FCC Test Report

FCC ID	:	**UDX-60099010**
Equipment	:	**Wi-Fi 6 Access Point**
Brand Name	:	**CISCO**
Model Name	:	**MR36-HW**
Applicant	:	**Cisco Systems** **170 West Tasman Drive, San Jose, CA 95134 USA**
Manufacturer	:	**Cisco Systems** **170 West Tasman Drive, San Jose, CA 95134 USA**
Standard	:	**47 CFR FCC Part 15.407**

The product was received on Jul. 02, 2019, and testing was started from Jul. 02, 2019 and completed on Jul. 20, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Allen Lin

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR962029-02AN	01	Initial issue of report	Jan. 16, 2020

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
-	15.207	AC Power-line Conducted Emissions	Not Required	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	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:
None

Reviewed by: Jackson Tsai

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 RF General Information

Radio 1_Non-Beamforming

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5470-5725	a, n (HT20), ac (VHT20), ax(HEW 20)	5500-5700	100-140 [8]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5470-5725	n (HT40), ac (VHT40), ax(HEW 40)	5510-5670	102-134 [3]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5470-5725	ac (VHT80), ax(HEW 80)	5530	106 [1]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX

Radio 1_Beamforming

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX

Radio 2_Non-Beamforming

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5470-5725	a, n (HT20), ac (VHT20)	5500-5700	100-140 [8]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5470-5725	n (HT40), ac (VHT40)	5510-5670	102-134 [3]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5470-5725	ac (VHT80)	5530	106 [1]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1TX
5.47-5.725GHz	802.11a	20	1TX
5.725-5.85GHz	802.11a	20	1TX
5.25-5.35GHz	802.11ac VHT20	20	1TX
5.47-5.725GHz	802.11ac VHT20	20	1TX
5.725-5.85GHz	802.11ac VHT20	20	1TX
5.25-5.35GHz	802.11ac VHT40	40	1TX
5.47-5.725GHz	802.11ac VHT40	40	1TX
5.725-5.85GHz	802.11ac VHT40	40	1TX
5.25-5.35GHz	802.11ac VHT80	80	1TX
5.47-5.725GHz	802.11ac VHT80	80	1TX
5.725-5.85GHz	802.11ac VHT80	80	1TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The resource unit of HEW 20, HEW 40, HEW80 only support full loading.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	PIFA	I-PEX
2	-	-	PIFA	I-PEX
3	-	-	PIFA	I-PEX
4	-	-	PIFA	I-PEX
5	-	-	PIFA	I-PEX
6	-	-	PIFA	I-PEX

Ant.	Port	Gain (dBi)										
		Radio 1					Radio 2					Radio 3
		2.4G	5G				2.4G	5G				BT
			B1	B2	B3	B4		B1	B2	B3	B4	
1	1	4.22	-	-	-	-	-	-	-	-	-	-
2	2	4.68	-	-	-	-	-	-	-	-	-	-
3	3	-	4.67	4.67	5.29	4.77	-	-	-	-	-	-
4	4	-	4.91	4.91	4.98	4.9	-	-	-	-	-	-
5	5	-	-	-	-	-	3.02	3.06	3.06	2.57	2.38	-
6	6	-	-	-	-	-	-	-	-	-	-	2.91

Note 1: The EUT has six antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/ac/ax mode (2TX/2RX) (Radio 1)

Support diversity function and pre-tested on each single chain, Ant. 1 (port 1) and Ant. 2(port 2) can be used as transmitting/receiving antenna.

For IEEE 802.11 b/g/n/ac mode (1TX/1RX) (Radio 2)

Ant. 5 (port 5) can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX) (Radio 1)

Support diversity function and pre-tested on each single chain, Ant. 3 (port 3) and Ant. 4(port 4) can be used as transmitting/receiving antenna.

For IEEE 802.11 a/n/ac mode (1TX/1RX) (Radio 2)

Ant. 5 (port 5) can be used as transmitting/receiving antenna.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) (Radio 3)

Ant. 6 (port 6) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter / PoE			
EUT Function	☐	Outdoor	☒	Indoor
	☐	Fixed P2P	☐	Client
Beamforming Function	☒	With beamforming	☐	Without beamforming
TPC Function	☒	With TPC Function	☐	Without TPC Function
Weather Band	☐	With 5600~5650MHz	☒	Without 5600~5650MHz

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	…
☐	Other:	

1.1.4 Mode Test Duty Cycle

Radio 1_Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.925	0.34	1.434m	1k
802.11ac VHT20	0.954	0.2	5.433m	300
802.11ac VHT40	0.954	0.2	5.433m	300
802.11ac VHT80	0.953	0.21	5.425m	300
802.11ax HEW20	0.962	0.17	5.446m	300
802.11ax HEW40	0.955	0.2	5.446m	300
802.11ax HEW80	0.955	0.2	5.44m	300

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Radio 1_Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.939	0.27	1.759m	1k
802.11ac VHT40-BF	0.933	0.3	1.695m	1k
802.11ac VHT80-BF	0.929	0.32	1.942m	1k
802.11ax HEW20-BF	0.917	0.38	1.759m	1k
802.11ax HEW40-BF	0.892	0.5	1.695m	1k
802.11ax HEW80-BF	0.927	0.33	1.95m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Radio 2_Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.961	0.17	2.029m	1k
802.11ac VHT20	0.964	0.16	1.901m	1k
802.11ac VHT40	0.928	0.32	937.5u	3k
802.11ac VHT80	0.872	0.59	460u	3k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR962029AN

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Frequency bands U-NII-2A and U-NII-2C was added	Emission Bandwidth, Maximum Conducted Output Power, Peak Power Spectral Density and Unwanted Emission above 1G
Model Name: MR36-HW was change	N/A

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 789033 D02 v02r01
- KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Dexter	24.8~24.5°C / 54~56%	04/Jul2019~ 20/Jul/2019
Radiated (Non-Beamforming)	03CH09-HY	Daniel	23.1~25.3°C / 46~52%	02/Jul2019~ 03/Jul/2019
Radiated (Beamforming)	03CH09-HY	Ryan	22.8~23.9°C / 41~57%	18/Jul2019~ 19/Jul/2019

1.4 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)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 ℃	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Radio 1_Non-Beamforming

Test Software Version	QRCT V4.0 00123

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	20
5580MHz	20
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	20
5580MHz	20
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	19.5
5300MHz	20
5320MHz	19
5500MHz	18.5

Mode	Power Setting
5580MHz	19
5700MHz	18.5
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19
5580MHz	20
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	20
5700MHz	20
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	18
5580MHz	19
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	18.5
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-
5270MHz	20
5310MHz	18
5510MHz	17

Mode	Power Setting
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-
5270MHz	20
5310MHz	19
5510MHz	18
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5270MHz	20
5310MHz	17
5510MHz	17
5550MHz	20
5670MHz	19
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-
5290MHz	17.5
5530MHz	17.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-
5290MHz	18.5
5530MHz	18.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5290MHz	16.5
5530MHz	16.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19
5580MHz	20
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	20
5700MHz	20
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	18
5580MHz	19.5
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-
5270MHz	20
5310MHz	18
5510MHz	17
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20

Mode	Power Setting
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
5270MHz	20
5310MHz	19
5510MHz	18
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	20
5310MHz	17
5510MHz	17
5550MHz	20
5670MHz	19
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-
5290MHz	17.5
5530MHz	17.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-
5290MHz	18.5
5530MHz	18.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	16.5
5530MHz	16.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20

Radio 1_Beamforming

Test Software	DoS

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5270MHz	17
5310MHz	17
5510MHz	17
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5290MHz	17
5530MHz	17
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17

Mode	Power Setting
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	17
5310MHz	17
5510MHz	17
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	17
5530MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17

Radio 2_Non-Beamforming

Test Software Version	QRCT V4.0 00123

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19.5
5580MHz	19
5700MHz	17.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
802.11ac VHT20_Nss1,(MCS0)_1TX	-
5260MHz	20
5300MHz	19.5
5320MHz	20
5500MHz	18.5
5580MHz	19
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	16.5

Mode	Power Setting
5720MHz Straddle 5.725-5.85GHz	16.5
802.11ac VHT40_Nss1,(MCS0)_1TX	-
5270MHz	20
5310MHz	15
5510MHz	16
5550MHz	19
5670MHz	18.5
5710MHz Straddle 5.47-5.725GHz	17.5
5710MHz Straddle 5.725-5.85GHz	17.5
802.11ac VHT80_Nss1,(MCS0)_1TX	-
5290MHz	12.5
5530MHz	14.5
5690MHz Straddle 5.47-5.725GHz	17.5
5690MHz Straddle 5.725-5.85GHz	17.5

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	Adapter mode_Radio 1_Non-Beamforming
2	Adapter mode_Radio 1_Beamforming
3	Adapter mode_Radio 2_Non-Beamforming
4	PoE mode_Radio 1_Non-Beamforming
5	PoE mode_Radio 1_Beamforming
6	PoE mode_Radio 2_Non-Beamforming

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter mode_Non-Beamforming		
2	Adapter mode_Beamforming		
3	PoE mode_Non-Beamforming		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT			V (Radio 1 & Radio 2)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4G (Radio1) + 5G (Radio1) + BT (Radio3) + WLAN 2.4G (Radio2)
2	WLAN 2.4G (Radio1) + 5G (Radio1) + BT (Radio3) + WLAN 5G (Radio2)
Refer to Sporton Test Report No.: FA962029-02 for Co-location RF Exposure Evaluation.	

2.4 Support Equipment

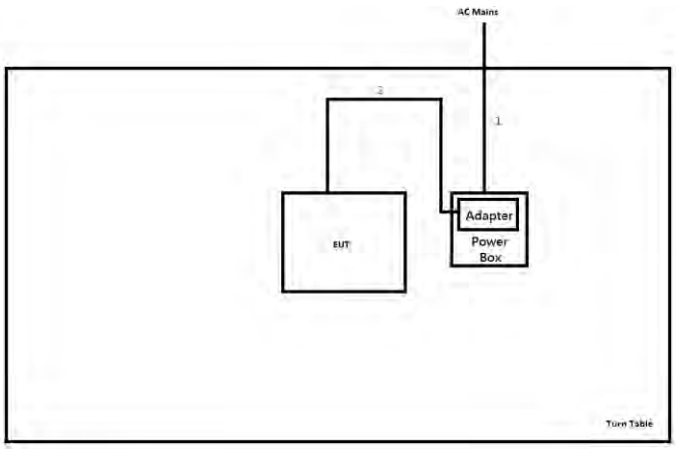
Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Power Source	GW	APS-9102	-

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	AC adapter	CISCO	MA-PWR-30W-US	-
2	PoE	CISCO	MA-INJ-4	-
3	Notebook (remote)	DELL	E5530	DoC
4	Client AP (remote)	CISCO	AXL	DoC

Note: Support equipment No.1 & 2 & 4 was provided by customer.

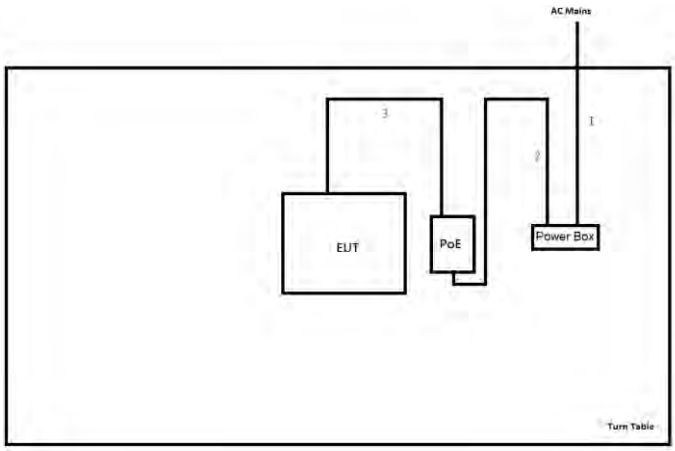
2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test - Adapter mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	DC Power line	No	1.5	-

Test Setup Diagram - Radiated Test – PoE mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	AC Power line	No	1.5	-
3	LAN cable	No	2.0	-

3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit
UNII Devices
☐ For the 5.15-5.25 GHz band, N/A
☒ For the 5.25-5.35 GHz band, N/A
☒ For the 5.47-5.725 GHz band, N/A
☒ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

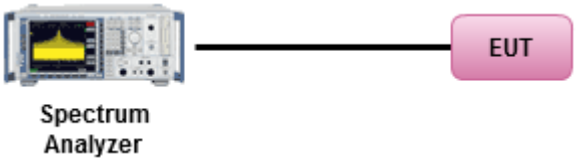
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
	☐ Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.1.4 Test Setup

Emission Bandwidth


3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☐ For the 5.15-5.25 GHz band:	
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒ For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).	
☒ For the 5.725-5.85 GHz band:	
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.2.2 Measuring Instruments

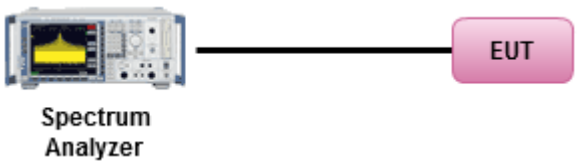
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	Duty cycle ≥ 98%
	☒ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
	☐ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as KDB 789033, clause E Method PM (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.2.4 Test Setup

RF Output Power (Spectrum Analyzer)



RF Output Power (Power Meter)

3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☐ For the 5.15-5.25 GHz band:	
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).	
☒ For the 5.725-5.85 GHz band:	
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

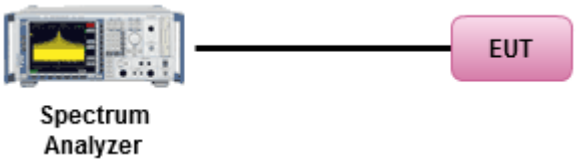
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:		
	☐ Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
	Duty cycle ≥ 98%	
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).	
	Duty cycle < 98%	
	☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
▪ For conducted measurement.		
	▪ If the EUT supports multiple transmit chains using options given below:	
		▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
	▪	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.3.4 Test Setup

Power Spectral Density


3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.4 Unwanted Emissions

3.4.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3
Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT. Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.			

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall	

be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.4.2 Measuring Instruments

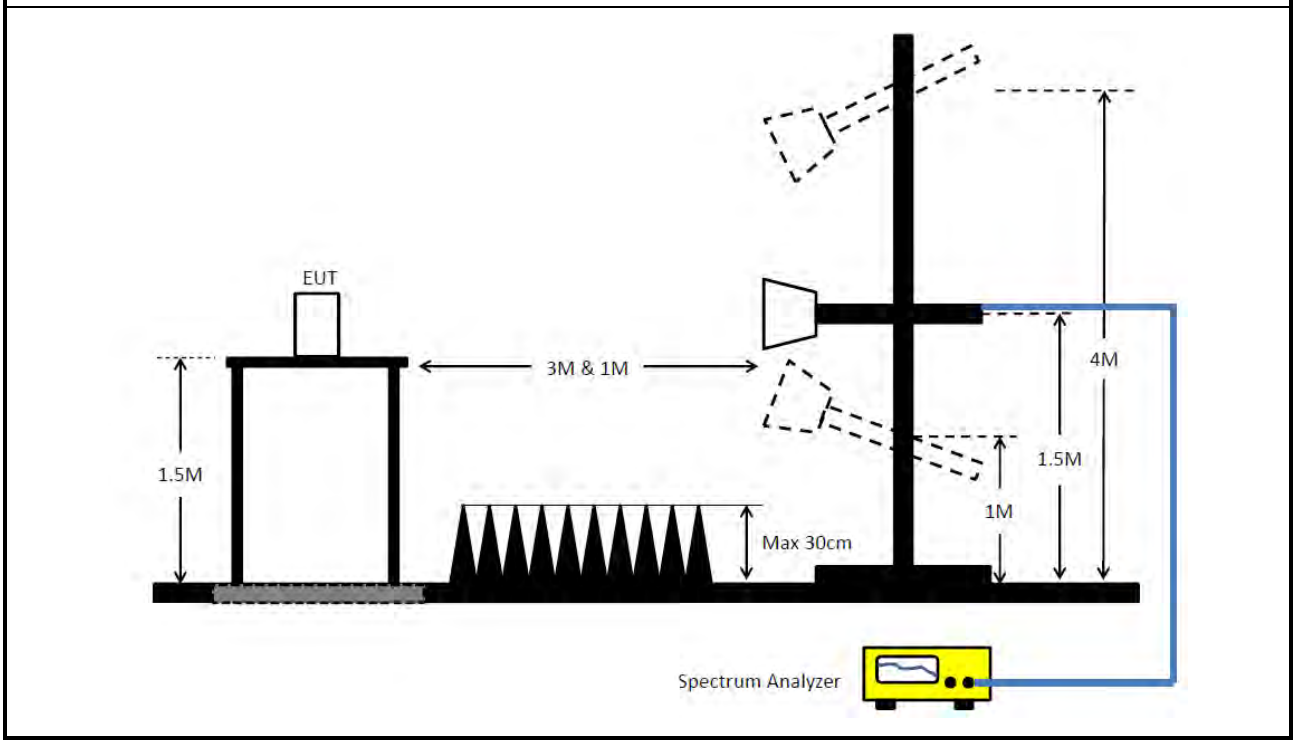
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.		
	▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.		
		☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.	
		☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.	
▪ For radiated measurement.			
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.		
▪ The any unwanted emissions level shall not exceed the fundamental emission level.			
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.			

3.4.4 Test Setup

Transmitter Radiated Unwanted Emissions
Above 1GHz



3.4.5 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

3.5 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test (Non-Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
Microwave Preamplifier with 10 dB Pad	EMC	EMC051845 & WK0602-10	980240 & 01	1GHz ~ 18GHz	11/Jan/2019	10/Jan/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+ SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020

Instrument for Radiated Test(Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz~26.5GHz	15/Jul/2019	14/Jul/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+ SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	20.58M	16.402M	16M4D1D	19.74M	16.402M
802.11a_Nss1,(6Mbps)_1TX(Port2)	20.7M	16.432M	16M4D1D	19.65M	16.402M
802.11a_Nss1,(6Mbps)_2TX	20.79M	16.432M	16M4D1D	19.74M	16.402M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	21.36M	17.631M	17M6D1D	21M	17.601M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	22.5M	17.631M	17M6D1D	21M	17.601M
802.11ac VHT20_Nss1,(MCS0)_2TX	21.84M	17.631M	17M6D1D	20.97M	17.571M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	41.34M	36.102M	36M1D1D	41.04M	36.102M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	40.74M	36.102M	36M1D1D	40.62M	36.102M
802.11ac VHT40_Nss1,(MCS0)_2TX	41.04M	36.102M	36M1D1D	40.32M	36.042M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	82.56M	75.562M	75M6D1D	82.56M	75.562M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	81.96M	75.682M	75M7D1D	81.96M	75.682M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.2M	75.562M	75M6D1D	81.96M	75.562M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	22.05M	18.951M	19M0D1D	21.63M	18.921M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	22.29M	18.981M	19M0D1D	21.72M	18.951M
802.11ax HEW20_Nss1,(MCS0)_2TX	23.67M	18.951M	19M0D1D	21.45M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	41.64M	37.841M	37M8D1D	40.92M	37.781M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	41.52M	37.841M	37M8D1D	41.46M	37.781M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.58M	37.841M	37M8D1D	40.92M	37.601M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	82.44M	77.241M	77M2D1D	82.44M	77.241M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	82.68M	77.121M	77M1D1D	82.68M	77.121M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.56M	77.121M	77M1D1D	82.44M	77.121M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	20.94M	16.402M	16M4D1D	15.375M	13.253M
802.11a_Nss1,(6Mbps)_1TX(Port2)	22.89M	16.462M	16M5D1D	15.18M	13.268M
802.11a_Nss1,(6Mbps)_2TX	20.61M	16.402M	16M4D1D	15.09M	13.208M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	21.18M	17.631M	17M6D1D	15.9M	13.838M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	22.68M	17.631M	17M6D1D	15.48M	13.868M
802.11ac VHT20_Nss1,(MCS0)_2TX	22.05M	17.631M	17M6D1D	15.435M	13.838M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	41.88M	36.102M	36M1D1D	36.015M	32.954M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	45.12M	36.162M	36M2D1D	35.49M	32.954M
802.11ac VHT40_Nss1,(MCS0)_2TX	45.24M	36.222M	36M2D1D	35.28M	32.954M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	82.2M	75.562M	75M6D1D	76.65M	72.339M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	82.2M	75.562M	75M6D1D	77.025M	72.339M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.08M	75.322M	75M3D1D	77.025M	72.264M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	21.75M	18.951M	19M0D1D	16.5M	14.498M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	23.31M	18.951M	19M0D1D	15.915M	14.483M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.38M	18.951M	19M0D1D	15.945M	14.453M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	43.44M	37.781M	37M8D1D	36.435M	33.723M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	42.66M	37.781M	37M8D1D	35.77M	33.793M
802.11ax HEW40_Nss1,(MCS0)_2TX	46.74M	37.841M	37M8D1D	35.56M	33.793M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	82.92M	77.001M	77M0D1D	76.425M	73.313M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	82.44M	77.241M	77M2D1D	76.5M	73.088M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.44M	77.121M	77M1D1D	76.575M	73.313M

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	3.1M	4.118M	4M12D1D	3.1M	4.118M
802.11a_Nss1,(6Mbps)_1TX(Port2)	3.12M	3.618M	3M62D1D	3.12M	3.618M
802.11a_Nss1,(6Mbps)_2TX	3.1M	3.458M	3M46D1D	3.1M	3.398M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	3.76M	4.118M	4M12D1D	3.76M	4.118M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	3.72M	4.018M	4M02D1D	3.72M	4.018M
802.11ac VHT20_Nss1,(MCS0)_2TX	3.76M	4.058M	4M06D1D	3.72M	3.958M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	3.12M	3.918M	3M92D1D	3.12M	3.918M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	3.12M	3.618M	3M62D1D	3.12M	3.618M
802.11ac VHT40_Nss1,(MCS0)_2TX	3.12M	3.998M	4M00D1D	3.12M	3.658M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	3.1M	14.593M	14M6D1D	3.1M	14.593M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	3.1M	6.057M	6M06D1D	3.1M	6.057M
802.11ac VHT80_Nss1,(MCS0)_2TX	3.1M	17.311M	17M3D1D	3.1M	6.457M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	4.46M	4.798M	4M80D1D	4.46M	4.798M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	4.42M	4.538M	4M54D1D	4.42M	4.538M
802.11ax HEW20_Nss1,(MCS0)_2TX	4.42M	4.578M	4M58D1D	4.34M	4.498M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	4.06M	8.576M	8M58D1D	4.06M	8.576M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	3.98M	4.418M	4M42D1D	3.98M	4.418M
802.11ax HEW40_Nss1,(MCS0)_2TX	4.06M	8.456M	8M46D1D	3.9M	4.298M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	4M	18.471M	18M5D1D	4M	18.471M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	4M	12.634M	12M6D1D	4M	12.634M
802.11ax HEW80_Nss1,(MCS0)_2TX	4M	18.011M	18M0D1D	3.98M	11.914M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	19.74M	16.402M		
5300MHz	Pass	Inf	20.58M	16.402M		
5320MHz	Pass	Inf	20.58M	16.402M		
5500MHz	Pass	Inf	20.94M	16.402M		
5580MHz	Pass	Inf	20.67M	16.372M		
5700MHz	Pass	Inf	19.92M	16.372M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.375M	13.253M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	4.118M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			19.65M	16.432M
5300MHz	Pass	Inf			20.52M	16.402M
5320MHz	Pass	Inf			20.7M	16.432M
5500MHz	Pass	Inf			22.89M	16.462M
5580MHz	Pass	Inf			21.03M	16.432M
5700MHz	Pass	Inf			19.71M	16.402M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			15.18M	13.268M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.12M	3.618M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	19.92M	16.402M	19.74M	16.432M
5300MHz	Pass	Inf	20.49M	16.402M	20.55M	16.402M
5320MHz	Pass	Inf	20.7M	16.402M	20.79M	16.432M
5500MHz	Pass	Inf	19.98M	16.402M	20.49M	16.402M
5580MHz	Pass	Inf	19.95M	16.402M	20.61M	16.402M
5700MHz	Pass	Inf	19.2M	16.372M	19.26M	16.402M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.33M	13.208M	15.09M	13.238M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.458M	3.1M	3.398M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	21M	17.601M		
5300MHz	Pass	Inf	21.24M	17.631M		
5320MHz	Pass	Inf	21.36M	17.601M		
5500MHz	Pass	Inf	20.61M	17.571M		
5580MHz	Pass	Inf	21.18M	17.601M		
5700MHz	Pass	Inf	21.06M	17.631M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.9M	13.838M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.118M		
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			21M	17.601M
5300MHz	Pass	Inf			21.81M	17.631M
5320MHz	Pass	Inf			22.5M	17.631M
5500MHz	Pass	Inf			22.41M	17.631M
5580MHz	Pass	Inf			22.68M	17.631M
5700MHz	Pass	Inf			20.94M	17.601M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			15.48M	13.868M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.72M	4.018M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.18M	17.571M	20.97M	17.601M
5300MHz	Pass	Inf	21.36M	17.631M	21.48M	17.601M
5320MHz	Pass	Inf	21.33M	17.631M	21.84M	17.601M
5500MHz	Pass	Inf	20.73M	17.601M	20.91M	17.571M
5580MHz	Pass	Inf	21.21M	17.571M	22.05M	17.631M
5700MHz	Pass	Inf	20.49M	17.601M	20.7M	17.601M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	13.853M	15.435M	13.838M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.058M	3.72M	3.958M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5270MHz	Pass	Inf	41.34M	36.102M		
5310MHz	Pass	Inf	41.04M	36.102M		
5510MHz	Pass	Inf	40.32M	36.102M		
5550MHz	Pass	Inf	41.88M	36.102M		
5670MHz	Pass	Inf	40.74M	36.102M		
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.015M	32.954M		
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.918M		
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5270MHz	Pass	Inf			40.74M	36.102M
5310MHz	Pass	Inf			40.62M	36.102M
5510MHz	Pass	Inf			41.52M	36.102M
5550MHz	Pass	Inf			45.12M	36.162M
5670MHz	Pass	Inf			42M	36.102M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			35.49M	32.954M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.12M	3.618M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	41.04M	36.102M	40.62M	36.042M
5310MHz	Pass	Inf	40.56M	36.042M	40.32M	36.102M
5510MHz	Pass	Inf	40.86M	36.042M	40.26M	36.102M
5550MHz	Pass	Inf	41.04M	36.102M	45.24M	36.222M
5670MHz	Pass	Inf	40.92M	36.102M	40.32M	36.042M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.05M	32.954M	35.28M	32.954M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.998M	3.12M	3.658M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5290MHz	Pass	Inf	82.56M	75.562M		
5530MHz	Pass	Inf	82.2M	75.562M		
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.65M	72.339M		
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	14.593M		
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5290MHz	Pass	Inf			81.96M	75.682M
5530MHz	Pass	Inf			82.2M	75.562M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			77.025M	72.339M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			3.1M	6.057M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5290MHz	Pass	Inf	82.2M	75.562M	81.96M	75.562M
5530MHz	Pass	Inf	82.08M	75.322M	81.6M	75.322M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.025M	72.414M	77.1M	72.264M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	17.311M	3.1M	6.457M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	21.66M	18.921M		
5300MHz	Pass	Inf	21.63M	18.951M		
5320MHz	Pass	Inf	22.05M	18.951M		
5500MHz	Pass	Inf	21.63M	18.891M		
5580MHz	Pass	Inf	21.75M	18.921M		
5700MHz	Pass	Inf	21.3M	18.951M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.5M	14.498M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.798M		
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			22.17M	18.981M
5300MHz	Pass	Inf			21.72M	18.951M
5320MHz	Pass	Inf			22.29M	18.951M
5500MHz	Pass	Inf			23.31M	18.951M
5580MHz	Pass	Inf			22.56M	18.921M
5700MHz	Pass	Inf			21.78M	18.951M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			15.915M	14.483M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			4.42M	4.538M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	22.53M	18.891M	21.45M	18.951M
5300MHz	Pass	Inf	21.6M	18.951M	21.6M	18.891M
5320MHz	Pass	Inf	21.75M	18.951M	23.67M	18.921M
5500MHz	Pass	Inf	21.69M	18.951M	21.33M	18.891M
5580MHz	Pass	Inf	21.78M	18.921M	22.38M	18.951M
5700MHz	Pass	Inf	21.42M	18.891M	21.06M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.095M	14.498M	15.945M	14.453M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.578M	4.34M	4.498M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5270MHz	Pass	Inf	41.64M	37.841M		
5310MHz	Pass	Inf	40.92M	37.781M		
5510MHz	Pass	Inf	41.1M	37.781M		
5550MHz	Pass	Inf	43.44M	37.781M		
5670MHz	Pass	Inf	41.46M	37.781M		
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.435M	33.723M		
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.06M	8.576M		
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5270MHz	Pass	Inf			41.46M	37.781M
5310MHz	Pass	Inf			41.52M	37.841M
5510MHz	Pass	Inf			41.28M	37.721M
5550MHz	Pass	Inf			42.66M	37.781M
5670MHz	Pass	Inf			41.22M	37.721M

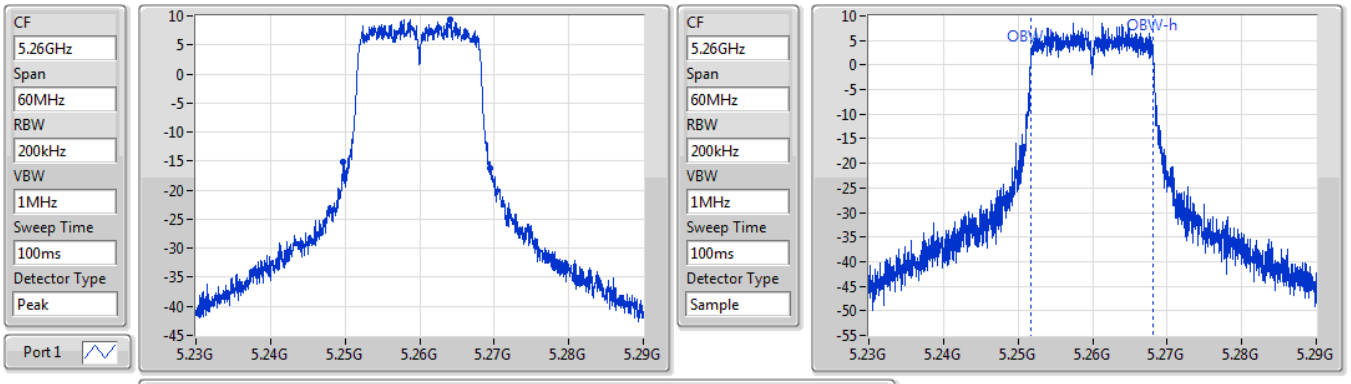
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			35.77M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.98M	4.418M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	41.28M	37.841M	41.58M	37.661M
5310MHz	Pass	Inf	40.98M	37.601M	40.92M	37.601M
5510MHz	Pass	Inf	40.68M	37.721M	41.4M	37.601M
5550MHz	Pass	Inf	42.36M	37.841M	46.74M	37.781M
5670MHz	Pass	Inf	40.8M	37.661M	41.1M	37.721M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.38M	33.793M	35.56M	33.828M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.06M	8.456M	3.9M	4.298M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5290MHz	Pass	Inf	82.44M	77.241M		
5530MHz	Pass	Inf	82.92M	77.001M		
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.425M	73.313M		
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	18.471M		
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5290MHz	Pass	Inf			82.68M	77.121M
5530MHz	Pass	Inf			82.44M	77.241M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			76.5M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			4M	12.634M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	82.56M	77.121M	82.44M	77.121M
5530MHz	Pass	Inf	82.08M	77.001M	82.44M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.4M	73.313M	76.575M	73.313M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	18.011M	3.98M	11.914M

