FCC Test Report

FCC ID	:	**MXF-WLTGG12248H**
Equipment	:	**WLTGG-122 LTE Cat 12 B48 HE Outdoor CPE**
Model No.	:	**WLTGG-122-HGA_48**
Brand Name	:	**Gemtek**
Multiple Listing	:	**Refer to item 1.1.1 for more details.**
Applicant	:	**Gemtek Technology Co., Ltd.**
Address	:	**No. 15-1 Zhonghua Road, Hsinchu Industrial Park, Hukou, Hsinchu, Taiwan, 30352.**
Standard	:	**47 CFR FCC Part 96**
Type	:	☐ **End User Device** ☐ **Category A CBSD** ☐ **Category B CBSD** ☒ **CPE-CBSD**
Received Date	:	**Aug. 30, 2019**
Tested Date	:	**Aug. 30 ~ Sep. 11, 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

Table of Contents

1 GENERAL DESCRIPTION 5

1.1 Information 5
1.2 Local Support Equipment List 9
1.3 Test Setup Chart 9
1.4 The Equipment List 10
1.5 Test Standards 11
1.6 Deviation from Test Standard and Measurement Procedure 11
1.7 Measurement Uncertainty 12

2 TEST CONFIGURATION 13

2.1 Testing Condition and Location Information 13
2.2 The Worst Test Modes and Channel Details 13

3 TEST RESULTS 15

3.1 Output Power 15
3.2 Radiated Emissions 55
3.3 Conducted Emissions & Band Edge 64
3.4 Emission Bandwidth 82
3.5 Peak to Average Ratio 101
3.6 Frequency Stability 116
3.7 Reception Limits 122

4 TEST LABORATORY INFORMATION 126

Release Record

Report No.	Version	Description	Issued Date
FG990205	Rev. 01	Initial issue	Sep. 23, 2019

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 / 96.41(b)	Maximum RF Power Output EIRP	Power[dBm/10MHz]: 40.06	Pass
96.41(b)	Maximum Power Spectral Density	Meet the requirement of limit	Pass
96.41(g)	Peak to Average Ratio	Meet the requirement of limit	Pass
2.1053 / 96.41(e)	Radiated Spurious Emission	Meet the requirement of limit	Pass
2.1051 / 96.41(e)	Conducted Spurious Emission	Meet the requirement of limit	Pass
2.1051 / 96.41(e)	Band Edge	Meet the requirement of limit	Pass
2.1049	Emission Bandwidth	Meet the requirement of limit	Pass
2.1055	Frequency Stability	Meet the requirement of limit	Pass
96.41(f)	Reception Limits	Meet the requirement of limit	Pass

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

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
Gemtek	WLTGG-122-HGA_48	WLTGG-122 LTE Cat 12 B48 HE Outdoor CPE	with 16dBi antenna
	WLTGG-122_48		with 13dBi antenna
BLiNQ	FWC-122HG-35	WLTGG-122-HGA	with 16dBi antenna
	FWC-122-35	WLTGG-122	with 13dBi antenna

- All models are electrically identical except antenna, different model names are for applied antenna and marketing purpose.
- The above models, model **WLTGG-122-HGA_48** with highest gain was selected as a representative one for the final test and only its data was recorded in this report.

1.1.2 Specification of the Equipment under Test (EUT)

Operating Band	**Band 48** Channel Bandwidth: 10MHz: 3555.0 MHz ~ 3695.0 MHz Channel Bandwidth: 20MHz: 3560.0 MHz ~ 3690.0 MHz
Modulation Type	QPSK, 16QAM, 64QAM (Uplink) QPSK, 16QAM, 64QAM, 256QAM (Downlink)
Duplex Mode	TDD
UE Category	Cat. 12
Release	12
TX/RX function	2TX / 4RX
CA Type	Intra-Band Non-Contiguous CA

1.1.3 Antenna Details

Two sets of antenna are provided for this device.

Ant.	Type	Connector	Gain (dBi)	Remark	Antenna Polarization
1	Patch	UFL	15.49	Black (TX)	- 45 degree
2	Patch	UFL	15.31	Blue (TX)	+ 45 degree
3	Patch	UFL	15.89	Gray	- 45 degree
4	Patch	UFL	15.39	Red	+ 45 degree
1	Patch	UFL	12.77	A1 (Black) (TX)	+ 45 degree
2	Patch	UFL	12.34	A2 (Blue) (TX)	- 45 degree
3	Patch	UFL	12.51	A3 (Blue)	- 45 degree
4	Patch	UFL	12.77	A4 (Black)	+ 45 degree

1.1.4 EUT Operational Condition

Supply Voltage	56Vdc from POE		
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (55°C)	☒ Tmin (-40°C)

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	POE	Brand: SHENZHEN FRECOM Model: PGOC24D01-560027 I/P: 100-240Vac, 50/60Hz, 0.7A Max O/P: 56Vdc, 0.27A Power Line: 0.72m non-shielded without core
2	RJ45 Cable	1.45m non-shielded without core

1.1.6 Maximum EIRP and Emission Designator

CDD Mode			
Channel Bandwidth (MHz)	**Modulation**	**Maximum EIRP**	**Emission Designator**
10	QPSK	10.139	8M94G7D
10	16QAM	8.035	8M94W7D
10	64QAM	6.442	8M94W7D
20	QPSK	10.423	17M9G7D
20	16QAM	8.260	17M8W7D
20	64QAM	6.653	17M8W7D

CA Mode			
Channel Bandwidth (MHz)	**Modulation**	**Maximum EIRP (W)**	**Emission Designator**
10+10	QPSK	4.753	17M9G7D
10+10	16QAM	4.721	17M9W7D
10+10	64QAM	4.764	17M8W7D
10+20	QPSK	4.753	26M8G7D
10+20	16QAM	4.721	26M8W7D
10+20	64QAM	4.699	26M8W7D
20+10	QPSK	4.656	26M8G7D
20+10	16QAM	4.624	26M8W7D
20+10	64QAM	4.677	26M7W7D
20+20	QPSK	4.624	35M7G7D
20+20	16QAM	4.613	35M7W7D
20+20	64QAM	4.624	35M6W7D

1.1.7 Operating Channel List

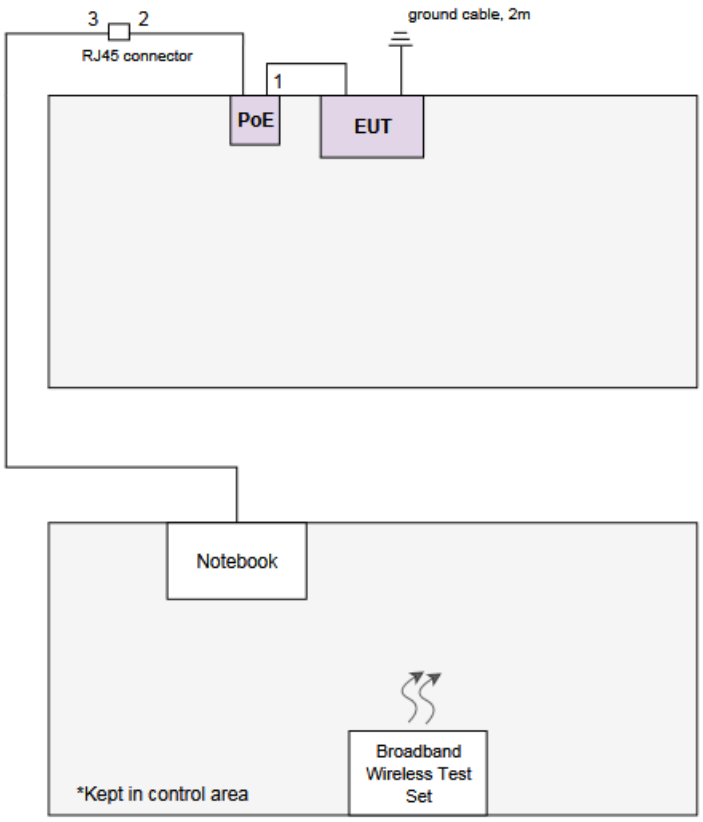
CDD Mode		
Channel Bandwidth (MHz)	**Channel**	**Frequency (MHz)**
10	55290	3555.0
10	55990	3625.0
10	56690	3695.0
20	55340	3560.0
20	55990	3625.0
20	56640	3690.0

CA Mode		
Channel Bandwidth (MHz)	**Test Channel**	**Frequency (MHz)**
10+10	55290+56690	3555.0+3695.0
10+20	55290+56640	3555.0+3690.0
20+10	55340+56690	3560.0+3695.0
20+20	55340+56640	3560.0+3690.0

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart

Test Setup Diagram


No.	Signal cable / Length (m)
1	RJ45, 1m shielded.
2	RJ45, 1.45m non-shielded.
3	RJ45, 8m non-shielded.

1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Broadband Wireless Test Set	keysight	E7515A	TH56180215	Dec. 19, 2018	Dec. 18, 2019
Spectrum Analyzer	R&S	FSV40	101498	Dec. 27, 2018	Dec. 26, 2019
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 18, 2018	Dec. 17, 2019
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	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 04, 2018	Oct. 03, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 08, 2018	Oct. 07, 2019
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 08, 2018	Oct. 07, 2019
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 08, 2018	Oct. 07, 2019
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 08, 2018	Oct. 07, 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**
Broadband Wireless Test Set	keysight	E7515A	TH56180215	Dec. 19, 2018	Dec. 18, 2019
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Spectrum Analyzer	R&S	FSV40	101499	Jan. 07, 2019	Jan. 06, 2020
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
Signal Generator	R&S	SMB100A	175727	Dec. 24, 2018	Dec. 23, 2019
MXG-B RF Vector Signal Generator	Agilent	N5182B	MY53050081	Apr. 21, 2019	Apr. 20, 2020
AC POWER SOURCE	APC	AFC-500W	F312060012	Nov. 29, 2018	Nov. 28, 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 96
ANSI C63.4-2014
ANSI C63.26-2015
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
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	±34.033 Hz
Conducted power	±0.607 dB
Frequency error	±34.033 Hz
Conducted emission	±2.771 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Temperature	±4.7°C

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
RF Conducted	TH01-WS	22°C / 46%	Aska Huang
Radiated Emissions	03CH01-WS	25°C / 67%	Aska Huang

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

2.2 The Worst Test Modes and Channel Details

CDD Mode			
Test item	**Channel Bandwidth**	**Modulation**	**Test channel (MHz)**
Equivalent Isotropically Radiated Power	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Maximum Power Spectral Density	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Radiated Emissions ≤ 1GHz	10MHz 20MHz	QPSK QPSK	3625.0 3625.0
Radiated Emissions > 1GHz	10MHz 20MHz	QPSK QPSK	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Conducted Emissions	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Band Edge	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Emission Bandwidth	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Peak to Average Ratio	10MHz 20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0 / 3625.0 / 3695.0 3560.0 / 3625.0 / 3690.0
Frequency Stability	10MHz 20MHz	Un-modulation	3625.0 3625.0
Reception Limits	10MHz 20MHz	QPSK QPSK	3625.0 3625.0

CA Mode			
Test item	**Channel Bandwidth**	**Modulation**	**Test channel (MHz)**
Equivalent Isotropically Radiated Power Peak EIRP Power Density	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0
Radiated Emission ≤ 1GHz	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	64QAM 64QAM 64QAM 64QAM	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0
Radiated Emission > 1GHz	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	64QAM 64QAM 64QAM 64QAM	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0
Conducted Emissions Emission Mask 26dBc Bandwidth	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0
Frequency Stability	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	Un-modulation	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0
Reception Limits	10MHz+10MHz 10MHz+20MHz 20MHz+10MHz 20MHz+20MHz	64QAM 64QAM 64QAM 64QAM	3555.0+3695.0 3555.0+3690.0 3560.0+3695.0 3560.0+3690.0

3 Test Results

3.1 Output Power

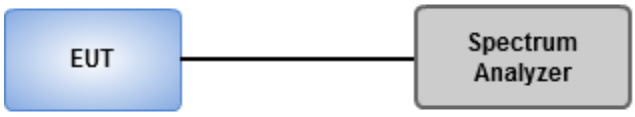
3.1.1 Limit of Output Power

Device	Maximum EIRP (dBm/10MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a
Category A CBSD	30	20
Category B CBSD	47	37

3.1.2 Test Procedures

1. Connect the transmitter to the spectrum analyzer via coaxial cable (i.e., conducted measurement) while ensuring proper impedance matching.
2. Tune the analyzer to the nominal center frequency of the emission bandwidth.
3 Set the span to twice the nominal EBW (span = 2 x EBW).
4 Set the resolution bandwidth (RBW) to 1 MHz.
5 Set the video bandwidth (VBW) to 3 MHz
6 Select the average power (RMS) display detector.
7 Set the number of measurement points to ≥ 1001.
8 Use auto-coupled sweep time.
9 Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
10 Utilize trace averaging over 100 traces in the power averaging.
11 Find the maximum trace amplitude (peak search) and record.
12 Using channel power function to integrate output power
13 Adjust the recorded level by applying appropriate correction factors for the measurement set-up.
14 Determine the EIRP / Power density by adding the effective antenna gain to the adjusted power level.

3.1.3 Test Setup



3.1.4 Duty Cycle and Duty Factor

	Mode	Duty Cycle (%)	Duty Factor (dB)
Duty Cycle and Duty Factor	QPSK	41.02%	3.87
	16QAM	41.02%	3.87
	64QAM	41.02%	3.87

3.1.5 Test Result of EIRP (CDD Mode)

Single-carrier

Summary of AV power @10MHz

Mode	Power (dBm)	Power (W)	EIRP (dBm)	EIRP (W)
Band 48	-	-	-	-
LTE_10MHz_Nss1,QPSK_2TX	24.57	0.286	40.06	10.139
LTE_10MHz_Nss1,16QAM_2TX	23.56	0.227	39.05	8.035
LTE_10MHz_Nss1,64QAM_2TX	22.60	0.182	38.09	6.442
LTE_20MHz_Nss1,QPSK_2TX	22.50	0.178	37.99	6.295
LTE_20MHz_Nss1,16QAM_2TX	21.46	0.140	36.95	4.955
LTE_20MHz_Nss1,64QAM_2TX	20.34	0.108	35.83	3.828

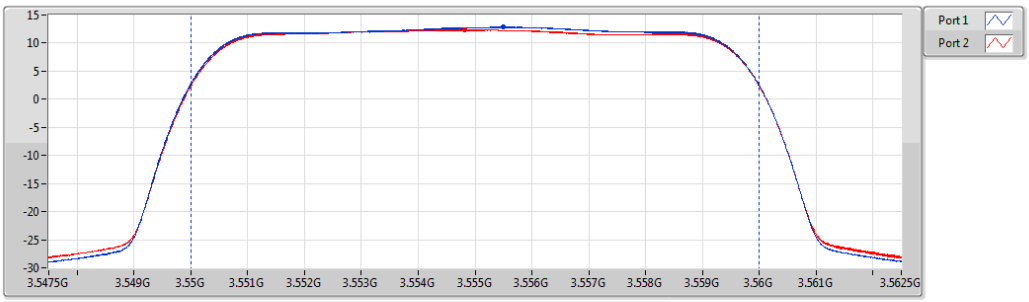
Result

Mode	Result	DG (dBi)	Port 1 (dBm/10MHz)	Port 2 (dBm/10MHz)	Power (dBm/10MHz)	EIRP (dBm/10MHz)	EIRP Lim. (dBm/10MHz)
Band 48_LTE_10MHz_Nss1_2TX	-	-	-	-	-	-	-
3555MHz_QPSK_RB 50,#RB 0	Pass	15.49	21.48	21.14	24.32	39.81	47
3625MHz_QPSK_RB 50,#RB 0	Pass	15.49	21.46	21.65	24.57	40.06	47
3695MHz_QPSK_RB 50,#RB 0	Pass	15.49	21.56	21.45	24.52	40.01	47
3555MHz_16QAM_RB 50,#RB 0	Pass	15.49	20.42	20.11	23.28	38.77	47
3625MHz_16QAM_RB 50,#RB 0	Pass	15.49	20.46	20.63	23.56	39.05	47
3695MHz_16QAM_RB 50,#RB 0	Pass	15.49	20.5	20.55	23.54	39.03	47
3555MHz_64QAM_RB 50,#RB 0	Pass	15.49	19.37	19.18	22.29	37.78	47
3625MHz_64QAM_RB 50,#RB 0	Pass	15.49	19.4	19.77	22.6	38.09	47
3695MHz_64QAM_RB 50,#RB 0	Pass	15.49	19.48	19.64	22.57	38.06	47
Band 48_LTE_20MHz_Nss1_2TX	-	-	-	-	-	-	-
3560MHz_QPSK_RB 100,#RB 0	Pass	15.49	19.25	18.92	22.1	37.59	47
3625MHz_QPSK_RB 100,#RB 0	Pass	15.49	19.4	19.58	22.5	37.99	47
3690MHz_QPSK_RB 100,#RB 0	Pass	15.49	19.13	19.52	22.34	37.83	47
3560MHz_16QAM_RB 100,#RB 0	Pass	15.49	18.29	17.92	21.12	36.61	47
3625MHz_16QAM_RB 100,#RB 0	Pass	15.49	18.35	18.54	21.46	36.95	47
3690MHz_16QAM_RB 100,#RB 0	Pass	15.49	18.14	18.5	21.33	36.82	47
3560MHz_64QAM_RB 100,#RB 0	Pass	15.49	17.31	16.9	20.12	35.61	47
3625MHz_64QAM_RB 100,#RB 0	Pass	15.49	17.14	17.52	20.34	35.83	47
3690MHz_64QAM_RB 100,#RB 0	Pass	15.49	17.08	17.55	20.33	35.82	47

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

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

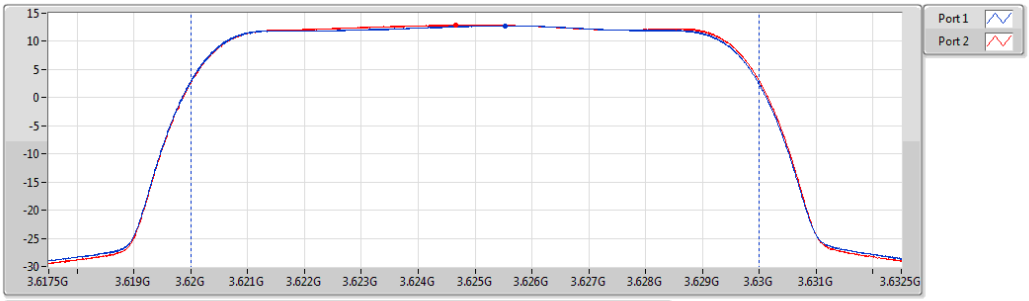
3555MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.48	3.555G	15M	1M	3M	10	RMS	10M	1
21.14	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.32								

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

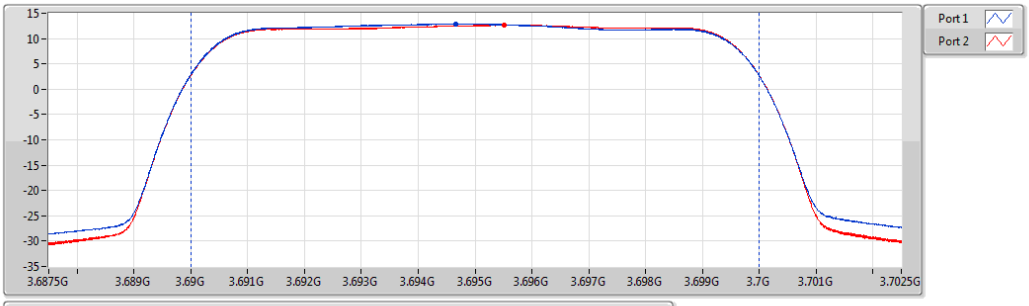
3625MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.46	3.625G	15M	1M	3M	10	RMS	10M	1
21.65	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.57								

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

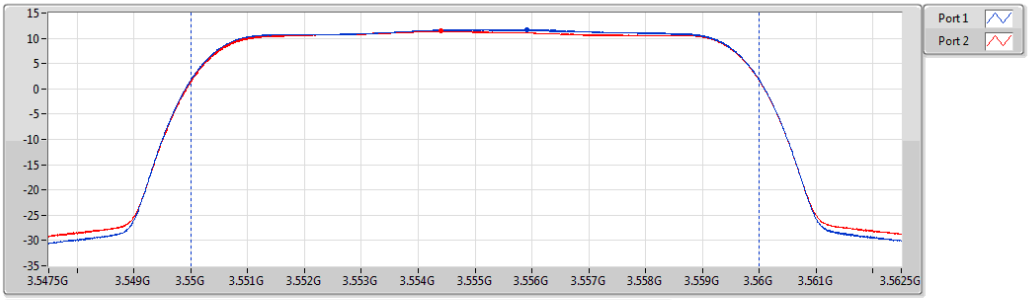
3695MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.56	3.695G	15M	1M	3M	10	RMS	10M	1
21.45	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.52								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

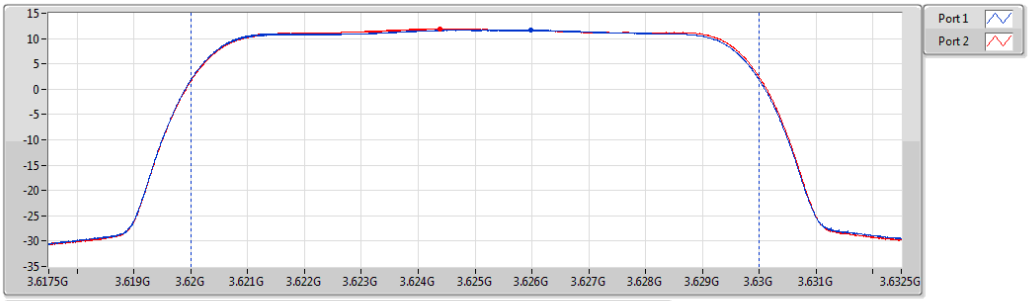
3555MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.42	3.555G	15M	1M	3M	10	RMS	10M	1
20.11	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.28								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

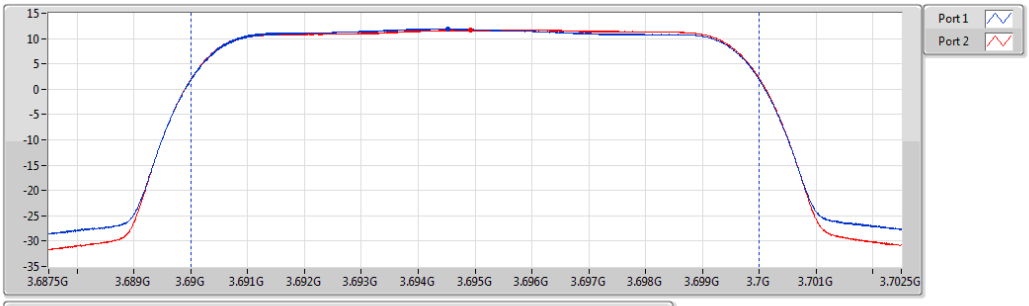
3625MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.46	3.625G	15M	1M	3M	10	RMS	10M	1
20.63	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.56								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

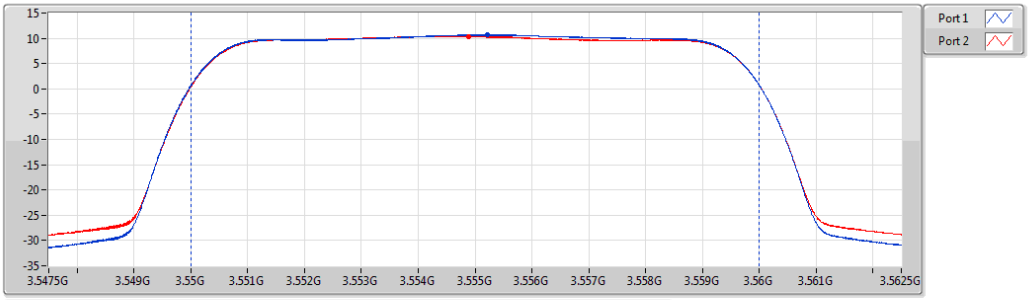
3695MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.50	3.695G	15M	1M	3M	10	RMS	10M	1
20.55	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.54								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

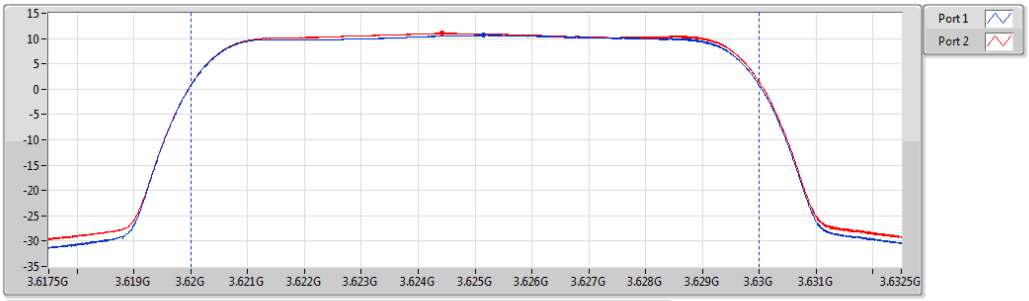
3555MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.37	3.555G	15M	1M	3M	10	RMS	10M	1
19.18	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.29								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

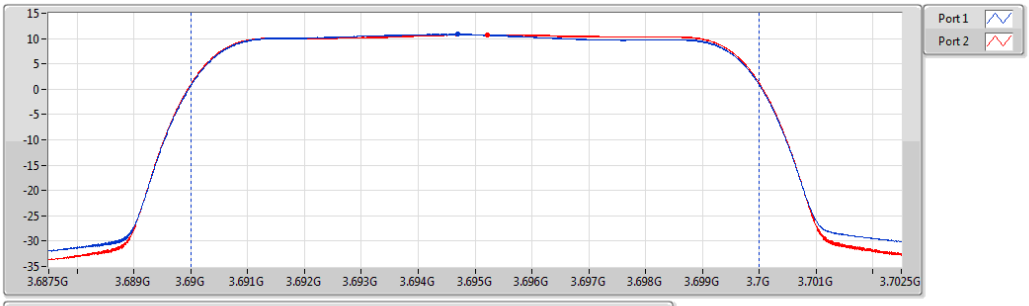
3625MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.40	3.625G	15M	1M	3M	10	RMS	10M	1
19.77	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.60								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

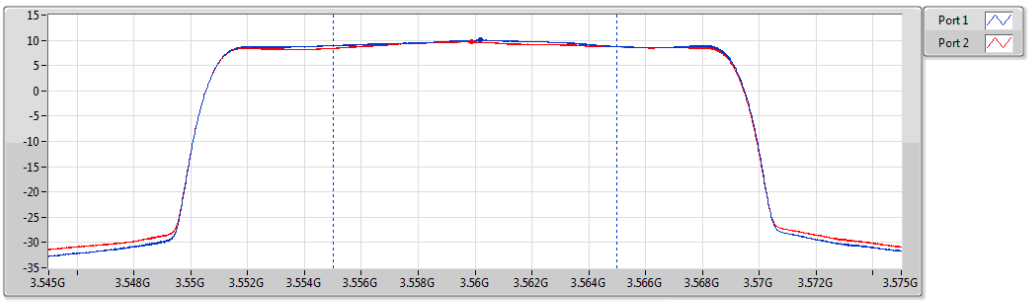
3695MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.48	3.695G	15M	1M	3M	10	RMS	10M	1
19.64	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.57								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

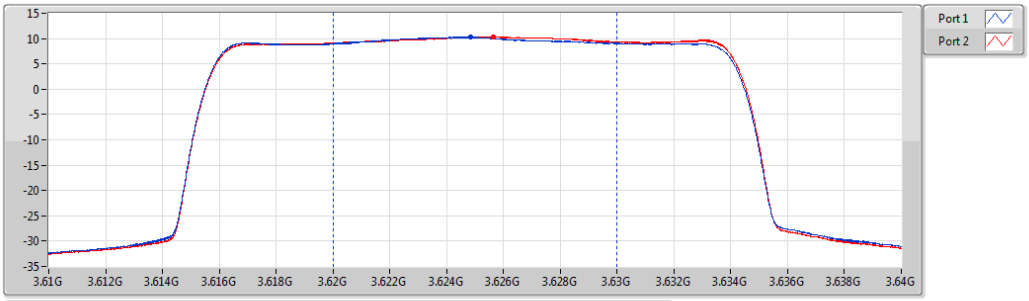
3560MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.25	3.56G	30M	1M	3M	10	RMS	10M	1
18.92	3.56G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.10								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

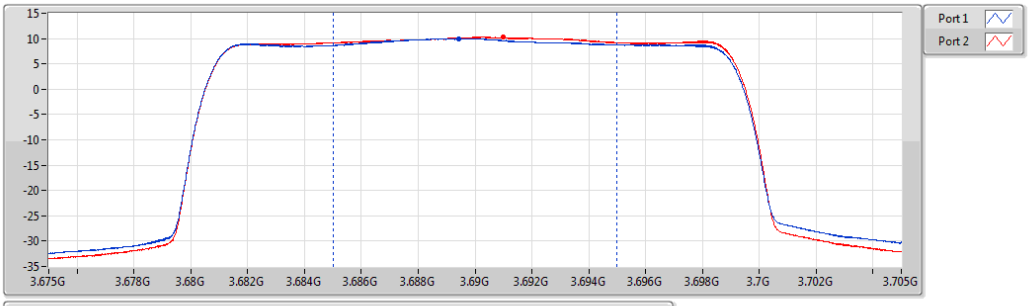
3625MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.40	3.625G	30M	1M	3M	10	RMS	10M	1
19.58	3.625G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.50								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

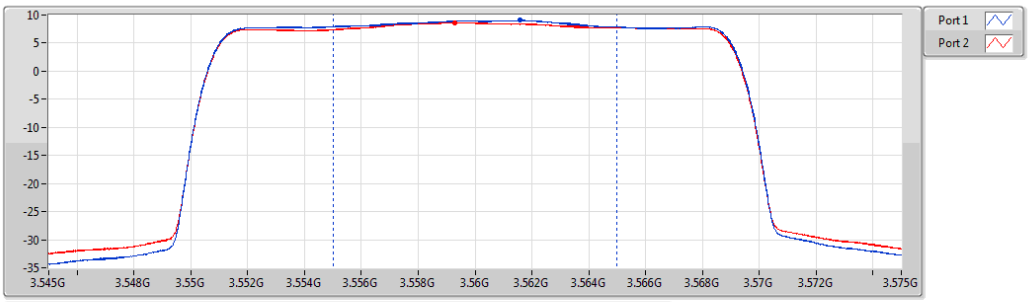
3690MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.13	3.69G	30M	1M	3M	10	RMS	10M	1
19.52	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.34								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

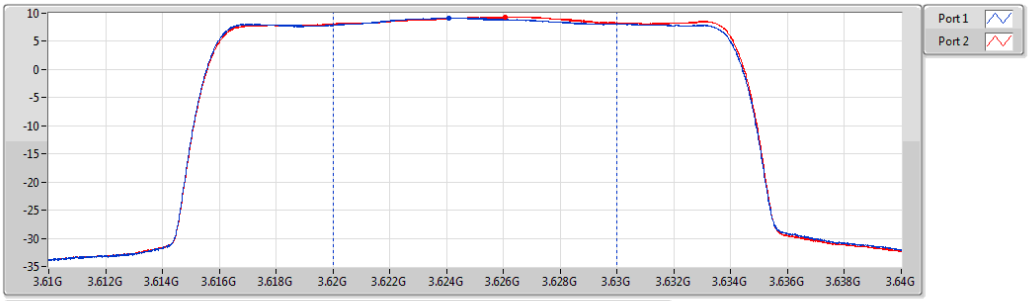
3560MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.29	3.56G	30M	1M	3M	10	RMS	10M	1
17.92	3.56G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.12								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

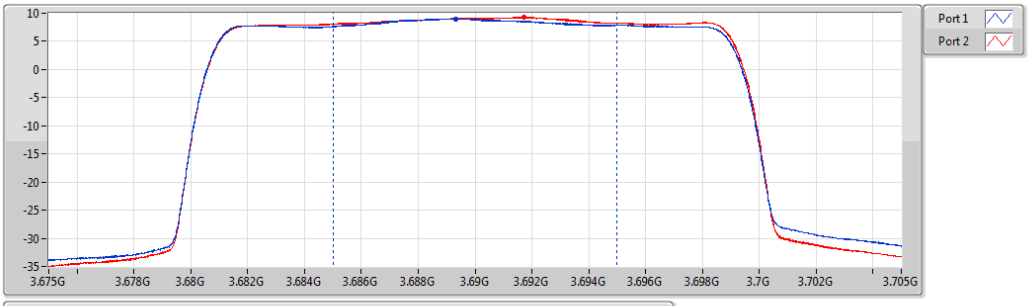
3625MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.35	3.625G	30M	1M	3M	10	RMS	10M	1
18.54	3.625G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.46								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

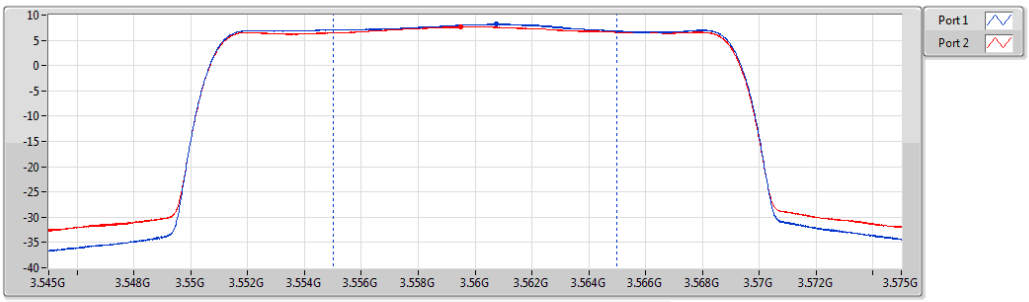
3690MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.14	3.69G	30M	1M	3M	10	RMS	10M	1
18.50	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.33								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

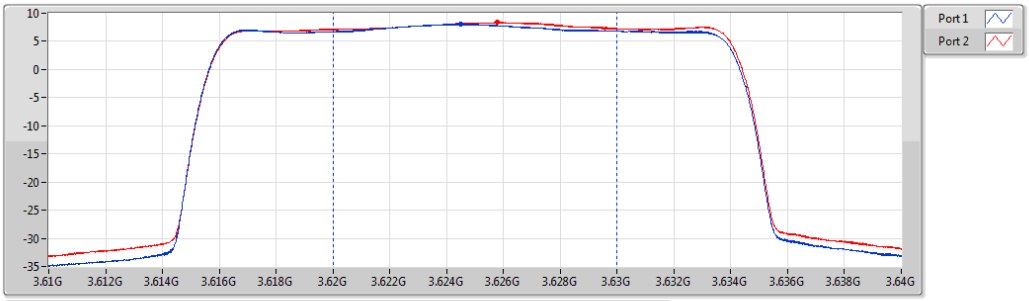
3560MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
17.31	3.56G	30M	1M	3M	10	RMS	10M	1
16.90	3.56G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.12								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

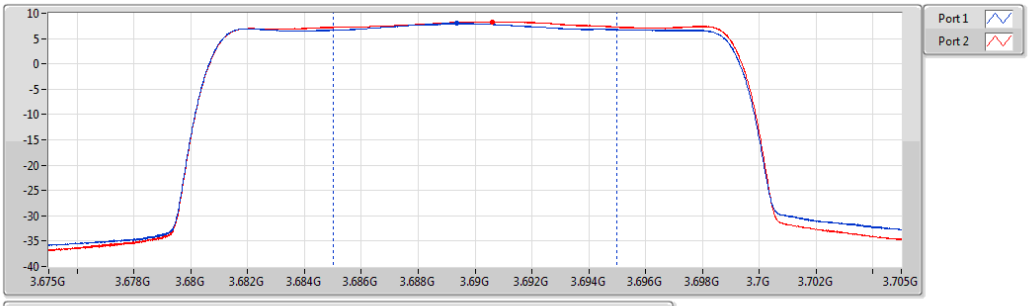
3625MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
17.14	3.625G	30M	1M	3M	10	RMS	10M	1
17.52	3.625G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.34								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

3690MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
17.08	3.69G	30M	1M	3M	10	RMS	10M	1
17.55	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.33								

Single-carrier
Full Power Result

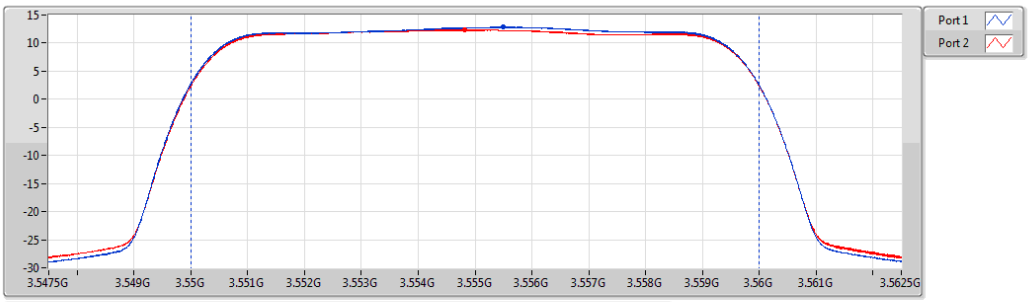
Mode	Result	DG (dBi)	EIRP (dBm/)	EIRP (W)	EIRP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)	Port 2 (dBm)
Band 48_LTE_10MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
3555MHz_QPSK_RB 50,#RB 0	Pass	15.49	39.81	9.572	Inf	24.32	0.270	Inf	21.48	21.14
3625MHz_QPSK_RB 50,#RB 0	Pass	15.49	40.06	10.139	Inf	24.57	0.286	Inf	21.46	21.65
3695MHz_QPSK_RB 50,#RB 0	Pass	15.49	40.01	10.023	Inf	24.52	0.283	Inf	21.56	21.45
3555MHz_16QAM_RB 50,#RB 0	Pass	15.49	38.77	7.534	Inf	23.28	0.213	Inf	20.42	20.11
3625MHz_16QAM_RB 50,#RB 0	Pass	15.49	39.05	8.035	Inf	23.56	0.227	Inf	20.46	20.63
3695MHz_16QAM_RB 50,#RB 0	Pass	15.49	39.03	7.998	Inf	23.54	0.226	Inf	20.50	20.55
3555MHz_64QAM_RB 50,#RB 0	Pass	15.49	37.78	5.998	Inf	22.29	0.169	Inf	19.37	19.18
3625MHz_64QAM_RB 50,#RB 0	Pass	15.49	38.09	6.442	Inf	22.60	0.182	Inf	19.40	19.77
3695MHz_64QAM_RB 50,#RB 0	Pass	15.49	38.06	6.397	Inf	22.57	0.181	Inf	19.48	19.64

Mode	Result	DG (dBi)	EIRP (dBm/)	EIRP (W)	EIRP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	Port 1 (dBm)	Port 2 (dBm)
Band 48_LTE_20MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
3560MHz_QPSK_RB 100,#RB 0	Pass	15.49	39.73	9.397	Inf	24.24	0.265	Inf	21.39	21.07
3625MHz_QPSK_RB 100,#RB 0	Pass	15.49	40.18	10.423	Inf	24.69	0.294	Inf	21.60	21.75
3690MHz_QPSK_RB 100,#RB 0	Pass	15.49	39.95	9.886	Inf	24.46	0.279	Inf	21.37	21.53
3560MHz_16QAM_RB 100,#RB 0	Pass	15.49	38.68	7.379	Inf	23.19	0.208	Inf	20.33	20.02
3625MHz_16QAM_RB 100,#RB 0	Pass	15.49	39.17	8.260	Inf	23.68	0.233	Inf	20.56	20.78
3690MHz_16QAM_RB 100,#RB 0	Pass	15.49	38.94	7.834	Inf	23.45	0.221	Inf	20.34	20.54
3560MHz_64QAM_RB 100,#RB 0	Pass	15.49	37.66	5.834	Inf	22.17	0.165	Inf	19.30	19.02
3625MHz_64QAM_RB 100,#RB 0	Pass	15.49	38.23	6.653	Inf	22.74	0.188	Inf	19.54	19.91
3690MHz_64QAM_RB 100,#RB 0	Pass	15.49	37.94	6.223	Inf	22.45	0.176	Inf	19.27	19.61

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

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

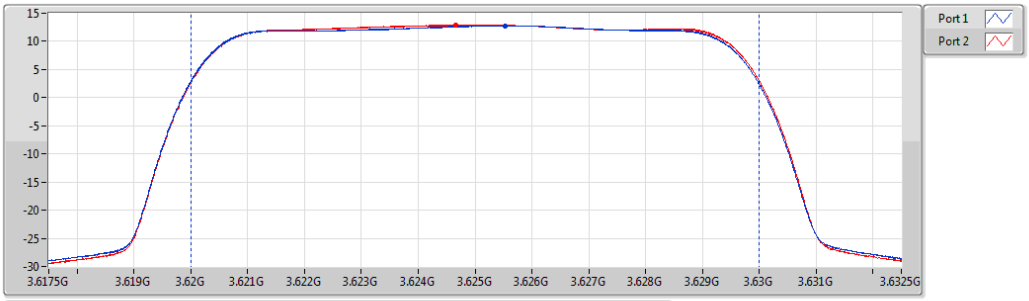
3555MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.48	3.555G	15M	1M	3M	10	RMS	10M	1
21.14	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.32								

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

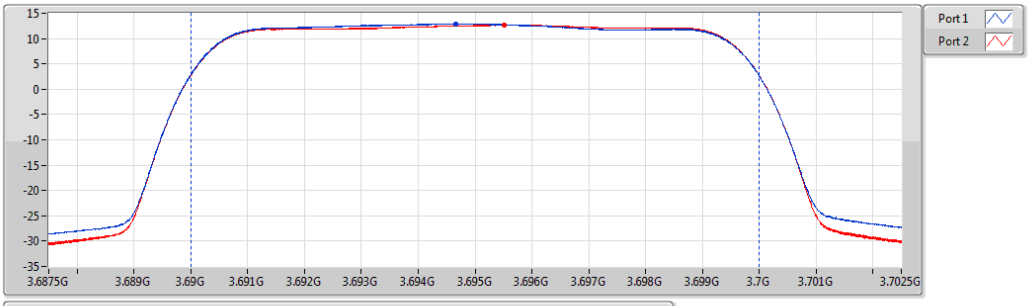
3625MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.46	3.625G	15M	1M	3M	10	RMS	10M	1
21.65	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.57								

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PowerAV**

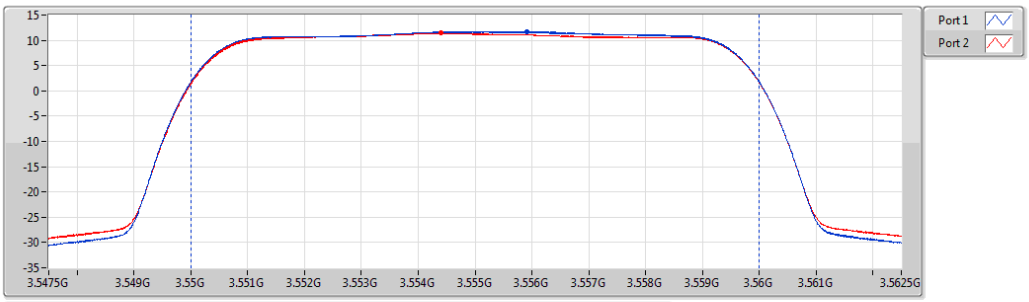
3695MHz_QPSK_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.56	3.695G	15M	1M	3M	10	RMS	10M	1
21.45	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
24.52								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

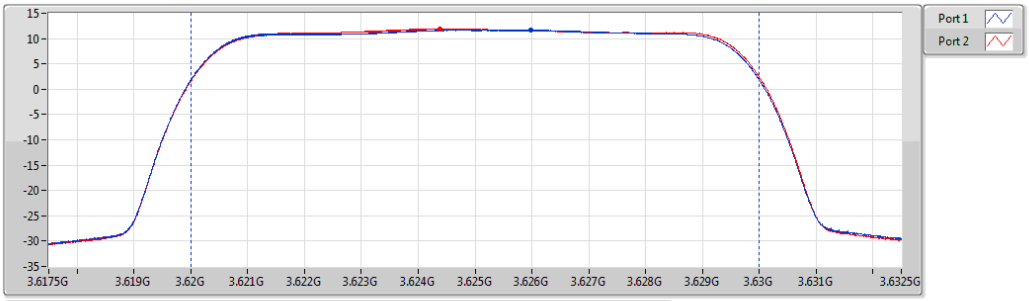
3555MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.42	3.555G	15M	1M	3M	10	RMS	10M	1
20.11	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.28								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

