	5.84
2479.50	H	-24.07	-13.00	-11.07	-31.82	-28.26	6.34
4132.50	H	-47.71	-13.00	-34.71	-60.28	-52.62	7.06
1653.00	V	-55.37	-13.00	-42.37	-59.49	-59.06	5.84
2479.50	V	-24.51	-13.00	-11.51	-32.29	-28.70	6.34
4132.50	V	-47.75	-13.00	-34.75	-60.33	-52.66	7.06

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-62.14	-13.00	-49.14	-66.26	-65.91	5.92
2509.50	H	-24.46	-13.00	-11.46	-32.43	-28.76	6.45
4182.50	H	-52.73	-13.00	-39.73	-65.46	-57.62	7.04
1673.00	V	-62.32	-13.00	-49.32	-66.53	-66.09	5.92
2509.50	V	-25.58	-13.00	-12.58	-33.56	-29.88	6.45
4182.50	V	-49.78	-13.00	-36.78	-62.46	-54.67	7.04

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20625							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1693.00	H	-59.32	-13.00	-46.32	-63.54	-63.18	6.01
2539.50	H	-23.31	-13.00	-10.31	-31.48	-27.72	6.56
4232.50	H	-47.39	-13.00	-34.39	-60.22	-52.24	7.00
1693.00	V	-60.28	-13.00	-47.28	-64.57	-64.14	6.01
2539.50	V	-25.48	-13.00	-12.48	-33.65	-29.89	6.56
4232.50	V	-42.76	-13.00	-29.76	-55.53	-47.61	7.00

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

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20450							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1658.00	H	-61.03	-13.00	-48.03	-65.06	-64.74	5.86
2487.00	H	-22.79	-13.00	-9.79	-30.59	-27.01	6.37
4145.00	H	-50.02	-13.00	-37.02	-62.63	-54.92	7.05
1658.00	V	-58.33	-13.00	-45.33	-62.47	-62.04	5.86
2487.00	V	-23.70	-13.00	-10.70	-31.53	-27.92	6.37
4145.00	V	-47.31	-13.00	-34.31	-59.92	-52.21	7.05

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-60.87	-13.00	-47.87	-64.99	-64.64	5.92
2509.50	H	-24.44	-13.00	-11.44	-32.41	-28.74	6.45
4182.50	H	-50.07	-13.00	-37.07	-62.80	-54.96	7.04
1673.00	V	-61.59	-13.00	-48.59	-65.80	-65.36	5.92
2509.50	V	-25.43	-13.00	-12.43	-33.41	-29.73	6.45
4182.50	V	-48.61	-13.00	-35.61	-61.29	-53.50	7.04

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20600							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1688.00	H	-55.83	-13.00	-42.83	-60.02	-59.67	5.99
2532.00	H	-23.50	-13.00	-10.50	-31.62	-27.88	6.53
4220.00	H	-49.13	-13.00	-36.13	-61.95	-53.99	7.01
1688.00	V	-56.99	-13.00	-43.99	-61.26	-60.83	5.99
2532.00	V	-26.24	-13.00	-13.24	-34.37	-30.62	6.53
4220.00	V	-45.46	-13.00	-32.46	-58.22	-50.32	7.01

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

Configuration 3: Individual antenna

3.2.8 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 5, CB:1.4MHz, 1RB, Offset 3, Channel: 20643						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.84	H	-64.10	-13.00	-51.10	-56.56	-59.45	-2.50
223.56	H	-58.57	-13.00	-45.57	-52.16	-54.41	-2.01
250.36	H	-64.63	-13.00	-51.63	-59.52	-61.00	-1.48
274.44	H	-62.40	-13.00	-49.40	-58.14	-58.78	-1.47
300.39	H	-57.99	-13.00	-44.99	-54.64	-54.38	-1.46
399.62	H	-61.11	-13.00	-48.11	-61.60	-57.58	-1.38
200.33	V	-60.44	-13.00	-47.44	-58.28	-55.82	-2.47
225.41	V	-56.78	-13.00	-43.78	-55.77	-52.66	-1.97
249.35	V	-61.33	-13.00	-48.33	-61.42	-57.69	-1.49
274.85	V	-61.51	-13.00	-48.51	-61.49	-57.89	-1.47
299.45	V	-60.37	-13.00	-47.37	-60.20	-56.76	-1.46
399.64	V	-63.70	-13.00	-50.70	-64.68	-60.17	-1.38

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

Mode	LTE Band 5, CB:3MHz, 1RB, Offset 8, Channel: 20635						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.98	H	-64.11	-13.00	-51.11	-56.55	-59.48	-2.48
225.35	H	-58.30	-13.00	-45.30	-51.97	-54.18	-1.97
249.30	H	-63.99	-13.00	-50.99	-58.83	-60.35	-1.49
274.92	H	-62.51	-13.00	-49.51	-58.26	-58.89	-1.47
299.23	H	-57.89	-13.00	-44.89	-54.49	-54.28	-1.46
400.05	H	-61.54	-13.00	-48.54	-62.04	-58.01	-1.38
200.65	V	-60.30	-13.00	-47.30	-58.15	-55.68	-2.47
225.88	V	-57.11	-13.00	-44.11	-56.12	-53.00	-1.96
249.66	V	-60.99	-13.00	-47.99	-61.09	-57.35	-1.49
274.25	V	-61.37	-13.00	-48.37	-61.35	-57.75	-1.47
299.66	V	-59.80	-13.00	-46.80	-59.63	-56.19	-1.46
399.41	V	-63.67	-13.00	-50.67	-64.65	-60.14	-1.38

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

Mode	LTE Band 5, CB:5MHz, 1RB, Offset 12, Channel: 20625						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.82	H	-63.94	-13.00	-50.94	-56.41	-59.29	-2.50
224.44	H	-58.70	-13.00	-45.70	-52.33	-54.56	-1.99
249.22	H	-64.23	-13.00	-51.23	-59.06	-60.58	-1.50
274.61	H	-62.63	-13.00	-49.63	-58.37	-59.01	-1.47
299.55	H	-59.06	-13.00	-46.06	-55.67	-55.45	-1.46
399.61	H	-61.18	-13.00	-48.18	-61.67	-57.65	-1.38
200.98	V	-61.01	-13.00	-48.01	-58.87	-56.40	-2.46
224.38	V	-56.48	-13.00	-43.48	-55.42	-52.34	-1.99
249.51	V	-61.69	-13.00	-48.69	-61.79	-58.05	-1.49
274.48	V	-61.78	-13.00	-48.78	-61.76	-58.16	-1.47
299.45	V	-60.31	-13.00	-47.31	-60.14	-56.70	-1.46
399.51	V	-63.37	-13.00	-50.37	-64.35	-59.84	-1.38

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

Mode	LTE Band 5, CB:10MHz, 1RB, Offset 25, Channel: 20600						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
199.75	H	-63.99	-13.00	-50.99	-56.47	-59.34	-2.50
224.00	H	-58.93	-13.00	-45.93	-52.54	-54.78	-2.00
249.22	H	-64.32	-13.00	-51.32	-59.15	-60.67	-1.50
274.44	H	-63.00	-13.00	-50.00	-58.74	-59.38	-1.47
299.66	H	-58.35	-13.00	-45.35	-54.97	-54.74	-1.46
399.57	H	-61.47	-13.00	-48.47	-61.96	-57.94	-1.38
199.75	V	-60.56	-13.00	-47.56	-58.39	-55.91	-2.50
224.00	V	-56.92	-13.00	-43.92	-55.84	-52.77	-2.00
249.22	V	-61.56	-13.00	-48.56	-61.64	-57.91	-1.50
274.44	V	-61.65	-13.00	-48.65	-61.63	-58.03	-1.47
299.66	V	-60.21	-13.00	-47.21	-60.04	-56.60	-1.46
399.57	V	-63.58	-13.00	-50.58	-64.56	-60.05	-1.38

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

3.2.9 Test Result of Radiated Emissions above 1GHz

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20407							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1649.40	H	-57.50	-13.00	-44.50	-61.48	-61.18	5.83
2474.10	H	-34.55	-13.00	-21.55	-42.26	-38.72	6.32
4123.50	H	-51.84	-13.00	-38.84	-64.37	-56.75	7.06
1649.40	V	-58.26	-13.00	-45.26	-62.36	-61.94	5.83
2474.10	V	-28.26	-13.00	-15.26	-36.00	-32.43	6.32
4123.50	V	-45.72	-13.00	-32.72	-58.28	-50.63	7.06

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-57.92	-13.00	-44.92	-62.04	-61.69	5.92
2509.50	H	-37.46	-13.00	-24.46	-45.43	-41.76	6.45
4182.50	H	-52.92	-13.00	-39.92	-65.65	-57.81	7.04
1673.00	V	-59.26	-13.00	-46.26	-63.47	-63.03	5.92
2509.50	V	-31.13	-13.00	-18.13	-39.11	-35.43	6.45
4182.50	V	-47.15	-13.00	-34.15	-59.83	-52.04	7.04

Mode							
LTE Band 5, CB: 1.4MHz, 1RB, Offset 3, Channel: 20643							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1696.60	H	-59.44	-13.00	-46.44	-63.68	-63.31	6.02
2544.90	H	-40.35	-13.00	-27.35	-48.55	-44.78	6.58
4241.50	H	-53.51	-13.00	-40.51	-66.36	-58.34	6.98
1696.60	V	-60.27	-13.00	-47.27	-64.58	-64.14	6.02
2544.90	V	-34.09	-13.00	-21.09	-42.30	-38.52	6.58
4241.50	V	-47.46	-13.00	-34.46	-60.25	-52.29	6.98

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

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20415							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1651.00	H	-57.21	-13.00	-44.21	-61.20	-60.89	5.83
2476.50	H	-34.85	-13.00	-21.85	-42.57	-39.03	6.33
4127.50	H	-51.65	-13.00	-38.65	-64.20	-56.56	7.06
1651.00	V	-58.37	-13.00	-45.37	-62.47	-62.05	5.83
2476.50	V	-28.47	-13.00	-15.47	-36.22	-32.65	6.33
4127.50	V	-45.82	-13.00	-32.82	-58.38	-50.73	7.06

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-58.18	-13.00	-45.18	-62.30	-61.95	5.92
2509.50	H	-37.62	-13.00	-24.62	-45.59	-41.92	6.45
4182.50	H	-52.58	-13.00	-39.58	-65.31	-57.47	7.04
1673.00	V	-59.37	-13.00	-46.37	-63.58	-63.14	5.92
2509.50	V	-31.27	-13.00	-18.27	39.25	-35.57	6.45
4182.50	V	-46.94	-13.00	-33.94	-59.62	-51.83	7.04

Mode							
LTE Band 5, CB: 3MHz, 1RB, Offset 8, Channel: 20635							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-58.18	-13.00	-45.18	-62.30	-61.95	5.92
2509.50	H	-37.62	-13.00	-24.62	-45.59	-41.92	6.45
4182.50	H	-52.58	-13.00	-39.58	-65.31	-57.47	7.04
1673.00	V	-59.37	-13.00	-46.37	-63.58	-63.14	5.92
2509.50	V	-31.27	-13.00	-18.27	39.25	-35.57	6.45
4182.50	V	-46.94	-13.00	-33.94	-59.62	-51.83	7.04

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

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20425							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1653.00	H	-57.75	-13.00	-44.75	-61.75	-61.44	5.84
2479.50	H	-34.63	-13.00	-21.63	-42.38	-38.82	6.34
4132.50	H	-51.91	-13.00	-38.91	-64.48	-56.82	7.06
1653.00	V	-58.34	-13.00	-45.34	-62.46	-62.03	5.84
2479.50	V	24.10	-13.00	37.10	-36.18	19.91	6.34
4132.50	V	-45.91	-13.00	-32.91	-58.49	-50.82	7.06

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-58.27	-13.00	-45.27	-62.39	-62.04	5.92
2509.50	H	-37.63	-13.00	-24.63	-45.60	-41.93	6.45
4182.50	H	-52.76	-13.00	-39.76	-65.49	-57.65	7.04
1673.00	V	-59.37	-13.00	-46.37	-63.58	-63.14	5.92
2509.50	V	-30.71	-13.00	-17.71	-38.69	-35.01	6.45
4182.50	V	-46.93	-13.00	-33.93	-59.61	-51.82	7.04

Mode							
LTE Band 5, CB: 5MHz, 1RB, Offset 12, Channel: 20625							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1693.00	H	-59.36	-13.00	-46.36	-63.58	-63.22	6.01
2539.50	H	-40.93	-13.00	-27.93	-49.10	-45.34	6.56
4232.50	H	-53.65	-13.00	-40.65	-66.48	-58.50	7.00
1693.00	V	-60.95	-13.00	-47.95	-65.24	-64.81	6.01
2539.50	V	-34.00	-13.00	-21.00	-42.17	-38.41	6.56
4232.50	V	-47.71	-13.00	-34.71	-60.48	-52.56	7.00

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

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20450							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1658.00	H	-57.55	-13.00	-44.55	-61.58	-61.26	5.86
2487.00	H	-34.51	-13.00	-21.51	-42.31	-38.73	6.37
4145.00	H	-51.92	-13.00	-38.92	-64.53	-56.82	7.05
1658.00	V	-58.29	-13.00	-45.29	-62.43	-62.00	5.86
2487.00	V	-28.42	-13.00	-15.42	-36.25	-32.64	6.37
4145.00	V	-45.71	-13.00	-32.71	-58.32	-50.61	7.05

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20525							
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1673.00	H	-58.37	-13.00	-45.37	-62.49	-62.14	5.92
2509.50	H	-37.35	-13.00	-24.35	-45.32	-41.65	6.45
4182.50	H	-52.85	-13.00	-39.85	-65.58	-57.74	7.04
1673.00	V	-59.37	-13.00	-46.37	-63.58	-63.14	5.92
2509.50	V	-31.28	-13.00	-18.28	-39.26	-35.58	6.45
4182.50	V	-47.00	-13.00	-34.00	-59.68	-51.89	7.04

Mode							
LTE Band 5, CB: 10MHz, 1RB, Offset 25, Channel: 20600							
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1688.00	H	-59.35	-13.00	-46.35	-63.54	-63.19	5.99
2532.00	H	-40.47	-13.00	-27.47	-48.59	-44.85	6.53
4220.00	H	-53.64	-13.00	-40.64	-66.46	-58.50	7.01
1688.00	V	-60.41	-13.00	-47.41	-64.68	-64.25	5.99
2532.00	V	-34.32	-13.00	-21.32	-42.45	-38.70	6.53
4220.00	V	-47.56	-13.00	-34.56	-60.32	-52.42	7.01

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

3.3 Conducted Emissions & Band Edge

3.3.1 Limit of Conducted Emissions & Band Edge

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

3.3.2 Test Procedures

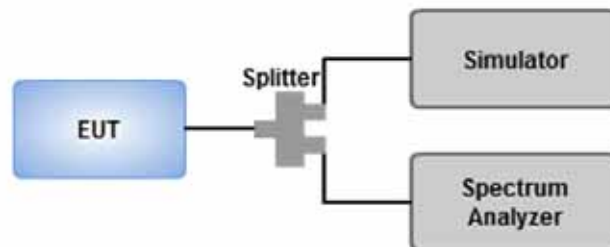
Out of band emission

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

Band edge

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

3.3.3 Test Setup



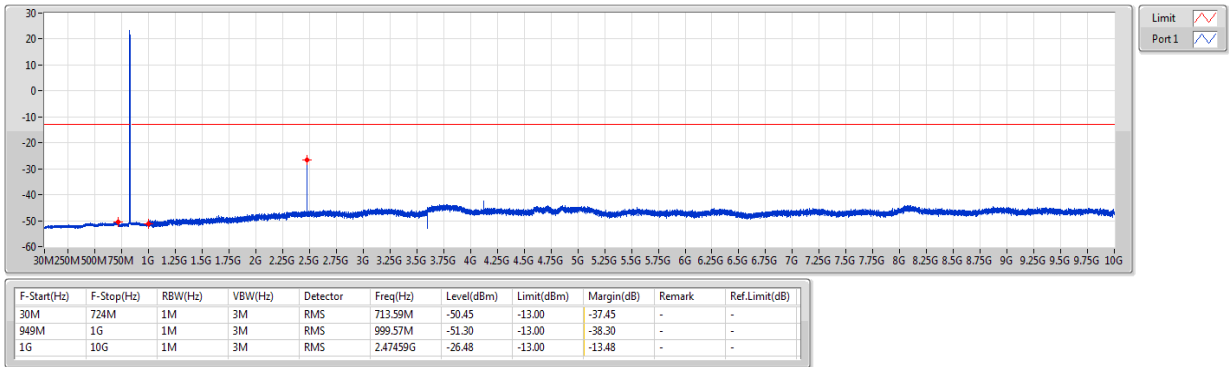
3.3.4 Test Result of Conducted Emissions & Band Edge

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 5	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.50975G	-26.45	-13.00	-13.45	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.47431G	-27.60	-13.00	-14.60	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.54322G	-25.86	-13.00	-12.86	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.51003G	-28.30	-13.00	-15.30	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.47966G	-25.92	-13.00	-12.92	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.47966G	-26.09	-13.00	-13.09	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	1G	10G	1M	3M	RMS	2.48725G	-26.62	-13.00	-13.62	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	1G	10G	1M	3M	RMS	2.48697G	-27.47	-13.00	-14.47	-	-

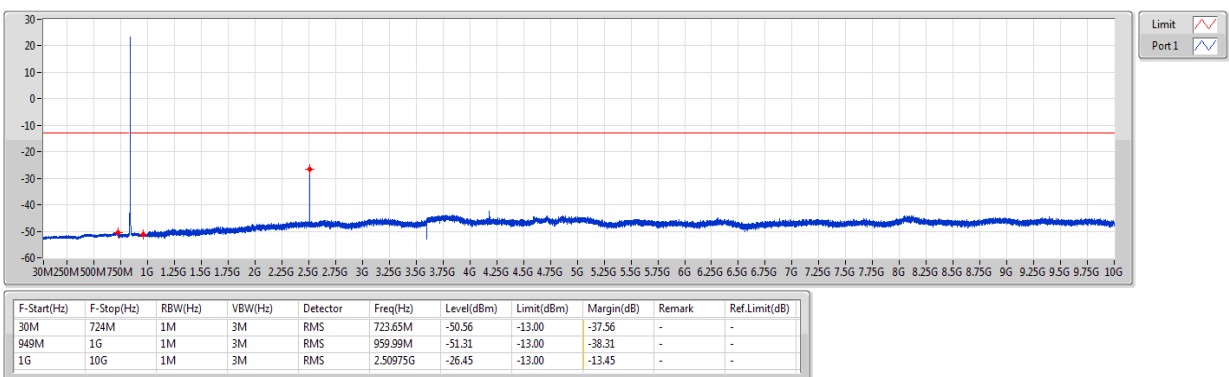
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 1,#RB 3

CSE-TX-Sum



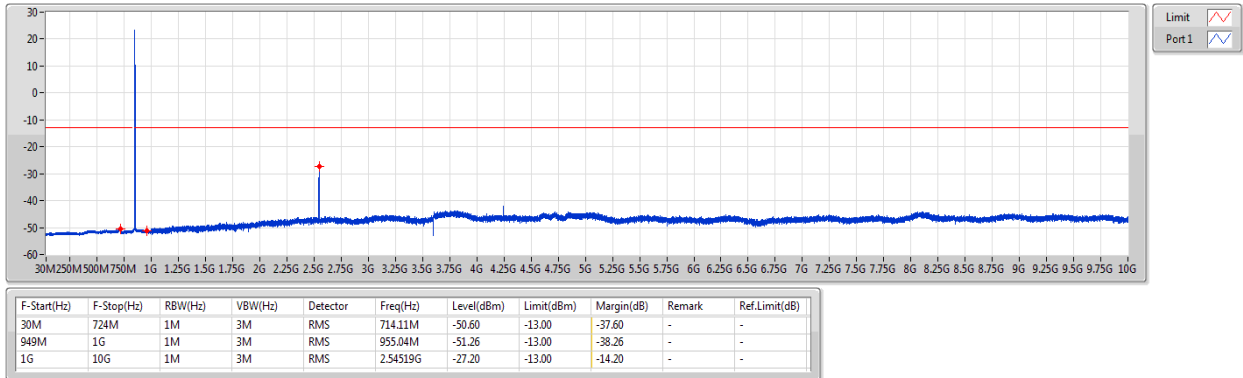
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 1,#RB 3

CSE-TX-Sum



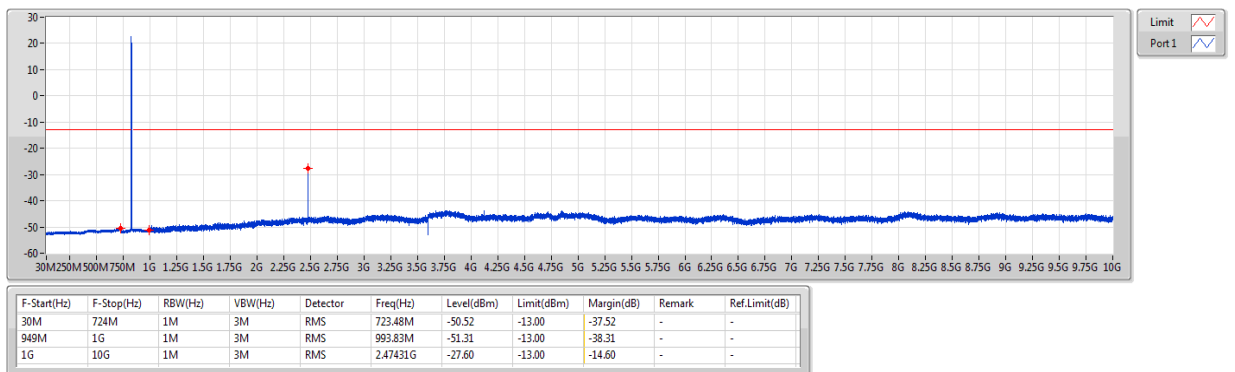
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz_QPSK_RB 1,#RB 3

CSE-TX-Sum



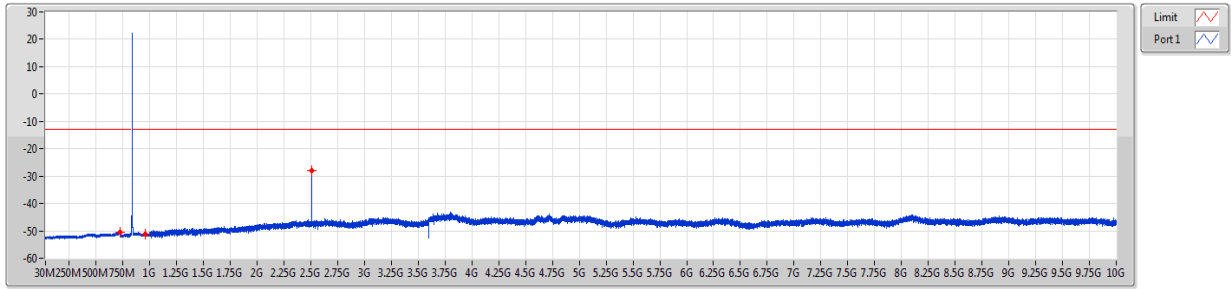
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz_16QAM_RB 1,#RB 3

