



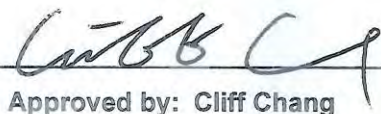
FCC RADIO TEST REPORT

FCC ID : QXO-AP410
Equipment : Wireless Access Point
Brand Name :  or Extreme Networks
Model Name : AP410i, AP410e
Applicant : Extreme Networks, Inc.
6480 Via Del Oro, San Jose, CA 95119, United States
Manufacturer : Extreme Networks, Inc.
6480 Via Del Oro, San Jose, CA 95119, United States
Standard : 47 CFR FCC Part 15.407

The product was received on Aug. 20, 2019, and testing was started from Oct. 16, 2019 and completed on Nov. 12, 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.



Approved by: Cliff Chang

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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.0



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
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:

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

Reviewed by: Sam Chen

Report Producer: Wendy Pan



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20), ax (HEW20)	5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5250-5350	n (HT40), ac (VHT40), ax (HEW40)	5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5250-5350	ac (VHT80), ax (HEW80)	5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.15-5.25GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.25-5.35GHz	802.11a	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.25-5.35GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.25-5.35GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.47-5.725GHz	802.11a	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.47-5.725GHz	802.11n HT40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1TX, 2TX, 4TX



5.47-5.725GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.47-5.725GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.47-5.725GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.725-5.85GHz	802.11a	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.725-5.85GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX, 4TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ For Radio 2 VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ For Radio 2 HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ For Radio 3 VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ For Radio 3 HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

For Internal antenna EUT:

Ant.	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)			Remark
					WLAN 2.4GHz	WLAN 5GHz	BLE/Thread	
1	SENAO	5718A0474300	PIFA	IPEX	4.56	-	-	Radio 1
2	SENAO	5718A0475300	PIFA	IPEX	4.56	-	-	Radio 1
3	SENAO	5718A0476300	PIFA	IPEX	4.47	5.02	-	Radio 3
4	SENAO	5718A0477300	PIFA	IPEX	4.47	5.02	-	Radio 3
5	SENAO	5718A0478300	PIFA	IPEX	-	5.36	-	Radio 2
6	SENAO	5718A0479300	PIFA	IPEX	-	5.36	-	Radio 2
7	SENAO	5718A0480300	PIFA	IPEX	-	5.36	-	Radio 2
8	SENAO	5718A0481300	PIFA	IPEX	-	5.36	-	Radio 2
9	SENAO	5718A0482300	PIFA	IPEX	-	-	4.37	Radio 4

Beamforming Gain (dBi)			
2TX		4TX	
WLAN 2.4GHz	WLAN 5GHz	WLAN 5GHz	
3.01		6.02	

Note: The above information was declared by manufacturer.

For Radio 1:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For Radio 2:

For IEEE 802.11a/n/ac/ax mode (1TX, 2TX, 4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.



For Radio 3:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For Radio 4 BLE/Thread (1TX/1RX):

Only Port 1 can be use as transmitting/receiving antenna.



For External antenna EUT:

Ant.	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)		
					WLAN 2.4GHz	WLAN 5GHz	BLE/Thread
1	Extreme	ML-2452-APA2-01	Omni	RP SMA male	3.17	4.85	-
2	Extreme	ML-2452-APA2-02	Omni	RP SMA male	3.17	4.85	-
3	Extreme	ML-2452-HPA5-036	Omni	RP SMA male	3.9	5.7	-
4	Extreme	ML-2452-HPAG4A6-01	Omni	N male	4.0	7.3	-
5	Extreme	ML-2452-PNA5-01R	Panel	Type N-Male	4.5	5.0	-
6	Extreme	ML-2452-PTA4M4-036	Omni	Rev-Polarity SMA Male 4x	5.0	6.6	-
7	Extreme	ML-2452-HPAG5A8-01	Omni	N male	5.0	8.0	-
8	Extreme	WS-AO-DQ04360N	Omni	N male	5.5	6.0	-
9	Extreme	AI-DQ04360S	Omni	RP SMA male	5.5	6.0	-
10	Extreme	ML-2452-SEC6M4-036 / WS-AI-DQ05120	Panel	RP SMA male	6.92	7.23	-
11	Extreme	WS-AI-DE07025	Panel	RP SMA male	7.50	6.50	-
12	Extreme	ML-2452-PNA7-01R	Panel	Type N-Male	7.8	10.7	7.8
13	Extreme	WS-AI-DE10055	Panel	RP SMA male	10.5	7.5	-
14	Extreme	ML-2499-HPA8-01	Dipole	N male	-	-	8.0

Beamforming Gain (dBi)			
2TX		4TX	
WLAN 2.4GHz	WLAN 5GHz	WLAN 5GHz	
3.01		6.02	

Radio	EUT icon			
	Port 1	Port 2	Port 3	Port 4
1	2.4G/5G-1	2.4G/5G-2	-	-
2	2.4G/5G-1	2.4G/5G-2	5G-3	5G-4
3	2.4G/5G-5	2.4G/5G-6	-	-
4	BLE	-	-	-

Note: 1. The above information was declared by manufacturer.

2. Ant. 1~14 are the different antenna type in the antenna list. Only the highest gain antenna was selected from each different type of antenna to test and record in this report. for 2.4GHz is Ant.7, Ant.12 and Ant.13 and for 5GHz is Ant.7 and Ant.12 and for BTLE/Thread is Ant.12 and Ant.14 were selected to perform the test and recorded in this report.



For Radio 1:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For Radio 2:

For IEEE 802.11a/n/ac/ax mode (1TX, 2TX, 4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For Radio 3:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For Radio 4 BLE/Thread (1TX/1RX):

Only Port 1 can be use as transmitting/receiving antenna.

**1.1.3 Mode Test Duty Cycle****For Radio 2****For 1TX Mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.068m	1k
802.11ac VHT20	0.986	0.06	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.973	0.12	1.935m	1k
802.11ac VHT80	0.943	0.25	461.25u	3k
802.11ac VHT160	0.897	0.47	253.75u	10k
802.11ax HEW20	0.986	0.06	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40	0.962	0.17	773.75u	3k
802.11ax HEW80	0.929	0.32	402.5u	3k
802.11ax HEW160	0.893	0.49	235u	10k

For 2TX Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.953	0.21	2.068m	1k
802.11ac VHT20	0.978	0.1	5.007m	300
802.11ac VHT40	0.957	0.19	5.007m	300
802.11ac VHT80	0.912	0.4	2.003m	1k
802.11ac VHT160	0.837	0.77	153.125u	10k
802.11ax HEW20	0.965	0.15	782.5u	3k
802.11ax HEW40	0.934	0.3	425u	3k
802.11ax HEW80	0.895	0.48	242.5u	10k
802.11ax HEW160	0.841	0.75	157.5u	10k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.068m	1k
802.11ac VHT20	0.986	0.06	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.973	0.12	1.935m	1k
802.11ac VHT80	0.943	0.25	461.25u	3k
802.11ac VHT160	0.895	0.48	252.5u	10k
802.11ax HEW20	0.986	0.06	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40	0.962	0.17	773.75u	3k
802.11ax HEW80	0.929	0.32	402.5u	3k
802.11ax HEW160	0.893	0.49	235u	10k

**For 4TXBF Mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.985	0.07	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40-BF	0.973	0.12	1.935m	1k
802.11ac VHT80-BF	0.945	0.25	950u	3k
802.11ac VHT160-BF	0.931	0.31	1.675m	1k
802.11ax HEW20-BF	0.858	0.67	1.505m	1k
802.11ax HEW40-BF	0.892	0.5	2.265m	1k
802.11ax HEW80-BF	0.928	0.32	3.865m	300
802.11ax HEW160-BF	0.921	0.36	1.317m	1k

For 4T4S Mode:

802.11ac VHT20	0.948	0.23	525u	3k
802.11ac VHT40	0.908	0.42	280.625u	10k
802.11ac VHT80	0.846	0.73	160.625u	10k
802.11ac VHT160	0.791	1.02	108.75u	10k
802.11ax HEW20	0.934	0.3	437.5u	3k
802.11ax HEW40	0.897	0.47	261.25u	10k
802.11ax HEW80	0.842	0.75	170u	10k
802.11ax HEW160	0.816	0.88	127.5u	10k

**For Radio 3****For 1TX Mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.95	0.22	2.068m	1k
802.11ac VHT20	0.99	0.04	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.971	0.13	5.007m	300
802.11ac VHT80	0.926	0.33	5.007m	300
802.11ax HEW20	0.981	0.08	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40	0.965	0.15	775u	3k
802.11ax HEW80	0.931	0.31	405u	3k

For 2TX Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.068m	1k
802.11ac VHT20	0.981	0.08	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.925	0.34	5.007m	300
802.11ac VHT80	0.845	0.73	252.174u	10k
802.11ax HEW20	0.965	0.15	782.5u	3k
802.11ax HEW40	0.934	0.3	425u	3k
802.11ax HEW80	0.895	0.48	242.5u	10k

For 2TXBF Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.986	0.06	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40-BF	0.97	0.13	945.333u	3k
802.11ac VHT80-BF	0.942	0.26	457.333u	3k
802.11ax HEW20-BF	0.885	0.53	1.505m	1k
802.11ax HEW40-BF	0.876	0.57	2.225m	1k
802.11ax HEW80-BF	0.928	0.32	3.842m	300

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

**1.1.4 EUT Operational Condition**

EUT Power Type	From Power Adapter or PoE		
Beamforming Function	☒ With beamforming	☐ Without beamforming	
	For VHT20/40 and 802.11n/ax in 2.4GHz and 802.11n/ac/ax in 5GHz.		
Weather Band	☒ With 5600~5650MHz	☐ Without 5600~5650MHz	
Function	☐ Outdoor P2M	☒ Indoor P2M	
	☐ Fixed P2P	☐ Client	
TPC Function	☒ With TPC	☐ Without TPC	
Test Software Version	Mtool V3.1.0.1		

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	EUT	Description
AP410i	EUT 1	The “i” in AP410i indicates that it comes with internal antennas and the “e” in AP410e indicates that the access point comes with external antenna connectors.
AP410e	EUT 2	

1.1.6 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR970232AD

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

Modifications	Performance Checking
1. Adding 5GHz band 2 and band 3 (5250~5350 MHz, 5470~5725 MHz) for this device.	1. Emission Bandwidth.
2. Adding 802.11ac 160MHz and 802.11ax 160MHz Mode.	2. Maximum Conducted Output Power.
	3. Peak Power Spectral Density.
	4. Unwanted Emissions above 1GHz.

1.2 Applicable 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
- ♦ FCC KDB 789033 D02 v02r01
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01

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
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH03-CB	Serway Li	25.4~25.8°C / 53~54%	Oct. 26, 2019 ~ Nov. 12, 2019
Radiated	03CH04-CB	Bruce Yang	24.2~24.9°C / 52~55%	Oct. 16, 2019 ~ Nov. 05, 2019

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086D with Industry Canada.

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
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 2

For Internal Antenna

For 1TX Mode:

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	99	24.75
5300MHz	99	24.75
5320MHz	83	20.75
5500MHz	80	20
5580MHz	94	23.5
5700MHz	74	18.5
5720MHz Straddle 5.47-5.725GHz	91	22.75
5720MHz Straddle 5.725-5.85GHz	91	22.75
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	98	24.5
5300MHz	98	24.5
5320MHz	83	20.75
5500MHz	77	19.25
5580MHz	93	23.25
5700MHz	69	17.25
5720MHz Straddle 5.47-5.725GHz	88	22
5720MHz Straddle 5.725-5.85GHz	88	22
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	95	23.75
5310MHz	74	18.5
5510MHz	71	17.75
5550MHz	93	23.25
5670MHz	81	20.25
5710MHz Straddle 5.47-5.725GHz	89	22.25
5710MHz Straddle 5.725-5.85GHz	89	22.25
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	75	18.75
5530MHz	71	17.75
5610MHz	90	22.5
5690MHz Straddle 5.47-5.725GHz	92	23
5690MHz Straddle 5.725-5.85GHz	92	23
802.11ac VHT160_Nss1,(MCS0)_1TX	-	-



Mode	Power Setting	PowerSetting (dBm)
5250MHz Straddle 5.15-5.25GHz	70	17.5
5250MHz Straddle 5.25-5.35GHz	70	17.5
5570MHz	71	17.75
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	98	24.5
5300MHz	98	24.5
5320MHz	83	20.75
5500MHz	77	19.25
5580MHz	93	23.25
5700MHz	69	17.25
5720MHz Straddle 5.47-5.725GHz	88	22
5720MHz Straddle 5.725-5.85GHz	88	22
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	95	23.75
5310MHz	74	18.5
5510MHz	71	17.75
5550MHz	93	23.25
5670MHz	81	20.25
5710MHz Straddle 5.47-5.725GHz	89	22.25
5710MHz Straddle 5.725-5.85GHz	89	22.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	75	18.75
5530MHz	71	17.75
5610MHz	90	22.5
5690MHz Straddle 5.47-5.725GHz	92	23
5690MHz Straddle 5.725-5.85GHz	92	23
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-
5250MHz Straddle 5.15-5.25GHz	70	17.5
5250MHz Straddle 5.25-5.35GHz	70	17.5
5570MHz	71	17.75

**For 2TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	77	19.25
5300MHz	77	19.25
5320MHz	77	19.25
5500MHz	66	16.5
5580MHz	76	19
5700MHz	60	15
5720MHz Straddle 5.47-5.725GHz	72	18
5720MHz Straddle 5.725-5.85GHz	72	18
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	86	21.5
5300MHz	86	21.5
5320MHz	78	19.5
5500MHz	76	19
5580MHz	86	21.5
5700MHz	60	15
5720MHz Straddle 5.47-5.725GHz	84	21
5720MHz Straddle 5.725-5.85GHz	84	21
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	85	21.25
5310MHz	70	17.5
5510MHz	59	14.75
5550MHz	86	21.5
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	85	21.25
5710MHz Straddle 5.725-5.85GHz	85	21.25
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	67	16.75
5530MHz	66	16.5
5610MHz	81	20.25
5690MHz Straddle 5.47-5.725GHz	85	21.25
5690MHz Straddle 5.725-5.85GHz	85	21.25
802.11ac VHT160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	58	14.5
5250MHz Straddle 5.25-5.35GHz	58	14.5
5570MHz	63	15.75
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	86	21.5
5300MHz	86	21.5



Mode	Power Setting	PowerSetting (dBm)
5320MHz	78	19.5
5500MHz	76	19
5580MHz	86	21.5
5700MHz	60	15
5720MHz Straddle 5.47-5.725GHz	84	21
5720MHz Straddle 5.725-5.85GHz	84	21
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	85	21.25
5310MHz	70	17.5
5510MHz	59	14.75
5550MHz	86	21.5
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	85	21.25
5710MHz Straddle 5.725-5.85GHz	85	21.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	67	16.75
5530MHz	66	16.5
5610MHz	81	20.25
5690MHz Straddle 5.47-5.725GHz	85	21.25
5690MHz Straddle 5.725-5.85GHz	85	21.25
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	58	14.5
5250MHz Straddle 5.25-5.35GHz	58	14.5
5570MHz	63	15.75

**For 4T1S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5260MHz	51	12.75
5300MHz	51	12.75
5320MHz	51	12.75
5500MHz	52	13
5580MHz	51	12.75
5700MHz	48	12
5720MHz Straddle 5.47-5.725GHz	48	12
5720MHz Straddle 5.725-5.85GHz	48	12
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-
5260MHz	52	13
5300MHz	52	13
5320MHz	52	13
5500MHz	53	13.25
5580MHz	52	13
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	49	12.25
5720MHz Straddle 5.725-5.85GHz	49	12.25
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-
5270MHz	63	15.75
5310MHz	64	16
5510MHz	63	15.75
5550MHz	64	16
5670MHz	61	15.25
5710MHz Straddle 5.47-5.725GHz	61	15.25
5710MHz Straddle 5.725-5.85GHz	61	15.25
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-
5290MHz	62	15.5
5530MHz	65	16.25
5610MHz	72	18
5690MHz Straddle 5.47-5.725GHz	70	17.5
5690MHz Straddle 5.725-5.85GHz	70	17.5
802.11ac VHT160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	56	14
5250MHz Straddle 5.25-5.35GHz	56	14
5570MHz	67	16.75
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5260MHz	52	13
5300MHz	52	13



Mode	Power Setting	PowerSetting (dBm)
5320MHz	52	13
5500MHz	53	13.25
5580MHz	52	13
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	49	12.25
5720MHz Straddle 5.725-5.85GHz	49	12.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5270MHz	63	15.75
5310MHz	64	16
5510MHz	63	15.75
5550MHz	64	16
5670MHz	61	15.25
5710MHz Straddle 5.47-5.725GHz	61	15.25
5710MHz Straddle 5.725-5.85GHz	61	15.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5290MHz	62	15.5
5530MHz	65	16.25
5610MHz	72	18
5690MHz Straddle 5.47-5.725GHz	70	17.5
5690MHz Straddle 5.725-5.85GHz	70	17.5
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	56	14
5250MHz Straddle 5.25-5.35GHz	56	14
5570MHz	67	16.75
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	48	12
5300MHz	48	12
5320MHz	48	12
5500MHz	47	11.75
5580MHz	48	12
5700MHz	43	10.75
5720MHz Straddle 5.47-5.725GHz	43	10.75
5720MHz Straddle 5.725-5.85GHz	43	10.75
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	48	12
5310MHz	48	12
5510MHz	49	12.25
5550MHz	48	12
5670MHz	43	10.75
5710MHz Straddle 5.47-5.725GHz	44	11



Mode	Power Setting	PowerSetting (dBm)
5710MHz Straddle 5.725-5.85GHz	44	11
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	49	12.25
5530MHz	49	12.25
5610MHz	44	11
5690MHz Straddle 5.47-5.725GHz	44	11
5690MHz Straddle 5.725-5.85GHz	44	11
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	59	14.75
5250MHz Straddle 5.25-5.35GHz	59	14.75
5570MHz	51	12.75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	48	12
5300MHz	48	12
5320MHz	48	12
5500MHz	47	11.75
5580MHz	48	12
5700MHz	43	10.75
5720MHz Straddle 5.47-5.725GHz	43	10.75
5720MHz Straddle 5.725-5.85GHz	43	10.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	48	12
5310MHz	48	12
5510MHz	49	12.25
5550MHz	48	12
5670MHz	43	10.75
5710MHz Straddle 5.47-5.725GHz	44	11
5710MHz Straddle 5.725-5.85GHz	44	11
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	49	12.25
5530MHz	49	12.25
5610MHz	44	11
5690MHz Straddle 5.47-5.725GHz	44	11
5690MHz Straddle 5.725-5.85GHz	44	11
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	59	14.75
5250MHz Straddle 5.25-5.35GHz	59	14.75
5570MHz	51	12.75

**For 4T4S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-
5260MHz	72	18
5300MHz	72	18
5320MHz	72	18
5500MHz	74	18.5
5580MHz	73	18.25
5700MHz	60	15
5720MHz Straddle 5.47-5.725GHz	69	17.25
5720MHz Straddle 5.725-5.85GHz	69	17.25
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-
5270MHz	73	18.25
5310MHz	63	15.75
5510MHz	59	14.75
5550MHz	74	18.5
5670MHz	65	16.25
5710MHz Straddle 5.47-5.725GHz	70	17.5
5710MHz Straddle 5.725-5.85GHz	70	17.5
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-
5290MHz	63	15.75
5530MHz	65	16.25
5610MHz	72	18
5690MHz Straddle 5.47-5.725GHz	70	17.5
5690MHz Straddle 5.725-5.85GHz	70	17.5
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	54	13.5
5250MHz Straddle 5.25-5.35GHz	54	13.5
5570MHz	62	15.5
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5260MHz	72	18
5300MHz	72	18
5320MHz	72	18
5500MHz	74	18.5
5580MHz	73	18.25
5700MHz	60	15
5720MHz Straddle 5.47-5.725GHz	69	17.25
5720MHz Straddle 5.725-5.85GHz	69	17.25
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5270MHz	73	18.25
5310MHz	63	15.75



Mode	Power Setting	PowerSetting (dBm)
5510MHz	59	14.75
5550MHz	74	18.5
5670MHz	65	16.25
5710MHz Straddle 5.47-5.725GHz	70	17.5
5710MHz Straddle 5.725-5.85GHz	70	17.5
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5290MHz	63	15.75
5530MHz	65	16.25
5610MHz	72	18
5690MHz Straddle 5.47-5.725GHz	70	17.5
5690MHz Straddle 5.725-5.85GHz	70	17.5
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	54	13.5
5250MHz Straddle 5.25-5.35GHz	54	13.5
5570MHz	62	15.5

**For External Antenna 7****For 1TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	85	21.25
5300MHz	86	21.5
5320MHz	76	19
5500MHz	59	14.75
5580MHz	90	22.5
5700MHz	59	14.75
5720MHz Straddle 5.47-5.725GHz	85	21.25
5720MHz Straddle 5.725-5.85GHz	85	21.25
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	85	21.25
5300MHz	85	21.25
5320MHz	71	17.75
5500MHz	63	15.75
5580MHz	89	22.25
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	83	20.75
5720MHz Straddle 5.725-5.85GHz	83	20.75
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	81	20.25
5310MHz	64	16
5510MHz	60	15
5550MHz	85	21.25
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	85	21.25
5710MHz Straddle 5.725-5.85GHz	85	21.25
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	65	16.25
5530MHz	61	15.25
5610MHz	78	19.5
5690MHz Straddle 5.47-5.725GHz	86	21.5
5690MHz Straddle 5.725-5.85GHz	86	21.5
802.11ac VHT160_Nss1,(MCS0)_1TX	-	-
5250MHz Straddle 5.15-5.25GHz	59	14.75
5250MHz Straddle 5.25-5.35GHz	59	14.75
5570MHz	52	13
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	85	21.25



Mode	Power Setting	PowerSetting (dBm)
5300MHz	85	21.25
5320MHz	71	17.75
5500MHz	63	15.75
5580MHz	89	22.25
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	83	20.75
5720MHz Straddle 5.725-5.85GHz	83	20.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	81	20.25
5310MHz	64	16
5510MHz	60	15
5550MHz	85	21.25
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	85	21.25
5710MHz Straddle 5.725-5.85GHz	85	21.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	65	16.25
5530MHz	61	15.25
5610MHz	78	19.5
5690MHz Straddle 5.47-5.725GHz	86	21.5
5690MHz Straddle 5.725-5.85GHz	86	21.5
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-
5250MHz Straddle 5.15-5.25GHz	59	14.75
5250MHz Straddle 5.25-5.35GHz	59	14.75
5570MHz	52	13

**For 2TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	65	16.25
5300MHz	65	16.25
5320MHz	65	16.25
5500MHz	55	13.75
5580MHz	65	16.25
5700MHz	54	13.5
5720MHz Straddle 5.47-5.725GHz	64	16
5720MHz Straddle 5.725-5.85GHz	64	16
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	77	19.25
5300MHz	77	19.25
5320MHz	65	16.25
5500MHz	61	15.25
5580MHz	77	19.25
5700MHz	53	13.25
5720MHz Straddle 5.47-5.725GHz	75	18.75
5720MHz Straddle 5.725-5.85GHz	75	18.75
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	77	19.25
5310MHz	57	14.25
5510MHz	51	12.75
5550MHz	75	18.75
5670MHz	53	13.25
5710MHz Straddle 5.47-5.725GHz	77	19.25
5710MHz Straddle 5.725-5.85GHz	77	19.25
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	54	13.5
5530MHz	55	13.75
5610MHz	70	17.5
5690MHz Straddle 5.47-5.725GHz	75	18.75
5690MHz Straddle 5.725-5.85GHz	75	18.75
802.11ac VHT160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	49	12.25
5250MHz Straddle 5.25-5.35GHz	49	12.25
5570MHz	46	11.5
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	77	19.25
5300MHz	77	19.25



Mode	Power Setting	PowerSetting (dBm)
5320MHz	65	16.25
5500MHz	61	15.25
5580MHz	77	19.25
5700MHz	53	13.25
5720MHz Straddle 5.47-5.725GHz	75	18.75
5720MHz Straddle 5.725-5.85GHz	75	18.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	77	19.25
5310MHz	57	14.25
5510MHz	51	12.75
5550MHz	75	18.75
5670MHz	53	13.25
5710MHz Straddle 5.47-5.725GHz	77	19.25
5710MHz Straddle 5.725-5.85GHz	77	19.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	54	13.5
5530MHz	55	13.75
5610MHz	70	17.5
5690MHz Straddle 5.47-5.725GHz	75	18.75
5690MHz Straddle 5.725-5.85GHz	75	18.75
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	49	12.25
5250MHz Straddle 5.25-5.35GHz	49	12.25
5570MHz	46	11.5

**For 4T1S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5260MHz	39	9.75
5300MHz	39	9.75
5320MHz	39	9.75
5500MHz	39	9.75
5580MHz	39	9.75
5700MHz	39	9.75
5720MHz Straddle 5.47-5.725GHz	39	9.75
5720MHz Straddle 5.725-5.85GHz	39	9.75
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-
5260MHz	41	10.25
5300MHz	41	10.25
5320MHz	41	10.25
5500MHz	41	10.25
5580MHz	41	10.25
5700MHz	41	10.25
5720MHz Straddle 5.47-5.725GHz	41	10.25
5720MHz Straddle 5.725-5.85GHz	41	10.25
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-
5270MHz	54	13.5
5310MHz	53	13.25
5510MHz	54	13.5
5550MHz	54	13.5
5670MHz	54	13.5
5710MHz Straddle 5.47-5.725GHz	54	13.5
5710MHz Straddle 5.725-5.85GHz	54	13.5
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-
5290MHz	51	12.75
5530MHz	55	13.75
5610MHz	64	16
5690MHz Straddle 5.47-5.725GHz	64	16
5690MHz Straddle 5.725-5.85GHz	64	16
802.11ac VHT160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	44	11
5250MHz Straddle 5.25-5.35GHz	44	11
5570MHz	43	10.75
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5260MHz	41	10.25
5300MHz	41	10.25



Mode	Power Setting	PowerSetting (dBm)
5320MHz	41	10.25
5500MHz	41	10.25
5580MHz	41	10.25
5700MHz	41	10.25
5720MHz Straddle 5.47-5.725GHz	41	10.25
5720MHz Straddle 5.725-5.85GHz	41	10.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5270MHz	54	13.5
5310MHz	53	13.25
5510MHz	54	13.5
5550MHz	54	13.5
5670MHz	54	13.5
5710MHz Straddle 5.47-5.725GHz	54	13.5
5710MHz Straddle 5.725-5.85GHz	54	13.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5290MHz	51	12.75
5530MHz	55	13.75
5610MHz	64	16
5690MHz Straddle 5.47-5.725GHz	64	16
5690MHz Straddle 5.725-5.85GHz	64	16
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	44	11
5250MHz Straddle 5.25-5.35GHz	44	11
5570MHz	43	10.75
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	38	9.5
5300MHz	38	9.5
5320MHz	38	9.5
5500MHz	38	9.5
5580MHz	38	9.5
5700MHz	36	9
5720MHz Straddle 5.47-5.725GHz	34	8.5
5720MHz Straddle 5.725-5.85GHz	34	8.5
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	40	10
5310MHz	39	9.75
5510MHz	38	9.5
5550MHz	38	9.5
5670MHz	37	9.25
5710MHz Straddle 5.47-5.725GHz	37	9.25



Mode	Power Setting	PowerSetting (dBm)
5710MHz Straddle 5.725-5.85GHz	37	9.25
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	40	10
5530MHz	39	9.75
5610MHz	37	9.25
5690MHz Straddle 5.47-5.725GHz	37	9.25
5690MHz Straddle 5.725-5.85GHz	37	9.25
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	44	11
5250MHz Straddle 5.25-5.35GHz	44	11
5570MHz	43	10.75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	38	9.5
5300MHz	38	9.5
5320MHz	38	9.5
5500MHz	38	9.5
5580MHz	38	9.5
5700MHz	36	9
5720MHz Straddle 5.47-5.725GHz	34	8.5
5720MHz Straddle 5.725-5.85GHz	34	8.5
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	40	10
5310MHz	39	9.75
5510MHz	38	9.5
5550MHz	38	9.5
5670MHz	37	9.25
5710MHz Straddle 5.47-5.725GHz	37	9.25
5710MHz Straddle 5.725-5.85GHz	37	9.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	40	10
5530MHz	39	9.75
5610MHz	37	9.25
5690MHz Straddle 5.47-5.725GHz	37	9.25
5690MHz Straddle 5.725-5.85GHz	37	9.25
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	44	11
5250MHz Straddle 5.25-5.35GHz	44	11
5570MHz	43	10.75

**For 4T4S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-
5260MHz	64	16
5300MHz	64	16
5320MHz	63	15.75
5500MHz	59	14.75
5580MHz	64	16
5700MHz	58	14.5
5720MHz Straddle 5.47-5.725GHz	63	15.75
5720MHz Straddle 5.725-5.85GHz	63	15.75
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-
5270MHz	65	16.25
5310MHz	54	13.5
5510MHz	56	14
5550MHz	65	16.25
5670MHz	63	15.75
5710MHz Straddle 5.47-5.725GHz	66	16.5
5710MHz Straddle 5.725-5.85GHz	66	16.5
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-
5290MHz	51	12.75
5530MHz	53	13.25
5610MHz	65	16.25
5690MHz Straddle 5.47-5.725GHz	65	16.25
5690MHz Straddle 5.725-5.85GHz	65	16.25
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	46	11.5
5250MHz Straddle 5.25-5.35GHz	46	11.5
5570MHz	42	10.5
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5260MHz	64	16
5300MHz	64	16
5320MHz	63	15.75
5500MHz	59	14.75
5580MHz	64	16
5700MHz	58	14.5
5720MHz Straddle 5.47-5.725GHz	63	15.75
5720MHz Straddle 5.725-5.85GHz	63	15.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5270MHz	65	16.25
5310MHz	54	13.5



Mode	Power Setting	PowerSetting (dBm)
5510MHz	56	14
5550MHz	65	16.25
5670MHz	63	15.75
5710MHz Straddle 5.47-5.725GHz	66	16.5
5710MHz Straddle 5.725-5.85GHz	66	16.5
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5290MHz	51	12.75
5530MHz	53	13.25
5610MHz	65	16.25
5690MHz Straddle 5.47-5.725GHz	65	16.25
5690MHz Straddle 5.725-5.85GHz	65	16.25
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	46	11.5
5250MHz Straddle 5.25-5.35GHz	46	11.5
5570MHz	42	10.5

**For External Antenna 12****For 1TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	78	19.5
5300MHz	78	19.5
5320MHz	75	18.75
5500MHz	56	14
5580MHz	78	19.5
5700MHz	58	14.5
5720MHz Straddle 5.47-5.725GHz	78	19.5
5720MHz Straddle 5.725-5.85GHz	78	19.5
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	79	19.75
5300MHz	79	19.75
5320MHz	72	18
5500MHz	61	15.25
5580MHz	79	19.75
5700MHz	48	12
5720MHz Straddle 5.47-5.725GHz	79	19.75
5720MHz Straddle 5.725-5.85GHz	79	19.75
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	78	19.5
5310MHz	65	16.25
5510MHz	56	14
5550MHz	78	19.5
5670MHz	66	16.5
5710MHz Straddle 5.47-5.725GHz	79	19.75
5710MHz Straddle 5.725-5.85GHz	79	19.75
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	64	16
5530MHz	58	14.5
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	77	19.25
5690MHz Straddle 5.725-5.85GHz	77	19.25
802.11ac VHT160_Nss1,(MCS0)_1TX	-	-
5250MHz Straddle 5.15-5.25GHz	61	15.25
5250MHz Straddle 5.25-5.35GHz	61	15.25
5570MHz	48	12
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	79	19.75



Mode	Power Setting	PowerSetting (dBm)
5300MHz	79	19.75
5320MHz	72	18
5500MHz	61	15.25
5580MHz	79	19.75
5700MHz	48	12
5720MHz Straddle 5.47-5.725GHz	79	19.75
5720MHz Straddle 5.725-5.85GHz	79	19.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	78	19.5
5310MHz	65	16.25
5510MHz	56	14
5550MHz	78	19.5
5670MHz	66	16.5
5710MHz Straddle 5.47-5.725GHz	79	19.75
5710MHz Straddle 5.725-5.85GHz	79	19.75
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	64	16
5530MHz	58	14.5
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	77	19.25
5690MHz Straddle 5.725-5.85GHz	77	19.25
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-
5250MHz Straddle 5.15-5.25GHz	61	15.25
5250MHz Straddle 5.25-5.35GHz	61	15.25
5570MHz	48	12

**For 2TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	54	13.5
5300MHz	54	13.5
5320MHz	54	13.5
5500MHz	51	12.75
5580MHz	54	13.5
5700MHz	52	13
5720MHz Straddle 5.47-5.725GHz	53	13.25
5720MHz Straddle 5.725-5.85GHz	53	13.25
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	66	16.5
5300MHz	66	16.5
5320MHz	64	16
5500MHz	59	14.75
5580MHz	66	16.5
5700MHz	51	12.75
5720MHz Straddle 5.47-5.725GHz	64	16
5720MHz Straddle 5.725-5.85GHz	64	16
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	67	16.75
5310MHz	56	14
5510MHz	49	12.25
5550MHz	66	16.5
5670MHz	51	12.75
5710MHz Straddle 5.47-5.725GHz	67	16.75
5710MHz Straddle 5.725-5.85GHz	67	16.75
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	54	13.5
5530MHz	51	12.75
5610MHz	65	16.25
5690MHz Straddle 5.47-5.725GHz	65	16.25
5690MHz Straddle 5.725-5.85GHz	65	16.25
802.11ac VHT160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	47	11.75
5250MHz Straddle 5.25-5.35GHz	47	11.75
5570MHz	41	10.25
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	66	16.5
5300MHz	66	16.5



Mode	Power Setting	PowerSetting (dBm)
5320MHz	64	16
5500MHz	59	14.75
5580MHz	66	16.5
5700MHz	51	12.75
5720MHz Straddle 5.47-5.725GHz	64	16
5720MHz Straddle 5.725-5.85GHz	64	16
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	67	16.75
5310MHz	56	14
5510MHz	49	12.25
5550MHz	66	16.5
5670MHz	51	12.75
5710MHz Straddle 5.47-5.725GHz	67	16.75
5710MHz Straddle 5.725-5.85GHz	67	16.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	54	13.5
5530MHz	51	12.75
5610MHz	65	16.25
5690MHz Straddle 5.47-5.725GHz	65	16.25
5690MHz Straddle 5.725-5.85GHz	65	16.25
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-
5250MHz Straddle 5.15-5.25GHz	47	11.75
5250MHz Straddle 5.25-5.35GHz	47	11.75
5570MHz	41	10.25

**For 4T1S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5260MHz	28	7
5300MHz	28	7
5320MHz	28	7
5500MHz	27	6.75
5580MHz	28	7
5700MHz	27	6.75
5720MHz Straddle 5.47-5.725GHz	27	6.75
5720MHz Straddle 5.725-5.85GHz	27	6.75
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-
5260MHz	30	7.5
5300MHz	30	7.5
5320MHz	30	7.5
5500MHz	30	7.5
5580MHz	30	7.5
5700MHz	29	7.25
5720MHz Straddle 5.47-5.725GHz	29	7.25
5720MHz Straddle 5.725-5.85GHz	29	7.25
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-
5270MHz	43	10.75
5310MHz	44	11
5510MHz	43	10.75
5550MHz	44	11
5670MHz	44	11
5710MHz Straddle 5.47-5.725GHz	45	11.25
5710MHz Straddle 5.725-5.85GHz	45	11.25
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-
5290MHz	45	11.25
5530MHz	54	13.5
5610MHz	54	13.5
5690MHz Straddle 5.47-5.725GHz	55	13.75
5690MHz Straddle 5.725-5.85GHz	55	13.75
802.11ac VHT160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	40	10
5250MHz Straddle 5.25-5.35GHz	40	10
5570MHz	45	11.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5260MHz	30	7.5
5300MHz	30	7.5



Mode	Power Setting	PowerSetting (dBm)
5320MHz	30	7.5
5500MHz	30	7.5
5580MHz	30	7.5
5700MHz	29	7.25
5720MHz Straddle 5.47-5.725GHz	29	7.25
5720MHz Straddle 5.725-5.85GHz	29	7.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5270MHz	43	10.75
5310MHz	44	11
5510MHz	43	10.75
5550MHz	44	11
5670MHz	44	11
5710MHz Straddle 5.47-5.725GHz	45	11.25
5710MHz Straddle 5.725-5.85GHz	45	11.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5290MHz	45	11.25
5530MHz	54	13.5
5610MHz	54	13.5
5690MHz Straddle 5.47-5.725GHz	55	13.75
5690MHz Straddle 5.725-5.85GHz	55	13.75
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	40	10
5250MHz Straddle 5.25-5.35GHz	40	10
5570MHz	45	11.25
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	27	6.75
5300MHz	27	6.75
5320MHz	27	6.75
5500MHz	26	6.5
5580MHz	26	6.5
5700MHz	24	6
5720MHz Straddle 5.47-5.725GHz	23	5.75
5720MHz Straddle 5.725-5.85GHz	23	5.75
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	28	7
5310MHz	28	7
5510MHz	27	6.75
5550MHz	27	6.75
5670MHz	25	6.25
5710MHz Straddle 5.47-5.725GHz	25	6.25



Mode	Power Setting	PowerSetting (dBm)
5710MHz Straddle 5.725-5.85GHz	25	6.25
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	29	7.25
5530MHz	27	6.75
5610MHz	25	6.25
5690MHz Straddle 5.47-5.725GHz	25	6.25
5690MHz Straddle 5.725-5.85GHz	25	6.25
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	43	10.75
5250MHz Straddle 5.25-5.35GHz	43	10.75
5570MHz	31	7.75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5260MHz	27	6.75
5300MHz	27	6.75
5320MHz	27	6.75
5500MHz	26	6.5
5580MHz	26	6.5
5700MHz	24	6
5720MHz Straddle 5.47-5.725GHz	23	5.75
5720MHz Straddle 5.725-5.85GHz	23	5.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5270MHz	28	7
5310MHz	28	7
5510MHz	27	6.75
5550MHz	27	6.75
5670MHz	25	6.25
5710MHz Straddle 5.47-5.725GHz	25	6.25
5710MHz Straddle 5.725-5.85GHz	25	6.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5290MHz	29	7.25
5530MHz	27	6.75
5610MHz	25	6.25
5690MHz Straddle 5.47-5.725GHz	25	6.25
5690MHz Straddle 5.725-5.85GHz	25	6.25
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	43	10.75
5250MHz Straddle 5.25-5.35GHz	43	10.75
5570MHz	31	7.75

**For 4T4S Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-
5260MHz	54	13.5
5300MHz	54	13.5
5320MHz	54	13.5
5500MHz	54	13.5
5580MHz	54	13.5
5700MHz	54	13.5
5720MHz Straddle 5.47-5.725GHz	54	13.5
5720MHz Straddle 5.725-5.85GHz	54	13.5
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-
5270MHz	55	13.75
5310MHz	49	12.25
5510MHz	54	13.5
5550MHz	55	13.75
5670MHz	56	14
5710MHz Straddle 5.47-5.725GHz	56	14
5710MHz Straddle 5.725-5.85GHz	56	14
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-
5290MHz	47	11.75
5530MHz	55	13.75
5610MHz	55	13.75
5690MHz Straddle 5.47-5.725GHz	55	13.75
5690MHz Straddle 5.725-5.85GHz	55	13.75
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	41	10.25
5250MHz Straddle 5.25-5.35GHz	41	10.25
5570MHz	44	11
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5260MHz	54	13.5
5300MHz	54	13.5
5320MHz	54	13.5
5500MHz	54	13.5
5580MHz	54	13.5
5700MHz	54	13.5
5720MHz Straddle 5.47-5.725GHz	54	13.5
5720MHz Straddle 5.725-5.85GHz	54	13.5
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5270MHz	55	13.75
5310MHz	49	12.25



Mode	Power Setting	PowerSetting (dBm)
5510MHz	54	13.5
5550MHz	55	13.75
5670MHz	56	14
5710MHz Straddle 5.47-5.725GHz	56	14
5710MHz Straddle 5.725-5.85GHz	56	14
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5290MHz	47	11.75
5530MHz	55	13.75
5610MHz	55	13.75
5690MHz Straddle 5.47-5.725GHz	55	13.75
5690MHz Straddle 5.725-5.85GHz	55	13.75
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-
5250MHz Straddle 5.15-5.25GHz	41	10.25
5250MHz Straddle 5.25-5.35GHz	41	10.25
5570MHz	44	11



For Radio 3
For Internal Antenna
For 1TX Mode:

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	97	24.25
5300MHz	97	24.25
5320MHz	93	23.25
5500MHz	86	21.5
5580MHz	98	24.5
5700MHz	81	20.25
5720MHz Straddle 5.47-5.725GHz	92	23
5720MHz Straddle 5.725-5.85GHz	92	23
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	97	24.25
5300MHz	97	24.25
5320MHz	85	21.25
5500MHz	80	20
5580MHz	97	24.25
5700MHz	73	18.25
5720MHz Straddle 5.47-5.725GHz	91	22.75
5720MHz Straddle 5.725-5.85GHz	91	22.75
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	96	24
5310MHz	79	19.75
5510MHz	75	18.75
5550MHz	97	24.25
5670MHz	87	21.75
5710MHz Straddle 5.47-5.725GHz	90	22.5
5710MHz Straddle 5.725-5.85GHz	90	22.5
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	79	19.75
5530MHz	78	19.5
5610MHz	94	23.5
5690MHz Straddle 5.47-5.725GHz	94	23.5
5690MHz Straddle 5.725-5.85GHz	94	23.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	97	24.25
5300MHz	97	24.25
5320MHz	85	21.25
5500MHz	80	20
5580MHz	97	24.25



Mode	Power Setting	PowerSetting (dBm)
5700MHz	73	18.25
5720MHz Straddle 5.47-5.725GHz	91	22.75
5720MHz Straddle 5.725-5.85GHz	91	22.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	96	24
5310MHz	79	19.75
5510MHz	75	18.75
5550MHz	97	24.25
5670MHz	87	21.75
5710MHz Straddle 5.47-5.725GHz	90	22.5
5710MHz Straddle 5.725-5.85GHz	90	22.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	79	19.75
5530MHz	78	19.5
5610MHz	94	23.5
5690MHz Straddle 5.47-5.725GHz	94	23.5
5690MHz Straddle 5.725-5.85GHz	94	23.5

**For 2TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	73	18.25
5300MHz	73	18.25
5320MHz	73	18.25
5500MHz	72	18
5580MHz	75	18.75
5700MHz	70	17.5
5720MHz Straddle 5.47-5.725GHz	74	18.5
5720MHz Straddle 5.725-5.85GHz	74	18.5
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	83	20.75
5300MHz	83	20.75
5320MHz	81	20.25
5500MHz	80	20
5580MHz	84	21
5700MHz	67	16.75
5720MHz Straddle 5.47-5.725GHz	84	21
5720MHz Straddle 5.725-5.85GHz	84	21
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	83	20.75
5310MHz	72	18
5510MHz	68	17
5550MHz	84	21
5670MHz	76	19
5710MHz Straddle 5.47-5.725GHz	82	20.5
5710MHz Straddle 5.725-5.85GHz	82	20.5
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	69	17.25
5530MHz	74	18.5
5610MHz	84	21
5690MHz Straddle 5.47-5.725GHz	83	20.75
5690MHz Straddle 5.725-5.85GHz	83	20.75
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	83	20.75
5300MHz	83	20.75
5320MHz	81	20.25
5500MHz	80	20
5580MHz	84	21
5700MHz	67	16.75



Mode	Power Setting	PowerSetting (dBm)
5720MHz Straddle 5.47-5.725GHz	84	21
5720MHz Straddle 5.725-5.85GHz	84	21
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	83	20.75
5310MHz	72	18
5510MHz	68	17
5550MHz	84	21
5670MHz	76	19
5710MHz Straddle 5.47-5.725GHz	82	20.5
5710MHz Straddle 5.725-5.85GHz	82	20.5
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	69	17.25
5530MHz	74	18.5
5610MHz	84	21
5690MHz Straddle 5.47-5.725GHz	83	20.75
5690MHz Straddle 5.725-5.85GHz	83	20.75
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-
5260MHz	73	18.25
5300MHz	72	18
5320MHz	72	18
5500MHz	72	18
5580MHz	73	18.25
5700MHz	65	16.25
5720MHz Straddle 5.47-5.725GHz	72	18
5720MHz Straddle 5.725-5.85GHz	72	18
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	74	18.5
5310MHz	72	18
5510MHz	69	17.25
5550MHz	73	18.25
5670MHz	74	18.5
5710MHz Straddle 5.47-5.725GHz	74	18.5
5710MHz Straddle 5.725-5.85GHz	74	18.5
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	68	17
5530MHz	63	15.75
5610MHz	74	18.5
5690MHz Straddle 5.47-5.725GHz	74	18.5
5690MHz Straddle 5.725-5.85GHz	74	18.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-



Mode	Power Setting	PowerSetting (dBm)
5260MHz	73	18.25
5300MHz	72	18
5320MHz	72	18
5500MHz	72	18
5580MHz	73	18.25
5700MHz	65	16.25
5720MHz Straddle 5.47-5.725GHz	72	18
5720MHz Straddle 5.725-5.85GHz	72	18
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	74	18.5
5310MHz	72	18
5510MHz	69	17.25
5550MHz	73	18.25
5670MHz	74	18.5
5710MHz Straddle 5.47-5.725GHz	74	18.5
5710MHz Straddle 5.725-5.85GHz	74	18.5
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	68	17
5530MHz	63	15.75
5610MHz	74	18.5
5690MHz Straddle 5.47-5.725GHz	74	18.5
5690MHz Straddle 5.725-5.85GHz	74	18.5

**For External Antenna 7****For 1TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	89	22.25
5300MHz	87	21.75
5320MHz	70	17.5
5500MHz	64	16
5580MHz	89	22.25
5700MHz	61	15.25
5720MHz Straddle 5.47-5.725GHz	75	18.75
5720MHz Straddle 5.725-5.85GHz	75	18.75
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	90	22.5
5300MHz	86	21.5
5320MHz	68	17
5500MHz	64	16
5580MHz	90	22.5
5700MHz	50	12.5
5720MHz Straddle 5.47-5.725GHz	79	19.75
5720MHz Straddle 5.725-5.85GHz	79	19.75
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	82	20.5
5310MHz	65	16.25
5510MHz	61	15.25
5550MHz	79	19.75
5670MHz	68	17
5710MHz Straddle 5.47-5.725GHz	82	20.5
5710MHz Straddle 5.725-5.85GHz	82	20.5
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	69	17.25
5530MHz	65	16.25
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	79	19.75
5690MHz Straddle 5.725-5.85GHz	79	19.75
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	90	22.5
5300MHz	86	21.5
5320MHz	68	17
5500MHz	64	16
5580MHz	90	22.5



Mode	Power Setting	PowerSetting (dBm)
5700MHz	50	12.5
5720MHz Straddle 5.47-5.725GHz	79	19.75
5720MHz Straddle 5.725-5.85GHz	79	19.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	82	20.5
5310MHz	65	16.25
5510MHz	61	15.25
5550MHz	79	19.75
5670MHz	68	17
5710MHz Straddle 5.47-5.725GHz	82	20.5
5710MHz Straddle 5.725-5.85GHz	82	20.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	69	17.25
5530MHz	65	16.25
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	79	19.75
5690MHz Straddle 5.725-5.85GHz	79	19.75

**For 2TX Mode:**

Mode	Power Setting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	60	15
5300MHz	60	15
5320MHz	60	15
5500MHz	60	15
5580MHz	61	15.25
5700MHz	57	14.25
5720MHz Straddle 5.47-5.725GHz	61	15.25
5720MHz Straddle 5.725-5.85GHz	61	15.25
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	73	18.25
5300MHz	73	18.25
5320MHz	67	16.75
5500MHz	67	16.75
5580MHz	73	18.25
5700MHz	54	13.5
5720MHz Straddle 5.47-5.725GHz	70	17.5
5720MHz Straddle 5.725-5.85GHz	70	17.5
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	73	18.25
5310MHz	60	15
5510MHz	55	13.75
5550MHz	73	18.25
5670MHz	57	14.25
5710MHz Straddle 5.47-5.725GHz	73	18.25
5710MHz Straddle 5.725-5.85GHz	73	18.25
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	61	15.25
5530MHz	64	16
5610MHz	73	18.25
5690MHz Straddle 5.47-5.725GHz	72	18
5690MHz Straddle 5.725-5.85GHz	72	18
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	73	18.25
5300MHz	73	18.25
5320MHz	67	16.75
5500MHz	67	16.75
5580MHz	73	18.25
5700MHz	54	13.5



Mode	Power Setting	PowerSetting (dBm)
5720MHz Straddle 5.47-5.725GHz	70	17.5
5720MHz Straddle 5.725-5.85GHz	70	17.5
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	73	18.25
5310MHz	60	15
5510MHz	55	13.75
5550MHz	73	18.25
5670MHz	57	14.25
5710MHz Straddle 5.47-5.725GHz	73	18.25
5710MHz Straddle 5.725-5.85GHz	73	18.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	61	15.25
5530MHz	64	16
5610MHz	73	18.25
5690MHz Straddle 5.47-5.725GHz	72	18
5690MHz Straddle 5.725-5.85GHz	72	18
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-
5260MHz	57	14.25
5300MHz	57	14.25
5320MHz	57	14.25
5500MHz	57	14.25
5580MHz	57	14.25
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	57	14.25
5720MHz Straddle 5.725-5.85GHz	57	14.25
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	57	14.25
5310MHz	55	13.75
5510MHz	56	14
5550MHz	56	14
5670MHz	58	14.5
5710MHz Straddle 5.47-5.725GHz	59	14.75
5710MHz Straddle 5.725-5.85GHz	59	14.75
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	59	14.75
5530MHz	58	14.5
5610MHz	59	14.75
5690MHz Straddle 5.47-5.725GHz	59	14.75
5690MHz Straddle 5.725-5.85GHz	59	14.75
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-



Mode	Power Setting	PowerSetting (dBm)
5260MHz	57	14.25
5300MHz	57	14.25
5320MHz	57	14.25
5500MHz	57	14.25
5580MHz	57	14.25
5700MHz	49	12.25
5720MHz Straddle 5.47-5.725GHz	57	14.25
5720MHz Straddle 5.725-5.85GHz	57	14.25
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	57	14.25
5310MHz	55	13.75
5510MHz	56	14
5550MHz	56	14
5670MHz	58	14.5
5710MHz Straddle 5.47-5.725GHz	59	14.75
5710MHz Straddle 5.725-5.85GHz	59	14.75
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	59	14.75
5530MHz	58	14.5
5610MHz	59	14.75
5690MHz Straddle 5.47-5.725GHz	59	14.75
5690MHz Straddle 5.725-5.85GHz	59	14.75

**For External Antenna 12****For 1TX Mode:**

Mode	PowerSetting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5260MHz	69	17.25
5300MHz	69	17.25
5320MHz	69	17.25
5500MHz	61	15.25
5580MHz	69	17.25
5700MHz	61	15.25
5720MHz Straddle 5.47-5.725GHz	68	17
5720MHz Straddle 5.725-5.85GHz	68	17
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-
5260MHz	69	17.25
5300MHz	69	17.25
5320MHz	68	17
5500MHz	61	15.25
5580MHz	69	17.25
5700MHz	69	17.25
5720MHz Straddle 5.47-5.725GHz	69	17.25
5720MHz Straddle 5.725-5.85GHz	69	17.25
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-
5270MHz	70	17.5
5310MHz	61	15.25
5510MHz	58	14.5
5550MHz	68	17
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	69	17.25
5710MHz Straddle 5.725-5.85GHz	69	17.25
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-
5290MHz	61	15.25
5530MHz	60	15
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	72	18
5690MHz Straddle 5.725-5.85GHz	72	18
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5260MHz	69	17.25
5300MHz	69	17.25
5320MHz	68	17
5500MHz	61	15.25
5580MHz	69	17.25



Mode	PowerSetting	PowerSetting (dBm)
5700MHz	69	17.25
5720MHz Straddle 5.47-5.725GHz	69	17.25
5720MHz Straddle 5.725-5.85GHz	69	17.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5270MHz	70	17.5
5310MHz	61	15.25
5510MHz	58	14.5
5550MHz	68	17
5670MHz	69	17.25
5710MHz Straddle 5.47-5.725GHz	69	17.25
5710MHz Straddle 5.725-5.85GHz	69	17.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5290MHz	61	15.25
5530MHz	60	15
5610MHz	71	17.75
5690MHz Straddle 5.47-5.725GHz	72	18
5690MHz Straddle 5.725-5.85GHz	72	18

**For 2TX Mode:**

Mode	PowerSetting	PowerSetting (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-
5260MHz	47	11.75
5300MHz	47	11.75
5320MHz	47	11.75
5500MHz	45	11.25
5580MHz	46	11.5
5700MHz	46	11.5
5720MHz Straddle 5.47-5.725GHz	45	11.25
5720MHz Straddle 5.725-5.85GHz	45	11.25
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-
5260MHz	58	14.5
5300MHz	58	14.5
5320MHz	58	14.5
5500MHz	58	14.5
5580MHz	59	14.75
5700MHz	55	13.75
5720MHz Straddle 5.47-5.725GHz	56	14
5720MHz Straddle 5.725-5.85GHz	56	14
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-
5270MHz	59	14.75
5310MHz	54	13.5
5510MHz	52	13
5550MHz	58	14.5
5670MHz	57	14.25
5710MHz Straddle 5.47-5.725GHz	58	14.5
5710MHz Straddle 5.725-5.85GHz	58	14.5
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-
5290MHz	53	13.25
5530MHz	51	12.75
5610MHz	62	15.5
5690MHz Straddle 5.47-5.725GHz	61	15.25
5690MHz Straddle 5.725-5.85GHz	61	15.25
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5260MHz	58	14.5
5300MHz	58	14.5
5320MHz	58	14.5
5500MHz	58	14.5
5580MHz	59	14.75
5700MHz	55	13.75



Mode	PowerSetting	PowerSetting (dBm)
5720MHz Straddle 5.47-5.725GHz	56	14
5720MHz Straddle 5.725-5.85GHz	56	14
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5270MHz	59	14.75
5310MHz	54	13.5
5510MHz	52	13
5550MHz	58	14.5
5670MHz	57	14.25
5710MHz Straddle 5.47-5.725GHz	58	14.5
5710MHz Straddle 5.725-5.85GHz	58	14.5
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5290MHz	53	13.25
5530MHz	51	12.75
5610MHz	62	15.5
5690MHz Straddle 5.47-5.725GHz	61	15.25
5690MHz Straddle 5.725-5.85GHz	61	15.25
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-
5260MHz	45	11.25
5300MHz	44	11
5320MHz	44	11
5500MHz	43	10.75
5580MHz	43	10.75
5700MHz	44	11
5720MHz Straddle 5.47-5.725GHz	41	10.25
5720MHz Straddle 5.725-5.85GHz	41	10.25
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	45	11.25
5310MHz	45	11.25
5510MHz	43	10.75
5550MHz	44	11
5670MHz	46	11.5
5710MHz Straddle 5.47-5.725GHz	44	11
5710MHz Straddle 5.725-5.85GHz	44	11
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	46	11.5
5530MHz	45	11.25
5610MHz	46	11.5
5690MHz Straddle 5.47-5.725GHz	45	11.25
5690MHz Straddle 5.725-5.85GHz	45	11.25
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-



Mode	PowerSetting	PowerSetting (dBm)
5260MHz	45	11.25
5300MHz	44	11
5320MHz	44	11
5500MHz	43	10.75
5580MHz	43	10.75
5700MHz	44	11
5720MHz Straddle 5.47-5.725GHz	41	10.25
5720MHz Straddle 5.725-5.85GHz	41	10.25
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-
5270MHz	45	11.25
5310MHz	45	11.25
5510MHz	43	10.75
5550MHz	44	11
5670MHz	46	11.5
5710MHz Straddle 5.47-5.725GHz	44	11
5710MHz Straddle 5.725-5.85GHz	44	11
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-
5290MHz	46	11.5
5530MHz	45	11.25
5610MHz	46	11.5
5690MHz Straddle 5.47-5.725GHz	45	11.25
5690MHz Straddle 5.725-5.85GHz	45	11.25

2.2 The Worst Case Measurement Configuration

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 (for more details refer note 1)

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 (for more details refer note 1)

The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions test.
And the worst case were found as below:

Items		Internal Antenna			External Antenna 7			External Antenna 12		
		1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX
Radio 2	Radiated	Y axis	X axis	Z axis	Y axis	Y axis	X axis	Y axis	Z axis	X axis
	Bandedge									
Radio 3	Radiated	Y axis	Z axis	-	Z axis	Z axis	-	Y axis	Y axis	-
	Bandedge									

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1 + Radio 2 + Radio 3 (2.4GHz) + Radio 4 (BT LE)
2	Radio 1 + Radio 2 + Radio 3 (5GHz) + Radio 4 (BT LE)
3	Radio 1 + Radio 2 + Radio 3 (2.4GHz) + Radio 4 (Thread)
4	Radio 1 + Radio 2 + Radio 3 (5GHz) + Radio 4 (Thread)
Refer to Sporton Test Report No.: FA970232-01 for Co-location RF Exposure Evaluation.	



Note: 1. Test Mode:

Test Item	Radio 2 / Radio 3 (Internal Antenna and External Ant. 7 and Ant. 12)														
	802.11a			802.11ac VHT20/40/80/160						802.11ax HEW20/40/80/160					
	1T1S	CDD 2T1S	CDD 4T1S	1T1S	SDM 2T2S	TXBF 2T1S	CDD 4T1S	SDM 4T4S	TXBF 4T1S	1T1S	SDM 2T2S	TXBF 2T1S	CDD 4T1S	SDM 4T4S	TXBF 4T1S
Maximum Conducted Output Power	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Emission Bandwidth	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Power Spectral Density	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Unwanted Emissions	V	V	V	Cover by 11ax	Cover by 11ax	Cover by 11ax	Cover by 11ax	Cover by 11ax	Cover by 11ax	V	V	V	V	V	V

2. HEW20/HEW40 covers HT20/HT40. The power setting 11n HT20 and HT40 are the same or lower than 802.11ax HEW20 and HEW40.
3. There are two modes of EUT for 802.11n/ax, VHT20, VHT40 in 2.4GHz and 802.11n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode. Both modes have been tested and recorded in this test report.
4. The Adapter and PoE is for measurement only, would not be marketed.

Adapter and PoE information as below:

Power	Brand Holder	Model
Adapter	Powertron Electronics Corp.	PA1024-120IB200
Power	Brand	Model
PoE	EnGenius	EPA5006GP

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed " Lan Test (2.0.0.2) " to link with the remote workstation to transmit and receive packet by Wireless AP and transmit duty cycle no less than 98%.

2.4 Accessories

Wall-mounted rack*1



2.5 Support Equipment

For Radiated (above 1GHz):

<For Non-Beamforming Mode>

Support Equipment				
No.	Equipment	Brand	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
E	Adapter	Powertron Electronics Corp.	PA1024-120IB200	N/A

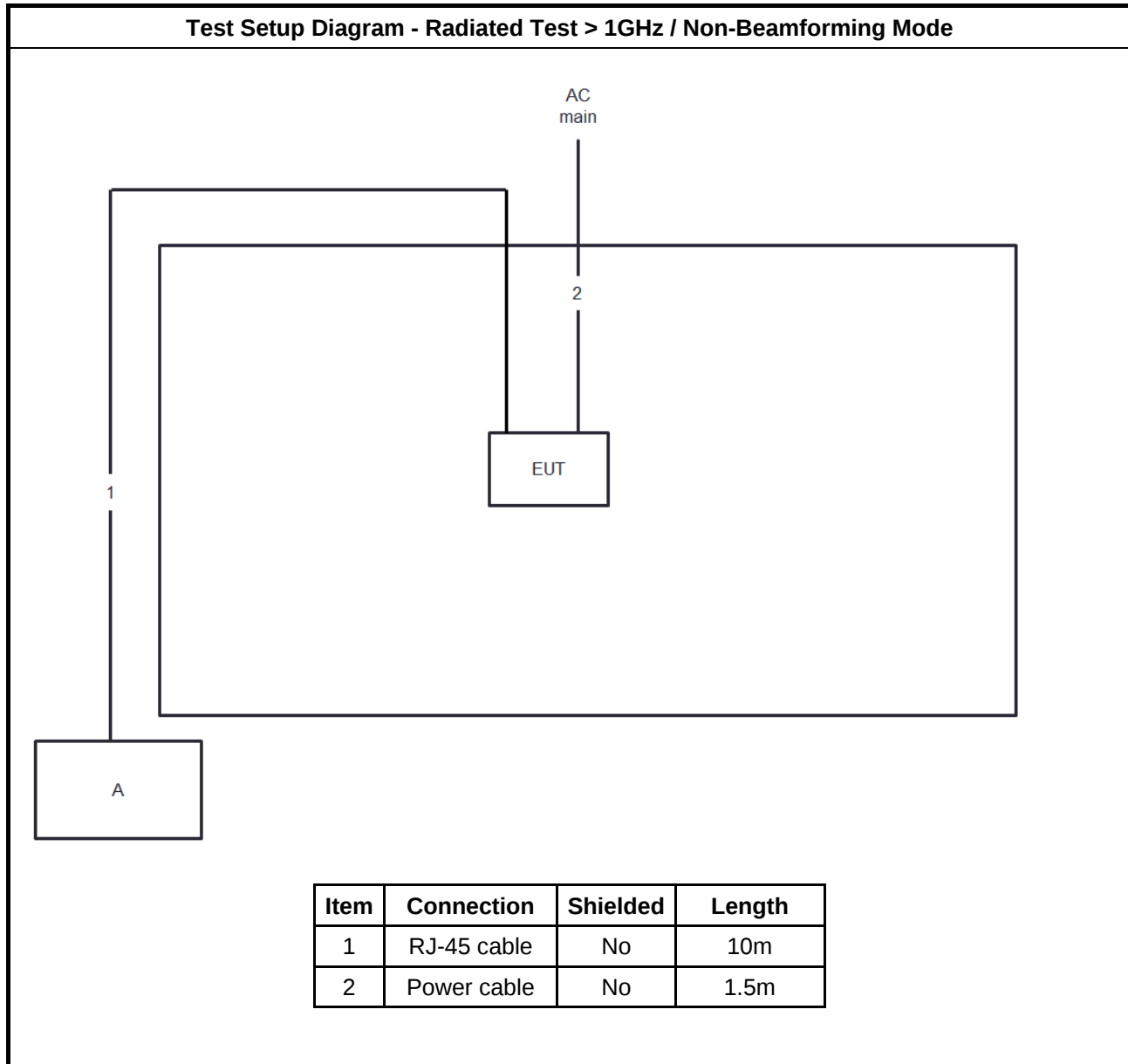
<For Beamforming Mode>

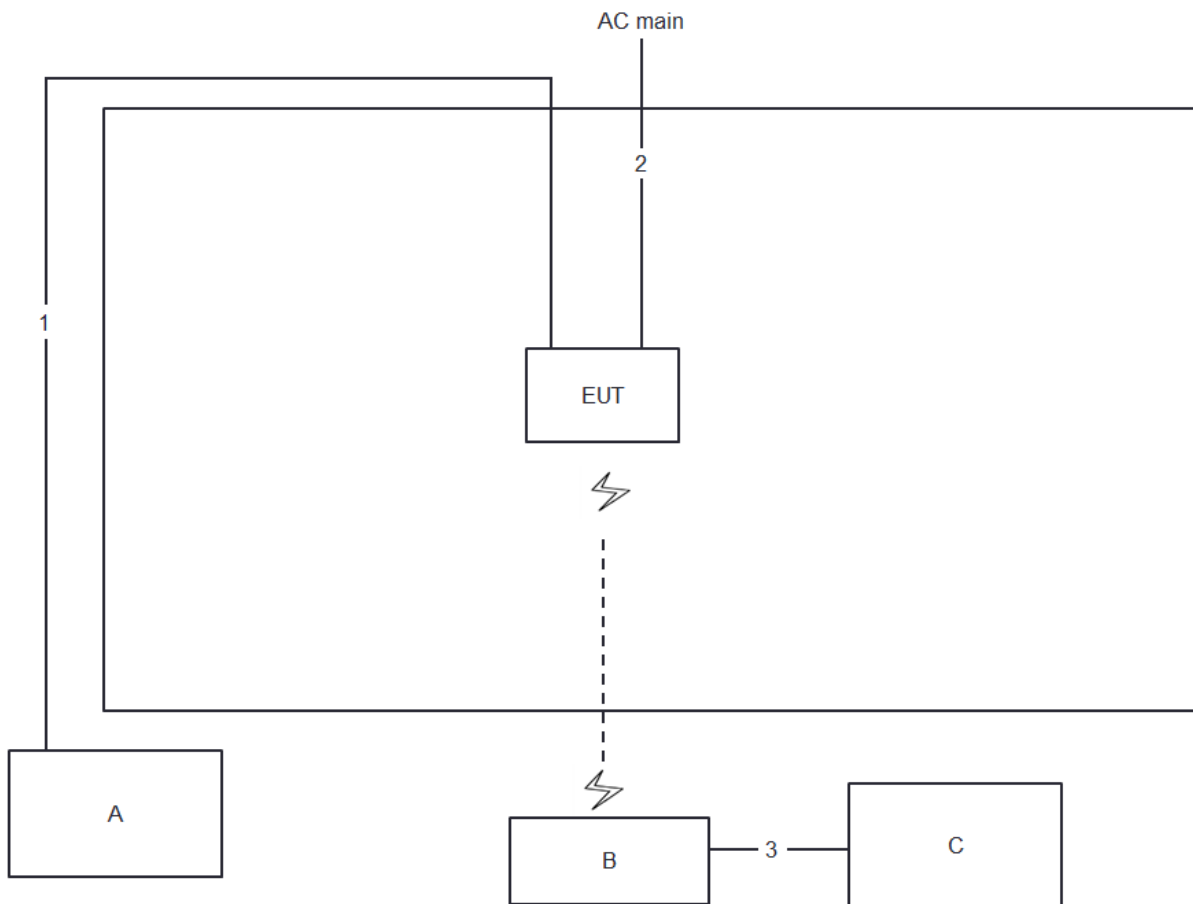
Support Equipment				
No.	Equipment	Brand	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP	Extreme Networks, Inc.	AP460i/e	N/A
C	Notebook	DELL	E4300	N/A
E	Adapter	Powertron Electronics Corp.	PA1024-120IB200	N/A

For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	Powertron Electronics Corp.	PA1024-120IB200	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test > 1GHz / Beamforming Mode


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.5m
3	RJ-45 cable	No	1.5m

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, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

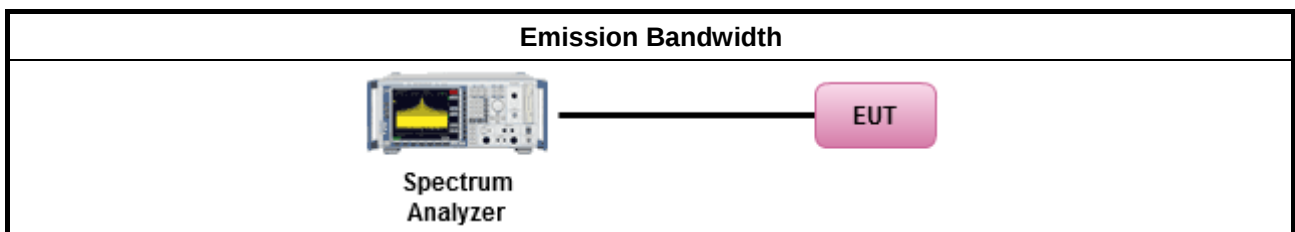
3.1.2 Measuring Instruments

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 FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.1.4 Test Setup



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.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ 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

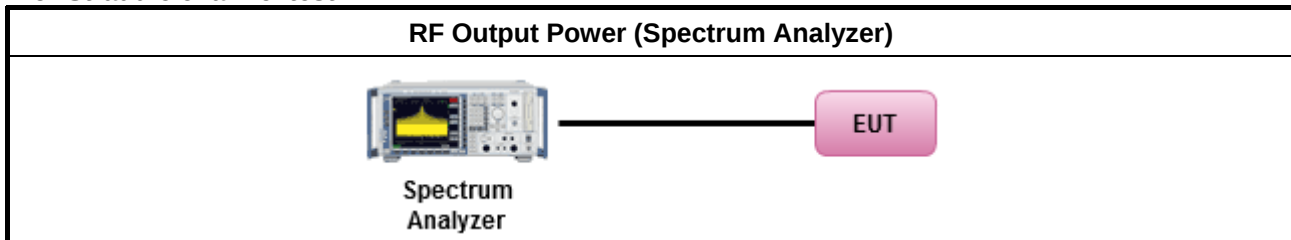
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

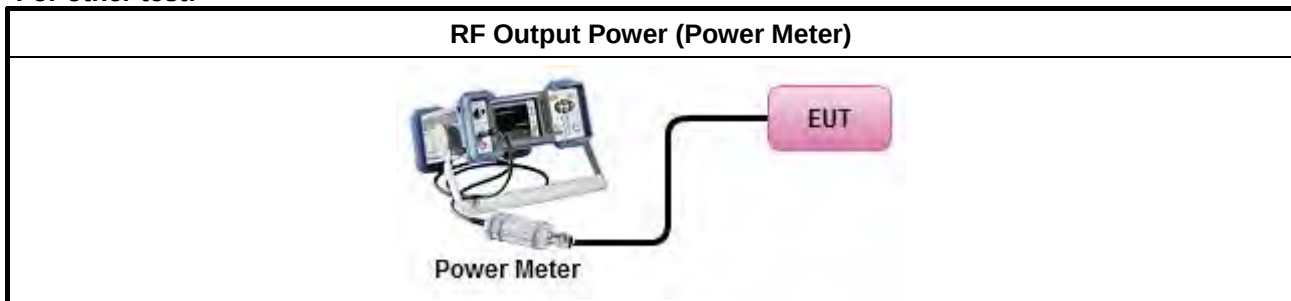
Test Method	
Maximum Conducted Output Power	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC 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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.2.4 Test Setup

For Straddle channel test:



For other test:



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.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
☐ 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.	

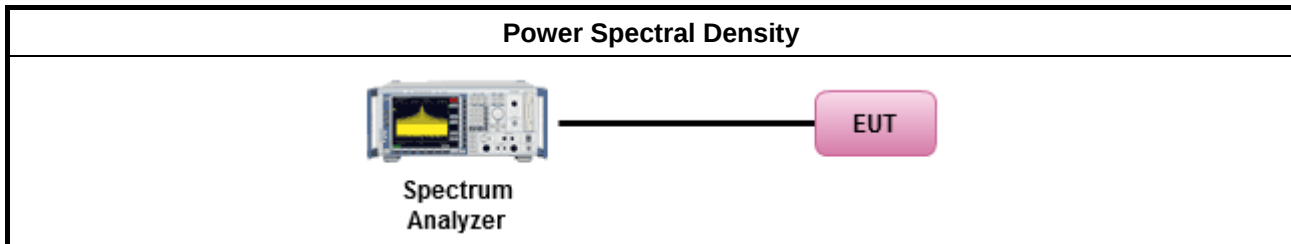
3.3.2 Measuring Instruments

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 FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth [duty cycle ≥ 98% or external video / power trigger]
☒	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) duty cycle < 98% and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC 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:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
☐	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C



3.4 Unwanted Emissions

3.4.1 Transmitter 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	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
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

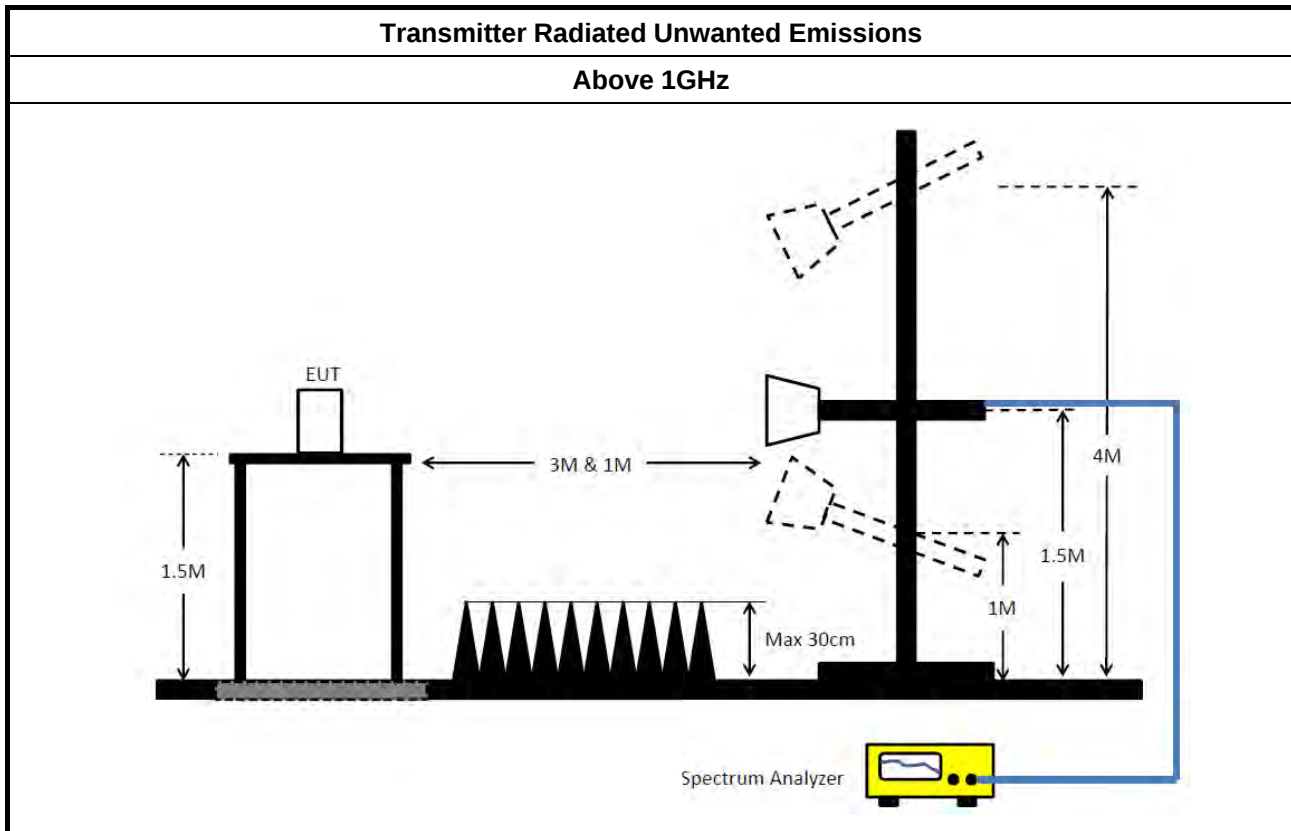
Refer a test equipment and calibration data table in this test report.



