



RADIO TEST REPORT

FCC ID : QXO-AP5010U
Equipment : Access Point
Brand Name : Extreme Networks
Model Name : AP5010U
Applicant : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Manufacturer : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Standard : 47 CFR FCC Part 15.407

The product was received on Dec. 11, 2021, and testing was started from Dec. 11, 2021 and completed on Apr. 28, 2022. We, Sporton International Inc. Hsinchu 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 test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	14
1.3 Testing Location Information	14
1.4 Measurement Uncertainty	14
2 Test Configuration of EUT	15
2.1 Test Channel Mode	15
2.2 The Worst Case Measurement Configuration	22
2.3 EUT Operation during Test	24
2.4 Accessories	24
2.5 Support Equipment.....	24
2.6 Test Setup Diagram	25
3 Transmitter Test Result	26
3.1 Emission Bandwidth	26
3.2 Maximum Output Power	28
3.3 Power Spectral Density	31
3.4 Unwanted Emissions.....	34
4 Test Equipment and Calibration Data	37
Appendix A. Test Results of Emission Bandwidth	
Appendix B. Test Results of Maximum Output Power	
Appendix C. Test Results of Power Spectral Density	
Appendix D. Test Results of Unwanted Emissions	
Appendix E. Test Photos	
Photographs of EUT v01	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4



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 Output Power	PASS	-
3.3	15.407(a)	Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

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: Viola Huang



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]

For Radio 2

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



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

For Scanning radio 1

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	2
5.25-5.35GHz	802.11n HT20	20	2
5.25-5.35GHz	802.11ac VHT20	20	2
5.25-5.35GHz	802.11ax HEW20	20	2
5.25-5.35GHz	802.11n HT40	40	2
5.25-5.35GHz	802.11ac VHT40	40	2
5.25-5.35GHz	802.11ax HEW40	40	2
5.25-5.35GHz	802.11ac VHT80	80	2
5.25-5.35GHz	802.11ax HEW80	80	2
5.47-5.725GHz	802.11a	20	2
5.47-5.725GHz	802.11n HT20	20	2
5.47-5.725GHz	802.11ac VHT20	20	2
5.47-5.725GHz	802.11ax HEW20	20	2
5.47-5.725GHz	802.11n HT40	40	2
5.47-5.725GHz	802.11ac VHT40	40	2
5.47-5.725GHz	802.11ax HEW40	40	2
5.47-5.725GHz	802.11ac VHT80	80	2



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

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port						Brand Name	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz (Radio 1) (Scanning Radio 1)	WLAN 5GHz (Radio 2)	WLAN 6E (Radio 3)	WLAN 5GHz / WLAN 6GHz (Scanning Radio 1)	BT / IEEE802.15.4 (Radio 4)	UWB (Radio 5)					
1	3	3	-	-	-	-	WNC	95XEAJ15.30	PIFA	I-PEX	Note 1
2	1	1	-	-	-	-	WNC	95XEAJ15.31	PIFA	I-PEX	
3	2	2	-	-	-	-	WNC	95XEAJ15.32	PIFA	I-PEX	
4	4	4	-	-	-	-	WNC	95XEAJ15.33	PIFA	I-PEX	
5	-	-	2	-	-	-	WNC	95XEAJ15.34	PIFA	I-PEX	
6	-	-	1	-	-	-	WNC	95XEAJ15.35	PIFA	I-PEX	
7	-	-	4	-	-	-	WNC	95XEAJ15.36	PIFA	I-PEX	
8	-	-	3	-	-	-	WNC	95XEAJ15.37	PIFA	I-PEX	
9	-	-	-	1	-	-	WNC	95XEAJ15.38	PIFA	I-PEX	
10	-	-	-	2	-	-	WNC	95XEAJ15.39	PIFA	I-PEX	
11	-	-	-	-	1	-	WNC	95XEAJ15.40	PIFA	I-PEX	
12	-	-	-	-	-	1	WNC	95XEAJ15.41	PIFA	I-PEX	

Note 1:

Ant.	Antenna Gain (dBi)									
	WLAN 2.4GHz (Radio 1) (Scanning Radio 1)	WLAN 5GHz (Radio 2)				WLAN 6E (Radio 3)	WLAN 5GHz (Scanning Radio 1)	WLAN 6GHz (Scanning Radio 1)	BT / IEEE802.15.4 (Radio 4)	UWB (Radio 5)
		UNII 1	UNII 2A	UNII 2C	UNII 3					
1	2.12	2.98	2.63	2.13	2.48	-	-	-	-	-
2	2.97	2.59	2.78	1.18	1.38	-	-	-	-	-
3	3.07	3.23	3.25	2.01	1.61	-	-	-	-	-
4	2.73	2.52	2.93	1.67	1.64	-	-	-	-	-
5	-	-	-	-	-	5.2	-	-	-	-
6	-	-	-	-	-	5.2	-	-	-	-
7	-	-	-	-	-	5.2	-	-	-	-
8	-	-	-	-	-	5.2	-	-	-	-
9	-	-	-	-	-	-	5.9	6.0	-	-
10	-	-	-	-	-	-	5.9	6.0	-	-
11	-	-	-	-	-	-	-	-	4.2	-
12	-	-	-	-	-	-	-	-	-	4.7



Ant.	Directional Gain (dBi)									
	WLAN 2.4GHz (Radio 1) (Scanning Radio 1)		WLAN 5GHz (Radio 2)							
			UNII 1		UNII 2A		UNII 2C		UNII 3	
			2T1S	2T2S	2T1S	2T2S	2T1S	2T2S	2T1S	2T2S
2	5.57	2.58	4.98	2.07	4.99	2.08	3.67	0.78	3.86	0.88
3										

Ant.	Directional Gain (dBi)														
	WLAN 2.4GHz (Radio 1) (Scanning Radio 1)			WLAN 5GHz (Radio 2)											
				UNII 1			UNII 2A			UNII 2C			UNII 3		
				4T1S	4T2S	4T4S	4T1S	4T2S	4T4S	4T1S	4T2S	4T4S	4T1S	4T2S	4T4S
1															
2	7.68	4.68	1.72	6.37	3.37	0.60	6.09	3.25	0.35	6.00	3.00	0.08	6.27	3.27	0.29
3															
4															

Note 2: The EUT has twelve antennas.

Note 3: The above information (except gain of Radio 1 2.4GHz, Scanning Radio 1 2.4GHz, Radio 2) was declared by manufacturer.

Note 4: Radio 1 2.4GHz, Scanning Radio 1 2.4GHz, Radio 2: Maximum Directional Gain following KDB662911 D03.

The antenna report is provided in the operational description for this application.

Note 5: Scanning Radio 1 5GHz: Maximum Directional Gain following KDB662911 D01.

Note 6: Scanning Radio 1 5GHz: Directional gain information.

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

$$G1 = 5.9 ; G2 = 5.9$$

$$5 \text{ GHz U-NII-1 DG} = 8.91 \text{ dBi}$$

$$5 \text{ GHz U-NII-2A DG} = 8.91 \text{ dBi}$$

$$5 \text{ GHz U-NII-2C DG} = 8.91 \text{ dBi}$$

$$5 \text{ GHz U-NII-3 DG} = 8.91 \text{ dBi}$$

**For Radio 1****For 2.4GHz:****For IEEE 802.11b/g/n/VHT/ax mode (1TX/4RX):**

Only Port 1 can be use as transmitting antenna.

Port 1, Port 2 could transmit simultaneously.

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

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

For IEEE 802.11b/g/n/VHT/ax mode (2TX/4RX):

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

Port 1, Port 2 could transmitting simultaneously.

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

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

For IEEE 802.11b/g/n/VHT/ax mode (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

For Scanning Radio 1**For 2.4GHz:****For IEEE 802.11b/g/n/VHT/ax mode (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

For 5GHz UNII 1~3:**For IEEE 802.11a/n/ac/ax mode (2TX/2RX):**

Port 1, Port 2 can be used as transmitting/receiving antenna.

Port 1, Port 2 could transmit/receive simultaneously.

For 6GHz UNII 5~8:**For IEEE 802.11ax mode (2TX/2RX):**

Port 1, Port 2 can be used as transmitting/receiving antenna.

Port 1, Port 2 could transmit/receive simultaneously.

For Radio 2**For 5GHz UNII 1~3:****For IEEE 802.11a/n/ac/ax mode (1TX/4RX):**

Only Port 1 can be use as transmitting antenna.

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

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

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

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

Port 1, Port 2 could transmitting simultaneously.

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

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

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

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

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

For Radio 3**For 6GHz UNII 5~8:****For IEEE 802.11ax mode (1TX/4RX):**

Only Port 1 can be use as transmitting antenna.

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

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

For IEEE 802.11ax mode (2TX/4RX):

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

Port 1, Port 2 could transmitting simultaneously.

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

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

For IEEE 802.11ax mode (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For Radio 4
Bluetooth / IEEE802.15.4 (1TX):

Only Port 1 can be used as transmitting antenna.

For Radio 5
UWB (1TX/1RX):

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

1.1.3 Mode Test Duty Cycle
For Radio 2
For 1T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.066m	1k
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	781.25u	3k
802.11ax HEW80	0.937	0.28	413.75u	3k
802.11ax HEW160	0.895	0.48	236.875u	10k

For 2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.066m	1k

For 2T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.965	0.15	781.25u	3k
802.11ax HEW40	0.941	0.26	427.5u	3k
802.11ax HEW80	0.896	0.48	244.375u	10k
802.11ax HEW160	0.855	0.68	162.5u	10k

For 4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.948	0.23	2.065m	1k
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	781.25u	3k
802.11ax HEW80	0.938	0.28	413.75u	3k
802.11ax HEW160	0.895	0.48	236.875u	10k

For 4T4S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.941	0.26	437.5u	3k
802.11ax HEW40	0.907	0.42	260u	10k
802.11ax HEW80	0.863	0.64	168.75u	10k
802.11ax HEW160	0.831	0.8	136.25u	10k

**For Scanning radio 1****For 2T1S**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.958	0.19	2.065m	1k

For 2T2S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.967	0.15	780u	3k
802.11ax HEW40	0.94	0.27	426.25u	3k
802.11ax HEW80	0.895	0.48	243.75u	10k

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
	The product has beamforming function for 11n/VHT/11ax in radio 1 2.4GHz, 11n/11ac/11ax in radio 2 5GHz and 11ax 6E.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	accessMTool_REL_3_2_1_5			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT support function

Function
AP
Bridge
Mesh

Note: For above table list, only AP mode was tested and recorded in this test.

Note: The above information was declared by manufacturer.

1.1.6 Table for Radio function

Radio (R)	WLAN 2.4GHz	5GHz UNII 1~3	Scanning radio (WLAN 2.4GHz 4TX / 5GHz UNII 1~3 2TX/ 6E UNII 5~8 2TX)	6E (UNII 5~8)	Bluetooth / IEEE802.15.4	UWB
R1	V (AP, Bridge, Mesh)	-	V (2.4GHz: AP, Bridge, Mesh/5GHz, 6E: AP)	-	-	-
R2	-	V AP for UNII 1~3 Bridge, Mesh for UNII 1, 3	-	-	-	-
R3	-	-	-	V (AP)	-	-
R4	-	-	-	-	V	-
R5	-	-	-	-	-	V

Note: The above information was declared by manufacturer.

1.1.7 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR1N2902AB

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

Modifications	Performance Checking
1. Add UNII 2A and UNII 2C (5250~5350MHz and 5470~5725MHz) for this device. 2. Add 160MHz for Radio 2.	1. Emission Bandwidth 2. Maximum Output Power 3. 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

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 662911 D03 v01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Jay Lo	20.3~21 / 59~61	Dec. 14, 2021~Feb. 19, 2022
Radiated above 1GHz	03CH01-CB	RJ Huang	23.5~24.4 / 56~59	Dec. 11, 2021~Apr. 28, 2022

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)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For non beamforming mode

For Radio 2

For 1T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	89
5300MHz	90
5320MHz	86
5500MHz	81
5580MHz	80
5700MHz	65
5720MHz Straddle 5.47-5.725GHz	87
5720MHz Straddle 5.725-5.85GHz	87
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	88
5300MHz	90
5320MHz	87
5500MHz	82
5580MHz	79
5700MHz	58
5720MHz Straddle 5.47-5.725GHz	85
5720MHz Straddle 5.725-5.85GHz	85
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	85
5310MHz	79
5510MHz	74
5550MHz	80
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	86
5710MHz Straddle 5.725-5.85GHz	86
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	79
5530MHz	76
5610MHz	76
5690MHz Straddle 5.47-5.725GHz	83
5690MHz Straddle 5.725-5.85GHz	83
802.11ax HEW160_Nss1,(MCS0)_1TX	-



Mode	Power Setting
5250MHz Straddle 5.15-5.25GHz	60
5250MHz Straddle 5.25-5.35GHz	60
5570MHz	58

For 2T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	79
5300MHz	79
5320MHz	82
5500MHz	77
5580MHz	73
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	72
5720MHz Straddle 5.725-5.85GHz	72

For 2T2S

Mode	Power Setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	79
5300MHz	79
5320MHz	82
5500MHz	78
5580MHz	68
5700MHz	61
5720MHz Straddle 5.47-5.725GHz	81
5720MHz Straddle 5.725-5.85GHz	81
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	79
5310MHz	74
5510MHz	70
5550MHz	74
5670MHz	72
5710MHz Straddle 5.47-5.725GHz	77
5710MHz Straddle 5.725-5.85GHz	77
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	66
5530MHz	67
5610MHz	76
5690MHz Straddle 5.47-5.725GHz	83
5690MHz Straddle 5.725-5.85GHz	83
802.11ax HEW160_Nss2,(MCS0)_2TX	-



Mode	Power Setting
5250MHz Straddle 5.15-5.25GHz	50
5250MHz Straddle 5.25-5.35GHz	50
5570MHz	50

For 4T1S

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	67
5300MHz	67
5320MHz	70
5500MHz	68
5580MHz	66
5700MHz	60
5720MHz Straddle 5.47-5.725GHz	70
5720MHz Straddle 5.725-5.85GHz	70
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	67
5300MHz	67
5320MHz	70
5500MHz	69
5580MHz	65
5700MHz	54
5720MHz Straddle 5.47-5.725GHz	68
5720MHz Straddle 5.725-5.85GHz	68
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	67
5310MHz	67
5510MHz	54
5550MHz	66
5670MHz	62
5710MHz Straddle 5.47-5.725GHz	71
5710MHz Straddle 5.725-5.85GHz	71
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	64
5530MHz	64
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	69
5690MHz Straddle 5.725-5.85GHz	69
802.11ax HEW160_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	41
5250MHz Straddle 5.25-5.35GHz	41



Mode	Power Setting
5570MHz	48

For 4T4S

Mode	Power Setting
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5260MHz	68
5300MHz	67
5320MHz	71
5500MHz	69
5580MHz	66
5700MHz	56
5720MHz Straddle 5.47-5.725GHz	70
5720MHz Straddle 5.725-5.85GHz	70
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5270MHz	68
5310MHz	65
5510MHz	60
5550MHz	67
5670MHz	63
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5290MHz	66
5530MHz	63
5610MHz	71
5690MHz Straddle 5.47-5.725GHz	70
5690MHz Straddle 5.725-5.85GHz	70
802.11ax HEW160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	45
5250MHz Straddle 5.25-5.35GHz	45
5570MHz	51

**For beamforming mode
For 4T1S**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	67
5300MHz	67
5320MHz	70
5500MHz	69
5580MHz	65
5700MHz	54
5720MHz Straddle 5.47-5.725GHz	68
5720MHz Straddle 5.725-5.85GHz	68
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	67
5310MHz	67
5510MHz	54
5550MHz	66
5670MHz	62
5710MHz Straddle 5.47-5.725GHz	71
5710MHz Straddle 5.725-5.85GHz	71
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	64
5530MHz	64
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	69
5690MHz Straddle 5.725-5.85GHz	69
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	41
5250MHz Straddle 5.25-5.35GHz	41
5570MHz	48

**For Scanning radio 1****For 2T1S**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	69
5300MHz	67
5320MHz	70
5500MHz	69
5580MHz	66
5700MHz	54
5720MHz Straddle 5.47-5.725GHz	69
5720MHz Straddle 5.725-5.85GHz	69

For 2T2S

Mode	Power Setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	71
5300MHz	60
5320MHz	78
5500MHz	76
5580MHz	73
5700MHz	55
5720MHz Straddle 5.47-5.725GHz	76
5720MHz Straddle 5.725-5.85GHz	76
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	73
5310MHz	64
5510MHz	69
5550MHz	74
5670MHz	64
5710MHz Straddle 5.47-5.725GHz	79
5710MHz Straddle 5.725-5.85GHz	79
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	59
5530MHz	66
5610MHz	72
5690MHz Straddle 5.47-5.725GHz	80
5690MHz Straddle 5.725-5.85GHz	80



Note:

- ♦ Evaluated HEW20/HEW40/HEW80/HEW160 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.
- ♦ The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Test Mode	Refer to note 1 for detail operating mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode > 1GHz	CTX
	1. For Radio 2 / 1T1S, 2T1S, 2T2S and Scan Radio 1 / 2T1S, 2T2S The EUT was performed at X axis, Y axis and Z axis and the worst case was found at X axis. So the measurement will follow this same test configuration.
	2. For Radio 2 / 4T1S, 4T4S The EUT was performed at X axis, Y axis and Z axis position and the harmonic worst case was found at Y axis and the bandedge worst case was found at Z axis. So the measurement will follow this same test configuration.
	3. Refer to note 1 for detail operating mode
1	Radio 2_1T1S_EUT in X axis
2	Radio 2_2T1S_2T2S_EUT in X axis
3	Radio 2_4T1S_EUT in Y axis for harmonic and EUT in Z axis for bandedge
4	Radio 2_4T4S_EUT in Y axis for harmonic and EUT in Z axis for bandedge
5	Scanning Radio 1_2T1S_2T2S_EUT in X axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	R1: (2.4GHz) + R2 + R3 + R4: (Bluetooth)
2	R1: (2.4GHz) + R2 + R3 + R4: (IEEE802.15.4)
3	R1: (2.4GHz) + R2 + R3 + R5: (UWB)
4	Scanning radio 1: (5GHz UNII 1~UNII 3) + R2 + R3 + R4: (Bluetooth)
5	Scanning radio 1: (5GHz UNII 1~UNII 3) + R2 + R3 + R4: (IEEE802.15.4)
6	Scanning radio 1: (5GHz UNII 1~UNII 3) + R2 + R3 + R5: (UWB)
7	Scanning radio 1: (6GHz UNII 5~UNII 8) + R2 + R3 + R4: (Bluetooth)
8	Scanning radio 1: (6GHz UNII 5~UNII 8) + R2 + R3 + R4: (IEEE802.15.4)
9	Scanning radio 1: (6GHz UNII 5~UNII 8) + R2 + R3 + R5: (UWB)
Refer to Sporton Test Report No.: FA1N2902-01 for Co-location RF Exposure Evaluation.	

Note 1: Test Mode

Test Item	Test Mode										
	802.11a					802.11ax HEW20/40/80/160					
	1T1S	2T1S	2T2S	4T1S	4T4S	1T1S	2T1S	2T2S	4T1S	TXBF 4T1S	4T4S
Maximum Conducted Output Power	V	V	-	V	-	V	Note2	V	V	V	V
Emission Bandwidth	V	V	-	V	-	V	Note2	V	V	-	V
Peak Power Spectral Density	V	V	-	V	-	V	Note2	V	V	-	V
Radiated Emission	V	V	-	V	-	V	Note2	V	V	-	V
Band Edge Emission	V	V	-	V	-	V	Note2	V	V	-	V

Note 2: 802.11ax HEW20/40/80/160 2T1S CDD mode was covered by 802.11ax HEW20/40/80/160 2T2S, due to $2T1S = \min(2T2S, (2T2S - (10 \cdot \log(2/1) - 2T2S \text{ (worst case of PSD/BE/Harmonic) MARGIN})))$.

Note 3: The PoE and adapter are for measurement only, would not be marketed.

Their information as below:

Power	Brand	Model
PoE	Microsemi	PD-9001-10GC/AC
Adapter	Powertron	PA1045-120HIB300



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

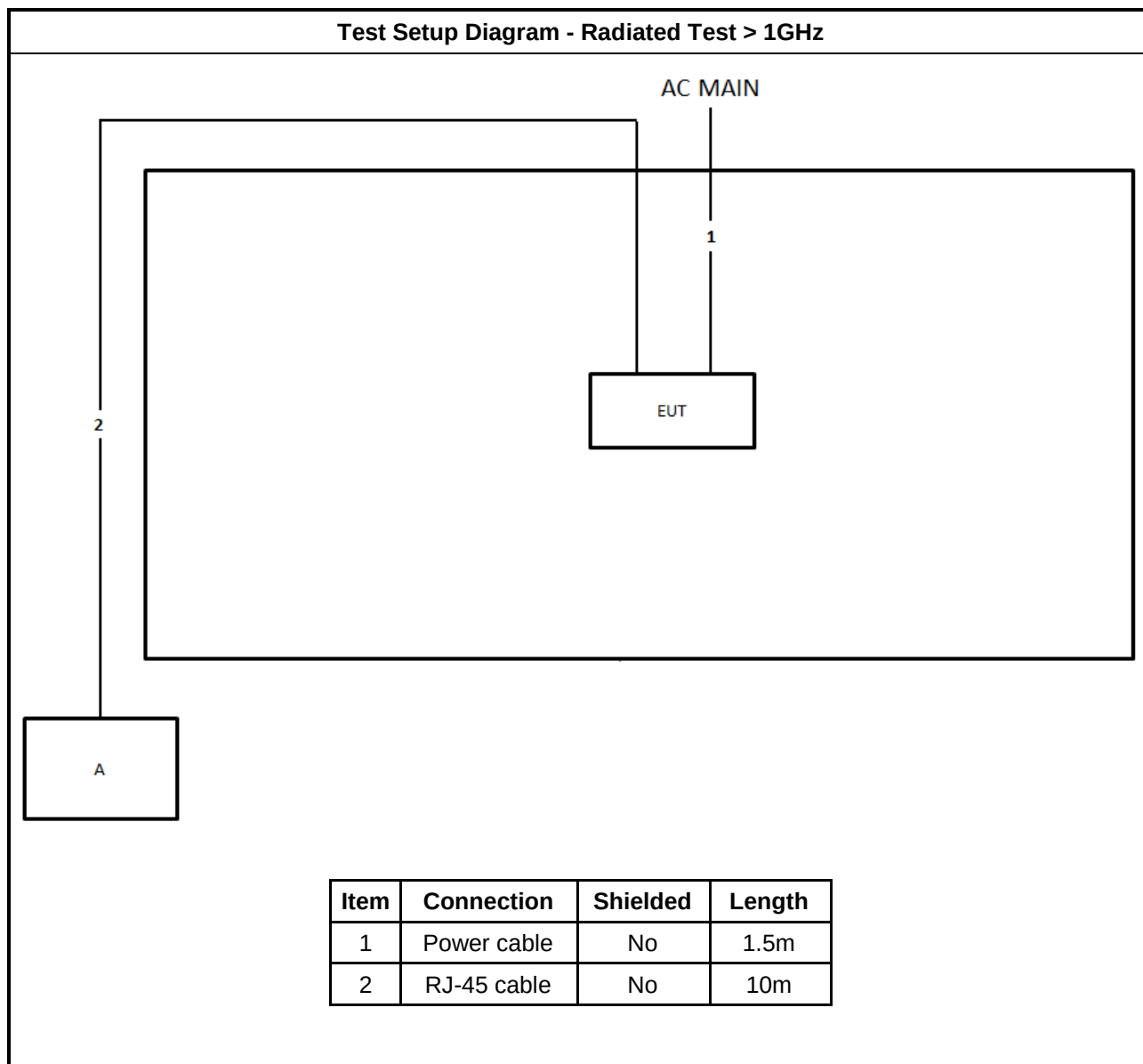
Accessories
Bracket*1

2.5 Support Equipment

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Adapter	Powertron	PA1045-120HIB300	N/A

2.6 Test Setup Diagram





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, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq$ 500kHz.
☐	For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 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.

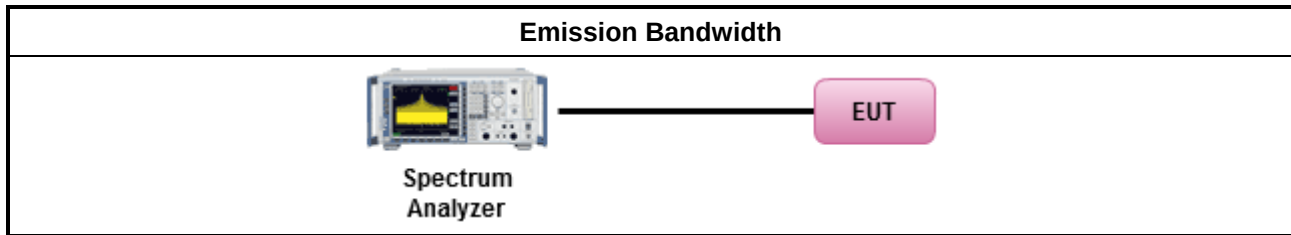
3.1.2 Measuring Instruments

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 D02, 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 Output Power

3.2.1 Limit

Maximum 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.
Maximum EIRP Limit	
☐ For the 5.85-5.895 GHz band:	
☐	- Indoor AP & subordinate device < 36 dBm - Client device < 30 dBm
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

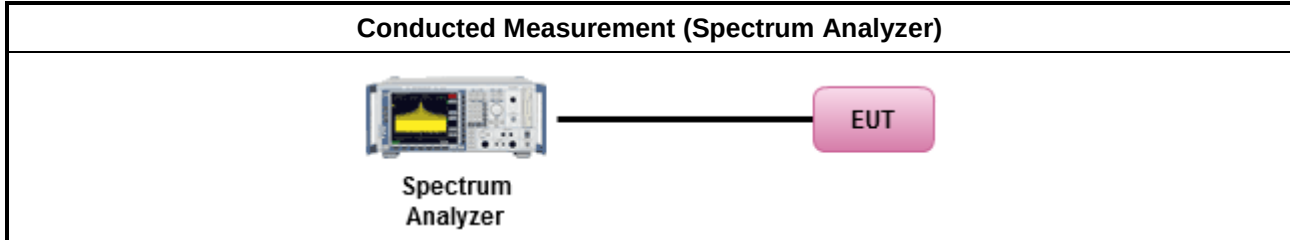
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

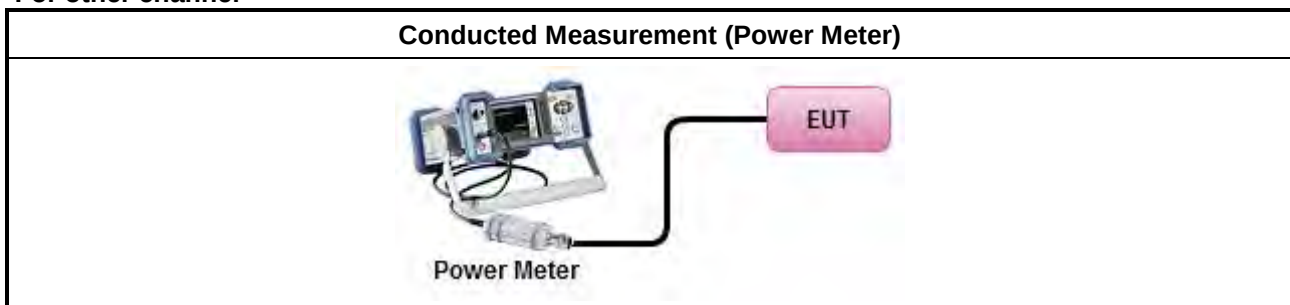
Test Method	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, 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]) $EIRP_{total} = P_{total} + DG$
☐	For radiated measurement.
	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.2.4 Test Setup

For Straddle channel



For other channel



3.2.5 Test Result of Maximum Output Power

Refer as Appendix B



3.3 Power Spectral Density

3.3.1 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.
EIRP Power Spectral Density Limit	
☐ For the 5.85-5.895 GHz band:	
	- Indoor AP & subordinate device < 20dBm/MHz - Client device < 14dBm/MHz
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

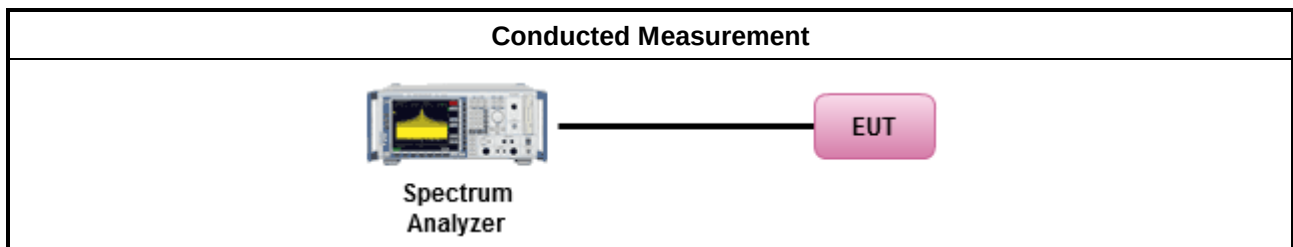
Refer a test equipment and calibration data table in this test report.

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 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, 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 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, 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])	

Test Method	
	$EIRP_{total} = PPSD_{total} + DG$
☐	For radiated measurement.
	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.3.4 Test Setup



3.3.5 Test Result of 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.
☐ 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an



	e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz. (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
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.

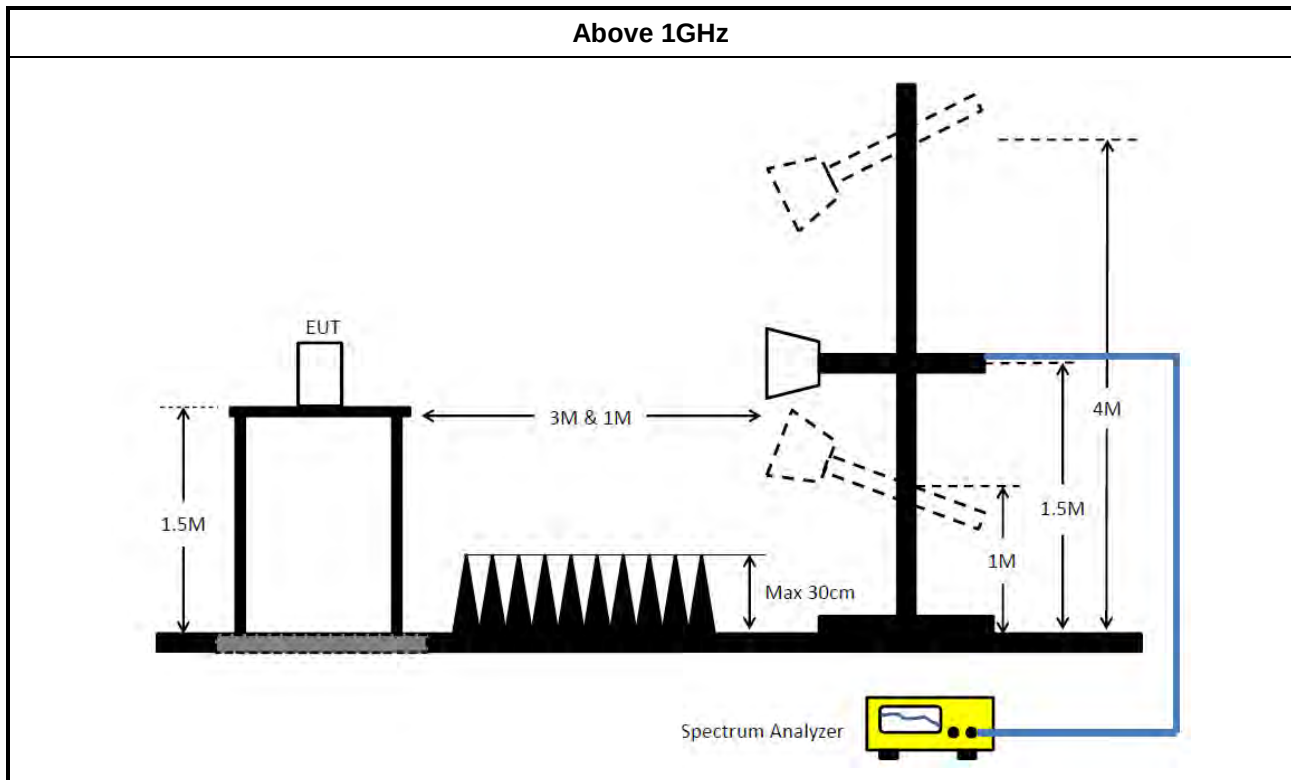
3.4.3 Test Procedures

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 D02, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033 D02, 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 D02, 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.	

Test Method

- 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 (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.4.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGR EN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2021	Nov. 05, 2022	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 02, 2021	Aug. 01, 2022	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

N.C.R. means Non-Calibration required.

For Radio 2 / 1T1S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX	82.32M	78.361M	78M4D1D	82.32M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	38.04M	19.07M	19M1D1D	26.1M	17.511M
802.11ax HEW20_Nss1,(MCS0)_1TX	42.24M	19.88M	19M9D1D	30.66M	19.34M
802.11ax HEW40_Nss1,(MCS0)_1TX	66.18M	38.621M	38M6D1D	48M	38.201M
802.11ax HEW80_Nss1,(MCS0)_1TX	84.72M	77.961M	78M0D1D	84.72M	77.961M
802.11ax HEW160_Nss1,(MCS0)_1TX	82.88M	78.441M	78M4D1D	82.88M	78.441M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	37.23M	18.741M	18M7D1D	21.72M	14.873M
802.11ax HEW20_Nss1,(MCS0)_1TX	39.06M	19.55M	19M5D1D	21.84M	14.858M
802.11ax HEW40_Nss1,(MCS0)_1TX	77.22M	39.4M	39M4D1D	40.74M	34.808M
802.11ax HEW80_Nss1,(MCS0)_1TX	109.8M	78.321M	78M3D1D	96.72M	74.438M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.88M	156.642M	157MD1D	164.88M	156.642M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	3.14M	9.395M	9M40D1D	3.14M	9.395M
802.11ax HEW20_Nss1,(MCS0)_1TX	4.48M	9.435M	9M44D1D	4.48M	9.435M
802.11ax HEW40_Nss1,(MCS0)_1TX	3.98M	35.342M	35M3D1D	3.98M	35.342M
802.11ax HEW80_Nss1,(MCS0)_1TX	3.98M	32.844M	32M8D1D	3.98M	32.844M

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

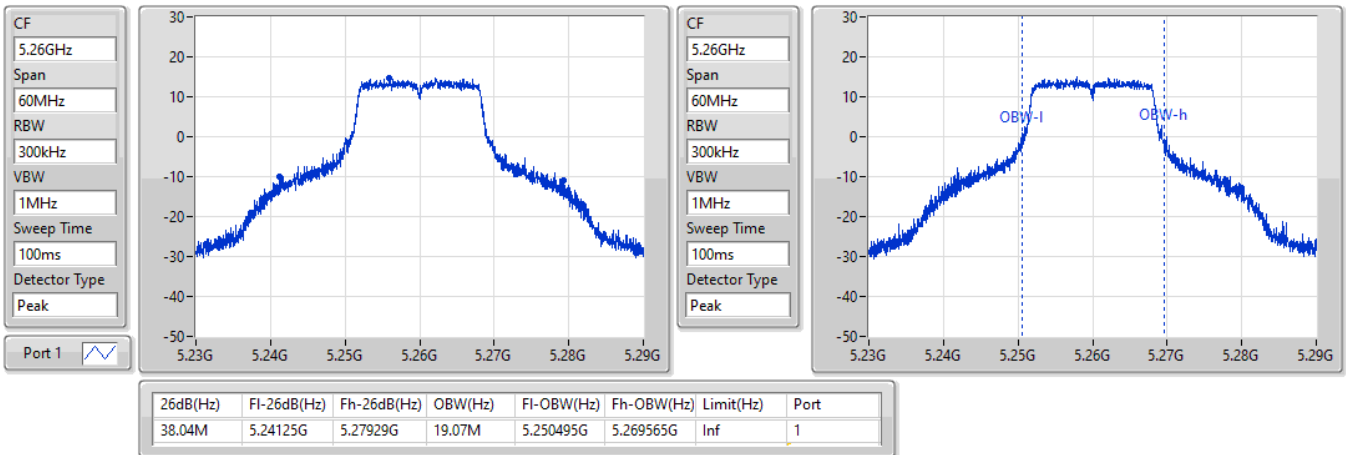
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5260MHz	Pass	Inf	38.04M	19.07M
5300MHz	Pass	Inf	37.14M	18.921M
5320MHz	Pass	Inf	26.1M	17.511M
5500MHz	Pass	Inf	28.95M	17.871M
5580MHz	Pass	Inf	37.23M	18.741M
5700MHz	Pass	Inf	21.72M	17.151M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.93M	14.873M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	9.395M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5260MHz	Pass	Inf	42.24M	19.7M
5300MHz	Pass	Inf	41.94M	19.88M
5320MHz	Pass	Inf	30.66M	19.34M
5500MHz	Pass	Inf	33.51M	19.37M
5580MHz	Pass	Inf	39.06M	19.55M
5700MHz	Pass	Inf	21.84M	19.13M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.405M	14.858M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.48M	9.435M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5270MHz	Pass	Inf	66.18M	38.621M
5310MHz	Pass	Inf	48M	38.201M
5510MHz	Pass	Inf	43.62M	38.141M
5550MHz	Pass	Inf	77.22M	39.4M
5670MHz	Pass	Inf	40.74M	38.141M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	54.11M	34.808M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	35.342M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5290MHz	Pass	Inf	84.72M	77.961M
5530MHz	Pass	Inf	96.72M	78.081M
5610MHz	Pass	Inf	105.24M	78.321M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	109.8M	74.438M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	32.844M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.32M	78.361M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.88M	78.441M
5570MHz	Pass	Inf	164.88M	156.642M

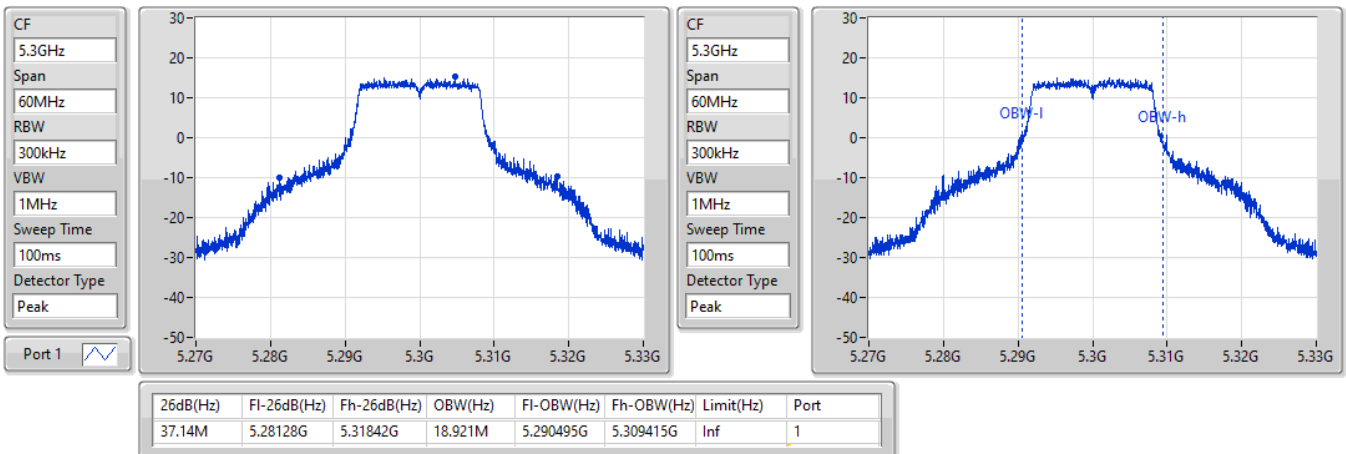
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX
EBW
5260MHz

29/12/2021

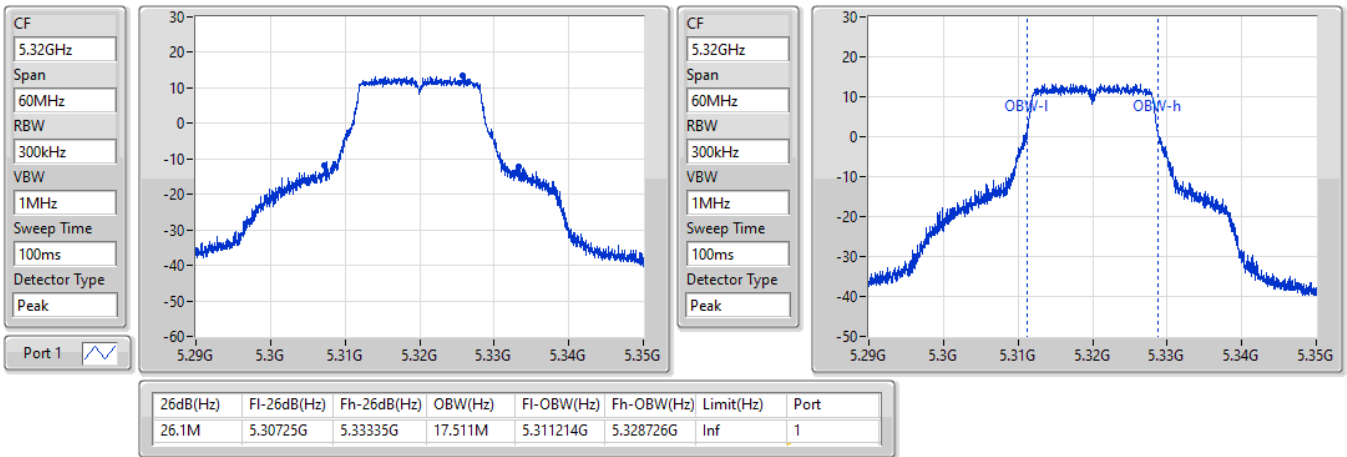

802.11a_Nss1,(6Mbps)_1TX
EBW
5300MHz

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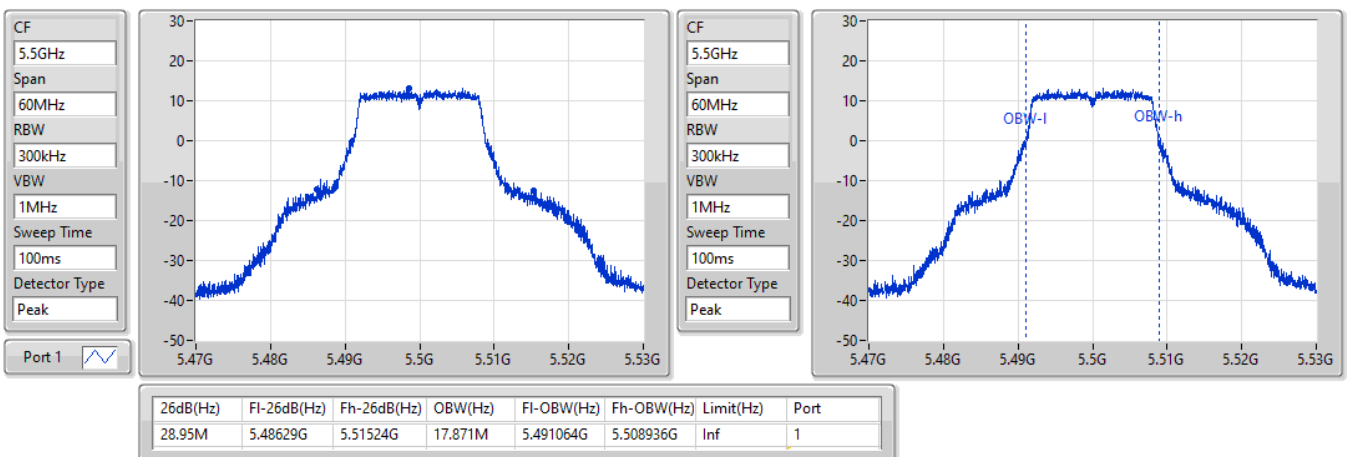


802.11a_Nss1,(6Mbps)_1TX
EBW
5320MHz

29/12/2021

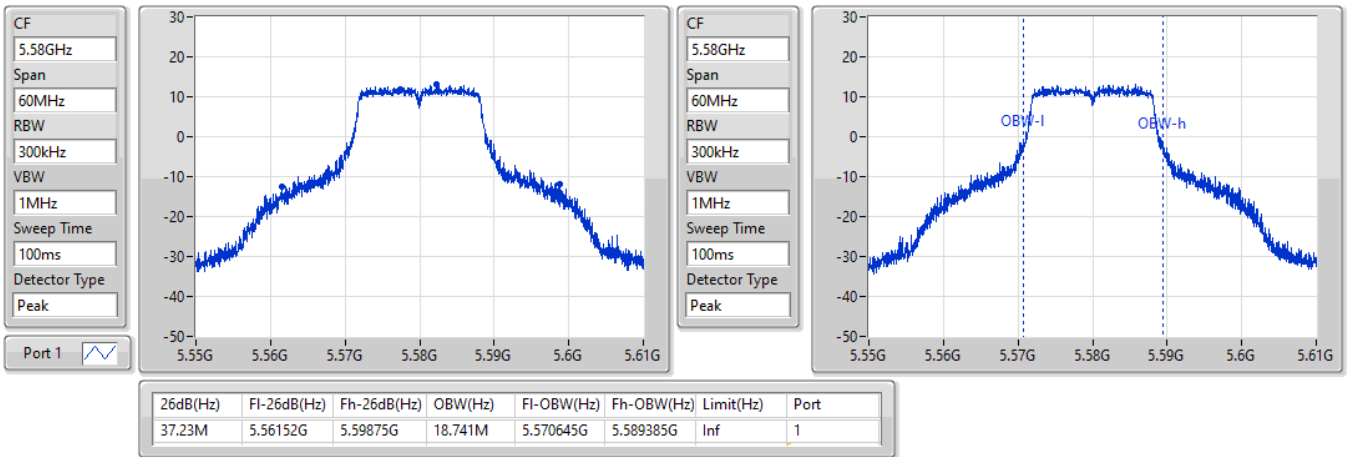

802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

29/12/2021

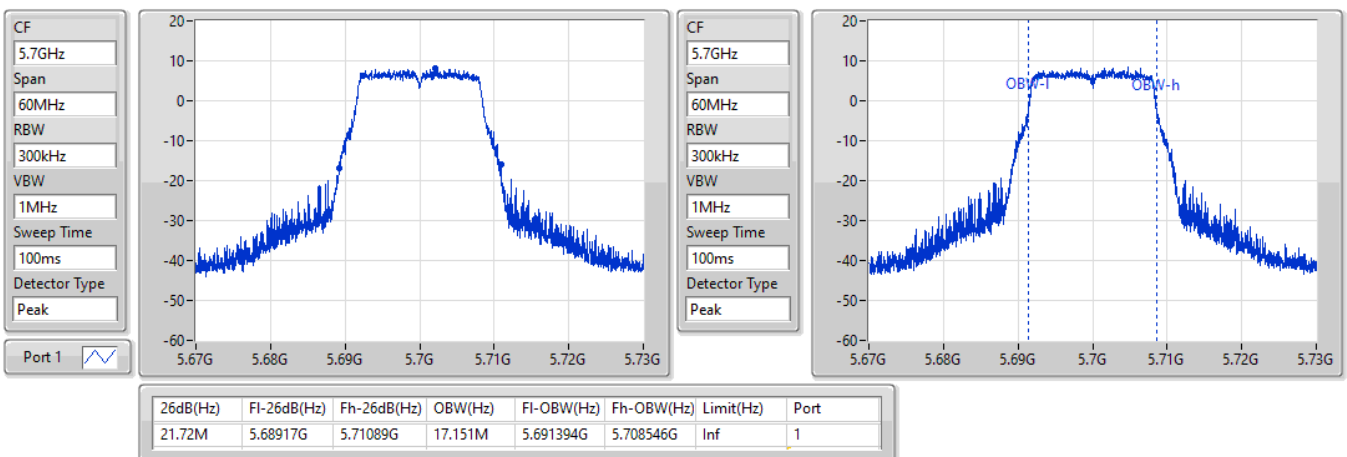


802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

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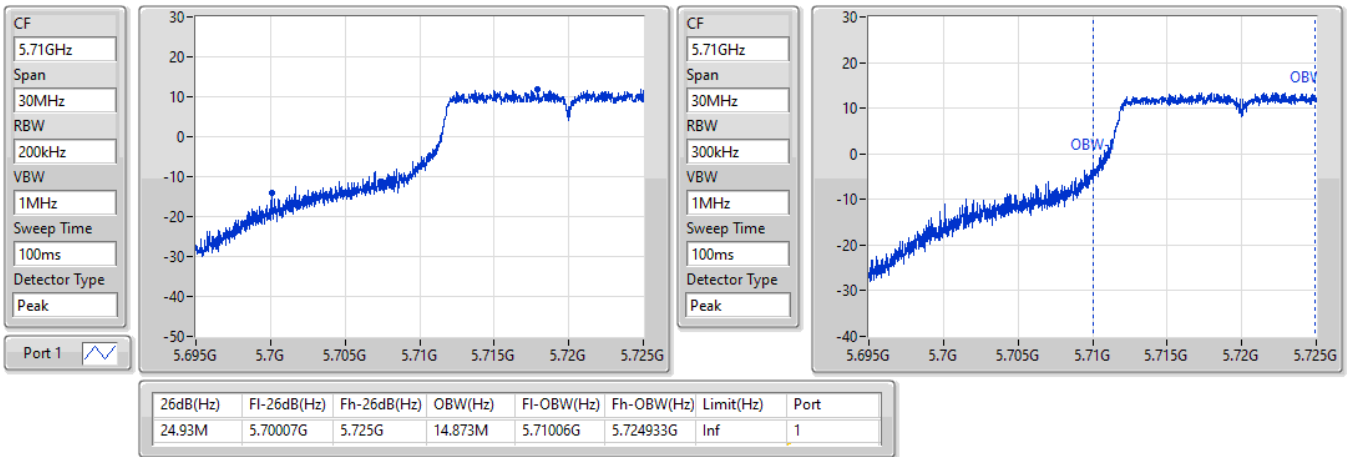

