



RADIO TEST REPORT

FCC ID : LDKIW9167EH
Equipment : Cisco Catalyst IW9167E Heavy Duty Access Point
Brand Name : CISCO
Model Name : IW9167EH-B
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 Aug. 11, 2022, and testing was started from Aug. 17, 2022 and completed on Dec. 15, 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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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	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	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen

Report Producer: Viola Huang



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

For Iron Radio 1~Pine Radio 2

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
5.15-5.25GHz	802.11ax HEW80	80	1, 2, 4
5.15-5.25GHz	802.11ax HEW80-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



Band	Mode	BWch (MHz)	Nant
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

For Scanning 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
5.15-5.25GHz	802.11ax HEW80	80	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 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Set.	CISCO's Brand Name	CISCO's Model Name	Antenna Type	Connector	Gain (dBi)
	Manufacturer's Brand Name	Manufacturer's Model Name			
1	CISCO	AIR-ANT2480V-N=	Dipole	N Male	Note 1
	CUSHCRAFT	S2406BFCNM			
2	CISCO	AIR-ANT2413P2M-N=	Panel	N Male	
	PCTEL	07-1193-01			
3	CISCO	IW-ANT-OMM-53-N=	Monopole	N Female	
	MP Antenna	08-ANT-0985			
4	CISCO	AIR-ANT5180V-N=	Dipole	N Male	
	Laird TECHNOLOGES	S4905WBCFNM			
5	CISCO	IW-ANT-PNL-59-N=	Panel	SMA Female	
	HUBER+SUHNER	1356.17.0076			
6	CISCO	IW-ANT-H90-510-N=	Horn	N Female	
	RF ELEMENTS	HG3-CC-S90			
7	CISCO	AIR-ANT5114P2M-N=	Panel	N Male	
	PCTEL	07-1192-01			
8	CISCO	IW-ANT-SKD-513-Q=	Patch	QMA Female	
	PCTEL	74-133202-01			
9	CISCO	IW-ANT-SKS-514-Q=	Patch	QMA Female	
	PCTEL	74-133201-01			
10	CISCO	FLMESH-HW-ANT-28	Panel	N Female	
	HUBER+SUHNER	1356.17.0023			
11	CISCO	AIR-ANT2547V-N=	Dipole	N Male	
	Laird TECHNOLOGES	OC24527-CS1			
12	CISCO	AIR-ANT2547VG-N=	Dipole	N Male	
	Laird TECHNOLOGES	OC24528-CS3			
13	CISCO	AIR-ANT2547VG-NS=	Dipole	N Male	
	Laird Connectivity	OC24528-CS4			
14	CISCO	AIR-ANT2568VG-N=	Dipole	N Male	
	Laird Connectivity	OCX24529-CS1			
15	CISCO	AIR-ANT2568VG-NS=	Dipole	N Male	
	Laird Connectivity	OCX24529-CS2			
16	CISCO	AIR-ANT2588P4M-NS=	Patch	N Female	
	Laird Connectivity	PDM24499-CS1			
17	CISCO	AIR-ANT2513P4M-N=	Patch	N Female	
	Laird Connectivity	PDM245115H-CS1			
18	CISCO	AIR-ANT2513P4M-NS=	Patch	N Female	
	Laird Connectivity	PDM245115H-CS2			
19	CISCO	IW-ANT-OMV-2567-N	Dipole	N Male	
	TE connectivity	OCX24688-CS1			
20	CISCO	IW-ANT-OMH-2567-N	Dipole	N Male	
	TE connectivity	OCX24688H-CS1			
21	CISCO	ANT-GNSS-OUT-TNC=	Patch	TNC Male	
	Pulse	W4053T4572			



Set.	Port						
	WLAN 2.4GHz (Radio 1)	4.9GHz / 5GHz (Radio 1)	4.9GHz / 5GHz (Radio 2)	WLAN 2.4GHz (Scanning Radio 3)	WLAN 5GHz (Scanning Radio 3)	BT (Radio 4)	GPS (Radio 5)
1	-	-	-	-	-	-	-
2	1	-	-	1	-	-	-
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	4	-	-	-	-	1	-
3	-	4	1	-	2	-	-
	-	3	2	-	1	-	-
	-	2	3	-	-	-	-
	-	1	4	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-
9	-	4	1	-	-	-	-
	-	3	2	-	-	-	-
	-	2	3	-	-	-	-
	-	1	4	-	-	-	-
10	-	4	1	-	2	-	-
	-	3	2	-	1	-	-
	-	2	3	-	-	-	-
	-	1	4	-	-	-	-
11	1	-	-	1	-	-	-
	2	-	-	-	-	-	-
	3	-	-	-	-	-	-
	4	-	-	-	-	1	-
12	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	1



Note 1:

Set.	Antenna Gain (dBi)				Cable loss (dB)				Net Gain (dBi)			
	WLAN 2.4GHz (Radio 1) (Scanning Radio 3) BT (Radio 4)	5GHz (Radio 1) (Radio 2) (Scanning Radio 3)	GPS (Radio 5)		WLAN 2.4GHz (Radio 1) (Scanning Radio 3) BT (Radio 4)	5GHz (Radio 1) (Radio 2) (Scanning Radio 3)	GPS (Radio 5)		WLAN 2.4GHz (Radio 1) (Scanning Radio 3) BT (Radio 4)	5GHz (Radio 1) (Radio 2) (Scanning Radio 3)	GPS (Radio 5)	
	2.4G / Bluetooth	UNII 1~3	4.9G	-	2.4G / Bluetooth	UNII 1~3	4.9G	-	2.4G / Bluetooth	UNII 1~3	4.9G	-
1	8	-	-	-	-	-	-	-	8	-	-	-
2	13	-	-	-	-	-	-	-	13	-	-	-
3	-	3	3	-	-	-	-	-	-	3	3	-
4	-	8	7	-	-	-	-	-	-	8	7	-
5	-	9	-	-	-	0.97	-	-	-	8.03	-	-
6	-	10	-	-	-	0.97	-	-	-	9.03	-	-
7	-	13	-	-	-	-	-	-	-	13	-	-
8	-	13	13	-	-	0.97	0.97	-	-	12.09	12.09	-
9	-	14	14	-	-	0.97	0.97	-	-	13.03	13.03	-
10	-	19.5	-	-	-	0.97	-	-	-	18.53	-	-
11	4	7	-	-	-	-	-	-	4	7	-	-
12	4	7	-	-	-	-	-	-	4	7	-	-
13	4	7	-	-	-	-	-	-	4	7	-	-
14	6	8	-	-	-	-	-	-	6	8	-	-
15	6	8	-	-	-	-	-	-	6	8	-	-
16	Vertical: 9.1 Horizontal: 7.1	Vertical: 9.6 Horizontal: 7.8	-	-	0.62	0.97	-	-	Vertical: 8.48 Horizontal: 6.48	Vertical: 8.63 Horizontal: 6.83	-	-
17	13	13	-	-	0.62	0.97	-	-	12.38	12.03	-	-
18	13	13	-	-	0.62	0.97	-	-	12.38	12.03	-	-
19	4	7	7	-	-	-	-	-	4	7	7	-
20	4	7	7	-	-	-	-	-	4	7	7	-
21	-	-	-	2.5	-	-	-	-	-	-	-	2.5



Set.	Point-to-Multipoint	Point-to-Point
1	Yes	No
2	Yes	Yes
3	Yes	No
4	Yes	No
5	Yes	Yes
6	Yes	Yes
7	Yes	Yes
8	Yes	Yes
9	Yes	Yes
10	Yes	Yes
11	Yes	No
12	Yes	No
13	Yes	No
14	Yes	No
15	Yes	No
16	Yes	No
17	Yes	Yes
18	Yes	Yes
19	Yes	No
20	Yes	No
21	-	-

Note 2: The above information was declared by manufacturer.

Note 3: There are 21 set antennas in the antenna table list.

The lowest and highest antenna gain was selected for the test and recorded in this report.

The antennas were selected as below:

For WLAN 2.4GHz/BT: Set 2, 11.

For WLAN 5GHz: Set 3, 10.

For 4.9GHz: Set 3, 9.

Note 4: Directional gain information.

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

Ex.

Directional Gain (NSS1) formula :

$$Directional\ Gain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left\{ \sum_{k=1}^{N_{ANT}} \mathcal{E}_{j,k} \right\}^2}{N_{ANT}} \right]$$

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

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

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

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

Where ;

$$2.4G \ G1 = 4 \text{ dBi}; G2 = 4 \text{ dBi}; G3 = 4 \text{ dBi}; G4 = 4 \text{ dBi};$$

$$2TDG = 7.01 \text{ dBi} \quad 4TDG = 10.02 \text{ dBi}$$

$$2.4G \ G1 = 13 \text{ dBi}; G2 = 13 \text{ dBi}; G3 = 13 \text{ dBi}; G4 = 13 \text{ dBi};$$

$$2TDG = 16.01 \text{ dBi} \quad 4TDG = 19.02 \text{ dBi}$$

$$5G \ G1 = 3 \text{ dBi}; G2 = 3 \text{ dBi}; G3 = 3 \text{ dBi}; G4 = 3 \text{ dBi};$$

$$2TDG = 6.01 \text{ dBi} \quad 4TDG = 9.02 \text{ dBi}$$

$$5G \ G1 = 18.53 \text{ dBi}; G2 = 18.53 \text{ dBi}; G3 = 18.53 \text{ dBi}; G4 = 18.53 \text{ dBi};$$

$$2TDG = 18.53 \text{ dBi} \quad 4TDG = 21.54 \text{ dBi}$$

$$4.9G \ G1 = 3 \text{ dBi}; G2 = 3 \text{ dBi}; G3 = 3 \text{ dBi}; G4 = 3 \text{ dBi};$$

$$2TDG = 6.01 \text{ dBi} \quad 4TDG = 9.02 \text{ dBi}$$

$$4.9G \ G1 = 13.03 \text{ dBi}; G2 = 13.03 \text{ dBi}; G3 = 13.03 \text{ dBi}; G4 = 13.03 \text{ dBi};$$

$$2TDG = 16.04 \text{ dBi} \quad 4TDG = 19.05 \text{ dBi}$$

For Iron Radio 1

For 2.4GHz:

For IEEE 802.11b/g/n/VHT/ax mode (1TX, 2TX, 4TX/4RX):

1TX

Only Port 1 can be use as transmitting antenna.

2TX

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

Port 1, Port 2 could transmitting simultaneously.

4TX

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

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

4RX

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

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



For Iron 5GHz UNII 1~UNII 3 and 4.9GHz:

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

1TX

Only Port 1 can be use as transmitting antenna.

2TX

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

Port 1, Port 2 could transmitting simultaneously.

4TX

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

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

4RX

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

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

For Pine Radio 2

For 5GHz UNII 1~UNII 3 and 4.9GHz:

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

1TX

Only Port 1 can be use as transmitting antenna.

2TX

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

Port 1, Port 2 could transmitting simultaneously.

4TX

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

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

4RX

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

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

For Scanning Radio 3

For 2.4GHz:

For IEEE 802.11b/g/n/VHT/ax mode (1TX/1RX):

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

For 5GHz UNII 1~UNII 3:

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

The EUT supports the antenna with TX and RX diversity functions.

Both port 1 and port 2 support transmit and receive functions, but only one of them will be used at one time.

The port 1 generated the worst case, so it was selected to test and record in the report.

For Radio 4

Bluetooth (1TX/1RX):

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

For Radio 5

GPS (1RX):

Only Port 1 can be used as receiving antenna.



1.1.3 Mode Test Duty Cycle

For UNII 1 and UNII 3 indoor/outdoor use

For Iron Radio 1 antenna set 3 and antenna set 10

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss1,(6Mbps)_1TX	0.971	0.13	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.944	0.25	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_1TX	0.936	0.29	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_1TX	0.938	0.28	5.445m	300
802.11a_Nss1,(6Mbps)_2TX	0.965	0.15	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.938	0.28	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_2TX	0.936	0.29	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_2TX	0.94	0.27	5.446m	300
802.11a_Nss1,(6Mbps)_4TX	0.951	0.22	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.956	0.2	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_4TX	0.954	0.2	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_4TX	0.937	0.28	5.446m	300

For Pine Radio 2

For Antenna set 3

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss1,(6Mbps)_1TX	0.969	0.14	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.932	0.31	5.445m	300
802.11ax HEW40_Nss1,(MCS0)_1TX	0.868	0.61	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_1TX	0.916	0.38	5.445m	300
802.11a_Nss1,(6Mbps)_2TX	0.975	0.11	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.939	0.27	5.445m	300
802.11ax HEW40_Nss1,(MCS0)_2TX	0.947	0.24	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_2TX	0.928	0.32	5.445m	300
802.11a_Nss1,(6Mbps)_4TX	0.969	0.14	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.922	0.35	5.445m	300
802.11ax HEW40_Nss1,(MCS0)_4TX	0.924	0.34	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_4TX	0.855	0.68	5.445m	300

For Antenna set 10

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss1,(6Mbps)_1TX	0.967	0.15	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.969	0.14	5.429m	300
802.11ax HEW40_Nss1,(MCS0)_1TX	0.923	0.35	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_1TX	0.934	0.3	5.445m	300
802.11a_Nss1,(6Mbps)_2TX	0.967	0.15	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.962	0.17	5.11m	300
802.11ax HEW40_Nss1,(MCS0)_2TX	0.93	0.32	5.445m	300
802.11ax HEW80_Nss1,(MCS0)_2TX	0.929	0.32	5.445m	300



Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)_4TX	0.967	0.15	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.921	0.36	5.445m	300
802.11ax HEW40_Nss1,(MCS0)_4TX	0.957	0.19	5.106m	300
802.11ax HEW80_Nss1,(MCS0)_4TX	0.959	0.18	4.931m	300

For Scanning radio 3 antenna set 3 and antenna set 10

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.967	0.15	1.977m	1k
802.11ax HEW20	0.932	0.31	5.445m	300
802.11ax HEW40	0.957	0.19	5.076m	300
802.11ax HEW80	0.931	0.31	5.445m	300

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE / Power adapter / DC 48V			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 11n/VHT/11ax in Iron radio 1 2.4GHz, 11n/11ac/11ax in Iron radio 1 5GHz and Pine radio 2 5GHz.			
Function	☒	Outdoor P2M	☒	Indoor P2M
	☒	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☒	Point-to-point
Channel Puncturing Function	☐	Supported	☒	Unsupported
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	QSPR (Version 5.0-00201)			
Supported Software Product IDs	IW9167EH-B - Industrial Wireless 9167 AP IW9167EH-B-AP - Wi-Fi mode IW9167EH-B-URWB - URWB mode IW9167EH-B-WGB - WGB mode IW9167EH-ROW - Industrial Wireless 9167 AP IW9167EH-ROW-AP - Wi-Fi mode IW9167EH-ROW-URWB - URWB mode IW9167EH-ROW-WGB - WGB mode			

Note: The above information was declared by manufacturer.

**1.1.5 Table for EUT support function**

Function	Support Band
AP	2.4GHz, 5GHz, 4.9GHz
P2P/P2MP	2.4GHz, 5GHz, 4.9GHz

Note1: For above table list, only AP mode was tested and recorded in this test.

Note2: The above information was declared by manufacturer.

1.1.6 Table for Radio function

Radio (R)	WLAN 2.4GHz	5GHz UNII 1~UNII 3	4.9 GHz	Scanning radio (WLAN 2.4GHz / 5GHz UNII 1~UNII 3)	Bluetooth	GPS
R1 (Iron Radio)	V (AP: 20/ P2P/P2MP: 20)	V (AP: 20/40/80) (P2P/P2MP: 20/40/80)	V	-	-	-
R2 (Pine Radio)	-	V (AP: 20/40/80/160) (P2P/P2MP: 20/40/80/160)	V	-	-	-
R3 (Scanning Radio)	-	-	-	V (AP: 20/40/80/160) (P2P/P2MP: 20/40/80/160)	-	-
R4	-	-	-	-	V	-
R5	-	-	-	-	-	V

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 D01 v02r01
- ♦ 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 (For other item tests)	TH02-CB	Jay Lo	22.5~23.8 / 55~61	Aug. 17, 2022~Nov. 29, 2022
Radiated below 1GHz (For cabinet test)	10CH01-CB	Ryan Huang	22~23 / 53~55	Nov. 02, 2022~Dec. 15, 2022
Radiated above 1GHz (For cabinet test)	03CH01-CB	Chris Lee	23.1~24.3 / 57~60	Sep. 26, 2022~Oct. 15, 2022
	03CH06-CB		22.6~23.9 / 55~59	
AC Conduction	CO01-CB	Tim Chen	23~24 / 56~57	Nov. 03, 2022~Dec. 14, 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))

For 10CH01-CB

For Before Nov. 04, 2022

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.9 dB	Confidence levels of 95%

For After Nov. 03, 2022

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.4 dB	Confidence levels of 95%

**For other Test Site No.**

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For UNII 1 and UNII 3 indoor/outdoor use

For Iron Radio 1

For Antenna set 3

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	24
5200MHz	24
5240MHz	24
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	24
5200MHz	24
5240MHz	24
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	22
5230MHz	24
5755MHz	24
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	21.5
5775MHz	24
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	19
5200MHz	19.5
5240MHz	19.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	19
5200MHz	19
5240MHz	19



Mode	Power Setting
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	19
5230MHz	19
5755MHz	24
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	19
5775MHz	22
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	15
5200MHz	15
5240MHz	15.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	15
5200MHz	15
5240MHz	15
5745MHz	24
5785MHz	24
5825MHz	23
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	12
5230MHz	15
5755MHz	21
5795MHz	21
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	12
5775MHz	19
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	16
5200MHz	16
5240MHz	16
5745MHz	24
5785MHz	24
5825MHz	24



Mode	Power Setting
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	16
5755MHz	24
5795MHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	16
5775MHz	22
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	9
5200MHz	9
5240MHz	9
5745MHz	23
5785MHz	22.5
5825MHz	22.5
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	9
5230MHz	9
5755MHz	21
5795MHz	21
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	9.5
5775MHz	19

For Antenna set 10 P to M and P to P

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	14
5200MHz	14.5
5240MHz	15
5745MHz	13.5
5785MHz	20
5825MHz	15
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	15
5200MHz	15
5240MHz	14.5
5745MHz	19
5785MHz	20.5
5825MHz	20
802.11ax HEW40_Nss1,(MCS0)_1TX	-



Mode	Power Setting
5190MHz	13
5230MHz	15
5755MHz	13.5
5795MHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	12
5775MHz	14
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	10
5200MHz	11
5240MHz	11
5745MHz	9.5
5785MHz	15
5825MHz	14.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	11.5
5200MHz	14
5240MHz	12
5745MHz	15
5785MHz	15
5825MHz	15
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	10
5755MHz	13.5
5795MHz	15
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	8
5775MHz	13.5
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	0
5200MHz	0
5240MHz	0
5745MHz	0
5785MHz	0
5825MHz	0
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	0
5200MHz	0
5240MHz	0



Mode	Power Setting
5745MHz	0
5785MHz	0
5825MHz	0
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	0
5230MHz	0
5755MHz	0
5795MHz	0
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	0
5775MHz	0
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	11.5
5200MHz	14
5240MHz	12
5745MHz	15
5785MHz	15
5825MHz	15
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	10
5755MHz	13.5
5795MHz	15
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	8
5775MHz	13.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	0
5200MHz	0
5240MHz	0
5745MHz	0
5785MHz	0
5825MHz	0
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	0
5230MHz	0
5755MHz	0
5795MHz	0
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	0



Mode	Power Setting
5775MHz	0

For Pine Radio 2
For Antenna set 3

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	16.5
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	16
5230MHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	15
5775MHz	17
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	16
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	15.5
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17



Mode	Power Setting
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	14.5
5230MHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	13.5
5775MHz	17
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	14.5
5200MHz	16
5240MHz	16
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	14
5200MHz	15.5
5240MHz	15.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	11.5
5230MHz	15.5
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	10.5
5775MHz	15.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	15.5
5200MHz	15.5
5240MHz	15.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	14.5
5230MHz	16



Mode	Power Setting
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	13.5
5775MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	8.5
5200MHz	9
5240MHz	8.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	8.5
5230MHz	8.5
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	8
5775MHz	15.5

For Antenna set 10 P to M

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	15
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	11
5200MHz	11
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	12
5230MHz	16
5755MHz	17



Mode	Power Setting
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	11.5
5775MHz	17
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	9
5200MHz	16
5240MHz	16
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	16
5240MHz	16
5745MHz	16
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	9
5755MHz	16
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	8.5
5775MHz	15.5
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	5.5
5200MHz	5
5240MHz	5.5
5745MHz	12.5
5785MHz	12.5
5825MHz	12.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	6
5200MHz	10.5
5240MHz	11
5745MHz	12
5785MHz	12
5825MHz	12



Mode	Power Setting
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	5.5
5230MHz	10
5755MHz	12
5795MHz	12
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	4.5
5775MHz	12
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	16
5240MHz	16
5745MHz	16
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	9
5755MHz	16
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	8.5
5775MHz	15.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	6
5200MHz	10.5
5240MHz	11
5745MHz	9
5785MHz	9
5825MHz	9
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	5.5
5230MHz	9
5755MHz	9
5795MHz	9
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	4.5
5775MHz	9

**For Antenna set 10 P to P**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	15
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	11
5200MHz	11
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	12
5230MHz	16
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	11.5
5775MHz	17
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	9
5200MHz	16
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	16
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	9



Mode	Power Setting
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	8.5
5775MHz	15.5
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	5.5
5200MHz	5
5240MHz	5.5
5745MHz	12.5
5785MHz	12.5
5825MHz	12.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	6
5200MHz	10.5
5240MHz	11
5745MHz	12
5785MHz	12
5825MHz	12
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	5.5
5230MHz	10
5755MHz	12
5795MHz	12
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	4.5
5775MHz	12
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	16
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	9
5230MHz	9
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-



Mode	Power Setting
5210MHz	8.5
5775MHz	15.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	6
5200MHz	10.5
5240MHz	11
5745MHz	12
5785MHz	12
5825MHz	12
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	5.5
5230MHz	10
5755MHz	12
5795MHz	12
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	4.5
5775MHz	12

For Scanning radio 3**For Antenna set 3**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	18
5200MHz	18
5240MHz	18
5745MHz	18
5785MHz	18
5825MHz	18
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	18
5200MHz	18
5240MHz	18
5745MHz	18
5785MHz	18
5825MHz	18
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	17.5
5230MHz	18
5755MHz	18
5795MHz	18
802.11ax HEW80_Nss1,(MCS0)_1TX	-



Mode	Power Setting
5210MHz	17.5
5775MHz	18

For Antenna set 10 P to M and P to P

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	16
5200MHz	18
5240MHz	18
5745MHz	18
5785MHz	18
5825MHz	18
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	15.5
5200MHz	18
5240MHz	18
5745MHz	18
5785MHz	18
5825MHz	18
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	12
5230MHz	18
5755MHz	18
5795MHz	18
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	11.5
5775MHz	15

Note:

- ♦ Evaluated HEW20/HEW40/HEW80 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
- ♦ 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 + Iron R1 : 2.4GHz + adapter
2	EUT + Iron R1 : 2.4GHz + PoE
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~7 will follow this same test mode.	
3	EUT + Iron R1 : 5GHz + adapter
4	EUT + Pine R2 : 5GHz + adapter
5	EUT + Scanning R3 : 2.4GHz + adapter
6	EUT + Scanning R3 : 5GHz + adapter
7	EUT + R4 : Bluetooth + adapter
8	EUT + Iron R1 : 2.4GHz + Ethernet cable + DC 48V
9	EUT + Iron R1 : 2.4GHz + Ethernet cable + PoE
Mode 8 has been evaluated to be the worst case among Mode 8~9, thus measurement for Mode 10~14 will follow this same test mode.	
10	EUT + Iron R1 : 5GHz + Ethernet cable + DC 48V
11	EUT + Pine R2 : 5GHz + Ethernet cable + DC 48V
12	EUT + Scanning R3 : 2.4GHz + Ethernet cable + DC 48V
13	EUT + Scanning R3 : 5GHz + Ethernet cable + DC 48V
14	EUT + R4 : Bluetooth + Ethernet cable + DC 48V
For operating mode 6 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 Unwanted Emissions above 1GHz
Test Condition	Conducted measurement at transmit chains
1	Iron R1 : 5GHz
2	Pine R2 : 5GHz
3	Scanning R3 : 5GHz



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions below 1GHz
Test Condition	Conducted measurement at transmit chains
1	Iron R1 : 2.4GHz
2	Iron R1 : 5GHz
3	Pine R2 : 5GHz
4	Scanning R3 : 2.4GHz
5	Scanning R3 : 5GHz
6	R4 : Bluetooth
For operating mode 3 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	Radiated measurement
Operating Mode < 1GHz	CTX (Cabinet)
	The EUT was performed at the X axis, Y axis, and Z axis position for Unwanted Emissions above 1GHz test, and the worst case axis was found and listed below. So the measurement will follow this same test configuration.
1	EUT in Y axis + Iron R1 : 2.4GHz + adapter
2	EUT in Y axis + Iron R1 : 2.4GHz + PoE
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~7 will follow this same test mode.	
3	EUT in Y axis + Iron R1 : 5GHz + PoE
4	EUT in Y axis + Pine R2 : 5GHz + PoE
5	EUT in Y axis + Scanning R3 : 2.4GHz + PoE
6	EUT in Z axis + Scanning R3 : 5GHz + PoE
7	EUT in Y axis + R4 : Bluetooth + PoE
8	EUT in Y axis + Iron R1 : 2.4GHz + Ethernet cable + DC 48V
9	EUT in Y axis + Iron R1 : 2.4GHz + Ethernet cable + PoE
Mode 9 has been evaluated to be the worst case among Mode 8~9, thus measurement for Mode 10~14 will follow this same test mode.	
10	EUT in Y axis + Iron R1 : 5GHz + Ethernet cable + PoE
11	EUT in Y axis + Pine R2 : 5GHz + Ethernet cable + PoE
12	EUT in Y axis + Scanning R3 : 2.4GHz + Ethernet cable + PoE
13	EUT in Z axis + Scanning R3 : 5GHz + Ethernet cable + PoE



14	EUT in Y axis + R4 : Bluetooth + Ethernet cable + PoE
For operating mode 5 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX (Cabinet)
	The EUT was performed at the X axis, Y axis, and Z axis position, and the worst case axis was found and listed below. So the measurement will follow this same test configuration.
1	EUT in Y axis + Iron R1 : 5GHz
2	EUT in Y axis + Pine R2 : 5GHz
3	EUT in Z axis + Scanning R3 : 5GHz

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Conducted Emission Co-location
Test Condition	Conducted measurement at transmit chains
Operating Mode	CTX
1	Iron R1 (2.4GHz) + Iron R1 (5GHz) + Scanning R3 (2.4GHz) + R4 (Bluetooth)
2	Iron R1 (2.4GHz) + Iron R1 (5GHz) + Scanning R3 (5GHz port 2) + R4 (Bluetooth)
3	Pine R2 (5GHz) + Scanning R3 (5GHz port 1)
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	Iron R1 (2.4GHz) + Iron R1 (4.9GHz / 5GHz) + Pine R2 (4.9GHz / 5GHz) + Scanning R3 (2.4GHz) + R4 (Bluetooth)
2	Iron R1 (2.4GHz) + Iron R1 (4.9GHz / 5GHz) + Pine R2 (4.9GHz / 5GHz) + Scanning R3 (5GHz port 2) + R4 (Bluetooth)
3	Iron R1 (2.4GHz) + Iron R1 (4.9GHz / 5GHz) + Pine R2 (4.9GHz / 5GHz) + Scanning R3 (5GHz port 1) + R4 (Bluetooth)
Refer to Sporton Test Report No.: FA281101 for Co-location RF Exposure Evaluation.	

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

Adapter and PoE information as below:

Power	Brand	Model
Adapter	LITEON	PA-1600-1C
PoE	CISCO	POE075U-1BT-C



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories
Sealing collar*3
Wall-mounted rack*2
Grounding wire*1, Non shielded, 0.8m
DC cable*1, Non shielded, 2.6m
DC cable connect*1
Ethernet cable*2, Shielded, 3m
Ethernet cable connect*2

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E6430	N/A
B	Adapter	LITEON	PA-1600-1C	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	PHIHONG	POE075U-1BT-C	N/A
B	LAN NB	DELL	E6430	N/A

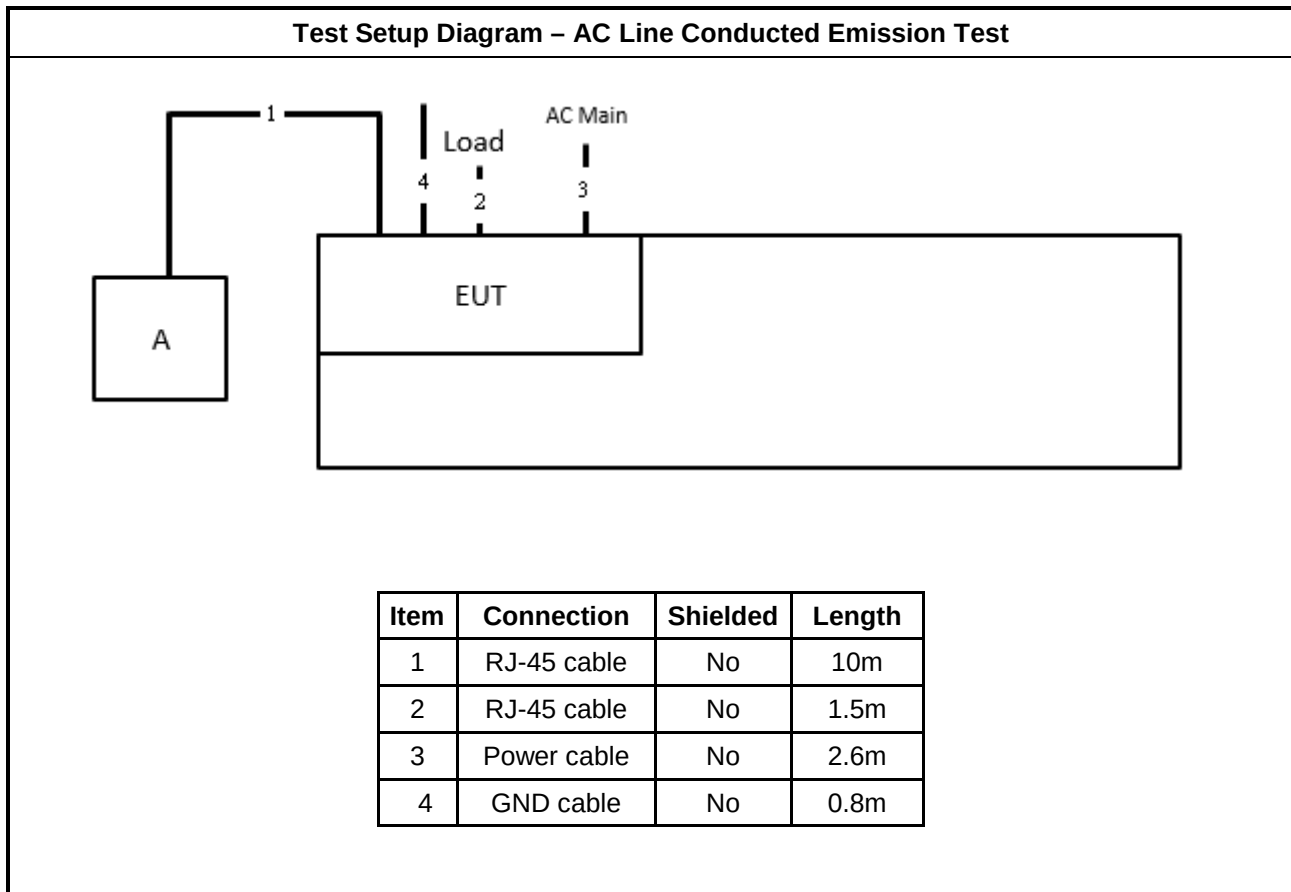
For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	LITEON	PA-1600-1C	N/A

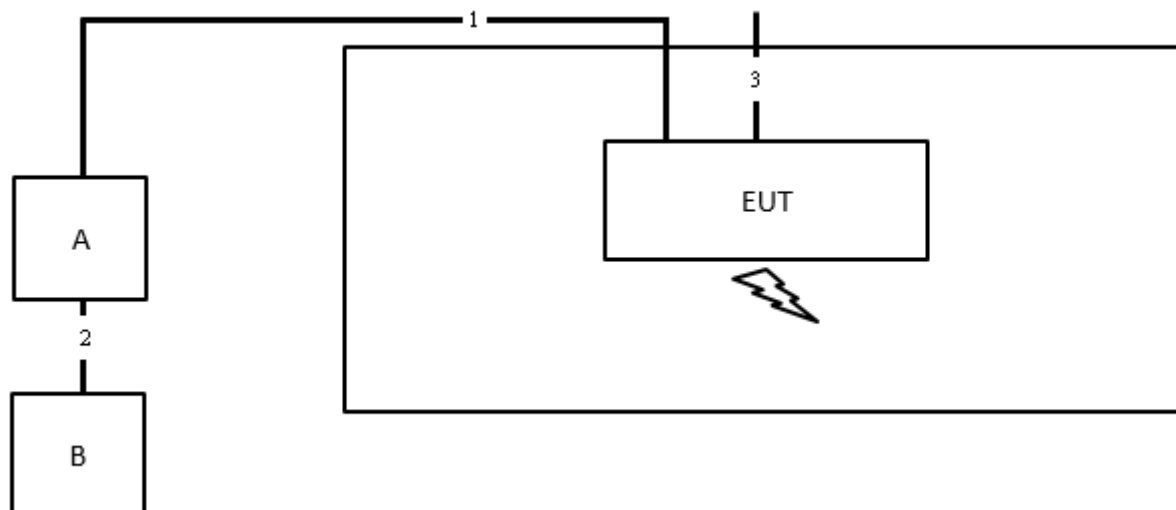
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	LITEON	PA-1600-1C	N/A

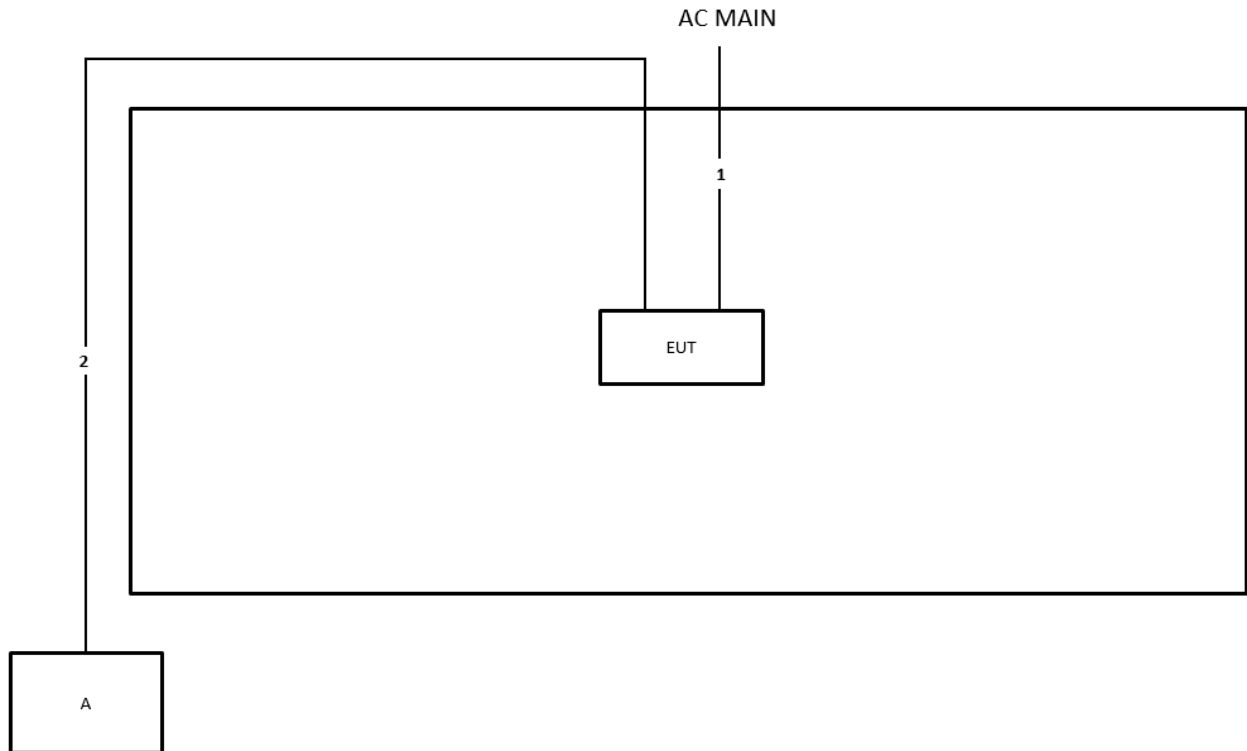
2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	3m
3	GND cable	No	0.8m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	RJ-45 cable	No	10m



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.		

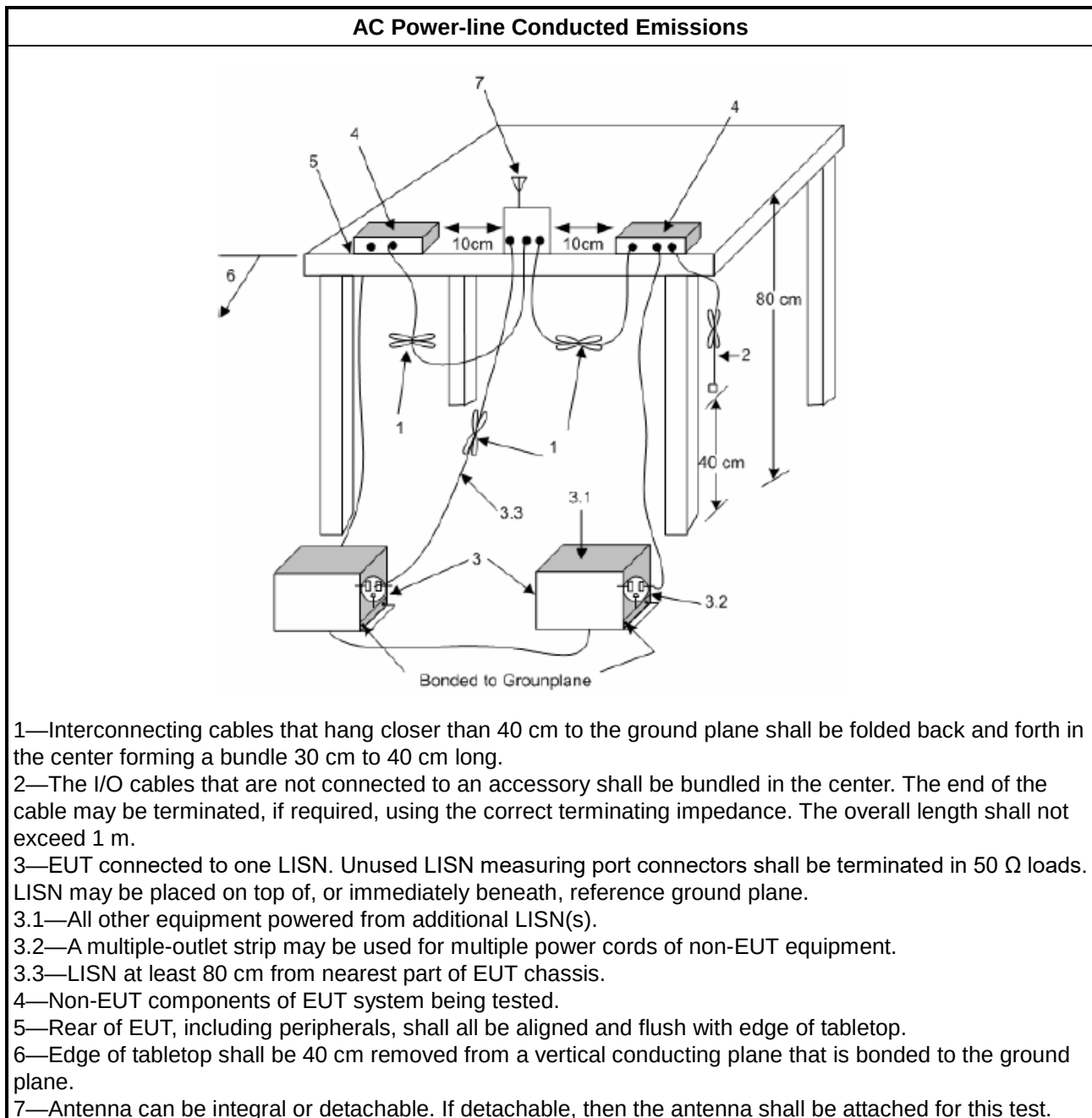
3.1.2 Measuring Instruments

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:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. 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 $\geq 500\text{kHz}$.

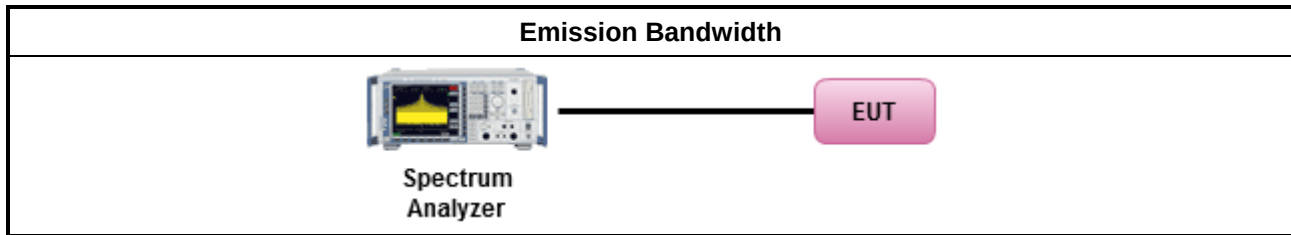
3.2.2 Measuring Instruments

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.

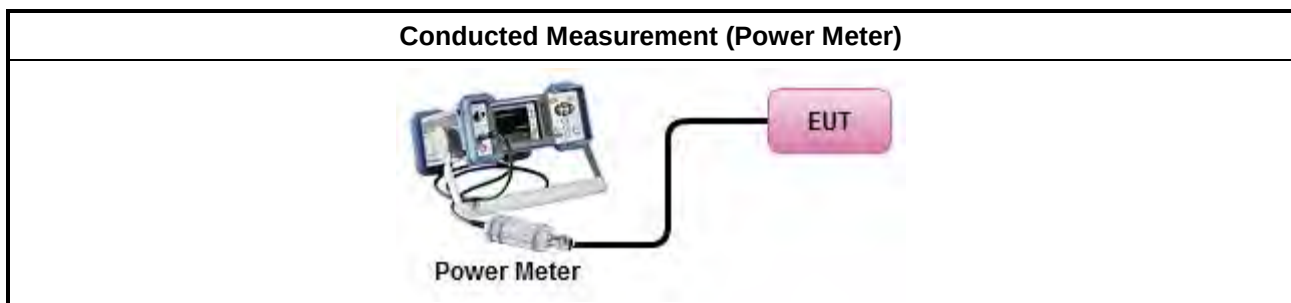
3.3.2 Measuring Instruments

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



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

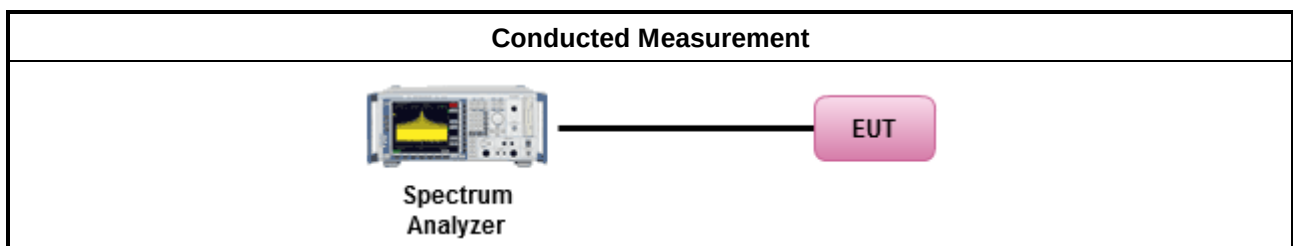
Refer a test equipment and calibration data table in this test report.

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.	

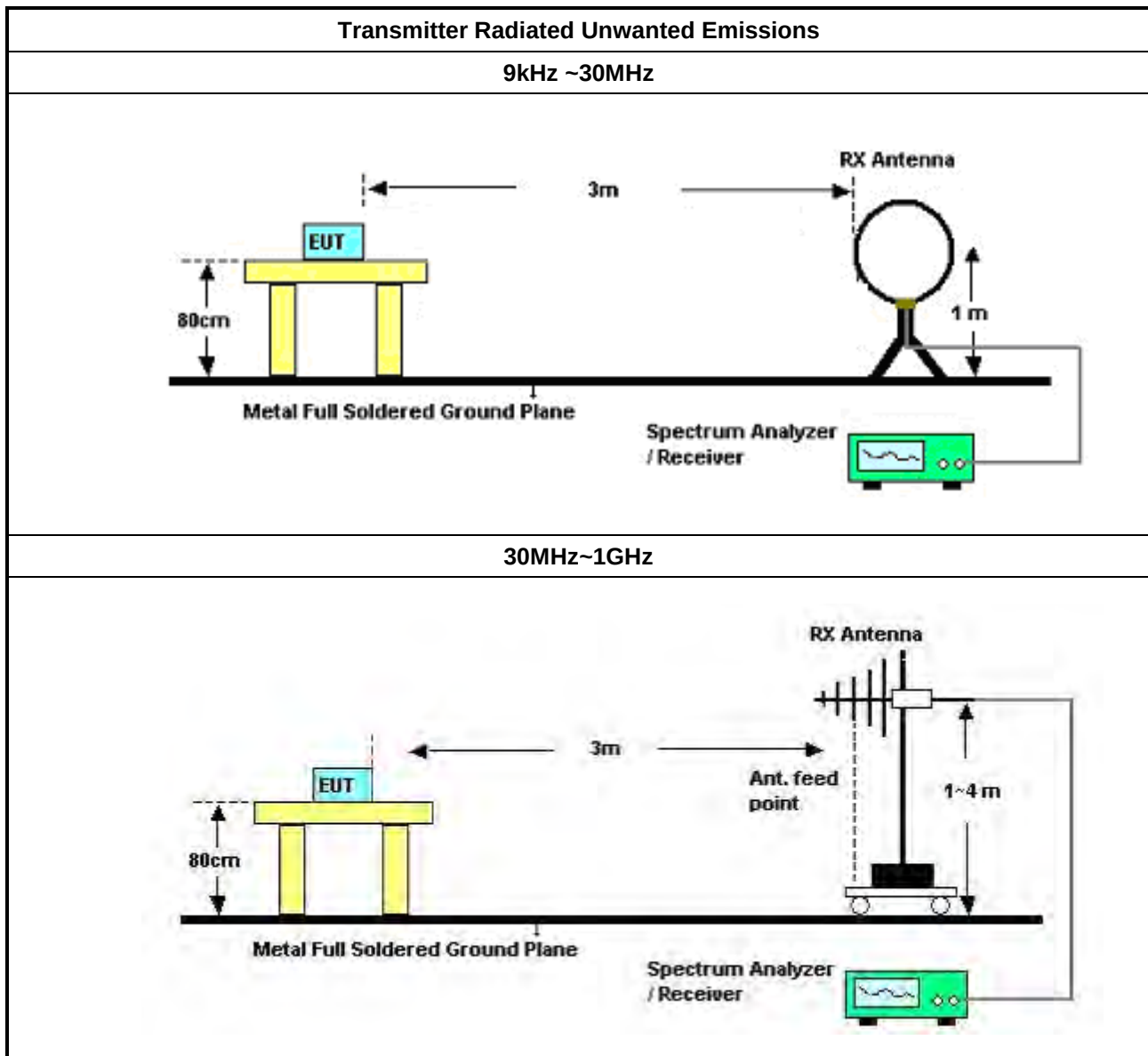
**Test Method**

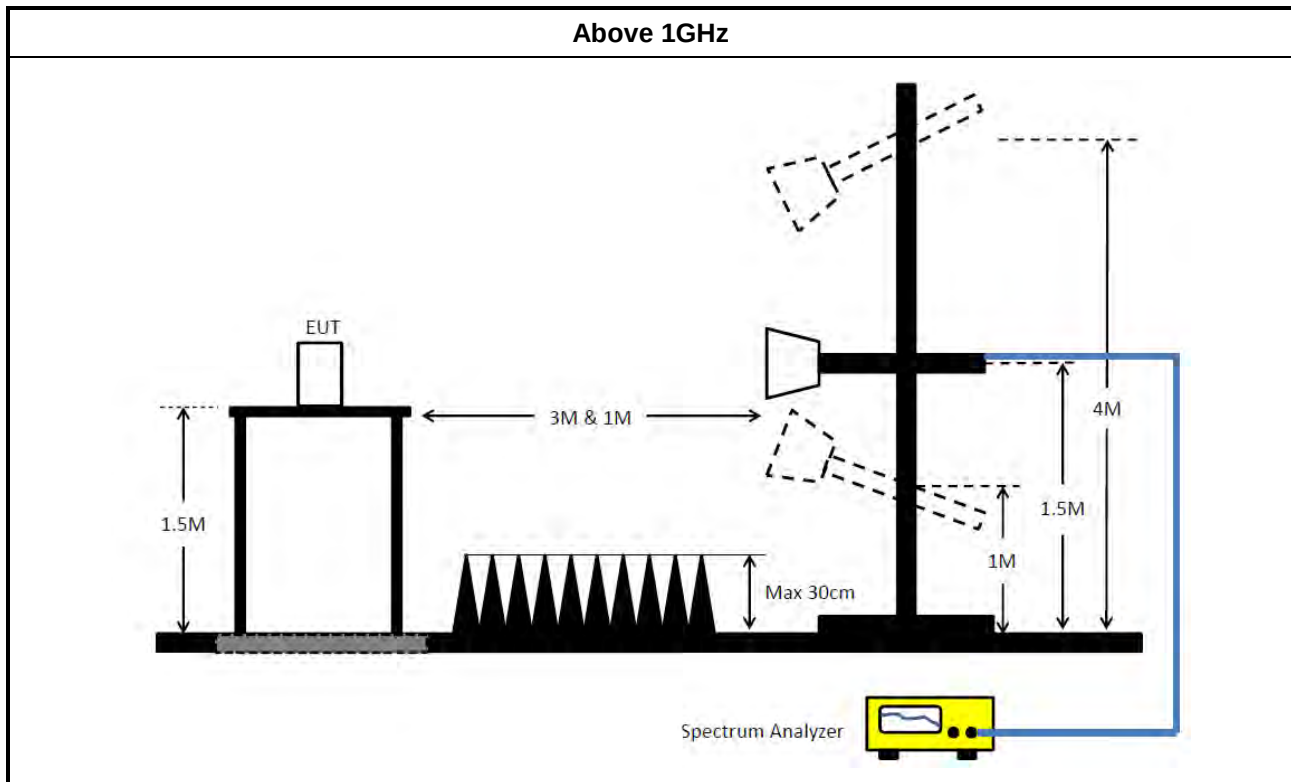
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

Test Method

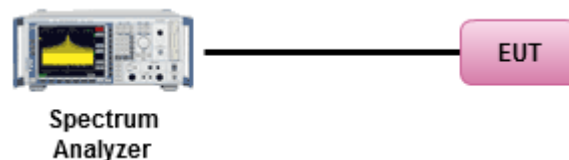
- For conducted and cabinet radiation measurement, refer as FCC KDB 789033 D02, clause G)3).
 - For conducted unwanted emissions into non-restricted bands (relative emission limits).
Devices with multiple transmit chains:
Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against 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 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
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 18, 2022	May 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (10CH01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 27, 2022	Jan. 26, 2023	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 18, 2022	Oct. 17, 2023	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 18, 2022	Oct. 17, 2023	Radiation (10CH01-CB)
Biconical Antenna	Schwarzbeck	VHBB 9124	324	30MHz ~ 200MHz	Jun. 11, 2022	Jun. 10, 2023	Radiation (10CH01-CB)
Log Antenna	Schwarzbeck	VUSLP 9111	247	200MHz ~ 1GHz	Jun. 11, 2022	Jun. 10, 2023	Radiation (10CH01-CB)
EMI Test Receiver	Rohde& Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 11, 2022	Jul. 10, 2023	Radiation (10CH01-CB)
Spectrum Analyzer	Rohde& Schwarz	FSV30	101026	9kHz ~ 30GHz	Apr. 22, 2022	Apr. 21, 2023	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGR EN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2021	Nov. 05, 2022	Radiation (03CH01-CB)
Horn Antenna	SCHWARZB EAK	BBHA9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 19, 2022	May 18, 2023	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Sep. 30, 2022	Sep. 29, 2023	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 09, 2022	Aug. 08, 2023	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	Aug 02, 2022	Aug 01, 2023	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

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



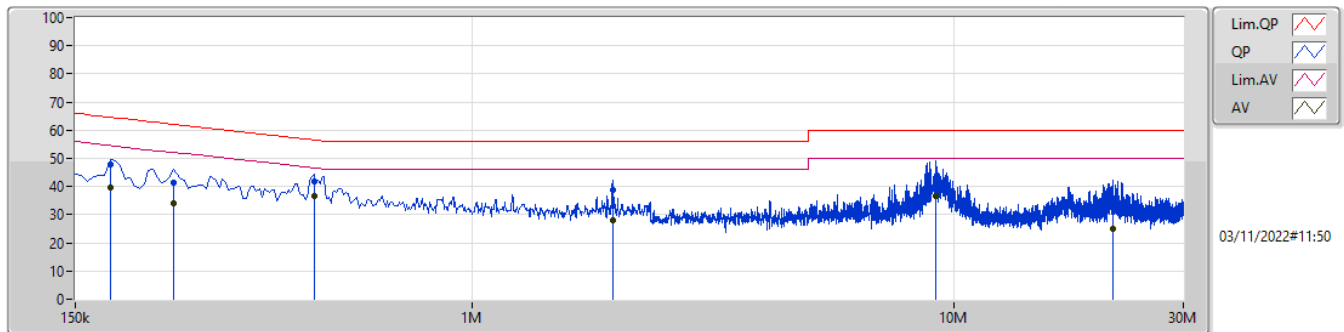
Conducted Emissions at Powerline

Appendix A

Summary

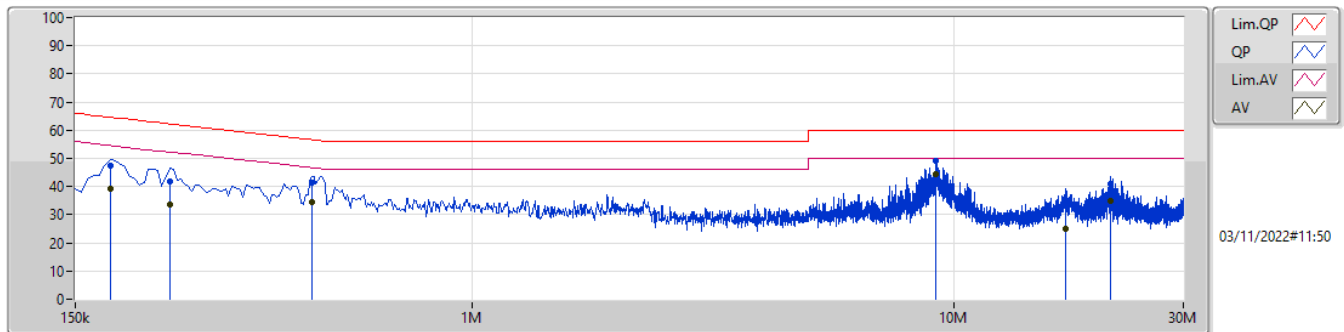
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 6	Pass	AV	9.173M	44.20	50.00	-5.80	Neutral

Mode 6



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	177k	47.82	64.62	-16.80	9.99	Line	-	37.83	0.06	0.04	9.89						
AV	177k	39.50	54.62	-15.12	9.99	Line	-	29.51	0.06	0.04	9.89						
QP	240k	41.52	62.10	-20.58	10.00	Line	-	31.52	0.06	0.05	9.89						
AV	240k	33.90	52.10	-18.20	10.00	Line	-	23.90	0.06	0.05	9.89						
QP	469.5k	41.70	56.52	-14.82	10.01	Line	-	31.69	0.06	0.06	9.89						
AV	469.5k	36.64	46.52	-9.88	10.01	Line	-	26.63	0.06	0.06	9.89						
QP	1.959M	38.81	56.00	-17.19	10.07	Line	-	28.74	0.09	0.09	9.89						
AV	1.959M	27.98	46.00	-18.02	10.07	Line	-	17.91	0.09	0.09	9.89						
QP	9.173M	41.36	60.00	-18.64	10.27	Line	-	31.09	0.21	0.15	9.91						
AV	9.173M	36.54	50.00	-13.46	10.27	Line	"Worst"	26.27	0.21	0.15	9.91						
QP	21.404M	32.35	60.00	-27.65	10.52	Line	-	21.83	0.32	0.24	9.96						
AV	21.404M	24.96	50.00	-25.04	10.52	Line	-	14.44	0.32	0.24	9.96						

Mode 6



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	177k	47.34	64.62	-17.28	10.00	Neutral	-	37.34	0.07	0.04	9.89						
AV	177k	39.38	54.62	-15.24	10.00	Neutral	-	29.38	0.07	0.04	9.89						
QP	235.5k	41.85	62.25	-20.40	10.00	Neutral	-	31.85	0.07	0.04	9.89						
AV	235.5k	33.54	52.25	-18.71	10.00	Neutral	-	23.54	0.07	0.04	9.89						
QP	465k	41.40	56.61	-15.21	10.02	Neutral	-	31.38	0.07	0.06	9.89						
AV	465k	34.58	46.61	-12.03	10.02	Neutral	-	24.56	0.07	0.06	9.89						
QP	9.173M	48.93	60.00	-11.07	10.29	Neutral	-	38.64	0.23	0.15	9.91						
AV	9.173M	44.20	50.00	-5.80	10.29	Neutral	"Worst"	33.91	0.23	0.15	9.91						
QP	17.115M	33.38	60.00	-26.62	10.43	Neutral	-	22.95	0.29	0.19	9.95						
AV	17.115M	24.87	50.00	-25.13	10.43	Neutral	-	14.44	0.29	0.19	9.95						
QP	21.161M	41.16	60.00	-18.84	10.50	Neutral	-	30.66	0.30	0.24	9.96						
AV	21.161M	34.98	50.00	-15.02	10.50	Neutral	-	24.48	0.30	0.24	9.96						

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	20.64M	16.516M	16M6D1D	20.43M	16.502M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.87M	18.981M	19M0D1D	21.72M	18.974M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.46M	38.049M	38M0D1D	41.28M	37.989M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.2M	77.379M	77M4D1D	82.2M	77.379M
802.11a_Nss1,(6Mbps)_2TX	19.56M	16.435M	16M5D1D	19.41M	16.405M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.78M	18.978M	19M0D1D	21.03M	18.902M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.1M	37.963M	38M0D1D	40.74M	37.852M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.2M	77.395M	77M4D1D	81.96M	77.19M
802.11a_Nss1,(6Mbps)_4TX	19.68M	16.501M	16M6D1D	19.32M	16.398M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.99M	18.962M	19M0D1D	21.12M	18.885M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.16M	37.985M	38M0D1D	40.62M	37.807M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.4M	77M4D1D	82.08M	77.324M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	16.473M	16M5D1D	16.29M	16.442M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.93M	18.969M	19M0D1D	18.84M	18.953M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.74M	38.036M	38M0D1D	37.74M	37.979M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.4M	77.609M	77M7D1D	77.4M	77.609M
802.11a_Nss1,(6Mbps)_2TX	16.29M	16.647M	16M7D1D	15.3M	16.414M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.96M	19.084M	19M1D1D	18.69M	18.983M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.74M	38.433M	38M5D1D	36.6M	37.877M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.76M	77.564M	77M6D1D	76.44M	77.35M
802.11a_Nss1,(6Mbps)_4TX	16.29M	16.932M	17M0D1D	15.21M	16.358M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.93M	19.195M	19M2D1D	18.42M	18.897M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.8M	38.048M	38M0D1D	37.56M	37.878M
802.11ax HEW80_Nss1,(MCS0)_4TX	78M	77.424M	77M5D1D	75.36M	77.275M

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

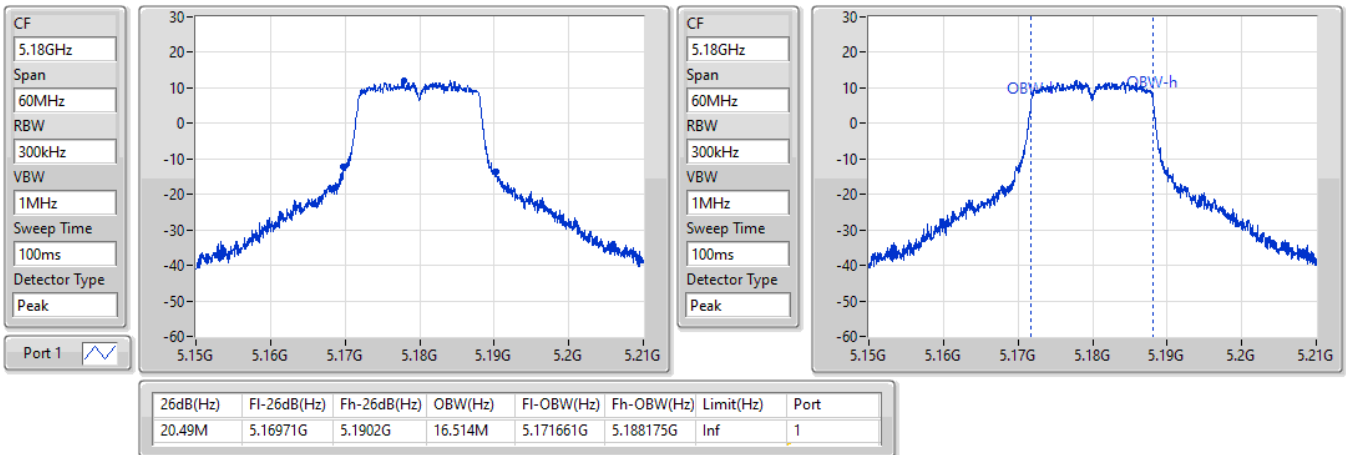
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.49M	16.514M						
5200MHz	Pass	Inf	20.43M	16.502M						
5240MHz	Pass	Inf	20.64M	16.516M						
5745MHz	Pass	500k	16.29M	16.473M						
5785MHz	Pass	500k	16.29M	16.455M						
5825MHz	Pass	500k	16.29M	16.442M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.87M	18.981M						
5200MHz	Pass	Inf	21.78M	18.978M						
5240MHz	Pass	Inf	21.72M	18.974M						
5745MHz	Pass	500k	18.93M	18.953M						
5785MHz	Pass	500k	18.9M	18.969M						
5825MHz	Pass	500k	18.84M	18.966M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.28M	37.989M						
5230MHz	Pass	Inf	41.46M	38.049M						
5755MHz	Pass	500k	37.74M	38.036M						
5795MHz	Pass	500k	37.74M	37.979M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.379M						
5775MHz	Pass	500k	77.4M	77.609M						
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.44M	16.416M	19.5M	16.424M				
5200MHz	Pass	Inf	19.53M	16.405M	19.44M	16.427M				
5240MHz	Pass	Inf	19.56M	16.435M	19.41M	16.425M				
5745MHz	Pass	500k	15.3M	16.424M	16.05M	16.516M				
5785MHz	Pass	500k	15.3M	16.414M	16.29M	16.567M				
5825MHz	Pass	500k	15.9M	16.43M	15.99M	16.647M				
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.24M	18.902M	21.06M	18.935M				
5200MHz	Pass	Inf	21.21M	18.978M	21.39M	18.945M				
5240MHz	Pass	Inf	21.78M	18.911M	21.03M	18.913M				
5745MHz	Pass	500k	18.96M	19.024M	18.69M	18.992M				
5785MHz	Pass	500k	18.81M	19.022M	18.87M	19.064M				
5825MHz	Pass	500k	18.93M	18.983M	18.84M	19.084M				
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.04M	37.852M	40.86M	37.963M				
5230MHz	Pass	Inf	41.1M	37.915M	40.74M	37.87M				
5755MHz	Pass	500k	36.6M	37.936M	37.56M	38.224M				
5795MHz	Pass	500k	37.56M	37.877M	37.74M	38.433M				
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	77.395M	81.96M	77.19M				
5775MHz	Pass	500k	76.44M	77.35M	77.76M	77.564M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.59M	16.479M	19.53M	16.42M	19.53M	16.455M	19.32M	16.421M
5200MHz	Pass	Inf	19.32M	16.407M	19.41M	16.398M	19.68M	16.441M	19.35M	16.447M
5240MHz	Pass	Inf	19.59M	16.501M	19.53M	16.471M	19.59M	16.415M	19.41M	16.448M
5745MHz	Pass	500k	15.21M	16.367M	15.96M	16.63M	15.93M	16.596M	16.29M	16.763M
5785MHz	Pass	500k	15.27M	16.358M	16.29M	16.82M	15.72M	16.768M	15.63M	16.932M
5825MHz	Pass	500k	15.93M	16.444M	15.66M	16.894M	16.26M	16.85M	16.29M	16.804M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.24M	18.901M	21.18M	18.894M	21.12M	18.949M	21.39M	18.914M
5200MHz	Pass	Inf	21.39M	18.926M	21.6M	18.93M	21.48M	18.95M	21.51M	18.962M
5240MHz	Pass	Inf	21.21M	18.885M	21.24M	18.901M	21.99M	18.958M	21.33M	18.93M

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)
5745MHz	Pass	500k	18.93M	19.058M	18.93M	19.071M	18.9M	19.041M	18.69M	19.096M
5785MHz	Pass	500k	18.42M	18.897M	18.72M	19.117M	18.42M	19.075M	18.87M	19.195M
5825MHz	Pass	500k	18.54M	18.937M	18.87M	19.033M	18.75M	19.06M	18.69M	19.072M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.8M	37.899M	40.98M	37.807M	40.98M	37.973M	40.62M	37.914M
5230MHz	Pass	Inf	41.04M	37.985M	40.98M	37.897M	41.16M	37.918M	41.04M	37.922M
5755MHz	Pass	500k	37.68M	37.878M	37.8M	38.003M	37.8M	38.045M	37.74M	38.039M
5795MHz	Pass	500k	37.62M	37.911M	37.56M	37.999M	37.8M	38.029M	37.8M	38.048M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.68M	77.4M	82.08M	77.345M	82.32M	77.324M	82.2M	77.341M
5775MHz	Pass	500k	78M	77.352M	77.76M	77.424M	75.36M	77.275M	77.52M	77.292M

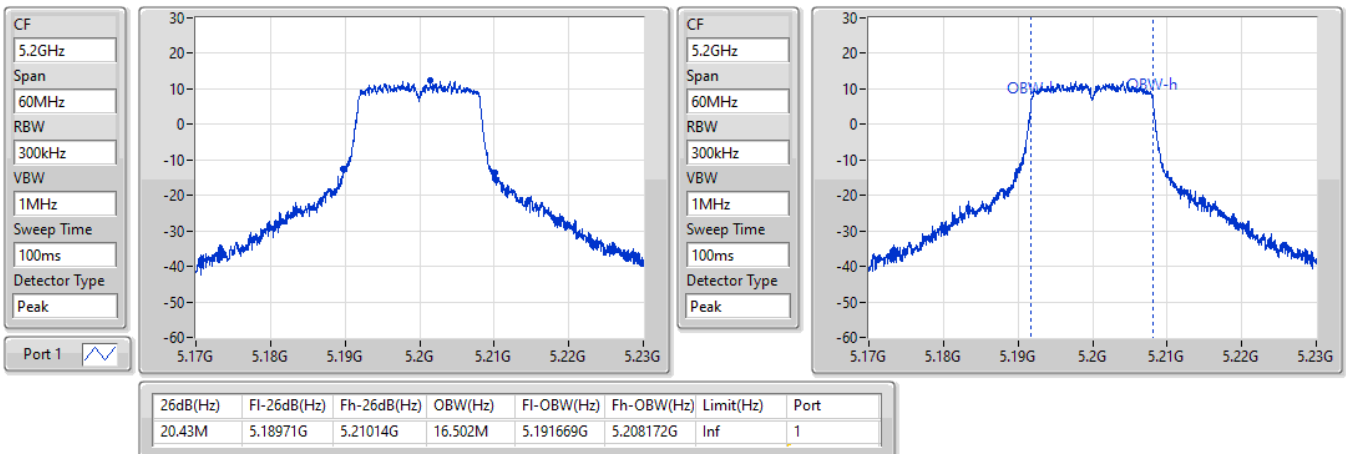
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX
EBW
5180MHz