CSE-TX-Sum



Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 1,#RB 3

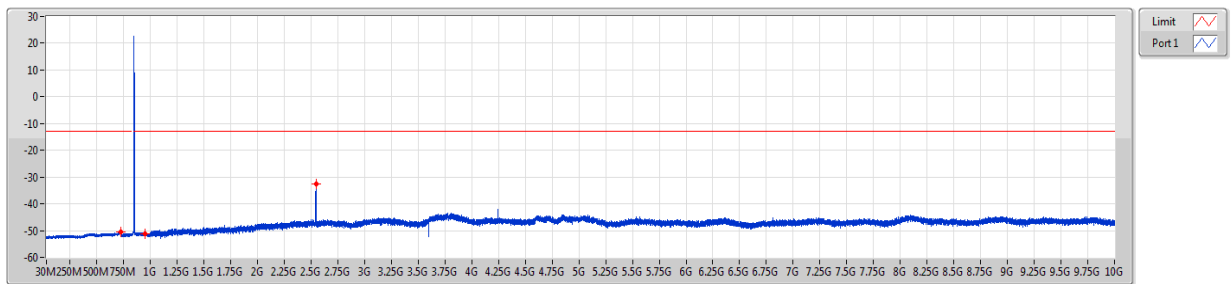
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	RMS	721.4M	-50.60	-13.00	-37.60	-	-
949M	1G	1M	3M	RMS	958.28M	-51.34	-13.00	-38.34	-	-
1G	10G	1M	3M	RMS	2.50975G	-28.06	-13.00	-15.06	-	-

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz_16QAM_RB 1,#RB 3

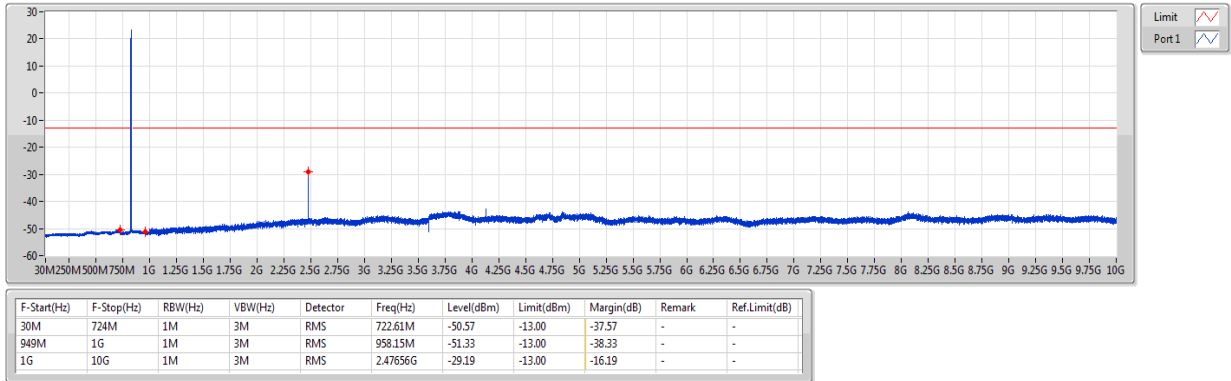
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	RMS	722.96M	-50.63	-13.00	-37.63	-	-
949M	1G	1M	3M	RMS	949.84M	-51.34	-13.00	-38.34	-	-
1G	10G	1M	3M	RMS	2.54519G	-32.63	-13.00	-19.63	-	-

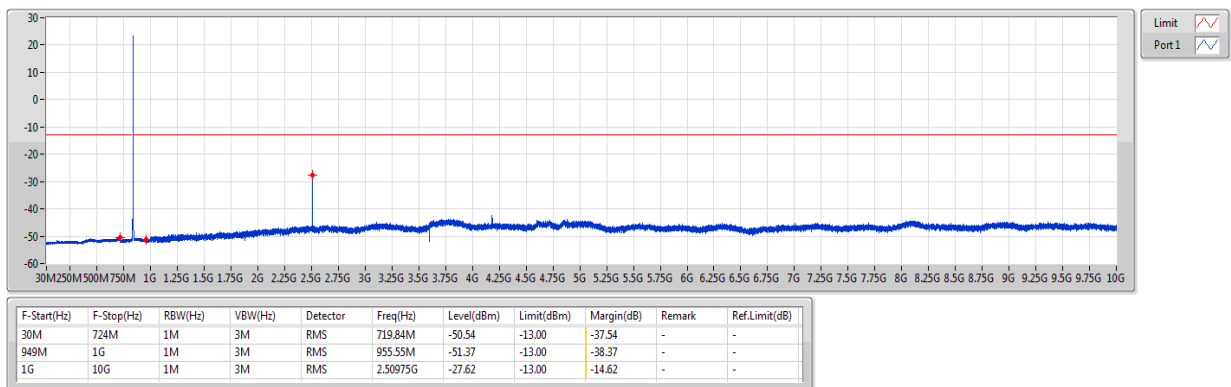
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 1,#RB 8

CSE-TX-Sum



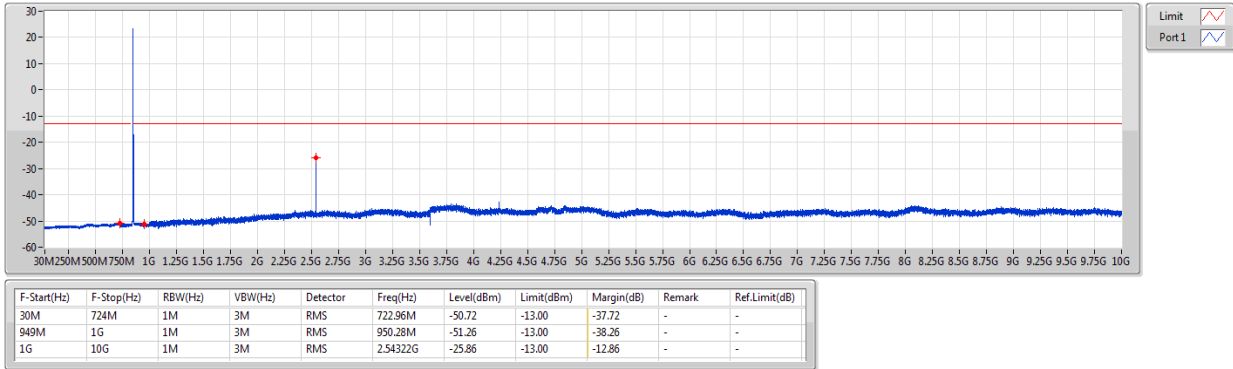
Band 5_LTE_3MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 1,#RB 8

CSE-TX-Sum



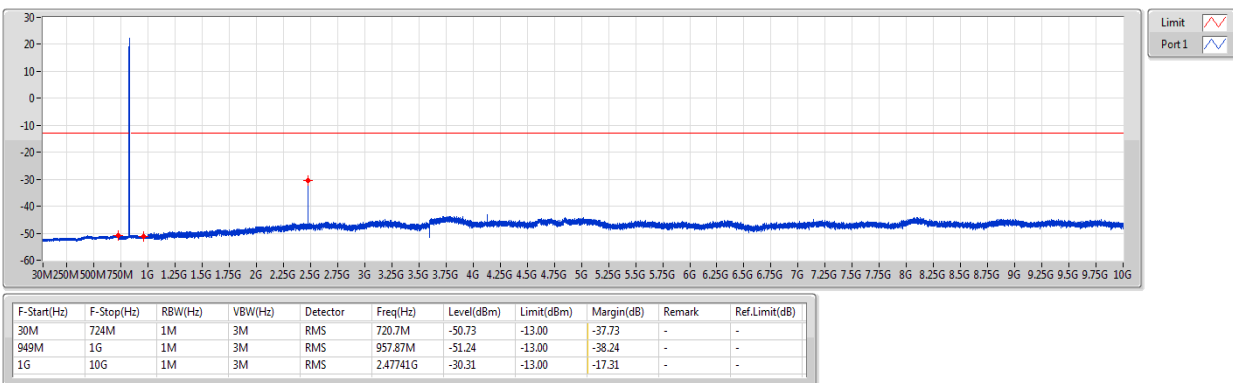
Band 5_LTE_3MHz_Nss1,QPSK_1TX
847.5MHz_QPSK_RB 1,#RB 8

CSE-TX-Sum



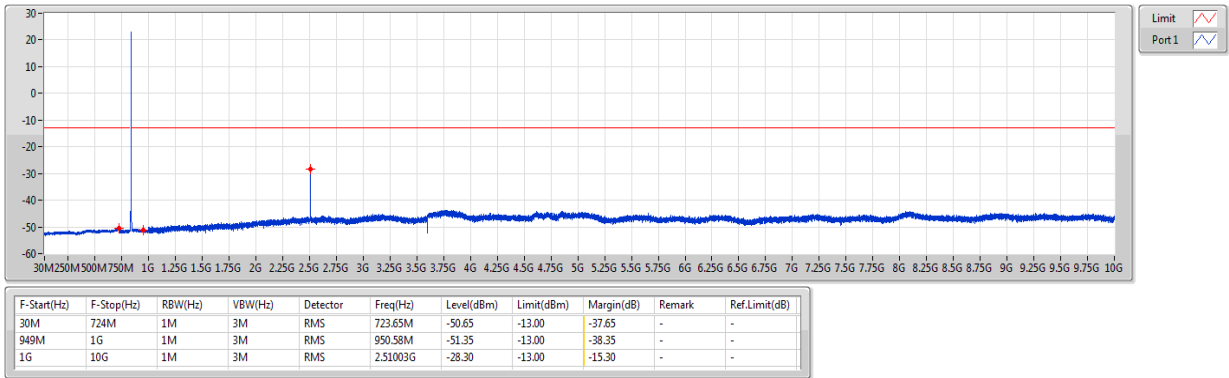
Band 5_LTE_3MHz_Nss1,16QAM_1TX
825.5MHz_16QAM_RB 1,#RB 8

CSE-TX-Sum



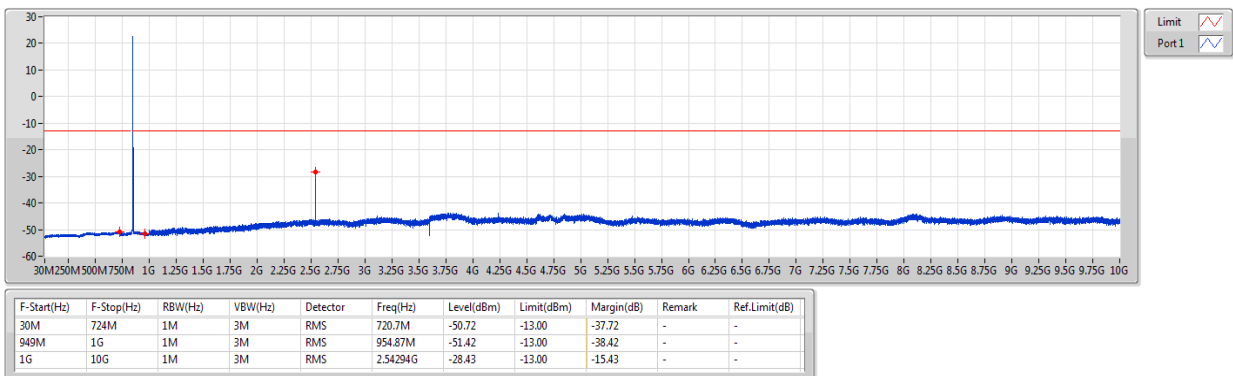
Band 5_LTE_3MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 1,#RB 8

CSE-TX-Sum



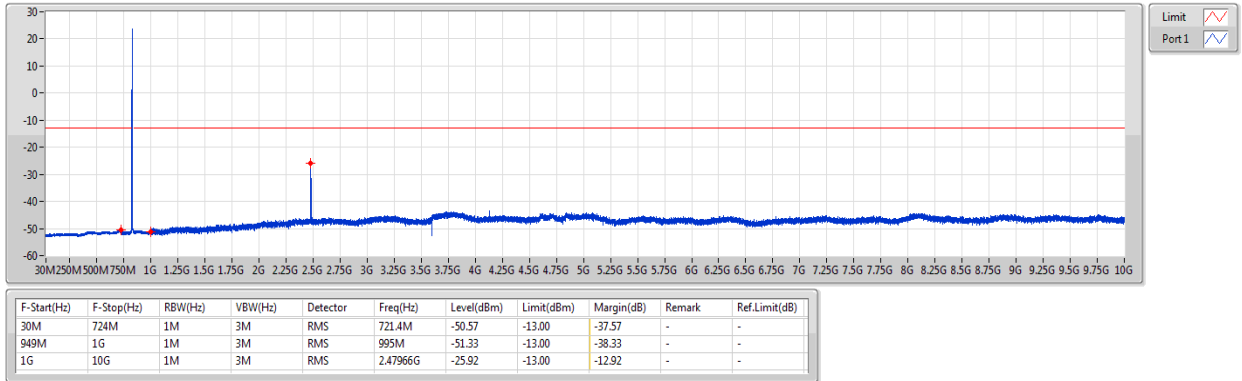
Band 5_LTE_3MHz_Nss1,16QAM_1TX
847.5MHz_16QAM_RB 1,#RB 8

CSE-TX-Sum



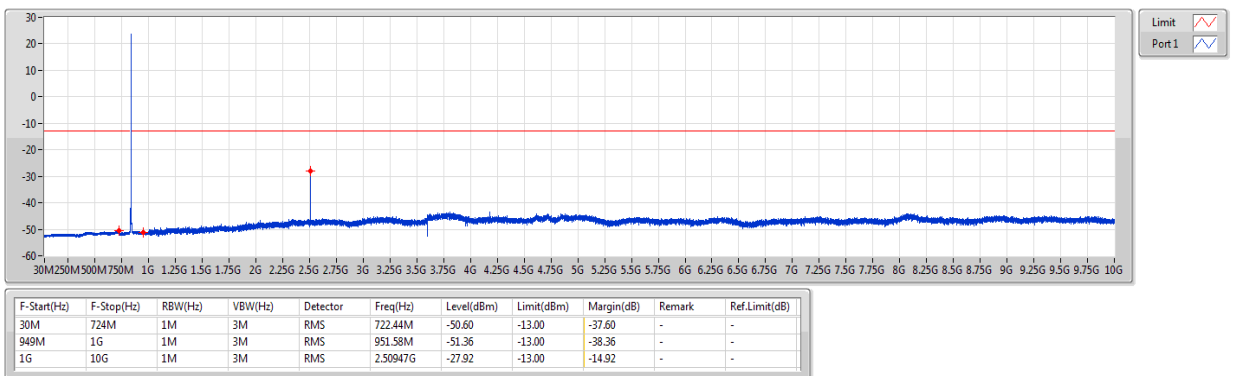
Band 5_LTE_5MHz_Nss1,QPSK_1TX
826.5MHz_QPSK_RB 1,#RB 12

CSE-TX-Sum



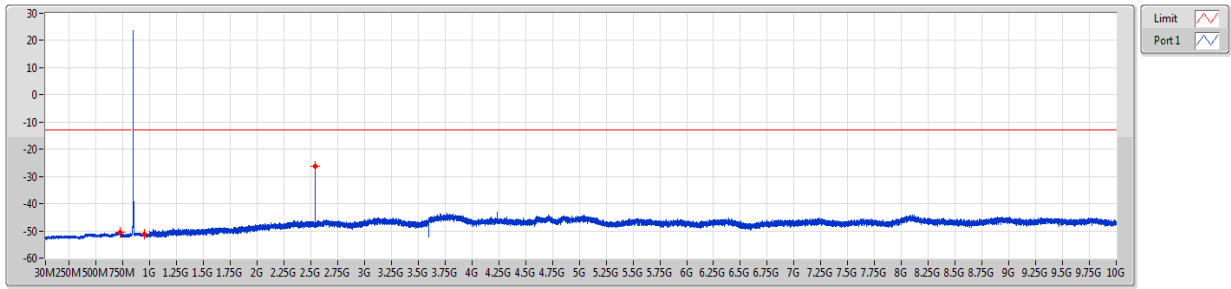
Band 5_LTE_5MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 1,#RB 12

CSE-TX-Sum



Band 5_LTE_5MHz_Nss1,QPSK_1TX
846.5MHz_QPSK_RB 1,#RB 12

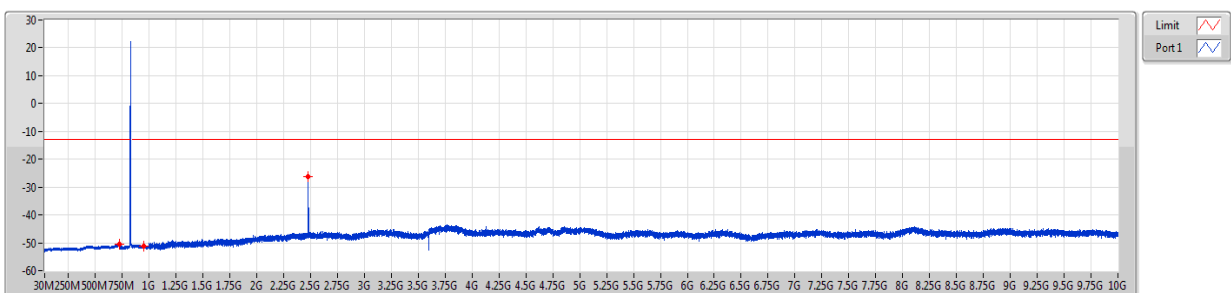
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	RMS	723.13M	-50.54	-13.00	-37.54	-	-
949M	1G	1M	3M	RMS	950.84M	-51.31	-13.00	-38.31	-	-
1G	10G	1M	3M	RMS	2.53956G	-26.21	-13.00	-13.21	-	-

Band 5_LTE_5MHz_Nss1,16QAM_1TX
826.5MHz_16QAM_RB 1,#RB 12

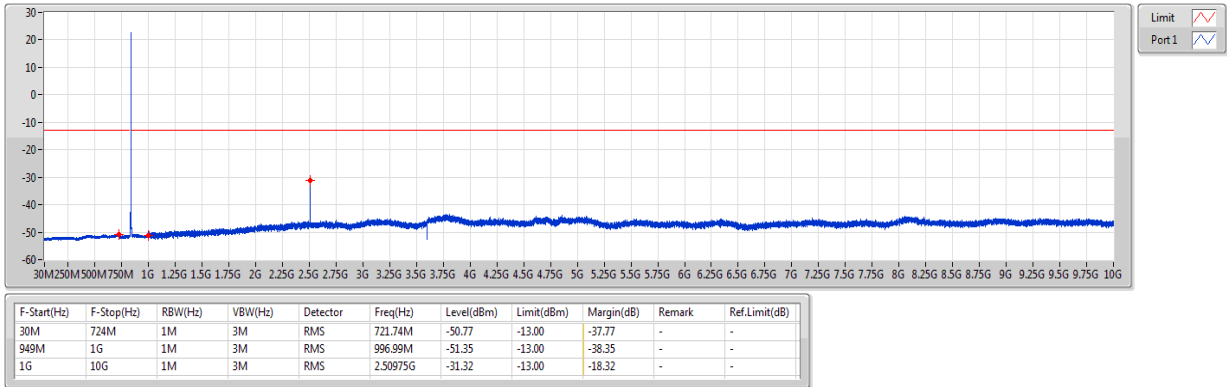
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
30M	724M	1M	3M	RMS	720.53M	-50.66	-13.00	-37.66	-	-
949M	1G	1M	3M	RMS	949.59M	-51.25	-13.00	-38.25	-	-
1G	10G	1M	3M	RMS	2.47966G	-26.09	-13.00	-13.09	-	-

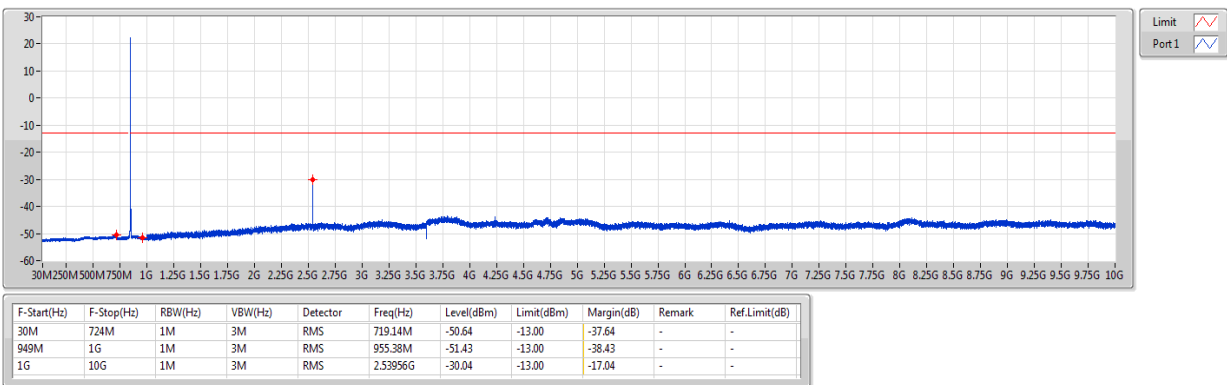
Band 5_LTE_5MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 1,#RB 12

CSE-TX-Sum



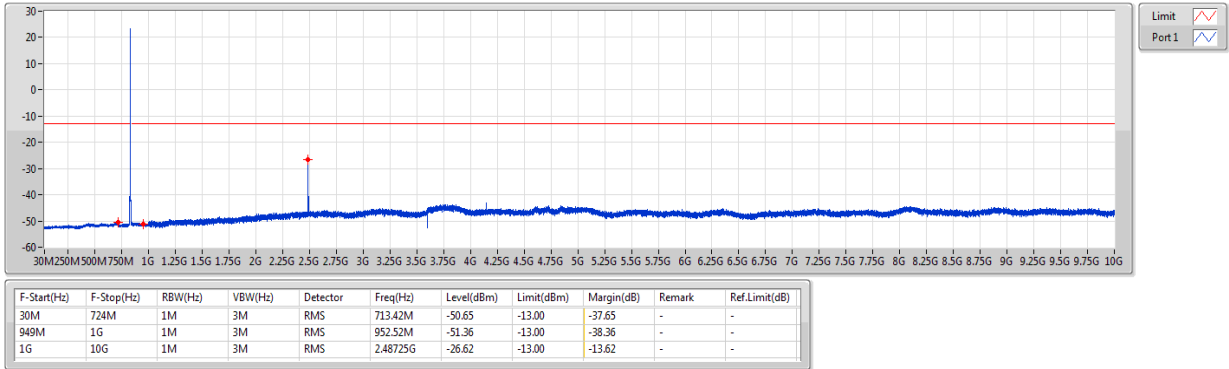
Band 5_LTE_5MHz_Nss1,16QAM_1TX
846.5MHz_16QAM_RB 1,#RB 12