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 $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐ Refer as 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



3.4.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 26, 2018	Oct. 25, 2019	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 22, 2019	Oct. 21, 2020	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 19, 2019	Mar. 18, 2020	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 26, 2018	Dec. 25, 2019	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+22	1GHz - 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160_Nss1,(MCS0)_1TX	115.6M	75.802M	75M8D1D	115.6M	75.802M
802.11ax HEW160_Nss1,(MCS0)_1TX	80.72M	77.241M	77M2D1D	80.72M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	43.29M	19.16M	19M2D1D	21.87M	16.672M
802.11ac VHT20_Nss1,(MCS0)_1TX	44.64M	18.981M	19M0D1D	24.09M	17.841M
802.11ac VHT40_Nss1,(MCS0)_1TX	82.5M	37.001M	37M0D1D	40.32M	36.402M
802.11ac VHT80_Nss1,(MCS0)_1TX	82.44M	75.682M	75M7D1D	82.44M	75.682M
802.11ac VHT160_Nss1,(MCS0)_1TX	147.04M	75.802M	75M8D1D	147.04M	75.802M
802.11ax HEW20_Nss1,(MCS0)_1TX	43.38M	19.52M	19M5D1D	26.1M	19.01M
802.11ax HEW40_Nss1,(MCS0)_1TX	77.58M	37.901M	37M9D1D	40.2M	37.541M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.08M	77.001M	77M0D1D	82.08M	77.001M
802.11ax HEW160_Nss1,(MCS0)_1TX	81.68M	77.161M	77M2D1D	81.68M	77.161M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	43.35M	19.64M	19M6D1D	21.81M	14.813M
802.11ac VHT20_Nss1,(MCS0)_1TX	44.55M	19.13M	19M1D1D	21.9M	14.468M
802.11ac VHT40_Nss1,(MCS0)_1TX	87.84M	38.681M	38M7D1D	40.38M	33.898M
802.11ac VHT80_Nss1,(MCS0)_1TX	165.96M	76.882M	76M9D1D	82.32M	73.913M
802.11ac VHT160_Nss1,(MCS0)_1TX	283.44M	154.243M	154MD1D	283.44M	154.243M
802.11ax HEW20_Nss1,(MCS0)_1TX	42.78M	19.73M	19M7D1D	21.75M	14.918M
802.11ax HEW40_Nss1,(MCS0)_1TX	84.18M	38.621M	38M6D1D	40.14M	34.108M
802.11ax HEW80_Nss1,(MCS0)_1TX	163.2M	78.201M	78M2D1D	82.32M	74.588M
802.11ax HEW160_Nss1,(MCS0)_1TX	165.36M	155.202M	155MD1D	165.36M	155.202M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	3.12M	11.034M	11M0D1D	3.12M	11.034M
802.11ac VHT20_Nss1,(MCS0)_1TX	3.74M	9.695M	9M70D1D	3.74M	9.695M
802.11ac VHT40_Nss1,(MCS0)_1TX	3.12M	23.188M	23M2D1D	3.12M	23.188M
802.11ac VHT80_Nss1,(MCS0)_1TX	3.1M	36.542M	36M5D1D	3.1M	36.542M
802.11ax HEW20_Nss1,(MCS0)_1TX	4.44M	10.795M	10M8D1D	4.44M	10.795M
802.11ax HEW40_Nss1,(MCS0)_1TX	3.76M	23.668M	23M7D1D	3.76M	23.668M
802.11ax HEW80_Nss1,(MCS0)_1TX	3.28M	35.902M	35M9D1D	3.28M	35.902M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% 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)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5260MHz	Pass	Inf	43.29M	19.16M
5300MHz	Pass	Inf	43.23M	18.891M
5320MHz	Pass	Inf	21.87M	16.672M
5500MHz	Pass	Inf	21.87M	16.702M
5580MHz	Pass	Inf	43.35M	19.64M
5700MHz	Pass	Inf	21.81M	16.672M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.18M	14.813M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	11.034M
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-	-	-
5260MHz	Pass	Inf	43.68M	18.921M
5300MHz	Pass	Inf	44.64M	18.981M
5320MHz	Pass	Inf	24.09M	17.841M
5500MHz	Pass	Inf	21.9M	17.901M
5580MHz	Pass	Inf	44.55M	19.13M
5700MHz	Pass	Inf	22.02M	17.841M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.33M	14.468M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	9.695M
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-	-	-
5270MHz	Pass	Inf	82.5M	37.001M
5310MHz	Pass	Inf	40.32M	36.402M
5510MHz	Pass	Inf	40.38M	36.342M
5550MHz	Pass	Inf	87.84M	38.681M
5670MHz	Pass	Inf	73.08M	36.522M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	60.48M	33.898M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	23.188M
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-	-	-
5290MHz	Pass	Inf	82.44M	75.682M
5530MHz	Pass	Inf	82.32M	75.802M
5610MHz	Pass	Inf	165.96M	76.882M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	124.95M	73.913M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	36.542M
802.11ac VHT160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	115.6M	75.802M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	147.04M	75.802M
5570MHz	Pass	Inf	283.44M	154.243M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5260MHz	Pass	Inf	43.38M	19.52M
5300MHz	Pass	Inf	42.36M	19.52M
5320MHz	Pass	Inf	26.1M	19.01M
5500MHz	Pass	Inf	23.1M	19.01M
5580MHz	Pass	Inf	42.78M	19.73M
5700MHz	Pass	Inf	21.75M	19.01M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	25.53M	14.918M



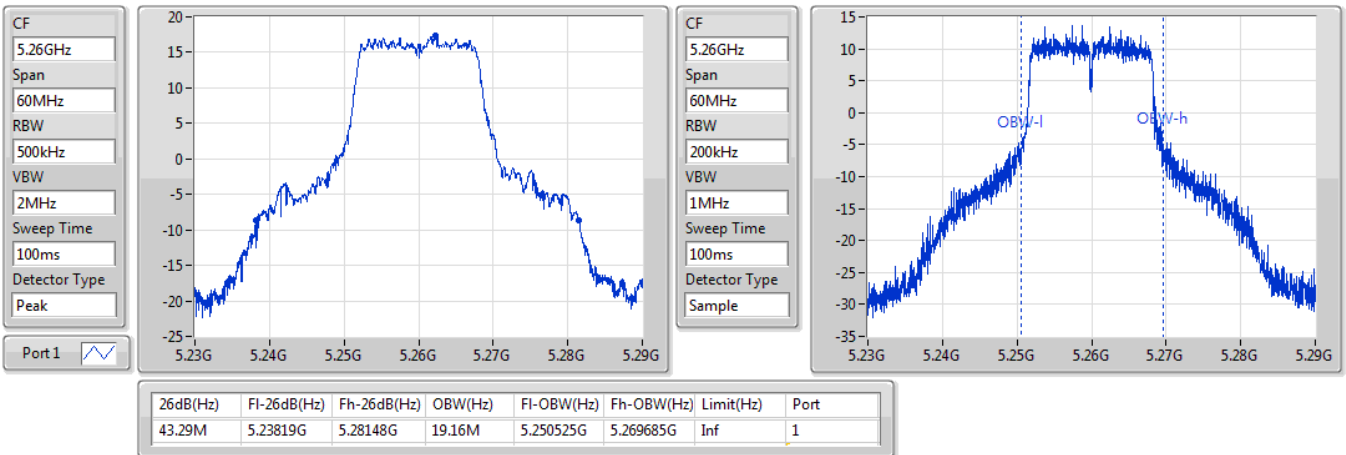
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	10.795M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5270MHz	Pass	Inf	77.58M	37.901M
5310MHz	Pass	Inf	40.2M	37.541M
5510MHz	Pass	Inf	40.14M	37.541M
5550MHz	Pass	Inf	84.18M	38.621M
5670MHz	Pass	Inf	60.36M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	59.465M	34.108M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	23.668M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5290MHz	Pass	Inf	82.08M	77.001M
5530MHz	Pass	Inf	82.32M	77.121M
5610MHz	Pass	Inf	163.2M	78.201M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	123.3M	74.588M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.28M	35.902M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.72M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.68M	77.161M
5570MHz	Pass	Inf	165.36M	155.202M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

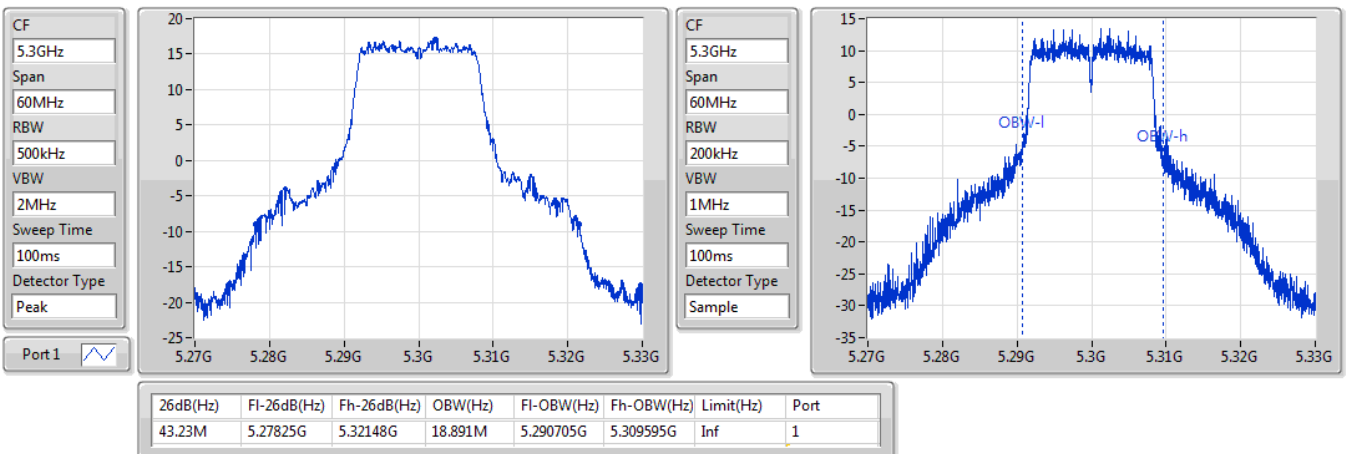
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX
EBW
5260MHz

