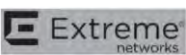


FCC Radio Test Report

FCC ID : QXO-AP3000
Equipment : Access Point
Brand Name :  Extreme
networks or Extreme Networks
Model Name : AP3000-WW, AP3000X-WW
Applicant : Extreme Networks, Inc.
2121 RDU Center Drive, Morrisville,
NC 27560, United States
Manufacturer : Extreme Networks, Inc.
2121 RDU Center Drive, Morrisville,
NC 27560, United States
Standard : 47 CFR FCC Part 15.407

The product was received on Apr. 07, 2022, and testing was started from Apr. 29, 2022 and completed on Aug. 13, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Approved by: Jordan Hsiao

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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TEL : 886-3-3273456
FAX : 886-3-3270973
Report Template No.: HE1-D1 Ver4.5
FCC ID: QXQ-AP3000

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Barry Hsiao

Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20), ax (HEW20)	5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5250-5350	n (HT40), ac (VHT40), ax (HEW40)	5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5250-5350	ac (VHT80), ax (HEW80)	5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5150-5250	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

Non-Beamforming_ Internal, Omni, Panel

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1TX(Port2)
5.47-5.725GHz	802.11a	20	1TX(Port2)
5.725-5.85GHz	802.11a	20	1TX(Port2)
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.25-5.35GHz	802.11ax HEW20	20	1TX(Port2)
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port2)
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port2)
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port2)
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port2)
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port2)
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port2)
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port2)
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port2)
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port2)
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port2)
5.15-5.25GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11ax HEW160	160	2TX

Non-Beamforming_Dipole

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1TX(Port1)
5.47-5.725GHz	802.11a	20	1TX(Port1)
5.725-5.85GHz	802.11a	20	1TX(Port1)
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.25-5.35GHz	802.11ax HEW20	20	1TX(Port1)
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port1)
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port1)
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port1)
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port1)
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port1)
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port1)
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port1)
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port1)
5.25-5.35GHz	802.11ax HEW80	80	2TX



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port1)
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port1)
5.15-5.25GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11ax HEW160	160	2TX

Beamforming_Internal, Dipole, Omni, Panel

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX
5.25-5.35GHz	802.11ax HEW160-BF	160	2TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX

Note:

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

1.1.2 Antenna Information

Internal Antenna (AP3000)

Ant.	Brand	Model Name	Antenna Type	Connector	Remark
1	Senao	5718A0691300	PIFA	I-PEX	Radio 1_5G+ Radio 2_2.4G
2	Senao	5718A0690300	PIFA	I-PEX	Radio 1_5G+ Radio 2_2.4G
3	Senao	5718A0693300	PIFA	I-PEX	Radio 2_6E
4	Senao	5718A0692300	PIFA	I-PEX	Radio 2_6E
5	Senao	5718A0694300	PIFA	I-PEX	Radio 3_ BT+802.15.4

Ant.	Port	Gain (dBi)				
		2.4G	5G	6E	BT	802.15.4
1	1	4.40	5.14	-	-	-
2	2	4.38	5.13	-	-	-
3	1	-	-	5.22	-	-
4	2	-	-	5.21	-	-
5	1	-	-	-	4.02	4.02

Composite Gain (dBi)			
2.4G		5G	
2T1S	2T2S	2T1S	2T2S
5.85	2.85	4.95	2.52

Note 1: The EUT has five antennas.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was recorded in this test report.

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For 5GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was recorded in this test report.

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For 6GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 4(port 2) and it was recorded in this test report.

For IEEE 802.11 a/ax mode (2TX/2RX)

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

For BT function:

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

Ant. 5 (port 1) could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX)

Ant. 5 (port 1) could transmit/receive.

External Antenna (AP3000X)

Ant.	Brand	Model Name	Antenna Type	Connector	Remark
1	WNC	ML2452-APA2-02	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
2	WNC	ML2452-APA2-02	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
3	AWAN	7102A0545000	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
4	AWAN	7102A0545000	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
5	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	Radio 1_5G+ Radio 2_2.4G
6	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	Radio 1_5G+ Radio 2_2.4G
7	MARS	MA-WC2458-2H	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
8	AWAN	7102A0547000	Dipole	I-Pex	Radio 2_6E
9	AWAN	7102A0546000	Dipole	I-Pex	Radio 2_6E
10	Senao	5718A0694300	PIFA	I-Pex	Radio 3_ BT+802.15.4
11	Ventev	M603004001D3620DP	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
12	Ventev	M604006002D2402	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G

Ant.	Gain (dBi)				
	2.4G	5G	6E	BT	802.15.4
1	3.04	4.96	-	-	-
2	3.04	4.96	-	-	-
3	3.23	5.22	-	-	-
4	3.23	5.22	-	-	-
5	5	8	-	-	-
6	5	8	-	-	-
7	7.5	7.5	-	-	-
8	-	-	5.49	-	-
9	-	-	5.49	-	-
10	-	-	-	4.02	4.02
11	2.94	4.62	-	-	-
12	2.97	4.94	-	-	-

Note 1: The EUT has twelve antennas.

Note 2: The antenna mentioned above will not be sold with the EUT in the market. (except Dipole Antenna_7102A0545000)



Note 3: EUT can match with above antennas for using. Higher gain in each type of antenna was used to perform the worst configuration and result of that was recorded as the final test result.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 3 (port 1), Ant. 5 (port 1), Ant. 7 (port 1) and it was recorded in this test report.

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

Ant. 1~2, Ant. 3~4, Ant. 5~6, Ant. 7, Ant 11, Ant 12 could transmit/receive simultaneously.

For 5GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 3 (port 1), Ant. 6 (port 2), Ant. 7 (port 2) and it was recorded in this test report.

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

Ant. 1~2, Ant. 3~4, Ant. 5~6, Ant. 7, Ant 11, Ant 12 could transmit/receive simultaneously.

For 6GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 9 (port 2) and it was recorded in this test report.

For IEEE 802.11 a/ax mode (2TX/2RX)

Ant. 8 and Ant. 9 could transmit/receive simultaneously.

For BT function:

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

Ant. 10 could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX)

Ant. 10 could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter		
EUT Function	☐	Outdoor AP	☒ Indoor AP
	☐	Fixed P2P AP	☐ Client
Beamforming Function	☒	With beamforming	☐ Without beamforming
TPC Function	☒	With TPC Function	☐ Without TPC Function
Weather Band	☒	With 5600~5650MHz	☐ Without 5600~5650MHz
Resource Unit(802.11ax)	☒	Full RU	☐ Partial RU
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		
☐	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming_Internal

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)_1TX(Port2)	0.979	0.09	4.464m	300
802.11a_Nss1,(6Mbps)_2TX	0.979	0.09	4.464m	300
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW20_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	0.886	0.53	236.563u	10k
802.11ax HEW160_Nss2,(MCS0)_2TX	0.886	0.53	236.563u	10k

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

Non-Beamforming_Dipole

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)_1TX(Port1)	0.979	0.09	4.064m	300
802.11a_Nss1,(6Mbps)_2TX	0.979	0.09	4.064m	300
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW20_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

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

Non-Beamforming_Omni

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)_1TX(Port2)	0.979	0.09	4.464m	300
802.11a_Nss1,(6Mbps)_2TX	0.979	0.09	4.464m	300
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW20_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

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

**Non-Beamforming_Panel**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)_1TX(Port2)	0.979	0.09	4.464m	300
802.11a_Nss1,(6Mbps)_2TX	0.979	0.09	4.464m	300
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW20_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160_Nss2,(MCS0)_2TX	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

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

Beamforming_Internal

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.969	0.14	5.16m	300
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.947	0.24	2.925m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.958	0.19	4.357m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.968	0.14	4.141m	300

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

Beamforming_Dipole

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.954	0.2	2.925m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.953	0.21	4.357m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.956	0.2	4.141m	300
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.961	0.17	5.16m	300

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

Beamforming_Omni

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.954	0.2	2.925m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.953	0.21	4.357m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.956	0.2	4.141m	300
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.961	0.17	5.16m	300

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

**Beamforming_Panel**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.954	0.2	2.925m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.953	0.21	4.357m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.956	0.2	4.141m	300
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.961	0.17	5.16m	300

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

1.1.5 Table for Multiple Listing

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

Model Name	Description
AP3000-WW, AP3000X-WW	The "X" in AP3000X-WW SKU indicates that it comes with external antenna

1.1.6 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR232478AN

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

Modifications	Performance Checking
Frequency bands U-NII-2A and U-NII-2C were added	Emission Bandwidth, Maximum Conducted Output Power, Peak Power Spectral Density and Unwanted Emissions above 1GHz were evaluated

1.2 Testing Applied Standards

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

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

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

- ♦ KDB 662911 D01 v02r01
- ♦ KDB 662911 D03 v01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Johnny	22.3~25.6°C / 51~60%	07/Jun/2022~13/Aug/2022
Radiated	03CH02-HY	Lego	21.5~22.3°C / 51~56%	29/Apr/2022~12/Aug/2022
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Emission Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Unwanted Emissions	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Non-Beamforming

Test Software Version	accessMTool_REL_3_2_1_5
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Non-Beamforming_Internal

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	91
5300MHz	88
5320MHz	73
5500MHz	68
5580MHz	91
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	88
5720MHz Straddle 5.725-5.85GHz	88
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	88
5300MHz	89
5320MHz	81
5500MHz	68
5580MHz	90
5700MHz	68
5720MHz Straddle 5.47-5.725GHz	84
5720MHz Straddle 5.725-5.85GHz	84
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
5260MHz	90
5300MHz	85
5320MHz	78
5500MHz	71
5580MHz	90
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	85
5720MHz Straddle 5.725-5.85GHz	85
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	87
5300MHz	89
5320MHz	75
5500MHz	71



Mode	Power Setting
5580MHz	89
5700MHz	66
5720MHz Straddle 5.47-5.725GHz	82
5720MHz Straddle 5.725-5.85GHz	82
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
5270MHz	79
5310MHz	63
5510MHz	63
5550MHz	81
5670MHz	73
5710MHz Straddle 5.47-5.725GHz	84
5710MHz Straddle 5.725-5.85GHz	84
5755MHz	84
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	85
5310MHz	71
5510MHz	67
5550MHz	84
5670MHz	74
5710MHz Straddle 5.47-5.725GHz	83
5710MHz Straddle 5.725-5.85GHz	83
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-
5290MHz	60
5530MHz	65
5610MHz	68
5690MHz Straddle 5.47-5.725GHz	87
5690MHz Straddle 5.725-5.85GHz	87
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	67
5530MHz	68
5610MHz	77
5690MHz Straddle 5.47-5.725GHz	82
5690MHz Straddle 5.725-5.85GHz	82
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-
5250MHz Straddle 5.15-5.25GHz	43
5250MHz Straddle 5.25-5.35GHz	43
5570MHz	48
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	44
5250MHz Straddle 5.25-5.35GHz	44



Mode	Power Setting
5570MHz	46

Non-Beamforming_Dipole

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5260MHz	95
5300MHz	95
5320MHz	88
5500MHz	67
5580MHz	94
5700MHz	72
5720MHz Straddle 5.47-5.725GHz	94
5720MHz Straddle 5.725-5.85GHz	94
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	72
5300MHz	72
5320MHz	72
5500MHz	62
5580MHz	71
5700MHz	64
5720MHz Straddle 5.47-5.725GHz	75
5720MHz Straddle 5.725-5.85GHz	75
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-
5260MHz	95
5300MHz	95
5320MHz	78
5500MHz	65
5580MHz	94
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	93
5720MHz Straddle 5.725-5.85GHz	93
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	86
5300MHz	86
5320MHz	73
5500MHz	68
5580MHz	83
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	82
5720MHz Straddle 5.725-5.85GHz	82



Mode	Power Setting
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-
5270MHz	89
5310MHz	70
5510MHz	60
5550MHz	86
5670MHz	79
5710MHz Straddle 5.47-5.725GHz	89
5710MHz Straddle 5.725-5.85GHz	89
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	82
5310MHz	65
5510MHz	64
5550MHz	79
5670MHz	75
5710MHz Straddle 5.47-5.725GHz	78
5710MHz Straddle 5.725-5.85GHz	78
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-
5290MHz	61
5530MHz	63
5610MHz	79
5690MHz Straddle 5.47-5.725GHz	89
5690MHz Straddle 5.725-5.85GHz	89
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	62
5530MHz	64
5610MHz	77
5690MHz Straddle 5.47-5.725GHz	81
5690MHz Straddle 5.725-5.85GHz	81
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	-
5250MHz Straddle 5.15-5.25GHz	44
5250MHz Straddle 5.25-5.35GHz	44
5570MHz	44
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	60
5250MHz Straddle 5.25-5.35GHz	60
5570MHz	56

**Non-Beamforming_Omni**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	86
5300MHz	85
5320MHz	80
5500MHz	64
5580MHz	83
5700MHz	65
5720MHz Straddle 5.47-5.725GHz	86
5720MHz Straddle 5.725-5.85GHz	86
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	61
5300MHz	60
5320MHz	61
5500MHz	59
5580MHz	60
5700MHz	65
5720MHz Straddle 5.47-5.725GHz	65
5720MHz Straddle 5.725-5.85GHz	65
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
5260MHz	86
5300MHz	85
5320MHz	74
5500MHz	65
5580MHz	83
5700MHz	64
5720MHz Straddle 5.47-5.725GHz	85
5720MHz Straddle 5.725-5.85GHz	85
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	72
5300MHz	71
5320MHz	73
5500MHz	66
5580MHz	70
5700MHz	62
5720MHz Straddle 5.47-5.725GHz	74
5720MHz Straddle 5.725-5.85GHz	74
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-



Mode	Power Setting
5270MHz	83
5310MHz	65
5510MHz	64
5550MHz	79
5670MHz	72
5710MHz Straddle 5.47-5.725GHz	83
5710MHz Straddle 5.725-5.85GHz	83
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	73
5310MHz	64
5510MHz	60
5550MHz	72
5670MHz	67
5710MHz Straddle 5.47-5.725GHz	74
5710MHz Straddle 5.725-5.85GHz	74
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-
5290MHz	62
5530MHz	65
5610MHz	78
5690MHz Straddle 5.47-5.725GHz	81
5690MHz Straddle 5.725-5.85GHz	81
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	61
5530MHz	60
5610MHz	69
5690MHz Straddle 5.47-5.725GHz	72
5690MHz Straddle 5.725-5.85GHz	72
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-
5250MHz Straddle 5.15-5.25GHz	45
5250MHz Straddle 5.25-5.35GHz	45
5570MHz	55
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	55
5250MHz Straddle 5.25-5.35GHz	55
5570MHz	57

**Non-Beamforming_Panel**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	87
5300MHz	88
5320MHz	87
5500MHz	78
5580MHz	85
5700MHz	75
5720MHz Straddle 5.47-5.725GHz	86
5720MHz Straddle 5.725-5.85GHz	86
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	63
5300MHz	62
5320MHz	63
5500MHz	61
5580MHz	62
5700MHz	66
5720MHz Straddle 5.47-5.725GHz	67
5720MHz Straddle 5.725-5.85GHz	67
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
5260MHz	87
5300MHz	86
5320MHz	80
5500MHz	69
5580MHz	85
5700MHz	68
5720MHz Straddle 5.47-5.725GHz	85
5720MHz Straddle 5.725-5.85GHz	85
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5260MHz	75
5300MHz	74
5320MHz	75
5500MHz	72
5580MHz	73
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	77
5720MHz Straddle 5.725-5.85GHz	77
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-



Mode	Power Setting
5270MHz	84
5310MHz	73
5510MHz	69
5550MHz	84
5670MHz	83
5710MHz Straddle 5.47-5.725GHz	83
5710MHz Straddle 5.725-5.85GHz	83
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5270MHz	75
5310MHz	69
5510MHz	65
5550MHz	75
5670MHz	74
5710MHz Straddle 5.47-5.725GHz	77
5710MHz Straddle 5.725-5.85GHz	77
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-
5290MHz	69
5530MHz	69
5610MHz	81
5690MHz Straddle 5.47-5.725GHz	81
5690MHz Straddle 5.725-5.85GHz	81
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5290MHz	66
5530MHz	64
5610MHz	72
5690MHz Straddle 5.47-5.725GHz	75
5690MHz Straddle 5.725-5.85GHz	75
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-
5250MHz Straddle 5.15-5.25GHz	64
5250MHz Straddle 5.25-5.35GHz	64
5570MHz	68
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	64
5250MHz Straddle 5.25-5.35GHz	64
5570MHz	68

**Beamforming**

Test Software Version	Dos 6.1
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Beamforming_Internal

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	87
5300MHz	87
5320MHz	83
5500MHz	74
5580MHz	88
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	83
5720MHz Straddle 5.725-5.85GHz	83
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	85
5310MHz	71
5510MHz	67
5550MHz	86
5670MHz	76
5710MHz Straddle 5.47-5.725GHz	85
5710MHz Straddle 5.725-5.85GHz	85
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	69
5530MHz	68
5610MHz	82
5690MHz Straddle 5.47-5.725GHz	84
5690MHz Straddle 5.725-5.85GHz	84
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	54
5250MHz Straddle 5.25-5.35GHz	54
5570MHz	57

**Beamforming_Dipole**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	68
5300MHz	69
5320MHz	69
5500MHz	64
5580MHz	68
5700MHz	56
5720MHz Straddle 5.47-5.725GHz	72
5720MHz Straddle 5.725-5.85GHz	72
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	70
5310MHz	64
5510MHz	60
5550MHz	70
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	60
5530MHz	62
5610MHz	67
5690MHz Straddle 5.47-5.725GHz	69
5690MHz Straddle 5.725-5.85GHz	69
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	43
5250MHz Straddle 5.25-5.35GHz	43
5570MHz	46

**Beamforming_Omni**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	57
5300MHz	57
5320MHz	57
5500MHz	56
5580MHz	56
5700MHz	57
5720MHz Straddle 5.47-5.725GHz	60
5720MHz Straddle 5.725-5.85GHz	60
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	60
5310MHz	58
5510MHz	55
5550MHz	58
5670MHz	58
5710MHz Straddle 5.47-5.725GHz	60
5710MHz Straddle 5.725-5.85GHz	60
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	56
5530MHz	59
5610MHz	57
5690MHz Straddle 5.47-5.725GHz	58
5690MHz Straddle 5.725-5.85GHz	58
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	50
5250MHz Straddle 5.25-5.35GHz	50
5570MHz	49

**Beamforming_Panel**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	59
5300MHz	59
5320MHz	58
5500MHz	58
5580MHz	58
5700MHz	61
5720MHz Straddle 5.47-5.725GHz	62
5720MHz Straddle 5.725-5.85GHz	62
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	62
5310MHz	61
5510MHz	59
5550MHz	60
5670MHz	59
5710MHz Straddle 5.47-5.725GHz	62
5710MHz Straddle 5.725-5.85GHz	62
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	59
5530MHz	61
5610MHz	59
5690MHz Straddle 5.47-5.725GHz	60
5690MHz Straddle 5.725-5.85GHz	60
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	55
5250MHz Straddle 5.25-5.35GHz	55
5570MHz	54

2.2 The Worst Case Measurement Configuration

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

The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT	V (Internal_1TX)	V (Internal_2TX)	V (External)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	CTX
1	5GHz WLAN + 2.4GHz WLAN + Bluetooth
2	5GHz WLAN + 6GHz WLAN + Bluetooth
3	5GHz WLAN + 2.4GHz WLAN + 802.15.4
4	5GHz WLAN + 6GHz WLAN + 802.15.4
Refer to Sporton Test Report No.: FA232478 for Co-location RF Exposure Evaluation.	

2.3 Accessories

Accessories				
SPECIAL WALL BKT	Brand Name	COMING	Model Name	6309Aq493000
Antenna (For AP3000X)	Brand Name	AWAN	Model Name	7102A0545000

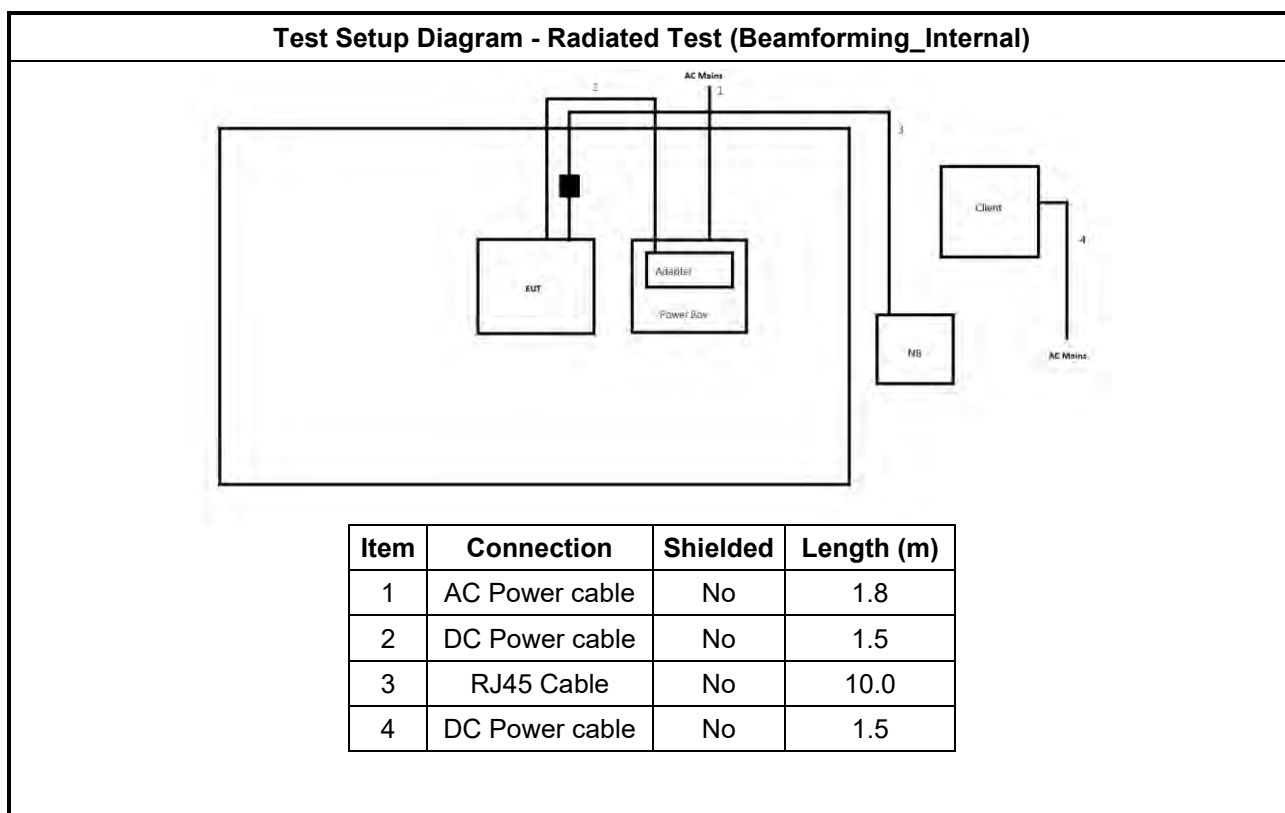
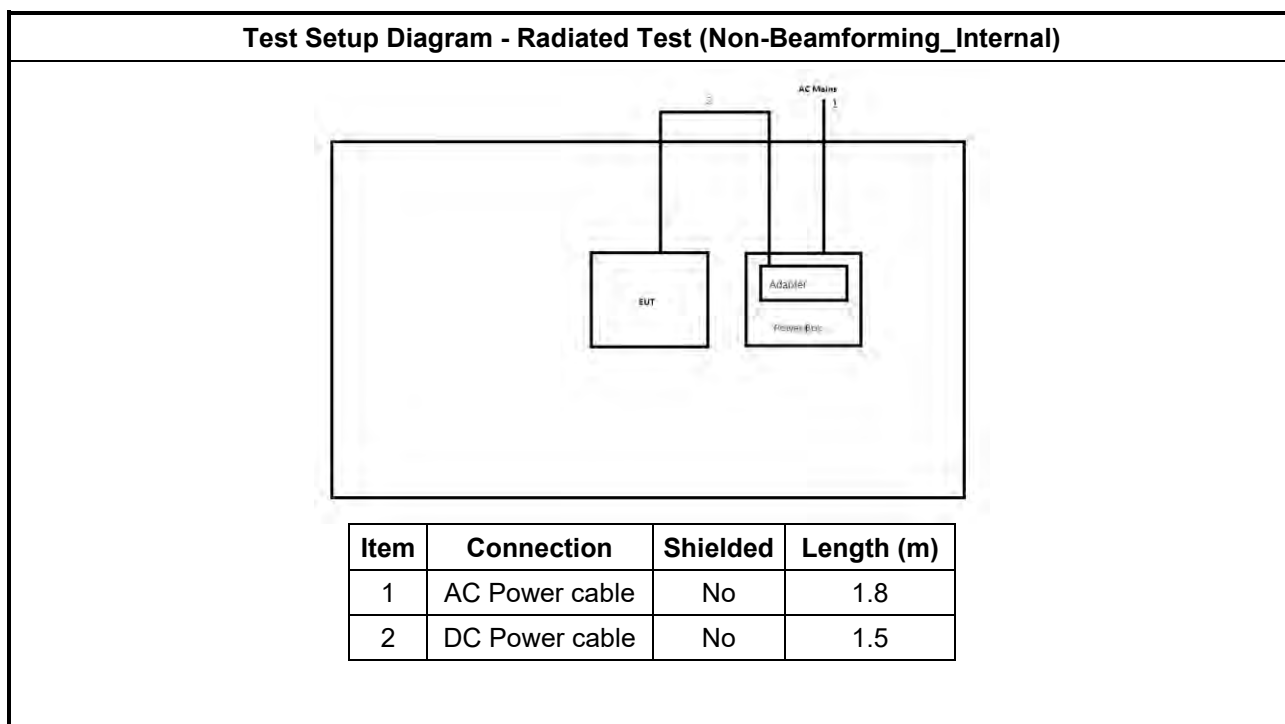
Reminder: Regarding to more detail and other information, please refer to user manual.

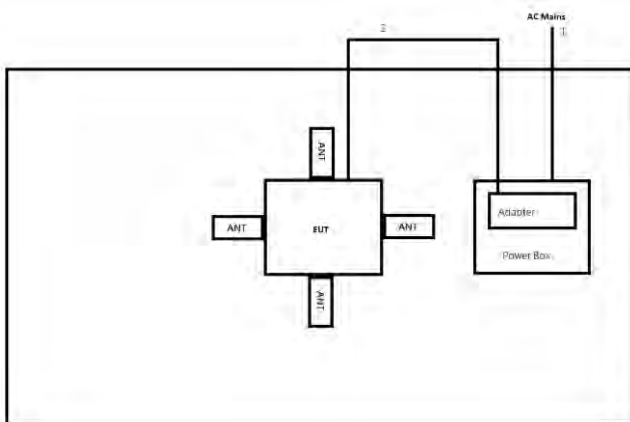
2.4 Support Equipment

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	AC Adapter	Powertron Electronics Corp.	PA1024-120IB200	-	-

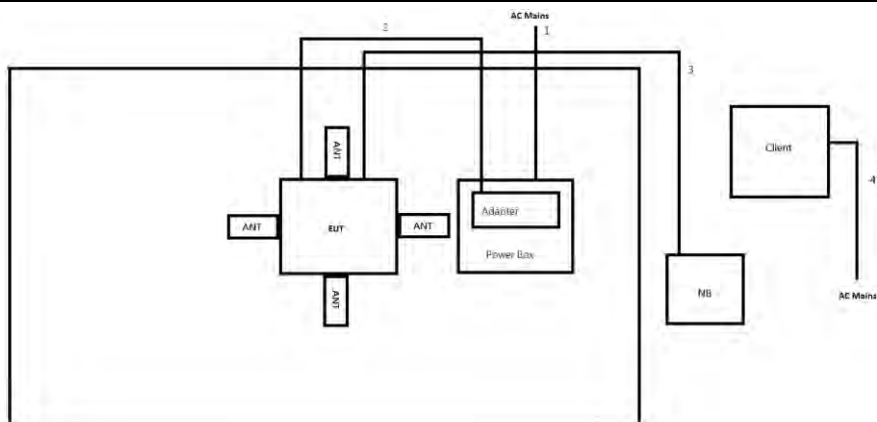
Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	5220M	-	-
2	Adapter for NB	HP	PPP012L-E	-	-
3	Adapter	Powertron Electronics Corp.	PA1024-120IB200	-	-
4	Omni Antenna	Extreme	ML-2452-HPAG5A8-01	-	-
5	Panel Antenna	MARS	MA-WC2458-2H	-	-

2.5 Test Setup Diagram

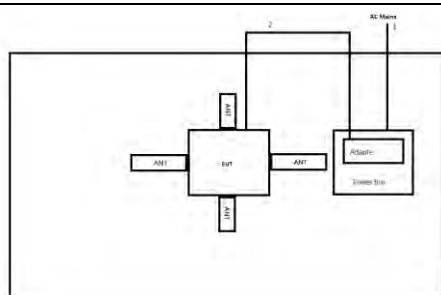


Test Setup Diagram - Radiated Test (Non-Beamforming_Dipole)


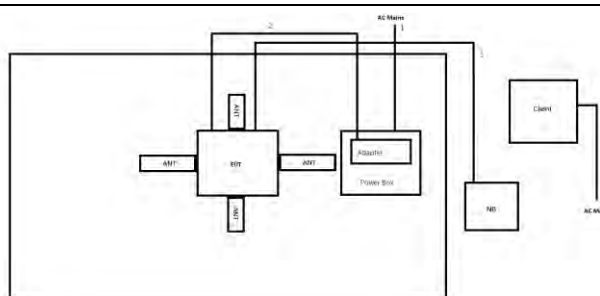
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Beamforming_Dipole)


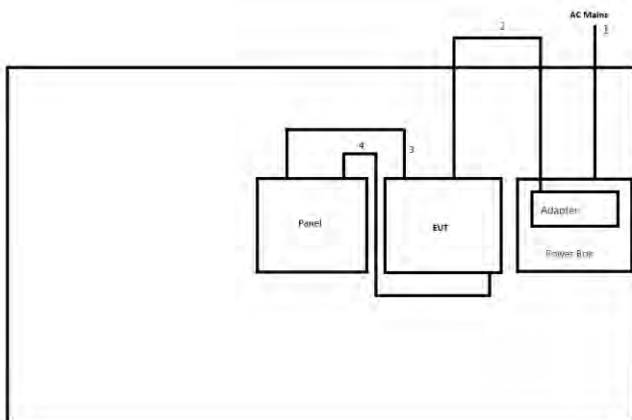
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RJ45 Cable	No	10.0
4	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Non-Beamforming_Omni)


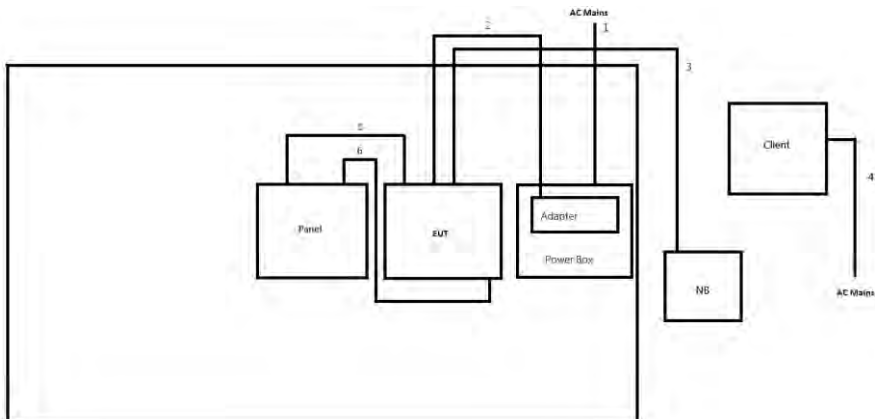
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Beamforming_Omni)


Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RJ45 Cable	No	10.0
4	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Non-Beamforming_Panel)


Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RF Cable	No	1.0
4	RF Cable	No	1.0

Test Setup Diagram - Radiated Test (Beamforming_Panel)


Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RJ45 Cable	No	10.0
4	DC Power cable	No	1.5
5	RF Cable	No	1.0
6	RF Cable	No	1.0

3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

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

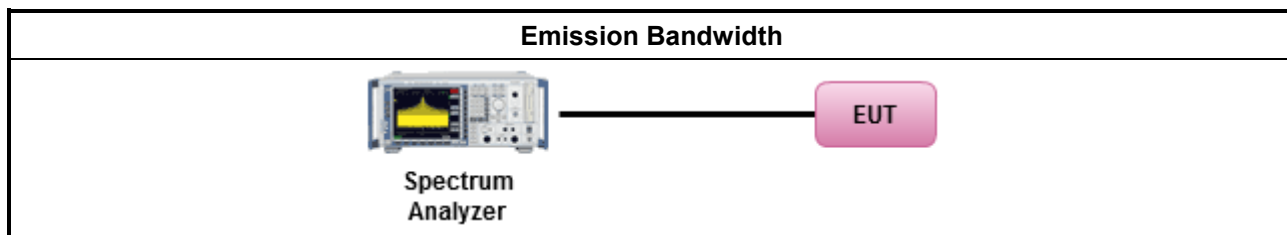
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

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

3.2.2 Measuring Instruments

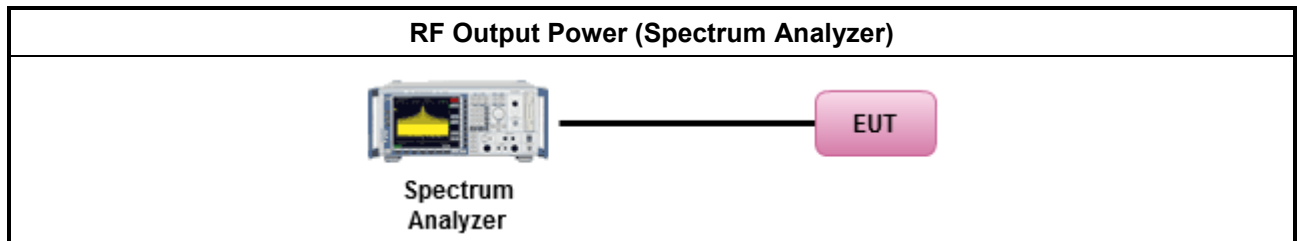
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

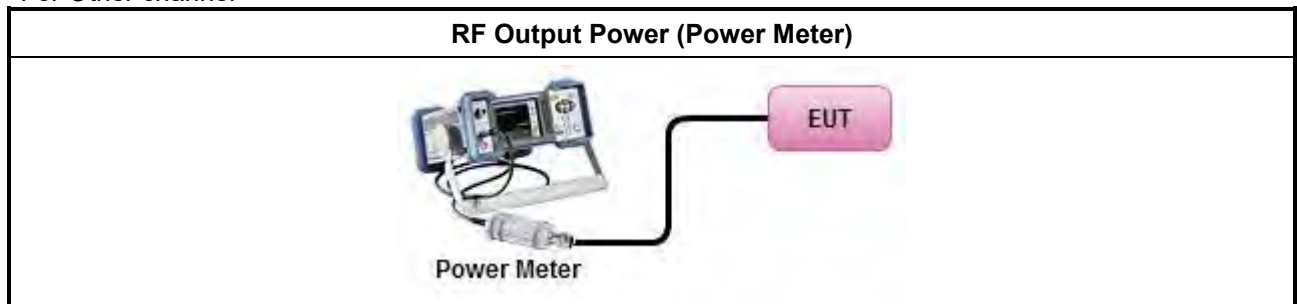
Test Method	
Maximum Conducted Output Power	
	Duty cycle $\geq 98\%$
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
	☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods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