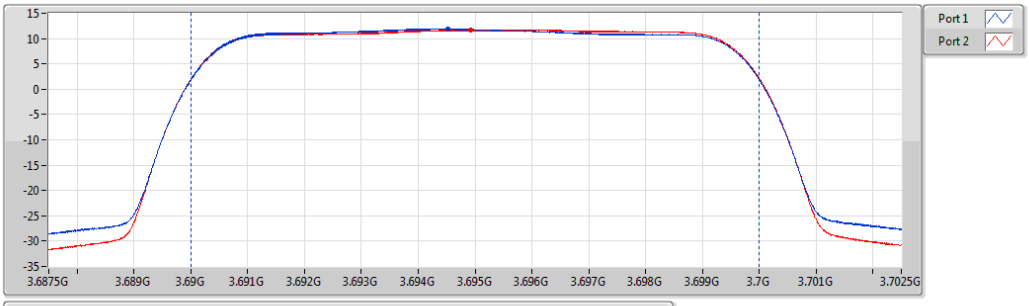
3625MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.46	3.625G	15M	1M	3M	10	RMS	10M	1
20.63	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.56								

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PowerAV**

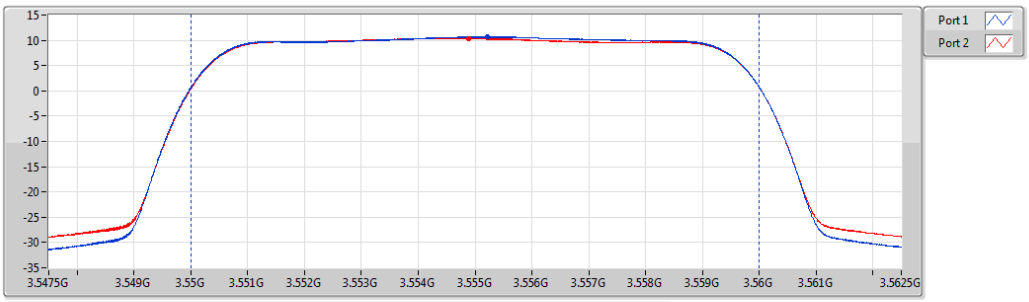
3695MHz_16QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.50	3.695G	15M	1M	3M	10	RMS	10M	1
20.55	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
23.54								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

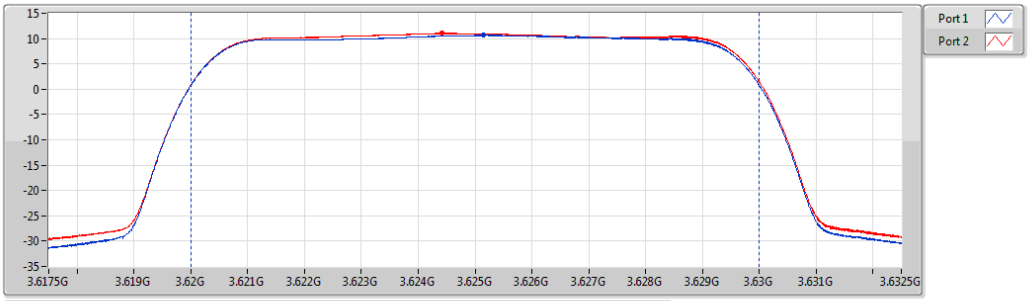
3555MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.37	3.555G	15M	1M	3M	10	RMS	10M	1
19.18	3.555G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.29								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

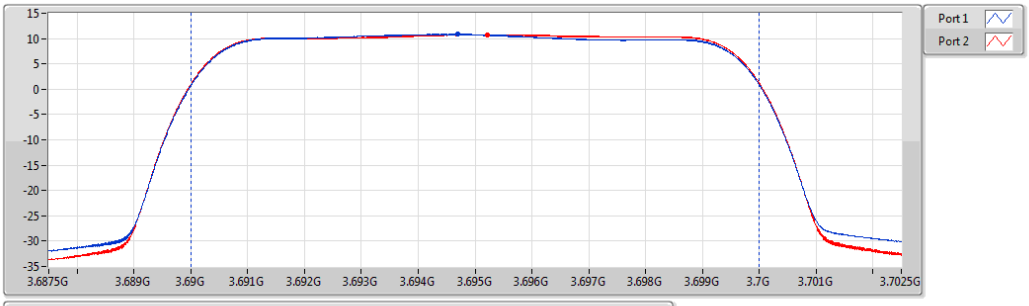
3625MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.40	3.625G	15M	1M	3M	10	RMS	10M	1
19.77	3.625G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.60								

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PowerAV**

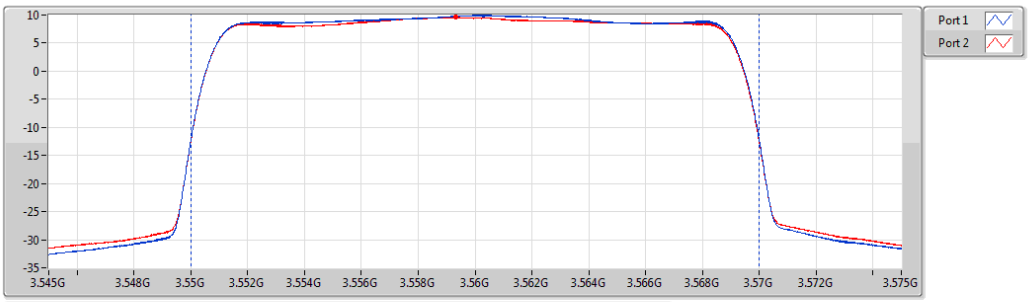
3695MHz_64QAM_RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.48	3.695G	15M	1M	3M	10	RMS	10M	1
19.64	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
22.57								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

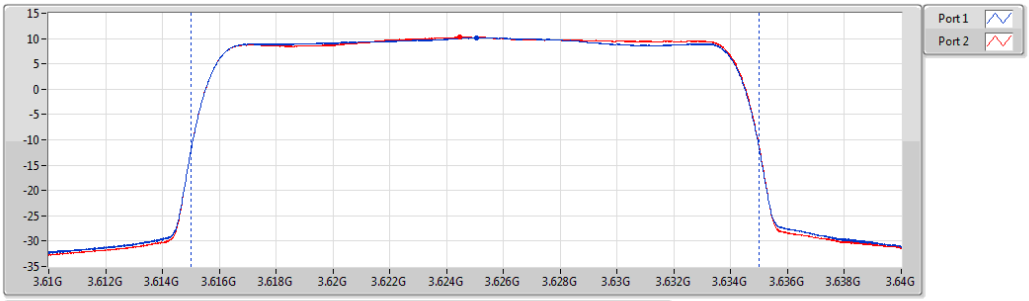
3560MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.39	3.56G	30M	1M	3M	10	RMS	20M	1
21.07	3.56G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
24.24								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

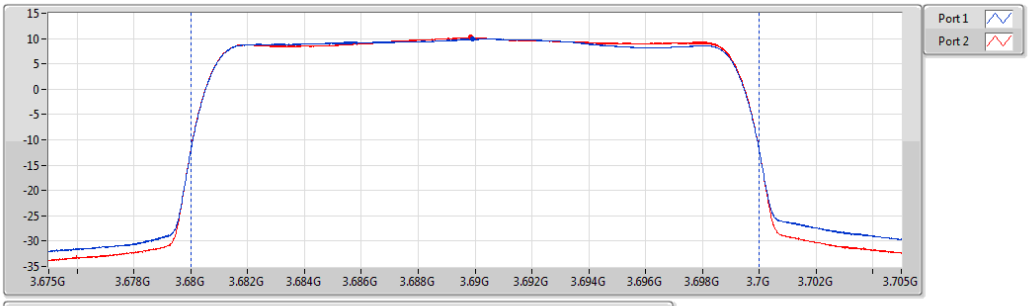
3625MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.60	3.625G	30M	1M	3M	10	RMS	20M	1
21.75	3.625G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
24.69								

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PowerAV**

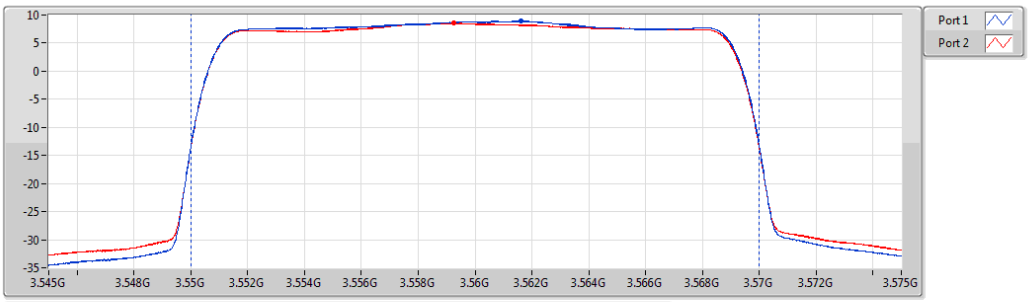
3690MHz_QPSK_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
21.37	3.69G	30M	1M	3M	10	RMS	20M	1
21.53	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
24.46								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

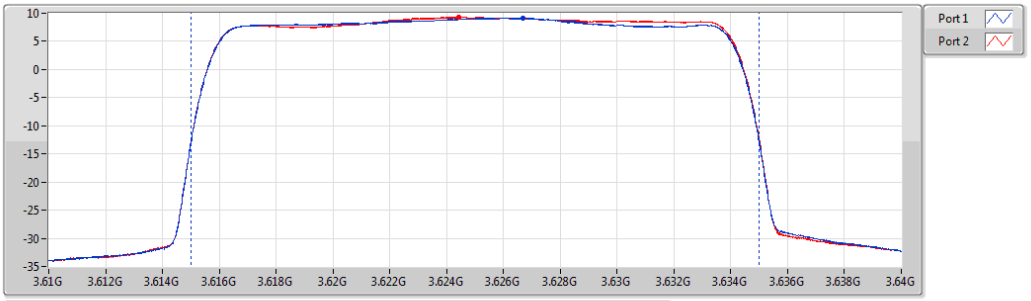
3560MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.33	3.56G	30M	1M	3M	10	RMS	20M	1
20.02	3.56G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
23.19								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

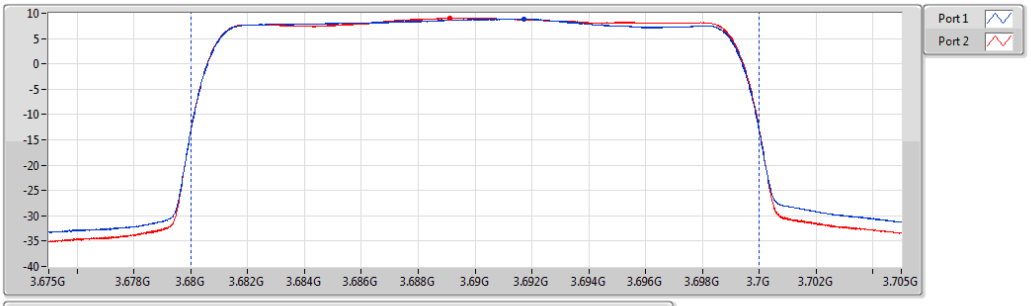
3625MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.56	3.625G	30M	1M	3M	10	RMS	20M	1
20.78	3.625G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
23.68								

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PowerAV**

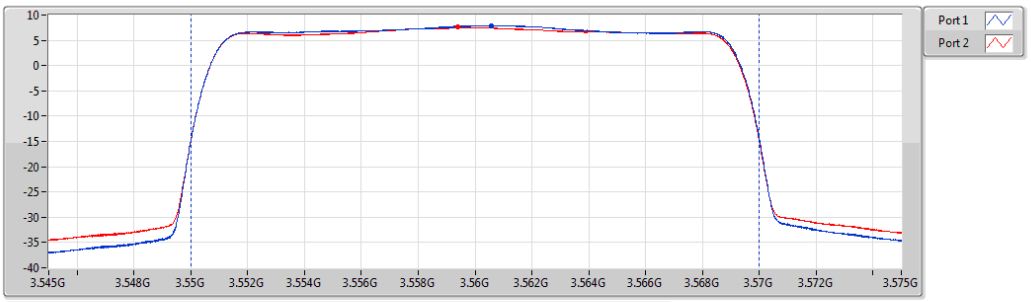
3690MHz_16QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
20.34	3.69G	30M	1M	3M	10	RMS	20M	1
20.54	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
23.45								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

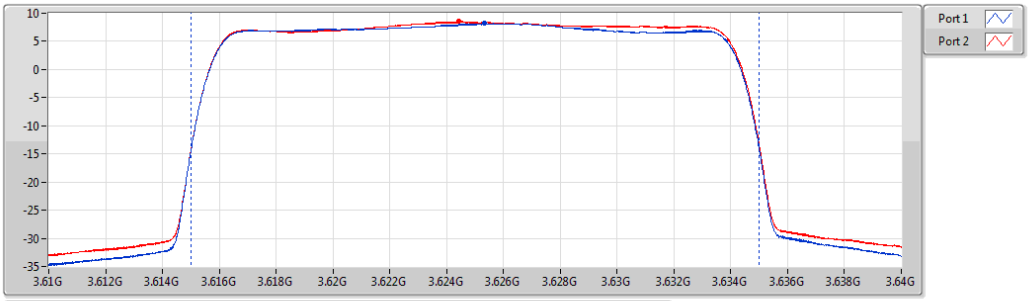
3560MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.30	3.56G	30M	1M	3M	10	RMS	20M	1
19.02	3.56G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
22.17								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

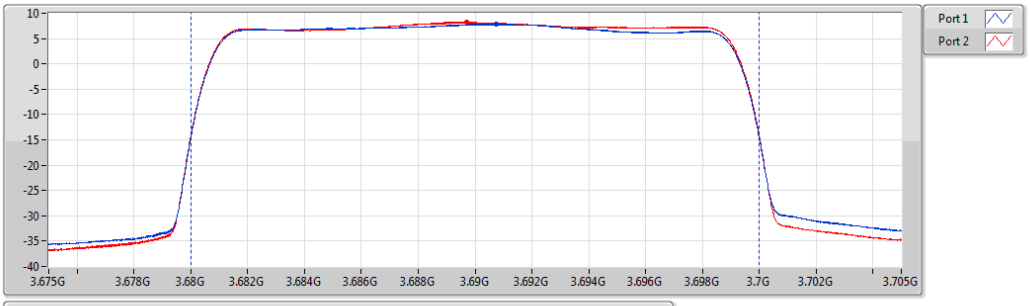
3625MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.54	3.625G	30M	1M	3M	10	RMS	20M	1
19.91	3.625G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
22.74								

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PowerAV**

3690MHz_64QAM_RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
19.27	3.69G	30M	1M	3M	10	RMS	20M	1
19.61	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
22.45								

3.1.6 Test Result of PSD (CDD Mode)

Single-carrier
Summary

Mode	PD (dBm/MHz)	EIRP PD (dBm/MHz)
Band 48	-	-
LTE_10MHz_Nss1,QPSK_2TX	15.94	31.43
LTE_10MHz_Nss1,16QAM_2TX	14.91	30.4
LTE_10MHz_Nss1,64QAM_2TX	13.90	29.39
LTE_20MHz_Nss1,QPSK_2TX	13.24	28.73
LTE_20MHz_Nss1,16QAM_2TX	12.13	27.62
LTE_20MHz_Nss1,64QAM_2TX	11.09	26.58

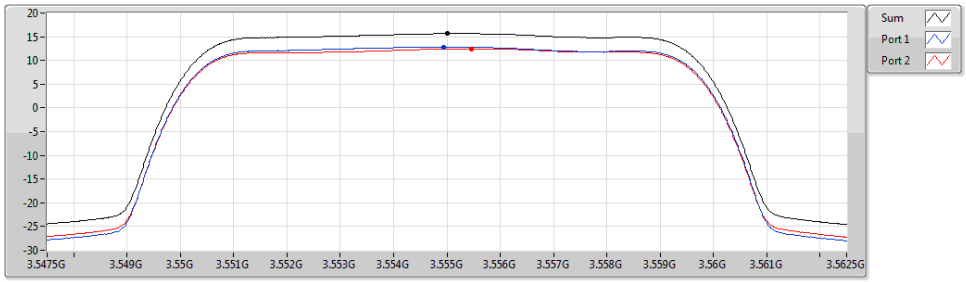
Result

Mode	Result	DG (dBi)	PD (dBm/MHz)	PD Limit (dBm/MHz)	EIRP PD (dBm/MHz)	EIRP PD Limit (dBm/MHz)	Port 1 (dBm/MHz)	Port 2 (dBm/MHz)
Band 48_LTE_10MHz_Nss1_2TX	-	-	-	-	-	-	-	-
3555MHz_QPSK_RB 50,#RB 0	Pass	15.49	15.64	Inf	31.13	37.00	12.83	12.45
3625MHz_QPSK_RB 50,#RB 0	Pass	15.49	15.94	Inf	31.43	37.00	12.87	12.98
3695MHz_QPSK_RB 50,#RB 0	Pass	15.49	15.80	Inf	31.29	37.00	12.82	12.81
3555MHz_16QAM_RB 50,#RB 0	Pass	15.49	14.61	Inf	30.1	37.00	11.85	11.35
3625MHz_16QAM_RB 50,#RB 0	Pass	15.49	14.91	Inf	30.4	37.00	11.83	11.99
3695MHz_16QAM_RB 50,#RB 0	Pass	15.49	14.91	Inf	30.4	37.00	11.97	11.90
3555MHz_64QAM_RB 50,#RB 0	Pass	15.49	13.58	Inf	29.07	37.00	10.74	10.42
3625MHz_64QAM_RB 50,#RB 0	Pass	15.49	13.81	Inf	29.3	37.00	10.66	10.98
3695MHz_64QAM_RB 50,#RB 0	Pass	15.49	13.90	Inf	29.39	37.00	10.88	10.95
Band 48_LTE_20MHz_Nss1_2TX	-	-	-	-	-	-	-	-
3560MHz_QPSK_RB 100,#RB 0	Pass	15.49	12.85	Inf	28.34	37.00	10.03	9.67
3625MHz_QPSK_RB 100,#RB 0	Pass	15.49	13.24	Inf	28.73	37.00	10.19	10.30
3690MHz_QPSK_RB 100,#RB 0	Pass	15.49	13.10	Inf	28.59	37.00	10.01	10.23
3560MHz_16QAM_RB 100,#RB 0	Pass	15.49	11.81	Inf	27.3	37.00	9.02	8.65
3625MHz_16QAM_RB 100,#RB 0	Pass	15.49	12.13	Inf	27.62	37.00	9.14	9.29
3690MHz_16QAM_RB 100,#RB 0	Pass	15.49	12.03	Inf	27.52	37.00	8.98	9.20
3560MHz_64QAM_RB 100,#RB 0	Pass	15.49	10.88	Inf	26.37	37.00	8.13	7.64
3625MHz_64QAM_RB 100,#RB 0	Pass	15.49	11.00	Inf	26.49	37.00	7.87	8.22
3690MHz_64QAM_RB 100,#RB 0	Pass	15.49	11.09	Inf	26.58	37.00	7.95	8.32

DG = Directional Gain;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PSD**

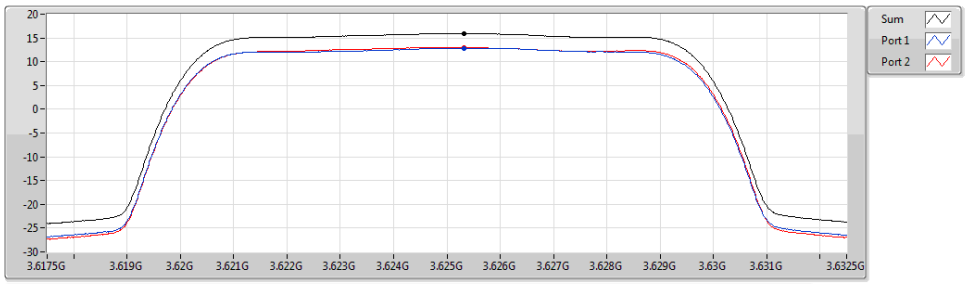
3555MHz_QPSK_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
12.83	3.555G	15M	1M	3M	10	RMS	1
12.45	3.555G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
15.64							

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PSD**

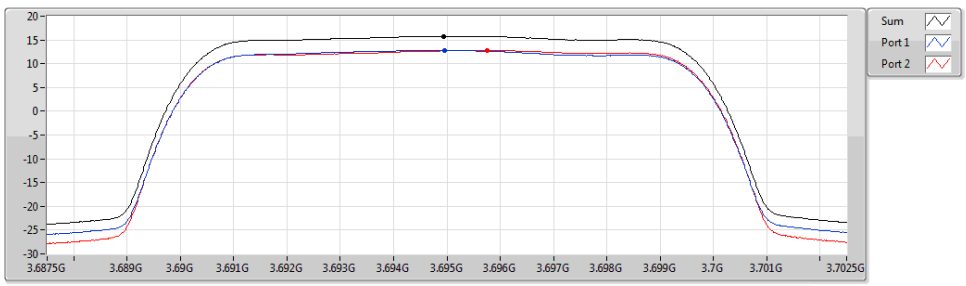
3625MHz_QPSK_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
12.87	3.625G	15M	1M	3M	10	RMS	1
12.98	3.625G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
15.94							

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PSD**

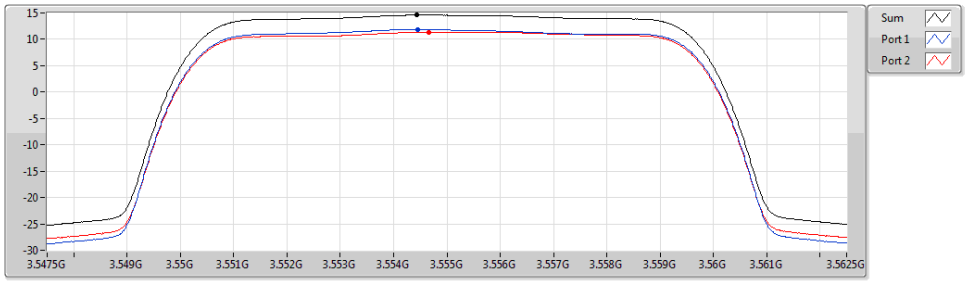
3695MHz_QPSK_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
12.82	3.695G	15M	1M	3M	10	RMS	1
12.81	3.695G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
15.80							

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PSD**

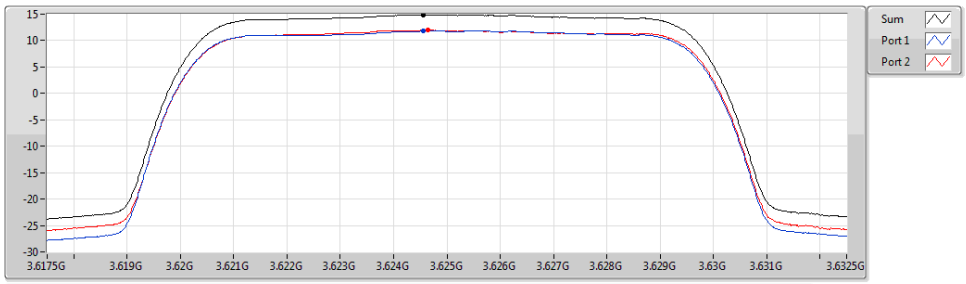
3555MHz_16QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
11.85	3.555G	15M	1M	3M	10	RMS	1
11.35	3.555G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
14.61							

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PSD**

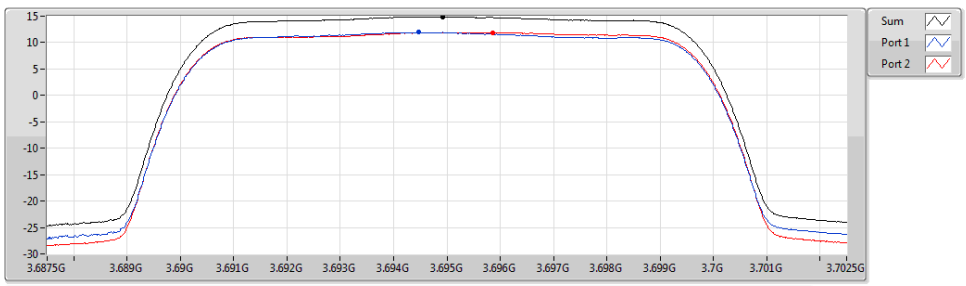
3625MHz_16QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
11.83	3.625G	15M	1M	3M	10	RMS	1
11.99	3.625G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
14.91							

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PSD**

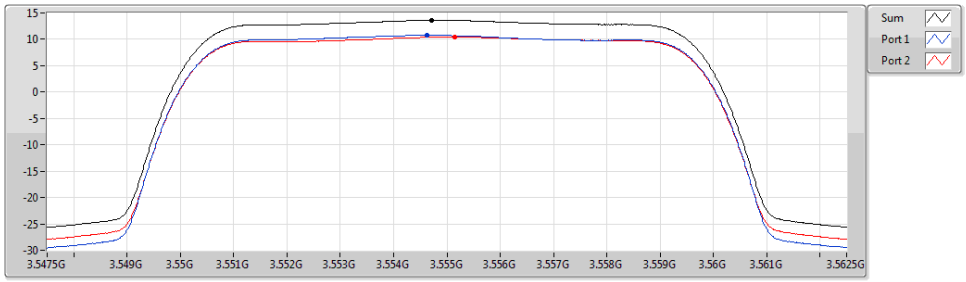
3695MHz_16QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
11.97	3.695G	15M	1M	3M	10	RMS	1
11.90	3.695G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
14.91							

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PSD**

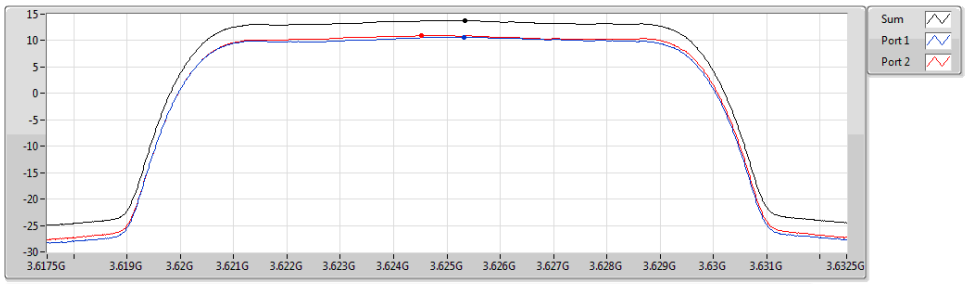
3555MHz_64QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.74	3.555G	15M	1M	3M	10	RMS	1
10.42	3.555G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
13.58							

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PSD**

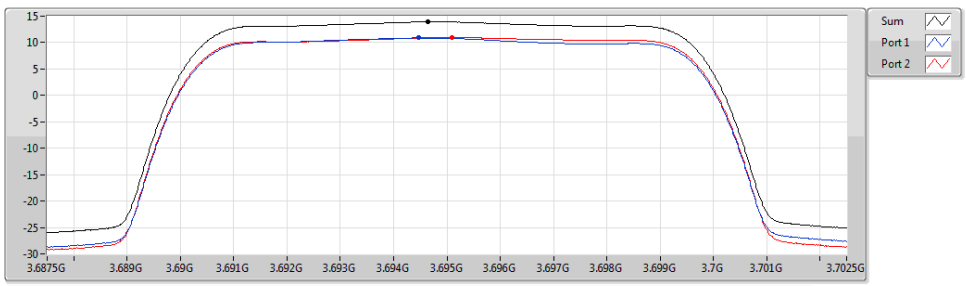
3625MHz_64QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.66	3.625G	15M	1M	3M	10	RMS	1
10.98	3.625G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
13.81							

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PSD**

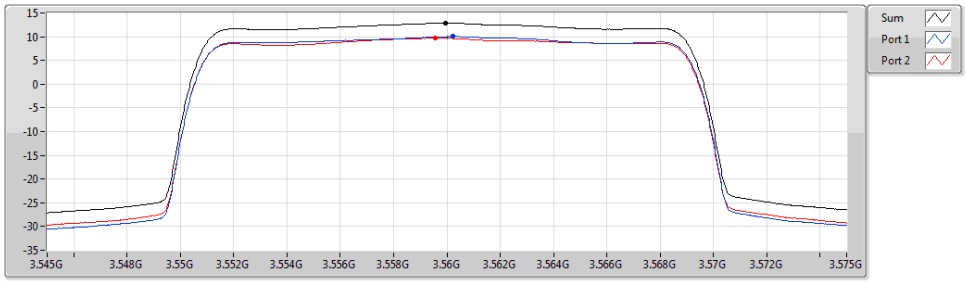
3695MHz_64QAM_RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.88	3.695G	15M	1M	3M	10	RMS	1
10.95	3.695G	15M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
13.90							

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PSD**

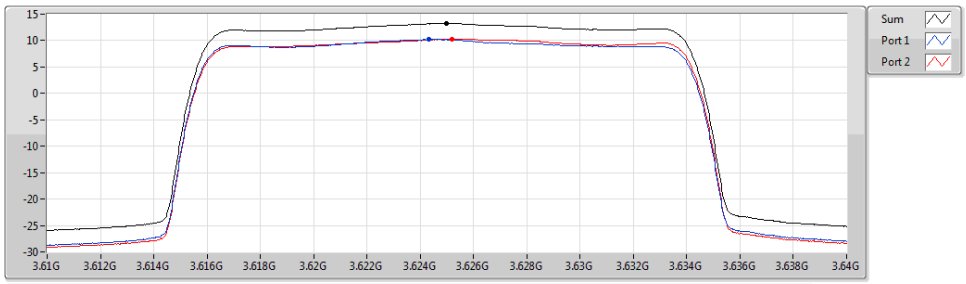
3560MHz_QPSK_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.03	3.56G	30M	1M	3M	10	RMS	1
9.67	3.56G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
12.85							

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PSD**

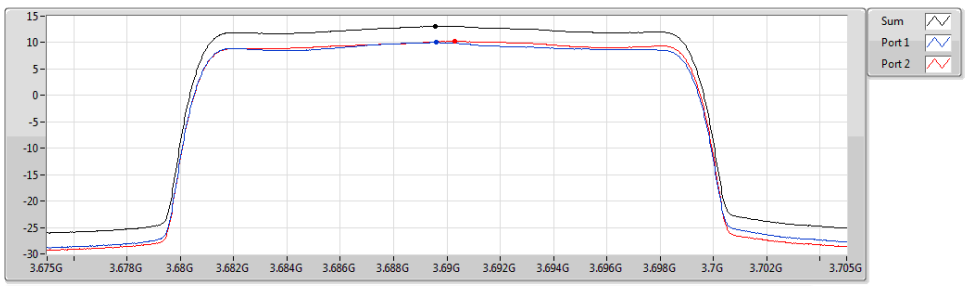
3625MHz_QPSK_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.19	3.625G	30M	1M	3M	10	RMS	1
10.30	3.625G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
13.24							

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PSD**

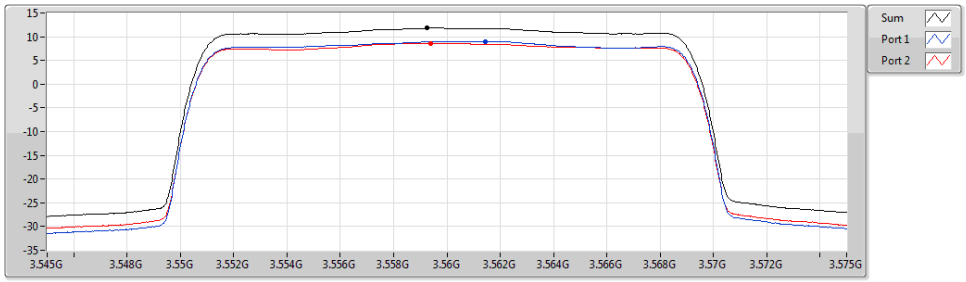
3690MHz_QPSK_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.01	3.69G	30M	1M	3M	10	RMS	1
10.23	3.69G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
13.10							

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PSD**

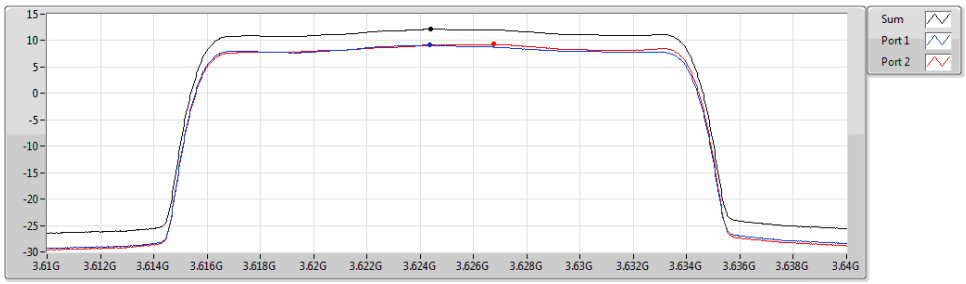
3560MHz_16QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
9.02	3.56G	30M	1M	3M	10	RMS	1
8.65	3.56G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
11.81							

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PSD**

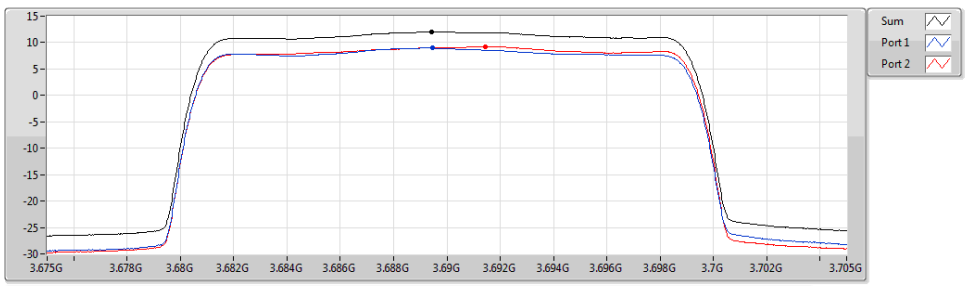
3625MHz_16QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
9.14	3.625G	30M	1M	3M	10	RMS	1
9.29	3.625G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
12.13							

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PSD**

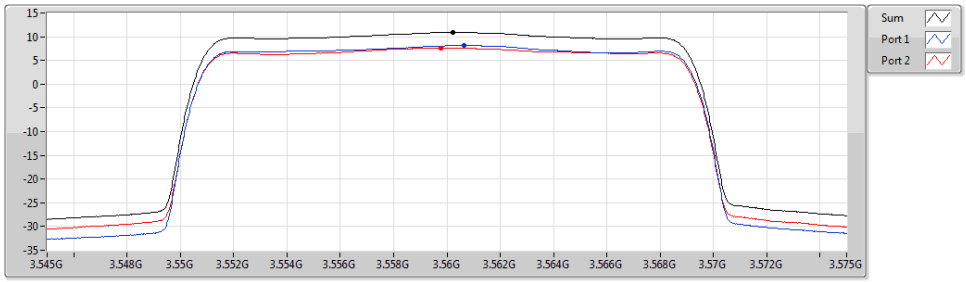
3690MHz_16QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
8.98	3.69G	30M	1M	3M	10	RMS	1
9.20	3.69G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
12.03							

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PSD**

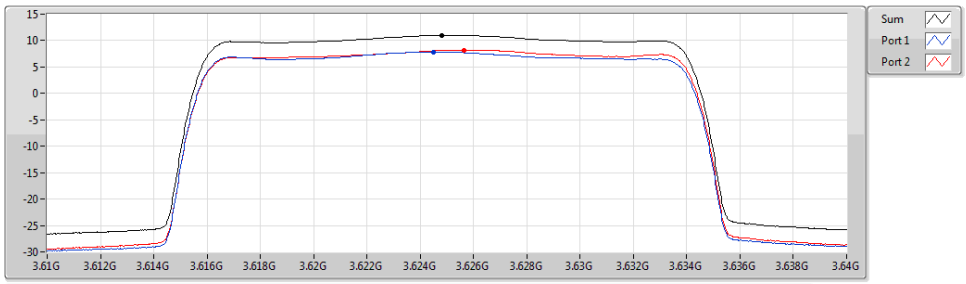
3560MHz_64QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
8.13	3.56G	30M	1M	3M	10	RMS	1
7.64	3.56G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.88							

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PSD**

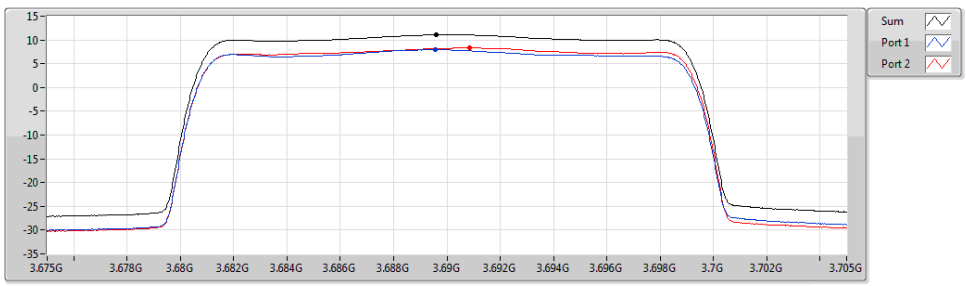
3625MHz_64QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.87	3.625G	30M	1M	3M	10	RMS	1
8.22	3.625G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
11.00							

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PSD**

3690MHz_64QAM_RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.95	3.69G	30M	1M	3M	10	RMS	1
8.32	3.69G	30M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
11.09							

3.1.7 Test Result of EIRP (CA Mode)

Multi-carrier
Summary of AV Power @10MHz

Mode	Power (dBm)	Power (W)	EIRP (dBm)	EIRP (W)
Band 48	-	-	-	-
LTE_10MHz+10MHz_Nss1,QPSK_2TX	21.28	0.134	36.77	4.753
LTE_10MHz+10MHz_Nss1,16QAM_2TX	21.25	0.133	36.74	4.721
LTE_10MHz+10MHz_Nss1,64QAM_2TX	21.29	0.135	36.78	4.764
LTE_10MHz+20MHz_Nss1,QPSK_2TX	20.26	0.106	35.75	3.758
LTE_10MHz+20MHz_Nss1,16QAM_2TX	20.27	0.106	35.76	3.767
LTE_10MHz+20MHz_Nss1,64QAM_2TX	20.28	0.107	35.77	3.776
LTE_20MHz+10MHz_Nss1,QPSK_2TX	20.16	0.104	35.65	3.673
LTE_20MHz+10MHz_Nss1,16QAM_2TX	20.19	0.104	35.68	3.698
LTE_20MHz+10MHz_Nss1,64QAM_2TX	20.19	0.104	35.68	3.698
LTE_20MHz+20MHz_Nss1,QPSK_2TX	18.91	0.078	34.40	2.754
LTE_20MHz+20MHz_Nss1,16QAM_2TX	18.93	0.078	34.42	2.767
LTE_20MHz+20MHz_Nss1,64QAM_2TX	18.94	0.078	34.43	2.773

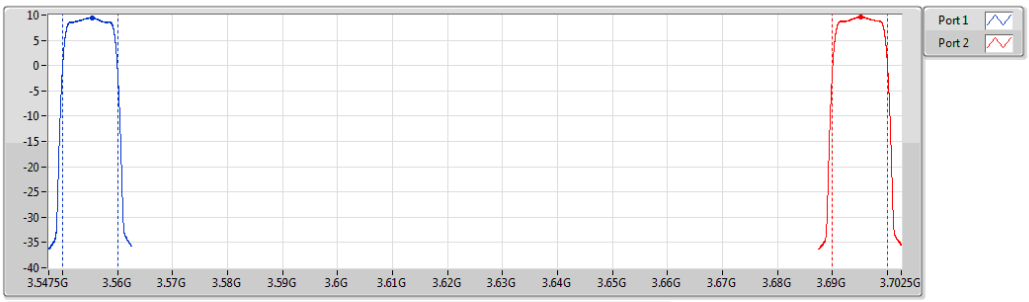
Result

Mode	Result	DG (dBi)	1Carrier Port 1 (dBm/10MHz)	2Carrier Port 2 (dBm/10MHz)	Max Power (dBm/10MHz)	Max EIRP (dBm/10MHz)	EIRP Lim. (dBm/10MHz)
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	18.17	18.36	18.36	33.85	47
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	18.17	18.3	18.3	33.79	47
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	18.18	18.37	18.37	33.86	47
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	18.24	15.96	18.24	33.73	47
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	18.24	15.98	18.24	33.73	47
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	18.24	16.01	18.24	33.73	47
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	15.83	18.16	18.16	33.65	47
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	15.85	18.19	18.19	33.68	47
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	15.83	18.21	18.21	33.7	47
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	15.83	15.96	15.96	31.45	47
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	15.84	15.99	15.99	31.48	47
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	15.86	16	16	31.49	47

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

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX **PowerAV**

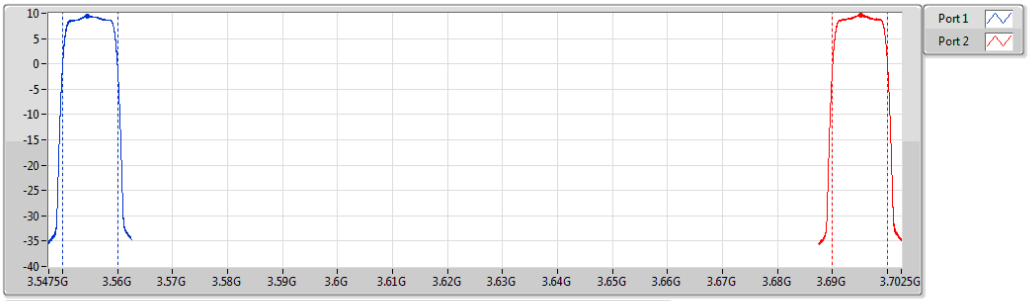
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.17	3.555G	15M	1M	3M	10	RMS	10M	1
18.36	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.28								

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX **PowerAV**

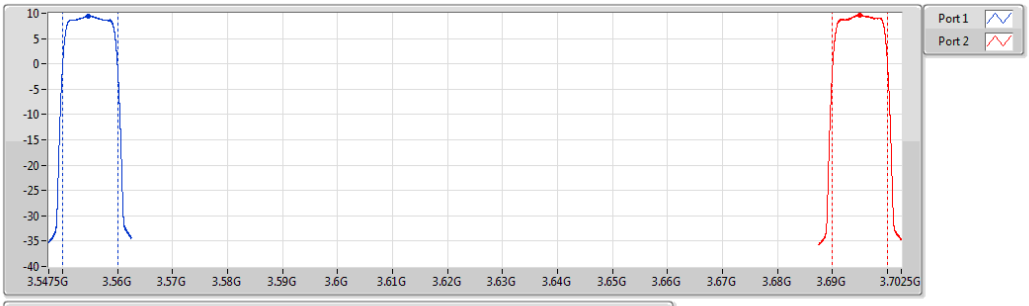
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.17	3.555G	15M	1M	3M	10	RMS	10M	1
18.30	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.25								

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX **PowerAV**

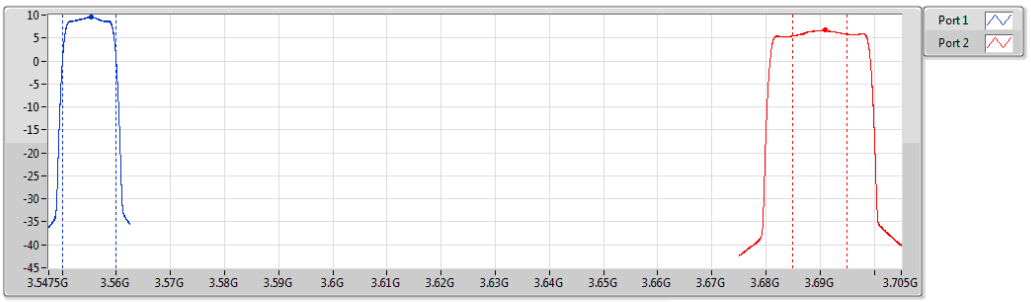
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.18	3.555G	15M	1M	3M	10	RMS	10M	1
18.37	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.29								