CSE-TX-Sum



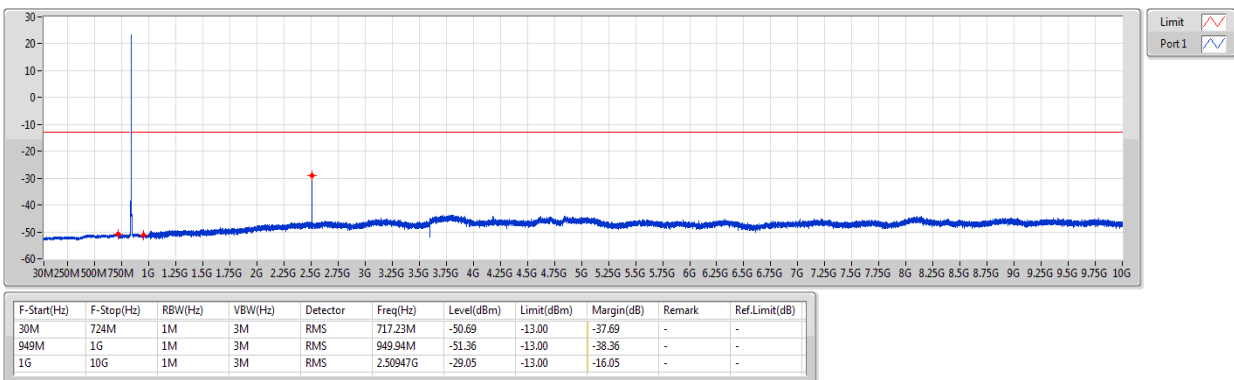
Band 5_LTE_10MHz_Nss1,QPSK_1TX
829MHz_QPSK_RB 1,#RB 25

CSE-TX-Sum



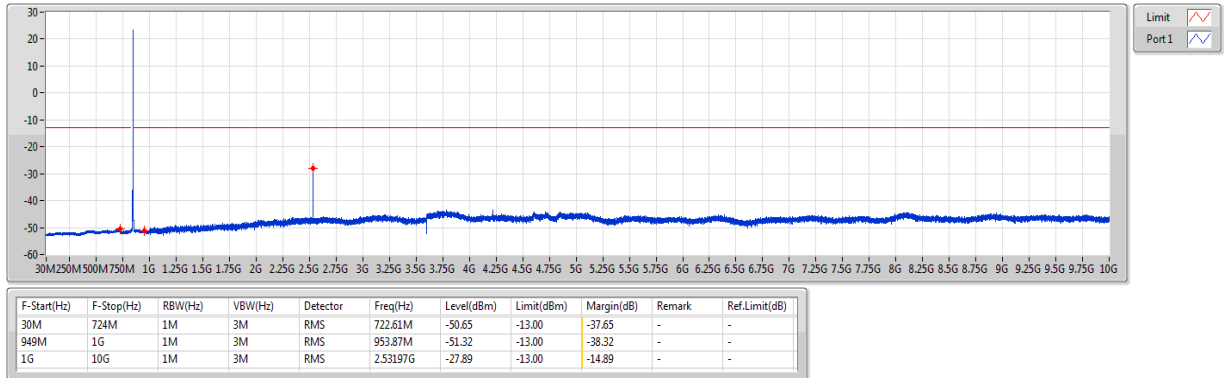
Band 5_LTE_10MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 1,#RB 25

CSE-TX-Sum



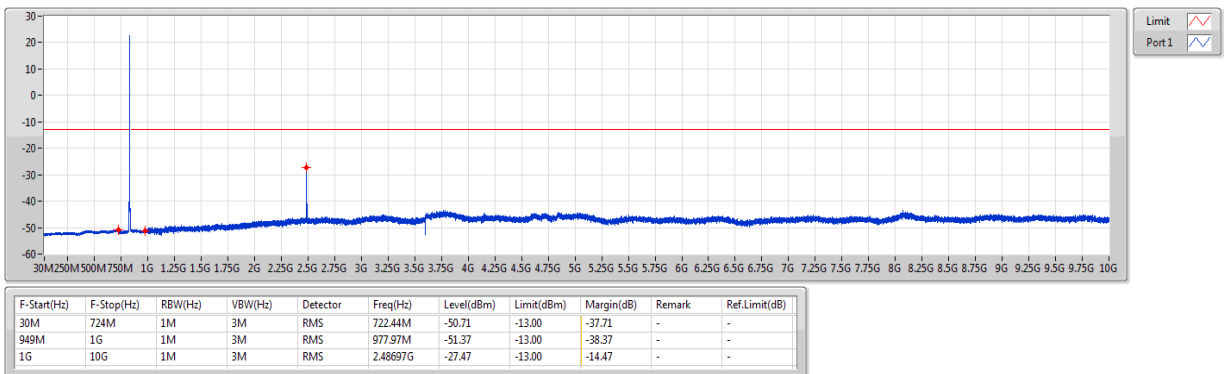
Band 5_LTE_10MHz_Nss1,QPSK_1TX
844MHz_QPSK_RB 1,#RB 25

CSE-TX-Sum



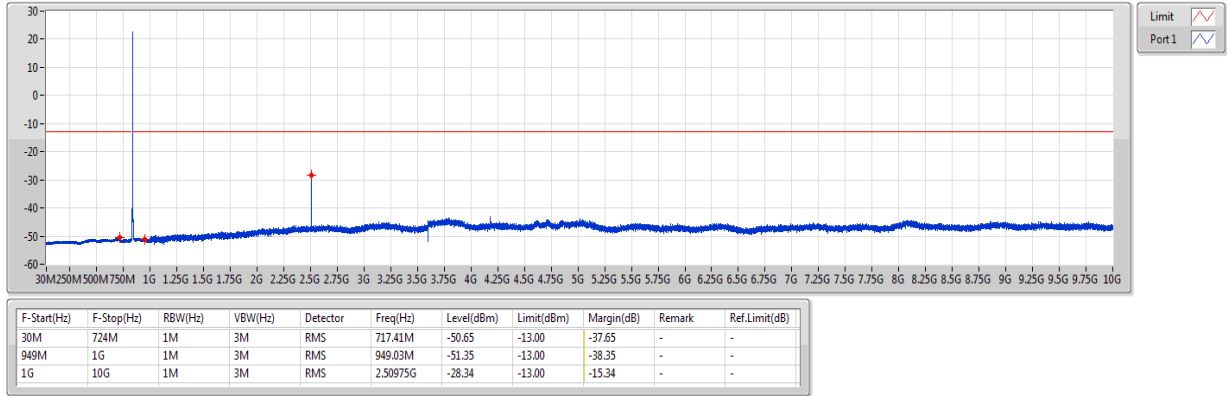
Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum



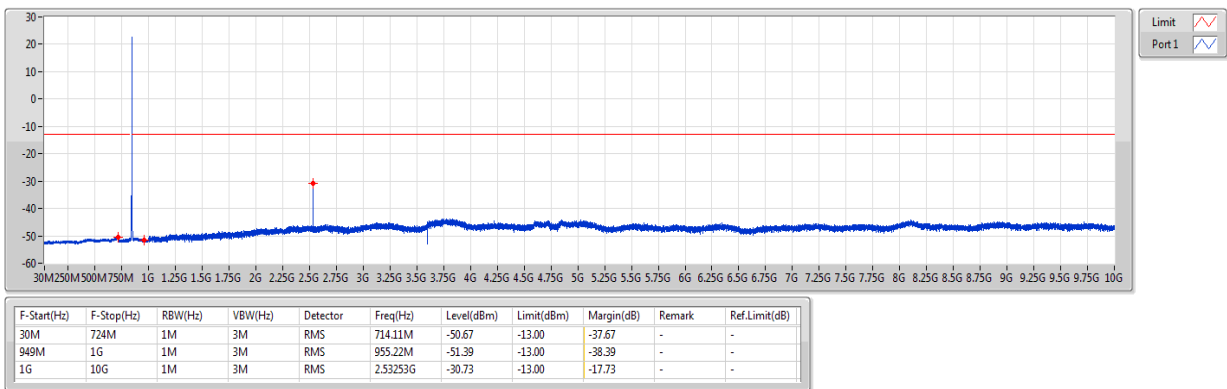
Band 5_LTE_10MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 1,#RB 25

CSE-TX-Sum



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

CSE-TX-Sum

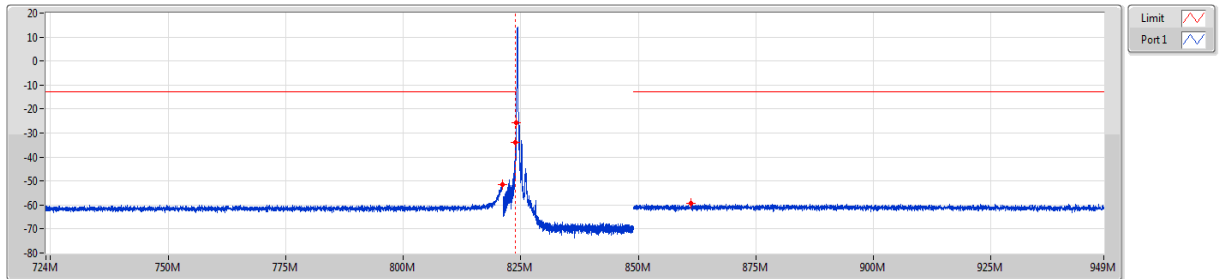


**Band edge
Summary**

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 5	-	-	-	-	-	-	-	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	15k	47k	RMS	849M	-25.08	-13.00	-12.08	-	-
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	15k	47k	RMS	849M	-22.89	-13.00	-9.89	-	-
LTE_3MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-19.54	-13.00	-6.54	-	-
LTE_3MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	30k	100k	RMS	849M	-20.71	-13.00	-7.71	-	-
LTE_5MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	51k	160k	RMS	849M	-20.06	-13.00	-7.06	-	-
LTE_5MHz_Nss1,16QAM_1TX	Pass	823.9M	824M	51k	160k	RMS	824M	-20.35	-13.00	-7.35	-	-
LTE_10MHz_Nss1,QPSK_1TX	Pass	849M	849.1M	100k	300k	RMS	849M	-29.00	-13.00	-16.00	-	-
LTE_10MHz_Nss1,16QAM_1TX	Pass	849M	849.1M	100k	300k	RMS	849M	-26.85	-13.00	-13.85	-	-

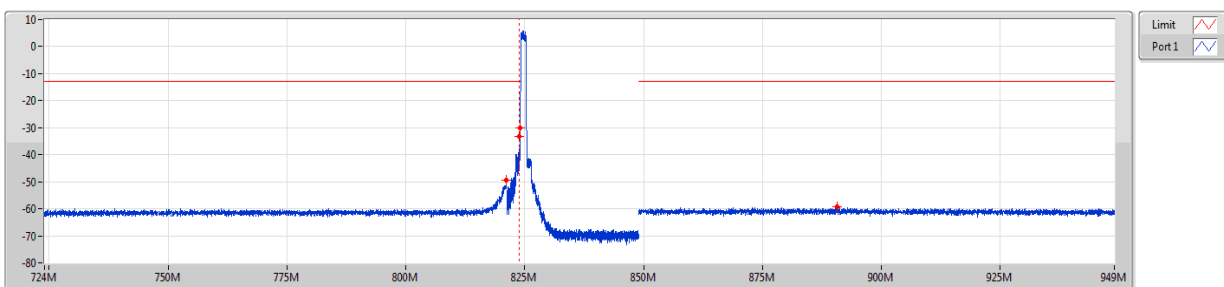
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



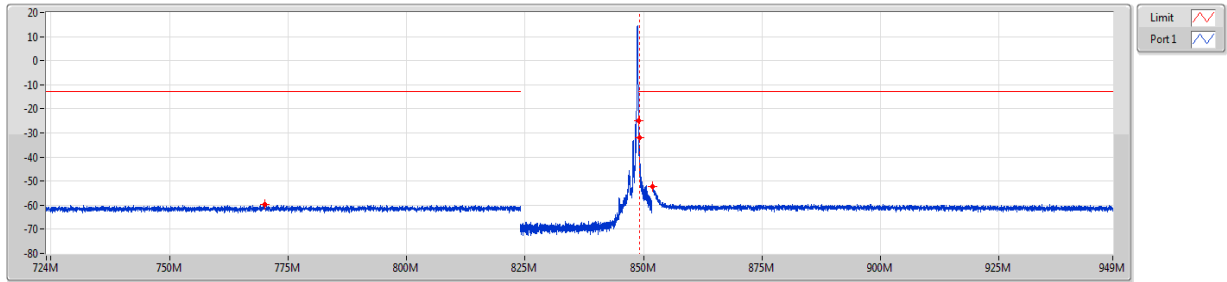
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



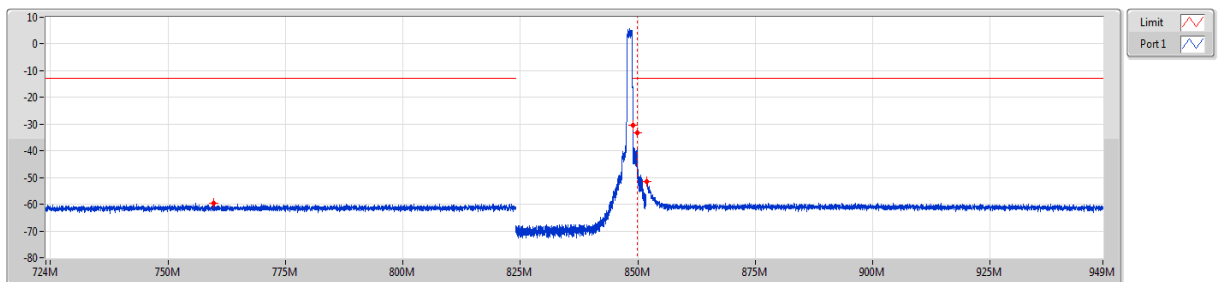
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz_QPSK_RB 1,#RB 5

CSE-TX-Sum



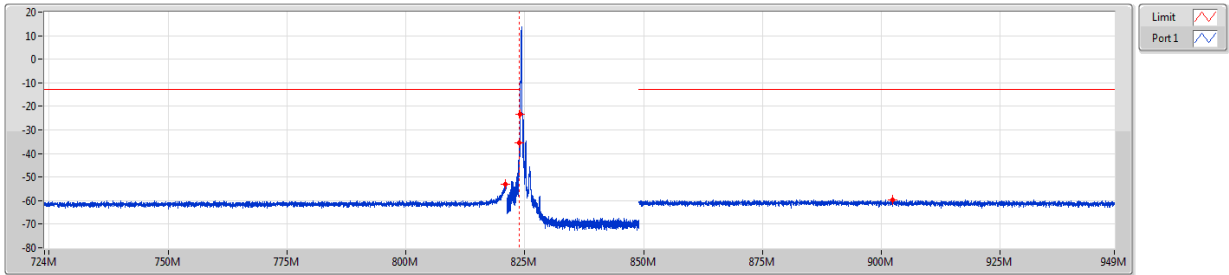
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz_QPSK_RB 6,#RB 0

CSE-TX-Sum



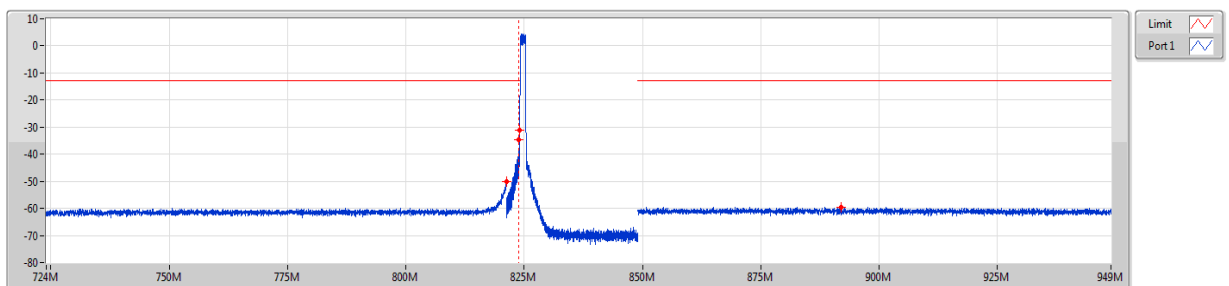
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



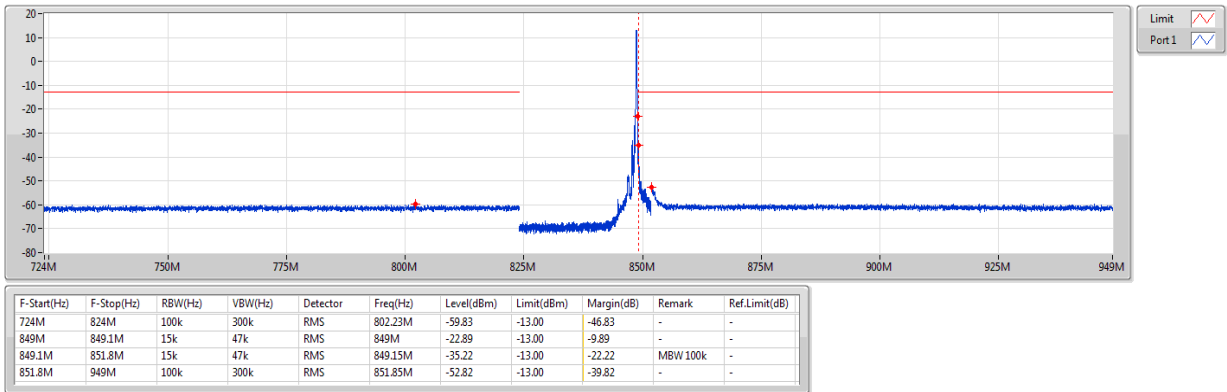
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



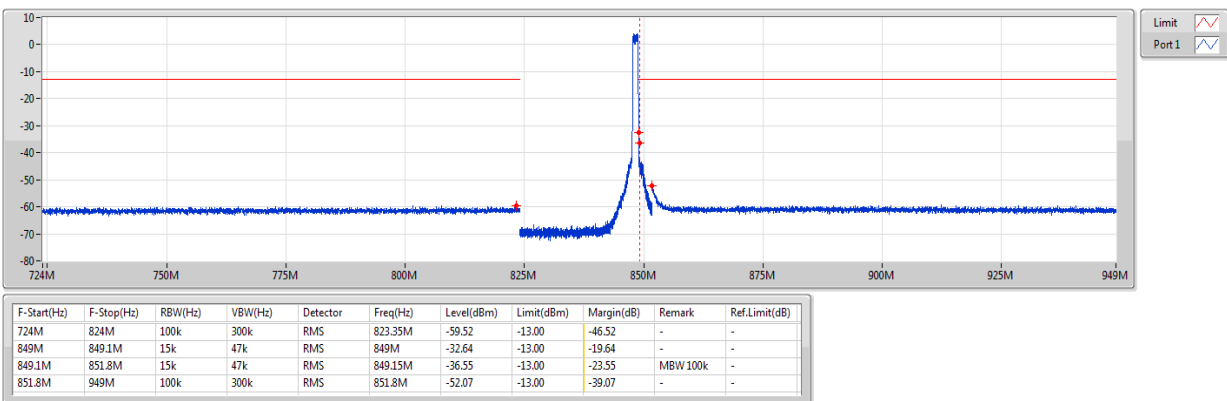
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz_16QAM_RB 1,#RB 5

CSE-TX-Sum



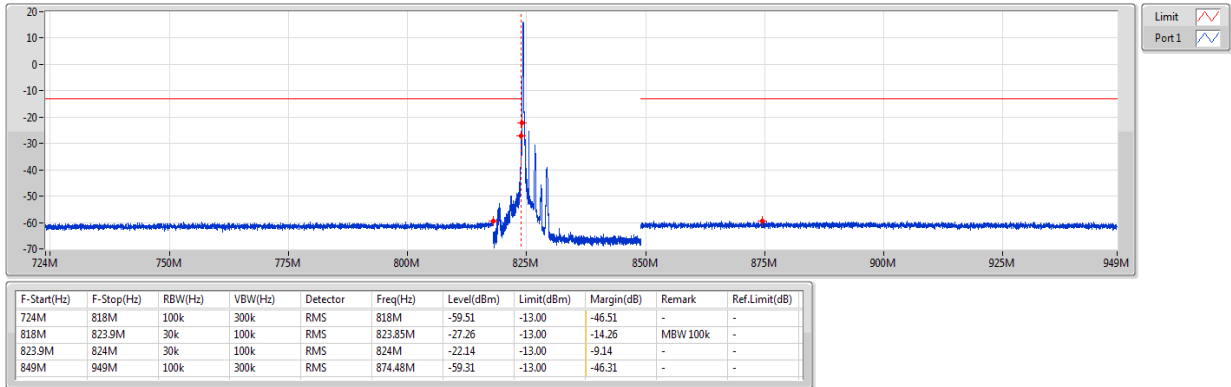
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz_16QAM_RB 6,#RB 0

CSE-TX-Sum



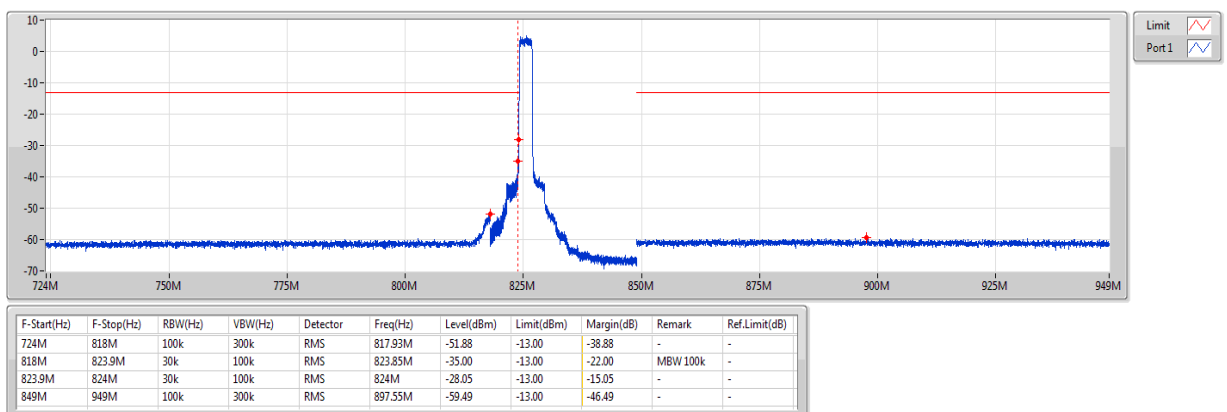
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



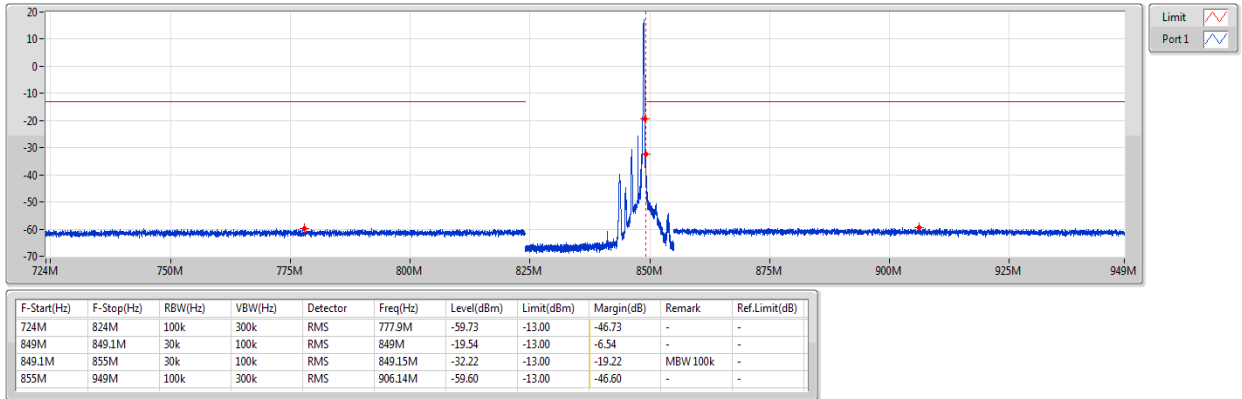
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 15,#RB 0

