



RADIO TEST REPORT

FCC ID : LDK-9160S2875
Equipment : Catalyst Wireless 9164I Series Wi-Fi 6E Access Point
Brand Name : CISCO
Model Name : CW9164I-B,CW9164I-MR
Applicant : Cisco Systems Inc
125 West Tasman Drive San Jose California United States 95134-1706
Manufacturer : Cisco Systems Inc
125 West Tasman Drive San Jose California United States 95134-1706
Standard : 47 CFR FCC Part 15.407

The product was received on Dec. 28, 2021, and testing was started from Jan. 22, 2022 and completed on Sep. 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 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

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History of this test report

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

Page Number : 3 of 53
Issued Date : Oct. 24, 2022
Report Version : 01



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	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Output Power	PASS	-
3.4	15.407(a)	Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Note: Reference to Sporton Project No.: 1D2822-01.

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:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. 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: Penny Kao**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

<Radio 1>

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



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80	80	1, 2, 4
5.15-5.25GHz	802.11ax HEW80-BF	80	2, 4
5.15-5.25GHz	802.11ac VHT80+80	80	1, 2, 4
5.15-5.25GHz	802.11ac VHT80+80-BF	80	2, 4
5.15-5.25GHz	802.11ax HEW80+80	80	1, 2, 4
5.15-5.25GHz	802.11ax HEW80+80-BF	80	2, 4
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
5.25-5.35GHz	802.11ac VHT80+80	80	1, 2, 4
5.25-5.35GHz	802.11ac VHT80+80-BF	80	2, 4
5.25-5.35GHz	802.11ax HEW80+80	80	1, 2, 4
5.25-5.35GHz	802.11ax HEW80+80-BF	80	2, 4
5.47-5.725GHz	802.11a	20	1, 2, 4
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



Band	Mode	BWch (MHz)	Nant
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 VHT80+80	80	1, 2, 4
5.47-5.725GHz	802.11ac VHT80+80-BF	80	2, 4
5.47-5.725GHz	802.11ax HEW80+80	80	1, 2, 4
5.47-5.725GHz	802.11ax HEW80+80-BF	80	2, 4
5.725-5.85GHz	802.11a	20	1, 2, 4
5.725-5.85GHz	802.11n HT20	20	1, 2, 4
5.725-5.85GHz	802.11n HT20-BF	20	2, 4
5.725-5.85GHz	802.11ac VHT20	20	1, 2, 4
5.725-5.85GHz	802.11ac VHT20-BF	20	2, 4
5.725-5.85GHz	802.11ax HEW20	20	1, 2, 4
5.725-5.85GHz	802.11ax HEW20-BF	20	2, 4
5.725-5.85GHz	802.11n HT40	40	1, 2, 4
5.725-5.85GHz	802.11n HT40-BF	40	2, 4
5.725-5.85GHz	802.11ac VHT40	40	1, 2, 4
5.725-5.85GHz	802.11ac VHT40-BF	40	2, 4
5.725-5.85GHz	802.11ax HEW40	40	1, 2, 4
5.725-5.85GHz	802.11ax HEW40-BF	40	2, 4
5.725-5.85GHz	802.11ac VHT80	80	1, 2, 4
5.725-5.85GHz	802.11ac VHT80-BF	80	2, 4
5.725-5.85GHz	802.11ax HEW80	80	1, 2, 4
5.725-5.85GHz	802.11ax HEW80-BF	80	2, 4
5.725-5.85GHz	802.11ac VHT80+80	80	1, 2, 4
5.725-5.85GHz	802.11ac VHT80+80-BF	80	2, 4
5.725-5.85GHz	802.11ax HEW80+80	80	1, 2, 4
5.725-5.85GHz	802.11ax HEW80+80-BF	80	2, 4

<Radio 3>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1
5.15-5.25GHz	802.11n HT20	20	1
5.15-5.25GHz	802.11ac VHT20	20	1
5.15-5.25GHz	802.11ax HEW20	20	1
5.15-5.25GHz	802.11n HT40	40	1
5.15-5.25GHz	802.11ac VHT40	40	1
5.15-5.25GHz	802.11ax HEW40	40	1
5.15-5.25GHz	802.11ac VHT80	80	1



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80	80	1
5.15-5.35GHz	802.11ac VHT160	160	1
5.15-5.35GHz	802.11ax HEW160	160	1
5.25-5.35GHz	802.11a	20	1
5.25-5.35GHz	802.11n HT20	20	1
5.25-5.35GHz	802.11ac VHT20	20	1
5.25-5.35GHz	802.11ax HEW20	20	1
5.25-5.35GHz	802.11n HT40	40	1
5.25-5.35GHz	802.11ac VHT40	40	1
5.25-5.35GHz	802.11ax HEW40	40	1
5.25-5.35GHz	802.11ac VHT80	80	1
5.25-5.35GHz	802.11ax HEW80	80	1
5.47-5.725GHz	802.11a	20	1
5.47-5.725GHz	802.11n HT20	20	1
5.47-5.725GHz	802.11ac VHT20	20	1
5.47-5.725GHz	802.11ax HEW20	20	1
5.47-5.725GHz	802.11n HT40	40	1
5.47-5.725GHz	802.11ac VHT40	40	1
5.47-5.725GHz	802.11ax HEW40	40	1
5.47-5.725GHz	802.11ac VHT80	80	1
5.47-5.725GHz	802.11ax HEW80	80	1
5.47-5.725GHz	802.11ac VHT160	160	1
5.47-5.725GHz	802.11ax HEW160	160	1
5.725-5.85GHz	802.11a	20	1
5.725-5.85GHz	802.11n HT20	20	1
5.725-5.85GHz	802.11ac VHT20	20	1
5.725-5.85GHz	802.11ax HEW20	20	1
5.725-5.85GHz	802.11n HT40	40	1
5.725-5.85GHz	802.11ac VHT40	40	1
5.725-5.85GHz	802.11ax HEW40	40	1
5.725-5.85GHz	802.11ac VHT80	80	1
5.725-5.85GHz	802.11ax HEW80	80	1

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 Table for 80+80 MHz Mode

<Radio 1>

Type	Channel No.	Frequency
1	42+58	5210+5290 MHz
2	106+122	5530+5610 MHz

1.1.3 Antenna Information

Ant.	Port					Brand	Model Name	Ant. Type	Connector	Gain (dBi)
	R1: WLAN 2.4GHz	R1: WLAN 5GHz UNII 1~3	R2: WLAN 6GHz UNII 5~8	R3: WLAN 2.4GHz /5GHz UNII1~3 /6GHz UNII 5~8	Bluetooth					
1	-	4	-	-	-	CISCO	95XEAJ15.G04	Folded	I-PEX	Note2
2	-	3	-	-	-	CISCO	95XEAJ15.G03	Folded	I-PEX	
3	2	2	-	-	-	CISCO	95XEAJ15.G05	Folded	I-PEX	
4	1	1	-	-	-	CISCO	95XEAJ15.G06	Folded	I-PEX	
5	-	-	4	-	-	CISCO	95XEAJ15.G12	H-POL Alford loop	I-PEX	
6	-	-	3	-	-	CISCO	95XEAJ15.G11	H-POL Alford loop	I-PEX	
7	-	-	1	-	-	CISCO	95XEAJ15.G09	H-POL Alford loop	I-PEX	
8	-	-	2	-	-	CISCO	95XEAJ15.G10	H-POL Alford loop	I-PEX	
9	-	-	-	1	-	CISCO	95XEAJ15.G07	PIFA	I-PEX	
10	-	-	-	2	-	CISCO	95XEAJ15.G08	PIFA	I-PEX	
11	-	-	-	-	1	CISCO	95XEAJ15.G13	PIFA	I-PEX	

Note1: R means Radio.

Note2:

Ant.	Antenna Gain (dBi)										Remark
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 6	WLAN 6GHz UNII 7	WLAN 6GHz UNII 8	Bluetooth	
1	-	4.27	3.94	1.88	2.57	-	-	-	-	-	Radio 1
2	-	5.09	5.16	2.89	2.72	-	-	-	-	-	Radio 1
3	2.79	2.78	2.74	2.66	1.91	-	-	-	-	-	Radio 1
4	2.62	5.24	5.46	4.26	3.94	-	-	-	-	-	Radio 1
5	-	-	-	-	-	2.4	2.41	1.39	0.77	-	Radio 2
6	-	-	-	-	-	2.95	1.96	1.32	0.87	-	Radio 2
7	-	-	-	-	-	2.95	2.31	0.99	0.61	-	Radio 2
8	-	-	-	-	-	2.91	3.96	1.59	0.33	-	Radio 2
9	3.3	4.0				5.3				-	Radio 3
10	3.3	4.0				5.3				-	Radio 3
11	-	-	-	-	-	-	-	-	-	3.8	Radio 4



Note3:

Item	Directional Gain (dBi)									Remark
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 6	WLAN 6GHz UNII 7	WLAN 6GHz UNII 8	
2T1S	4.29	5.39	5.26	4.69	4.16	-	-	-	-	Radio 1
2T2S	1.28	2.99	2.99	2.02	1.65	-	-	-	-	
4T1S	-	6.99	7.25	6.62	5.97	-	-	-	-	
4T2S	-	5.24	5.46	4.26	3.94	-	-	-	-	
4T4S	-	1.09	1.55	0.94	0.27	-	-	-	-	
2T1S	-	-	-	-	-	5.38	4.47	4.13	3.08	Radio 2
2T2S	-	-	-	-	-	2.37	1.59	1.12	0.09	
4T1S	-	-	-	-	-	7.45	6.03	6.05	4.51	
4T2S	-	-	-	-	-	4.45	3.96	3.05	1.51	
4T4S	-	-	-	-	-	1.51	0.27	0.07	-1.19	

Note4: The above information (except gain of Radio 1 and Radio 2) was declared by manufacturer.

Note5: Radio 1 (WLAN 2.4/5GHz UNII 1~3), Radio 2 (6GHz UNII 5~8): The directional gain is measured which follows the procedure of KDB 662911 D03.

Note6: The EUT has eleven antennas.

For WLAN 2.4GHz function (Radio 1):**For IEEE 802.11b/g/n/VHT/ax mode (1TX,2TX/2RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 2RX

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

Port 1, Port 2 could receive simultaneously.

For WLAN 5GHz function (Radio 1):**For IEEE 802.11a/n/ac/ax mode (1TX,2TX,4TX/4RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For 6GHz function (Radio 2):**For IEEE 802.11ax mode (1TX,2TX,4TX/4RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

**For Scanning Radio 3:****For WLAN 2.4GHz function****For 802.11b/g/n/VHT/ax mode (1TX/2RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For WLAN 5GHz function**For IEEE 802.11a/n/ac/ax mode (1TX/2RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For 6GHz function:**For IEEE 802.11ax mode (1TX/2RX):**

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For Bluetooth function (Radio 4):**For Bluetooth mode (1TX/1RX):**

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

**1.1.4 Mode Test Duty Cycle****For Radio 1:****For 20/40/80MHz****For 1T1S:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.928	0.32	1.433m	1k
802.11ax HEW20	0.94	0.27	5.445m	300
802.11ax HEW40	0.957	0.19	5.445m	300
802.11ax HEW80	0.934	0.3	5.445m	300

For 2T1S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.928	0.32	1.433m	1k
802.11ax HEW20	0.954	0.2	5.446m	300
802.11ax HEW40	0.956	0.2	5.446m	300
802.11ax HEW80	0.952	0.21	5.446m	300

For 4T1S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.928	0.32	1.433m	1k
802.11ax HEW20	0.954	0.2	5.446m	300
802.11ax HEW40	0.956	0.2	5.446m	300
802.11ax HEW80	0.952	0.21	5.446m	300

For 80+80MHz**For 2T2S:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW80+80	0.954	0.2	5.446m	300

For 4T2S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW80+80	0.94	0.27	5.445m	300

For Radio 3:**For 20/40/80/160MHz****For 1T1S:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.925	0.34	1.433m	1k
802.11ax HEW20	0.943	0.25	5.446m	300
802.11ax HEW40	0.938	0.28	5.446m	300
802.11ax HEW80	0.937	0.28	5.446m	300
802.11ax HEW160	0.934	0.3	5.446m	300

Note:

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



1.1.5 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in Radio1-2.4GHz, n/ac/ax in Radio1-5GHz and ax in Radio2-6GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	Tera team 4.75			

Note: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

Equipment Name	Model Name	SW	R1: 2.4GHz	R1: 5GHz Full Band	R2: 6GHz	R3: 2.4GHz/ 5GHz/ 6GHz	R4: Bluetooth
Catalyst Wireless 9164I Wi-Fi 6E Series Access Point	CW9164I-B	Cisco	V	V (with 80+80MHz)	V	V	V
	CW9164I-MR	Meraki	V	V (without 80+80MHz)	V	V	V

Note1: From the above models, model: CW9164I-B was selected as representative model for the test and its data was recorded in this report.

Note2: The above information was declared by manufacturer.

1.1.7 Table for Radio function

Function Radio	WLAN 2.4GHz	WLAN 5GHz UNII 1~2A	WLAN 5GHz UNII 2C~3	WLAN 6GHz UNII 5~8	Bluetooth
1 (Iron Radio)	V	V	V	-	-
2 (Pine Radio)	-	-	-	V	-
3 (Scanning Radio)	V	V	V	V	-
4	-	-	-	-	V

Note1 : The above information was declared by manufacture.

Note2 : The Radio 2 and Radio 3 can't operate simultaneously.

**1.1.8 Table for EUT Operation Function**

Mode	Operation Function
1	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Bluetooth
2	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Bluetooth
3	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Bluetooth

Note: The above information was declared by manufacturer.



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 D03 v01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 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 ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Owen Hsu	20.3~20.7 / 60~62	Jan. 22, 2022~ May 13, 2022
Radiated for below 1GHz	03CH04-CB	RJ Huang	23.8-24.9 / 55-58	Sep. 26, 2022~ Sep. 27, 2022
Radiated for cabinet	03CH04-CB	Simmon Cheng	23.8-24.9 / 55-58	Feb. 26, 2022~ Apr. 29, 2022
Radiated for co-location	03CH03-CB	Simmon Cheng	23.5-24.6 / 55-59	Apr. 19, 2022
AC Conduction	CO02-CB	Elvin Yeh	20~22 / 60~63	Sep. 28, 2022

Note: The tested sample of the Radiated below 1GHz & AC Conduction test item was received on Jul. 21, 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 Date: Before Jun. 01, 2022

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%

Test Date: After May 31, 2022

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Radio 1:

<Non-Beamforming Mode>

For 20/40/80MHz

For 1T1S:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	17
5230MHz	17



Mode	Power Setting
5270MHz	17
5310MHz	17
5510MHz	17
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	17
5290MHz	17
5530MHz	17
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17

**For 2T1S:**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	17
5270MHz	17
5310MHz	15
5510MHz	15
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17



Mode	Power Setting
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	15
5290MHz	17
5530MHz	15
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17

**For 4T1S:**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	15
5300MHz	15
5320MHz	15
5500MHz	16
5580MHz	16
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	16
5300MHz	16
5320MHz	15
5500MHz	15
5580MHz	16
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	14
5230MHz	17
5270MHz	16
5310MHz	14
5510MHz	14
5550MHz	16
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17



Mode	Power Setting
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	13
5290MHz	13
5530MHz	14
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17

For 80+80MHz**For 2T2S:**

Mode	Power Setting
802.11ax HEW80+80_Nss1,(MCS0)_1TX	-
#5210MHz,5290MHz	15
802.11ax HEW80+80_Nss1,(MCS0)_1TX	-
5210MHz,#5290MHz	15
802.11ax HEW80+80_Nss2,(MCS0)_2TX	-
#5530MHz,#5610MHz	15

For 4T2S:

Mode	Power Setting
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-
#5210MHz,5290MHz	9
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-
5210MHz,#5290MHz	9
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	13

**<Beamforming Mode>****For 20/40/80MHz****For 2T1S:**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	17
5270MHz	17
5310MHz	15
5510MHz	15
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	15
5290MHz	17
5530MHz	15
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17

**For 4T1S:**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	15
5300MHz	15
5320MHz	15
5500MHz	15
5580MHz	16
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	14
5230MHz	17
5270MHz	15
5310MHz	14
5510MHz	14
5550MHz	16
5670MHz	16
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	13
5290MHz	13
5530MHz	14
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17

**For 80+80MHz****For 4T2S:**

Mode	Power Setting
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	-
#5210MHz,5290MHz	9
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	-
5210MHz,#5290MHz	9
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	13



For Radio 3:
For 20/40/80/160MHz
For 1T1S:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	18
5200MHz	19.5
5240MHz	19.5
5260MHz	19.5
5300MHz	20
5320MHz	18.5
5500MHz	18.5
5580MHz	19.5
5700MHz	18.5
5720MHz Straddle 5.47-5.725GHz	20.5
5720MHz Straddle 5.725-5.85GHz	20.5
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	17
5200MHz	19
5240MHz	19
5260MHz	19
5300MHz	19.5
5320MHz	18
5500MHz	17.5
5580MHz	19
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	20.5
5720MHz Straddle 5.725-5.85GHz	20.5
5745MHz	19.5
5785MHz	19.5
5825MHz	19
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	16.5
5230MHz	19.5
5270MHz	19.5
5310MHz	17
5510MHz	16.5
5550MHz	19.5
5670MHz	18



Mode	Power Setting
5710MHz Straddle 5.47-5.725GHz	19.5
5710MHz Straddle 5.725-5.85GHz	19.5
5755MHz	19.5
5795MHz	19.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	16
5290MHz	16.5
5530MHz	16.5
5610MHz	19
5690MHz Straddle 5.47-5.725GHz	19.5
5690MHz Straddle 5.725-5.85GHz	19.5
5775MHz	19.5
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	17
5250MHz Straddle 5.25-5.35GHz	17
5570MHz	17

Note1: Evaluated HEW20/HEW40/HEW80/HEW160 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.

Note2: 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	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	EUT-R1: 2.4GHz + Adapter
2	EUT-R1: 2.4GHz + PoE 1
3	EUT-R1: 2.4GHz + PoE 2
4	EUT-R1: 2.4GHz + PoE 3
5	EUT-R1: 2.4GHz + PoE 4
6	EUT-R1: 2.4GHz + PoE 5
Mode 2 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7 ~ 12 will follow this same test mode.	
7	EUT-R1: 5GHz + PoE 1
8	EUT-R2: 6GHz + PoE 1
9	EUT-R3: 2.4GHz + PoE 1
10	EUT-R3: 5GHz + PoE 1
11	EUT-R3: 6GHz + PoE 1
12	EUT-R4: Bluetooth + PoE 1
For operating mode 10 is the worst case and it was record in this test report.	

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
Operating Mode	
1	R1: 1T1S
2	R1: 2T1S
3	R1: 4T1S
4	R3: 1T1S
5	R1: 2T2S(80+80MHz)
6	R1: 4T2S(80+80MHz)



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
	The EUT was performed at X axis, Y axis and Z axis position and the worst case was found as below:
1	EUT in Z axis-R1: 2.4GHz + Adapter
2	EUT in Z axis-R1: 2.4GHz + PoE 1
3	EUT in Z axis-R1: 2.4GHz + PoE 2
4	EUT in Z axis-R1: 2.4GHz + PoE 3
5	EUT in Z axis-R1: 2.4GHz + PoE 4
6	EUT in Z axis-R1: 2.4GHz + PoE 5
Mode 4 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7~12 will follow this same test mode.	
7	EUT in X axis-R1: 5GHz + PoE 3
8	EUT in Y axis-R2: 6GHz + PoE 3
9	EUT in Y axis-R3: 2.4GHz + PoE 3
10	EUT in Z axis-R3: 5GHz + PoE 3
11	EUT in X axis-R3: 6GHz + PoE 3
12	EUT in Z axis-R4: Bluetooth + PoE 3
For operating mode 10 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Conducted measurement at transmit chains
Operating Mode > 1GHz	CTX(Harmonic and bandedge)
1	R1: 1T1S
2	R1: 2T1S
3	R1: 4T1S
4	R3: 1T1S
5	R1: 2T2S(80+80MHz)
6	R1: 4T2S(80+80MHz)

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(Cabinet)
The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found as below. So the measurement will follow this same test configuration.	
1	For R1:1T1S_EUT in X axis
2	For R1:2T1S_EUT in Z axis
3	For R1:4T1S_EUT in X axis
4	For R3:1T1S_EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions above 1GHz, and the worst case was found as below. So the measurement will follow this same test configuration.	
1	EUT in X axis - R1: 2.4GHz/5GHz Full Band
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	R1: 2.4GH + R1: 5GHz Full Band +R2: 6GHz + R3: 2.4GHz + R4: Bluetooth
2	R1: 2.4GH + R1: 5GHz Full Band +R2: 6GHz + R3: 5GHz + R4: Bluetooth
3	R1: 2.4GH + R1: 5GHz Full Band +R2: 6GHz + R3: 6GHz + R4: Bluetooth
Refer to Sporton Test Report No.: FA271817 for Co-location RF Exposure Evaluation.	

Note: The Adapter and PoEs are for measurement only, would not be marketed.

Adapter and PoEs information as below:

Power	Brand	Model
Adapter	UMEC	MA-PWR-50WAC
PoE 1	PHIHONG	POEA33U-1ATE
PoE 2	PHIHONG	POE60U-1BT-X
PoE 3	Delta	ADH-65AR B
PoE 4	Microchip	PD-9001GR/AT/AC
PoE 5	PHIHONG	POE29U-1AT



2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Wall-mounted rack*1

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 1	PHIHONG	POEA33U-1ATE	N/A
B	Flash disk3.0	Transcend	639205 7755	N/A
C	NB	DELL	E4300	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 3	Delta	ADH-65AR B	N/A

For Radiated (above 1GHz):

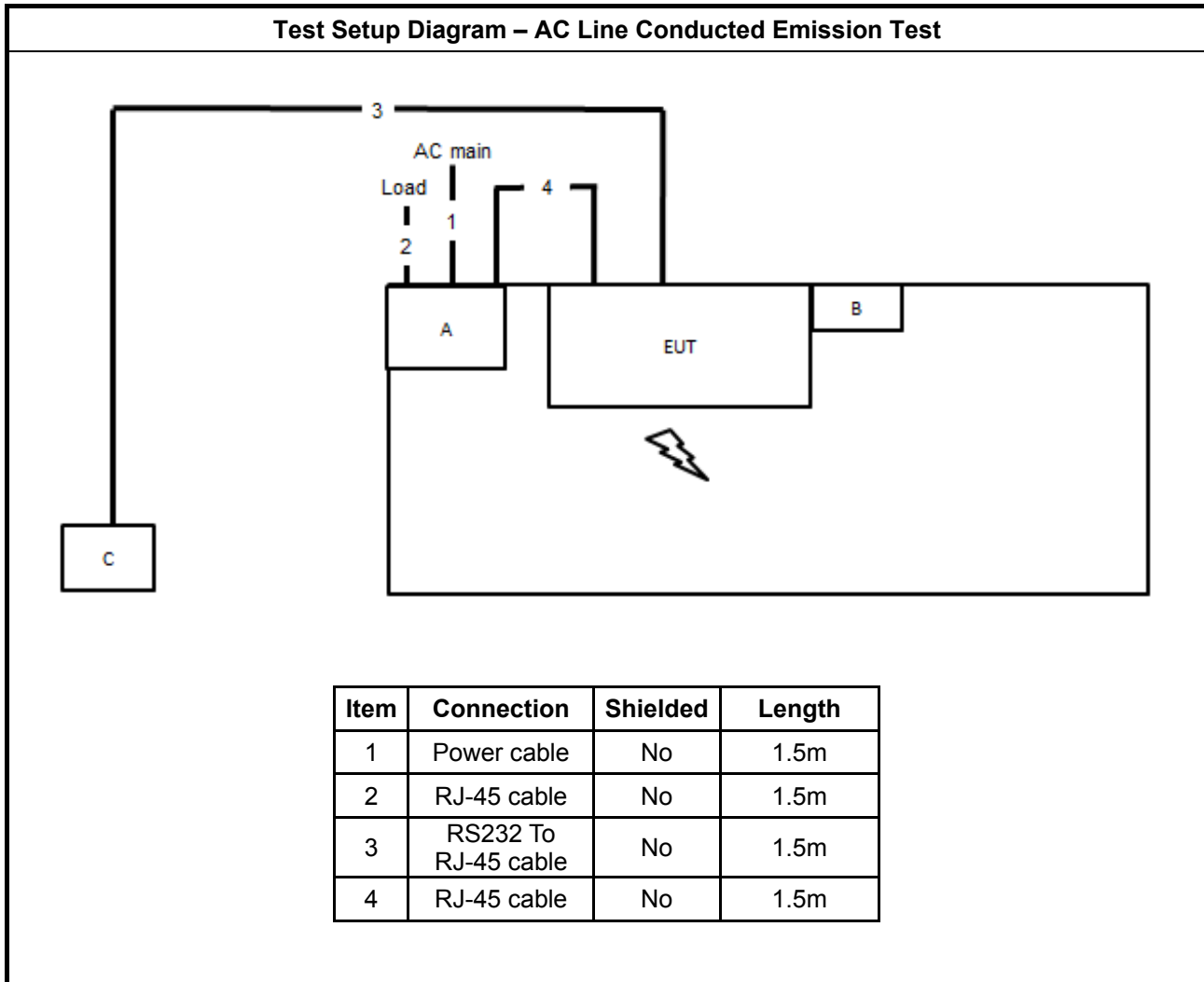
For cabinet:

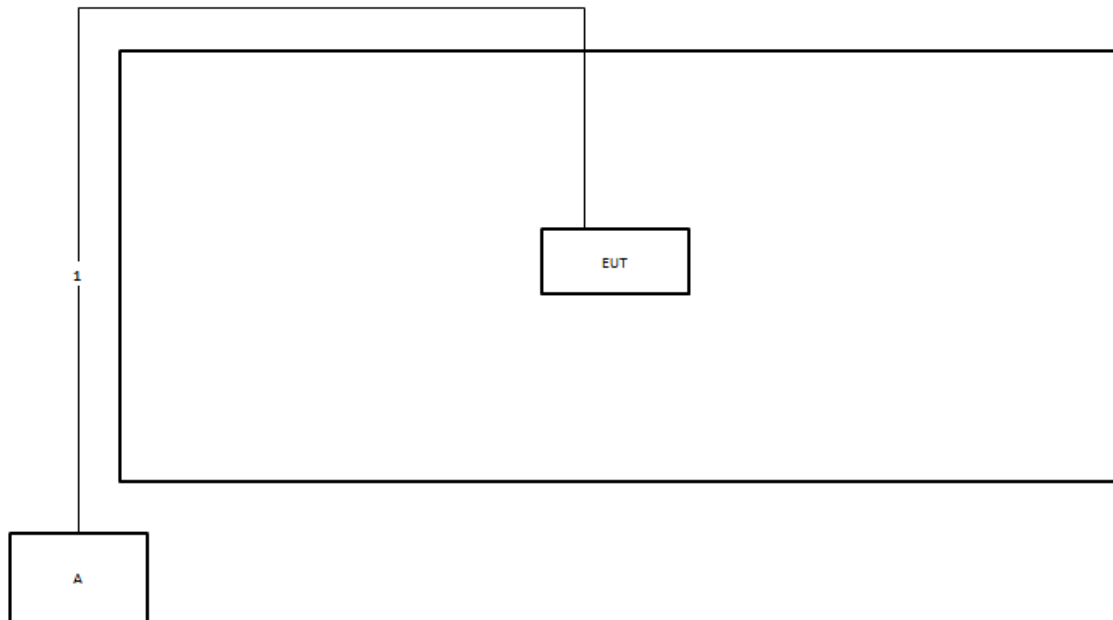
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE 1	PHIHONG	POEA33U-1ATE	N/A

For RF Conducted:

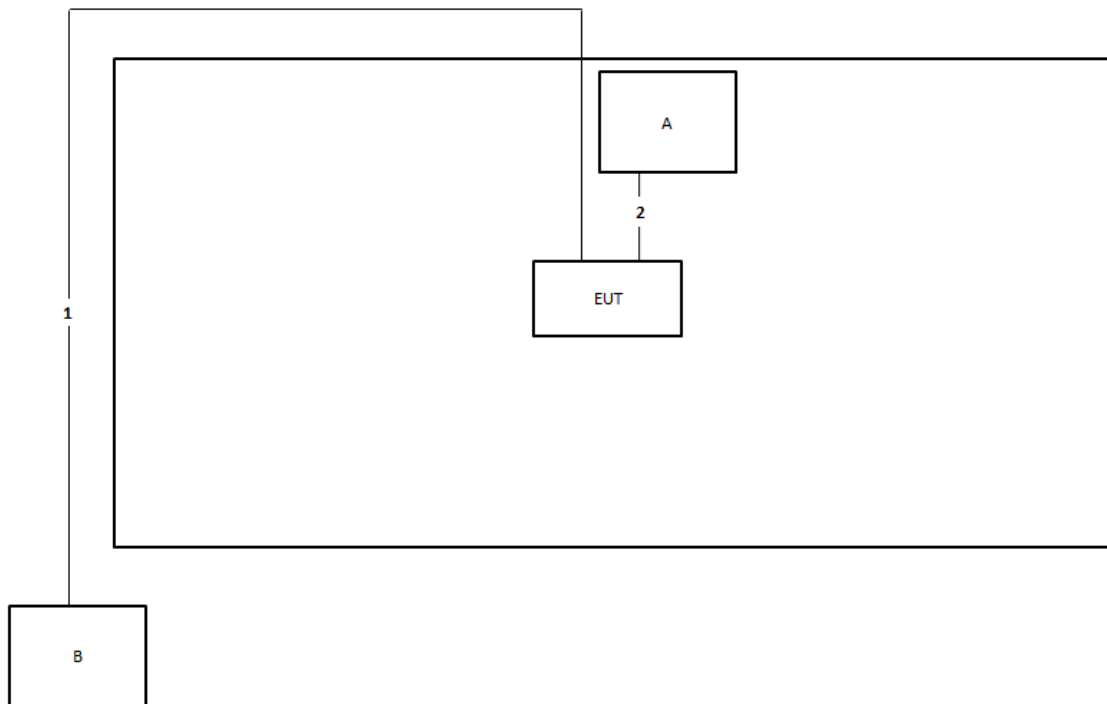
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE 1	PHIHONG	POEA33U-1ATE	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz for Cabinet


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Console cable (RS-232 to RJ-45)	No	0.5m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

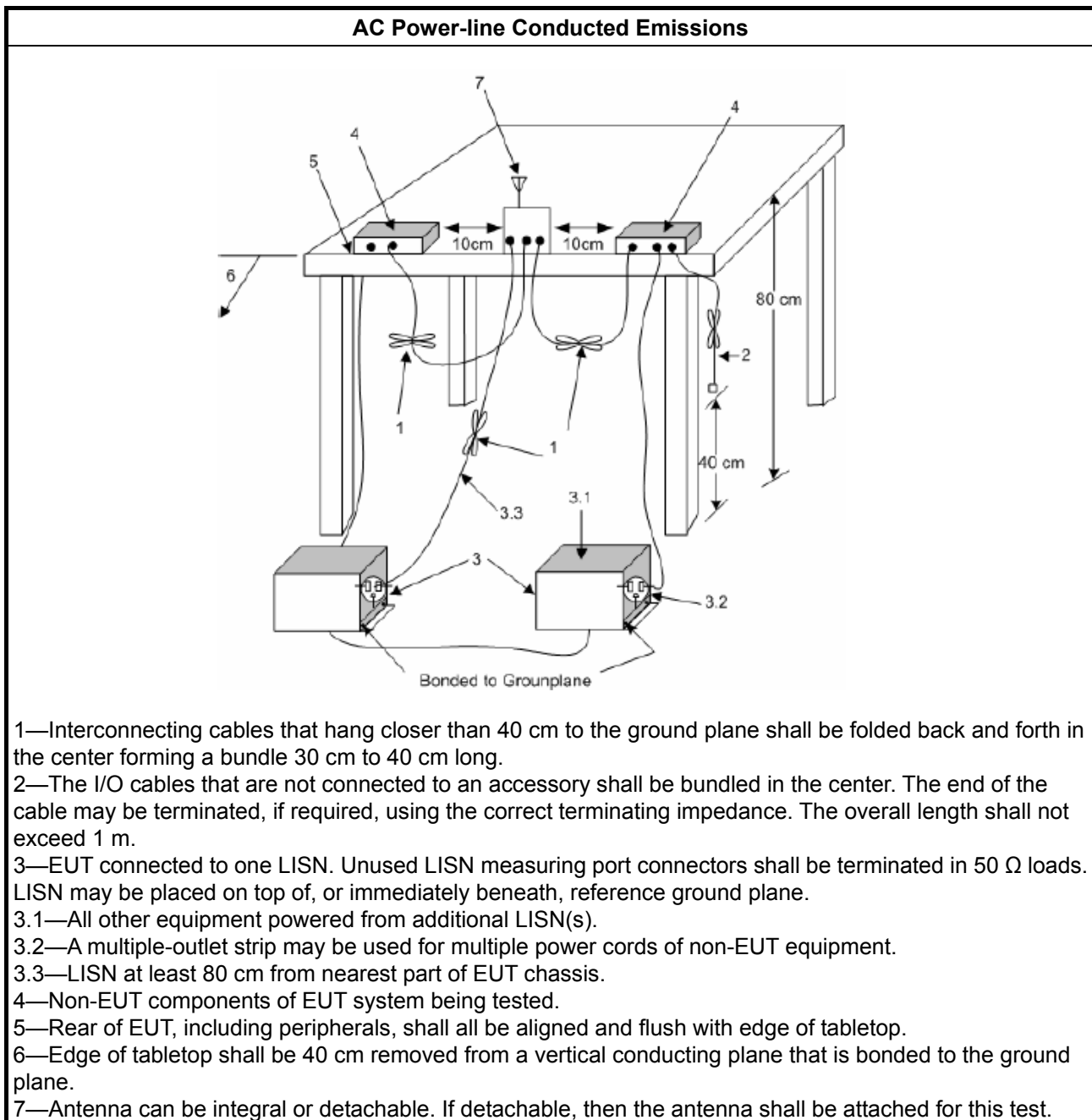
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 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 $11 \text{ dBm} + 10 \log B$, 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 $11 \text{ dBm} + 10 \log B$, 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 $\geq 500\text{kHz}$.
☐	For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq 500\text{kHz}$.
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 $\geq 500\text{kHz}$.

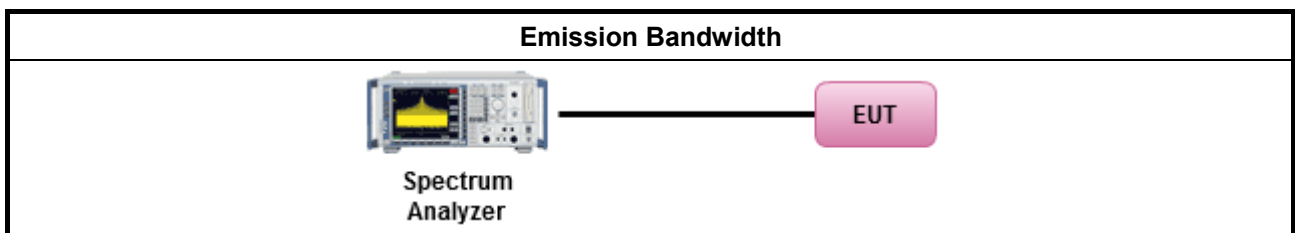
3.2.2 Measuring Instruments

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

3.2.3 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.

3.2.4 Test Setup





3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Output Power

3.3.1 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.

3.3.2 Measuring Instruments

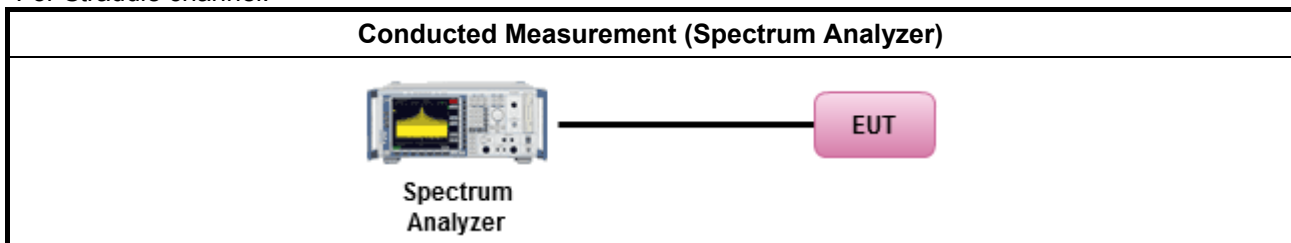
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

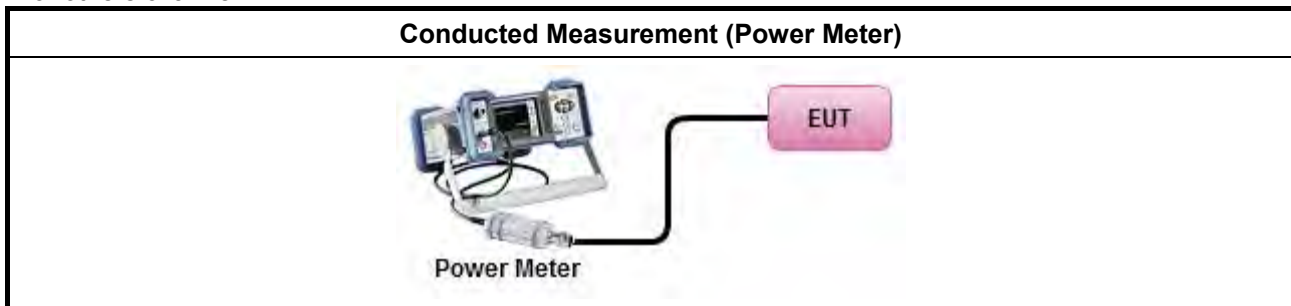
Test Method	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty 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.

3.3.4 Test Setup

For Straddle channel:



For others channel:



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 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.

3.4.2 Measuring Instruments

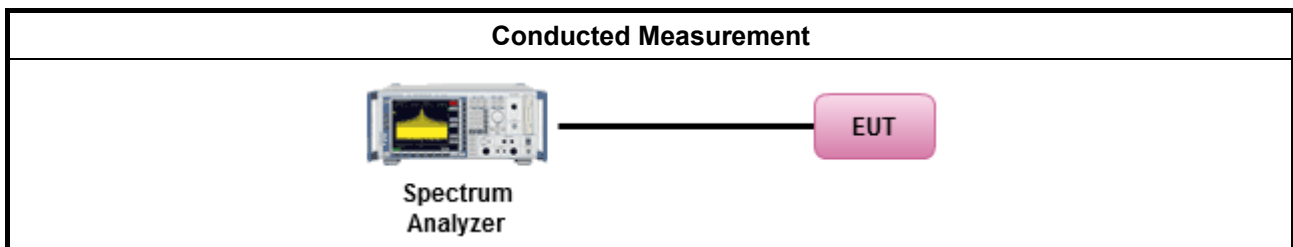
Refer a test equipment and calibration data table in this test report.

3.4.3 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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 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).	

3.5.2 Measuring Instruments

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

3.5.3 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.	

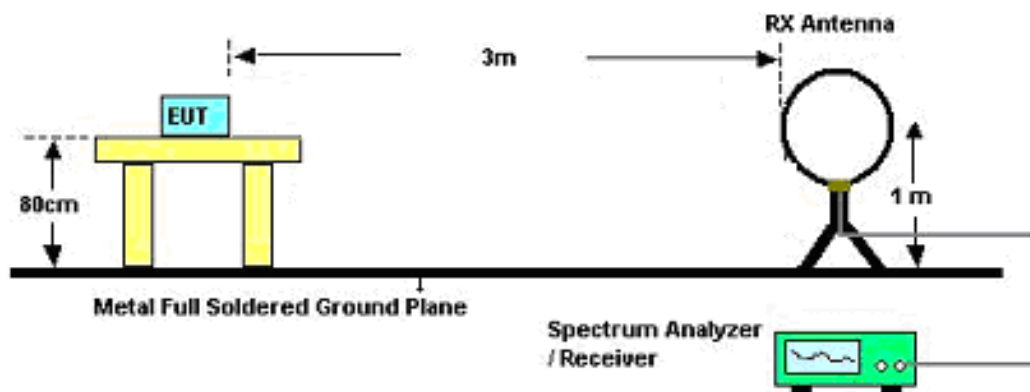
Test Method

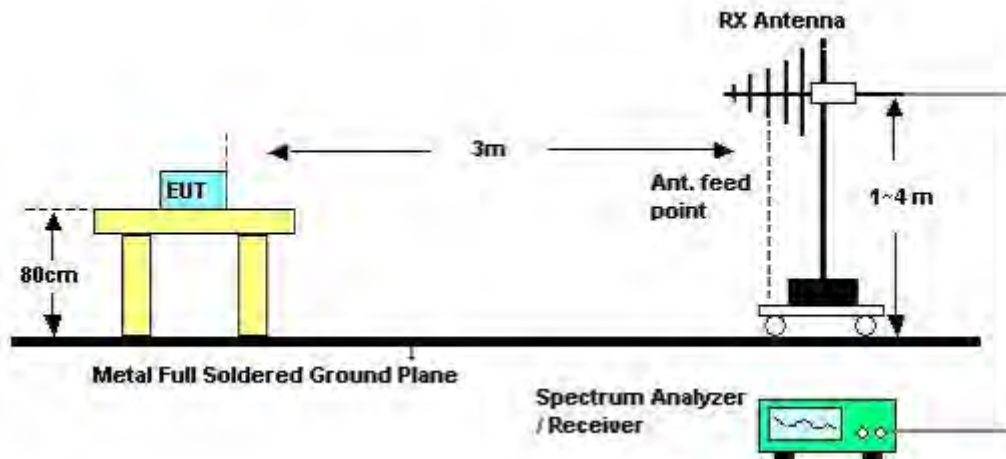
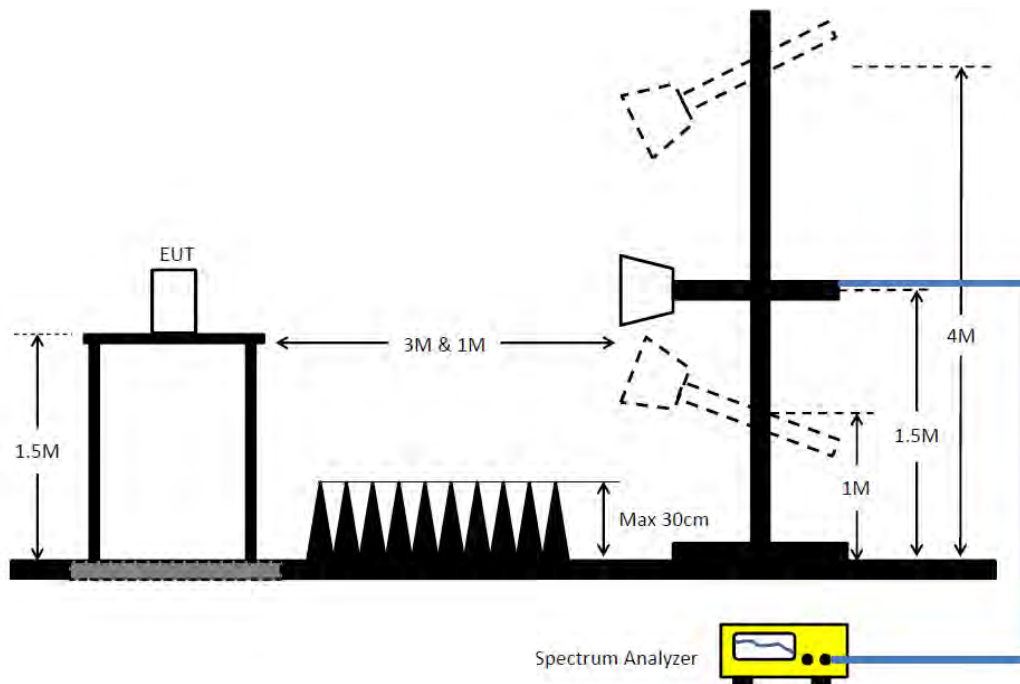
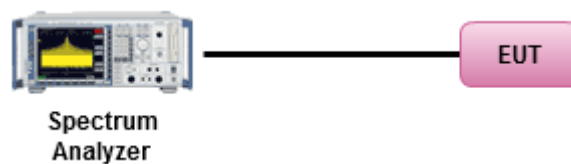
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

Test Method

- For conducted and cabinet radiation measurement, refer as FCC KDB 789033 D02, clause G3).
- For conducted unwanted emissions into non-restricted bands (relative emission limits).
Devices with multiple transmit chains:
Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding $10 \log(N)$ if the measurements are made relative to the in-band emissions on the individual outputs.
- For conducted unwanted emissions into restricted bands (absolute emission limits).
Devices with multiple transmit chains using options given below:
(1) Measure and sum the spectra across the outputs or
(2) Measure and add $10 \log(N)$ dB
- For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions
9kHz ~30MHz


30MHz~1GHz

Above 1GHz

Transmitter Conducted Unwanted Emissions




3.5.5 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.

3.5.6 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.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Jan. 07, 2022	Jan. 06, 2023	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 22, 2021	Dec. 21, 2022	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 06, 2022	May 05, 2023	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 19, 2021	Oct. 18, 2022	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 18, 2022	Mar. 17, 2023	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~ 18GHz 3m	May 06, 2021	May 05, 2022	Radiation (03CH03-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~ 18GHz	Jan. 21, 2022	Jan. 20, 2023	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 04, 2021	Jun. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 02, 2022	Aug. 01, 2023	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 09, 2021	Oct. 08, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 16, 2021	Dec. 15, 2022	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~ 18GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH04-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 28, 2022	Mar. 27, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz~ 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-07	1 GHz– 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz– 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz– 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz– 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz– 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P1	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P2	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P3	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P4	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P5	1 GHz– 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	1339408	300MHz~ 40GHz	Sep. 06, 2021	Sep. 05, 2022	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1517009	300MHz~ 40GHz	Sep. 06, 2021	Sep. 05, 2022	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.



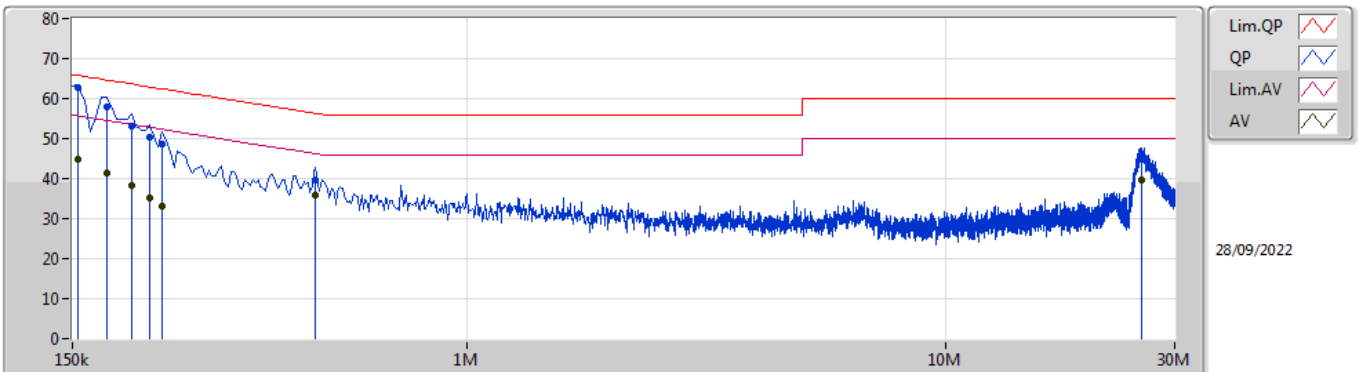
Conducted Emissions at Powerline

Appendix A

Summary

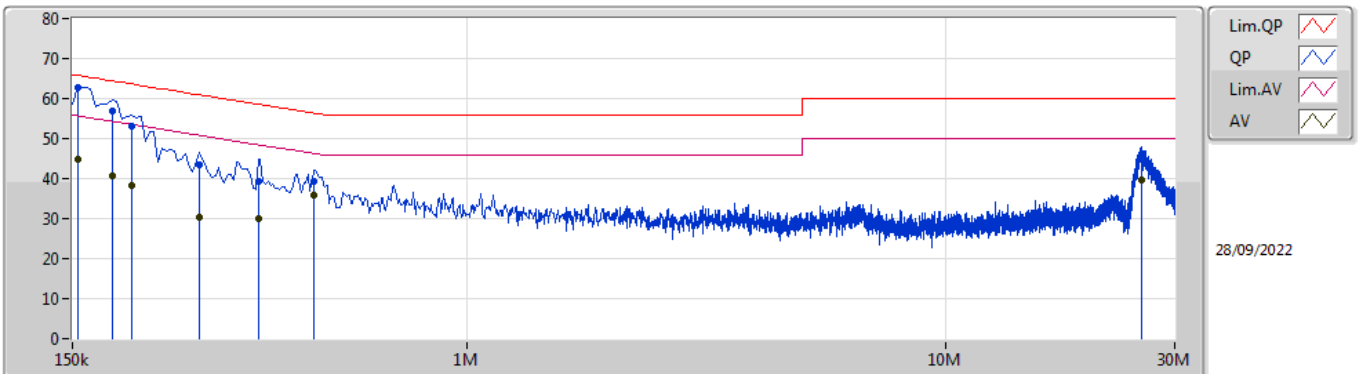
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 10	Pass	QP	154.5k	62.69	65.75	-3.06	Line

Mode 10



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.5k	62.69	65.75	-3.06	10.24	Line	"Worst"	52.45	0.12	0.02	10.10			
AV	154.5k	44.80	55.75	-10.95	10.24	Line	-	34.56	0.12	0.02	10.10			
QP	177k	57.89	64.62	-6.73	10.22	Line	-	47.67	0.12	0.02	10.08			
AV	177k	41.44	54.62	-13.18	10.22	Line	-	31.22	0.12	0.02	10.08			
QP	199.5k	53.02	63.63	-10.61	10.20	Line	-	42.82	0.12	0.02	10.06			
AV	199.5k	38.18	53.63	-15.45	10.20	Line	-	27.98	0.12	0.02	10.06			
QP	217.5k	50.44	62.92	-12.48	10.21	Line	-	40.23	0.12	0.02	10.07			
AV	217.5k	35.01	52.92	-17.91	10.21	Line	-	24.80	0.12	0.02	10.07			
QP	231k	48.45	62.41	-13.96	10.21	Line	-	38.24	0.12	0.02	10.07			
AV	231k	33.04	52.41	-19.37	10.21	Line	-	22.83	0.12	0.02	10.07			
QP	483k	39.70	56.29	-16.59	10.26	Line	-	29.44	0.12	0.02	10.12			
AV	483k	35.86	46.29	-10.43	10.26	Line	-	25.60	0.12	0.02	10.12			
QP	25.539M	45.43	60.00	-14.57	10.82	Line	-	34.61	0.40	0.20	10.22			
AV	25.539M	39.56	50.00	-10.44	10.82	Line	-	28.74	0.40	0.20	10.22			

Mode 10



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.5k	62.60	65.75	-3.15	10.28	Neutral	"Worst"	52.32	0.16	0.02	10.10			
AV	154.5k	44.91	55.75	-10.84	10.28	Neutral	-	34.63	0.16	0.02	10.10			
QP	181.5k	56.88	64.41	-7.53	10.26	Neutral	-	46.62	0.16	0.02	10.08			
AV	181.5k	40.67	54.41	-13.74	10.26	Neutral	-	30.41	0.16	0.02	10.08			
QP	199.5k	53.27	63.63	-10.36	10.24	Neutral	-	43.03	0.16	0.02	10.06			
AV	199.5k	38.21	53.63	-15.42	10.24	Neutral	-	27.97	0.16	0.02	10.06			
QP	276k	43.29	60.93	-17.64	10.26	Neutral	-	33.03	0.16	0.02	10.08			
AV	276k	30.22	50.93	-20.71	10.26	Neutral	-	19.96	0.16	0.02	10.08			
QP	366k	39.38	58.60	-19.22	10.28	Neutral	-	29.10	0.16	0.02	10.10			
AV	366k	29.92	48.60	-18.68	10.28	Neutral	-	19.64	0.16	0.02	10.10			
QP	478.5k	39.34	56.36	-17.02	10.30	Neutral	-	29.04	0.16	0.02	10.12			
AV	478.5k	35.72	46.36	-10.64	10.30	Neutral	-	25.42	0.16	0.02	10.12			
QP	25.62M	45.53	60.00	-14.47	10.79	Neutral	-	34.74	0.36	0.21	10.22			
AV	25.62M	39.54	50.00	-10.46	10.79	Neutral	-	28.75	0.36	0.21	10.22			

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.53M	16.432M	16M4D1D	19.29M	16.402M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.54M	18.921M	18M9D1D	21.36M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.8M	37.781M	37M8D1D	40.5M	37.721M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.2M	77.001M	77M0D1D	82.2M	77.001M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.74M	16.432M	16M4D1D	19.56M	16.432M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.54M	18.951M	19M0D1D	21.42M	18.951M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.56M	37.721M	37M7D1D	40.26M	37.721M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.44M	77.121M	77M1D1D	82.44M	77.121M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.77M	16.432M	16M4D1D	15.315M	13.298M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.72M	18.921M	18M9D1D	15.93M	14.528M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.74M	37.781M	37M8D1D	35.595M	33.758M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.2M	77.001M	77M0D1D	76.2M	73.013M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	16.522M	16M5D1D	3.12M	3.658M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.9M	18.981M	19M0D1D	4.42M	4.798M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.56M	37.781M	37M8D1D	3.92M	4.858M
802.11ax HEW80_Nss1,(MCS0)_1TX	75.72M	77.241M	77M2D1D	4.04M	16.212M

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

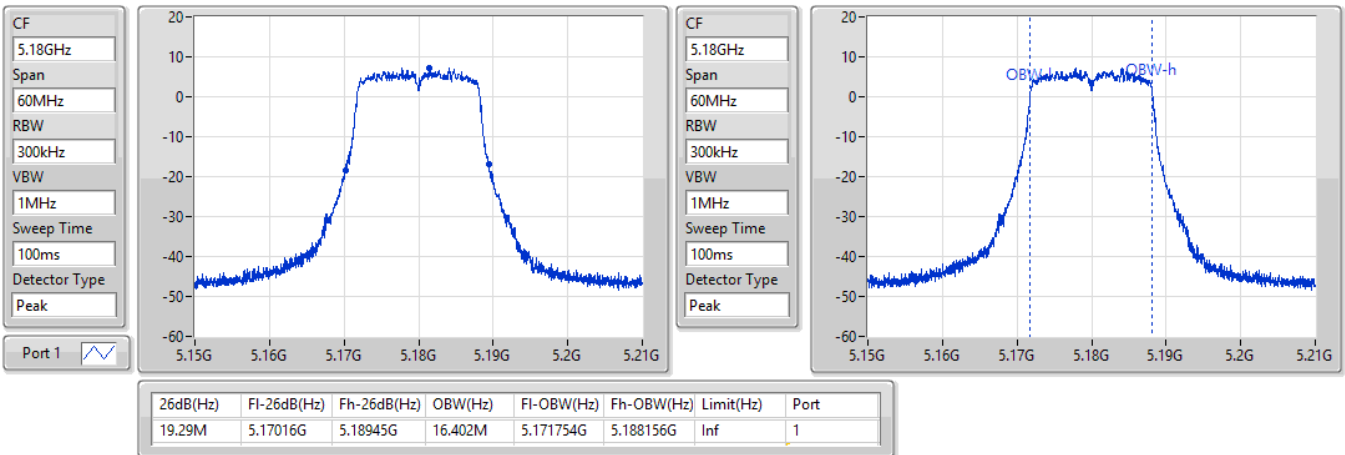
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	19.29M	16.402M
5200MHz	Pass	Inf	19.53M	16.432M
5240MHz	Pass	Inf	19.53M	16.432M
5260MHz	Pass	Inf	19.74M	16.432M
5300MHz	Pass	Inf	19.68M	16.432M
5320MHz	Pass	Inf	19.56M	16.432M
5500MHz	Pass	Inf	19.53M	16.432M
5580MHz	Pass	Inf	19.77M	16.432M
5700MHz	Pass	Inf	19.56M	16.432M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.315M	13.298M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.658M
5745MHz	Pass	500k	16.29M	16.462M
5785MHz	Pass	500k	16.29M	16.492M
5825MHz	Pass	500k	16.29M	16.522M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	21.36M	18.921M
5200MHz	Pass	Inf	21.54M	18.921M
5240MHz	Pass	Inf	21.42M	18.891M
5260MHz	Pass	Inf	21.42M	18.951M
5300MHz	Pass	Inf	21.54M	18.951M
5320MHz	Pass	Inf	21.48M	18.951M
5500MHz	Pass	Inf	21.45M	18.921M
5580MHz	Pass	Inf	21.57M	18.921M
5700MHz	Pass	Inf	21.72M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.93M	14.528M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.798M
5745MHz	Pass	500k	18.81M	18.921M
5785MHz	Pass	500k	18.9M	18.981M
5825MHz	Pass	500k	18.78M	18.951M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	40.5M	37.721M
5230MHz	Pass	Inf	40.8M	37.781M
5270MHz	Pass	Inf	40.26M	37.721M
5310MHz	Pass	Inf	40.56M	37.721M
5510MHz	Pass	Inf	40.74M	37.661M
5550MHz	Pass	Inf	40.5M	37.721M
5670MHz	Pass	Inf	40.56M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.595M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.858M
5755MHz	Pass	500k	34.98M	37.781M
5795MHz	Pass	500k	37.56M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.001M
5290MHz	Pass	Inf	82.44M	77.121M
5530MHz	Pass	Inf	82.2M	77.001M
5610MHz	Pass	Inf	81.84M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.013M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	16.212M
5775MHz	Pass	500k	75.72M	77.241M

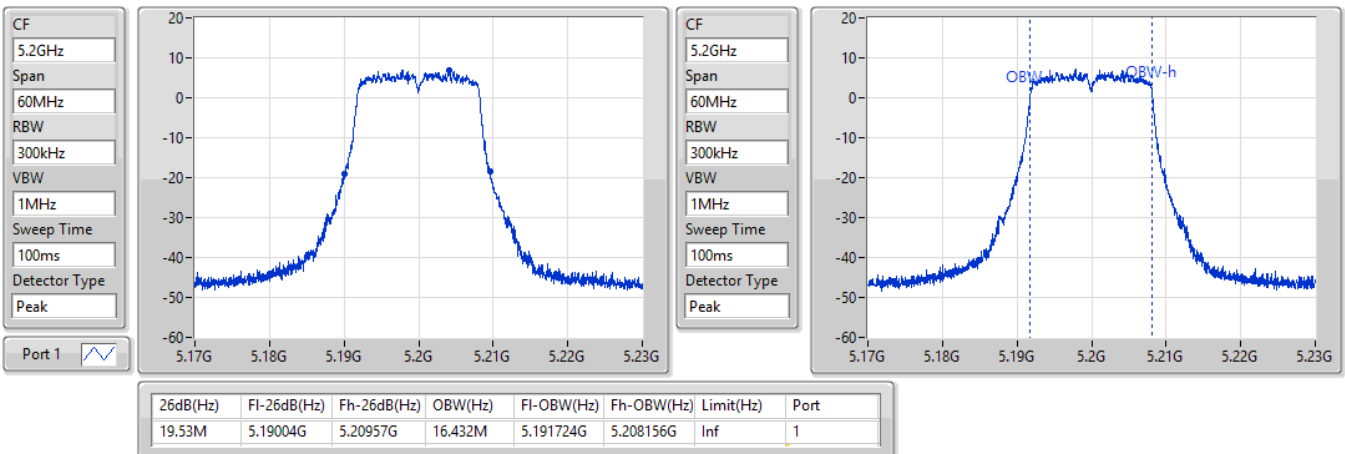
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX
EBW
5180MHz