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX **PowerAV**

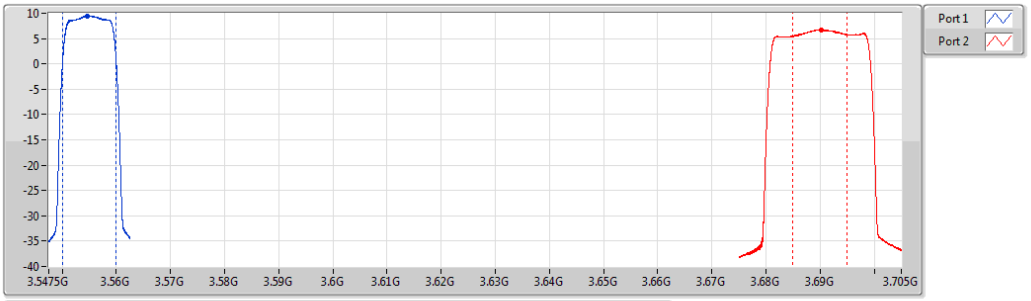
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.24	3.555G	15M	1M	3M	10	RMS	10M	1
15.96	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.26								

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX **PowerAV**

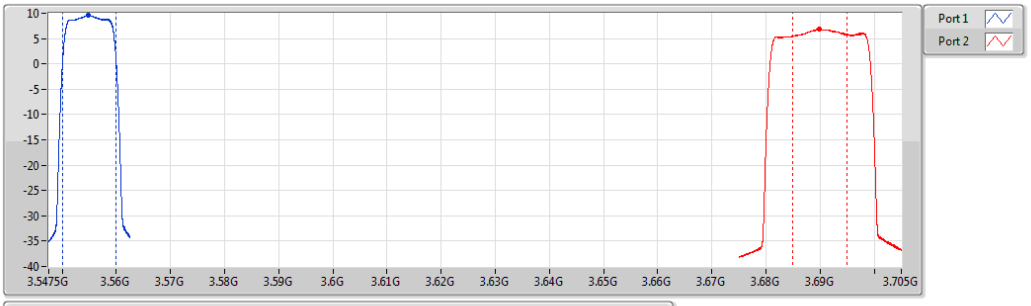
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.24	3.555G	15M	1M	3M	10	RMS	10M	1
15.98	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.27								

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX **PowerAV**

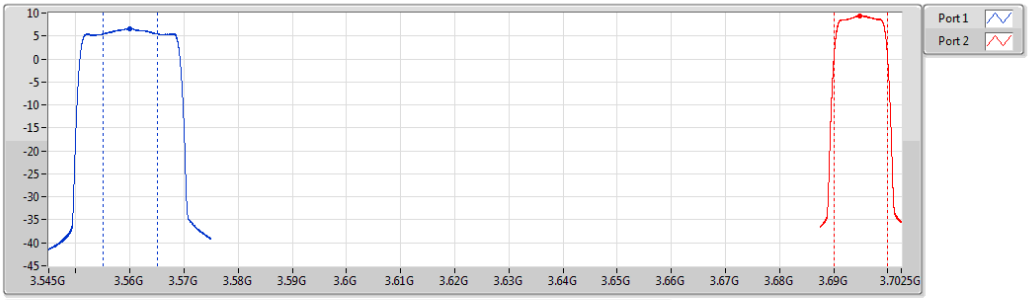
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.24	3.555G	15M	1M	3M	10	RMS	10M	1
16.01	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.28								

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX **PowerAV**

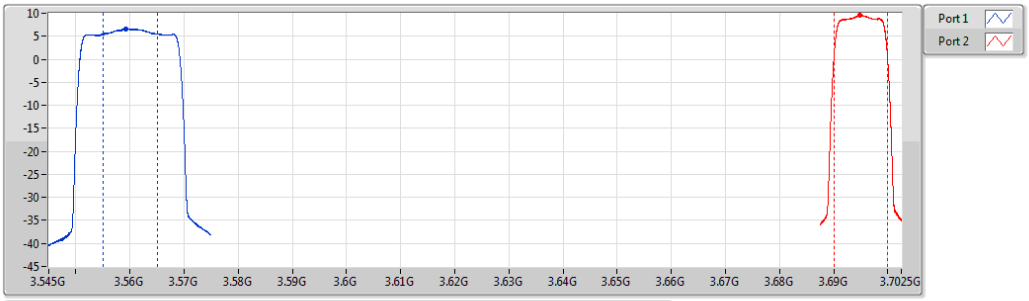
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.83	3.56G	30M	1M	3M	10	RMS	10M	1
18.16	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.16								

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX **PowerAV**

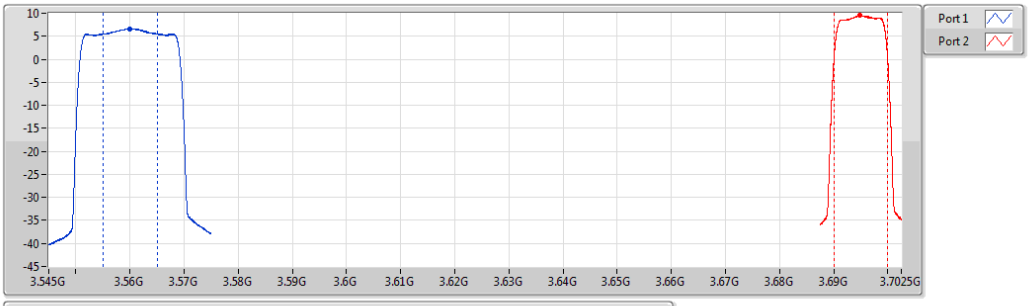
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.85	3.56G	30M	1M	3M	10	RMS	10M	1
18.19	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.19								

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX **PowerAV**

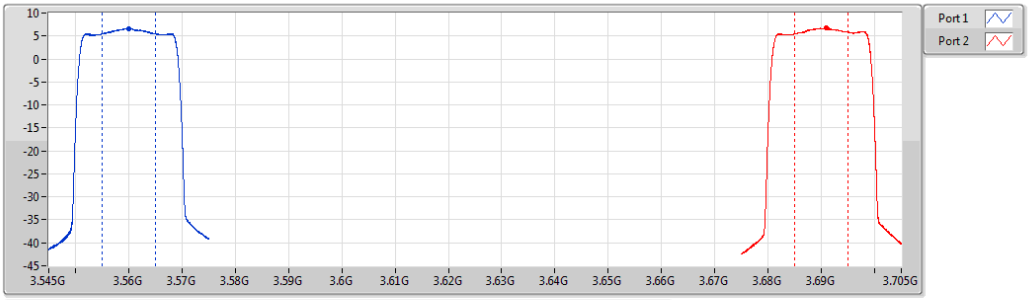
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.83	3.56G	30M	1M	3M	10	RMS	10M	1
18.21	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
20.19								

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX **PowerAV**

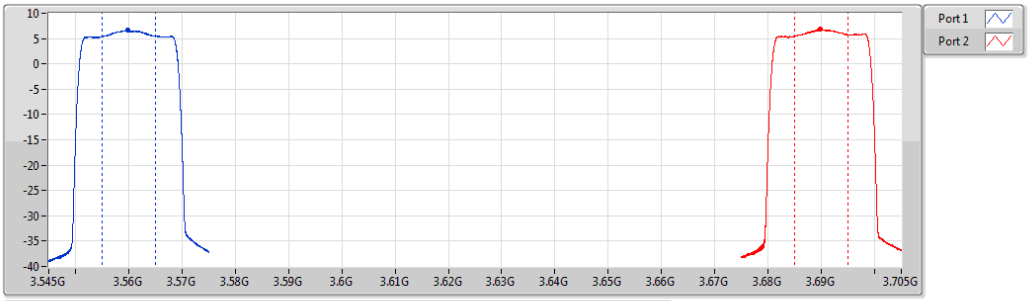
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.83	3.56G	30M	1M	3M	10	RMS	10M	1
15.96	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
18.91								

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX **PowerAV**

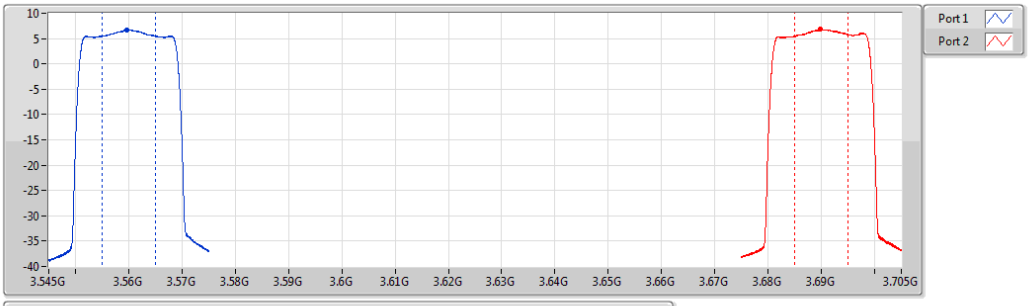
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.84	3.56G	30M	1M	3M	10	RMS	10M	1
15.99	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
18.93								

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX **PowerAV**

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
15.86	3.56G	30M	1M	3M	10	RMS	10M	1
16.00	3.69G	30M	1M	3M	10	RMS	10M	2
Sum(dBm)								
18.94								

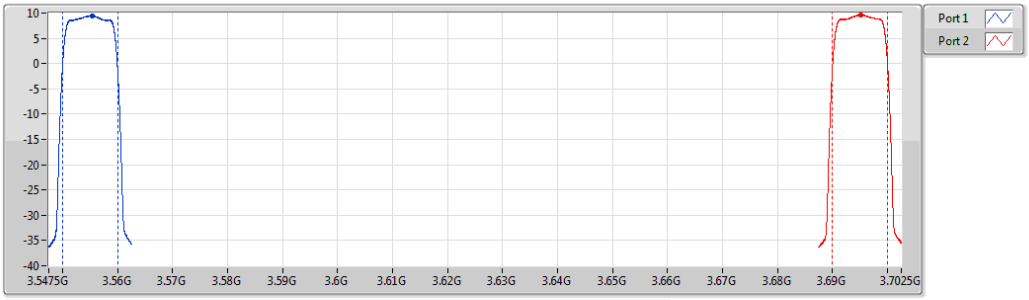
Multi-carrier
Full Power Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP (W)	EIRP Lim. (W)	Power (dBm)	Power (W)	Power Lim. (W)	1Carrier Port 1 (dBm)	2Carrier Port 2 (dBm)
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	36.77	4.753	Inf	21.28	0.134	Inf	18.17	18.36
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	36.74	4.721	Inf	21.25	0.133	Inf	18.17	18.30
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	36.78	4.764	Inf	21.29	0.135	Inf	18.18	18.37
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	36.77	4.753	Inf	21.28	0.134	Inf	18.24	18.30
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	36.74	4.721	Inf	21.25	0.133	Inf	18.19	18.28
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	36.72	4.699	Inf	21.23	0.133	Inf	18.16	18.27
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	36.68	4.656	Inf	21.19	0.132	Inf	18.11	18.25
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	36.65	4.624	Inf	21.16	0.131	Inf	18.08	18.21
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	36.70	4.677	Inf	21.21	0.132	Inf	18.03	18.36
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-	-	-	-
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	36.65	4.624	Inf	21.16	0.131	Inf	18.06	18.24
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	36.64	4.613	Inf	21.15	0.130	Inf	18.04	18.24
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	36.65	4.624	Inf	21.16	0.131	Inf	18.04	18.26

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

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX **PowerAV**

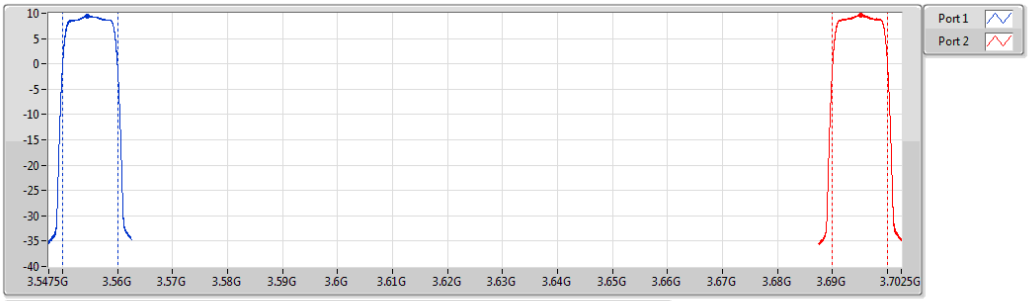
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.17	3.555G	15M	1M	3M	10	RMS	10M	1
18.36	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.28								

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX **PowerAV**

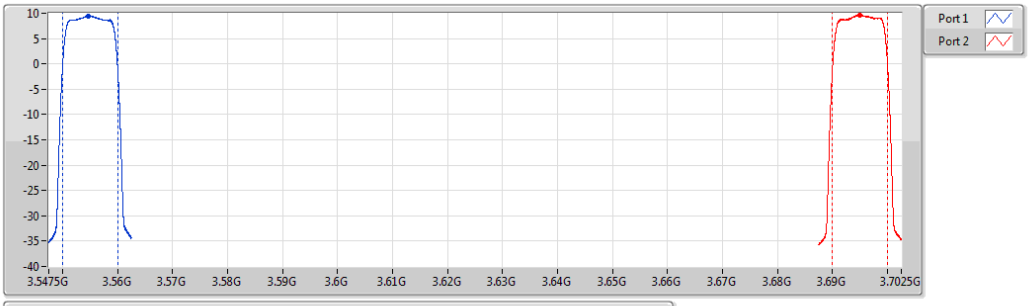
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.17	3.555G	15M	1M	3M	10	RMS	10M	1
18.30	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.25								

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX **PowerAV**

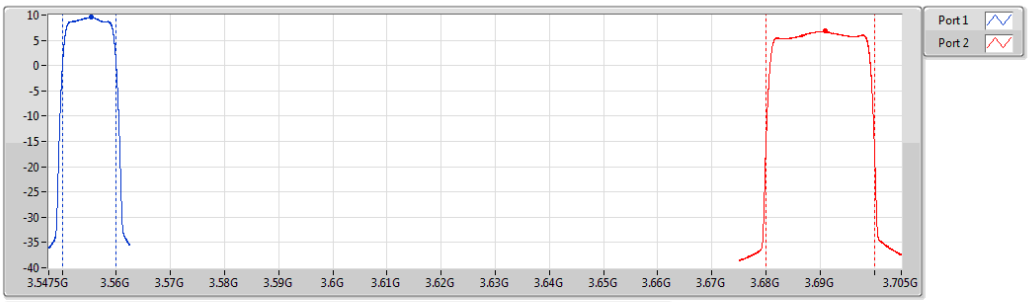
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.18	3.555G	15M	1M	3M	10	RMS	10M	1
18.37	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.29								

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX **PowerAV**

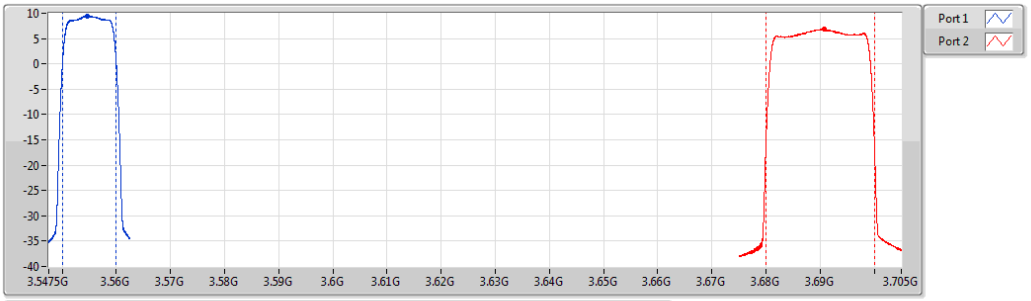
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.24	3.555G	15M	1M	3M	10	RMS	10M	1
18.30	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.28								

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX **PowerAV**

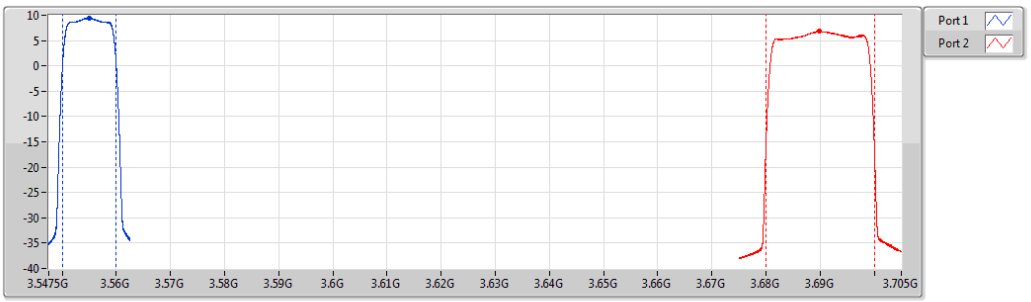
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.19	3.555G	15M	1M	3M	10	RMS	10M	1
18.28	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.25								

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX **PowerAV**

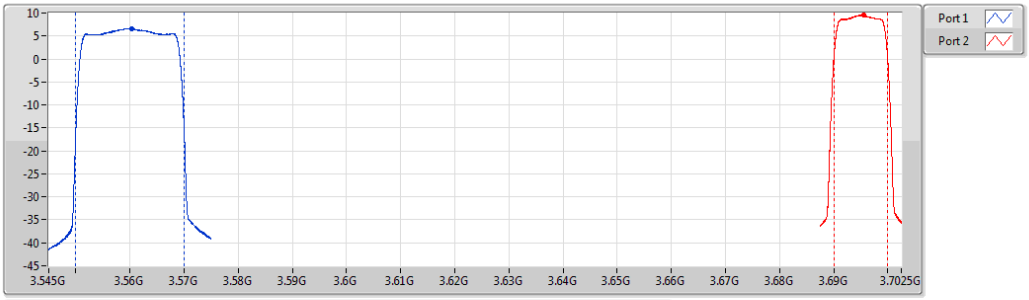
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.16	3.555G	15M	1M	3M	10	RMS	10M	1
18.27	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.23								

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX **PowerAV**

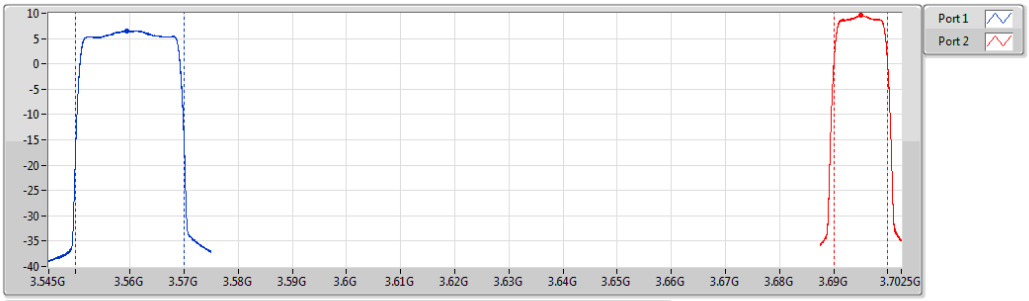
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.11	3.56G	30M	1M	3M	10	RMS	20M	1
18.25	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.19								

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX **PowerAV**

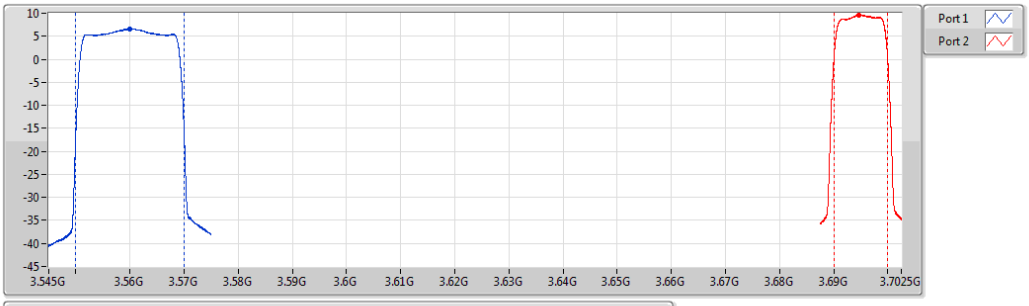
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.08	3.56G	30M	1M	3M	10	RMS	20M	1
18.21	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.16								

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX **PowerAV**

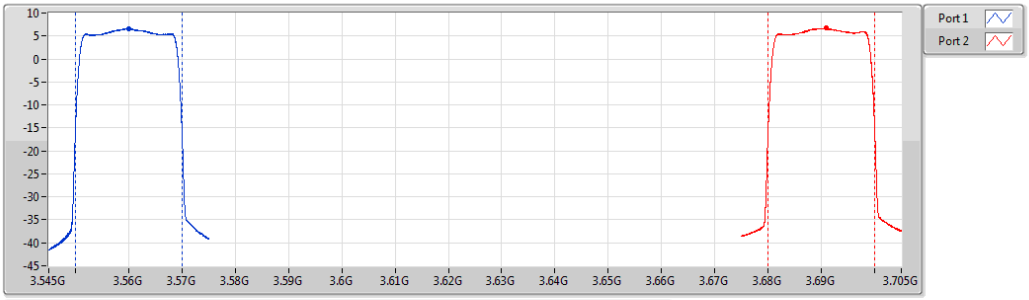
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.03	3.56G	30M	1M	3M	10	RMS	20M	1
18.36	3.695G	15M	1M	3M	10	RMS	10M	2
Sum(dBm)								
21.21								

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX **PowerAV**

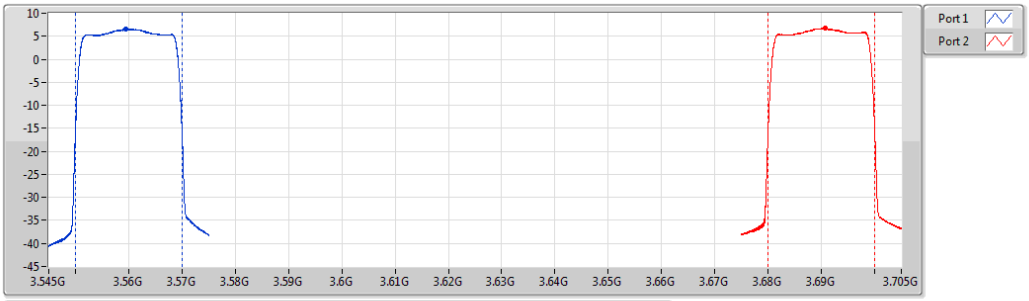
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.06	3.56G	30M	1M	3M	10	RMS	20M	1
18.24	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.16								

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX **PowerAV**

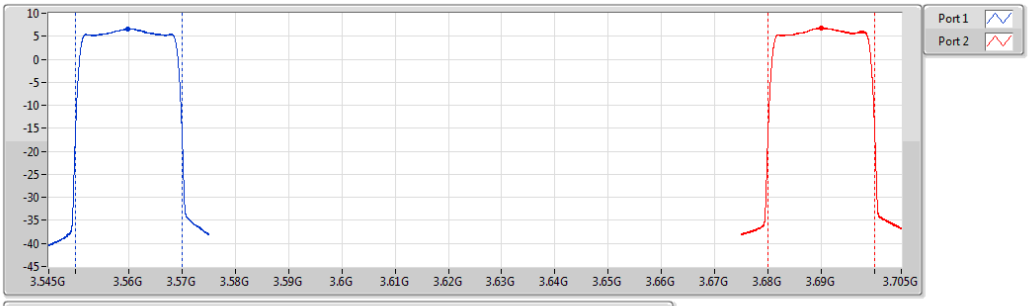
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.04	3.56G	30M	1M	3M	10	RMS	20M	1
18.24	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.15								

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX **PowerAV**

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0



CP(dBm)	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)	Sweep(s)	Detector	CP BW(Hz)	Port
18.04	3.56G	30M	1M	3M	10	RMS	20M	1
18.26	3.69G	30M	1M	3M	10	RMS	20M	2
Sum(dBm)								
21.16								

3.1.8 Test Result of PSD (CA Mode)

Multi-carrier
Summary

Mode	PD (dBm/MHz)	EIRP PD (dBm/MHz)
Band 48	-	-
LTE_10MHz+10MHz_Nss1,QPSK_2TX	10.52	26.01
LTE_10MHz+10MHz_Nss1,16QAM_2TX	10.43	25.92
LTE_10MHz+10MHz_Nss1,64QAM_2TX	10.50	25.99
LTE_10MHz+20MHz_Nss1,QPSK_2TX	10.48	25.97
LTE_10MHz+20MHz_Nss1,16QAM_2TX	10.41	25.90
LTE_10MHz+20MHz_Nss1,64QAM_2TX	10.45	25.94
LTE_20MHz+10MHz_Nss1,QPSK_2TX	9.39	24.88
LTE_20MHz+10MHz_Nss1,16QAM_2TX	9.33	24.82
LTE_20MHz+10MHz_Nss1,64QAM_2TX	9.42	24.91
LTE_20MHz+20MHz_Nss1,QPSK_2TX	7.60	23.09
LTE_20MHz+20MHz_Nss1,16QAM_2TX	7.54	23.03
LTE_20MHz+20MHz_Nss1,64QAM_2TX	7.50	22.99

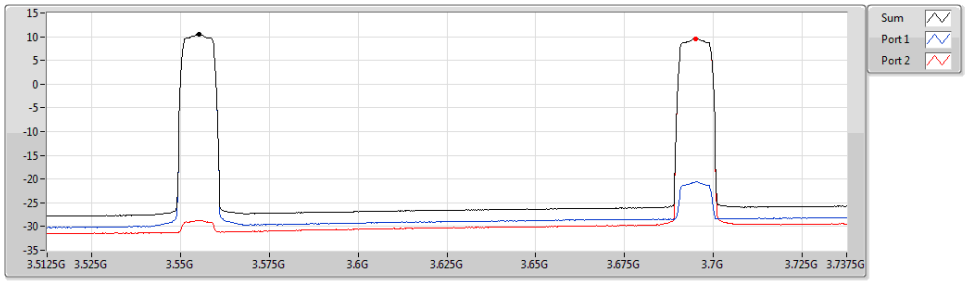
Result

Mode	Result	DG (dBi)	PD (dBm/MHz)	PD Limit (dBm/MHz)	EIRP PD (dBm/MHz)	EIRP PD Limit (dBm/MHz)	1Carrier Port 1 (dBm/MHz)	2Carrier Port 2 (dBm/MHz)
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	10.52	Inf	26.01	37.00	10.52	9.62
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	10.43	Inf	25.92	37.00	10.43	9.82
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	15.49	10.50	Inf	25.99	37.00	10.50	9.80
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-	-
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	10.48	Inf	25.97	37.00	10.48	6.93
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	10.41	Inf	25.90	37.00	10.41	6.69
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	15.49	10.45	Inf	25.94	37.00	10.45	6.75
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-	-	-	-	-	-	-
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	9.39	Inf	24.88	37.00	7.57	9.39
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	9.33	Inf	24.82	37.00	7.41	9.33
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	15.49	9.42	Inf	24.91	37.00	7.59	9.42
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-	-	-	-	-	-	-
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	7.60	Inf	23.09	37.00	7.60	6.59
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	7.54	Inf	23.03	37.00	7.54	6.60
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	15.49	7.50	Inf	22.99	37.00	7.50	6.55

DG = Directional Gain;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX **PSD**

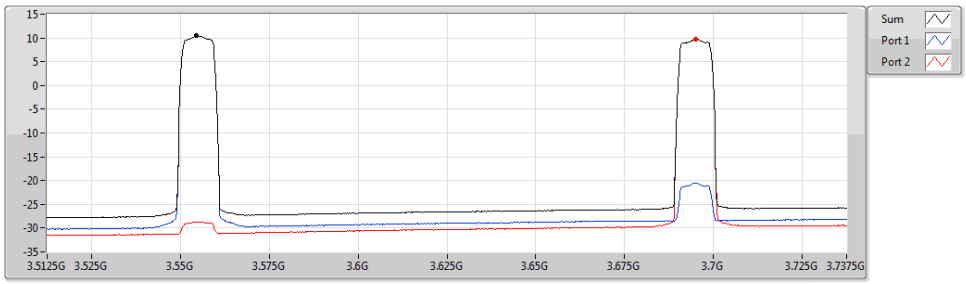
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.52	3.625G	225M	1M	3M	10	RMS	1
9.62	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.52							

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX **PSD**

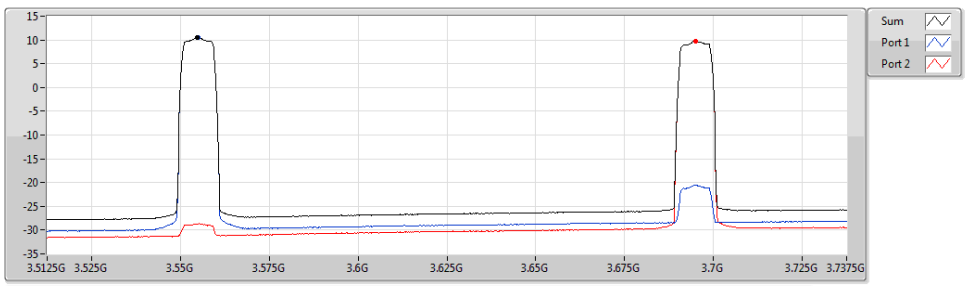
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.43	3.625G	225M	1M	3M	10	RMS	1
9.82	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.43							

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX **PSD**

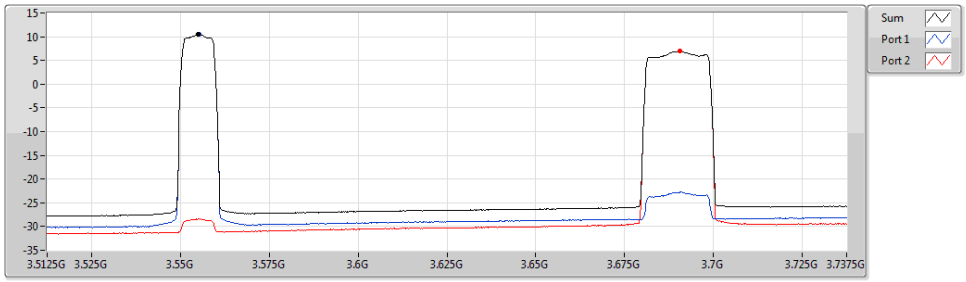
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.50	3.625G	225M	1M	3M	10	RMS	1
9.80	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.50							

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX **PSD**

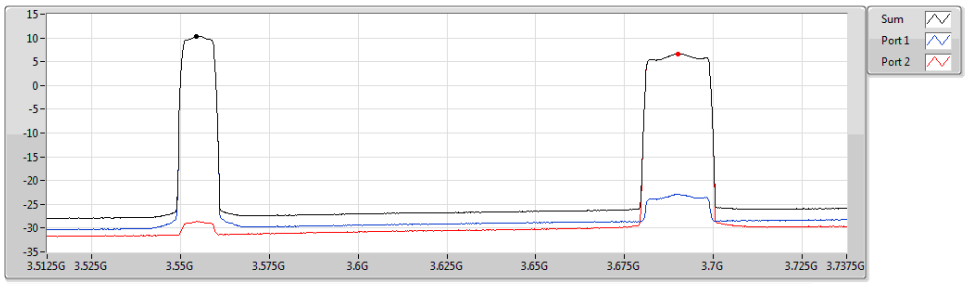
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.48	3.625G	225M	1M	3M	10	RMS	1
6.93	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.48							

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX **PSD**

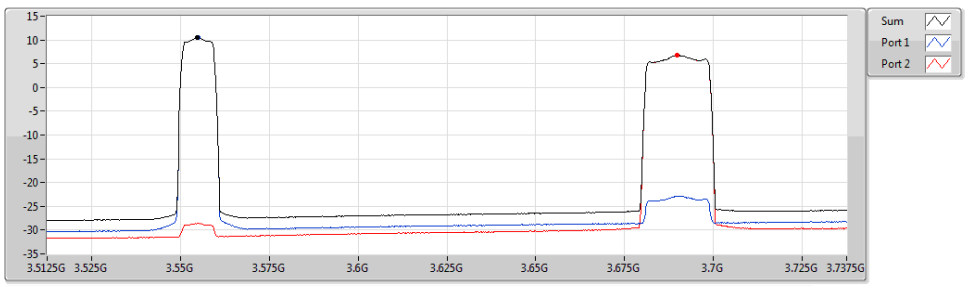
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.41	3.625G	225M	1M	3M	10	RMS	1
6.69	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.41							

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX **PSD**

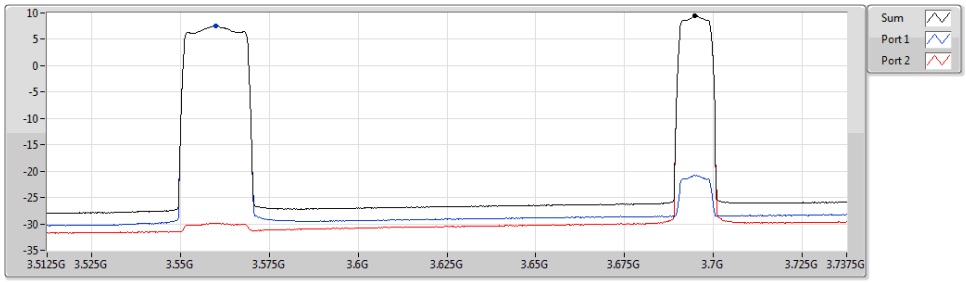
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
10.45	3.625G	225M	1M	3M	10	RMS	1
6.75	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
10.45							

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX **PSD**

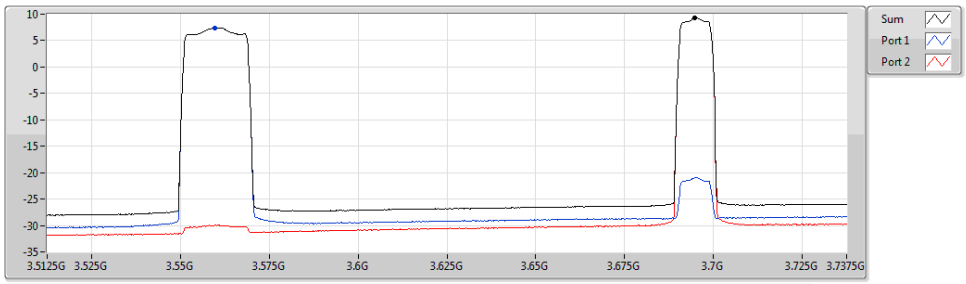
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.57	3.625G	225M	1M	3M	10	RMS	1
9.39	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
9.39							

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX **PSD**

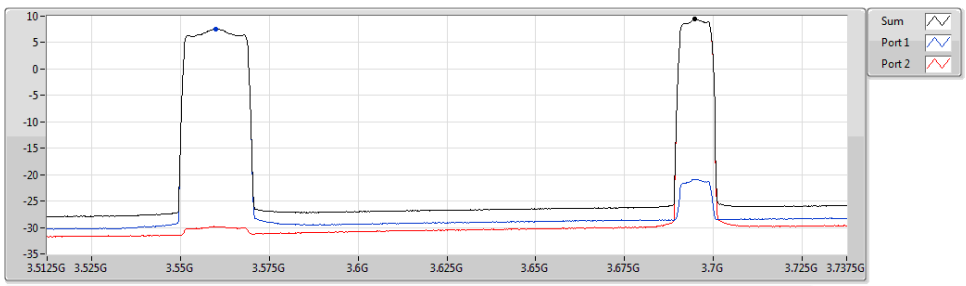
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.41	3.625G	225M	1M	3M	10	RMS	1
9.33	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
9.33							

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX **PSD**

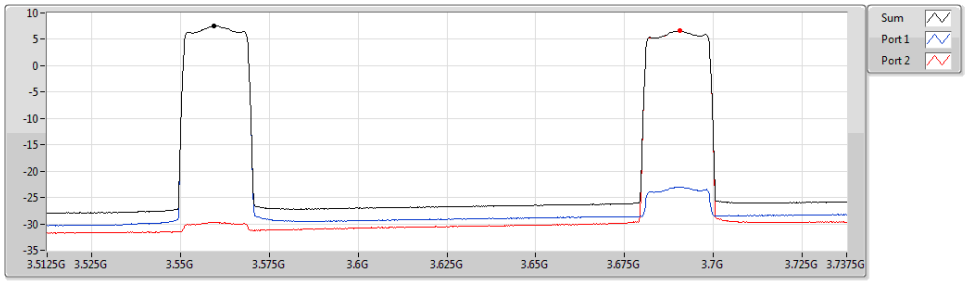
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.59	3.625G	225M	1M	3M	10	RMS	1
9.42	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
9.42							

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX **PSD**

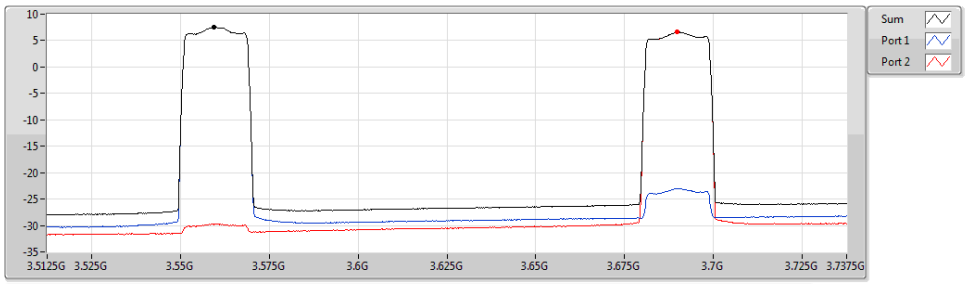
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.60	3.625G	225M	1M	3M	10	RMS	1
6.59	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
7.60							

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX **PSD**

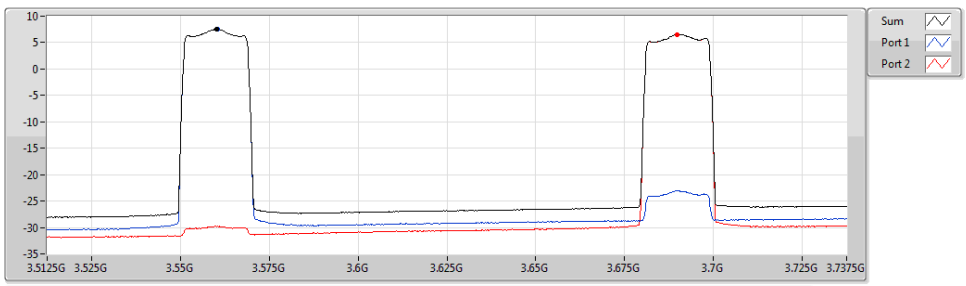
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.54	3.625G	225M	1M	3M	10	RMS	1
6.60	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
7.54							

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX **PSD**

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0



PD	CF	Span	RBW	VBW	Sweep	Detector	Port
(dBm/MHz)	(Hz)	(Hz)	(Hz)	(Hz)	(s)		
7.50	3.625G	225M	1M	3M	10	RMS	1
6.55	3.625G	225M	1M	3M	10	RMS	2
Sum PD							
(dBm/MHz)							
7.50							

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

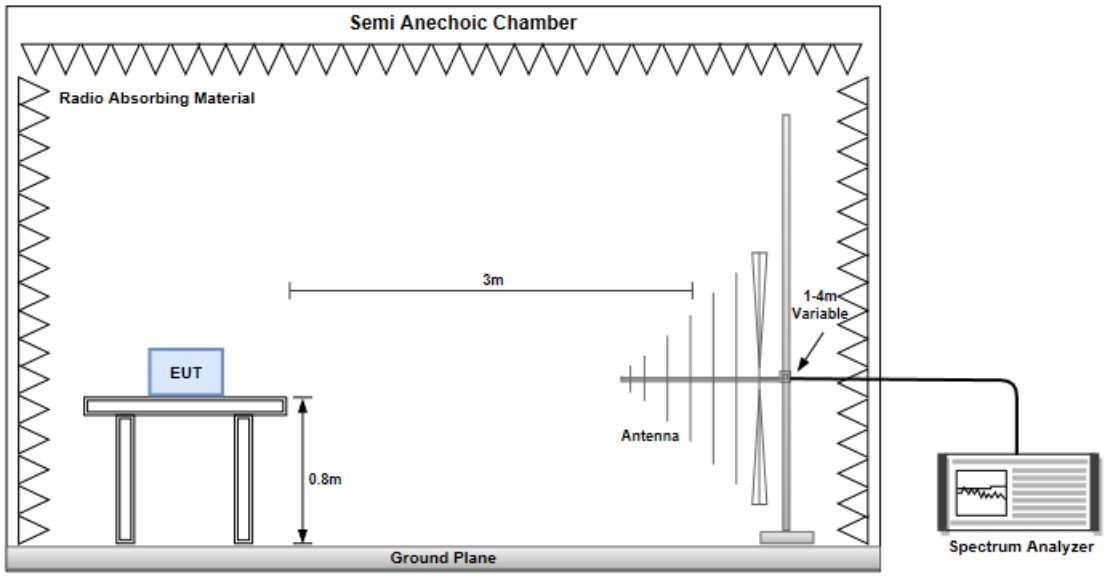
Frequency range	Limit (dBm/MHz)
Within 0-10 MHz above the Assigned Channel Within 0-10 MHz below the assigned Channel	-13
Greater than 10 MHz above the Assigned Channel Greater than 10 MHz below the Assigned Channel	-25
Power of any Emission below 3530 MHz Power of any Emission above 3720 MHz	-40

3.2.2 Test Procedures

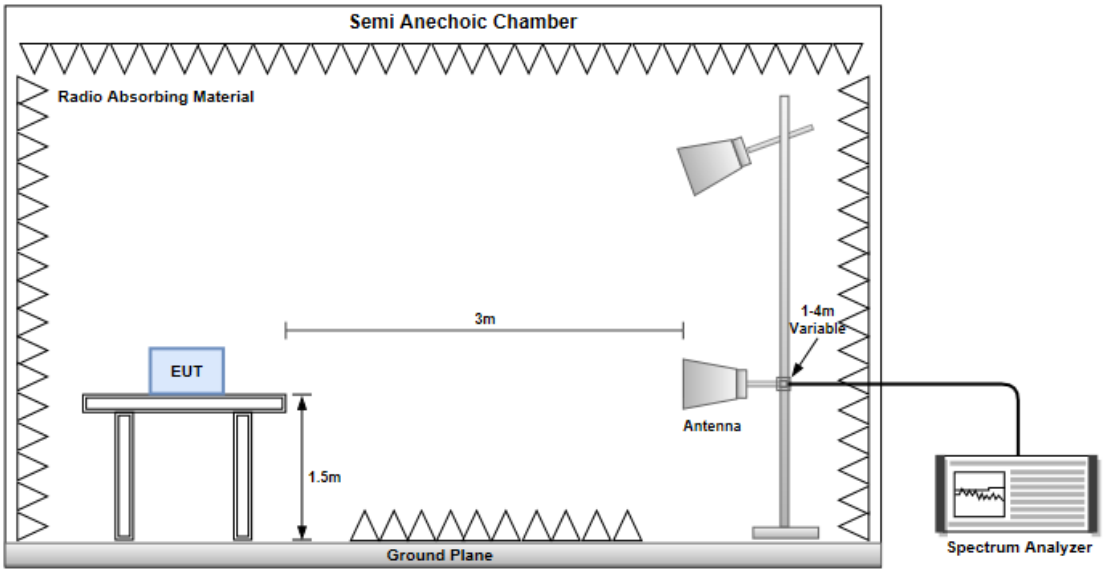
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

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 (CDD Mode)