CSE-TX-Sum



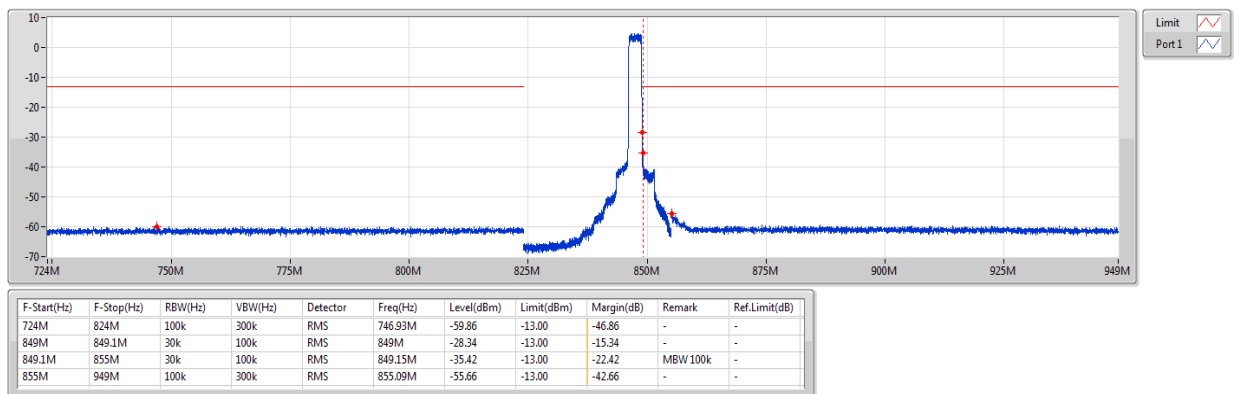
Band 5_LTE_3MHz_Nss1,QPSK_1TX
847.5MHz_QPSK_RB 1,#RB 14

CSE-TX-Sum



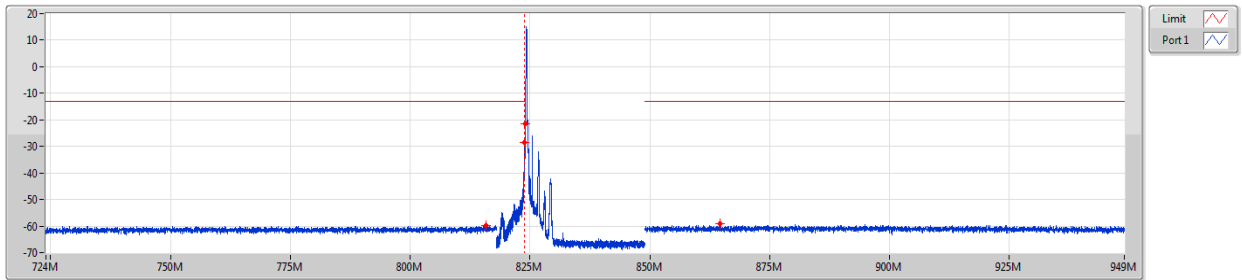
Band 5_LTE_3MHz_Nss1,QPSK_1TX
847.5MHz_QPSK_RB 15,#RB 0

CSE-TX-Sum



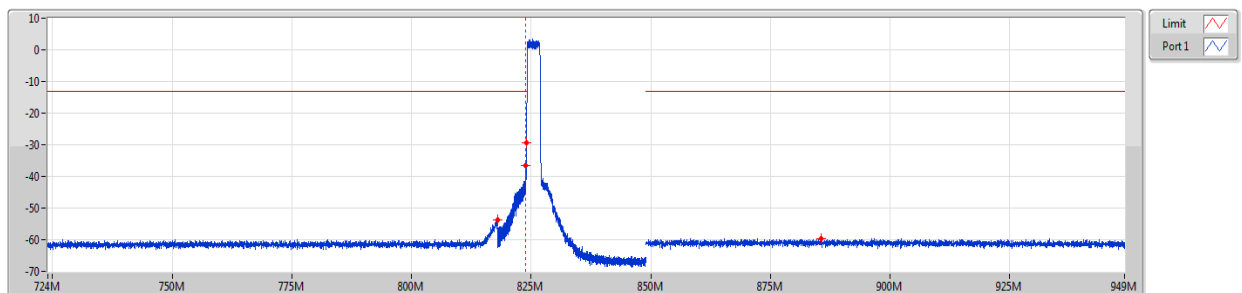
Band 5_LTE_3MHz_Nss1,16QAM_1TX
825.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



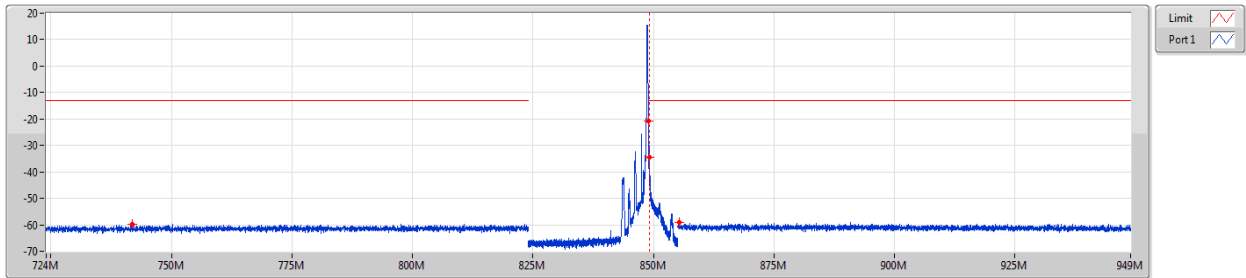
Band 5_LTE_3MHz_Nss1,16QAM_1TX
825.5MHz_16QAM_RB 15,#RB 0

CSE-TX-Sum



Band 5_LTE_3MHz_Nss1,16QAM_1TX
847.5MHz_16QAM_RB 1,#RB 14

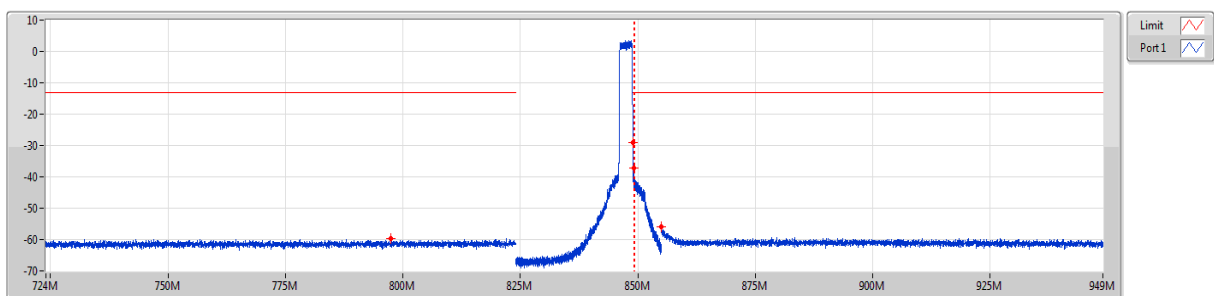
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	741.85M	-59.73	-13.00	-46.73	-	-
849M	849.1M	30k	100k	RMS	849M	-20.71	-13.00	-7.71	-	-
849.1M	855M	30k	100k	RMS	849.15M	-34.61	-13.00	-21.61	MBW 100k	-
855M	949M	100k	300k	RMS	855.35M	-59.00	-13.00	-46.00	-	-

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

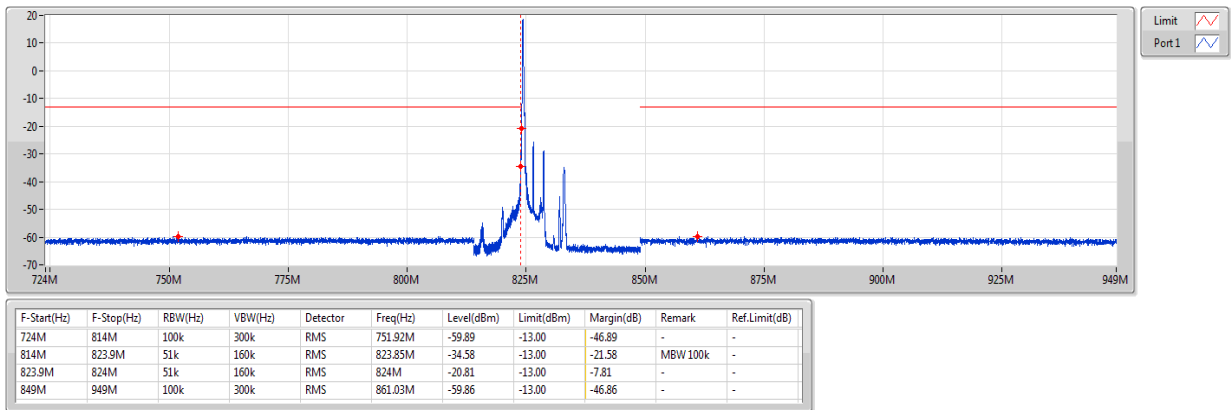
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	797.45M	-59.75	-13.00	-46.75	-	-
849M	849.1M	30k	100k	RMS	849M	-29.02	-13.00	-16.02	-	-
849.1M	855M	30k	100k	RMS	849.25M	-37.07	-13.00	-24.07	MBW 100k	-
855M	949M	100k	300k	RMS	855M	-55.98	-13.00	-42.98	-	-

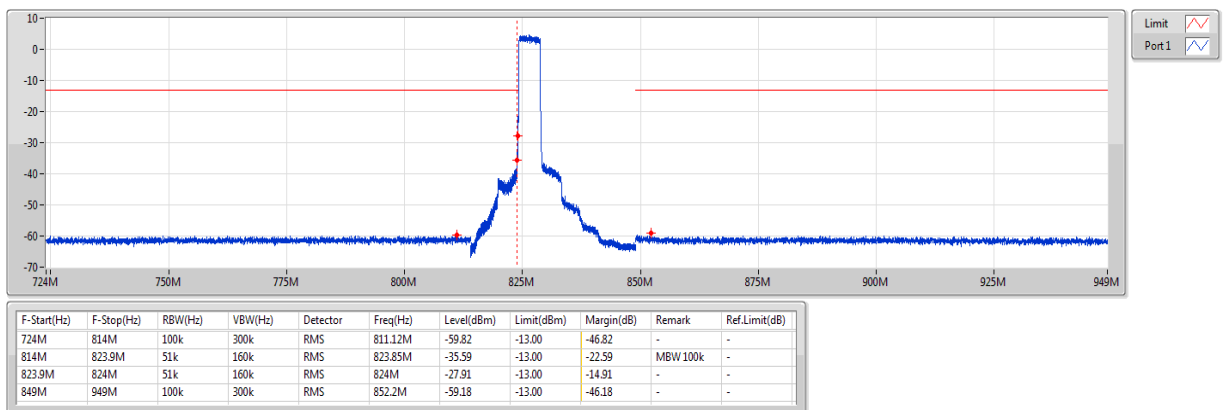
Band 5_LTE_5MHz_Nss1,QPSK_1TX
826.5MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



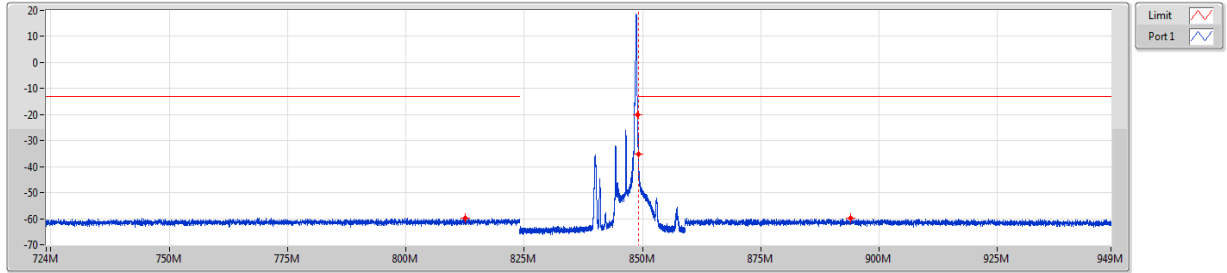
Band 5_LTE_5MHz_Nss1,QPSK_1TX
826.5MHz_QPSK_RB 25,#RB 0

CSE-TX-Sum



Band 5_LTE_5MHz_Nss1,QPSK_1TX
846.5MHz_QPSK_RB 1,#RB 24

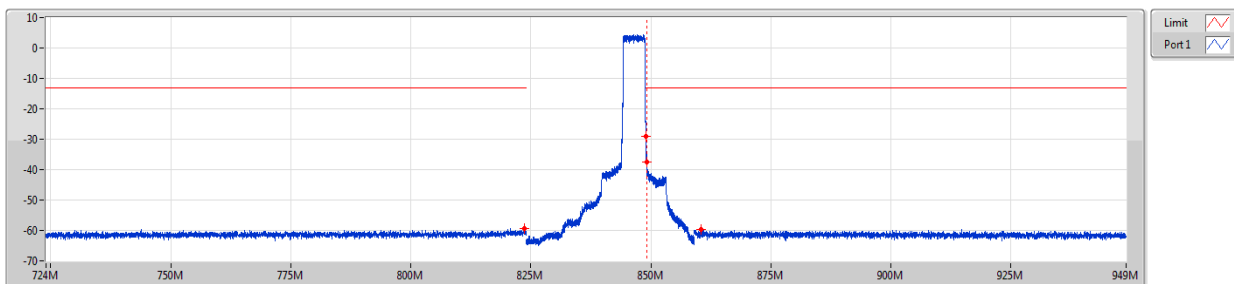
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	812.6M	-59.66	-13.00	-46.66	-	-
849M	849.1M	51k	160k	RMS	849M	-20.06	-13.00	-7.06	-	-
849.1M	859M	51k	160k	RMS	849.15M	-35.21	-13.00	-22.21	MBW 100k	-
859M	949M	100k	300k	RMS	894.03M	-59.73	-13.00	-46.73	-	-

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

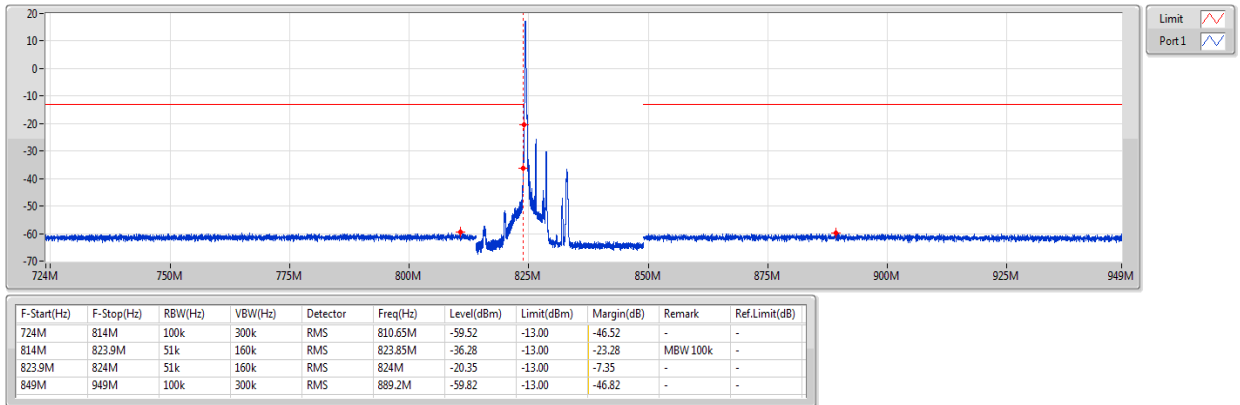
CSE-TX-Sum



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)
724M	824M	100k	300k	RMS	823.73M	-59.27	-13.00	-46.27	-	-
849M	849.1M	51k	160k	RMS	849M	-29.07	-13.00	-16.07	-	-
849.1M	859M	51k	160k	RMS	849.15M	-37.52	-13.00	-24.52	MBW 100k	-
859M	949M	100k	300k	RMS	860.46M	-59.76	-13.00	-46.76	-	-

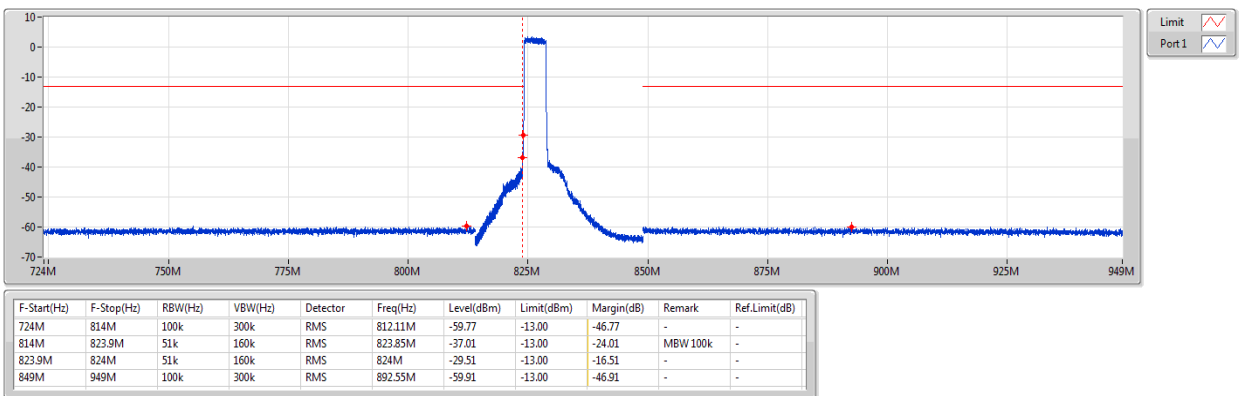
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826.5MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



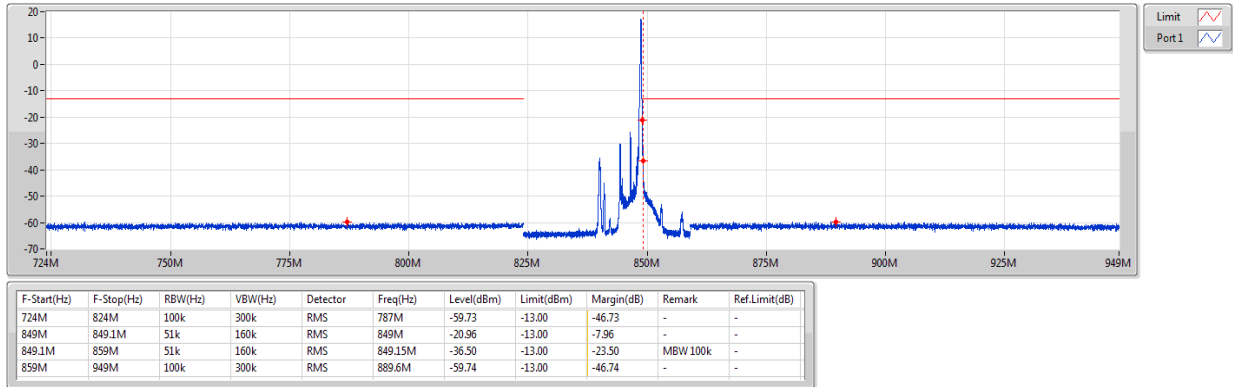
Band 5_LTE_5MHz_Nss1,16QAM_1TX
826.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



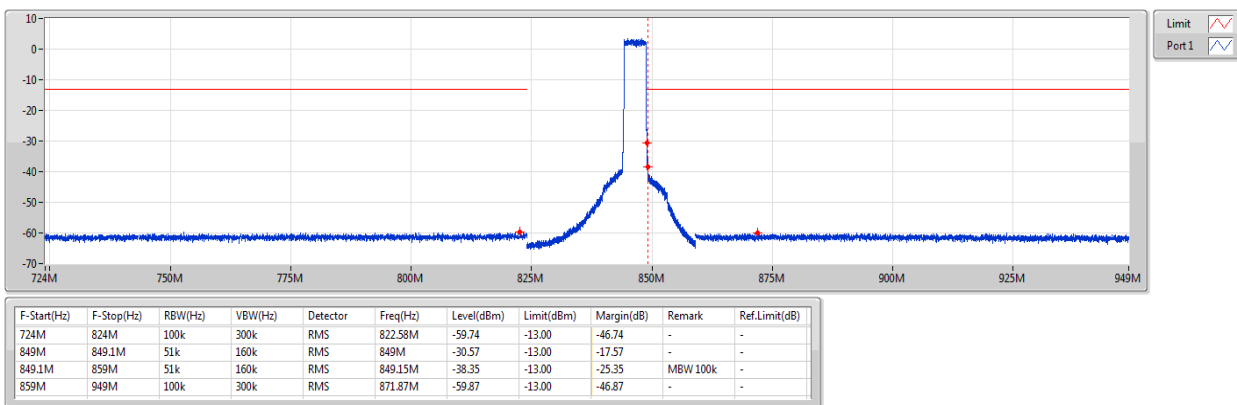
Band 5_LTE_5MHz_Nss1,16QAM_1TX
846.5MHz_16QAM_RB 1,#RB 24

CSE-TX-Sum



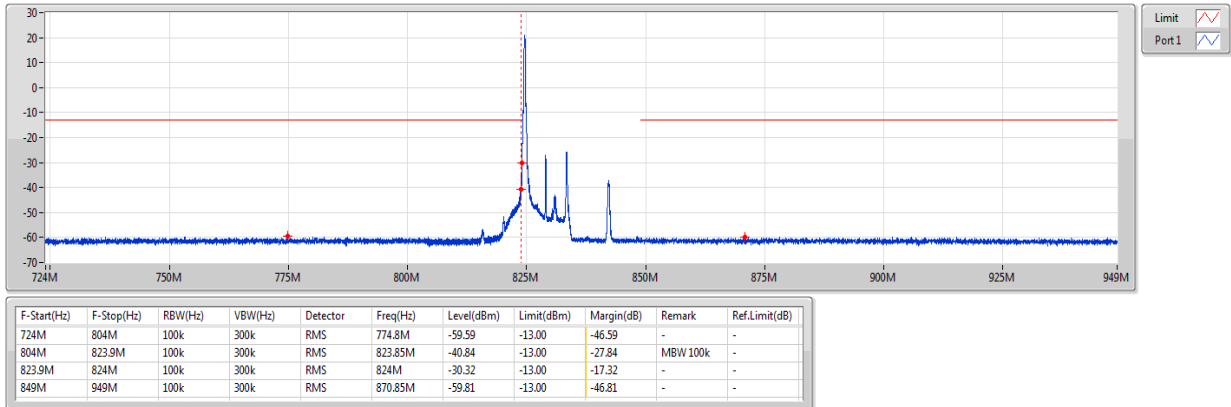
Band 5_LTE_5MHz_Nss1,16QAM_1TX
846.5MHz_16QAM_RB 25,#RB 0