802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

29/12/2021

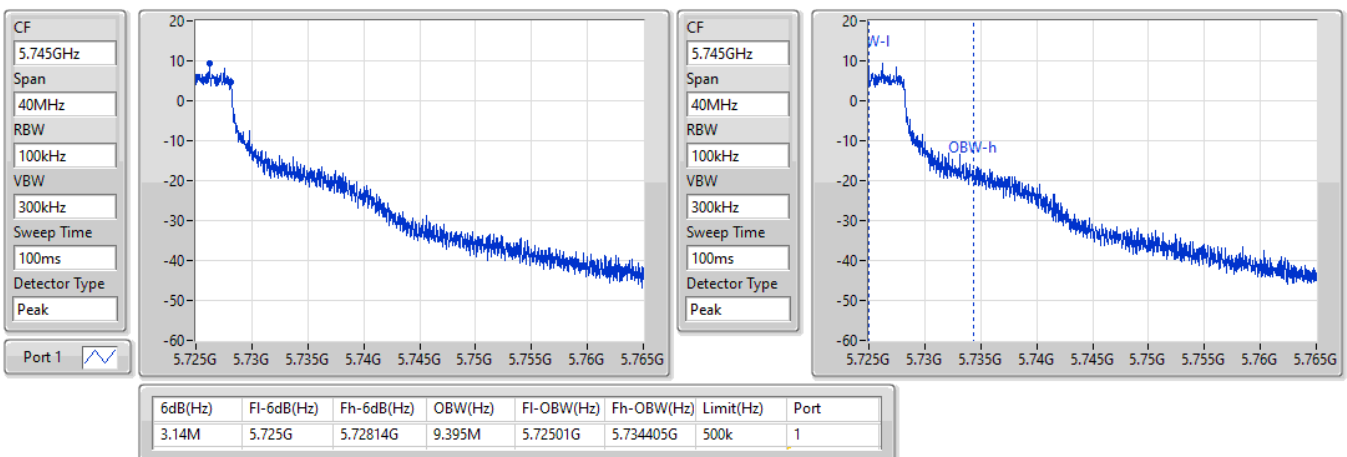


802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

29/12/2021


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

05/01/2022

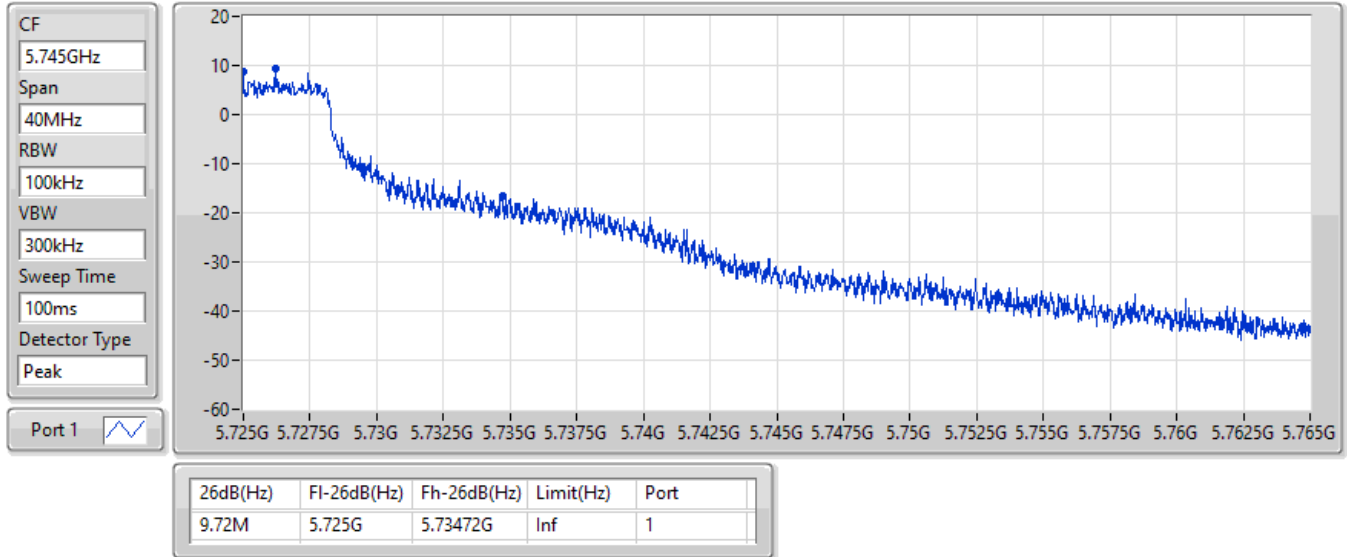


802.11a_Nss1,(6Mbps)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

05/01/2022

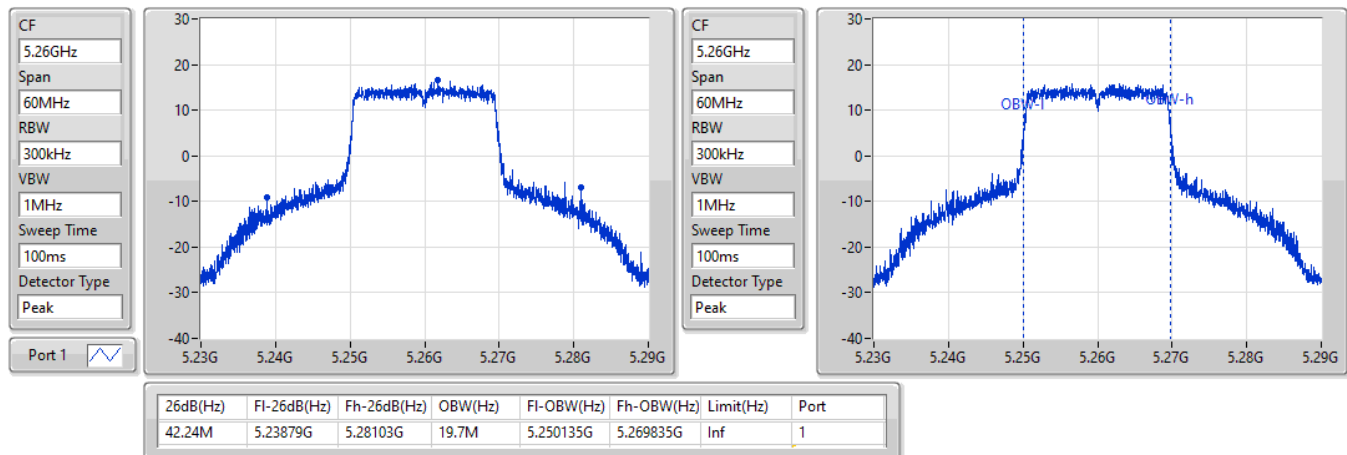


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

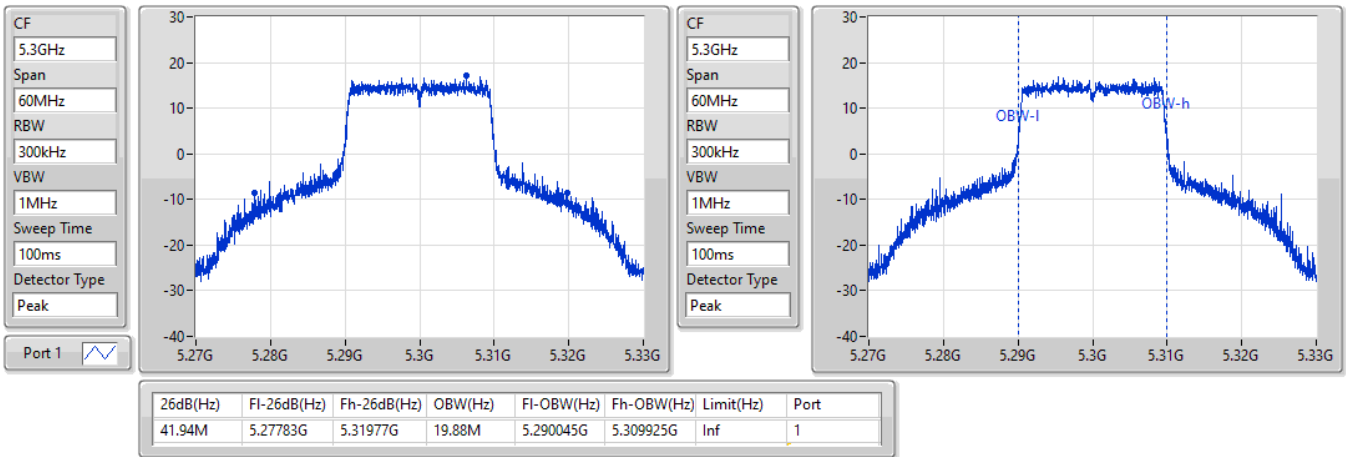
5260MHz

29/12/2021

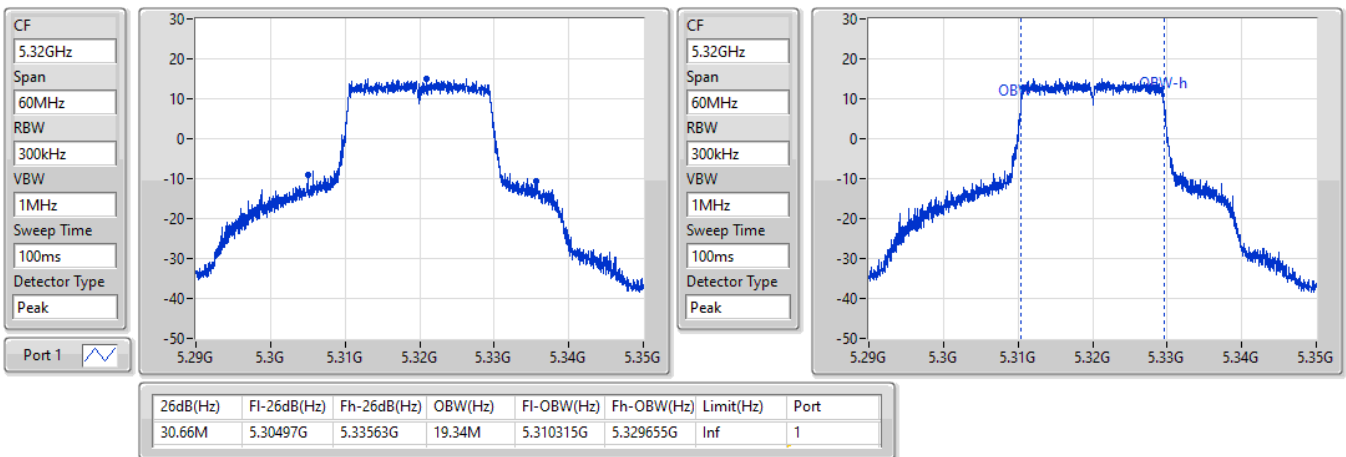


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5300MHz

29/12/2021

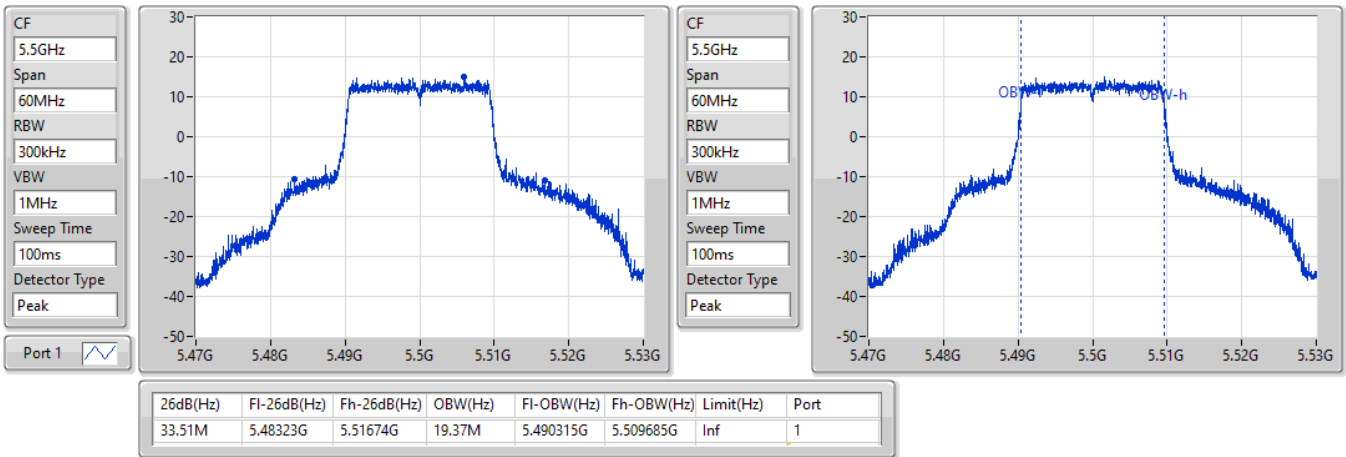

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5320MHz

29/12/2021

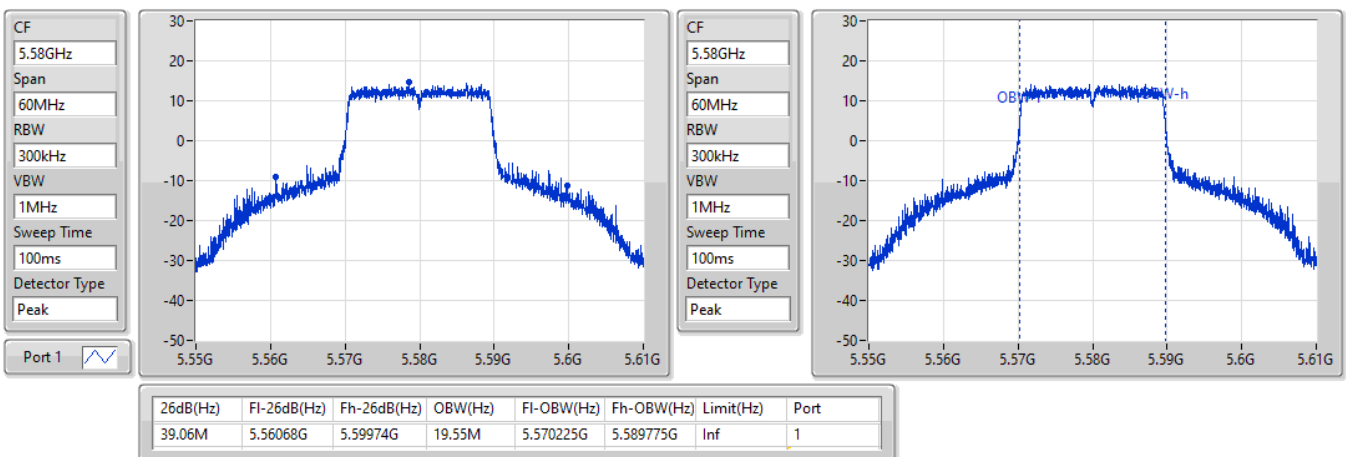


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

29/12/2021

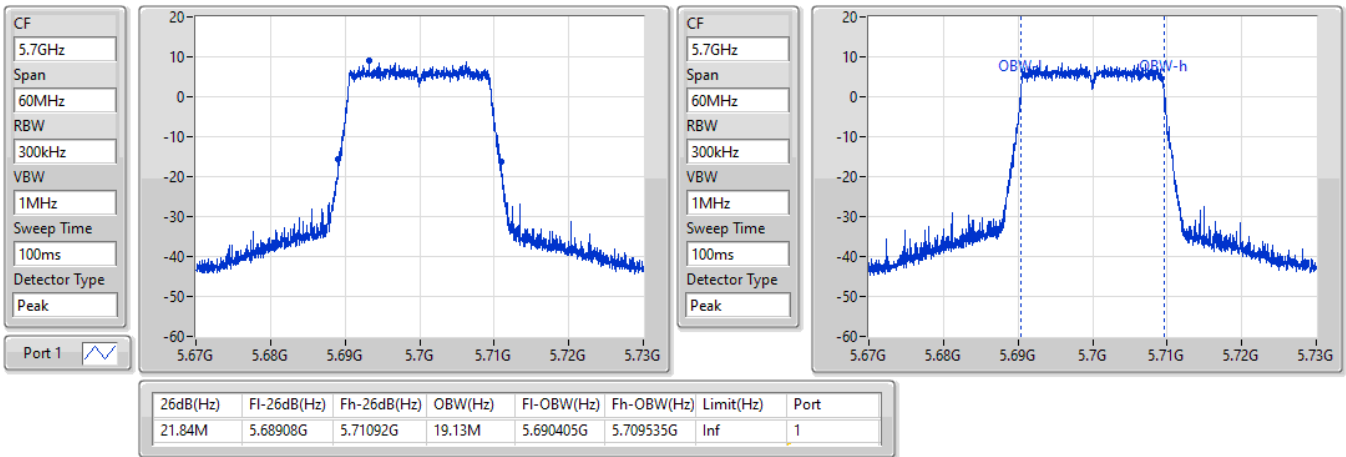

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

29/12/2021

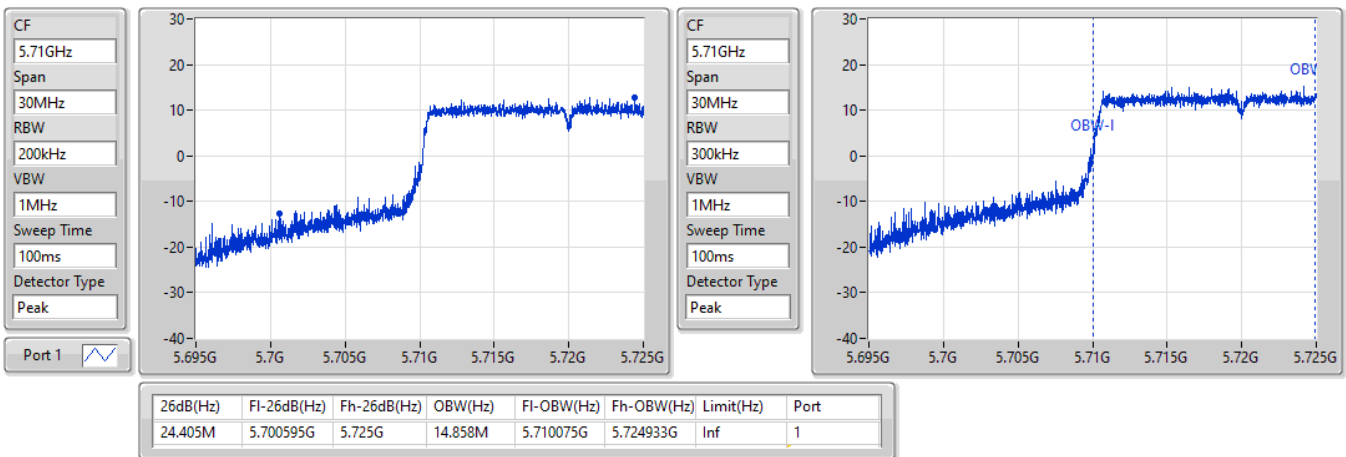


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

29/12/2021


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.67-5.725GHz

29/12/2021

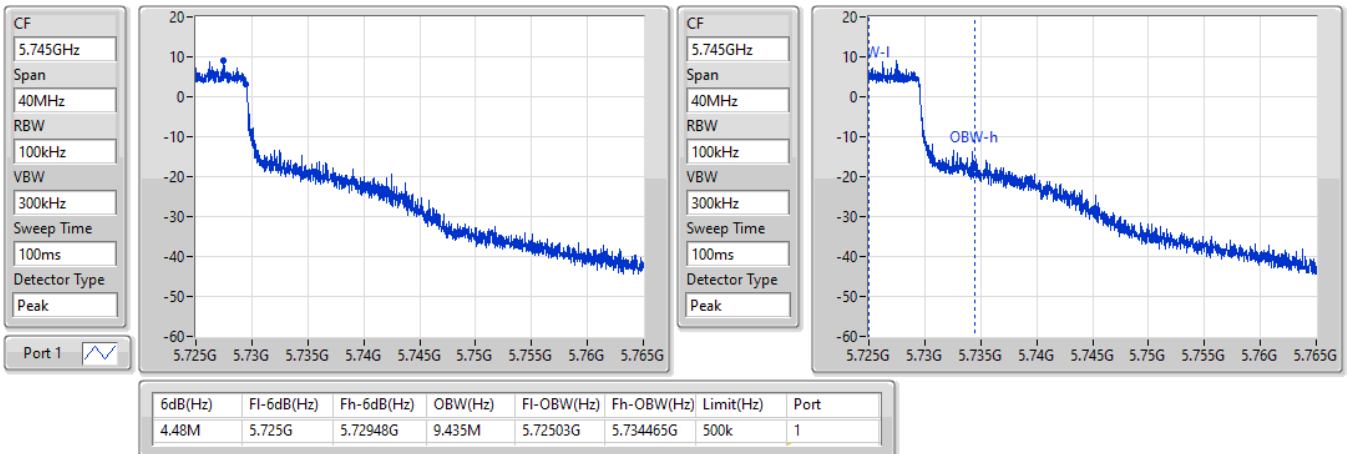


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

05/01/2022

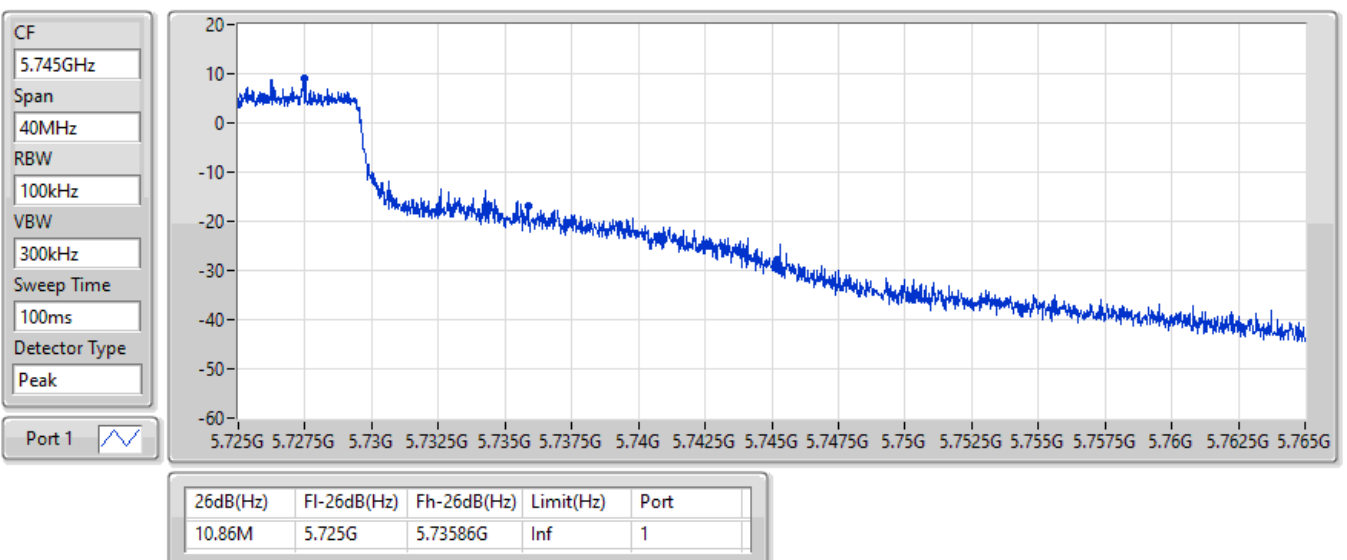


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

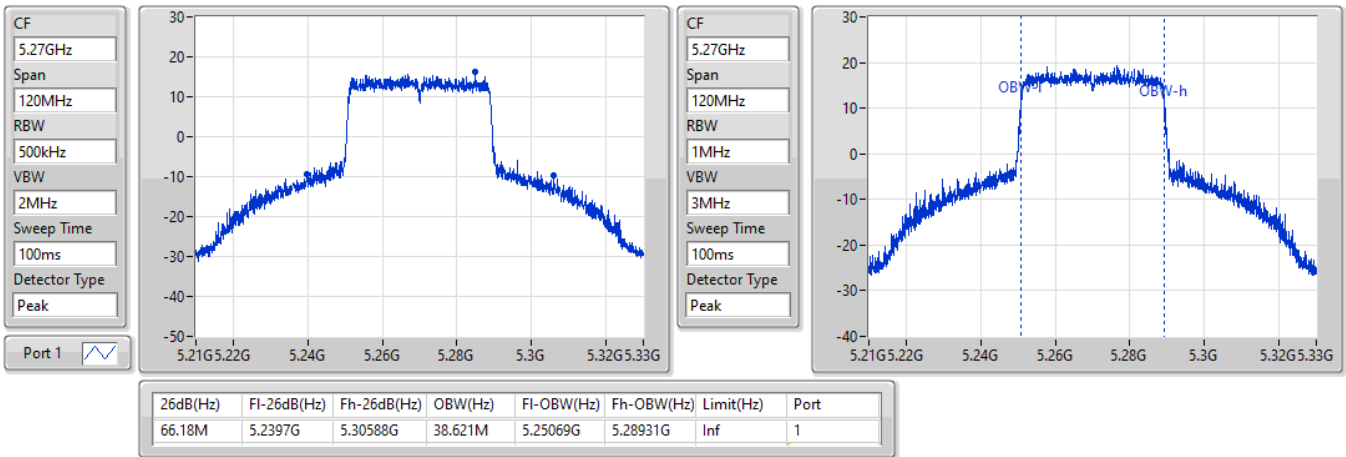
5720MHz Straddle 5.725-5.85GHz

05/01/2022

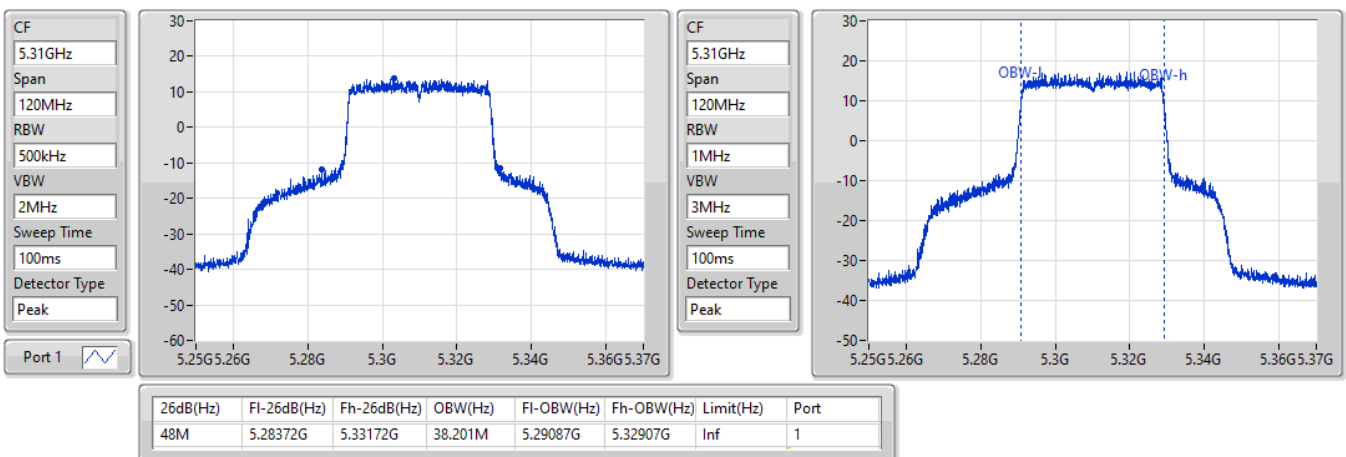


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5270MHz

29/12/2021

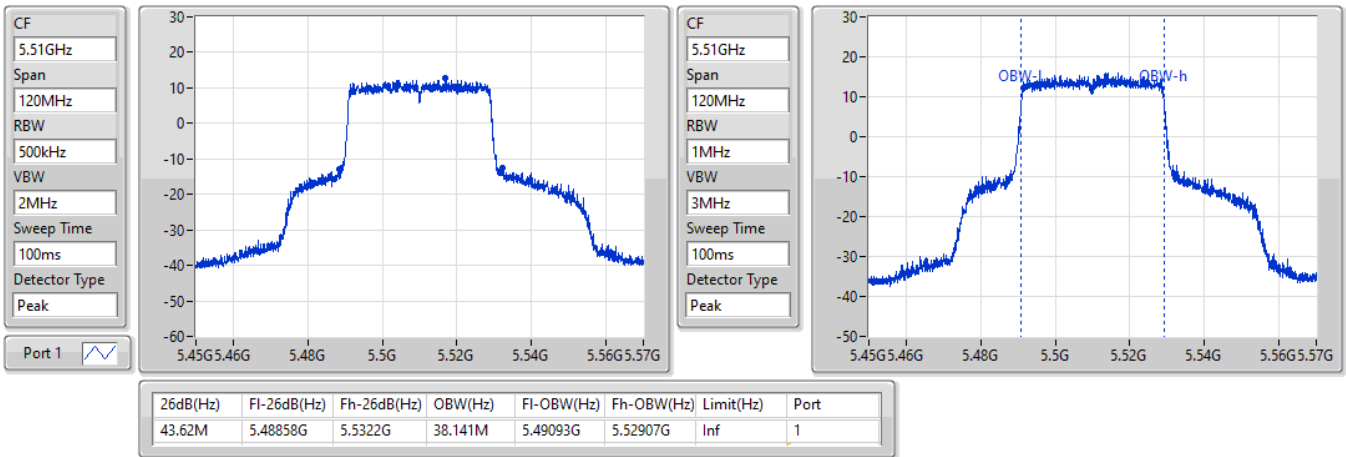

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5310MHz

29/12/2021

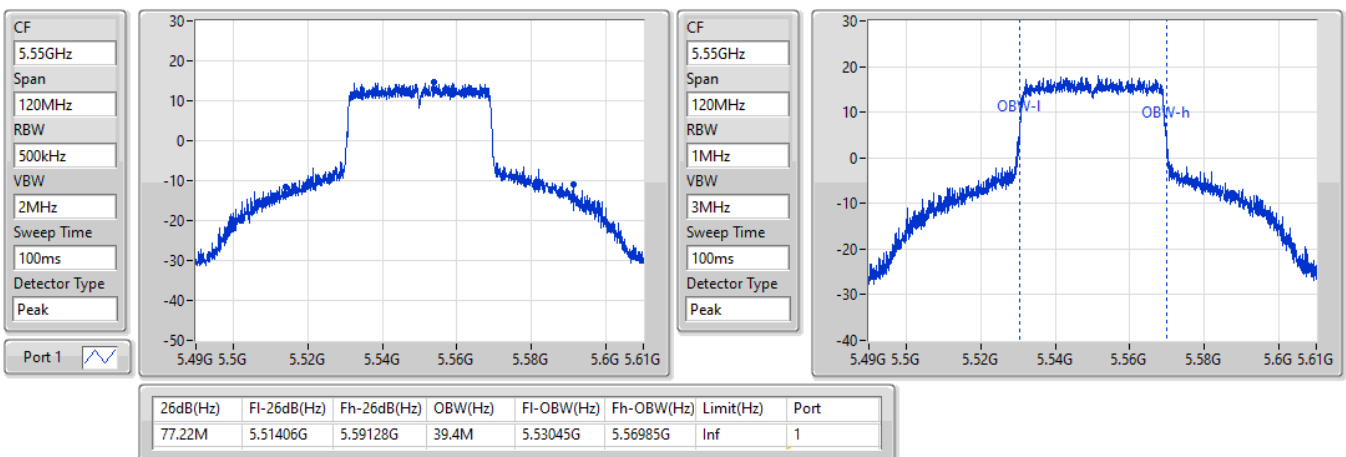


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5510MHz

29/12/2021

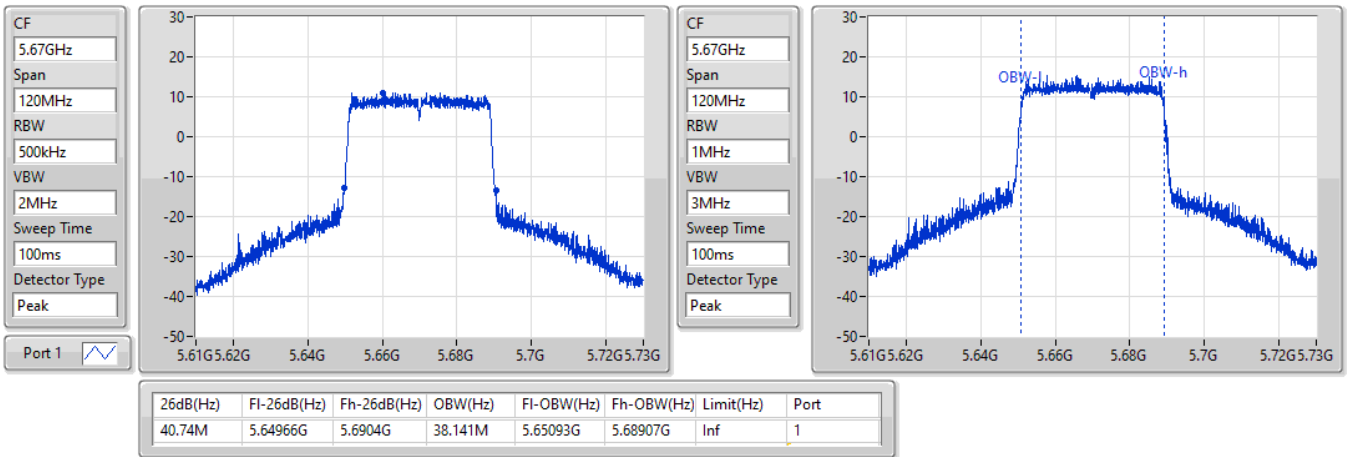

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5550MHz

29/12/2021

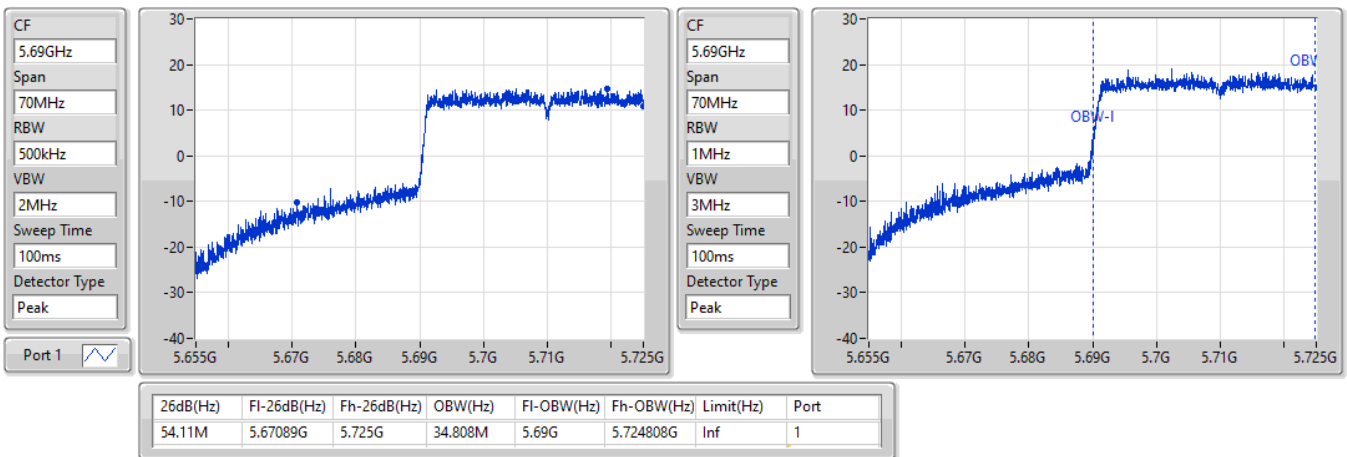


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5670MHz

29/12/2021

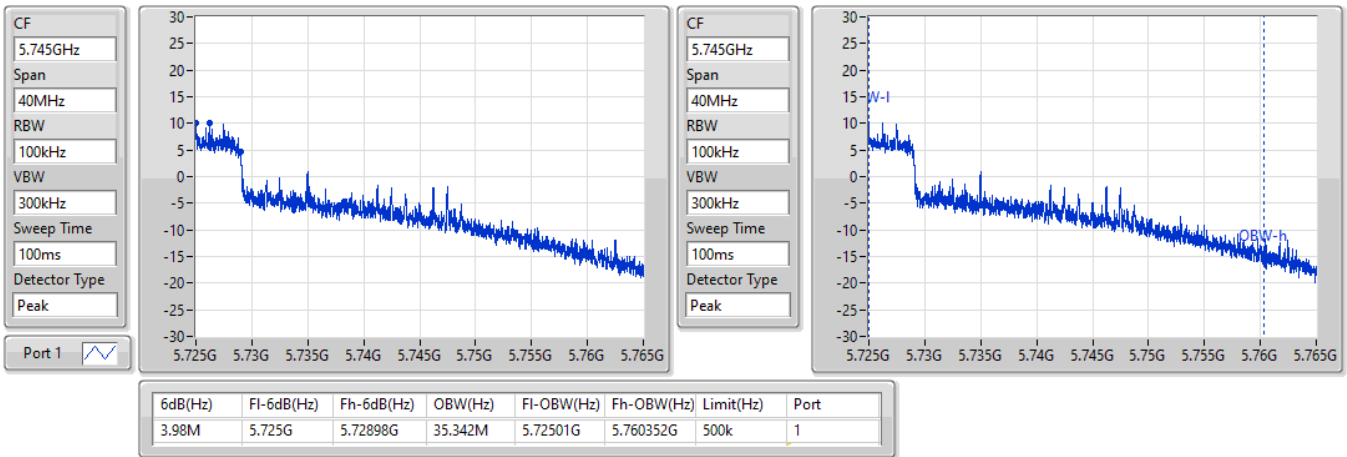

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

29/12/2021

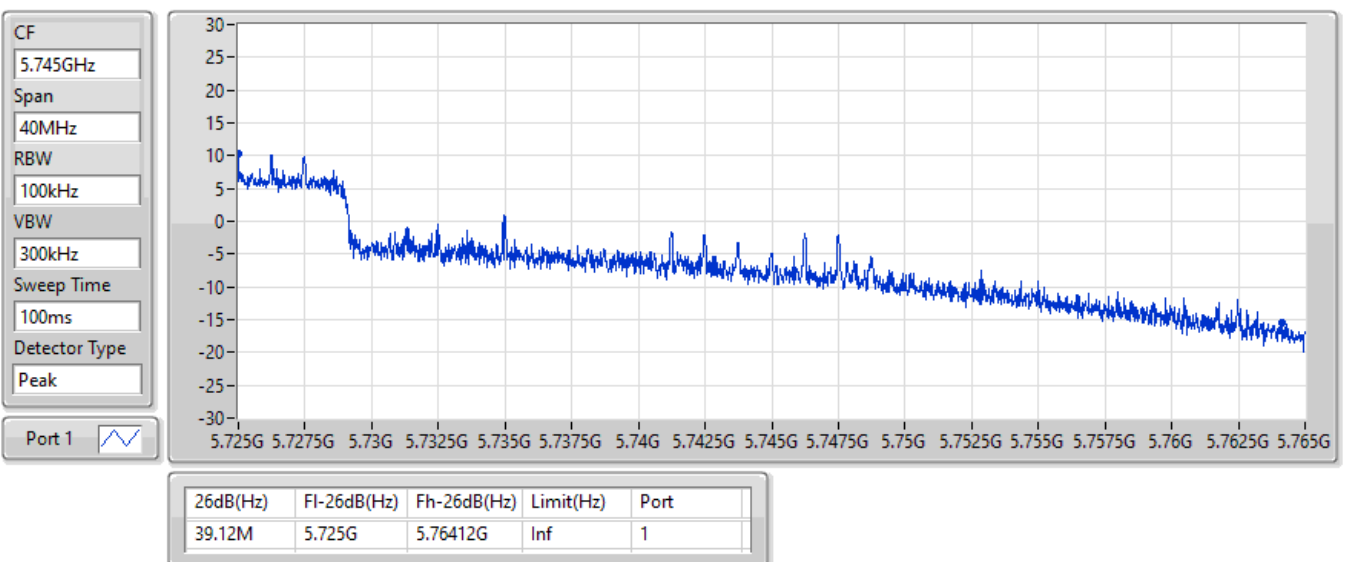


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

29/12/2021

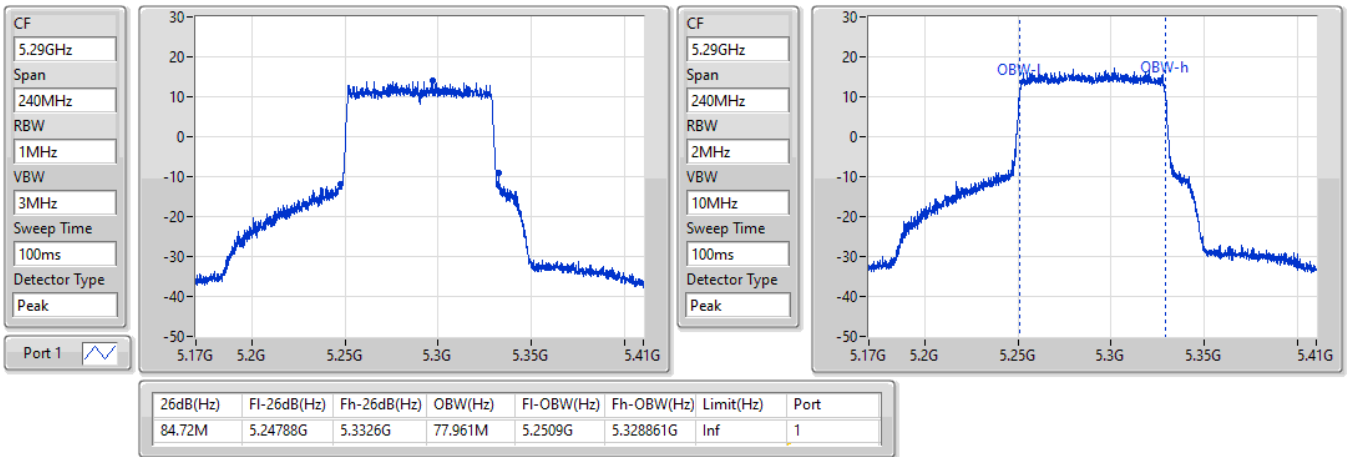

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

29/12/2021

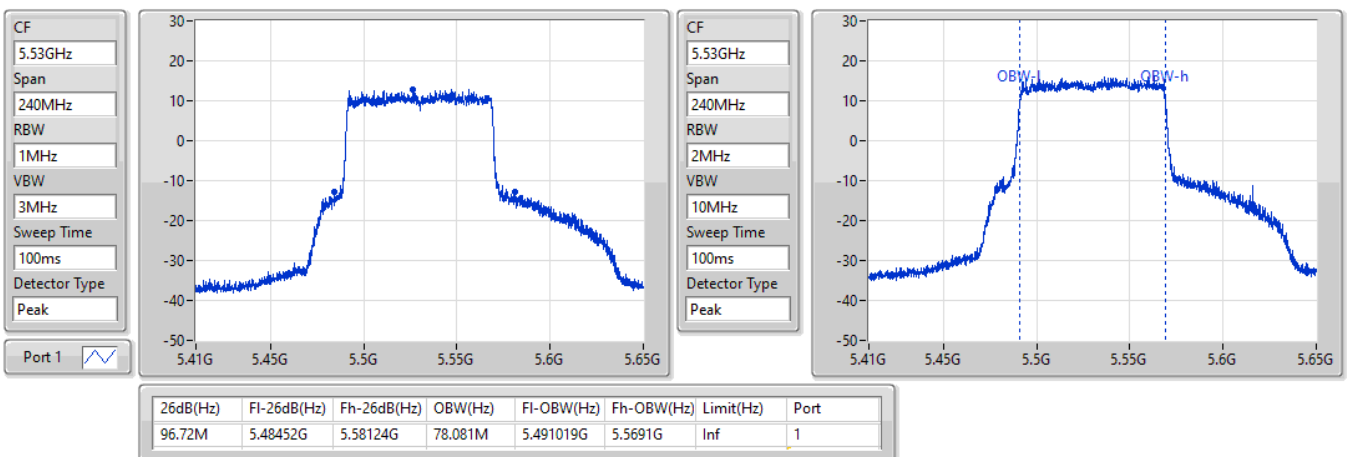


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5290MHz

29/12/2021

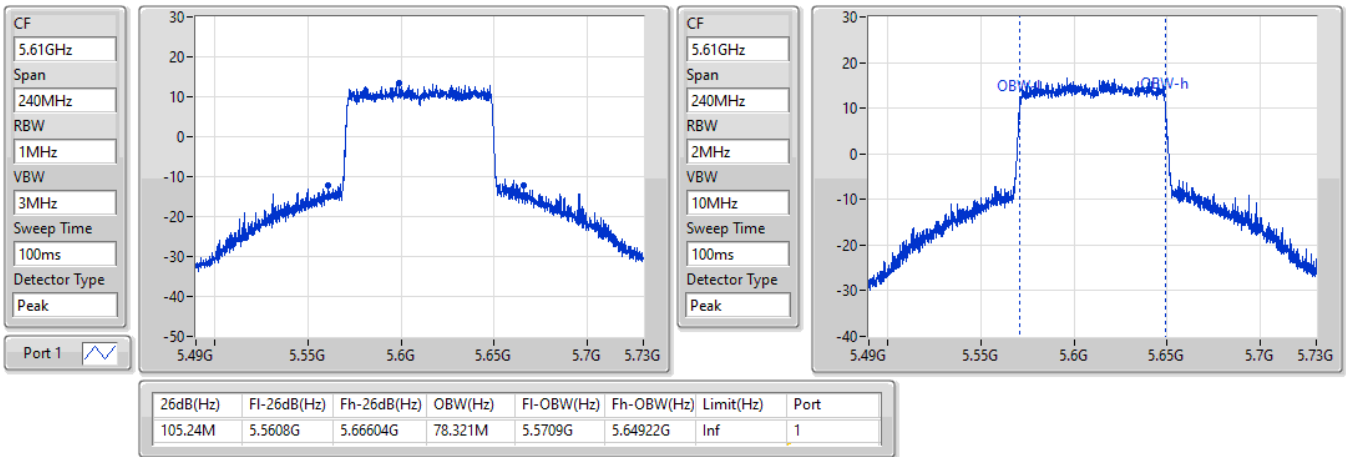

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5530MHz

29/12/2021

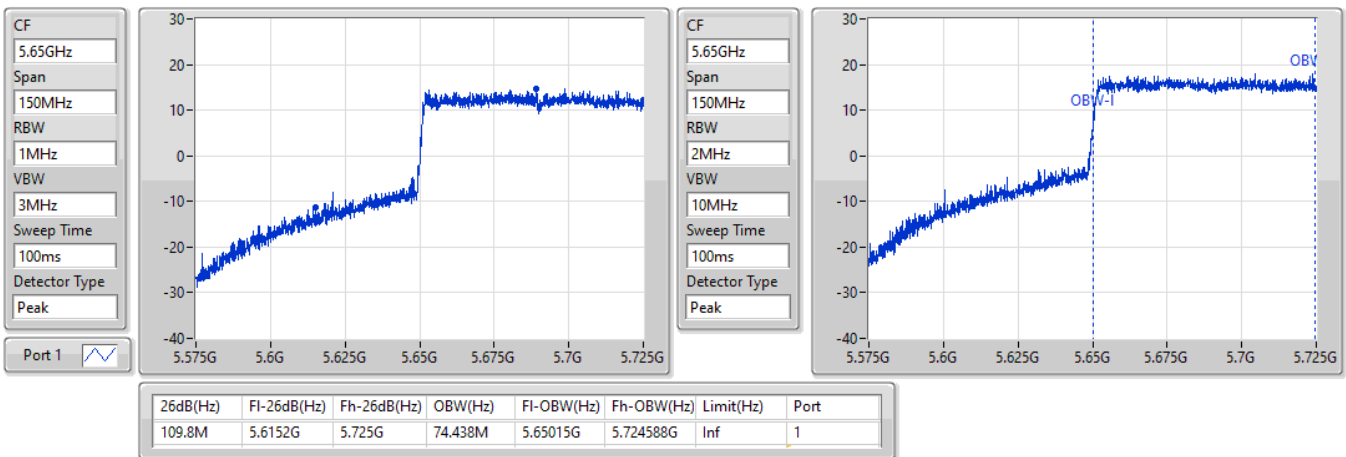


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5610MHz

29/12/2021

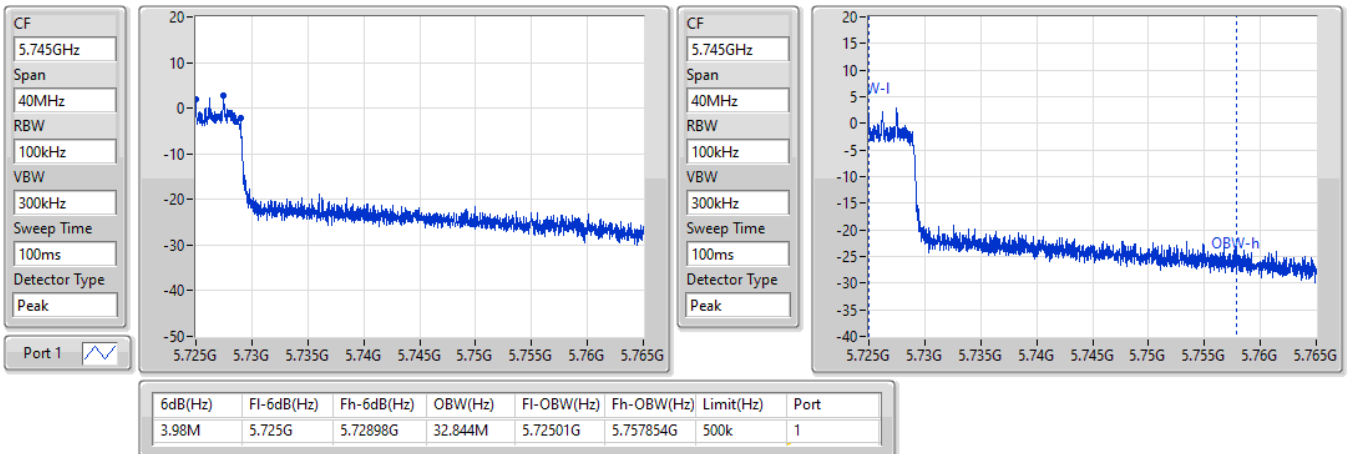

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

29/12/2021

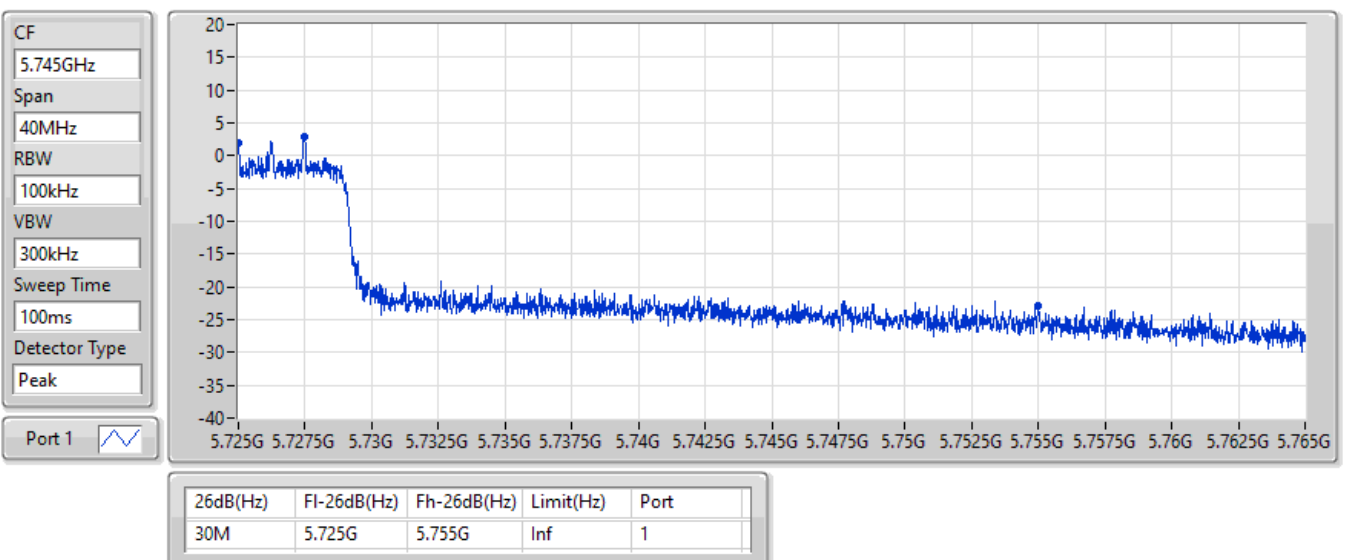


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

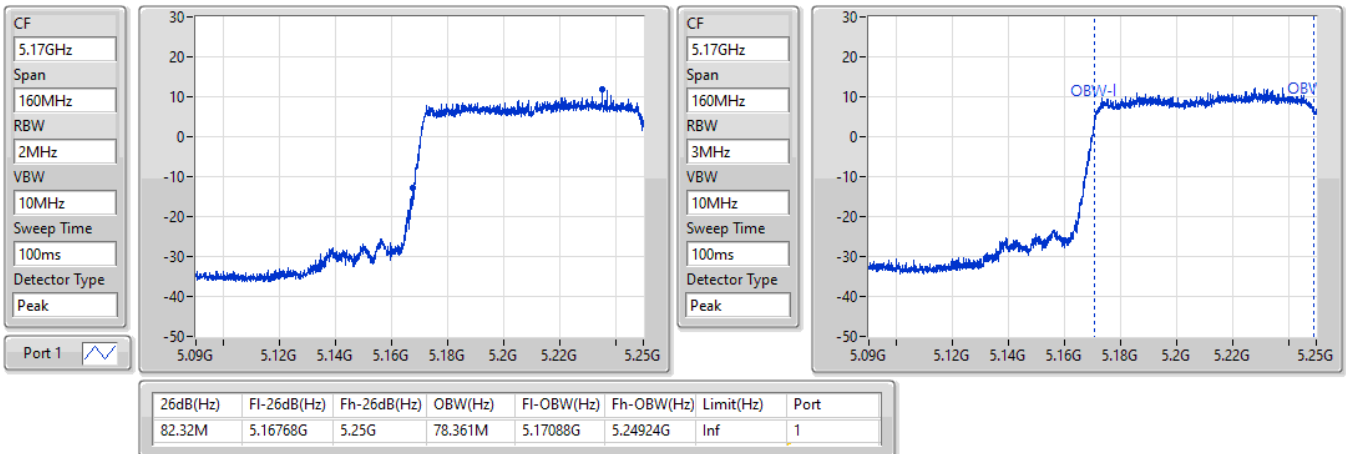

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

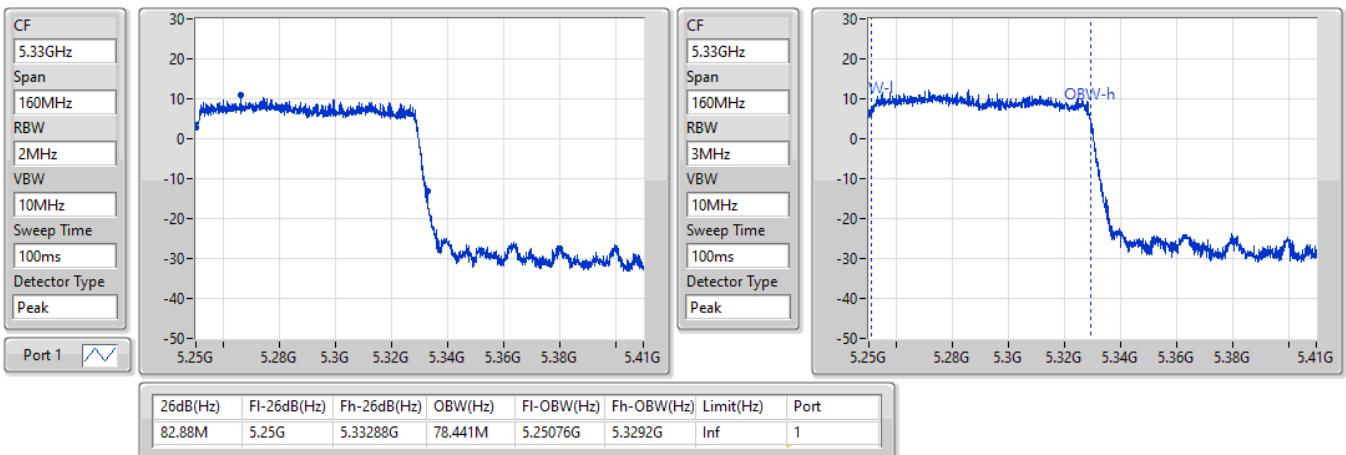


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/01/2022


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

27/01/2022

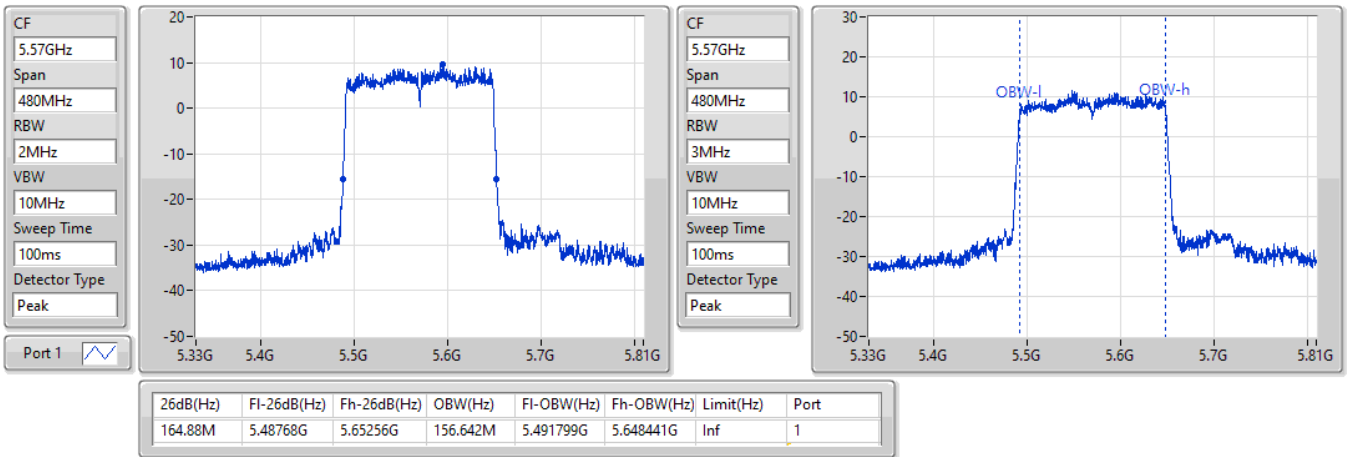


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

5570MHz

27/01/2022



For 2T1S and 2T2S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss2,(MCS0)_2TX	82.48M	78.361M	78M4D1D	82M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	26.4M	17.421M	17M4D1D	23.82M	17.091M
802.11ax HEW20_Nss2,(MCS0)_2TX	27.33M	19.25M	19M2D1D	21.6M	19.19M
802.11ax HEW40_Nss2,(MCS0)_2TX	48.3M	38.201M	38M2D1D	41.64M	38.141M
802.11ax HEW80_Nss2,(MCS0)_2TX	87.24M	77.961M	78M0D1D	83.88M	77.841M
802.11ax HEW160_Nss2,(MCS0)_2TX	83.44M	78.361M	78M4D1D	82.8M	78.361M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	29.64M	17.511M	17M5D1D	15.78M	13.568M
802.11ax HEW20_Nss2,(MCS0)_2TX	29.79M	19.31M	19M3D1D	18.645M	14.663M
802.11ax HEW40_Nss2,(MCS0)_2TX	56.52M	38.381M	38M4D1D	35.91M	33.968M
802.11ax HEW80_Nss2,(MCS0)_2TX	108.72M	78.321M	78M3D1D	90.84M	74.438M
802.11ax HEW160_Nss2,(MCS0)_2TX	165.36M	156.882M	157MD1D	164.4M	156.402M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.14M	4.398M	4M40D1D	3.14M	4.338M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.46M	5.897M	5M90D1D	4.44M	5.477M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.94M	8.516M	8M52D1D	3.9M	8.356M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.86M	33.323M	33M3D1D	3.76M	31.064M

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

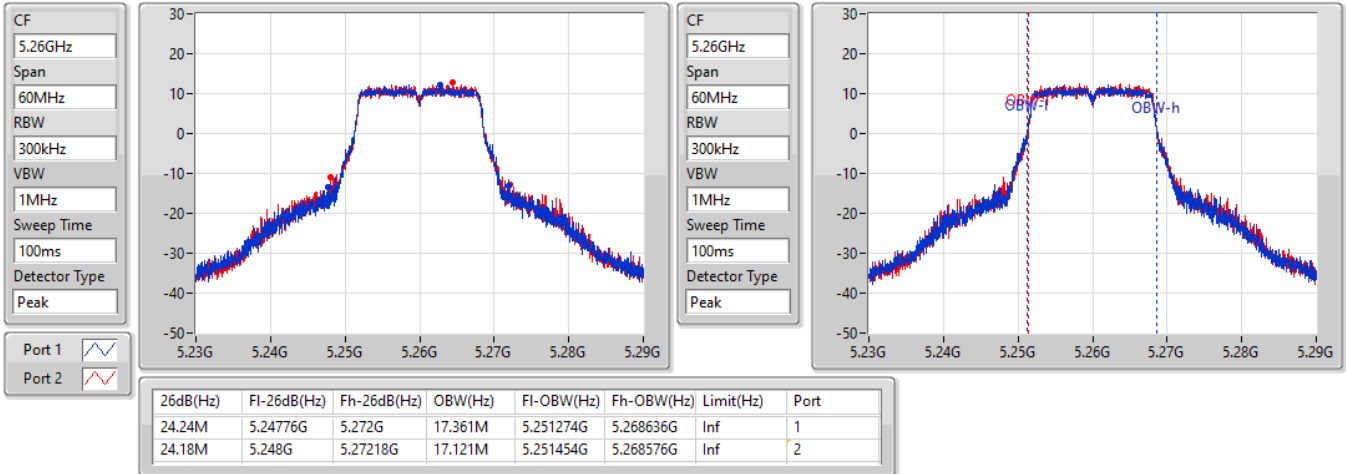
Result

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	24.24M	17.361M	24.18M	17.121M
5300MHz	Pass	Inf	23.91M	17.271M	23.82M	17.091M
5320MHz	Pass	Inf	25.11M	17.421M	26.4M	17.271M
5500MHz	Pass	Inf	24.54M	17.511M	26.25M	17.361M
5580MHz	Pass	Inf	29.64M	17.451M	27.96M	17.301M
5700MHz	Pass	Inf	21.63M	17.121M	22.02M	16.942M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.78M	13.688M	16.095M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	4.398M	3.14M	4.338M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	24.12M	19.22M	24.12M	19.22M
5300MHz	Pass	Inf	23.13M	19.19M	21.6M	19.19M
5320MHz	Pass	Inf	22.77M	19.22M	27.33M	19.25M
5500MHz	Pass	Inf	29.79M	19.31M	27.33M	19.25M
5580MHz	Pass	Inf	23.61M	19.19M	21.96M	19.19M
5700MHz	Pass	Inf	21.78M	19.13M	21.66M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	19.32M	14.708M	18.645M	14.663M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	5.897M	4.44M	5.477M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	48.3M	38.201M	45.36M	38.201M
5310MHz	Pass	Inf	41.64M	38.201M	43.62M	38.141M
5510MHz	Pass	Inf	45.3M	38.141M	43.74M	38.201M
5550MHz	Pass	Inf	56.52M	38.261M	50.22M	38.381M
5670MHz	Pass	Inf	42.6M	38.081M	40.92M	38.201M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.855M	34.038M	35.91M	33.968M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	8.356M	3.94M	8.516M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	87.24M	77.841M	83.88M	77.961M
5530MHz	Pass	Inf	92.64M	78.081M	90.84M	77.961M
5610MHz	Pass	Inf	108.72M	78.321M	104.16M	78.321M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	107.775M	74.438M	98.025M	74.438M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.86M	33.323M	3.76M	31.064M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.48M	78.361M	82M	78.361M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	83.44M	78.361M	82.8M	78.361M
5570MHz	Pass	Inf	165.36M	156.882M	164.4M	156.402M

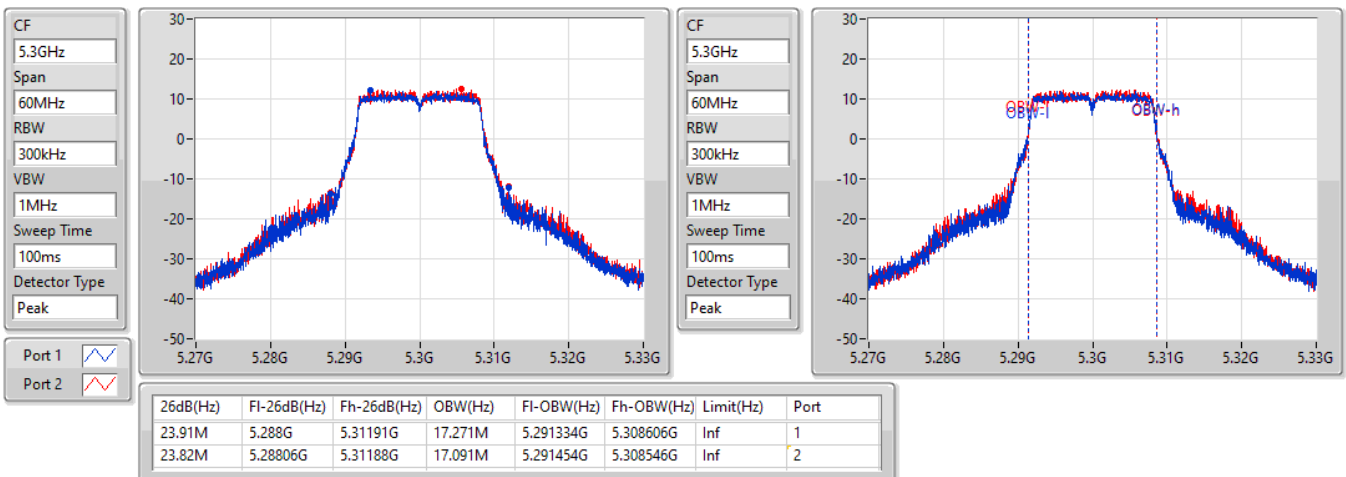
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

