FCC Test Report

FCC ID	:	**2AIHD2045**
Equipment	:	**HW-AG45**
Model No.	:	**010-2045**
Brand Name	:	**Samsara**
Applicant	:	**Samsara Networks Inc.**
Address	:	**444 De Haro Street, San Francisco, CA 94107, U.S.A.**
Standard	:	**47 CFR FCC Part 27**
Received Date	:	**Nov. 20, 2018**
Tested Date	:	**Jan. 08 ~ Jan. 24, 2019**

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

Reviewed by: **Approved by:**

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

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FG8N2001-1	Rev. 01	Initial issue	Feb. 25, 2019

Summary of Test Results

LTE band 12

FCC Rules	Test Items	Measured	Result
2.1046 / 27.50(c)(10)	Effective Radiated Power	Power[dBm]: 20.43	Pass
2.1053 / 27.53(g)	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 / 27.53(g)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 / 27.53(g)	Band Edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
2.1055 / 27.54	Frequency Stability	Meet the requirement of limit	Pass
27.50(d)(5)	Peak to Average Ratio	Meet the requirement of limit	Pass

LTE band 13

FCC Rules	Test Items	Measured	Result
2.1046 / 27.50(b)(10)	Effective Radiated Power	Power[dBm]: 20.28	Pass
2.1053 / 27.53(c)	Radiated Emissions	Meet the requirement of limit	Pass
2.1053 / 27.53(f)	Radiated Spurious Emission in the 1559-1610MHz band	Meet the requirement of limit	Pass
2.1051 / 27.53(c)	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 / 27.53(c)	Band Edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
2.1055 / 27.54	Frequency Stability	Meet the requirement of limit	Pass
27.50(d)(5)	Peak to Average Ratio	Meet the requirement of limit	Pass

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

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

Operating Frequency	**LTE Band 12**: Channel Bandwidth: 1.4MHz: 699.7 MHz ~ 715.3 MHz Channel Bandwidth: 3MHz: 700.5 MHz ~ 714.5 MHz Channel Bandwidth: 5MHz: 701.5 MHz ~ 713.5 MHz Channel Bandwidth: 10MHz: 704.0 MHz ~ 711.0 MHz **LTE Band 13**: Channel Bandwidth: 5MHz: 779.5 MHz ~ 784.5 MHz Channel Bandwidth: 10MHz: 782 MHz
Modulation Type	QPSK, 16QAM (Uplink)
Release Version	13 Cat M1
Duplex Mode	FDD
H/W Version	1.0
S/W Version	2019-01-25-0725-app594-NRF52840-r-310a6223b2-combined.hex

1.1.2 Maximum ERP and Emission Designator

Mode	Modulation	Maximum ERP (W)	Emission Designator
LTE Band 12, CB: 1.4MHz	QPSK	0.106	1M10G7D
LTE Band 12, CB: 1.4MHz	16QAM	0.099	1M10W7D
LTE Band 12, CB: 3MHz	QPSK	0.110	1M11G7D
LTE Band 12, CB: 3MHz	16QAM	0.104	1M11W7D
LTE Band 12, CB: 5MHz	QPSK	0.108	1M10G7D
LTE Band 12, CB: 5MHz	16QAM	0.101	1M12W7D
LTE Band 12, CB: 10MHz	QPSK	0.109	1M13G7D
LTE Band 12, CB: 10MHz	16QAM	0.101	1M12W7D
LTE Band 13, CB: 5MHz	QPSK	0.107	1M10G7D
LTE Band 13, CB: 5MHz	16QAM	0.102	1M11W7D
LTE Band 13, CB: 10MHz	QPSK	0.106	1M12G7D
LTE Band 13, CB: 10MHz	16QAM	0.101	1M13W7D

1.1.3 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remark
1	PIFA	0.22	No	For 699 ~ 716 MHz
2	PIFA	-1.25	No	For 777 ~ 787 MHz

1.1.4 EUT Operational Condition

Supply Voltage	3.6Vdc (AA battery x4)		
Operational Voltage	☒ Vnom (3.6 V)	☒ Vmax (3.7 V)	☒ Vmin (2.45 V)
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (75°C)	☒ Tmin (-35°C)

1.1.5 Operating Channel List

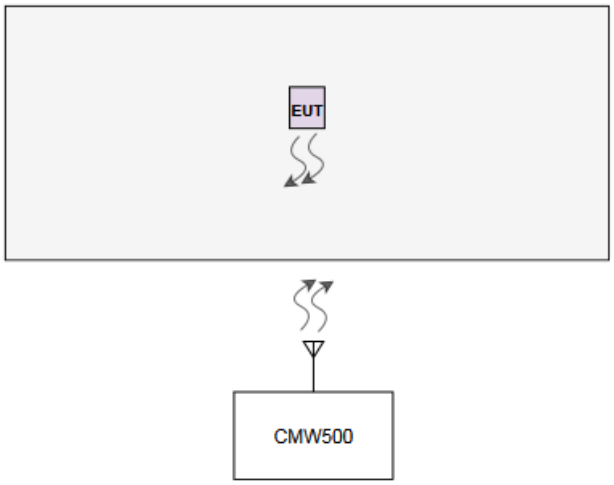
LTE Band 12		
Channel Bandwidth (MHz)	**Channel**	**Frequency (MHz)**
1.4	23017	699.7
1.4	23095	707.5
1.4	23173	715.3
3	23025	700.5
3	23095	707.5
3	23165	714.5
5	23035	701.5
5	23095	707.5
5	23155	713.5
10	23060	704.0
10	23095	707.5
10	23130	711.0

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

1.2 Local Support Equipment List

N/A

1.3 Test Setup Chart

Test Setup Diagram
 **Kept in control area**

1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 12, 2018	Feb. 11, 2019
Spectrum Analyzer	R&S	FSV40	101499	Jan. 07, 2019	Jan. 06, 2020
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 19, 2018	Apr. 18, 2019
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Jan. 07, 2019	Jan. 06, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980187	Aug. 24, 2018	Aug. 23, 2019
Preamplifier	Agilent	83017A	MY53270014	Aug. 09, 2018	Aug. 08, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/**4**	Oct. 01, 2018	Sep. 30, 2019
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Oct. 01, 2018	Sep. 30, 2019
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Oct. 01, 2018	Sep. 30, 2019
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Oct. 01, 2018	Sep. 30, 2019
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Oct. 01, 2018	Sep. 30, 2019
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Oct. 01, 2018	Sep. 30, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 12, 2018	Feb. 11, 2019
Spectrum Analyzer	R&S	FSV40	101063	Apr. 16, 2018	Apr. 15, 2019
Spectrum Analyzer	Keysight	N9010A	MY54510374	Jun. 21, 2018	Jun. 20, 2019
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 05, 2018	Dec. 04, 2019
Power Meter	Anritsu	ML2495A	1241002	Oct. 09, 2018	Oct. 08, 2019
Power Sensor	Anritsu	MA2411B	1207366	Oct. 09, 2018	Oct. 08, 2019
DC POWER SOURCE	GW INSTEK	GPC-6030D	EM892433	Oct. 25, 2018	Oct. 24, 2019
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

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

47 CFR FCC Part 27
ANSI C63.4-2014
ANSI C63.26-2015
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Temperature	±0.6 ^{o}C
Conducted emission	±2.670 dB
Radiated emission ≤ 1GHz	±3.66 dB
Radiated emission > 1GHz	±5.37 dB

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
Radiated Emissions	03CH03-WS	20°C / 67%	Roger Lu
RF conducted	TH01-WS	22°C / 64%	Roger Lu

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

LTE Band 12			
Test item	**Channel Bandwidth**	**Modulation**	**Test channel**
E.R.P Conducted Emissions Occupied Bandwidth Peak to Average Ratio	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	23017 / 23095 / 23173 23025 / 23095 / 23165 23035 / 23095 / 23155 23060 / 23095 / 23130
Radiated Emission ≤ 1GHz	3 MHz	QPSK	23095
Radiated Emission > 1GHz	3 MHz	QPSK	23025 / 23095 / 23165
Band Edge	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	23017 / 23173 23025 / 23165 23035 / 23155 23060 / 23130
Frequency Stability	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	23095 23095 23095 23095
Note: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report. 2. The selected bandwidth of Radiated Emission is the maximum power bandwidth.			

LTE Band 13			
Test item	**Channel Bandwidth**	**Modulation**	**Test channel**
E.R.P Conducted Emissions Occupied Bandwidth Peak to Average Ratio	5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM	23205 / 23230 / 23255 23230
Radiated Emission ≤ 1GHz	5 MHz	QPSK	23230
Radiated Emission > 1GHz	5 MHz	QPSK	23205 / 23230 / 23255
Band Edge	5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM	23205 / 23255 23230
Frequency Stability	5 MHz 10 MHz	QPSK QPSK	23230 23230
Note: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report. 2. The selected bandwidth of Radiated Emission is the maximum power bandwidth.			

3 Test Results

3.1 Effective Radiated Power

3.1.1 Limit of Effective Radiated Power

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

3.1.2 Test Procedures

For Conducted power measurement:

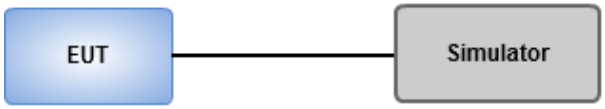
1. The EUT links up with simulator and is set to maximum output power level at low / middel / high channel.
2. Measure the output power of low / middle / high channel of the EUT.

For ERP measurement:

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

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

3.1.3 Test Setup



3.1.4 Test Result of Effective Radiated Power (dBm)

Mode	LTE Band 12, CB: 1.4MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
QPSK	23017	699.7	1#0	0	22.04	0.22	22.26	20.11	0.103	3
			1#5	0	22.06	0.22	22.28	20.13	0.103	3
			6#0	0	22.02	0.22	22.24	20.09	0.102	3
	23095	707.5	1#0	0	22.10	0.22	22.32	20.17	0.104	3
			1#5	0	**22.18**	**0.22**	**22.40**	**20.25**	**0.106**	3
			6#0	0	22.08	0.22	22.30	20.15	0.104	3
	23173	715.3	1#0	0	22.09	0.22	22.31	20.16	0.104	3
			1#5	0	22.10	0.22	22.32	20.17	0.104	3
			6#0	0	22.03	0.22	22.25	20.10	0.102	3
16QAM	23017	699.7	1#0	0	21.77	0.22	21.99	19.84	0.096	3
			1#5	0	21.80	0.22	22.02	19.87	0.097	3
			6#0	0	21.74	0.22	21.96	19.81	0.096	3
	23095	707.5	1#0	0	**21.87**	**0.22**	**22.09**	**19.94**	**0.099**	3
			1#5	0	21.79	0.22	22.01	19.86	0.097	3
			6#0	0	21.78	0.22	22.00	19.85	0.097	3
	23173	715.3	1#0	0	21.80	0.22	22.02	19.87	0.097	3
			1#5	0	21.84	0.22	22.06	19.91	0.098	3
			6#0	0	21.77	0.22	21.99	19.84	0.096	3

Mode	LTE Band 12, CB: 3MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
QPSK	23025	700.5	1#0	0	22.23	0.22	22.45	20.30	0.107	3
			1#0	1	22.14	0.22	22.36	20.21	0.105	3
			1#5	0	22.29	0.22	22.51	20.36	0.109	3
			1#5	1	22.13	0.22	22.35	20.20	0.105	3
			3#0	0	22.16	0.22	22.38	20.23	0.105	3
			3#3	1	22.20	0.22	22.42	20.27	0.106	3
			6#0	0	22.14	0.22	22.36	20.21	0.105	3
			6#0	1	22.19	0.22	22.41	20.26	0.106	3
	23095	707.5	1#0	0	22.18	0.22	22.40	20.25	0.106	3
			1#0	1	22.25	0.22	22.47	20.32	0.108	3
			1#5	0	**22.36**	**0.22**	**22.58**	**20.43**	**0.110**	3
			1#5	1	22.20	0.22	22.42	20.27	0.106	3
			3#0	0	22.09	0.22	22.31	20.16	0.104	3
			3#3	1	22.06	0.22	22.28	20.13	0.103	3
			6#0	0	22.12	0.22	22.34	20.19	0.104	3
			6#0	1	22.07	0.22	22.29	20.14	0.103	3
	23165	714.5	1#0	0	22.11	0.22	22.33	20.18	0.104	3
			1#0	1	22.15	0.22	22.37	20.22	0.105	3
			1#5	0	22.20	0.22	22.42	20.27	0.106	3
			1#5	1	22.17	0.22	22.39	20.24	0.106	3
			3#0	0	22.01	0.22	22.23	20.08	0.102	3
			3#3	1	22.13	0.22	22.35	20.20	0.105	3
			6#0	0	22.03	0.22	22.25	20.10	0.102	3
			6#0	1	22.16	0.22	22.38	20.23	0.105	3

Mode	LTE Band 12, CB: 3MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
16QAM	23025	700.5	1#0	0	21.93	0.22	22.15	20.00	0.100	3
			1#0	1	21.97	0.22	22.19	20.04	0.101	3
			1#5	0	21.99	0.22	22.21	20.06	0.101	3
			1#5	1	22.00	0.22	22.22	20.07	0.102	3
			3#0	0	22.08	0.22	22.30	20.15	0.104	3
			3#3	1	**22.10**	**0.22**	**22.32**	**20.17**	**0.104**	3
			6#0	0	21.99	0.22	22.21	20.06	0.101	3
			6#0	1	21.96	0.22	22.18	20.03	0.101	3
	23095	707.5	1#0	0	22.00	0.22	22.22	20.07	0.102	3
			1#0	1	21.98	0.22	22.20	20.05	0.101	3
			1#5	0	22.08	0.22	22.30	20.15	0.104	3
			1#5	1	21.90	0.22	22.12	19.97	0.099	3
			3#0	0	22.05	0.22	22.27	20.12	0.103	3
			3#3	1	22.08	0.22	22.30	20.15	0.104	3
			6#0	0	22.01	0.22	22.23	20.08	0.102	3
			6#0	1	22.03	0.22	22.25	20.10	0.102	3
	23165	714.5	1#0	0	21.91	0.22	22.13	19.98	0.100	3
			1#0	1	22.01	0.22	22.23	20.08	0.102	3
			1#5	0	22.04	0.22	22.26	20.11	0.103	3
			1#5	1	22.03	0.22	22.25	20.10	0.102	3
			3#0	0	21.94	0.22	22.16	20.01	0.100	3
			3#3	1	22.05	0.22	22.27	20.12	0.103	3
			6#0	0	21.93	0.22	22.15	20.00	0.100	3
			6#0	1	22.02	0.22	22.24	20.09	0.102	3