CSE-TX-Sum



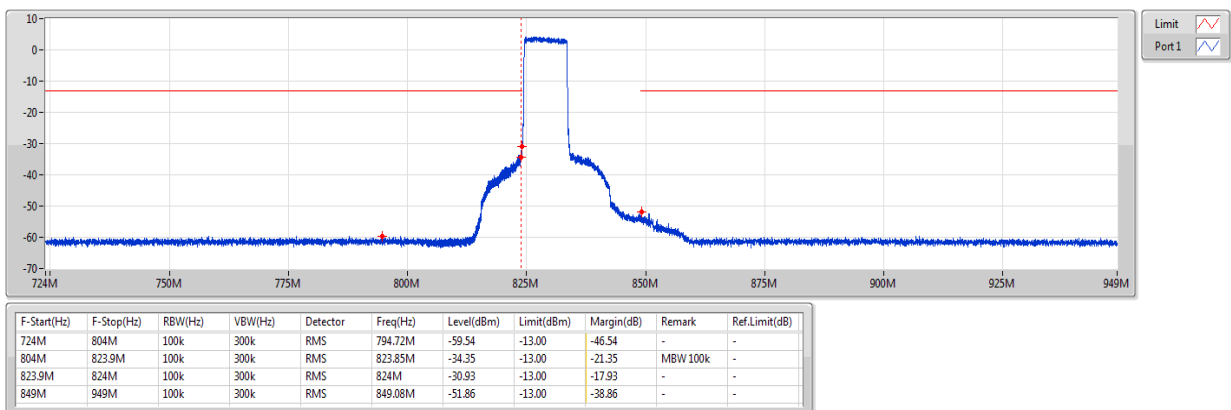
Band 5_LTE_10MHz_Nss1,QPSK_1TX
829MHz_QPSK_RB 1,#RB 0

CSE-TX-Sum



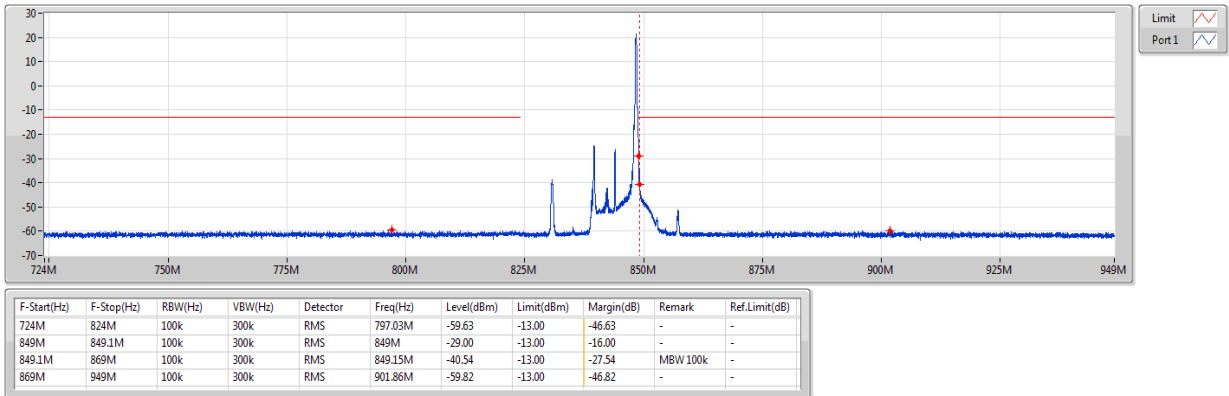
Band 5_LTE_10MHz_Nss1,QPSK_1TX
829MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



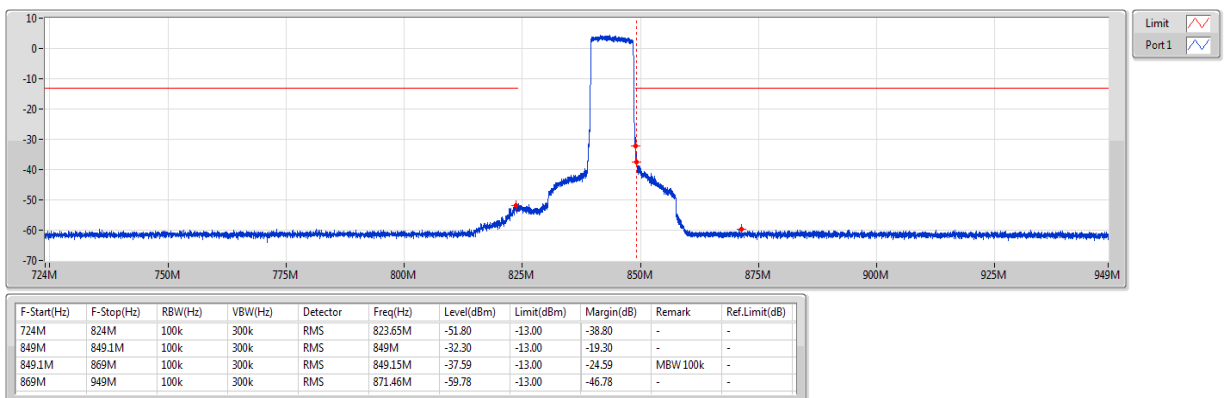
Band 5_LTE_10MHz_Nss1,QPSK_1TX
844MHz_QPSK_RB 1,#RB 49

CSE-TX-Sum



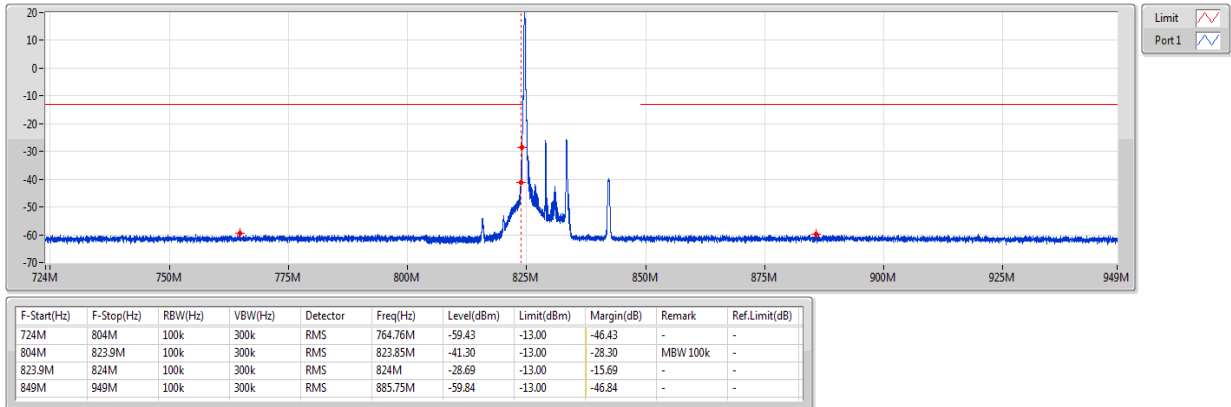
Band 5_LTE_10MHz_Nss1,QPSK_1TX
844MHz_QPSK_RB 50,#RB 0

CSE-TX-Sum



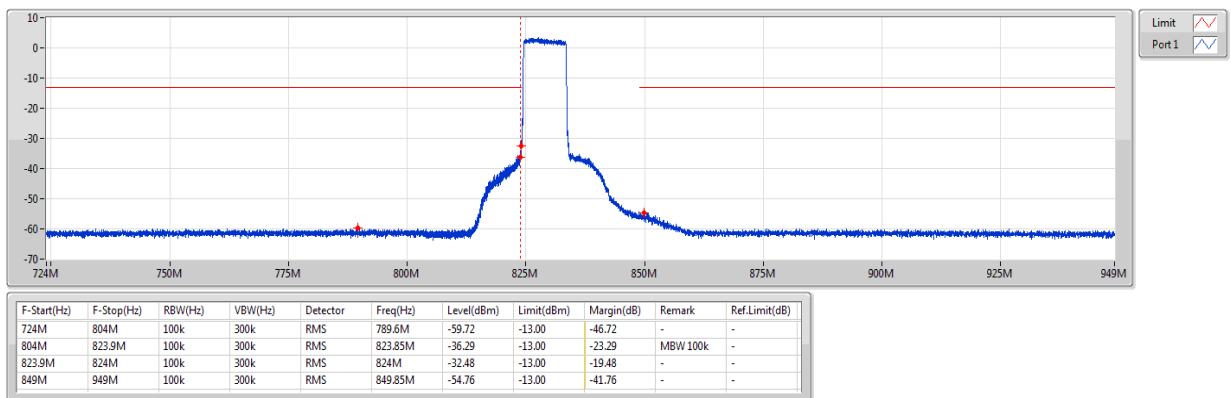
Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 1,#RB 0

CSE-TX-Sum



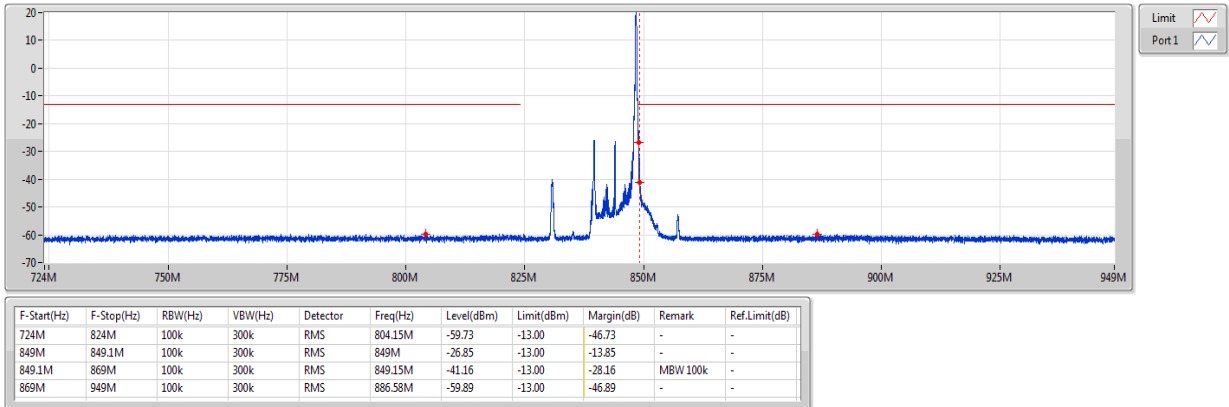
Band 5_LTE_10MHz_Nss1,16QAM_1TX
829MHz_16QAM_RB 50,#RB 0

CSE-TX-Sum



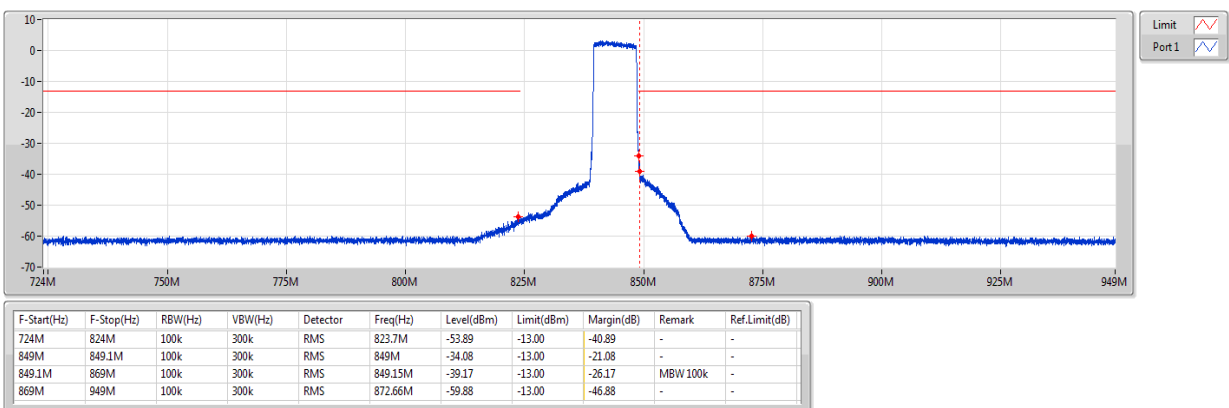
Band 5_LTE_10MHz_Nss1,16QAM_1TX
844MHz_16QAM_RB 1,#RB 49

CSE-TX-Sum



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

CSE-TX-Sum

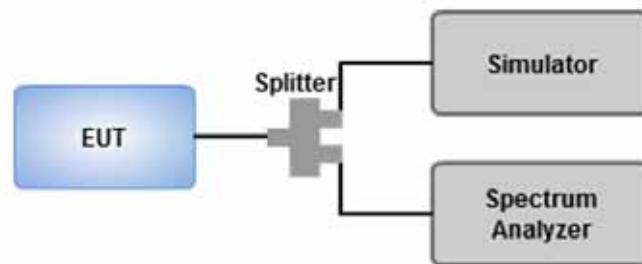


3.4 Occupied and 26 dB Bandwidth

3.4.1 Test Procedures

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

3.4.2 Test Setup



3.4.3 Test Result of Occupied and 26 dB Bandwidth

Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	1.241M	1.08M	1M08G7D	1.23M	1.078M
LTE_1.4MHz_Nss1,16QAM_1TX	1.239M	1.079M	1M08W7D	1.23M	1.077M
LTE_3MHz_Nss1,QPSK_1TX	2.91M	2.68M	2M68G7D	2.895M	2.678M
LTE_3MHz_Nss1,16QAM_1TX	2.903M	2.682M	2M68W7D	2.903M	2.677M
LTE_5MHz_Nss1,QPSK_1TX	4.913M	4.468M	4M47G7D	4.894M	4.458M
LTE_5MHz_Nss1,16QAM_1TX	4.888M	4.464M	4M46W7D	4.875M	4.459M
LTE_10MHz_Nss1,QPSK_1TX	9.675M	8.922M	8M92G7D	9.638M	8.91M
LTE_10MHz_Nss1,16QAM_1TX	9.6M	8.911M	8M91W7D	9.55M	8.911M

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

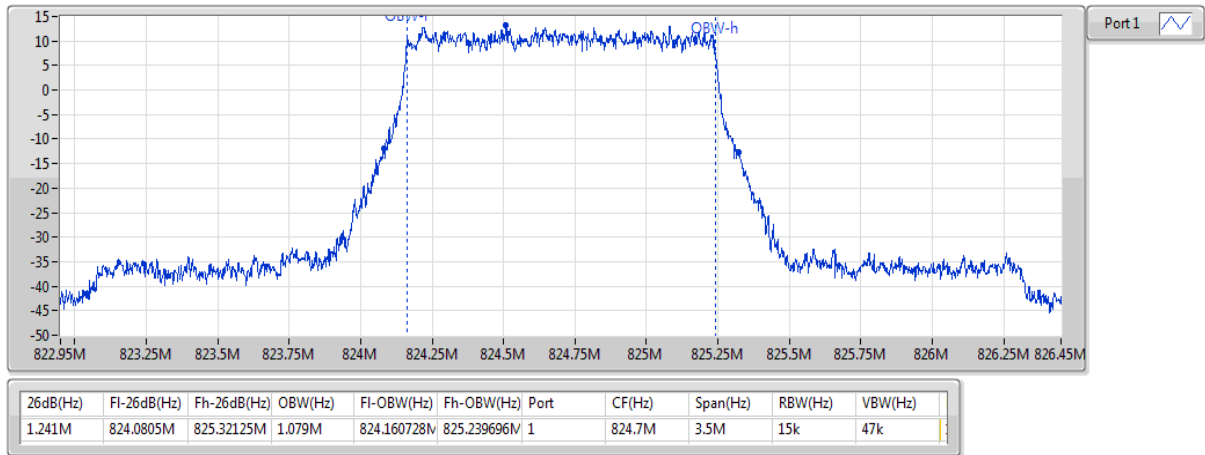
Result

Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-
824.7MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.241M	1.079M
836.5MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.23M	1.078M
848.3MHz_QPSK_RB 6,#RB 0	Pass	Inf	1.239M	1.08M
824.7MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.23M	1.078M
836.5MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.239M	1.077M
848.3MHz_16QAM_RB 6,#RB 0	Pass	Inf	1.236M	1.079M
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.895M	2.678M
836.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.903M	2.68M
847.5MHz_QPSK_RB 15,#RB 0	Pass	Inf	2.91M	2.68M
825.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.903M	2.677M
836.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.903M	2.677M
847.5MHz_16QAM_RB 15,#RB 0	Pass	Inf	2.903M	2.682M
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.9M	4.458M
836.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.913M	4.468M
846.5MHz_QPSK_RB 25,#RB 0	Pass	Inf	4.894M	4.463M
826.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.875M	4.459M
836.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.888M	4.464M
846.5MHz_16QAM_RB 25,#RB 0	Pass	Inf	4.875M	4.464M
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-
829MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.65M	8.922M
836.5MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.675M	8.91M
844MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.638M	8.916M
829MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.563M	8.911M
836.5MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.55M	8.911M
844MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.6M	8.911M

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

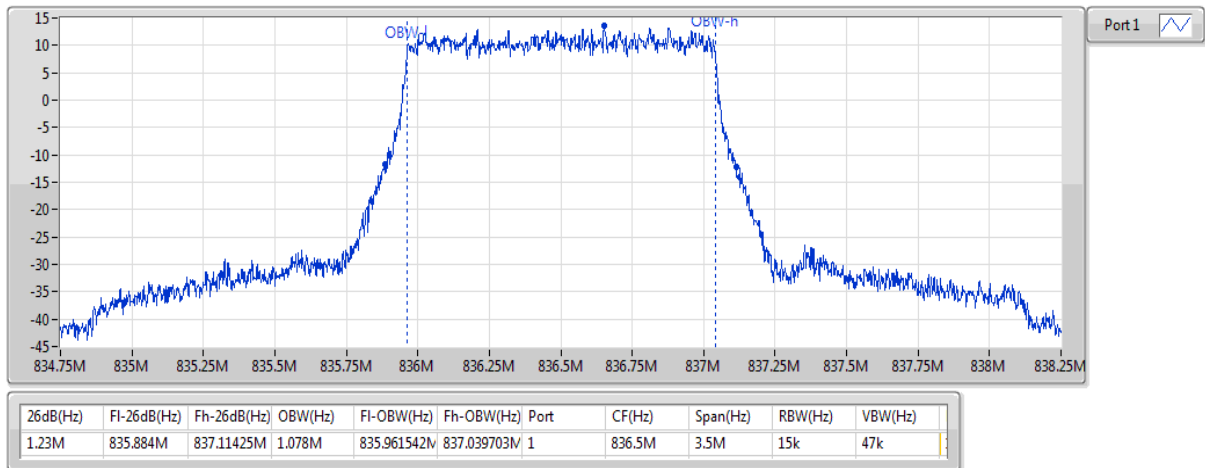
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
824.7MHz_QPSK_RB 6,#RB 0

EBW



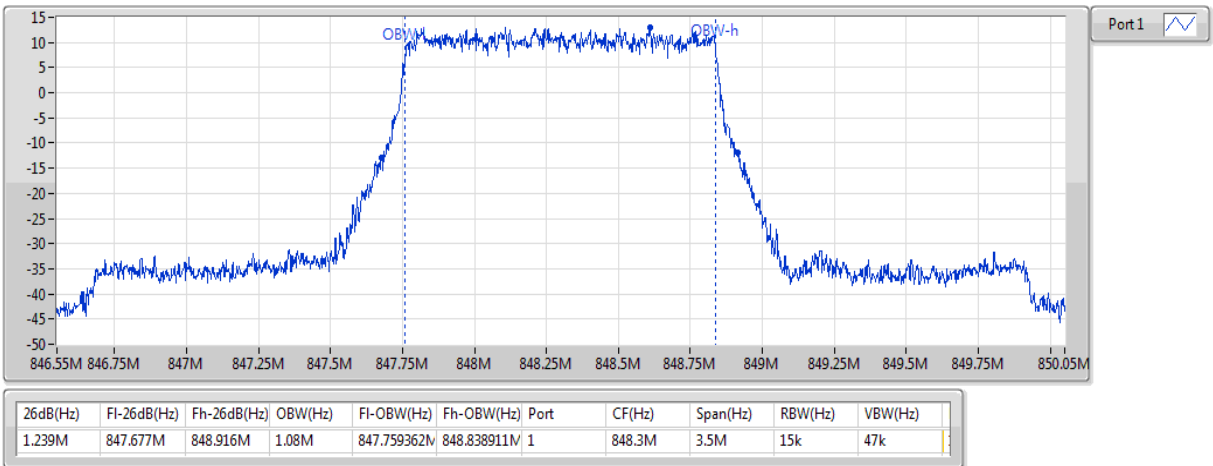
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 6,#RB 0

EBW



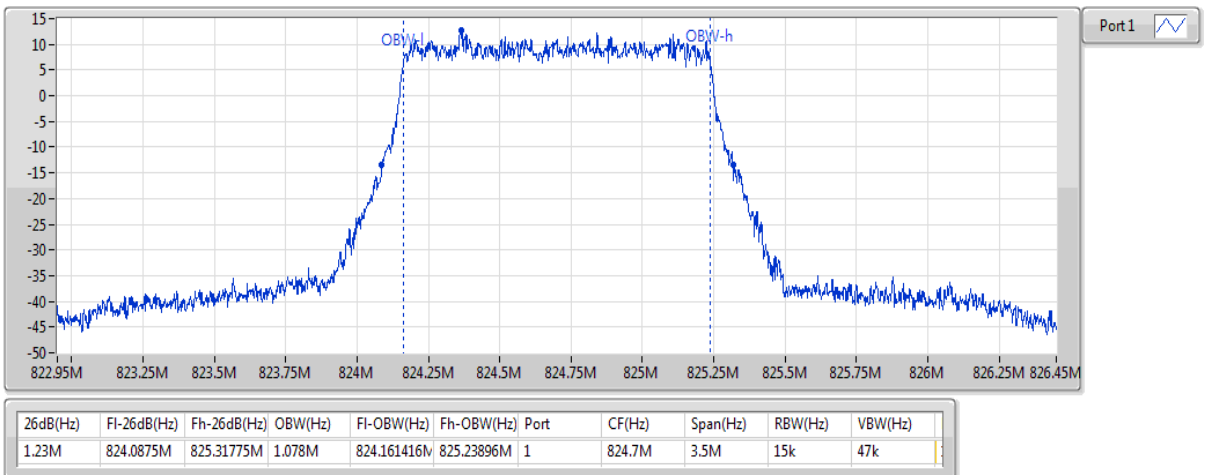
Band 5_LTE_1.4MHz_Nss1,QPSK_1TX
848.3MHz_QPSK_RB 6,#RB 0