3.2.4 Test Setup

For Straddle channel



For Other channel



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

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

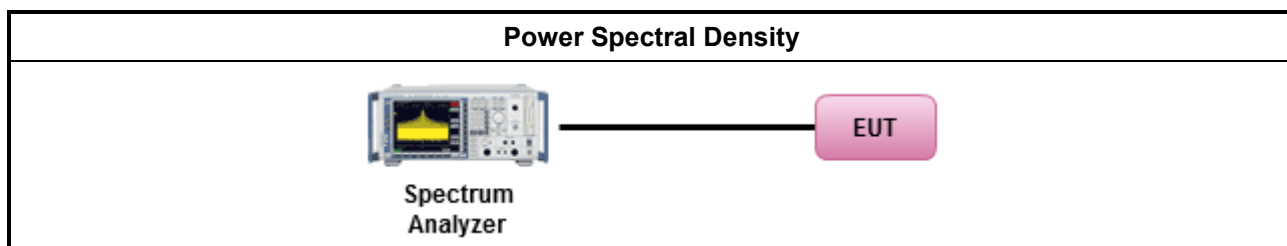
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.4 Unwanted Emissions

3.4.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

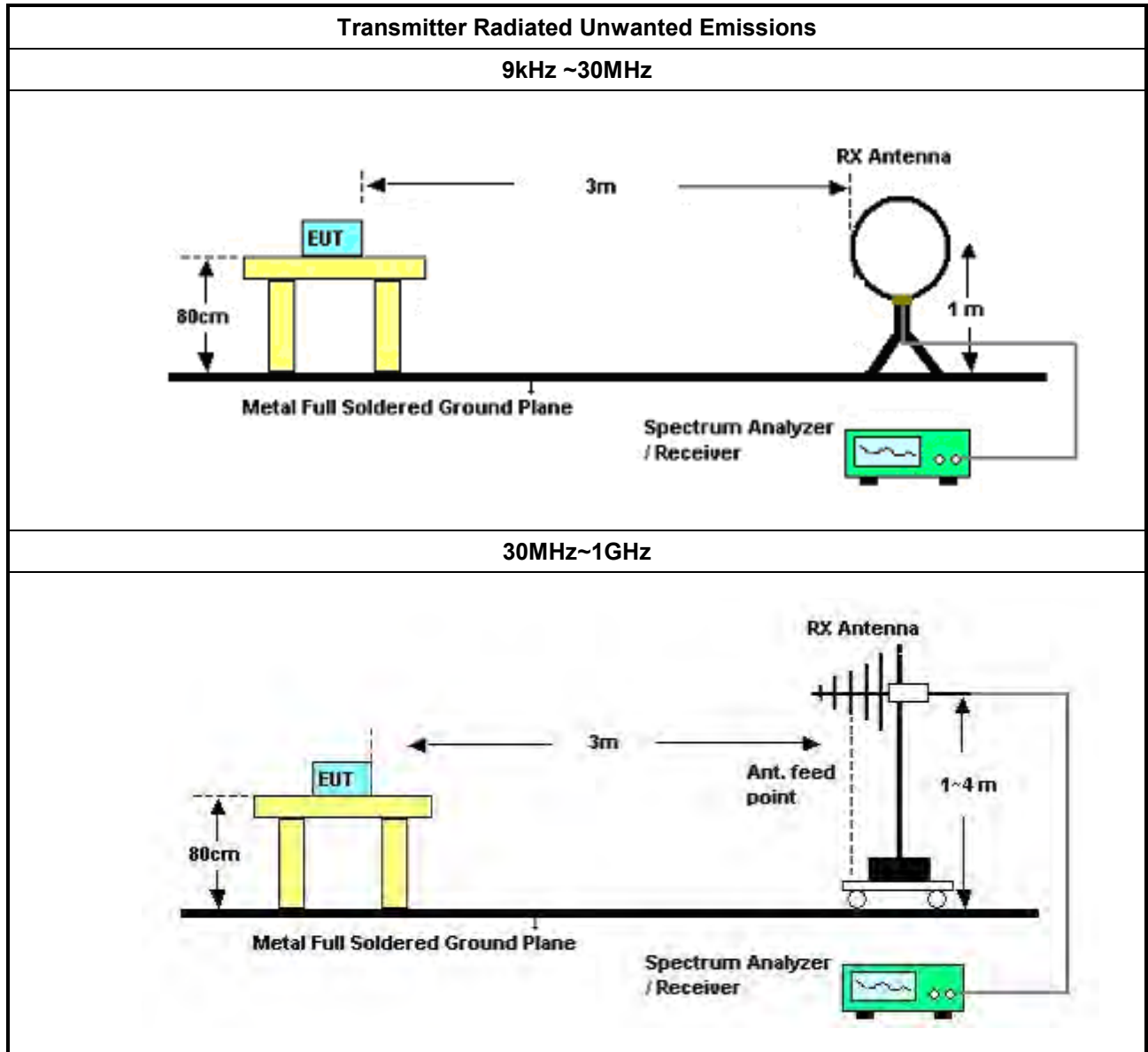
Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
☒	Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
☒	Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

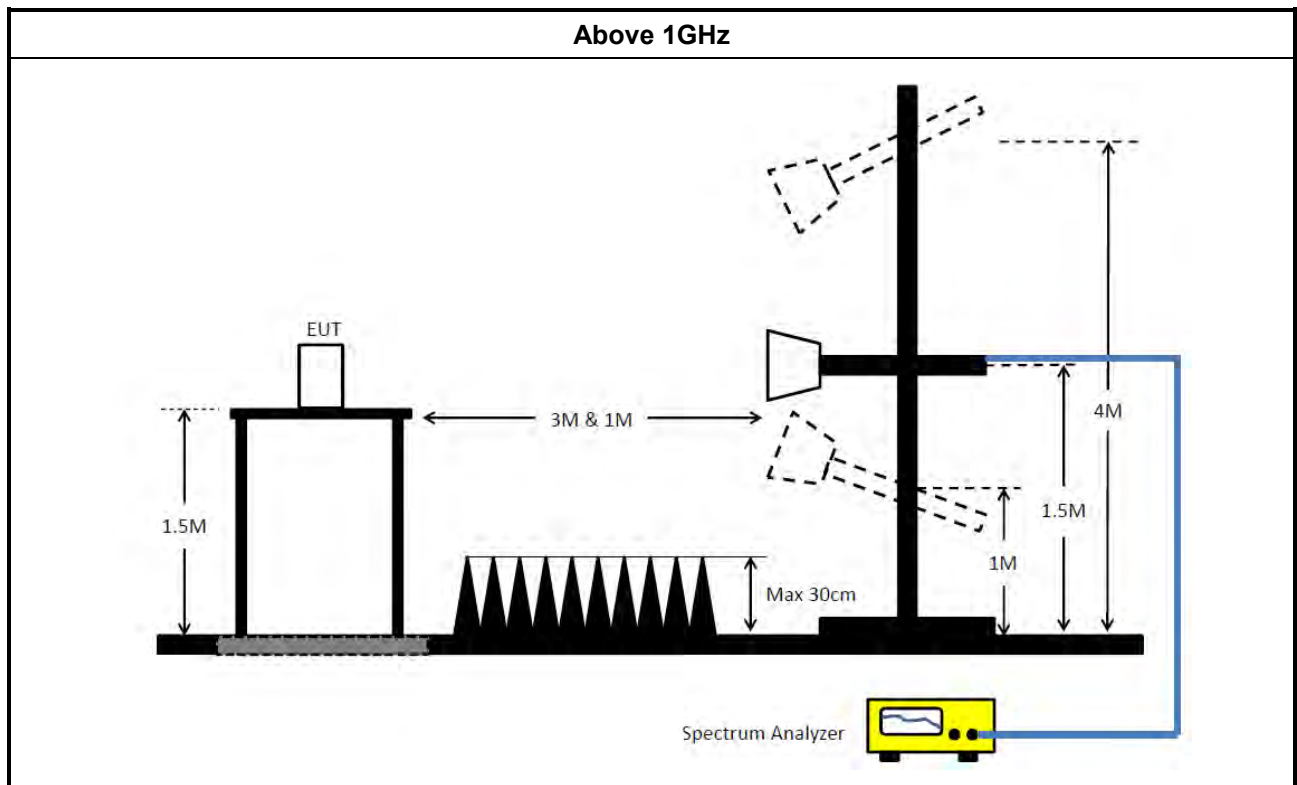
3.4.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.4.5 Test Setup





3.4.6 Transmitter Unwanted Emissions (Below 30MHz)

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

3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	01/Apr/2022	31/Mar/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	21/Feb/2022	20/Feb/2023
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	21/Feb/2022	20/Feb/2023
SENSE-15407_NII	Sporton	V5.10.7.20	N/A	N/A	N/A	N/A

Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	02/Aug/2021	01/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	01/Aug/2021	31/Jul/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	31/Jul/2022	30/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	30/Jul/2022	29/Jul/2023
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	08/Apr/2022	07/Apr/2023
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2021	28/Jun/2022
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	28/Jun/2022	27/Jun/2023
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	03/Nov/2021	02/Nov/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz ~18GHz	14/Sep/2021	13/Sep/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1543	1GHz~18GHz	04/Jun/2021	03/Jun/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	04/May/2022	03/May/2023
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	04/May/2022	03/May/2023
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192 /4	1GHz~40GHz	01/Apr/2022	31/Mar/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Prempplier	EMC INSTRUMENTS	EM18G40G	060604	18GHz~40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	13/May/2022	12/May/2023
SENSE-15407_NII	Sporton	V5.10.8.1	N/A	N/A	N/A	N/A

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	82.24M	78.201M	78M3D1D	82.24M	78.201M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.48M	78.281M	78M3D1D	81.92M	78.201M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	37.95M	19.07M	19M1D1D	21.48M	17.061M
802.11a_Nss1,(6Mbps)_2TX	38.37M	19.4M	19M4D1D	26.82M	17.091M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	40.29M	19.82M	19M9D1D	23.64M	19.13M
802.11ax HEW20_Nss2,(MCS0)_2TX	41.88M	19.79M	19M8D1D	21.6M	19.16M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	40.2M	37.841M	37M9D1D	40.14M	37.721M
802.11ax HEW40_Nss2,(MCS0)_2TX	61.74M	38.621M	38M7D1D	39.78M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	81.24M	77.001M	77M0D1D	81.24M	77.001M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.24M	77.121M	77M2D1D	81.24M	77.001M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	82.48M	78.041M	78M0D1D	82.48M	78.041M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.08M	78.441M	78M5D1D	82M	78.201M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	37.92M	19.16M	19M2D1D	21.48M	14.753M
802.11a_Nss1,(6Mbps)_2TX	38.37M	19.52M	19M6D1D	21.45M	14.183M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	40.44M	19.76M	19M8D1D	21.66M	14.858M
802.11ax HEW20_Nss2,(MCS0)_2TX	40.08M	19.67M	19M7D1D	17.745M	14.708M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	56.595M	37.961M	38M0D1D	40.2M	34.598M
802.11ax HEW40_Nss2,(MCS0)_2TX	62.94M	38.441M	38M5D1D	39.84M	34.353M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	95.4M	77.241M	77M3D1D	81.12M	73.763M
802.11ax HEW80_Nss2,(MCS0)_2TX	99.825M	77.841M	77M9D1D	81.24M	73.763M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	164.4M	156.162M	156MD1D	164.4M	156.162M
802.11ax HEW160_Nss2,(MCS0)_2TX	164.4M	156.162M	156MD1D	164.16M	156.162M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	3.14M	9.115M	9M12D1D	3.14M	9.115M
802.11a_Nss1,(6Mbps)_2TX	3.12M	9.115M	9M12D1D	3.12M	7.896M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	4.46M	8.236M	8M24D1D	4.46M	8.236M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.42M	9.115M	9M12D1D	4.36M	5.517M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	3.84M	20.77M	20M8D1D	3.84M	20.77M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.82M	21.009M	21M0D1D	3.8M	19.79M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	3.82M	31.784M	31M8D1D	3.82M	31.784M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.78M	33.143M	33M2D1D	3.76M	25.187M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			37.95M	19.07M
5300MHz	Pass	Inf			37.56M	17.841M
5320MHz	Pass	Inf			21.48M	17.061M
5500MHz	Pass	Inf			21.48M	17.061M
5580MHz	Pass	Inf			37.92M	19.16M
5700MHz	Pass	Inf			21.48M	17.031M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			23.79M	14.753M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.14M	9.115M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	38.1M	19.4M	38.37M	18.261M
5300MHz	Pass	Inf	38.01M	18.981M	38.13M	18.381M
5320MHz	Pass	Inf	27.33M	17.361M	26.82M	17.091M
5500MHz	Pass	Inf	21.45M	17.061M	21.75M	16.882M
5580MHz	Pass	Inf	38.01M	19.52M	38.37M	18.771M
5700MHz	Pass	Inf	21.54M	17.061M	21.6M	16.852M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	23.82M	14.663M	23.385M	14.183M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	9.115M	3.12M	7.896M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			40.29M	19.82M
5300MHz	Pass	Inf			26.64M	19.28M
5320MHz	Pass	Inf			23.64M	19.13M
5500MHz	Pass	Inf			21.66M	19.1M
5580MHz	Pass	Inf			40.44M	19.76M
5700MHz	Pass	Inf			21.66M	19.07M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			25.365M	14.858M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			4.46M	8.236M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	41.88M	19.76M	34.65M	19.46M
5300MHz	Pass	Inf	40.44M	19.79M	37.47M	19.52M
5320MHz	Pass	Inf	21.6M	19.16M	21.63M	19.19M
5500MHz	Pass	Inf	21.63M	19.16M	21.66M	19.19M
5580MHz	Pass	Inf	40.08M	19.67M	35.58M	19.64M
5700MHz	Pass	Inf	21.6M	19.1M	21.54M	19.16M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	24.42M	14.888M	17.745M	14.708M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	9.115M	4.36M	5.517M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5270MHz	Pass	Inf			40.2M	37.841M
5310MHz	Pass	Inf			40.14M	37.721M
5510MHz	Pass	Inf			40.26M	37.721M
5550MHz	Pass	Inf			43.74M	37.961M
5670MHz	Pass	Inf			40.2M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			56.595M	34.598M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.84M	20.77M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	61.74M	38.621M	59.34M	38.441M
5310MHz	Pass	Inf	39.78M	37.841M	39.96M	37.781M
5510MHz	Pass	Inf	39.9M	37.901M	40.08M	37.781M
5550MHz	Pass	Inf	62.94M	38.441M	62.22M	38.441M
5670MHz	Pass	Inf	39.84M	37.961M	40.26M	37.841M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	50.26M	34.353M	53.235M	34.773M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.8M	19.79M	3.82M	21.009M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5290MHz	Pass	Inf			81.24M	77.001M
5530MHz	Pass	Inf			81.12M	77.121M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf			81.36M	77.241M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			95.4M	73.763M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			3.82M	31.784M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.24M	77.121M	81.24M	77.001M
5530MHz	Pass	Inf	81.36M	77.241M	81.24M	77.601M
5610MHz	Pass	Inf	92.16M	77.841M	84.96M	77.841M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	99.825M	73.988M	83.1M	73.763M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	33.143M	3.76M	25.187M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf			82.24M	78.201M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf			82.48M	78.041M
5570MHz	Pass	Inf			164.4M	156.162M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.92M	78.201M	82.48M	78.281M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82M	78.441M	82.08M	78.201M
5570MHz	Pass	Inf	164.16M	156.162M	164.4M	156.162M

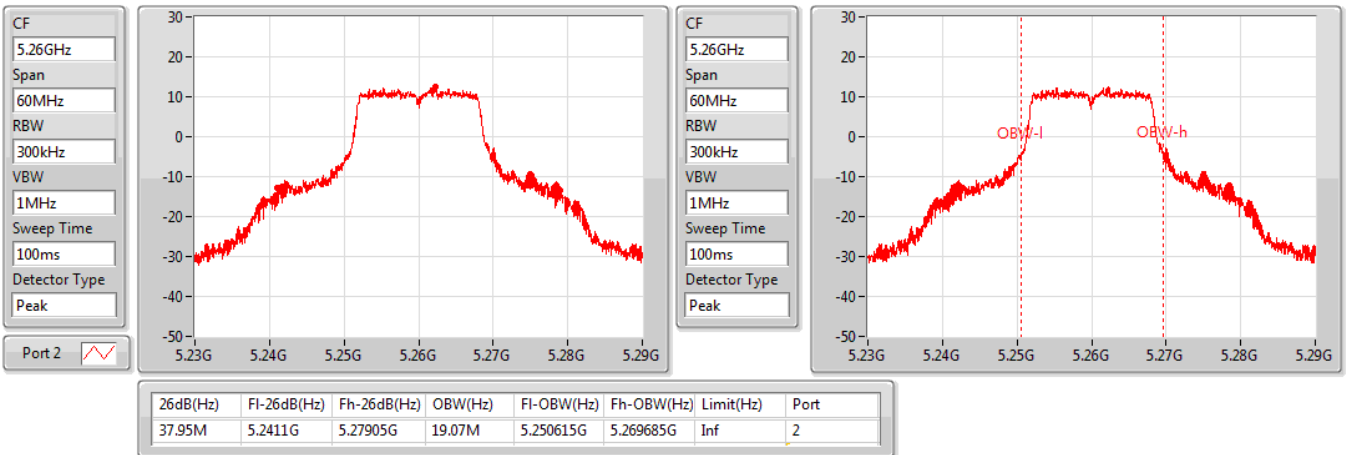
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5260MHz

07/06/2022

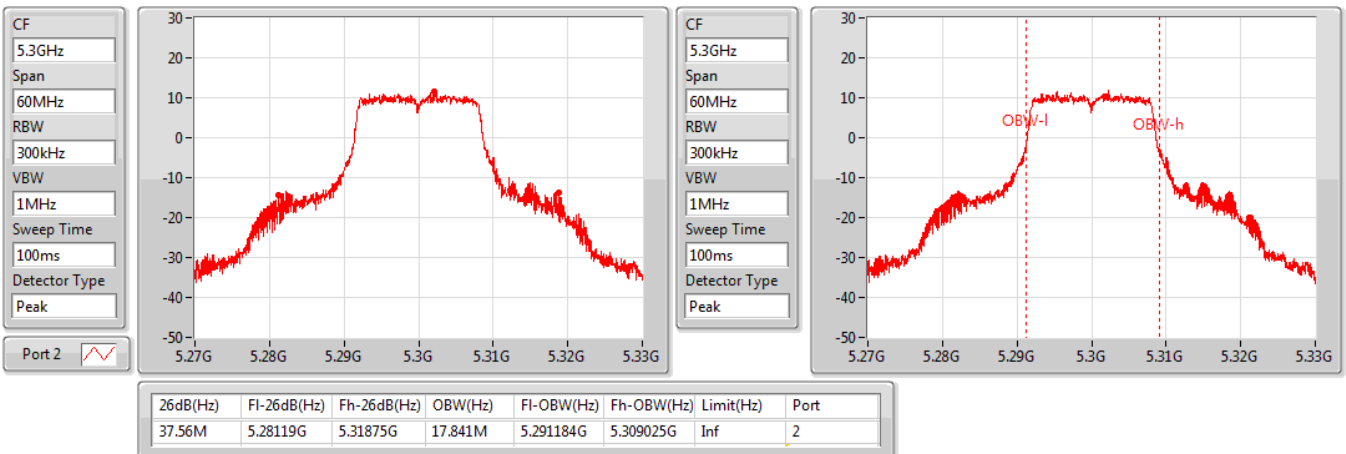


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5300MHz

07/06/2022

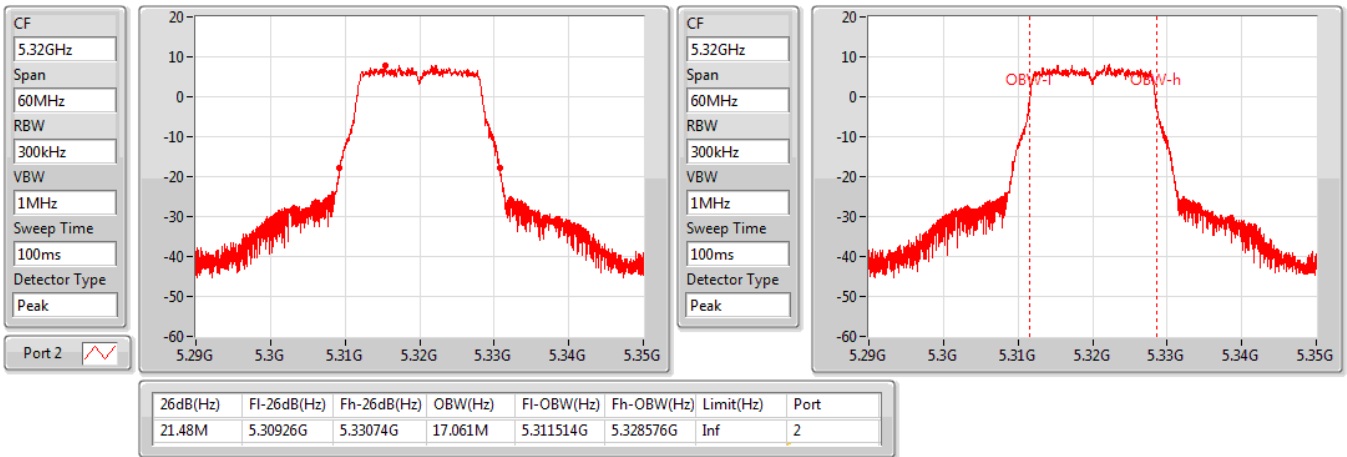


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5320MHz

07/06/2022

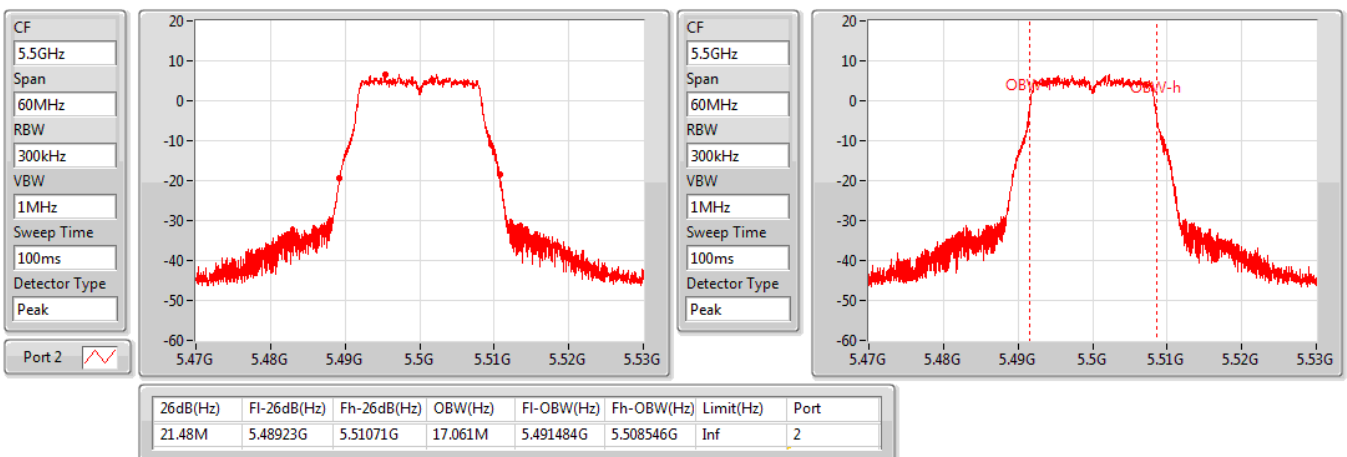


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

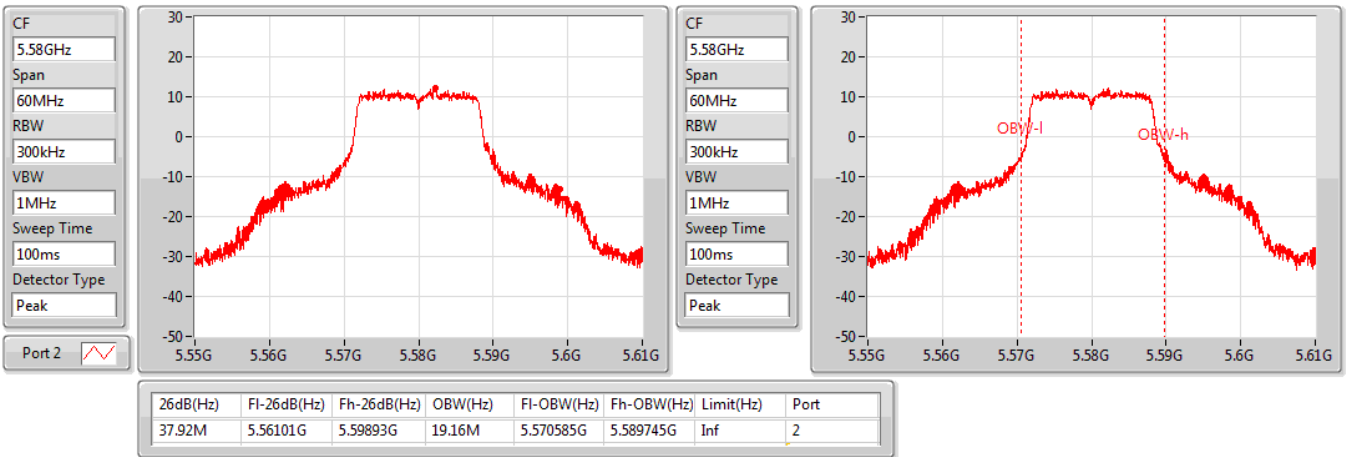
5500MHz

07/06/2022

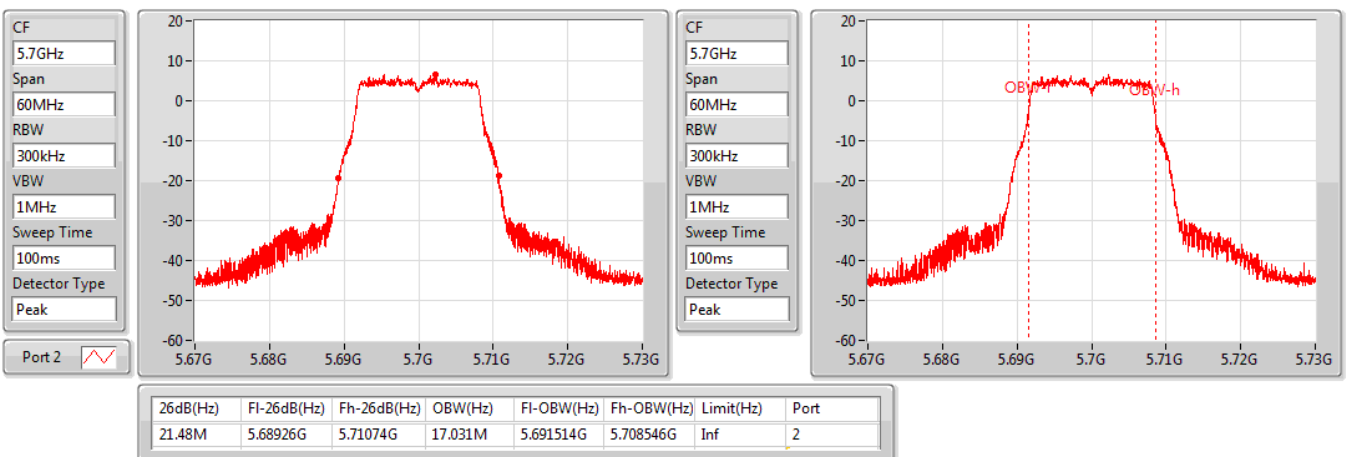


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5580MHz

07/06/2022


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5700MHz

07/06/2022

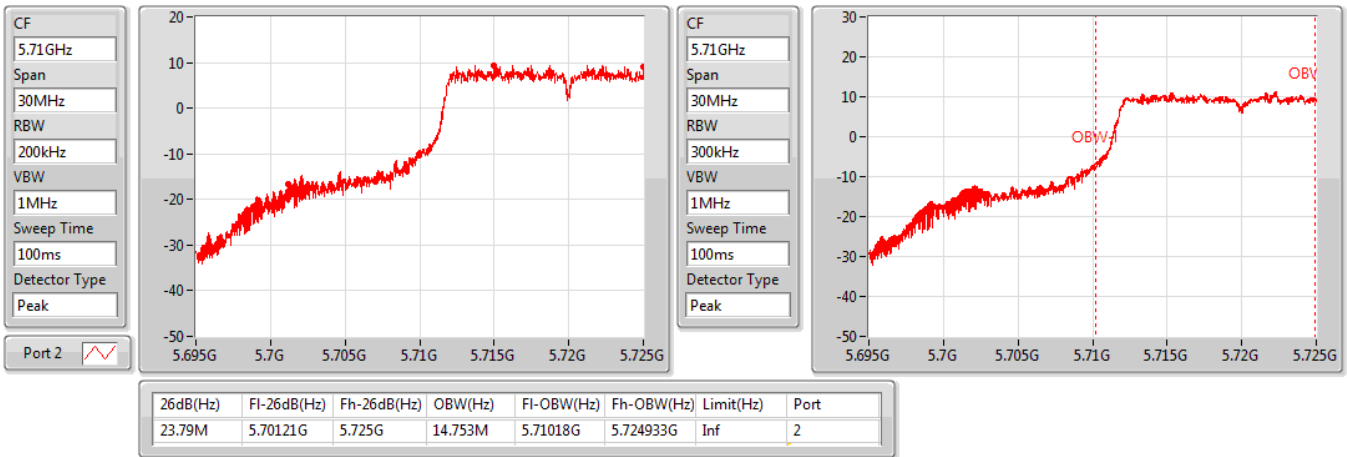


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5720MHz Straddle 5.67-5.725GHz