Mode	LTE Band 12, CB: 5MHz									
Modulation	Channel	Frequency (MHz)	RB size #RB start	RB Index	Conducted Average Power (dBm)	Max Antenna Gain (dBi)	E.I.R.P Power (dBm)	E.R.P Power (dBm)	E.R.P Power (W)	E.R.P Limit (W)
QPSK	23035	701.5	1#0	0	22.12	0.22	22.34	20.19	0.104	3
			1#0	1	22.21	0.22	22.43	20.28	0.107	3
			1#5	1	22.22	0.22	22.44	20.29	0.107	3
			1#5	3	22.17	0.22	22.39	20.24	0.106	3
			3#0	0	22.07	0.22	22.29	20.14	0.103	3
			3#3	3	22.15	0.22	22.37	20.22	0.105	3
			6#0	0	22.09	0.22	22.31	20.16	0.104	3
			6#0	3	22.12	0.22	22.34	20.19	0.104	3
	23095	707.5	1#0	0	22.13	0.22	22.35	20.20	0.105	3
			1#0	1	22.17	0.22	22.39	20.24	0.106	3
			1#5	1	**22.25**	**0.22**	**22.47**	**20.32**	**0.108**	3
			1#5	3	22.23	0.22	22.45	20.30	0.107	3
			3#0	0	22.02	0.22	22.24	20.09	0.102	3
			3#3	3	22.01	0.22	22.23	20.08	0.102	3
			6#0	0	22.22	0.22	22.44	20.29	0.107	3
			6#0	3	22.09	0.22	22.31	20.16	0.104	3
	23155	713.5	1#0	0	22.14	0.22	22.36	20.21	0.105	3
			1#0	1	22.15	0.22	22.37	20.22	0.105	3
			1#5	1	22.19	0.22	22.41	20.26	0.106	3
			1#5	3	22.17	0.22	22.39	20.24	0.106	3
			3#0	0	22.04	0.22	22.26	20.11	0.103	3
			3#3	3	22.10	0.22	22.32	20.17	0.104	3
			6#0	0	22.12	0.22	22.34	20.19	0.104	3
			6#0	3	22.07	0.22	22.29	20.14	0.103	3

Mode	LTE Band 12, CB: 5MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
16QAM	23035	701.5	1#0	0	21.72	0.22	21.94	19.79	0.095	3
			1#0	1	21.65	0.22	21.87	19.72	0.094	3
			1#5	1	21.69	0.22	21.91	19.76	0.095	3
			1#5	3	21.82	0.22	22.04	19.89	0.097	3
			3#0	0	21.88	0.22	22.10	19.95	0.099	3
			3#3	3	21.95	0.22	22.17	20.02	0.100	3
			6#0	0	21.82	0.22	22.04	19.89	0.097	3
			6#0	3	21.85	0.22	22.07	19.92	0.098	3
	23095	707.5	1#0	0	21.75	0.22	21.97	19.82	0.096	3
			1#0	1	21.72	0.22	21.94	19.79	0.095	3
			1#5	1	21.78	0.22	22.00	19.85	0.097	3
			1#5	3	21.76	0.22	21.98	19.83	0.096	3
			3#0	0	21.85	0.22	22.07	19.92	0.098	3
			3#3	3	21.82	0.22	22.04	19.89	0.097	3
			6#0	0	21.87	0.22	22.09	19.94	0.099	3
			6#0	3	21.91	0.22	22.13	19.98	0.100	3
	23155	713.5	1#0	0	21.78	0.22	22.00	19.85	0.097	3
			1#0	1	21.73	0.22	21.95	19.80	0.095	3
			1#5	1	21.86	0.22	22.08	19.93	0.098	3
			1#5	3	21.89	0.22	22.11	19.96	0.099	3
			3#0	0	21.88	0.22	22.10	19.95	0.099	3
			3#3	3	**21.98**	**0.22**	**22.20**	**20.05**	**0.101**	3
			6#0	0	21.90	0.22	22.12	19.97	0.099	3
			6#0	3	21.97	0.22	22.19	20.04	0.101	3

Mode	LTE Band 12, CB: 10MHz									
Modulation	Channel	Frequency (MHz)	RB size #RB start	RB Index	Conducted Average Power (dBm)	Max Antenna Gain (dBi)	E.I.R.P Power (dBm)	E.R.P Power (dBm)	E.R.P Power (W)	E.R.P Limit (W)
QPSK	23060	704.0	1#0	0	22.15	0.22	22.37	20.22	0.105	3
			1#0	3	22.18	0.22	22.40	20.25	0.106	3
			1#5	3	22.21	0.22	22.43	20.28	0.107	3
			1#5	7	22.17	0.22	22.39	20.24	0.106	3
			3#0	0	22.09	0.22	22.31	20.16	0.104	3
			3#3	7	22.04	0.22	22.26	20.11	0.103	3
			6#0	0	22.25	0.22	22.47	20.32	0.108	3
			6#0	7	22.17	0.22	22.39	20.24	0.106	3
	23095	707.5	1#0	0	22.22	0.22	22.44	20.29	0.107	3
			1#0	3	22.15	0.22	22.37	20.22	0.105	3
			1#5	3	**22.31**	**0.22**	**22.53**	**20.38**	**0.109**	3
			1#5	7	22.27	0.22	22.49	20.34	0.108	3
			3#0	0	22.08	0.22	22.30	20.15	0.104	3
			3#3	7	22.21	0.22	22.43	20.28	0.107	3
			6#0	0	22.18	0.22	22.40	20.25	0.106	3
			6#0	7	22.24	0.22	22.46	20.31	0.107	3
	23130	711.0	1#0	0	22.16	0.22	22.38	20.23	0.105	3
			1#0	3	22.21	0.22	22.43	20.28	0.107	3
			1#5	3	22.28	0.22	22.50	20.35	0.108	3
			1#5	7	22.26	0.22	22.48	20.33	0.108	3
			3#0	0	22.02	0.22	22.24	20.09	0.102	3
			3#3	7	22.15	0.22	22.37	20.22	0.105	3
			6#0	0	22.06	0.22	22.28	20.13	0.103	3
			6#0	7	22.09	0.22	22.31	20.16	0.104	3

Mode	LTE Band 12, CB: 10MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
16QAM	23060	704.0	1#0	0	21.73	0.22	21.95	19.80	0.095	3
			1#0	3	21.78	0.22	22.00	19.85	0.097	3
			1#5	3	21.82	0.22	22.04	19.89	0.097	3
			1#5	7	21.85	0.22	22.07	19.92	0.098	3
			3#0	0	21.91	0.22	22.13	19.98	0.100	3
			3#3	7	21.86	0.22	22.08	19.93	0.098	3
			6#0	0	21.90	0.22	22.12	19.97	0.099	3
			6#0	7	21.93	0.22	22.15	20.00	0.100	3
	23095	707.5	1#0	0	21.82	0.22	22.04	19.89	0.097	3
			1#0	3	21.73	0.22	21.95	19.80	0.095	3
			1#5	3	21.79	0.22	22.01	19.86	0.097	3
			1#5	7	21.82	0.22	22.04	19.89	0.097	3
			3#0	0	21.93	0.22	22.15	20.00	0.100	3
			3#3	7	21.91	0.22	22.13	19.98	0.100	3
			6#0	0	21.96	0.22	22.18	20.03	0.101	3
			6#0	7	**21.99**	**0.22**	**22.21**	**20.06**	**0.101**	3
	23130	711.0	1#0	0	21.73	0.22	21.95	19.80	0.095	3
			1#0	3	21.87	0.22	22.09	19.94	0.099	3
			1#5	3	21.88	0.22	22.10	19.95	0.099	3
			1#5	7	21.95	0.22	22.17	20.02	0.100	3
			3#0	0	21.85	0.22	22.07	19.92	0.098	3
			3#3	7	21.96	0.22	22.18	20.03	0.101	3
			6#0	0	21.95	0.22	22.17	20.02	0.100	3
			6#0	7	21.98	0.22	22.20	20.05	0.101	3

Mode	LTE Band 13, CB: 5MHz									
Modulation	Channel	Frequency (MHz)	RB size #RB start	RB Index	Conducted Average Power (dBm)	Max Antenna Gain (dBi)	E.I.R.P Power (dBm)	E.R.P Power (dBm)	E.R.P Power (W)	E.R.P Limit (W)
QPSK	23205	779.5	1#0	0	23.49	-1.25	22.24	20.09	0.102	3
			1#0	1	23.51	-1.25	22.26	20.11	0.103	3
			1#5	1	23.58	-1.25	22.33	20.18	0.104	3
			1#5	3	23.54	-1.25	22.29	20.14	0.103	3
			3#0	0	23.46	-1.25	22.21	20.06	0.101	3
			3#3	3	23.35	-1.25	22.10	19.95	0.099	3
			6#0	0	23.30	-1.25	22.05	19.90	0.098	3
			6#0	3	23.39	-1.25	22.14	19.99	0.100	3
	23230	782.0	1#0	0	23.62	-1.25	22.37	20.22	0.105	3
			1#0	1	23.66	-1.25	22.41	20.26	0.106	3
			1#5	1	**23.68**	**-1.25**	**22.43**	**20.28**	**0.107**	3
			1#5	3	23.52	-1.25	22.27	20.12	0.103	3
			3#0	0	23.45	-1.25	22.20	20.05	0.101	3
			3#3	3	23.41	-1.25	22.16	20.01	0.100	3
			6#0	0	23.47	-1.25	22.22	20.07	0.102	3
			6#0	3	23.43	-1.25	22.18	20.03	0.101	3
	23255	784.5	1#0	0	23.56	-1.25	22.31	20.16	0.104	3
			1#0	1	23.52	-1.25	22.27	20.12	0.103	3
			1#5	1	23.62	-1.25	22.37	20.22	0.105	3
			1#5	3	23.51	-1.25	22.26	20.11	0.103	3
			3#0	0	23.42	-1.25	22.17	20.02	0.100	3
			3#3	3	23.50	-1.25	22.25	20.10	0.102	3
			6#0	0	23.35	-1.25	22.10	19.95	0.099	3
			6#0	3	23.45	-1.25	22.20	20.05	0.101	3

Mode	LTE Band 13, CB: 5MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
16QAM	23205	779.5	1#0	0	23.10	-1.25	21.85	19.70	0.093	3
			1#0	1	23.21	-1.25	21.96	19.81	0.096	3
			1#5	1	23.28	-1.25	22.03	19.88	0.097	3
			1#5	3	23.15	-1.25	21.90	19.75	0.094	3
			3#0	0	23.27	-1.25	22.02	19.87	0.097	3
			3#3	3	23.34	-1.25	22.09	19.94	0.099	3
			6#0	0	23.32	-1.25	22.07	19.92	0.098	3
			6#0	3	23.30	-1.25	22.05	19.90	0.098	3
	23230	782.0	1#0	0	23.25	-1.25	22.00	19.85	0.097	3
			1#0	1	23.32	-1.25	22.07	19.92	0.098	3
			1#5	1	23.35	-1.25	22.10	19.95	0.099	3
			1#5	3	23.32	-1.25	22.07	19.92	0.098	3
			3#0	0	23.31	-1.25	22.06	19.91	0.098	3
			3#3	3	**23.47**	**-1.25**	**22.22**	**20.07**	**0.102**	3
			6#0	0	23.34	-1.25	22.09	19.94	0.099	3
			6#0	3	23.36	-1.25	22.11	19.96	0.099	3
	23255	784.5	1#0	0	23.12	-1.25	21.87	19.72	0.094	3
			1#0	1	23.32	-1.25	22.07	19.92	0.098	3
			1#5	1	23.41	-1.25	22.16	20.01	0.100	3
			1#5	3	23.35	-1.25	22.10	19.95	0.099	3
			3#0	0	23.36	-1.25	22.11	19.96	0.099	3
			3#3	3	23.40	-1.25	22.15	20.00	0.100	3
			6#0	0	23.34	-1.25	22.09	19.94	0.099	3
			6#0	3	23.30	-1.25	22.05	19.90	0.098	3

Mode	LTE Band 13, CB: 10MHz									
Modulation	**Channel**	**Frequency (MHz)**	**RB size #RB start**	**RB Index**	**Conducted Average Power (dBm)**	**Max Antenna Gain (dBi)**	**E.I.R.P Power (dBm)**	**E.R.P Power (dBm)**	**E.R.P Power (W)**	**E.R.P Limit (W)**
QPSK	23230	782.0	1#0	0	23.55	-1.25	22.30	20.15	0.104	3
			1#0	3	23.59	-1.25	22.34	20.19	0.104	3
			1#5	3	**23.64**	**-1.25**	**22.39**	**20.24**	**0.106**	3
			1#5	7	23.61	-1.25	22.36	20.21	0.105	3
			3#0	0	23.37	-1.25	22.12	19.97	0.099	3
			3#3	7	23.45	-1.25	22.20	20.05	0.101	3
			6#0	0	23.36	-1.25	22.11	19.96	0.099	3
			6#0	7	23.54	-1.25	22.29	20.14	0.103	3
16QAM	23230	782.0	1#0	0	23.21	-1.25	21.96	19.81	0.096	3
			1#0	3	23.25	-1.25	22.00	19.85	0.097	3
			1#5	3	23.42	-1.25	22.17	20.02	0.100	3
			1#5	7	23.35	-1.25	22.10	19.95	0.099	3
			3#0	0	23.32	-1.25	22.07	19.92	0.098	3
			3#3	7	23.37	-1.25	22.12	19.97	0.099	3
			6#0	0	23.39	-1.25	22.14	19.99	0.100	3
			6#0	7	**23.45**	**-1.25**	**22.20**	**20.05**	**0.101**	3

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

LTE band 12
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB equal to -13dBm.