30/12/2021

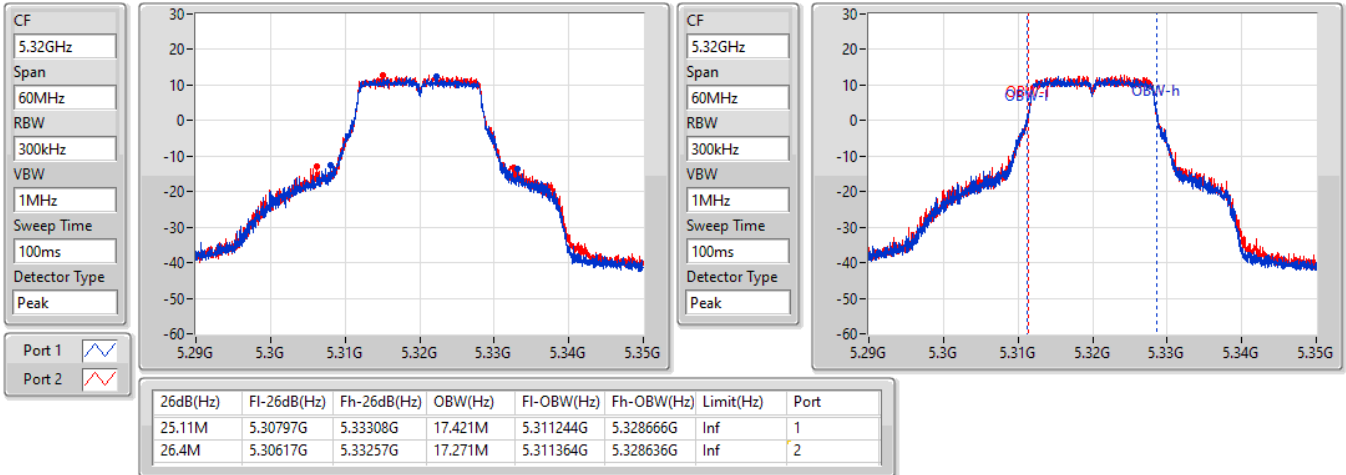

802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

30/12/2021

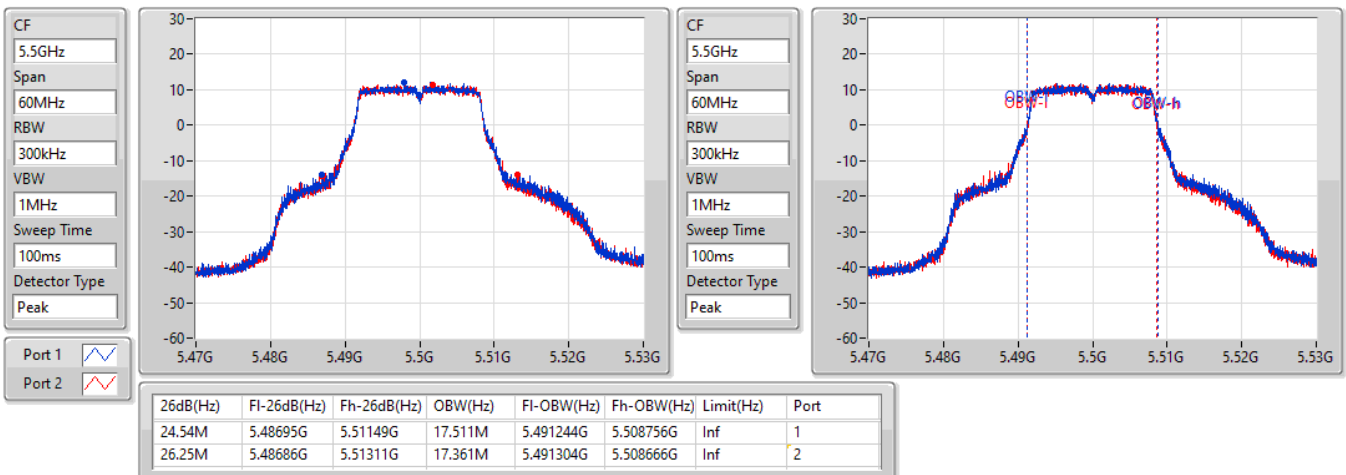


802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

30/12/2021

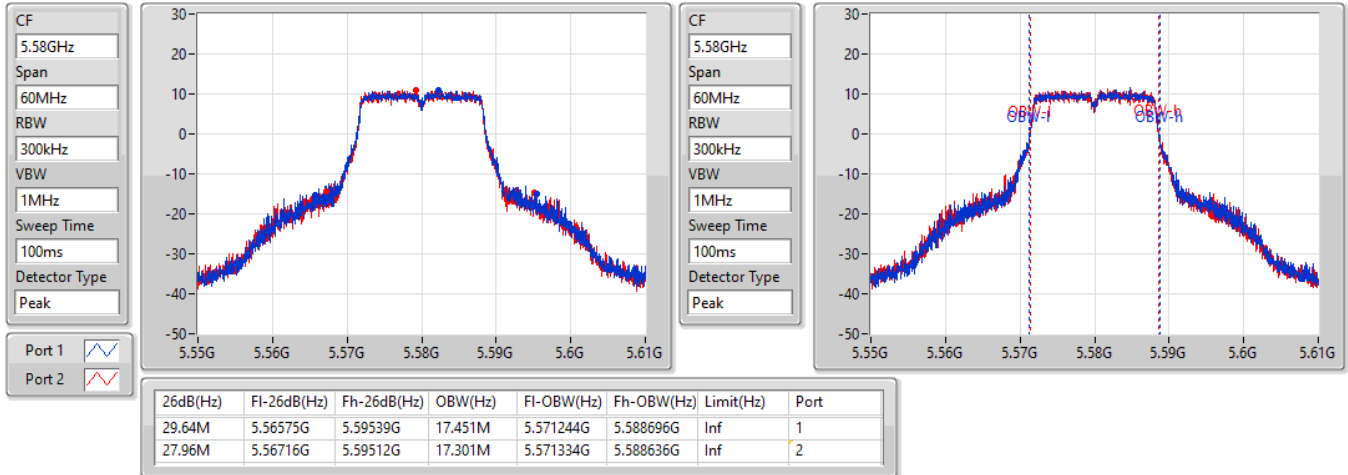

802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

30/12/2021

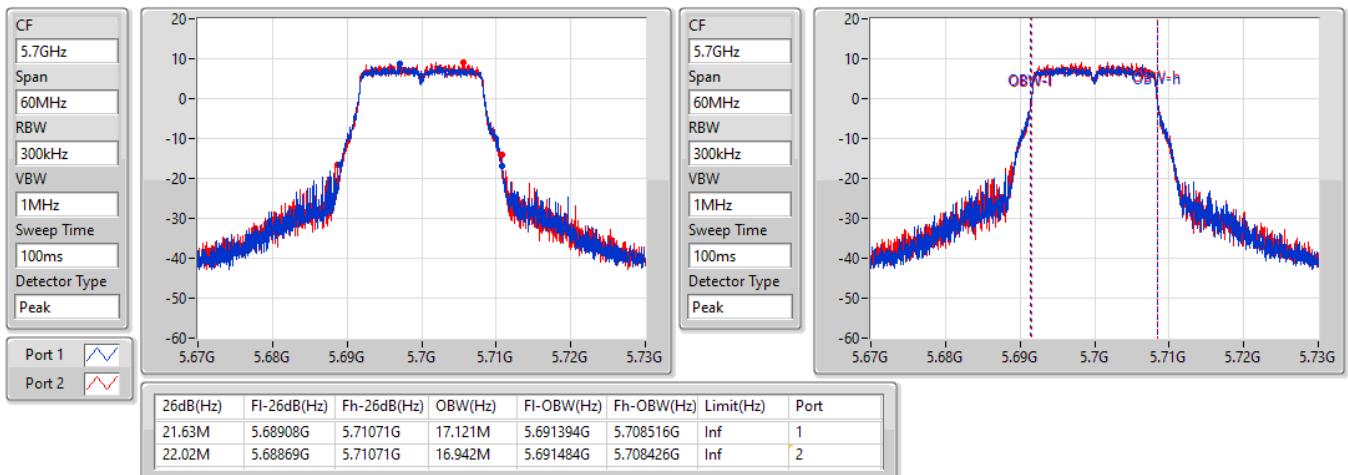


802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

30/12/2021

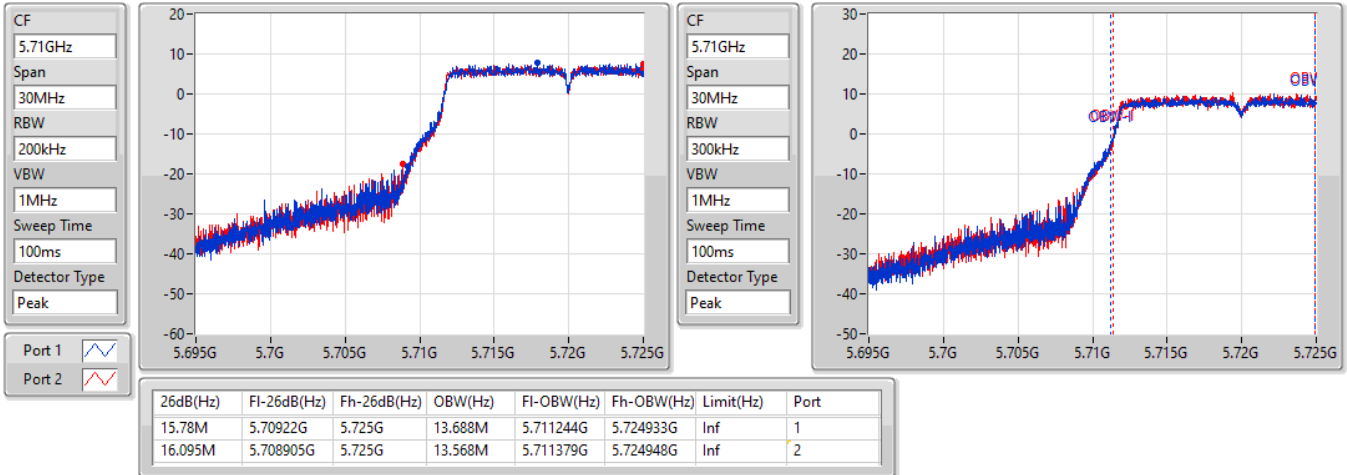

802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

30/12/2021

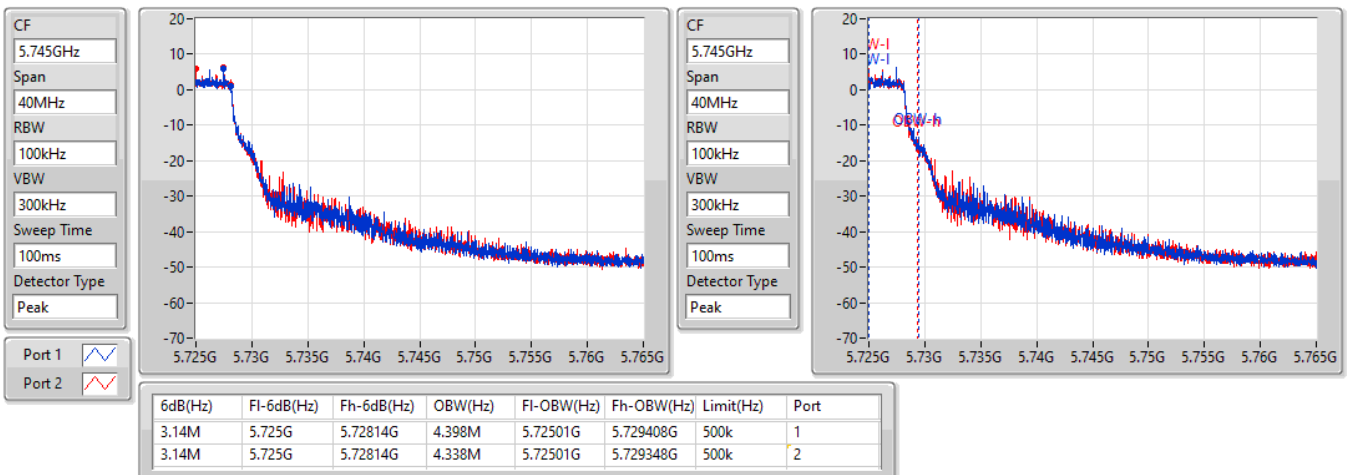


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

30/12/2021


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

30/12/2021

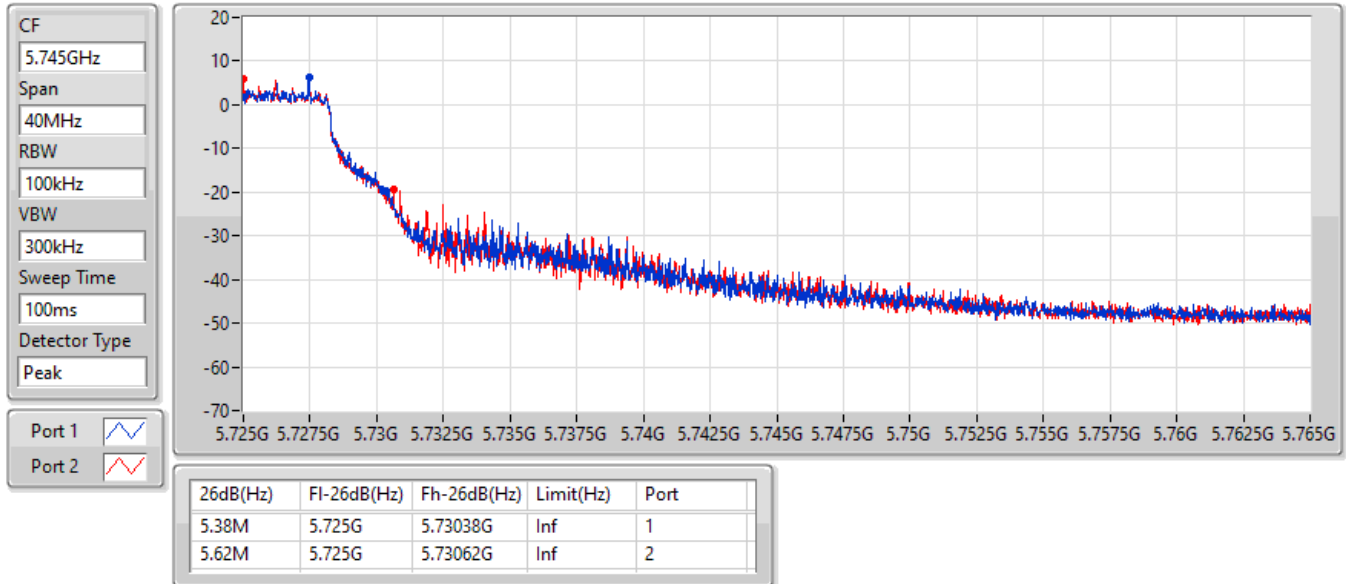


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

30/12/2021

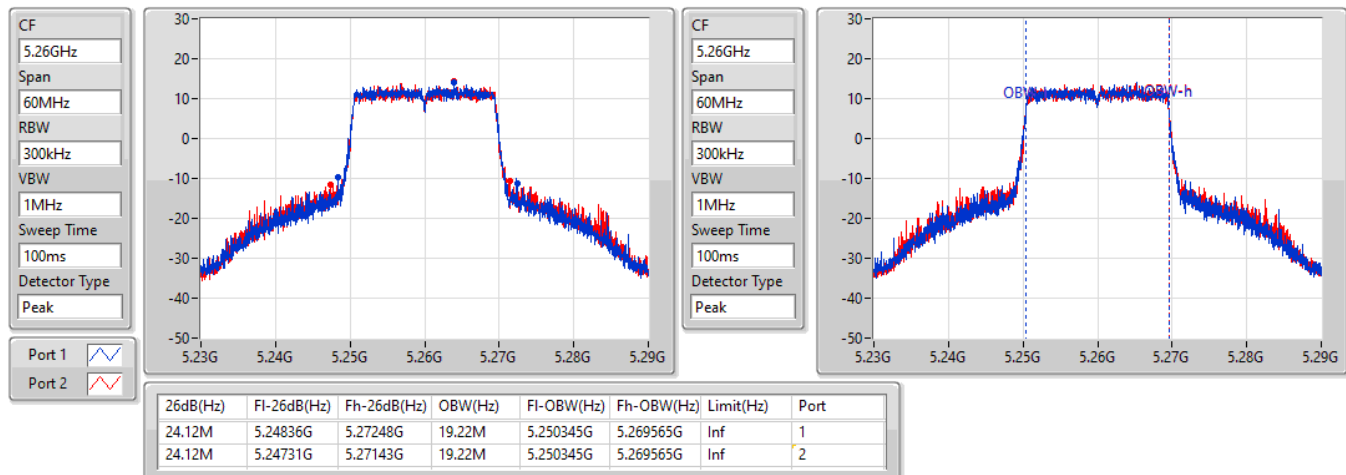


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

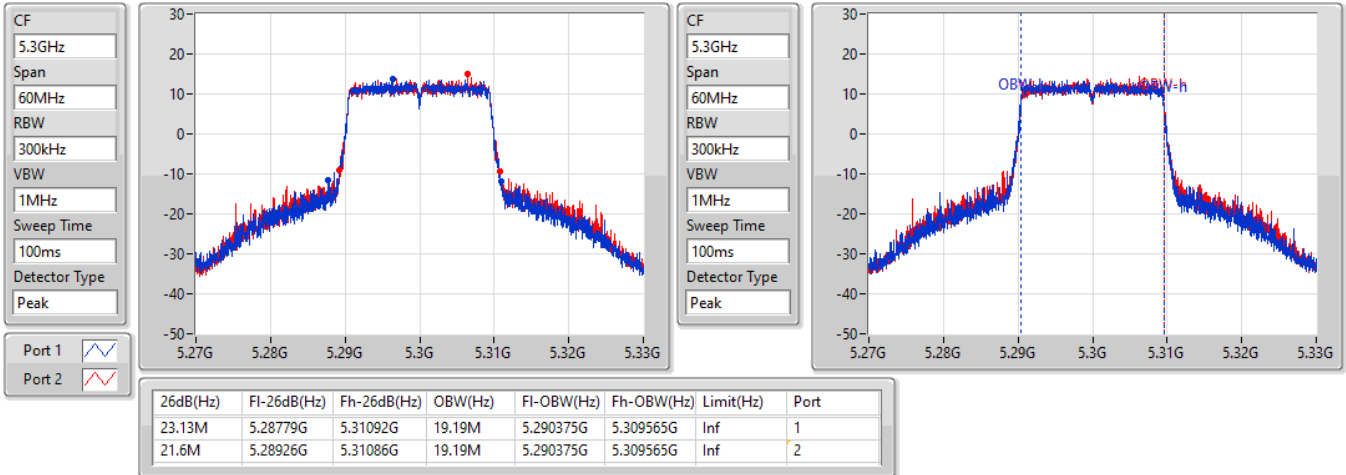
5260MHz

30/12/2021

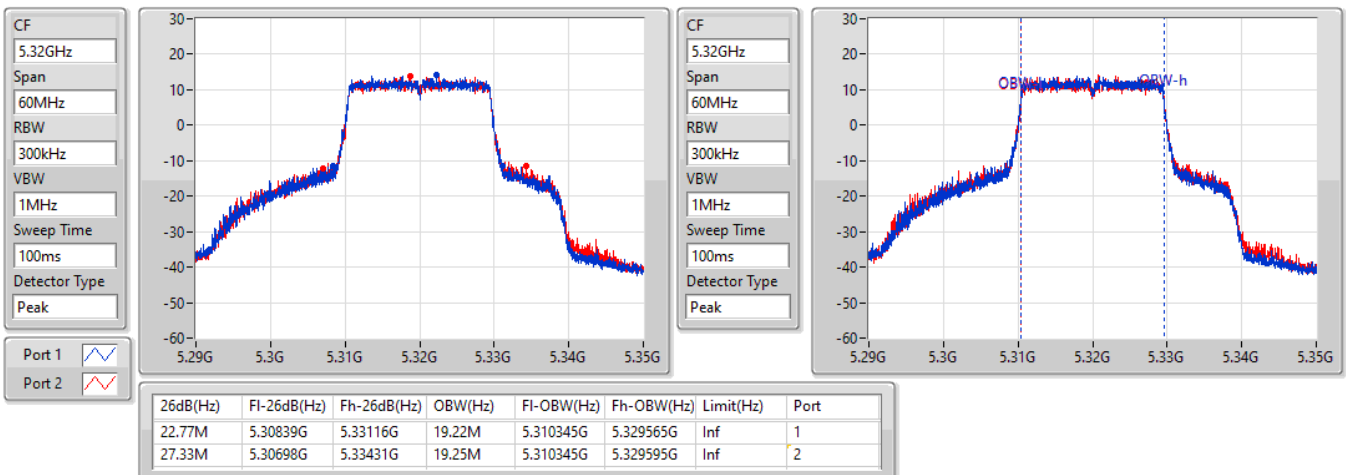


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

30/12/2021

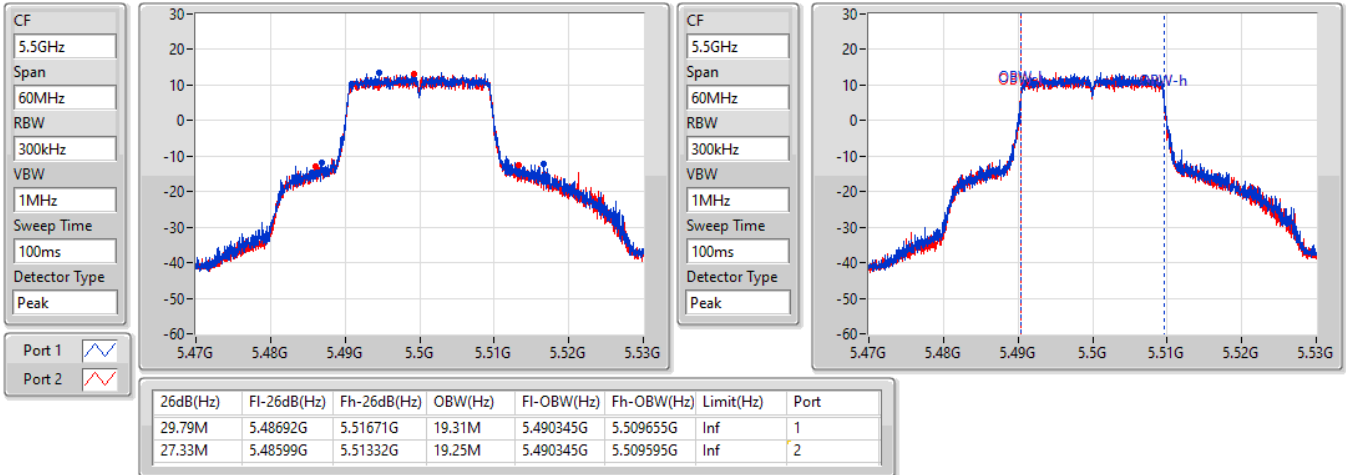

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5320MHz

30/12/2021

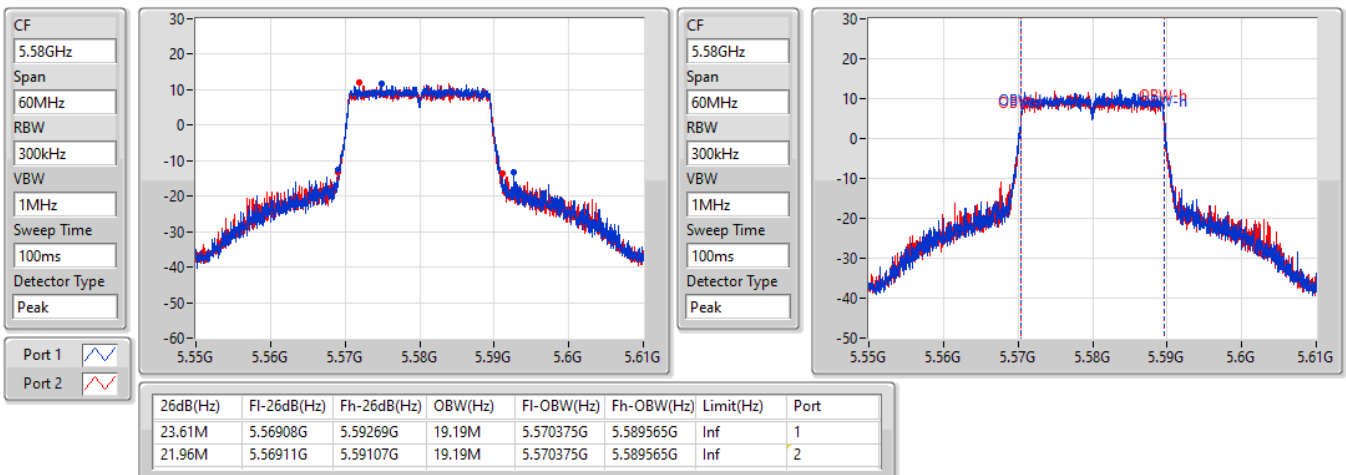


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5500MHz

30/12/2021


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5580MHz

30/12/2021

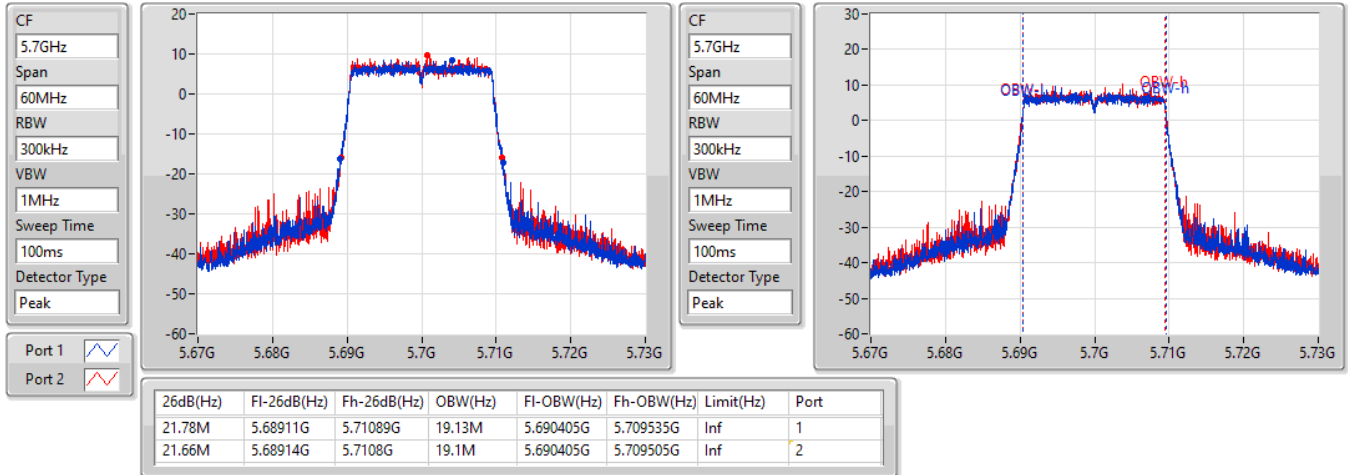


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5700MHz

30/12/2021

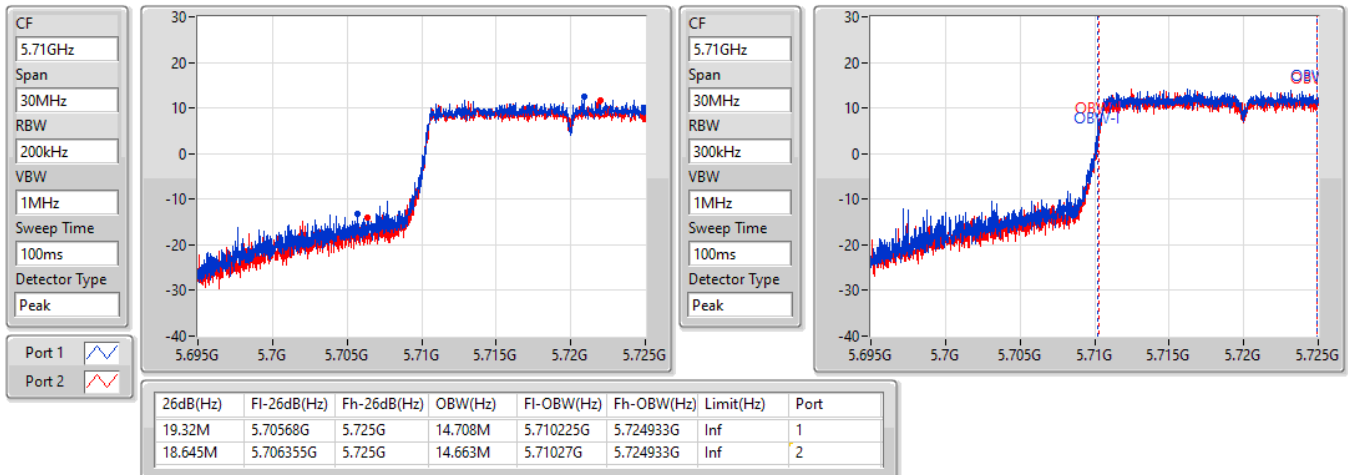


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

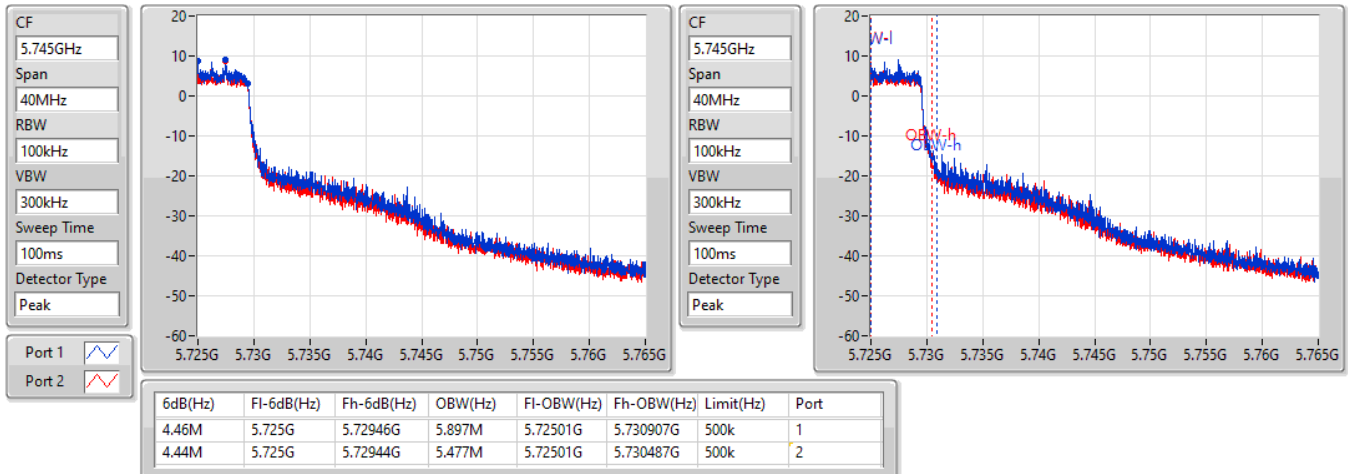
5720MHz Straddle 5.47-5.725GHz

27/01/2022

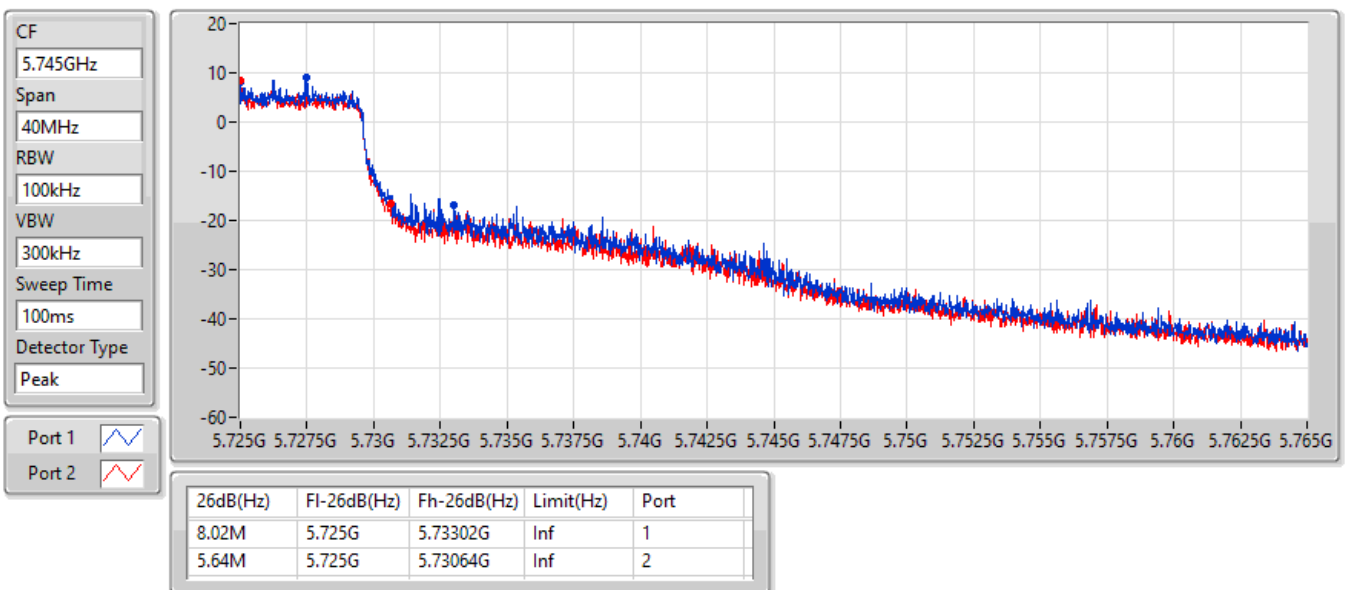


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/01/2022

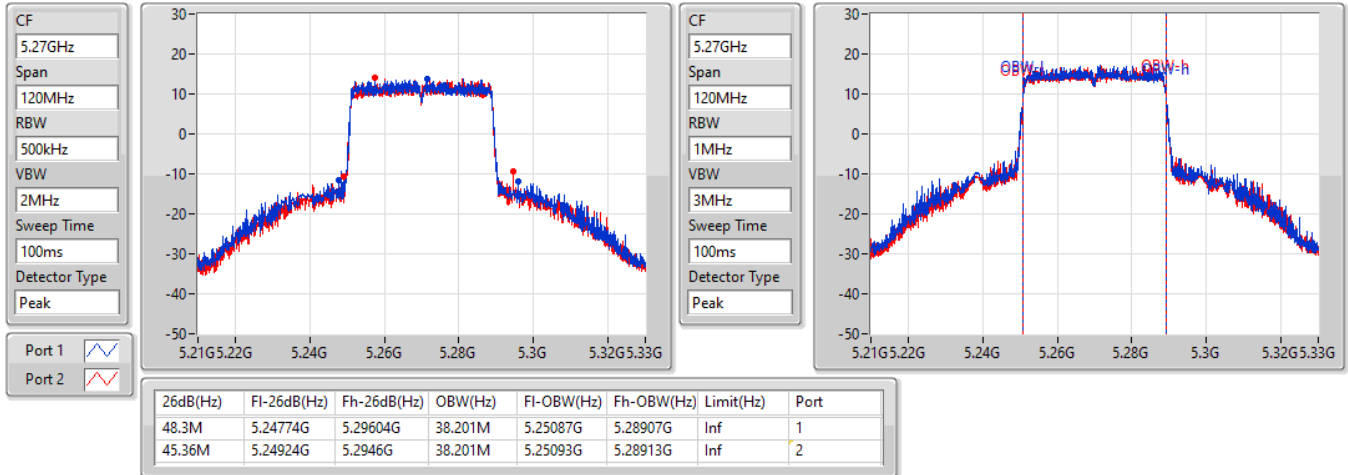

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/01/2022

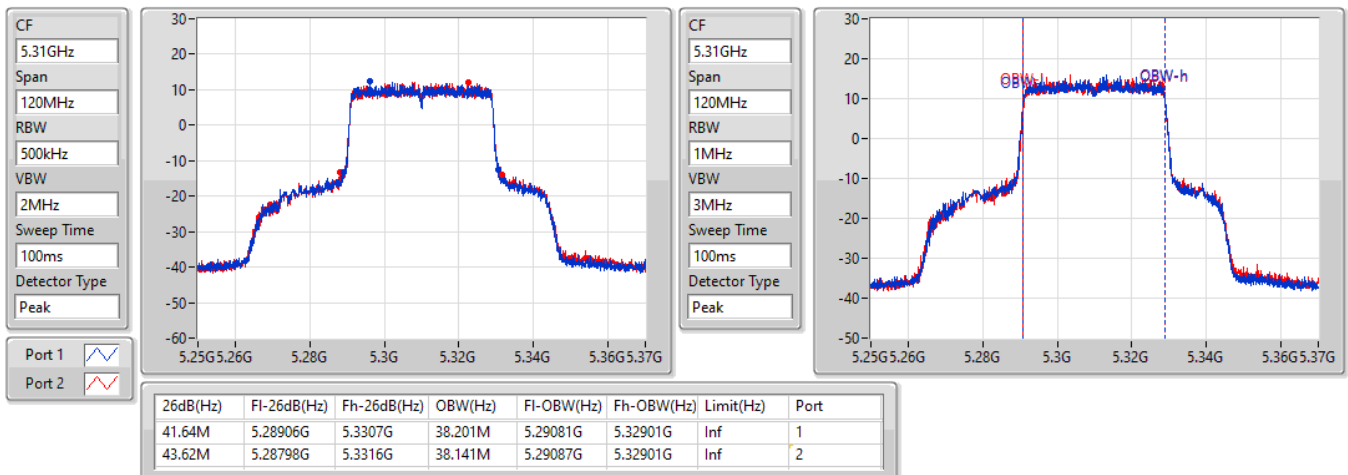


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5270MHz

30/12/2021

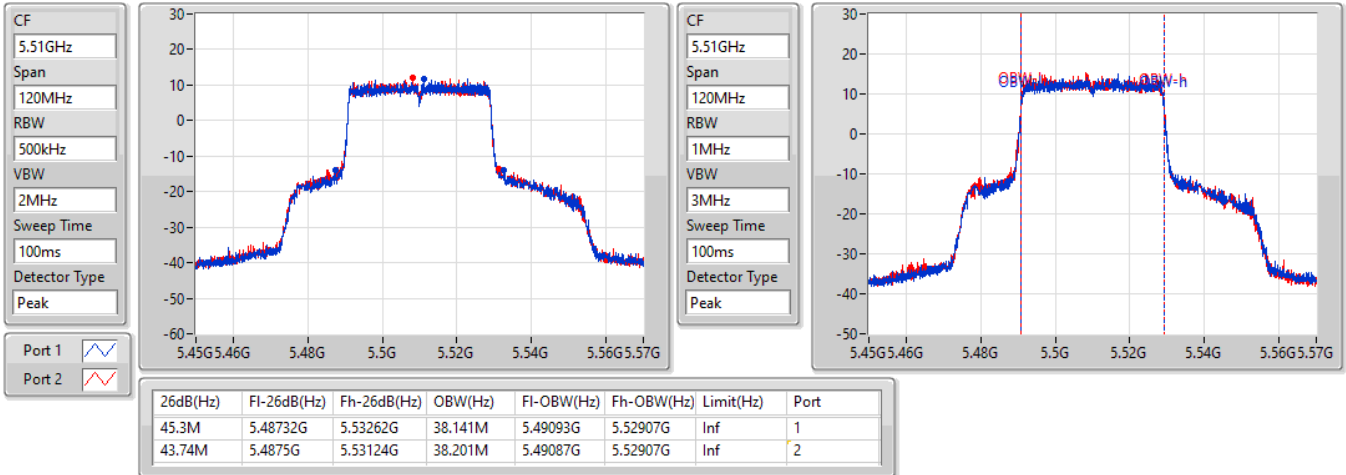

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5310MHz

30/12/2021

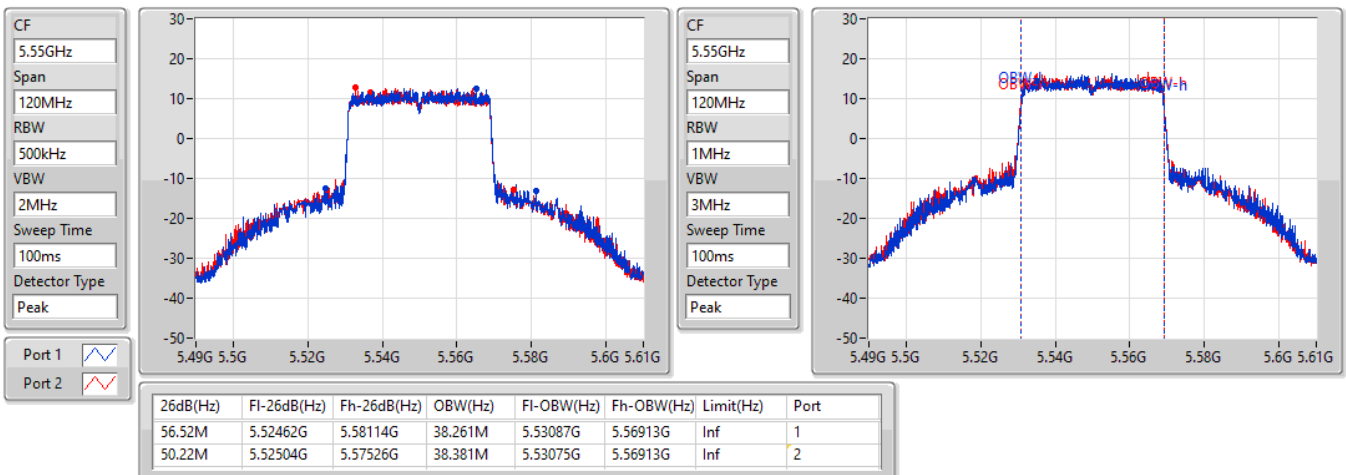


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5510MHz

30/12/2021

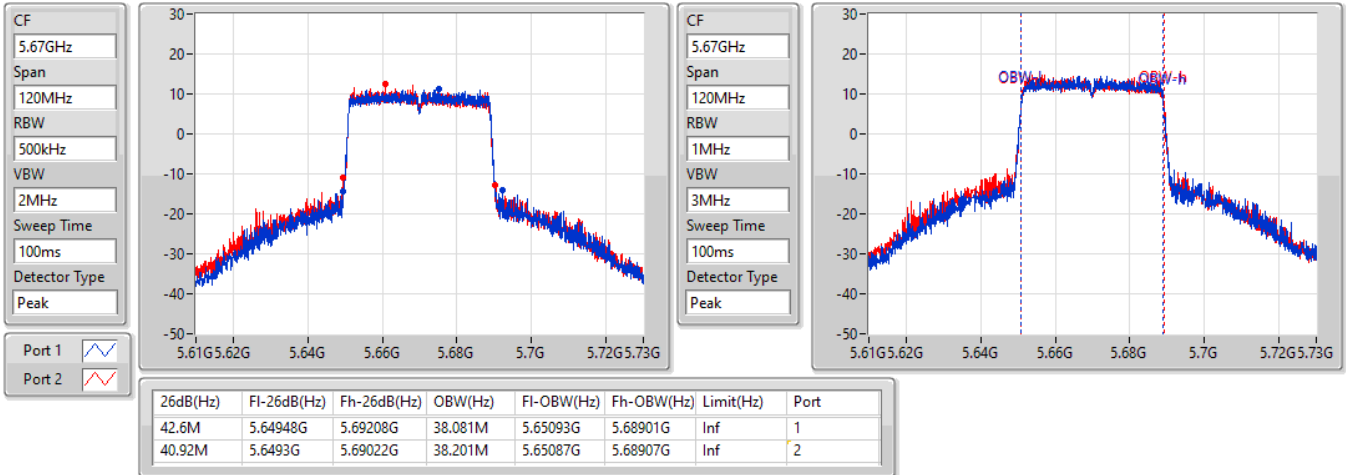

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5550MHz

30/12/2021

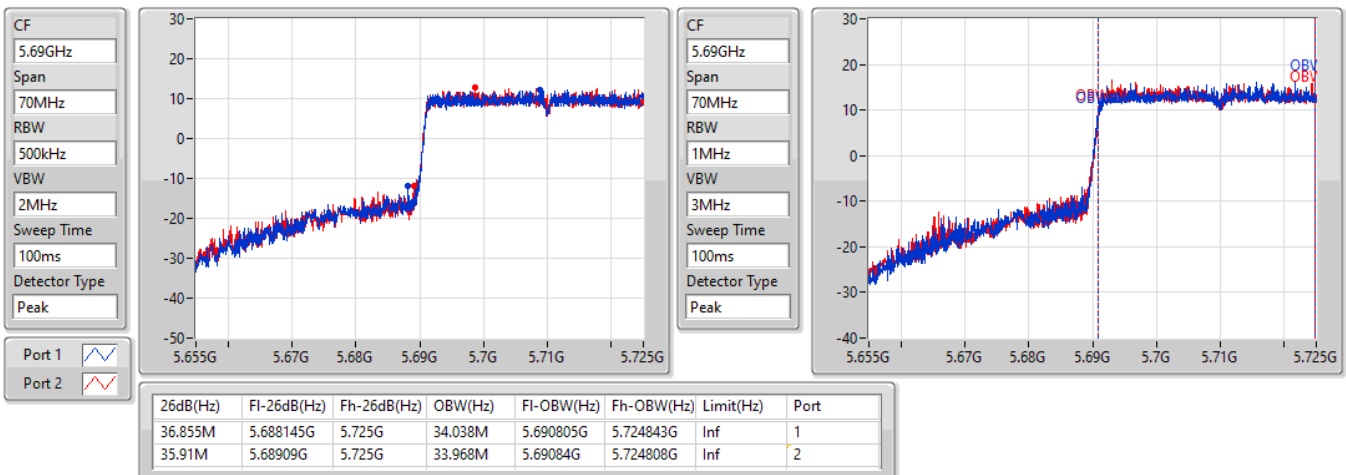


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5670MHz

30/12/2021

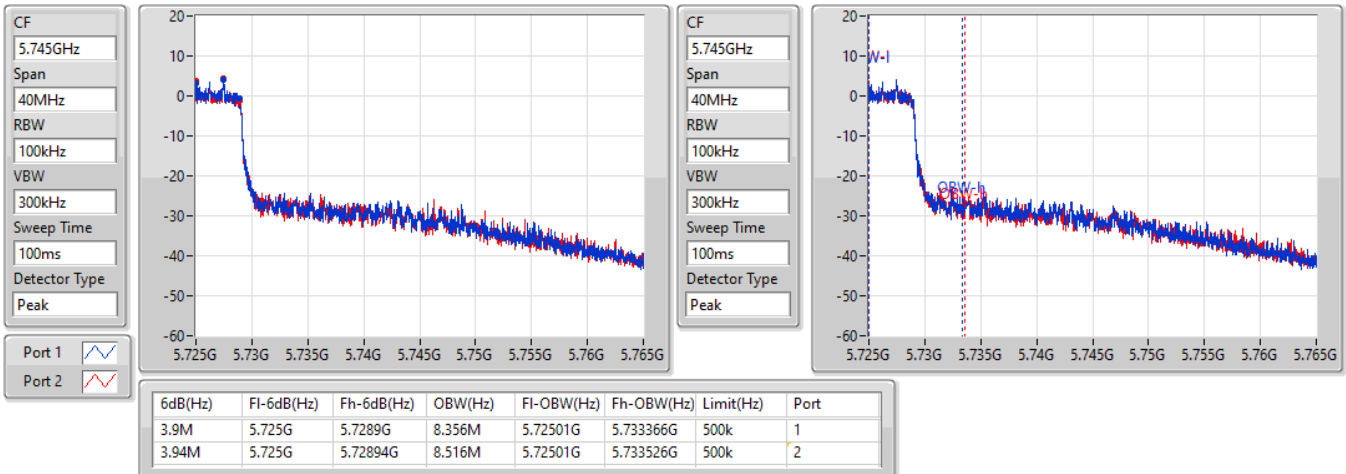

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

30/12/2021

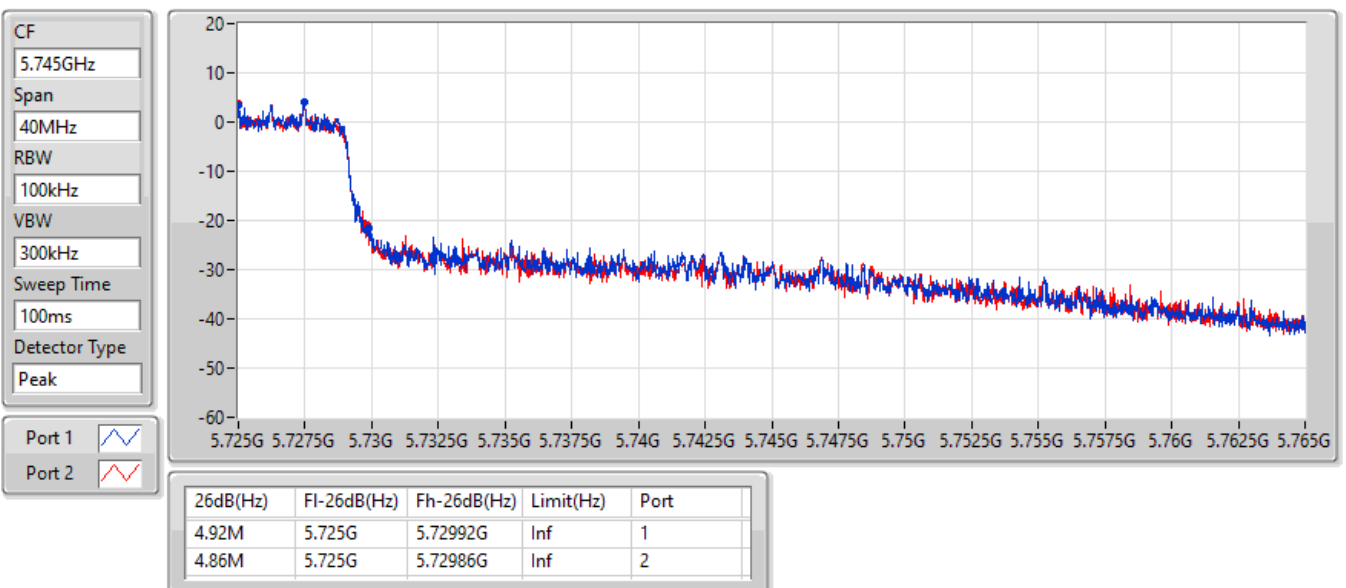


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

30/12/2021

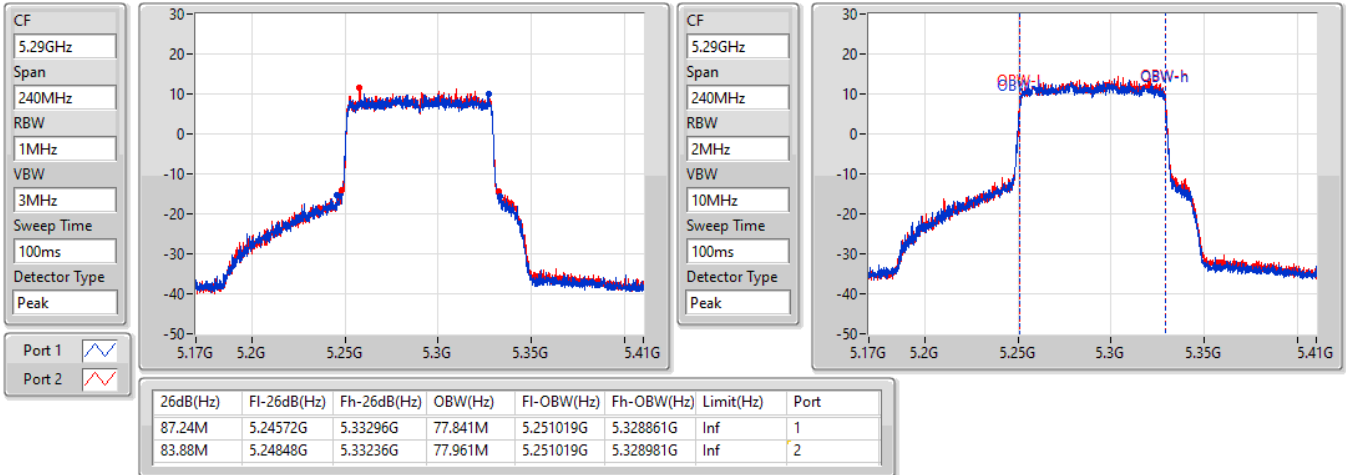

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

30/12/2021

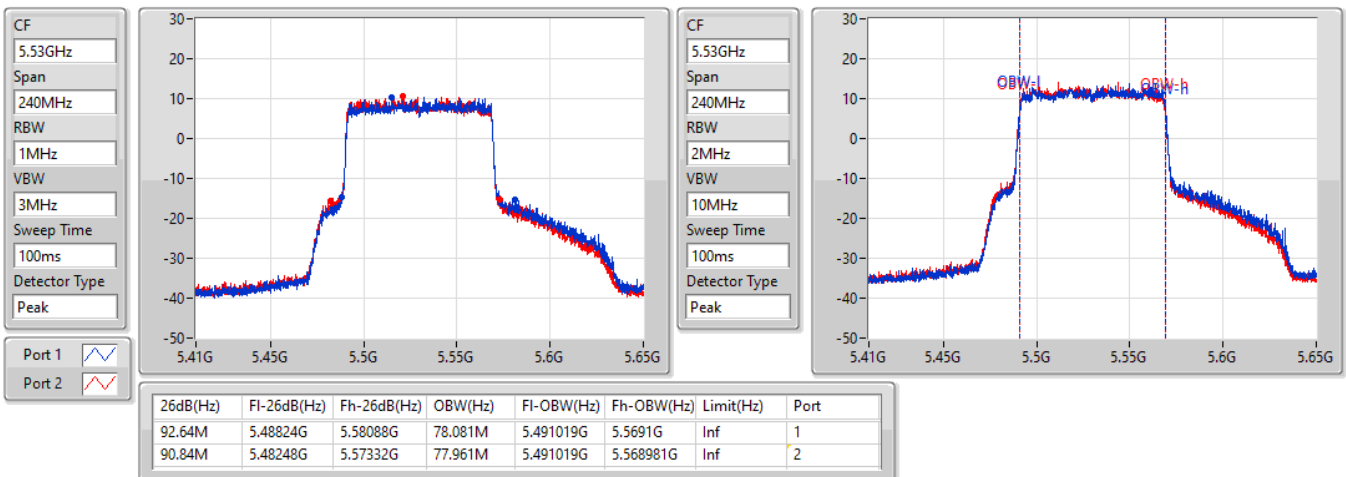


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

30/12/2021

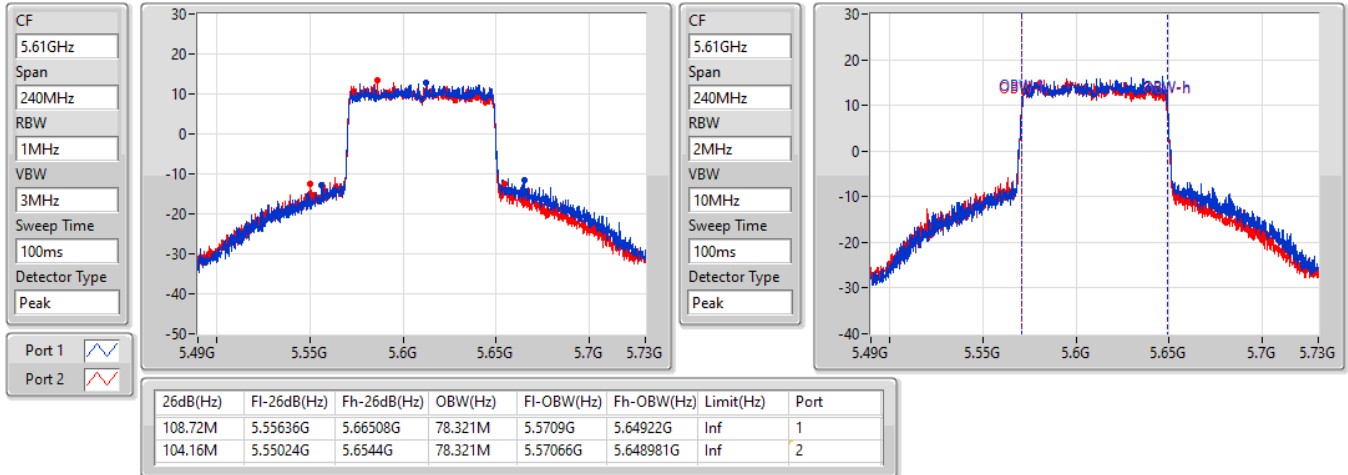

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

30/12/2021

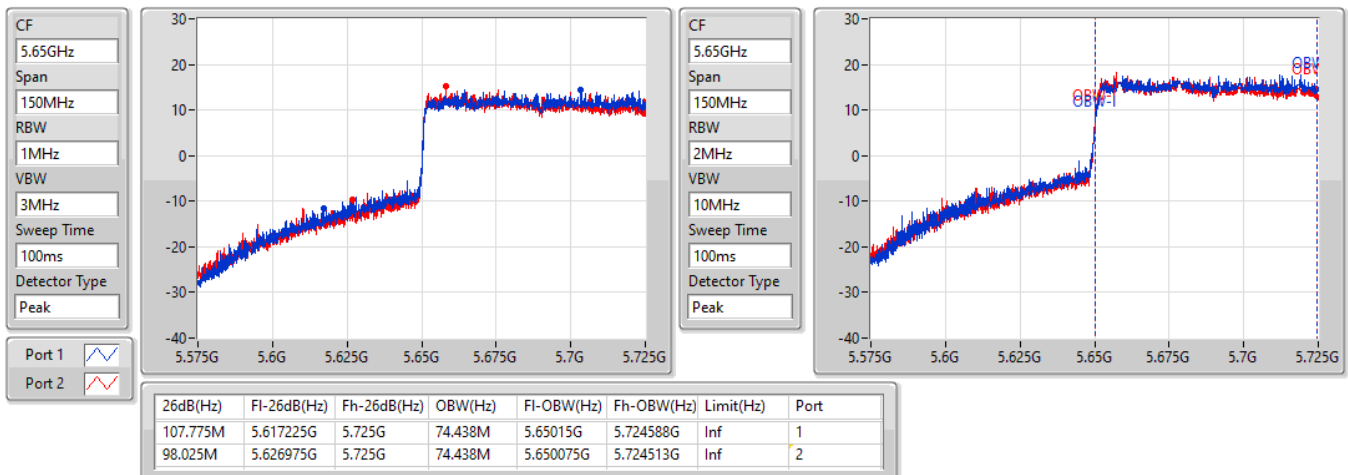


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

30/12/2021

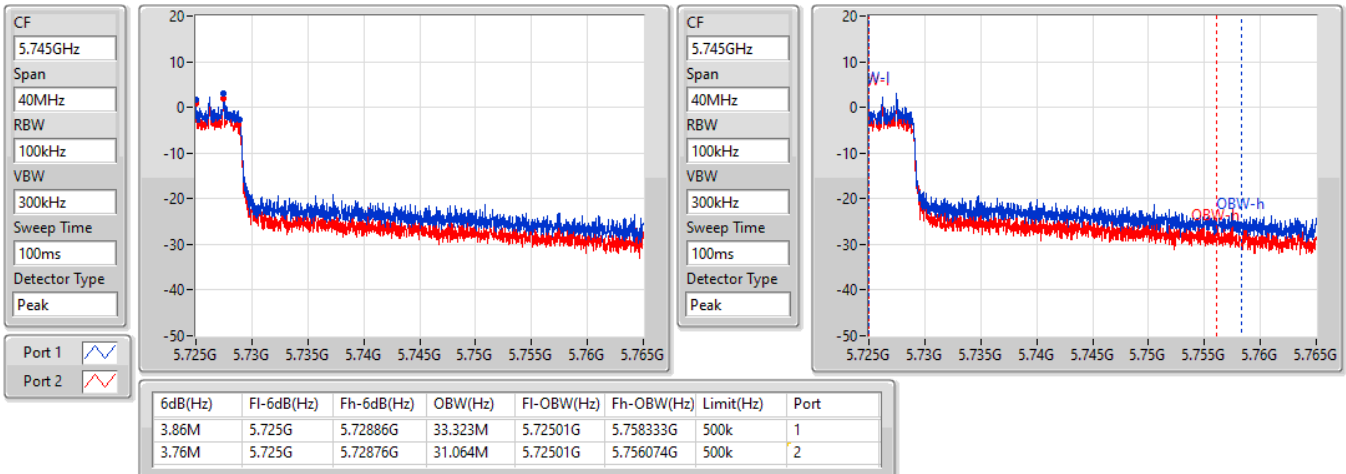

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

30/12/2021

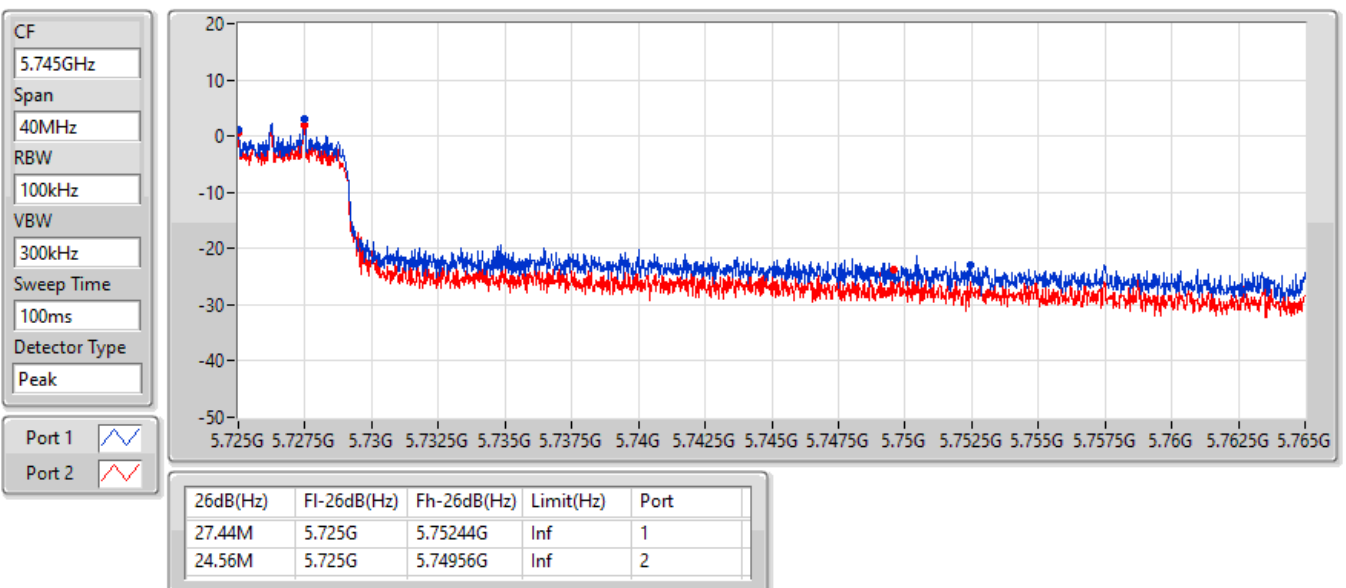


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

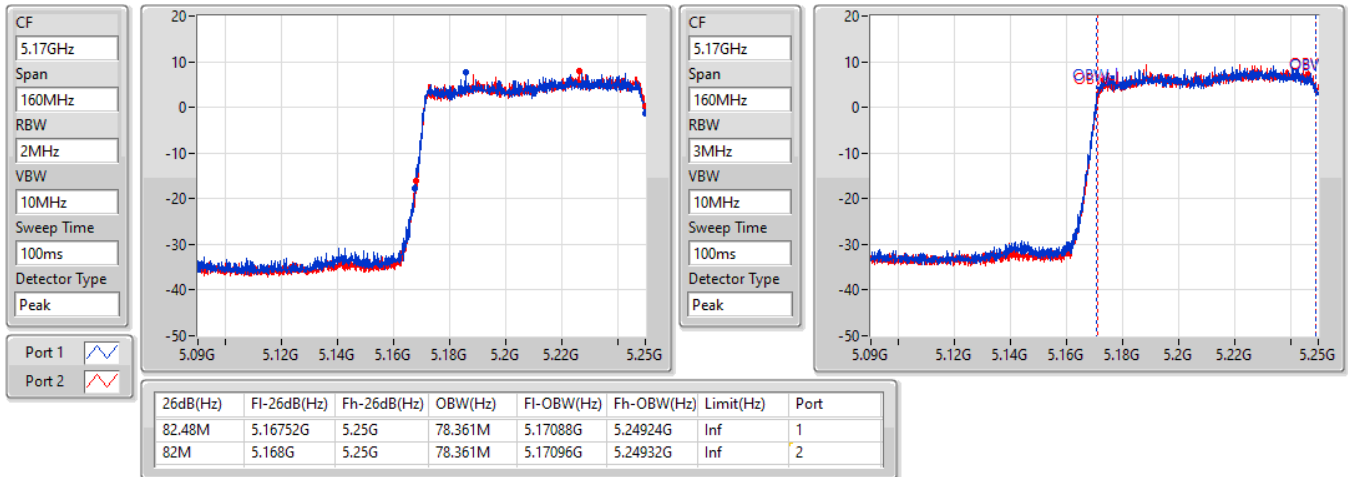

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

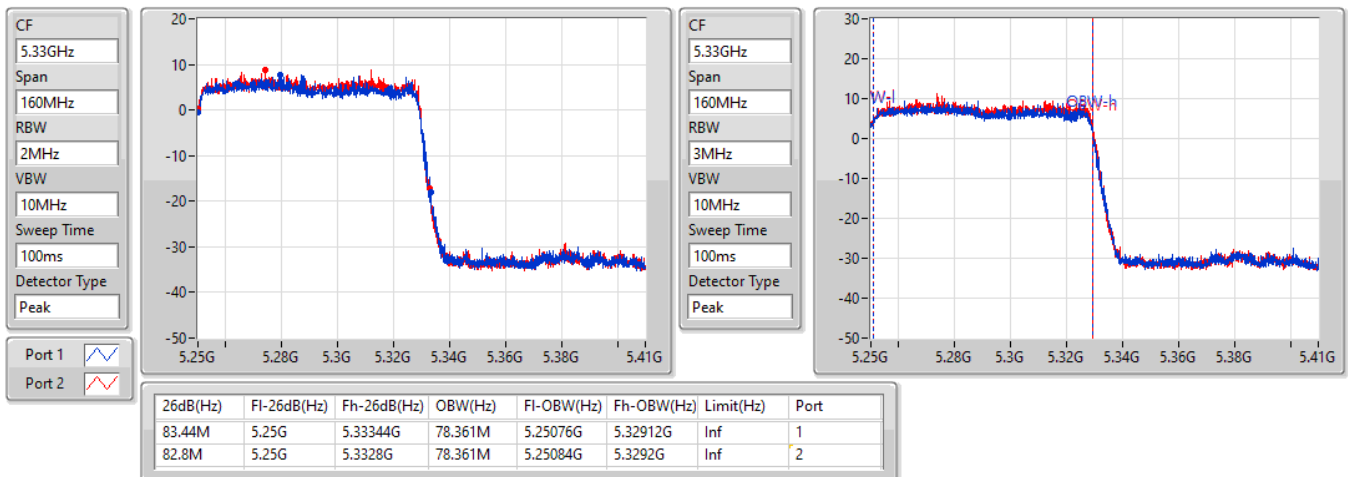


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/01/2022


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

27/01/2022

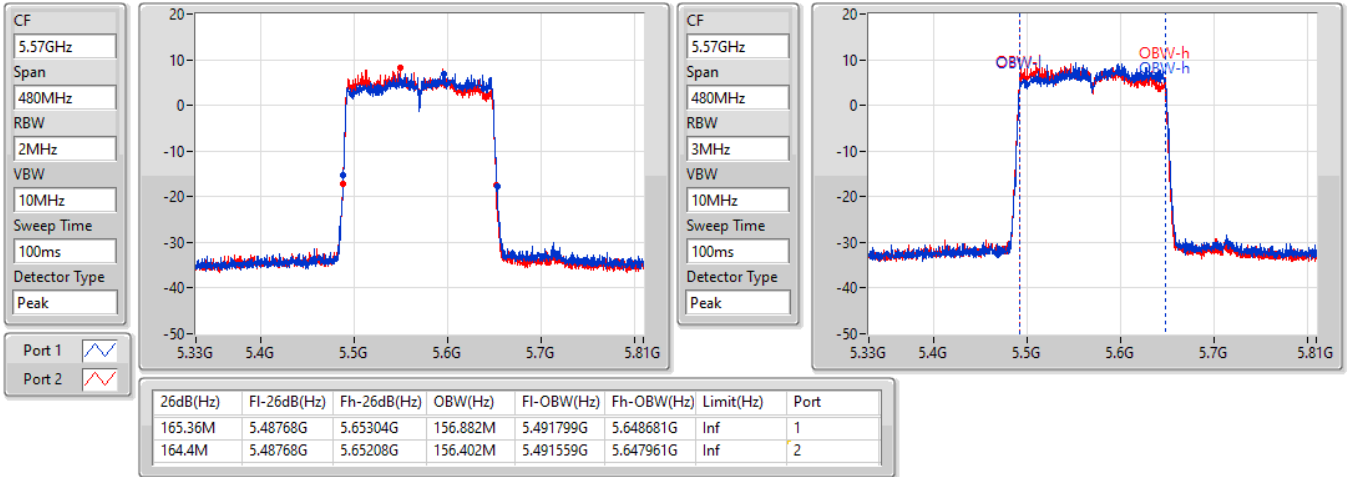


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

27/01/2022



**For 4T1S
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_4TX	82.8M	78.601M	78M6D1D	82.24M	78.281M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	23.76M	17.391M	17M4D1D	21.45M	16.942M
802.11ax HEW20_Nss1,(MCS0)_4TX	27.6M	19.25M	19M2D1D	21.6M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	49.92M	38.201M	38M2D1D	40.44M	37.961M
802.11ax HEW80_Nss1,(MCS0)_4TX	89.76M	78.081M	78M1D1D	84.48M	77.961M
802.11ax HEW160_Nss1,(MCS0)_4TX	83.36M	78.441M	78M4D1D	82.56M	78.441M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	27.87M	17.451M	17M5D1D	15.78M	13.553M
802.11ax HEW20_Nss1,(MCS0)_4TX	27.06M	19.31M	19M3D1D	15.765M	14.588M
802.11ax HEW40_Nss1,(MCS0)_4TX	51.24M	38.261M	38M3D1D	35.21M	33.898M
802.11ax HEW80_Nss1,(MCS0)_4TX	92.52M	78.081M	78M1D1D	75.9M	73.538M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.36M	156.882M	157MD1D	164.64M	156.642M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	3.16M	4.398M	4M40D1D	3.14M	4.258M
802.11ax HEW20_Nss1,(MCS0)_4TX	4.56M	4.718M	4M72D1D	4.46M	4.698M
802.11ax HEW40_Nss1,(MCS0)_4TX	4M	4.278M	4M28D1D	3.86M	4.198M
802.11ax HEW80_Nss1,(MCS0)_4TX	3.92M	4.838M	4M84D1D	3.84M	4.278M

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

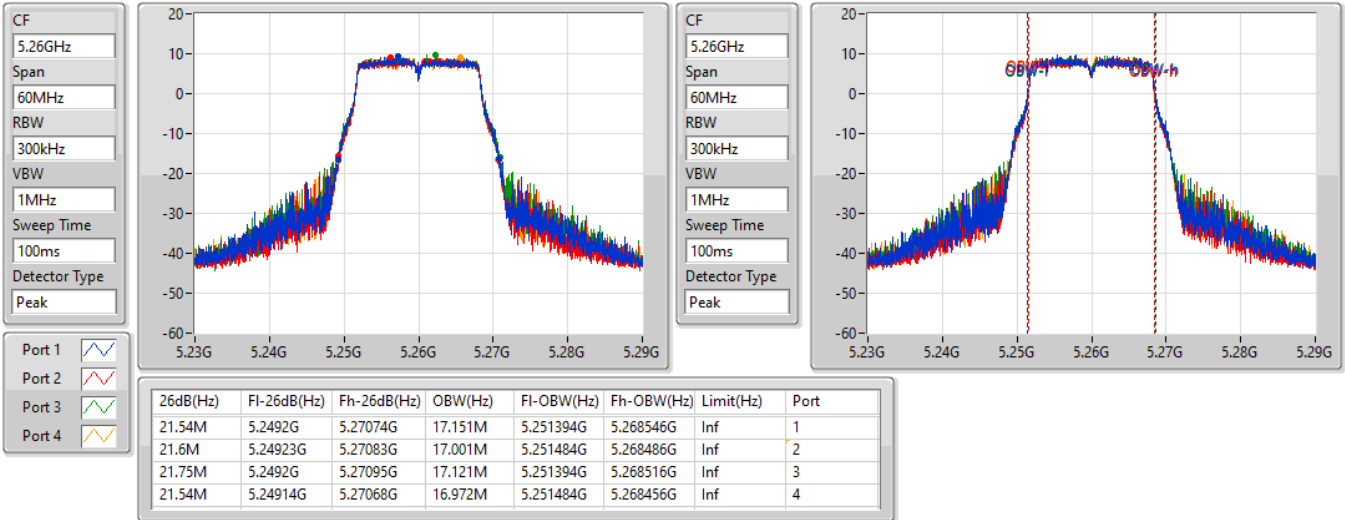
Result

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	21.54M	17.151M	21.6M	17.001M	21.75M	17.121M	21.54M	16.972M
5300MHz	Pass	Inf	21.66M	17.091M	21.57M	17.031M	21.99M	17.061M	21.45M	16.942M
5320MHz	Pass	Inf	22.68M	17.391M	23.76M	17.331M	23.22M	17.391M	22.02M	17.271M
5500MHz	Pass	Inf	24.81M	17.451M	26.49M	17.301M	27.87M	17.421M	24.12M	17.301M
5580MHz	Pass	Inf	22.8M	17.181M	22.26M	16.972M	22.62M	17.181M	21.75M	17.031M
5700MHz	Pass	Inf	21.54M	17.091M	21.45M	16.972M	21.54M	17.091M	21.48M	16.972M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.78M	13.688M	16.305M	13.553M	16.065M	13.643M	16.29M	13.628M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	4.338M	3.14M	4.258M	3.16M	4.298M	3.16M	4.398M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.96M	19.16M	21.84M	19.16M	21.72M	19.1M	21.78M	19.13M
5300MHz	Pass	Inf	21.96M	19.16M	21.6M	19.13M	21.72M	19.1M	21.6M	19.13M
5320MHz	Pass	Inf	27.6M	19.25M	23.73M	19.25M	23.31M	19.19M	24.57M	19.22M
5500MHz	Pass	Inf	24.75M	19.28M	25.95M	19.28M	27.06M	19.31M	25.59M	19.28M
5580MHz	Pass	Inf	21.63M	19.19M	21.6M	19.16M	21.93M	19.13M	21.78M	19.16M
5700MHz	Pass	Inf	21.84M	19.13M	21.78M	19.13M	21.72M	19.1M	21.39M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.945M	14.603M	15.825M	14.603M	15.78M	14.588M	15.765M	14.588M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.5M	4.718M	4.56M	4.718M	4.46M	4.698M	4.46M	4.698M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.74M	37.961M	40.86M	37.961M	40.44M	38.081M	40.5M	37.961M
5310MHz	Pass	Inf	49.92M	38.141M	43.38M	38.201M	46.08M	38.201M	45.6M	38.201M
5510MHz	Pass	Inf	51.24M	38.261M	48.42M	38.201M	43.92M	38.201M	46.56M	38.201M
5550MHz	Pass	Inf	40.74M	38.081M	40.5M	37.961M	40.74M	38.081M	40.56M	38.081M
5670MHz	Pass	Inf	40.56M	37.961M	40.68M	37.961M	40.38M	37.961M	40.26M	37.961M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.49M	33.968M	35.21M	33.898M	35.42M	33.968M	35.49M	33.898M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4M	4.238M	3.92M	4.218M	3.86M	4.198M	3.96M	4.278M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	84.48M	77.961M	88.68M	78.081M	89.76M	77.961M	85.32M	77.961M
5530MHz	Pass	Inf	84.36M	77.961M	86.16M	78.081M	92.52M	77.961M	84.6M	77.961M
5610MHz	Pass	Inf	81.84M	78.081M	81.72M	77.841M	83.64M	77.841M	81.96M	78.081M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.538M	75.9M	73.538M	75.9M	73.613M	76.275M	73.538M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.698M	3.9M	4.438M	3.84M	4.278M	3.88M	4.838M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.8M	78.601M	82.32M	78.281M	82.24M	78.361M	82.56M	78.441M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	83.36M	78.441M	83.36M	78.441M	82.56M	78.441M	82.56M	78.441M
5570MHz	Pass	Inf	165.36M	156.642M	165.12M	156.642M	165.36M	156.642M	164.64M	156.882M

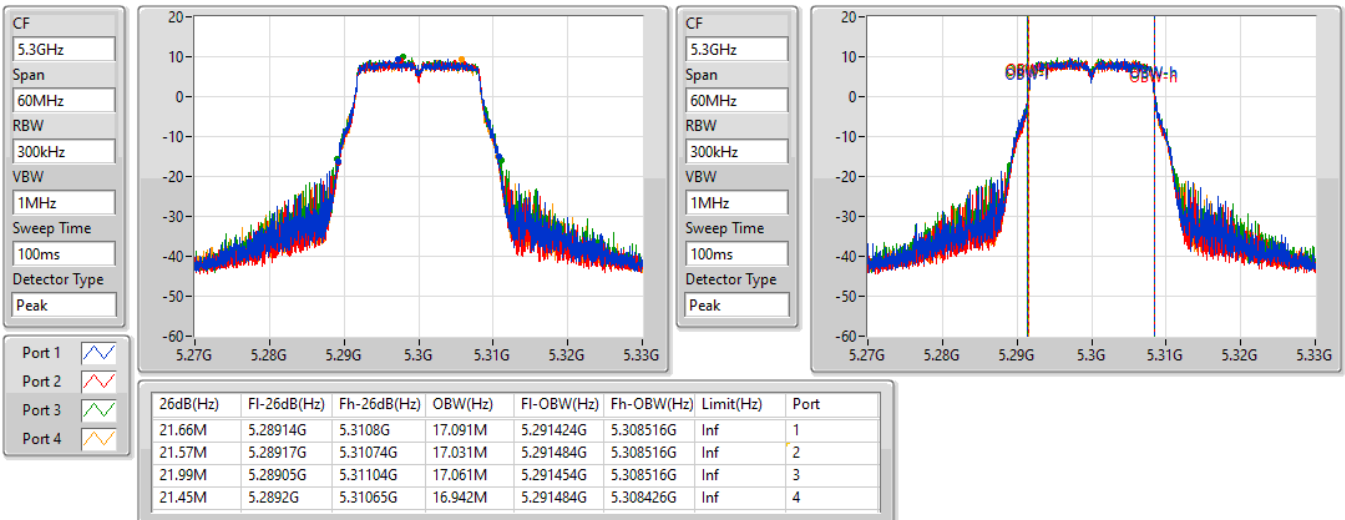
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