07/06/2022

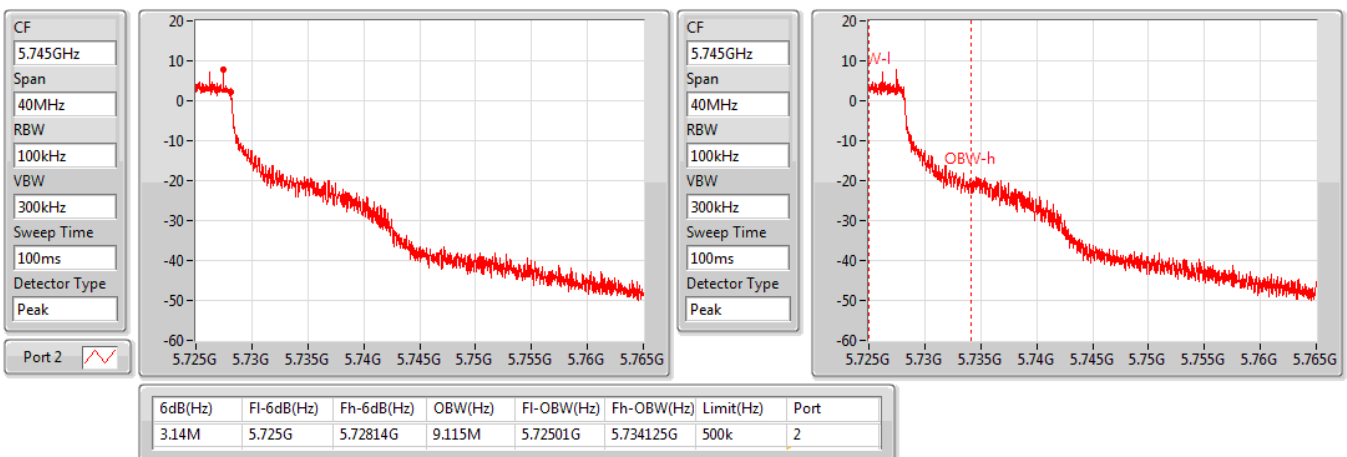


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

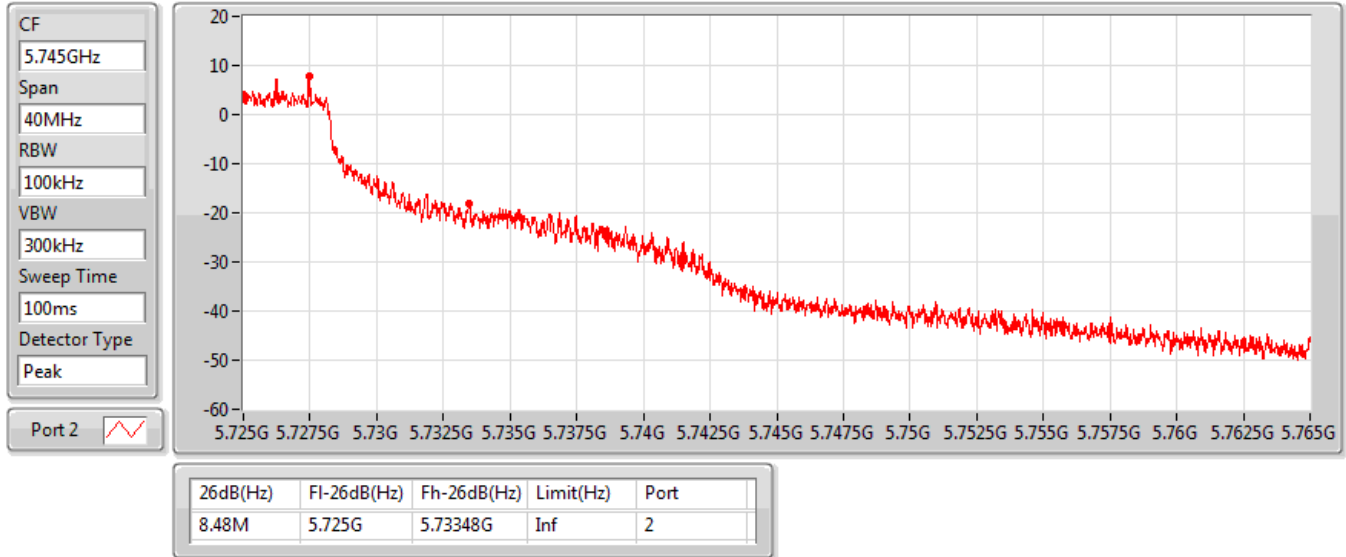


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

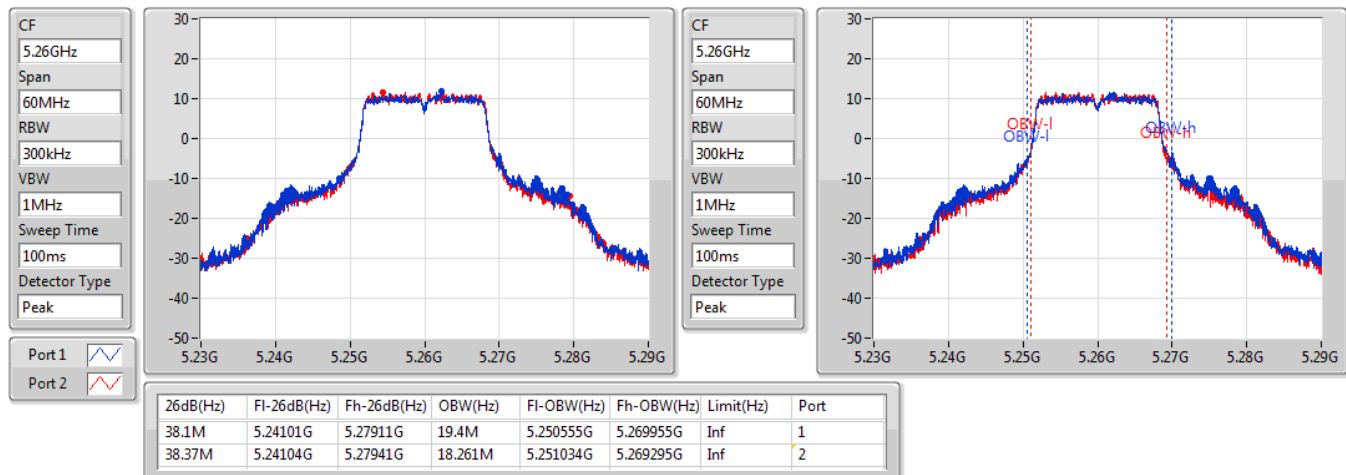


802.11a_Nss1,(6Mbps)_2TX

EBW

5260MHz

07/06/2022

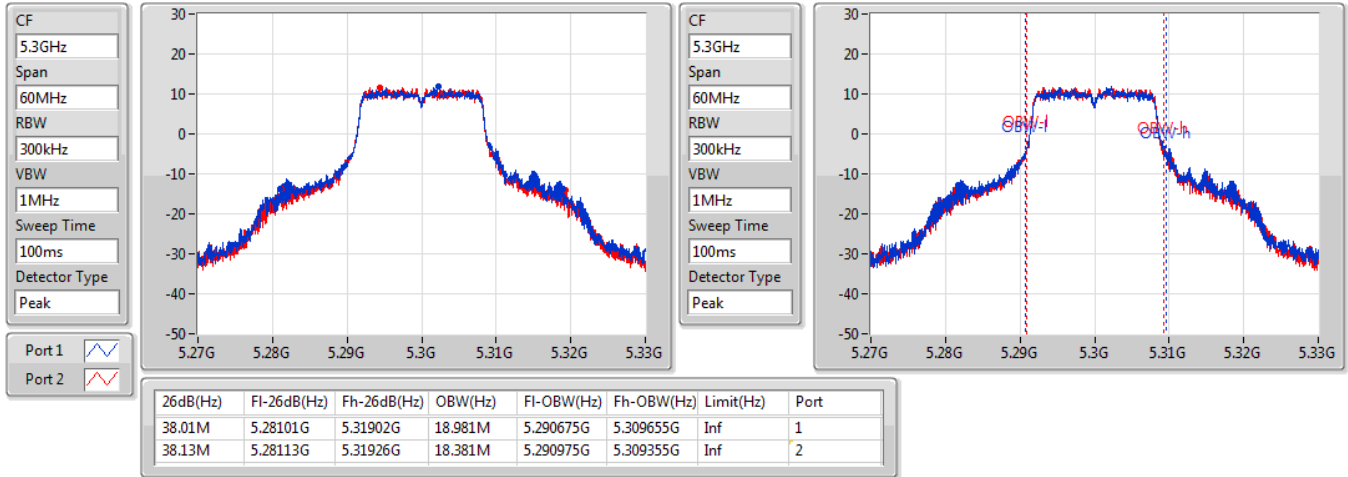


802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

07/06/2022

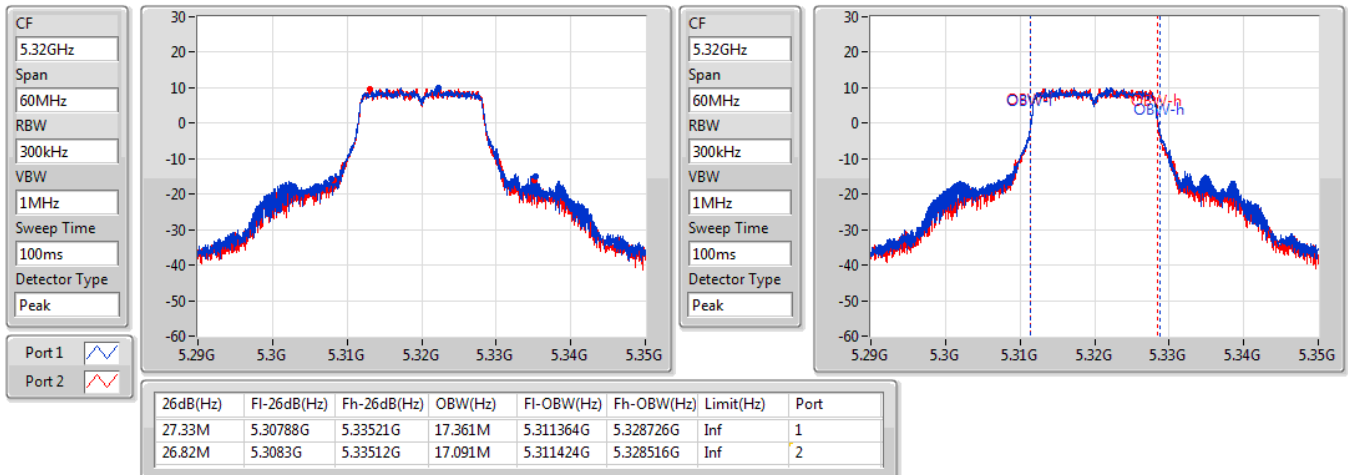


802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

07/06/2022

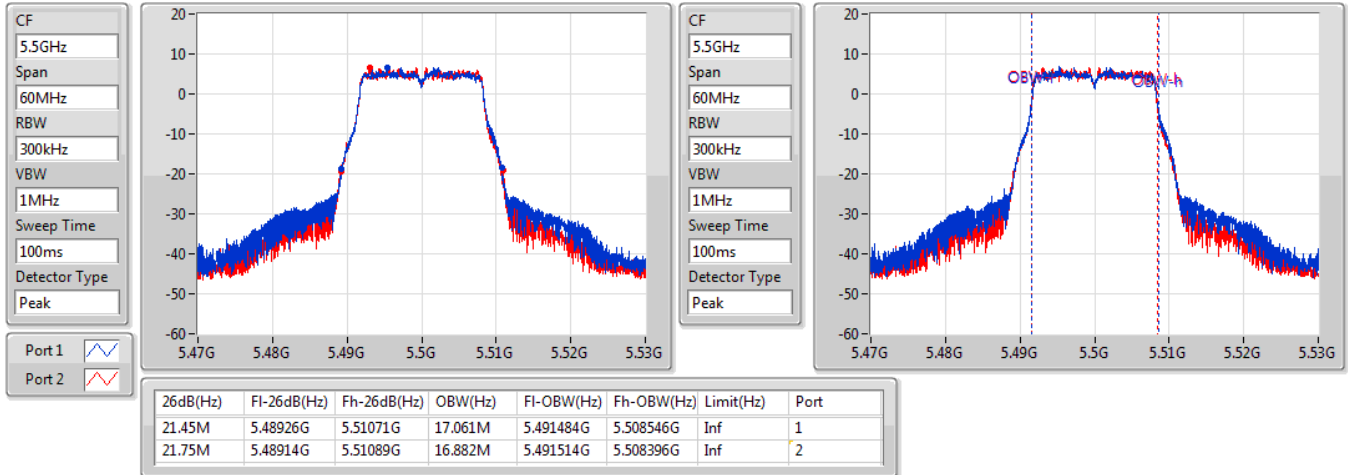


802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

07/06/2022

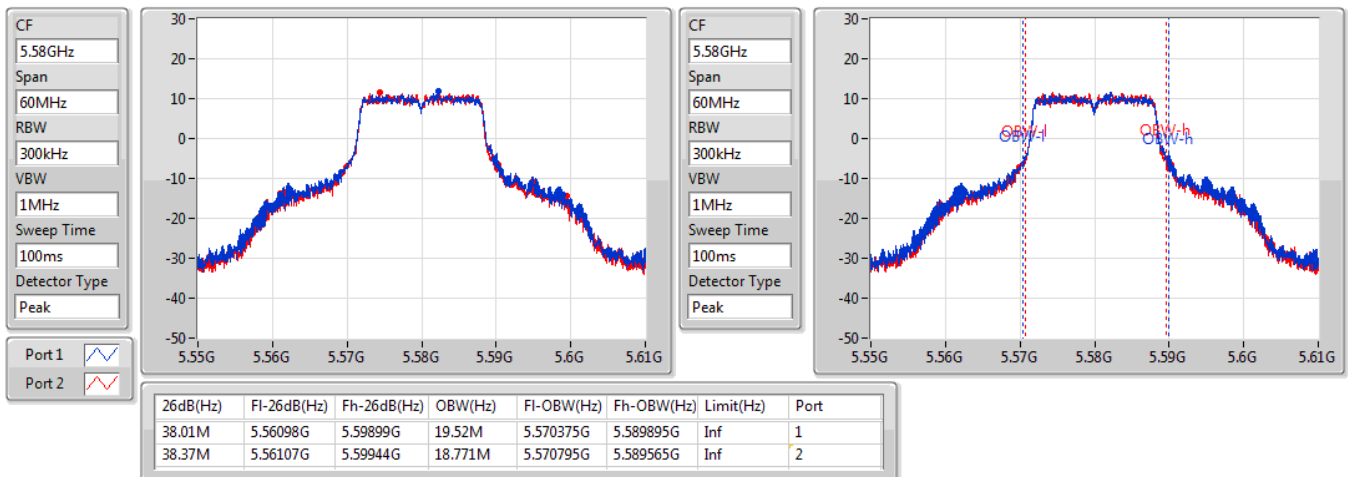


802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

07/06/2022

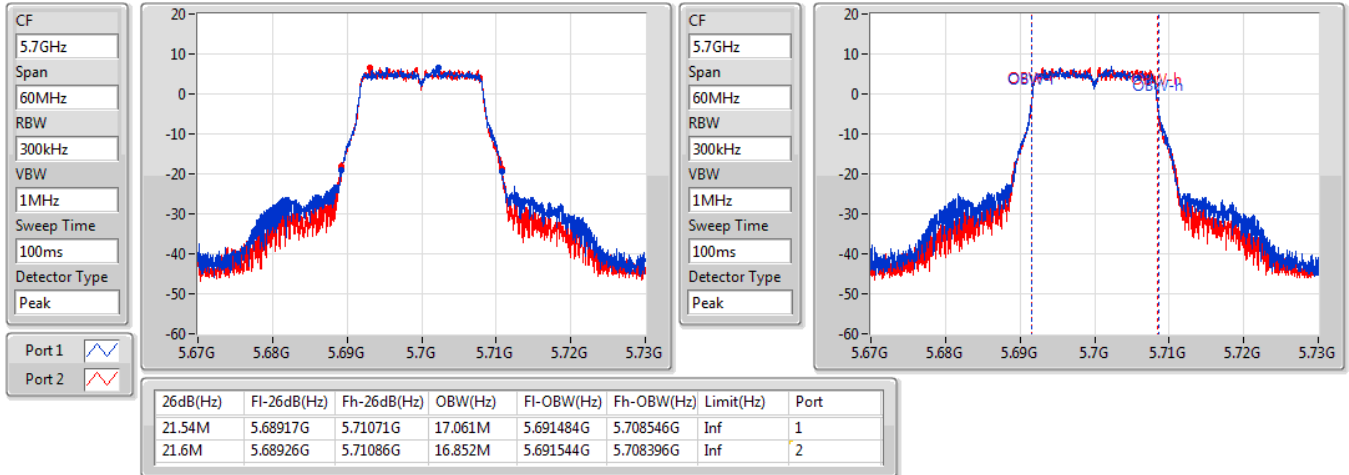


802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

07/06/2022

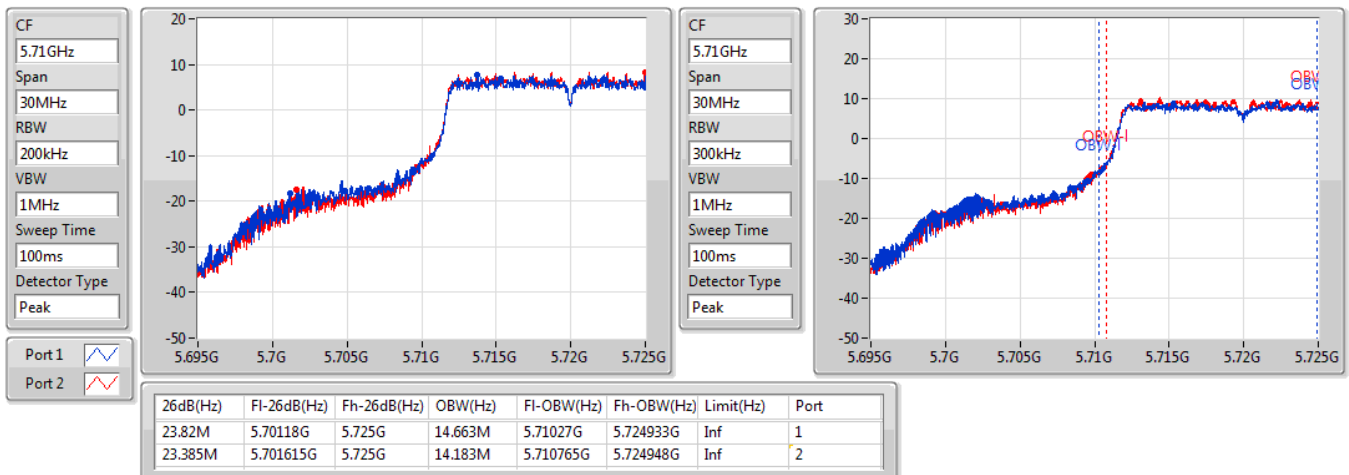


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

07/06/2022

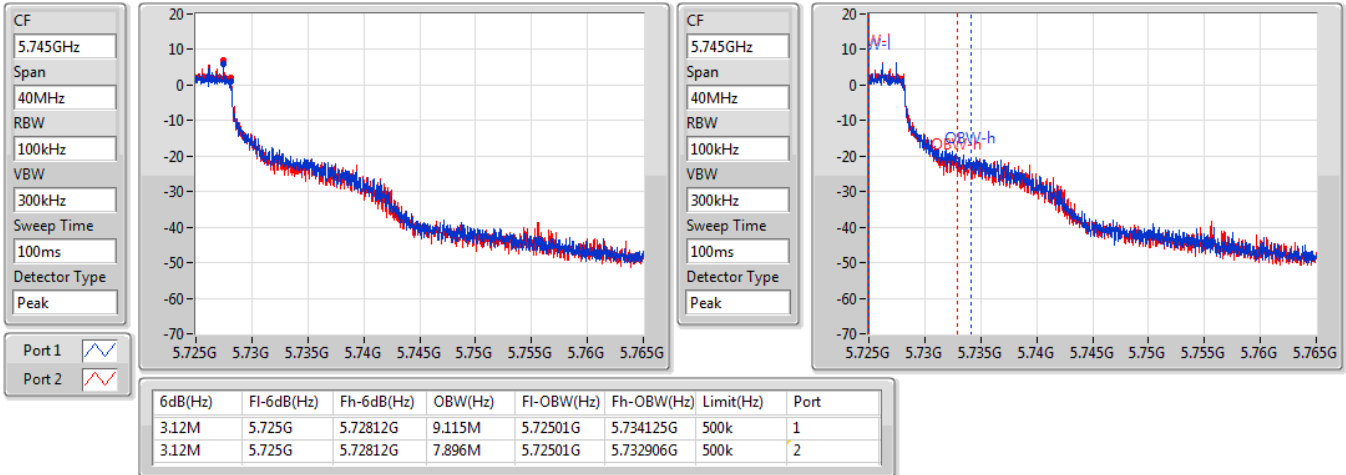


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

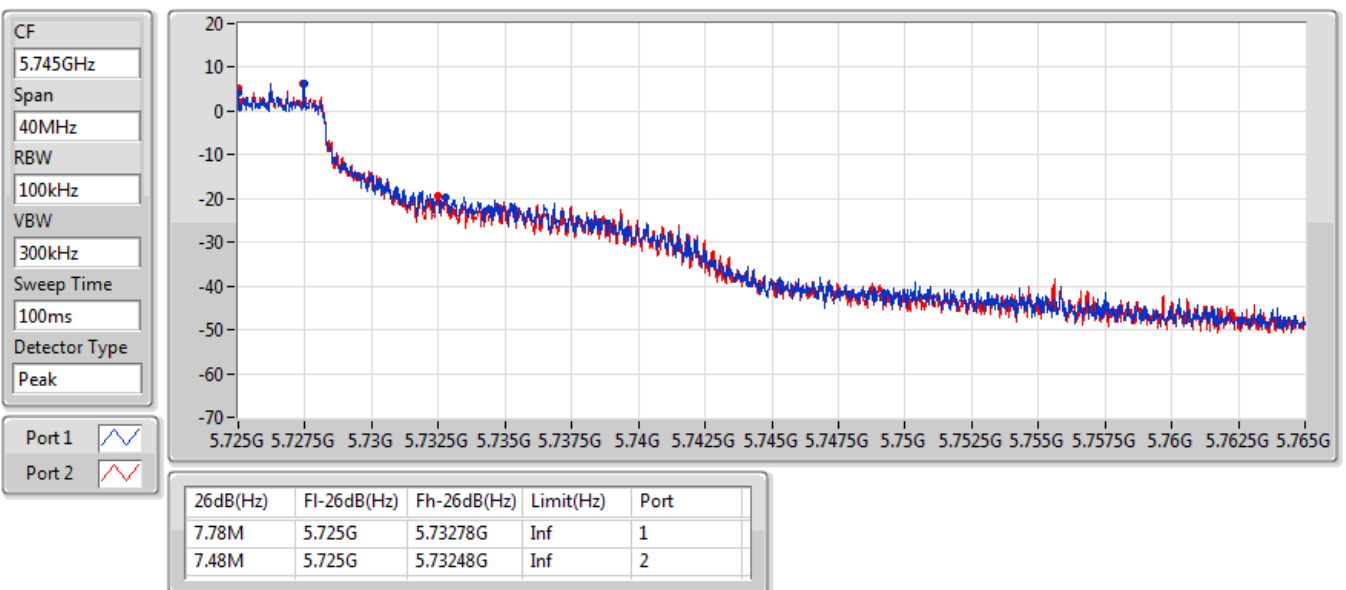


802.11a_Nss1,(6Mbps)_2TX

EBW

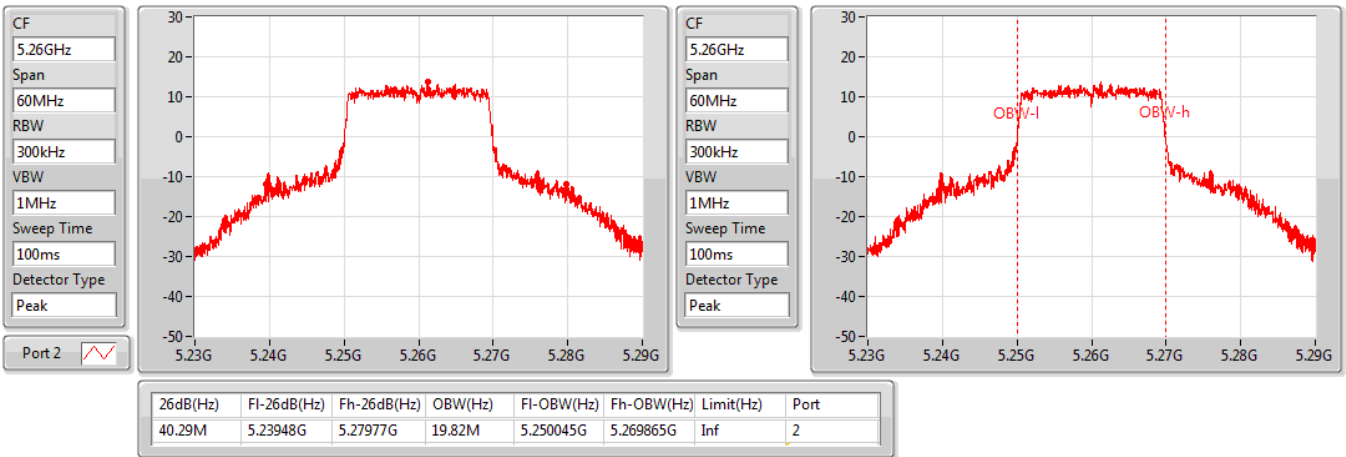
5720MHz Straddle 5.725-5.85GHz

07/06/2022

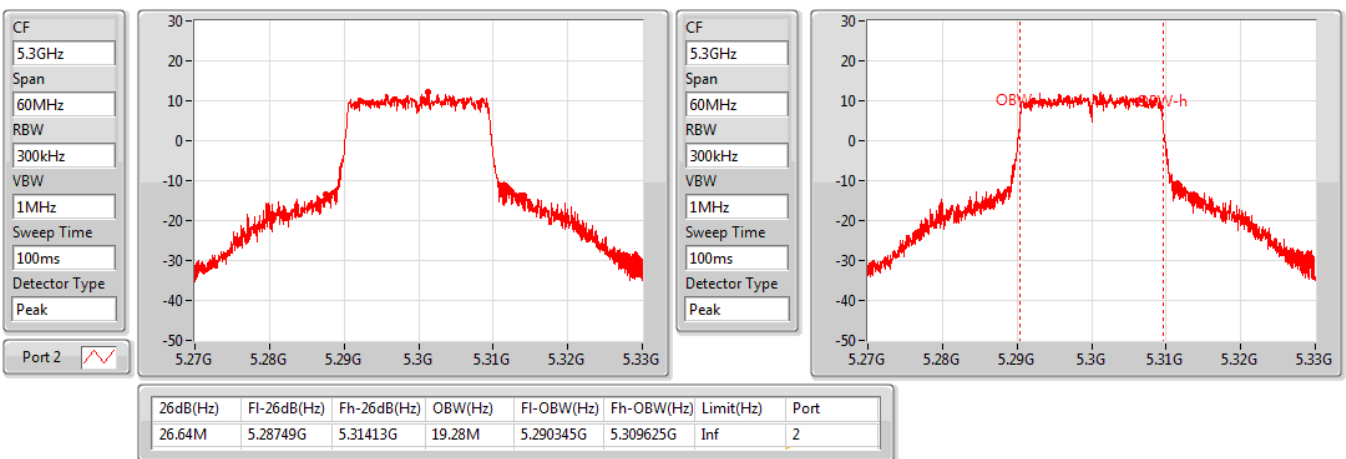


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5260MHz

07/06/2022


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5300MHz

07/06/2022

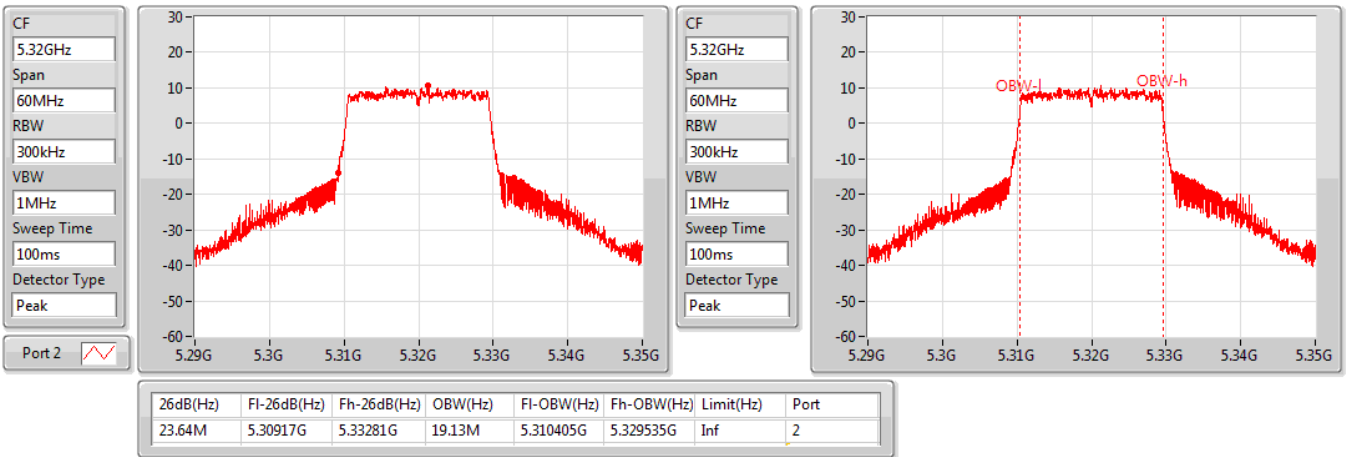


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5320MHz

07/06/2022

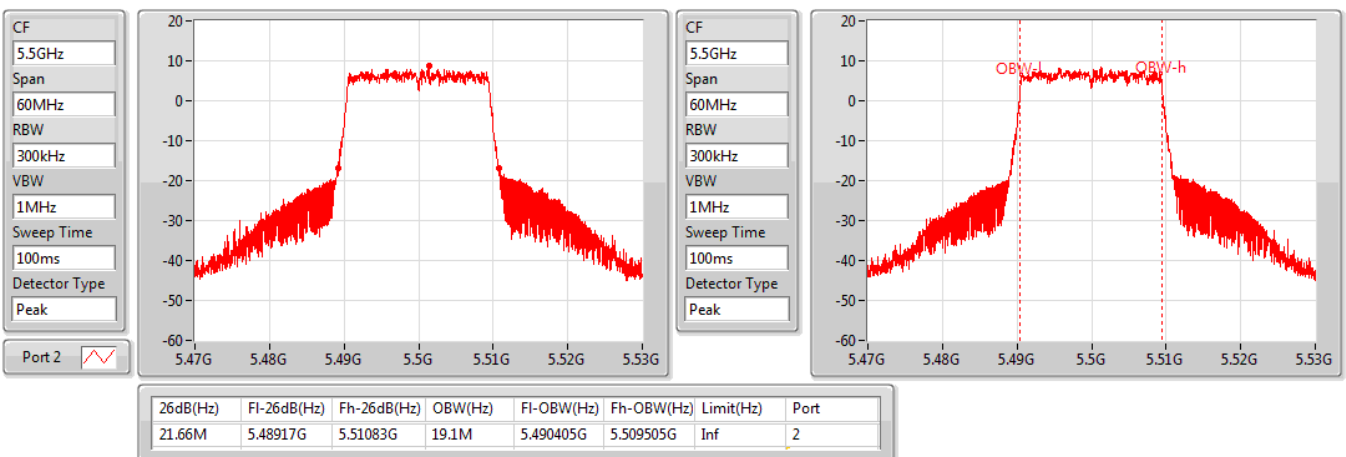


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5500MHz

07/06/2022

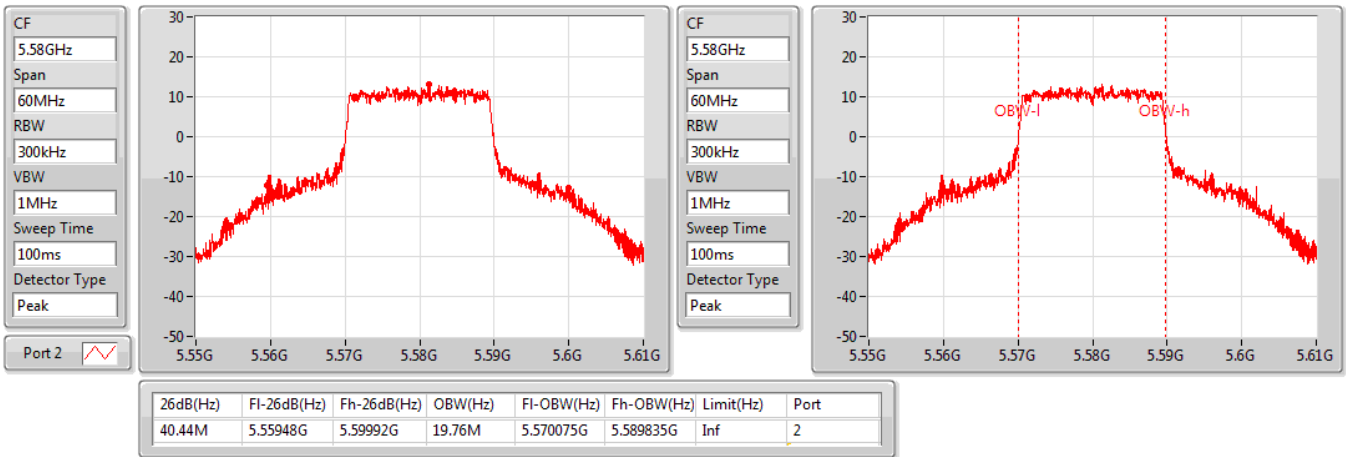


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5580MHz

07/06/2022

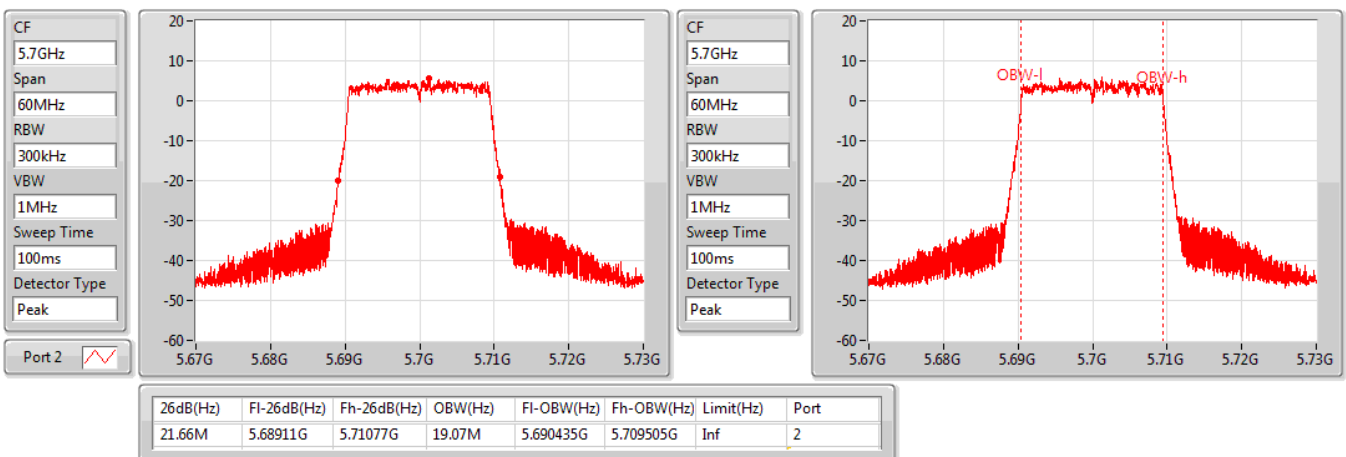


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

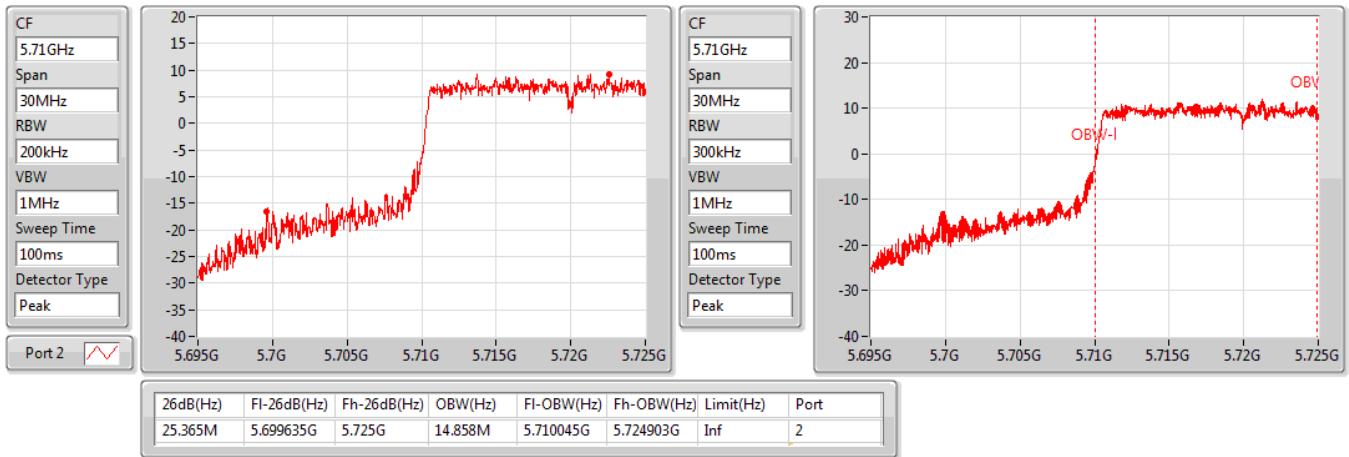
5700MHz

07/06/2022

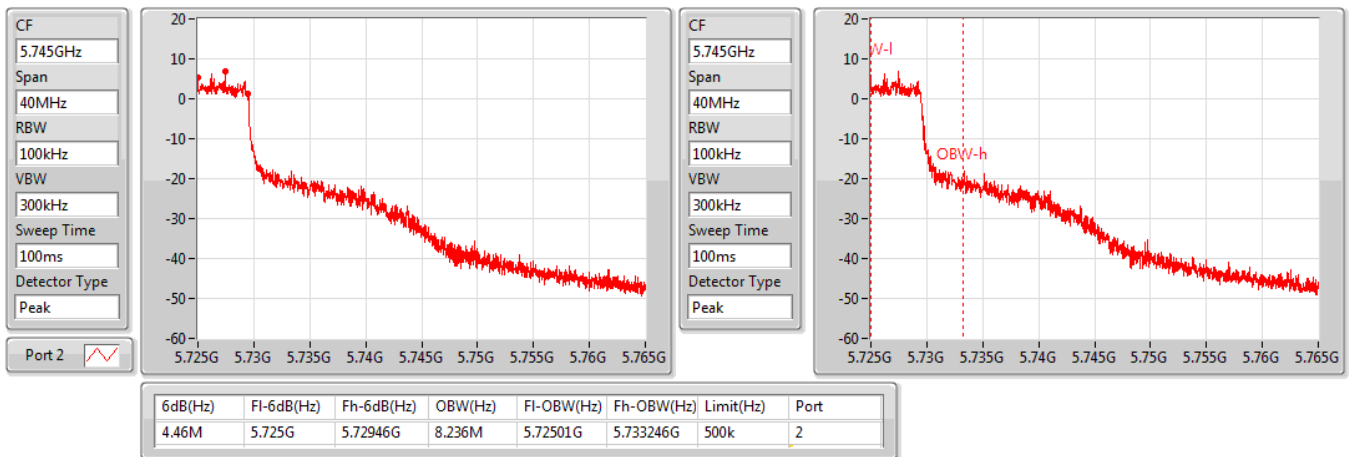


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.47-5.725GHz

07/06/2022