26/10/2019

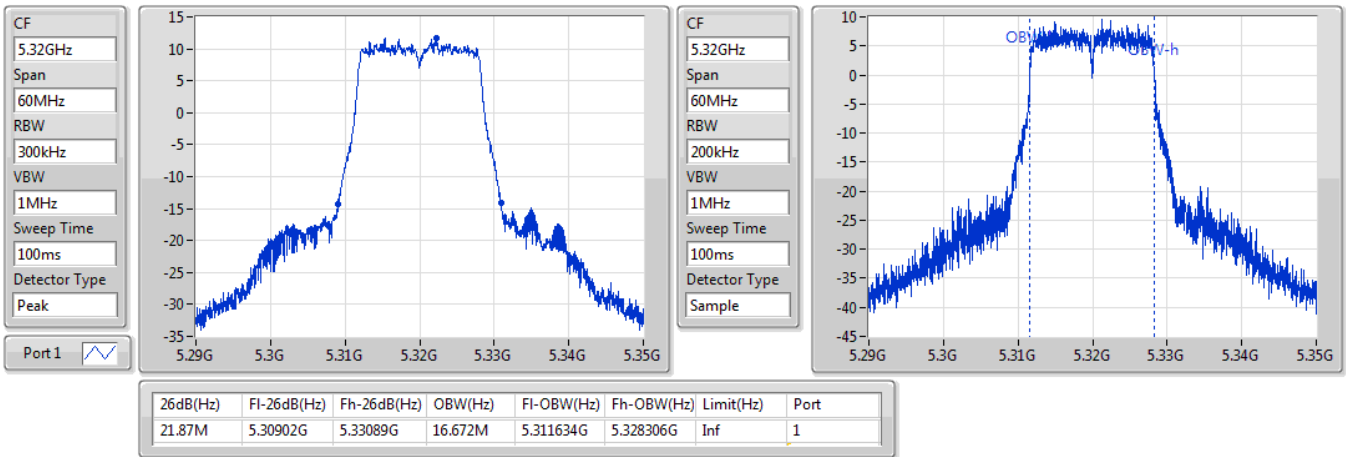

802.11a_Nss1,(6Mbps)_1TX
EBW
5300MHz

26/10/2019

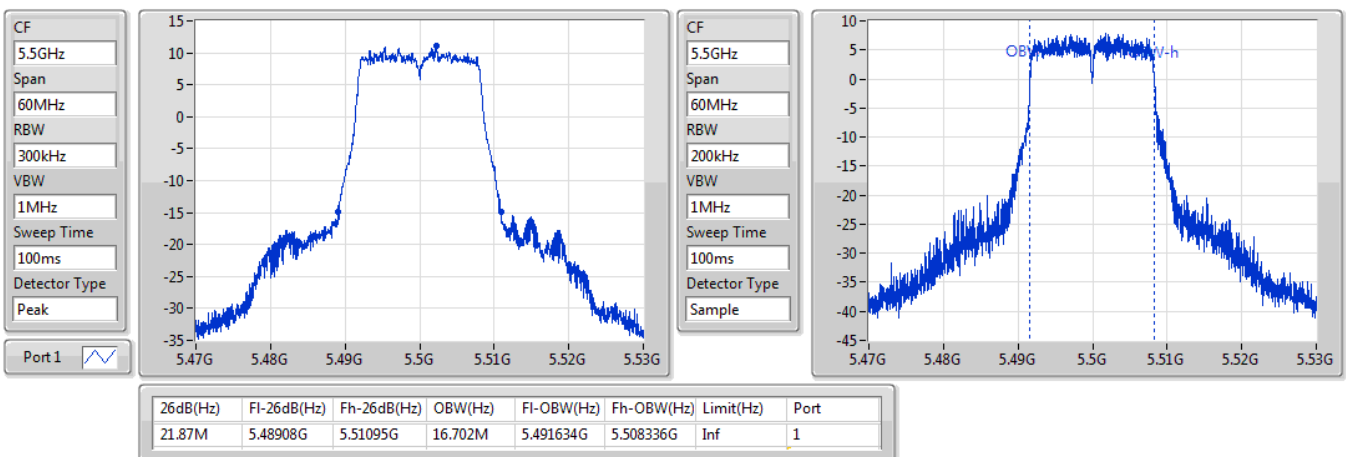


802.11a_Nss1,(6Mbps)_1TX
EBW
5320MHz

26/10/2019

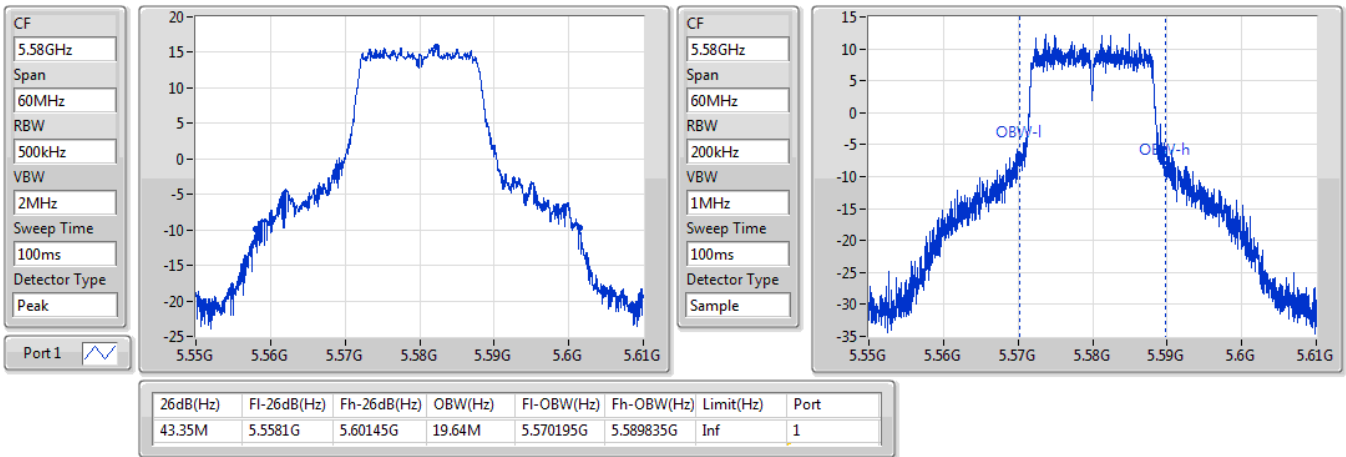

802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

26/10/2019

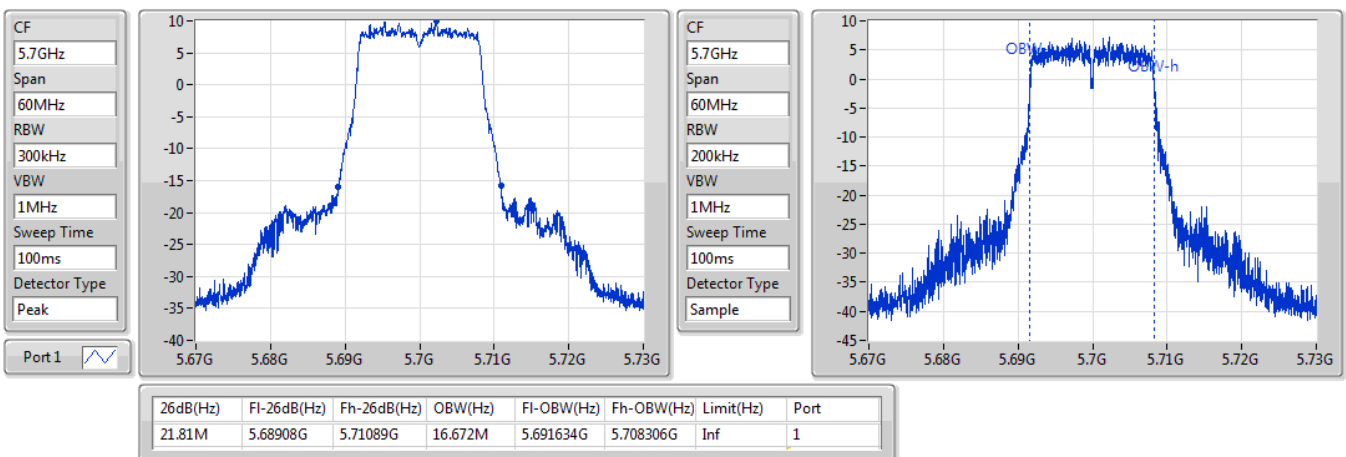


802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

26/10/2019

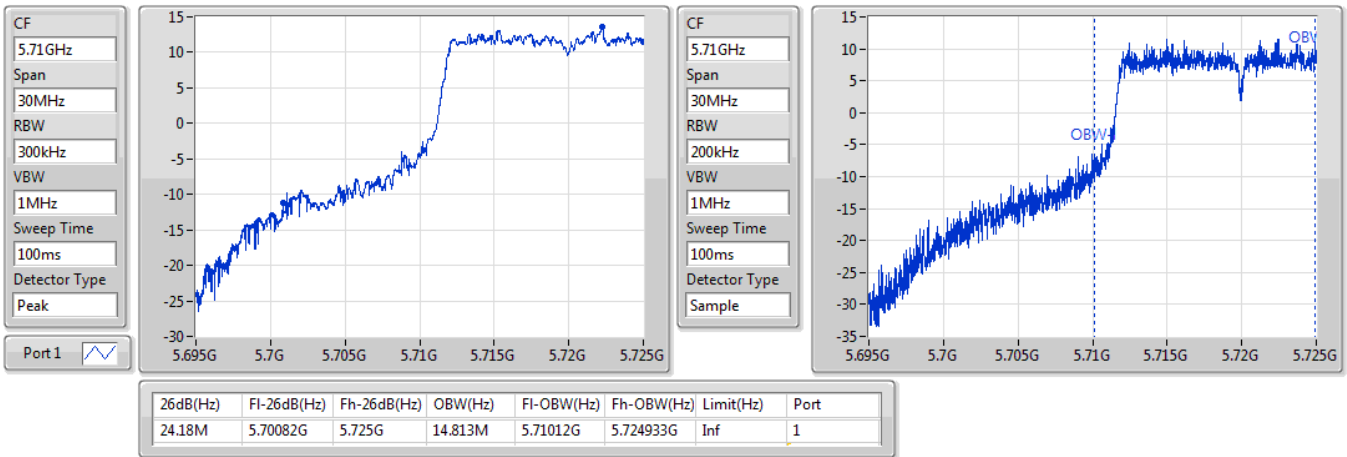

802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

26/10/2019

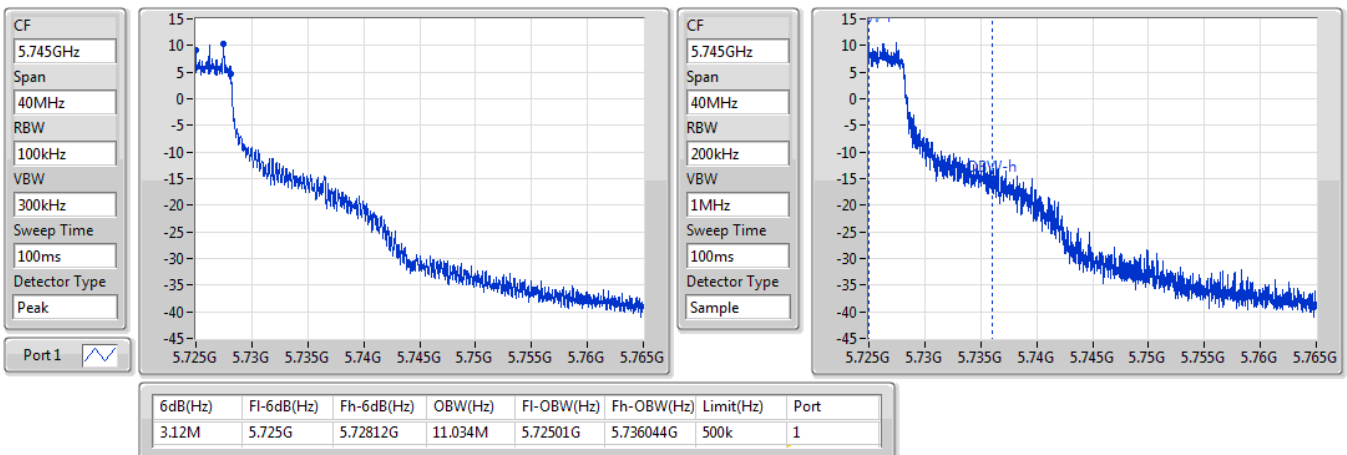


802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.67-5.725GHz

26/10/2019

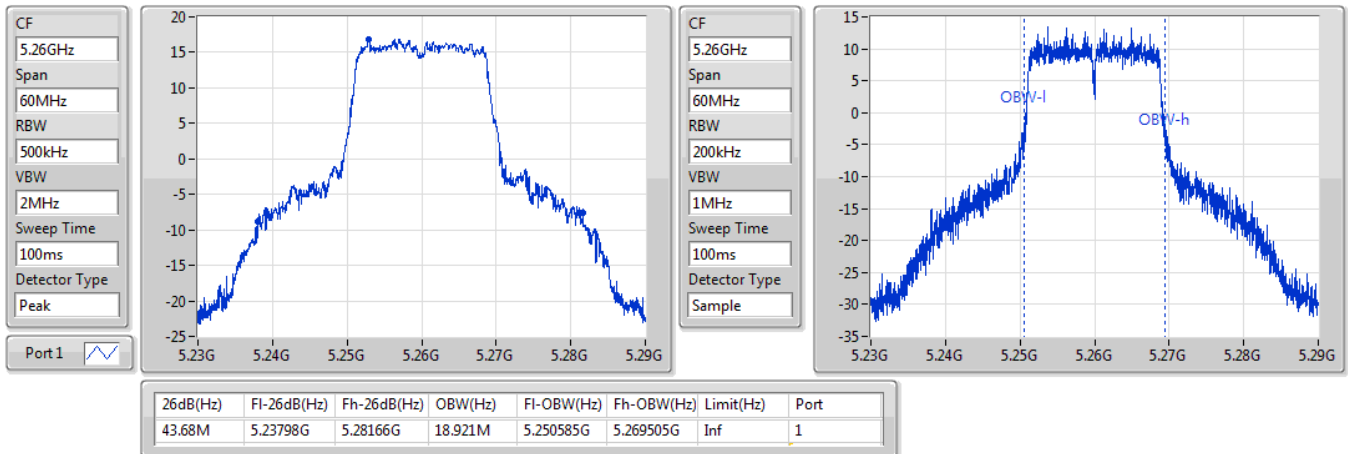

802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

26/10/2019

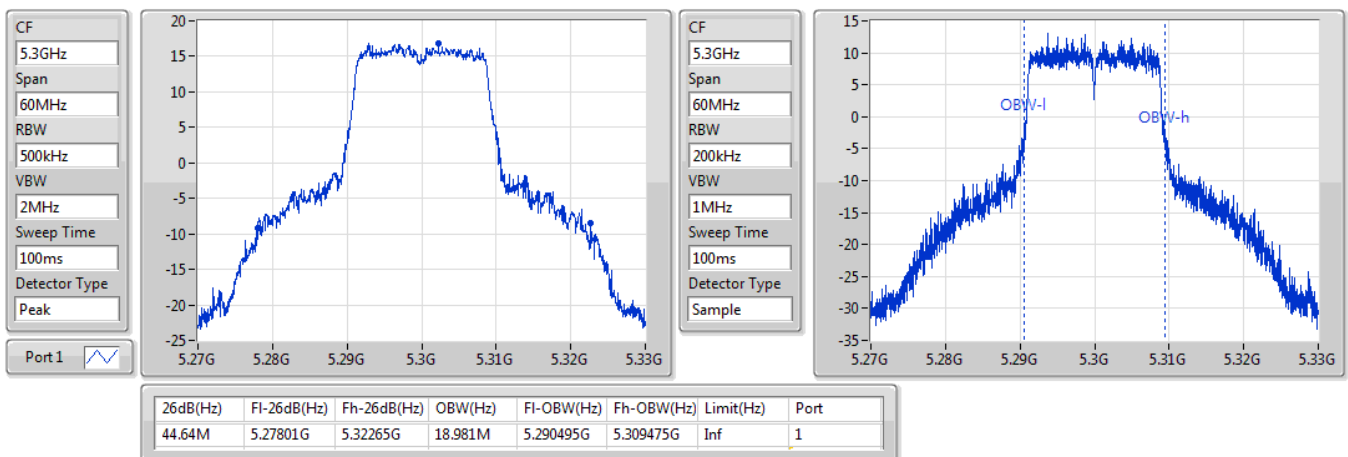


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5260MHz

26/10/2019

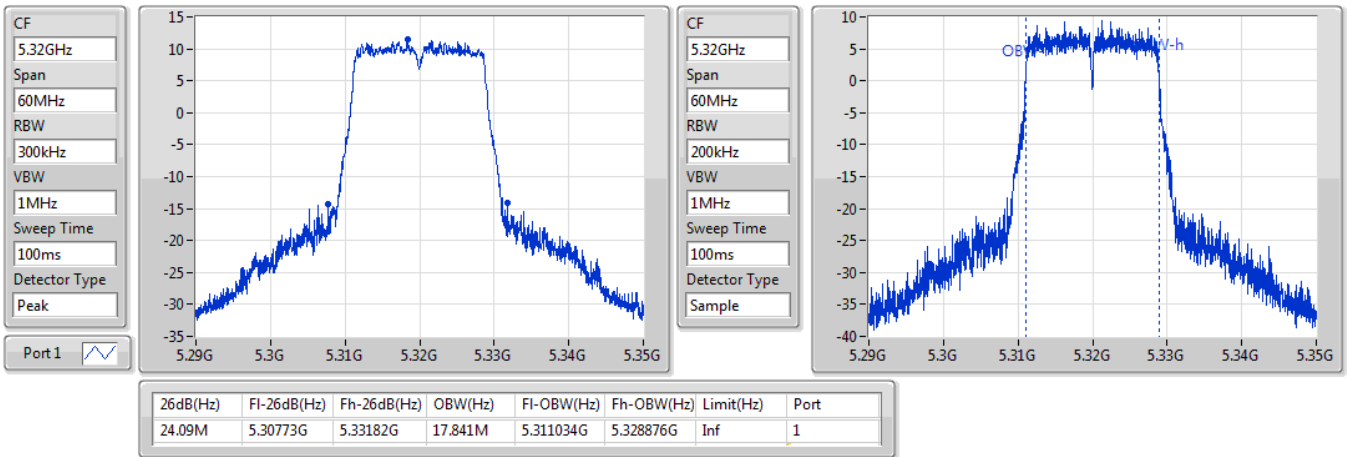

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5300MHz

26/10/2019

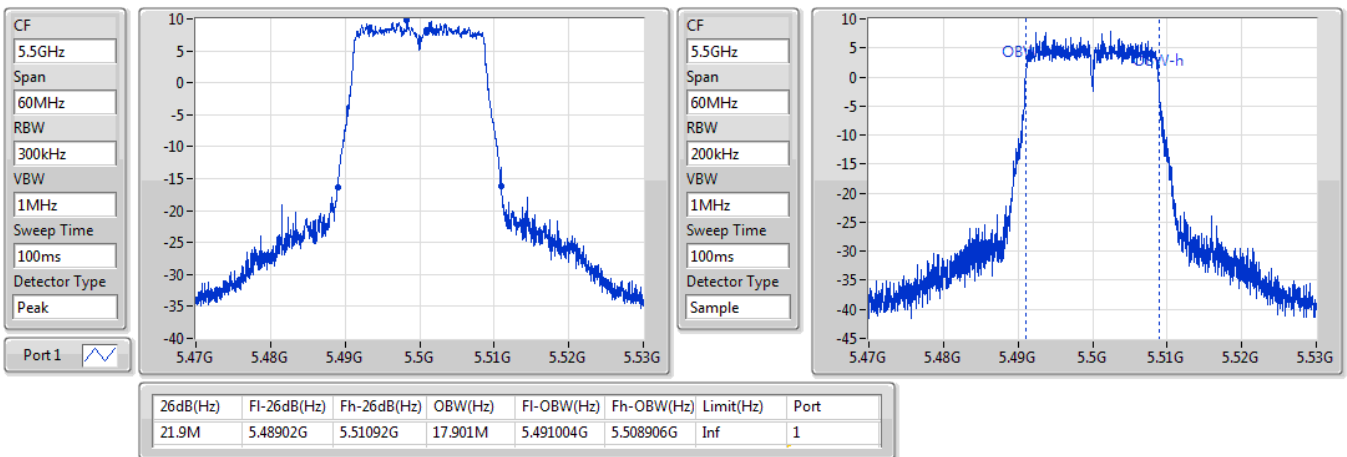


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5320MHz

26/10/2019

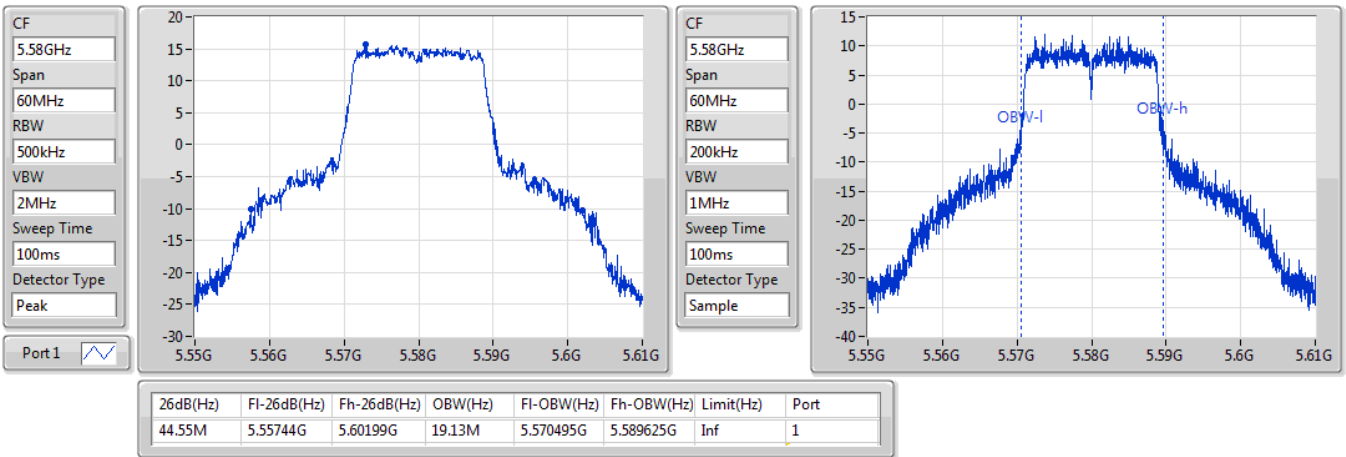

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5500MHz

26/10/2019

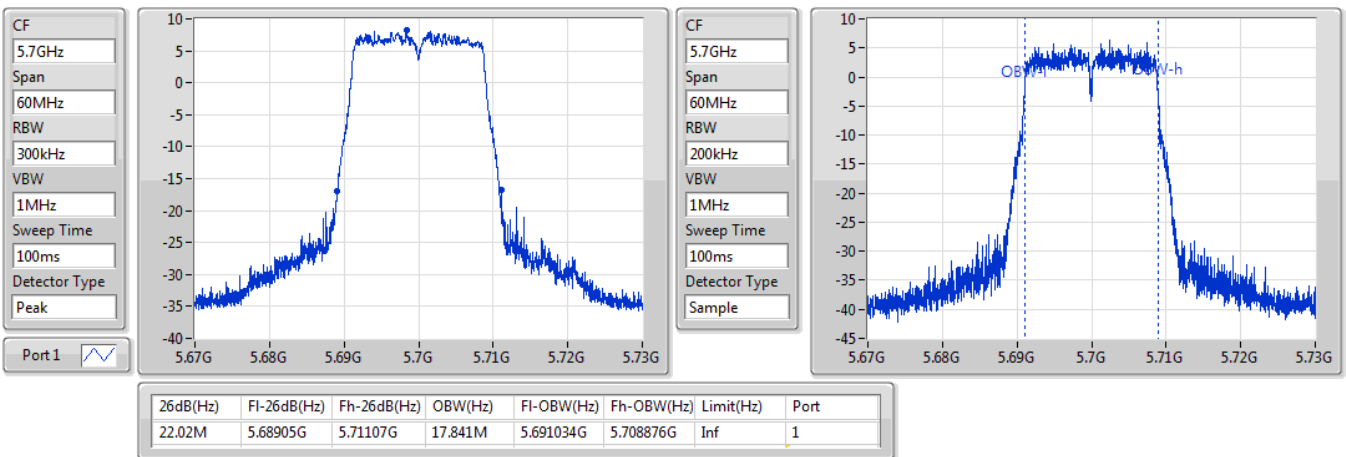


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5580MHz

26/10/2019

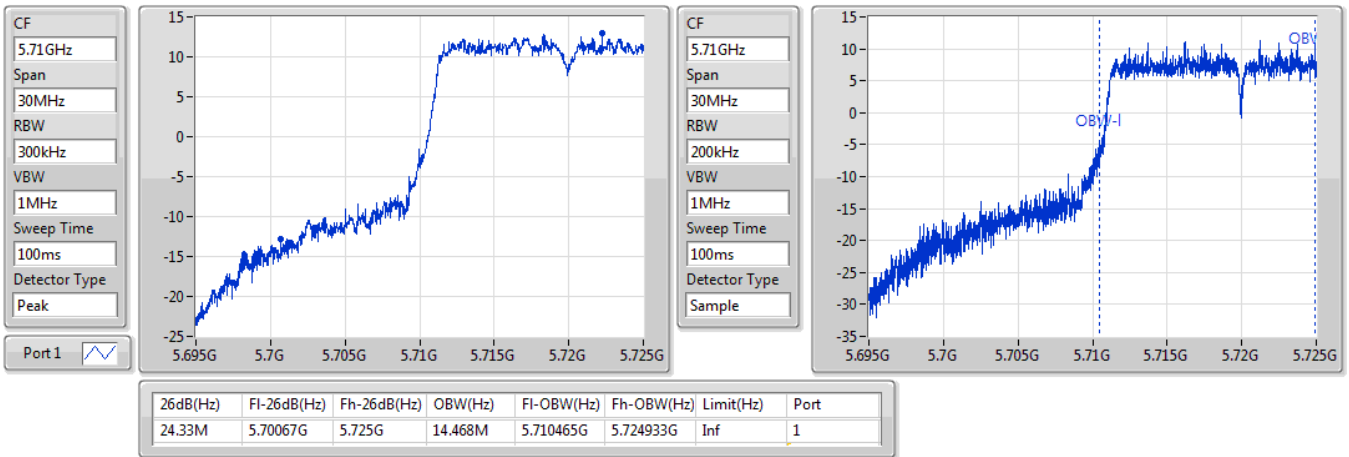

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5700MHz

26/10/2019

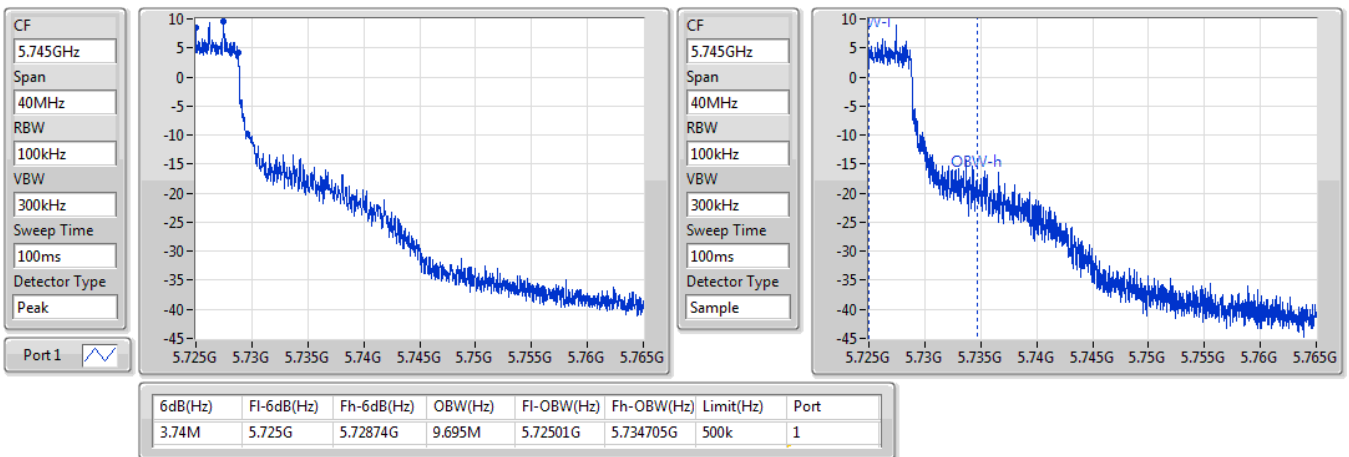


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

26/10/2019

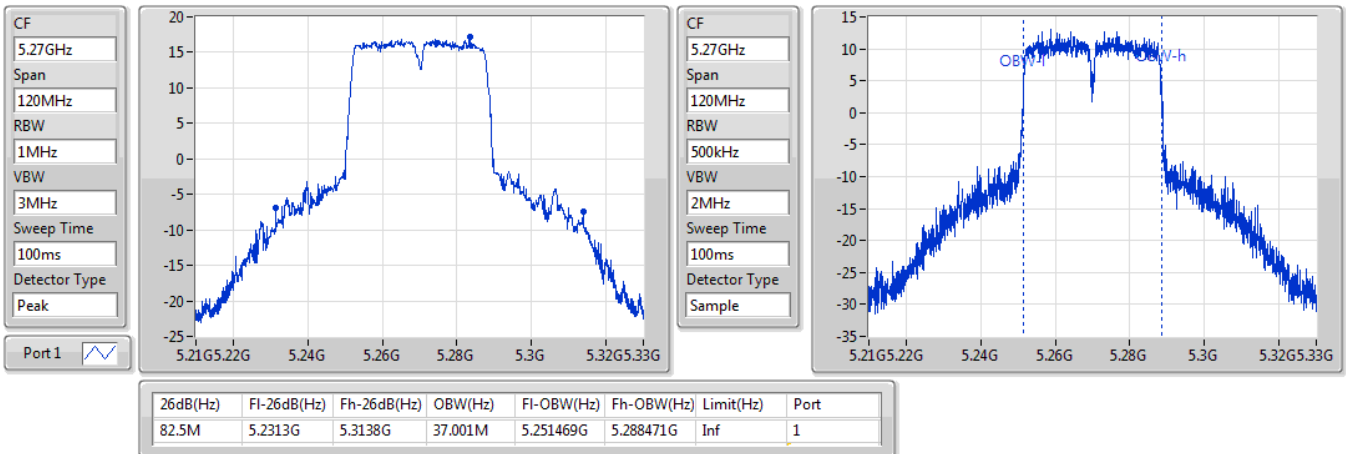

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

26/10/2019

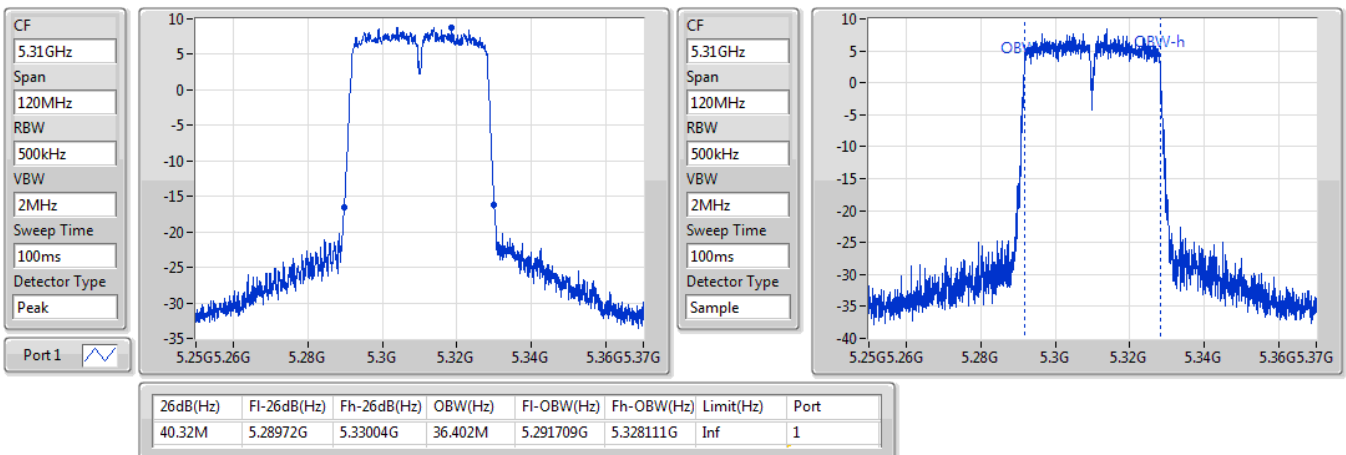


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5270MHz

26/10/2019

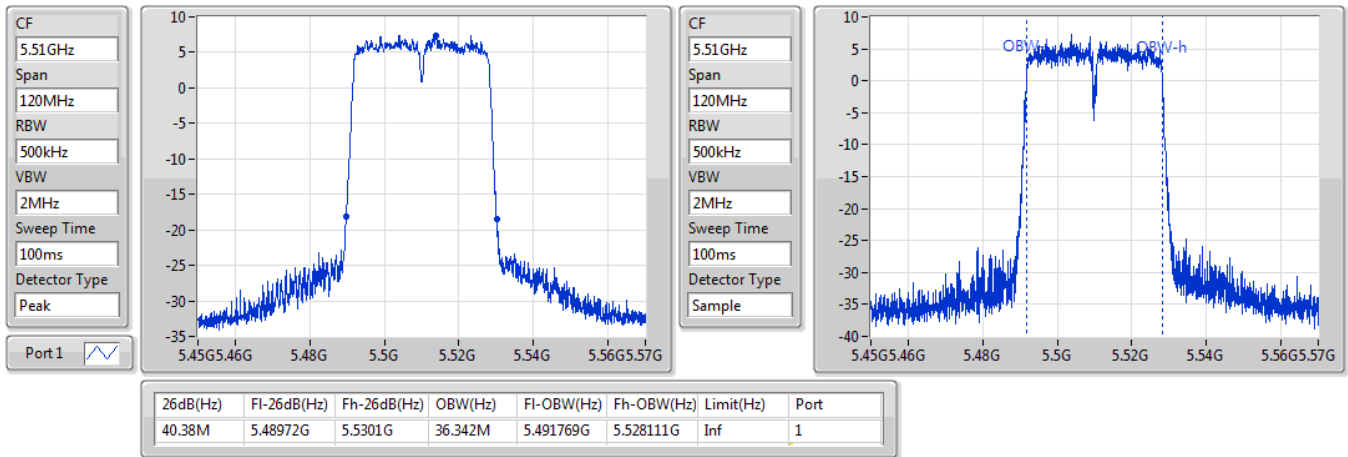

802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5310MHz

26/10/2019

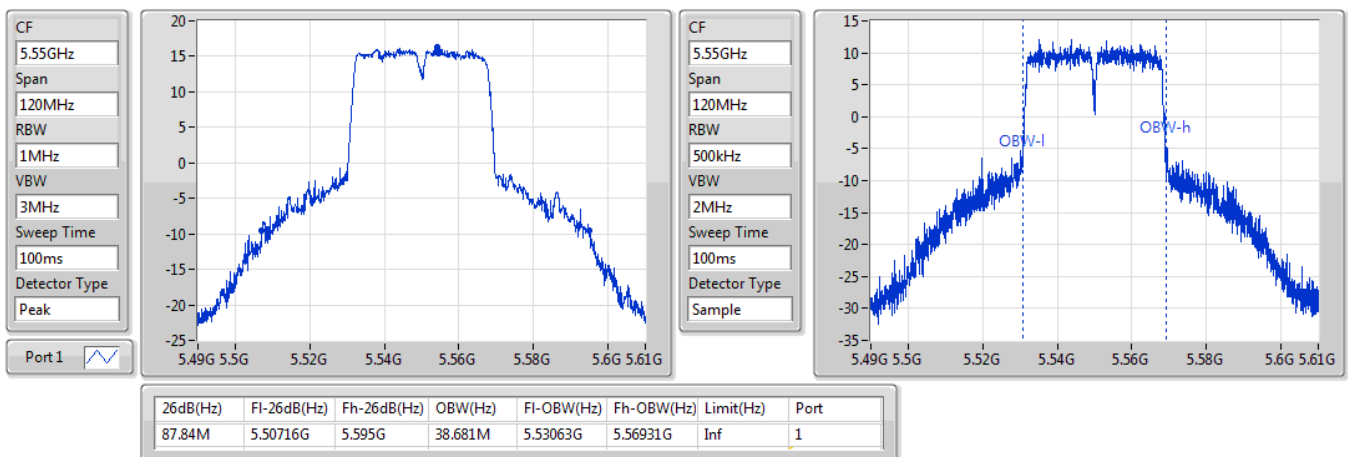


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5510MHz

26/10/2019

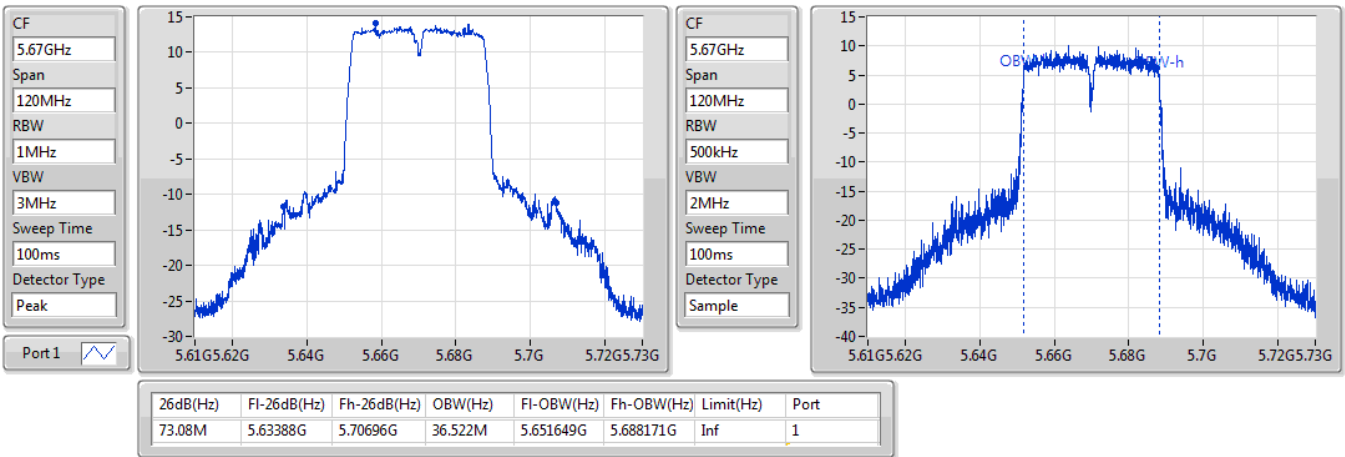

802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5550MHz

26/10/2019

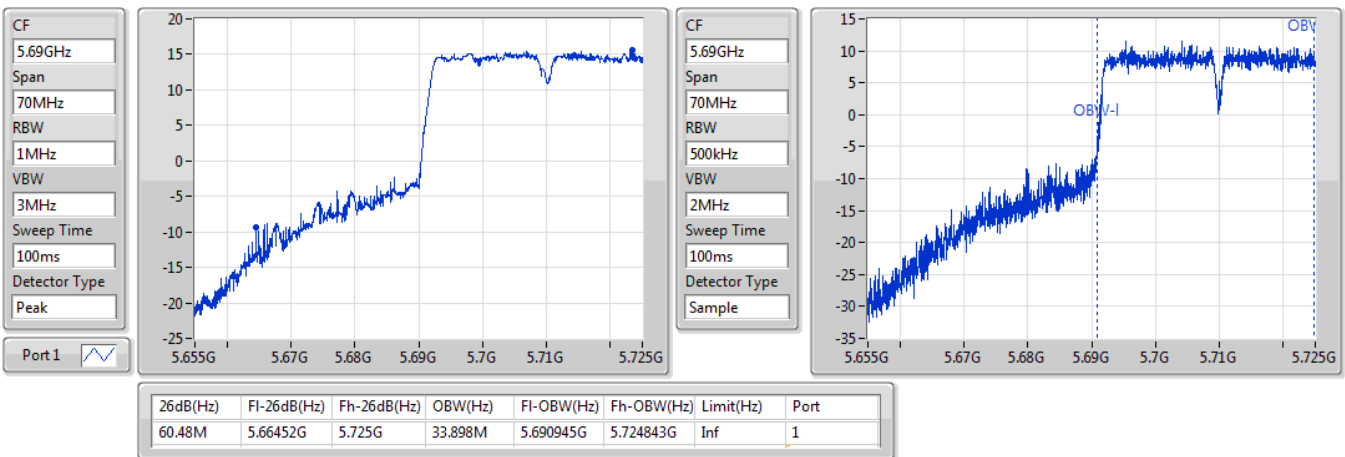


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5670MHz

26/10/2019

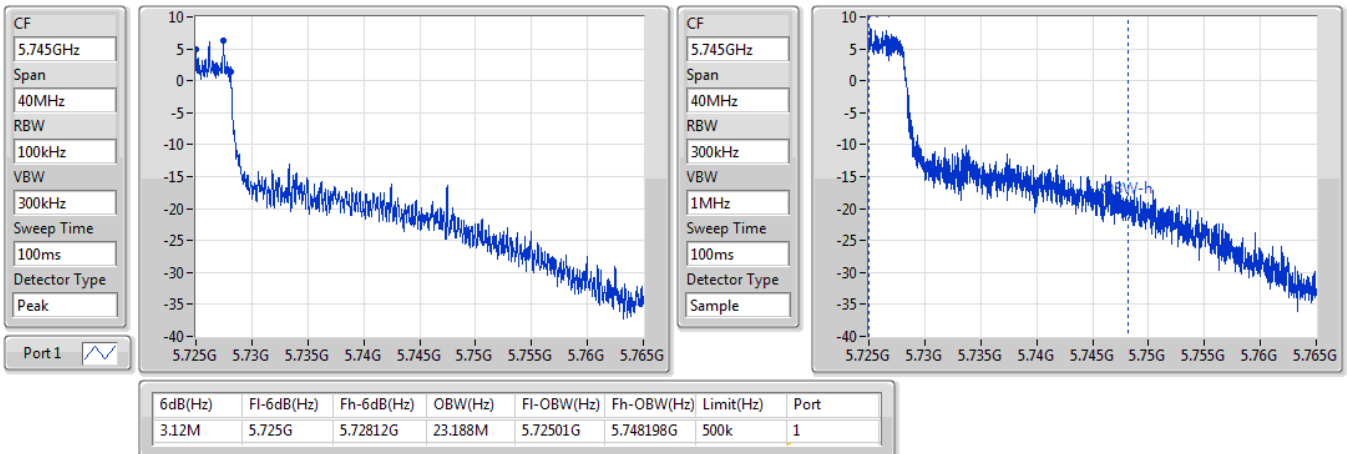

802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

26/10/2019

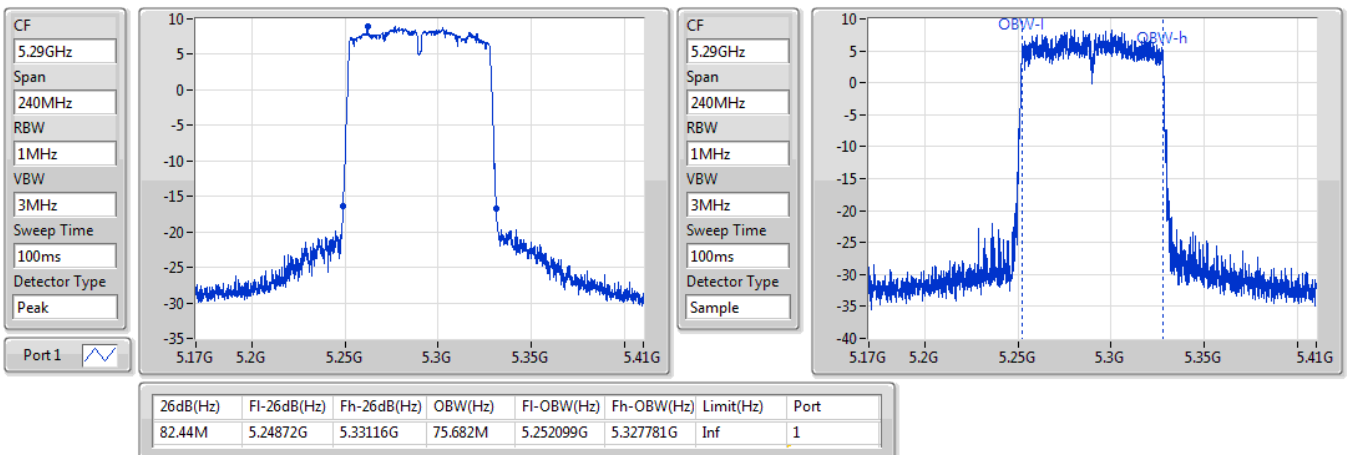


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

26/10/2019

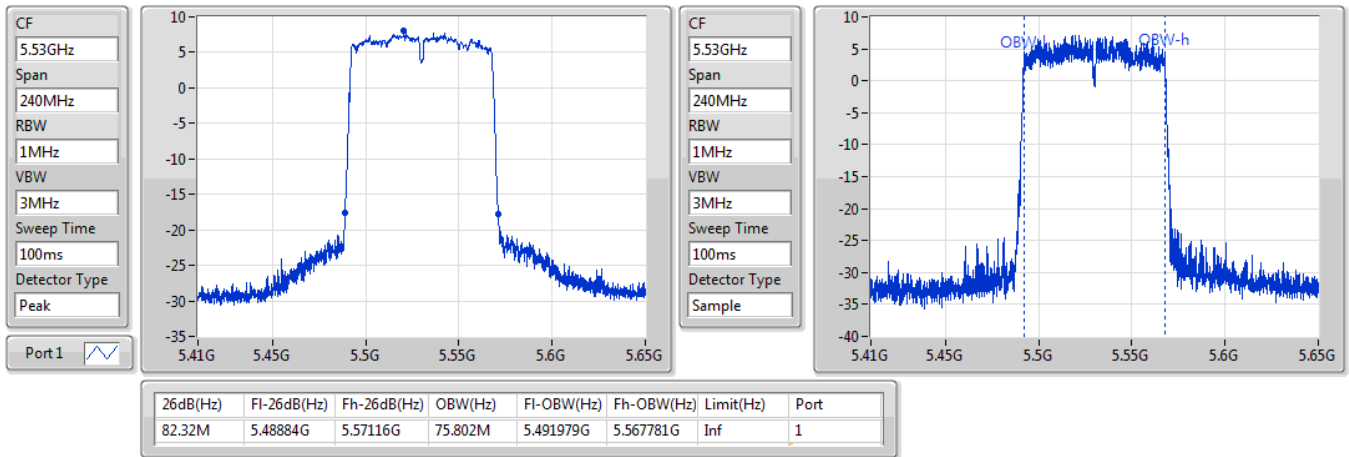

802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5290MHz

26/10/2019

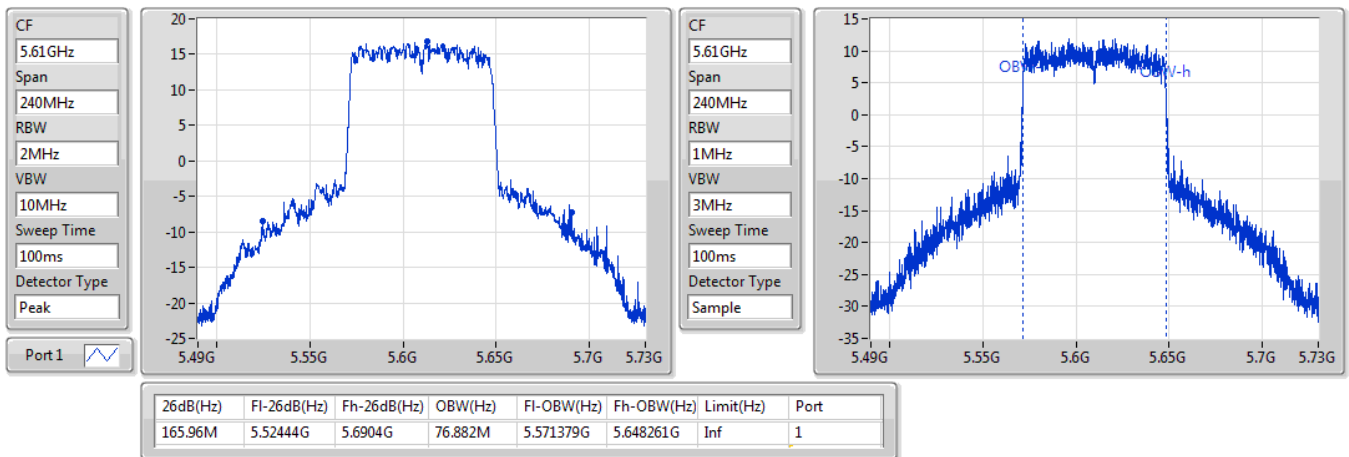


802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5530MHz

26/10/2019

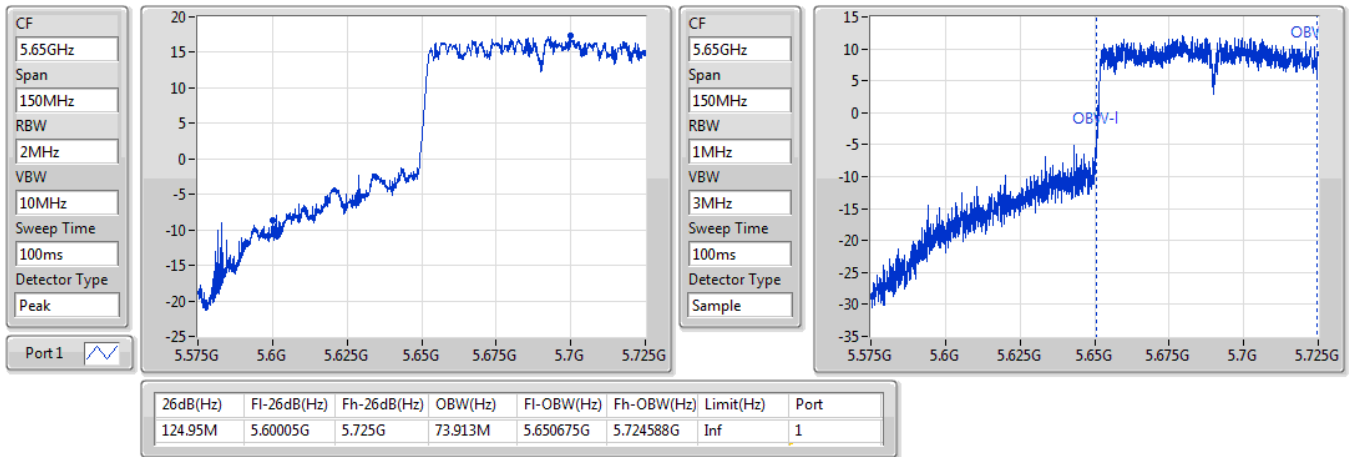

802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5610MHz

26/10/2019

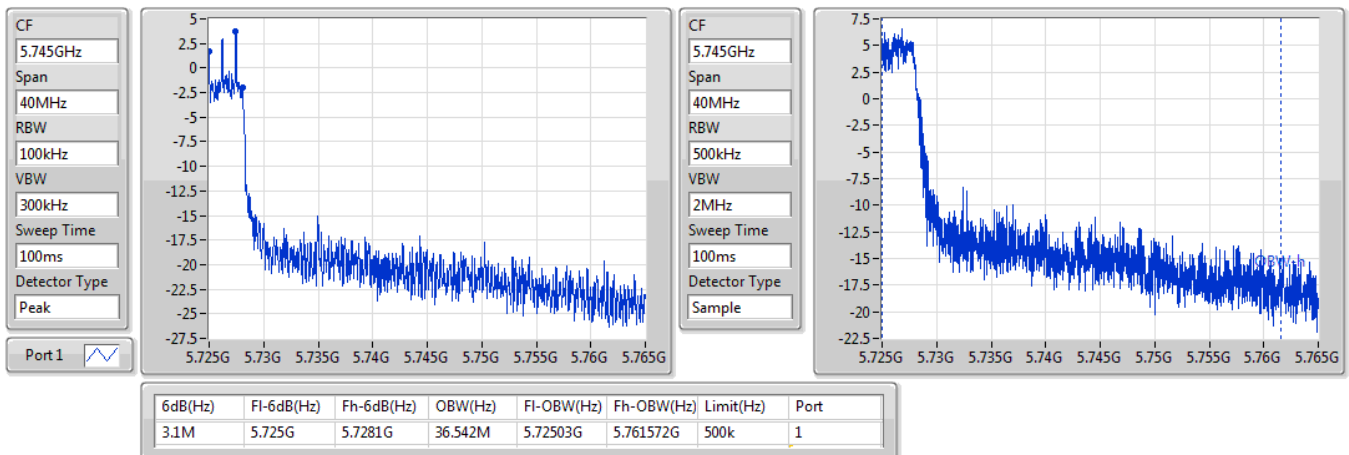


802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

26/10/2019

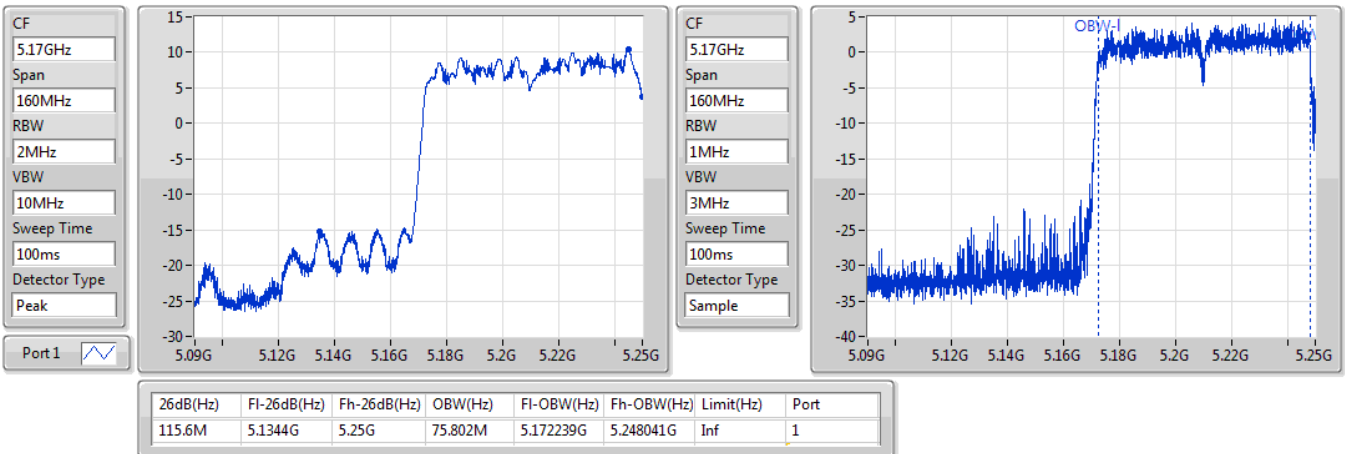

802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/10/2019

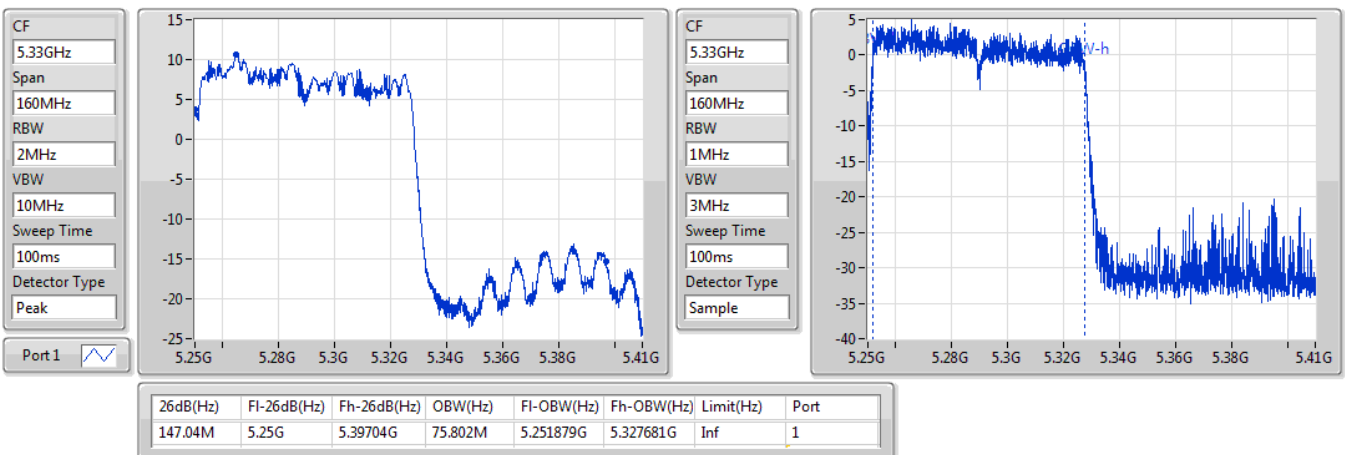


802.11ac VHT160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/10/2019

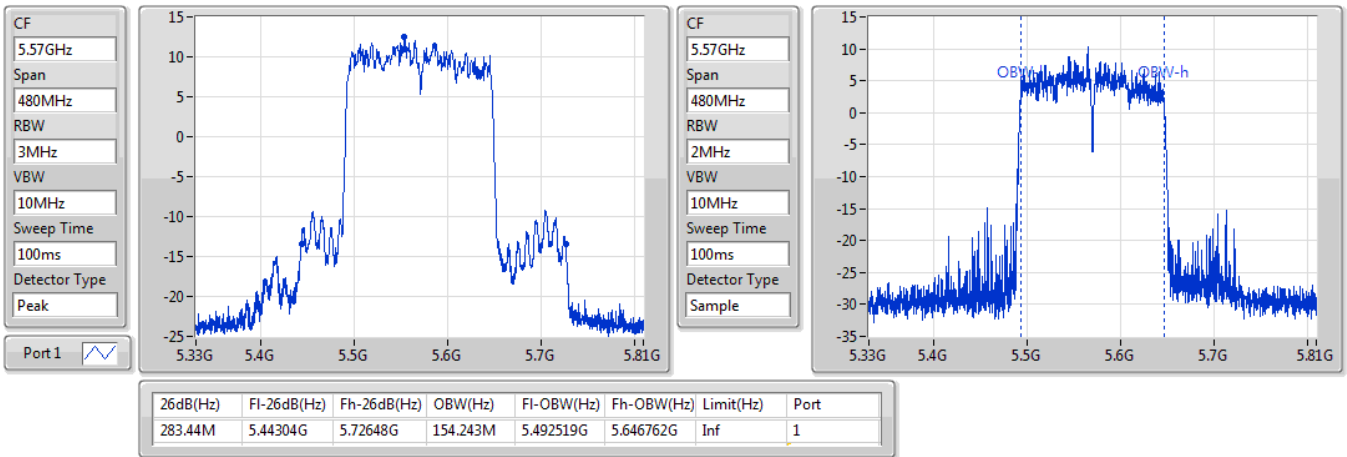

802.11ac VHT160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.25-5.35GHz

27/10/2019

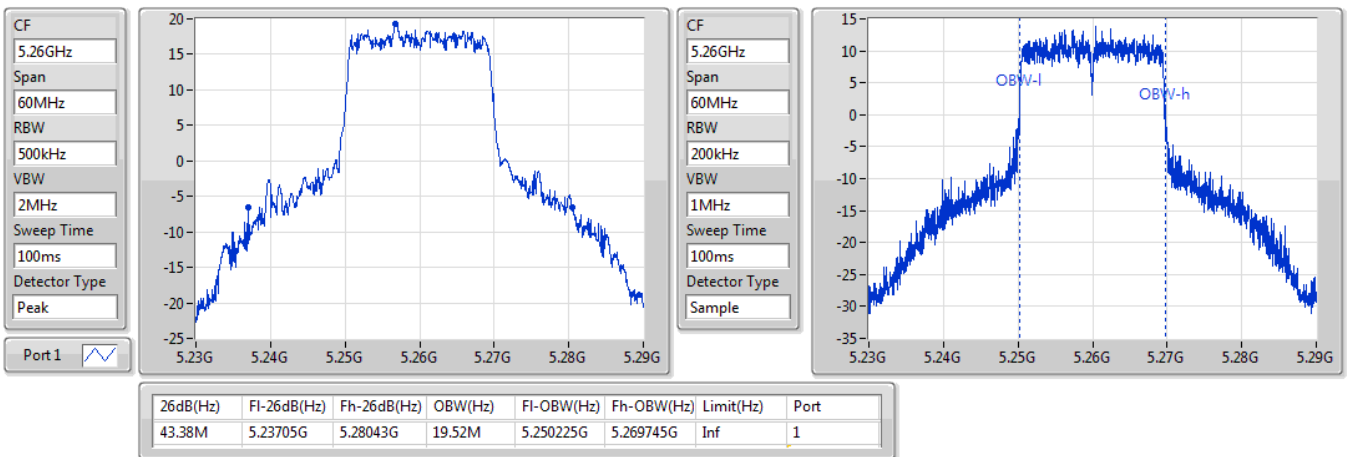


802.11ac VHT160_Nss1,(MCS0)_1TX
EBW
5570MHz

27/10/2019

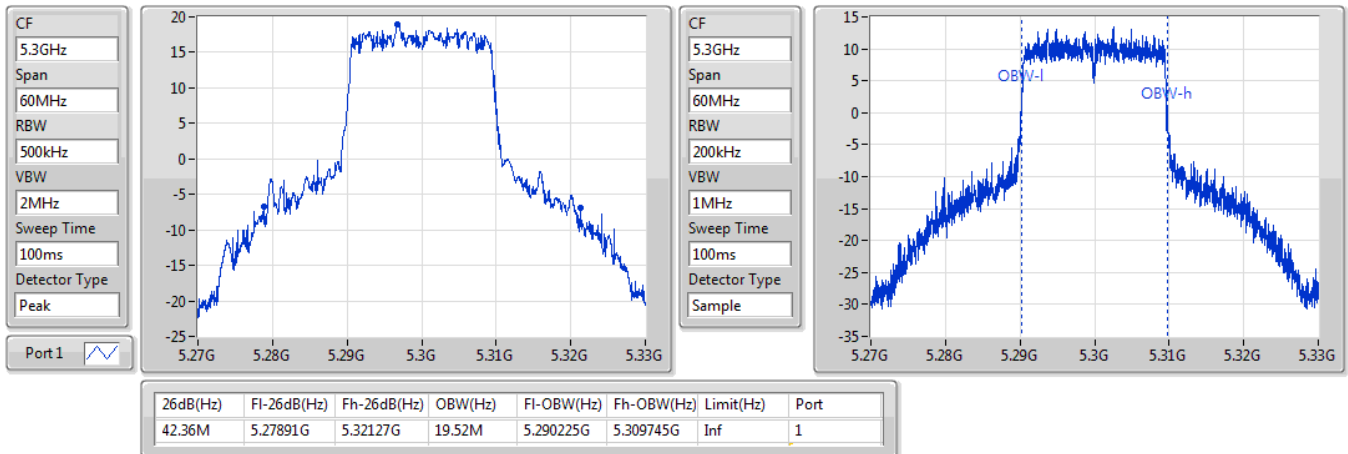

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5260MHz

26/10/2019

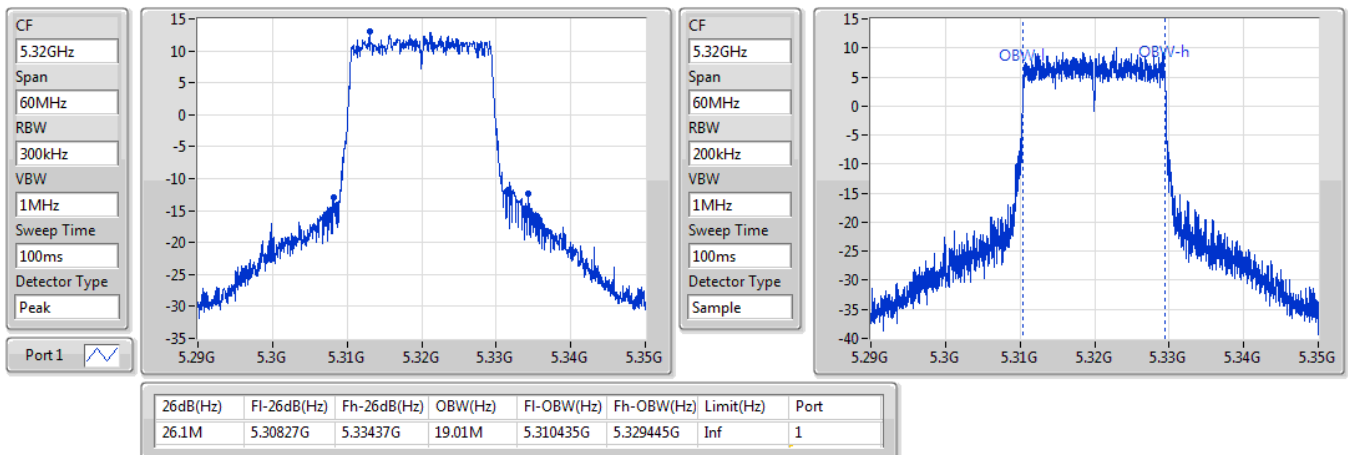


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5300MHz

26/10/2019

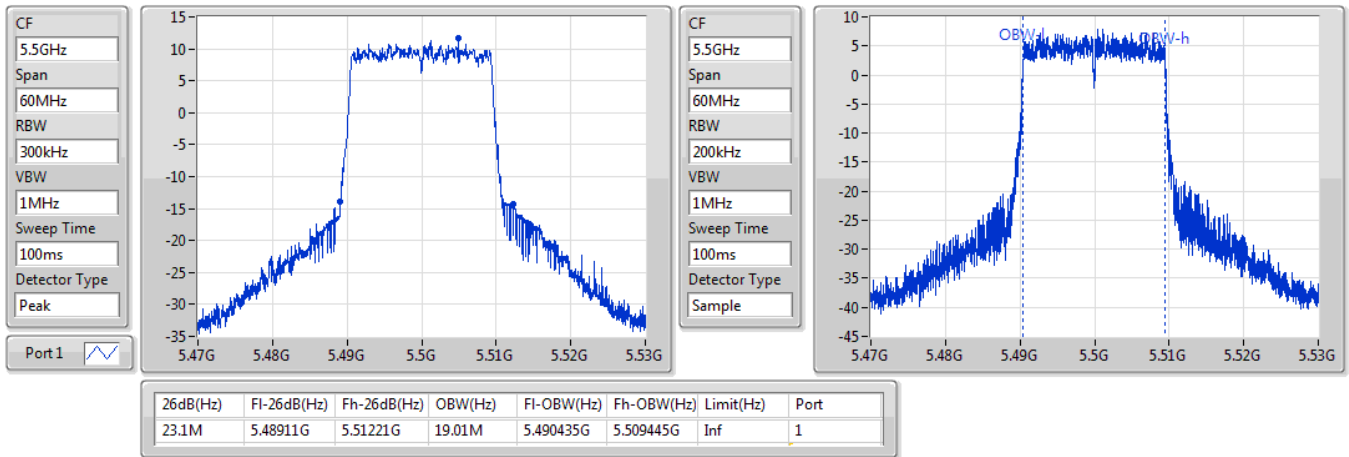

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5320MHz

26/10/2019

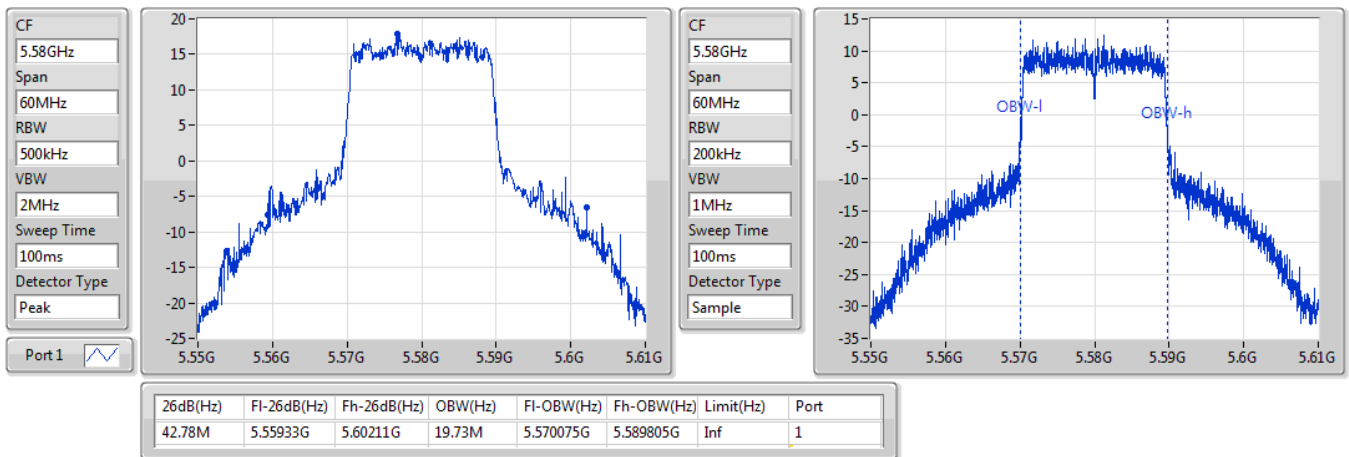


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

26/10/2019

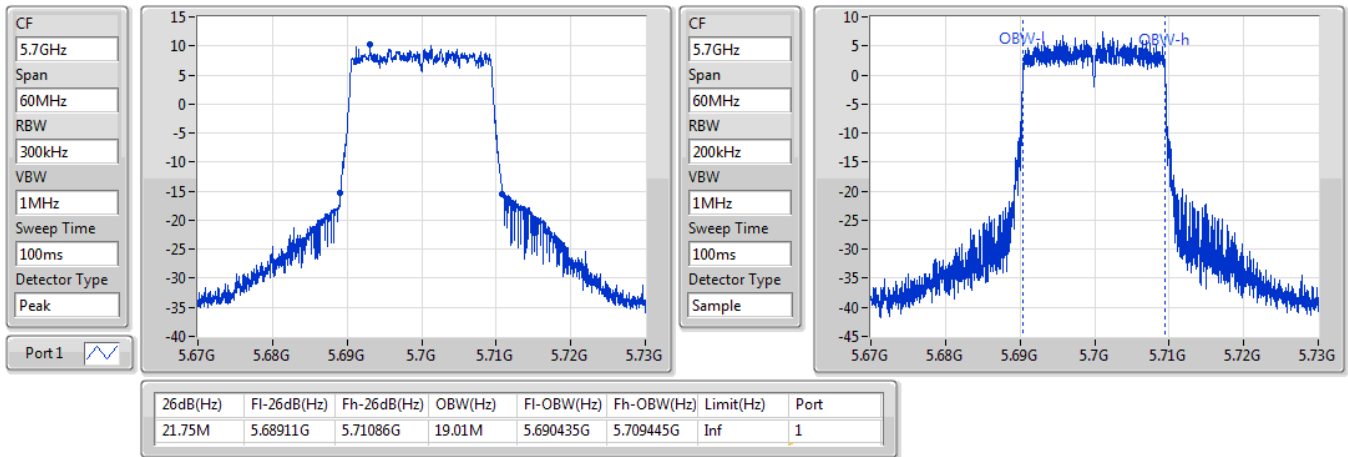

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

26/10/2019

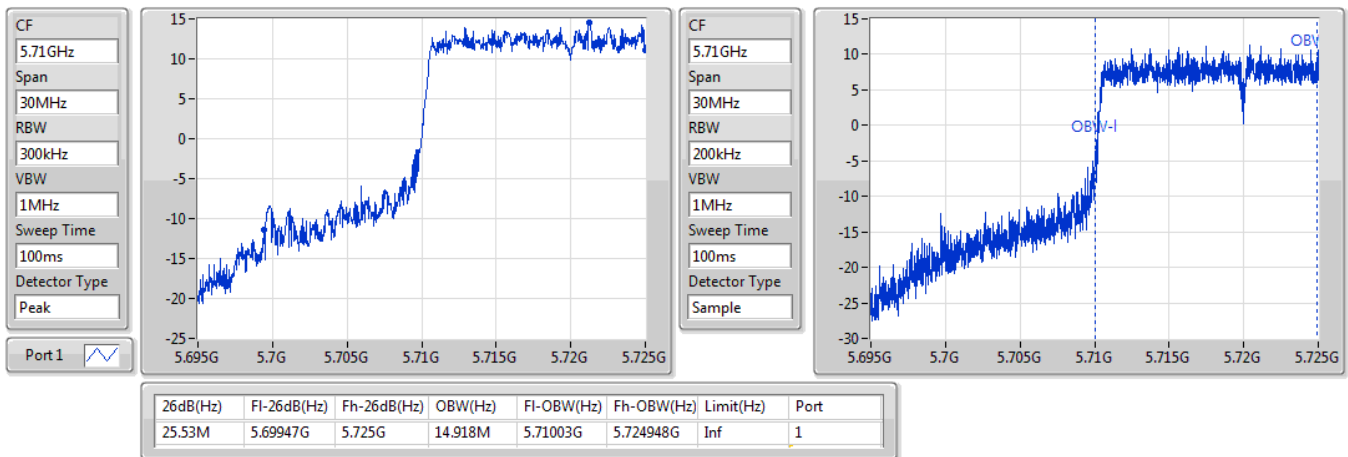


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

26/10/2019

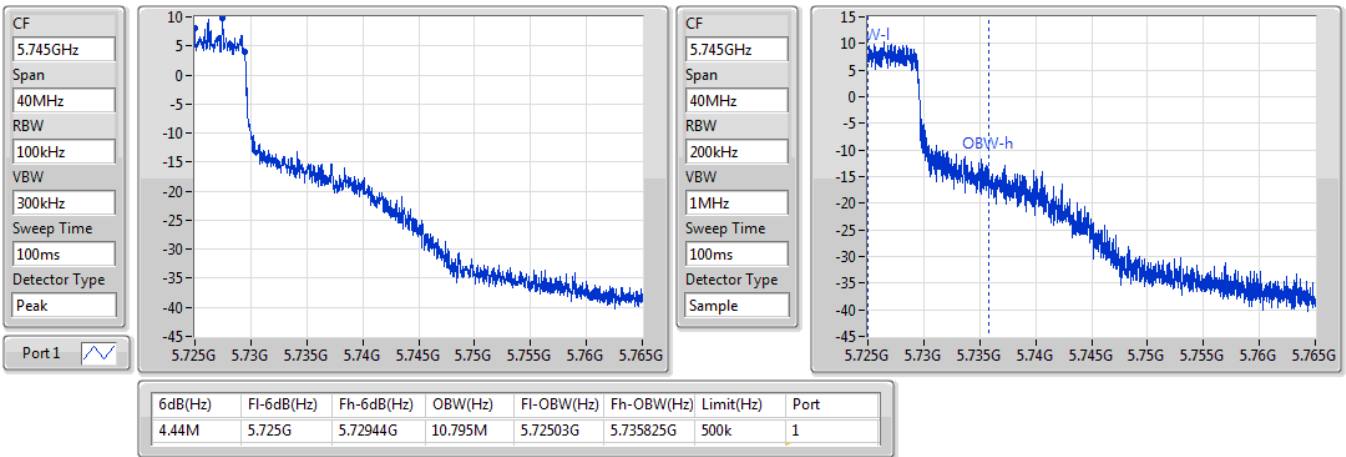

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

26/10/2019

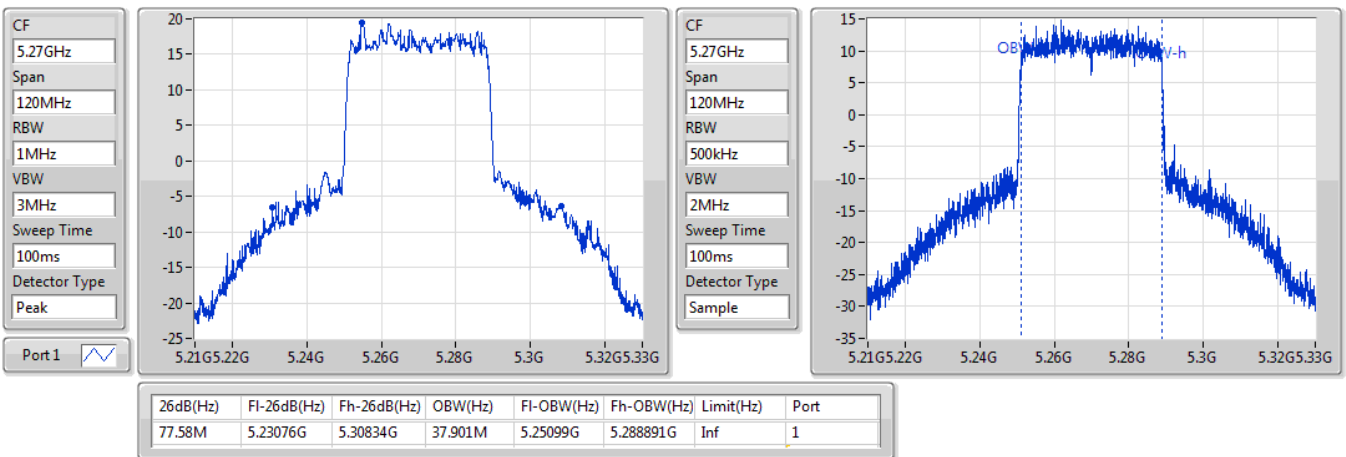


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

26/10/2019

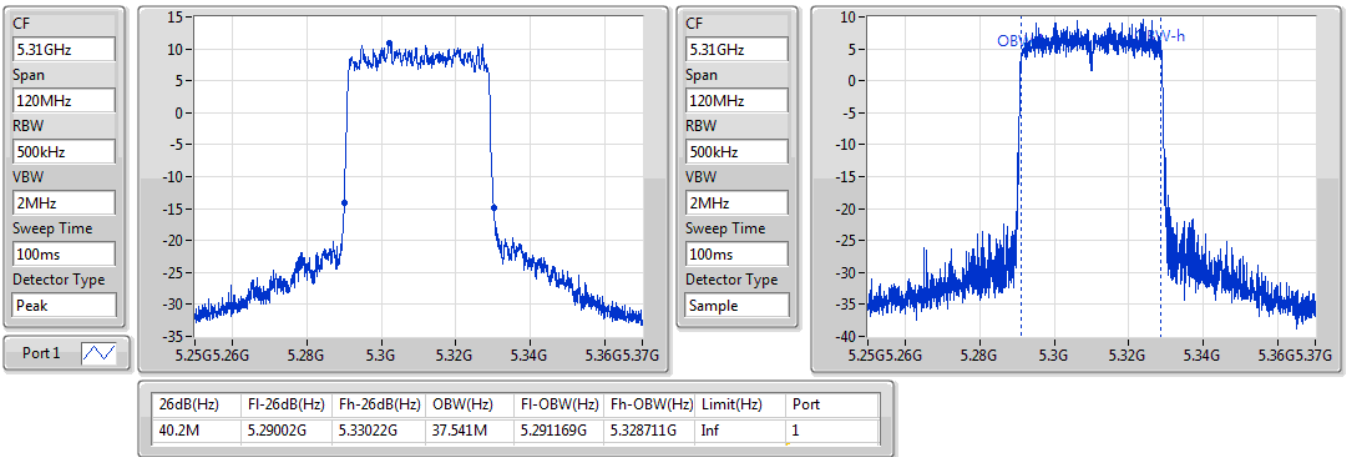

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5270MHz

26/10/2019

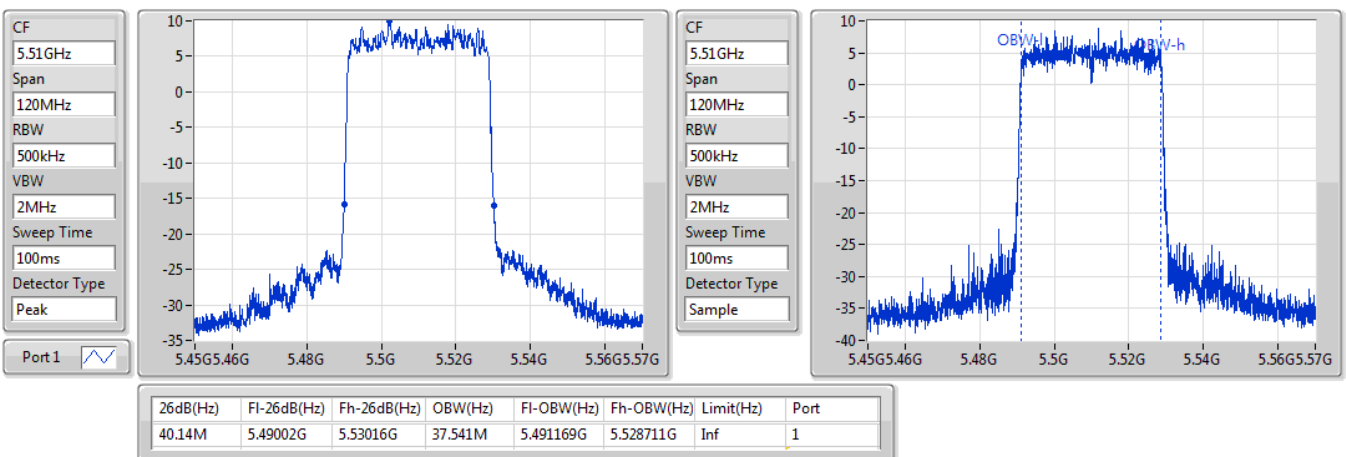


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5310MHz

26/10/2019

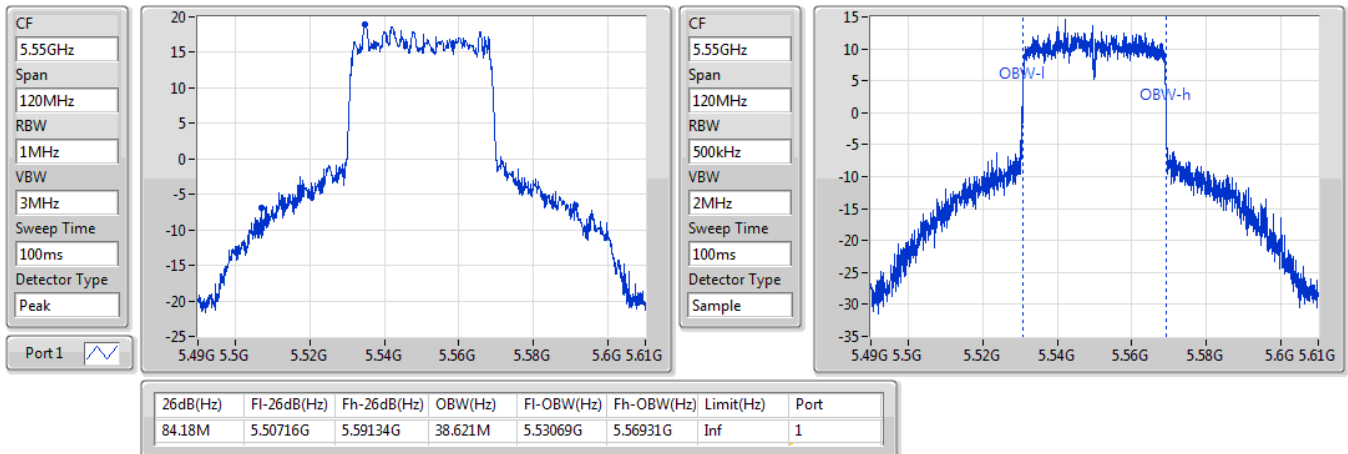

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5510MHz

26/10/2019

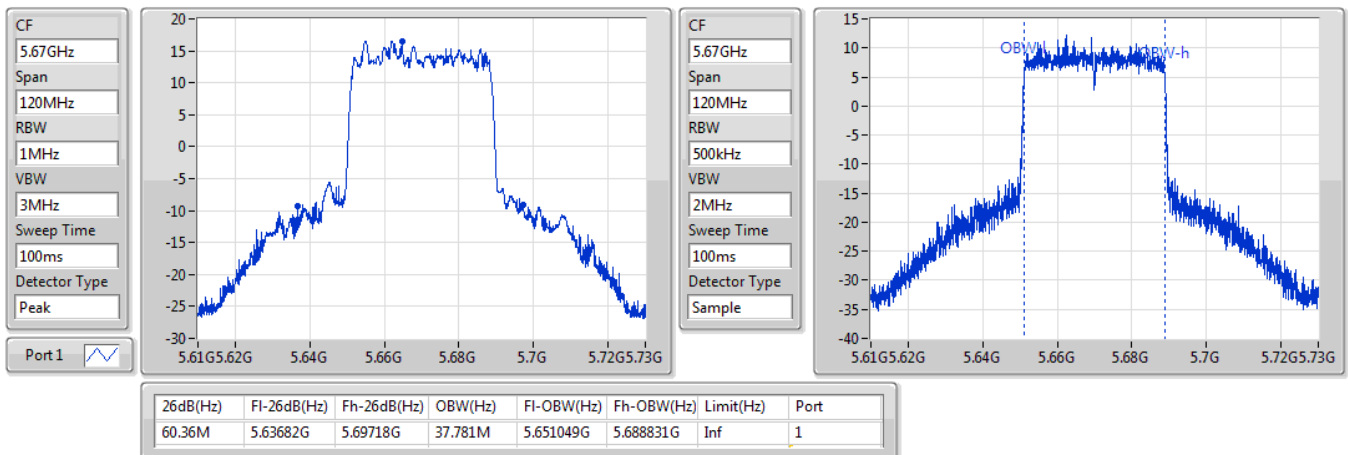


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5550MHz

26/10/2019

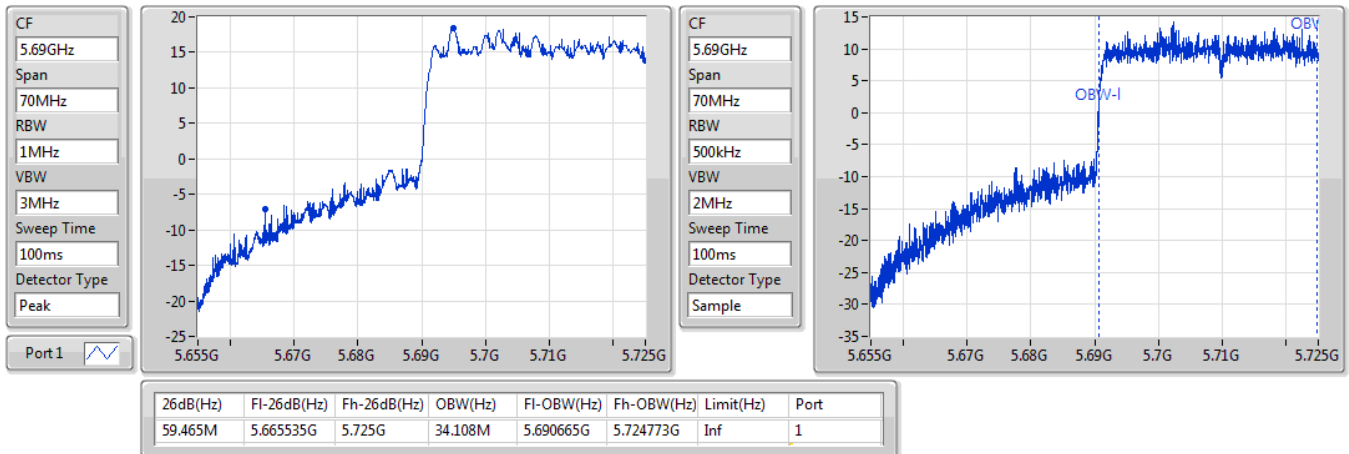

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5670MHz

26/10/2019

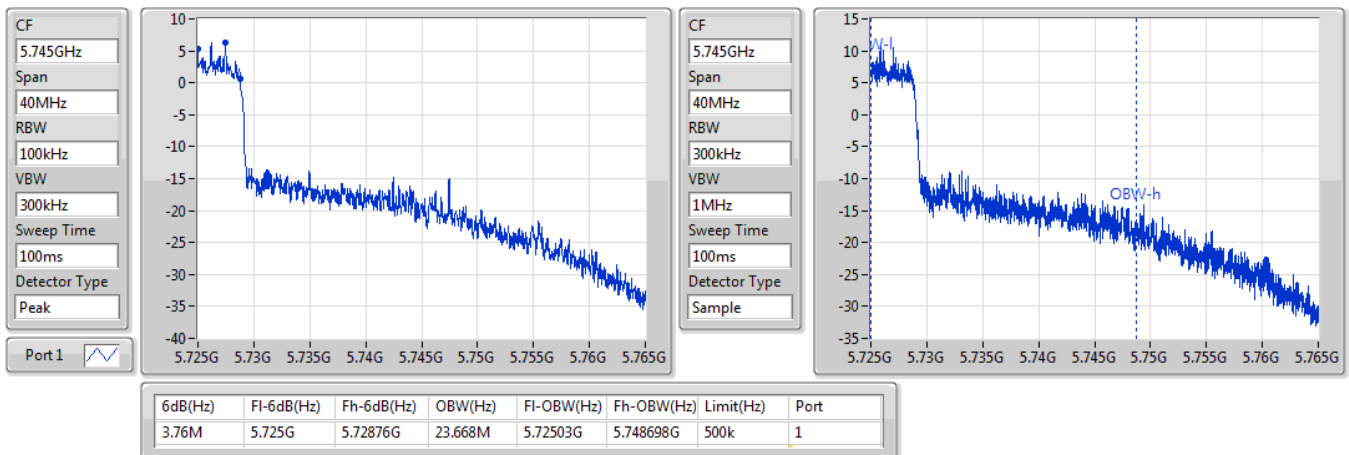


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

26/10/2019

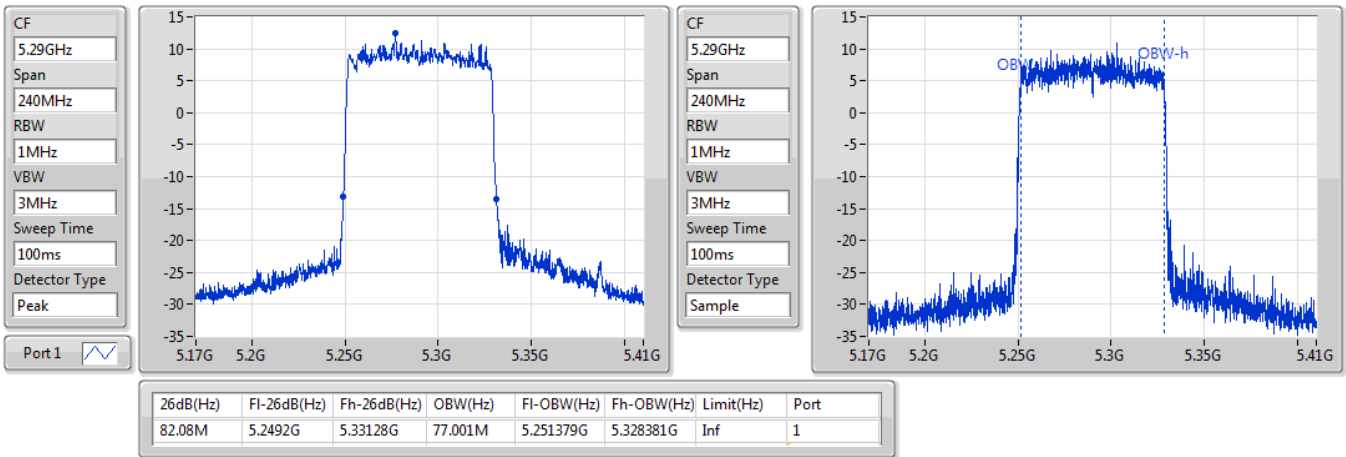

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

26/10/2019

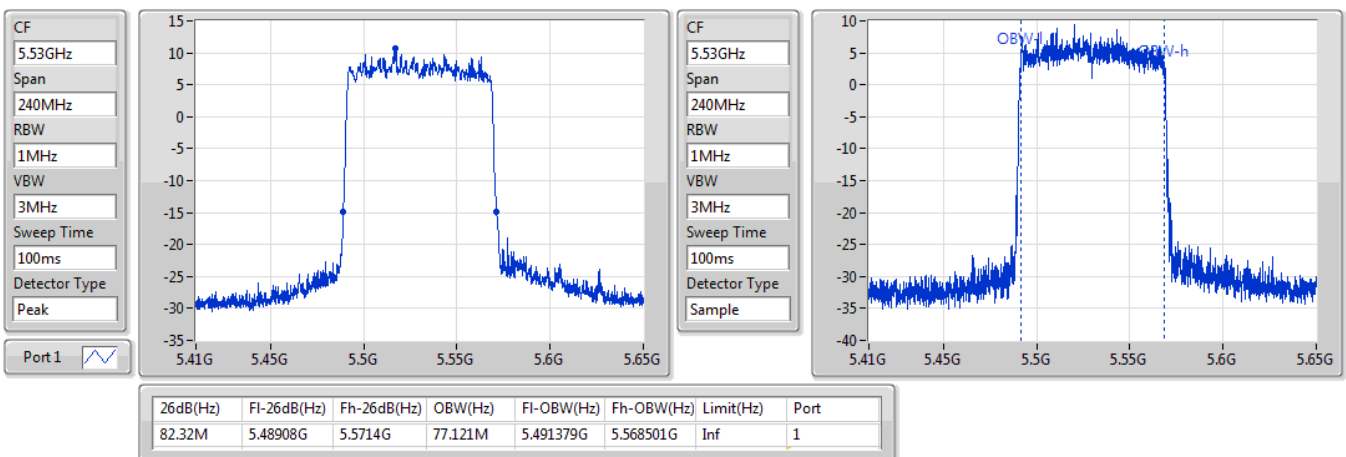


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5290MHz

26/10/2019

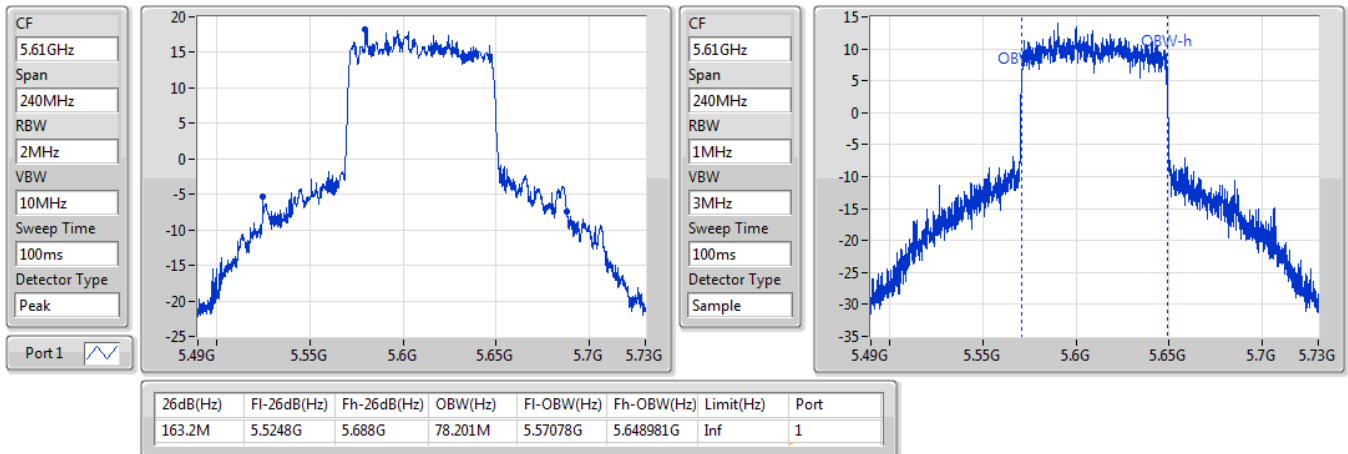

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5530MHz

26/10/2019

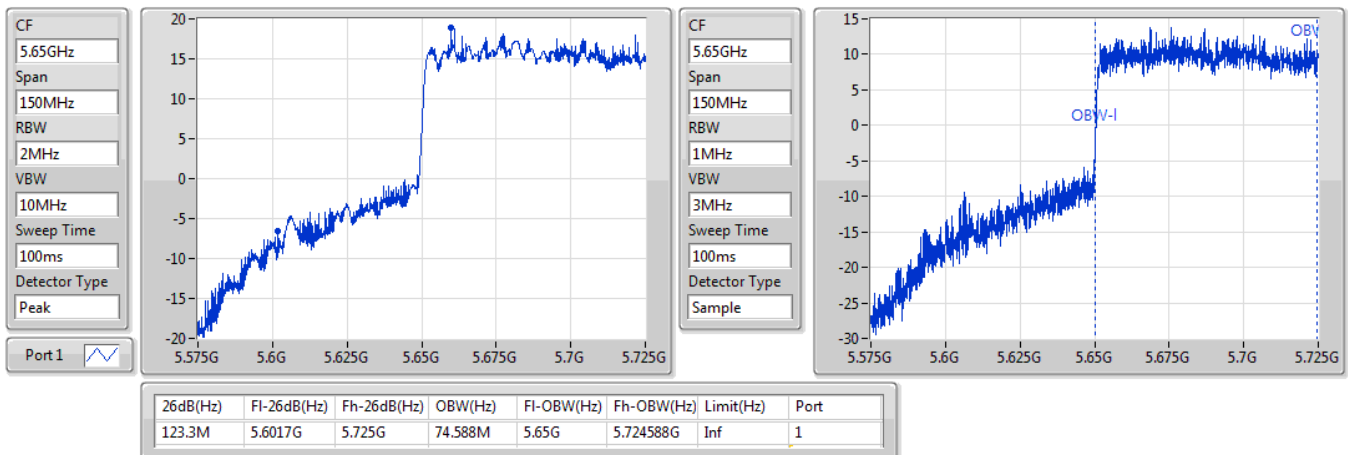


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5610MHz

26/10/2019

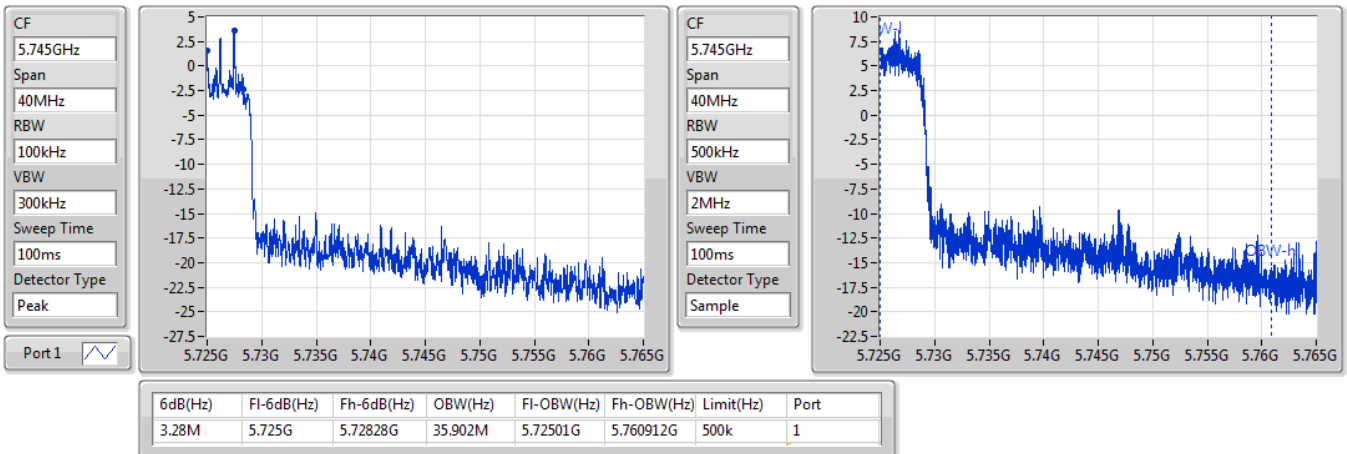

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

26/10/2019

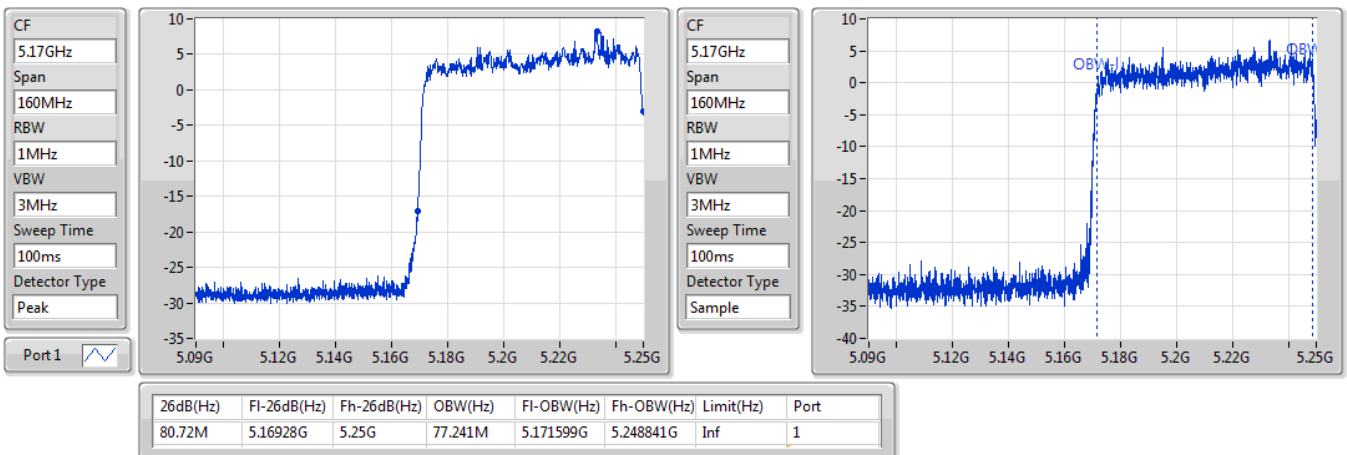


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

26/10/2019

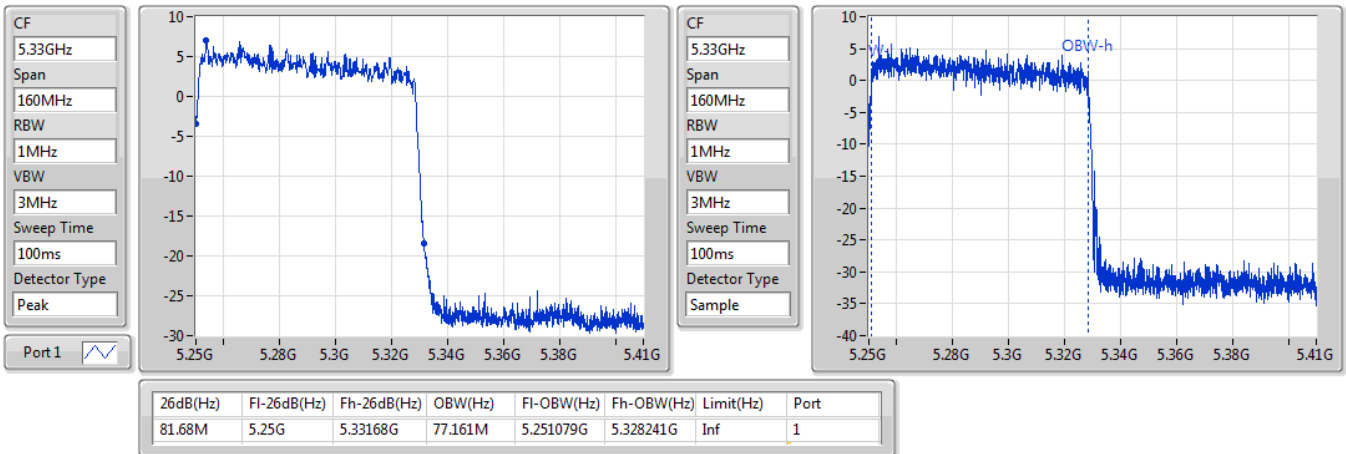

802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.15-5.25GHz

26/10/2019

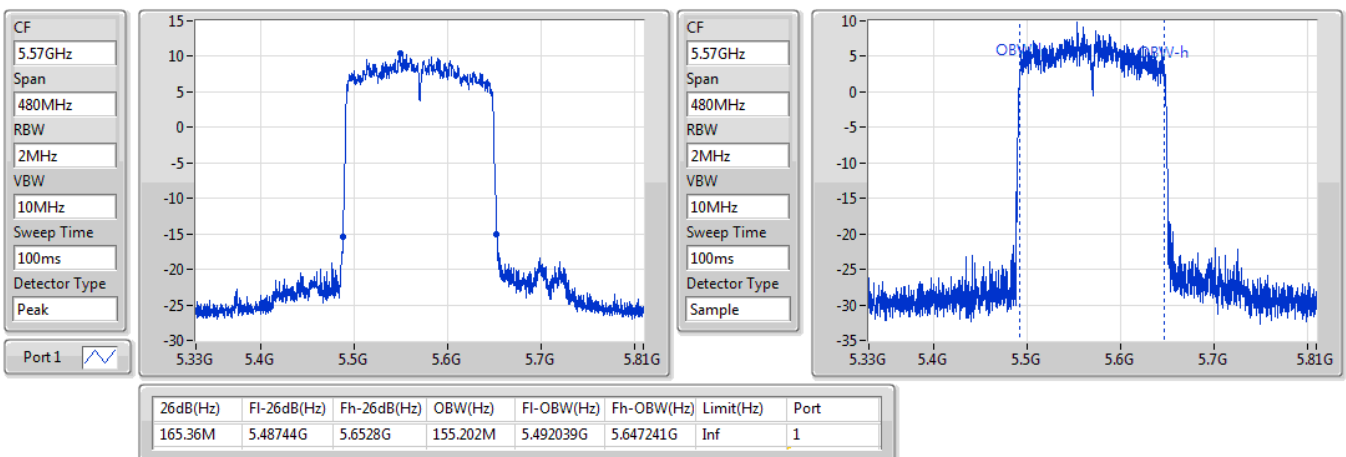


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.25-5.35GHz

26/10/2019


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
5570MHz

27/10/2019



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160_Nss2,(MCS0)_2TX	82.88M	75.882M	75M9D1D	81.44M	75.642M
802.11ax HEW160_Nss2,(MCS0)_2TX	81.12M	77.161M	77M2D1D	81.04M	77.081M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.23M	16.642M	16M6D1D	21.45M	16.582M
802.11ac VHT20_Nss2,(MCS0)_2TX	34.92M	17.961M	18M0D1D	22.11M	17.751M
802.11ac VHT40_Nss2,(MCS0)_2TX	61.08M	36.402M	36M4D1D	40.08M	36.282M
802.11ac VHT80_Nss2,(MCS0)_2TX	81.84M	75.802M	75M8D1D	81.48M	75.802M
802.11ac VHT160_Nss2,(MCS0)_2TX	82.24M	75.882M	75M9D1D	82M	75.882M
802.11ax HEW20_Nss2,(MCS0)_2TX	33.3M	19.1M	19M1D1D	21.39M	18.981M
802.11ax HEW40_Nss2,(MCS0)_2TX	73.86M	37.721M	37M7D1D	40.02M	37.541M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.48M	77.121M	77M1D1D	81.24M	76.882M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.56M	77.321M	77M3D1D	82.32M	77.081M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	27.12M	16.672M	16M7D1D	15.69M	13.373M
802.11ac VHT20_Nss2,(MCS0)_2TX	39.39M	18.471M	18M5D1D	21.63M	14.063M
802.11ac VHT40_Nss2,(MCS0)_2TX	75.96M	37.121M	37M1D1D	39.9M	33.163M
802.11ac VHT80_Nss2,(MCS0)_2TX	150M	76.522M	76M5D1D	81.48M	72.714M
802.11ac VHT160_Nss2,(MCS0)_2TX	165.36M	154.483M	154MD1D	164.88M	154.243M
802.11ax HEW20_Nss2,(MCS0)_2TX	43.89M	19.37M	19M4D1D	21.57M	14.618M
802.11ax HEW40_Nss2,(MCS0)_2TX	85.74M	38.201M	38M2D1D	39.96M	33.863M
802.11ax HEW80_Nss2,(MCS0)_2TX	159.48M	77.961M	78M0D1D	81.24M	73.463M
802.11ax HEW160_Nss2,(MCS0)_2TX	225.36M	155.442M	155MD1D	165.36M	155.202M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.12M	4.218M	4M22D1D	3.12M	3.978M
802.11ac VHT20_Nss2,(MCS0)_2TX	3.74M	9.555M	9M56D1D	3.72M	5.777M
802.11ac VHT40_Nss2,(MCS0)_2TX	3.1M	23.348M	23M3D1D	3.1M	19.69M
802.11ac VHT80_Nss2,(MCS0)_2TX	3.1M	35.682M	35M7D1D	3.1M	32.544M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.44M	11.794M	11M8D1D	4.4M	7.476M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.72M	23.868M	23M9D1D	3.68M	19.71M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.74M	34.523M	34M5D1D	3.72M	31.884M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% 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)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.45M	16.612M	22.14M	16.642M
5300MHz	Pass	Inf	21.51M	16.612M	22.17M	16.582M
5320MHz	Pass	Inf	21.51M	16.612M	22.23M	16.612M
5500MHz	Pass	Inf	21.48M	16.612M	22.05M	16.612M
5580MHz	Pass	Inf	21.66M	16.642M	27.12M	16.672M
5700MHz	Pass	Inf	21.39M	16.642M	21.9M	16.612M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.69M	13.373M	15.96M	13.373M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.978M	3.12M	4.218M
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	28.29M	17.811M	31.05M	17.961M
5300MHz	Pass	Inf	27.9M	17.811M	34.92M	17.961M
5320MHz	Pass	Inf	22.11M	17.781M	23.64M	17.751M
5500MHz	Pass	Inf	22.05M	17.811M	24.45M	17.841M
5580MHz	Pass	Inf	36.24M	17.961M	39.39M	18.471M
5700MHz	Pass	Inf	22.02M	17.781M	21.63M	17.781M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	21.66M	14.063M	25.38M	14.513M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.72M	5.777M	3.74M	9.555M
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	61.08M	36.342M	59.04M	36.402M
5310MHz	Pass	Inf	40.38M	36.282M	40.08M	36.282M
5510MHz	Pass	Inf	39.9M	36.282M	40.08M	36.222M
5550MHz	Pass	Inf	74.64M	36.402M	75.96M	37.121M
5670MHz	Pass	Inf	40.38M	36.282M	40.08M	36.282M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	53.795M	33.163M	54.46M	33.373M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	19.69M	3.1M	23.348M
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.84M	75.802M	81.48M	75.802M
5530MHz	Pass	Inf	82.08M	75.682M	81.48M	75.802M
5610MHz	Pass	Inf	115.32M	76.042M	150M	76.522M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	112.2M	72.714M	112.05M	72.864M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	32.544M	3.1M	35.682M
802.11ac VHT160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.88M	75.882M	81.44M	75.642M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.24M	75.882M	82M	75.882M
5570MHz	Pass	Inf	165.36M	154.243M	164.88M	154.483M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	22.92M	19.01M	33.3M	19.1M
5300MHz	Pass	Inf	21.87M	19.01M	31.47M	19.07M
5320MHz	Pass	Inf	21.84M	18.981M	21.39M	19.04M
5500MHz	Pass	Inf	21.81M	19.01M	24.18M	19.04M
5580MHz	Pass	Inf	34.38M	19.07M	43.89M	19.37M
5700MHz	Pass	Inf	21.78M	18.981M	21.57M	18.981M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	22.125M	14.618M	24.405M	14.783M

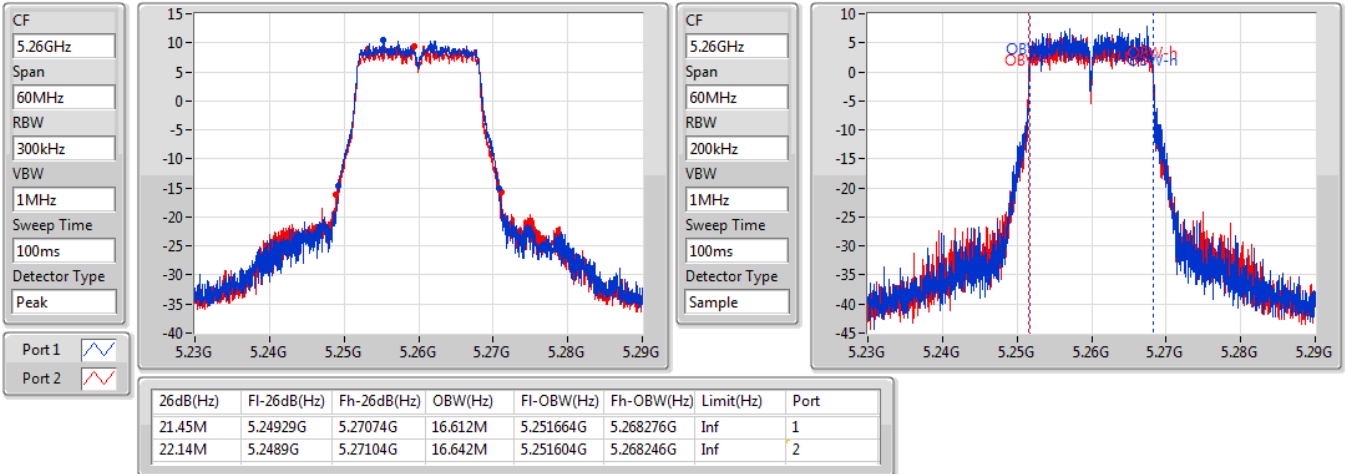
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	7.476M	4.4M	11.794M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	53.58M	37.721M	73.86M	37.661M
5310MHz	Pass	Inf	40.02M	37.601M	40.08M	37.541M
5510MHz	Pass	Inf	40.2M	37.661M	39.96M	37.481M
5550MHz	Pass	Inf	74.16M	37.781M	85.74M	38.201M
5670MHz	Pass	Inf	40.14M	37.661M	54.24M	37.541M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	55.37M	33.863M	59.115M	34.003M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.72M	19.71M	3.68M	23.868M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.24M	76.882M	81.48M	77.121M
5530MHz	Pass	Inf	81.24M	76.882M	81.6M	77.121M
5610MHz	Pass	Inf	94.44M	77.121M	159.48M	77.961M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	97.95M	73.463M	115.875M	73.763M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	31.884M	3.72M	34.523M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.04M	77.081M	81.12M	77.161M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.32M	77.081M	82.56M	77.321M
5570MHz	Pass	Inf	165.36M	155.202M	225.36M	155.442M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

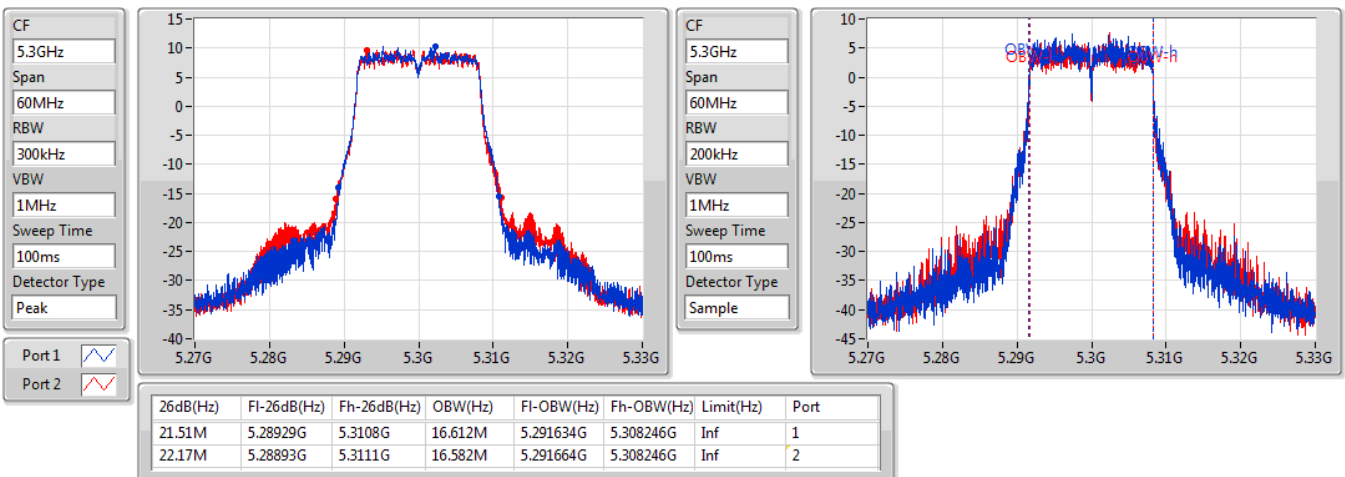
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