EBW



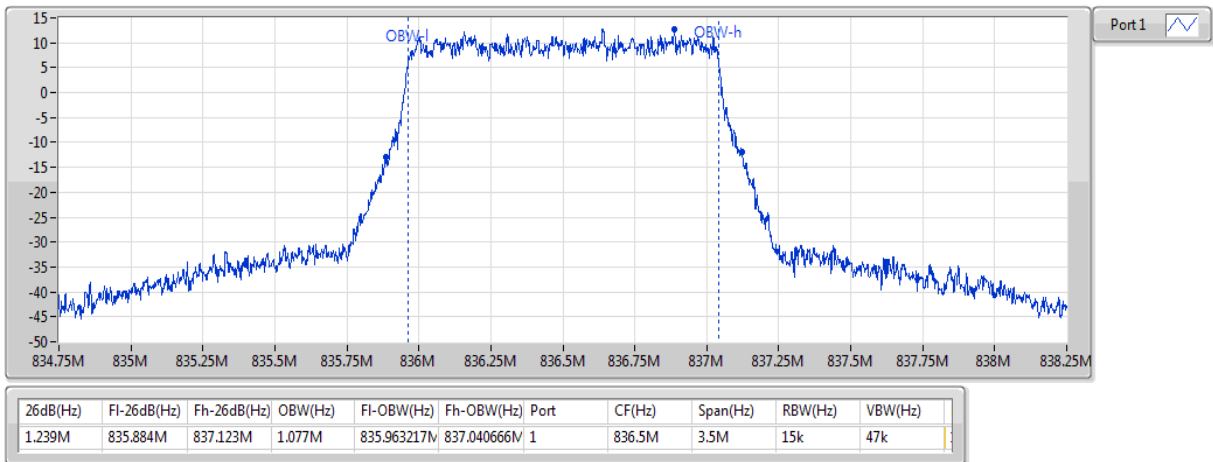
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
824.7MHz_16QAM_RB 6,#RB 0

EBW



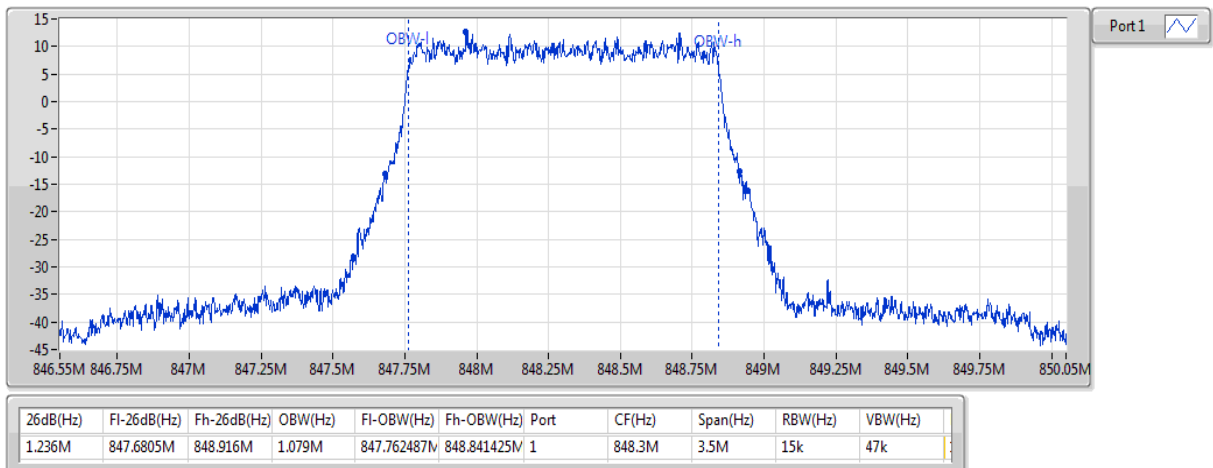
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 6,#RB 0

EBW



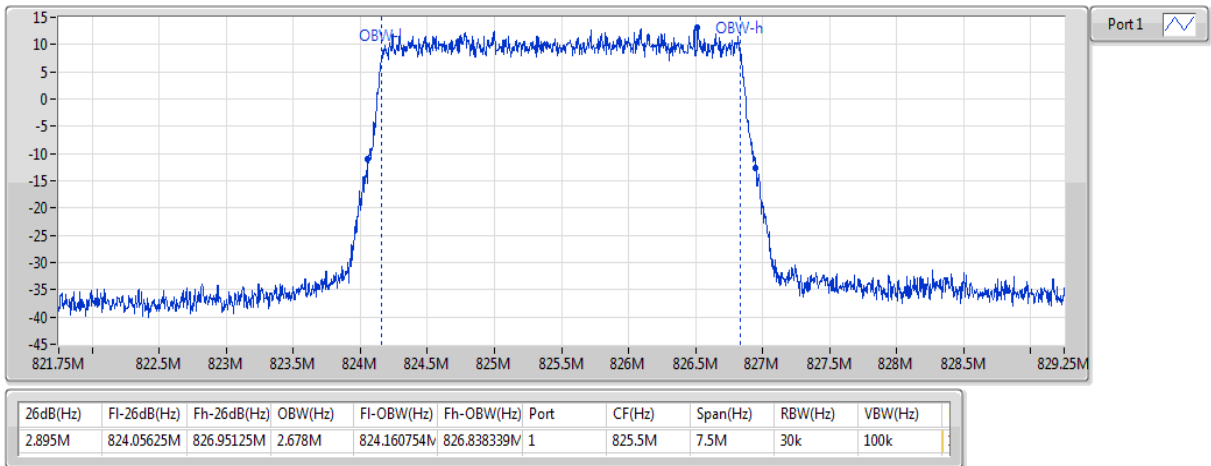
Band 5_LTE_1.4MHz_Nss1,16QAM_1TX
848.3MHz_16QAM_RB 6,#RB 0

EBW



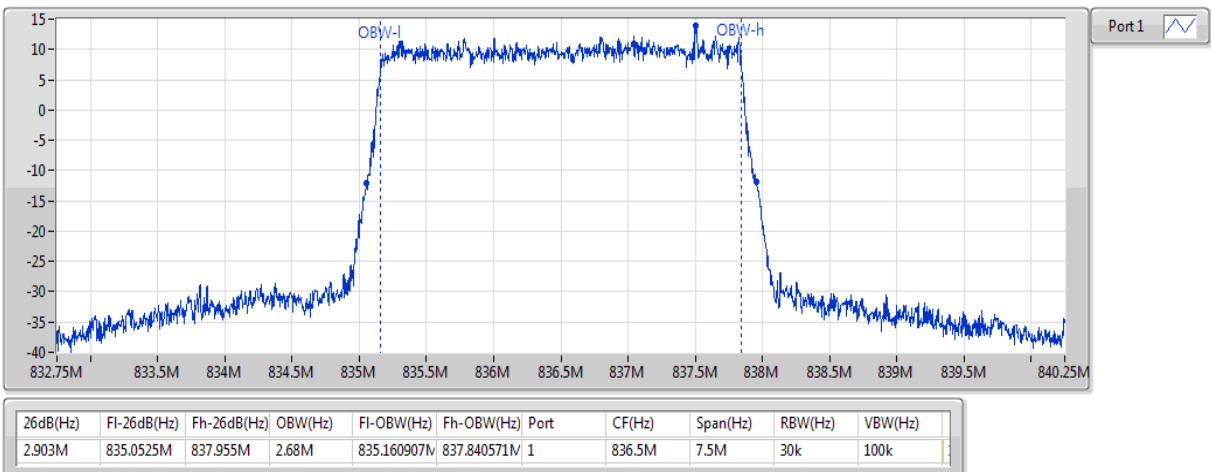
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 15,#RB 0

EBW



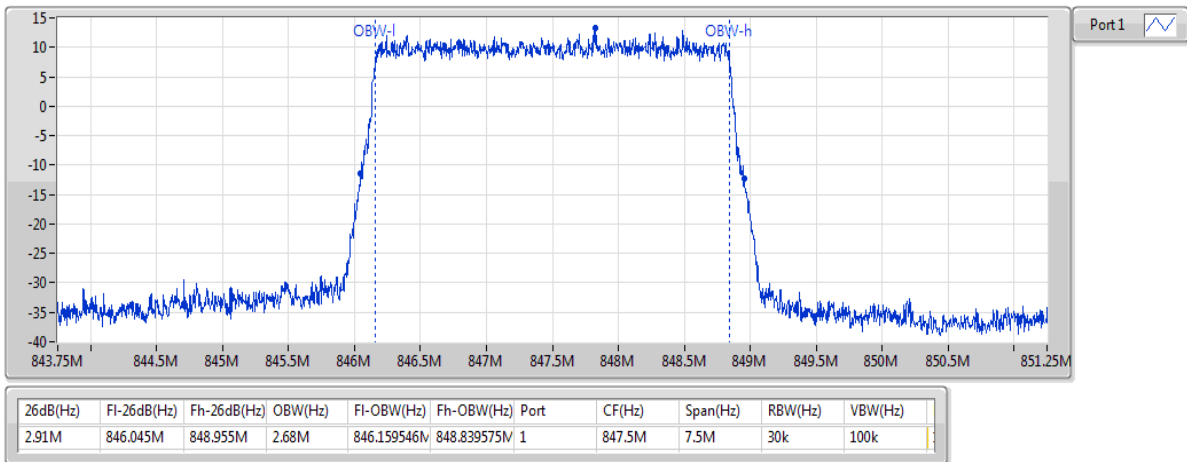
Band 5_LTE_3MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 15,#RB 0

EBW



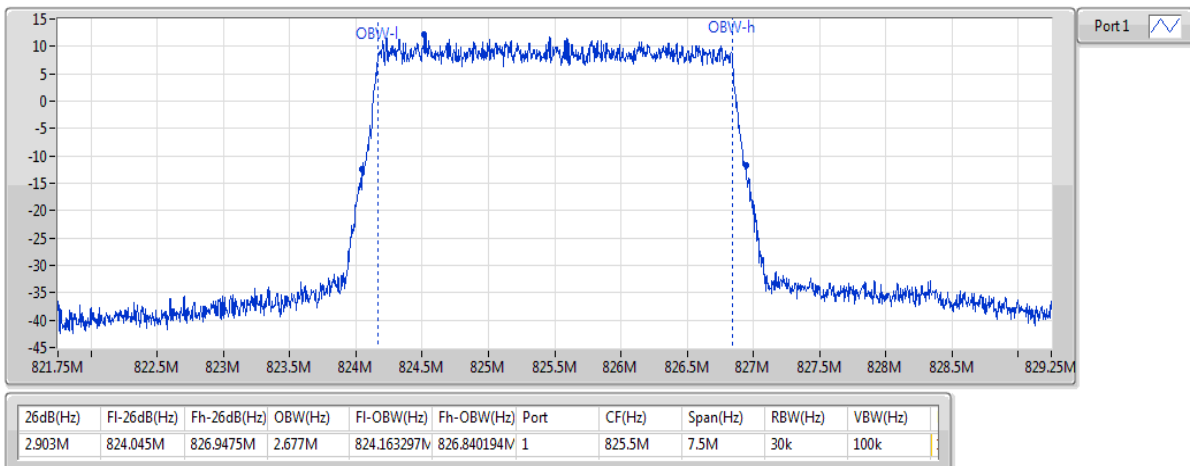
Band 5_LTE_3MHz_Nss1,QPSK_1TX
847.5MHz_QPSK_RB 15,#RB 0

EBW



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

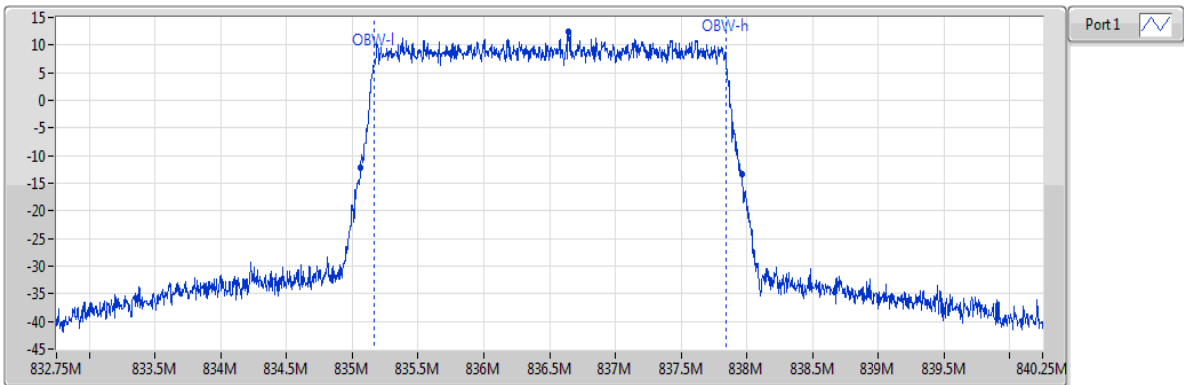
EBW



Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

836.5MHz_16QAM_RB 15,#RB 0

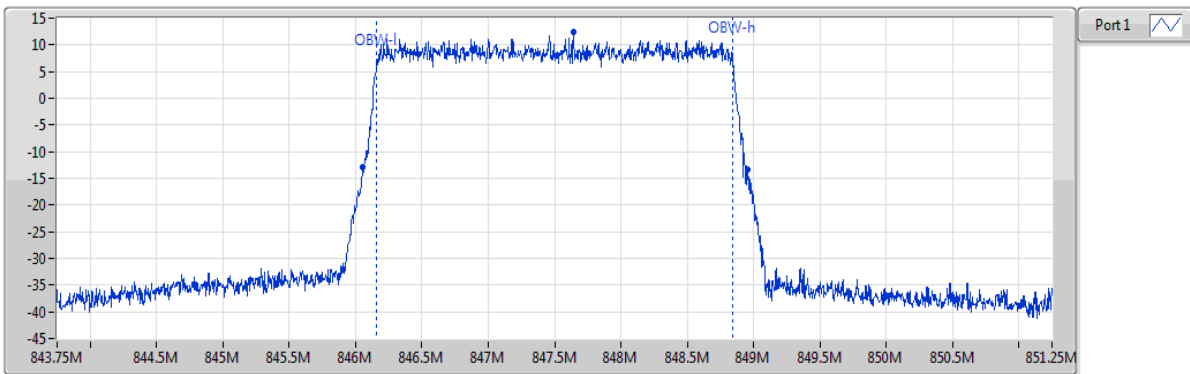


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.903M	835.06375M	837.96625M	2.677M	835.163242M	837.840623M	1	836.5M	7.5M	30k	100k

Band 5_LTE_3MHz_Nss1,16QAM_1TX

EBW

847.5MHz_16QAM_RB 15,#RB 0

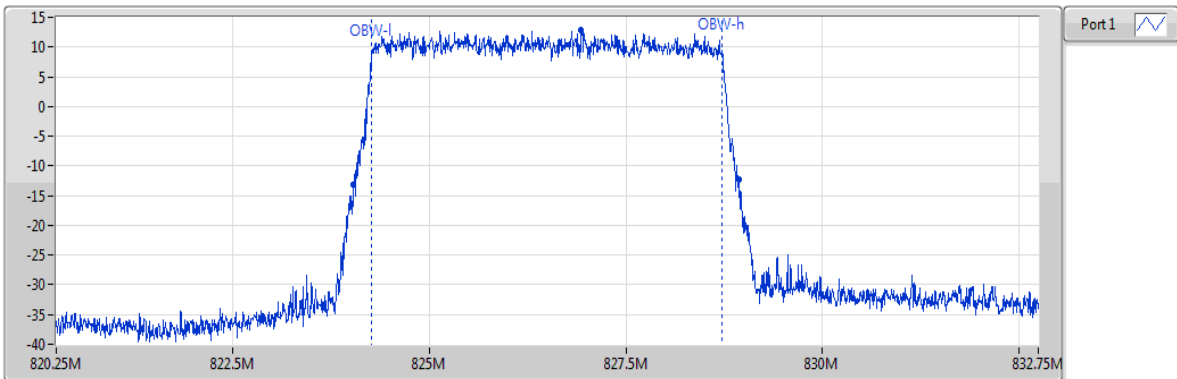


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
2.903M	846.05625M	848.95875M	2.682M	846.160481M	848.842221M	1	847.5M	7.5M	30k	100k

Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

826.5MHz_QPSK_RB 25,#RB 0

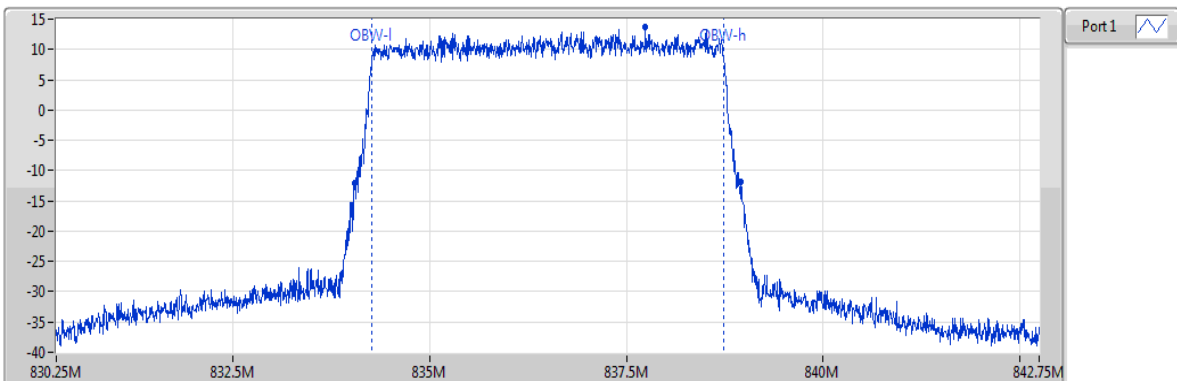


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.9M	824.0375M	828.9375M	4.458M	824.268295M	828.726689M	1	826.5M	12.5M	51k	160k

Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

836.5MHz_QPSK_RB 25,#RB 0

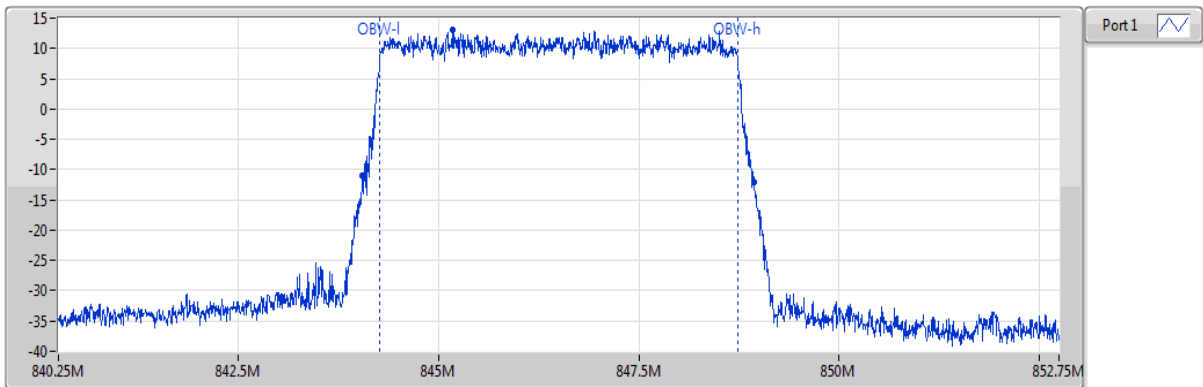


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.913M	834.04375M	838.95625M	4.468M	834.267772M	838.735595M	1	836.5M	12.5M	51k	160k

Band 5_LTE_5MHz_Nss1,QPSK_1TX

EBW

846.5MHz_QPSK_RB 25,#RB 0

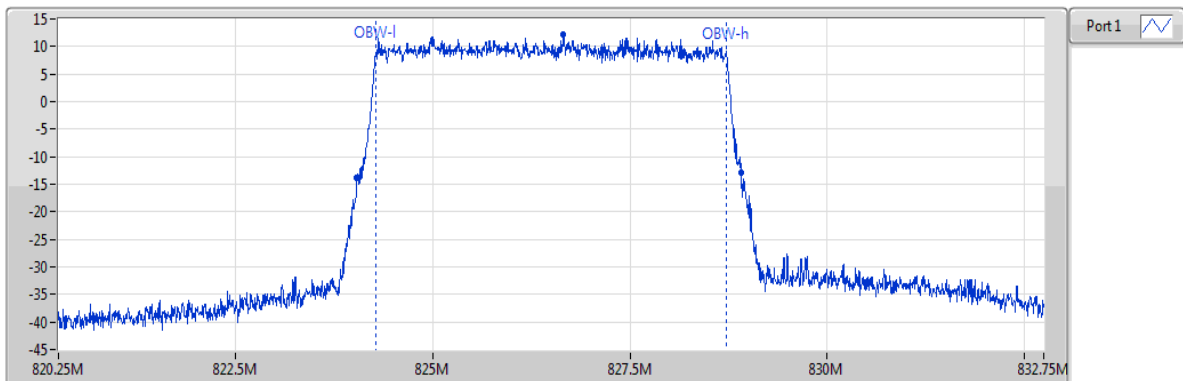


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.894M	844.05M	848.94375M	4.463M	844.269142M	848.731682M	1	846.5M	12.5M	51k	160k

Band 5_LTE_5MHz_Nss1,16QAM_1TX

EBW

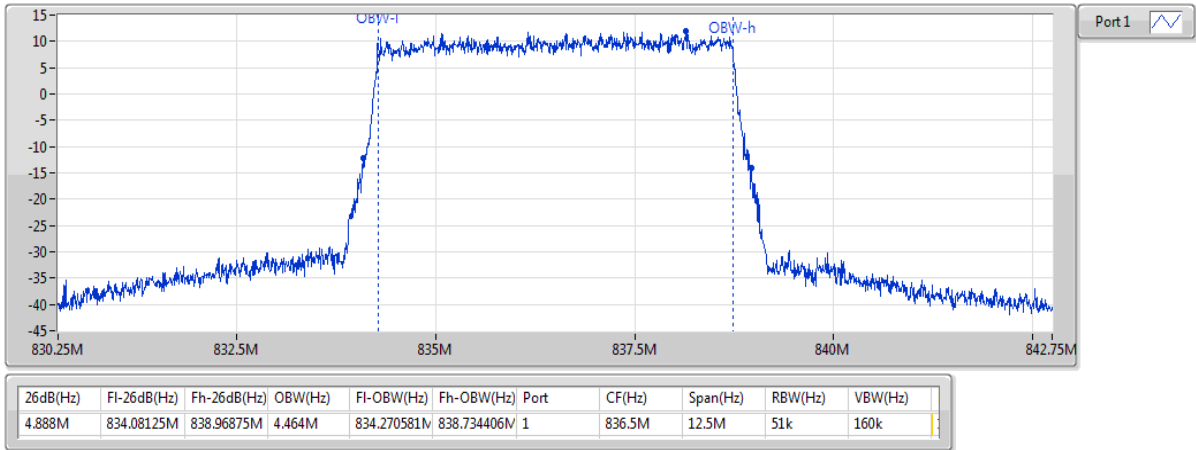
826.5MHz_16QAM_RB 25,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
4.875M	824.0375M	828.9125M	4.459M	824.269555M	828.728433M	1	826.5M	12.5M	51k	160k