Port X-N dB = Port **X** 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

5260MHz

04/07/2019

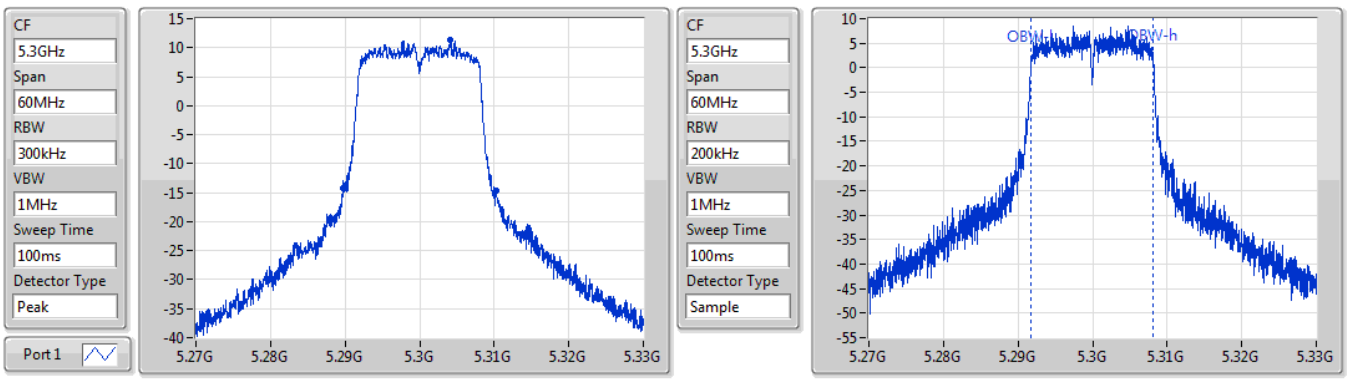


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.74M	5.24974G	5.26948G	16.402M	5.251724G	5.268126G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

5300MHz

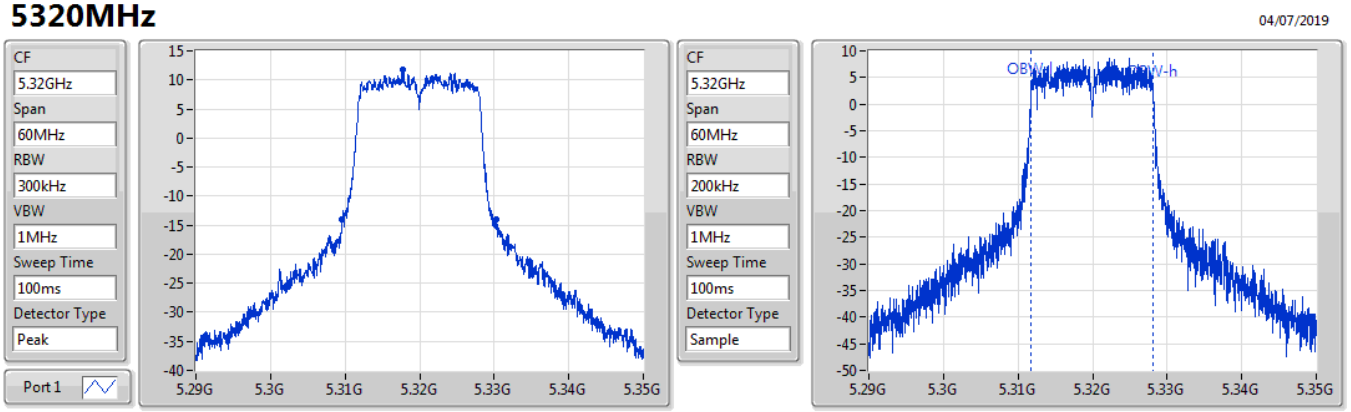
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.28965G	5.31023G	16.402M	5.291754G	5.308156G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

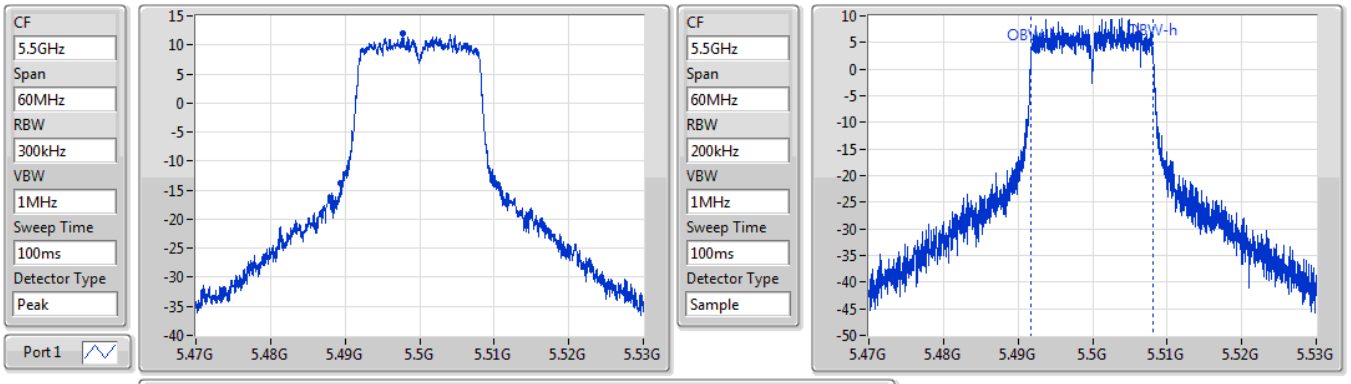
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.30962G	5.3302G	16.402M	5.311754G	5.328156G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

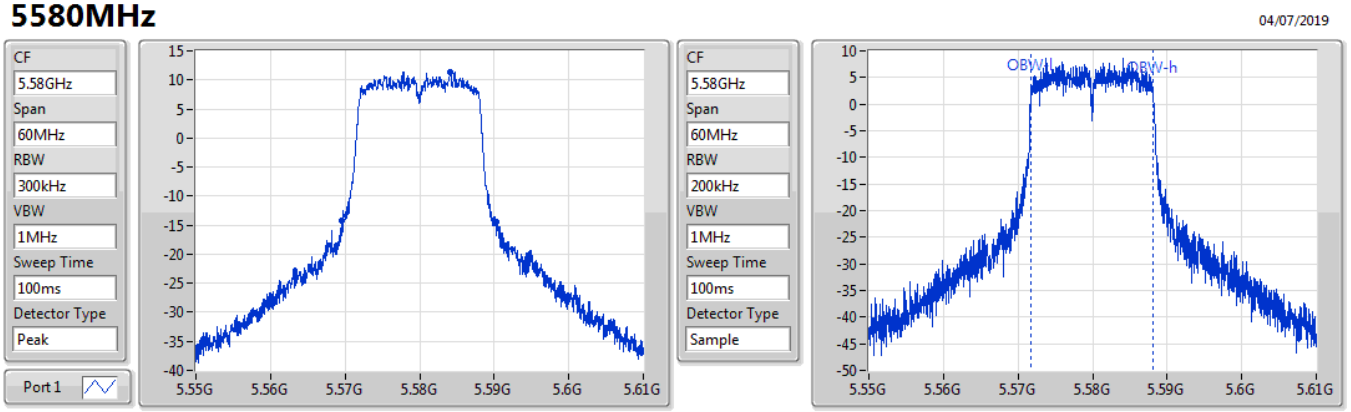
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.94M	5.48944G	5.51038G	16.402M	5.491724G	5.508126G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

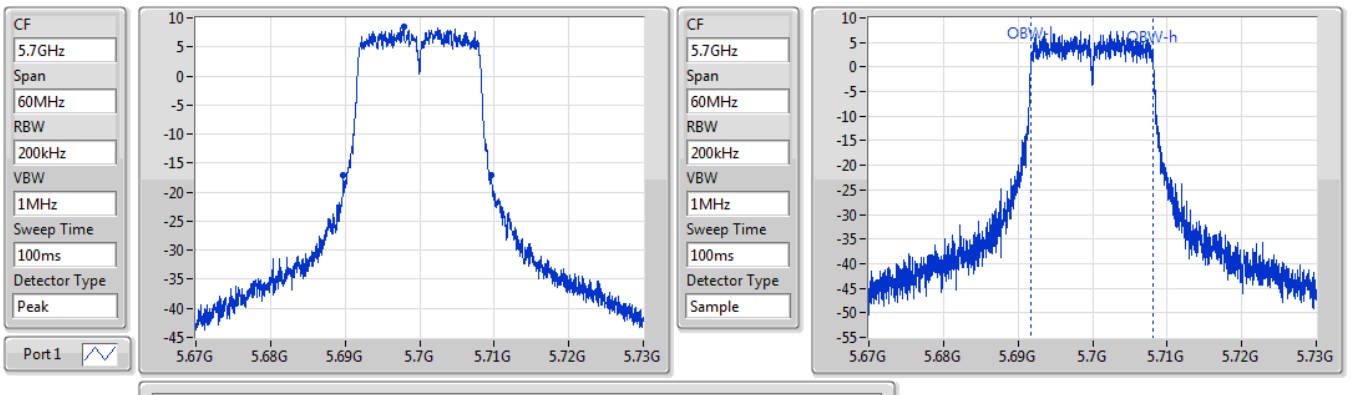
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.67M	5.56962G	5.59029G	16.372M	5.571754G	5.588126G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

5700MHz

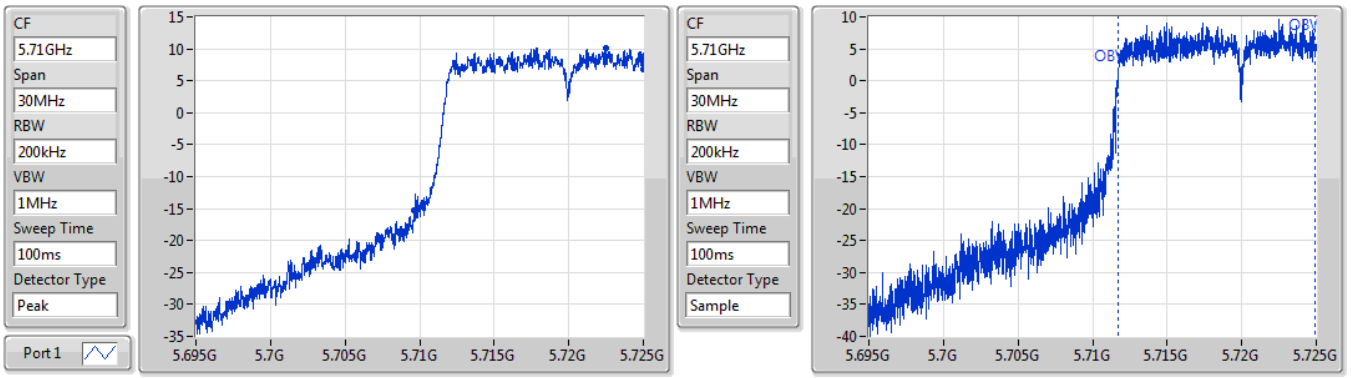


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.92M	5.68974G	5.70966G	16.372M	5.691754G	5.708126G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

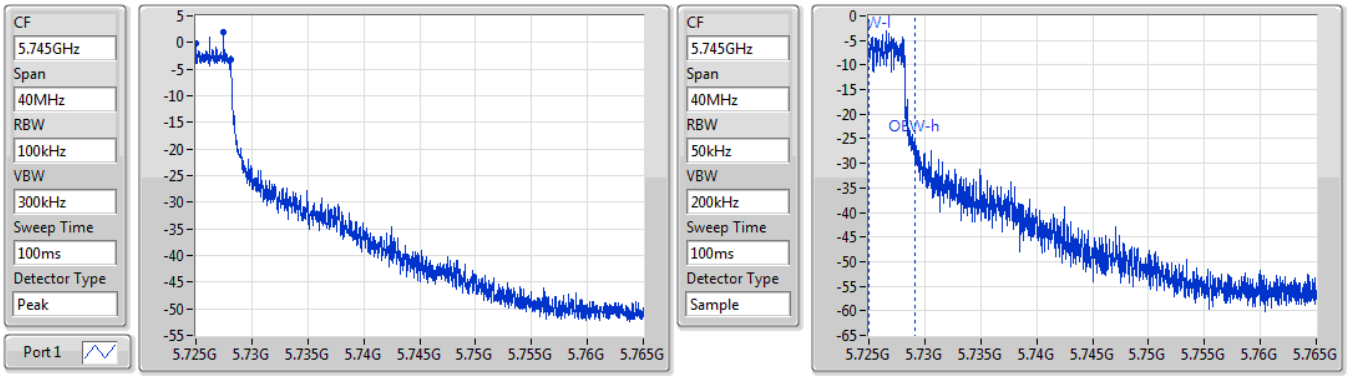


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.375M	5.709625G	5.725G	13.253M	5.711679G	5.724933G	Inf	1

802.11a_Nss1,(6Mbps)_1TX(Port1) EBW

5720MHz Straddle 5.725-5.85GHz

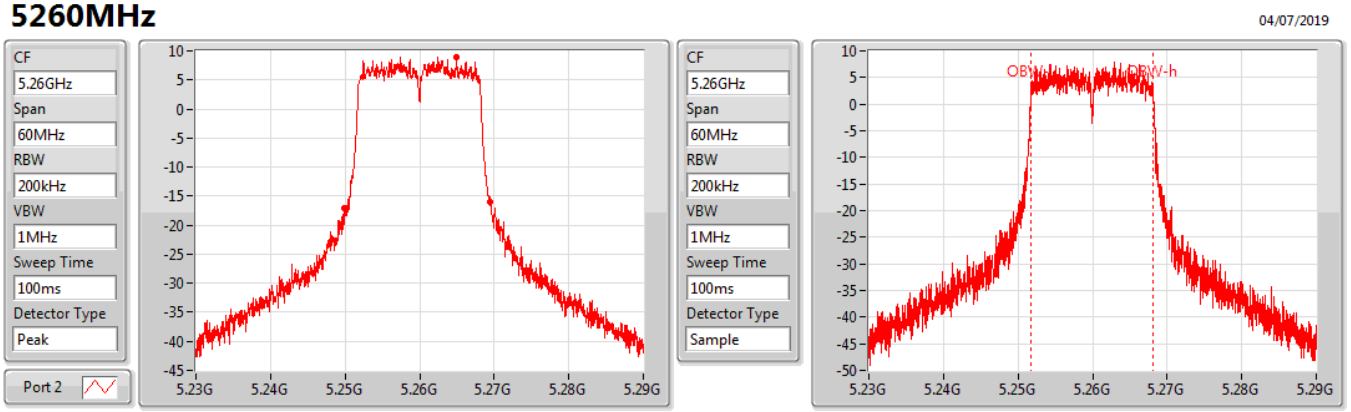
04/07/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	4.118M	5.72501G	5.729128G	500k	1

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

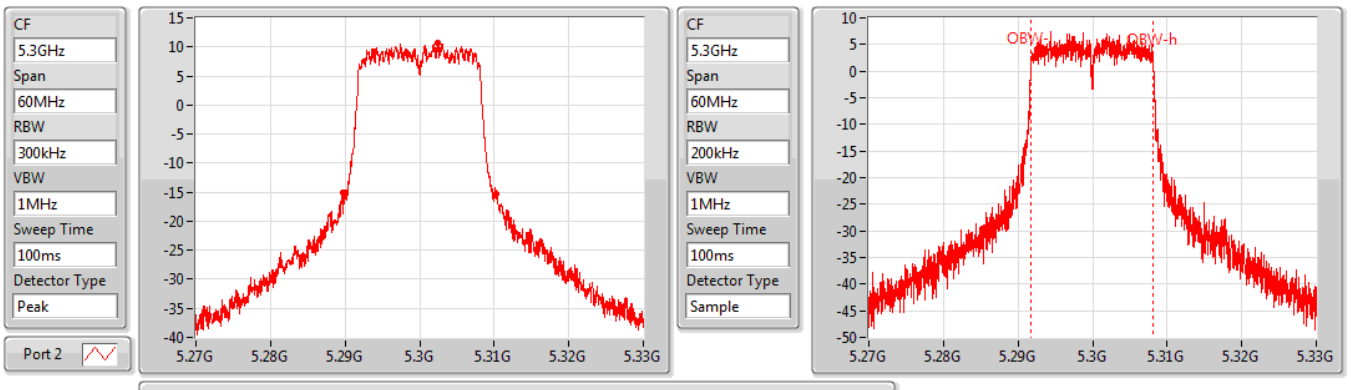
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.65M	5.24986G	5.26951G	16.432M	5.251724G	5.268156G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

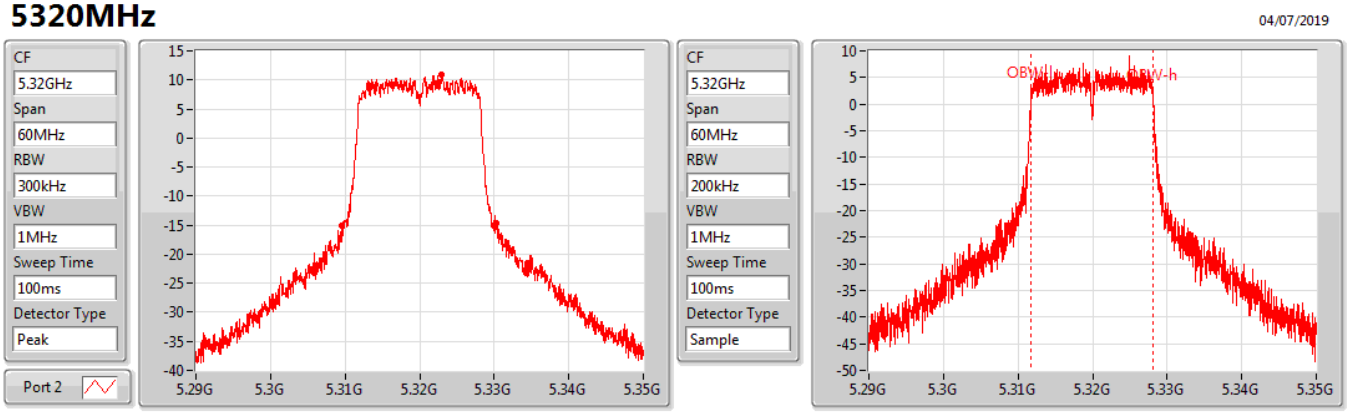
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.52M	5.28977G	5.31029G	16.402M	5.291754G	5.308156G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

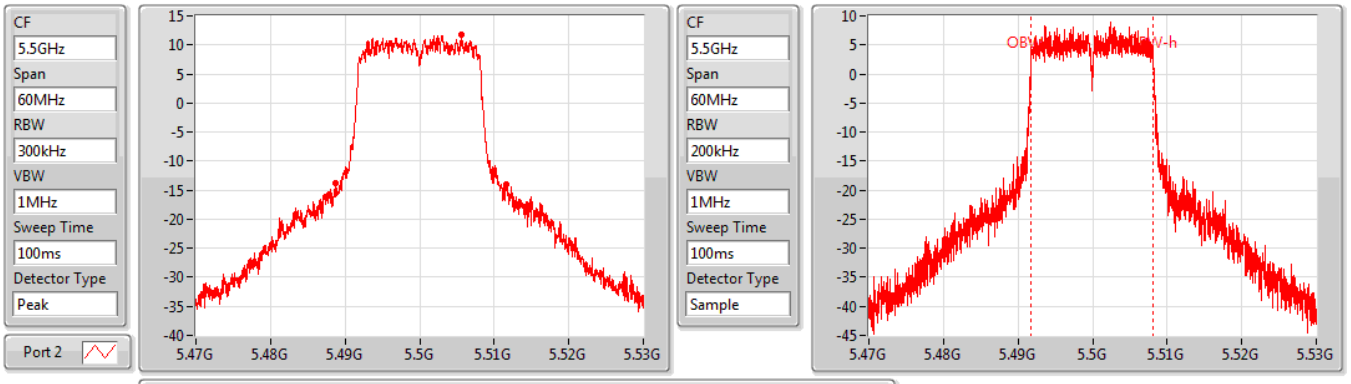
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.7M	5.30959G	5.33029G	16.432M	5.311724G	5.328156G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

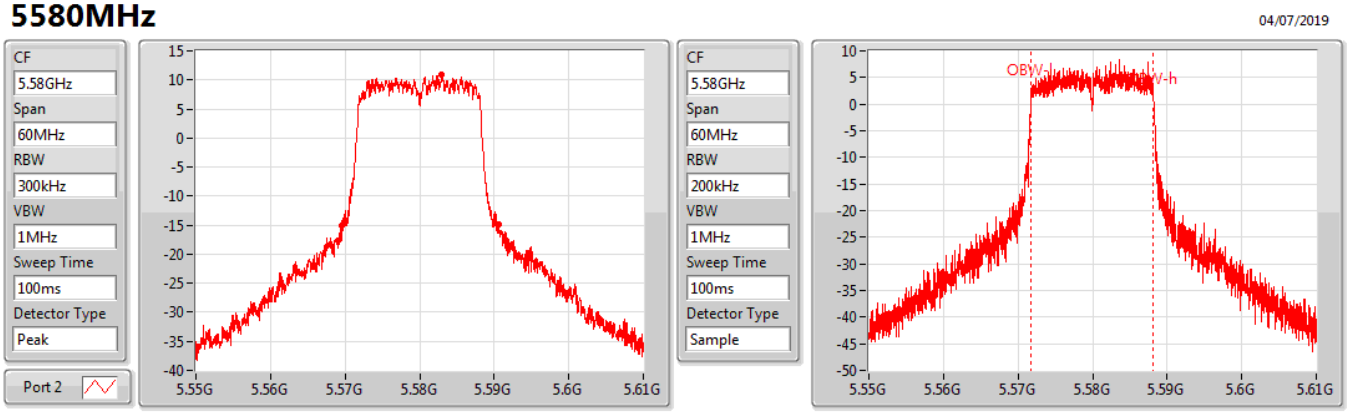
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.89M	5.48878G	5.51167G	16.462M	5.491724G	5.508186G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

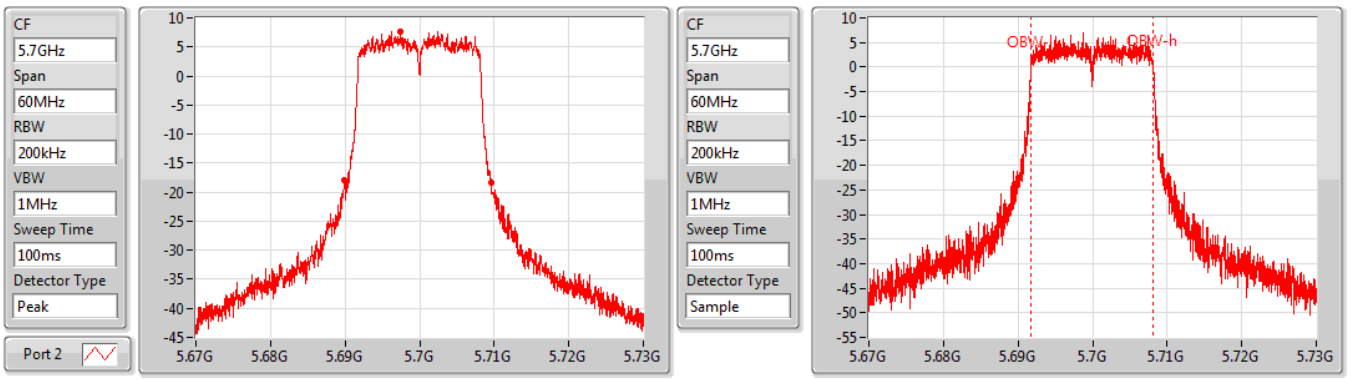
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.03M	5.5695G	5.59053G	16.432M	5.571754G	5.588186G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

5700MHz

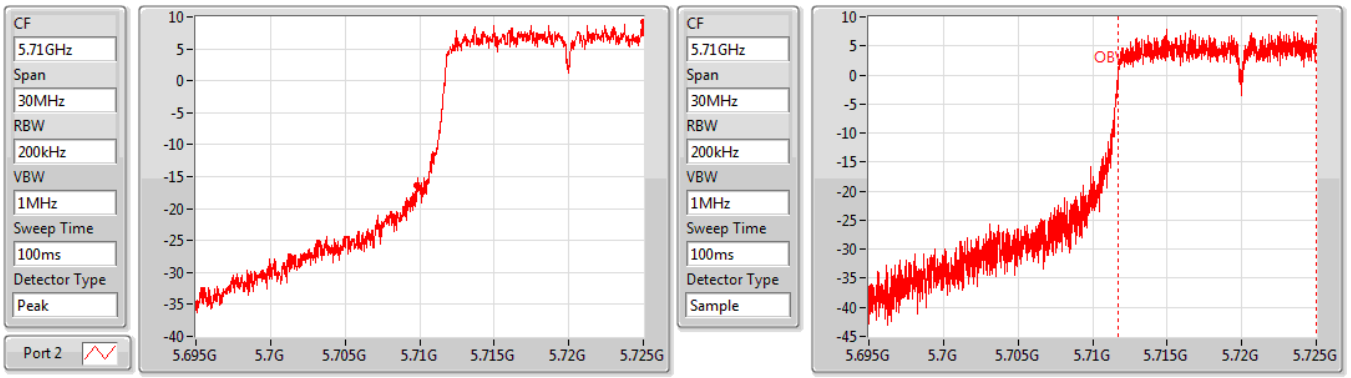


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.71M	5.68995G	5.70966G	16.402M	5.691724G	5.708126G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

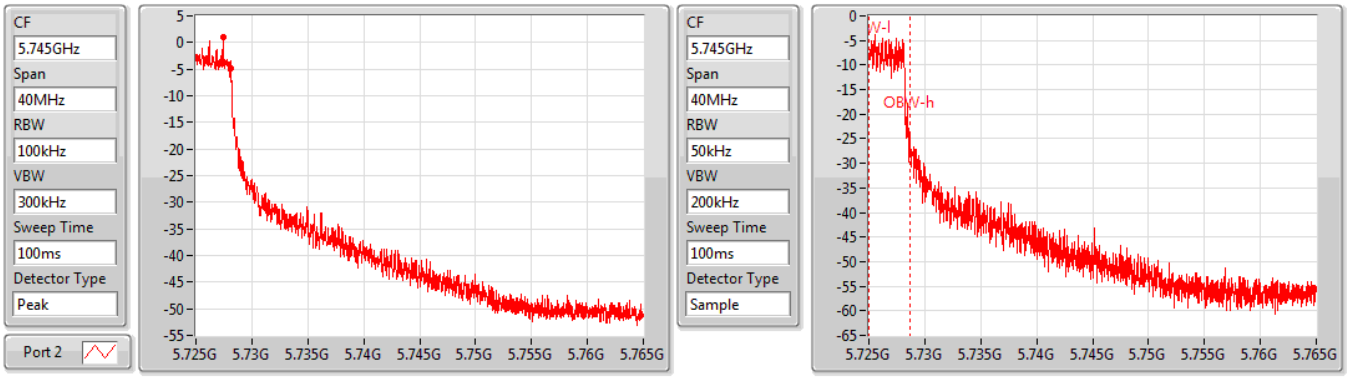


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.18M	5.70982G	5.725G	13.268M	5.711694G	5.724963G	Inf	2

802.11a_Nss1,(6Mbps)_1TX(Port2) EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

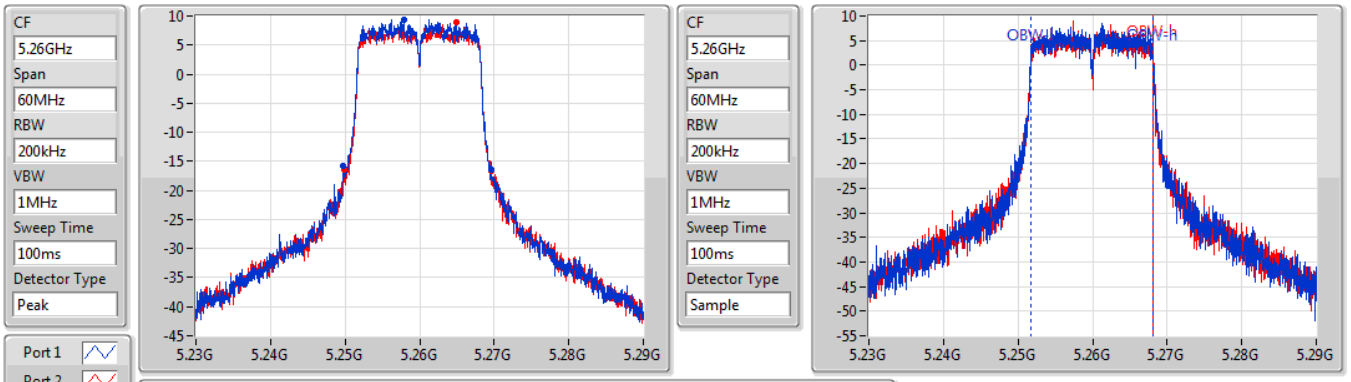


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	3.618M	5.72501G	5.728628G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

5260MHz

04/07/2019

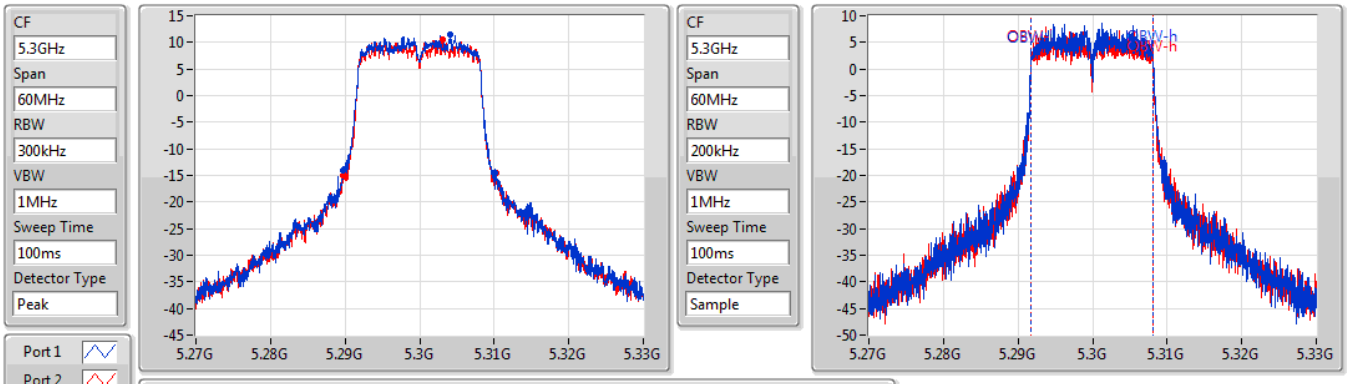


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.92M	5.24971G	5.26963G	16.402M	5.251724G	5.268126G	Inf	1
19.74M	5.24989G	5.26963G	16.432M	5.251724G	5.268156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5300MHz

04/07/2019

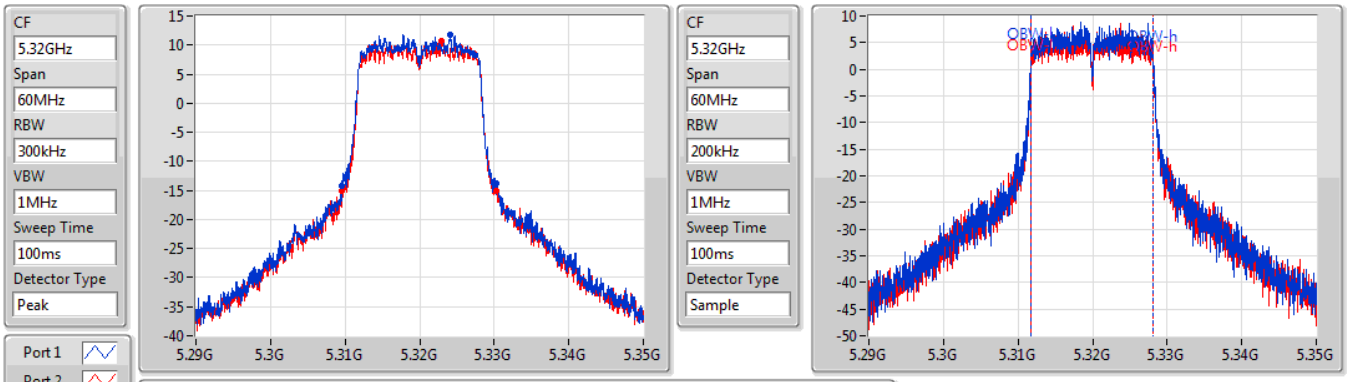


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.49M	5.28965G	5.31014G	16.402M	5.291754G	5.308156G	Inf	1
20.55M	5.28968G	5.31023G	16.402M	5.291754G	5.308156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5320MHz