10/02/2022

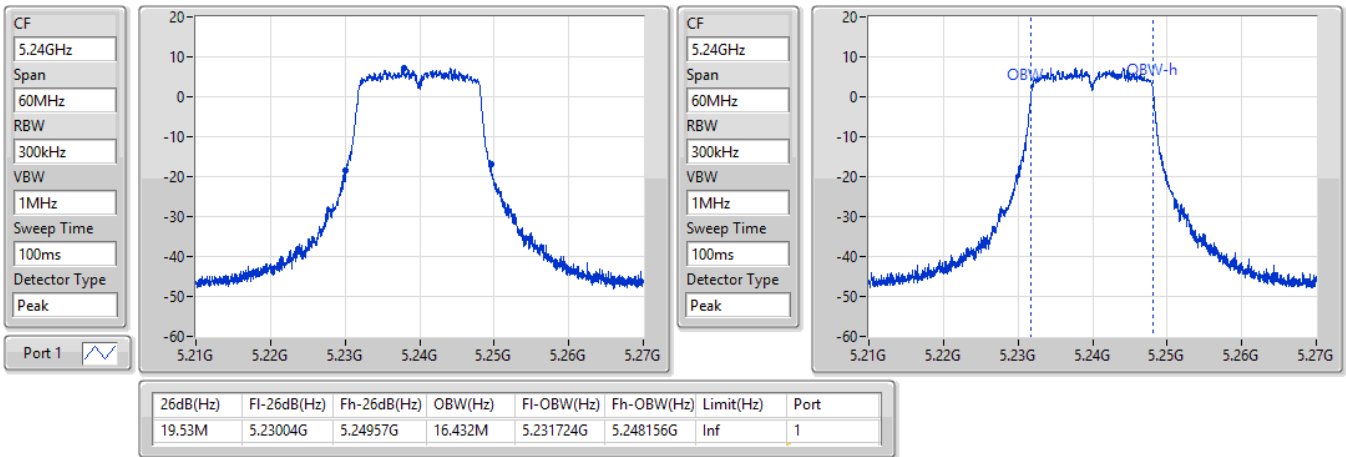

802.11a_Nss1,(6Mbps)_1TX
EBW
5200MHz

10/02/2022

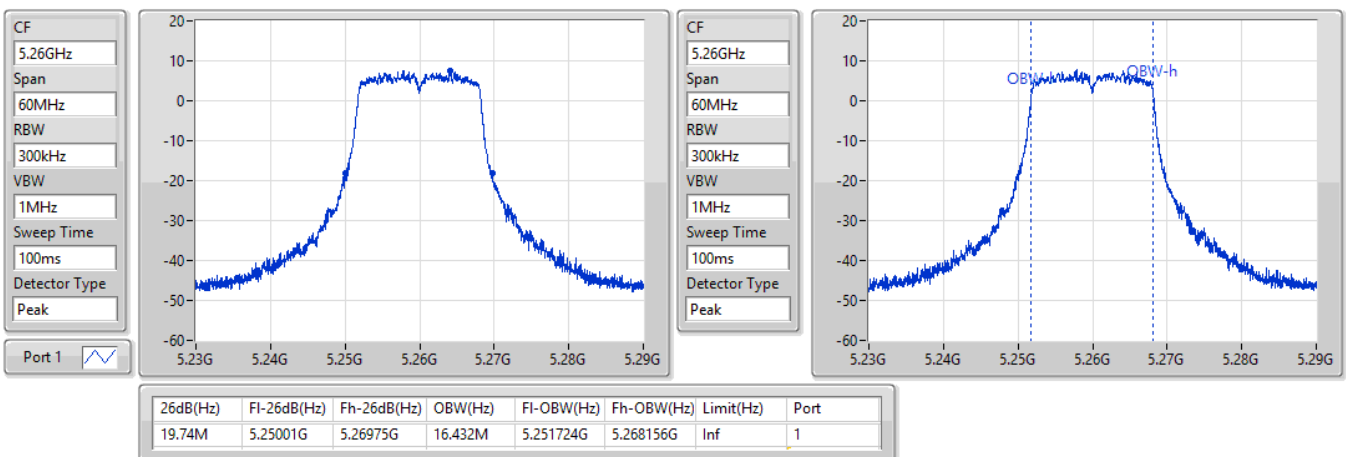


802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

10/02/2022

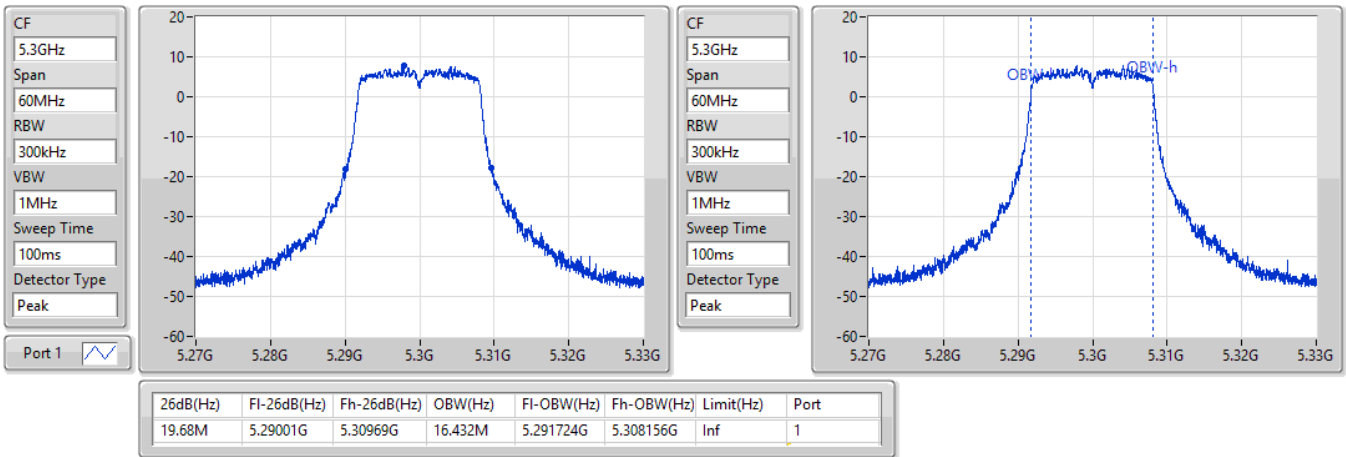

802.11a_Nss1,(6Mbps)_1TX
EBW
5260MHz

10/02/2022

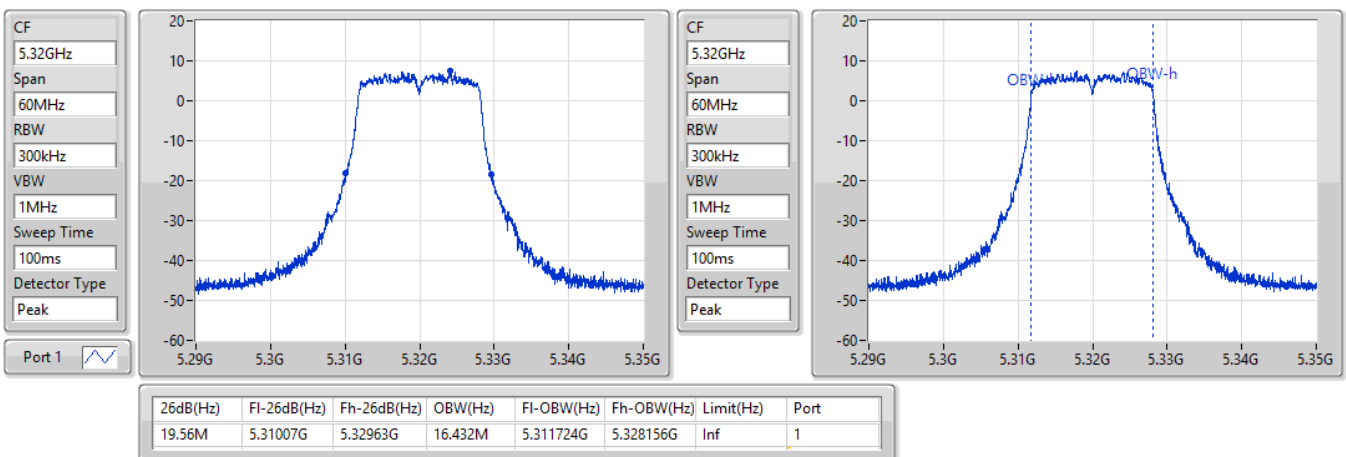


802.11a_Nss1,(6Mbps)_1TX
EBW
5300MHz

10/02/2022

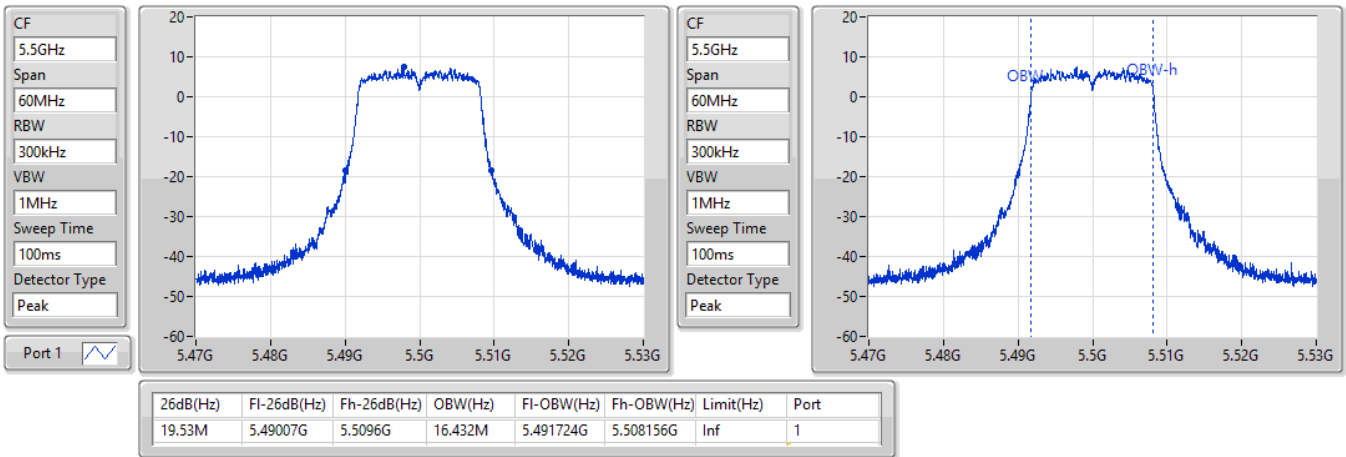

802.11a_Nss1,(6Mbps)_1TX
EBW
5320MHz

10/02/2022

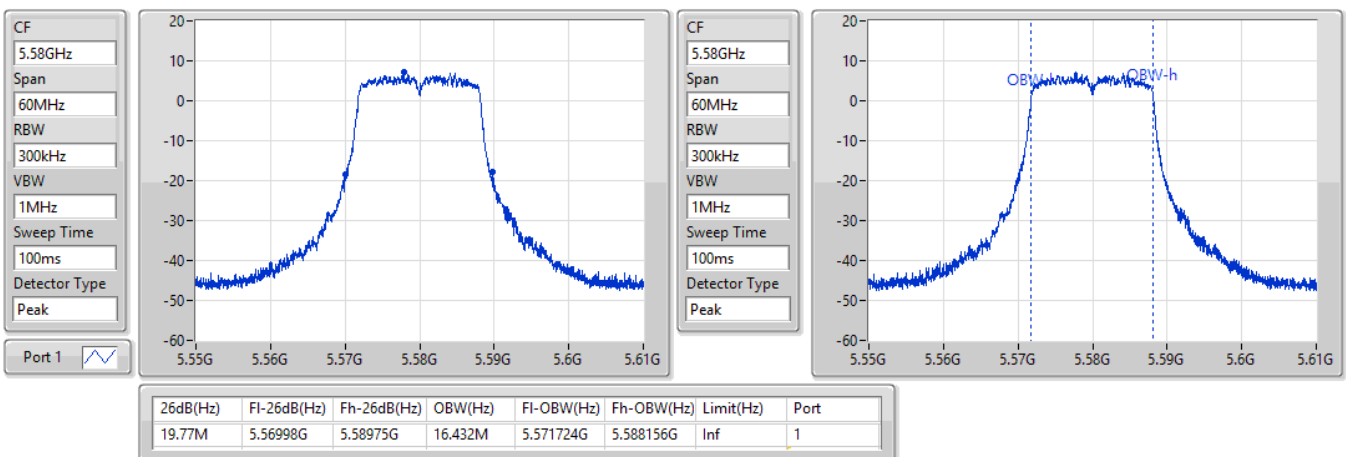


802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

10/02/2022

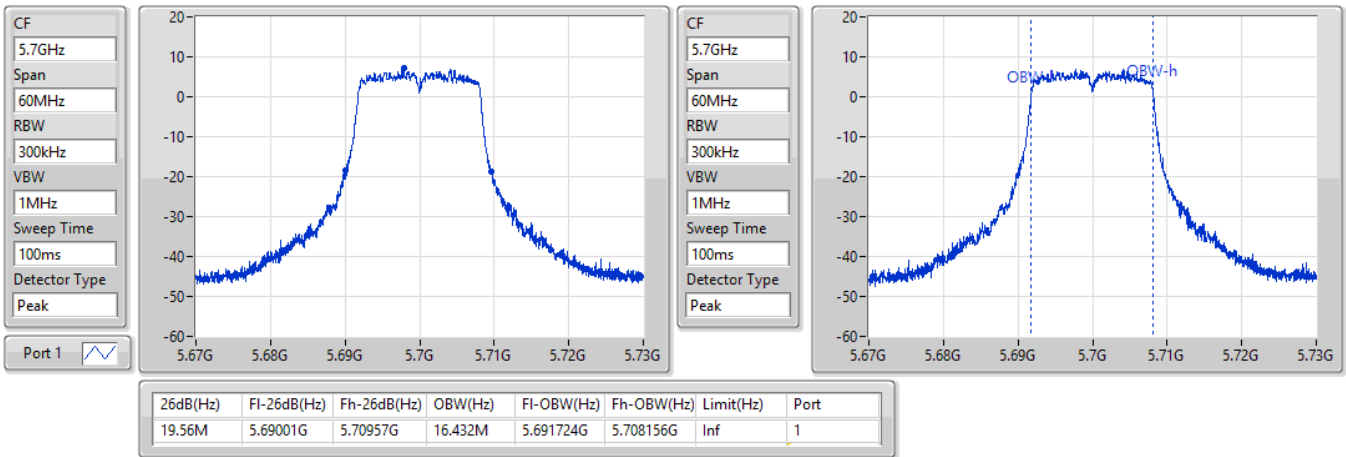

802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

10/02/2022

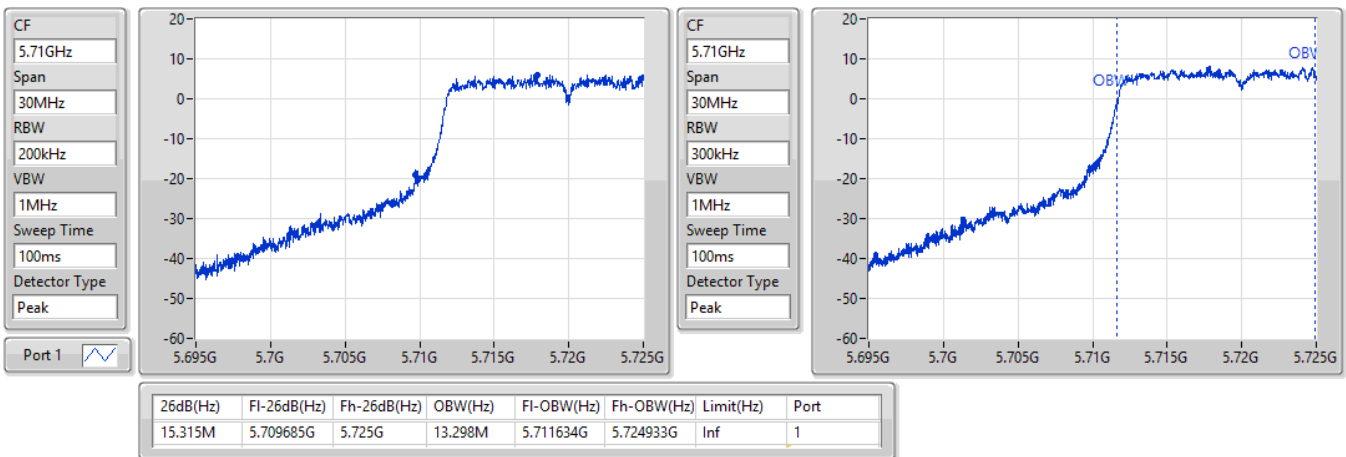


802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

10/02/2022

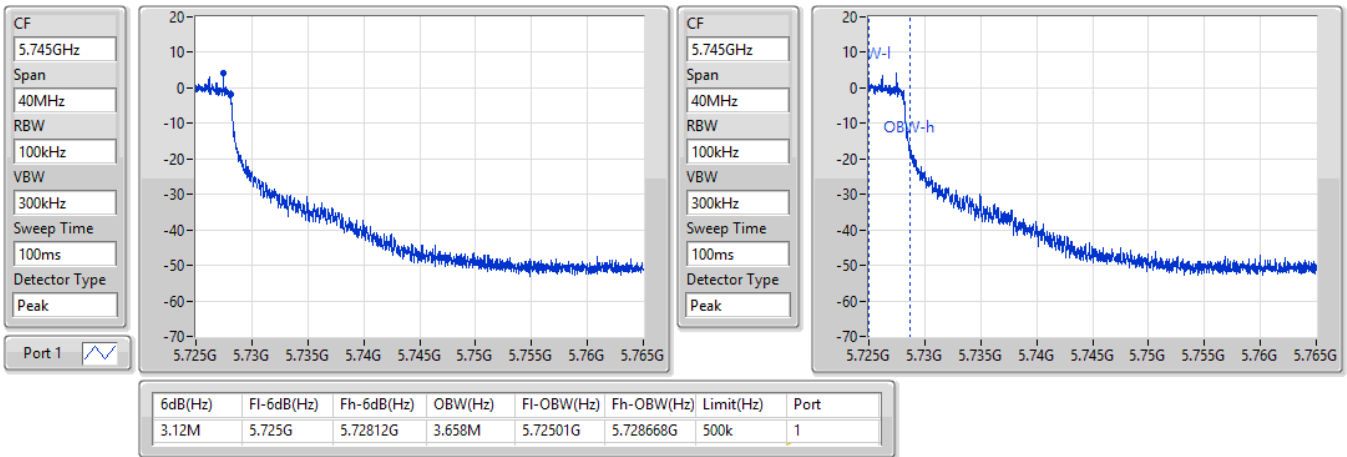

802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

10/02/2022

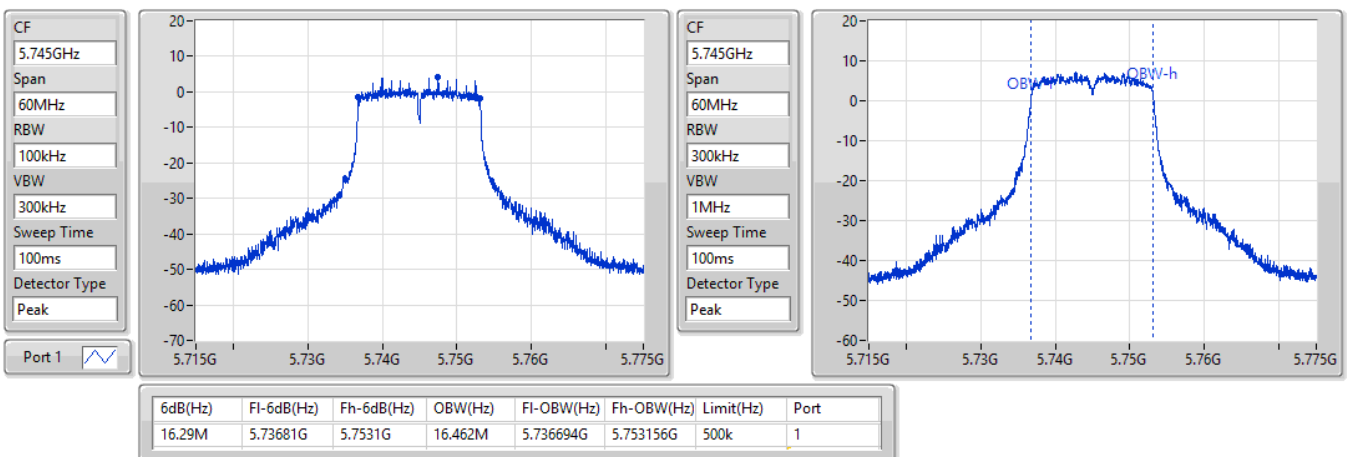


802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

10/02/2022

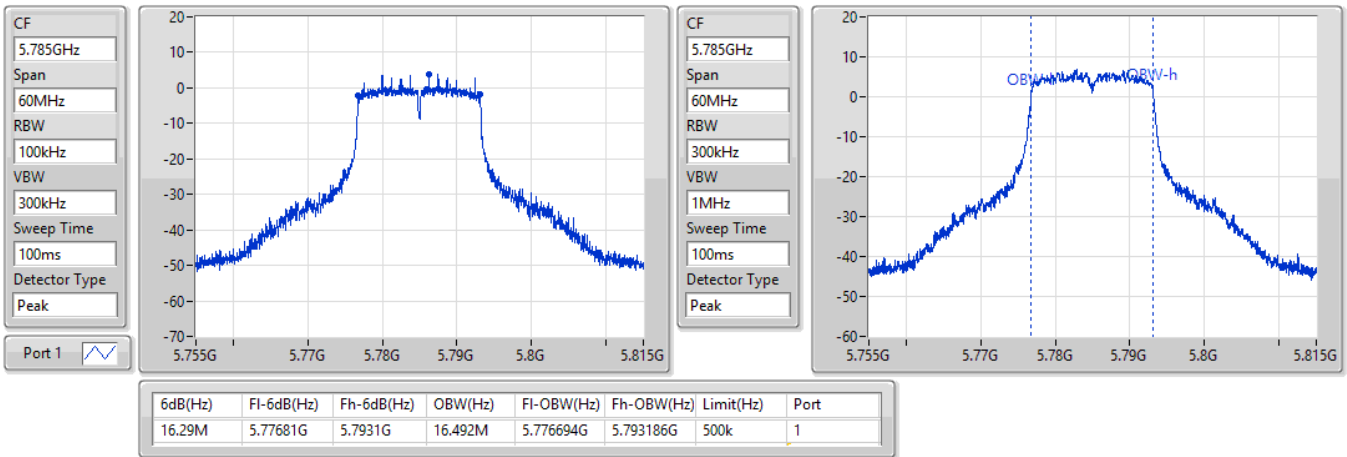

802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

10/02/2022

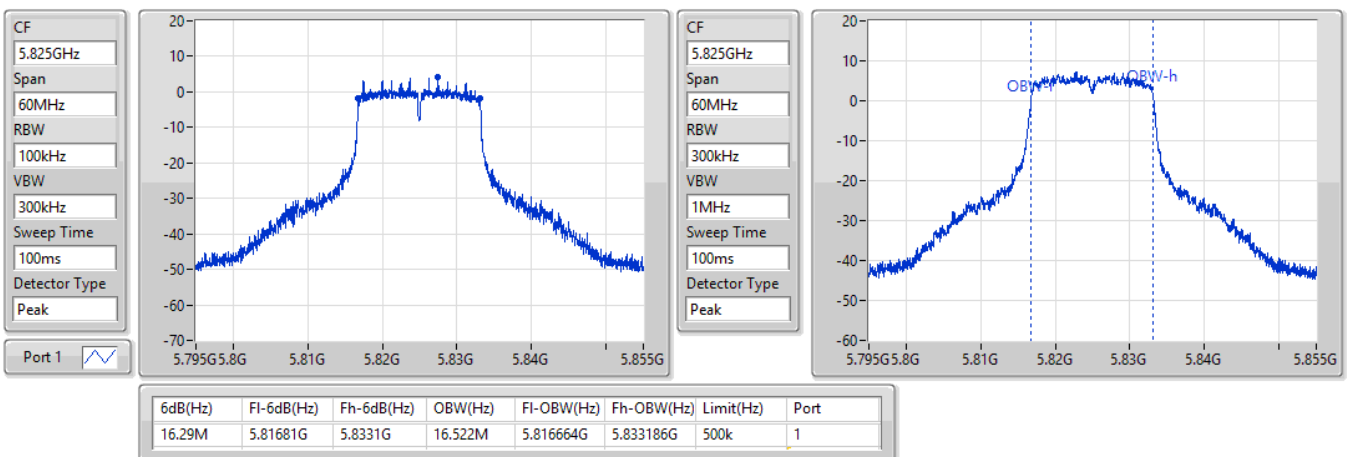


802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

10/02/2022

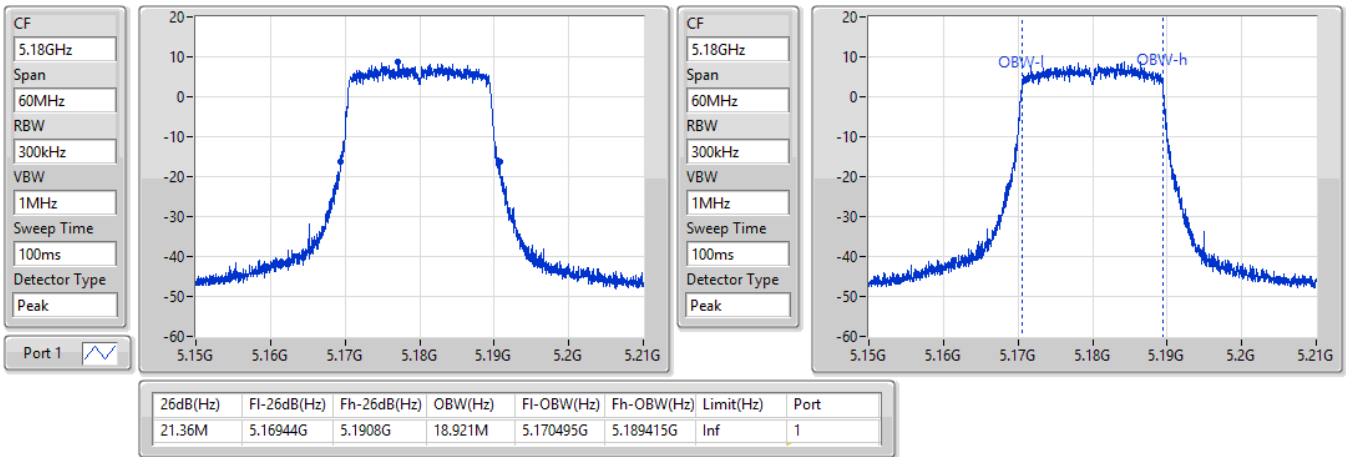

802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

10/02/2022

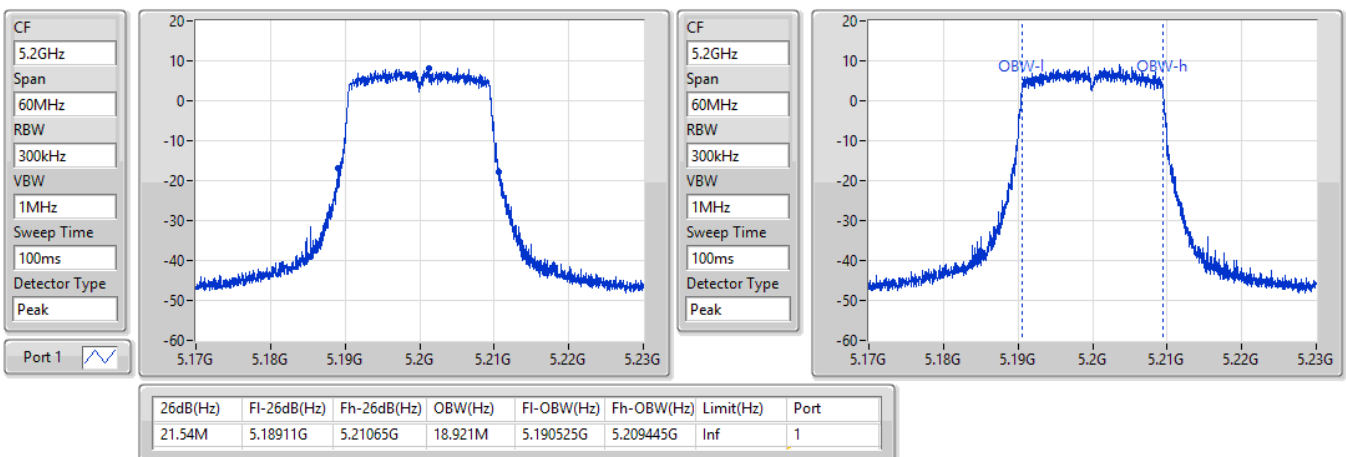


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5180MHz

10/02/2022

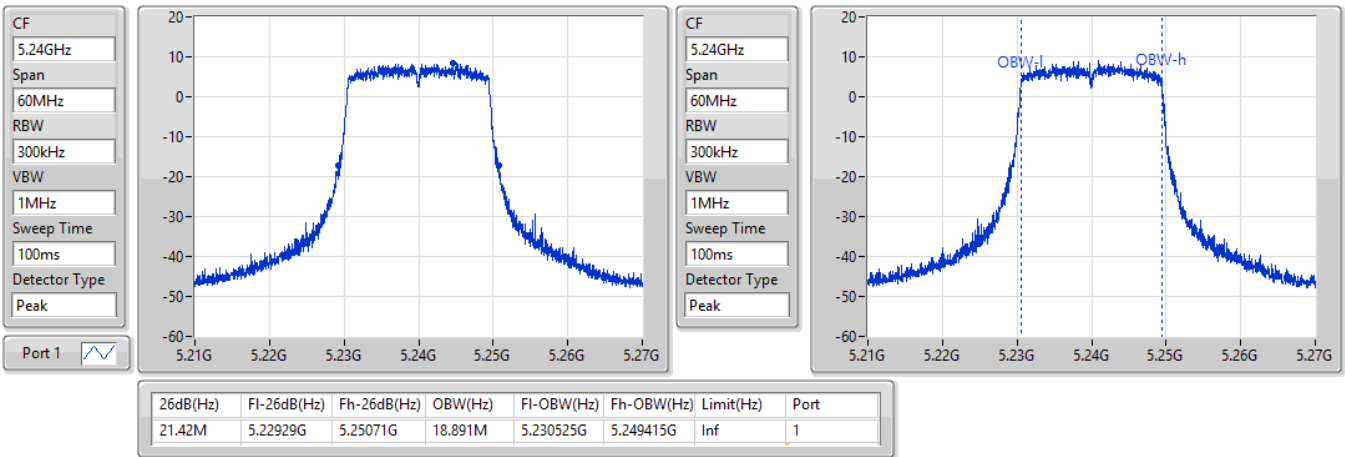

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5200MHz

10/02/2022

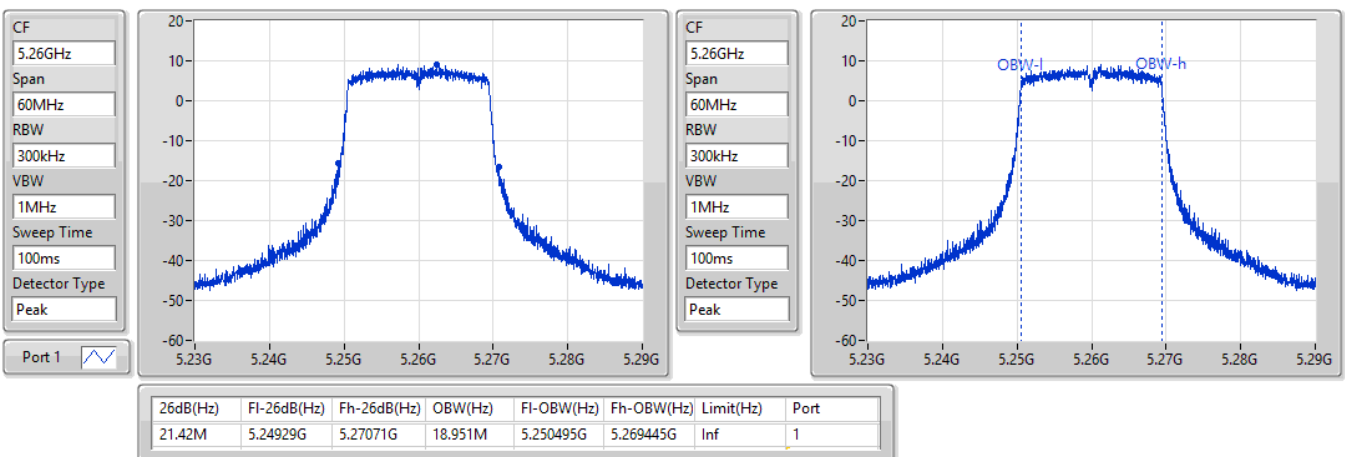


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5240MHz

10/02/2022

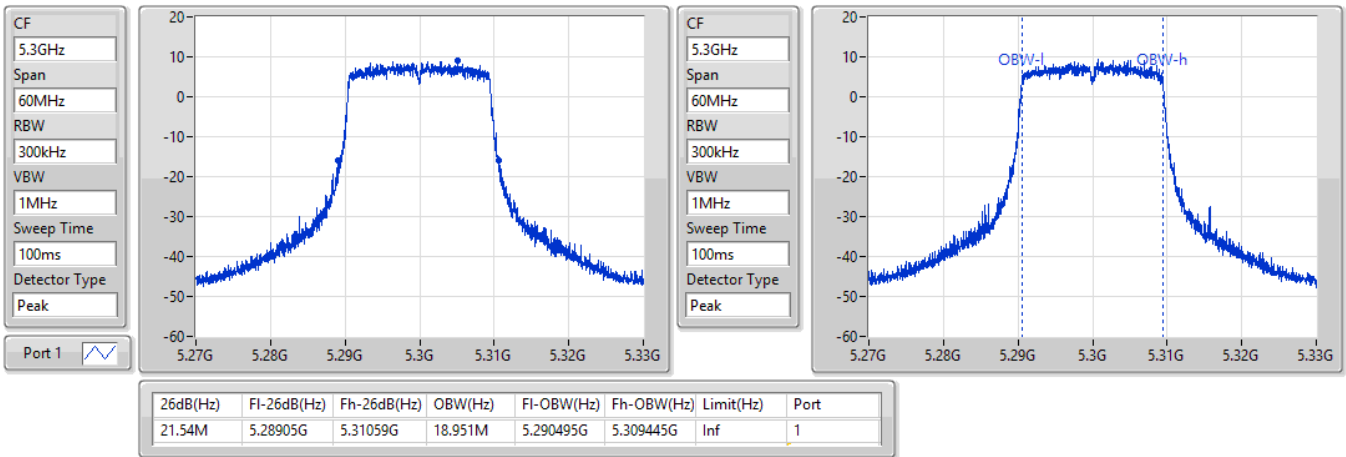

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5260MHz

10/02/2022

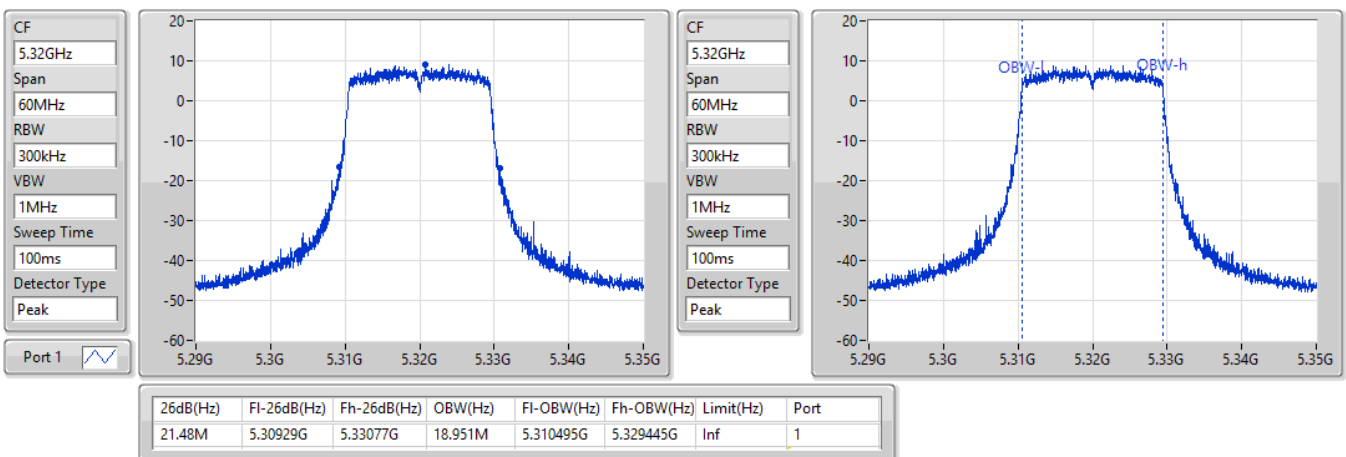


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5300MHz

10/02/2022

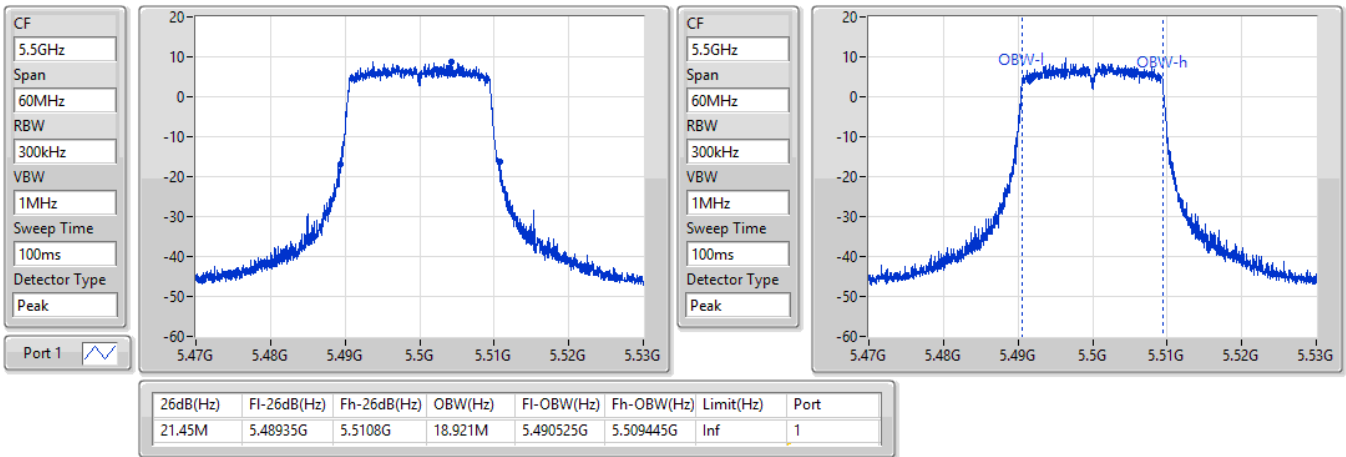

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5320MHz

10/02/2022

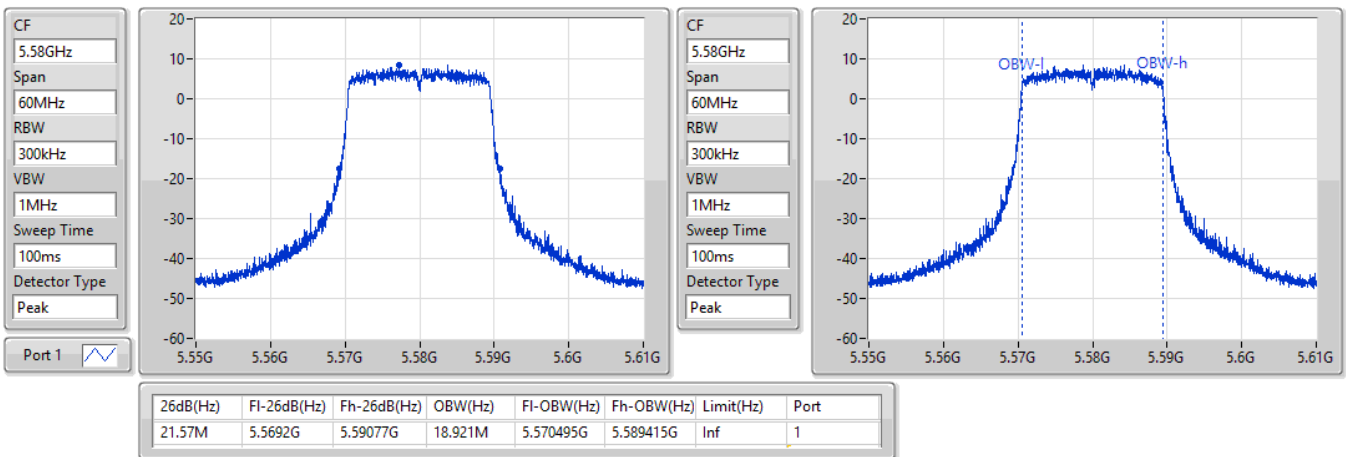


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

10/02/2022

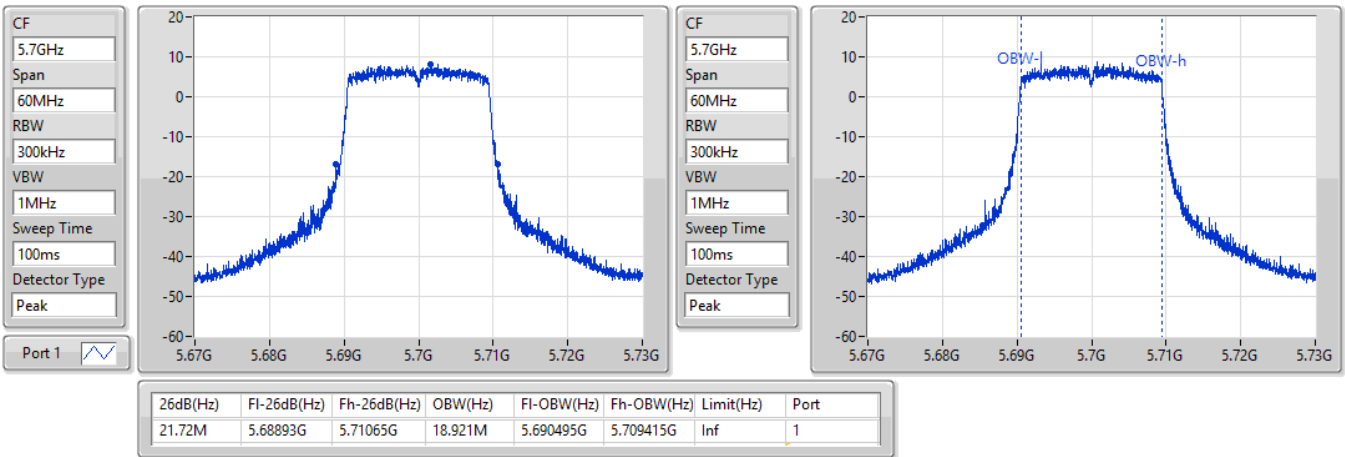

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

10/02/2022

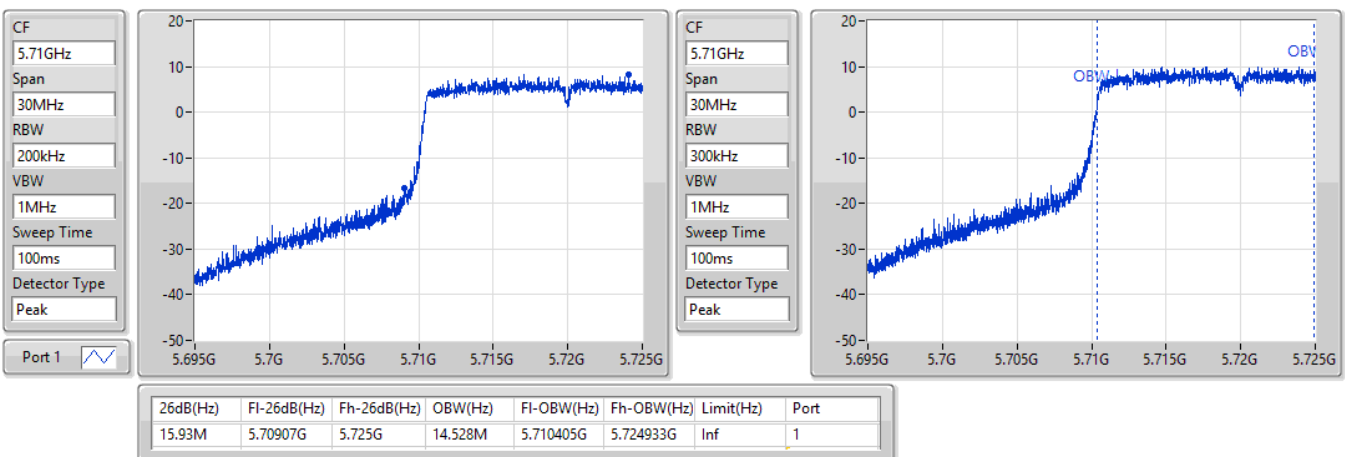


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

10/02/2022

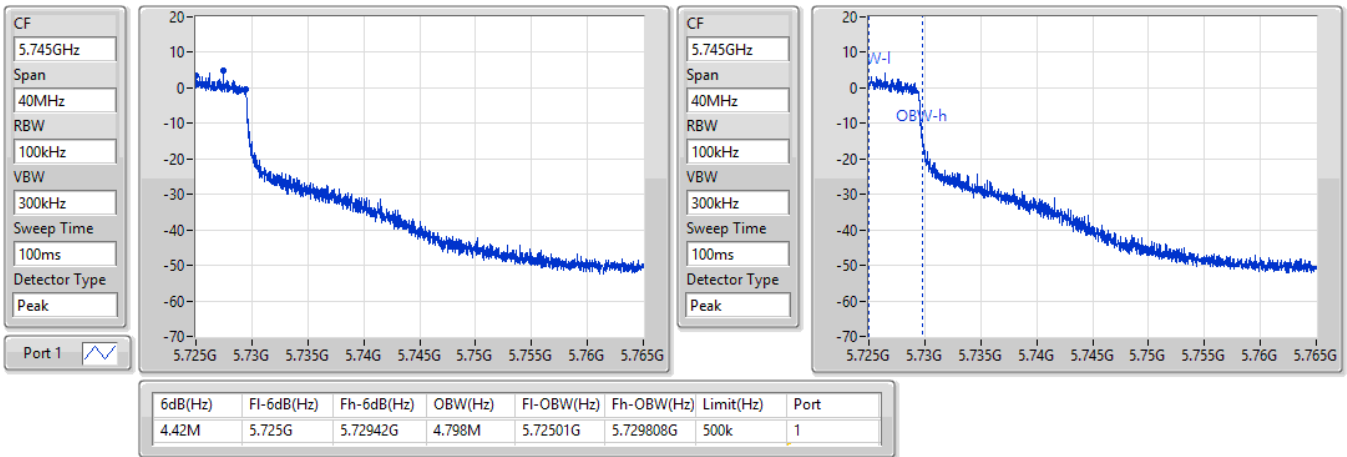

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

10/02/2022

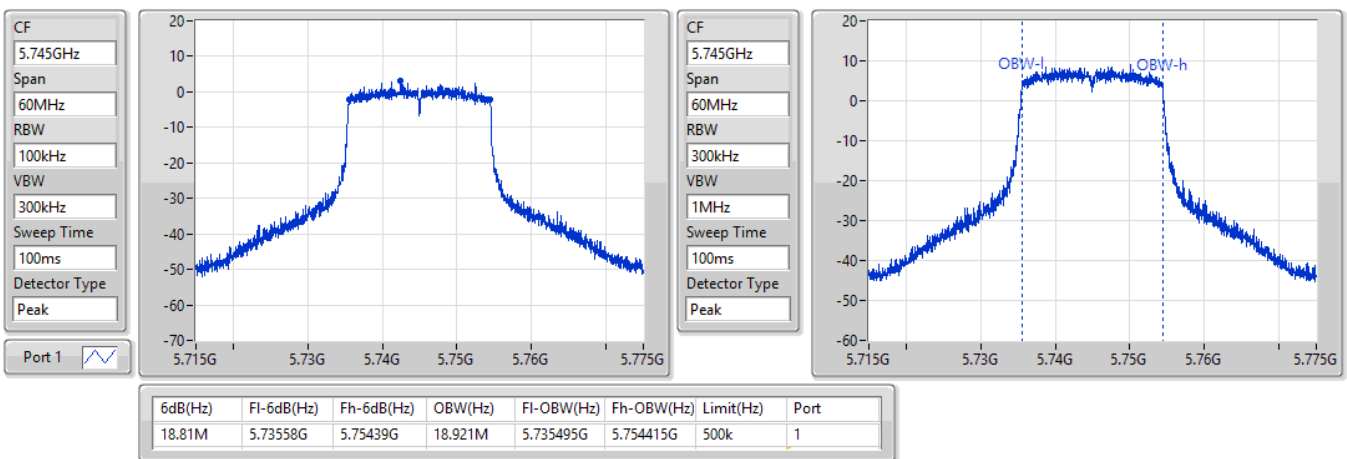


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

10/02/2022

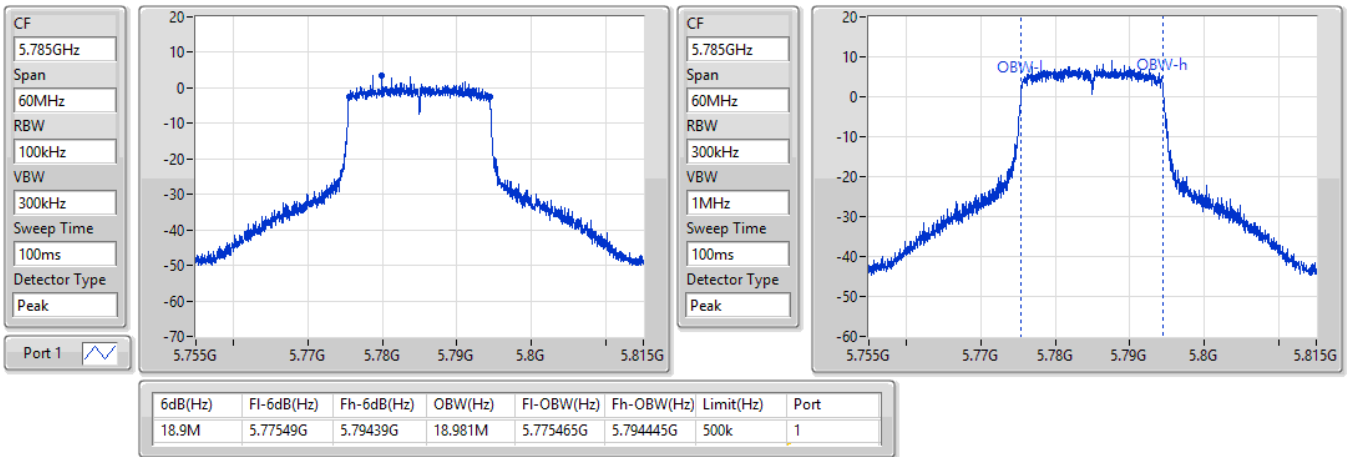

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5745MHz

10/02/2022

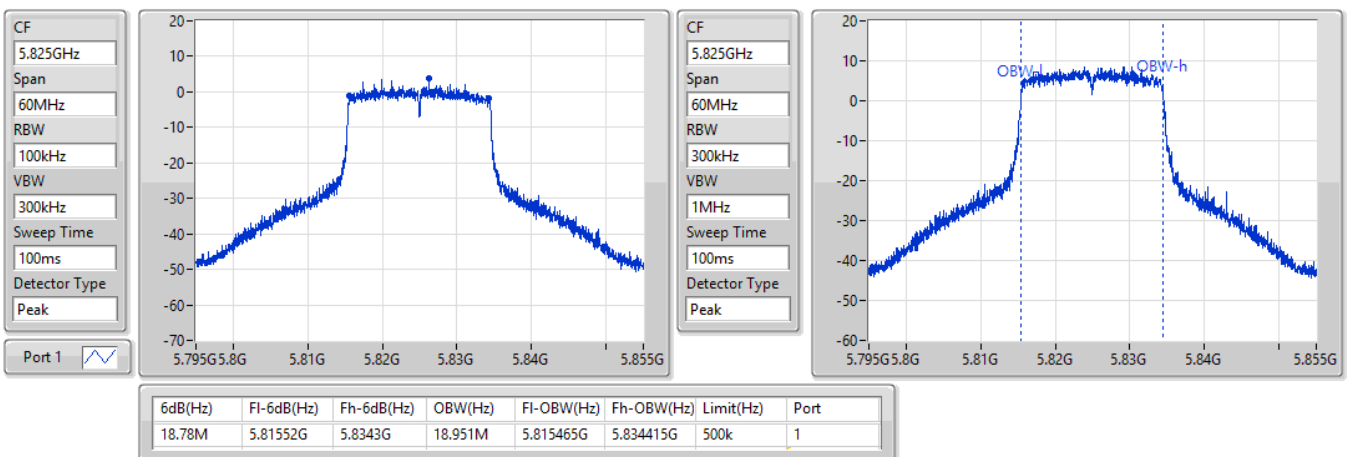


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5785MHz

10/02/2022

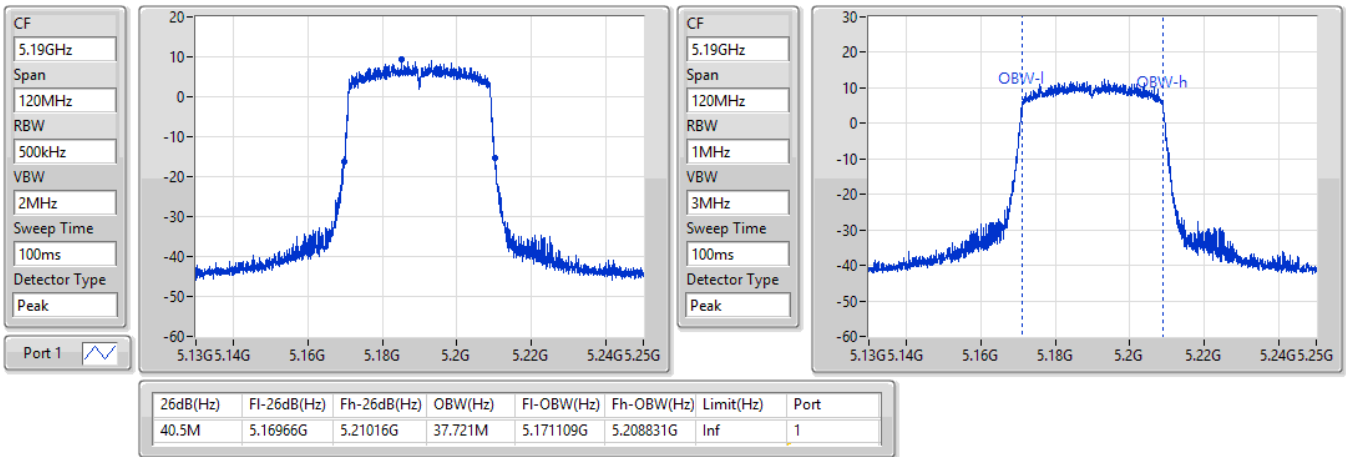

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5825MHz

10/02/2022

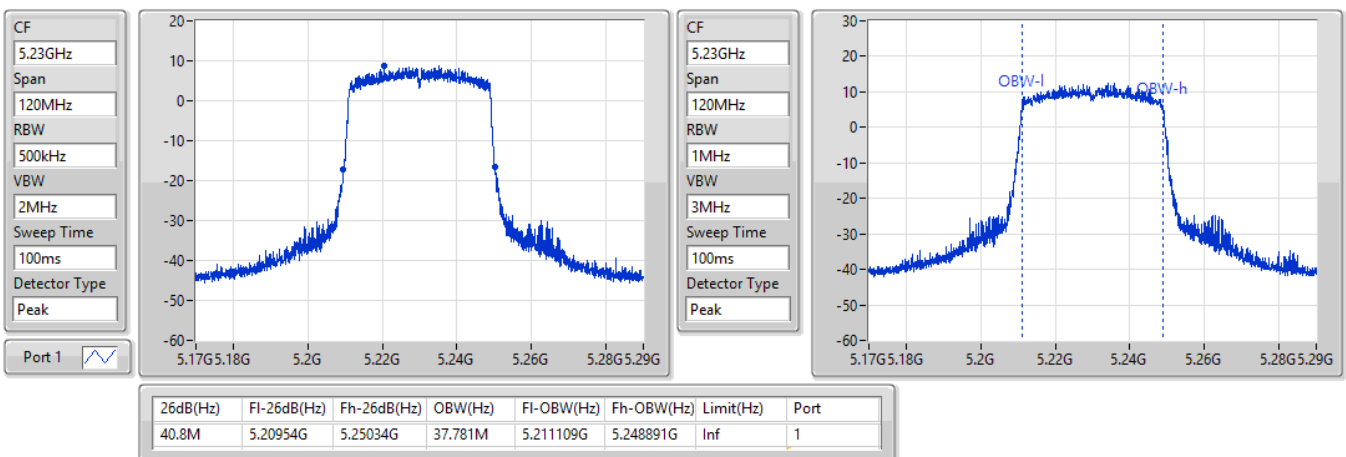


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5190MHz

10/02/2022

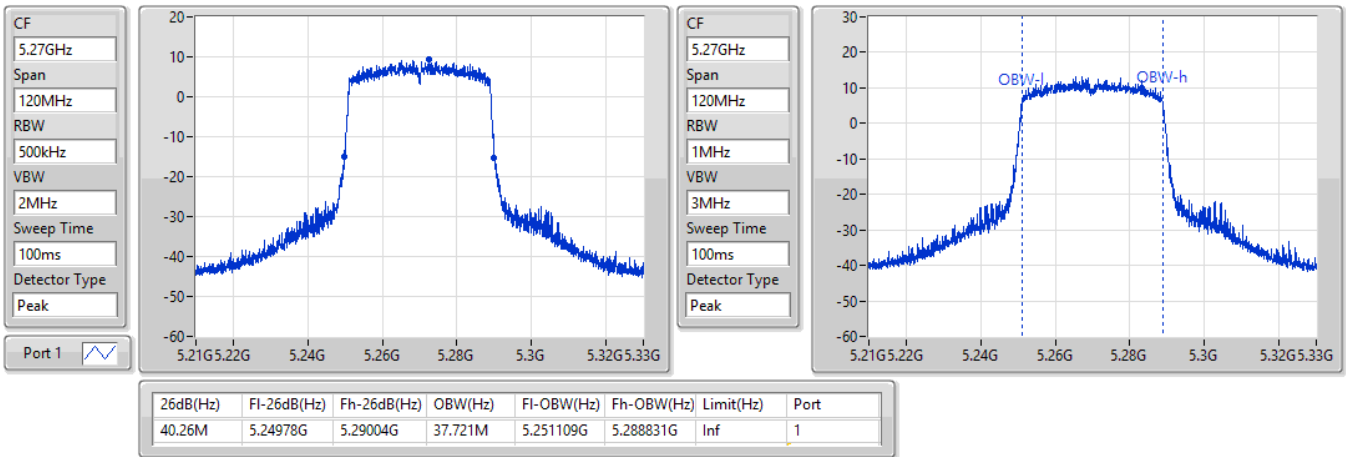

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5230MHz

10/02/2022

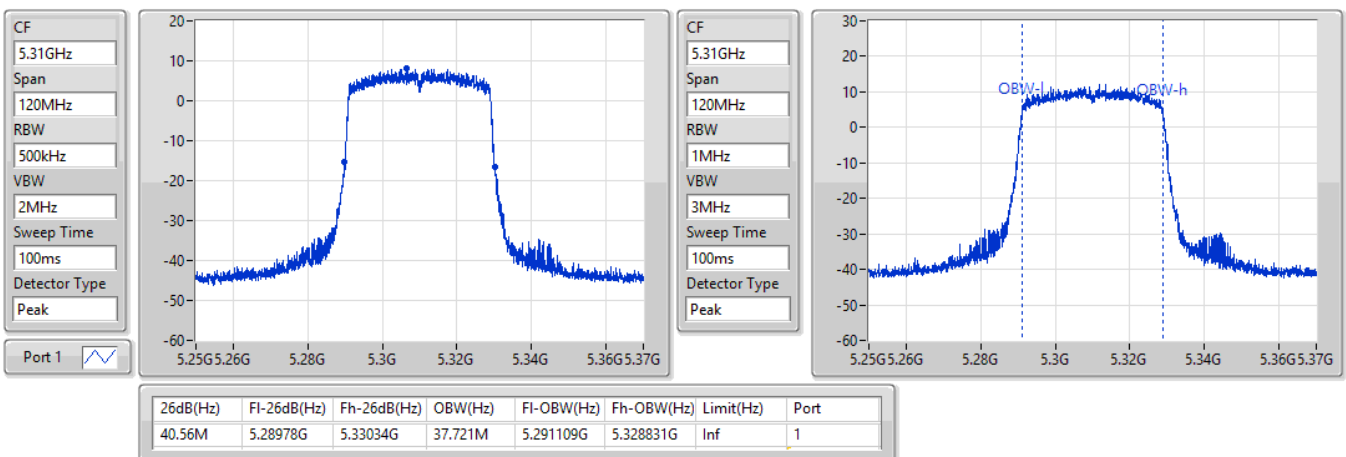


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5270MHz

10/02/2022

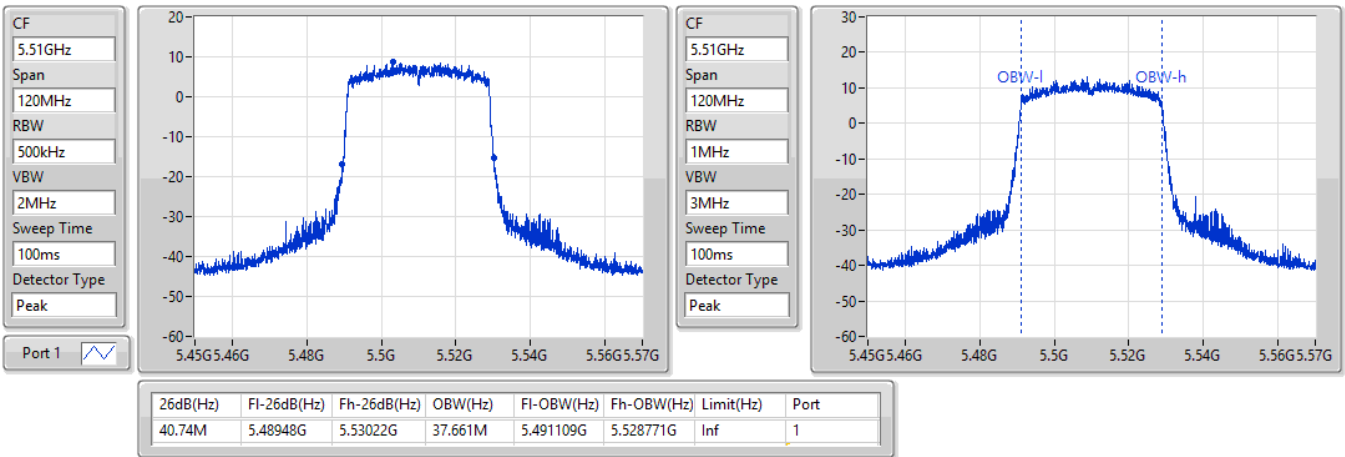

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5310MHz

10/02/2022

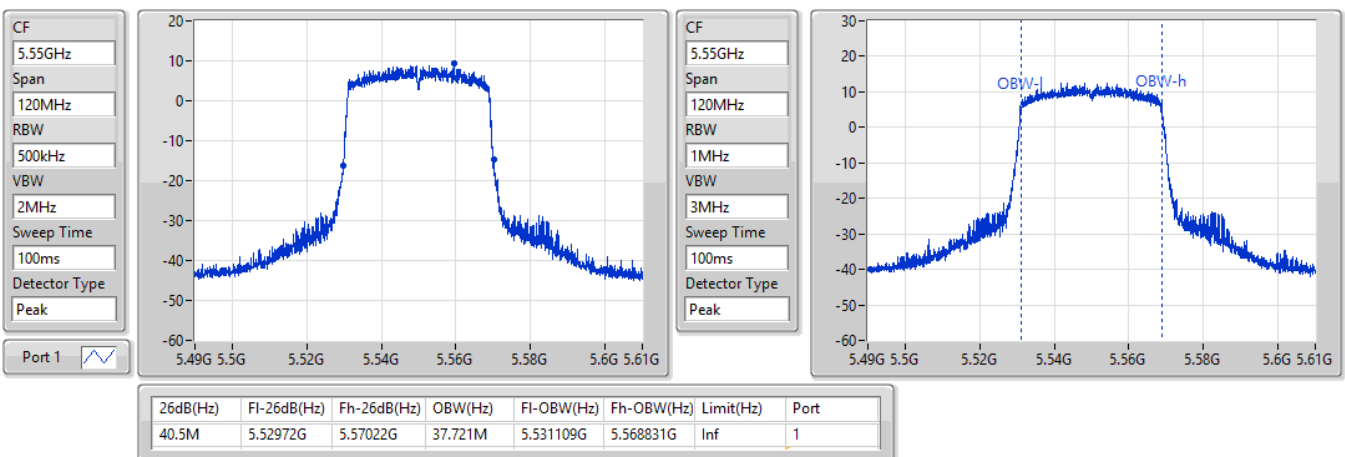


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5510MHz

10/02/2022

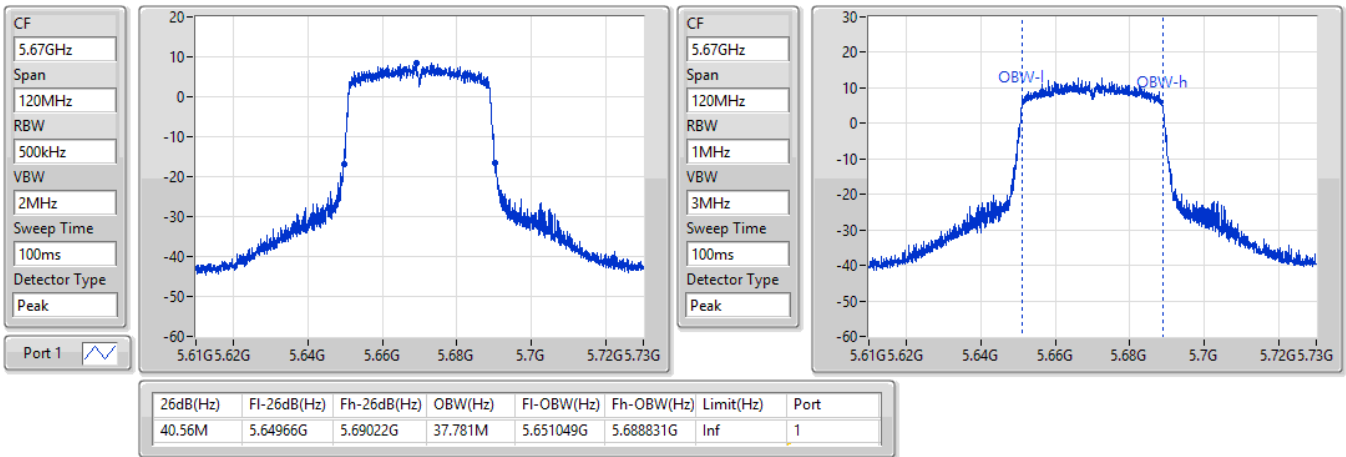

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5550MHz

10/02/2022

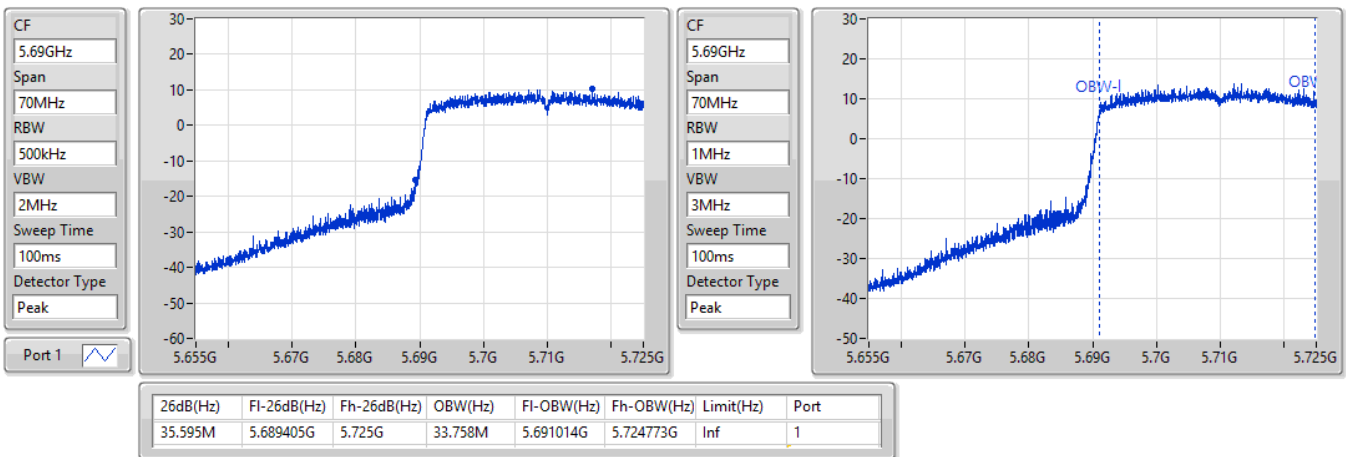


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5670MHz

10/02/2022

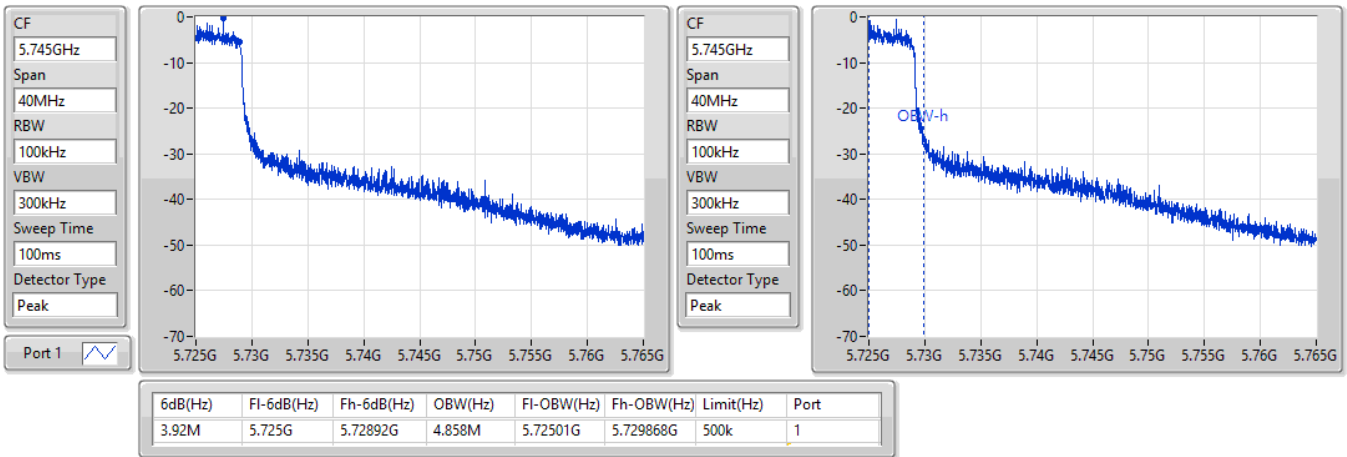

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

10/02/2022

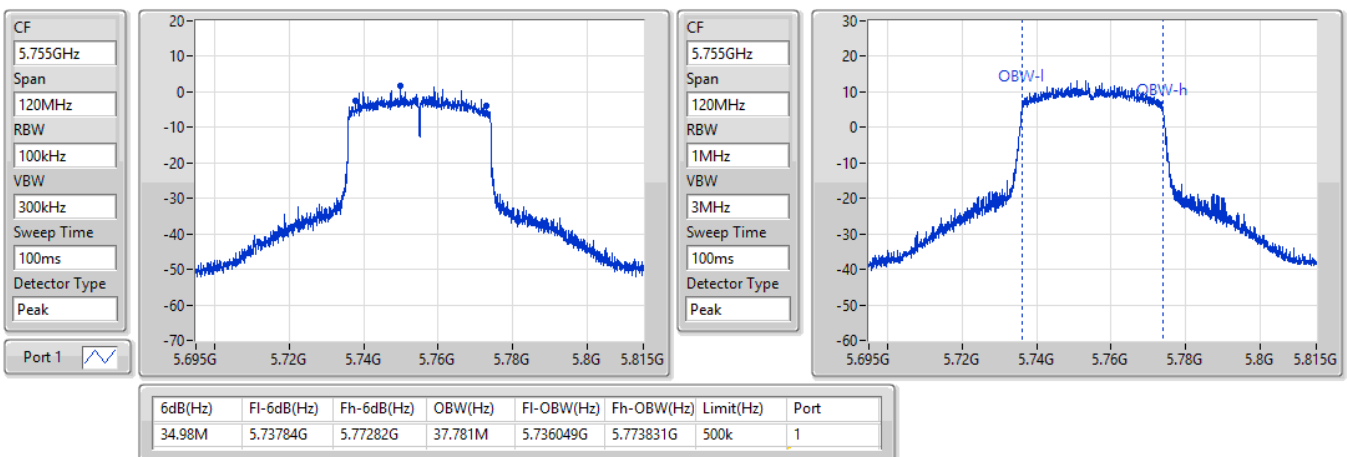


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

10/02/2022

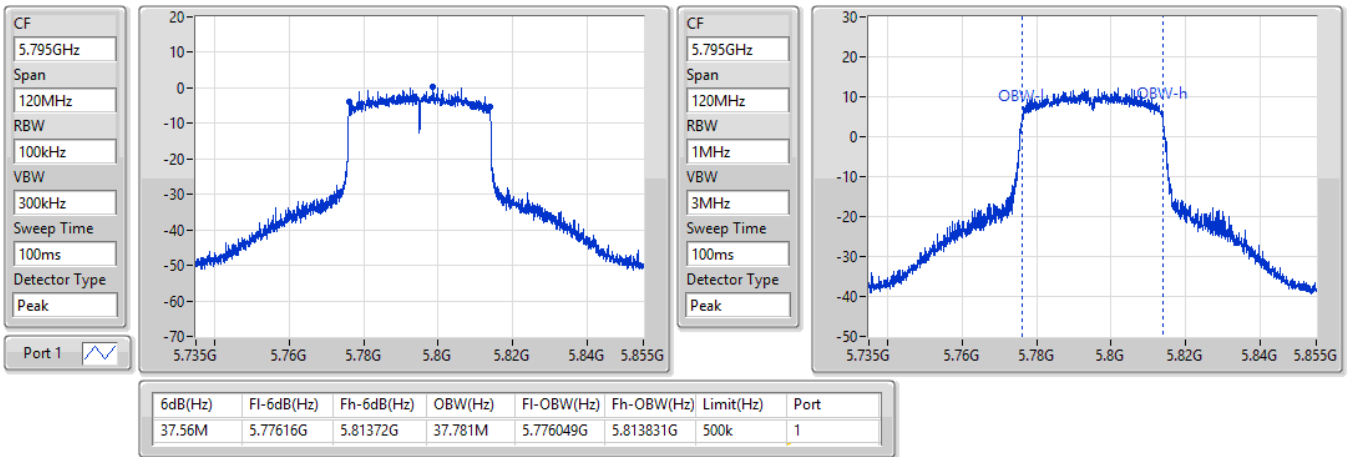

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5755MHz

10/02/2022

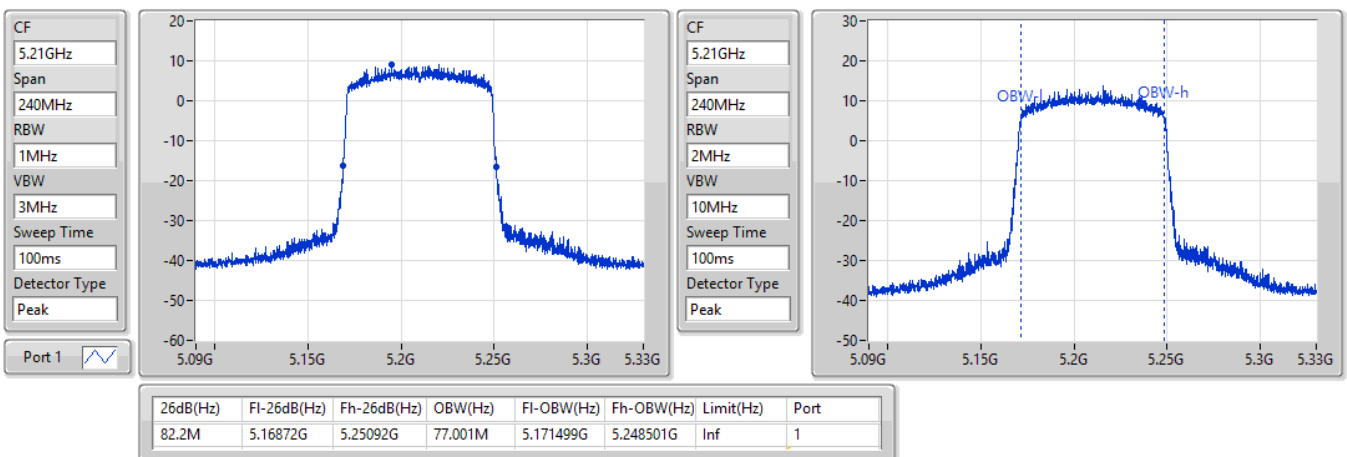


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5795MHz

10/02/2022

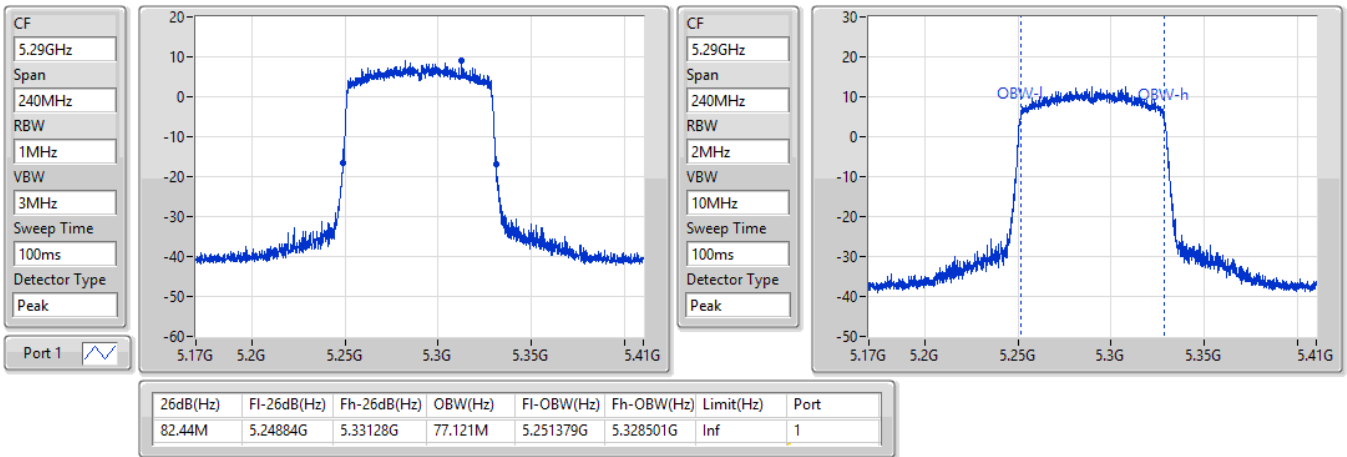

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5210MHz

10/02/2022

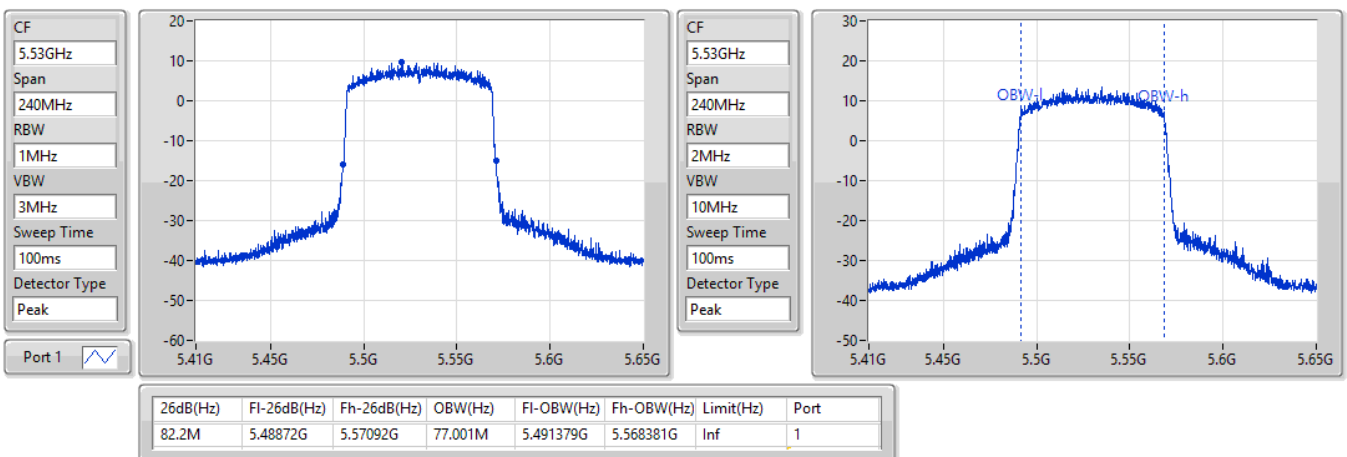


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5290MHz

10/02/2022

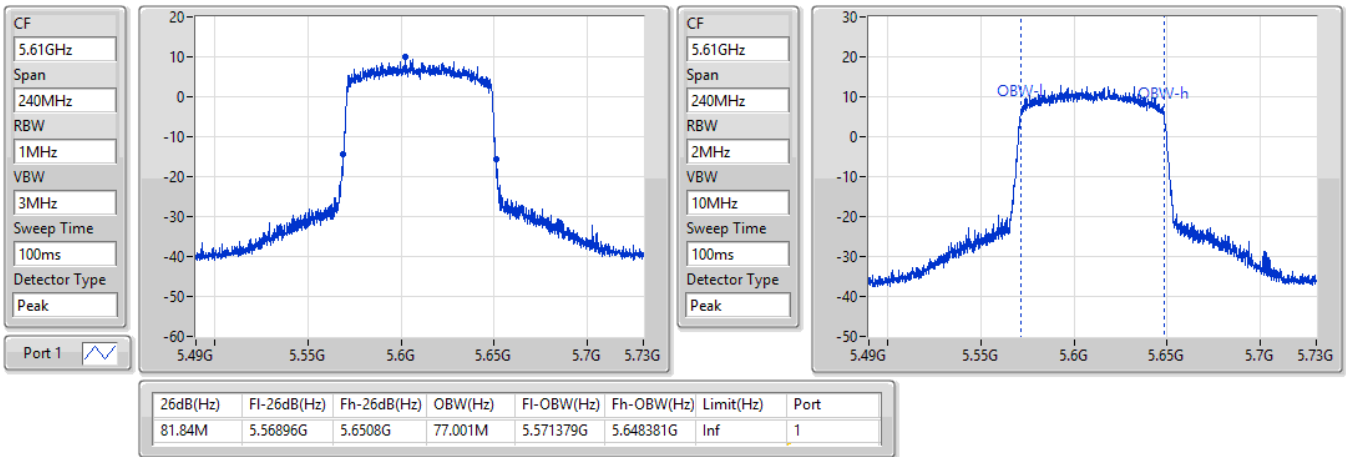

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5530MHz

10/02/2022

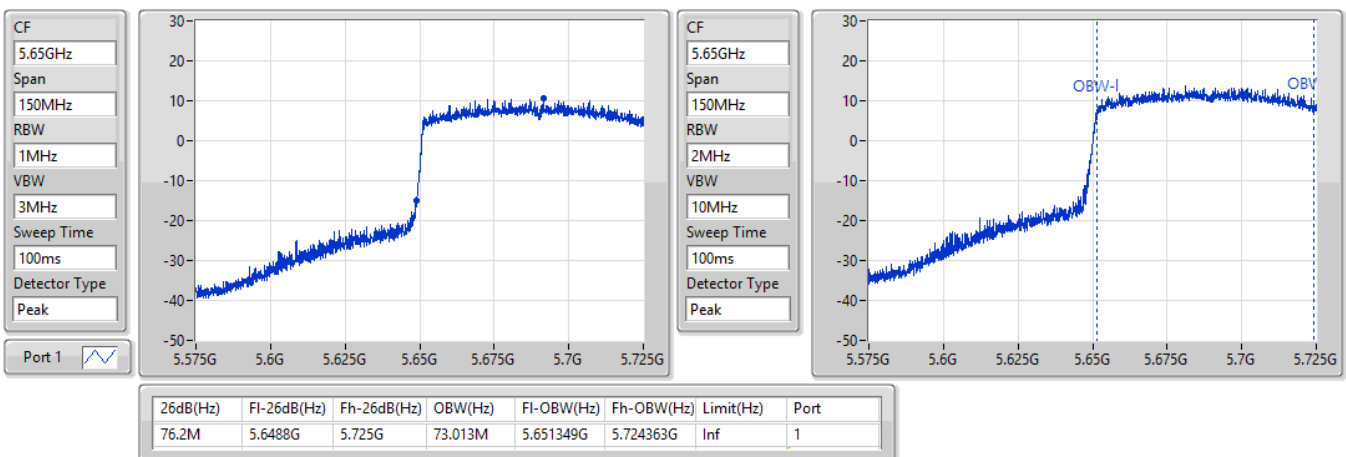


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5610MHz

10/02/2022

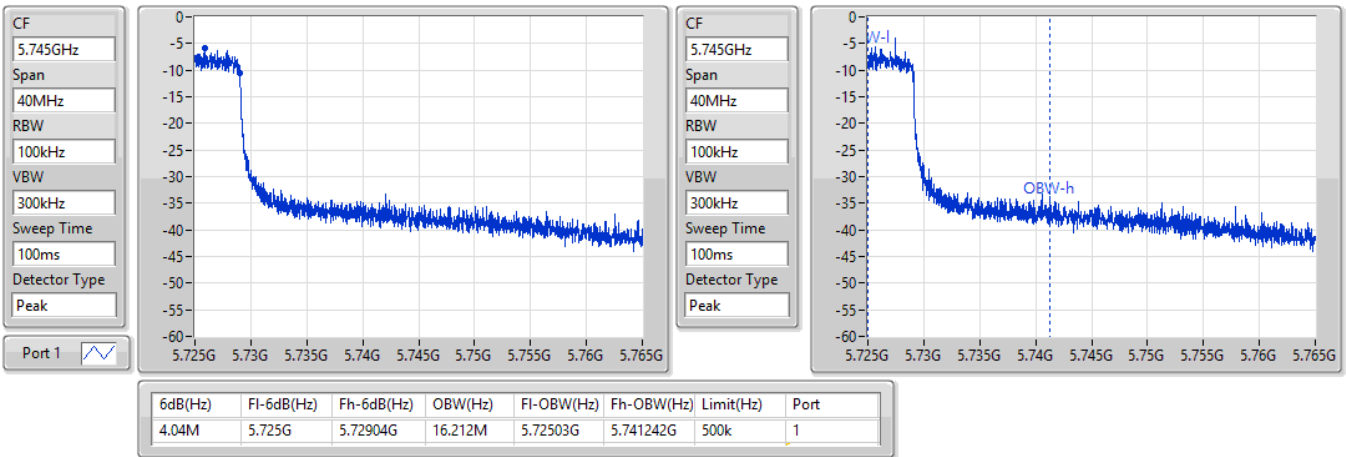

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

10/02/2022

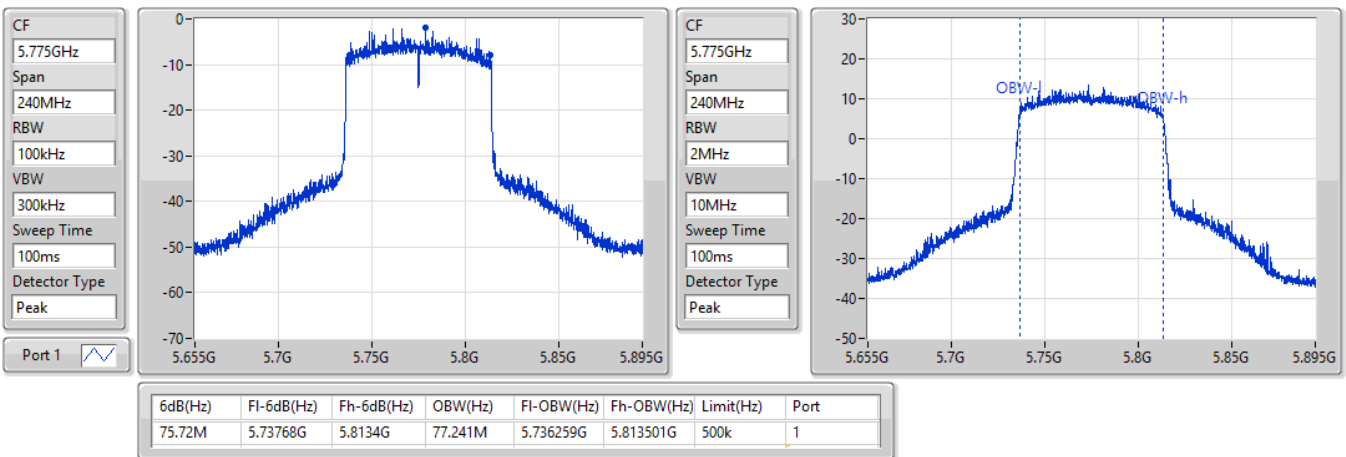


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

10/02/2022


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5775MHz

10/02/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.56M	16.462M	16M5D1D	19.38M	16.402M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.42M	18.921M	18M9D1D	21.12M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.5M	37.721M	37M7D1D	40.44M	37.601M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.48M	77.121M	77M1D1D	81.24M	76.882M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.5M	16.492M	16M5D1D	19.35M	16.372M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.63M	18.981M	19M0D1D	21.09M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.74M	37.721M	37M7D1D	40.26M	37.661M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.32M	77.001M	77M0D1D	81.48M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.56M	16.612M	16M6D1D	15.12M	13.238M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.42M	18.921M	18M9D1D	15.675M	14.498M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.04M	37.721M	37M7D1D	35M	33.583M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.08M	77.241M	77M2D1D	75.525M	72.939M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.29M	16.612M	16M6D1D	2.5M	3.638M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.72M	18.981M	19M0D1D	4.4M	4.638M
802.11ax HEW40_Nss1,(MCS0)_2TX	36.84M	37.781M	37M8D1D	3.86M	4.118M
802.11ax HEW80_Nss1,(MCS0)_2TX	75.72M	77.241M	77M2D1D	3.92M	4.358M