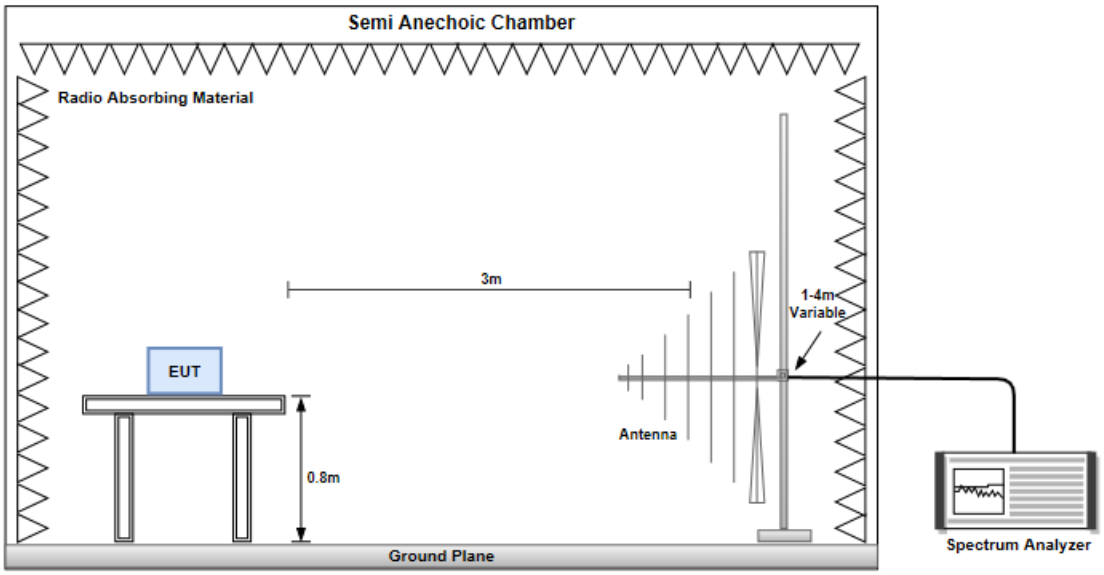
LTE Band 13
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB equal to -13dBm. Emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP)

3.2.2 Test Procedures

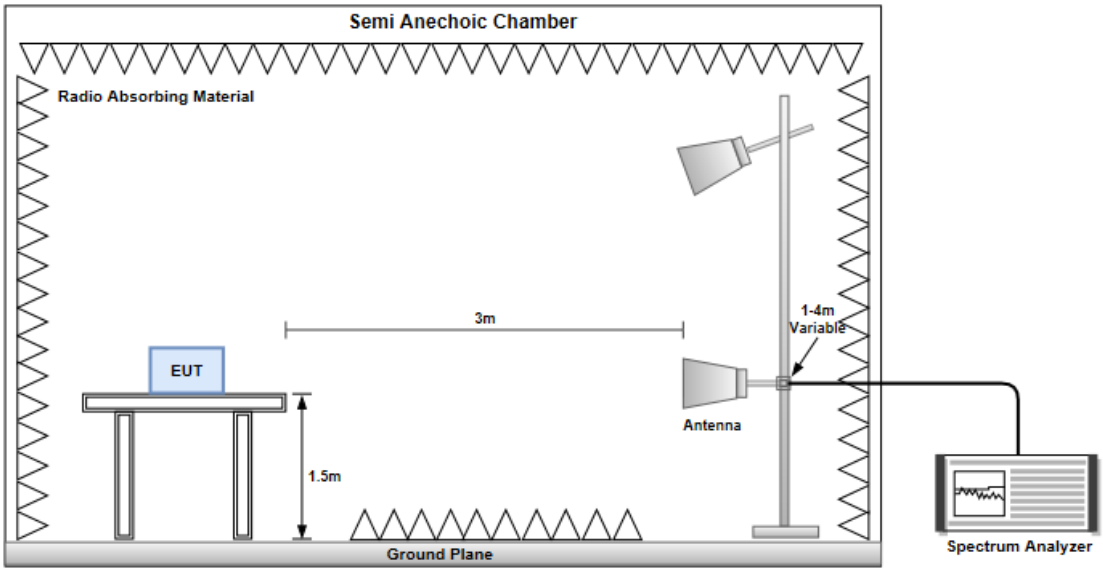
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
   E.R.P= E.I.R.P –2.15dB

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 12, CB: 3MHz, Channel : 23095						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
33.88	H	-67.74	-13.00	-54.74	-74.75	-49.00	-18.74
145.43	H	-74.91	-13.00	-61.91	-73.38	-67.89	-7.02
317.12	H	-68.19	-13.00	-55.19	-66.67	-66.89	-1.30
445.16	H	-72.22	-13.00	-59.22	-74.29	-71.08	-1.14
568.35	H	-70.05	-13.00	-57.05	73.49	-68.50	-1.55
661.47	H	-68.11	-13.00	-55.11	-73.33	-66.38	-1.73
52.31	V	-72.72	-13.00	-59.72	-69.06	-56.96	-15.76
90.14	V	-70.53	-13.00	-57.53	-67.58	-65.42	-5.11
146.4	V	-72.79	-13.00	-59.79	-73.65	-65.76	-7.03
276.38	V	-72.76	-13.00	-59.76	-73.43	-71.14	-1.62
486.87	V	-70.71	-13.00	-57.71	-74.00	-69.36	-1.35
582.9	V	-65.78	-13.00	-52.78	-72.40	-64.12	-1.66

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

Mode	LTE Band 13, CB: 5MHz, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
33.88	H	-66.14	-13.00	-53.14	-73.15	-47.40	-18.74
145.43	H	-75.52	-13.00	-62.52	-73.99	-68.50	-7.02
210.42	H	-71.48	-13.00	-58.48	-66.12	-69.51	-1.97
487.84	H	-71.40	-13.00	-58.40	-73.71	-70.04	-1.36
556.71	H	-70.73	-13.00	-57.73	-73.94	-69.26	-1.47
651.77	H	-63.44	-13.00	-50.44	-68.37	-61.67	-1.77
51.34	V	-74.67	-13.00	-61.67	-71.28	-58.74	-15.93
92.08	V	-71.26	-13.00	-58.26	-68.63	-66.41	-4.85
154.16	V	-72.40	-13.00	-59.40	-73.03	-65.60	-6.80
253.10	V	-72.54	-13.00	-59.54	-73.31	-71.16	-1.38
464.56	V	-71.22	-13.00	-58.22	-73.86	-69.99	-1.23
624.61	V	-66.11	-13.00	-53.11	-73.26	-64.14	-1.97

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

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 12, CB: 3MHz, Channel : 23025						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1401.00	H	-42.28	-13.00	-29.28	-47.56	-46.23	3.95
2101.50	H	-41.02	-13.00	-28.02	-49.67	-46.89	5.87
2802.00	H	-52.65	-13.00	-39.65	-64.32	-59.87	7.22
1401.00	V	-43.83	-13.00	-30.83	-48.76	-47.78	3.95
2101.50	V	-44.98	-13.00	-31.98	-53.64	-50.85	5.87
2802.00	V	-52.99	-13.00	-39.99	-64.46	-60.21	7.22

Mode	LTE Band 12, CB: 3MHz, Channel : 23095						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1415.00	H	-42.01	-13.00	-29.01	-47.27	-46.02	4.01
2122.50	H	-40.54	-13.00	-27.54	-49.51	-46.04	5.50
2830.00	H	-52.47	-13.00	-39.47	-64.40	-59.54	7.07
1415.00	V	-43.60	-13.00	-30.60	-48.51	-47.61	4.01
2122.50	V	-44.81	-13.00	-31.81	-53.78	-50.31	5.50
2830.00	V	-52.81	-13.00	-39.81	-64.51	-59.88	7.07

Mode	LTE Band 12, CB: 3MHz, Channel : 23165						
Frequency (MHz)	**Antenna Polarity**	**E.R.P (dBm)**	**Limit (dBm)**	**Margin (dB)**	**S.A Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**
1429.00	H	-41.87	-13.00	-28.87	-47.11	-45.95	4.08
2143.50	H	-41.11	-13.00	-28.11	-50.40	-46.41	5.30
2858.00	H	-52.28	-13.00	-39.28	-64.45	-59.28	7.00
1429.00	V	-43.56	-13.00	-30.56	-48.46	-47.64	4.08
2143.50	V	-43.43	-13.00	-30.43	-53.72	-48.73	5.30
2858.00	V	-52.54	-13.00	-39.54	-64.46	-59.54	7.00

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

Mode	LTE Band 13, CB: 5MHz, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2338.50	H	-46.34	-13.00	-33.34	-55.63	-51.94	5.60
3118.00	H	-52.81	-13.00	-39.81	-64.21	-59.25	6.44
3897.50	H	-51.56	-13.00	-38.56	-65.41	-58.41	6.85
2338.50	V	-46.97	-13.00	-33.97	-56.47	-52.57	5.60
3118.00	V	-53.46	-13.00	-40.46	-64.56	-59.90	6.44
3897.50	V	-51.05	-13.00	-38.05	-64.57	-57.90	6.85

Mode	LTE Band 13, CB: 5MHz, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2346.00	H	-46.03	-13.00	-33.03	-55.37	-51.69	5.66
3128.00	H	-53.25	-13.00	-40.25	-64.69	-59.70	6.45
3910.00	H	-51.52	-13.00	-38.52	-65.33	-58.38	6.86
2346.00	V	-46.93	-13.00	-33.93	-56.40	-52.59	5.66
3128.00	V	-53.12	-13.00	-40.12	-64.26	-59.57	6.45
3910.00	V	-51.51	-13.00	-38.51	-64.99	-58.37	6.86

Mode	LTE Band 13, CB: 5MHz, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
2353.50	H	-46.70	-13.00	-33.70	-55.89	-52.41	5.71
3138.00	H	-50.75	-13.00	-37.75	-64.27	-57.22	6.47
3922.50	H	-50.59	-13.00	-37.59	-64.36	-57.47	6.88
2353.50	V	-47.04	-13.00	-34.04	-56.47	-52.75	5.71
3138.00	V	-53.34	-13.00	-40.34	-64.53	-59.81	6.47
3922.50	V	-50.95	-13.00	-37.95	-64.38	-57.83	6.88

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

3.2.6 Test Result of Radiated Emissions in the 1559-1610MHz band

Mode	LTE Band 13, CB: 5MHz, Channel : 23205						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1559.00	H	-47.44	-40.00	-7.44	-54.47	-52.78	5.34
1559.00	V	-47.63	-40.00	-7.63	-54.39	-52.97	5.34

Mode	LTE Band 13, CB: 5MHz, Channel : 23230						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1564.00	H	-47.15	-40.00	-7.15	-54.15	-52.52	5.37
1564.00	V	-47.51	-40.00	-7.51	-54.25	-52.88	5.37

Mode	LTE Band 13, CB: 5MHz, Channel : 23255						
Frequency (MHz)	Antenna Polarity	E.I.R.P. (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1569.00	H	-47.64	-40.00	-7.64	-54.62	-53.04	5.40
1569.00	V	-47.90	-40.00	-7.90	-54.62	-53.30	5.40

NOTE: EIRP = S.G power value + correction factor

3.3 Conducted Emissions & Band Edge

3.3.1 Limit of Conducted Emissions & Band Edge

LTE band 12
The power of any emission outside a licensee'sfrequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB.

LTE band 13
1) The power of any emission shall be attenuatedoutside the band below the transmitter power (P) by at least 43 + 10 log (P) dB equal to -13dBm.

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

3.3.2 Test Procedures

Out of Band Emission

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

Band Edge – 100 kHz band immediately outside the Frequency Band

1 Lowest and highest operating channels are tested for this item.

2 Set RBW = 30 kHz, VBW = 100 kHz, detector = RMS, sweep time = auto to measure trace.

Band Edge - Other frequency

1 Lowest and highest operating channels are tested for this item.

2 Set RBW = 30 kHz, VBW = 100 kHz, detector = RMS and use channel power measurement function of spectrum analyze to integrate power over 100 kHz.

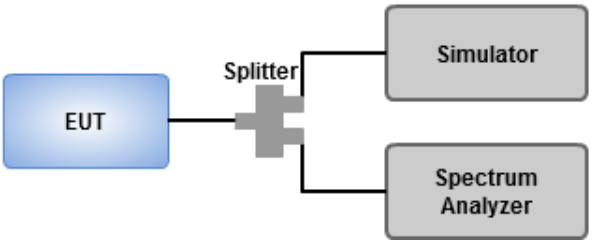
763 ~ 775 MHz / 793 ~ 806 MHz

1 Lowest, middle and highest operating channels are tested for this item.

2 Scan frequency range is from 763 MHz ~ 806 MHz.

3 Set RBW = 10 kHz, VBW = 30 kHz, detector = rms, sweep time = auto.

3.3.3 Test Setup



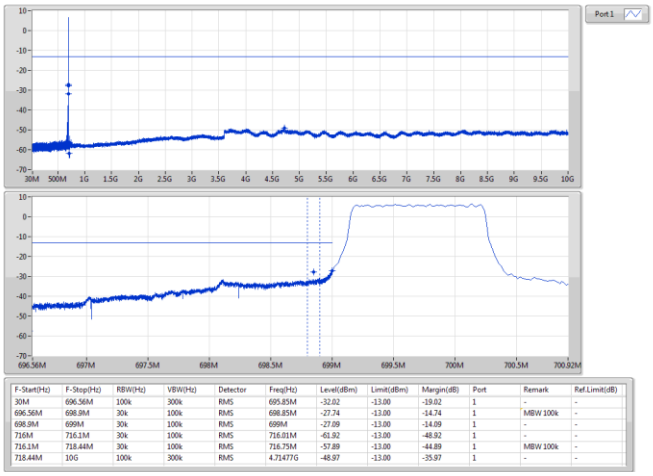
3.3.4 Test Result of Conducted Emissions

Summary of LTE Band 12

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 12_LTE-M1_1.4MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
715.3MHz_16QAM_RB 6,#RB 0,NB 0	Pass	716.1M	718.44M	30k	100k	RMS	716.15M	-20.02	-13	-7.02	1	MBW 100k	-
Band 12_LTE-M1_3MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
714.5MHz_16QAM_RB 6,#RB 0,NB 1	Pass	716.1M	722M	30k	100k	RMS	716.15M	-21.18	-13	-8.18	1	MBW 100k	-
Band 12_LTE-M1_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
713.5MHz_16QAM_RB 6,#RB 0,NB 3	Pass	716.1M	726M	30k	100k	RMS	716.15M	-20.4	-13	-7.4	1	MBW 100k	-
Band 12_LTE-M1_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
704MHz_16QAM_RB 6,#RB 0,NB 0	Pass	679M	698.9M	30k	100k	RMS	698.85M	-24.82	-13	-11.82	1	MBW 100k	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

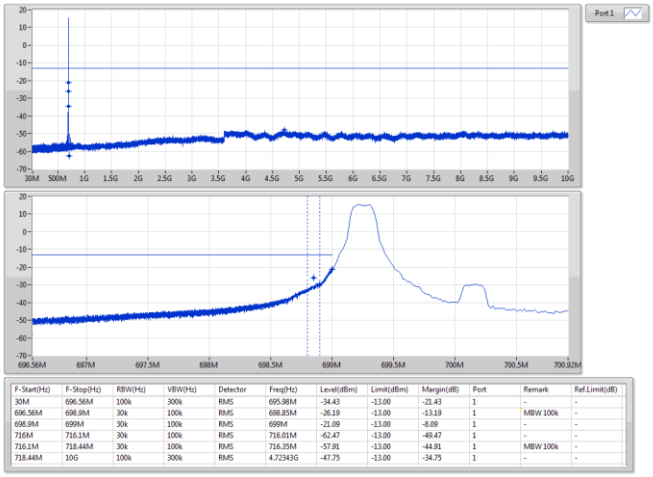
699.7MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	695.85M	-32.02	-13.00	-19.02	1	-	-
696.56M	698.8M	30k	100k	RMS	698.85M	-27.74	-13.00	-14.74	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-27.09	-13.00	-14.09	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-61.92	-13.00	-48.92	1	-	-
716.1M	718.44M	30k	100k	RMS	716.75M	-57.89	-13.00	-44.89	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	4.71477G	-48.97	-13.00	-35.97	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

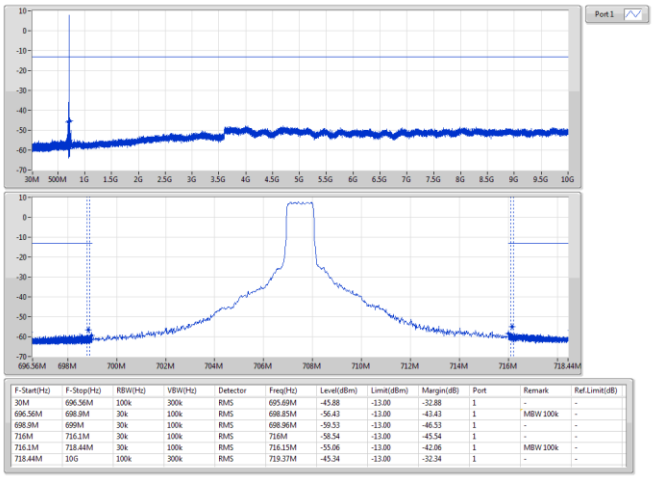
699.7MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	695.98M	-34.43	-13.00	-21.43	1	-	-
696.56M	698.8M	30k	100k	RMS	698.85M	-26.19	-13.00	-13.19	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-21.09	-13.00	-8.09	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-62.47	-13.00	-49.47	1	-	-
716.1M	718.44M	30k	100k	RMS	716.35M	-57.91	-13.00	-44.91	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	4.72345G	-47.75	-13.00	-34.75	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