27/10/2019

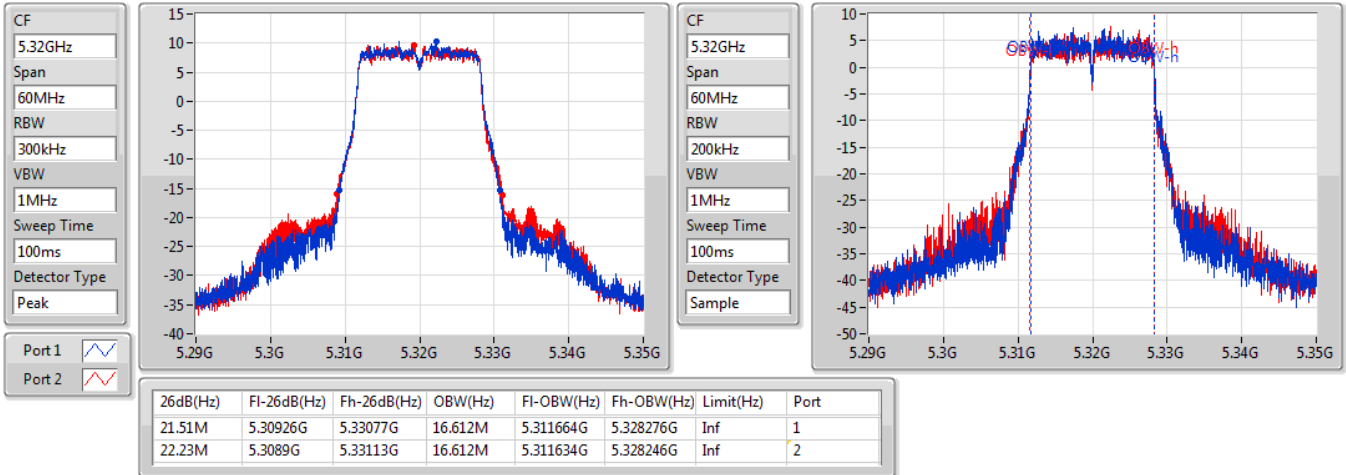

802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

27/10/2019

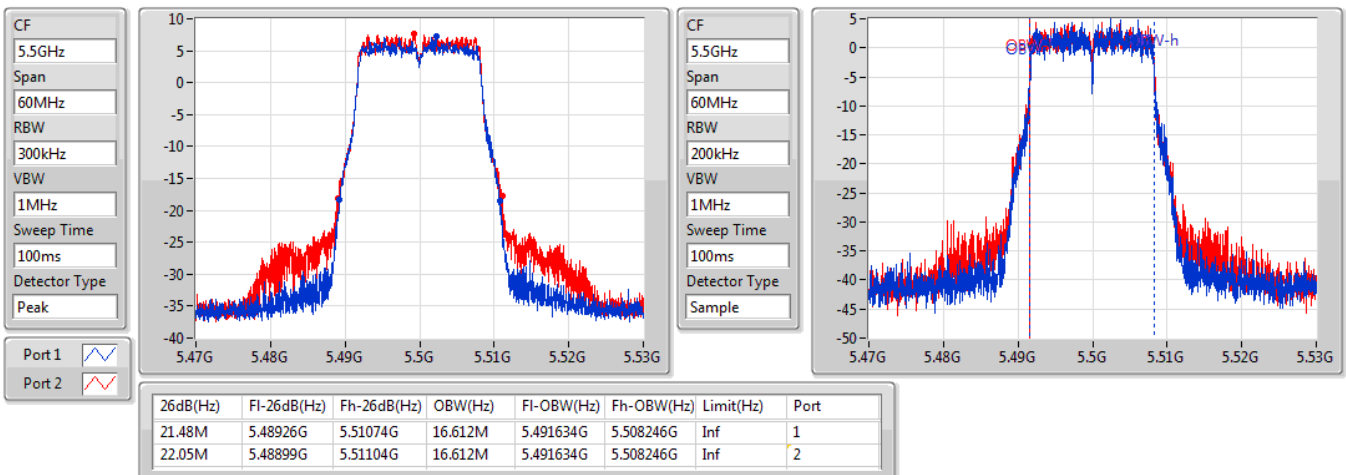


802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

27/10/2019

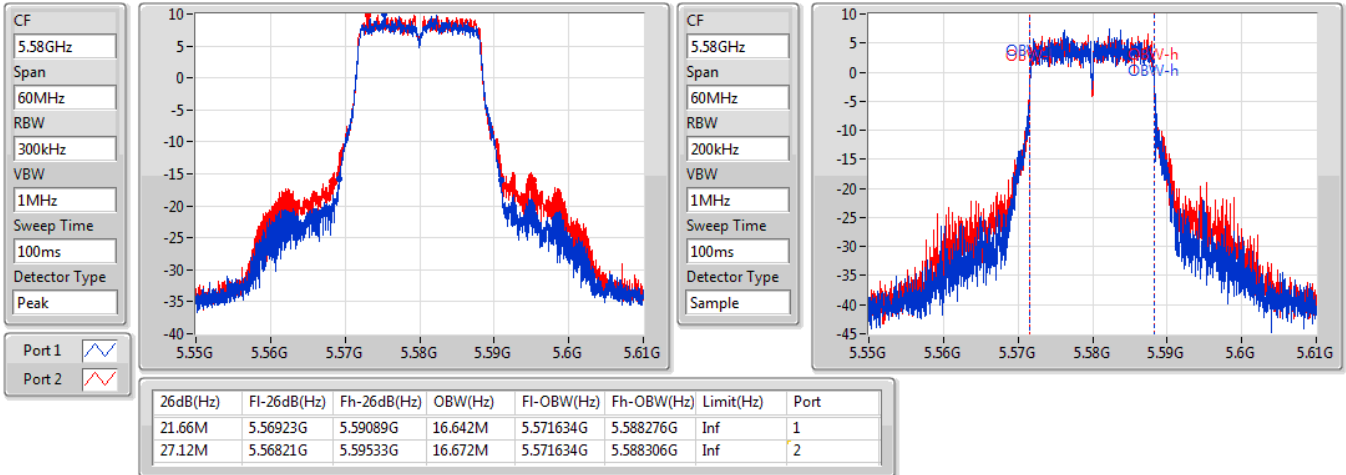

802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

27/10/2019

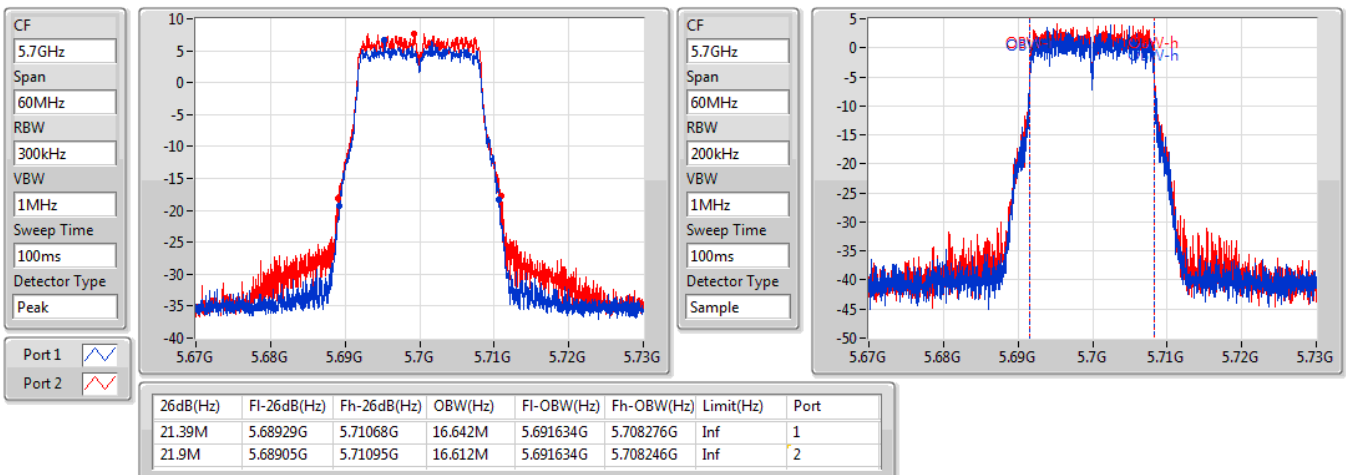


802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

27/10/2019

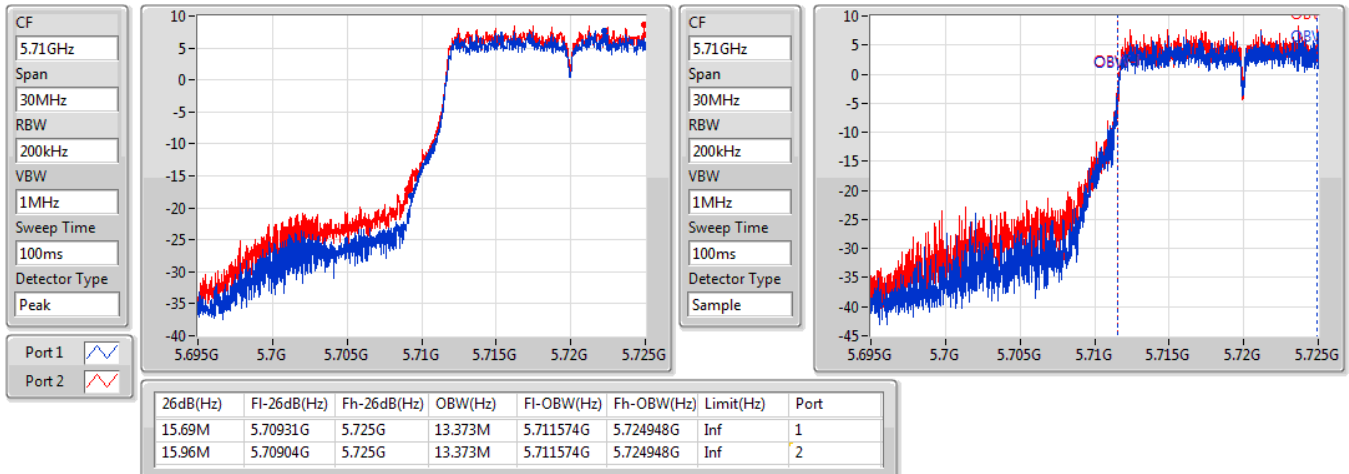

802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

27/10/2019

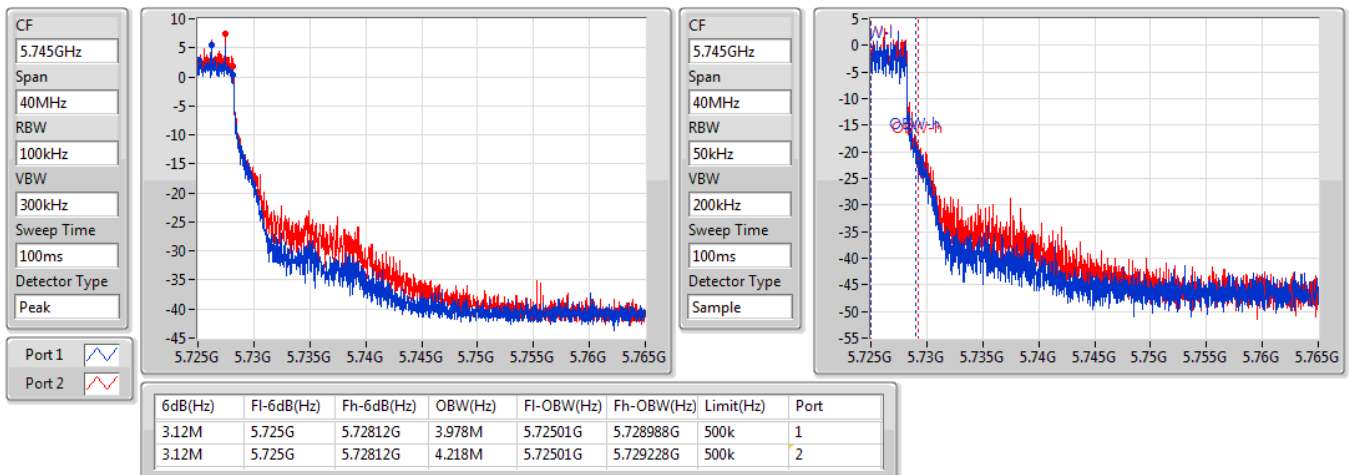


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

27/10/2019

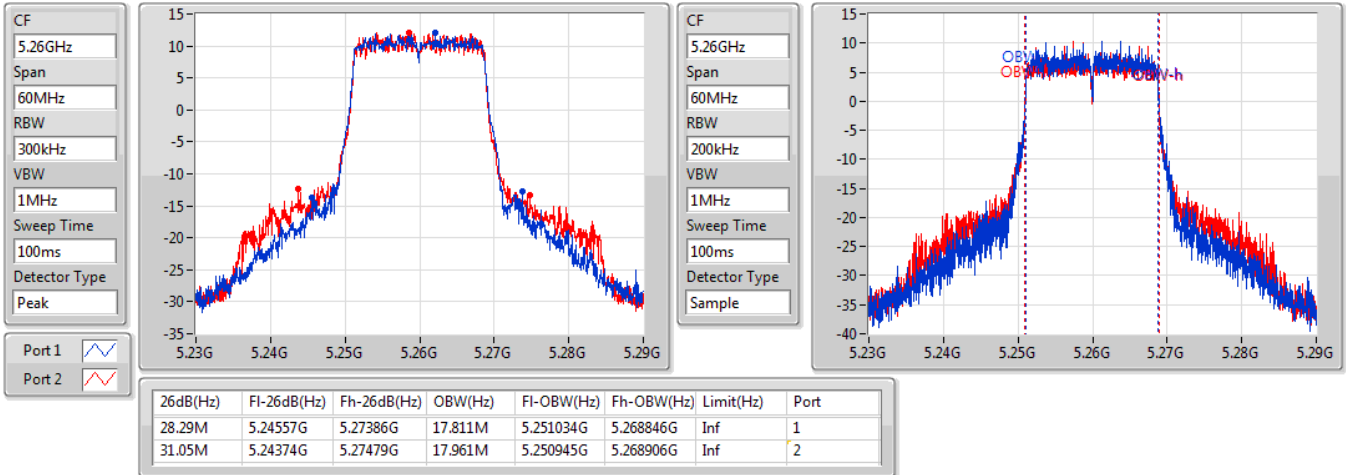

802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/10/2019

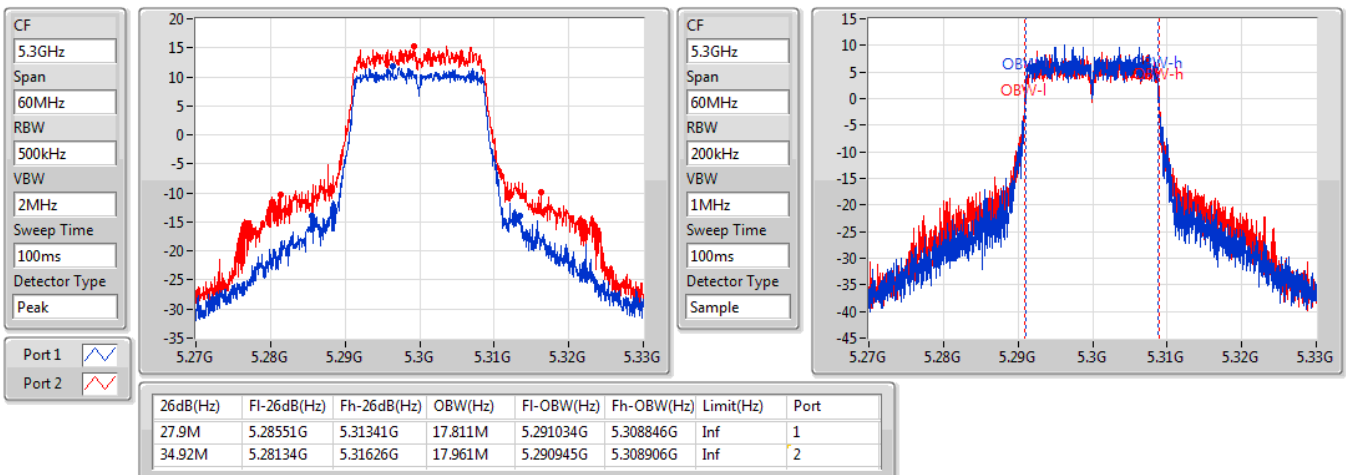


802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5260MHz

27/10/2019

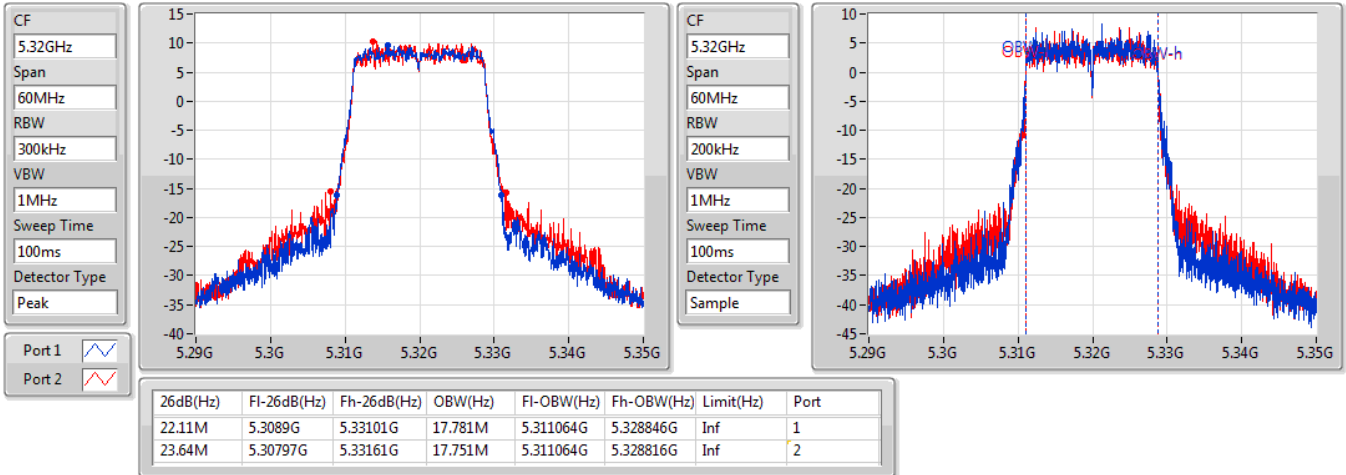

802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5300MHz

27/10/2019

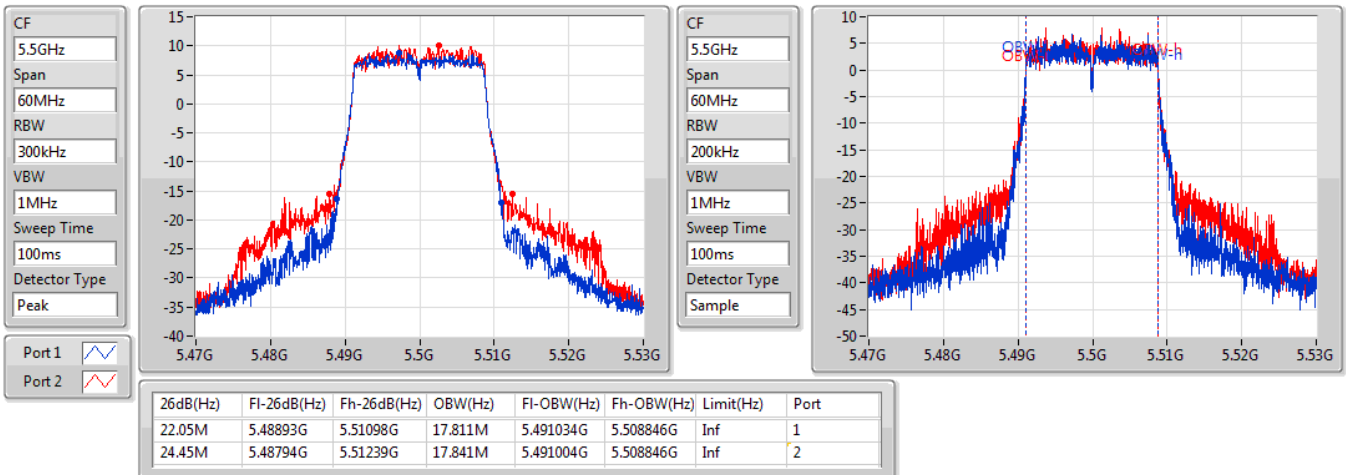


802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5320MHz

27/10/2019

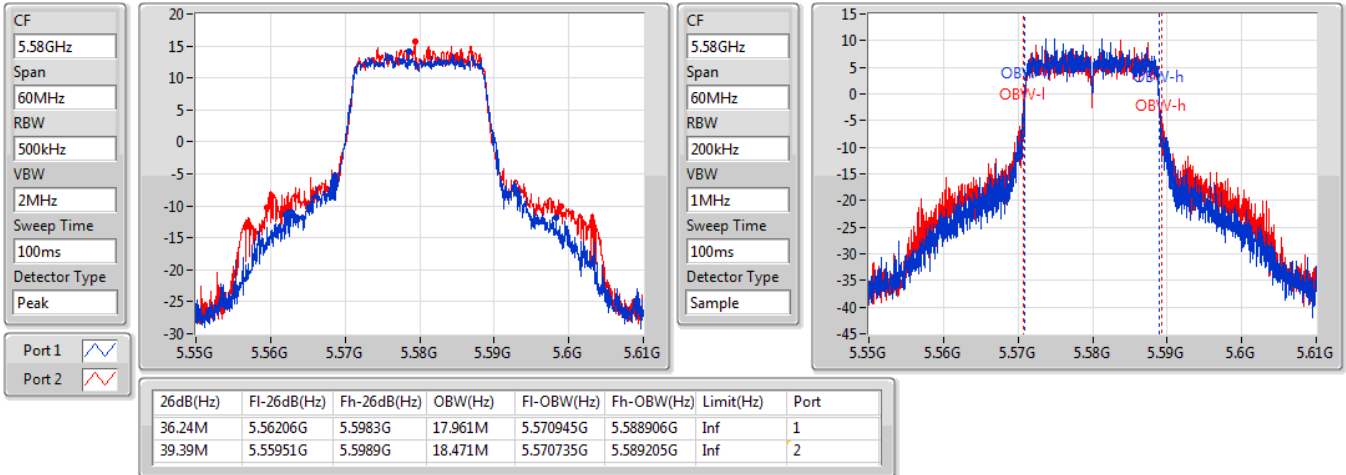

802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5500MHz

27/10/2019

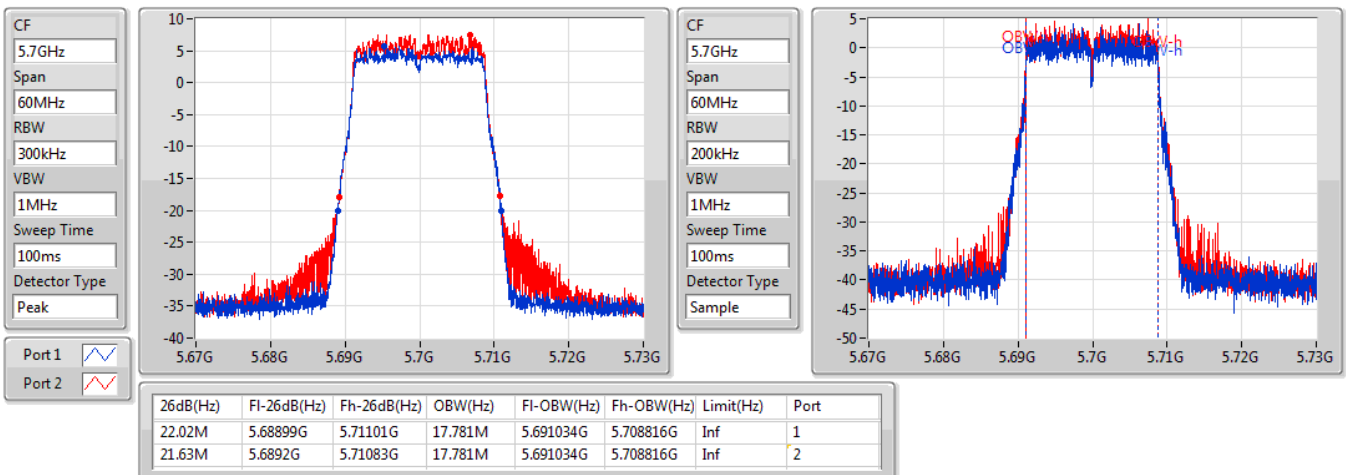


802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5580MHz

27/10/2019

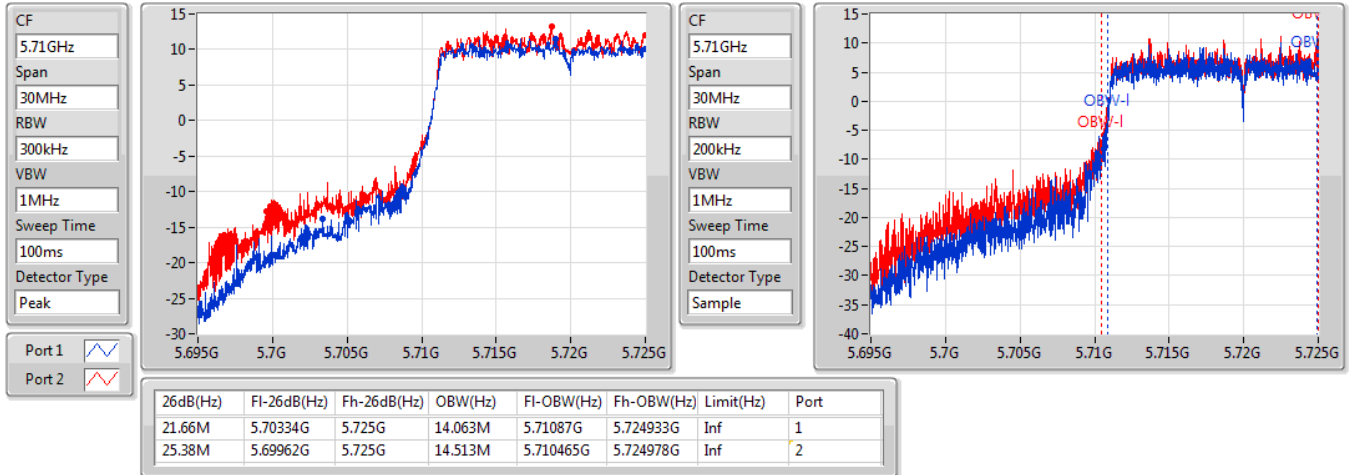

802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5700MHz

27/10/2019

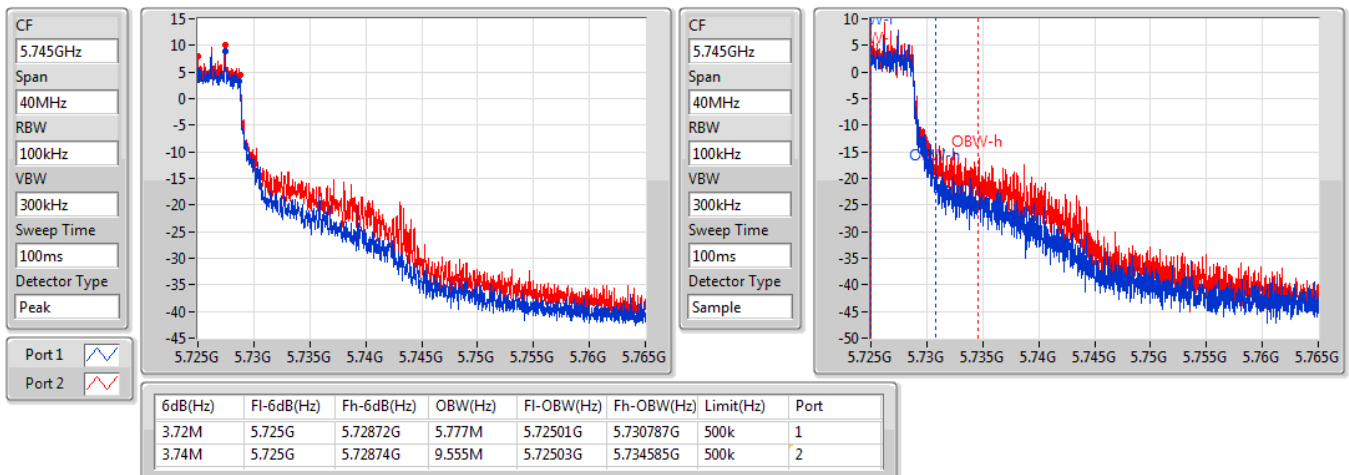


802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

27/10/2019

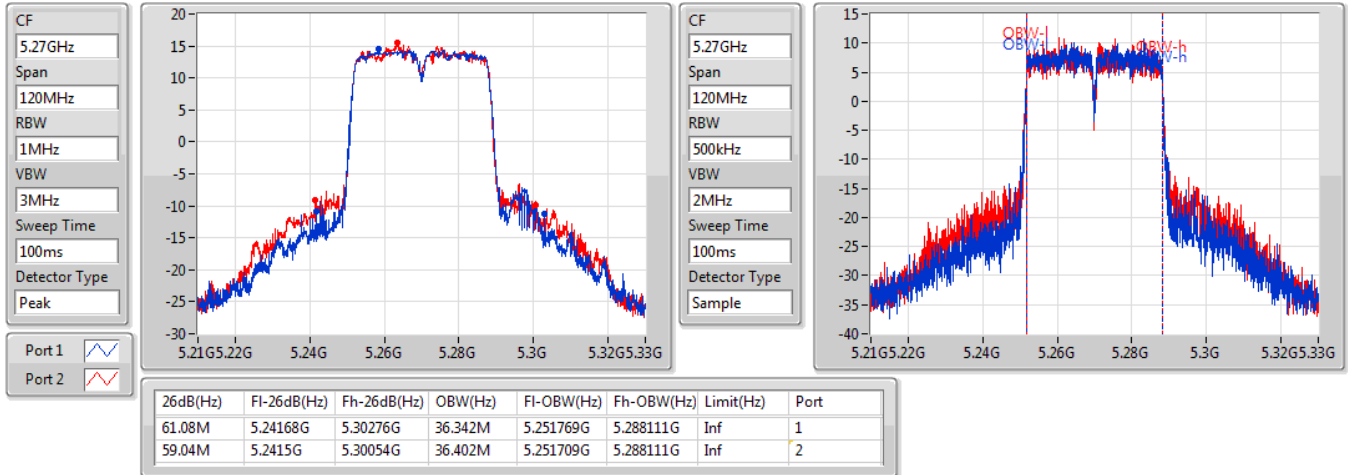

802.11ac VHT20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/10/2019

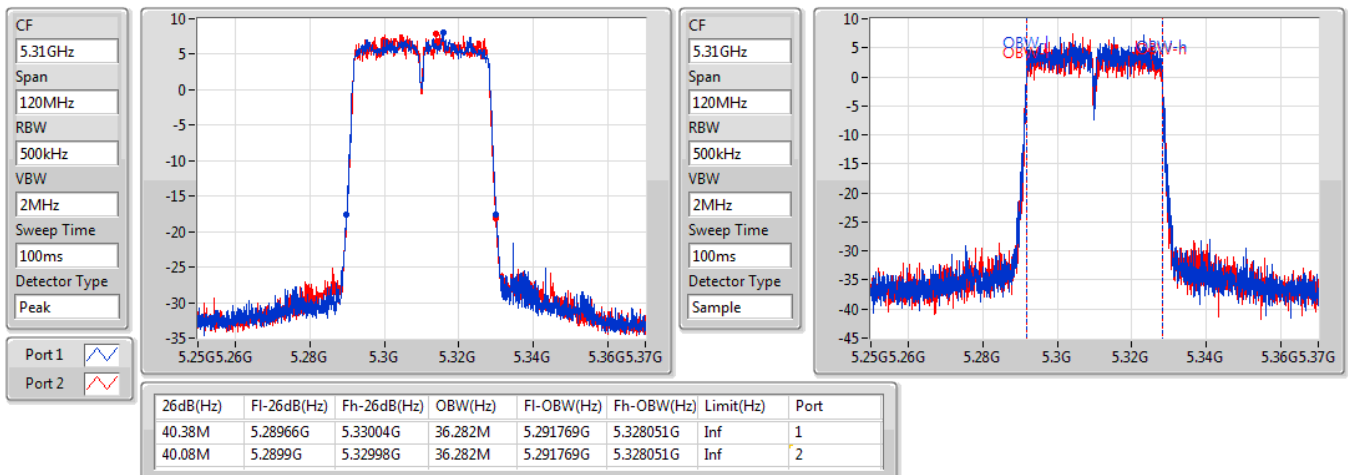


802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5270MHz

27/10/2019

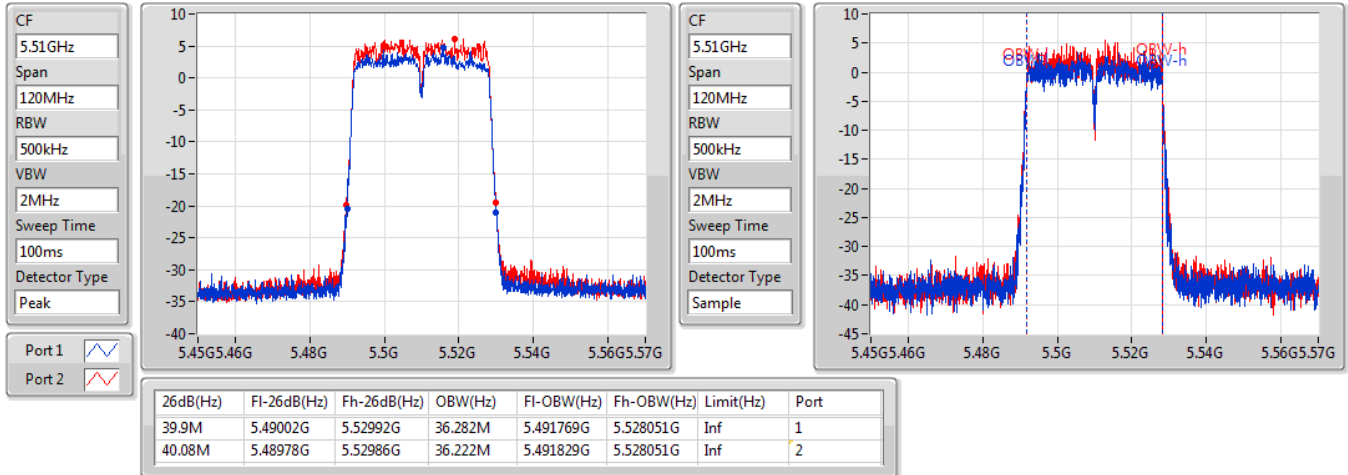

802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5310MHz

27/10/2019

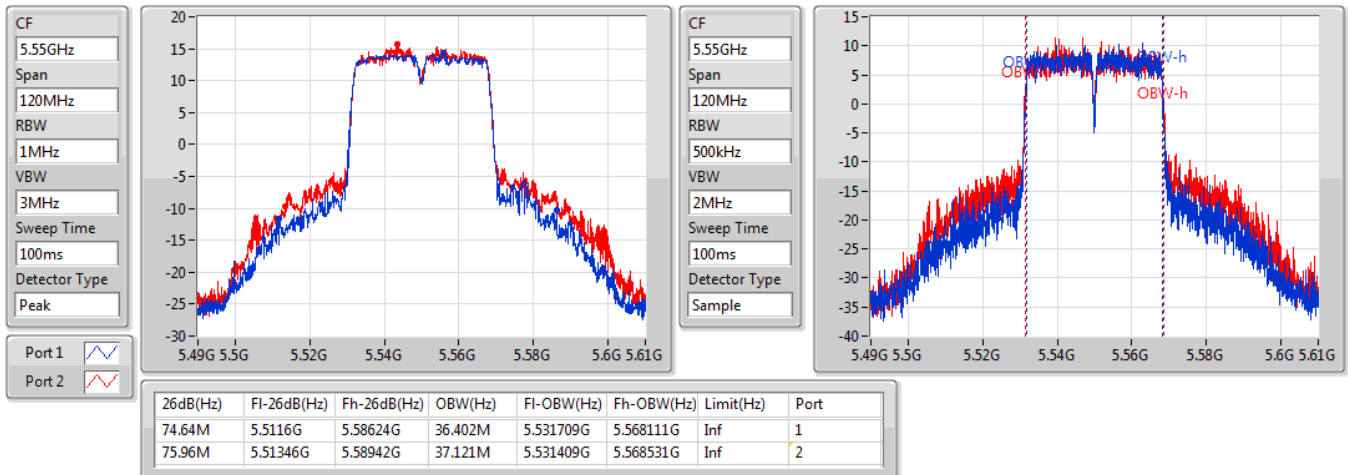


802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5510MHz

27/10/2019

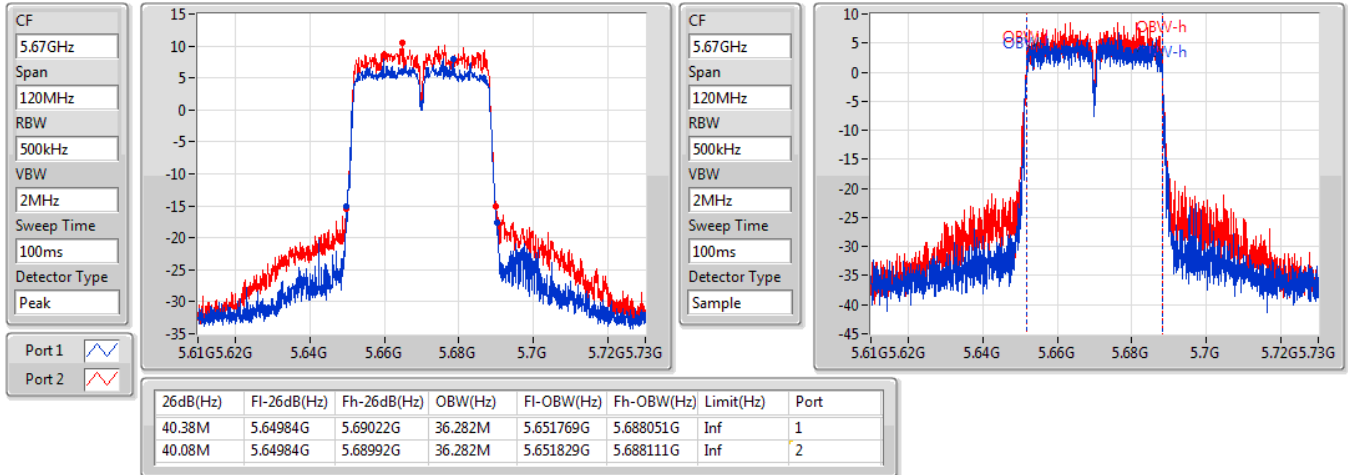

802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5550MHz

27/10/2019

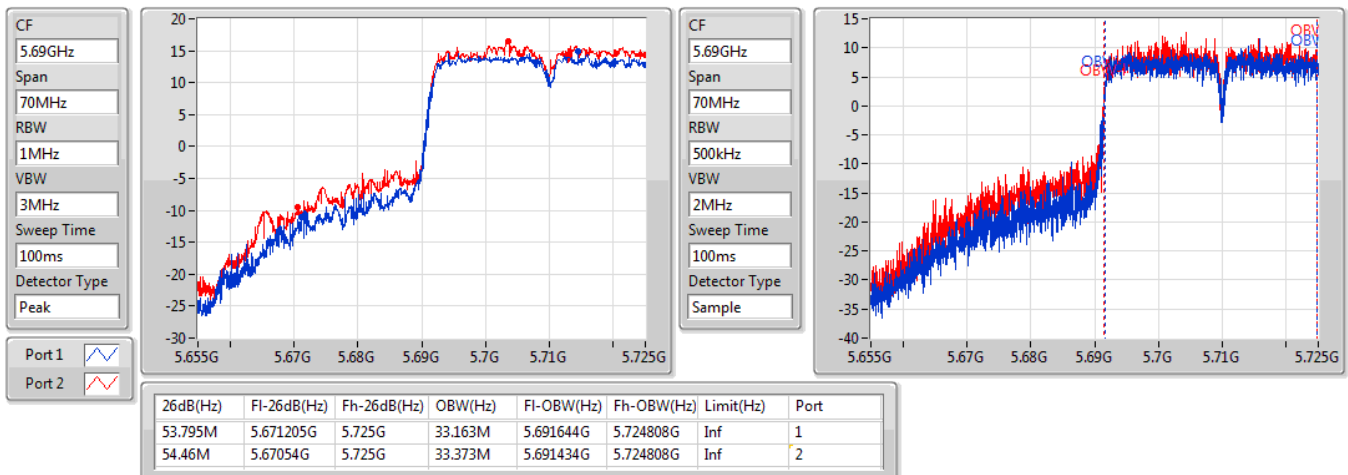


802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5670MHz

27/10/2019

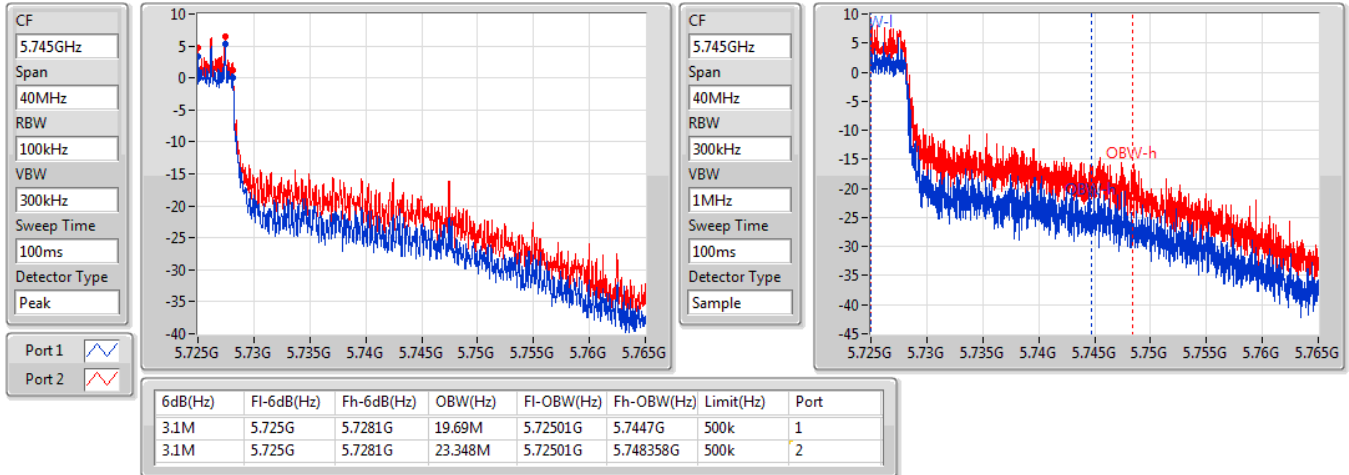

802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

27/10/2019

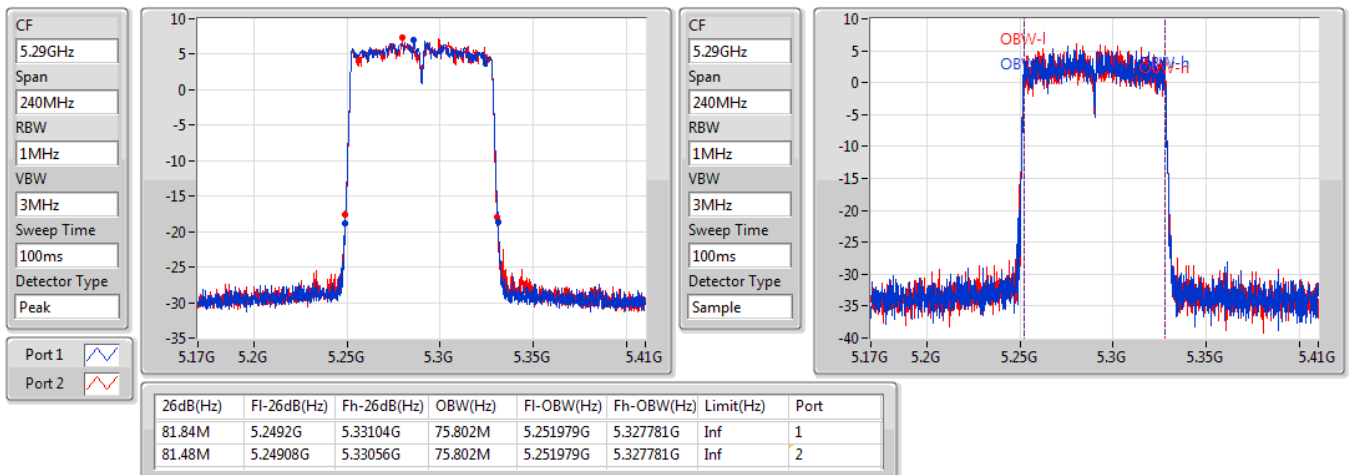


802.11ac VHT40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

27/10/2019

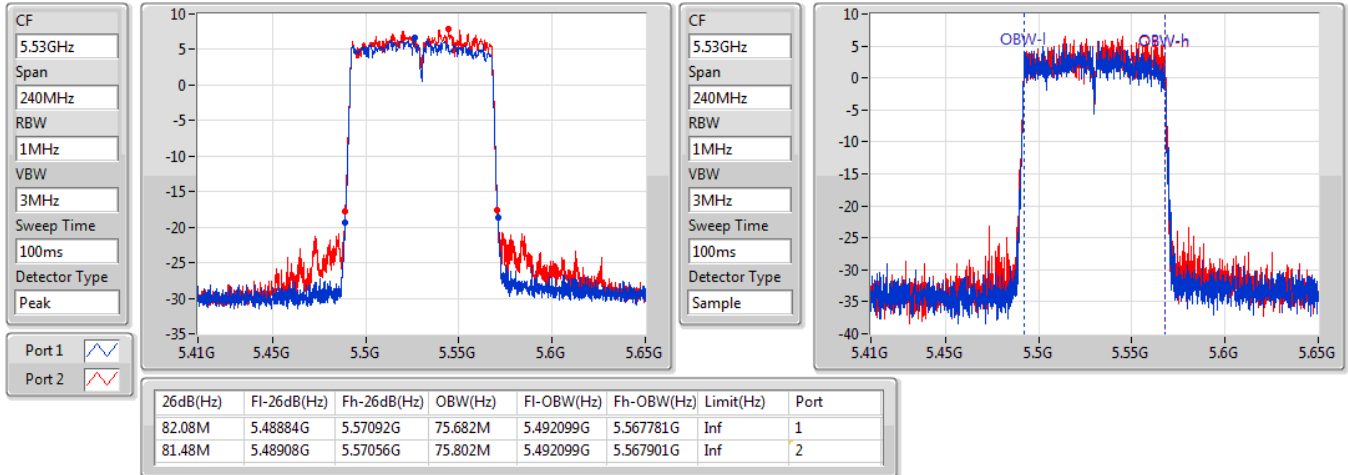

802.11ac VHT80_Nss2,(MCS0)_2TX
EBW
5290MHz

27/10/2019

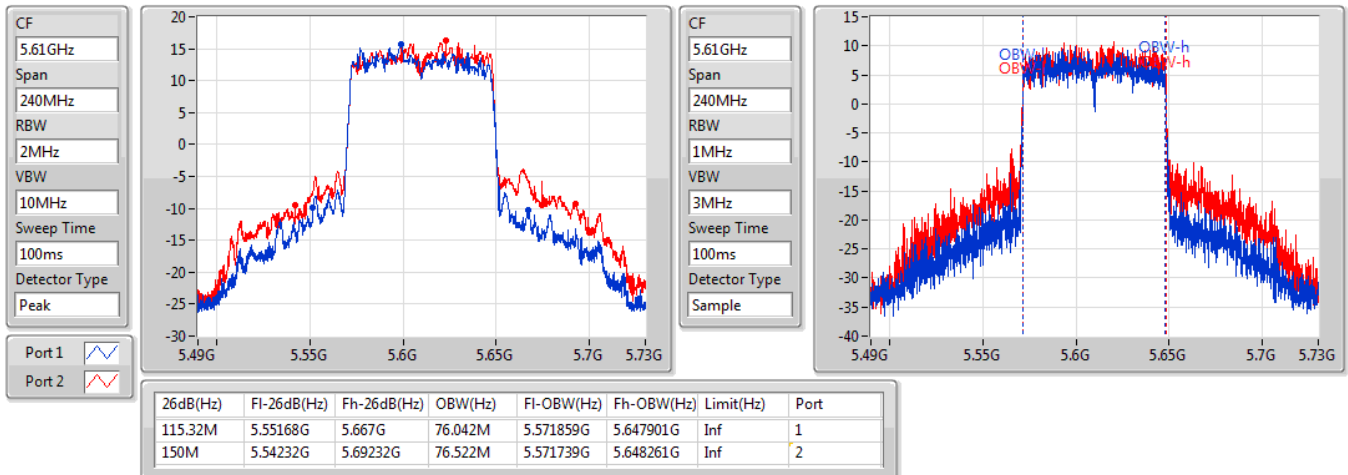


802.11ac VHT80_Nss2,(MCS0)_2TX
EBW
5530MHz

27/10/2019

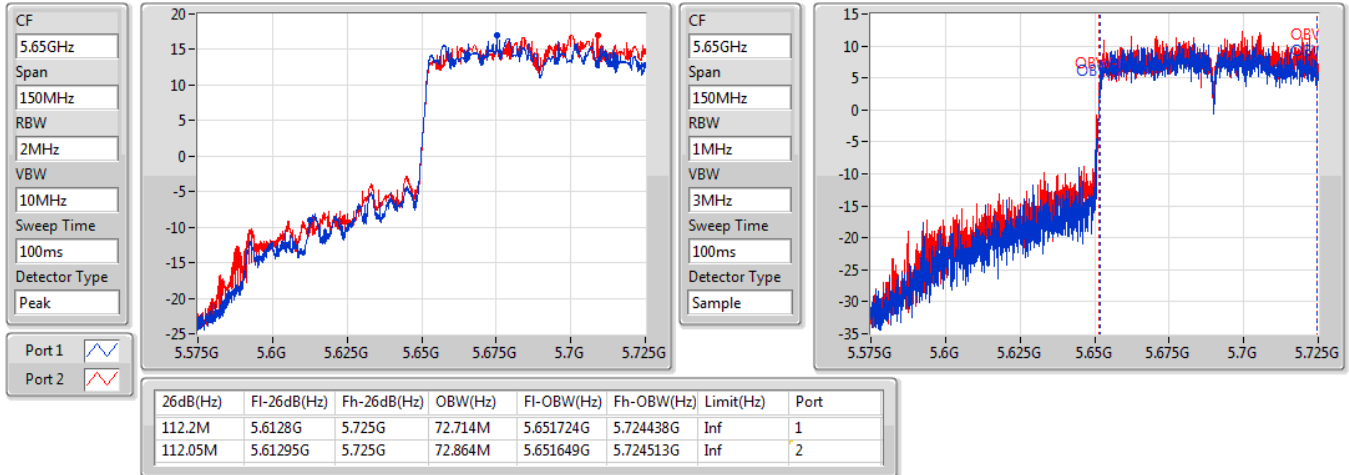

802.11ac VHT80_Nss2,(MCS0)_2TX
EBW
5610MHz

27/10/2019

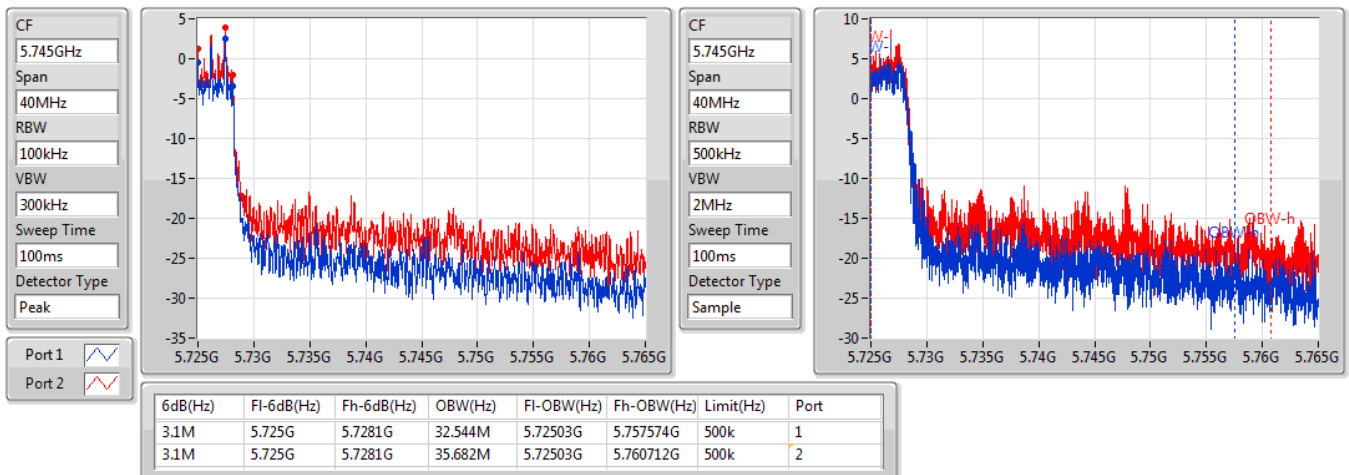


802.11ac VHT80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

27/10/2019

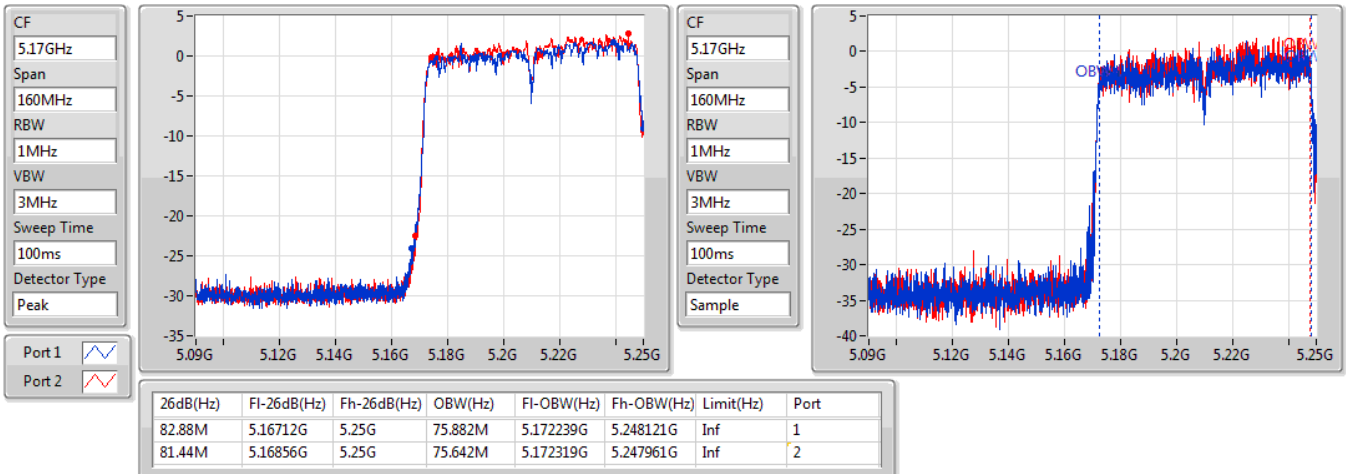

802.11ac VHT80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/10/2019

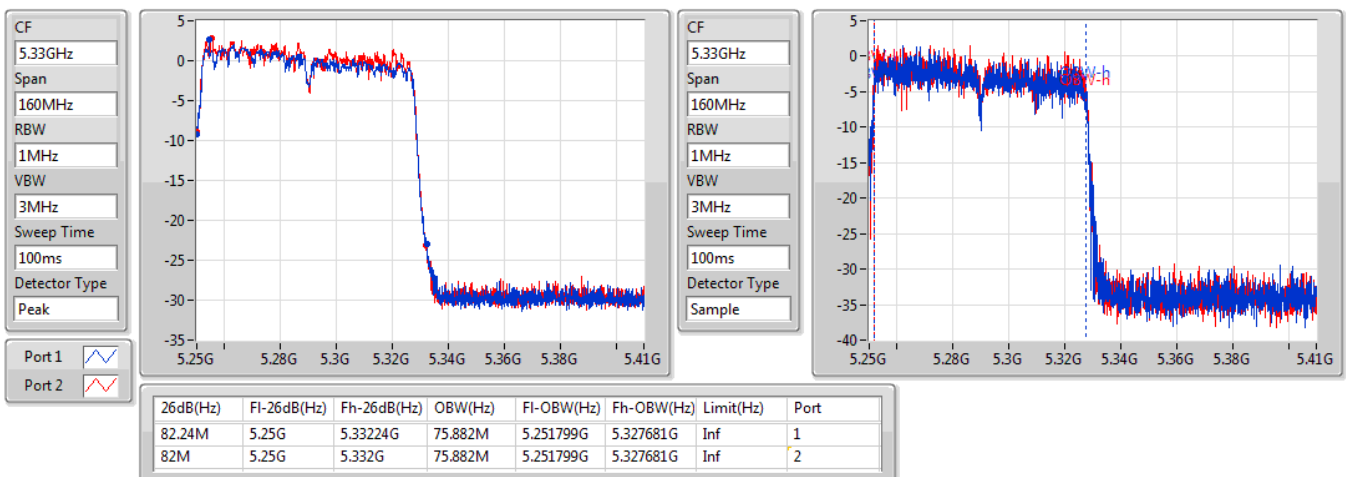


802.11ac VHT160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/10/2019

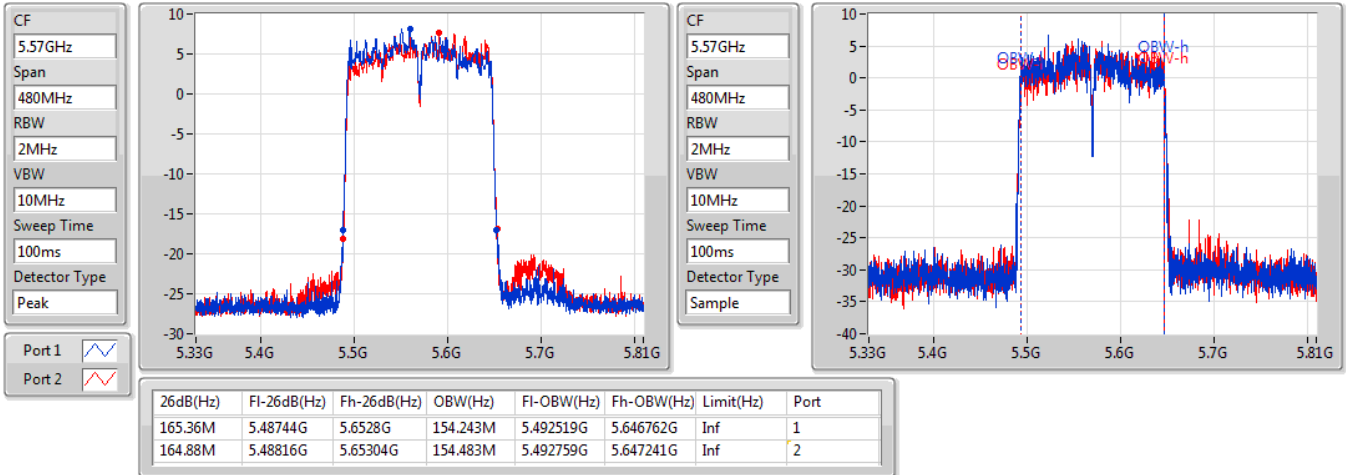

802.11ac VHT160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.25-5.35GHz

27/10/2019

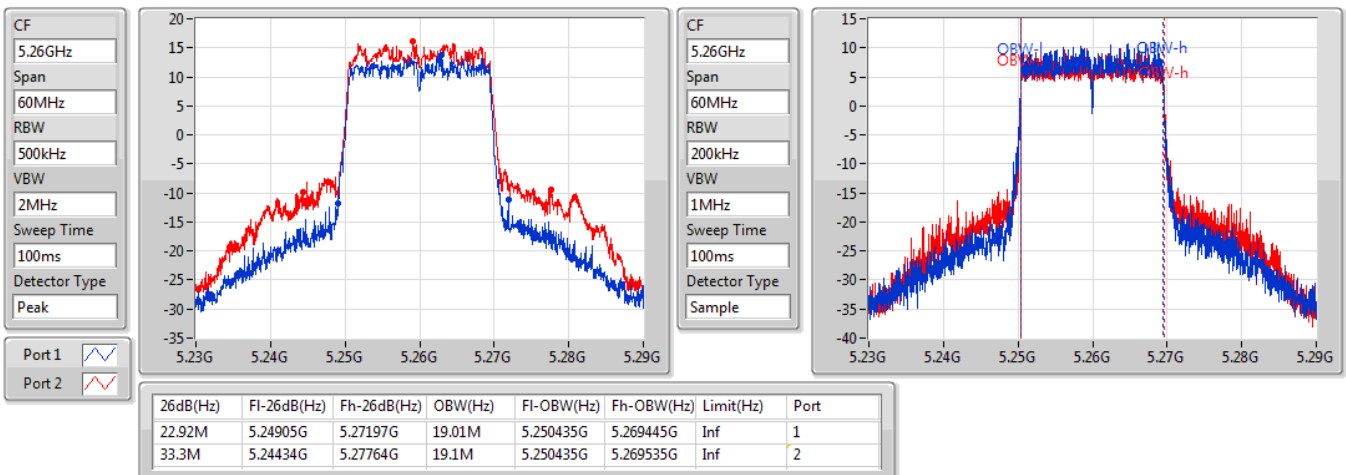


802.11ac VHT160_Nss2,(MCS0)_2TX
EBW
5570MHz

27/10/2019

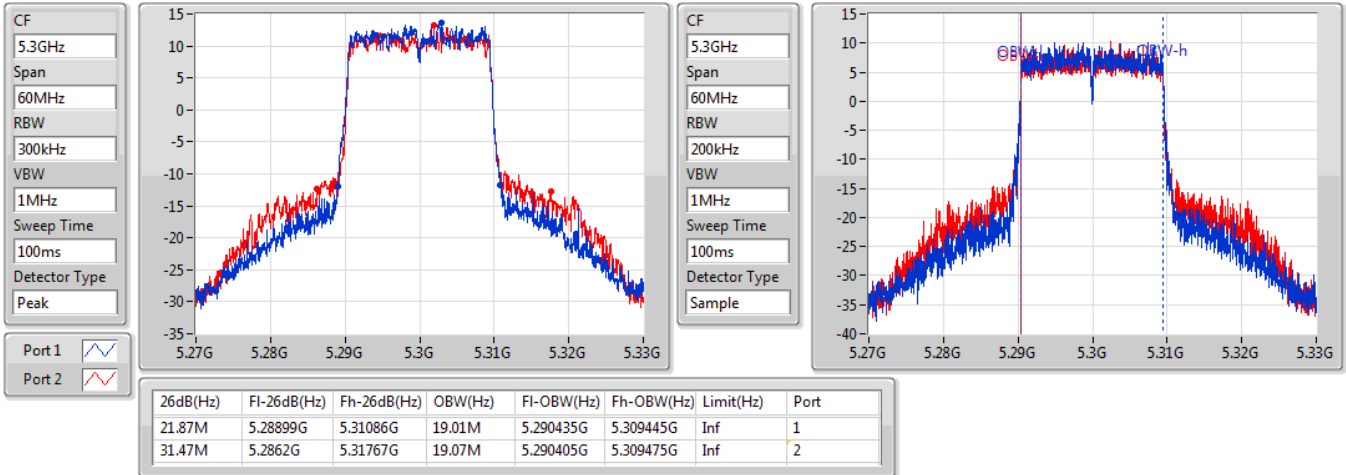

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5260MHz

27/10/2019

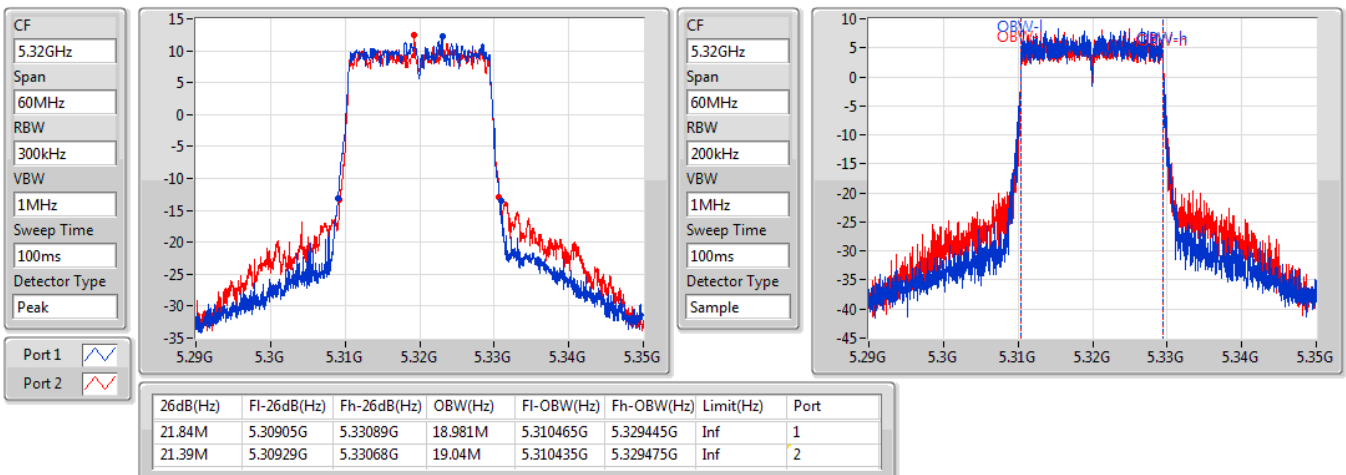


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

27/10/2019

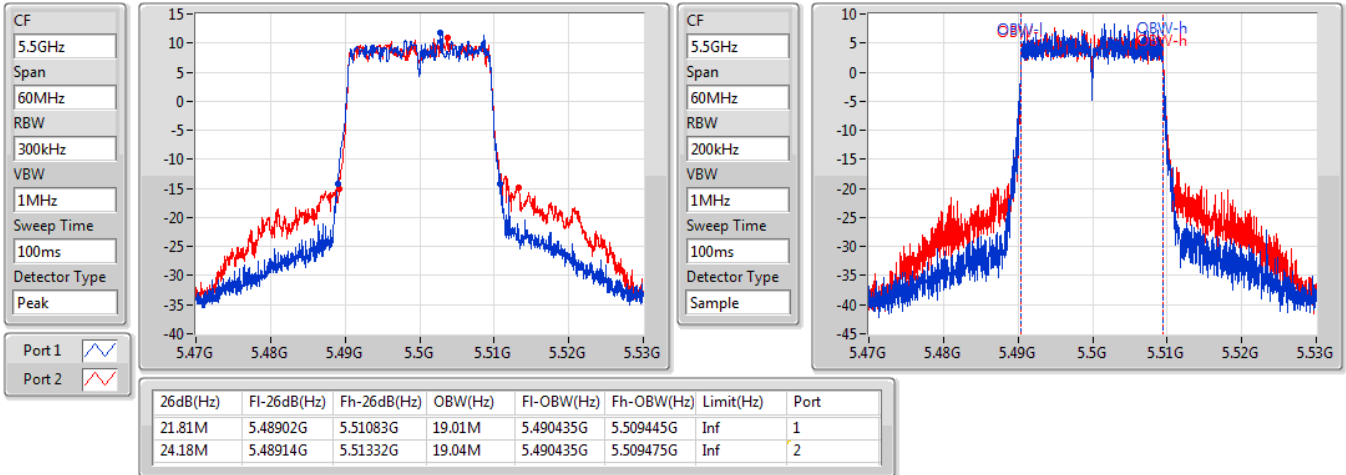

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5320MHz

27/10/2019

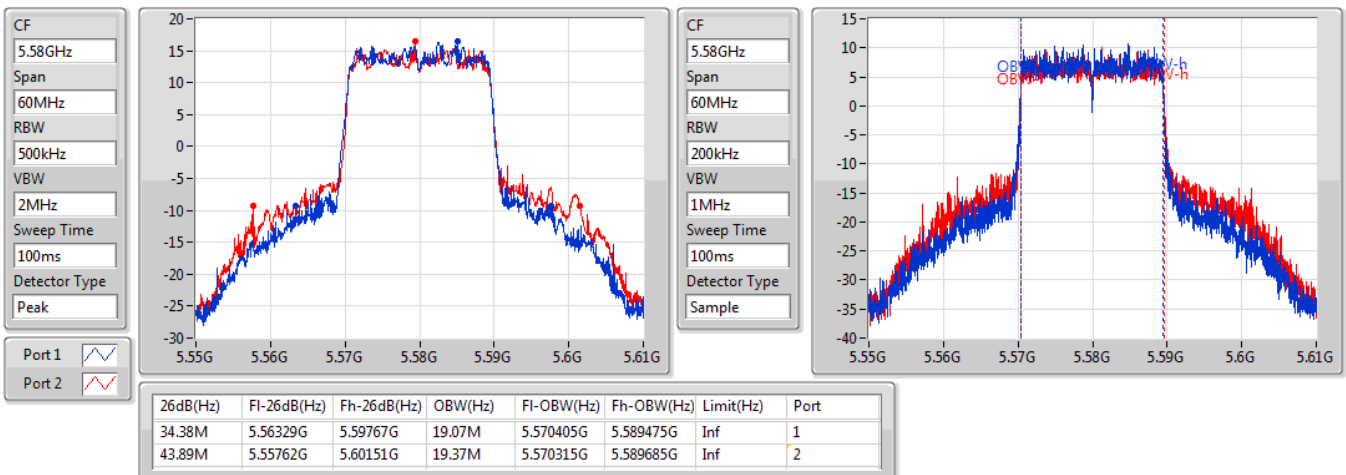


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5500MHz

27/10/2019

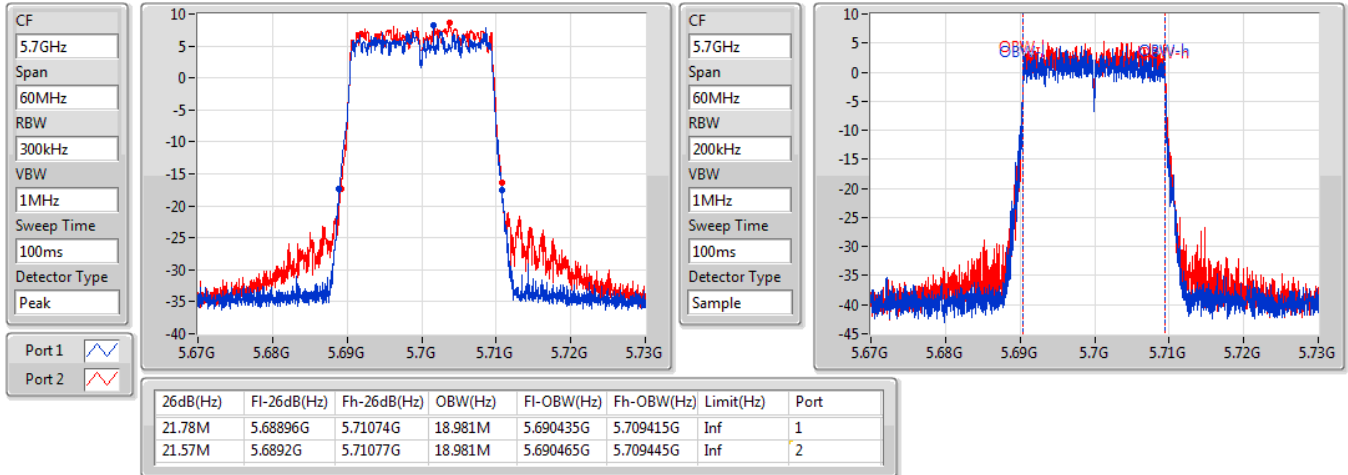

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5580MHz

27/10/2019

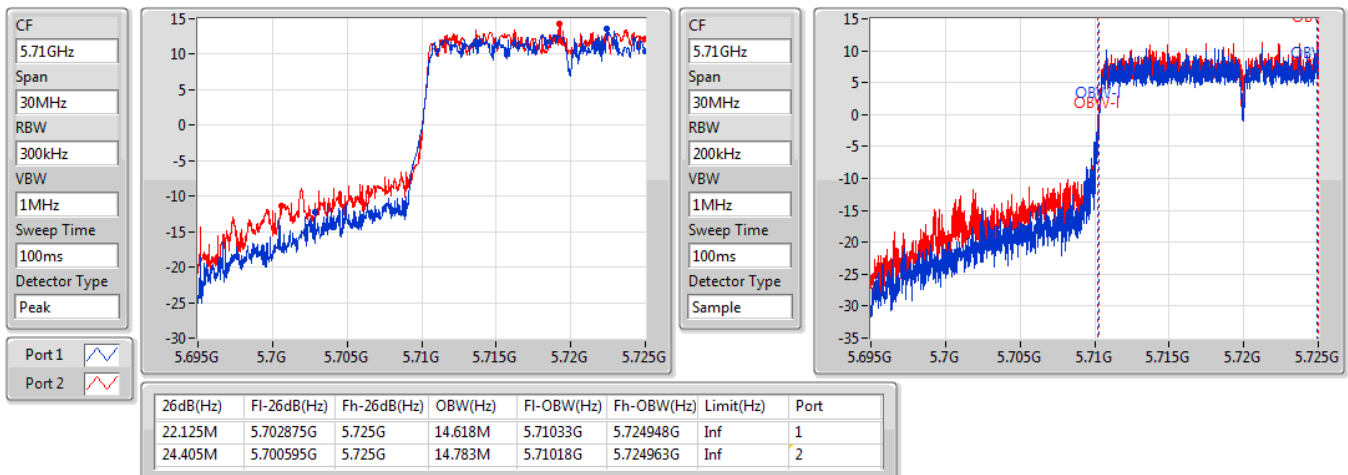


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5700MHz

27/10/2019

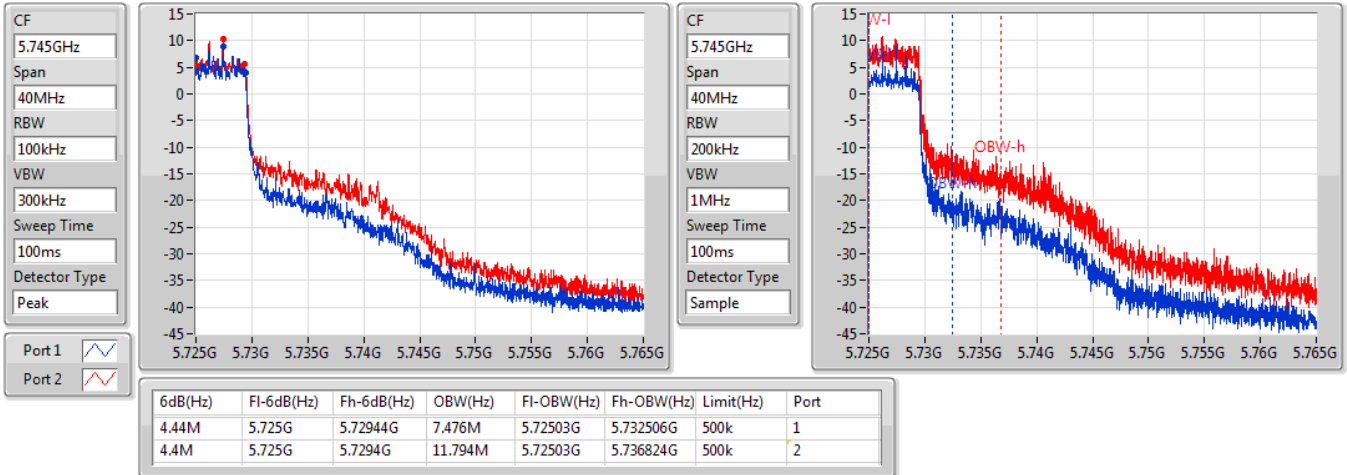

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

27/10/2019

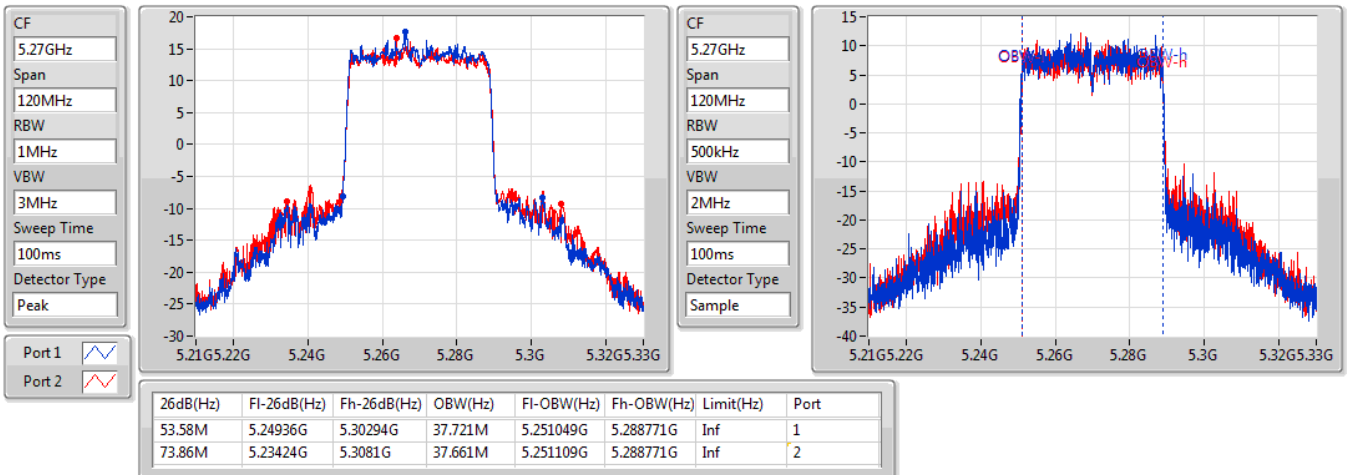


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/10/2019

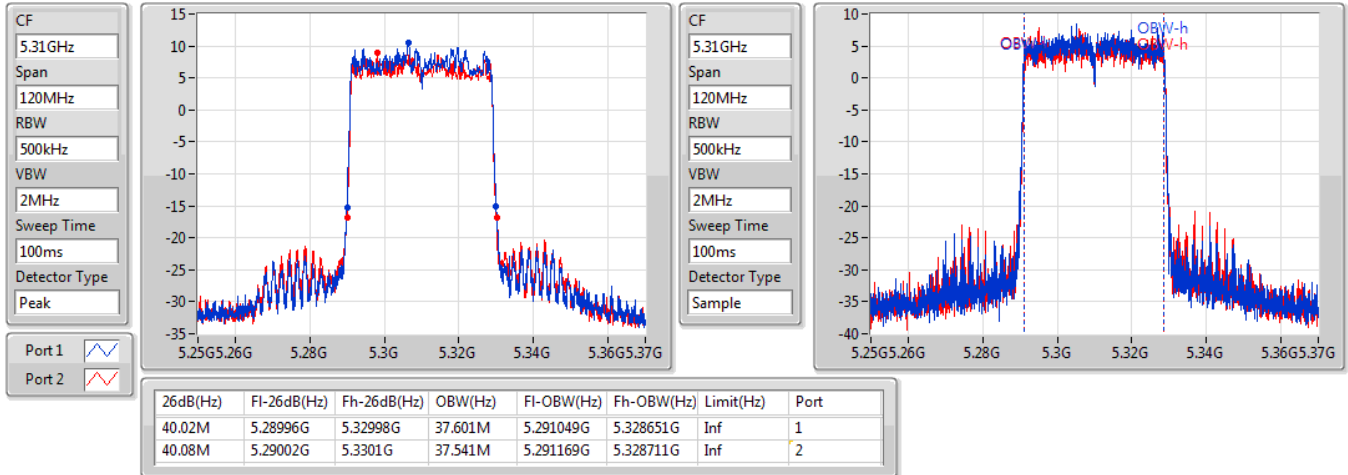

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5270MHz

27/10/2019

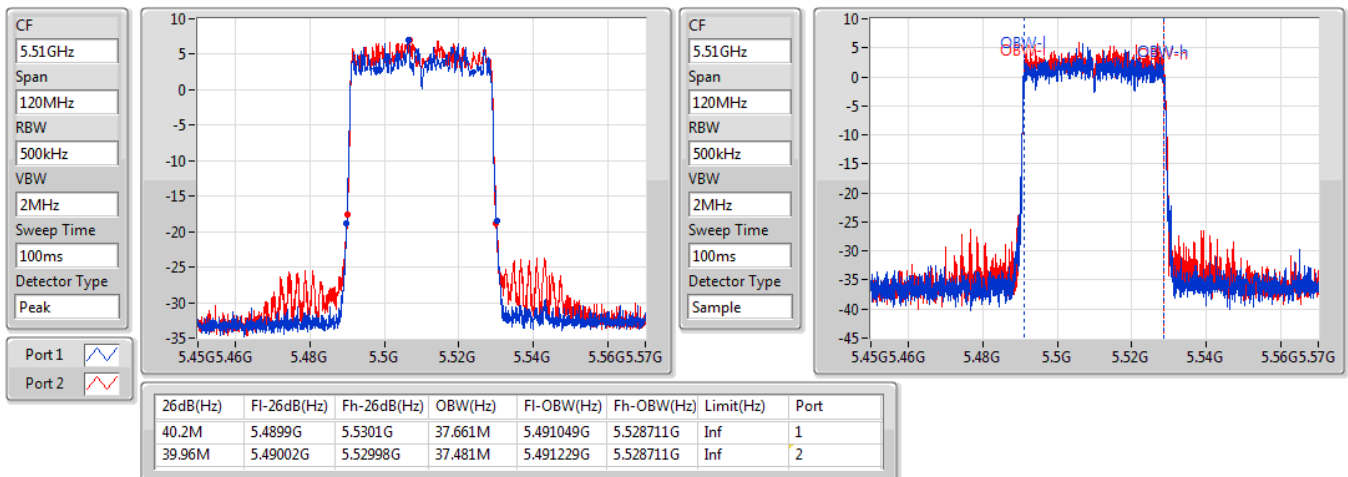


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5310MHz

27/10/2019

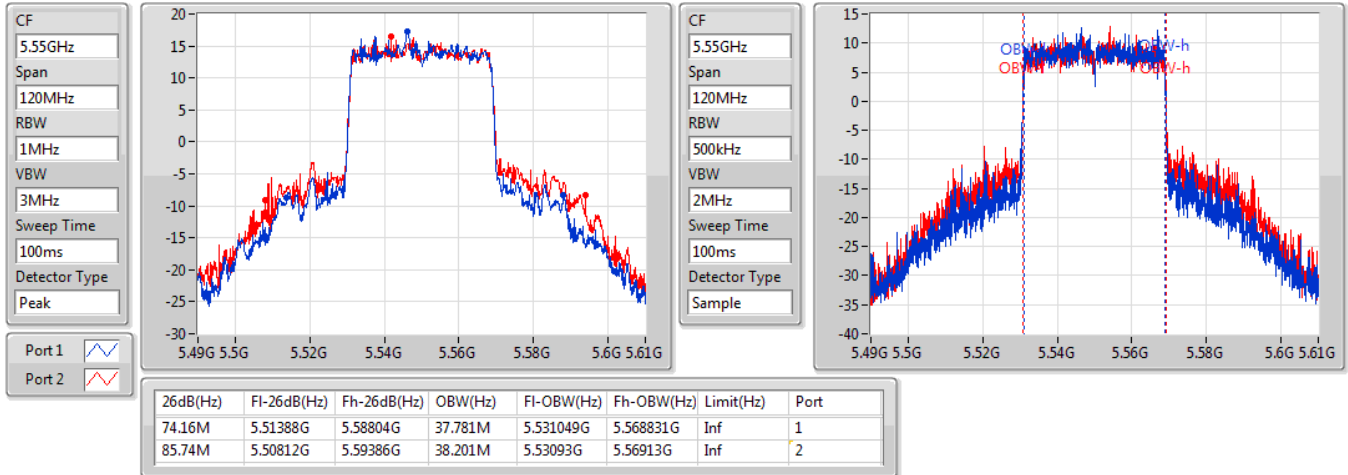

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5510MHz

27/10/2019

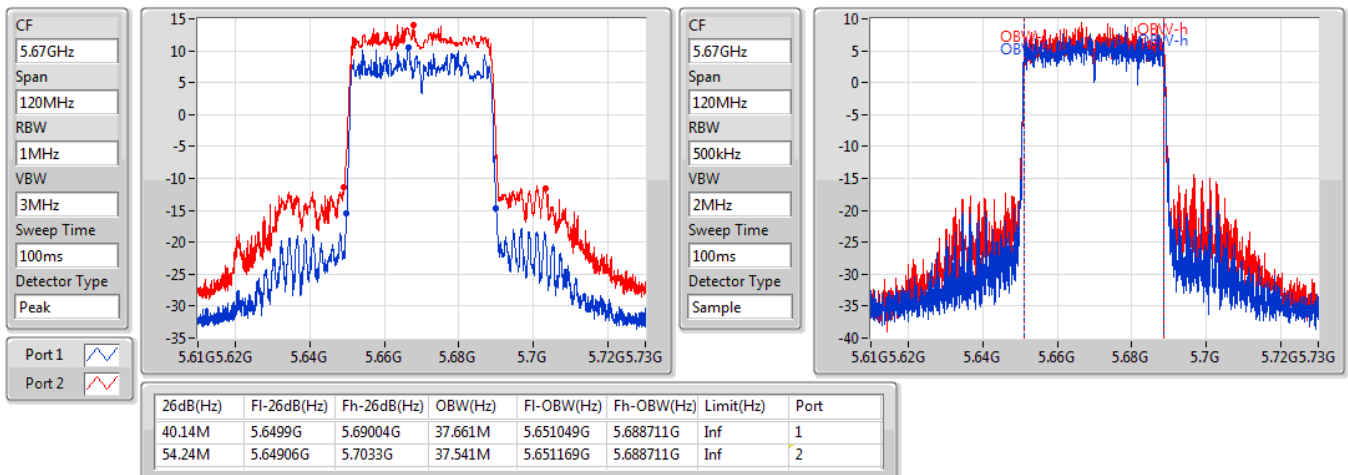


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5550MHz

27/10/2019

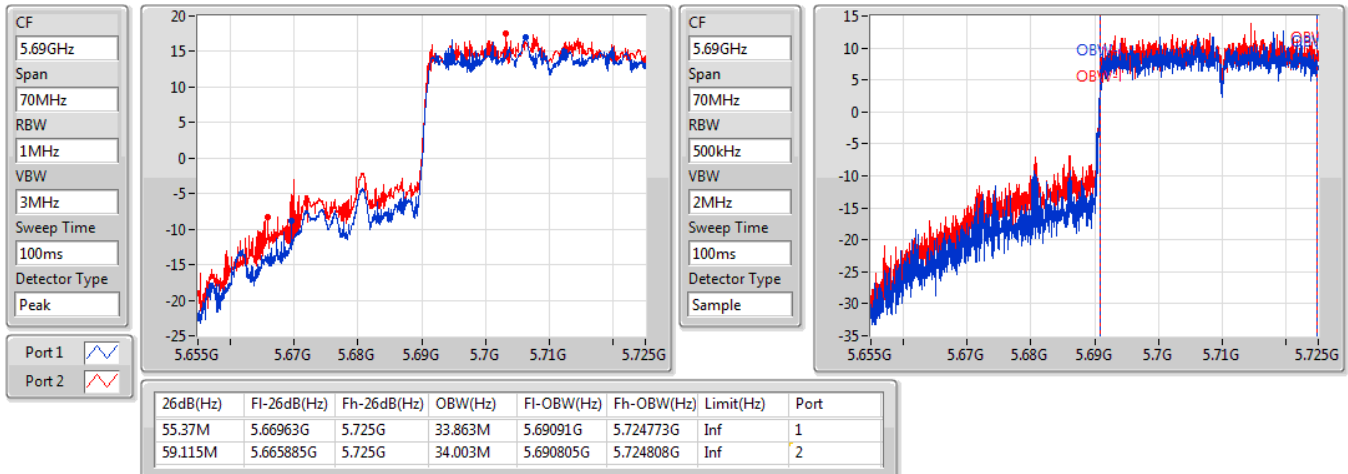

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5670MHz

27/10/2019

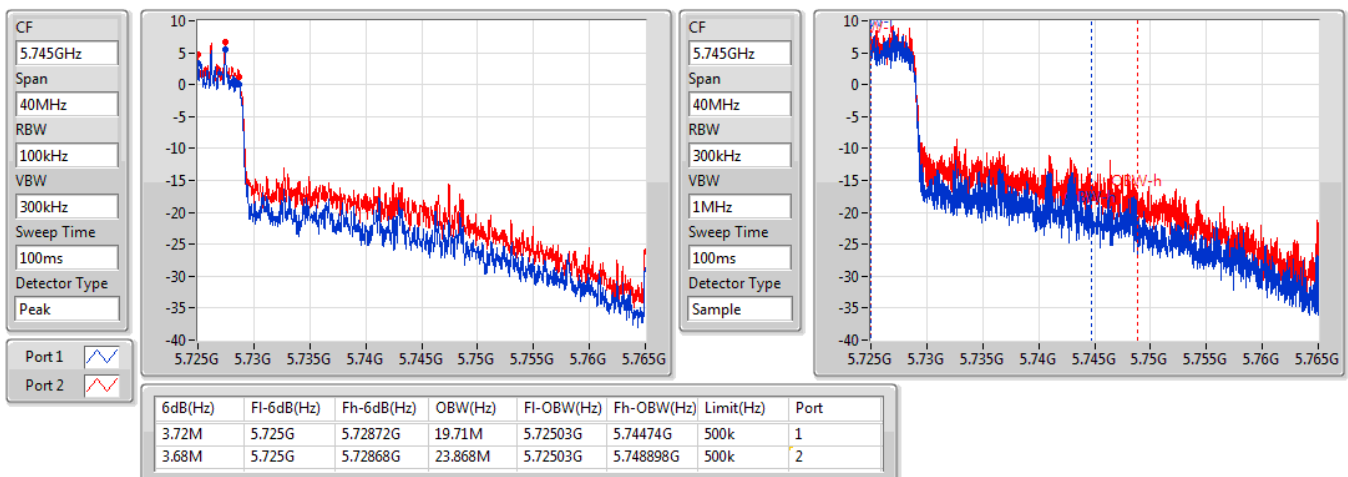


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

27/10/2019

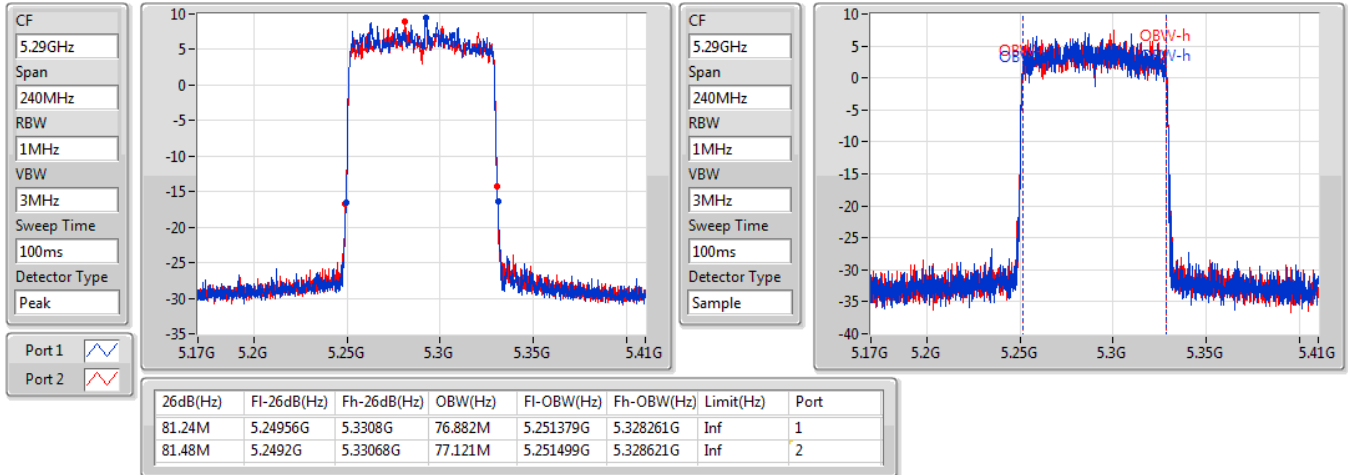

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

27/10/2019

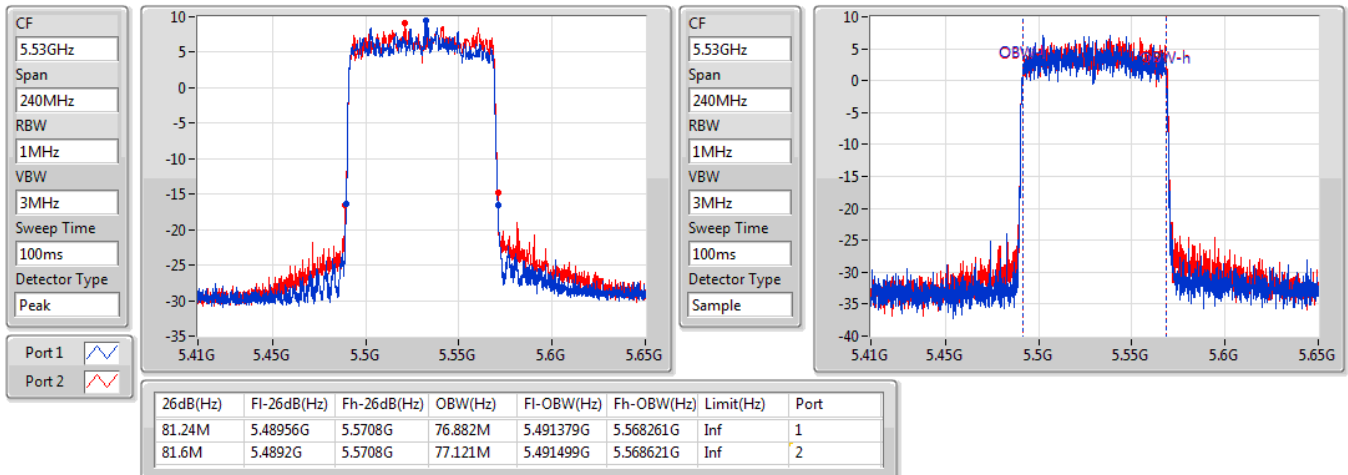


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

27/10/2019

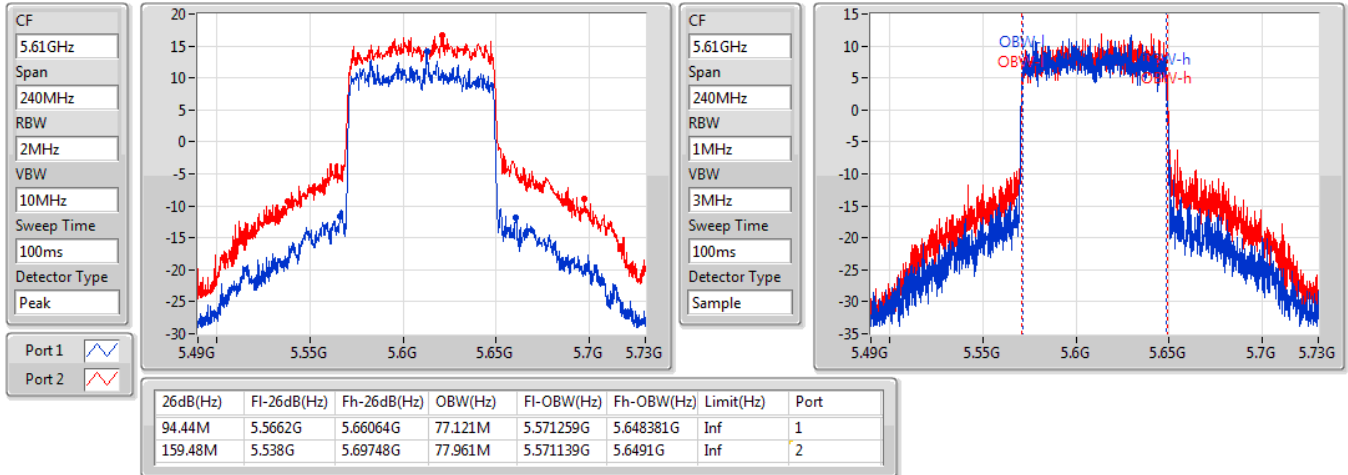

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

27/10/2019

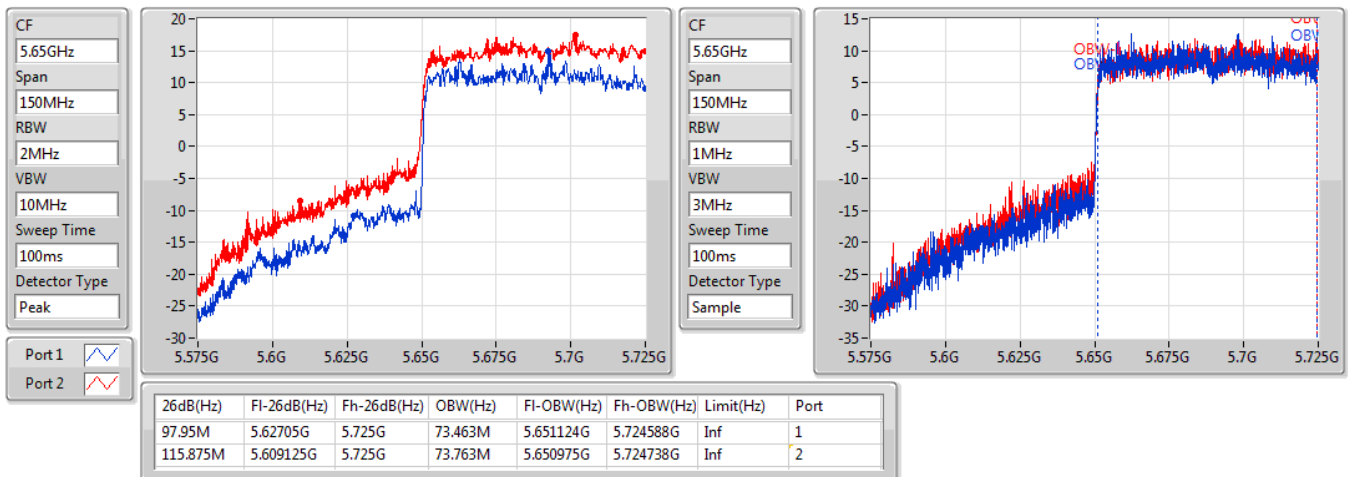


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

27/10/2019

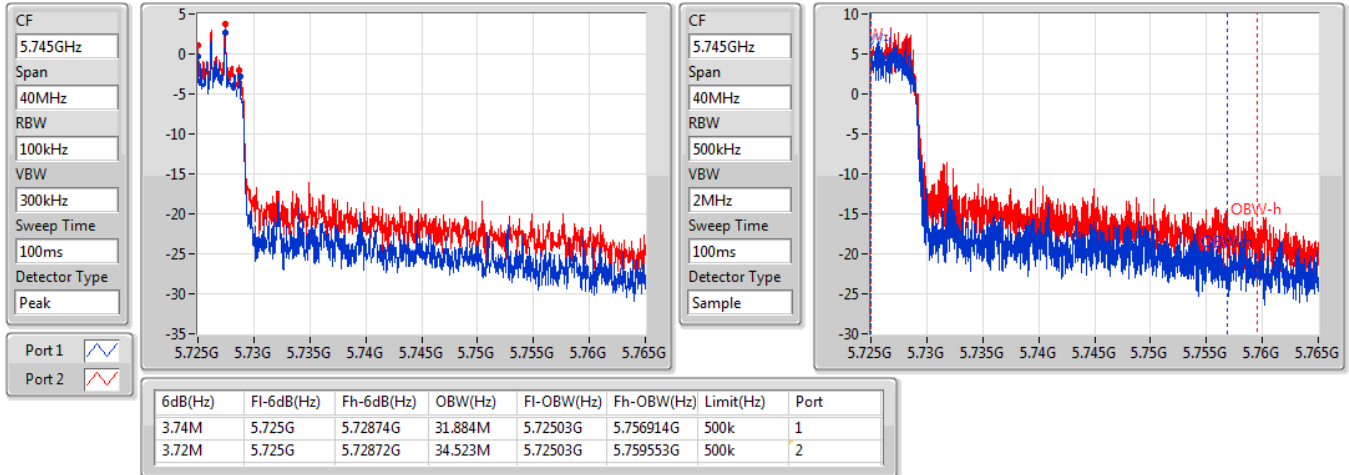

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

27/10/2019

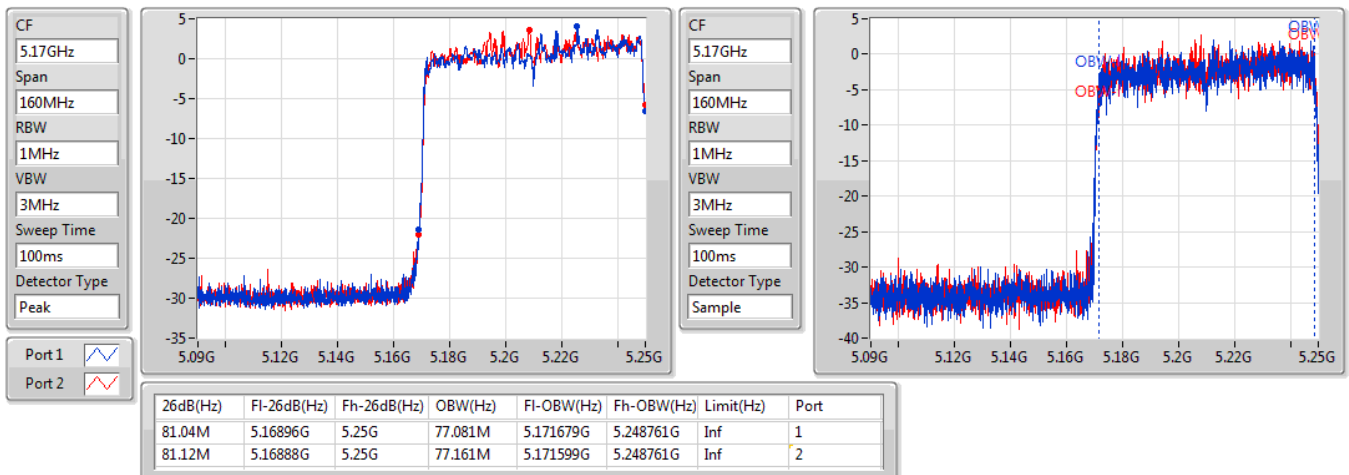


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/10/2019

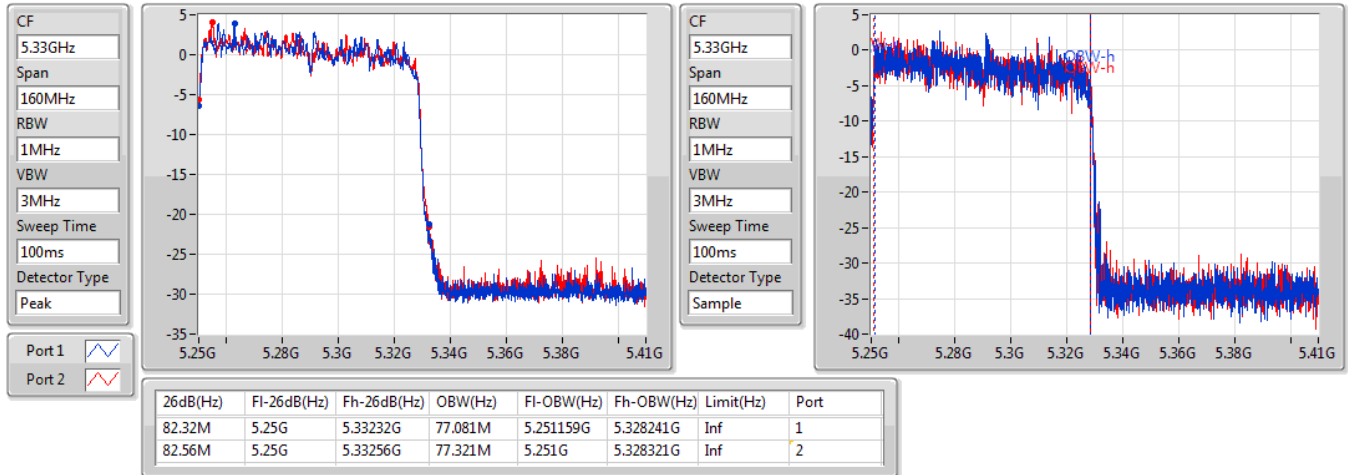

802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/10/2019

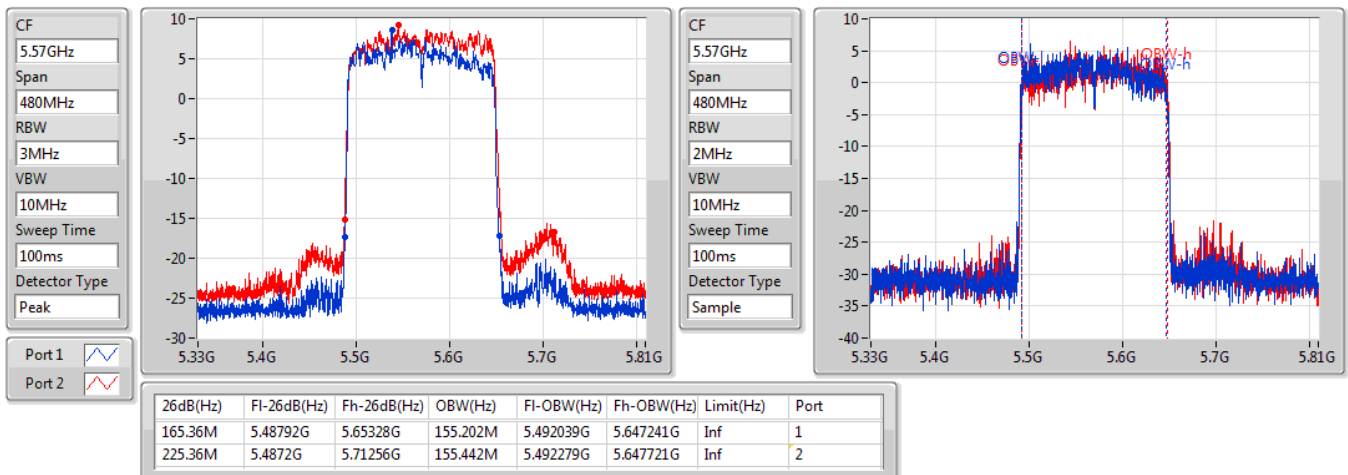


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.25-5.35GHz

27/10/2019


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5570MHz

27/10/2019



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160_Nss1,(MCS0)_4TX	82.32M	75.882M	75M9D1D	80.88M	75.882M
802.11ax HEW160_Nss1,(MCS0)_4TX	81.2M	77.241M	77M2D1D	80.64M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.72M	16.612M	16M6D1D	21.36M	16.522M
802.11ac VHT20_Nss1,(MCS0)_4TX	21.93M	17.811M	17M8D1D	21.48M	17.751M
802.11ac VHT40_Nss1,(MCS0)_4TX	40.32M	36.342M	36M3D1D	39.84M	36.222M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.96M	75.922M	75M9D1D	81.6M	75.802M
802.11ac VHT160_Nss1,(MCS0)_4TX	83.76M	75.962M	76M0D1D	81.36M	75.642M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.72M	19.01M	19M0D1D	21.57M	18.921M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.14M	37.661M	37M7D1D	39.9M	37.421M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.2M	77.241M	77M2D1D	81.72M	76.762M
802.11ax HEW160_Nss1,(MCS0)_4TX	82.56M	77.321M	77M3D1D	81.44M	77.081M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.75M	16.642M	16M6D1D	15.54M	13.298M
802.11ac VHT20_Nss1,(MCS0)_4TX	21.78M	17.811M	17M8D1D	15.735M	13.928M
802.11ac VHT40_Nss1,(MCS0)_4TX	40.38M	36.342M	36M3D1D	34.93M	32.989M
802.11ac VHT80_Nss1,(MCS0)_4TX	124.8M	75.922M	75M9D1D	75.75M	72.489M
802.11ac VHT160_Nss1,(MCS0)_4TX	282.96M	154.723M	155MD1D	228.48M	154.003M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.81M	19.04M	19M0D1D	15.75M	14.513M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.2M	37.661M	37M7D1D	34.895M	33.688M
802.11ax HEW80_Nss1,(MCS0)_4TX	142.44M	77.241M	77M2D1D	75.9M	73.163M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.84M	155.682M	156MD1D	165.36M	154.963M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	3.22M	4.178M	4M18D1D	3.1M	3.958M
802.11ac VHT20_Nss1,(MCS0)_4TX	3.74M	4.458M	4M46D1D	3.68M	4.278M
802.11ac VHT40_Nss1,(MCS0)_4TX	3.12M	3.658M	3M66D1D	3.08M	3.618M
802.11ac VHT80_Nss1,(MCS0)_4TX	3.08M	13.633M	13M6D1D	3.08M	4.118M
802.11ax HEW20_Nss1,(MCS0)_4TX	4.44M	4.538M	4M54D1D	4.42M	4.498M
802.11ax HEW40_Nss1,(MCS0)_4TX	3.8M	4.018M	4M02D1D	3.7M	3.998M
802.11ax HEW80_Nss1,(MCS0)_4TX	3.76M	12.574M	12M6D1D	3.2M	4.118M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% 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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.39M	16.552M	21.6M	16.522M	21.63M	16.612M	21.51M	16.522M
5300MHz	Pass	Inf	21.36M	16.582M	21.57M	16.582M	21.72M	16.582M	21.63M	16.582M
5320MHz	Pass	Inf	21.48M	16.522M	21.51M	16.552M	21.57M	16.582M	21.36M	16.612M
5500MHz	Pass	Inf	21.57M	16.612M	21.48M	16.612M	21.75M	16.612M	21.45M	16.582M
5580MHz	Pass	Inf	21.45M	16.612M	21.63M	16.582M	21.57M	16.582M	21.51M	16.582M
5700MHz	Pass	Inf	21.33M	16.582M	21.45M	16.642M	21.51M	16.552M	21.6M	16.612M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.54M	13.358M	15.78M	13.298M	15.675M	13.343M	15.645M	13.373M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.22M	4.098M	3.1M	3.958M	3.18M	4.078M	3.1M	4.178M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.69M	17.781M	21.54M	17.781M	21.51M	17.811M	21.69M	17.781M
5300MHz	Pass	Inf	21.93M	17.751M	21.48M	17.811M	21.51M	17.781M	21.75M	17.751M
5320MHz	Pass	Inf	21.87M	17.811M	21.63M	17.751M	21.48M	17.781M	21.66M	17.751M
5500MHz	Pass	Inf	21.69M	17.751M	21.6M	17.781M	21.45M	17.751M	21.75M	17.751M
5580MHz	Pass	Inf	21.69M	17.721M	21.66M	17.751M	21.54M	17.811M	21.78M	17.751M
5700MHz	Pass	Inf	21.69M	17.781M	21.54M	17.781M	21.51M	17.751M	21.66M	17.751M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.78M	13.958M	15.795M	13.928M	15.735M	13.943M	15.825M	13.958M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.72M	4.458M	3.68M	4.358M	3.72M	4.278M	3.74M	4.298M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.32M	36.282M	39.96M	36.282M	39.96M	36.342M	39.96M	36.222M
5310MHz	Pass	Inf	40.26M	36.222M	39.84M	36.282M	39.96M	36.222M	39.9M	36.222M
5510MHz	Pass	Inf	40.26M	36.282M	39.84M	36.222M	39.78M	36.222M	39.9M	36.282M
5550MHz	Pass	Inf	40.38M	36.222M	39.78M	36.342M	39.9M	36.162M	39.96M	36.342M
5670MHz	Pass	Inf	40.26M	36.282M	39.72M	36.282M	39.96M	36.222M	39.84M	36.342M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.245M	33.058M	34.93M	33.023M	35M	33.023M	34.93M	32.989M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.658M	3.12M	3.638M	3.1M	3.638M	3.08M	3.618M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.96M	75.802M	81.72M	75.922M	81.6M	75.802M	81.96M	75.802M
5530MHz	Pass	Inf	82.08M	75.922M	81.6M	75.922M	81.72M	75.922M	81.84M	75.802M
5610MHz	Pass	Inf	83.28M	75.802M	124.8M	75.802M	81.48M	75.922M	81.72M	75.802M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.65M	72.489M	75.75M	72.564M	75.9M	72.564M	76.125M	72.489M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	9.755M	3.08M	13.633M	3.08M	4.118M	3.08M	4.178M
802.11ac VHT160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.92M	75.882M	82.08M	75.882M	82.32M	75.882M	80.88M	75.882M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.16M	75.802M	83.76M	75.962M	81.36M	75.802M	81.52M	75.642M
5570MHz	Pass	Inf	263.76M	154.003M	282.96M	154.243M	229.92M	154.243M	228.48M	154.723M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.72M	18.951M	21.57M	18.951M	21.69M	18.951M	21.69M	18.921M
5300MHz	Pass	Inf	21.66M	19.01M	21.69M	18.981M	21.66M	18.951M	21.72M	18.981M
5320MHz	Pass	Inf	21.66M	18.981M	21.6M	18.981M	21.69M	18.981M	21.57M	18.981M
5500MHz	Pass	Inf	21.69M	18.951M	21.57M	18.981M	21.72M	18.951M	21.72M	18.981M
5580MHz	Pass	Inf	21.6M	18.951M	21.36M	18.951M	21.72M	19.01M	21.33M	18.951M
5700MHz	Pass	Inf	21.63M	18.951M	21.54M	19.04M	21.81M	18.981M	21.72M	19.01M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	14.528M	15.96M	14.543M	15.765M	14.513M	15.75M	14.513M