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

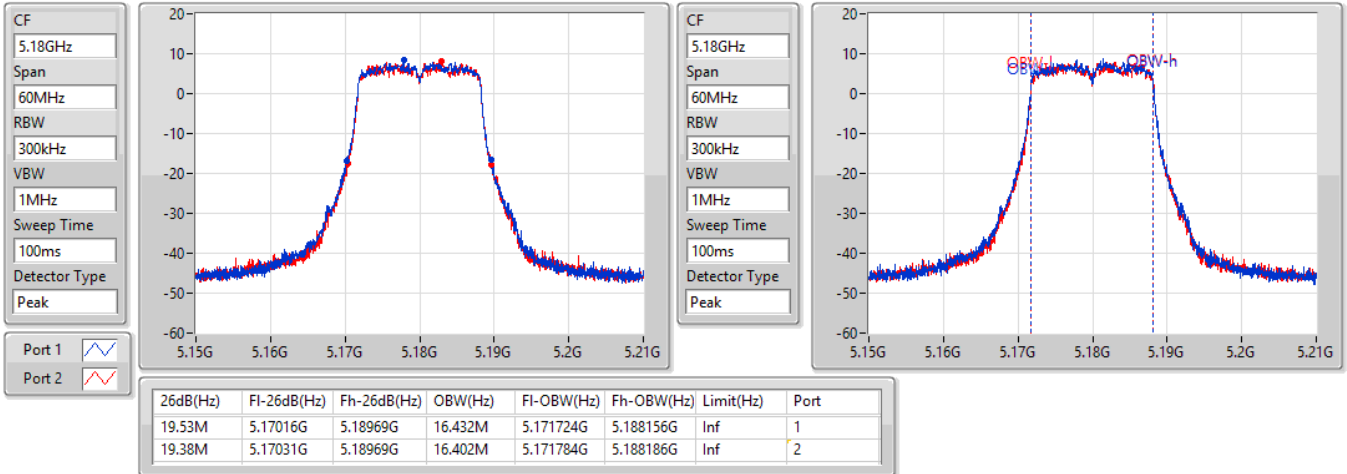
Result

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	-	-	-	-	-	-
5180MHz	Pass	Inf	19.53M	16.432M	19.38M	16.402M
5200MHz	Pass	Inf	19.53M	16.402M	19.38M	16.402M
5240MHz	Pass	Inf	19.56M	16.462M	19.44M	16.402M
5260MHz	Pass	Inf	19.5M	16.462M	19.47M	16.402M
5300MHz	Pass	Inf	19.41M	16.372M	19.44M	16.432M
5320MHz	Pass	Inf	19.44M	16.492M	19.35M	16.402M
5500MHz	Pass	Inf	19.5M	16.462M	19.38M	16.402M
5580MHz	Pass	Inf	19.56M	16.522M	19.23M	16.432M
5700MHz	Pass	Inf	19.47M	16.612M	19.41M	16.432M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.225M	13.253M	15.12M	13.238M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	2.5M	3.638M	3.12M	3.638M
5745MHz	Pass	500k	16.02M	16.582M	16.26M	16.432M
5785MHz	Pass	500k	15.93M	16.612M	16.29M	16.432M
5825MHz	Pass	500k	15.72M	16.522M	16.29M	16.462M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.33M	18.921M	21.18M	18.891M
5200MHz	Pass	Inf	21.3M	18.921M	21.12M	18.891M
5240MHz	Pass	Inf	21.42M	18.891M	21.21M	18.921M
5260MHz	Pass	Inf	21.57M	18.981M	21.36M	18.921M
5300MHz	Pass	Inf	21.09M	18.891M	21.3M	18.951M
5320MHz	Pass	Inf	21.63M	18.981M	21.15M	18.921M
5500MHz	Pass	Inf	21.12M	18.891M	21.18M	18.891M
5580MHz	Pass	Inf	20.97M	18.771M	21.3M	18.921M
5700MHz	Pass	Inf	20.43M	18.621M	21.42M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.885M	14.558M	15.675M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.838M	4.4M	4.638M
5745MHz	Pass	500k	15.99M	18.771M	18.6M	18.921M
5785MHz	Pass	500k	16.38M	18.831M	18.72M	18.921M
5825MHz	Pass	500k	16.92M	18.981M	18.6M	18.951M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.5M	37.721M	40.5M	37.721M
5230MHz	Pass	Inf	40.5M	37.601M	40.44M	37.721M
5270MHz	Pass	Inf	40.26M	37.661M	40.74M	37.721M
5310MHz	Pass	Inf	40.56M	37.661M	40.44M	37.661M
5510MHz	Pass	Inf	40.62M	37.721M	40.44M	37.661M
5550MHz	Pass	Inf	40.62M	37.541M	41.04M	37.721M
5670MHz	Pass	Inf	40.2M	37.421M	40.38M	37.721M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35M	33.583M	35.49M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.86M	4.118M	3.96M	4.258M
5755MHz	Pass	500k	35.64M	37.721M	36.18M	37.781M
5795MHz	Pass	500k	36M	37.721M	36.84M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.24M	77.121M	81.48M	76.882M
5290MHz	Pass	Inf	82.32M	77.001M	81.48M	77.001M
5530MHz	Pass	Inf	81.84M	76.882M	81.72M	77.001M
5610MHz	Pass	Inf	82.08M	77.241M	81.96M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.525M	73.013M	76.05M	72.939M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.358M	3.96M	5.317M
5775MHz	Pass	500k	75.24M	77.241M	75.72M	77.001M

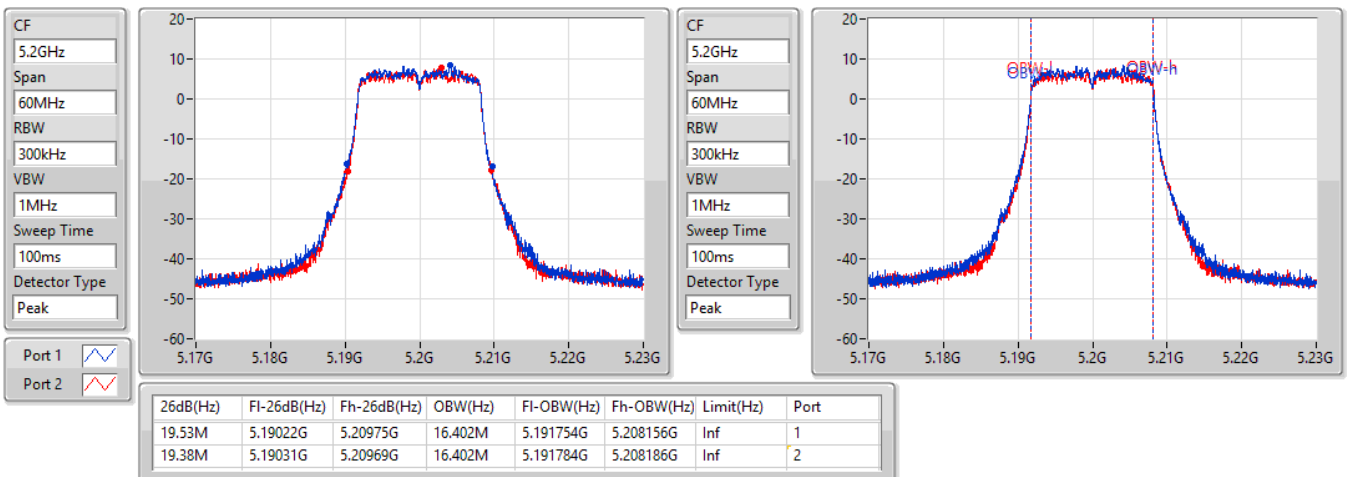
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_2TX
EBW
5180MHz