Mode	LTE Band 48, QPSK, CB:10 MHz, 50 RB Offset 0, Channel: 55990						
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)**
97.90	H	-59.12	-40.00	-19.12	-57.91	-54.05	-5.07
124.09	H	-64.34	-40.00	-24.34	-63.18	-57.73	-6.61
195.87	H	-64.18	-40.00	-24.18	-60.56	-61.30	-2.88
249.22	H	-68.61	-40.00	-28.61	-65.35	-67.11	-1.50
358.83	H	-65.13	-40.00	-25.13	-66.84	-63.79	-1.34
624.61	H	-59.87	-40.00	-19.87	-64.56	-58.05	-1.82
97.90	V	-54.26	-40.00	-14.26	-55.03	-49.19	-5.07
164.83	V	-59.64	-40.00	-19.64	-62.42	-53.57	-6.07
221.09	V	-62.13	-40.00	-22.13	-63.30	-60.07	-2.06
249.22	V	-62.40	-40.00	-22.40	-64.20	-60.90	-1.50
358.83	V	-61.29	-40.00	-21.29	-63.09	-59.95	-1.34
624.61	V	-56.08	-40.00	-16.08	-63.86	-54.26	-1.82

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

Mode	LTE Band 48, QPSK, CB:20 MHz, 100 RB Offset 0, Channel: 55990						
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)**
97.90	H	-58.44	-40.00	-18.44	-57.23	-53.37	-5.07
135.73	H	-63.04	-40.00	-23.04	-62.23	-56.07	-6.97
183.26	H	-65.28	-40.00	-25.28	-63.86	-61.17	-4.11
358.83	H	-64.70	-40.00	-24.70	-66.41	-63.36	-1.34
499.48	H	-66.64	-40.00	-26.64	-69.53	-65.21	-1.43
624.61	H	-60.03	-40.00	-20.03	-64.72	-58.21	-1.82
67.83	V	-57.60	-40.00	-17.60	-56.75	-46.03	-11.57
97.90	V	-53.58	-40.00	-13.58	-54.35	-48.51	-5.07
163.86	V	-60.01	-40.00	-20.01	-62.78	-53.84	-6.17
224.00	V	-63.17	-40.00	-23.17	-64.41	-61.17	-2.00
358.83	V	-60.53	-40.00	-20.53	-62.33	-59.19	-1.34
624.61	V	-56.12	-40.00	-16.12	-63.90	-54.30	-1.82

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

3.2.5 Test Result of Radiated Emissions above 1GHz (CDD Mode)

Mode	LTE Band 48, QPSK, CB:10 MHz, 50 RB Offset 0, Channel: 55290						
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)
7110.00	H	-43.24	-40.00	-3.24	-62.98	-47.30	4.06
10665.00	H	-49.22	-40.00	-9.22	-71.89	-50.36	1.14
7110.00	V	-43.54	-40.00	-3.54	-64.31	-47.60	4.06
10665.00	V	-49.54	-40.00	-9.54	-71.33	-50.68	1.14

Mode	LTE Band 48, QPSK, CB:10 MHz, 50 RB Offset 0, Channel: 55990						
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)
7250.00	H	-42.51	-40.00	-2.51	-62.29	-46.06	3.55
10875.00	H	-48.78	-40.00	-8.78	-71.25	-49.77	0.99
7250.00	V	-42.20	-40.00	-2.20	-63.08	-45.75	3.55
10875.00	V	-49.40	-40.00	-9.40	-71.55	-50.39	0.99

Mode	LTE Band 48, QPSK, CB:10 MHz, 50 RB Offset 0, Channel: 56690						
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)
7390.00	H	-41.85	-40.00	-1.85	-61.66	-45.19	3.34
11085.00	H	-48.78	-40.00	-8.78	-71.25	-49.68	0.90
7390.00	V	-41.96	-40.00	-1.96	-62.27	-45.30	3.34
11085.00	V	-48.79	-40.00	-8.79	-71.29	-49.69	0.90

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

Mode	LTE Band 48, QPSK, CB:20 MHz, 100 RB Offset 0, Channel: 55340						
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)
7120.00	H	-43.47	-40.00	-3.47	-63.21	-47.48	4.01
10680.00	H	-48.60	-40.00	-8.60	-71.25	-49.73	1.13
7120.00	V	-43.60	-40.00	-3.60	-64.41	-47.61	4.01
10680.00	V	-49.61	-40.00	-9.61	-71.43	-50.74	1.13

Mode	LTE Band 48, QPSK, CB:20 MHz, 100 RB Offset 0, Channel: 55990						
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)
7250.00	H	-42.50	-40.00	-2.50	-62.28	-46.05	3.55
10875.00	H	-48.74	-40.00	-8.74	-71.21	-49.73	0.99
7250.00	V	-42.80	-40.00	-2.80	-63.68	-46.35	3.55
10875.00	V	-49.67	-40.00	-9.67	-71.82	-50.66	0.99

Mode	LTE Band 48, QPSK, CB:20 MHz, 100 RB Offset 0, Channel: 56640						
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)
7380.00	H	-41.95	-40.00	-1.95	-61.75	-45.30	3.35
11070.00	H	-49.19	-40.00	-9.19	-71.65	-50.09	0.90
7380.00	V	-41.89	-40.00	-1.89	-62.24	-45.24	3.35
11070.00	V	-48.96	-40.00	-8.96	-71.44	-49.86	0.90

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

3.2.6 Test Result of Radiated Emissions below 1GHz (CA Mode)

Mode	LTE Band 48, 64QAM, CB:10+10 MHz, 50+50 RB Offset 0, Channel: 55290+56690						
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)
66.86	H	-58.35	-40.00	-18.35	-58.01	-46.78	-11.57
97.90	H	-53.95	-40.00	-13.95	-54.72	-48.88	-5.07
164.83	H	-58.93	-40.00	-18.93	-61.71	-52.86	-6.07
196.84	H	-62.14	-40.00	-22.14	-63.17	-58.41	-3.73
358.83	H	-62.51	-40.00	-22.51	-64.31	-61.17	-1.34
624.61	H	-56.28	-40.00	-16.28	-64.06	-54.46	-1.82
67.83	V	-62.25	-40.00	-22.25	-62.15	-50.35	-11.90
97.90	V	-60.49	-40.00	-20.49	-59.28	-55.42	-5.07
164.83	V	-64.33	-40.00	-24.33	-63.61	-58.26	-6.07
187.14	V	-64.67	-40.00	-24.67	-62.57	-61.88	-2.79
358.83	V	-66.44	-40.00	-26.44	-68.15	-65.10	-1.34
624.61	V	-59.94	-40.00	-19.94	-64.63	-58.12	-1.82

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

Mode	LTE Band 48, QPSK, CB:10+20 MHz, 50+100 RB Offset 0, Channel: 55290+56690						
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)
67.83	H	-62.04	-40.00	-22.04	-61.94	-50.14	-11.90
97.90	H	-59.11	-40.00	-19.11	-57.90	-54.04	-5.07
135.73	H	-63.77	-40.00	-23.77	-62.96	-57.70	-6.07
194.90	H	-63.45	-40.00	-23.45	-60.00	-61.43	-2.02
358.83	H	-66.44	-40.00	-26.44	-68.15	-65.10	-1.34
624.61	H	-59.66	-40.00	-19.66	-64.35	-57.84	-1.82
66.86	V	-58.80	-40.00	-18.80	-58.46	-46.90	-11.90
97.90	V	-54.01	-40.00	-14.01	-54.78	-48.94	-5.07
164.83	V	-59.52	-40.00	-19.52	-62.30	-53.45	-6.07
223.03	V	-62.23	-40.00	-22.23	-63.45	-60.21	-2.02
358.83	V	-60.48	-40.00	-20.48	-62.28	-59.14	-1.34
624.61	V	-56.26	-40.00	-16.26	-64.04	-54.44	-1.82

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

Mode	LTE Band 48, 64QAM, CB:20+10 MHz, 100+50 RB Offset 0, Channel: 55340+56690						
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)
33.88	H	-62.11	-40.00	-22.11	-70.62	-43.23	-18.88
97.90	H	-60.87	-40.00	-20.87	-59.66	-55.80	-5.07
136.70	H	-63.83	-40.00	-23.83	-63.05	-56.83	-7.00
192.96	H	-62.40	-40.00	-22.40	-59.29	-59.23	-3.17
358.83	H	-65.06	-40.00	-25.06	-66.77	-63.72	-1.34
624.61	H	-59.33	-40.00	-19.33	-64.02	-57.51	-1.82
67.83	V	-59.48	-40.00	-19.48	-58.63	-47.91	-11.57
97.90	V	-55.46	-40.00	-15.46	-56.23	-50.39	-5.07
158.04	V	-59.98	-40.00	-19.98	-62.67	-53.34	-6.64
195.87	V	-61.73	-40.00	-21.73	-62.87	-58.85	-2.88
358.83	V	-59.86	-40.00	-19.86	-61.66	-58.52	-1.34
624.61	V	-57.32	-40.00	-17.32	-65.10	-55.50	-1.82

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

Mode	LTE Band 48, 64QAM, CB:20+20 MHz, 100+100 RB Offset 0, Channel: 55340+56640						
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)
67.83	H	-62.04	-40.00	-22.04	-61.94	-50.14	-11.90
97.90	H	-59.11	-40.00	-19.11	-57.90	-54.04	-5.07
135.73	H	-63.77	-40.00	-23.77	-62.96	-57.70	-6.07
194.90	H	-63.45	-40.00	-23.45	-60.00	-61.43	-2.02
358.83	H	-66.44	-40.00	-26.44	-68.15	-65.10	-1.34
624.61	H	-59.66	-40.00	-19.66	-64.35	-57.84	-1.82
66.86	V	-58.80	-40.00	-18.80	-58.46	-46.90	-11.90
97.90	V	-54.01	-40.00	-14.01	-54.78	-48.94	-5.07
164.83	V	-59.52	-40.00	-19.52	-62.30	-53.45	-6.07
223.03	V	-62.23	-40.00	-22.23	-63.45	-60.21	-2.02
358.83	V	-60.48	-40.00	-20.48	-62.28	-59.14	-1.34
624.61	V	-56.26	-40.00	-16.26	-64.04	-54.44	-1.82

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

3.2.7 Test Result of Radiated Emissions above 1GHz (CA Mode)

Mode	LTE Band 48, 64QAM, CB:10+10 MHz, 50+50 RB Offset 0, Channel: 55290+56690						
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)**
7110.00	H	-49.75	-40.00	-9.75	-69.49	-53.81	4.06
7390.00	H	-46.23	-40.00	-6.23	-66.04	-49.57	3.34
10665.00	H	-48.82	-40.00	-8.82	-71.49	-49.96	1.14
11085.00	H	-49.01	-40.00	-9.01	-71.48	-49.91	0.90
7110.00	V	-43.42	-40.00	-3.42	-64.19	-47.48	4.06
7390.00	V	-45.66	-40.00	-5.66	-65.97	-49.00	3.34
10665.00	V	-50.00	-40.00	-10.00	-71.79	-51.14	1.14
11085.00	V	-49.15	-40.00	-9.15	-71.65	-50.05	0.90

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

Mode	LTE Band 48, QPSK, CB:10+20 MHz, 50+100 RB Offset 0, Channel: 55290+56690						
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)**
7110.00	H	-49.61	-40.00	-9.61	-69.35	-53.67	4.06
7380.00	H	-46.05	-40.00	-6.05	-65.85	-49.40	3.35
10665.00	H	-48.68	-40.00	-8.68	-71.35	-49.82	1.14
11070.00	H	-48.70	-40.00	-8.70	-71.16	-49.60	0.90
7110.00	V	-43.88	-40.00	-3.88	-64.65	-47.94	4.06
7380.00	V	-45.72	-40.00	-5.72	-66.07	-49.07	3.35
10665.00	V	-49.28	-40.00	-9.28	-71.07	-50.42	1.14
11070.00	V	-48.80	-40.00	-8.80	-71.28	-49.70	0.90

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

Mode	LTE Band 48, 64QAM, CB:20+10 MHz, 100+50 RB Offset 0, Channel: 55340+56690						
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)**
7120.00	H	-49.81	-40.00	-9.81	-69.55	-53.82	4.01
7390.00	H	-46.51	-40.00	-6.51	-66.32	-49.85	3.34
10680.00	H	-48.52	-40.00	-8.52	-71.17	-49.65	1.13
11085.00	H	-49.06	-40.00	-9.06	-71.53	-49.96	0.90
7120.00	V	-43.43	-40.00	-3.43	-64.24	-47.44	4.01
7390.00	V	-46.00	-40.00	-6.00	-66.31	-49.34	3.34
10680.00	V	-50.00	-40.00	-10.00	-71.82	-51.13	1.13
11085.00	V	-48.94	-40.00	-8.94	-71.44	-49.84	0.90

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

Mode	LTE Band 48, 64QAM, CB:20+20 MHz, 100+100 RB Offset 0, Channel: 55340+56640						
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)**
7120.00	H	-49.65	-40.00	-9.65	-69.39	-53.66	4.01
7380.00	H	-46.07	-40.00	-6.07	-65.87	-49.42	3.35
10680.00	H	-49.18	-40.00	-9.18	-71.83	-50.31	1.13
11070.00	H	-49.41	-40.00	-9.41	-71.83	-50.31	0.90
7120.00	V	-43.40	-40.00	-3.40	-64.21	-47.41	4.01
7380.00	V	-45.18	-40.00	-5.18	-65.53	-48.53	3.35
10680.00	V	-49.61	-40.00	-9.61	-71.43	-50.74	1.13
11070.00	V	-49.29	-40.00	-9.29	-71.77	-50.19	0.90

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

3.3 Conducted Emissions & Band Edge

3.3.1 Limit of Conducted Emissions & Band Edge

Frequency range	Limit (dBm/MHz)
Within 0-10 MHz above the Assigned Channel Within 0-10 MHz below the assigned Channel	-13
Greater than 10 MHz above the Assigned Channel Greater than 10 MHz below the Assigned Channel	-25
Power of any Emission below 3530 MHz Power of any Emission above 3720 MHz	-40

3.3.2 Test Procedures

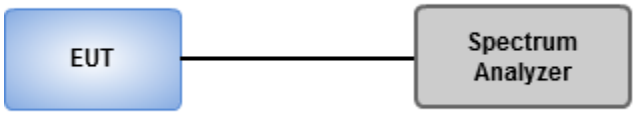
Emission below 3530 MHz / Emission above 3720 MHz

1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30 MHz ~ 37 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.

3530 MHz ~ (F_c - BW/2) / (F_c + BW/2) ~ 3720 MHz

1. Lowest /middel / highest operating channels are tested for this item.
2. The center frequency of spectrum analyzer will be set to Lowest /middel / highest operating channels.
3. Set RBW = 1% of EBW, VBW = 3 x RBW, detector = RMS, sweep time = auto..
4. Using channel power function to measure test result and record the max trace value and capture the test plot.

3.3.3 Test Setup



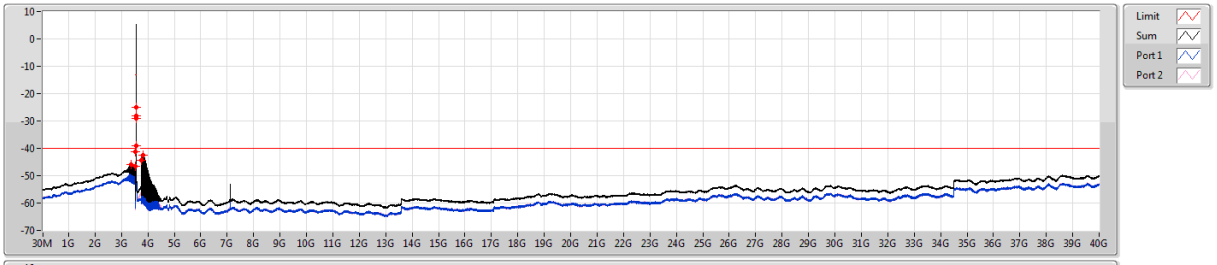
3.3.4 Test Result of Conducted Emissions & Band Edge (CDD Mode)

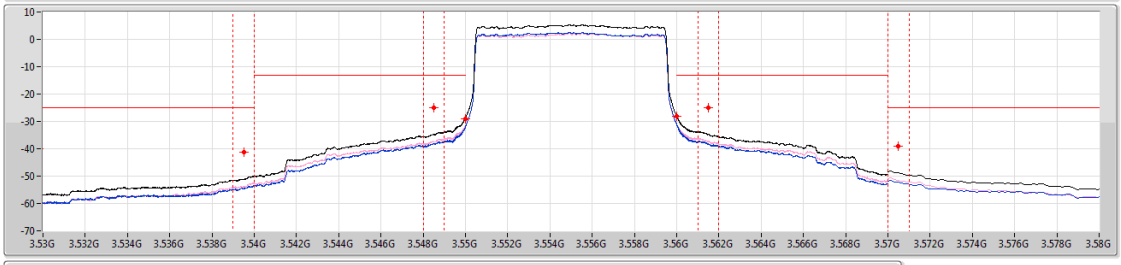
Single-carrier
Summary

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 48	-	-	-	-	-	-	-	-	-	-	-	-
Band 48_LTE_20MHz_Nss1_2TX												
3690MHz_QPSK_RB 100,#RB 0	Pass	3.72G	3.75G	200k	620k	RMS	3.7205G	-40.43	-40.00	-0.43	MBW 1M	-

Band 48_LTE_10MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

3555MHz_QPSK_RB 50,#RB 0

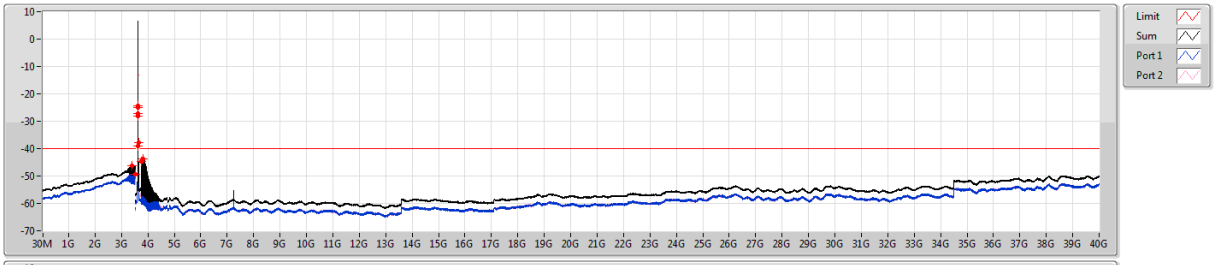


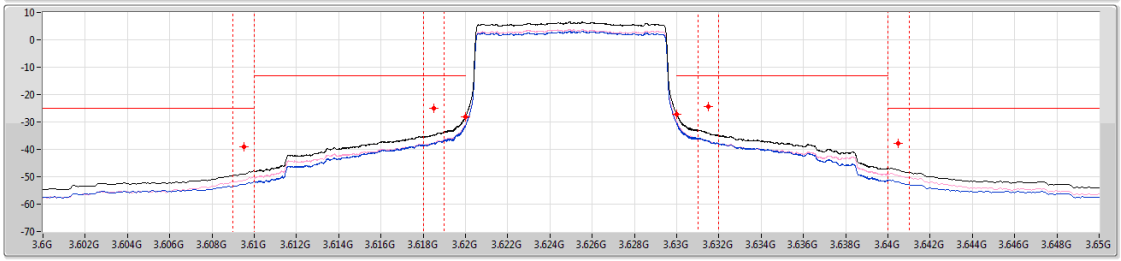


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.37733G	-45.91	-40.00	-5.91	-	-	-48.81	-49.04
3.51G	3.53G	100k	300k	RMS	3.5275G	-46.67	-40.00	-6.67	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5395G	-41.25	-25.00	-16.25	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-25.06	-13.00	-12.06	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-28.93	-13.00	-15.93	-	-	-32.08	-31.81
3.56G	3.561G	100k	300k	RMS	3.56G	-28.10	-13.00	-15.10	-	-	-31.00	-31.22
3.561G	3.57G	100k	300k	RMS	3.5615G	-24.97	-13.00	-11.97	MBW 1M	-	-	-
3.57G	3.72G	100k	300k	RMS	3.5705G	-39.09	-25.00	-14.09	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7495G	-44.48	-40.00	-4.48	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.80664G	-42.56	-40.00	-2.56	-	-	-50.63	-43.30

Band 48_LTE_10MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

3625MHz_QPSK_RB 50,#RB 0

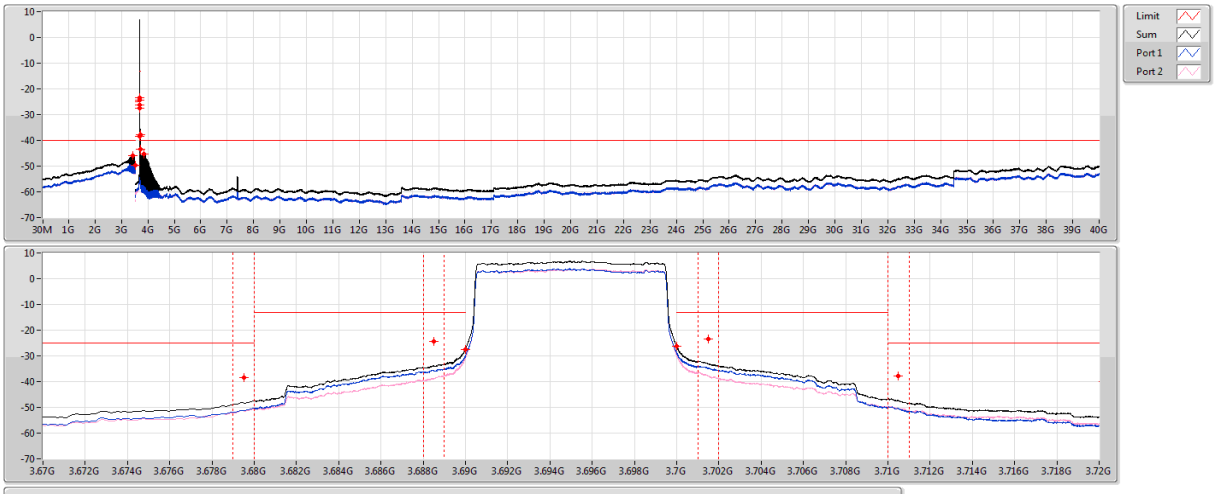




F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.40865G	-46.12	-40.00	-6.12	-	-	-48.23	-50.28
3.51G	3.53G	100k	300k	RMS	3.5285G	-49.31	-40.00	-9.31	MBW 1M	-	-	-
3.53G	3.61G	100k	300k	RMS	3.6095G	-39.08	-25.00	-14.08	MBW 1M	-	-	-
3.61G	3.619G	100k	300k	RMS	3.6185G	-24.95	-13.00	-11.95	MBW 1M	-	-	-
3.619G	3.62G	100k	300k	RMS	3.62G	-28.05	-13.00	-15.05	-	-	-31.33	-30.81
3.63G	3.631G	100k	300k	RMS	3.63G	-27.17	-13.00	-14.17	-	-	-30.51	-29.87
3.631G	3.64G	100k	300k	RMS	3.6315G	-24.29	-13.00	-11.29	MBW 1M	-	-	-
3.64G	3.72G	100k	300k	RMS	3.6405G	-37.86	-25.00	-12.86	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7495G	-44.67	-40.00	-4.67	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.81457G	-43.67	-40.00	-3.67	-	-	-60.07	-43.77

Band 48_LTE_10MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

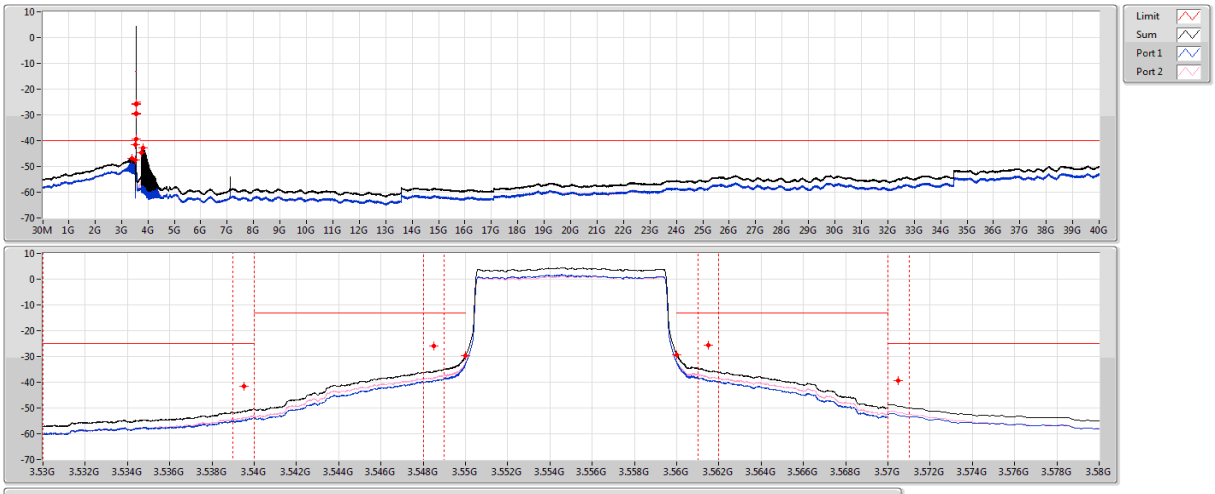
3695MHz_QPSK_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.42561G	-46.08	-40.00	-6.08	-	-	-48.16	-50.27
3.51G	3.53G	100k	300k	RMS	3.5235G	-49.68	-40.00	-9.68	MBW 1M	-	-	-
3.53G	3.68G	100k	300k	RMS	3.6795G	-38.45	-25.00	-13.45	MBW 1M	-	-	-
3.68G	3.689G	100k	300k	RMS	3.6885G	-24.26	-13.00	-11.26	MBW 1M	-	-	-
3.689G	3.69G	100k	300k	RMS	3.69G	-27.36	-13.00	-14.36	-	-	-30.03	-30.74
3.7G	3.701G	100k	300k	RMS	3.7G	-26.32	-13.00	-13.32	-	-	-28.99	-29.70
3.701G	3.71G	100k	300k	RMS	3.7015G	-23.29	-13.00	-10.29	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-37.79	-25.00	-12.79	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7225G	-43.46	-40.00	-3.46	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.83723G	-45.24	-40.00	-5.24	-	-	-51.13	-46.53

Band 48_LTE_10MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

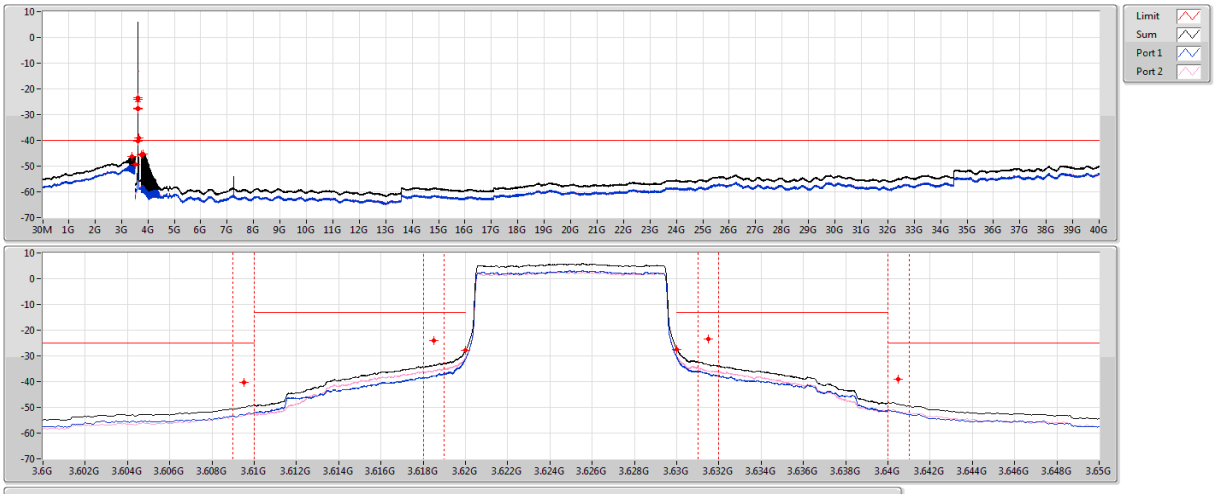
3555MHz_16QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.39821G	-46.88	-40.00	-6.88	-	-	-48.24	-52.60
3.51G	3.53G	100k	300k	RMS	3.5295G	-47.43	-40.00	-7.43	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5395G	-41.51	-25.00	-16.51	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-26.02	-13.00	-13.02	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-29.74	-13.00	-16.74	-	-	-32.92	-32.58
3.56G	3.561G	100k	300k	RMS	3.56G	-29.35	-13.00	-16.35	-	-	-32.40	-32.33
3.561G	3.57G	100k	300k	RMS	3.5615G	-25.74	-13.00	-12.74	MBW 1M	-	-	-
3.57G	3.72G	100k	300k	RMS	3.5705G	-39.46	-25.00	-14.46	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7485G	-44.55	-40.00	-4.55	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.83043G	-42.84	-40.00	-2.84	-	-	-51.05	-43.55

Band 48_LTE_10MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

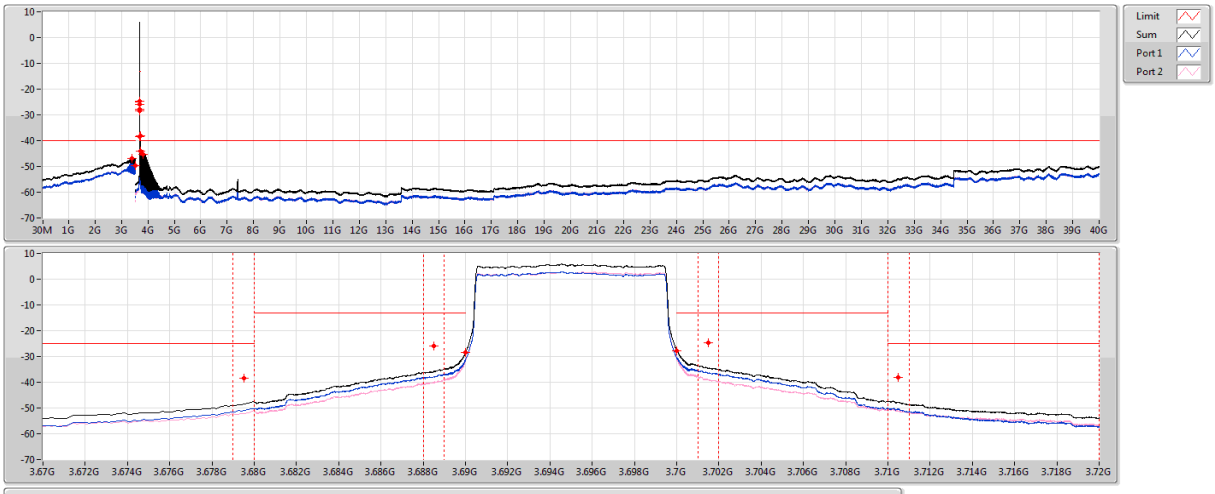
3625MHz_16QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.40908G	-46.35	-40.00	-6.35	-	-	-49.04	-49.70
3.51G	3.53G	100k	300k	RMS	3.5105G	-49.32	-40.00	-9.32	MBW 1M	-	-	-
3.53G	3.61G	100k	300k	RMS	3.6095G	-40.23	-25.00	-15.23	MBW 1M	-	-	-
3.61G	3.619G	100k	300k	RMS	3.6185G	-23.93	-13.00	-10.93	MBW 1M	-	-	-
3.619G	3.62G	100k	300k	RMS	3.62G	-27.90	-13.00	-14.90	-	-	-31.42	-30.46
3.63G	3.631G	100k	300k	RMS	3.63G	-27.39	-13.00	-14.39	-	-	-30.53	-30.27
3.631G	3.64G	100k	300k	RMS	3.6315G	-23.52	-13.00	-10.52	MBW 1M	-	-	-
3.64G	3.72G	100k	300k	RMS	3.6405G	-39.04	-25.00	-14.04	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7495G	-45.50	-40.00	-5.50	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.8293G	-45.23	-40.00	-5.23	-	-	-50.75	-46.66

Band 48_LTE_10MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

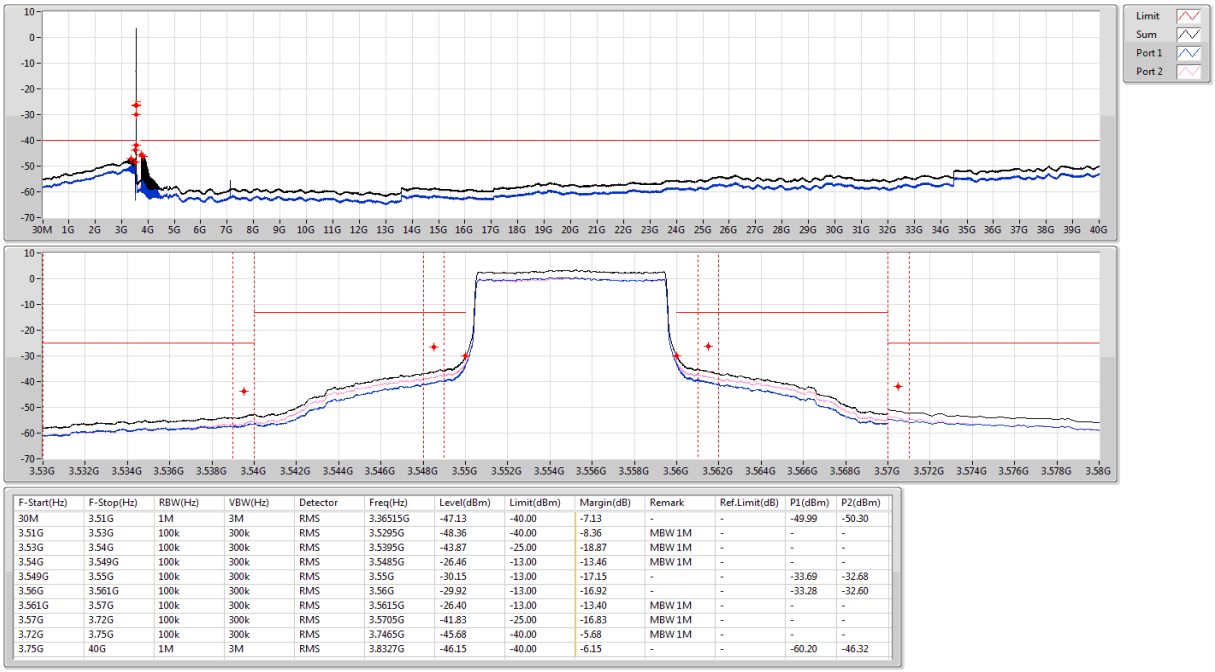
3695MHz_16QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.40038G	-46.80	-40.00	-6.80	-	-	-48.09	-52.69
3.51G	3.53G	100k	300k	RMS	3.5265G	-49.73	-40.00	-9.73	MBW 1M	-	-	-
3.53G	3.68G	100k	300k	RMS	3.6795G	-38.59	-25.00	-13.59	MBW 1M	-	-	-
3.68G	3.689G	100k	300k	RMS	3.6885G	-26.01	-13.00	-13.01	MBW 1M	-	-	-
3.689G	3.69G	100k	300k	RMS	3.69G	-28.53	-13.00	-15.53	-	-	-31.32	-31.78
3.7G	3.701G	100k	300k	RMS	3.7G	-27.77	-13.00	-14.77	-	-	-30.49	-31.09
3.701G	3.71G	100k	300k	RMS	3.7015G	-24.69	-13.00	-11.69	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-38.22	-25.00	-13.22	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-44.17	-40.00	-4.17	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.80891G	-45.36	-40.00	-5.36	-	-	-50.78	-46.83

Band 48_LTE_10MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

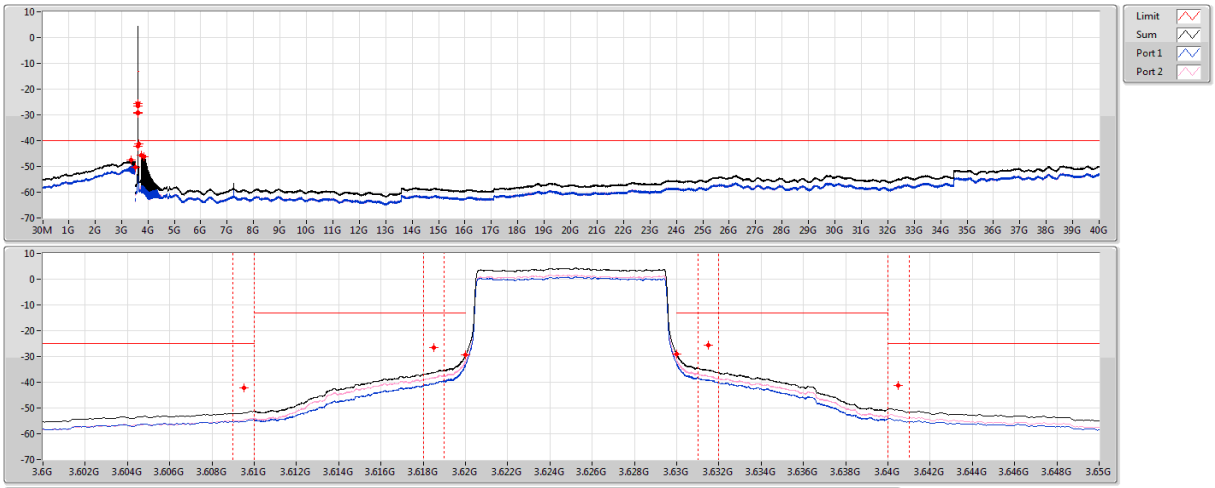
3555MHz_64QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.36515G	-47.13	-40.00	-7.13	-	-	-49.99	-50.30
3.51G	3.53G	100k	300k	RMS	3.5295G	-48.36	-40.00	-8.36	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5395G	-43.87	-25.00	-18.87	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-26.46	-13.00	-13.46	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-30.15	-13.00	-17.15	-	-	-33.69	-32.68
3.56G	3.561G	100k	300k	RMS	3.56G	-29.92	-13.00	-16.92	-	-	-33.28	-32.60
3.561G	3.57G	100k	300k	RMS	3.5615G	-26.40	-13.00	-13.40	MBW 1M	-	-	-
3.57G	3.72G	100k	300k	RMS	3.5705G	-41.83	-25.00	-16.83	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7465G	-45.68	-40.00	-5.68	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.8327G	-46.15	-40.00	-6.15	-	-	-60.20	-46.32

Band 48_LTE_10MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

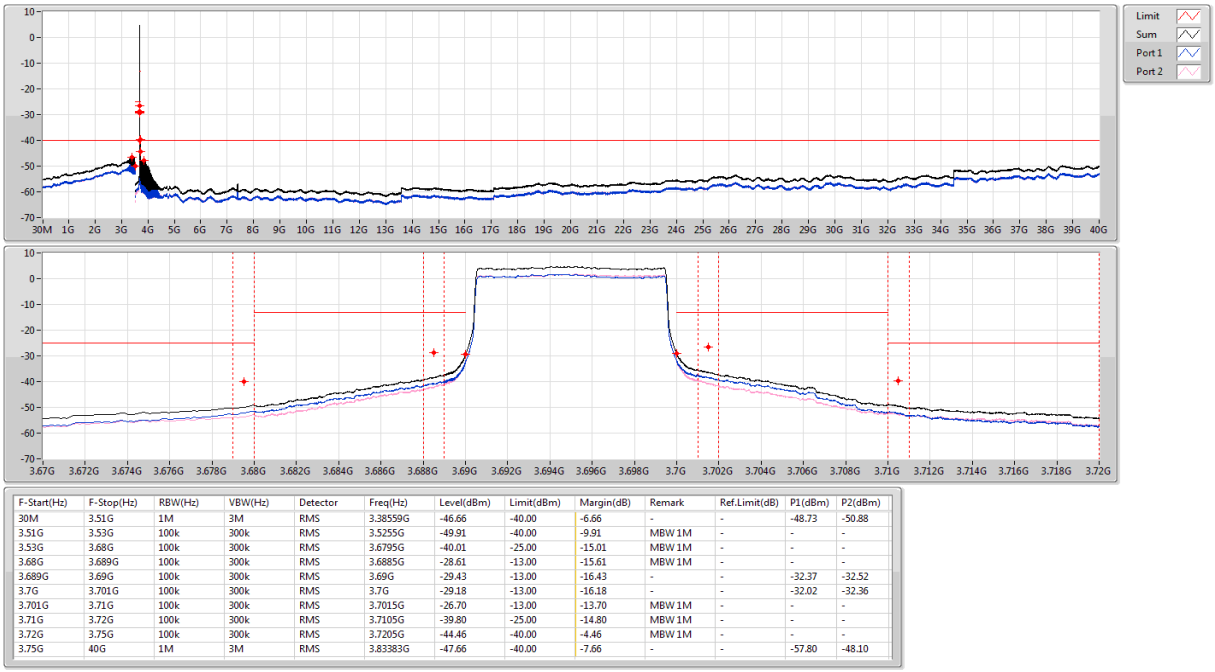
3625MHz_64QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.36123G	-47.65	-40.00	-7.65	-	-	-51.16	-50.22
3.51G	3.53G	100k	300k	RMS	3.5235G	-50.41	-40.00	-10.41	MBW 1M	-	-	-
3.53G	3.61G	100k	300k	RMS	3.6095G	-42.10	-25.00	-17.10	MBW 1M	-	-	-
3.61G	3.619G	100k	300k	RMS	3.6185G	-26.43	-13.00	-13.43	MBW 1M	-	-	-
3.619G	3.62G	100k	300k	RMS	3.62G	-29.44	-13.00	-16.44	-	-	-33.19	-31.81
3.63G	3.631G	100k	300k	RMS	3.63G	-29.02	-13.00	-16.02	-	-	-32.73	-31.43
3.631G	3.64G	100k	300k	RMS	3.6315G	-25.67	-13.00	-12.67	MBW 1M	-	-	-
3.64G	3.72G	100k	300k	RMS	3.6405G	-41.21	-25.00	-16.21	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7485G	-45.75	-40.00	-5.75	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.83609G	-46.40	-40.00	-6.40	-	-	-60.29	-46.58

Band 48_LTE_10MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

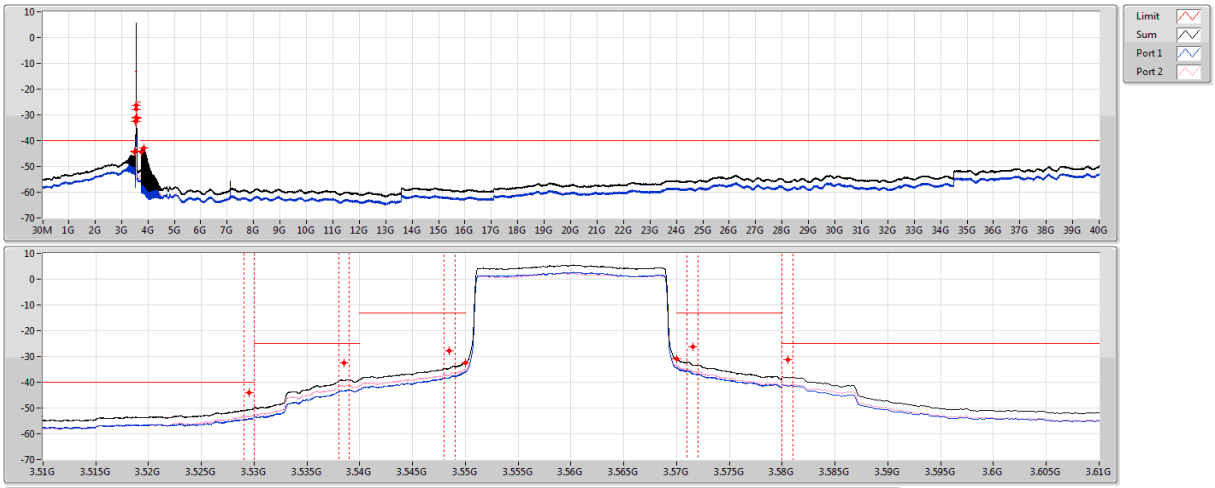
3695MHz_64QAM_RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.38559G	-46.66	-40.00	-6.66	-	-	-48.73	-50.88
3.51G	3.53G	100k	300k	RMS	3.5255G	-49.91	-40.00	-9.91	MBW 1M	-	-	-
3.53G	3.68G	100k	300k	RMS	3.6795G	-40.01	-25.00	-15.01	MBW 1M	-	-	-
3.68G	3.689G	100k	300k	RMS	3.6885G	-28.61	-13.00	-15.61	MBW 1M	-	-	-
3.689G	3.69G	100k	300k	RMS	3.69G	-29.43	-13.00	-16.43	-	-	-32.37	-32.52
3.7G	3.701G	100k	300k	RMS	3.7G	-29.18	-13.00	-16.18	-	-	-32.02	-32.36
3.701G	3.71G	100k	300k	RMS	3.7015G	-26.70	-13.00	-13.70	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-39.80	-25.00	-14.80	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-44.46	-40.00	-4.46	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.83383G	-47.66	-40.00	-7.66	-	-	-57.80	-48.10