04/07/2019

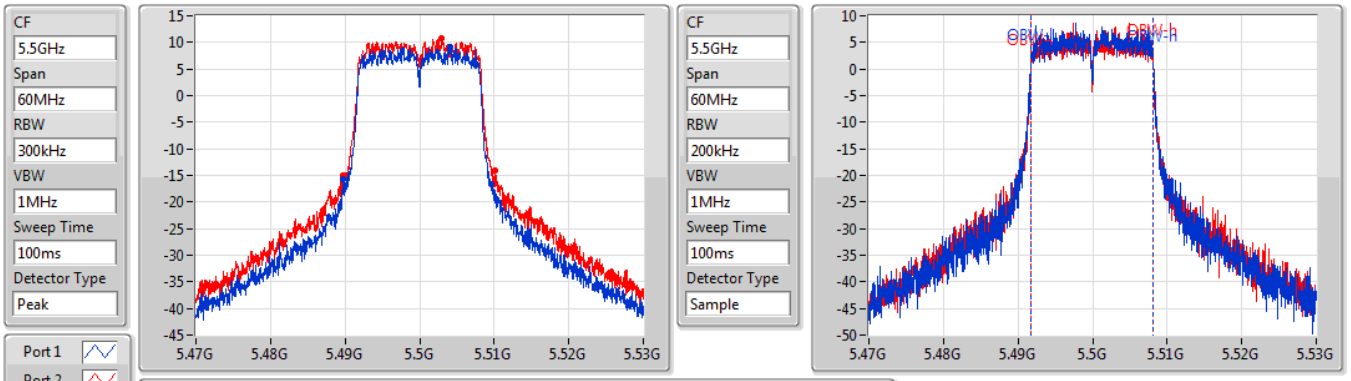


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.7M	5.30956G	5.33026G	16.402M	5.311754G	5.328156G	Inf	1
20.79M	5.30956G	5.33035G	16.432M	5.311724G	5.328156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5500MHz

04/07/2019

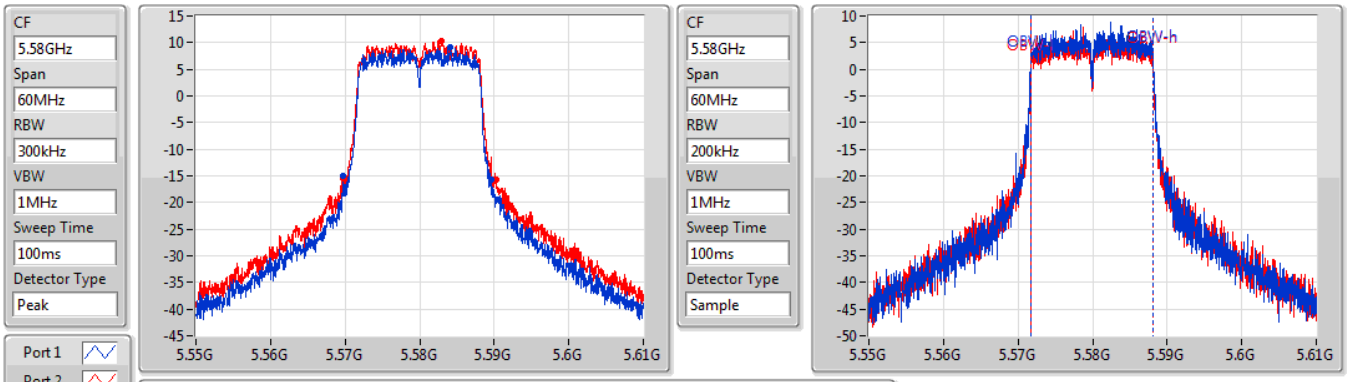


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.98M	5.48971G	5.50969G	16.402M	5.491754G	5.508156G	Inf	1
20.49M	5.48968G	5.51017G	16.402M	5.491724G	5.508126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5580MHz

04/07/2019

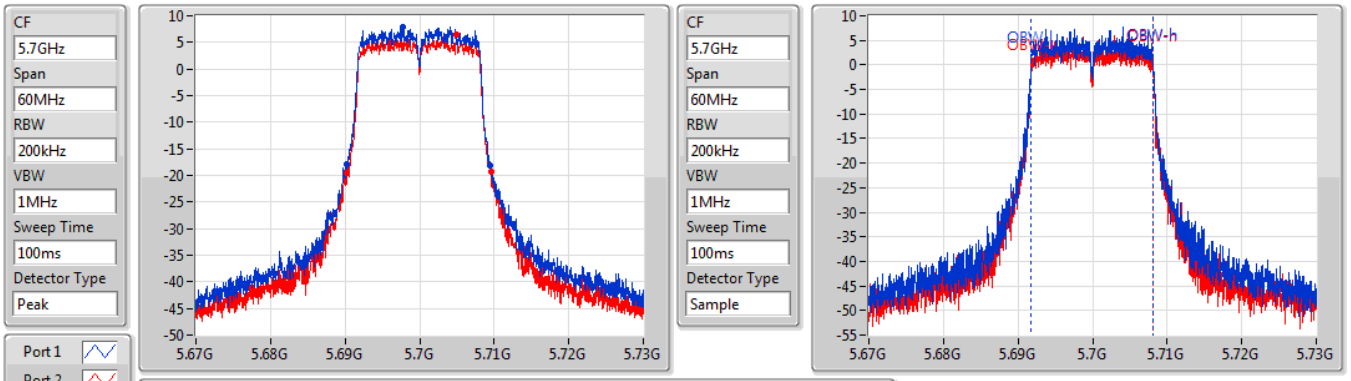


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.95M	5.56971G	5.58966G	16.402M	5.571724G	5.588126G	Inf	1
20.61M	5.56965G	5.59026G	16.402M	5.571724G	5.588126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5700MHz

04/07/2019

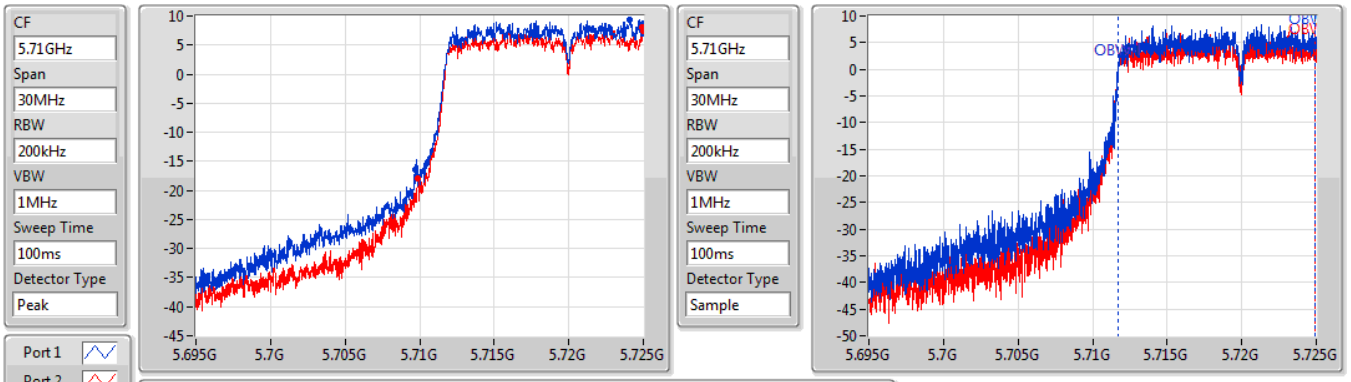


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.2M	5.69019G	5.70939G	16.372M	5.691754G	5.708126G	Inf	1
19.26M	5.69028G	5.70954G	16.402M	5.691724G	5.708126G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

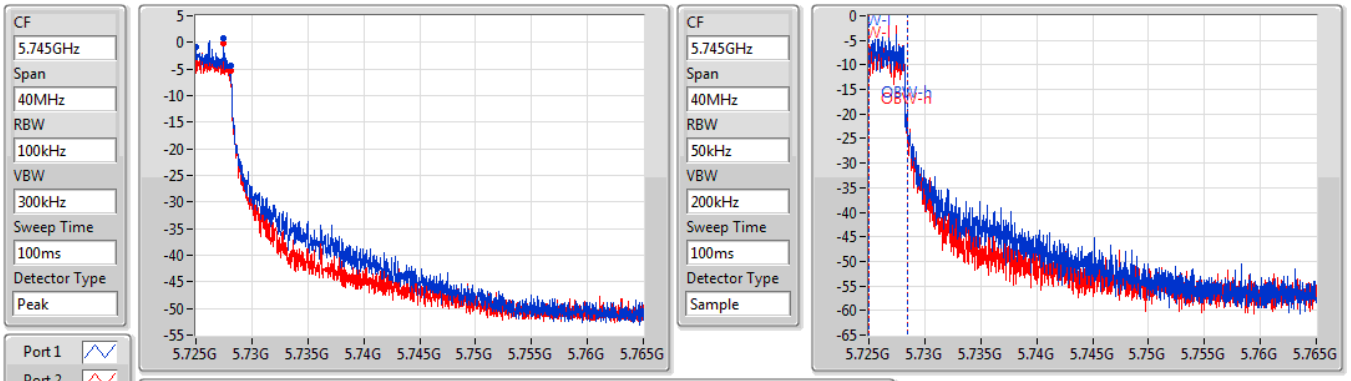


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.33M	5.70967G	5.725G	13.208M	5.711724G	5.724933G	Inf	1
15.09M	5.70991G	5.725G	13.238M	5.711709G	5.724948G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

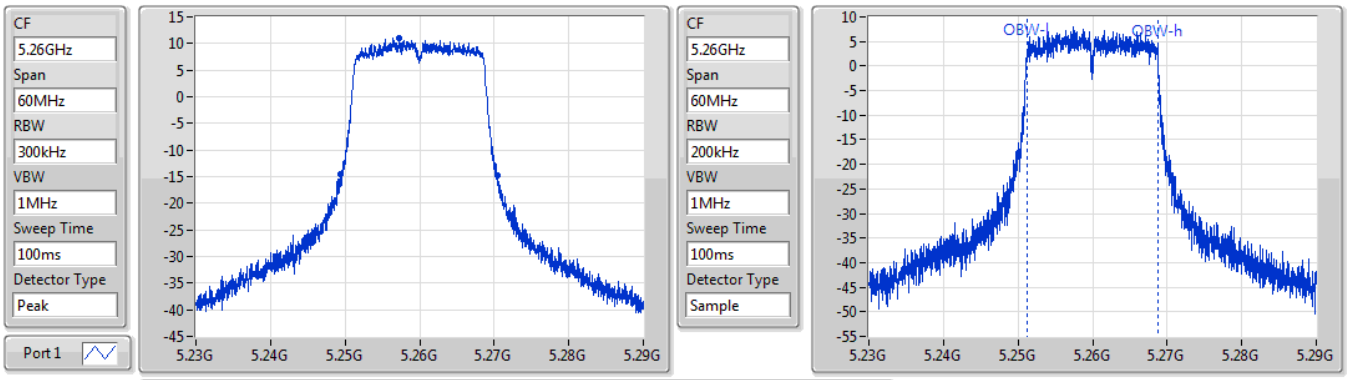


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.458M	5.72501G	5.728468G	500k	1
3.1M	5.725G	5.7281G	3.398M	5.72501G	5.728408G	500k	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5260MHz

04/07/2019

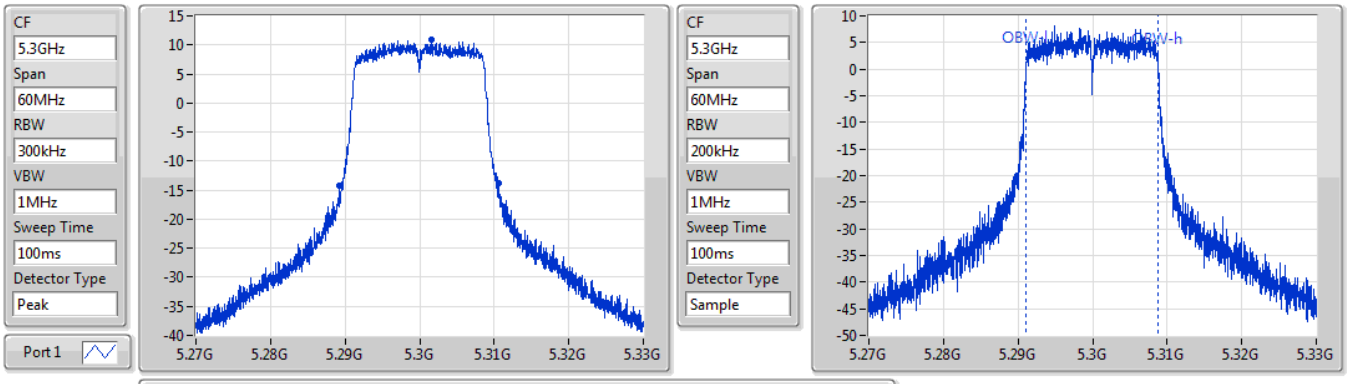


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21M	5.24944G	5.27044G	17.601M	5.251154G	5.268756G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5300MHz

04/07/2019

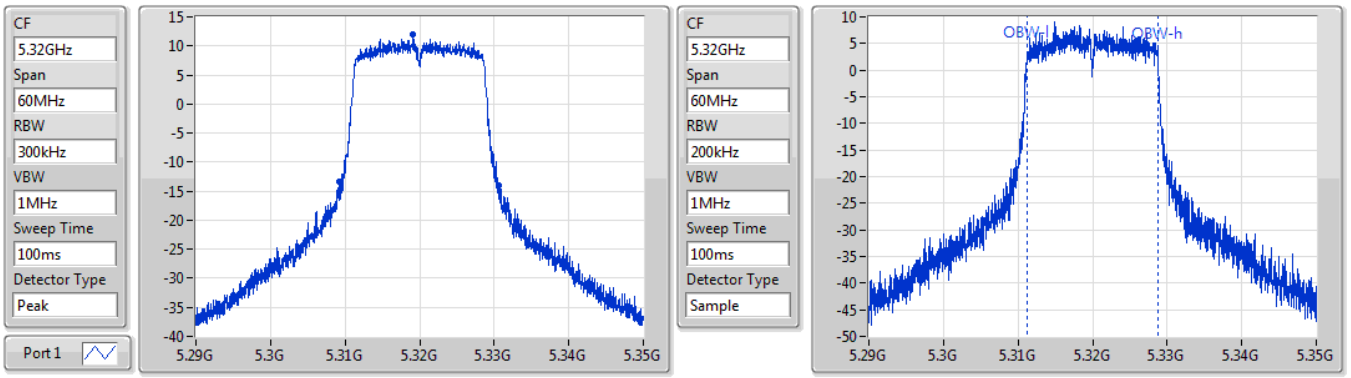


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.24M	5.28929G	5.31053G	17.631M	5.291124G	5.308756G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5320MHz

04/07/2019

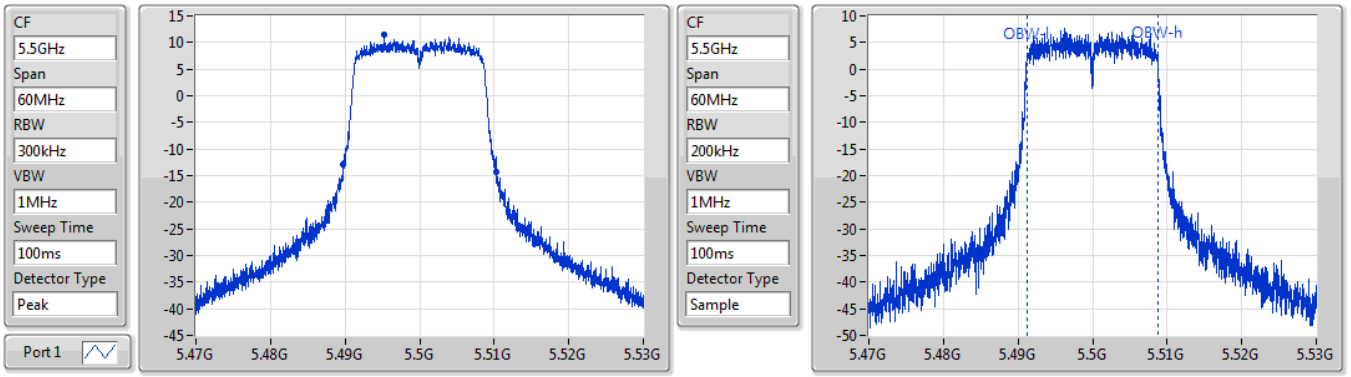


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.36M	5.30923G	5.33059G	17.601M	5.311154G	5.328756G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5500MHz

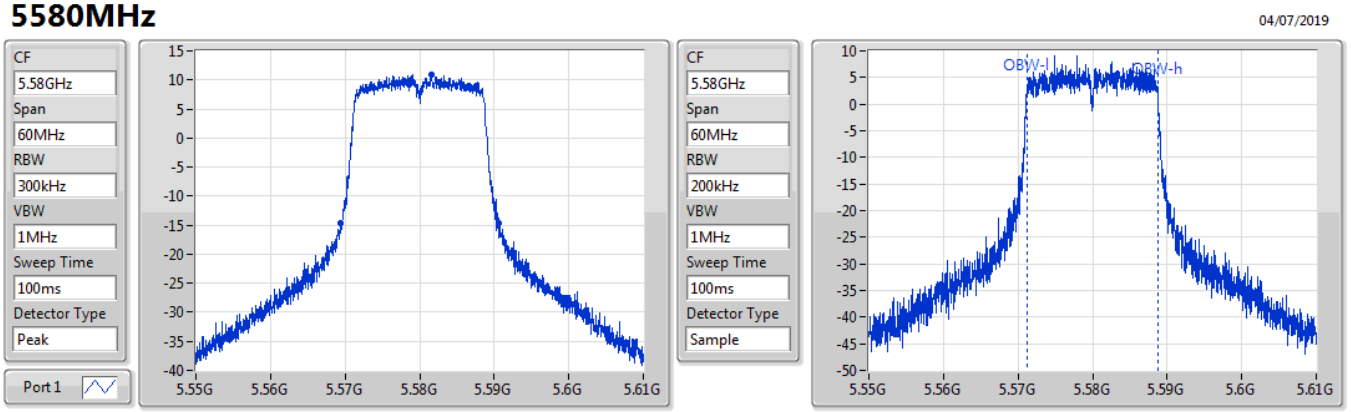
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.61M	5.48968G	5.51029G	17.571M	5.491154G	5.508726G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

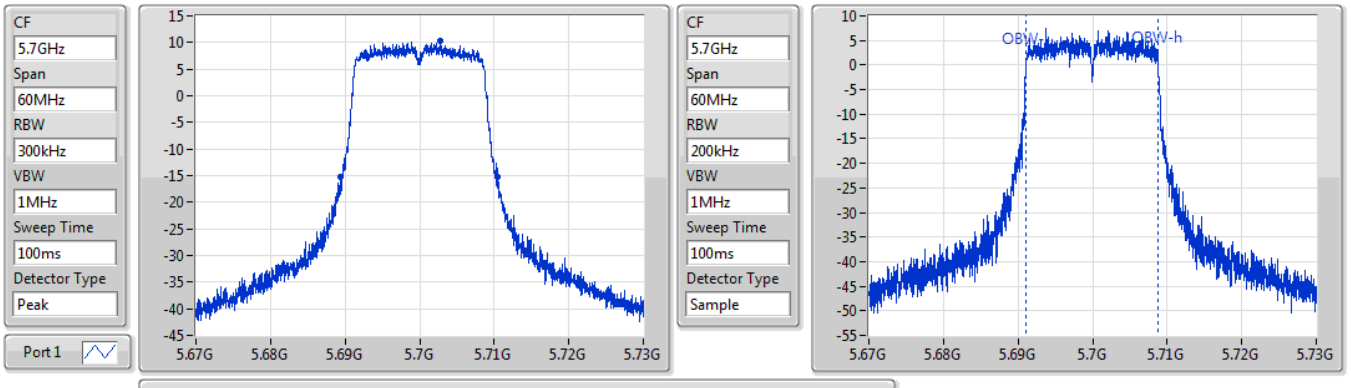
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.18M	5.56947G	5.59065G	17.601M	5.571154G	5.588756G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5700MHz

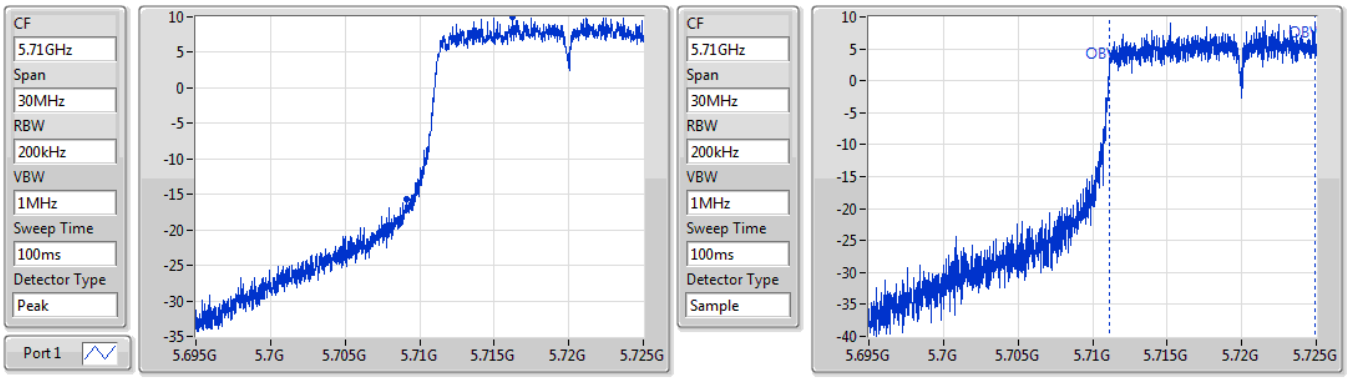


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.06M	5.68938G	5.71044G	17.631M	5.691124G	5.708756G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

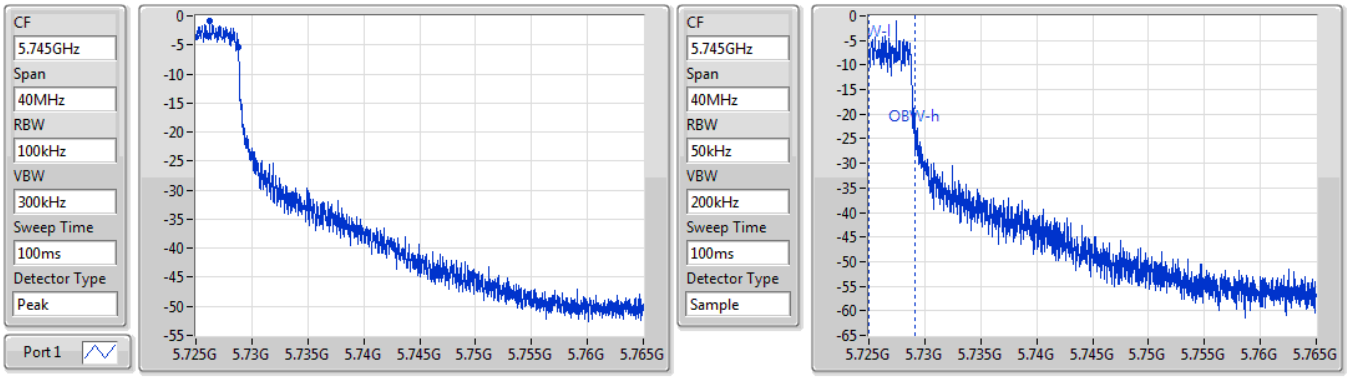


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.9M	5.7091G	5.725G	13.838M	5.711094G	5.724933G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1) EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

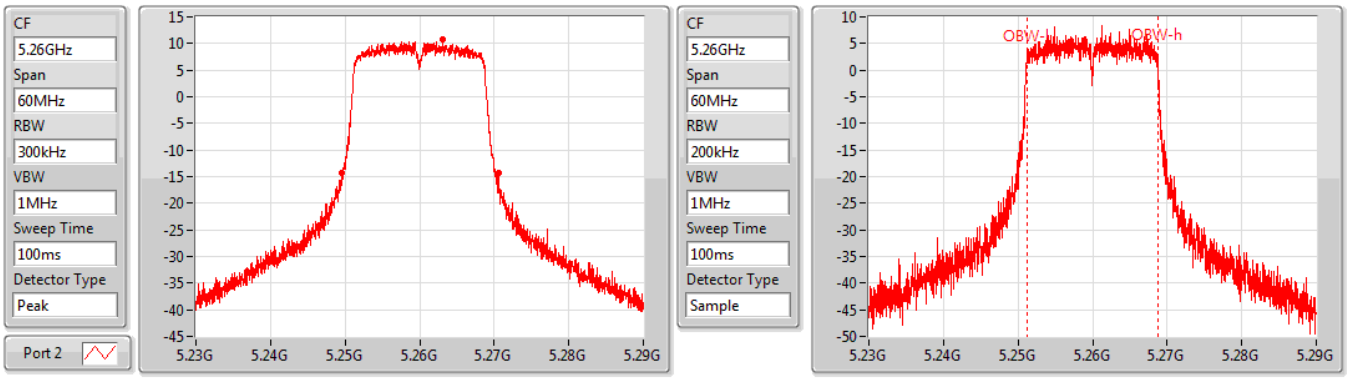


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.76M	5.725G	5.72876G	4.118M	5.72503G	5.729148G	500k	1

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

5260MHz

04/07/2019

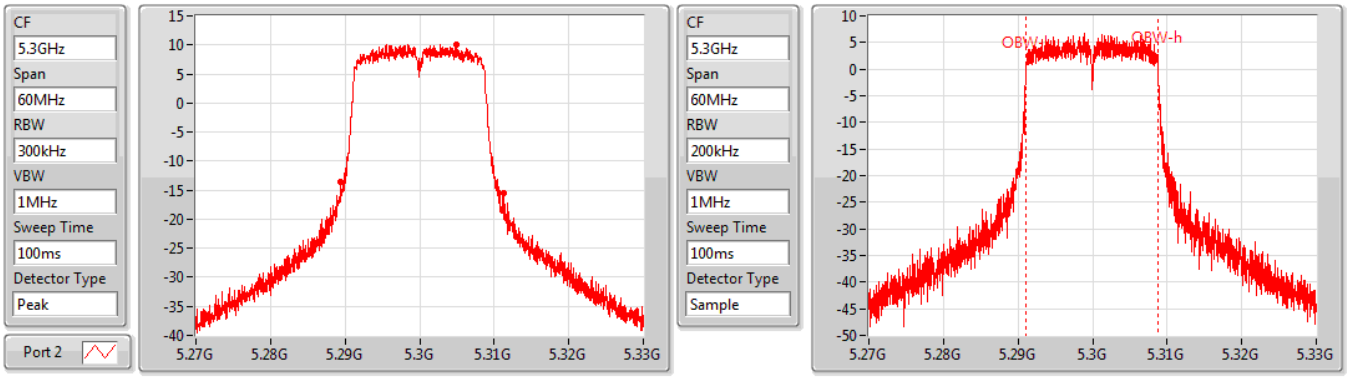


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21M	5.24959G	5.27059G	17.601M	5.251154G	5.268756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

5300MHz

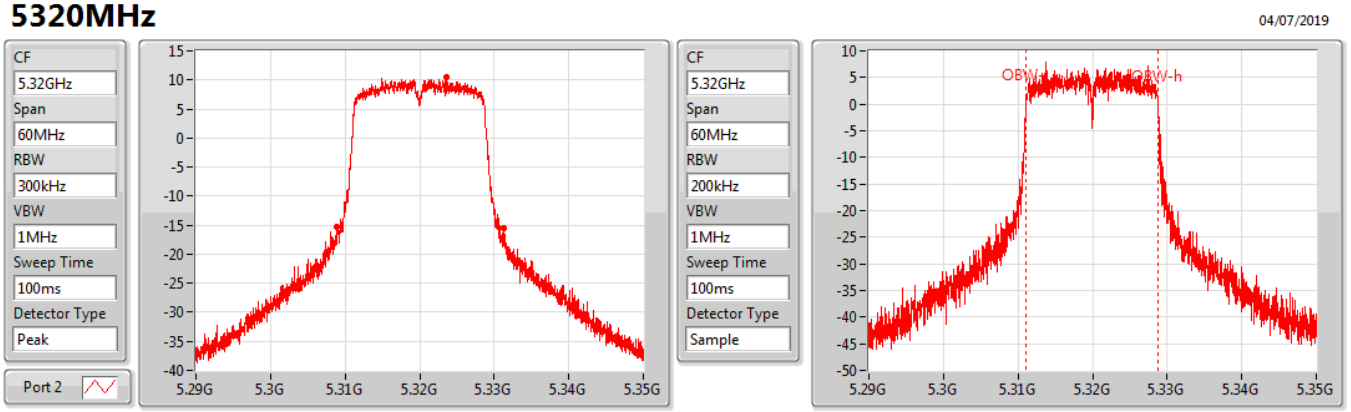
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.81M	5.28941G	5.31122G	17.631M	5.291124G	5.308756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

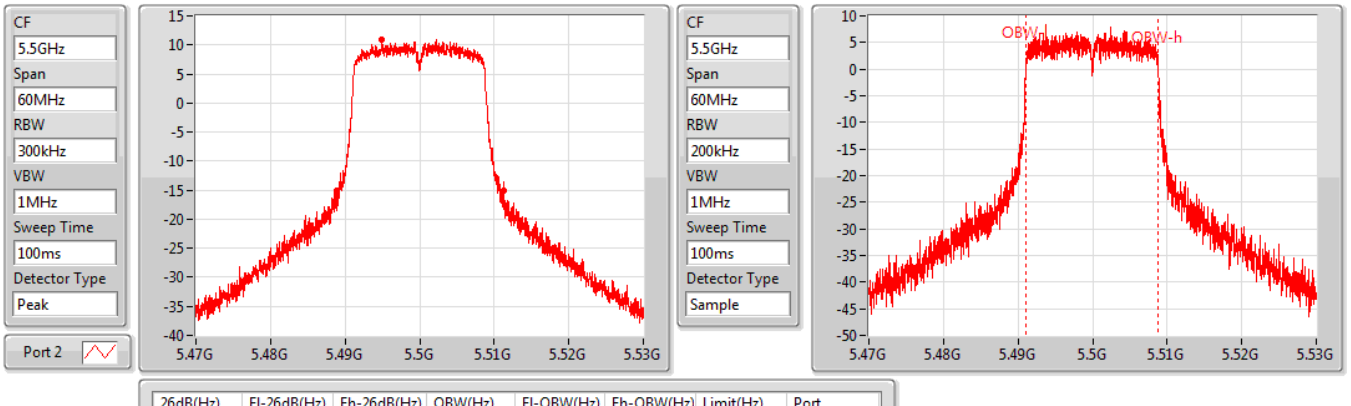
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.5M	5.30884G	5.33134G	17.631M	5.311124G	5.328756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