10/02/2022

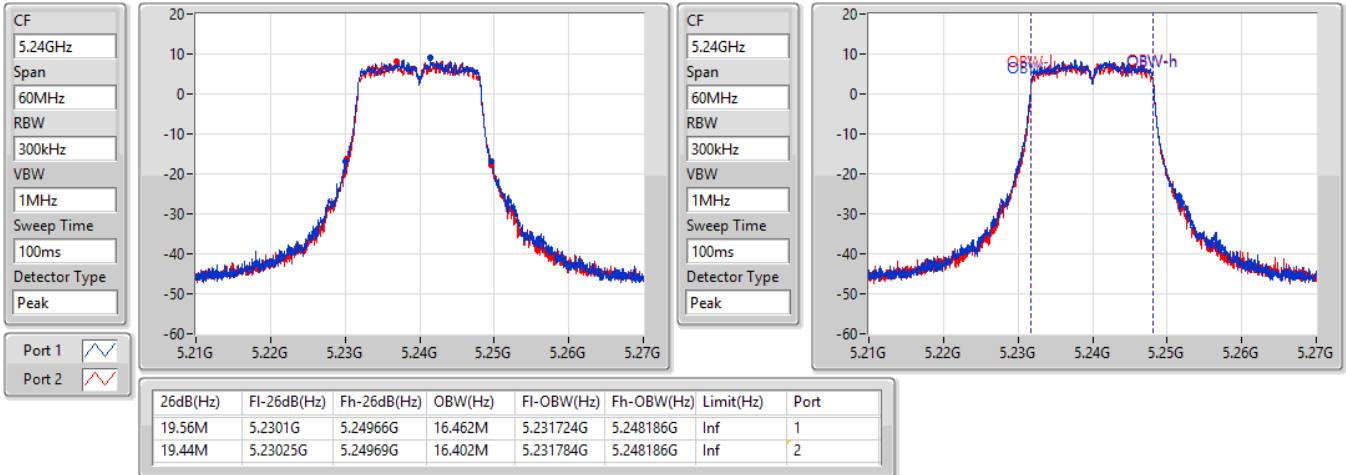

802.11a_Nss1,(6Mbps)_2TX
EBW
5200MHz

10/02/2022

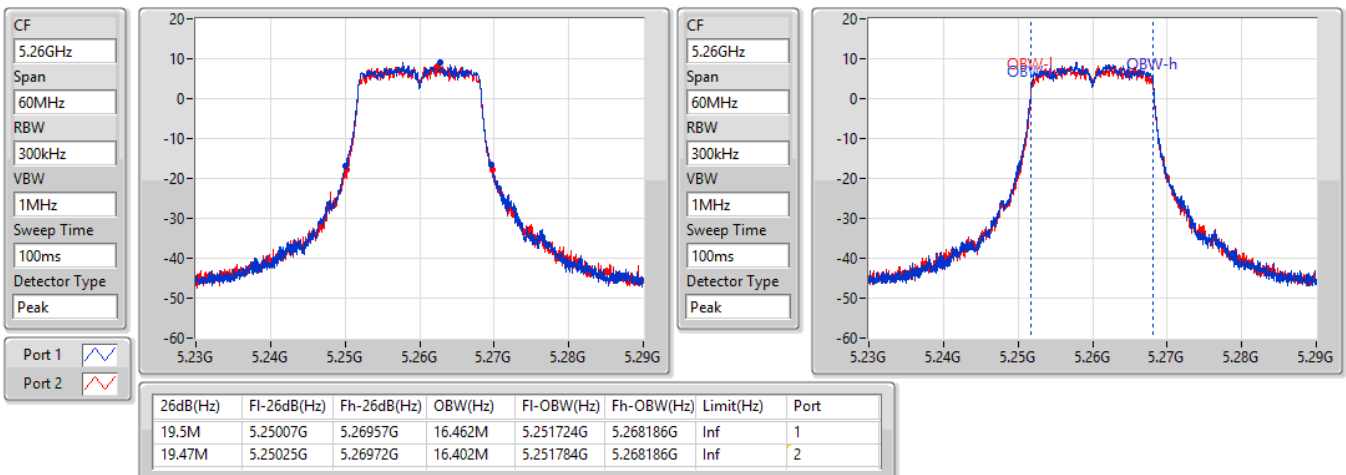


802.11a_Nss1,(6Mbps)_2TX
EBW
5240MHz

10/02/2022

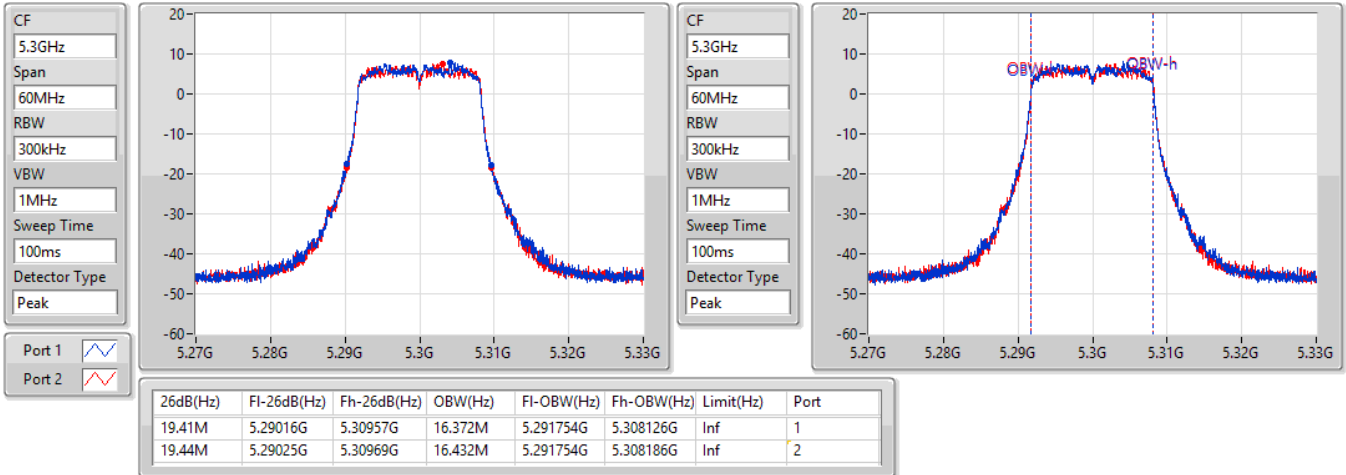

802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

10/02/2022

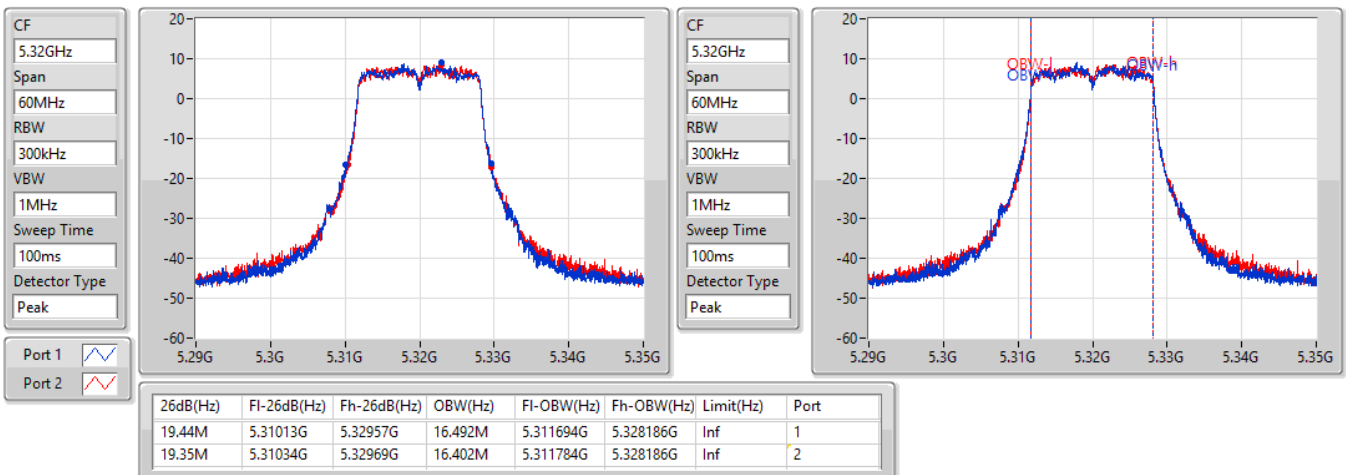


802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

10/02/2022

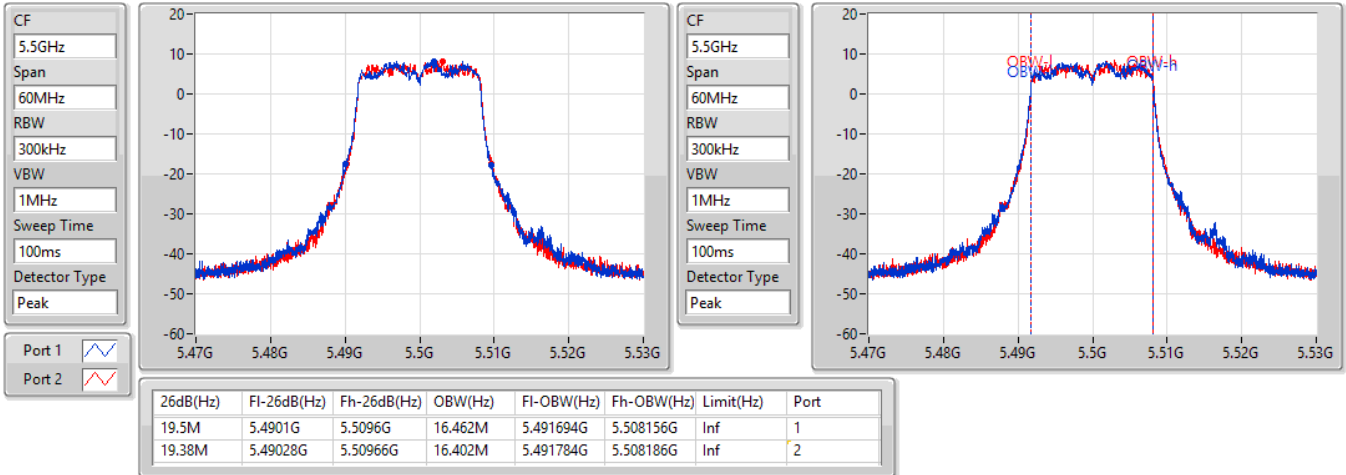

802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

10/02/2022

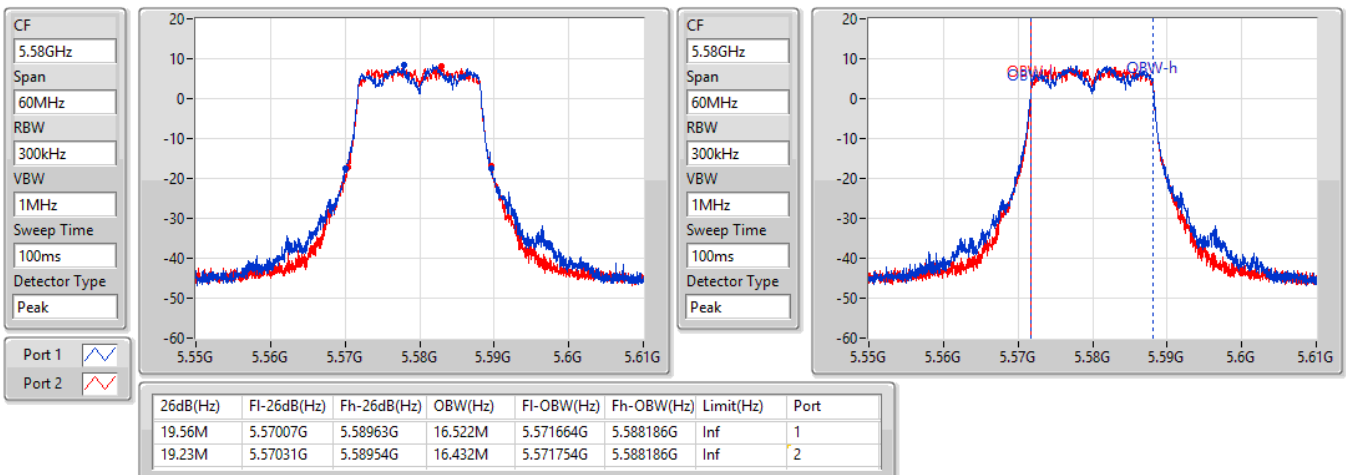


802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

10/02/2022

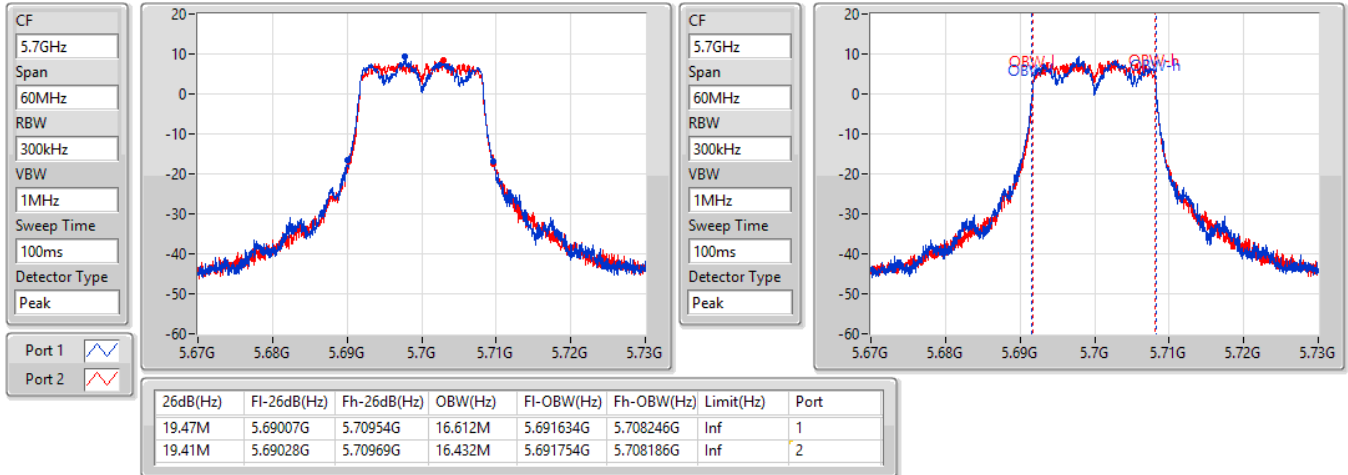

802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

10/02/2022

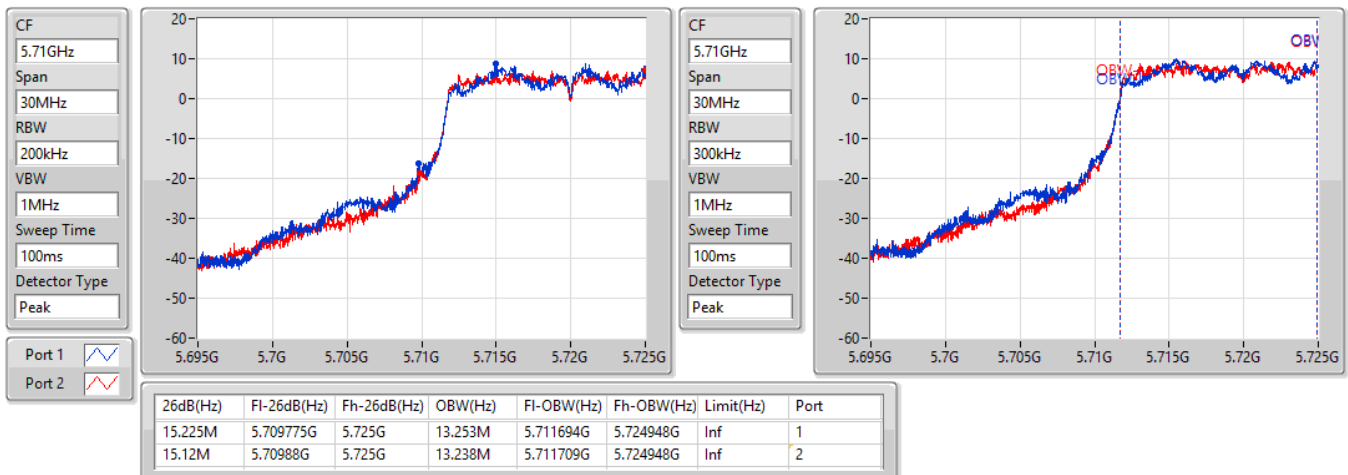


802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

10/02/2022

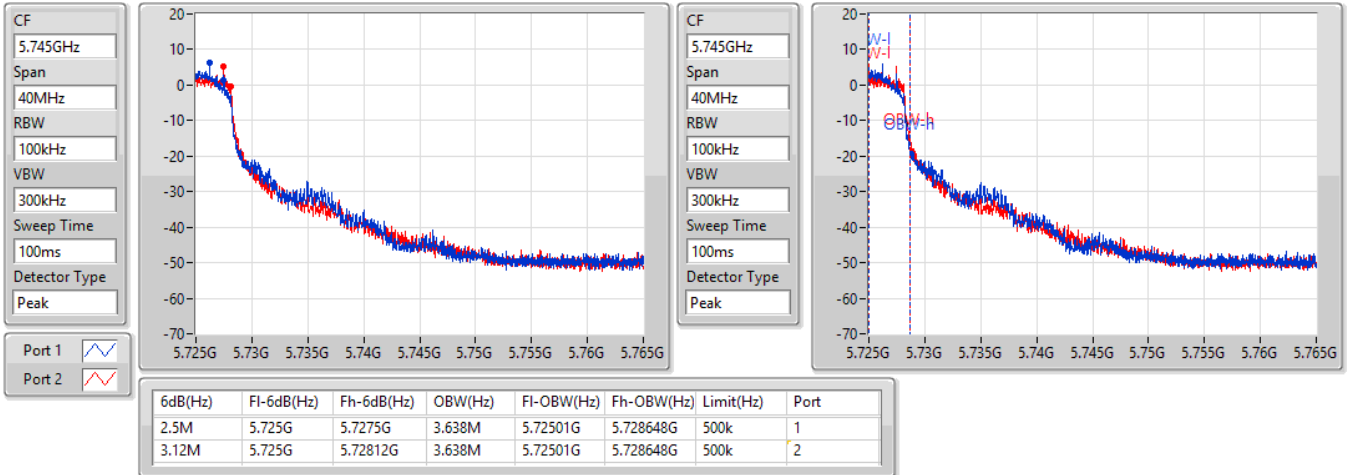

802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

10/02/2022

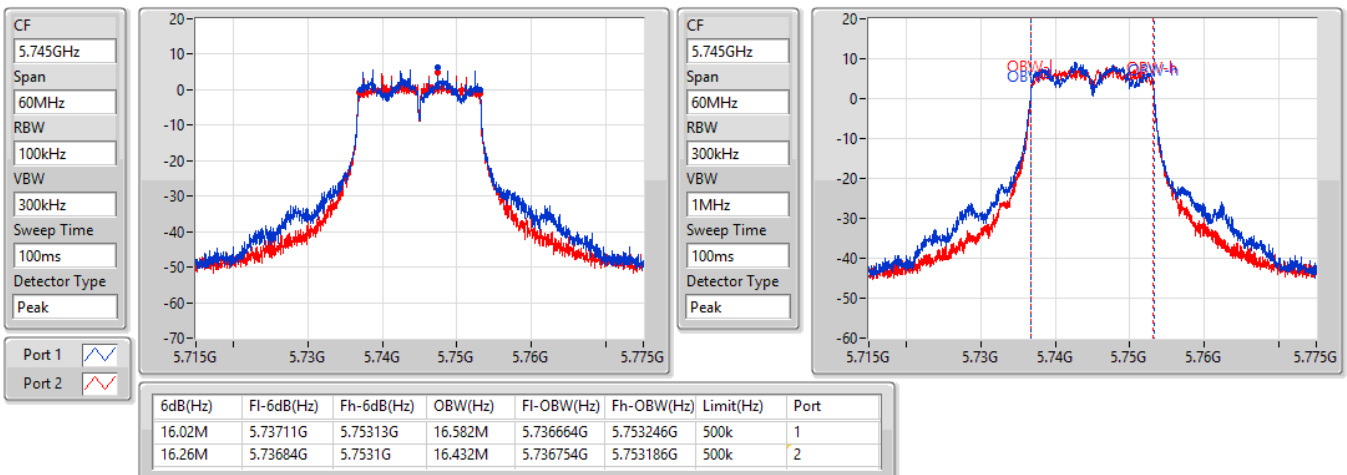


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

10/02/2022

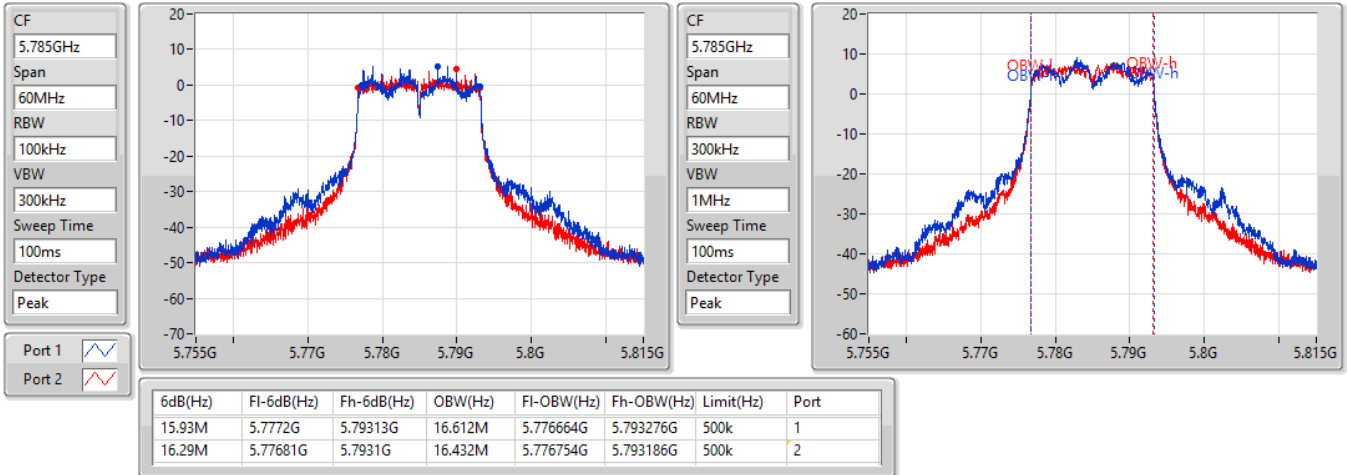

802.11a_Nss1,(6Mbps)_2TX
EBW
5745MHz

10/02/2022

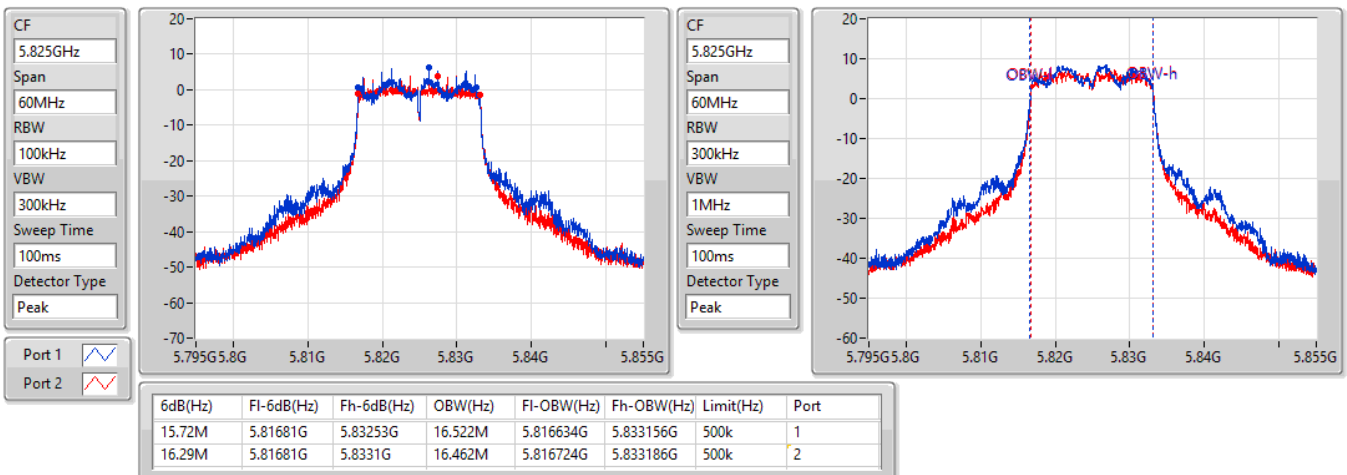


802.11a_Nss1,(6Mbps)_2TX
EBW
5785MHz

10/02/2022

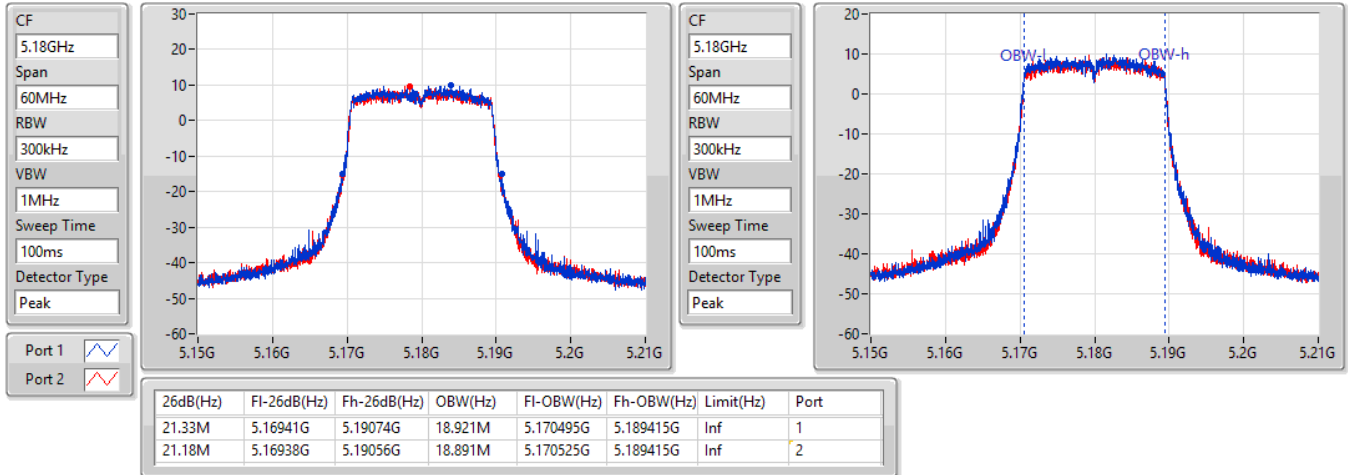

802.11a_Nss1,(6Mbps)_2TX
EBW
5825MHz

10/02/2022

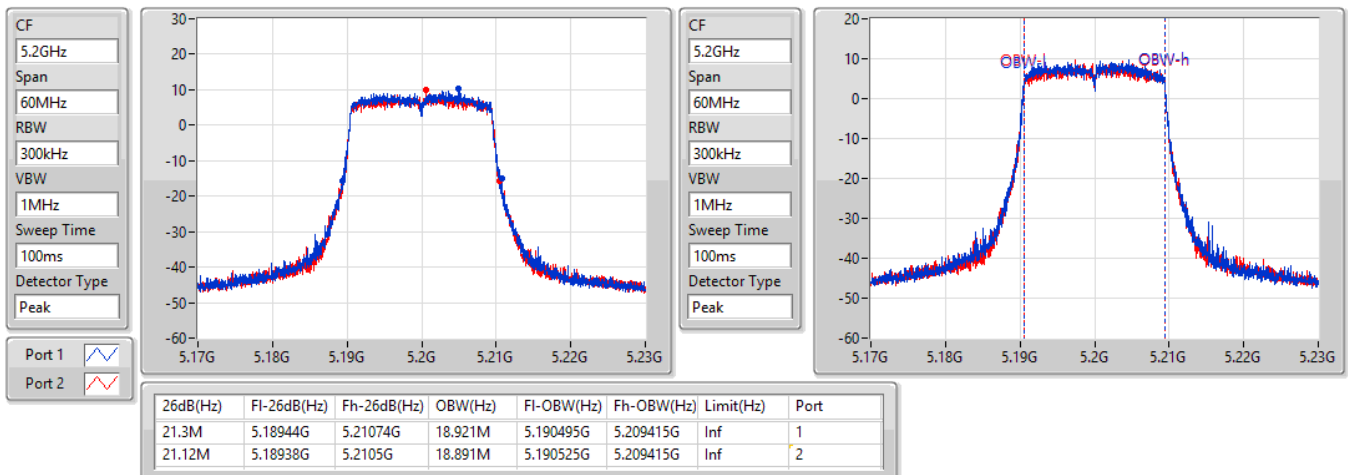


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5180MHz

10/02/2022

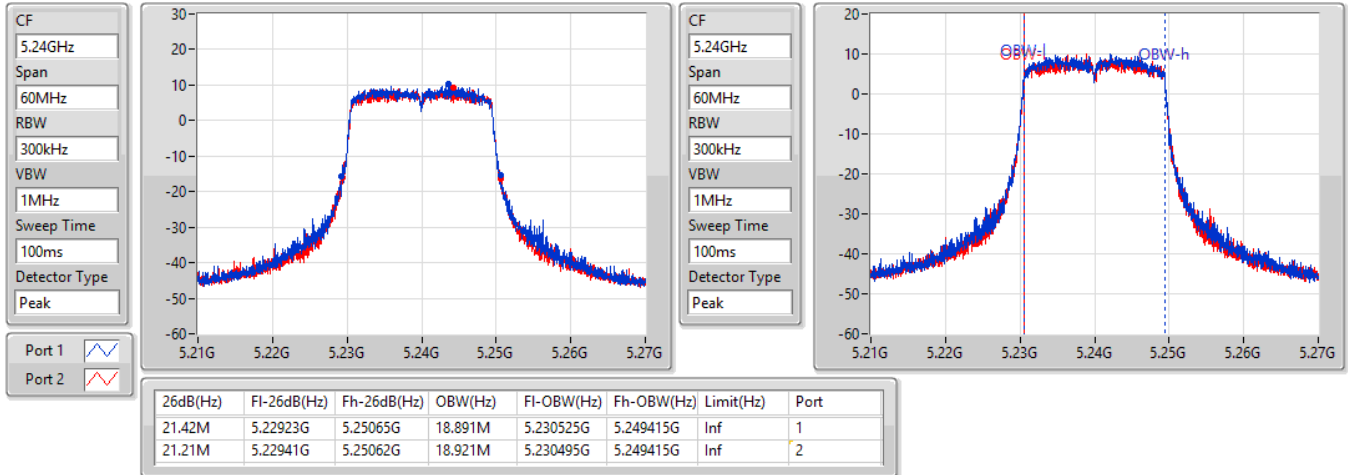

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5200MHz

10/02/2022

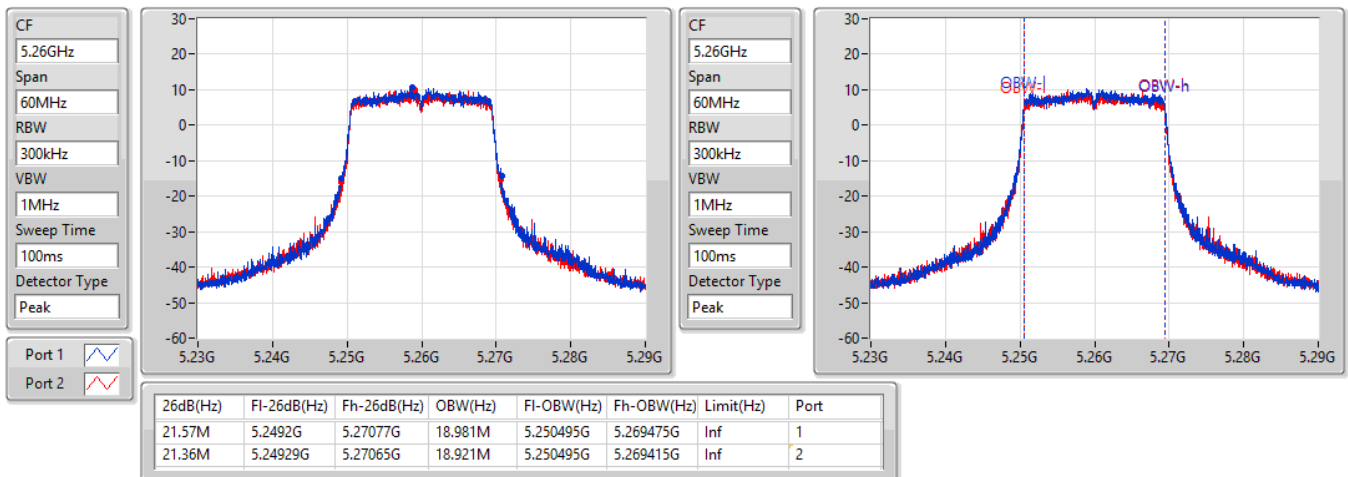


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5240MHz

10/02/2022

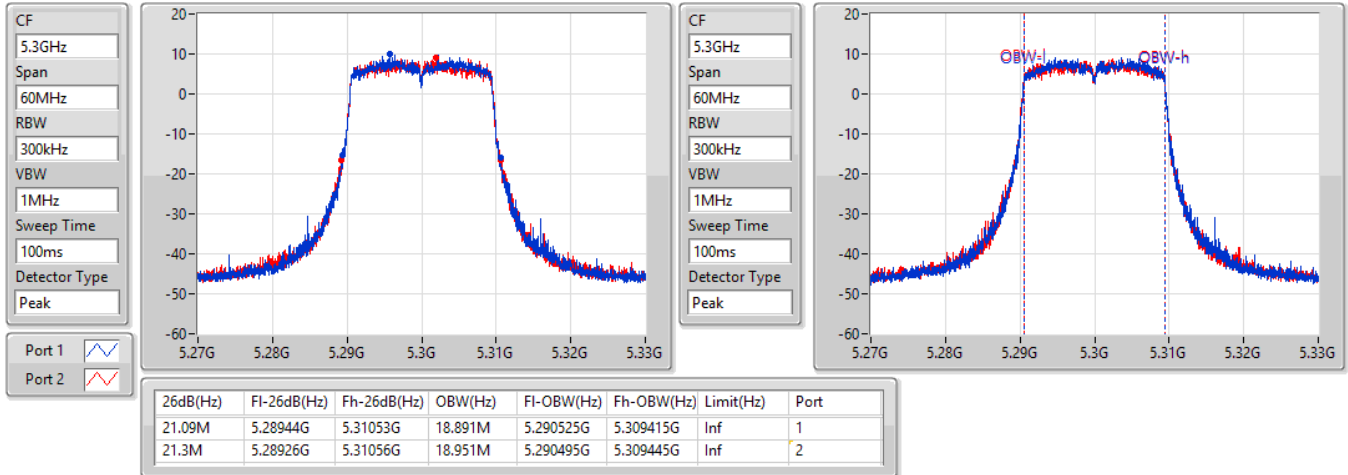

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5260MHz

10/02/2022

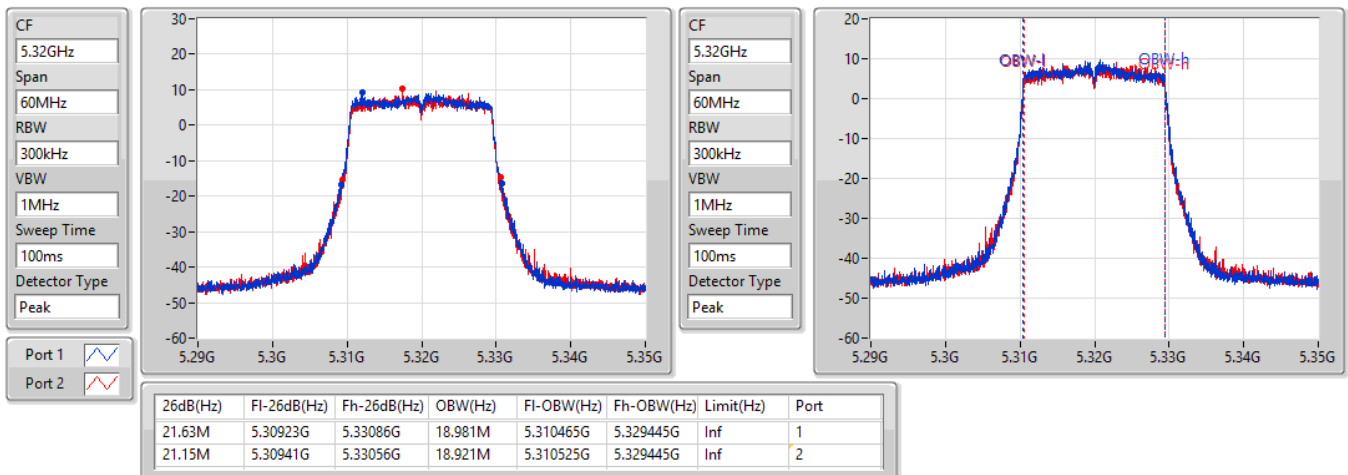


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5300MHz

10/02/2022

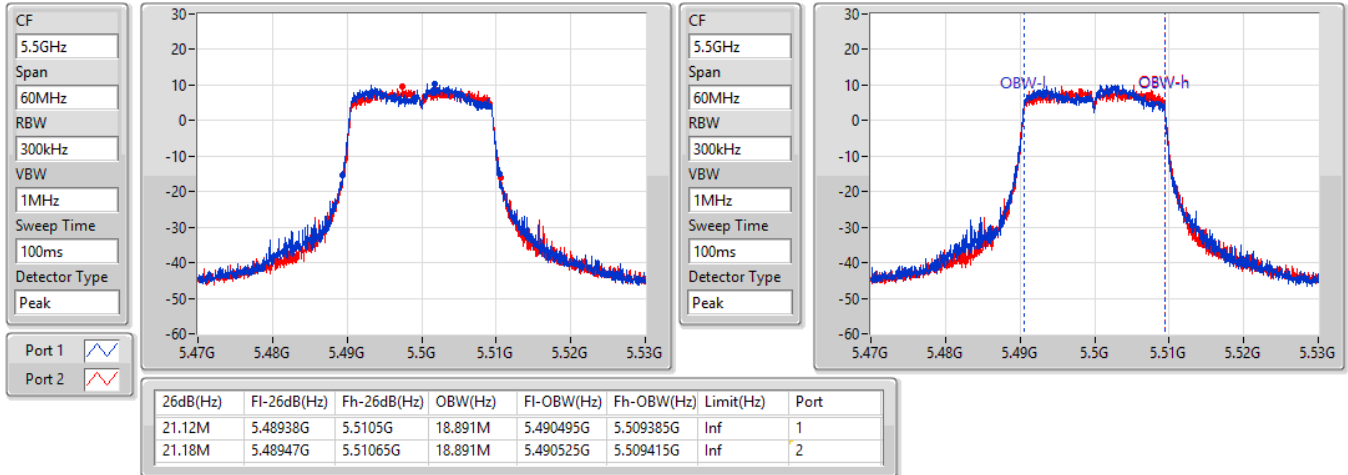

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5320MHz

10/02/2022

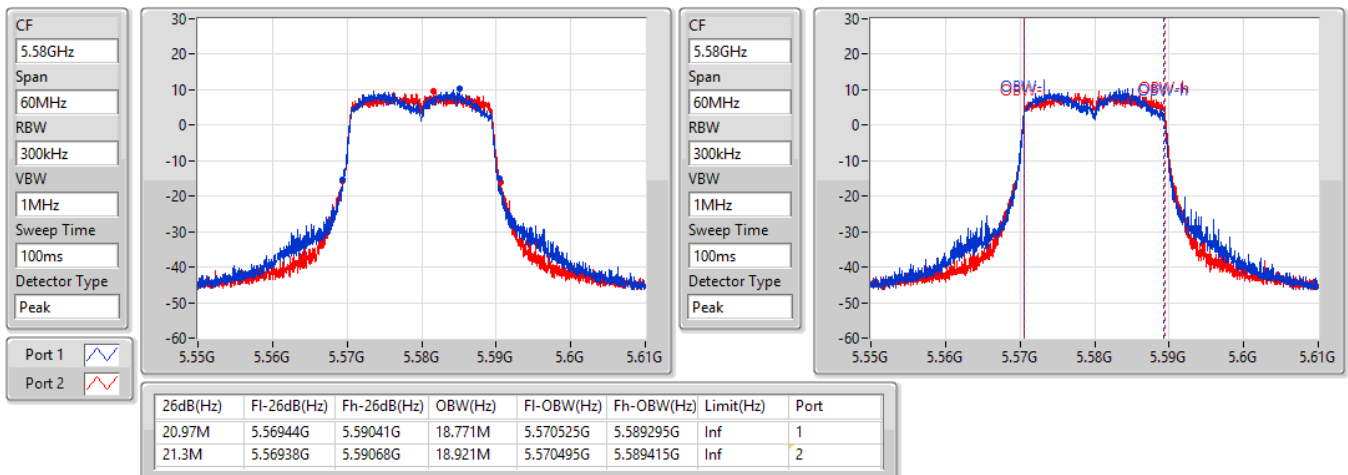


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5500MHz

10/02/2022

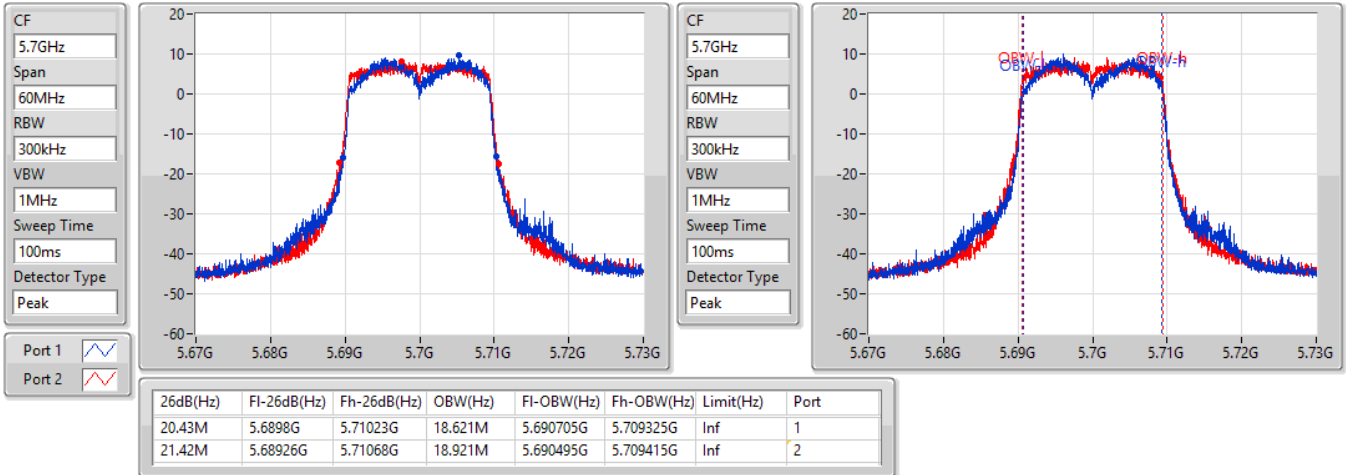

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5580MHz

10/02/2022

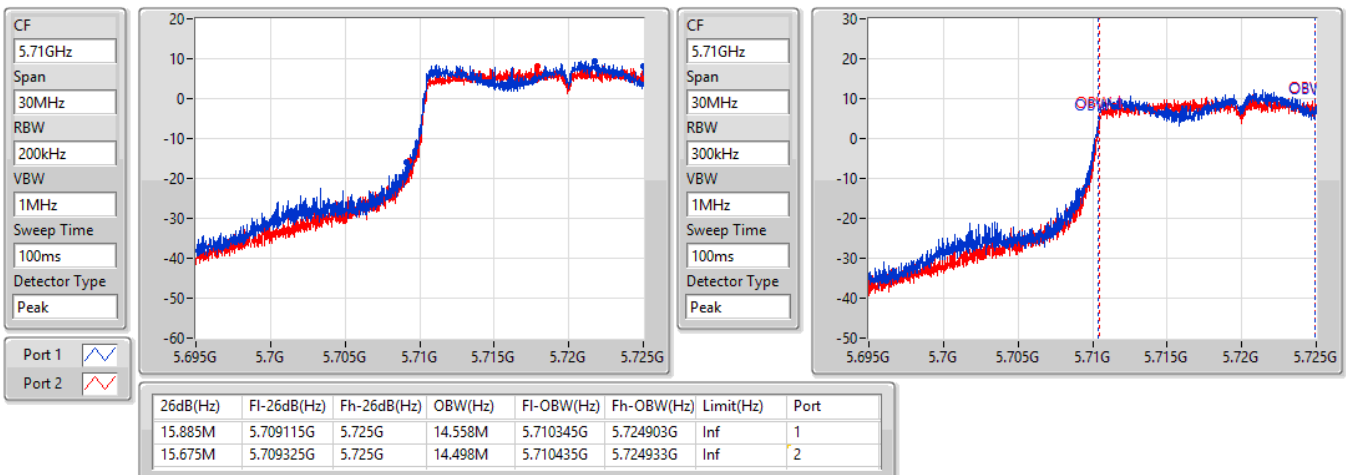


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5700MHz

10/02/2022

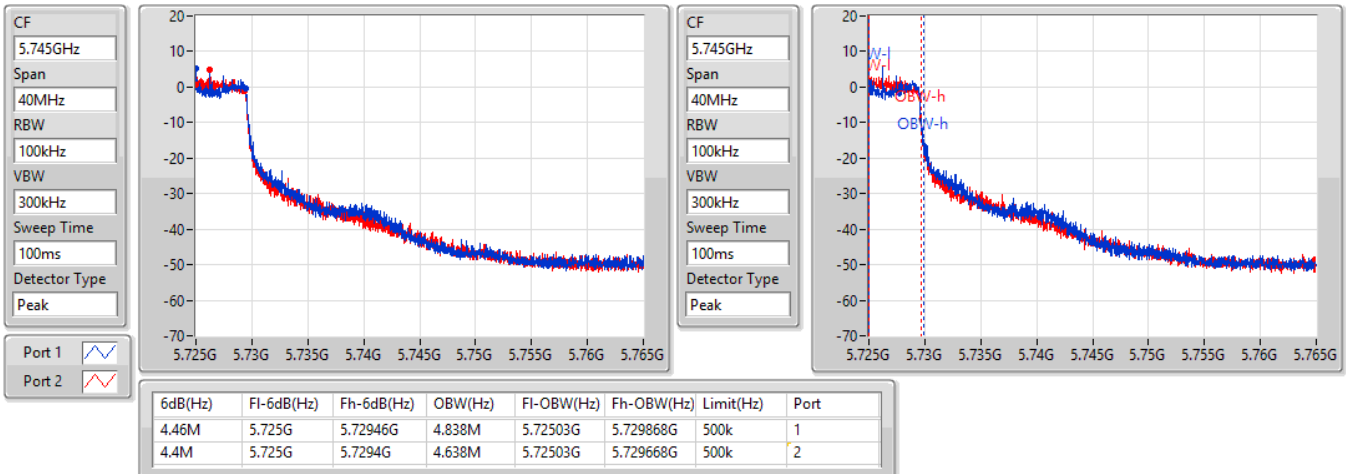

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

10/02/2022

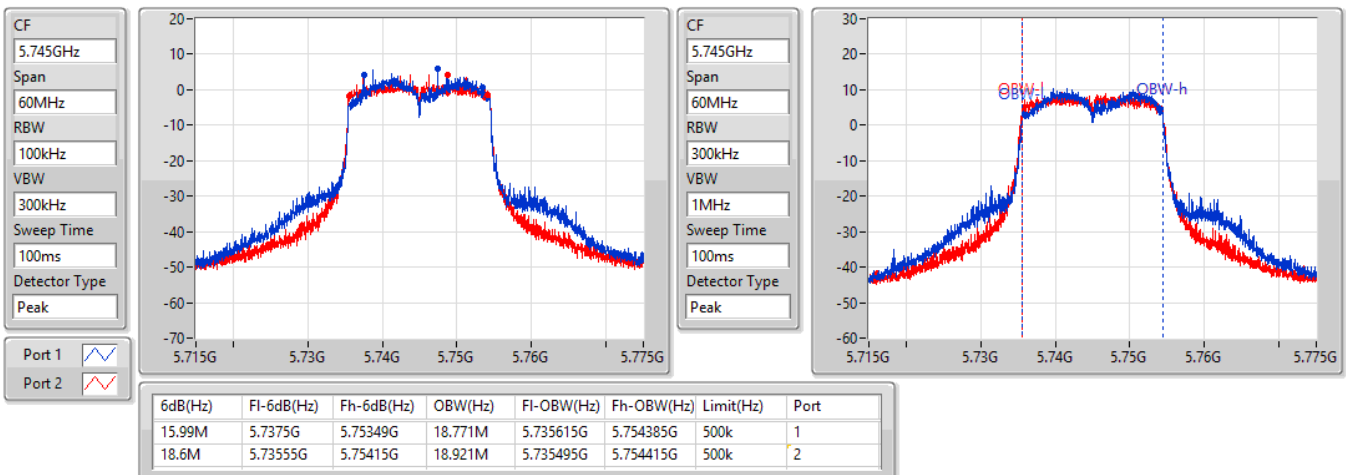


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

10/02/2022

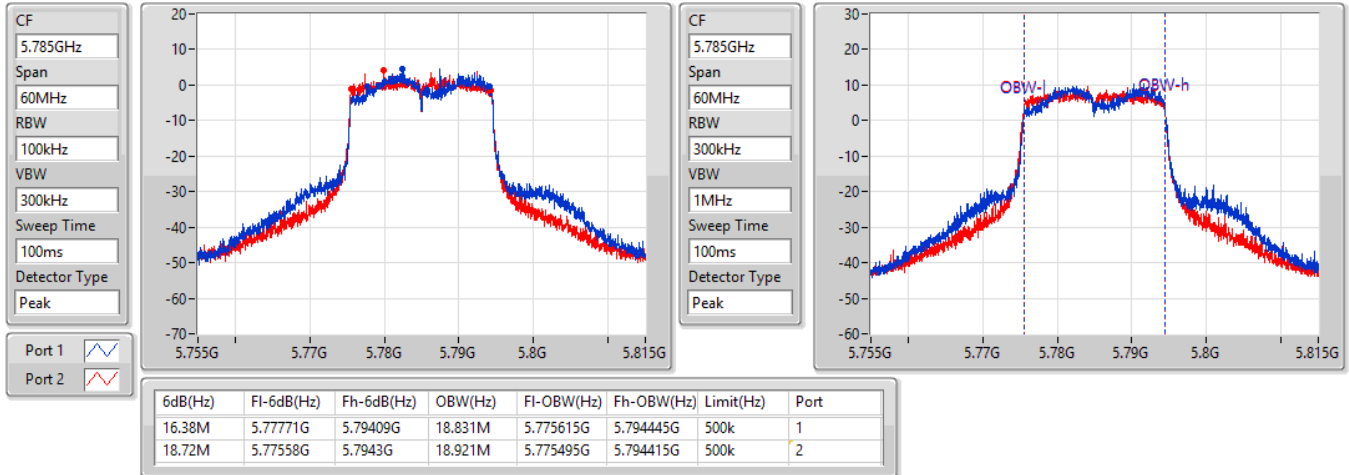

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5745MHz

10/02/2022

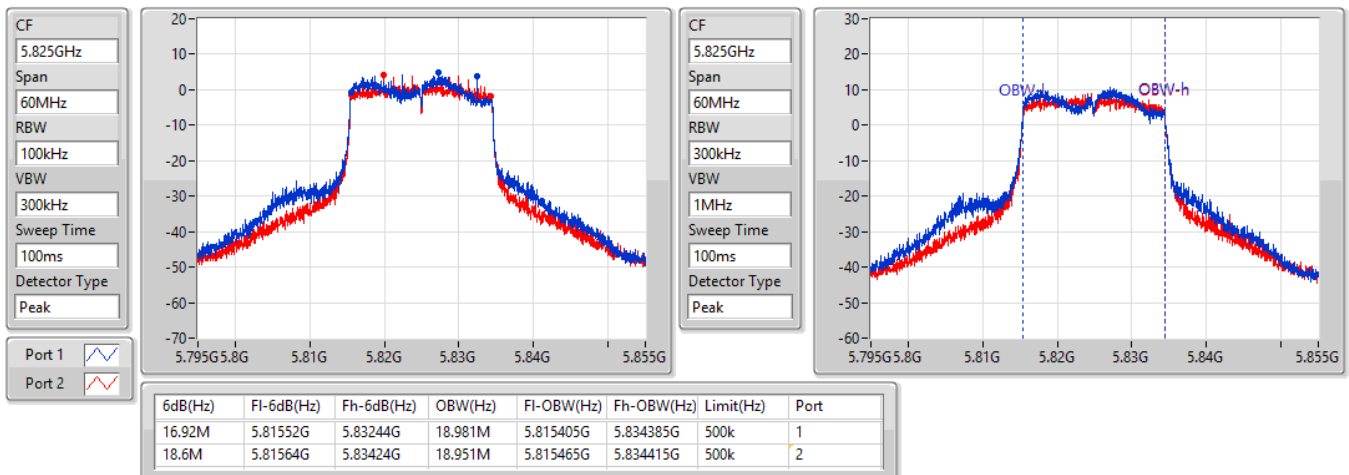


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5785MHz

10/02/2022

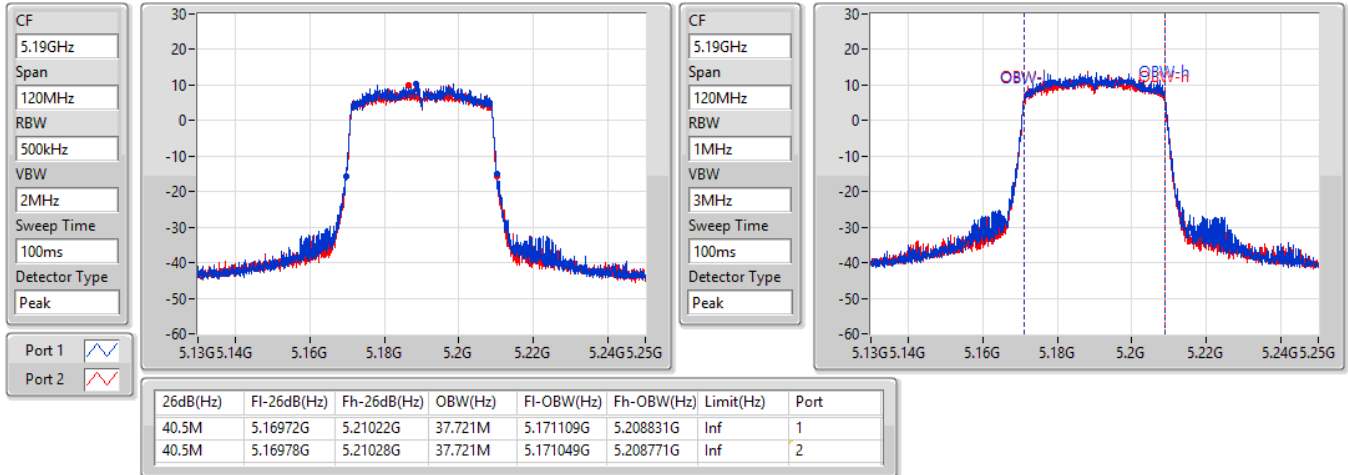

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5825MHz

10/02/2022

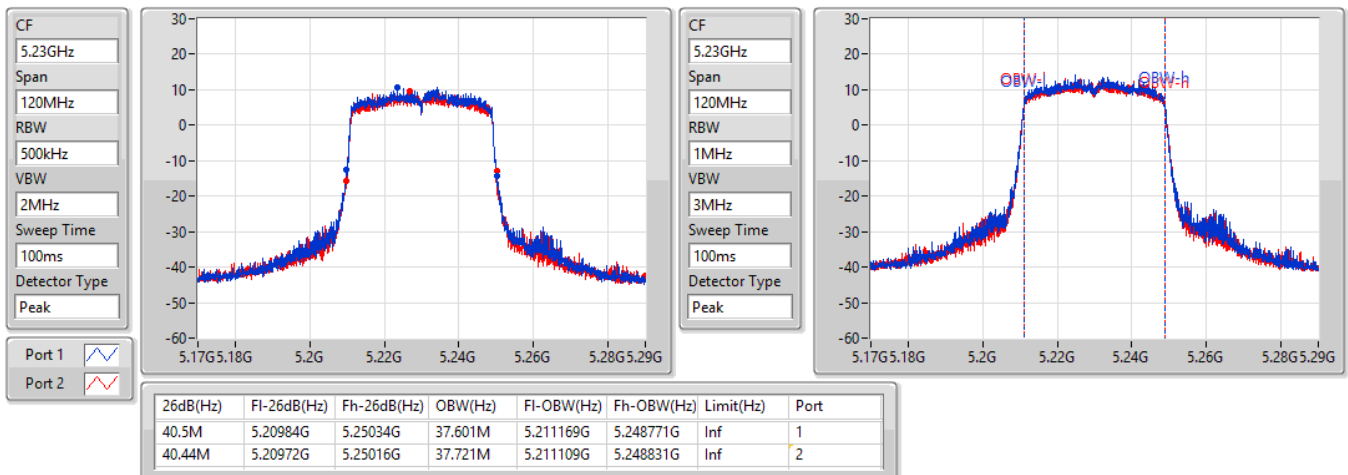


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5190MHz

10/02/2022

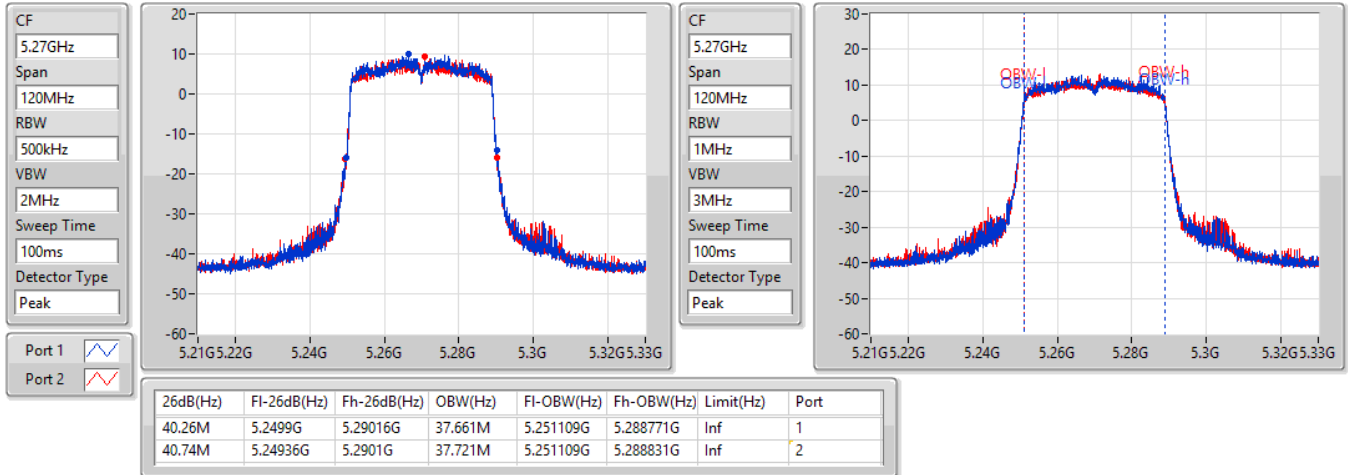

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5230MHz

10/02/2022

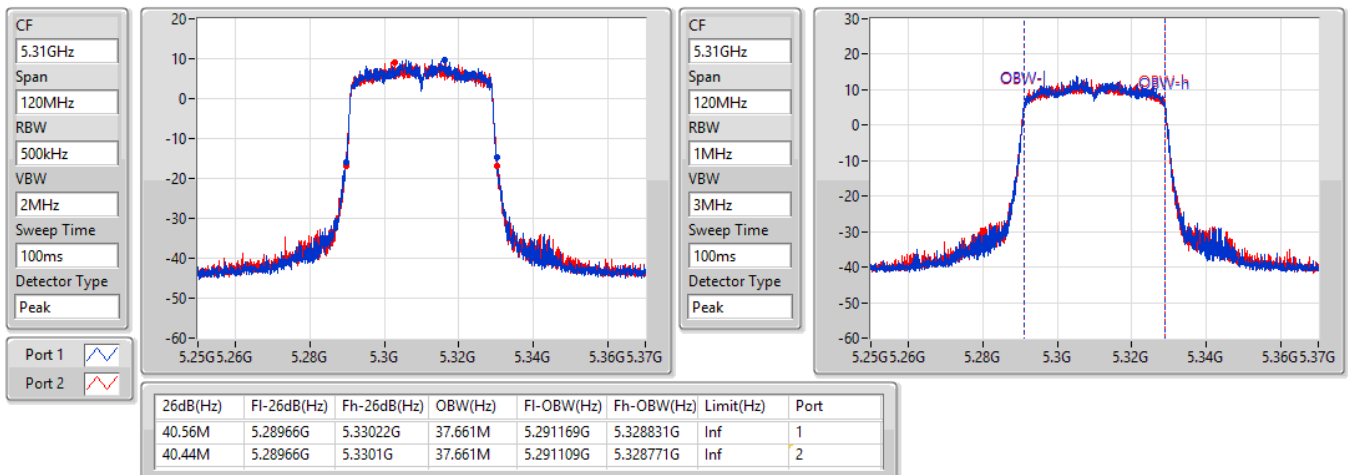


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5270MHz

10/02/2022

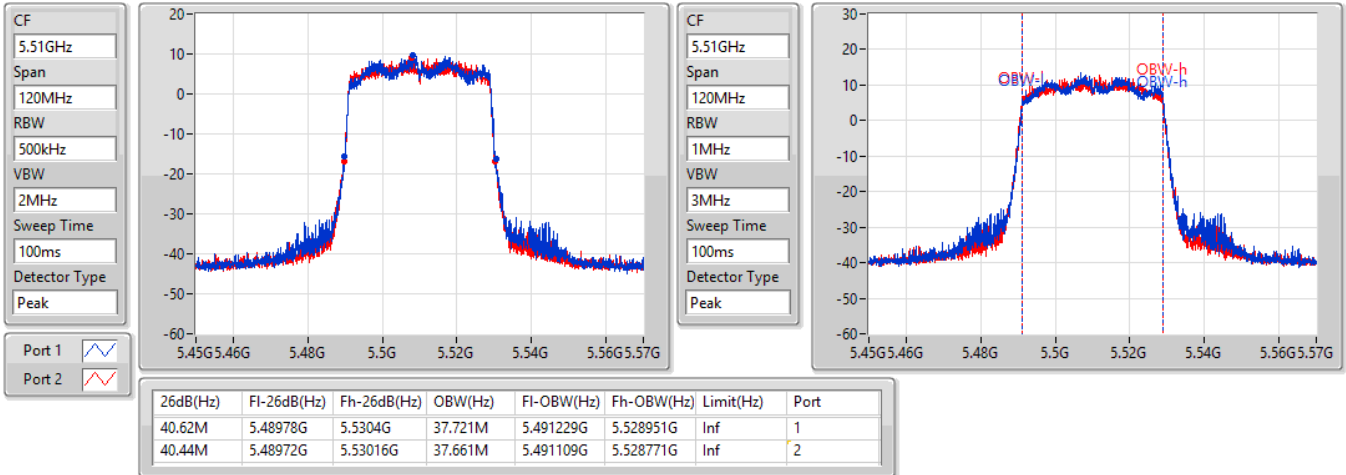

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5310MHz

10/02/2022

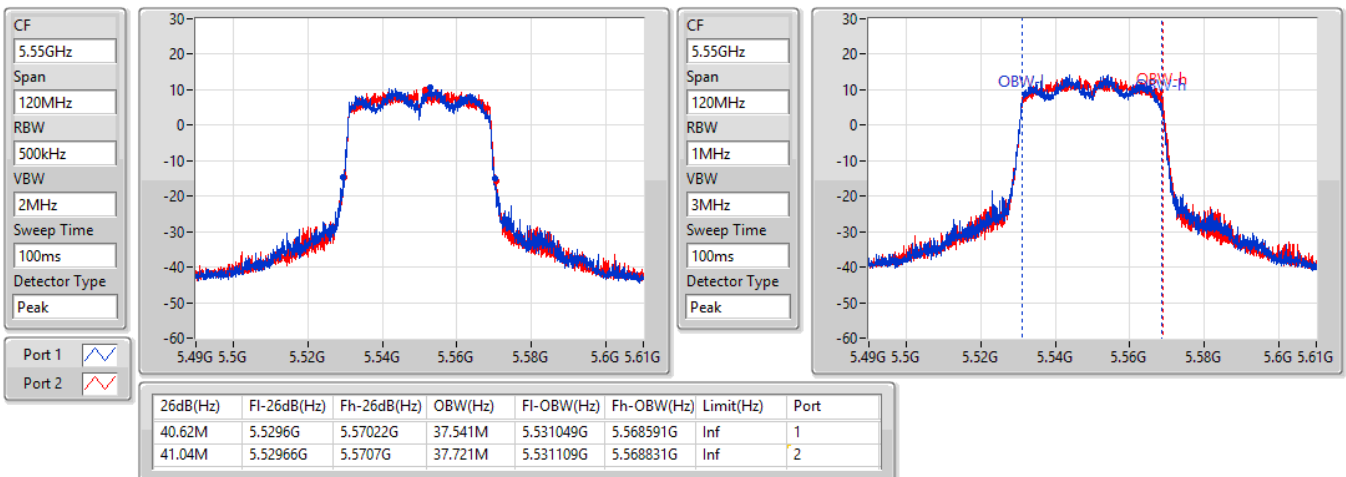


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5510MHz

10/02/2022

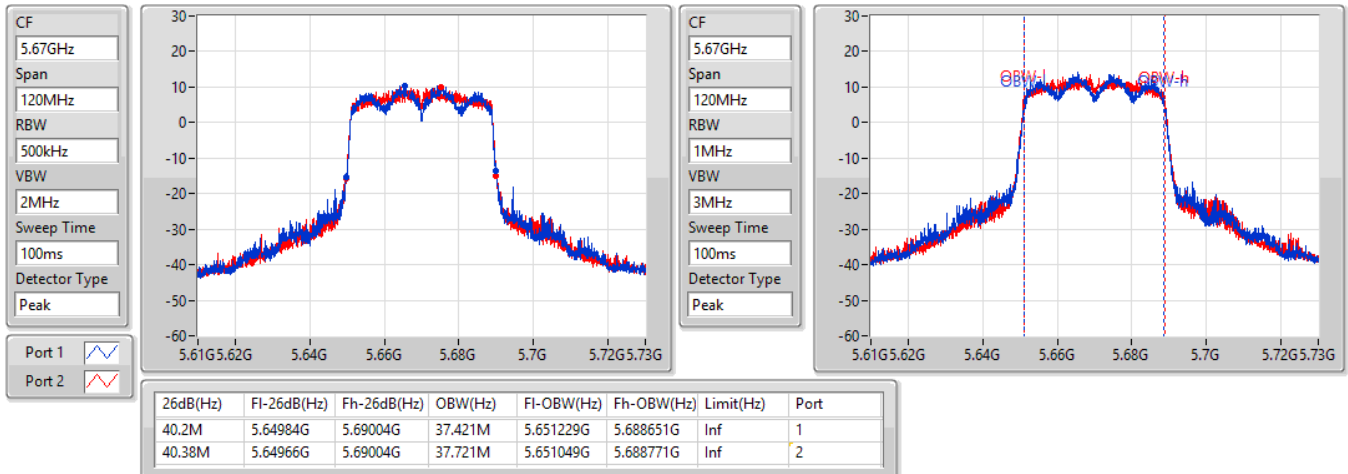

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5550MHz

10/02/2022

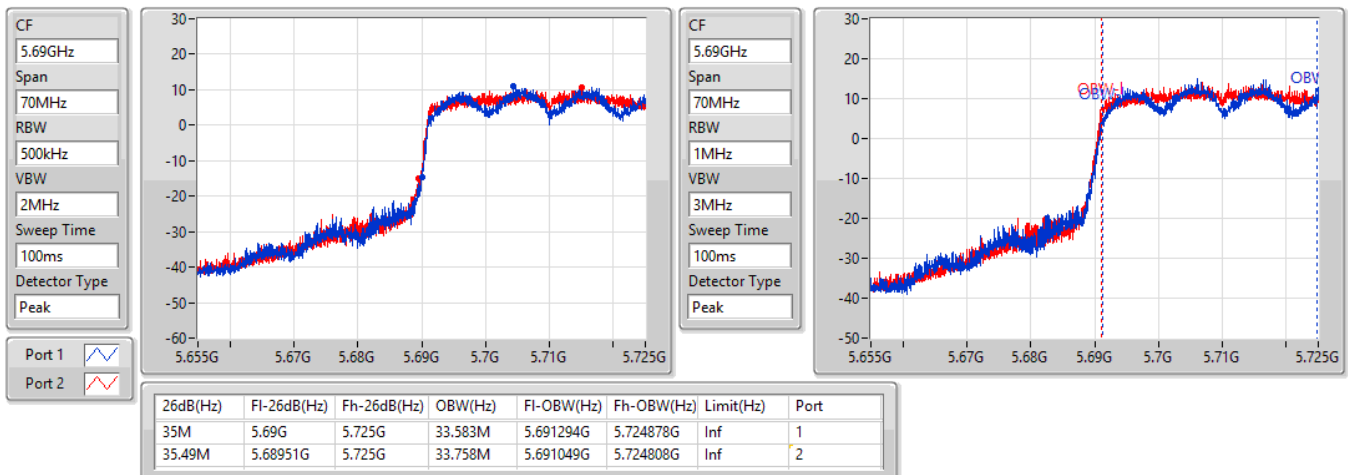


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5670MHz

10/02/2022

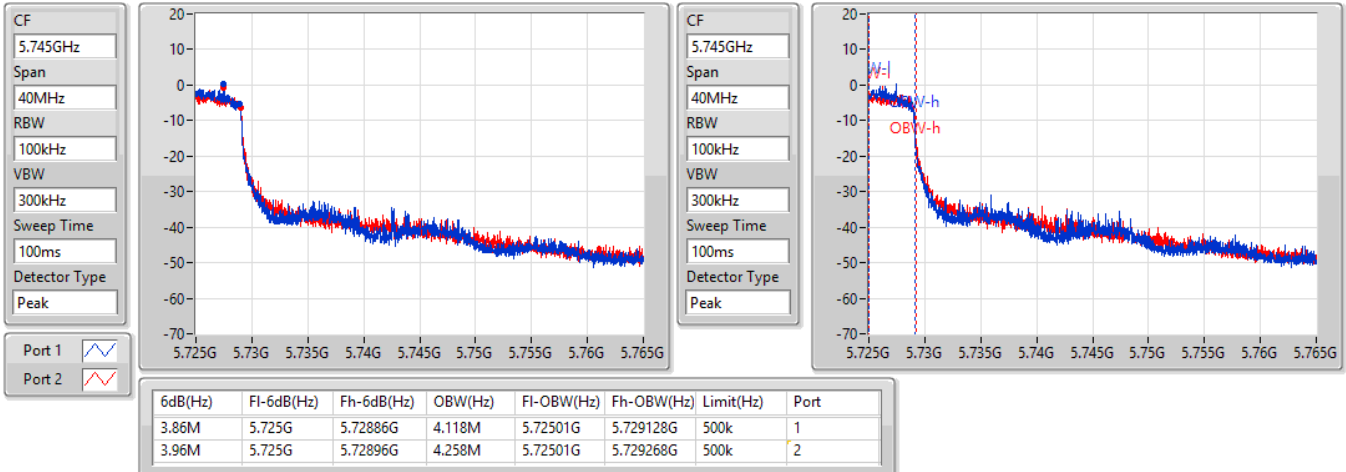

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

10/02/2022

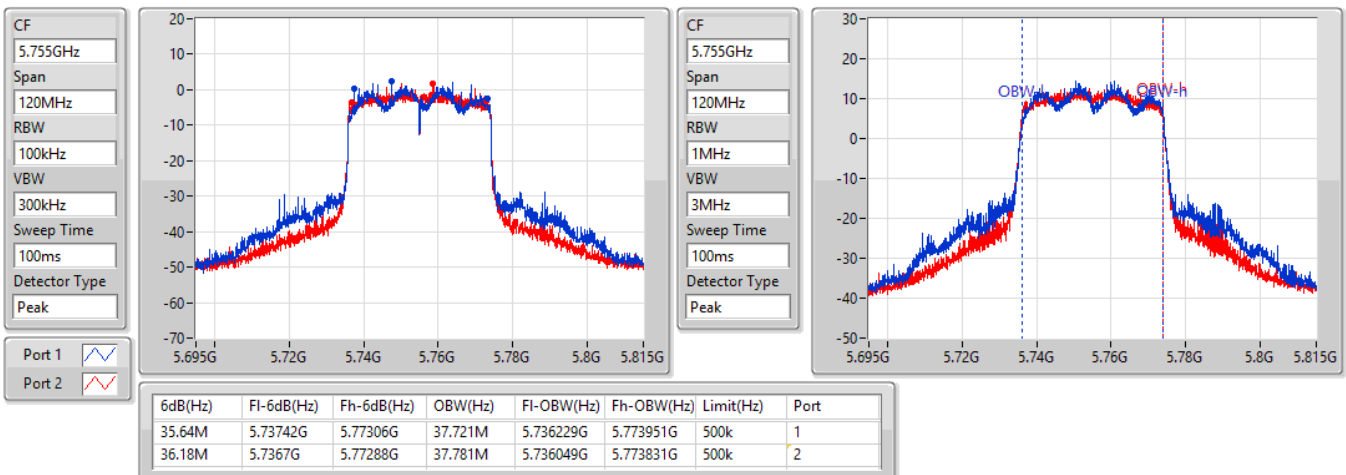


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

10/02/2022

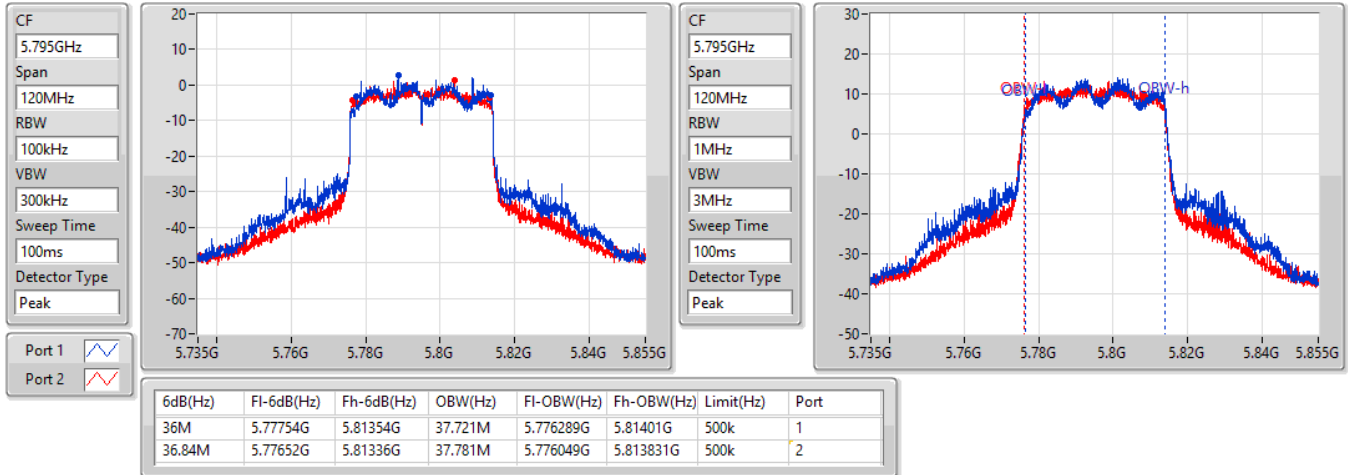

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5755MHz

10/02/2022

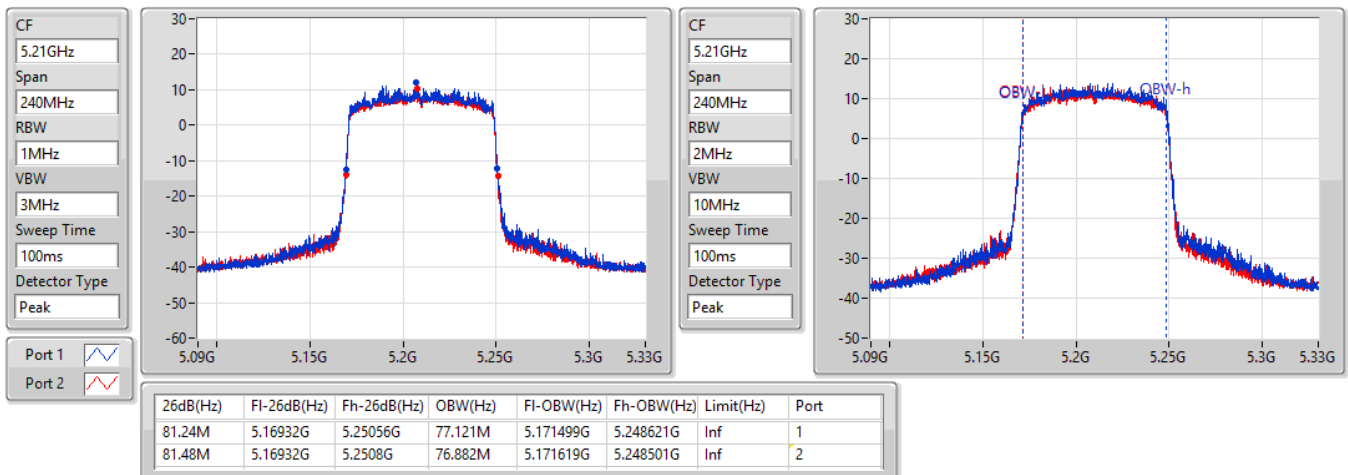


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EBW
5795MHz

10/02/2022

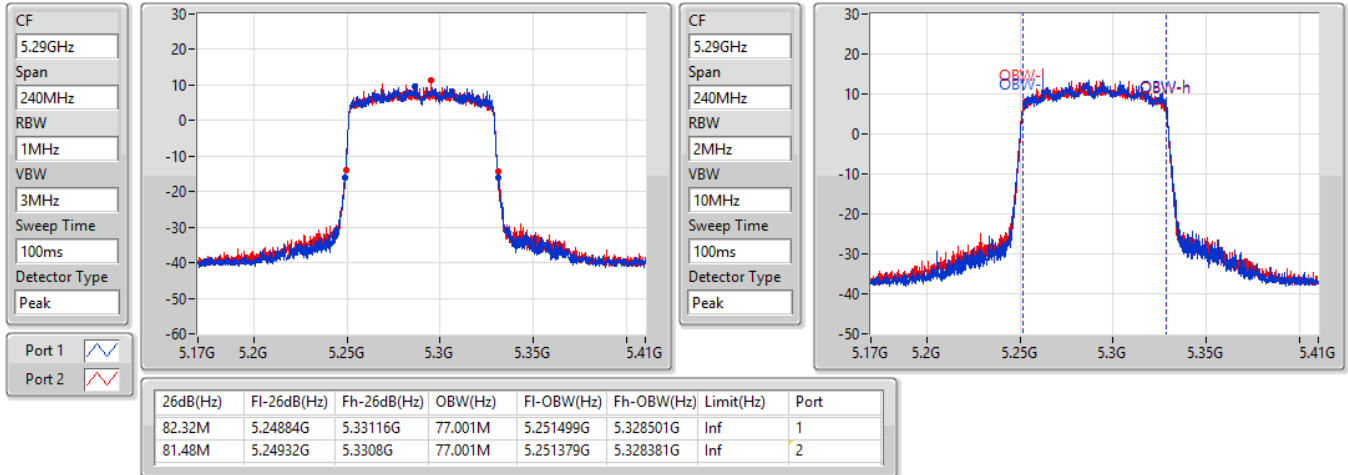

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5210MHz

10/02/2022

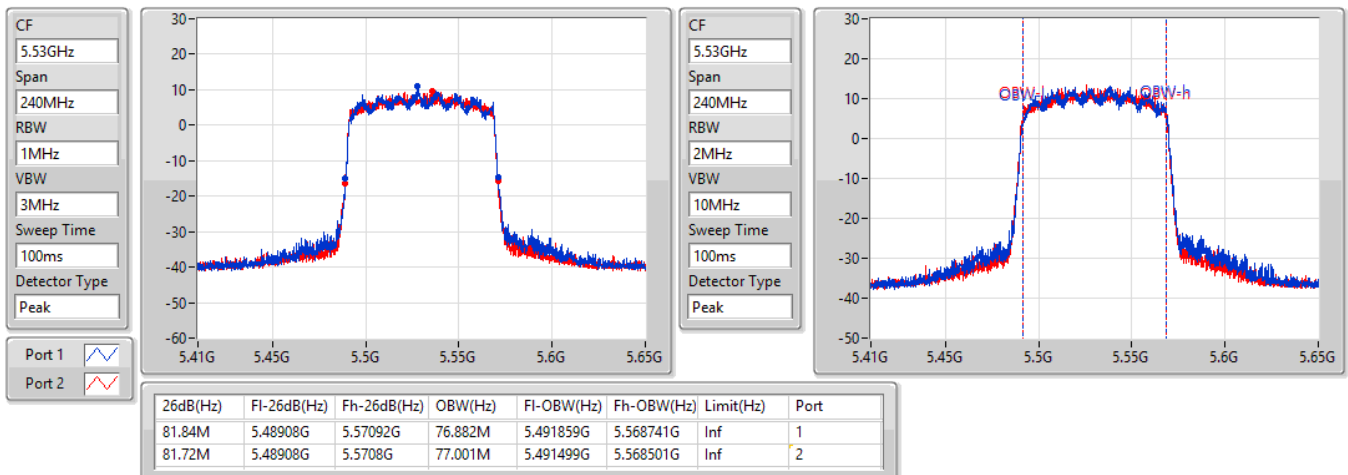


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5290MHz

10/02/2022

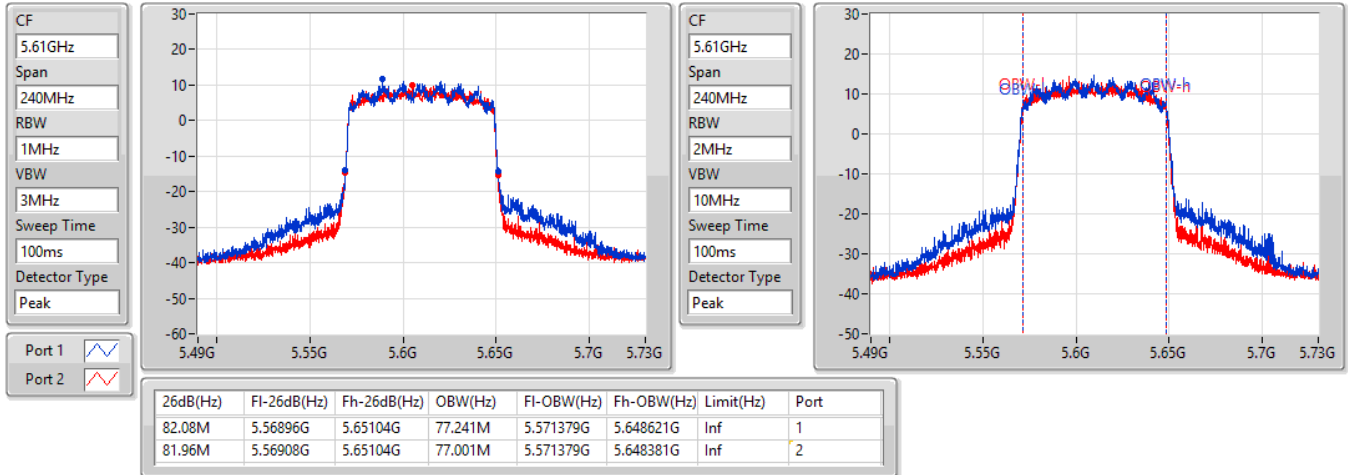

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5530MHz

10/02/2022

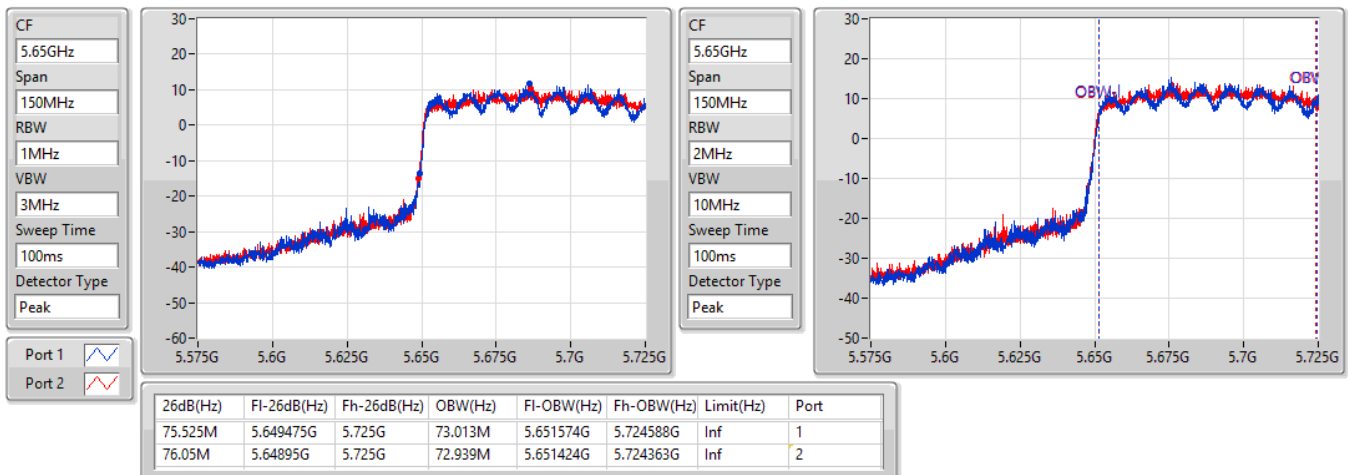


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5610MHz

10/02/2022

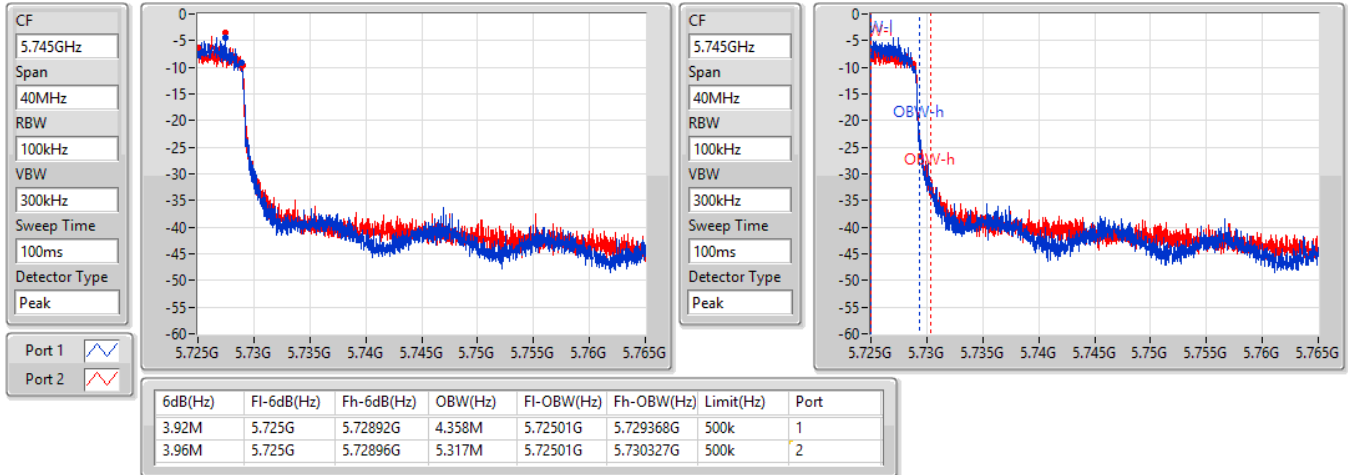

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

10/02/2022

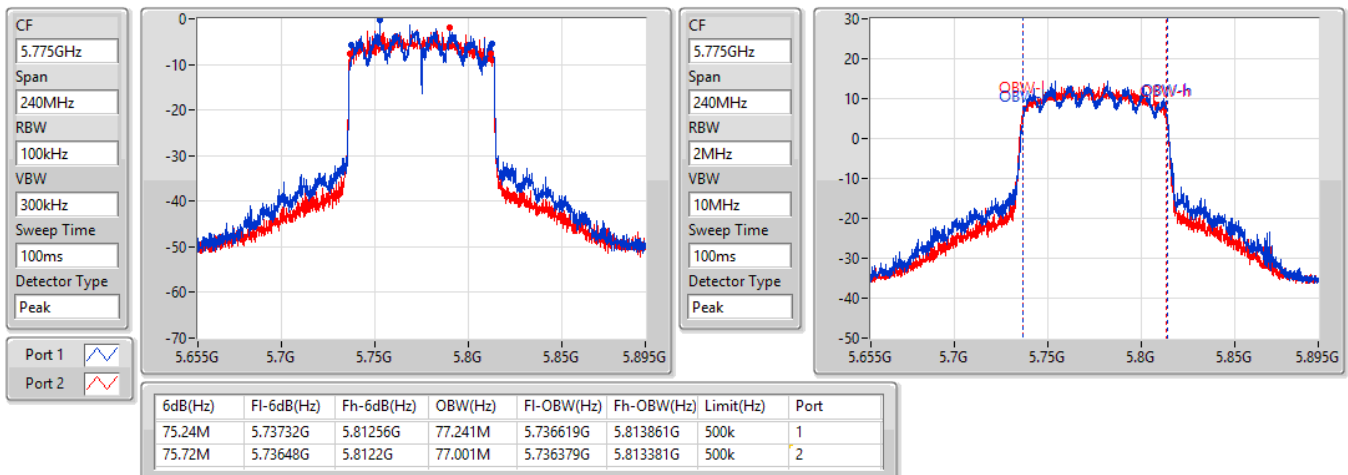


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

10/02/2022


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5775MHz

10/02/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.56M	16.492M	16M5D1D	19.02M	16.312M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.6M	18.981M	19M0D1D	20.97M	18.861M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.74M	37.781M	37M8D1D	40.08M	37.601M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.72M	77.121M	77M1D1D	81.12M	76.762M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.59M	16.492M	16M5D1D	19.08M	16.312M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.36M	18.981M	19M0D1D	20.82M	18.861M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.98M	37.721M	37M7D1D	40.26M	37.661M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.2M	77.121M	77M1D1D	81.48M	76.762M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.01M	16.612M	16M6D1D	14.055M	13.028M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.54M	18.981M	19M0D1D	15.375M	14.333M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.86M	37.901M	37M9D1D	35M	33.583M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.08M	77.241M	77M2D1D	75.75M	72.864M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.35M	16.732M	16M7D1D	2.48M	3.338M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.02M	19.13M	19M1D1D	4.4M	4.538M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.92M	38.141M	38M1D1D	3.36M	4.118M
802.11ax HEW80_Nss1,(MCS0)_4TX	74.16M	77.721M	77M7D1D	3.8M	4.358M

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

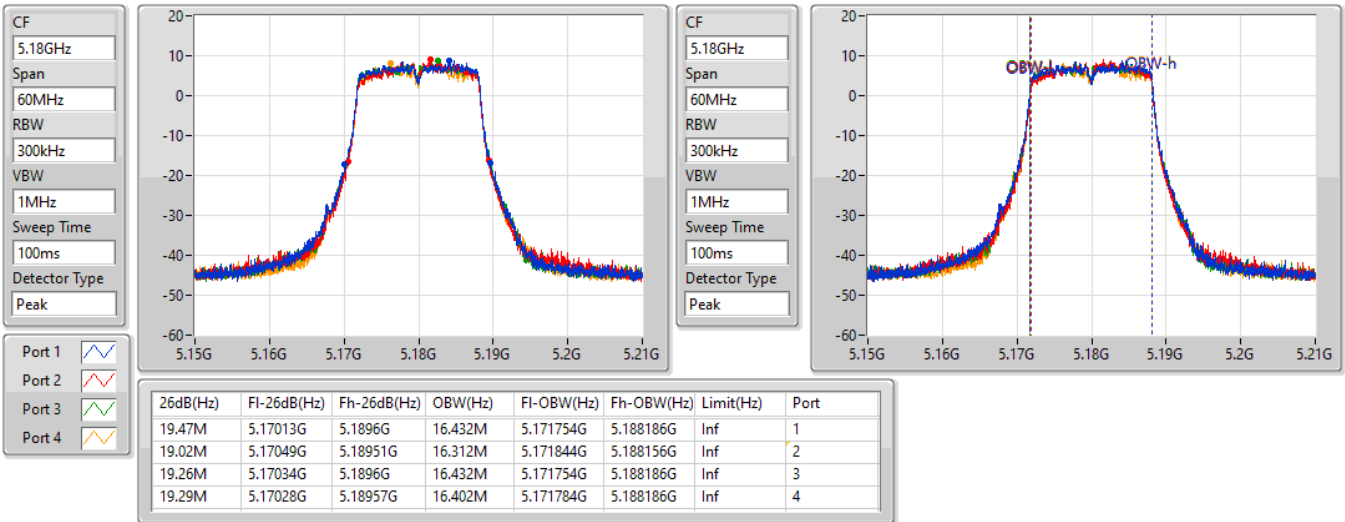
Result

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	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.47M	16.432M	19.02M	16.312M	19.26M	16.432M	19.29M	16.402M
5200MHz	Pass	Inf	19.47M	16.432M	19.02M	16.342M	19.32M	16.402M	19.32M	16.402M
5240MHz	Pass	Inf	19.41M	16.342M	19.56M	16.492M	19.47M	16.432M	19.35M	16.402M
5260MHz	Pass	Inf	19.59M	16.492M	19.08M	16.342M	19.53M	16.462M	19.35M	16.402M
5300MHz	Pass	Inf	19.14M	16.312M	19.11M	16.462M	19.26M	16.372M	19.38M	16.402M
5320MHz	Pass	Inf	19.56M	16.492M	19.17M	16.342M	19.35M	16.462M	19.11M	16.402M
5500MHz	Pass	Inf	19.56M	16.432M	20.01M	16.612M	19.32M	16.432M	19.11M	16.402M
5580MHz	Pass	Inf	18.87M	16.192M	19.47M	16.582M	19.68M	16.432M	18.96M	16.342M
5700MHz	Pass	Inf	18.78M	16.102M	19.26M	16.522M	19.32M	16.432M	19.32M	16.432M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.055M	13.028M	14.625M	13.163M	14.655M	13.238M	14.625M	13.298M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.438M	3.12M	3.558M	3.12M	3.458M	2.48M	3.338M
5745MHz	Pass	500k	13.83M	16.192M	16.32M	16.582M	16.29M	16.462M	15.93M	16.492M
5785MHz	Pass	500k	15.39M	16.312M	16.32M	16.702M	16.29M	16.492M	15.27M	16.312M
5825MHz	Pass	500k	15.66M	16.492M	16.35M	16.732M	16.32M	16.552M	13.77M	16.432M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.24M	18.921M	20.97M	18.861M	21.27M	18.861M	21.18M	18.891M
5200MHz	Pass	Inf	21.45M	18.951M	21.18M	18.951M	21.45M	18.891M	21.21M	18.861M
5240MHz	Pass	Inf	21.54M	18.981M	21.09M	18.951M	21.51M	18.921M	21.6M	18.951M
5260MHz	Pass	Inf	21.09M	18.981M	21.09M	18.951M	21.21M	18.861M	21.21M	18.921M
5300MHz	Pass	Inf	21.36M	18.951M	20.94M	18.891M	21.33M	18.951M	21.18M	18.921M
5320MHz	Pass	Inf	20.97M	18.891M	20.82M	18.891M	21.03M	18.921M	21.09M	18.921M
5500MHz	Pass	Inf	20.97M	18.861M	20.25M	18.591M	21.54M	18.921M	21.39M	18.981M
5580MHz	Pass	Inf	21.03M	18.801M	20.49M	18.741M	21.33M	18.951M	21.45M	18.951M
5700MHz	Pass	Inf	20.58M	18.651M	20.64M	18.831M	21.33M	18.891M	20.85M	18.891M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	14.543M	15.75M	14.513M	15.465M	14.453M	15.375M	14.333M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.52M	4.738M	4.44M	4.638M	4.4M	4.598M	4.4M	4.538M
5745MHz	Pass	500k	18.57M	19.07M	19.02M	19.04M	18.39M	18.891M	15.51M	18.801M
5785MHz	Pass	500k	18.66M	19.07M	18.87M	19.1M	18.81M	18.921M	17.85M	19.1M
5825MHz	Pass	500k	15.57M	18.921M	12.33M	18.681M	18.39M	18.891M	18.87M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.781M	40.62M	37.781M	40.38M	37.601M	40.5M	37.601M
5230MHz	Pass	Inf	40.62M	37.721M	40.2M	37.781M	40.5M	37.721M	40.74M	37.721M
5270MHz	Pass	Inf	40.98M	37.661M	40.26M	37.721M	40.8M	37.721M	40.26M	37.721M
5310MHz	Pass	Inf	40.56M	37.721M	40.38M	37.661M	40.62M	37.661M	40.38M	37.721M
5510MHz	Pass	Inf	40.5M	37.781M	40.08M	37.181M	40.68M	37.661M	40.62M	37.841M
5550MHz	Pass	Inf	40.62M	37.541M	40.14M	37.121M	40.74M	37.661M	39.96M	37.601M
5670MHz	Pass	Inf	39.78M	37.481M	40.74M	37.721M	40.86M	37.901M	40.32M	37.601M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35M	33.583M	35.35M	33.758M	35.385M	33.723M	35.21M	33.898M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.118M	4.06M	4.558M	4M	4.218M	3.36M	4.178M
5755MHz	Pass	500k	32.46M	37.541M	37.92M	38.021M	37.5M	37.841M	35.46M	37.781M
5795MHz	Pass	500k	34.02M	37.841M	36.54M	38.141M	37.32M	37.901M	33.6M	37.841M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.6M	76.882M	81.72M	77.121M	81.72M	77.001M	81.12M	76.762M
5290MHz	Pass	Inf	81.48M	77.001M	81.48M	77.001M	82.2M	77.121M	81.48M	76.762M
5530MHz	Pass	Inf	82.08M	77.001M	80.64M	75.802M	81.72M	77.001M	81.72M	77.001M
5610MHz	Pass	Inf	81.6M	77.241M	80.88M	76.522M	81.96M	77.001M	82.08M	77.241M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.75M	73.013M	76.2M	72.864M	76.2M	73.013M	75.825M	73.388M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.358M	4.08M	9.575M	4.08M	5.597M	3.8M	6.657M
5775MHz	Pass	500k	73.32M	77.121M	74.16M	77.721M	70.32M	77.241M	67.32M	76.882M

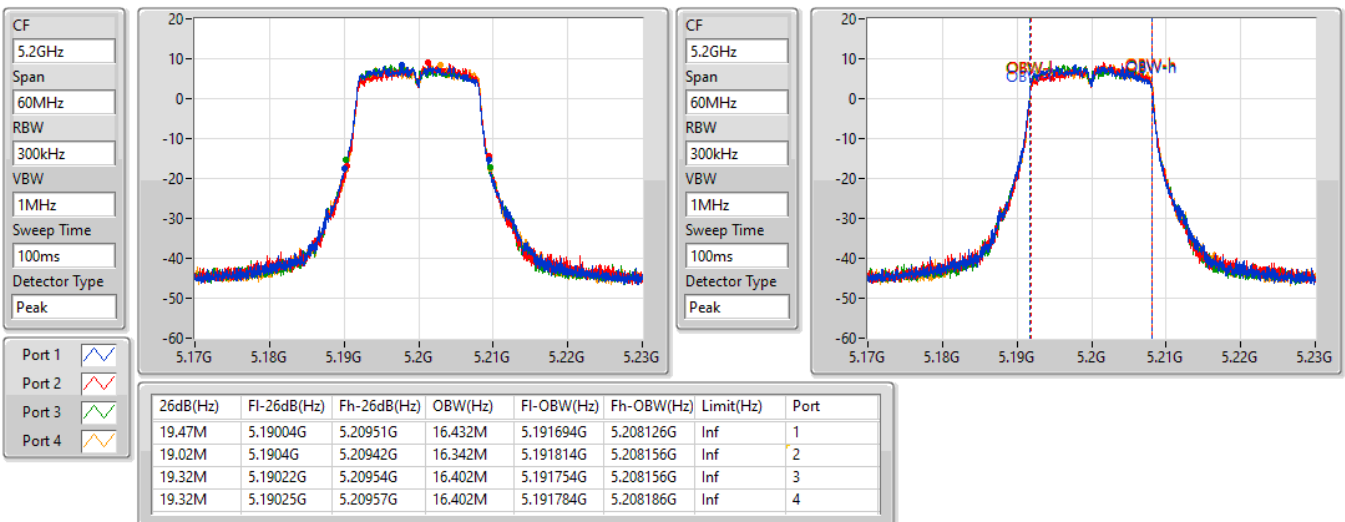
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