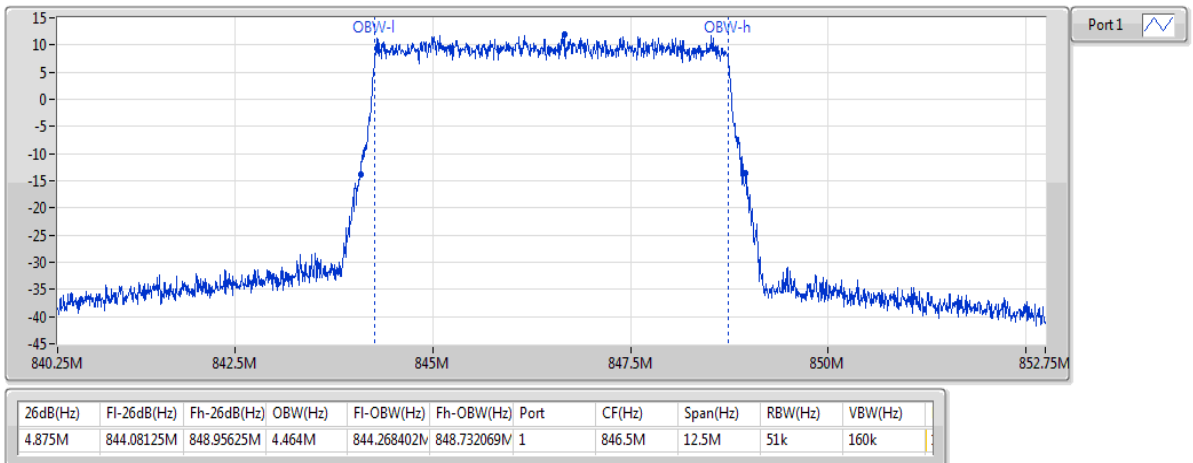
Band 5_LTE_5MHz_Nss1,16QAM_1TX
836.5MHz_16QAM_RB 25,#RB 0

EBW



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

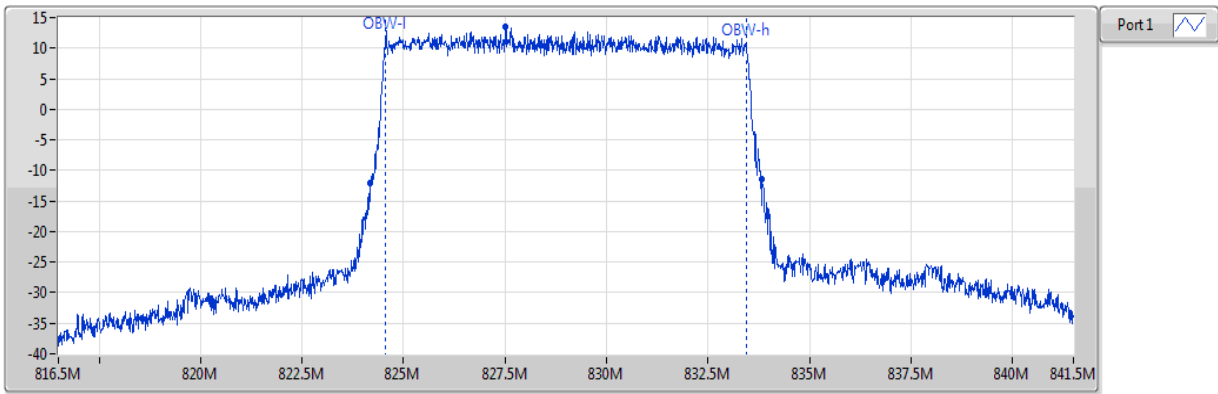
EBW



Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

829MHz_QPSK_RB 50,#RB 0

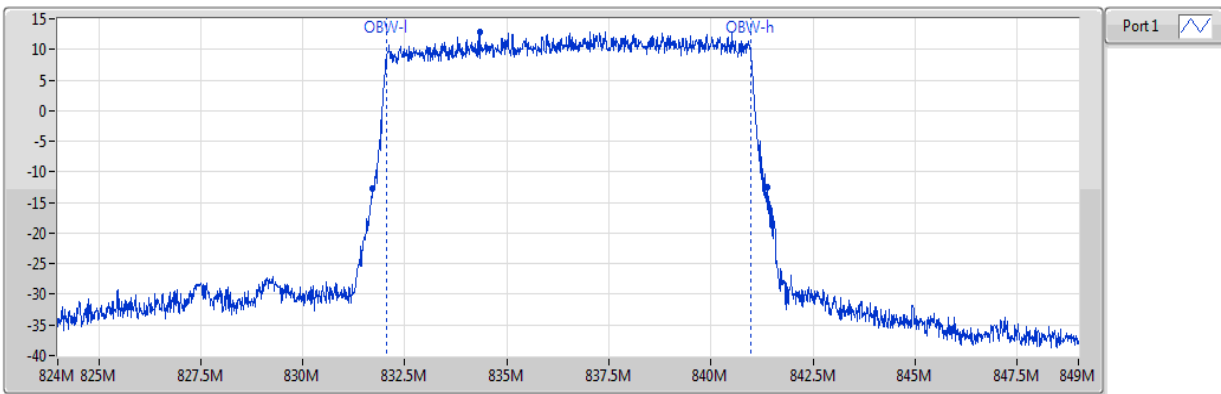


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.65M	824.1875M	833.8375M	8.922M	824.539041M	833.460857M	1	829M	25M	100k	300k

Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

836.5MHz_QPSK_RB 50,#RB 0

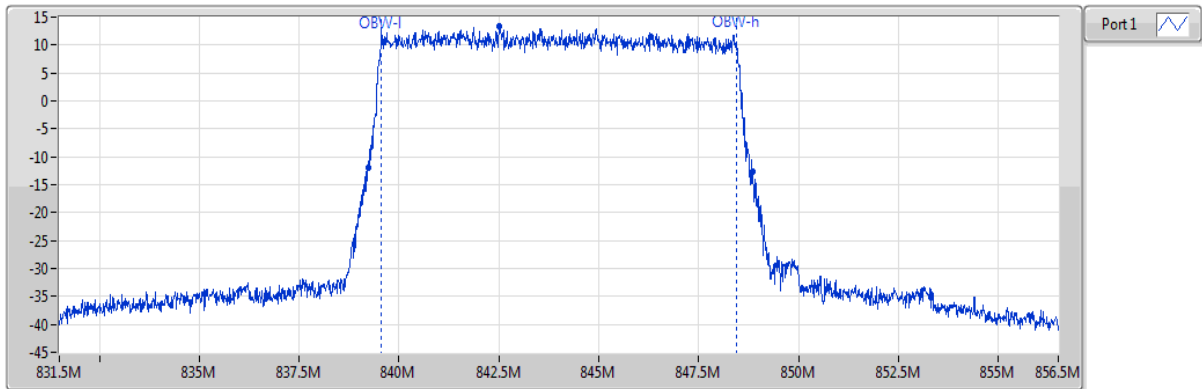


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.675M	831.7125M	841.3875M	8.91M	832.060968M	840.971256M	1	836.5M	25M	100k	300k

Band 5_LTE_10MHz_Nss1,QPSK_1TX

EBW

844MHz_QPSK_RB 50,#RB 0

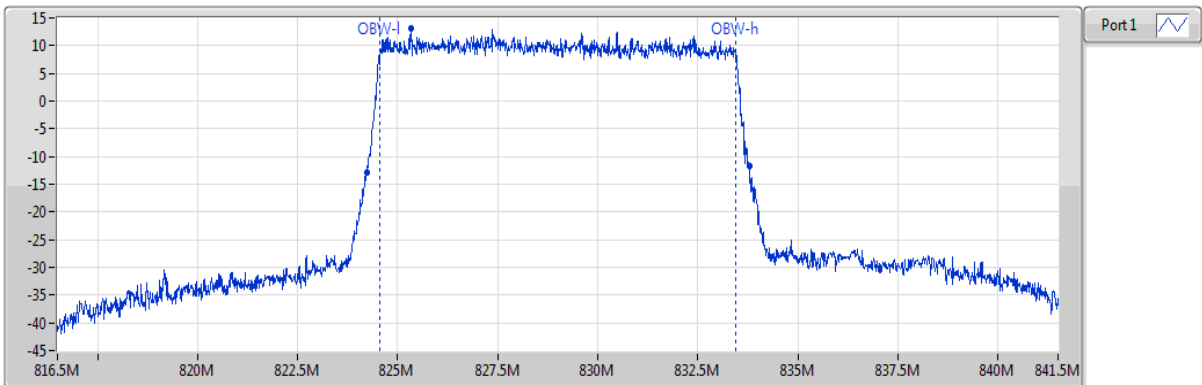


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.638M	839.225M	848.8625M	8.916M	839.541779M	848.458182M	1	844M	25M	100k	300k

Band 5_LTE_10MHz_Nss1,16QAM_1TX

EBW

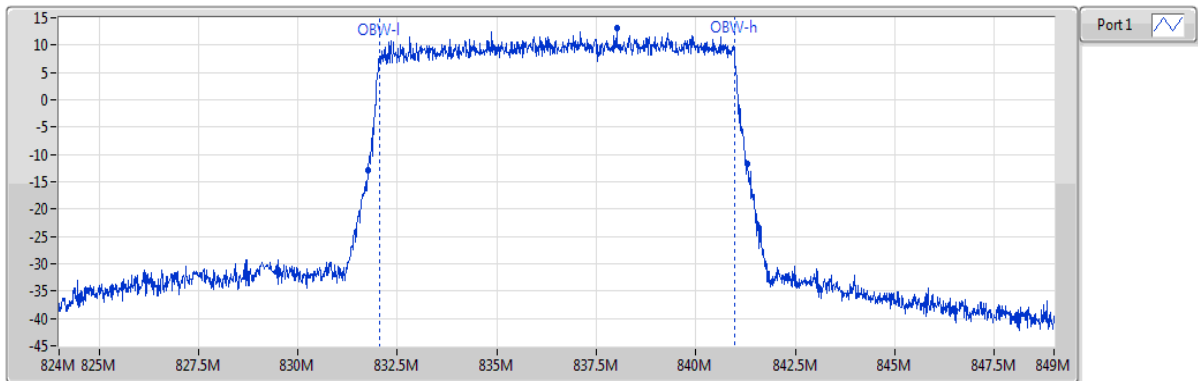
829MHz_16QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.563M	824.225M	833.7875M	8.911M	824.542595M	833.453711M	1	829M	25M	100k	300k

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

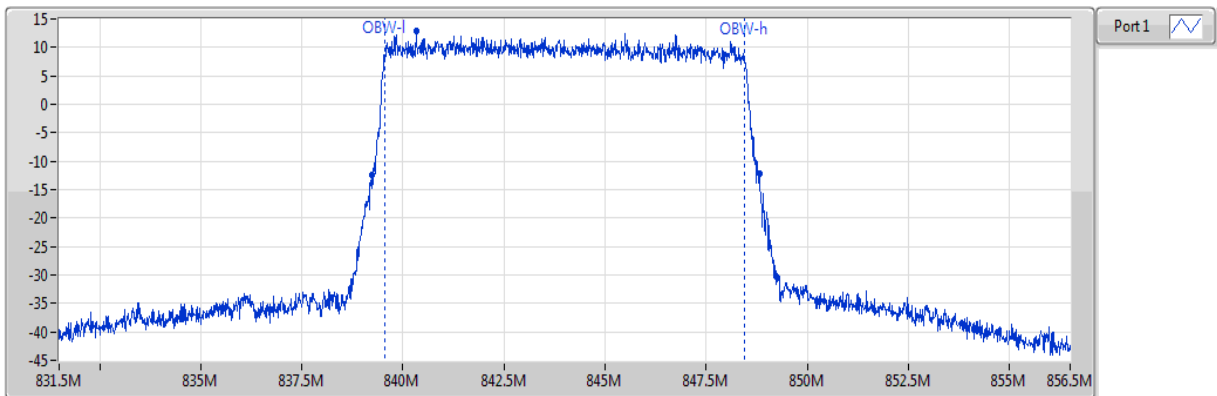
EBW



26dB(Hz)	F1-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	F1-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.55M	831.75M	841.3M	8.911M	832.056242M	840.967152M	1	836.5M	25M	100k	300k

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

EBW



26dB(Hz)	F1-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	F1-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.6M	839.225M	848.825M	8.911M	839.542748M	848.453522M	1	844M	25M	100k	300k

3.5 Peak to Average Ratio

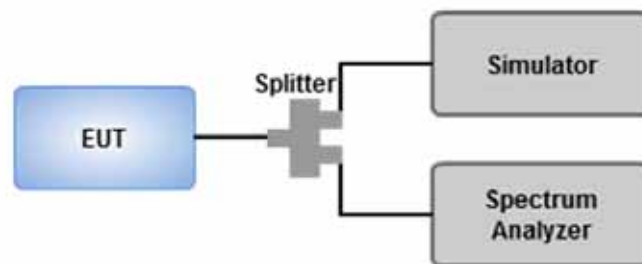
3.5.1 Limit of Peak to Average Ratio

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

3.5.2 Test Procedures

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

3.5.3 Test Setup



3.5.4 Test Result of Peak to Average Ratio

Summary

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5	-	-	-	-	-
LTE_1.4MHz_Nss1,QPSK_1TX	Pass	836.5	13.00	5.77	1
LTE_1.4MHz_Nss1,16QAM_1TX	Pass	836.5	13.00	6.44	1
LTE_3MHz_Nss1,QPSK_1TX	Pass	836.5	13.00	5.81	1
LTE_3MHz_Nss1,16QAM_1TX	Pass	836.5	13.00	6.57	1
LTE_5MHz_Nss1,QPSK_1TX	Pass	836.5	13.00	5.70	1
LTE_5MHz_Nss1,16QAM_1TX	Pass	836.5	13.00	6.40	1
LTE_10MHz_Nss1,QPSK_1TX	Pass	829	13.00	5.75	1
LTE_10MHz_Nss1,16QAM_1TX	Pass	829	13.00	6.41	1

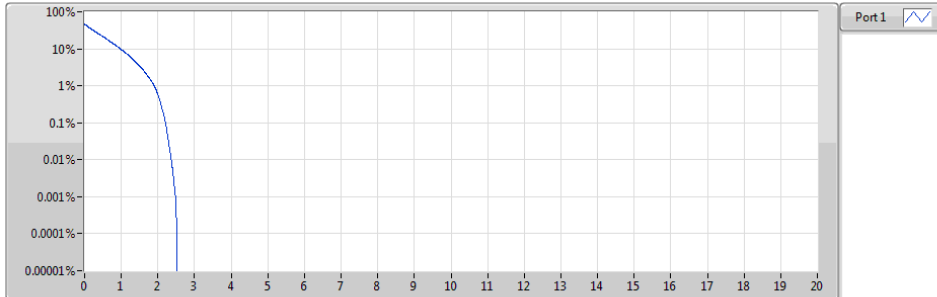
Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 5_LTE_1.4MHz_Nss1_1TX	-	-	-	-	-
824.7MHz_QPSK_RB 6,#RB 0	Pass	824.7	13.00	5.51	1
836.5MHz_QPSK_RB 6,#RB 0	Pass	836.5	13.00	5.77	1
848.3MHz_QPSK_RB 6,#RB 0	Pass	848.3	13.00	5.54	1
824.7MHz_16QAM_RB 6,#RB 0	Pass	824.7	13.00	6.19	1
836.5MHz_16QAM_RB 6,#RB 0	Pass	836.5	13.00	6.44	1
848.3MHz_16QAM_RB 6,#RB 0	Pass	848.3	13.00	6.26	1
Band 5_LTE_3MHz_Nss1_1TX	-	-	-	-	-
825.5MHz_QPSK_RB 15,#RB 0	Pass	825.5	13.00	5.53	1
836.5MHz_QPSK_RB 15,#RB 0	Pass	836.5	13.00	5.81	1
847.5MHz_QPSK_RB 15,#RB 0	Pass	847.5	13.00	5.58	1
825.5MHz_16QAM_RB 15,#RB 0	Pass	825.5	13.00	6.30	1
836.5MHz_16QAM_RB 15,#RB 0	Pass	836.5	13.00	6.57	1
847.5MHz_16QAM_RB 15,#RB 0	Pass	847.5	13.00	6.39	1
Band 5_LTE_5MHz_Nss1_1TX	-	-	-	-	-
826.5MHz_QPSK_RB 25,#RB 0	Pass	826.5	13.00	5.51	1
836.5MHz_QPSK_RB 25,#RB 0	Pass	836.5	13.00	5.70	1
846.5MHz_QPSK_RB 25,#RB 0	Pass	846.5	13.00	5.53	1
826.5MHz_16QAM_RB 25,#RB 0	Pass	826.5	13.00	6.21	1
836.5MHz_16QAM_RB 25,#RB 0	Pass	836.5	13.00	6.40	1
846.5MHz_16QAM_RB 25,#RB 0	Pass	846.5	13.00	6.25	1
Band 5_LTE_10MHz_Nss1_1TX	-	-	-	-	-
829MHz_QPSK_RB 50,#RB 0	Pass	829	13.00	5.75	1
836.5MHz_QPSK_RB 50,#RB 0	Pass	836.5	13.00	5.69	1
844MHz_QPSK_RB 50,#RB 0	Pass	844	13.00	5.58	1
829MHz_16QAM_RB 50,#RB 0	Pass	829	13.00	6.41	1
836.5MHz_16QAM_RB 50,#RB 0	Pass	836.5	13.00	6.36	1
844MHz_16QAM_RB 50,#RB 0	Pass	844	13.00	6.25	1

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

824.7MHz_QPSK_RB 6,#RB 0

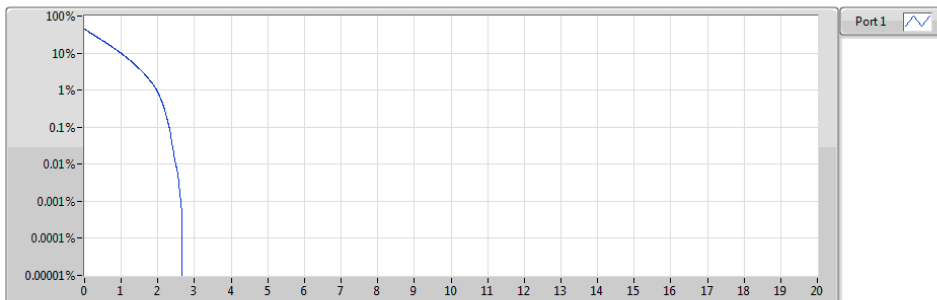


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
824.7	20M	5.51	-7.49	13.00	1

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

836.5MHz_QPSK_RB 6,#RB 0

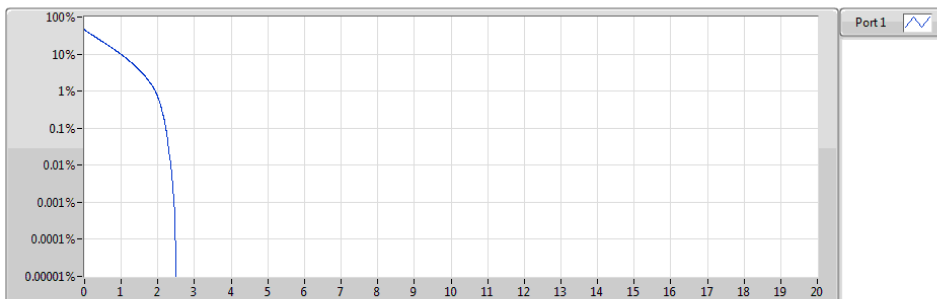


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	5.77	-7.23	13.00	1

Band 5_LTE_1.4MHz_Nss1,QPSK_1TX

PAR

848.3MHz_QPSK_RB 6,#RB 0

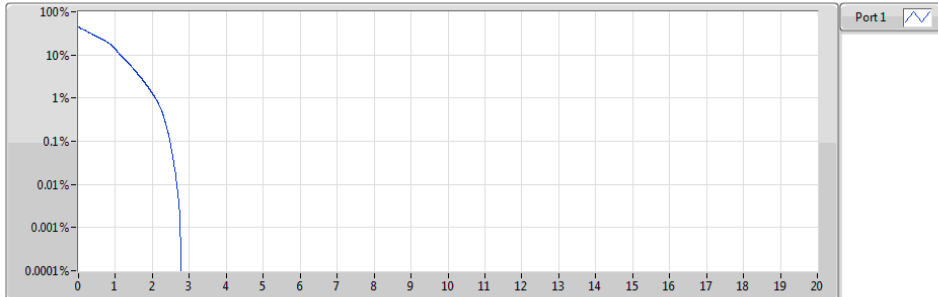


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
848.3	20M	5.54	-7.46	13.00	1

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

824.7MHz_16QAM_RB 6,#RB 0

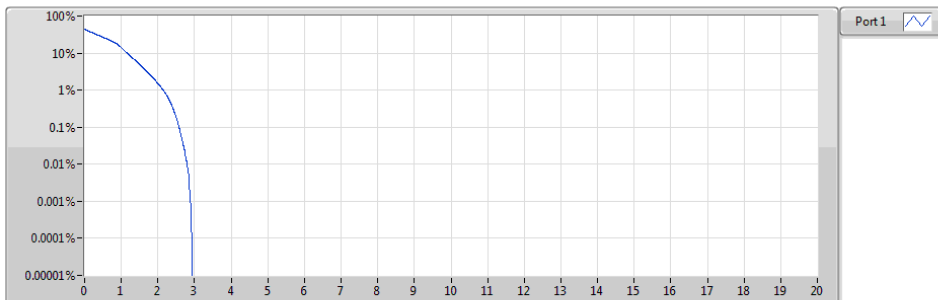


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
824.7	20M	6.19	-6.81	13.00	1

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

836.5MHz_16QAM_RB 6,#RB 0

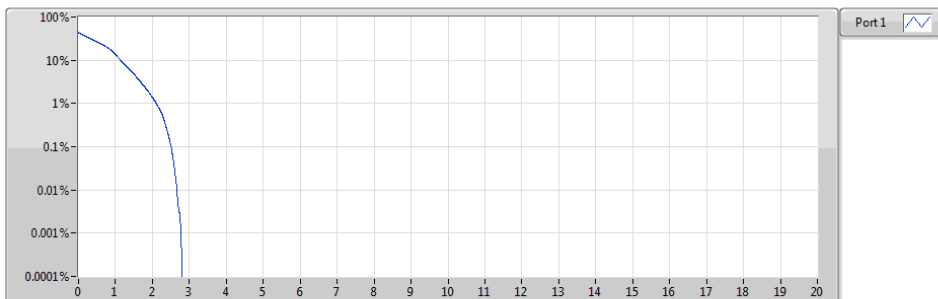


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	6.44	-6.56	13.00	1

Band 5_LTE_1.4MHz_Nss1,16QAM_1TX

PAR

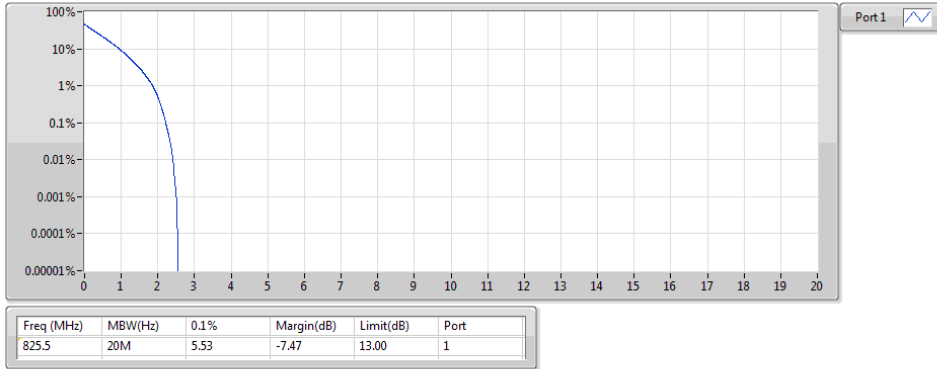
848.3MHz_16QAM_RB 6,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
848.3	20M	6.26	-6.74	13.00	1