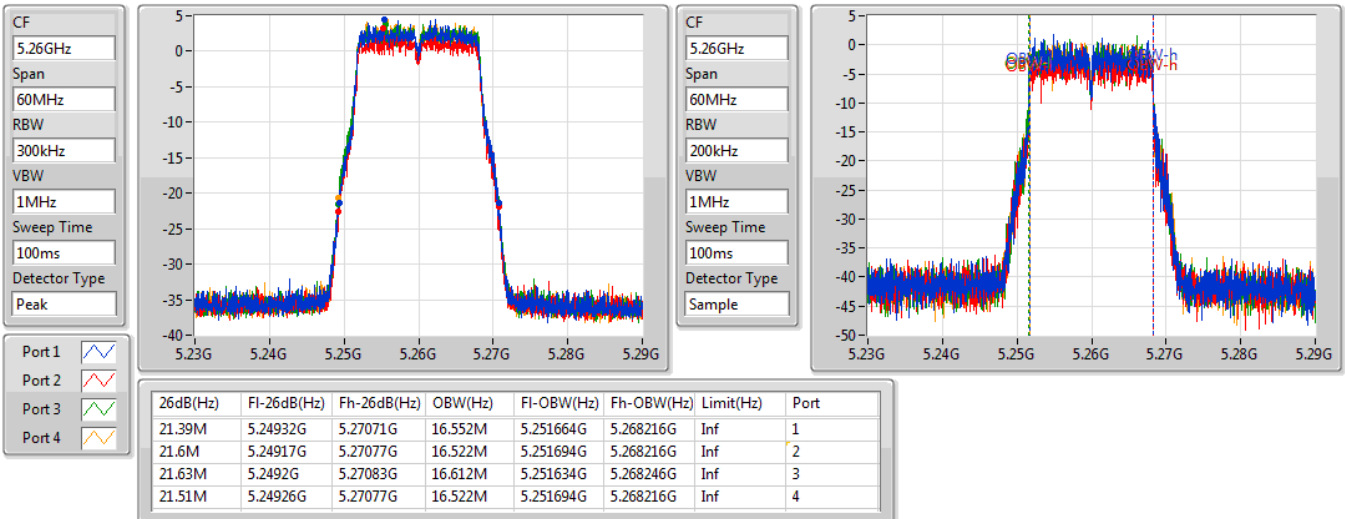
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.498M	4.44M	4.498M	4.42M	4.518M	4.42M	4.538M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.08M	37.541M	39.9M	37.481M	39.96M	37.541M	40.02M	37.601M
5310MHz	Pass	Inf	40.08M	37.421M	39.9M	37.541M	40.14M	37.661M	40.14M	37.541M
5510MHz	Pass	Inf	40.08M	37.601M	39.78M	37.481M	39.84M	37.601M	40.14M	37.541M
5550MHz	Pass	Inf	40.02M	37.481M	39.84M	37.601M	40.14M	37.481M	40.08M	37.601M
5670MHz	Pass	Inf	40.02M	37.661M	39.84M	37.601M	40.08M	37.601M	40.2M	37.541M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35M	33.688M	34.895M	33.688M	35.14M	33.688M	35.14M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.7M	4.018M	3.8M	3.998M	3.74M	4.018M	3.78M	4.018M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.2M	77.001M	82.08M	77.121M	82.08M	76.762M	81.72M	77.241M
5530MHz	Pass	Inf	82.08M	77.241M	82.32M	77.121M	82.08M	77.241M	81.72M	77.241M
5610MHz	Pass	Inf	82.2M	77.121M	142.44M	77.241M	81.96M	77.241M	81.6M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.9M	73.388M	75.9M	73.238M	76.125M	73.388M	75.975M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	8.536M	3.46M	12.574M	3.68M	4.158M	3.2M	4.118M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.64M	77.161M	80.88M	77.241M	81.2M	77.241M	80.88M	77.161M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	77.081M	81.6M	77.321M	81.44M	77.241M	81.52M	77.161M
5570MHz	Pass	Inf	165.36M	155.442M	165.36M	155.442M	165.36M	155.682M	165.84M	154.963M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

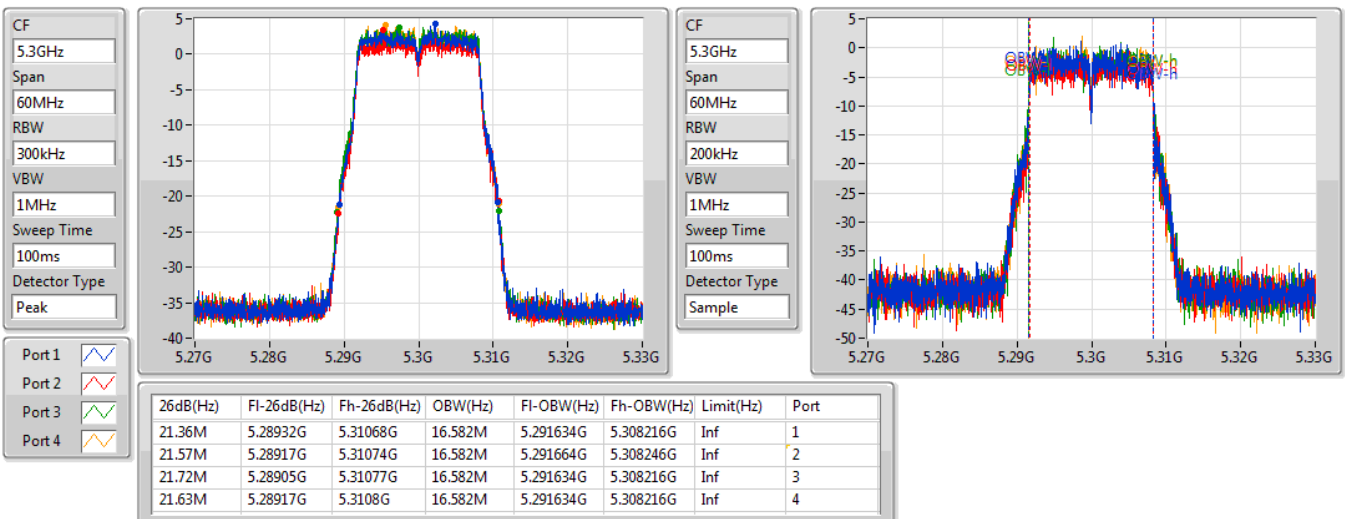
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