22/01/2022

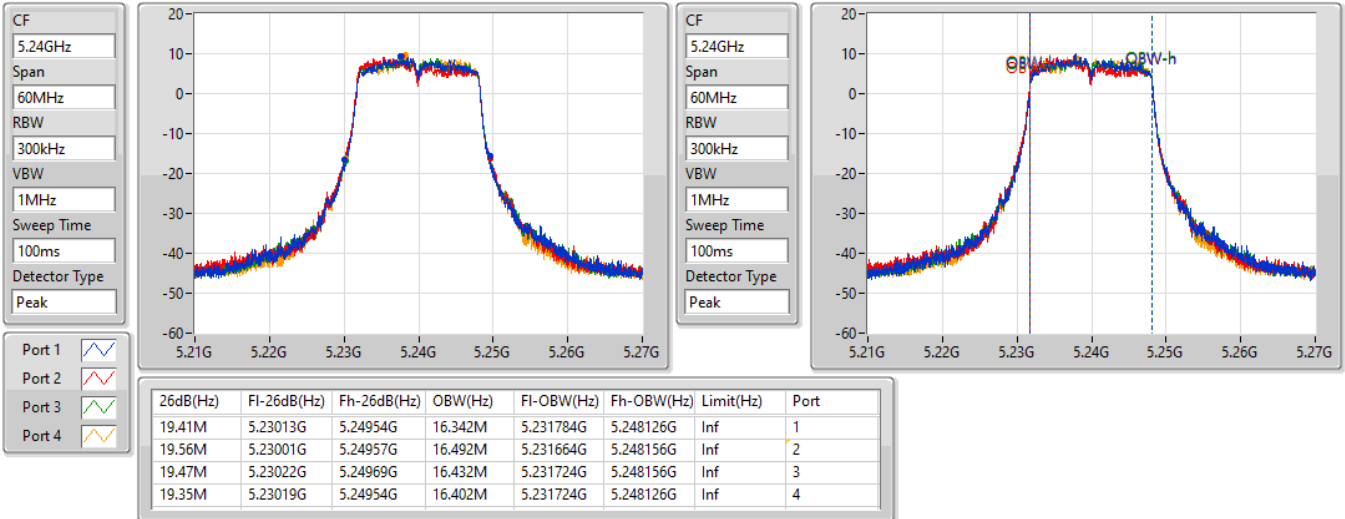

802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

22/01/2022

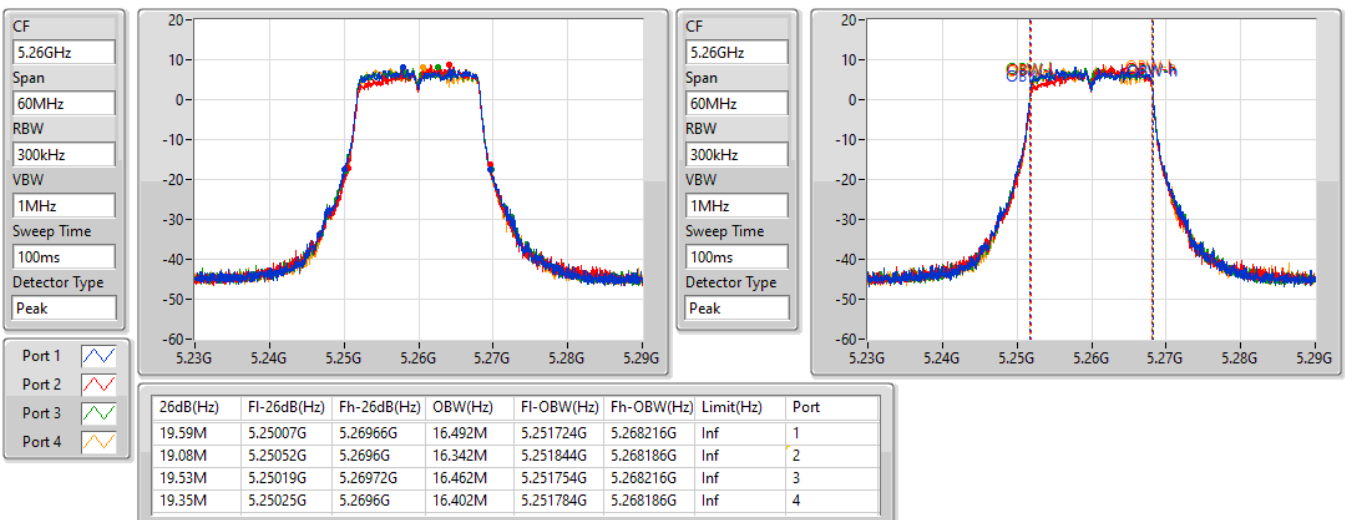


802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

22/01/2022

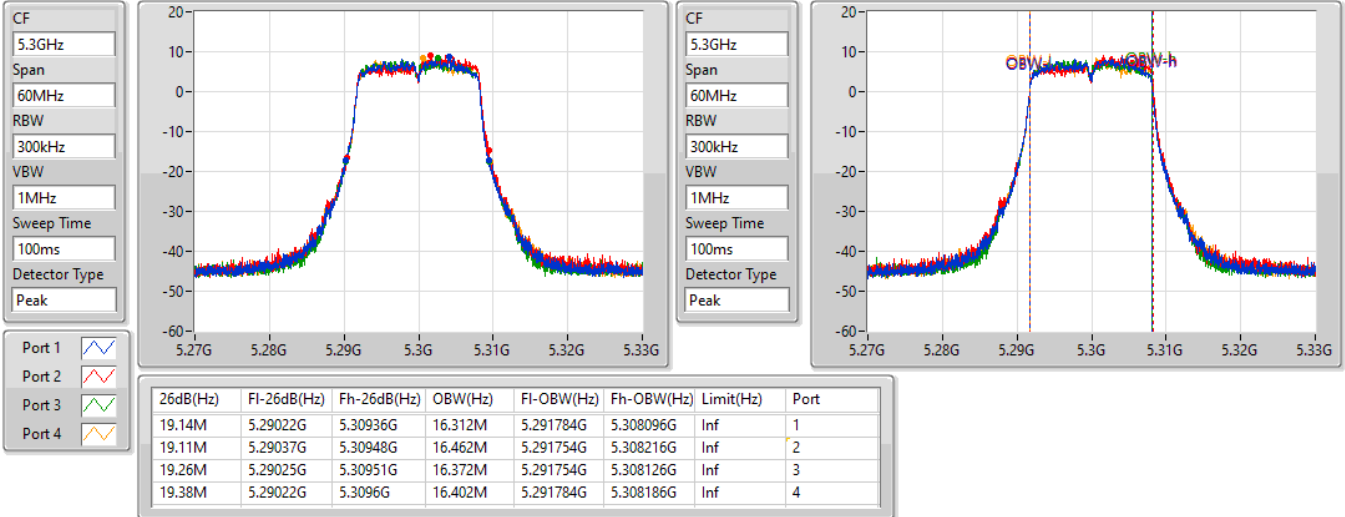

802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

22/01/2022

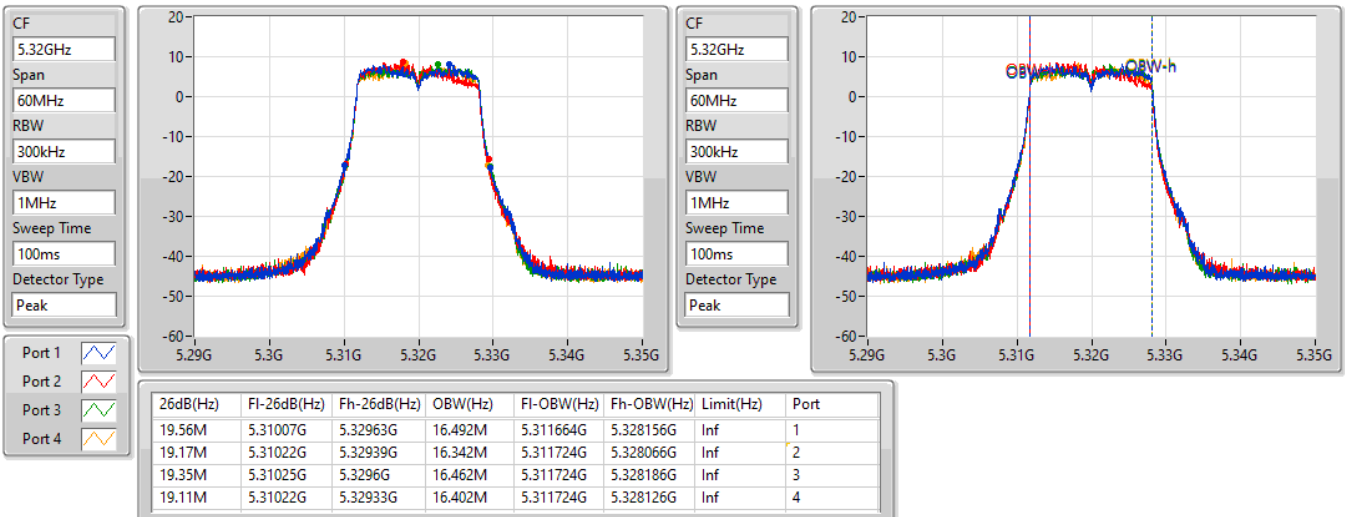


802.11a_Nss1,(6Mbps)_4TX
EBW
5300MHz

22/01/2022

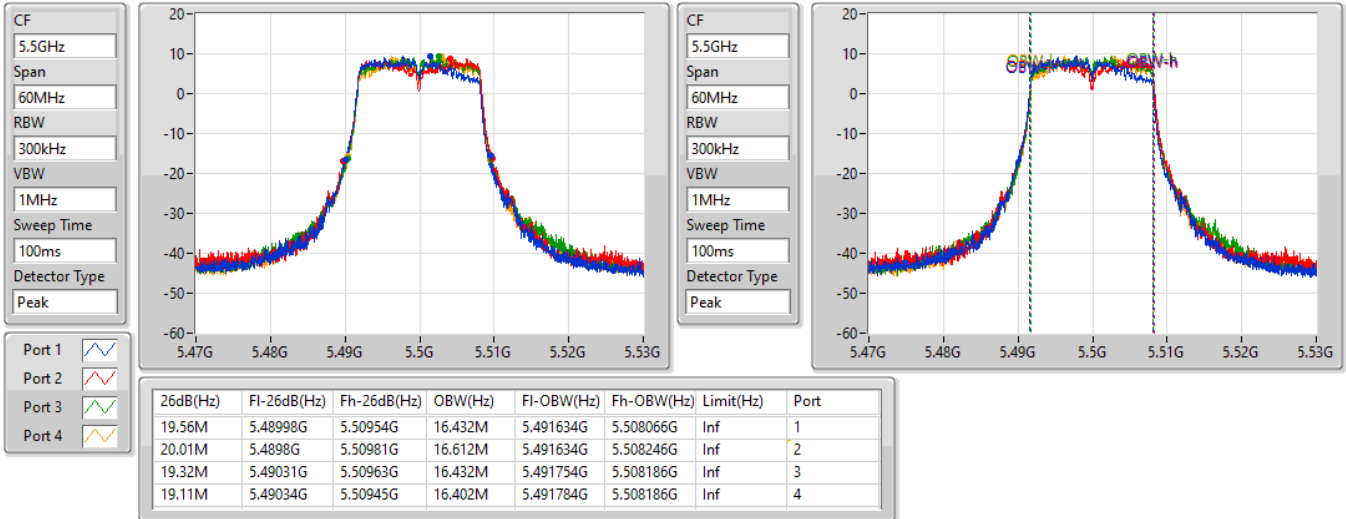

802.11a_Nss1,(6Mbps)_4TX
EBW
5320MHz

22/01/2022

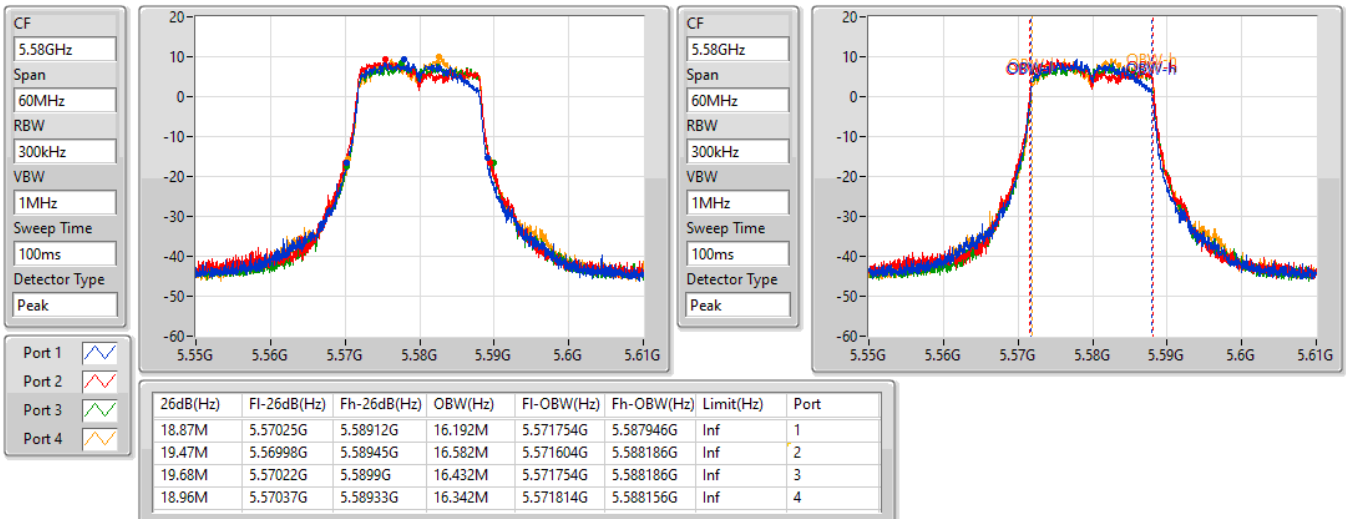


802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

22/01/2022

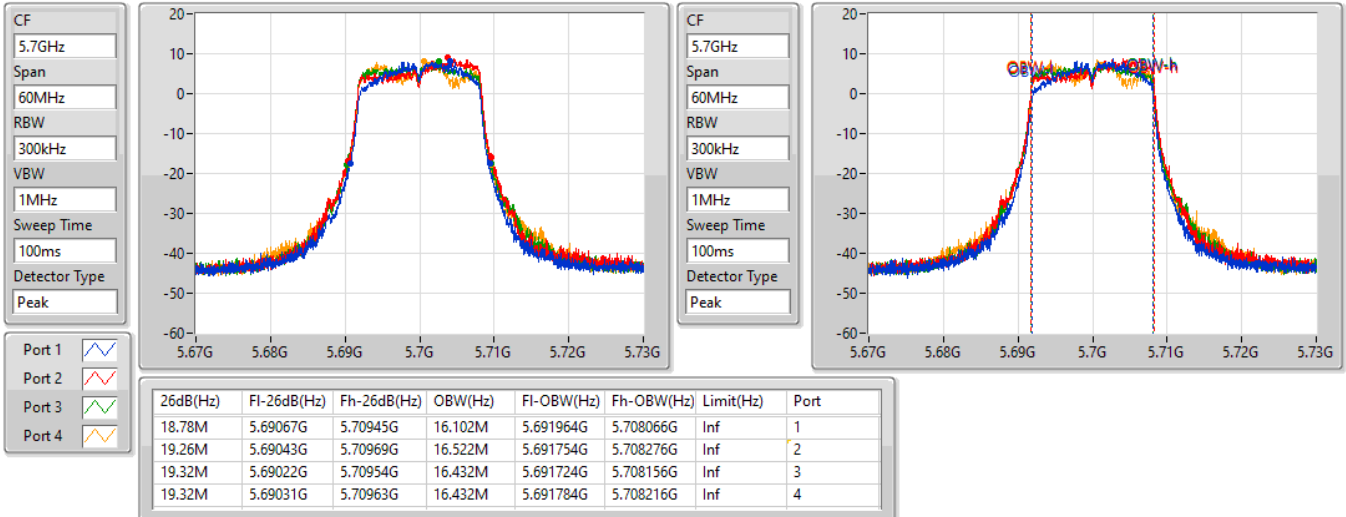

802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

22/01/2022

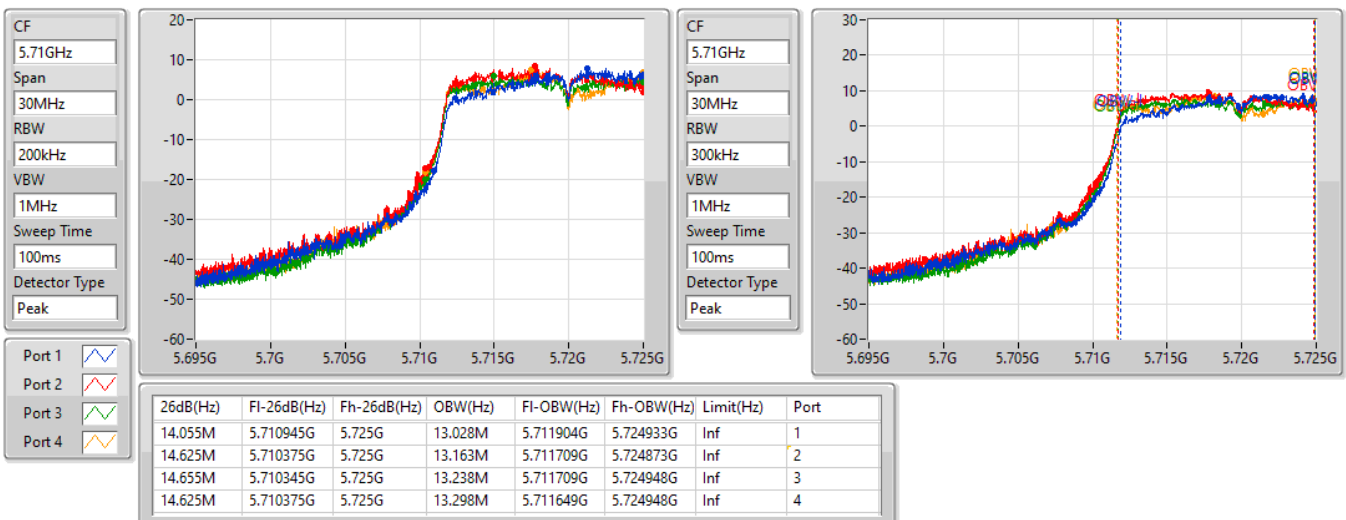


802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz

22/01/2022

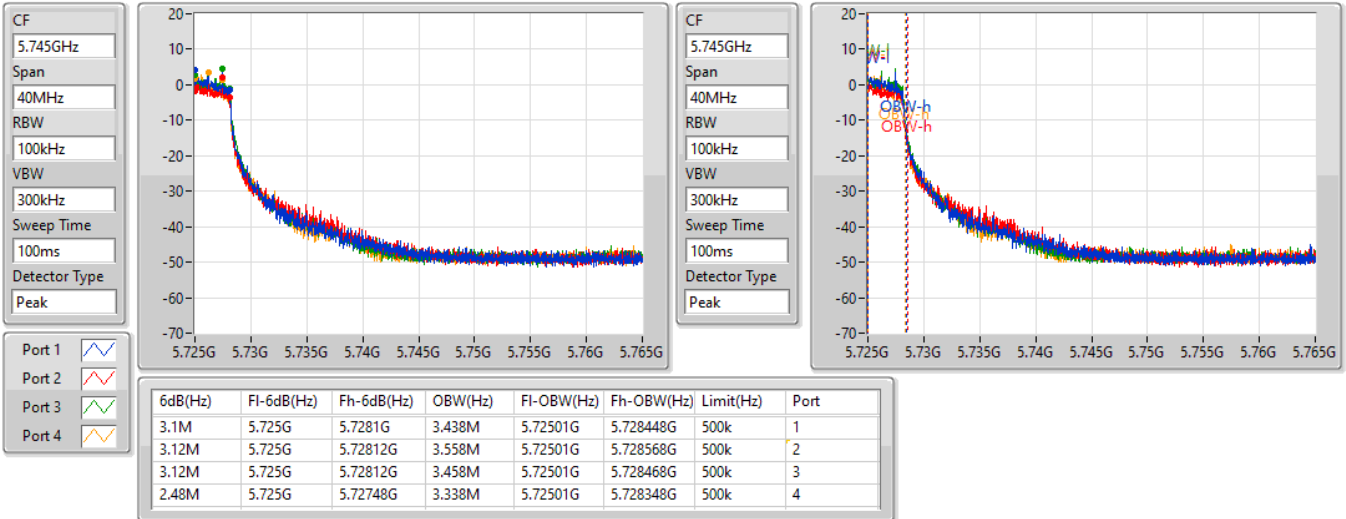

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

22/01/2022

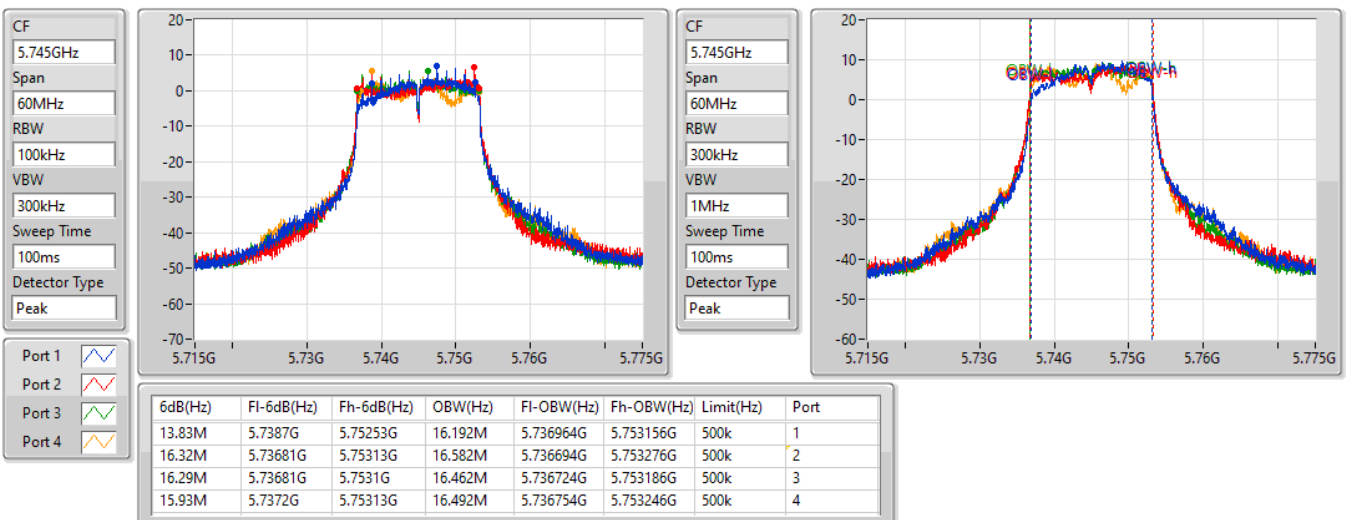


802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

22/01/2022

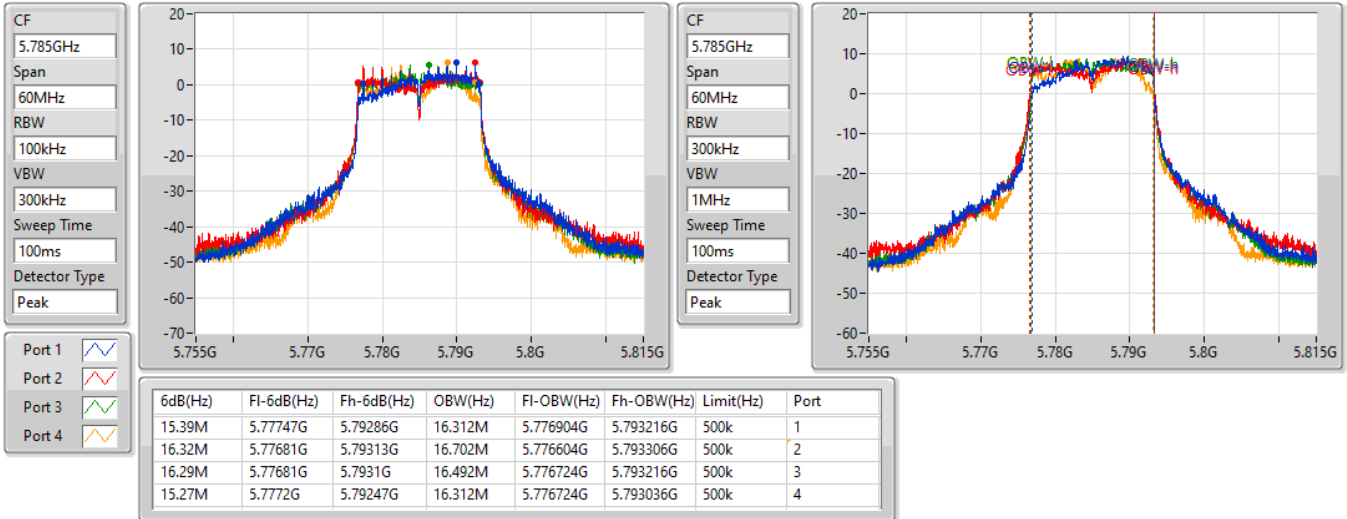

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

22/01/2022

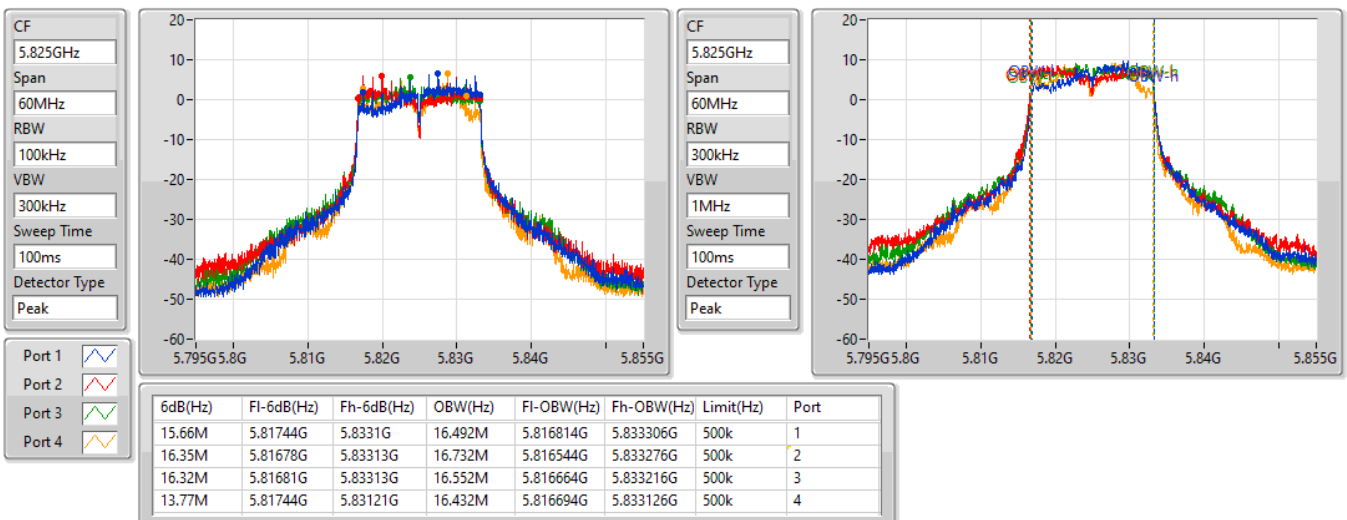


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

22/01/2022

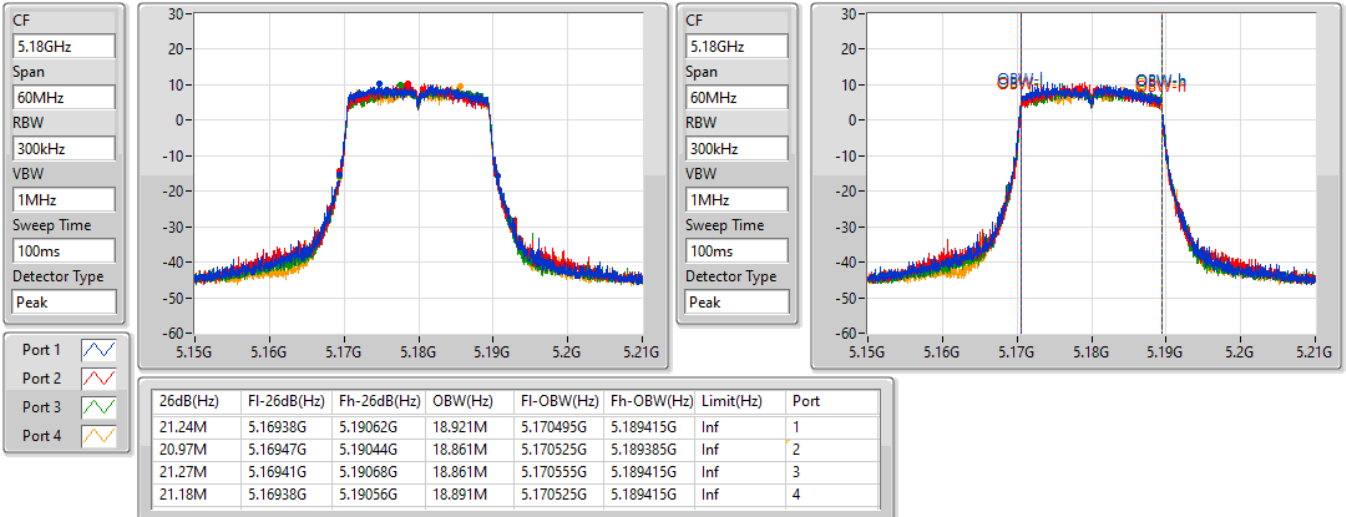

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

22/01/2022

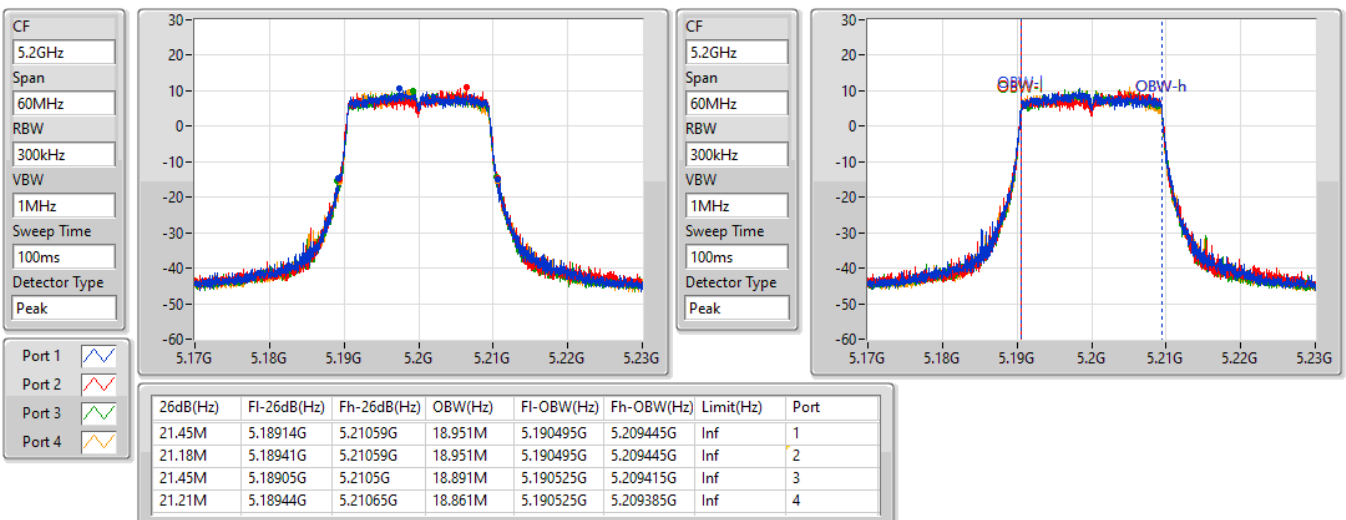


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5180MHz

22/01/2022

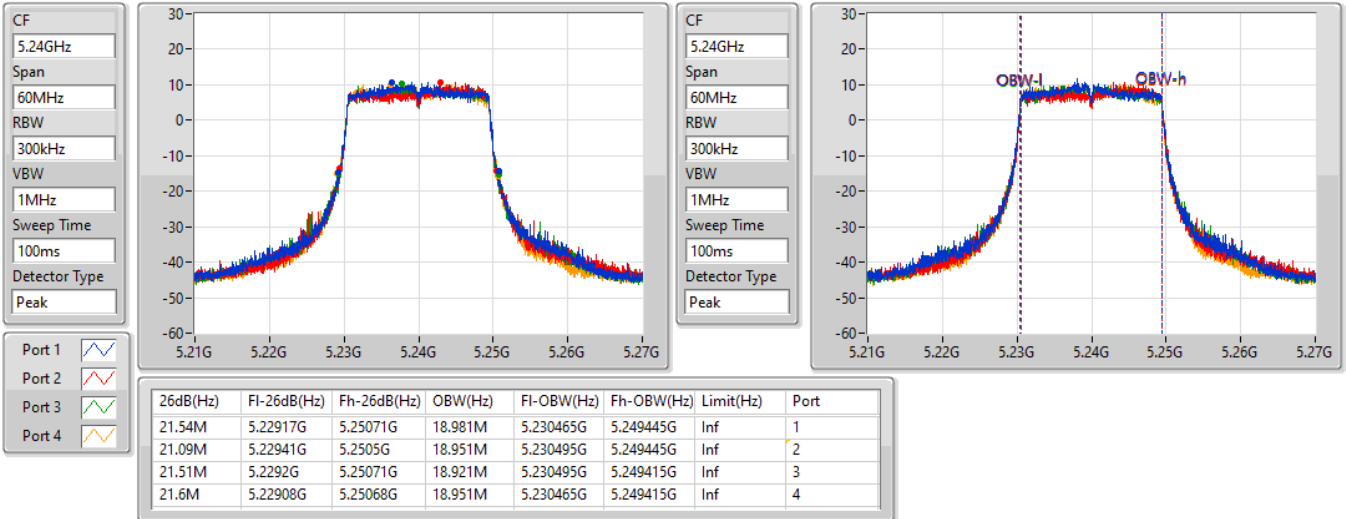

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5200MHz

22/01/2022

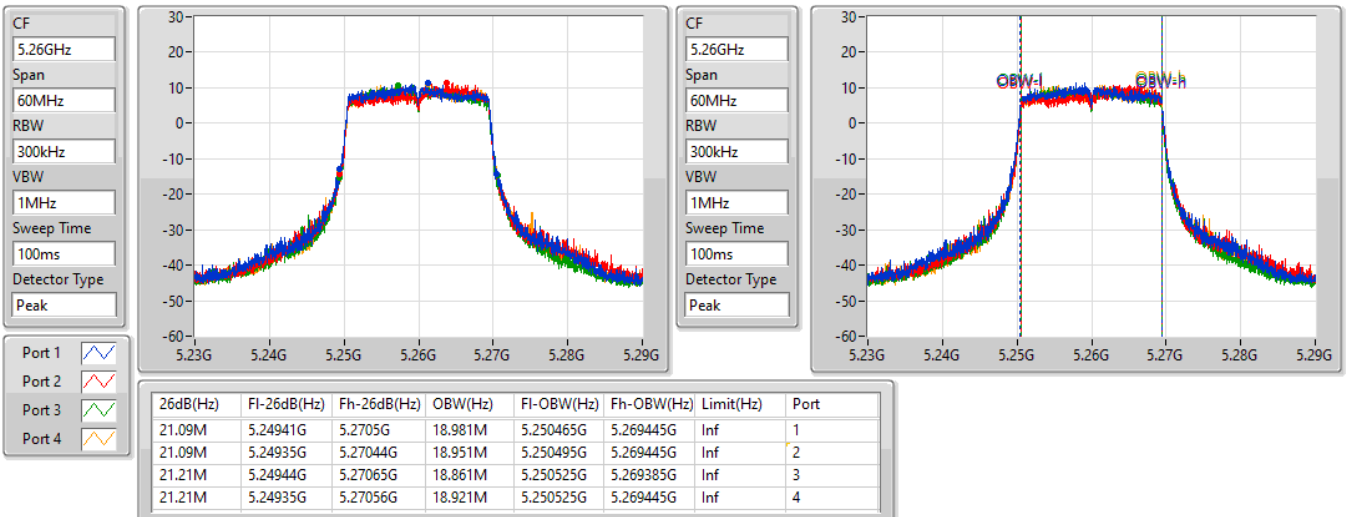


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5240MHz

22/01/2022

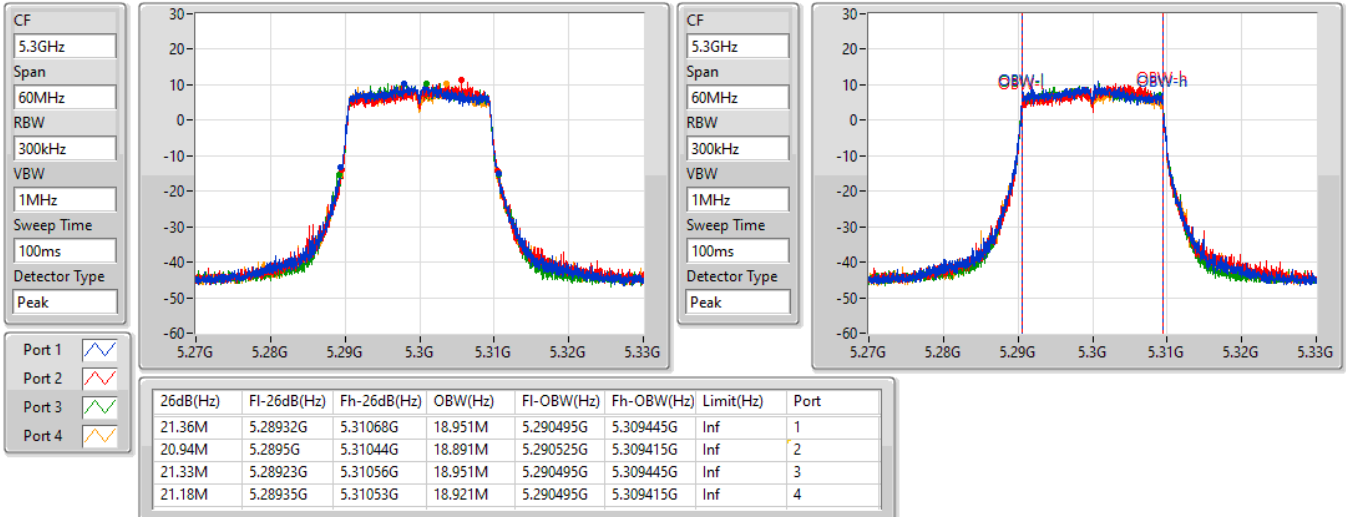

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5260MHz

22/01/2022

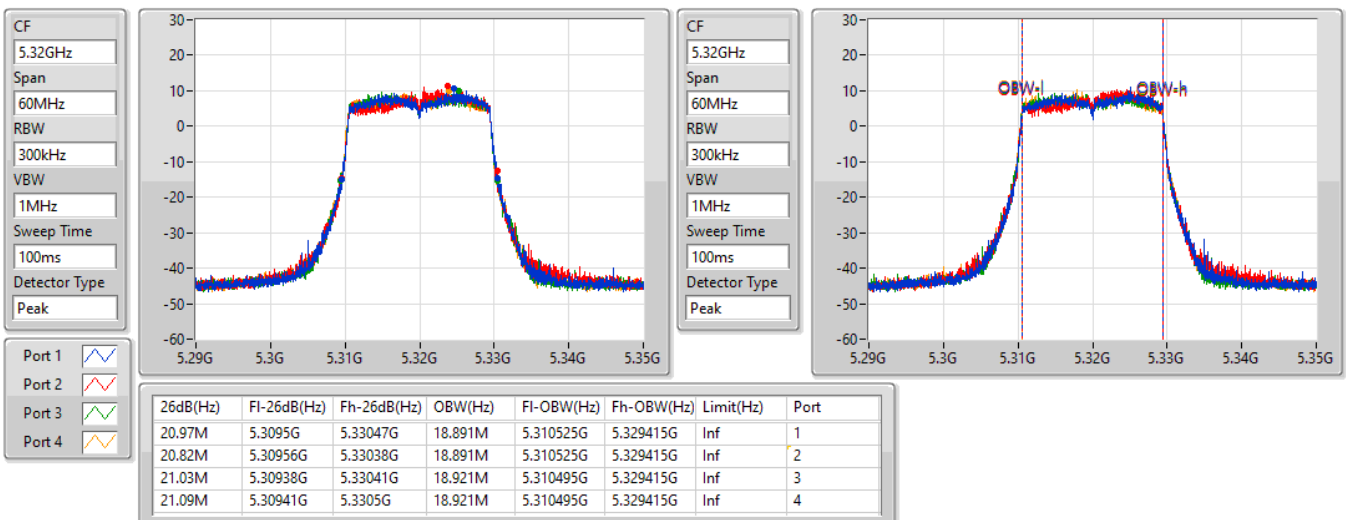


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5300MHz

22/01/2022

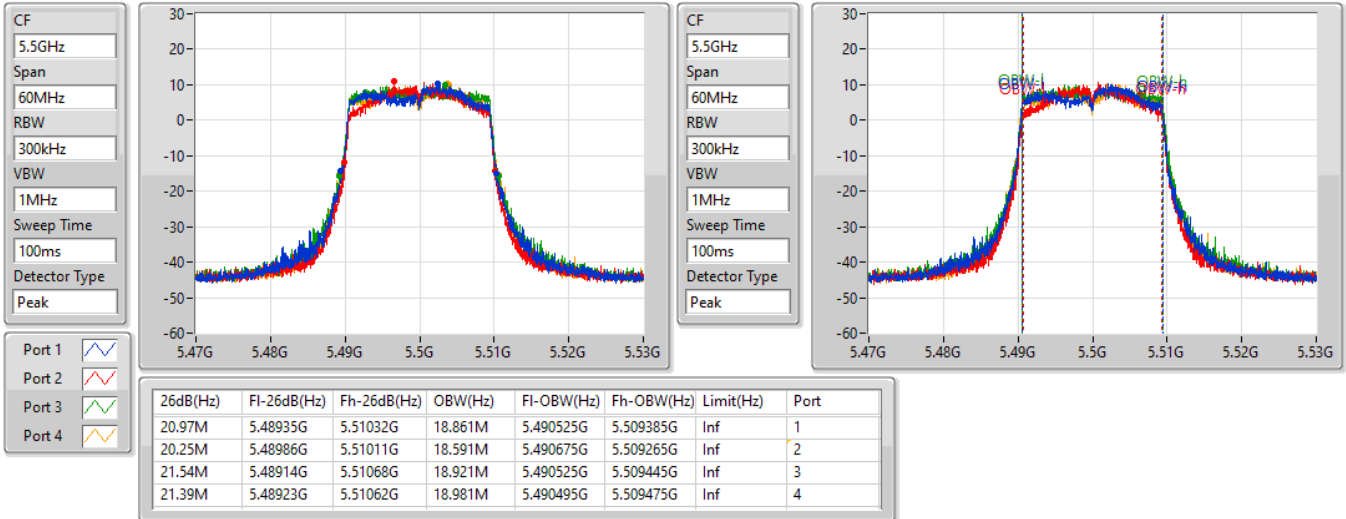

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5320MHz

22/01/2022

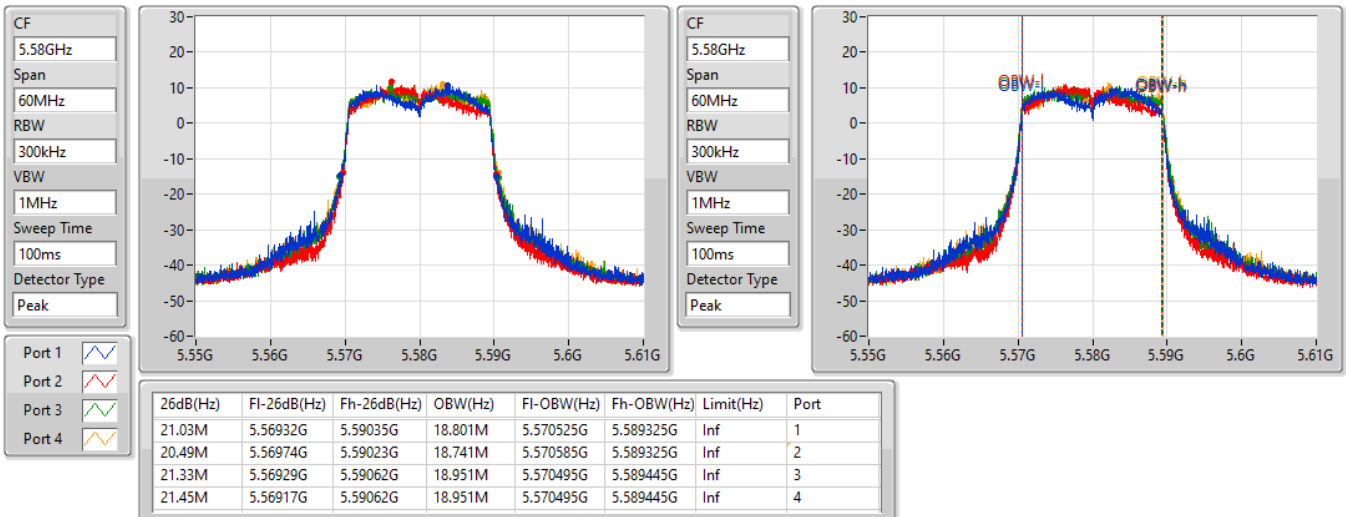


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5500MHz

22/01/2022

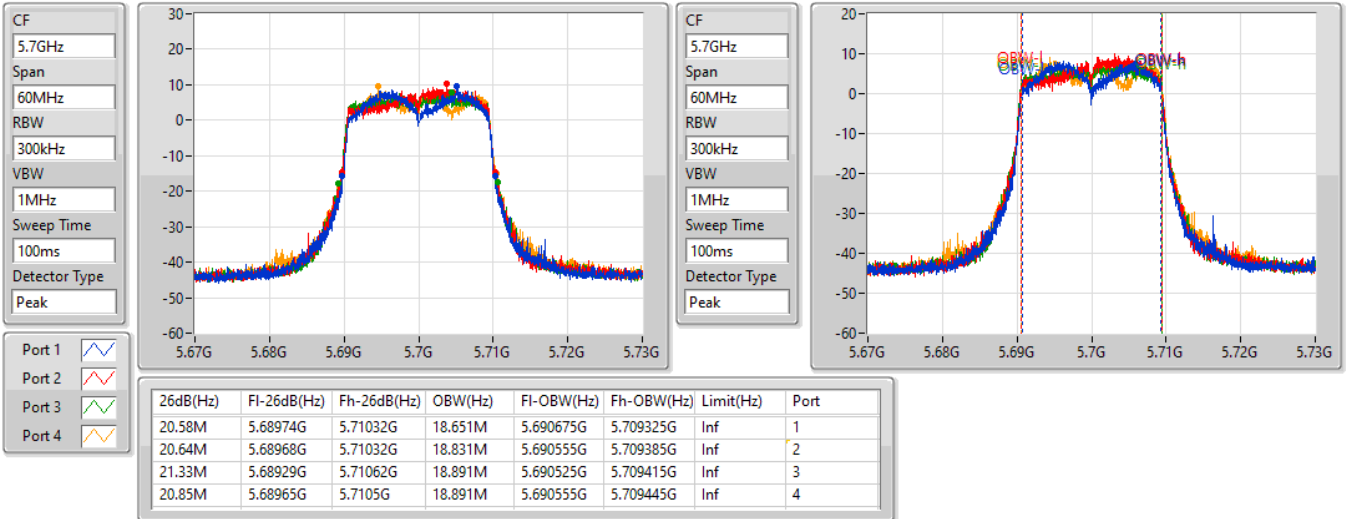

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5580MHz

22/01/2022

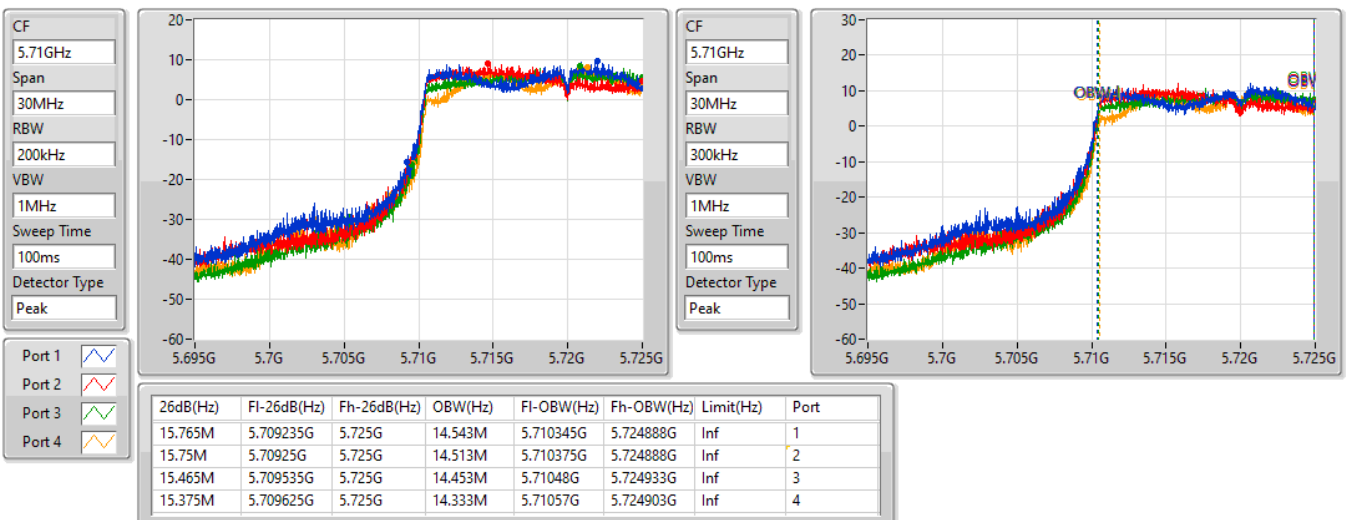


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5700MHz

22/01/2022

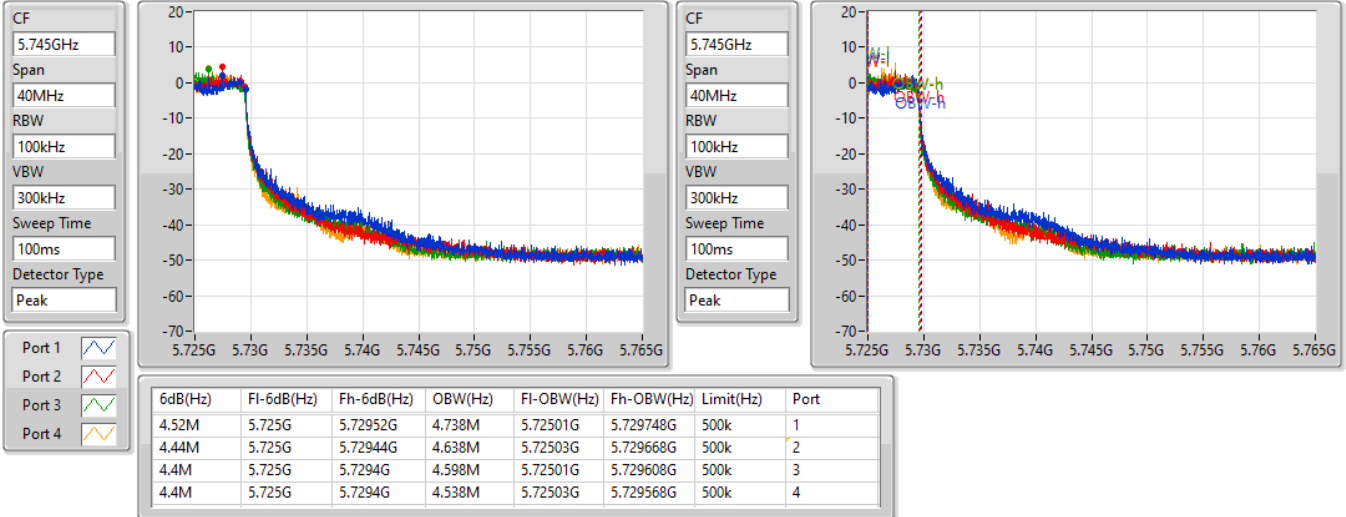

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

22/01/2022

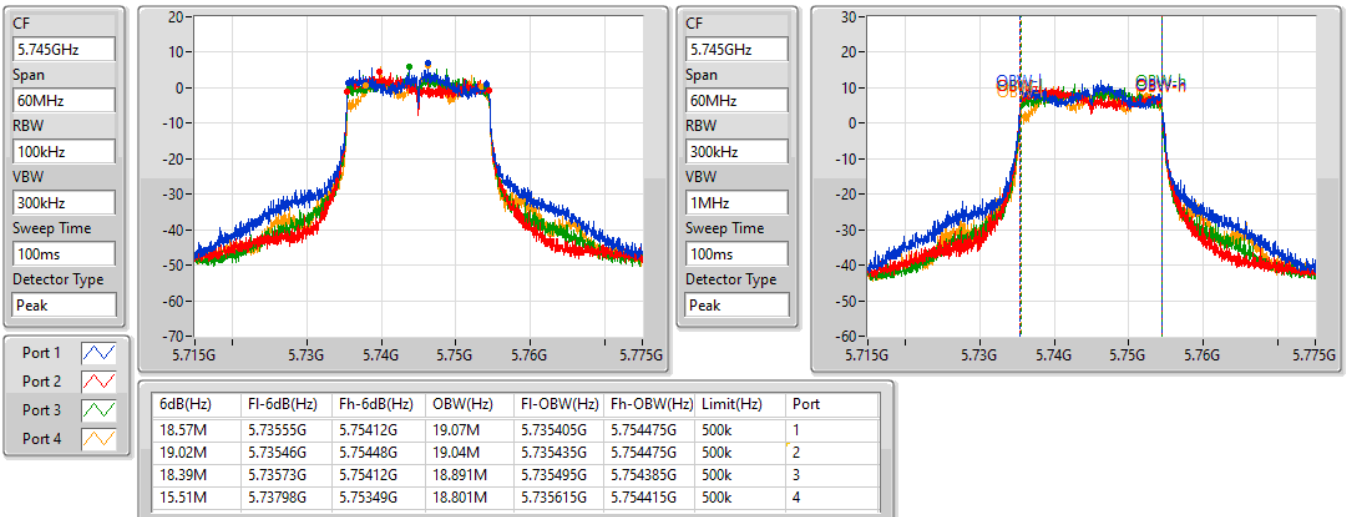


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

22/01/2022

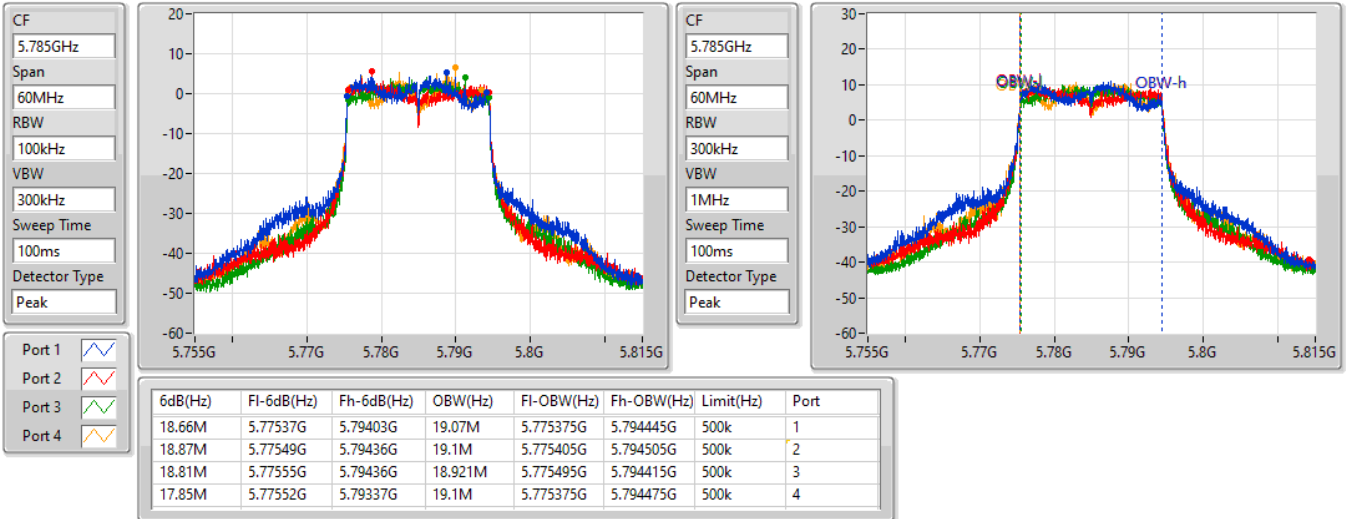

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5745MHz

22/01/2022

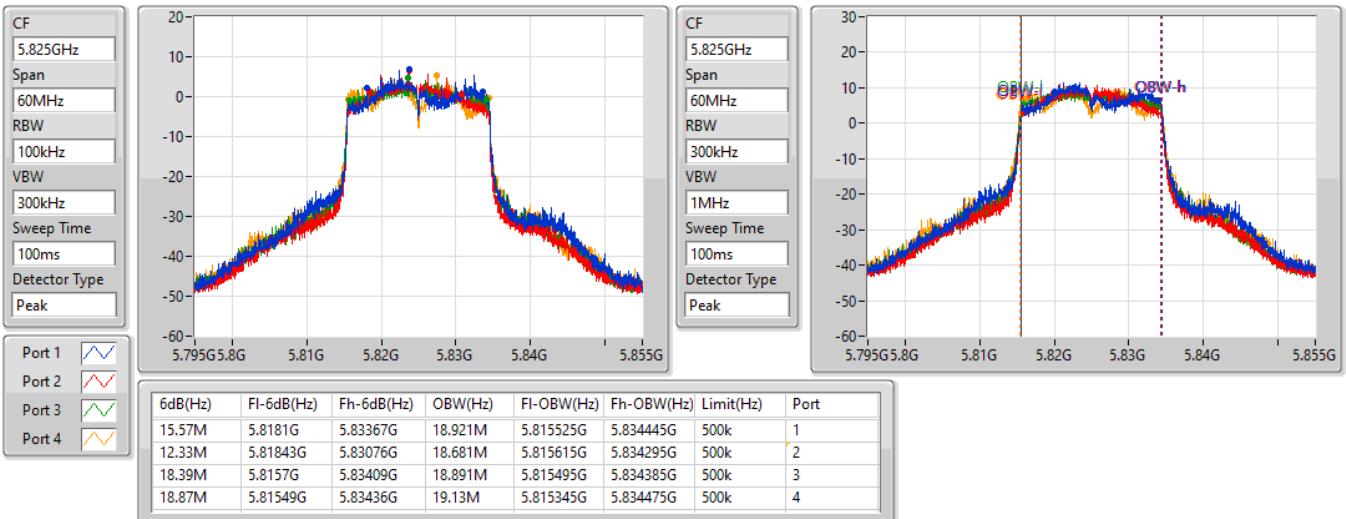


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

22/01/2022

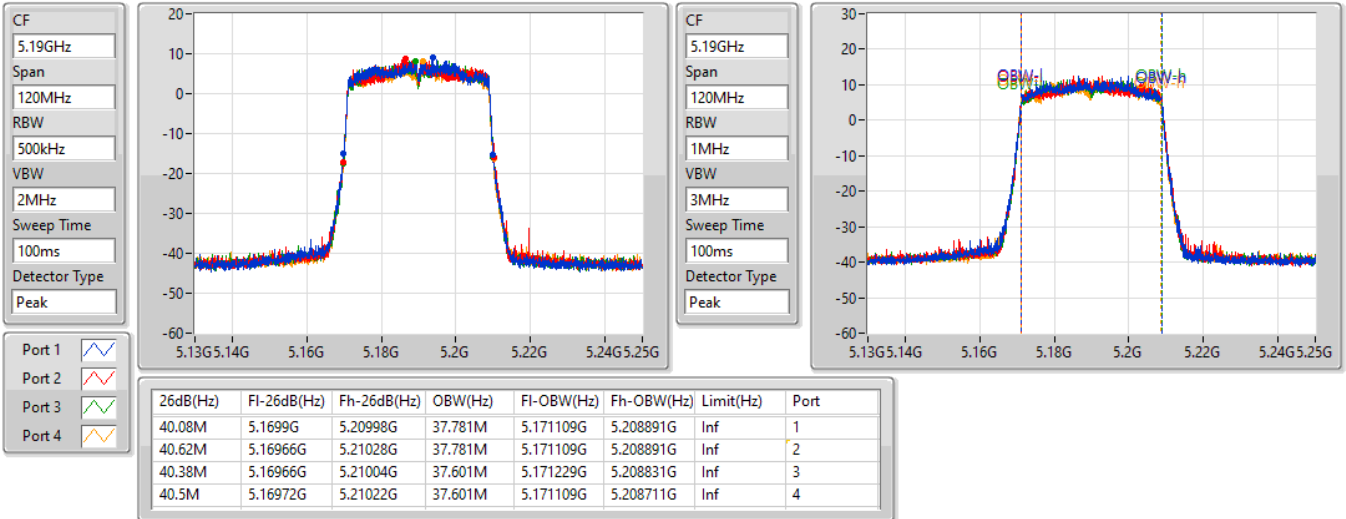

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5825MHz

22/01/2022

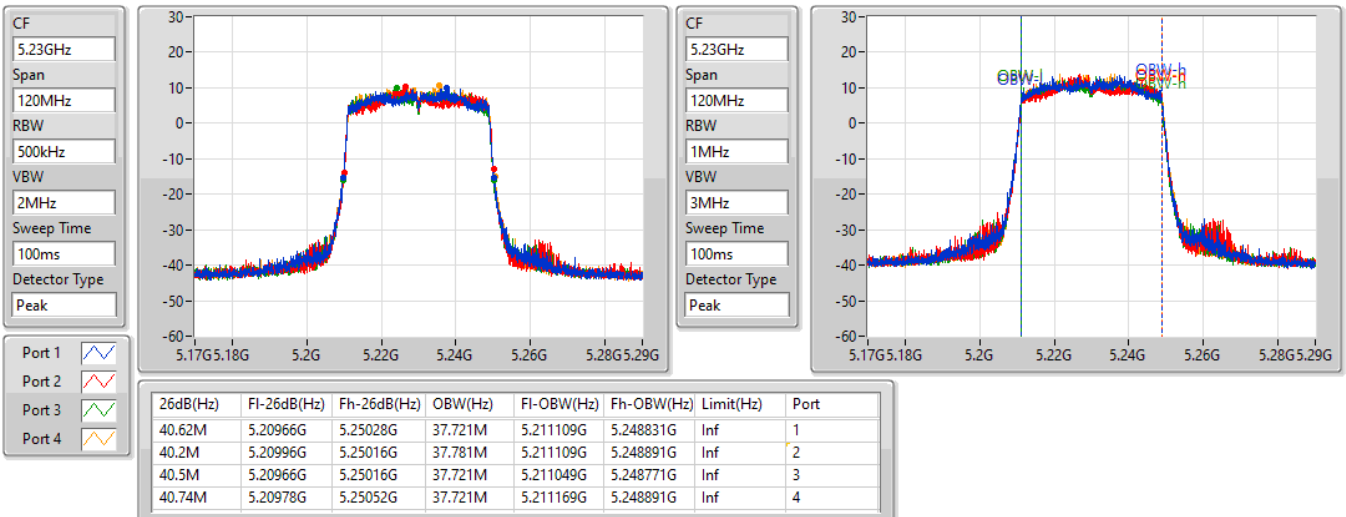


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5190MHz

22/01/2022

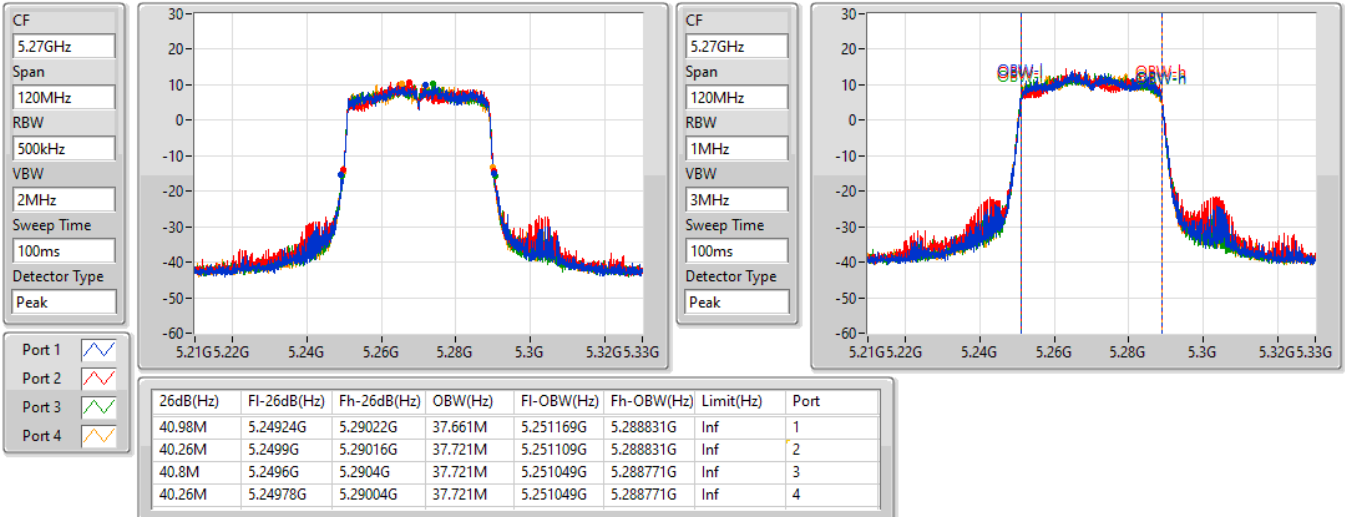

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5230MHz

22/01/2022

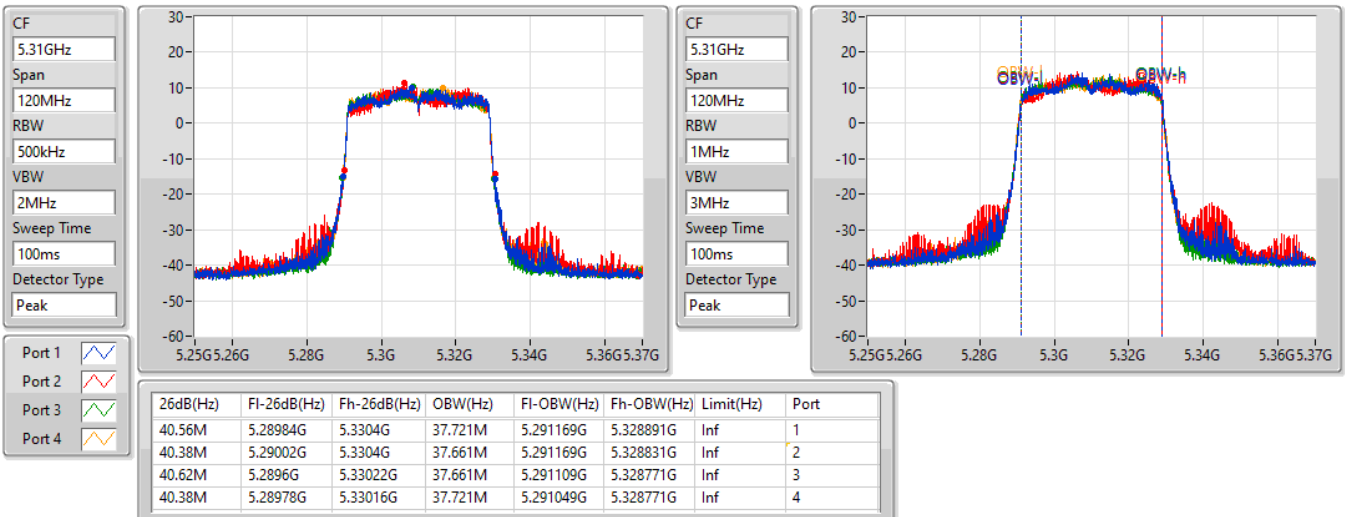


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5270MHz

22/01/2022

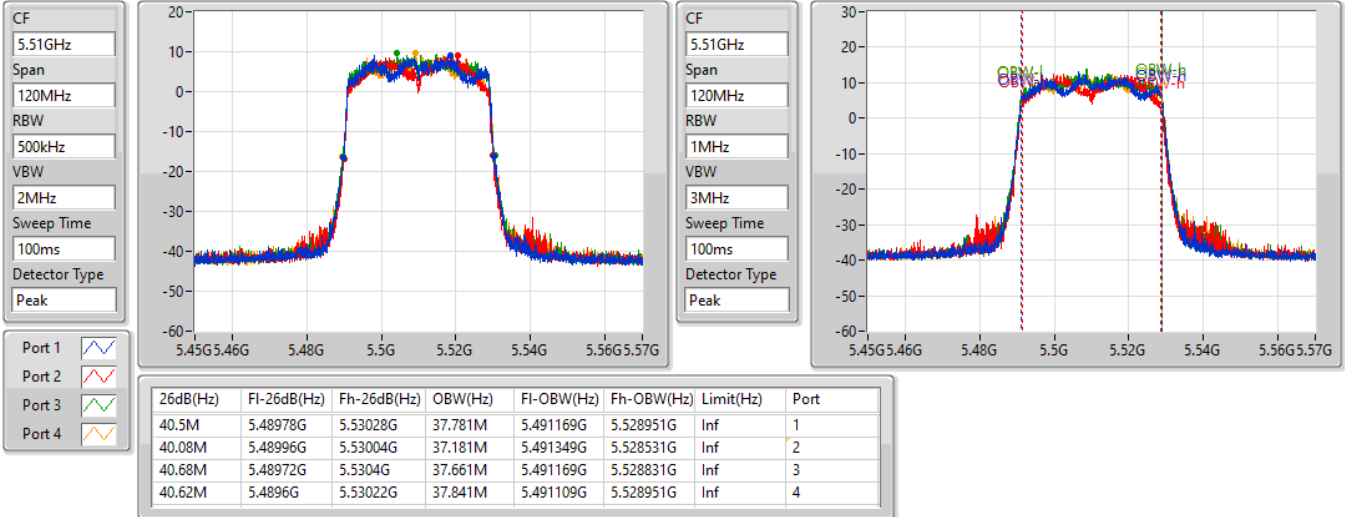

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5310MHz

22/01/2022

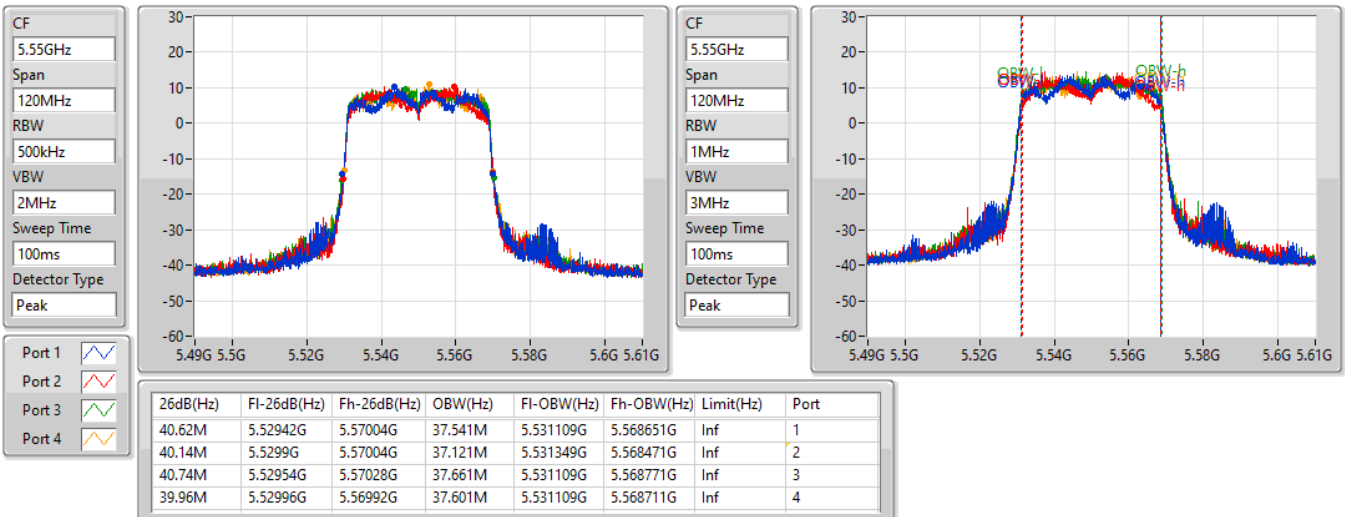


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5510MHz

22/01/2022

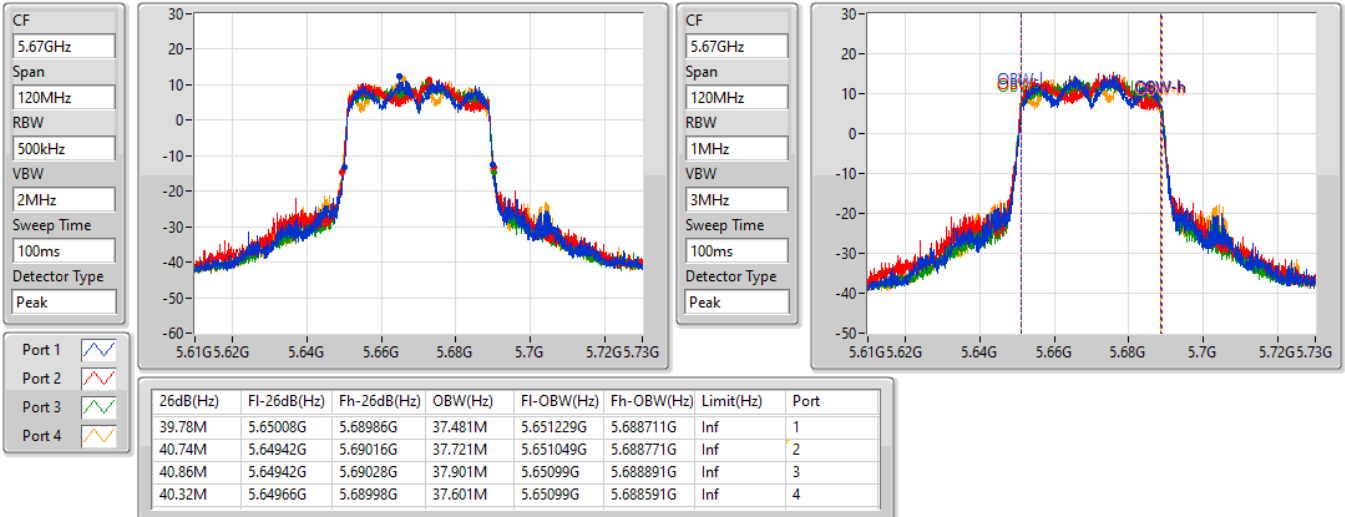

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5550MHz

22/01/2022

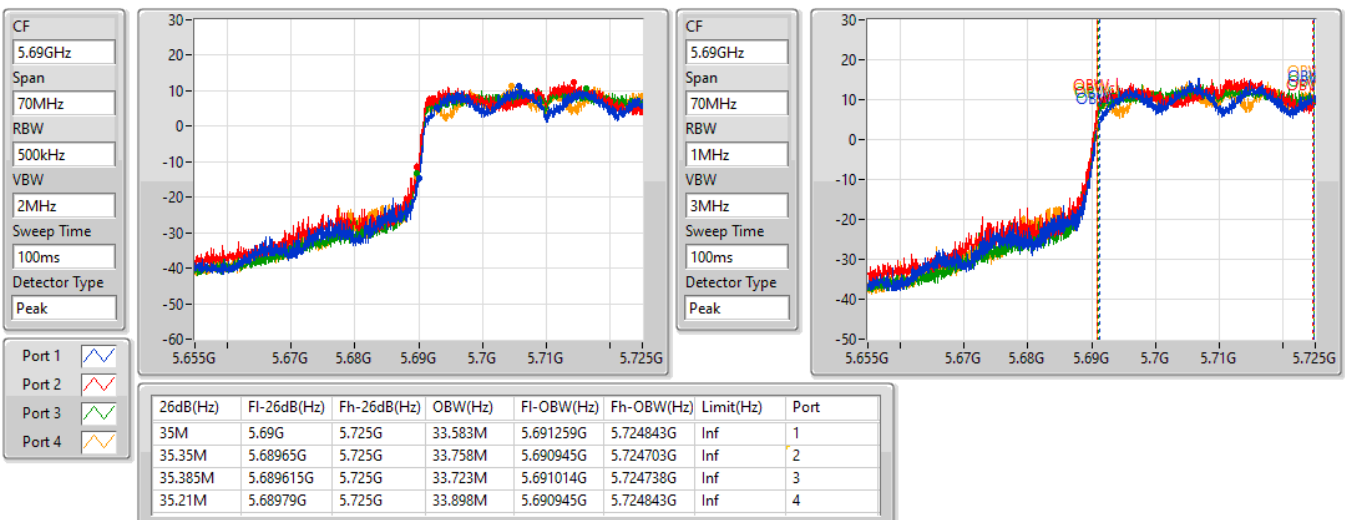


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5670MHz

22/01/2022

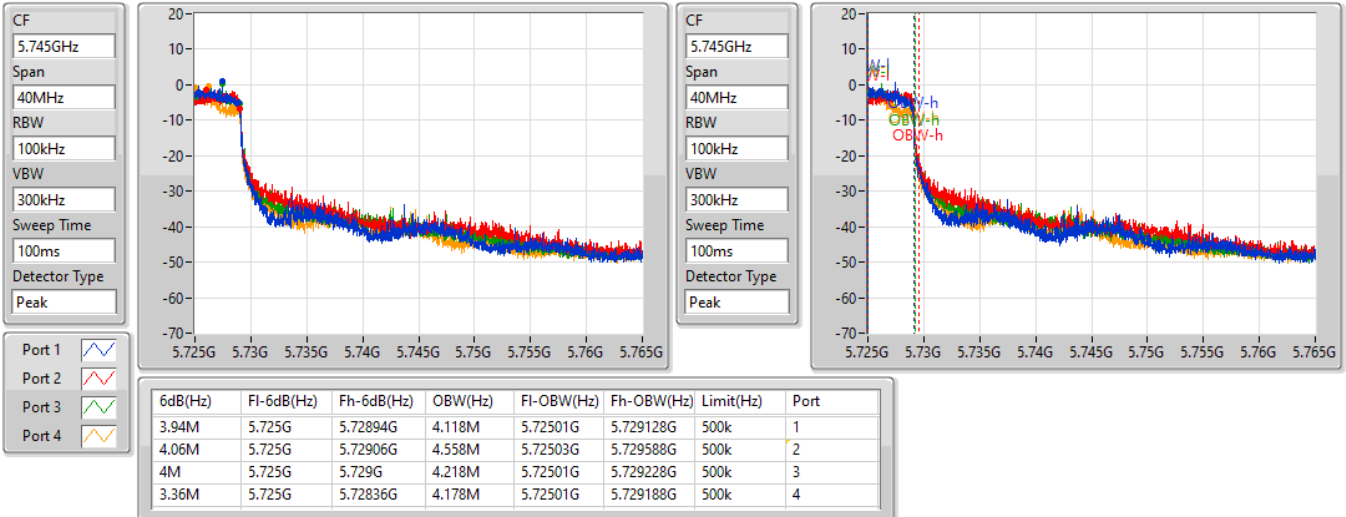

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

22/01/2022

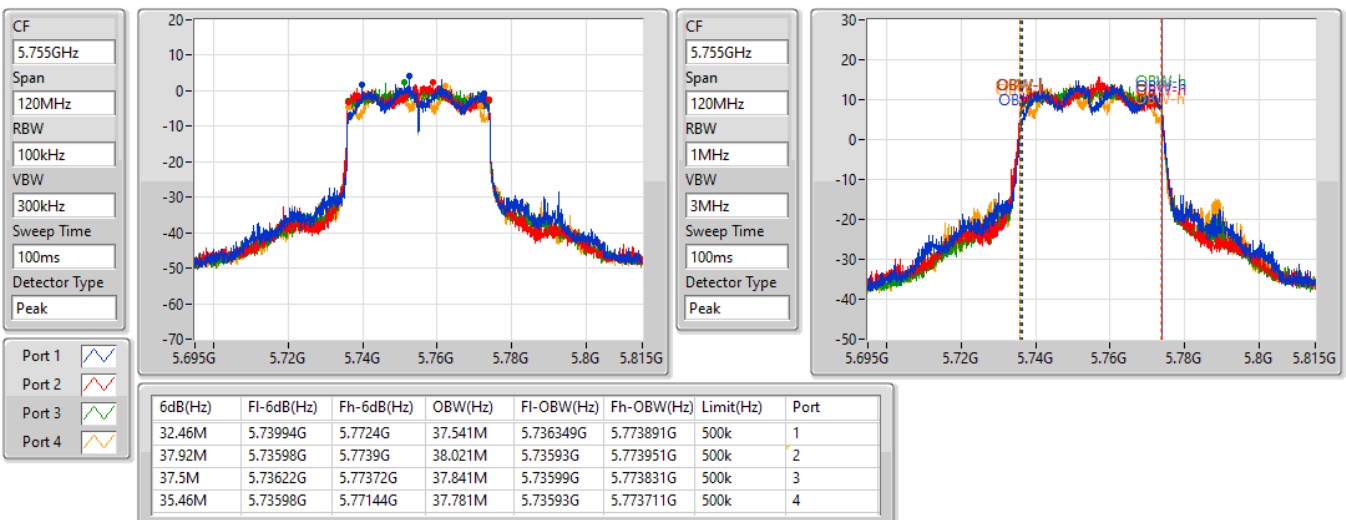


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

22/01/2022

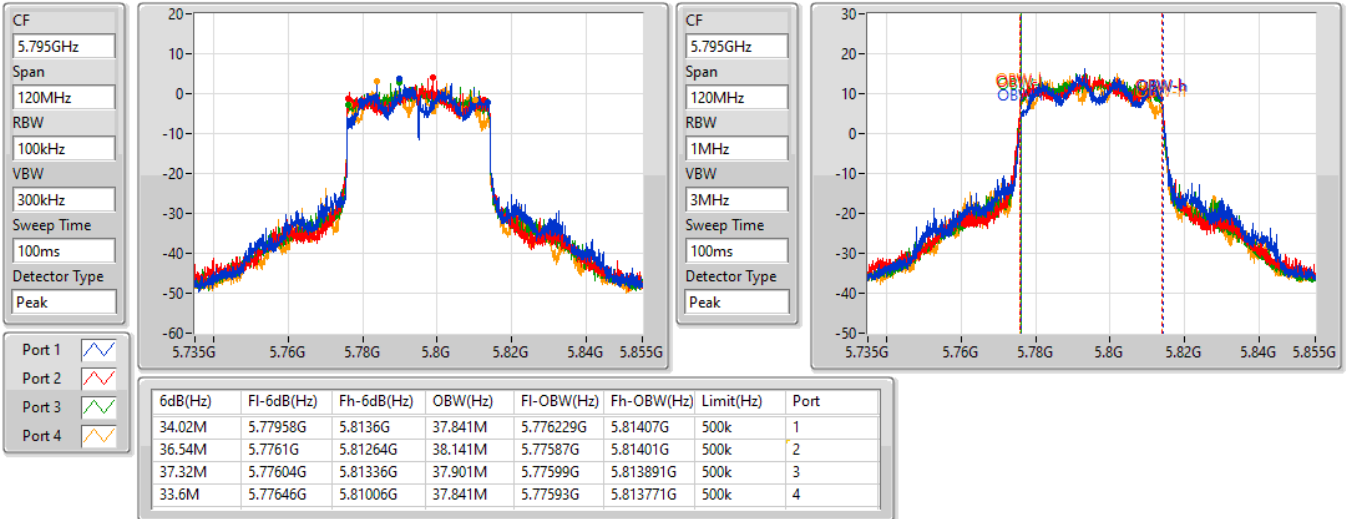

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5755MHz

22/01/2022

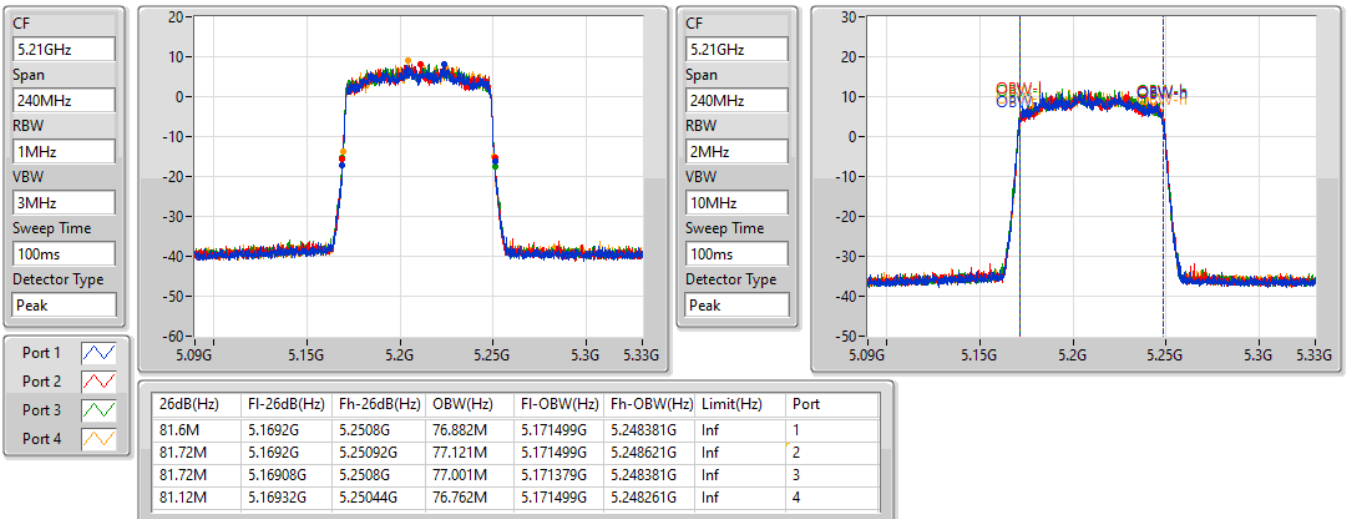


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz

22/01/2022

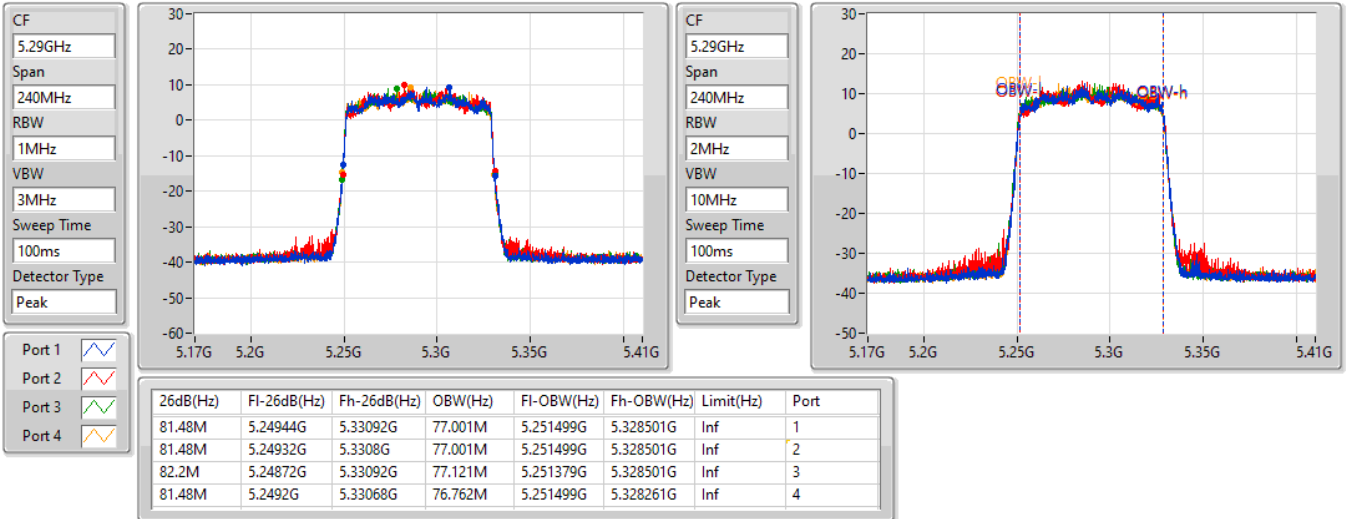

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5210MHz

22/01/2022

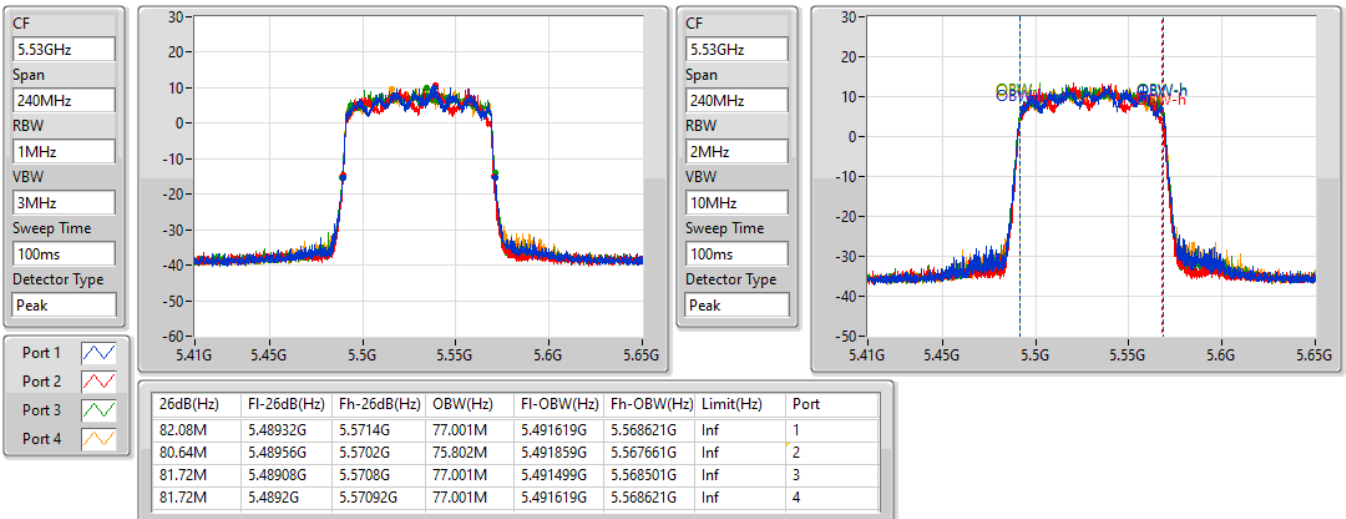


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5290MHz

22/01/2022

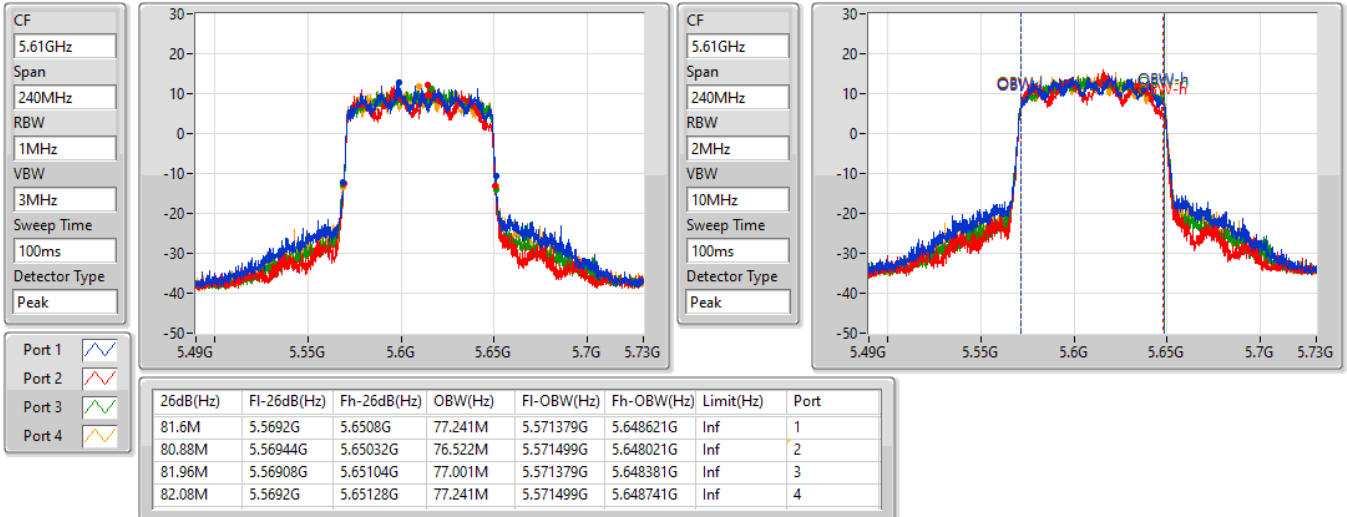

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5530MHz

22/01/2022

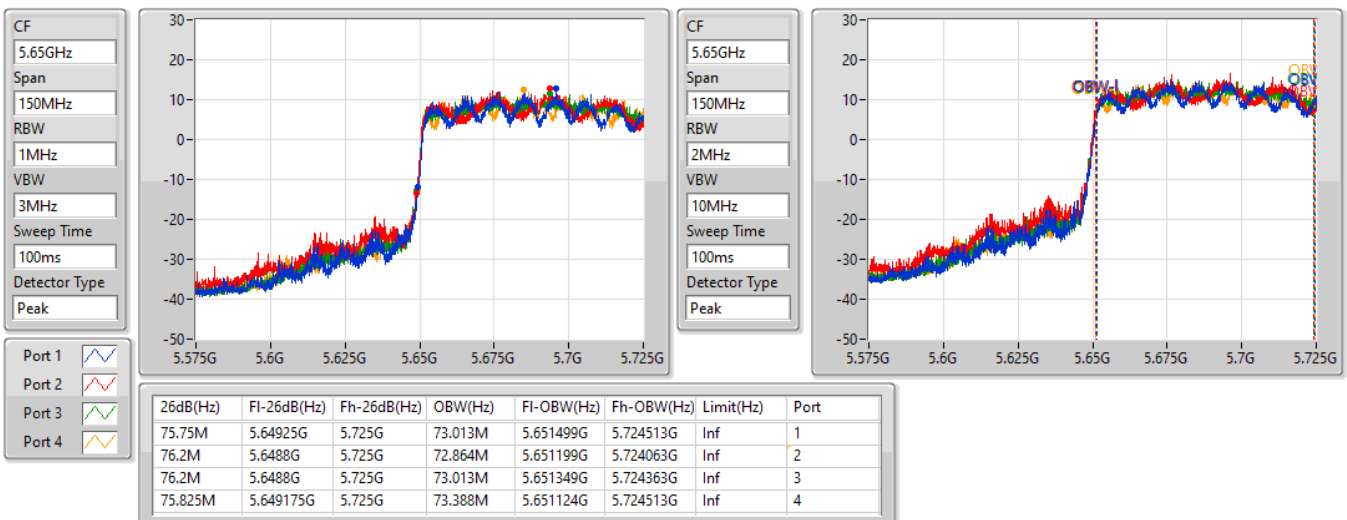


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5610MHz

22/01/2022

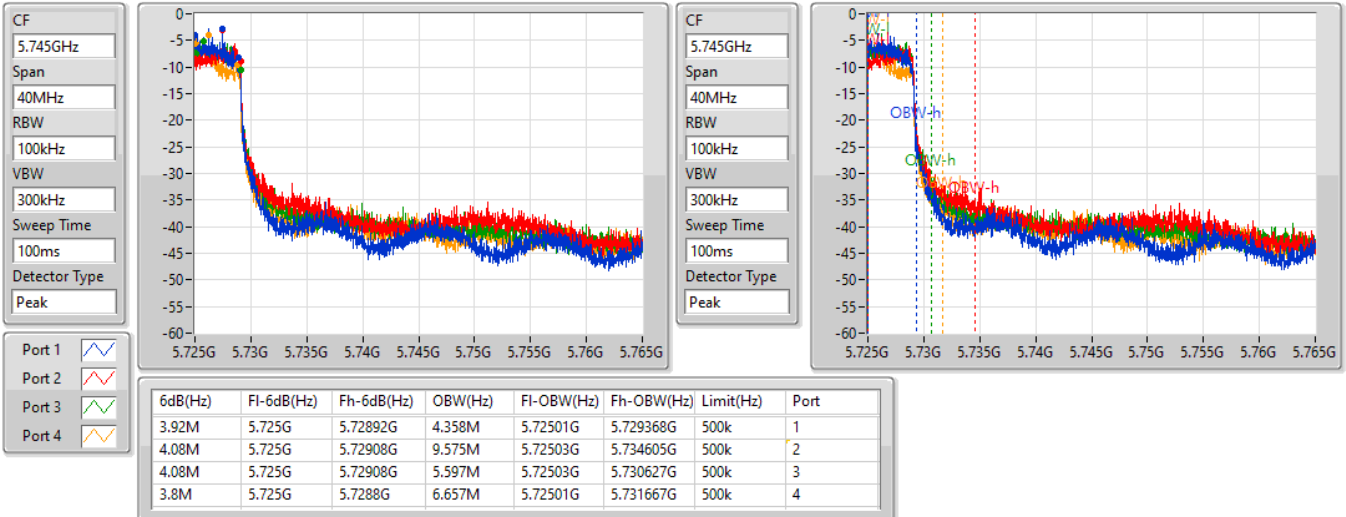

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

22/01/2022

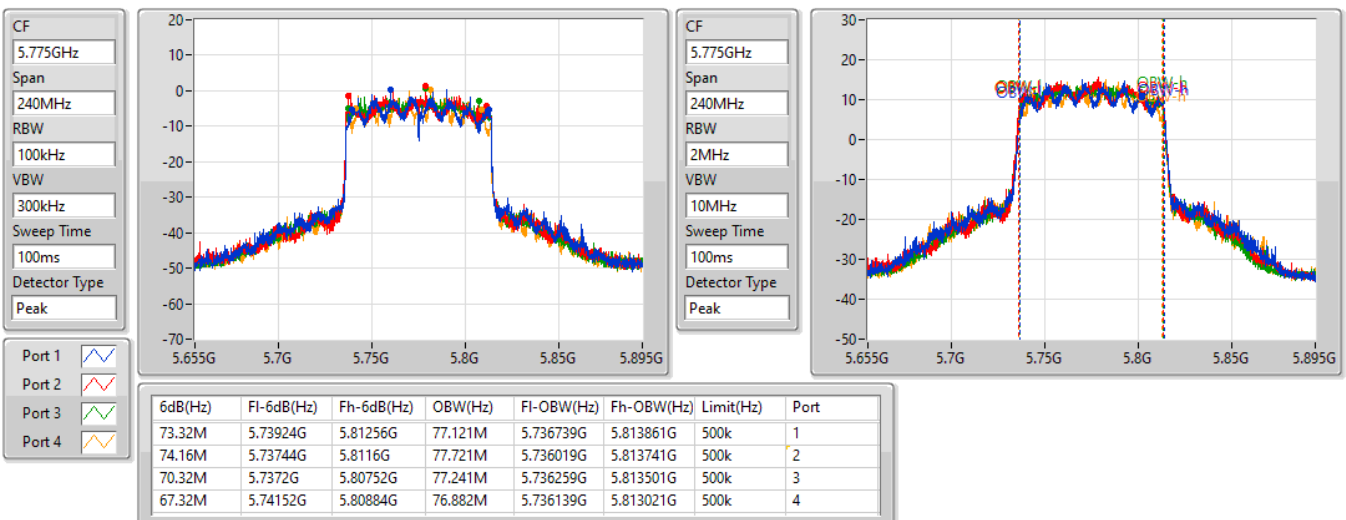


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

22/01/2022


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5775MHz

22/01/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	22.32M	16.822M	16M8D1D	20.82M	16.702M
802.11ax HEW20_Nss1,(MCS0)_1TX	24.27M	19.19M	19M2D1D	22.05M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	50.82M	38.141M	38M1D1D	40.5M	37.841M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.32M	77.481M	77M5D1D	82.32M	77.481M
802.11ax HEW160_Nss1,(MCS0)_1TX	82.56M	78.041M	78M0D1D	82.56M	78.041M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	24.15M	16.882M	16M9D1D	20.82M	16.702M
802.11ax HEW20_Nss1,(MCS0)_1TX	24.84M	19.25M	19M2D1D	22.17M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	43.44M	38.201M	38M2D1D	40.56M	37.841M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.32M	77.241M	77M2D1D	82.32M	77.241M
802.11ax HEW160_Nss1,(MCS0)_1TX	82.56M	77.881M	77M9D1D	82.56M	77.881M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	21.45M	16.792M	16M8D1D	15.42M	13.448M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.11M	19.16M	19M2D1D	18.705M	14.648M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.86M	38.021M	38M0D1D	35.385M	33.793M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.56M	77.721M	77M7D1D	76.275M	73.463M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.64M	154.963M	155MD1D	164.64M	154.963M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.35M	16.762M	16M8D1D	3.16M	4.438M
802.11ax HEW20_Nss1,(MCS0)_1TX	19.11M	19.16M	19M2D1D	4.5M	5.517M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.56M	37.901M	37M9D1D	4M	5.617M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.76M	77.721M	77M7D1D	4.04M	18.451M