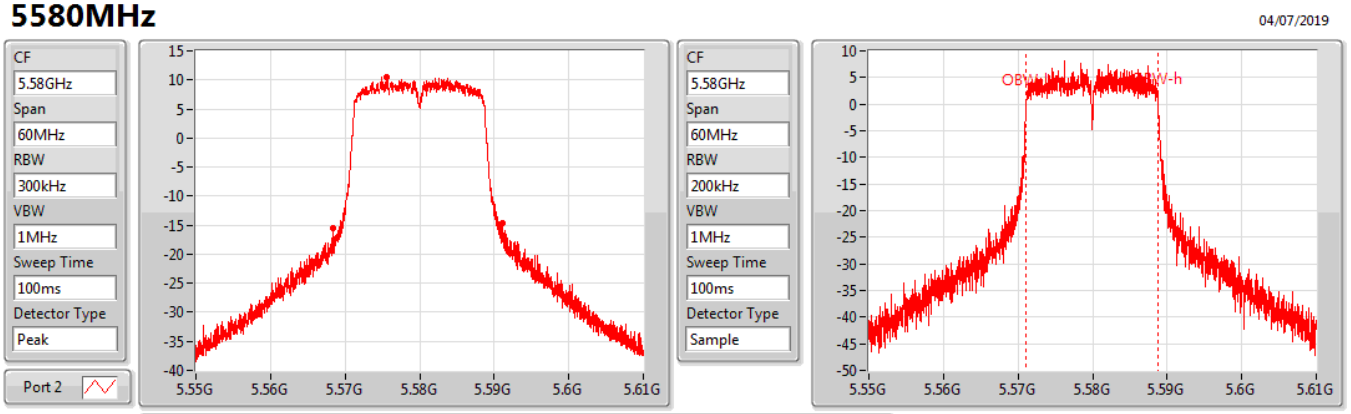
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.41M	5.4889G	5.51131G	17.631M	5.491124G	5.508756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

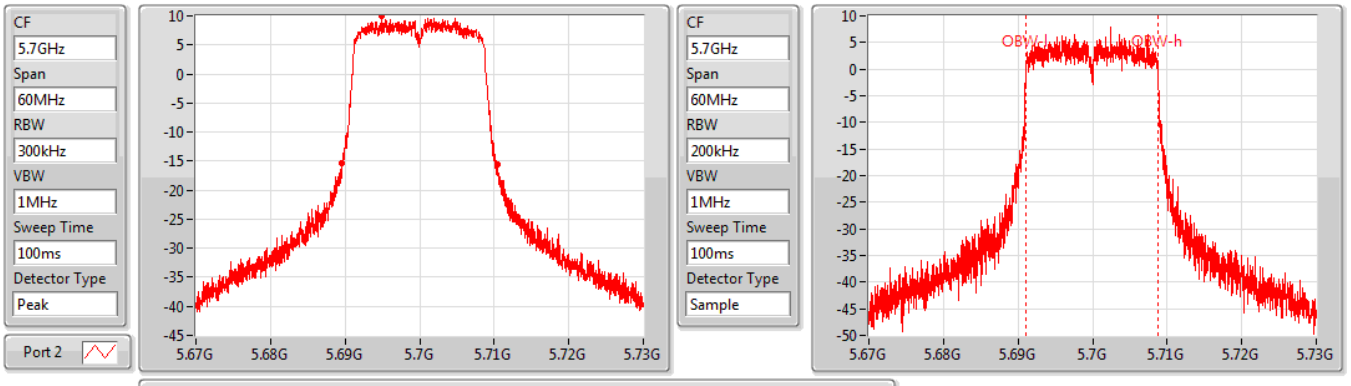
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.68M	5.56845G	5.59113G	17.631M	5.571124G	5.588756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

5700MHz

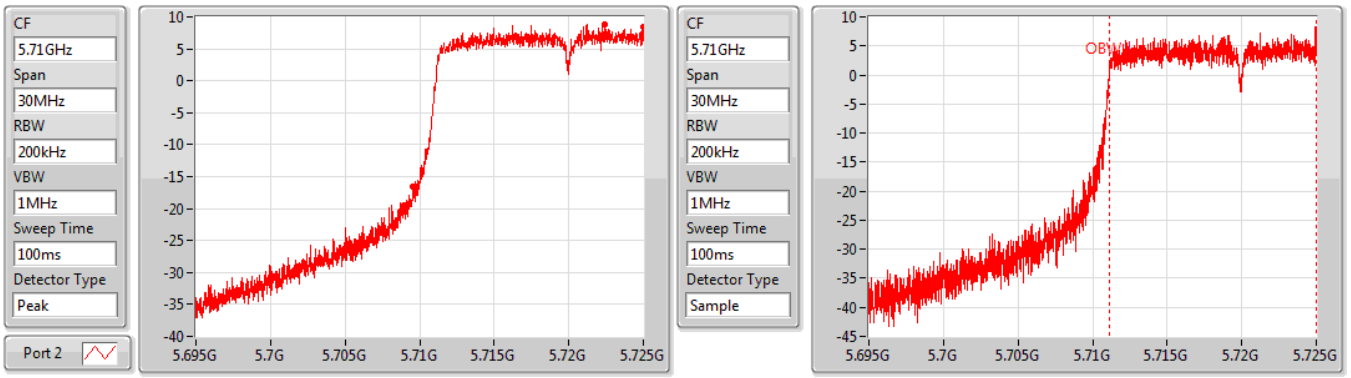


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.94M	5.68953G	5.71047G	17.601M	5.691124G	5.708726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

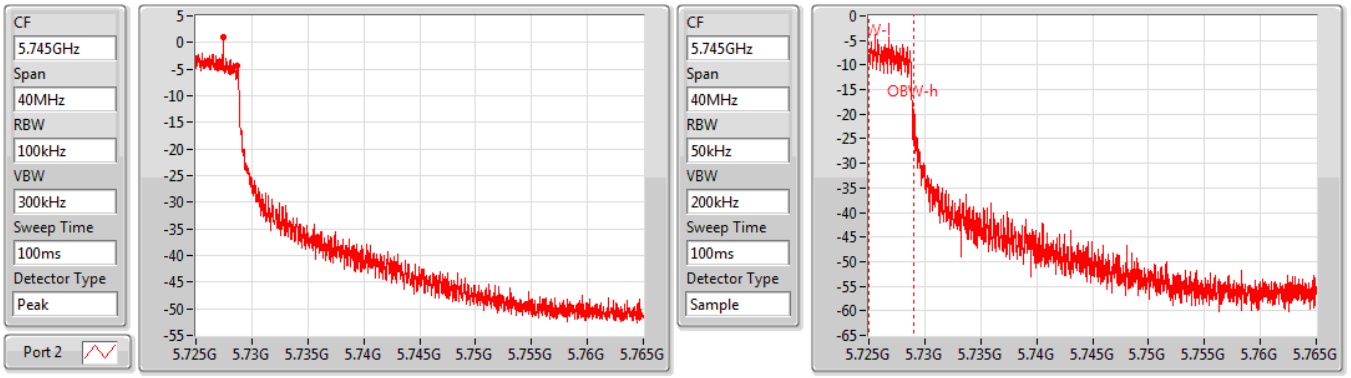


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.48M	5.70952G	5.725G	13.868M	5.711094G	5.724963G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2) EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

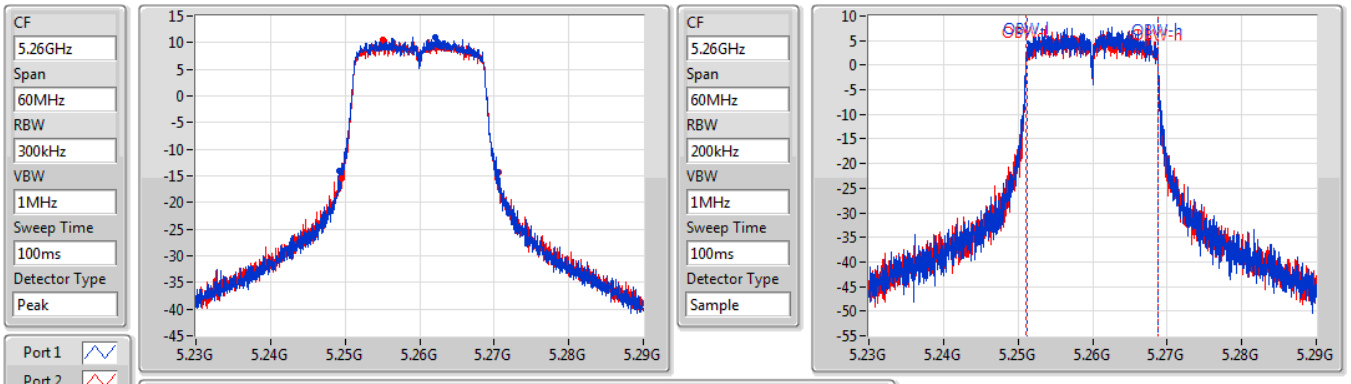


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.72M	5.725G	5.72872G	4.018M	5.72501G	5.729028G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5260MHz

04/07/2019

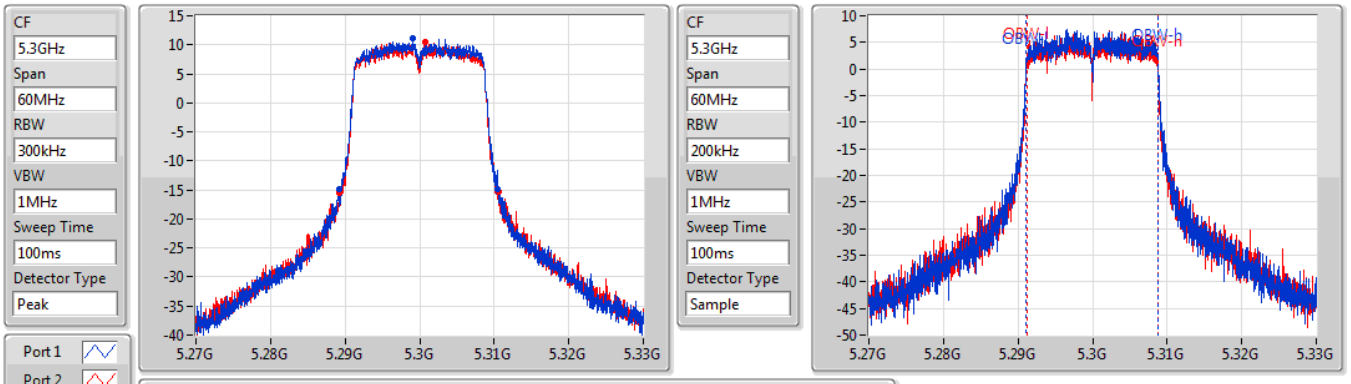


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.18M	5.24926G	5.27044G	17.571M	5.251154G	5.268726G	Inf	1
20.97M	5.24956G	5.27053G	17.601M	5.251124G	5.268726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5300MHz

04/07/2019

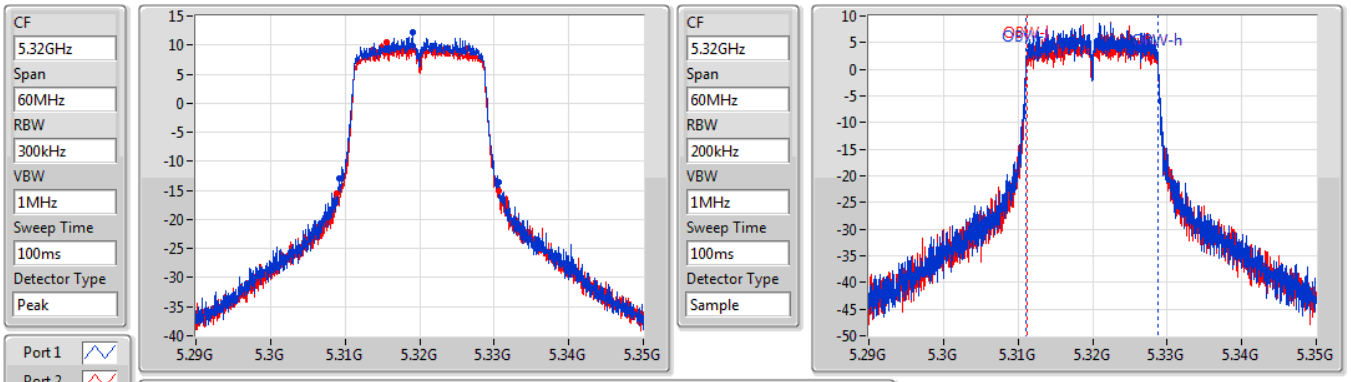


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.36M	5.28914G	5.3105G	17.631M	5.291124G	5.308756G	Inf	1
21.48M	5.28917G	5.31065G	17.601M	5.291154G	5.308756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5320MHz

04/07/2019

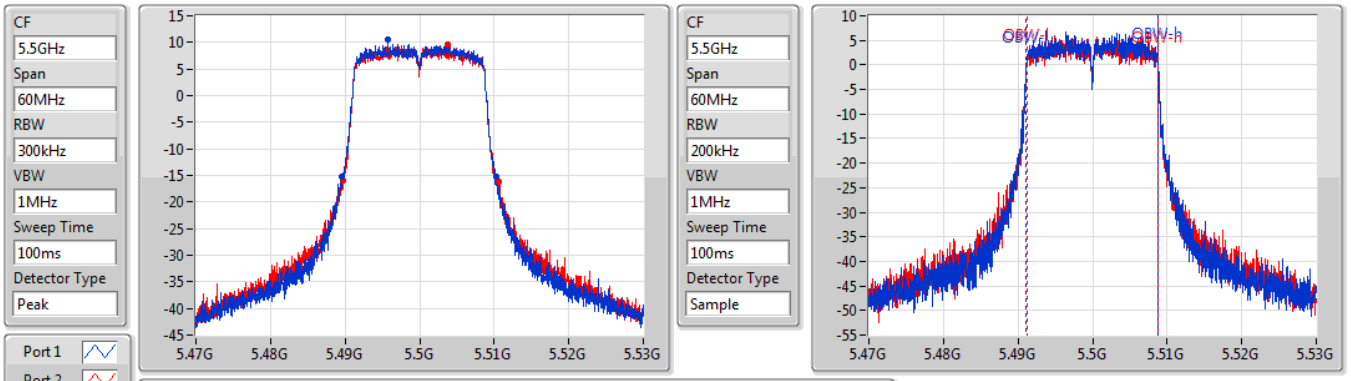


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.33M	5.3092G	5.33053G	17.631M	5.311124G	5.328756G	Inf	1
21.84M	5.30884G	5.33068G	17.601M	5.311154G	5.328756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5500MHz

04/07/2019

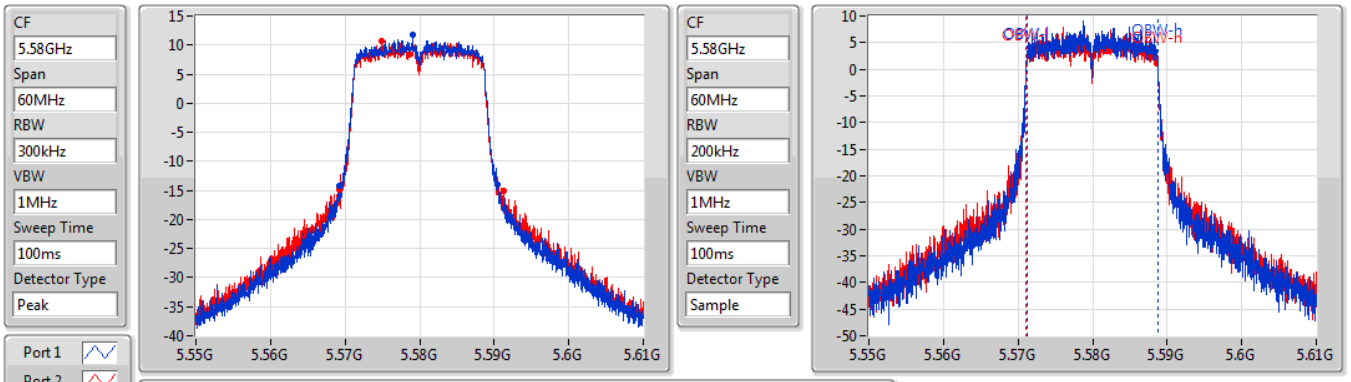


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.73M	5.48956G	5.51029G	17.601M	5.491124G	5.508726G	Inf	1
20.91M	5.48968G	5.51059G	17.571M	5.491154G	5.508726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5580MHz

04/07/2019

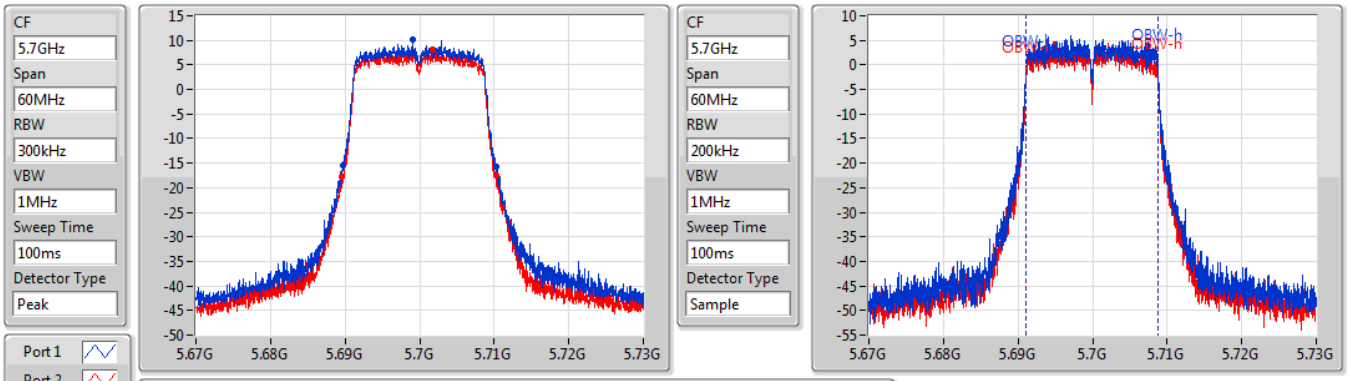


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.21M	5.56923G	5.59044G	17.571M	5.571154G	5.588726G	Inf	1
22.05M	5.56926G	5.59131G	17.631M	5.571124G	5.588756G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5700MHz

04/07/2019

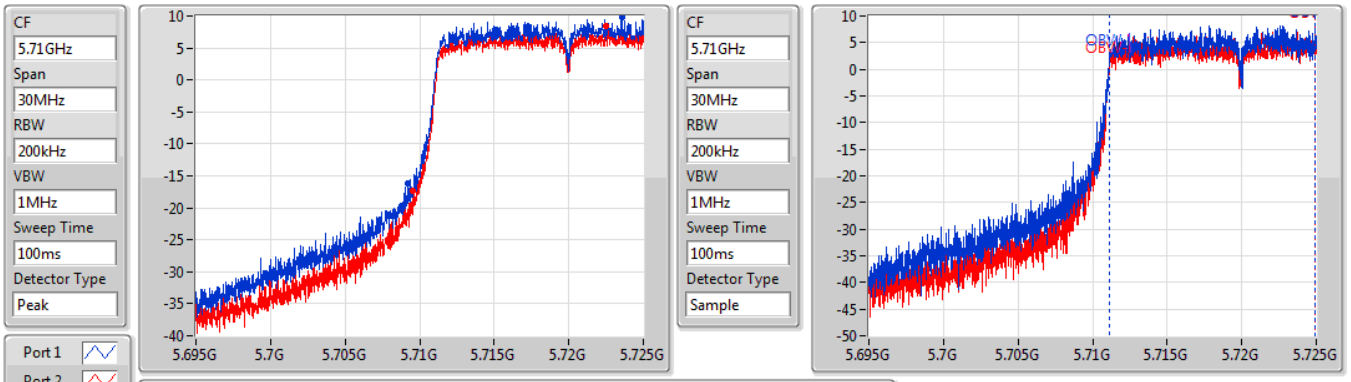


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.49M	5.68974G	5.71023G	17.601M	5.691124G	5.708726G	Inf	1
20.7M	5.68959G	5.71029G	17.601M	5.691124G	5.708726G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

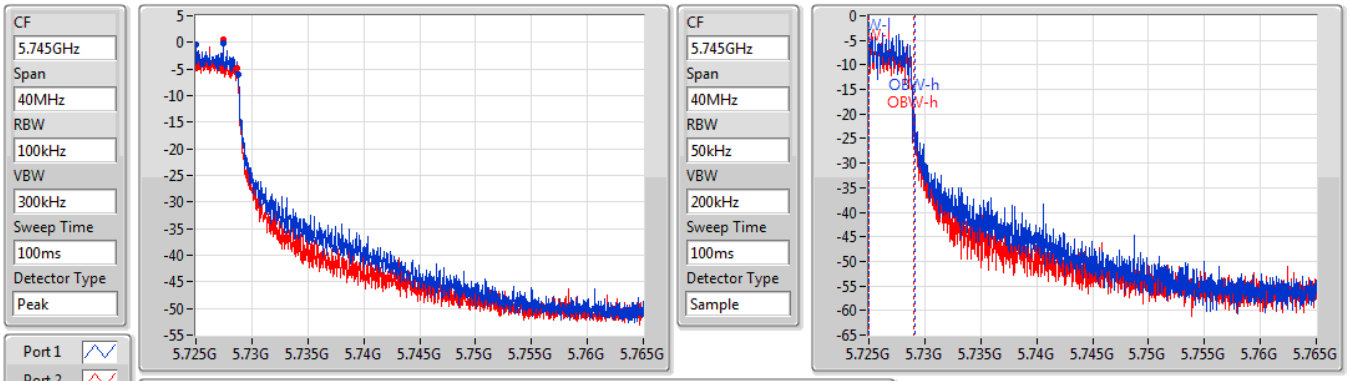


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.765M	5.709235G	5.725G	13.853M	5.711094G	5.724948G	Inf	1
15.435M	5.709565G	5.725G	13.838M	5.711109G	5.724948G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5720MHz Straddle 5.725-5.85GHz

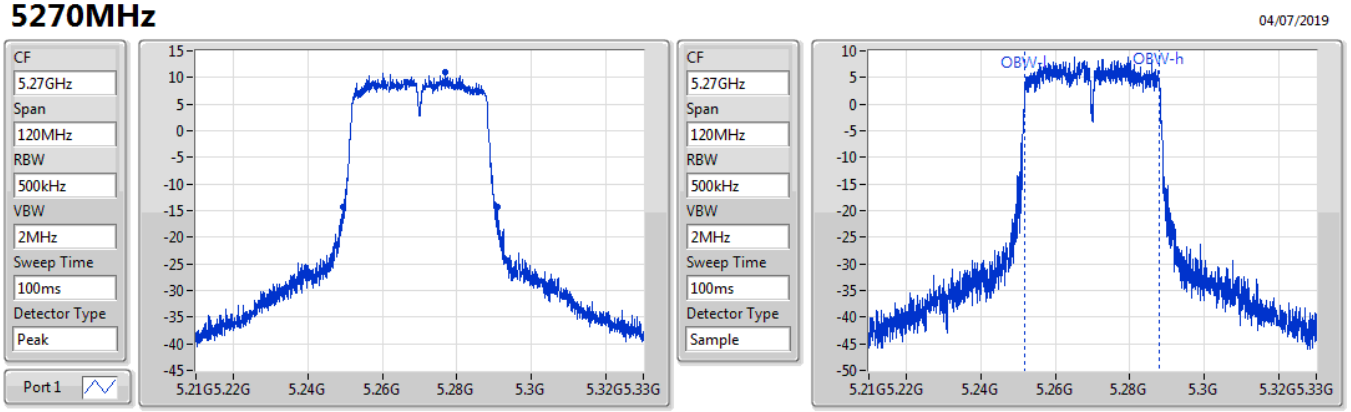
04/07/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.76M	5.725G	5.72876G	4.058M	5.72501G	5.729068G	500k	1
3.72M	5.725G	5.72872G	3.958M	5.72503G	5.728988G	500k	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

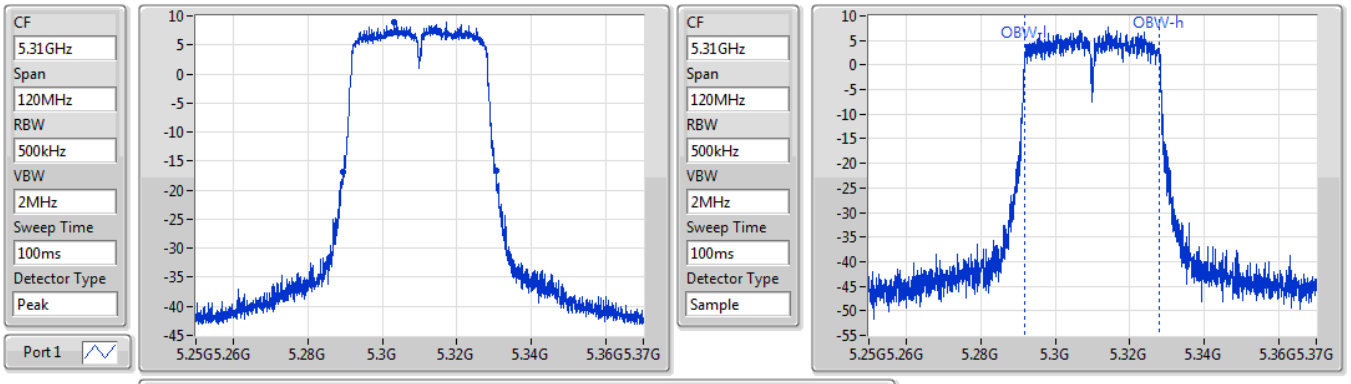
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.34M	5.24954G	5.29088G	36.102M	5.251889G	5.287991G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5310MHz

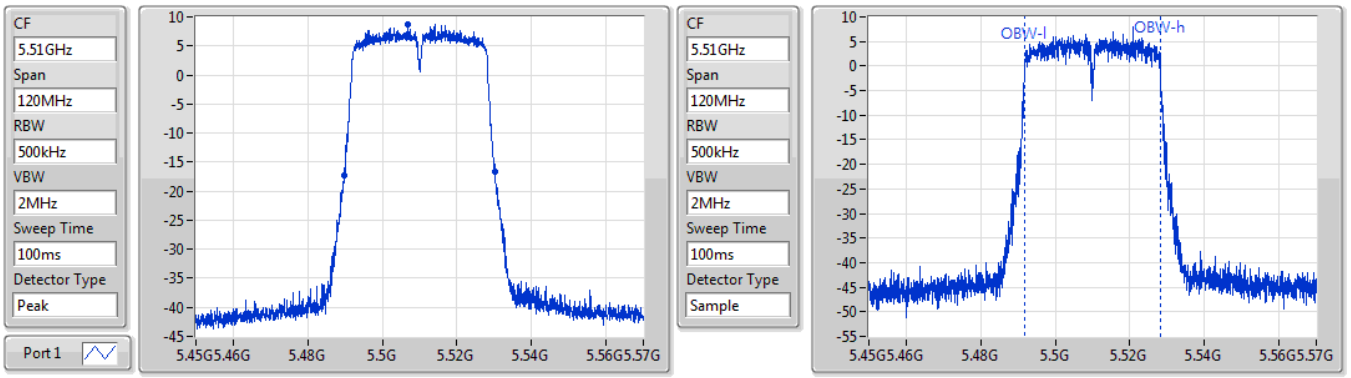


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.04M	5.28954G	5.33058G	36.102M	5.291889G	5.327991G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5510MHz

04/07/2019

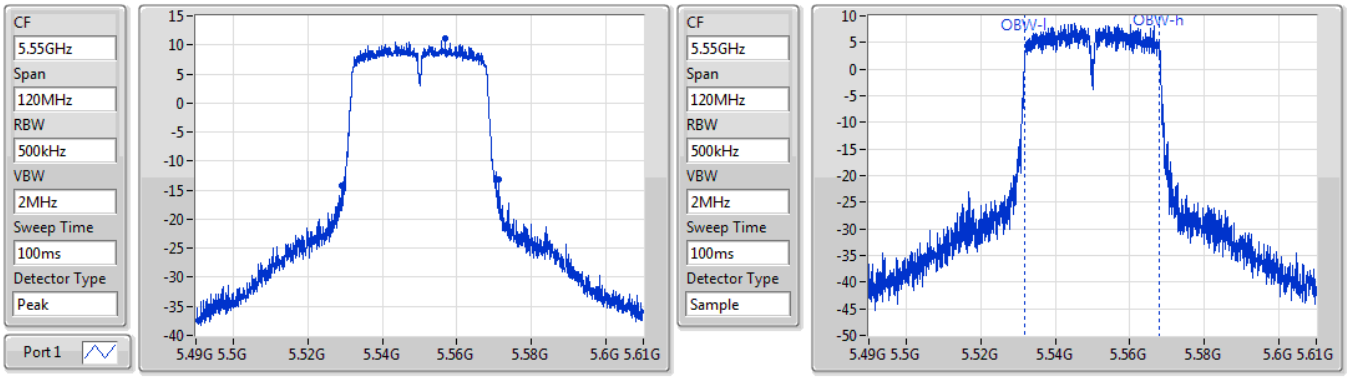


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.32M	5.4899G	5.53022G	36.102M	5.491949G	5.528051G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5550MHz

04/07/2019

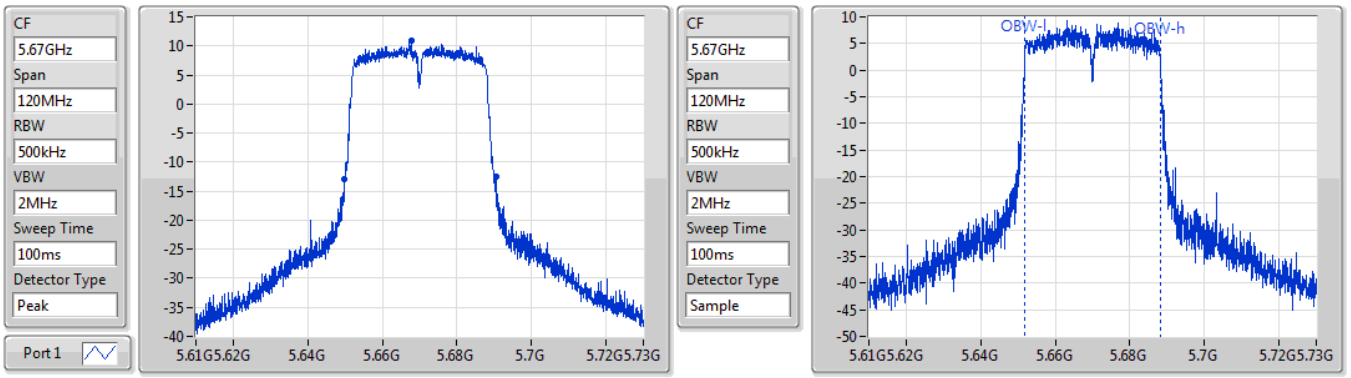


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.88M	5.52918G	5.57106G	36.102M	5.531889G	5.567991G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5670MHz

04/07/2019

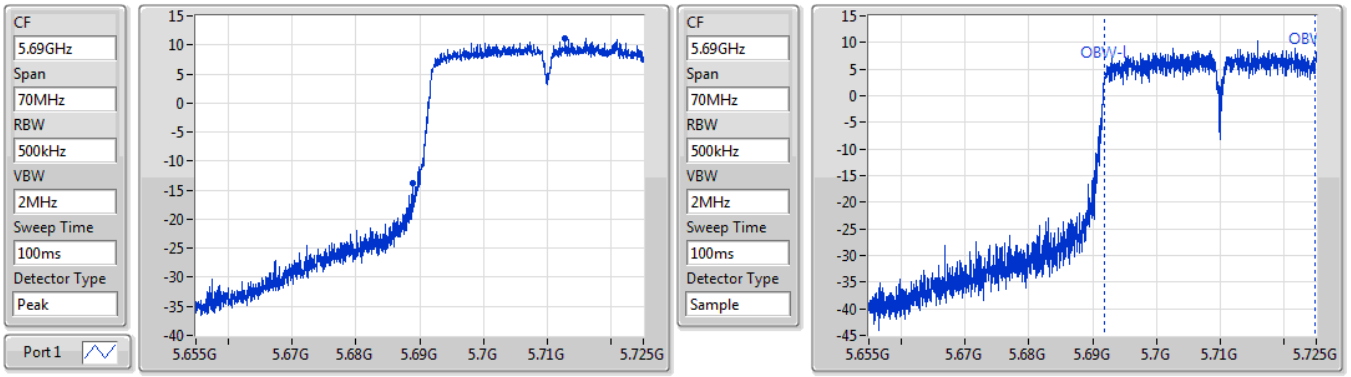


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.74M	5.64984G	5.69058G	36.102M	5.651949G	5.688051G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5710MHz Straddle 5.47-5.725GHz