18/08/2022


802.11a_Nss1,(6Mbps)_1TX
EBW
5200MHz

18/08/2022

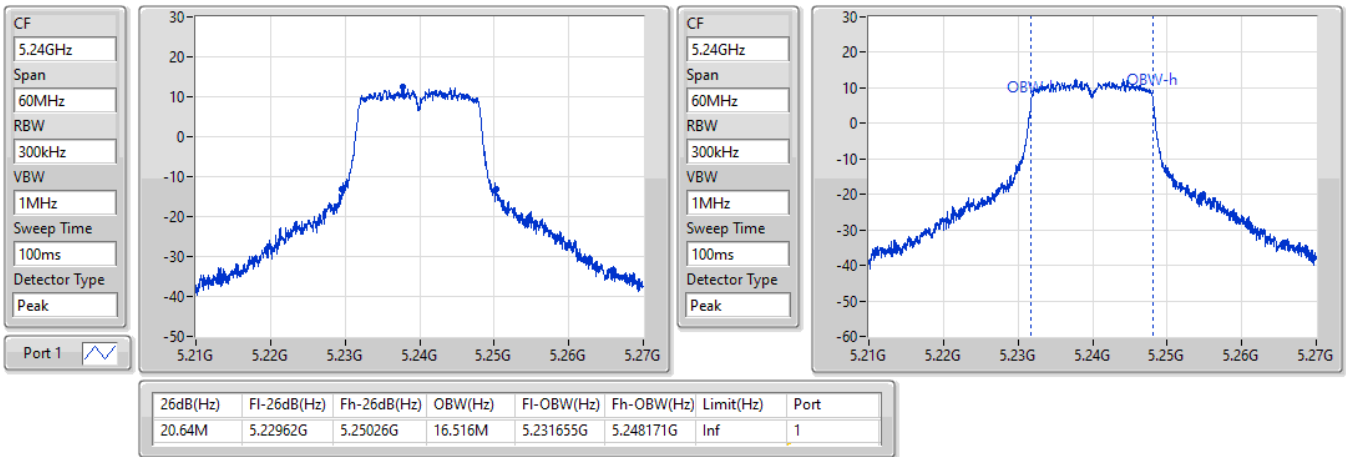


802.11a_Nss1,(6Mbps)_1TX

EBW

5240MHz

18/08/2022

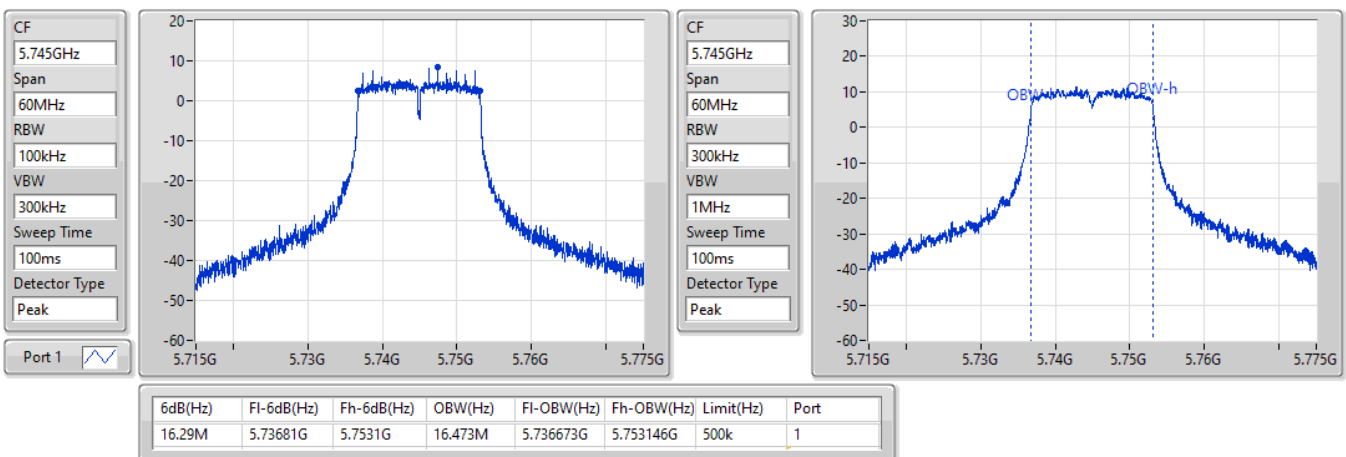


802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

18/08/2022

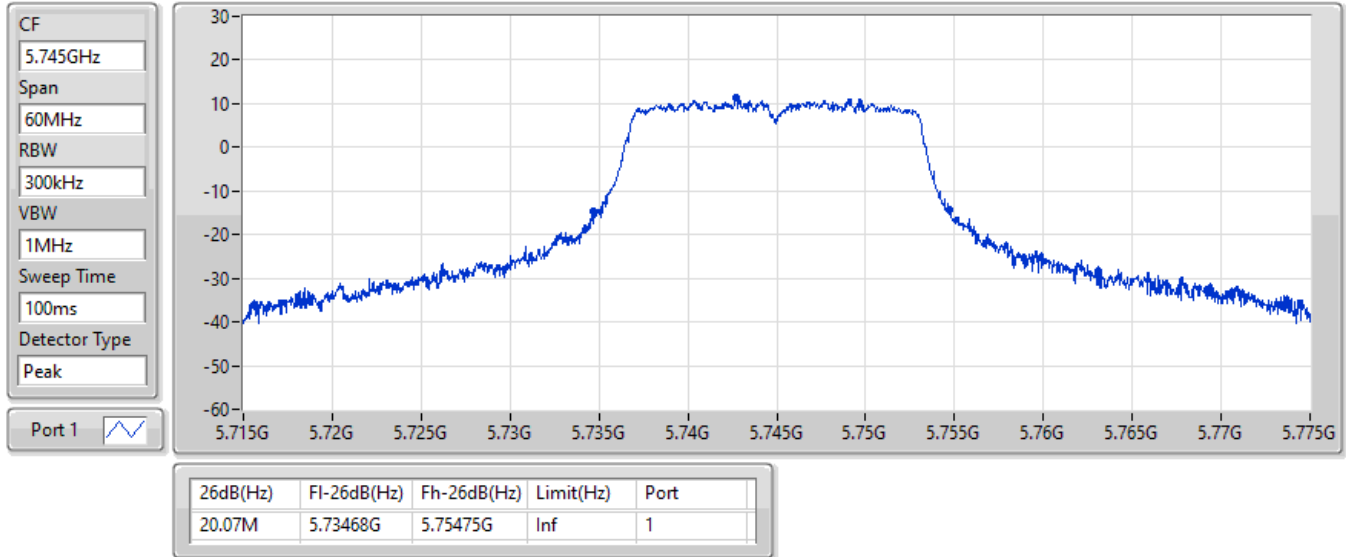


802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

18/08/2022

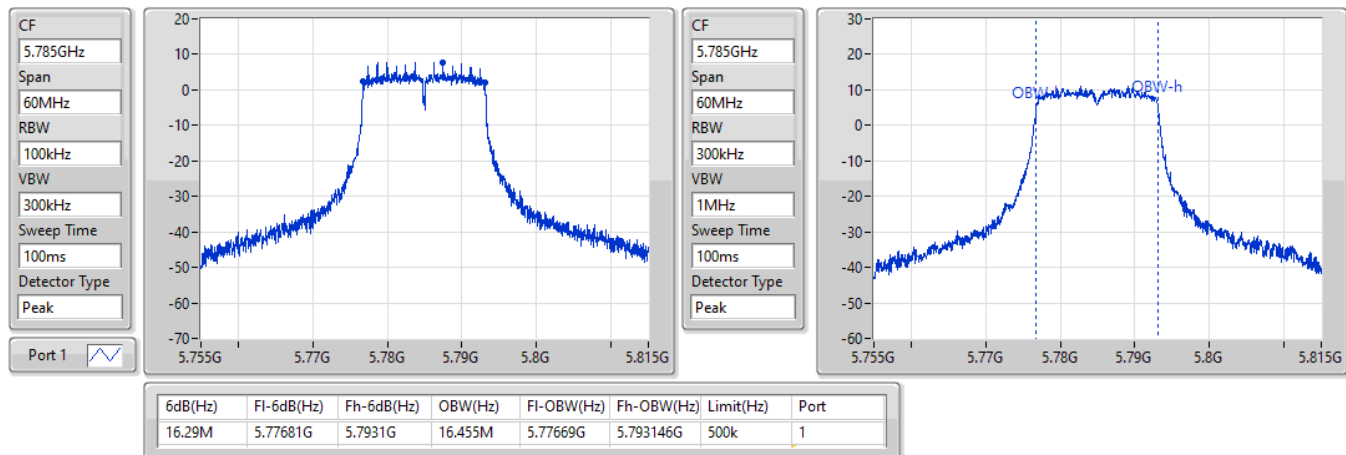


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

18/08/2022

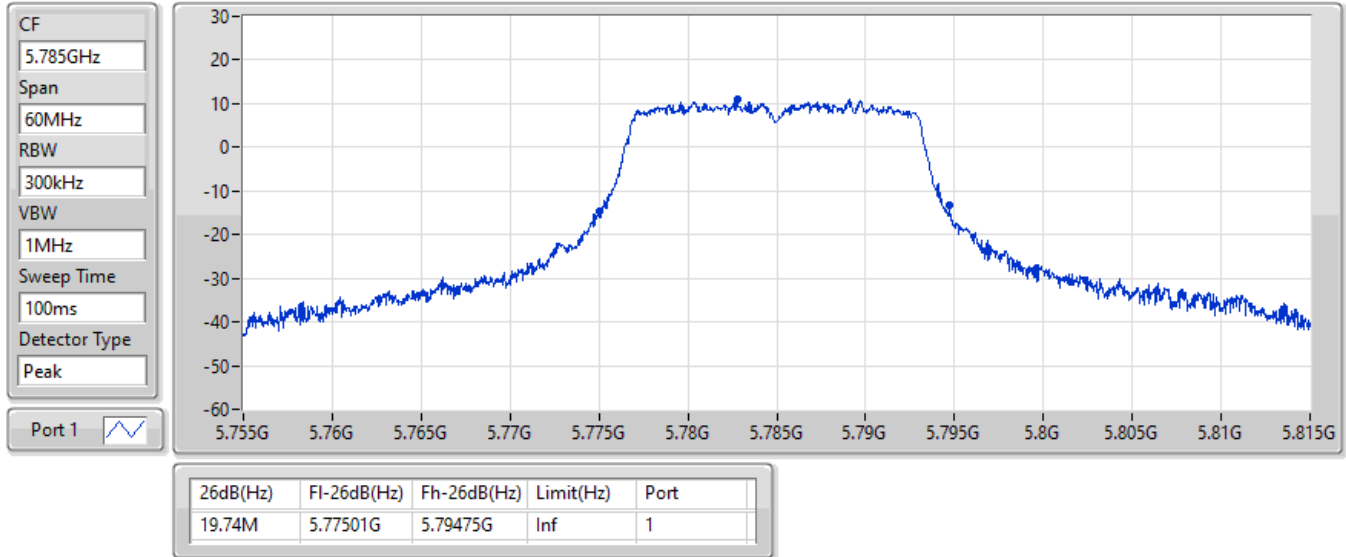


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

18/08/2022

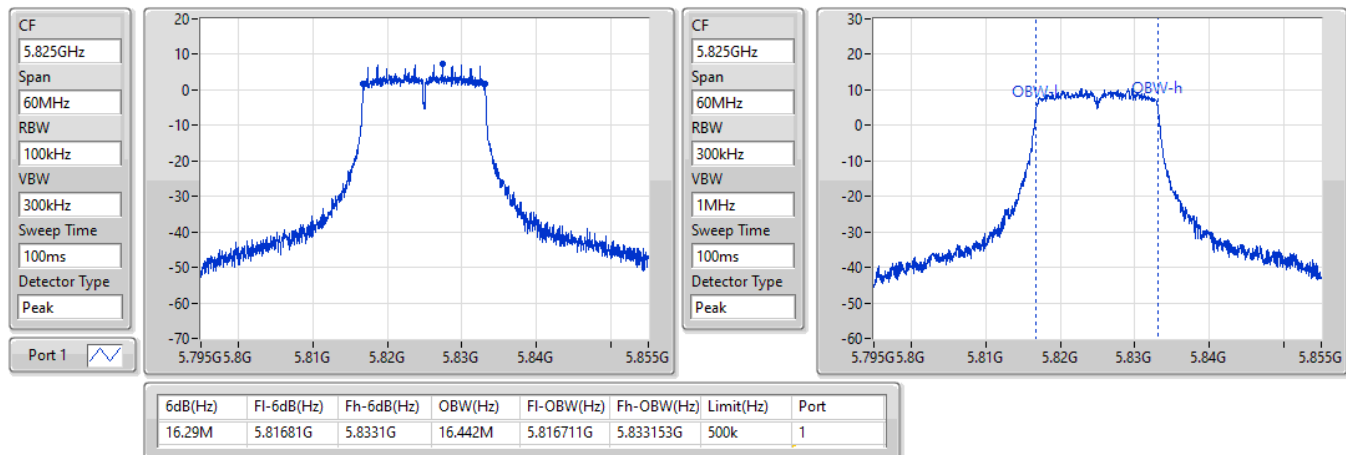


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

18/08/2022

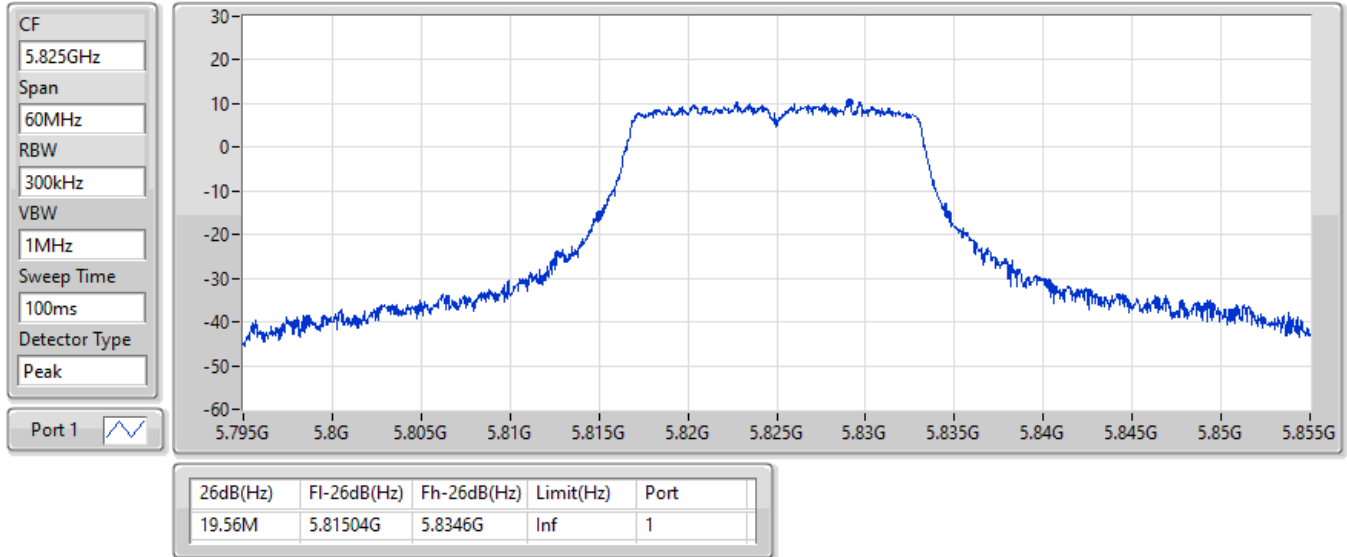


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

18/08/2022

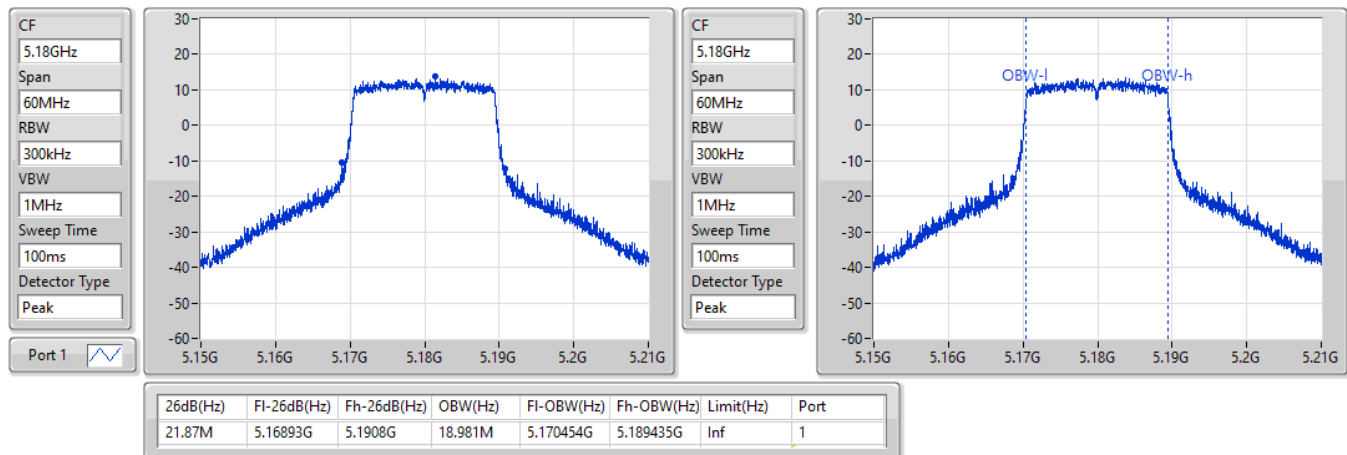


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5180MHz

18/08/2022

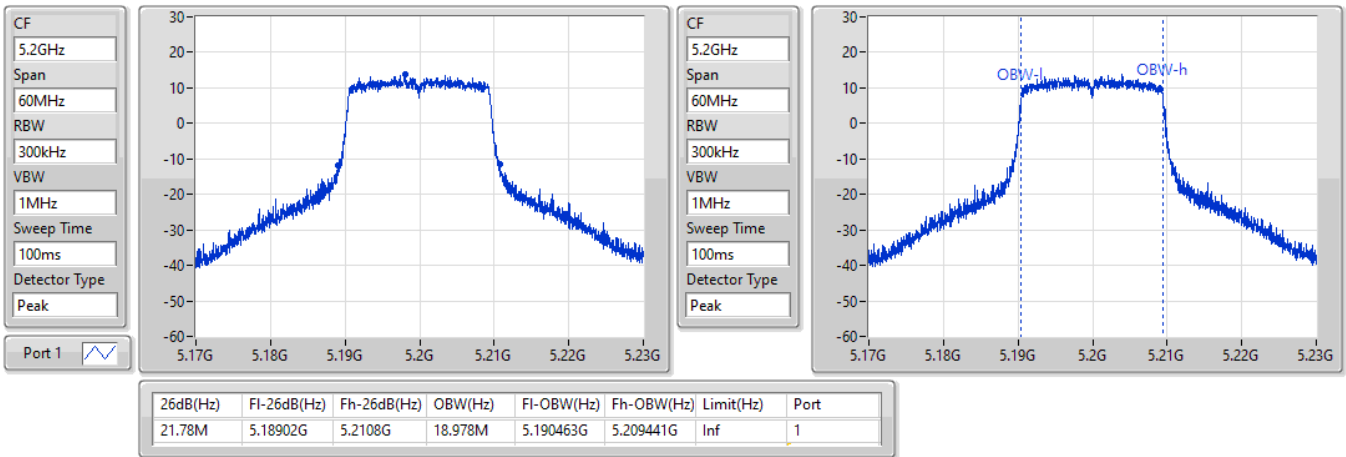


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5200MHz

18/08/2022

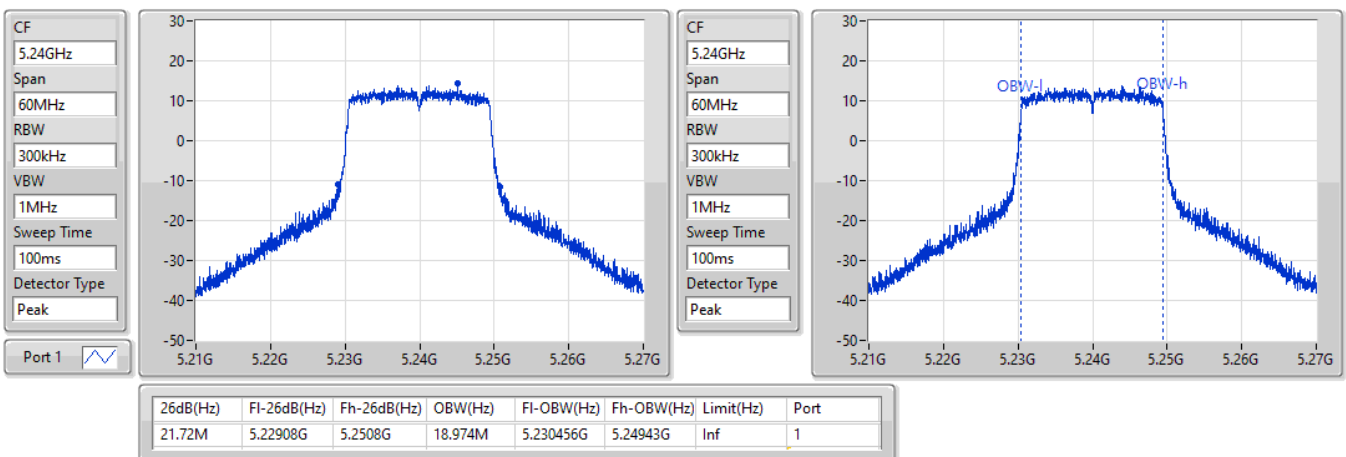


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5240MHz

18/08/2022

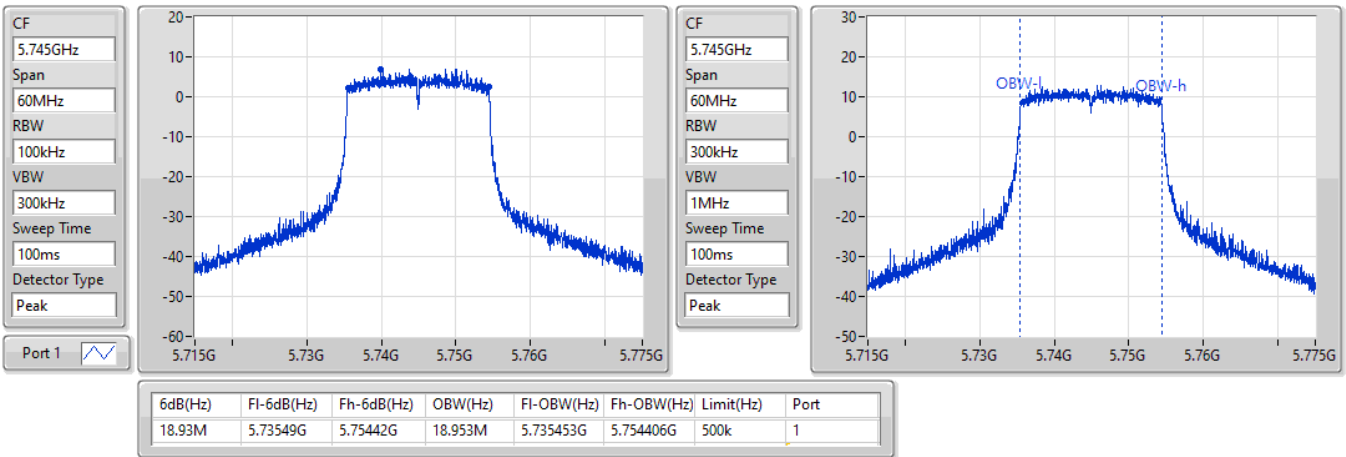


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

18/08/2022

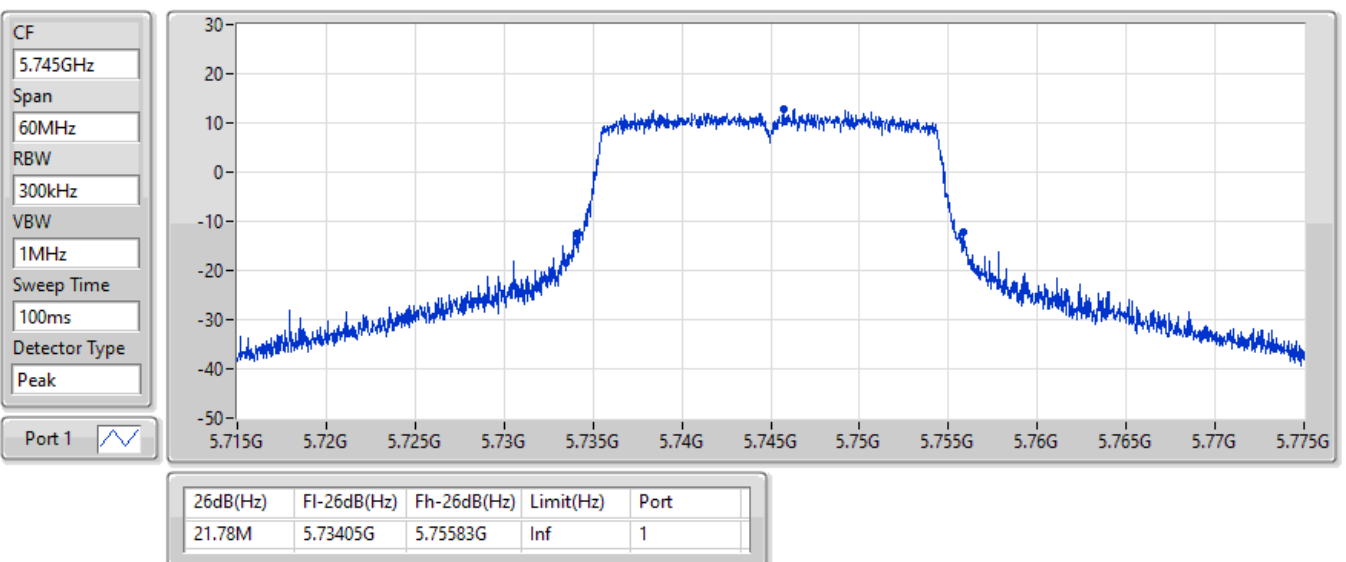


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

18/08/2022

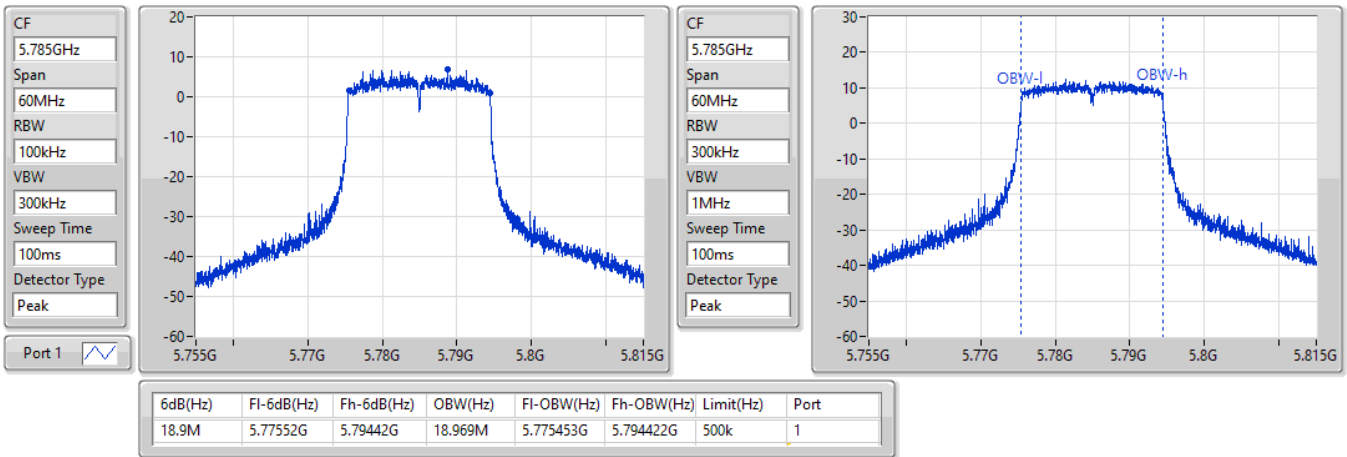


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

18/08/2022

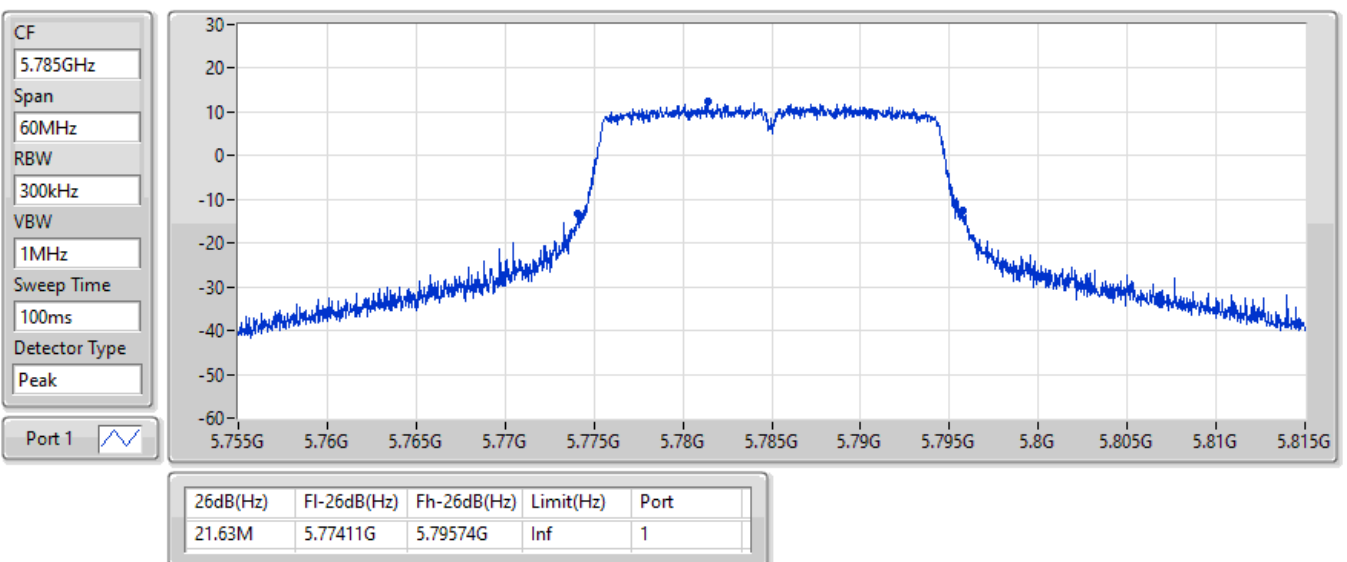


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

18/08/2022

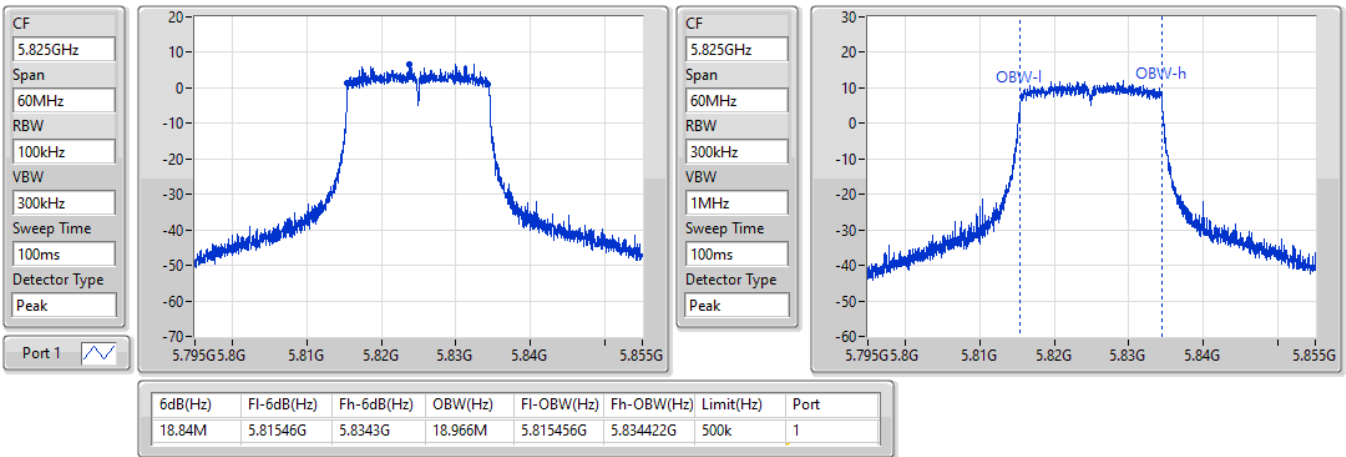


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

18/08/2022

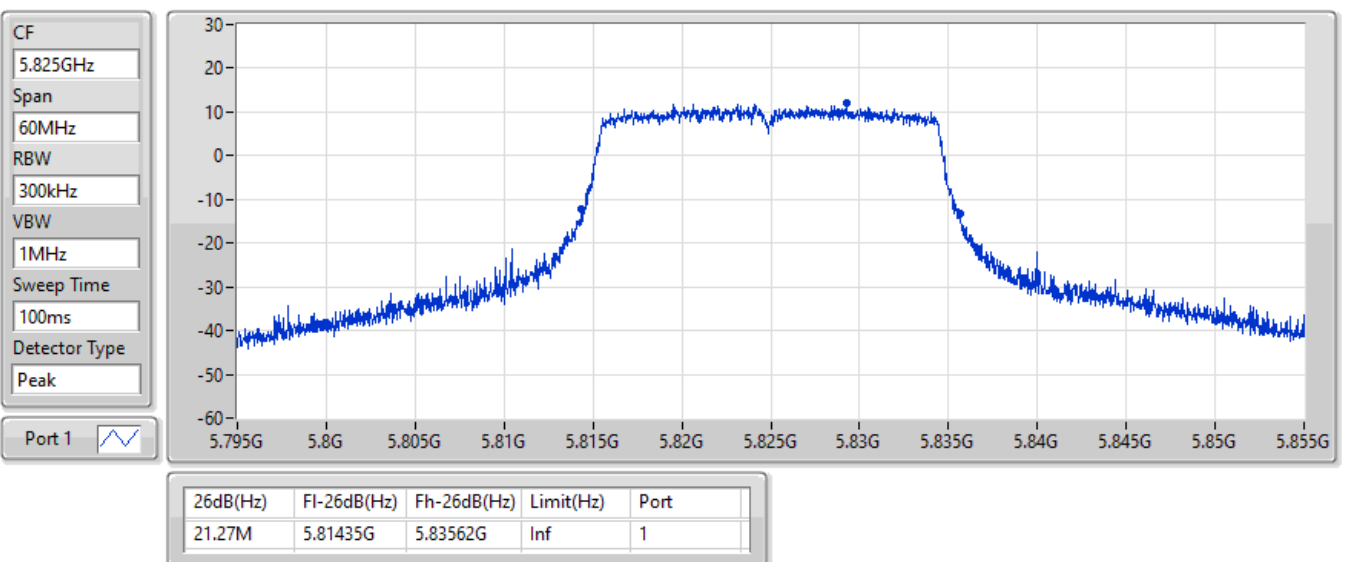


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

18/08/2022

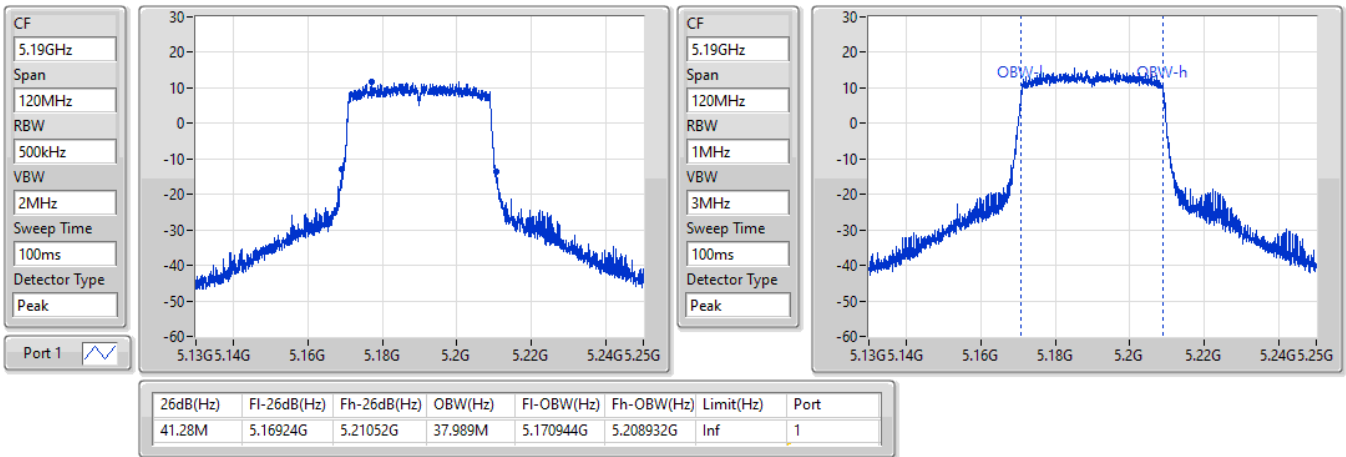


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5190MHz

19/08/2022

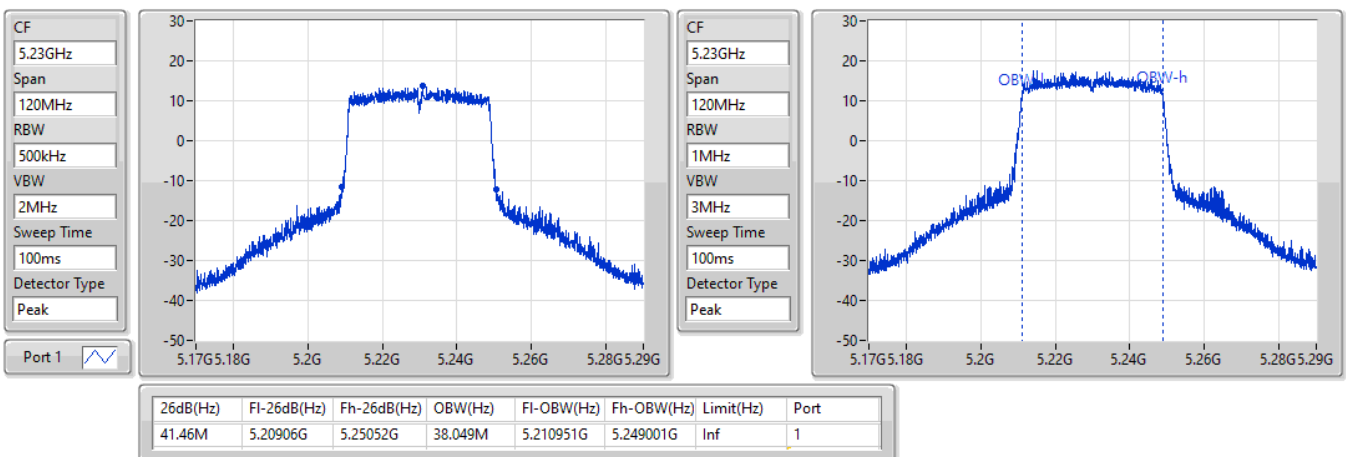


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5230MHz

18/08/2022

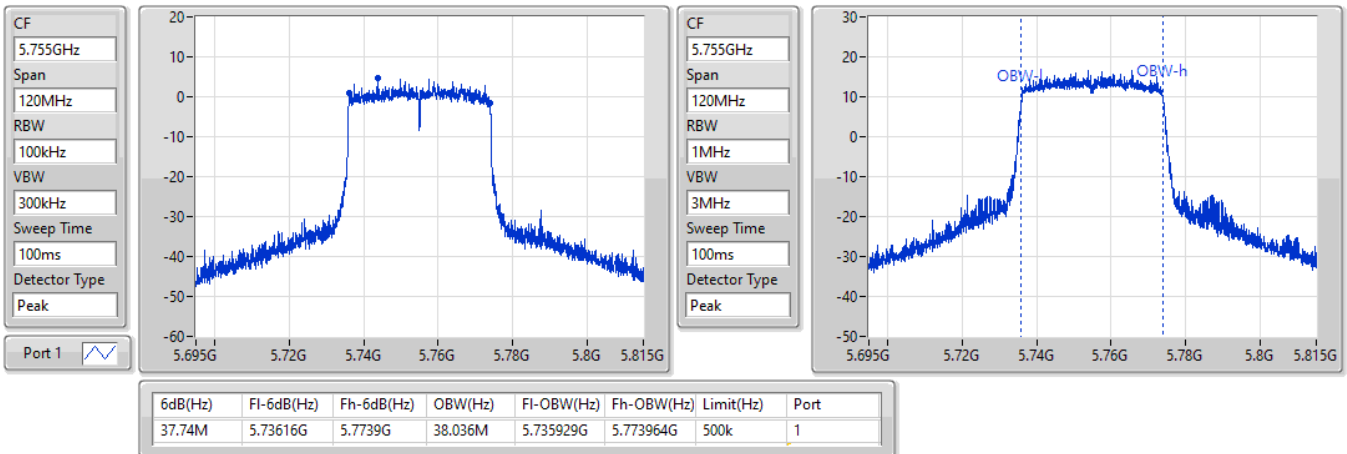


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

18/08/2022

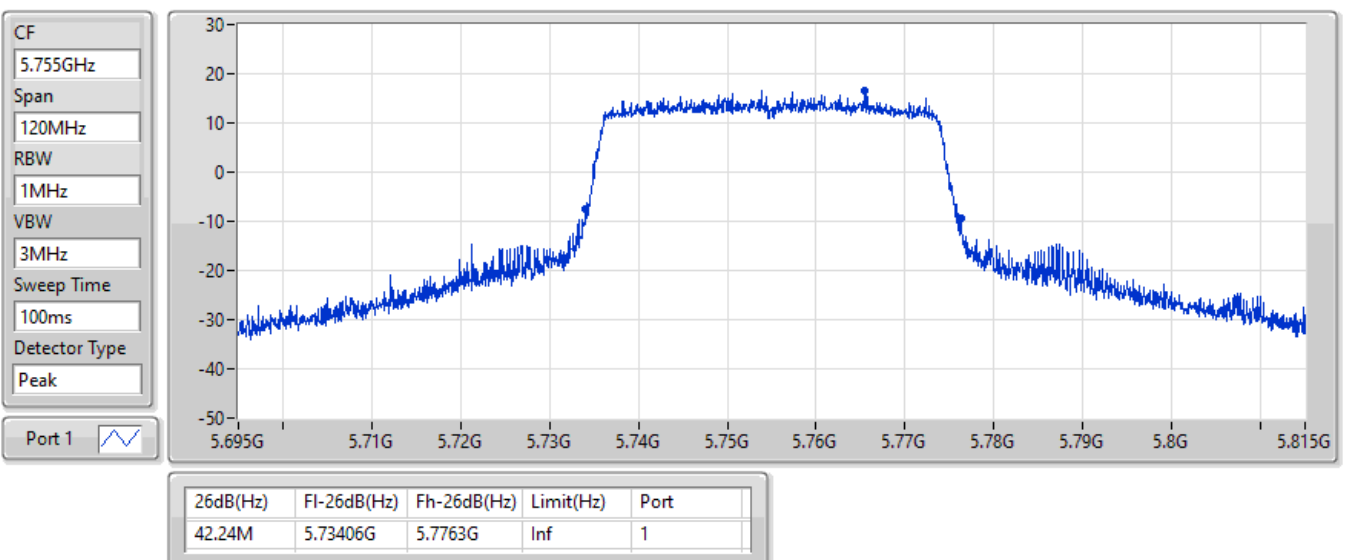


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

18/08/2022

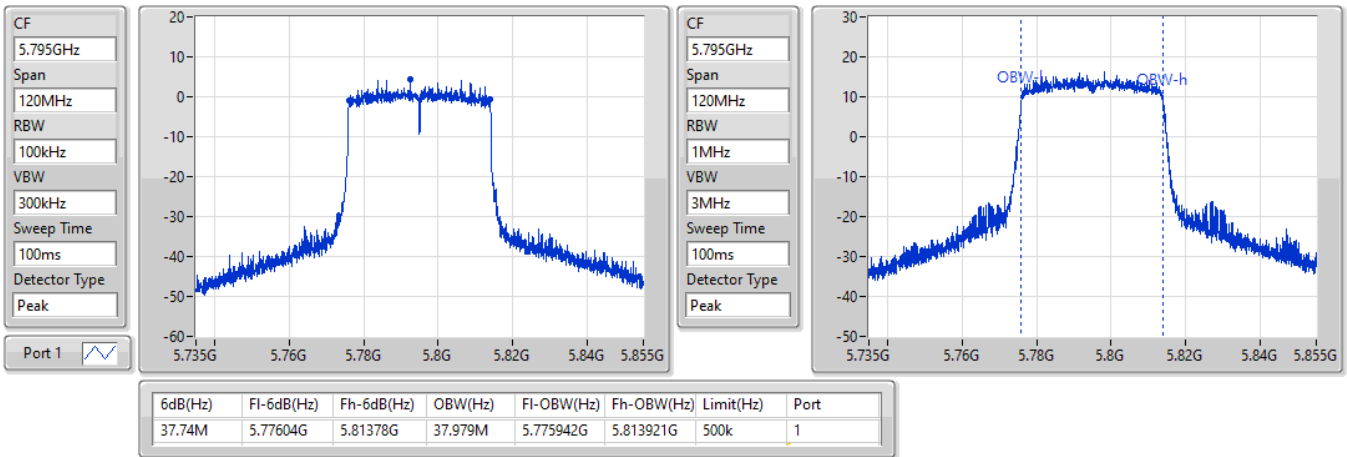


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

18/08/2022

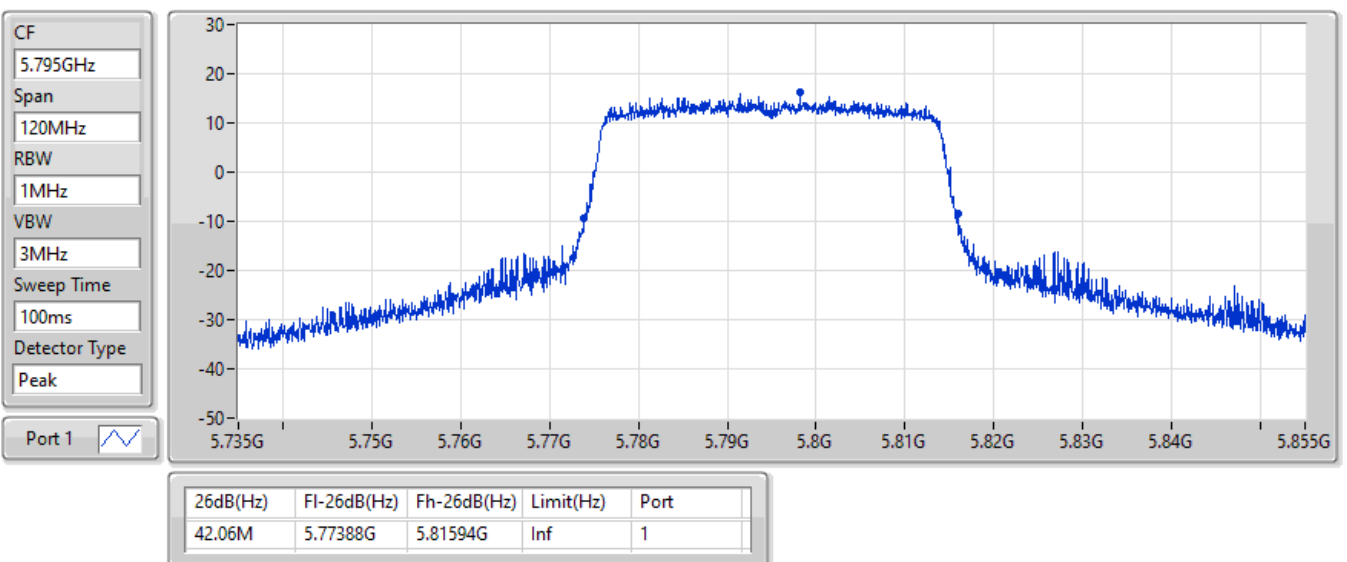


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

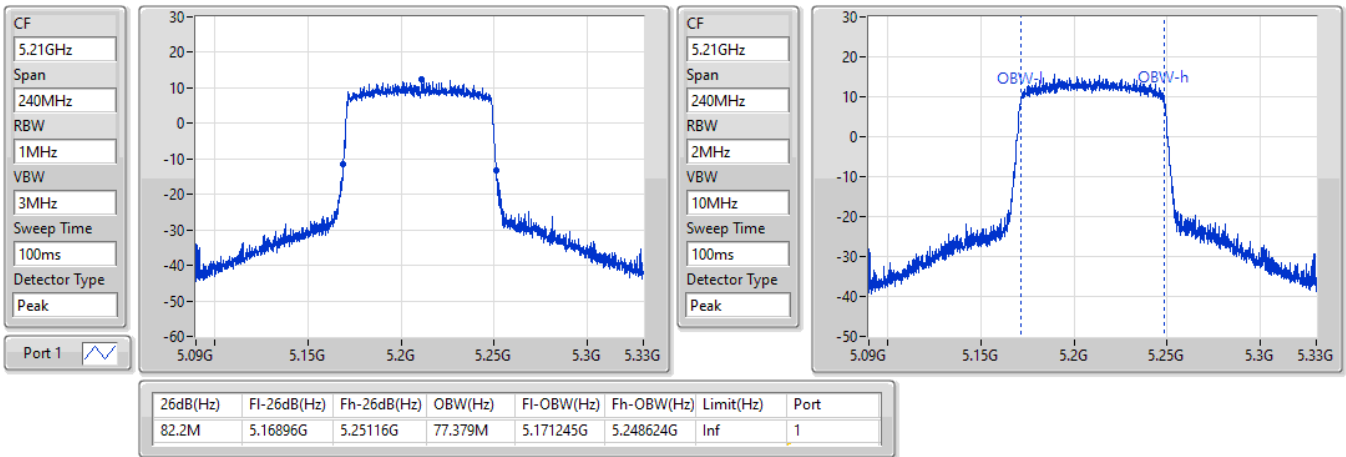
5795MHz

18/08/2022

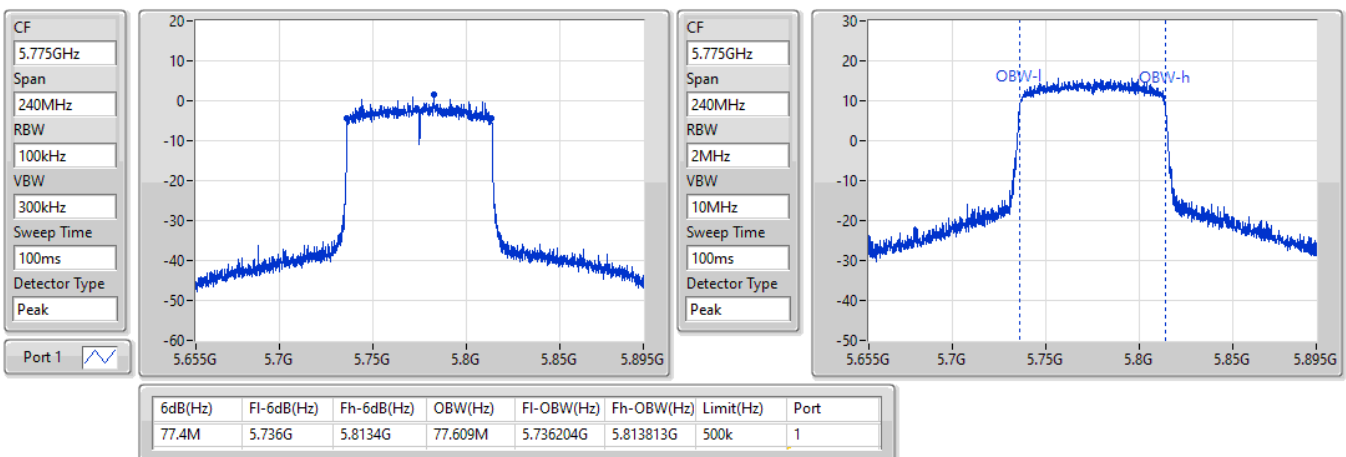


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5210MHz

19/08/2022


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5775MHz

18/08/2022

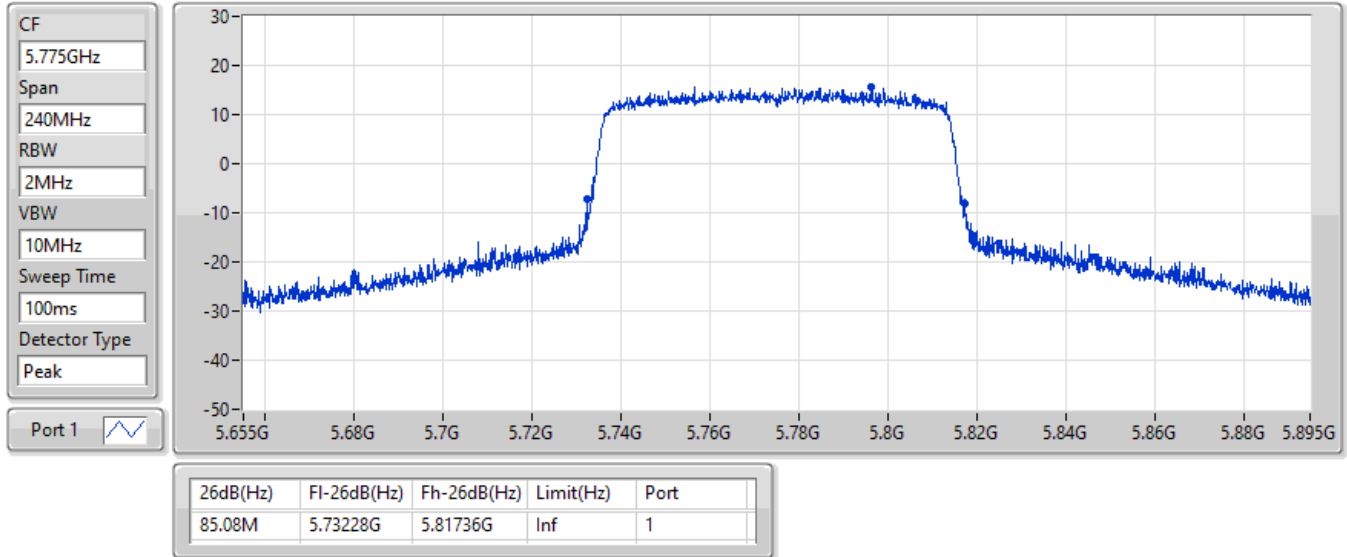


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

18/08/2022

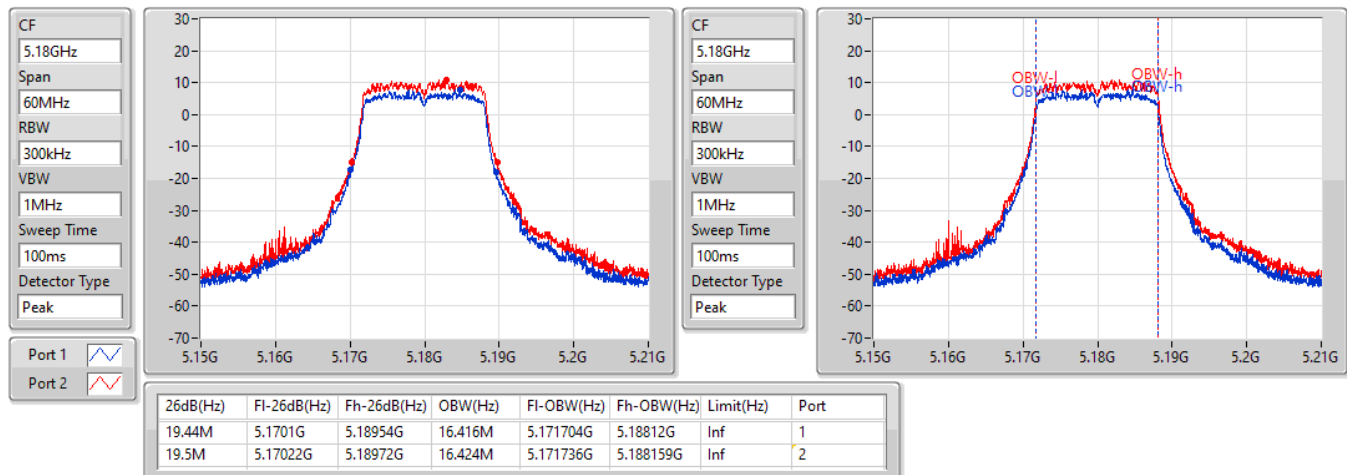


802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

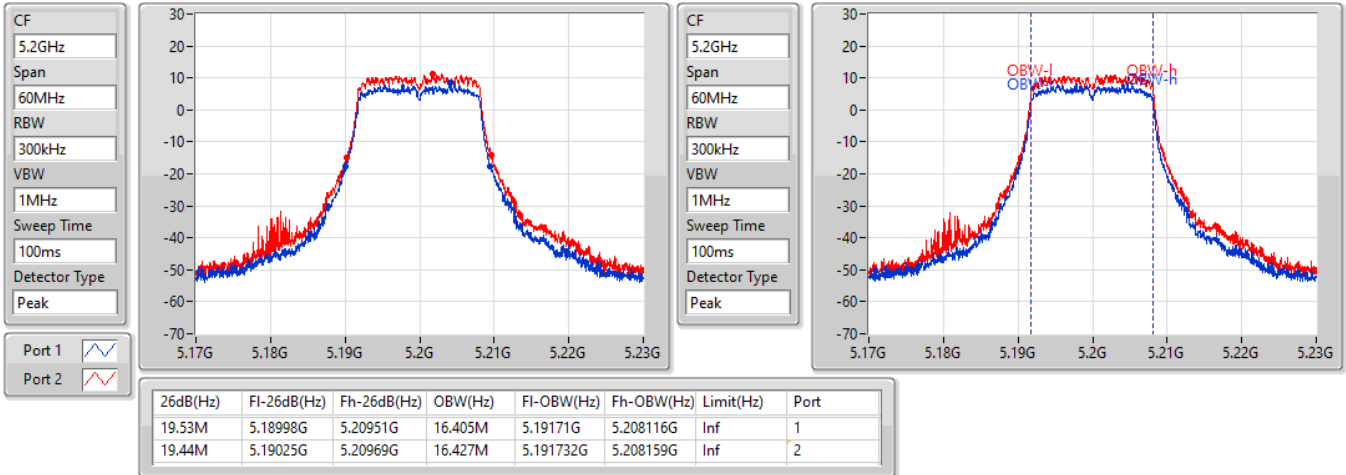
19/08/2022



802.11a_Nss1,(6Mbps)_2TX

5200MHz

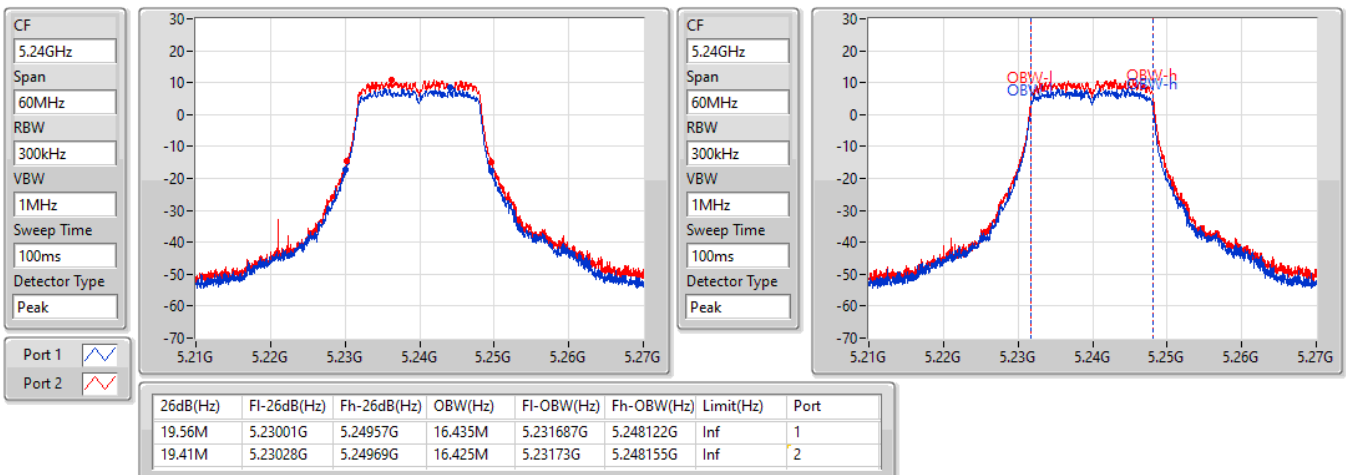
19/08/2022



802.11a_Nss1,(6Mbps)_2TX

5240MHz

19/08/2022

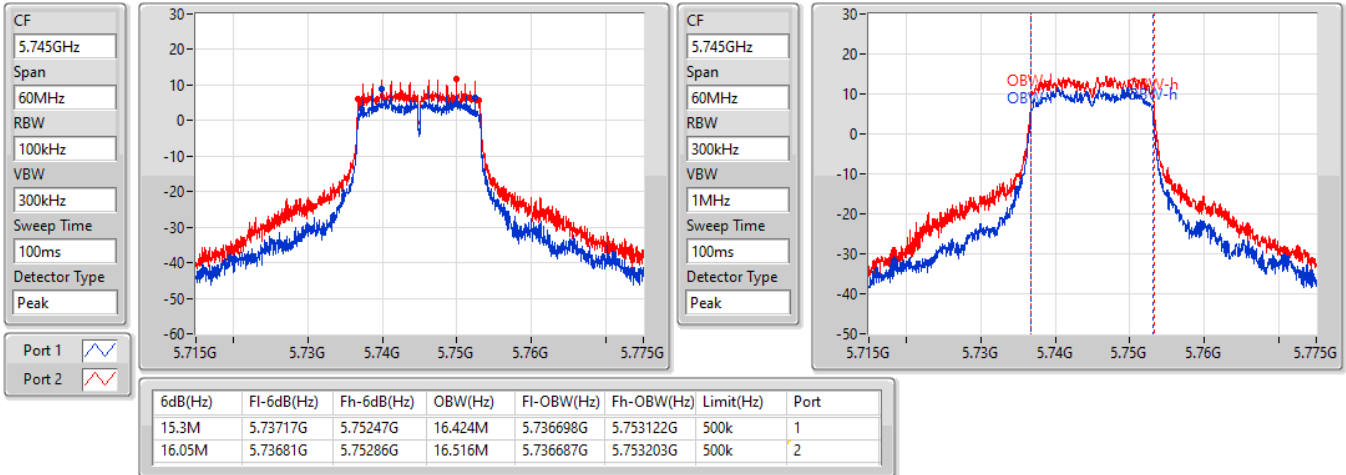


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

18/08/2022

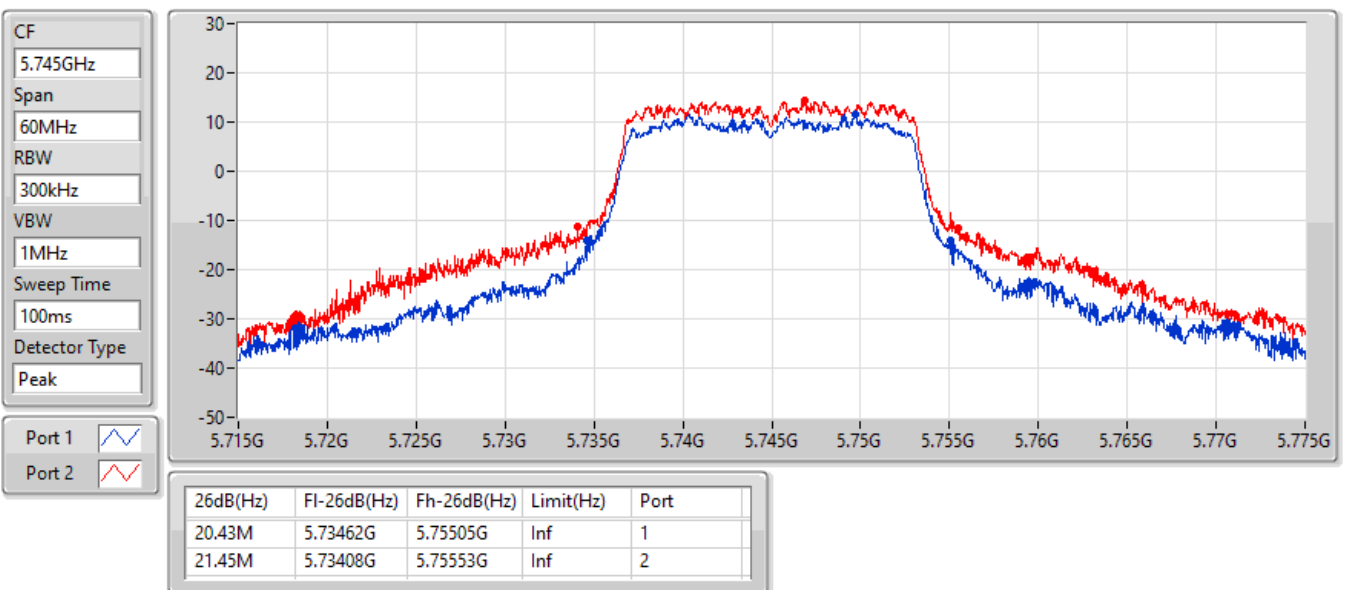


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

18/08/2022

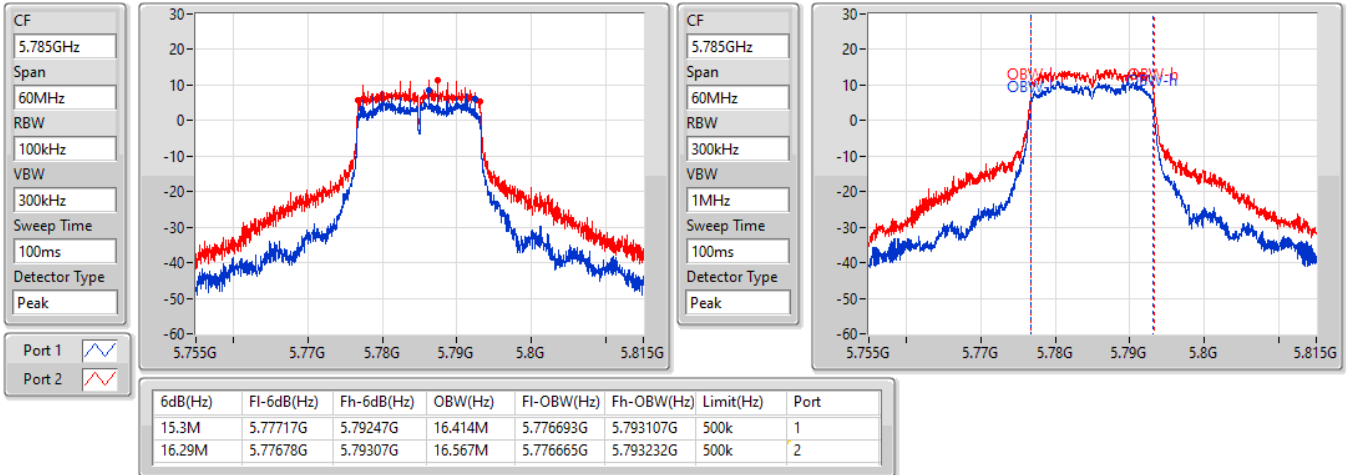


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

18/08/2022

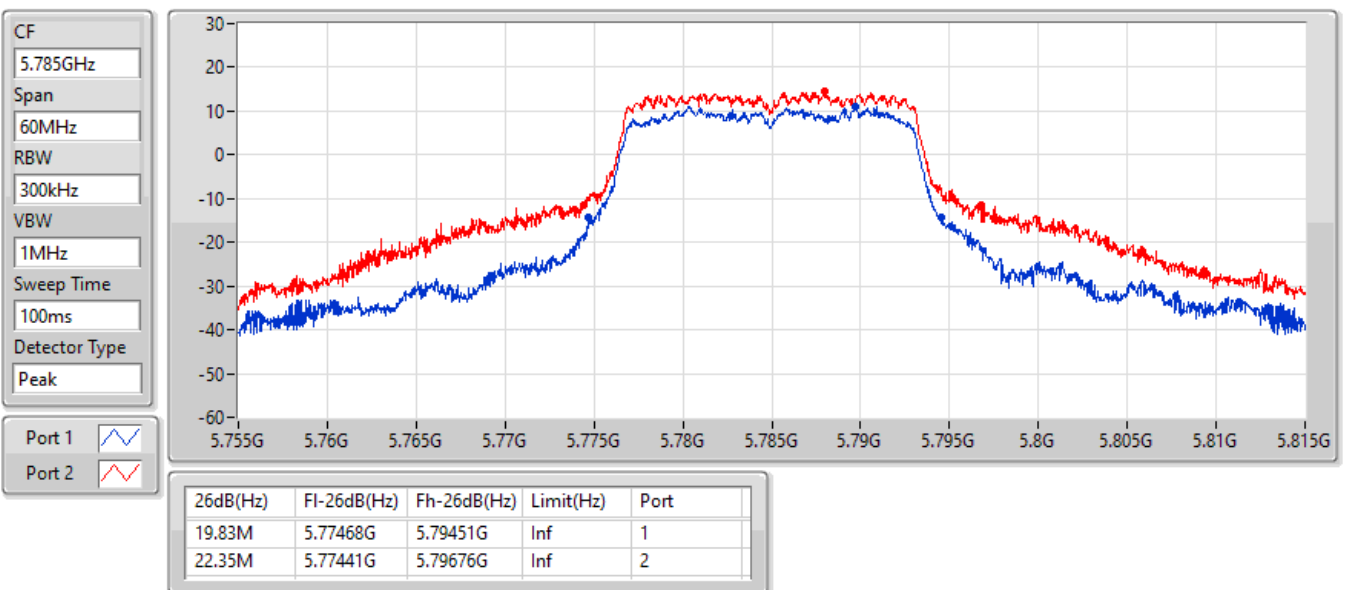


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

18/08/2022

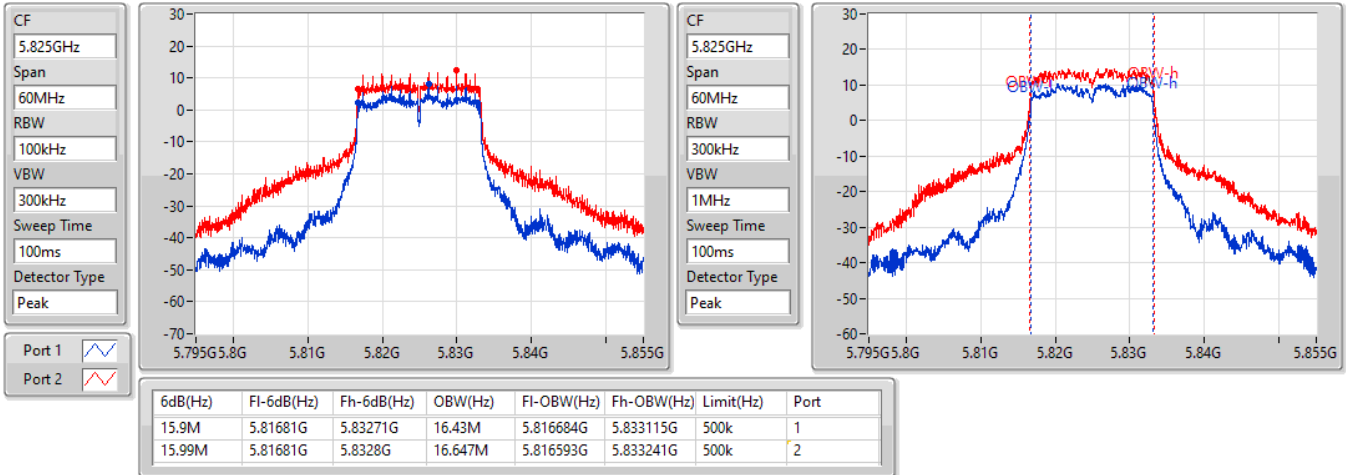


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

18/08/2022

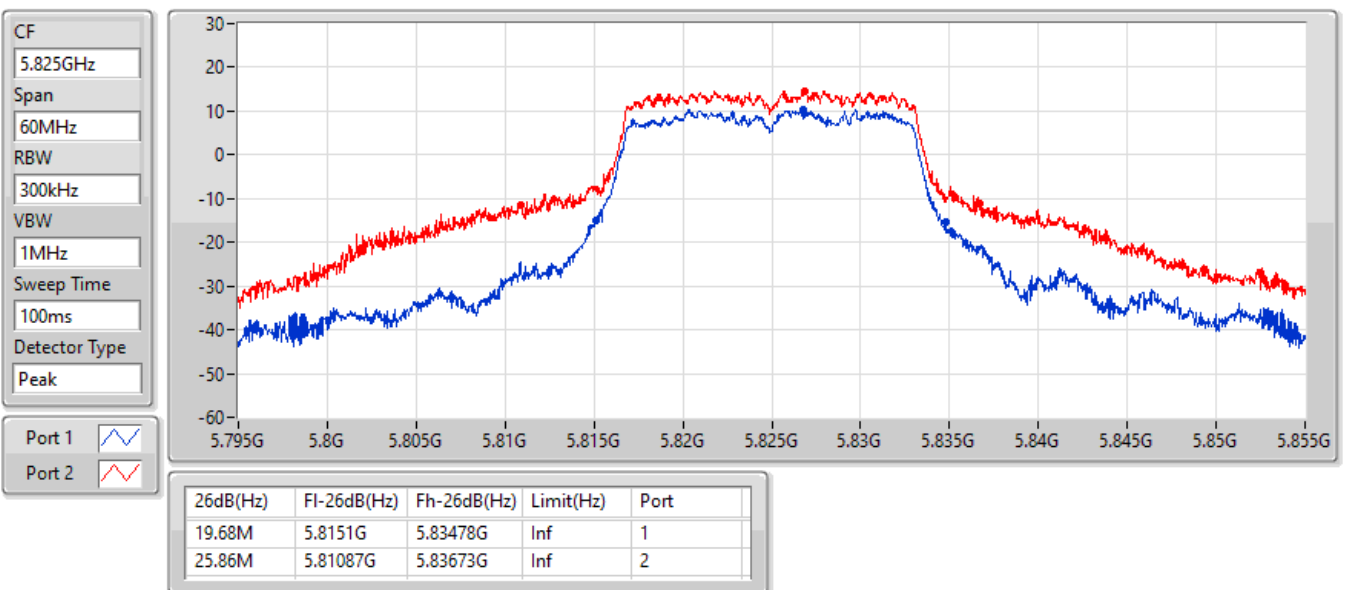


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

18/08/2022

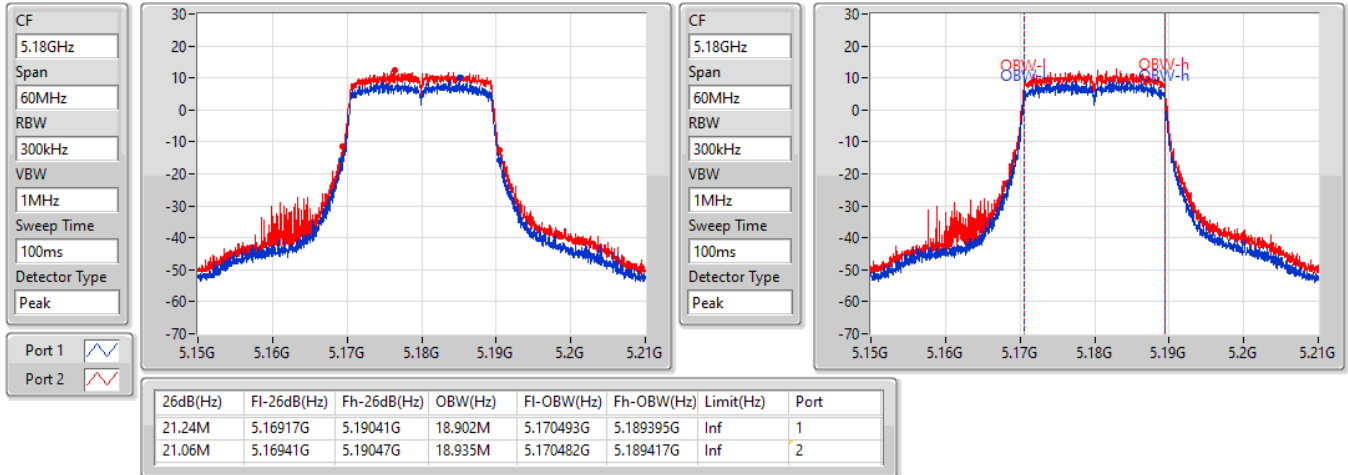


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5180MHz

19/08/2022

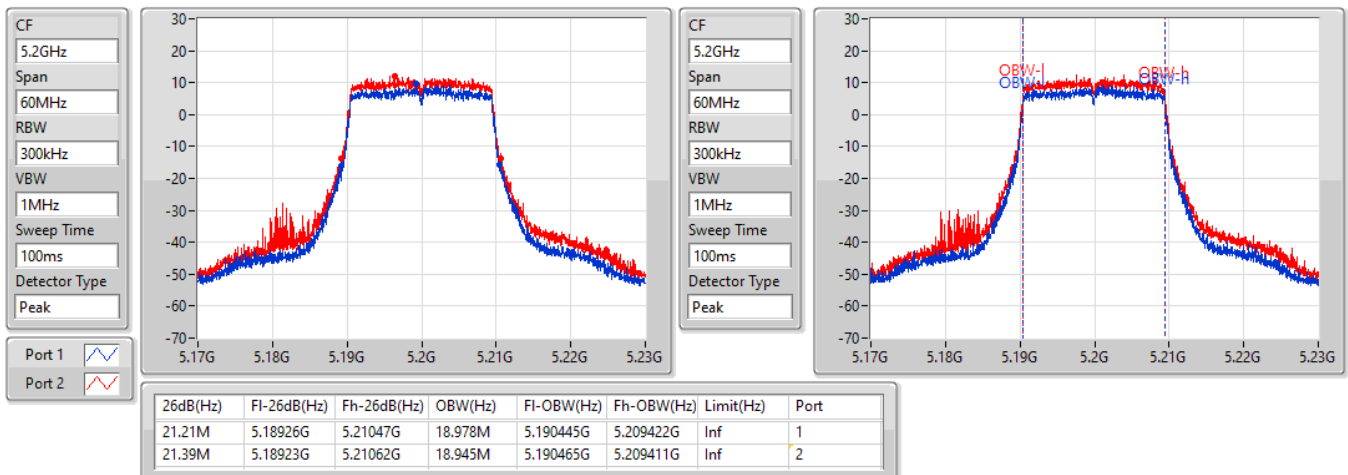


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

19/08/2022

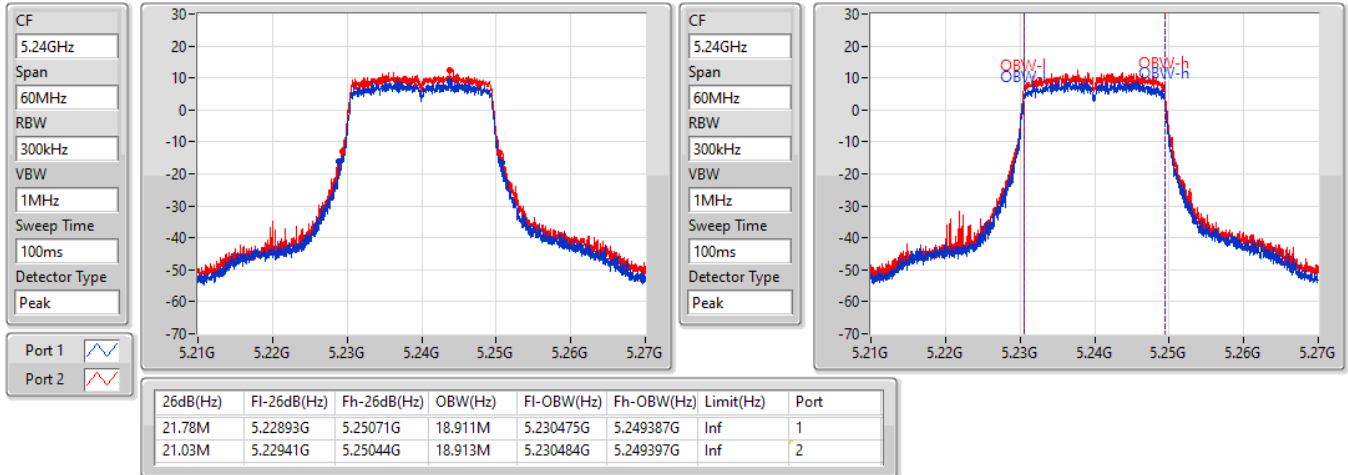


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

19/08/2022

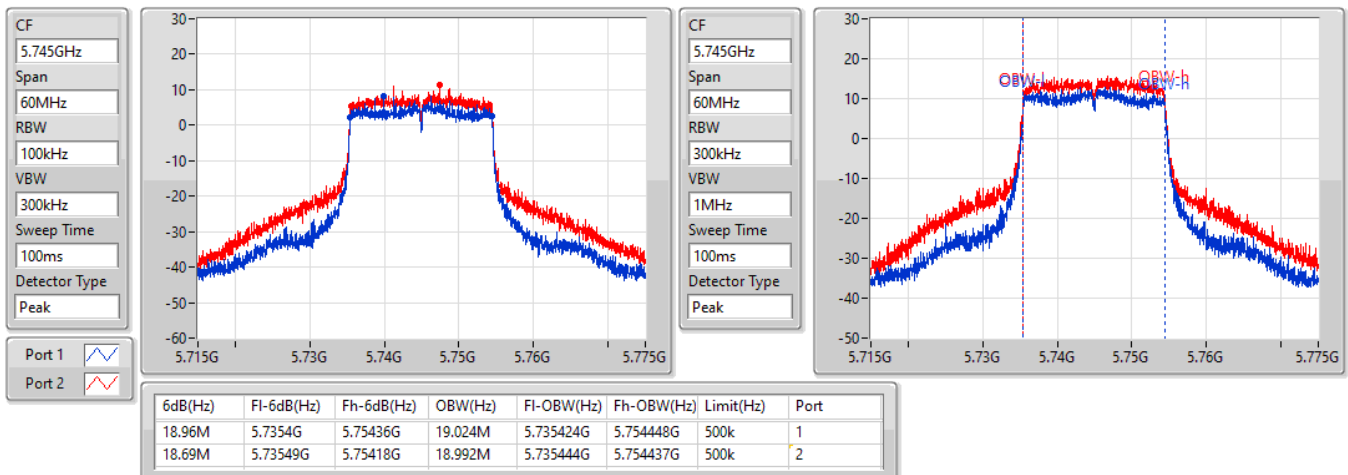


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

18/08/2022

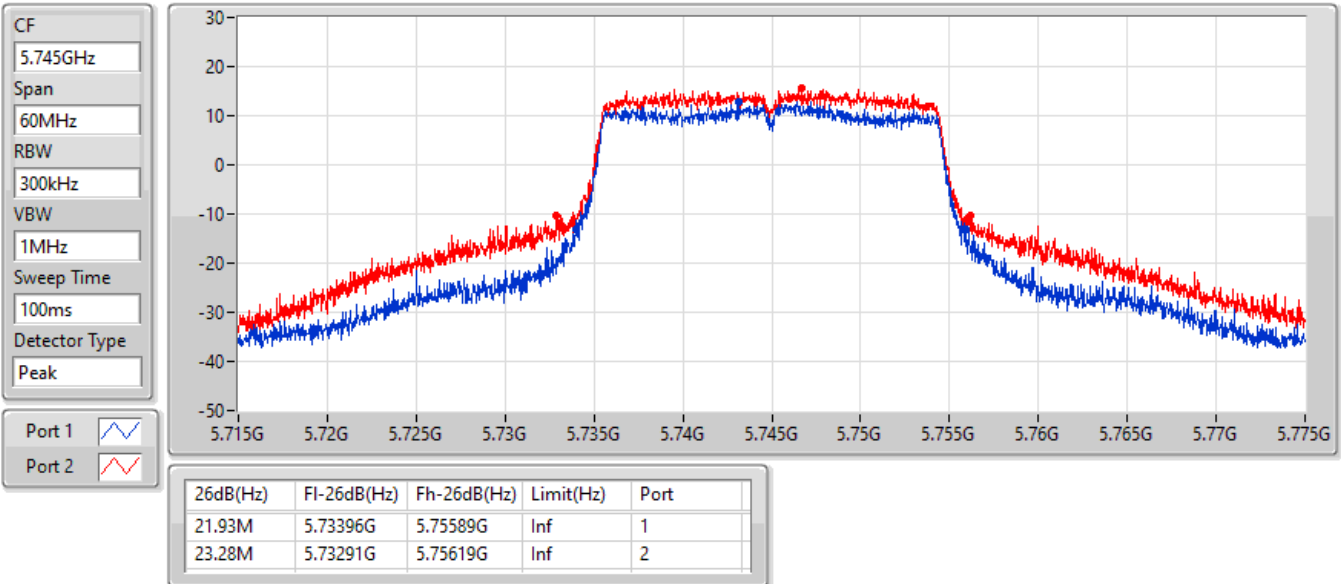


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

18/08/2022

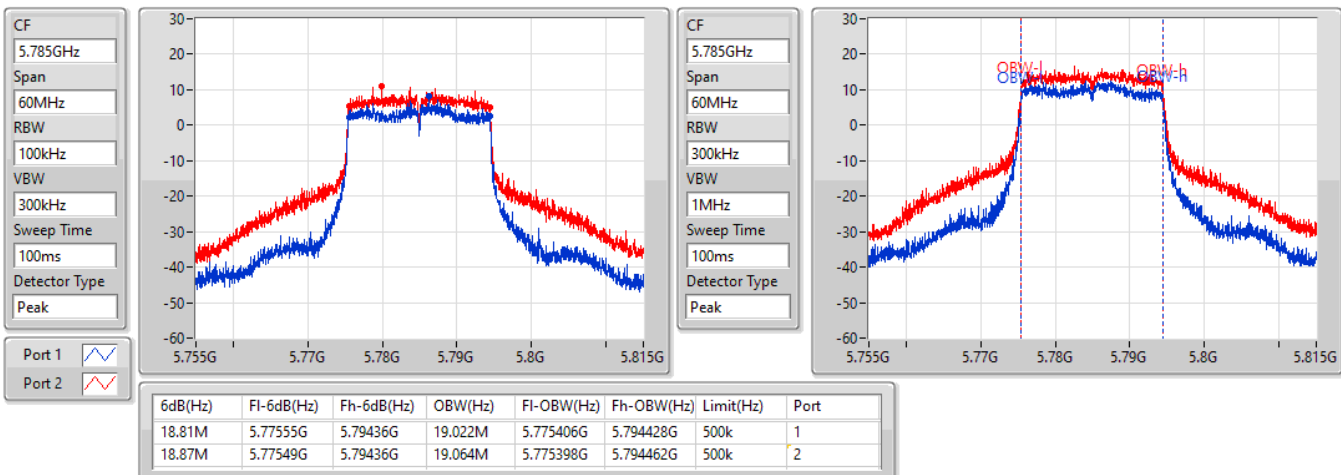


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

18/08/2022

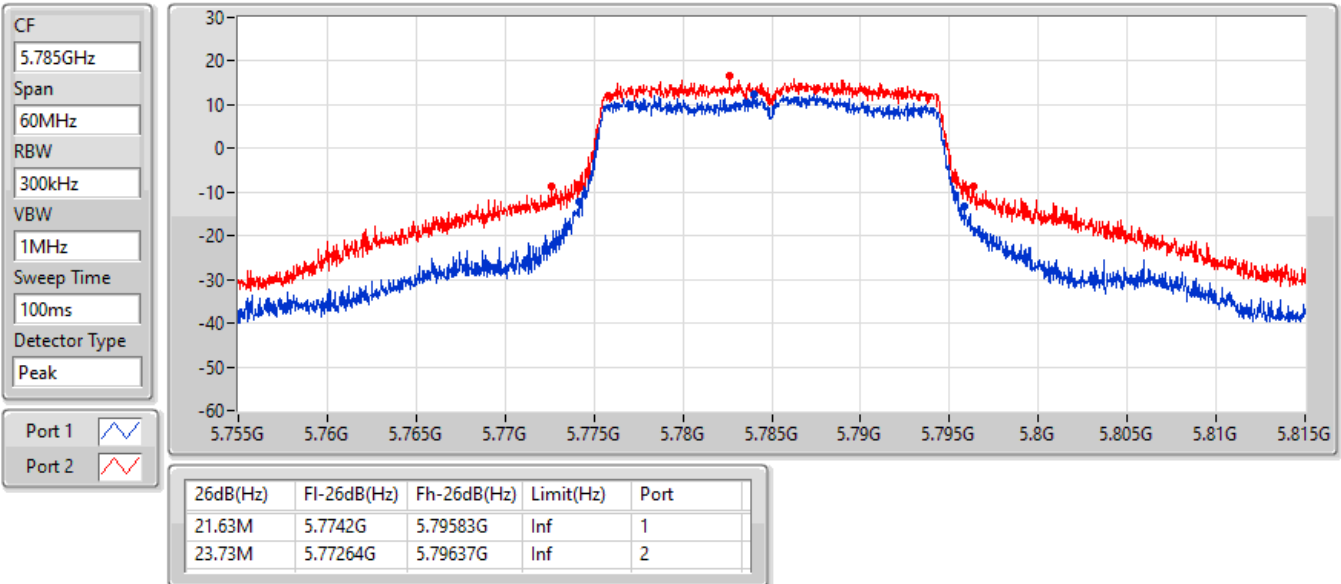


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

18/08/2022

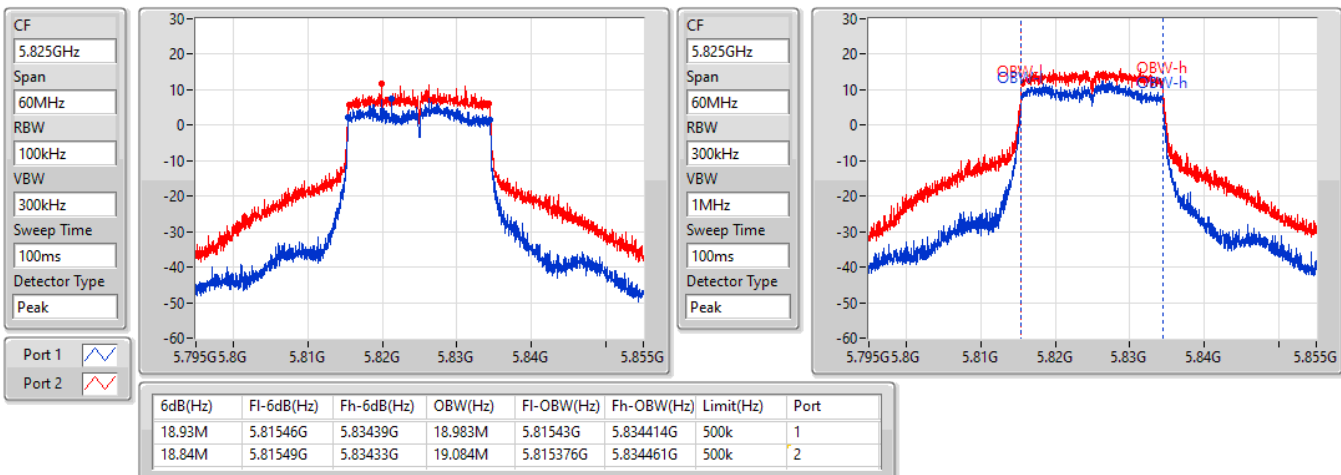


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

18/08/2022

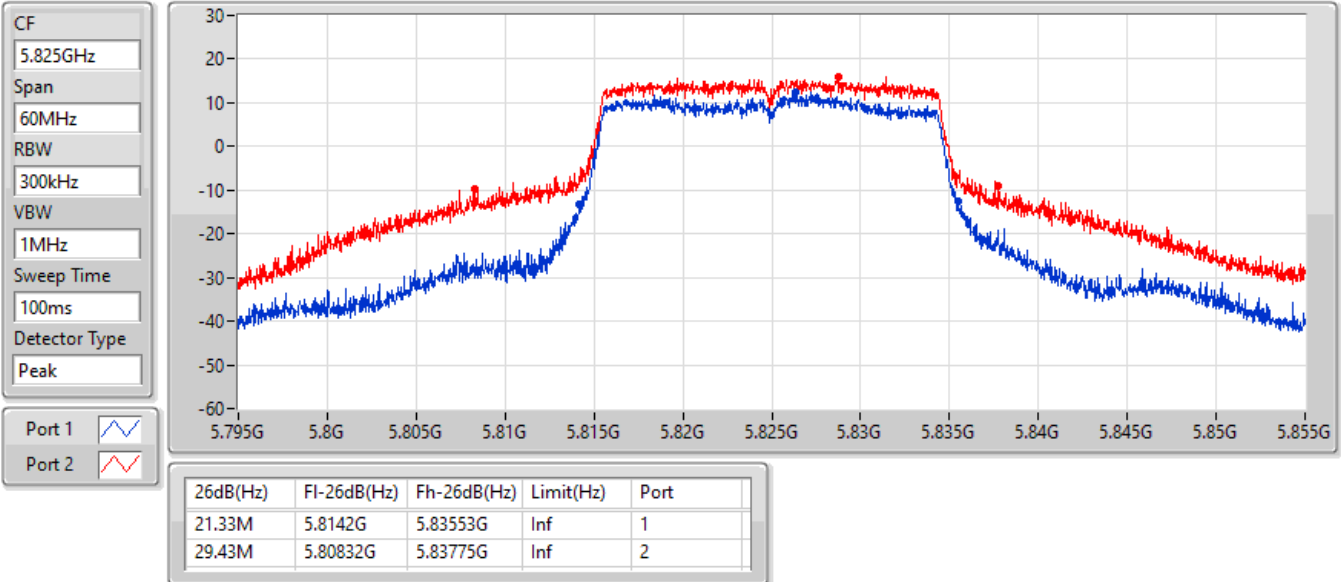


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

18/08/2022

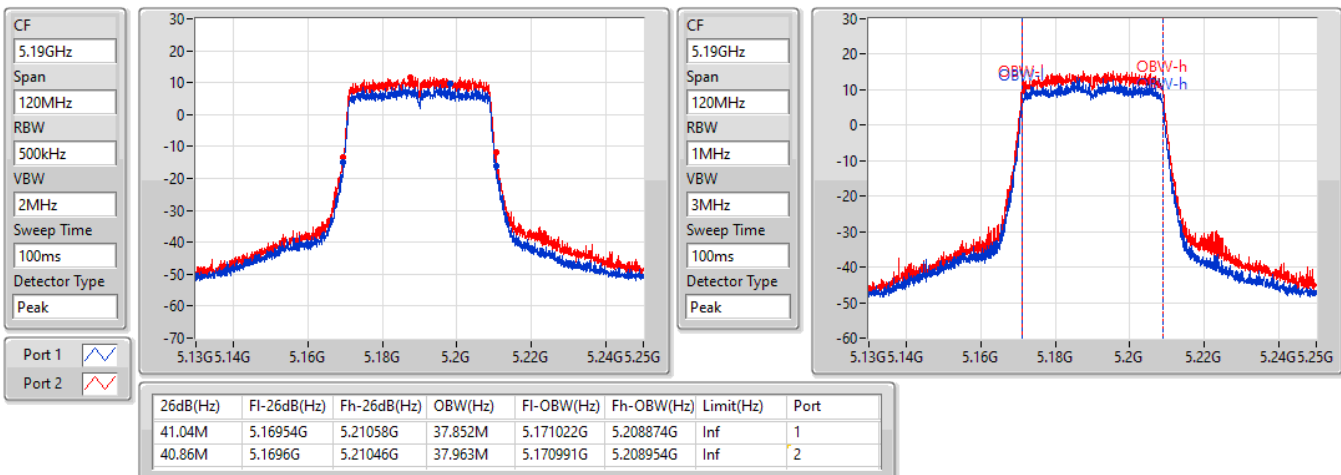


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5190MHz

19/08/2022

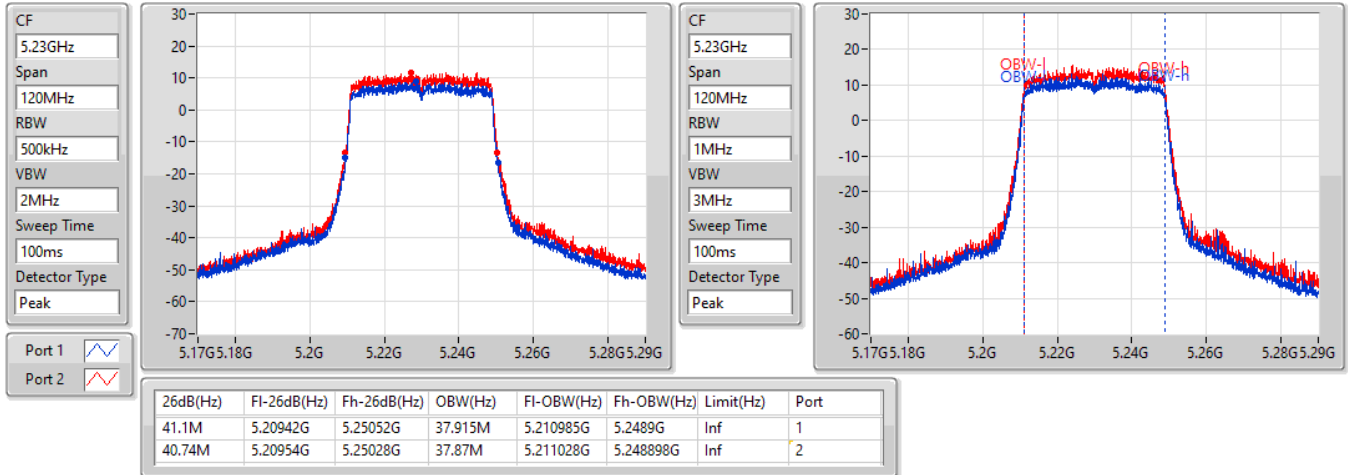


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5230MHz

19/08/2022

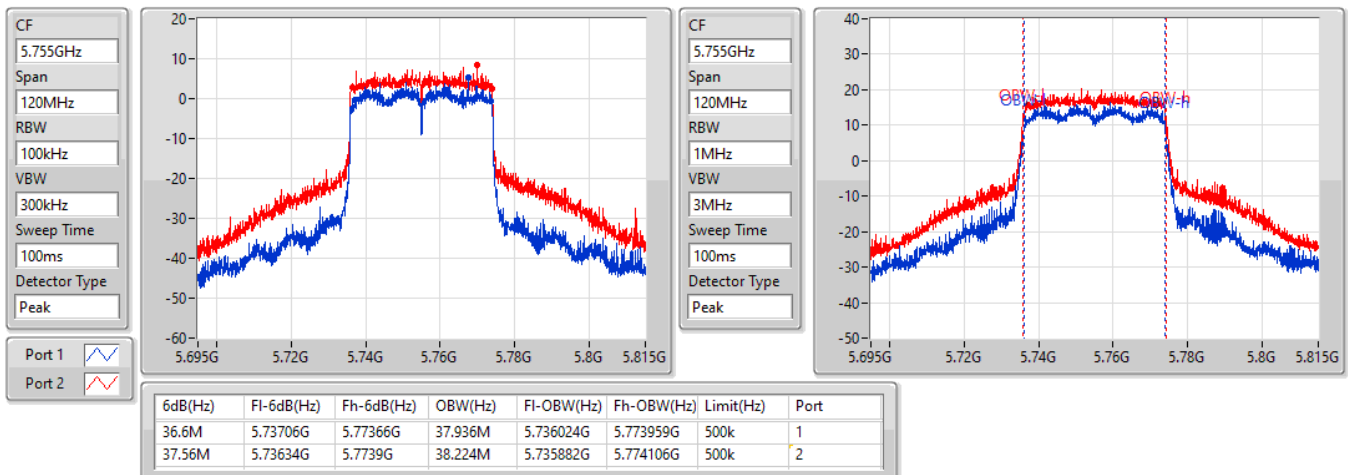


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

18/08/2022

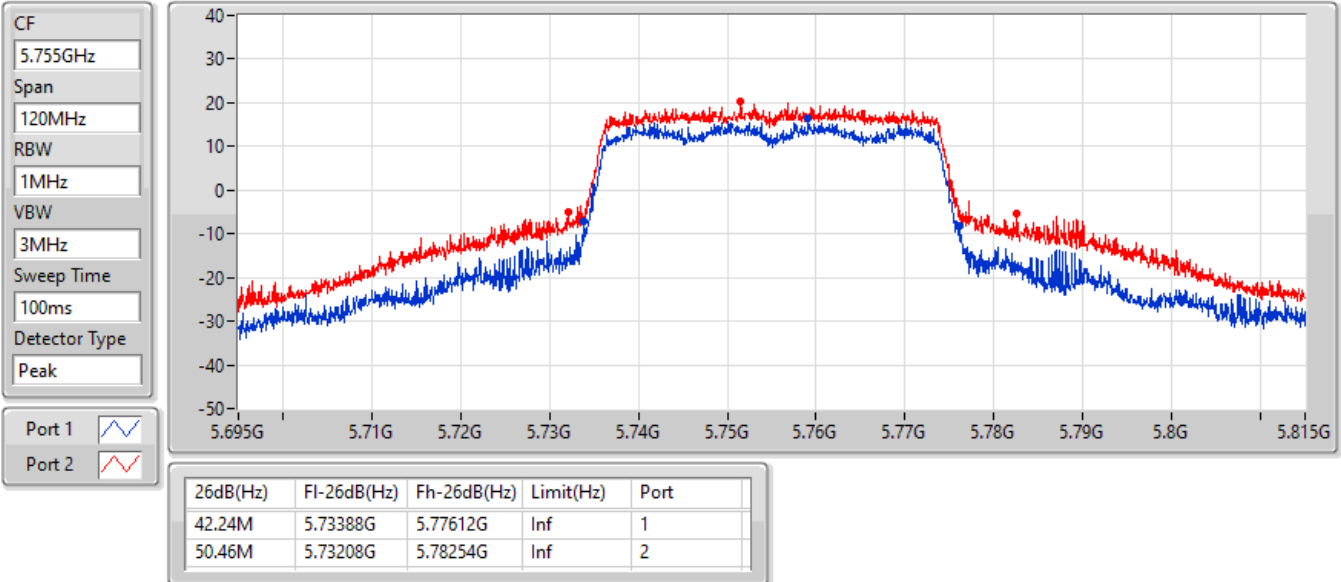


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

18/08/2022

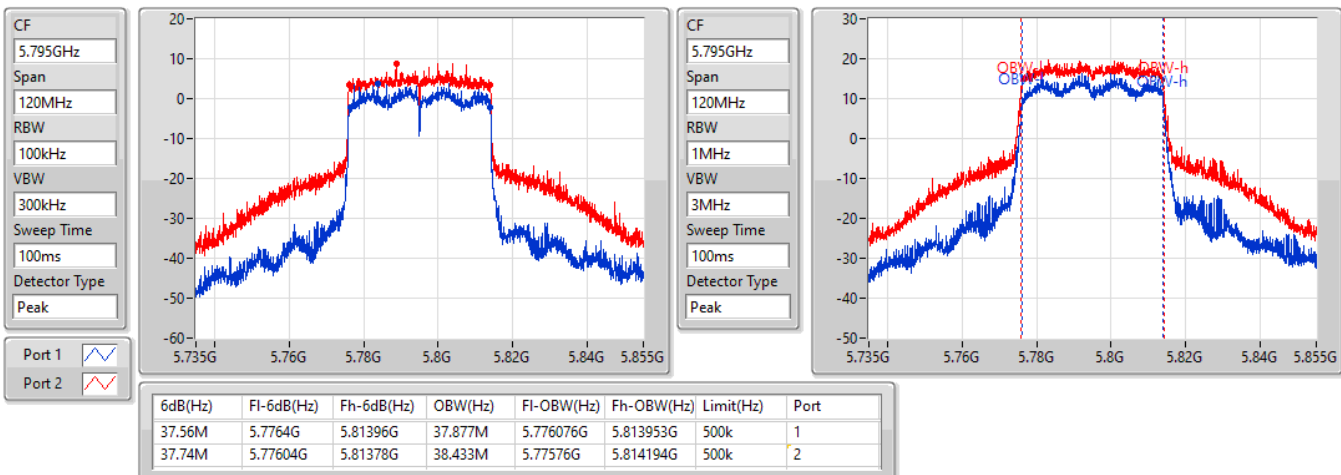


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

18/08/2022

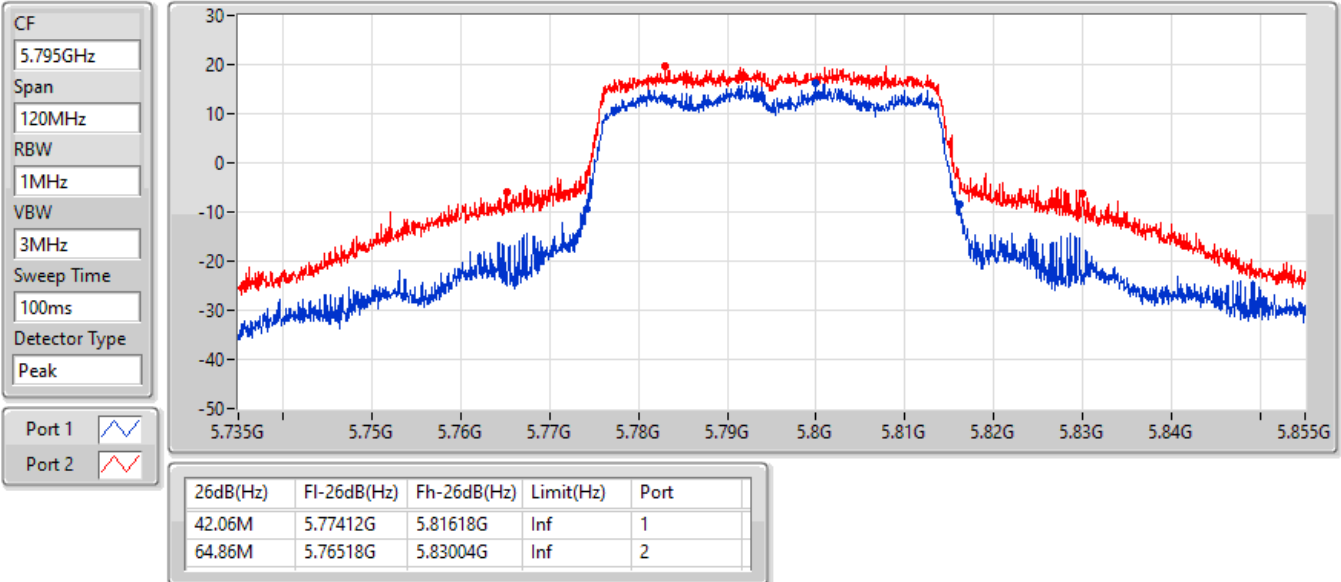


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

18/08/2022

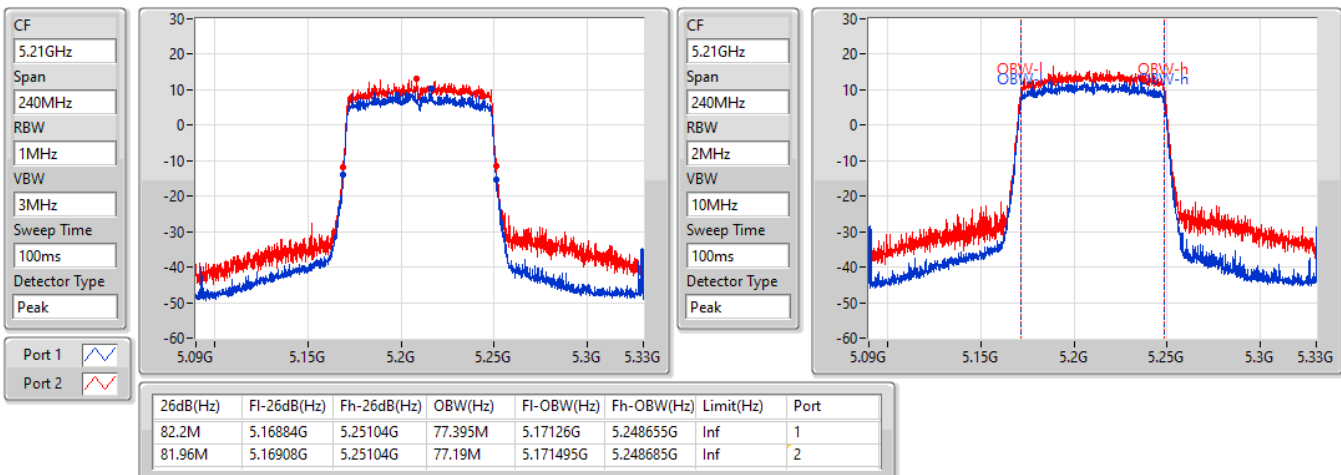


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5210MHz

19/08/2022

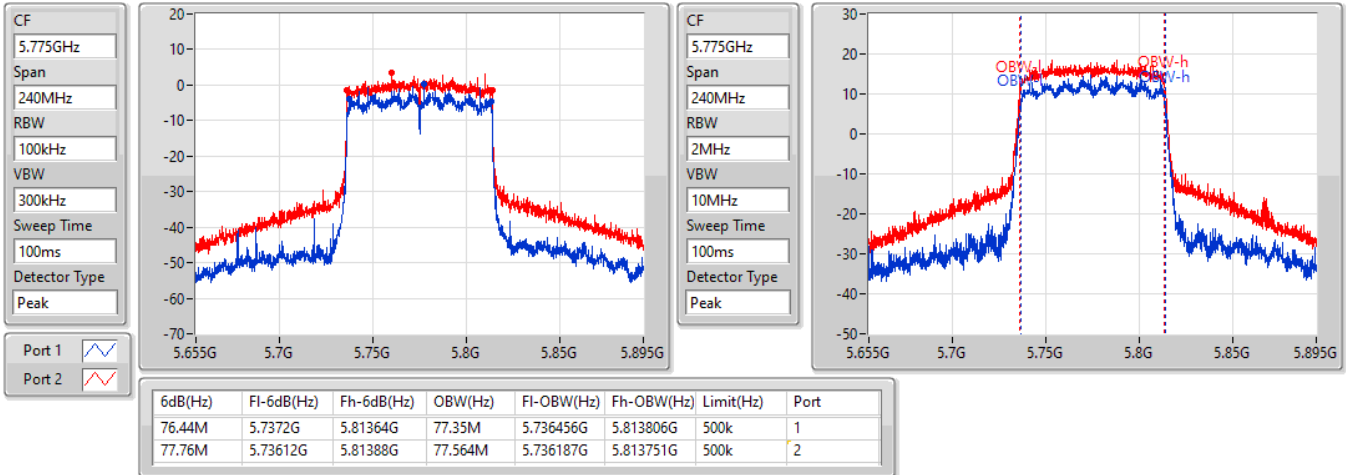


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

19/08/2022

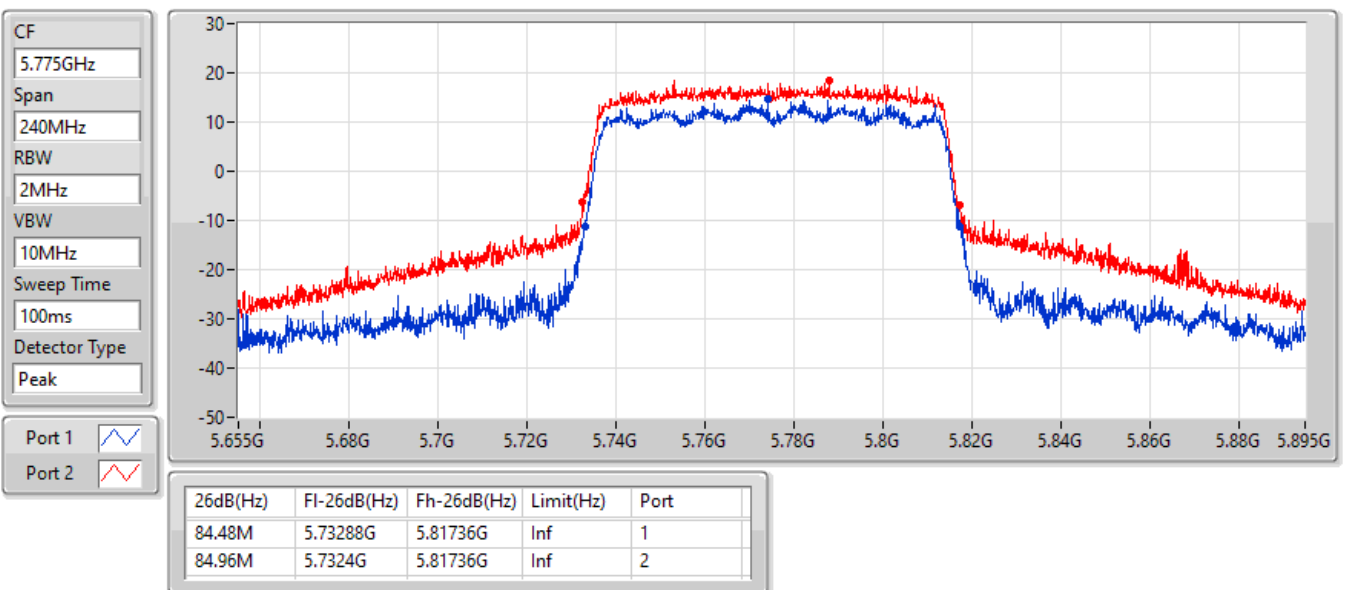


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

19/08/2022

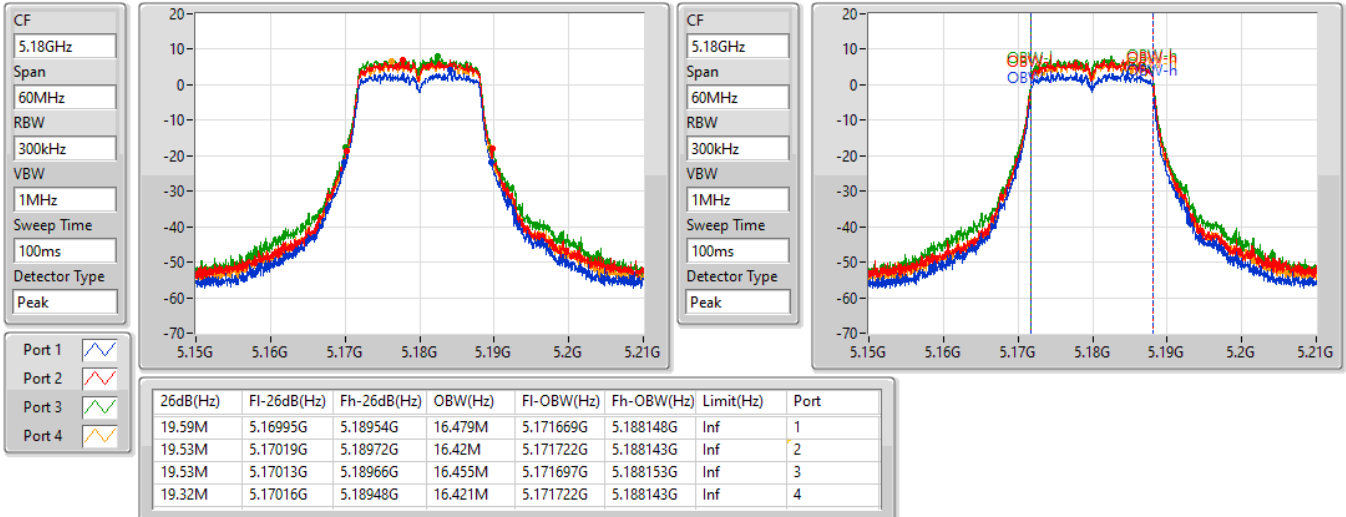


802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

19/08/2022

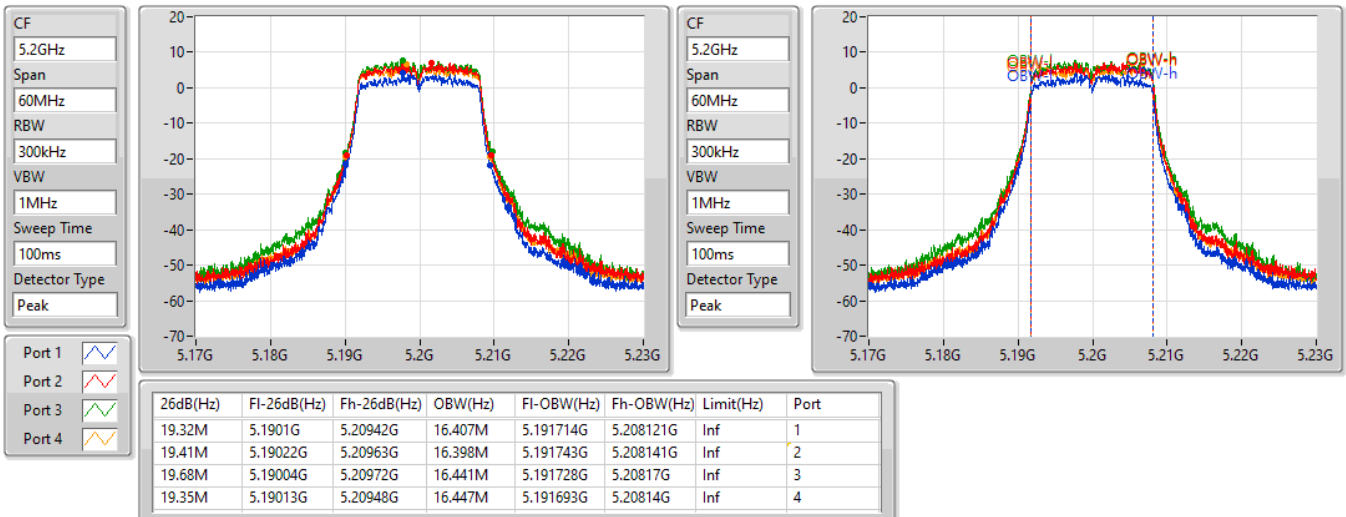


802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

19/08/2022

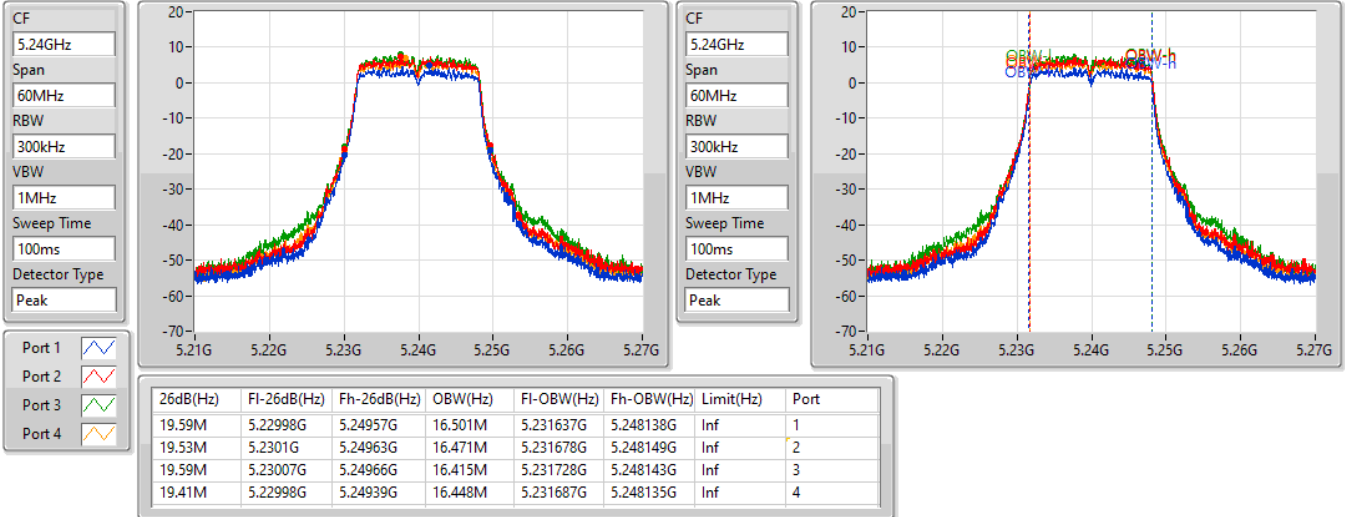


802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

19/08/2022

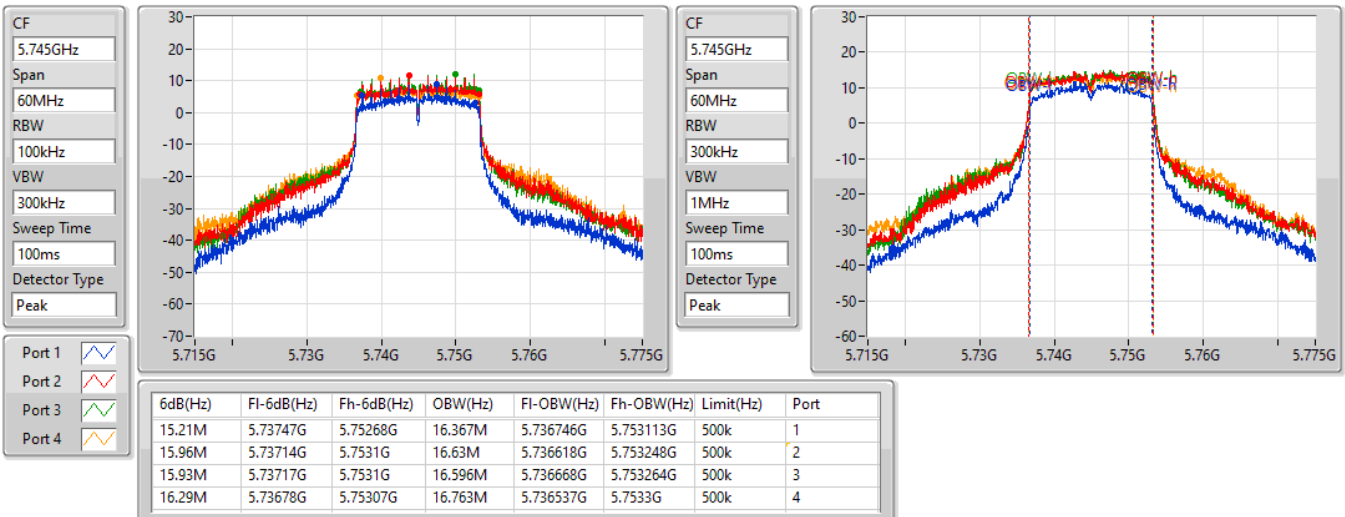


802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

18/08/2022

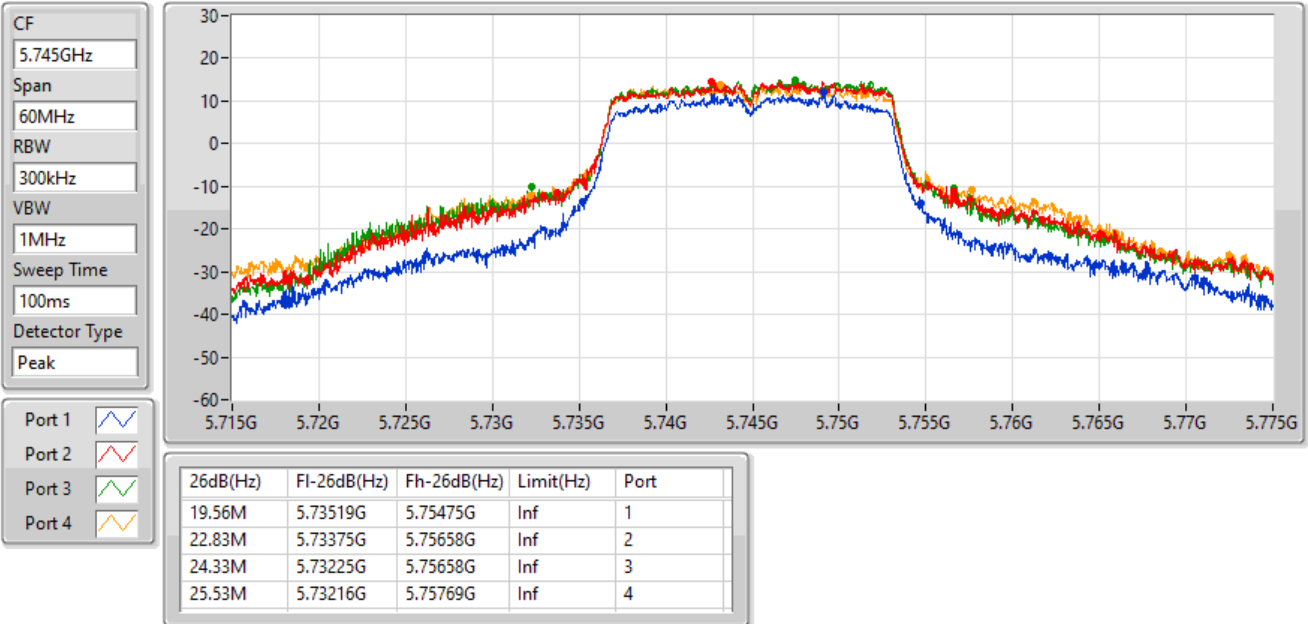


802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

18/08/2022

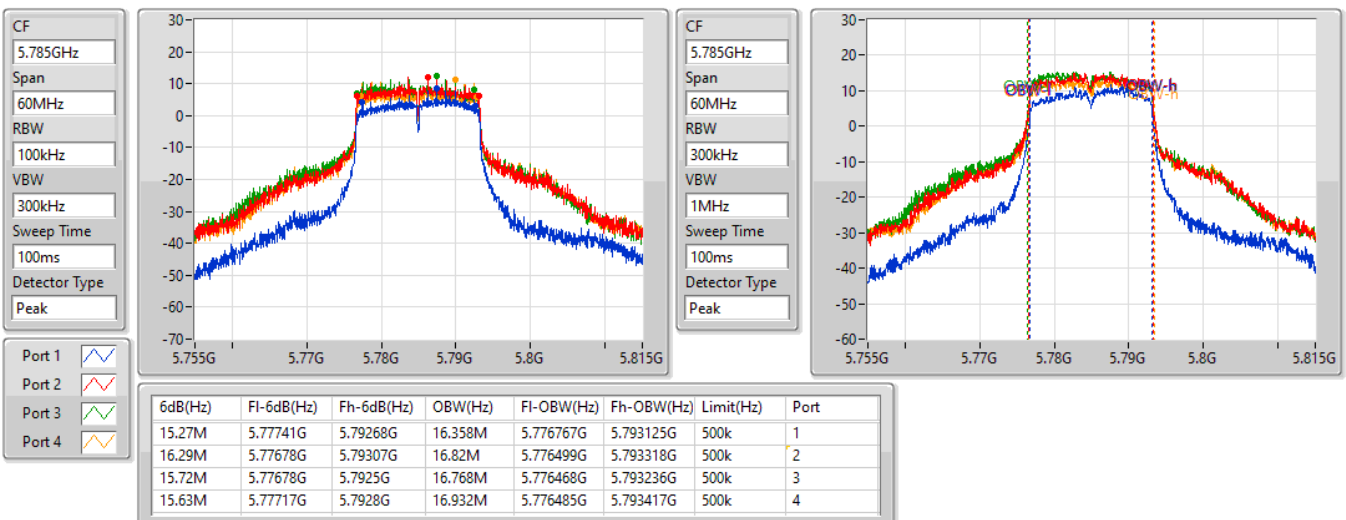


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

18/08/2022

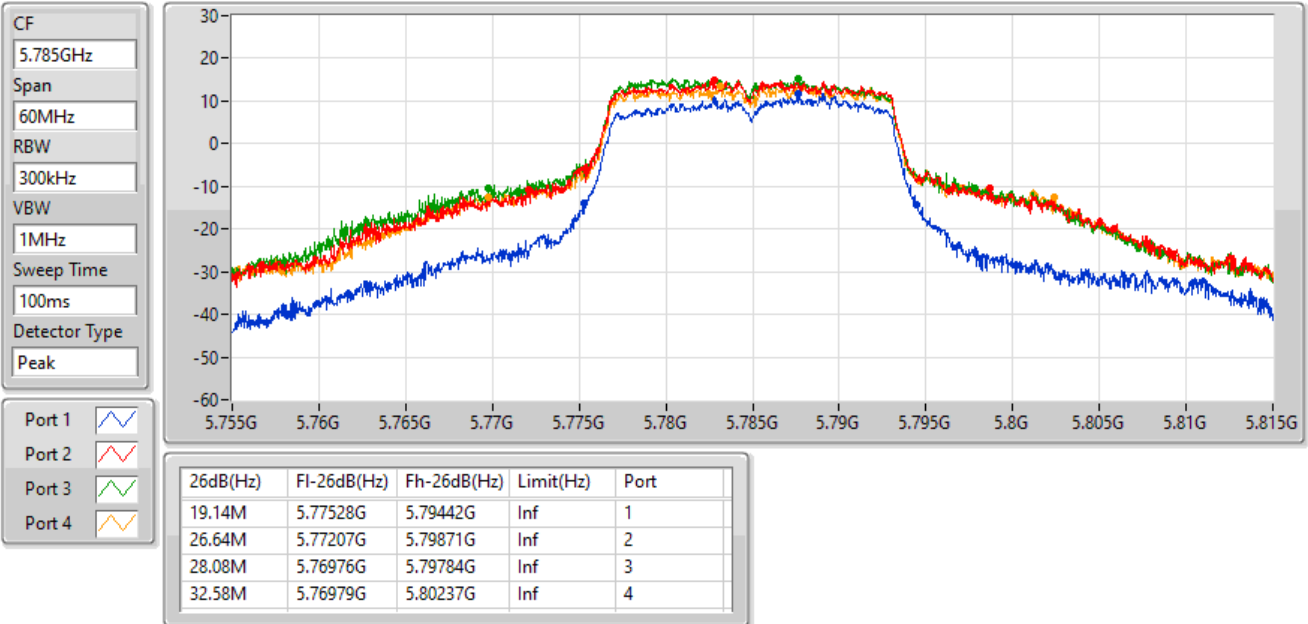


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

18/08/2022

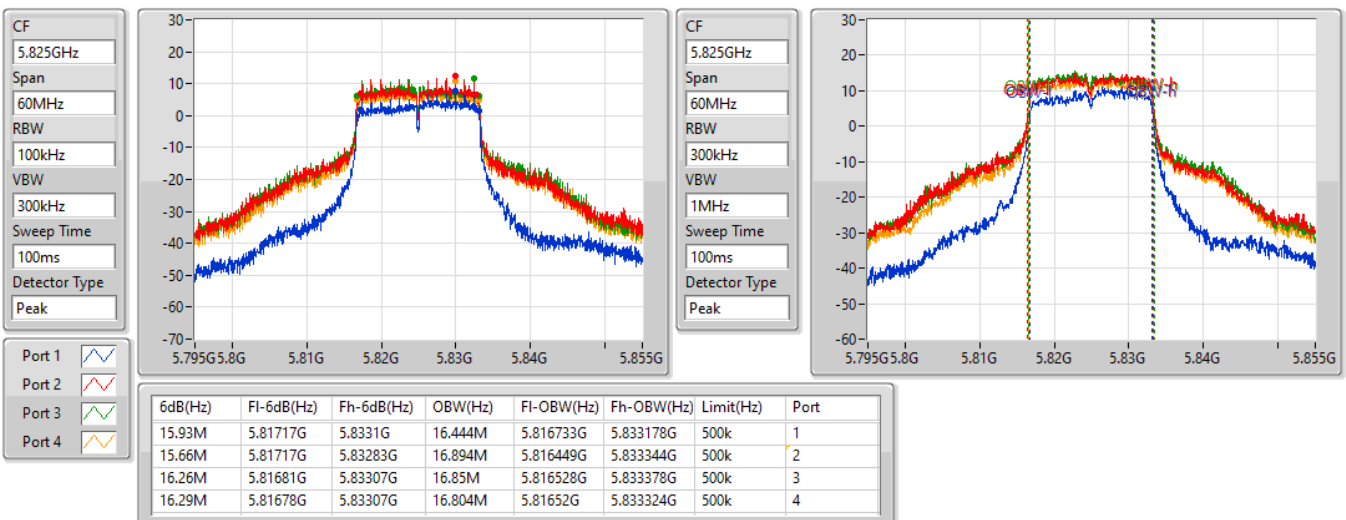


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

18/08/2022

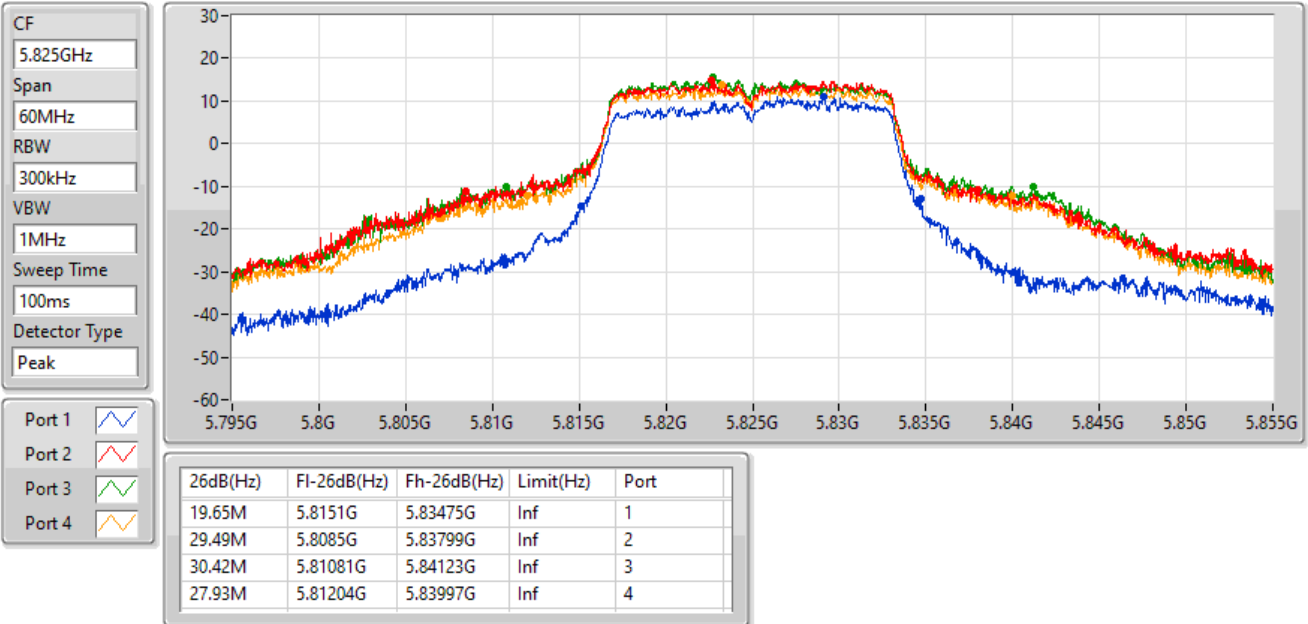


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

18/08/2022

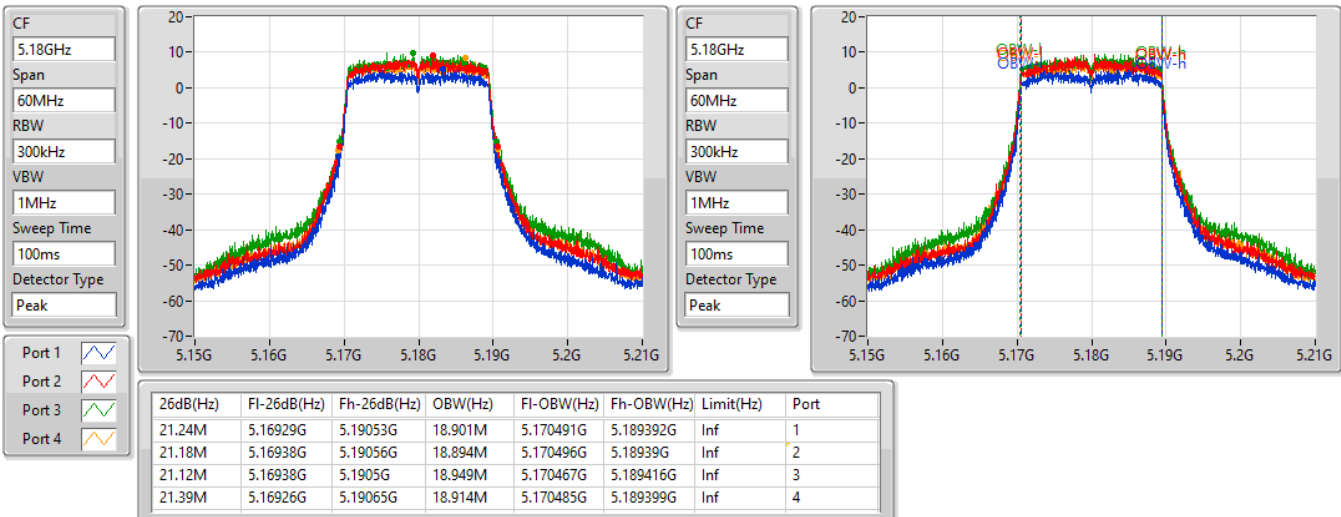


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5180MHz

19/08/2022

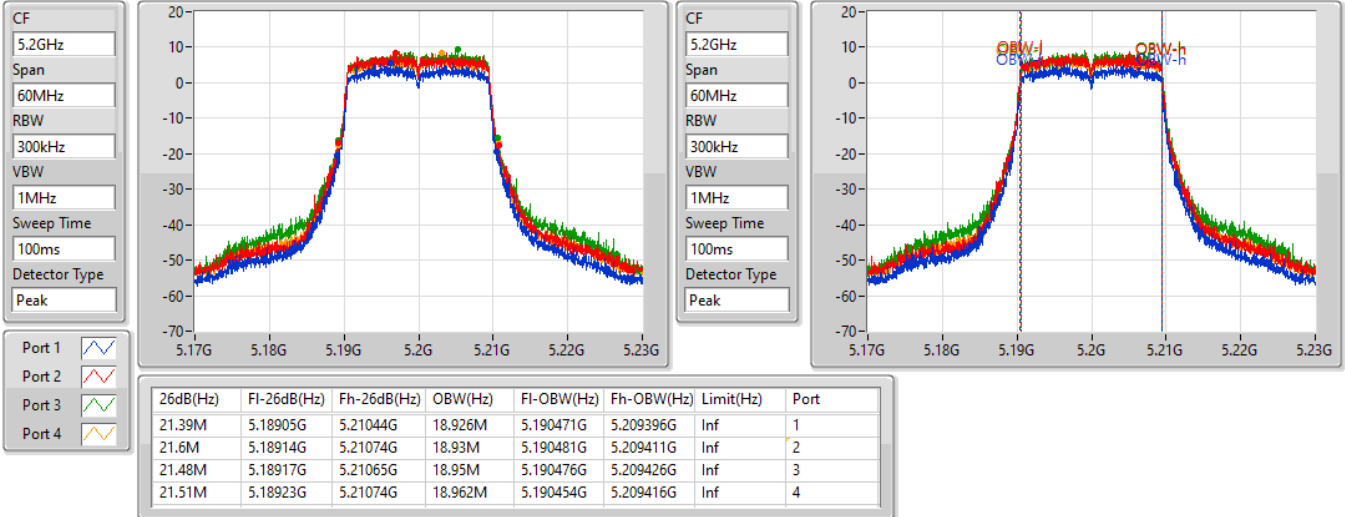


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5200MHz

19/08/2022

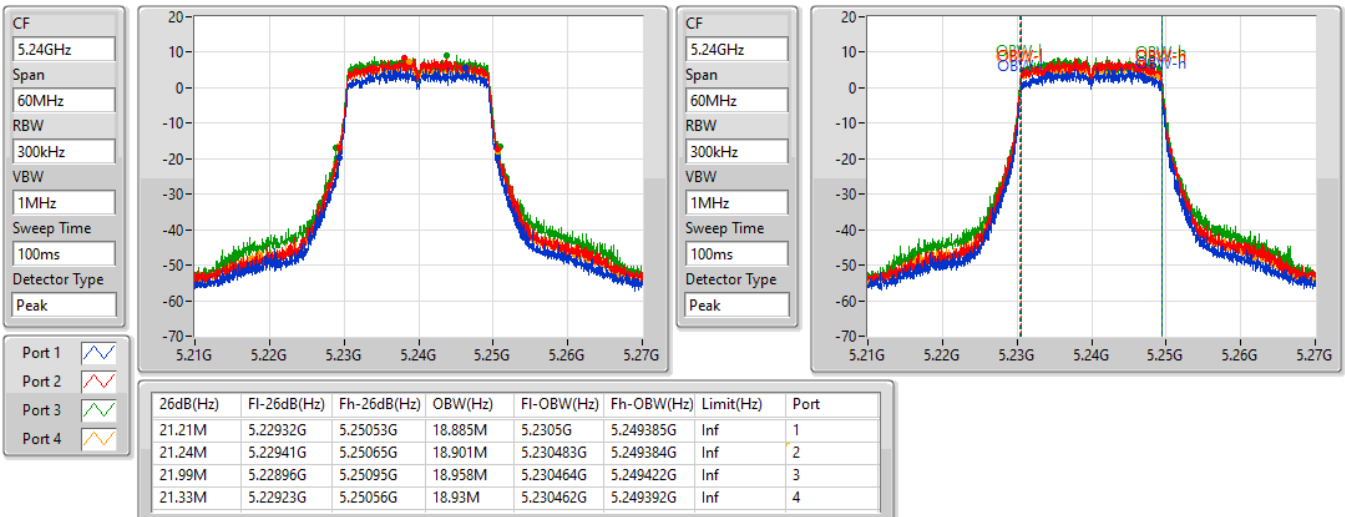


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5240MHz

19/08/2022

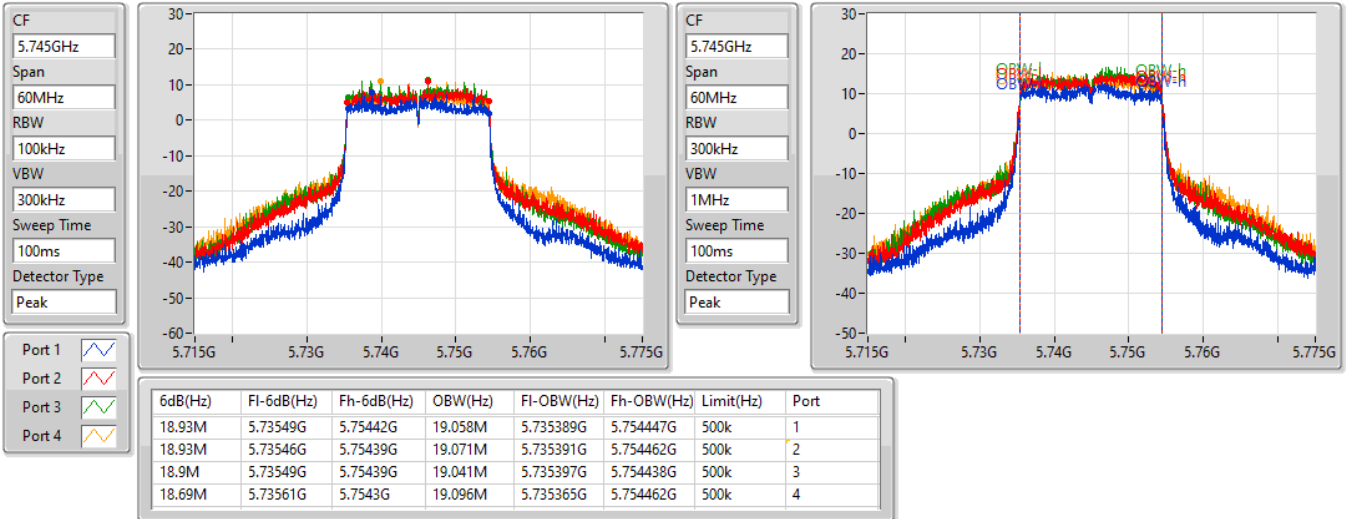