28/10/2019

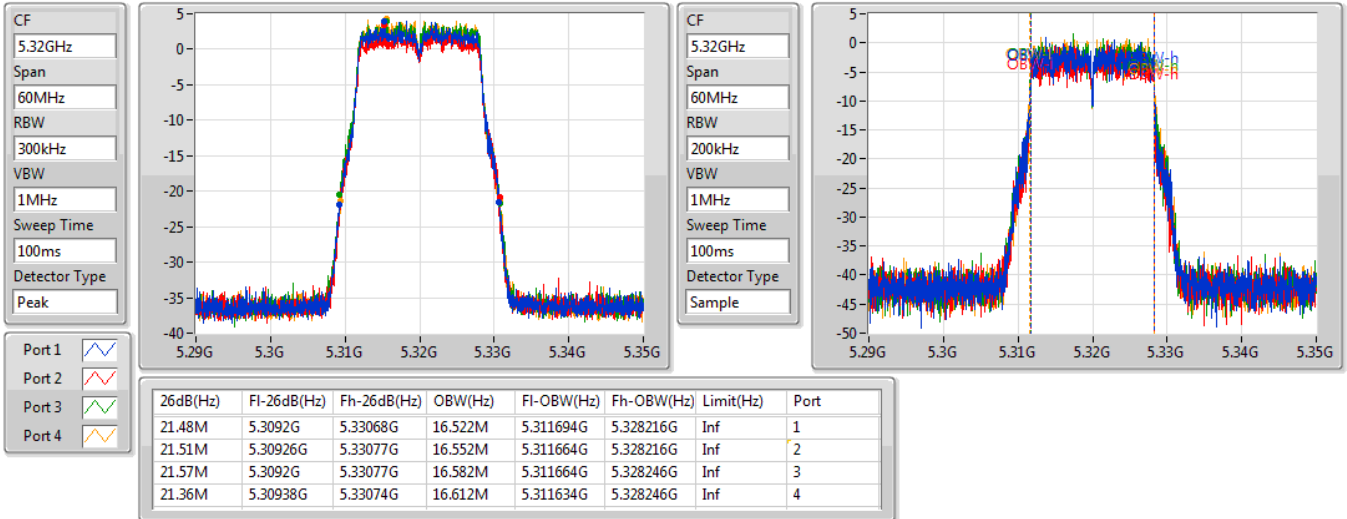

802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

28/10/2019

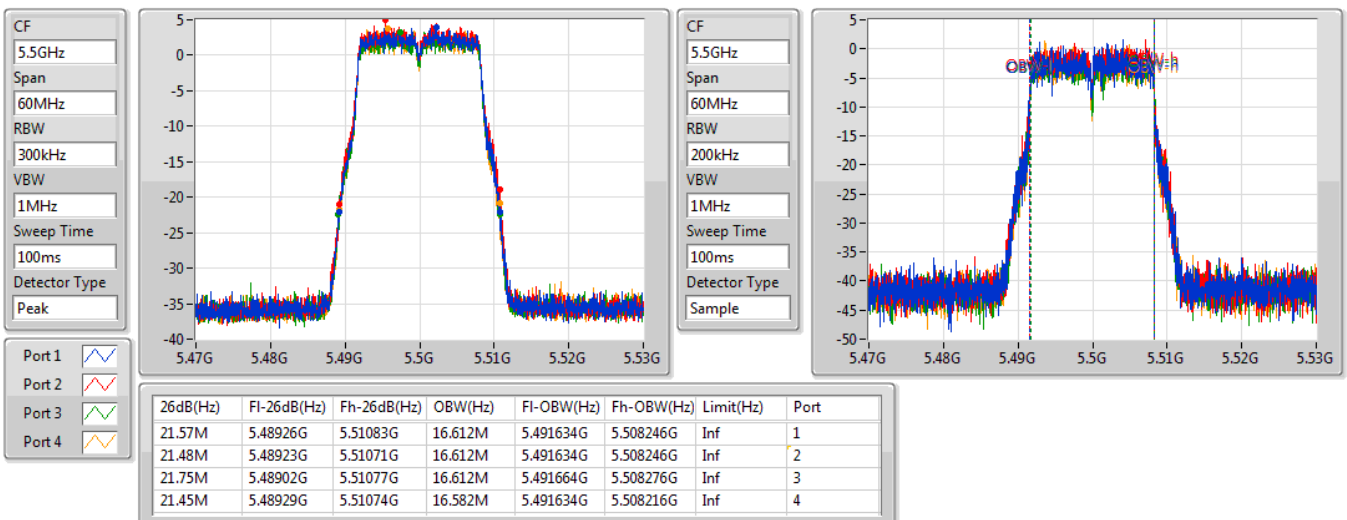


802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

28/10/2019

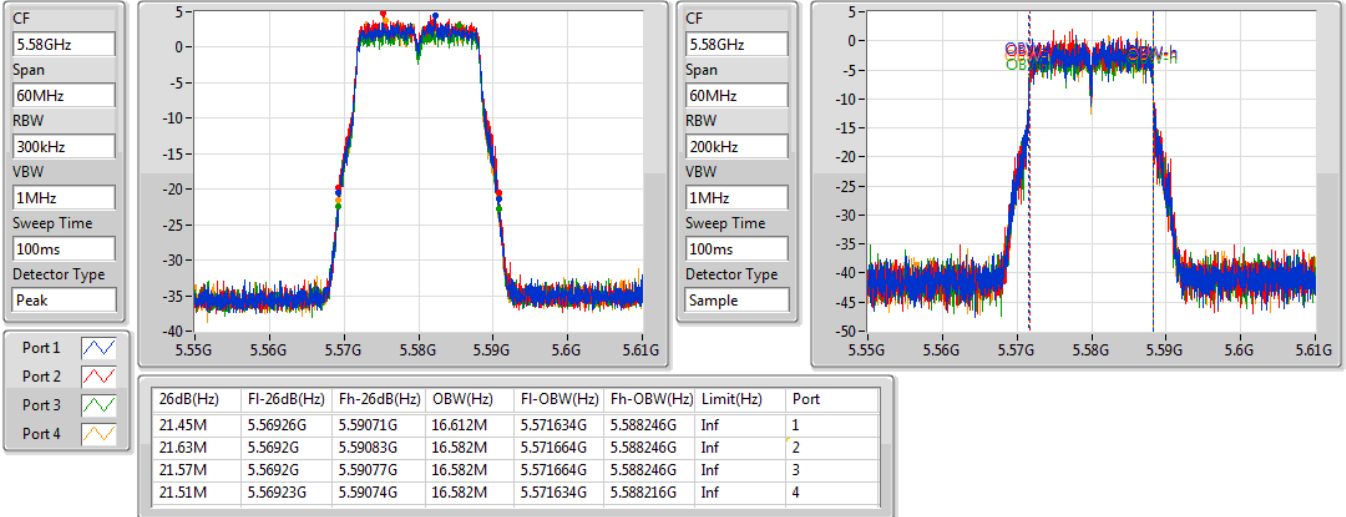

802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

28/10/2019

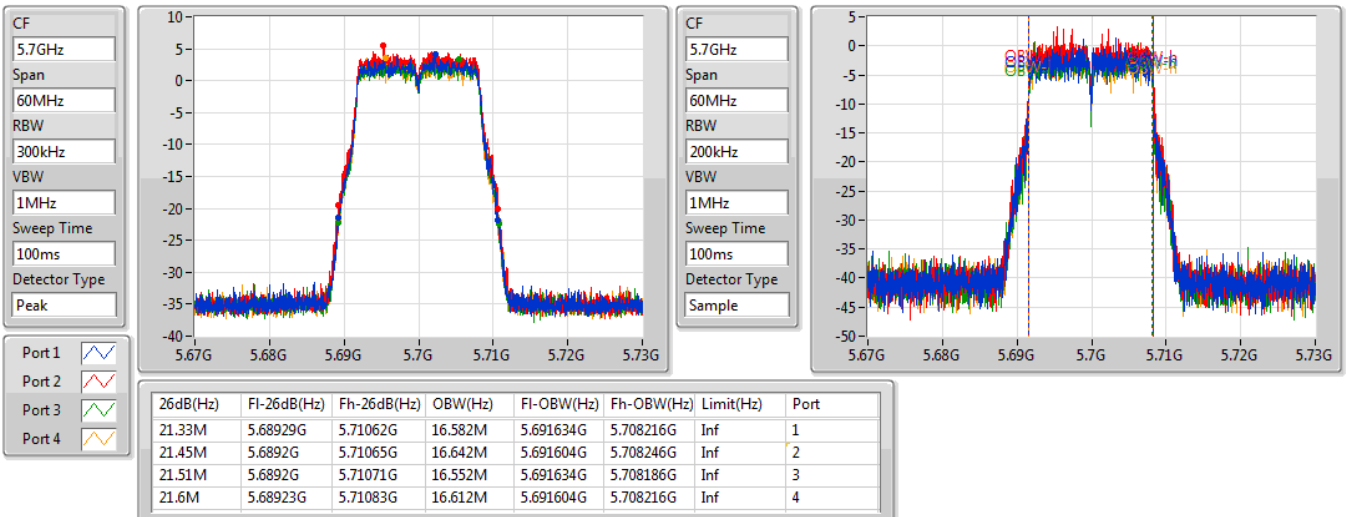


802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

28/10/2019

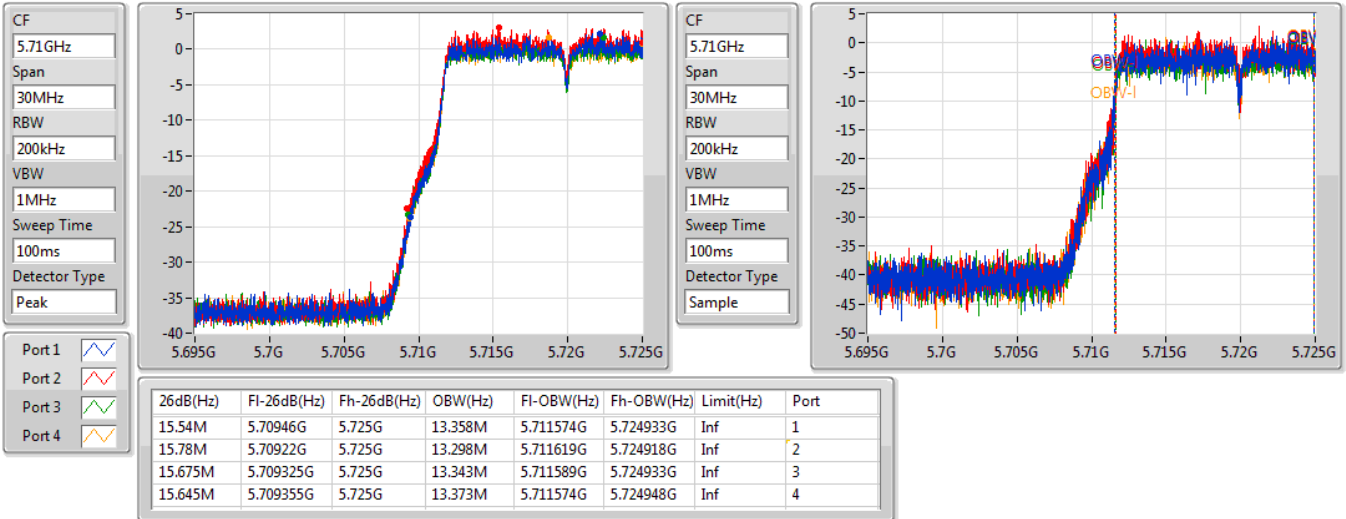

802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz

28/10/2019

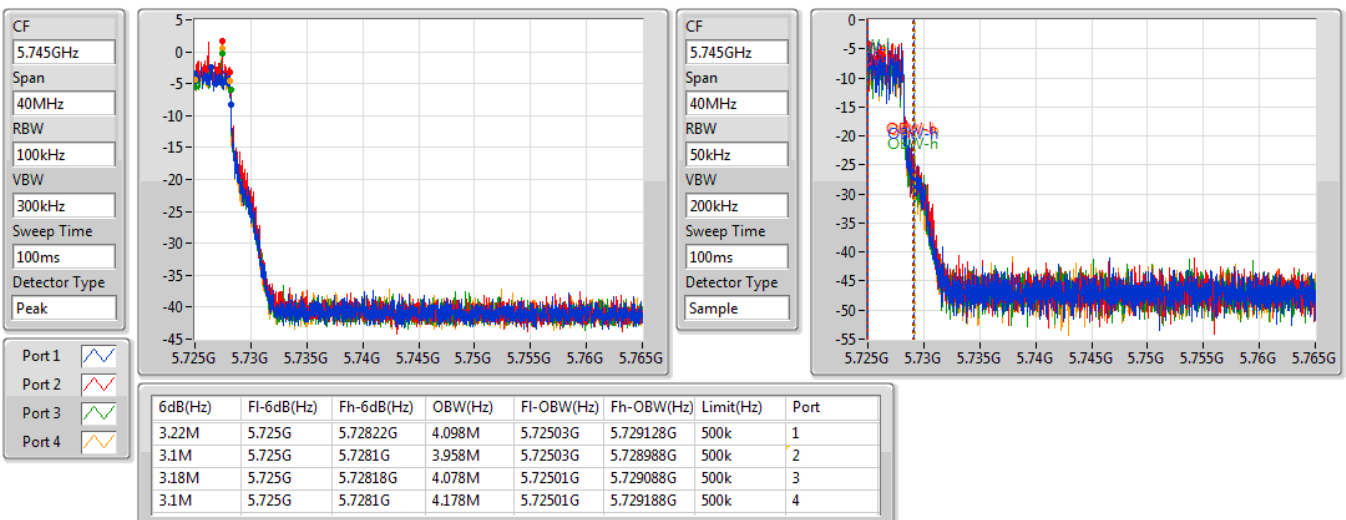


802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/10/2019

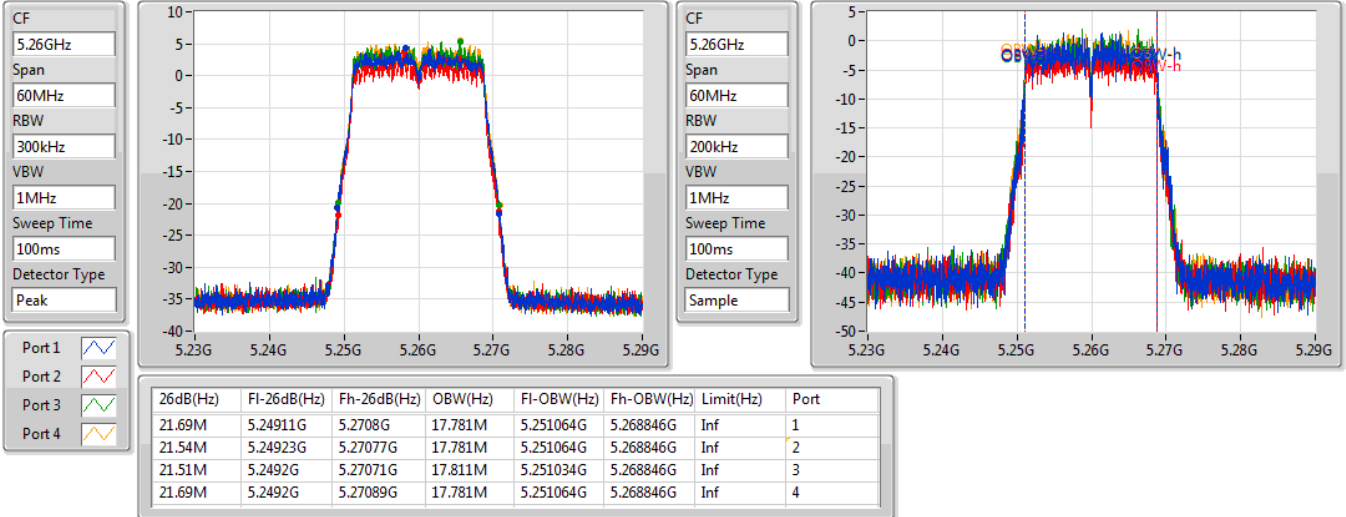

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/10/2019

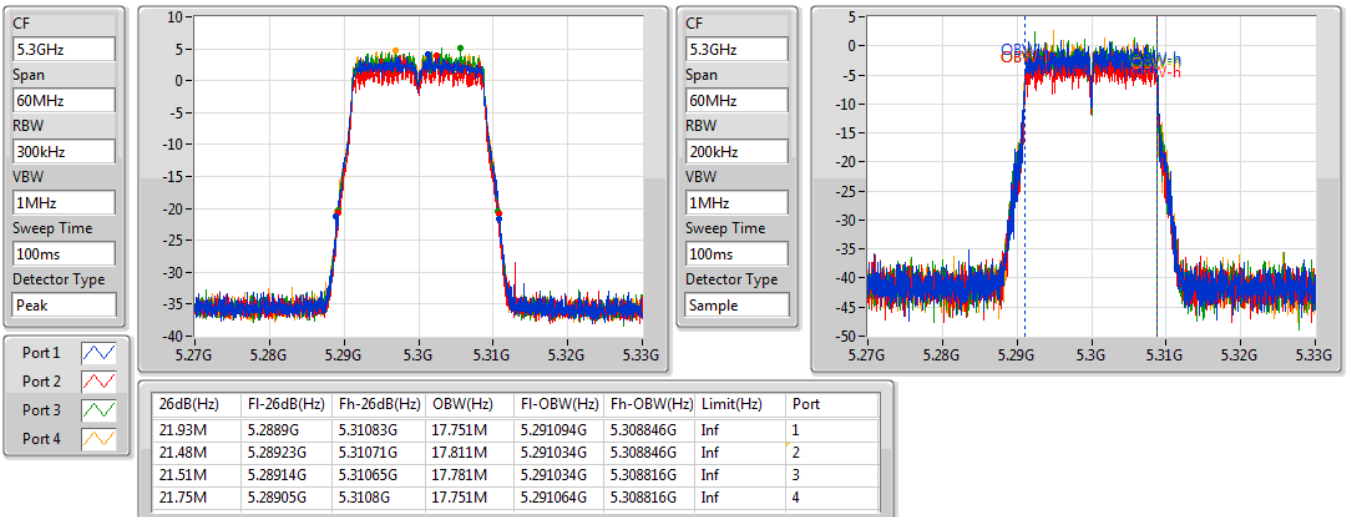


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5260MHz

30/10/2019

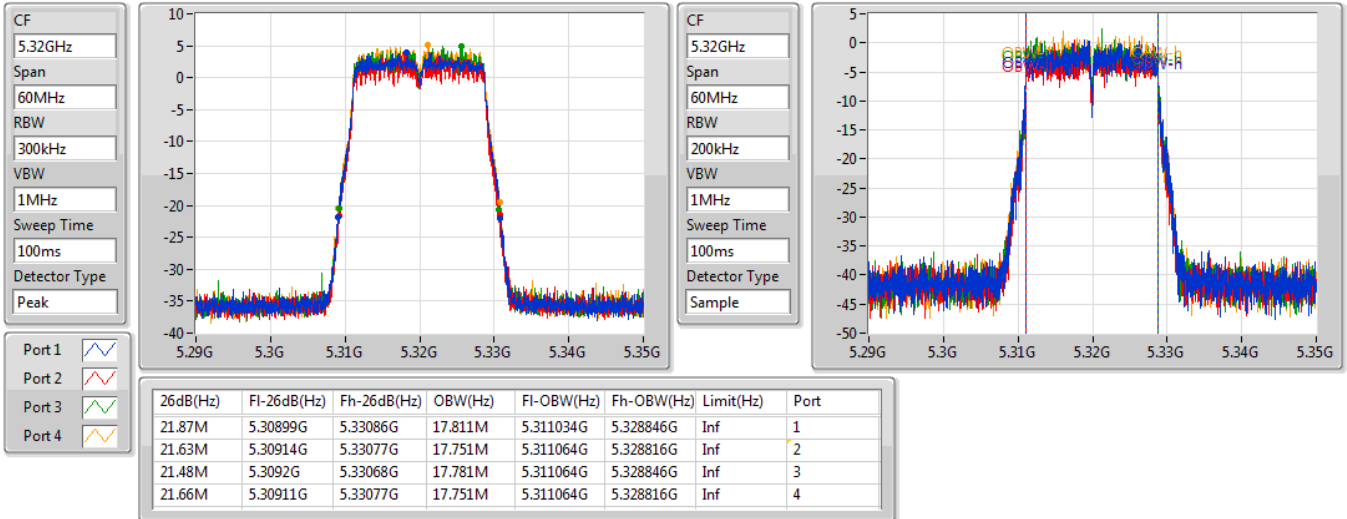

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5300MHz

30/10/2019

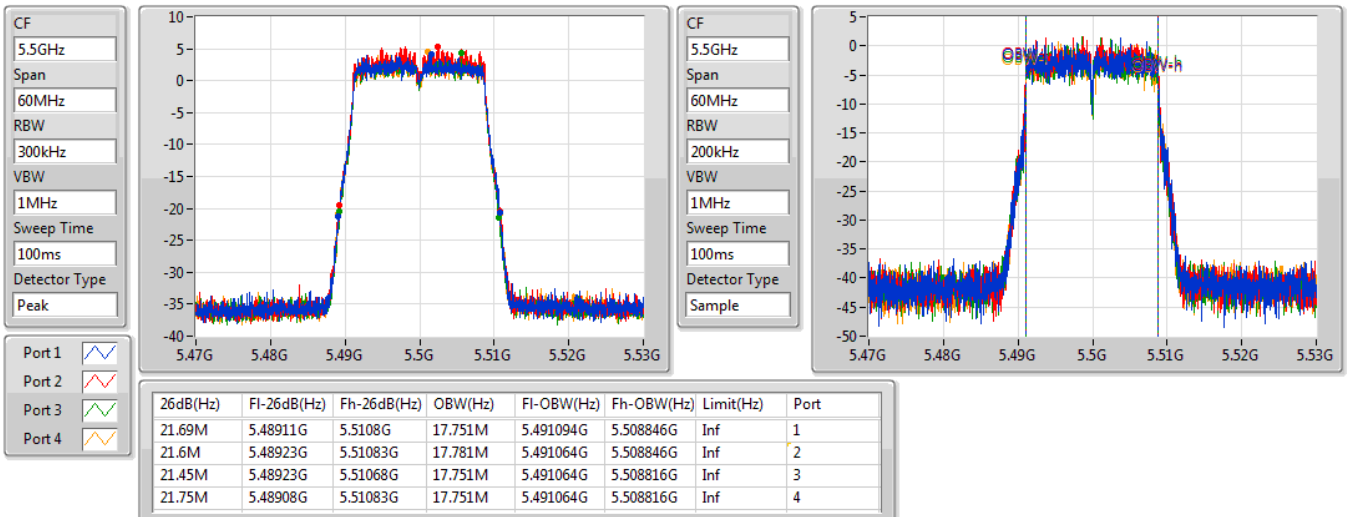


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5320MHz

30/10/2019

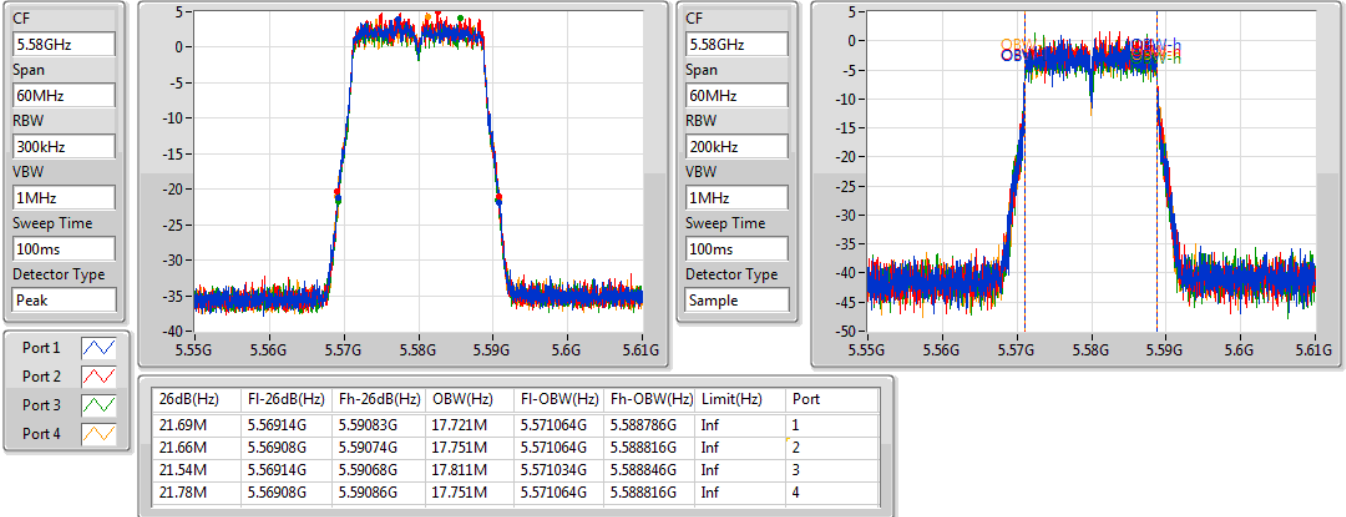

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5500MHz

30/10/2019

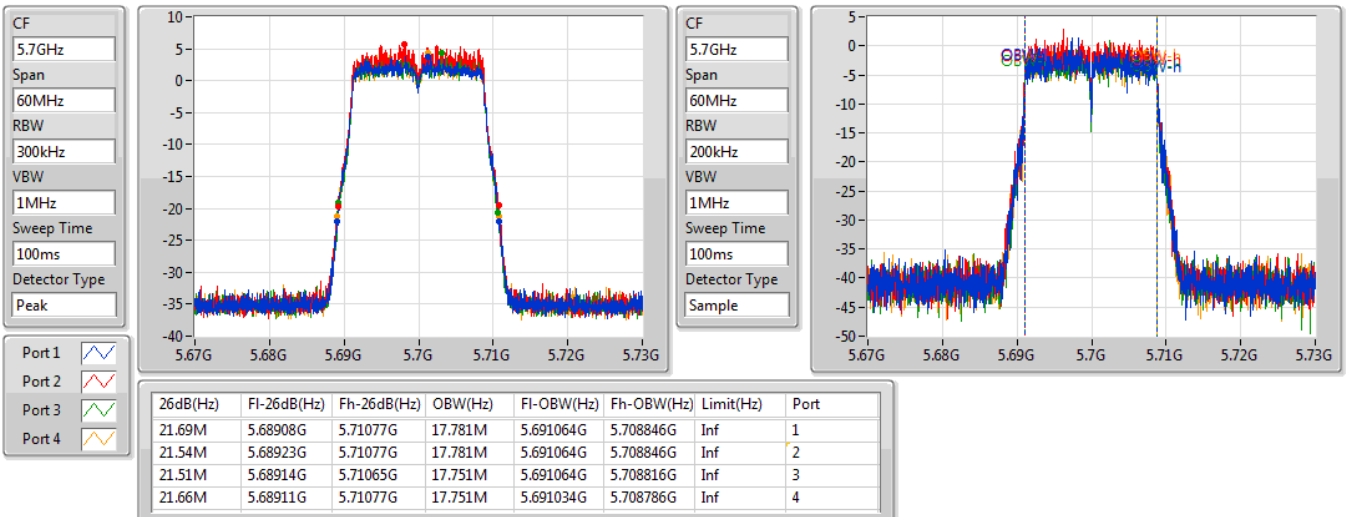


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5580MHz

30/10/2019

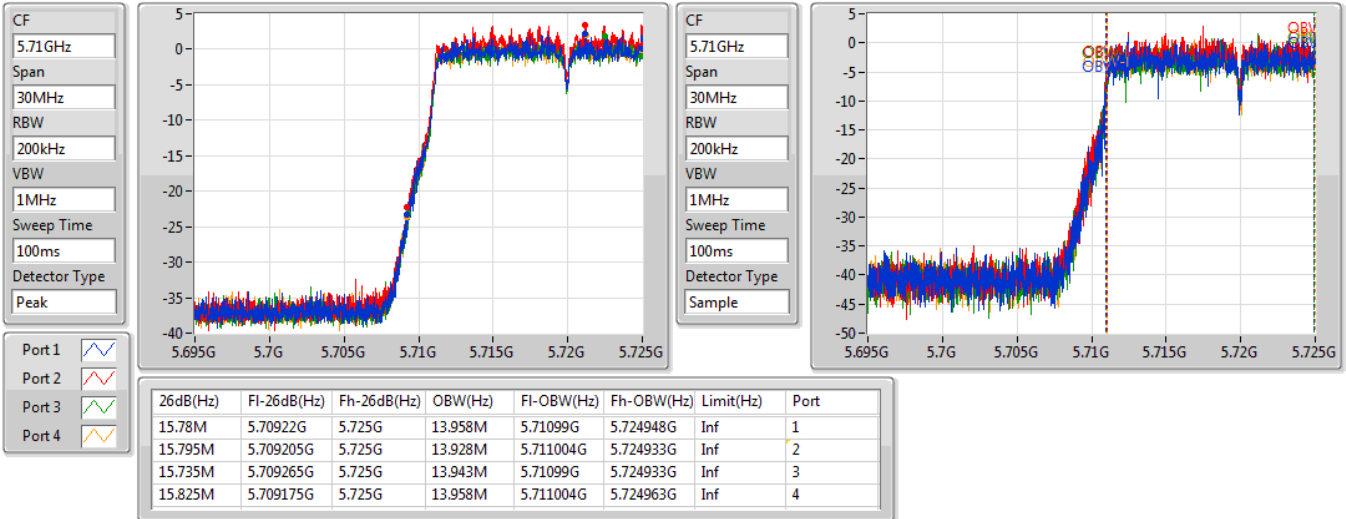

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5700MHz

30/10/2019

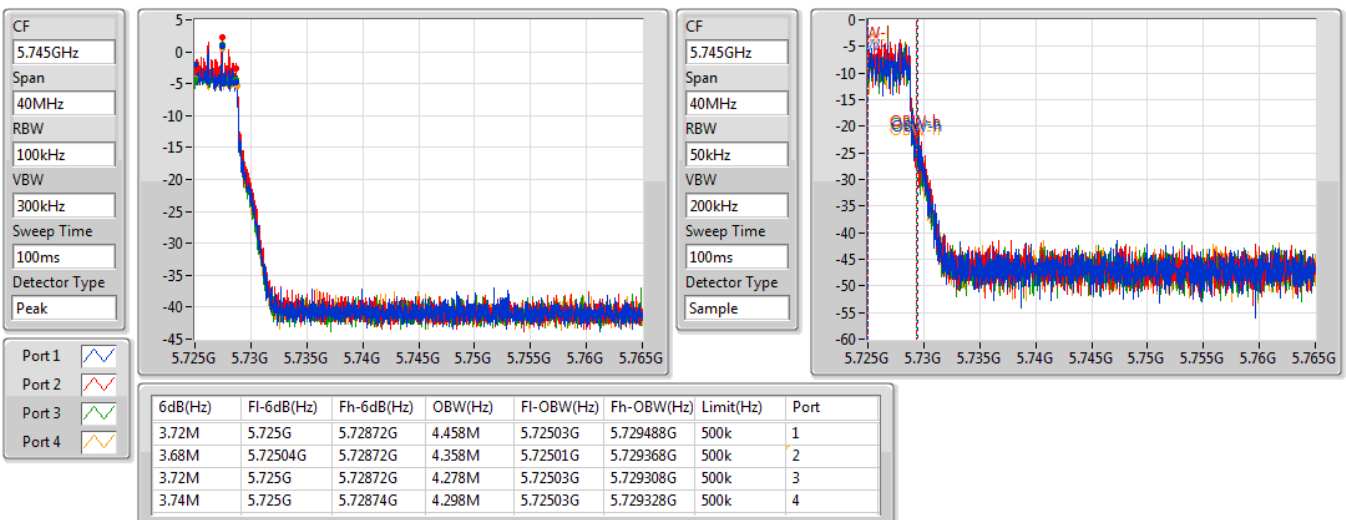


802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/10/2019

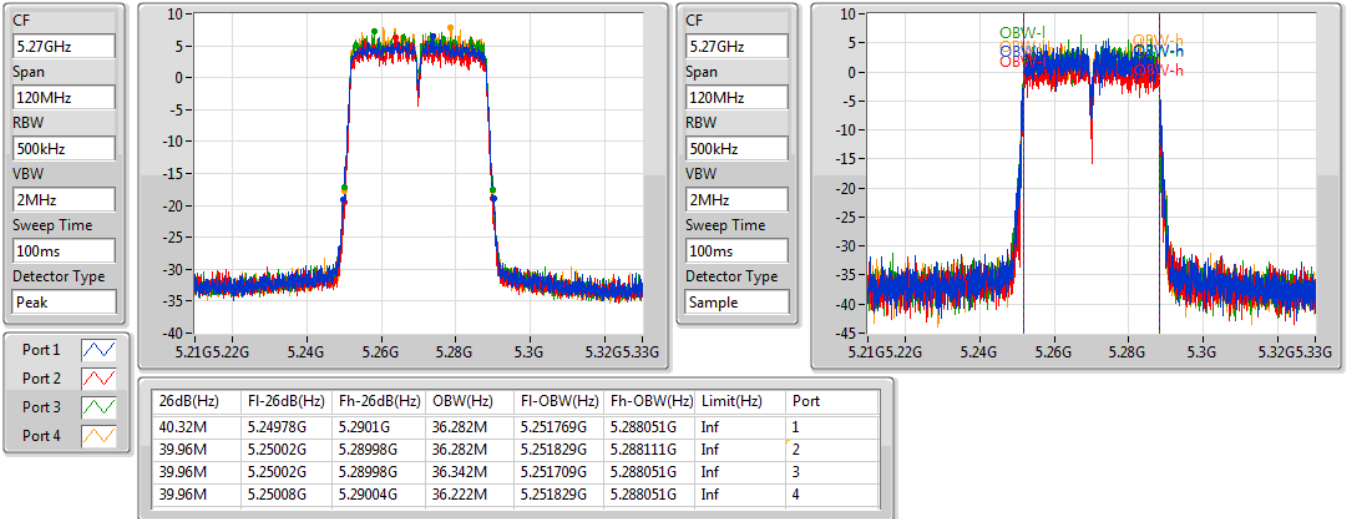

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/10/2019

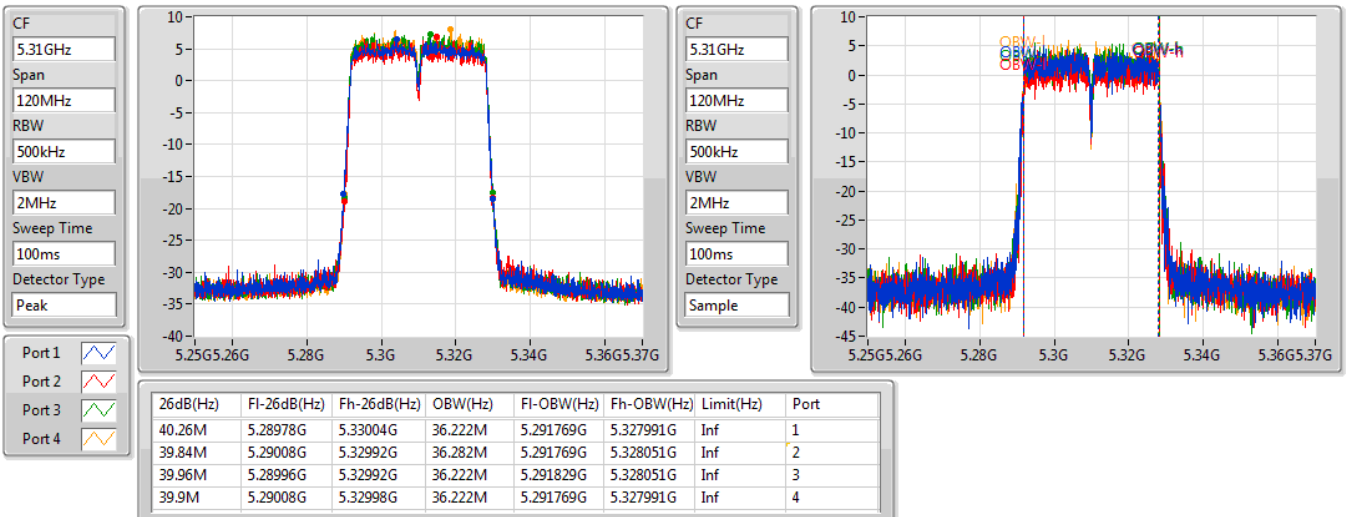


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5270MHz

30/10/2019

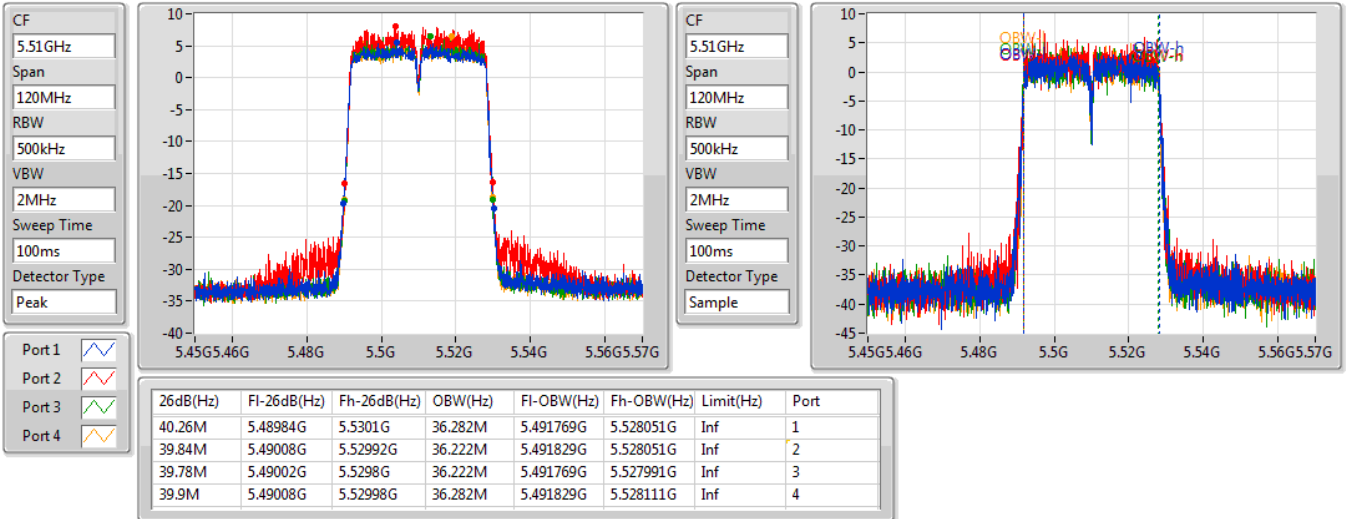

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5310MHz

30/10/2019

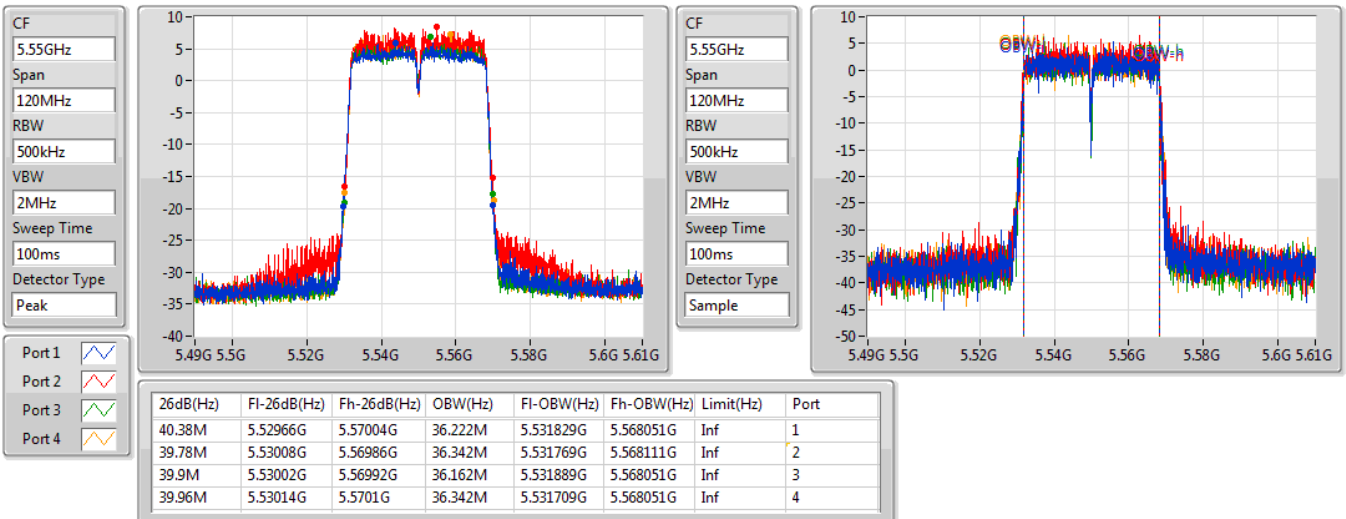


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5510MHz

30/10/2019

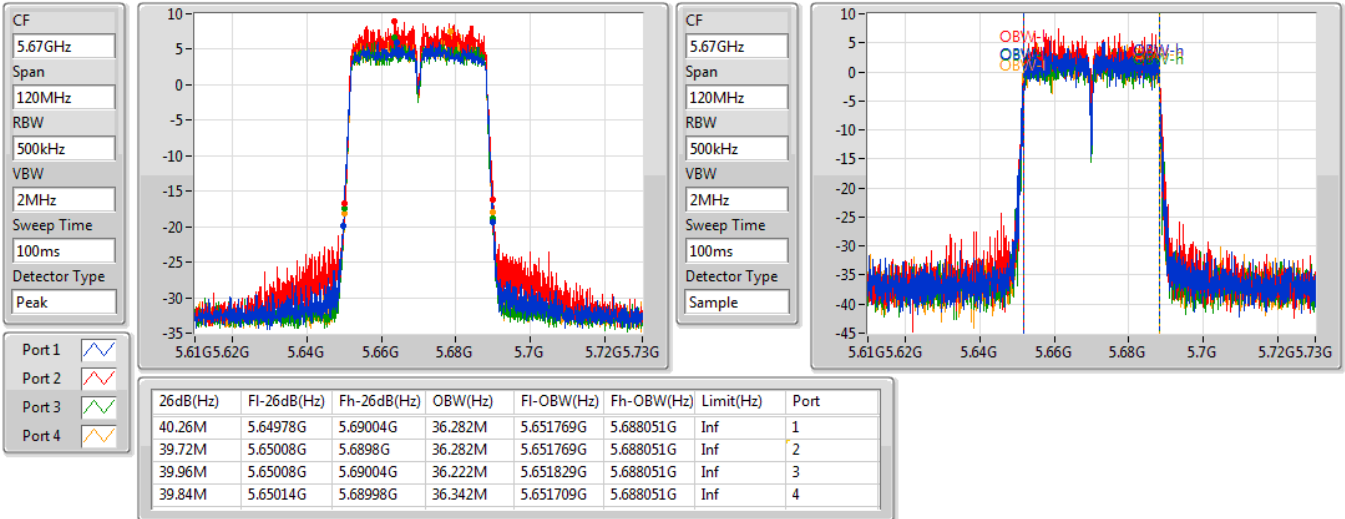

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5550MHz

30/10/2019

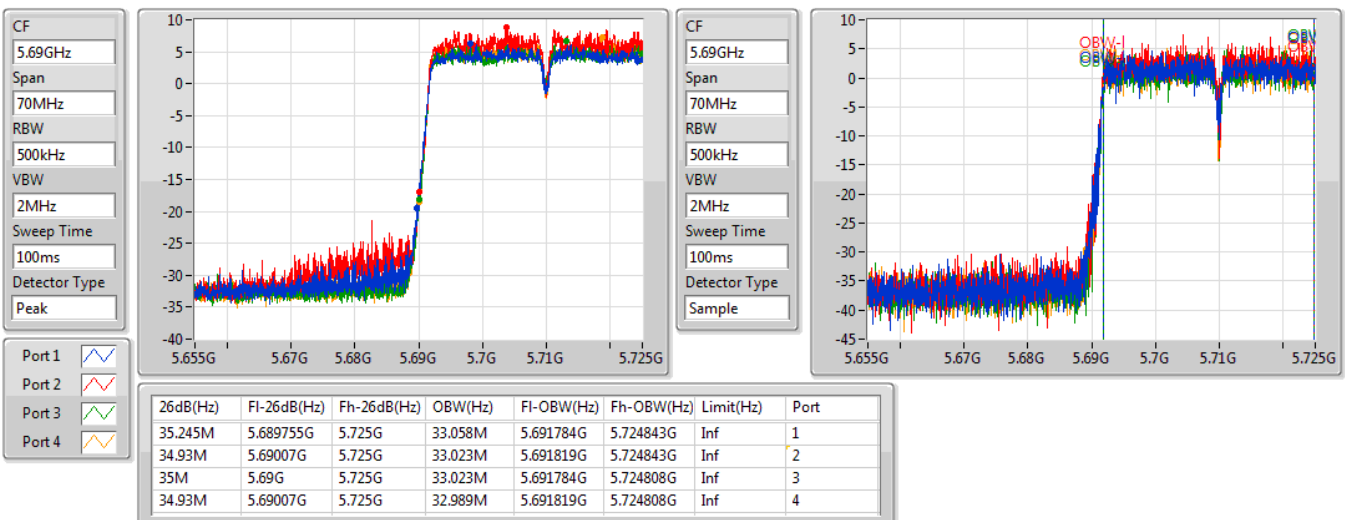


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5670MHz

30/10/2019

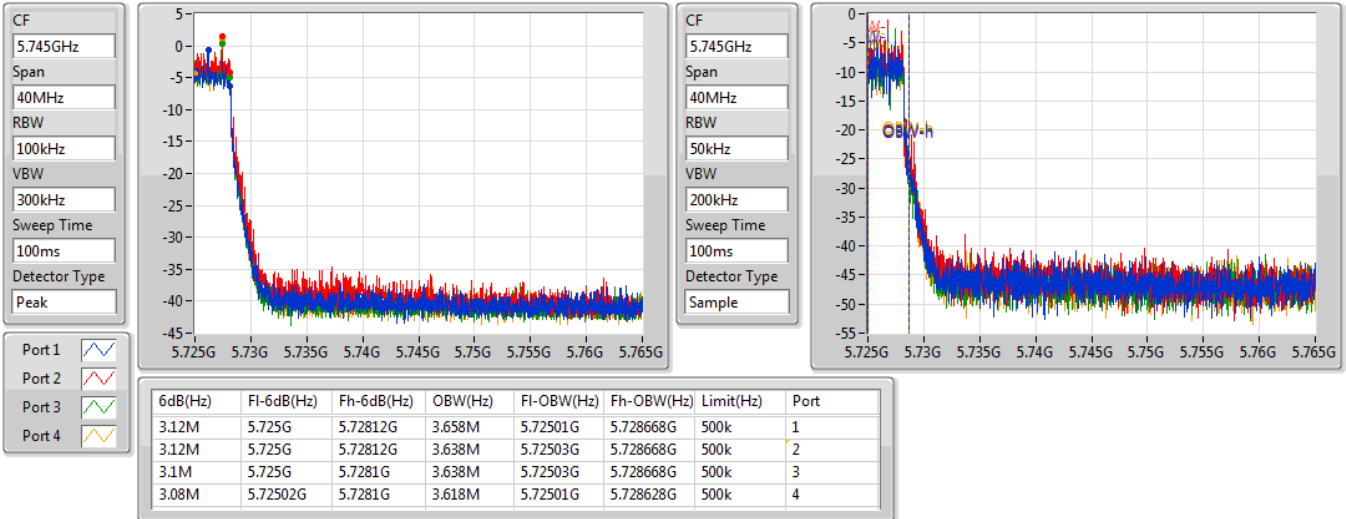

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

30/10/2019

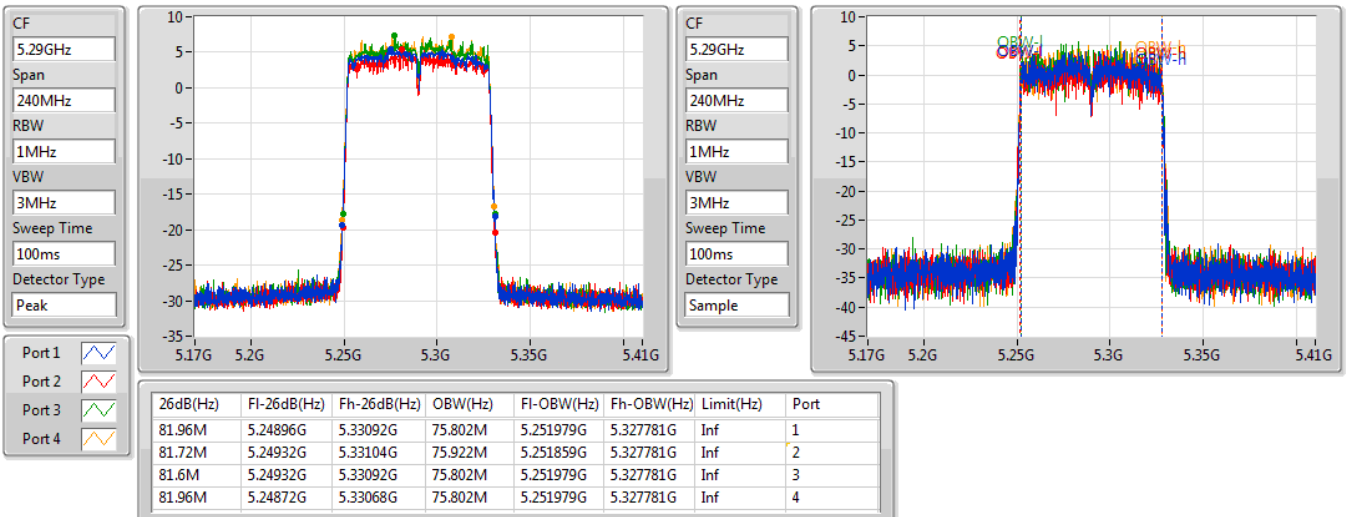


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

30/10/2019

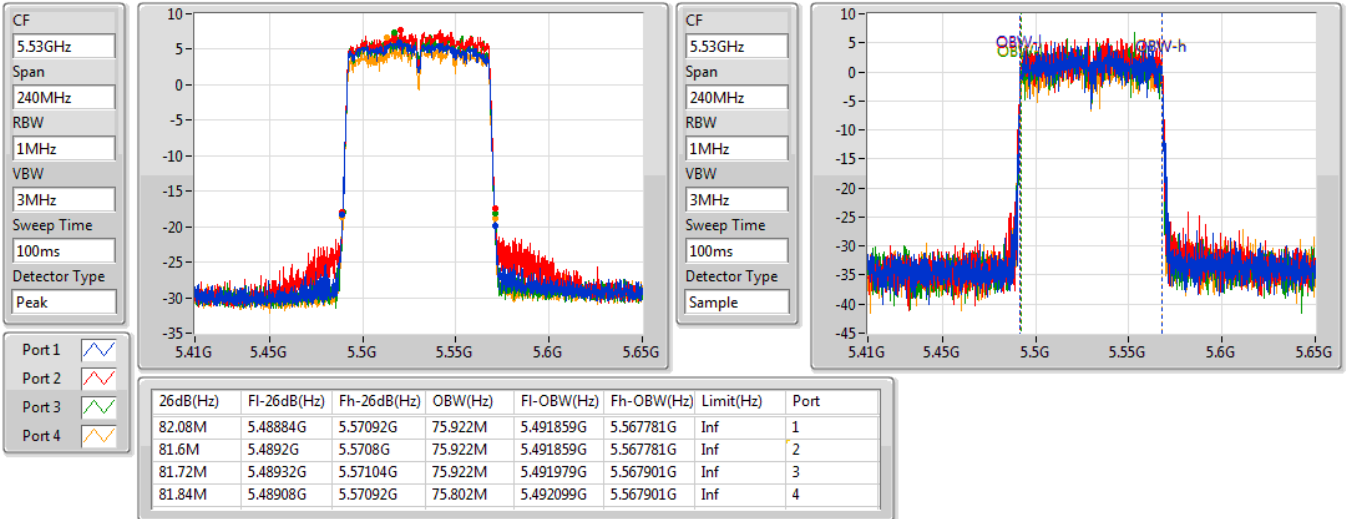

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5290MHz

30/10/2019

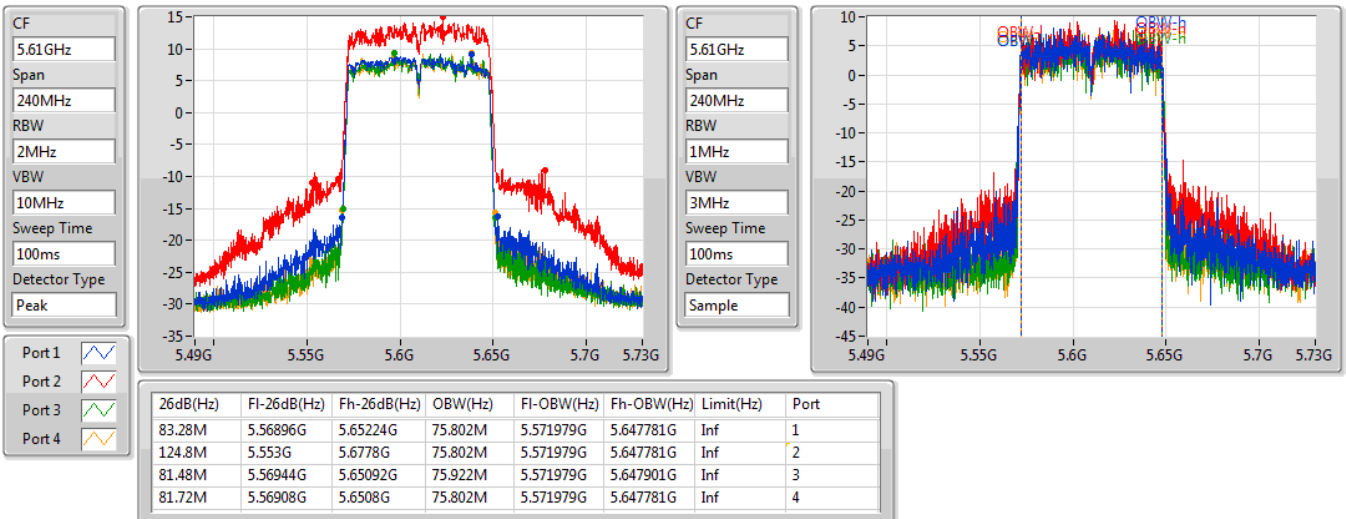


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5530MHz

30/10/2019

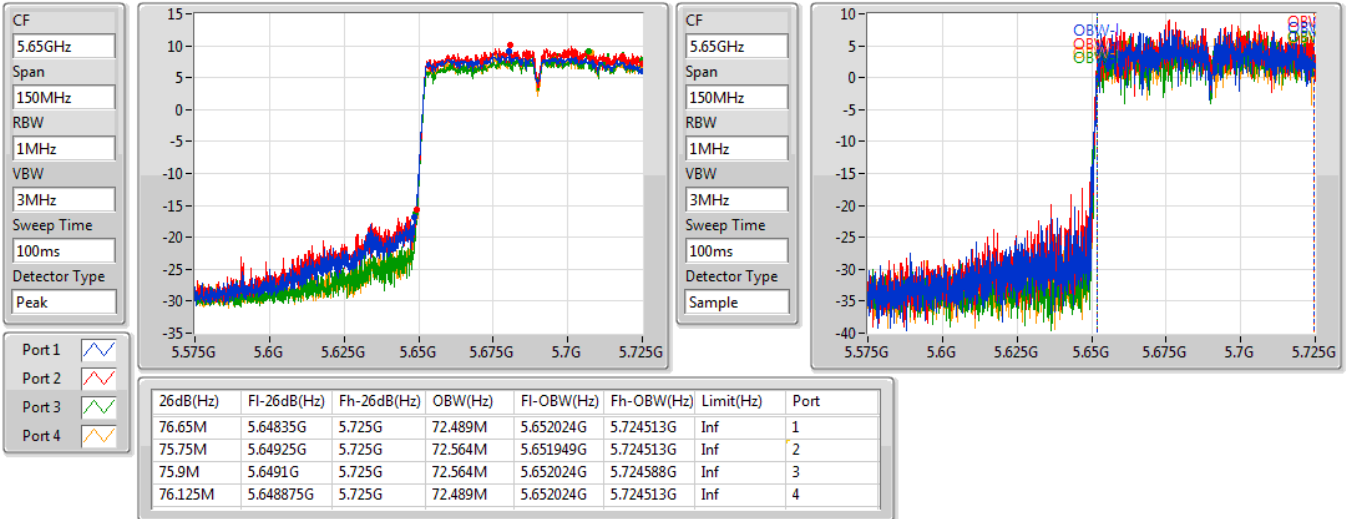

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5610MHz

30/10/2019

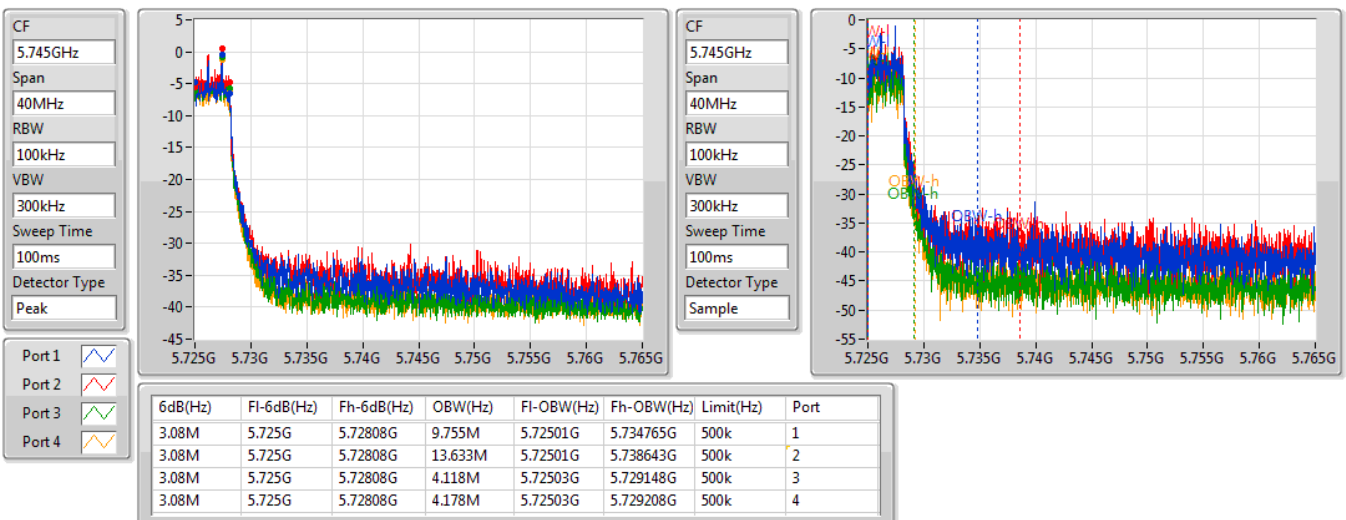


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

30/10/2019

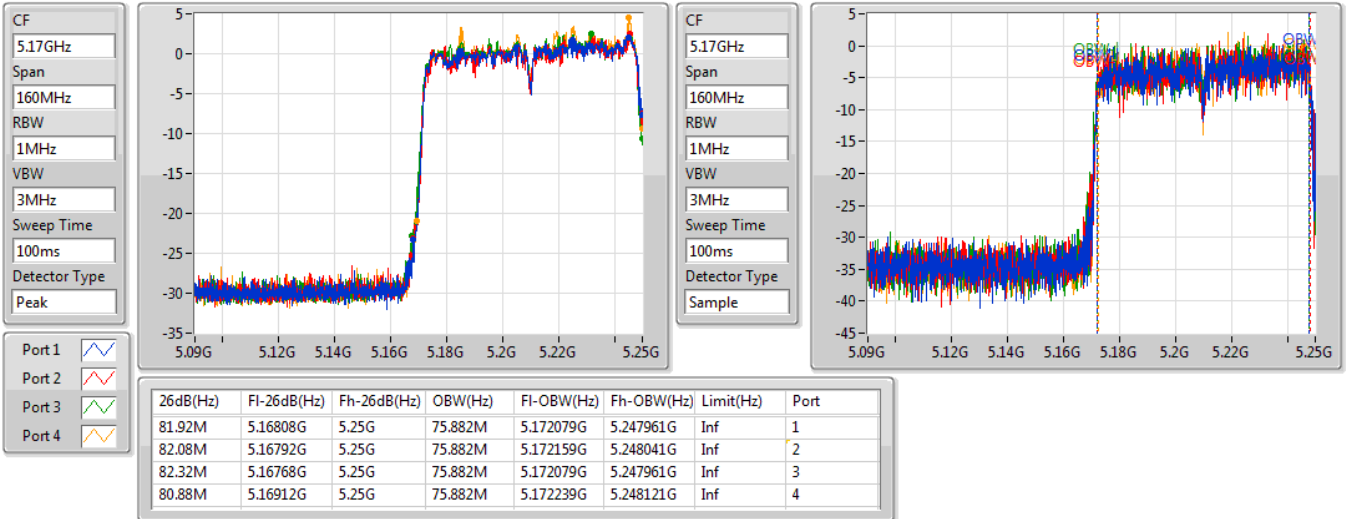

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

30/10/2019

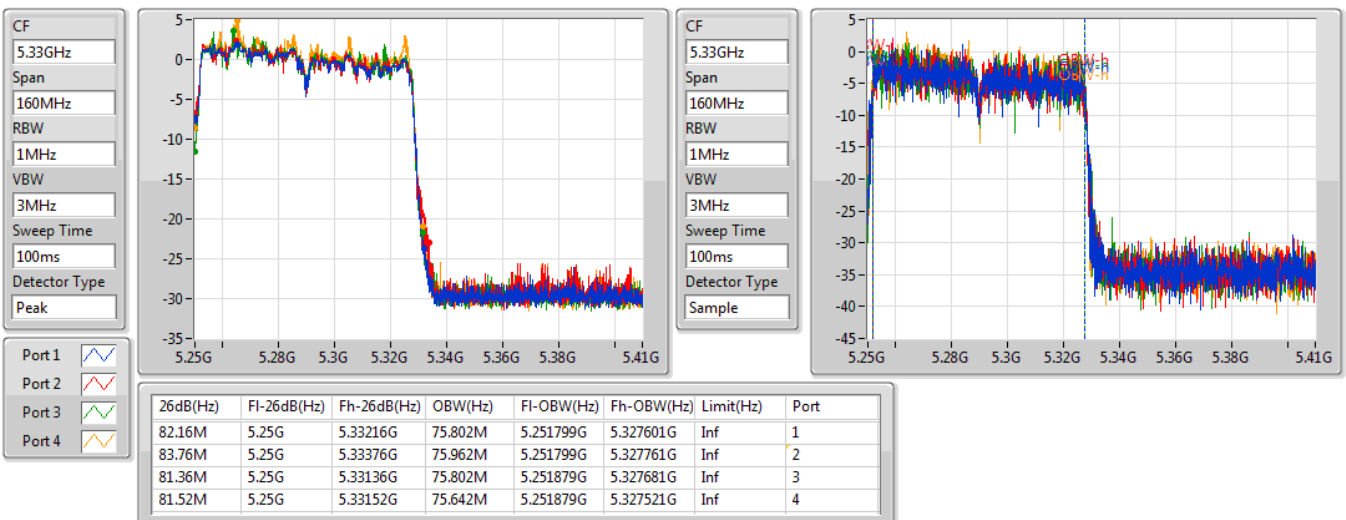


802.11ac VHT160_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

30/10/2019

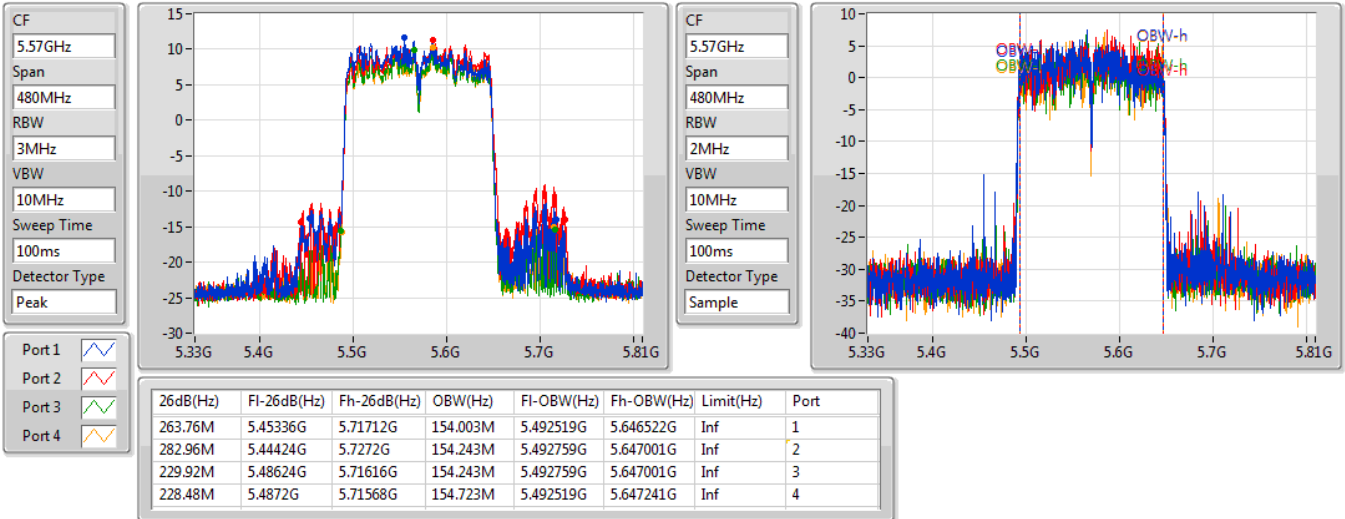

802.11ac VHT160_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

30/10/2019

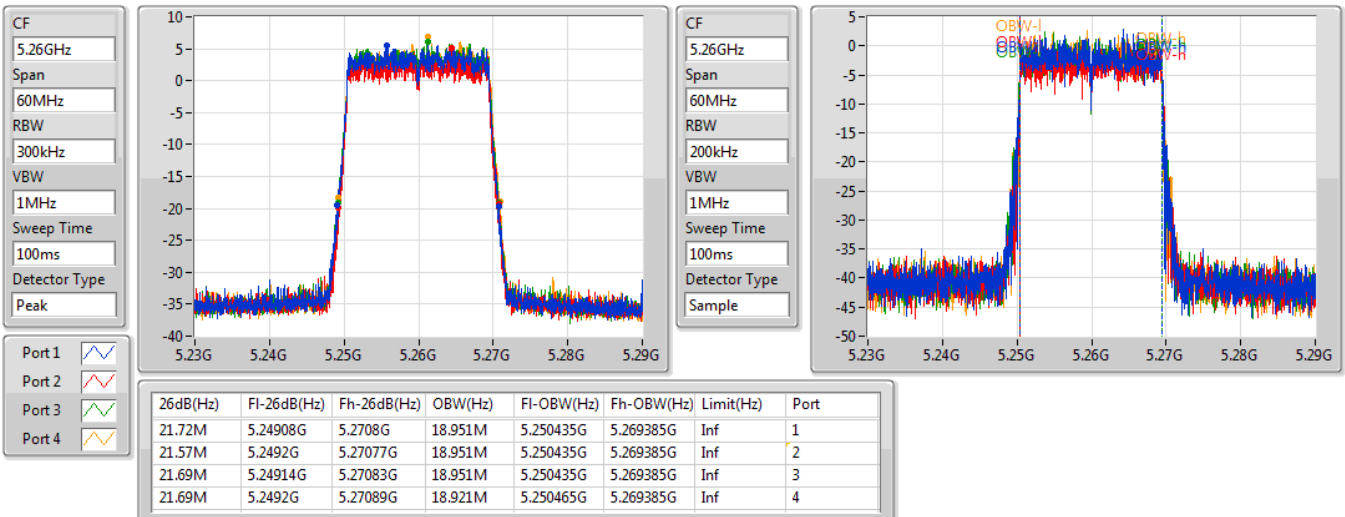


802.11ac VHT160_Nss1,(MCS0)_4TX
EBW
5570MHz

30/10/2019

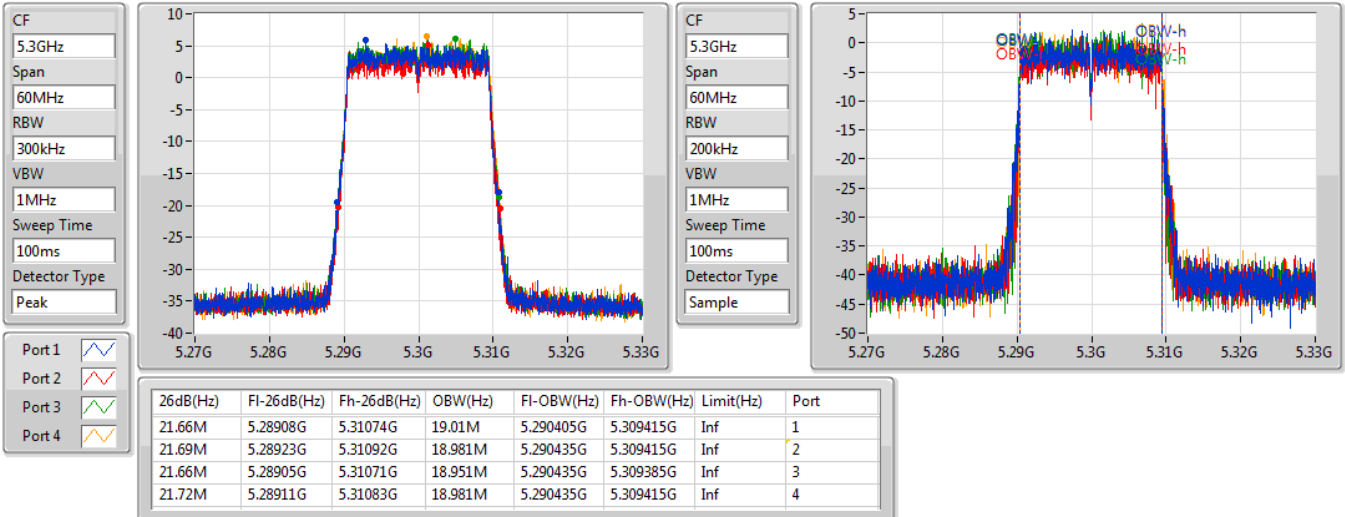

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5260MHz

28/10/2019

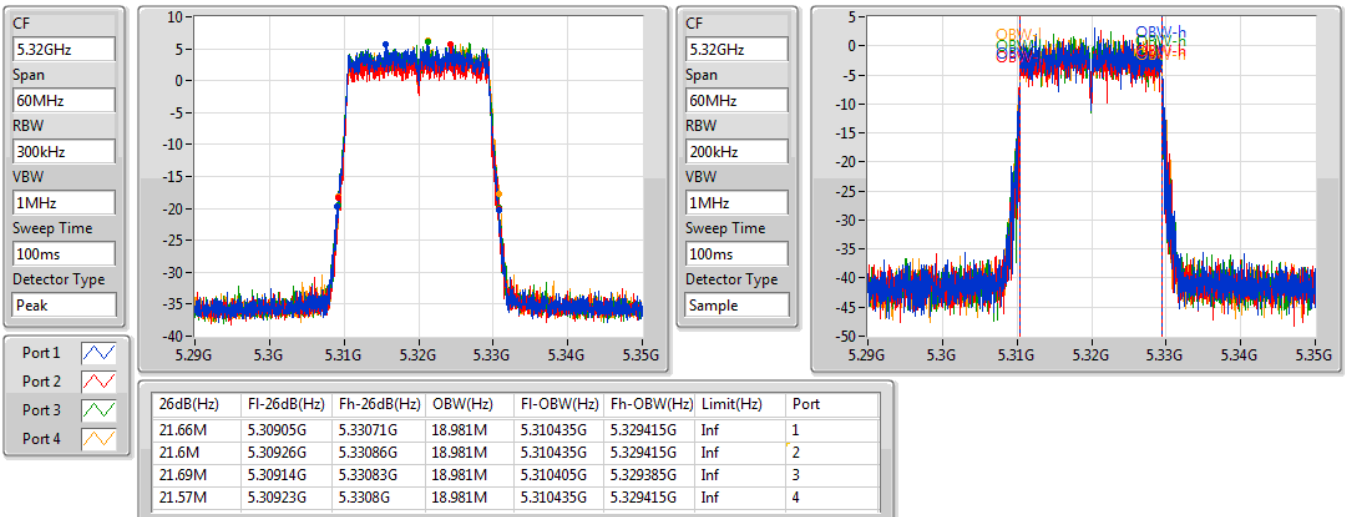


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5300MHz

28/10/2019

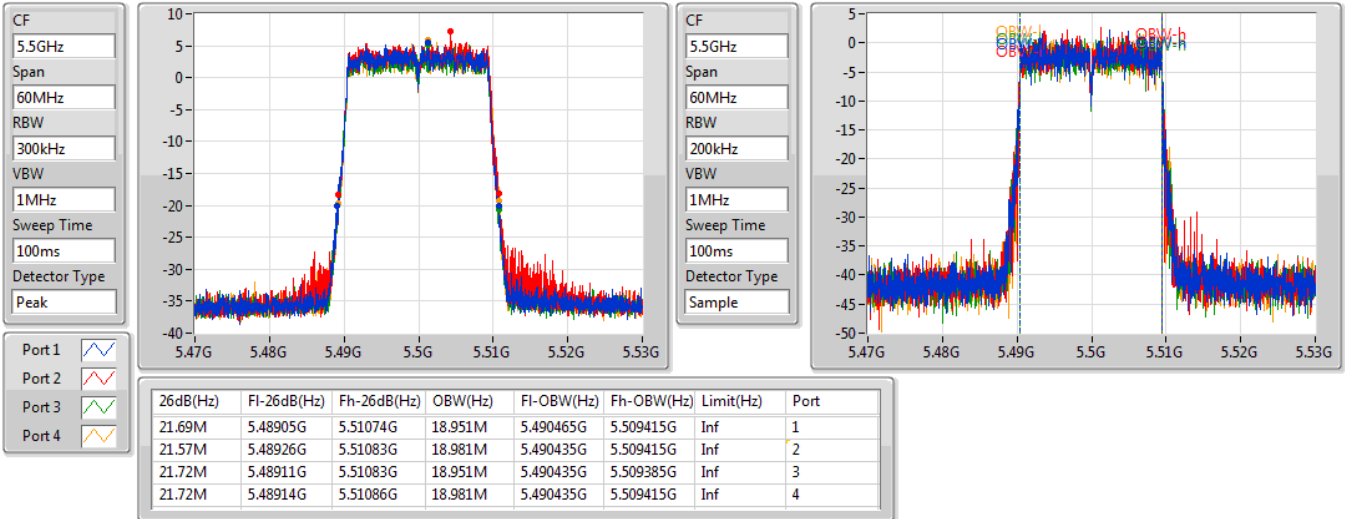

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5320MHz

28/10/2019

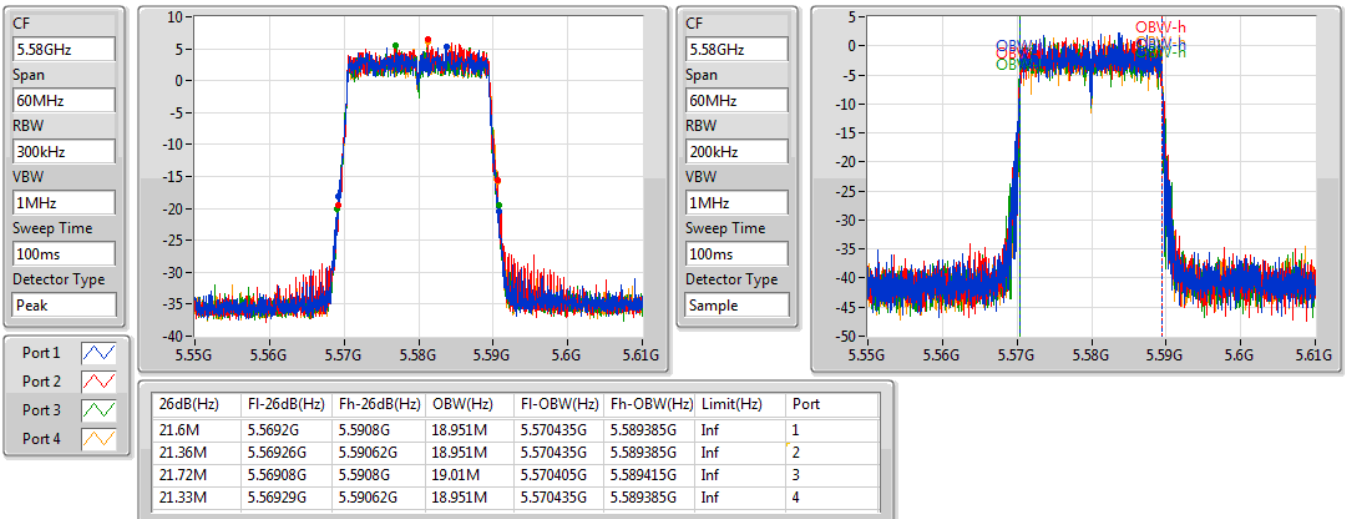


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5500MHz

28/10/2019

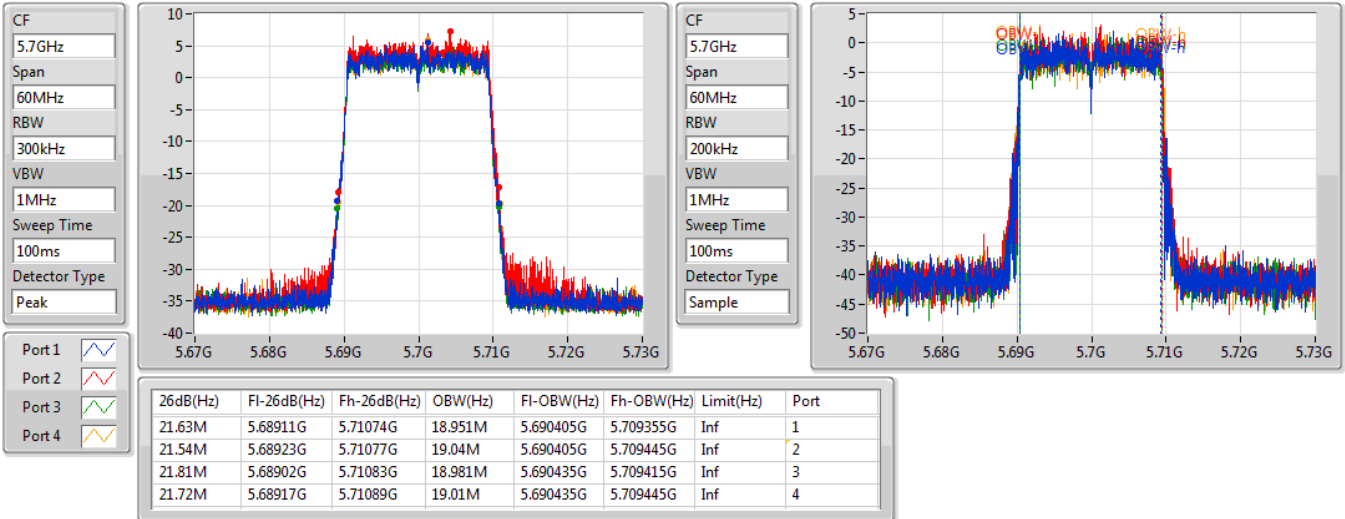

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5580MHz

28/10/2019

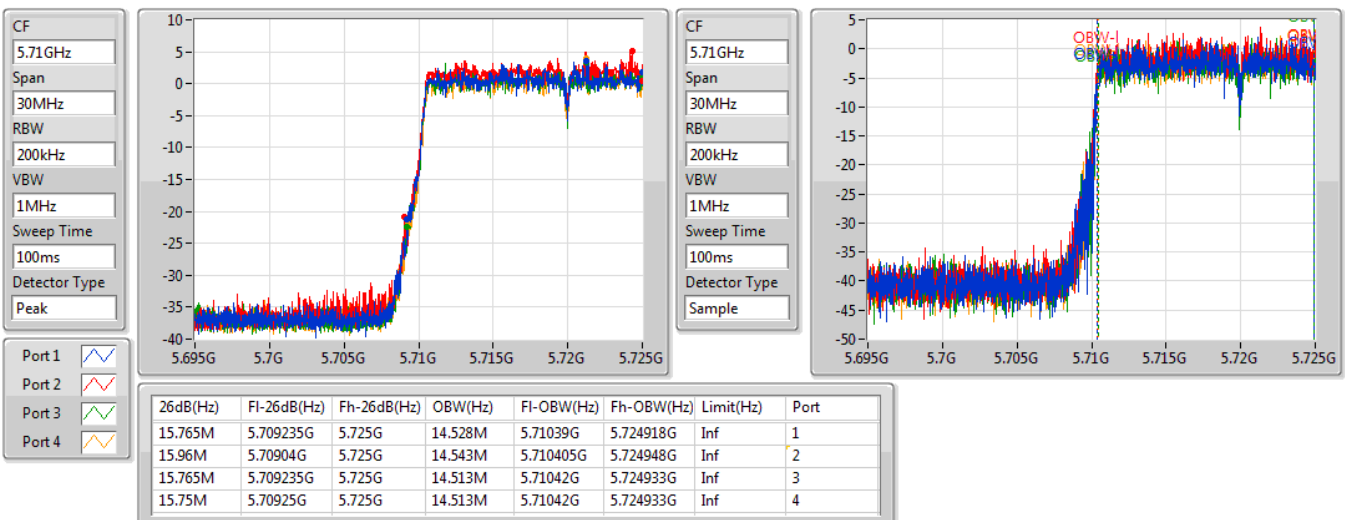


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5700MHz

28/10/2019

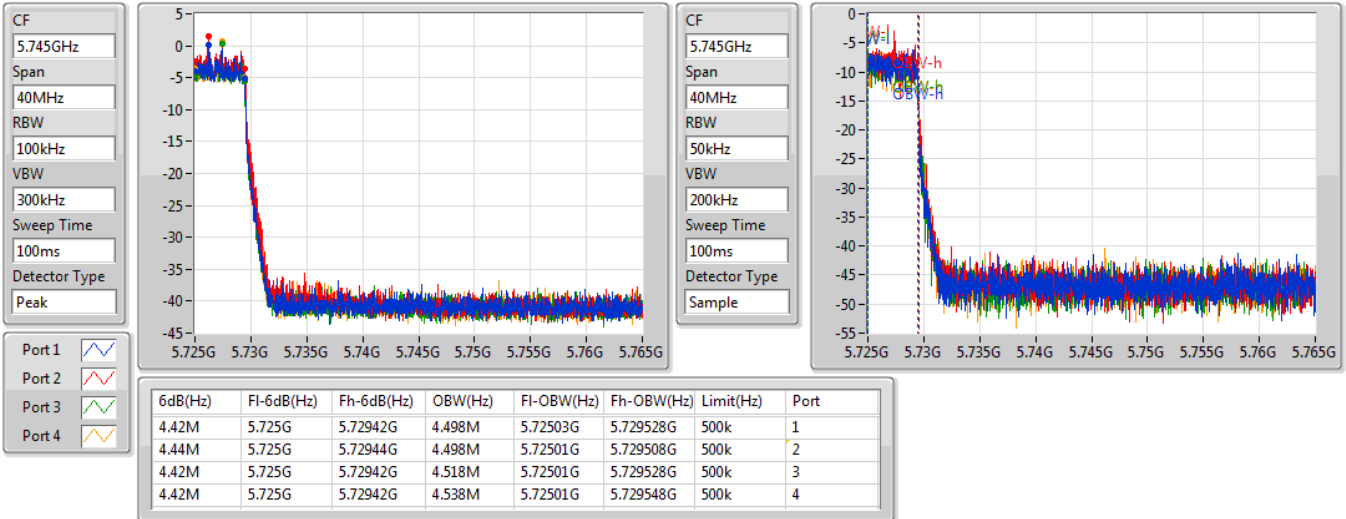

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/10/2019

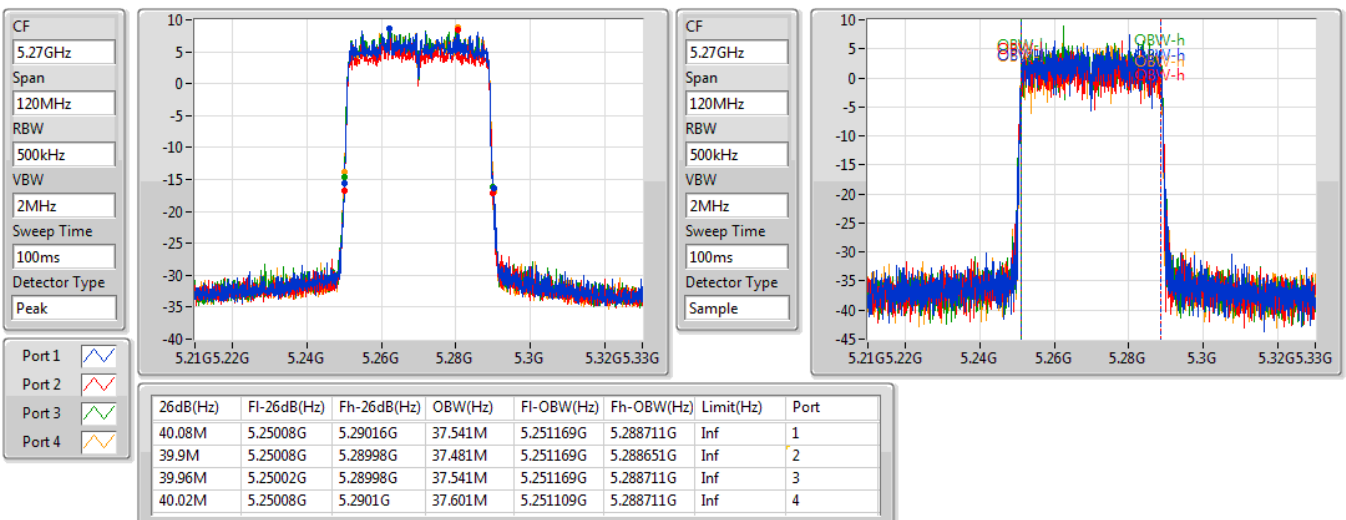


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/10/2019

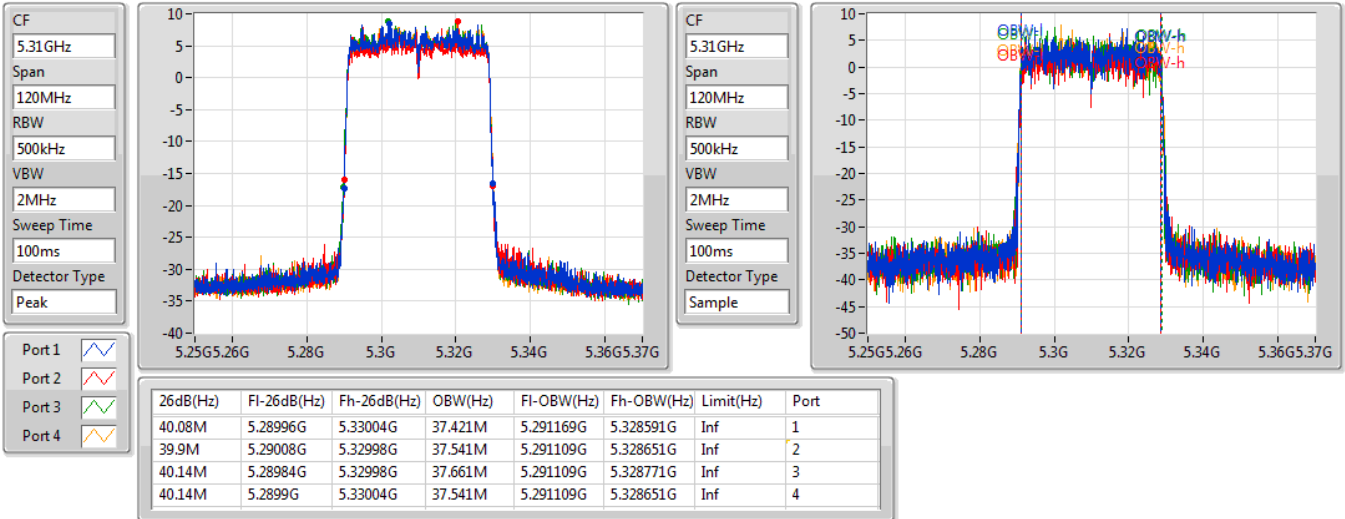

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5270MHz

28/10/2019

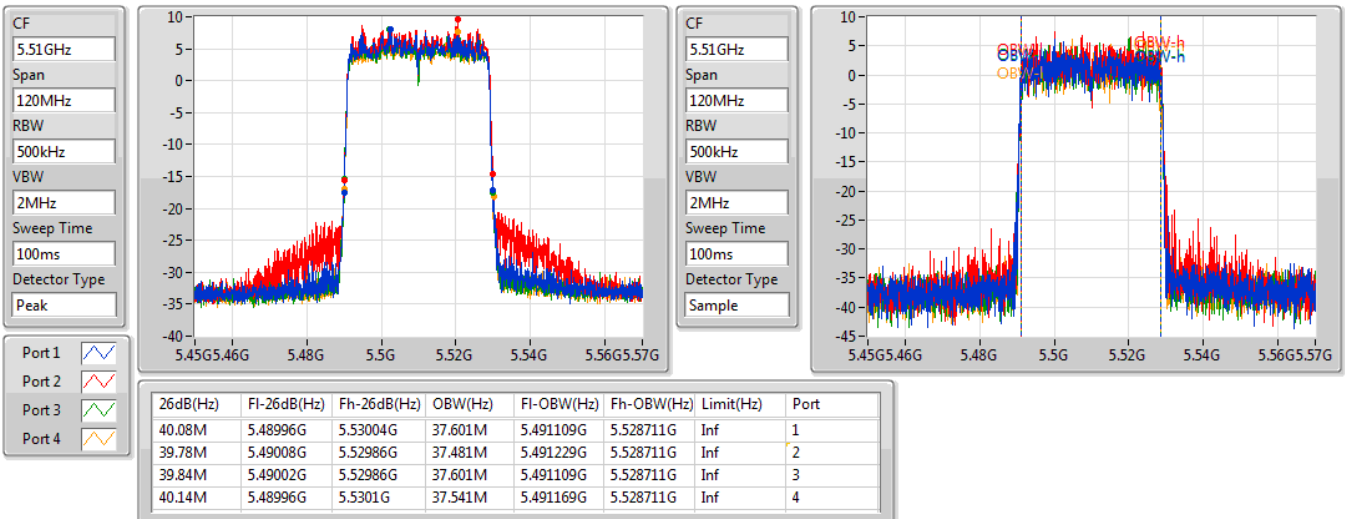


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5310MHz

28/10/2019

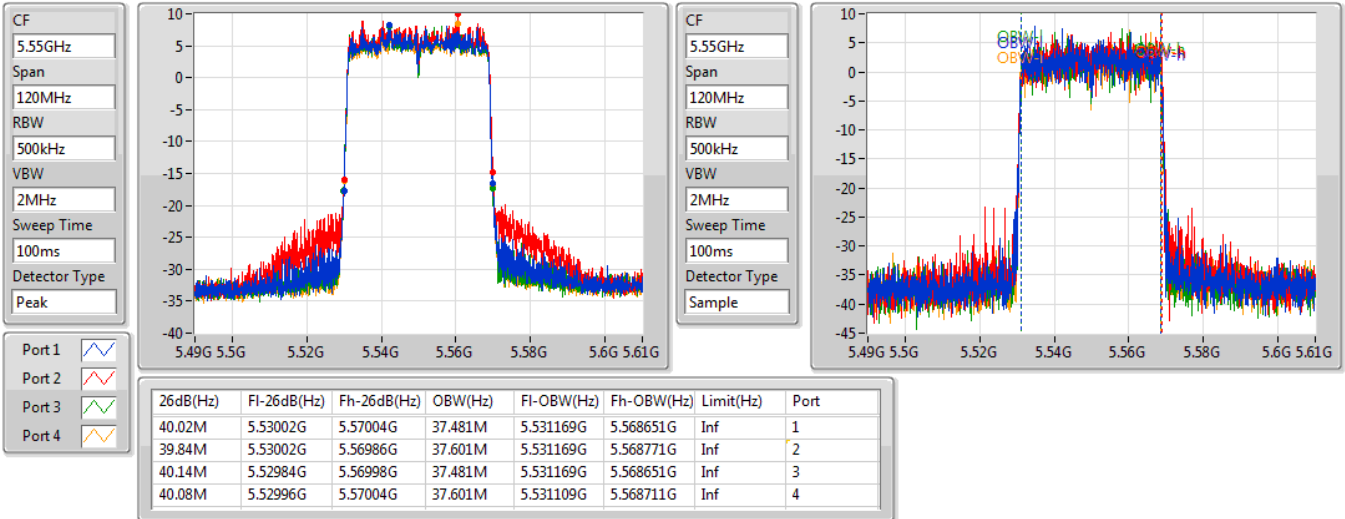

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5510MHz

28/10/2019

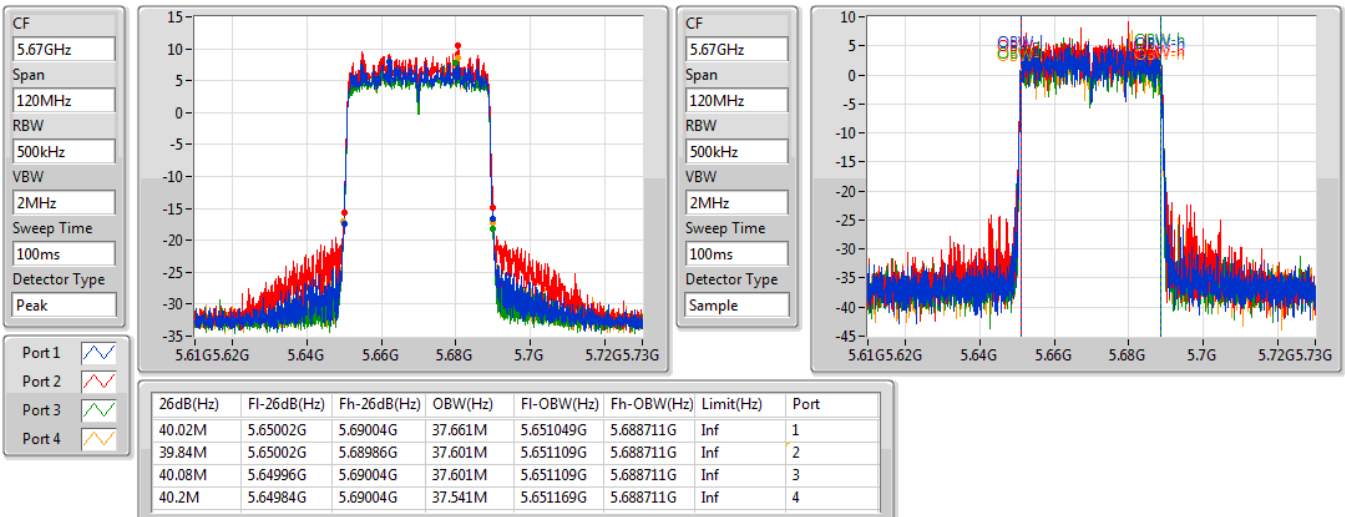


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5550MHz

28/10/2019

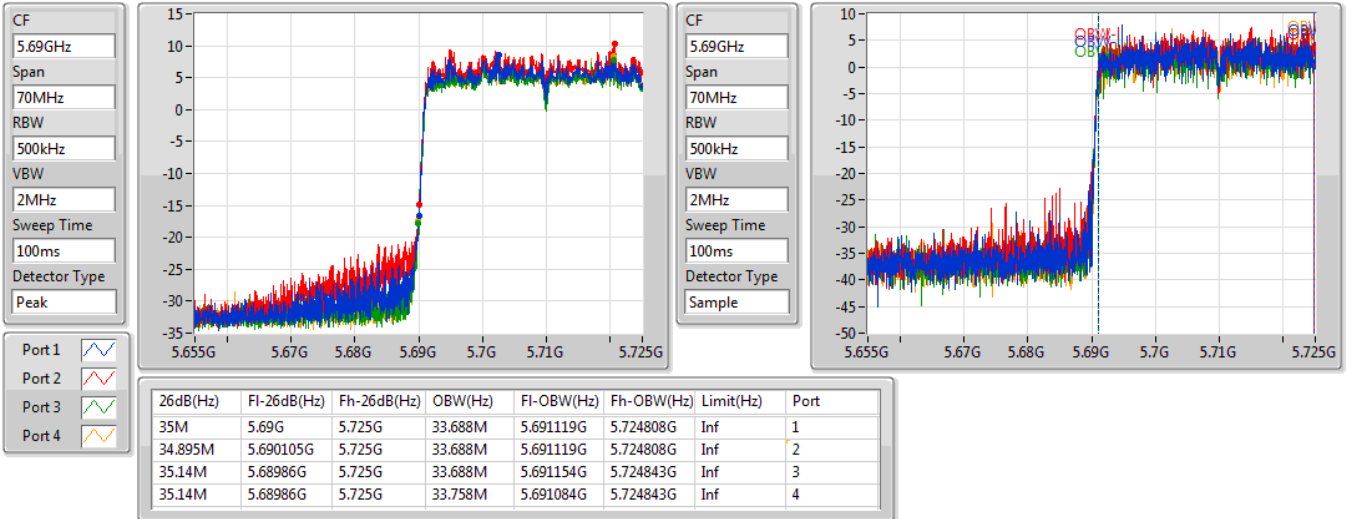

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5670MHz

28/10/2019

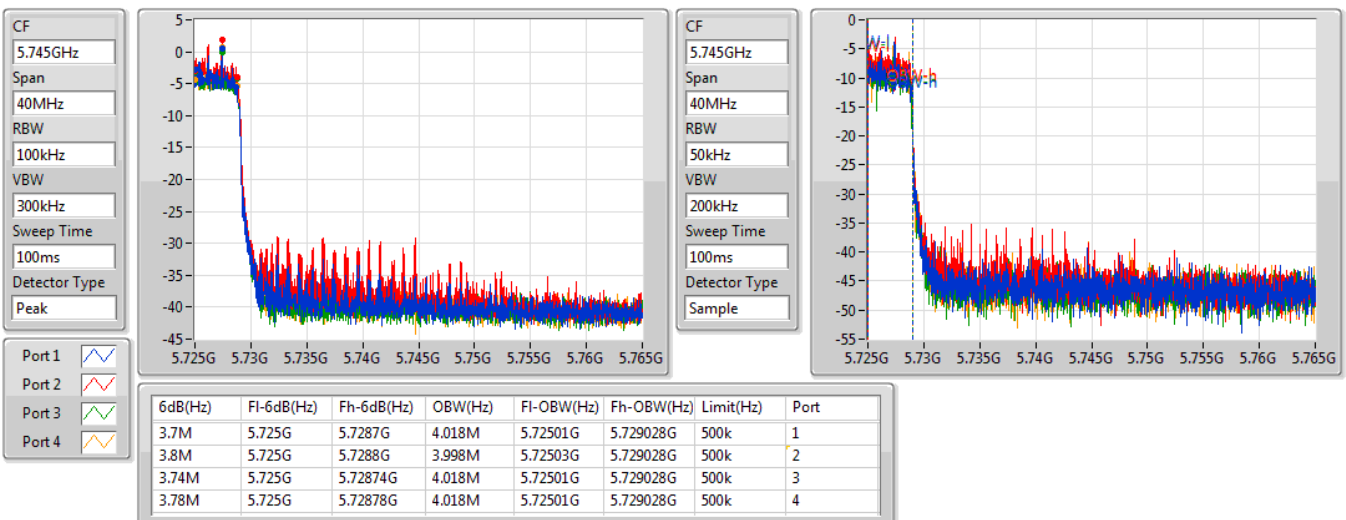


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

28/10/2019

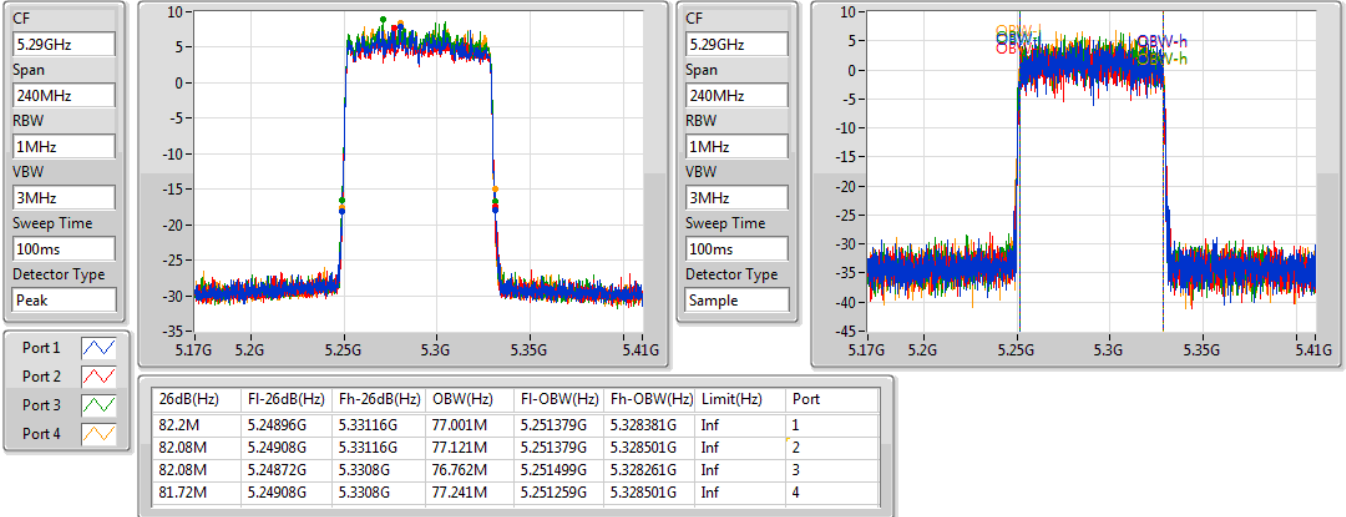

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

28/10/2019

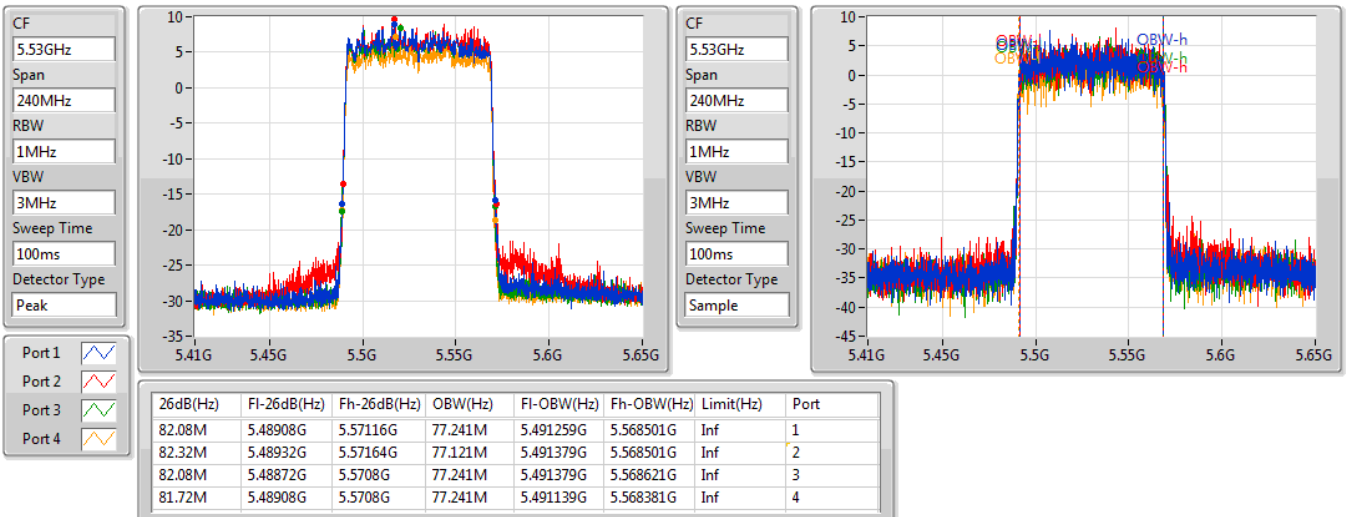


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5290MHz

28/10/2019

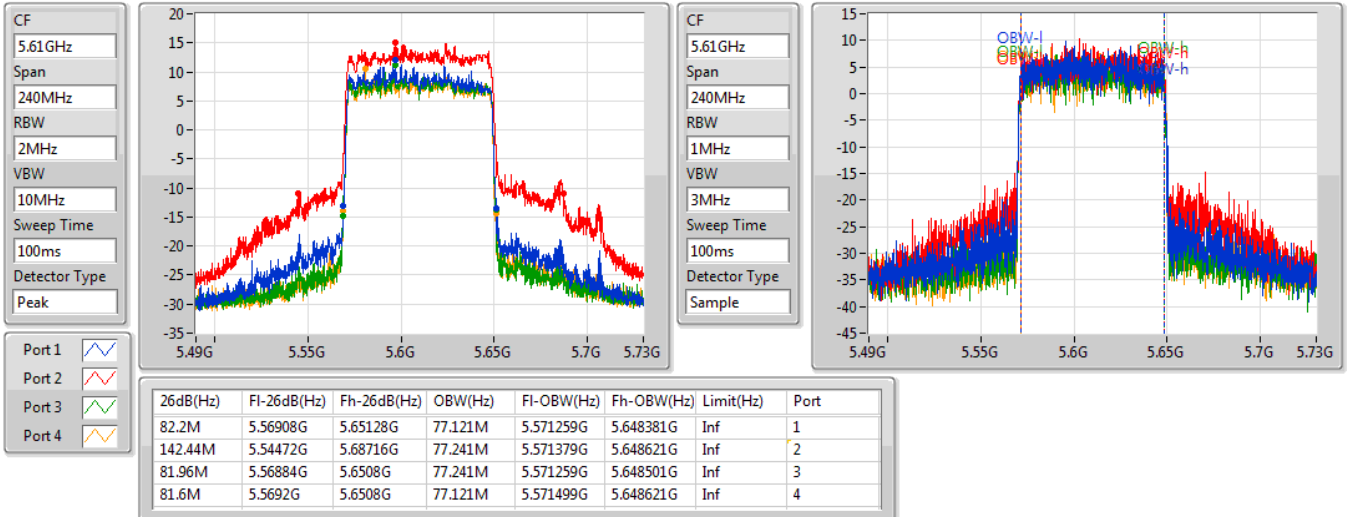

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5530MHz

28/10/2019

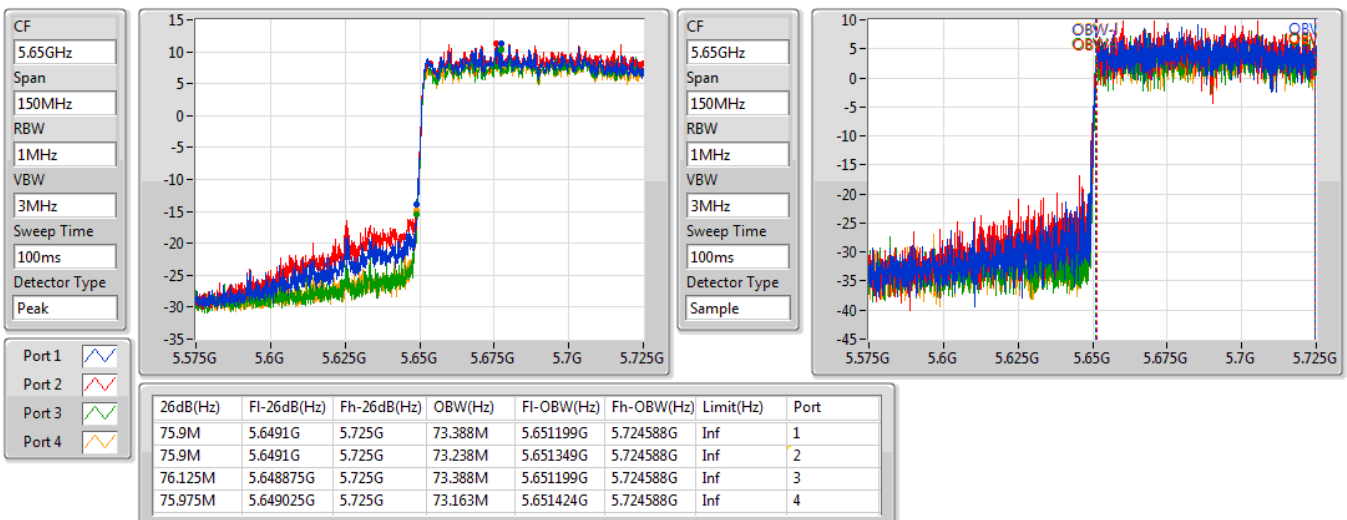


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5610MHz

28/10/2019

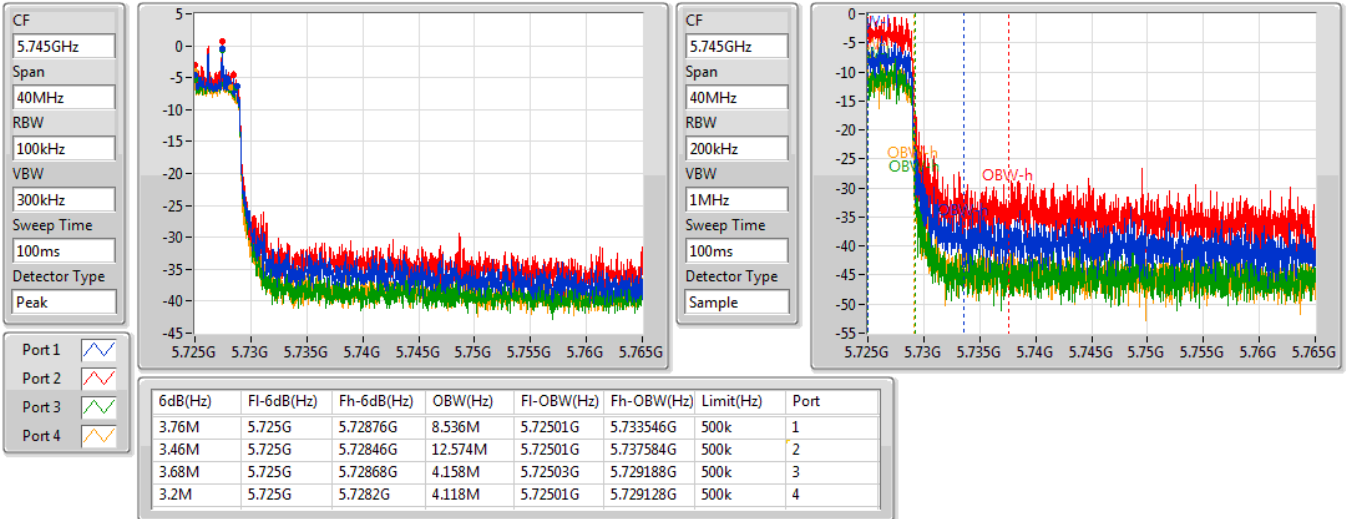

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

28/10/2019

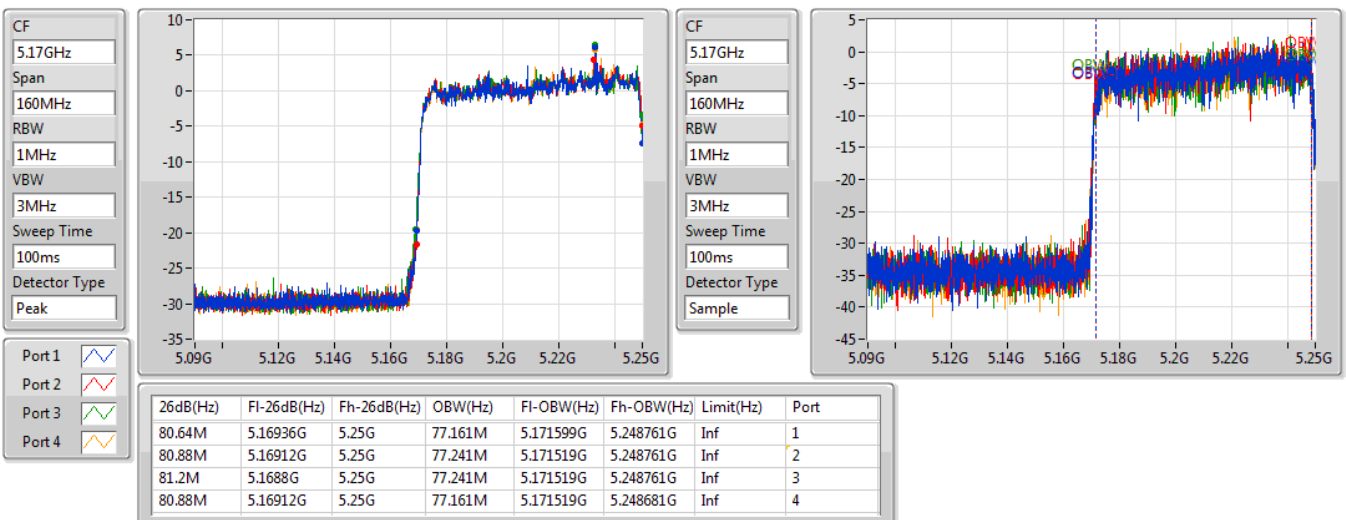


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

28/10/2019

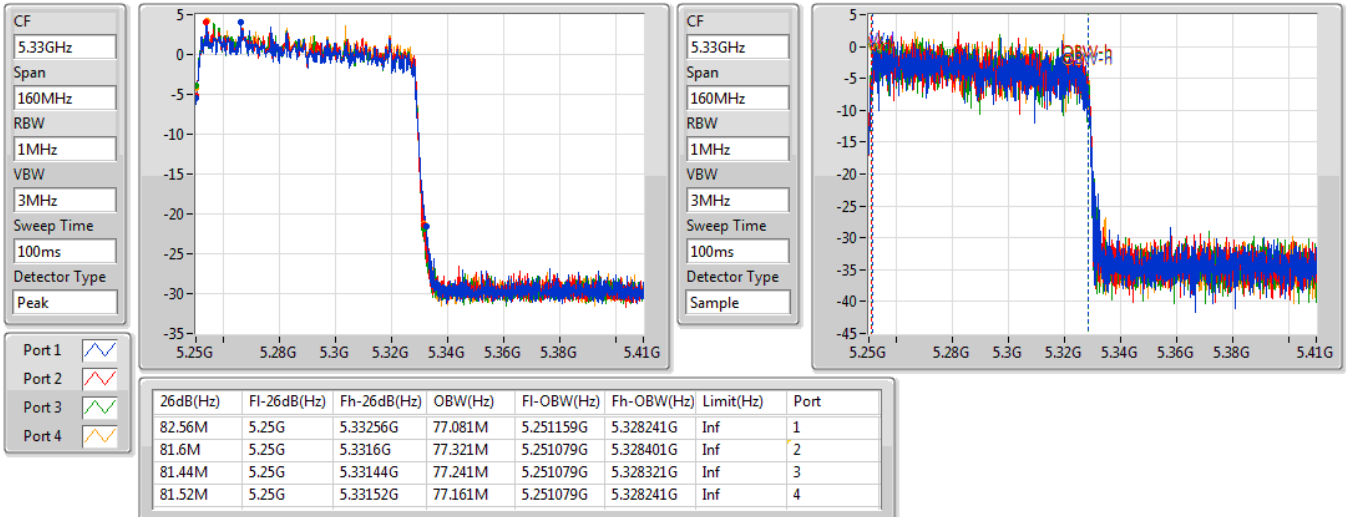

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

28/10/2019

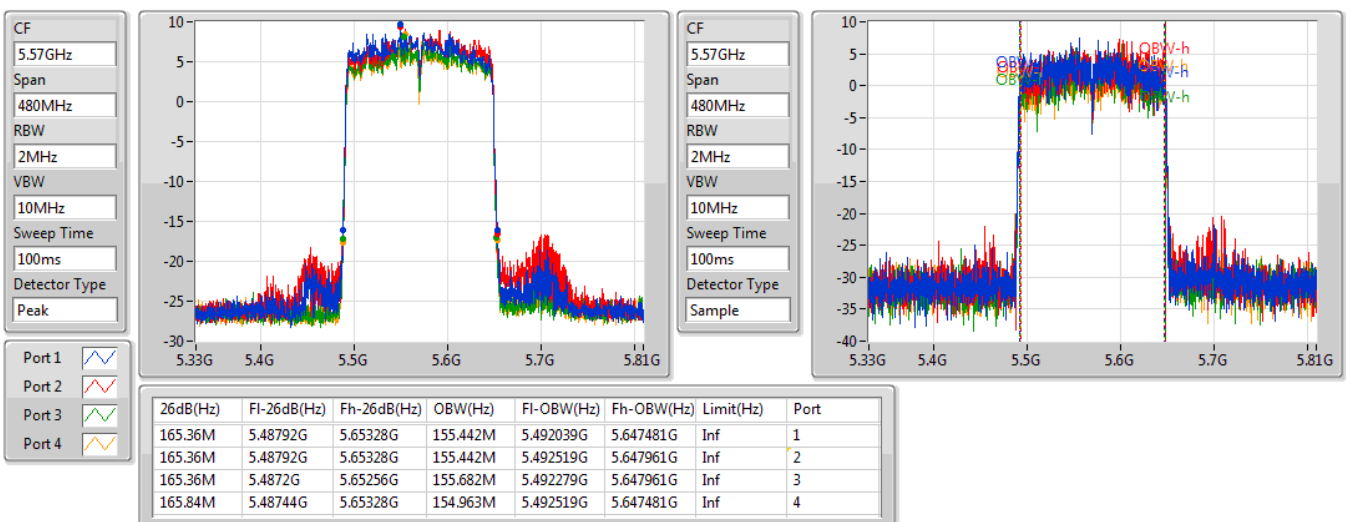


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

28/10/2019


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
5570MHz

28/10/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	83.12M	75.962M	76M0D1D	80.72M	75.722M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	81.28M	77.321M	77M3D1D	80.56M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	21.84M	17.811M	17M8D1D	21.48M	17.721M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	40.44M	36.282M	36M3D1D	39.78M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.32M	76.042M	76M0D1D	81.48M	75.682M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	83.52M	75.962M	76M0D1D	81.12M	75.722M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.81M	18.981M	19M0D1D	21.36M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.2M	37.661M	37M7D1D	39.9M	37.481M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.32M	77.241M	77M2D1D	81.96M	77.001M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	81.68M	77.241M	77M2D1D	81.52M	77.081M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	21.96M	17.811M	17M8D1D	15.75M	13.868M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	40.26M	36.342M	36M3D1D	34.86M	33.023M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.32M	76.042M	76M0D1D	75.75M	72.489M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	166.08M	154.723M	155MD1D	164.64M	154.243M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.84M	19.04M	19M0D1D	15.675M	14.483M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	40.2M	37.661M	37M7D1D	34.93M	33.653M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.92M	77.361M	77M4D1D	75.9M	73.238M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	166.32M	156.402M	156MD1D	164.88M	155.682M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	3.8M	4.458M	4M46D1D	3.74M	4.298M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	3.12M	4.418M	4M42D1D	3.08M	3.818M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	3.1M	22.009M	22M0D1D	3.08M	14.973M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	4.54M	4.538M	4M54D1D	4.4M	4.498M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	3.82M	4.118M	4M12D1D	3.76M	4.038M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.76M	18.491M	18M5D1D	3.48M	7.016M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% 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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.69M	17.751M	21.72M	17.781M	21.51M	17.751M	21.66M	17.781M
5300MHz	Pass	Inf	21.84M	17.811M	21.51M	17.751M	21.63M	17.751M	21.78M	17.721M
5320MHz	Pass	Inf	21.78M	17.781M	21.48M	17.781M	21.48M	17.811M	21.63M	17.751M
5500MHz	Pass	Inf	21.93M	17.751M	21.48M	17.751M	21.54M	17.781M	21.69M	17.781M
5580MHz	Pass	Inf	21.75M	17.811M	21.63M	17.721M	21.48M	17.751M	21.69M	17.781M
5700MHz	Pass	Inf	21.96M	17.781M	21.6M	17.781M	21.51M	17.781M	21.66M	17.781M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.825M	13.868M	15.75M	13.928M	15.75M	13.958M	15.765M	13.898M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.458M	3.76M	4.298M	3.74M	4.318M	3.8M	4.298M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.44M	36.162M	39.9M	36.222M	40.26M	36.282M	39.78M	36.222M
5310MHz	Pass	Inf	40.44M	36.222M	39.84M	36.282M	40.08M	36.282M	39.78M	36.282M
5510MHz	Pass	Inf	40.14M	36.222M	39.54M	36.282M	40.2M	36.342M	39.66M	36.222M
5550MHz	Pass	Inf	40.26M	36.222M	39.84M	36.222M	40.02M	36.282M	39.84M	36.282M
5670MHz	Pass	Inf	40.26M	36.282M	39.78M	36.222M	40.02M	36.282M	39.66M	36.222M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.385M	33.058M	34.86M	33.023M	35M	33.093M	34.93M	33.058M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	4.418M	3.08M	3.818M	3.1M	4.058M	3.12M	3.898M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.32M	75.682M	81.48M	76.042M	81.72M	75.922M	81.84M	75.802M
5530MHz	Pass	Inf	82.32M	75.802M	81.96M	75.922M	81.6M	76.042M	82.2M	75.802M
5610MHz	Pass	Inf	82.32M	75.922M	81.84M	75.802M	81.6M	75.802M	81.96M	75.802M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	72.489M	75.75M	72.564M	75.9M	72.489M	76.05M	72.564M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	21.609M	3.08M	14.973M	3.1M	22.009M	3.1M	20.35M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.84M	75.722M	82.16M	75.882M	83.12M	75.962M	80.72M	75.882M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.76M	75.802M	83.52M	75.962M	81.2M	75.722M	81.12M	75.882M
5570MHz	Pass	Inf	164.88M	154.723M	166.08M	154.723M	164.88M	154.723M	164.64M	154.243M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.72M	18.981M	21.6M	18.981M	21.63M	18.981M	21.78M	18.981M
5300MHz	Pass	Inf	21.63M	18.951M	21.36M	18.981M	21.72M	18.981M	21.81M	18.951M
5320MHz	Pass	Inf	21.57M	18.951M	21.45M	18.951M	21.6M	18.981M	21.66M	18.981M
5500MHz	Pass	Inf	21.69M	18.981M	21.6M	18.951M	21.84M	18.981M	21.63M	19.04M
5580MHz	Pass	Inf	21.81M	19.01M	21.45M	18.981M	21.75M	18.951M	21.69M	18.981M
5700MHz	Pass	Inf	21.66M	18.981M	21.57M	18.981M	21.66M	18.981M	21.69M	18.981M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.87M	14.543M	15.675M	14.483M	15.705M	14.498M	15.78M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.518M	4.46M	4.498M	4.4M	4.538M	4.54M	4.538M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.08M	37.601M	39.9M	37.481M	40.08M	37.661M	40.2M	37.541M
5310MHz	Pass	Inf	40.08M	37.601M	39.9M	37.541M	40.02M	37.601M	40.14M	37.541M
5510MHz	Pass	Inf	40.14M	37.601M	39.84M	37.601M	40.14M	37.541M	40.14M	37.601M
5550MHz	Pass	Inf	40.14M	37.481M	39.9M	37.601M	40.14M	37.661M	40.08M	37.661M
5670MHz	Pass	Inf	39.96M	37.541M	39.78M	37.601M	40.2M	37.661M	40.14M	37.601M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.035M	33.723M	34.93M	33.723M	35.245M	33.758M	35.035M	33.653M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.118M	3.82M	4.038M	3.76M	4.058M	3.78M	4.038M



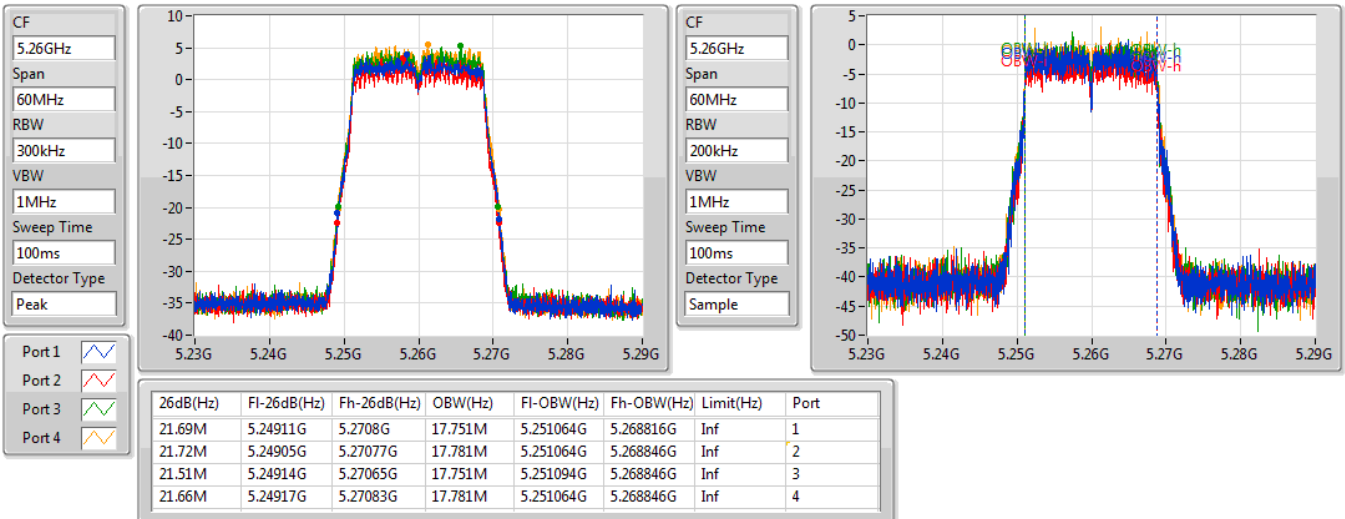
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.32M	77.001M	82.32M	77.121M	82.2M	77.241M	81.96M	77.001M
5530MHz	Pass	Inf	82.2M	77.121M	82.08M	77.121M	82.92M	77.361M	81.96M	77.241M
5610MHz	Pass	Inf	82.32M	77.361M	81.84M	76.882M	82.44M	77.241M	81.96M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.05M	73.238M	75.9M	73.388M	75.9M	73.313M	75.975M	73.313M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	18.491M	3.5M	7.016M	3.72M	17.411M	3.48M	15.632M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.56M	77.321M	80.72M	77.161M	81.28M	77.321M	80.88M	77.321M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.6M	77.081M	81.6M	77.241M	81.68M	77.241M	81.52M	77.161M
5570MHz	Pass	Inf	164.88M	155.682M	164.88M	155.922M	165.36M	156.402M	166.32M	155.682M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

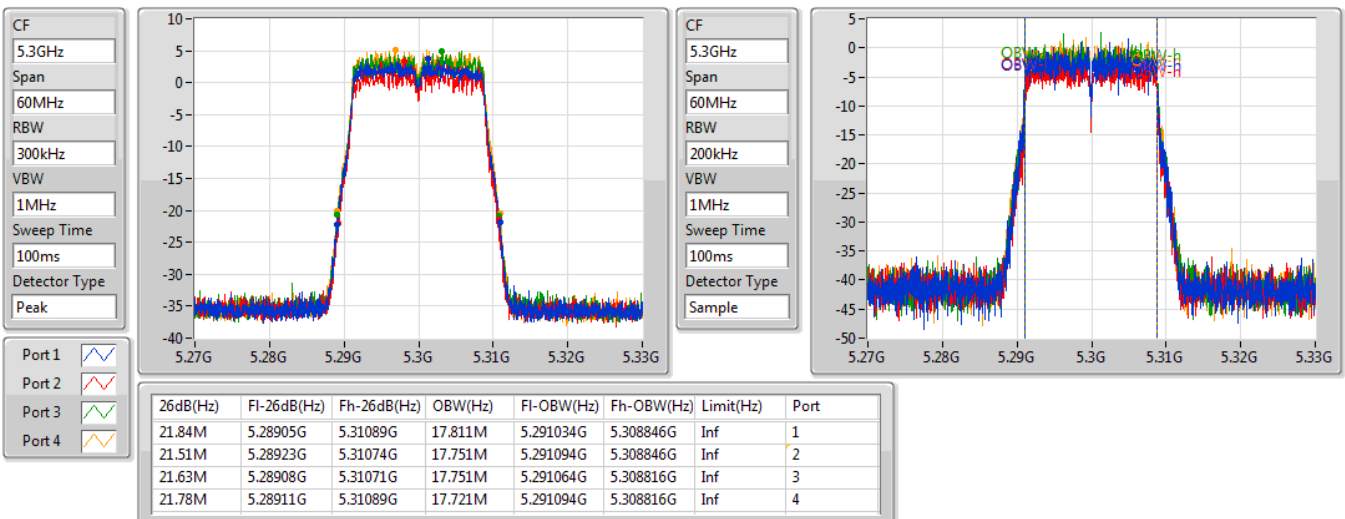
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