04/07/2019

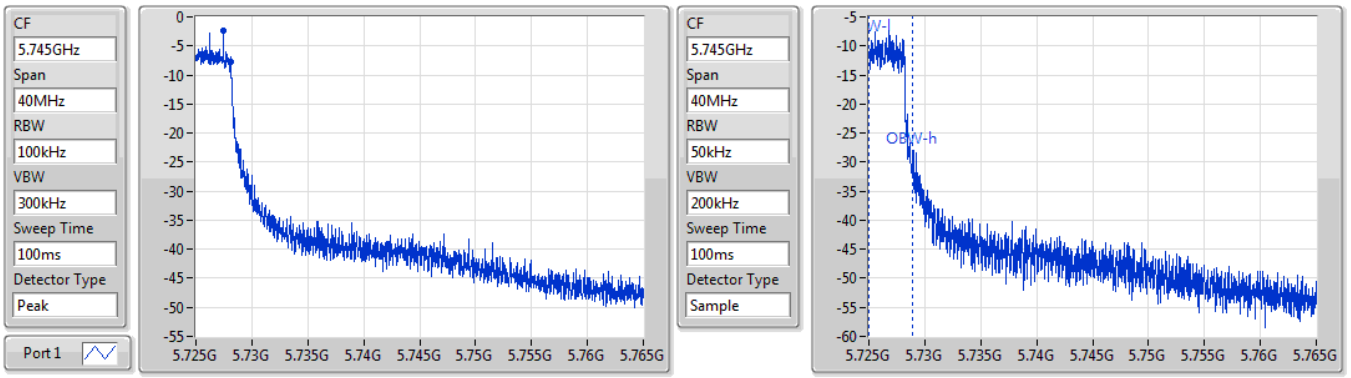


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.015M	5.688985G	5.725G	32.954M	5.691889G	5.724843G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1) EBW

5710MHz Straddle 5.725-5.85GHz

04/07/2019

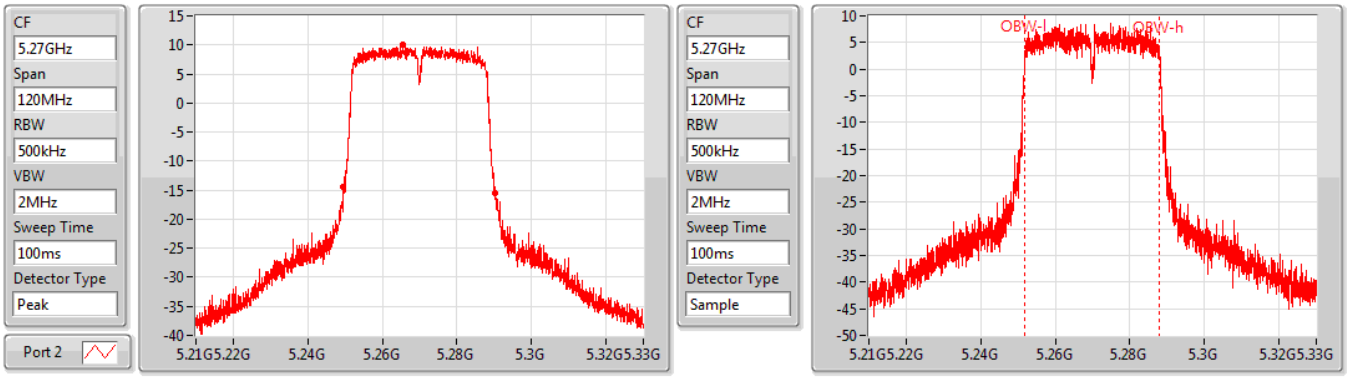


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	3.918M	5.72501G	5.728928G	500k	1

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5270MHz

04/07/2019

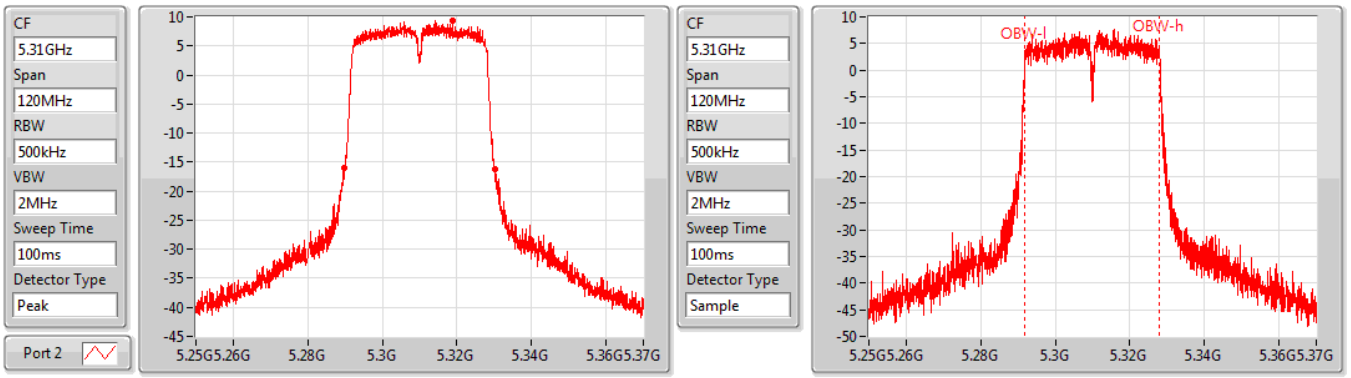


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.74M	5.2496G	5.29034G	36.102M	5.251889G	5.287991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5310MHz

04/07/2019

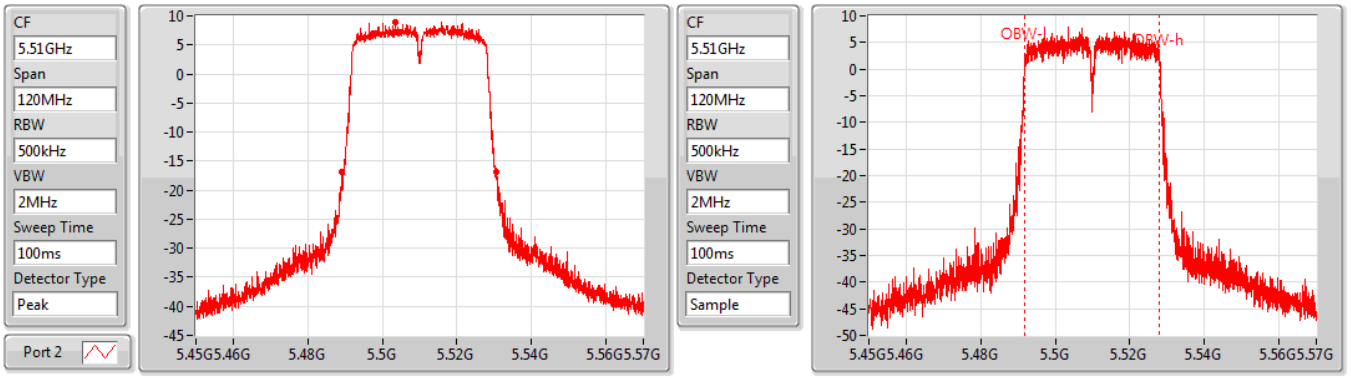


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.62M	5.28966G	5.33028G	36.102M	5.291889G	5.327991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5510MHz

04/07/2019

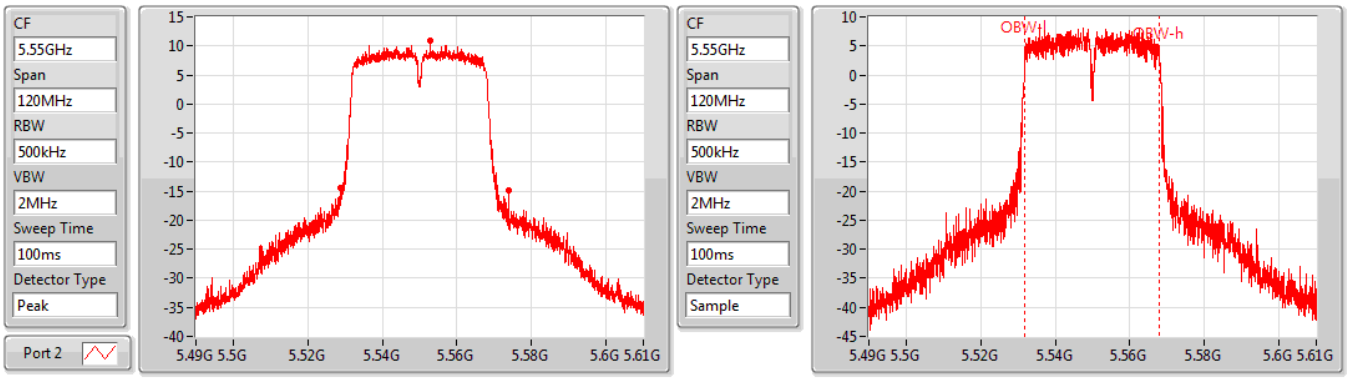


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.52M	5.48906G	5.53058G	36.102M	5.491889G	5.527991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5550MHz

04/07/2019

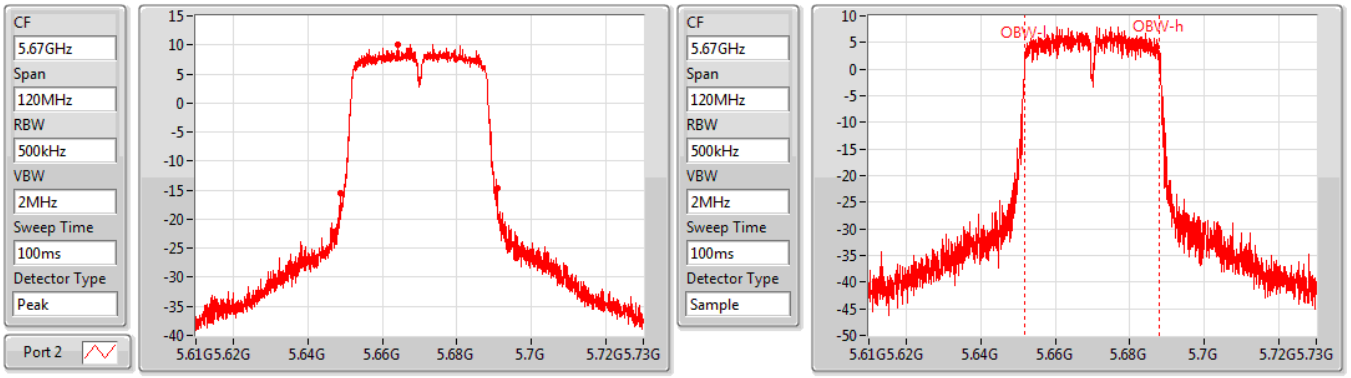


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45.12M	5.52882G	5.57394G	36.162M	5.531829G	5.567991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5670MHz

04/07/2019

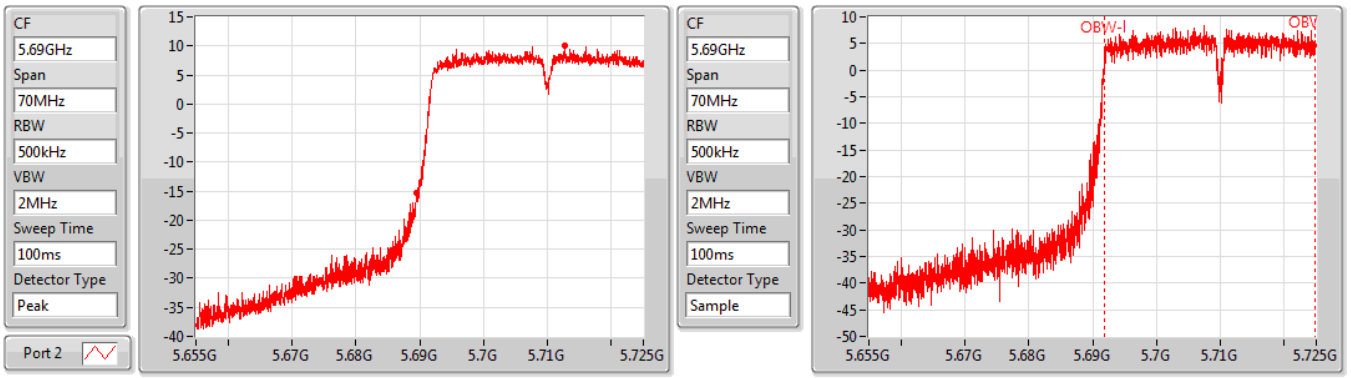


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42M	5.64876G	5.69076G	36.102M	5.651889G	5.687991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5710MHz Straddle 5.47-5.725GHz

04/07/2019

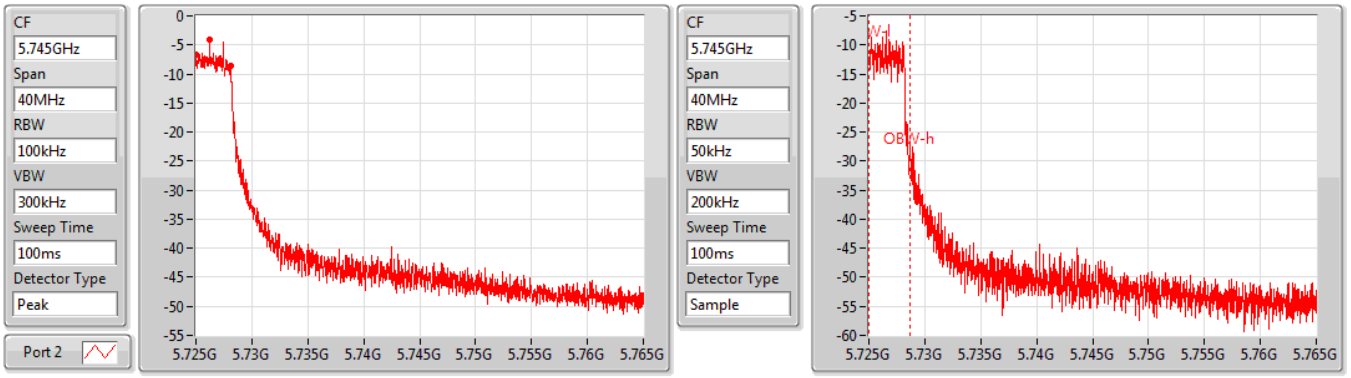


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.49M	5.68951G	5.725G	32.954M	5.691889G	5.724843G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2) EBW

5710MHz Straddle 5.725-5.85GHz

04/07/2019

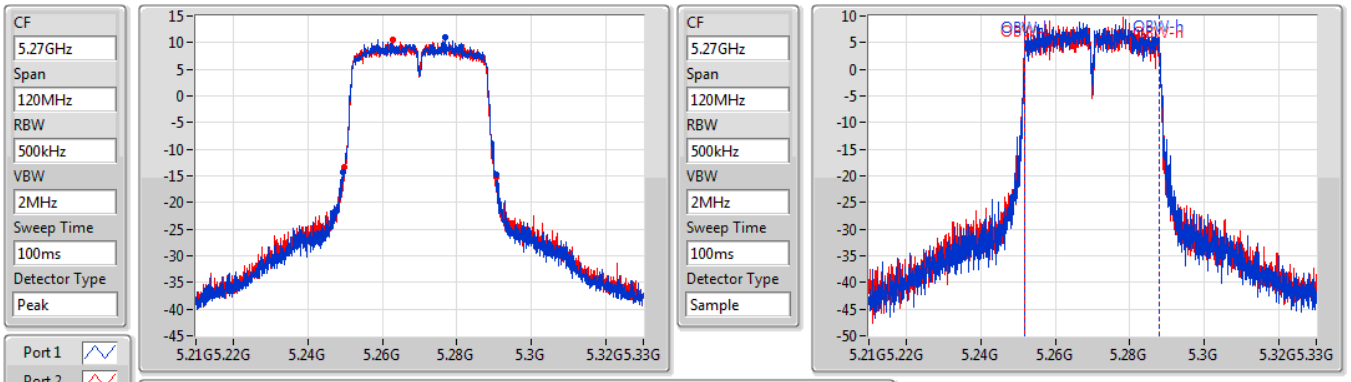


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	3.618M	5.72501G	5.728628G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5270MHz

04/07/2019

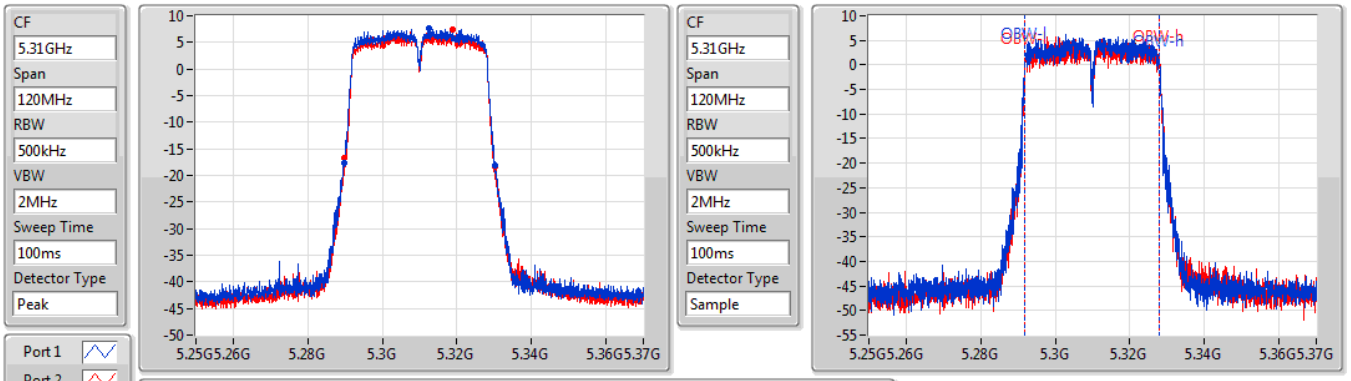


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.04M	5.24942G	5.29046G	36.102M	5.251889G	5.287991G	Inf	1
40.62M	5.24978G	5.2904G	36.042M	5.251889G	5.287931G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5310MHz

04/07/2019

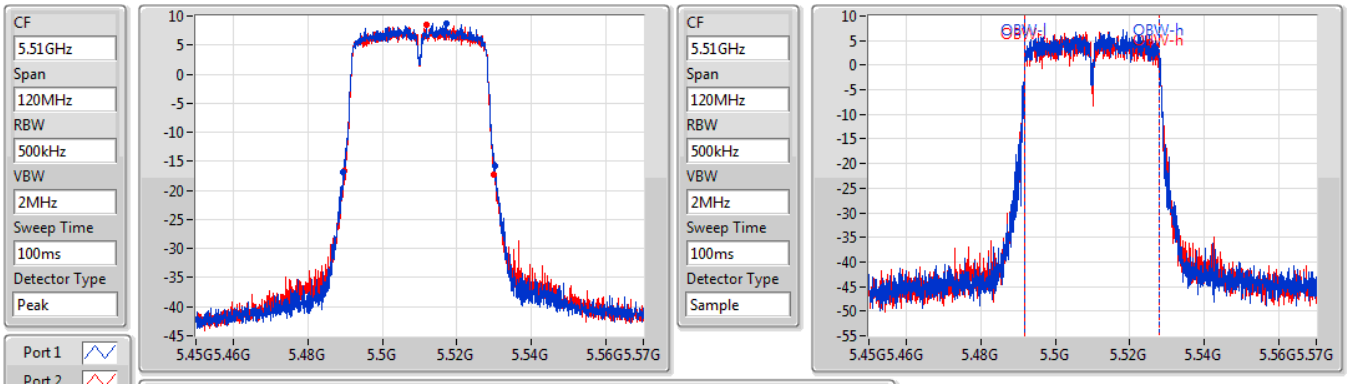


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.56M	5.28972G	5.33028G	36.042M	5.291889G	5.327931G	Inf	1
40.32M	5.28984G	5.33016G	36.102M	5.291889G	5.327991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5510MHz

04/07/2019

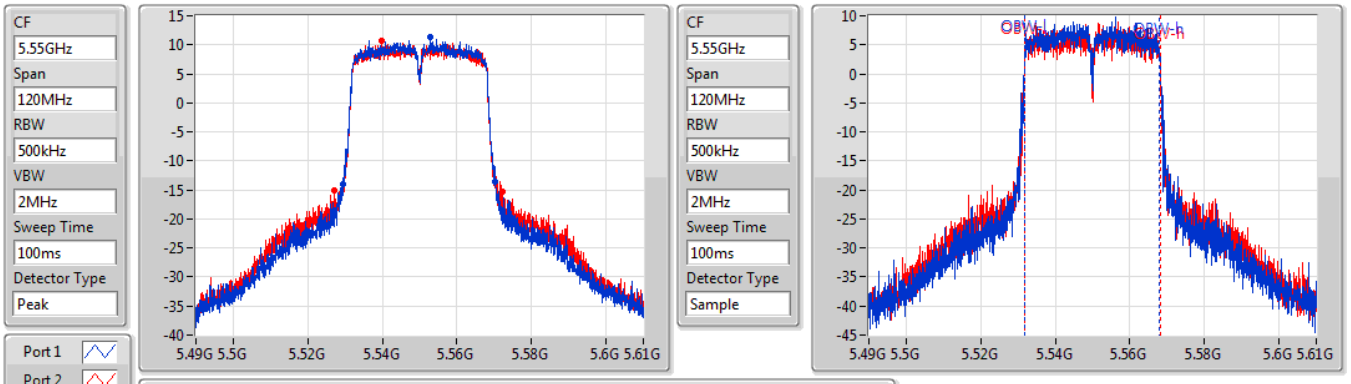


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.86M	5.48948G	5.53034G	36.042M	5.491949G	5.527991G	Inf	1
40.26M	5.48978G	5.53004G	36.102M	5.491889G	5.527991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5550MHz

04/07/2019

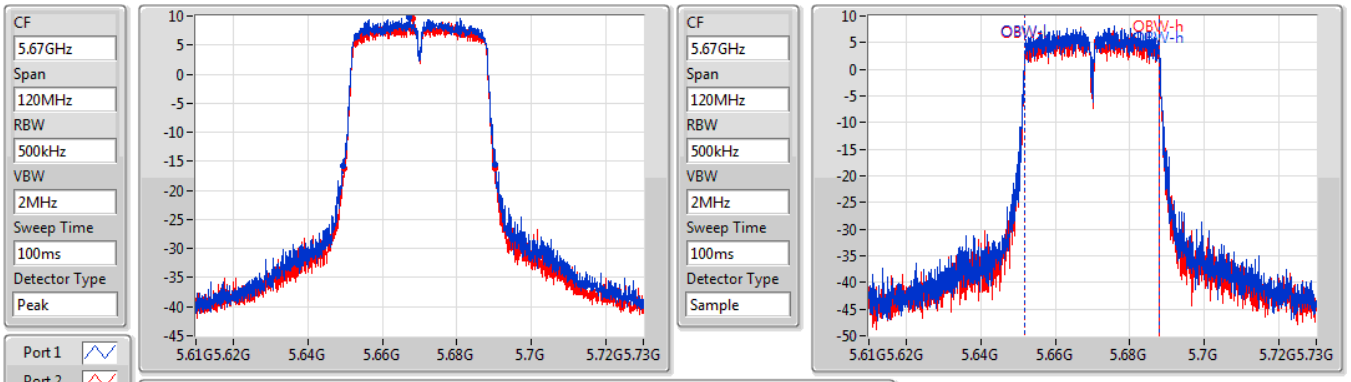


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.04M	5.5293G	5.57034G	36.102M	5.531889G	5.567991G	Inf	1
45.24M	5.52708G	5.57232G	36.222M	5.531829G	5.568051G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5670MHz

04/07/2019

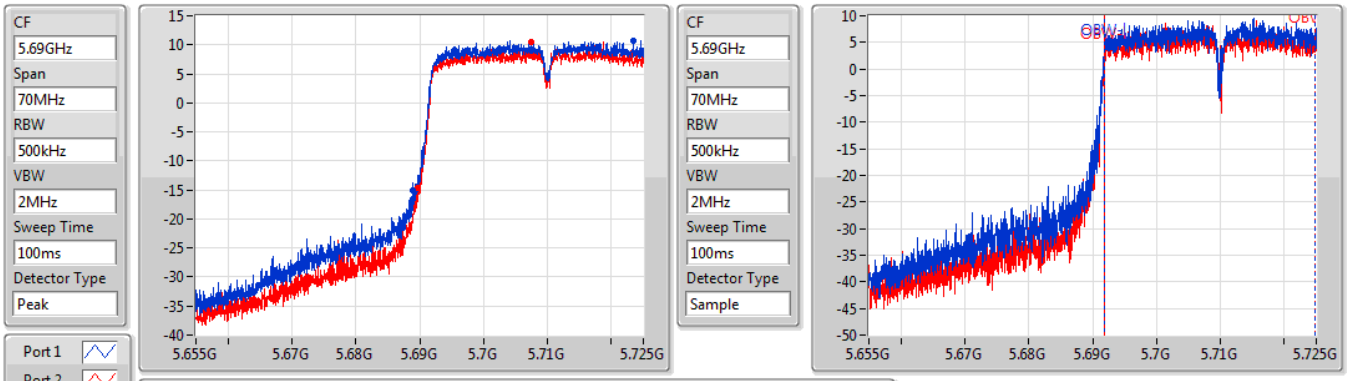


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.92M	5.64936G	5.69028G	36.102M	5.651829G	5.687931G	Inf	1
40.32M	5.6499G	5.69022G	36.042M	5.651889G	5.687931G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5710MHz Straddle 5.47-5.725GHz

04/07/2019

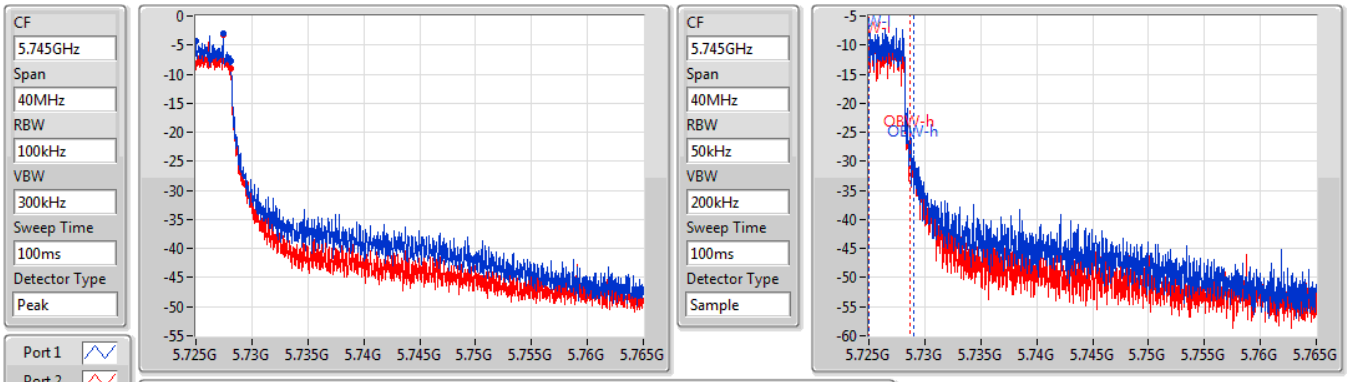


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.05M	5.68895G	5.725G	32.954M	5.691889G	5.724843G	Inf	1
35.28M	5.68972G	5.725G	32.954M	5.691854G	5.724808G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5710MHz Straddle 5.725-5.85GHz

04/07/2019

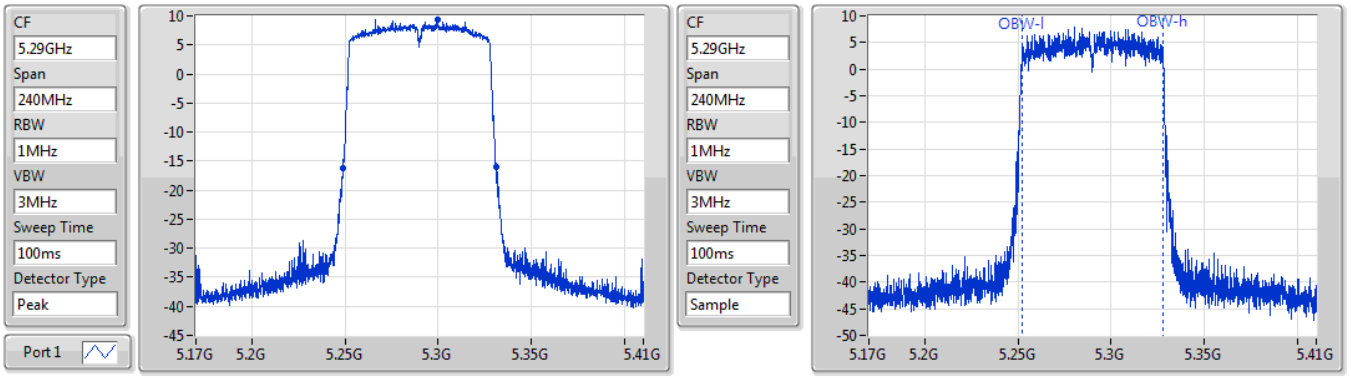


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	3.998M	5.72501G	5.729008G	500k	1
3.12M	5.725G	5.72812G	3.658M	5.72501G	5.728668G	500k	2

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1) EBW

5290MHz

04/07/2019

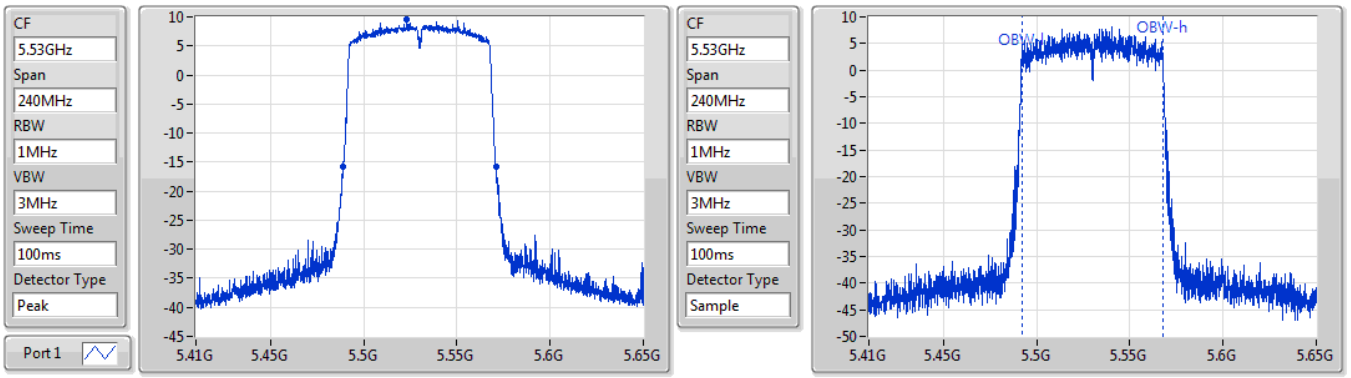


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.56M	5.24884G	5.3314G	75.562M	5.252099G	5.327661G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1) EBW