29/12/2021

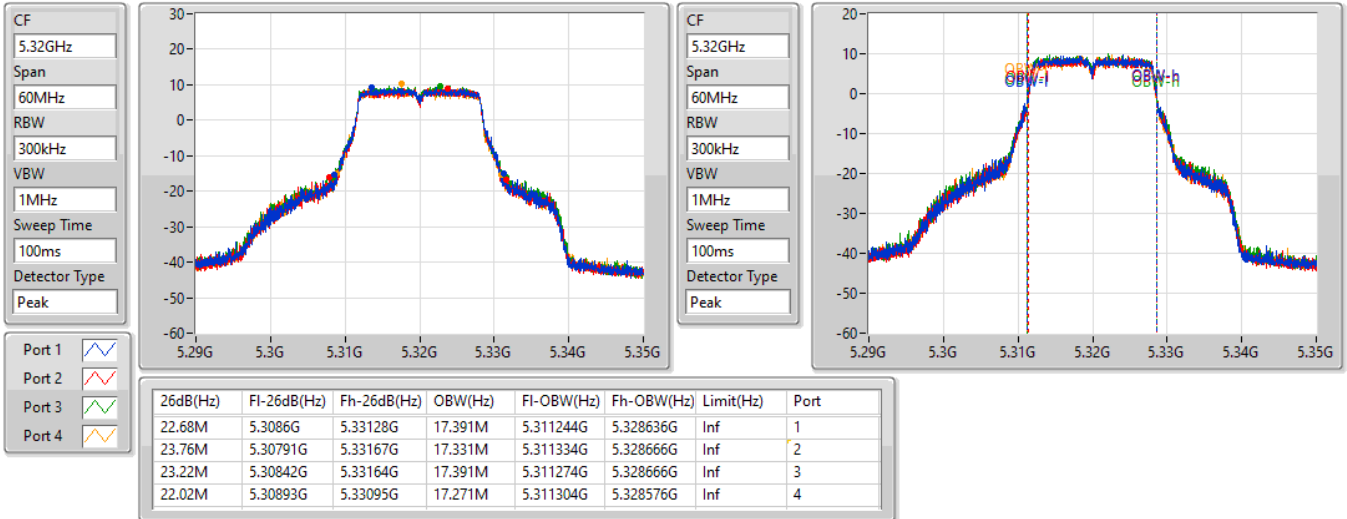

802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

29/12/2021

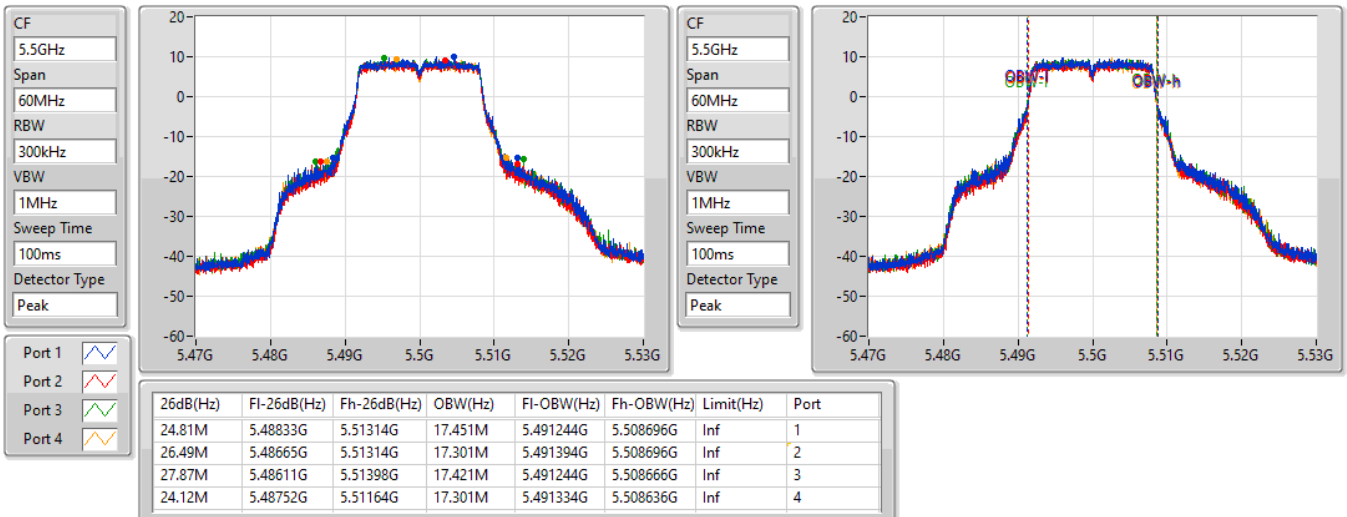


802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

29/12/2021

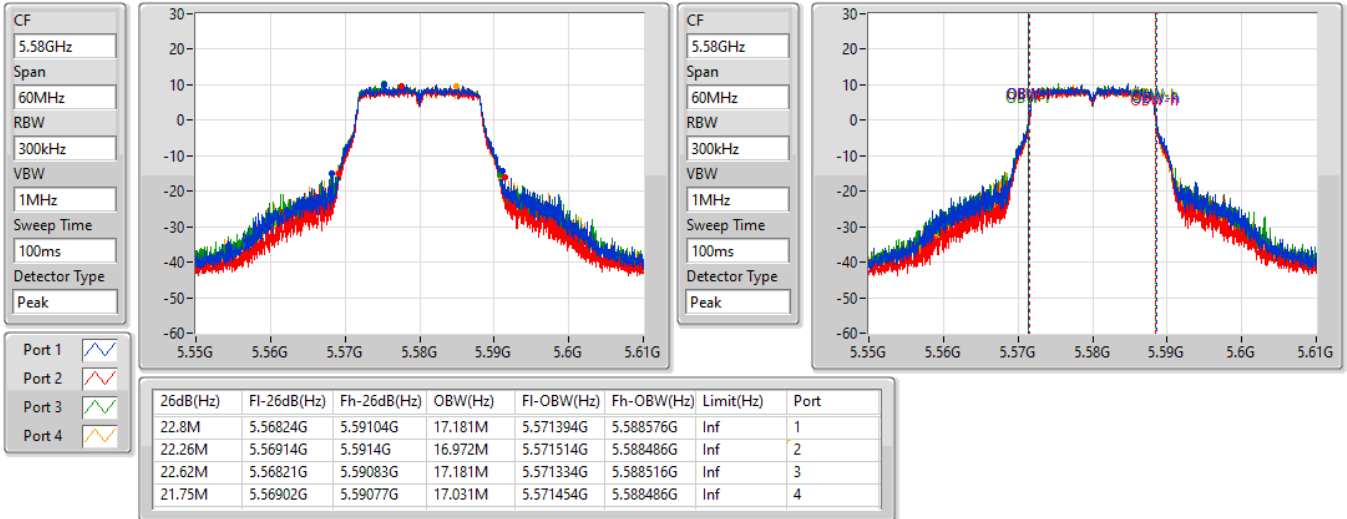

802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

29/12/2021

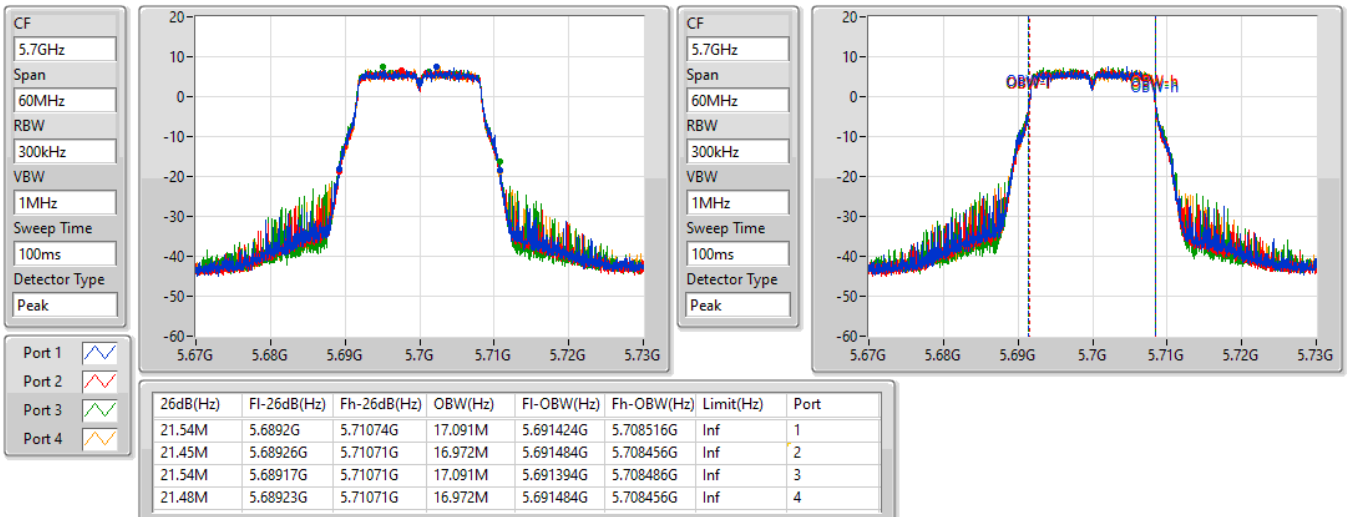


802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

29/12/2021

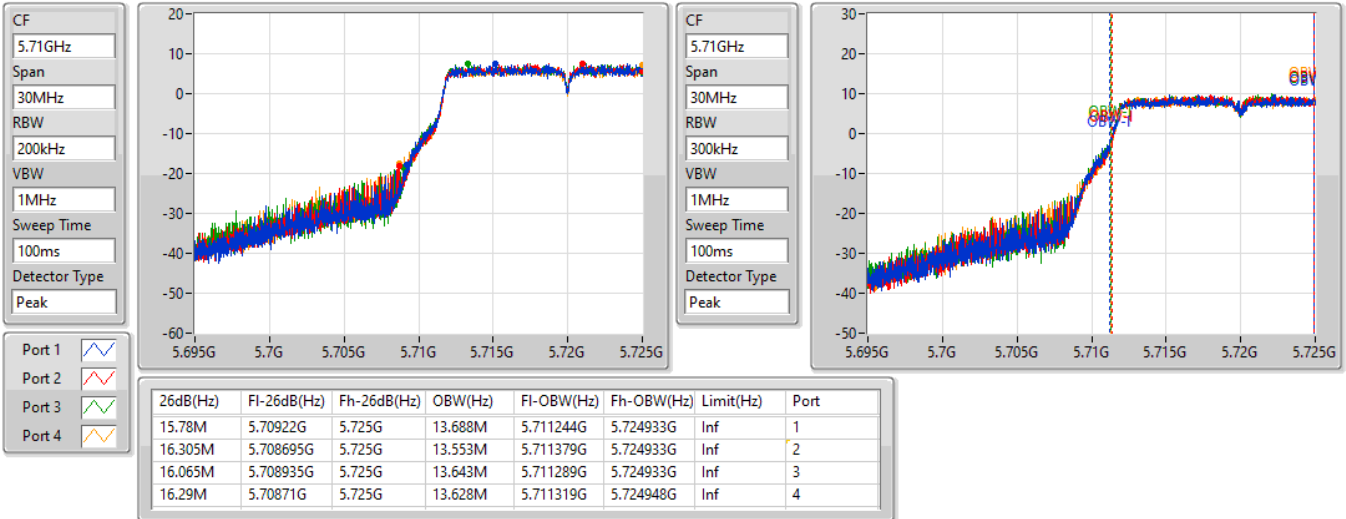

802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz

29/12/2021

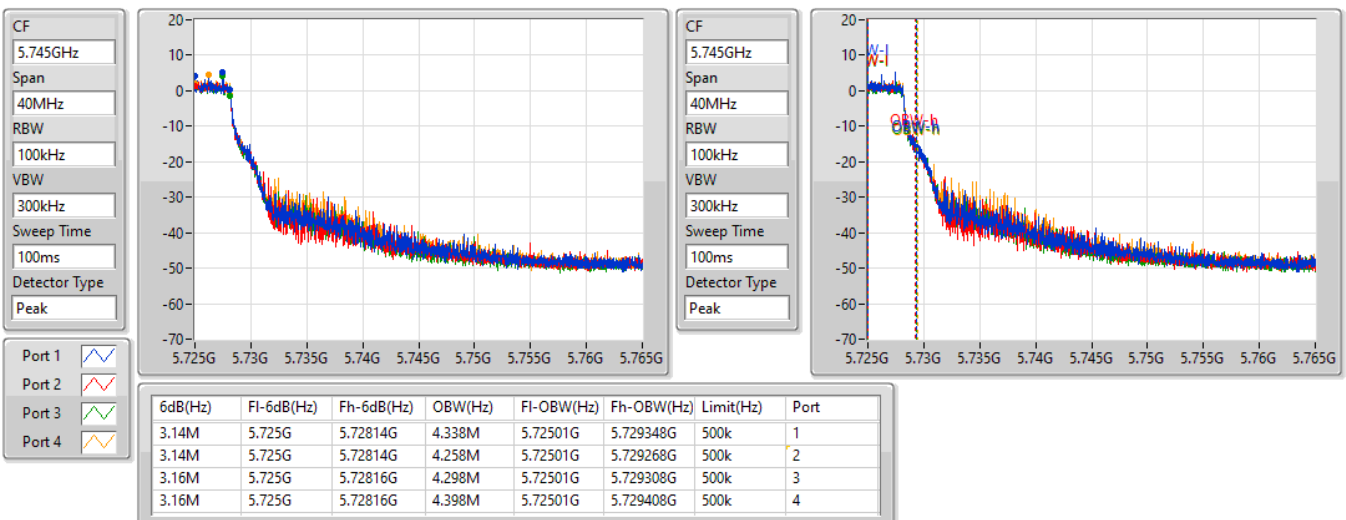


802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

29/12/2021


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

05/01/2022

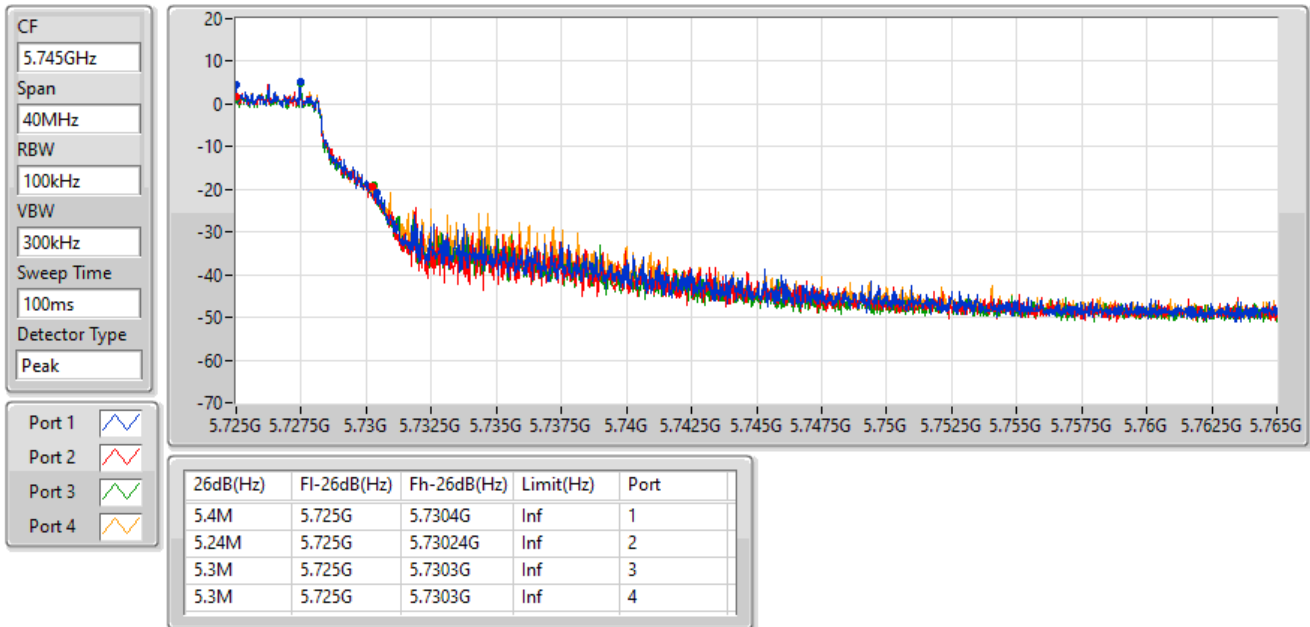


802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

05/01/2022

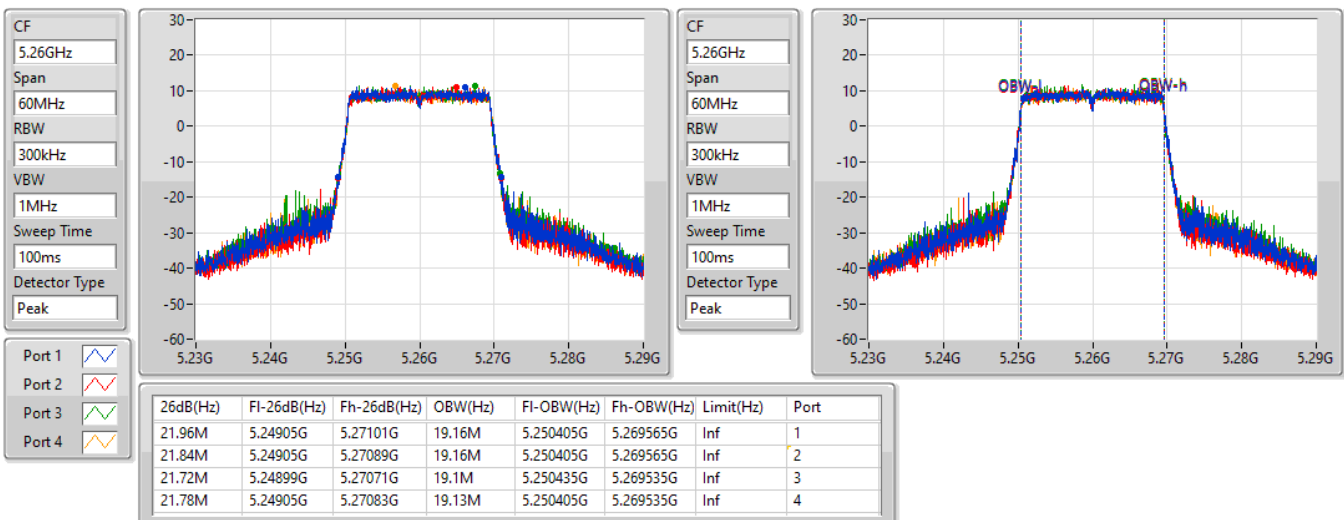


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

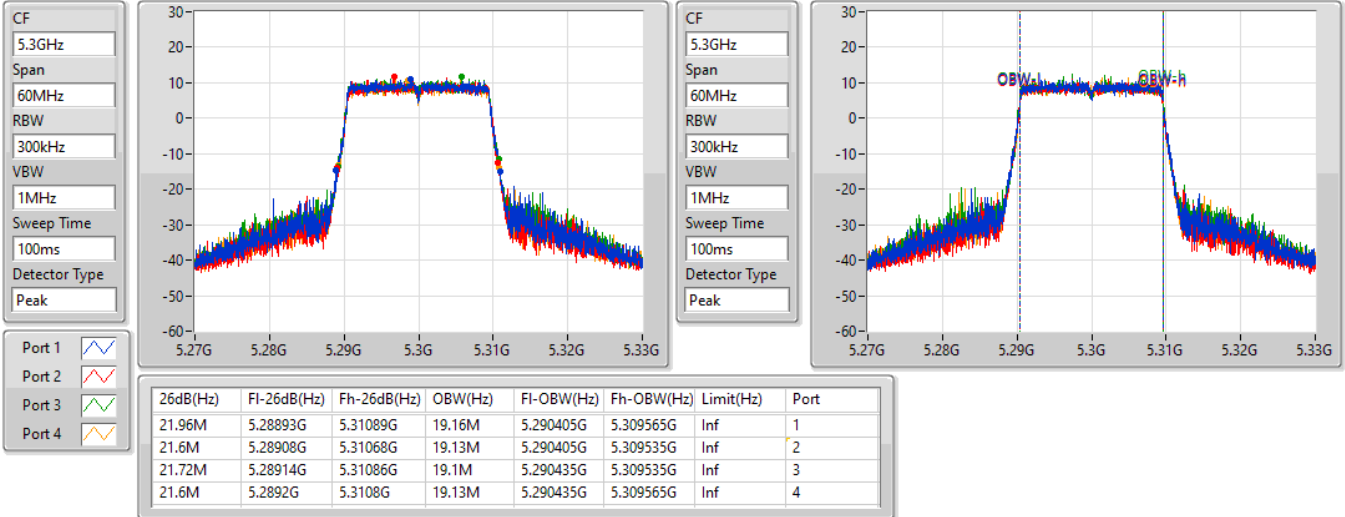
5260MHz

29/12/2021

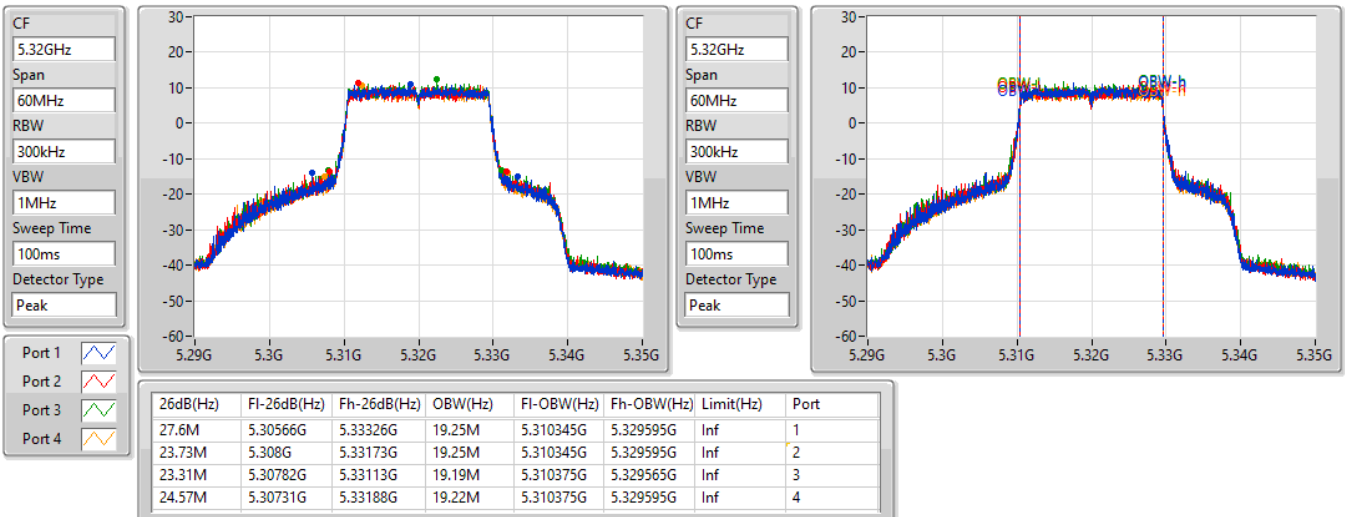


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5300MHz

29/12/2021

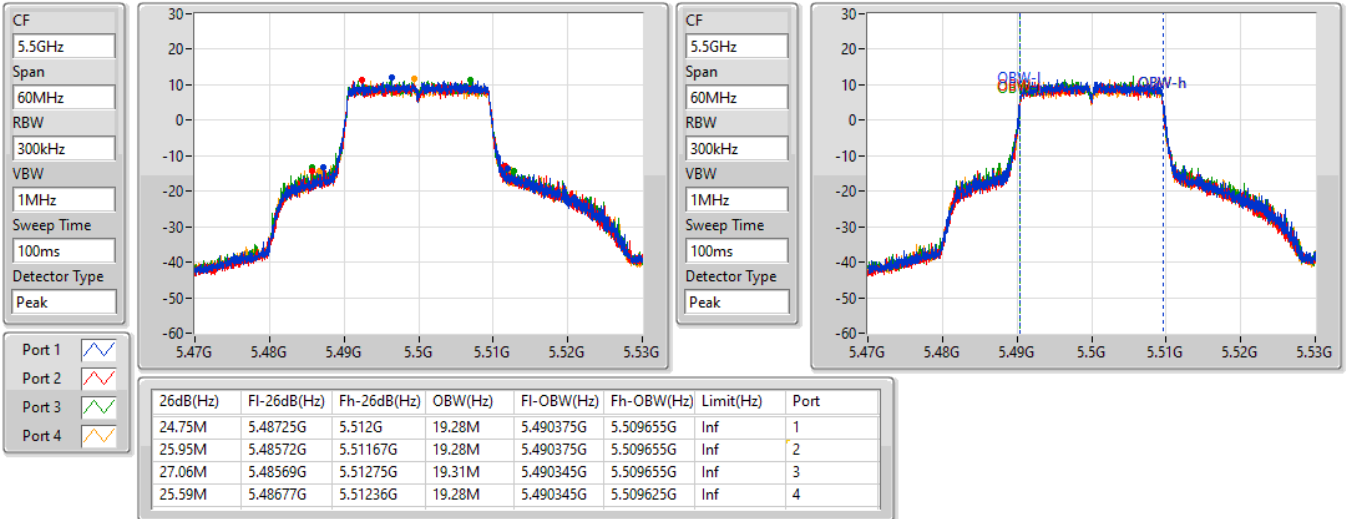

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5320MHz

29/12/2021

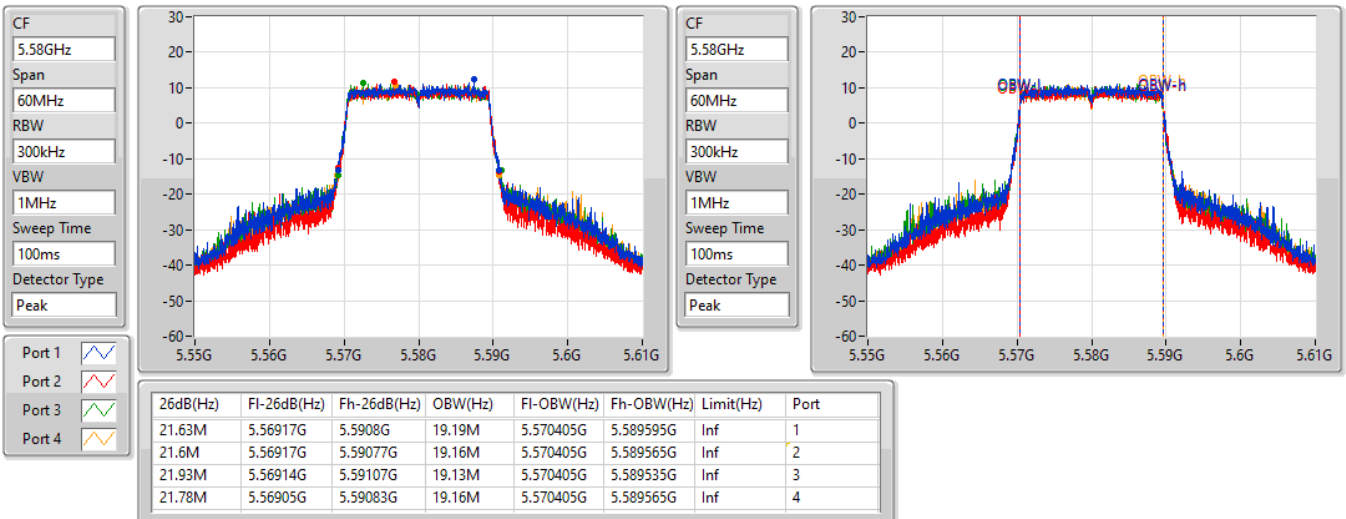


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5500MHz

29/12/2021

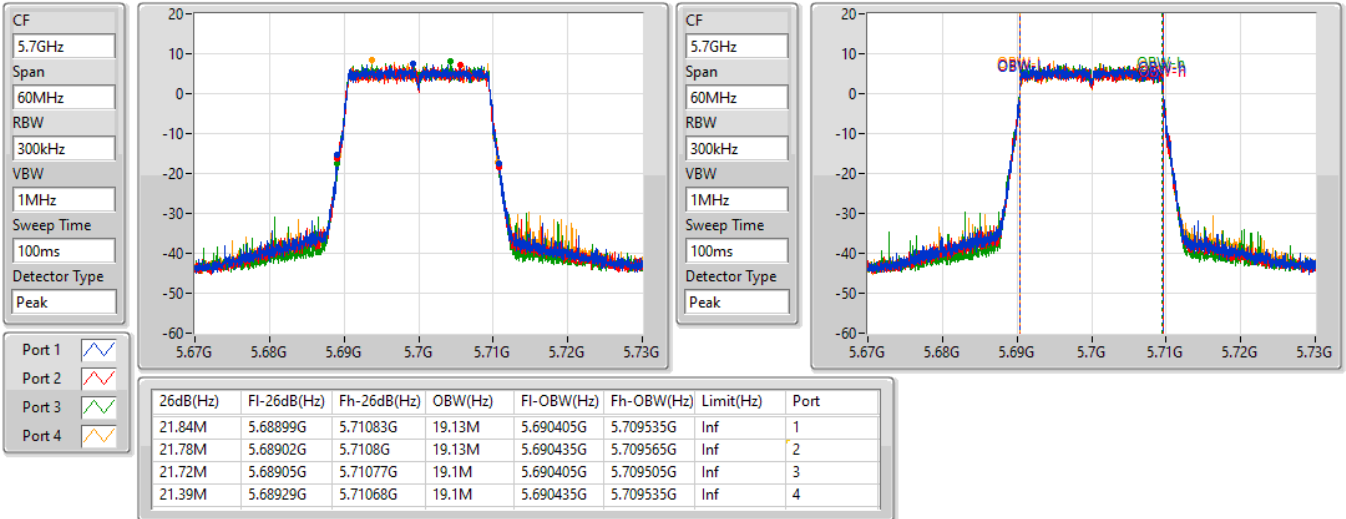

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5580MHz

29/12/2021

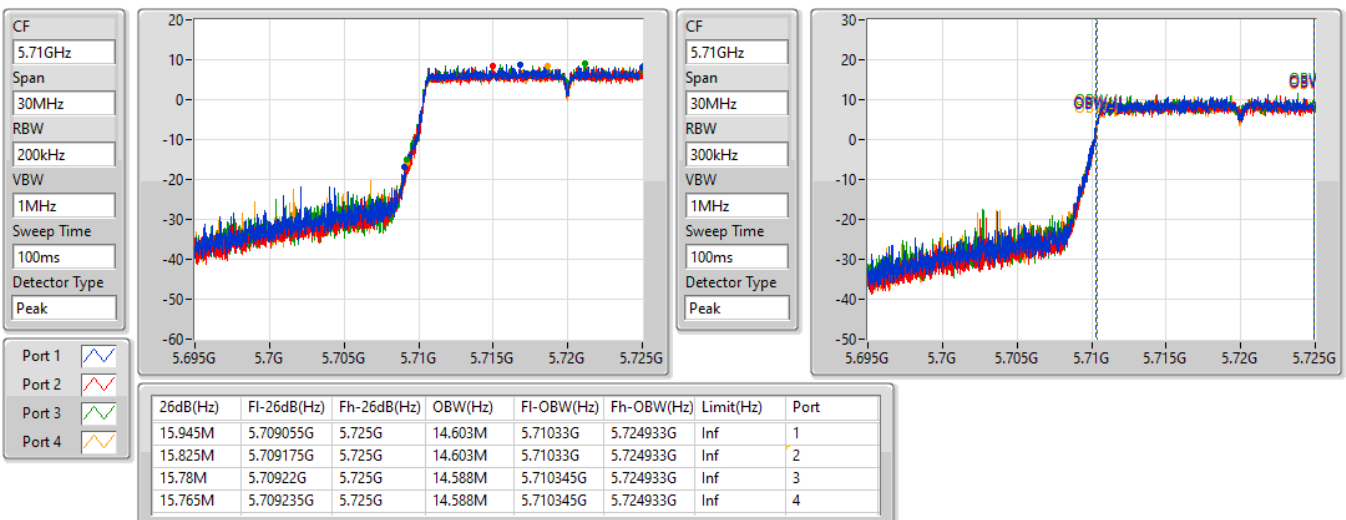


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5700MHz

29/12/2021

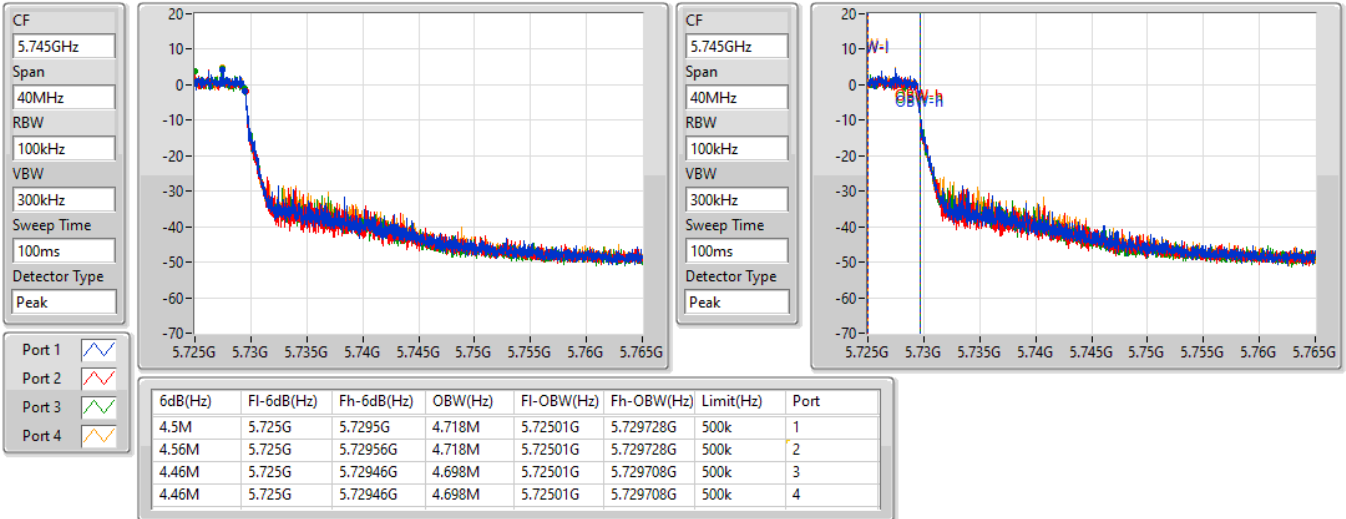

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

29/12/2021

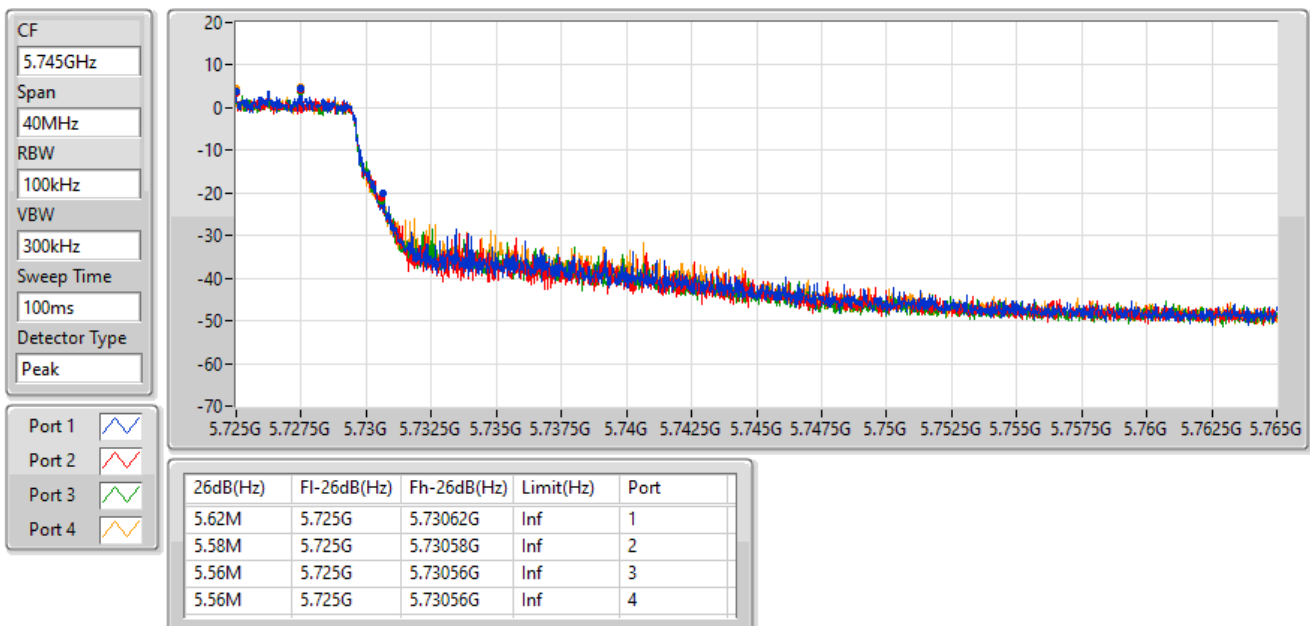


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

05/01/2022

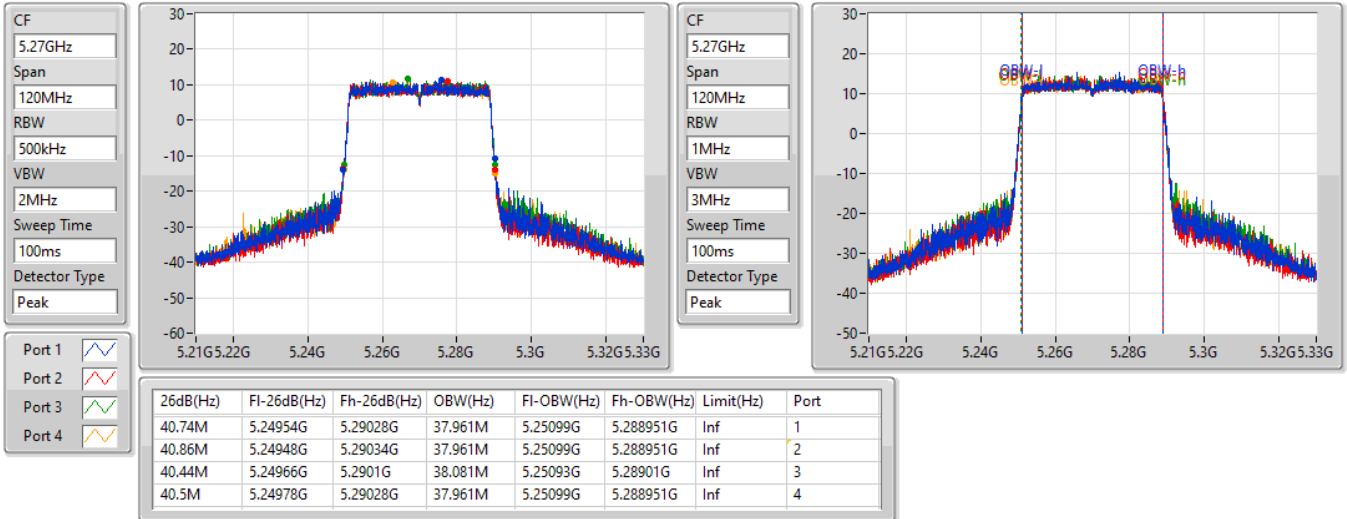

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

05/01/2022

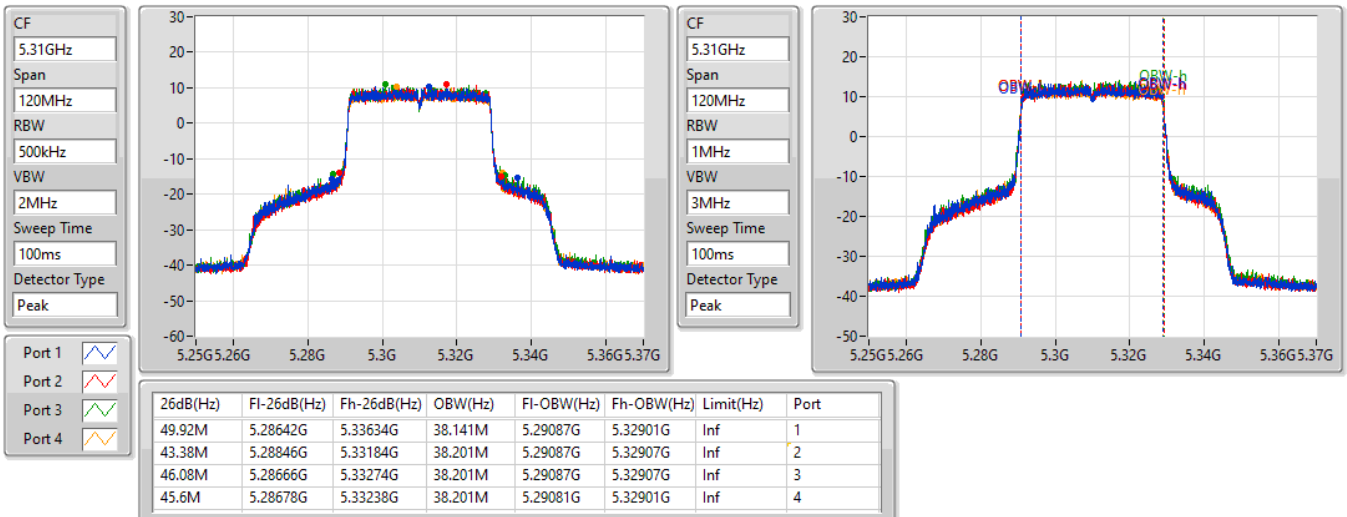


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5270MHz

29/12/2021

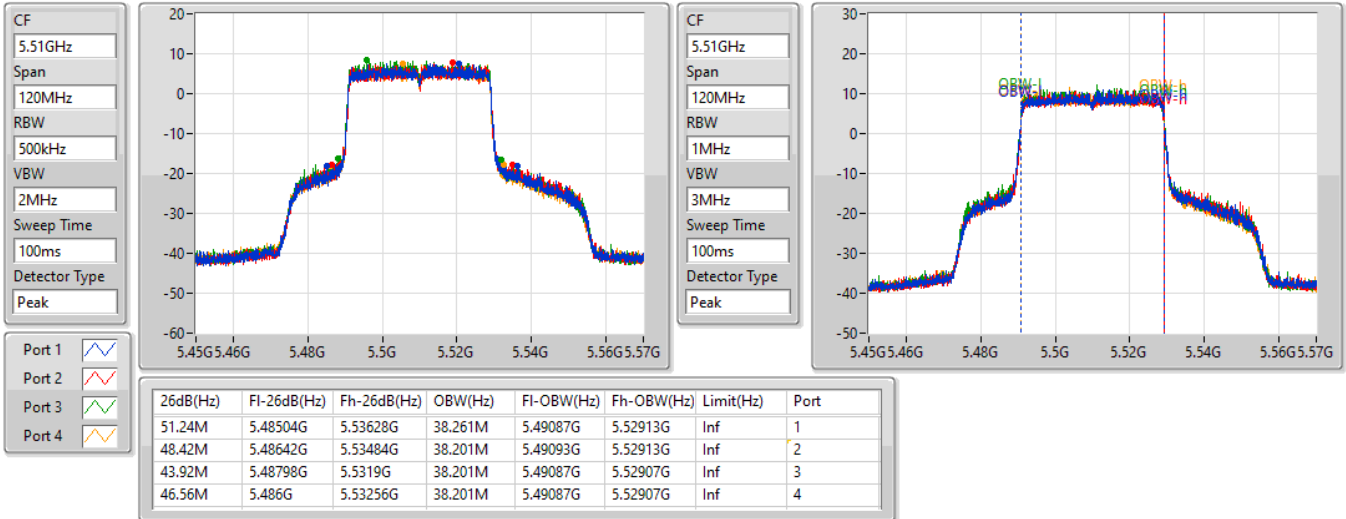

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5310MHz

29/12/2021

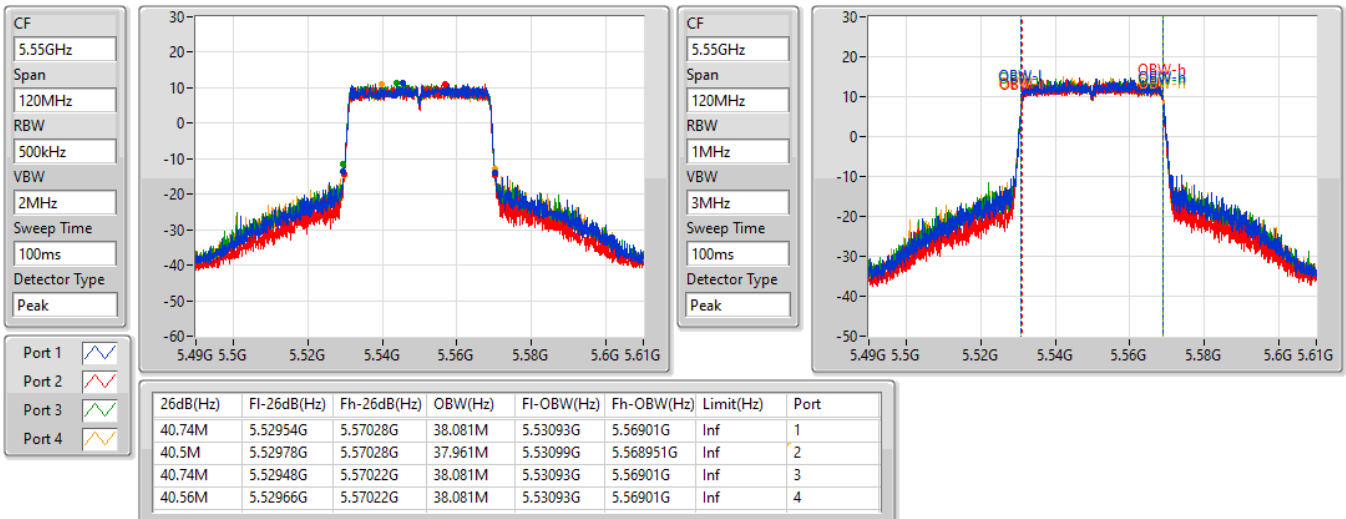


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5510MHz

29/12/2021

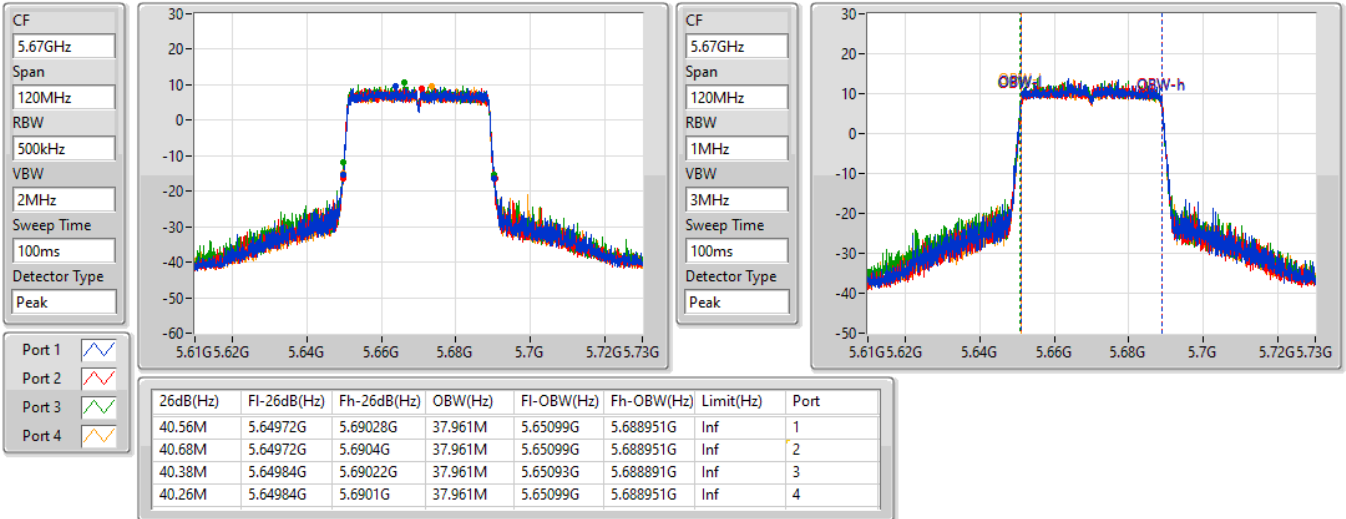

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5550MHz

29/12/2021

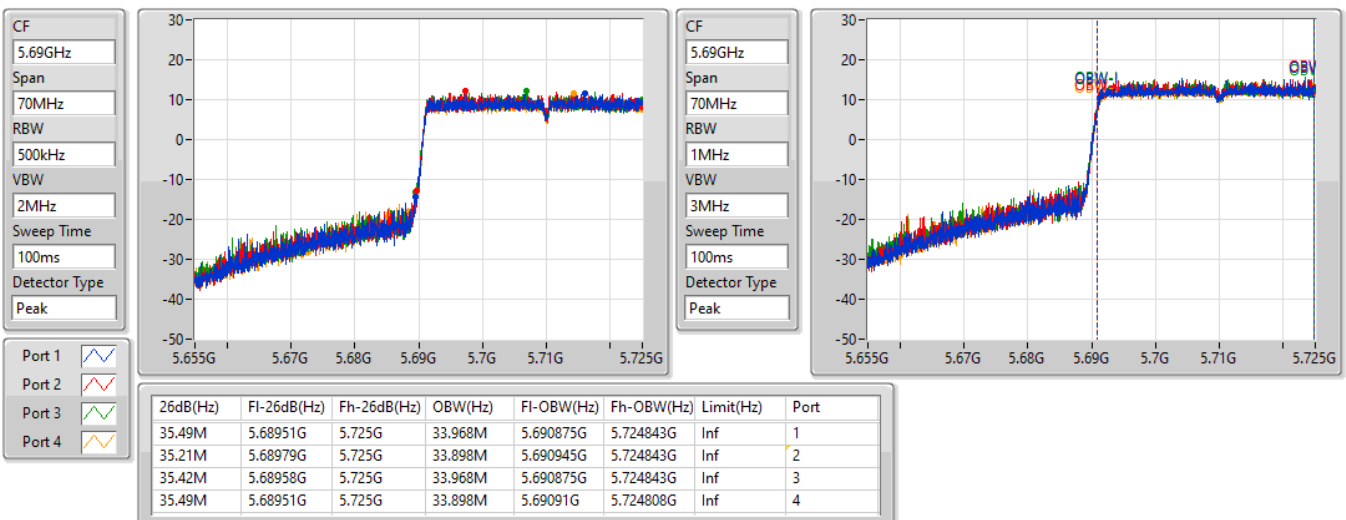


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5670MHz

29/12/2021

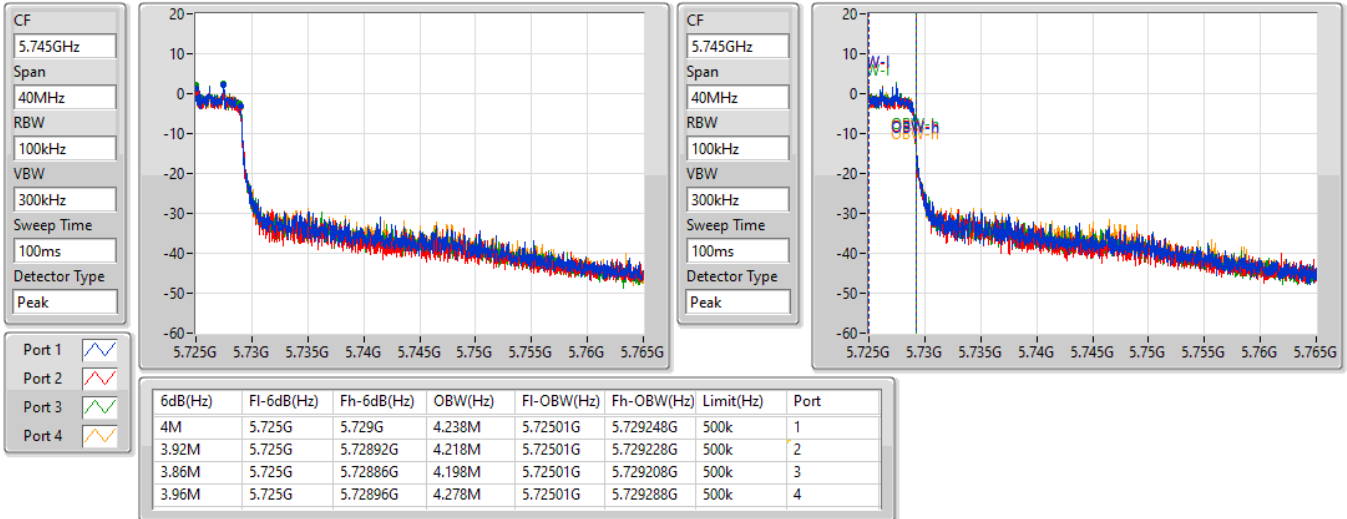

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

29/12/2021

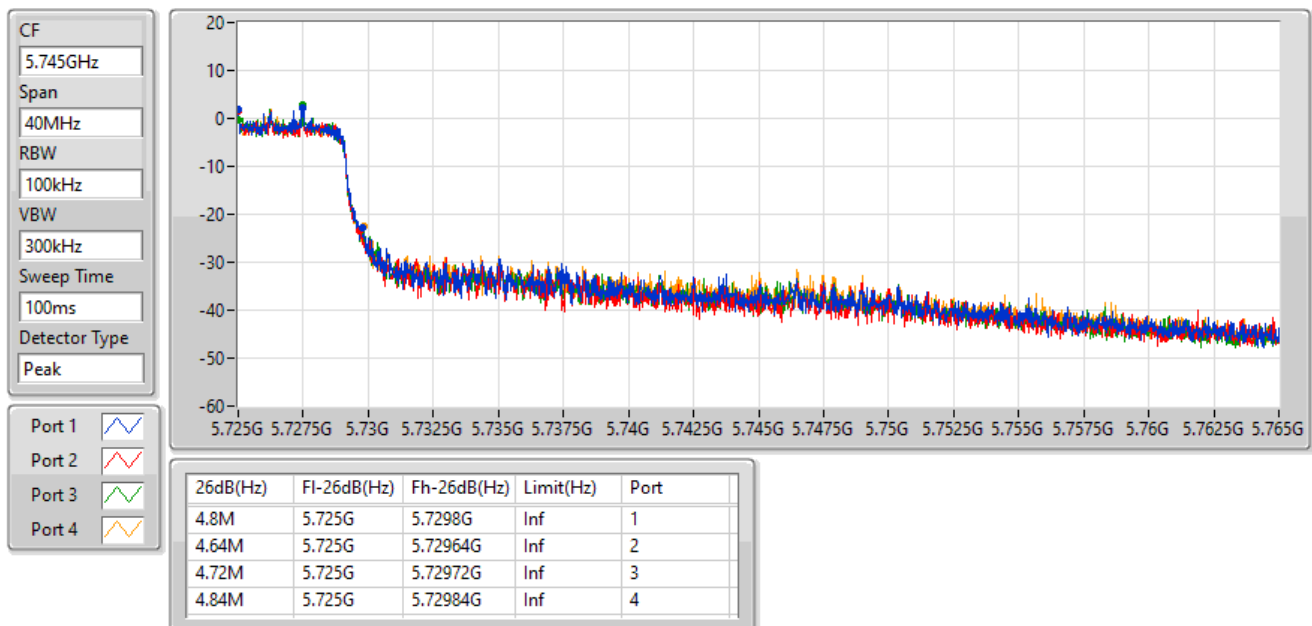


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

05/01/2022

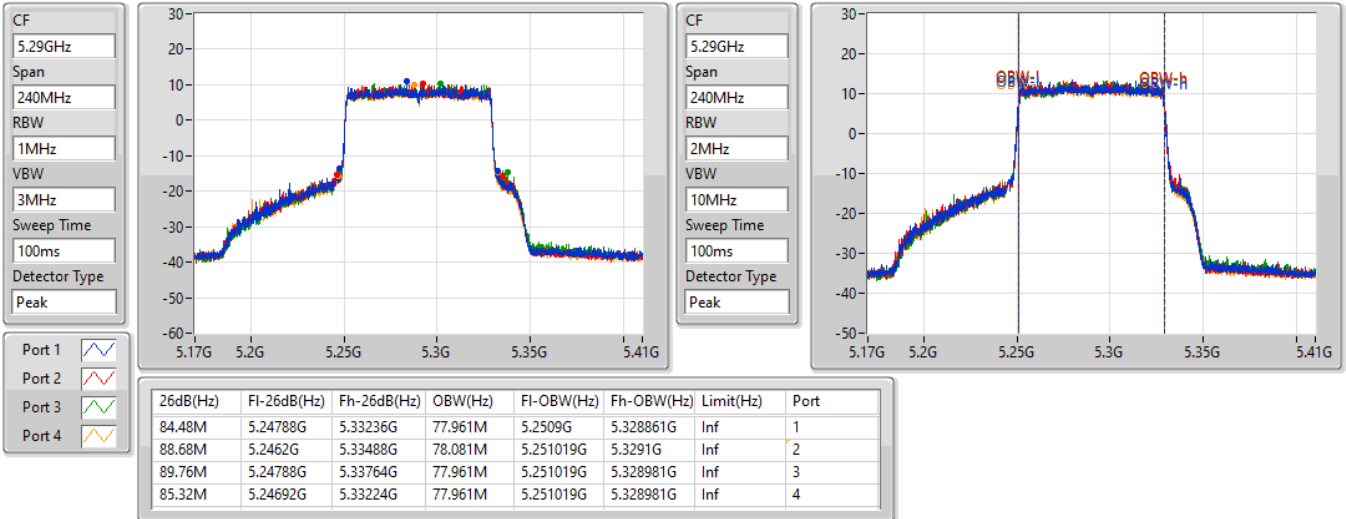

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

05/01/2022

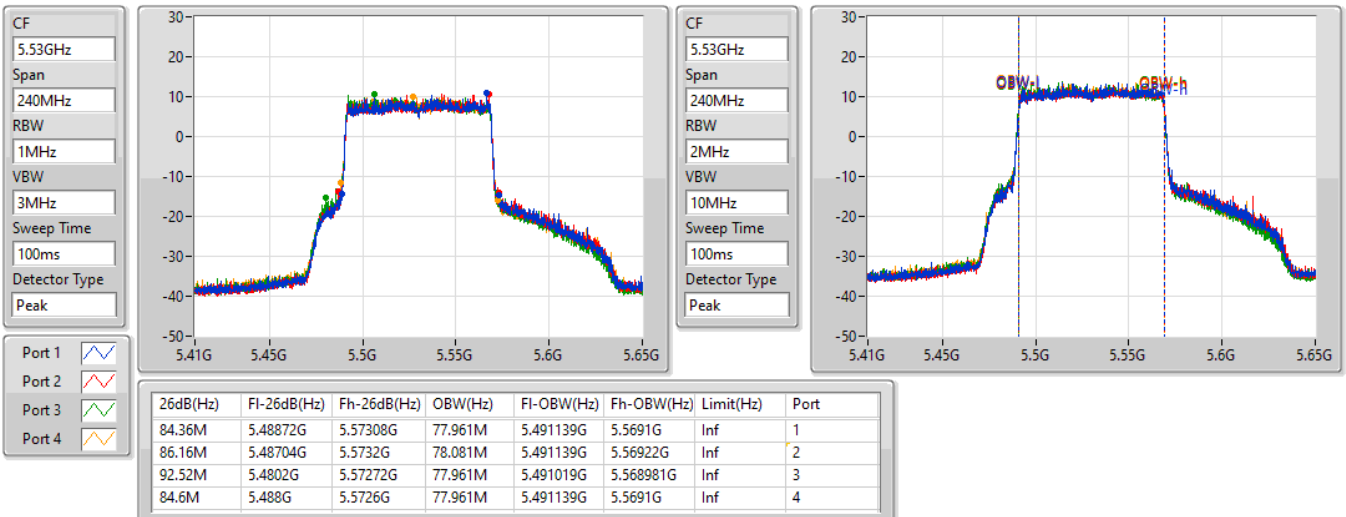


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5290MHz

29/12/2021

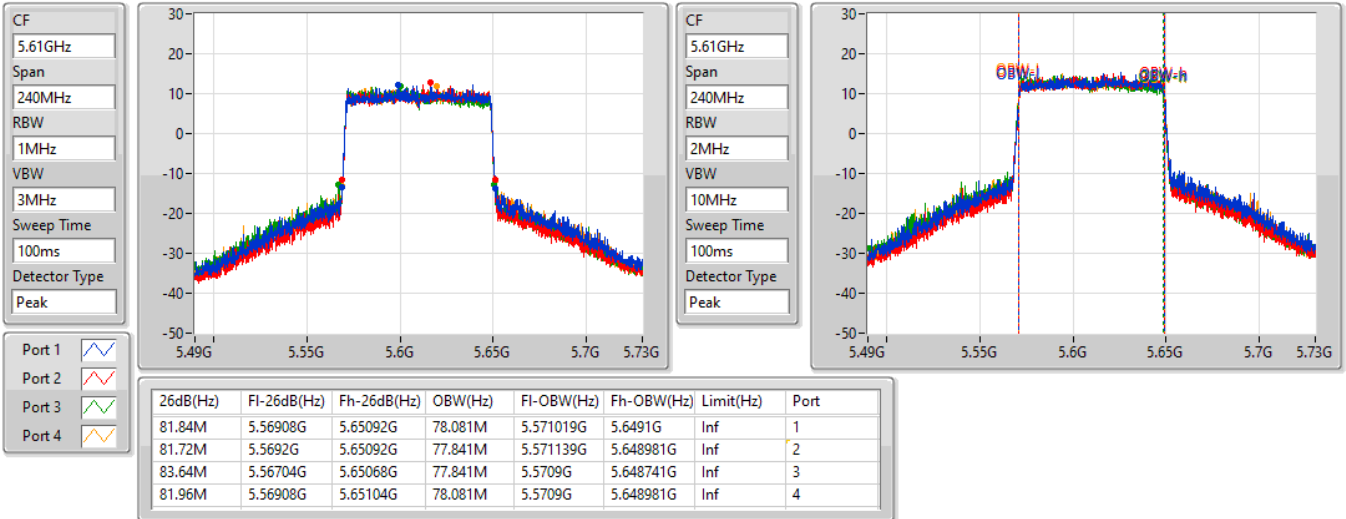

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5530MHz

29/12/2021

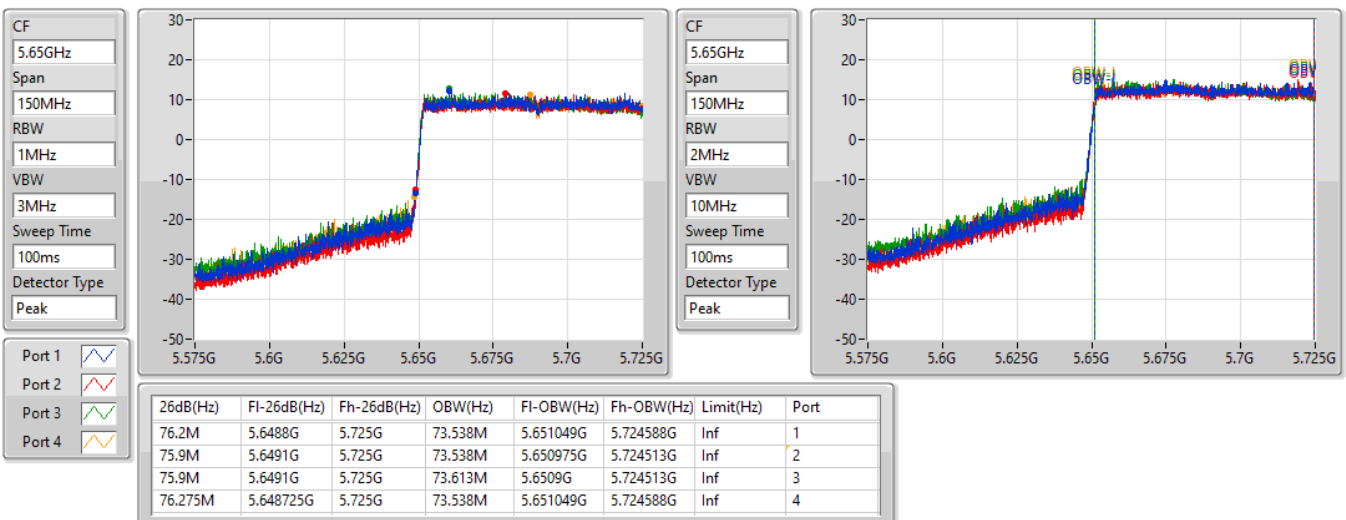


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5610MHz

29/12/2021

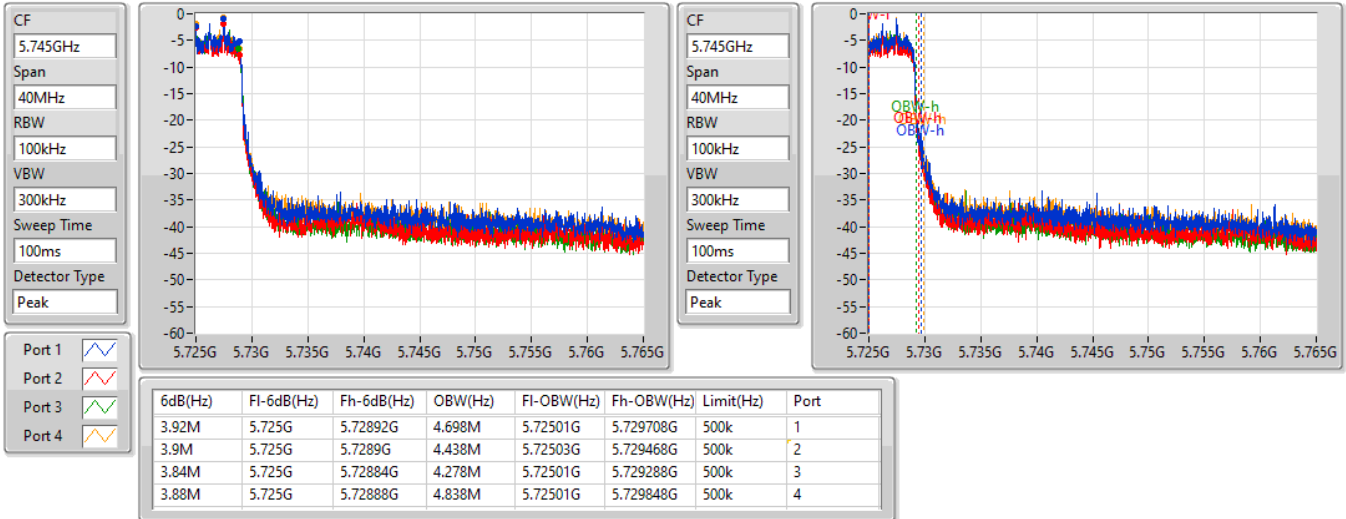

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

29/12/2021

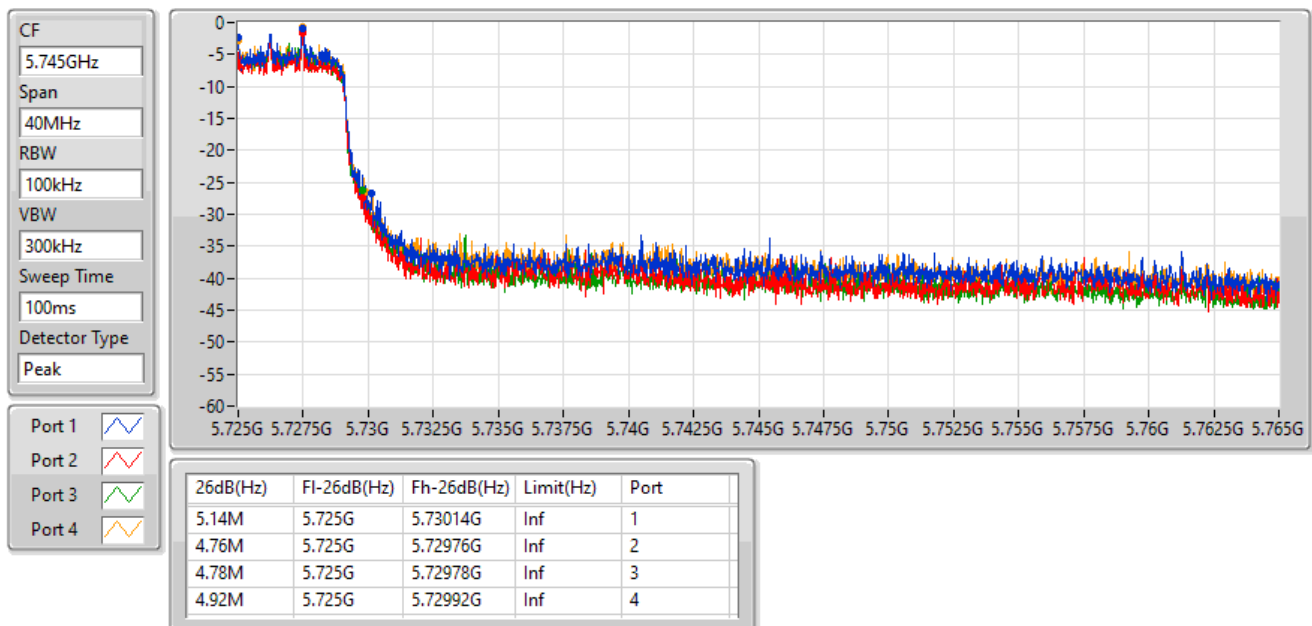


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

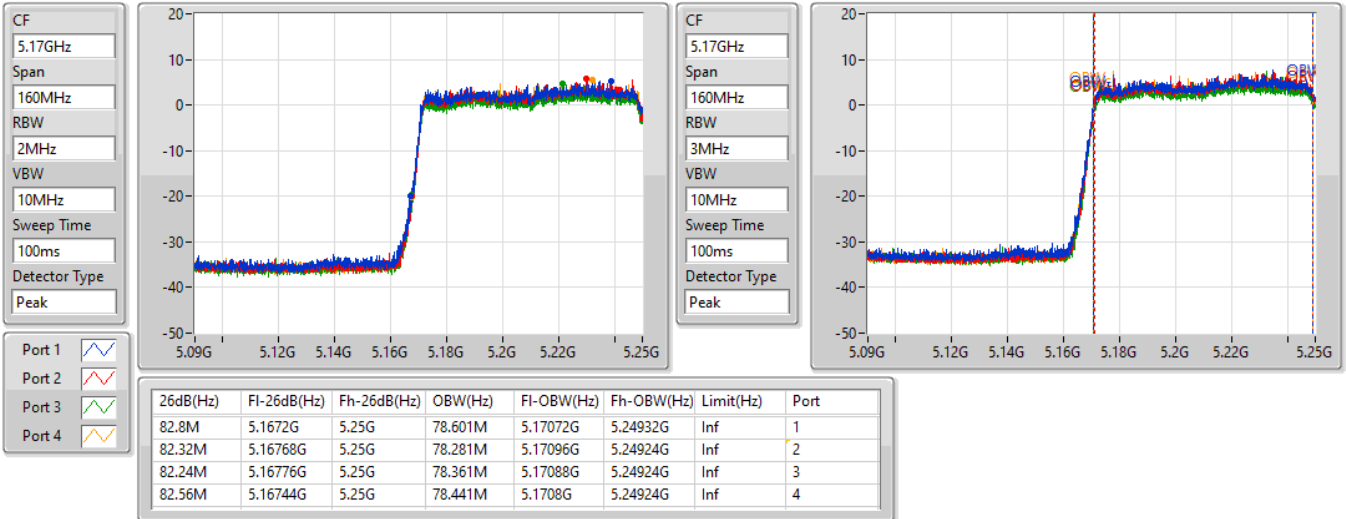

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

05/01/2022

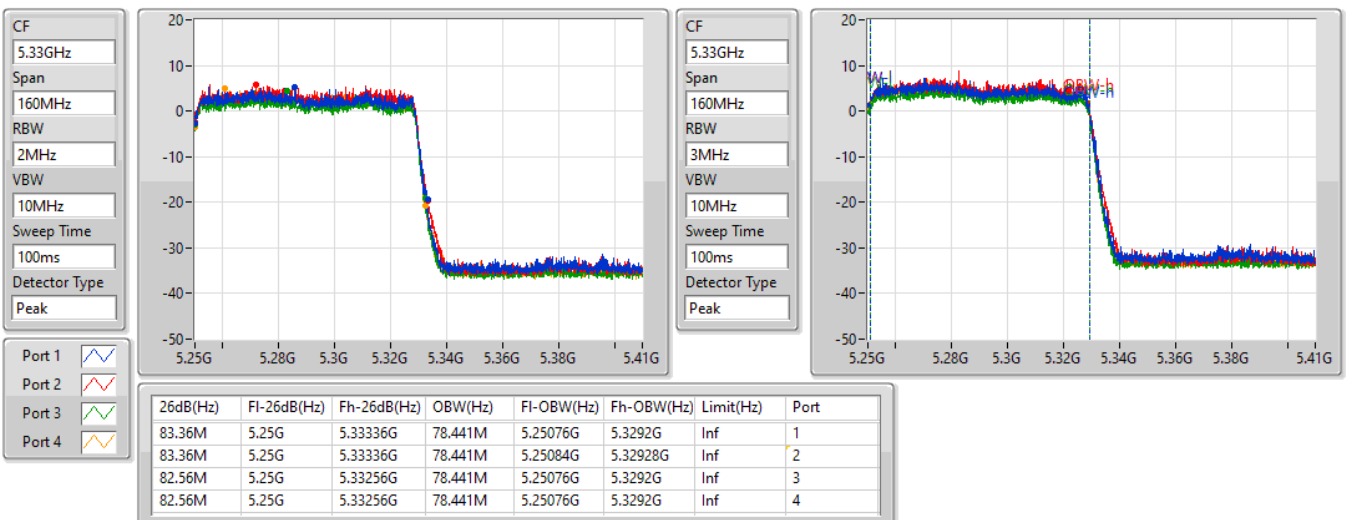


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/01/2022


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

27/01/2022

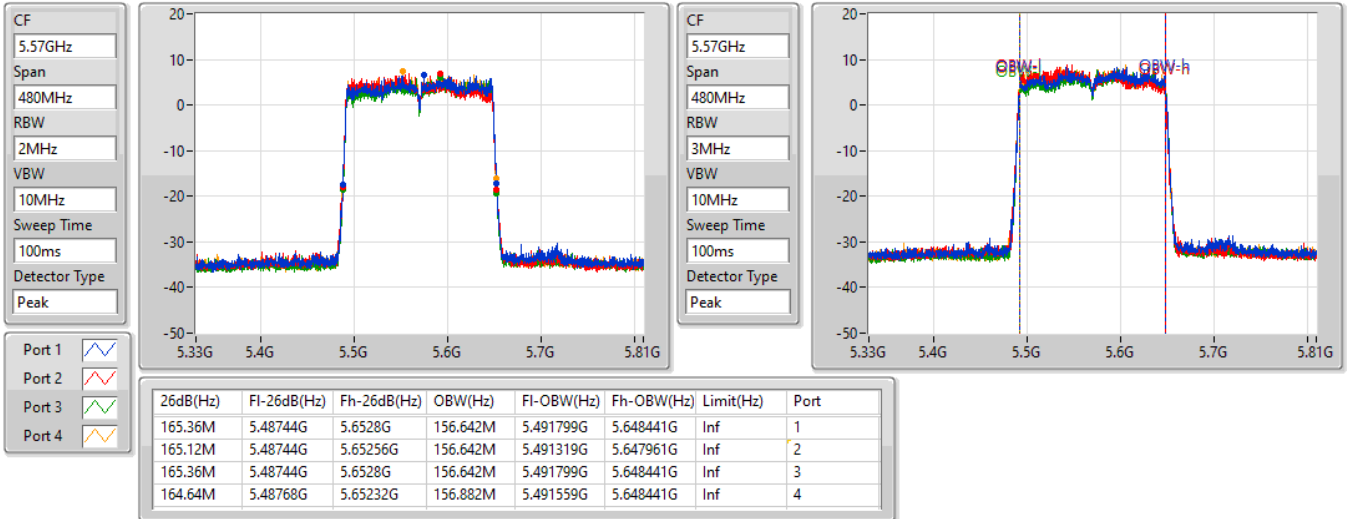


802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

5570MHz

27/01/2022



**For 4T4S
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss4,(MCS0)_4TX	82.72M	78.361M	78M4D1D	82.16M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	27M	19.22M	19M2D1D	21.63M	19.1M
802.11ax HEW40_Nss4,(MCS0)_4TX	47.1M	38.141M	38M1D1D	40.44M	37.901M
802.11ax HEW80_Nss4,(MCS0)_4TX	85.68M	77.961M	78M0D1D	83.04M	77.961M
802.11ax HEW160_Nss4,(MCS0)_4TX	83.04M	78.521M	78M5D1D	82.08M	78.281M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	27.39M	19.28M	19M3D1D	15.81M	14.603M
802.11ax HEW40_Nss4,(MCS0)_4TX	51.78M	38.321M	38M3D1D	35.21M	33.898M
802.11ax HEW80_Nss4,(MCS0)_4TX	90M	78.201M	78M2D1D	75.75M	73.538M
802.11ax HEW160_Nss4,(MCS0)_4TX	166.08M	157.121M	157MD1D	164.4M	156.882M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	4.46M	4.698M	4M70D1D	4.4M	4.658M
802.11ax HEW40_Nss4,(MCS0)_4TX	3.94M	4.278M	4M28D1D	3.78M	4.198M
802.11ax HEW80_Nss4,(MCS0)_4TX	3.92M	8.236M	8M24D1D	3.7M	4.558M