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

19/08/2022

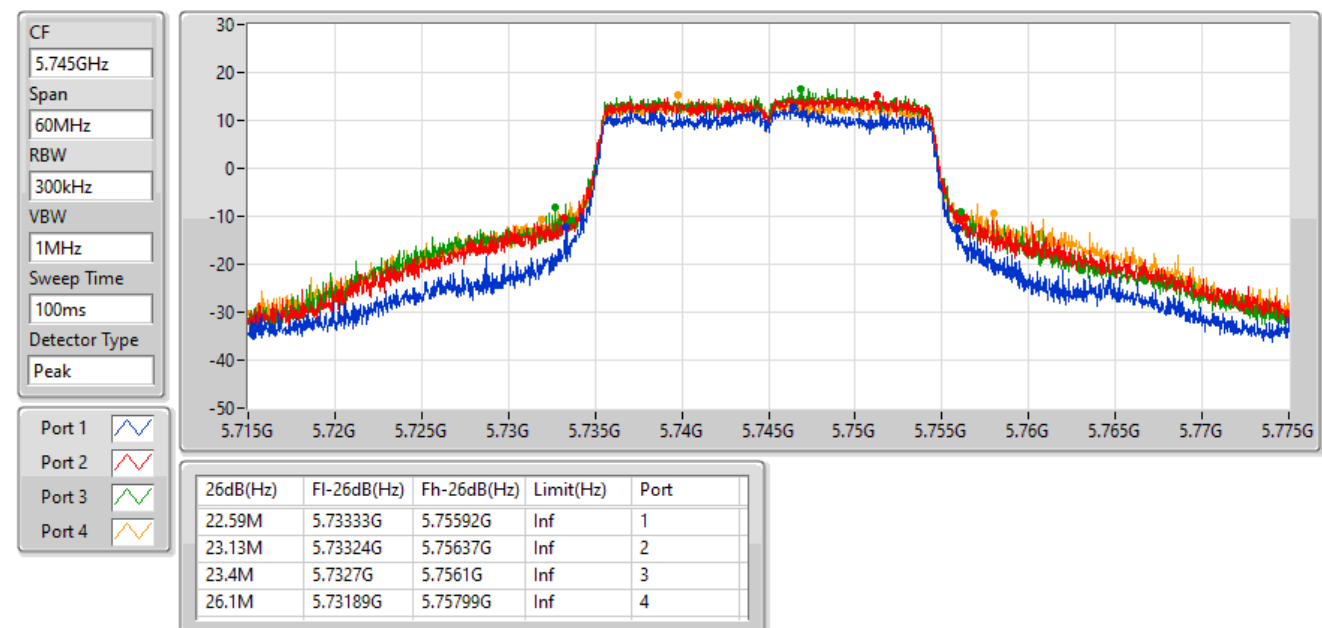


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

19/08/2022

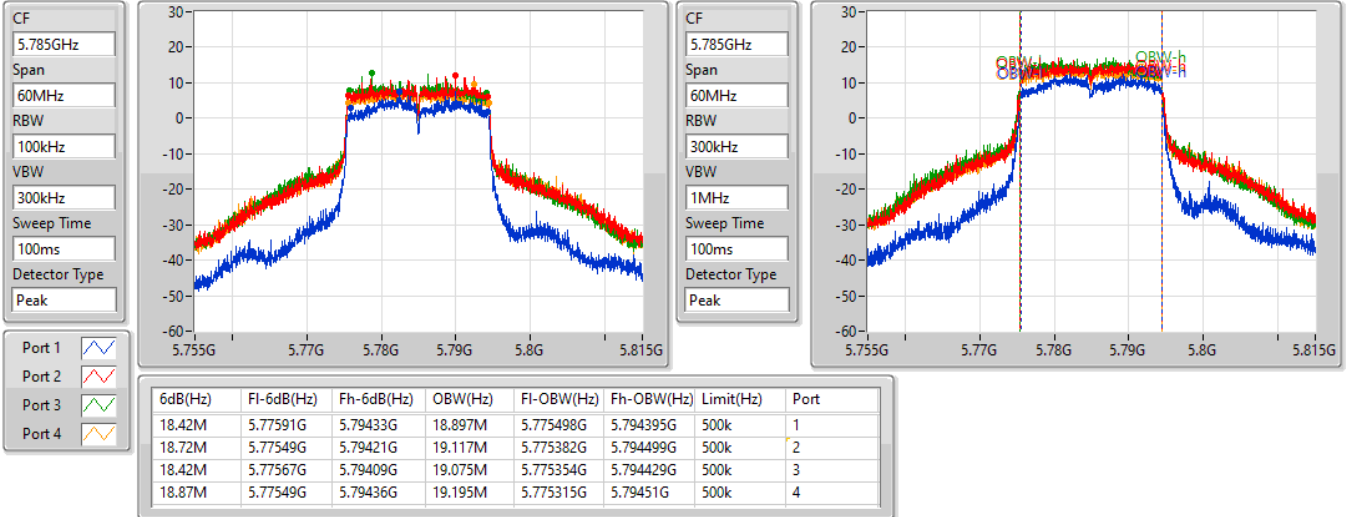


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

19/08/2022

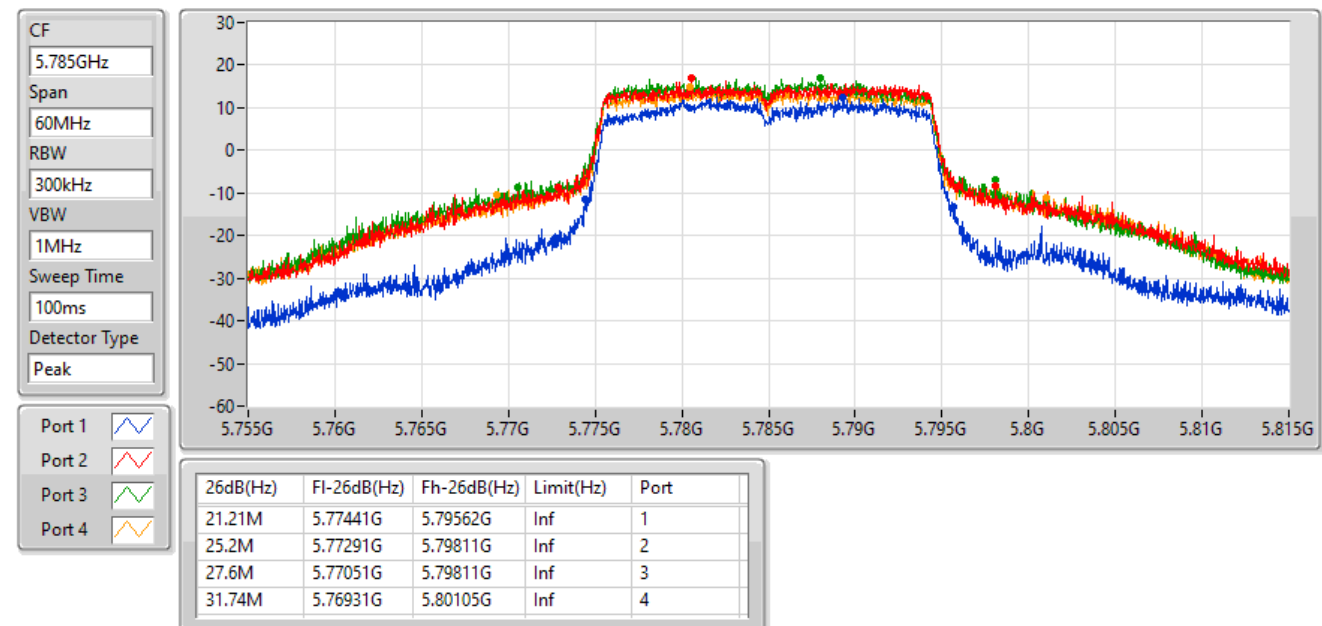


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

19/08/2022

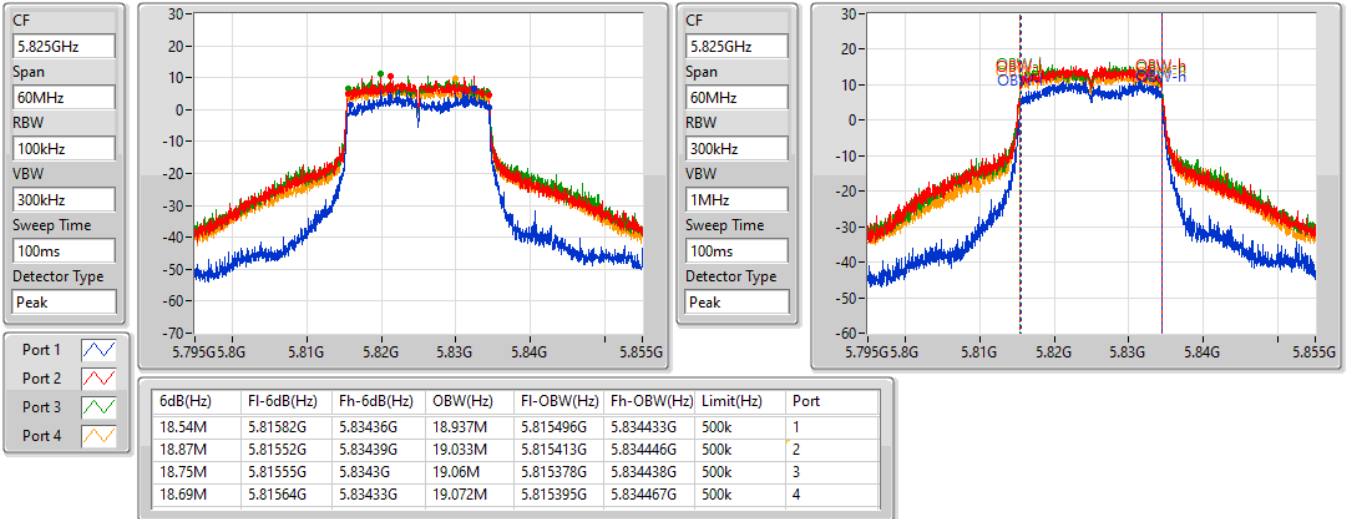


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

19/08/2022

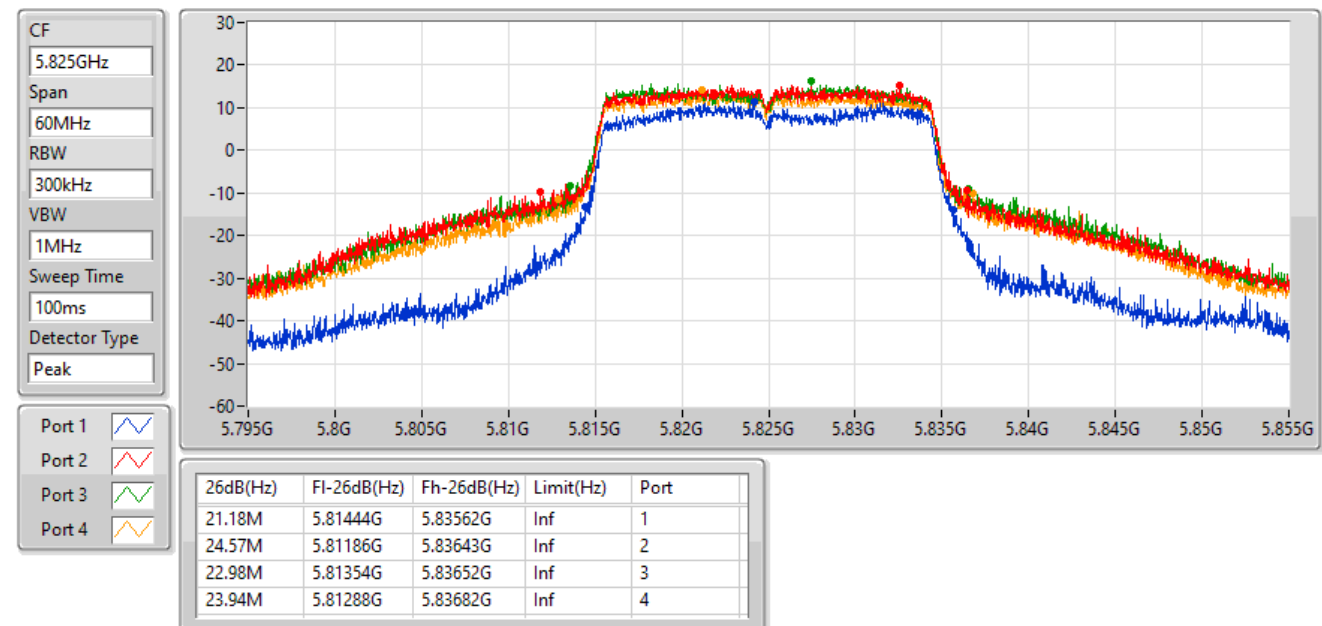


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

19/08/2022

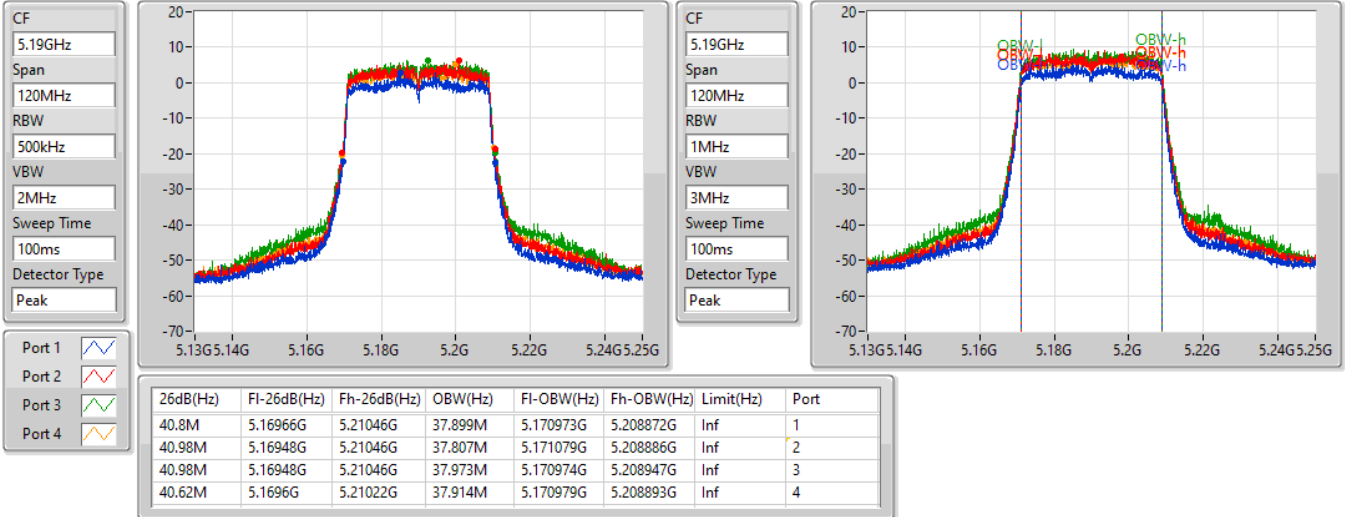


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5190MHz

19/08/2022

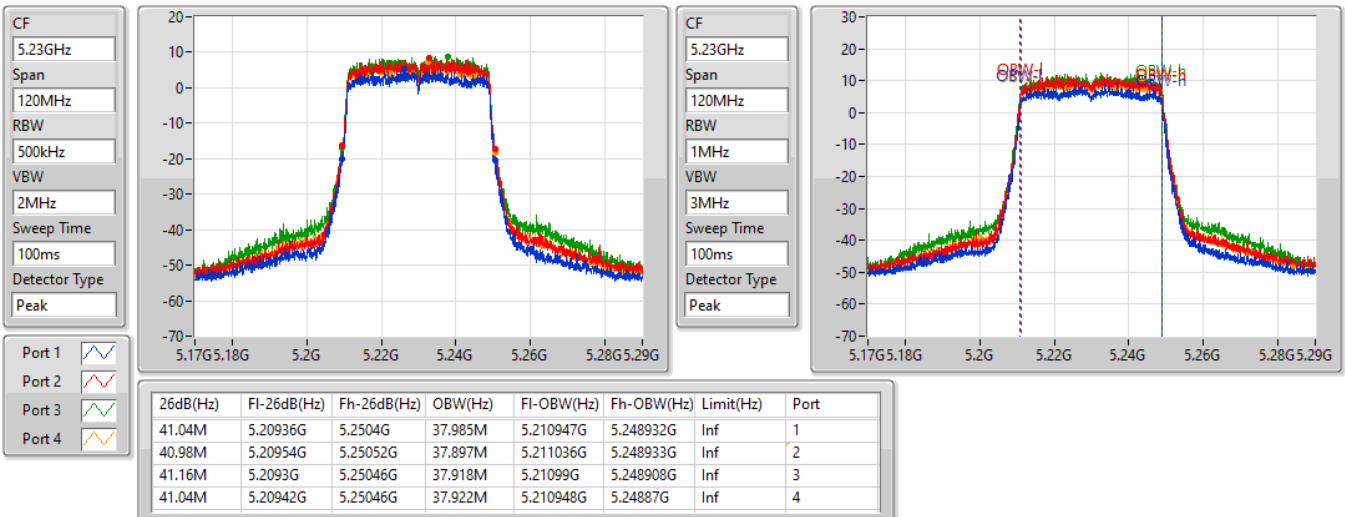


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5230MHz

19/08/2022

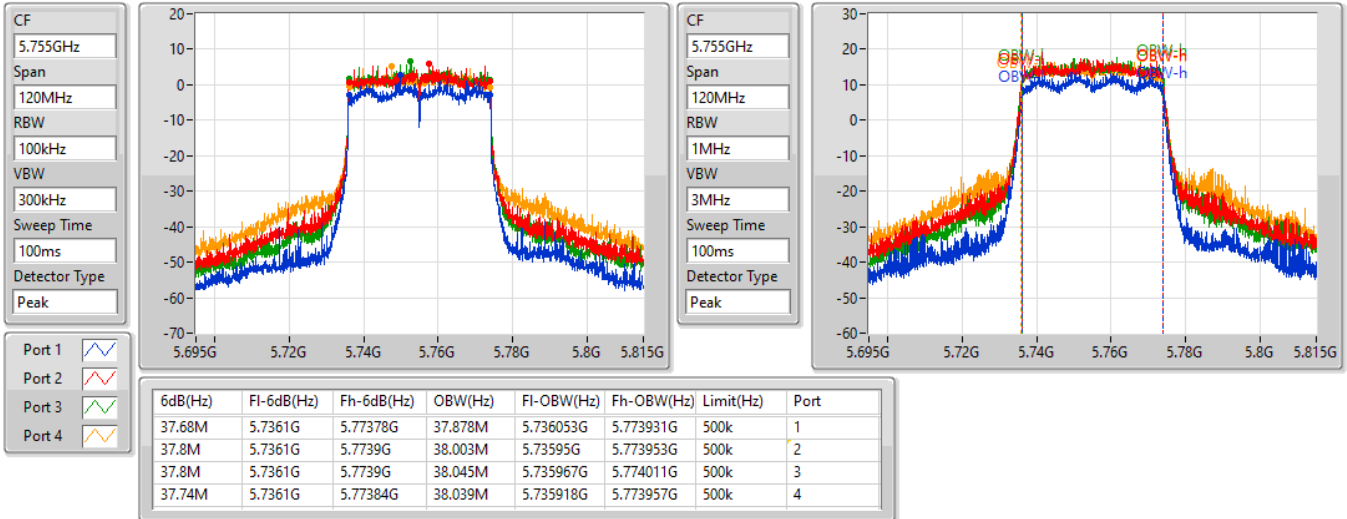


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5755MHz

19/08/2022

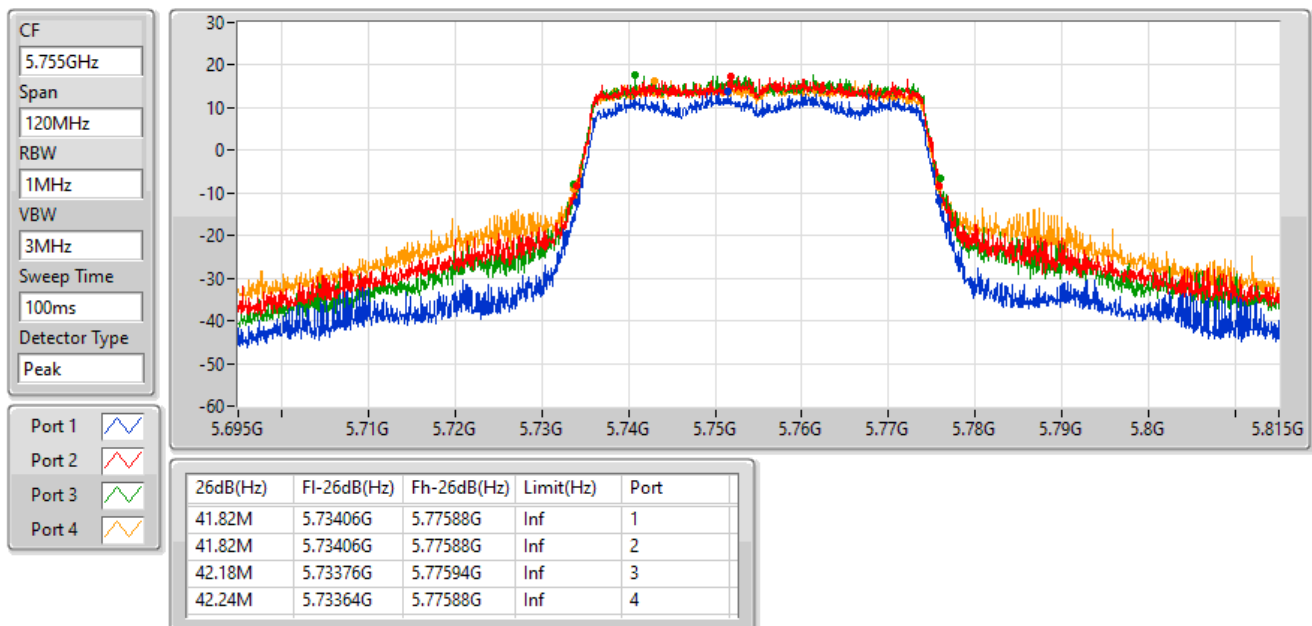


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5755MHz

19/08/2022

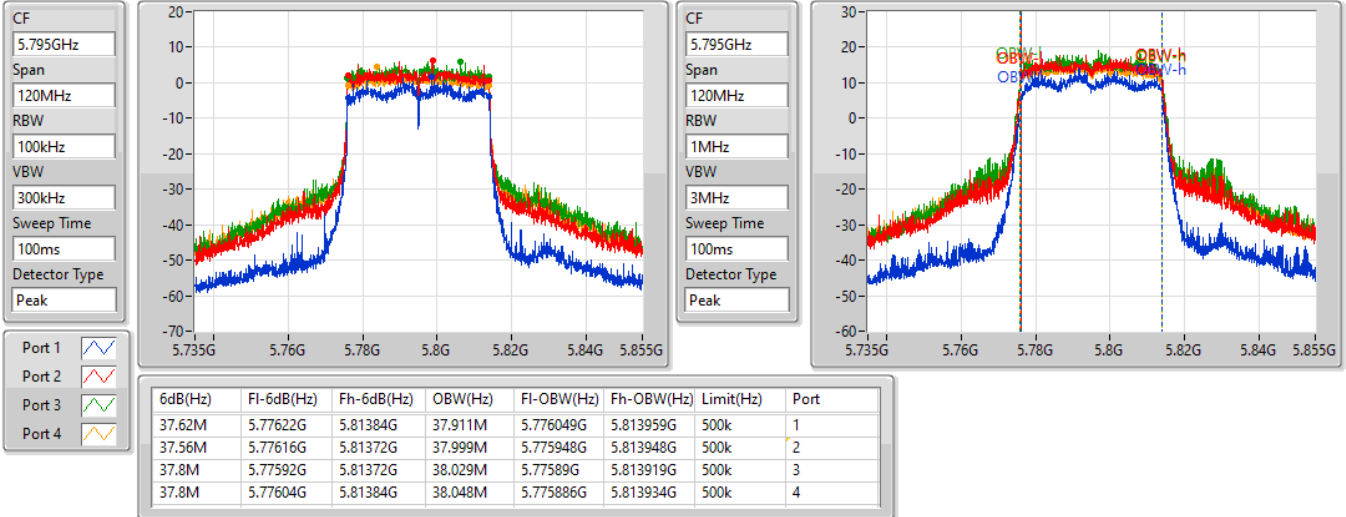


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5795MHz

19/08/2022

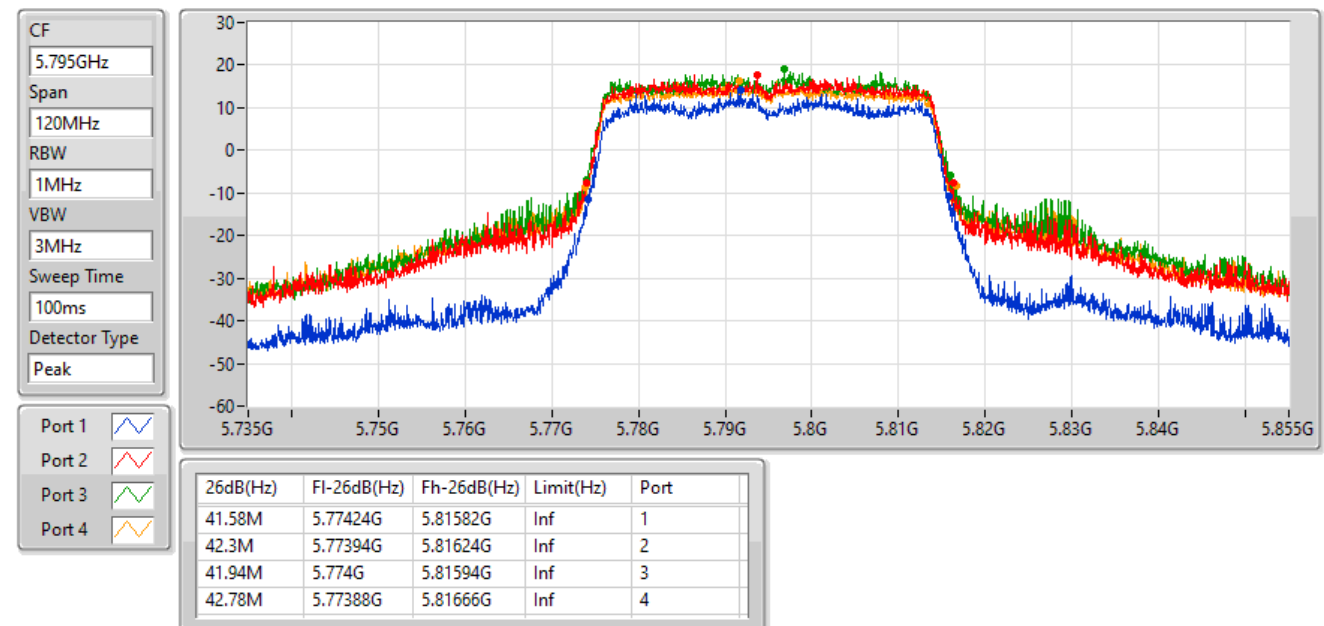


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5795MHz

19/08/2022

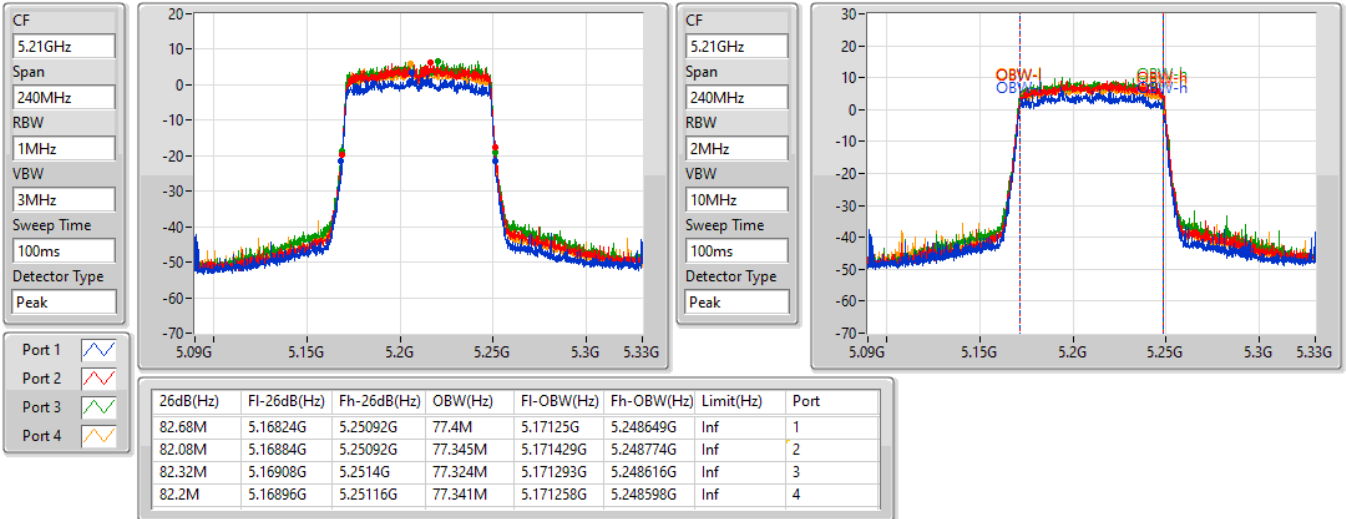


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5210MHz

19/08/2022

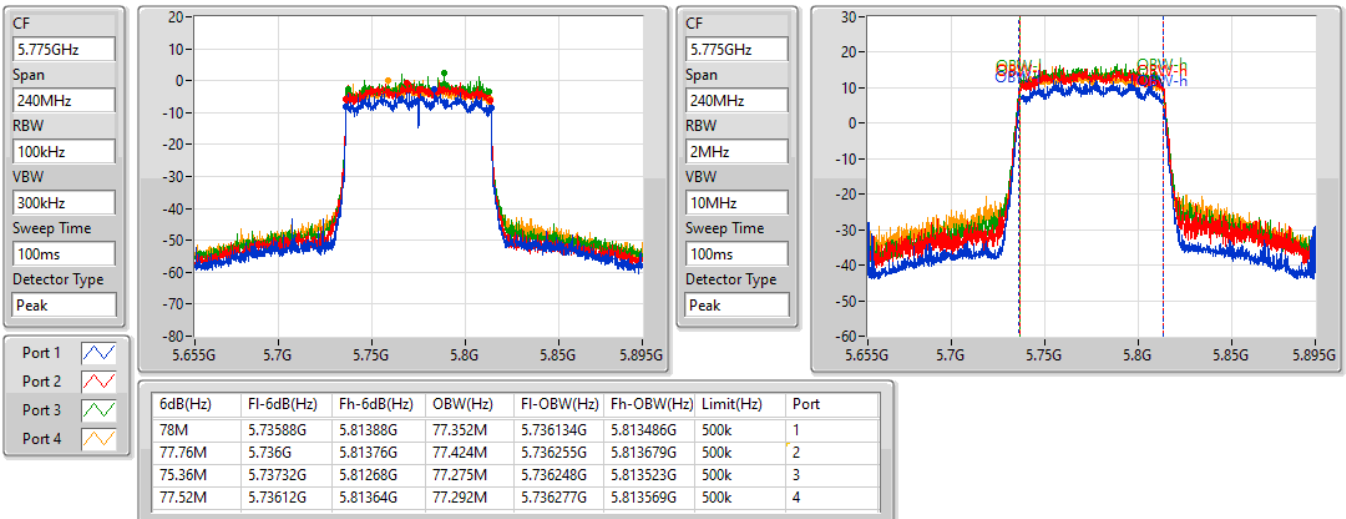


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5775MHz

19/08/2022

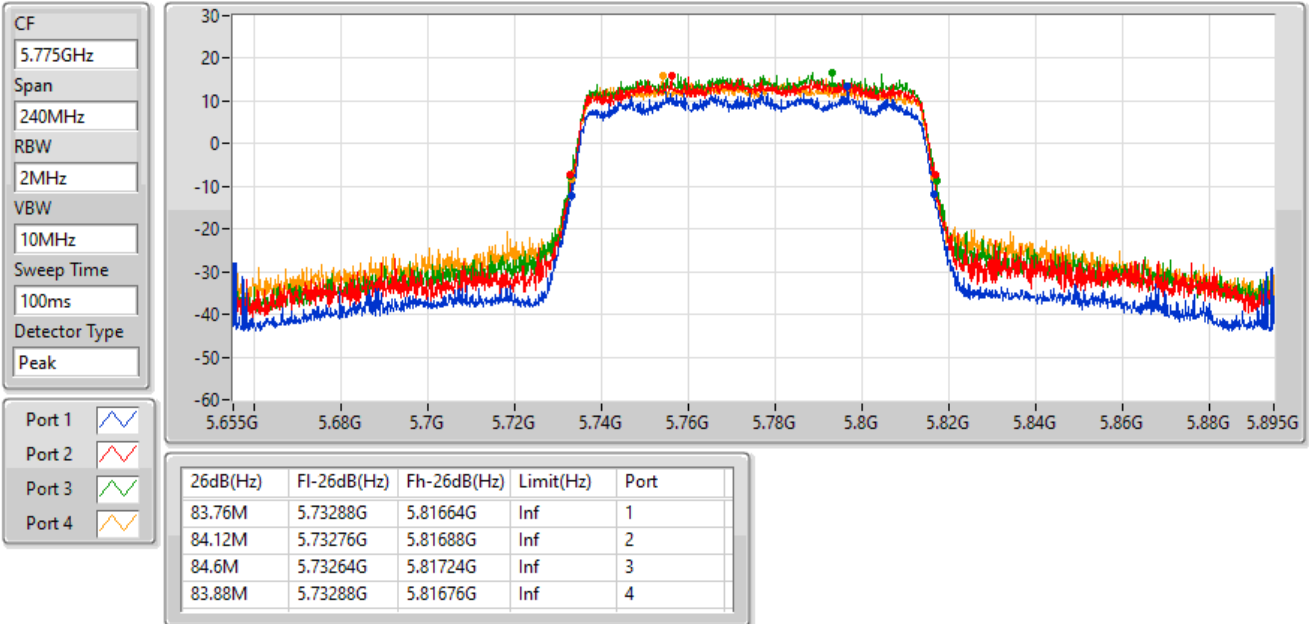


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5775MHz

19/08/2022



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	19.89M	16.446M	16M5D1D	19.5M	16.441M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.84M	18.955M	19M0D1D	21.3M	18.942M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.04M	37.967M	38M0D1D	40.98M	37.921M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.92M	77.298M	77M3D1D	82.92M	77.298M
802.11a_Nss1,(6Mbps)_2TX	19.62M	16.489M	16M5D1D	19.38M	16.416M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.69M	18.96M	19M0D1D	21.12M	18.88M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.46M	37.979M	38M0D1D	40.86M	37.894M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.92M	77.42M	77M5D1D	82.08M	77.364M
802.11a_Nss1,(6Mbps)_4TX	19.89M	16.523M	16M6D1D	19.41M	16.406M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.54M	18.966M	19M0D1D	21.09M	18.894M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.1M	37.964M	38M0D1D	40.8M	37.847M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.409M	77M5D1D	81.48M	77.227M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	16.434M	16M5D1D	16.29M	16.428M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.93M	18.934M	19M0D1D	18.84M	18.921M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.92M	37.945M	38M0D1D	37.74M	37.928M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.64M	77.412M	77M5D1D	77.64M	77.412M
802.11a_Nss1,(6Mbps)_2TX	16.35M	16.537M	16M6D1D	16.05M	16.39M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.99M	19.042M	19M0D1D	17.88M	18.866M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.5M	37.99M	38M0D1D	37.14M	37.783M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.68M	77.474M	77M5D1D	76.08M	77.213M
802.11a_Nss1,(6Mbps)_4TX	16.32M	16.581M	16M6D1D	15.6M	16.33M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.96M	18.958M	19M0D1D	18.42M	18.835M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.92M	38.042M	38M0D1D	37.26M	37.827M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.64M	77.503M	77M6D1D	74.4M	77.208M

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)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.53M	16.446M						
5200MHz	Pass	Inf	19.89M	16.441M						
5240MHz	Pass	Inf	19.5M	16.443M						
5745MHz	Pass	500k	16.29M	16.434M						
5785MHz	Pass	500k	16.29M	16.433M						
5825MHz	Pass	500k	16.29M	16.428M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.6M	18.955M						
5200MHz	Pass	Inf	21.84M	18.942M						
5240MHz	Pass	Inf	21.3M	18.943M						
5745MHz	Pass	500k	18.87M	18.927M						
5785MHz	Pass	500k	18.93M	18.934M						
5825MHz	Pass	500k	18.84M	18.921M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.04M	37.921M						
5230MHz	Pass	Inf	40.98M	37.967M						
5755MHz	Pass	500k	37.92M	37.928M						
5795MHz	Pass	500k	37.74M	37.945M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.92M	77.298M						
5775MHz	Pass	500k	77.64M	77.412M						
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.62M	16.486M	19.44M	16.428M				
5200MHz	Pass	Inf	19.38M	16.489M	19.47M	16.425M				
5240MHz	Pass	Inf	19.59M	16.417M	19.38M	16.416M				
5745MHz	Pass	500k	16.32M	16.537M	16.32M	16.427M				
5785MHz	Pass	500k	16.35M	16.528M	16.32M	16.429M				
5825MHz	Pass	500k	16.05M	16.39M	16.32M	16.415M				
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.69M	18.88M	21.27M	18.941M				
5200MHz	Pass	Inf	21.27M	18.96M	21.12M	18.958M				
5240MHz	Pass	Inf	21.48M	18.9M	21.18M	18.931M				
5745MHz	Pass	500k	18.99M	19.042M	18.87M	18.924M				
5785MHz	Pass	500k	17.88M	18.866M	18.9M	18.922M				
5825MHz	Pass	500k	18.57M	18.983M	18.84M	18.934M				
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	37.93M	41.1M	37.979M				
5230MHz	Pass	Inf	41.46M	37.894M	40.86M	37.91M				
5755MHz	Pass	500k	37.5M	37.783M	37.14M	37.959M				
5795MHz	Pass	500k	37.32M	37.813M	37.44M	37.99M				
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.92M	77.42M	82.08M	77.364M				
5775MHz	Pass	500k	76.08M	77.213M	76.68M	77.474M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.89M	16.523M	19.5M	16.478M	19.47M	16.452M	19.56M	16.444M
5200MHz	Pass	Inf	19.71M	16.52M	19.5M	16.456M	19.5M	16.422M	19.47M	16.423M
5240MHz	Pass	Inf	19.47M	16.419M	19.41M	16.406M	19.44M	16.419M	19.41M	16.441M
5745MHz	Pass	500k	16.29M	16.581M	15.93M	16.427M	15.93M	16.418M	16.29M	16.436M
5785MHz	Pass	500k	15.6M	16.33M	16.29M	16.414M	16.26M	16.446M	16.32M	16.454M
5825MHz	Pass	500k	16.29M	16.539M	15.93M	16.445M	16.29M	16.392M	16.29M	16.44M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.39M	18.952M	21.24M	18.949M	21.39M	18.921M	21.18M	18.896M
5200MHz	Pass	Inf	21.18M	18.903M	21.27M	18.894M	21.24M	18.949M	21.48M	18.911M
5240MHz	Pass	Inf	21.27M	18.932M	21.09M	18.966M	21.54M	18.957M	21.18M	18.916M

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)
5745MHz	Pass	500k	18.63M	18.835M	18.96M	18.958M	18.57M	18.921M	18.84M	18.92M
5785MHz	Pass	500k	18.69M	18.872M	18.6M	18.891M	18.78M	18.95M	18.69M	18.923M
5825MHz	Pass	500k	18.42M	18.908M	18.75M	18.914M	18.81M	18.932M	18.84M	18.944M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.86M	37.964M	40.92M	37.887M	41.1M	37.885M	40.8M	37.907M
5230MHz	Pass	Inf	40.98M	37.886M	40.86M	37.847M	40.8M	37.914M	40.8M	37.858M
5755MHz	Pass	500k	37.86M	37.831M	37.26M	37.827M	37.92M	38.042M	37.74M	37.956M
5795MHz	Pass	500k	37.32M	37.864M	37.68M	37.919M	37.8M	38.035M	37.8M	37.989M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.68M	77.409M	82.2M	77.227M	82.32M	77.244M	81.48M	77.299M
5775MHz	Pass	500k	77.16M	77.503M	76.08M	77.208M	77.64M	77.364M	74.4M	77.355M

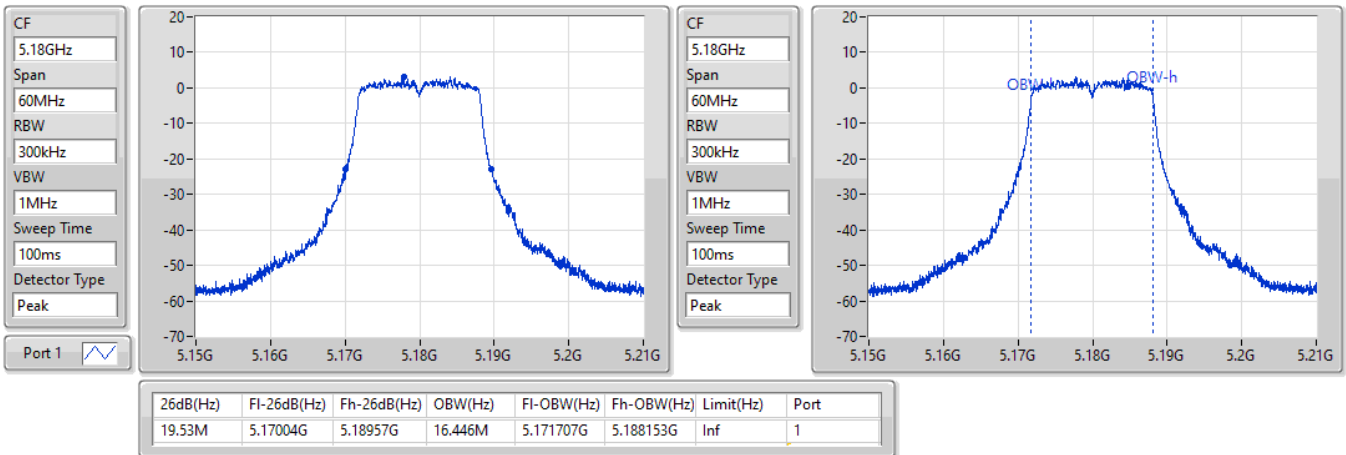
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX

EBW

5180MHz

24/08/2022

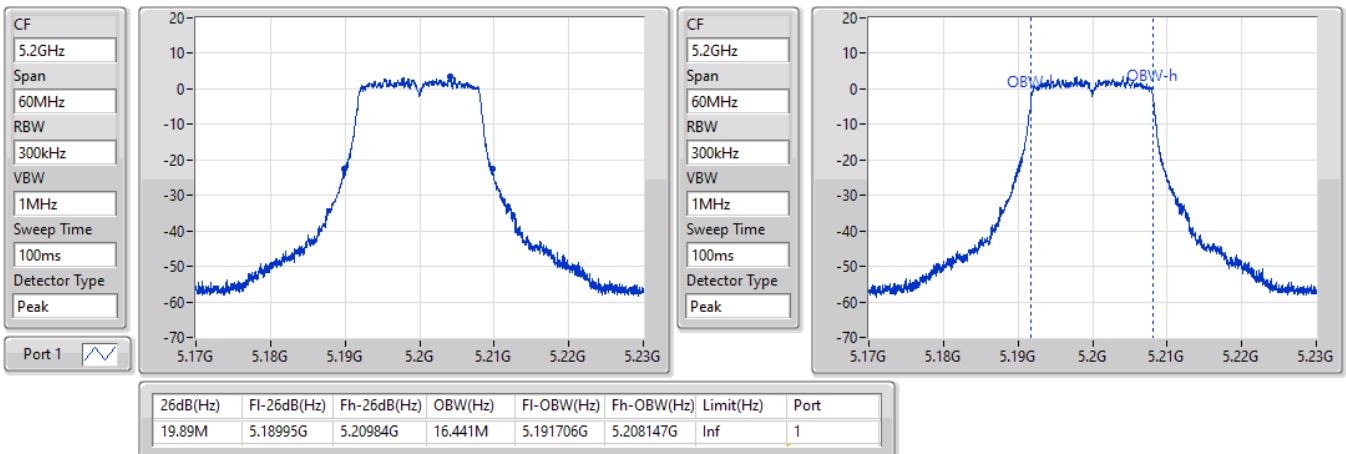


802.11a_Nss1,(6Mbps)_1TX

EBW

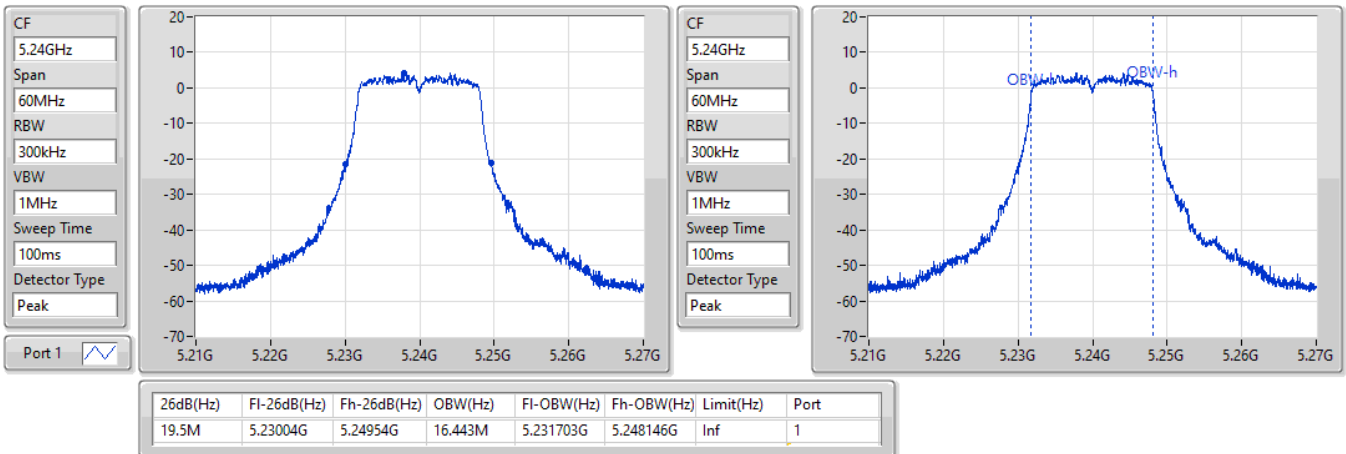
5200MHz

24/08/2022

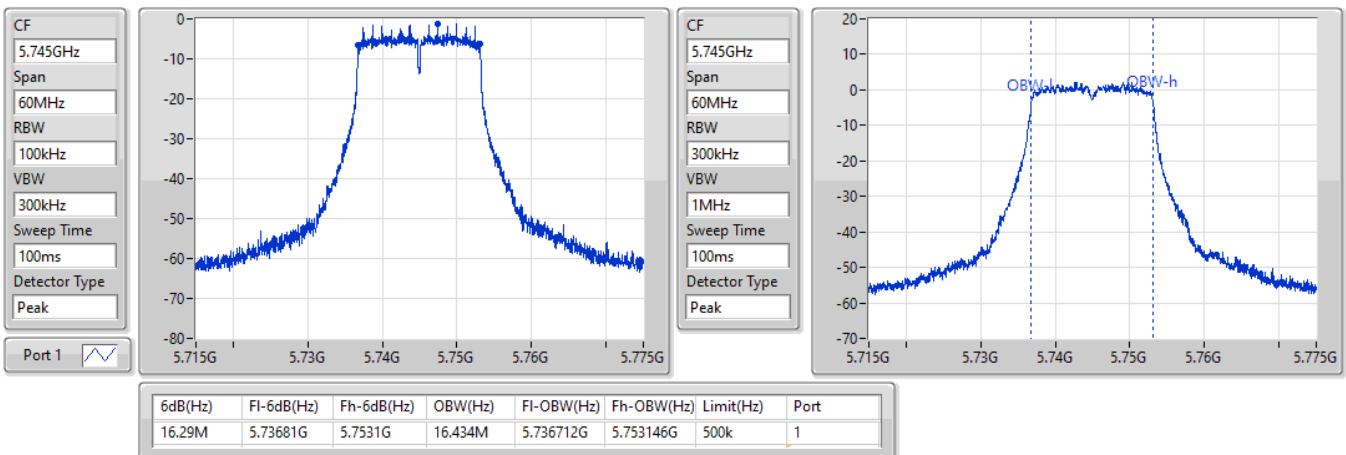


802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

24/08/2022


802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

24/08/2022

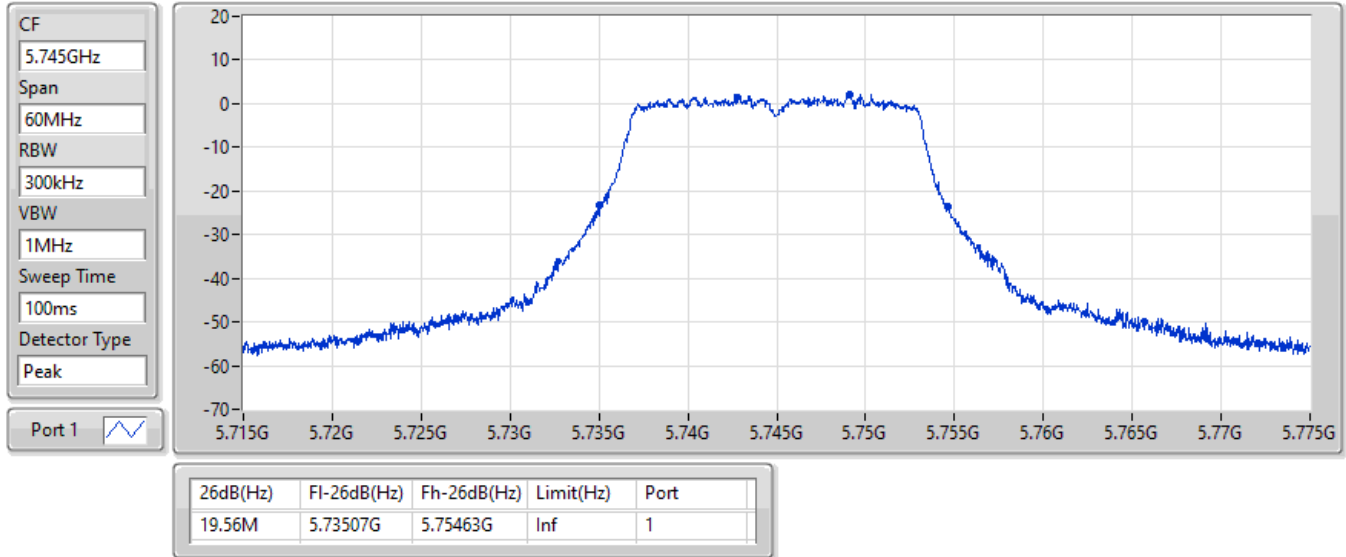


802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

24/08/2022

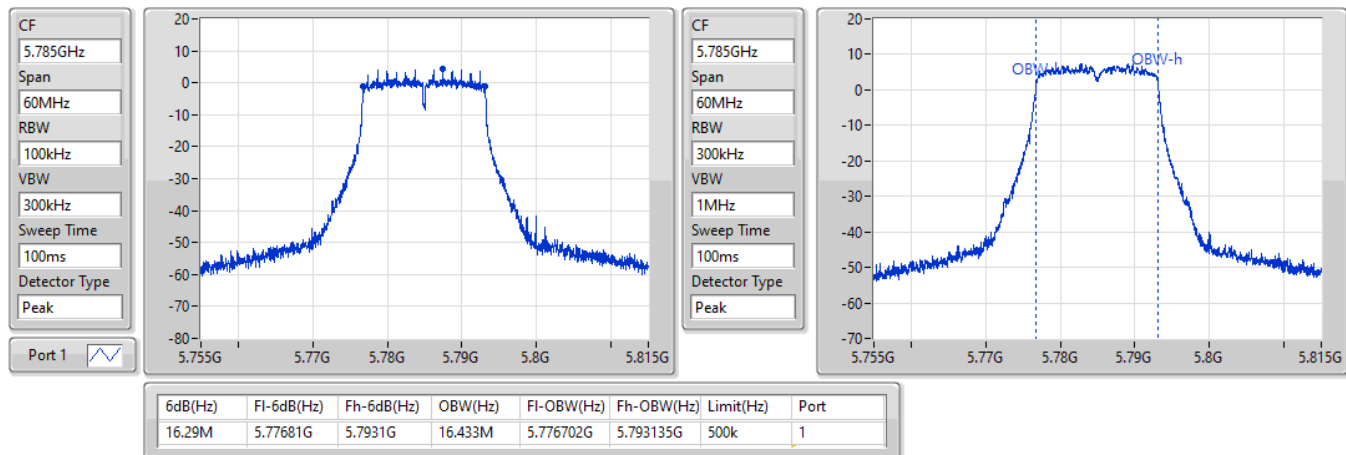


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

24/08/2022

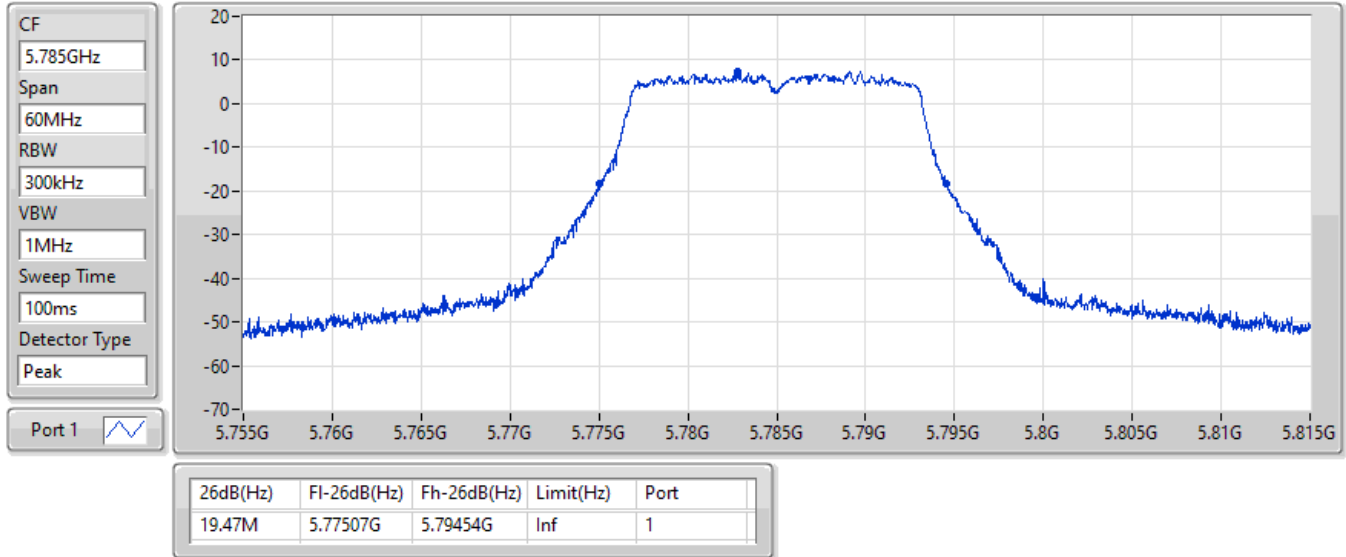


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

24/08/2022

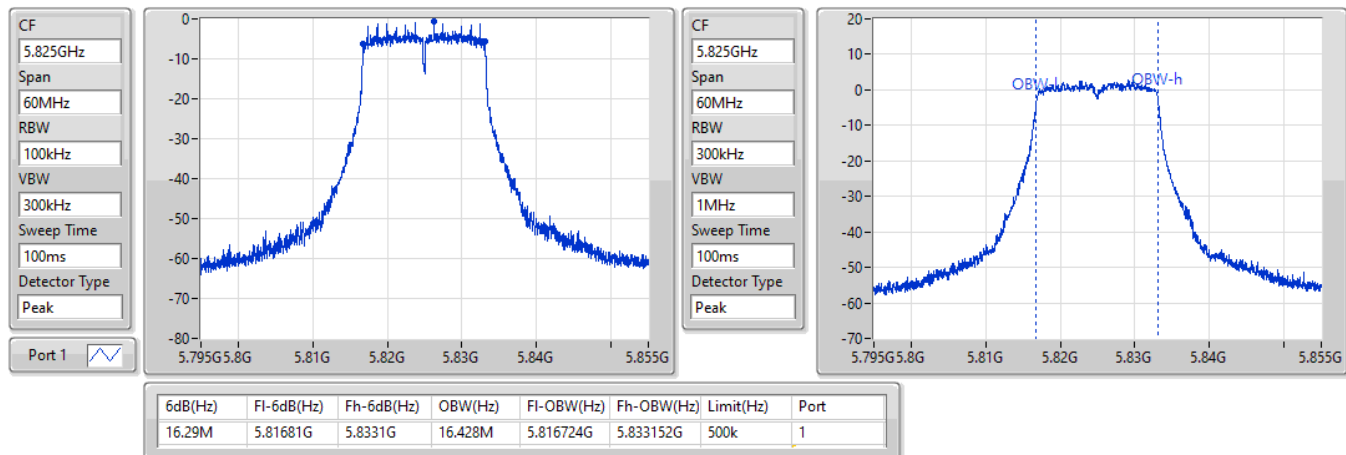


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

24/08/2022

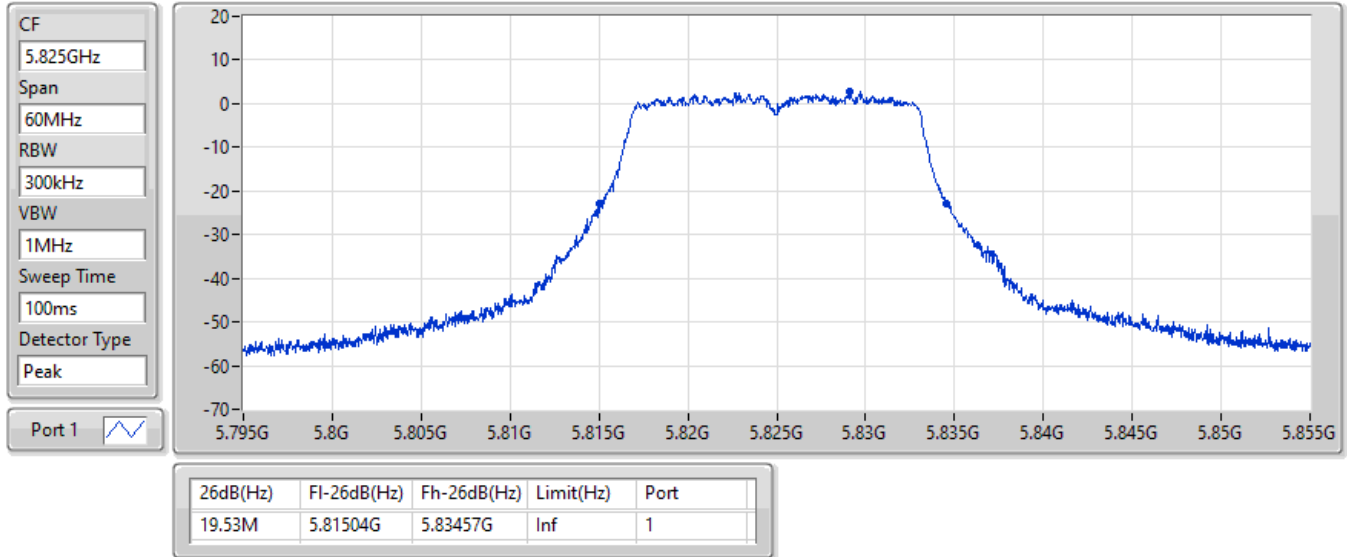


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

24/08/2022

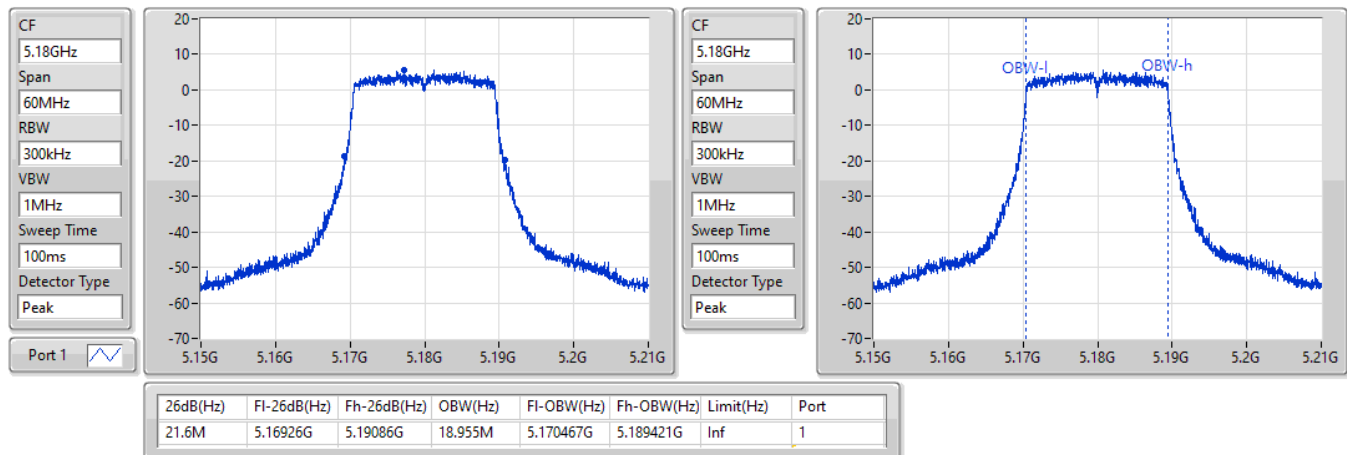


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

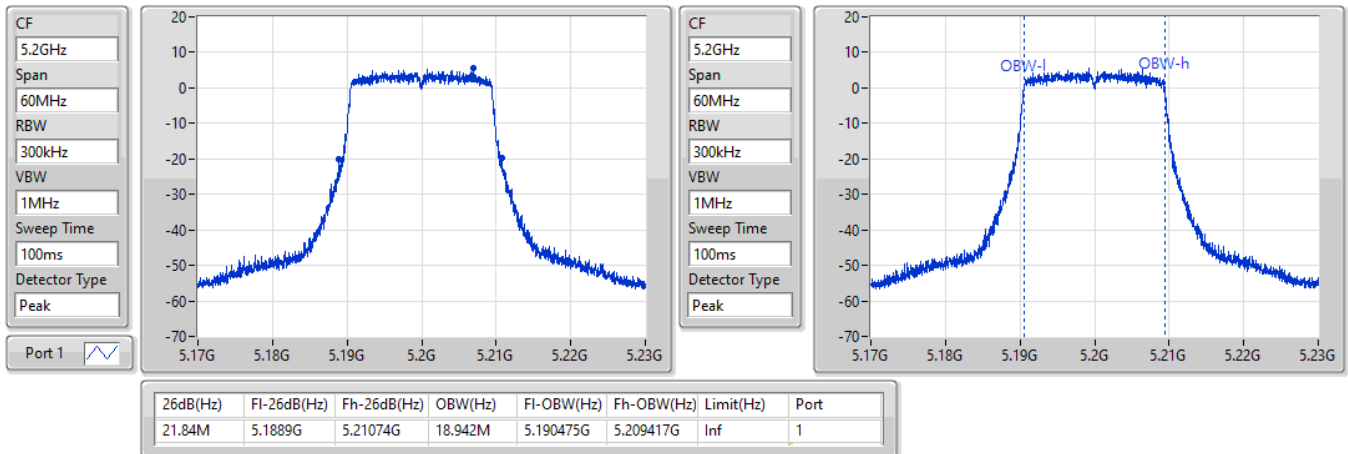
5180MHz

24/08/2022

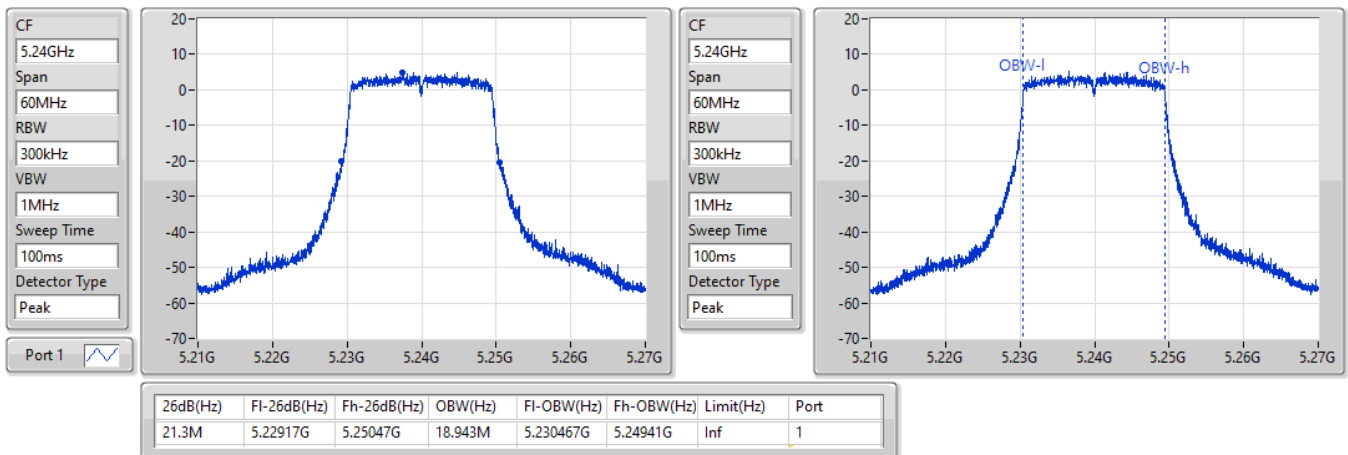


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5200MHz

24/08/2022


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5240MHz

24/08/2022

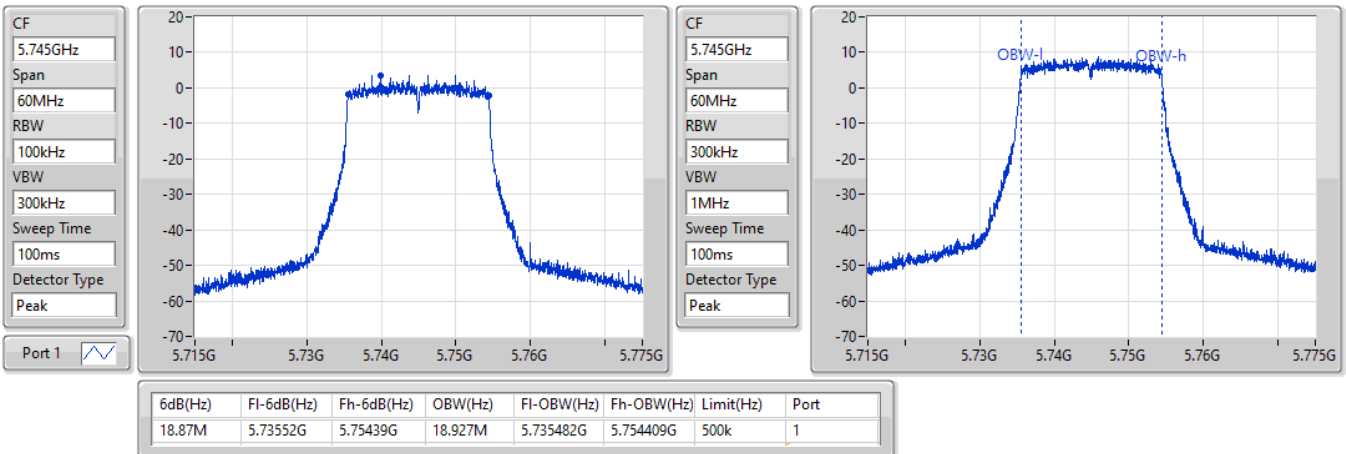


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

24/08/2022

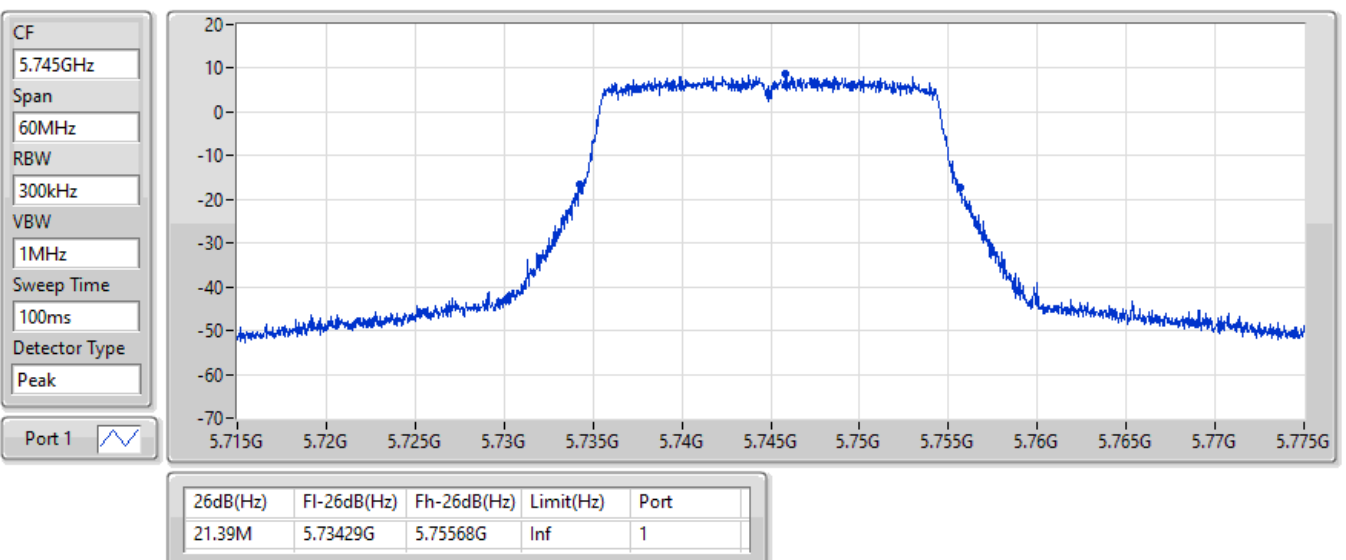


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

24/08/2022

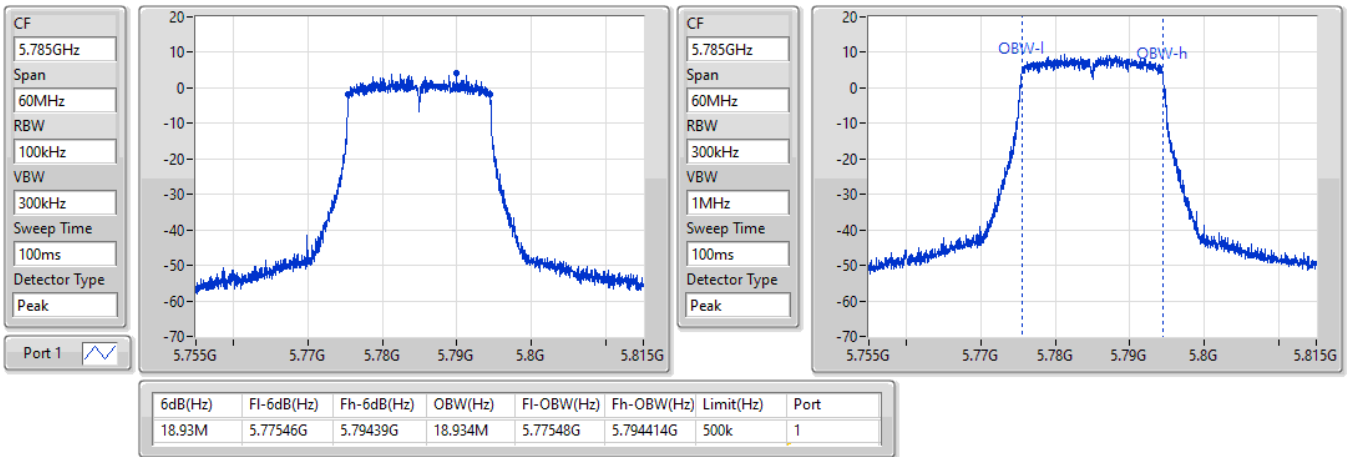


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

24/08/2022

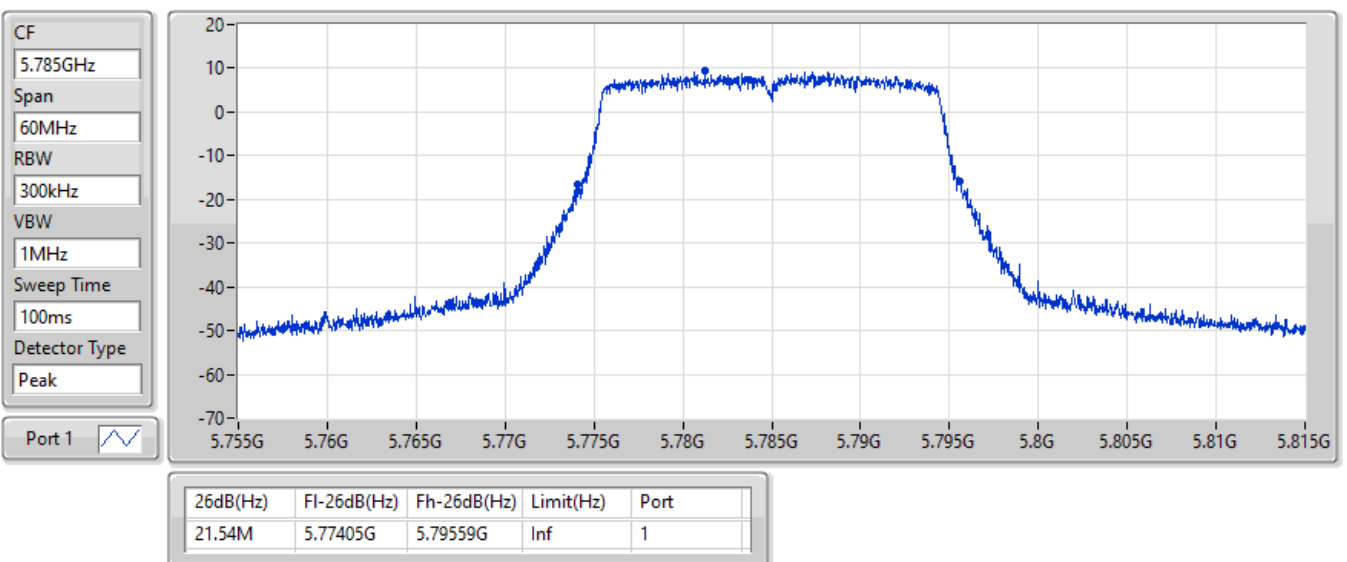


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

24/08/2022

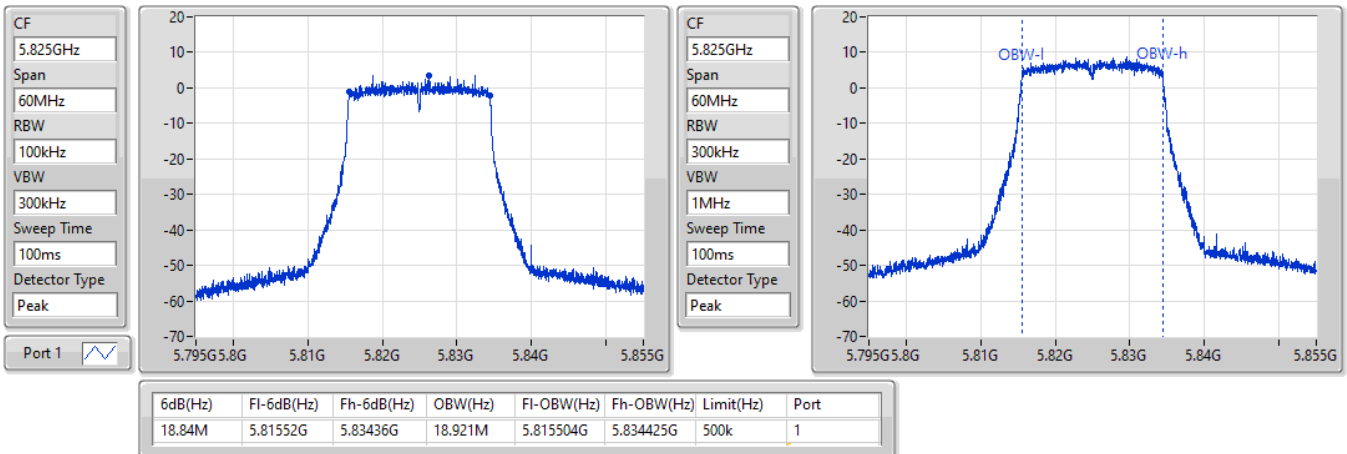


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

24/08/2022

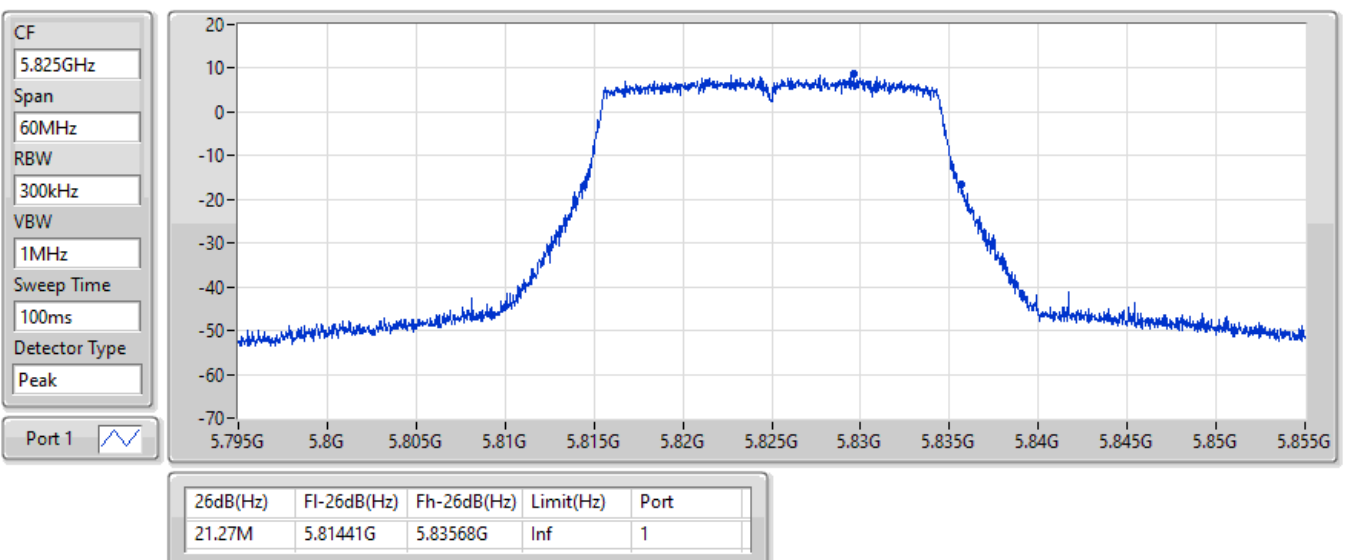


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

24/08/2022

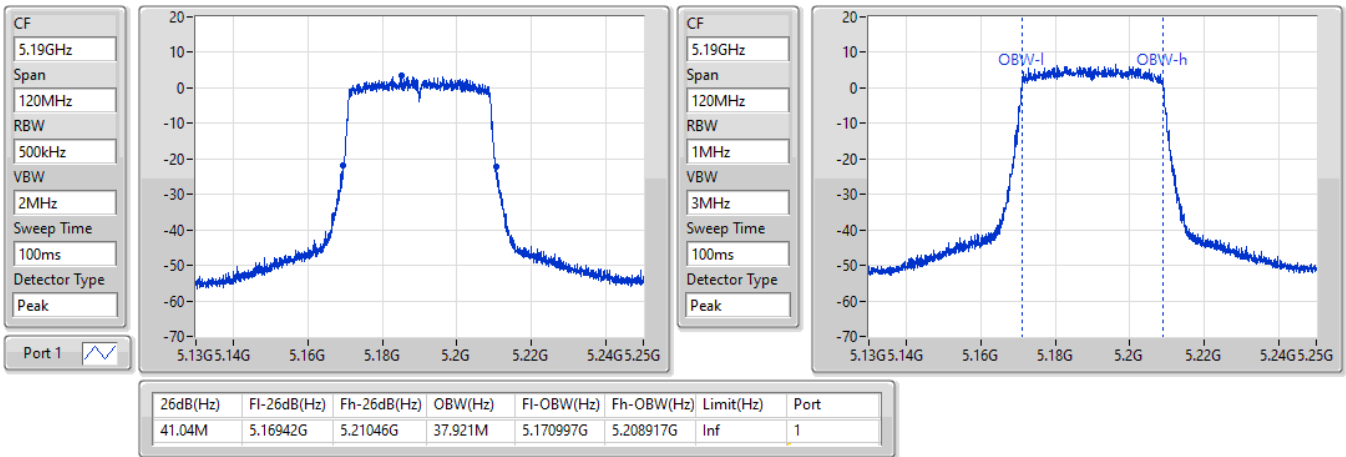


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5190MHz

24/08/2022

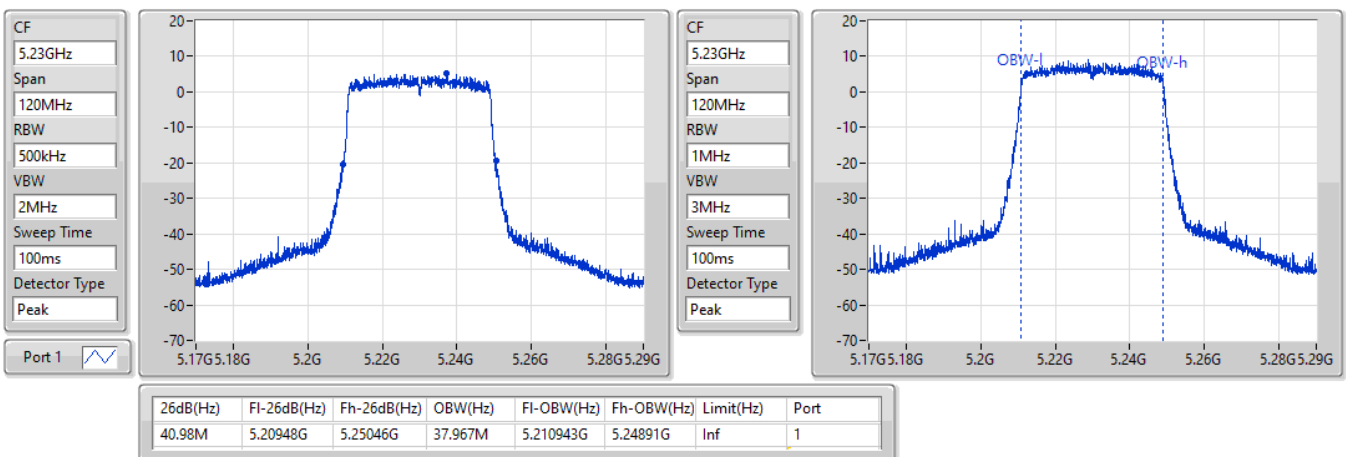


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5230MHz

24/08/2022

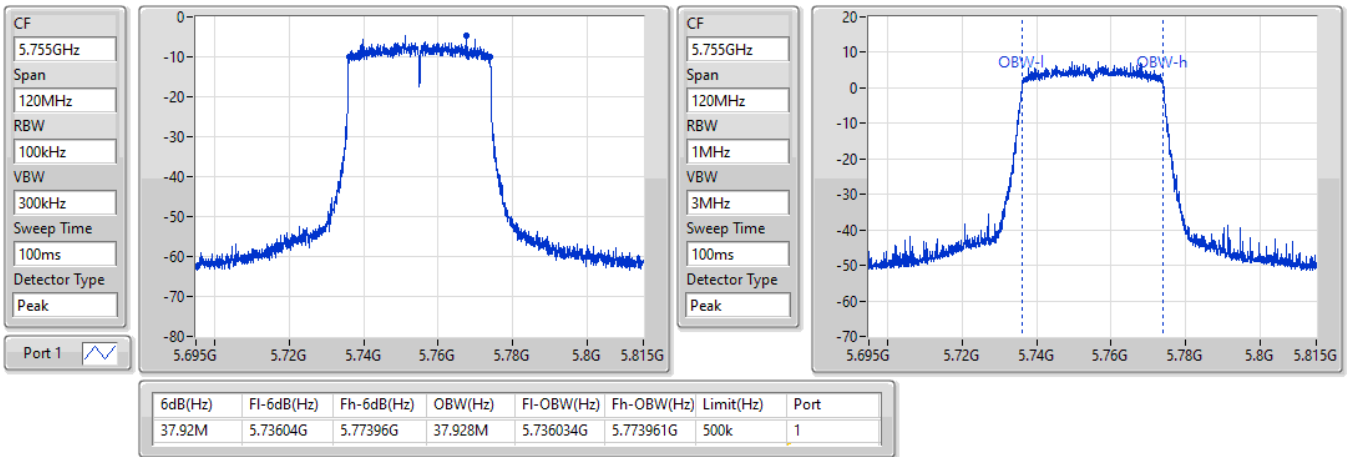


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

24/08/2022

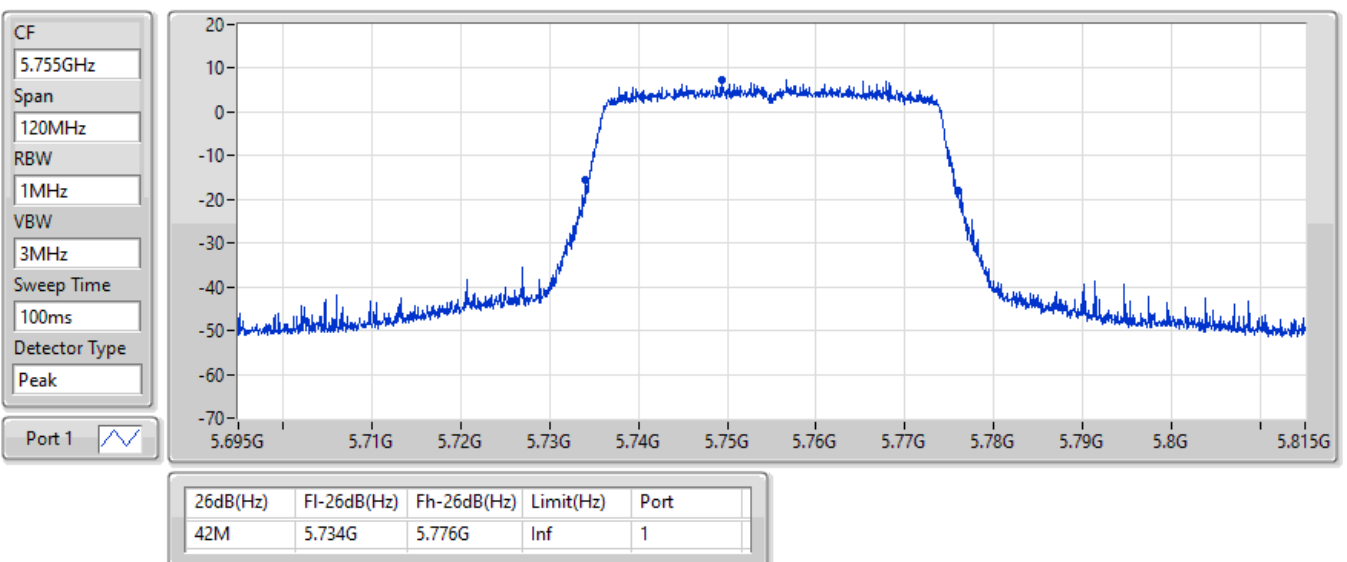


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

24/08/2022

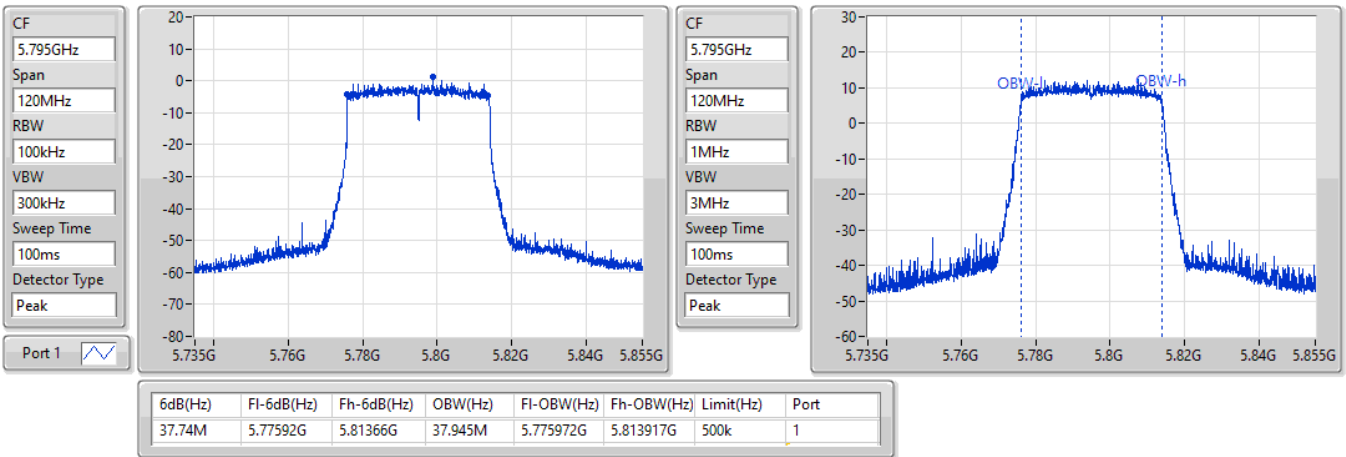


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

24/08/2022

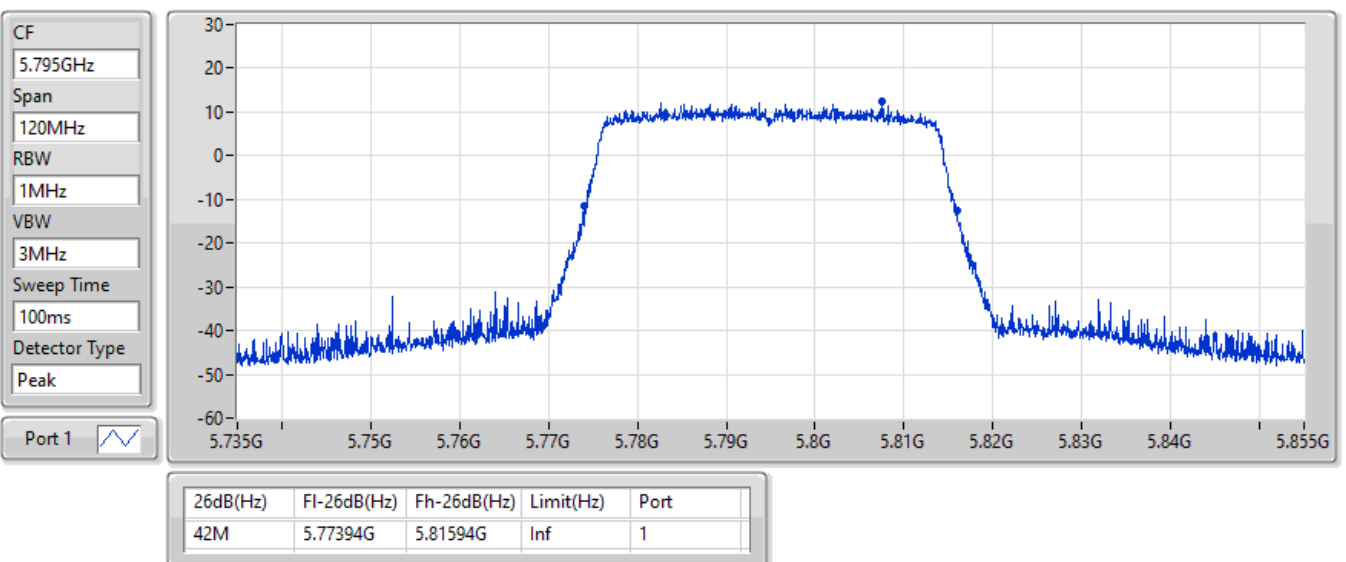


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

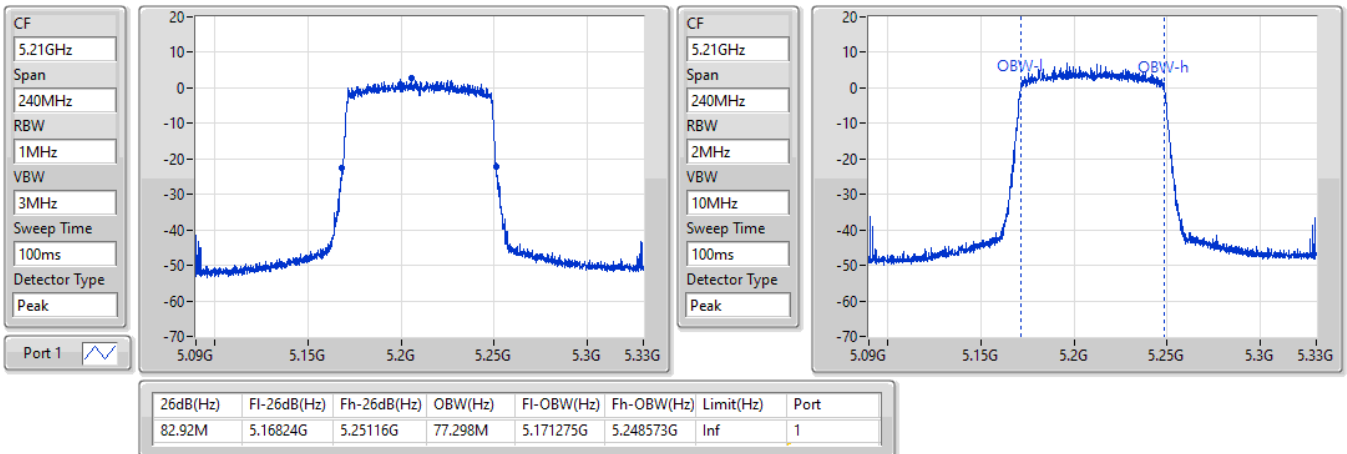
5795MHz

24/08/2022

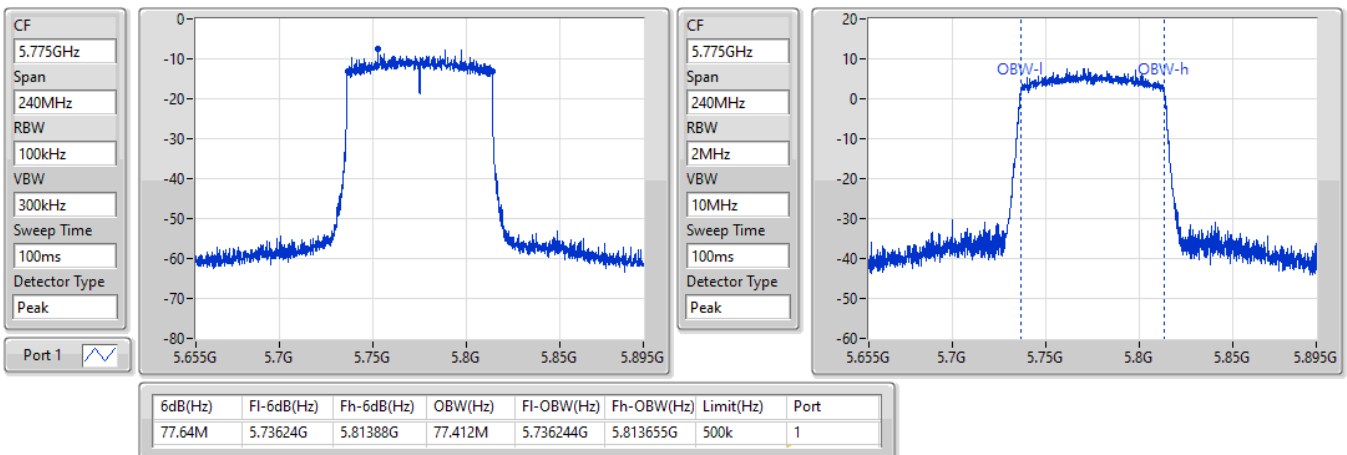


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5210MHz

24/08/2022


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5775MHz

24/08/2022

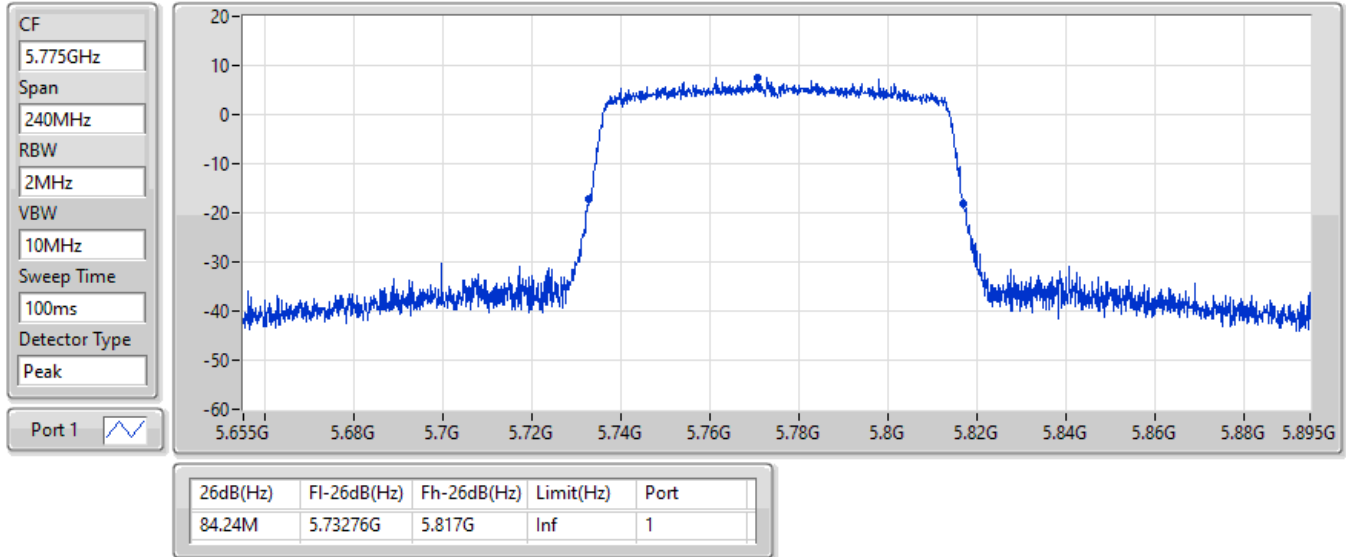


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

24/08/2022

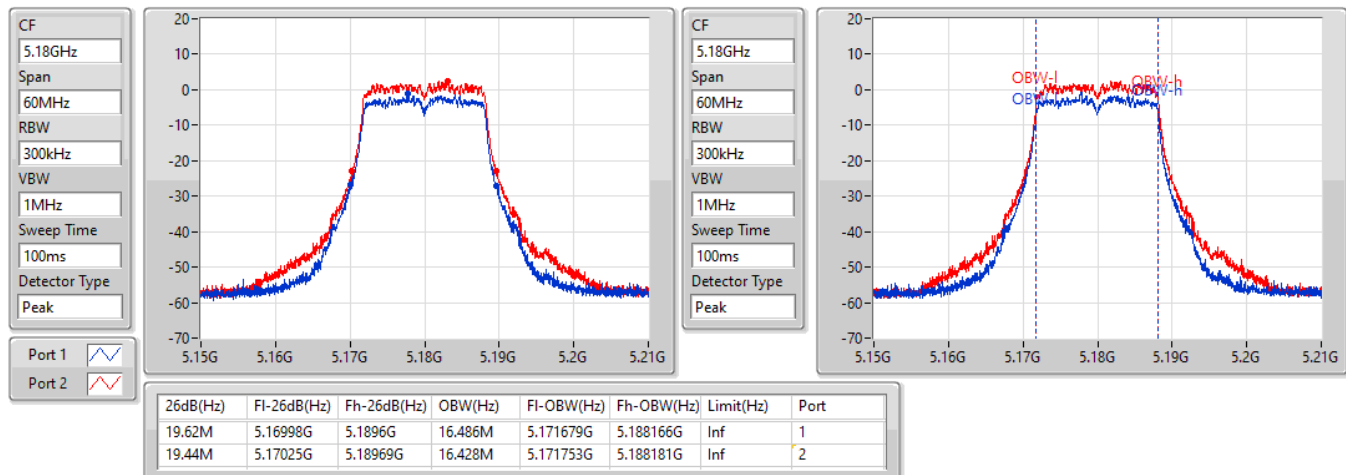


802.11a_Nss1,(6Mbps)_2TX

EBW

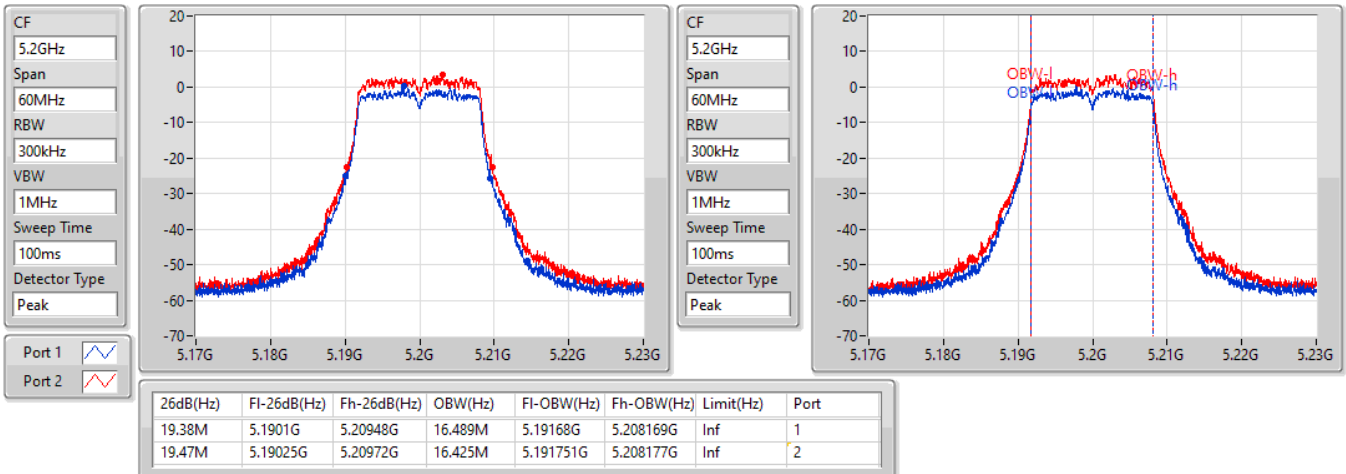
5180MHz

24/08/2022

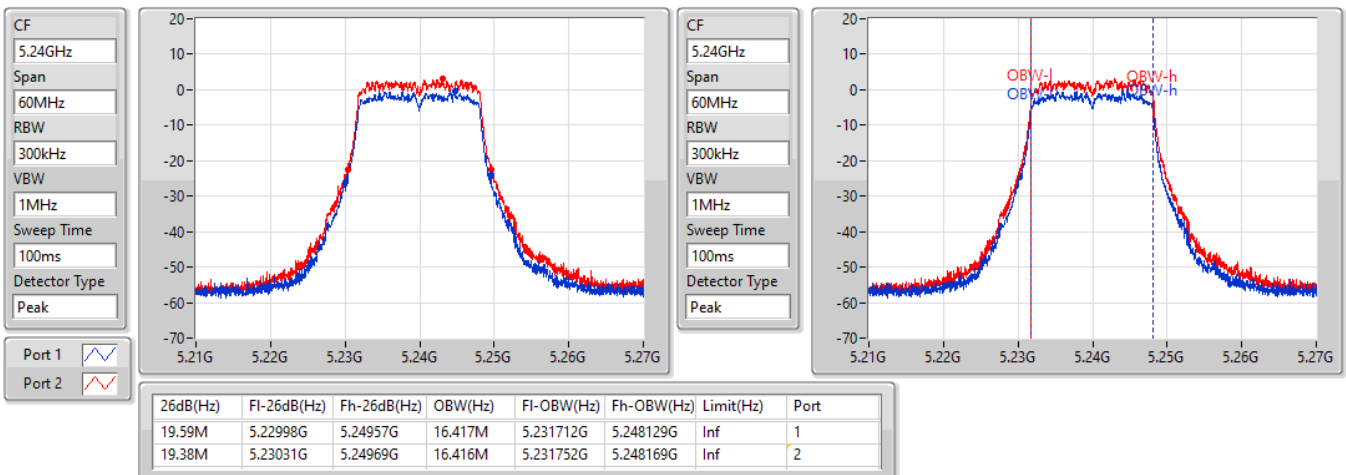


802.11a_Nss1,(6Mbps)_2TX
EBW
5200MHz

24/08/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5240MHz

24/08/2022

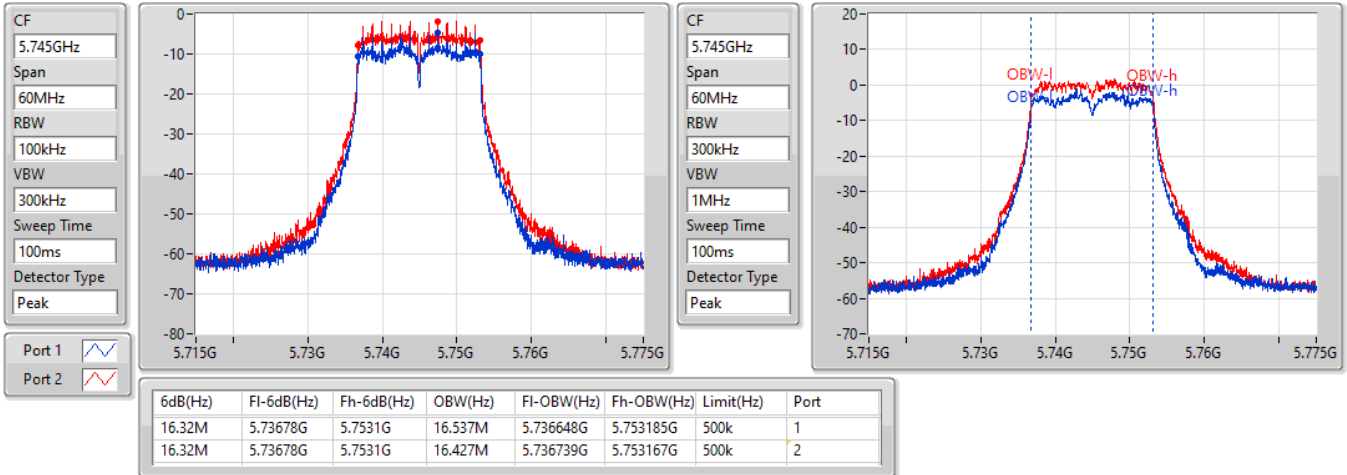


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

24/08/2022

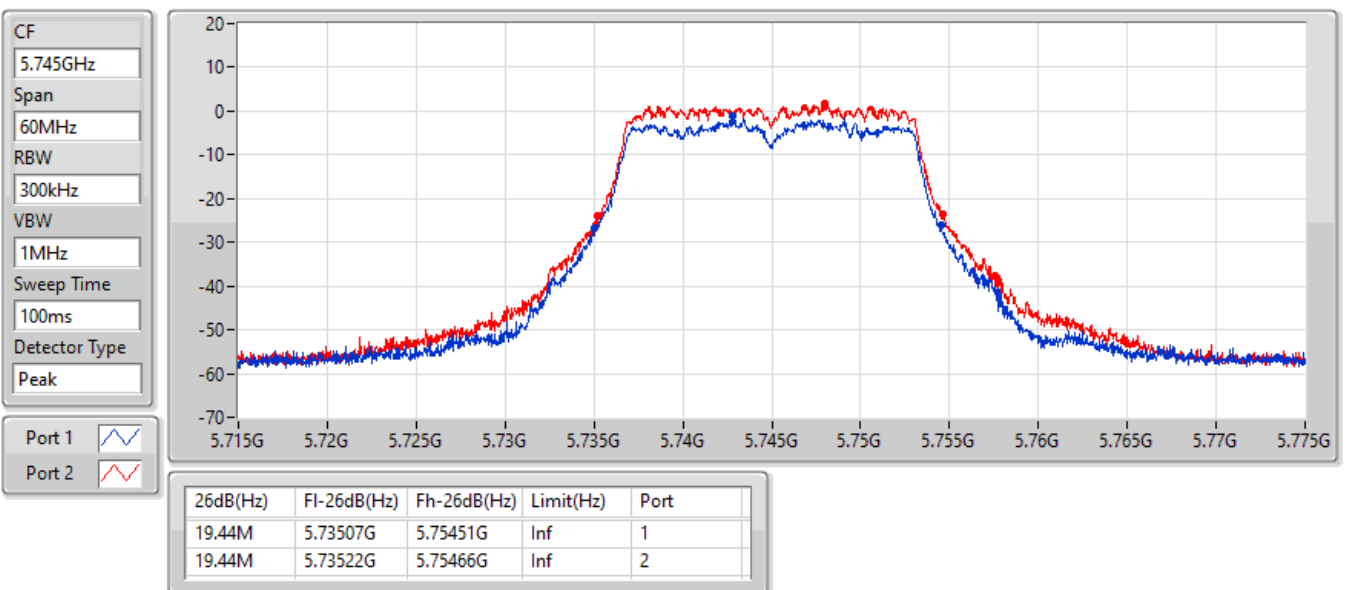


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

24/08/2022

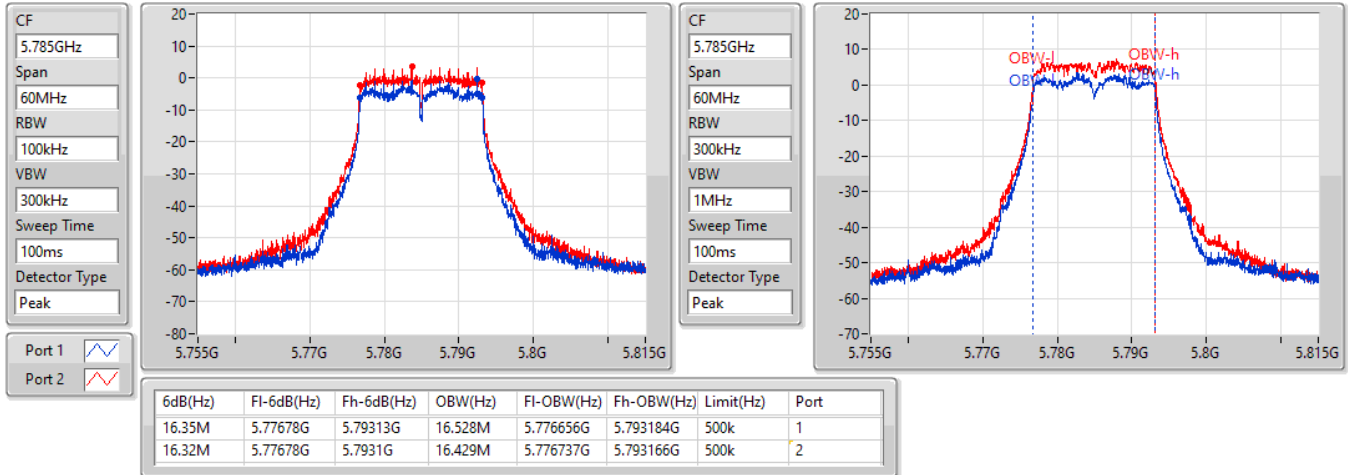


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

24/08/2022

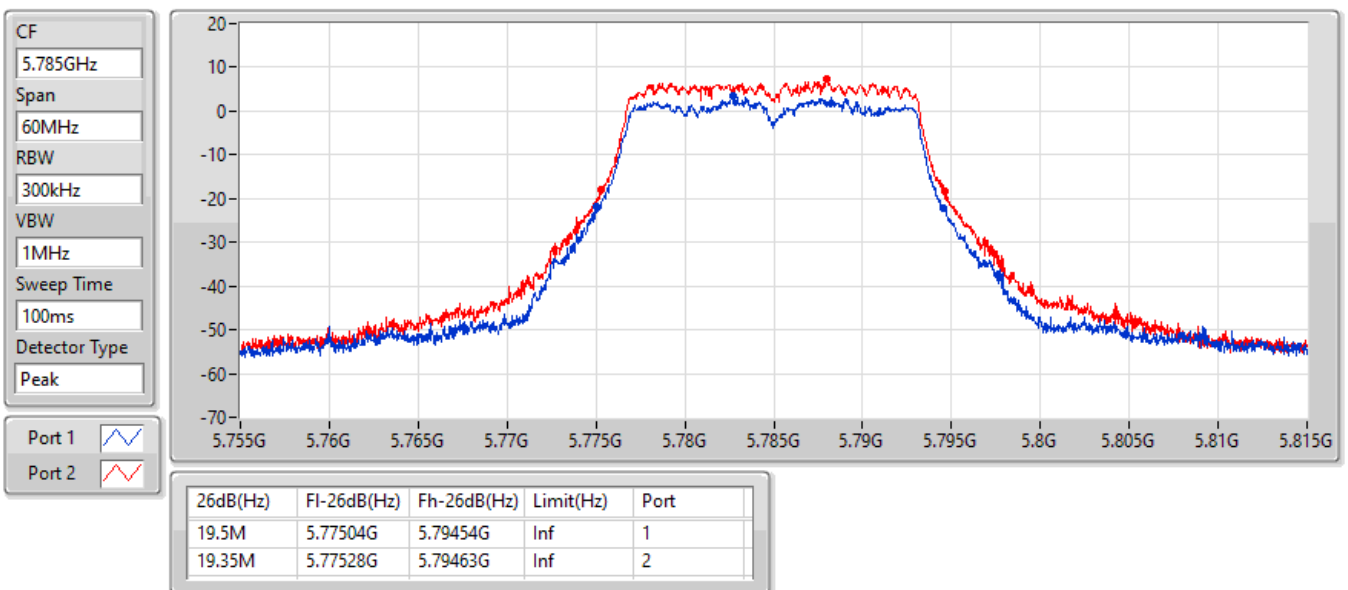


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

24/08/2022

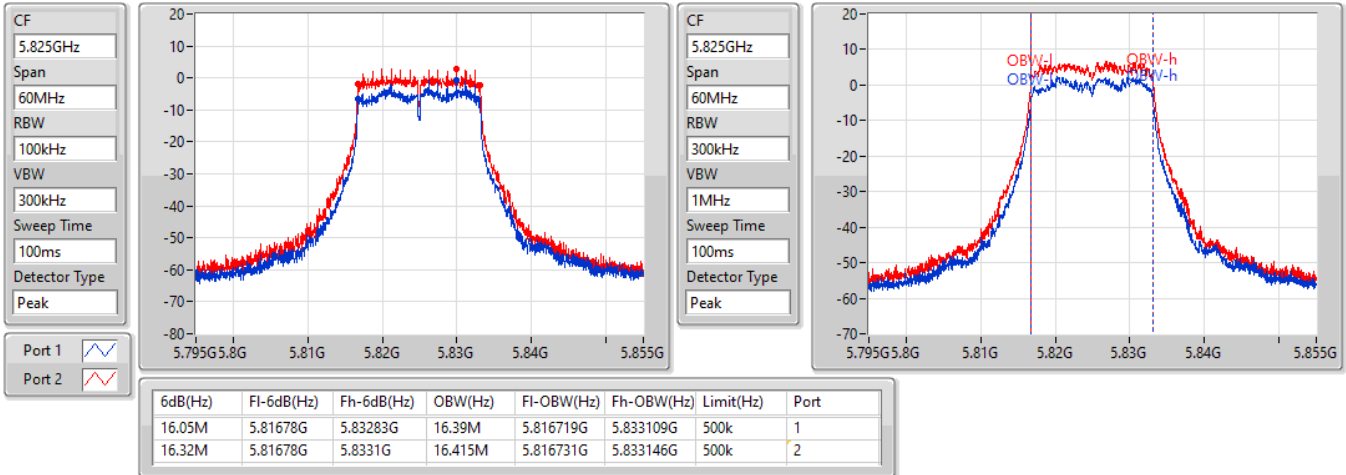


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

24/08/2022

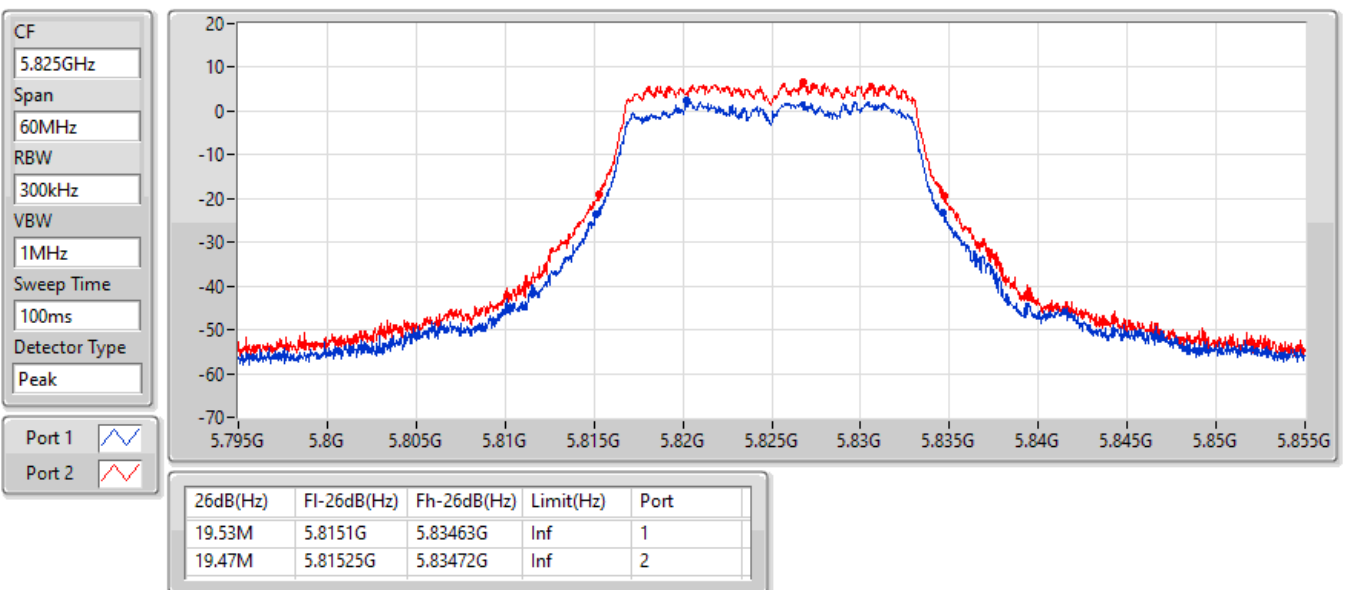


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

24/08/2022

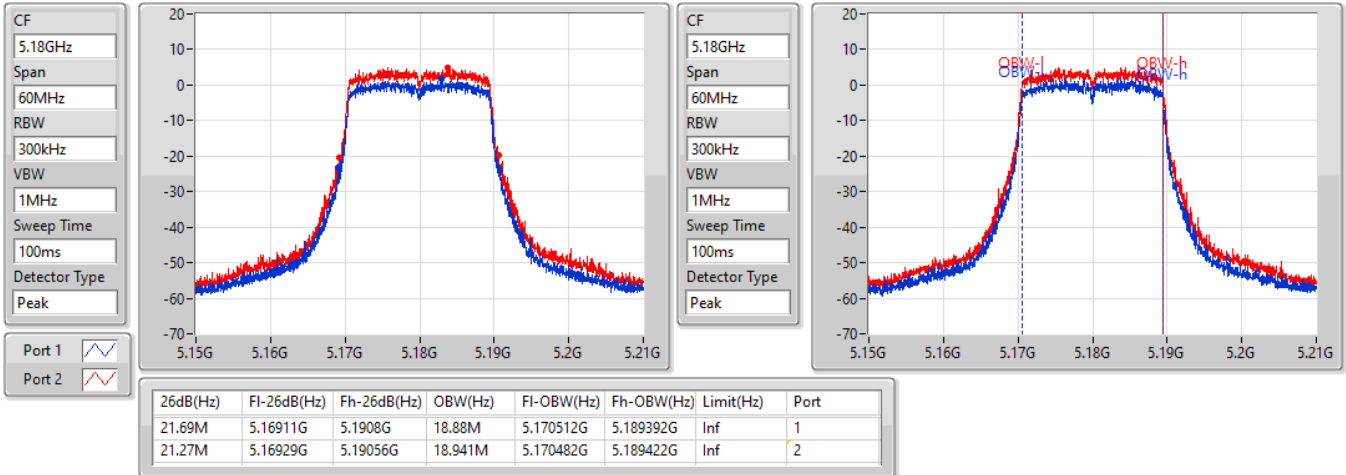


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5180MHz

24/08/2022

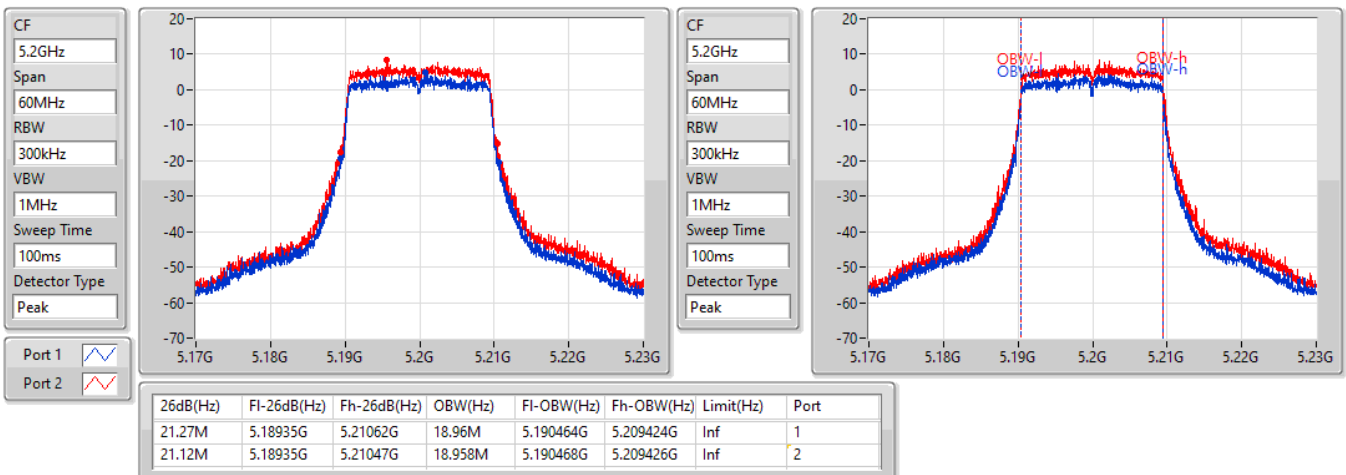


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

24/08/2022

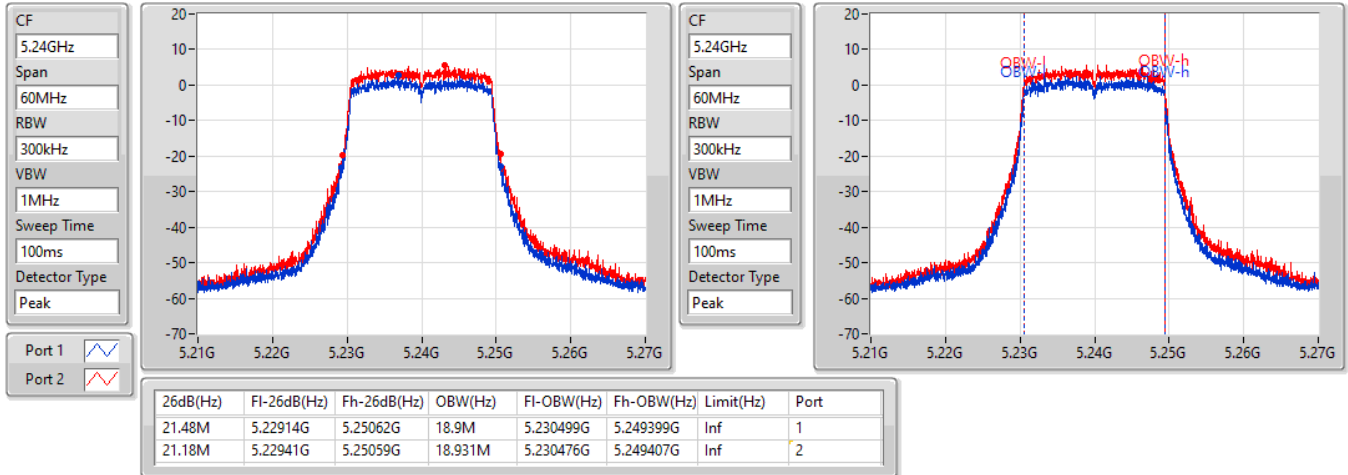


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

24/08/2022

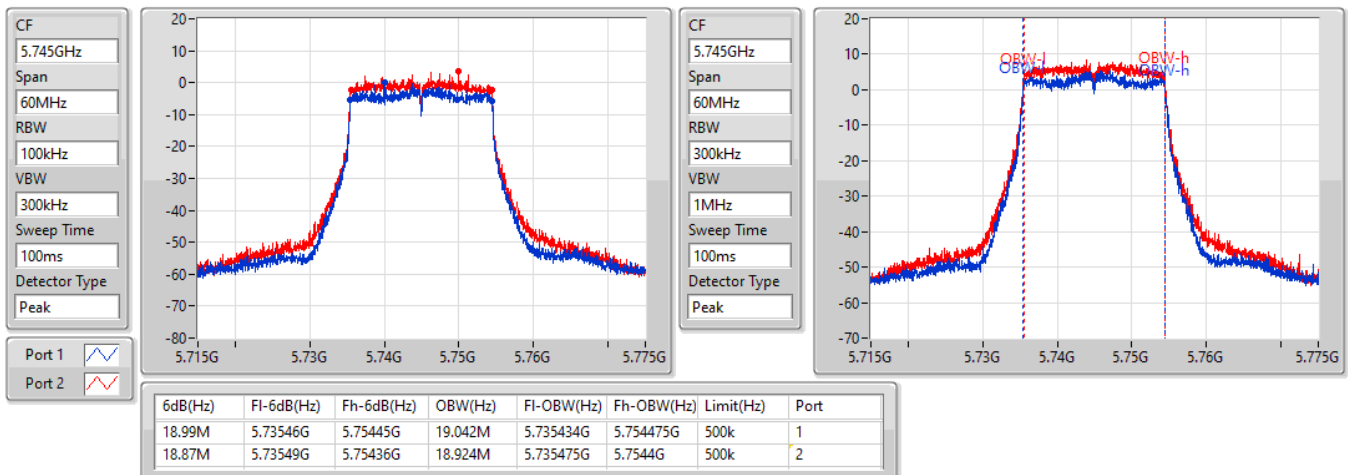


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

24/08/2022

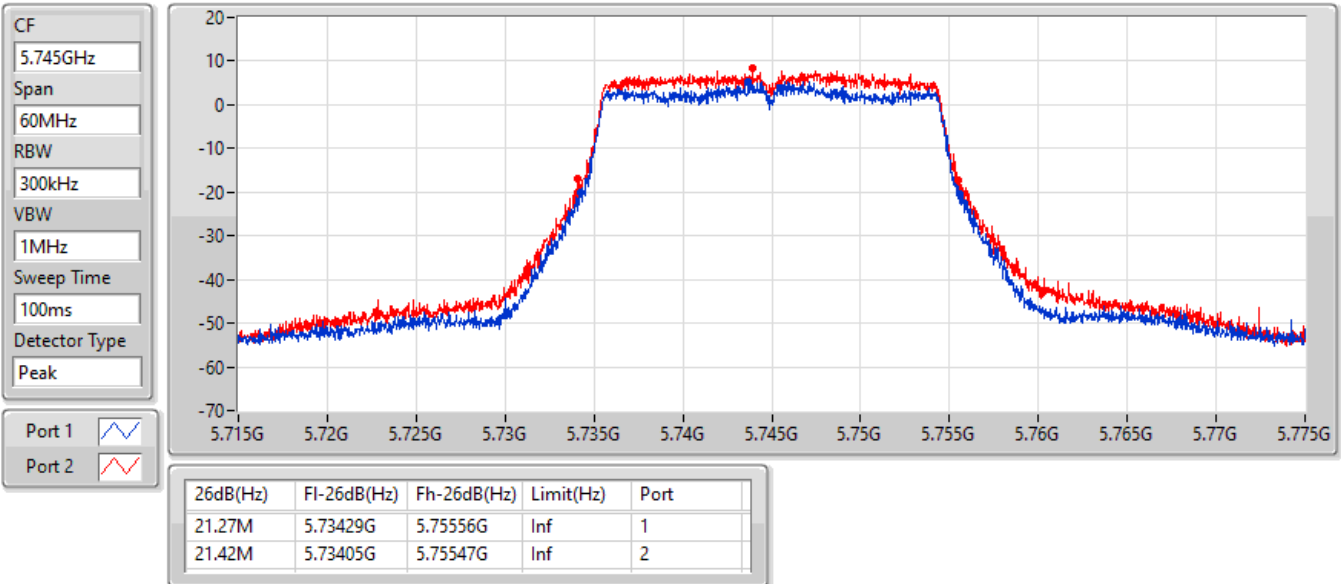


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

24/08/2022

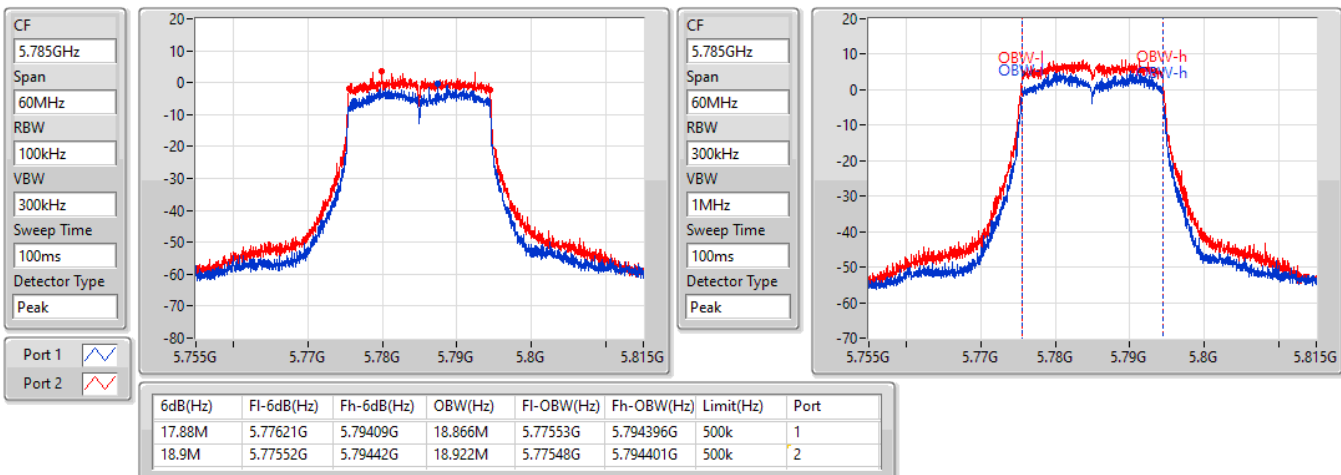


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

24/08/2022

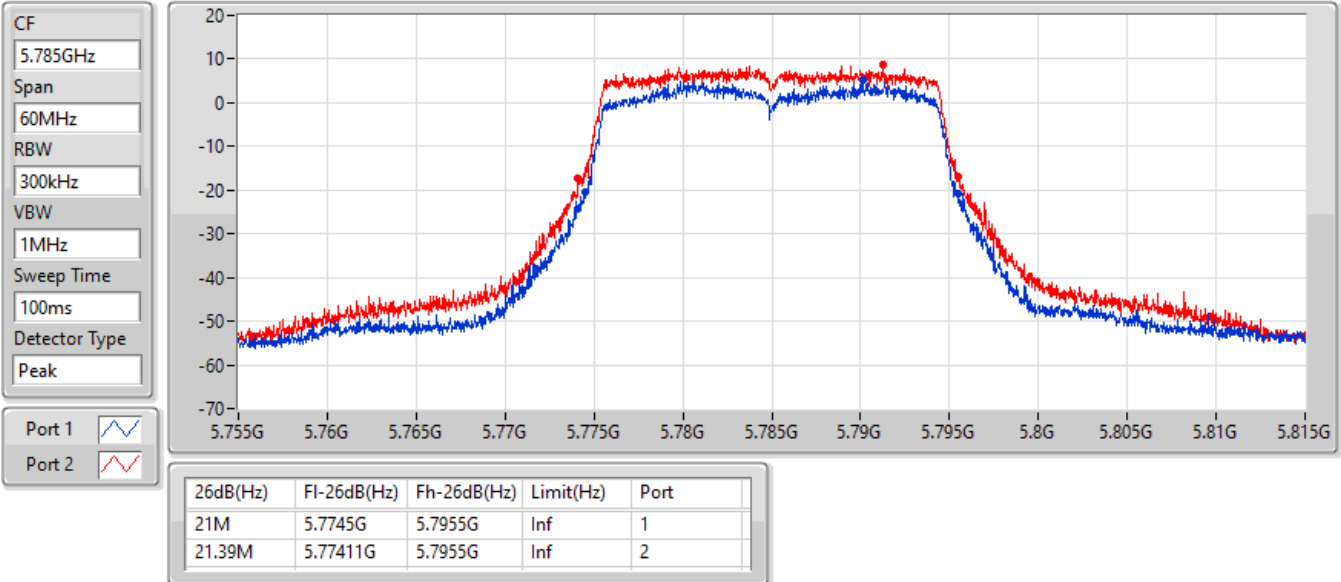


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

24/08/2022

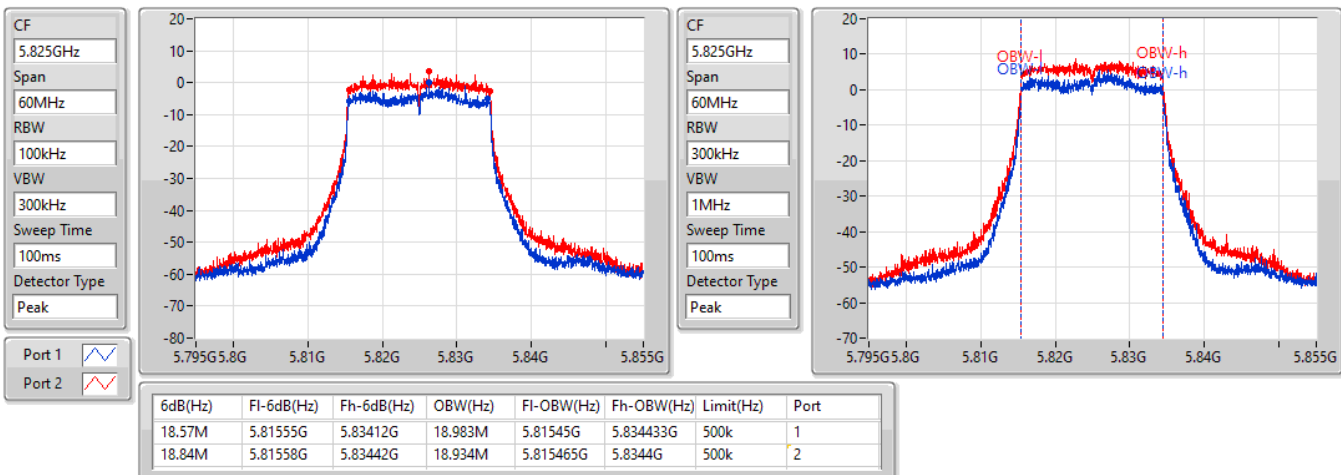


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

24/08/2022

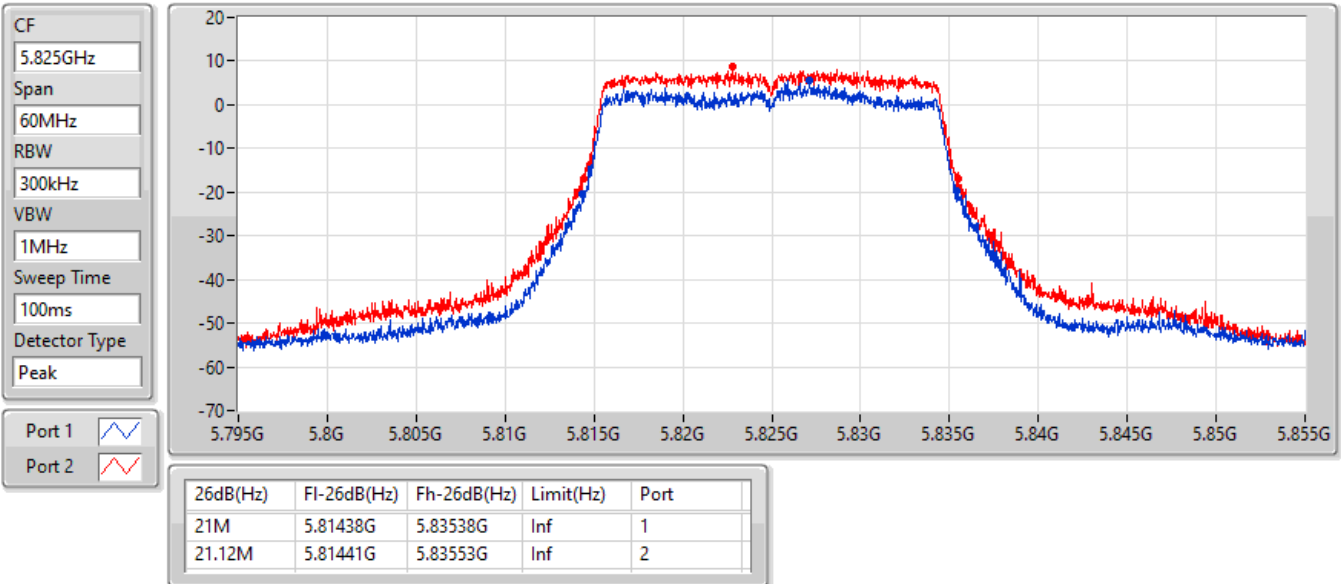