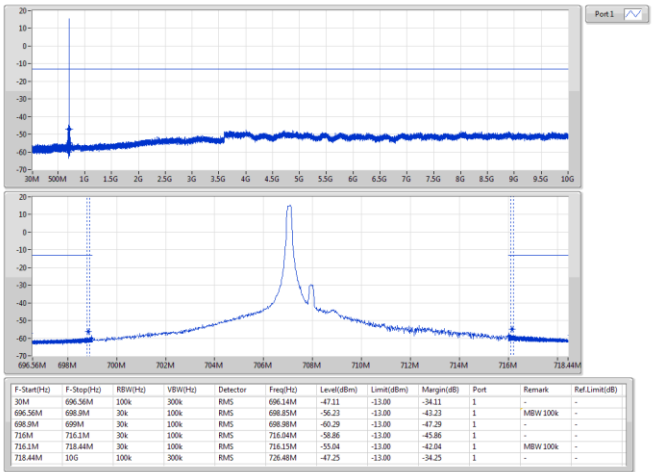
707.5MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	695.69M	-45.88	-13.00	-32.88	1	-	-
696.56M	698.8M	30k	100k	RMS	698.85M	-56.43	-13.00	-43.43	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-59.53	-13.00	-46.53	1	-	-
716M	716.1M	30k	100k	RMS	716M	-58.54	-13.00	-45.54	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-55.06	-13.00	-42.06	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	719.37M	-45.34	-13.00	-32.34	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

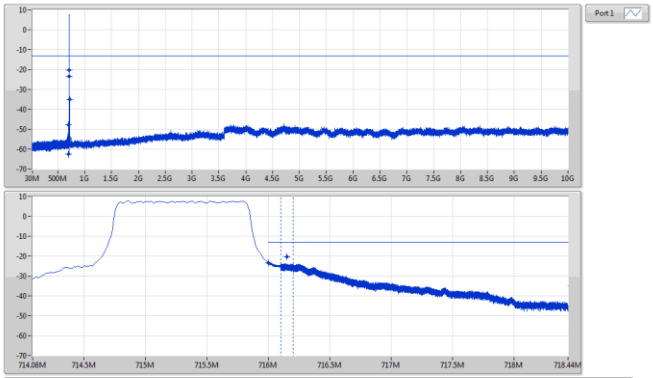
707.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	696.14M	-47.11	-13.00	-34.11	1	-	-
696.56M	698.8M	30k	100k	RMS	698.85M	-56.23	-13.00	-43.23	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.98M	-60.29	-13.00	-47.29	1	-	-
716M	716.1M	30k	100k	RMS	716.04M	-58.86	-13.00	-45.86	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-55.04	-13.00	-42.04	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	726.48M	-47.25	-13.00	-34.25	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

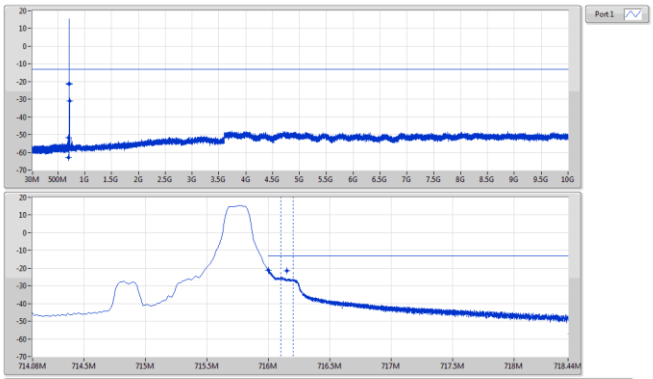
715.3MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	694.92M	-47.91	-13.00	-34.91	1	-	-
696.56M	698.8M	30k	100k	RMS	698.51M	-58.20	-13.00	-45.20	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-62.51	-13.00	-49.51	1	-	-
716M	716.1M	30k	100k	RMS	716M	-23.33	-13.00	-10.33	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-20.44	-13.00	-7.44	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	718.75M	-35.13	-13.00	-22.13	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

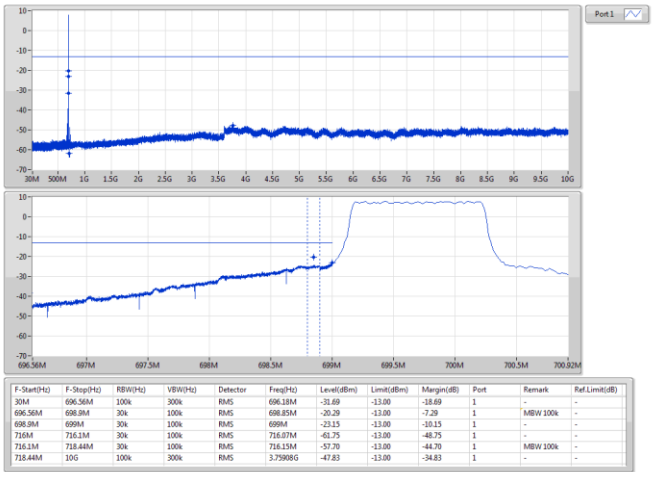
715.3MHz_QPSK_RB 1,#RB 5,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	694.45M	-51.83	-13.00	-38.83	1	-	-
696.56M	698.8M	30k	100k	RMS	698.71M	-58.32	-13.00	-45.32	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.93M	-62.89	-13.00	-49.89	1	-	-
716M	716.1M	30k	100k	RMS	716M	-21.28	-13.00	-8.28	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-21.44	-13.00	-8.44	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	718.75M	-31.01	-13.00	-18.01	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

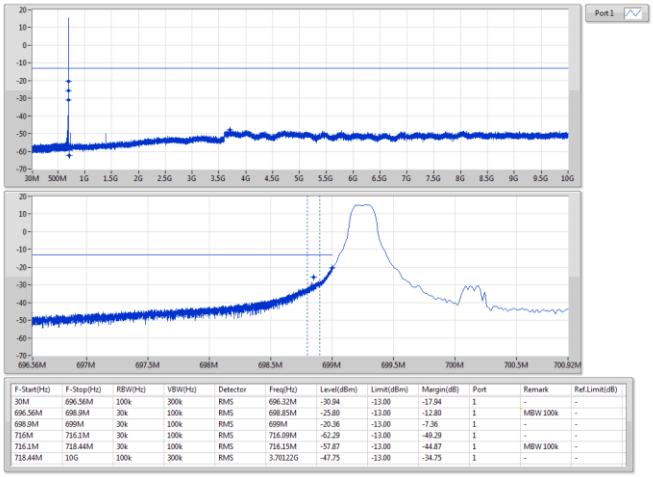
699.7MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	696.18M	-31.69	-13.00	-18.69	1	-	-
696.56M	698.9M	30k	100k	RMS	698.85M	-20.29	-13.00	-7.29	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-23.15	-13.00	-10.15	1	-	-
716M	716.1M	30k	100k	RMS	716.07M	-61.75	-13.00	-48.75	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-57.70	-13.00	-44.70	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	3.75908G	-47.83	-13.00	-34.83	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

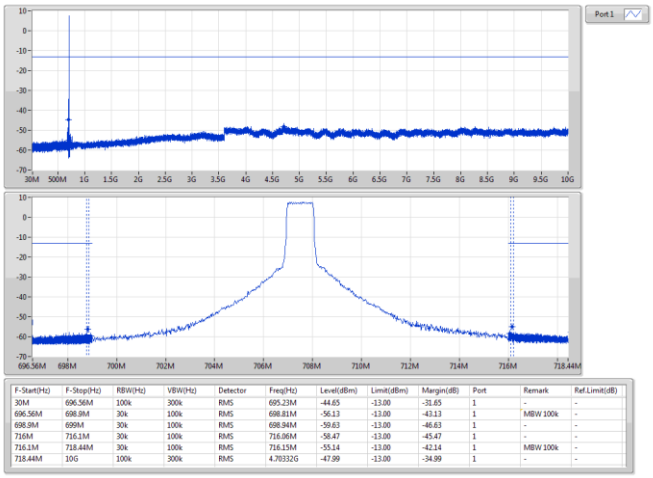
699.7MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	696.32M	-30.94	-13.00	-17.94	1	-	-
696.56M	698.9M	30k	100k	RMS	698.85M	-25.80	-13.00	-12.80	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-20.36	-13.00	-7.36	1	-	-
716M	716.1M	30k	100k	RMS	716.09M	-62.29	-13.00	-49.29	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-57.87	-13.00	-44.87	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	3.70122G	-47.75	-13.00	-34.75	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

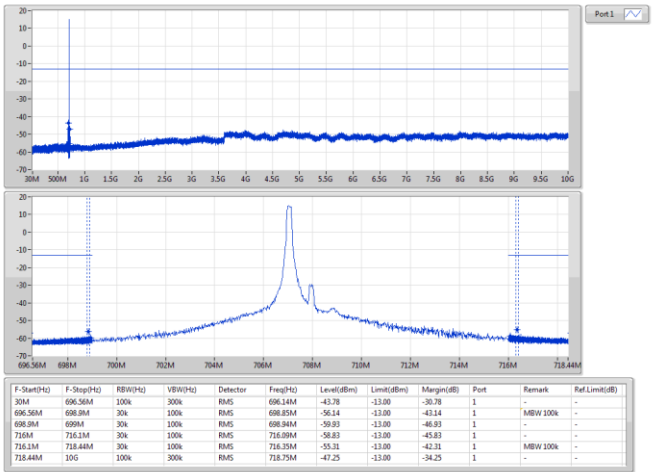
707.5MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	695.23M	-44.65	-13.00	-31.65	1	-	-
696.56M	698.9M	30k	100k	RMS	698.81M	-56.13	-13.00	-43.13	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-59.63	-13.00	-46.63	1	-	-
716M	716.1M	30k	100k	RMS	716.06M	-58.47	-13.00	-45.47	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-55.14	-13.00	-42.14	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	4.70332G	-47.99	-13.00	-34.99	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

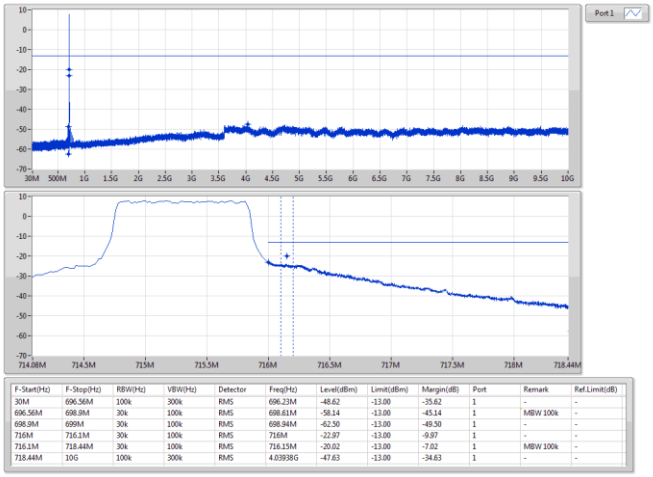
707.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	696.14M	-43.78	-13.00	-30.78	1	-	-
696.56M	698.9M	30k	100k	RMS	698.85M	-56.14	-13.00	-43.14	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-59.93	-13.00	-46.93	1	-	-
716M	716.1M	30k	100k	RMS	716.09M	-58.83	-13.00	-45.83	1	-	-
716.1M	718.44M	30k	100k	RMS	716.35M	-55.31	-13.00	-42.31	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	718.75M	-47.25	-13.00	-34.25	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

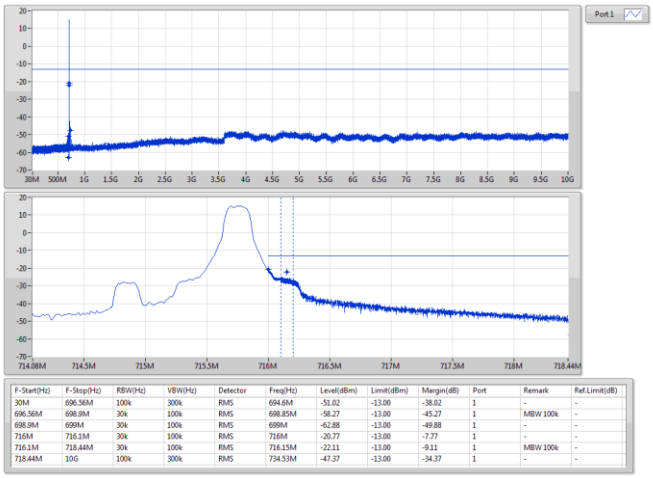
715.3MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	696.23M	-48.62	-13.00	-35.62	1	-	-
696.56M	698.9M	30k	100k	RMS	698.61M	-58.14	-13.00	-45.14	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.94M	-62.50	-13.00	-49.50	1	-	-
716M	716.1M	30k	100k	RMS	716M	-22.97	-13.00	-9.97	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-20.02	-13.00	-7.02	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	4.03938G	-47.63	-13.00	-34.63	1	-	-

Band 12_LTE-M1_1.4MHz_Nss1_1TX **CSE-TX**

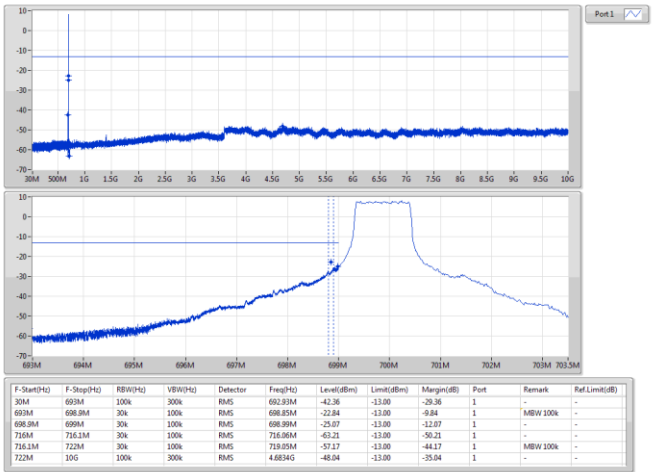
715.3MHz_16QAM_RB 1,#RB 5,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	696.56M	100k	300k	RMS	694.6M	-51.02	-13.00	-38.02	1	-	-
696.56M	698.9M	30k	100k	RMS	698.85M	-58.27	-13.00	-45.27	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-62.88	-13.00	-49.88	1	-	-
716M	716.1M	30k	100k	RMS	716M	-20.77	-13.00	-7.77	1	-	-
716.1M	718.44M	30k	100k	RMS	716.15M	-22.11	-13.00	-9.11	1	MBW 100k	-
718.44M	10G	100k	300k	RMS	734.53M	-47.37	-13.00	-34.37	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