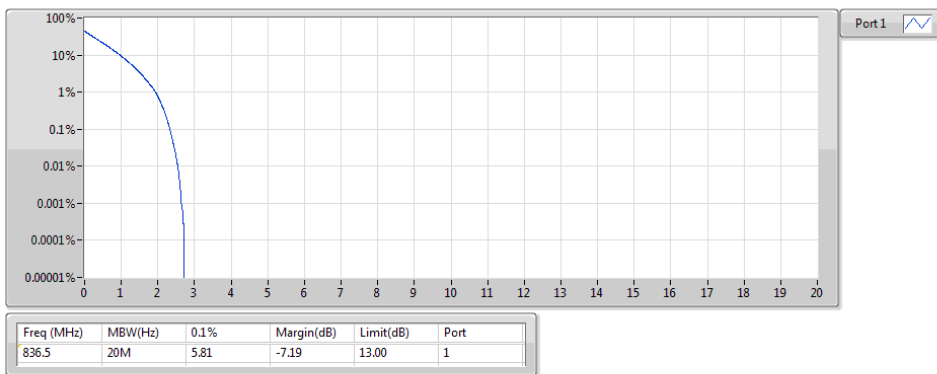
Band 5_LTE_3MHz_Nss1,QPSK_1TX
825.5MHz_QPSK_RB 15,#RB 0

PAR



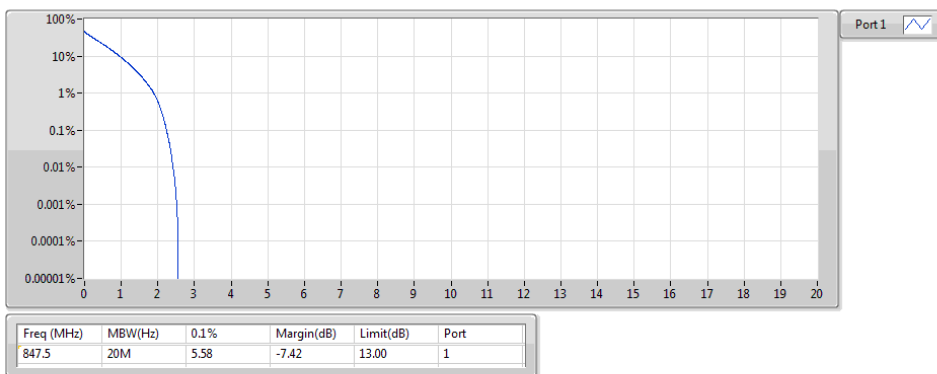
Band 5_LTE_3MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 15,#RB 0

PAR



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

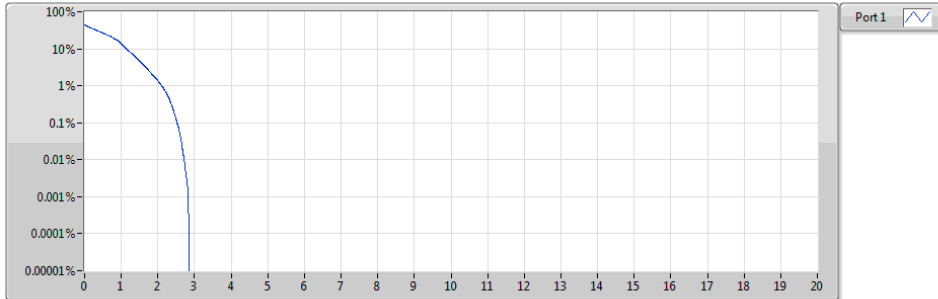
PAR



Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

825.5MHz_16QAM_RB 15,#RB 0

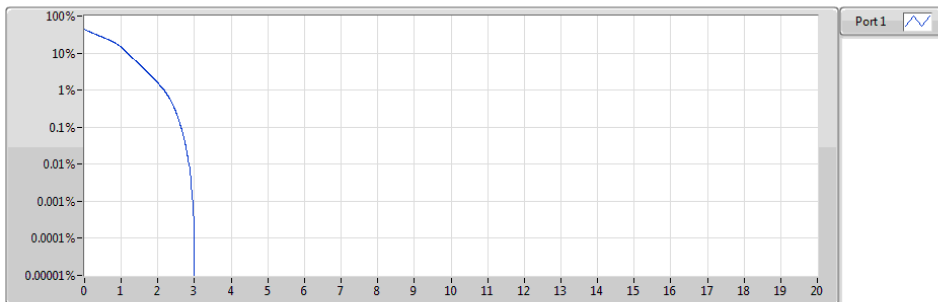


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
825.5	20M	6.30	-6.70	13.00	1

Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

836.5MHz_16QAM_RB 15,#RB 0

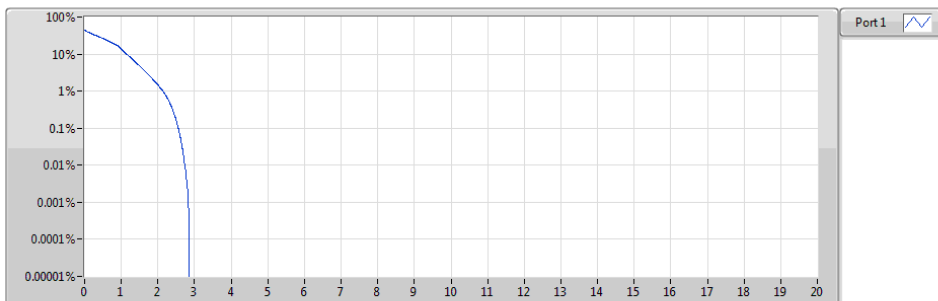


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	6.57	-6.43	13.00	1

Band 5_LTE_3MHz_Nss1,16QAM_1TX

PAR

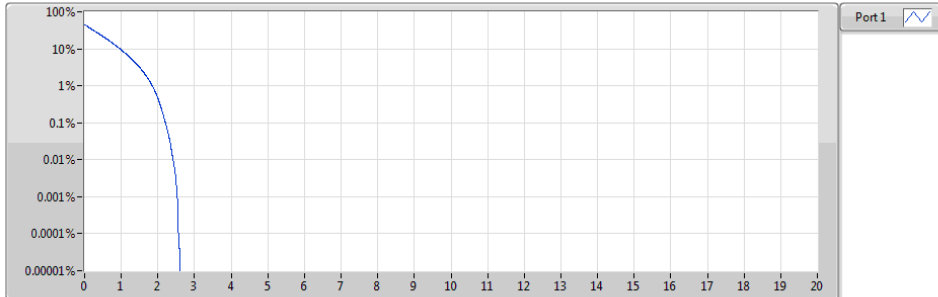
847.5MHz_16QAM_RB 15,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
847.5	20M	6.39	-6.61	13.00	1

Band 5_LTE_5MHz_Nss1,QPSK_1TX
826.5MHz_QPSK_RB 25,#RB 0

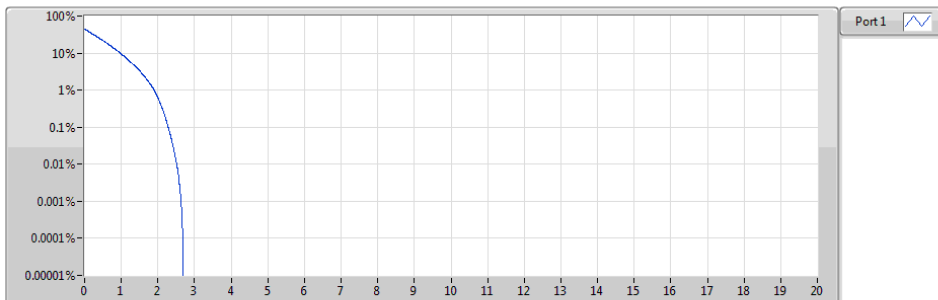
PAR



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
826.5	20M	5.51	-7.49	13.00	1

Band 5_LTE_5MHz_Nss1,QPSK_1TX
836.5MHz_QPSK_RB 25,#RB 0

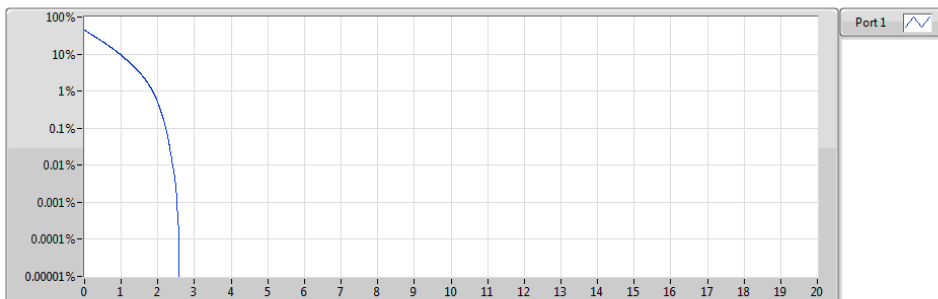
PAR



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	5.70	-7.30	13.00	1

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

PAR

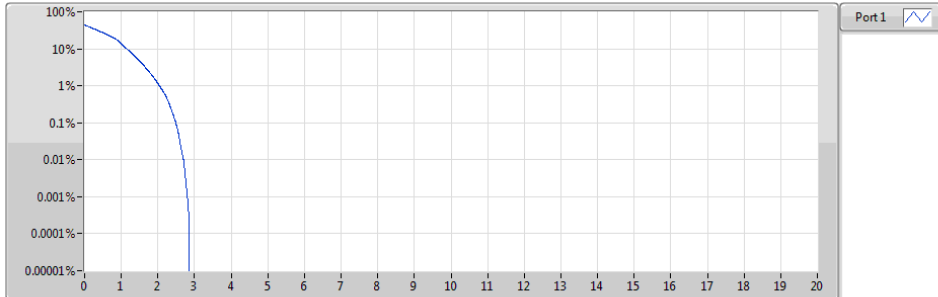


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
846.5	20M	5.53	-7.47	13.00	1

Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

826.5MHz_16QAM_RB 25,#RB 0

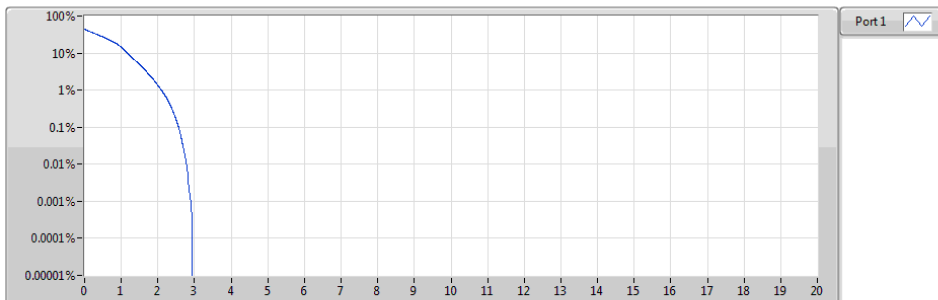


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
826.5	20M	6.21	-6.79	13.00	1

Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

836.5MHz_16QAM_RB 25,#RB 0

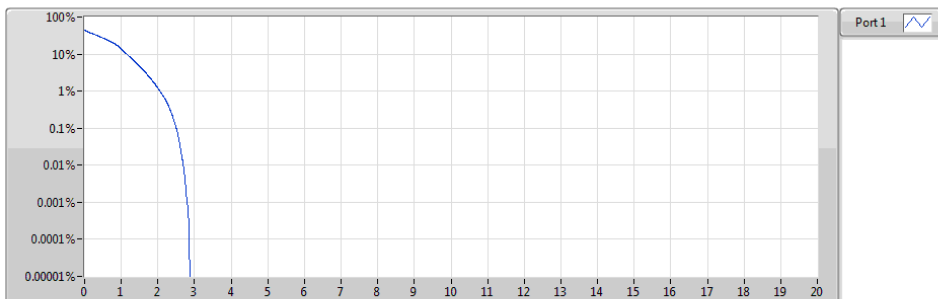


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	6.40	-6.60	13.00	1

Band 5_LTE_5MHz_Nss1,16QAM_1TX

PAR

846.5MHz_16QAM_RB 25,#RB 0

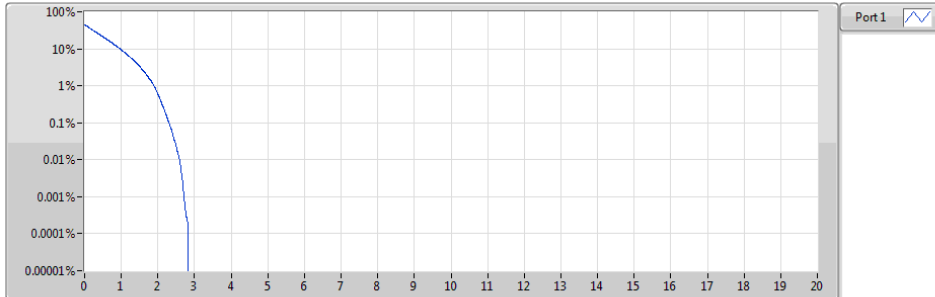


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
846.5	20M	6.25	-6.75	13.00	1

Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

829MHz_QPSK_RB 50,#RB 0

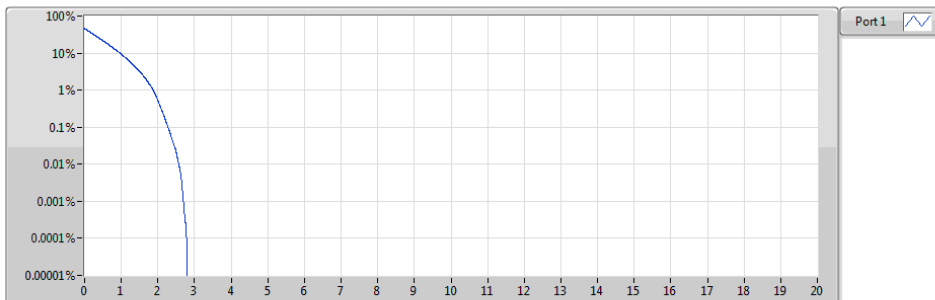


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
829	20M	5.75	-7.25	13.00	1

Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

836.5MHz_QPSK_RB 50,#RB 0

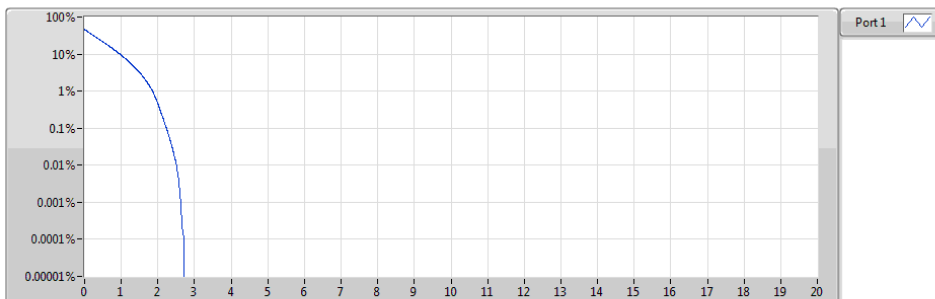


Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	5.69	-7.31	13.00	1

Band 5_LTE_10MHz_Nss1,QPSK_1TX

PAR

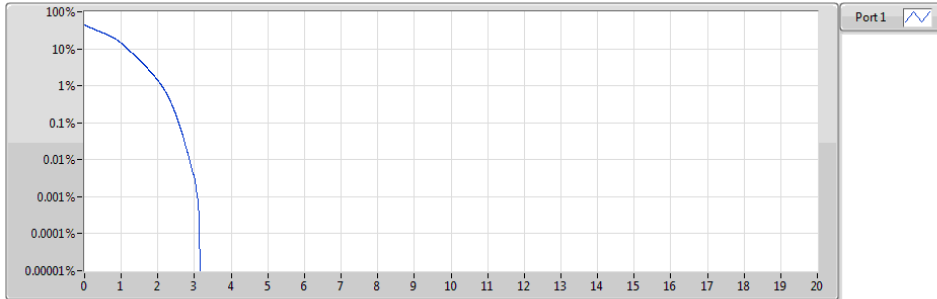
844MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
844	20M	5.58	-7.42	13.00	1

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

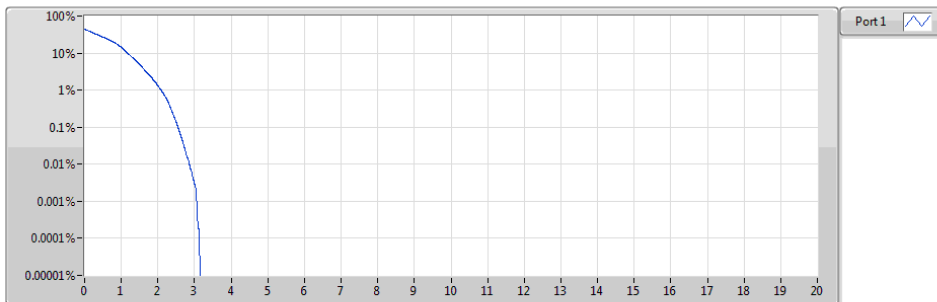
PAR



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
829	20M	6.41	-6.59	13.00	1

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

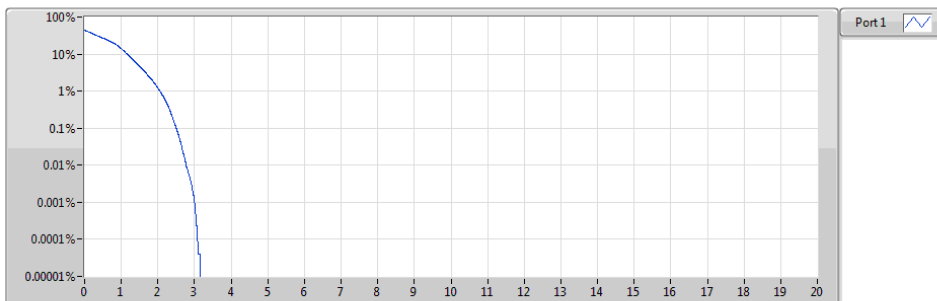
PAR



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
836.5	20M	6.36	-6.64	13.00	1

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

PAR



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
844	20M	6.25	-6.75	13.00	1

3.6 Frequency Stability

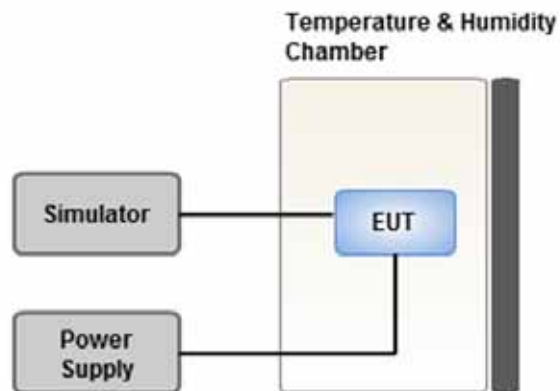
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. Temperature range is from $-30\sim 55^{\circ}\text{C}$ and voltage range is from lowest to highest working 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

CB: 1.4MHz				
Temperature (°C)	824.7MHz		848.3MHz	
	Frequency Drift (ppm)	F _L (MHz)	Frequency Drift (ppm)	F _H (MHz)
T20°CVmax	0.006	824.160735	0.005	848.841429
T20°CVmin	0.005	824.160736	0.006	848.841430
T70°CVnom	0.006	824.160737	0.005	848.841429
T60°CVnom	0.005	824.160738	0.004	848.841428
T50°CVnom	0.004	824.160739	0.005	848.841429
T40°CVnom	0.002	824.160740	0.005	848.841429
T30°CVnom	0.005	824.160741	0.004	848.841428
T20°CVnom	0.006	824.160742	0.006	848.841430
T10°CVnom	0.005	824.160743	0.005	848.841429
T0°CVnom	0.004	824.160744	0.006	848.841430
T-10°CVnom	0.002	824.160745	0.007	848.841431
T-20°CVnom	0.005	824.160746	0.008	848.841432
T-30°CVnom	0.004	824.160747	0.006	848.841430
T-40°CVnom	0.002	824.160748	0.005	848.841429
Limit	>824MHz		<849MHz	

CB: 3MHz				
Temperature (°C)	825.5MHz		847.5MHz	
	Frequency Drift (ppm)	F_L (MHz)	Frequency Drift (ppm)	F_H (MHz)
T20°CVmax	0.005	824.160795	0.006	848.842226
T20°CVmin	0.005	824.160796	0.004	848.842224
T70°CVnom	0.006	824.160797	0.004	848.842224
T60°CVnom	0.007	824.160798	0.005	848.842225
T50°CVnom	0.005	824.160799	0.006	848.842226
T40°CVnom	0.004	824.160800	0.004	848.842224
T30°CVnom	0.004	824.160801	0.005	848.842225
T20°CVnom	0.002	824.160802	0.006	848.842226
T10°CVnom	0.005	824.160803	0.002	848.842223
T0°CVnom	0.002	824.160804	0.005	848.842225
T-10°CVnom	0.004	824.160805	0.006	848.842226
T-20°CVnom	0.006	824.160806	0.005	848.842225
T-30°CVnom	0.005	824.160807	0.004	848.842224
T-40°CVnom	0.005	824.160808	0.006	848.842226
Limit	>824MHz		<849MHz	

CB: 5MHz				
Temperature (°C)	826.5MHz		846.5MHz	
	Frequency Drift (ppm)	F_L (MHz)	Frequency Drift (ppm)	F_H (MHz)
T20°CVmax	0.005	824.268336	0.005	848.732073
T20°CVmin	0.005	824.268337	0.006	848.732074
T70°CVnom	0.006	824.268338	0.005	848.732073
T60°CVnom	0.007	824.268339	0.004	848.732072
T50°CVnom	0.005	824.268340	0.006	848.732074
T40°CVnom	0.004	824.268341	0.005	848.732073
T30°CVnom	0.004	824.268342	0.004	848.732072
T20°CVnom	0.002	824.268343	0.006	848.732074
T10°CVnom	0.005	824.268344	0.005	848.732073
T0°CVnom	0.002	824.268345	0.004	848.732072
T-10°CVnom	0.004	824.268346	0.005	848.732073
T-20°CVnom	0.006	824.268347	0.004	848.732072
T-30°CVnom	0.005	824.268348	0.005	848.732073
T-40°CVnom	0.005	824.268349	0.005	848.732073
Limit	>824MHz		<849MHz	

CB: 10MHz				
Temperature (°C)	826.5MHz		846.5MHz	
	Frequency Drift (ppm)	F_L (MHz)	Frequency Drift (ppm)	F_H (MHz)
T20°CVmax	0.005	824.539082	0.006	848.458187
T20°CVmin	0.005	824.539083	0.005	848.458186
T70°CVnom	0.006	824.539084	0.004	848.458185
T60°CVnom	0.007	824.539085	0.006	848.458187
T50°CVnom	0.005	824.539086	0.005	848.458186
T40°CVnom	0.004	824.539087	0.004	848.458185
T30°CVnom	0.004	824.539088	0.005	848.458186
T20°CVnom	0.002	824.539089	0.006	848.458187
T10°CVnom	0.005	824.539090	0.005	848.458186
T0°CVnom	0.002	824.539091	0.005	848.458186
T-10°CVnom	0.004	824.539092	0.004	848.458185
T-20°CVnom	0.006	824.539093	0.006	848.458187
T-30°CVnom	0.005	824.539094	0.004	848.458185
T-40°CVnom	0.005	824.539095	0.005	848.458186
Limit	>824MHz		<849MHz	

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

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