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

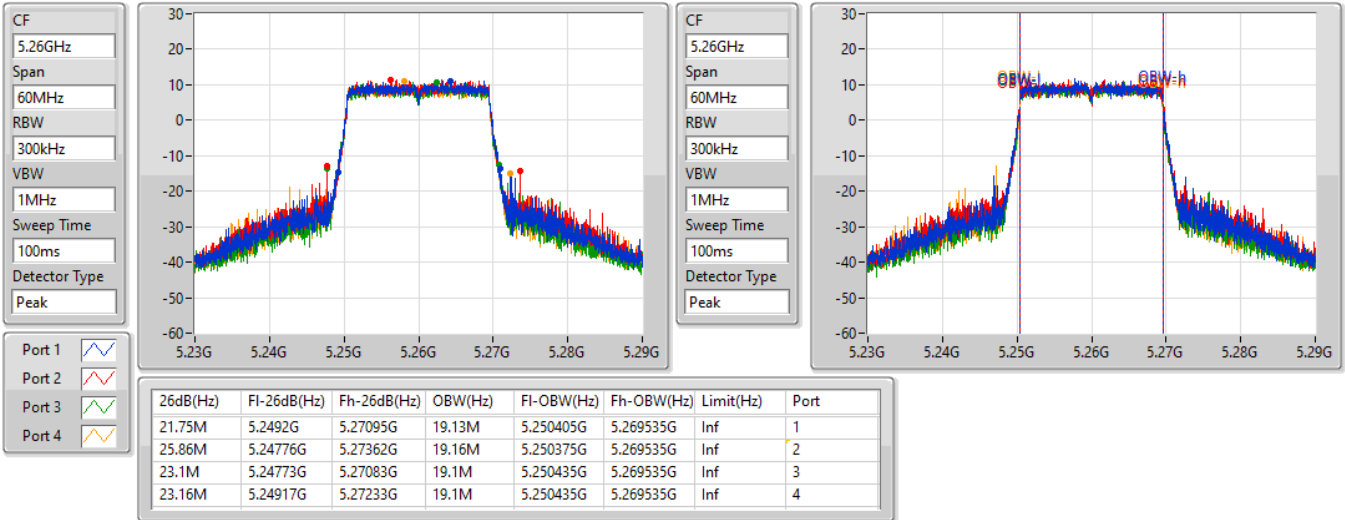
Result

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)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.75M	19.13M	25.86M	19.16M	23.1M	19.1M	23.16M	19.1M
5300MHz	Pass	Inf	24.21M	19.13M	22.5M	19.1M	21.66M	19.13M	21.63M	19.1M
5320MHz	Pass	Inf	23.55M	19.22M	24M	19.22M	27M	19.22M	22.89M	19.22M
5500MHz	Pass	Inf	26.46M	19.28M	25.56M	19.25M	23.82M	19.22M	27.39M	19.22M
5580MHz	Pass	Inf	25.68M	19.19M	22.23M	19.19M	24.99M	19.1M	22.2M	19.1M
5700MHz	Pass	Inf	21.78M	19.13M	21.84M	19.13M	22.86M	19.13M	22.98M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.81M	14.603M	15.84M	14.618M	15.825M	14.603M	15.855M	14.618M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.678M	4.44M	4.698M	4.44M	4.698M	4.4M	4.658M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.8M	38.021M	40.44M	37.901M	40.44M	38.021M	41.22M	37.961M
5310MHz	Pass	Inf	44.52M	38.141M	43.5M	38.081M	44.1M	38.141M	47.1M	38.141M
5510MHz	Pass	Inf	47.4M	38.141M	51.6M	38.261M	46.14M	38.141M	51.78M	38.321M
5550MHz	Pass	Inf	42.6M	37.961M	40.62M	38.081M	42.96M	38.021M	40.74M	38.081M
5670MHz	Pass	Inf	40.74M	37.961M	40.62M	37.901M	40.5M	37.961M	40.26M	37.961M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.735M	33.968M	37.24M	33.933M	35.28M	33.898M	35.21M	33.933M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.278M	3.78M	4.218M	3.92M	4.198M	3.84M	4.278M
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	84.48M	77.961M	84.84M	77.961M	85.68M	77.961M	83.04M	77.961M
5530MHz	Pass	Inf	83.64M	77.961M	90M	78.081M	85.56M	78.081M	86.76M	78.081M
5610MHz	Pass	Inf	82.08M	78.201M	81.84M	78.081M	81.84M	78.081M	84.72M	78.201M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.75M	73.538M	75.975M	73.763M	75.975M	73.538M	84.375M	73.688M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	8.236M	3.92M	5.537M	3.86M	4.558M	3.7M	8.116M
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.64M	78.361M	82.24M	78.361M	82.16M	78.361M	82.72M	78.361M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	83.04M	78.521M	82.8M	78.441M	82.08M	78.281M	82.72M	78.281M
5570MHz	Pass	Inf	166.08M	157.121M	164.88M	156.882M	164.64M	156.882M	164.4M	156.882M

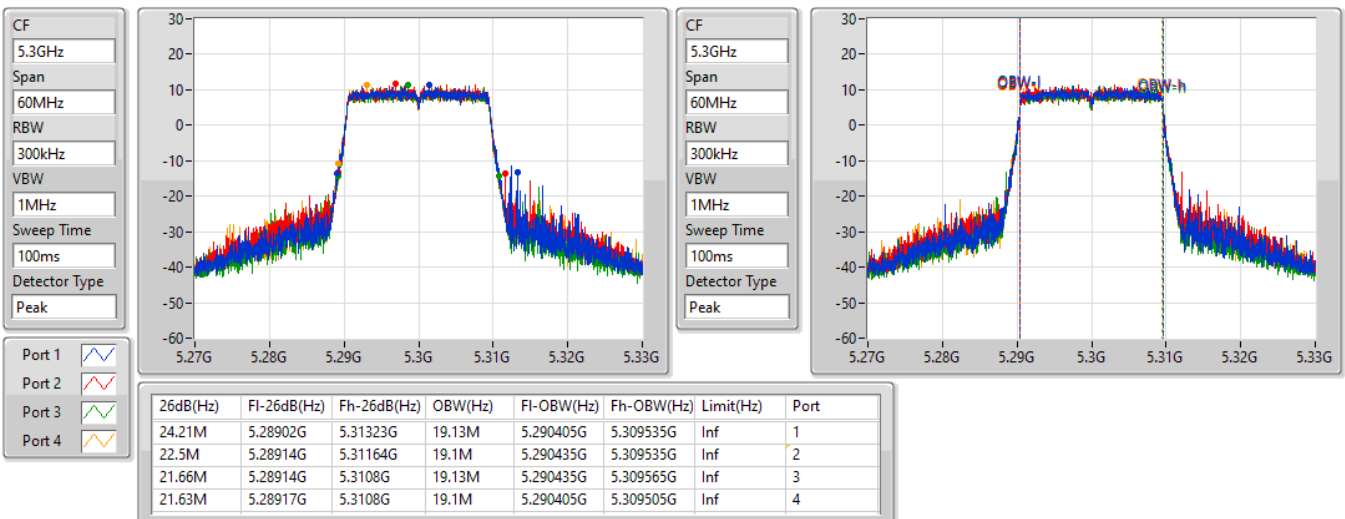
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5260MHz

04/01/2022

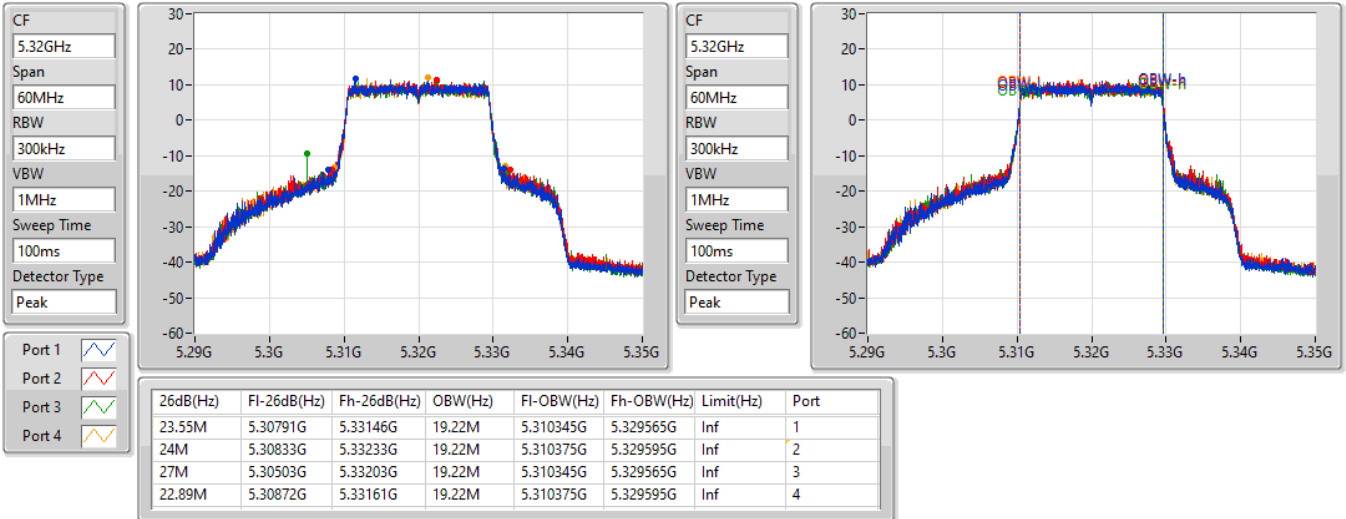

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5300MHz

04/01/2022

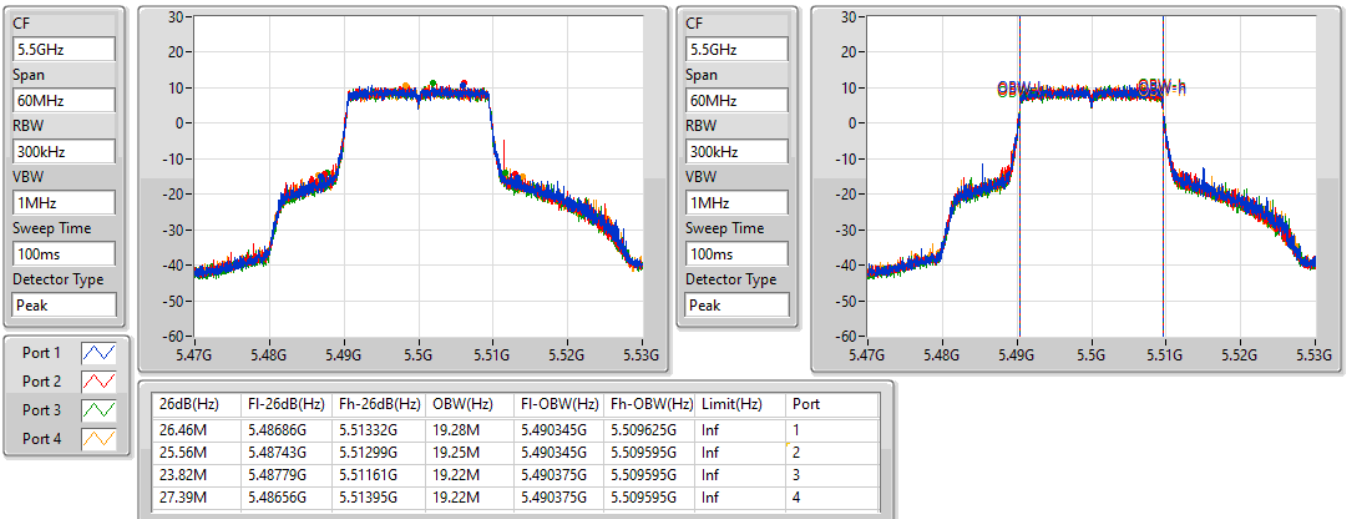


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5320MHz

04/01/2022

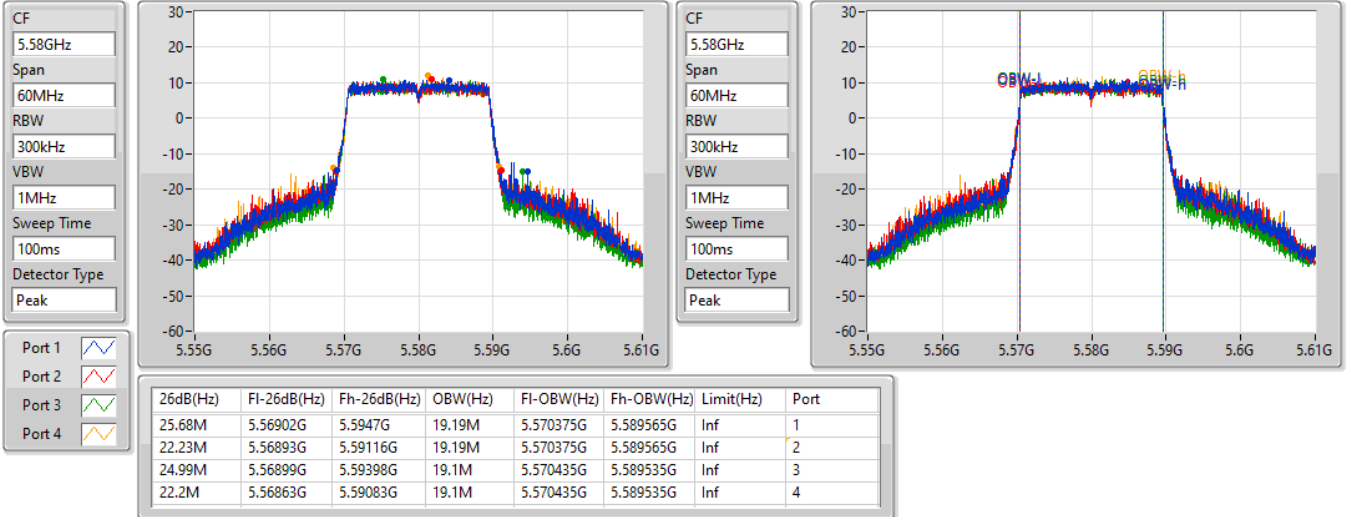

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5500MHz

04/01/2022

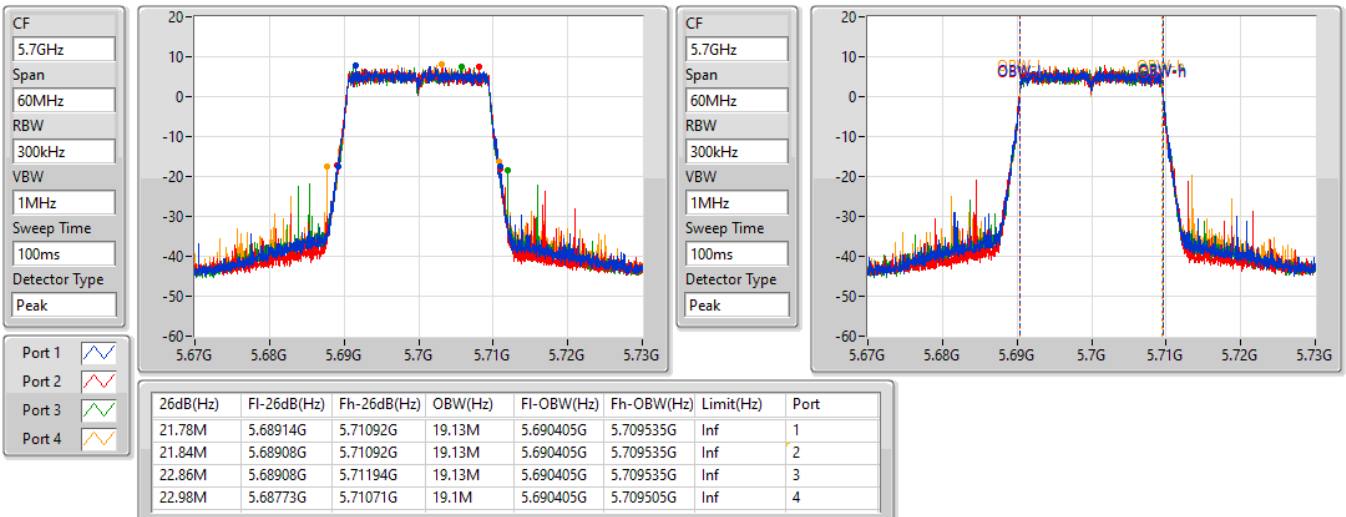


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5580MHz

04/01/2022

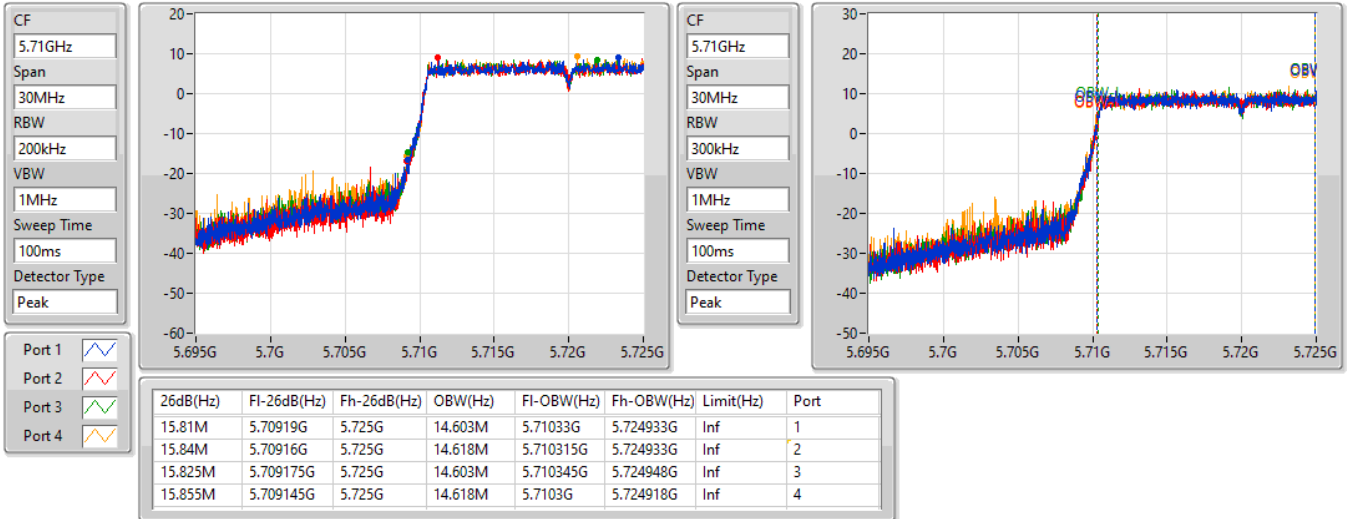

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5700MHz

04/01/2022

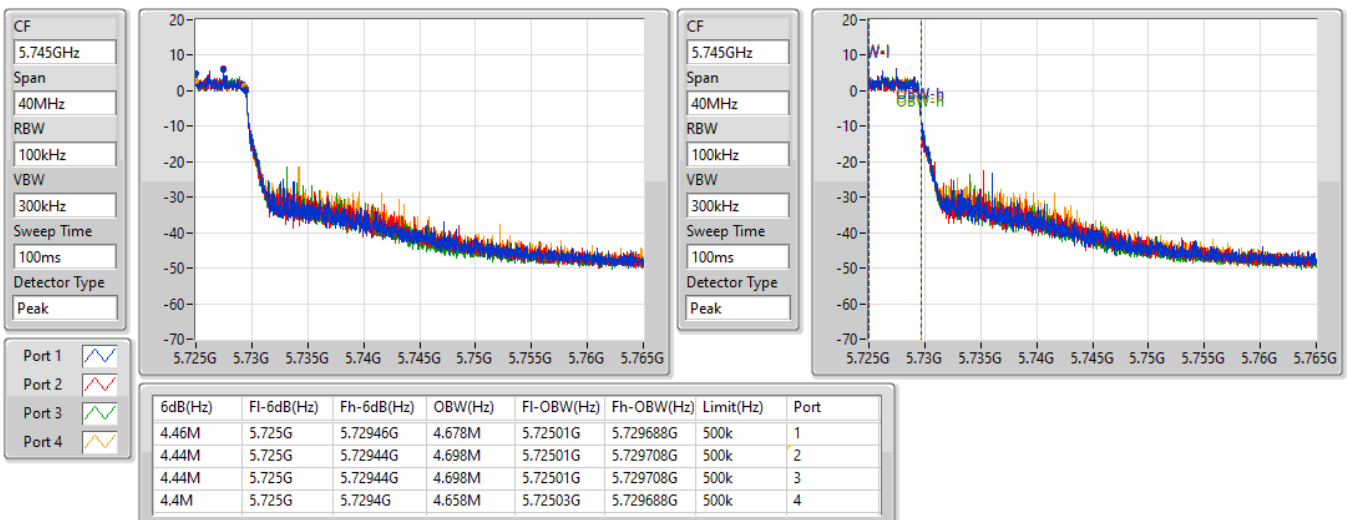


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

04/01/2022

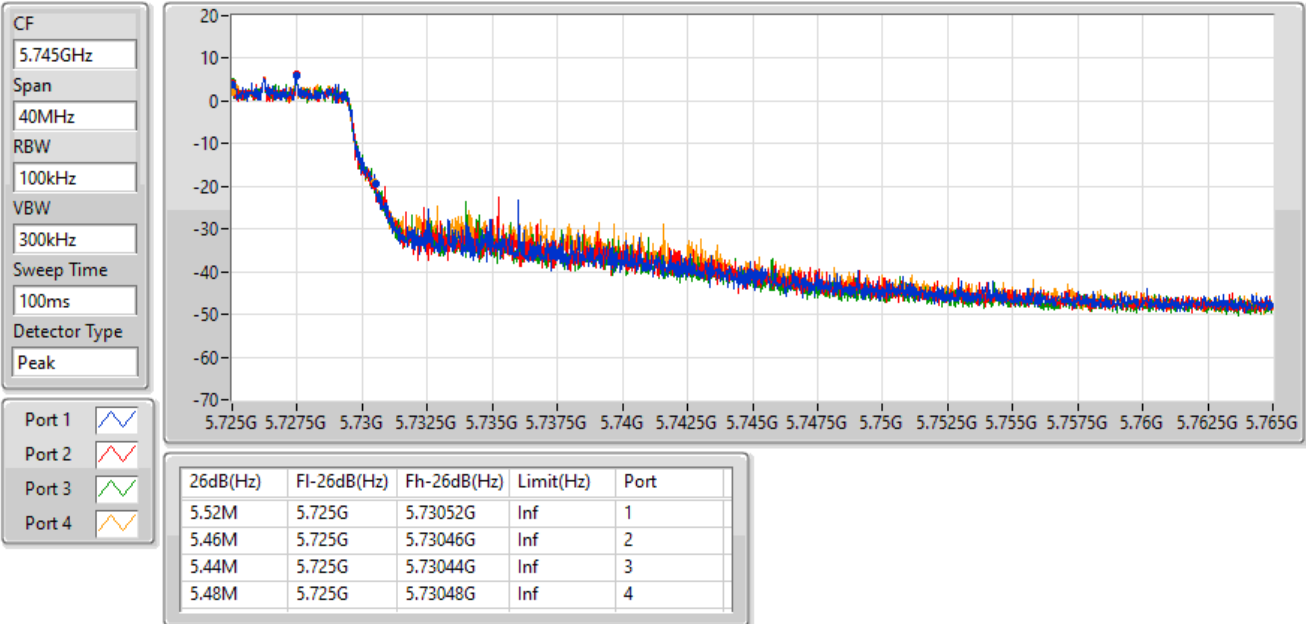

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

04/01/2022

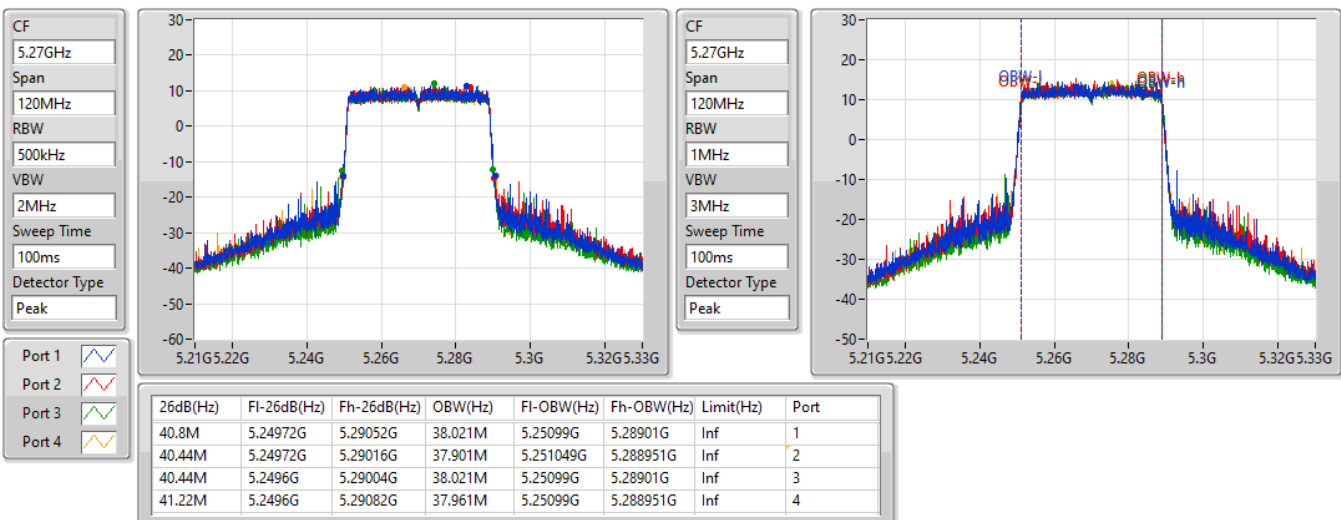


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

04/01/2022

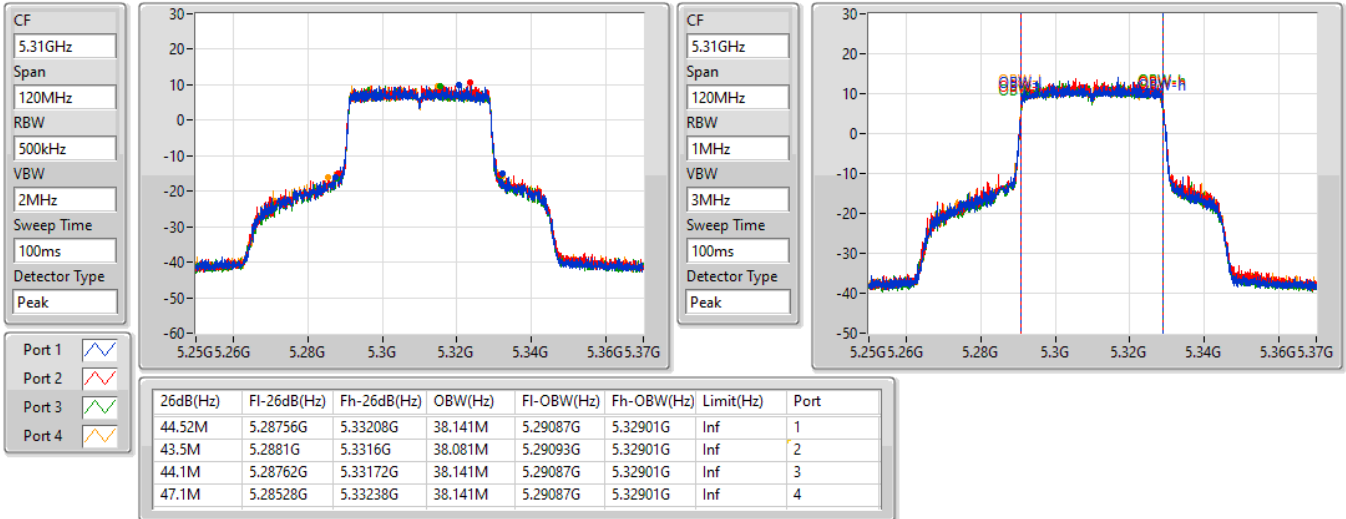

802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5270MHz

04/01/2022

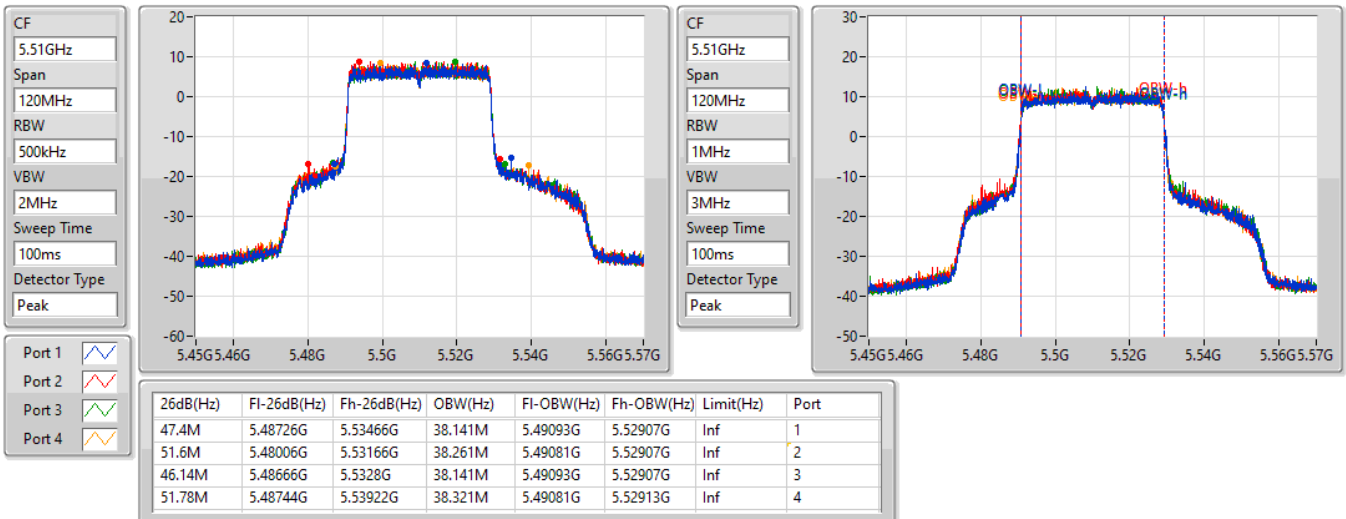


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5310MHz

04/01/2022

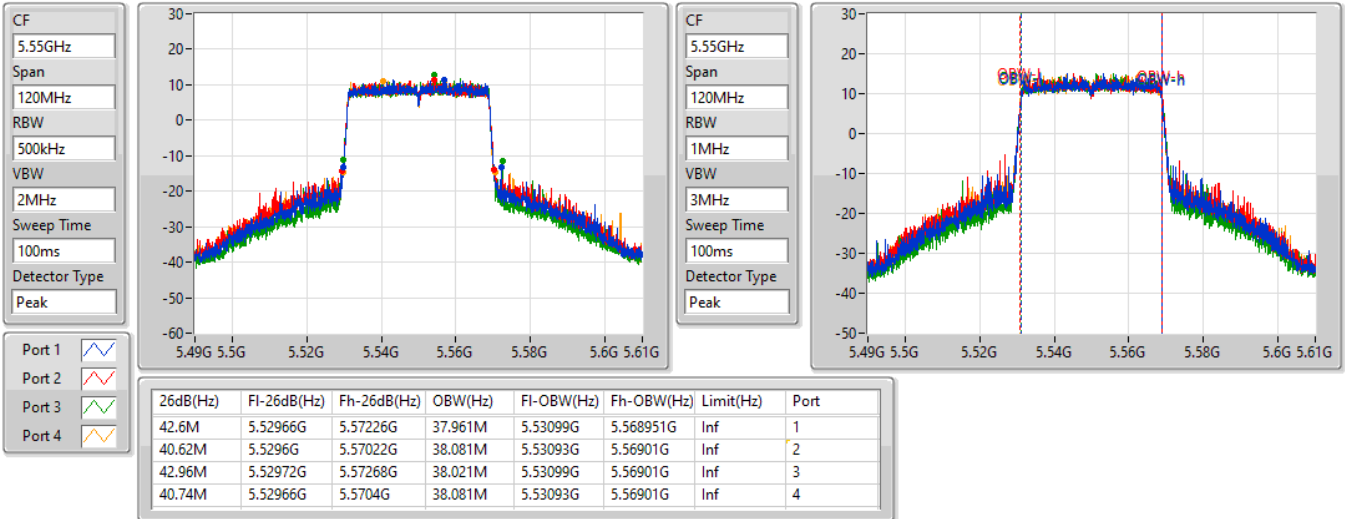

802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5510MHz

04/01/2022

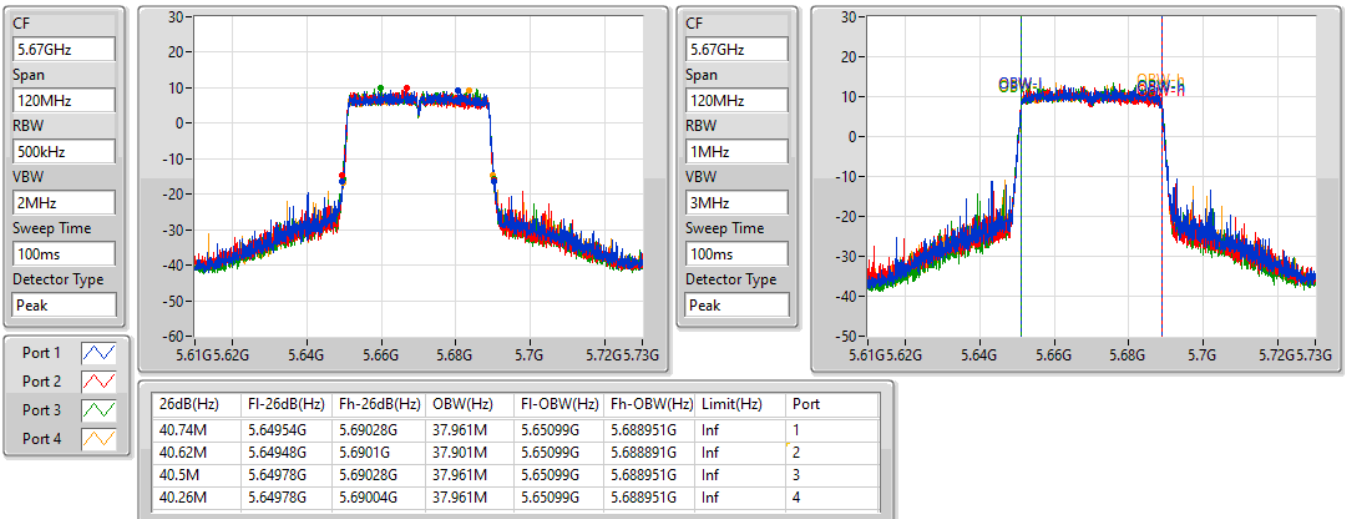


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5550MHz

04/01/2022

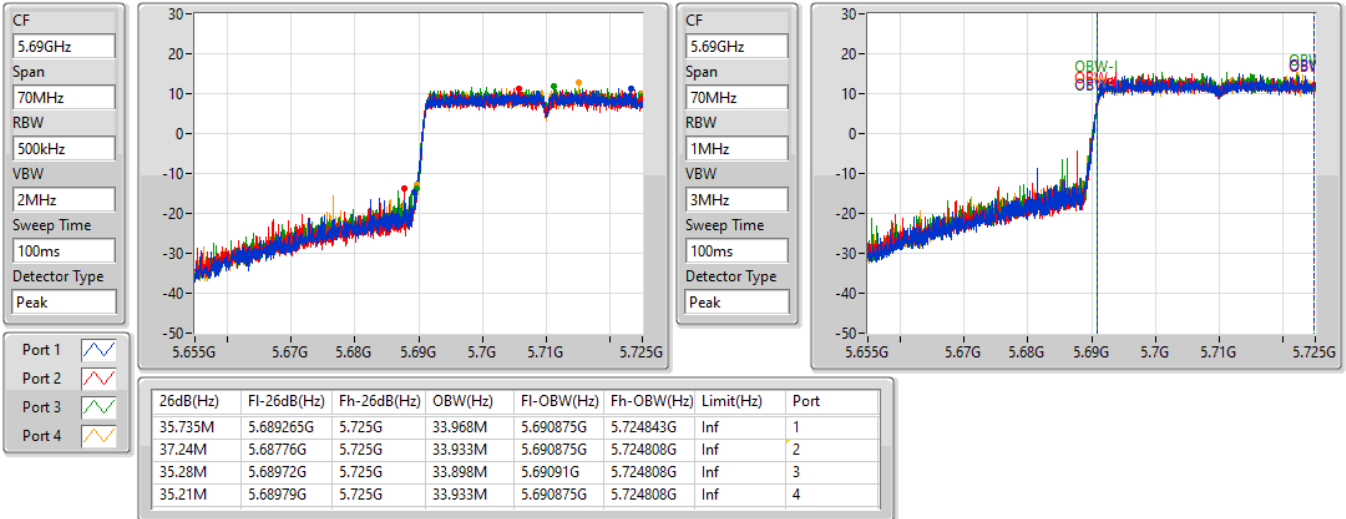

802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5670MHz

04/01/2022

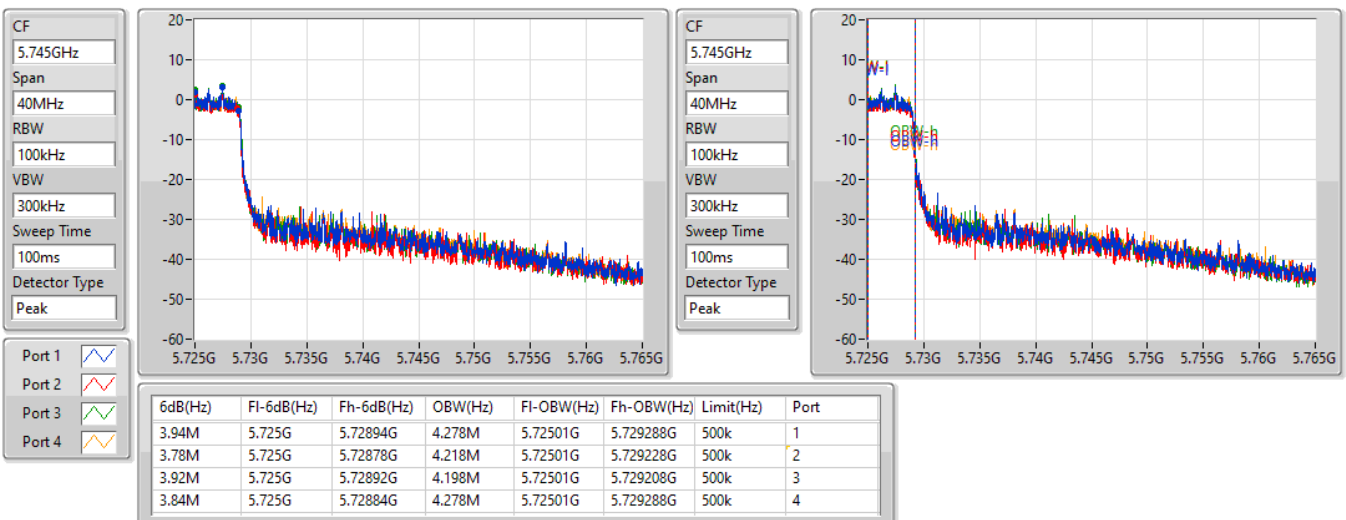


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

04/01/2022


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

04/01/2022

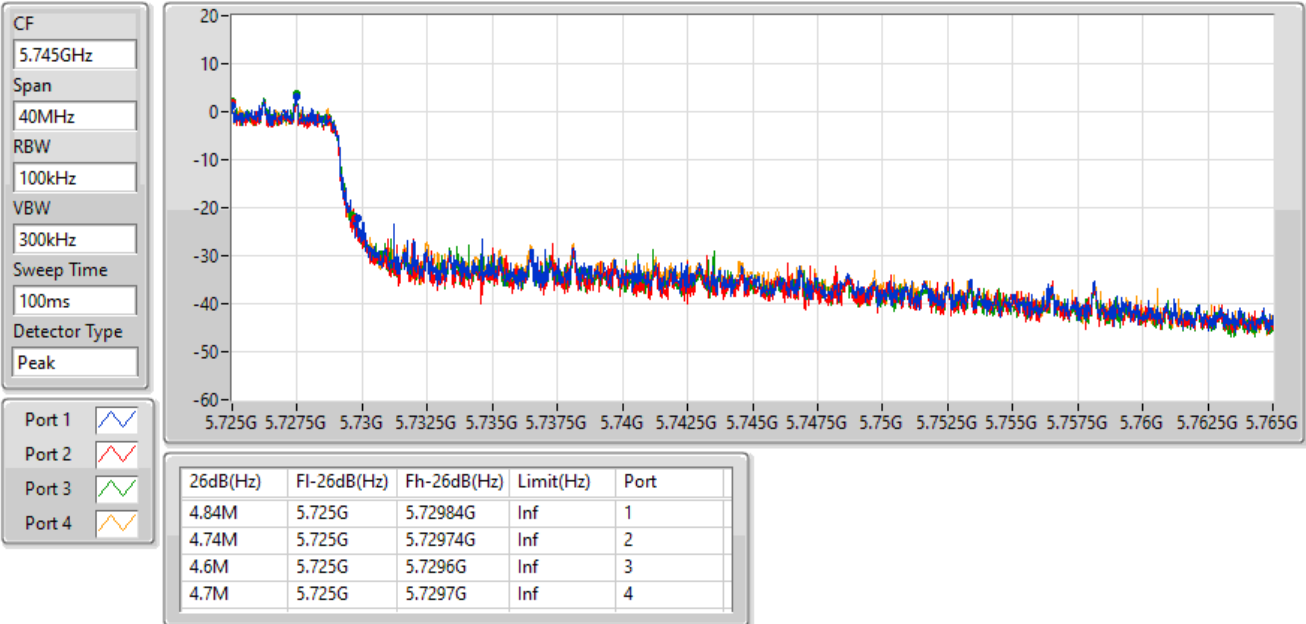


802.11ax HEW40_Nss4,(MCS0)_4TX

EBW

5710MHz Straddle 5.725-5.85GHz

04/01/2022

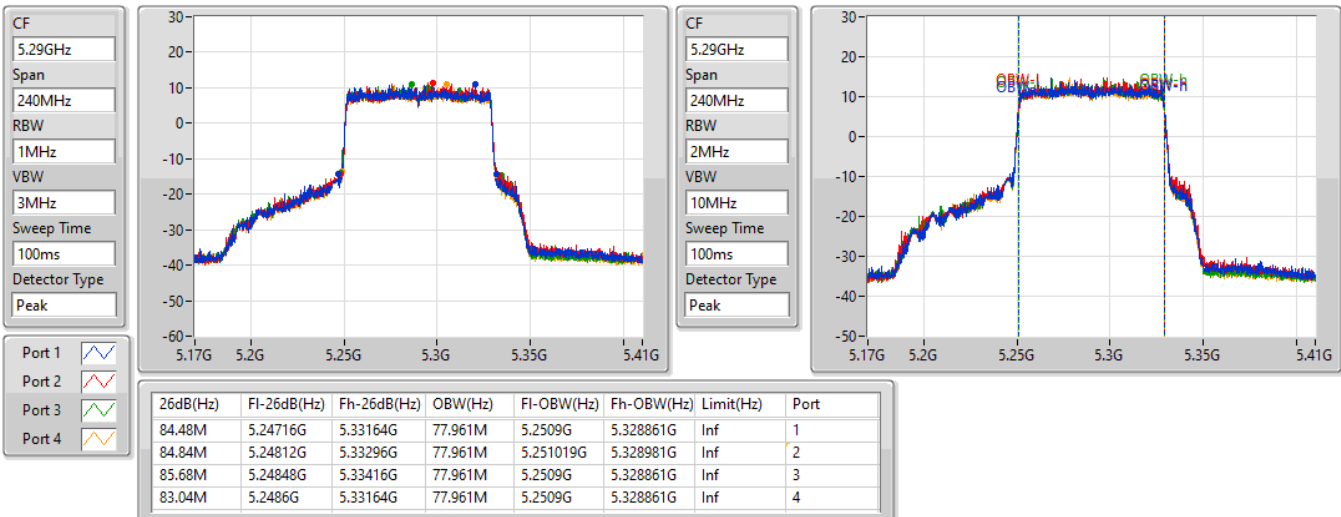


802.11ax HEW80_Nss4,(MCS0)_4TX

EBW

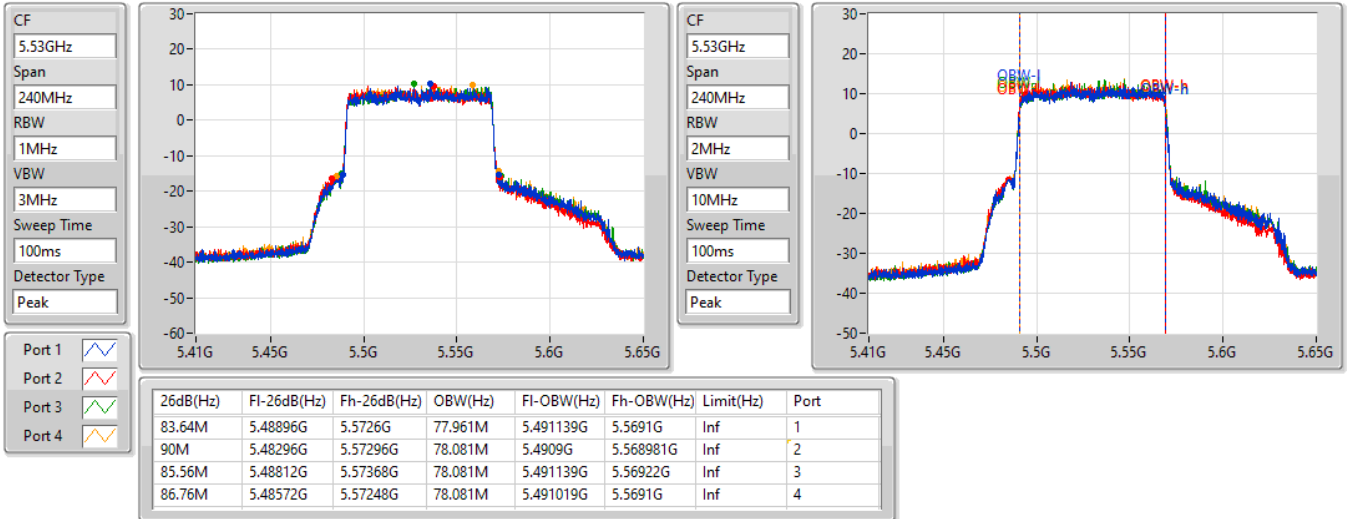
5290MHz

04/01/2022

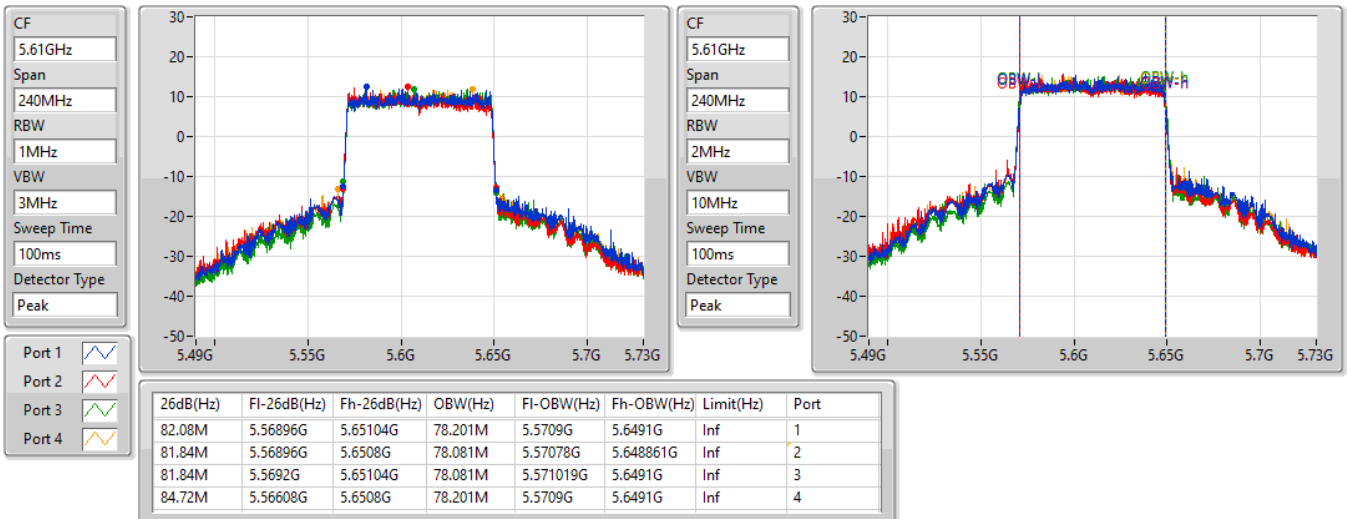


802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5530MHz

04/01/2022

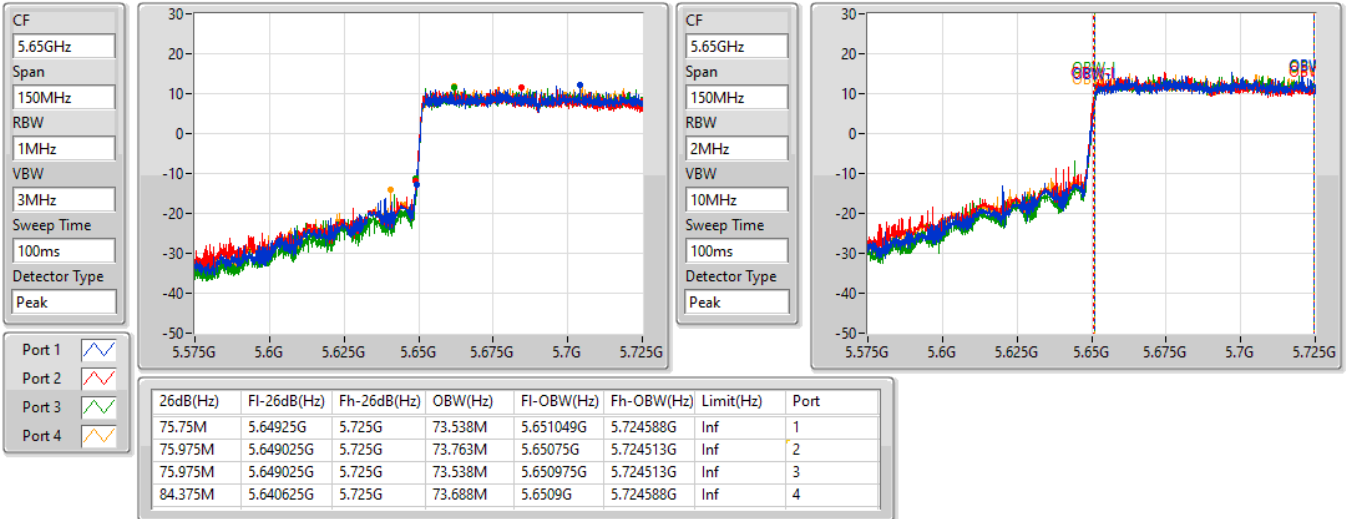

802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5610MHz

04/01/2022

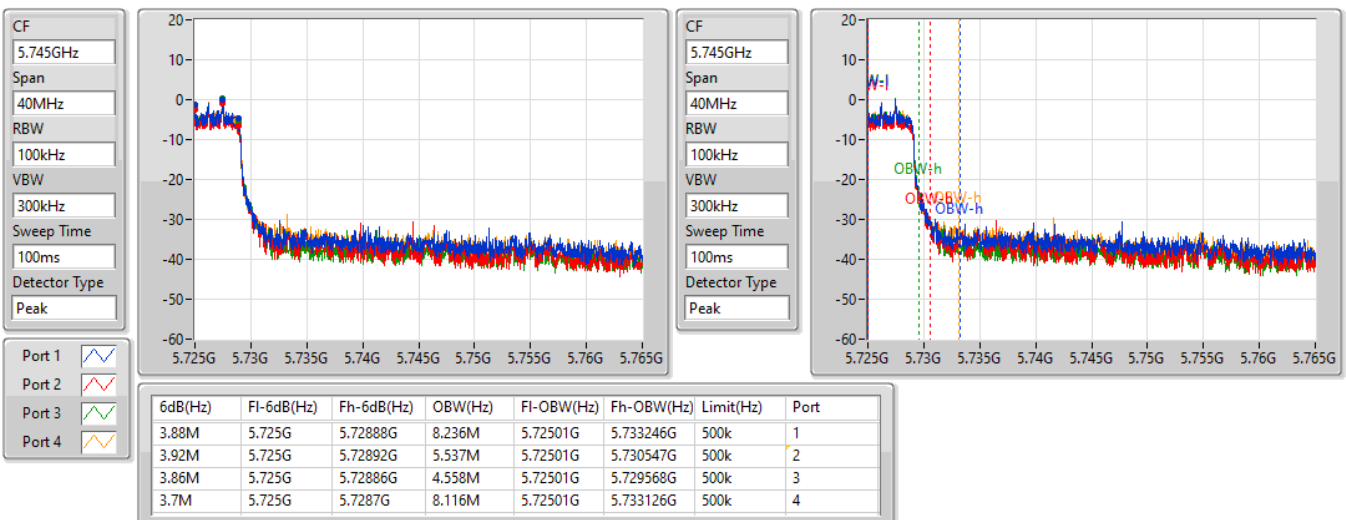


802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

04/01/2022


802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

04/01/2022

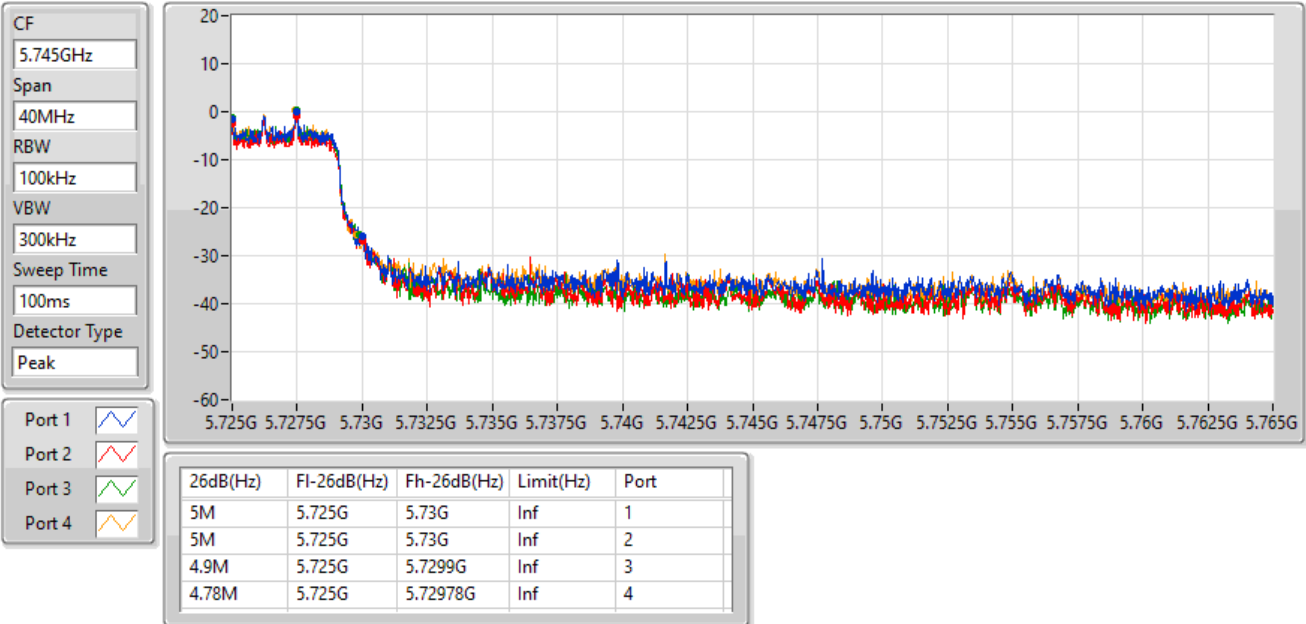


802.11ax HEW80_Nss4,(MCS0)_4TX

EBW

5690MHz Straddle 5.725-5.85GHz

04/01/2022

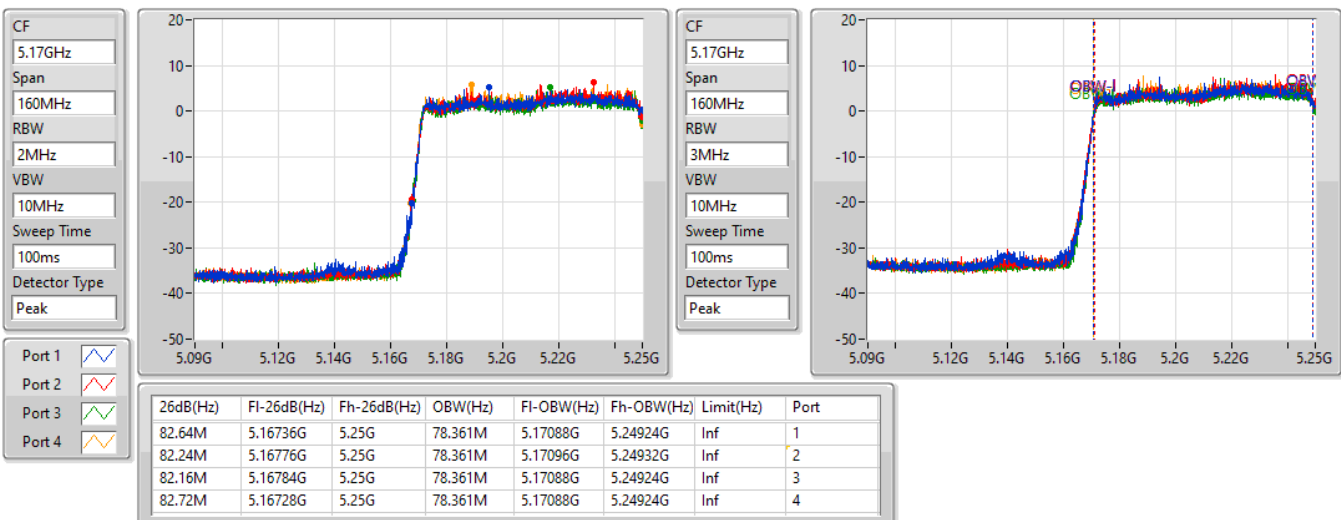


802.11ax HEW160_Nss4,(MCS0)_4TX

EBW

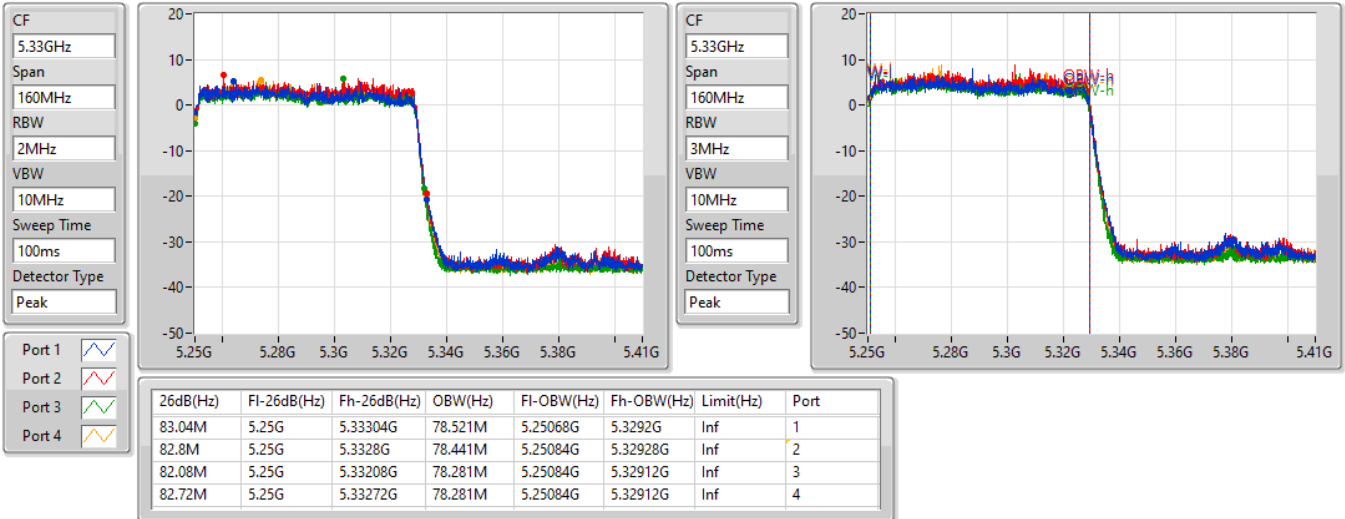
5250MHz Straddle 5.15-5.25GHz

27/01/2022



802.11ax HEW160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

27/01/2022


802.11ax HEW160_Nss4,(MCS0)_4TX
EBW
5570MHz

27/01/2022



For Scanning radio 1 / 2T1S and 2T2S
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	24.3M	17.511M	17M5D1D	21.33M	16.942M
802.11ax HEW20_Nss2,(MCS0)_2TX	26.91M	19.31M	19M3D1D	21.48M	19.07M
802.11ax HEW40_Nss2,(MCS0)_2TX	46.38M	38.201M	38M2D1D	42.24M	38.141M
802.11ax HEW80_Nss2,(MCS0)_2TX	96.24M	77.961M	78M0D1D	83.16M	77.961M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25.38M	17.361M	17M4D1D	16.245M	13.523M
802.11ax HEW20_Nss2,(MCS0)_2TX	31.53M	19.25M	19M2D1D	18.93M	14.633M
802.11ax HEW40_Nss2,(MCS0)_2TX	55.195M	38.261M	38M3D1D	40.38M	34.073M
802.11ax HEW80_Nss2,(MCS0)_2TX	109.875M	77.961M	78M0D1D	81.6M	73.913M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.16M	4.758M	4M76D1D	3.16M	4.338M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.52M	9.495M	9M50D1D	4.44M	5.037M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.92M	21.249M	21M2D1D	3.84M	16.572M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.94M	32.144M	32M1D1D	3.76M	29.125M