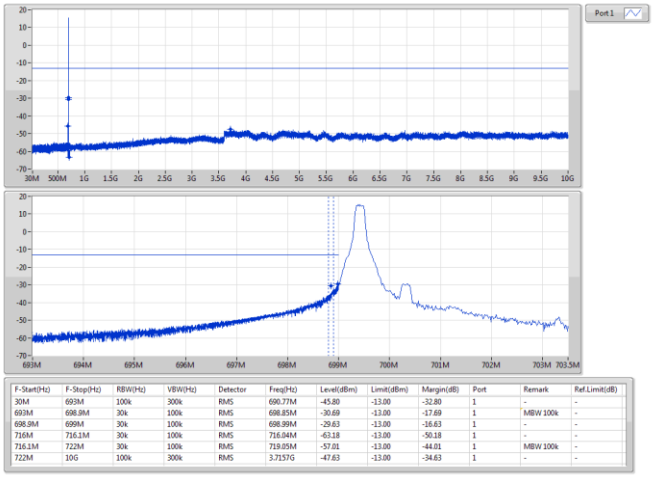
700.5MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	692.93M	-42.36	-13.00	-29.36	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-22.84	-13.00	-9.84	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-25.07	-13.00	-12.07	1	-	-
716M	716.1M	30k	100k	RMS	716.06M	-63.21	-13.00	-50.21	1	-	-
716.1M	722M	30k	100k	RMS	719.05M	-57.17	-13.00	-44.17	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.6834G	-48.04	-13.00	-35.04	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

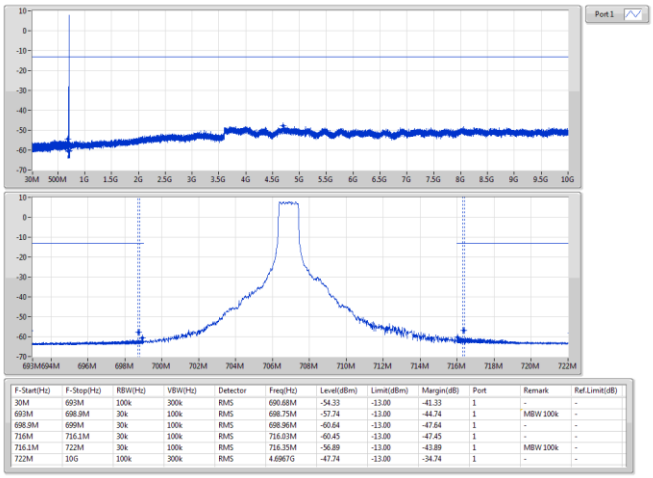
700.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	690.77M	-45.80	-13.00	-32.80	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-30.69	-13.00	-17.69	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-29.63	-13.00	-16.63	1	-	-
716M	716.1M	30k	100k	RMS	716.04M	-63.18	-13.00	-50.18	1	-	-
716.1M	722M	30k	100k	RMS	719.05M	-57.01	-13.00	-44.01	1	MBW 100k	-
722M	10G	100k	300k	RMS	3.7157G	-47.63	-13.00	-34.63	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

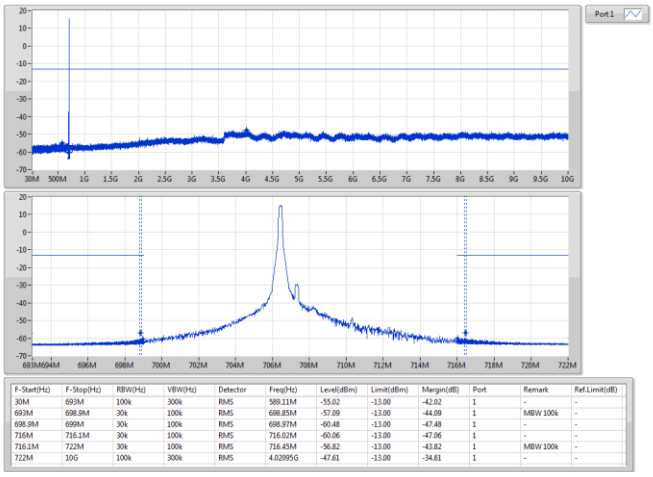
707.5MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	690.68M	-54.33	-13.00	-41.33	1	-	-
693M	698.8M	30k	100k	RMS	698.75M	-57.74	-13.00	-44.74	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-60.64	-13.00	-47.64	1	-	-
716M	716.1M	30k	100k	RMS	716.03M	-60.45	-13.00	-47.45	1	-	-
716.1M	722M	30k	100k	RMS	716.35M	-56.89	-13.00	-43.89	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.6967G	-47.74	-13.00	-34.74	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

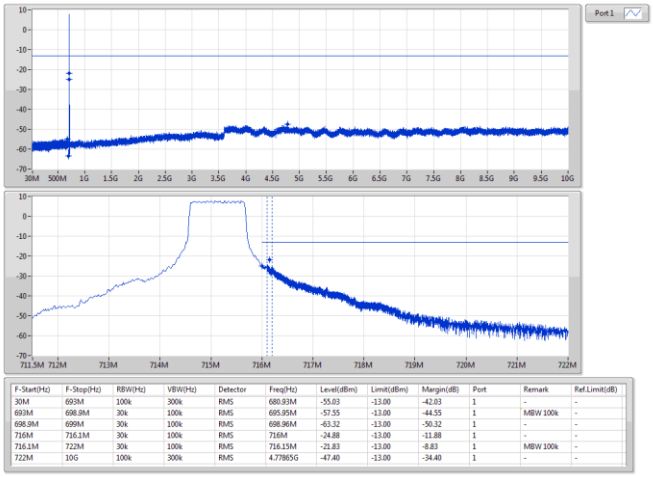
707.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	589.11M	-55.02	-13.00	-42.02	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-57.09	-13.00	-44.09	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.97M	-60.48	-13.00	-47.48	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-60.06	-13.00	-47.06	1	-	-
716.1M	722M	30k	100k	RMS	716.45M	-56.82	-13.00	-43.82	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.02095G	-47.61	-13.00	-34.61	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

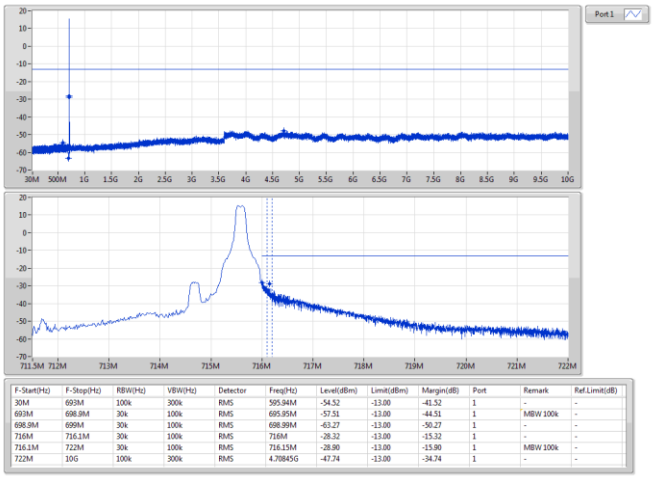
714.5MHz_QPSK_RB 6,#RB 0,NB 1



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	680.93M	-55.03	-13.00	-42.03	1	-	-
693M	698.8M	30k	100k	RMS	695.95M	-57.55	-13.00	-44.55	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-63.32	-13.00	-50.32	1	-	-
716M	716.1M	30k	100k	RMS	716M	-24.88	-13.00	-11.88	1	-	-
716.1M	722M	30k	100k	RMS	716.15M	-21.83	-13.00	-8.83	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.77865G	-47.40	-13.00	-34.40	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

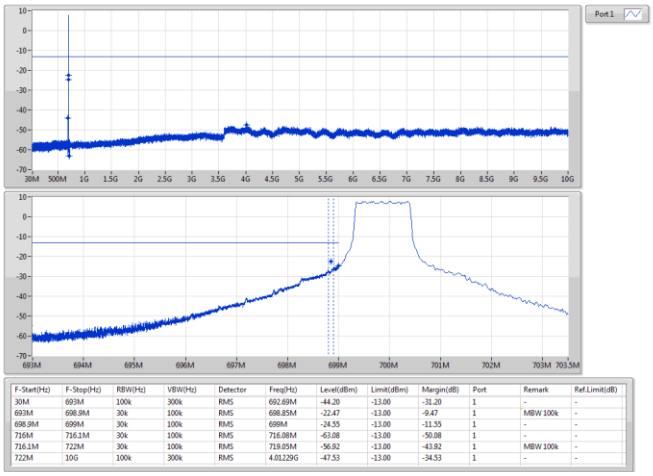
714.5MHz_QPSK_RB 1,#RB 5,NB 1



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	595.94M	-54.52	-13.00	-41.52	1	-	-
693M	698.8M	30k	100k	RMS	695.95M	-57.51	-13.00	-44.51	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-63.27	-13.00	-50.27	1	-	-
716M	716.1M	30k	100k	RMS	716M	-28.32	-13.00	-15.32	1	-	-
716.1M	722M	30k	100k	RMS	716.15M	-28.90	-13.00	-15.90	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.70845G	-47.74	-13.00	-34.74	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

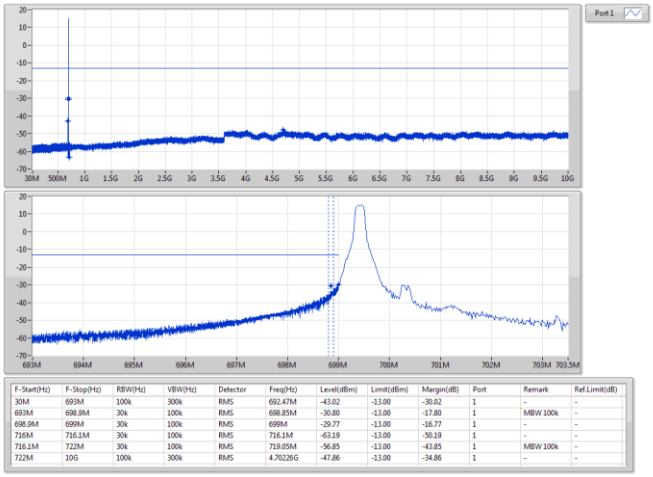
700.5MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	692.69M	-44.20	-13.00	-31.20	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-22.47	-13.00	-9.47	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-24.55	-13.00	-11.55	1	-	-
716M	716.1M	30k	100k	RMS	716.08M	-63.08	-13.00	-50.08	1	-	-
716.1M	722M	30k	100k	RMS	719.05M	-56.92	-13.00	-43.92	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.01229G	-47.53	-13.00	-34.53	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

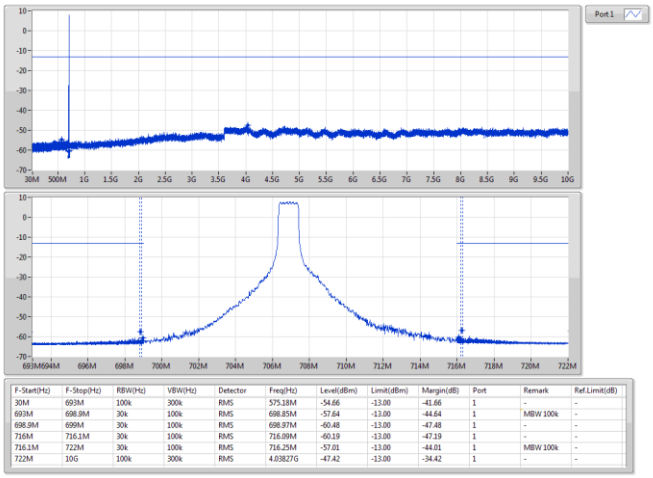
700.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	692.47M	-43.02	-13.00	-30.02	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-30.80	-13.00	-17.80	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-29.77	-13.00	-16.77	1	-	-
716M	716.1M	30k	100k	RMS	716.1M	-63.19	-13.00	-50.19	1	-	-
716.1M	722M	30k	100k	RMS	719.05M	-56.85	-13.00	-43.85	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.70226G	-47.86	-13.00	-34.86	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

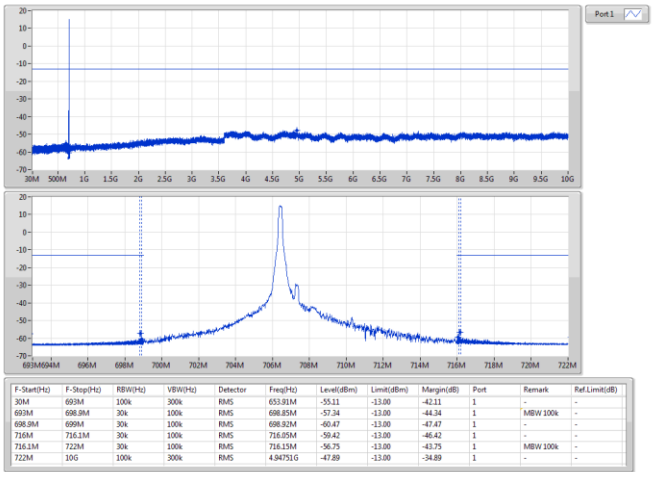
707.5MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	575.18M	-54.66	-13.00	-41.66	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-57.64	-13.00	-44.64	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.87M	-60.48	-13.00	-47.48	1	-	-
716M	716.1M	30k	100k	RMS	716.09M	-60.19	-13.00	-47.19	1	-	-
716.1M	722M	30k	100k	RMS	716.25M	-57.01	-13.00	-44.01	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.03827G	-47.42	-13.00	-34.42	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

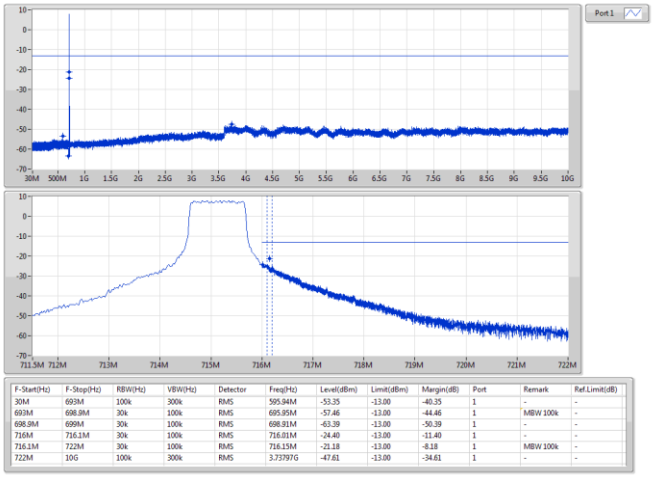
707.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	653.91M	-55.11	-13.00	-42.11	1	-	-
693M	698.8M	30k	100k	RMS	698.85M	-57.34	-13.00	-44.34	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.92M	-60.47	-13.00	-47.47	1	-	-
716M	716.1M	30k	100k	RMS	716.05M	-59.42	-13.00	-46.42	1	-	-
716.1M	722M	30k	100k	RMS	716.15M	-56.75	-13.00	-43.75	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.94751G	-47.89	-13.00	-34.89	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