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.725-5.85GHz

07/06/2022

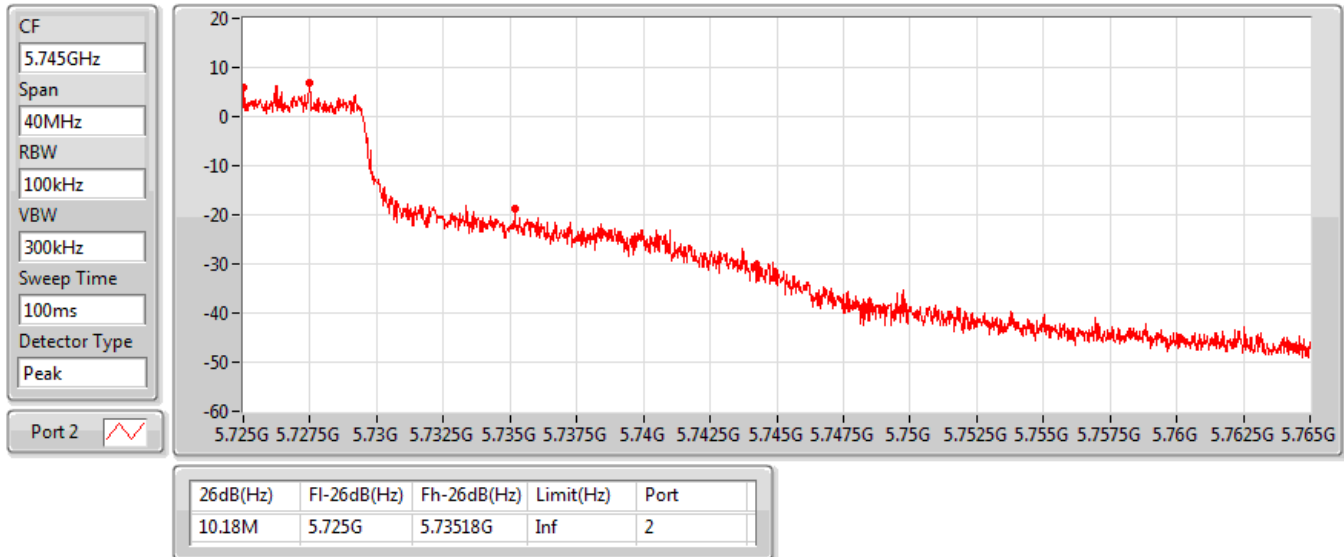


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

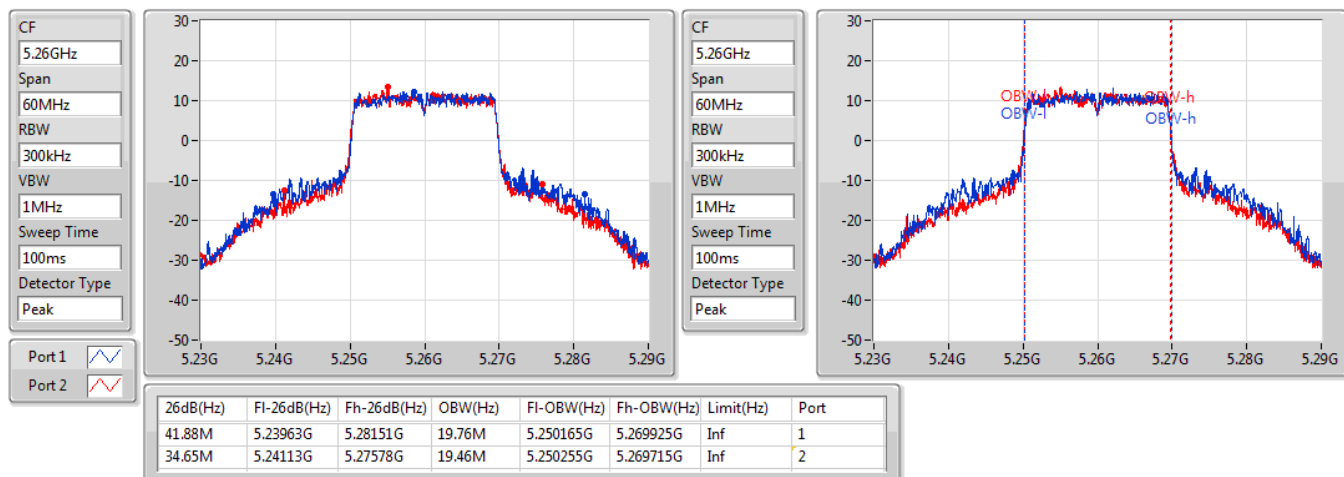


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5260MHz

07/06/2022

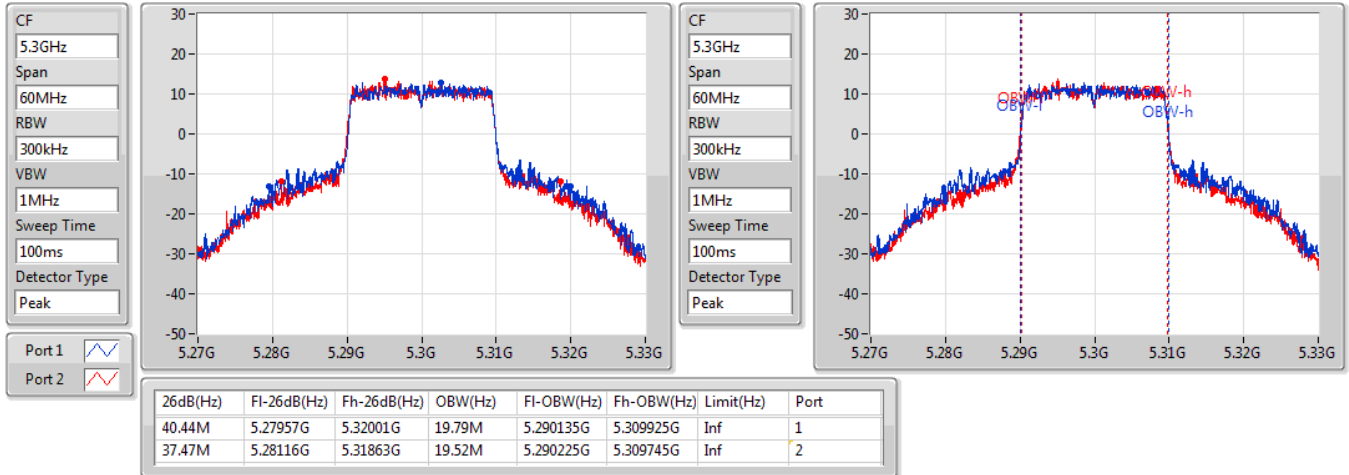


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5300MHz

07/06/2022

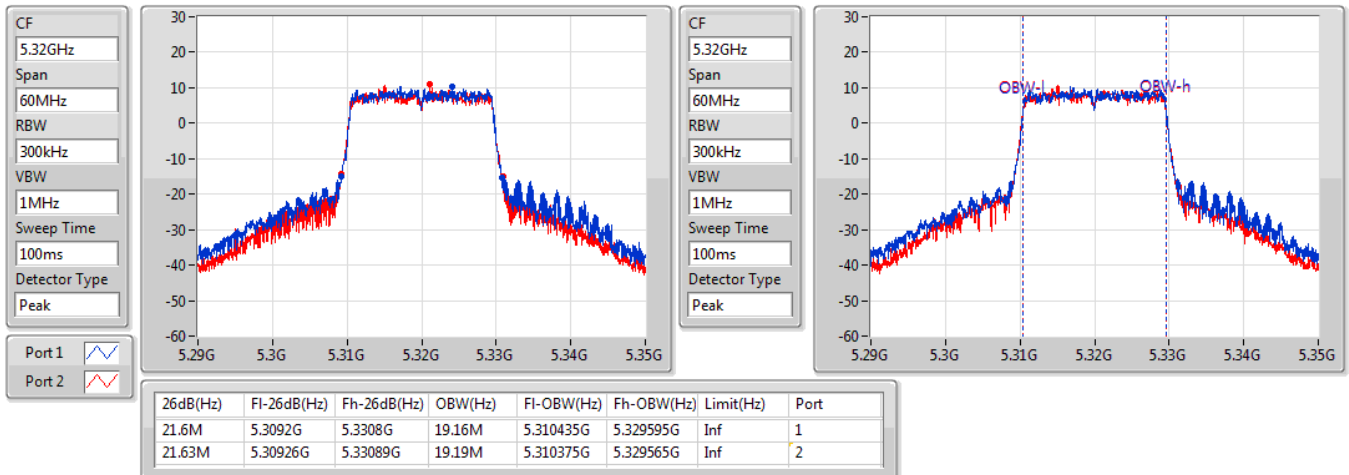


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5320MHz

07/06/2022

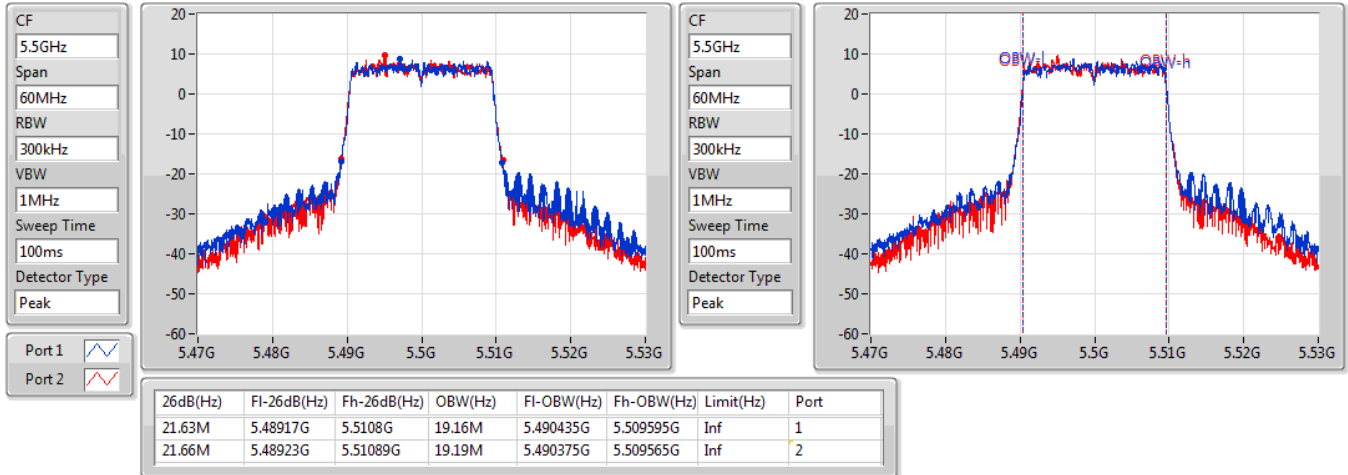


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5500MHz

07/06/2022

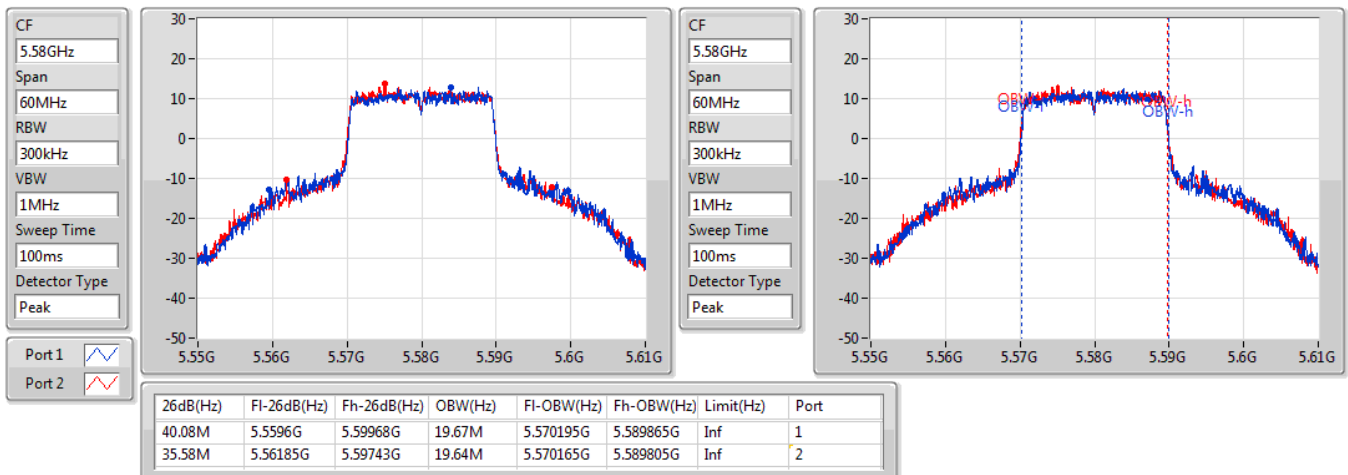


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

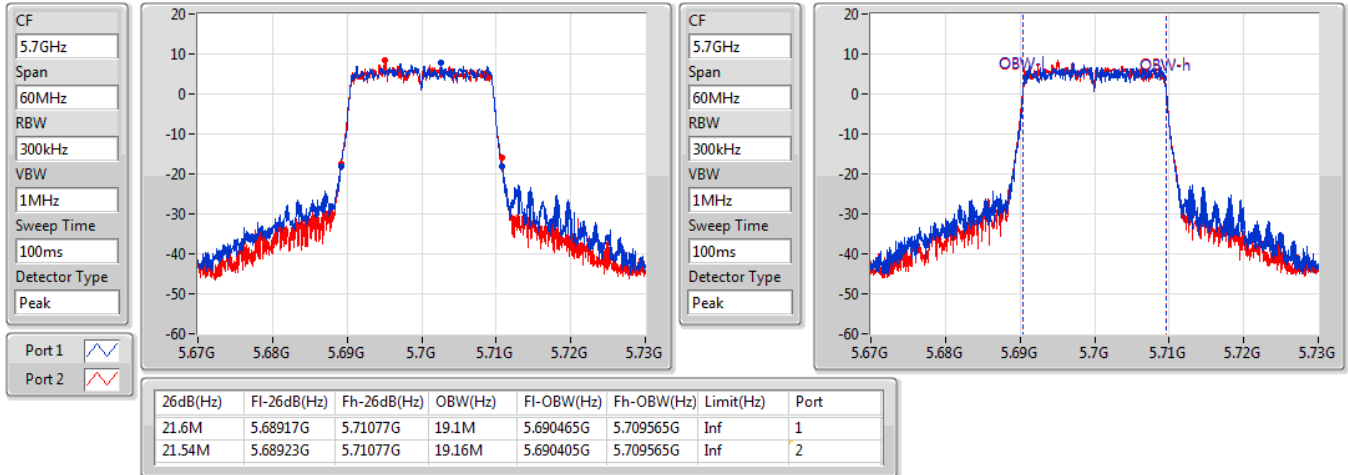
5580MHz

07/06/2022

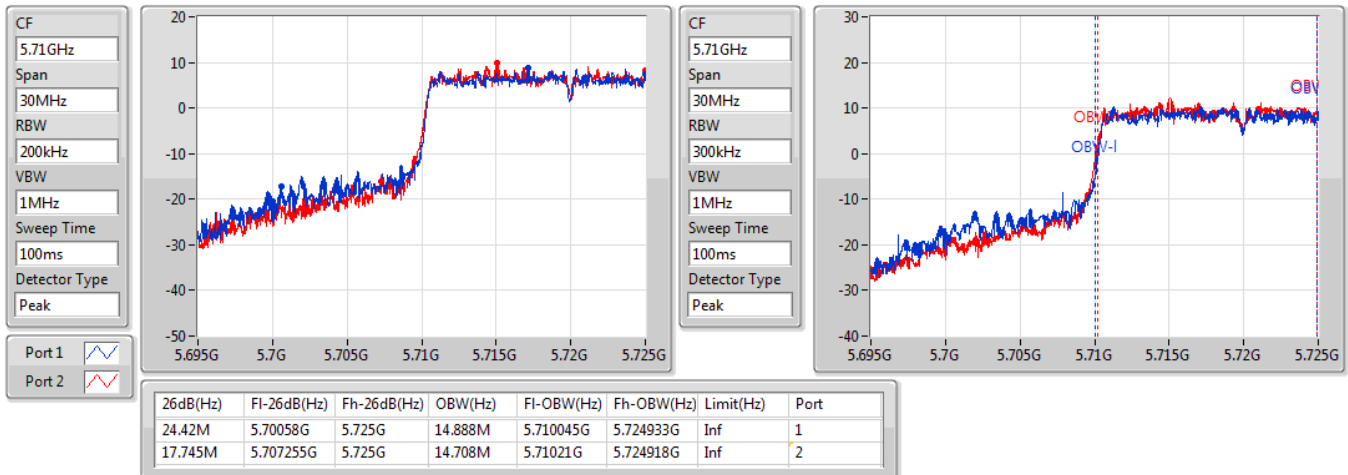


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5700MHz

07/06/2022


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

07/06/2022

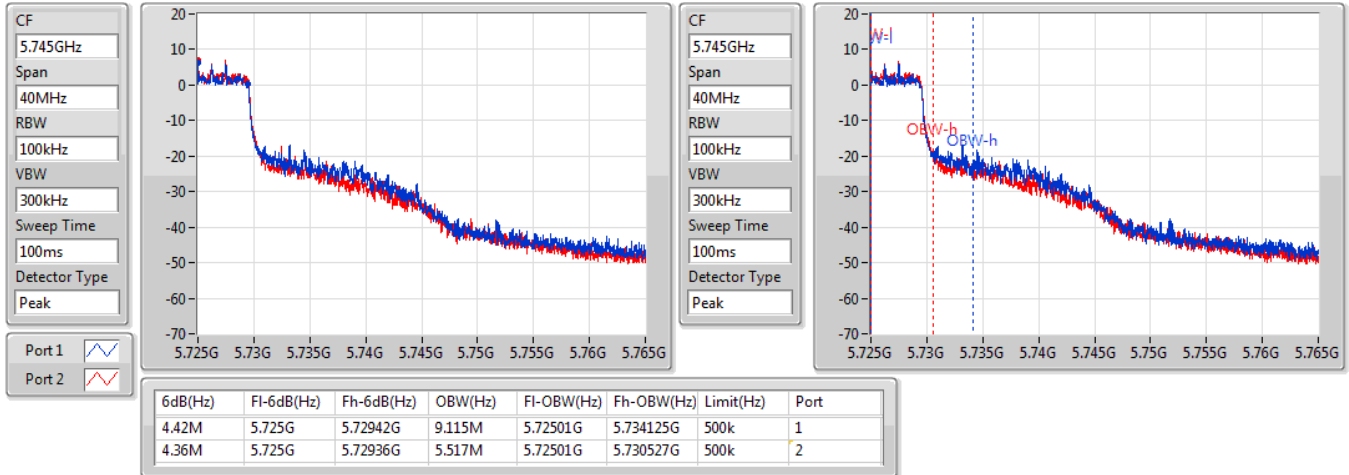


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

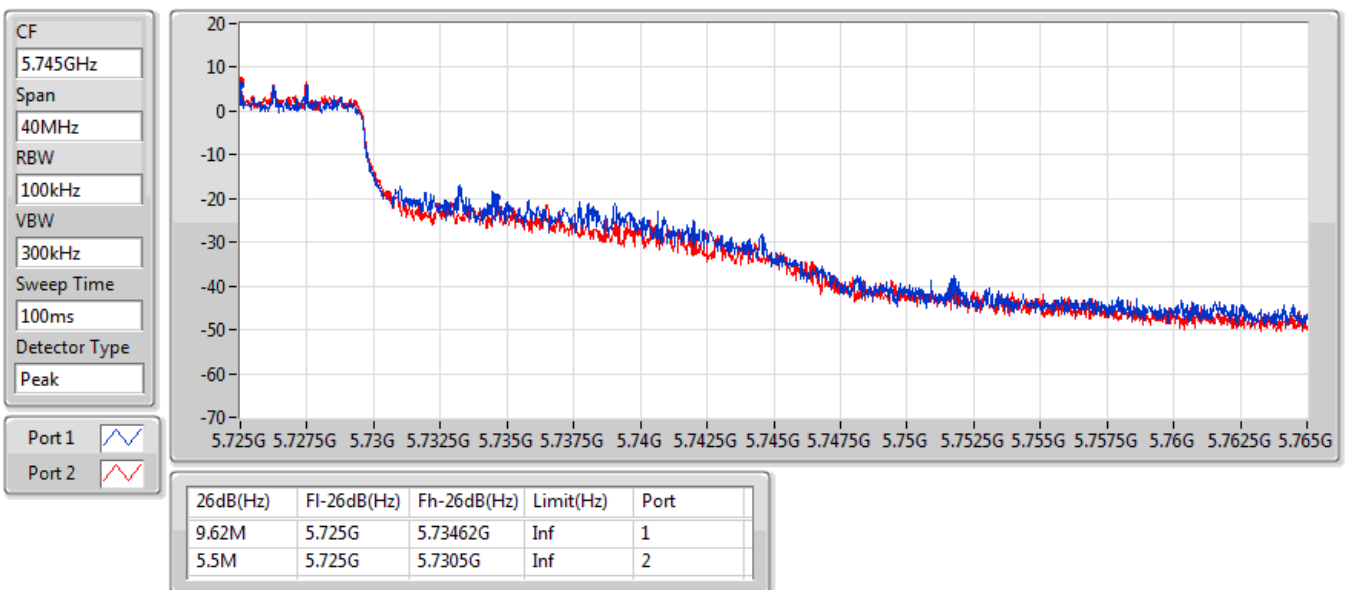


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

07/06/2022

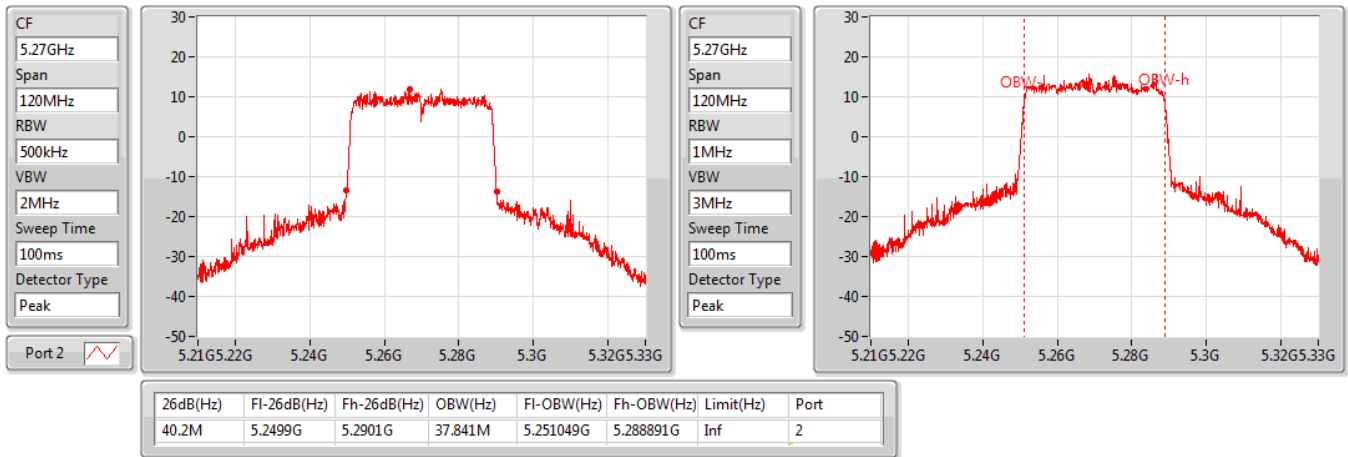


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5270MHz

07/06/2022

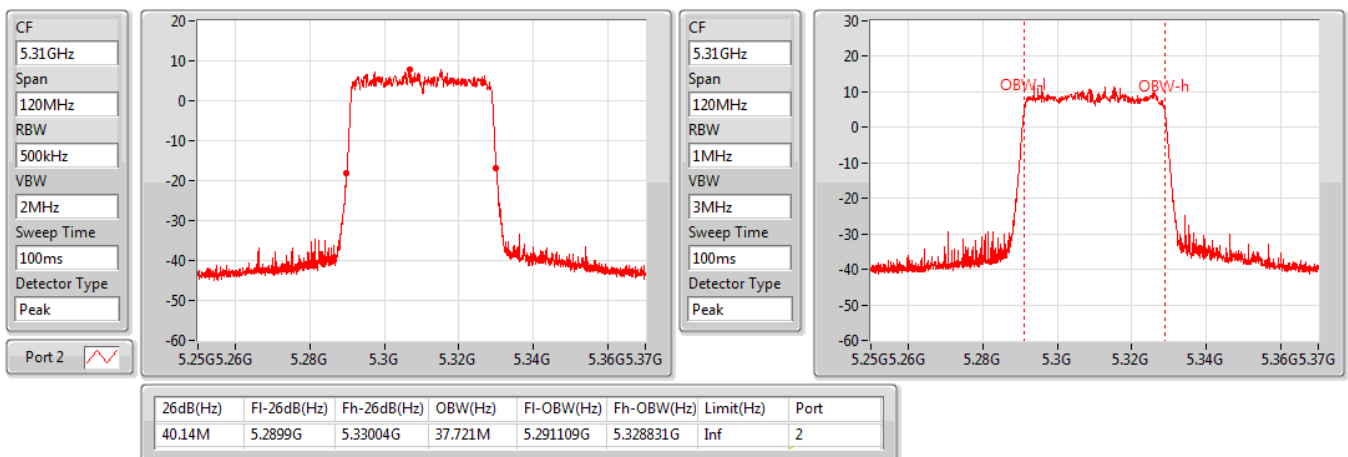


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5310MHz

07/06/2022

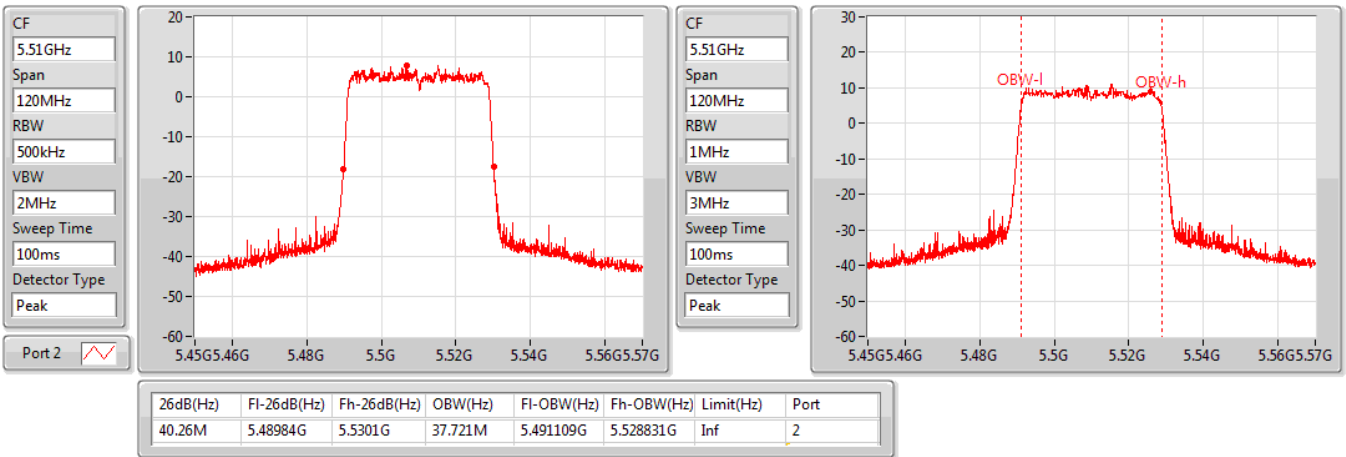


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5510MHz

07/06/2022

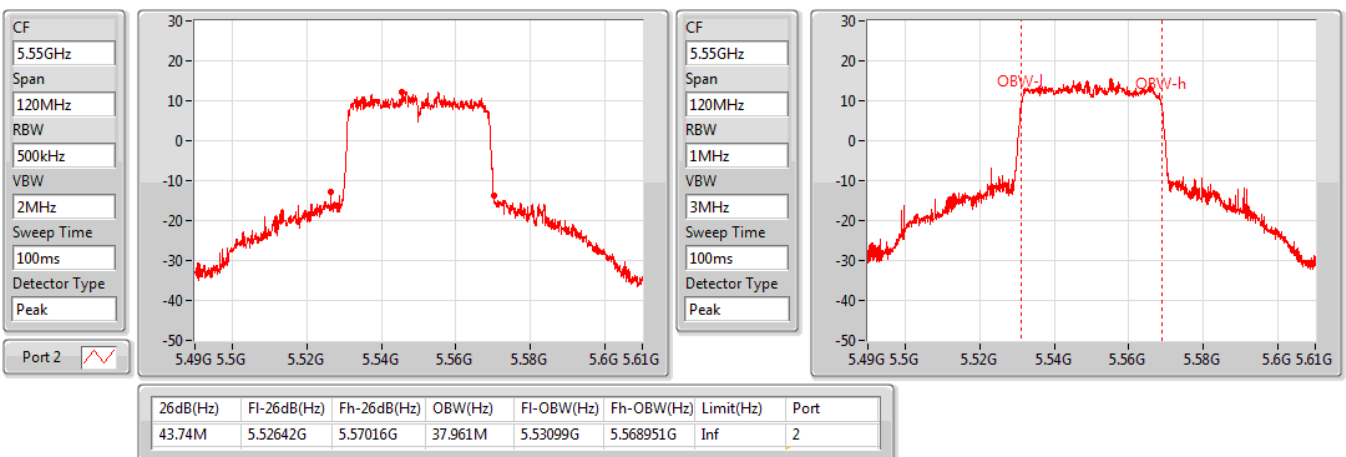


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5550MHz

07/06/2022

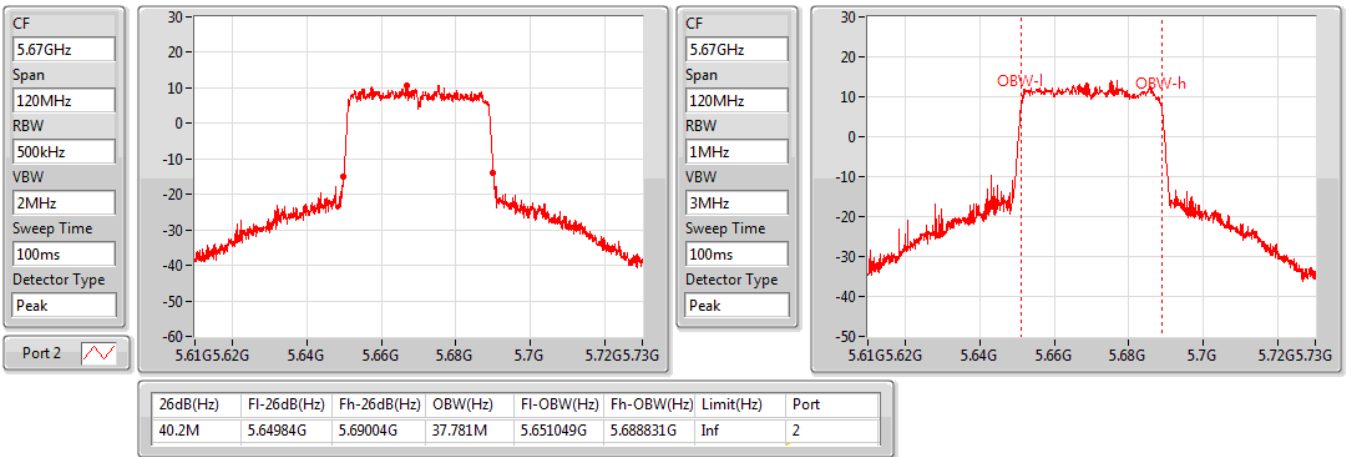


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5670MHz

07/06/2022

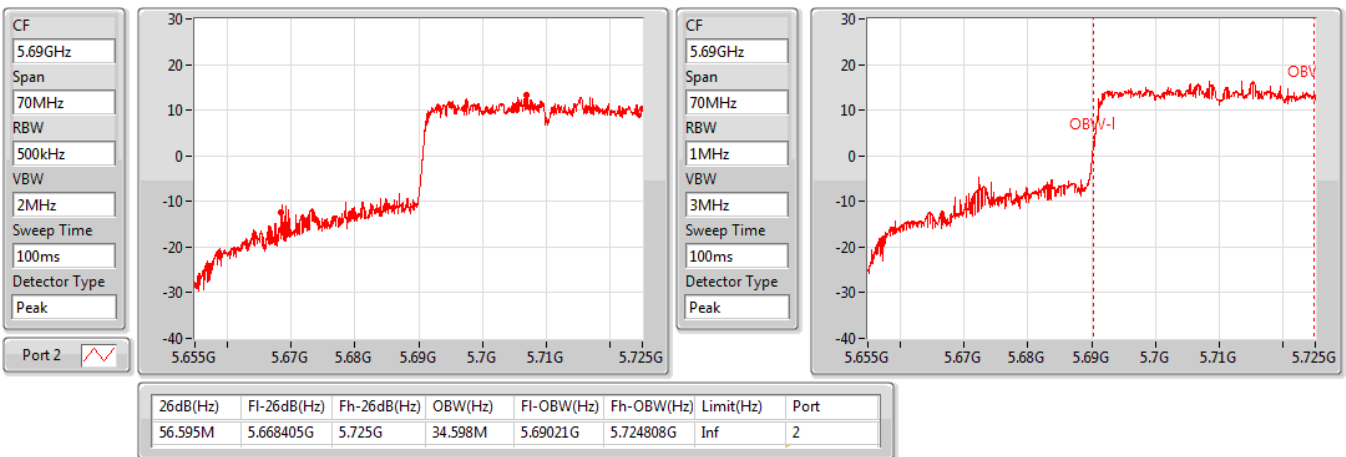


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

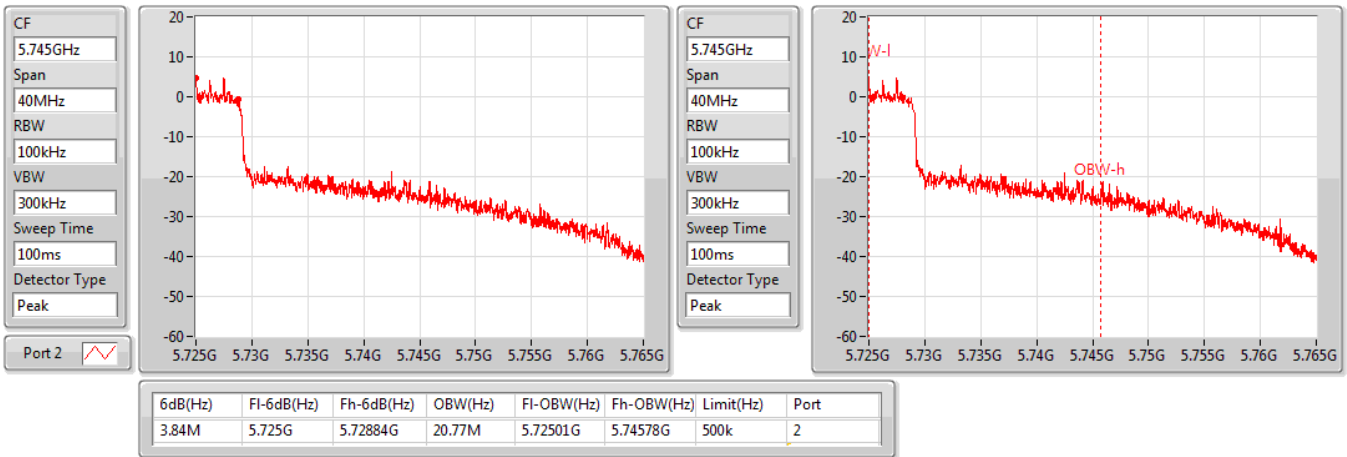
5710MHz Straddle 5.47-5.725GHz

07/06/2022

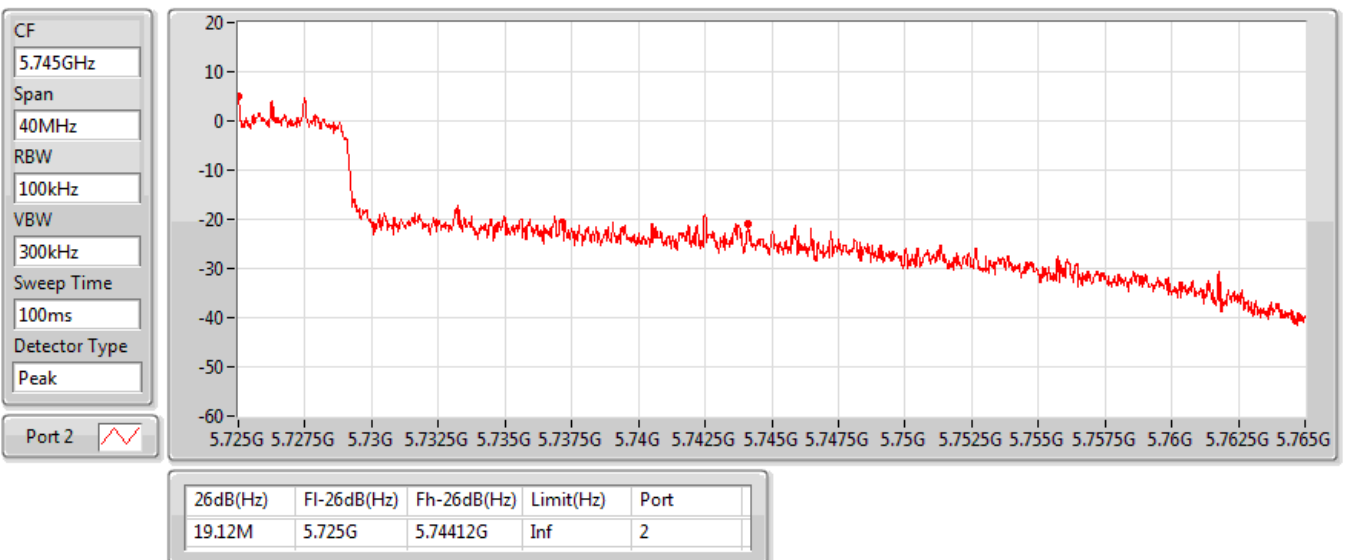


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5710MHz Straddle 5.725-5.85GHz