Band 48_LTE_20MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

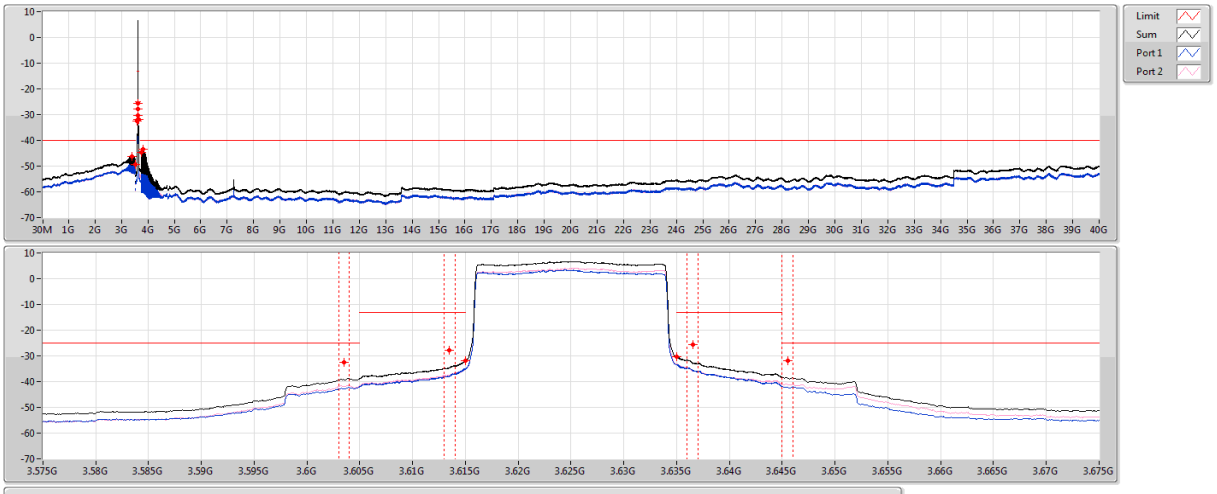
3560MHz_QPSK_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.50391G	-44.26	-40.00	-4.26	-	-	-47.07	-47.48
3.51G	3.53G	200k	620k	RMS	3.5295G	-43.93	-40.00	-3.93	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-32.47	-25.00	-7.47	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-27.69	-13.00	-14.69	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.54998G	-32.53	-13.00	-19.53	-	-	-36.07	-35.07
3.57G	3.571G	200k	620k	RMS	3.57003G	-30.95	-13.00	-17.95	-	-	-34.43	-33.53
3.571G	3.58G	200k	620k	RMS	3.5715G	-26.24	-13.00	-13.24	MBW 1M	-	-	-
3.58G	3.72G	200k	620k	RMS	3.5805G	-31.40	-25.00	-6.40	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7475G	-44.49	-40.00	-4.49	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.83496G	-42.76	-40.00	-2.76	-	-	-52.02	-43.31

Band 48_LTE_20MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

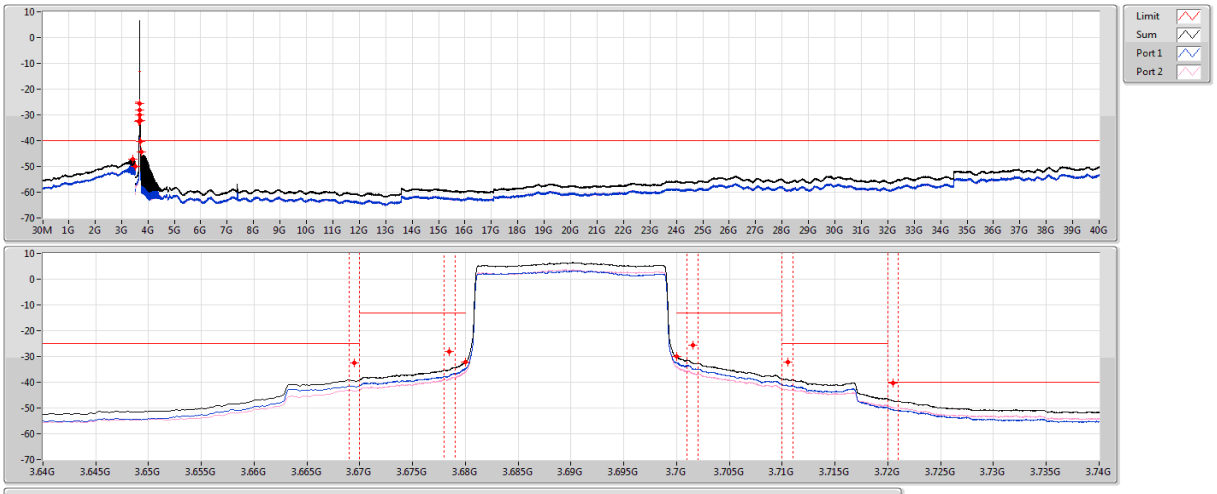
3625MHz_QPSK_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.39212G	-46.20	-40.00	-6.20	-	-	-49.44	-49.00
3.51G	3.53G	200k	620k	RMS	3.5295G	-49.33	-40.00	-9.33	MBW 1M	-	-	-
3.53G	3.605G	200k	620k	RMS	3.6035G	-32.38	-25.00	-7.38	MBW 1M	-	-	-
3.605G	3.614G	200k	620k	RMS	3.6135G	-27.75	-13.00	-14.75	MBW 1M	-	-	-
3.614G	3.615G	200k	620k	RMS	3.615G	-31.98	-13.00	-18.98	-	-	-34.88	-35.11
3.635G	3.636G	200k	620k	RMS	3.63503G	-30.26	-13.00	-17.26	-	-	-33.34	-33.20
3.636G	3.645G	200k	620k	RMS	3.6365G	-25.73	-13.00	-12.73	MBW 1M	-	-	-
3.645G	3.72G	200k	620k	RMS	3.6455G	-31.88	-25.00	-6.88	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7475G	-44.67	-40.00	-4.67	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.81684G	-43.53	-40.00	-3.53	-	-	-60.18	-43.63

Band 48_LTE_20MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

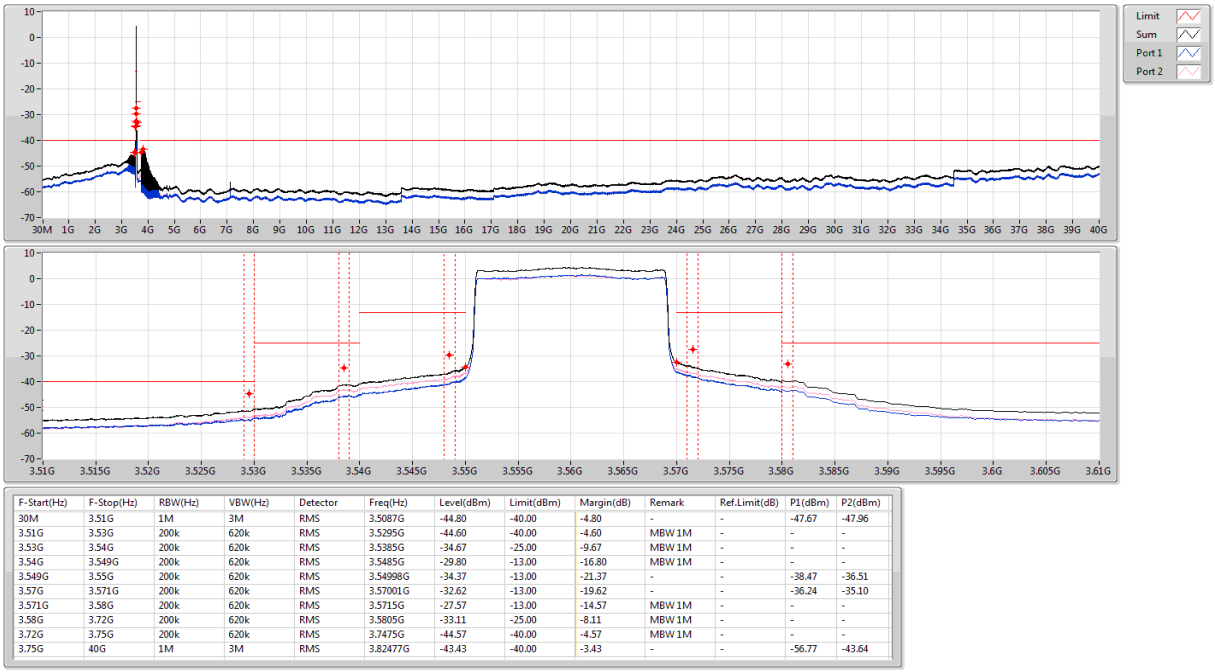
3690MHz_QPSK_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.41865G	-47.28	-40.00	-7.28	-	-	-48.96	-52.21
3.51G	3.53G	200k	620k	RMS	3.5235G	-50.10	-40.00	-10.10	MBW 1M	-	-	-
3.53G	3.67G	200k	620k	RMS	3.6695G	-32.60	-25.00	-7.60	MBW 1M	-	-	-
3.67G	3.679G	200k	620k	RMS	3.6785G	-28.24	-13.00	-15.24	MBW 1M	-	-	-
3.679G	3.68G	200k	620k	RMS	3.67999G	-32.34	-13.00	-19.34	-	-	-34.71	-36.09
3.7G	3.701G	200k	620k	RMS	3.7G	-30.12	-13.00	-17.12	-	-	-32.40	-34.00
3.701G	3.71G	200k	620k	RMS	3.7015G	-25.57	-13.00	-12.57	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-32.32	-25.00	-7.32	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-40.43	-40.00	-0.43	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.75G	-44.53	-40.00	-4.53	-	-	-49.08	-46.41

Band 48_LTE_20MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

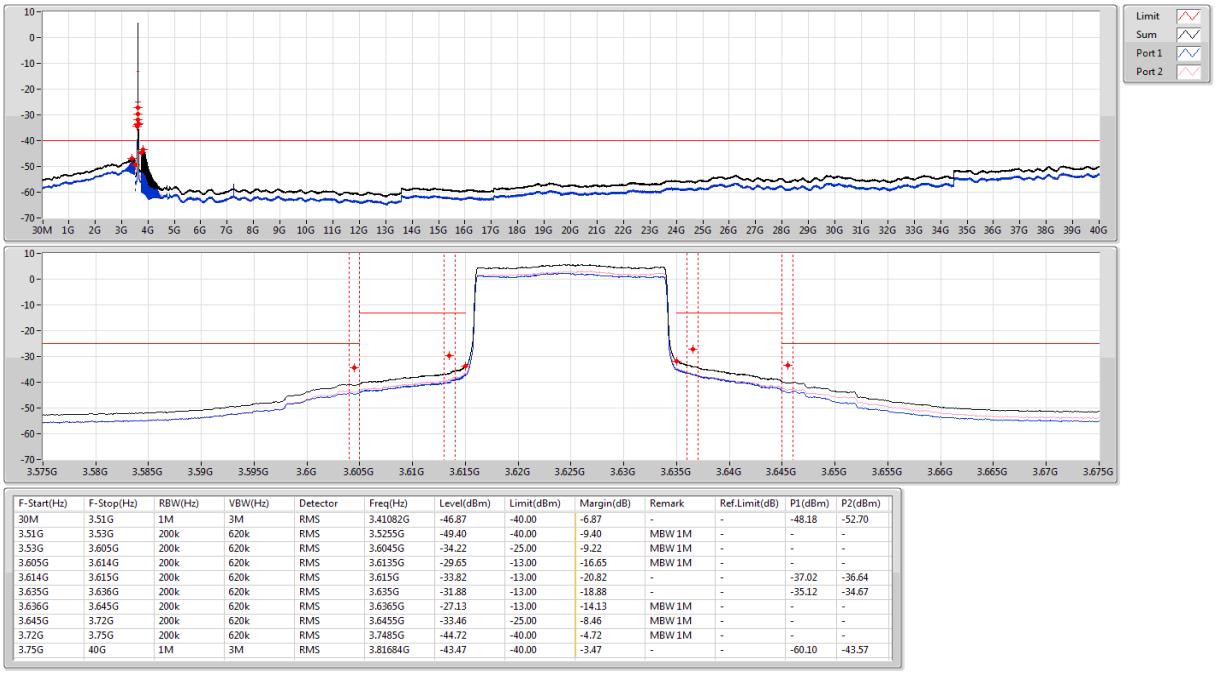
3560MHz_16QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.5087G	-44.80	-40.00	-4.80	-	-	-47.67	-47.96
3.51G	3.53G	200k	620k	RMS	3.5295G	-44.60	-40.00	-4.60	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-34.67	-25.00	-9.67	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-29.80	-13.00	-16.80	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.54998G	-34.37	-13.00	-21.37	-	-	-38.47	-36.51
3.57G	3.571G	200k	620k	RMS	3.57001G	-32.62	-13.00	-19.62	-	-	-36.24	-35.10
3.571G	3.58G	200k	620k	RMS	3.5715G	-27.57	-13.00	-14.57	MBW 1M	-	-	-
3.58G	3.72G	200k	620k	RMS	3.5805G	-33.11	-25.00	-8.11	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7475G	-44.57	-40.00	-4.57	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.82477G	-43.43	-40.00	-3.43	-	-	-56.77	-43.64

Band 48_LTE_20MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

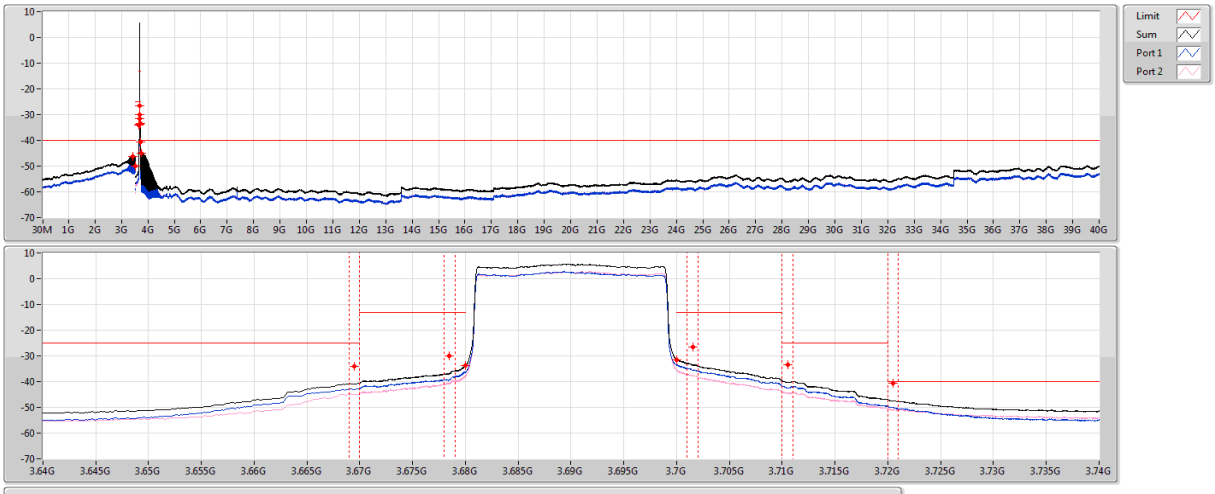
3625MHz_16QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.41082G	-46.87	-40.00	-6.87	-	-	-48.18	-52.70
3.51G	3.53G	200k	620k	RMS	3.5255G	-49.40	-40.00	-9.40	MBW 1M	-	-	-
3.53G	3.605G	200k	620k	RMS	3.6045G	-34.22	-25.00	-9.22	MBW 1M	-	-	-
3.605G	3.614G	200k	620k	RMS	3.6135G	-29.65	-13.00	-16.65	MBW 1M	-	-	-
3.614G	3.615G	200k	620k	RMS	3.615G	-33.82	-13.00	-20.82	-	-	-37.02	-36.64
3.635G	3.636G	200k	620k	RMS	3.635G	-31.88	-13.00	-18.88	-	-	-35.12	-34.67
3.636G	3.645G	200k	620k	RMS	3.6365G	-27.13	-13.00	-14.13	MBW 1M	-	-	-
3.645G	3.72G	200k	620k	RMS	3.6455G	-33.46	-25.00	-8.46	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7485G	-44.72	-40.00	-4.72	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.81684G	-43.47	-40.00	-3.47	-	-	-60.10	-43.57

Band 48_LTE_20MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

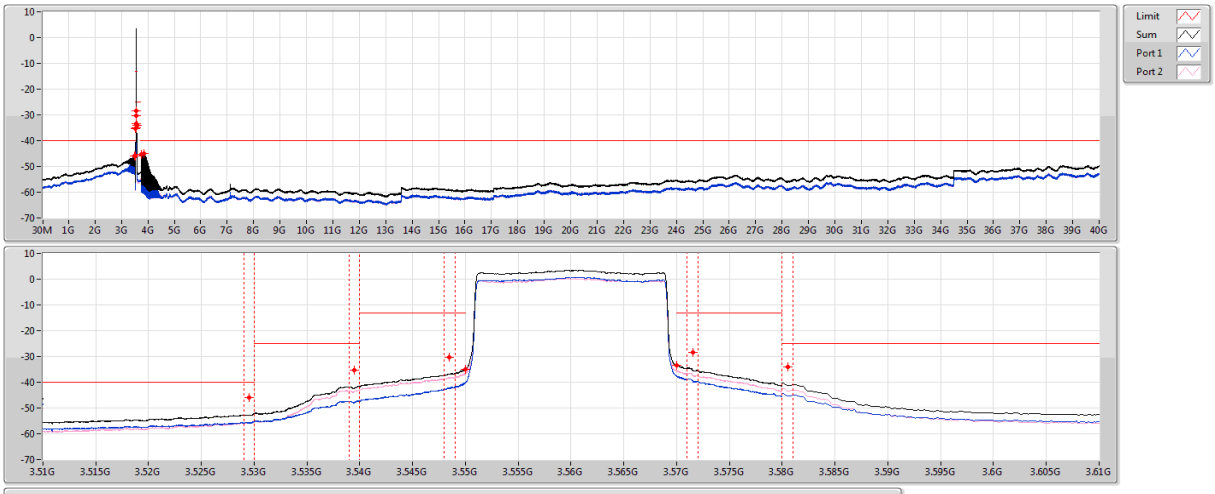
3690MHz_16QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.42083G	-46.16	-40.00	-6.16	-	-	-48.13	-50.54
3.51G	3.53G	200k	620k	RMS	3.5245G	-49.87	-40.00	-9.87	MBW 1M	-	-	-
3.53G	3.67G	200k	620k	RMS	3.6695G	-34.07	-25.00	-9.07	MBW 1M	-	-	-
3.67G	3.679G	200k	620k	RMS	3.6785G	-29.87	-13.00	-16.87	MBW 1M	-	-	-
3.679G	3.68G	200k	620k	RMS	3.67999G	-33.89	-13.00	-20.89	-	-	-36.17	-37.78
3.7G	3.701G	200k	620k	RMS	3.7G	-31.46	-13.00	-18.46	-	-	-33.59	-35.58
3.701G	3.71G	200k	620k	RMS	3.7015G	-26.65	-13.00	-13.65	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-33.40	-25.00	-8.40	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-40.77	-40.00	-0.77	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.75G	-45.11	-40.00	-5.11	-	-	-49.31	-47.19

Band 48_LTE_20MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

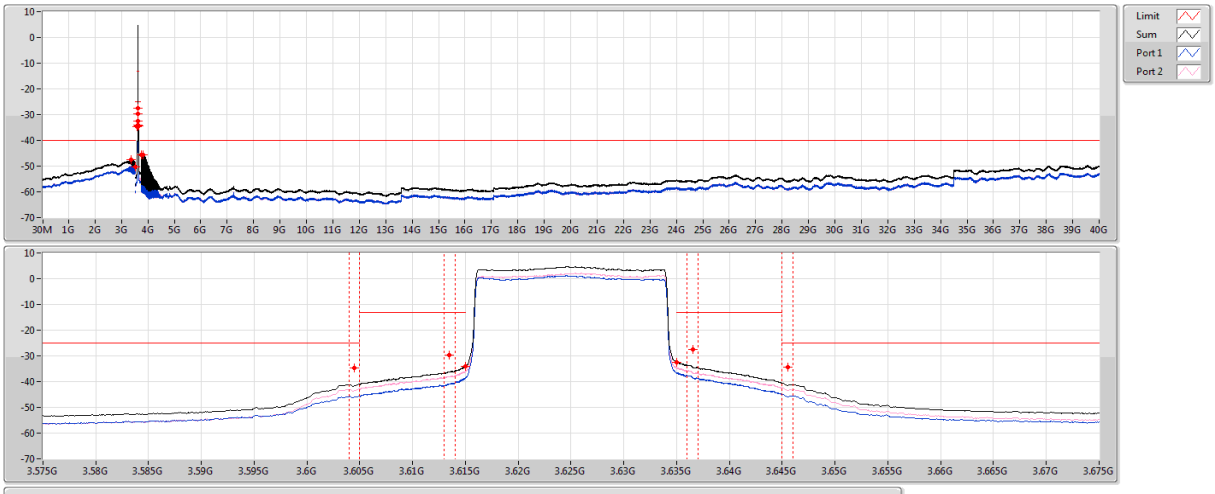
3560MHz_64QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.5087G	-46.01	-40.00	-6.01	-	-	-48.91	-49.14
3.51G	3.53G	200k	620k	RMS	3.5295G	-45.99	-40.00	-5.99	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5395G	-35.26	-25.00	-10.26	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-30.19	-13.00	-17.19	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.54999G	-35.01	-13.00	-22.01	-	-	-40.13	-36.60
3.57G	3.571G	200k	620k	RMS	3.57001G	-33.50	-13.00	-20.50	-	-	-37.59	-35.65
3.571G	3.58G	200k	620k	RMS	3.5715G	-28.33	-13.00	-15.33	MBW 1M	-	-	-
3.58G	3.72G	200k	620k	RMS	3.5805G	-34.17	-25.00	-9.17	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7485G	-45.45	-40.00	-5.45	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.85082G	-45.13	-40.00	-5.13	-	-	-51.44	-46.29

Band 48_LTE_20MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

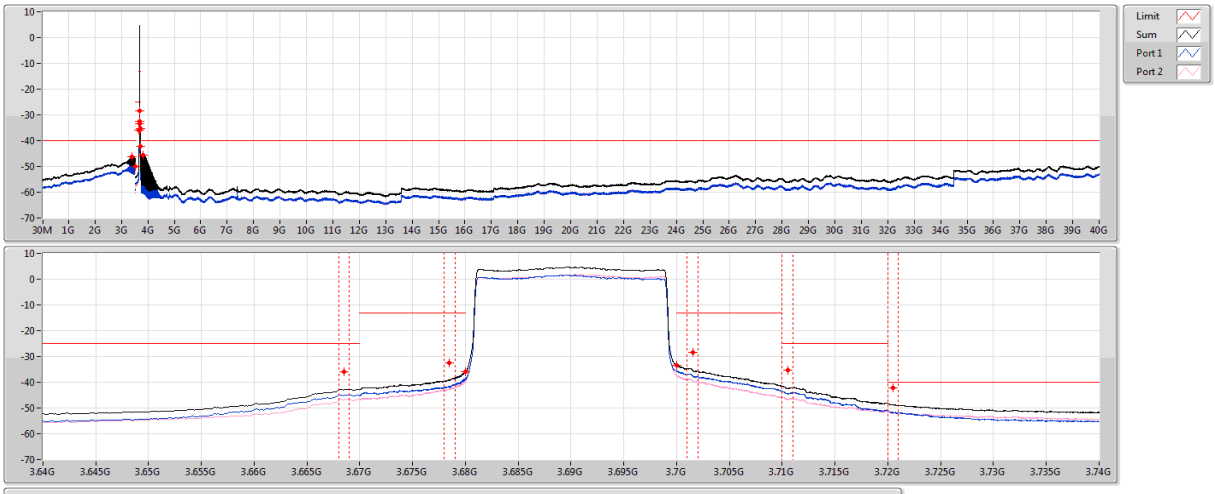
3625MHz_64QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.35601G	-47.58	-40.00	-7.58	-	-	-50.41	-50.77
3.51G	3.53G	200k	620k	RMS	3.5255G	-50.44	-40.00	-10.44	MBW 1M	-	-	-
3.53G	3.605G	200k	620k	RMS	3.6045G	-34.65	-25.00	-9.65	MBW 1M	-	-	-
3.605G	3.614G	200k	620k	RMS	3.6135G	-29.59	-13.00	-16.59	MBW 1M	-	-	-
3.614G	3.615G	200k	620k	RMS	3.615G	-34.15	-13.00	-21.15	-	-	-38.58	-36.09
3.635G	3.636G	200k	620k	RMS	3.635G	-32.53	-13.00	-19.53	-	-	-36.64	-34.66
3.636G	3.645G	200k	620k	RMS	3.6365G	-27.46	-13.00	-14.46	MBW 1M	-	-	-
3.645G	3.72G	200k	620k	RMS	3.6455G	-34.36	-25.00	-9.36	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7475G	-45.72	-40.00	-5.72	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.8191G	-45.49	-40.00	-5.49	-	-	-53.24	-46.29

Band 48_LTE_20MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

3690MHz_64QAM_RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.51G	1M	3M	RMS	3.40517G	-46.40	-40.00	-6.40	-	-	-48.47	-50.60
3.51G	3.53G	200k	620k	RMS	3.5235G	-49.97	-40.00	-9.97	MBW 1M	-	-	-
3.53G	3.67G	200k	620k	RMS	3.6685G	-36.09	-25.00	-11.09	MBW 1M	-	-	-
3.67G	3.679G	200k	620k	RMS	3.6785G	-32.35	-13.00	-19.35	MBW 1M	-	-	-
3.679G	3.68G	200k	620k	RMS	3.67998G	-36.08	-13.00	-23.08	-	-	-38.49	-39.78
3.7G	3.701G	200k	620k	RMS	3.70001G	-33.45	-13.00	-20.45	-	-	-35.71	-37.38
3.701G	3.71G	200k	620k	RMS	3.7015G	-28.54	-13.00	-15.54	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-35.39	-25.00	-10.39	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-42.04	-40.00	-2.04	MBW 1M	-	-	-
3.75G	40G	1M	3M	RMS	3.81684G	-45.76	-40.00	-5.76	-	-	-51.14	-47.24

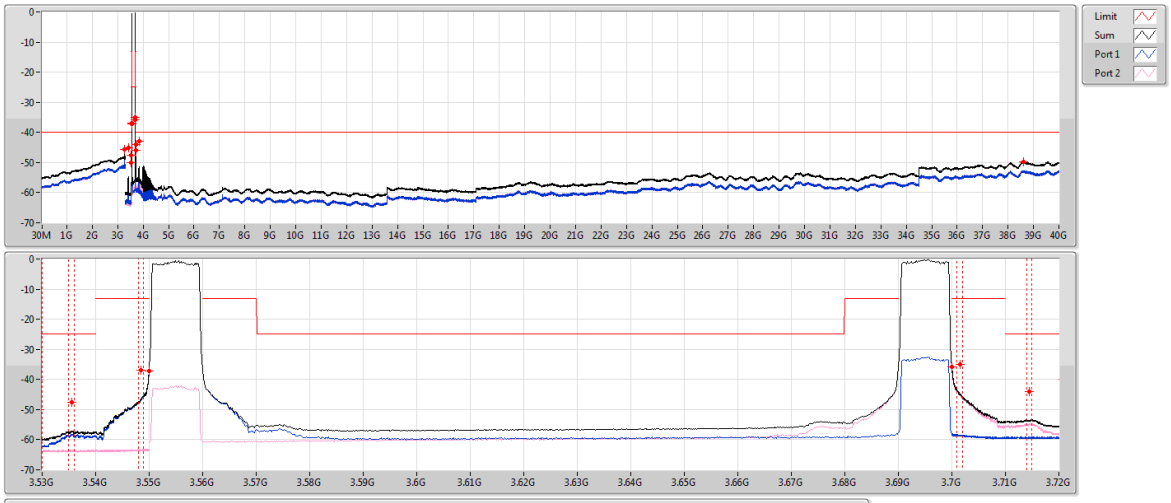
3.3.5 Test Result of Conducted Emissions & Band Edge (CA Mode)

Multi-carrier
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 48	-	-	-	-	-	-	-	-	-	-	-	-
Band 48_LTE_10MHz+20MHz_Nss1_2TX												
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	3.75G	4G	100k	300k	RMS	3.8245G	-42.47	-40.00	-2.47	MBW 1M	-

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

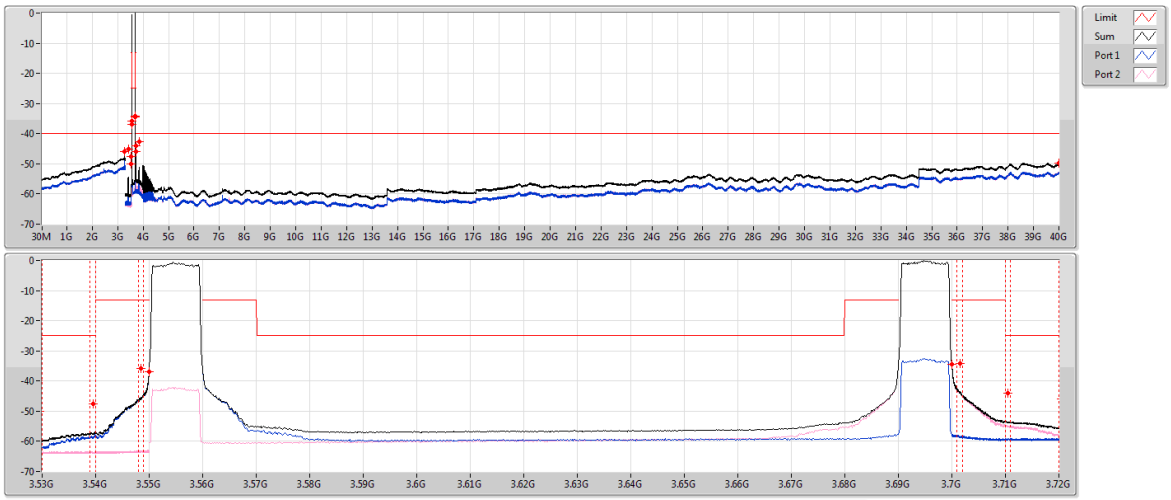
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.27507G	-45.64	-40.00	-5.64	-	-	-47.01	-51.30
3.3G	3.51G	100k	300k	RMS	3.4145G	-45.23	-40.00	-5.23	MBW 1M	-	-	-
3.51G	3.53G	100k	300k	RMS	3.5295G	-50.16	-40.00	-10.16	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5355G	-47.70	-25.00	-22.70	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-36.84	-13.00	-23.84	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-37.15	-13.00	-24.15	-	-	-37.16	-63.30
3.7G	3.701G	100k	300k	RMS	3.7G	-35.79	-13.00	-22.79	-	-	-58.34	-35.81
3.701G	3.71G	100k	300k	RMS	3.7015G	-35.10	-13.00	-22.10	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7145G	-43.91	-25.00	-18.91	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7215G	-45.96	-40.00	-5.96	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8355G	-42.82	-40.00	-2.82	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	38.623G	-49.86	-40.00	-9.86	-	-	-52.81	-52.94

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

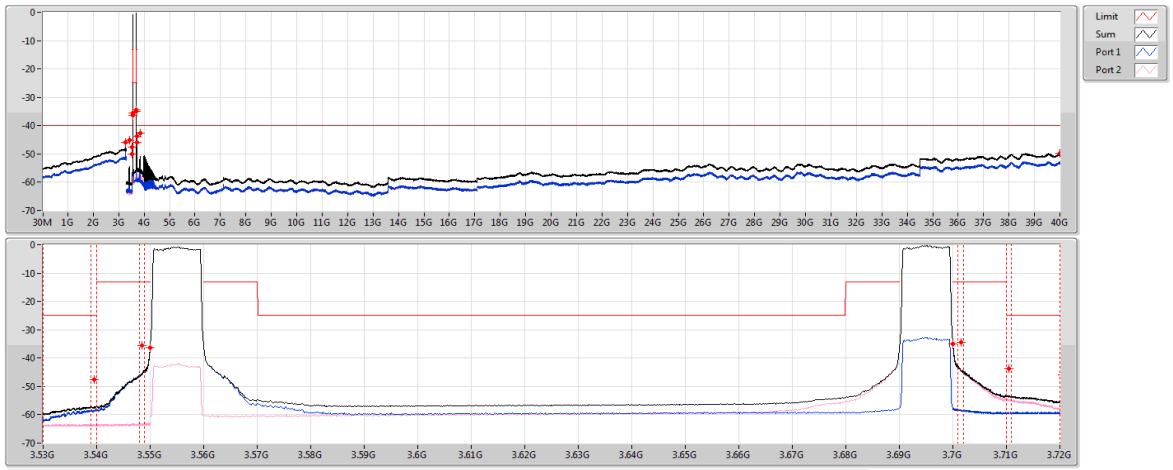
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.27588G	-45.96	-40.00	-5.96	-	-	-47.27	-51.79
3.3G	3.51G	100k	300k	RMS	3.4145G	-45.13	-40.00	-5.13	MBW 1M	-	-	-
3.51G	3.53G	100k	300k	RMS	3.5295G	-50.15	-40.00	-10.15	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5395G	-47.61	-25.00	-22.61	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-35.77	-13.00	-22.77	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-36.94	-13.00	-23.94	-	-	-36.95	-63.55
3.7G	3.701G	100k	300k	RMS	3.7G	-34.46	-13.00	-21.46	-	-	-57.82	-34.48
3.701G	3.71G	100k	300k	RMS	3.7015G	-34.05	-13.00	-21.05	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-43.93	-25.00	-18.93	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-45.88	-40.00	-5.88	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8355G	-42.78	-40.00	-2.78	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.99438G	-49.82	-40.00	-9.82	-	-	-52.82	-52.84

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

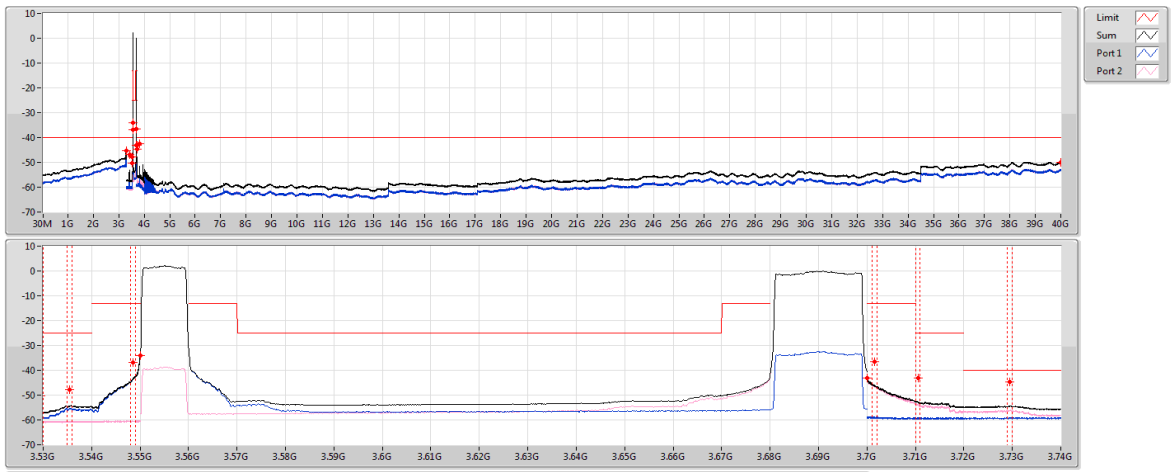
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.27466G	-45.98	-40.00	-5.98	-	-	-47.29	-51.83
3.3G	3.51G	100k	300k	RMS	3.4155G	-45.16	-40.00	-5.16	MBW 1M	-	-	-
3.51G	3.53G	100k	300k	RMS	3.5295G	-50.09	-40.00	-10.09	MBW 1M	-	-	-
3.53G	3.54G	100k	300k	RMS	3.5395G	-47.65	-25.00	-22.65	MBW 1M	-	-	-
3.54G	3.549G	100k	300k	RMS	3.5485G	-35.62	-13.00	-22.62	MBW 1M	-	-	-
3.549G	3.55G	100k	300k	RMS	3.55G	-36.47	-13.00	-23.47	-	-	-36.48	-63.07
3.7G	3.701G	100k	300k	RMS	3.7G	-34.95	-13.00	-21.95	-	-	-57.85	-34.97
3.701G	3.71G	100k	300k	RMS	3.7015G	-34.41	-13.00	-21.41	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-43.82	-25.00	-18.82	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-45.93	-40.00	-5.93	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8345G	-42.69	-40.00	-2.69	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.99775G	-49.81	-40.00	-9.81	-	-	-52.74	-52.91

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

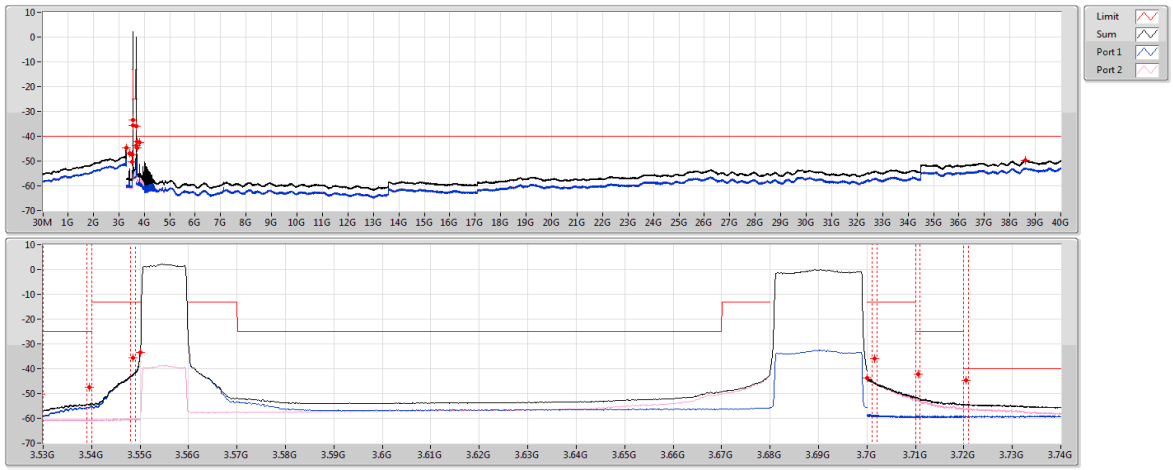
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.28569G	-45.16	-40.00	-5.16	-	-	-46.28	-51.58
3.3G	3.51G	200k	620k	RMS	3.4185G	-46.84	-40.00	-6.84	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5295G	-50.23	-40.00	-10.23	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5355G	-47.77	-25.00	-22.77	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-36.86	-13.00	-23.86	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-33.97	-13.00	-20.97	-	-	-33.98	-60.55
3.7G	3.701G	100k	300k	RMS	3.7G	-43.28	-13.00	-30.28	-	-	-58.96	-43.40
3.701G	3.71G	100k	300k	RMS	3.7015G	-36.45	-13.00	-23.45	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-43.15	-25.00	-18.15	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7295G	-44.83	-40.00	-4.83	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8245G	-42.63	-40.00	-2.63	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.99888G	-49.87	-40.00	-9.87	-	-	-52.74	-53.02

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

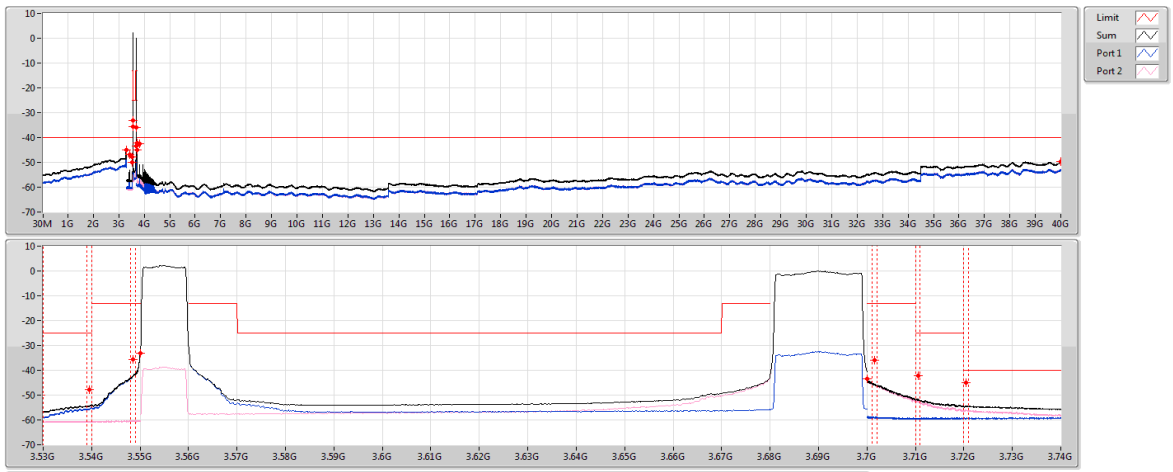
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.28488G	-44.62	-40.00	-4.62	-	-	-45.72	-51.14
3.3G	3.51G	200k	620k	RMS	3.4195G	-46.74	-40.00	-6.74	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5295G	-50.18	-40.00	-10.18	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5395G	-47.63	-25.00	-22.63	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-35.69	-13.00	-22.69	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-33.55	-13.00	-20.55	-	-	-33.56	-60.36
3.7G	3.701G	100k	300k	RMS	3.7G	-43.64	-13.00	-30.64	-	-	-58.88	-43.77
3.701G	3.71G	100k	300k	RMS	3.7015G	-35.96	-13.00	-22.96	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-42.22	-25.00	-17.22	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-44.84	-40.00	-4.84	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8245G	-42.55	-40.00	-2.55	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	38.61288G	-49.81	-40.00	-9.81	-	-	-52.86	-52.78

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

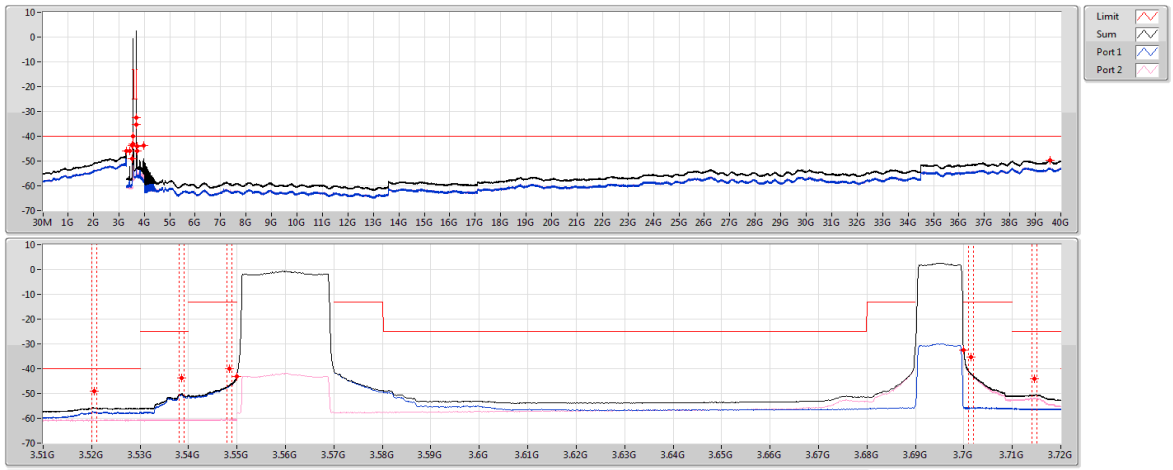
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.28529G	-45.15	-40.00	-5.15	-	-	-46.23	-51.71
3.3G	3.51G	200k	620k	RMS	3.4195G	-46.75	-40.00	-6.75	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5295G	-50.15	-40.00	-10.15	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5395G	-47.67	-25.00	-22.67	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-35.59	-13.00	-22.59	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-33.21	-13.00	-20.21	-	-	-33.22	-60.20
3.7G	3.701G	100k	300k	RMS	3.70001G	-43.37	-13.00	-30.37	-	-	-58.92	-43.49
3.701G	3.71G	100k	300k	RMS	3.7015G	-35.90	-13.00	-22.90	MBW 1M	-	-	-
3.71G	3.72G	100k	300k	RMS	3.7105G	-42.20	-25.00	-17.20	MBW 1M	-	-	-
3.72G	3.75G	100k	300k	RMS	3.7205G	-44.85	-40.00	-4.85	MBW 1M	-	-	-
3.75G	4G	100k	300k	RMS	3.8245G	-42.47	-40.00	-2.47	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.99663G	-49.81	-40.00	-9.81	-	-	-52.74	-52.91