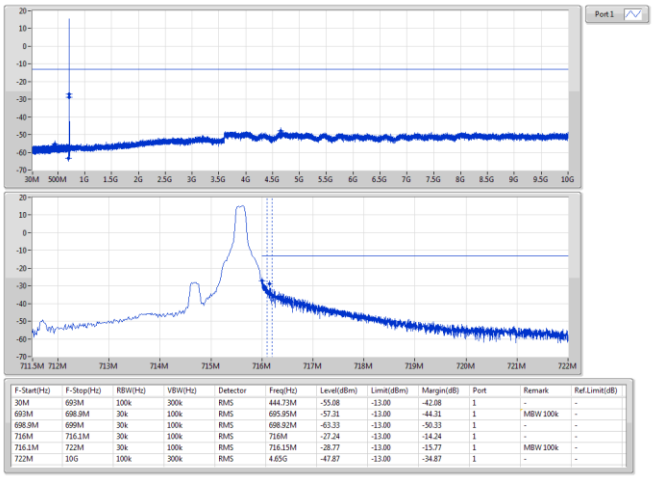
714.5MHz_16QAM_RB 6,#RB 0,NB 1



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	595.94M	-53.35	-13.00	-40.35	1	-	-
693M	698.8M	30k	100k	RMS	695.95M	-57.46	-13.00	-44.46	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.91M	-63.39	-13.00	-50.39	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-24.40	-13.00	-11.40	1	-	-
716.1M	722M	30k	100k	RMS	716.15M	-21.18	-13.00	-8.18	1	MBW 100k	-
722M	10G	100k	300k	RMS	3.75797G	-47.61	-13.00	-34.61	1	-	-

Band 12_LTE-M1_3MHz_Nss1_1TX **CSE-TX**

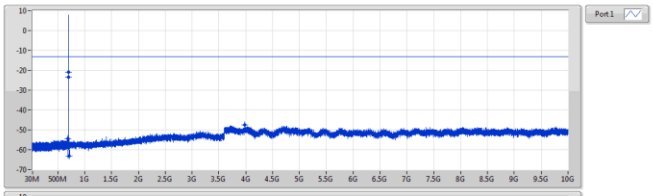
714.5MHz_16QAM_RB 1,#RB 5,NB 1

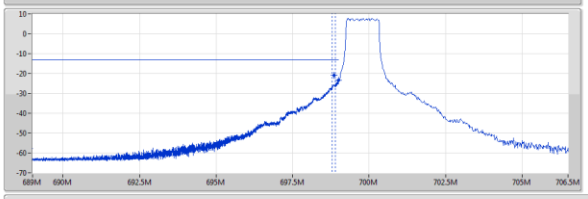


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	693M	100k	300k	RMS	444.73M	-55.08	-13.00	-42.08	1	-	-
693M	698.8M	30k	100k	RMS	695.95M	-57.31	-13.00	-44.31	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.92M	-63.33	-13.00	-50.33	1	-	-
716M	716.1M	30k	100k	RMS	716M	-27.24	-13.00	-14.24	1	-	-
716.1M	722M	30k	100k	RMS	716.15M	-28.77	-13.00	-15.77	1	MBW 100k	-
722M	10G	100k	300k	RMS	4.65G	-47.87	-13.00	-34.87	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

701.5MHz_QPSK_RB 6,#RB 0,NB 0

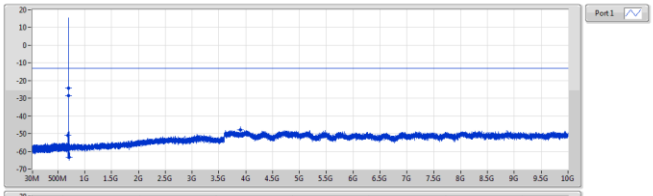


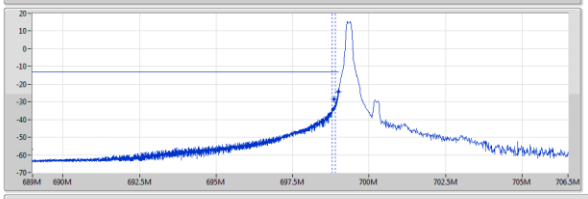


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	686.98M	-54.37	-13.00	-41.37	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-21.08	-13.00	-8.08	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-23.36	-13.00	-10.36	1	-	-
716M	716.1M	30k	100k	RMS	716.08M	-63.20	-13.00	-50.20	1	-	-
716.1M	726M	30k	100k	RMS	718.95M	-57.69	-13.00	-44.69	1	MBW 100k	-
726M	10G	100k	300k	RMS	3.98365G	-47.60	-13.00	-34.60	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

701.5MHz_QPSK_RB 1,#RB 0,NB 0

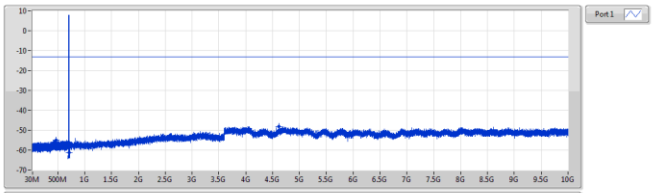


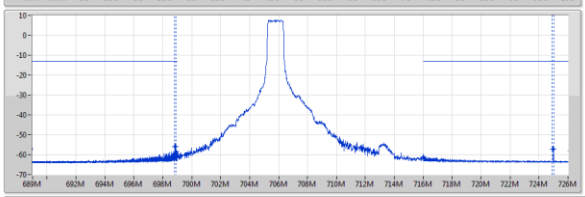


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	688.3M	-51.09	-13.00	-38.09	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-28.44	-13.00	-15.44	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-24.46	-13.00	-11.46	1	-	-
716M	716.1M	30k	100k	RMS	716.07M	-63.15	-13.00	-50.15	1	-	-
716.1M	726M	30k	100k	RMS	718.95M	-57.66	-13.00	-44.66	1	MBW 100k	-
726M	10G	100k	300k	RMS	3.8977G	-48.00	-13.00	-35.00	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

707.5MHz_QPSK_RB 6,#RB 0,NB 0

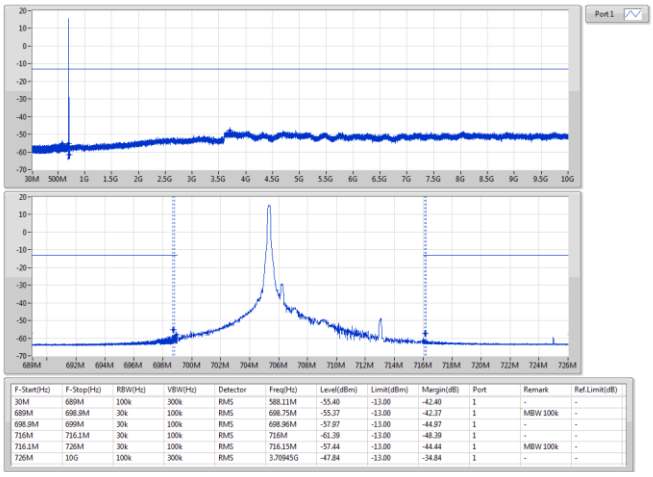




F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	471.55M	-55.02	-13.00	-42.02	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-55.87	-13.00	-42.87	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.81M	-58.41	-13.00	-45.41	1	-	-
716M	716.1M	30k	100k	RMS	716.03M	-61.32	-13.00	-48.32	1	-	-
716.1M	726M	30k	100k	RMS	724.95M	-57.29	-13.00	-44.29	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.6183G	-48.01	-13.00	-35.01	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

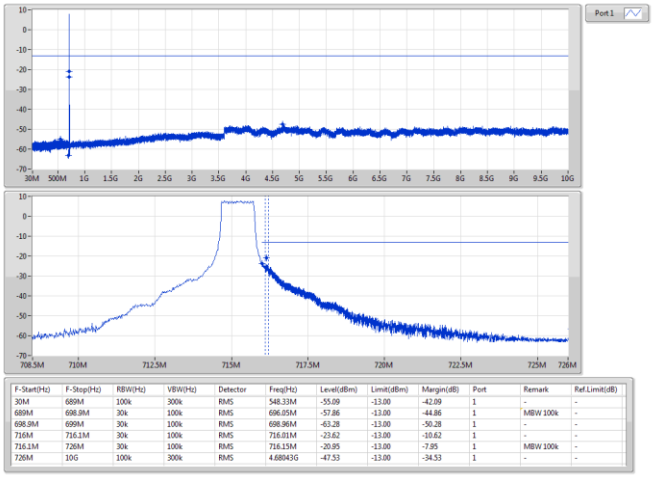
707.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	588.11M	-55.40	-13.00	-42.40	1	-	-
689M	698.8M	30k	100k	RMS	698.75M	-55.37	-13.00	-42.37	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-57.97	-13.00	-44.97	1	-	-
716M	716.1M	30k	100k	RMS	716M	-61.39	-13.00	-48.39	1	-	-
716.1M	726M	30k	100k	RMS	716.15M	-57.44	-13.00	-44.44	1	MBW 100k	-
726M	10G	100k	300k	RMS	3.70945G	-47.84	-13.00	-34.84	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

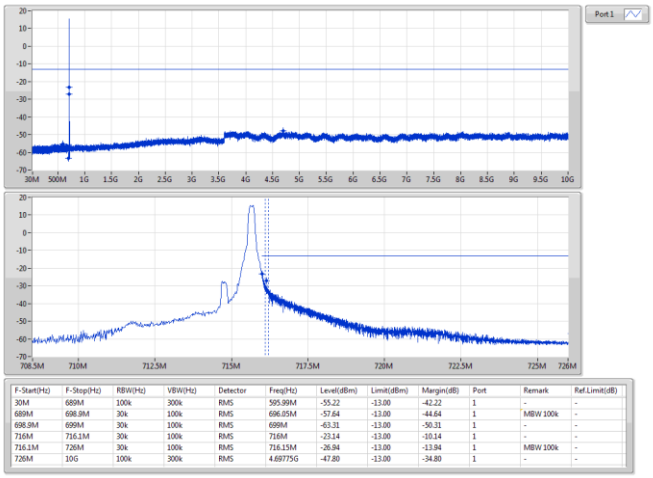
713.5MHz_QPSK_RB 6,#RB 0,NB 3



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	548.33M	-55.09	-13.00	-42.09	1	-	-
689M	698.8M	30k	100k	RMS	696.05M	-57.86	-13.00	-44.86	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.96M	-63.28	-13.00	-50.28	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-23.62	-13.00	-10.62	1	-	-
716.1M	726M	30k	100k	RMS	716.15M	-20.85	-13.00	-7.85	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.68043G	-47.53	-13.00	-34.53	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

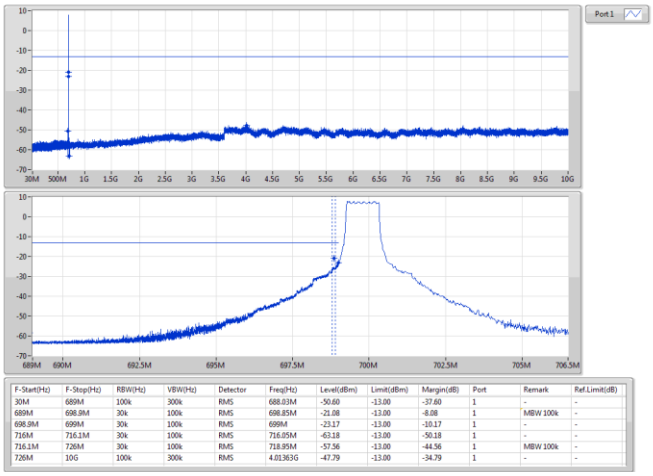
713.5MHz_QPSK_RB 1,#RB 5,NB 3



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	595.99M	-55.22	-13.00	-42.22	1	-	-
689M	698.8M	30k	100k	RMS	696.05M	-57.64	-13.00	-44.64	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-63.31	-13.00	-50.31	1	-	-
716M	716.1M	30k	100k	RMS	716M	-23.14	-13.00	-10.14	1	-	-
716.1M	726M	30k	100k	RMS	716.15M	-26.94	-13.00	-13.94	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.69775G	-47.80	-13.00	-34.80	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

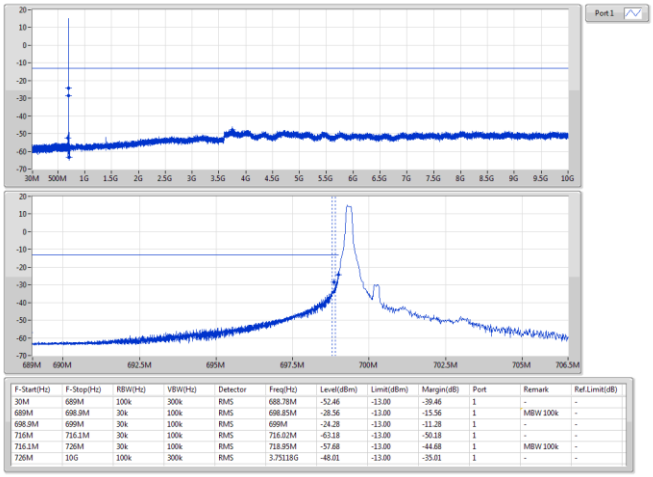
701.5MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	688.03M	-50.60	-13.00	-37.60	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-21.08	-13.00	-8.08	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-23.17	-13.00	-10.17	1	-	-
716M	716.1M	30k	100k	RMS	716.05M	-63.18	-13.00	-50.18	1	-	-
716.1M	726M	30k	100k	RMS	718.95M	-57.56	-13.00	-44.56	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.01363G	-47.79	-13.00	-34.79	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

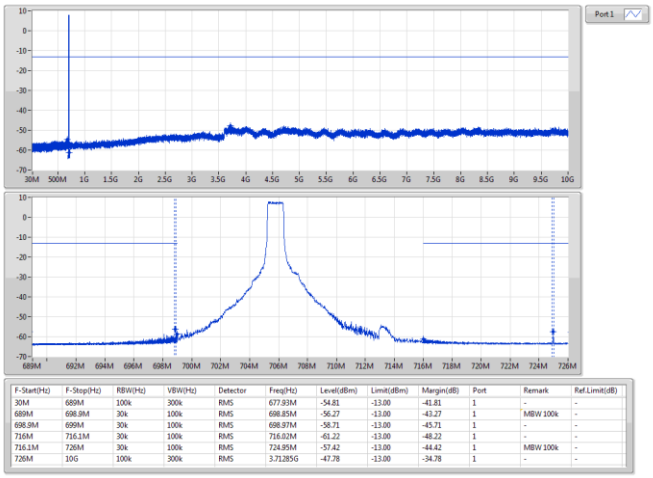
701.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	688.78M	-52.46	-13.00	-39.46	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-28.56	-13.00	-15.56	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-24.28	-13.00	-11.28	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-63.18	-13.00	-50.18	1	-	-
716.1M	726M	30k	100k	RMS	718.95M	-57.68	-13.00	-44.68	1	MBW 100k	-
726M	10G	100k	300k	RMS	3.75118G	-48.01	-13.00	-35.01	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