5530MHz

04/07/2019

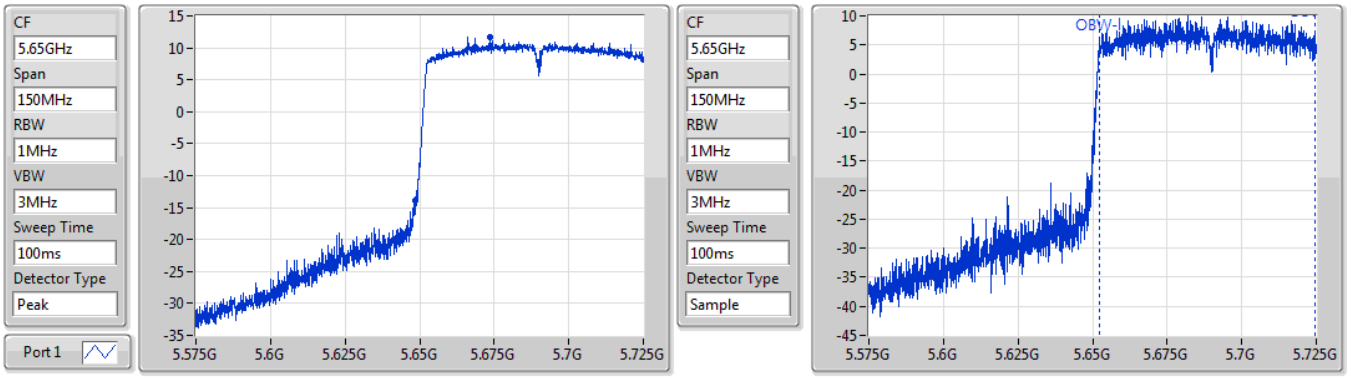


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.2M	5.48884G	5.57104G	75.562M	5.492099G	5.567661G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1) EBW

5690MHz Straddle 5.47-5.725GHz

04/07/2019

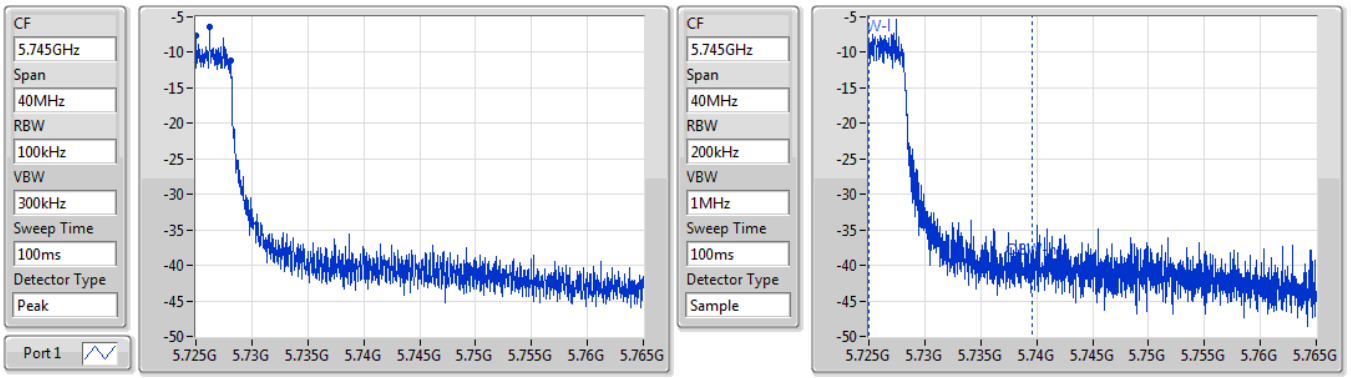


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.65M	5.64835G	5.725G	72.339M	5.652099G	5.724438G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1) EBW

5690MHz Straddle 5.725-5.85GHz

04/07/2019

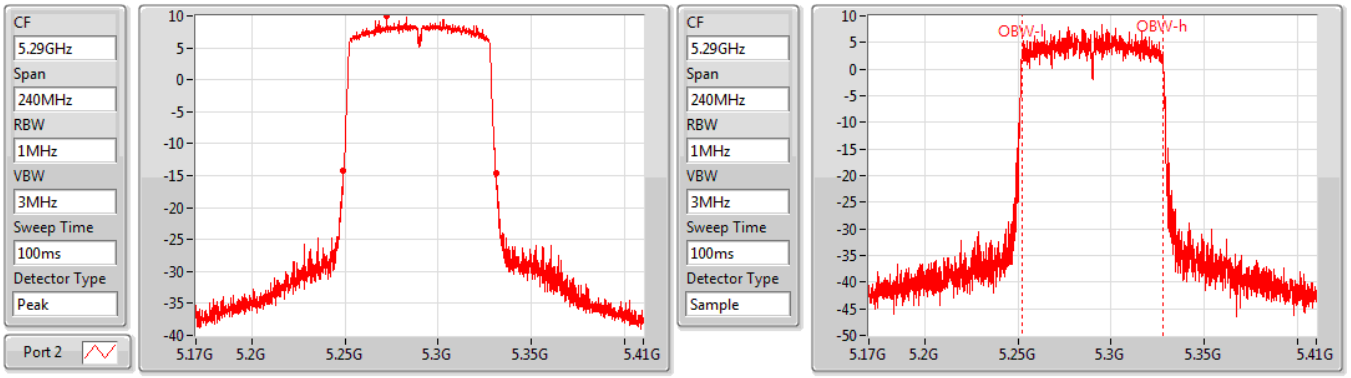


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	14.593M	5.72501G	5.739603G	500k	1

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2) EBW

5290MHz

04/07/2019

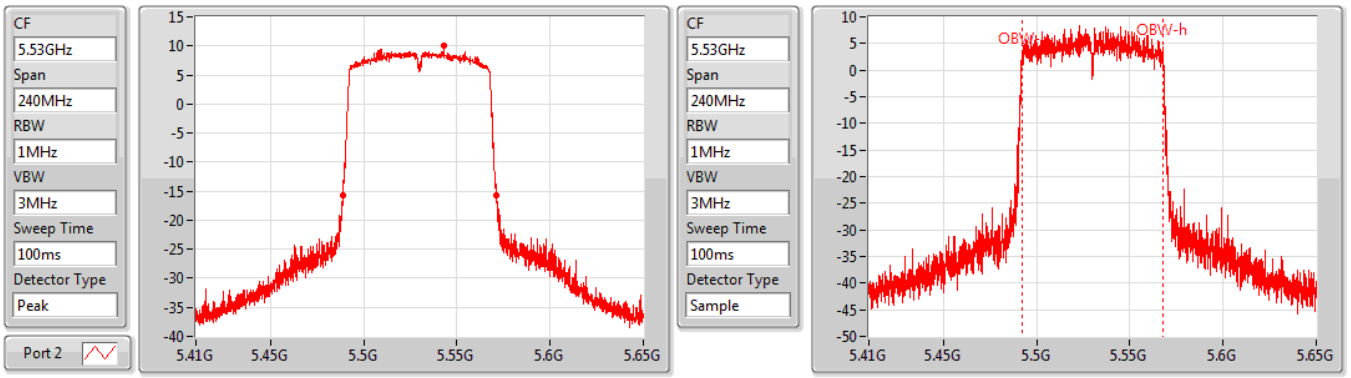


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.96M	5.24908G	5.33104G	75.682M	5.252099G	5.327781G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2) EBW

5530MHz

04/07/2019

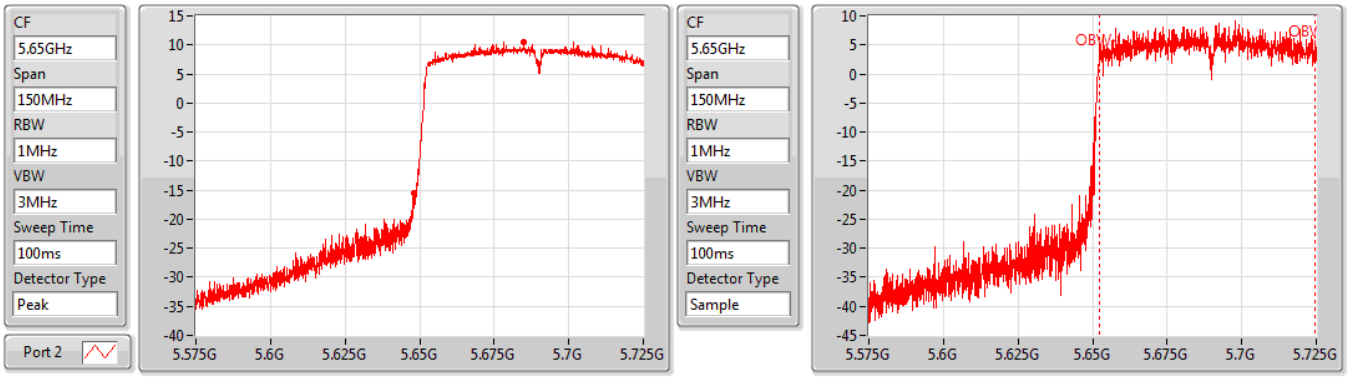


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.2M	5.48896G	5.57116G	75.562M	5.492099G	5.567661G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2) EBW

5690MHz Straddle 5.47-5.725GHz

04/07/2019

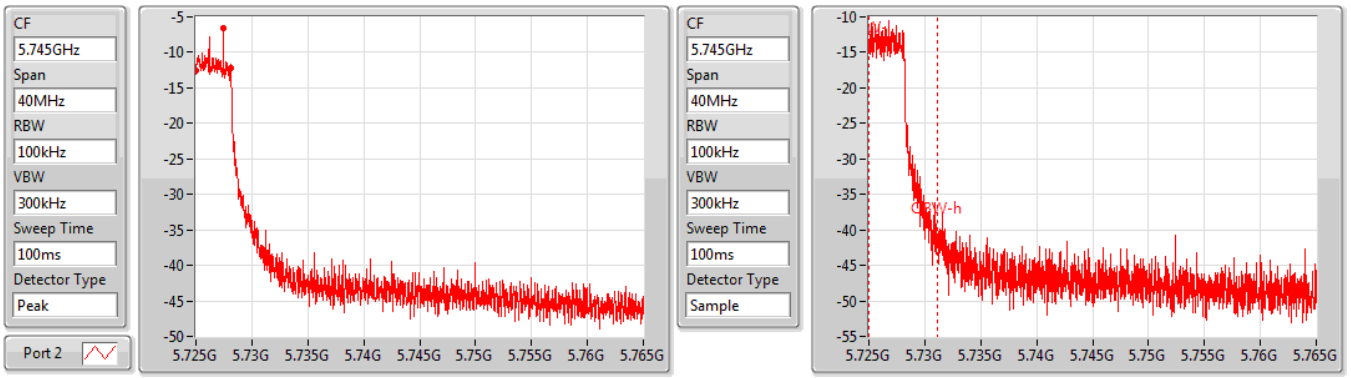


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.025M	5.647975G	5.725G	72.339M	5.652174G	5.724513G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2) EBW

5690MHz Straddle 5.725-5.85GHz

04/07/2019

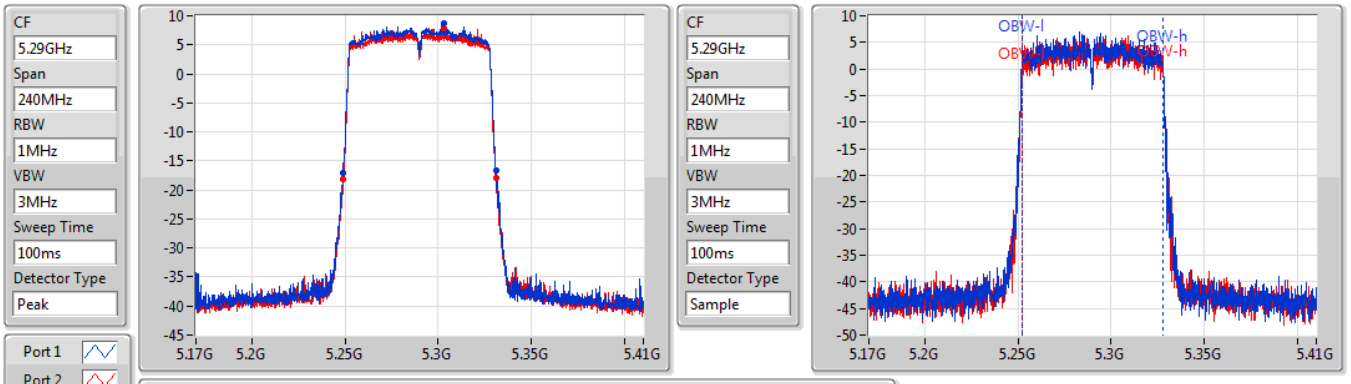


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	6.057M	5.72503G	5.731087G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5290MHz

04/07/2019

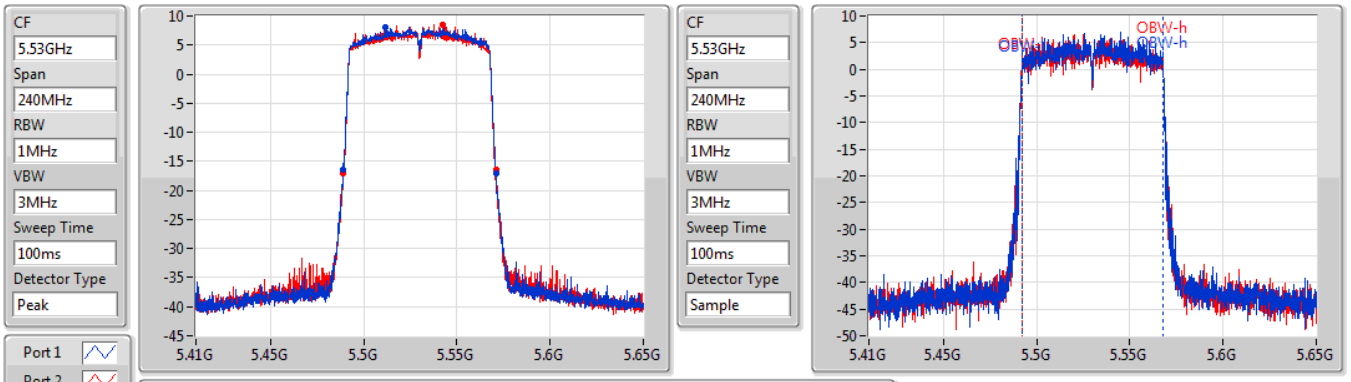


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.2M	5.24872G	5.33092G	75.562M	5.252099G	5.327661G	Inf	1
81.96M	5.24884G	5.3308G	75.562M	5.252219G	5.327781G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5530MHz

04/07/2019

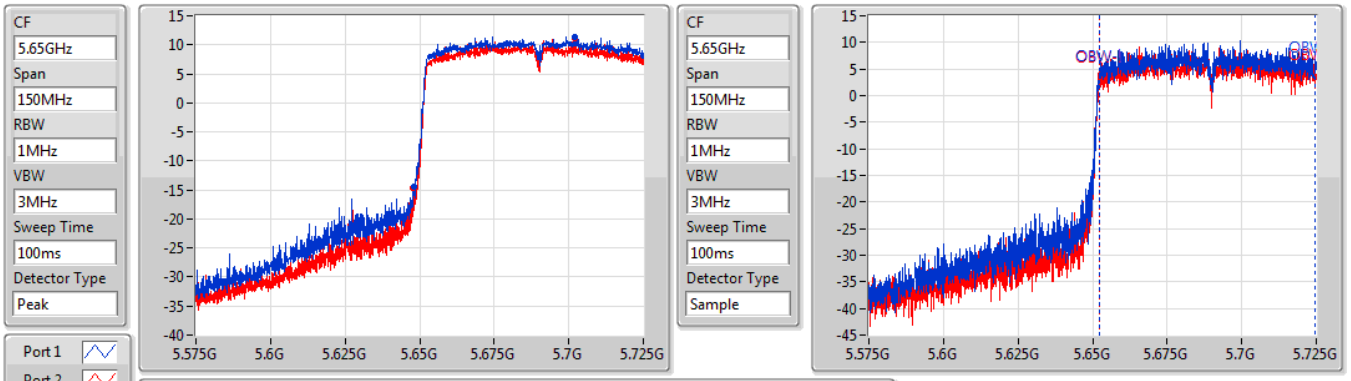


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.08M	5.48908G	5.57116G	75.322M	5.492219G	5.567541G	Inf	1
81.6M	5.4892G	5.5708G	75.322M	5.492219G	5.567541G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5690MHz Straddle 5.47-5.725GHz

04/07/2019

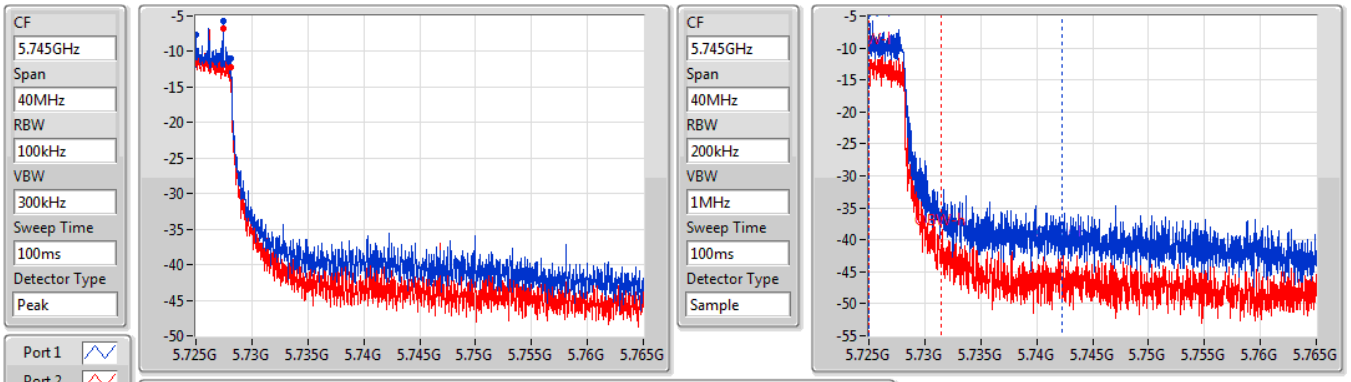


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.025M	5.647975G	5.725G	72.414M	5.652174G	5.724588G	Inf	1
77.1M	5.6479G	5.725G	72.264M	5.652174G	5.724438G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

5690MHz Straddle 5.725-5.85GHz

04/07/2019

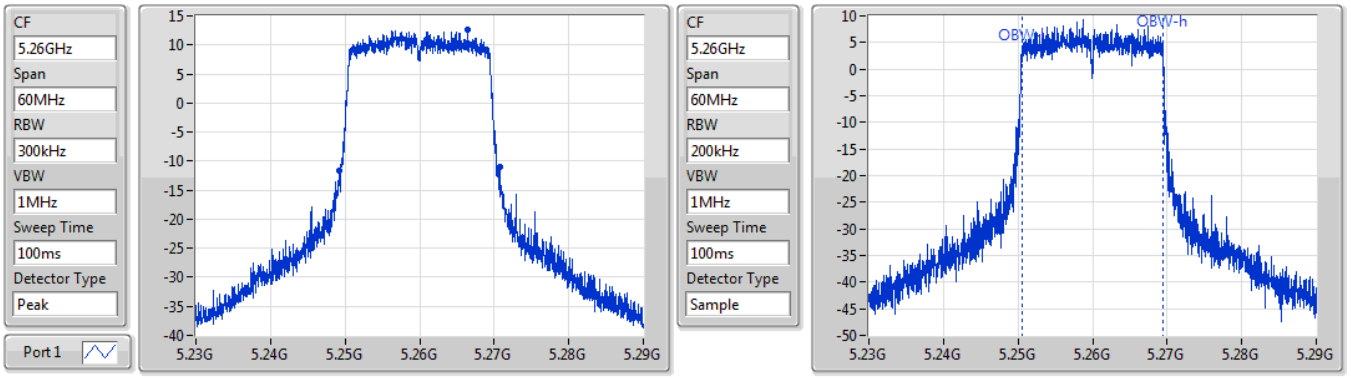


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	17.311M	5.72501G	5.742321G	500k	1
3.1M	5.725G	5.7281G	6.457M	5.72501G	5.731467G	500k	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5260MHz

04/07/2019

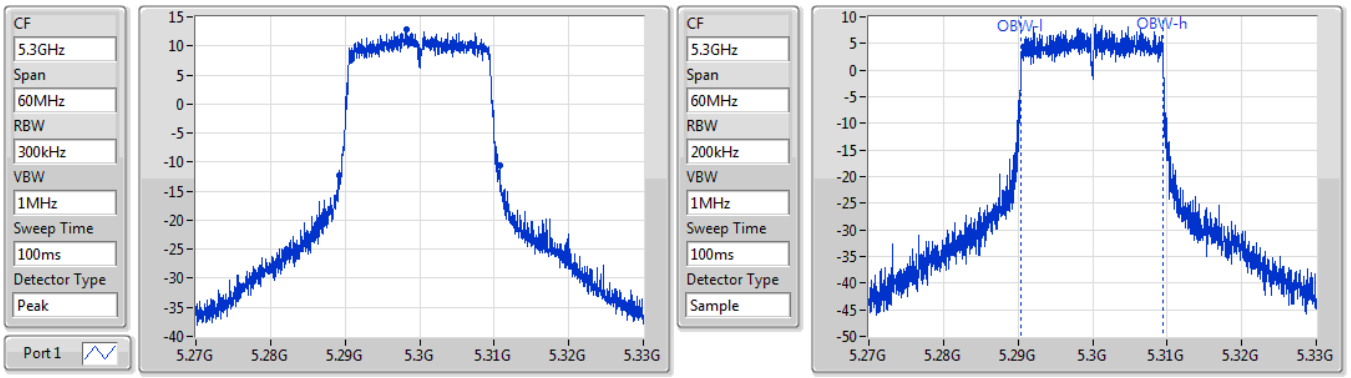


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.66M	5.24914G	5.2708G	18.921M	5.250495G	5.269415G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5300MHz

04/07/2019

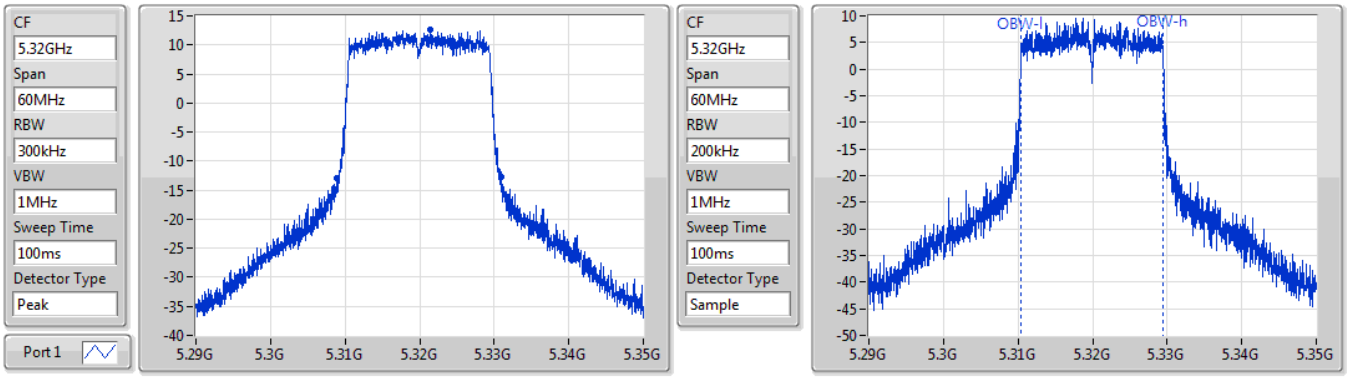


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.63M	5.28914G	5.31077G	18.951M	5.290465G	5.309415G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5320MHz

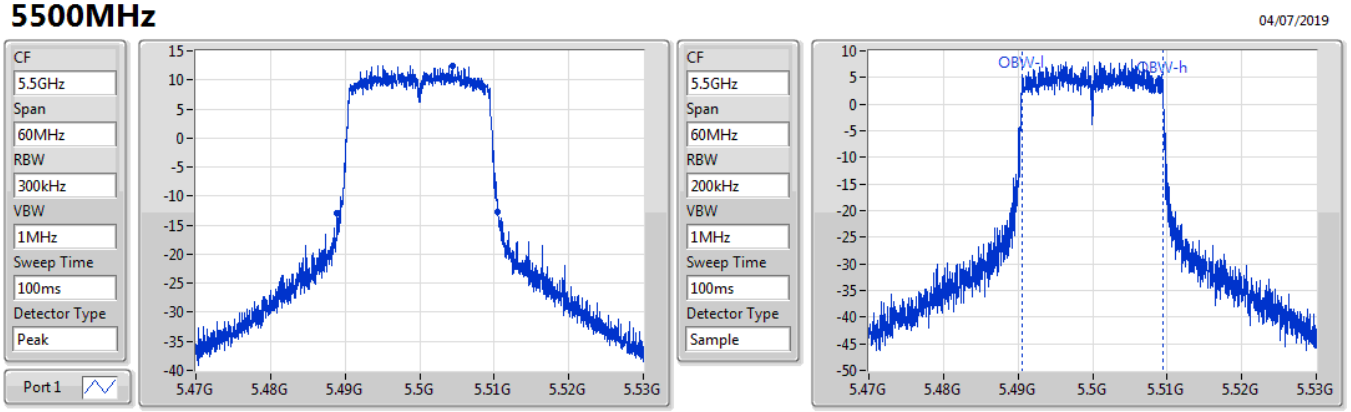
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.05M	5.30893G	5.33098G	18.951M	5.310465G	5.329415G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

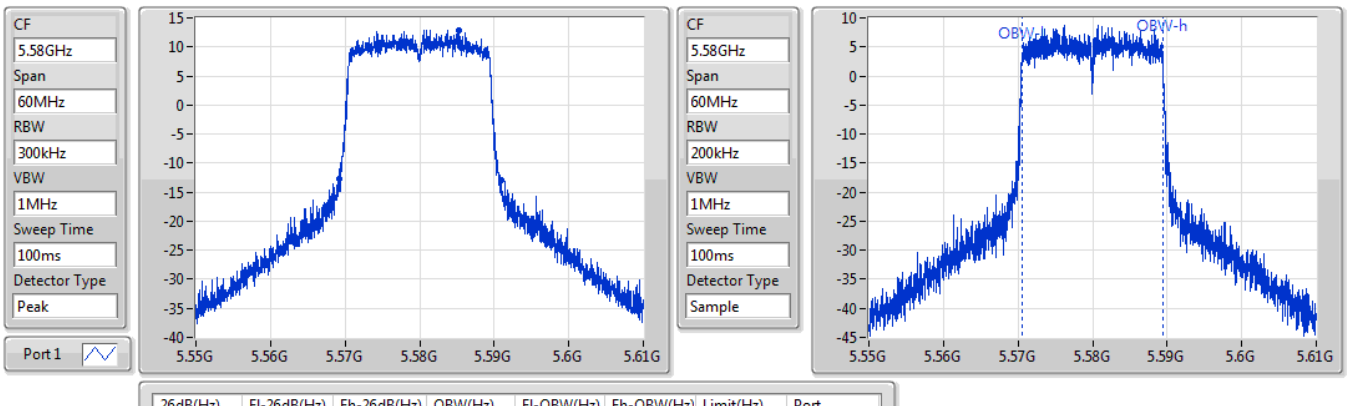
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.63M	5.48887G	5.5105G	18.891M	5.490495G	5.509385G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5580MHz

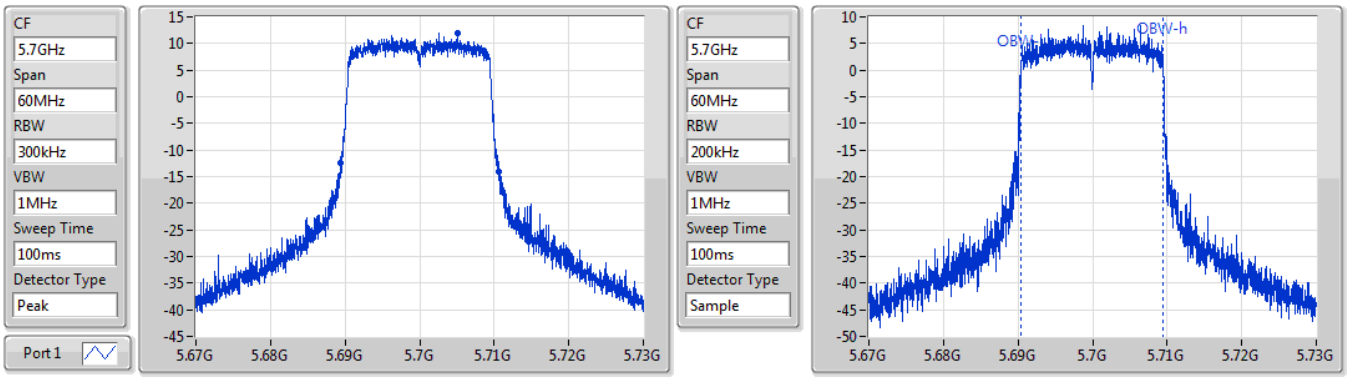


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.56914G	5.59089G	18.921M	5.570495G	5.589415G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5700MHz

04/07/2019

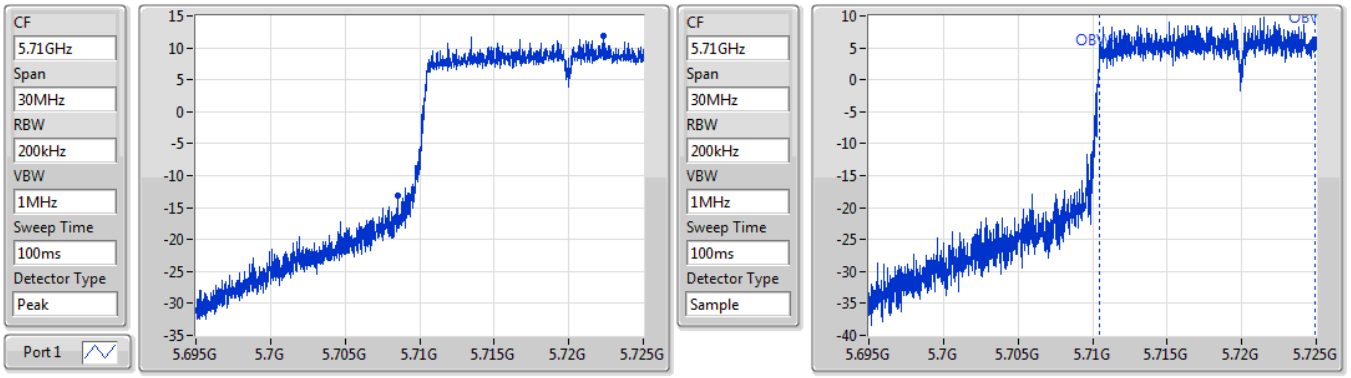


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.3M	5.68938G	5.71068G	18.951M	5.690465G	5.709415G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

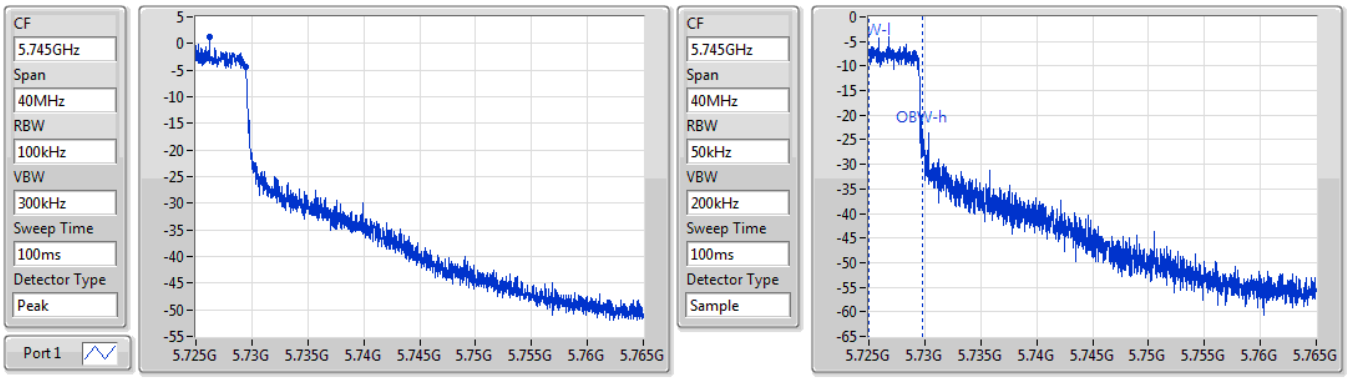


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.5M	5.7085G	5.725G	14.498M	5.710435G	5.724933G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1) EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