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

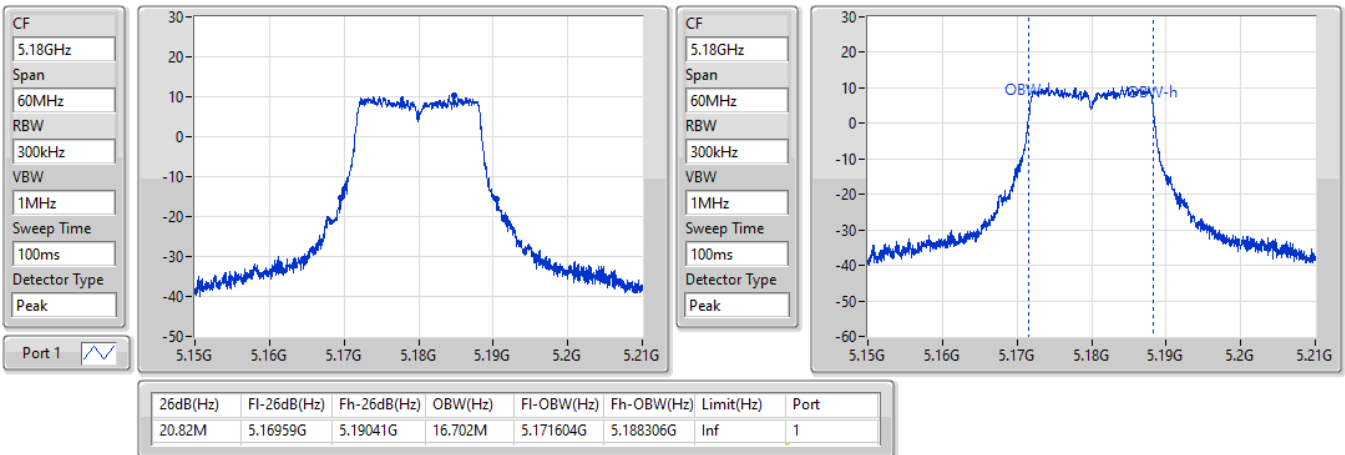
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	20.82M	16.702M
5200MHz	Pass	Inf	22.32M	16.822M
5240MHz	Pass	Inf	21.75M	16.822M
5260MHz	Pass	Inf	21.81M	16.792M
5300MHz	Pass	Inf	24.15M	16.882M
5320MHz	Pass	Inf	20.82M	16.702M
5500MHz	Pass	Inf	20.73M	16.702M
5580MHz	Pass	Inf	21.45M	16.792M
5700MHz	Pass	Inf	20.37M	16.672M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.42M	13.448M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.16M	4.438M
5745MHz	Pass	500k	16.35M	16.732M
5785MHz	Pass	500k	16.32M	16.732M
5825MHz	Pass	500k	16.32M	16.762M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	22.11M	19.13M
5200MHz	Pass	Inf	24.27M	19.19M
5240MHz	Pass	Inf	22.05M	19.19M
5260MHz	Pass	Inf	22.59M	19.19M
5300MHz	Pass	Inf	24.84M	19.25M
5320MHz	Pass	Inf	22.17M	19.13M
5500MHz	Pass	Inf	21.9M	19.13M
5580MHz	Pass	Inf	22.11M	19.16M
5700MHz	Pass	Inf	21.93M	19.13M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	18.705M	14.648M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.5M	5.517M
5745MHz	Pass	500k	19.11M	19.16M
5785MHz	Pass	500k	18.93M	19.13M
5825MHz	Pass	500k	19.02M	19.16M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	40.5M	37.841M
5230MHz	Pass	Inf	50.82M	38.141M
5270MHz	Pass	Inf	43.44M	38.201M
5310MHz	Pass	Inf	40.56M	37.841M
5510MHz	Pass	Inf	40.62M	37.721M
5550MHz	Pass	Inf	40.86M	38.021M
5670MHz	Pass	Inf	40.5M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.385M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4M	5.617M
5755MHz	Pass	500k	37.56M	37.901M
5795MHz	Pass	500k	37.56M	37.901M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	82.32M	77.481M
5290MHz	Pass	Inf	82.32M	77.241M
5530MHz	Pass	Inf	82.32M	77.241M
5610MHz	Pass	Inf	82.56M	77.721M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.275M	73.463M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	18.451M
5775MHz	Pass	500k	77.76M	77.721M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.56M	78.041M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	77.881M
5570MHz	Pass	Inf	164.64M	154.963M



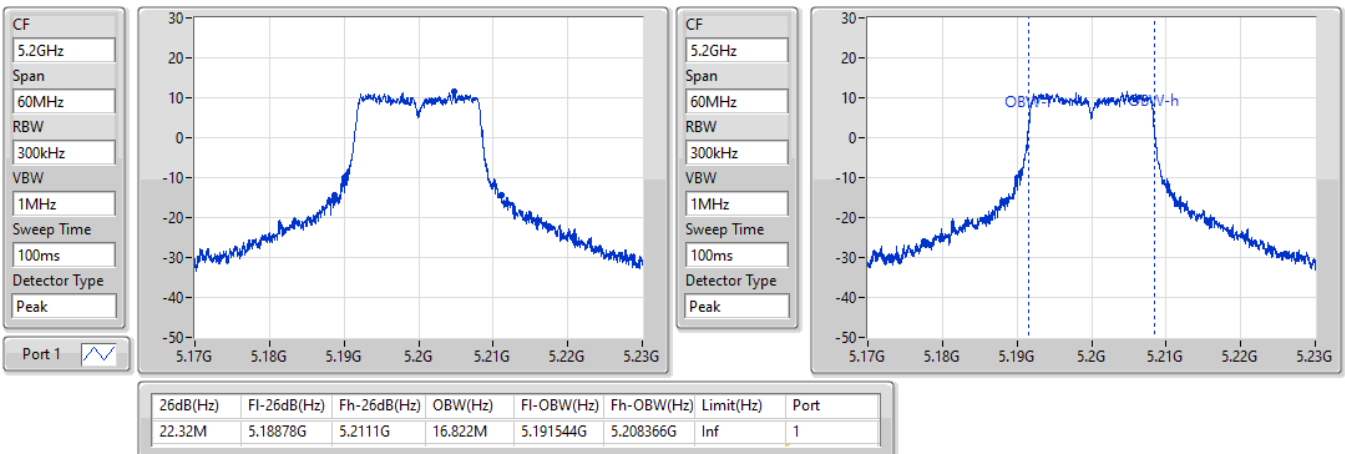
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX
EBW
5180MHz