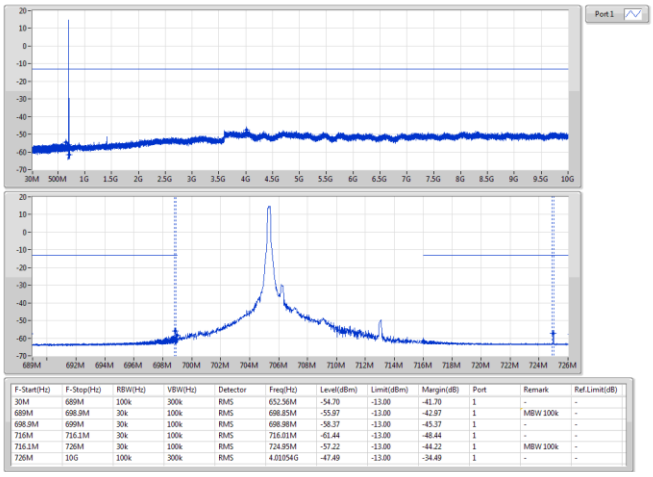
707.5MHz_16QAM_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	677.93M	-54.81	-13.00	-41.81	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-56.27	-13.00	-43.27	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.97M	-58.71	-13.00	-45.71	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-61.22	-13.00	-48.22	1	-	-
716.1M	726M	30k	100k	RMS	724.95M	-57.42	-13.00	-44.42	1	MBW 100k	-
726M	10G	100k	300k	RMS	3.71285G	-47.78	-13.00	-34.78	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

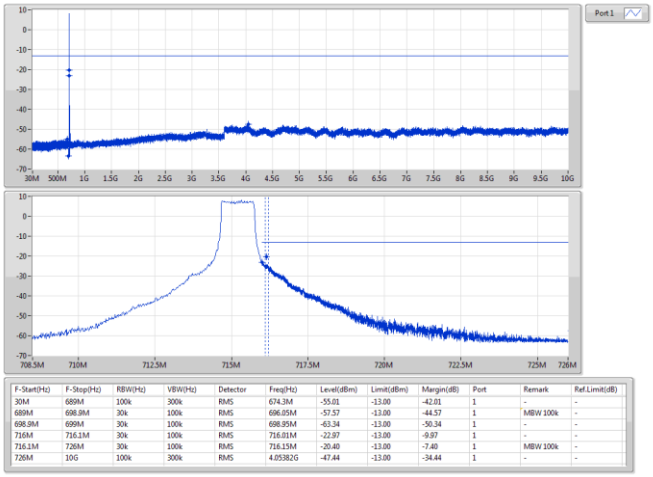
707.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	652.56M	-54.70	-13.00	-41.70	1	-	-
689M	698.8M	30k	100k	RMS	698.85M	-55.97	-13.00	-42.97	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.98M	-58.37	-13.00	-45.37	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-61.44	-13.00	-48.44	1	-	-
716.1M	726M	30k	100k	RMS	724.95M	-57.22	-13.00	-44.22	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.01054G	-47.49	-13.00	-34.49	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

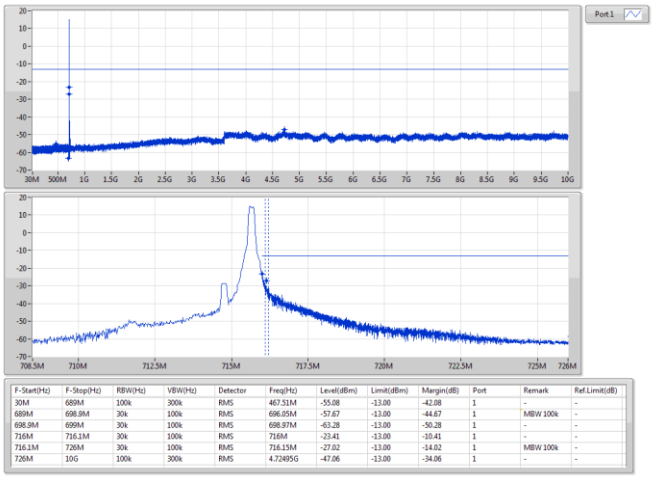
713.5MHz_16QAM_RB 6,#RB 0,NB 3



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	674.3M	-55.01	-13.00	-42.01	1	-	-
689M	698.8M	30k	100k	RMS	696.05M	-57.57	-13.00	-44.57	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.95M	-63.34	-13.00	-50.34	1	-	-
716M	716.1M	30k	100k	RMS	716.01M	-22.97	-13.00	-9.97	1	-	-
716.1M	726M	30k	100k	RMS	716.15M	-20.40	-13.00	-7.40	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.05382G	-47.44	-13.00	-34.44	1	-	-

Band 12_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

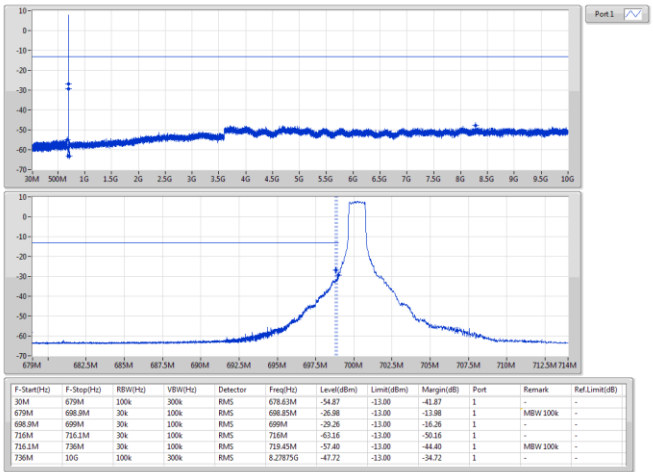
713.5MHz_16QAM_RB 1,#RB 5,NB 3



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	689M	100k	300k	RMS	467.51M	-55.08	-13.00	-42.08	1	-	-
689M	698.8M	30k	100k	RMS	696.05M	-57.67	-13.00	-44.67	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.97M	-63.28	-13.00	-50.28	1	-	-
716M	716.1M	30k	100k	RMS	716M	-23.41	-13.00	-10.41	1	-	-
716.1M	726M	30k	100k	RMS	716.15M	-27.02	-13.00	-14.02	1	MBW 100k	-
726M	10G	100k	300k	RMS	4.72405G	-47.06	-13.00	-34.06	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

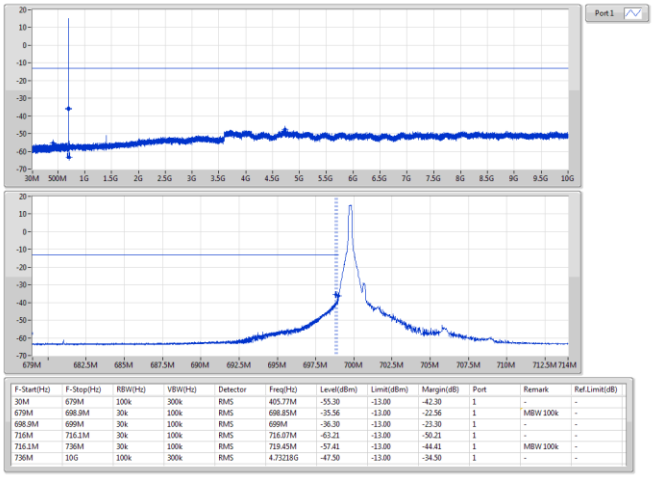
704MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	678.63M	-54.87	-13.00	-41.87	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-26.98	-13.00	-13.98	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-29.26	-13.00	-16.26	1	-	-
716M	716.1M	30k	100k	RMS	716M	-63.16	-13.00	-50.16	1	-	-
716.1M	736M	30k	100k	RMS	719.45M	-57.40	-13.00	-44.40	1	MBW 100k	-
736M	10G	100k	300k	RMS	8.27875G	-47.72	-13.00	-34.72	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

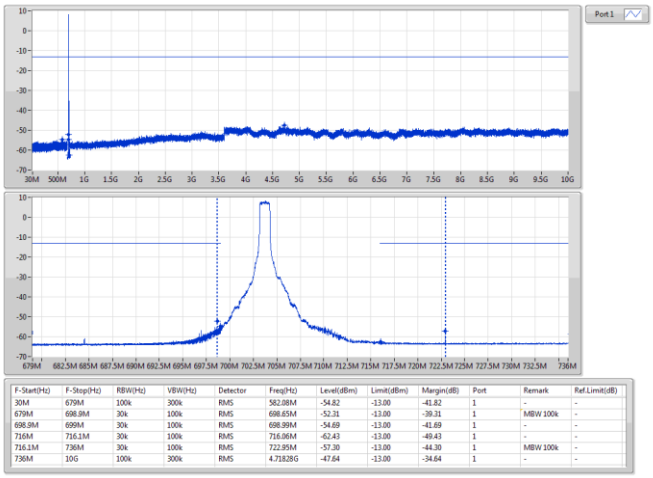
704MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	405.77M	-55.30	-13.00	-42.30	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-35.56	-13.00	-22.56	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-36.30	-13.00	-23.30	1	-	-
716M	716.1M	30k	100k	RMS	716.07M	-63.21	-13.00	-50.21	1	-	-
716.1M	736M	30k	100k	RMS	719.45M	-57.41	-13.00	-44.41	1	MBW 100k	-
736M	10G	100k	300k	RMS	4.73218G	-47.50	-13.00	-34.50	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

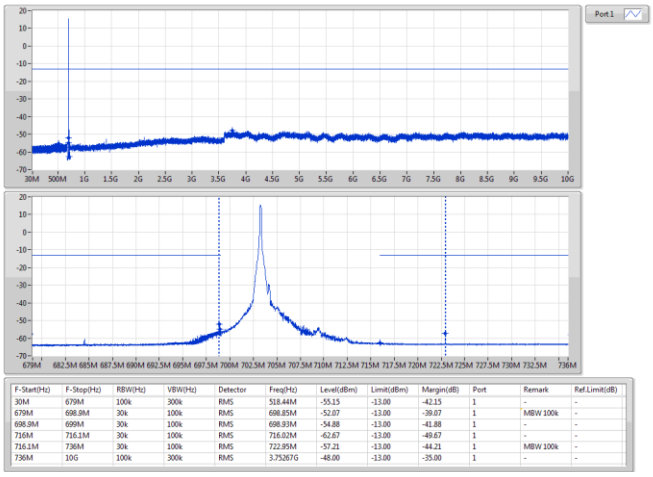
707.5MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	582.08M	-54.82	-13.00	-41.82	1	-	-
679M	698.8M	30k	100k	RMS	698.65M	-52.31	-13.00	-39.31	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-54.69	-13.00	-41.69	1	-	-
716M	716.1M	30k	100k	RMS	716.06M	-62.43	-13.00	-49.43	1	-	-
716.1M	736M	30k	100k	RMS	722.95M	-57.30	-13.00	-44.30	1	MBW 100k	-
736M	10G	100k	300k	RMS	4.71828G	-47.64	-13.00	-34.64	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

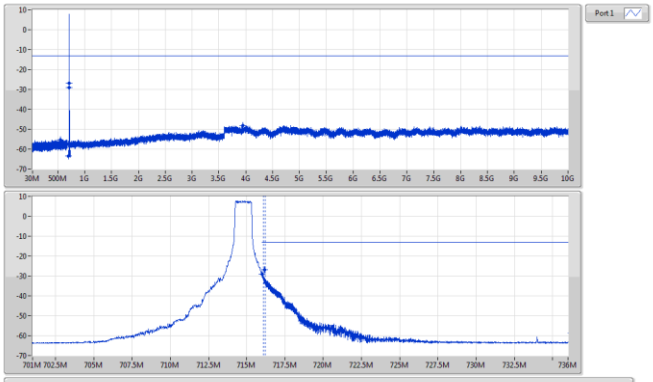
707.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	518.44M	-55.15	-13.00	-42.15	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-52.07	-13.00	-39.07	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.93M	-54.88	-13.00	-41.88	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-62.67	-13.00	-49.67	1	-	-
716.1M	736M	30k	100k	RMS	722.95M	-57.21	-13.00	-44.21	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.75267G	-48.00	-13.00	-35.00	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

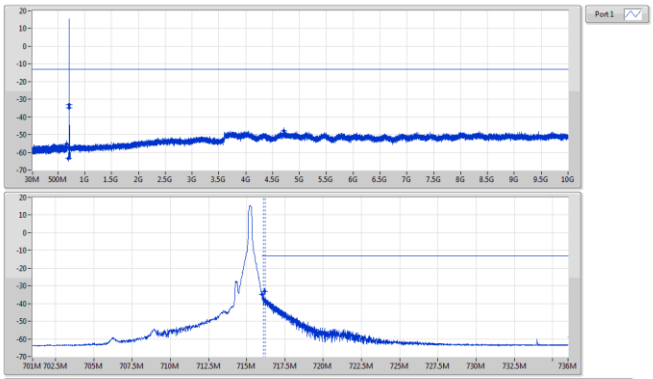
711MHz_QPSK_RB 6,#RB 0,NB 7



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	550.17M	-55.21	-13.00	-42.21	1	-	-
679M	698.8M	30k	100k	RMS	695.55M	-57.45	-13.00	-44.45	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.98M	-63.45	-13.00	-50.45	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-29.19	-13.00	-16.19	1	-	-
716.1M	736M	30k	100k	RMS	716.15M	-26.90	-13.00	-13.90	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.95092G	-48.16	-13.00	-35.16	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

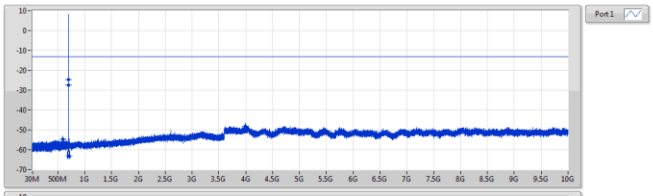
711MHz_QPSK_RB 1,#RB 5,NB 7

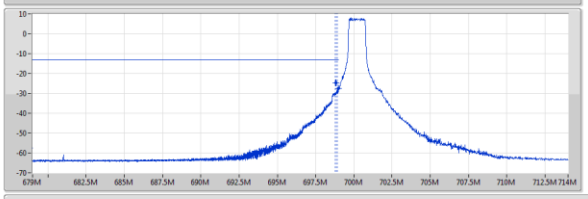


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	661.76M	-55.15	-13.00	-42.15	1	-	-
679M	698.8M	30k	100k	RMS	695.55M	-57.43	-13.00	-44.43	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.97M	-63.42	-13.00	-50.42	1	-	-
716M	716.1M	30k	100k	RMS	716M	-34.67	-13.00	-21.67	1	-	-
716.1M	736M	30k	100k	RMS	716.15M	-33.14	-13.00	-20.14	1	MBW 100k	-
736M	10G	100k	300k	RMS	4.70655G	-47.76	-13.00	-34.76	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