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

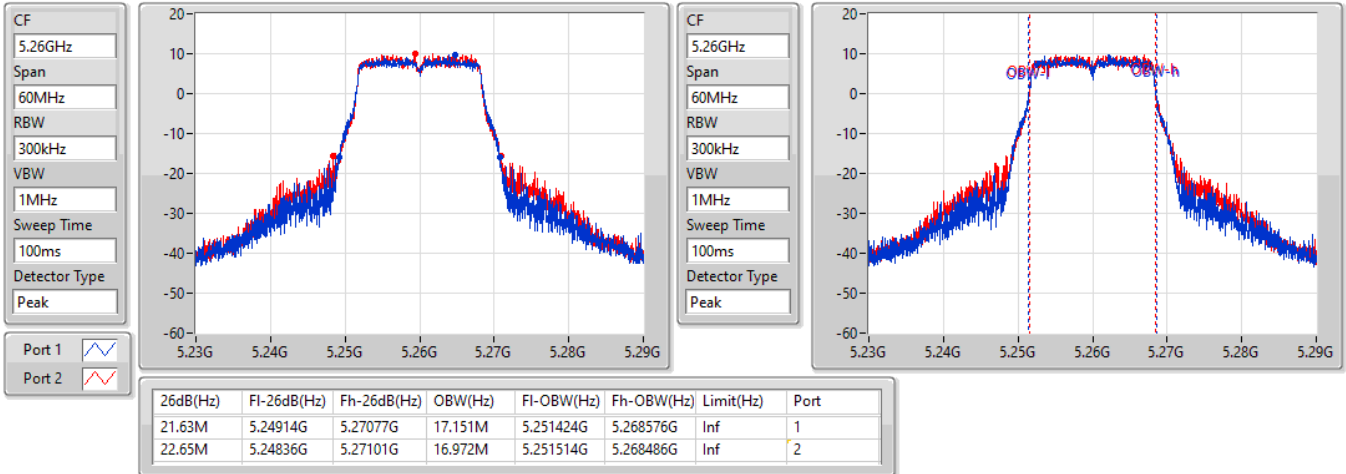
Result

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	21.63M	17.151M	22.65M	16.972M
5300MHz	Pass	Inf	21.87M	17.151M	21.33M	16.942M
5320MHz	Pass	Inf	24.3M	17.511M	23.82M	17.241M
5500MHz	Pass	Inf	25.38M	17.361M	23.1M	17.211M
5580MHz	Pass	Inf	22.41M	17.211M	22.08M	16.942M
5700MHz	Pass	Inf	21.57M	17.121M	21.3M	16.912M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.725M	13.763M	16.245M	13.523M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.16M	4.758M	3.16M	4.338M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.57M	19.16M	22.05M	19.13M
5300MHz	Pass	Inf	21.78M	19.07M	21.48M	19.1M
5320MHz	Pass	Inf	26.91M	19.31M	26.52M	19.28M
5500MHz	Pass	Inf	27.03M	19.25M	29.07M	19.22M
5580MHz	Pass	Inf	31.53M	19.25M	29.25M	19.22M
5700MHz	Pass	Inf	21.84M	19.1M	21.57M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.045M	14.858M	18.93M	14.633M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.52M	9.495M	4.44M	5.037M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	42.24M	38.141M	42.72M	38.201M
5310MHz	Pass	Inf	43.38M	38.141M	46.38M	38.141M
5510MHz	Pass	Inf	52.44M	38.201M	42.18M	38.141M
5550MHz	Pass	Inf	46.02M	38.201M	52.2M	38.261M
5670MHz	Pass	Inf	40.38M	37.961M	40.44M	37.901M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	55.195M	34.598M	41.86M	34.073M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	21.249M	3.84M	16.572M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	96.24M	77.961M	83.16M	77.961M
5530MHz	Pass	Inf	85.8M	77.841M	96M	77.961M
5610MHz	Pass	Inf	81.96M	77.961M	81.6M	77.841M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	109.875M	74.138M	86.175M	73.913M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	32.144M	3.76M	29.125M

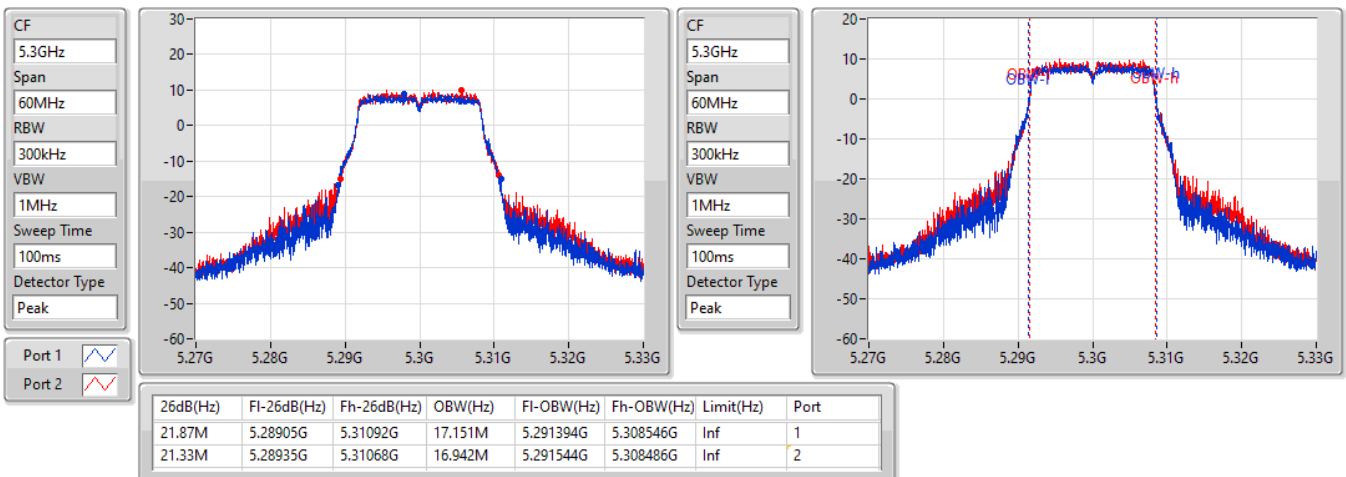
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

30/12/2021

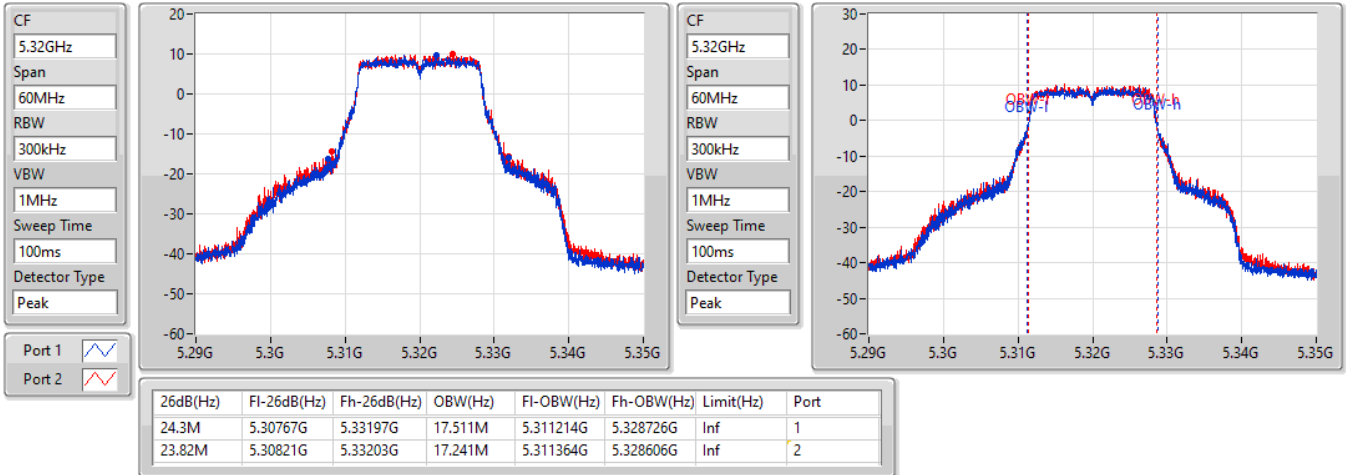

802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

30/12/2021

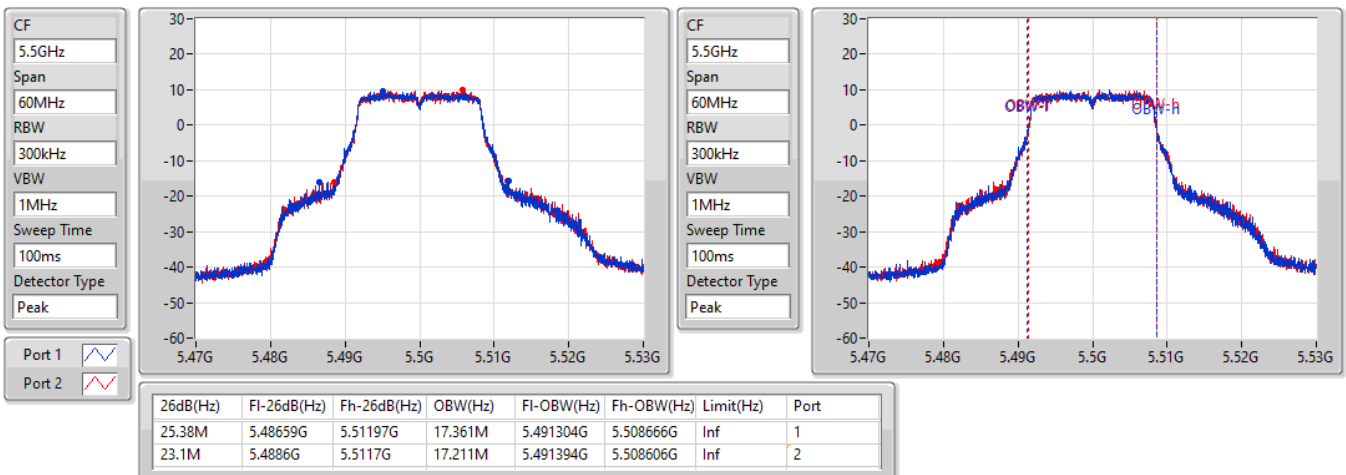


802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

30/12/2021

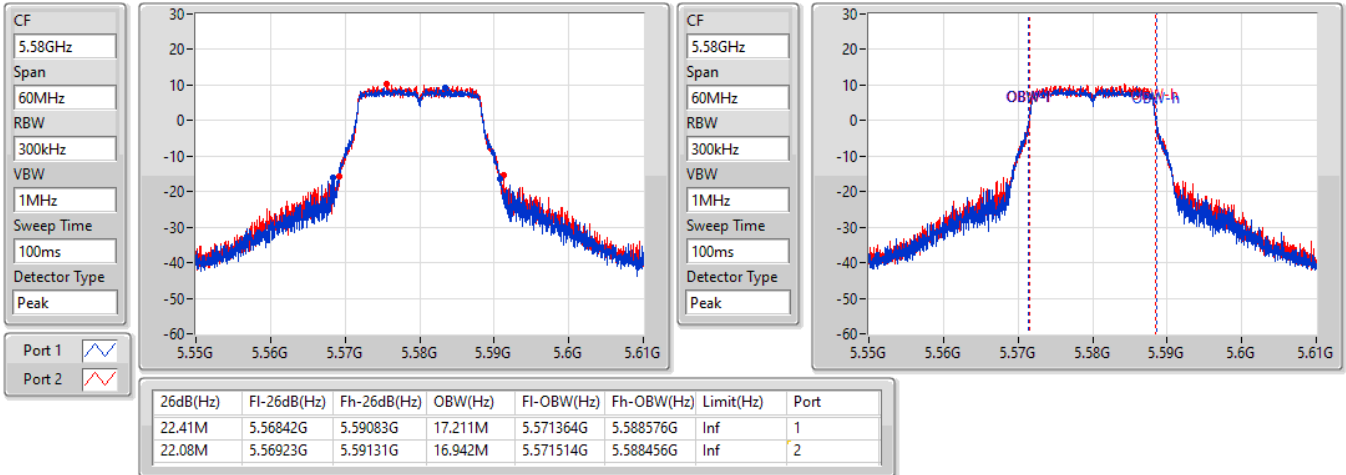

802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

30/12/2021

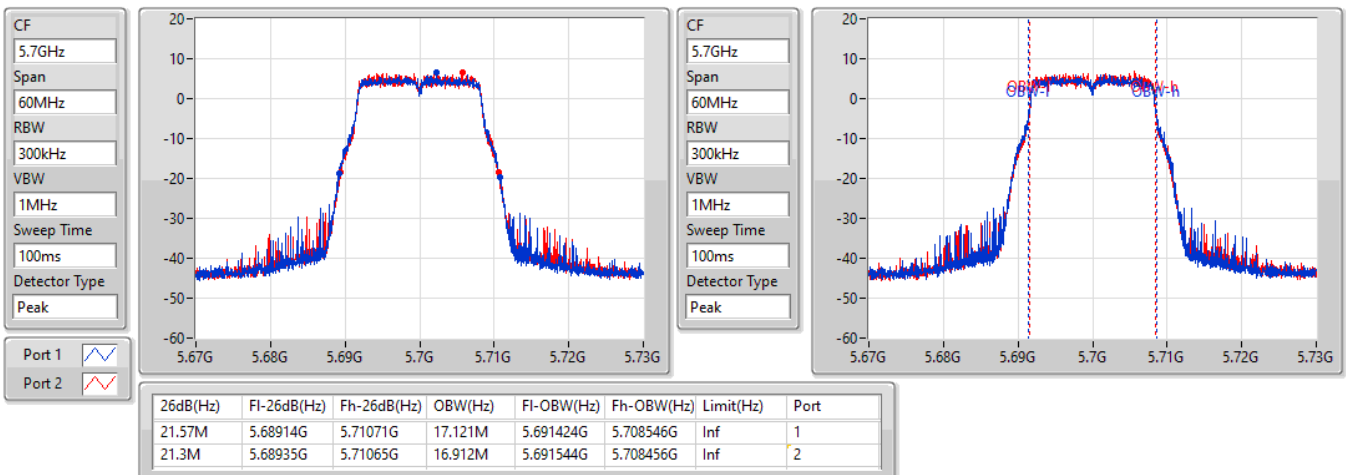


802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

30/12/2021

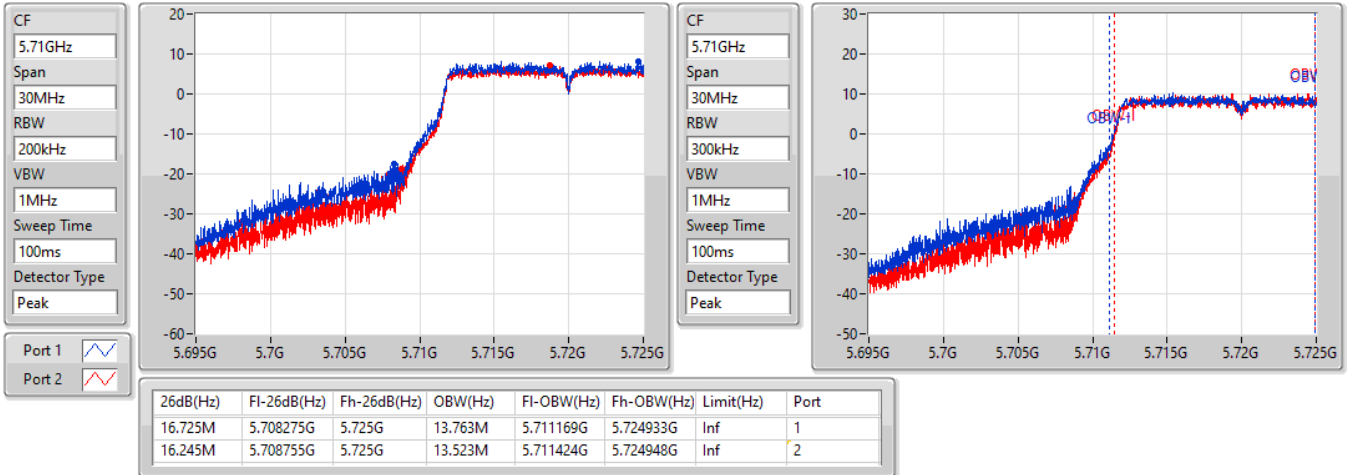

802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

30/12/2021

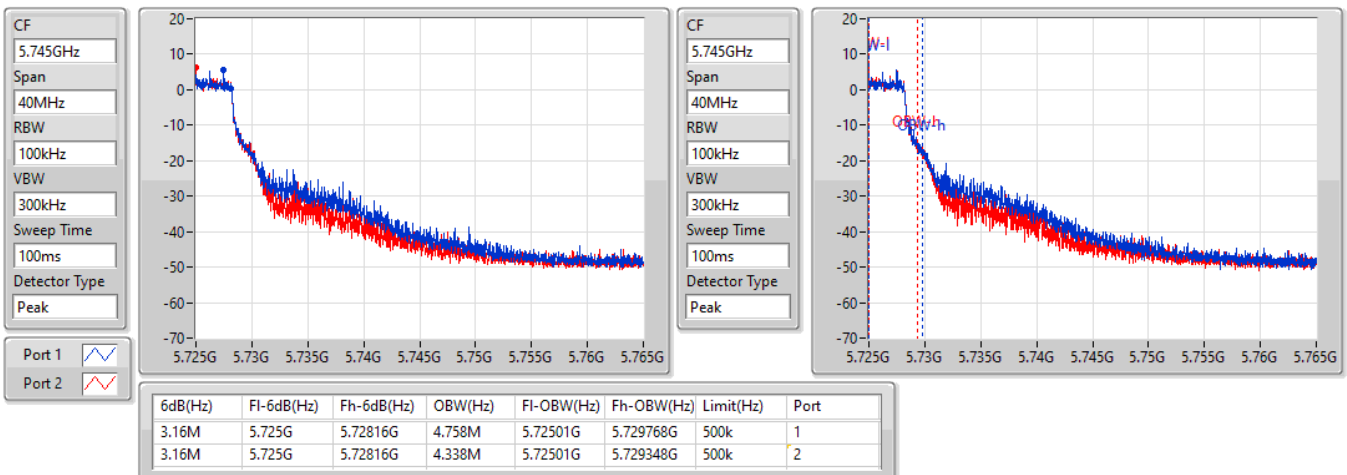


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

30/12/2021


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

05/01/2022

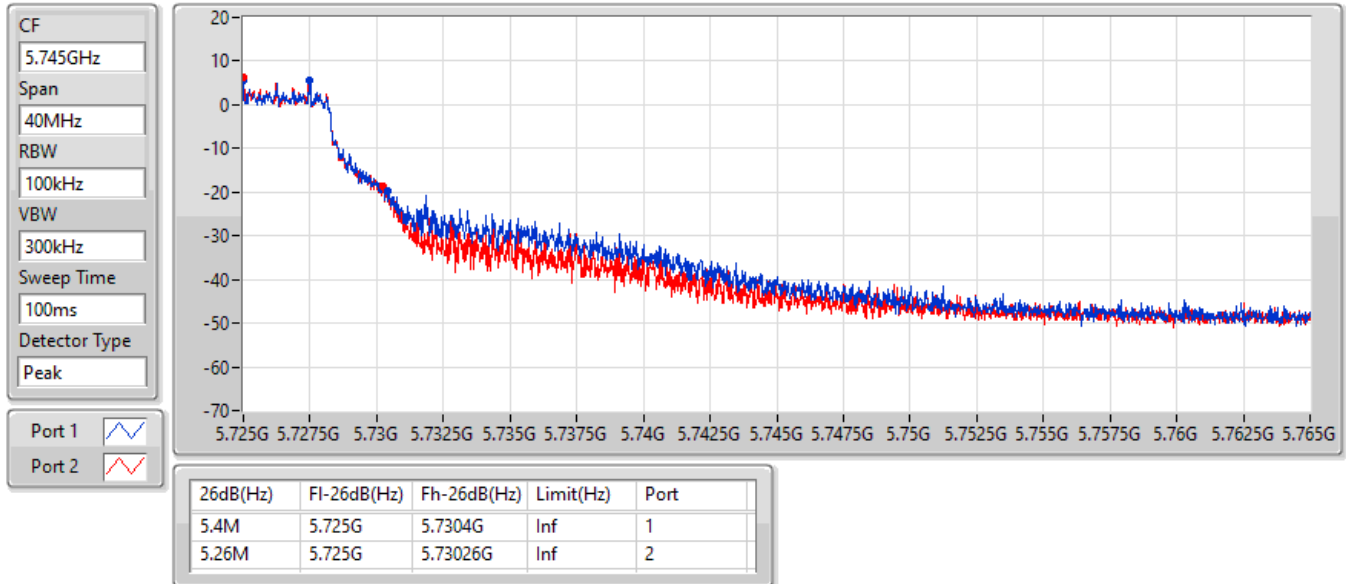


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

05/01/2022

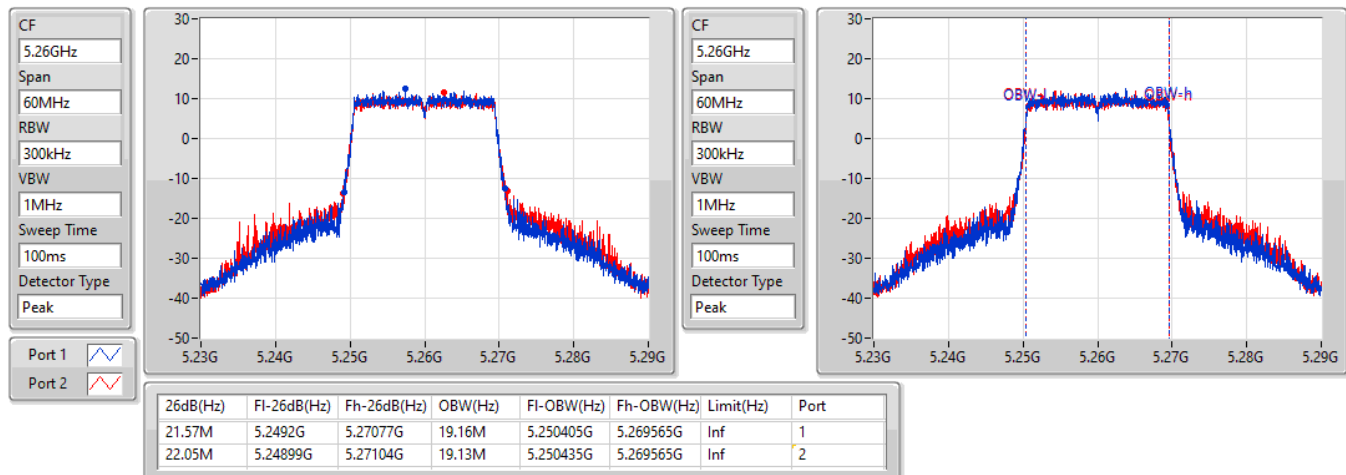


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

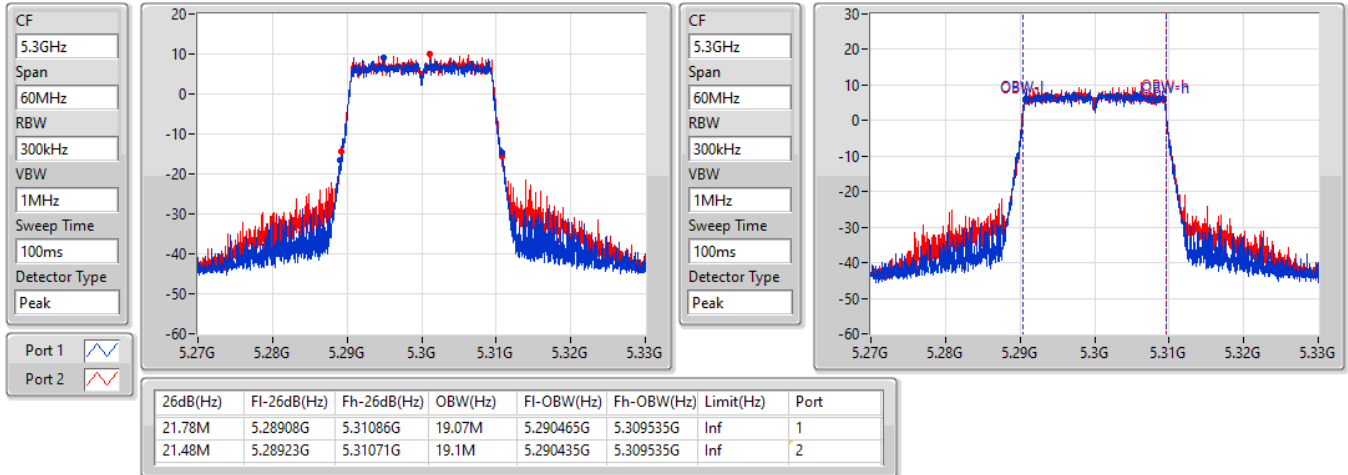
5260MHz

30/12/2021

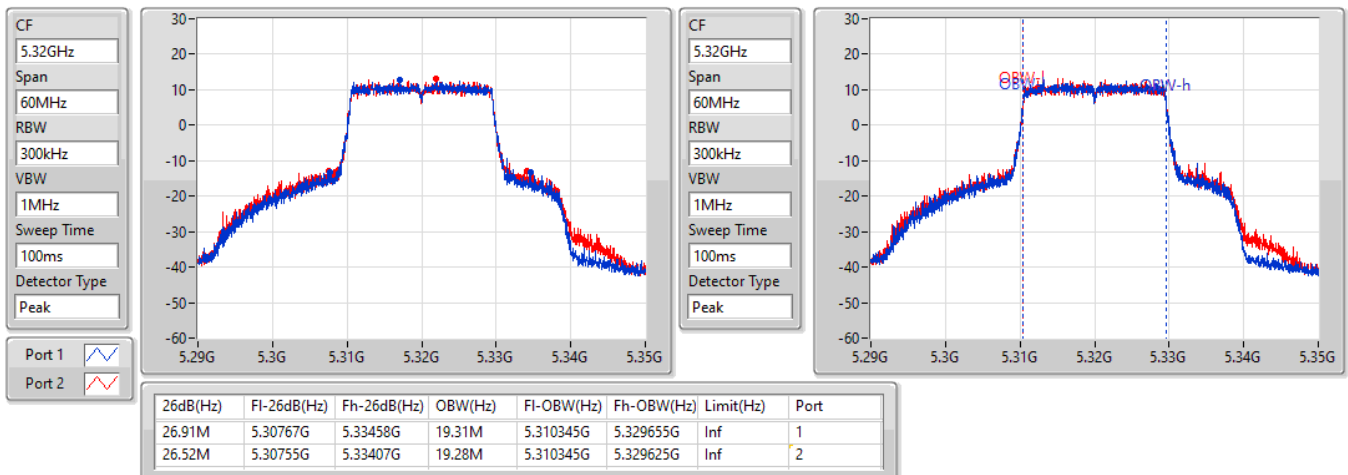


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

30/12/2021

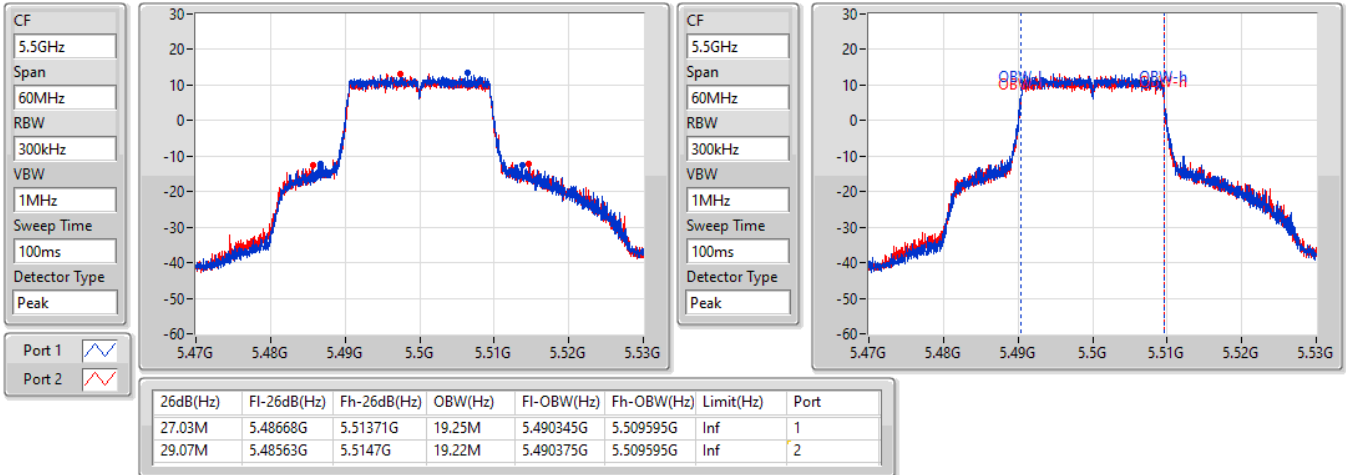

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5320MHz

27/01/2022

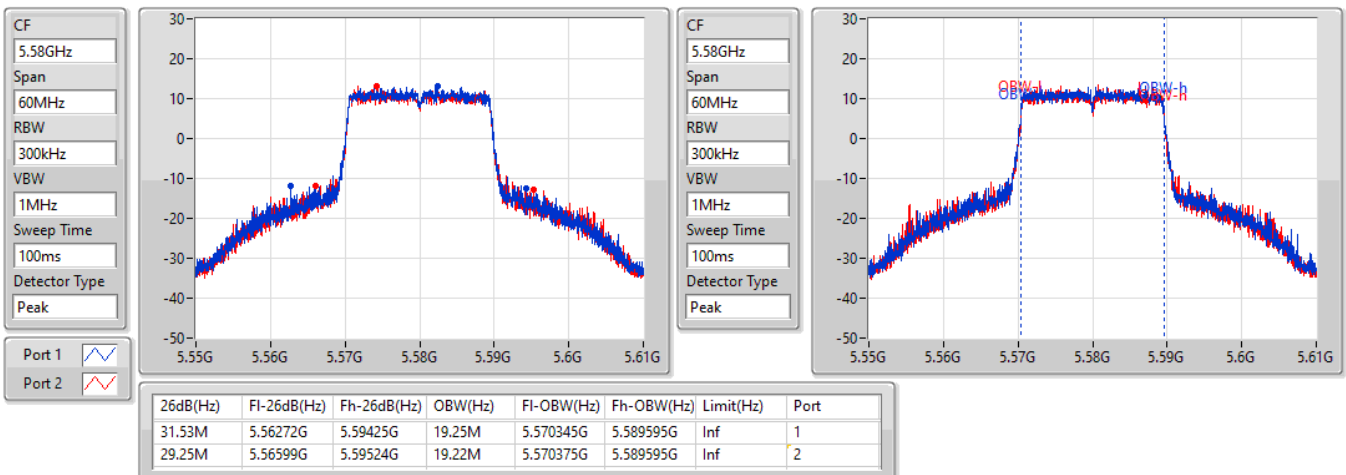


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5500MHz

30/12/2021

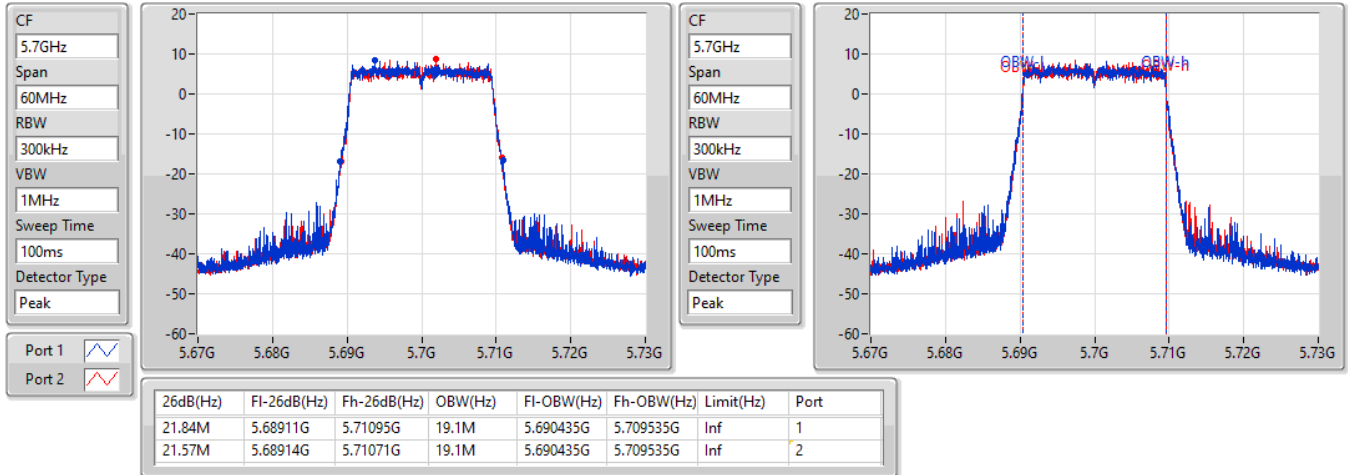

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5580MHz

30/12/2021

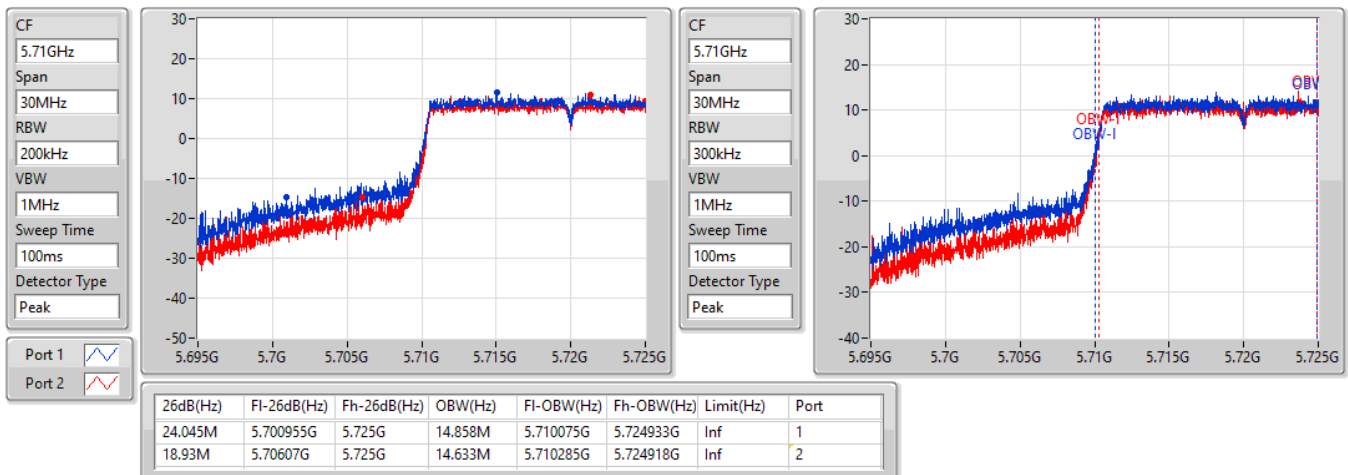


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5700MHz

30/12/2021

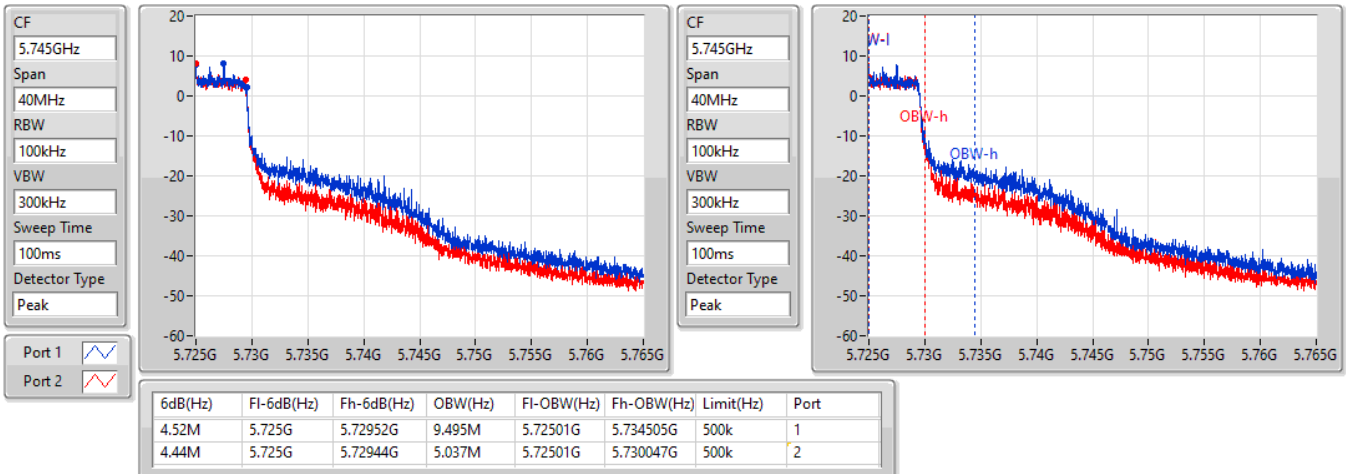

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

30/12/2021

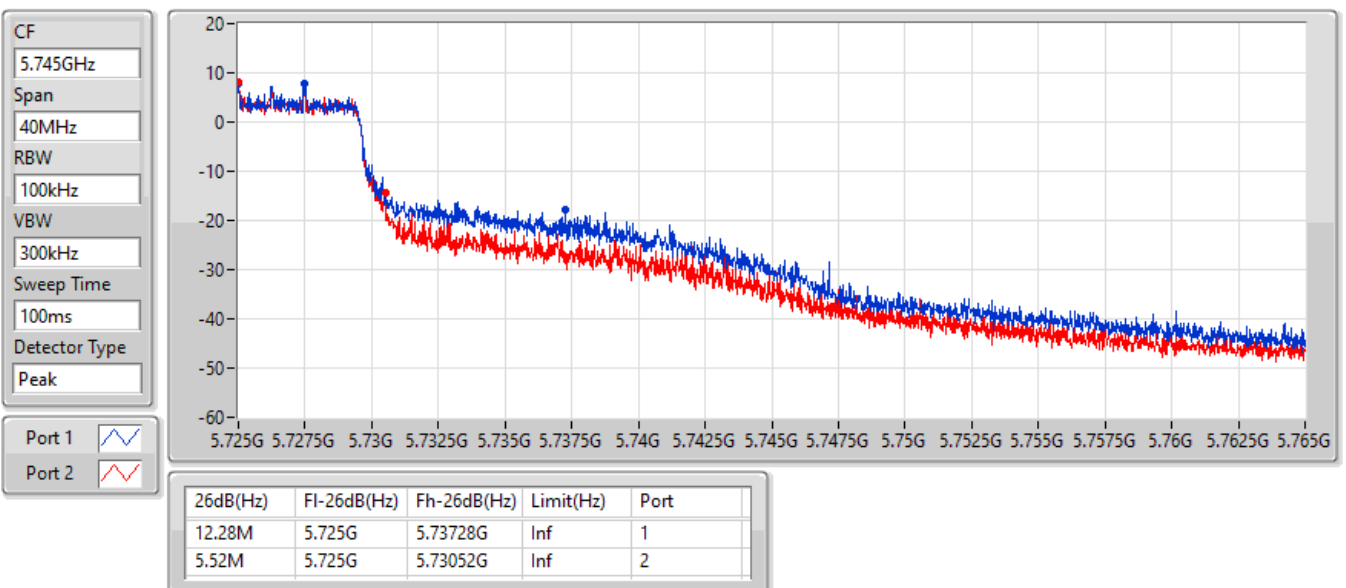


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

05/01/2022

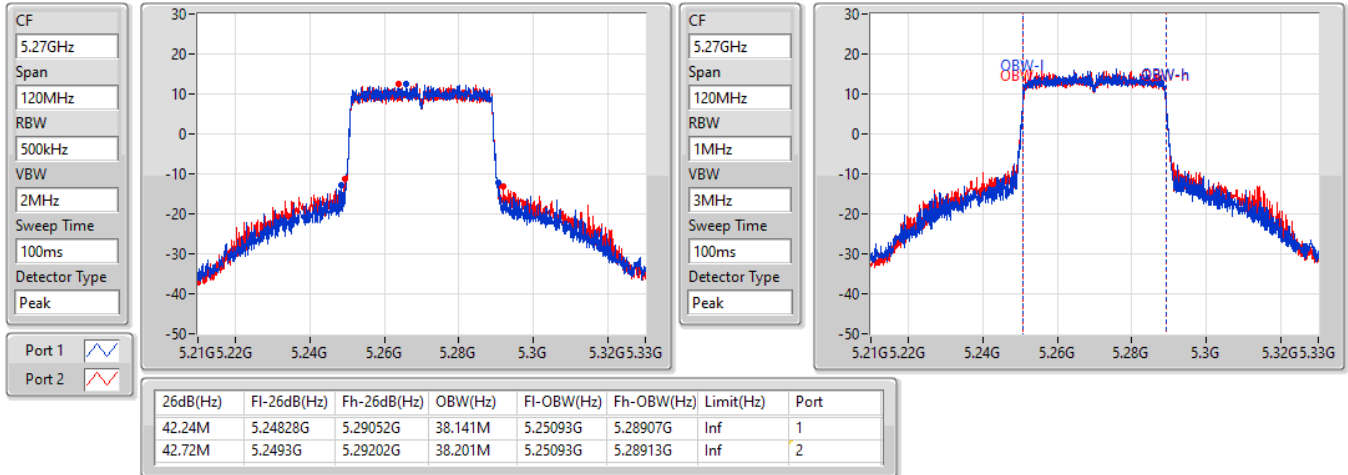

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

05/01/2022

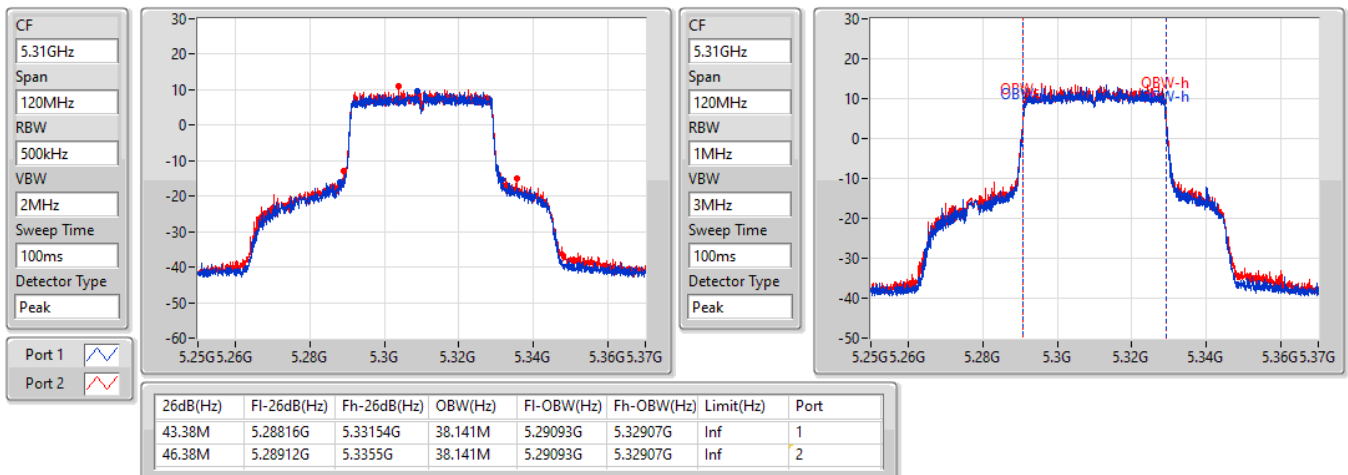


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5270MHz

30/12/2021

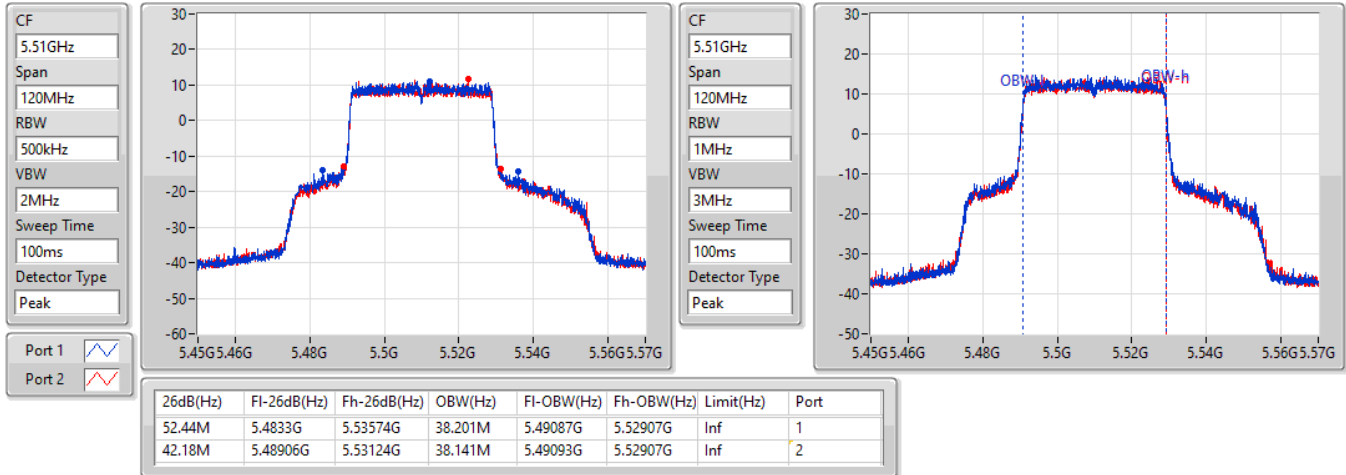

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5310MHz

30/12/2021

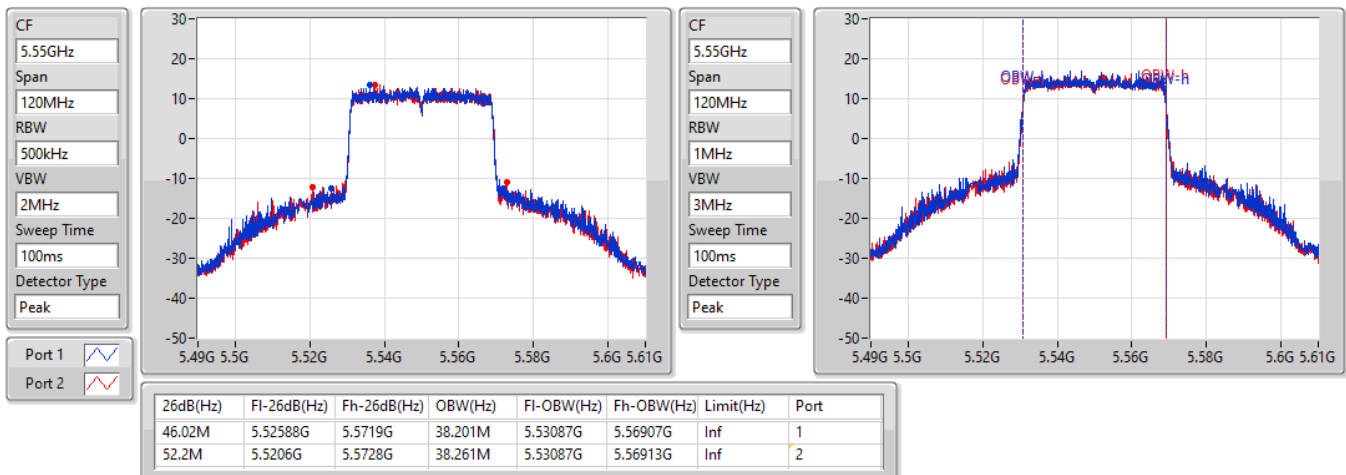


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5510MHz

30/12/2021

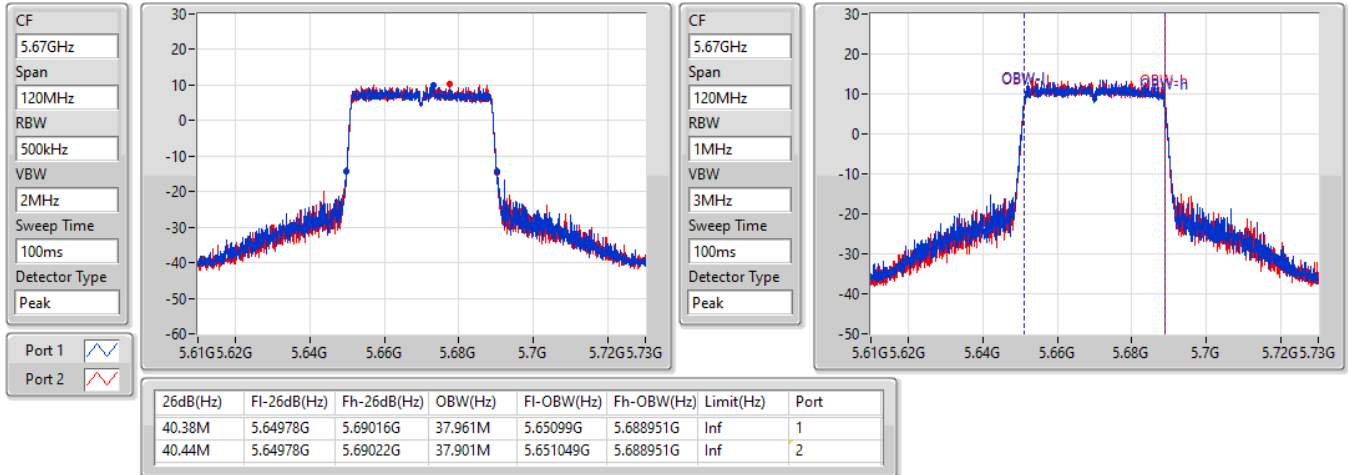

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5550MHz

30/12/2021

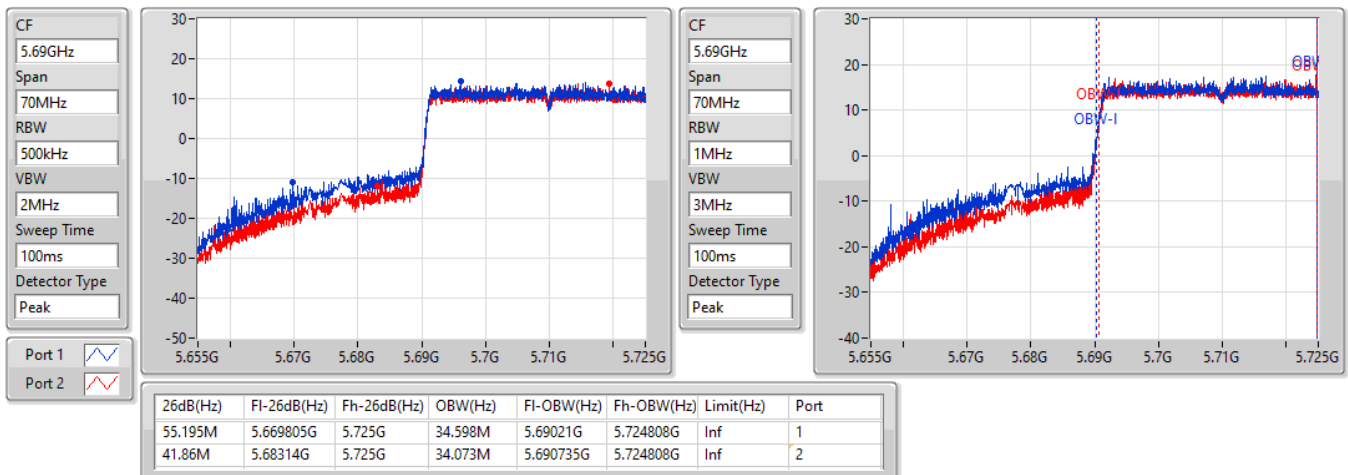


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5670MHz

30/12/2021

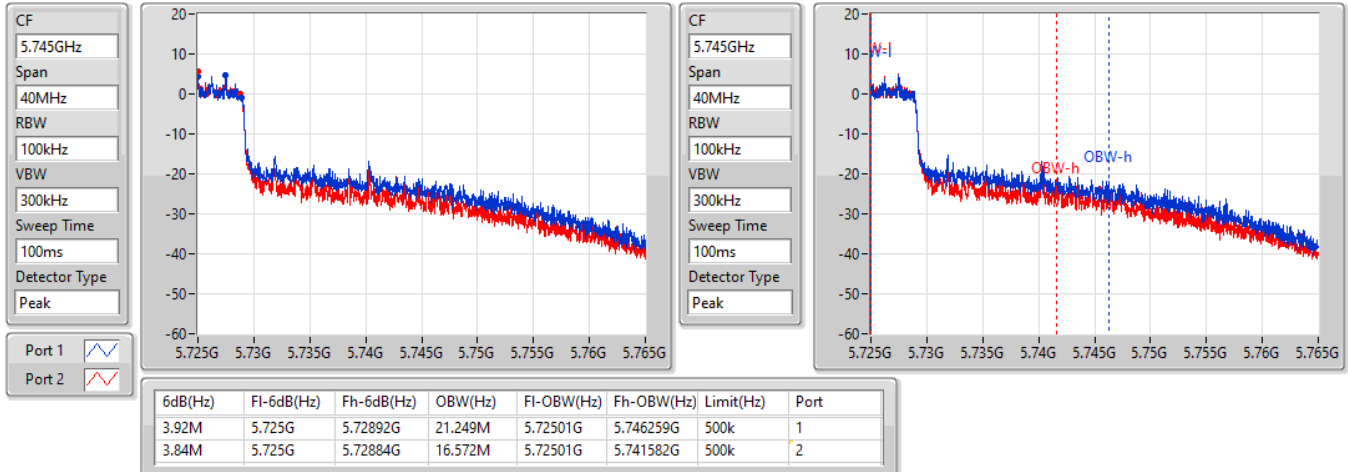

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

30/12/2021

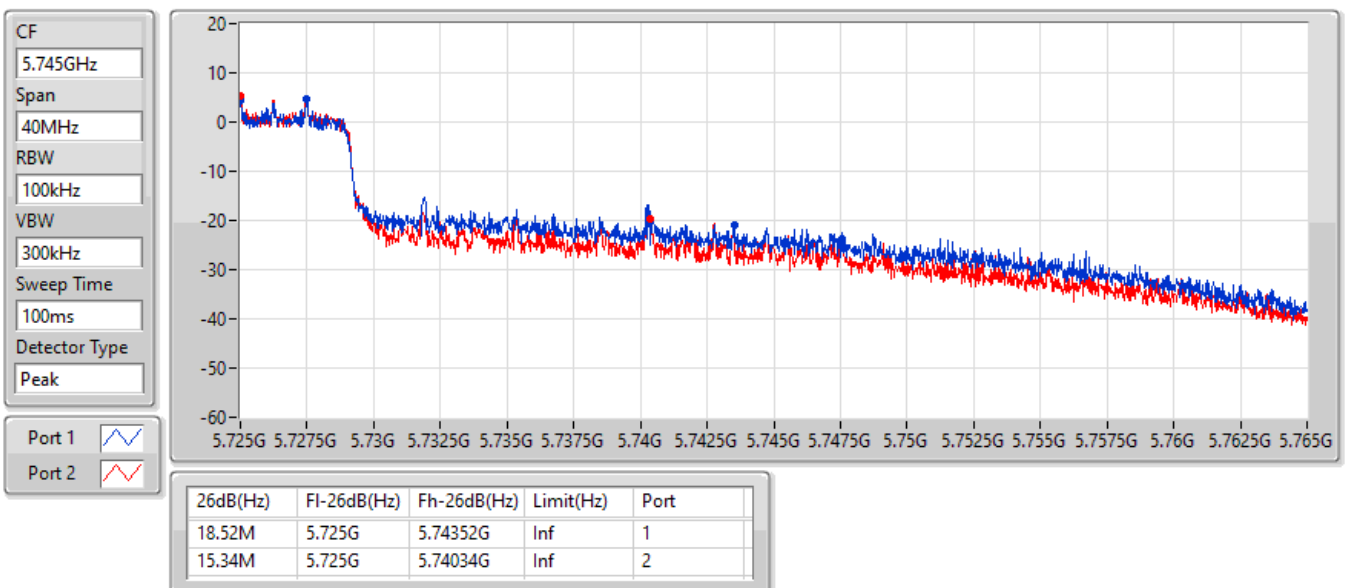


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

05/01/2022

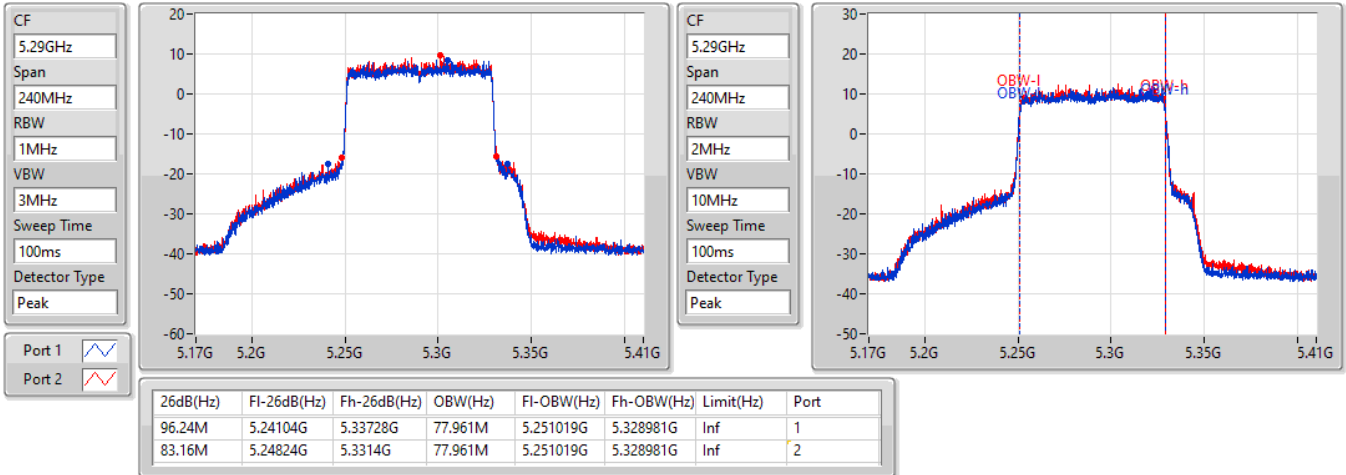

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

05/01/2022

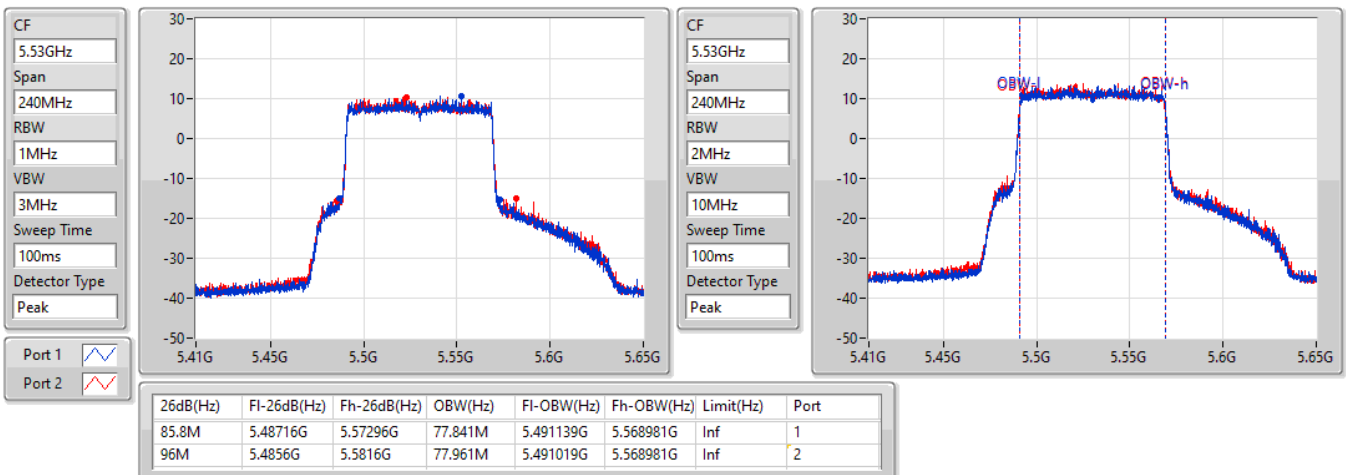


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

30/12/2021

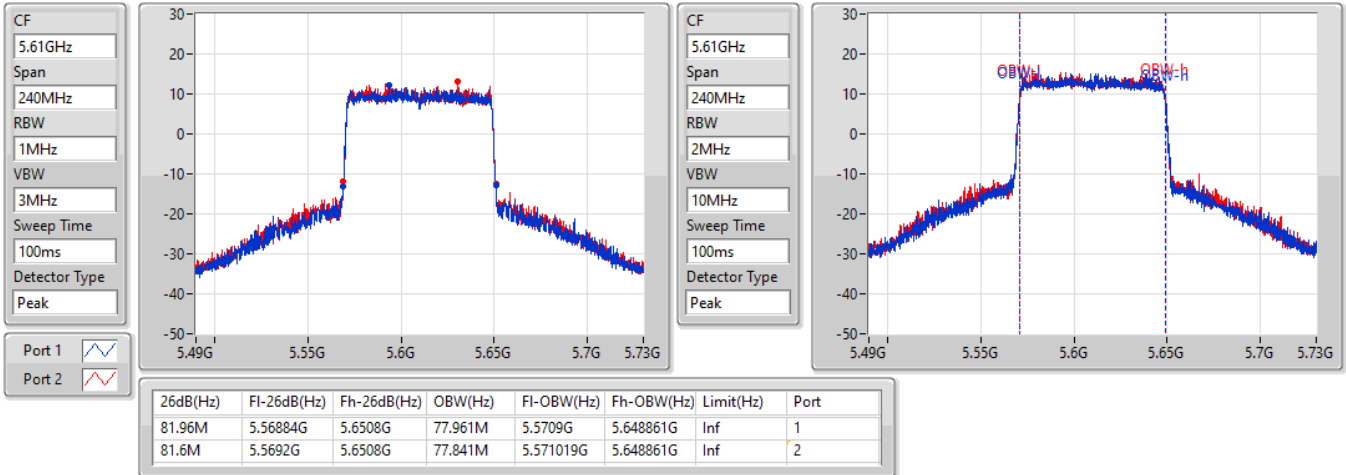

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

30/12/2021

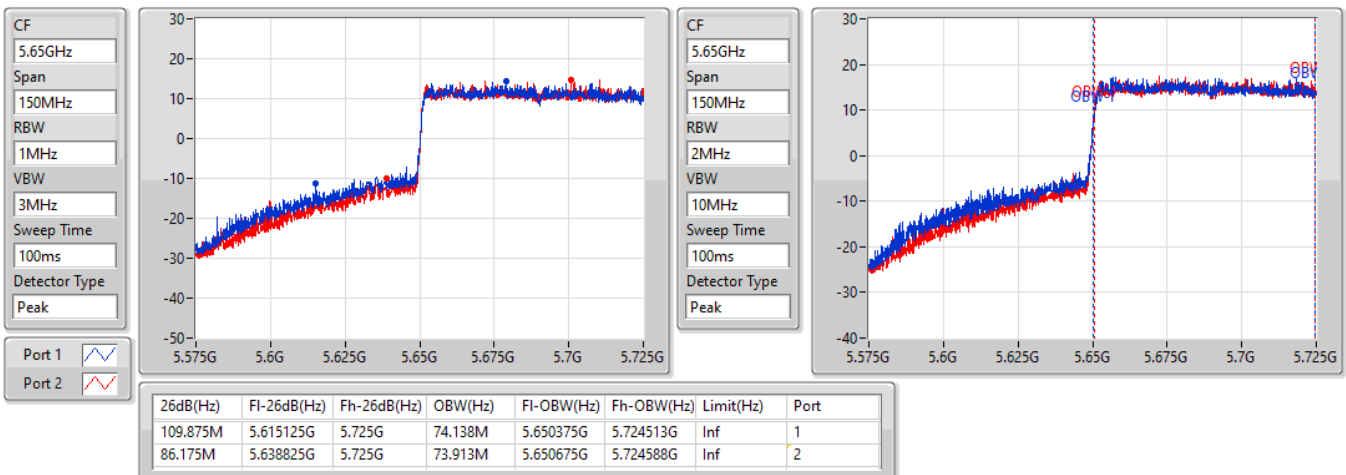


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

30/12/2021

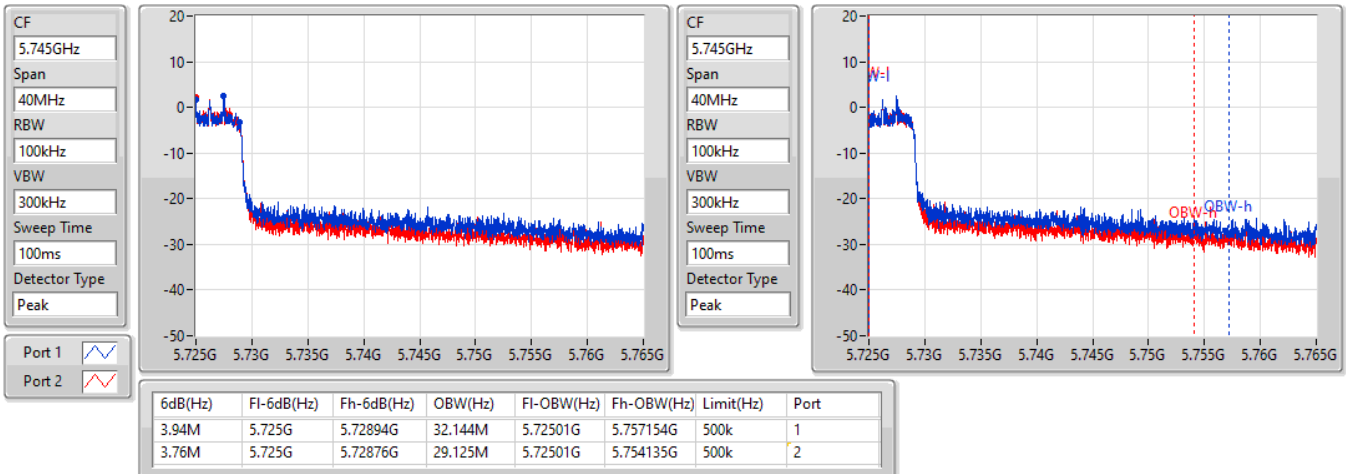

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

30/12/2021

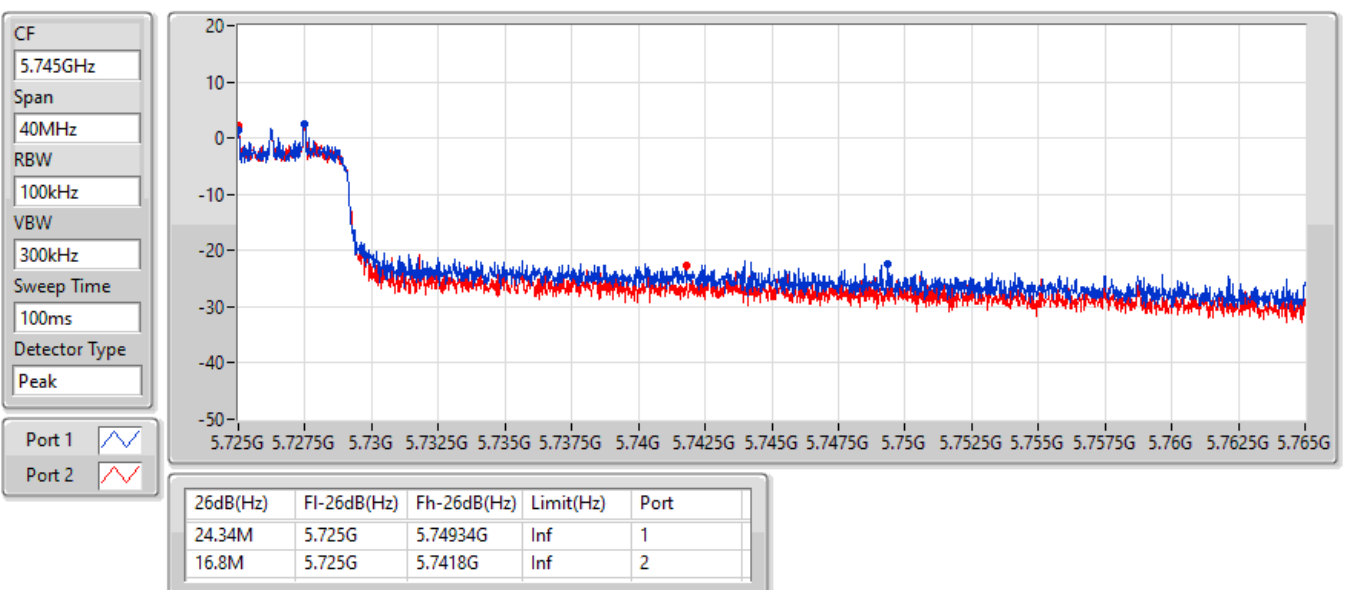


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

30/12/2021


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

30/12/2021



**For Radio 2 / 1T1S
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX	13.30	0.02138
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	23.02	0.20045
802.11ax HEW20_Nss1,(MCS0)_1TX	23.32	0.21478
802.11ax HEW40_Nss1,(MCS0)_1TX	22.24	0.16749
802.11ax HEW80_Nss1,(MCS0)_1TX	20.07	0.10162
802.11ax HEW160_Nss1,(MCS0)_1TX	13.49	0.02234
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	21.10	0.12882
802.11ax HEW20_Nss1,(MCS0)_1TX	21.50	0.14125
802.11ax HEW40_Nss1,(MCS0)_1TX	21.60	0.14454
802.11ax HEW80_Nss1,(MCS0)_1TX	21.46	0.13996
802.11ax HEW160_Nss1,(MCS0)_1TX	15.17	0.03289
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	14.40	0.02754
802.11ax HEW20_Nss1,(MCS0)_1TX	14.93	0.03112
802.11ax HEW40_Nss1,(MCS0)_1TX	16.08	0.04055
802.11ax HEW80_Nss1,(MCS0)_1TX	7.75	0.00596