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

24/08/2022

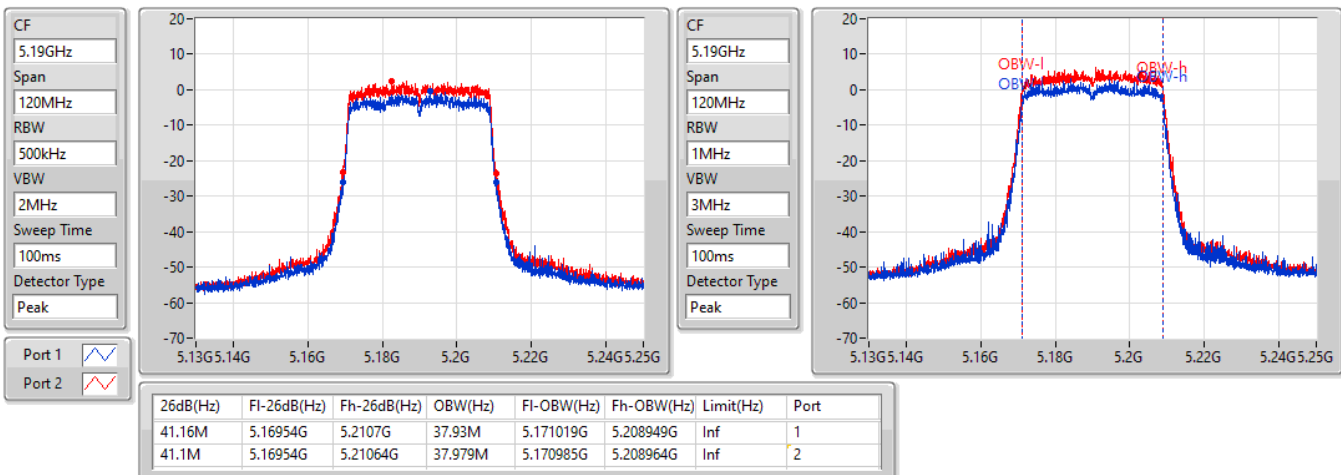


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5190MHz

24/08/2022

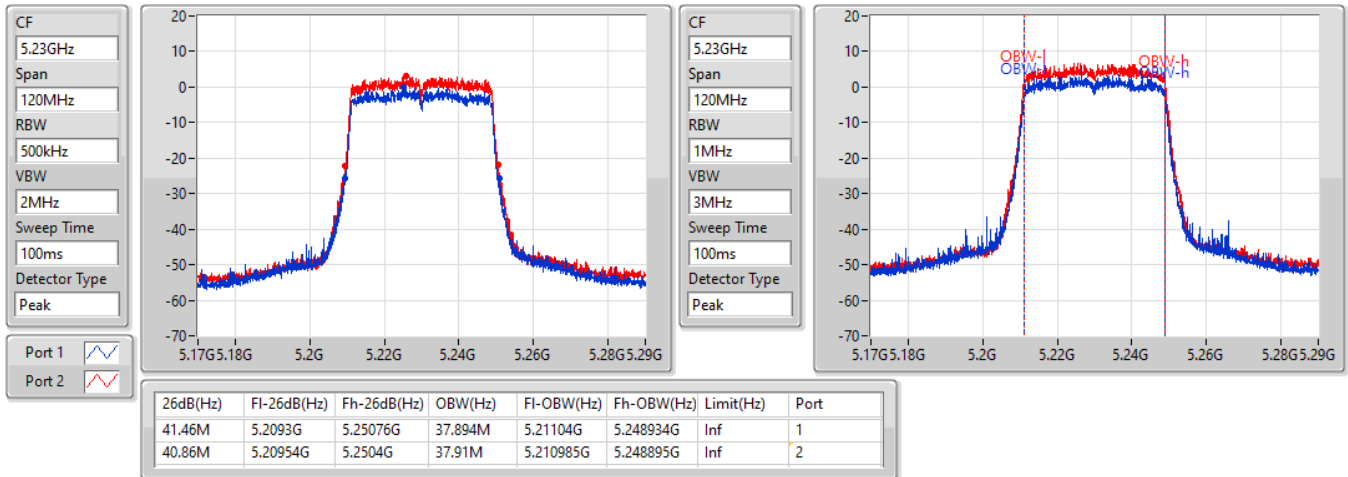


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5230MHz

24/08/2022

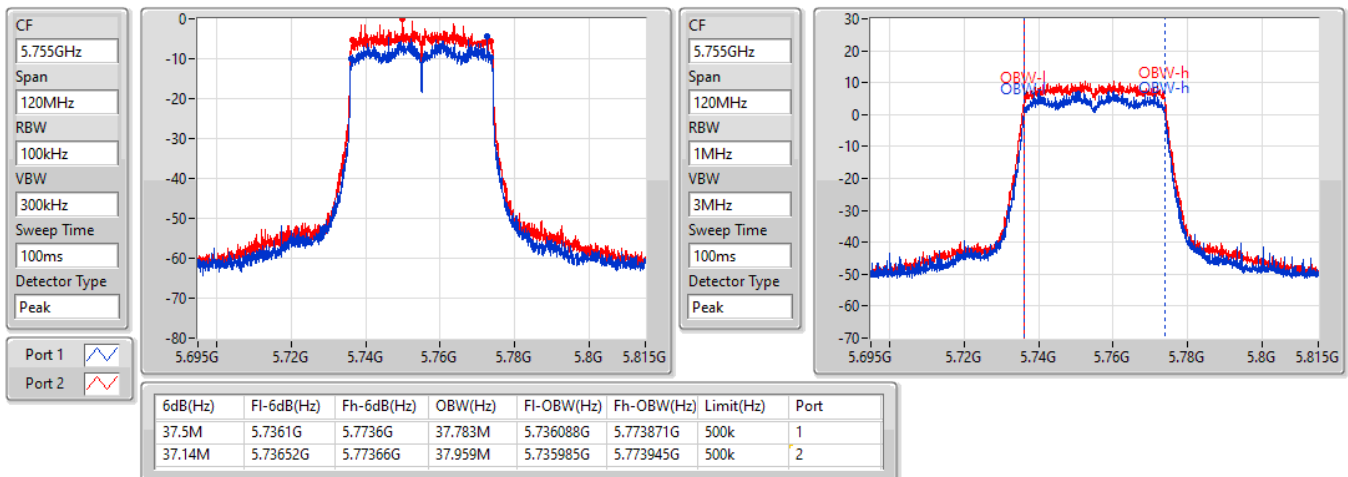


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

24/08/2022

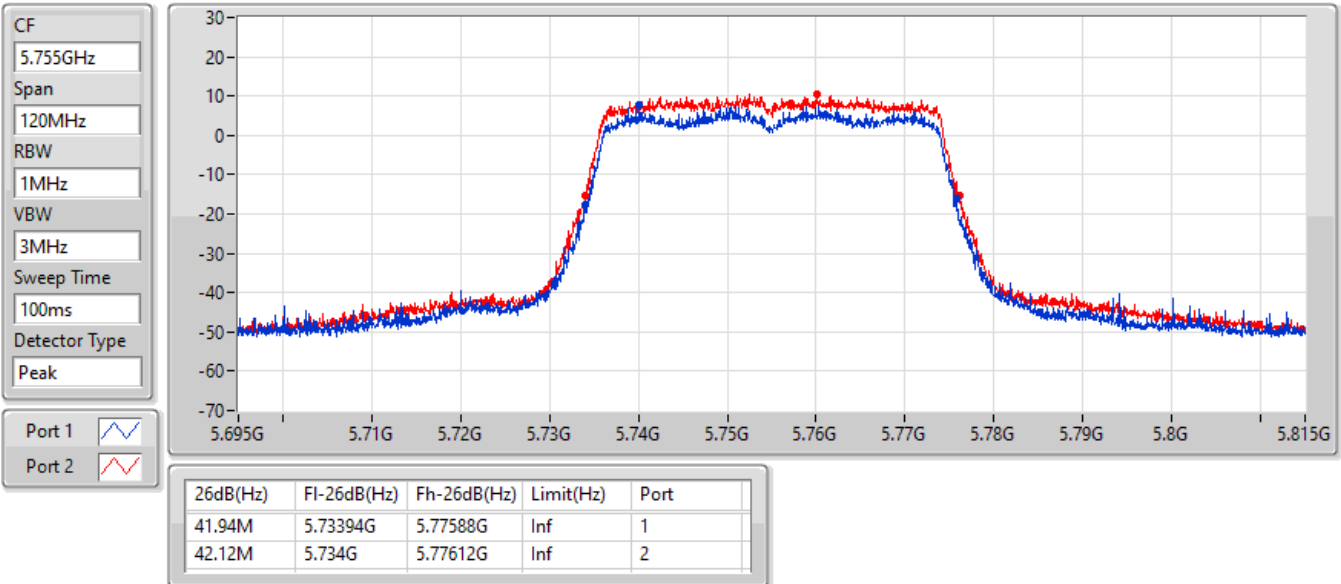


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

24/08/2022

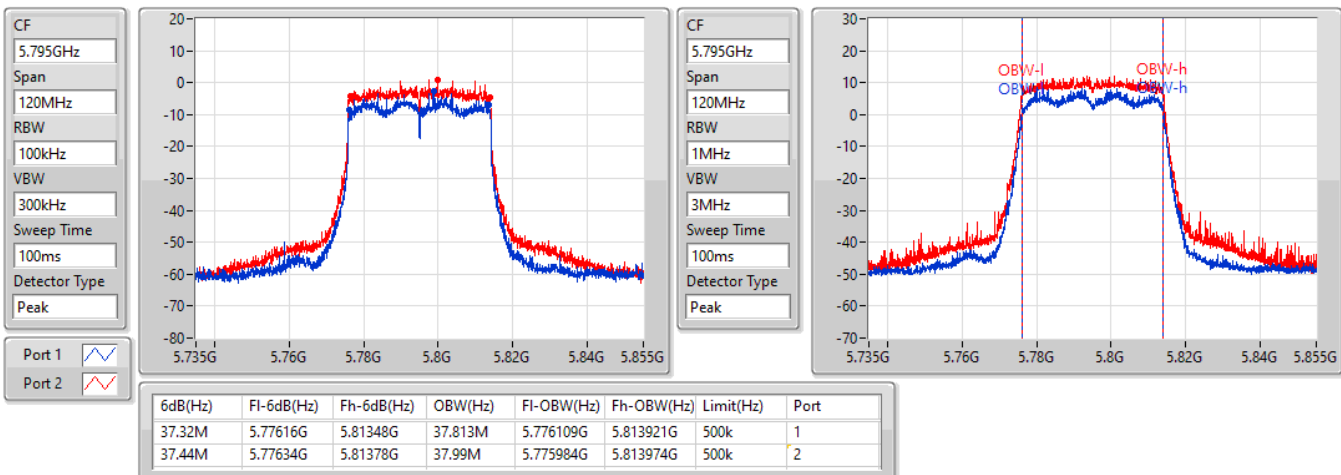


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

24/08/2022

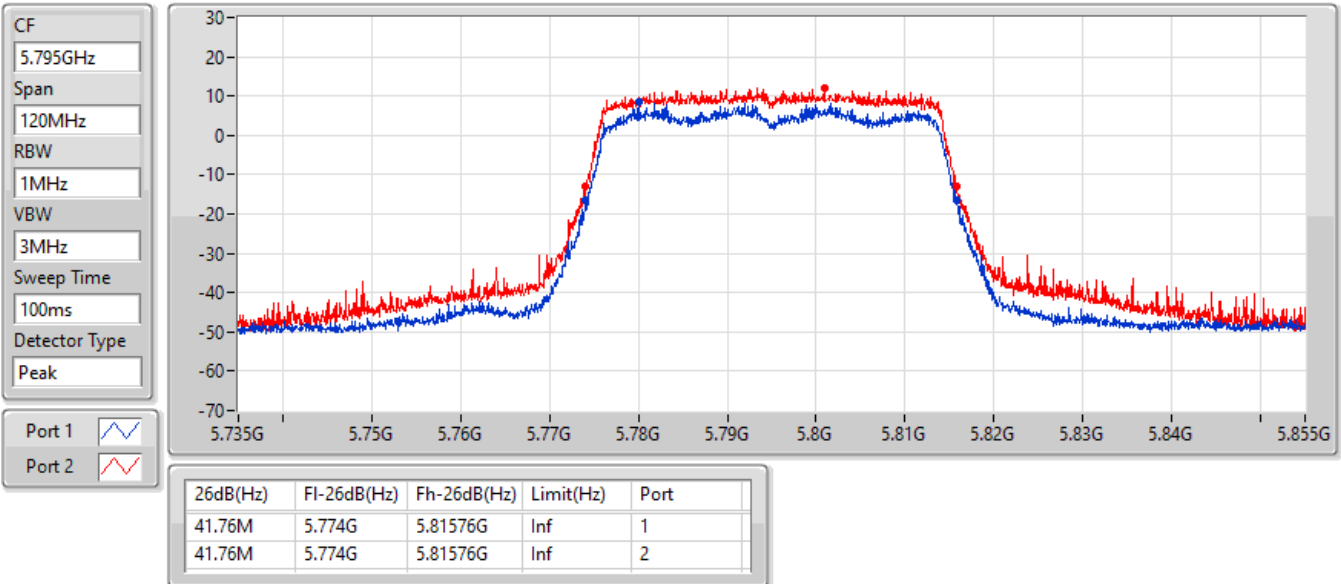


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

24/08/2022

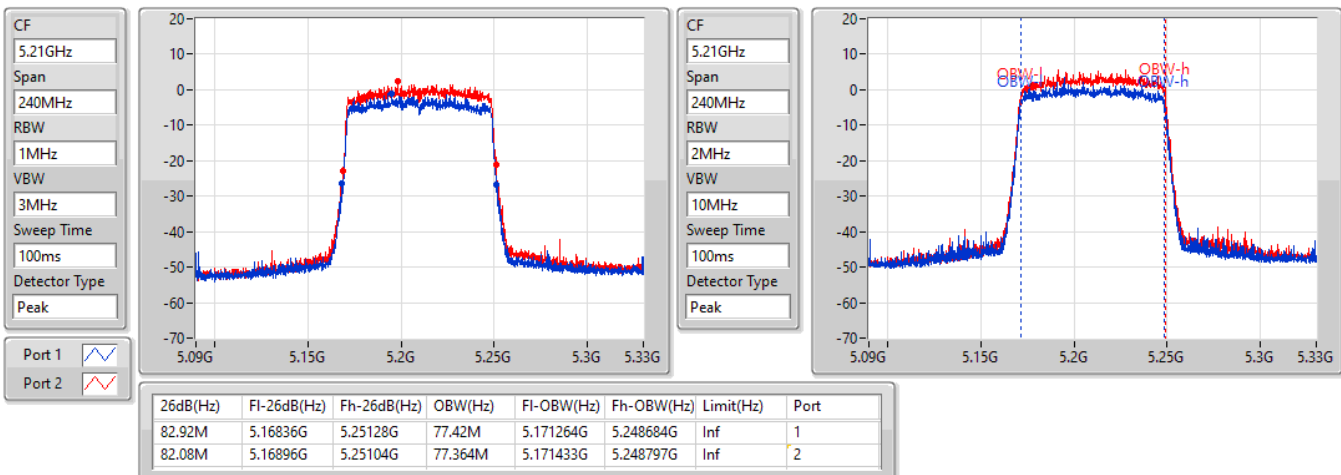


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5210MHz

24/08/2022

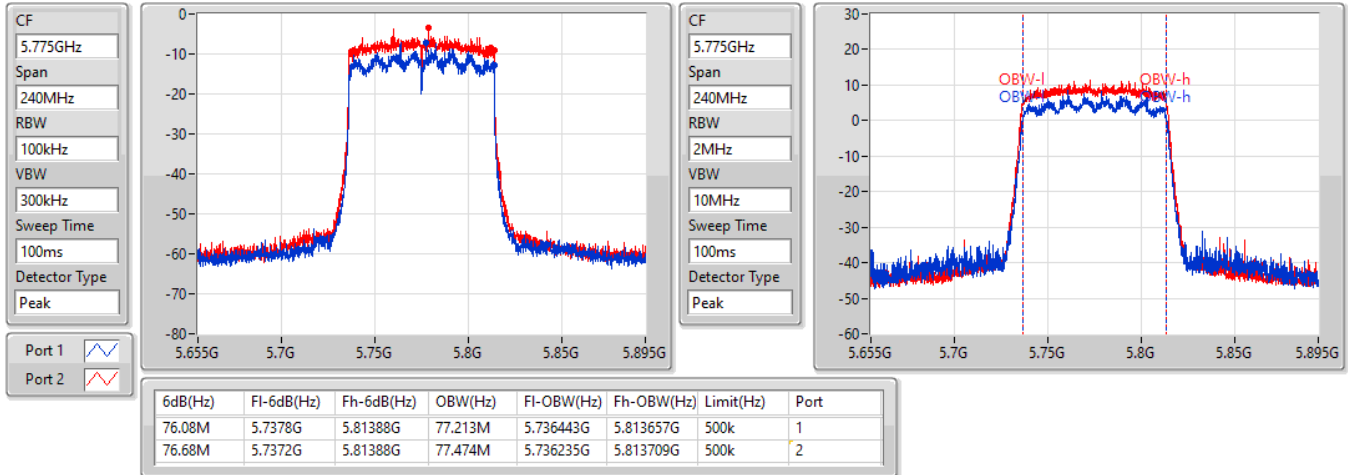


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

24/08/2022

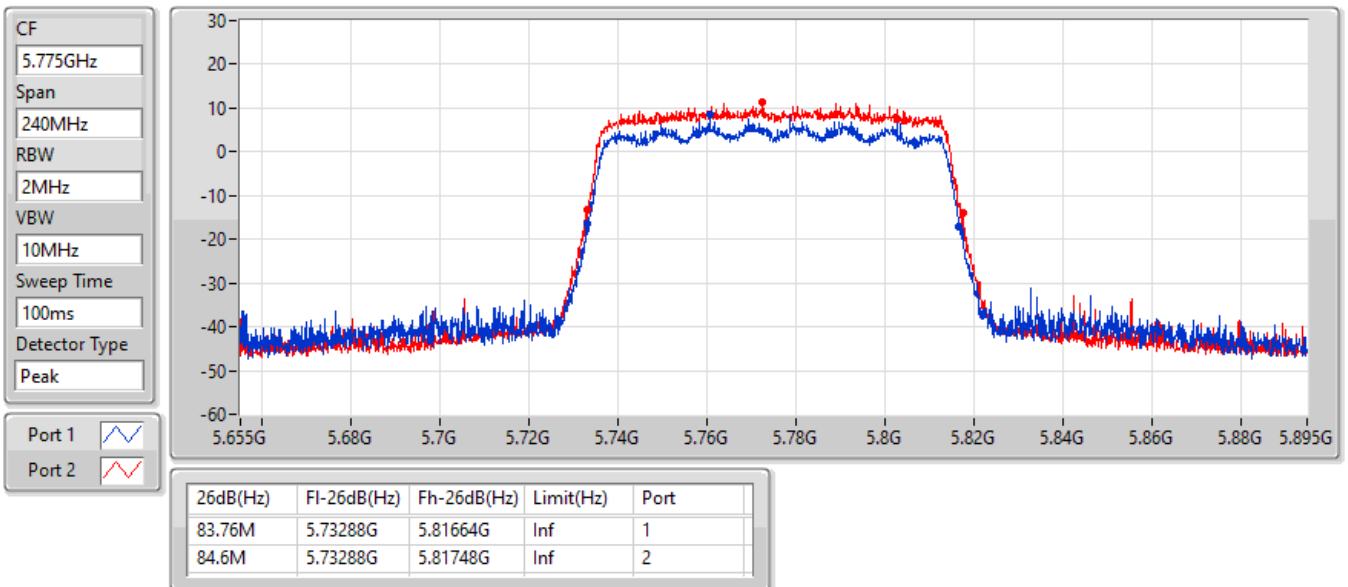


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

24/08/2022

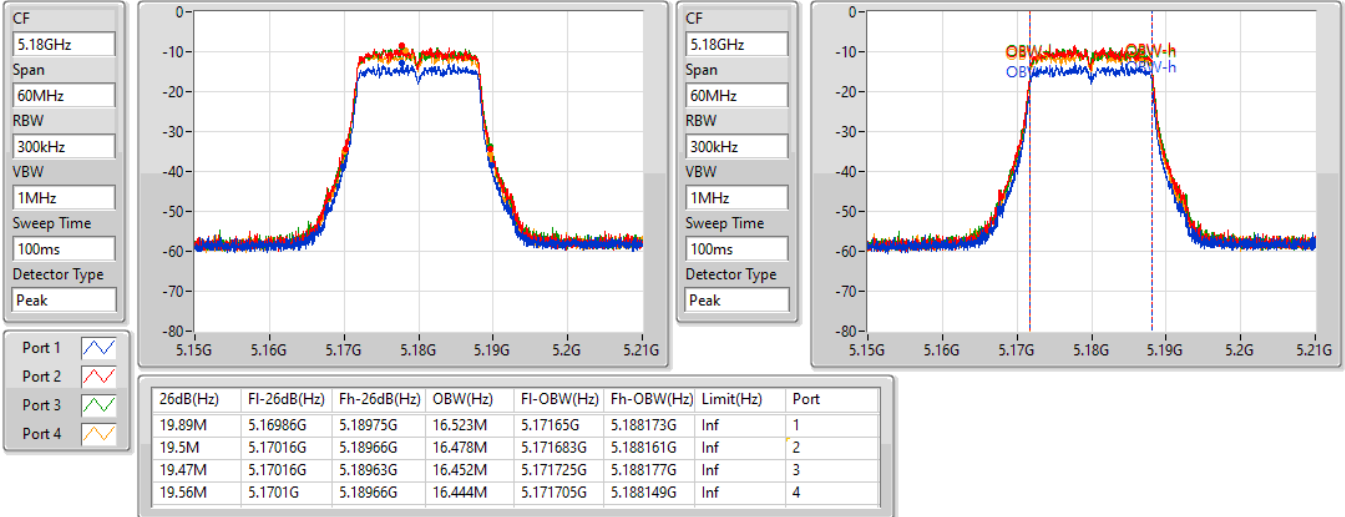


802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

22/08/2022

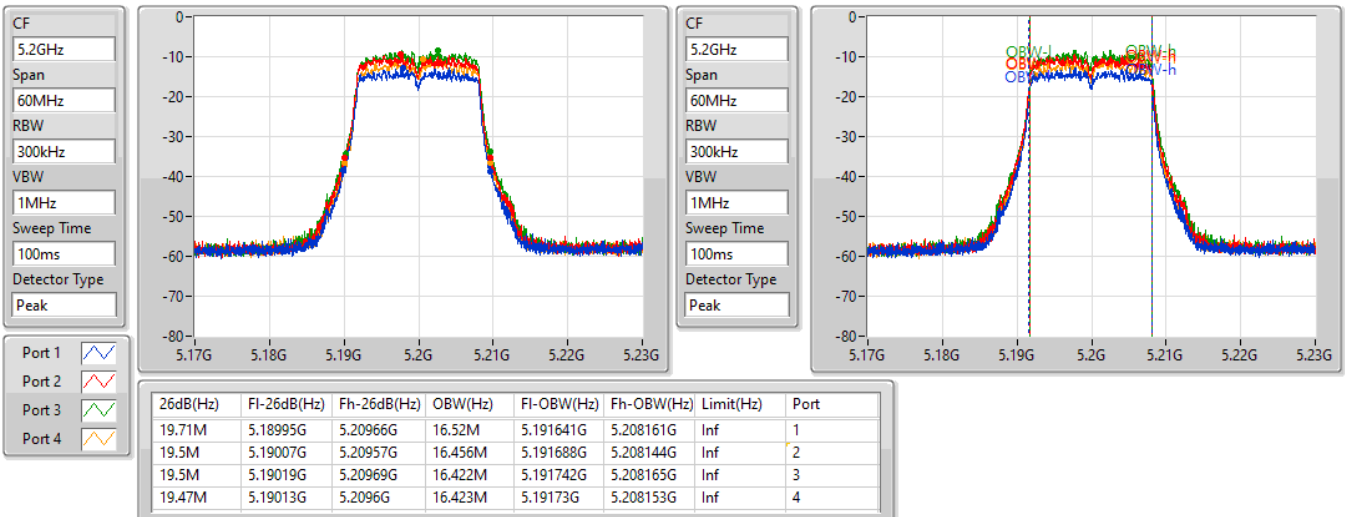


802.11a_Nss1,(6Mbps)_4TX

EBW

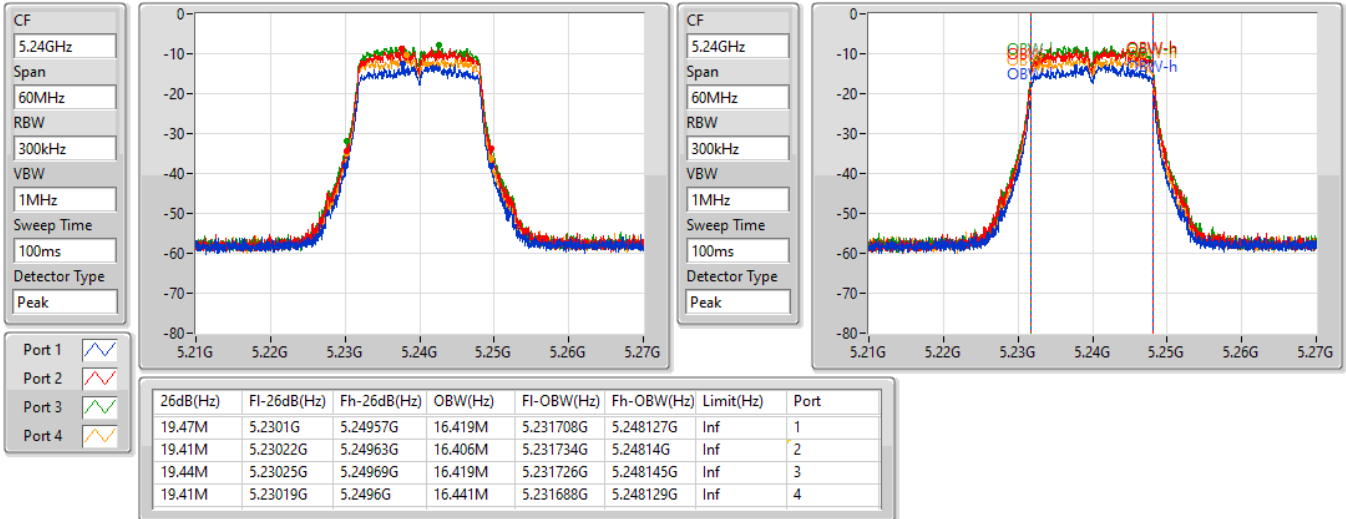
5200MHz

22/08/2022

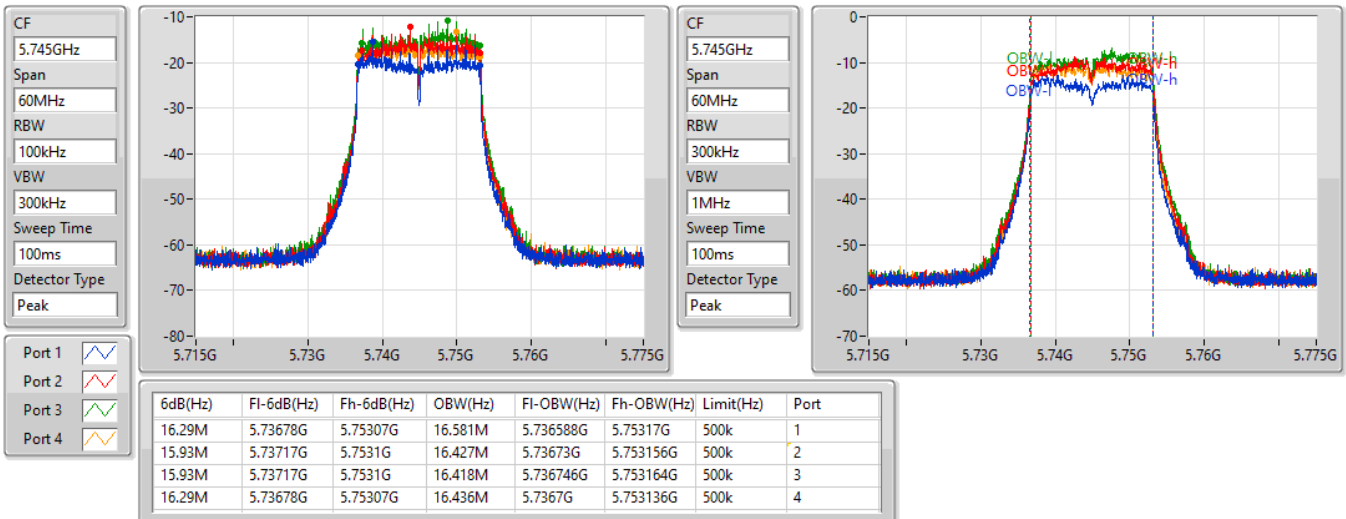


802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

22/08/2022


802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

22/08/2022

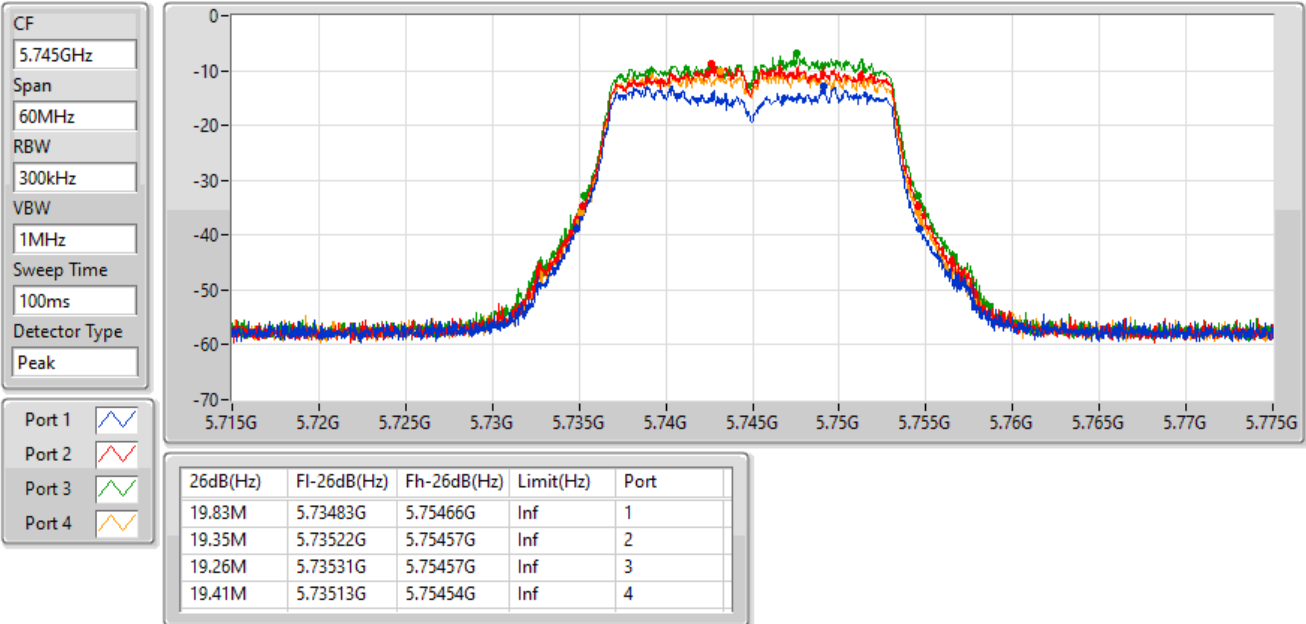


802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

22/08/2022

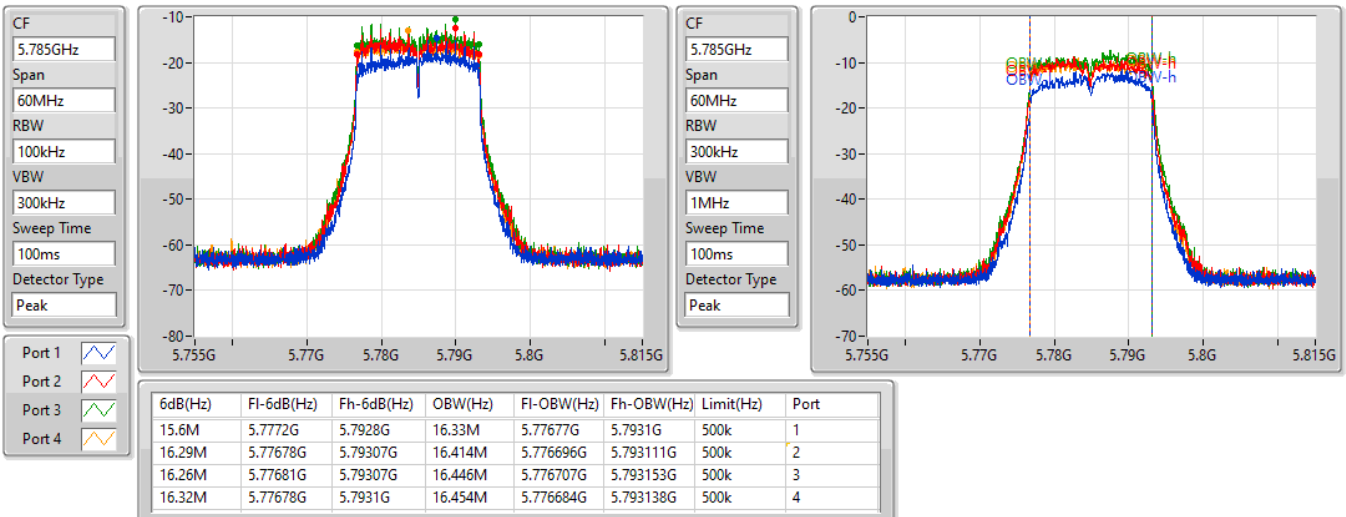


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

22/08/2022

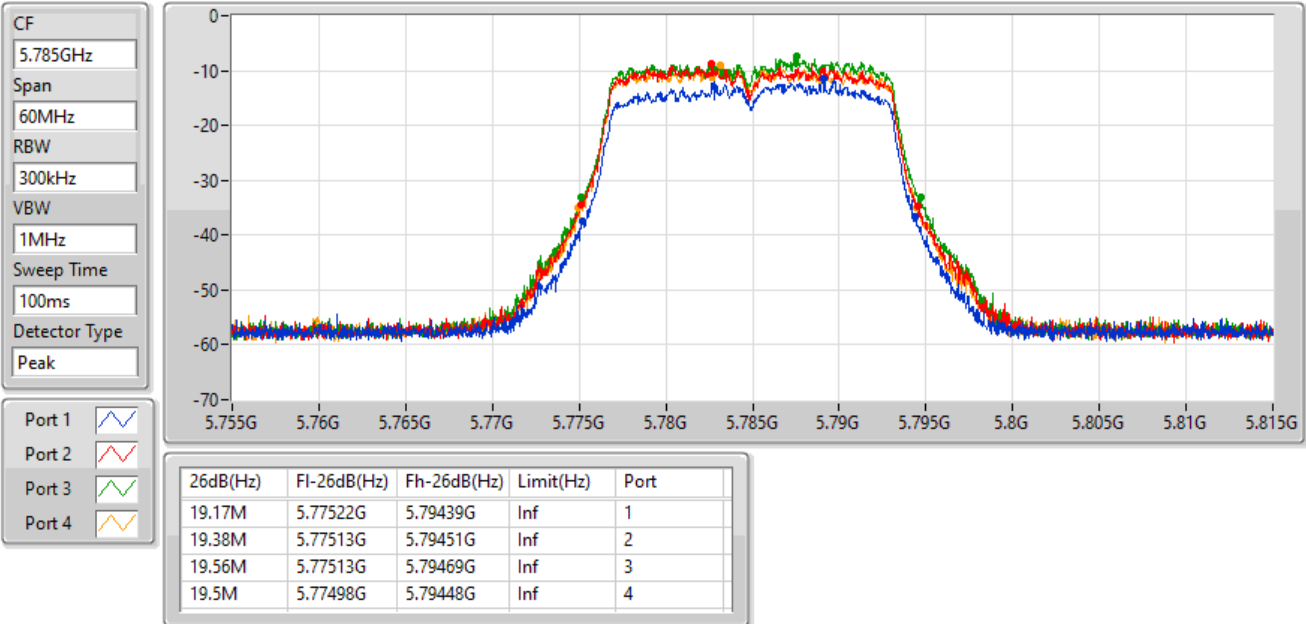


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

22/08/2022

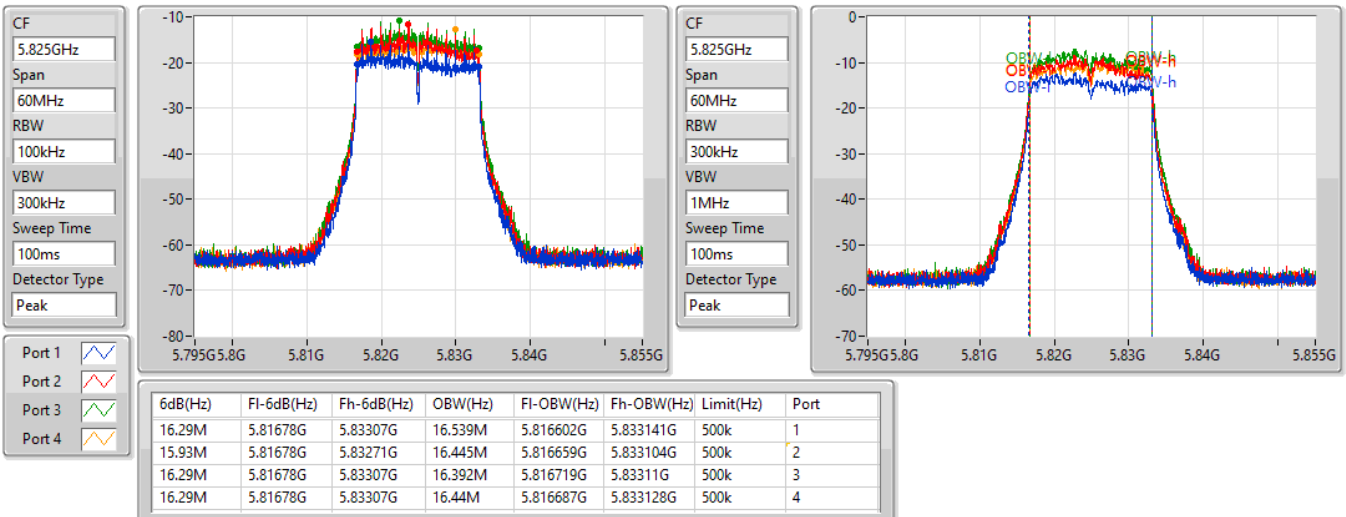


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

22/08/2022

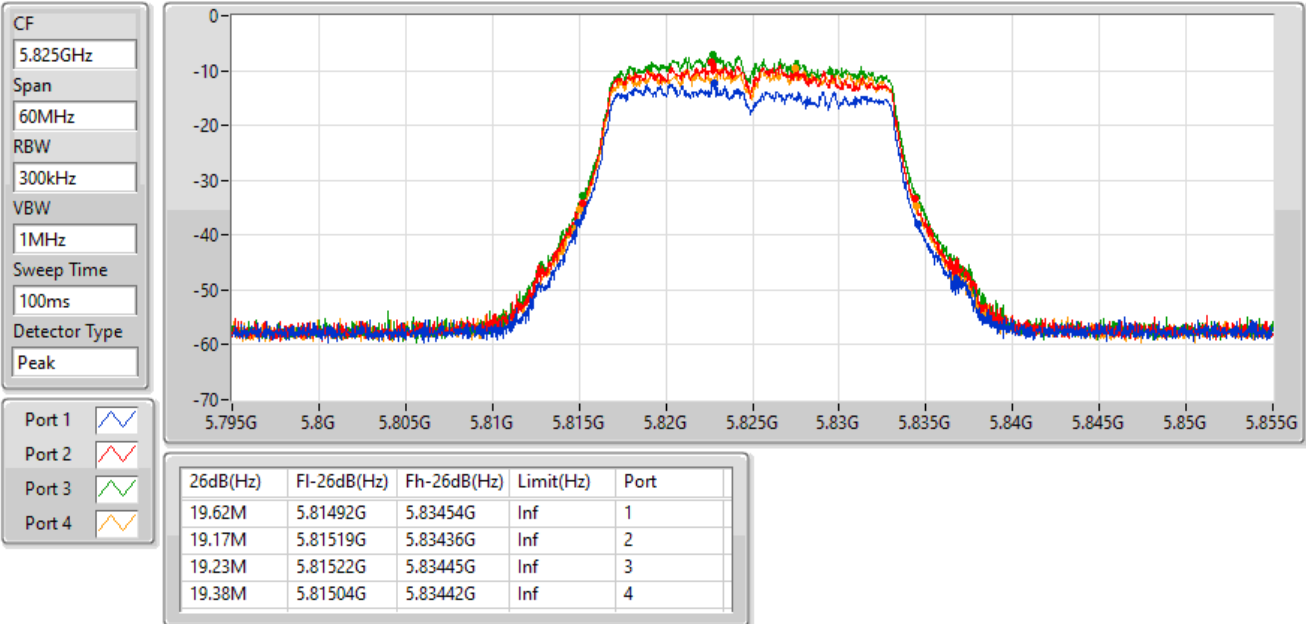


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

22/08/2022

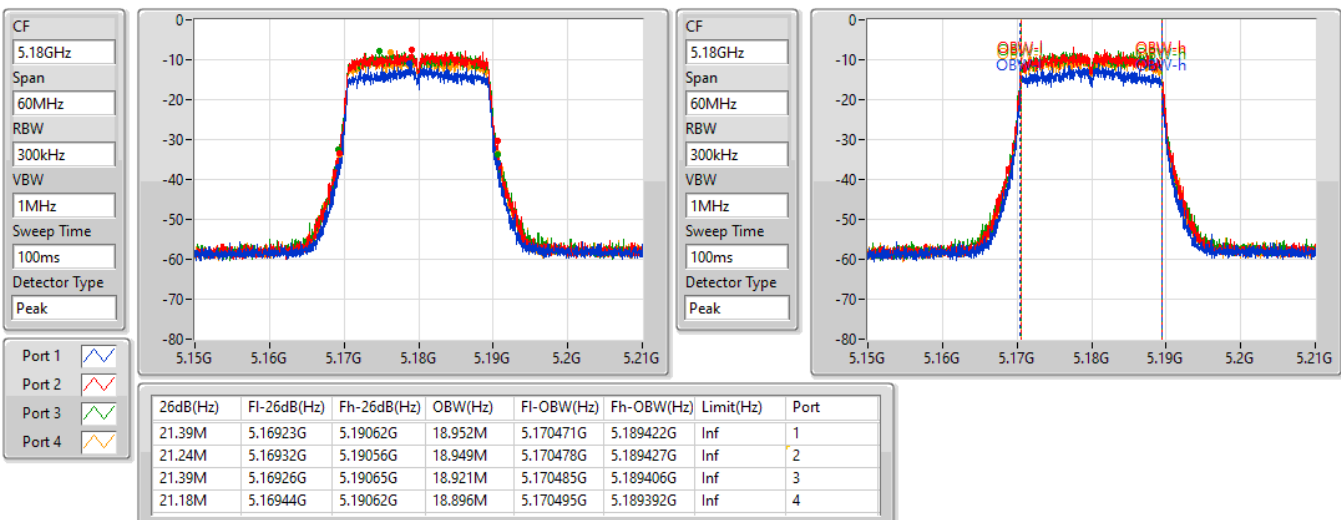


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5180MHz

22/08/2022

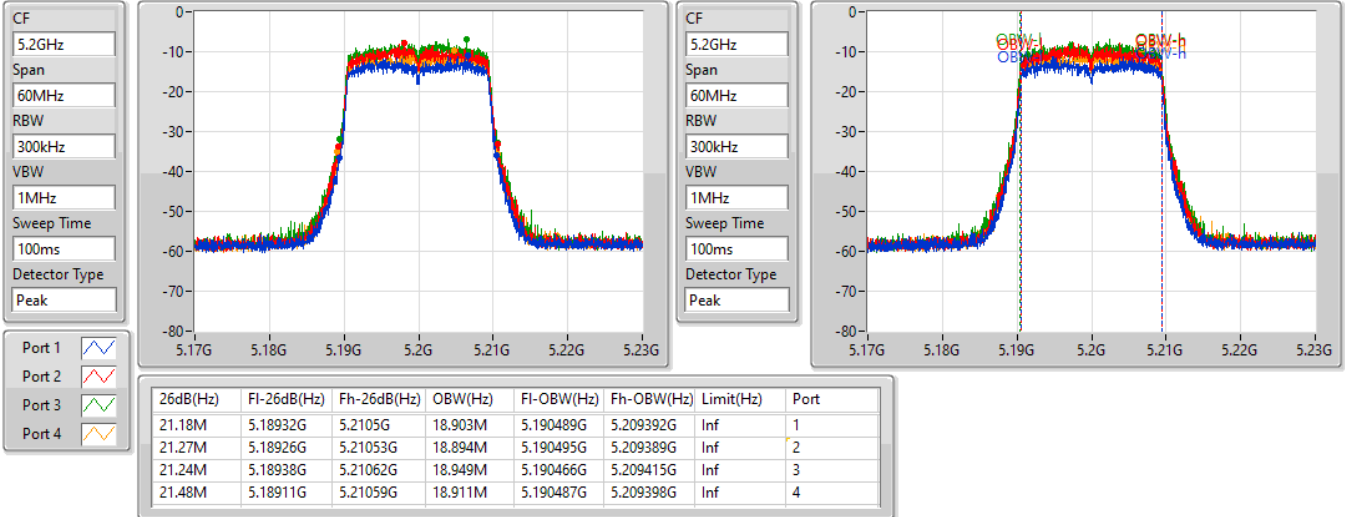


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5200MHz

22/08/2022

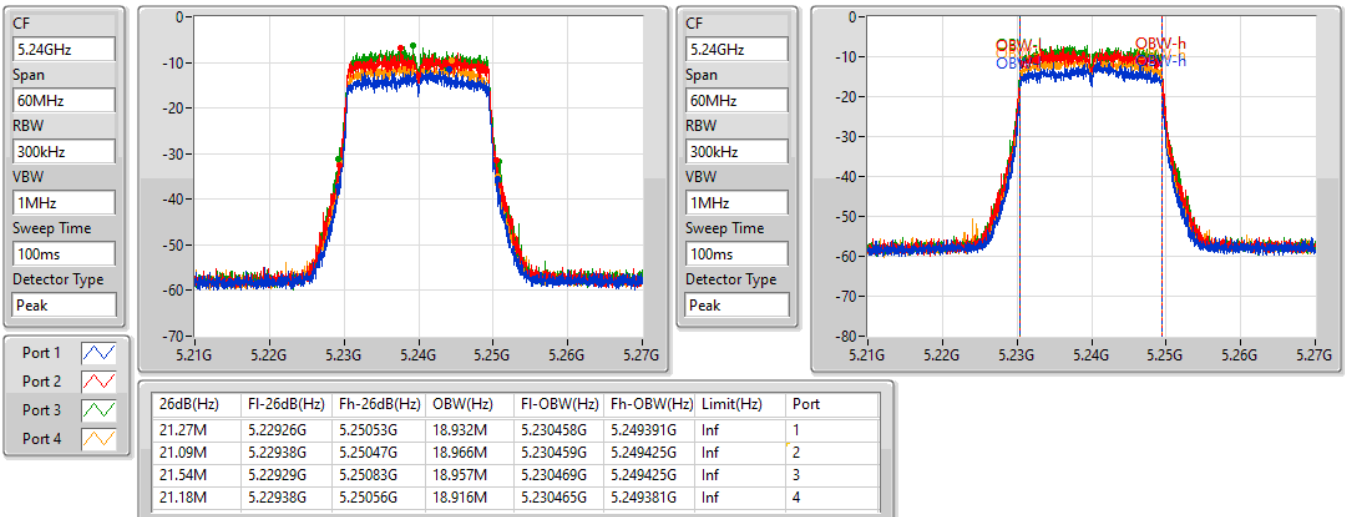


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5240MHz

22/08/2022

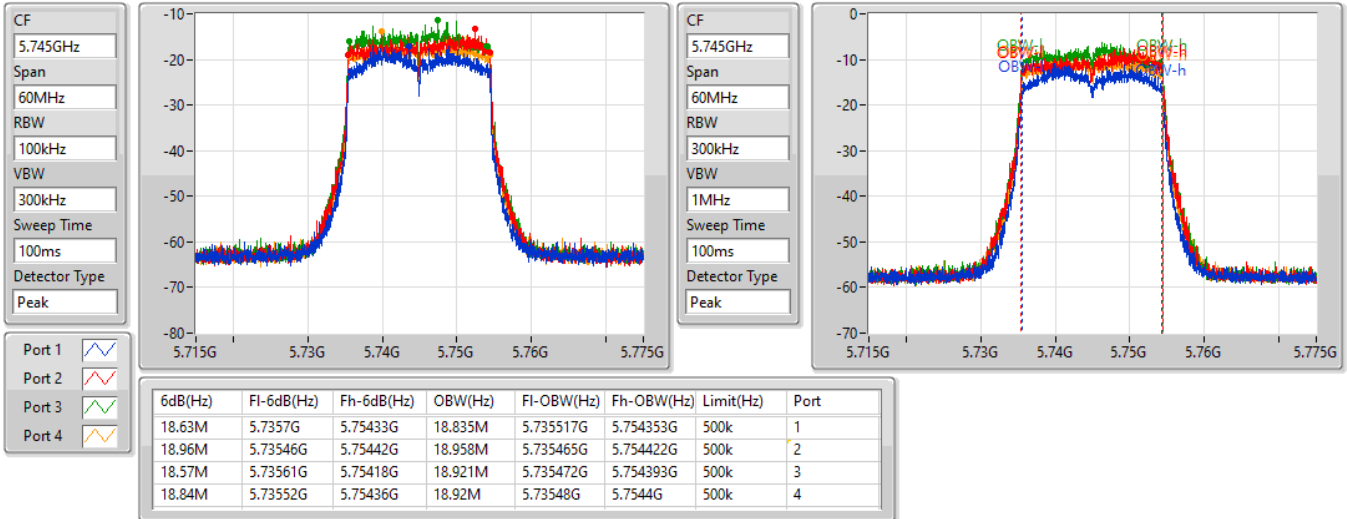


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

22/08/2022

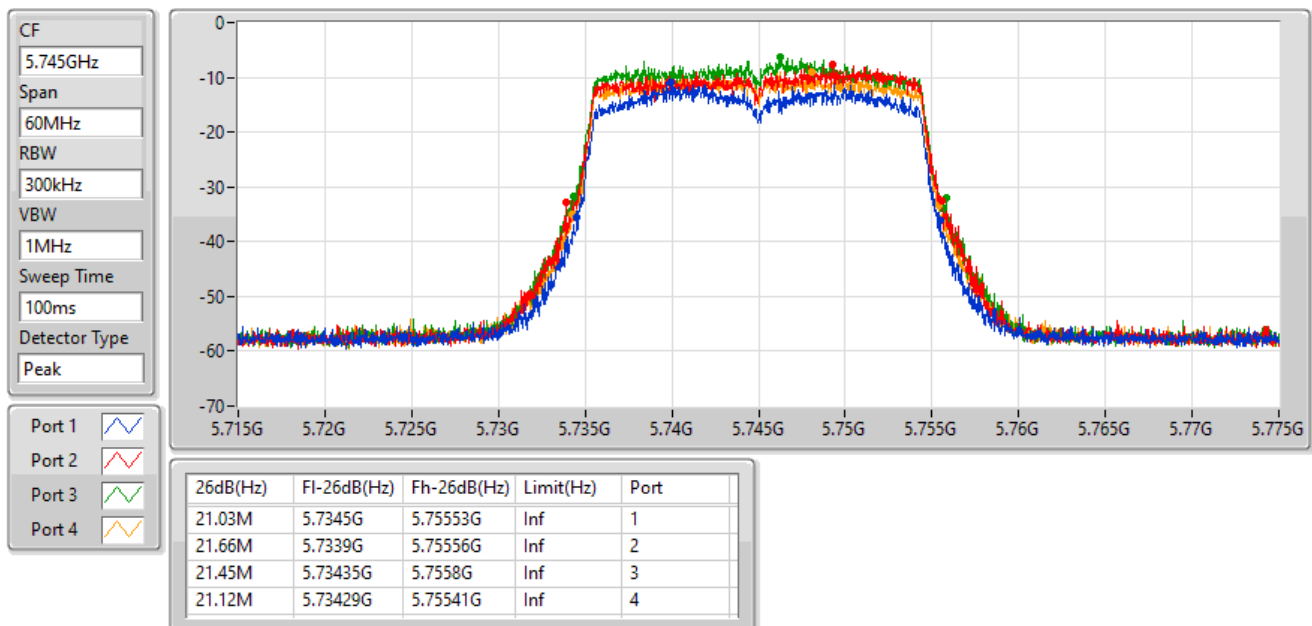


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

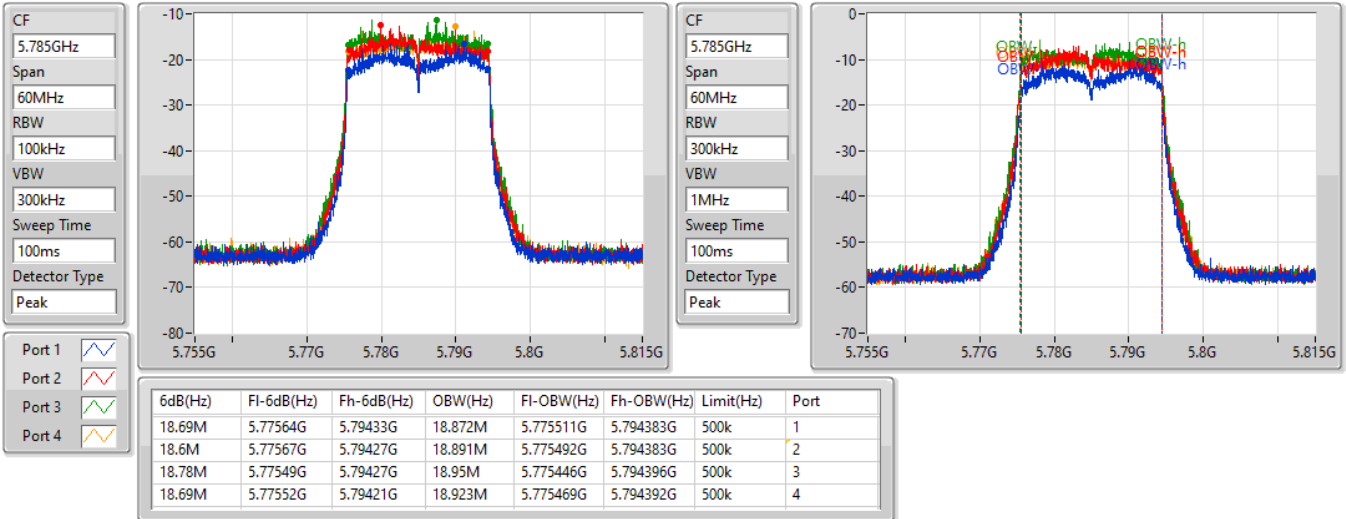
5745MHz

22/08/2022

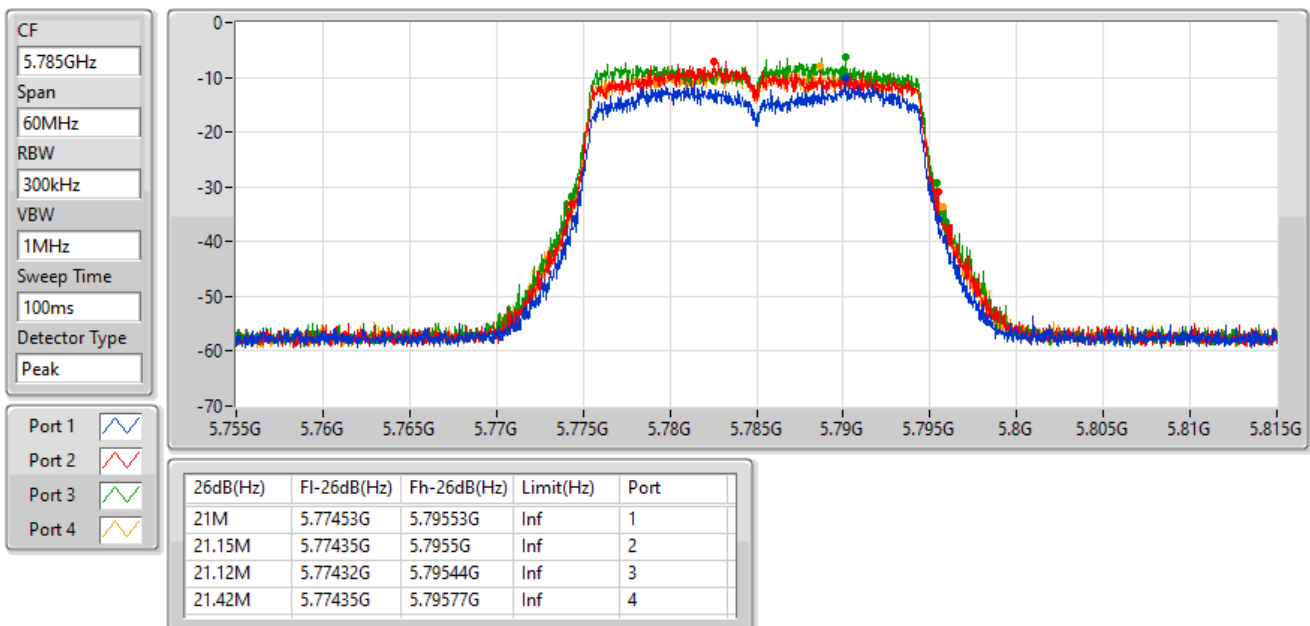


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

22/08/2022


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5785MHz

22/08/2022

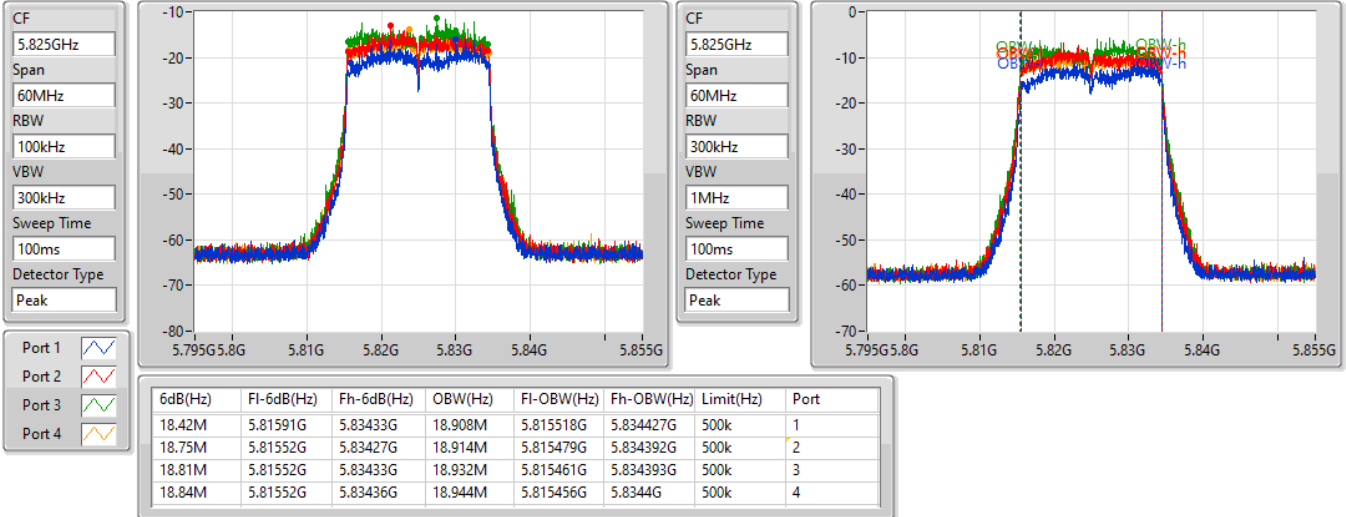


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

22/08/2022

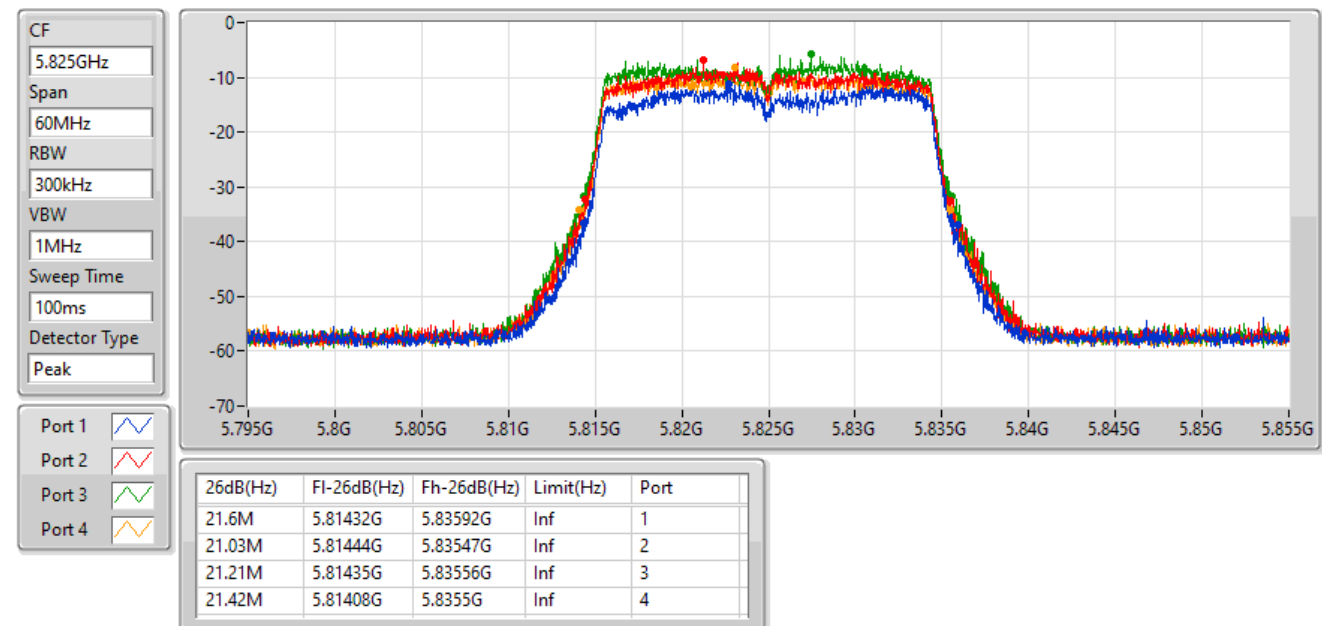


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

22/08/2022

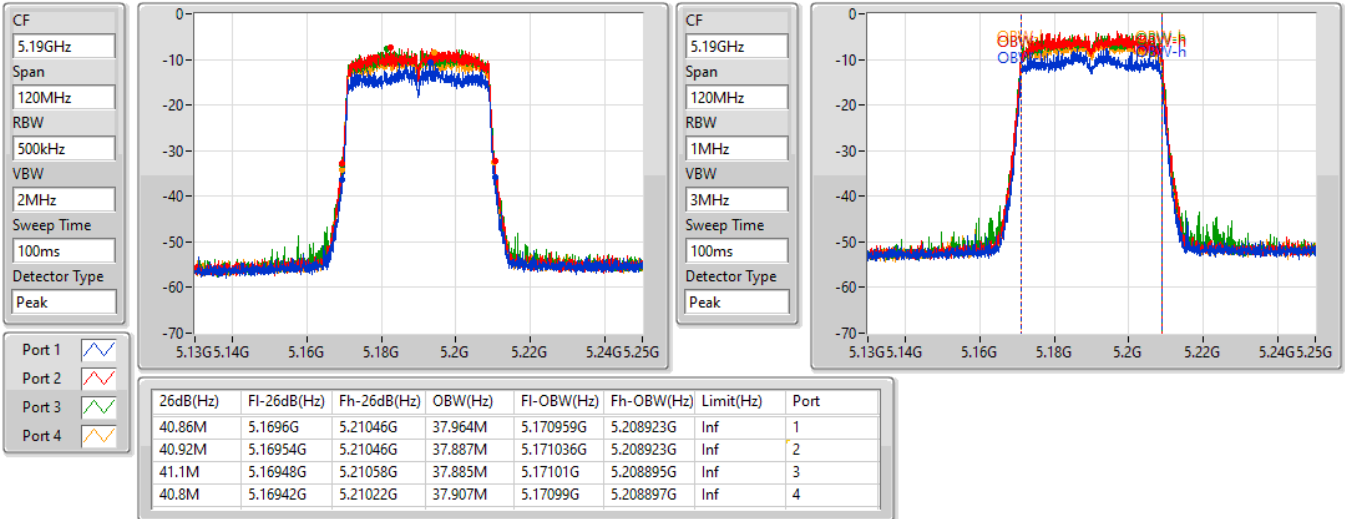


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5190MHz

22/08/2022

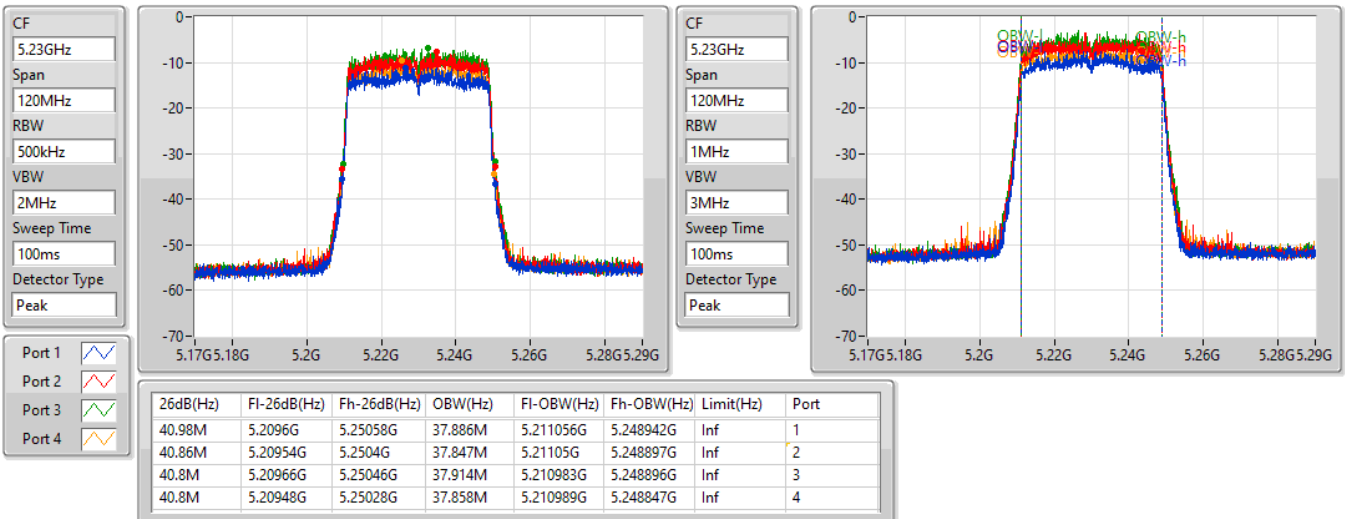


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5230MHz

22/08/2022

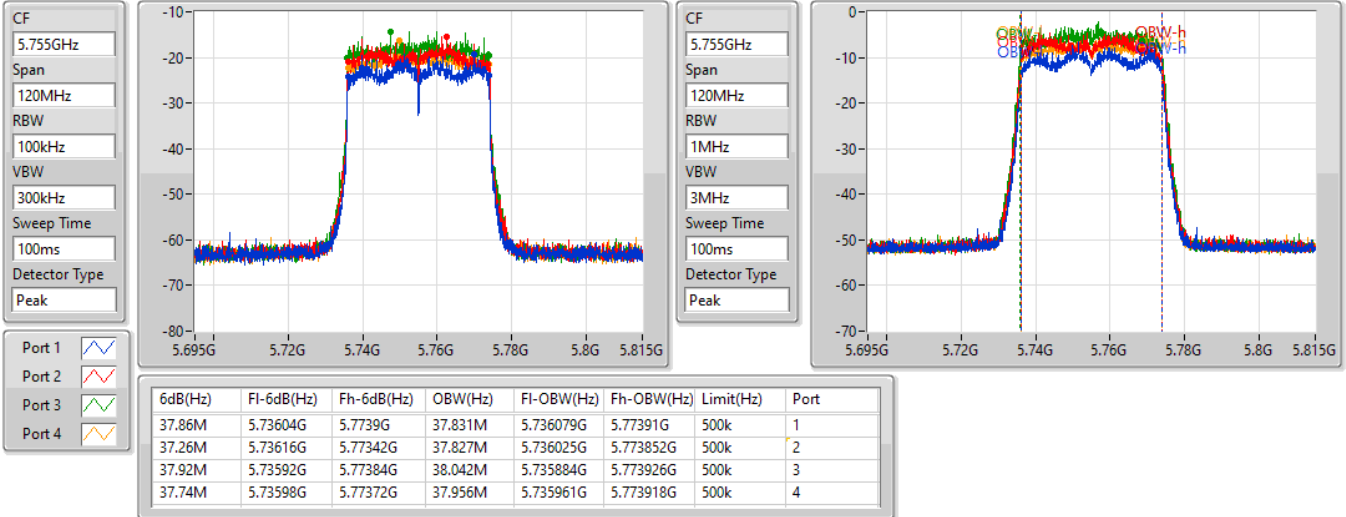


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5755MHz

22/08/2022

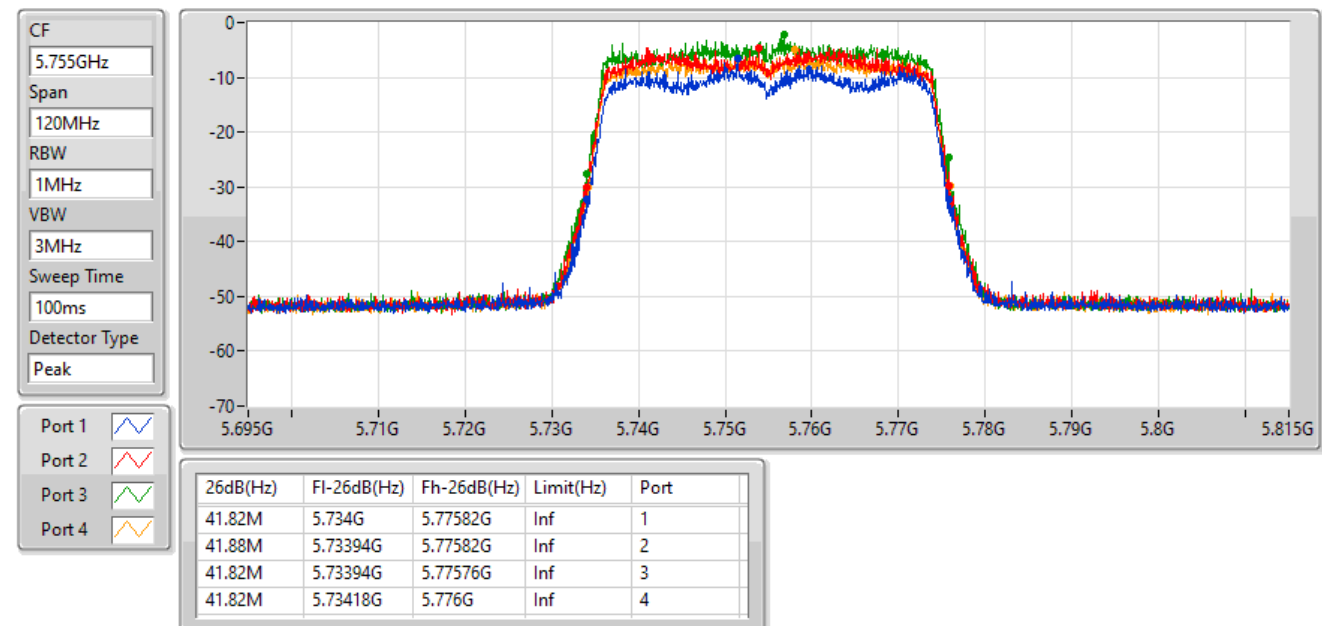


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5755MHz

22/08/2022

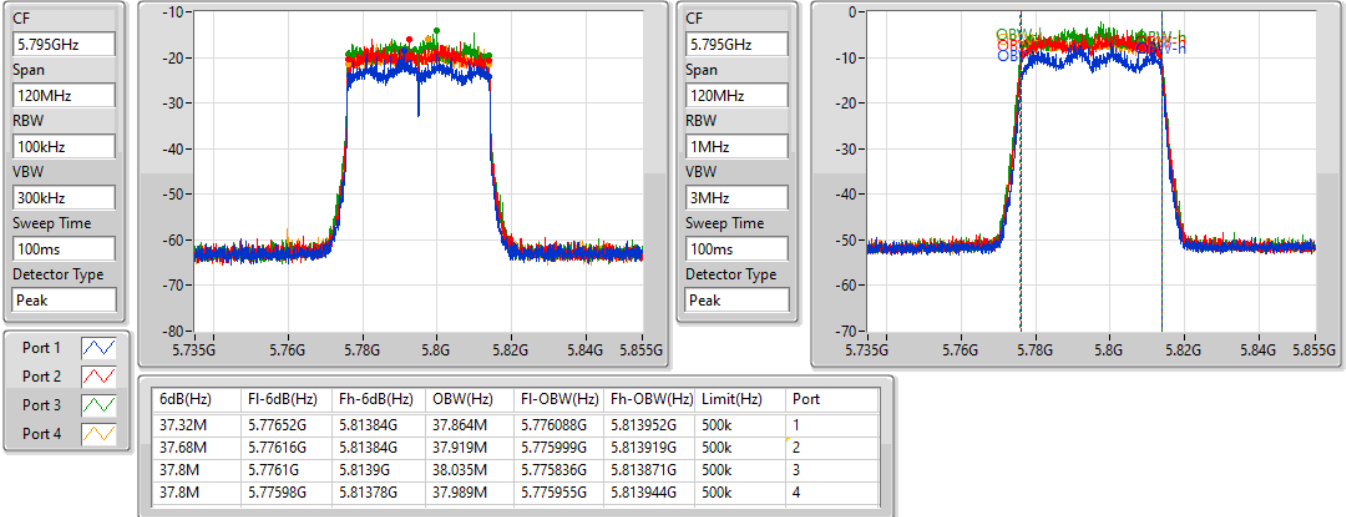


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5795MHz

22/08/2022

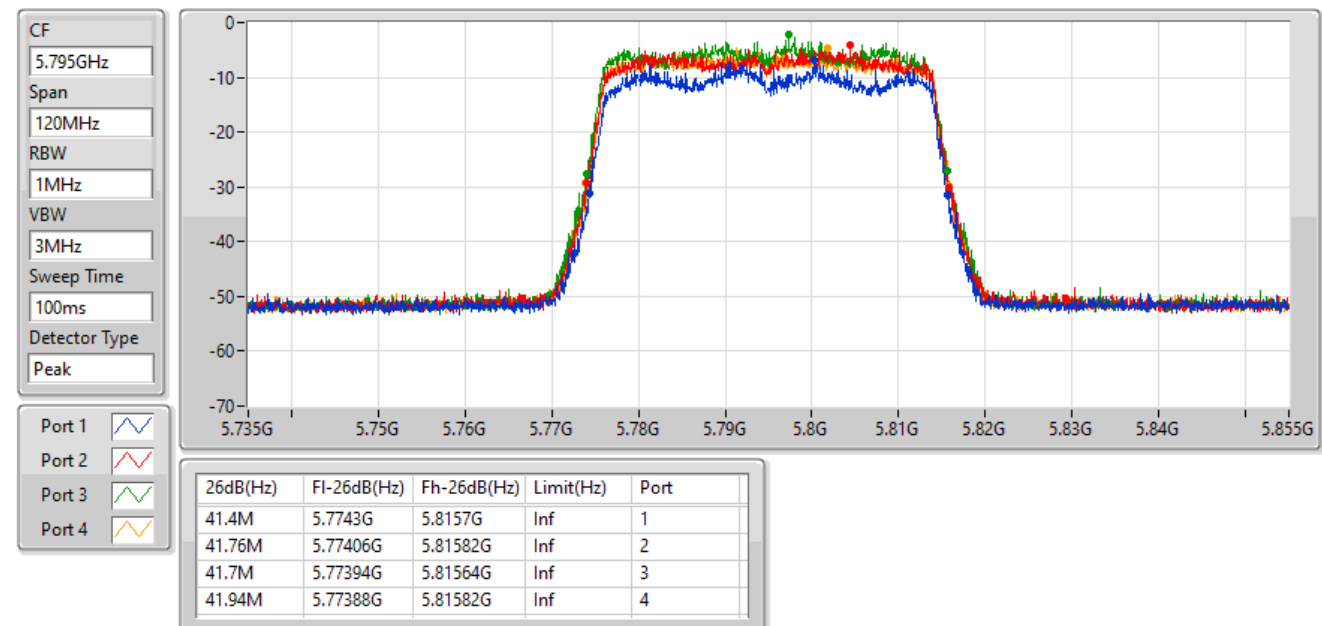


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5795MHz

22/08/2022

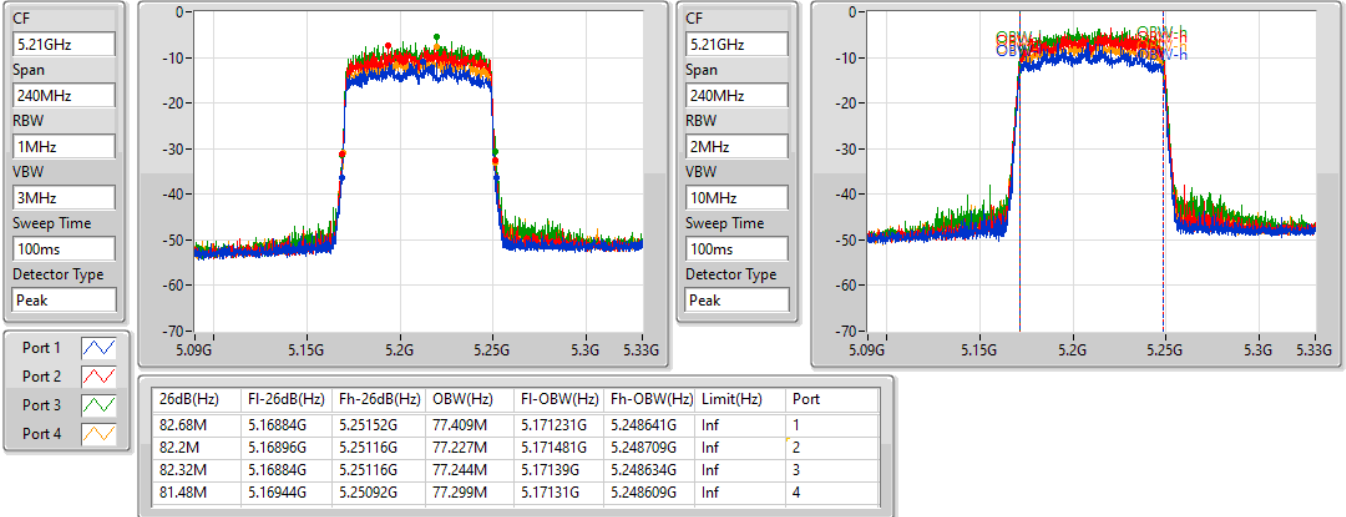


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5210MHz

22/08/2022

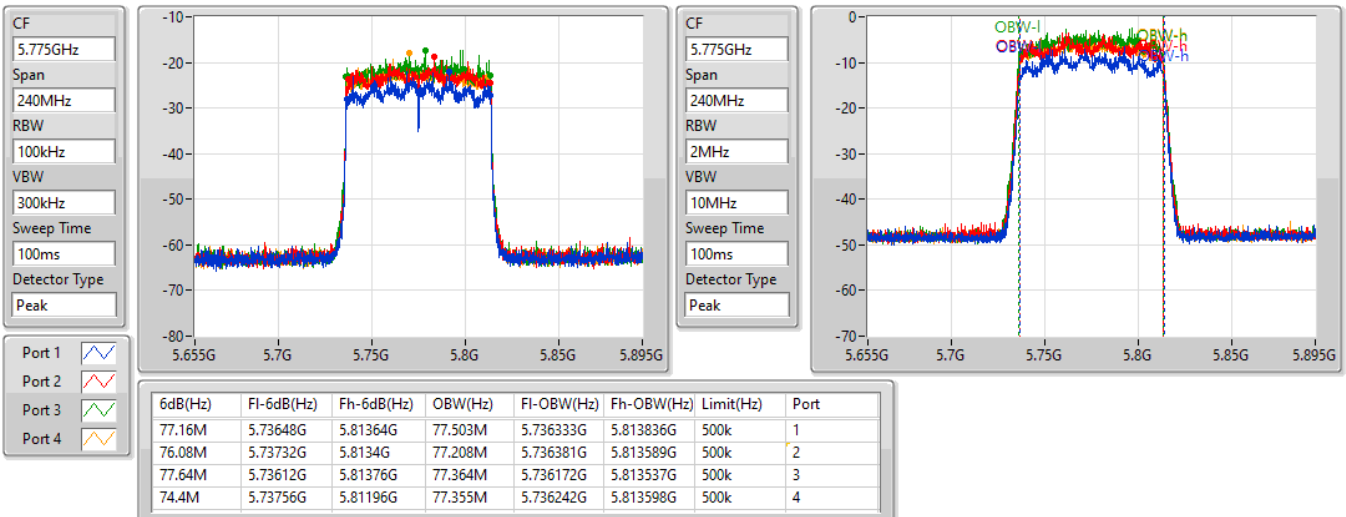


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5775MHz

22/08/2022

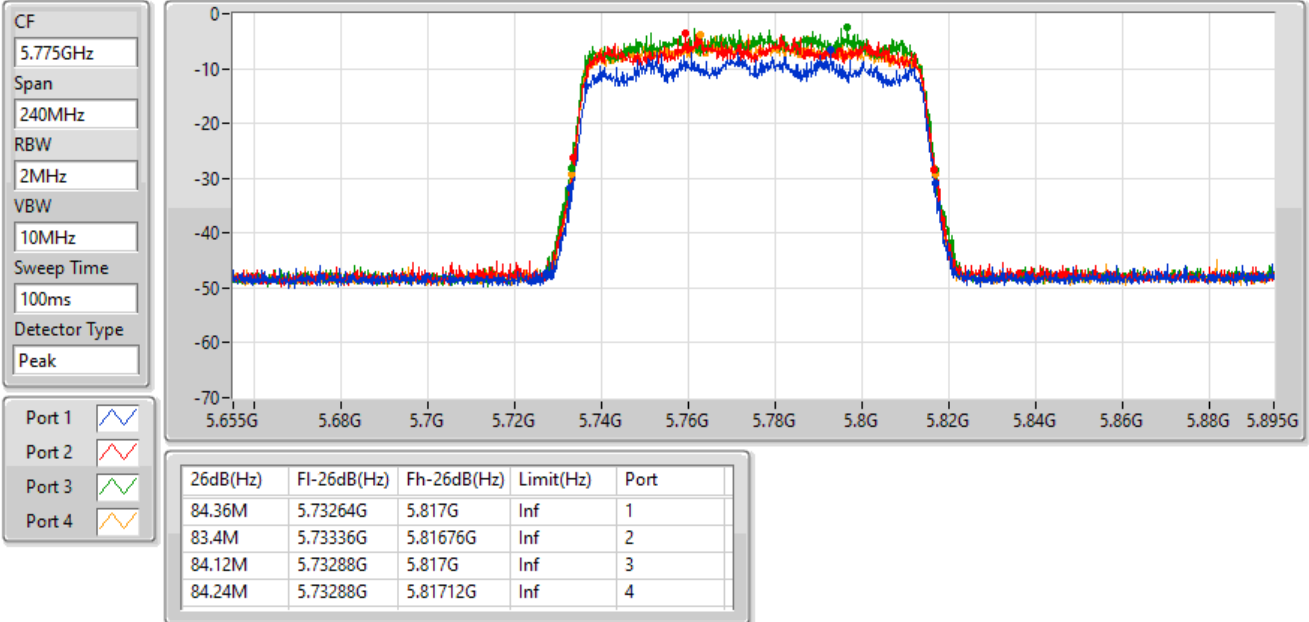


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5775MHz

22/08/2022



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	19.89M	16.446M	16M5D1D	19.5M	16.441M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.84M	18.955M	19M0D1D	21.3M	18.942M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.04M	37.967M	38M0D1D	40.98M	37.921M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.92M	77.298M	77M3D1D	82.92M	77.298M
802.11a_Nss1,(6Mbps)_2TX	19.62M	16.489M	16M5D1D	19.38M	16.416M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.69M	18.96M	19M0D1D	21.12M	18.88M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.46M	37.979M	38M0D1D	40.86M	37.894M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.92M	77.42M	77M5D1D	82.08M	77.364M