07/06/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5710MHz Straddle 5.725-5.85GHz

07/06/2022

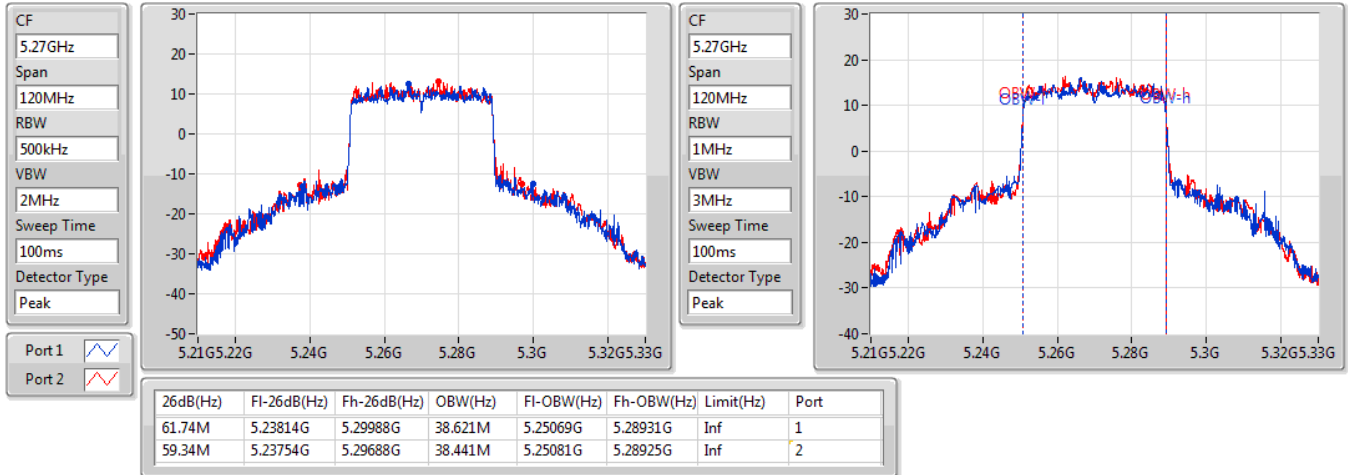


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5270MHz

07/06/2022

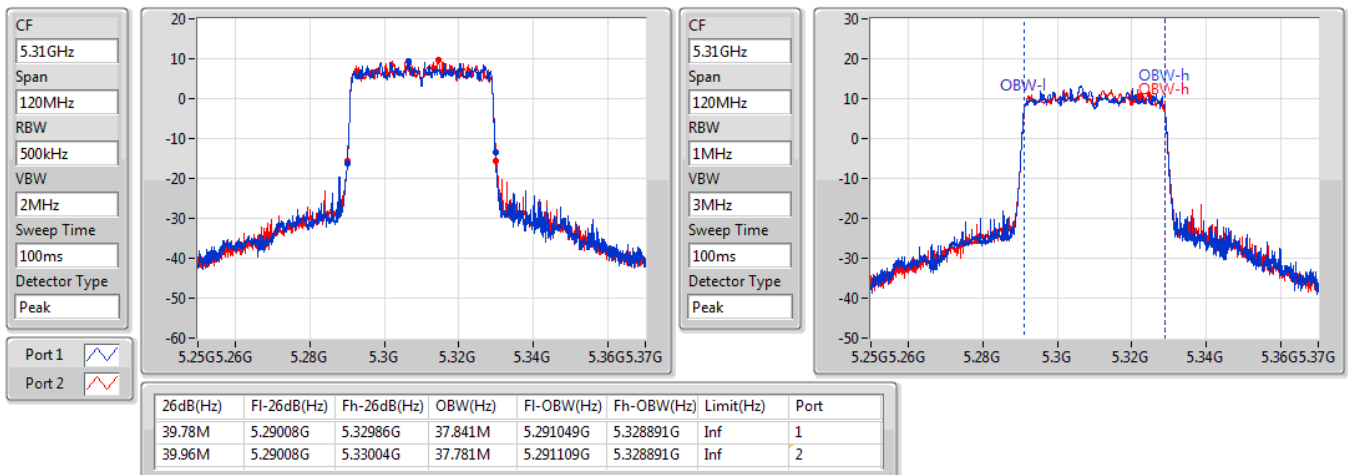


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

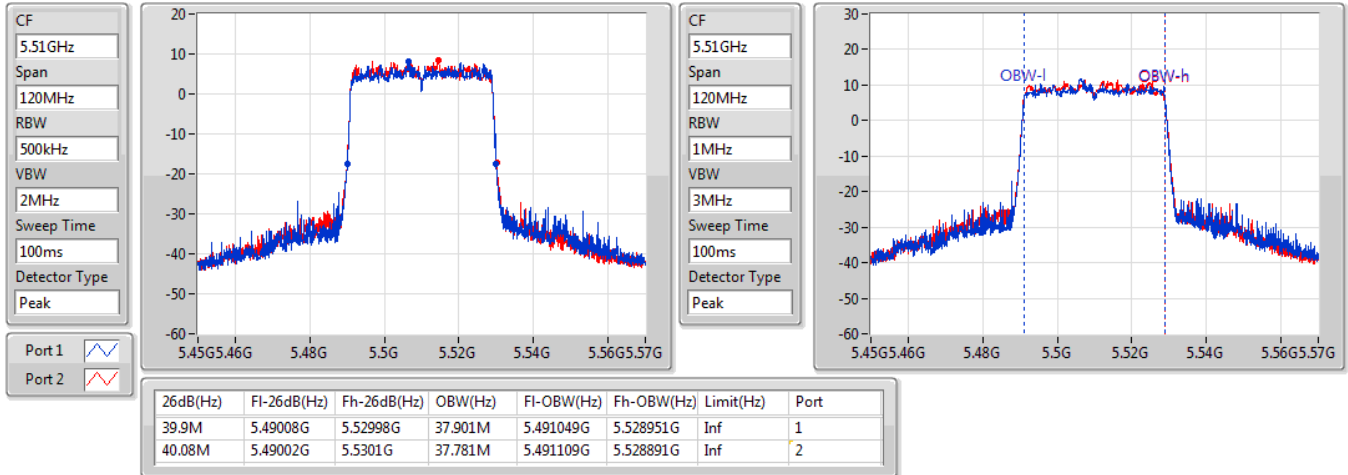
5310MHz

07/06/2022

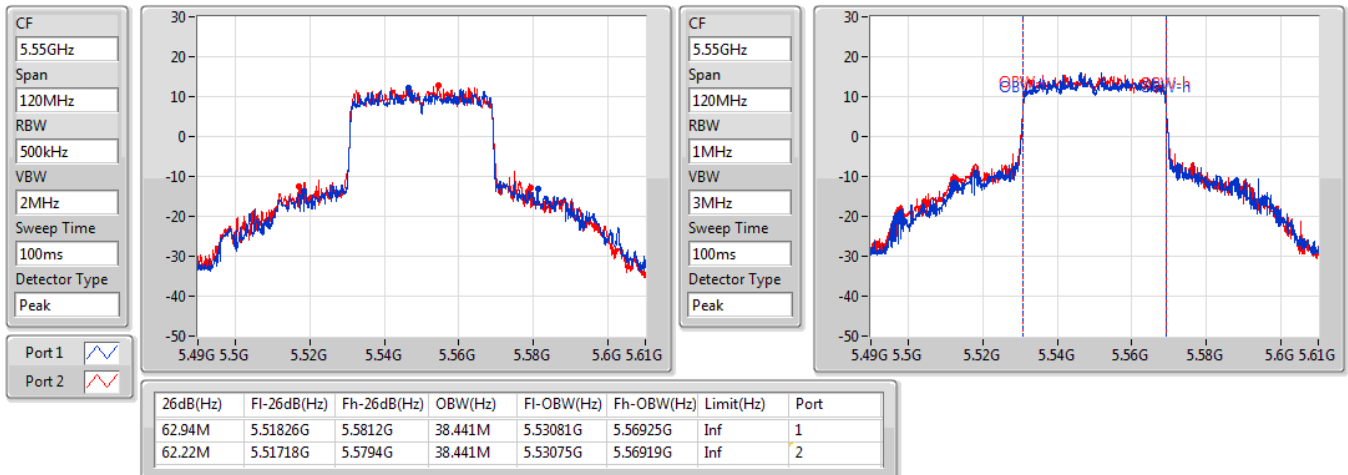


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5510MHz

07/06/2022


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5550MHz

07/06/2022

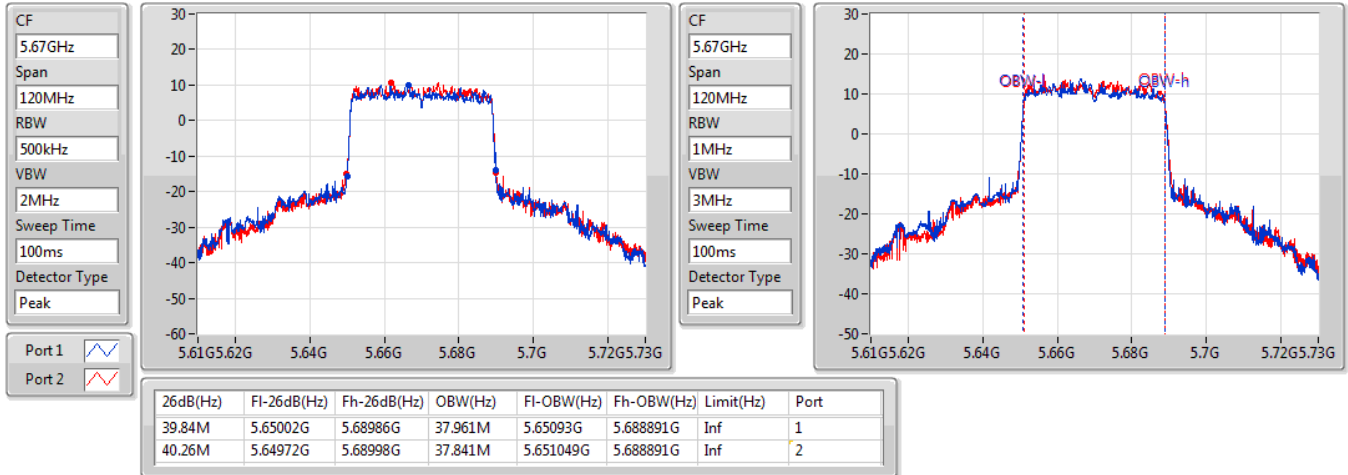


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5670MHz

07/06/2022

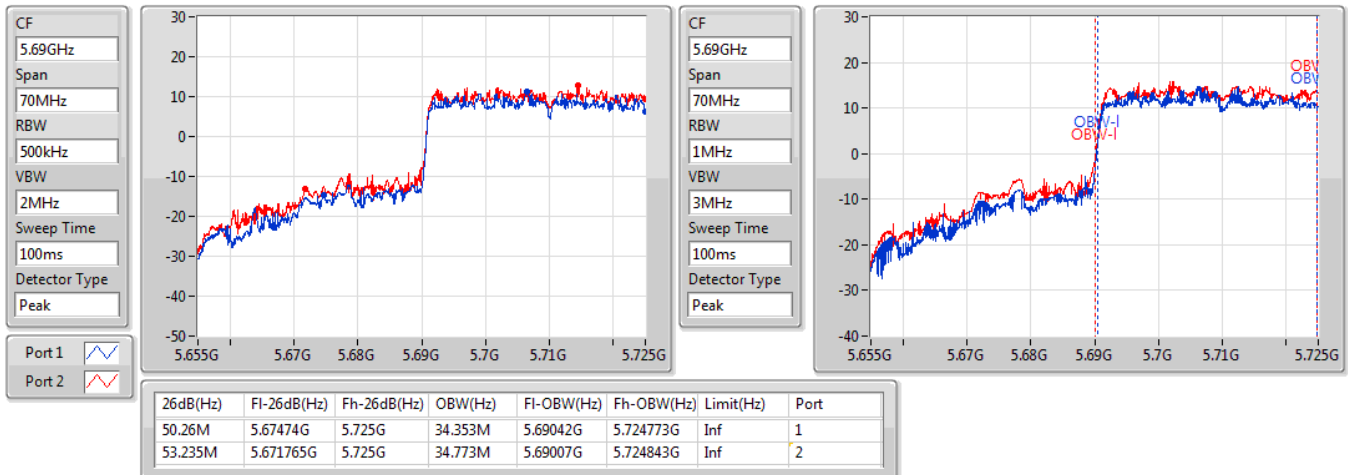


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

07/06/2022

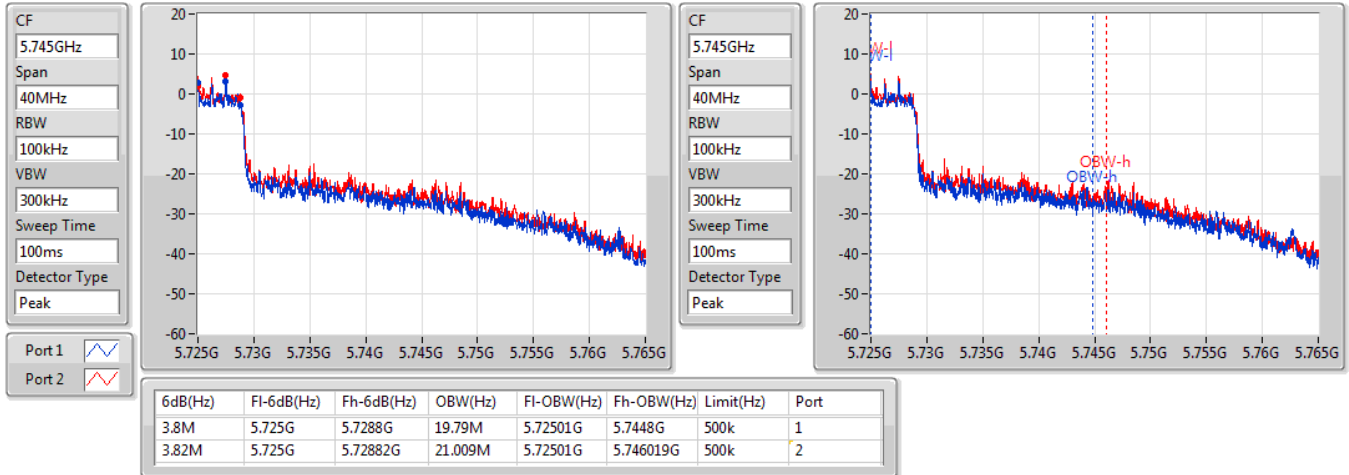


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

07/06/2022

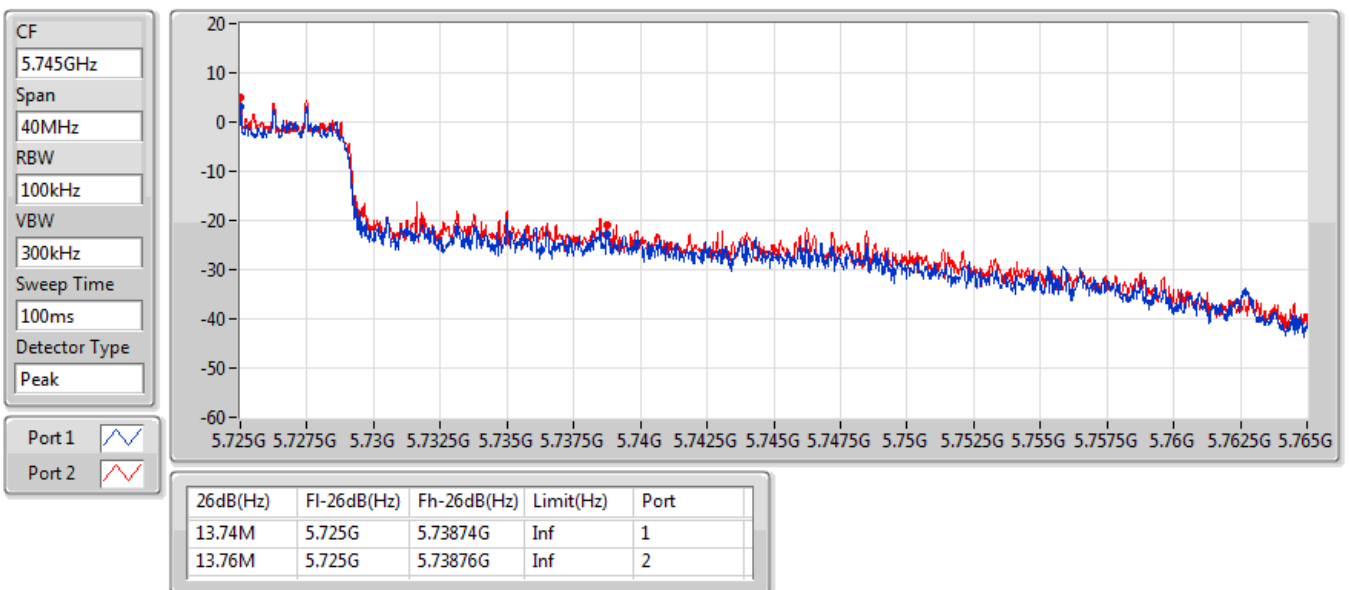


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

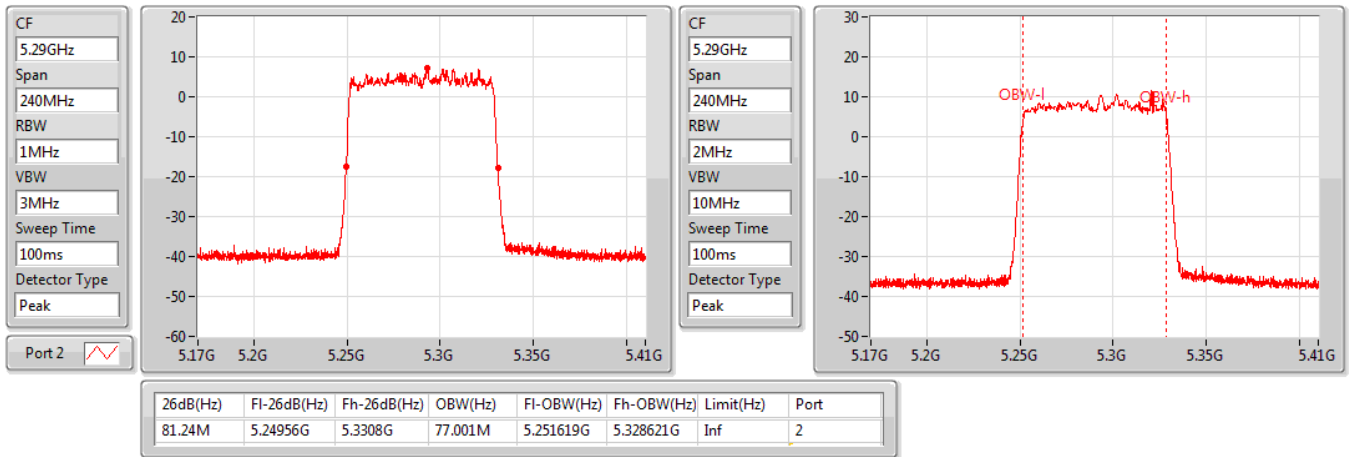
5710MHz Straddle 5.725-5.85GHz

07/06/2022

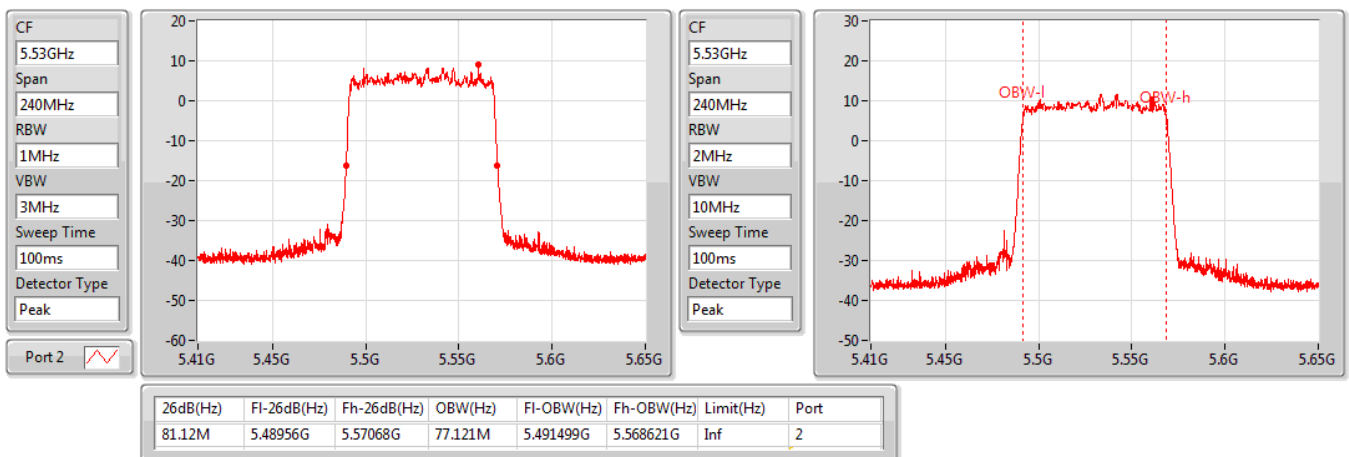


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5290MHz

07/06/2022

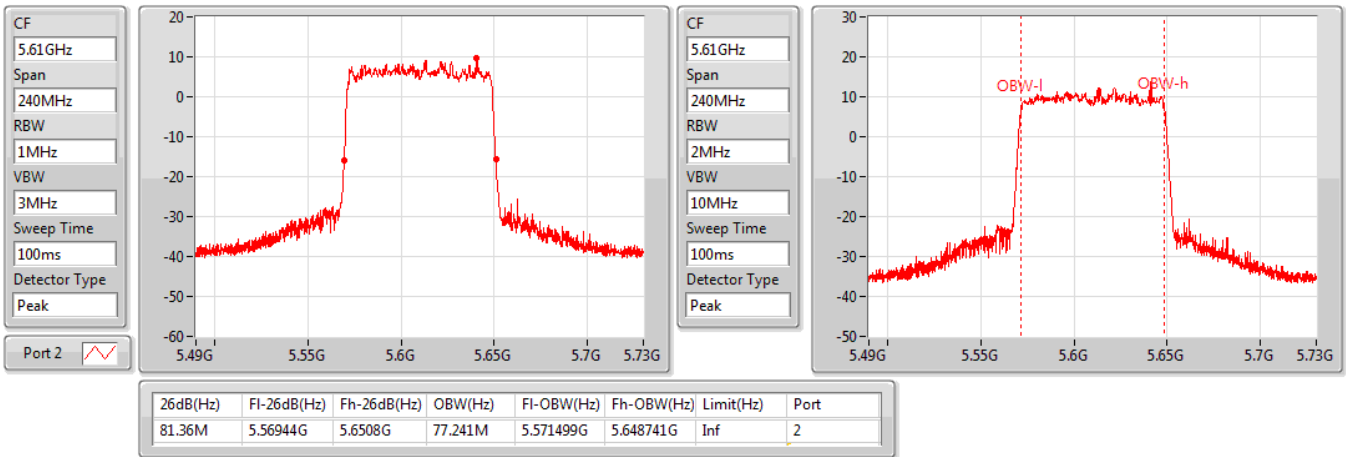

802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5530MHz

07/06/2022

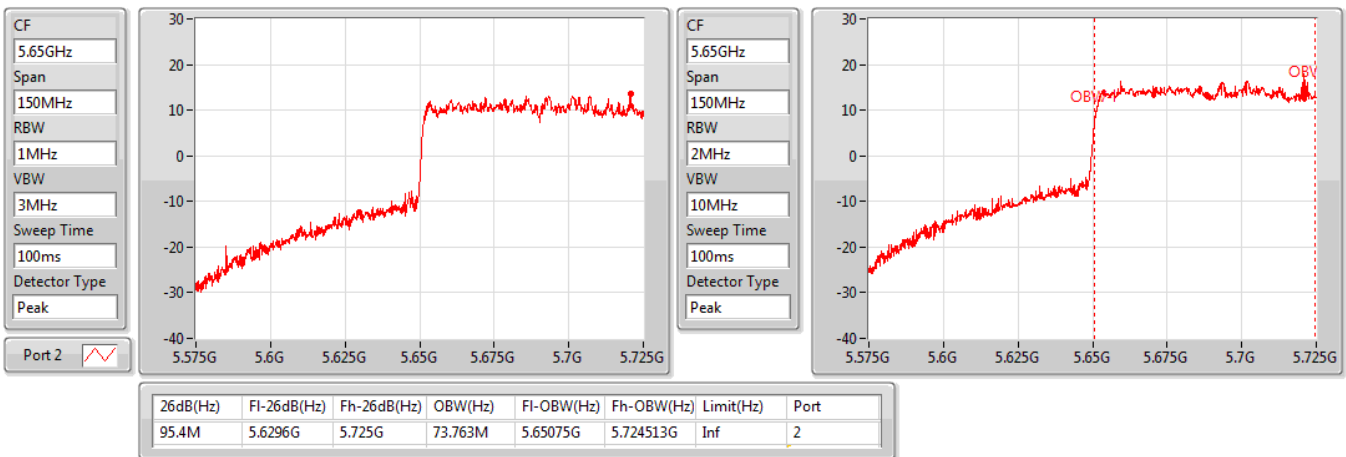


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5610MHz

07/06/2022

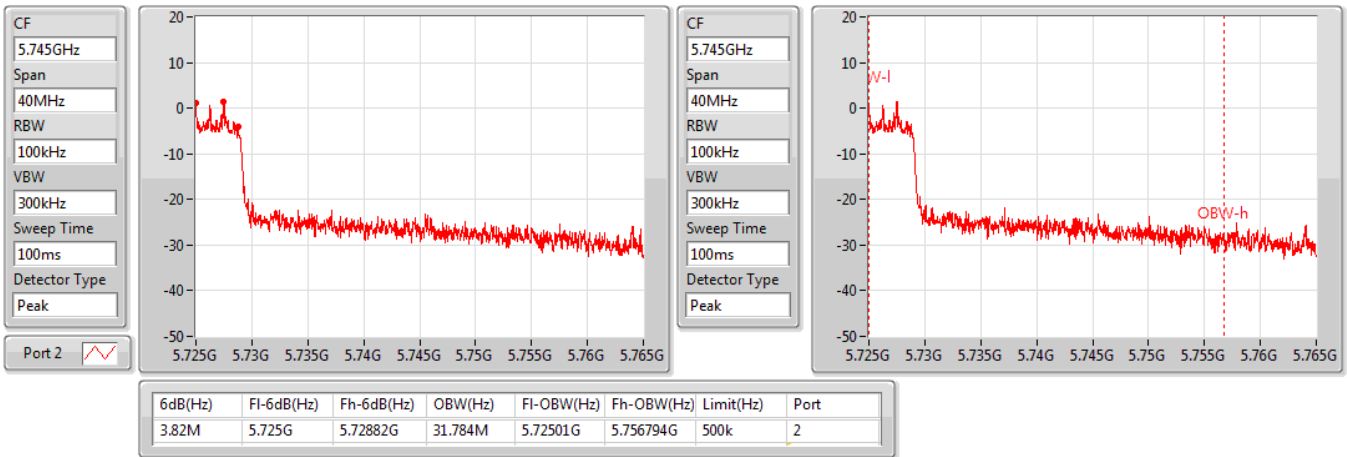

802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.47-5.725GHz

07/06/2022

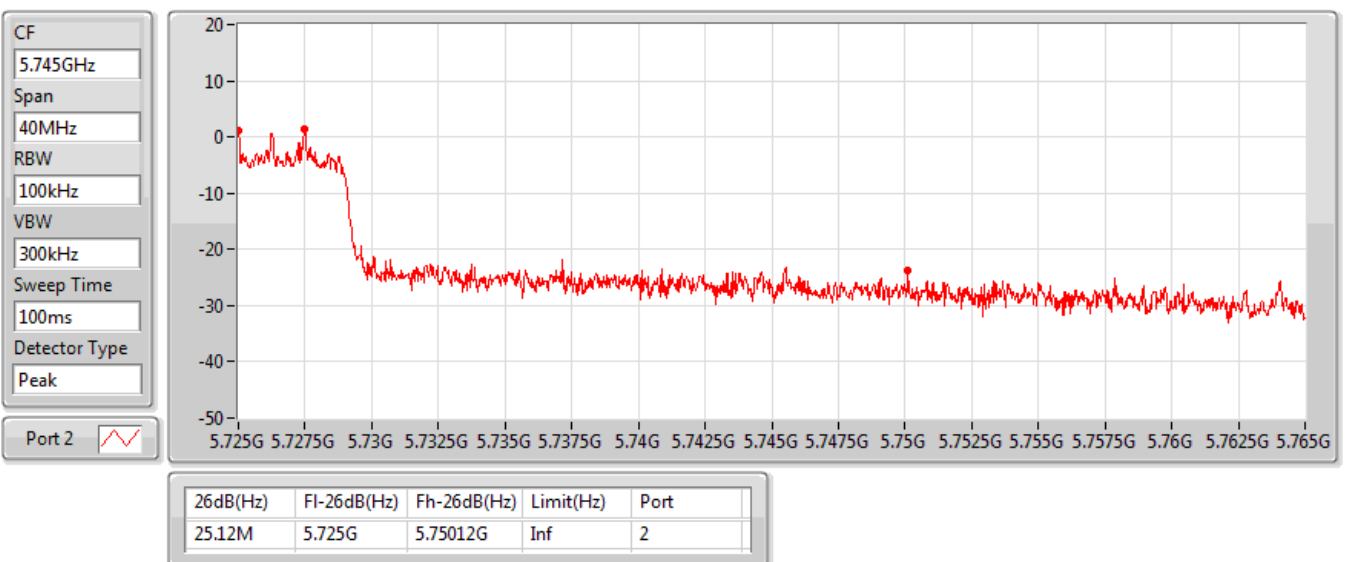


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.725-5.85GHz

07/06/2022

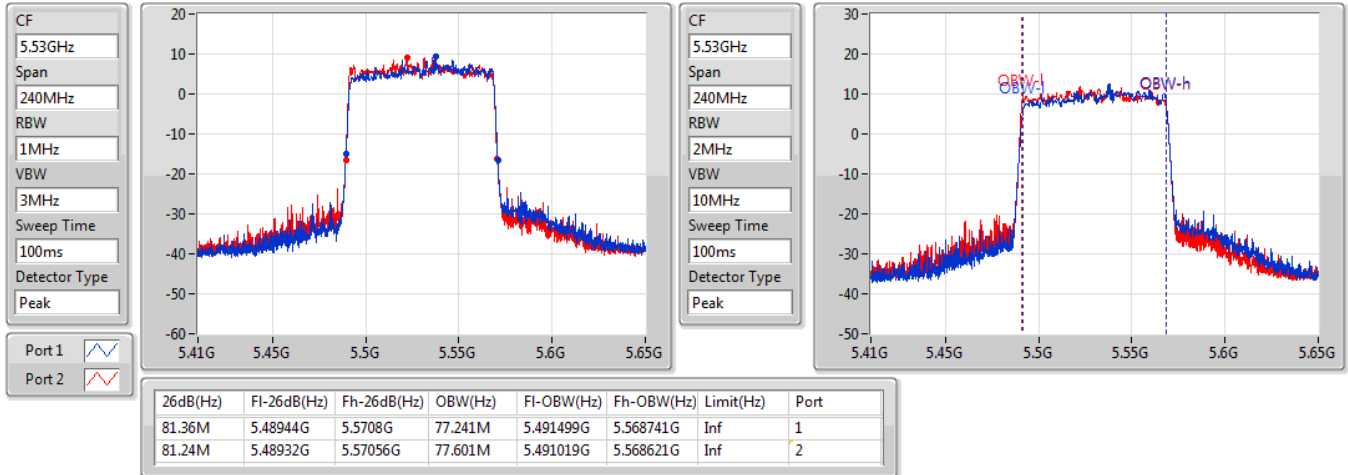

802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.725-5.85GHz

07/06/2022

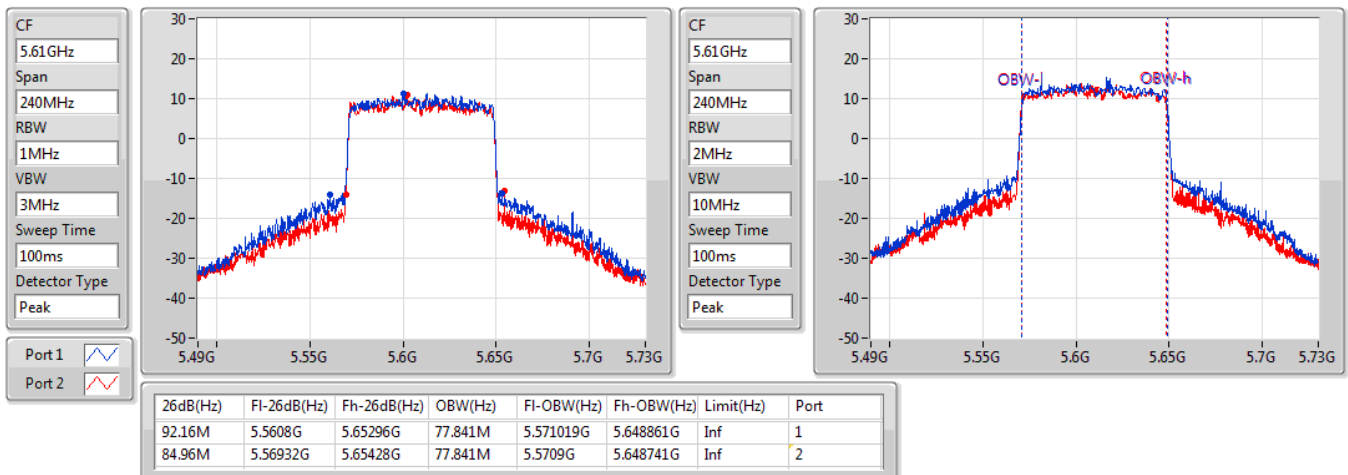


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

07/06/2022


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

07/06/2022

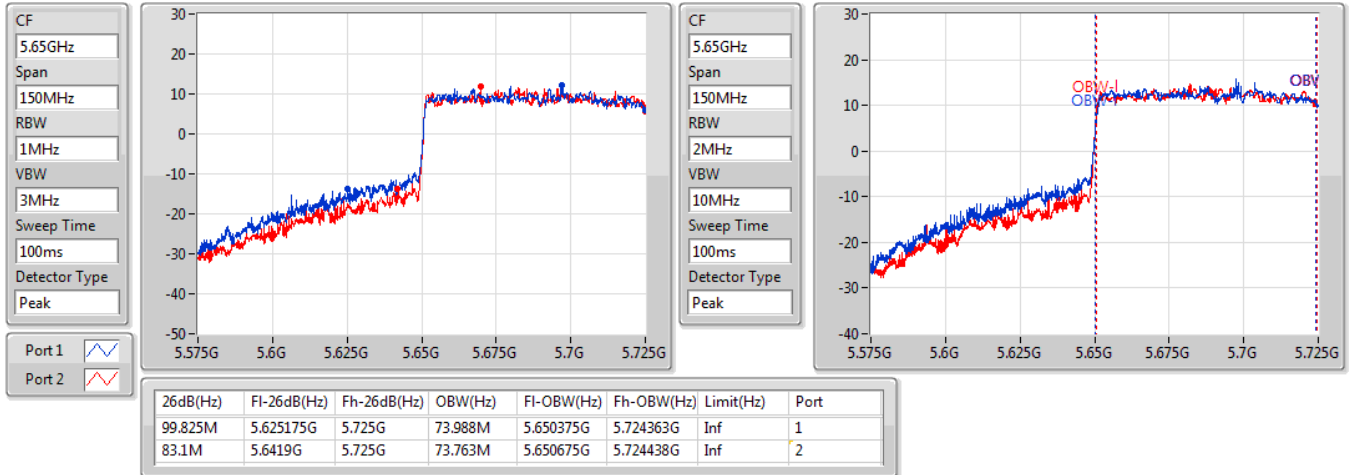


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

07/06/2022

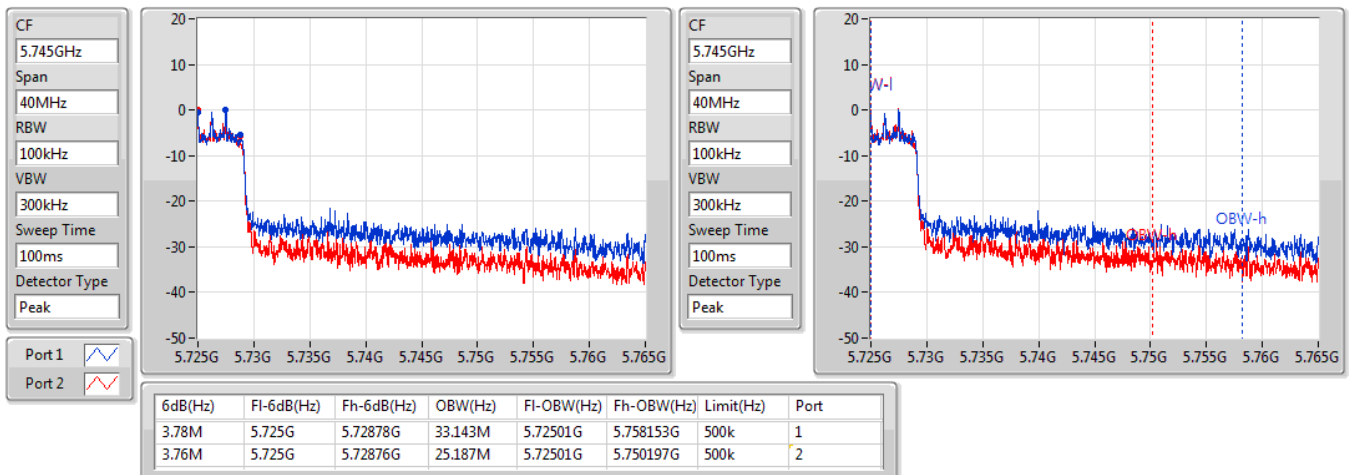


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

07/06/2022

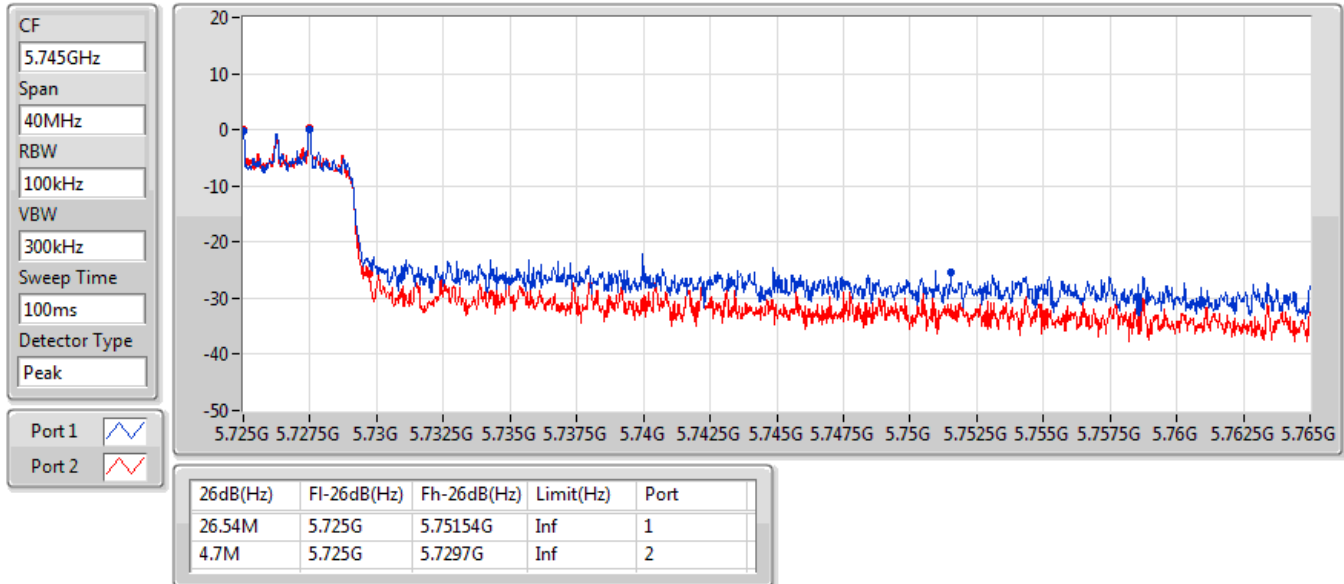


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

07/06/2022

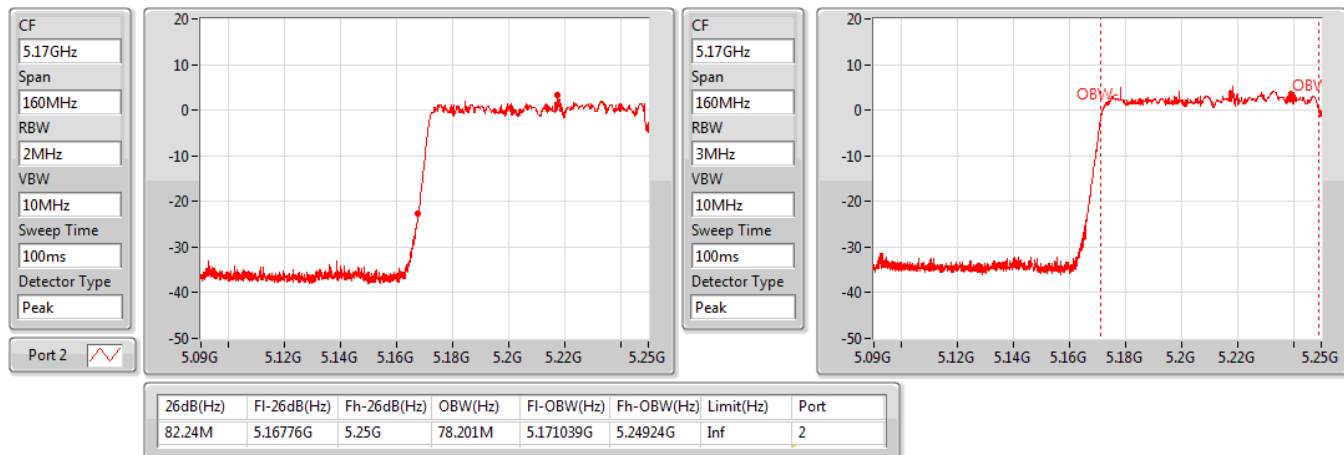


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)

EBW

5250MHz Straddle 5.15-5.25GHz

07/06/2022

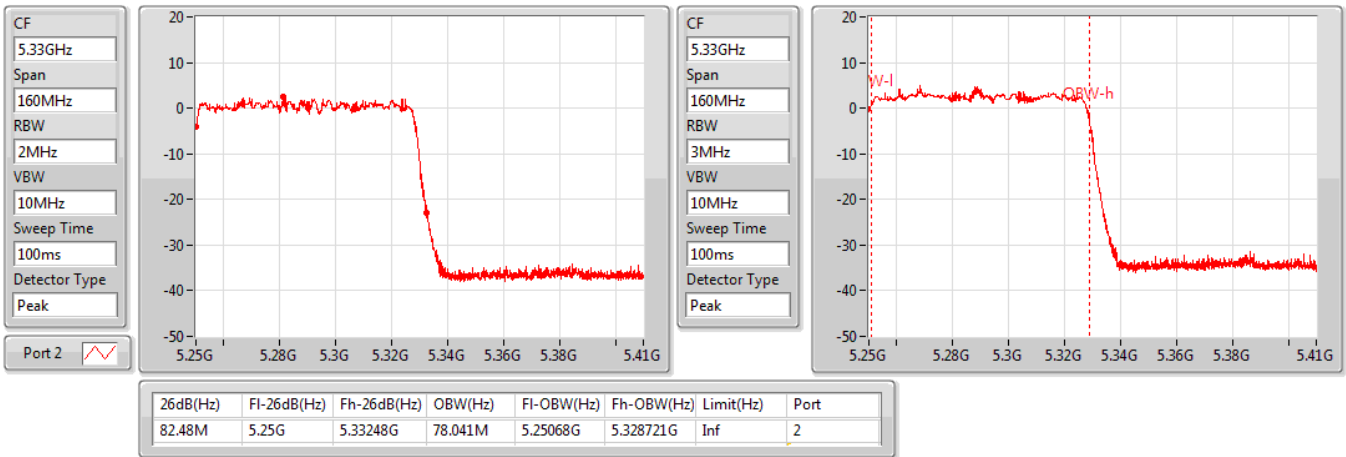


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)

EBW

5250MHz Straddle 5.25-5.35GHz

07/06/2022

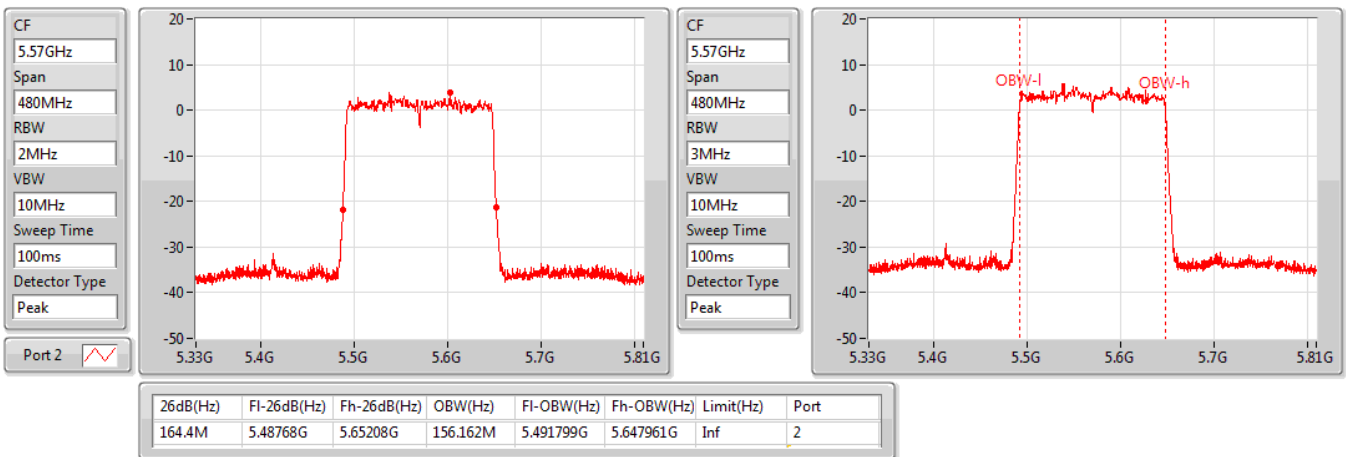


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)

EBW

5570MHz

07/06/2022

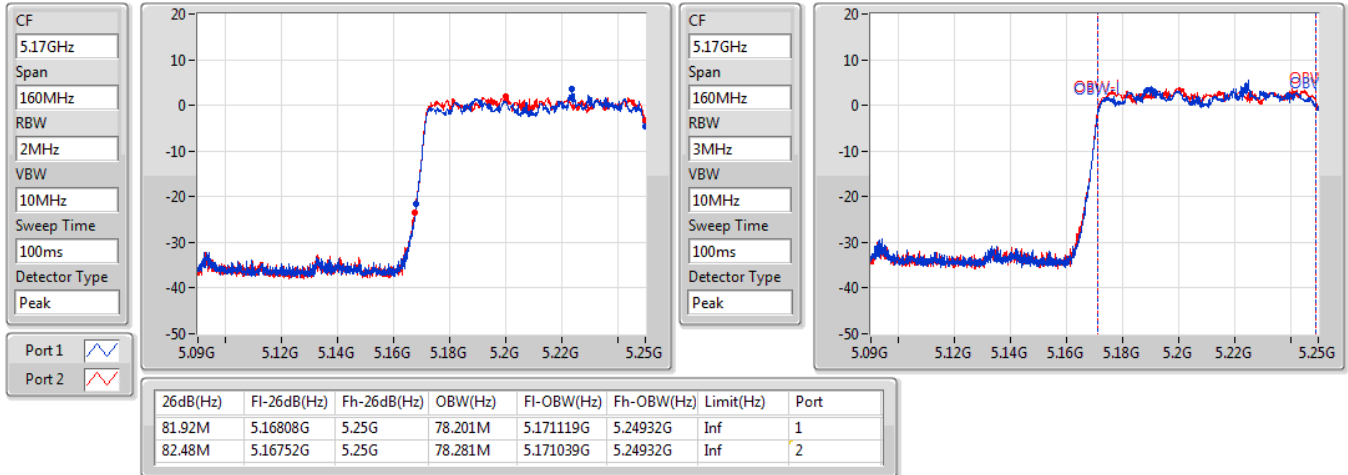


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

07/06/2022

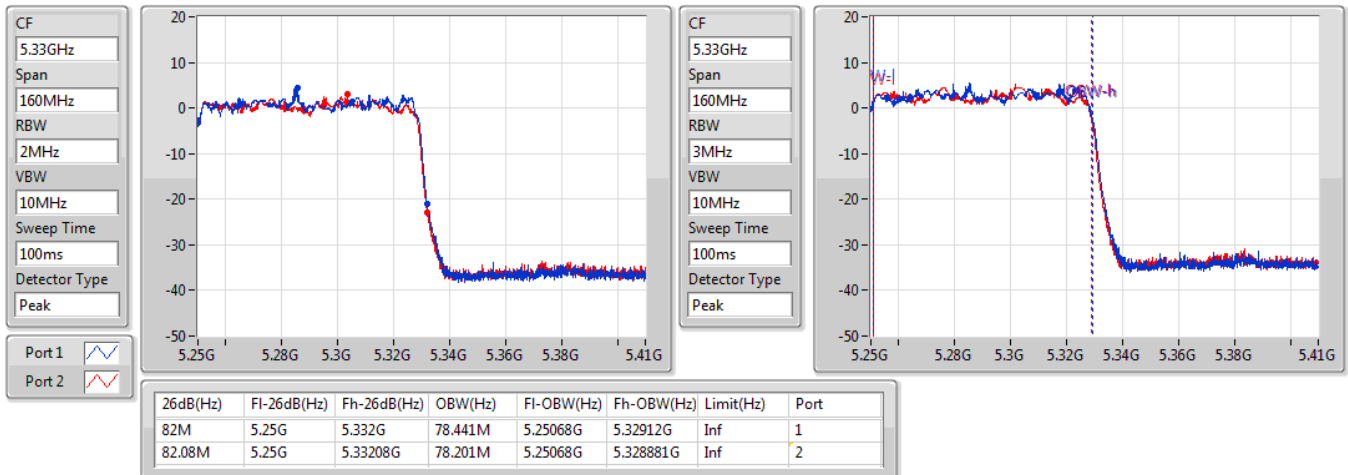


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

07/06/2022

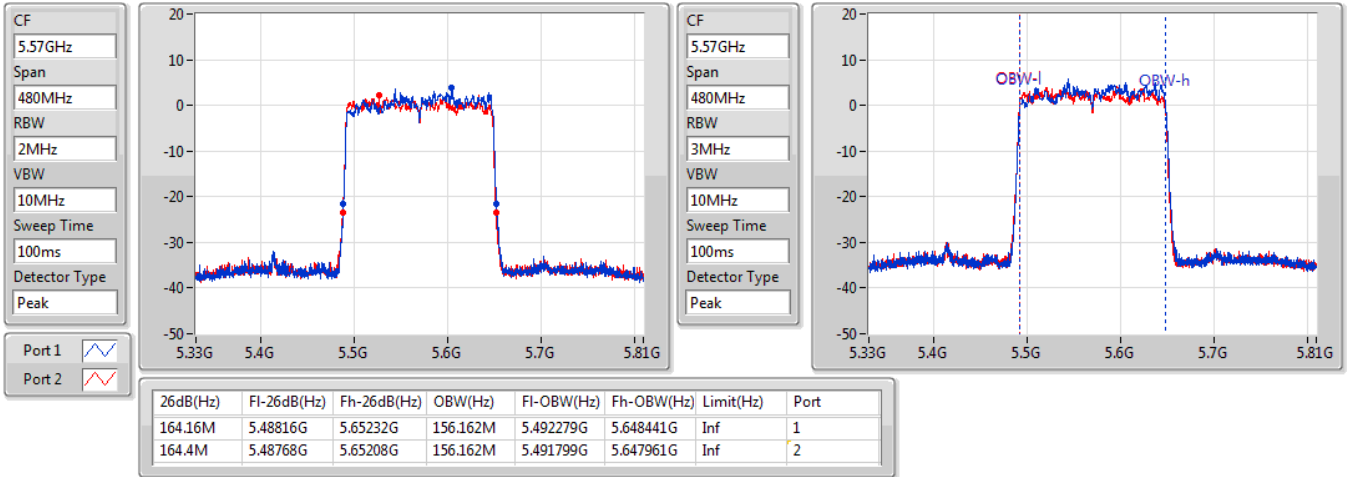


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

07/06/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	82.96M	78.201M	78M3D1D	82.96M	78.201M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.64M	78.361M	78M4D1D	82.32M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	37.92M	19.07M	19M1D1D	28.98M	17.511M
802.11a_Nss1,(6Mbps)_2TX	21.84M	17.181M	17M2D1D	21.72M	16.912M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	40.38M	19.7M	19M7D1D	21.81M	19.16M
802.11ax HEW20_Nss2,(MCS0)_2TX	39.69M	19.82M	19M9D1D	21.63M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	62.16M	38.141M	38M2D1D	40.08M	37.721M
802.11ax HEW40_Nss2,(MCS0)_2TX	49.56M	38.081M	38M1D1D	40.08M	37.721M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	81.48M	77.361M	77M4D1D	81.48M	77.361M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.72M	77.481M	77M5D1D	81.24M	77.241M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	81.92M	78.121M	78M2D1D	81.92M	78.121M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.72M	78.041M	78M0D1D	82.64M	77.961M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	37.68M	19.37M	19M4D1D	21.72M	14.888M
802.11a_Nss1,(6Mbps)_2TX	21.72M	17.211M	17M3D1D	15.81M	13.568M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	38.22M	19.73M	19M8D1D	21.78M	14.918M
802.11ax HEW20_Nss2,(MCS0)_2TX	38.28M	19.67M	19M7D1D	17.07M	14.678M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	61.98M	38.141M	38M2D1D	39.96M	34.318M
802.11ax HEW40_Nss2,(MCS0)_2TX	55.26M	38.321M	38M4D1D	39.84M	33.968M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	100.95M	77.601M	77M7D1D	81.48M	74.588M