01/11/2019

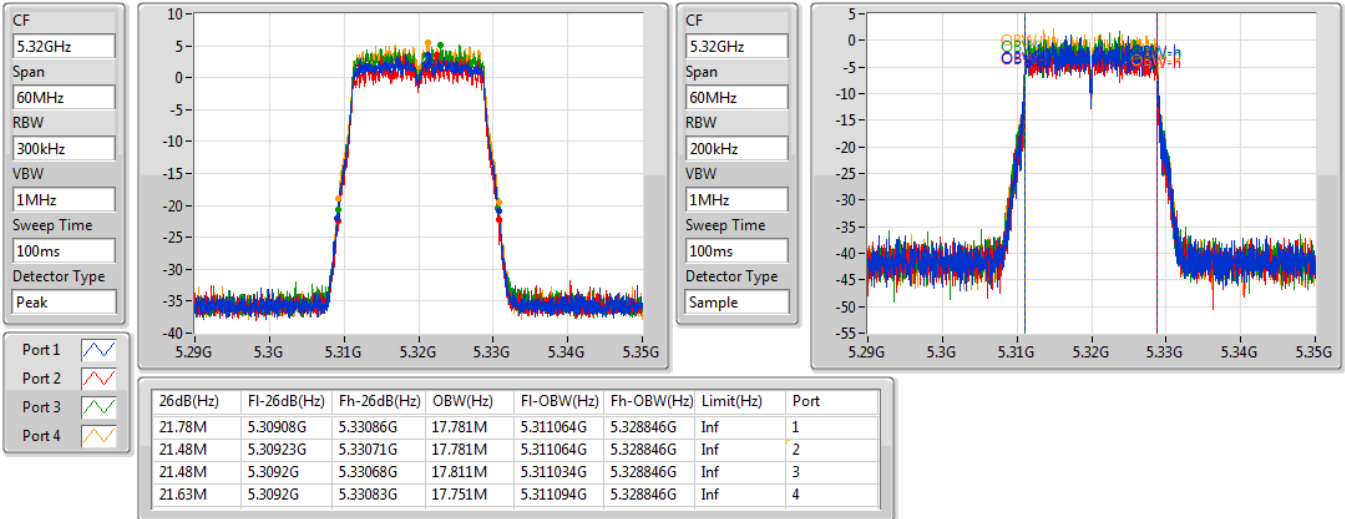

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

01/11/2019

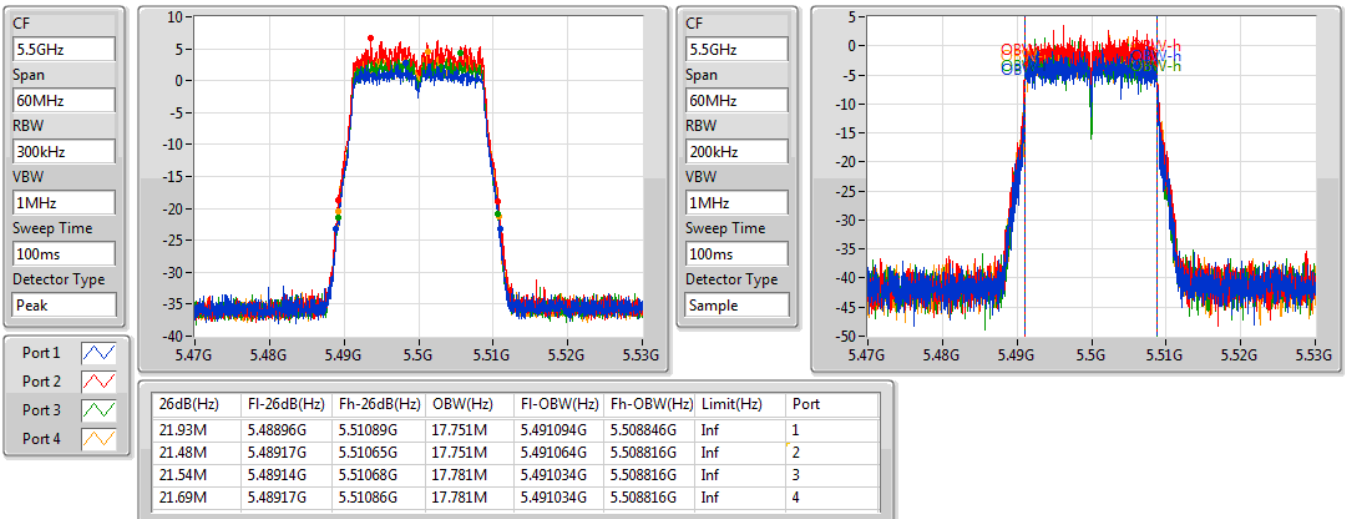


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz

01/11/2019

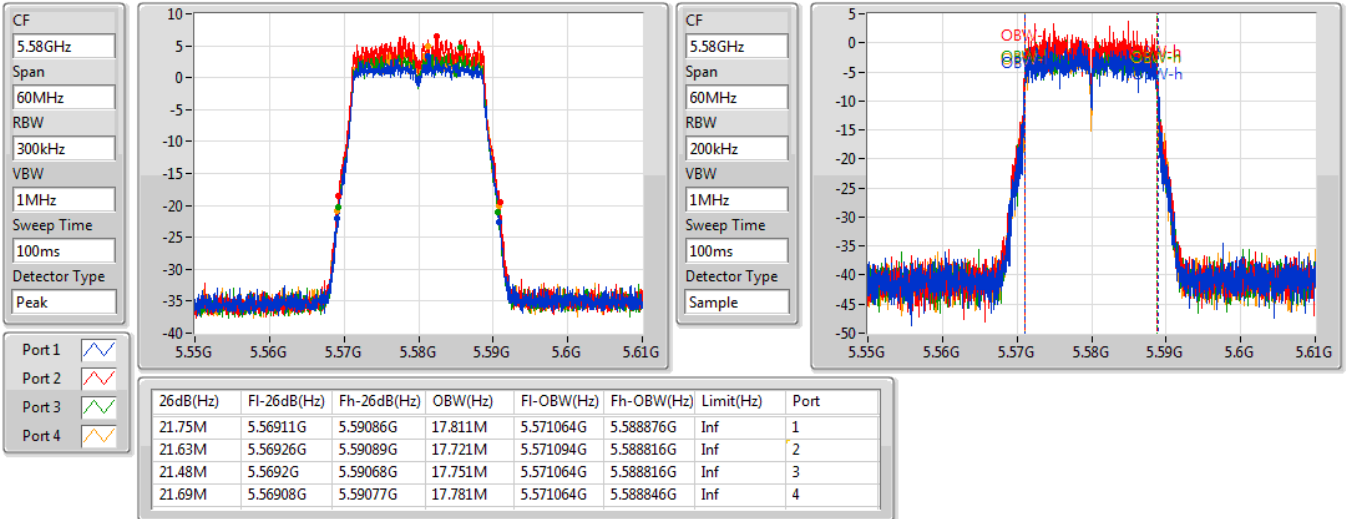

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

01/11/2019

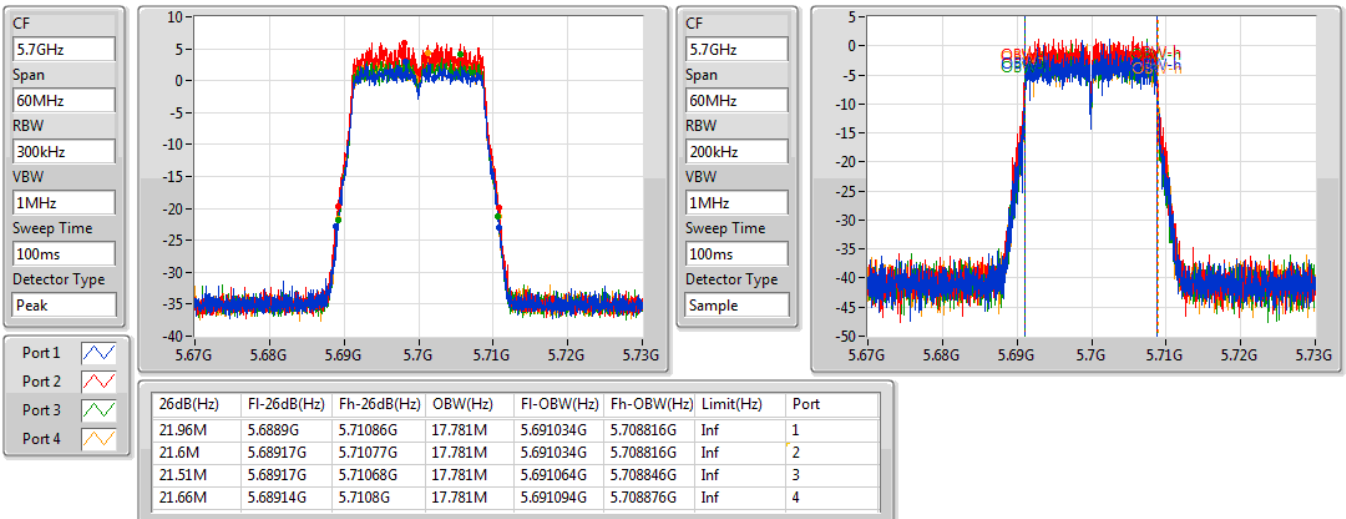


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

01/11/2019

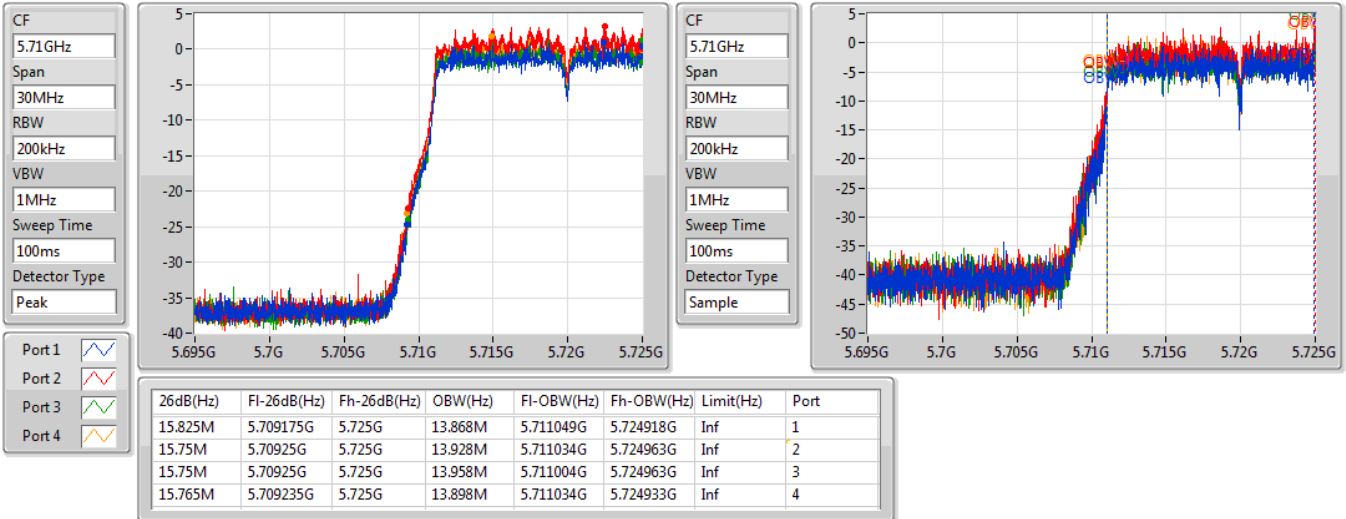

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

01/11/2019

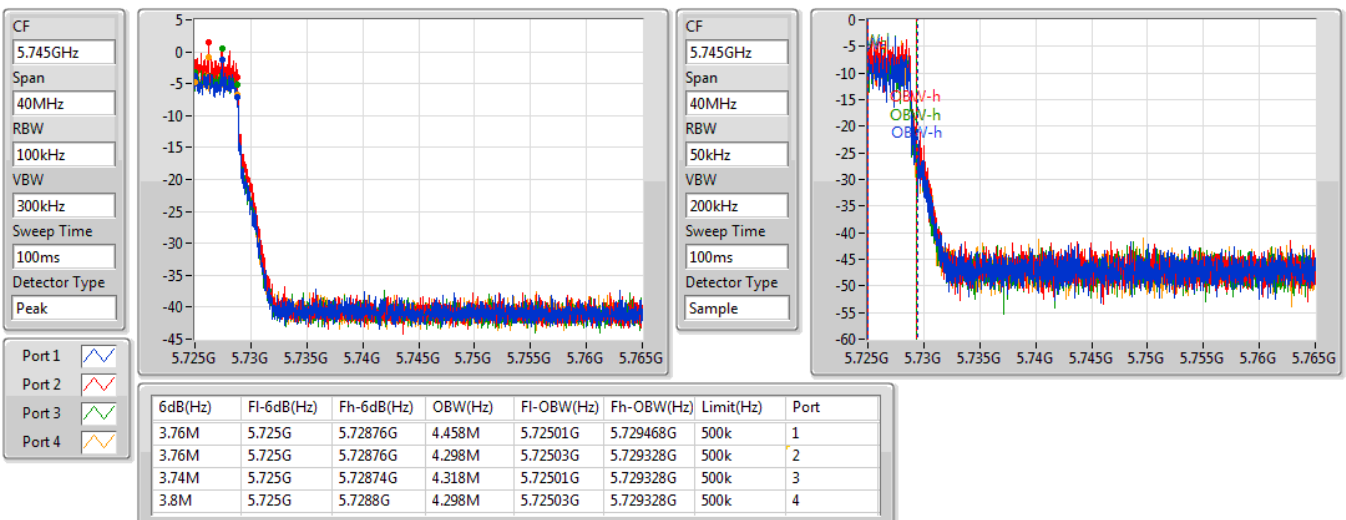


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

01/11/2019

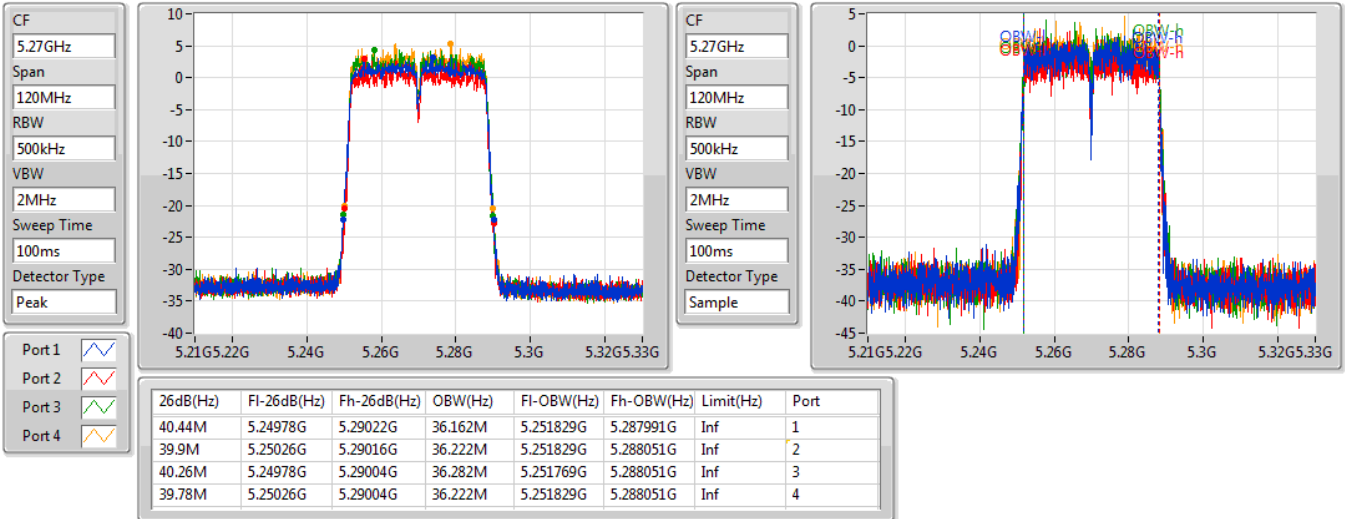

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

01/11/2019

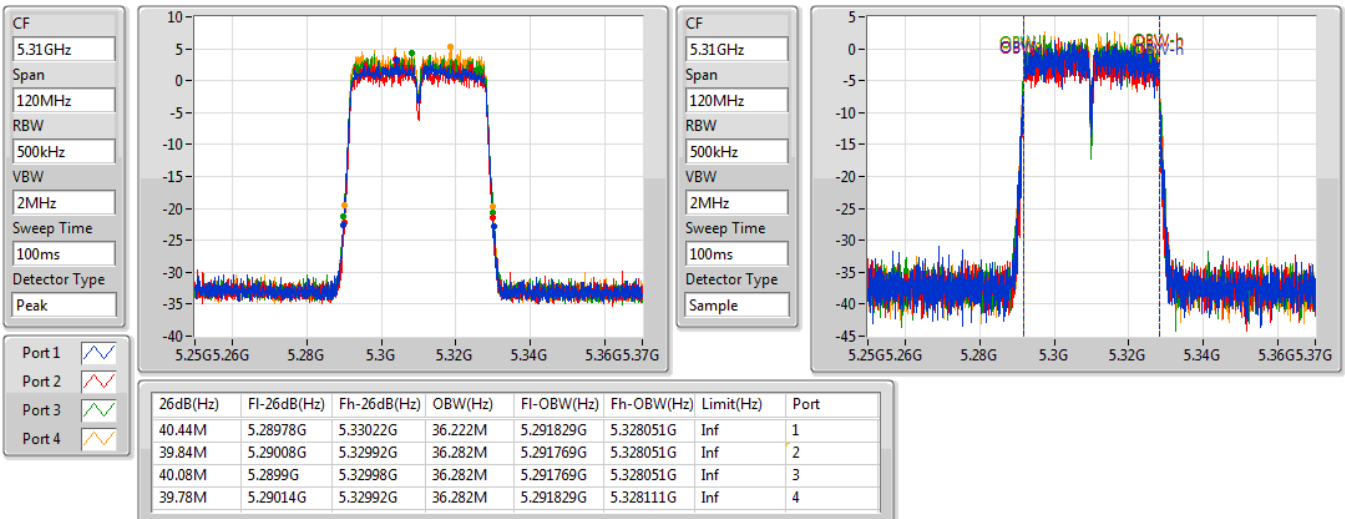


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

01/11/2019

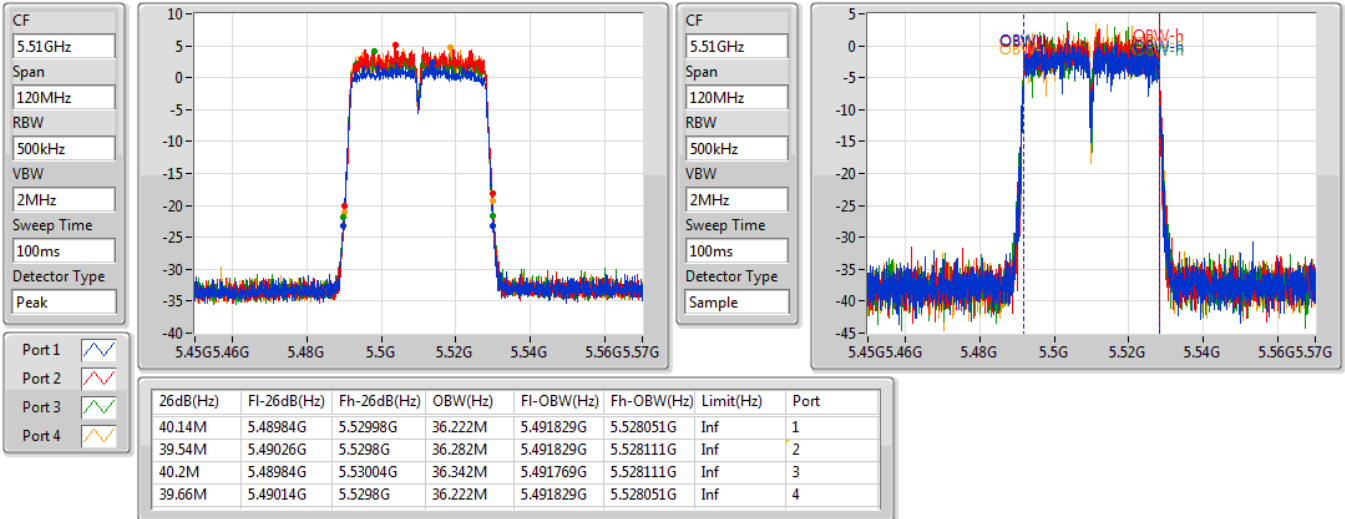

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz

01/11/2019

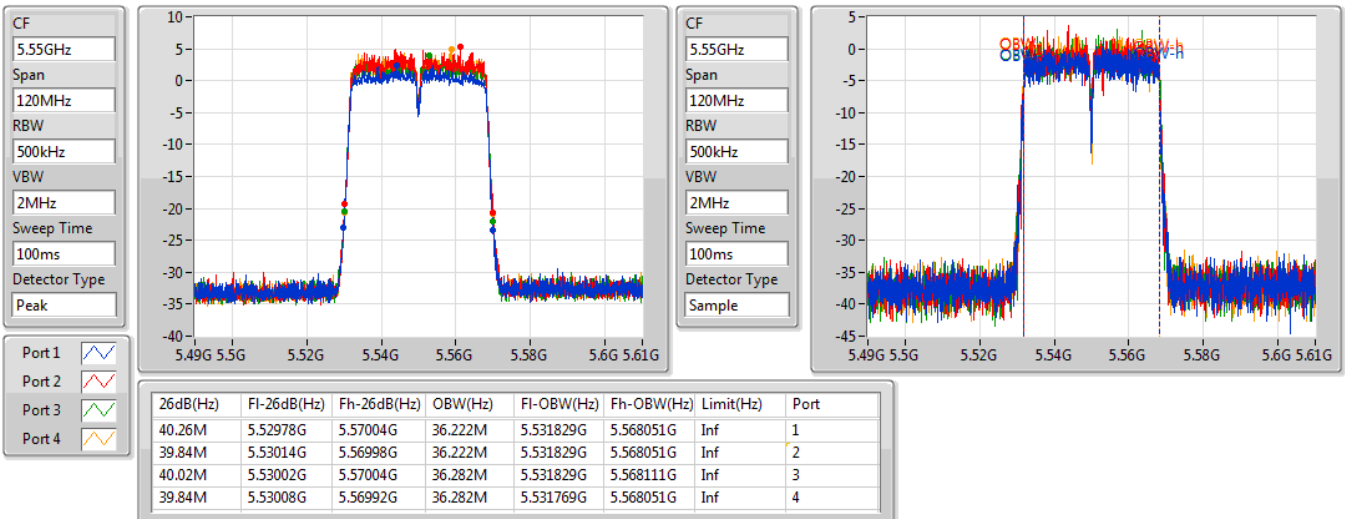


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

01/11/2019

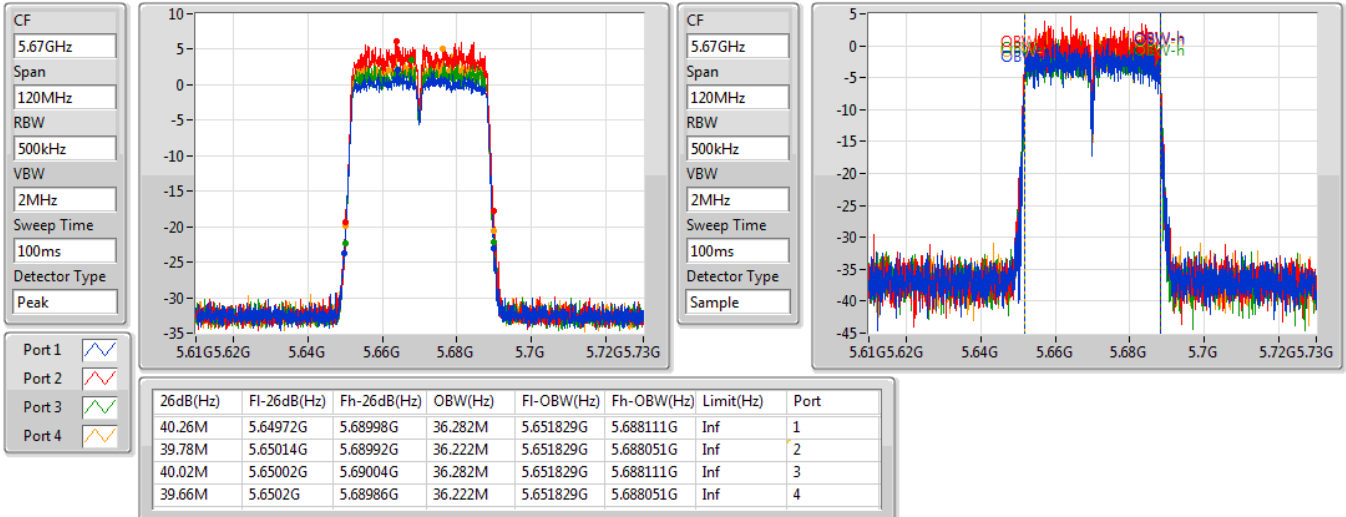

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

01/11/2019

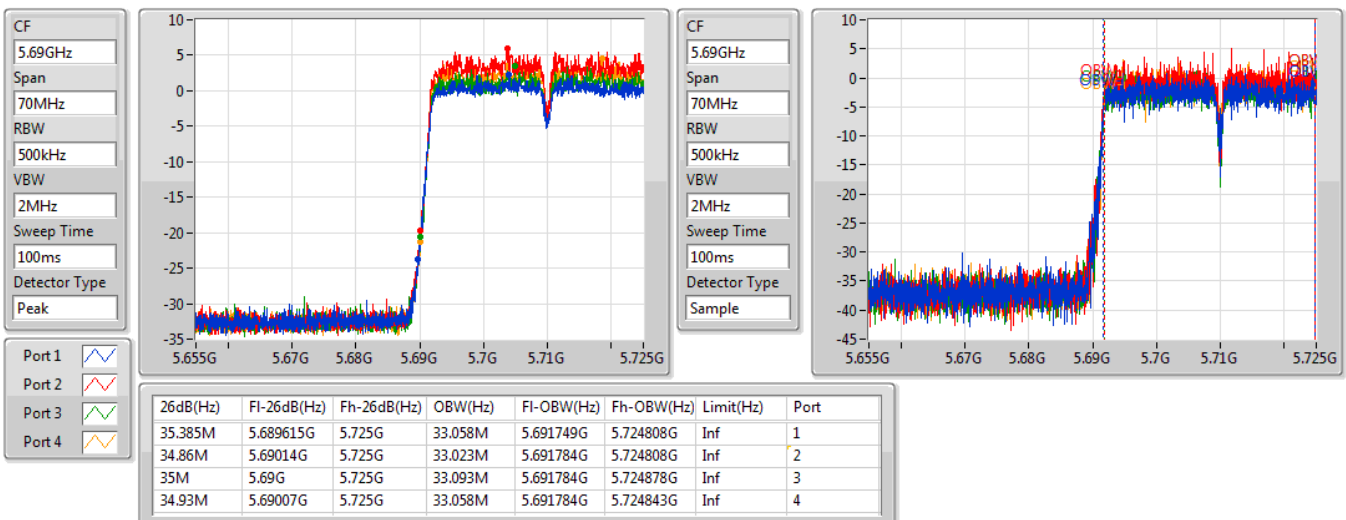


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz

01/11/2019

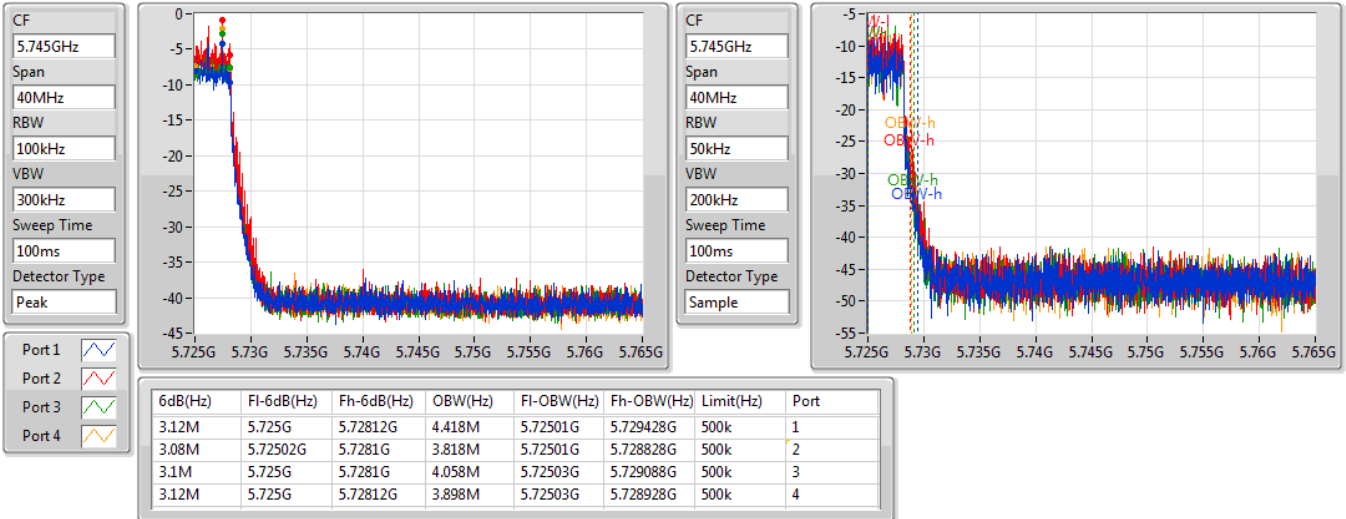

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

01/11/2019

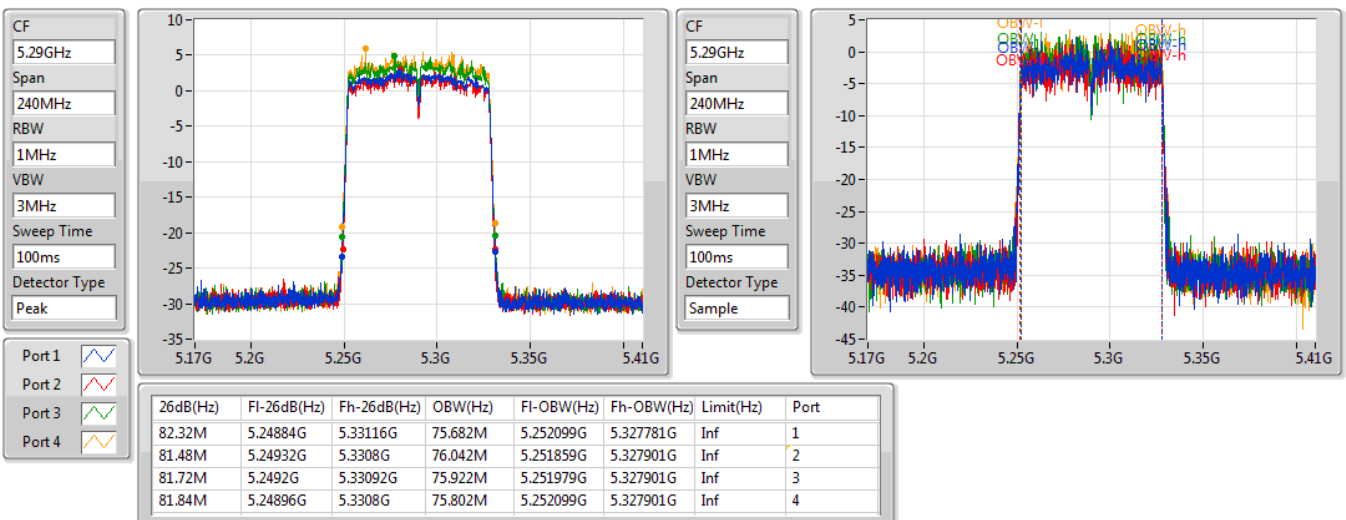


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

01/11/2019

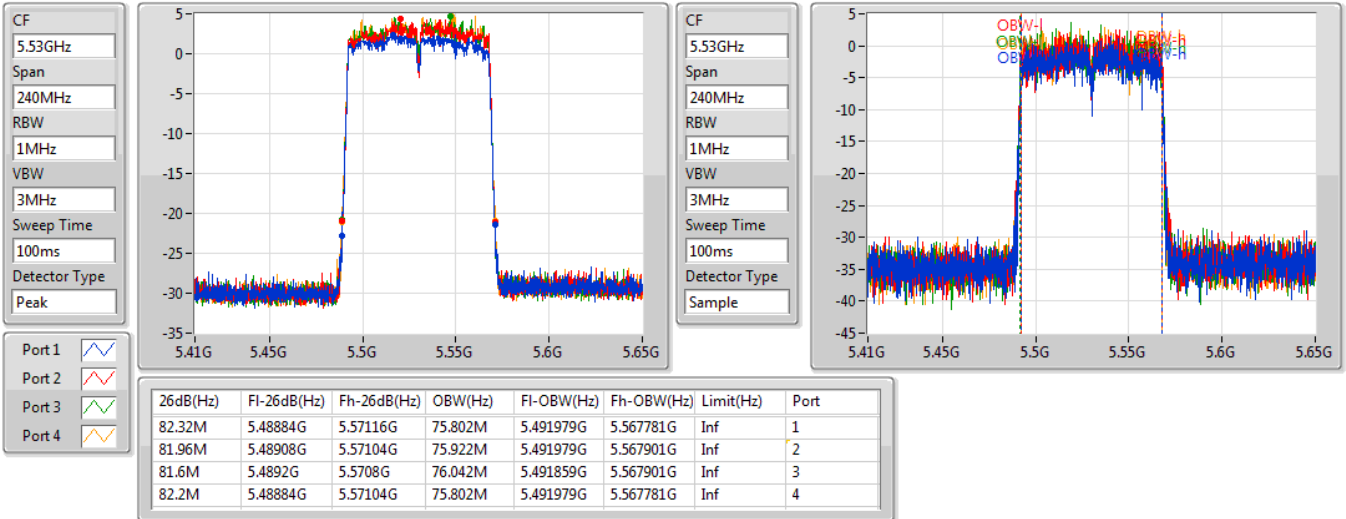

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz

01/11/2019

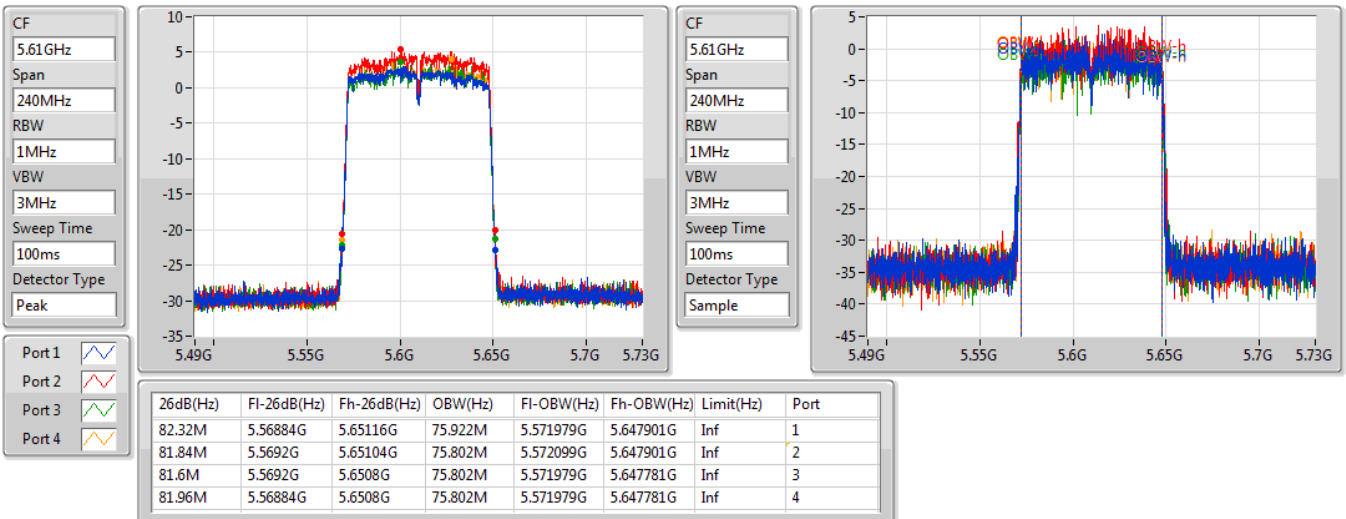


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

01/11/2019

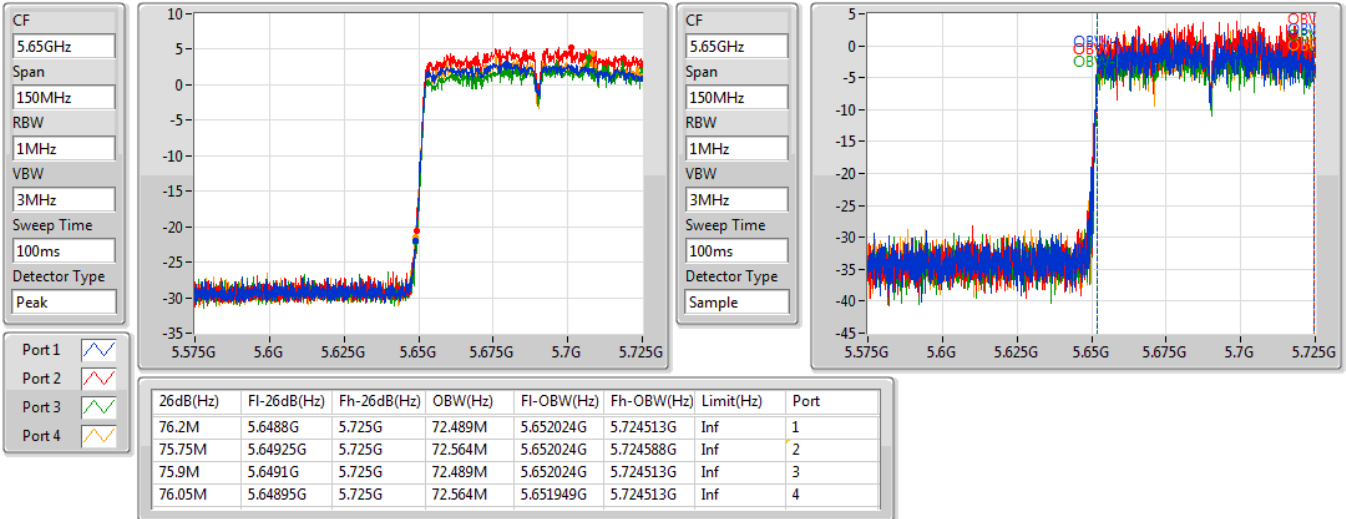

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

01/11/2019

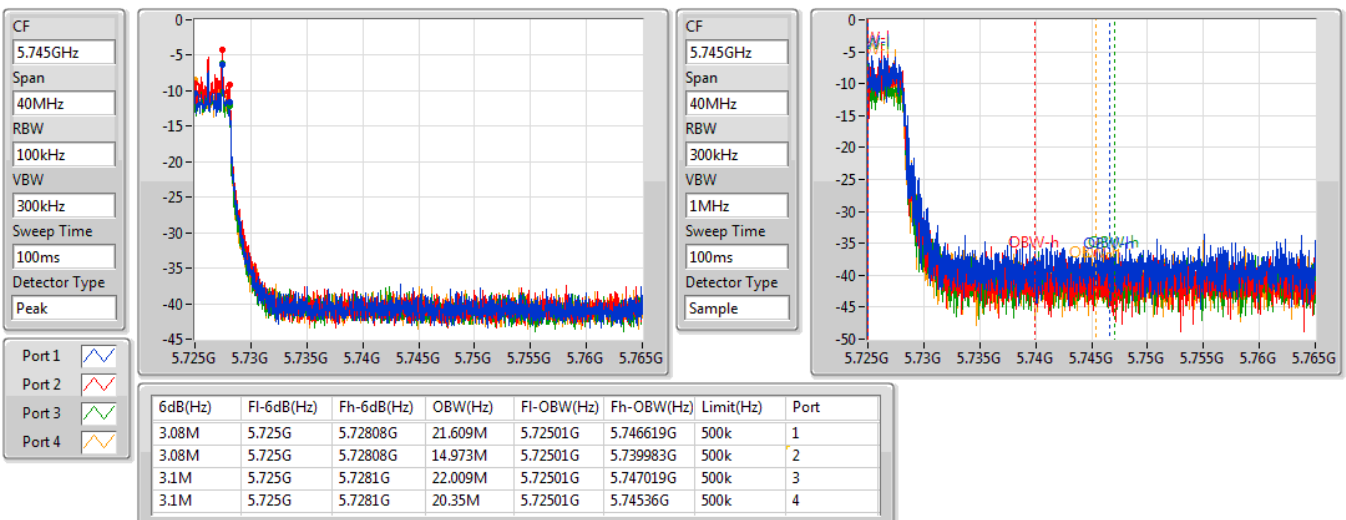


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

01/11/2019

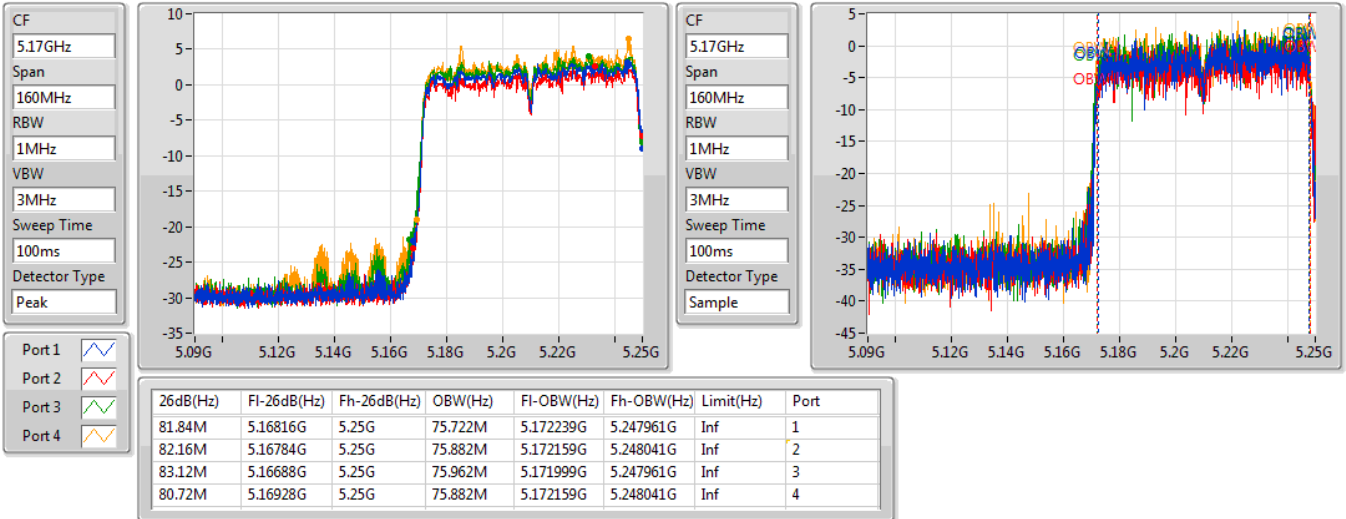

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

01/11/2019

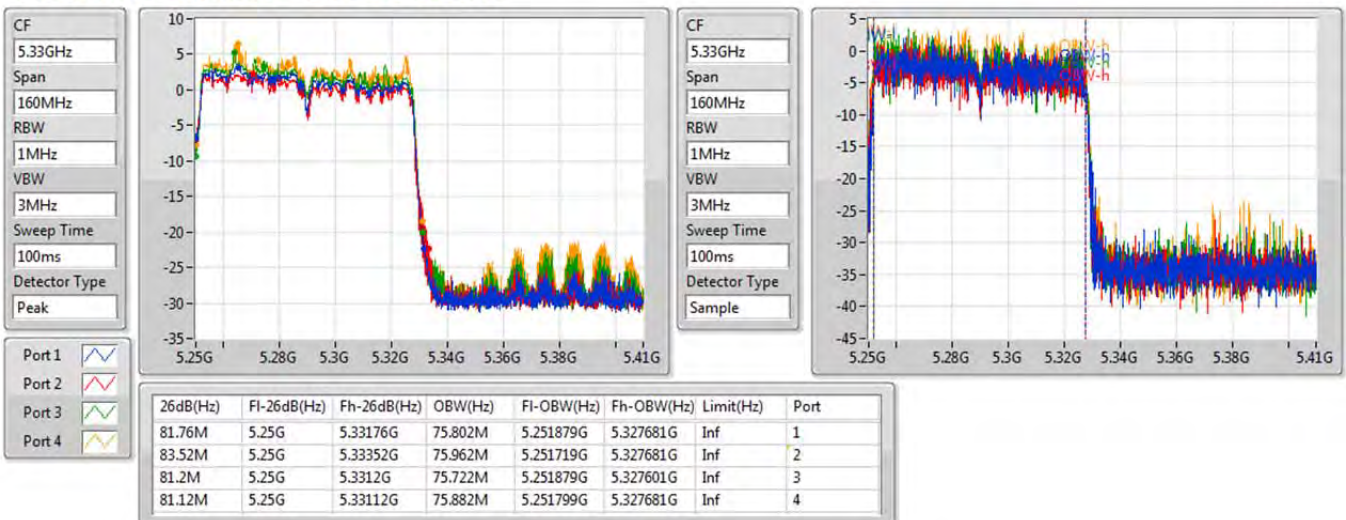


802.11ac VHT160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

01/11/2019

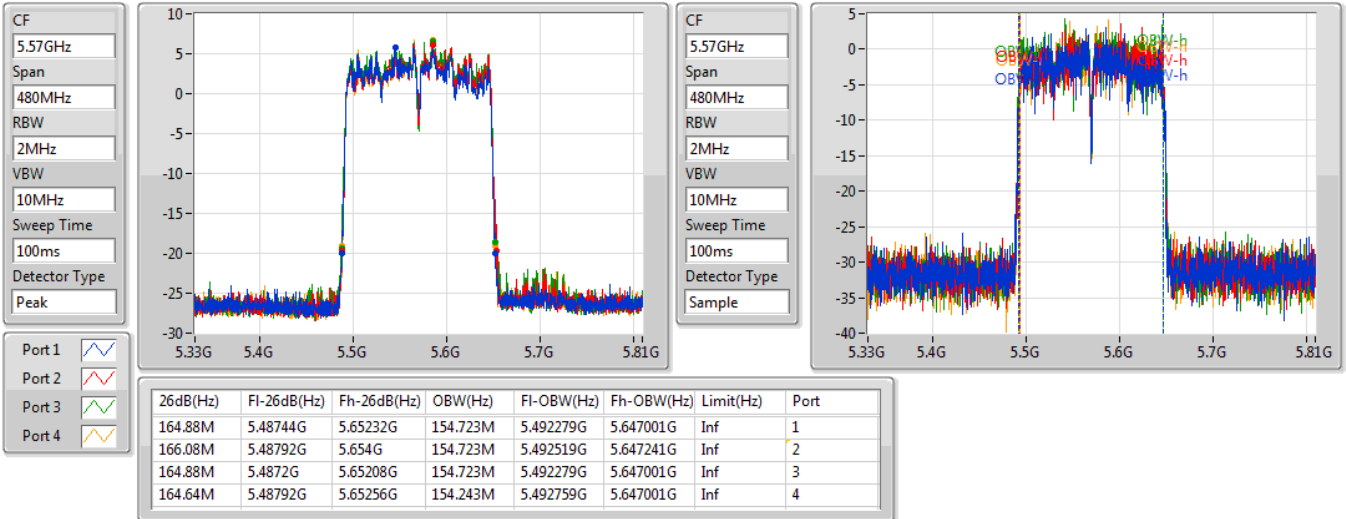

802.11ac VHT160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

01/11/2019

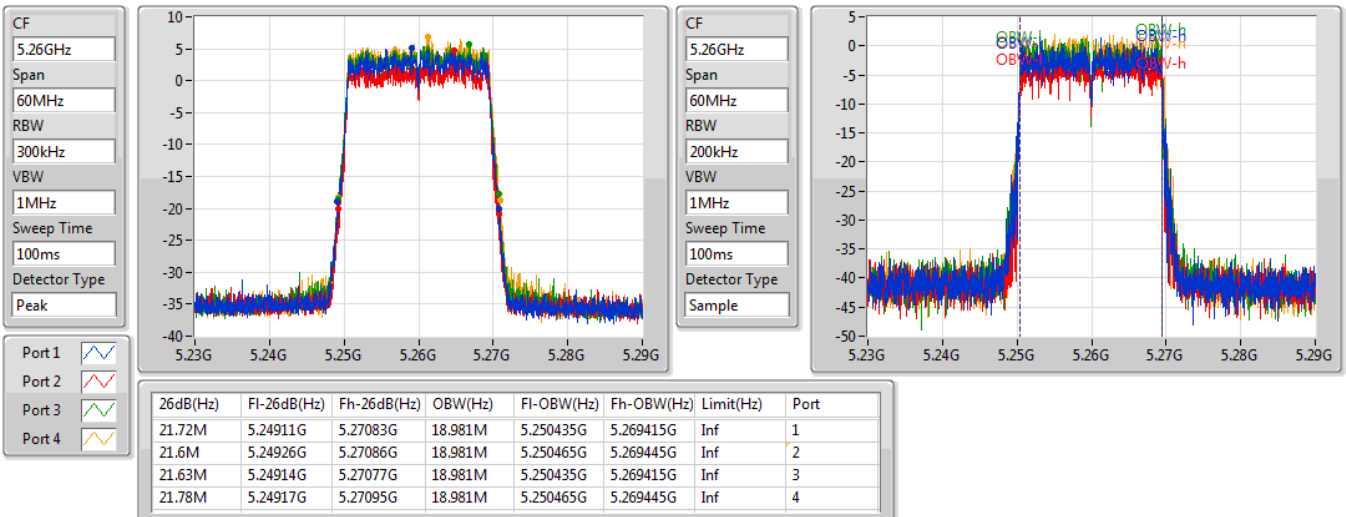


802.11ac VHT160-BF_Nss1,(MCS0)_4TX
EBW
5570MHz

01/11/2019

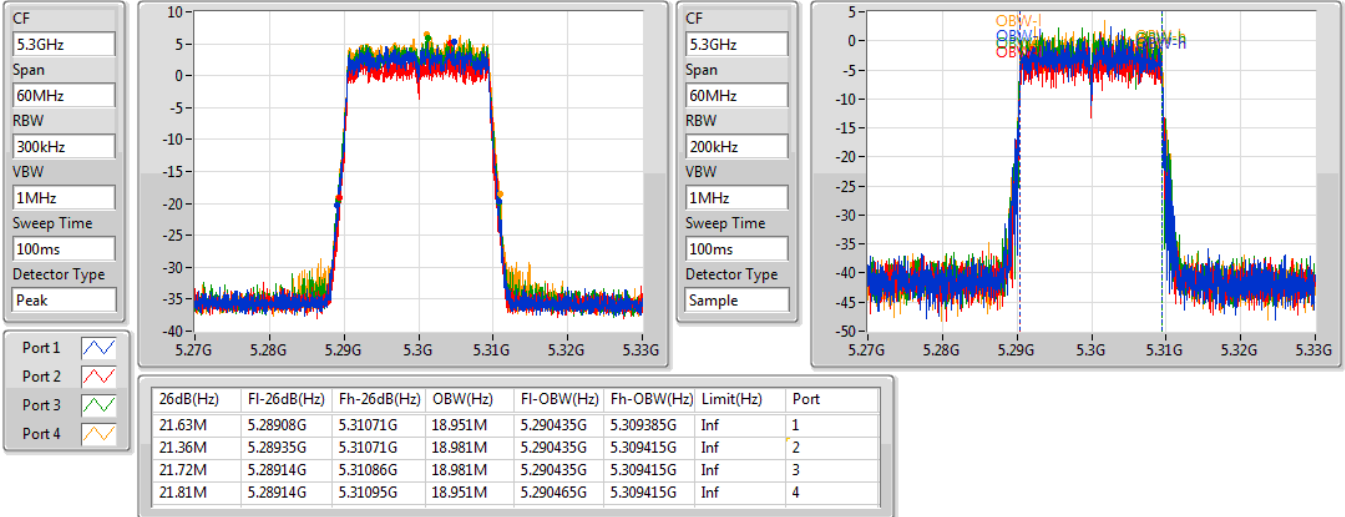

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

01/11/2019

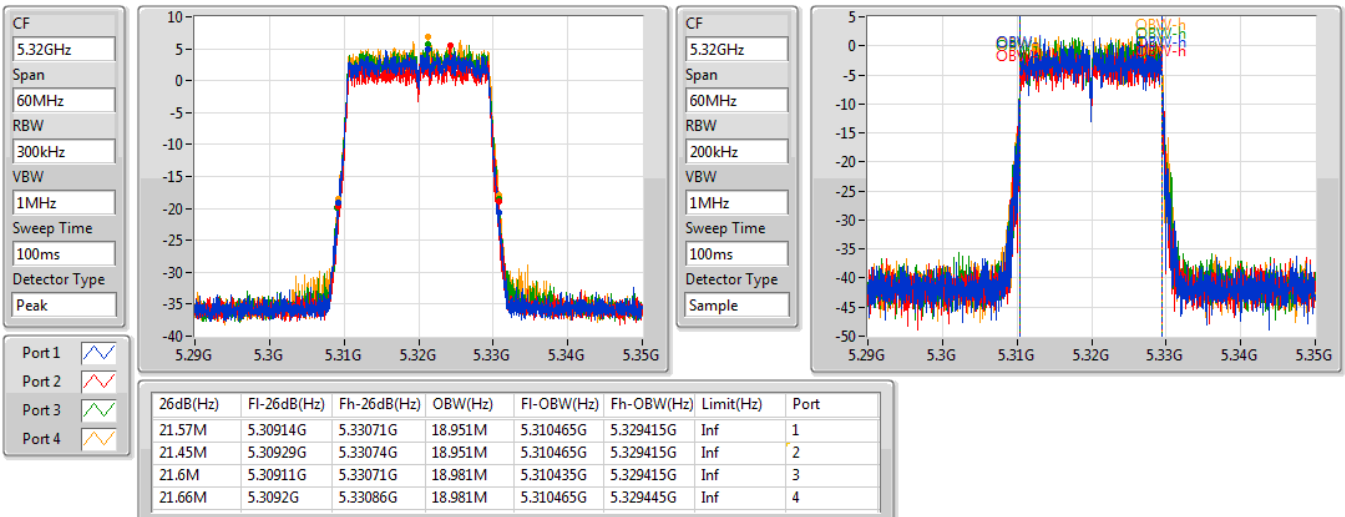


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

01/11/2019

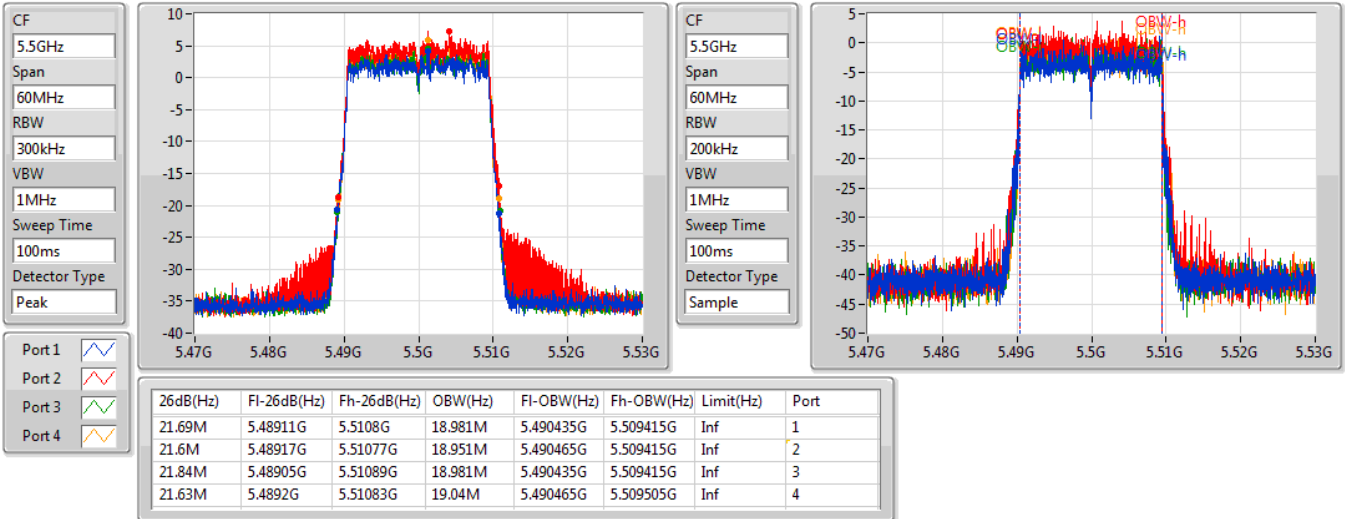

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz

01/11/2019

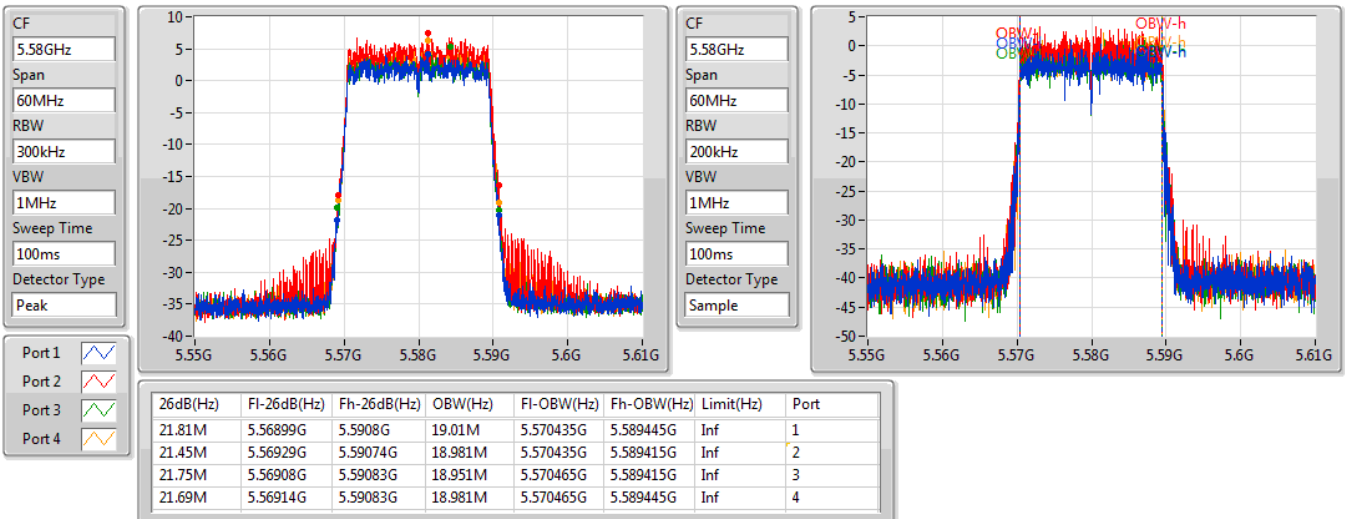


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

01/11/2019

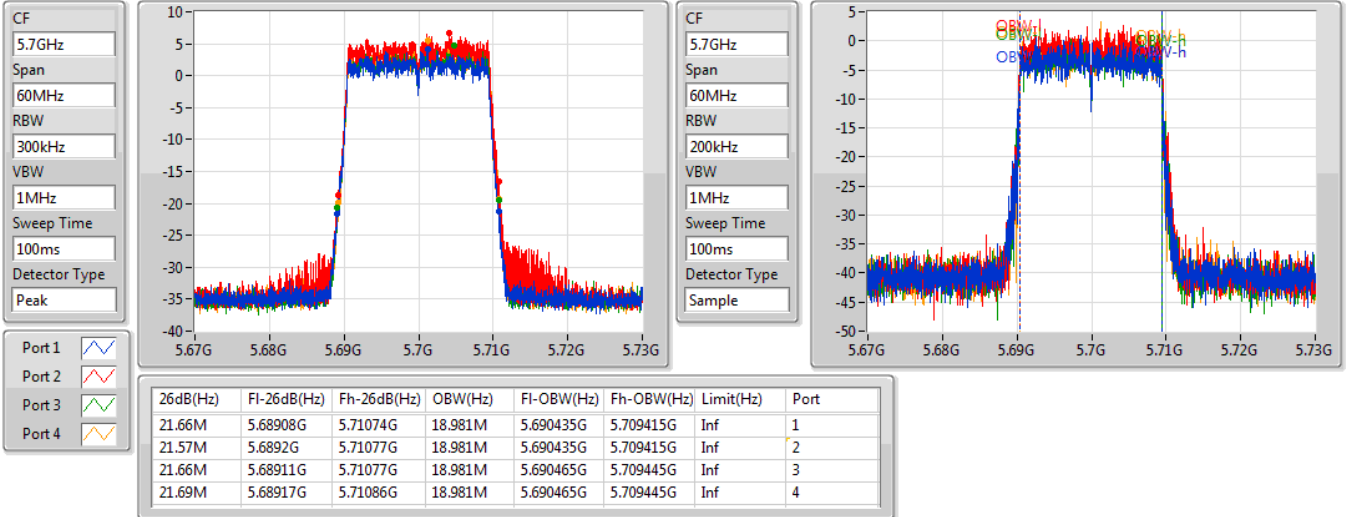

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

01/11/2019

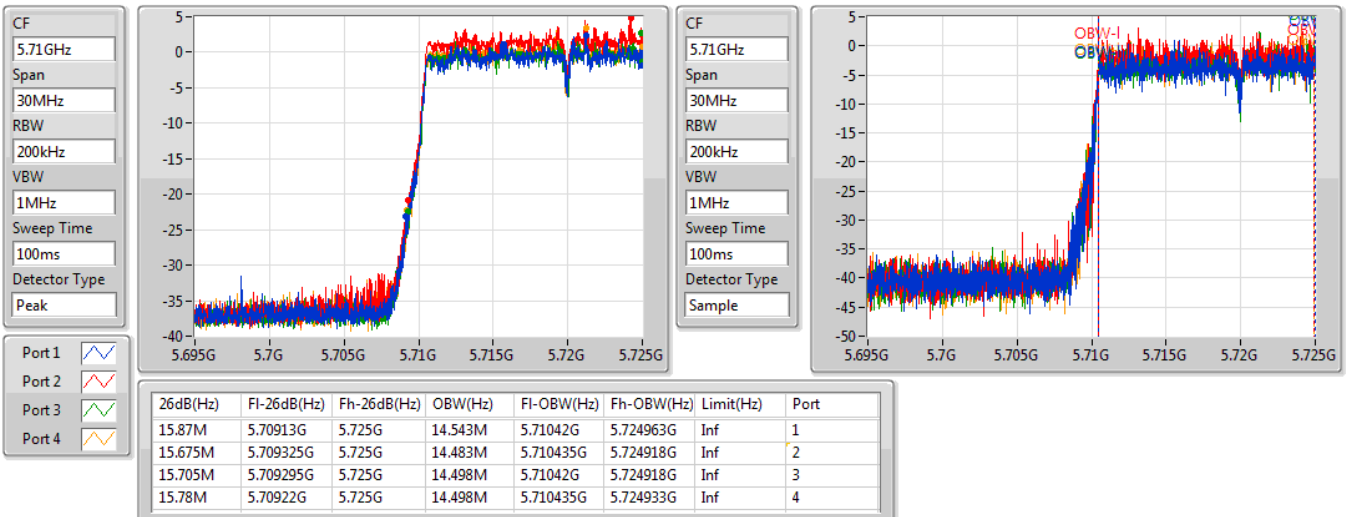


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

01/11/2019

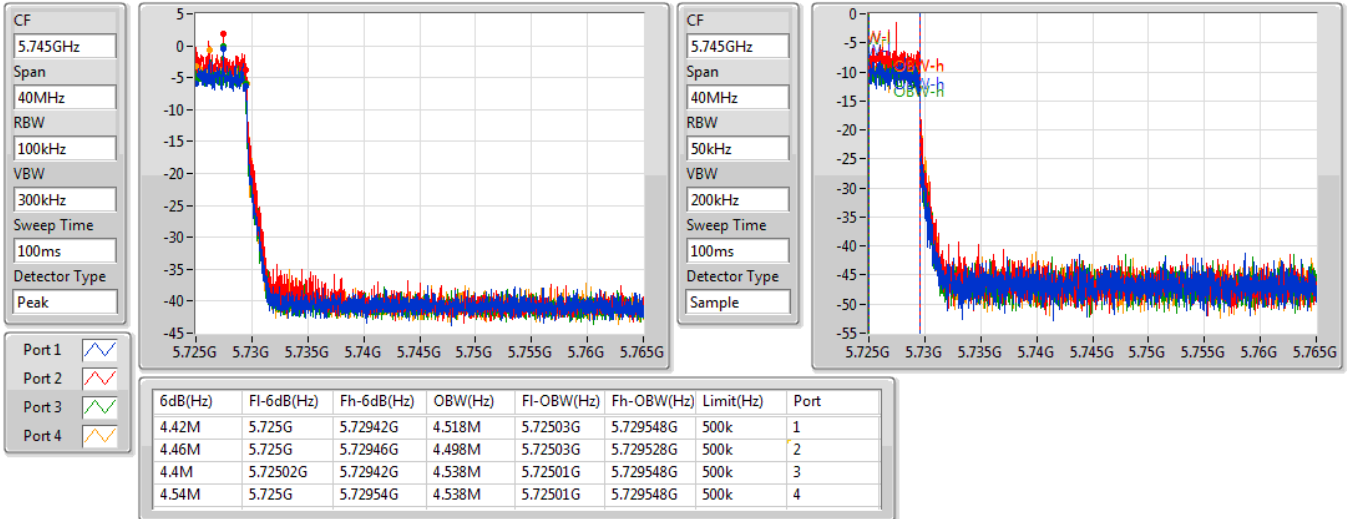

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

01/11/2019

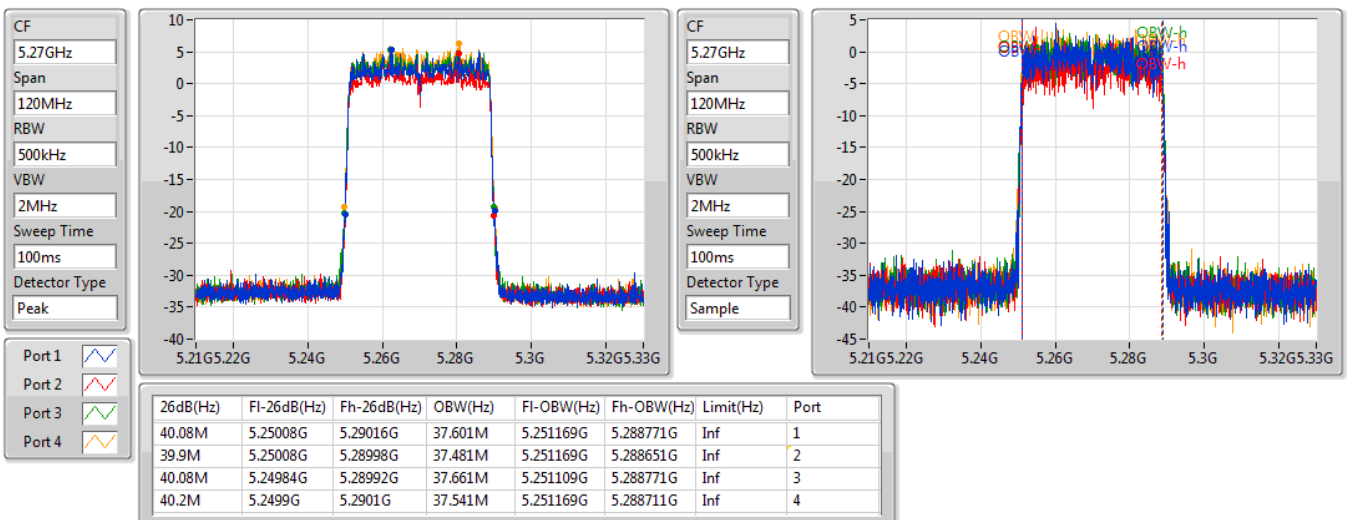


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

01/11/2019

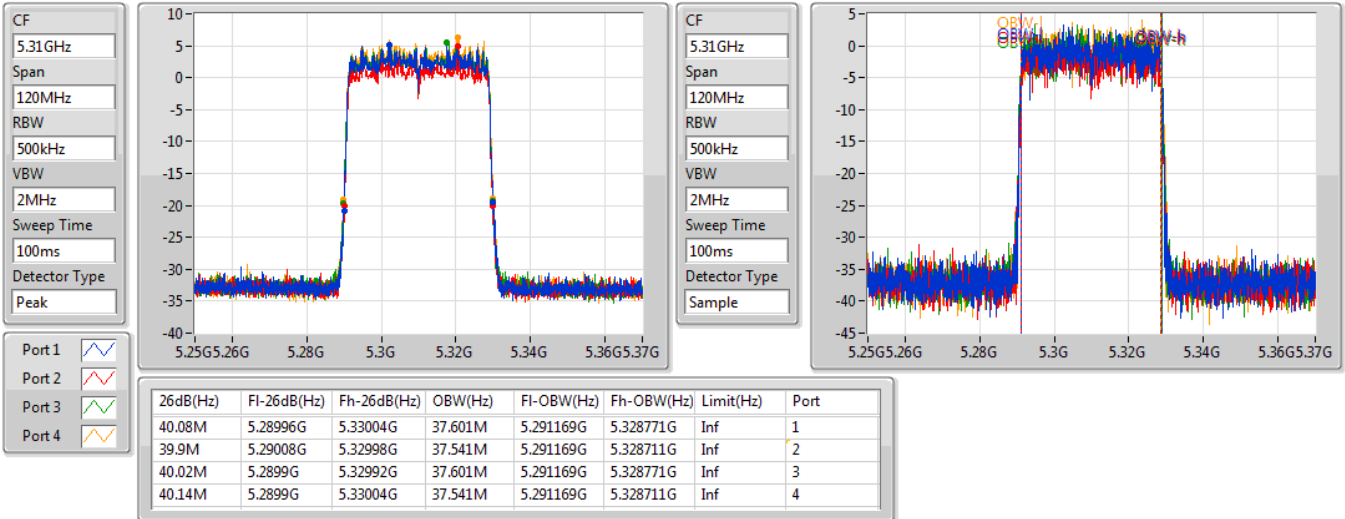

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

01/11/2019

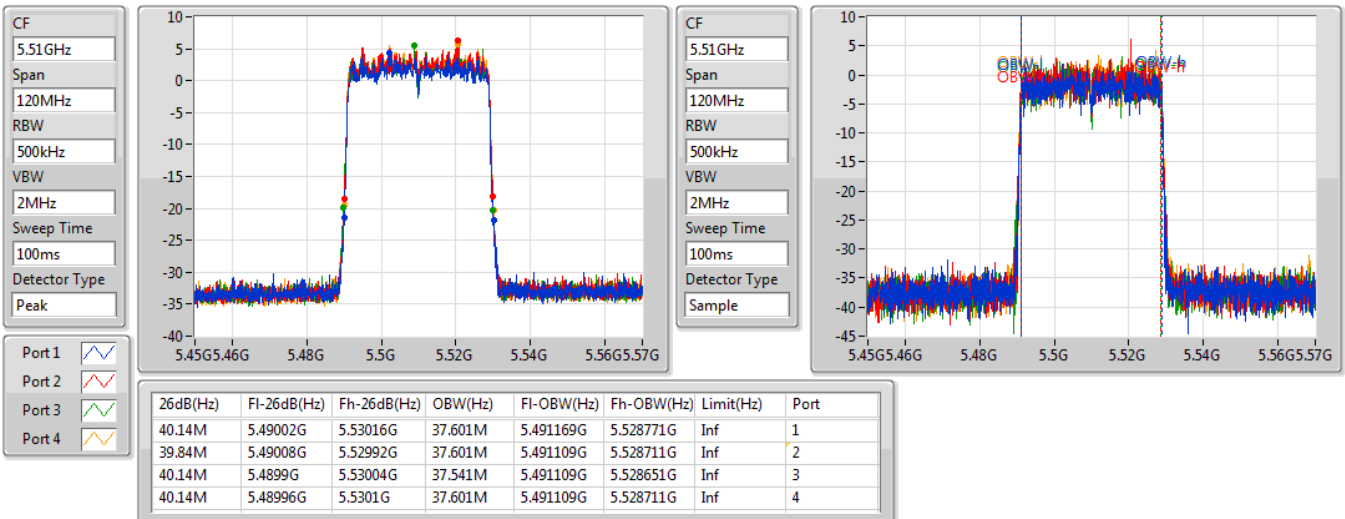


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz

01/11/2019

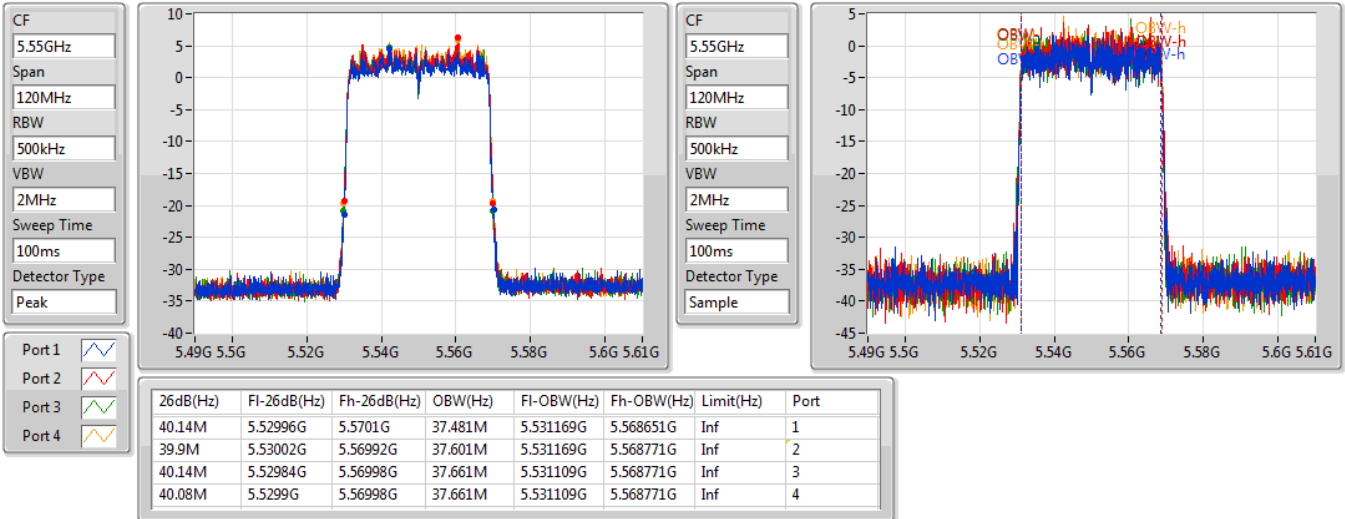

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

01/11/2019

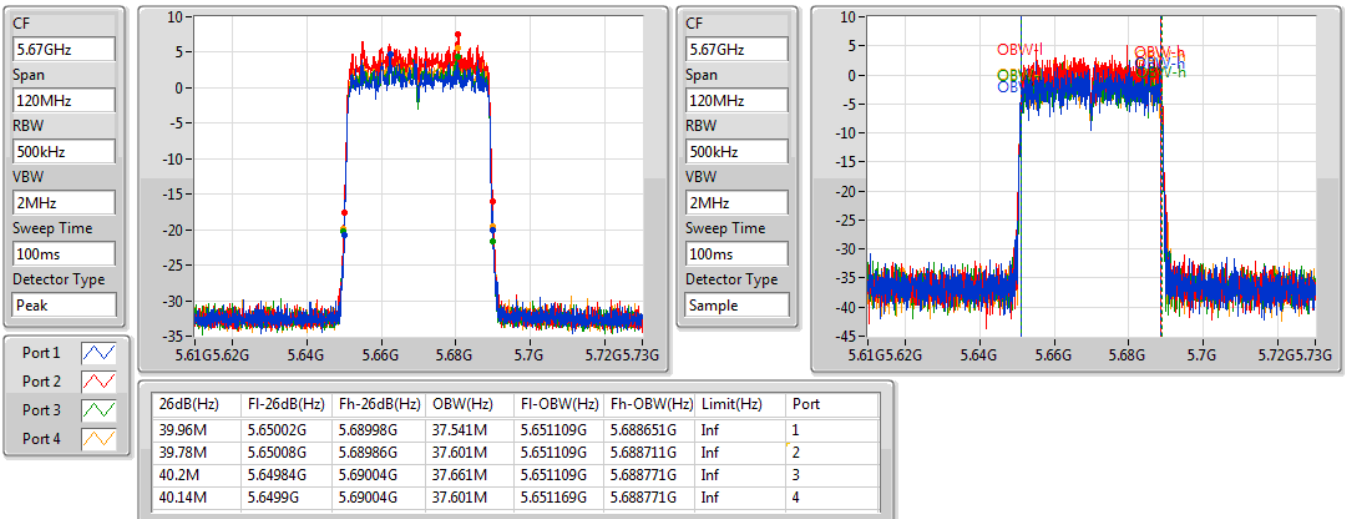


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

01/11/2019

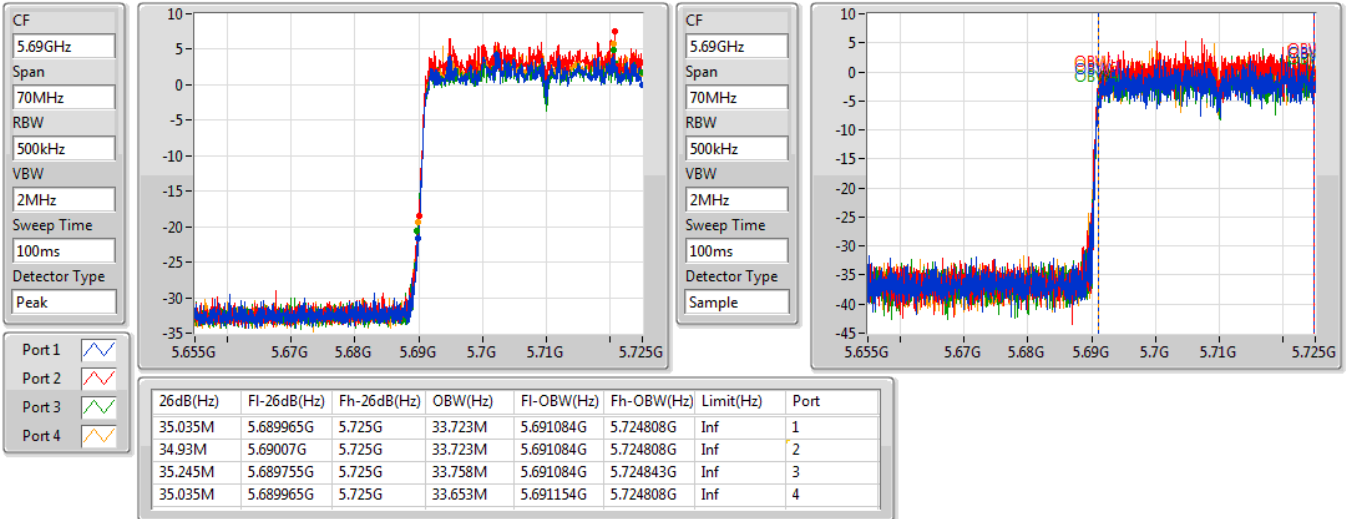

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz

01/11/2019

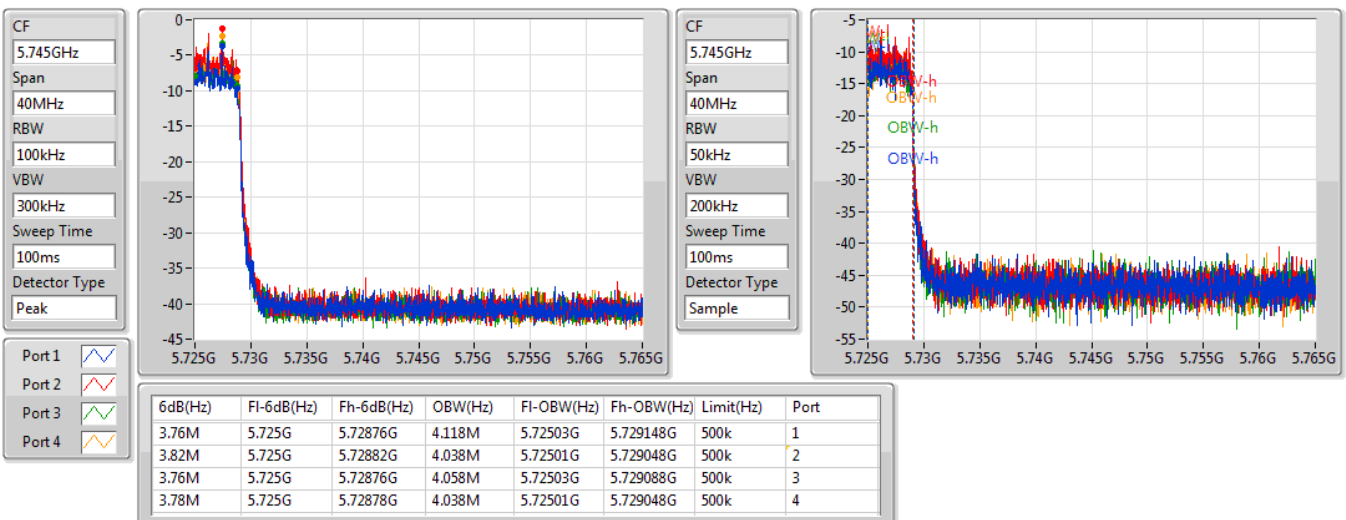


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

01/11/2019

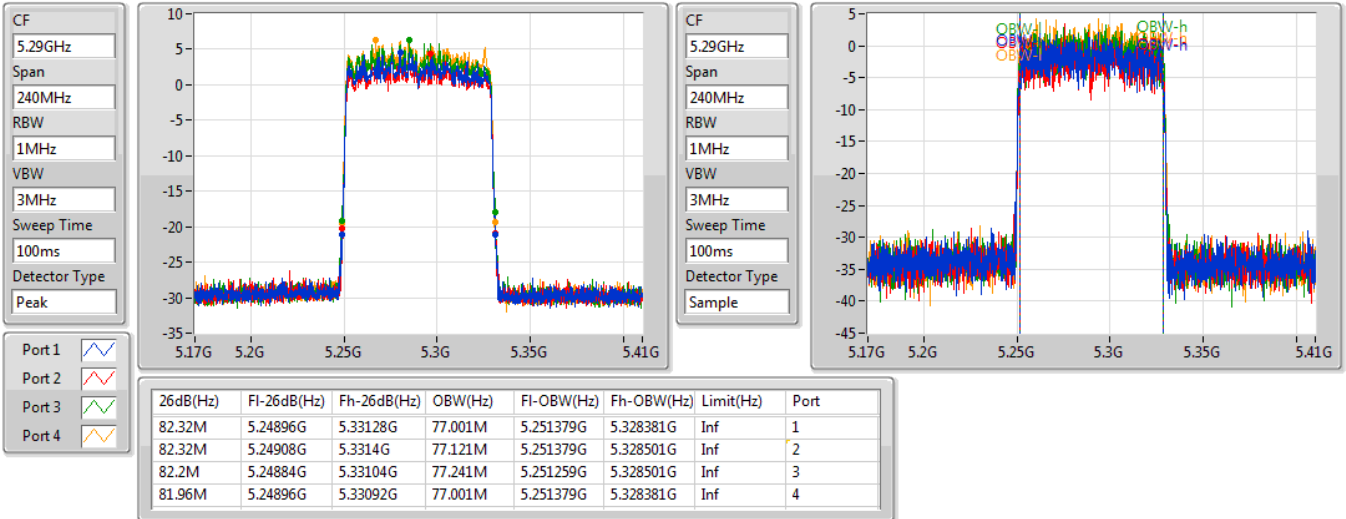

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

01/11/2019



802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz

01/11/2019

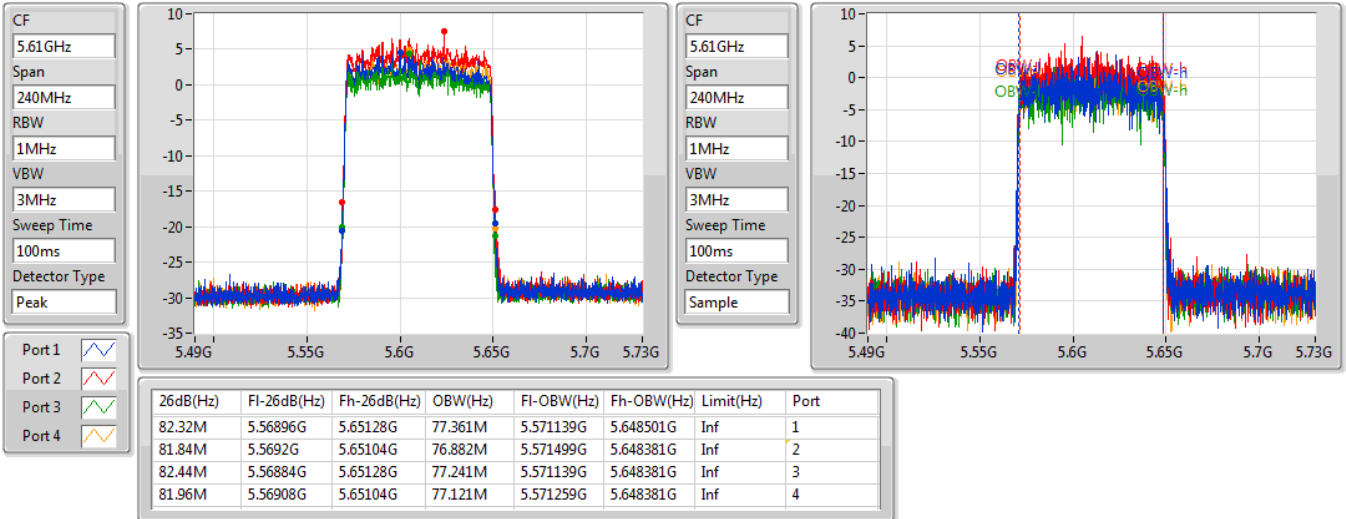

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

01/11/2019

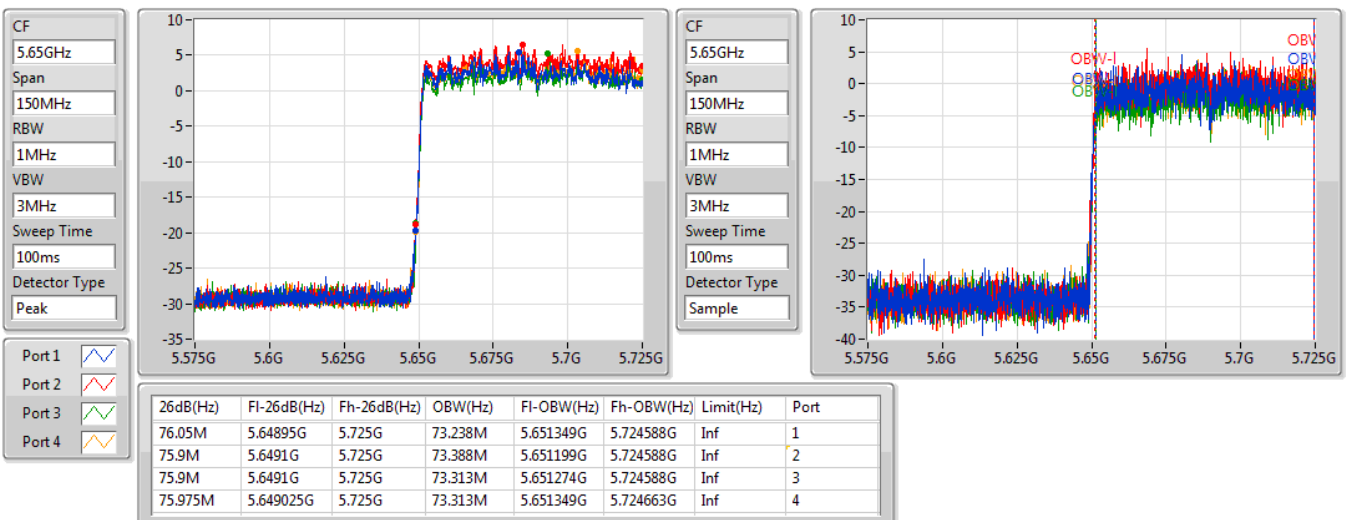


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

01/11/2019

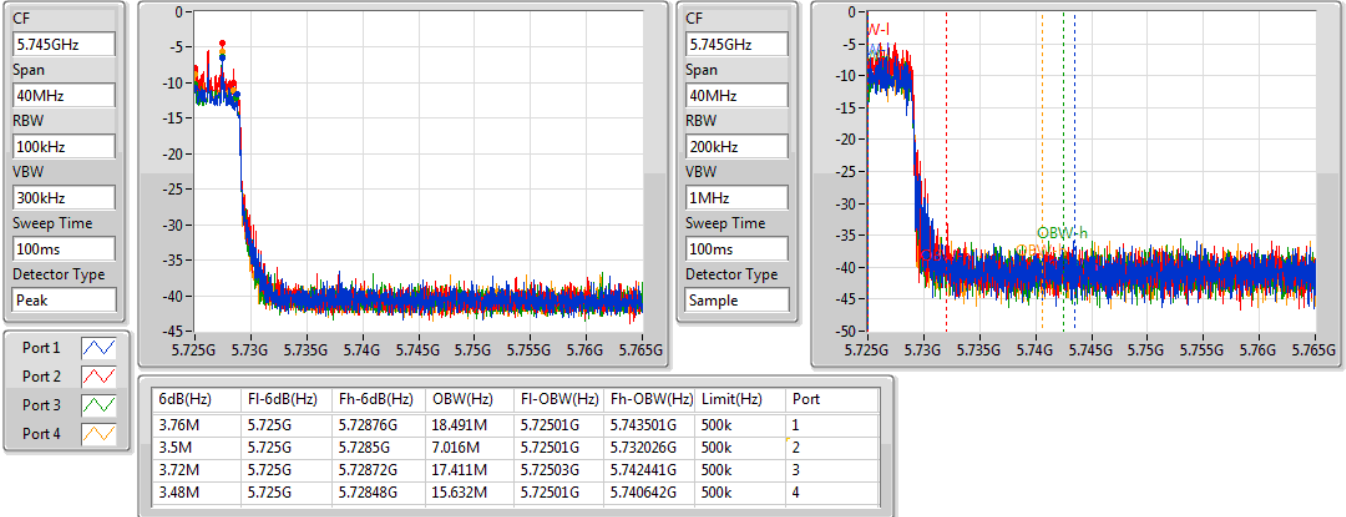

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

01/11/2019

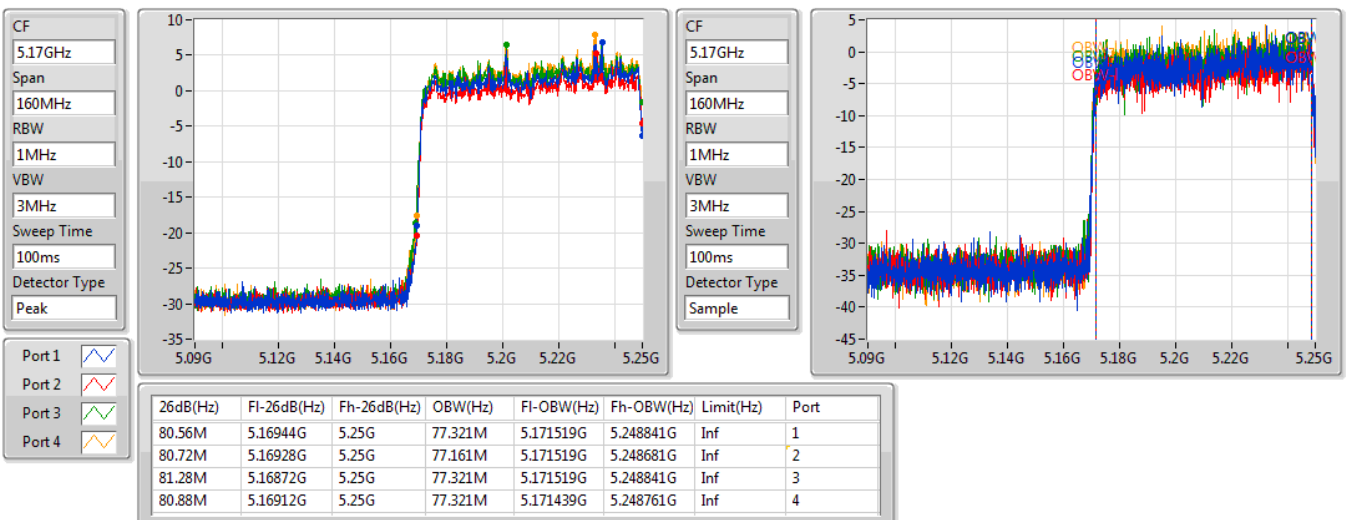


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

01/11/2019

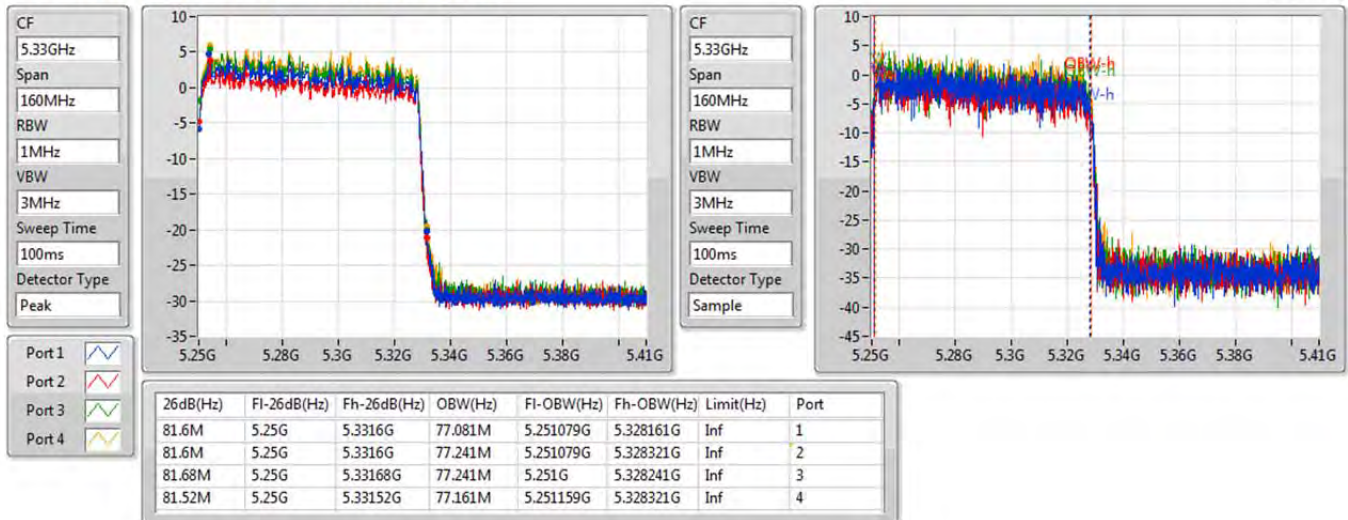

802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

01/11/2019

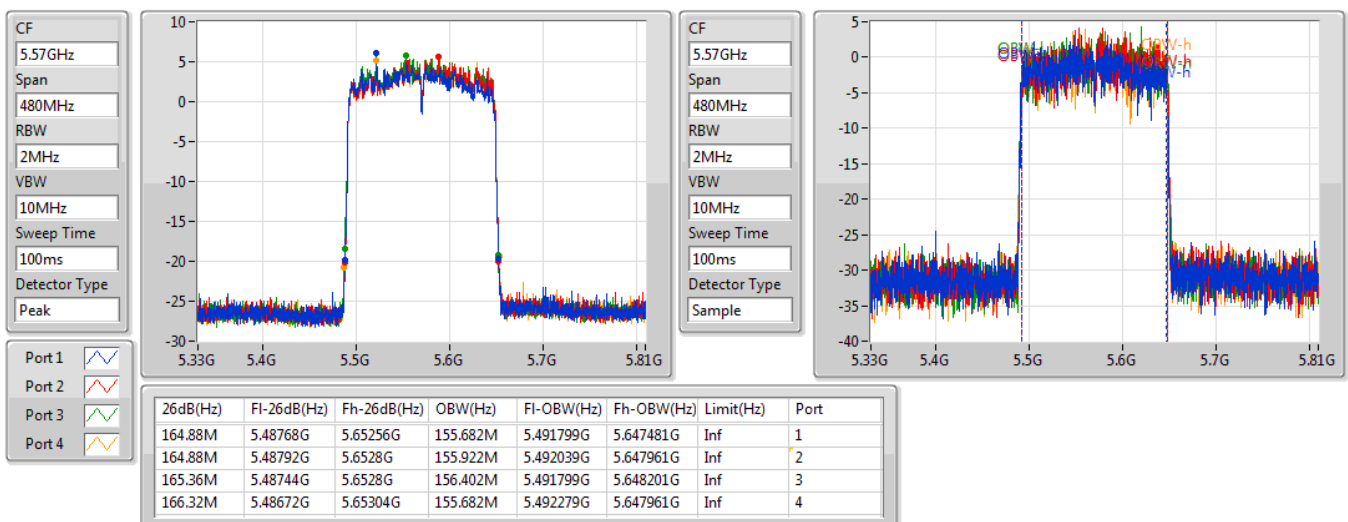


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

01/11/2019


802.11ax HEW160-BF_Nss1,(MCS0)_4TX
EBW
5570MHz

01/11/2019



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160_Nss4,(MCS0)_4TX	82.4M	76.042M	76M0D1D	80.88M	75.802M
802.11ax HEW160_Nss4,(MCS0)_4TX	81.44M	77.241M	77M2D1D	80.88M	77.081M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	21.81M	17.781M	17M8D1D	21.39M	17.691M
802.11ac VHT40_Nss4,(MCS0)_4TX	40.14M	36.402M	36M4D1D	39.78M	36.162M
802.11ac VHT80_Nss4,(MCS0)_4TX	81.96M	75.922M	75M9D1D	81M	75.682M
802.11ac VHT160_Nss4,(MCS0)_4TX	82.64M	75.962M	76M0D1D	81.92M	75.802M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.9M	19.01M	19M0D1D	21.15M	18.951M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.08M	37.601M	37M6D1D	39.72M	37.421M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.96M	77.241M	77M2D1D	80.76M	76.882M
802.11ax HEW160_Nss4,(MCS0)_4TX	82.96M	77.241M	77M2D1D	81.28M	77.161M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	22.98M	17.781M	17M8D1D	15.705M	13.883M
802.11ac VHT40_Nss4,(MCS0)_4TX	43.8M	36.402M	36M4D1D	34.965M	32.989M
802.11ac VHT80_Nss4,(MCS0)_4TX	94.08M	76.042M	76M0D1D	75.6M	72.564M
802.11ac VHT160_Nss4,(MCS0)_4TX	165.6M	154.483M	154MD1D	164.64M	154.243M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.99M	19.04M	19M0D1D	15.6M	14.513M
802.11ax HEW40_Nss4,(MCS0)_4TX	41.34M	37.721M	37M7D1D	35M	33.653M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.96M	77.241M	77M2D1D	75.375M	73.238M
802.11ax HEW160_Nss4,(MCS0)_4TX	165.36M	155.682M	156MD1D	163.44M	155.202M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	3.72M	4.278M	4M28D1D	3.64M	4.098M
802.11ac VHT40_Nss4,(MCS0)_4TX	3.1M	3.978M	3M98D1D	3.06M	3.598M
802.11ac VHT80_Nss4,(MCS0)_4TX	3.1M	8.096M	8M10D1D	2.82M	4.358M
802.11ax HEW20_Nss4,(MCS0)_4TX	4.38M	4.498M	4M50D1D	4.3M	4.478M
802.11ax HEW40_Nss4,(MCS0)_4TX	3.88M	4.198M	4M20D1D	3.66M	3.978M
802.11ax HEW80_Nss4,(MCS0)_4TX	3.74M	7.996M	8M00D1D	2.26M	4.078M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% 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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.63M	17.721M	21.6M	17.691M	21.72M	17.751M	21.6M	17.691M
5300MHz	Pass	Inf	21.75M	17.781M	21.48M	17.751M	21.81M	17.751M	21.42M	17.691M
5320MHz	Pass	Inf	21.66M	17.751M	21.48M	17.721M	21.69M	17.691M	21.39M	17.691M
5500MHz	Pass	Inf	21.72M	17.721M	21.78M	17.781M	21.87M	17.721M	21.51M	17.691M
5580MHz	Pass	Inf	21.78M	17.721M	22.98M	17.751M	21.78M	17.751M	21.63M	17.721M
5700MHz	Pass	Inf	21.66M	17.751M	21.63M	17.721M	21.81M	17.721M	21.63M	17.691M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.75M	13.913M	15.915M	13.928M	15.75M	13.913M	15.705M	13.883M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.64M	4.198M	3.7M	4.278M	3.72M	4.218M	3.72M	4.098M
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.14M	36.342M	39.84M	36.162M	39.9M	36.342M	39.96M	36.222M
5310MHz	Pass	Inf	40.08M	36.282M	39.78M	36.402M	39.9M	36.162M	40.02M	36.282M
5510MHz	Pass	Inf	40.26M	36.282M	39.84M	36.402M	39.84M	36.282M	40.02M	36.342M
5550MHz	Pass	Inf	40.32M	36.282M	43.8M	36.222M	39.9M	36.342M	40.26M	36.282M
5670MHz	Pass	Inf	40.14M	36.282M	39.96M	36.282M	39.9M	36.162M	40.14M	36.402M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.175M	33.023M	35M	32.989M	34.965M	33.093M	35.21M	33.093M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.598M	3.1M	3.978M	3.06M	3.618M	3.08M	3.618M
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.96M	75.802M	81.6M	75.802M	81M	75.922M	81.36M	75.682M
5530MHz	Pass	Inf	82.2M	75.682M	81.6M	75.682M	81.24M	76.042M	81.6M	75.802M
5610MHz	Pass	Inf	81.6M	75.562M	94.08M	75.802M	81.24M	75.922M	81.48M	75.802M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.975M	72.564M	75.6M	72.564M	75.675M	72.564M	75.675M	72.639M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.04M	7.416M	3.1M	8.096M	2.82M	4.358M	3.08M	4.618M
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.4M	75.802M	82M	75.882M	80.88M	75.802M	81.36M	76.042M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	75.882M	81.92M	75.802M	82.24M	75.962M	82.64M	75.802M
5570MHz	Pass	Inf	165.12M	154.483M	164.88M	154.483M	164.64M	154.243M	165.6M	154.483M
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.33M	18.981M	21.84M	18.951M	21.45M	18.981M	21.75M	18.951M
5300MHz	Pass	Inf	21.39M	19.01M	21.9M	18.981M	21.48M	18.981M	21.72M	18.951M
5320MHz	Pass	Inf	21.15M	18.981M	21.81M	18.981M	21.27M	19.01M	21.72M	18.951M
5500MHz	Pass	Inf	21.27M	18.981M	21.72M	18.981M	21.36M	18.951M	21.69M	19.01M
5580MHz	Pass	Inf	21.45M	18.951M	21.78M	19.04M	21.42M	19.01M	21.78M	18.981M
5700MHz	Pass	Inf	21.21M	18.981M	21.99M	19.01M	21.42M	19.01M	21.72M	19.01M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.6M	14.513M	16.23M	14.513M	15.63M	14.513M	15.9M	14.543M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.3M	4.478M	4.38M	4.498M	4.32M	4.478M	4.32M	4.498M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.02M	37.541M	40.02M	37.421M	39.72M	37.481M	39.96M	37.601M
5310MHz	Pass	Inf	39.96M	37.541M	40.02M	37.601M	40.08M	37.421M	40.08M	37.481M
5510MHz	Pass	Inf	40.02M	37.541M	40.02M	37.541M	39.9M	37.541M	40.14M	37.541M
5550MHz	Pass	Inf	39.9M	37.541M	41.34M	37.601M	39.78M	37.481M	40.02M	37.661M
5670MHz	Pass	Inf	39.96M	37.721M	40.14M	37.541M	39.66M	37.481M	40.08M	37.661M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.245M	33.723M	35M	33.688M	35.035M	33.653M	35.035M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	3.998M	3.74M	4.198M	3.66M	3.978M	3.66M	3.998M