802.11a_Nss1,(6Mbps)_4TX	19.89M	16.523M	16M6D1D	19.41M	16.406M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.54M	18.966M	19M0D1D	21.09M	18.894M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.1M	37.964M	38M0D1D	40.8M	37.847M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.409M	77M5D1D	81.48M	77.227M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	16.434M	16M5D1D	16.29M	16.428M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.93M	18.934M	19M0D1D	18.84M	18.921M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.92M	37.945M	38M0D1D	37.74M	37.928M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.64M	77.412M	77M5D1D	77.64M	77.412M
802.11a_Nss1,(6Mbps)_2TX	16.35M	16.537M	16M6D1D	16.05M	16.39M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.99M	19.042M	19M0D1D	17.88M	18.866M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.5M	37.99M	38M0D1D	37.14M	37.783M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.68M	77.474M	77M5D1D	76.08M	77.213M
802.11a_Nss1,(6Mbps)_4TX	16.32M	16.581M	16M6D1D	15.6M	16.33M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.96M	18.958M	19M0D1D	18.42M	18.835M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.92M	38.042M	38M0D1D	37.26M	37.827M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.64M	77.503M	77M6D1D	74.4M	77.208M

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)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.53M	16.446M						
5200MHz	Pass	Inf	19.89M	16.441M						
5240MHz	Pass	Inf	19.5M	16.443M						
5745MHz	Pass	500k	16.29M	16.434M						
5785MHz	Pass	500k	16.29M	16.433M						
5825MHz	Pass	500k	16.29M	16.428M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.6M	18.955M						
5200MHz	Pass	Inf	21.84M	18.942M						
5240MHz	Pass	Inf	21.3M	18.943M						
5745MHz	Pass	500k	18.87M	18.927M						
5785MHz	Pass	500k	18.93M	18.934M						
5825MHz	Pass	500k	18.84M	18.921M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.04M	37.921M						
5230MHz	Pass	Inf	40.98M	37.967M						
5755MHz	Pass	500k	37.92M	37.928M						
5795MHz	Pass	500k	37.74M	37.945M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.92M	77.298M						
5775MHz	Pass	500k	77.64M	77.412M						
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.62M	16.486M	19.44M	16.428M				
5200MHz	Pass	Inf	19.38M	16.489M	19.47M	16.425M				
5240MHz	Pass	Inf	19.59M	16.417M	19.38M	16.416M				
5745MHz	Pass	500k	16.32M	16.537M	16.32M	16.427M				
5785MHz	Pass	500k	16.35M	16.528M	16.32M	16.429M				
5825MHz	Pass	500k	16.05M	16.39M	16.32M	16.415M				
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.69M	18.88M	21.27M	18.941M				
5200MHz	Pass	Inf	21.27M	18.96M	21.12M	18.958M				
5240MHz	Pass	Inf	21.48M	18.9M	21.18M	18.931M				
5745MHz	Pass	500k	18.99M	19.042M	18.87M	18.924M				
5785MHz	Pass	500k	17.88M	18.866M	18.9M	18.922M				
5825MHz	Pass	500k	18.57M	18.983M	18.84M	18.934M				
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	37.93M	41.1M	37.979M				
5230MHz	Pass	Inf	41.46M	37.894M	40.86M	37.91M				
5755MHz	Pass	500k	37.5M	37.783M	37.14M	37.959M				
5795MHz	Pass	500k	37.32M	37.813M	37.44M	37.99M				
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.92M	77.42M	82.08M	77.364M				
5775MHz	Pass	500k	76.08M	77.213M	76.68M	77.474M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.89M	16.523M	19.5M	16.478M	19.47M	16.452M	19.56M	16.444M
5200MHz	Pass	Inf	19.71M	16.52M	19.5M	16.456M	19.5M	16.422M	19.47M	16.423M
5240MHz	Pass	Inf	19.47M	16.419M	19.41M	16.406M	19.44M	16.419M	19.41M	16.441M
5745MHz	Pass	500k	16.29M	16.581M	15.93M	16.427M	15.93M	16.418M	16.29M	16.436M
5785MHz	Pass	500k	15.6M	16.33M	16.29M	16.414M	16.26M	16.446M	16.32M	16.454M
5825MHz	Pass	500k	16.29M	16.539M	15.93M	16.445M	16.29M	16.392M	16.29M	16.44M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.39M	18.952M	21.24M	18.949M	21.39M	18.921M	21.18M	18.896M
5200MHz	Pass	Inf	21.18M	18.903M	21.27M	18.894M	21.24M	18.949M	21.48M	18.911M
5240MHz	Pass	Inf	21.27M	18.932M	21.09M	18.966M	21.54M	18.957M	21.18M	18.916M

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)
5745MHz	Pass	500k	18.63M	18.835M	18.96M	18.958M	18.57M	18.921M	18.84M	18.92M
5785MHz	Pass	500k	18.69M	18.872M	18.6M	18.891M	18.78M	18.95M	18.69M	18.923M
5825MHz	Pass	500k	18.42M	18.908M	18.75M	18.914M	18.81M	18.932M	18.84M	18.944M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.86M	37.964M	40.92M	37.887M	41.1M	37.885M	40.8M	37.907M
5230MHz	Pass	Inf	40.98M	37.886M	40.86M	37.847M	40.8M	37.914M	40.8M	37.858M
5755MHz	Pass	500k	37.86M	37.831M	37.26M	37.827M	37.92M	38.042M	37.74M	37.956M
5795MHz	Pass	500k	37.32M	37.864M	37.68M	37.919M	37.8M	38.035M	37.8M	37.989M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.68M	77.409M	82.2M	77.227M	82.32M	77.244M	81.48M	77.299M
5775MHz	Pass	500k	77.16M	77.503M	76.08M	77.208M	77.64M	77.364M	74.4M	77.355M

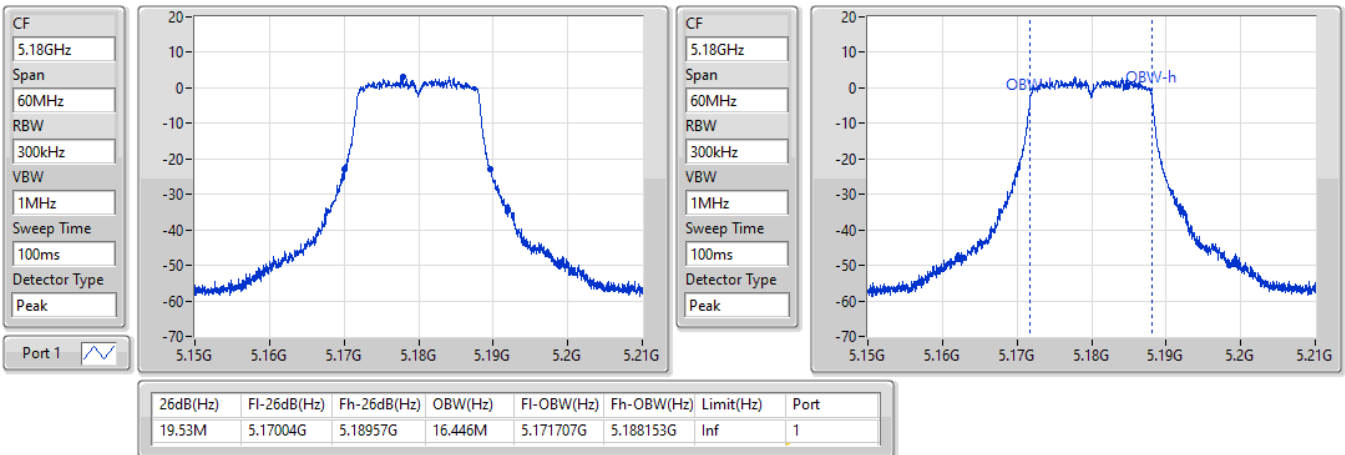
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX