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-
5260MHz	Pass	2.78	22.76	22.76	23.98
5300MHz	Pass	2.78	23.02	23.02	23.98
5320MHz	Pass	2.78	21.41	21.41	23.98
5500MHz	Pass	1.18	21.10	21.10	23.98
5580MHz	Pass	1.18	21.07	21.07	23.98
5700MHz	Pass	1.18	16.23	16.23	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.18	21.07	21.07	23.98
5720MHz Straddle 5.725-5.85GHz	Pass	1.38	14.40	14.40	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
5260MHz	Pass	2.78	22.86	22.86	23.98
5300MHz	Pass	2.78	23.32	23.32	23.98
5320MHz	Pass	2.78	21.84	21.84	23.98
5500MHz	Pass	1.18	21.50	21.50	23.98
5580MHz	Pass	1.18	21.00	21.00	23.98
5700MHz	Pass	1.18	15.04	15.04	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	1.18	20.67	20.67	23.98
5720MHz Straddle 5.725-5.85GHz	Pass	1.38	14.93	14.93	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-
5270MHz	Pass	2.78	22.24	22.24	23.98
5310MHz	Pass	2.78	20.34	20.34	23.98
5510MHz	Pass	1.18	19.20	19.20	23.98
5550MHz	Pass	1.18	21.37	21.37	23.98
5670MHz	Pass	1.18	17.79	17.79	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	1.18	21.60	21.60	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	1.38	16.08	16.08	30.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-
5290MHz	Pass	2.78	20.07	20.07	23.98
5530MHz	Pass	1.18	19.44	19.44	23.98
5610MHz	Pass	1.18	19.35	19.35	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	1.18	21.46	21.46	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	1.38	7.75	7.75	30.00
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.59	13.30	13.30	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.78	13.49	13.49	23.98
5570MHz	Pass	1.18	15.17	15.17	23.98

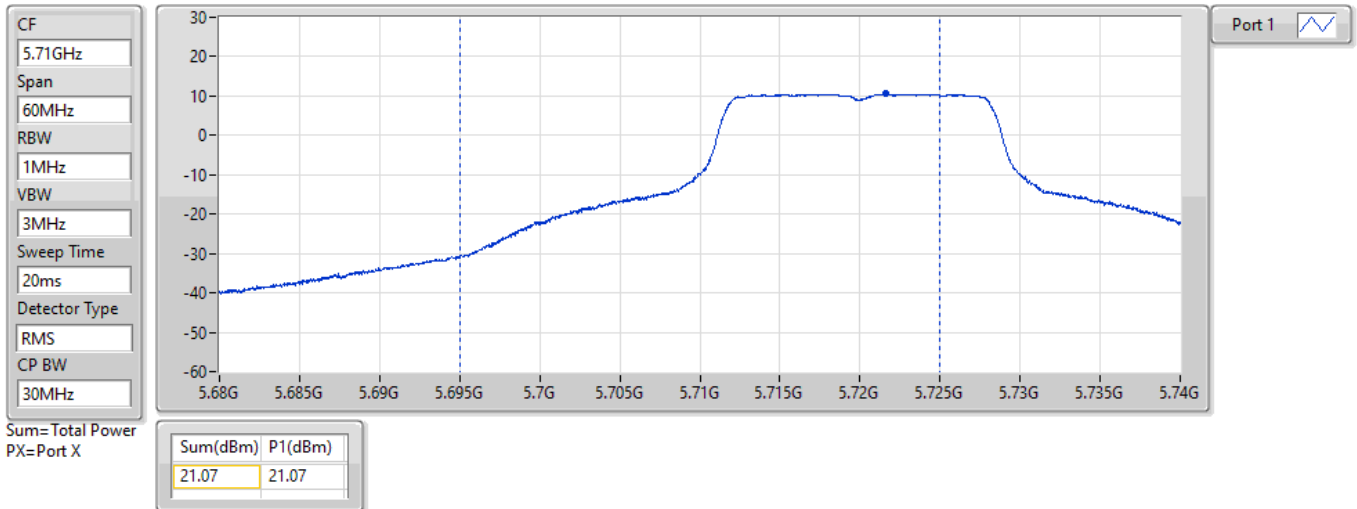
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

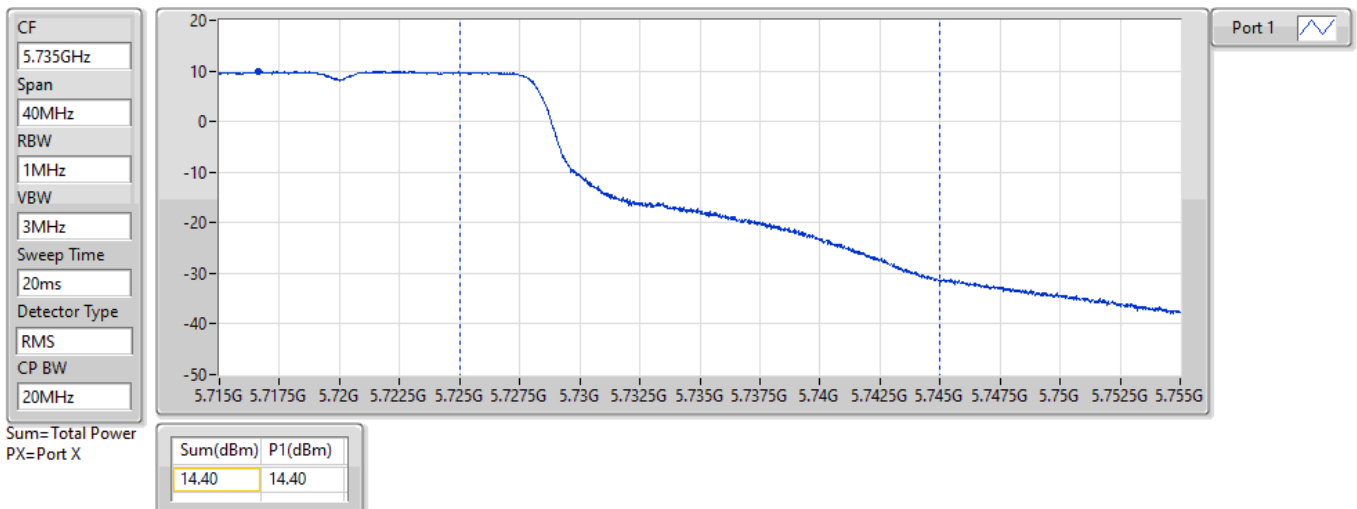


802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

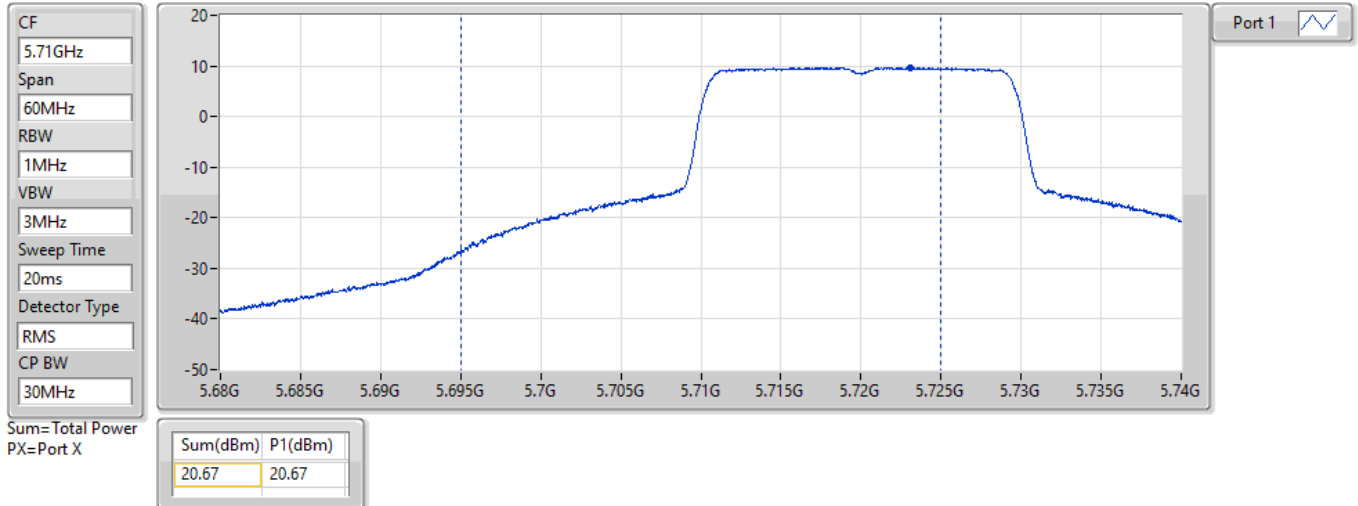


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

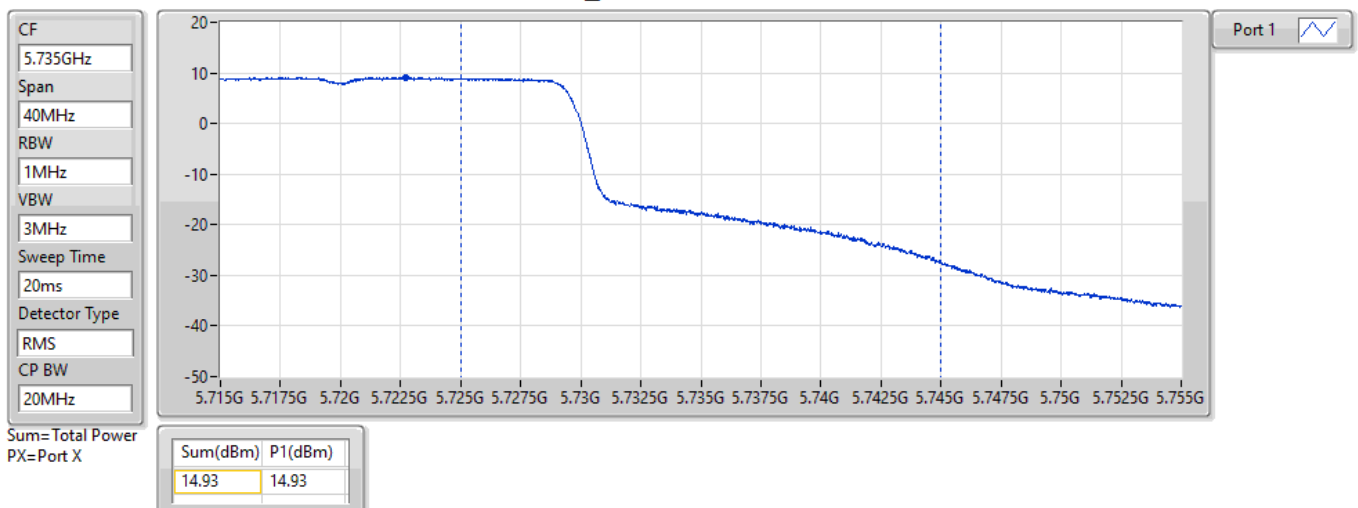


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

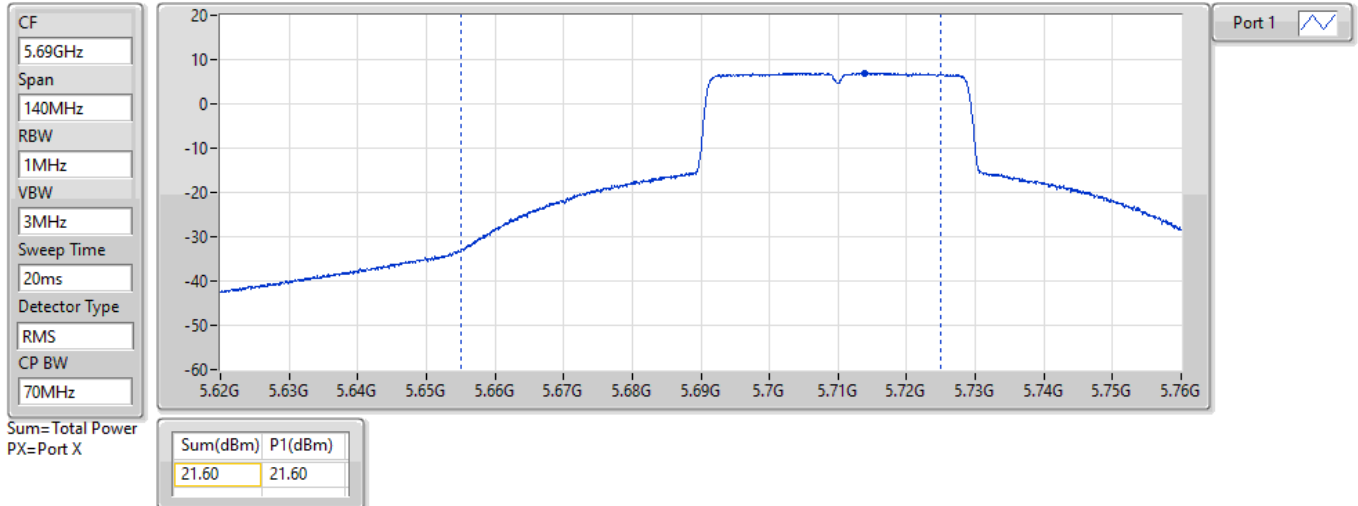


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

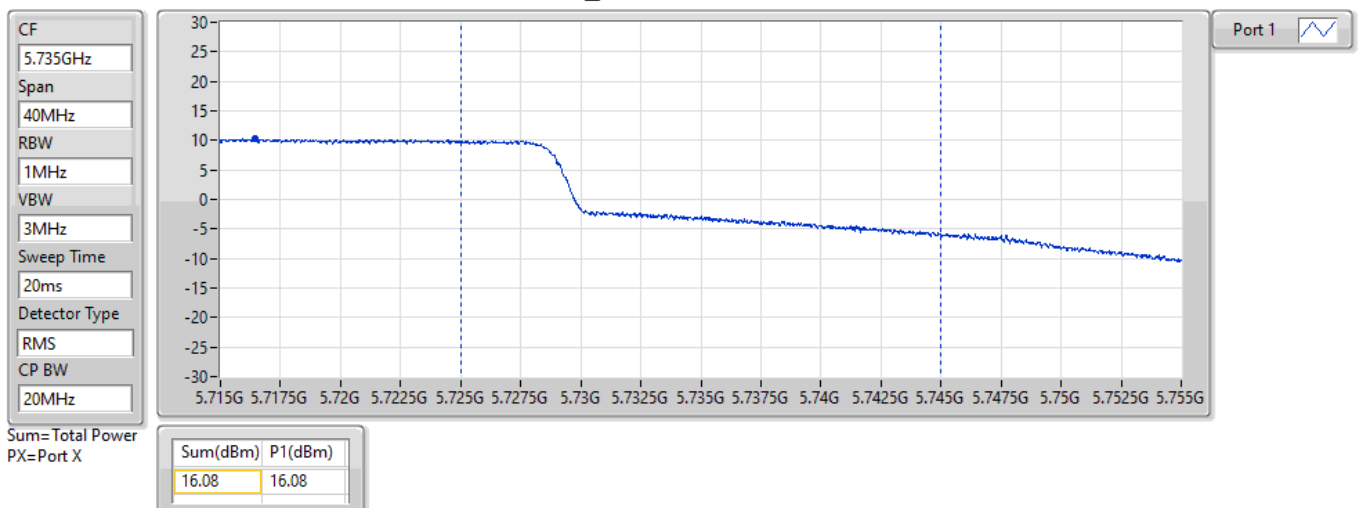


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

29/12/2021

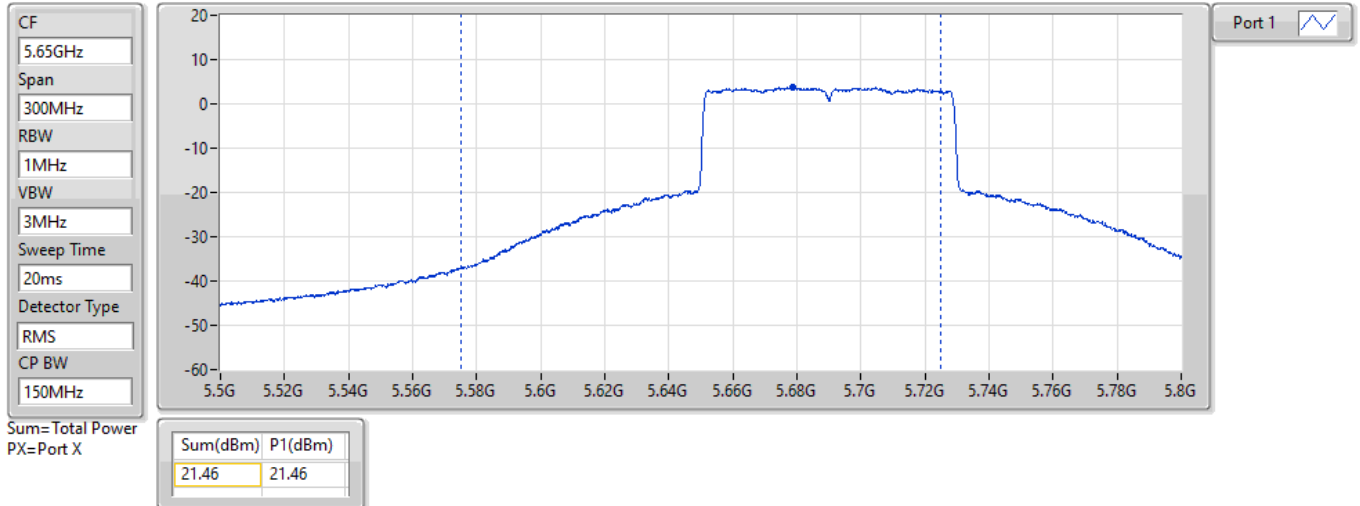


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

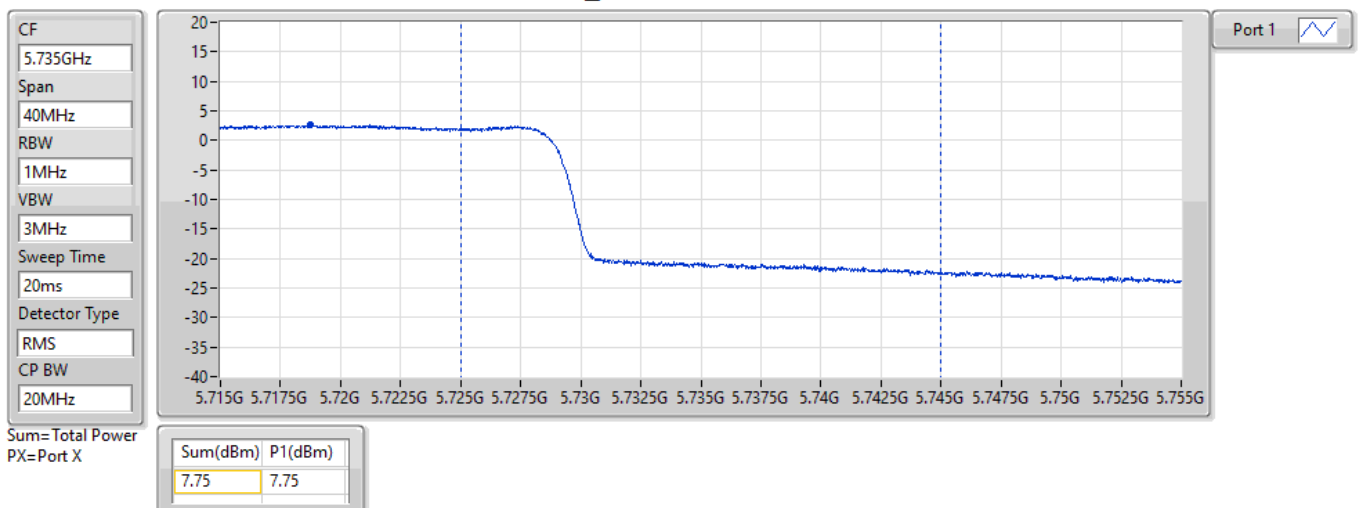


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

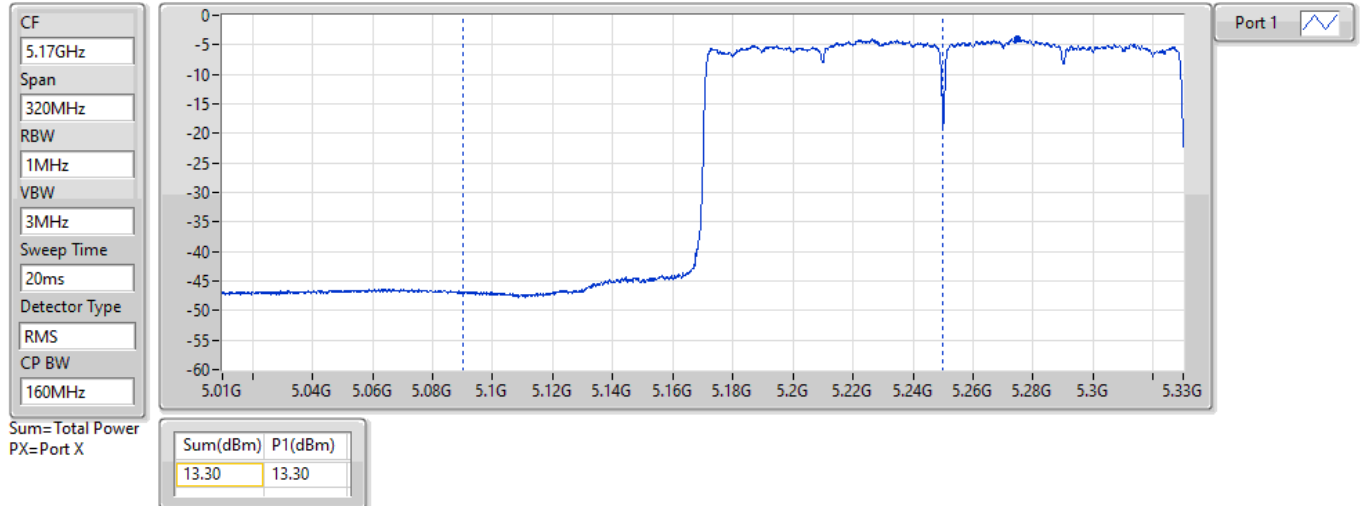


802.11ax HEW160_Nss1,(MCS0)_1TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

27/01/2022

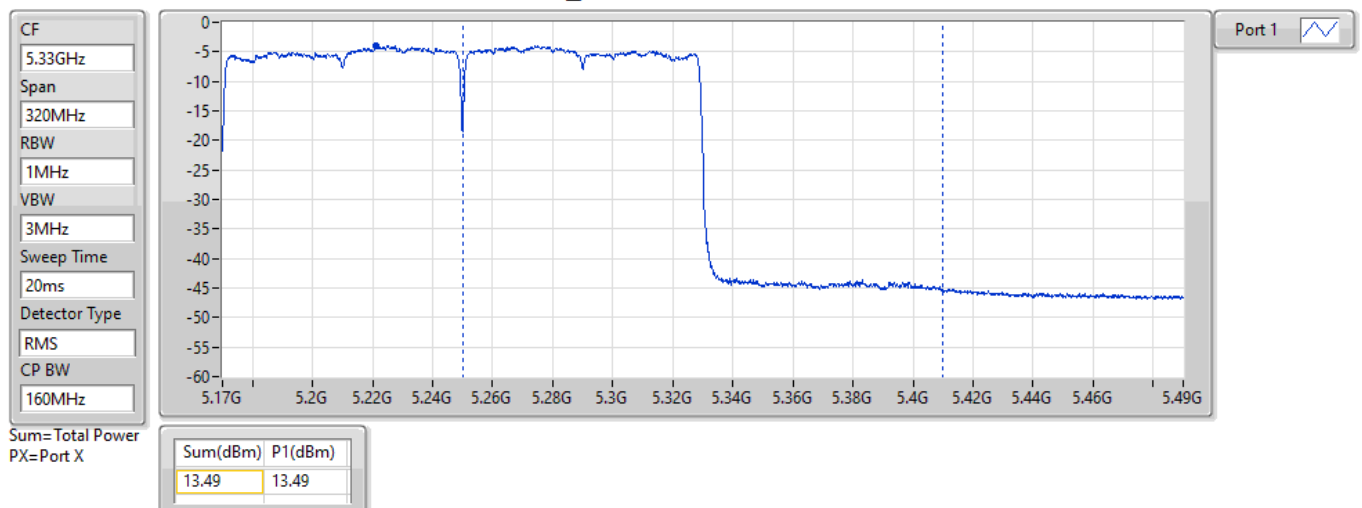


802.11ax HEW160_Nss1,(MCS0)_1TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

27/01/2022



For 2T1S and 2T2S Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW160_Nss2,(MCS0)_2TX	13.67	0.02328
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.79	0.23933
802.11ax HEW20_Nss2,(MCS0)_2TX	23.90	0.24547
802.11ax HEW40_Nss2,(MCS0)_2TX	23.87	0.24378
802.11ax HEW80_Nss2,(MCS0)_2TX	20.28	0.10666
802.11ax HEW160_Nss2,(MCS0)_2TX	14.29	0.02685
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	22.89	0.19454
802.11ax HEW20_Nss2,(MCS0)_2TX	23.59	0.22856
802.11ax HEW40_Nss2,(MCS0)_2TX	22.76	0.18880
802.11ax HEW80_Nss2,(MCS0)_2TX	23.86	0.24322
802.11ax HEW160_Nss2,(MCS0)_2TX	16.36	0.04325
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	14.09	0.02564
802.11ax HEW20_Nss2,(MCS0)_2TX	23.65	0.23174
802.11ax HEW40_Nss2,(MCS0)_2TX	12.43	0.01750
802.11ax HEW80_Nss2,(MCS0)_2TX	10.22	0.01052

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	3.25	20.63	20.45	23.55	23.98
5300MHz	Pass	3.25	20.66	20.64	23.66	23.98
5320MHz	Pass	3.25	20.66	20.89	23.79	23.98
5500MHz	Pass	2.01	19.96	19.79	22.89	23.98
5580MHz	Pass	2.01	19.56	19.38	22.48	23.98
5700MHz	Pass	2.01	17.12	17.17	20.16	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	2.01	17.04	17.16	20.11	22.98
5720MHz Straddle 5.725-5.85GHz	Pass	1.61	11.07	11.09	14.09	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	2.08	20.80	20.80	23.81	23.98
5300MHz	Pass	2.08	20.79	20.98	23.90	23.98
5320MHz	Pass	2.08	20.83	20.85	23.85	23.98
5500MHz	Pass	0.78	20.49	20.34	23.43	23.98
5580MHz	Pass	0.78	18.75	18.55	21.66	23.98
5700MHz	Pass	0.78	15.78	16.16	18.98	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	0.78	20.77	20.38	23.59	23.71
5720MHz Straddle 5.725-5.85GHz	Pass	0.88	20.81	20.46	23.65	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	2.08	21.02	20.69	23.87	23.98
5310MHz	Pass	2.08	19.16	19.06	22.12	23.98
5510MHz	Pass	0.78	18.31	18.55	21.44	23.98
5550MHz	Pass	0.78	19.75	19.74	22.76	23.98
5670MHz	Pass	0.78	18.39	18.38	21.40	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	0.78	18.91	18.94	21.94	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	0.88	9.52	9.31	12.43	30.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	2.08	17.07	17.47	20.28	23.98
5530MHz	Pass	0.78	17.25	17.36	20.32	23.98
5610MHz	Pass	0.78	19.49	19.14	22.33	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	0.78	21.09	20.60	23.86	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	0.88	7.75	6.59	10.22	30.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.07	10.68	10.63	13.67	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.08	10.94	11.59	14.29	23.98
5570MHz	Pass	0.78	13.35	13.34	16.36	23.98

DG = Directional Gain; Port X = Port X output power

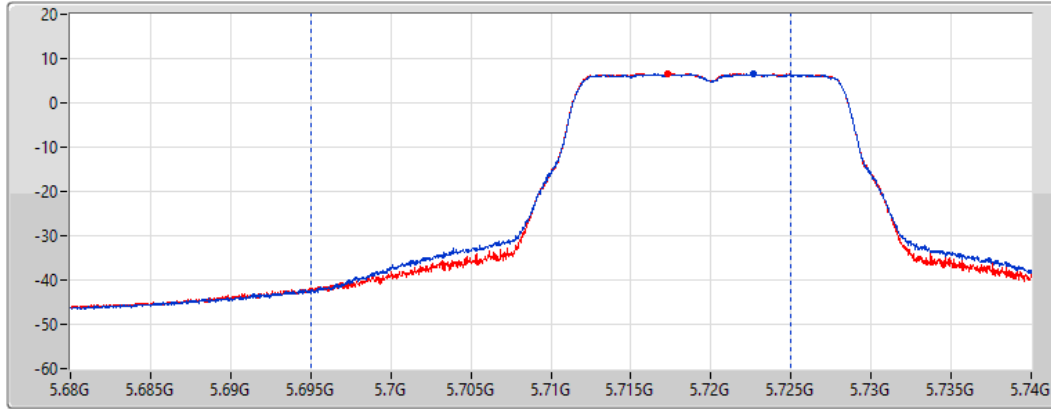
802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
30MHz



Port 1
Port 2

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
20.11	17.04	17.16

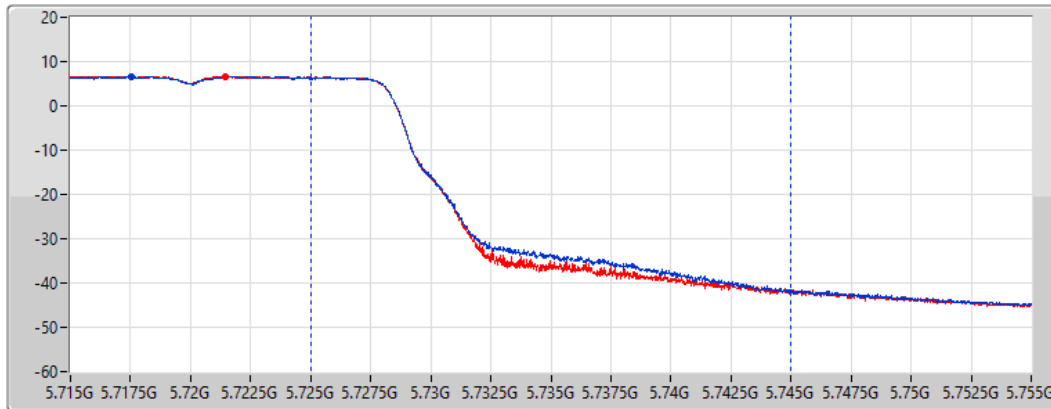
802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

30/12/2021

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2

Sum= Total Power
PX=Port X

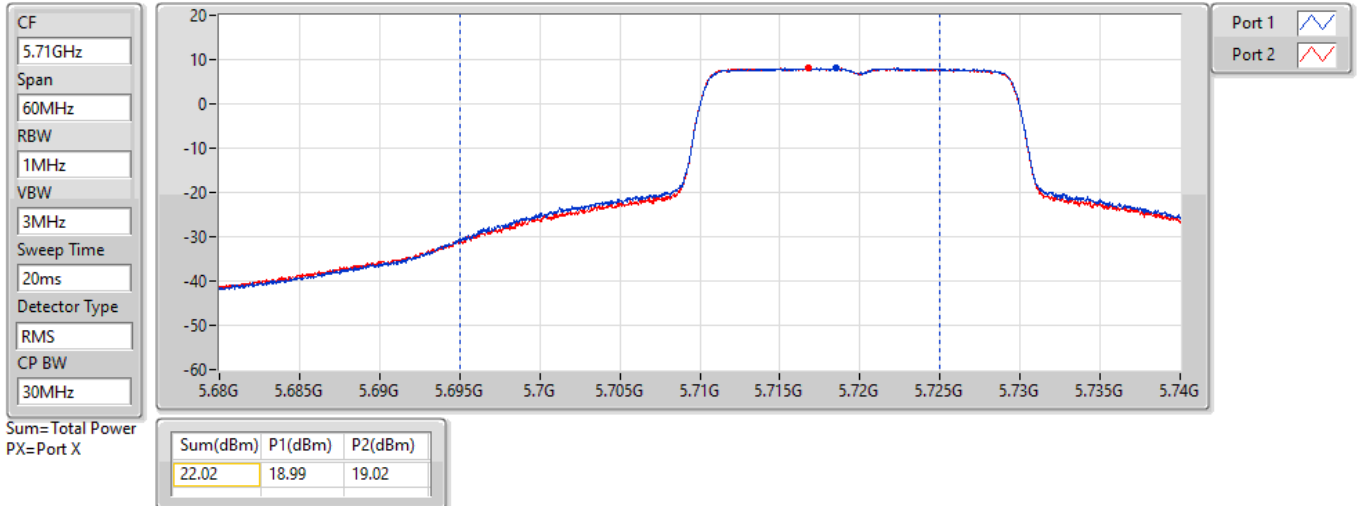
Sum(dBm)	P1(dBm)	P2(dBm)
14.09	11.07	11.09

802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

27/01/2022

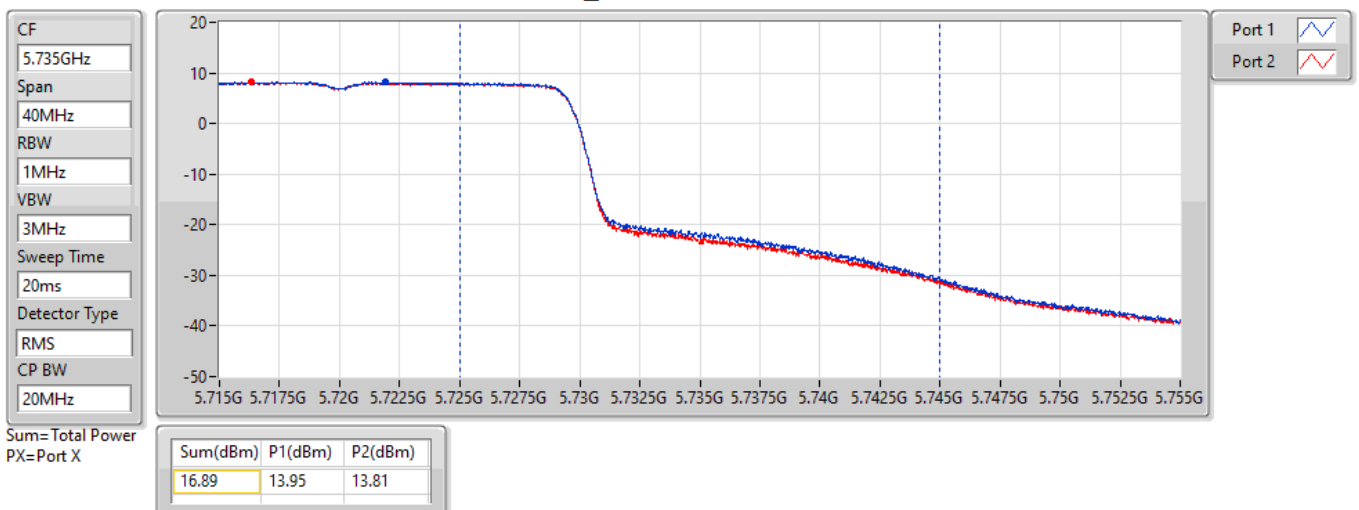


802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

27/01/2022



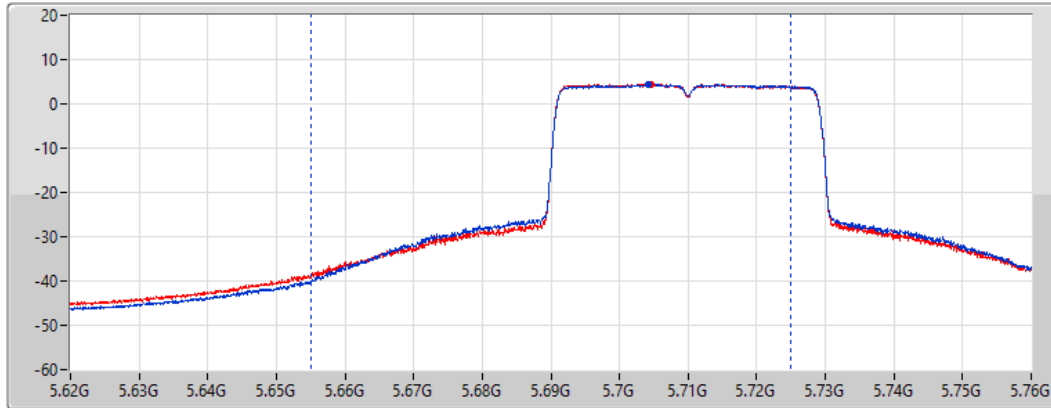
802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
70MHz



Port 1 
Port 2 

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
21.94	18.91	18.94

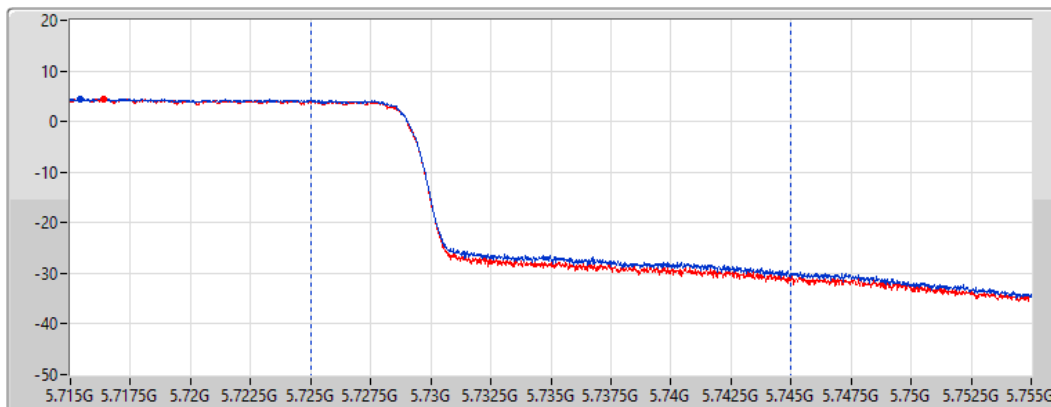
802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

30/12/2021

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1 
Port 2 

Sum= Total Power
PX=Port X

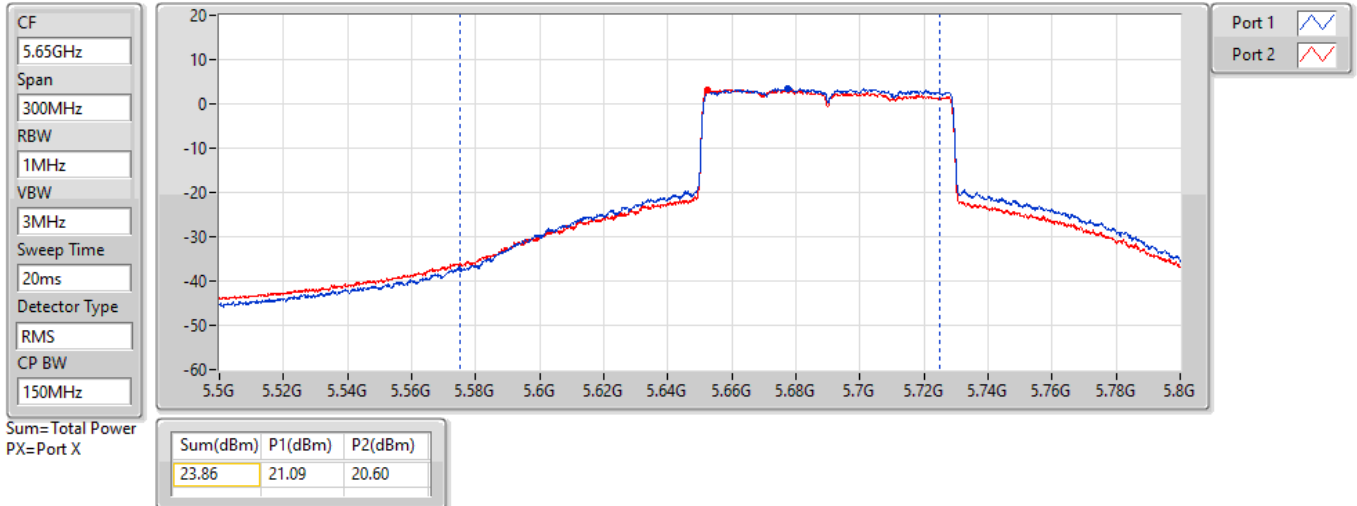
Sum(dBm)	P1(dBm)	P2(dBm)
12.43	9.52	9.31

802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

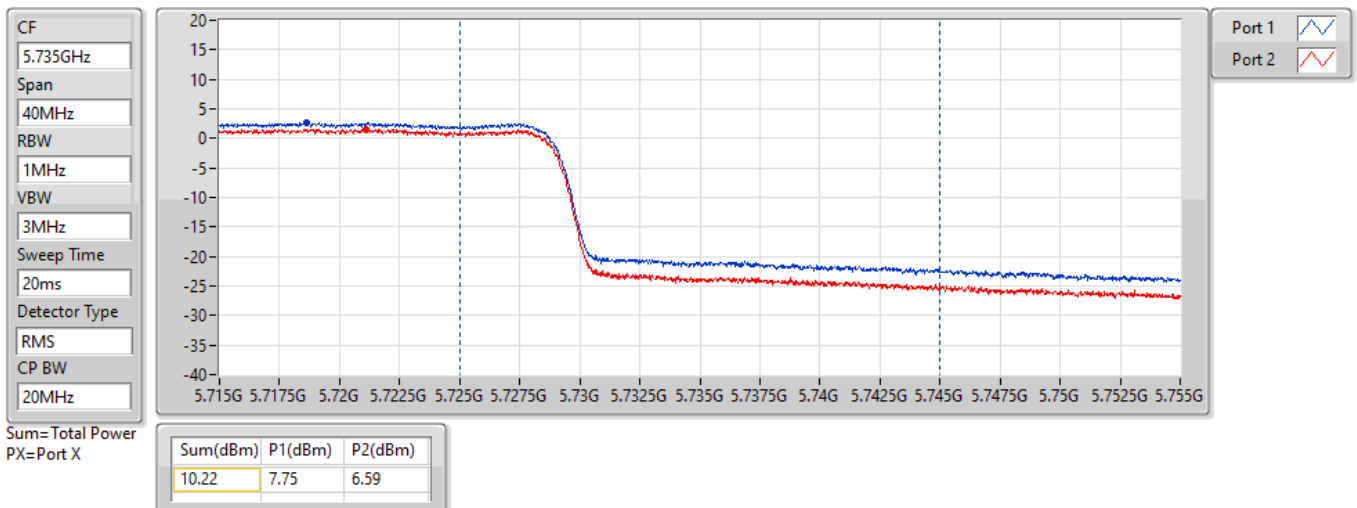


802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

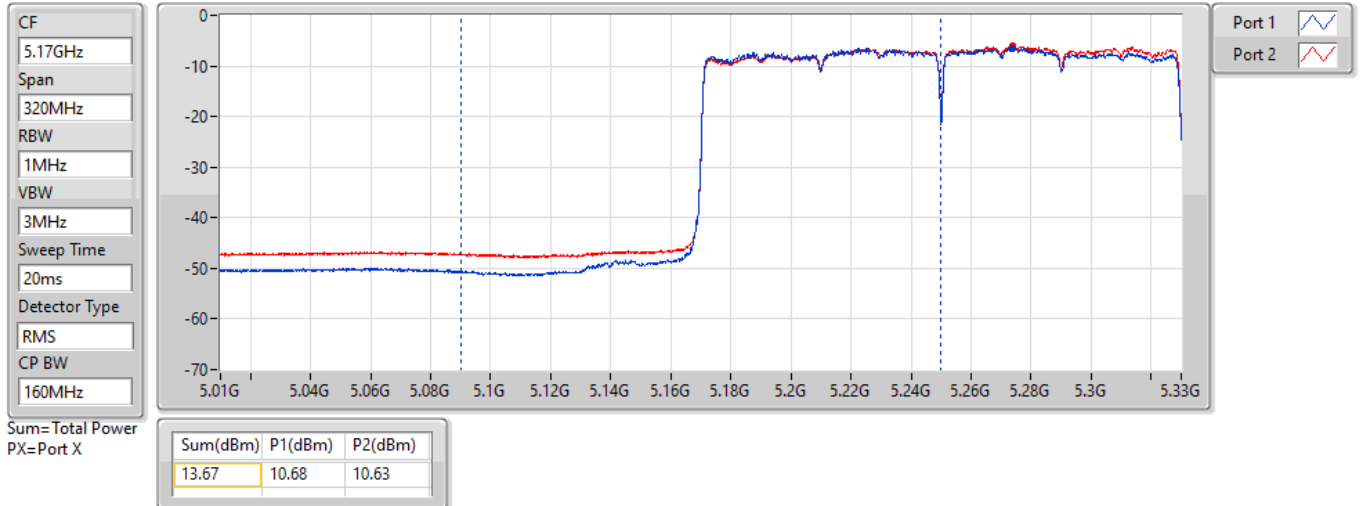


802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

27/01/2022

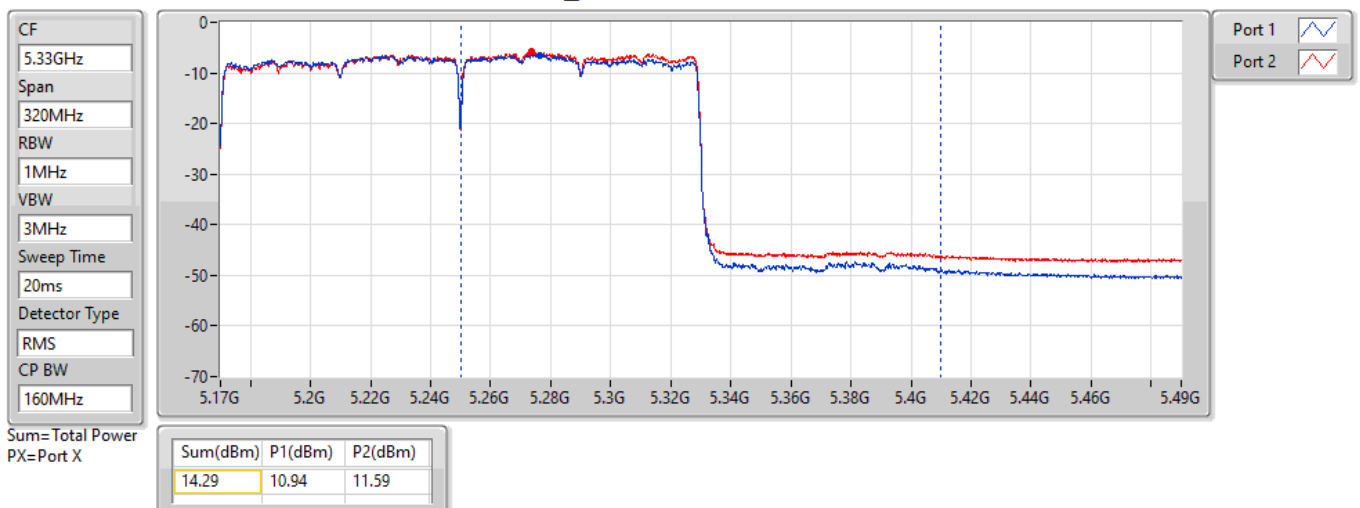


802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

27/01/2022





For 4T1S / Non beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_4TX	14.00	0.02512
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.45	0.22131
802.11ax HEW20_Nss1,(MCS0)_4TX	23.77	0.23823
802.11ax HEW40_Nss1,(MCS0)_4TX	23.64	0.23121
802.11ax HEW80_Nss1,(MCS0)_4TX	22.58	0.18113
802.11ax HEW160_Nss1,(MCS0)_4TX	14.42	0.02767
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.61	0.22961
802.11ax HEW20_Nss1,(MCS0)_4TX	23.87	0.24378
802.11ax HEW40_Nss1,(MCS0)_4TX	23.89	0.24491
802.11ax HEW80_Nss1,(MCS0)_4TX	23.85	0.24266
802.11ax HEW160_Nss1,(MCS0)_4TX	18.67	0.07362
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	16.16	0.04130
802.11ax HEW20_Nss1,(MCS0)_4TX	16.67	0.04645
802.11ax HEW40_Nss1,(MCS0)_4TX	13.60	0.02291
802.11ax HEW80_Nss1,(MCS0)_4TX	9.82	0.00959

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	3.25	17.42	17.32	17.63	17.26	23.43	23.98
5300MHz	Pass	3.25	17.36	17.12	17.59	17.16	23.33	23.98
5320MHz	Pass	3.25	17.50	17.39	17.69	17.13	23.45	23.98
5500MHz	Pass	2.13	17.67	17.14	17.64	17.16	23.43	23.98
5580MHz	Pass	2.13	17.86	17.23	17.75	17.48	23.61	23.98
5700MHz	Pass	2.13	15.16	15.06	15.48	14.92	21.18	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	2.13	16.91	16.99	17.05	16.84	22.97	22.98
5720MHz Straddle 5.725-5.85GHz	Pass	2.48	10.22	10.10	10.00	10.24	16.16	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	3.25	17.89	17.81	17.81	17.49	23.77	23.98
5300MHz	Pass	3.25	17.71	17.60	18.03	17.51	23.74	23.98
5320MHz	Pass	3.25	17.56	17.53	17.91	17.32	23.61	23.98
5500MHz	Pass	2.13	18.02	17.60	17.98	17.79	23.87	23.98
5580MHz	Pass	2.13	17.77	17.31	17.60	17.35	23.53	23.98
5700MHz	Pass	2.13	14.03	13.95	14.38	14.02	20.12	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	2.13	16.51	16.41	16.62	16.40	22.51	22.98
5720MHz Straddle 5.725-5.85GHz	Pass	2.48	10.72	10.66	10.59	10.63	16.67	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	3.25	17.80	17.54	17.70	17.44	23.64	23.98
5310MHz	Pass	3.25	17.07	16.94	17.50	16.88	23.12	23.98
5510MHz	Pass	2.13	14.44	14.39	15.02	14.31	20.57	23.98
5550MHz	Pass	2.13	17.80	17.57	18.00	17.48	23.74	23.98
5670MHz	Pass	2.13	15.88	15.74	16.03	15.68	21.86	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	2.13	17.81	17.98	18.09	17.56	23.89	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	2.48	7.59	7.48	7.64	7.59	13.60	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	3.25	16.48	16.83	16.75	16.16	22.58	23.98
5530MHz	Pass	2.13	16.36	16.30	16.51	16.55	22.45	23.98
5610MHz	Pass	2.13	18.00	17.80	17.78	17.72	23.85	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	2.13	18.01	17.55	17.70	17.67	23.76	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	2.48	4.05	3.37	3.70	4.05	9.82	30.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	3.23	8.34	8.25	7.12	8.10	14.00	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	3.25	8.56	9.18	7.46	8.21	14.42	23.98
5570MHz	Pass	2.13	12.88	12.73	12.24	12.71	18.67	23.98

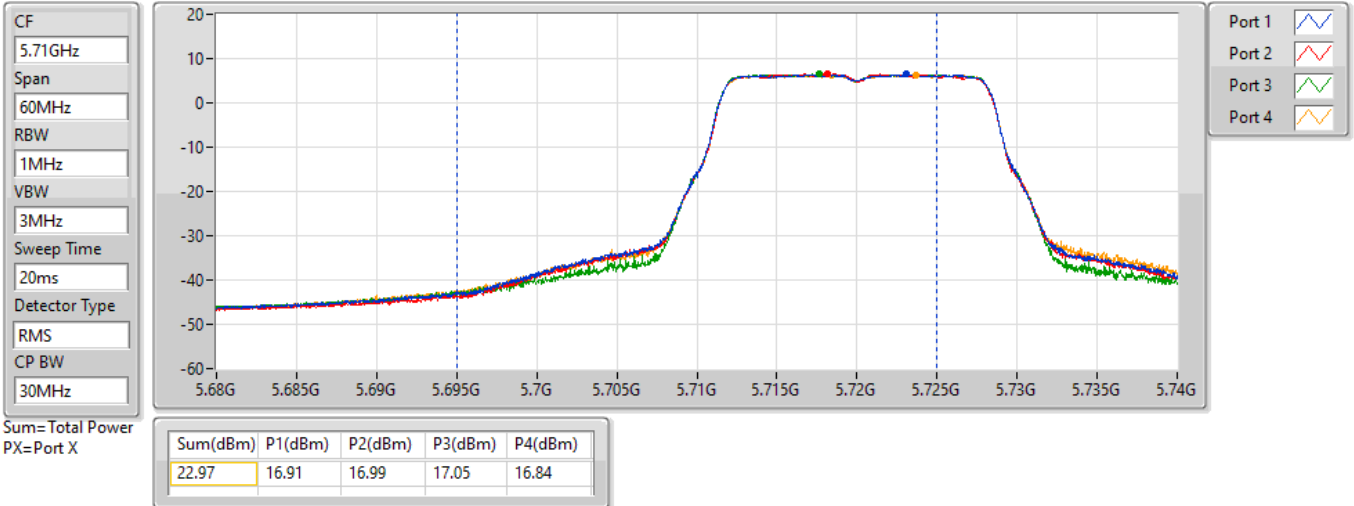
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

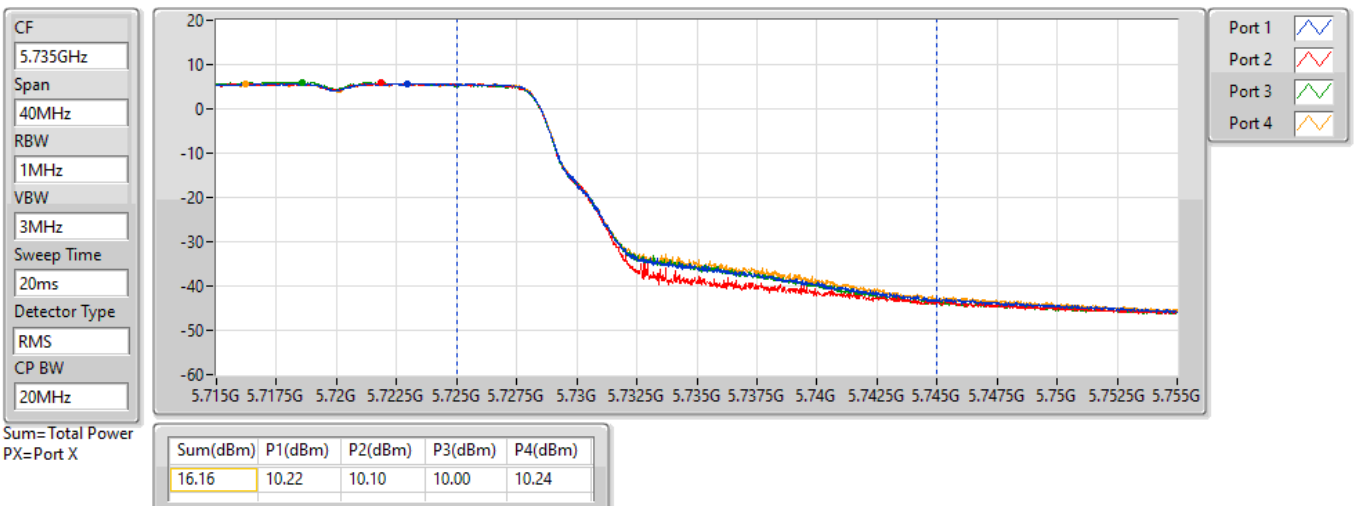


802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

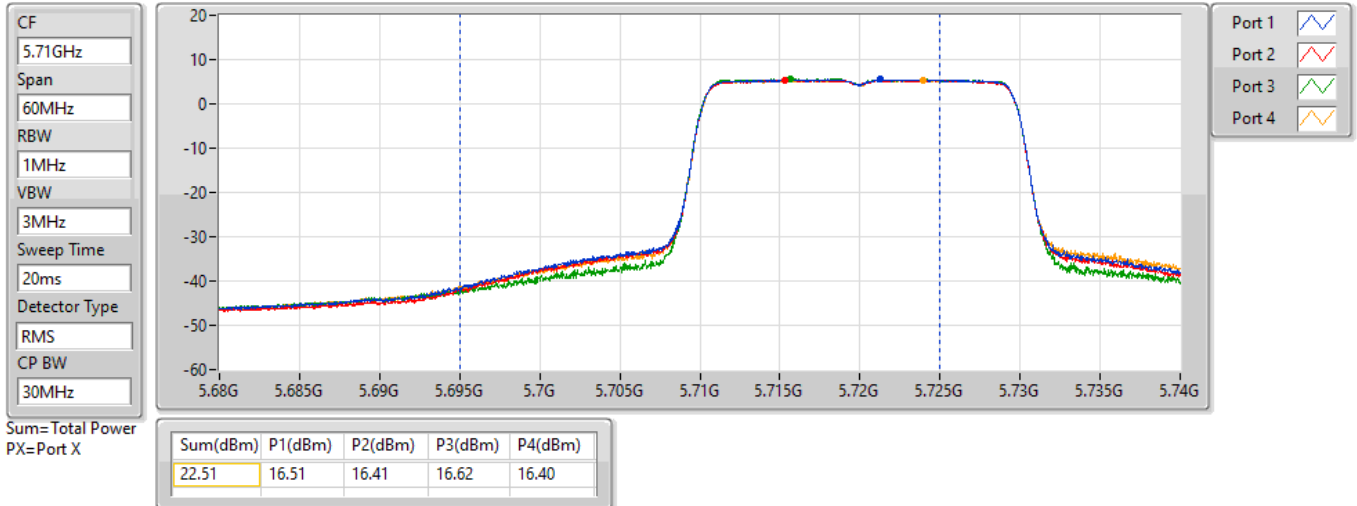


802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

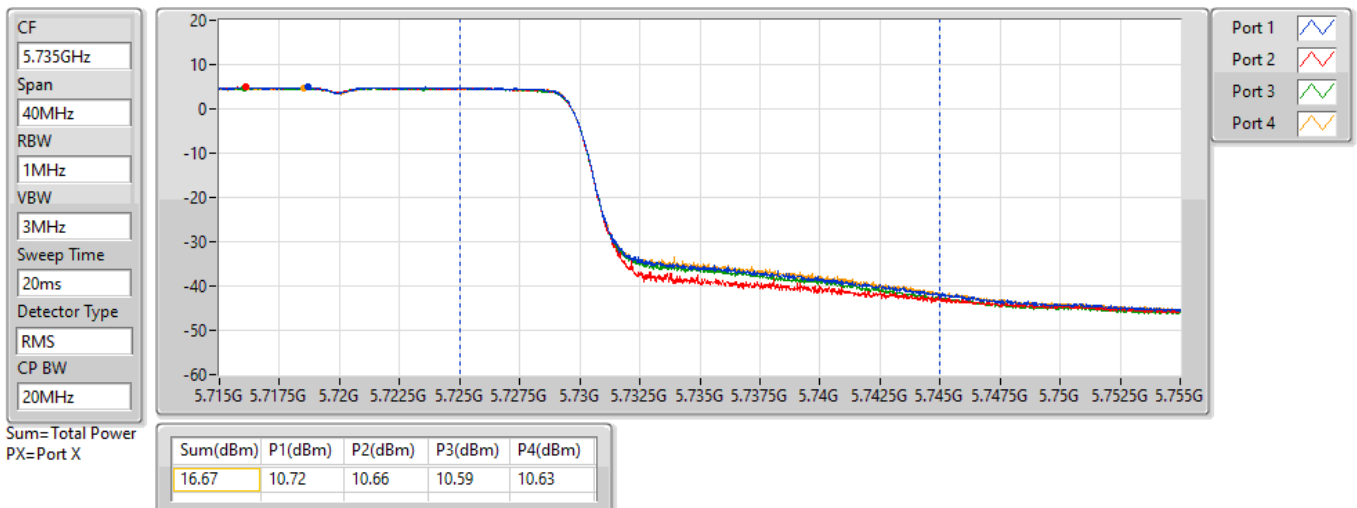


802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022



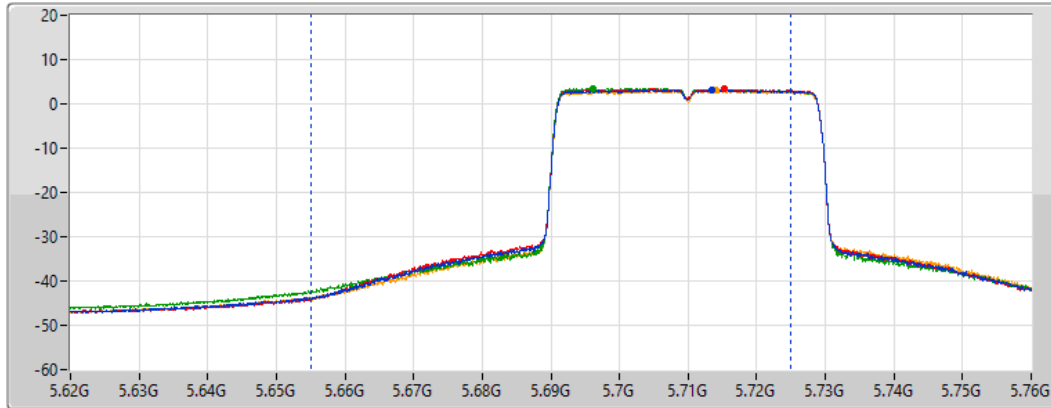
802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
70MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.89	17.81	17.98	18.09	17.56