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

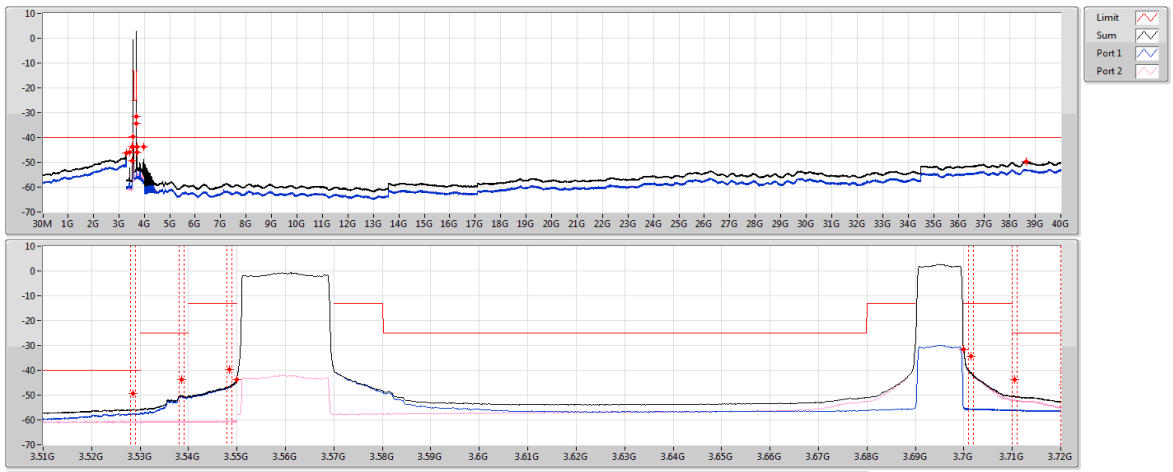
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.29019G	-46.00	-40.00	-6.00	-	-	-47.55	-51.23
3.3G	3.51G	200k	620k	RMS	3.4245G	-45.90	-40.00	-5.90	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5205G	-49.18	-40.00	-9.18	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.65	-25.00	-18.65	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.88	-13.00	-26.88	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-43.26	-13.00	-30.26	-	-	-43.34	-60.70
3.7G	3.701G	200k	620k	RMS	3.7G	-32.52	-13.00	-19.52	-	-	-55.69	-32.54
3.701G	3.71G	200k	620k	RMS	3.7015G	-35.34	-13.00	-22.34	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7145G	-43.95	-25.00	-18.95	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7225G	-46.00	-40.00	-6.00	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.9645G	-43.72	-40.00	-3.72	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.586G	-49.80	-40.00	-9.80	-	-	-52.77	-52.86

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

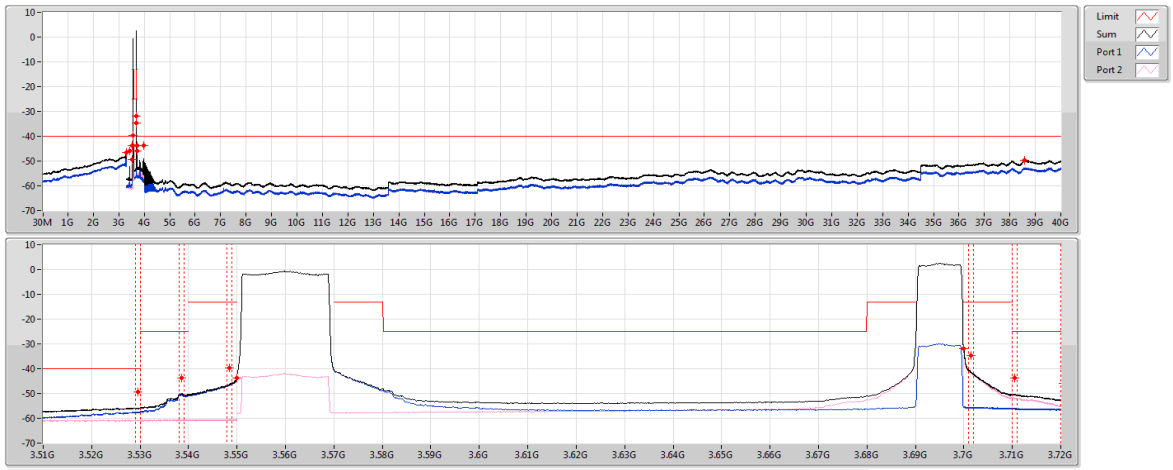
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.29019G	-46.19	-40.00	-6.19	-	-	-47.61	-51.73
3.3G	3.51G	200k	620k	RMS	3.4255G	-45.86	-40.00	-5.86	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5285G	-49.22	-40.00	-9.22	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.66	-25.00	-18.66	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.74	-13.00	-26.74	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-43.60	-13.00	-30.60	-	-	-43.69	-60.55
3.7G	3.701G	200k	620k	RMS	3.7G	-31.48	-13.00	-18.48	-	-	-55.09	-31.50
3.701G	3.71G	200k	620k	RMS	3.7015G	-34.38	-13.00	-21.38	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-43.90	-25.00	-18.90	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-45.93	-40.00	-5.93	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.9645G	-43.72	-40.00	-3.72	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	38.62975G	-49.80	-40.00	-9.80	-	-	-52.69	-52.93

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

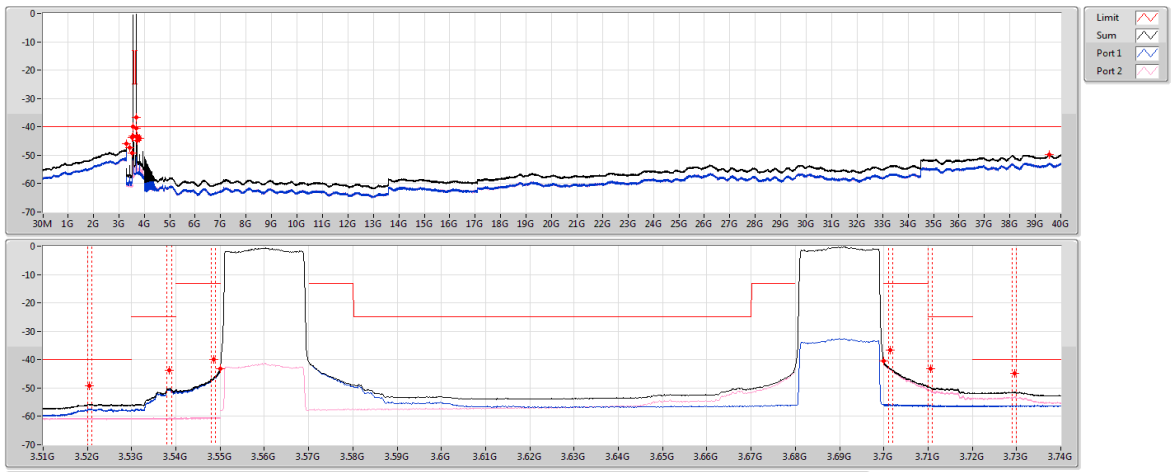
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.28978G	-46.52	-40.00	-6.52	-	-	-48.35	-51.15
3.3G	3.51G	200k	620k	RMS	3.4255G	-45.88	-40.00	-5.88	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5295G	-49.27	-40.00	-9.27	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.60	-25.00	-18.60	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.63	-13.00	-26.63	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.54999G	-43.82	-13.00	-30.82	-	-	-43.91	-60.67
3.7G	3.701G	200k	620k	RMS	3.7G	-31.83	-13.00	-18.83	-	-	-55.37	-31.85
3.701G	3.71G	200k	620k	RMS	3.7015G	-34.72	-13.00	-21.72	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-43.82	-25.00	-18.82	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-46.05	-40.00	-6.05	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.9655G	-43.80	-40.00	-3.80	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	38.57463G	-49.79	-40.00	-9.79	-	-	-52.89	-52.72

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX **CSE-TX-Sum**

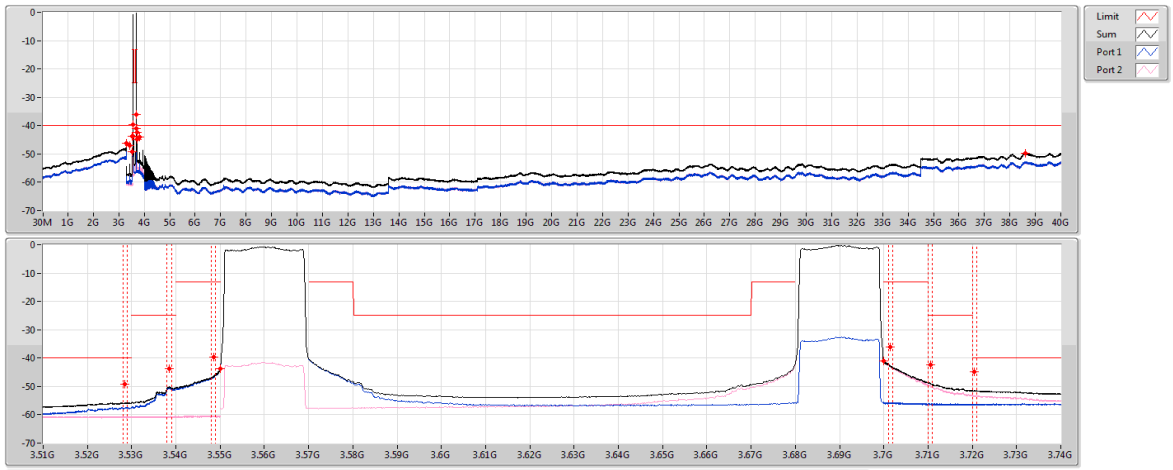
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.3G	-45.99	-40.00	-5.99	-	-	-47.36	-51.66
3.3G	3.51G	200k	620k	RMS	3.4305G	-47.18	-40.00	-7.18	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5205G	-49.17	-40.00	-9.17	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.66	-25.00	-18.66	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.86	-13.00	-26.86	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-43.25	-13.00	-30.25	-	-	-43.33	-60.81
3.7G	3.701G	200k	620k	RMS	3.70001G	-40.60	-13.00	-27.60	-	-	-56.14	-40.72
3.701G	3.71G	200k	620k	RMS	3.7015G	-36.56	-13.00	-23.56	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-43.16	-25.00	-18.16	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7295G	-44.89	-40.00	-4.89	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.8205G	-44.10	-40.00	-4.10	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	39.541G	-49.81	-40.00	-9.81	-	-	-52.88	-52.76

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX **CSE-TX-Sum**

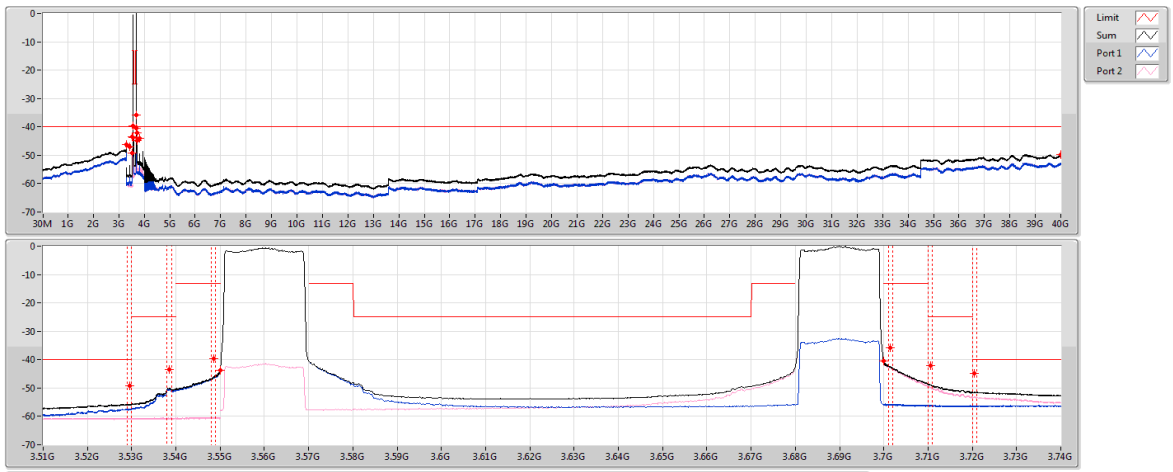
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.29918G	-46.28	-40.00	-6.28	-	-	-48.14	-50.86
3.3G	3.51G	200k	620k	RMS	3.4305G	-47.15	-40.00	-7.15	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5285G	-49.23	-40.00	-9.23	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.68	-25.00	-18.68	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.77	-13.00	-26.77	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.54999G	-43.69	-13.00	-30.69	-	-	-43.78	-60.56
3.7G	3.701G	200k	620k	RMS	3.70003G	-40.93	-13.00	-27.93	-	-	-55.86	-41.07
3.701G	3.71G	200k	620k	RMS	3.7015G	-36.10	-13.00	-23.10	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-42.27	-25.00	-17.27	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-44.87	-40.00	-4.87	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.8205G	-44.14	-40.00	-4.14	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	38.61063G	-49.68	-40.00	-9.68	-	-	-52.65	-52.74

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX **CSE-TX-Sum**

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0



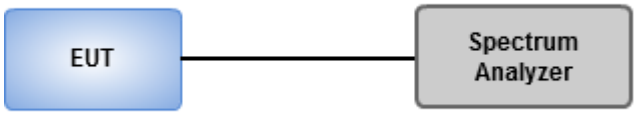
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	VBW(Hz)	Detector	Freq(Hz)	Level(dBm)	Limit(dBm)	Margin(dB)	Remark	Ref.Limit(dB)	P1(dBm)	P2(dBm)
30M	3.3G	1M	3M	RMS	3.29959G	-46.18	-40.00	-6.18	-	-	-47.73	-51.42
3.3G	3.51G	200k	620k	RMS	3.4305G	-47.11	-40.00	-7.11	MBW 1M	-	-	-
3.51G	3.53G	200k	620k	RMS	3.5295G	-49.17	-40.00	-9.17	MBW 1M	-	-	-
3.53G	3.54G	200k	620k	RMS	3.5385G	-43.55	-25.00	-18.55	MBW 1M	-	-	-
3.54G	3.549G	200k	620k	RMS	3.5485G	-39.57	-13.00	-26.57	MBW 1M	-	-	-
3.549G	3.55G	200k	620k	RMS	3.55G	-43.70	-13.00	-30.70	-	-	-43.79	-60.50
3.7G	3.701G	200k	620k	RMS	3.7G	-40.60	-13.00	-27.60	-	-	-55.74	-40.74
3.701G	3.71G	200k	620k	RMS	3.7015G	-35.94	-13.00	-22.94	MBW 1M	-	-	-
3.71G	3.72G	200k	620k	RMS	3.7105G	-42.21	-25.00	-17.21	MBW 1M	-	-	-
3.72G	3.75G	200k	620k	RMS	3.7205G	-44.83	-40.00	-4.83	MBW 1M	-	-	-
3.75G	4G	200k	620k	RMS	3.8205G	-44.02	-40.00	-4.02	MBW 1M	-	-	-
4G	40G	1M	3M	RMS	40G	-49.81	-40.00	-9.81	-	-	-52.75	-52.89

3.4 Emission 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. 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.
5. Measure the occupied bandwidth.

3.4.2 Test Setup



3.4.3 Test Result of Occupied Bandwidth (CDD Mode)

Single-carrier
Summary

Mode	Max-NdB (Hz)	Max-OBW (Hz)	ITU-Code	Min-NdB (Hz)	Min-OBW (Hz)
Band 48	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_2TX	9.75M	8.941M	8M94G7D	9.6M	8.92M
LTE_10MHz_Nss1,16QAM_2TX	9.8M	8.944M	8M94W7D	9.613M	8.933M
LTE_10MHz_Nss1,64QAM_2TX	9.975M	8.94M	8M94W7D	9.788M	8.915M
LTE_20MHz_Nss1,QPSK_2TX	19.3M	17.871M	17M9G7D	18.775M	17.853M
LTE_20MHz_Nss1,16QAM_2TX	19.025M	17.838M	17M8W7D	18.85M	17.814M
LTE_20MHz_Nss1,64QAM_2TX	19M	17.82M	17M8W7D	18.8M	17.812M

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;

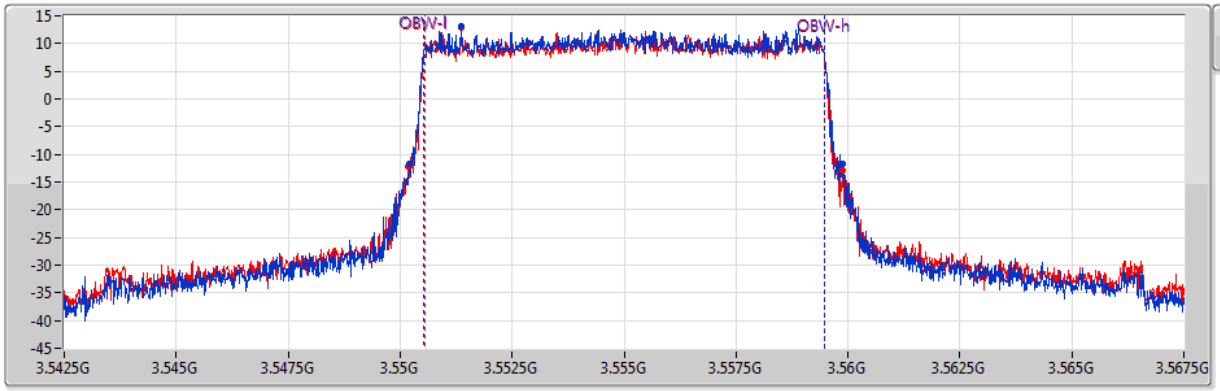
Result

Mode	Result	Limit (Hz)	Port 1-NdB (Hz)	Port 1-OBW (Hz)	Port 2-NdB (Hz)	Port 2-OBW (Hz)
Band 48_LTE_10MHz_Nss1_2TX	-	-	-	-	-	-
3555MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.688M	8.925M	9.7M	8.92M
3625MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.688M	8.929M	9.6M	8.926M
3695MHz_QPSK_RB 50,#RB 0	Pass	Inf	9.738M	8.941M	9.75M	8.93M
3555MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.613M	8.944M	9.788M	8.943M
3625MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.738M	8.933M	9.688M	8.937M
3695MHz_16QAM_RB 50,#RB 0	Pass	Inf	9.8M	8.941M	9.775M	8.938M
3555MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.8M	8.915M	9.963M	8.933M
3625MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.975M	8.933M	9.888M	8.933M
3695MHz_64QAM_RB 50,#RB 0	Pass	Inf	9.8M	8.94M	9.788M	8.937M
Band 48_LTE_20MHz_Nss1_2TX	-	-	-	-	-	-
3560MHz_QPSK_RB 100,#RB 0	Pass	Inf	19M	17.853M	19.15M	17.854M
3625MHz_QPSK_RB 100,#RB 0	Pass	Inf	18.775M	17.87M	18.85M	17.861M
3690MHz_QPSK_RB 100,#RB 0	Pass	Inf	19.3M	17.871M	18.95M	17.857M
3560MHz_16QAM_RB 100,#RB 0	Pass	Inf	18.925M	17.838M	18.9M	17.825M
3625MHz_16QAM_RB 100,#RB 0	Pass	Inf	19.025M	17.832M	18.875M	17.814M
3690MHz_16QAM_RB 100,#RB 0	Pass	Inf	18.9M	17.836M	18.85M	17.825M
3560MHz_64QAM_RB 100,#RB 0	Pass	Inf	18.9M	17.812M	18.875M	17.82M
3625MHz_64QAM_RB 100,#RB 0	Pass	Inf	19M	17.812M	18.8M	17.816M
3690MHz_64QAM_RB 100,#RB 0	Pass	Inf	18.9M	17.819M	18.925M	17.819M

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

Band 48_LTE_10MHz_Nss1,QPSK_2TX

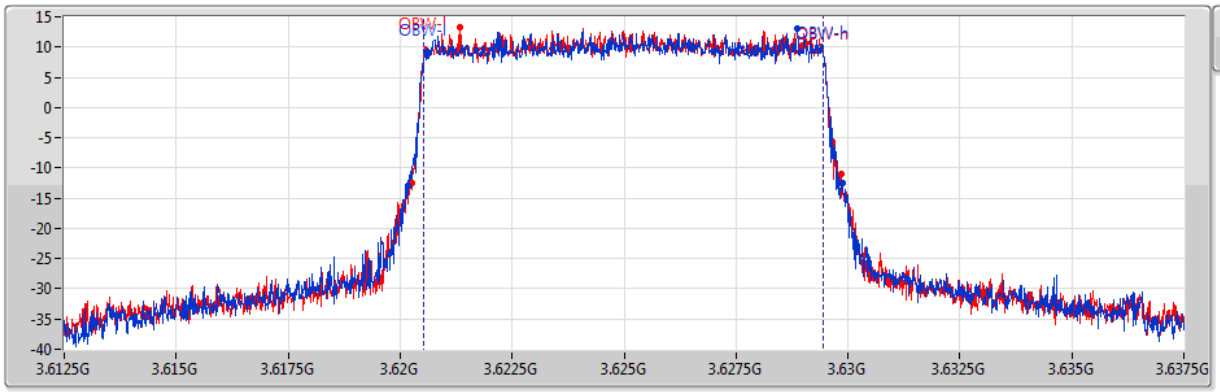
3555MHz_QPSK_RB 50,#RB 0



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)
9.688M	3.5502G	3.559888G	8.925M	3.550538G	3.559463G	1	3.555G	25M	100k	300k
9.7M	3.550188G	3.559888G	8.92M	3.550542G	3.559461G	2	3.555G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,QPSK_2TX

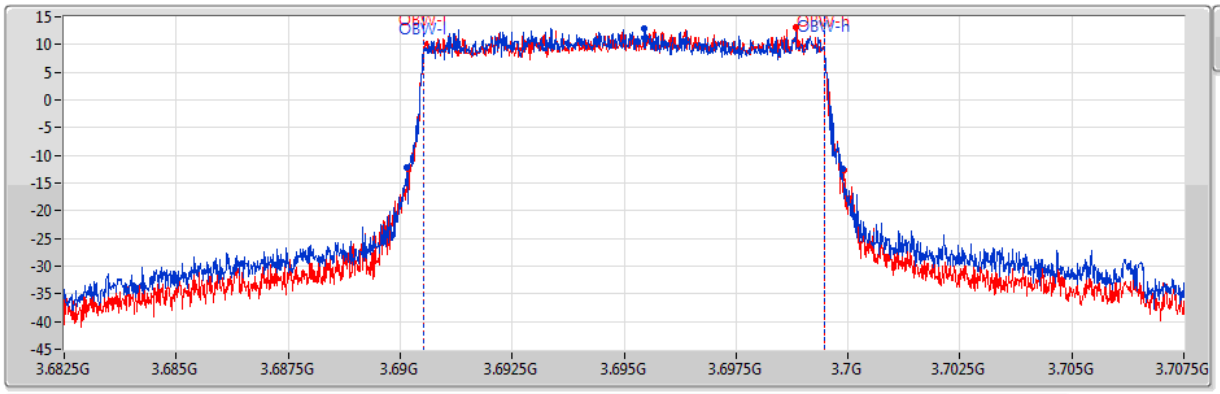
3625MHz_QPSK_RB 50,#RB 0



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)
9.688M	3.620188G	3.629875G	8.929M	3.62053G	3.629459G	1	3.625G	25M	100k	300k
9.6M	3.620263G	3.629863G	8.926M	3.620533G	3.629459G	2	3.625G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,QPSK_2TX

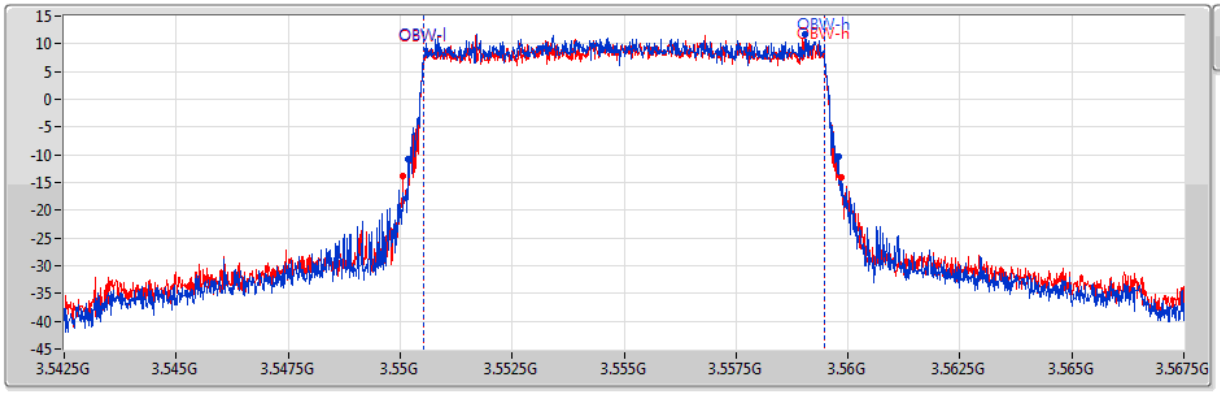
3695MHz_QPSK_RB 50,#RB 0



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)
9.738M	3.69015G	3.699888G	8.941M	3.690534G	3.699475G	1	3.695G	25M	100k	300k
9.75M	3.690163G	3.699913G	8.93M	3.690536G	3.699466G	2	3.695G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,16QAM_2TX

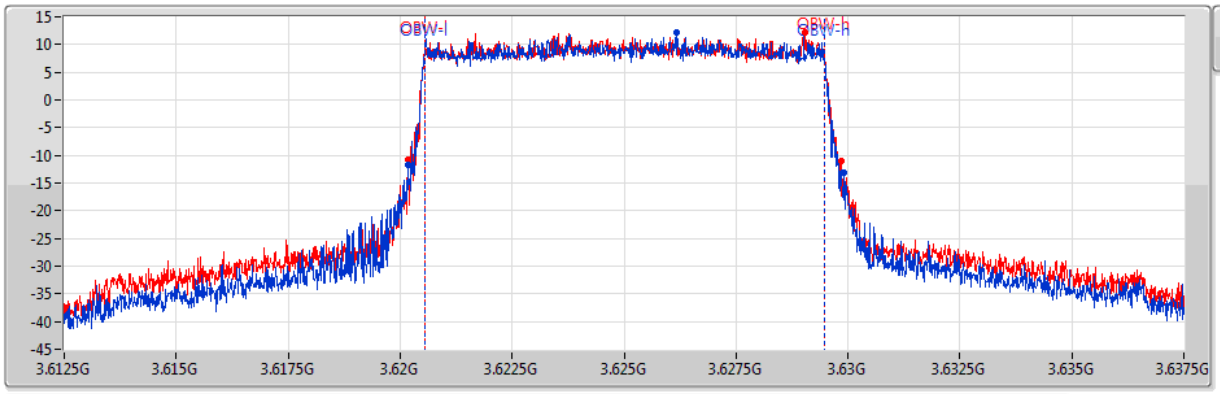
3555MHz_16QAM_RB 50,#RB 0



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)
9.613M	3.550175G	3.559788G	8.944M	3.550534G	3.559478G	1	3.555G	25M	100k	300k
9.788M	3.550063G	3.55985G	8.943M	3.550534G	3.559477G	2	3.555G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,16QAM_2TX

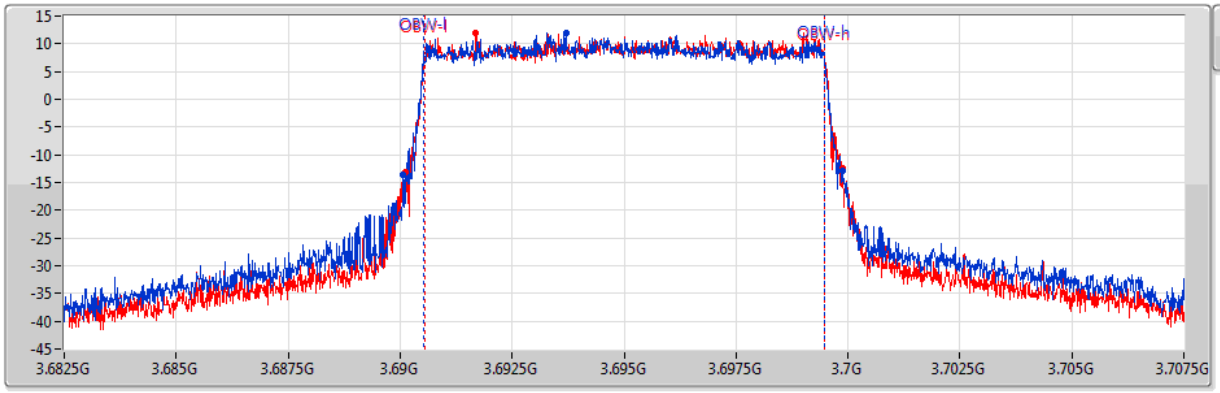
3625MHz_16QAM_RB 50,#RB 0



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)
9.738M	3.620175G	3.629913G	8.933M	3.620539G	3.629472G	1	3.625G	25M	100k	300k
9.688M	3.620163G	3.62985G	8.937M	3.620541G	3.629478G	2	3.625G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,16QAM_2TX

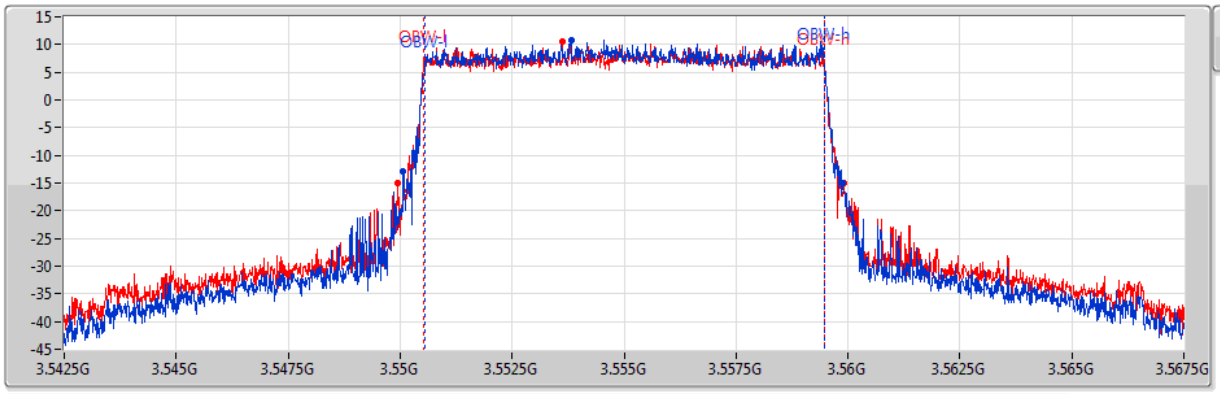
3695MHz_16QAM_RB 50,#RB 0



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)
9.8M	3.690075G	3.699875G	8.941M	3.690532G	3.699473G	1	3.695G	25M	100k	300k
9.775M	3.690113G	3.699888G	8.938M	3.690543G	3.699482G	2	3.695G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,64QAM_2TX

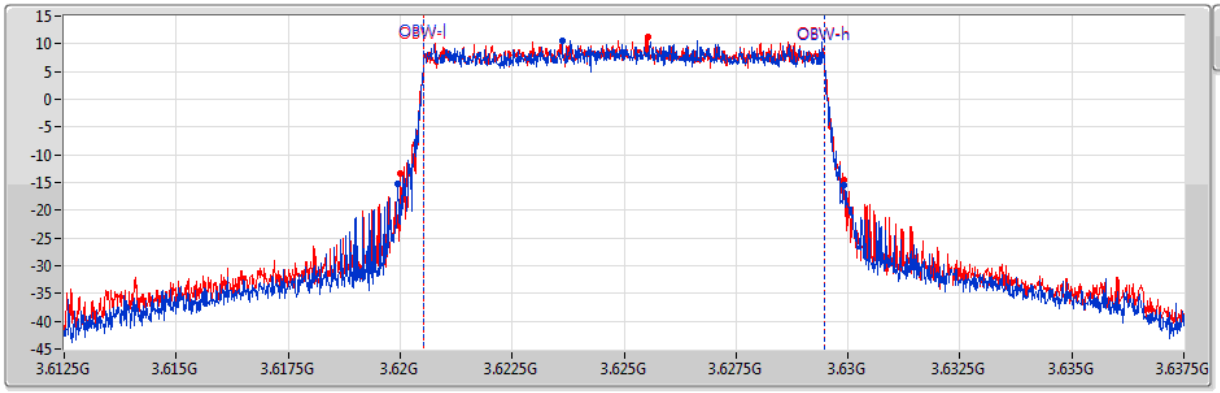
3555MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.8M	3.550075G	3.559875G	8.915M	3.550554G	3.559469G	1	3.555G	25M	100k	300k
9.963M	3.54995G	3.559913G	8.933M	3.550536G	3.559469G	2	3.555G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,64QAM_2TX

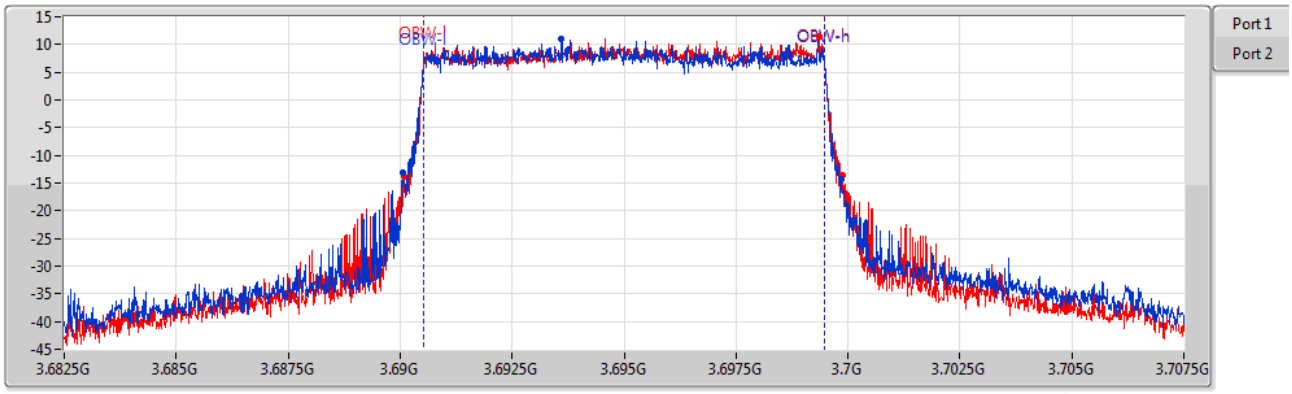
3625MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.975M	3.619938G	3.629913G	8.933M	3.620535G	3.629467G	1	3.625G	25M	100k	300k
9.888M	3.620013G	3.6299G	8.933M	3.620538G	3.629471G	2	3.625G	25M	100k	300k

Band 48_LTE_10MHz_Nss1,64QAM_2TX

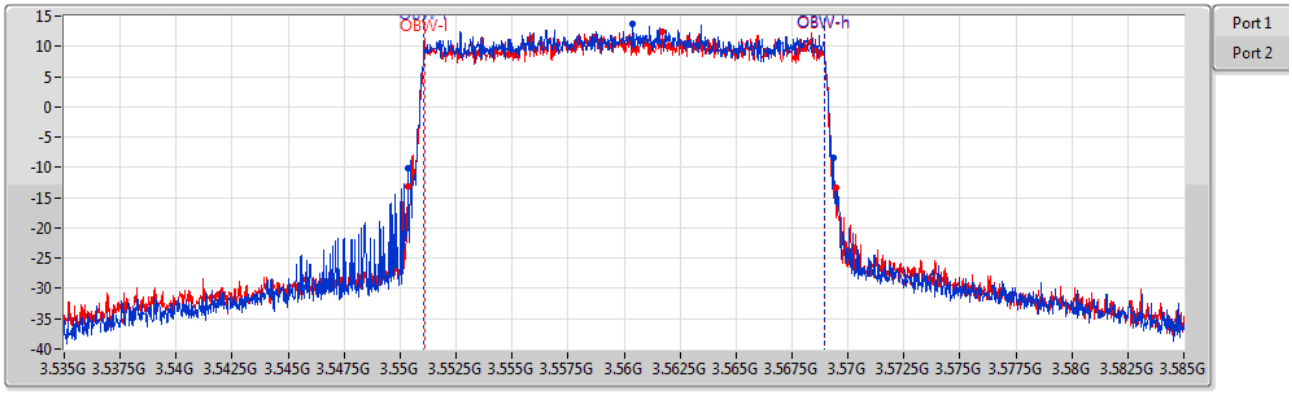
3695MHz_64QAM_RB 50,#RB 0



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Port	CF(Hz)	Span(Hz)	RBW(Hz)	VBW(Hz)
9.8M	3.69005G	3.69985G	8.94M	3.69053G	3.69947G	1	3.695G	25M	100k	300k
9.788M	3.690088G	3.699875G	8.937M	3.690535G	3.699472G	2	3.695G	25M	100k	300k

Band 48_LTE_20MHz_Nss1,QPSK_2TX

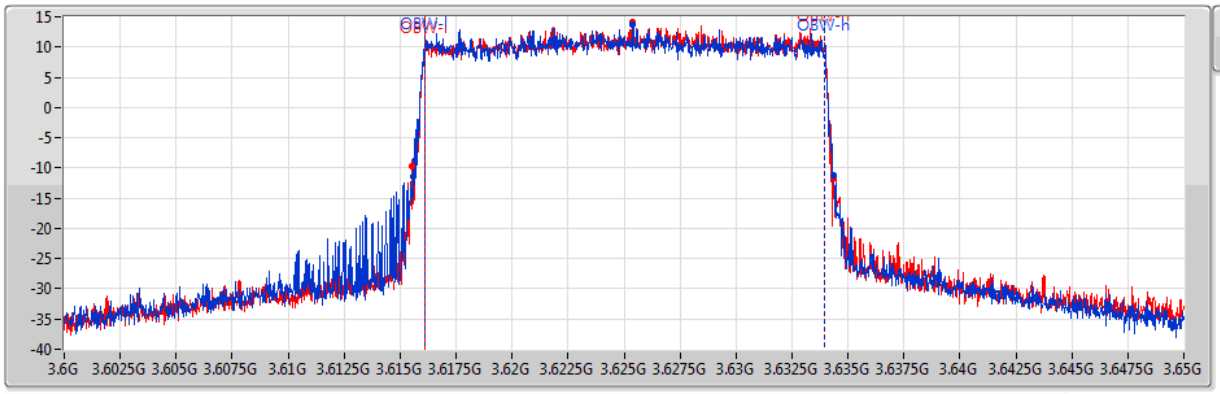
3560MHz_QPSK_RB 100,#RB 0



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)
19M	3.550375G	3.569375G	17.853M	3.551072G	3.568925G	1	3.56G	50M	200k	620k
19.15M	3.550325G	3.569475G	17.854M	3.551091G	3.568945G	2	3.56G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,QPSK_2TX

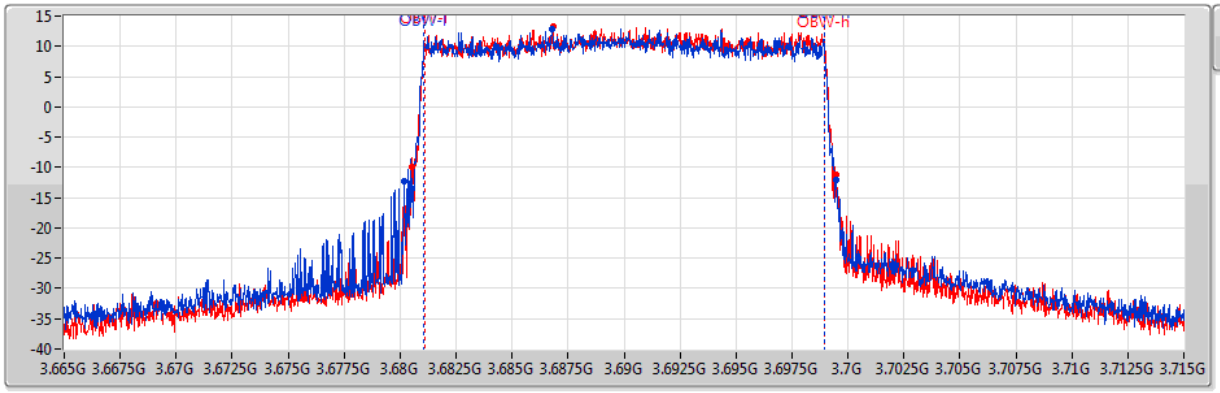
3625MHz_QPSK_RB 100,#RB 0



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)
18.775M	3.6156G	3.634375G	17.87M	3.616078G	3.633948G	1	3.625G	50M	200k	620k
18.85M	3.615525G	3.634375G	17.861M	3.616087G	3.633948G	2	3.625G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,QPSK_2TX

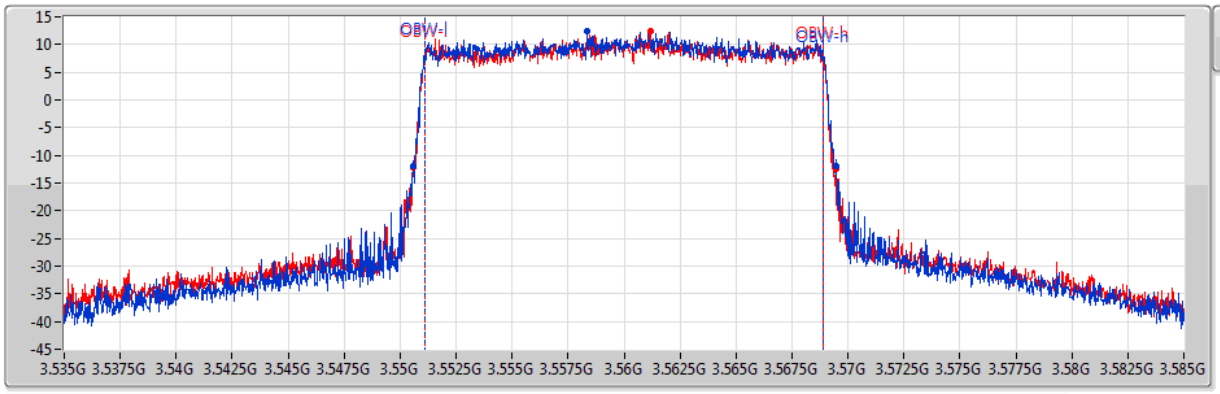
3690MHz_QPSK_RB 100,#RB 0



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)
19.3M	3.6802G	3.6995G	17.871M	3.68106G	3.69893G	1	3.69G	50M	200k	620k
18.95M	3.6805G	3.69945G	17.857M	3.681092G	3.69895G	2	3.69G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,16QAM_2TX