EBW

5180MHz

24/08/2022

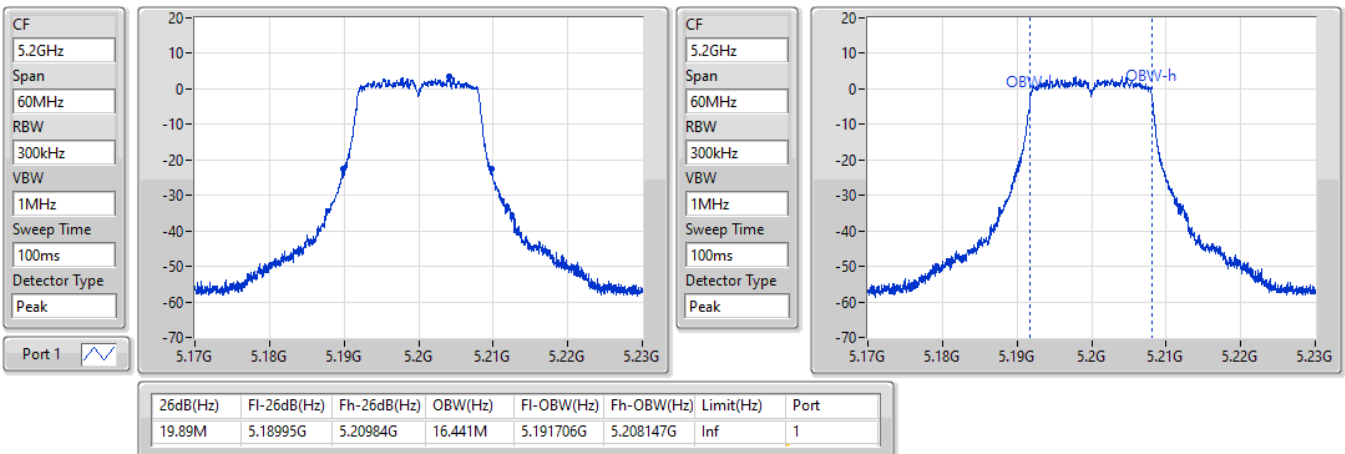


802.11a_Nss1,(6Mbps)_1TX

EBW

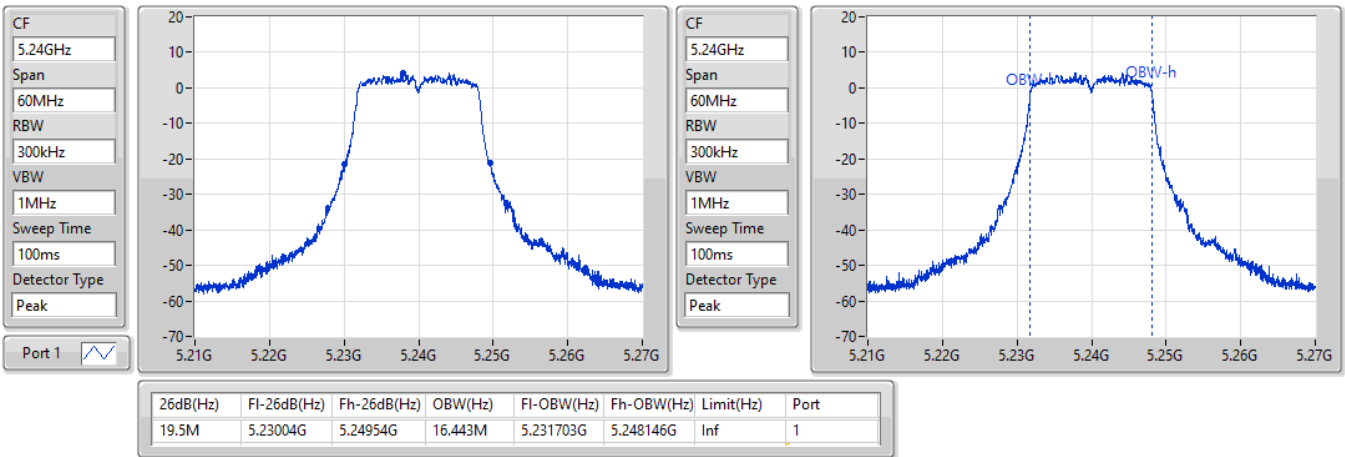
5200MHz

24/08/2022

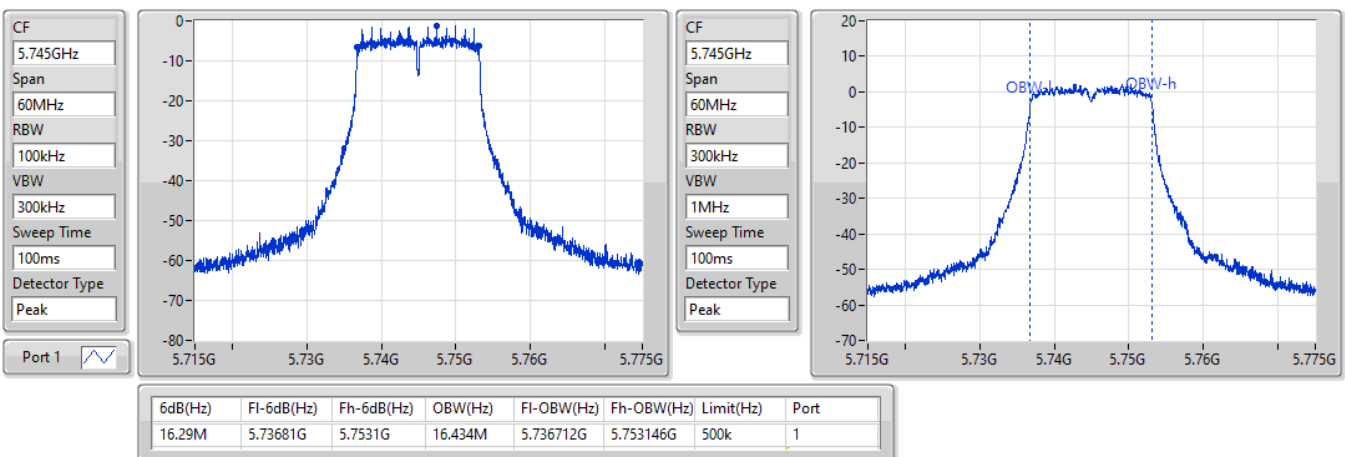


802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

24/08/2022


802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

24/08/2022

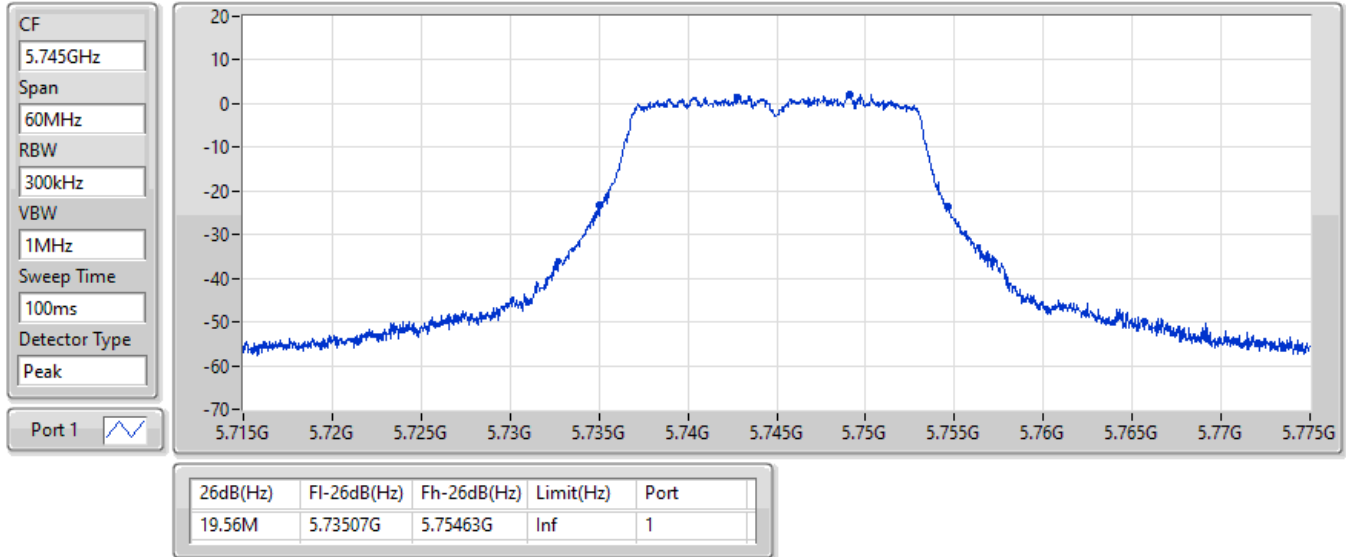


802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

24/08/2022

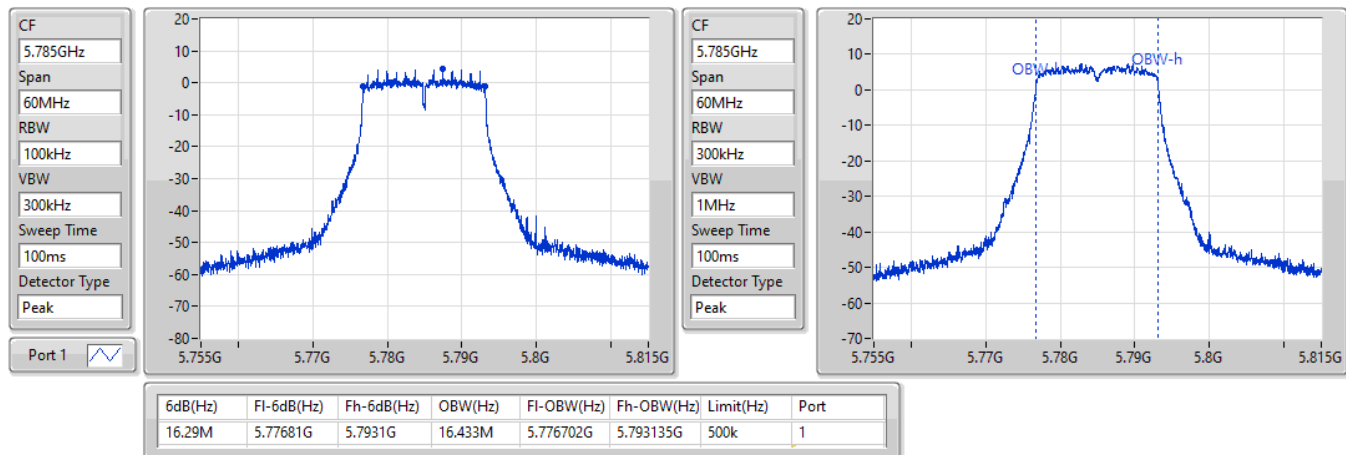


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

24/08/2022

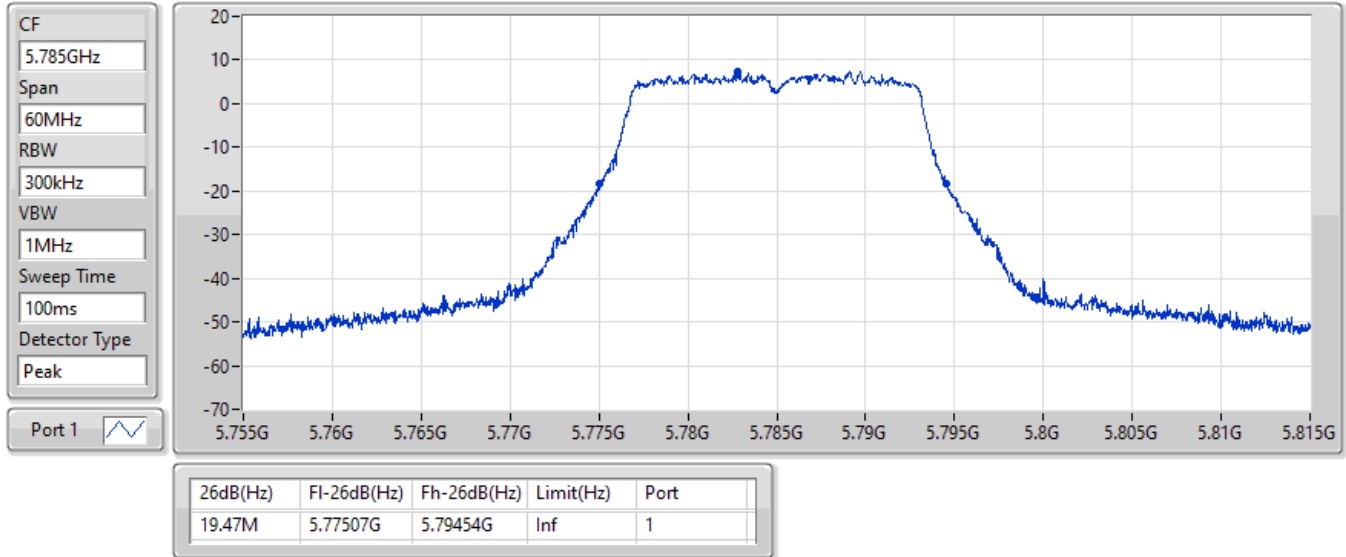


802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

24/08/2022

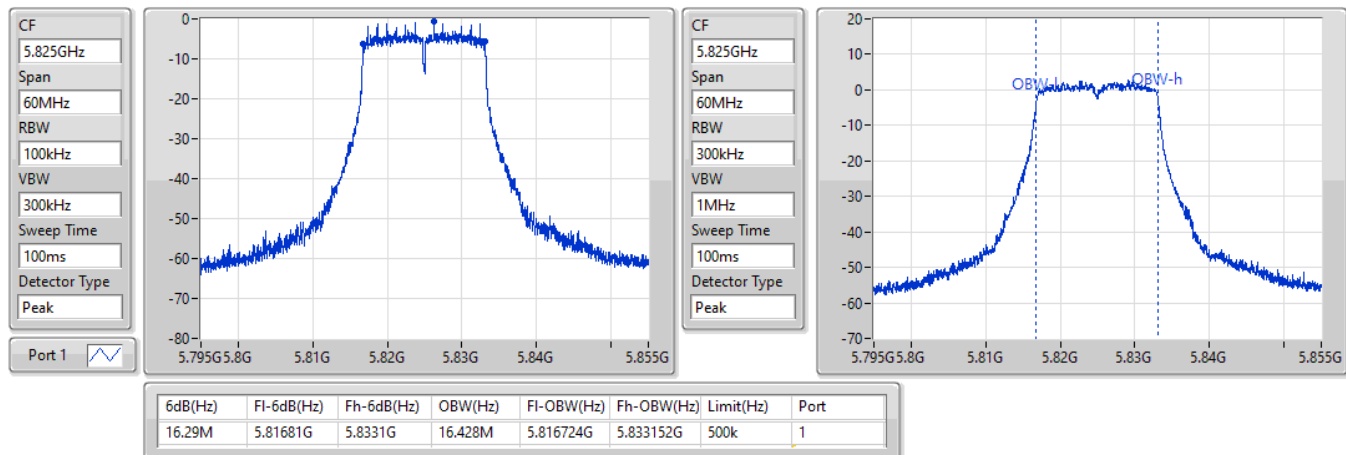


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

24/08/2022

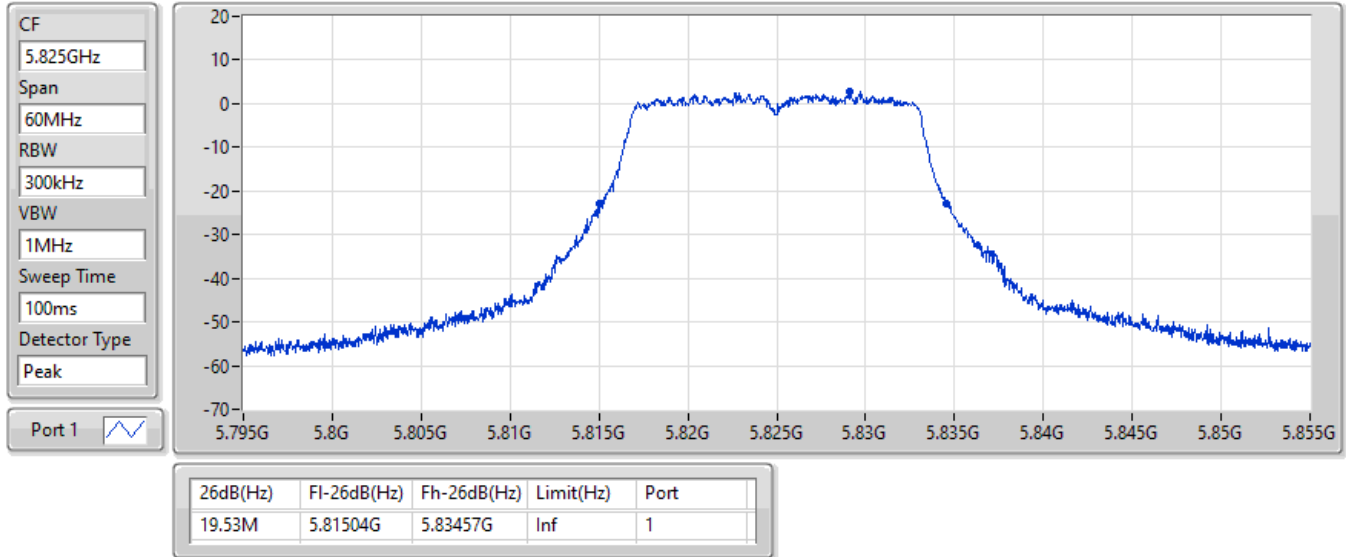


802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

24/08/2022

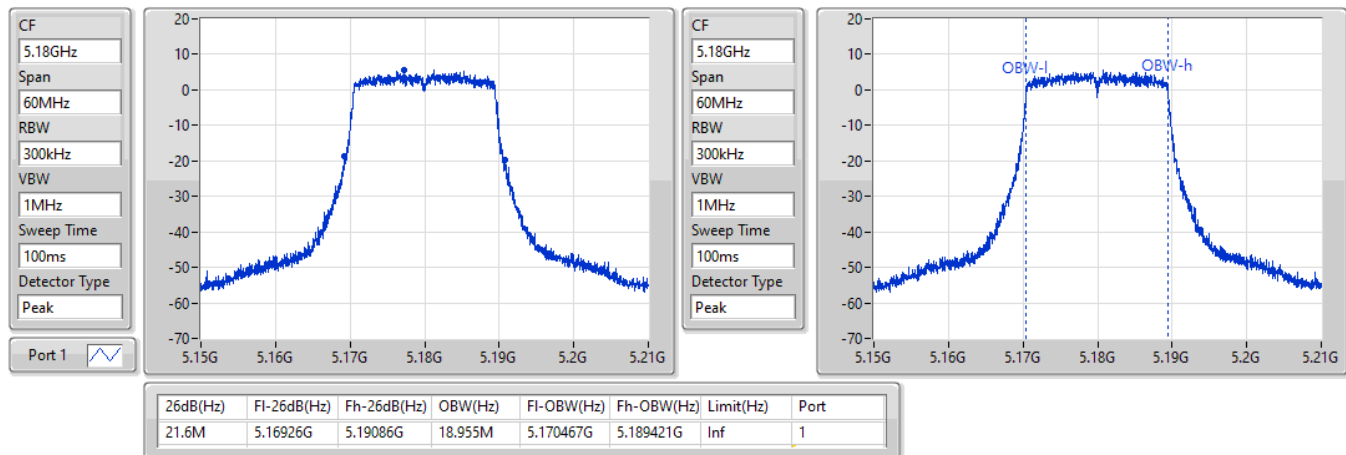


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5180MHz

24/08/2022

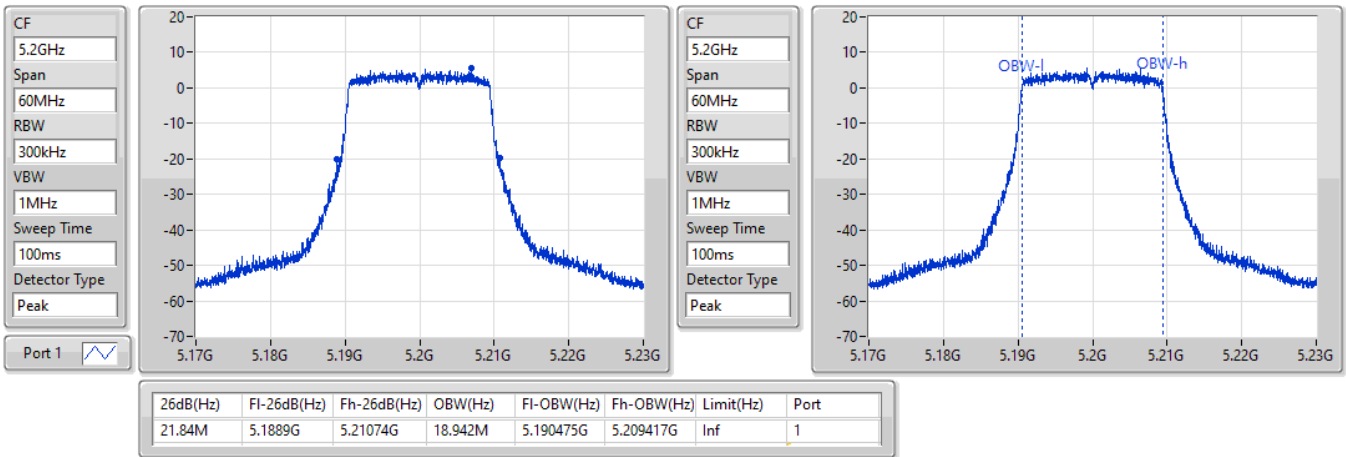


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5200MHz

24/08/2022

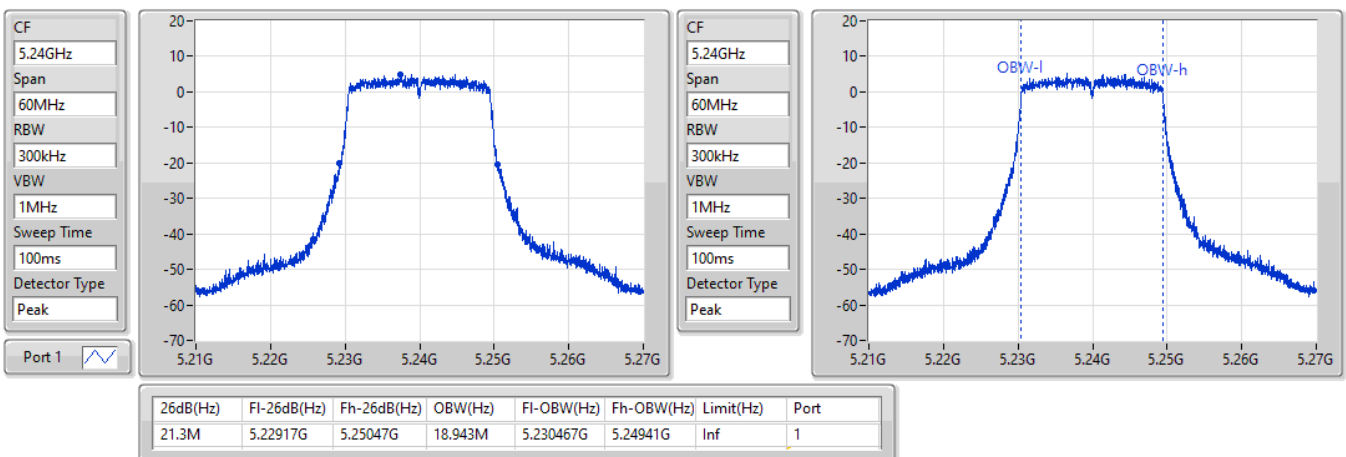


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5240MHz

24/08/2022

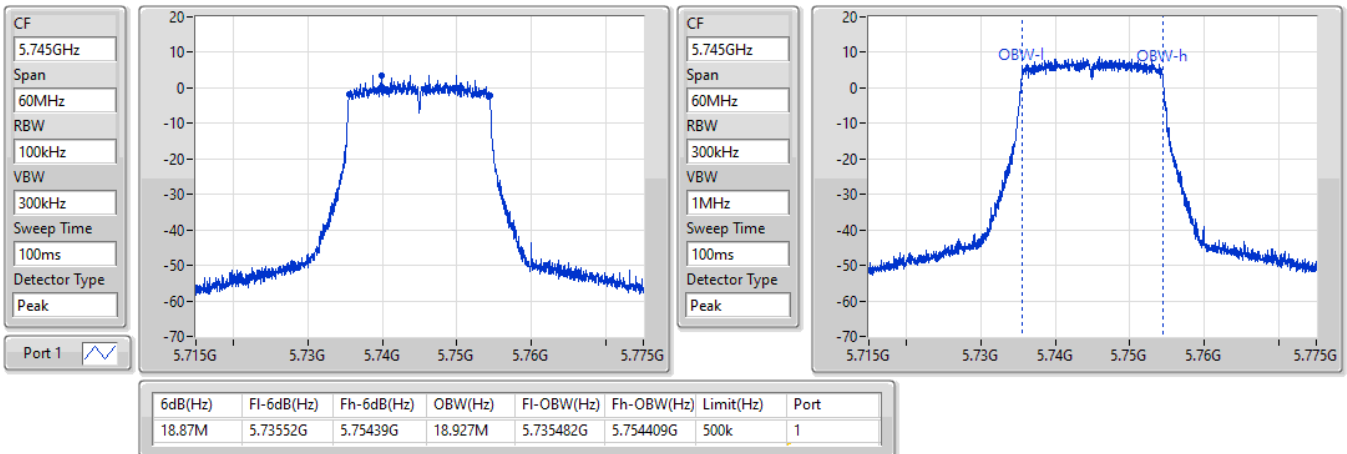


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

24/08/2022

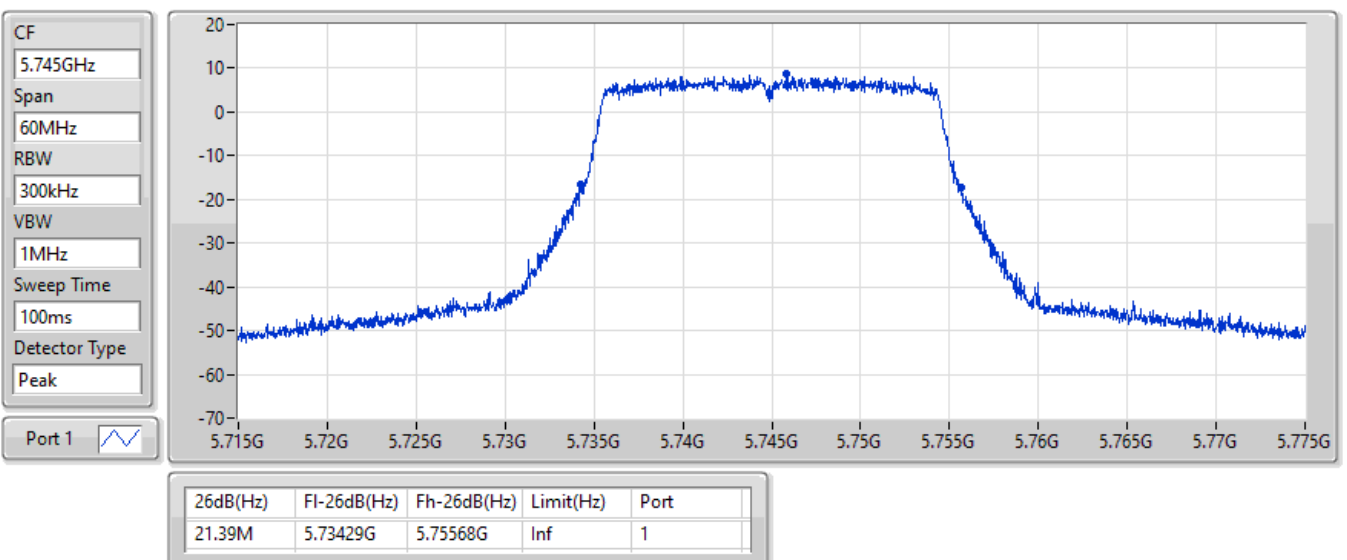


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

24/08/2022

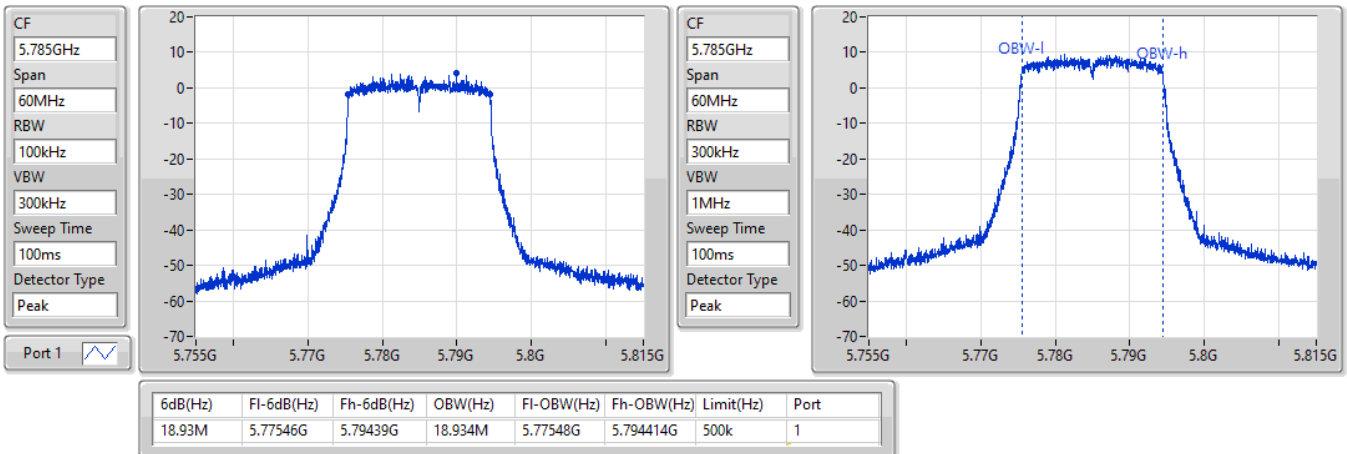


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

24/08/2022

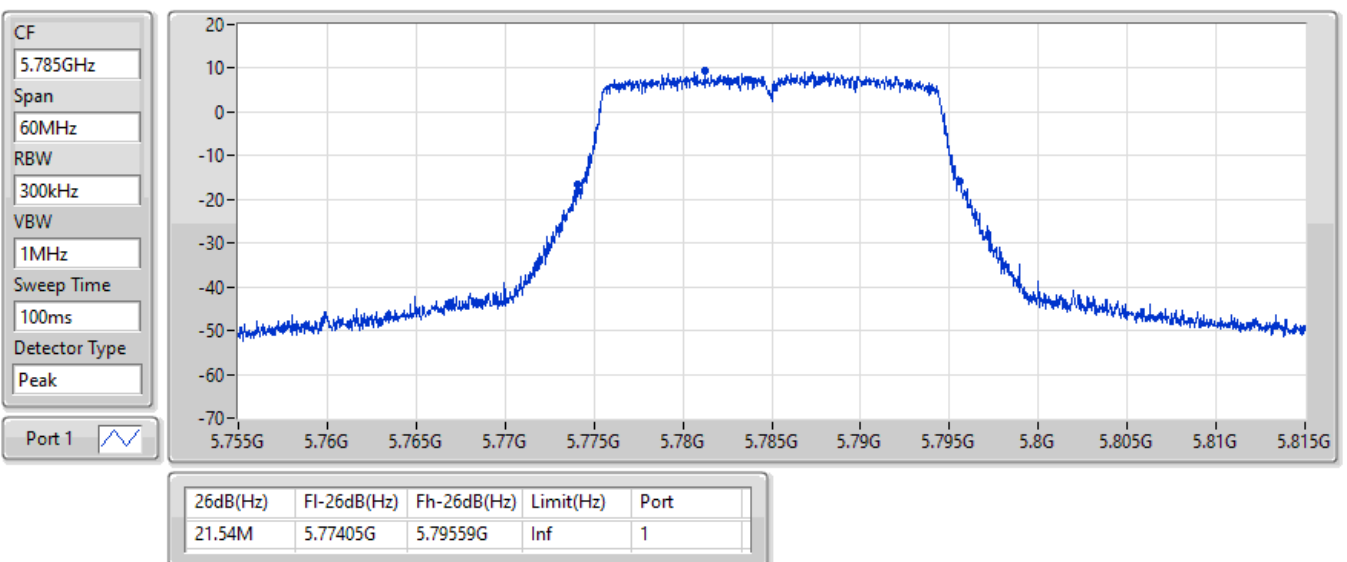


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

24/08/2022

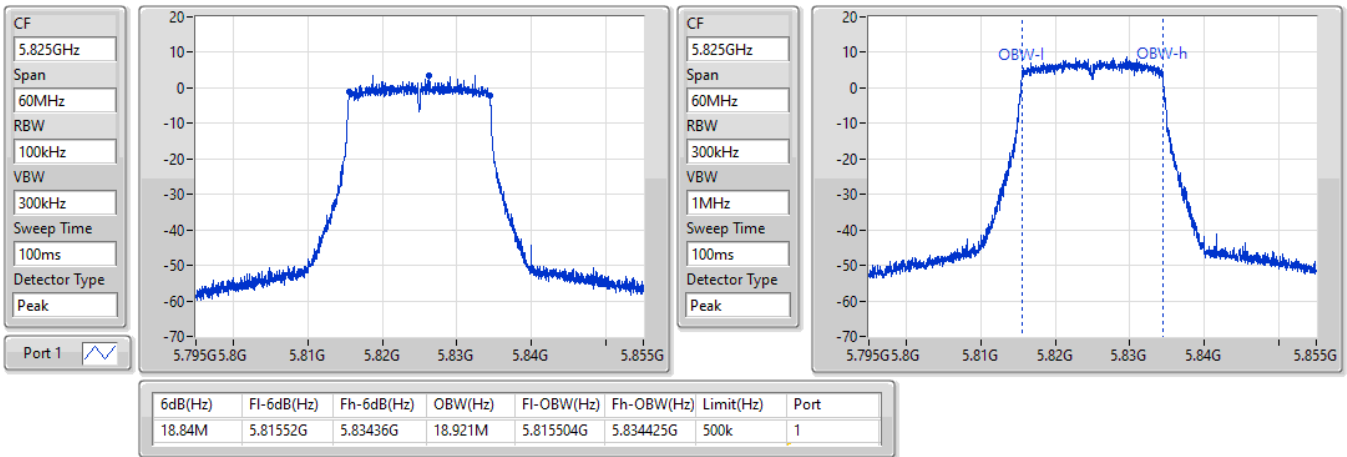


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

24/08/2022

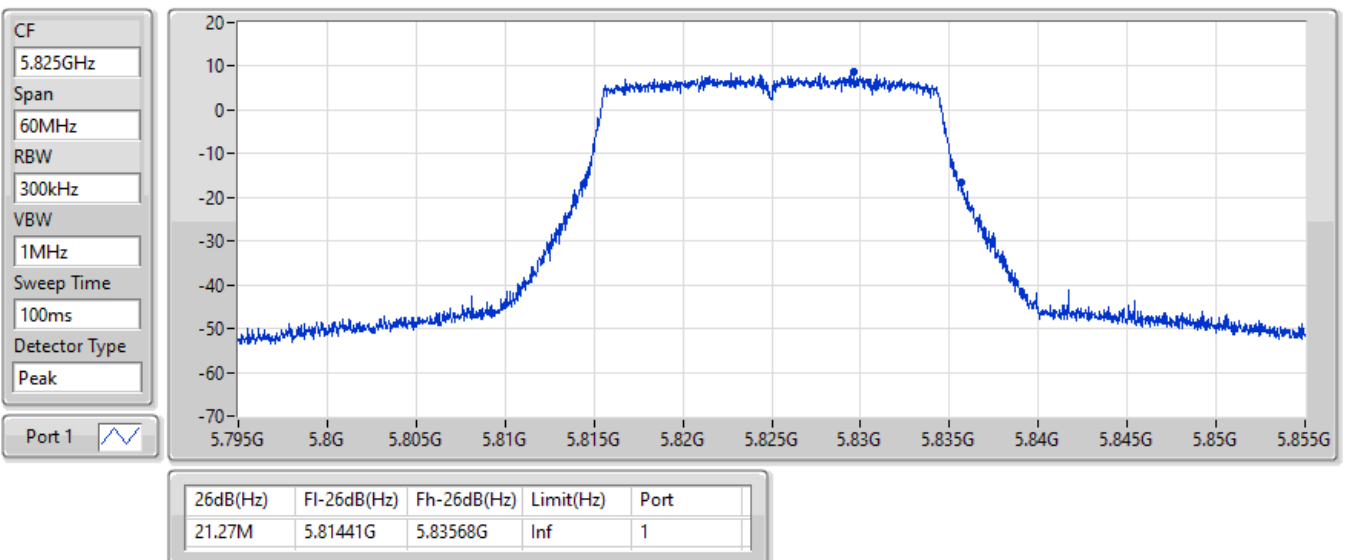


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

24/08/2022

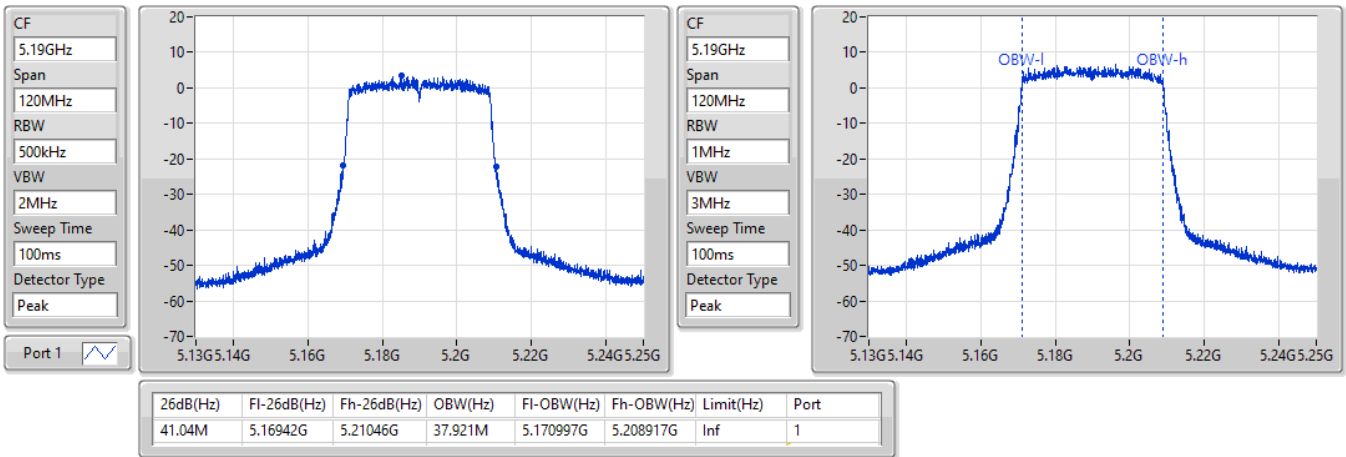


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5190MHz

24/08/2022

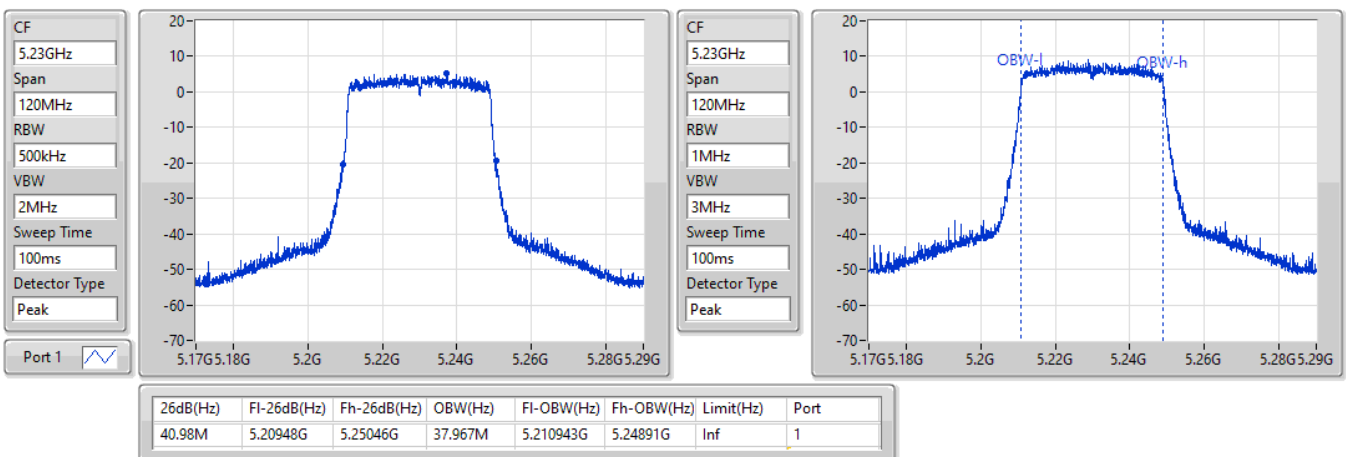


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5230MHz

24/08/2022

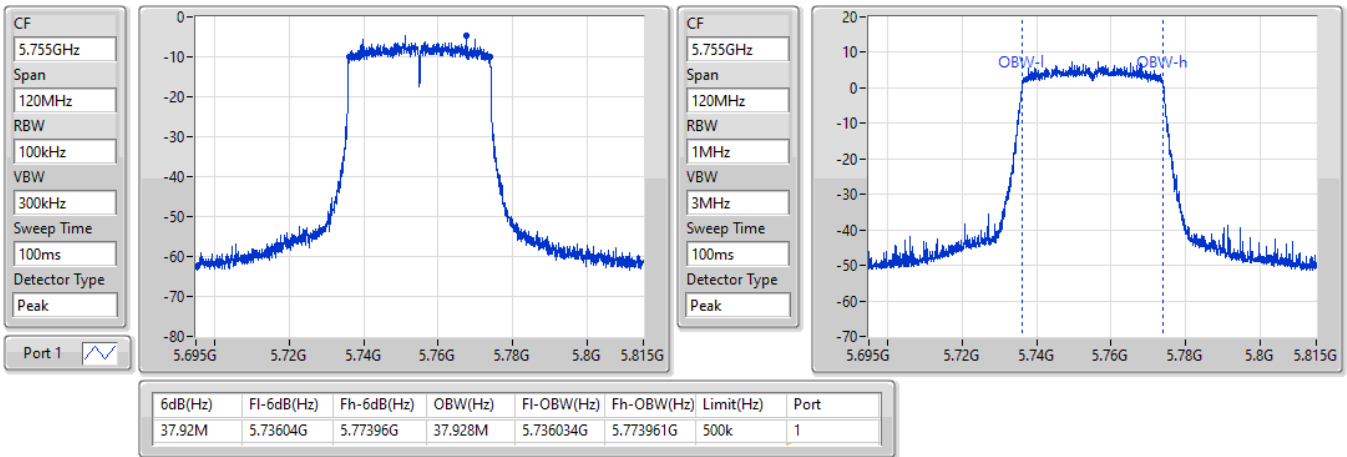


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

24/08/2022

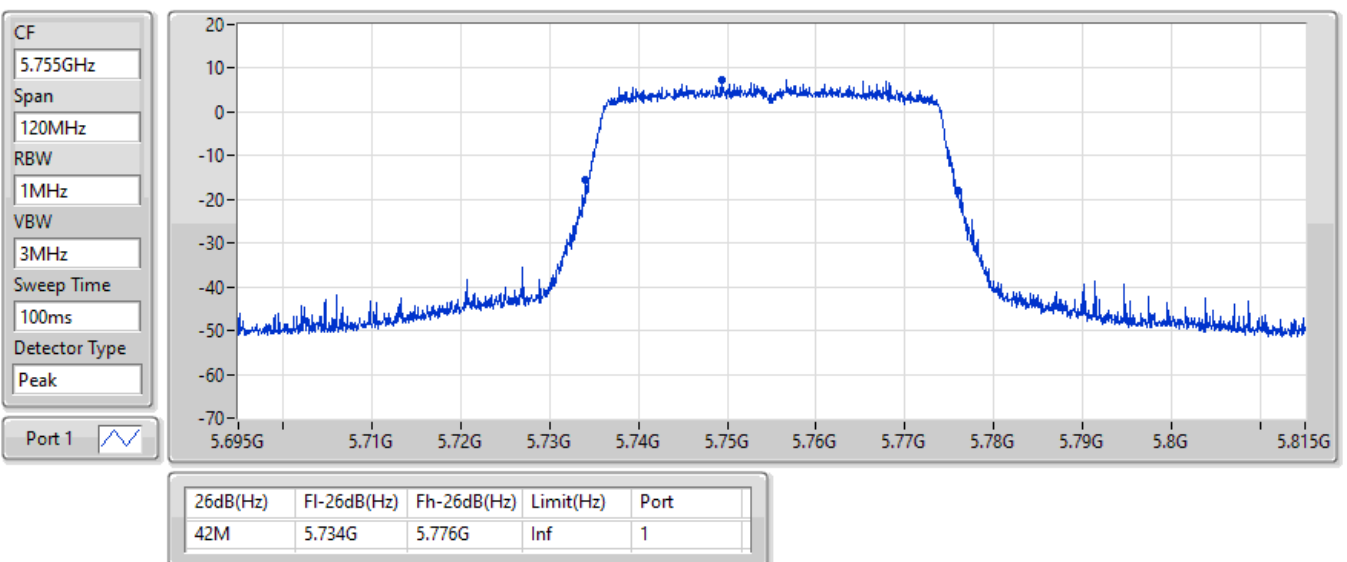


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

24/08/2022

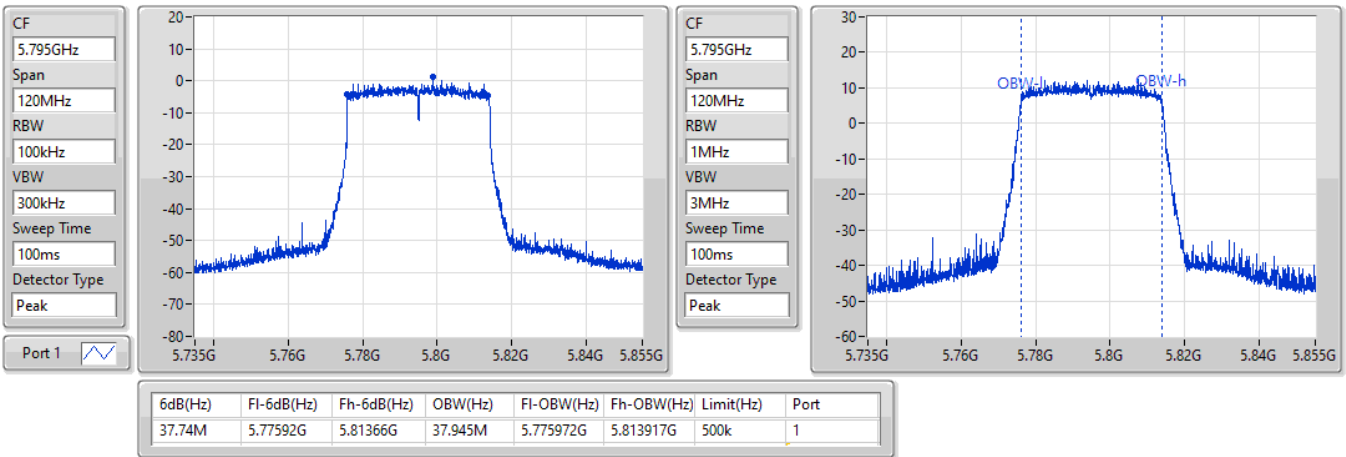


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

24/08/2022

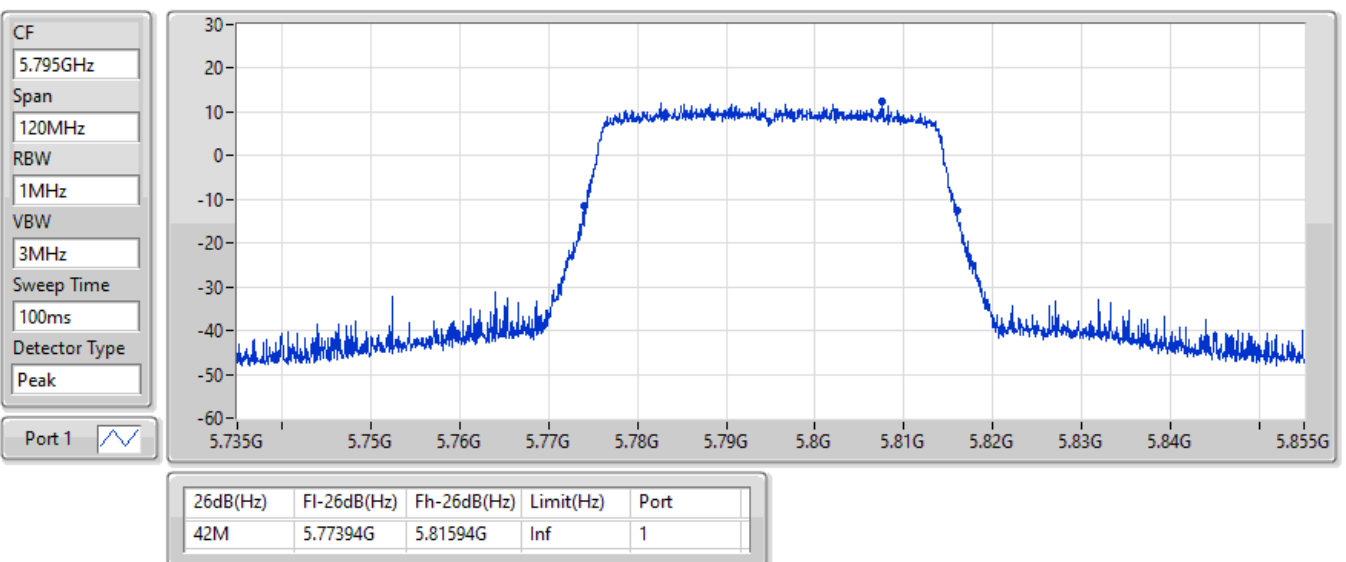


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

24/08/2022

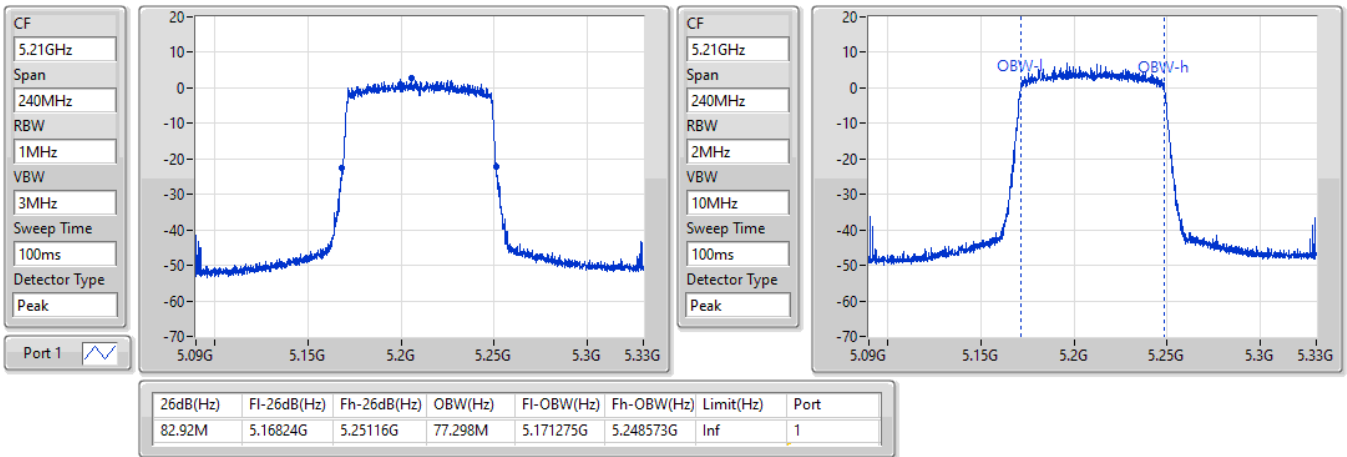


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5210MHz

24/08/2022

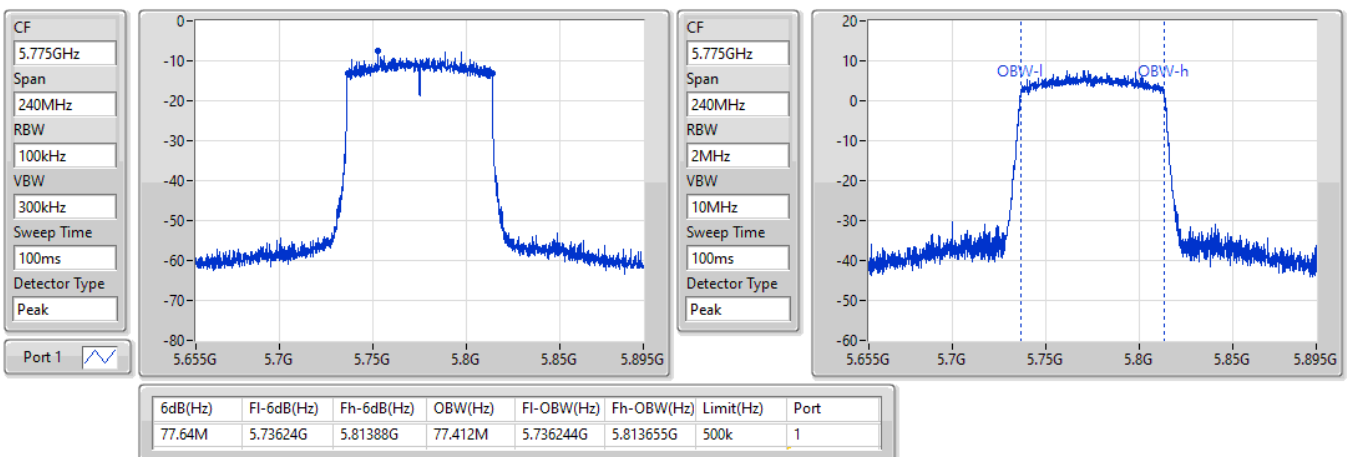


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

24/08/2022

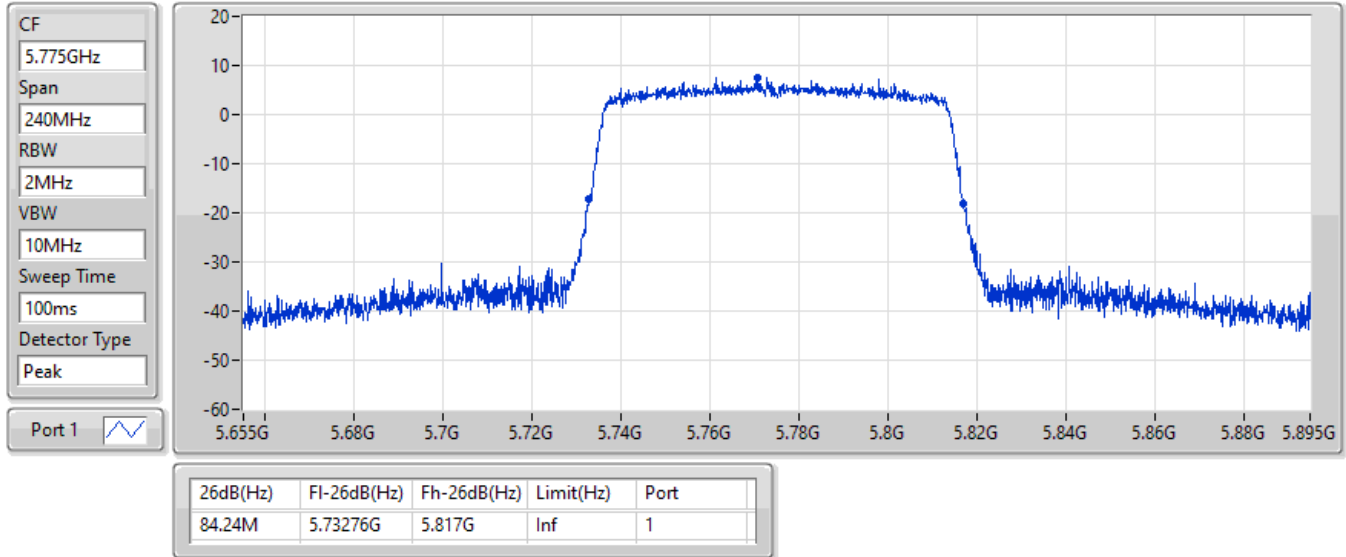


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

24/08/2022

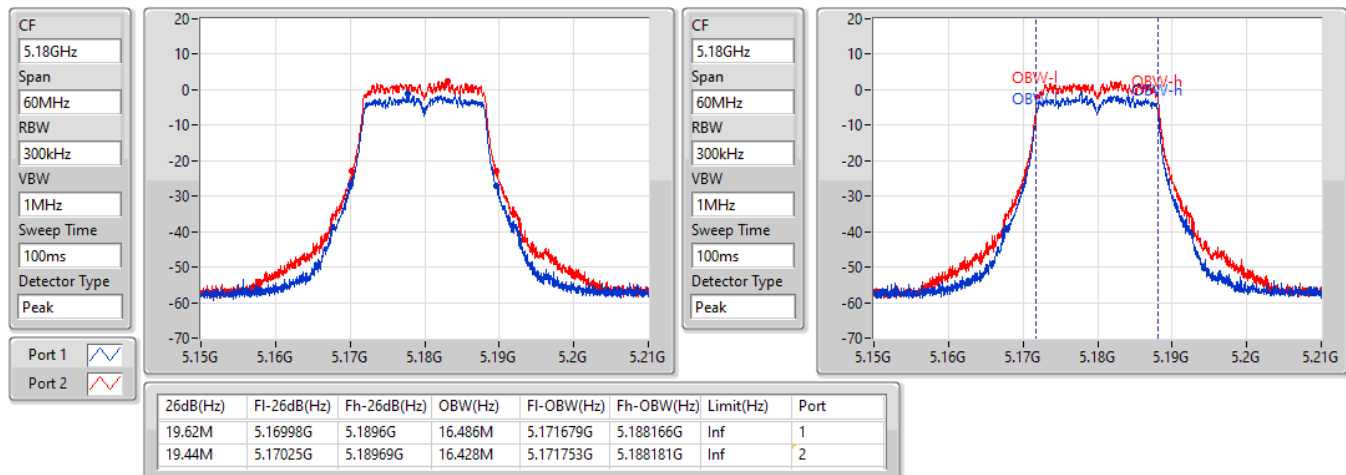


802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

24/08/2022

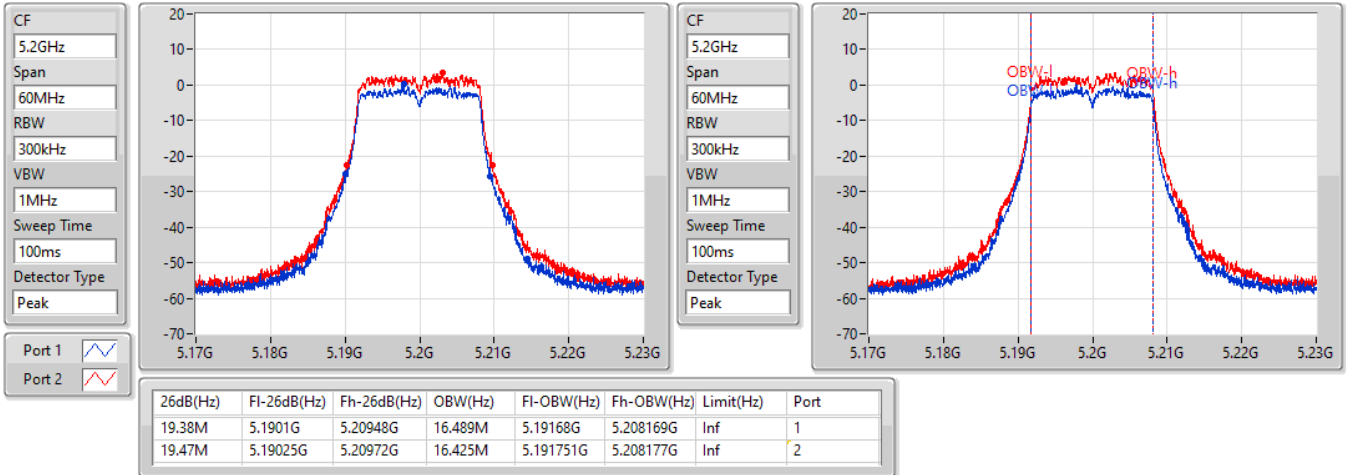


802.11a_Nss1,(6Mbps)_2TX

EBW

5200MHz

24/08/2022

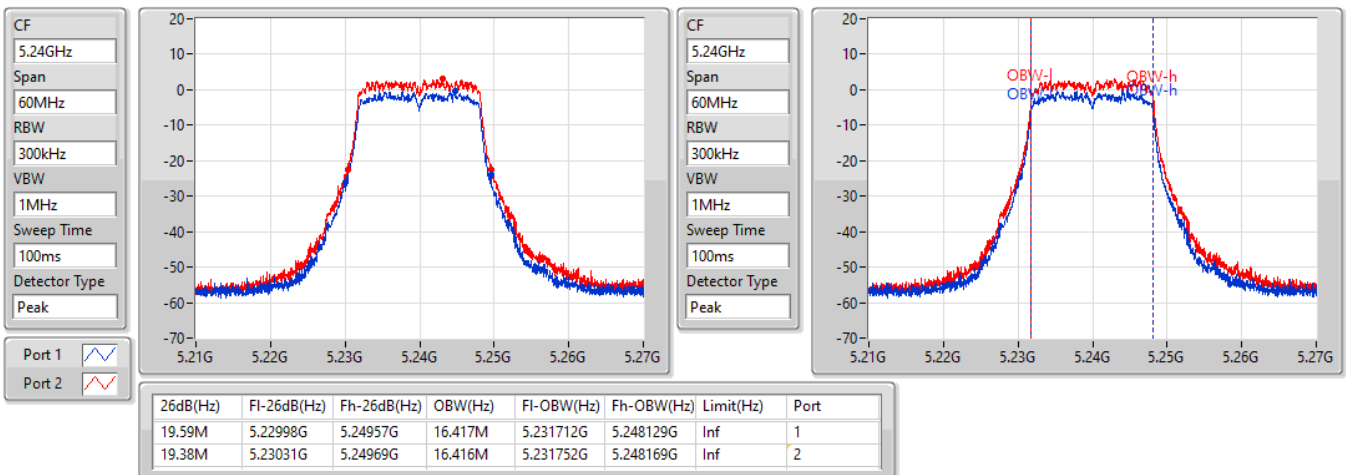