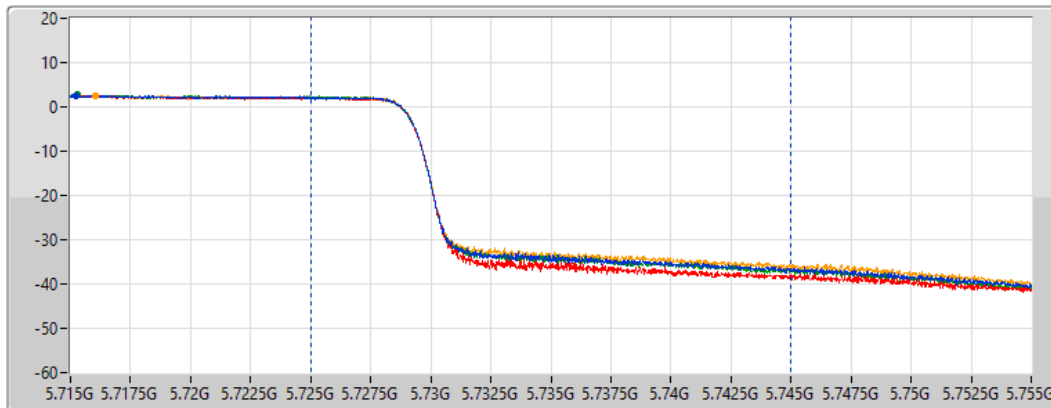
802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

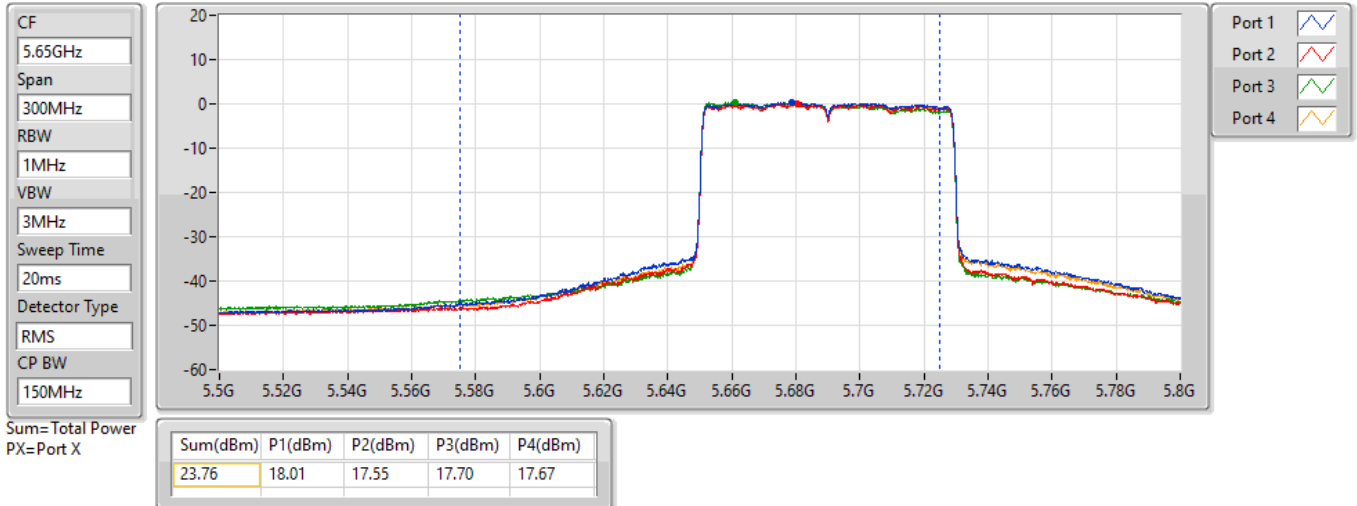
Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.60	7.59	7.48	7.64	7.59

802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

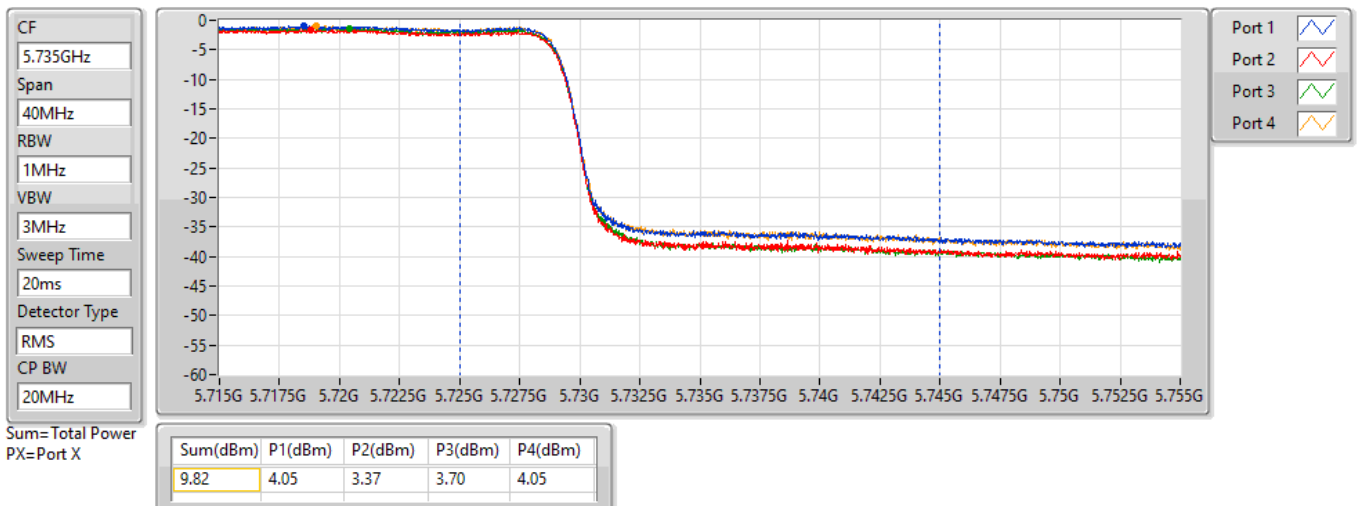


802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

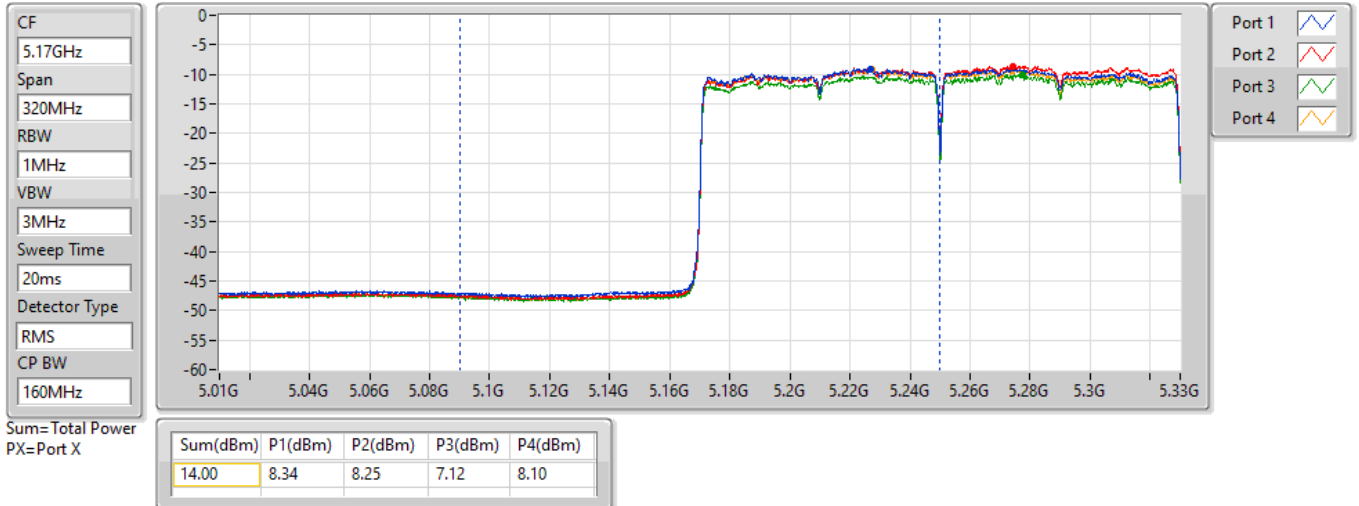


802.11ax HEW160_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

27/01/2022

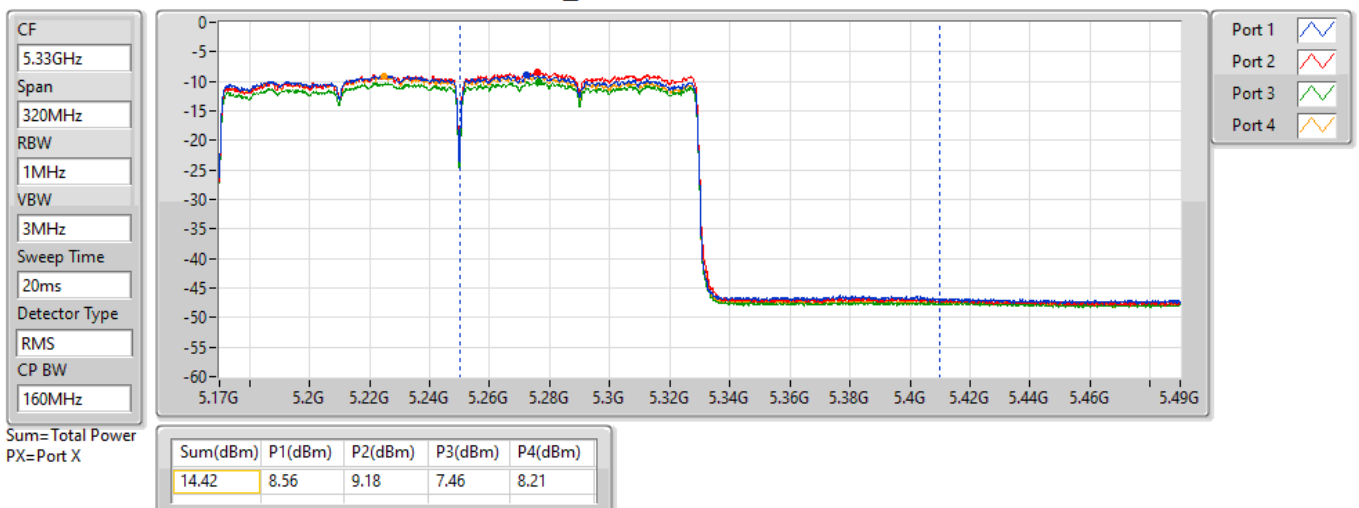


802.11ax HEW160_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

27/01/2022





For 4T1S / Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	14.00	0.02512
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.77	0.23823
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.64	0.23121
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.58	0.18113
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	14.42	0.02767
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.87	0.24378
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.89	0.24491
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.85	0.24266
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	18.67	0.07362
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	16.67	0.04645
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	13.60	0.02291
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	9.82	0.00959

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	6.09	17.89	17.81	17.81	17.49	23.77	23.89
5300MHz	Pass	6.09	17.71	17.6	18.03	17.51	23.74	23.89
5320MHz	Pass	6.09	17.56	17.53	17.91	17.32	23.61	23.89
5500MHz	Pass	6.00	18.02	17.6	17.98	17.79	23.87	23.98
5580MHz	Pass	6.00	17.77	17.31	17.6	17.35	23.53	23.98
5700MHz	Pass	6.00	14.03	13.95	14.38	14.02	20.12	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	6.00	16.51	16.41	16.62	16.4	22.51	23.98
5720MHz Straddle 5.725-5.85GHz	Pass	6.27	10.72	10.66	10.59	10.63	16.67	29.73
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	6.09	17.8	17.54	17.7	17.44	23.64	23.89
5310MHz	Pass	6.09	17.07	16.94	17.5	16.88	23.12	23.89
5510MHz	Pass	6.00	14.44	14.39	15.02	14.31	20.57	23.98
5550MHz	Pass	6.00	17.8	17.57	18	17.48	23.74	23.98
5670MHz	Pass	6.00	15.88	15.74	16.03	15.68	21.86	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	6.00	17.81	17.98	18.09	17.56	23.89	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	6.27	7.59	7.48	7.64	7.59	13.60	29.73
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	6.09	16.48	16.83	16.75	16.16	22.58	23.89
5530MHz	Pass	6.00	16.36	16.3	16.51	16.55	22.45	23.98
5610MHz	Pass	6.00	18	17.8	17.78	17.72	23.85	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	6.00	18.01	17.55	17.7	17.67	23.76	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	6.27	4.05	3.37	3.7	4.05	9.82	29.73
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.37	8.34	8.25	7.12	8.1	14.00	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.09	8.56	9.18	7.46	8.21	14.42	23.89
5570MHz	Pass	6.00	12.88	12.73	12.24	12.71	18.67	23.98

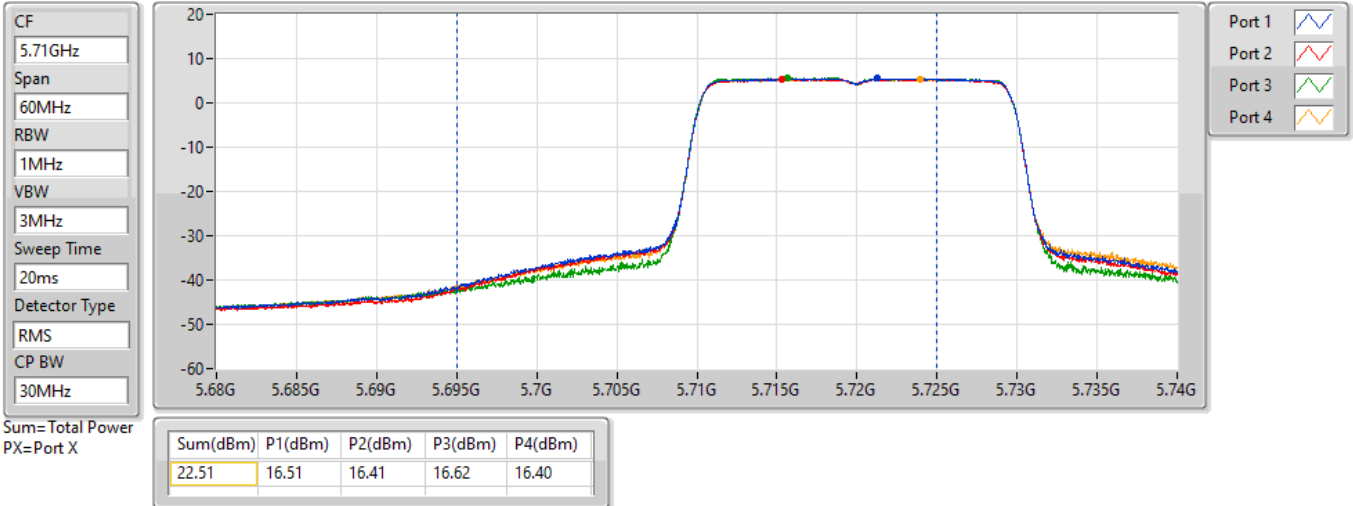
DG = Directional Gain; Port X = Port X output power

802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

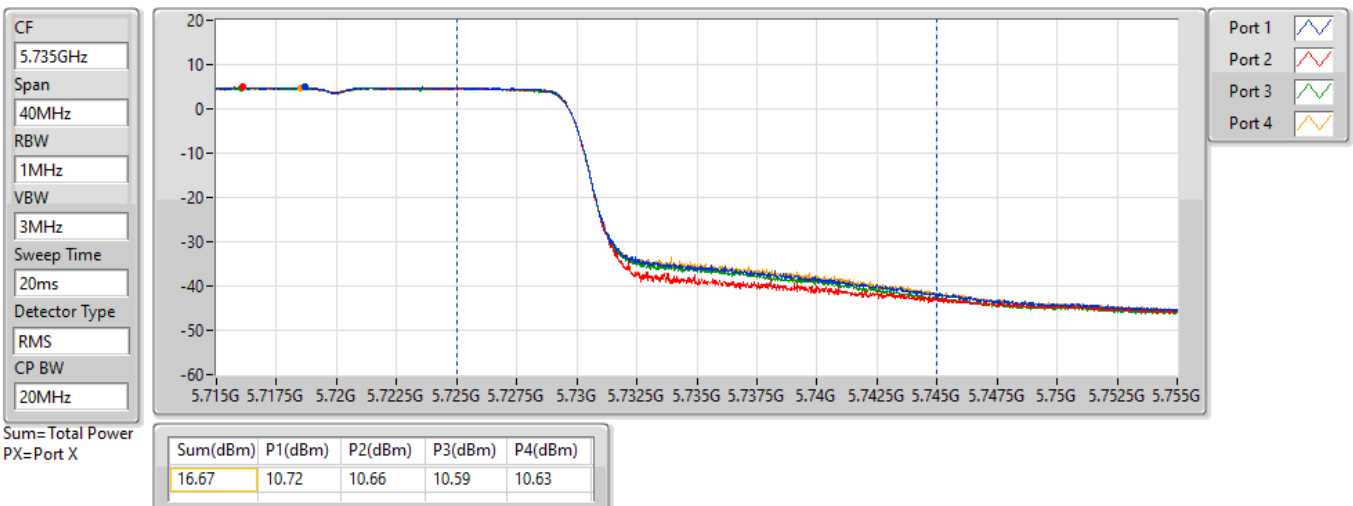


802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022



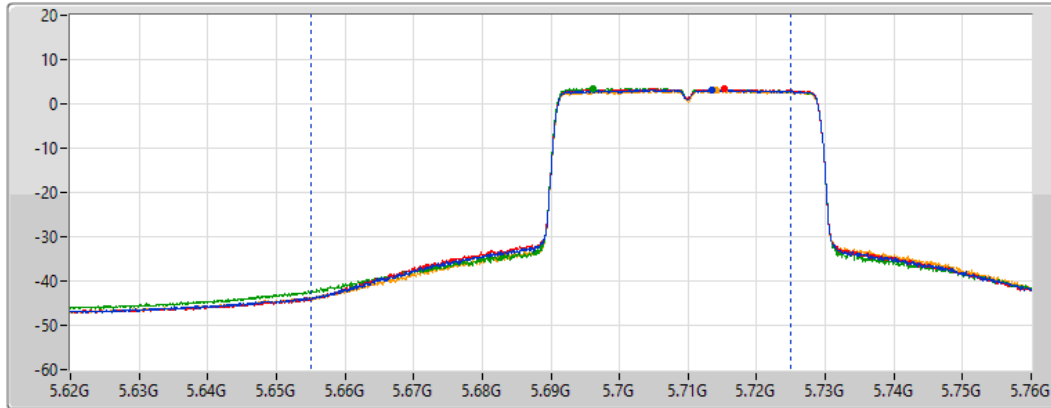
802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
70MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.89	17.81	17.98	18.09	17.56

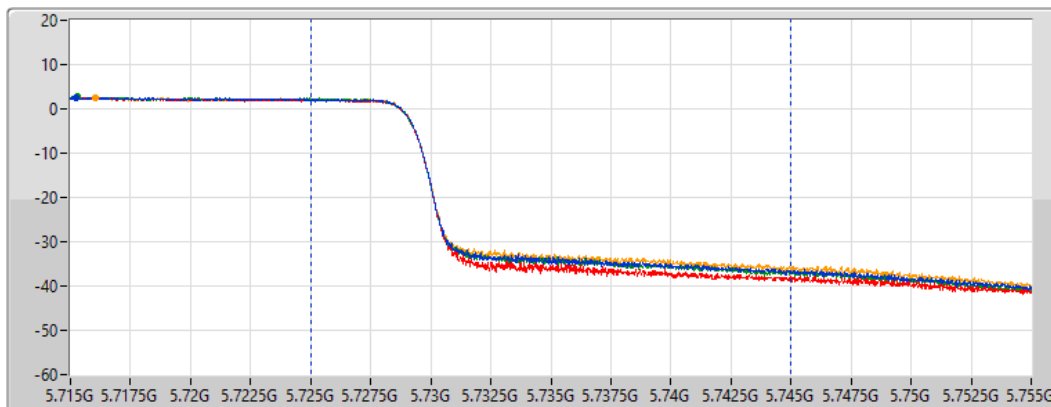
802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

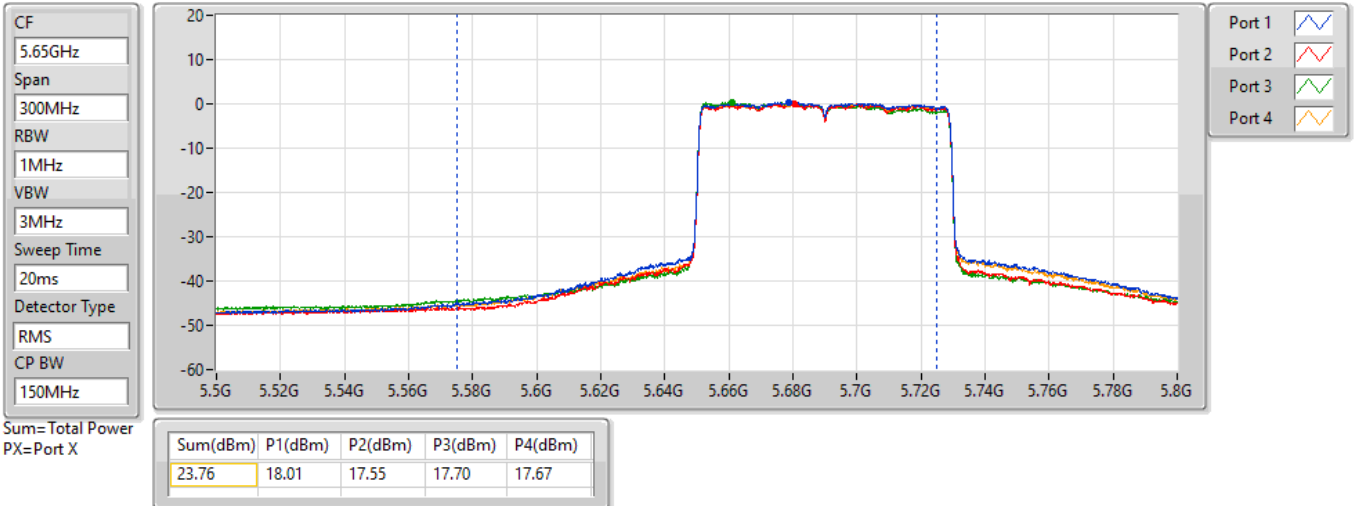
Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.60	7.59	7.48	7.64	7.59

802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

29/12/2021

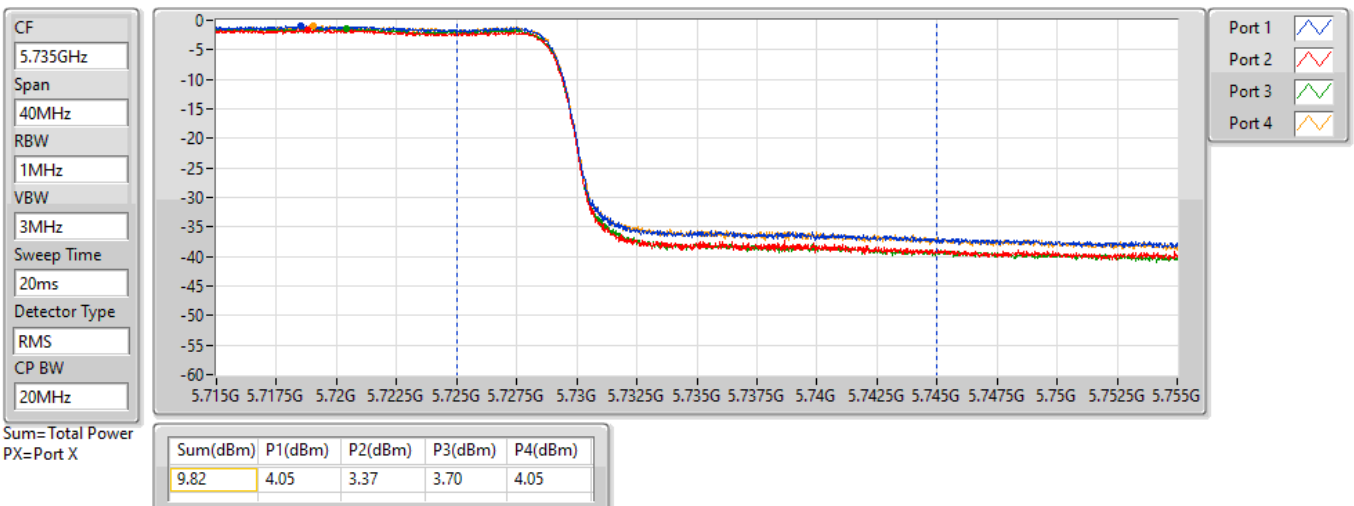


802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

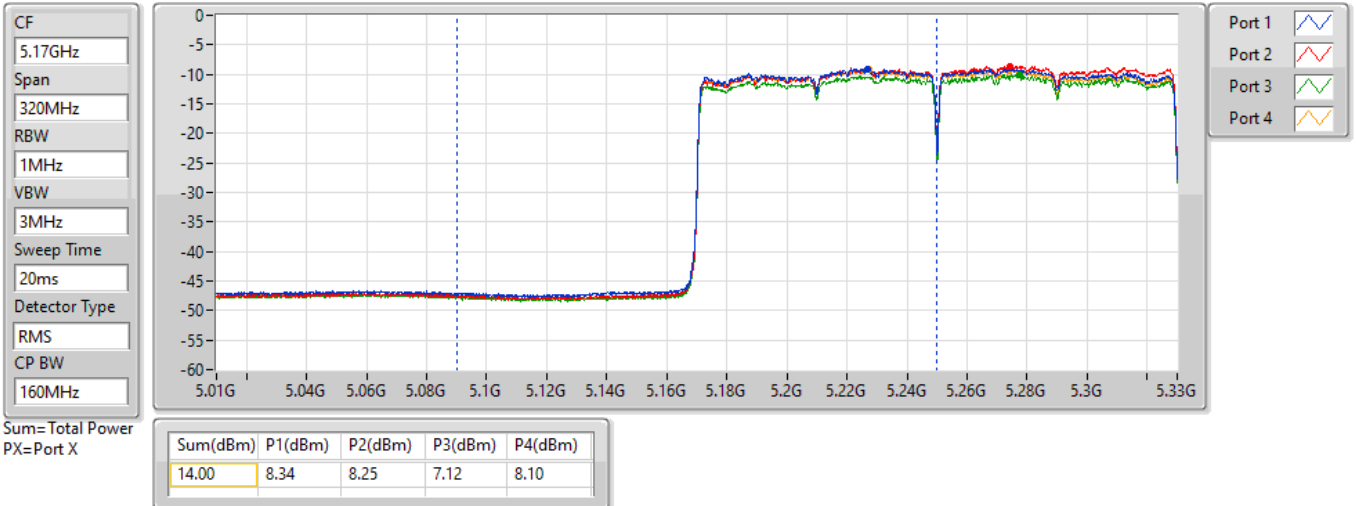


802.11ax HEW160_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

27/01/2022

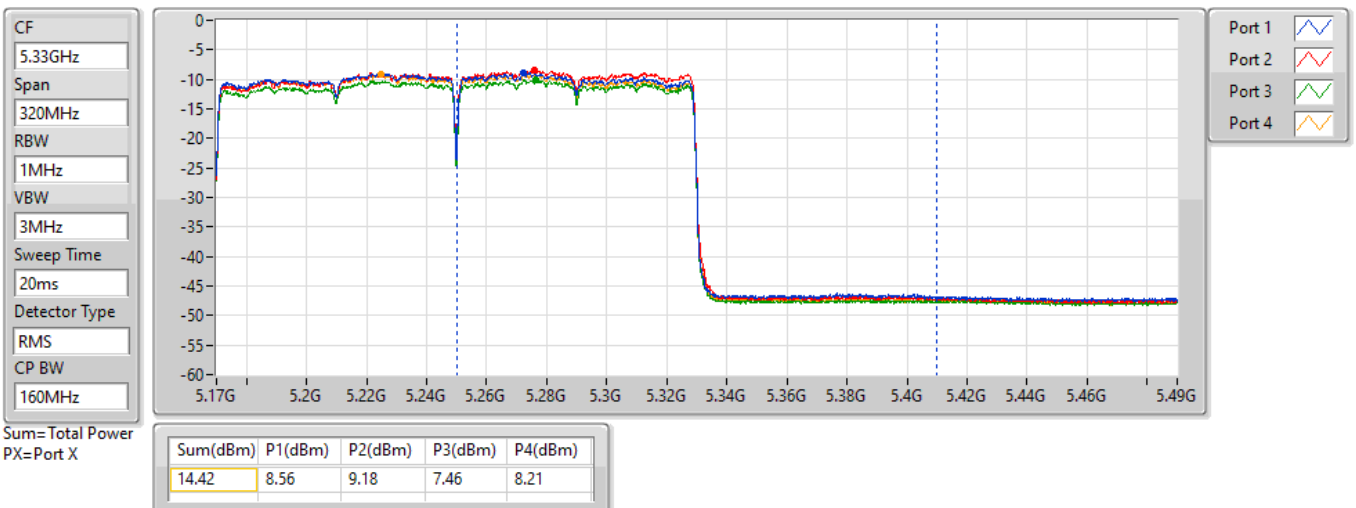


802.11ax HEW160_Nss1,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

27/01/2022



For 4T4S Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW160_Nss4,(MCS0)_4TX	14.40	0.02754
5.25-5.35GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	23.92	0.24660
802.11ax HEW40_Nss4,(MCS0)_4TX	23.85	0.24266
802.11ax HEW80_Nss4,(MCS0)_4TX	22.95	0.19724
802.11ax HEW160_Nss4,(MCS0)_4TX	14.83	0.03041
5.47-5.725GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	23.86	0.24322
802.11ax HEW40_Nss4,(MCS0)_4TX	23.90	0.24547
802.11ax HEW80_Nss4,(MCS0)_4TX	23.82	0.24099
802.11ax HEW160_Nss4,(MCS0)_4TX	18.68	0.07379
5.725-5.85GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	17.82	0.06053
802.11ax HEW40_Nss4,(MCS0)_4TX	14.43	0.02773
802.11ax HEW80_Nss4,(MCS0)_4TX	10.71	0.01178

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	0.35	17.87	18.01	17.82	17.71	23.87	23.98
5300MHz	Pass	0.35	17.71	18.12	17.58	17.55	23.77	23.98
5320MHz	Pass	0.35	17.94	18.19	17.81	17.63	23.92	23.98
5500MHz	Pass	0.08	17.84	17.90	17.64	17.98	23.86	23.98
5580MHz	Pass	0.08	17.86	17.81	17.62	17.76	23.78	23.98
5700MHz	Pass	0.08	14.30	14.45	14.32	14.64	20.45	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	0.08	16.60	16.73	16.73	16.90	22.76	22.99
5720MHz Straddle 5.725-5.85GHz	Pass	0.29	11.66	11.72	11.77	12.02	17.82	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	0.35	17.92	17.99	17.67	17.75	23.85	23.98
5310MHz	Pass	0.35	16.35	16.96	16.39	16.42	22.56	23.98
5510MHz	Pass	0.08	15.45	15.88	15.52	15.71	21.66	23.98
5550MHz	Pass	0.08	17.91	17.98	17.77	17.85	23.90	23.98
5670MHz	Pass	0.08	16.04	15.82	16.00	15.93	21.97	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	0.08	17.83	17.79	18.01	17.79	23.88	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	0.29	8.44	8.08	8.60	8.51	14.43	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	0.35	16.95	17.10	17.08	16.57	22.95	23.98
5530MHz	Pass	0.08	15.72	15.94	15.79	16.18	21.93	23.98
5610MHz	Pass	0.08	18.07	17.52	17.67	17.90	23.82	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	0.08	17.87	17.52	17.67	17.87	23.76	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	0.29	4.94	3.90	4.77	5.04	10.71	30.00
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	0.60	8.38	8.52	7.81	8.74	14.40	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	0.35	8.58	9.50	8.19	8.85	14.83	23.98
5570MHz	Pass	0.08	12.64	12.88	12.32	12.77	18.68	23.98

DG = Directional Gain; Port X = Port X output power

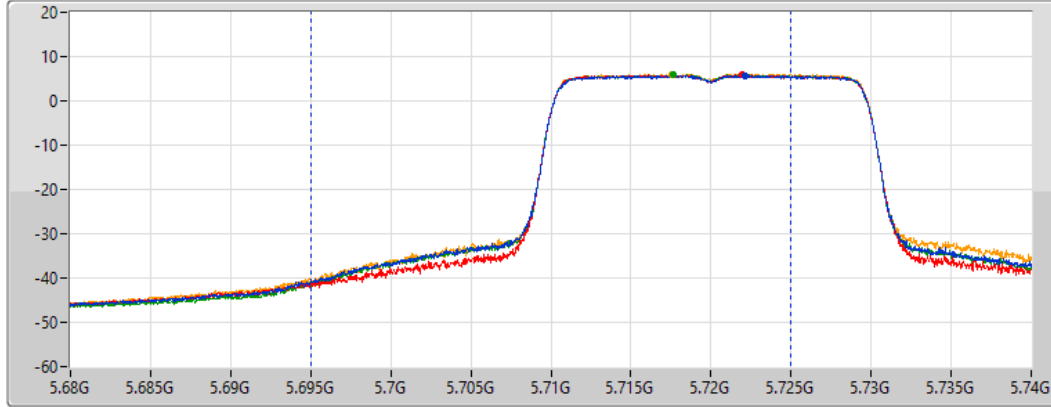
802.11ax HEW20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

04/01/2022

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
30MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.76	16.60	16.73	16.73	16.90

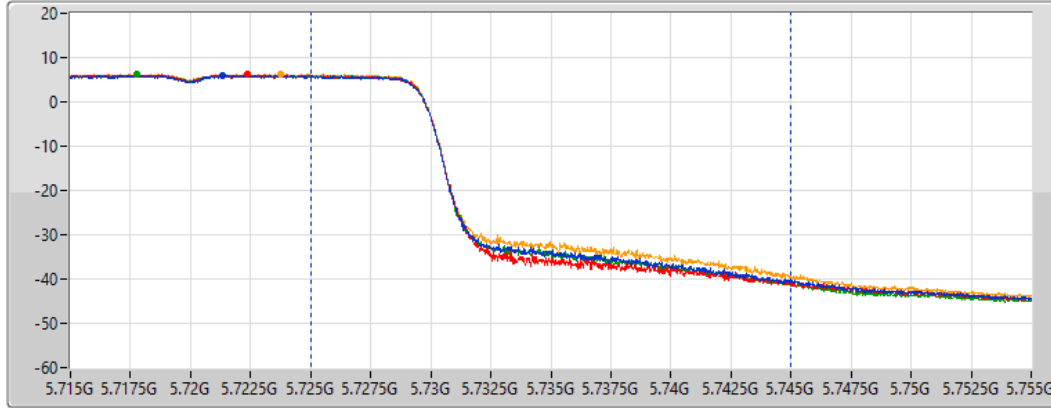
802.11ax HEW20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

04/01/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.82	11.66	11.72	11.77	12.02

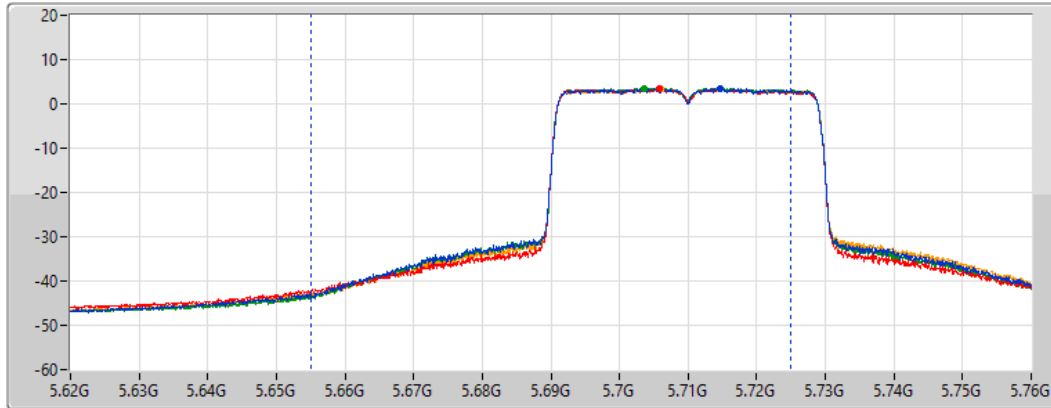
802.11ax HEW40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

04/01/2022

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
70MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.88	17.83	17.79	18.01	17.79

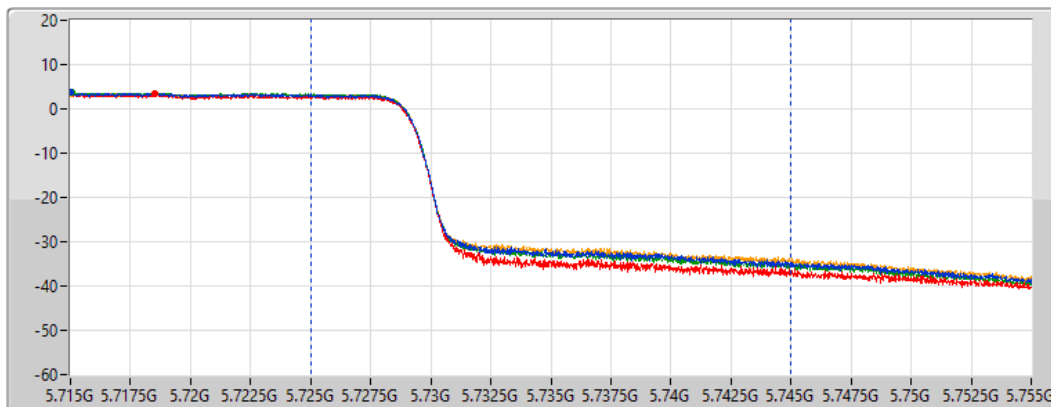
802.11ax HEW40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

04/01/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
14.43	8.44	8.08	8.60	8.51

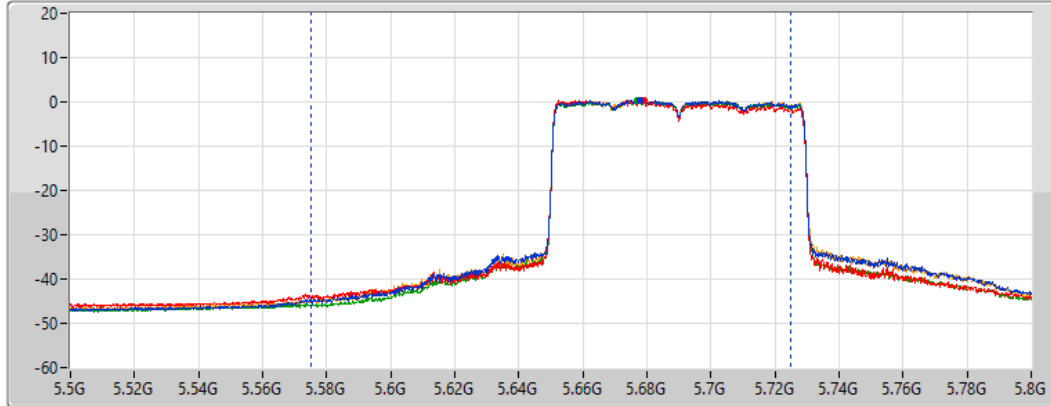
802.11ax HEW80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

04/01/2022

CF
5.65GHz
Span
300MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
150MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.76	17.87	17.52	17.67	17.87

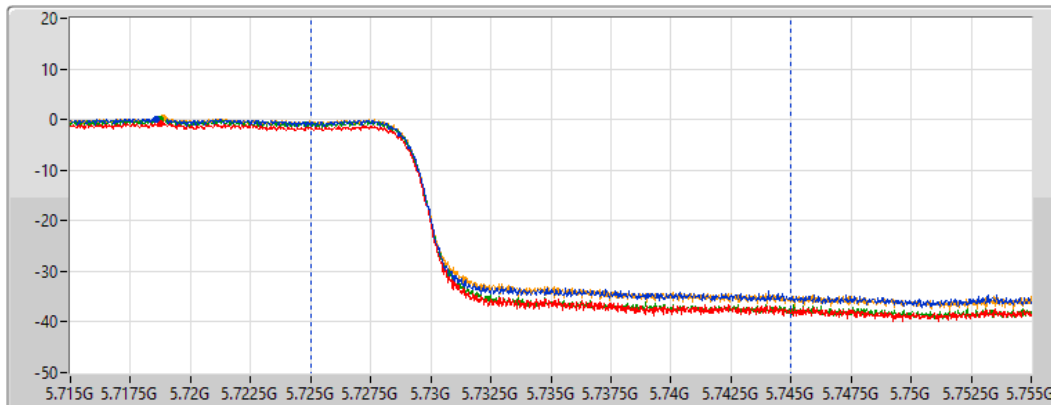
802.11ax HEW80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

04/01/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

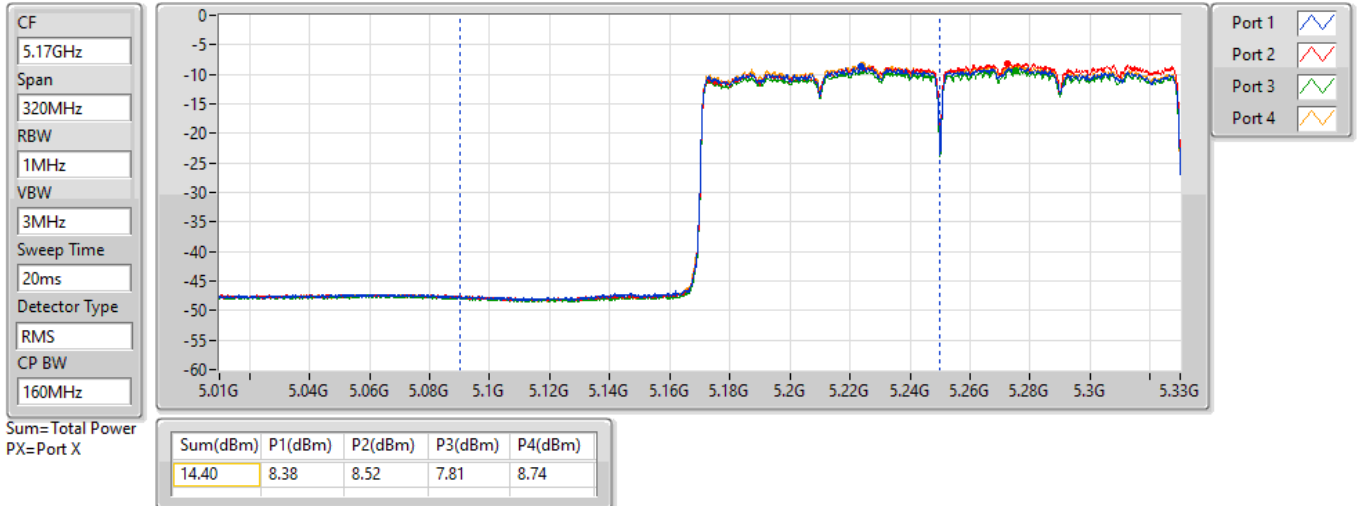
Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.71	4.94	3.90	4.77	5.04

802.11ax HEW160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

27/01/2022

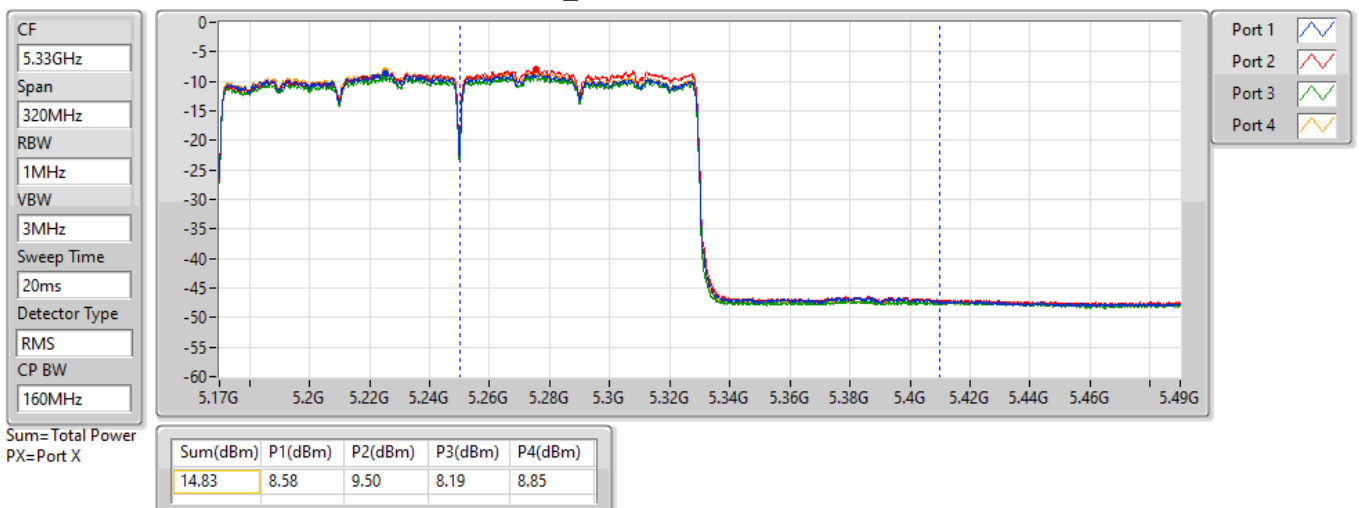


802.11ax HEW160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

27/01/2022



For Scanning radio 1 / 2T1S and 2T2S

Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	21.06	0.12764
802.11ax HEW20_Nss2,(MCS0)_2TX	22.77	0.18923
802.11ax HEW40_Nss2,(MCS0)_2TX	22.52	0.17865
802.11ax HEW80_Nss2,(MCS0)_2TX	18.46	0.07015
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	21.21	0.13213
802.11ax HEW20_Nss2,(MCS0)_2TX	23.28	0.21281
802.11ax HEW40_Nss2,(MCS0)_2TX	23.23	0.21038
802.11ax HEW80_Nss2,(MCS0)_2TX	23.54	0.22594
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	13.67	0.02328
802.11ax HEW20_Nss2,(MCS0)_2TX	16.50	0.04467
802.11ax HEW40_Nss2,(MCS0)_2TX	13.04	0.02014
802.11ax HEW80_Nss2,(MCS0)_2TX	10.30	0.01072

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	5.90	17.99	18.10	21.06	23.98
5300MHz	Pass	5.90	17.60	17.93	20.78	23.98
5320MHz	Pass	5.90	17.83	18.16	21.01	23.98
5500MHz	Pass	5.90	18.23	18.17	21.21	23.98
5580MHz	Pass	5.90	18.07	18.33	21.21	23.98
5700MHz	Pass	5.90	14.67	14.61	17.65	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	5.90	17.44	16.85	20.17	23.11
5720MHz Straddle 5.725-5.85GHz	Pass	5.90	10.63	10.69	13.67	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	5.90	18.96	18.83	21.91	23.98
5300MHz	Pass	5.90	16.05	16.45	19.26	23.98
5320MHz	Pass	5.90	19.67	19.84	22.77	23.98
5500MHz	Pass	5.90	20.35	20.16	23.27	23.98
5580MHz	Pass	5.90	20.37	20.16	23.28	23.98
5700MHz	Pass	5.90	15.21	15.13	18.18	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	5.90	19.46	18.68	22.10	23.77
5720MHz Straddle 5.725-5.85GHz	Pass	5.90	13.51	13.46	16.50	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	5.90	19.64	19.38	22.52	23.98
5310MHz	Pass	5.90	16.80	17.12	19.97	23.98
5510MHz	Pass	5.90	18.55	18.14	21.36	23.98
5550MHz	Pass	5.90	20.36	20.08	23.23	23.98
5670MHz	Pass	5.90	16.98	16.96	19.98	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	5.90	20.45	19.91	23.20	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	5.90	9.74	10.31	13.04	30.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	5.90	15.23	15.66	18.46	23.98
5530MHz	Pass	5.90	17.19	17.23	20.22	23.98
5610MHz	Pass	5.90	18.61	18.77	21.70	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	5.90	20.64	20.42	23.54	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	5.90	7.23	7.34	10.30	30.00

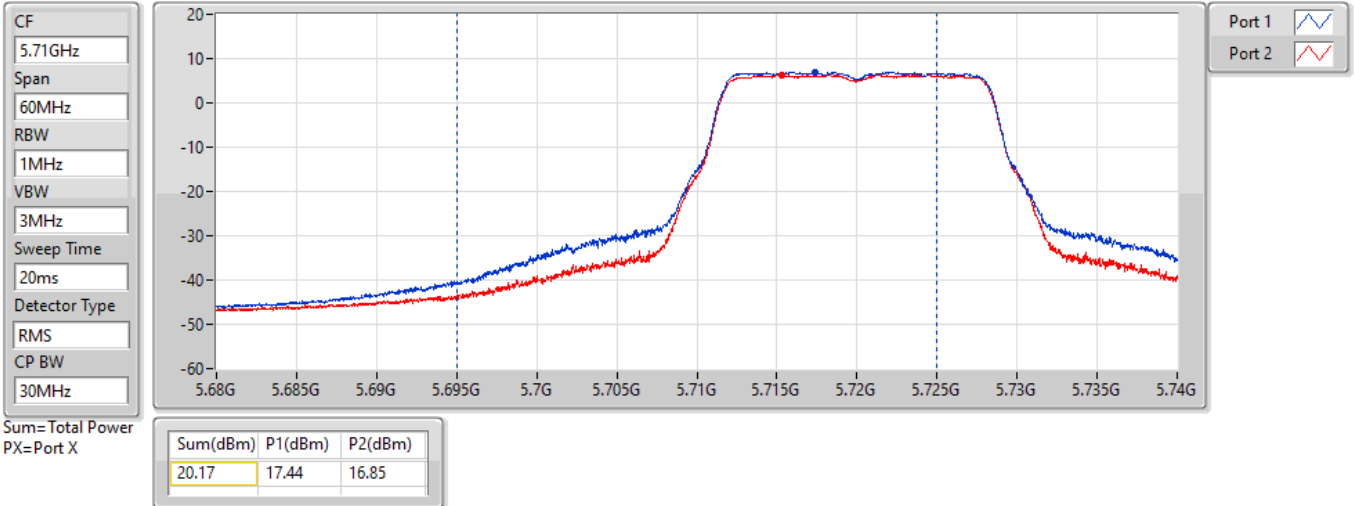
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

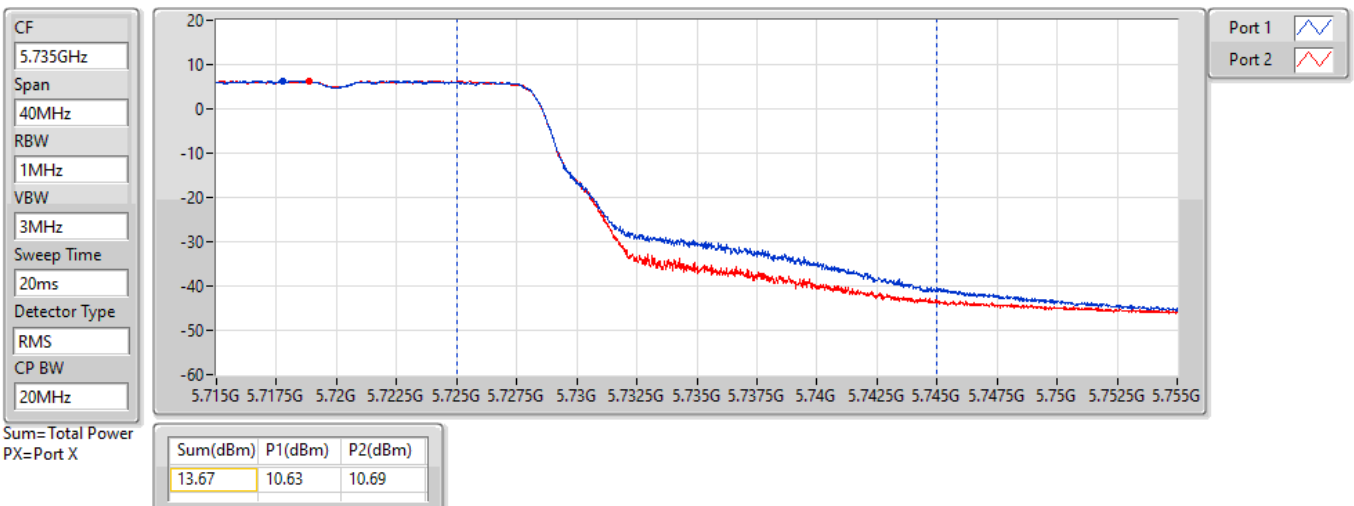


802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

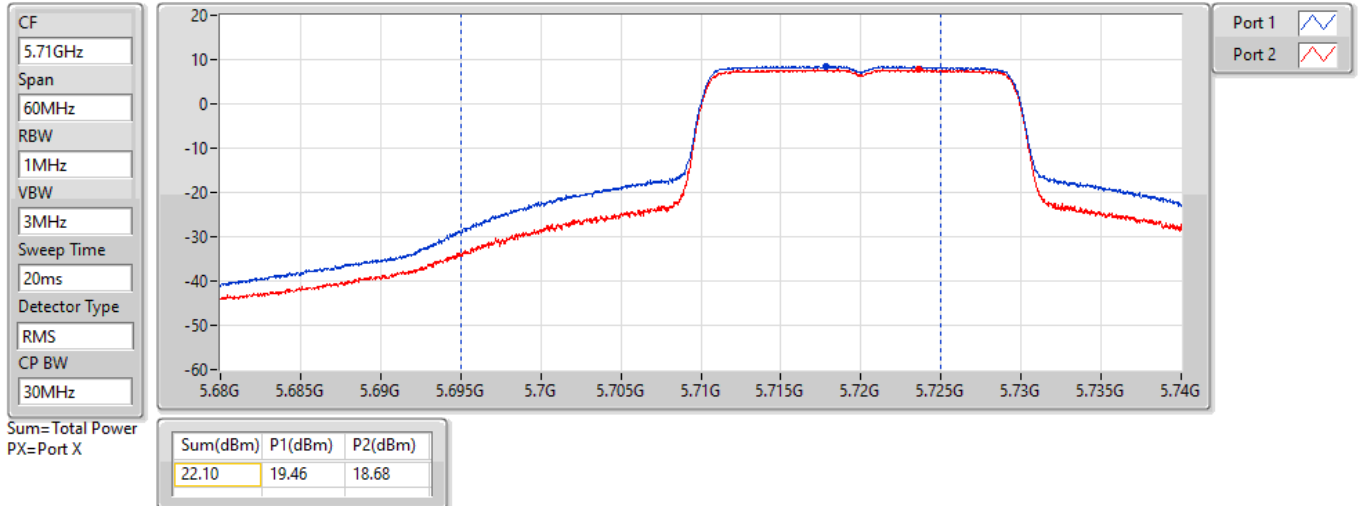


802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

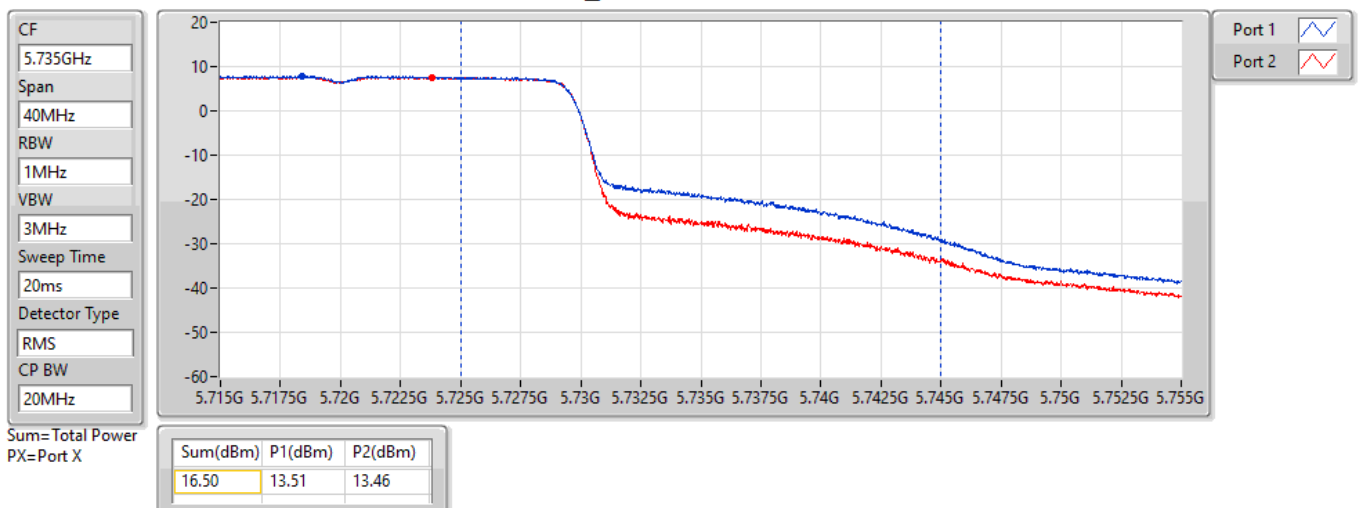


802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

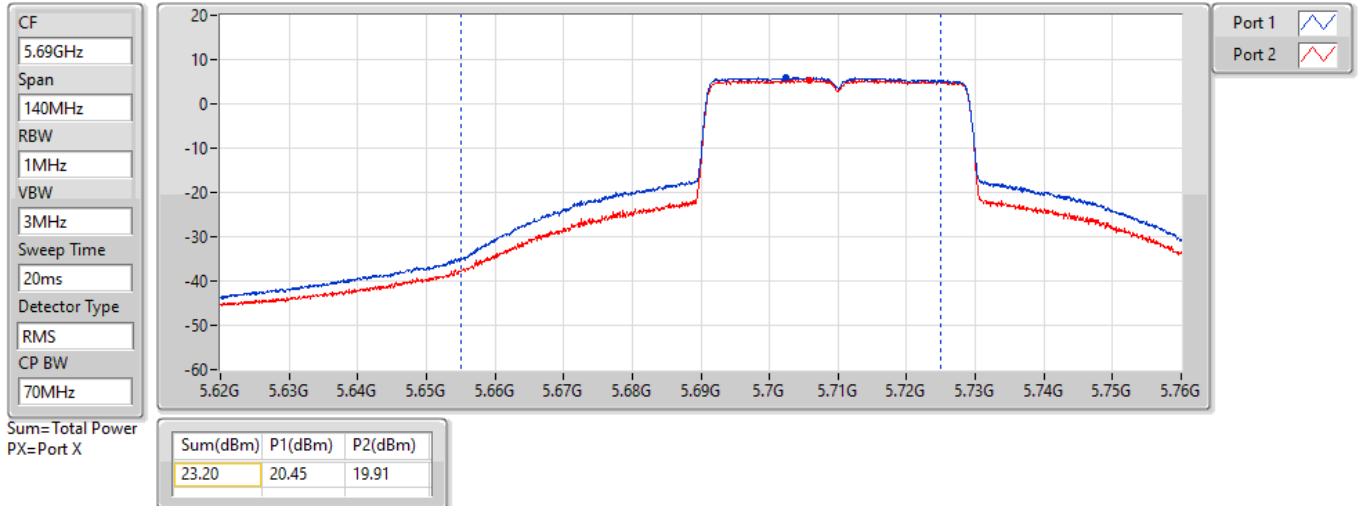


802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021

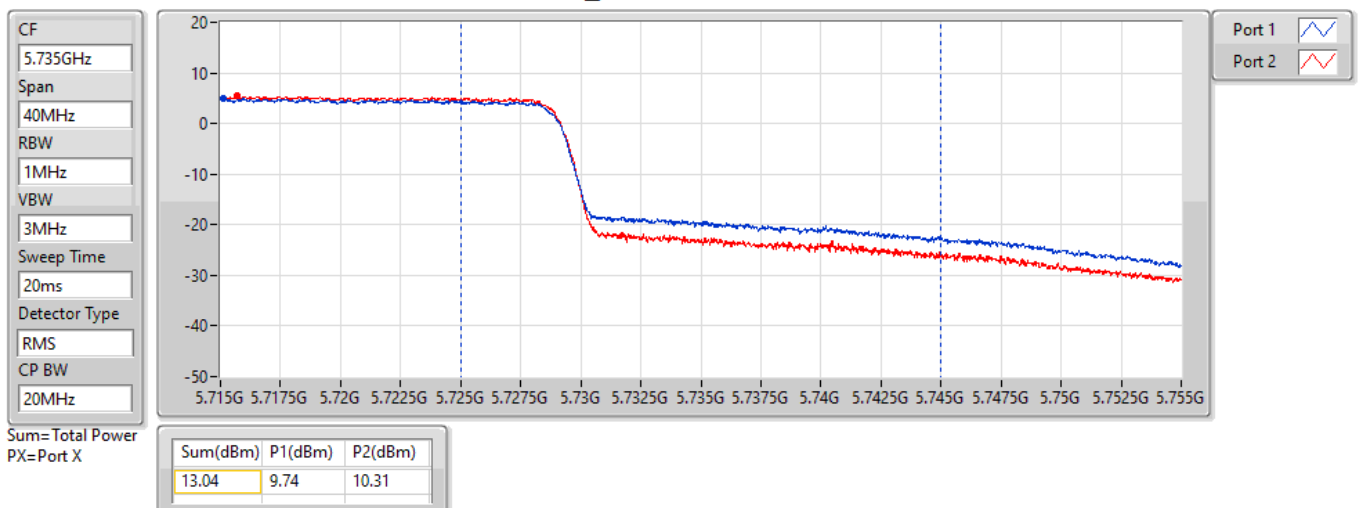


802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

05/01/2022

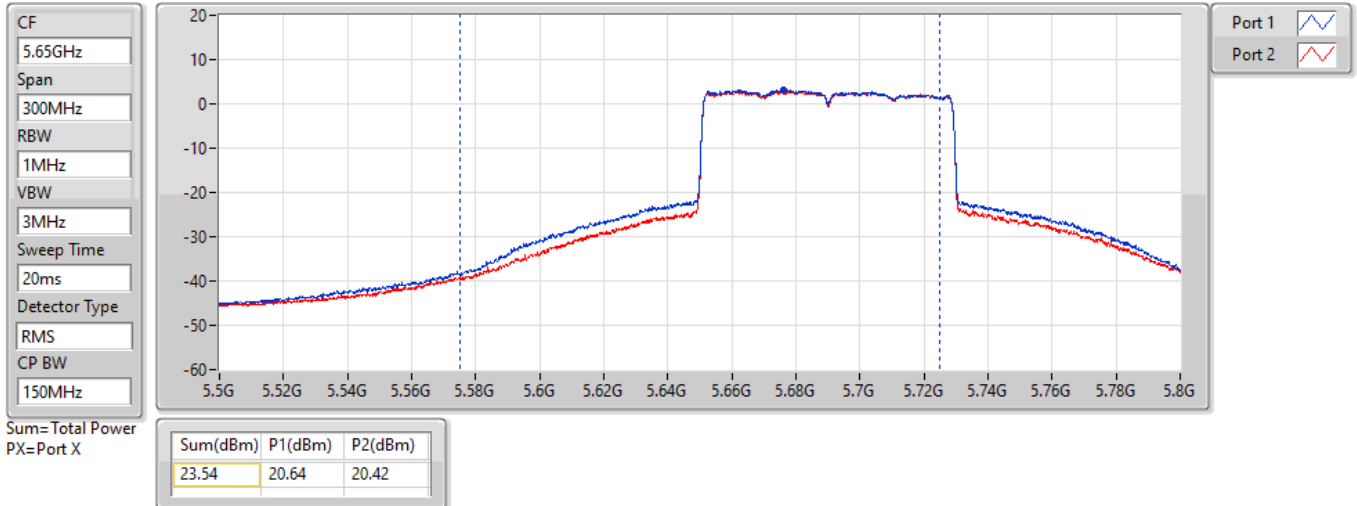


802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

30/12/2021



802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

30/12/2021