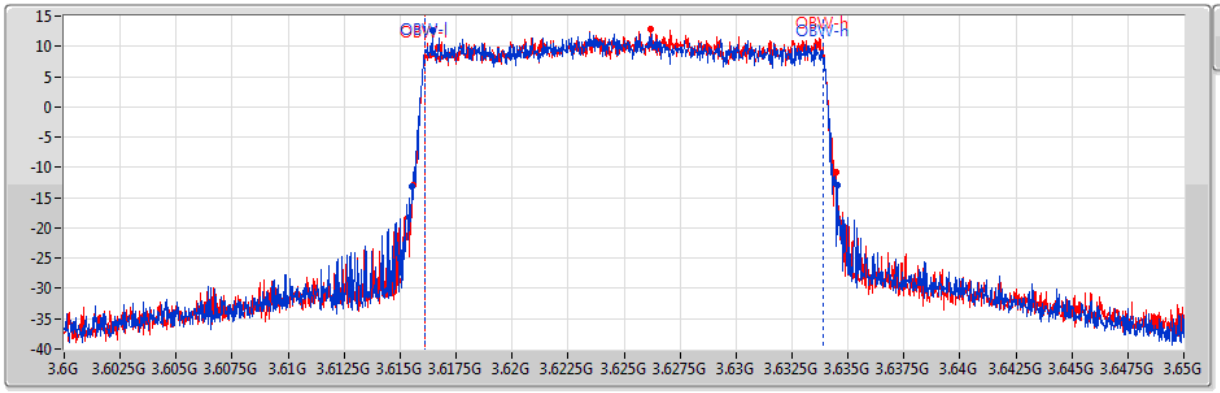
3560MHz_16QAM_RB 100,#RB 0



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)
18.925M	3.550575G	3.5695G	17.838M	3.551079G	3.568916G	1	3.56G	50M	200k	620k
18.9M	3.550575G	3.569475G	17.825M	3.551078G	3.568903G	2	3.56G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,16QAM_2TX

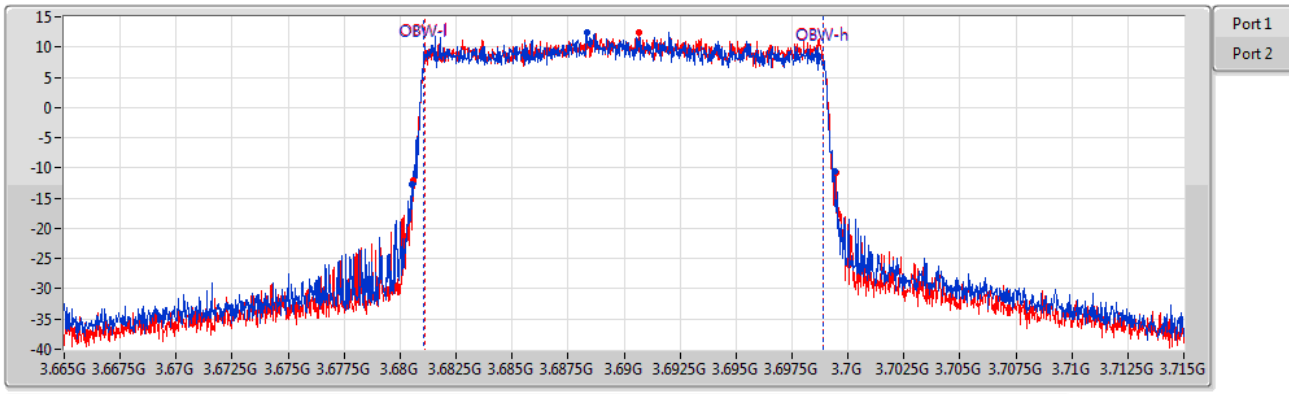
3625MHz_16QAM_RB 100,#RB 0



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)
19.025M	3.6155G	3.634525G	17.832M	3.616082G	3.633914G	1	3.625G	50M	200k	620k
18.875M	3.615575G	3.63445G	17.814M	3.616099G	3.633912G	2	3.625G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,16QAM_2TX

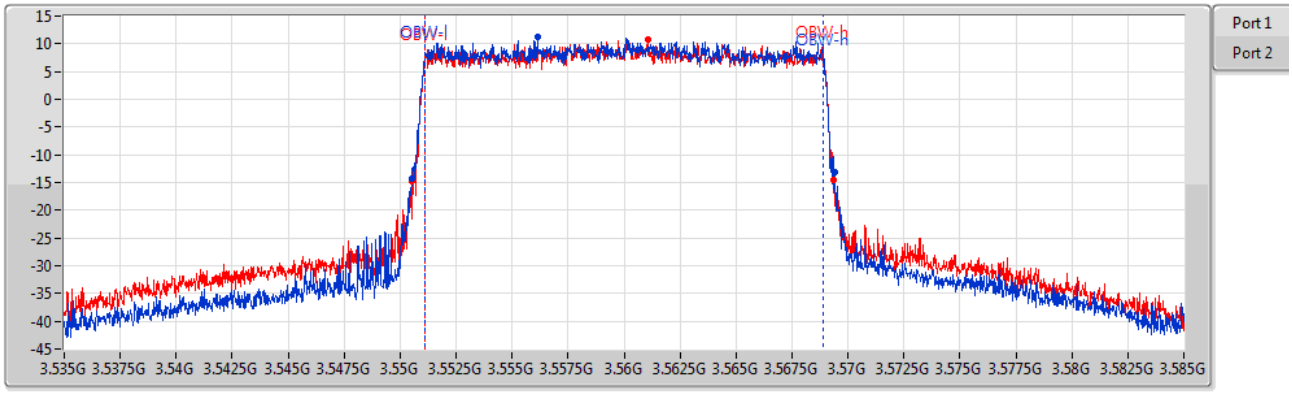
3690MHz_16QAM_RB 100,#RB 0



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)
18.9M	3.6805G	3.6994G	17.836M	3.681074G	3.698911G	1	3.69G	50M	200k	620k
18.85M	3.6806G	3.69945G	17.825M	3.681092G	3.698917G	2	3.69G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,64QAM_2TX

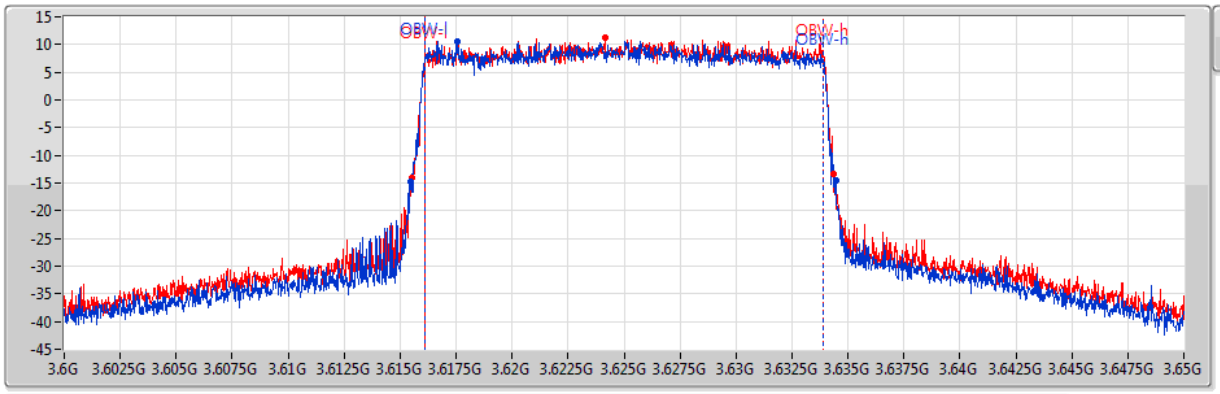
3560MHz_64QAM_RB 100,#RB 0



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)
18.9M	3.5505G	3.5694G	17.812M	3.551095G	3.568908G	1	3.56G	50M	200k	620k
18.875M	3.5505G	3.569375G	17.82M	3.55109G	3.56891G	2	3.56G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,64QAM_2TX

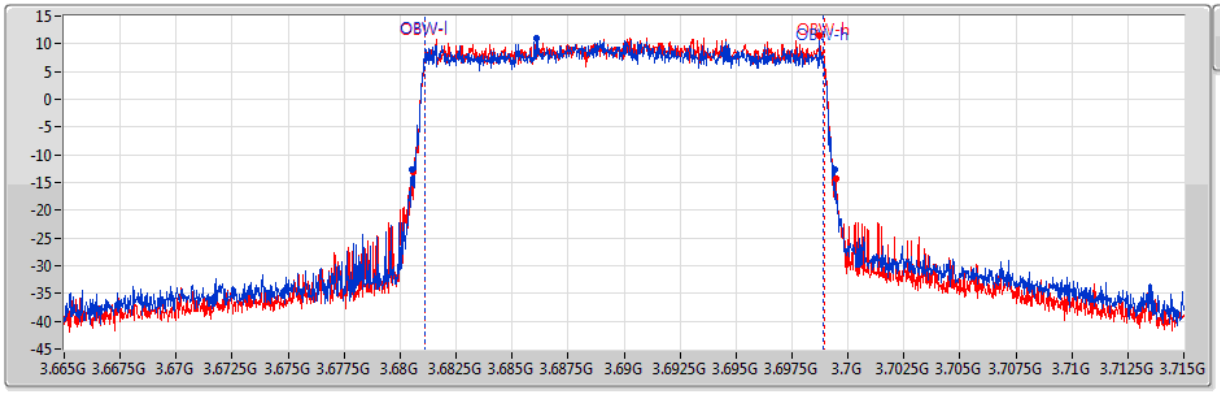
3625MHz_64QAM_RB 100,#RB 0



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)
19M	3.615475G	3.634475G	17.812M	3.616093G	3.633905G	1	3.625G	50M	200k	620k
18.8M	3.61555G	3.63435G	17.816M	3.616105G	3.633921G	2	3.625G	50M	200k	620k

Band 48_LTE_20MHz_Nss1,64QAM_2TX

3690MHz_64QAM_RB 100,#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)
18.9M	3.6805G	3.6994G	17.819M	3.681088G	3.698907G	1	3.69G	50M	200k	620k
18.925M	3.680575G	3.6995G	17.819M	3.681105G	3.698924G	2	3.69G	50M	200k	620k

3.4.4 Test Result of Occupied Bandwidth (CA Mode)

Multi-carrier
Summary

Mode	N-dB (Hz)	OBW (Hz)	ITU-Code
Band 48	-	-	-
LTE_10MHz+10MHz_Nss1,QPSK_2TX	19.526 M	17.860 M	17M9G7D
LTE_10MHz+10MHz_Nss1,16QAM_2TX	19.613 M	17.897 M	17M9W7D
LTE_10MHz+10MHz_Nss1,64QAM_2TX	19.688 M	17.847 M	17M8W7D
LTE_10MHz+20MHz_Nss1,QPSK_2TX	28.750 M	26.803 M	26M8G7D
LTE_10MHz+20MHz_Nss1,16QAM_2TX	28.863 M	26.790 M	26M8W7D
LTE_10MHz+20MHz_Nss1,64QAM_2TX	28.688 M	26.761 M	26M7W7D
LTE_20MHz+10MHz_Nss1,QPSK_2TX	29.000 M	26.804 M	26M8G7D
LTE_20MHz+10MHz_Nss1,16QAM_2TX	28.750 M	26.768 M	26M8W7D
LTE_20MHz+10MHz_Nss1,64QAM_2TX	28.650 M	26.746 M	26M7W7D
LTE_20MHz+20MHz_Nss1,QPSK_2TX	38.050 M	35.730 M	35M7G7D
LTE_20MHz+20MHz_Nss1,16QAM_2TX	38.000 M	35.688 M	35M7W7D
LTE_20MHz+20MHz_Nss1,64QAM_2TX	37.800 M	35.649 M	35M6W7D

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

Result

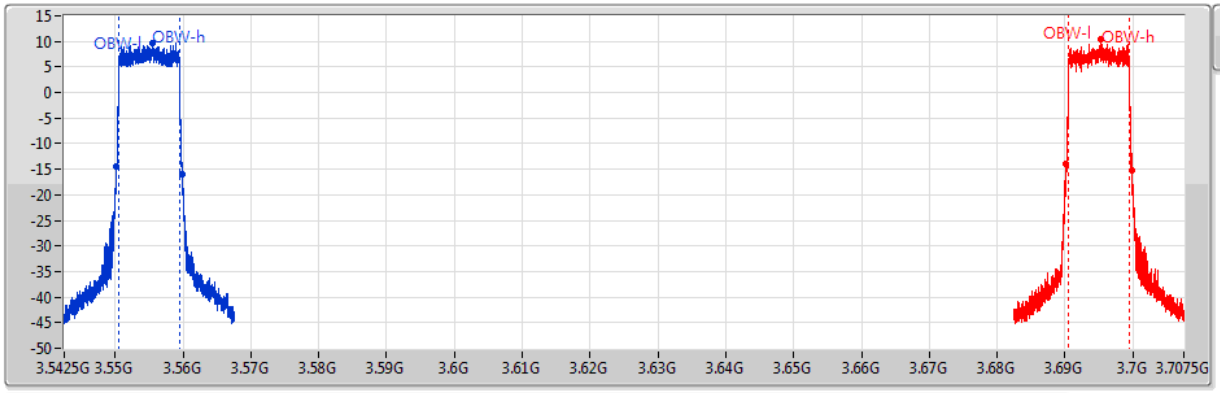
Mode	Result	Limit (Hz)	1Carrier Port 1-NdB (Hz)	1Carrier Port 1-OBW (Hz)	2Carrier Port 2-NdB (Hz)	2Carrier Port 2-OBW (Hz)
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	9.738M	8.928M	9.788M	8.932M
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	9.788M	8.942M	9.825M	8.955M
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	9.9M	8.929M	9.788M	8.918M
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-	-	-	-	-
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	9.725M	8.931M	19.025M	17.872M
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	9.763M	8.936M	19.1M	17.854M
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	9.863M	8.93M	18.825M	17.831M
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-	-	-	-	-
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	19.225M	17.87M	9.775M	8.934M
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	18.975M	17.811M	9.775M	8.957M
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	18.925M	17.823M	9.725M	8.923M
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-	-	-	-	-
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	19.05M	17.869M	19M	17.861M
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	18.95M	17.81M	19.05M	17.878M
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	18.95M	17.817M	18.85M	17.832M

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

Mode	Result	Limit (Hz)	Port 1 + Port 2 -NdB (Hz)	Port 1 + Port 2 -OBW (Hz)
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	19.526M	17.860 M
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	19.613 M	17.897 M
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	Inf	19.688 M	17.847 M
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-		
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	28.750 M	26.803 M
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	28.863 M	26.790 M
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	Inf	28.688 M	26.761 M
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-		
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	29.000 M	26.804 M
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	28.750 M	26.768 M
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	Inf	28.650 M	26.746 M
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-		
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	38.050 M	35.730 M
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	38.000 M	35.688 M
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	Inf	37.800 M	35.649 M

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX

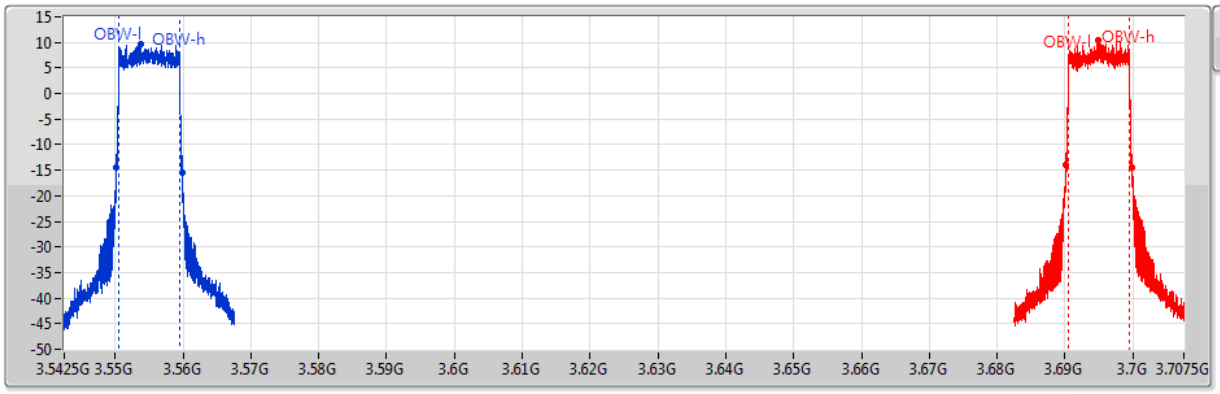
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



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)
9.738M	3.550188G	3.559925G	8.928M	3.550538G	3.559466G	1	3.555G	25M	100k	300k
9.788M	3.6901G	3.699888G	8.932M	3.690532G	3.699464G	2	3.695G	25M	100k	300k

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX

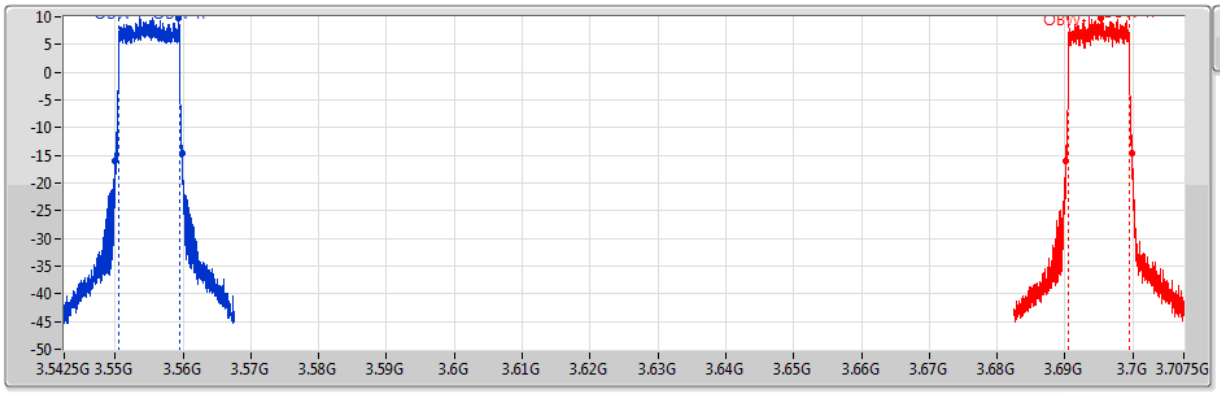
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



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)
9.788M	3.550113G	3.5599G	8.942M	3.550532G	3.559474G	1	3.555G	25M	100k	300k
9.825M	3.6901G	3.699925G	8.955M	3.690524G	3.699479G	2	3.695G	25M	100k	300k

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX

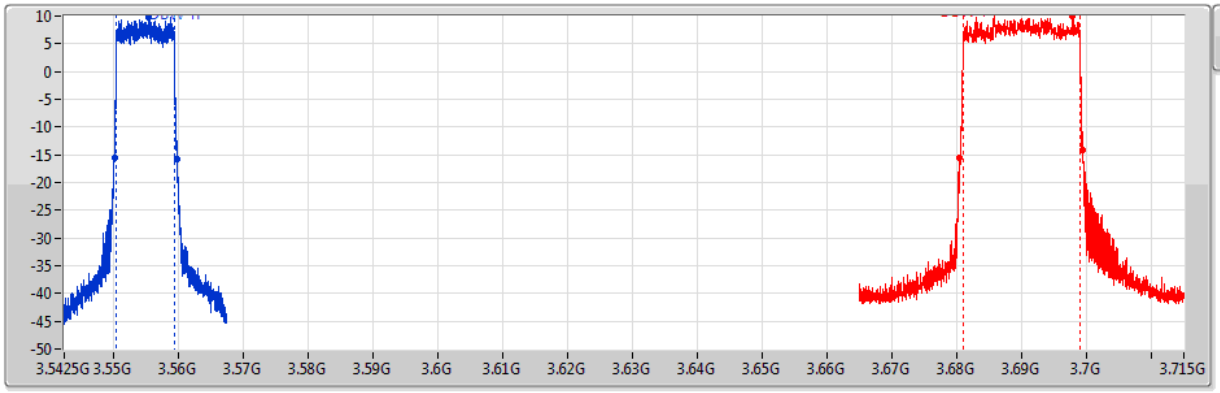
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



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)
9.9M	3.549975G	3.559875G	8.929M	3.550537G	3.559465G	1	3.555G	25M	100k	300k
9.788M	3.690088G	3.699875G	8.918M	3.690537G	3.699455G	2	3.695G	25M	100k	300k

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX

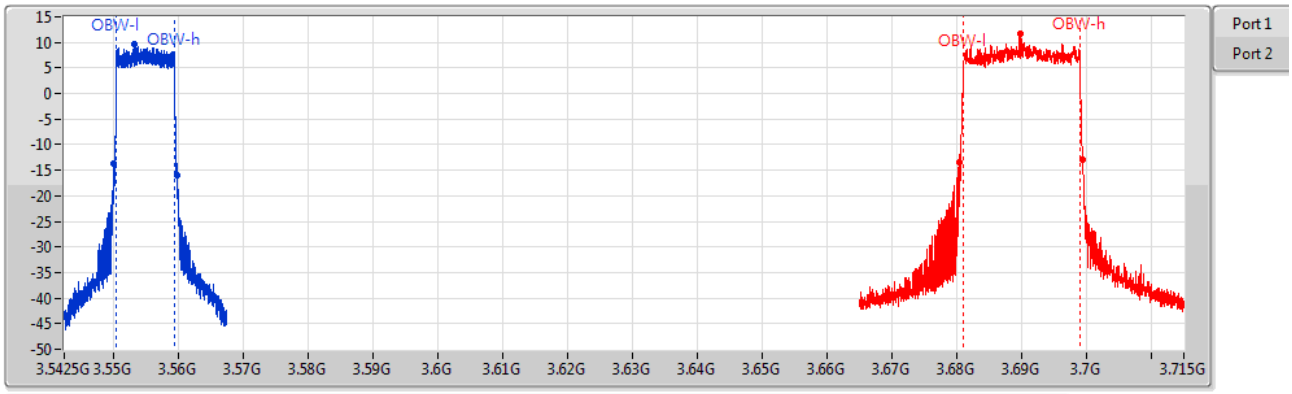
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



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)
9.725M	3.5502G	3.559925G	8.931M	3.550534G	3.559465G	1	3.555G	25M	100k	300k
19.025M	3.68045G	3.699475G	17.872M	3.681067G	3.698939G	2	3.69G	50M	200k	620k

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX

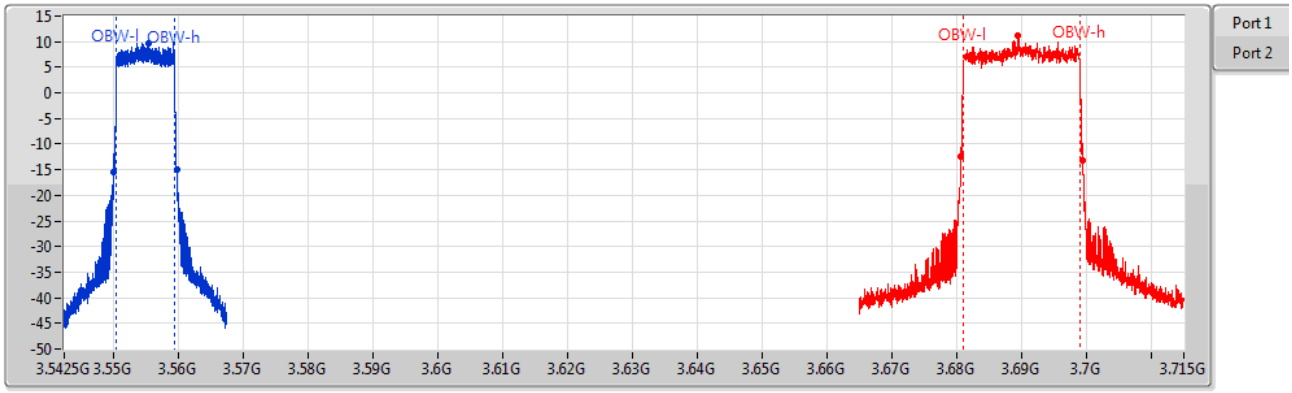
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



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)
9.763M	3.55015G	3.559913G	8.936M	3.550535G	3.559471G	1	3.555G	25M	100k	300k
19.1M	3.68035G	3.69945G	17.854M	3.681083G	3.698937G	2	3.69G	50M	200k	620k

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX

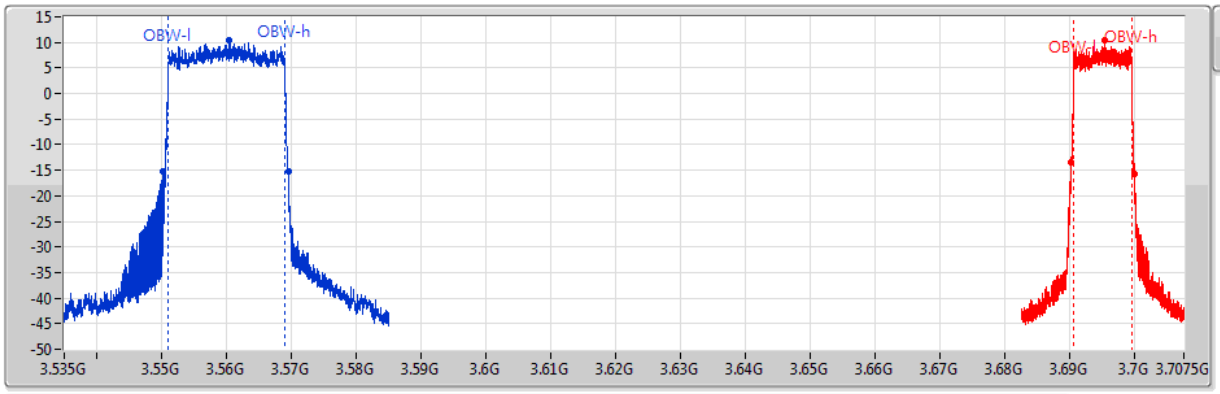
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



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)
9.863M	3.550013G	3.559875G	8.93M	3.550537G	3.559467G	1	3.555G	25M	100k	300k
18.825M	3.68065G	3.699475G	17.831M	3.681093G	3.698924G	2	3.69G	50M	200k	620k

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX

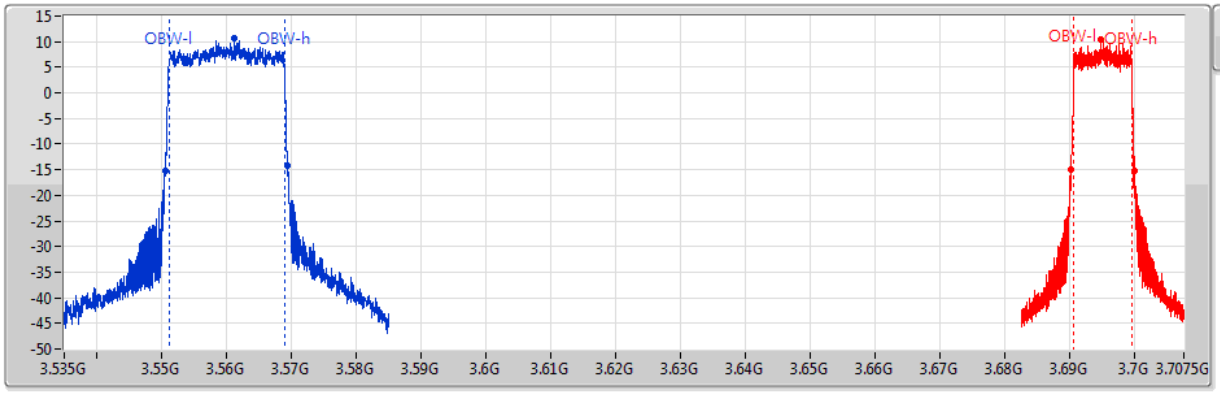
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



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)
19.225M	3.550275G	3.5695G	17.87M	3.551061G	3.568931G	1	3.56G	50M	200k	620k
9.775M	3.690113G	3.699888G	8.934M	3.690529G	3.699464G	2	3.695G	25M	100k	300k

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX

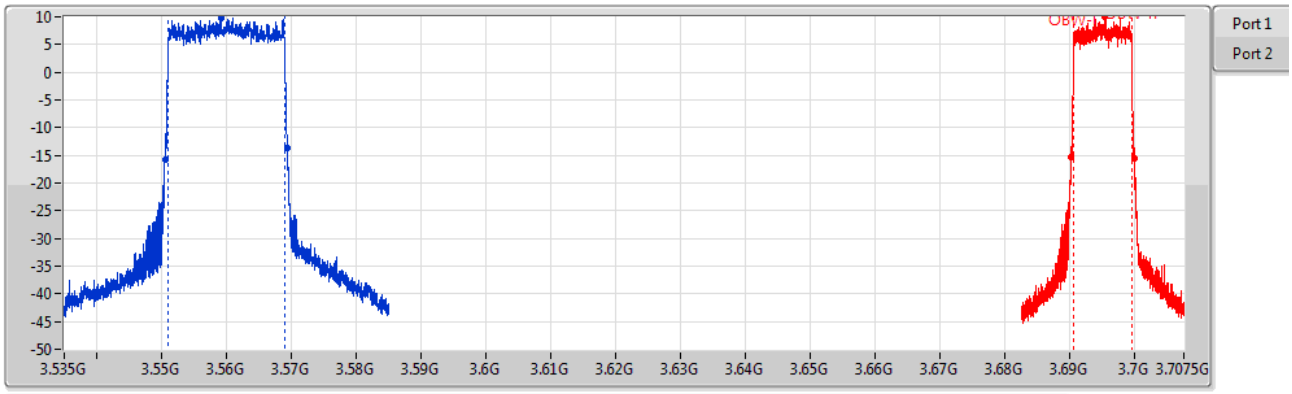
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



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)
18.975M	3.5505G	3.569475G	17.811M	3.551101G	3.568912G	1	3.56G	50M	200k	620k
9.775M	3.6901G	3.699875G	8.957M	3.690516G	3.699473G	2	3.695G	25M	100k	300k

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX

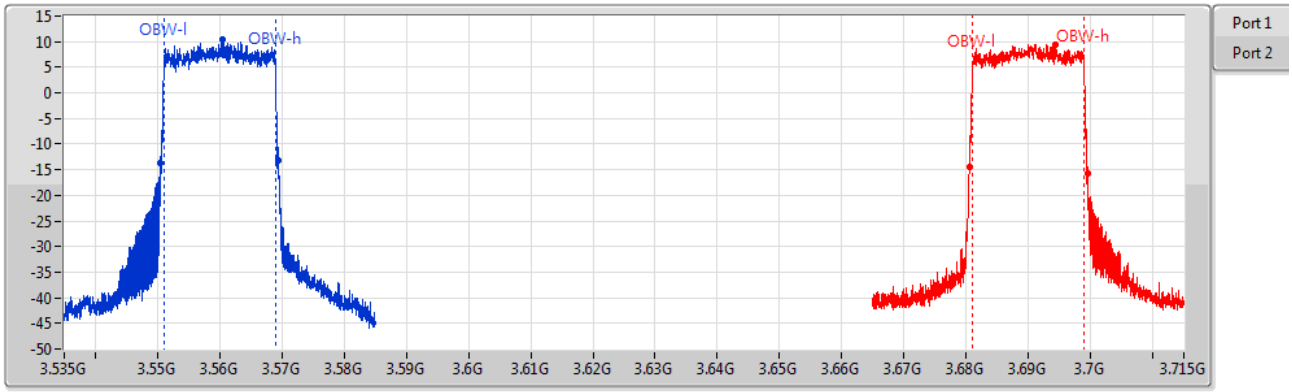
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



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)
18.925M	3.5505G	3.569425G	17.823M	3.55109G	3.568913G	1	3.56G	50M	200k	620k
9.725M	3.69015G	3.699875G	8.923M	3.690539G	3.699462G	2	3.695G	25M	100k	300k

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX

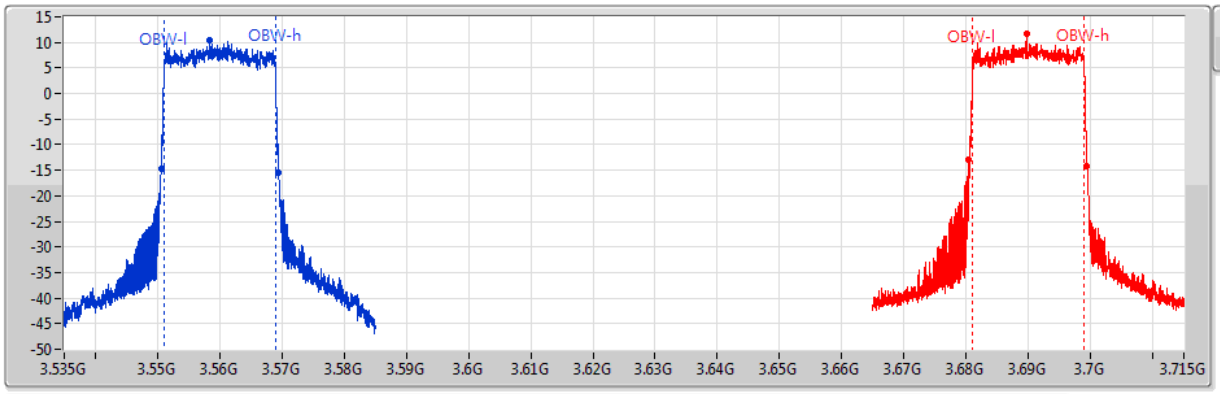
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



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)
19.05M	3.5504G	3.56945G	17.869M	3.551061G	3.56893G	1	3.56G	50M	200k	620k
19M	3.6805G	3.6995G	17.861M	3.681056G	3.698916G	2	3.69G	50M	200k	620k

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX

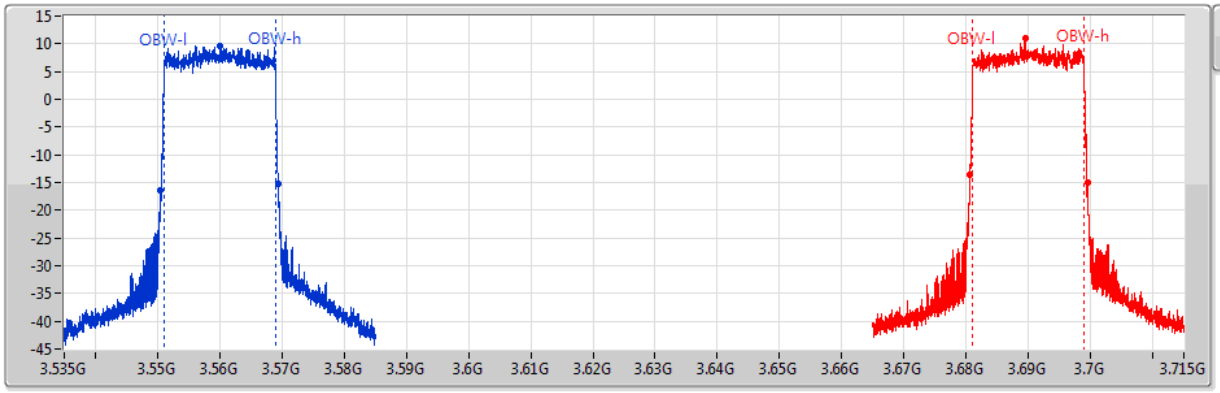
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



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)
18.95M	3.55055G	3.5695G	17.81M	3.551099G	3.568909G	1	3.56G	50M	200k	620k
19.05M	3.6804G	3.69945G	17.878M	3.681062G	3.69894G	2	3.69G	50M	200k	620k

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#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)
18.95M	3.5505G	3.56945G	17.817M	3.551088G	3.568905G	1	3.56G	50M	200k	620k
18.85M	3.680625G	3.699475G	17.832M	3.68109G	3.698922G	2	3.69G	50M	200k	620k

3.5 Peak to Average Ratio

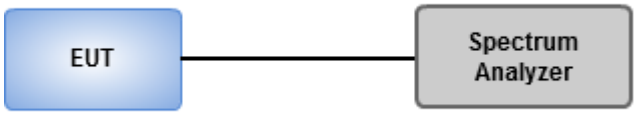
3.5.1 Limit of Peak to Average Ratio

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

3.5.2 Test Procedures

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

3.5.3 Test Setup



3.5.4 Test Result of Peak to Average Ratio (CDD Mode)

Single-carrier
Summary

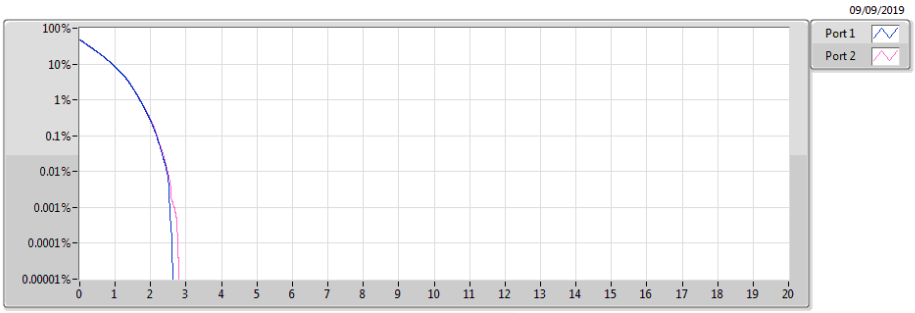
Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 48	-	-	-	-	-
LTE_10MHz_Nss1,QPSK_2TX	Pass	3625	13.00	5.47	1
LTE_10MHz_Nss1,16QAM_2TX	Pass	3555	13.00	6.26	2
LTE_10MHz_Nss1,64QAM_2TX	Pass	3625	13.00	6.44	1
LTE_20MHz_Nss1,QPSK_2TX	Pass	3625	13.00	5.44	1
LTE_20MHz_Nss1,16QAM_2TX	Pass	3625	13.00	6.21	1
LTE_20MHz_Nss1,64QAM_2TX	Pass	3690	13.00	6.45	1

Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 48_LTE_10MHz_Nss1_2TX	-	-	-	-	-
3555MHz_QPSK_RB 50,#RB 0	Pass	3555	13.00	5.41	1
3555MHz_QPSK_RB 50,#RB 0	Pass	3555	13.00	5.45	2
3625MHz_QPSK_RB 50,#RB 0	Pass	3625	13.00	5.47	1
3625MHz_QPSK_RB 50,#RB 0	Pass	3625	13.00	5.40	2
3695MHz_QPSK_RB 50,#RB 0	Pass	3695	13.00	5.35	1
3695MHz_QPSK_RB 50,#RB 0	Pass	3695	13.00	5.43	2
3555MHz_16QAM_RB 50,#RB 0	Pass	3555	13.00	6.18	1
3555MHz_16QAM_RB 50,#RB 0	Pass	3555	13.00	6.26	2
3625MHz_16QAM_RB 50,#RB 0	Pass	3625	13.00	6.25	1
3625MHz_16QAM_RB 50,#RB 0	Pass	3625	13.00	6.11	2
3695MHz_16QAM_RB 50,#RB 0	Pass	3695	13.00	6.13	1
3695MHz_16QAM_RB 50,#RB 0	Pass	3695	13.00	6.20	2
3555MHz_64QAM_RB 50,#RB 0	Pass	3555	13.00	6.37	1
3555MHz_64QAM_RB 50,#RB 0	Pass	3555	13.00	6.34	2
3625MHz_64QAM_RB 50,#RB 0	Pass	3625	13.00	6.44	1
3625MHz_64QAM_RB 50,#RB 0	Pass	3625	13.00	6.36	2
3695MHz_64QAM_RB 50,#RB 0	Pass	3695	13.00	6.38	1
3695MHz_64QAM_RB 50,#RB 0	Pass	3695	13.00	6.40	2
Band 48_LTE_20MHz_Nss1_2TX	-	-	-	-	-
3560MHz_QPSK_RB 100,#RB 0	Pass	3560	13.00	5.32	1
3560MHz_QPSK_RB 100,#RB 0	Pass	3560	13.00	5.38	2
3625MHz_QPSK_RB 100,#RB 0	Pass	3625	13.00	5.44	1
3625MHz_QPSK_RB 100,#RB 0	Pass	3625	13.00	5.41	2
3690MHz_QPSK_RB 100,#RB 0	Pass	3690	13.00	5.36	1
3690MHz_QPSK_RB 100,#RB 0	Pass	3690	13.00	5.34	2
3560MHz_16QAM_RB 100,#RB 0	Pass	3560	13.00	6.12	1
3560MHz_16QAM_RB 100,#RB 0	Pass	3560	13.00	6.18	2
3625MHz_16QAM_RB 100,#RB 0	Pass	3625	13.00	6.21	1
3625MHz_16QAM_RB 100,#RB 0	Pass	3625	13.00	6.18	2
3690MHz_16QAM_RB 100,#RB 0	Pass	3690	13.00	6.16	1
3690MHz_16QAM_RB 100,#RB 0	Pass	3690	13.00	6.15	2
3560MHz_64QAM_RB 100,#RB 0	Pass	3560	13.00	6.41	1
3560MHz_64QAM_RB 100,#RB 0	Pass	3560	13.00	6.29	2
3625MHz_64QAM_RB 100,#RB 0	Pass	3625	13.00	6.43	1
3625MHz_64QAM_RB 100,#RB 0	Pass	3625	13.00	6.31	2
3690MHz_64QAM_RB 100,#RB 0	Pass	3690	13.00	6.45	1
3690MHz_64QAM_RB 100,#RB 0	Pass	3690	13.00	6.42	2

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PAR**

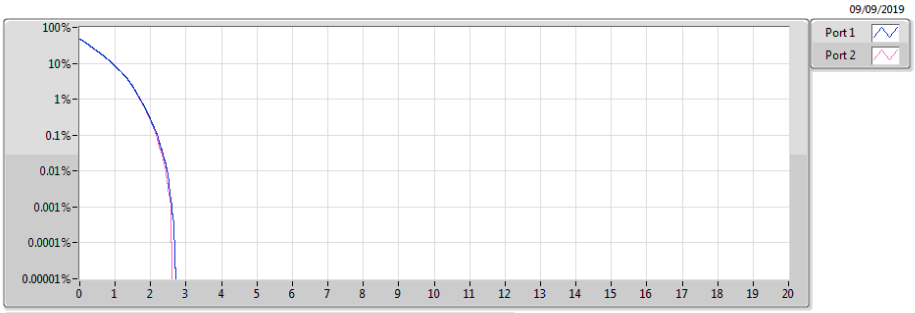
3555MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	5.41	-7.59	13.00	1
3555	10M	5.45	-7.55	13.00	2

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PAR**

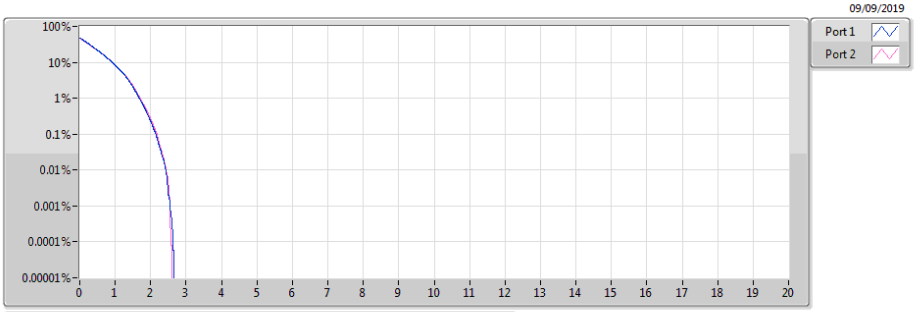
3625MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	10M	5.47	-7.53	13.00	1
3625	10M	5.40	-7.60	13.00	2

Band 48_LTE_10MHz_Nss1,QPSK_2TX **PAR**

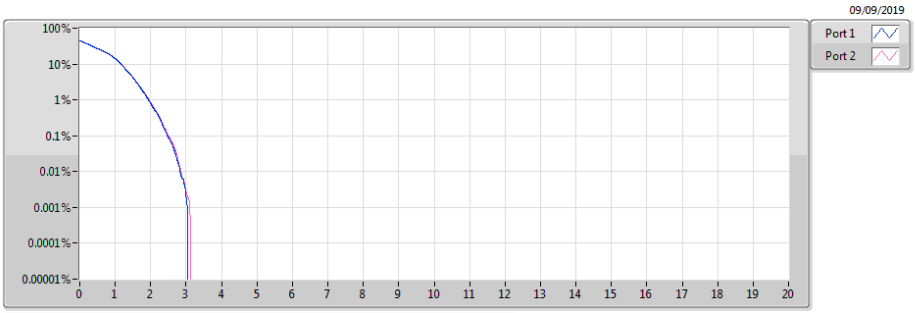
3695MHz_QPSK_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3695	10M	5.35	-7.65	13.00	1
3695	10M	5.43	-7.57	13.00	2