704MHz_16QAM_RB 6,#RB 0,NB 0

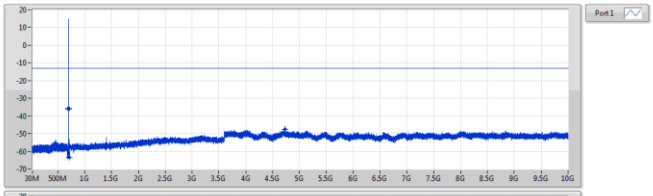


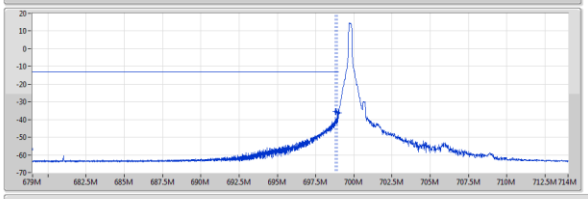


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	596.71M	-54.54	-13.00	-41.54	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-24.82	-13.00	-11.82	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	699M	-27.41	-13.00	-14.41	1	-	-
716M	716.1M	30k	100k	RMS	716.07M	-63.23	-13.00	-50.23	1	-	-
716.1M	736M	30k	100k	RMS	719.45M	-57.38	-13.00	-44.38	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.996G	-47.98	-13.00	-34.98	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

704MHz_16QAM_RB 1,#RB 0,NB 0

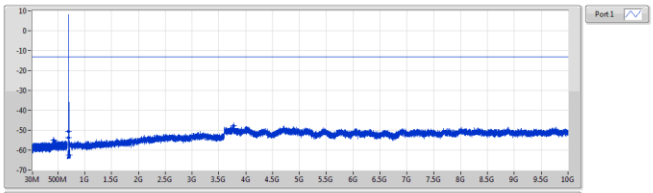


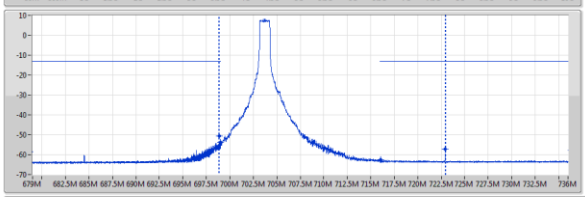


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	456.8M	-55.25	-13.00	-42.25	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-35.52	-13.00	-22.52	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-36.09	-13.00	-23.09	1	-	-
716M	716.1M	30k	100k	RMS	716.08M	-63.23	-13.00	-50.23	1	-	-
716.1M	736M	30k	100k	RMS	719.45M	-57.44	-13.00	-44.44	1	MBW 100k	-
736M	10G	100k	300k	RMS	4.72724G	-47.62	-13.00	-34.62	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

707.5MHz_16QAM_RB 6,#RB 0,NB 0

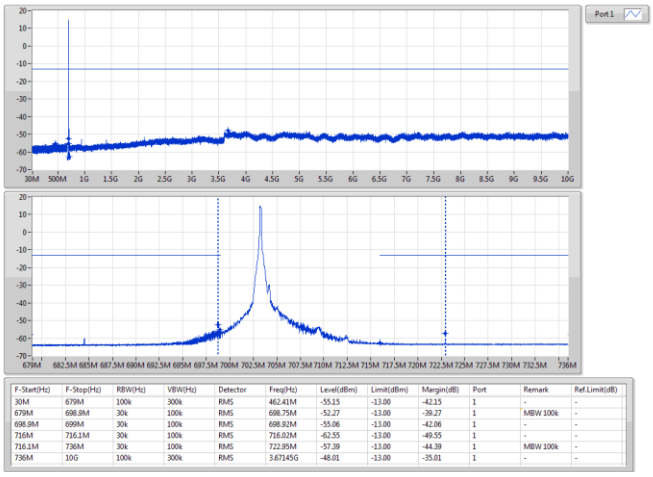




F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	428.38M	-55.04	-13.00	-42.04	1	-	-
679M	698.8M	30k	100k	RMS	698.85M	-50.53	-13.00	-37.53	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.98M	-53.64	-13.00	-40.64	1	-	-
716M	716.1M	30k	100k	RMS	716.03M	-62.48	-13.00	-49.48	1	-	-
716.1M	736M	30k	100k	RMS	722.95M	-57.18	-13.00	-44.18	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.76811G	-47.79	-13.00	-34.79	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

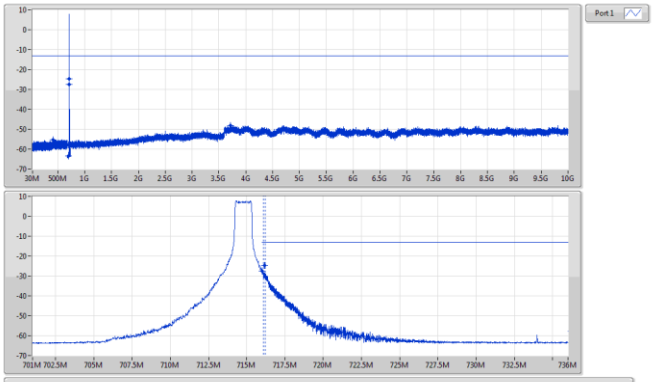
707.5MHz_16QAM_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	462.41M	-55.15	-13.00	-42.15	1	-	-
679M	698.8M	30k	100k	RMS	698.75M	-52.27	-13.00	-39.27	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.92M	-55.06	-13.00	-42.06	1	-	-
716M	716.1M	30k	100k	RMS	716.02M	-62.55	-13.00	-49.55	1	-	-
716.1M	736M	30k	100k	RMS	722.95M	-57.39	-13.00	-44.39	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.67145G	-48.01	-13.00	-35.01	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

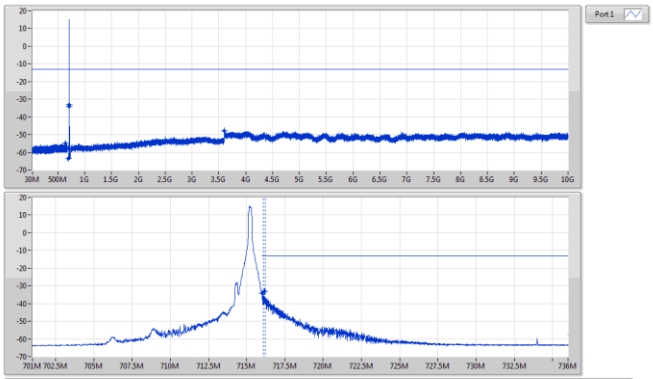
711MHz_16QAM_RB 6,#RB 0,NB 7



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	416.93M	-55.29	-13.00	-42.29	1	-	-
679M	698.8M	30k	100k	RMS	695.55M	-57.92	-13.00	-44.92	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.99M	-63.34	-13.00	-50.34	1	-	-
716M	716.1M	30k	100k	RMS	716M	-27.35	-13.00	-14.35	1	-	-
716.1M	736M	30k	100k	RMS	716.15M	-24.84	-13.00	-11.84	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.71592G	-48.01	-13.00	-35.01	1	-	-

Band 12_LTE-M1_10MHz_Nss1_1TX **CSE-TX**

711MHz_16QAM_RB 1,#RB 5,NB 7



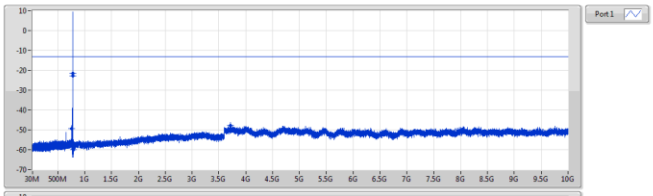
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	679M	100k	300k	RMS	639.91M	-54.98	-13.00	-41.98	1	-	-
679M	698.8M	30k	100k	RMS	695.55M	-57.79	-13.00	-44.79	1	MBW 100k	-
698.9M	699M	30k	100k	RMS	698.9M	-63.36	-13.00	-50.36	1	-	-
716M	716.1M	30k	100k	RMS	716M	-34.17	-13.00	-21.17	1	-	-
716.1M	736M	30k	100k	RMS	716.15M	-33.15	-13.00	-20.15	1	MBW 100k	-
736M	10G	100k	300k	RMS	3.68105G	-48.01	-13.00	-35.01	1	-	-

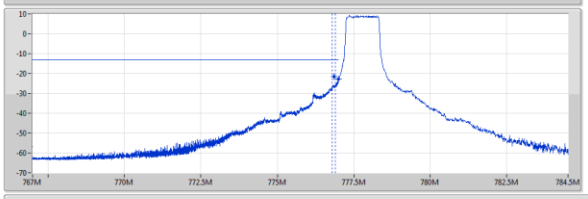
Summary of LTE Band 13

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	VBW (Hz)	Detector	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port	Remark	Ref.Limit (dB)
Band 13_LTE-M1_5MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
784.5MHz_16QAM_RB 6,#RB 0,NB 3	Pass	787.1M	797M	30k	100k	RMS	787.15M	-19.19	-13	-6.19	1	MBW 100k	-
Band 13_LTE-M1_10MHz_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
782MHz_16QAM_RB 6,#RB 0,NB 7	Pass	787.1M	807M	30k	100k	RMS	787.15M	-23.58	-13	-10.58	1	MBW 100k	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

779.5MHz_QPSK_RB 6,#RB 0,NB 0

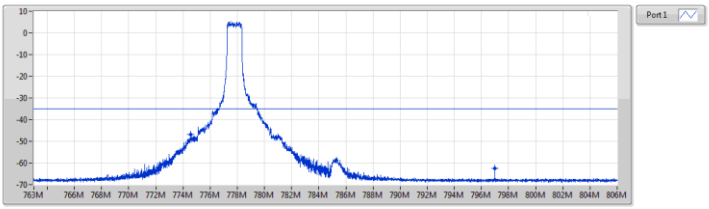




F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	767M	100k	300k	RMS	758.6M	-49.44	-13.00	-36.44	1	-	-
767M	776.9M	30k	100k	RMS	776.85M	-21.57	-13.00	-8.57	1	MBW 100k	-
776.9M	777M	30k	100k	RMS	777M	-22.85	-13.00	-9.85	1	-	-
787M	787.1M	30k	100k	RMS	787M	-59.97	-13.00	-46.97	1	-	-
787.1M	797M	30k	100k	RMS	787.15M	-56.67	-13.00	-43.67	1	MBW 100k	-
797M	10G	100k	300k	RMS	3.71773G	-47.77	-13.00	-34.77	1	-	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

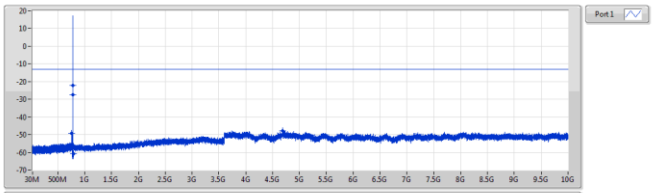
779.5MHz_QPSK_RB 6,#RB 0,NB 0

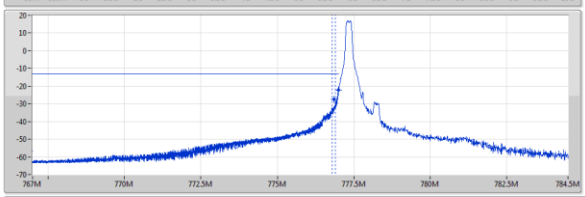


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.58M	-46.92	-35.00	-11.92	1	-	-
793M	806M	10k	30k	RMS	796.99M	-62.47	-35.00	-27.47	1	-	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

779.5MHz_QPSK_RB 1,#RB 0,NB 0

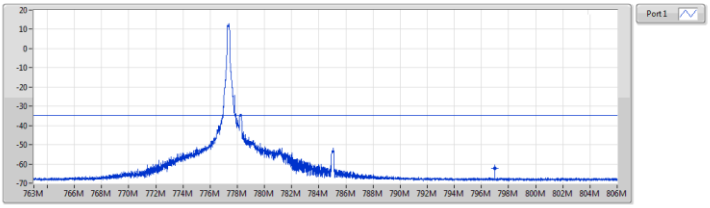




F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	767M	100k	300k	RMS	758.6M	-49.10	-13.00	-36.10	1	-	-
767M	776.9M	30k	100k	RMS	776.85M	-27.39	-13.00	-14.39	1	MBW 100k	-
776.9M	777M	30k	100k	RMS	777M	-22.20	-13.00	-9.20	1	-	-
787M	787.1M	30k	100k	RMS	787.07M	-60.81	-13.00	-47.81	1	-	-
787.1M	797M	30k	100k	RMS	787.45M	-56.74	-13.00	-43.74	1	MBW 100k	-
797M	10G	100k	300k	RMS	4.6911G	-47.74	-13.00	-34.74	1	-	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

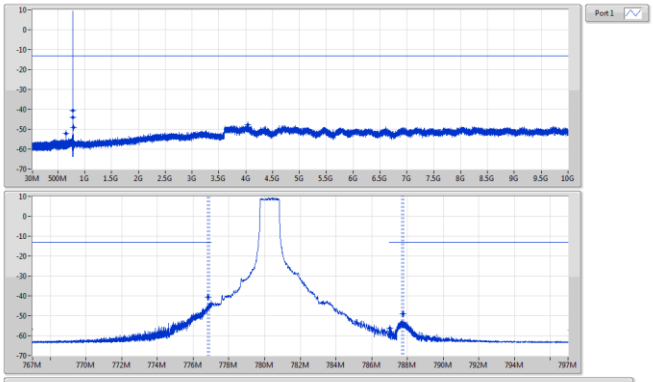
779.5MHz_QPSK_RB 1,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.99M	-53.27	-35.00	-18.27	1	-	-
793M	806M	10k	30k	RMS	796.99M	-62.43	-35.00	-27.43	1	-	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

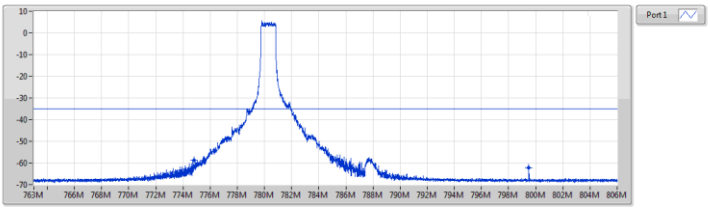
782MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
30M	767M	100k	300k	RMS	650.21M	-52.31	-13.00	-39.31	1	-	-
767M	776.8M	30k	100k	RMS	776.85M	-40.48	-13.00	-27.48	1	MBW 100k	-
776.9M	777M	30k	100k	RMS	777M	-43.97	-13.00	-30.97	1	-	-
787M	787.1M	30k	100k	RMS	787.04M	-56.13	-13.00	-43.13	1	-	-
787.1M	797M	30k	100k	RMS	787.75M	-49.15	-13.00	-36.15	1	MBW 100k	-
797M	10G	100k	300k	RMS	4.04198G	-47.82	-13.00	-34.82	1	-	-

Band 13_LTE-M1_5MHz_Nss1_1TX **CSE-TX**

782MHz_QPSK_RB 6,#RB 0,NB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Port	Remark	Ref.Limit(dB)
763M	775M	10k	30k	RMS	774.81M	-58.82	-35.00	-23.82	1	-	-
793M	806M	10k	30k	RMS	799.49M	-62.12	-35.00	-27.12	1	-	-