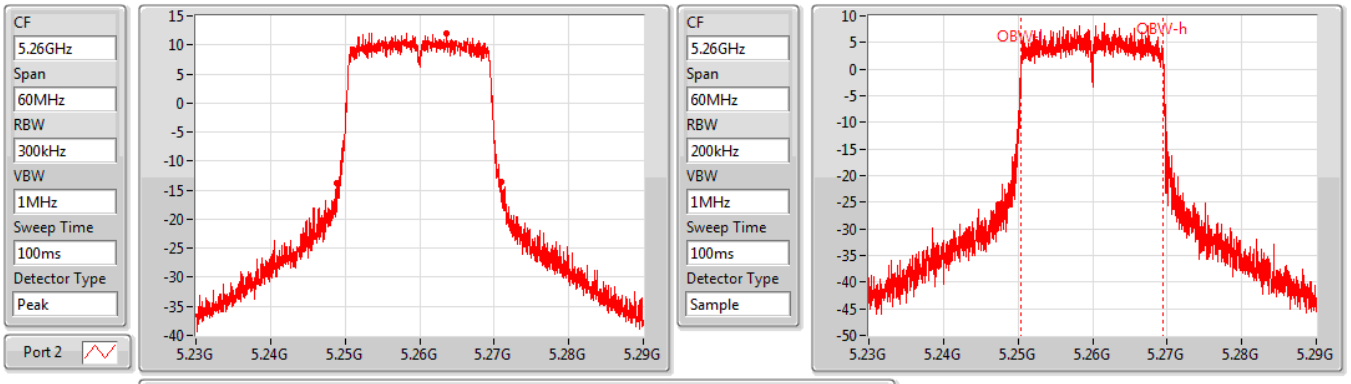


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.46M	5.725G	5.72946G	4.798M	5.72503G	5.729828G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5260MHz

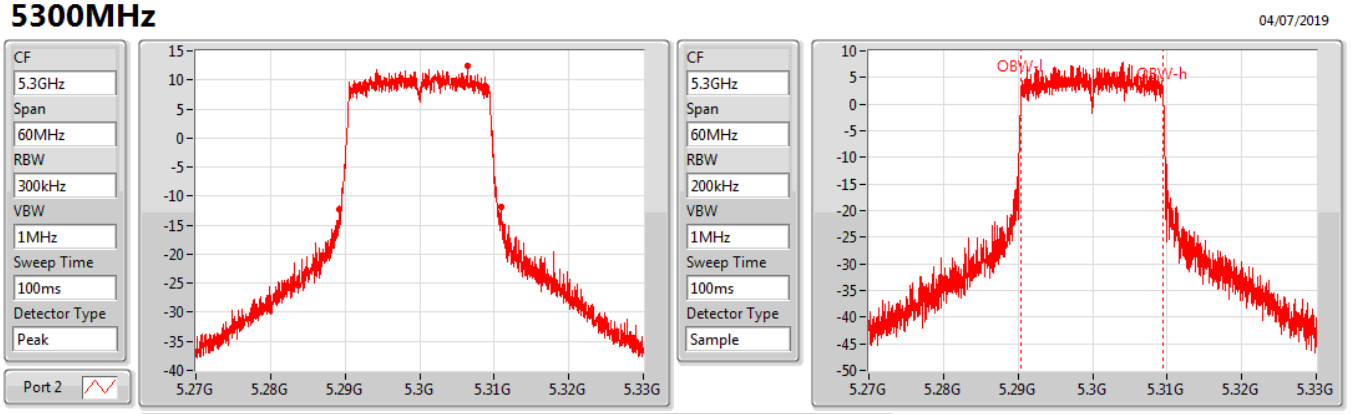
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.17M	5.24884G	5.27101G	18.981M	5.250465G	5.269445G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

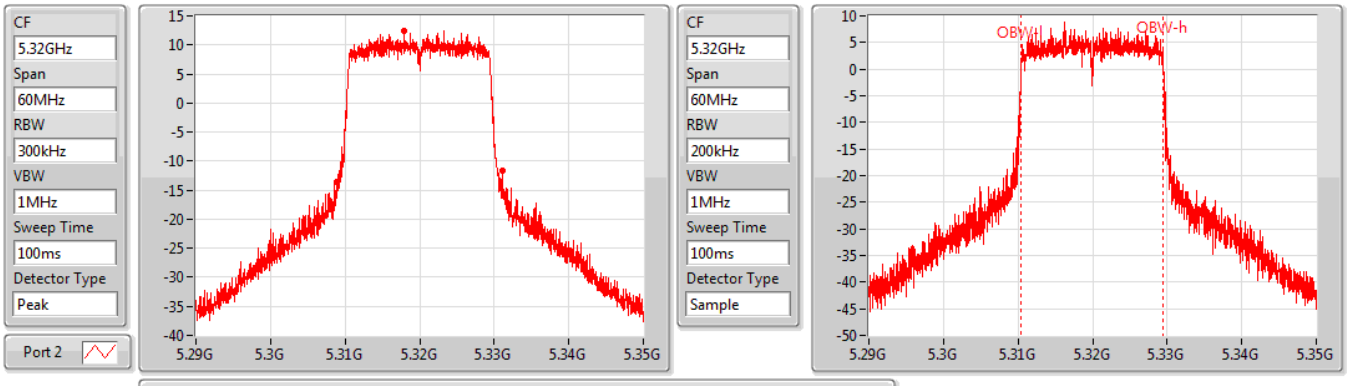
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.72M	5.28917G	5.31089G	18.951M	5.290465G	5.309415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5320MHz

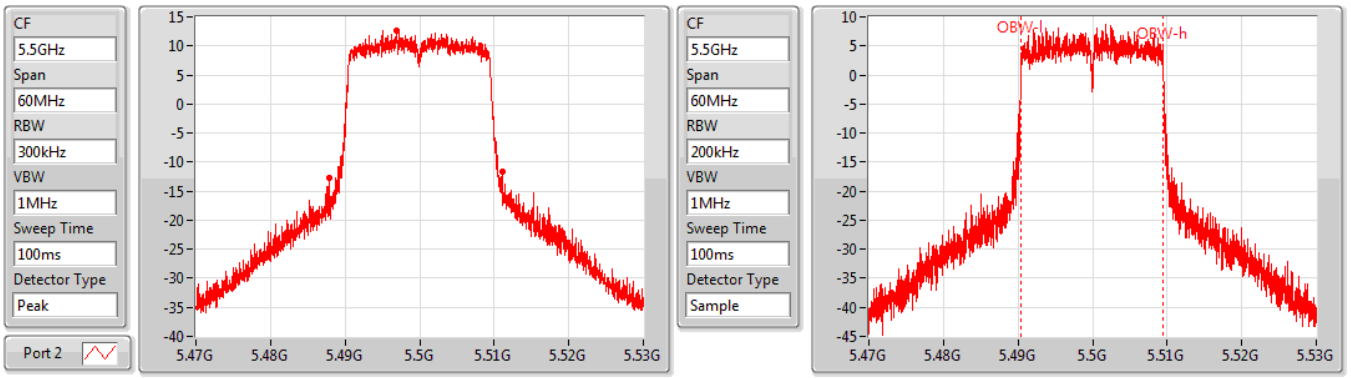


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.29M	5.30887G	5.33116G	18.951M	5.310465G	5.329415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5500MHz

04/07/2019

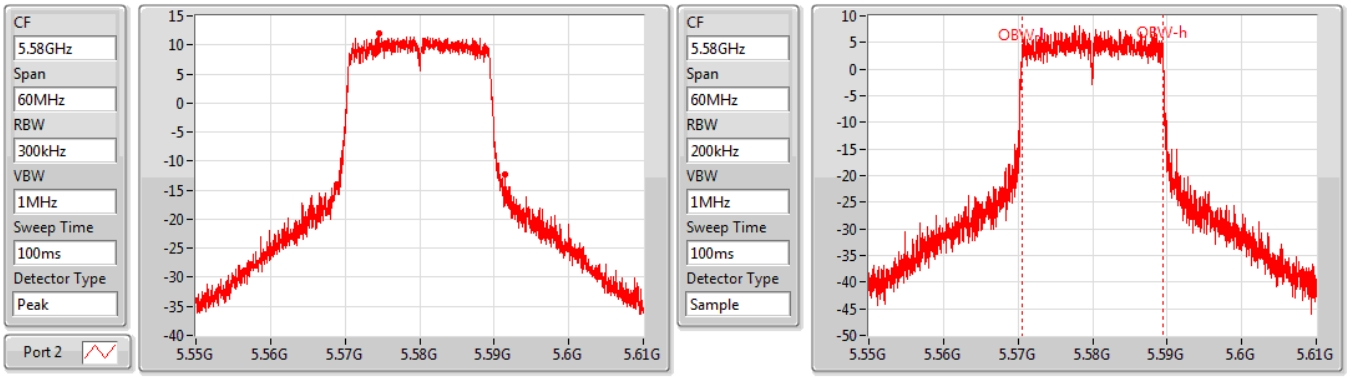


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.31M	5.48782G	5.51113G	18.951M	5.490465G	5.509415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5580MHz

04/07/2019

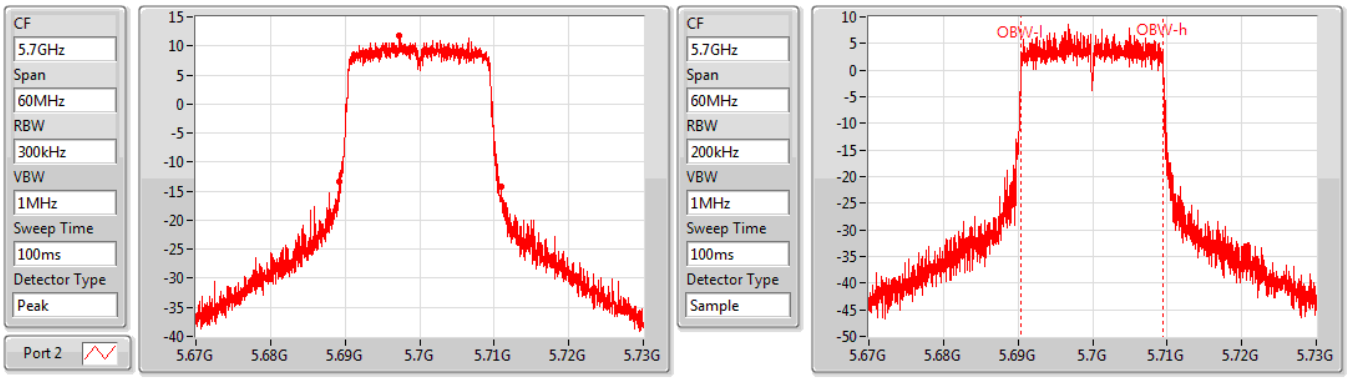


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.56M	5.5689G	5.59146G	18.921M	5.570495G	5.589415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5700MHz

04/07/2019

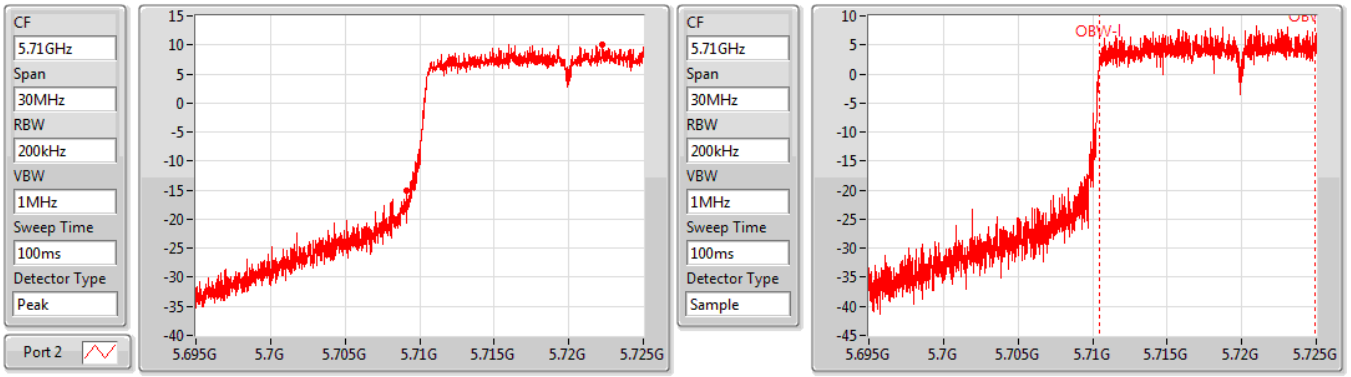


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.78M	5.68917G	5.71095G	18.951M	5.690465G	5.709415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

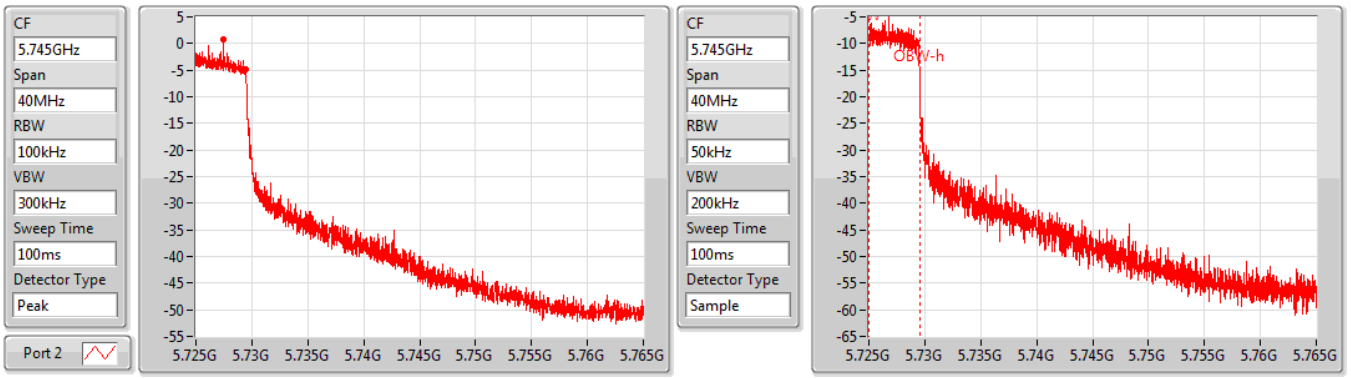


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.915M	5.709085G	5.725G	14.483M	5.71045G	5.724933G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2) EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

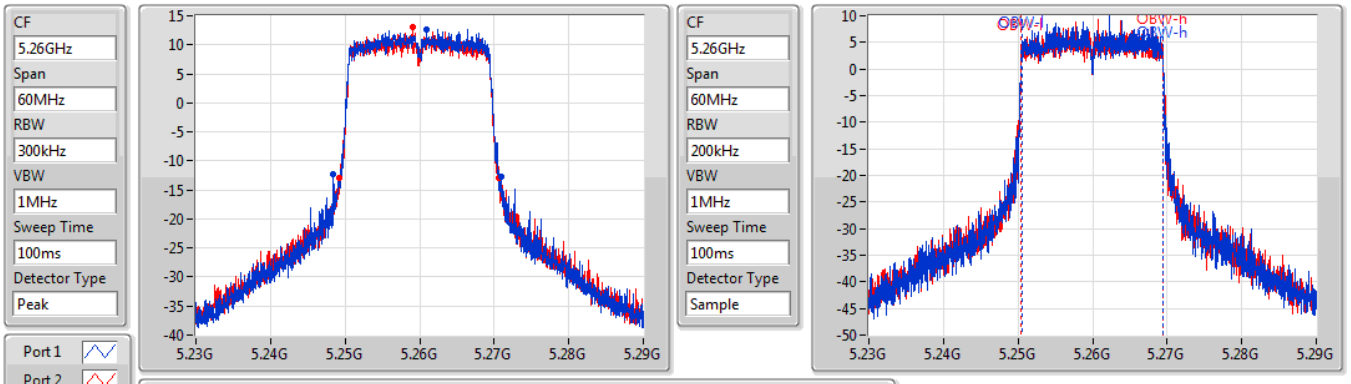


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.42M	5.725G	5.72942G	4.538M	5.72503G	5.729568G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5260MHz

04/07/2019

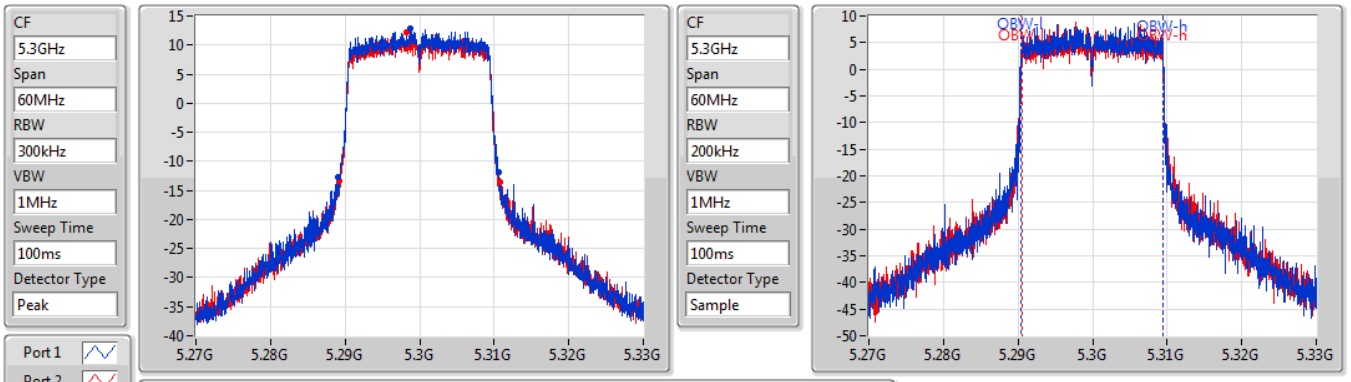


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.53M	5.24845G	5.27098G	18.891M	5.250495G	5.269385G	Inf	1
21.45M	5.24914G	5.27059G	18.951M	5.250465G	5.269415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5300MHz

04/07/2019

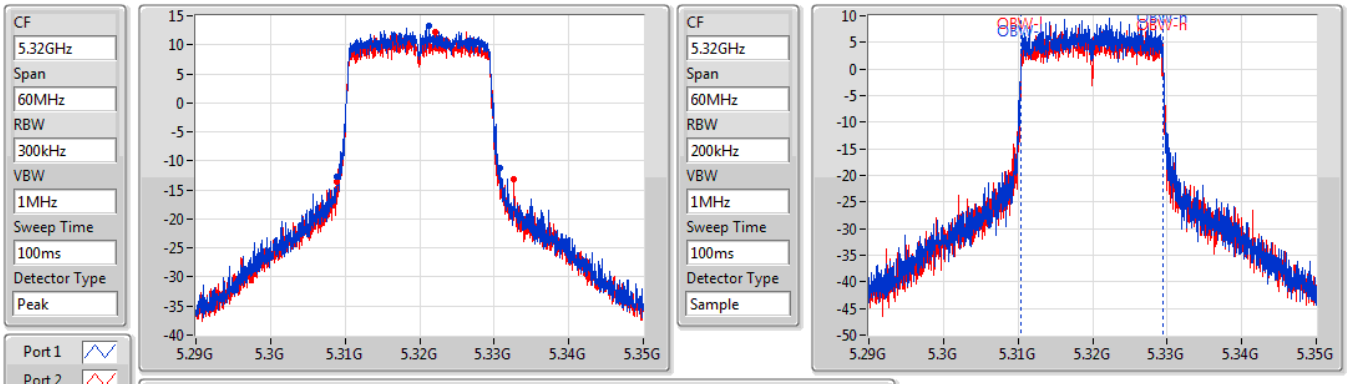


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.6M	5.28908G	5.31068G	18.951M	5.290465G	5.309415G	Inf	1
21.6M	5.2892G	5.3108G	18.891M	5.290495G	5.309385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5320MHz

04/07/2019

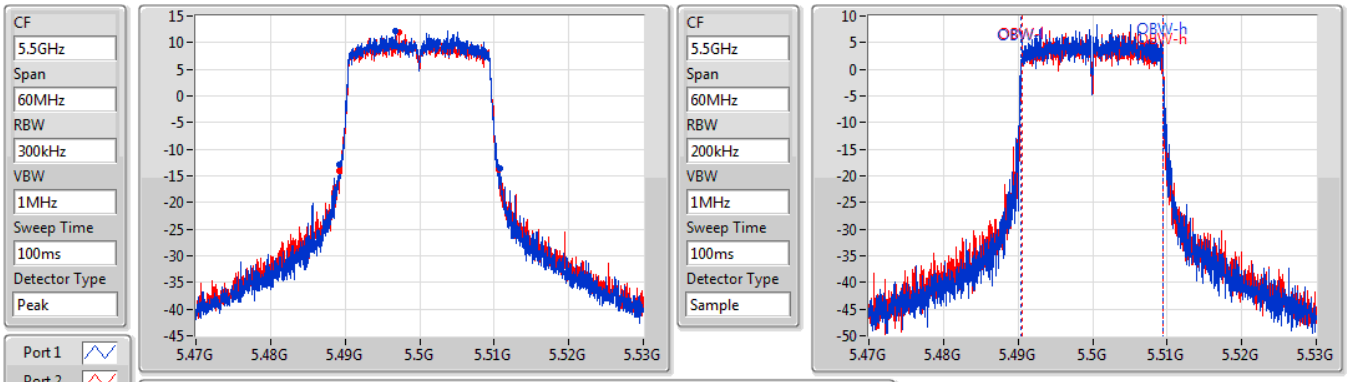


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.30896G	5.33071G	18.951M	5.310465G	5.329415G	Inf	1
23.67M	5.30896G	5.33263G	18.921M	5.310465G	5.329385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5500MHz

04/07/2019

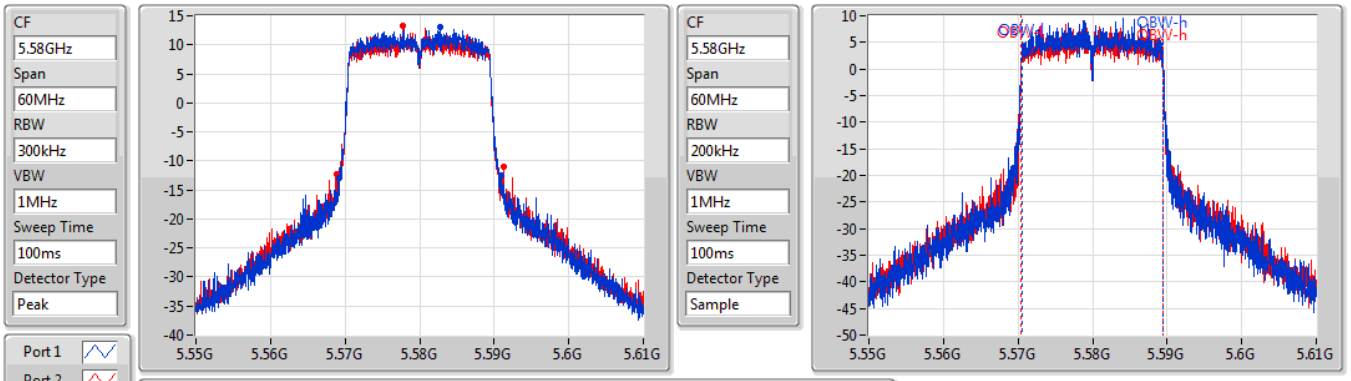


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.48917G	5.51086G	18.951M	5.490465G	5.509415G	Inf	1
21.33M	5.48923G	5.51056G	18.891M	5.490495G	5.509385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5580MHz

04/07/2019

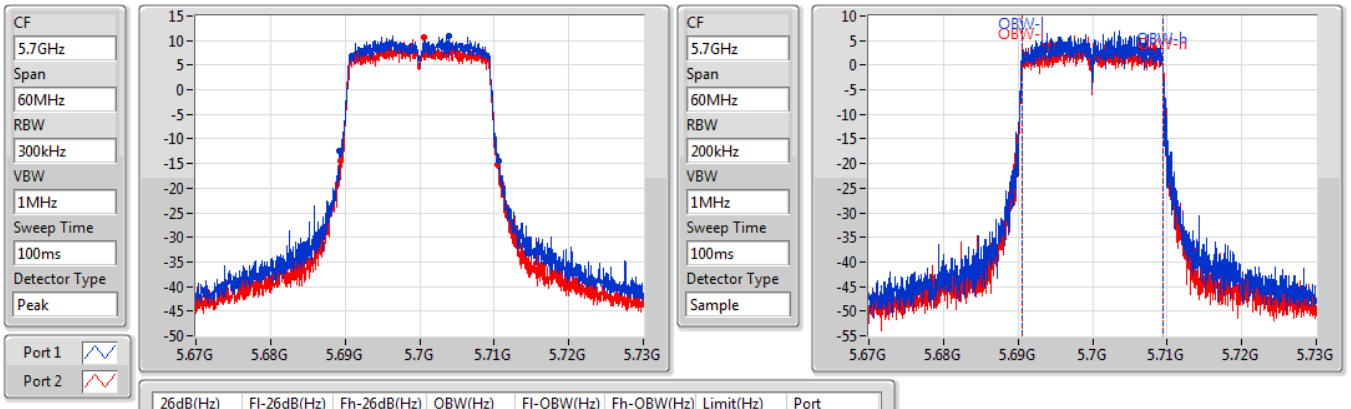


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.78M	5.56914G	5.59092G	18.921M	5.570495G	5.589415G	Inf	1
22.38M	5.56884G	5.59122G	18.951M	5.570465G	5.589415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5700MHz

04/07/2019

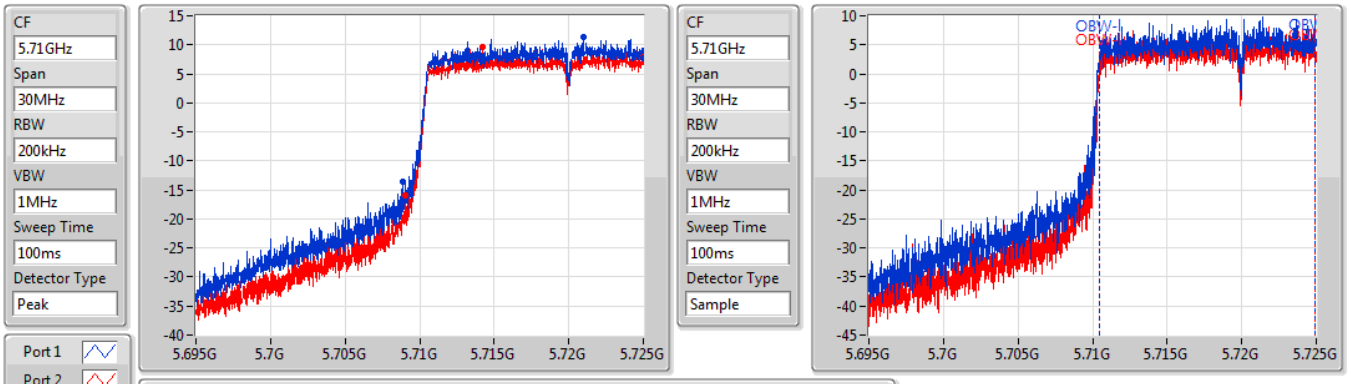


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.42M	5.68917G	5.71059G	18.891M	5.690495G	5.709385G	Inf	1
21.06M	5.68938G	5.71044G	18.921M	5.690495G	5.709415G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5720MHz Straddle 5.47-5.725GHz

04/07/2019

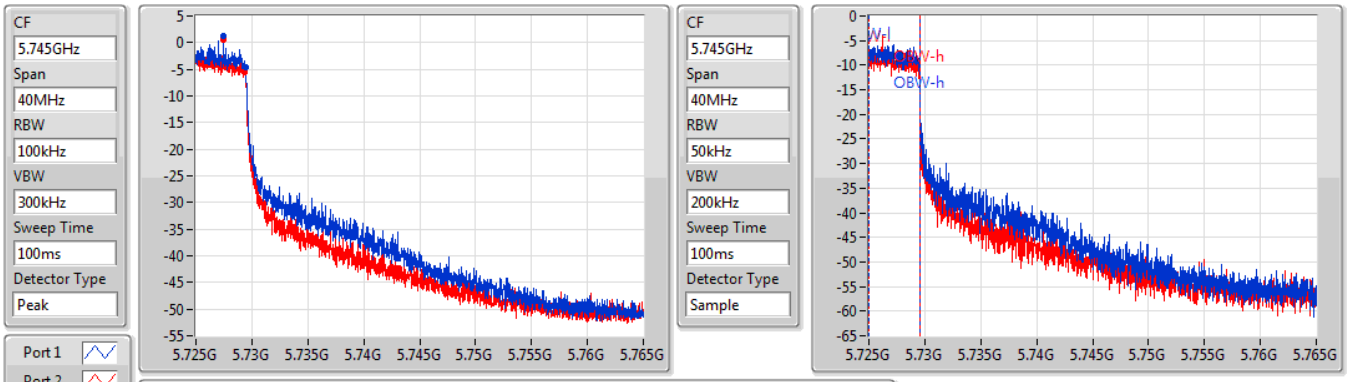


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.095M	5.708905G	5.725G	14.498M	5.710435G	5.724933G	Inf	1
15.945M	5.709055G	5.725G	14.453M	5.710465G	5.724918G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

5720MHz Straddle 5.725-5.85GHz

04/07/2019

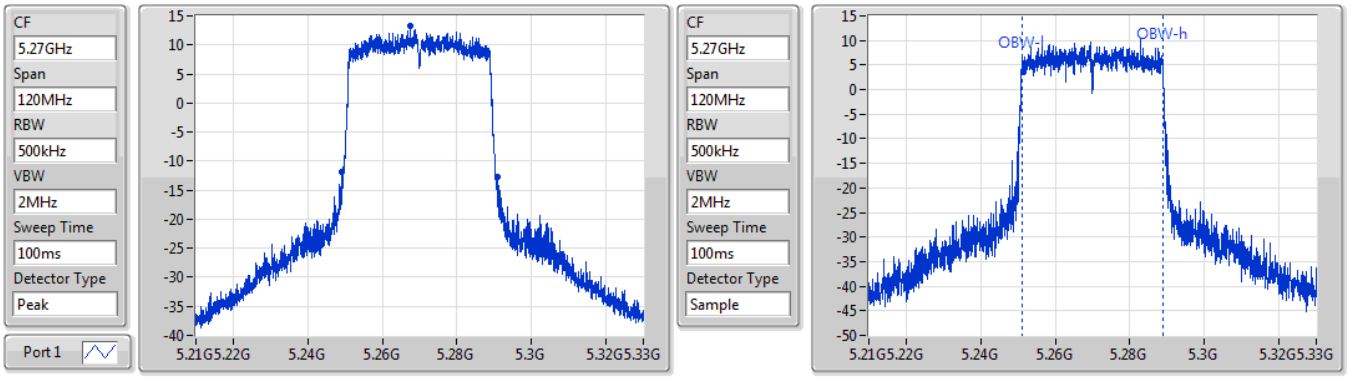


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.42M	5.725G	5.72942G	4.578M	5.72503G	5.729608G	500k	1
4.34M	5.725G	5.72934G	4.498M	5.72503G	5.729528G	500k	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5270MHz

04/07/2019

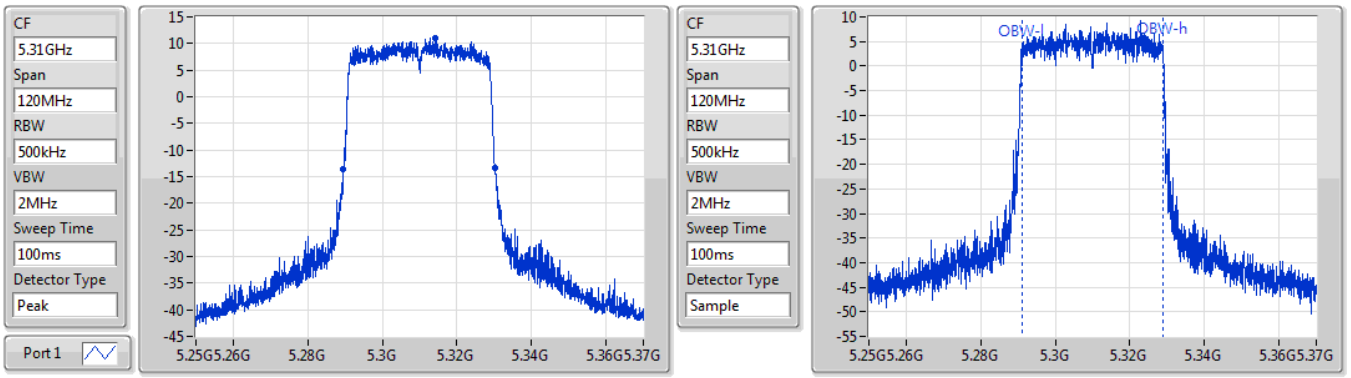


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.64M	5.24912G	5.29076G	37.841M	5.25099G	5.288831G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5310MHz