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PAR**

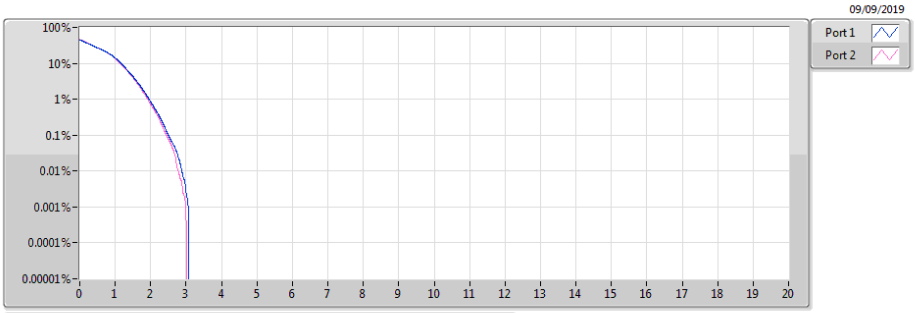
3555MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.18	-6.82	13.00	1
3555	10M	6.26	-6.74	13.00	2

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PAR**

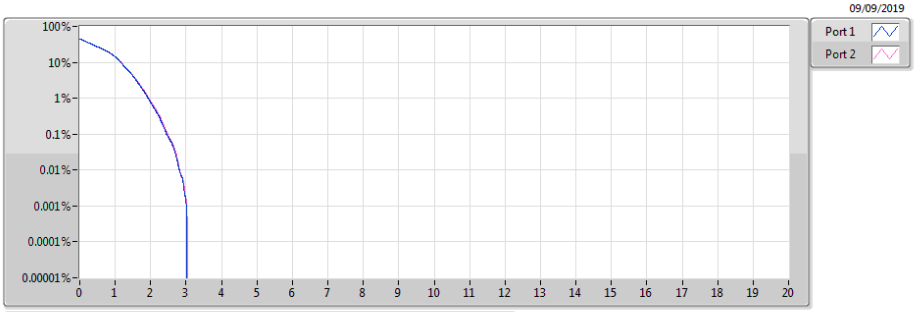
3625MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	10M	6.25	-6.75	13.00	1
3625	10M	6.11	-6.89	13.00	2

Band 48_LTE_10MHz_Nss1,16QAM_2TX **PAR**

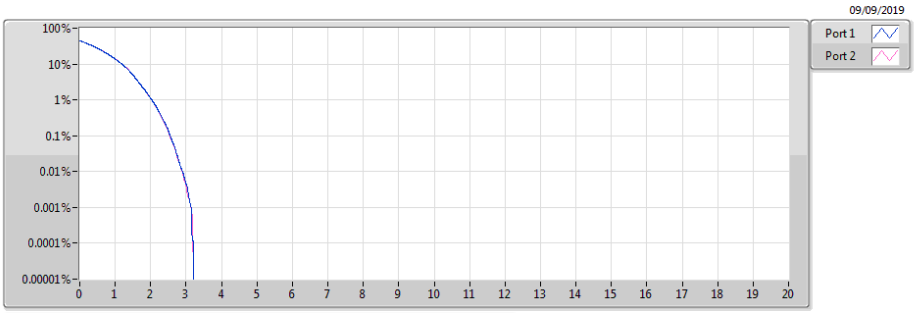
3695MHz_16QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3695	10M	6.13	-6.87	13.00	1
3695	10M	6.20	-6.80	13.00	2

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PAR**

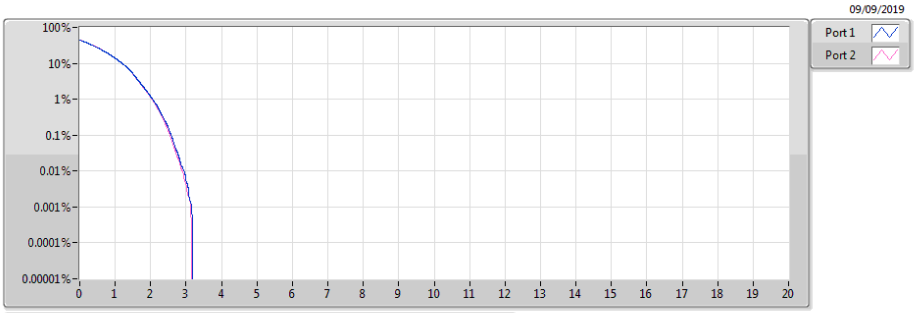
3555MHz_64QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.37	-6.63	13.00	1
3555	10M	6.34	-6.66	13.00	2

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PAR**

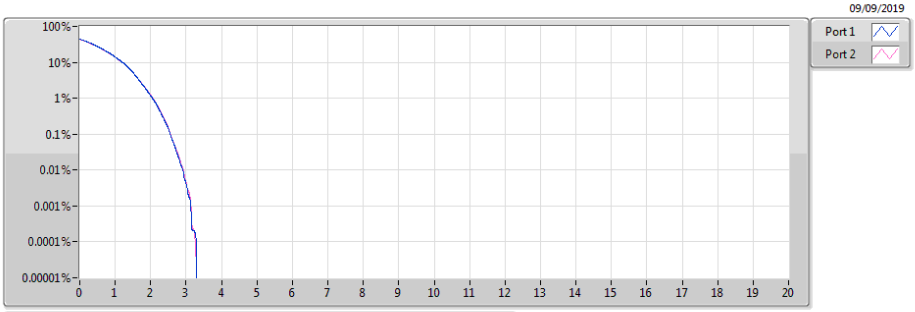
3625MHz_64QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	10M	6.44	-6.56	13.00	1
3625	10M	6.36	-6.64	13.00	2

Band 48_LTE_10MHz_Nss1,64QAM_2TX **PAR**

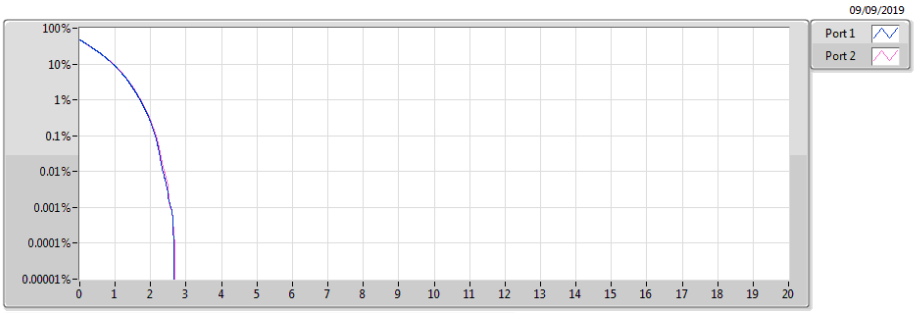
3695MHz_64QAM_RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3695	10M	6.38	-6.62	13.00	1
3695	10M	6.40	-6.60	13.00	2

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PAR**

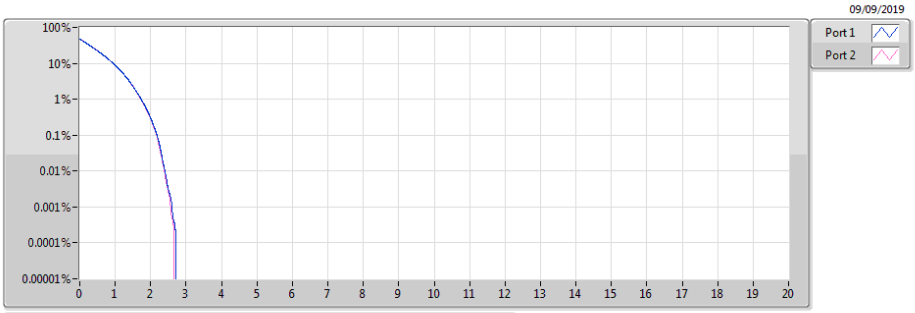
3560MHz_QPSK_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	5.32	-7.68	13.00	1
3560	20M	5.38	-7.62	13.00	2

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PAR**

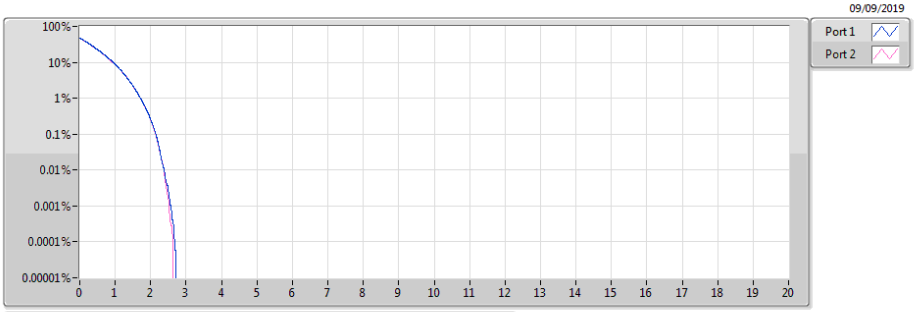
3625MHz_QPSK_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	20M	5.44	-7.56	13.00	1
3625	20M	5.41	-7.59	13.00	2

Band 48_LTE_20MHz_Nss1,QPSK_2TX **PAR**

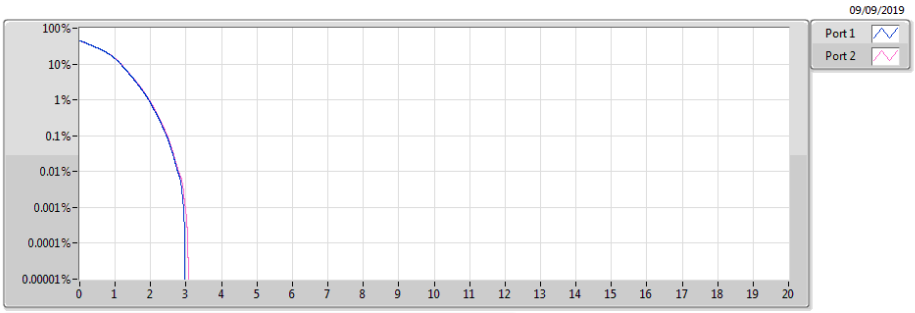
3690MHz_QPSK_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3690	20M	5.36	-7.64	13.00	1
3690	20M	5.34	-7.66	13.00	2

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PAR**

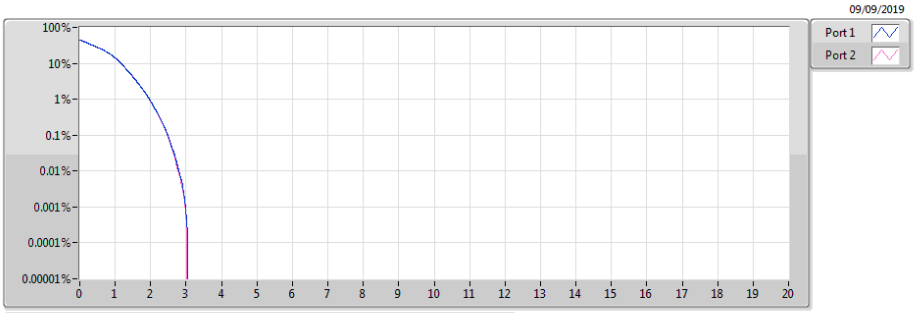
3560MHz_16QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.12	-6.88	13.00	1
3560	20M	6.18	-6.82	13.00	2

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PAR**

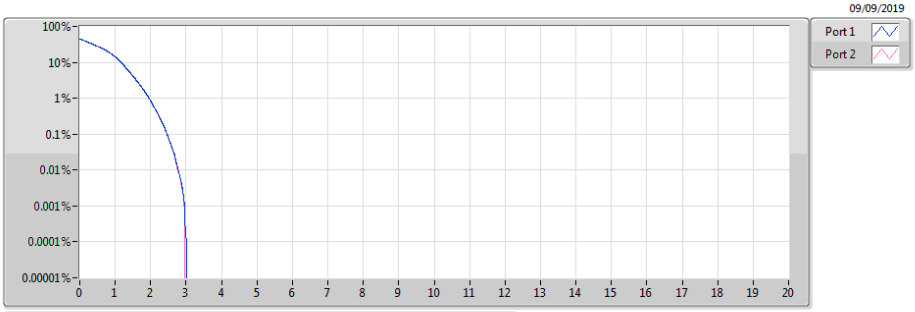
3625MHz_16QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	20M	6.21	-6.79	13.00	1
3625	20M	6.18	-6.82	13.00	2

Band 48_LTE_20MHz_Nss1,16QAM_2TX **PAR**

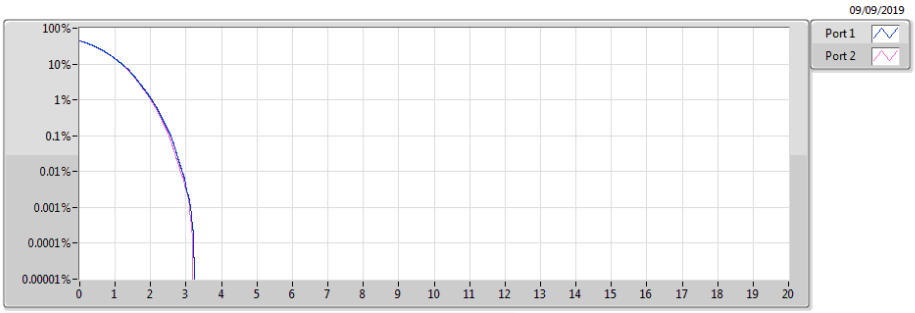
3690MHz_16QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3690	20M	6.16	-6.84	13.00	1
3690	20M	6.15	-6.85	13.00	2

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PAR**

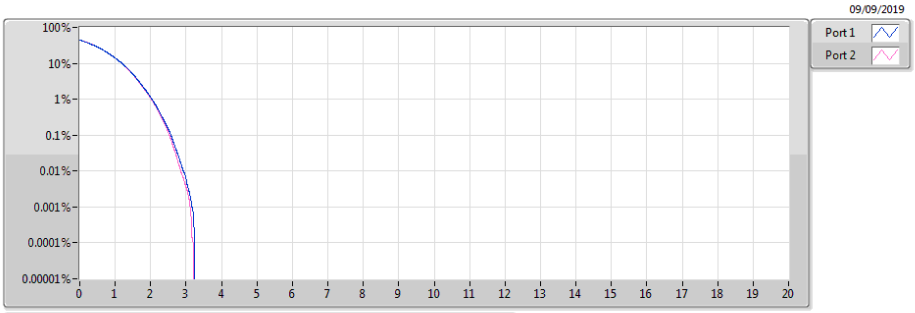
3560MHz_64QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.41	-6.59	13.00	1
3560	20M	6.29	-6.71	13.00	2

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PAR**

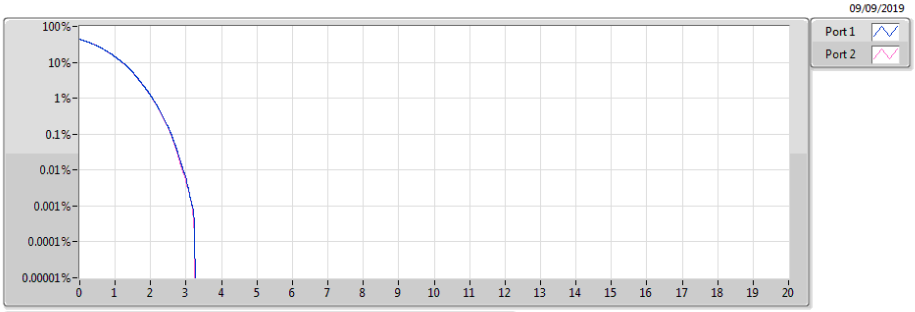
3625MHz_64QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3625	20M	6.43	-6.57	13.00	1
3625	20M	6.31	-6.69	13.00	2

Band 48_LTE_20MHz_Nss1,64QAM_2TX **PAR**

3690MHz_64QAM_RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3690	20M	6.45	-6.55	13.00	1
3690	20M	6.42	-6.58	13.00	2

3.5.5 Test Result of Peak to Average Ratio (CA Mode)

Multi-carrier
Summary

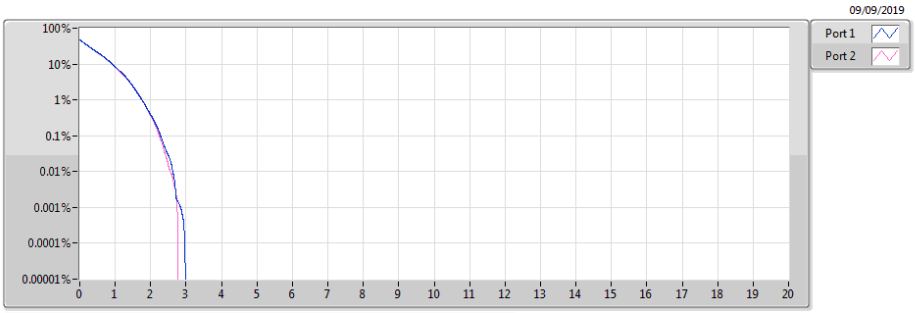
Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 48	-	-	-	-	-
LTE_10MHz+10MHz_Nss1,QPSK_2TX	Pass	3555	13.00	5.69	1
LTE_10MHz+10MHz_Nss1,16QAM_2TX	Pass	3695	13.00	6.56	2
LTE_10MHz+10MHz_Nss1,64QAM_2TX	Pass	3695	13.00	6.59	2
LTE_10MHz+20MHz_Nss1,QPSK_2TX	Pass	3690	13.00	5.72	2
LTE_10MHz+20MHz_Nss1,16QAM_2TX	Pass	3690	13.00	6.57	2
LTE_10MHz+20MHz_Nss1,64QAM_2TX	Pass	3690	13.00	6.64	2
LTE_20MHz+10MHz_Nss1,QPSK_2TX	Pass	3695	13.00	5.63	2
LTE_20MHz+10MHz_Nss1,16QAM_2TX	Pass	3695	13.00	6.59	2
LTE_20MHz+10MHz_Nss1,64QAM_2TX	Pass	3695	13.00	6.59	2
LTE_20MHz+20MHz_Nss1,QPSK_2TX	Pass	3690	13.00	5.76	2
LTE_20MHz+20MHz_Nss1,16QAM_2TX	Pass	3690	13.00	6.59	2
LTE_20MHz+20MHz_Nss1,64QAM_2TX	Pass	3690	13.00	6.64	2

Result

Mode	Result	Freq (MHz)	Limit (dB)	0.1%	Port
Band 48_LTE_10MHz+10MHz_Nss1_2TX	-	-	-	-	-
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	3555	13.00	5.69	1
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0	Pass	3695	13.00	5.61	2
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	3555	13.00	6.43	1
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	3695	13.00	6.56	2
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	3555	13.00	6.54	1
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0	Pass	3695	13.00	6.59	2
Band 48_LTE_10MHz+20MHz_Nss1_2TX	-	-	-	-	-
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	3555	13.00	5.70	1
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0	Pass	3690	13.00	5.72	2
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	3555	13.00	6.43	1
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	3690	13.00	6.57	2
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	3555	13.00	6.52	1
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0	Pass	3690	13.00	6.64	2
Band 48_LTE_20MHz+10MHz_Nss1_2TX	-	-	-	-	-
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	3560	13.00	5.61	1
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0	Pass	3695	13.00	5.63	2
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	3560	13.00	6.36	1
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	3695	13.00	6.59	2
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	3560	13.00	6.50	1
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0	Pass	3695	13.00	6.59	2
Band 48_LTE_20MHz+20MHz_Nss1_2TX	-	-	-	-	-
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	3560	13.00	5.60	1
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0	Pass	3690	13.00	5.76	2
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	3560	13.00	6.34	1
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	3690	13.00	6.59	2
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	3560	13.00	6.47	1
P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0	Pass	3690	13.00	6.64	2

Band 48_LTE_10MHz+10MHz_Nss1,QPSK_2TX **PAR**

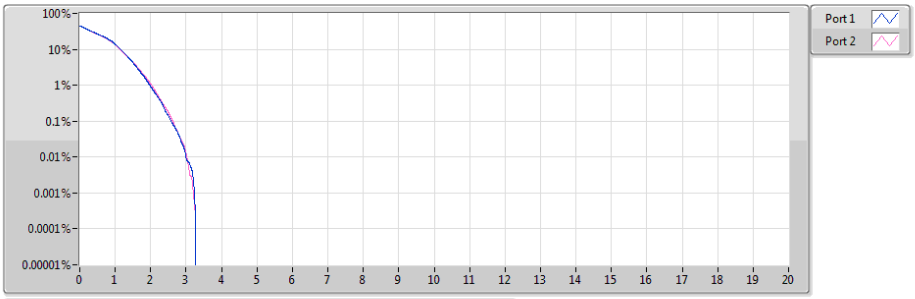
P#3555MHz,#3695MHz_QPSK_RB 50,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	5.69	-7.31	13.00	1
3695	10M	5.61	-7.39	13.00	2

Band 48_LTE_10MHz+10MHz_Nss1,16QAM_2TX **PAR**

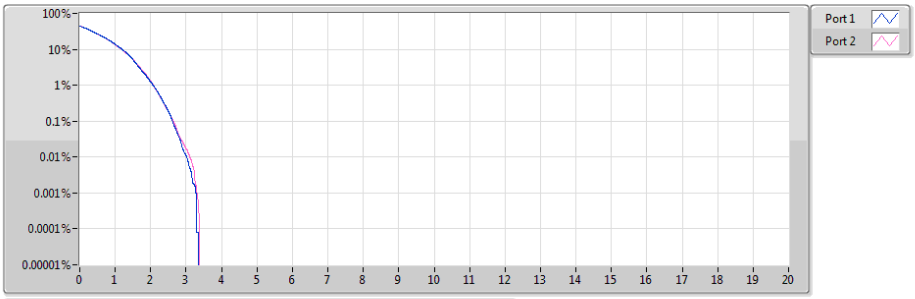
P#3555MHz,#3695MHz_16QAM_RB 50,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.43	-6.57	13.00	1
3695	10M	6.56	-6.44	13.00	2

Band 48_LTE_10MHz+10MHz_Nss1,64QAM_2TX **PAR**

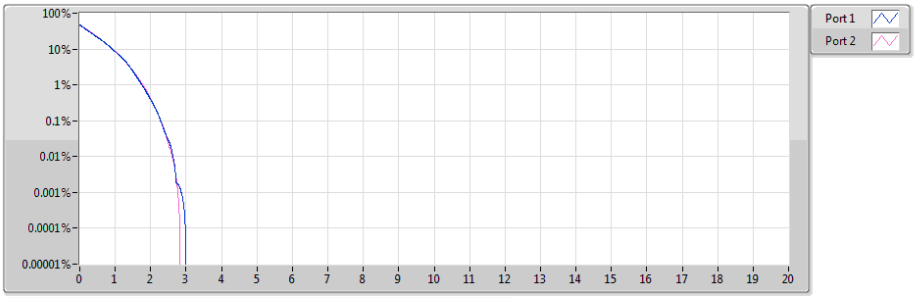
P#3555MHz,#3695MHz_64QAM_RB 50,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.54	-6.46	13.00	1
3695	10M	6.59	-6.41	13.00	2

Band 48_LTE_10MHz+20MHz_Nss1,QPSK_2TX **PAR**

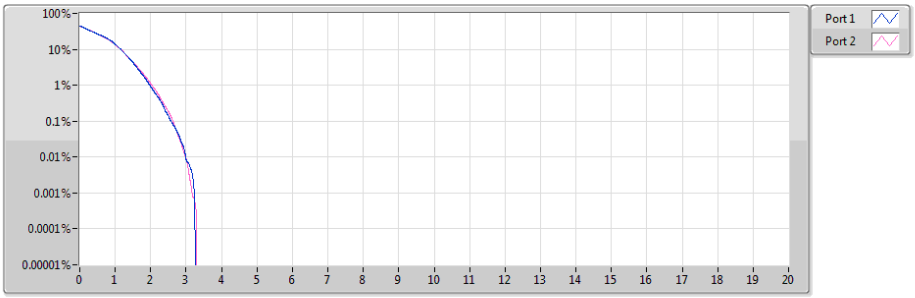
P#3555MHz,#3690MHz_QPSK_RB 50,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	5.70	-7.30	13.00	1
3690	20M	5.72	-7.28	13.00	2

Band 48_LTE_10MHz+20MHz_Nss1,16QAM_2TX **PAR**

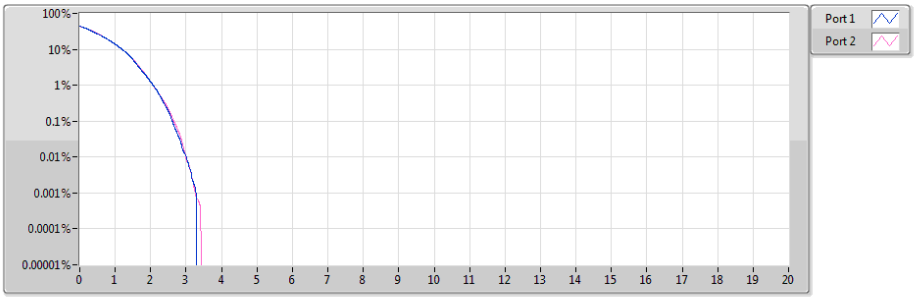
P#3555MHz,#3690MHz_16QAM_RB 50,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.43	-6.57	13.00	1
3690	20M	6.57	-6.43	13.00	2

Band 48_LTE_10MHz+20MHz_Nss1,64QAM_2TX **PAR**

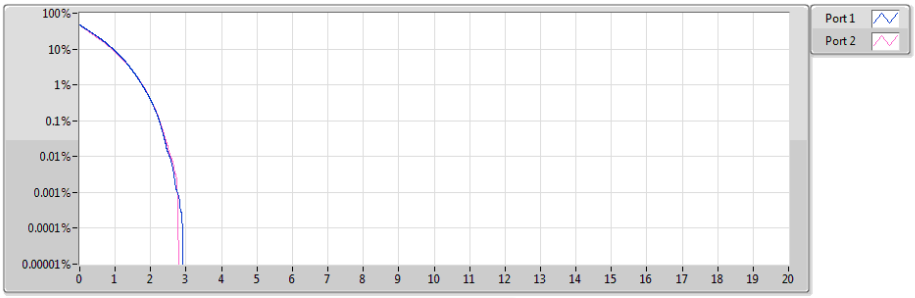
P#3555MHz,#3690MHz_64QAM_RB 50,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3555	10M	6.52	-6.48	13.00	1
3690	20M	6.64	-6.36	13.00	2

Band 48_LTE_20MHz+10MHz_Nss1,QPSK_2TX **PAR**

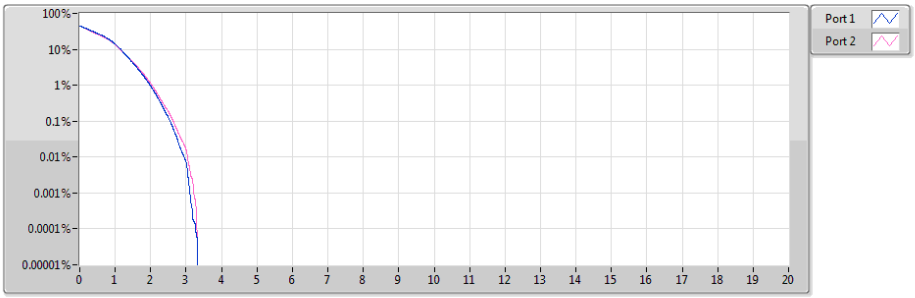
P#3560MHz,#3695MHz_QPSK_RB 100,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	5.61	-7.39	13.00	1
3695	10M	5.63	-7.37	13.00	2

Band 48_LTE_20MHz+10MHz_Nss1,16QAM_2TX **PAR**

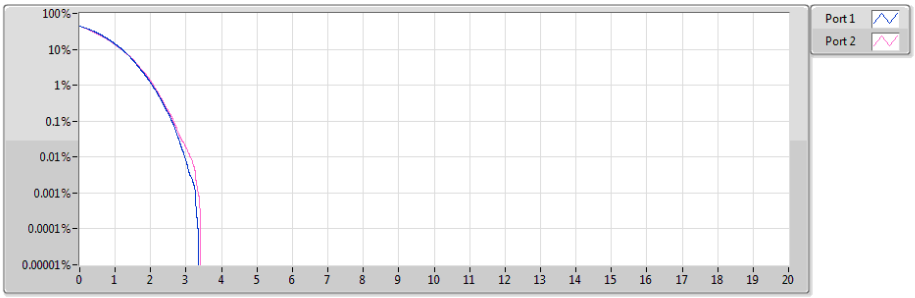
P#3560MHz,#3695MHz_16QAM_RB 100,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.36	-6.64	13.00	1
3695	10M	6.59	-6.41	13.00	2

Band 48_LTE_20MHz+10MHz_Nss1,64QAM_2TX **PAR**

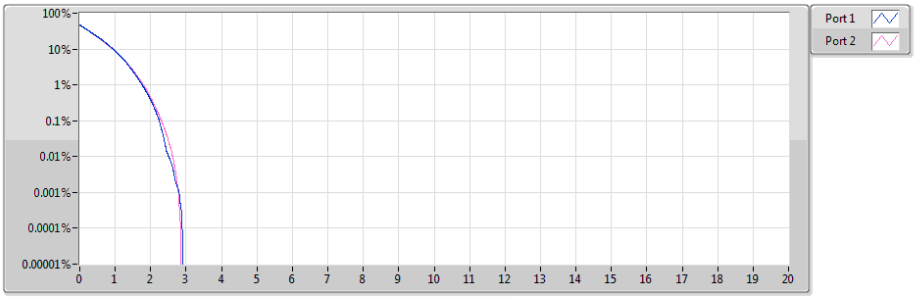
P#3560MHz,#3695MHz_64QAM_RB 100,#RB 0+RB 50,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.50	-6.50	13.00	1
3695	10M	6.59	-6.41	13.00	2

Band 48_LTE_20MHz+20MHz_Nss1,QPSK_2TX **PAR**

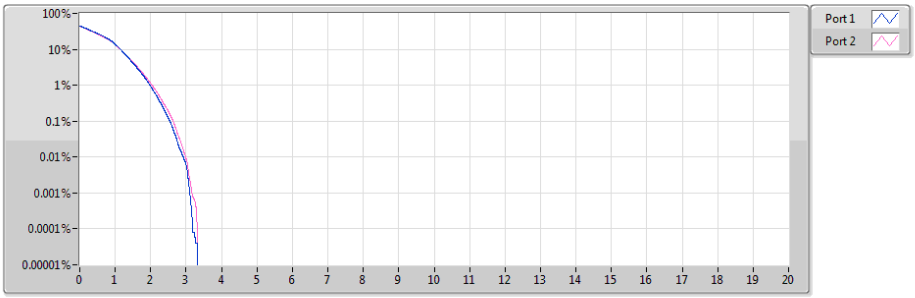
P#3560MHz,#3690MHz_QPSK_RB 100,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	5.60	-7.40	13.00	1
3690	20M	5.76	-7.24	13.00	2

Band 48_LTE_20MHz+20MHz_Nss1,16QAM_2TX **PAR**

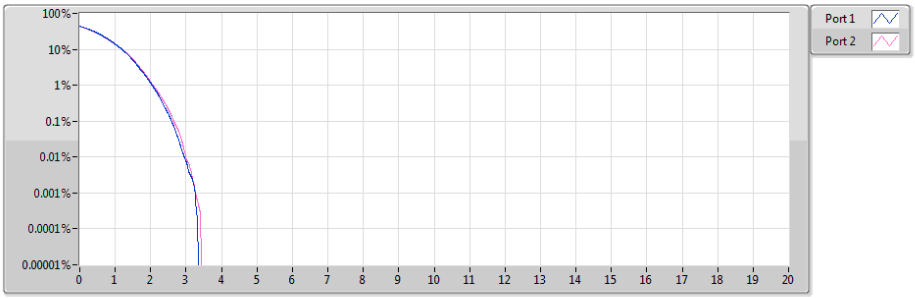
P#3560MHz,#3690MHz_16QAM_RB 100,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.34	-6.66	13.00	1
3690	20M	6.59	-6.41	13.00	2

Band 48_LTE_20MHz+20MHz_Nss1,64QAM_2TX **PAR**

P#3560MHz,#3690MHz_64QAM_RB 100,#RB 0+RB 100,#RB 0



Freq (MHz)	MBW(Hz)	0.1%	Margin(dB)	Limit(dB)	Port
3560	20M	6.47	-6.53	13.00	1
3690	20M	6.64	-6.36	13.00	2

3.6 Frequency Stability

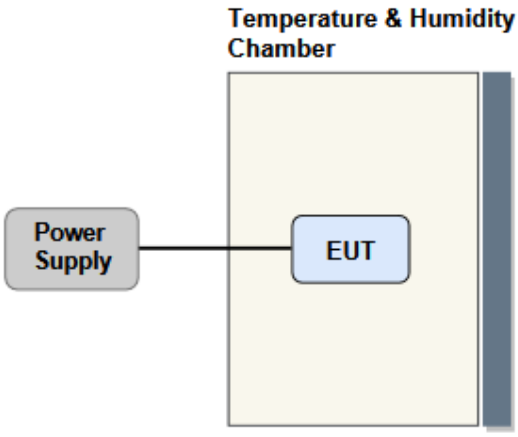
3.6.1 Limit of Frequency Stability

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 -40 ~ 55 ^{o}C and voltage range is from lowest to highest working voltage.
4. Tem 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 (CDD Mode)

Channel Bandwidth: 10MHz

Frequency: 3625 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.01
T20°CVmin		0.02
T55°CVnom		0.02
T50°CVnom		0.01
T40°CVnom		0.01
T30°CVnom		0.02
T20°CVnom		0.01
T10°CVnom		0.01
T0°CVnom		0.01
T-10°CVnom		0.01
T-20°CVnom		0.01
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 20MHz

Frequency: 3625 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.02
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.02
T40°CVnom		0.01
T30°CVnom		0.01
T20°CVnom		0.01
T10°CVnom		0.01
T0°CVnom		0.02
T-10°CVnom		0.01
T-20°CVnom		0.02
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

3.6.5 Test Result of Frequency Stability (CA Mode)

Channel Bandwidth: 10+10MHz / 1Carrier-PCC

Frequency: 3555 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.02
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.01
T40°CVnom		0.02
T30°CVnom		0.02
T20°CVnom		0.01
T10°CVnom		0.01
T0°CVnom		0.01
T-10°CVnom		0.01
T-20°CVnom		0.01
T-30°CVnom		0.01
T-40°CVnom		0.01
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 10+10MHz / 2Carrier-SCC

Frequency: 3695 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.01
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.02
T40°CVnom		0.01
T30°CVnom		0.02
T20°CVnom		0.01
T10°CVnom		0.01
T0°CVnom		0.02
T-10°CVnom		0.01
T-20°CVnom		0.02
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 10+20MHz / 1Carrier-PCC

Frequency: 3555 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.01
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.02
T40°CVnom		0.01
T30°CVnom		0.02
T20°CVnom		0.01
T10°CVnom		0.02
T0°CVnom		0.01
T-10°CVnom		0.02
T-20°CVnom		0.01
T-30°CVnom		0.02
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 10+20MHz / 2Carrier-SCC

Frequency: 3690 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.02
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.01
T40°CVnom		0.02
T30°CVnom		0.02
T20°CVnom		0.01
T10°CVnom		0.02
T0°CVnom		0.01
T-10°CVnom		0.02
T-20°CVnom		0.01
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 20+10MHz / 1Carrier-PCC

Frequency: 3560 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.01
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.02
T40°CVnom		0.02
T30°CVnom		0.01
T20°CVnom		0.02
T10°CVnom		0.01
T0°CVnom		0.02
T-10°CVnom		0.02
T-20°CVnom		0.01
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 20+10MHz / 2Carrier-SCC

Frequency: 3695 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.02
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.01
T40°CVnom		0.01
T30°CVnom		0.01
T20°CVnom		0.02
T10°CVnom		0.02
T0°CVnom		0.01
T-10°CVnom		0.01
T-20°CVnom		0.02
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 20+20MHz / 1Carrier-PCC

Frequency: 3560 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.01
T20°CVmin		0.01
T55°CVnom		0.02
T50°CVnom		0.01
T40°CVnom		0.01
T30°CVnom		0.02
T20°CVnom		0.02
T10°CVnom		0.02
T0°CVnom		0.01
T-10°CVnom		0.01
T-20°CVnom		0.02
T-30°CVnom		0.01
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

Channel Bandwidth: 20+20MHz / 2Carrier-SCC

Frequency: 3690 MHz Temperature (°C)		Frequency Drift (ppm)
T20°CVmax		0.02
T20°CVmin		0.01
T55°CVnom		0.01
T50°CVnom		0.02
T40°CVnom		0.02
T30°CVnom		0.01
T20°CVnom		0.01
T10°CVnom		0.02
T0°CVnom		0.02
T-10°CVnom		0.01
T-20°CVnom		0.02
T-30°CVnom		0.02
T-40°CVnom		0.02
Vnom [V]: 120	Vmax [V]: 138	Vmin [V]: 102
Tnom [°C]: 20	Tmax [°C]: 55	Tmin [°C]: -40

3.7 Reception Limits

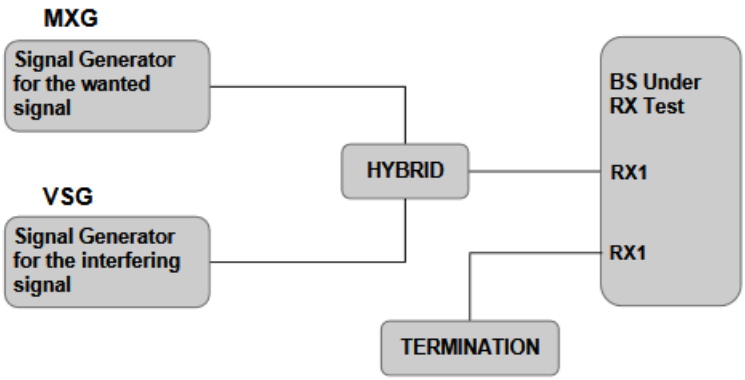
3.7.1 Description of Reception Limits

Priority Access Licensees must accept adjacent channel and in-band blocking interference (emissions from other authorized Priority Access or GAA CBSDs transmitting between 3550 and 3700 MHz) up to a power spectral density level not to exceed −40dBm in any direction with greater than 99% probability when integrated over a 10 megahertz reference bandwidth.

3.7.2 Test Procedures

1. Generate the wanted signal and adjust the input level to specified power level.
2. Select low, middle and high channels for each modulation.
3. For adjacent channel interference, set up the interfering signals at the adjacent channel frequency and adjust the interfering signal level to -40dBm at receiver antenna ports.
4. For in-band blocking interference, set up the interfering signal in the frequency range from 3550MHz to 3700MHz and adjust the interfering signal level to -40dBm at receiver antenna ports.
5. Measure and check the throughput of the EUT greater than 99% probability.

3.7.3 Test Setup



3.7.4 Test Result of Reception Limits (CDD Mode)

Mode	Interference Power Level (dBm)	Port 1 wanted signal power Level (dBm)	Port 1 Adjacent Channel selectivity Thoughput (%)	Port 1 In-Band blocking Thoughpu (%)	Port 2 wanted signal power Level (dBm)	Port 2 Adjacent Channel selectivity Thoughput (%)	Port 2 In-Band blocking Thoughpu (%)	Limit (%)
CB:10MHz,3625MHz RB offset=0	-40	-87.5	100	99.56	-87.5	100	99.51	99
CB:10MHz,3625MHz RB offset=25	-40	-87.5	100	99.82	-87.5	100	99.63	99

Mode	Interference Power Level (dBm)	Port 1 wanted signal power Level (dBm)	Port 1 Adjacent Channel selectivity Thoughput (%)	Port 1 In-Band blocking Thoughpu (%)	Port 2 wanted signal power Level (dBm)	Port 2 Adjacent Channel selectivity Thoughput (%)	Port 2 In-Band blocking Thoughpu (%)	Limit (%)
CB:20MHz,3625MHz RB offset=0	-40	-84.5	100	99.97	-84.5	100	99.98	99
CB:20MHz,3625MHz RB offset=25	-40	-84.5	100	99.99	-84.5	100	99.98	99
CB:20MHz,3625MHz RB offset=50	-40	-84.5	100	99.99	-84.5	100	99.98	99
CB:20MHz,3625MHz RB offset=75	-40	-84.5	100	99.99	-84.5	100	99.99	99

3.7.5 Test Result of Reception Limits (CA Mode)

Mode	Interference Power Level (dBm)	Port 1 wanted signal power Level (dBm)	Port 1 Adjacent Channel selectivity Thoughput (%)	Port 1 In-Band blocking Thoughpu (%)	Port 2 wanted signal power Level (dBm)	Port 2 Adjacent Channel selectivity Thoughput (%)	Port 2 In-Band blocking Thoughpu (%)	Limit (%)
PCC BW:10MHz,3555MHz RB offset=0 SCC BW:10MHz,3695MHz RB offset=0	-40	-87.5	100	99.96	-87.5	100	99.97	99
PCC BW:10MHz,3555MHz RB offset=25 SCC BW:10MHz,3695MHz RB offset=25	-40	-87.5	100	99.96	-87.5	100	99.97	99
PCC BW:10MHz,3555MHz RB offset=0 SCC BW:20MHz,3690MHz RB offset=0	-40	-87.5	100	99.97	-84.5	100	99.99	99
PCC BW:10MHz,3555MHz RB offset=25 SCC BW:20MHz,3690MHz RB offset=25	-40	-87.5	100	99.96	-84.5	100	99.98	99
PCC BW:10MHz,3555MHz RB offset=0 SCC BW:20MHz,3690MHz RB offset=50	-40	-87.5	100	99.97	-84.5	100	99.99	99
PCC BW:10MHz,3555MHz RB offset=0 SCC BW:20MHz,3690MHz RB offset=75	-40	-87.5	100	99.97	-84.5	100	99.99	99

Mode	Interference Power Level (dBm)	Port 1 wanted signal power Level (dBm)	Port 1 Adjacent Channel selectivity Thoughput (%)	Port 1 In-Band blocking Thoughpu (%)	Port 2 wanted signal power Level (dBm)	Port 2 Adjacent Channel selectivity Thoughput (%)	Port 2 In-Band blocking Thoughpu (%)	Limit (%)
PCC BW:20MHz,3560MHz RB offset=0 SCC BW:10MHz,3695MHz RB offset=0	-40	-84.5	100	99.99	-87.5	100	99.98	99
PCC BW:20MHz,3560MHz RB offset=25 SCC BW:10MHz,3695MHz RB offset=25	-40	-84.5	100	99.98	-87.5	100	99.96	99
PCC BW:20MHz,3560MHz RB offset=50 SCC BW:10MHz,3695MHz RB offset=0	-40	-84.5	100	99.99	-87.5	100	99.98	99
PCC BW:20MHz,3560MHz RB offset=75 SCC BW:10MHz,3695MHz RB offset=0	-40	-84.5	100	99.97	-87.5	100	99.96	99
PCC BW:20MHz,3560MHz RB offset=0 SCC BW:20MHz,3690MHz RB offset=0	-40	-84.5	100	100	-84.5	100	100	99
PCC BW:20MHz,3560MHz RB offset=25 SCC BW:20MHz,3690MHz RB offset=25	-40	-84.5	100	100	-84.5	100	99.99	99
PCC BW:20MHz,3560MHz RB offset=50 SCC BW:20MHz,3690MHz RB offset=50	-40	-84.5	100	100	-84.5	100	99.98	99
PCC BW:20MHz,3560MHz RB offset=75 SCC BW:20MHz,3695MHz RB offset=75	-40	-84.5	100	100	-84.5	100	99.98	99

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C..

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

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

==END==