01/03/2022

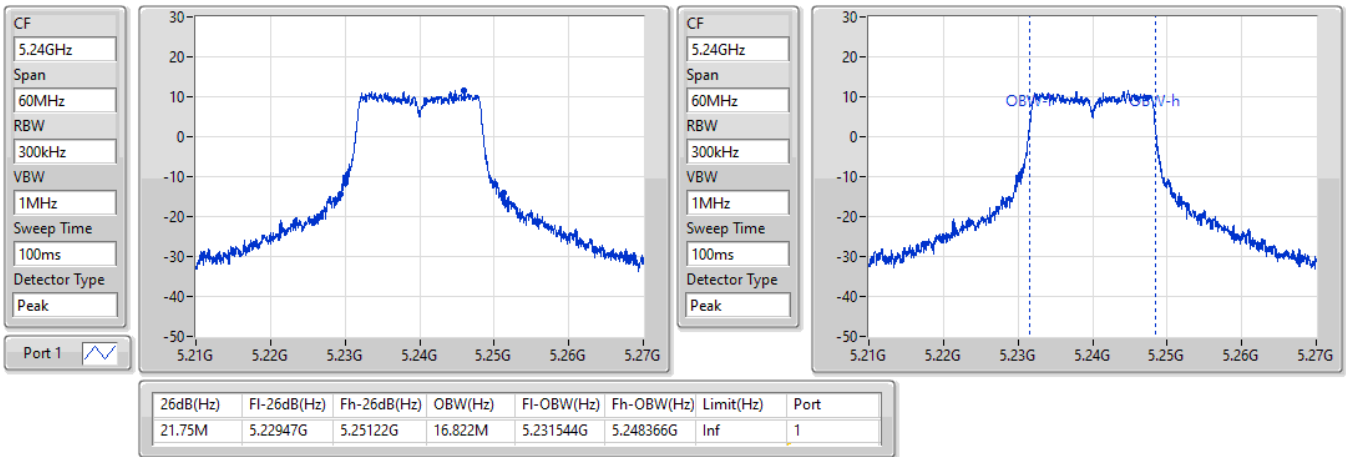

802.11a_Nss1,(6Mbps)_1TX
EBW
5200MHz

01/03/2022

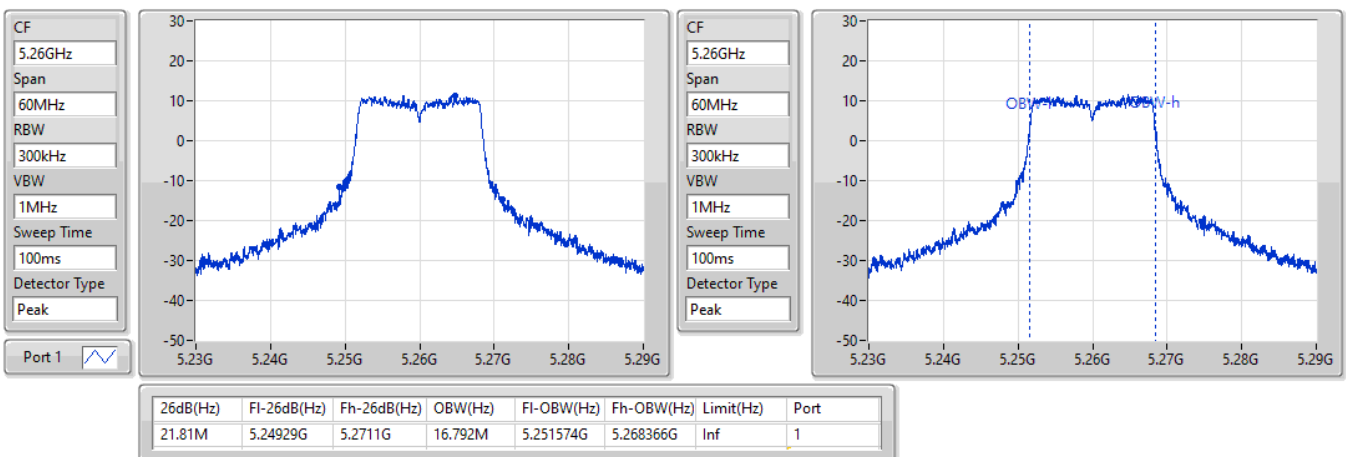


802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

01/03/2022

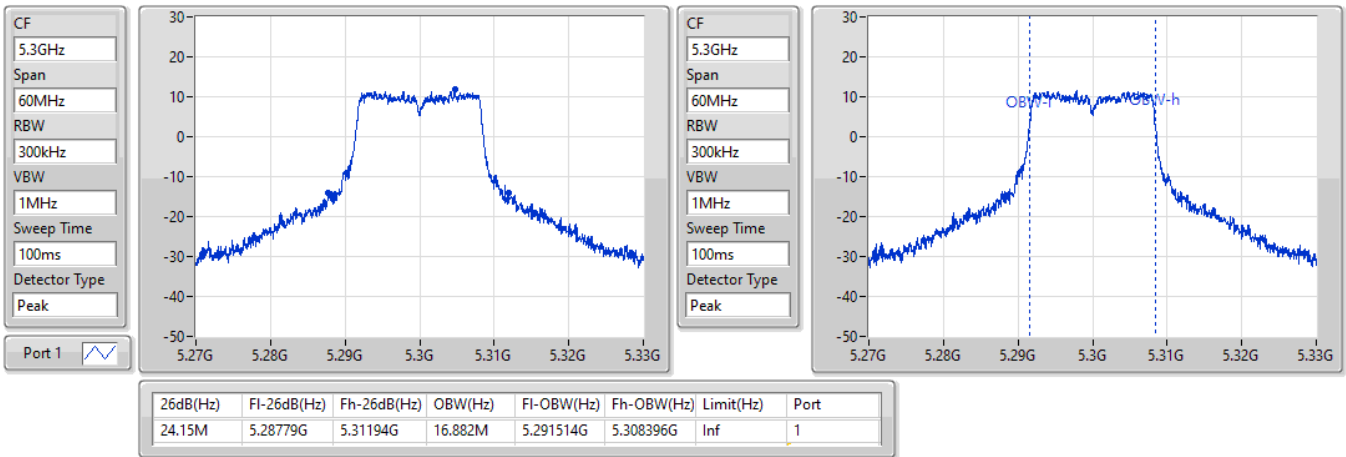

802.11a_Nss1,(6Mbps)_1TX
EBW
5260MHz

01/03/2022

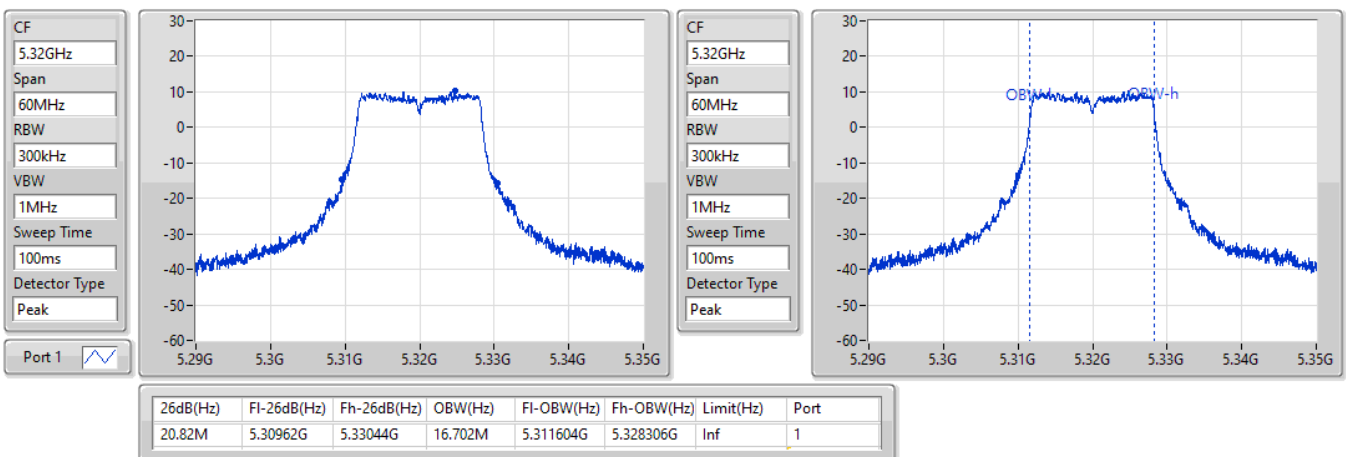


802.11a_Nss1,(6Mbps)_1TX
EBW
5300MHz

01/03/2022

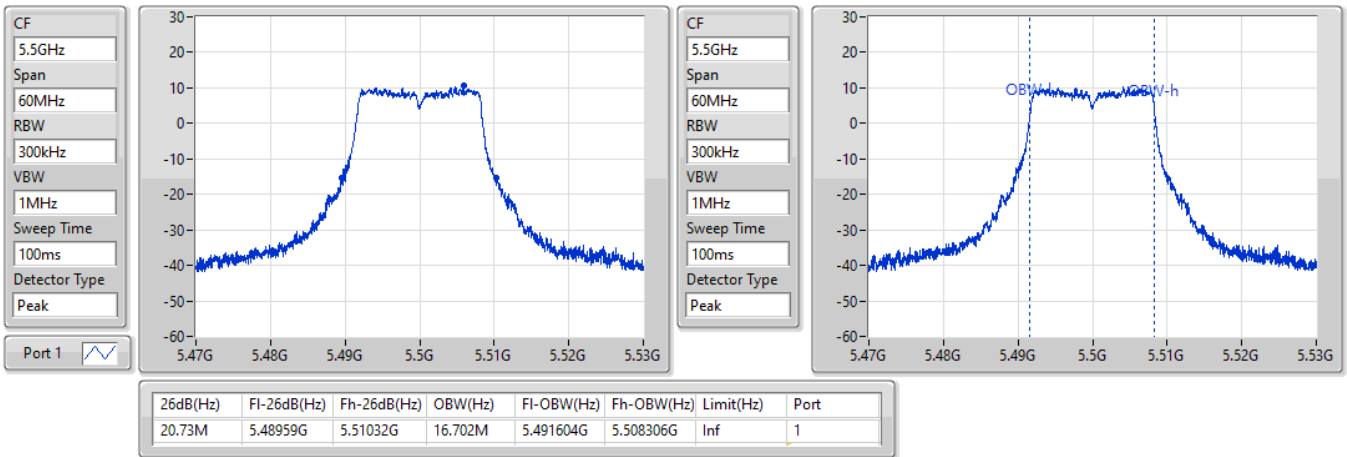

802.11a_Nss1,(6Mbps)_1TX
EBW
5320MHz

01/03/2022

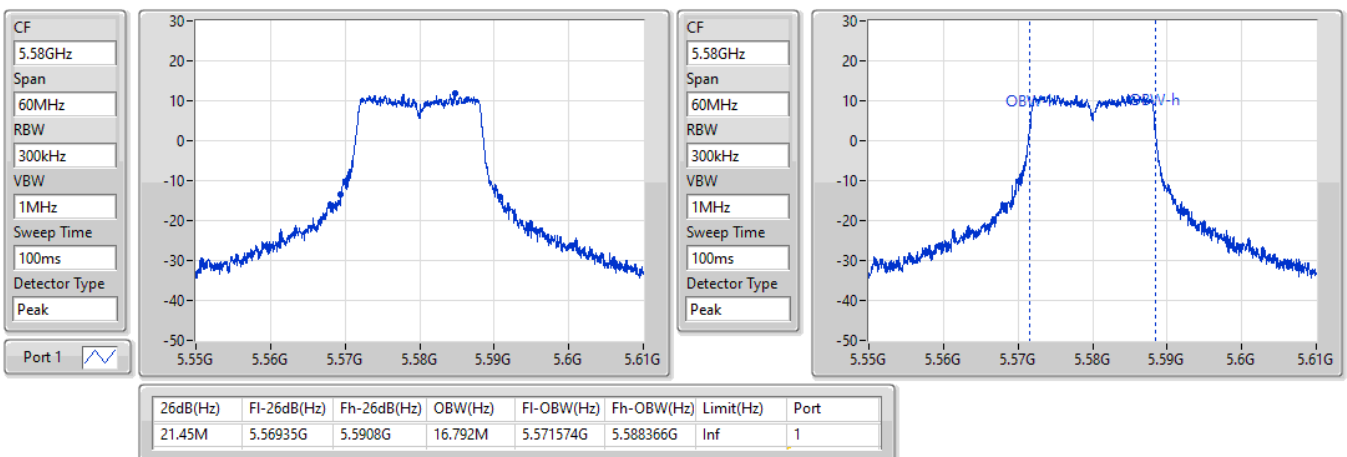


802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

01/03/2022

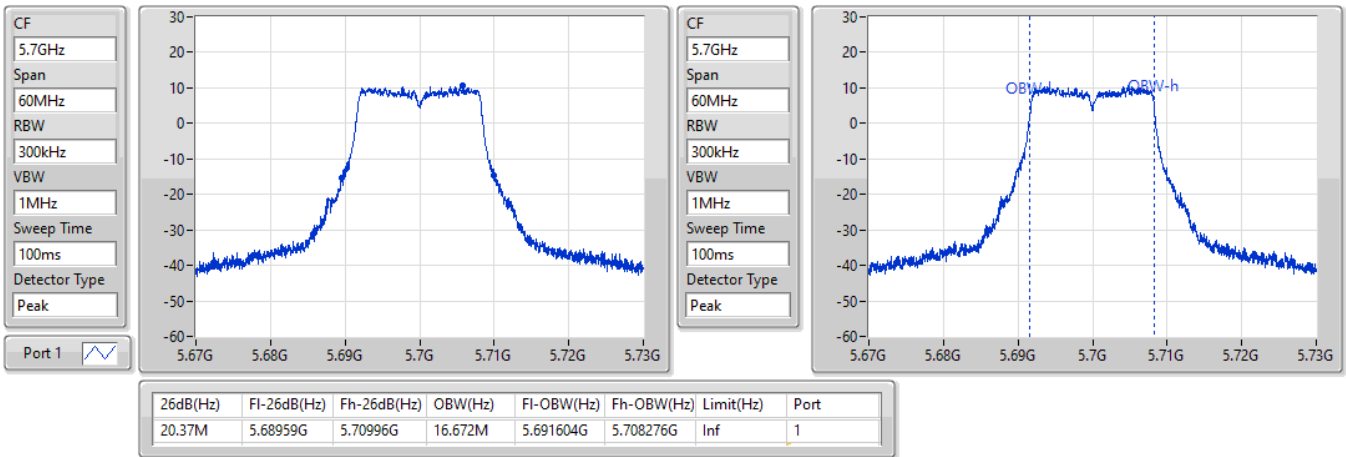

802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

01/03/2022

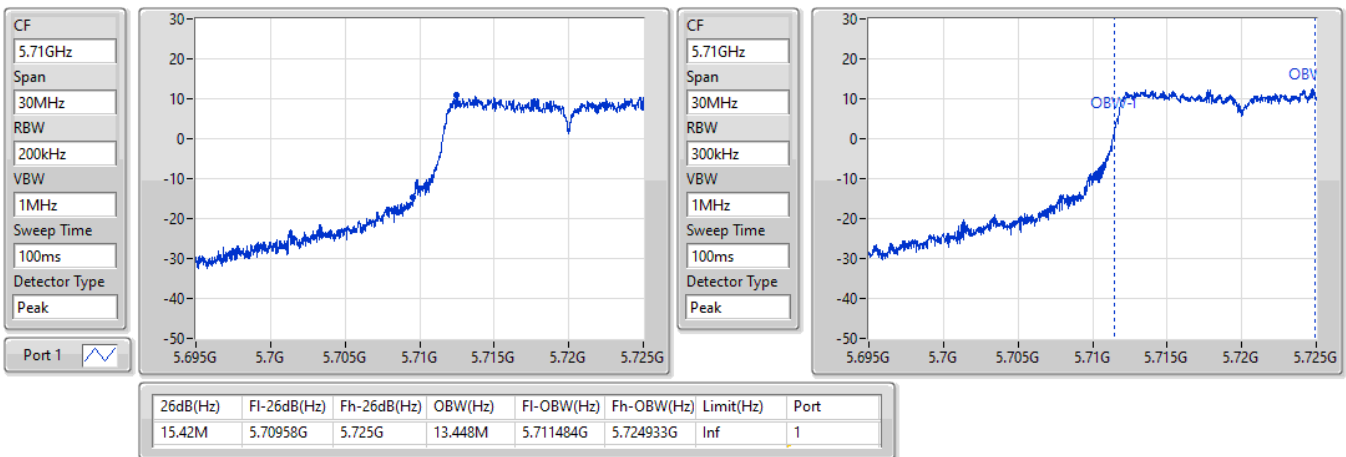


802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

01/03/2022

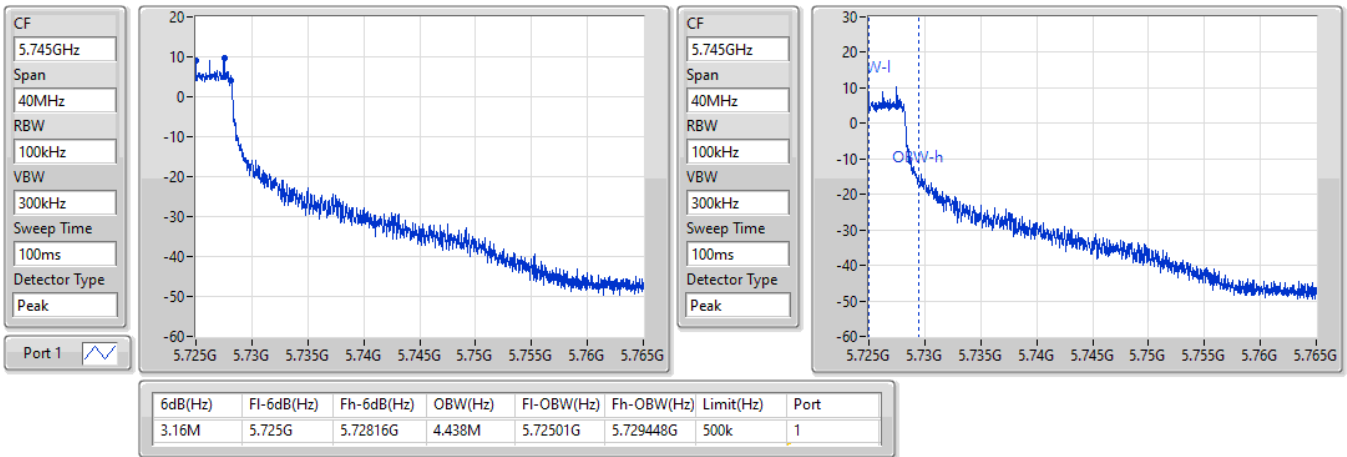

802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

01/03/2022

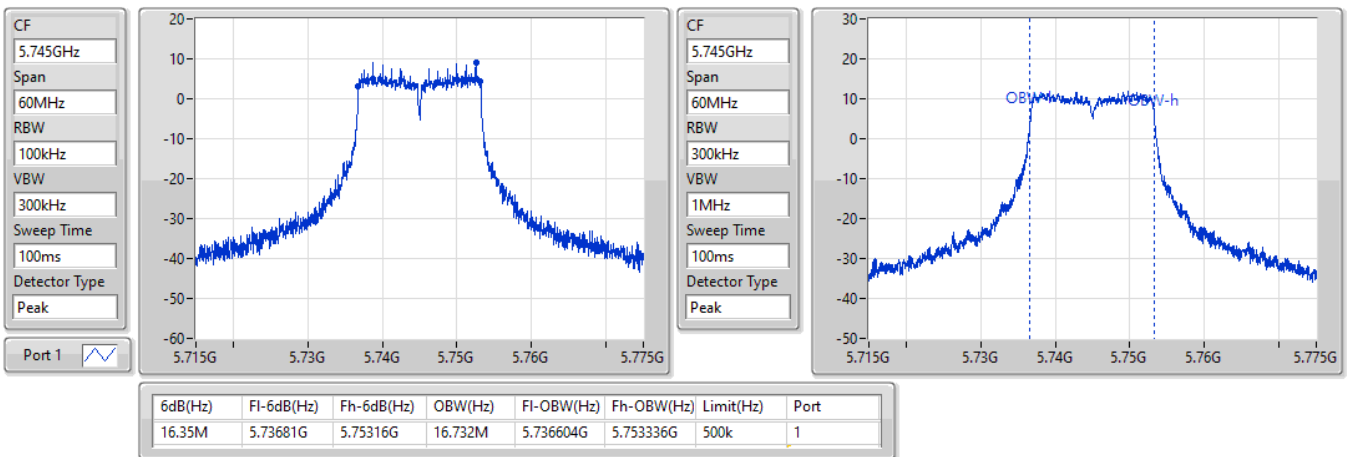


802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

01/03/2022

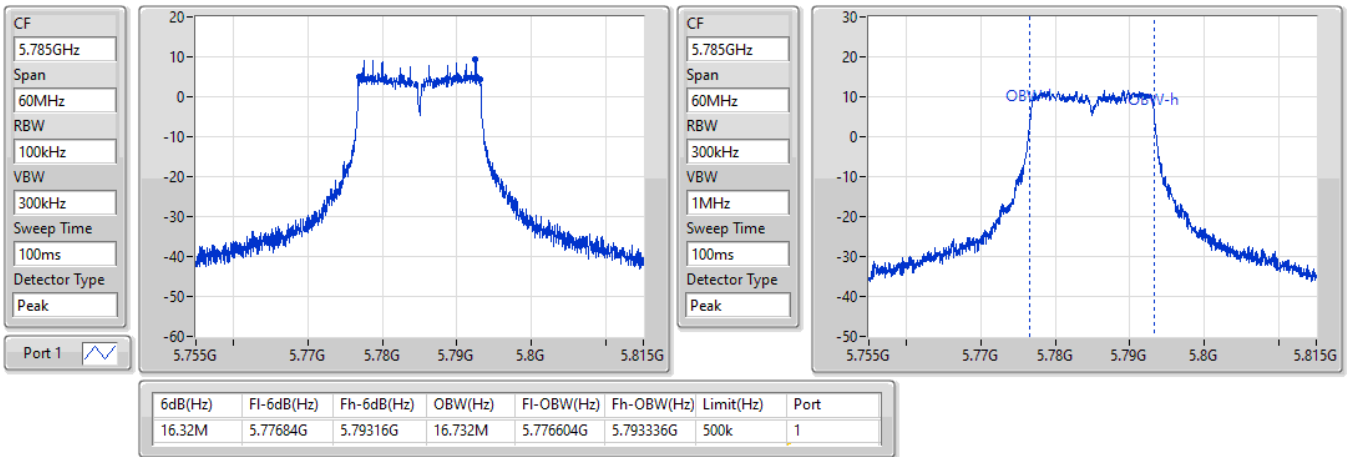

802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

01/03/2022

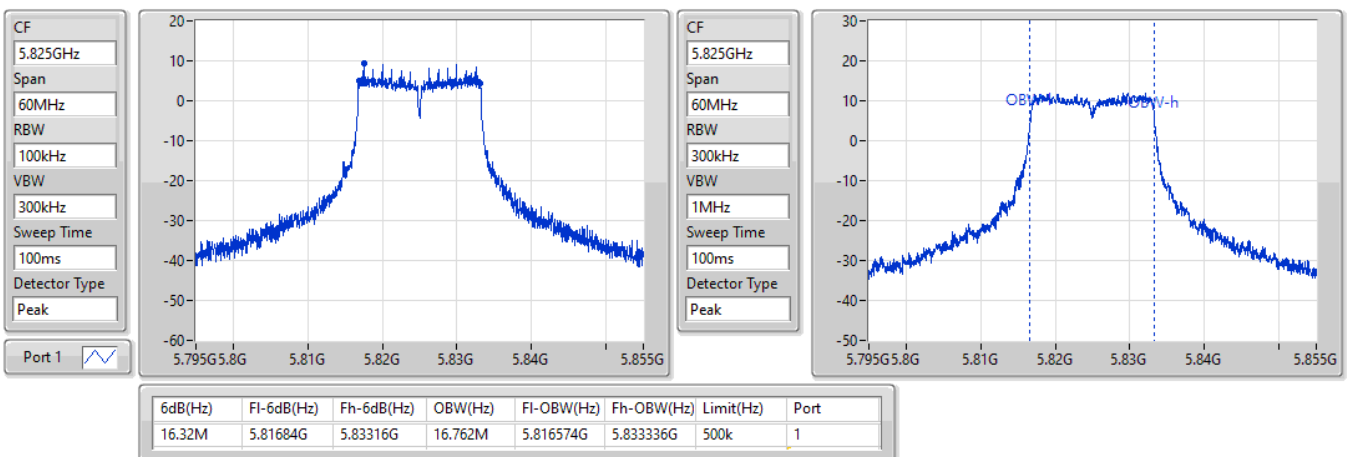


802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

01/03/2022

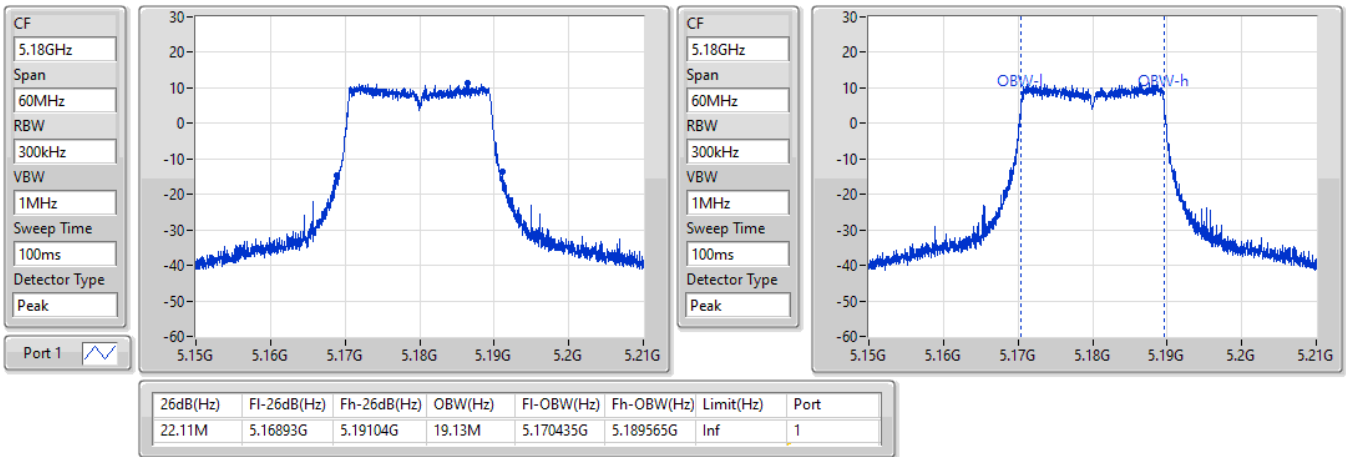

802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

01/03/2022

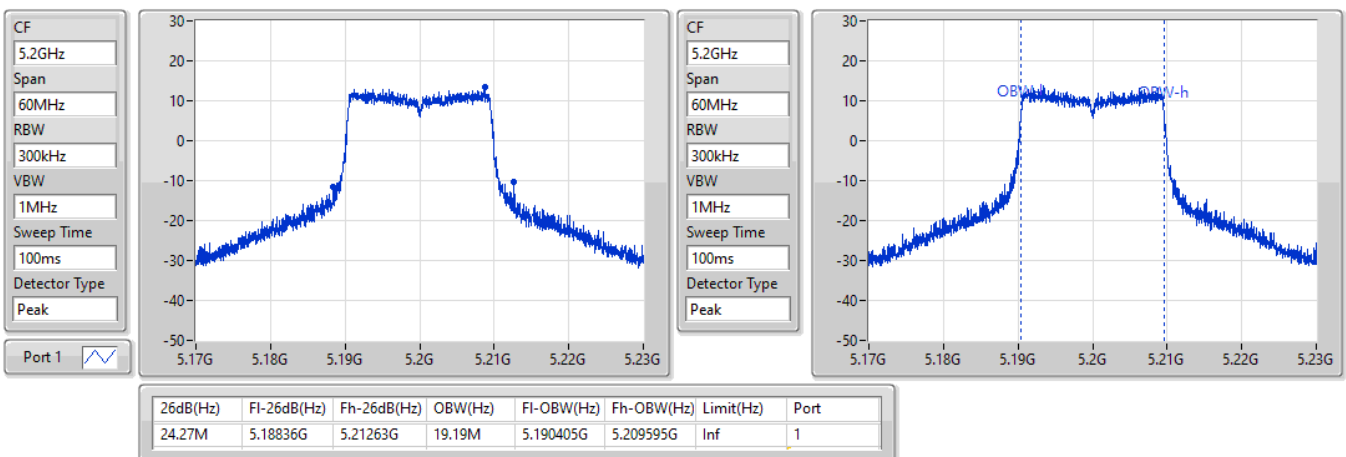


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5180MHz

01/03/2022

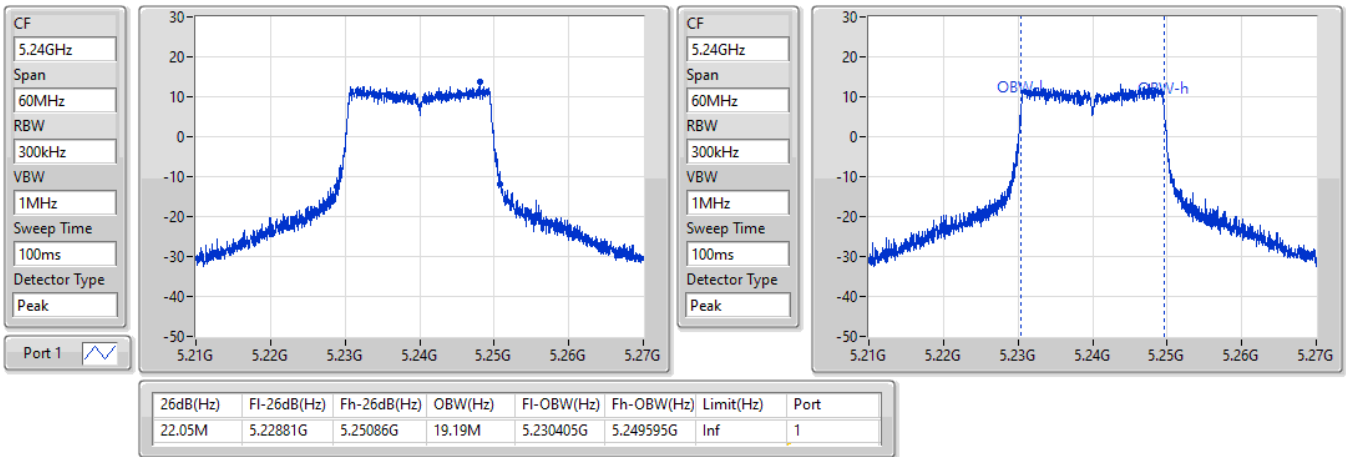

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5200MHz

01/03/2022

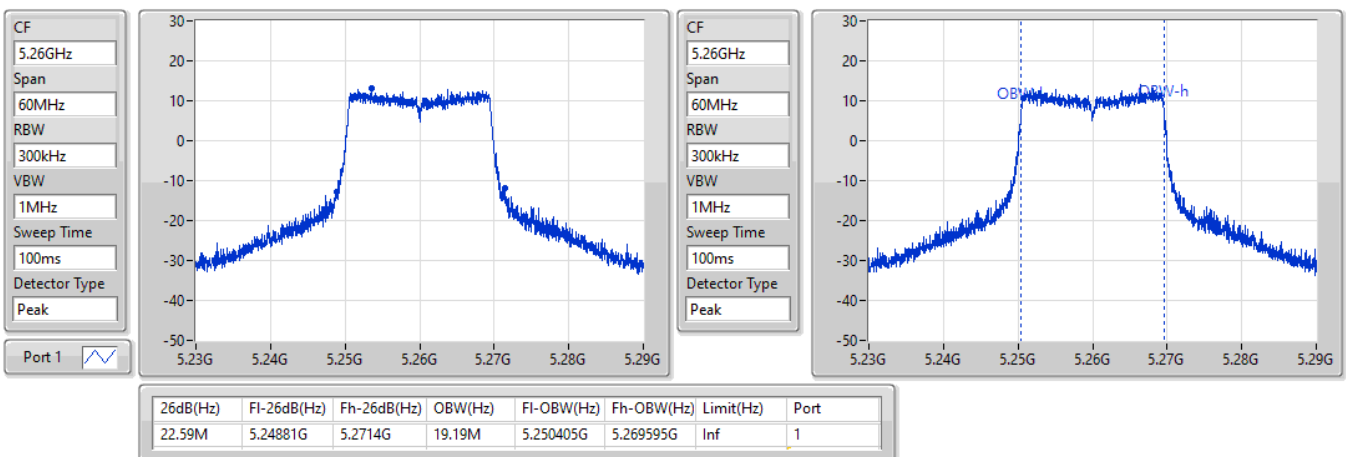


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5240MHz

01/03/2022

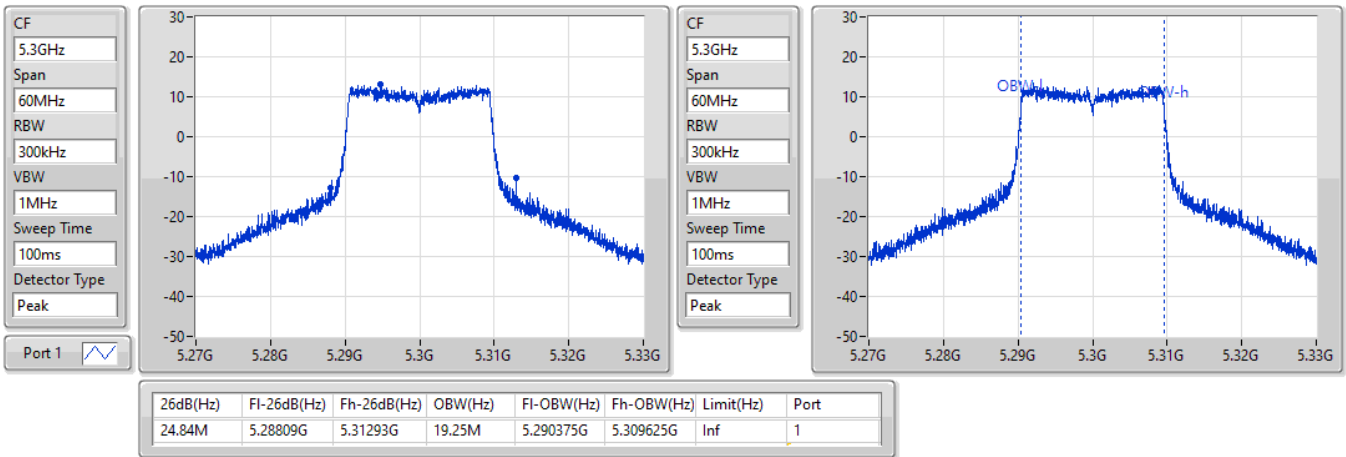

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5260MHz

01/03/2022

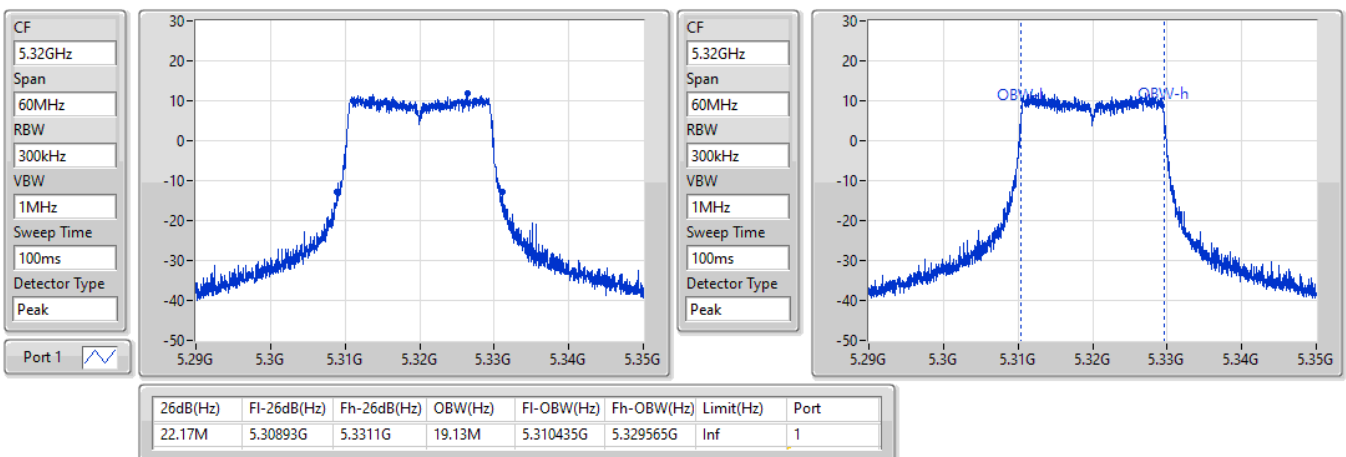


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5300MHz

01/03/2022

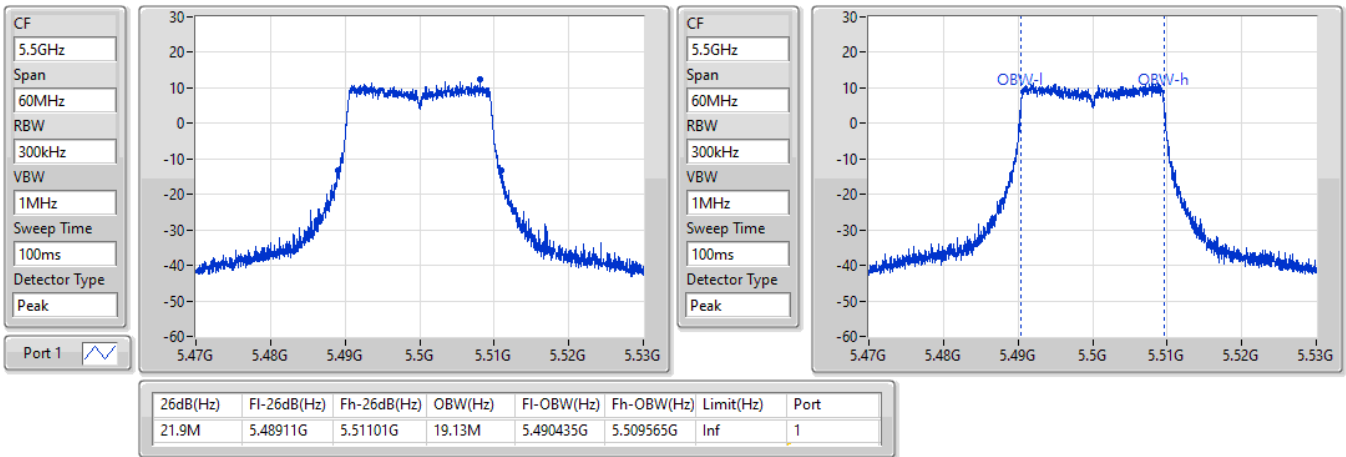

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5320MHz

01/03/2022

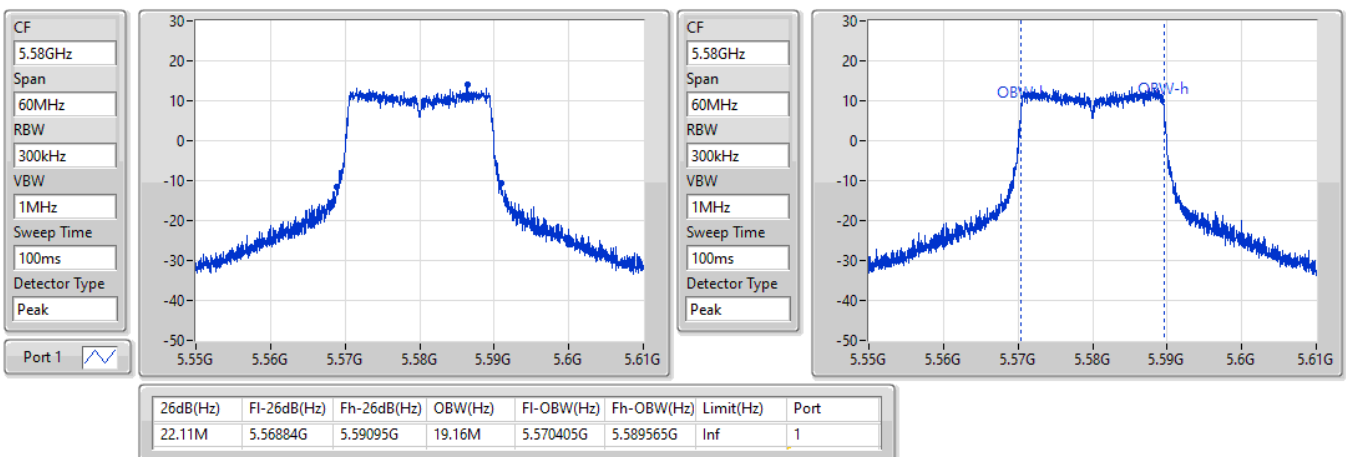


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

01/03/2022

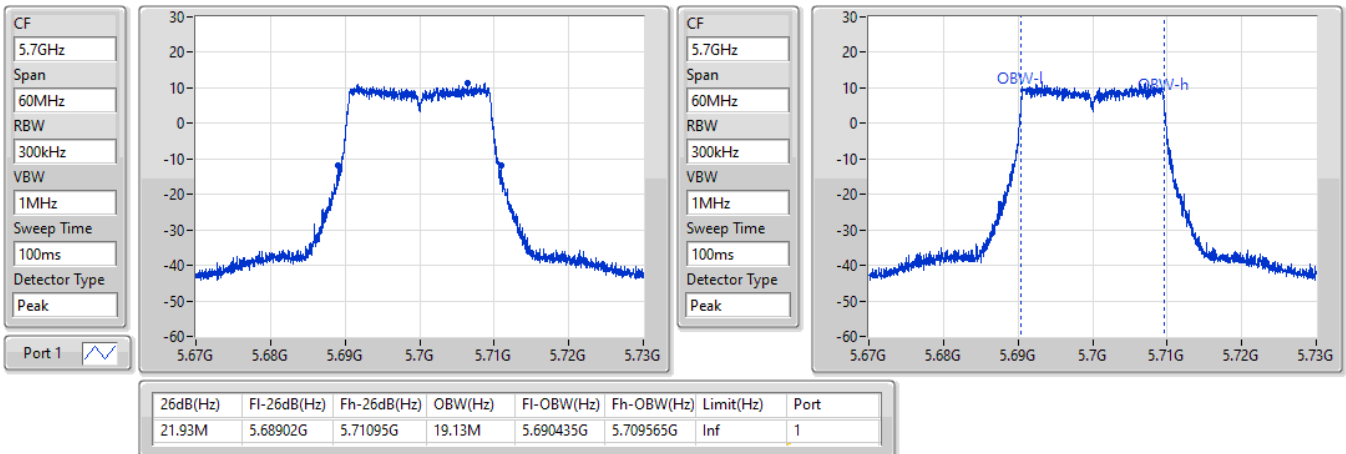

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

01/03/2022

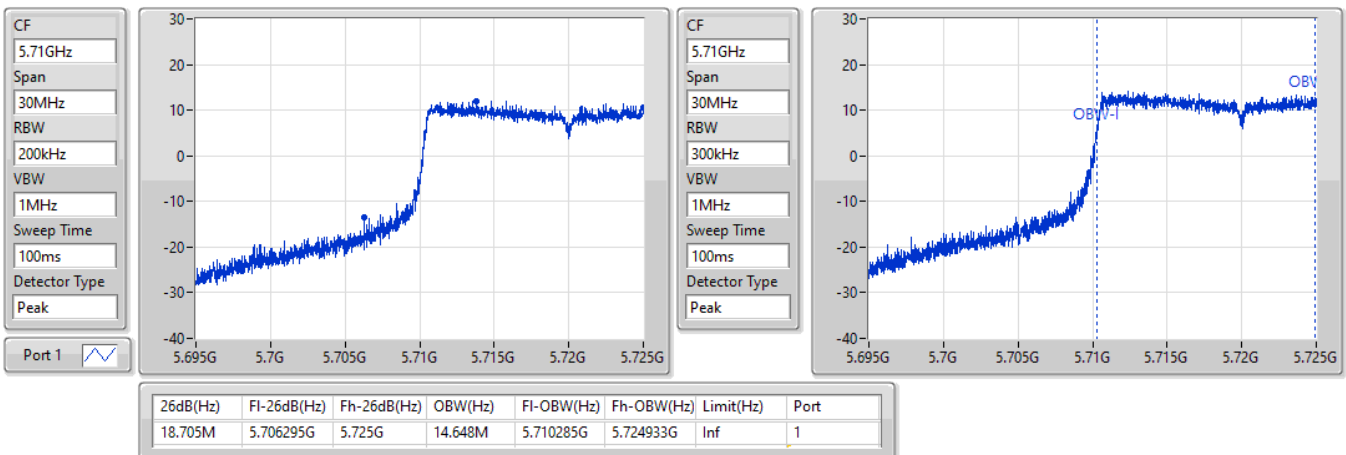


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

01/03/2022

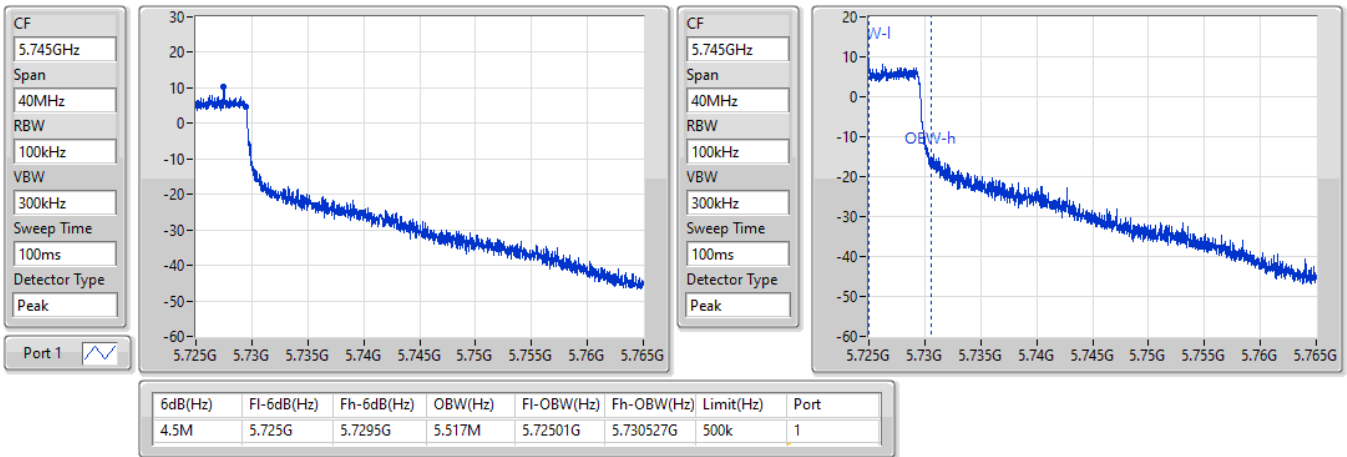

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

01/03/2022

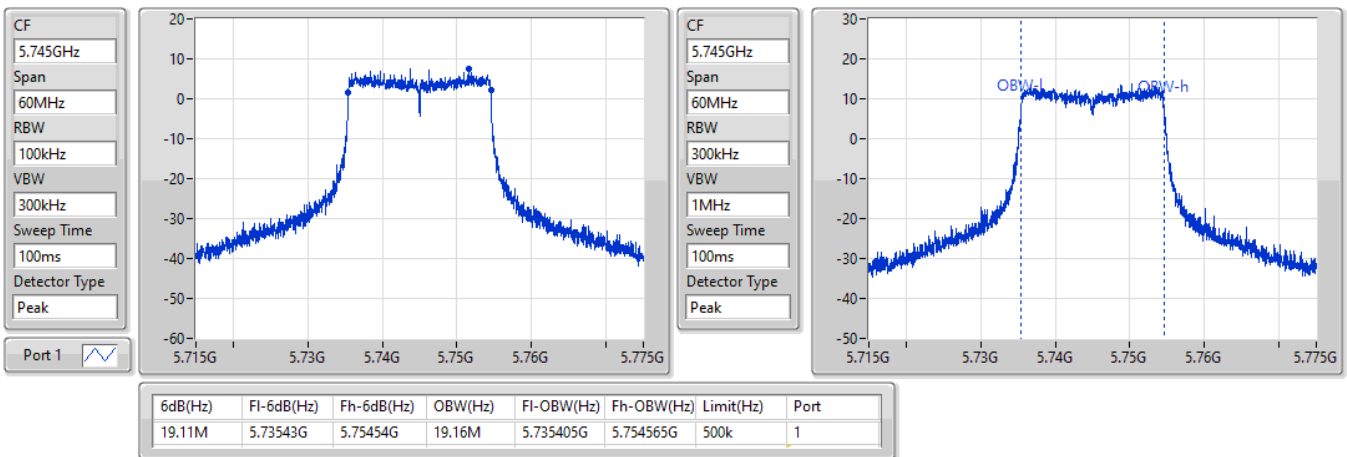


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

01/03/2022

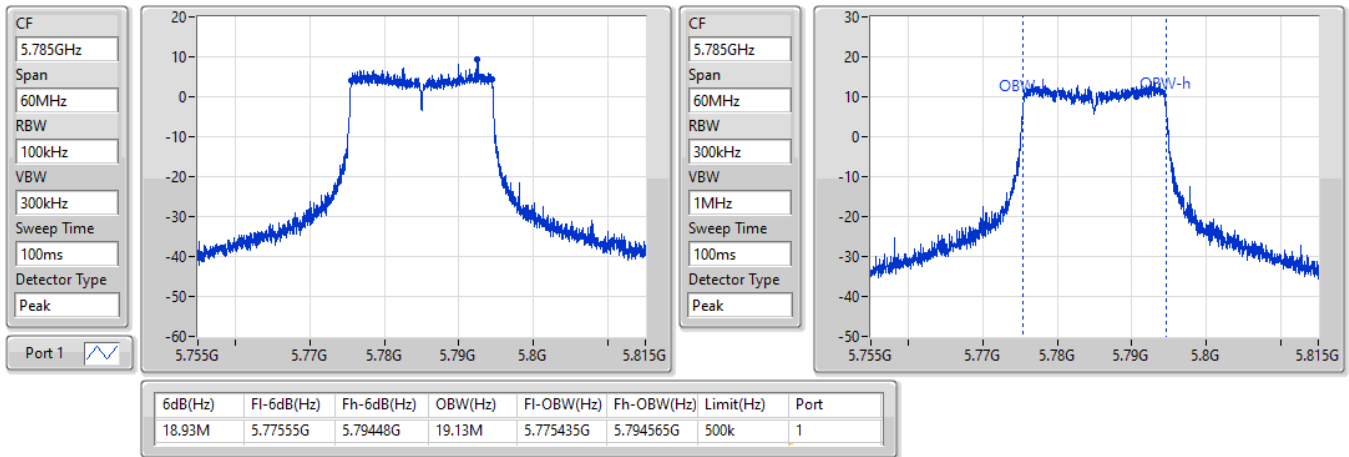

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5745MHz

01/03/2022

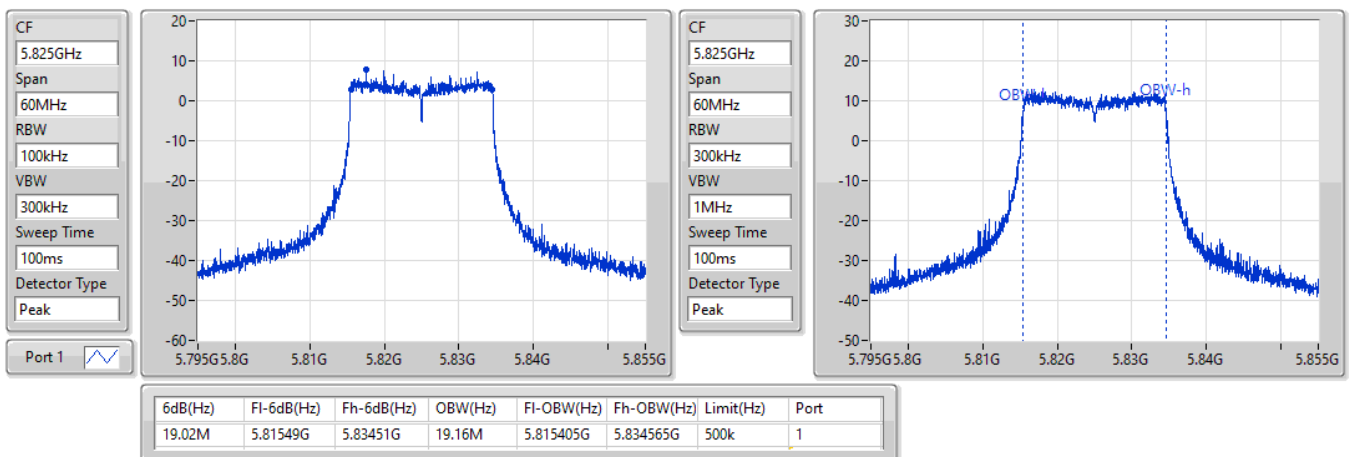


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5785MHz

01/03/2022

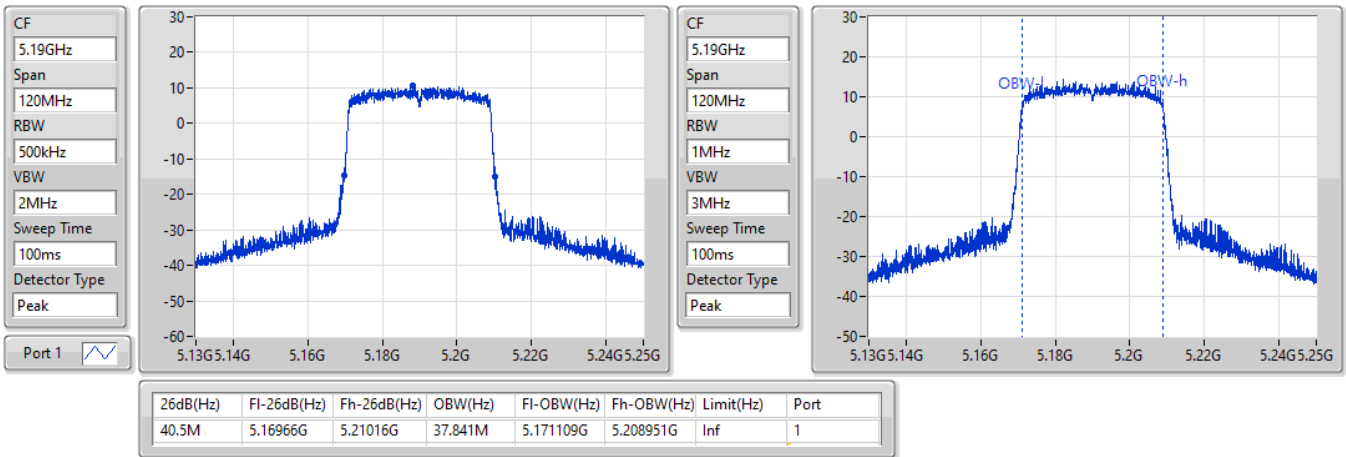

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5825MHz

01/03/2022

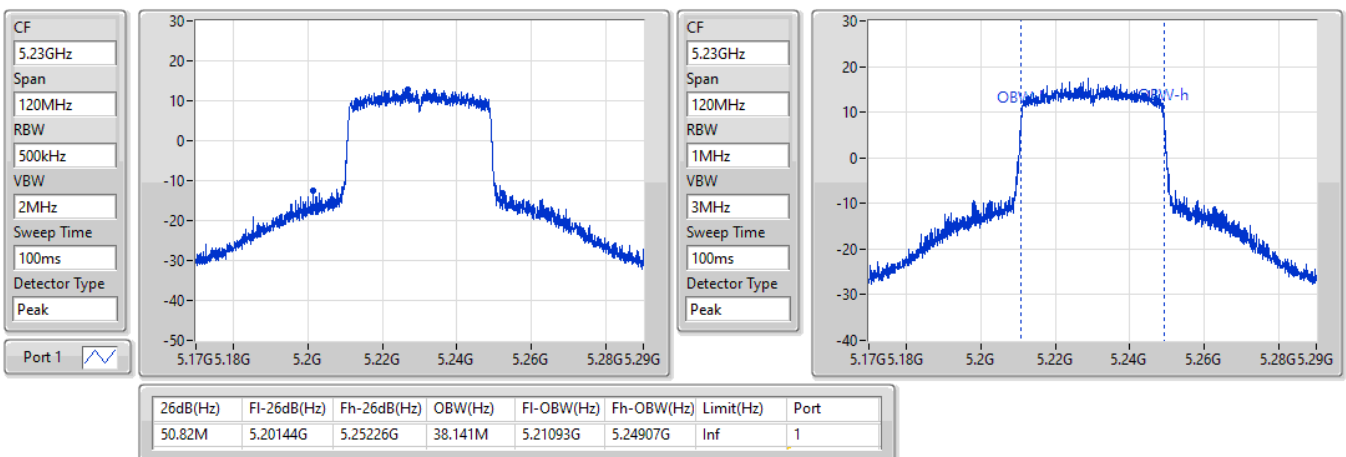


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5190MHz

01/03/2022

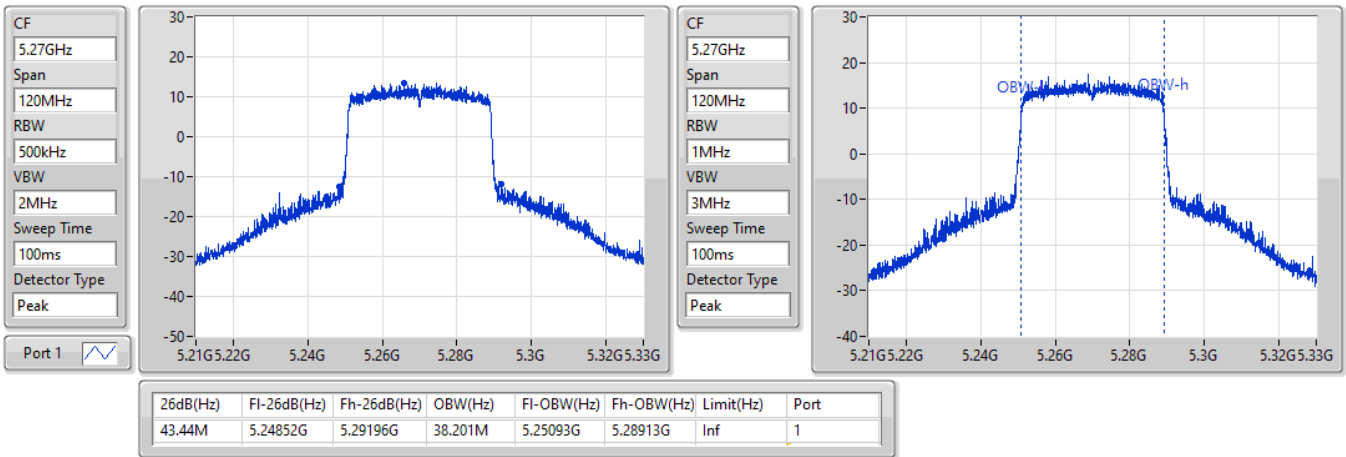

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5230MHz

01/03/2022

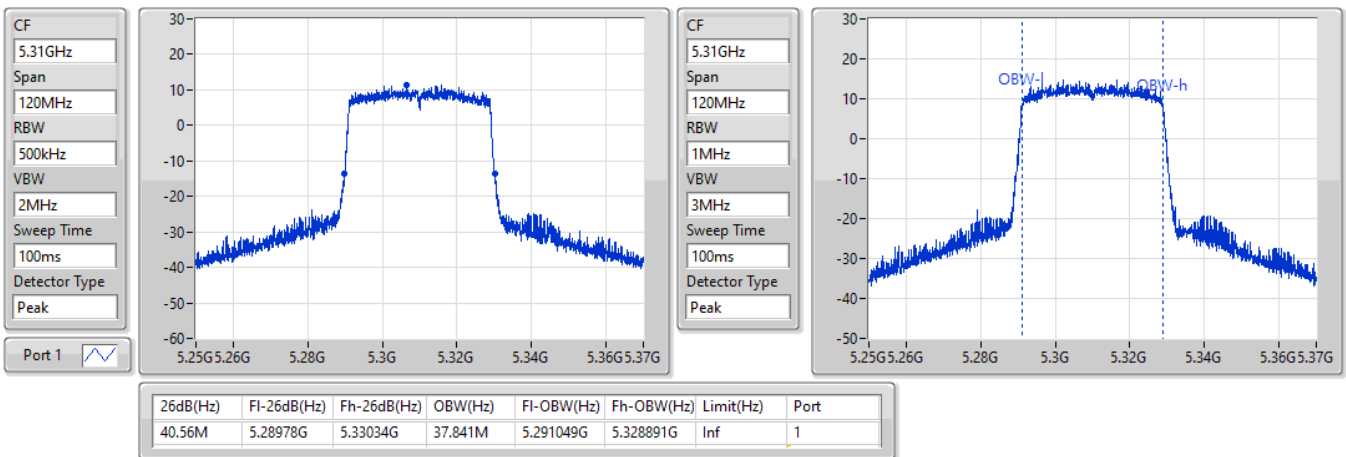


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5270MHz

01/03/2022

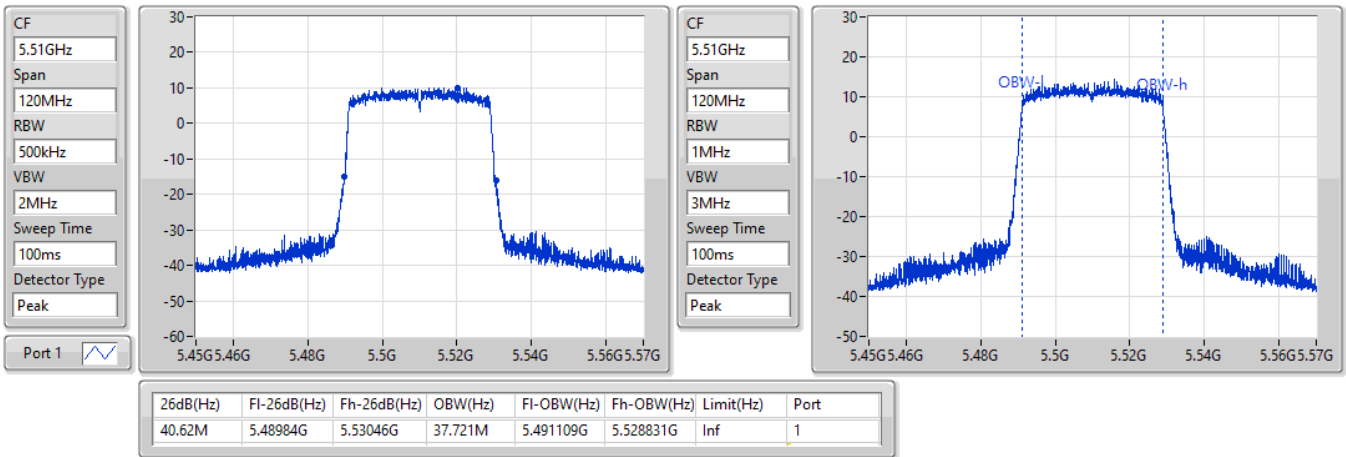

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5310MHz

01/03/2022

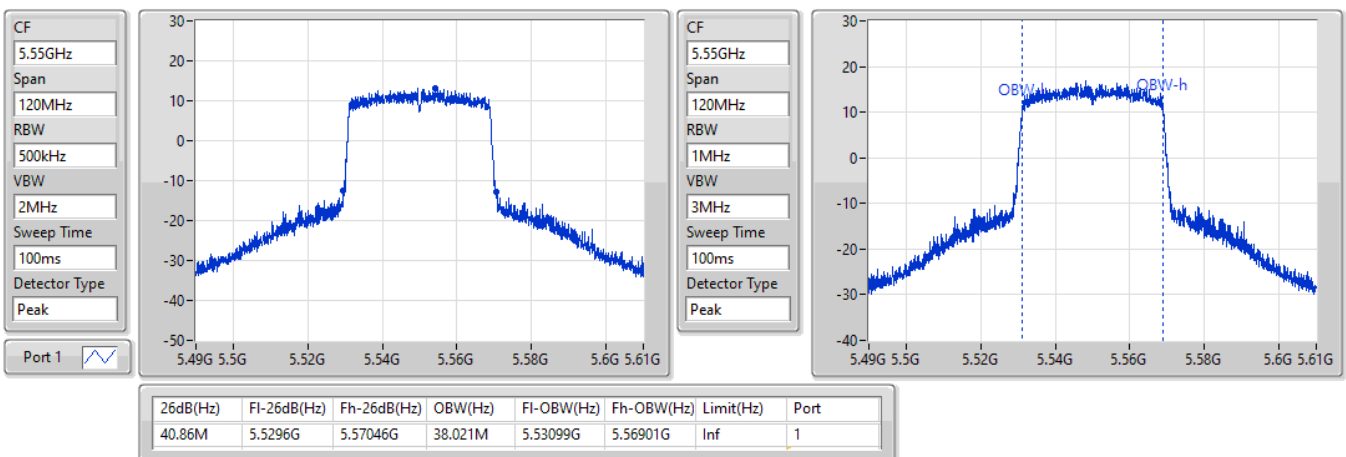


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5510MHz

01/03/2022

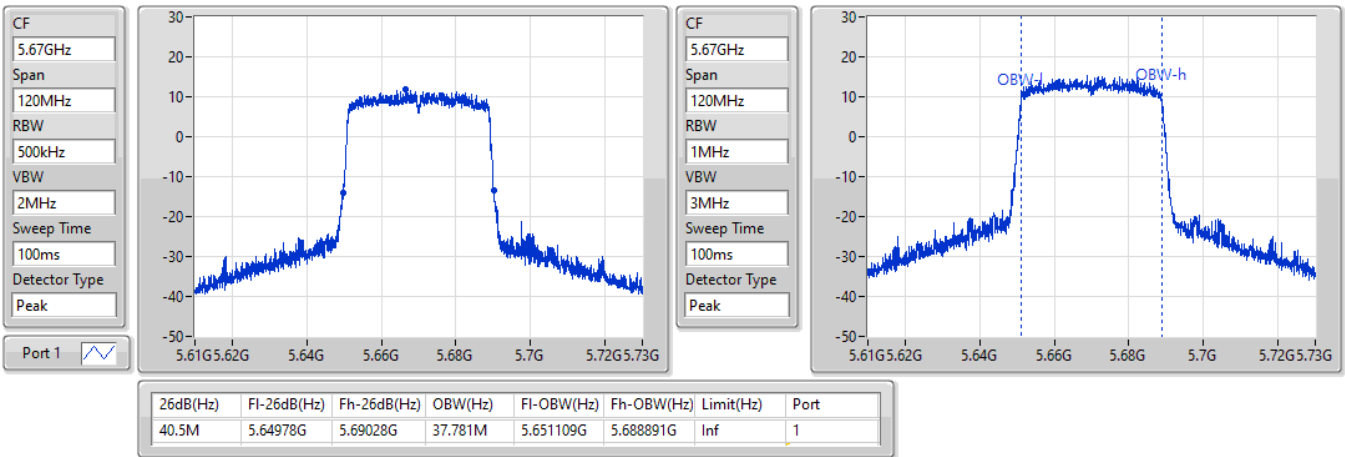

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5550MHz

01/03/2022

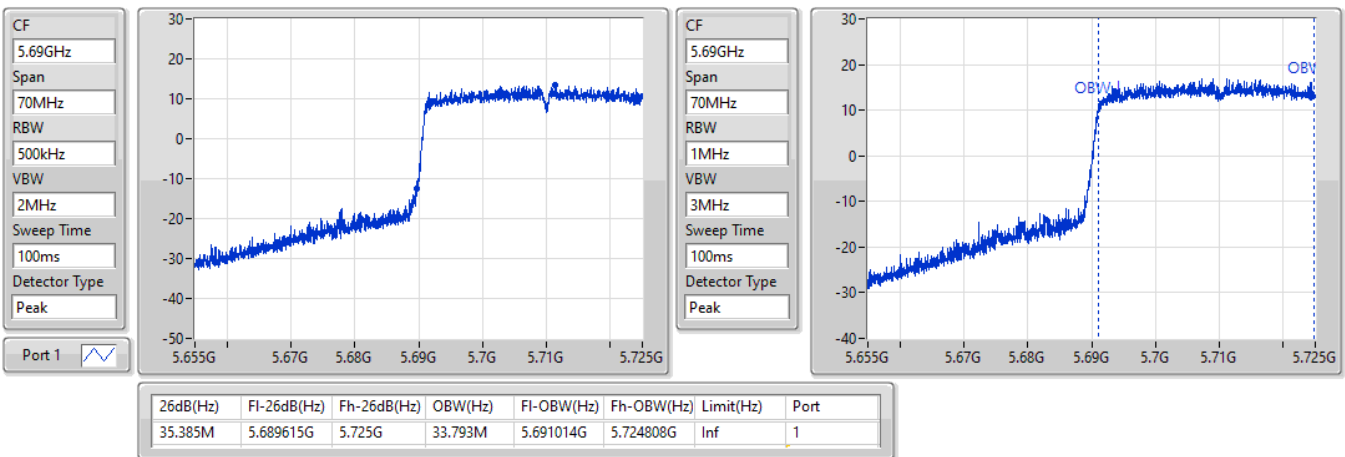


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5670MHz

01/03/2022

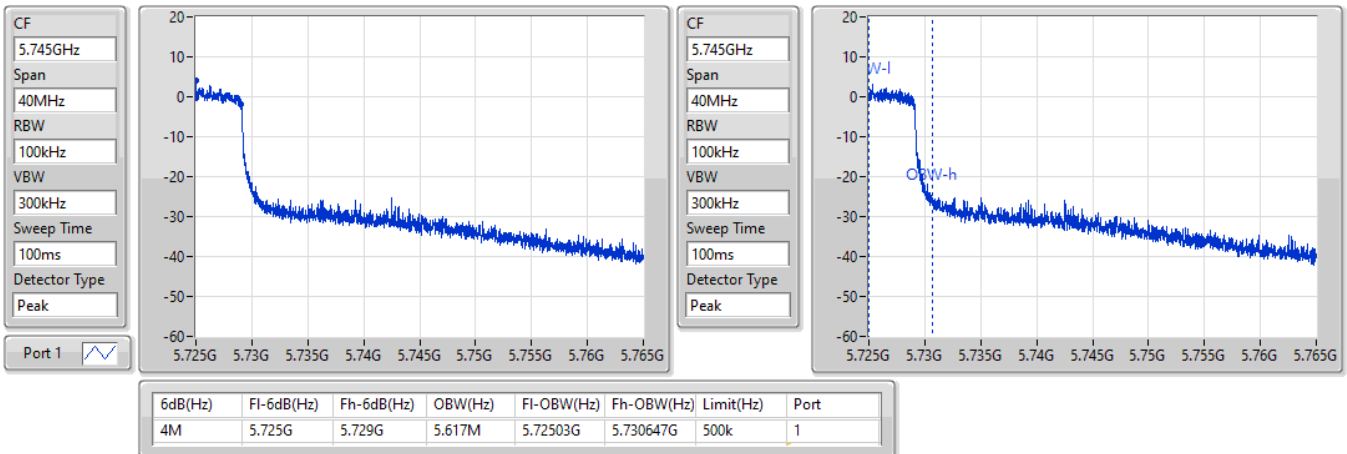

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

01/03/2022

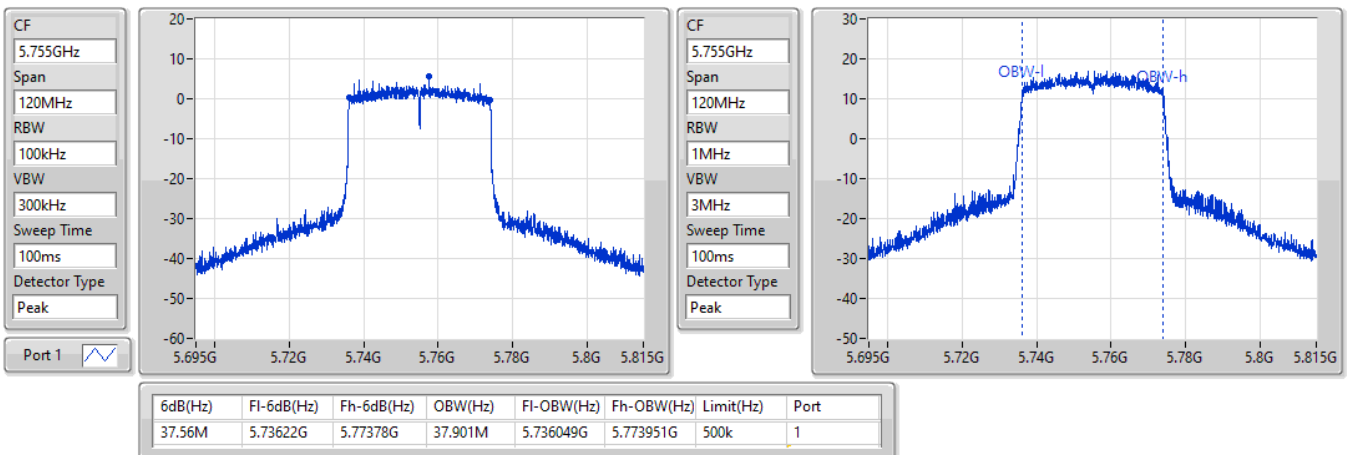


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

01/03/2022

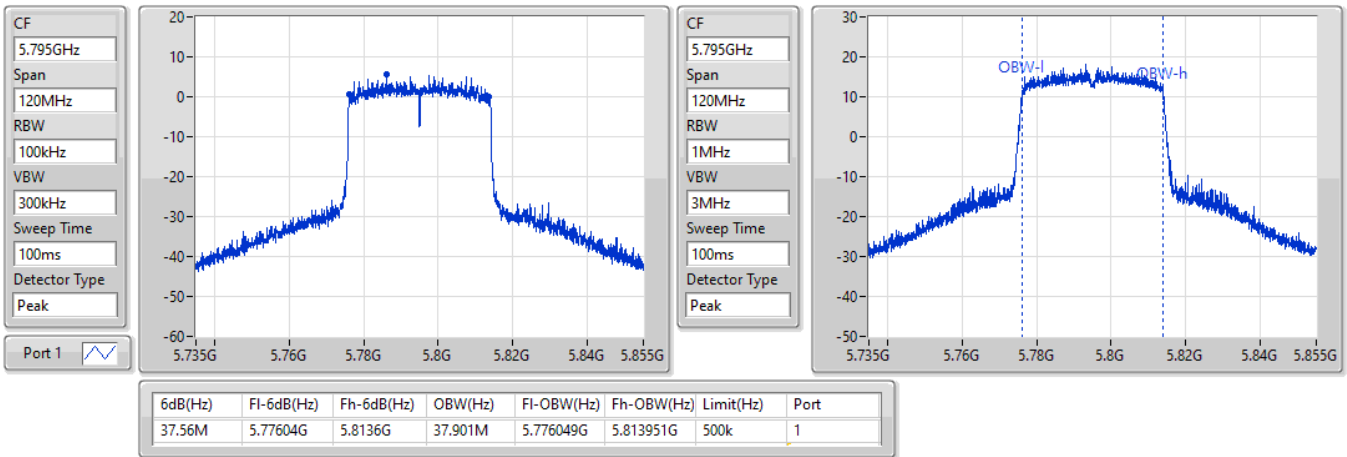

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5755MHz

01/03/2022

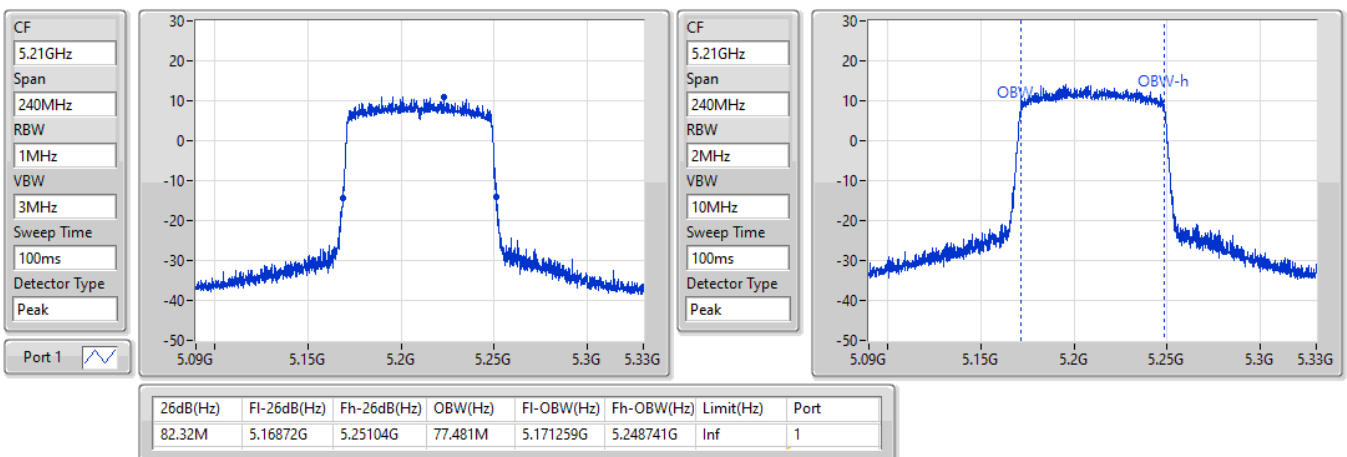


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5795MHz

01/03/2022

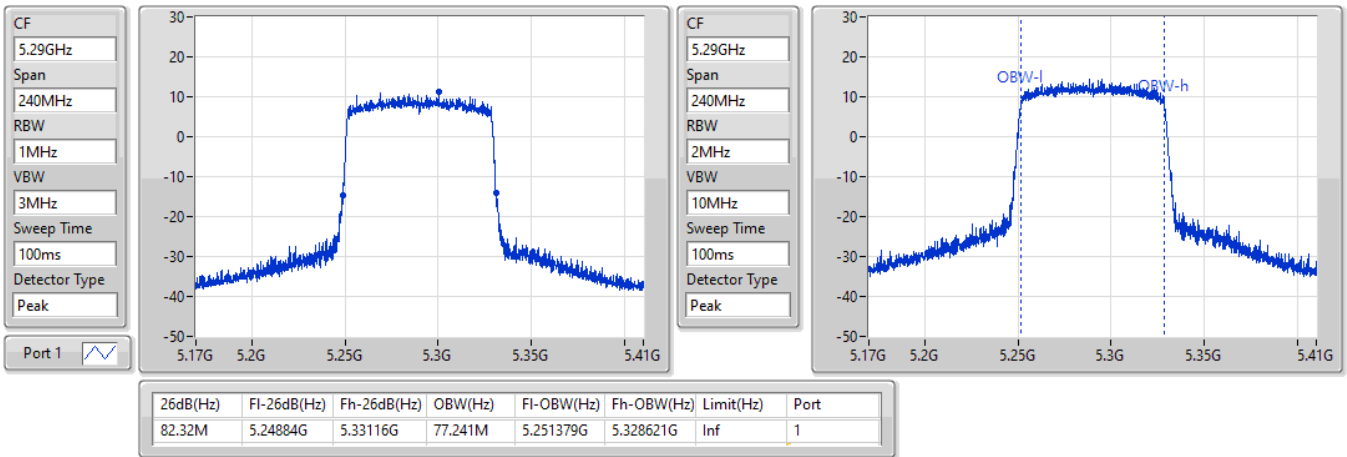

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5210MHz

01/03/2022

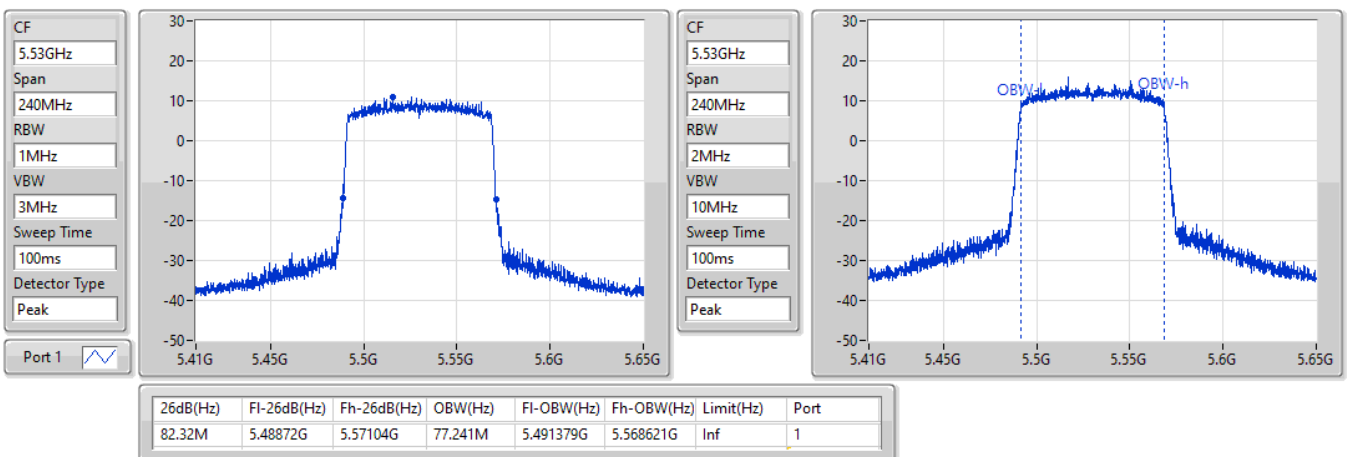


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5290MHz

01/03/2022

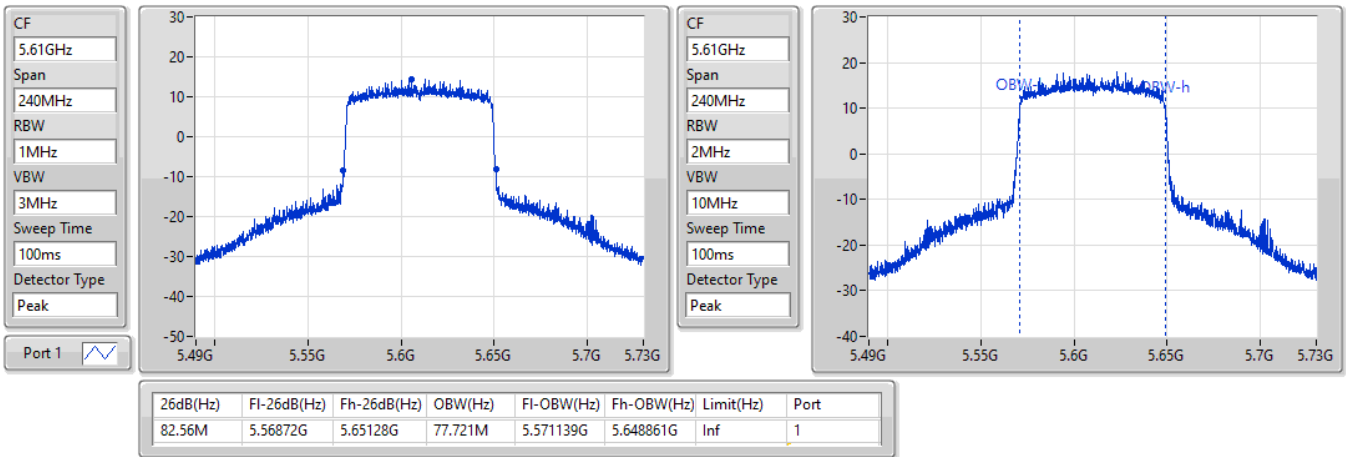

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5530MHz

01/03/2022

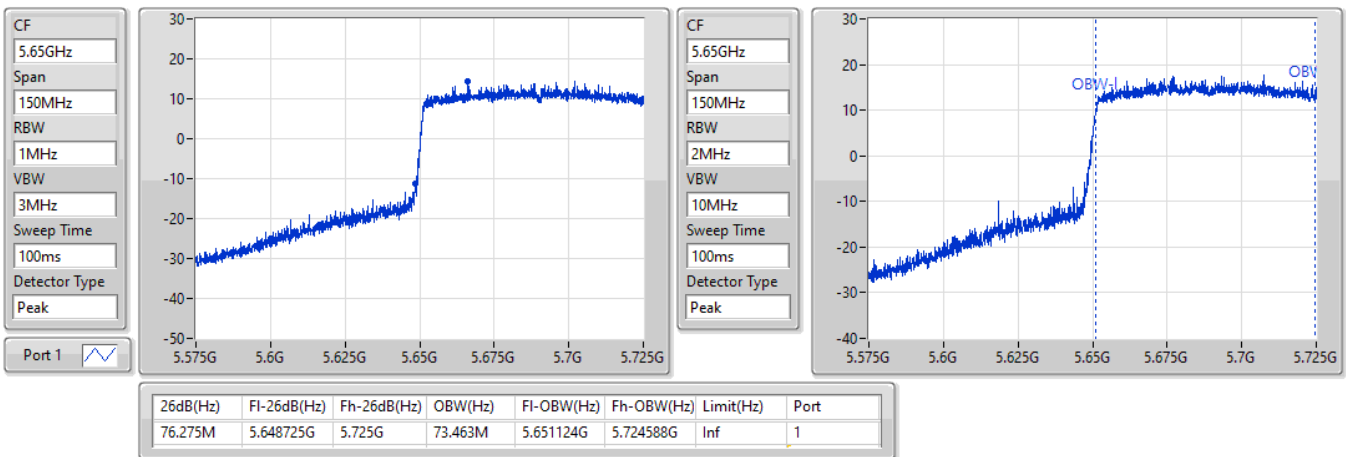


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5610MHz

01/03/2022

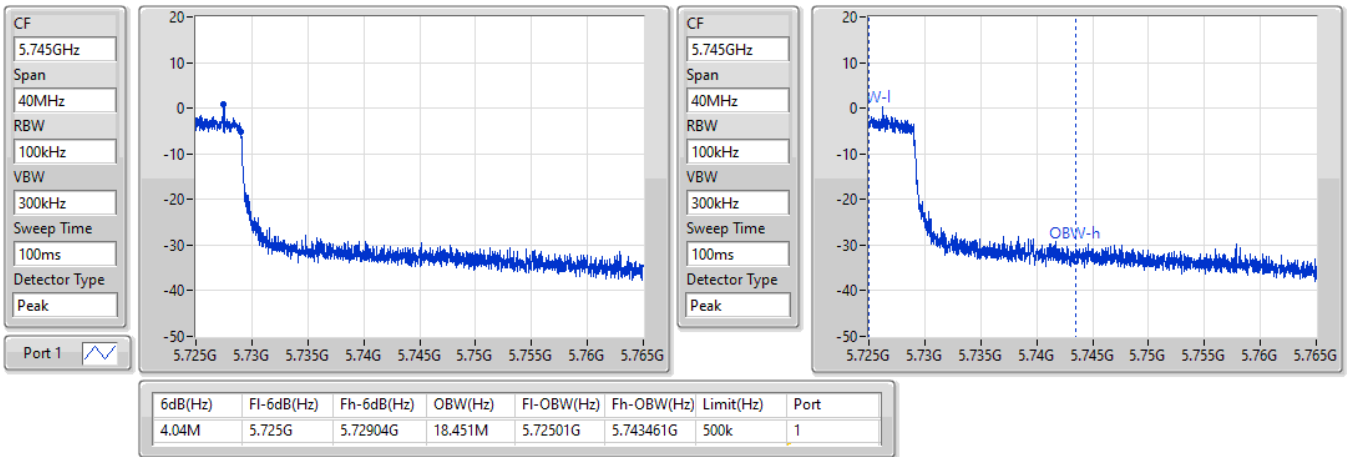

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

01/03/2022

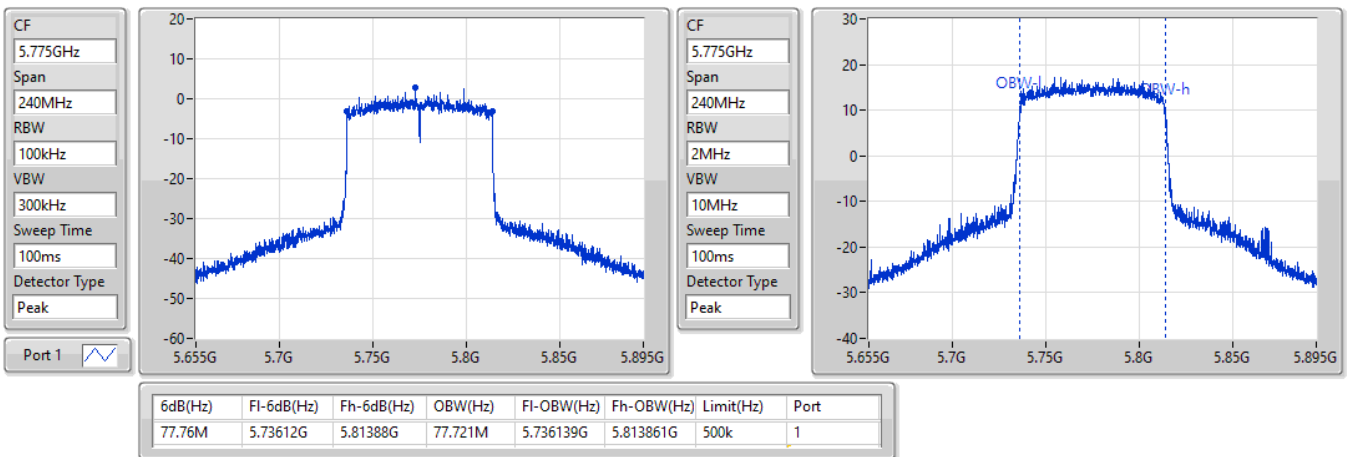


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

01/03/2022

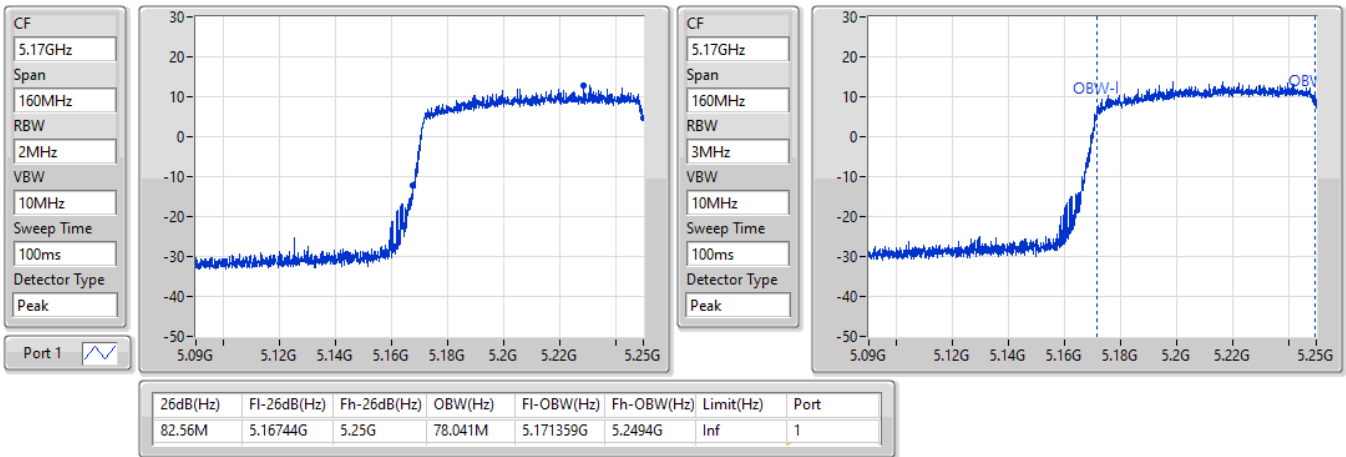

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5775MHz

01/03/2022

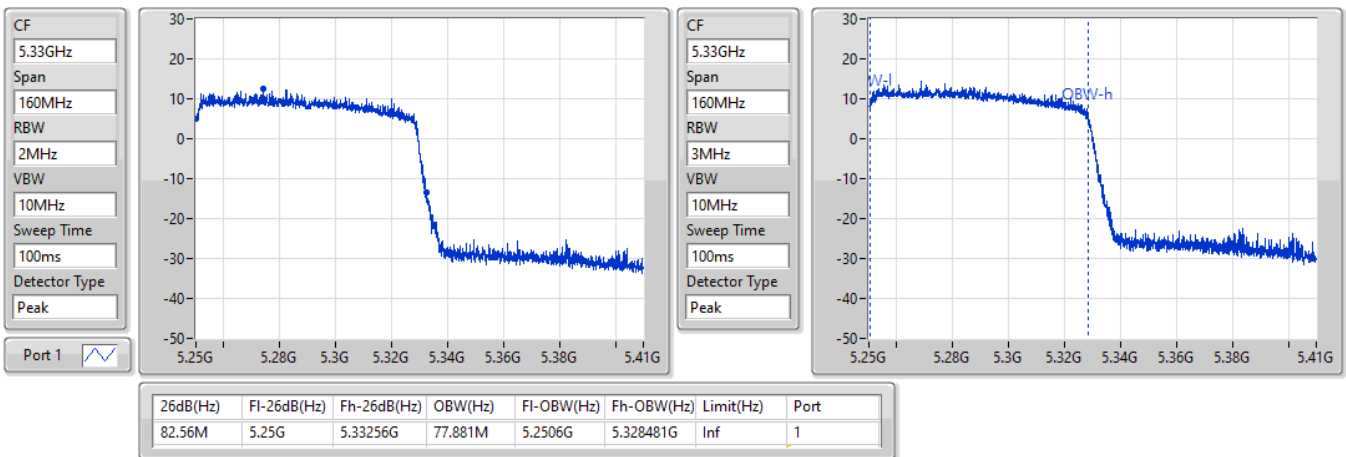


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
5250MHz Straddle 5.15-5.25GHz

01/03/2022


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

01/03/2022

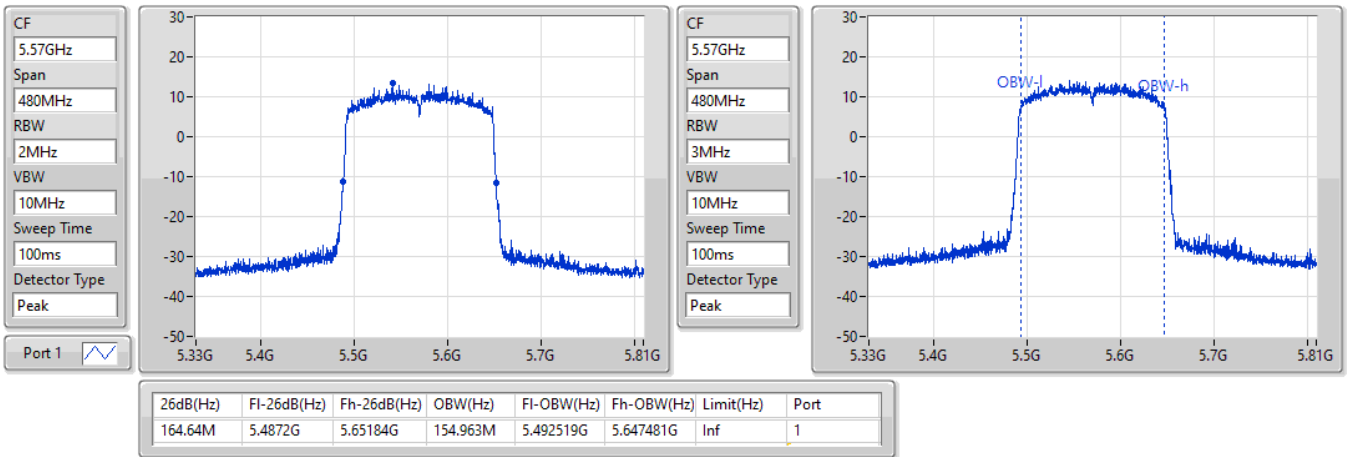


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

5570MHz

01/03/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	155.28M	103.868M	104MD1D	84M	77.481M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	160.32M	136.492M	136MD1D	83.76M	77.241M

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**

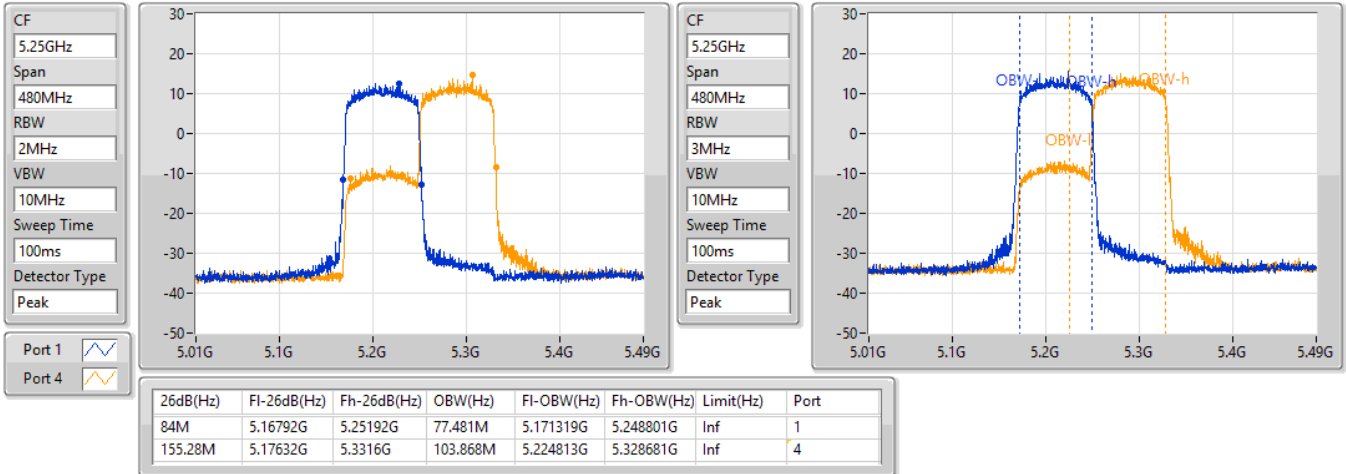
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	84M	77.481M	-	-	-	-	155.28M	103.868M
5570MHz	Pass	Inf	83.76M	77.241M	-	-	-	-	160.32M	136.492M

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

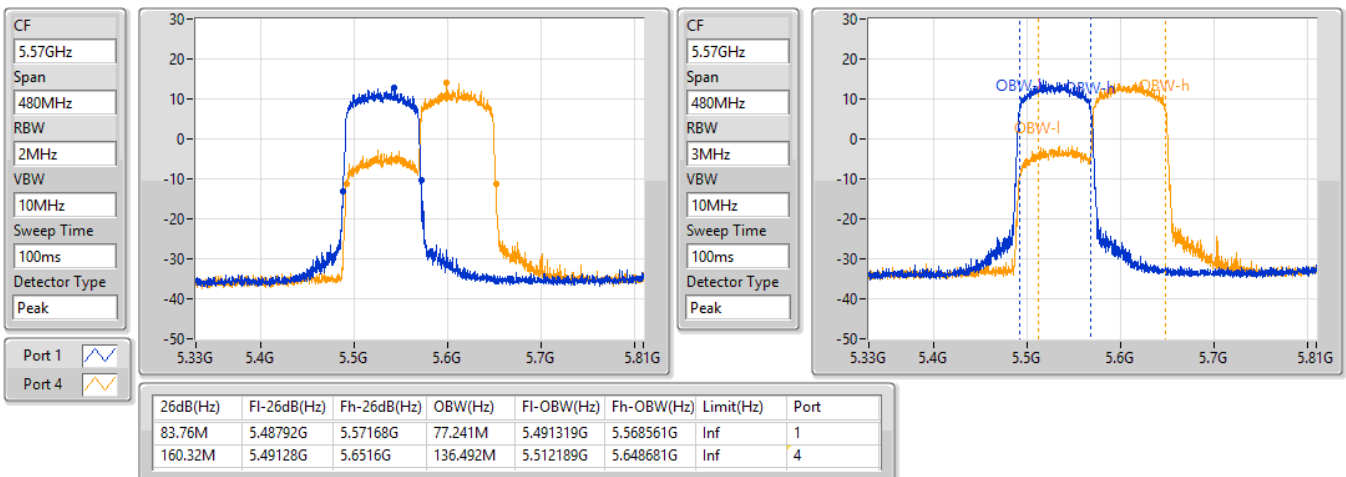
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
5250MHz Straddle 5.25-5.35GHz

12/05/2022


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
5570MHz

12/05/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_4TX	161.04M	141.049M	141MD1D	84M	77.481M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW160_Nss2,(MCS0)_4TX	161.52M	145.847M	146MD1D	83.28M	77.721M

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

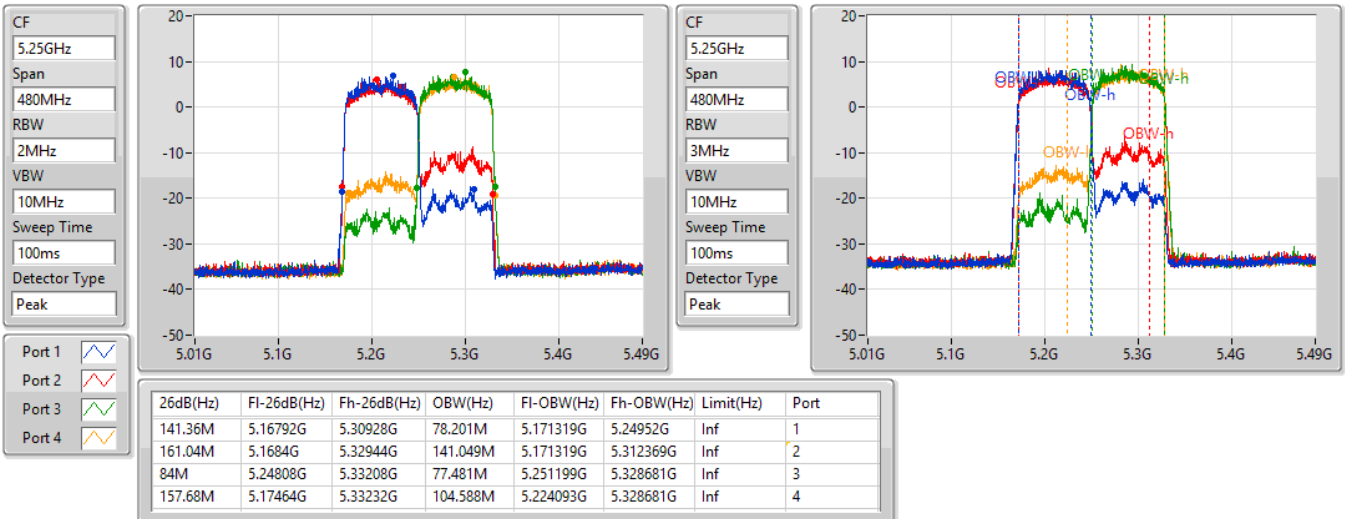
Result

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 HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	141.36M	78.201M	161.04M	141.049M	84M	77.481M	157.68M	104.588M
802.11ax HEW160_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	83.52M	78.201M	161.52M	145.847M	83.28M	77.721M	160.56M	132.414M

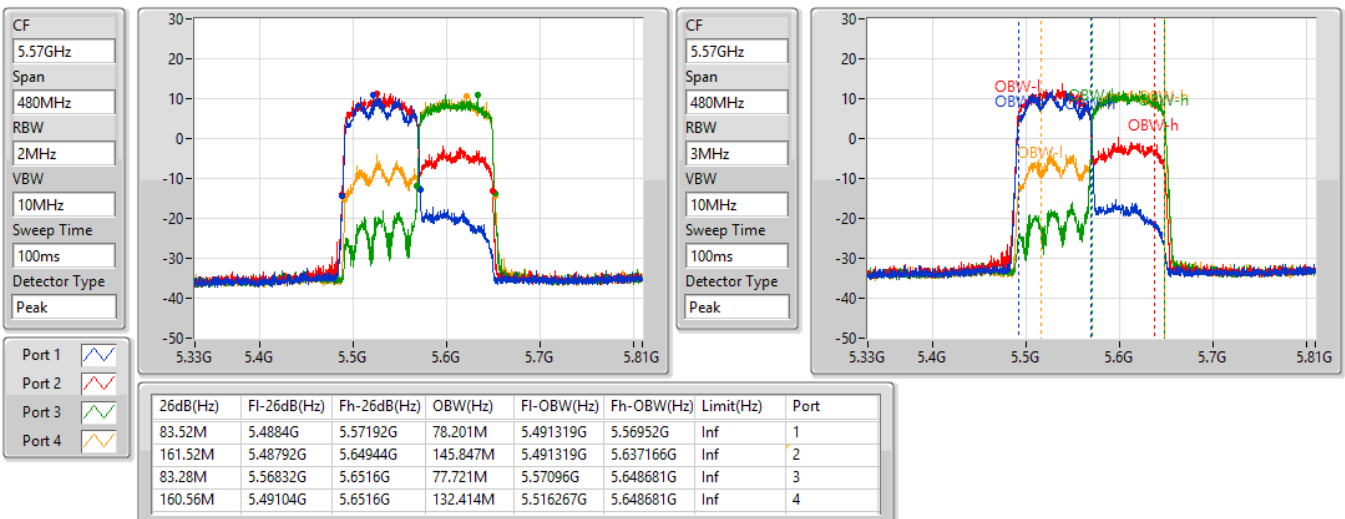
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

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

12/05/2022


802.11ax HEW160_Nss2,(MCS0)_4TX
EBW
5570MHz

12/05/2022



**<Non-Beamforming Mode>****Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	17.33	0.05408
802.11ax HEW20_Nss1,(MCS0)_1TX	17.52	0.05649
802.11ax HEW40_Nss1,(MCS0)_1TX	17.50	0.05623
802.11ax HEW80_Nss1,(MCS0)_1TX	17.28	0.05346
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	17.92	0.06194
802.11ax HEW20_Nss1,(MCS0)_1TX	17.96	0.06252
802.11ax HEW40_Nss1,(MCS0)_1TX	18.30	0.06761
802.11ax HEW80_Nss1,(MCS0)_1TX	18.25	0.06683
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	17.54	0.05675
802.11ax HEW20_Nss1,(MCS0)_1TX	17.75	0.05957
802.11ax HEW40_Nss1,(MCS0)_1TX	17.92	0.06194
802.11ax HEW80_Nss1,(MCS0)_1TX	17.72	0.05916
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	17.48	0.05598
802.11ax HEW20_Nss1,(MCS0)_1TX	17.59	0.05741
802.11ax HEW40_Nss1,(MCS0)_1TX	17.74	0.05943
802.11ax HEW80_Nss1,(MCS0)_1TX	17.40	0.05495



Average Power_Radio 1

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-
5180MHz	Pass	5.24	17.29	17.29	30.00
5200MHz	Pass	5.24	17.20	17.20	30.00
5240MHz	Pass	5.24	17.33	17.33	30.00
5260MHz	Pass	5.46	17.63	17.63	23.95
5300MHz	Pass	5.46	17.92	17.92	23.94
5320MHz	Pass	5.46	17.87	17.87	23.91
5500MHz	Pass	4.26	17.54	17.54	23.91
5580MHz	Pass	4.26	17.23	17.23	23.96
5700MHz	Pass	4.26	17.29	17.29	23.91
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	16.10	16.10	22.85
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	9.60	9.60	30.00
5745MHz	Pass	3.94	17.45	17.45	30.00
5785MHz	Pass	3.94	17.12	17.12	30.00
5825MHz	Pass	3.94	17.48	17.48	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
5180MHz	Pass	5.24	17.36	17.36	30.00
5200MHz	Pass	5.24	17.27	17.27	30.00
5240MHz	Pass	5.24	17.52	17.52	30.00
5260MHz	Pass	5.46	17.79	17.79	23.98
5300MHz	Pass	5.46	17.96	17.96	23.98
5320MHz	Pass	5.46	17.78	17.78	23.98
5500MHz	Pass	4.26	17.75	17.75	23.98
5580MHz	Pass	4.26	17.42	17.42	23.98
5700MHz	Pass	4.26	17.35	17.35	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	16.01	16.01	23.02
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	10.42	10.42	30.00
5745MHz	Pass	3.94	17.59	17.59	30.00
5785MHz	Pass	3.94	17.14	17.14	30.00
5825MHz	Pass	3.94	17.49	17.49	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-
5190MHz	Pass	5.24	17.49	17.49	30.00
5230MHz	Pass	5.24	17.50	17.50	30.00
5270MHz	Pass	5.46	18.06	18.06	23.98
5310MHz	Pass	5.46	18.30	18.30	23.98
5510MHz	Pass	4.26	17.66	17.66	23.98
5550MHz	Pass	4.26	17.92	17.92	23.98
5670MHz	Pass	4.26	17.46	17.46	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.26	16.03	16.03	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.94	4.99	4.99	30.00
5755MHz	Pass	3.94	17.74	17.74	30.00
5795MHz	Pass	3.94	17.65	17.65	30.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-
5210MHz	Pass	5.24	17.28	17.28	30.00
5290MHz	Pass	5.46	18.25	18.25	23.98
5530MHz	Pass	4.26	17.72	17.72	23.98
5610MHz	Pass	4.26	17.43	17.43	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.26	16.30	16.30	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.94	1.15	1.15	30.00
5775MHz	Pass	3.94	17.40	17.40	30.00

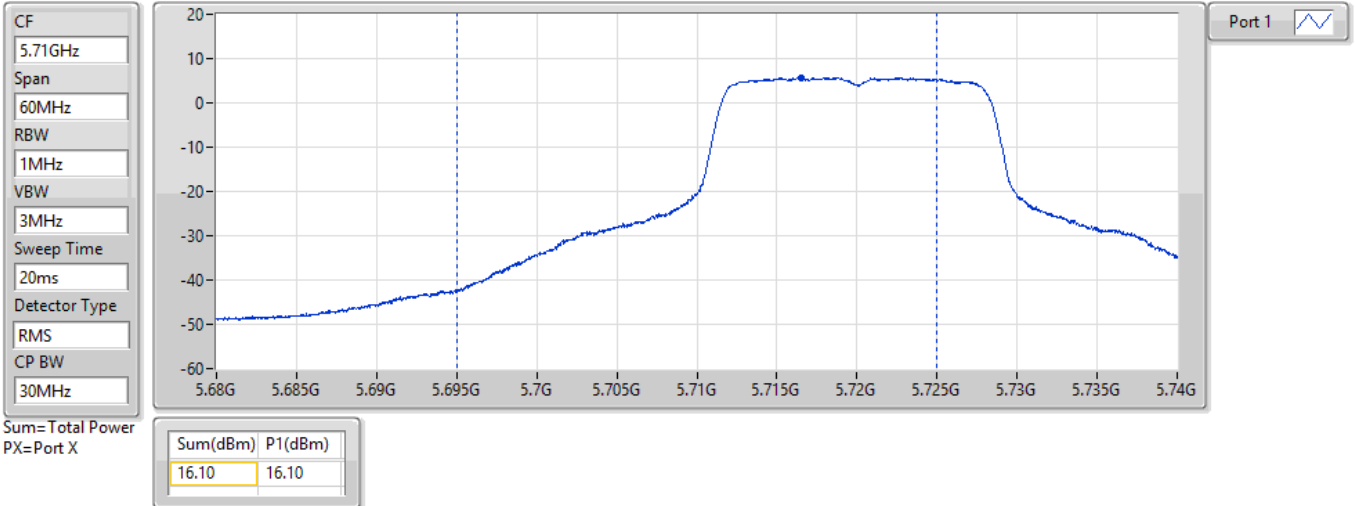
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

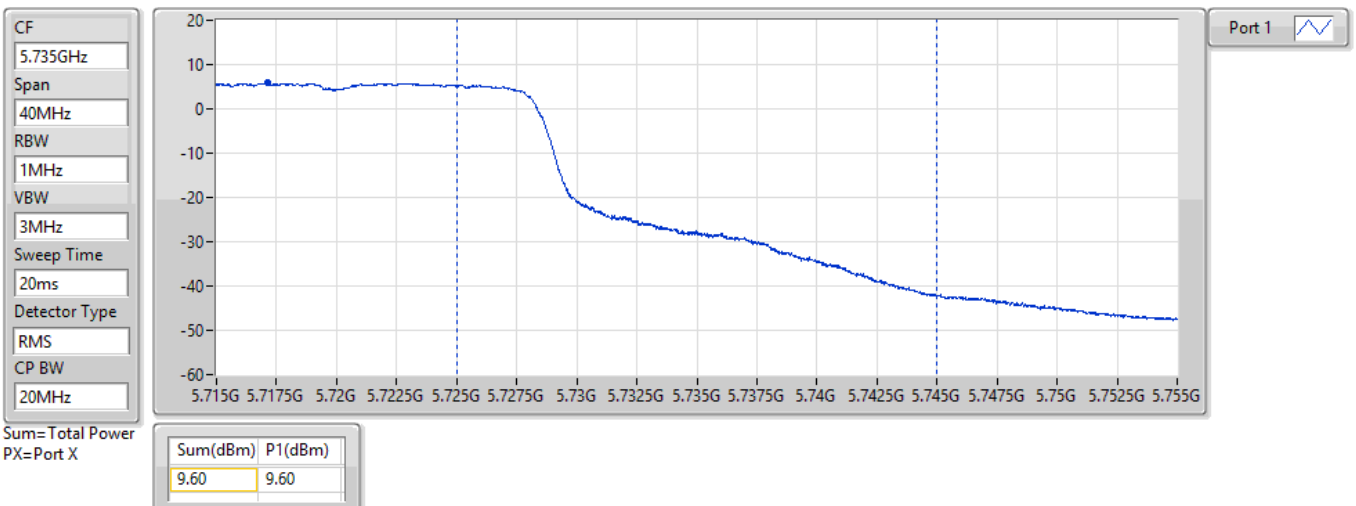


802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022

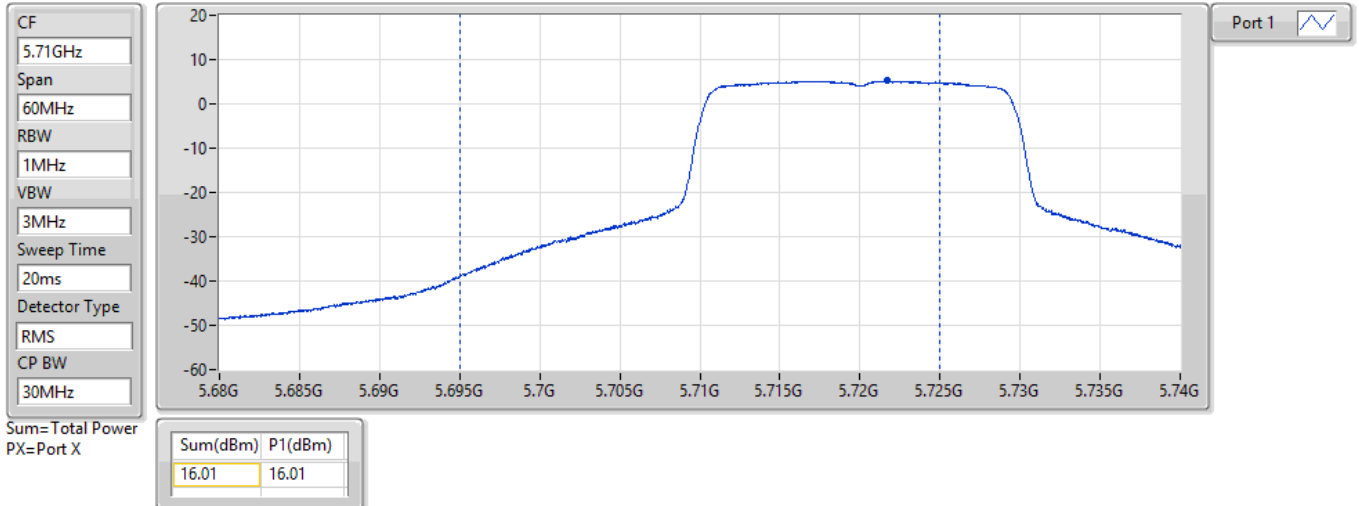


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

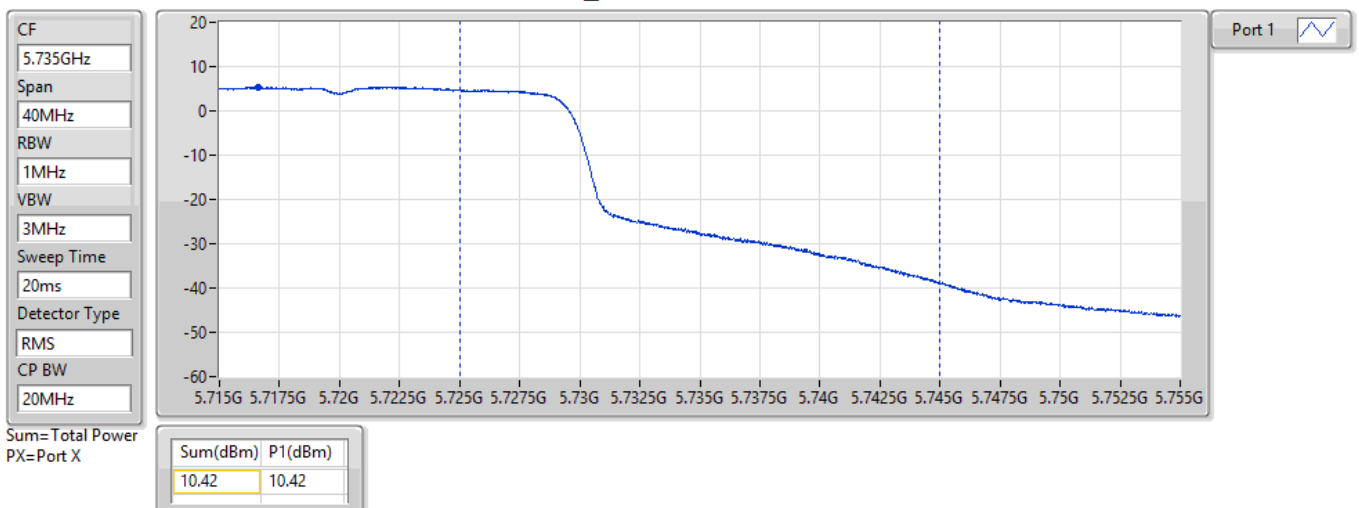


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022

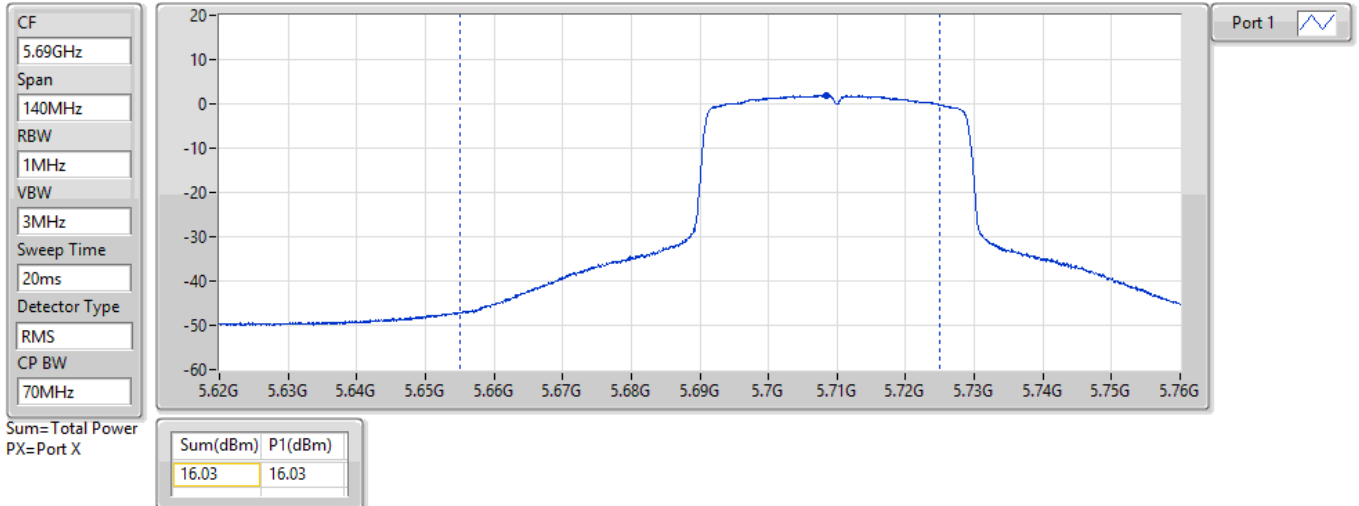


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

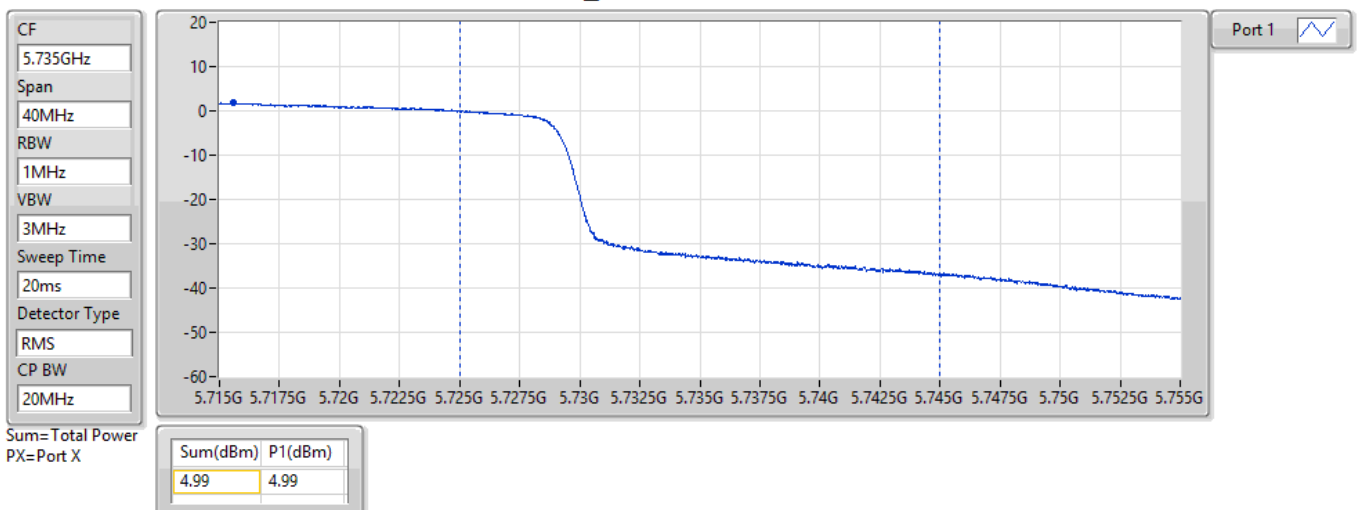


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022

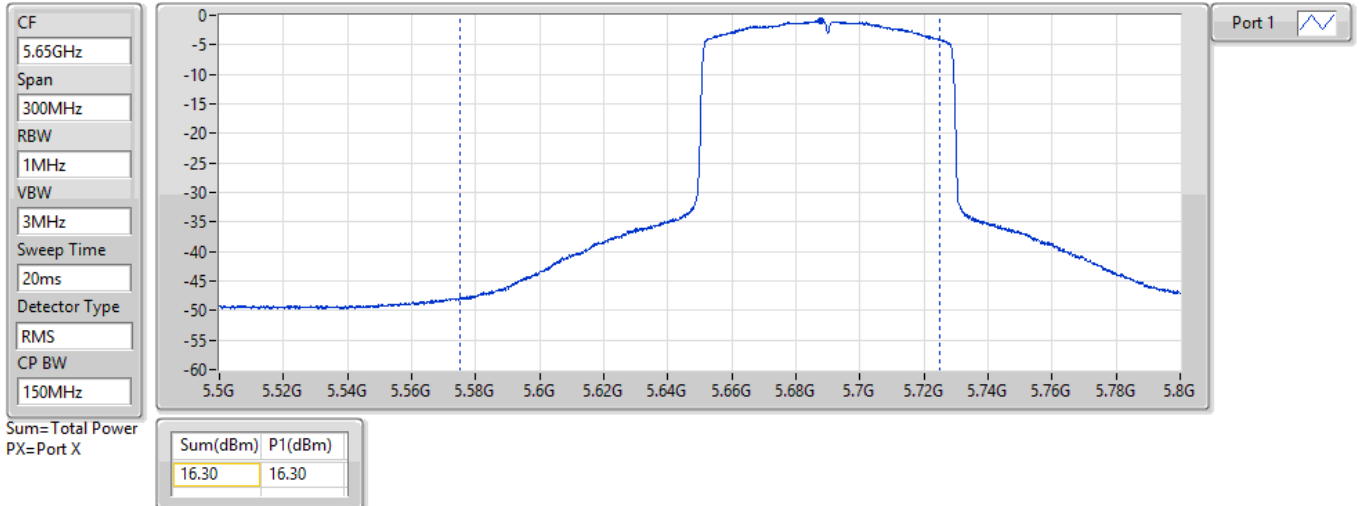


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

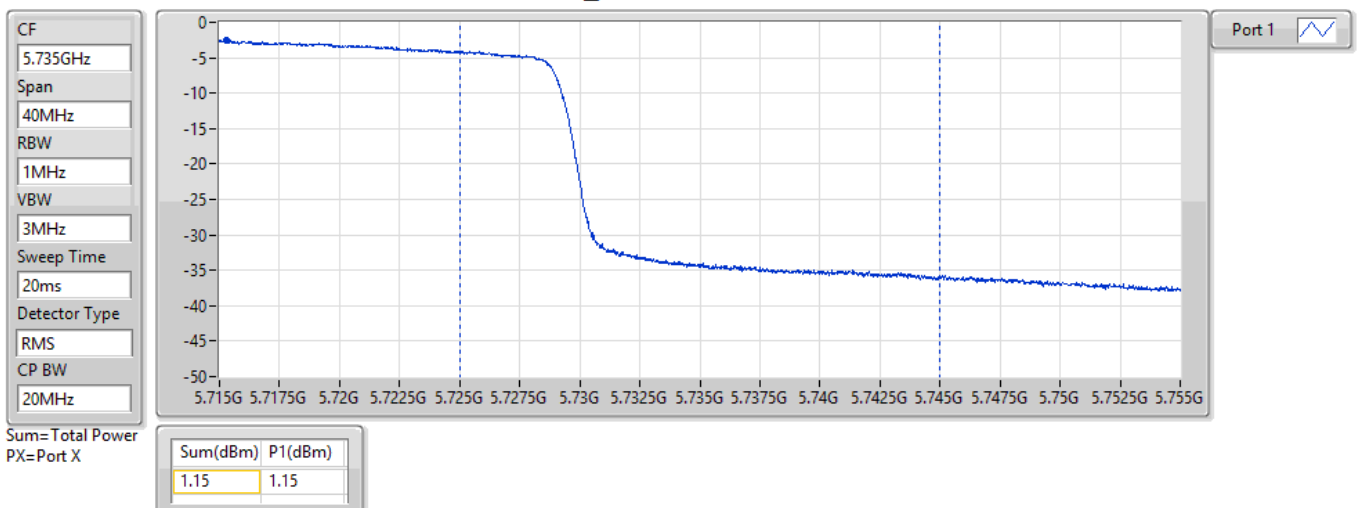


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022



<Non-Beamforming Mode>
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.31	0.10740
802.11ax HEW20_Nss1,(MCS0)_2TX	20.40	0.10965
802.11ax HEW40_Nss1,(MCS0)_2TX	20.44	0.11066
802.11ax HEW80_Nss1,(MCS0)_2TX	18.50	0.07079
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	21.00	0.12589
802.11ax HEW20_Nss1,(MCS0)_2TX	21.08	0.12823
802.11ax HEW40_Nss1,(MCS0)_2TX	21.05	0.12735
802.11ax HEW80_Nss1,(MCS0)_2TX	21.04	0.12706
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.41	0.10990
802.11ax HEW20_Nss1,(MCS0)_2TX	20.72	0.11803
802.11ax HEW40_Nss1,(MCS0)_2TX	20.65	0.11614
802.11ax HEW80_Nss1,(MCS0)_2TX	20.56	0.11376
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.46	0.11117
802.11ax HEW20_Nss1,(MCS0)_2TX	20.44	0.11066
802.11ax HEW40_Nss1,(MCS0)_2TX	20.64	0.11588
802.11ax HEW80_Nss1,(MCS0)_2TX	20.42	0.11015

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.24	17.48	17.05	20.28	30.00
5200MHz	Pass	5.24	17.55	17.01	20.30	30.00
5240MHz	Pass	5.24	17.61	16.97	20.31	30.00
5260MHz	Pass	5.46	17.94	17.14	20.57	23.89
5300MHz	Pass	5.46	18.10	17.88	21.00	23.88
5320MHz	Pass	5.46	17.78	17.86	20.83	23.87
5500MHz	Pass	4.26	17.55	17.19	20.38	23.87
5580MHz	Pass	4.26	17.29	17.12	20.22	23.84
5700MHz	Pass	4.26	17.30	17.50	20.41	23.88
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	16.24	16.21	19.24	22.80
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	10.20	9.76	13.00	30.00
5745MHz	Pass	3.94	17.55	17.34	20.46	30.00
5785MHz	Pass	3.94	17.19	17.14	20.18	30.00
5825MHz	Pass	3.94	17.54	16.71	20.16	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.24	17.53	17.24	20.40	30.00
5200MHz	Pass	5.24	17.59	17.05	20.34	30.00
5240MHz	Pass	5.24	17.56	17.22	20.40	30.00
5260MHz	Pass	5.46	17.77	17.68	20.74	23.98
5300MHz	Pass	5.46	18.21	17.83	21.03	23.98
5320MHz	Pass	5.46	18.13	18.01	21.08	23.98
5500MHz	Pass	4.26	17.81	17.61	20.72	23.98
5580MHz	Pass	4.26	17.08	17.19	20.15	23.98
5700MHz	Pass	4.26	15.39	15.81	18.62	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	16.47	16.14	19.32	22.95
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	9.19	10.44	12.87	30.00
5745MHz	Pass	3.94	17.49	17.36	20.44	30.00
5785MHz	Pass	3.94	17.20	17.34	20.28	30.00
5825MHz	Pass	3.94	17.58	16.81	20.22	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.24	16.73	16.15	19.46	30.00
5230MHz	Pass	5.24	17.70	17.14	20.44	30.00
5270MHz	Pass	5.46	18.23	17.85	21.05	23.98
5310MHz	Pass	5.46	16.16	16.07	19.13	23.98
5510MHz	Pass	4.26	15.81	15.52	18.68	23.98
5550MHz	Pass	4.26	17.48	17.65	20.58	23.98
5670MHz	Pass	4.26	17.55	17.72	20.65	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.26	17.27	16.71	20.01	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.94	4.32	5.33	7.86	30.00
5755MHz	Pass	3.94	17.64	17.61	20.64	30.00
5795MHz	Pass	3.94	17.62	17.42	20.53	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.24	15.71	15.26	18.50	30.00
5290MHz	Pass	5.46	18.18	17.87	21.04	23.98
5530MHz	Pass	4.26	15.97	15.66	18.83	23.98
5610MHz	Pass	4.26	17.69	17.40	20.56	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.26	16.75	17.30	20.04	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.94	3.09	2.05	5.61	30.00
5775MHz	Pass	3.94	17.51	17.30	20.42	30.00

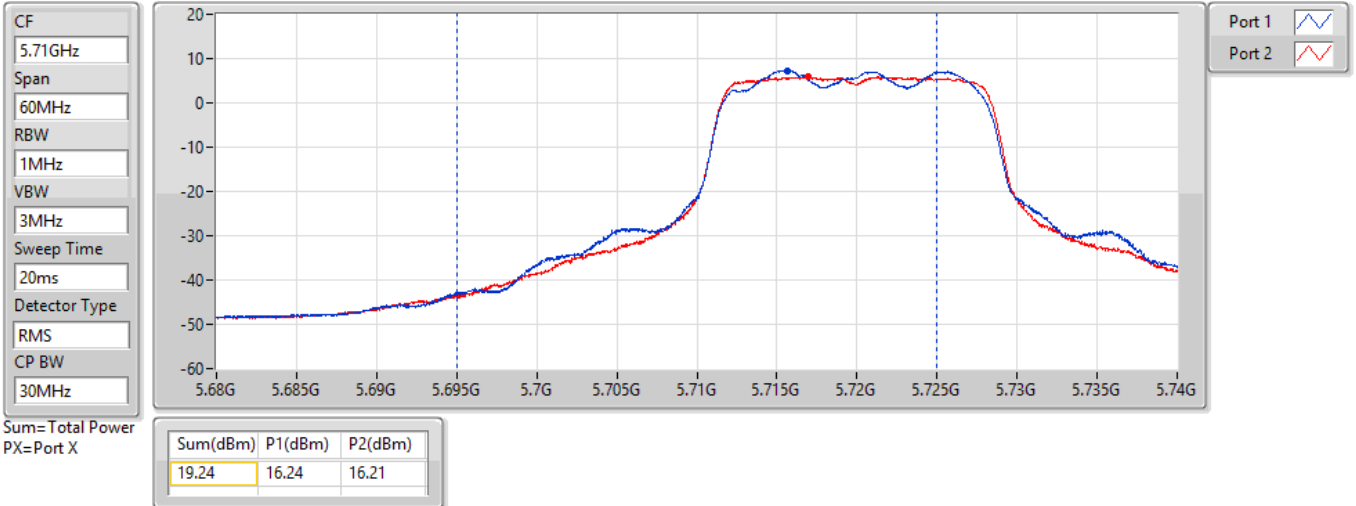
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