802.11ax HEW80_Nss2,(MCS0)_2TX	92.1M	77.721M	77M8D1D	80.925M	73.763M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	164.4M	155.922M	156MD1D	164.4M	155.922M
802.11ax HEW160_Nss2,(MCS0)_2TX	164.16M	156.402M	156MD1D	163.44M	155.682M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	3.16M	9.895M	9M90D1D	3.16M	9.895M
802.11a_Nss1,(6Mbps)_2TX	3.2M	4.418M	4M42D1D	3.18M	4.398M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	4.54M	11.254M	11M3D1D	4.54M	11.254M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.44M	10.295M	10M3D1D	4.4M	6.317M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	3.78M	21.169M	21M2D1D	3.78M	21.169M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.96M	17.771M	17M8D1D	3.76M	13.353M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	3.9M	32.384M	32M4D1D	3.9M	32.384M
802.11ax HEW80_Nss2,(MCS0)_2TX	4.02M	26.047M	26M0D1D	3.78M	19.91M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	37.92M	19.07M		
5300MHz	Pass	Inf	37.53M	18.951M		
5320MHz	Pass	Inf	28.98M	17.511M		
5500MHz	Pass	Inf	21.72M	17.151M		
5580MHz	Pass	Inf	37.68M	19.37M		
5700MHz	Pass	Inf	21.81M	17.211M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	23.37M	14.888M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.16M	9.895M		
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.75M	17.181M	21.84M	16.942M
5300MHz	Pass	Inf	21.72M	17.181M	21.75M	16.942M
5320MHz	Pass	Inf	21.72M	17.181M	21.75M	16.912M
5500MHz	Pass	Inf	21.6M	17.151M	21.48M	16.912M
5580MHz	Pass	Inf	21.57M	17.211M	21.63M	16.912M
5700MHz	Pass	Inf	21.72M	17.211M	21.54M	16.912M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.855M	13.703M	15.81M	13.568M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.2M	4.398M	3.18M	4.418M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	38.91M	19.7M		
5300MHz	Pass	Inf	40.38M	19.67M		
5320MHz	Pass	Inf	21.81M	19.16M		
5500MHz	Pass	Inf	21.93M	19.13M		
5580MHz	Pass	Inf	38.22M	19.73M		
5700MHz	Pass	Inf	21.78M	19.1M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	23.49M	14.918M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.54M	11.254M		
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	30.12M	19.4M	38.43M	19.76M
5300MHz	Pass	Inf	32.76M	19.49M	39.69M	19.82M
5320MHz	Pass	Inf	21.87M	19.13M	21.63M	19.16M
5500MHz	Pass	Inf	21.39M	19.1M	21.69M	19.07M
5580MHz	Pass	Inf	30.42M	19.43M	38.28M	19.67M
5700MHz	Pass	Inf	21.63M	19.16M	21.72M	19.13M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.07M	14.678M	23.505M	14.933M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	6.317M	4.4M	10.295M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5270MHz	Pass	Inf	62.16M	38.141M		
5310MHz	Pass	Inf	40.08M	37.721M		
5510MHz	Pass	Inf	39.96M	37.781M		
5550MHz	Pass	Inf	61.98M	38.141M		
5670MHz	Pass	Inf	40.2M	37.901M		
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	55.37M	34.318M		
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	21.169M		
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40.32M	37.841M	49.56M	38.081M
5310MHz	Pass	Inf	40.2M	37.721M	40.08M	37.721M
5510MHz	Pass	Inf	40.2M	37.721M	39.84M	37.721M
5550MHz	Pass	Inf	55.26M	38.321M	44.76M	38.081M
5670MHz	Pass	Inf	48.84M	38.141M	44.22M	38.081M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	51.625M	34.318M	43.75M	33.968M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	17.771M	3.96M	13.353M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5290MHz	Pass	Inf	81.48M	77.361M		
5530MHz	Pass	Inf	81.96M	77.361M		



EBW_Non-Beamforming_Dipole

Appendix A.2

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf	81.48M	77.601M		
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	100.95M	74.588M		
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	32.384M		
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.72M	77.241M	81.24M	77.481M
5530MHz	Pass	Inf	81.84M	77.361M	81.36M	77.361M
5610MHz	Pass	Inf	81.72M	77.481M	81.6M	77.721M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	80.925M	73.763M	92.1M	73.763M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.02M	19.91M	3.78M	26.047M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.96M	78.201M		
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	81.92M	78.121M		
5570MHz	Pass	Inf	164.4M	155.922M		
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.64M	78.361M	82.32M	78.361M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.64M	77.961M	82.72M	78.041M
5570MHz	Pass	Inf	164.16M	155.682M	163.44M	156.402M

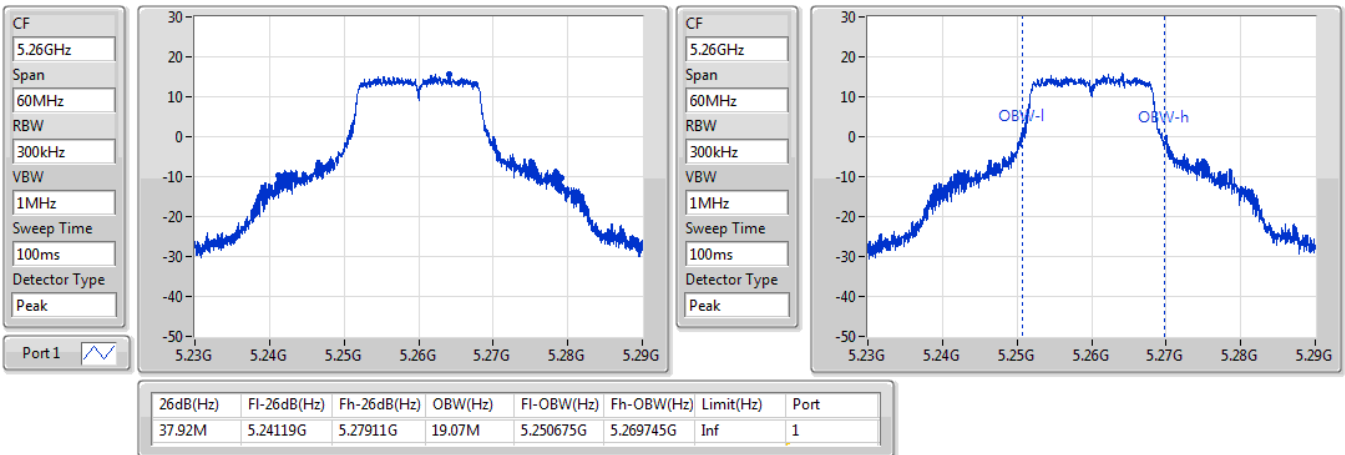
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5260MHz