04/07/2019

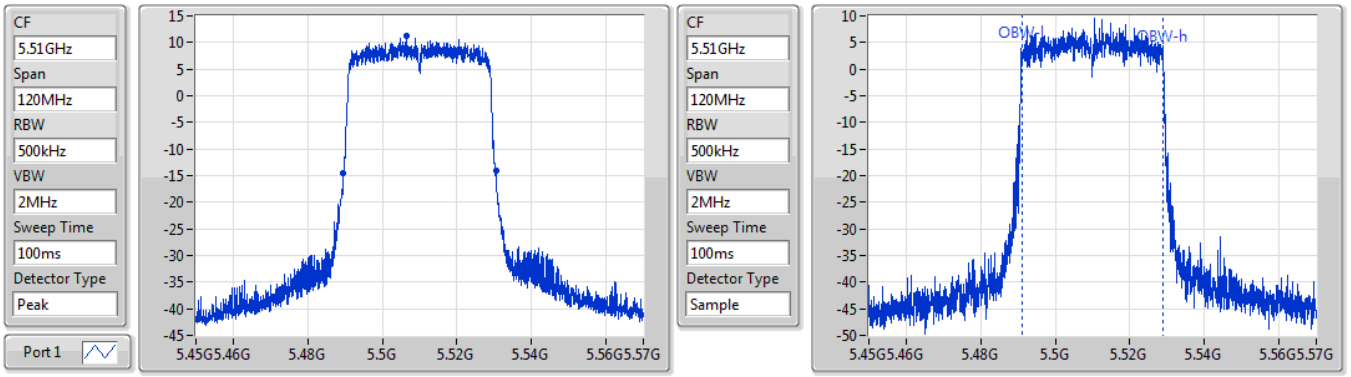


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.92M	5.28942G	5.33034G	37.781M	5.291049G	5.328831G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5510MHz

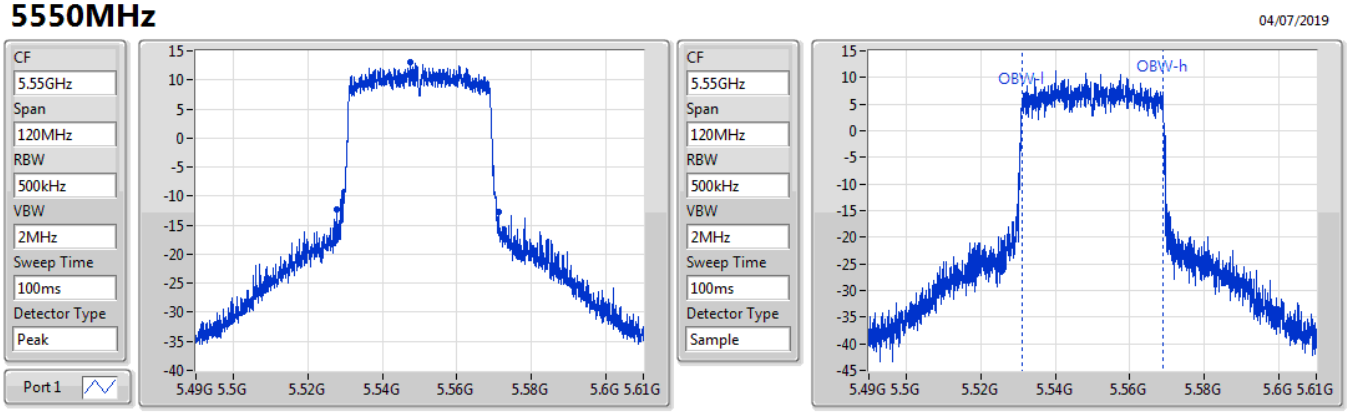
04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.1M	5.48948G	5.53058G	37.781M	5.491049G	5.528831G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

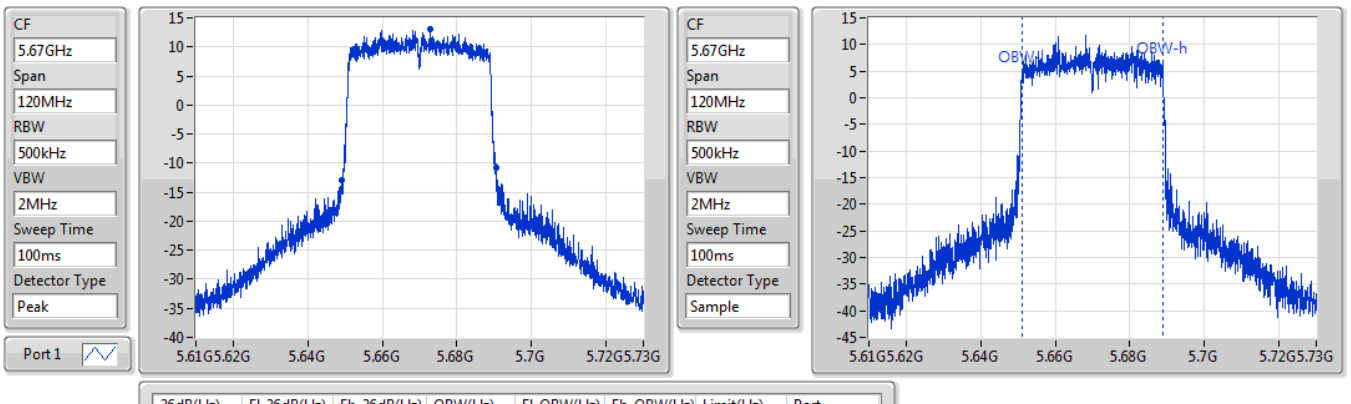
5550MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.44M	5.52762G	5.57106G	37.781M	5.53099G	5.568771G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5670MHz

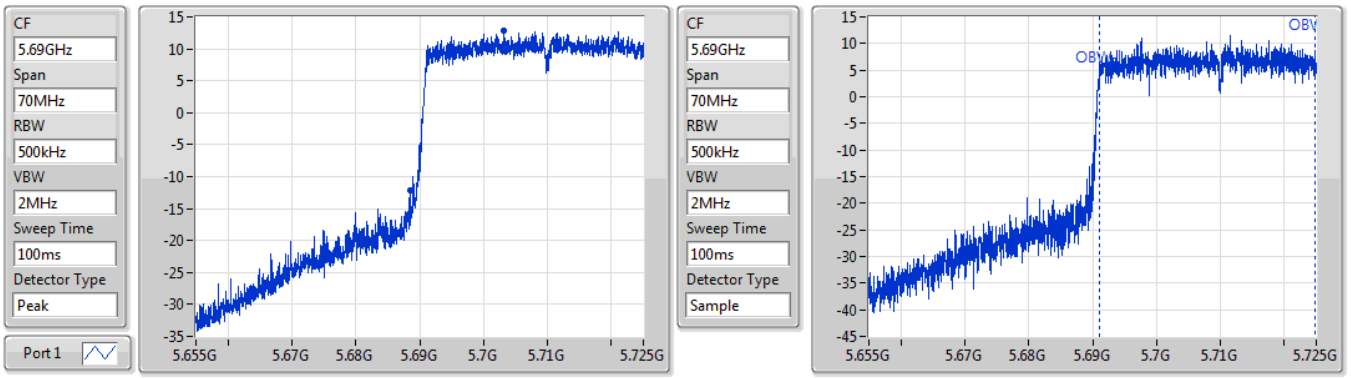


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.46M	5.64924G	5.6907G	37.781M	5.651049G	5.688831G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5710MHz Straddle 5.47-5.725GHz

04/07/2019

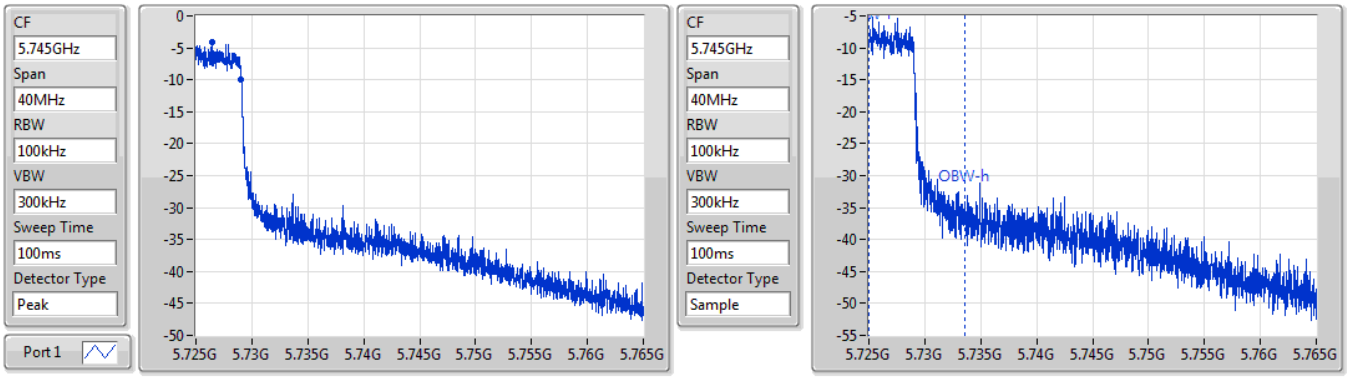


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.435M	5.688565G	5.725G	33.723M	5.691049G	5.724773G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1) EBW

5710MHz Straddle 5.725-5.85GHz

04/07/2019

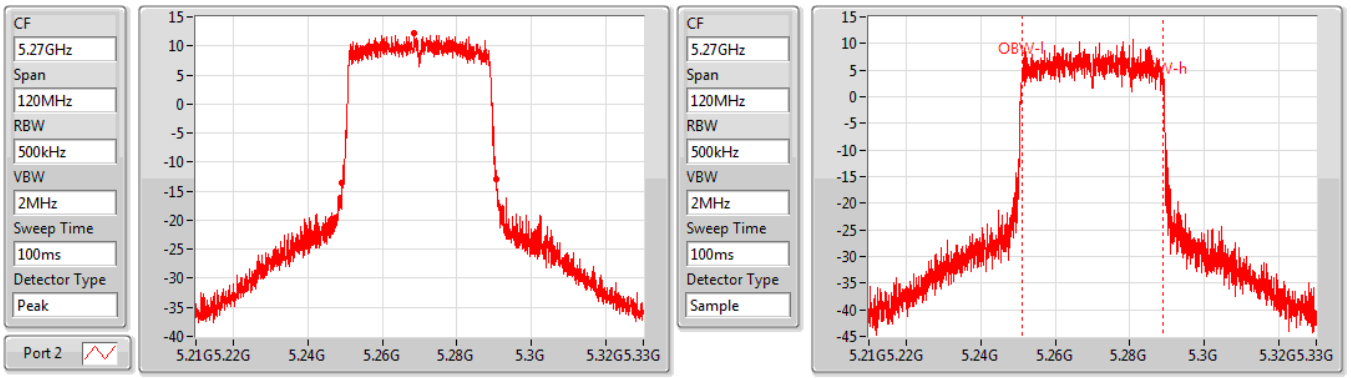


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.06M	5.725G	5.72906G	8.576M	5.72503G	5.733606G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5270MHz

04/07/2019

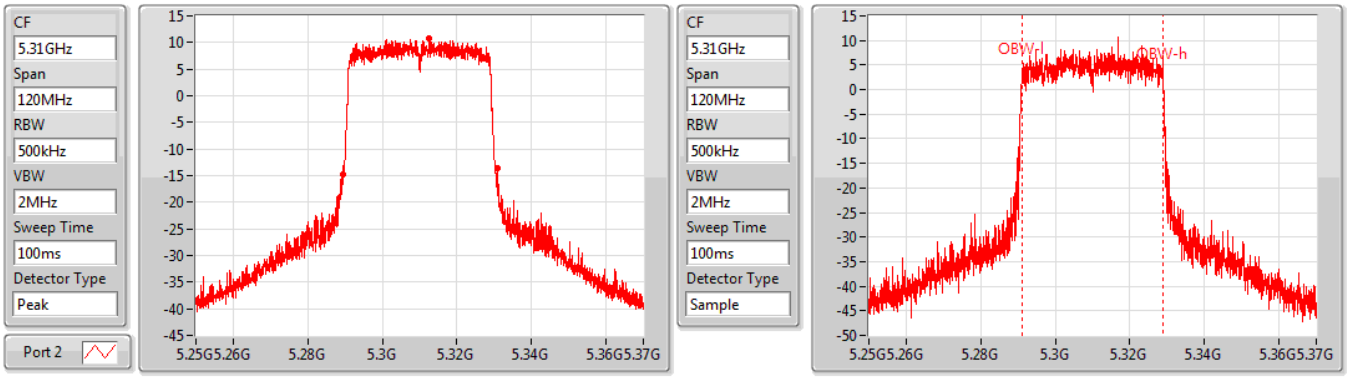


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.46M	5.24912G	5.29058G	37.781M	5.251049G	5.288831G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5310MHz

04/07/2019

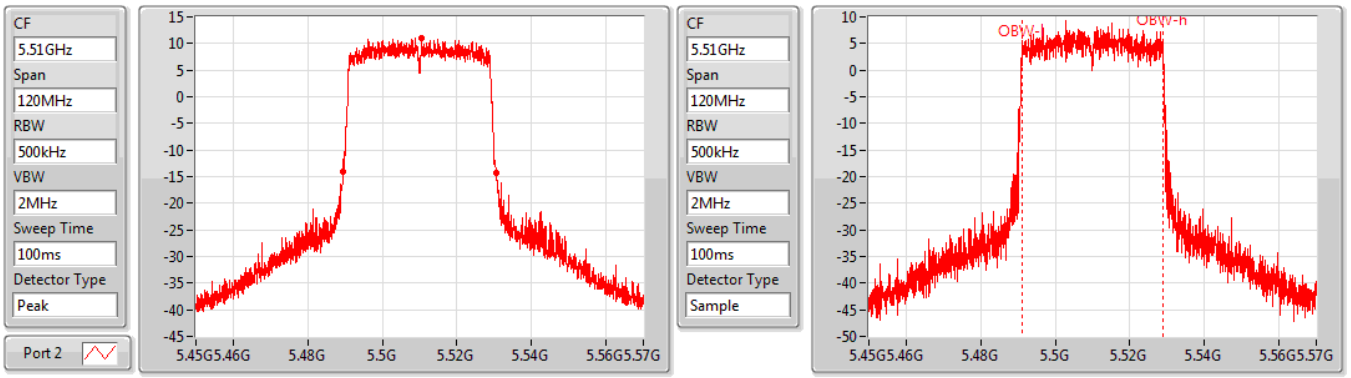


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.52M	5.2893G	5.33082G	37.841M	5.291049G	5.328891G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5510MHz

04/07/2019

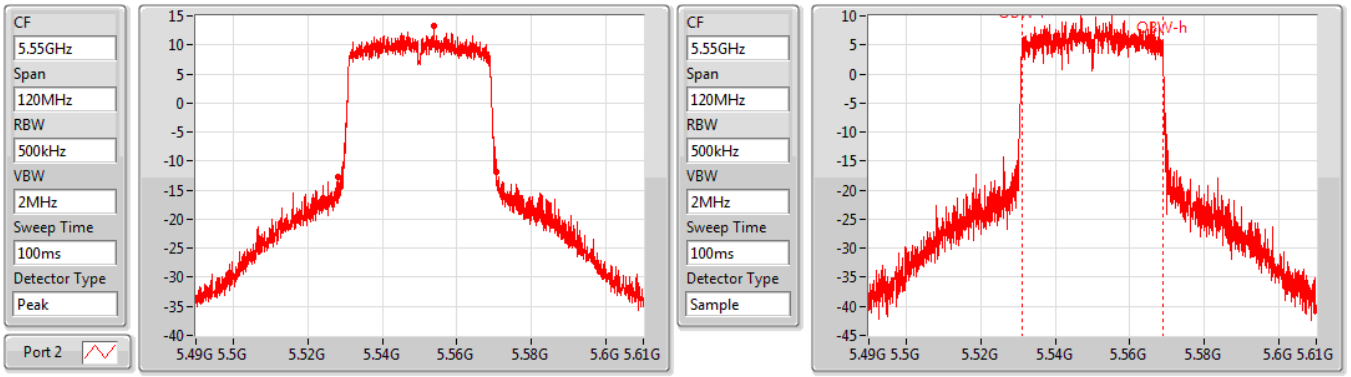


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.28M	5.48942G	5.5307G	37.721M	5.491109G	5.528831G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5550MHz

04/07/2019

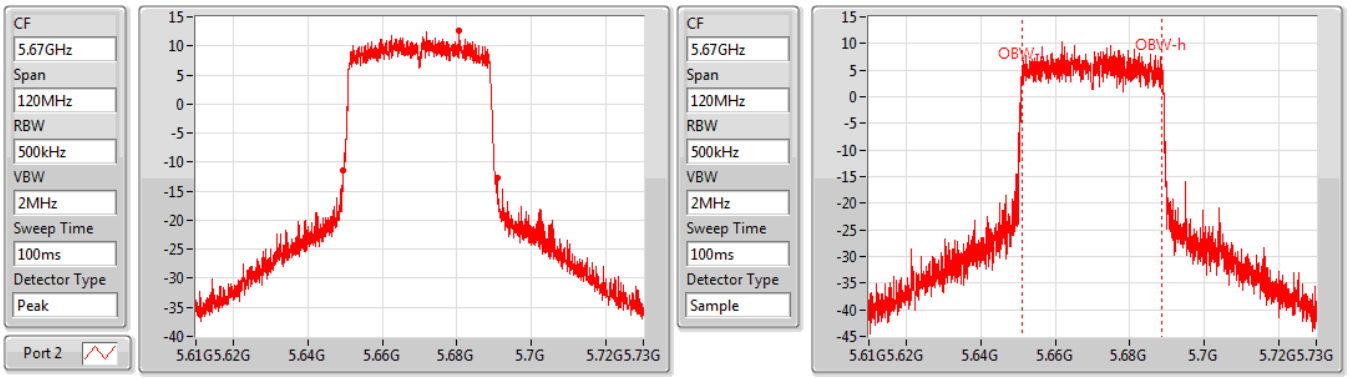


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.66M	5.52798G	5.57064G	37.781M	5.531049G	5.568831G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5670MHz

04/07/2019

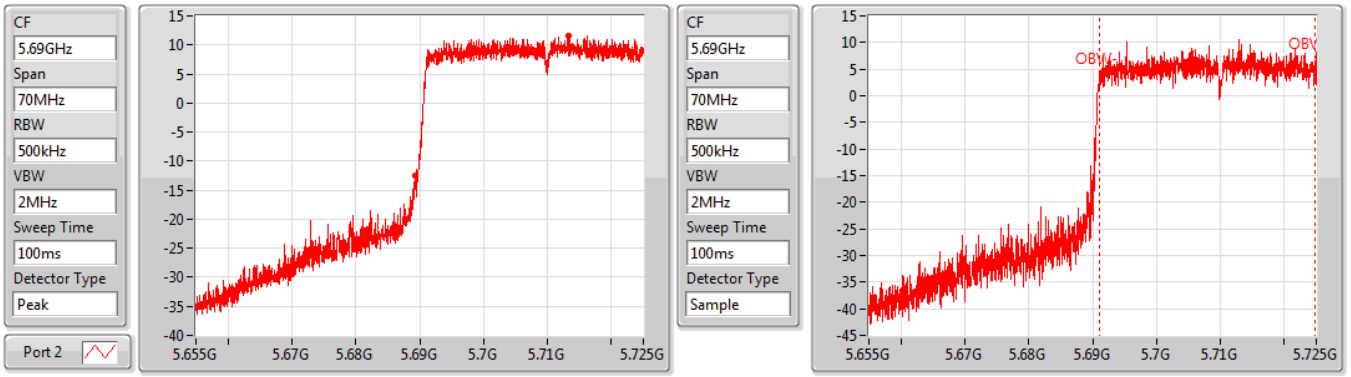


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.22M	5.64954G	5.69076G	37.721M	5.65099G	5.688711G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5710MHz Straddle 5.47-5.725GHz

04/07/2019

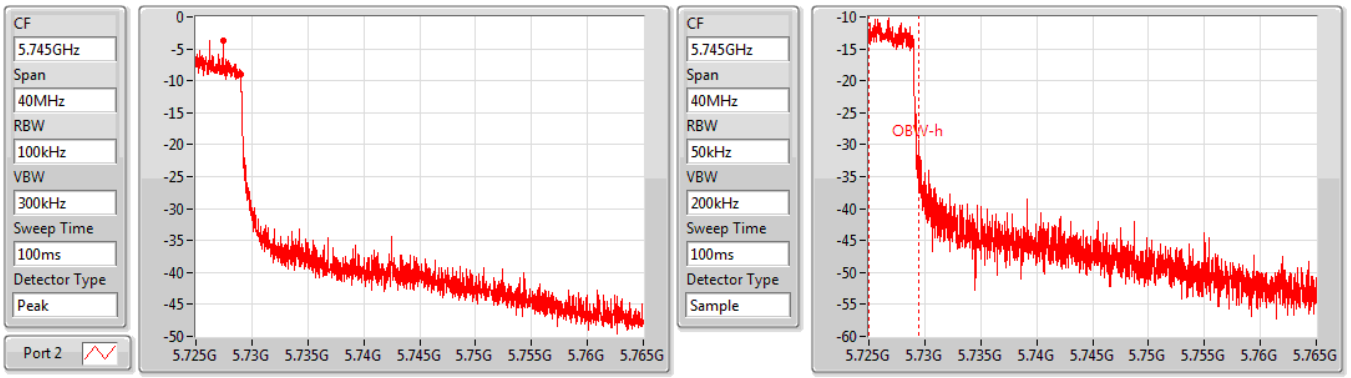


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.77M	5.68923G	5.725G	33.793M	5.691049G	5.724843G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2) EBW

5710MHz Straddle 5.725-5.85GHz

04/07/2019

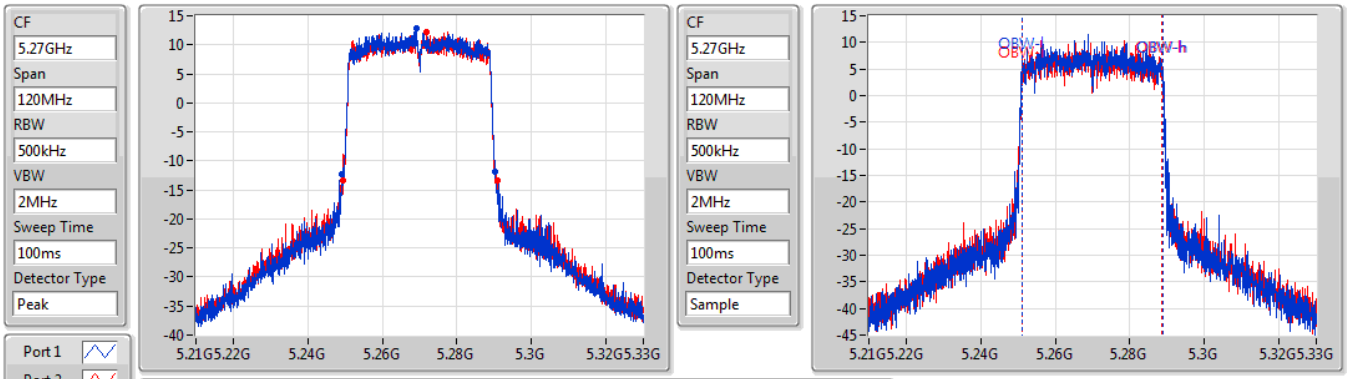


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.98M	5.725G	5.72898G	4.418M	5.72501G	5.729428G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

5270MHz

04/07/2019

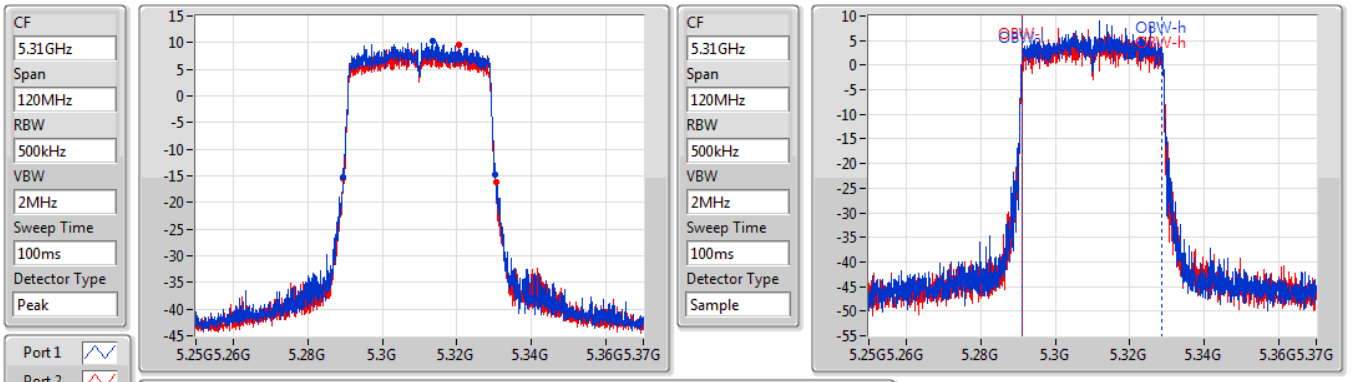


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.28M	5.24906G	5.29034G	37.841M	5.25099G	5.288831G	Inf	1
41.58M	5.24942G	5.291G	37.661M	5.251049G	5.288711G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

5310MHz

04/07/2019

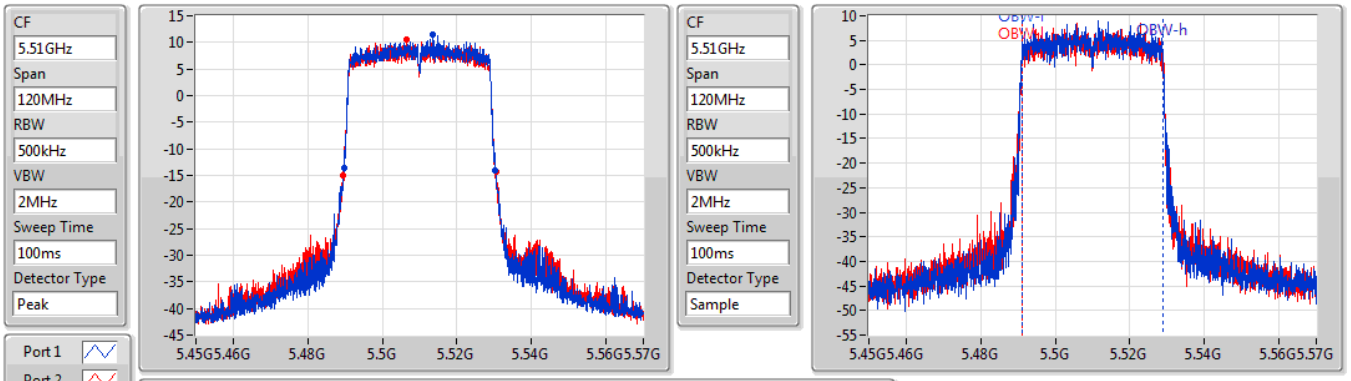


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.98M	5.28936G	5.33034G	37.601M	5.291109G	5.328711G	Inf	1
40.92M	5.2896G	5.33052G	37.601M	5.291109G	5.328711G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

5510MHz

04/07/2019

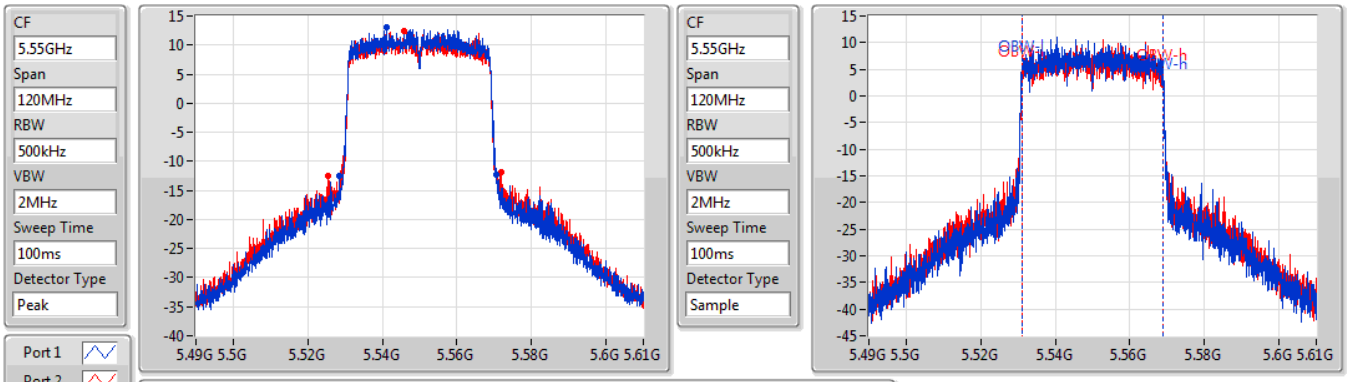


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.68M	5.48966G	5.53034G	37.721M	5.491049G	5.528771G	Inf	1
41.4M	5.4893G	5.5307G	37.601M	5.491169G	5.528771G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

5550MHz

04/07/2019

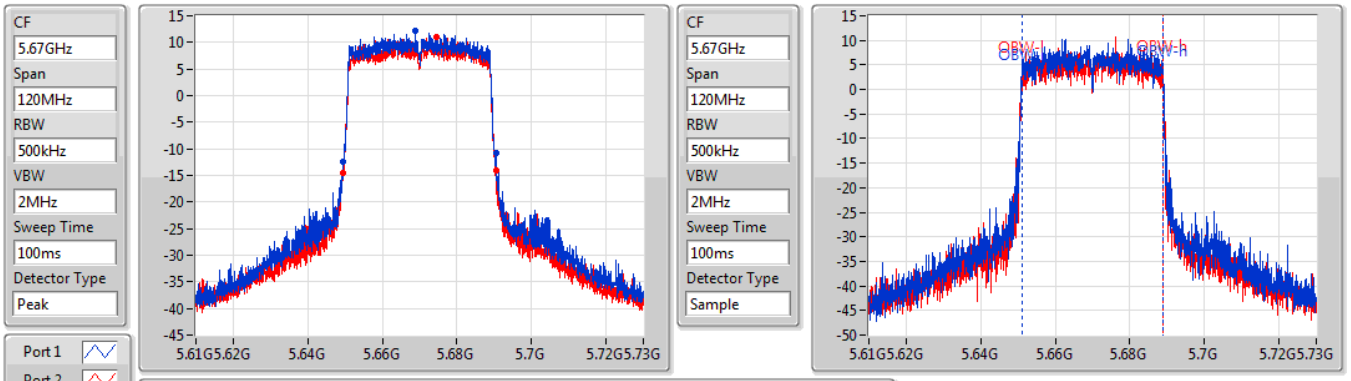


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.36M	5.52834G	5.5707G	37.841M	5.53099G	5.568831G	Inf	1
46.74M	5.52528G	5.57202G	37.781M	5.531049G	5.568831G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

5670MHz

04/07/2019



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.8M	5.6496G	5.6904G	37.661M	5.651109G	5.688771G	Inf	1
41.1M	5.6493G	5.6904G	37.721M	5.651049G	5.688771G	Inf	2