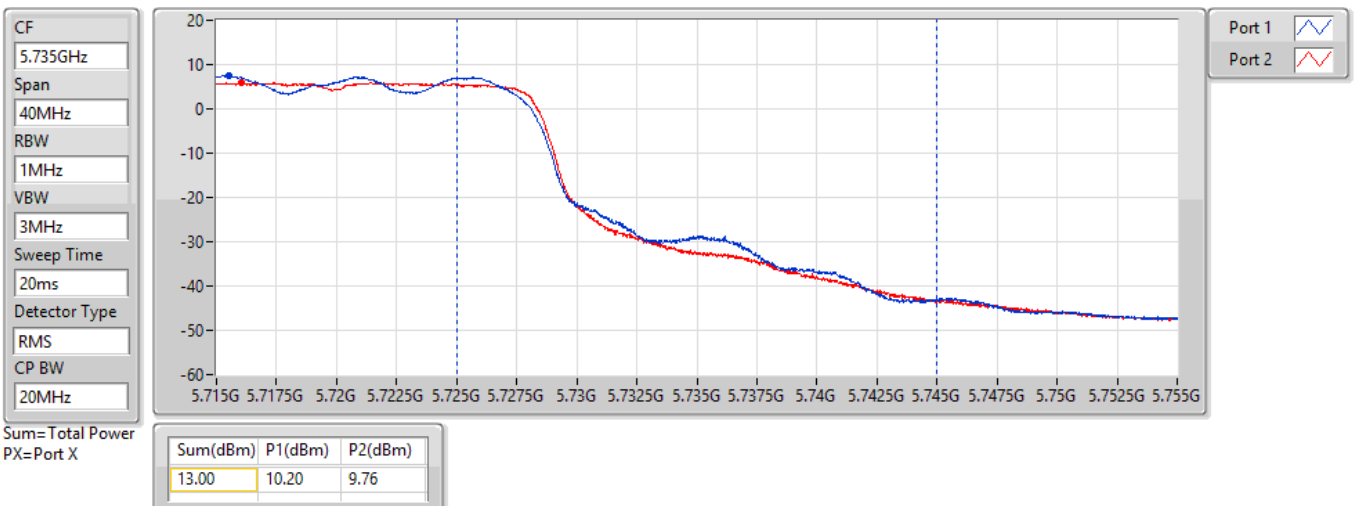


802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022



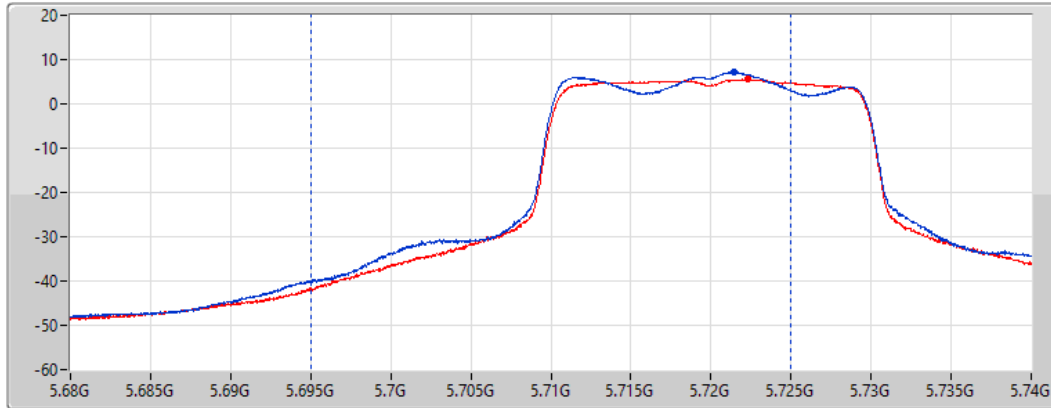
802.11ax HEW20_Nss1,(MCS0)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

10/02/2022

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)
19.32	16.47	16.14

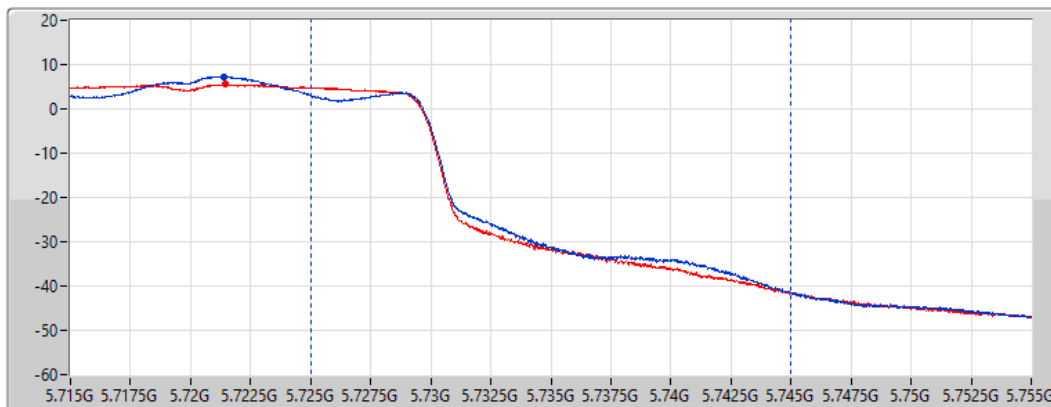
802.11ax HEW20_Nss1,(MCS0)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

10/02/2022

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

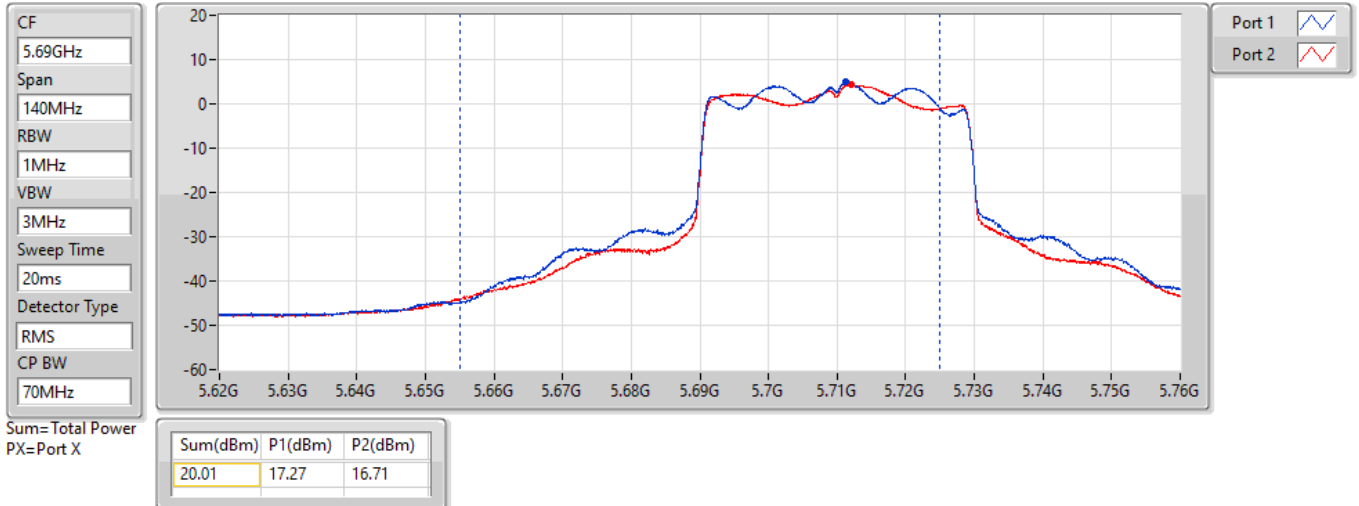
Sum(dBm)	P1(dBm)	P2(dBm)
12.87	9.19	10.44

802.11ax HEW40_Nss1,(MCS0)_2TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

06/05/2022

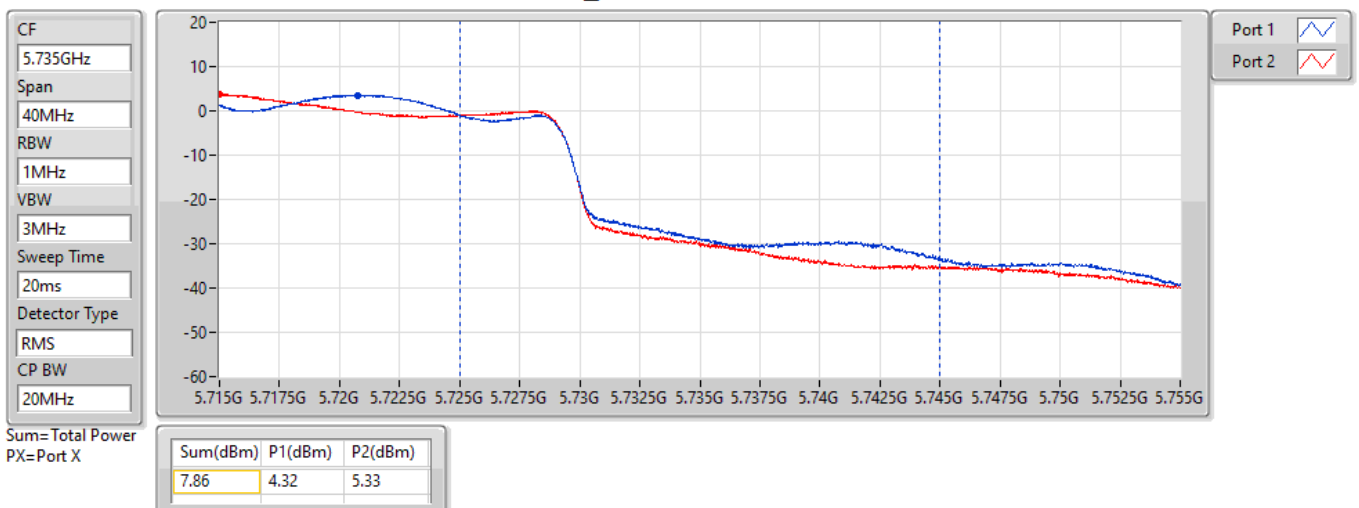


802.11ax HEW40_Nss1,(MCS0)_2TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

06/05/2022

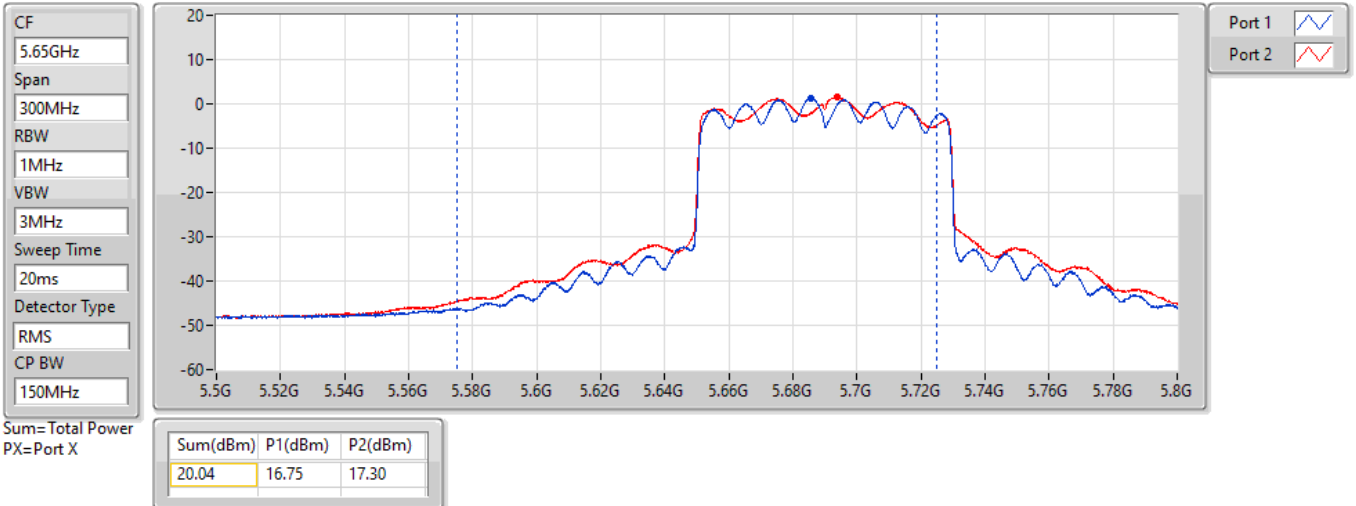


802.11ax HEW80_Nss1,(MCS0)_2TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

06/05/2022

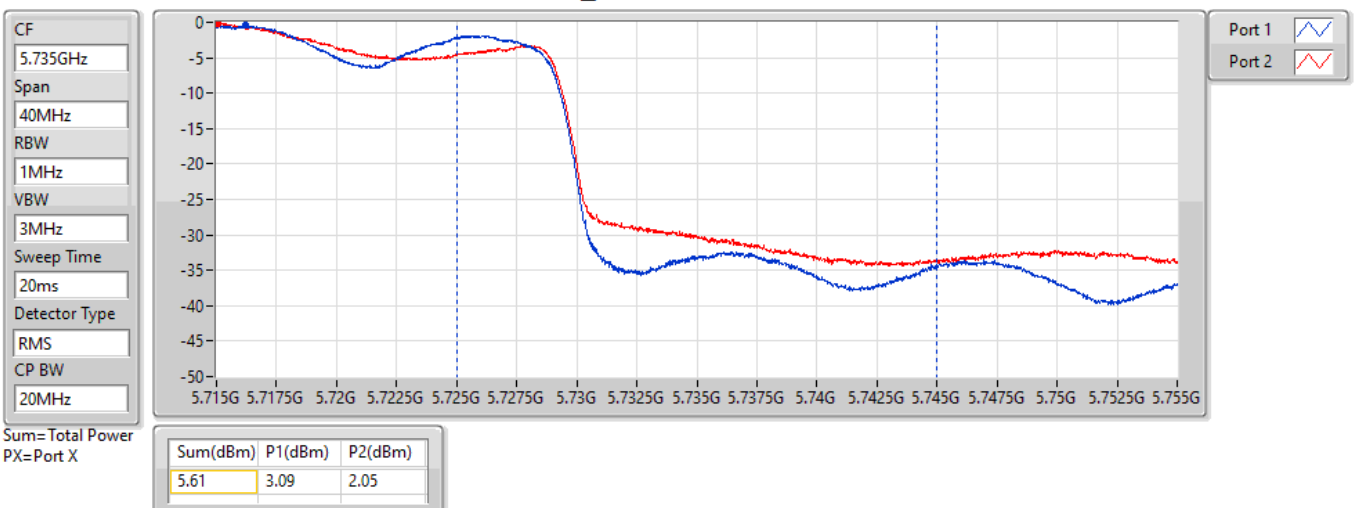


802.11ax HEW80_Nss1,(MCS0)_2TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

06/05/2022



<Beamforming Mode>

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.40	0.10965
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.44	0.11066
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	18.50	0.07079
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	21.08	0.12823
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	21.05	0.12735
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	21.04	0.12706
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.72	0.11803
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.65	0.11614
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	20.56	0.11376
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.44	0.11066
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.64	0.11588
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	20.42	0.11015

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.39	17.53	17.24	20.40	30.00
5200MHz	Pass	5.39	17.59	17.05	20.34	30.00
5240MHz	Pass	5.39	17.56	17.22	20.40	30.00
5260MHz	Pass	5.26	17.77	17.68	20.74	23.98
5300MHz	Pass	5.26	18.21	17.83	21.03	23.98
5320MHz	Pass	5.26	18.13	18.01	21.08	23.98
5500MHz	Pass	4.69	17.81	17.61	20.72	23.98
5580MHz	Pass	4.69	17.08	17.19	20.15	23.98
5700MHz	Pass	4.69	15.39	15.81	18.62	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.69	16.47	16.14	19.32	23.98
5720MHz Straddle 5.725-5.85GHz	Pass	4.16	9.19	10.44	12.87	30.00
5745MHz	Pass	4.16	17.49	17.36	20.44	30.00
5785MHz	Pass	4.16	17.20	17.34	20.28	30.00
5825MHz	Pass	4.16	17.58	16.81	20.22	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.39	16.73	16.15	19.46	30.00
5230MHz	Pass	5.39	17.70	17.14	20.44	30.00
5270MHz	Pass	5.26	18.23	17.85	21.05	23.98
5310MHz	Pass	5.26	16.16	16.07	19.13	23.98
5510MHz	Pass	4.69	15.81	15.52	18.68	23.98
5550MHz	Pass	4.69	17.48	17.65	20.58	23.98
5670MHz	Pass	4.69	17.55	17.72	20.65	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.69	16.68	17.24	19.98	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	4.16	6.93	6.39	9.68	30.00
5755MHz	Pass	4.16	17.64	17.61	20.64	30.00
5795MHz	Pass	4.16	17.62	17.42	20.53	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.39	15.71	15.26	18.50	30.00
5290MHz	Pass	5.26	18.18	17.87	21.04	23.98
5530MHz	Pass	4.69	15.97	15.66	18.83	23.98
5610MHz	Pass	4.69	17.69	17.40	20.56	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.69	16.99	17.27	20.14	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	4.16	2.96	2.36	5.68	30.00
5775MHz	Pass	4.16	17.51	17.30	20.42	30.00

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



<Non-Beamforming Mode>

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.69	0.23388
802.11ax HEW20_Nss1,(MCS0)_4TX	23.86	0.24322
802.11ax HEW40_Nss1,(MCS0)_4TX	23.98	0.25003
802.11ax HEW80_Nss1,(MCS0)_4TX	19.78	0.09506
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	21.98	0.15776
802.11ax HEW20_Nss1,(MCS0)_4TX	23.35	0.21627
802.11ax HEW40_Nss1,(MCS0)_4TX	23.31	0.21429
802.11ax HEW80_Nss1,(MCS0)_4TX	20.41	0.10990
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	21.68	0.14723
802.11ax HEW20_Nss1,(MCS0)_4TX	22.48	0.17701
802.11ax HEW40_Nss1,(MCS0)_4TX	23.79	0.23933
802.11ax HEW80_Nss1,(MCS0)_4TX	23.84	0.24210
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.50	0.22387
802.11ax HEW20_Nss1,(MCS0)_4TX	23.57	0.22751
802.11ax HEW40_Nss1,(MCS0)_4TX	23.87	0.24378
802.11ax HEW80_Nss1,(MCS0)_4TX	23.67	0.23281

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	-	-	-	-	-	-	-	-
5180MHz	Pass	5.24	17.55	17.58	17.32	16.92	23.37	30.00
5200MHz	Pass	5.24	17.49	17.13	17.43	16.96	23.28	30.00
5240MHz	Pass	5.24	17.86	17.38	17.62	17.80	23.69	30.00
5260MHz	Pass	5.46	16.07	15.83	16.01	15.93	21.98	23.81
5300MHz	Pass	5.46	14.83	15.26	15.02	15.05	21.06	23.81
5320MHz	Pass	5.46	15.80	15.96	15.88	15.71	21.86	23.81
5500MHz	Pass	4.26	15.61	15.44	16.05	15.51	21.68	23.81
5580MHz	Pass	4.26	15.37	15.40	15.07	15.52	21.36	23.76
5700MHz	Pass	4.26	15.51	15.90	15.67	15.26	21.61	23.74
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	14.69	15.18	14.25	14.48	20.68	22.48
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	7.91	6.16	8.11	7.62	13.53	30.00
5745MHz	Pass	3.94	17.76	17.55	17.56	17.03	23.50	30.00
5785MHz	Pass	3.94	17.07	17.21	17.72	16.86	23.25	30.00
5825MHz	Pass	3.94	17.46	17.39	17.71	16.72	23.36	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.24	17.67	17.43	17.37	16.91	23.37	30.00
5200MHz	Pass	5.24	17.56	17.32	17.44	17.27	23.42	30.00
5240MHz	Pass	5.24	17.97	17.53	17.82	18.01	23.86	30.00
5260MHz	Pass	5.46	17.22	16.86	16.97	17.11	23.06	23.98
5300MHz	Pass	5.46	17.49	17.40	17.39	17.02	23.35	23.98
5320MHz	Pass	5.46	15.97	16.09	16.15	16.02	22.08	23.98
5500MHz	Pass	4.26	15.85	15.72	16.46	15.78	21.98	23.98
5580MHz	Pass	4.26	16.31	16.25	16.66	16.59	22.48	23.98
5700MHz	Pass	4.26	14.25	14.66	14.32	14.38	20.43	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.26	16.19	15.93	15.58	15.06	21.73	22.87
5720MHz Straddle 5.725-5.85GHz	Pass	3.94	8.94	9.86	9.77	10.26	15.75	30.00
5745MHz	Pass	3.94	17.81	17.55	17.71	17.10	23.57	30.00
5785MHz	Pass	3.94	17.45	17.30	17.53	17.40	23.44	30.00
5825MHz	Pass	3.94	17.27	17.27	17.12	17.07	23.20	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.24	14.68	14.42	14.56	14.31	20.52	30.00
5230MHz	Pass	5.24	18.14	17.65	17.74	18.27	23.98	30.00
5270MHz	Pass	5.46	17.27	17.28	17.35	17.24	23.31	23.98
5310MHz	Pass	5.46	14.97	15.08	15.30	15.41	21.21	23.98
5510MHz	Pass	4.26	15.01	14.98	15.72	15.25	21.27	23.98
5550MHz	Pass	4.26	16.76	16.96	17.50	17.31	23.16	23.98
5670MHz	Pass	4.26	17.54	17.99	17.81	17.71	23.79	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.26	17.07	17.88	17.20	17.04	23.33	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.94	7.48	6.72	6.12	5.21	12.48	30.00
5755MHz	Pass	3.94	17.32	17.89	17.99	17.07	23.61	30.00
5795MHz	Pass	3.94	17.63	18.00	18.03	17.74	23.87	30.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	5.24	13.51	13.72	13.92	13.86	19.78	30.00
5290MHz	Pass	5.46	14.28	14.51	14.43	14.34	20.41	23.98
5530MHz	Pass	4.26	14.94	14.87	15.57	15.13	21.16	23.98
5610MHz	Pass	4.26	17.89	17.58	17.87	17.70	23.78	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.26	17.69	18.20	17.77	17.59	23.84	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.94	3.86	2.85	2.74	1.50	8.84	30.00
5775MHz	Pass	3.94	17.55	17.90	17.86	17.24	23.67	30.00

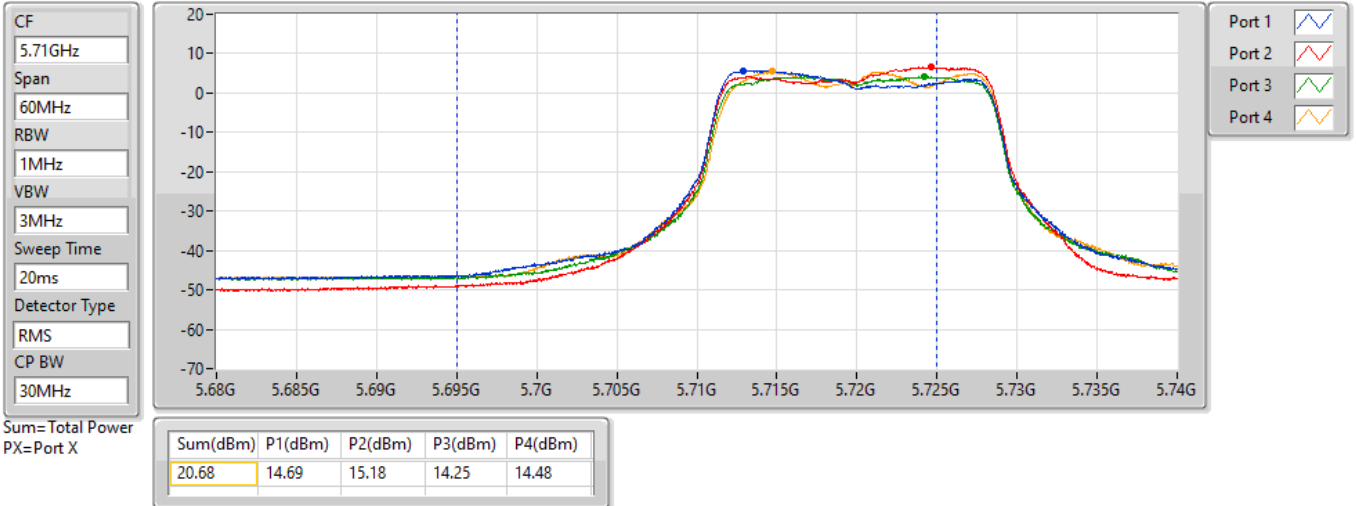
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

20/03/2022

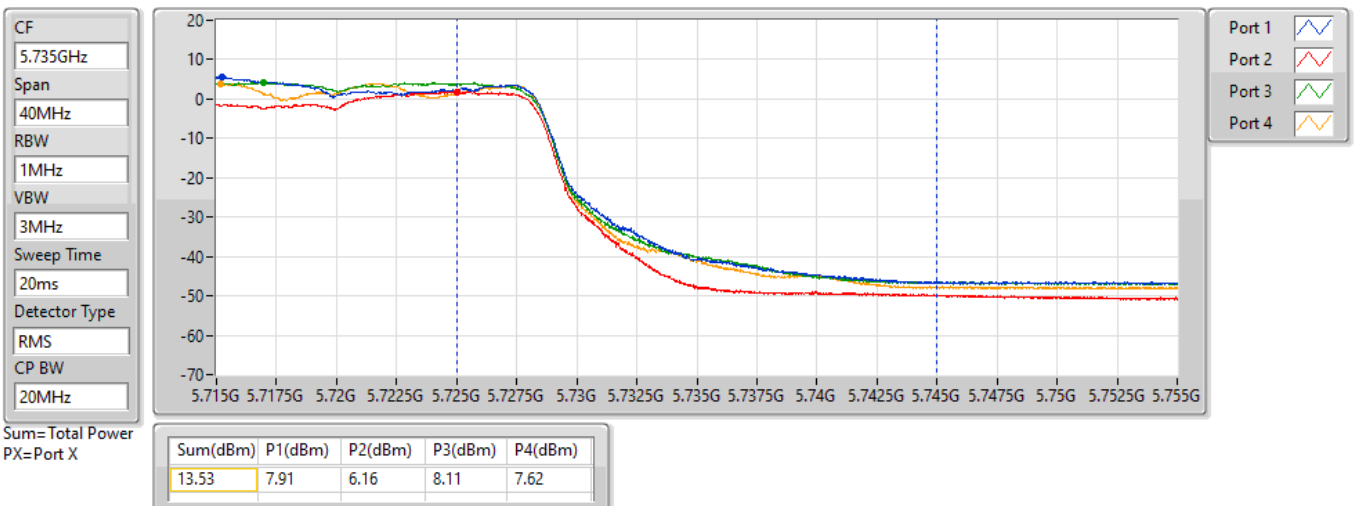


802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

20/03/2022

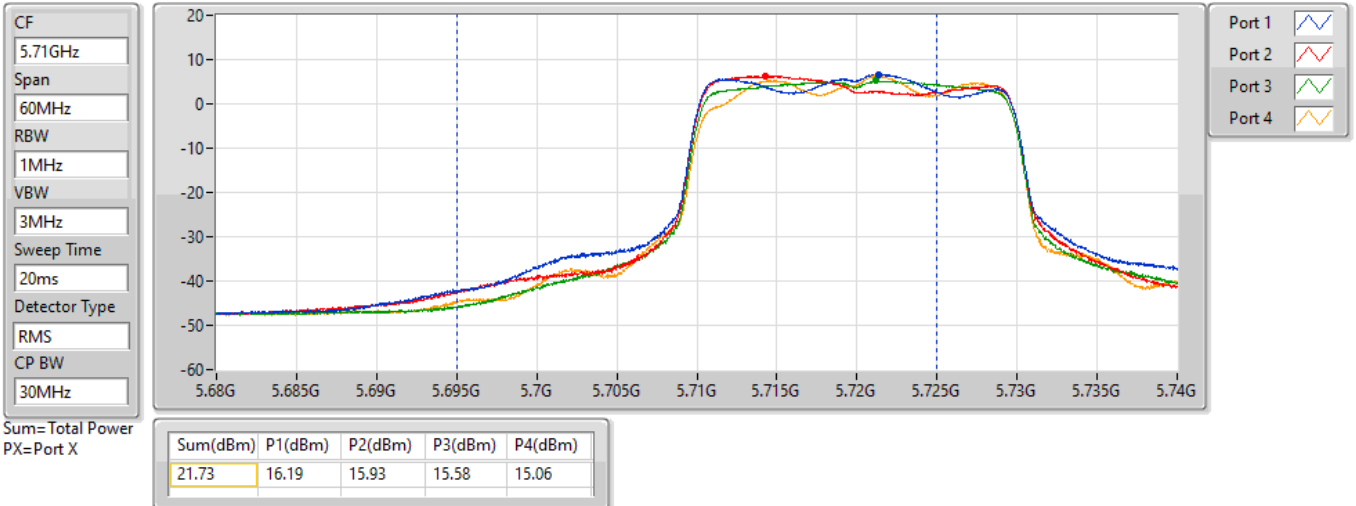


802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

22/01/2022

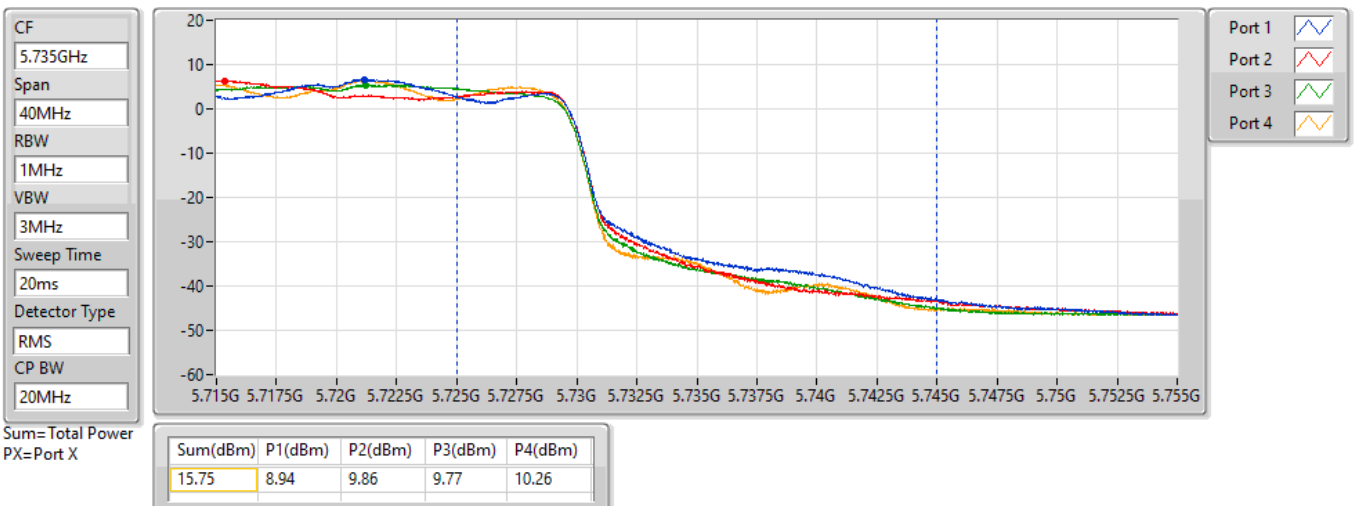


802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

22/01/2022

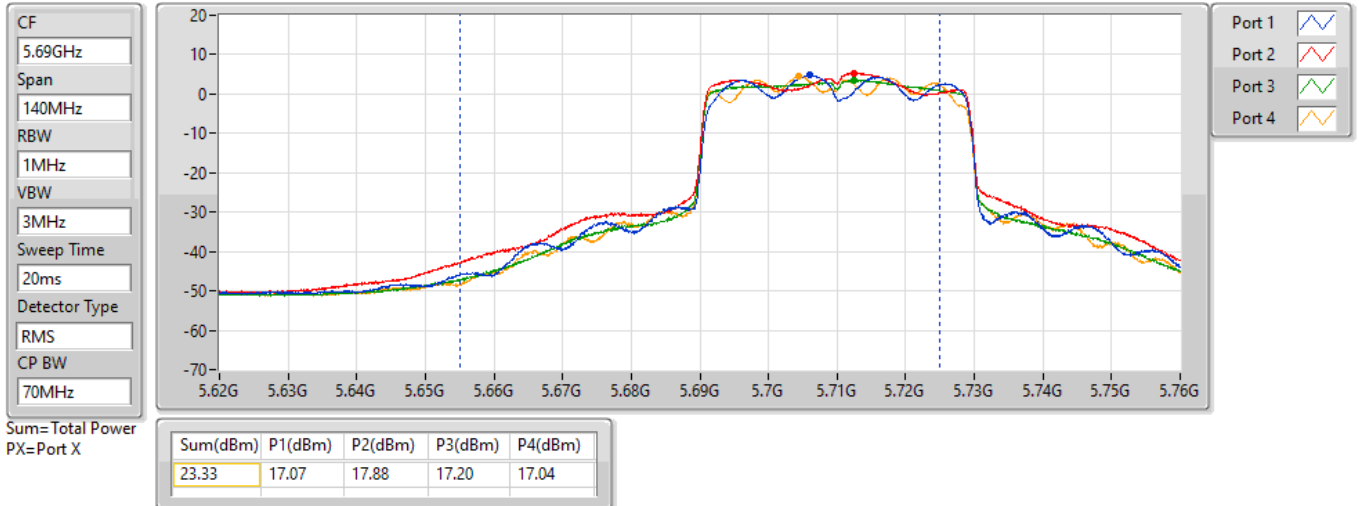


802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

05/05/2022

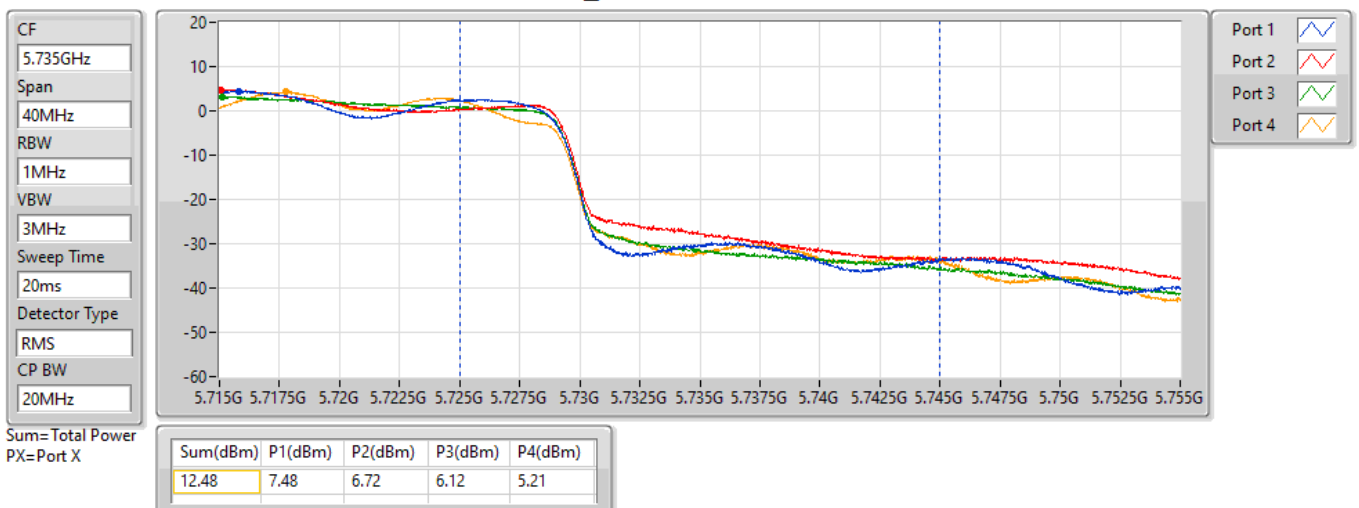


802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

05/05/2022

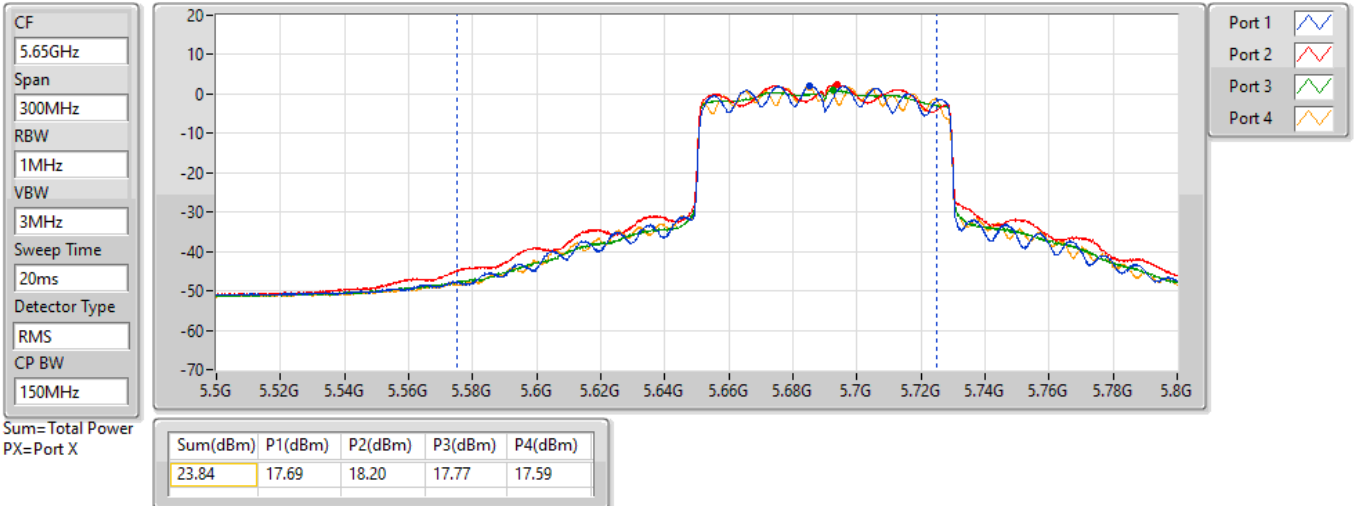


802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

05/05/2022

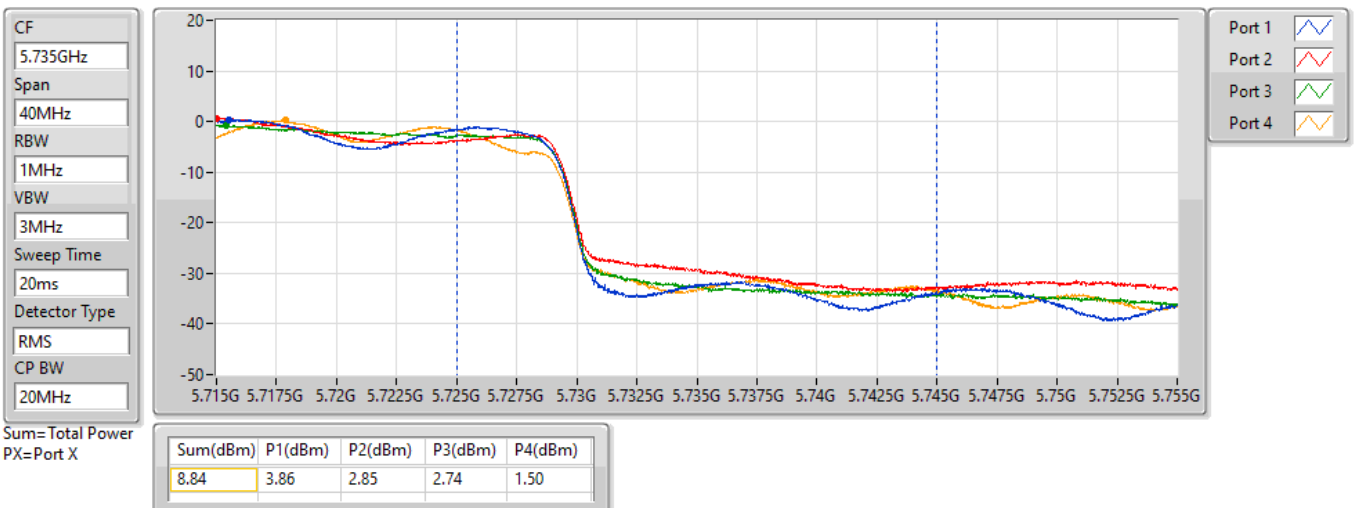


802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

05/05/2022



<Beamforming Mode>
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.86	0.24322
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.98	0.25003
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	19.78	0.09506
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.35	0.17179
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.31	0.17022
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	20.41	0.10990
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.48	0.17701
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.33	0.21528
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.75	0.18836
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.57	0.22751
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.87	0.24378
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.67	0.23281

**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	-	-	-	-	-	-	-	-
5180MHz	Pass	6.99	17.67	17.43	17.37	16.91	23.37	29.01
5200MHz	Pass	6.99	17.56	17.32	17.44	17.27	23.42	29.01
5240MHz	Pass	6.99	17.97	17.53	17.82	18.01	23.86	29.01
5260MHz	Pass	7.25	16.29	16.01	15.96	16.13	22.12	22.73
5300MHz	Pass	7.25	16.46	16.33	16.41	16.12	22.35	22.73
5320MHz	Pass	7.25	15.97	16.09	16.15	16.02	22.08	22.73
5500MHz	Pass	6.62	15.85	15.72	16.46	15.78	21.98	23.36
5580MHz	Pass	6.62	16.31	16.25	16.66	16.59	22.48	23.36
5700MHz	Pass	6.62	14.25	14.66	14.32	14.38	20.43	23.36
5720MHz Straddle 5.47-5.725GHz	Pass	6.62	16.19	15.93	15.58	15.06	21.73	23.36
5720MHz Straddle 5.725-5.85GHz	Pass	5.97	8.94	9.86	9.77	10.26	15.75	30.00
5745MHz	Pass	5.97	17.81	17.55	17.71	17.10	23.57	30.00
5785MHz	Pass	5.97	17.45	17.30	17.53	17.40	23.44	30.00
5825MHz	Pass	5.97	17.27	17.27	17.12	17.07	23.20	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.99	14.68	14.42	14.56	14.31	20.52	29.01
5230MHz	Pass	6.99	18.14	17.65	17.74	18.27	23.98	29.01
5270MHz	Pass	7.25	16.27	16.34	16.31	16.24	22.31	22.73
5310MHz	Pass	7.25	14.97	15.08	15.30	15.41	21.21	22.73
5510MHz	Pass	6.62	15.01	14.98	15.72	15.25	21.27	23.36
5550MHz	Pass	6.62	16.76	16.96	17.50	17.31	23.16	23.36
5670MHz	Pass	6.62	16.53	16.93	16.81	16.76	22.78	23.36
5710MHz Straddle 5.47-5.725GHz	Pass	6.62	17.07	17.88	17.20	17.04	23.33	23.36
5710MHz Straddle 5.725-5.85GHz	Pass	5.97	7.48	6.72	6.12	5.21	12.48	30.00
5755MHz	Pass	5.97	17.32	17.89	17.99	17.07	23.61	30.00
5795MHz	Pass	5.97	17.63	18.00	18.03	17.74	23.87	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.99	13.51	13.72	13.92	13.86	19.78	29.01
5290MHz	Pass	7.25	14.28	14.51	14.43	14.34	20.41	22.73
5530MHz	Pass	6.62	14.94	14.87	15.57	15.13	21.16	23.36
5610MHz	Pass	6.62	16.96	16.37	16.83	16.74	22.75	23.36
5690MHz Straddle 5.47-5.725GHz	Pass	6.62	16.22	16.95	16.76	16.49	22.63	23.36
5690MHz Straddle 5.725-5.85GHz	Pass	5.97	2.22	1.63	2.03	0.71	7.71	30.00
5775MHz	Pass	5.97	17.55	17.90	17.86	17.24	23.67	30.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	19.54	0.08995
802.11ax HEW20_Nss1,(MCS0)_1TX	19.70	0.09333
802.11ax HEW40_Nss1,(MCS0)_1TX	19.56	0.09036
802.11ax HEW80_Nss1,(MCS0)_1TX	16.72	0.04699
802.11ax HEW160_Nss1,(MCS0)_1TX	14.81	0.03027
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	19.68	0.09290
802.11ax HEW20_Nss1,(MCS0)_1TX	19.85	0.09661
802.11ax HEW40_Nss1,(MCS0)_1TX	19.83	0.09616
802.11ax HEW80_Nss1,(MCS0)_1TX	16.88	0.04875
802.11ax HEW160_Nss1,(MCS0)_1TX	14.67	0.02931
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	19.76	0.09462
802.11ax HEW20_Nss1,(MCS0)_1TX	19.89	0.09750
802.11ax HEW40_Nss1,(MCS0)_1TX	19.88	0.09727
802.11ax HEW80_Nss1,(MCS0)_1TX	19.89	0.09750
802.11ax HEW160_Nss1,(MCS0)_1TX	17.68	0.05861
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	19.95	0.09886
802.11ax HEW20_Nss1,(MCS0)_1TX	19.98	0.09954
802.11ax HEW40_Nss1,(MCS0)_1TX	19.91	0.09795
802.11ax HEW80_Nss1,(MCS0)_1TX	19.77	0.09484

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-
5180MHz	Pass	4.00	18.35	18.35	30.00
5200MHz	Pass	4.00	19.47	19.47	30.00
5240MHz	Pass	4.00	19.54	19.54	30.00
5260MHz	Pass	4.00	19.51	19.51	23.98
5300MHz	Pass	4.00	19.68	19.68	23.98
5320MHz	Pass	4.00	18.26	18.26	23.98
5500MHz	Pass	4.00	18.37	18.37	23.98
5580MHz	Pass	4.00	19.76	19.76	23.98
5700MHz	Pass	4.00	18.53	18.53	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.00	19.61	19.61	22.88
5720MHz Straddle 5.725-5.85GHz	Pass	4.00	14.43	14.43	30.00
5745MHz	Pass	4.00	19.84	19.84	30.00
5785MHz	Pass	4.00	19.71	19.71	30.00
5825MHz	Pass	4.00	19.95	19.95	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
5180MHz	Pass	4.00	17.92	17.92	30.00
5200MHz	Pass	4.00	19.70	19.70	30.00
5240MHz	Pass	4.00	19.61	19.61	30.00
5260MHz	Pass	4.00	19.56	19.56	23.98
5300MHz	Pass	4.00	19.85	19.85	23.98
5320MHz	Pass	4.00	18.42	18.42	23.98
5500MHz	Pass	4.00	18.07	18.07	23.98
5580MHz	Pass	4.00	19.89	19.89	23.98
5700MHz	Pass	4.00	17.72	17.72	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.00	19.83	19.83	23.72
5720MHz Straddle 5.725-5.85GHz	Pass	4.00	15.80	15.80	30.00
5745MHz	Pass	4.00	19.98	19.98	30.00
5785MHz	Pass	4.00	19.84	19.84	30.00
5825MHz	Pass	4.00	19.21	19.21	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-
5190MHz	Pass	4.00	17.31	17.31	30.00
5230MHz	Pass	4.00	19.56	19.56	30.00
5270MHz	Pass	4.00	19.83	19.83	23.98
5310MHz	Pass	4.00	17.54	17.54	23.98
5510MHz	Pass	4.00	16.98	16.98	23.98
5550MHz	Pass	4.00	19.79	19.79	23.98
5670MHz	Pass	4.00	18.39	18.39	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.00	19.88	19.88	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	4.00	9.70	9.70	30.00
5755MHz	Pass	4.00	19.86	19.86	30.00
5795MHz	Pass	4.00	19.91	19.91	30.00
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-
5210MHz	Pass	4.00	16.72	16.72	30.00
5290MHz	Pass	4.00	16.88	16.88	23.98
5530MHz	Pass	4.00	16.94	16.94	23.98
5610MHz	Pass	4.00	19.71	19.71	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.00	19.89	19.89	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	4.00	5.94	5.94	30.00
5775MHz	Pass	4.00	19.77	19.77	30.00
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.00	14.81	14.81	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.00	14.67	14.67	23.98
5570MHz	Pass	4.00	17.68	17.68	23.98

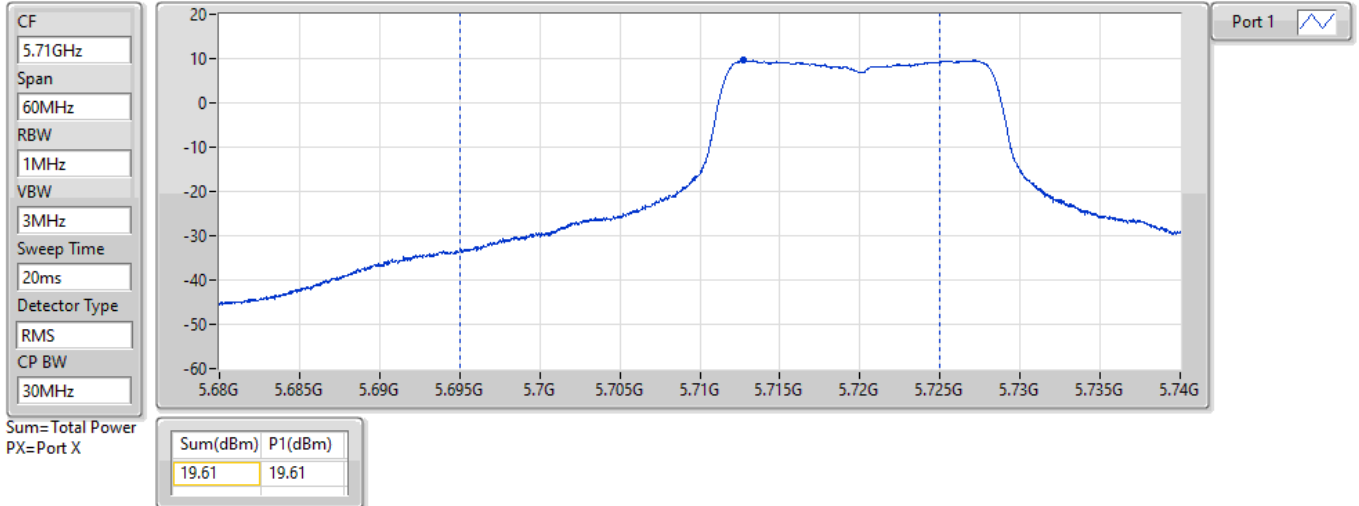
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

01/03/2022

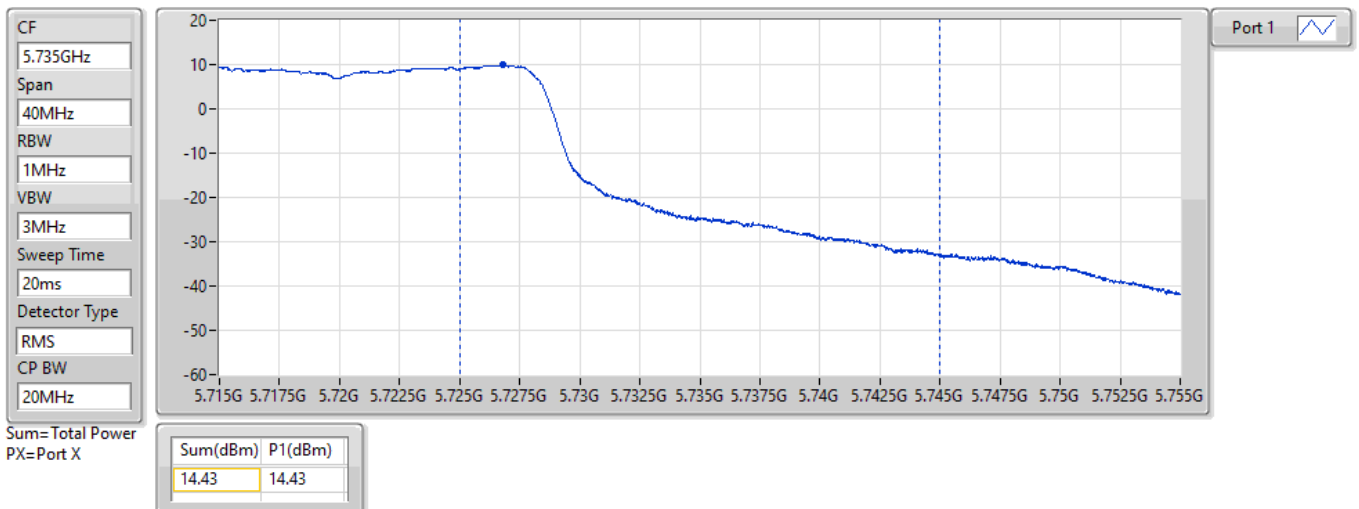


802.11a_Nss1,(6Mbps)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

01/03/2022

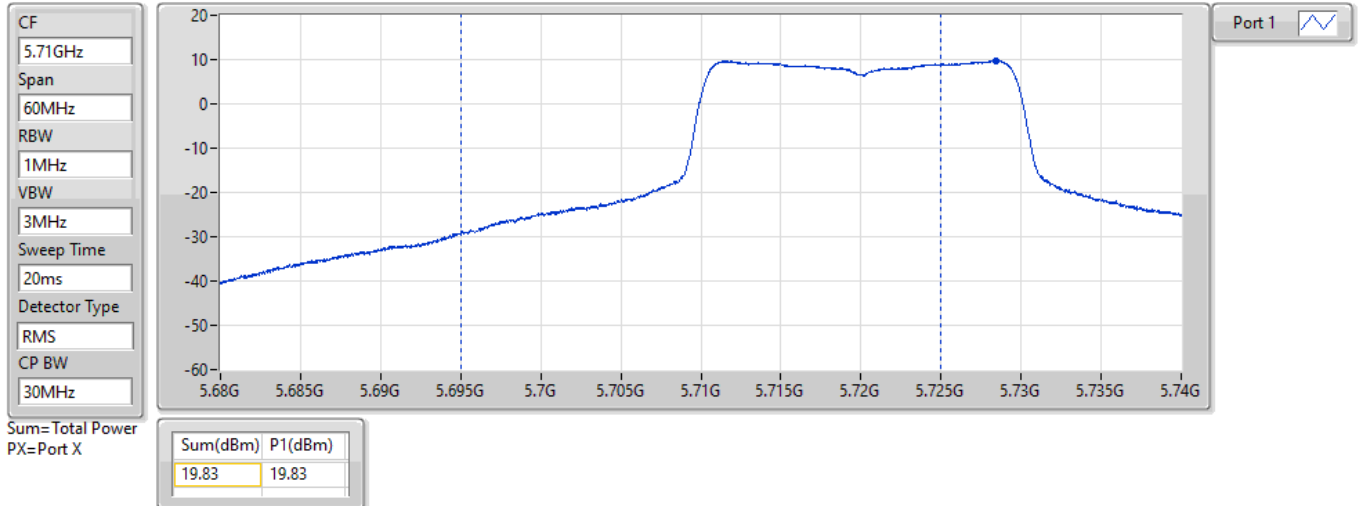


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

01/03/2022

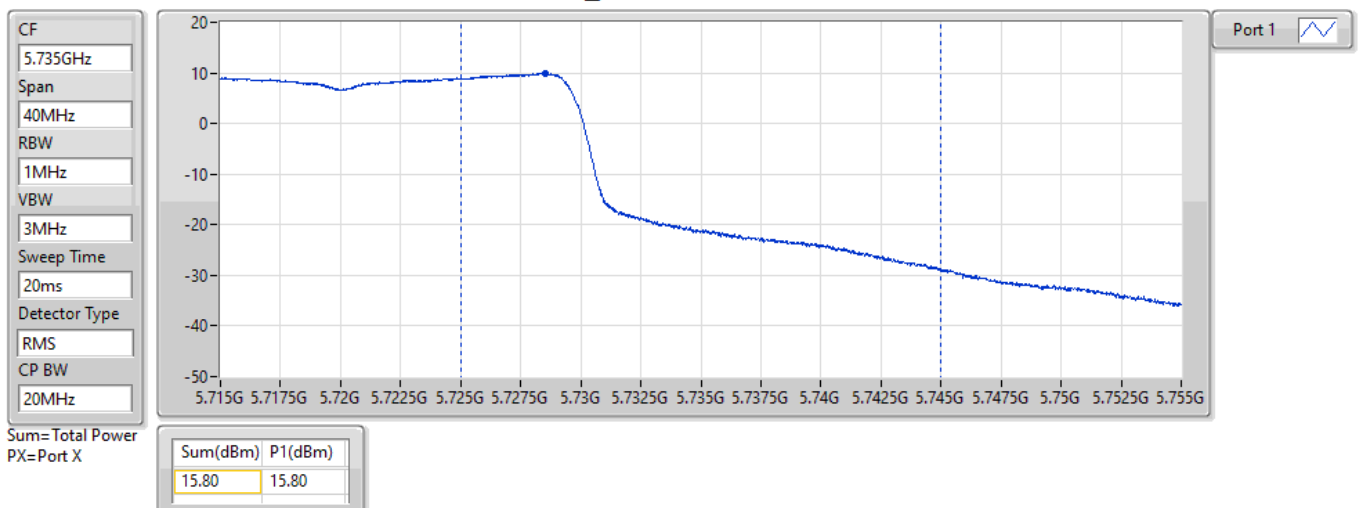


802.11ax HEW20_Nss1,(MCS0)_1TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

01/03/2022

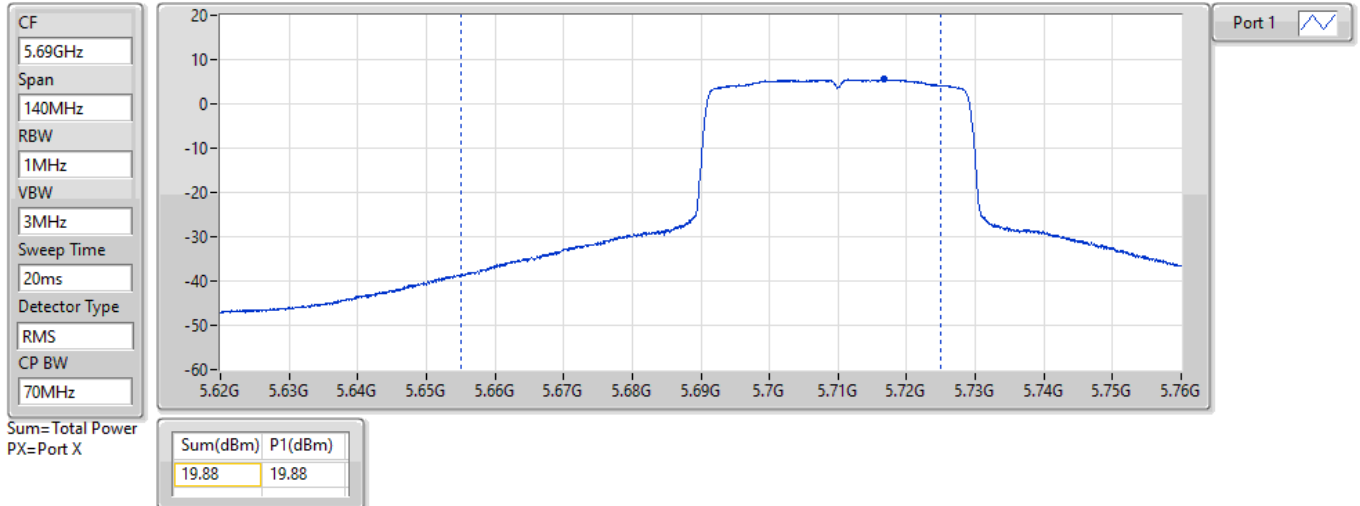


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

01/03/2022

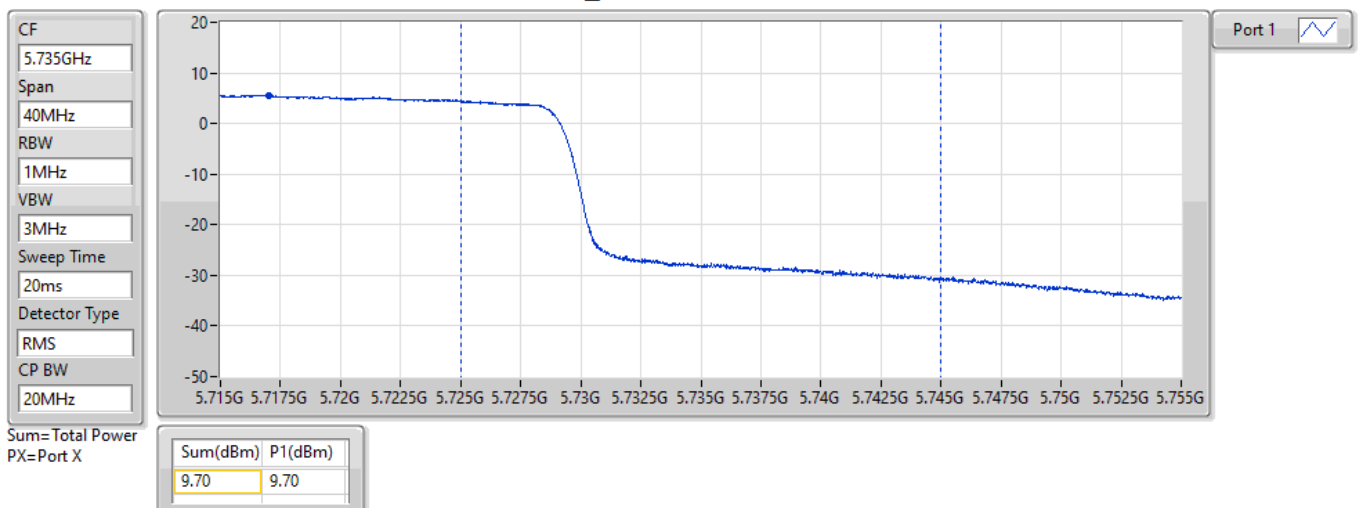


802.11ax HEW40_Nss1,(MCS0)_1TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

01/03/2022

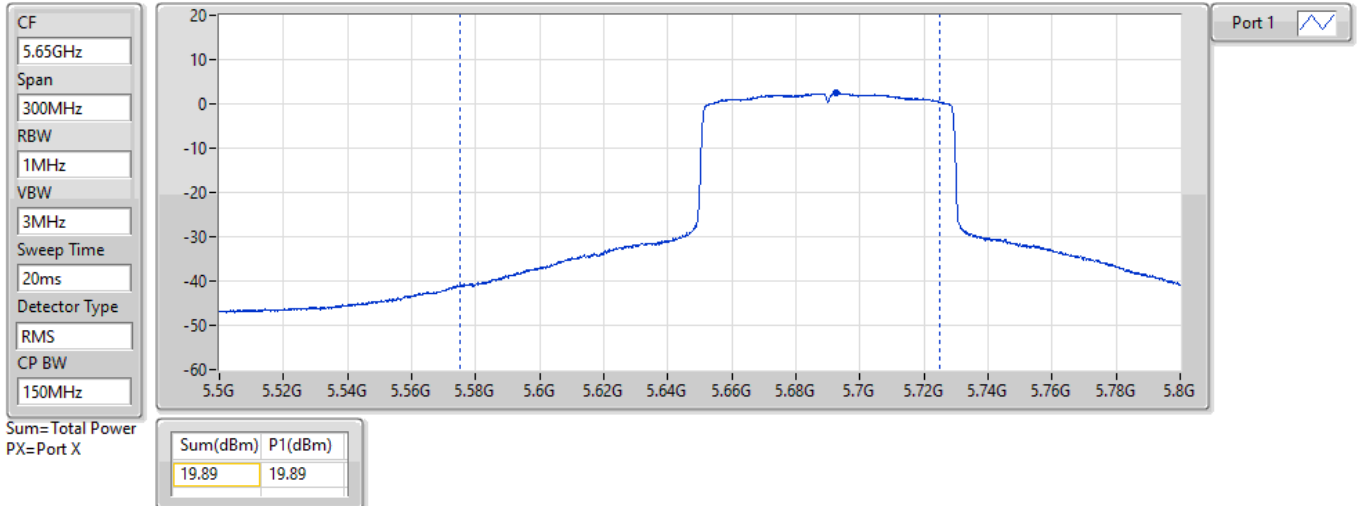


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

01/03/2022

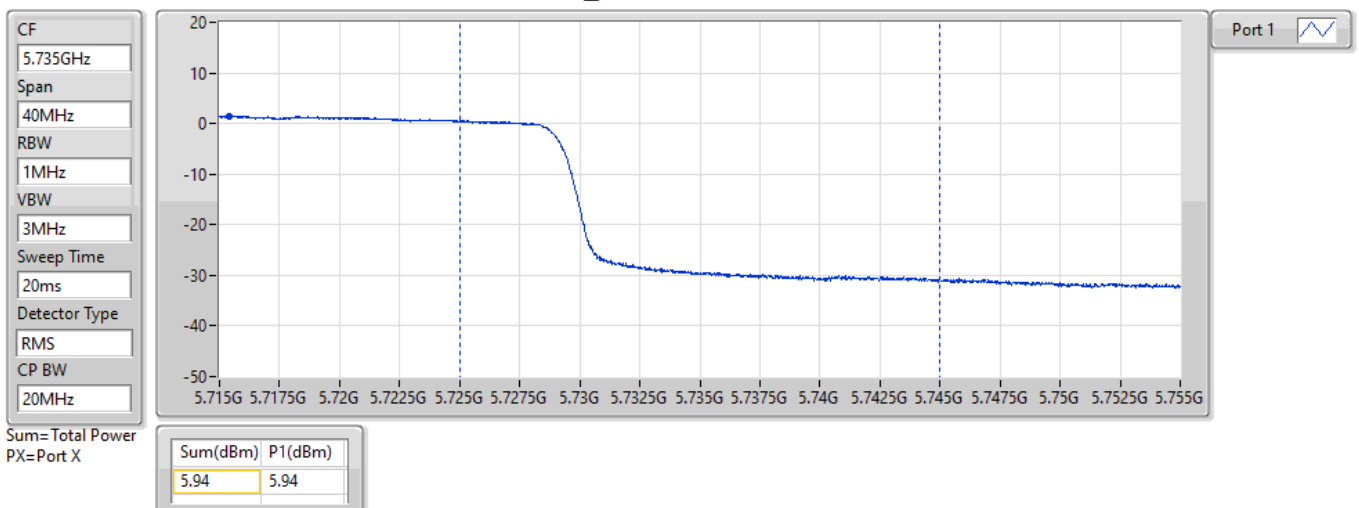


802.11ax HEW80_Nss1,(MCS0)_1TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

01/03/2022

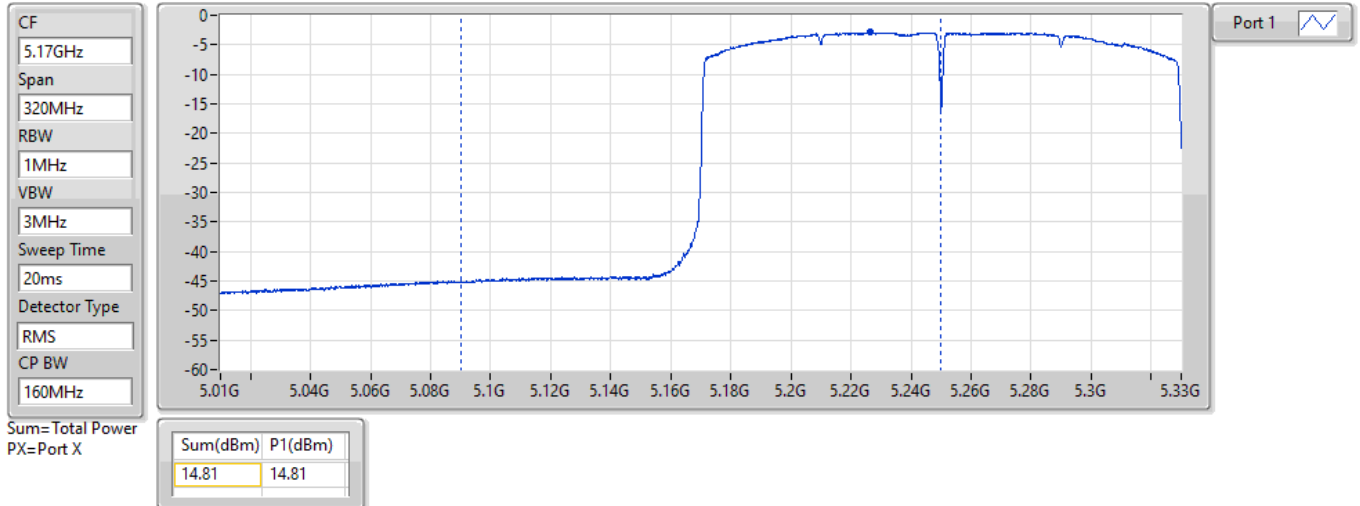


802.11ax HEW160_Nss1,(MCS0)_1TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

01/03/2022

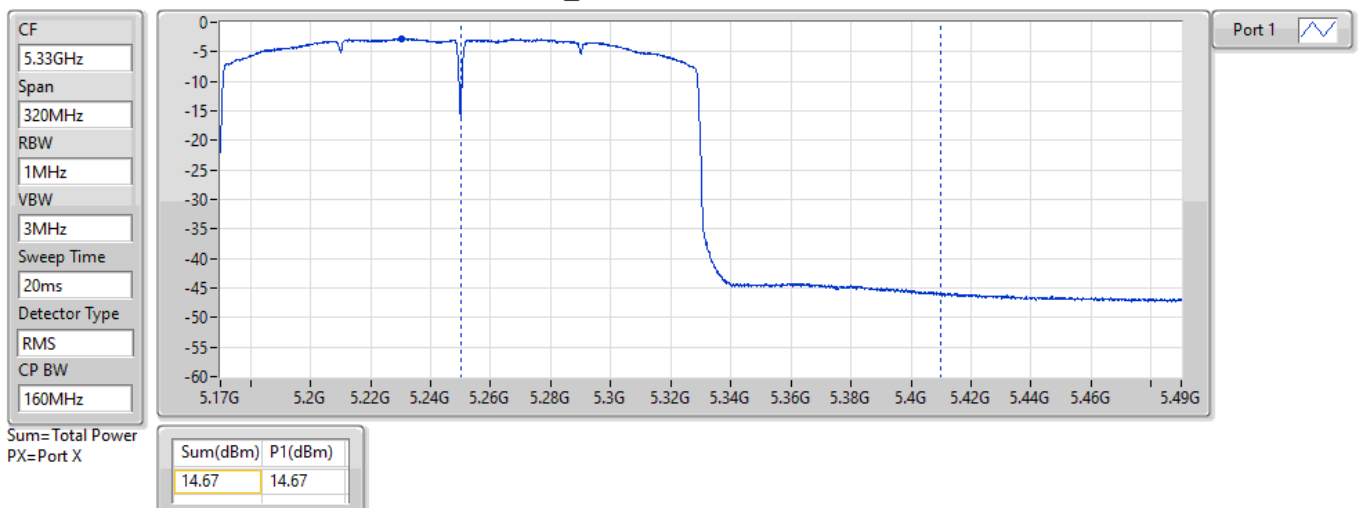


802.11ax HEW160_Nss1,(MCS0)_1TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

01/03/2022





<Non-Beamforming Mode>

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_1TX	14.92	0.03105
5.25-5.35GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_1TX	15.25	0.03350
5.47-5.725GHz	-	-
802.11ax HEW80+80_Nss2,(MCS0)_2TX	18.54	0.07145

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 HEW80+80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	5.24	14.92				14.92	30.00
802.11ax HEW80+80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	5.46	-	-	-	15.25	15.25	23.98
802.11ax HEW80+80_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	4.26	15.66			15.4	18.54	23.98

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



<Non-Beamforming Mode>

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_2TX	12.66	0.01845
5.25-5.35GHz	-	-
802.11ax HEW80+80_Nss1,(MCS0)_2TX	13.21	0.02094
5.47-5.725GHz	-	-
802.11ax HEW80+80_Nss2,(MCS0)_4TX	19.35	0.08610

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 HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	5.24	9.68	9.62			12.66	30.00
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	5.46	-	-	10.25	10.15	13.21	23.98
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	4.26	13.97	12.25	13.39	13.52	19.35	23.98

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



<Beamforming Mode>

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	12.66	0.01845
5.25-5.35GHz	-	-
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	13.21	0.02094
5.47-5.725GHz	-	-
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	19.35	0.08610

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 HEW80+80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	5.39	9.68	9.62			12.66	30.00
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz,#5290MHz	Pass	5.26			10.25	10.15	13.21	23.98
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	4.26	13.97	12.25	13.39	13.52	19.35	23.98

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	2.67	7.91
802.11ax HEW20_Nss1,(MCS0)_1TX	2.18	7.42
802.11ax HEW40_Nss1,(MCS0)_1TX	-0.49	4.75
802.11ax HEW80_Nss1,(MCS0)_1TX	-3.36	1.88
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	3.06	8.52
802.11ax HEW20_Nss1,(MCS0)_1TX	2.63	8.09
802.11ax HEW40_Nss1,(MCS0)_1TX	-0.97	4.49
802.11ax HEW80_Nss1,(MCS0)_1TX	-3.87	1.59
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	4.21	8.47
802.11ax HEW20_Nss1,(MCS0)_1TX	3.69	7.95
802.11ax HEW40_Nss1,(MCS0)_1TX	0.42	4.68
802.11ax HEW80_Nss1,(MCS0)_1TX	-2.56	1.70
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	2.49	6.43
802.11ax HEW20_Nss1,(MCS0)_1TX	1.94	5.88
802.11ax HEW40_Nss1,(MCS0)_1TX	-2.02	1.92
802.11ax HEW80_Nss1,(MCS0)_1TX	-5.24	-1.30

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;