26/07/2022

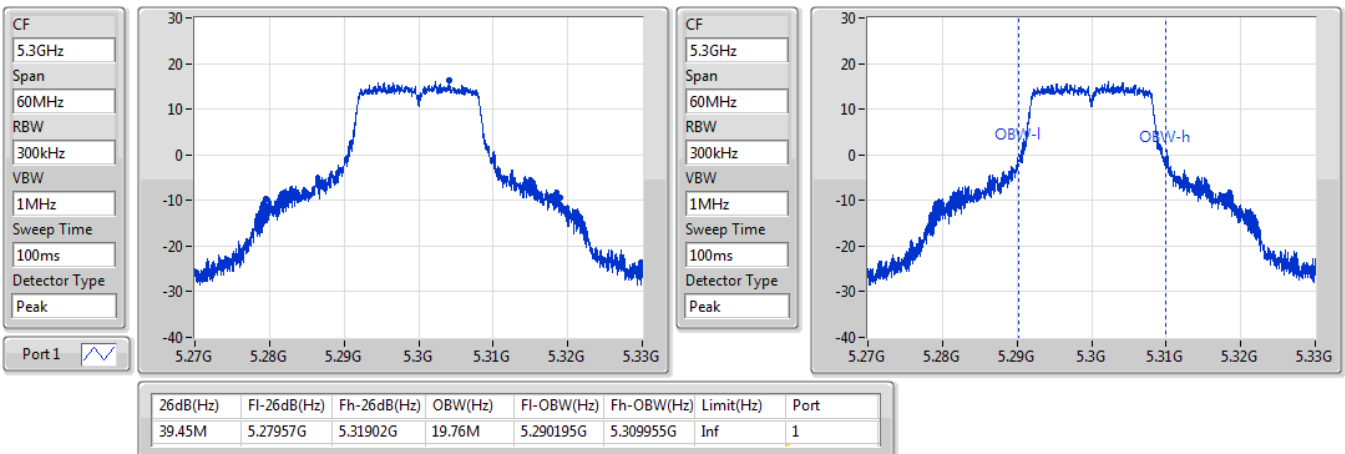


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5300MHz

26/07/2022

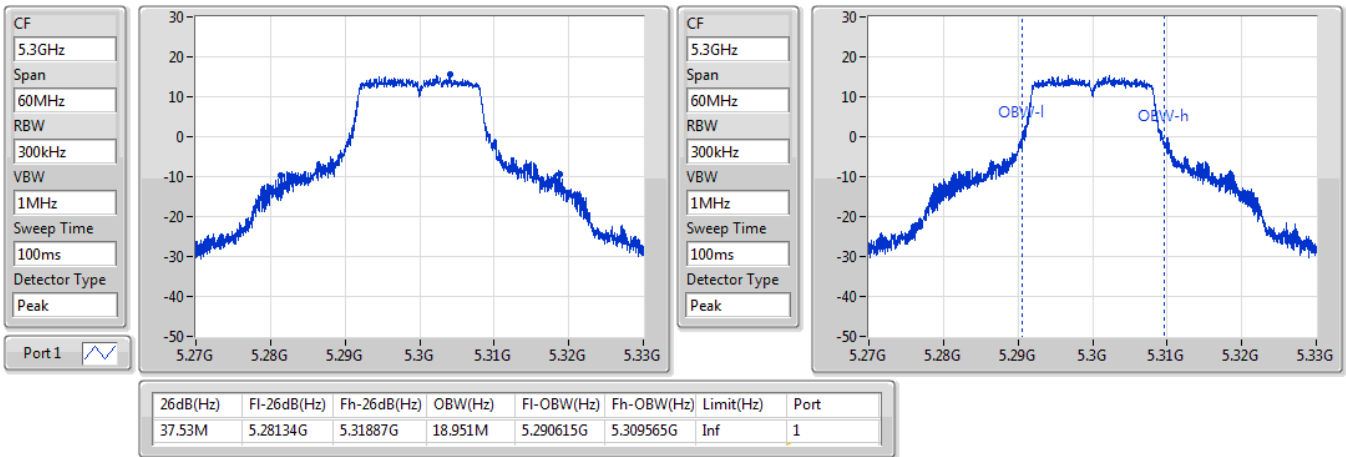


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5300MHz

26/07/2022

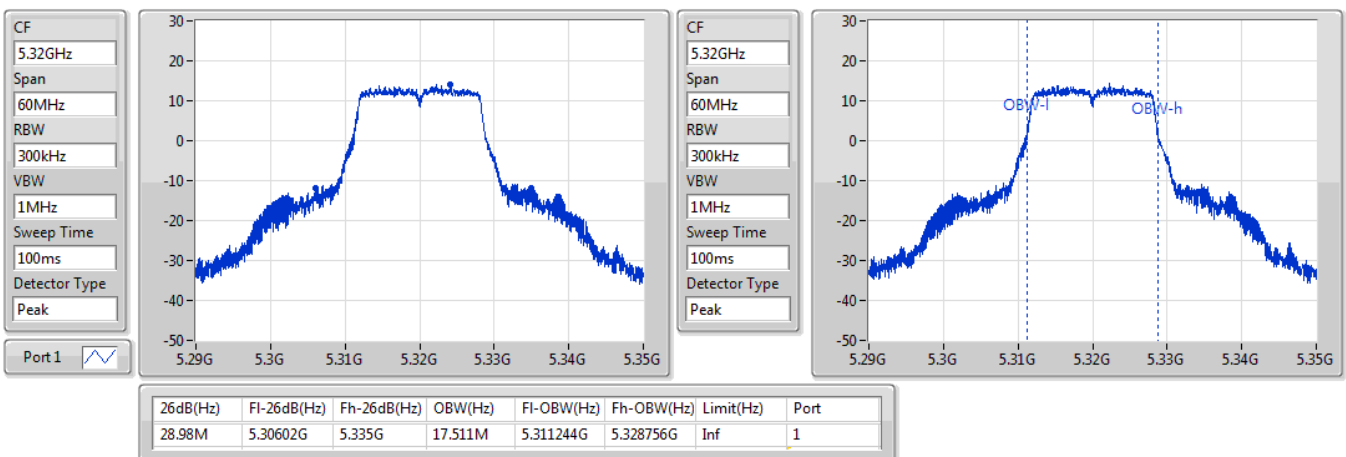


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5320MHz

26/07/2022

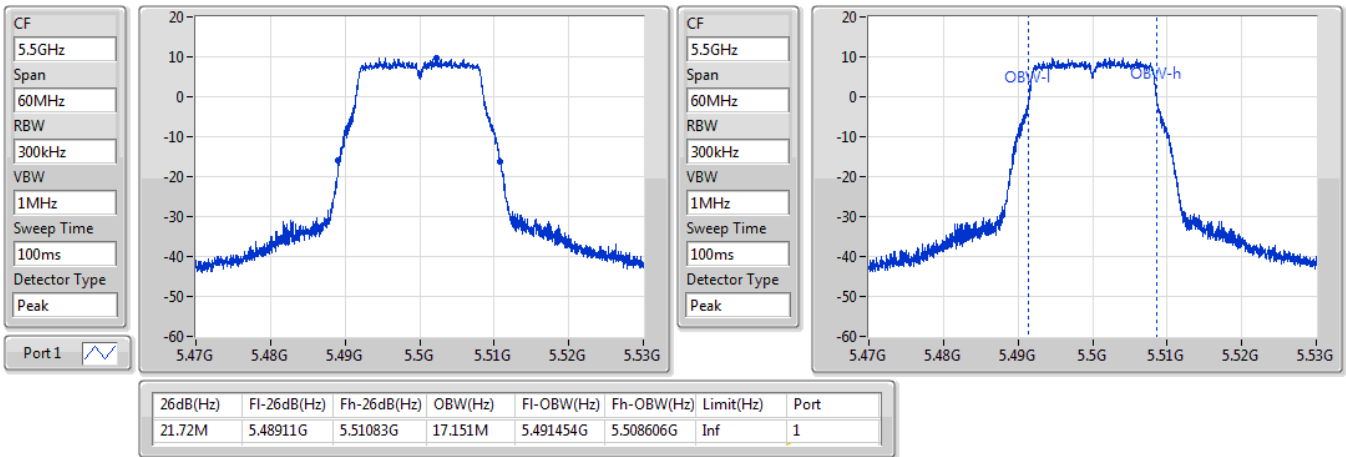


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5500MHz

26/07/2022

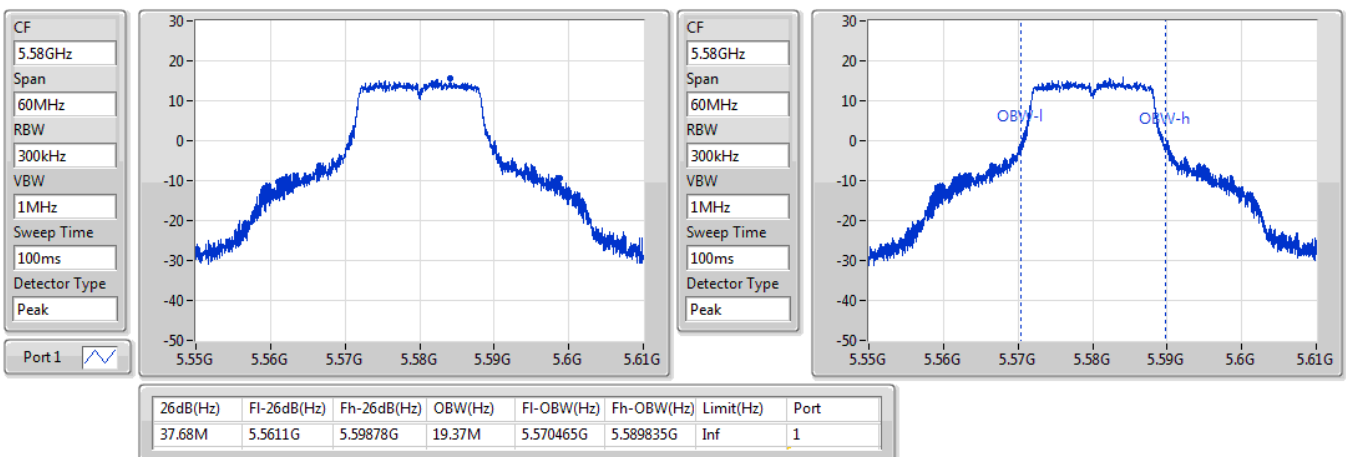


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

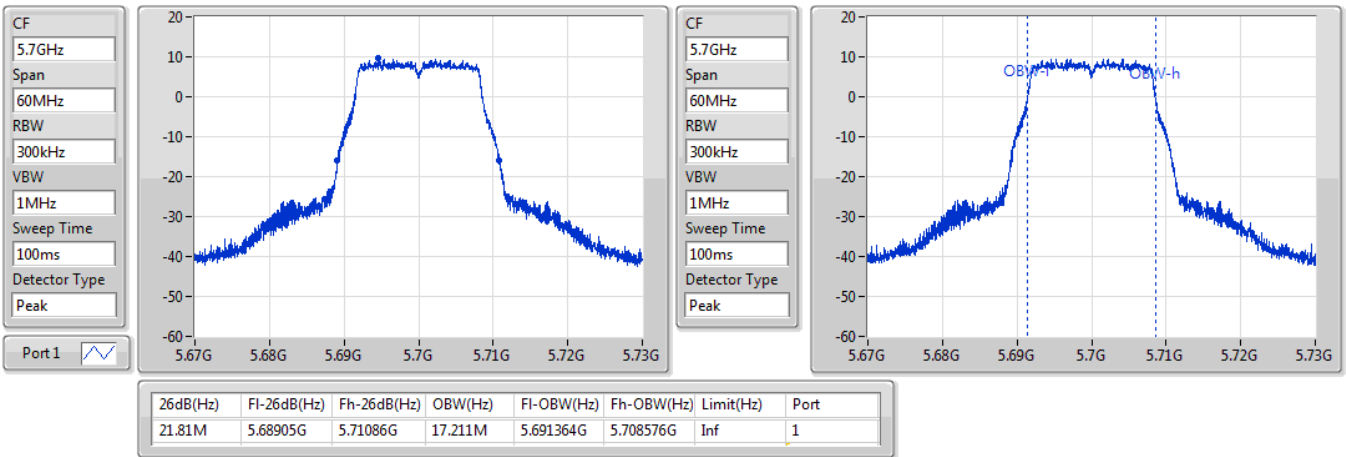
5580MHz

26/07/2022

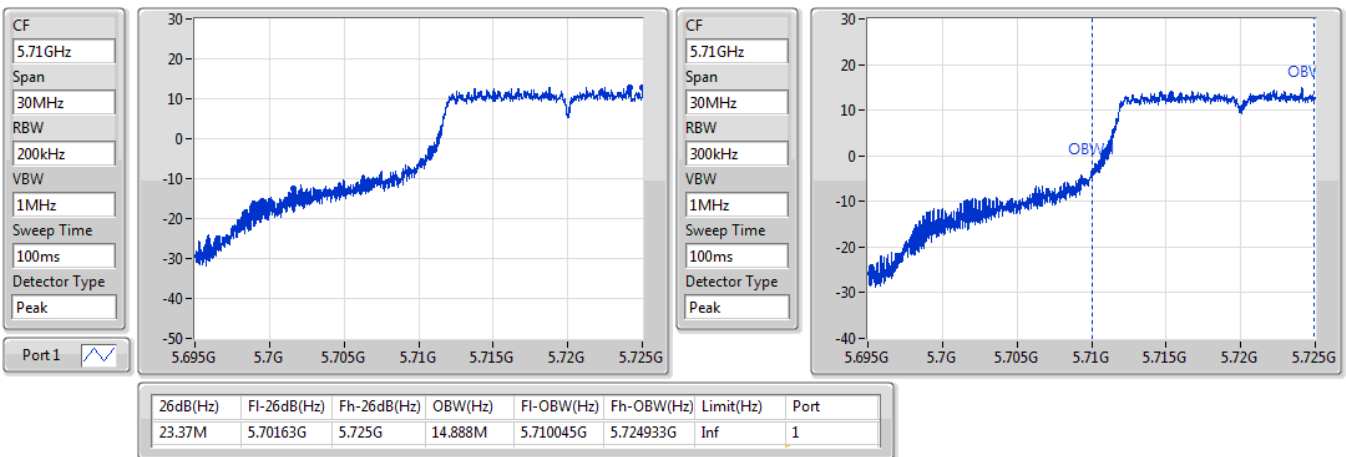


802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5700MHz

26/07/2022

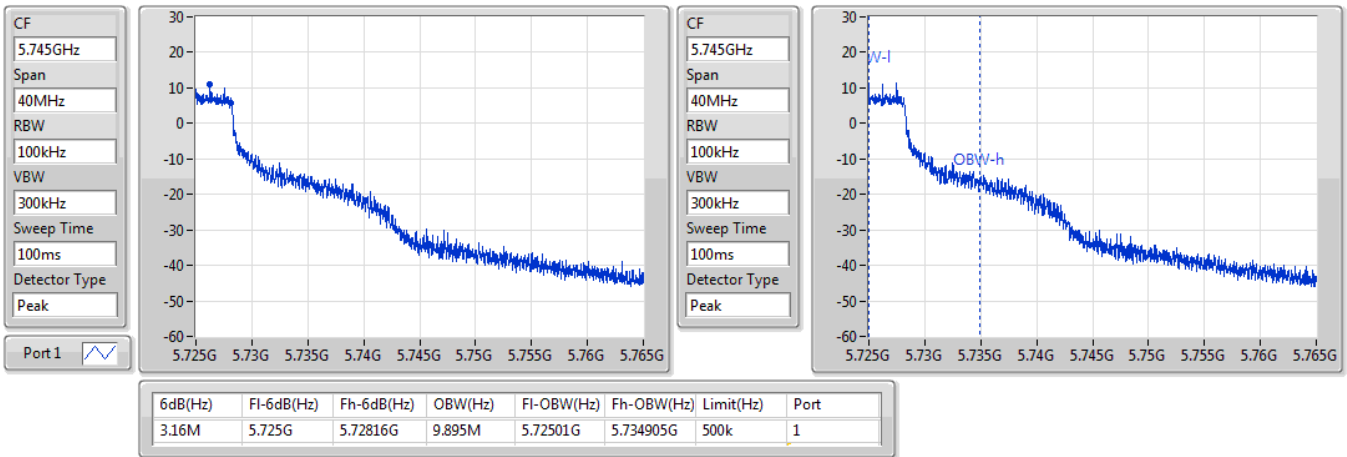

802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5720MHz Straddle 5.47-5.725GHz

26/07/2022

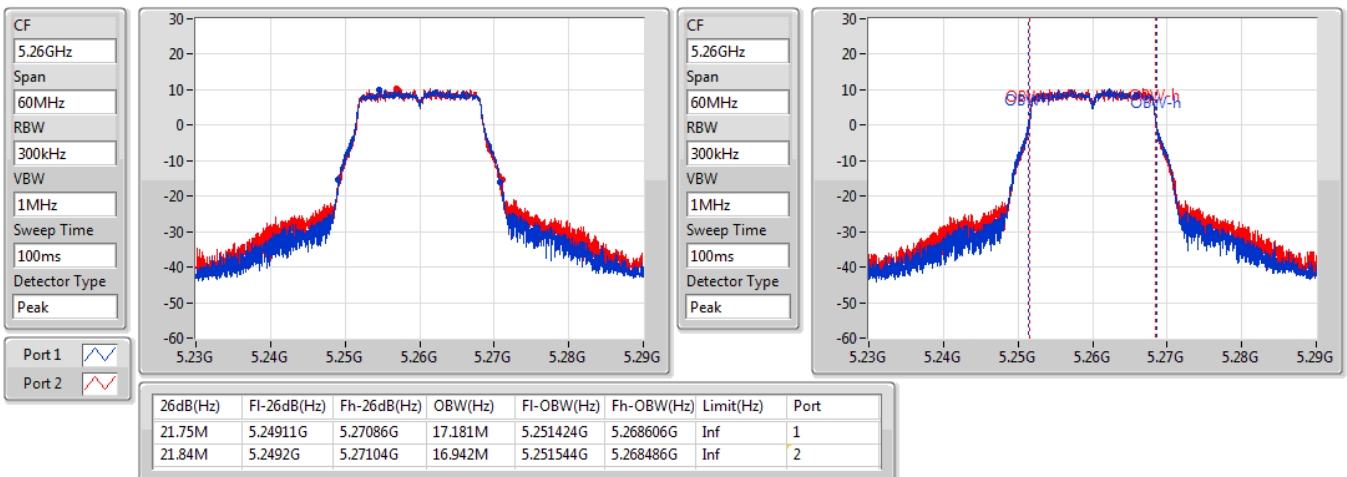


802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5720MHz Straddle 5.725-5.85GHz