802.11a_Nss1,(6Mbps)_2TX

EBW

5240MHz

24/08/2022

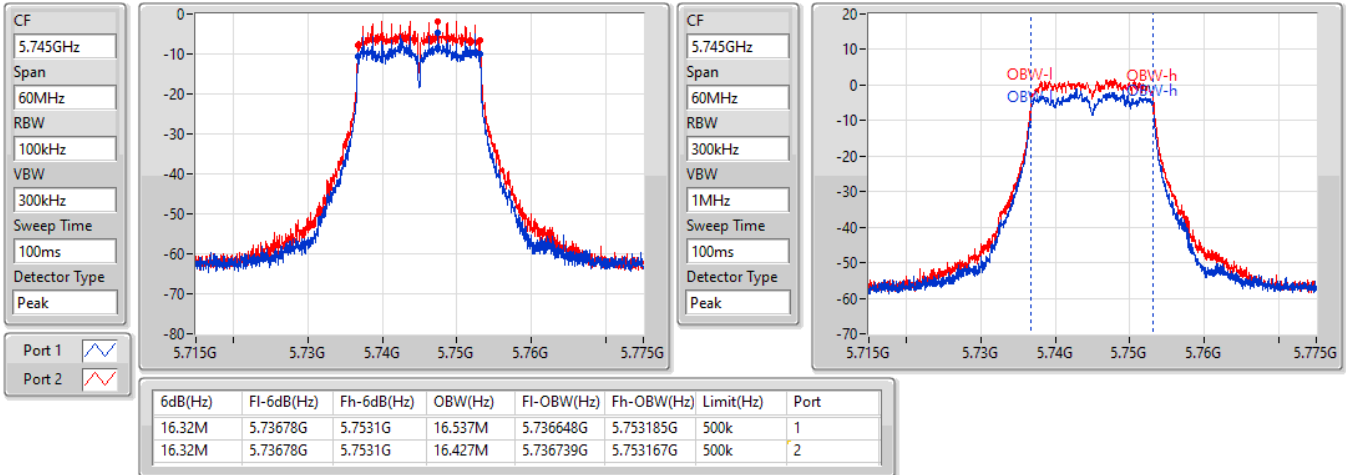


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

24/08/2022

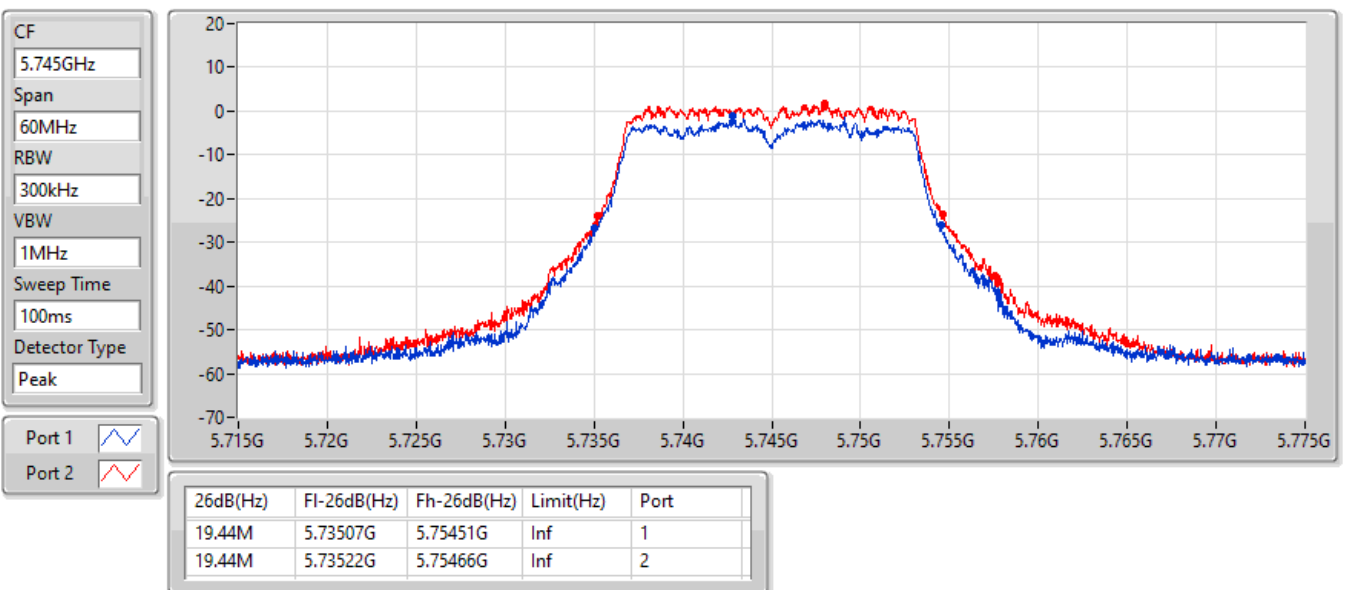


802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

24/08/2022

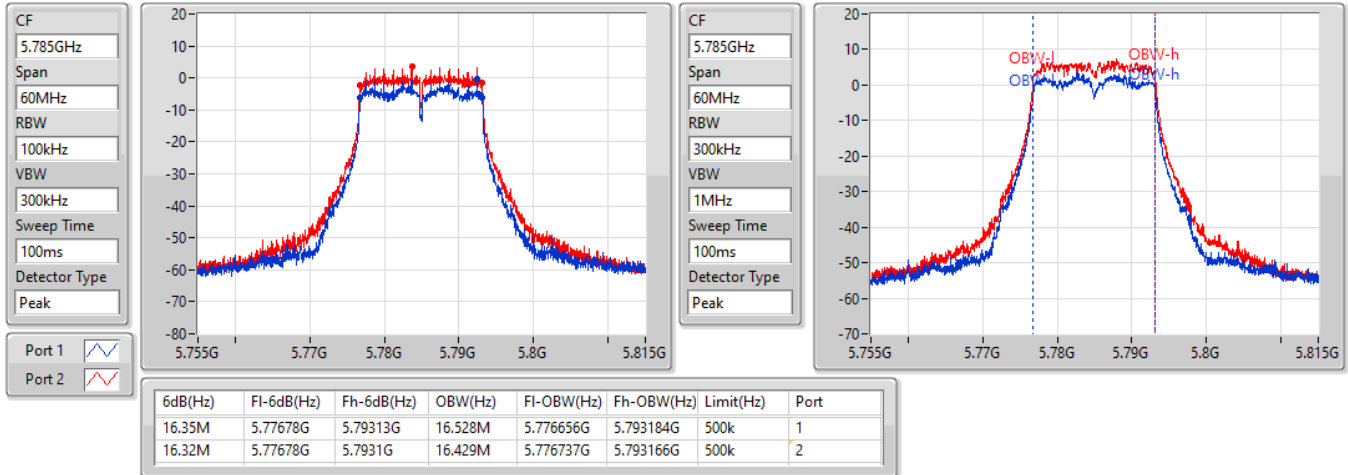


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

24/08/2022

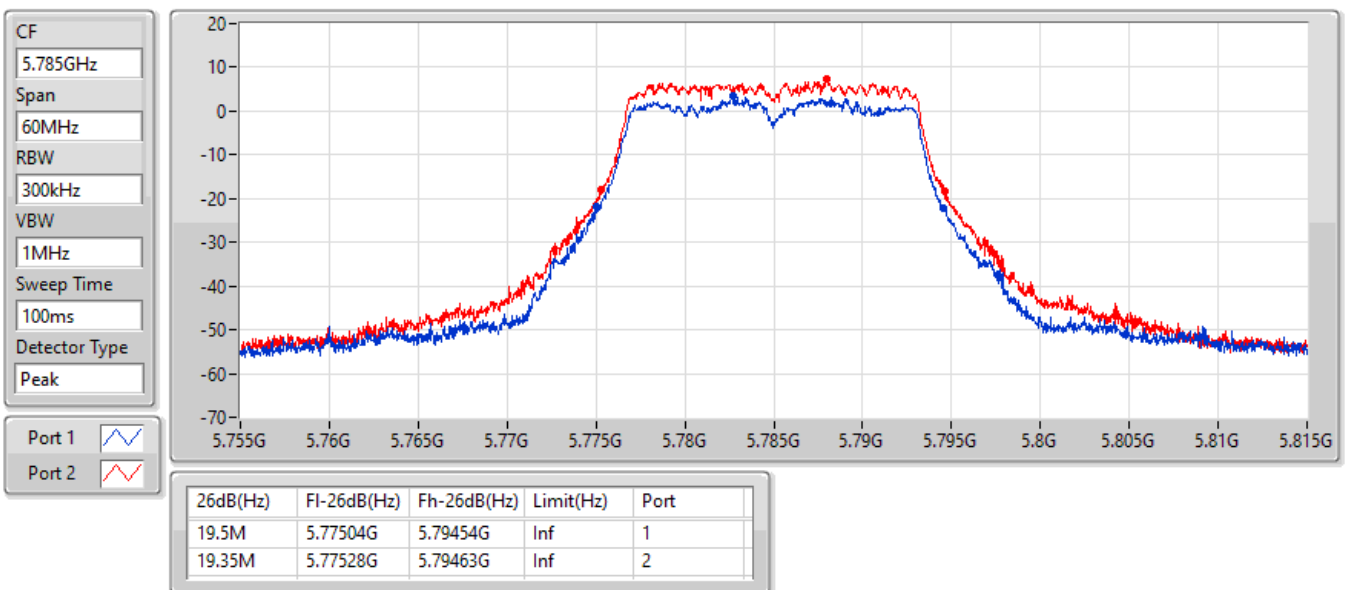


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

24/08/2022

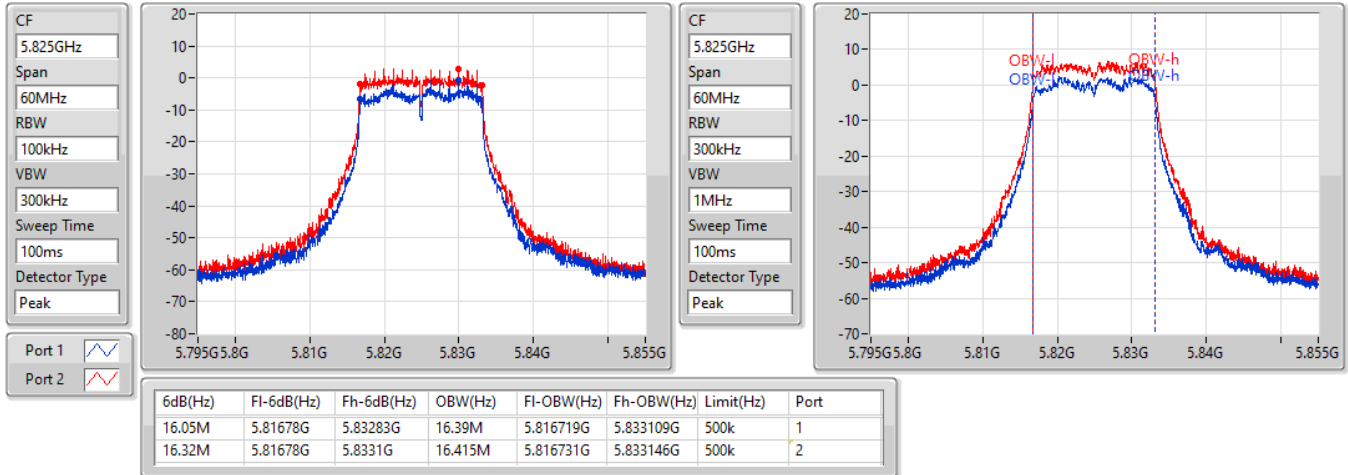


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

24/08/2022

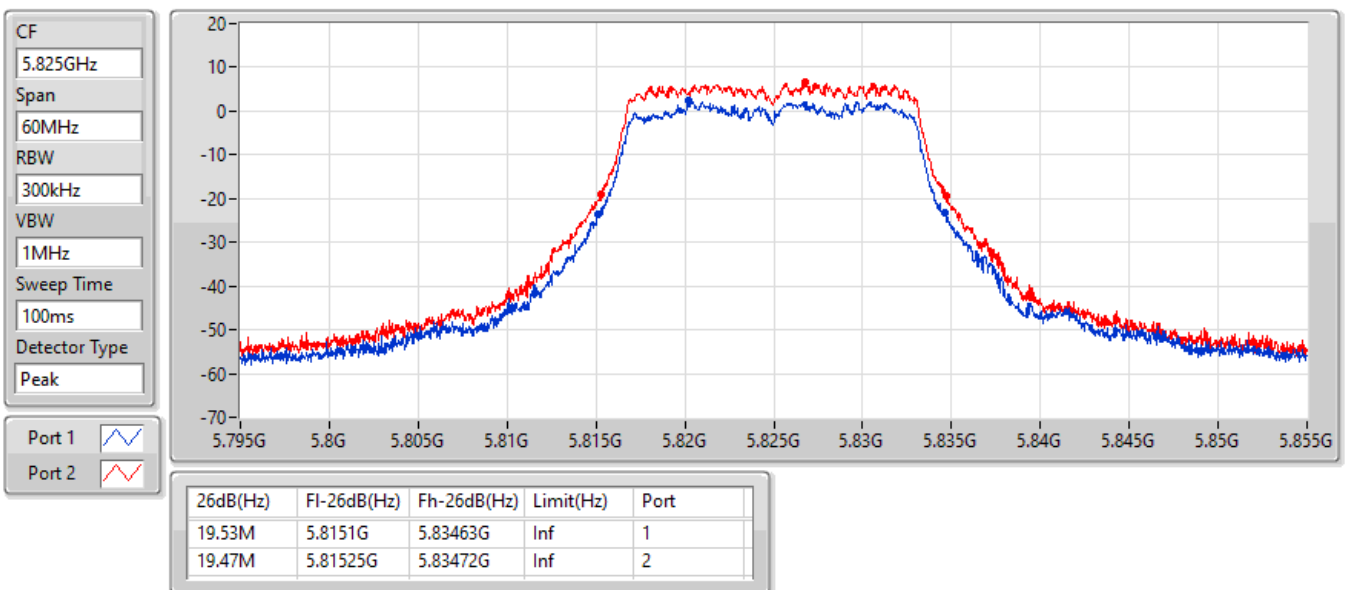


802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

24/08/2022

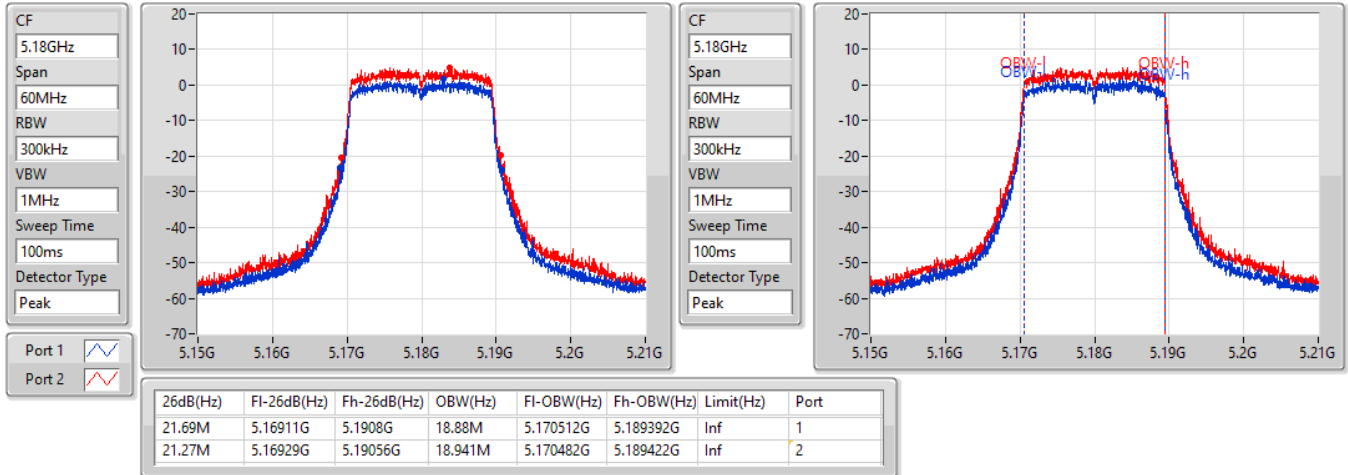


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5180MHz

24/08/2022

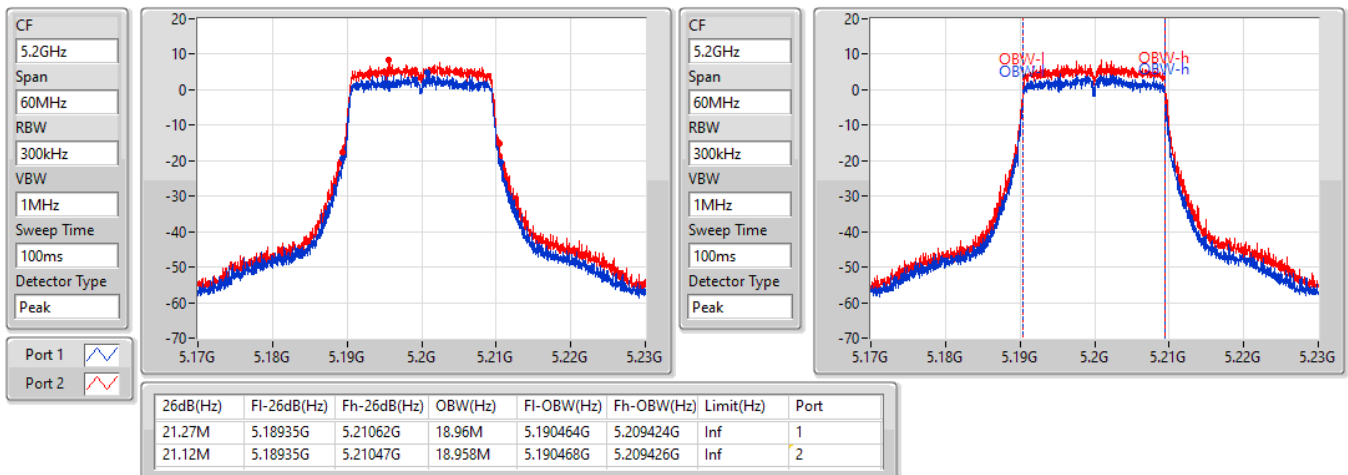


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

24/08/2022

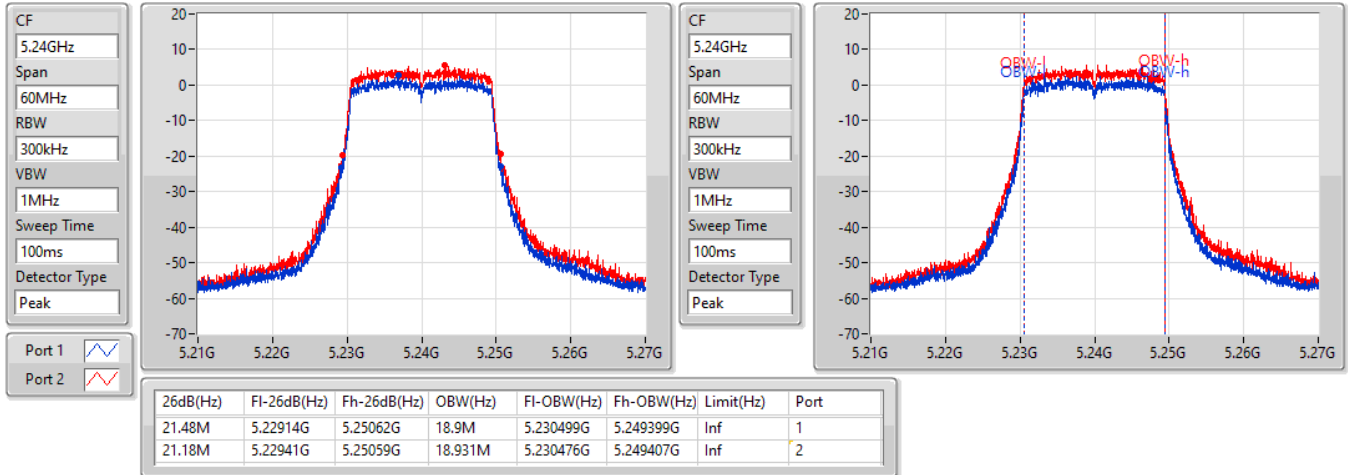


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

24/08/2022

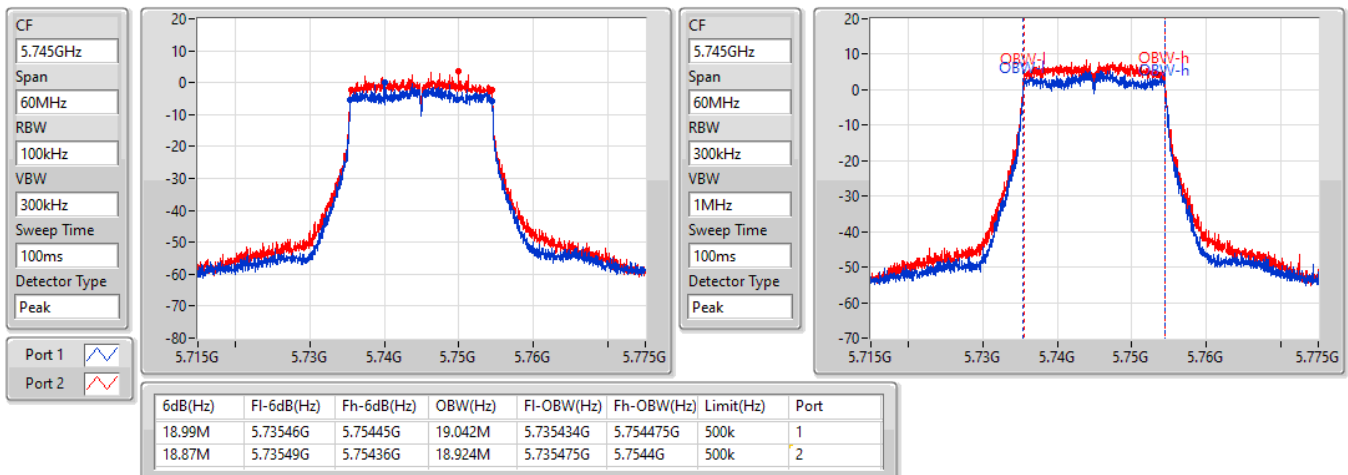


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

24/08/2022

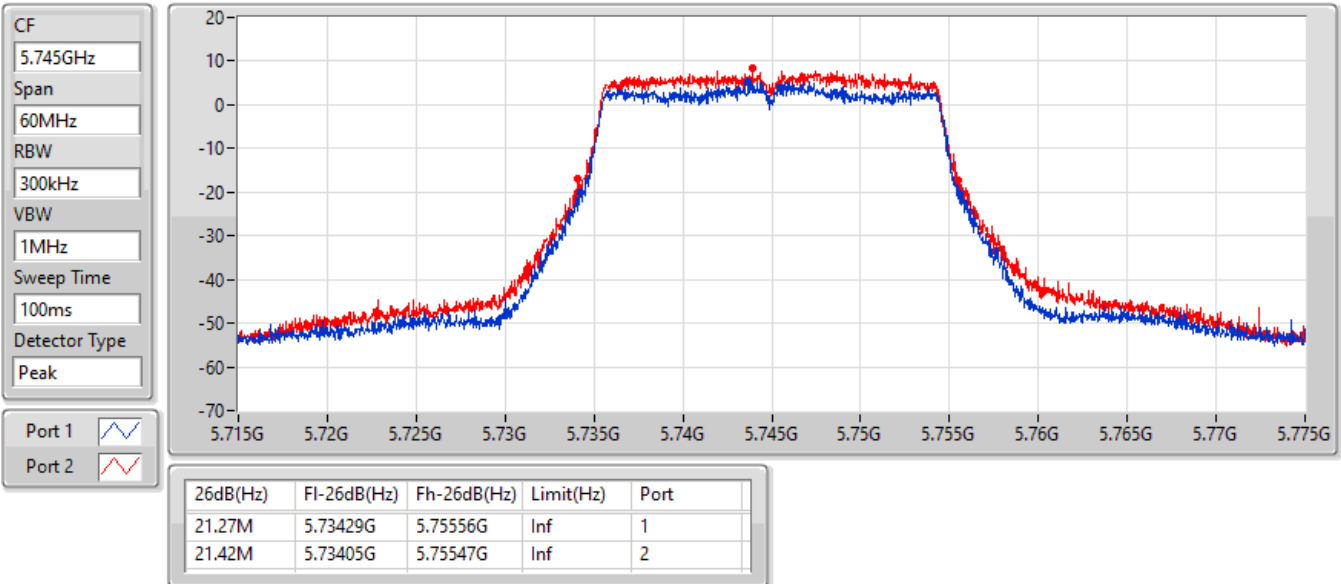


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

24/08/2022

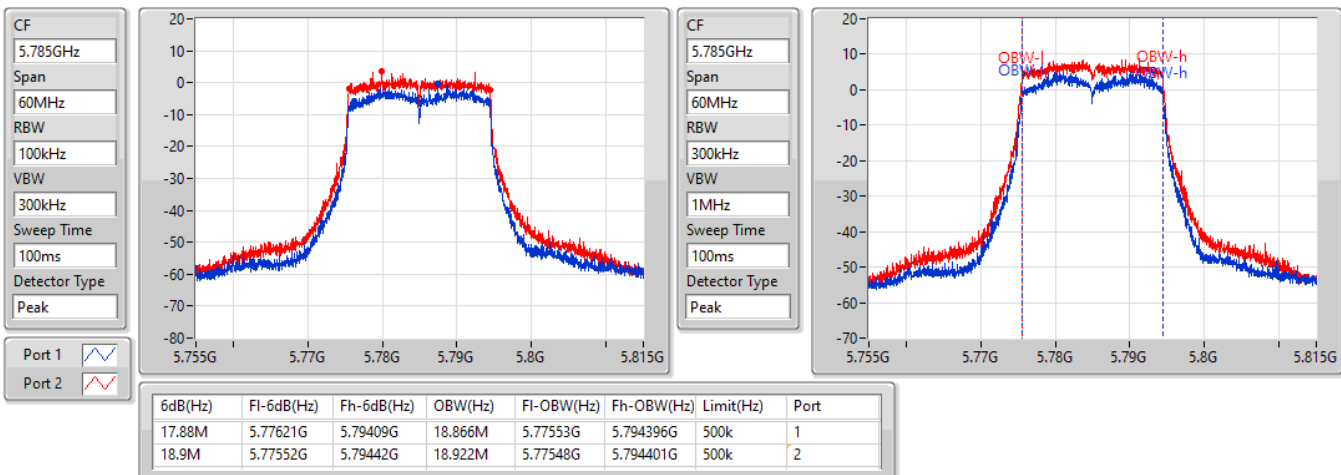


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

24/08/2022

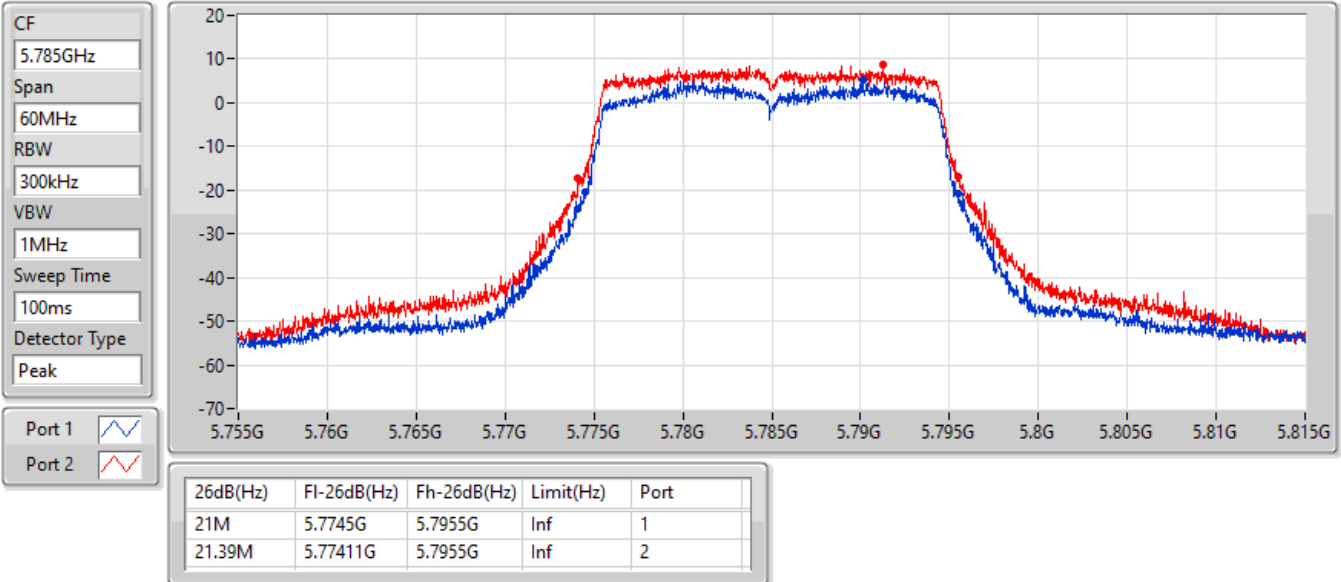


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

24/08/2022

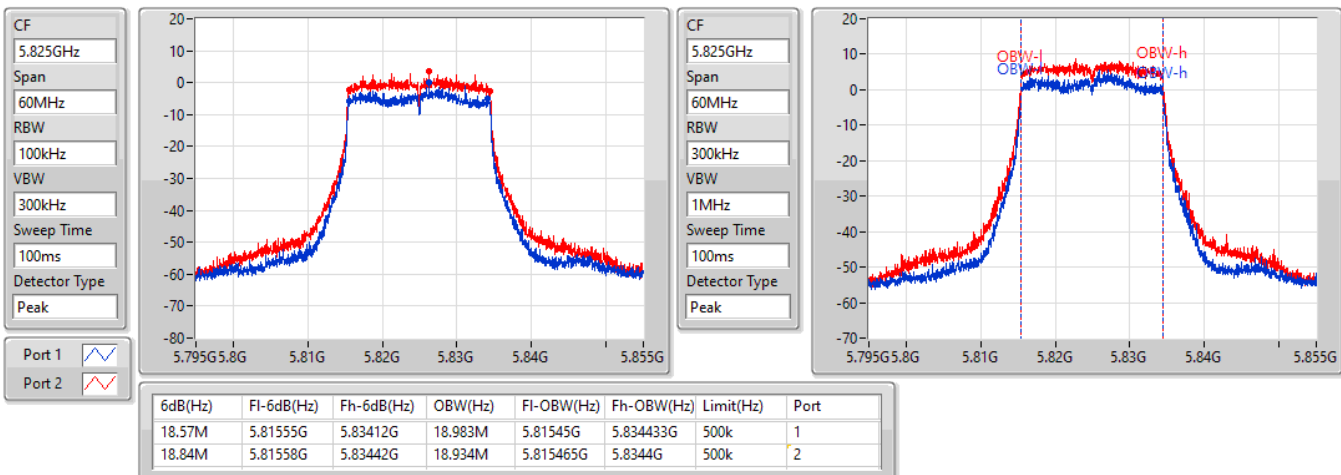


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

24/08/2022

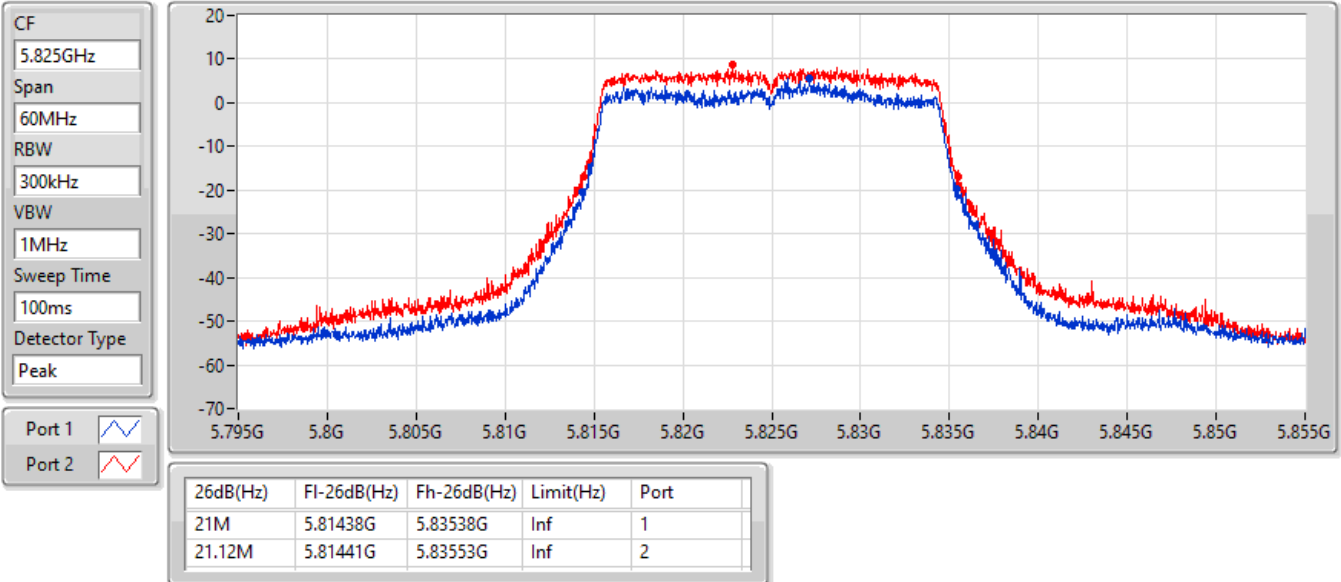


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

24/08/2022

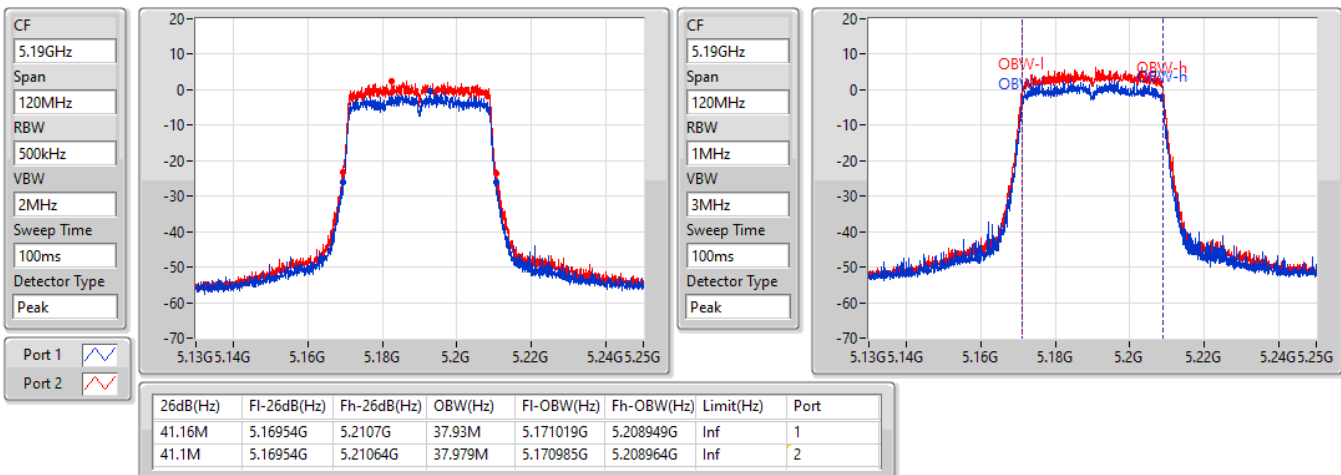


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5190MHz

24/08/2022

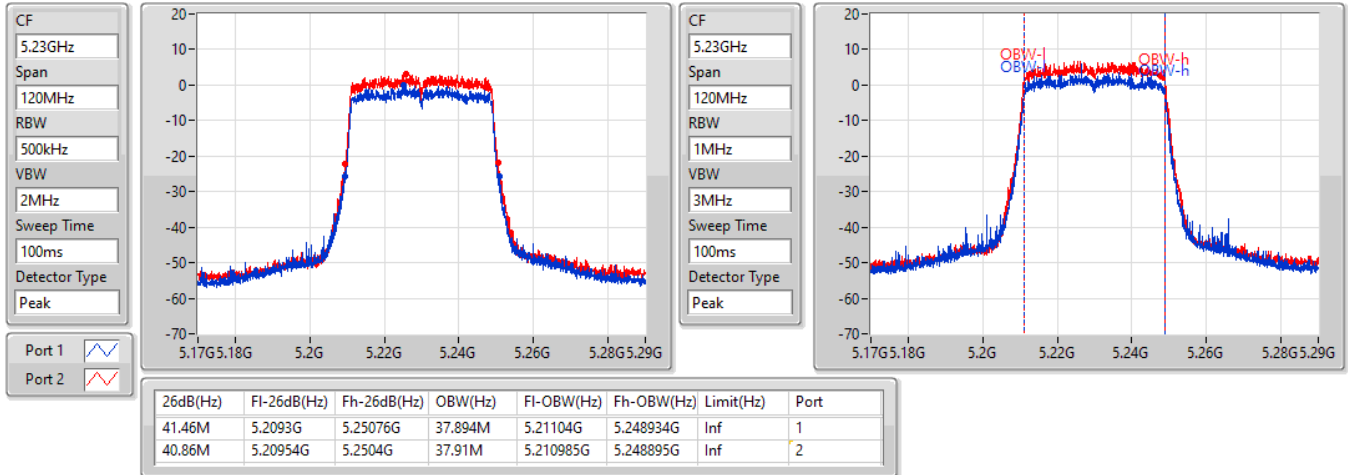


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5230MHz

24/08/2022

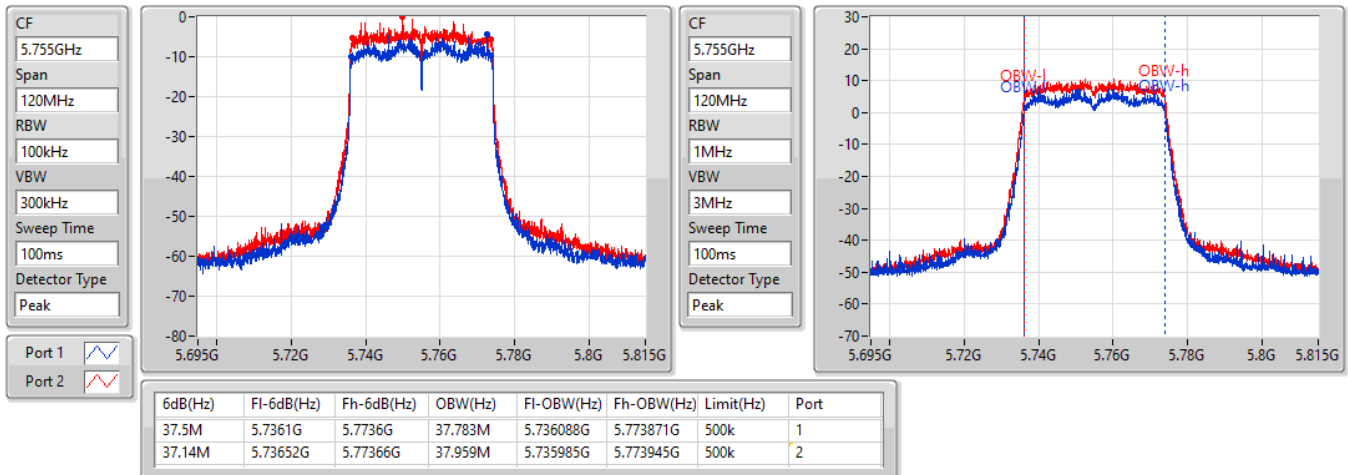


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

24/08/2022

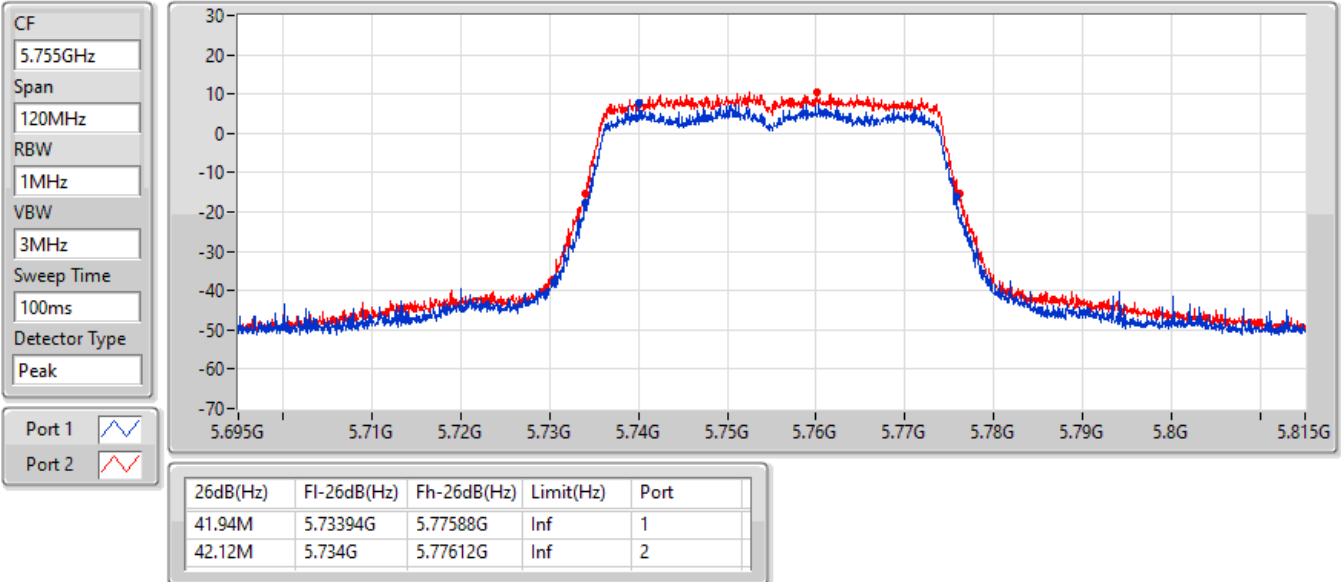


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

24/08/2022

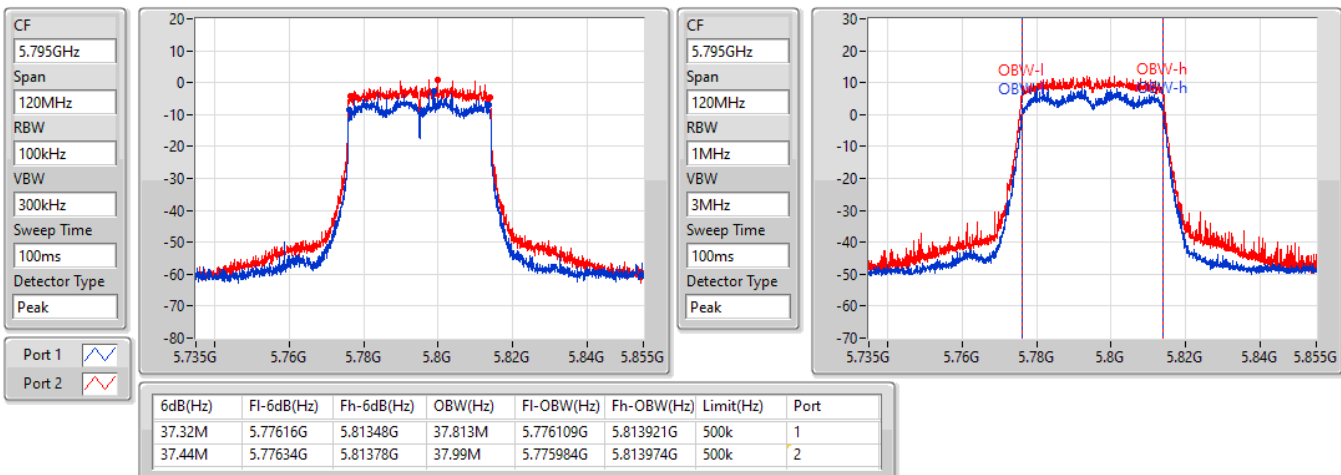


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

24/08/2022

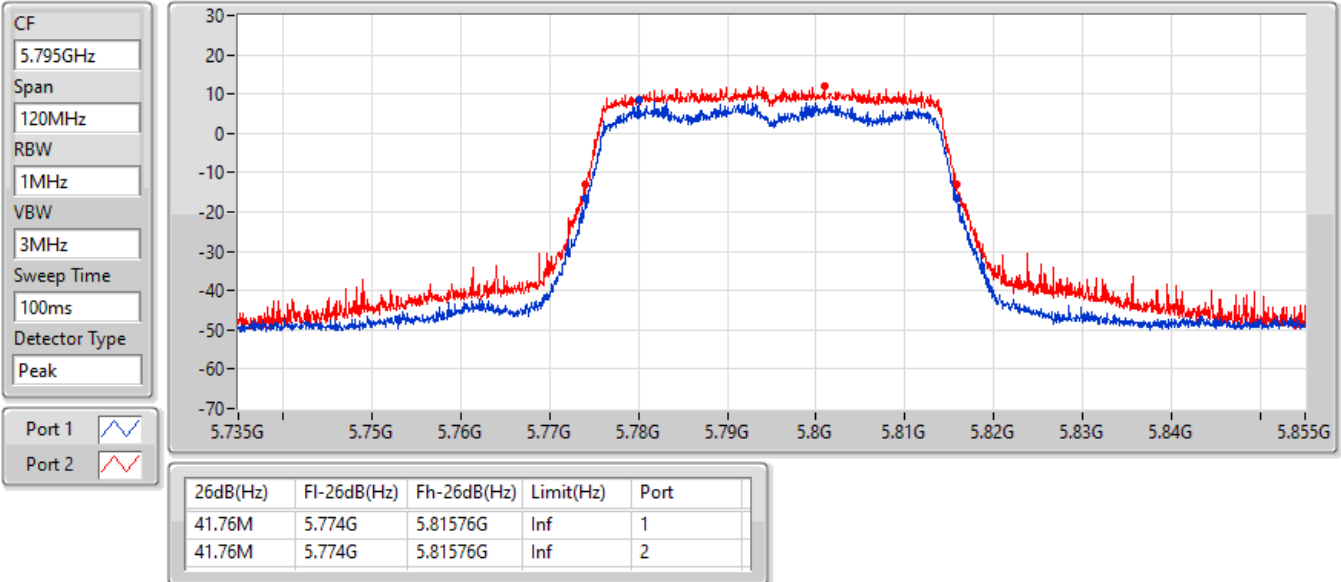


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

24/08/2022

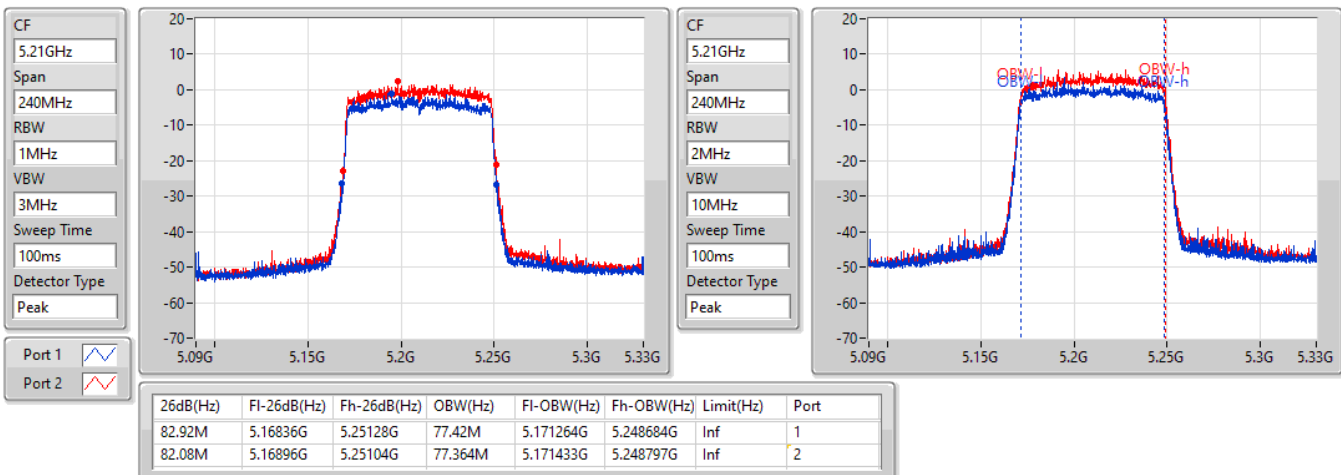


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5210MHz

24/08/2022

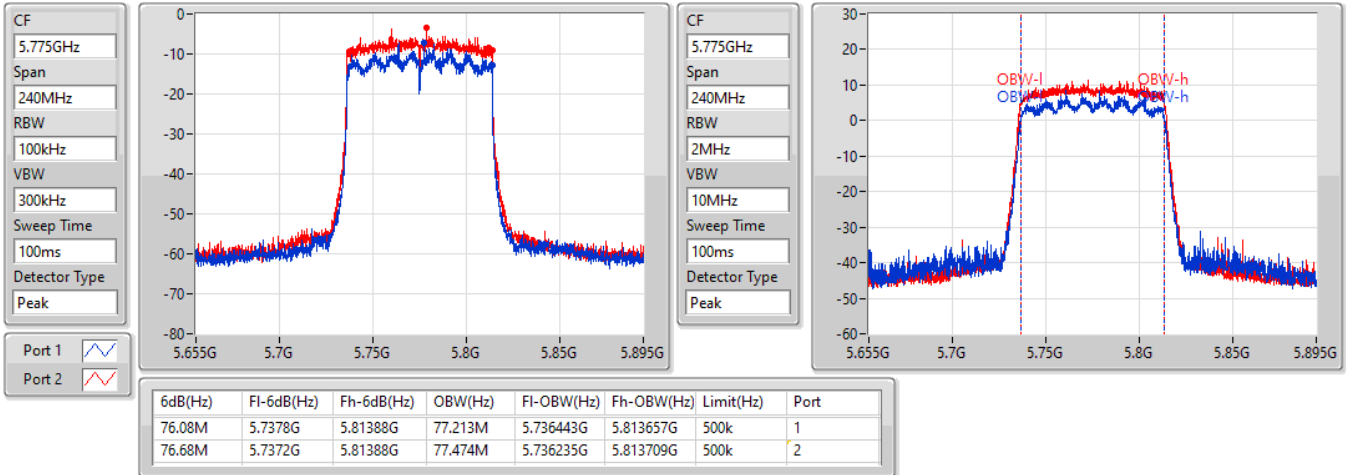


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

24/08/2022

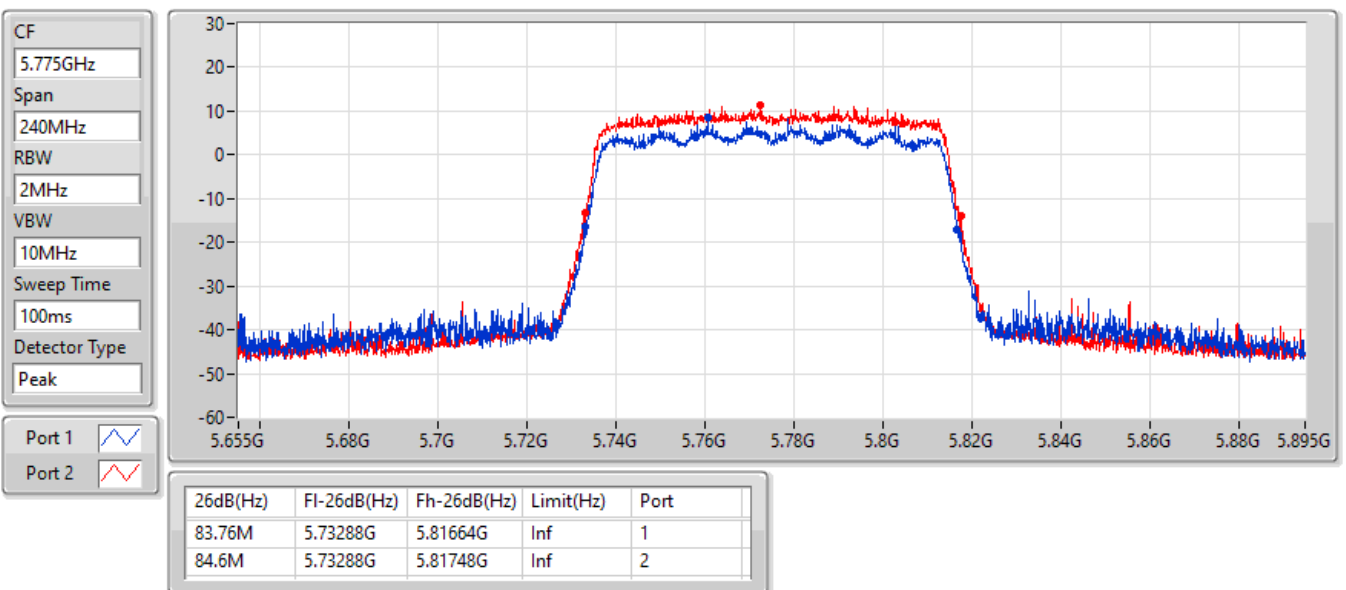


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

24/08/2022

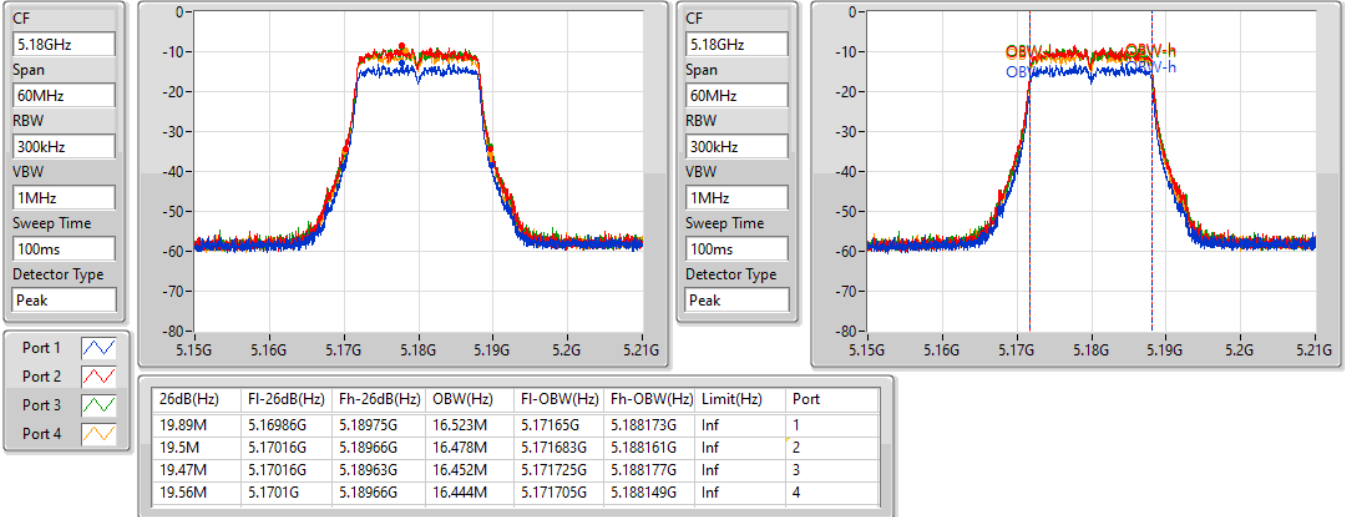


802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

22/08/2022

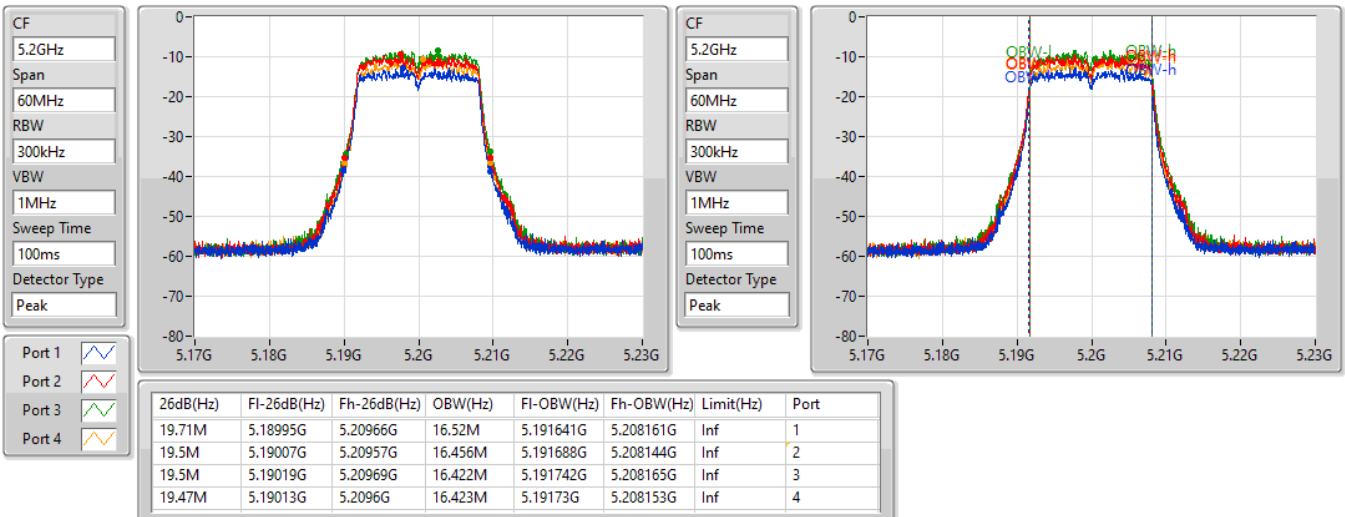


802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

22/08/2022

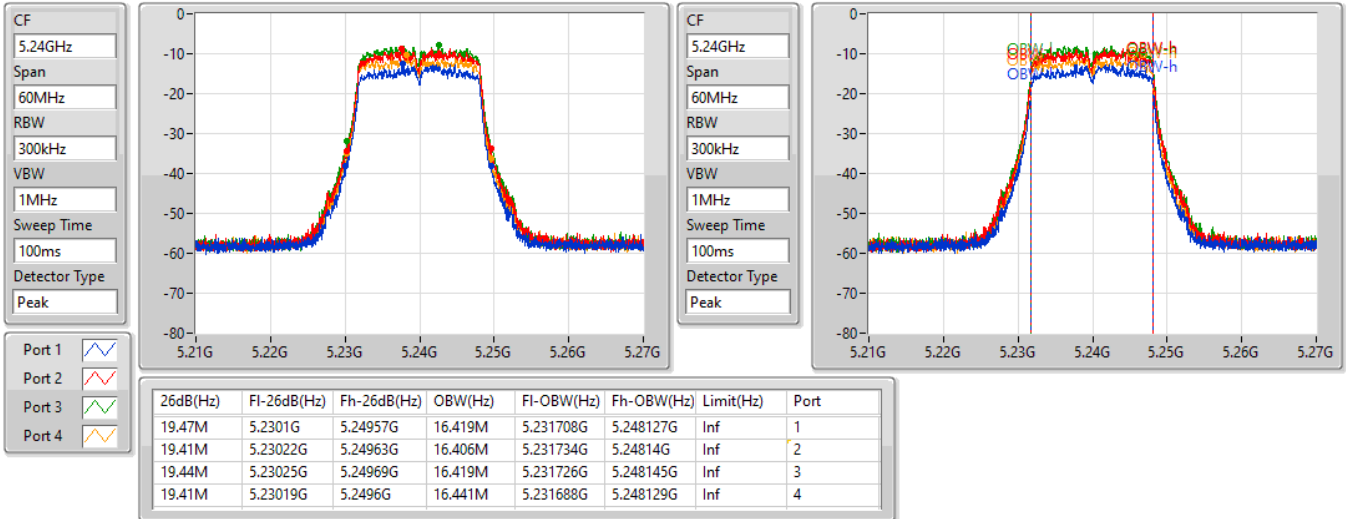


802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

22/08/2022



802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

22/08/2022