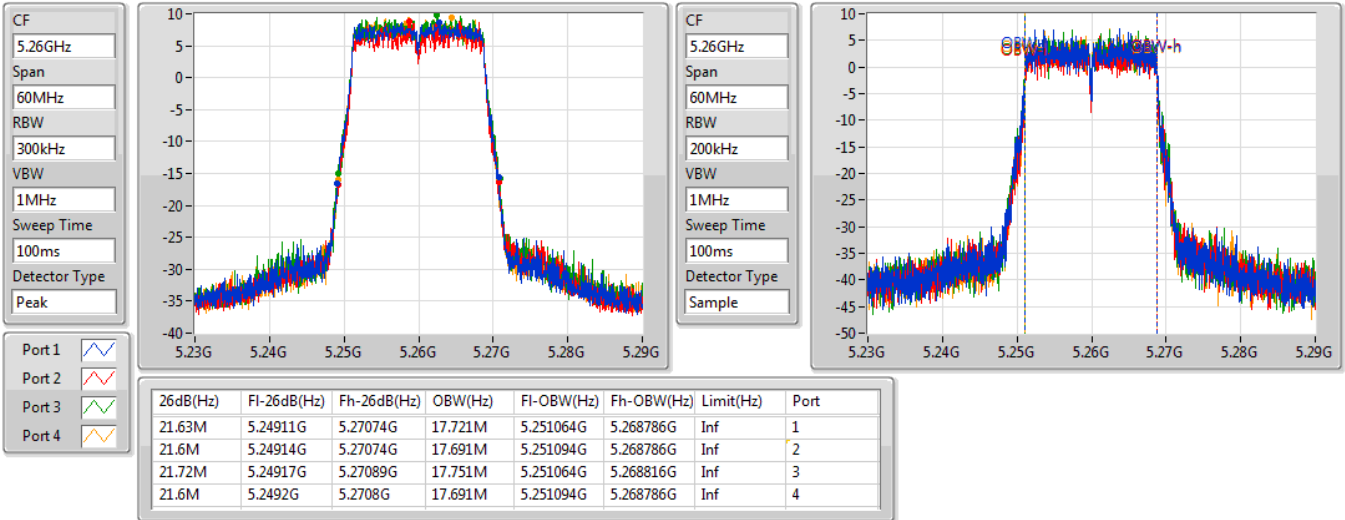
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.96M	76.882M	80.76M	77.241M	81.12M	77.121M	81.96M	76.882M
5530MHz	Pass	Inf	81.36M	76.882M	80.76M	76.882M	81.24M	76.882M	81.96M	76.882M
5610MHz	Pass	Inf	81.48M	77.001M	80.88M	77.241M	81.24M	77.001M	81.72M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.975M	73.463M	75.375M	73.313M	75.675M	73.313M	75.525M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	2.26M	4.858M	3.72M	7.996M	3.42M	4.078M	3.74M	4.198M
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.88M	77.161M	80.96M	77.241M	81.36M	77.161M	81.44M	77.081M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.88M	77.161M	82.96M	77.241M	81.28M	77.241M	81.68M	77.161M
5570MHz	Pass	Inf	165.36M	155.442M	164.88M	155.202M	163.44M	155.682M	165.36M	155.682M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

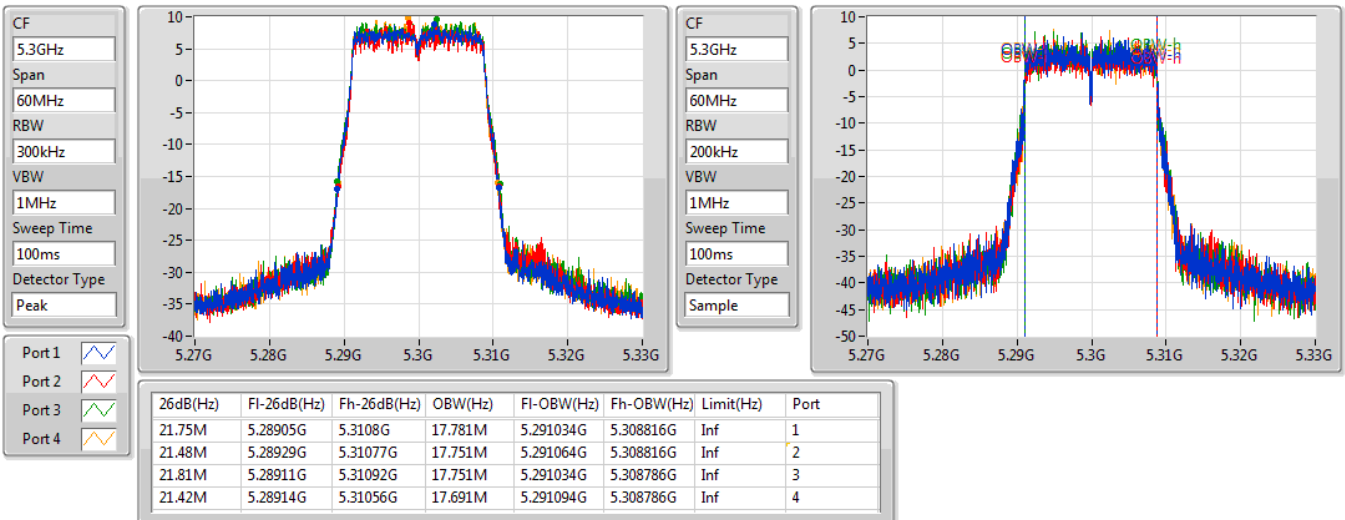
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5260MHz

29/10/2019

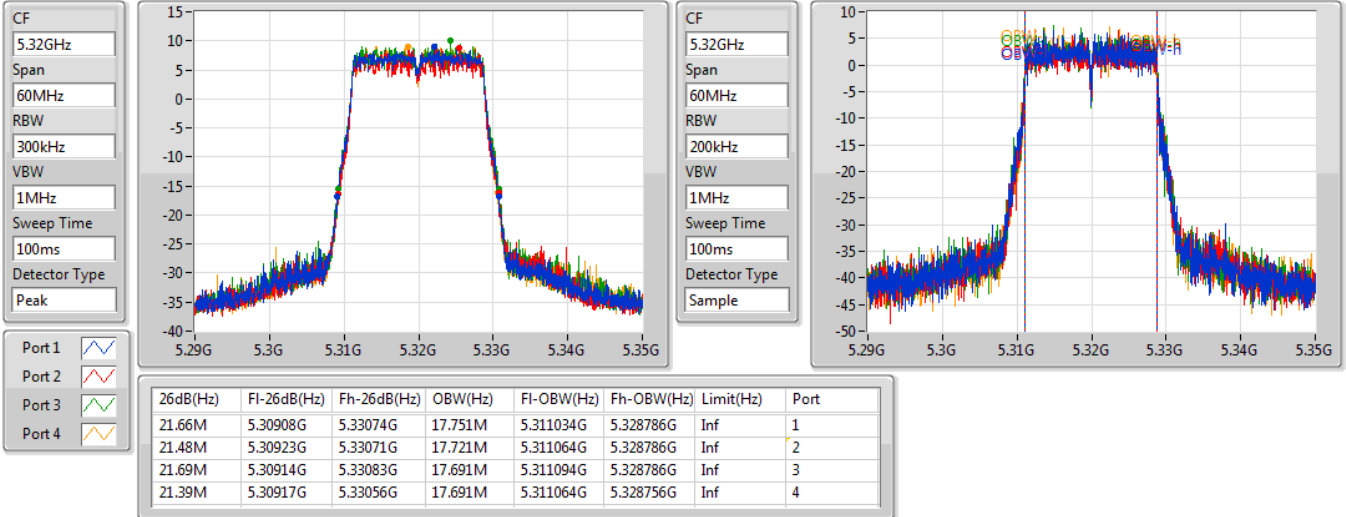

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5300MHz

29/10/2019

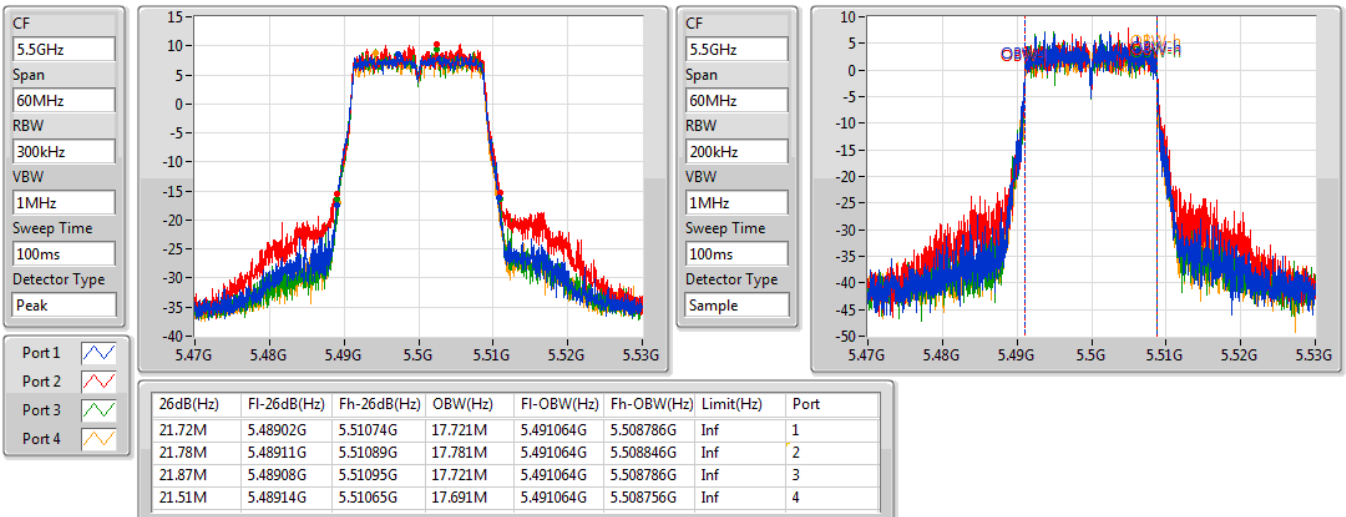


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5320MHz

29/10/2019

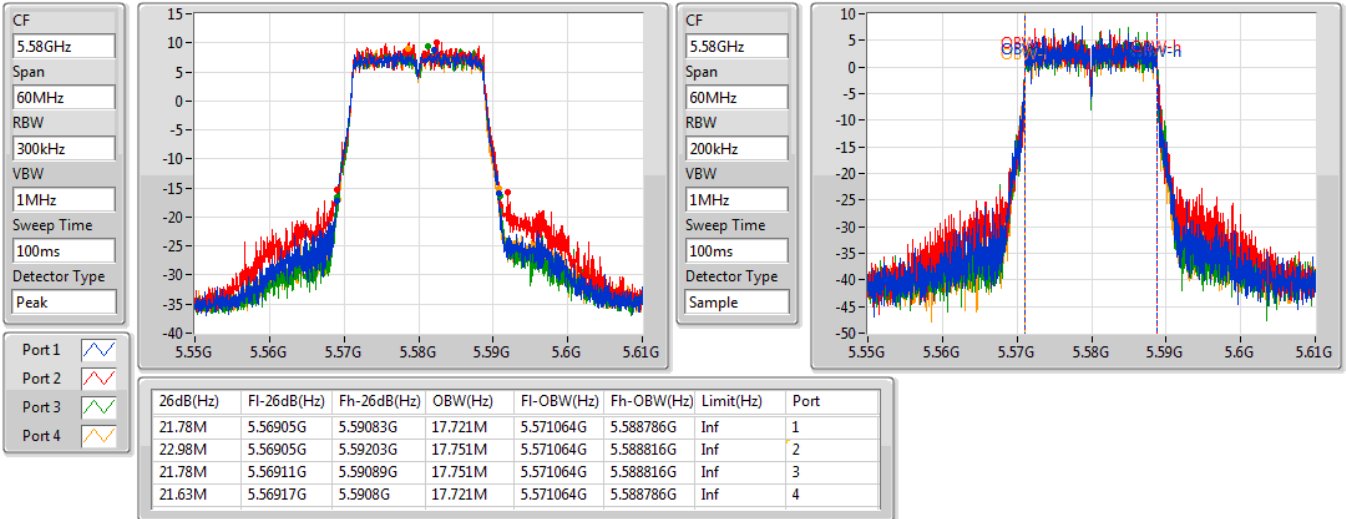

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5500MHz

29/10/2019

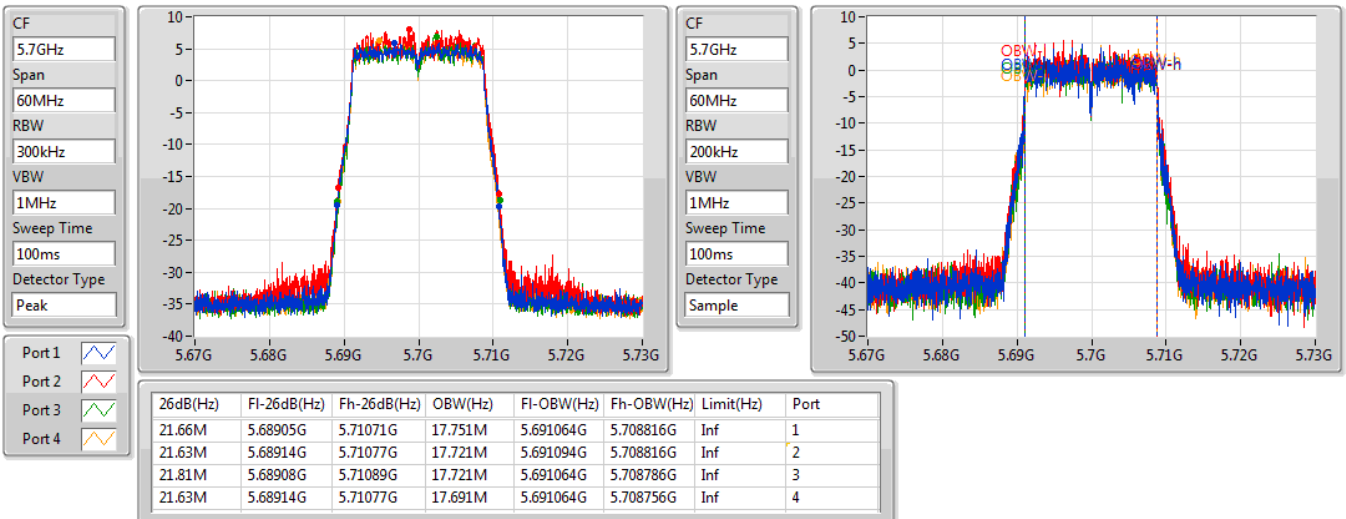


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5580MHz

29/10/2019

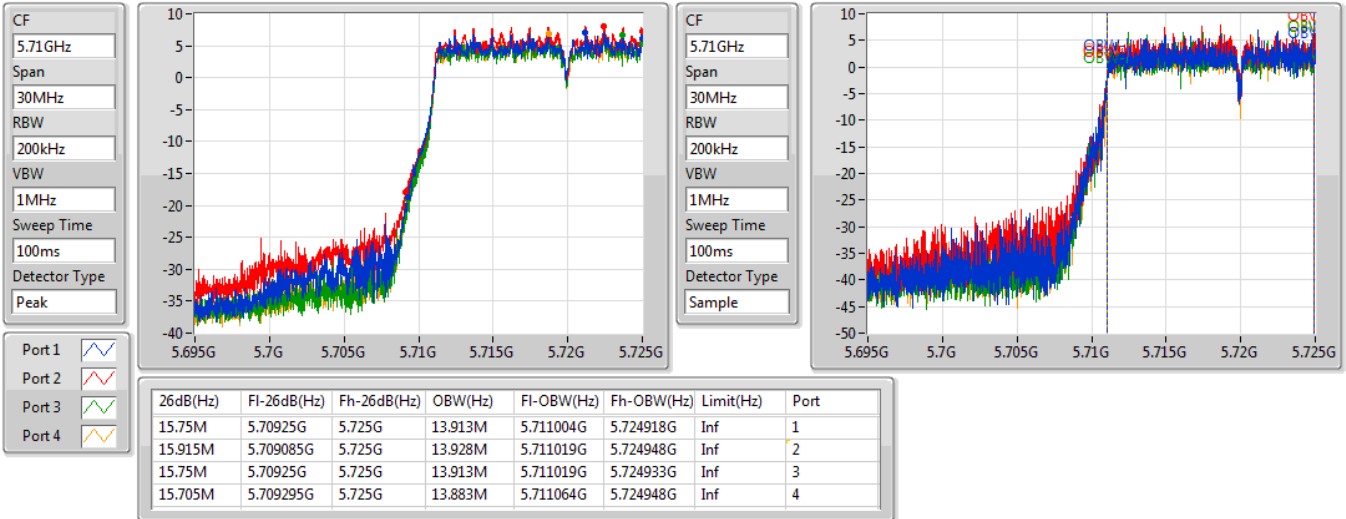

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5700MHz

29/10/2019

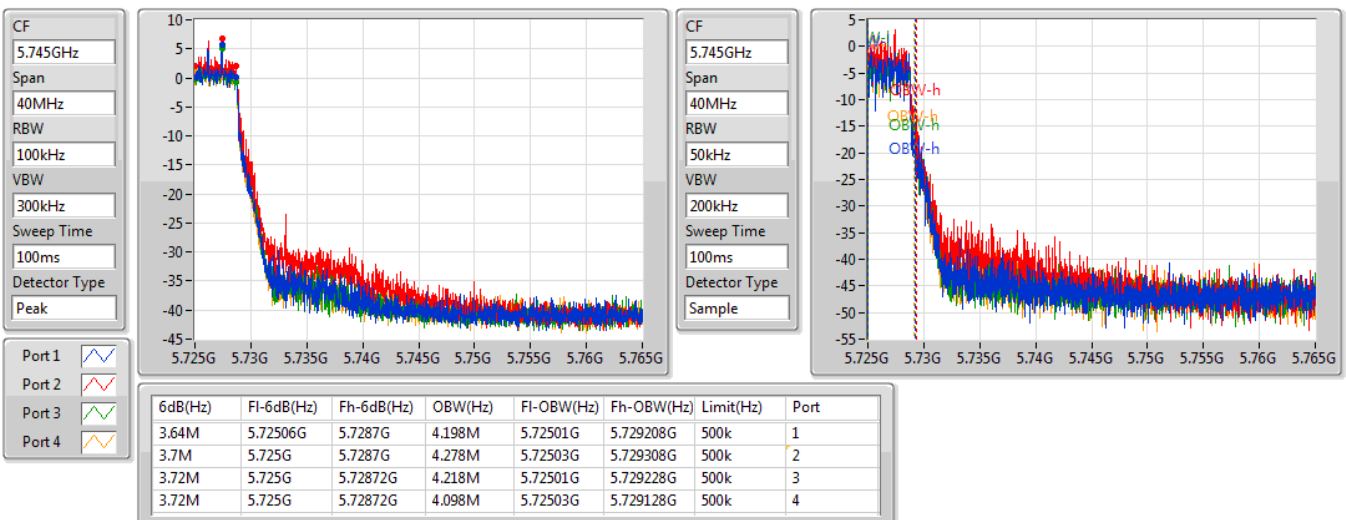


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

29/10/2019

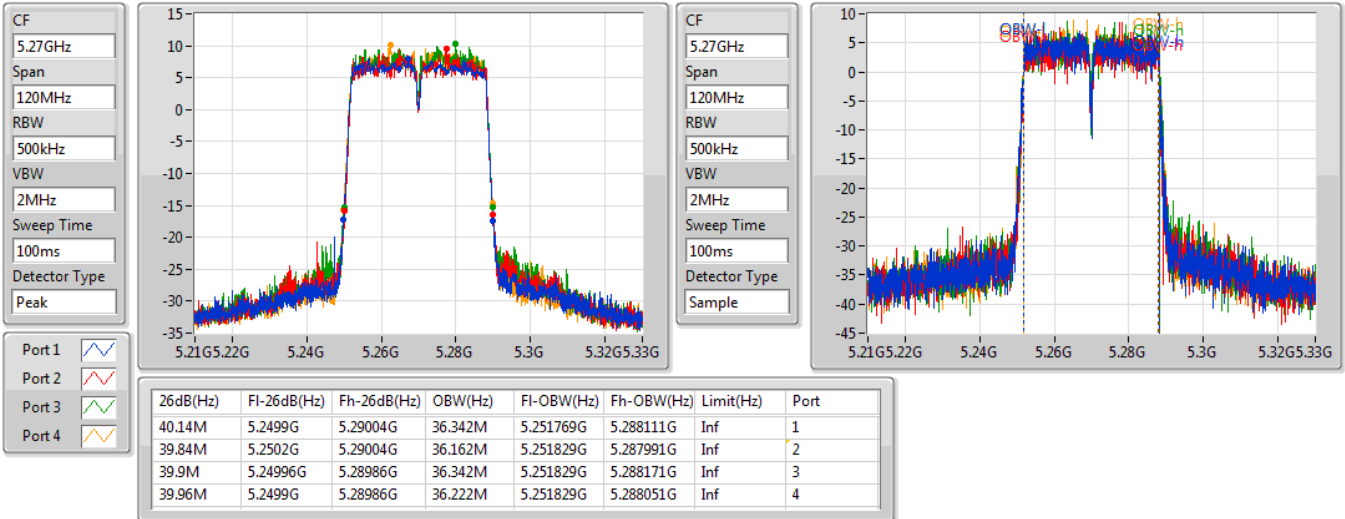

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

29/10/2019

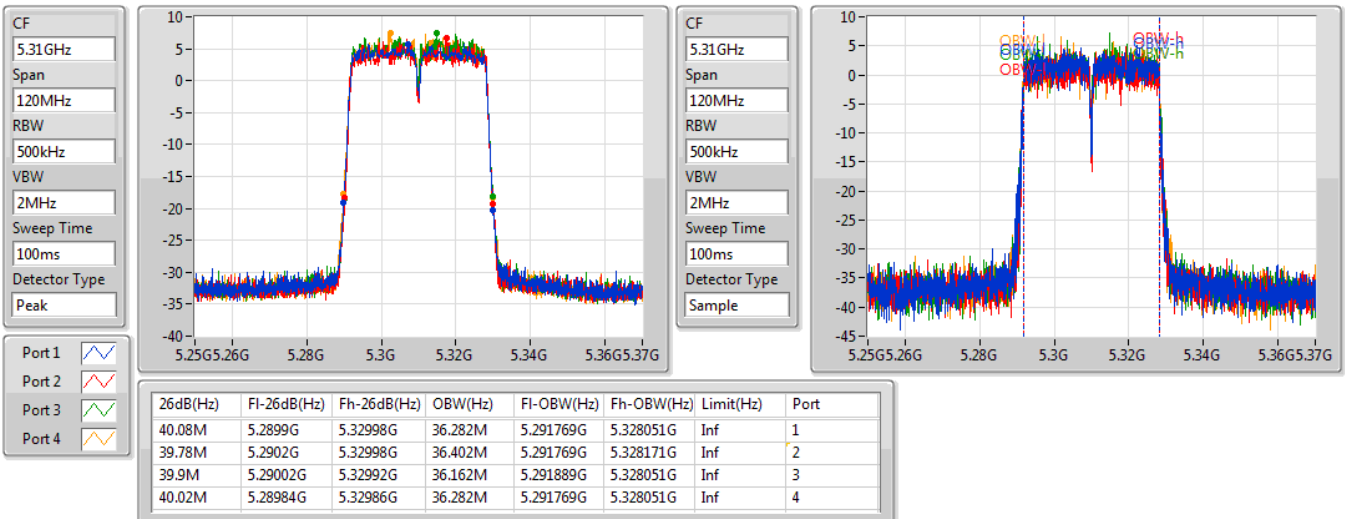


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5270MHz

29/10/2019

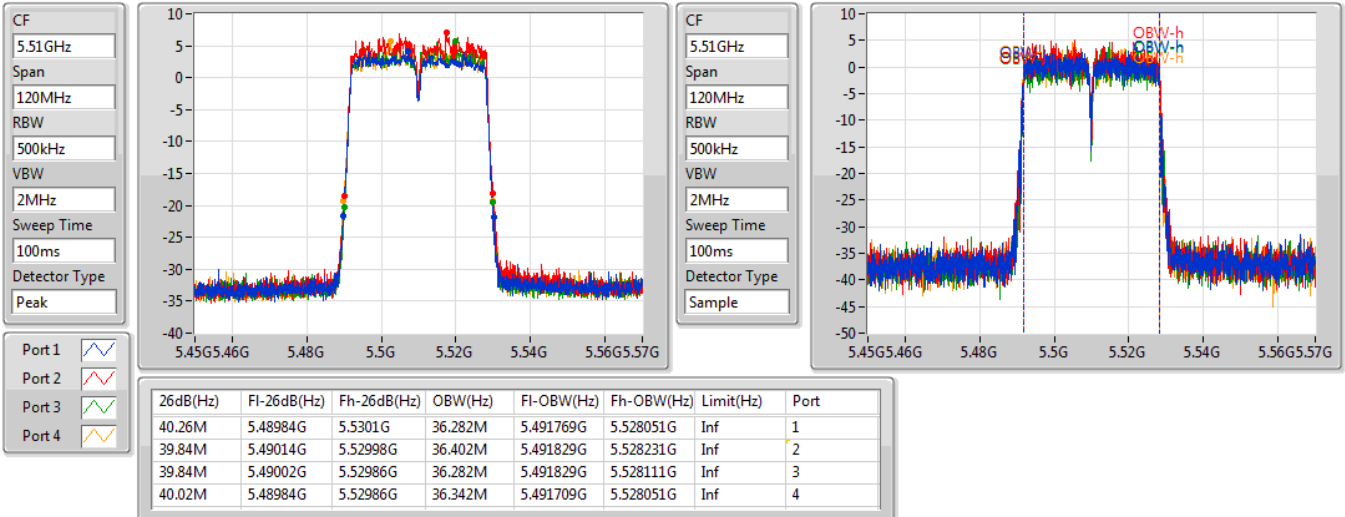

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5310MHz

29/10/2019

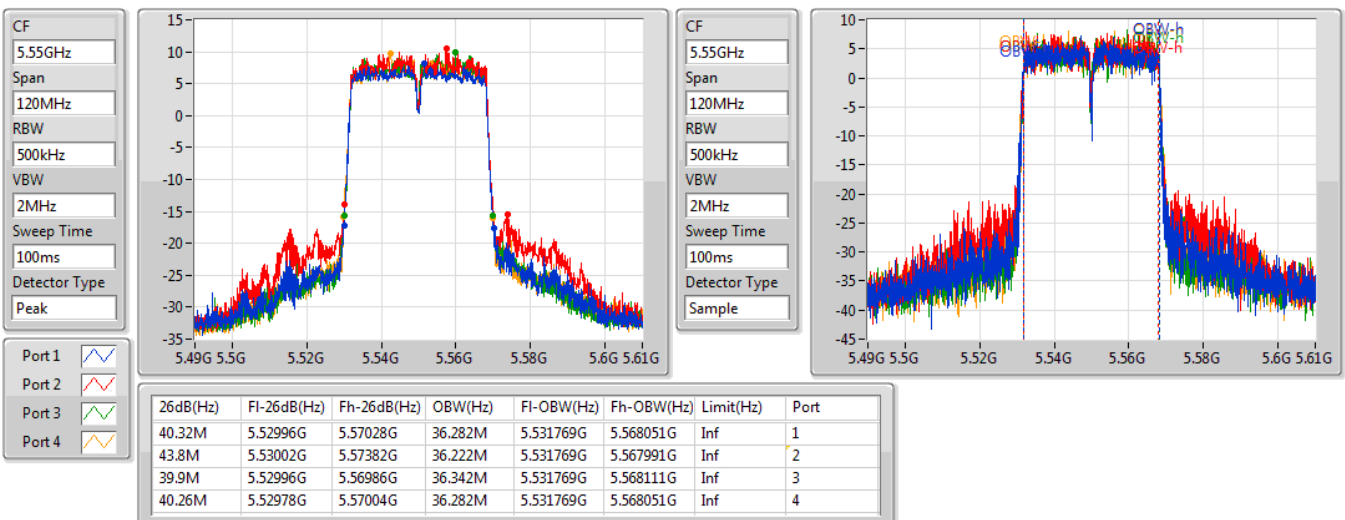


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5510MHz

29/10/2019

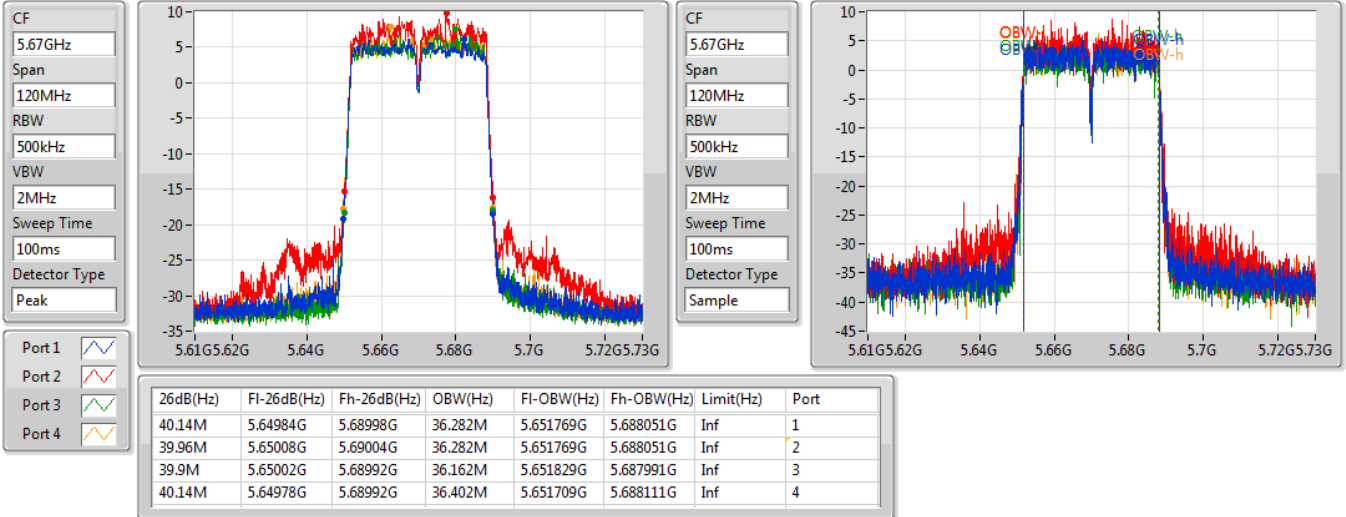

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5550MHz

29/10/2019

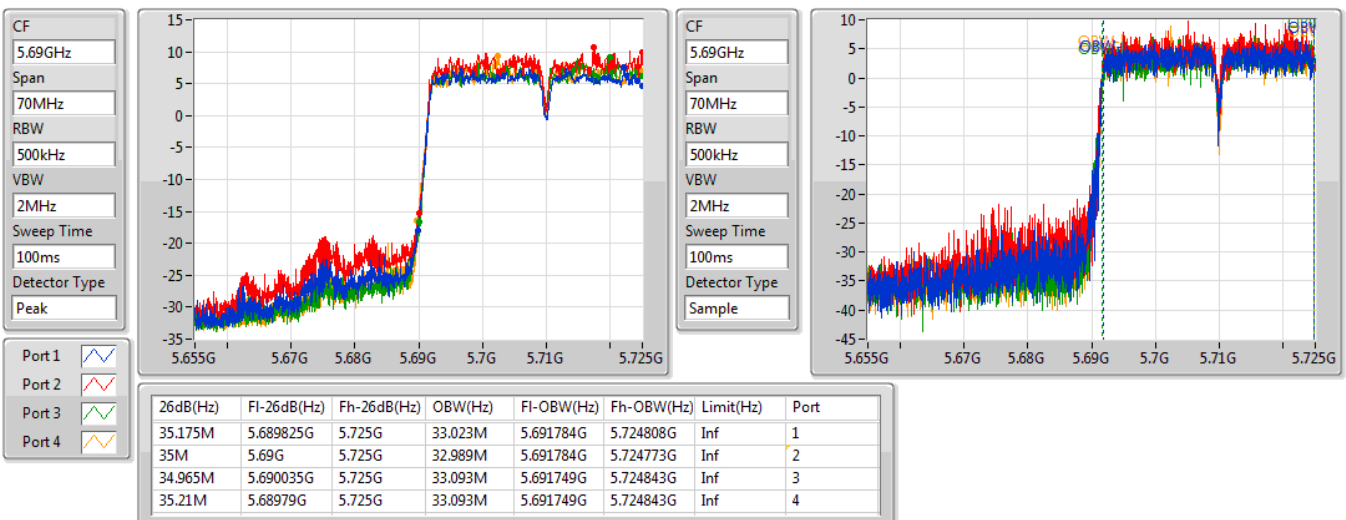


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5670MHz

29/10/2019

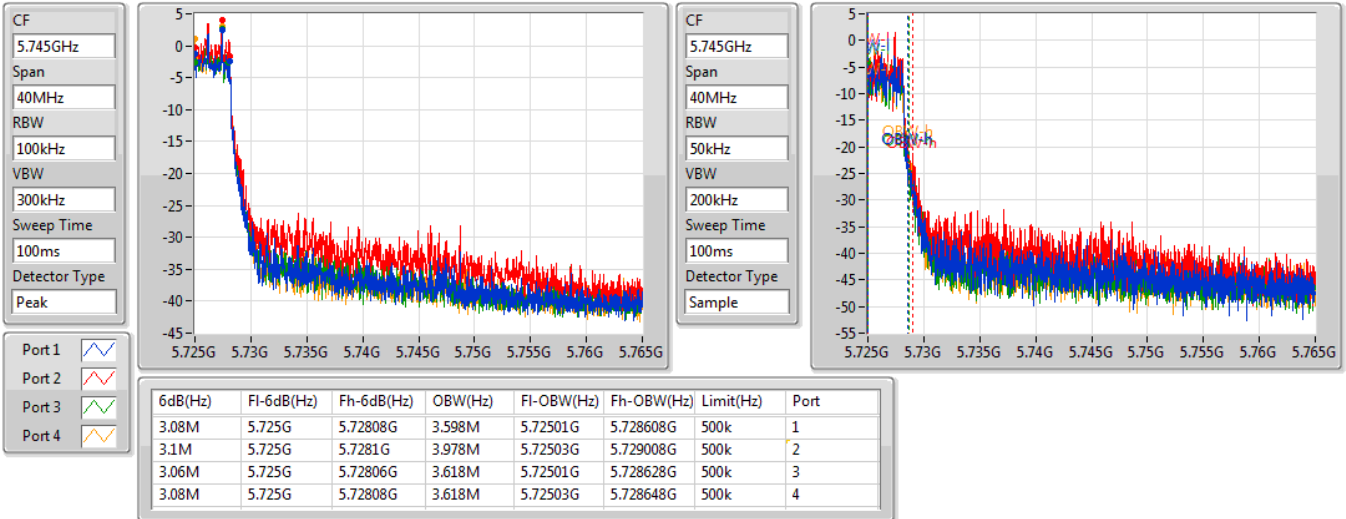

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

29/10/2019

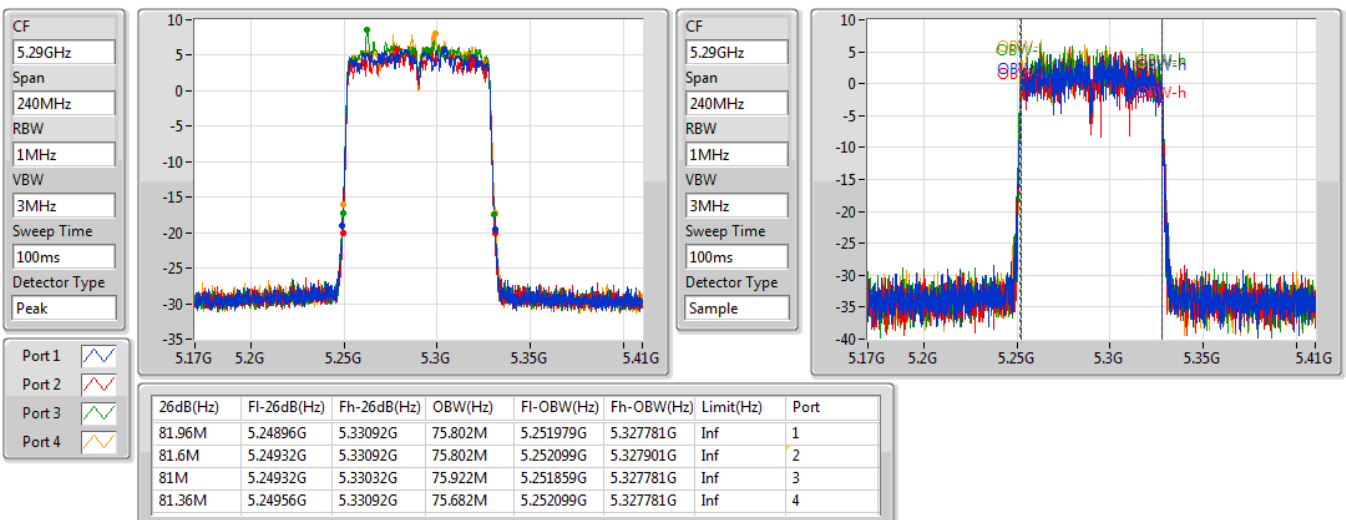


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

29/10/2019

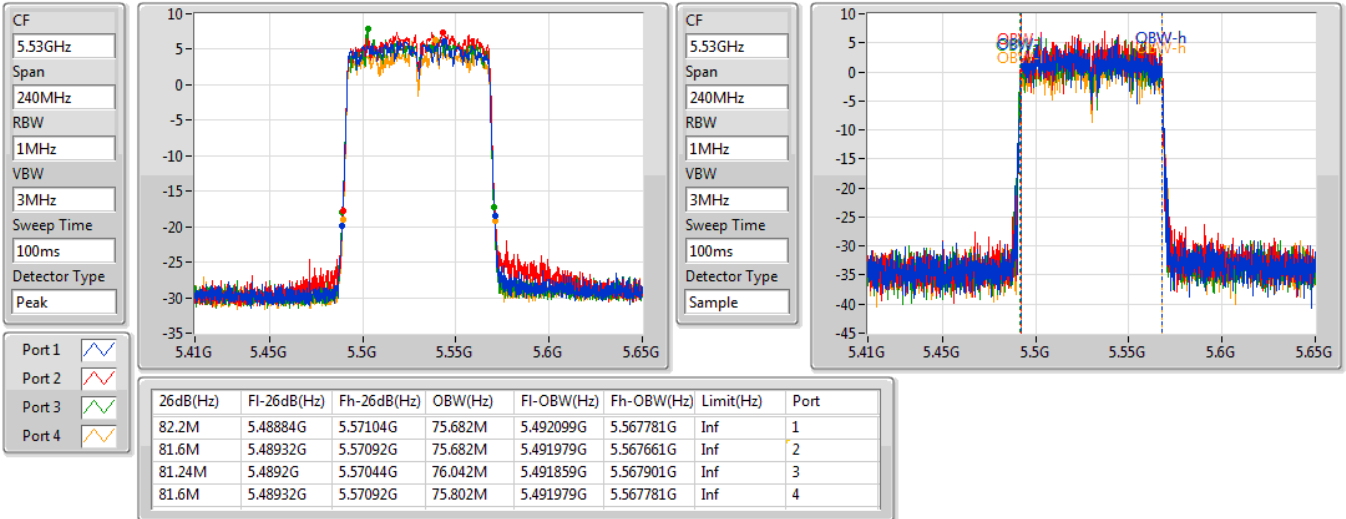

802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5290MHz

29/10/2019

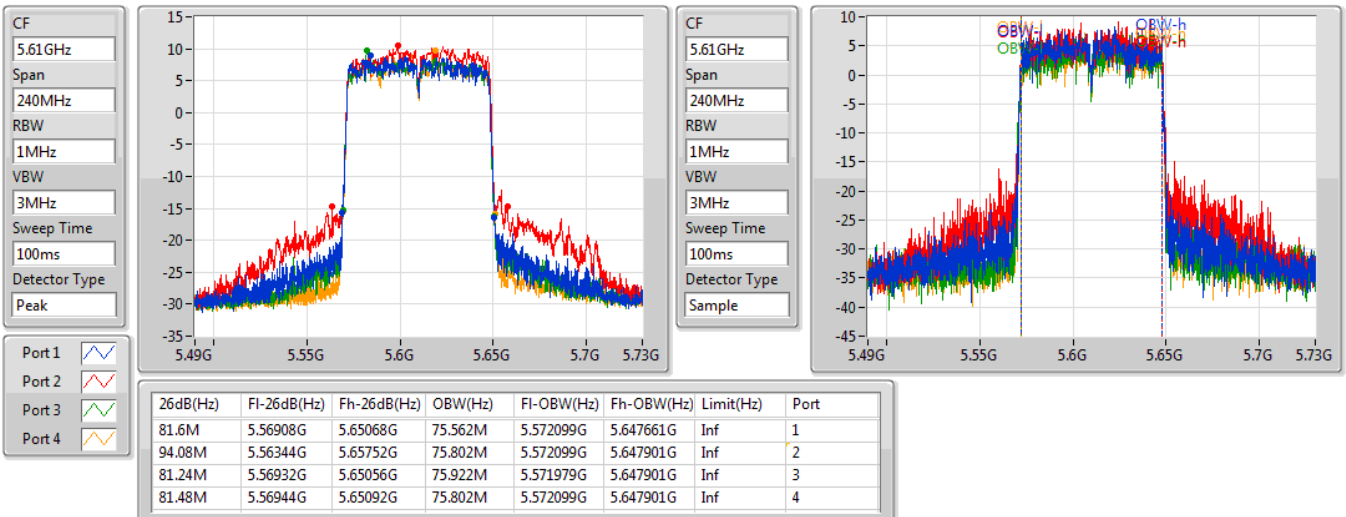


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5530MHz

29/10/2019

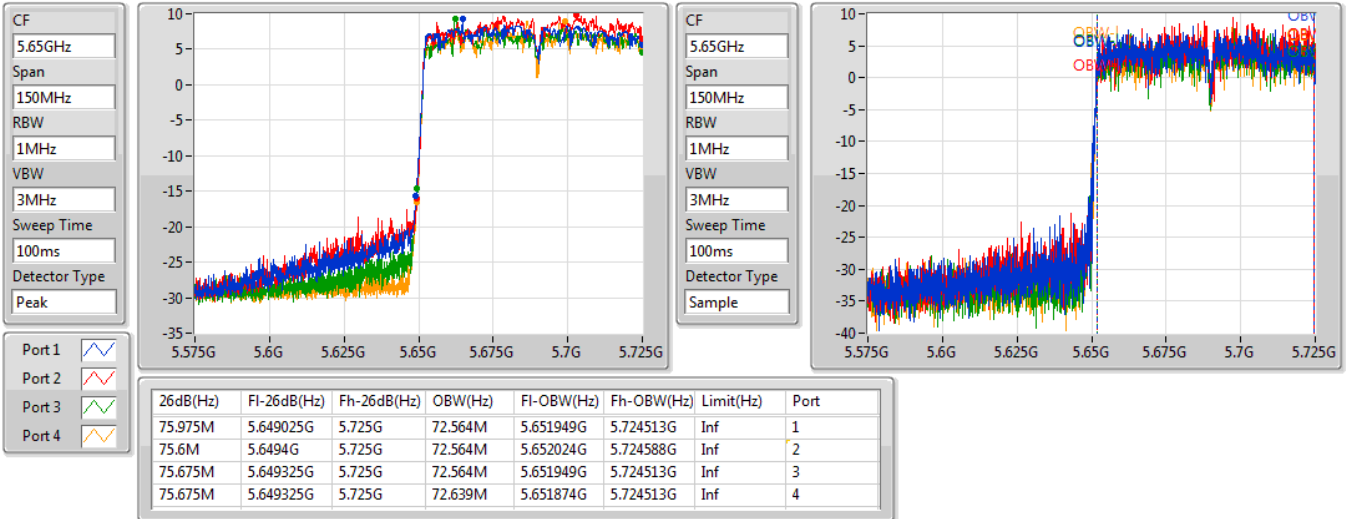

802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5610MHz

29/10/2019

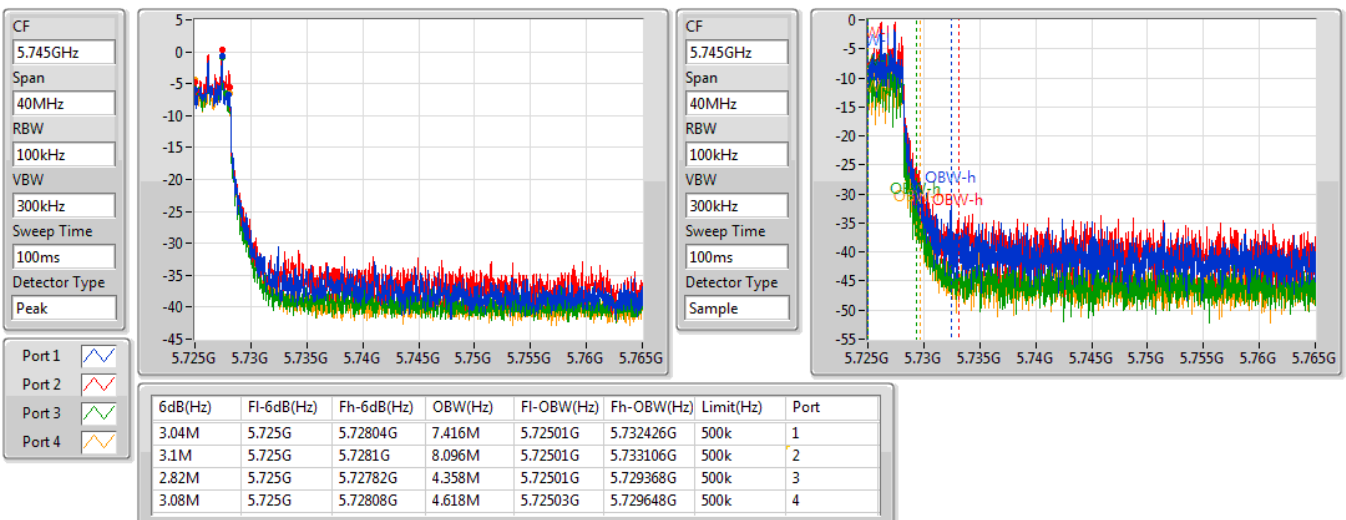


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

29/10/2019

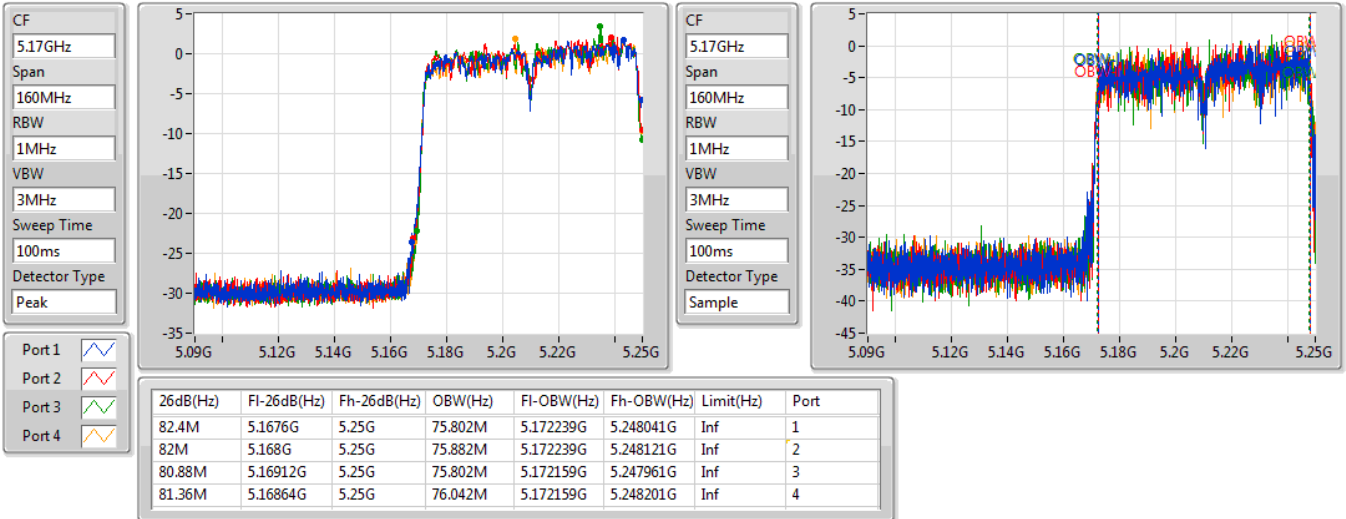

802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

29/10/2019

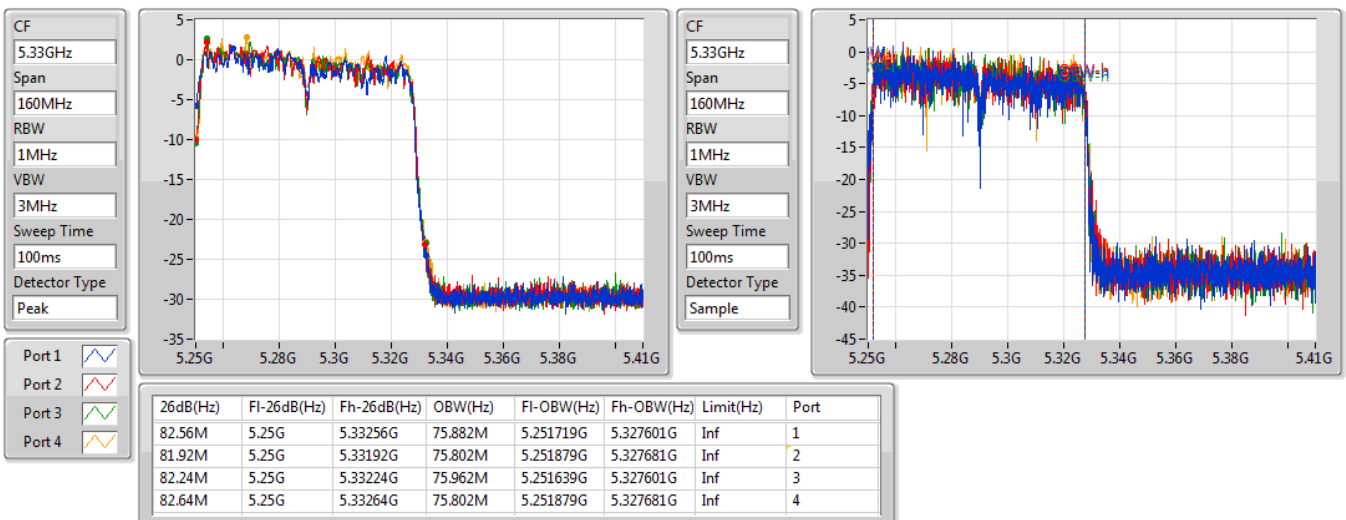


802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

29/10/2019

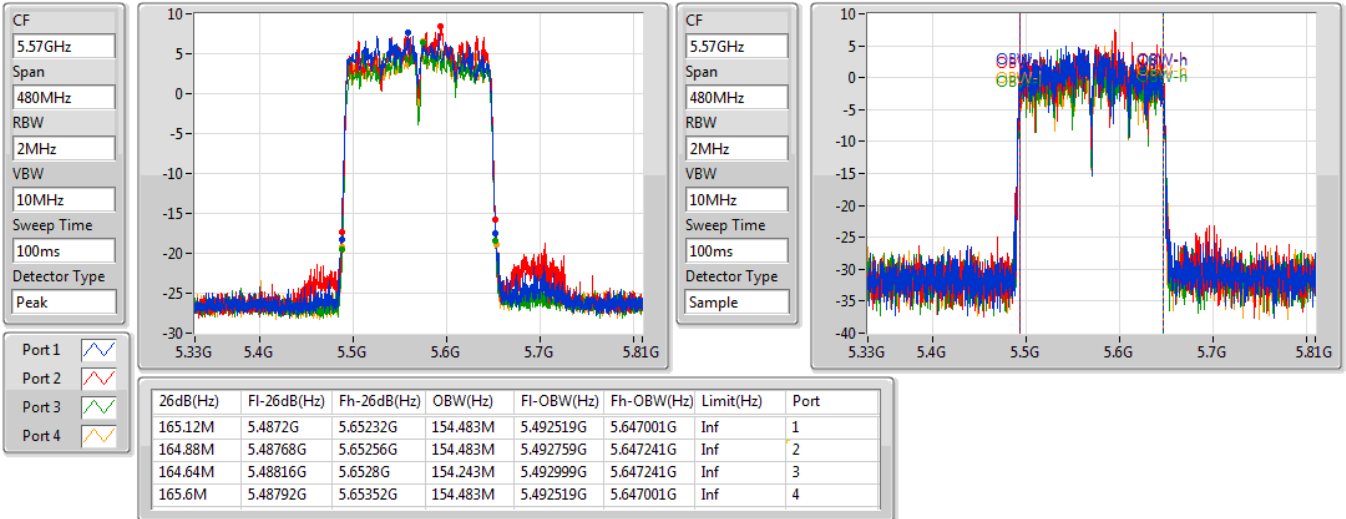

802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

29/10/2019

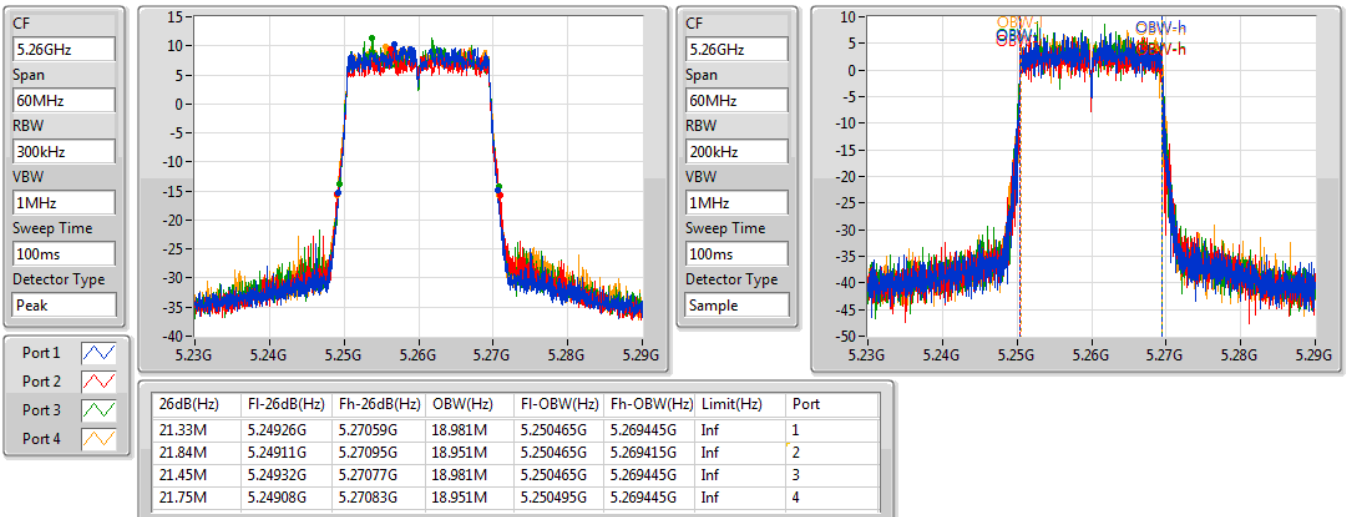


802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5570MHz

29/10/2019

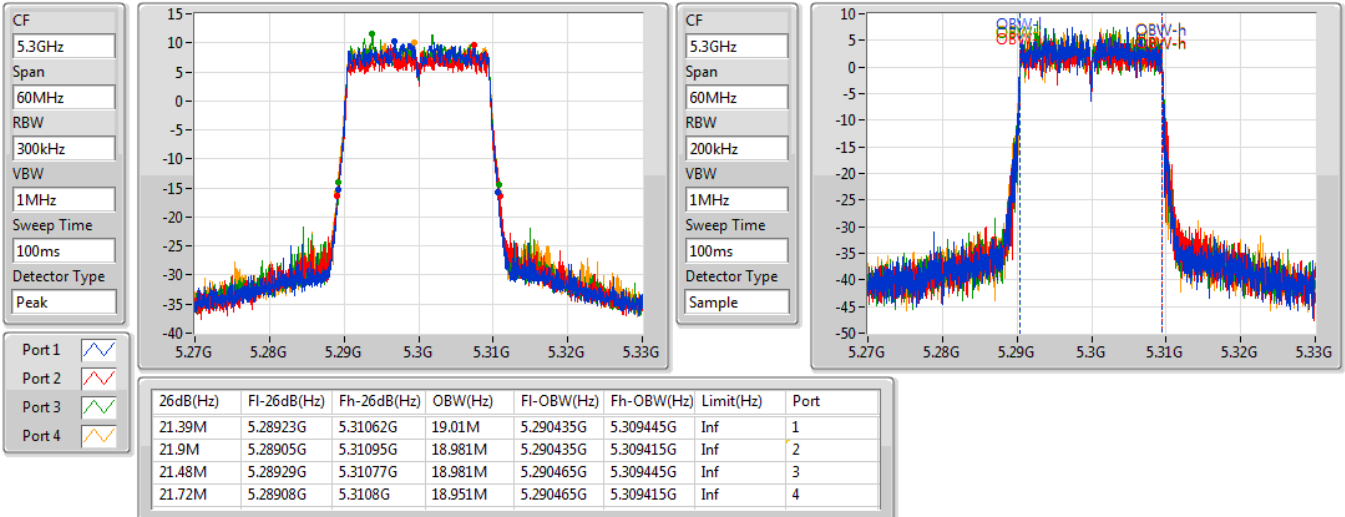

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5260MHz

29/10/2019

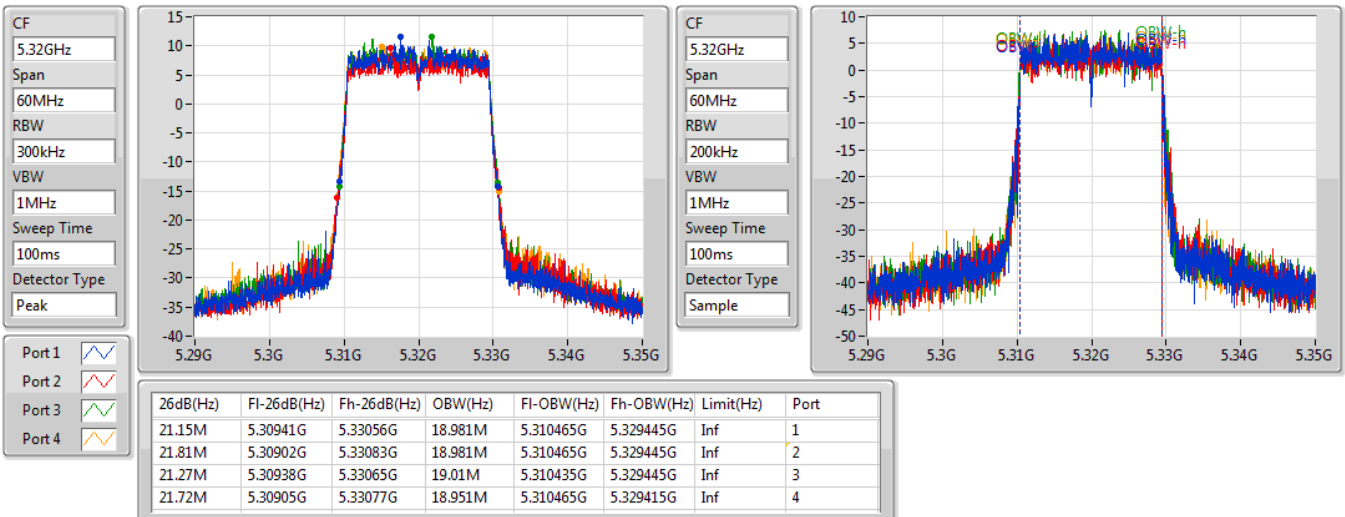


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5300MHz

29/10/2019

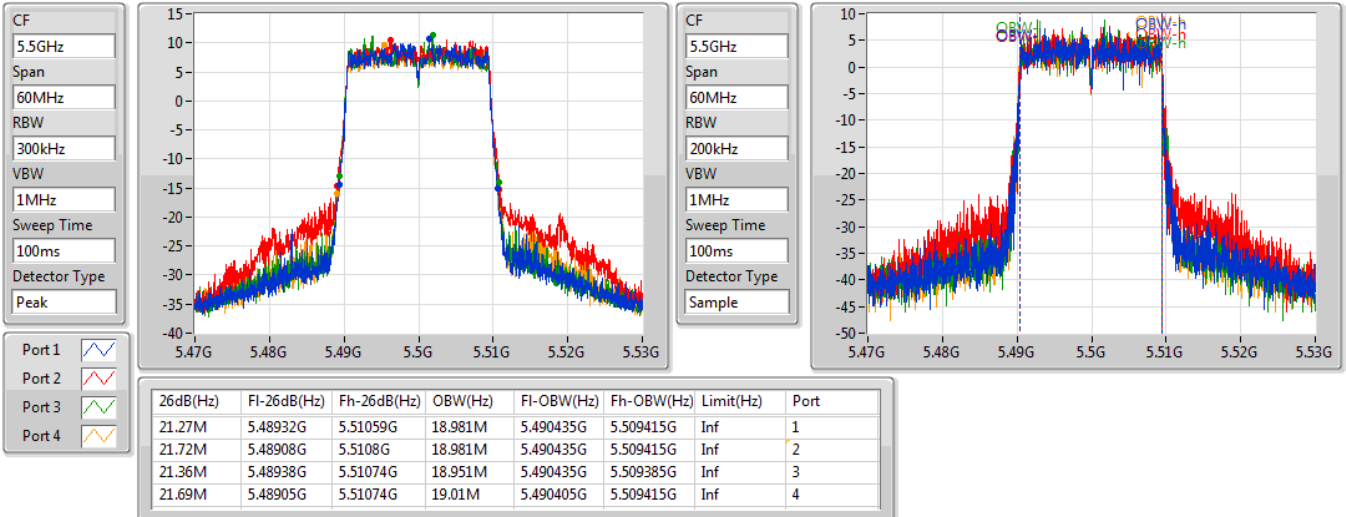

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5320MHz

29/10/2019

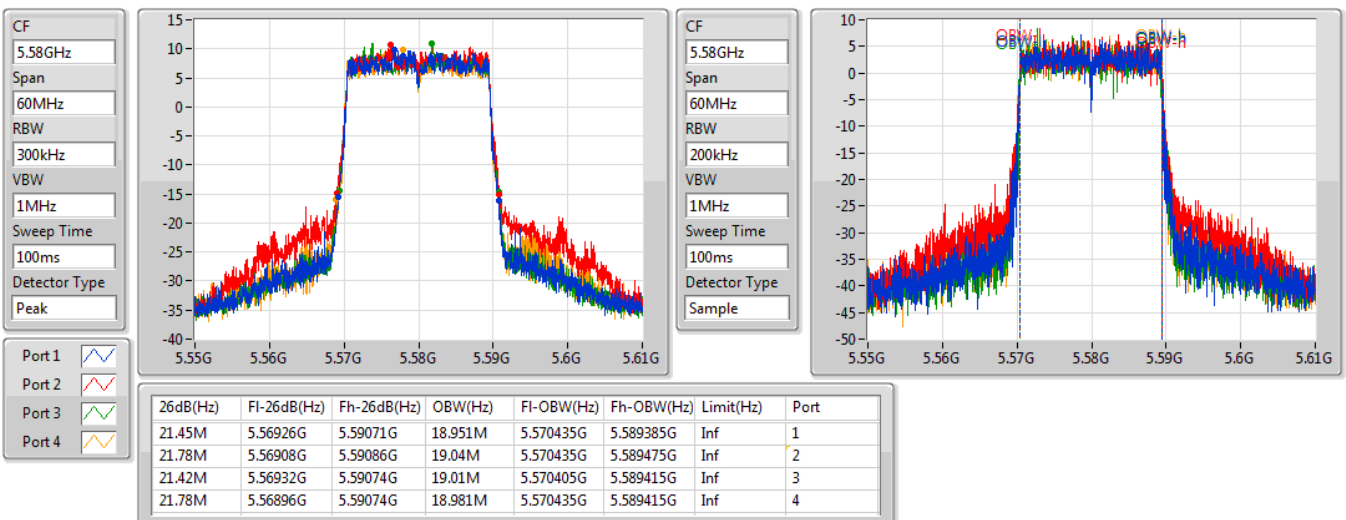


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5500MHz

29/10/2019

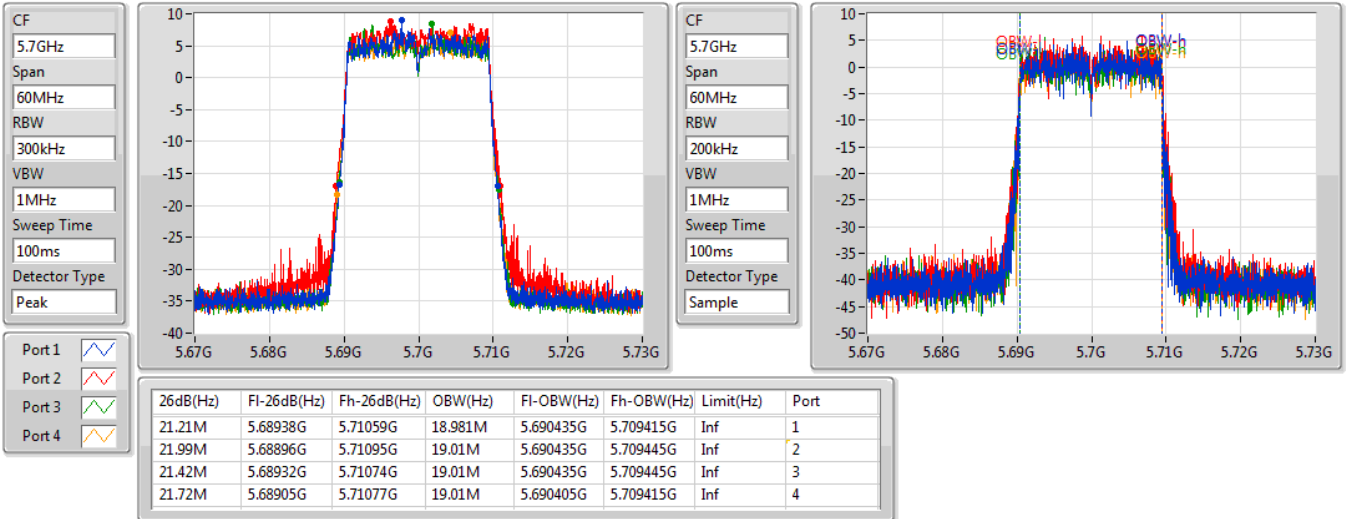

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5580MHz

29/10/2019



802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5700MHz

29/10/2019


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

29/10/2019