26/07/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

26/07/2022

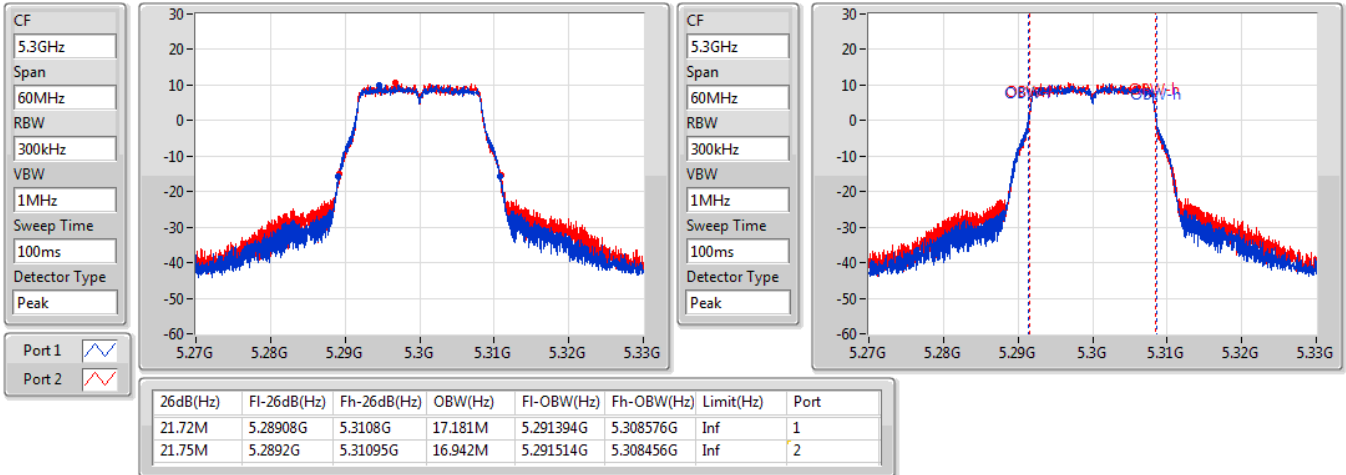


802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

26/07/2022

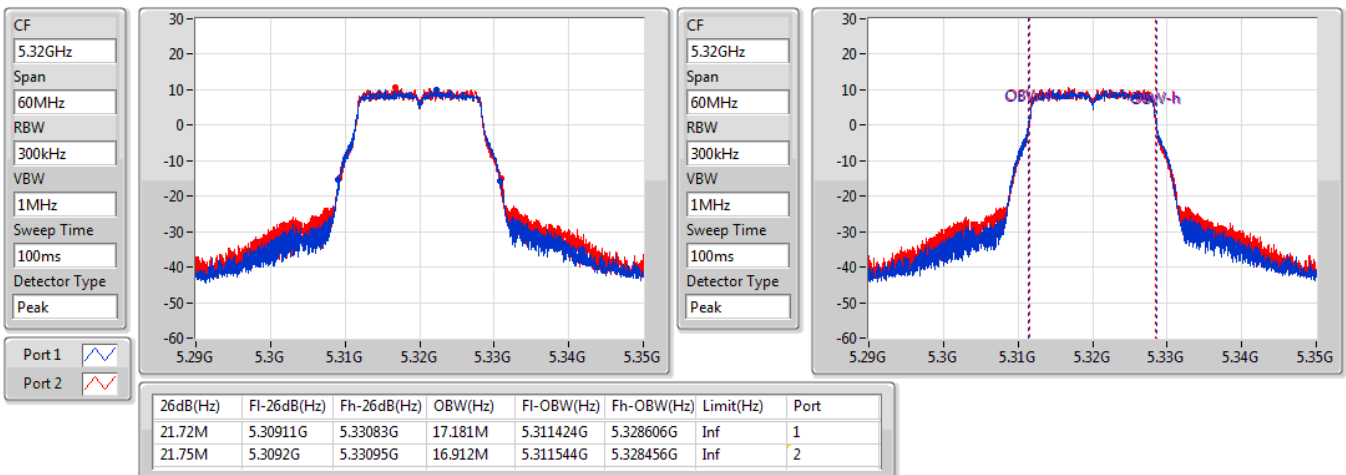


802.11a_Nss1,(6Mbps)_2TX

EBW

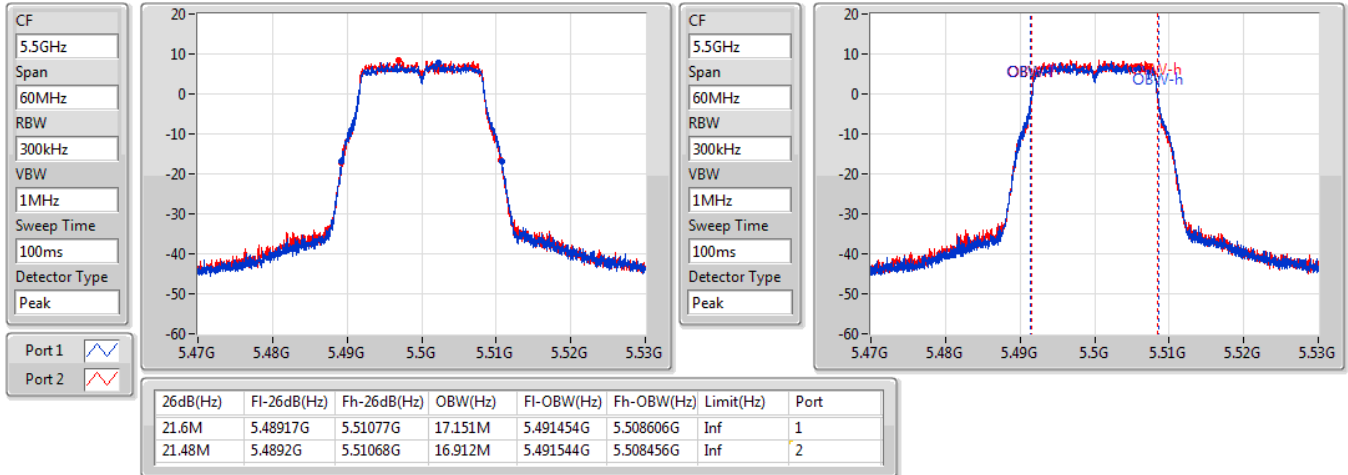
5320MHz

26/07/2022

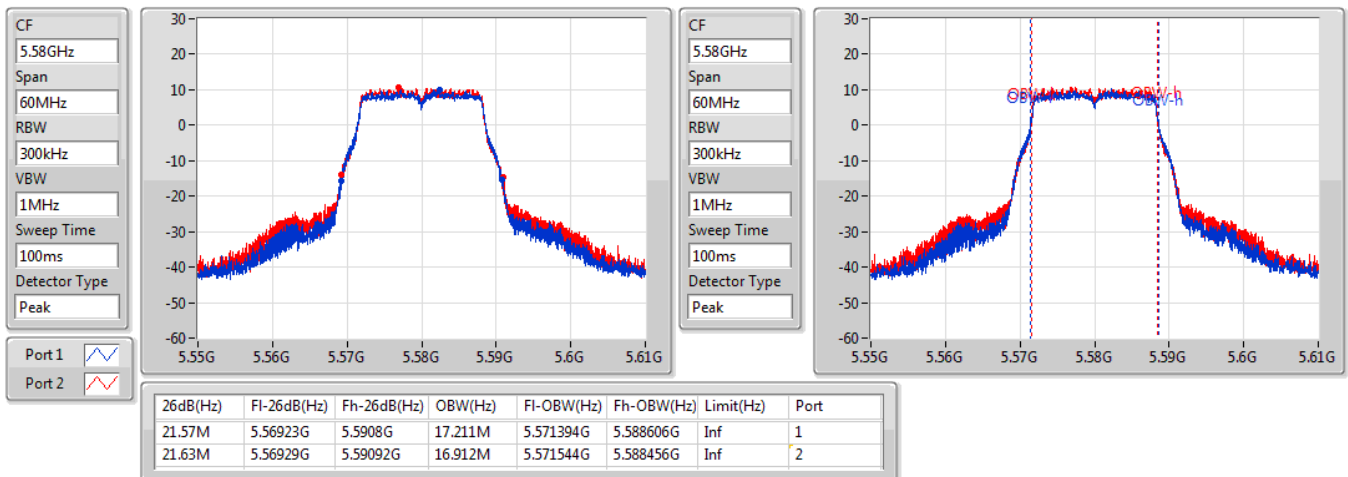


802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

26/07/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

26/07/2022

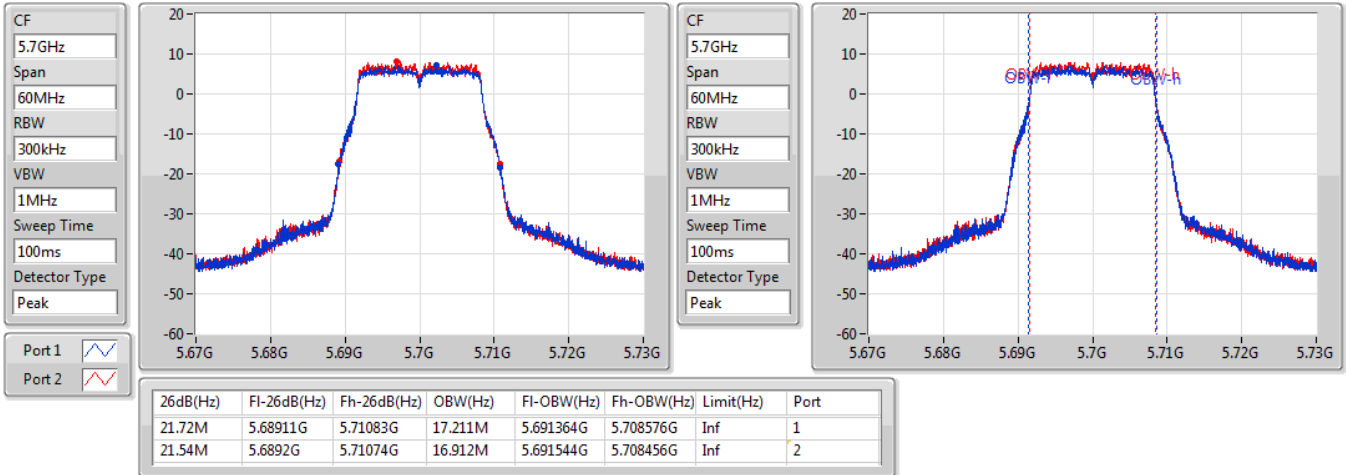


802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

26/07/2022

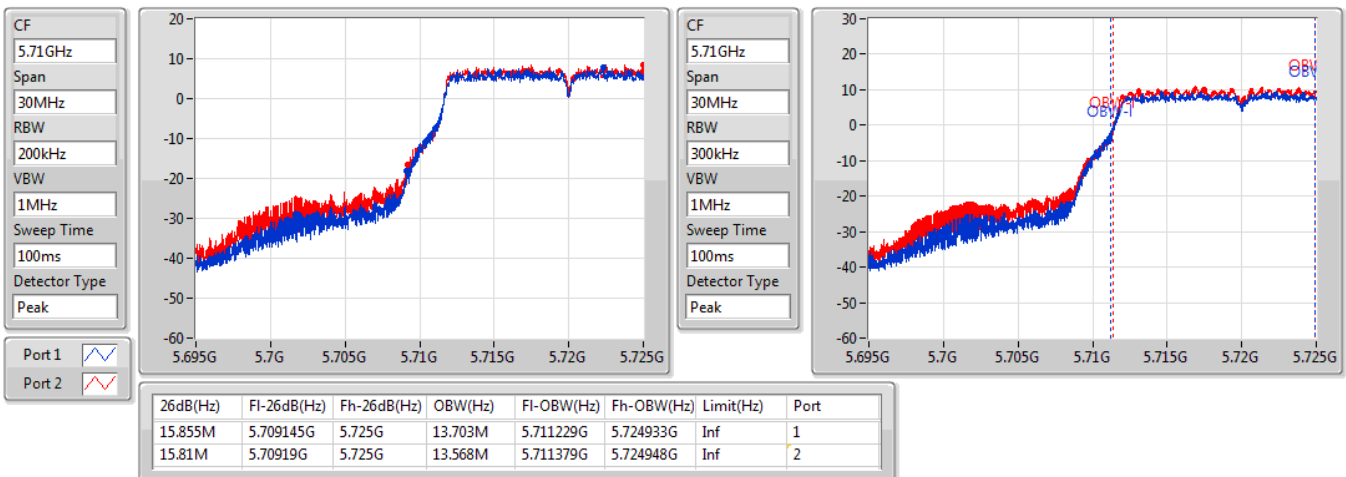


802.11a_Nss1,(6Mbps)_2TX

EBW

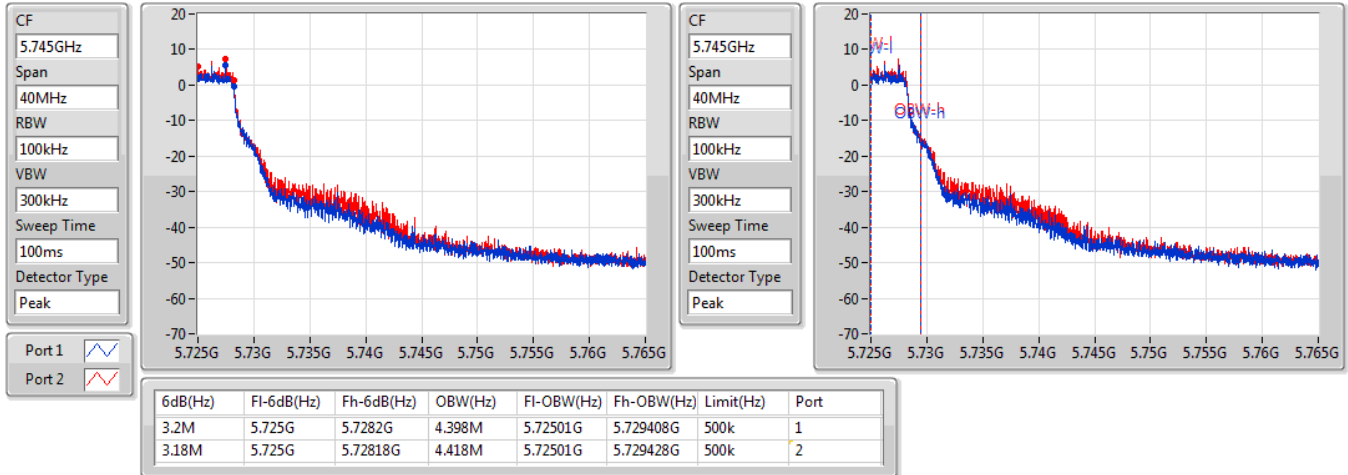
5720MHz Straddle 5.47-5.725GHz

27/07/2022

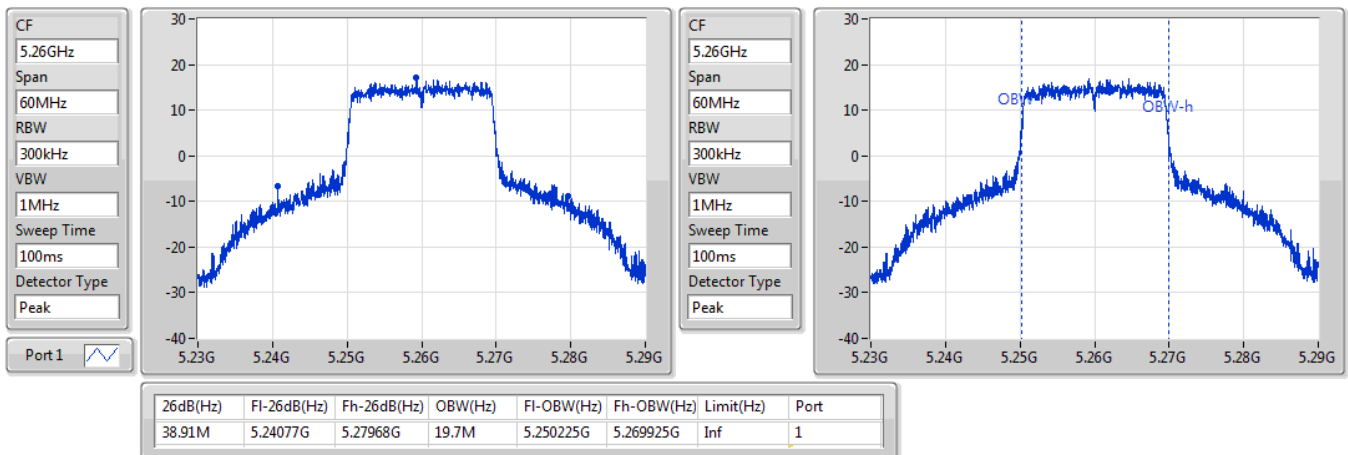


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

27/07/2022

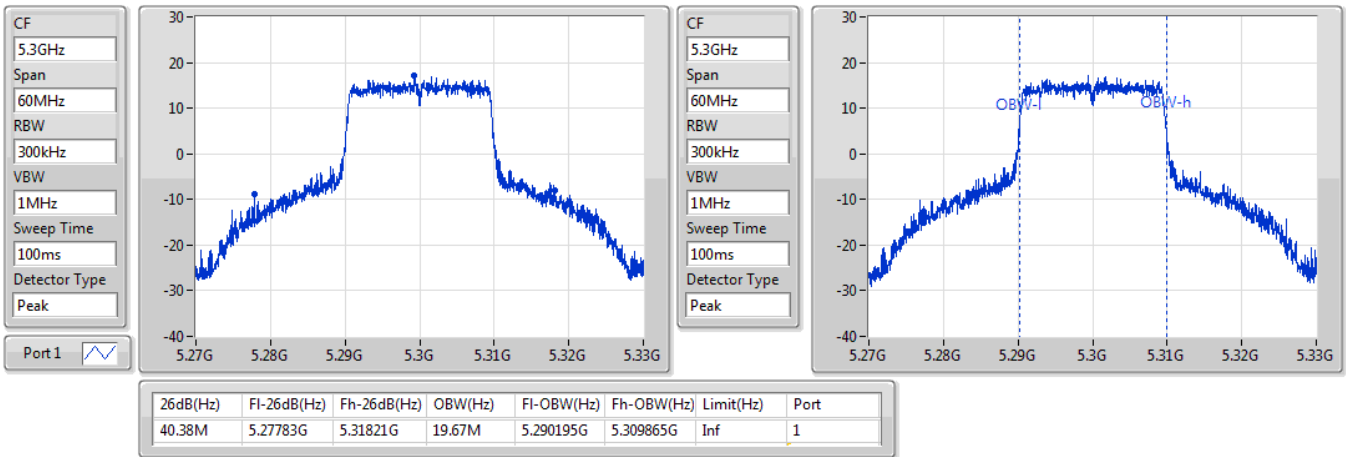

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5260MHz

27/07/2022

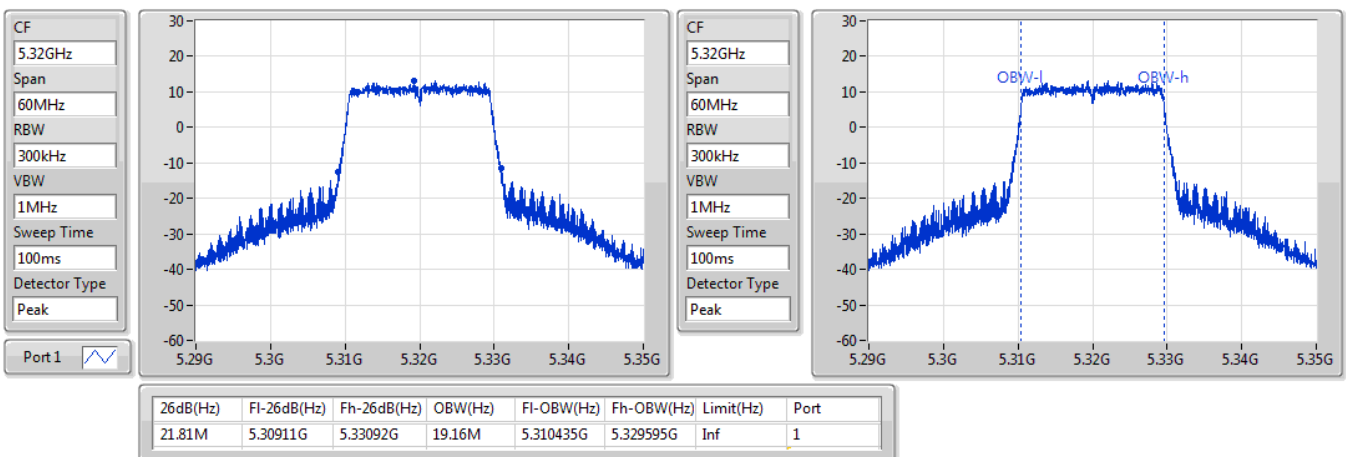


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5300MHz

27/07/2022

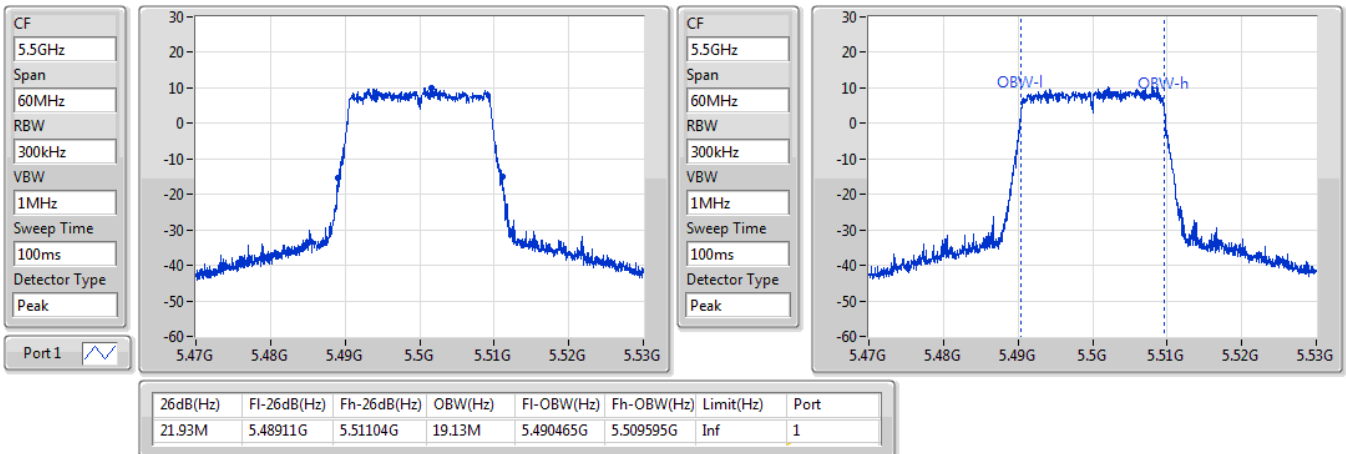

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5320MHz

27/07/2022

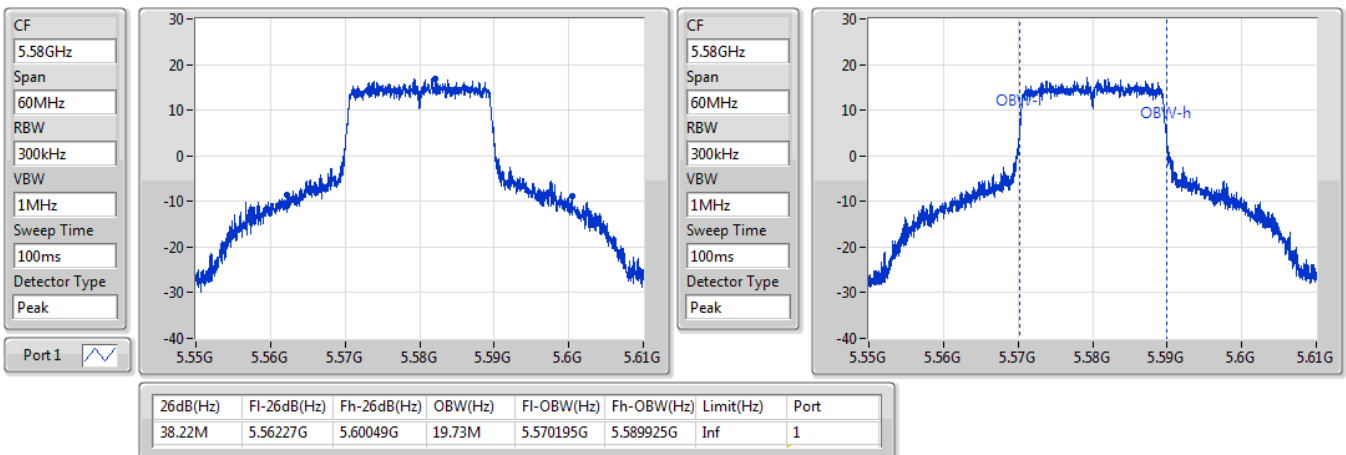


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5500MHz

27/07/2022

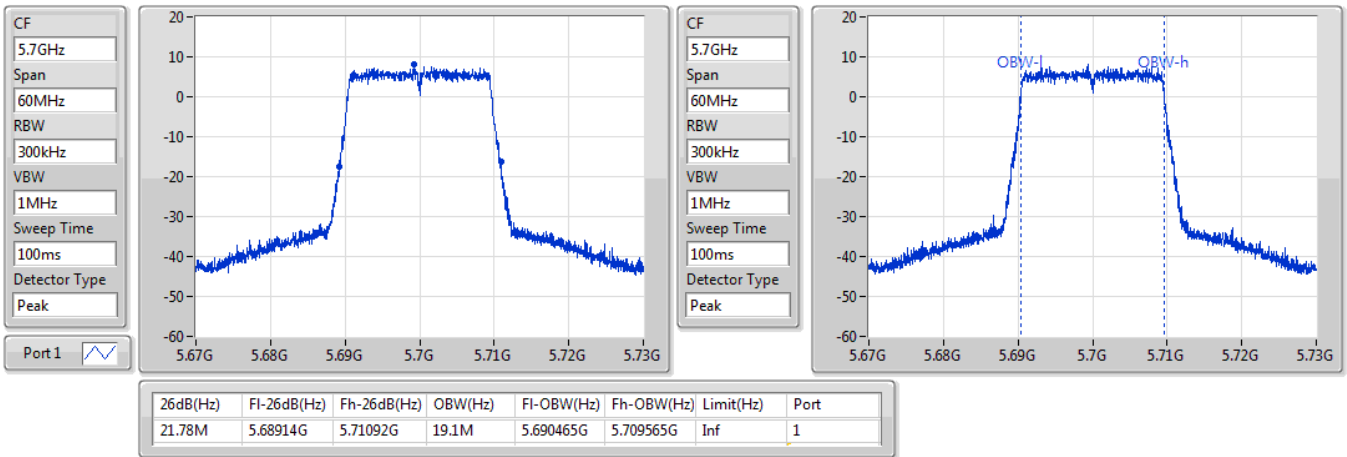

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5580MHz

27/07/2022

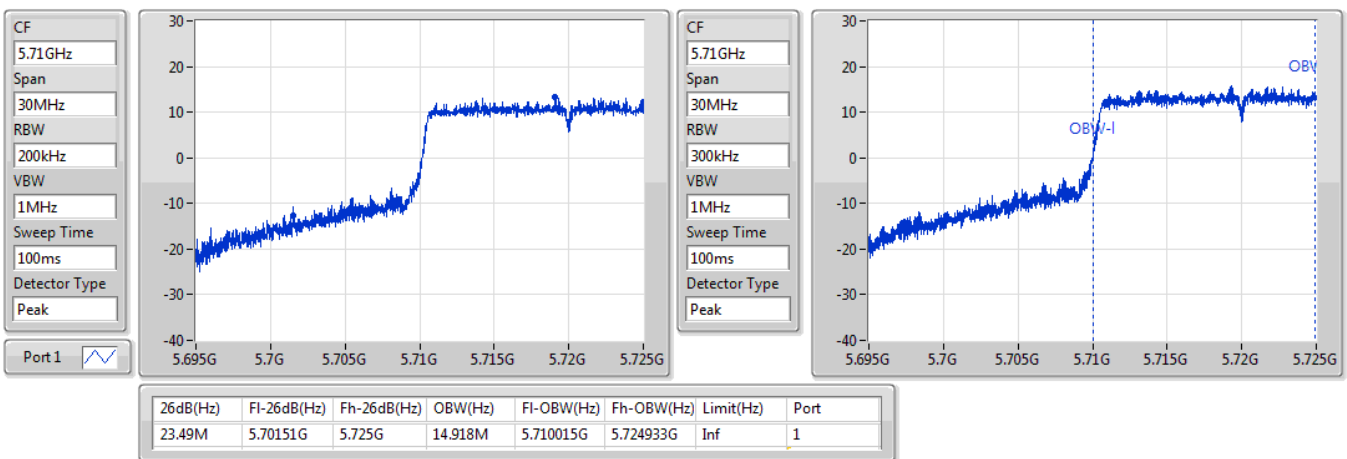


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5700MHz

27/07/2022


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5720MHz Straddle 5.67-5.725GHz

27/07/2022

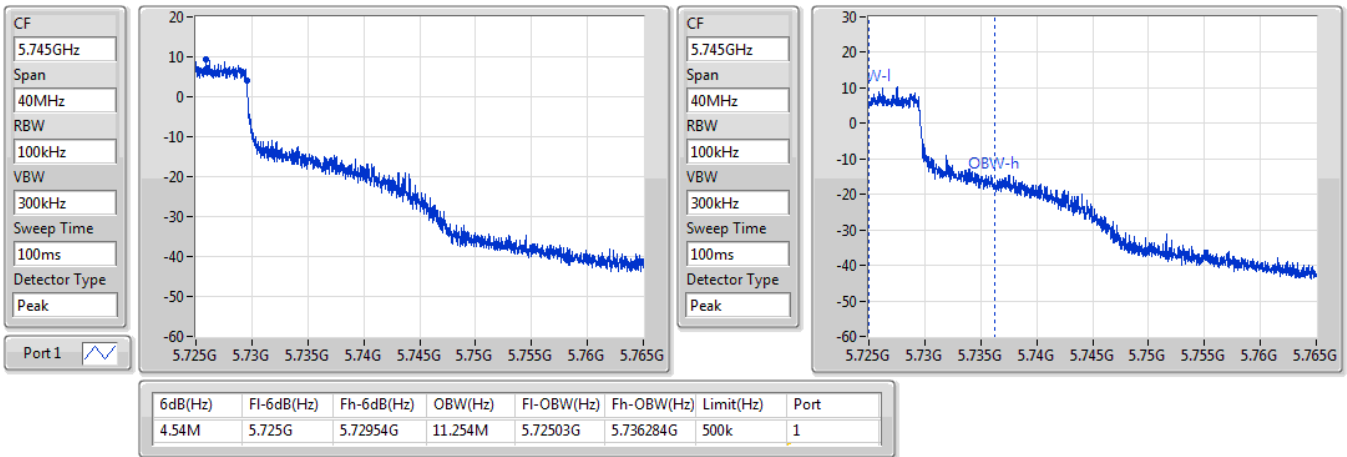


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

EBW

5720MHz Straddle 5.725-5.85GHz

27/07/2022

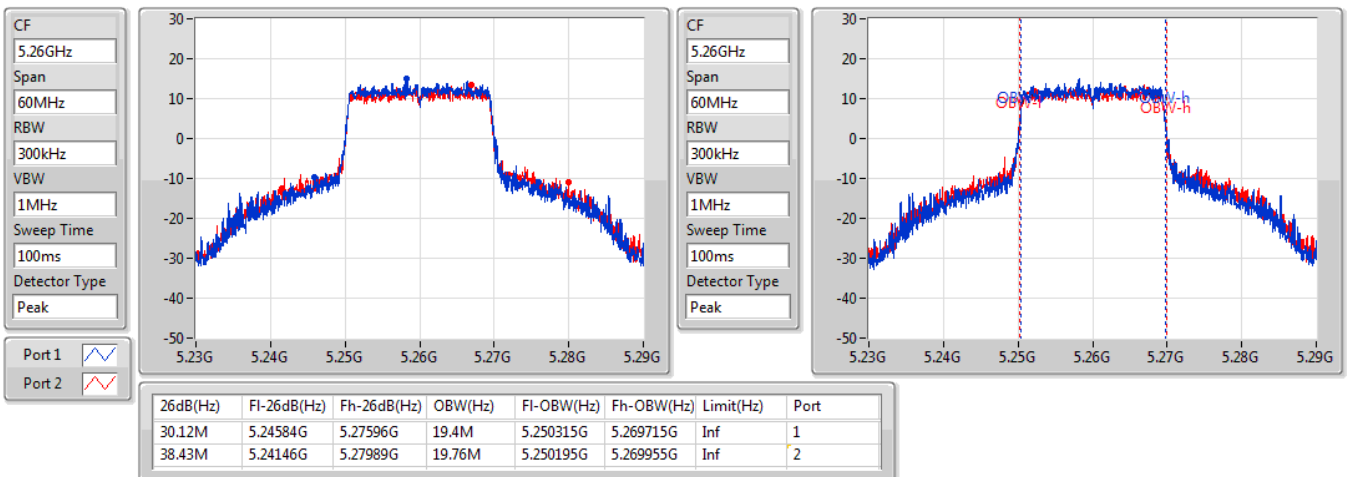


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5260MHz

27/07/2022

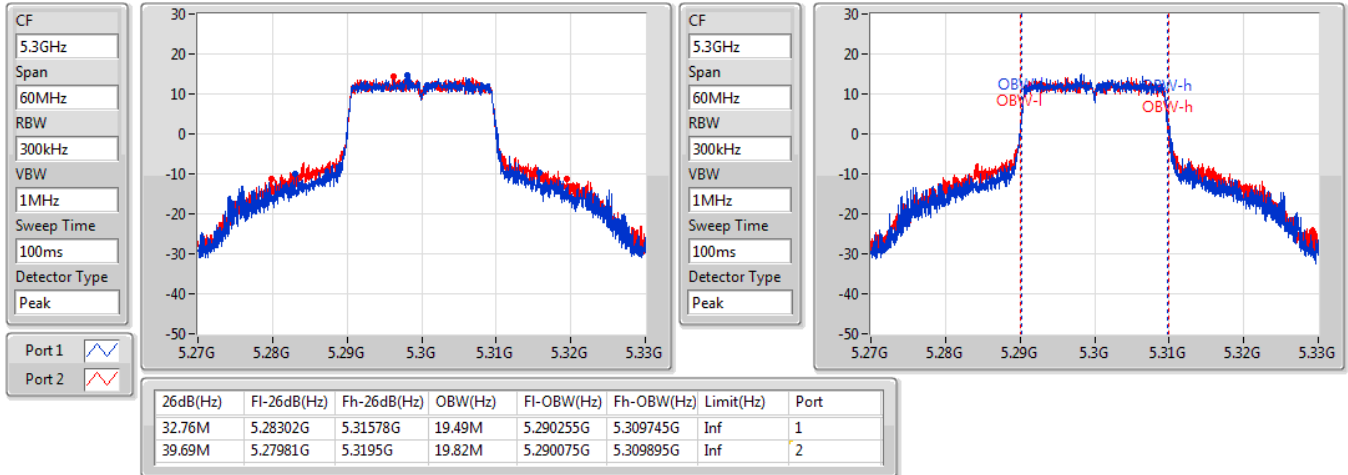


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5300MHz

27/07/2022

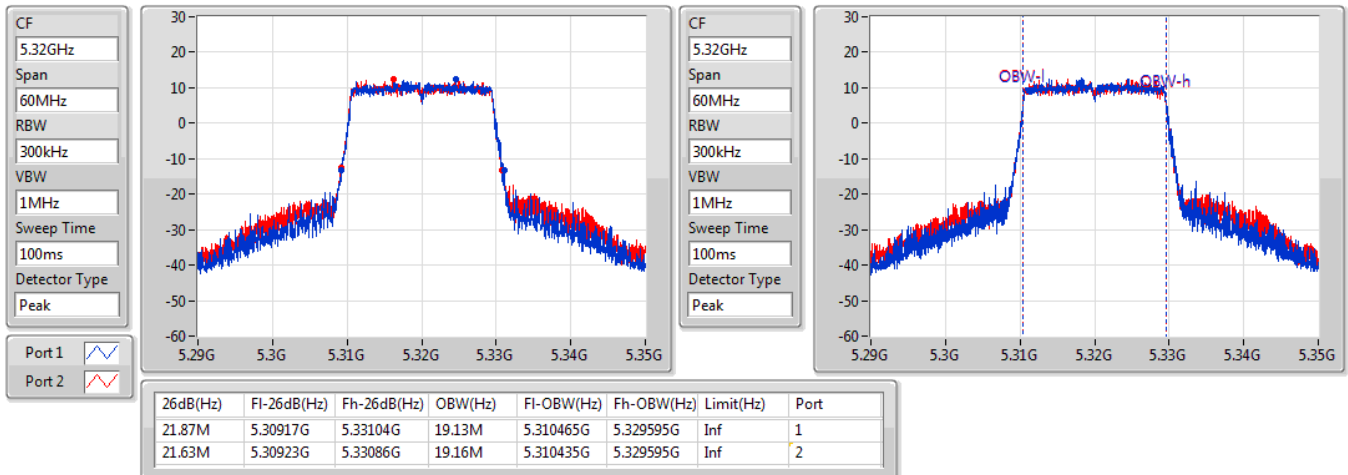


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5320MHz

27/07/2022

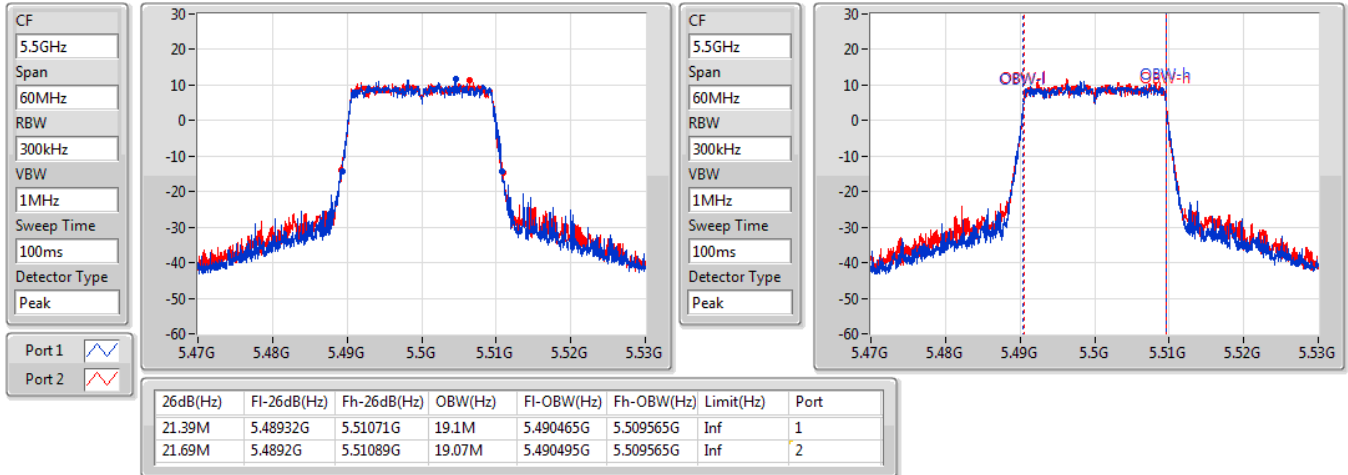


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5500MHz

27/07/2022

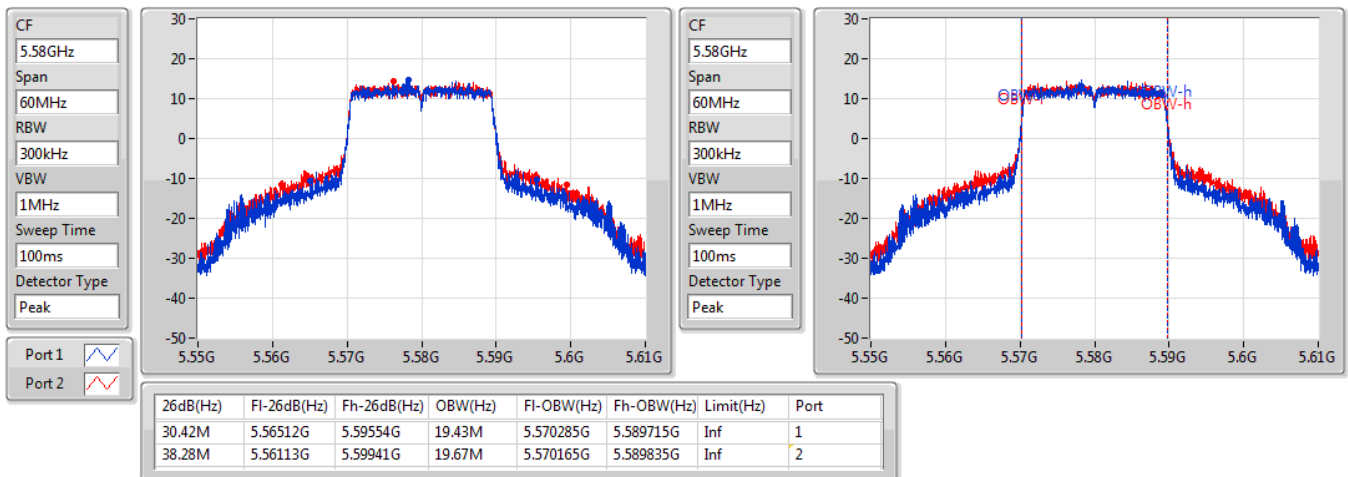


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

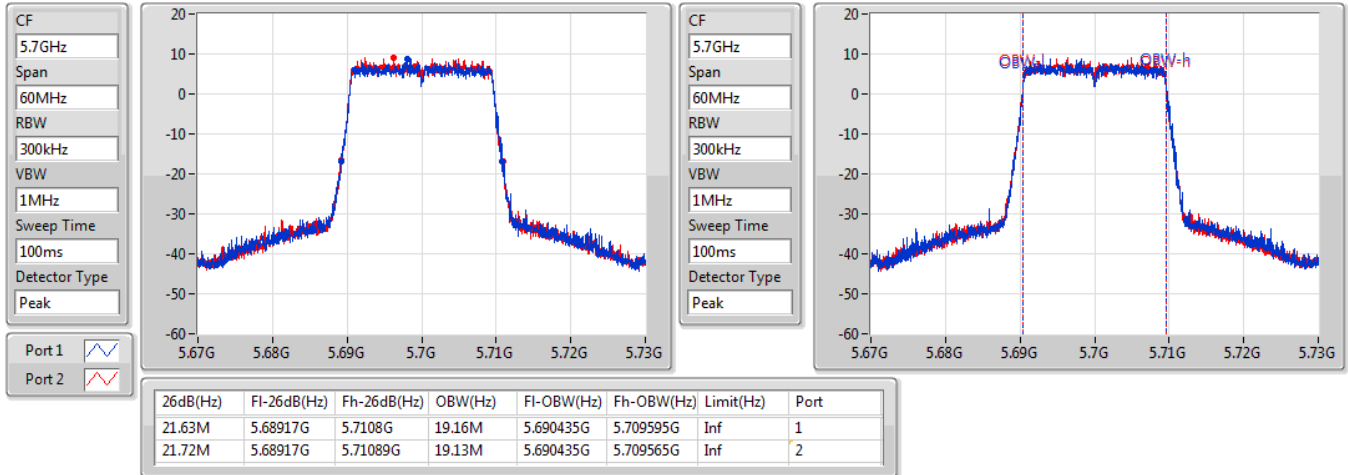
5580MHz

27/07/2022

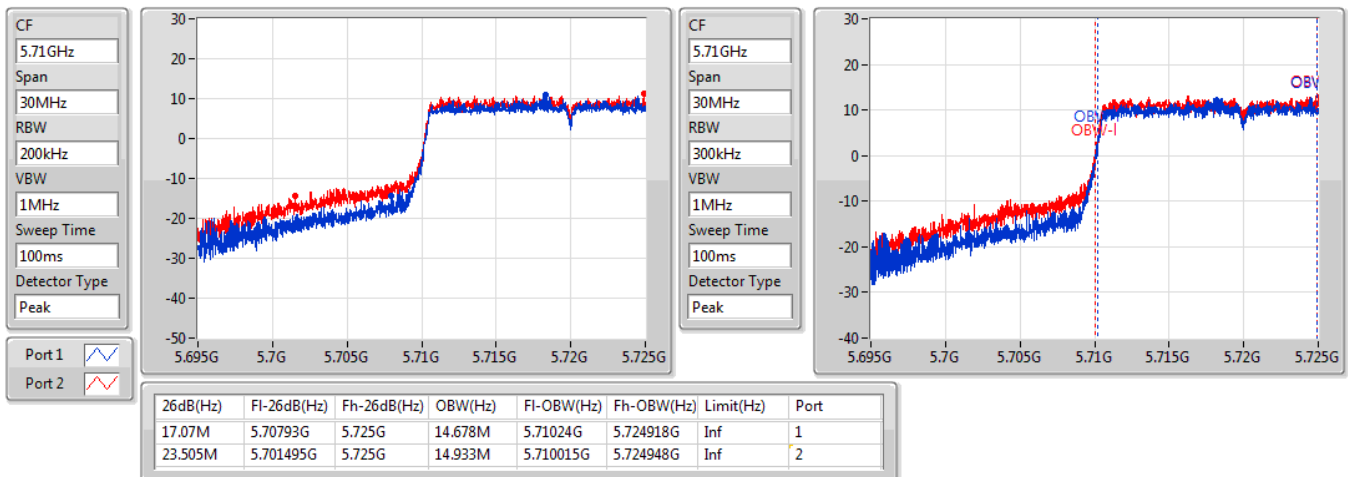


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5700MHz

27/07/2022


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

27/07/2022

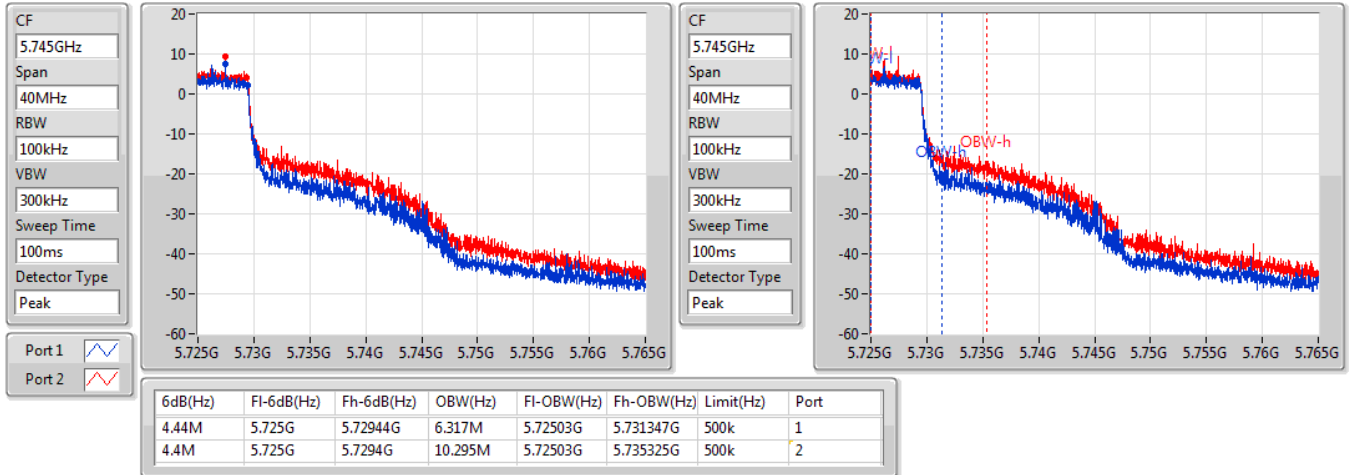


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

27/07/2022

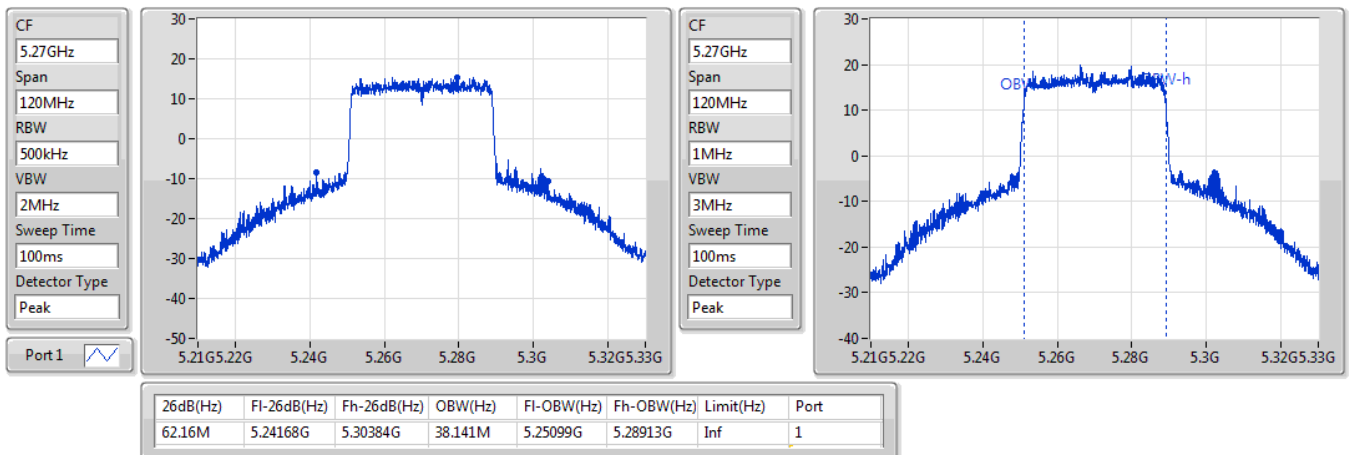


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)

EBW

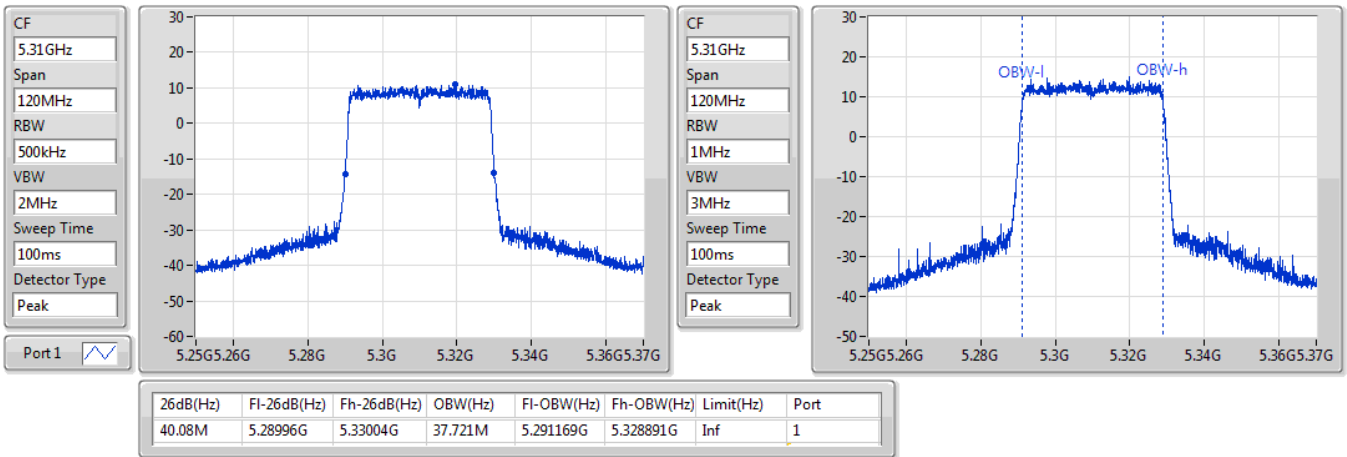
5270MHz

27/07/2022

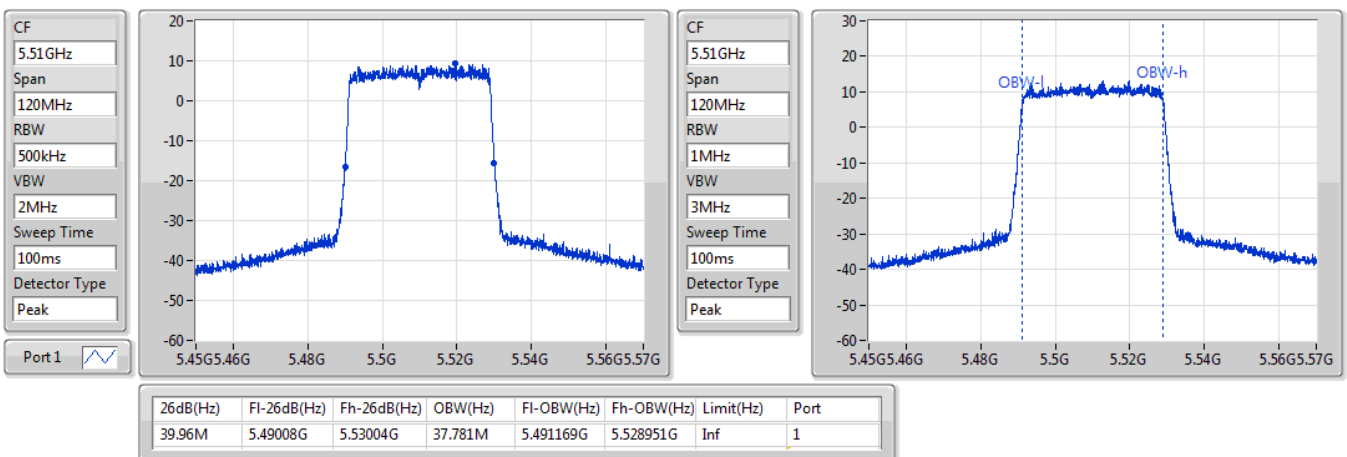


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5310MHz

27/07/2022

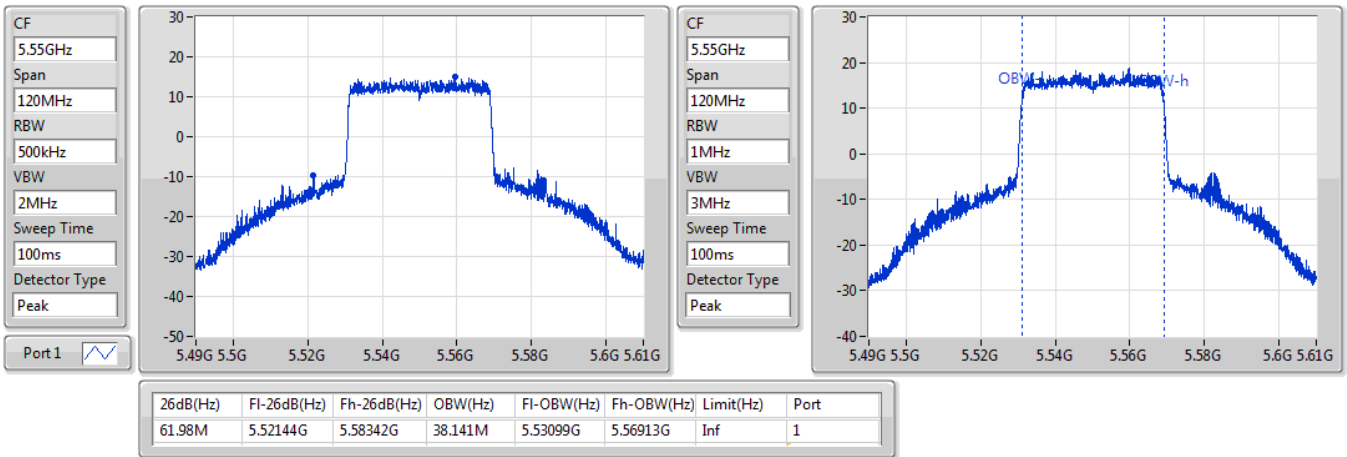

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5510MHz

27/07/2022

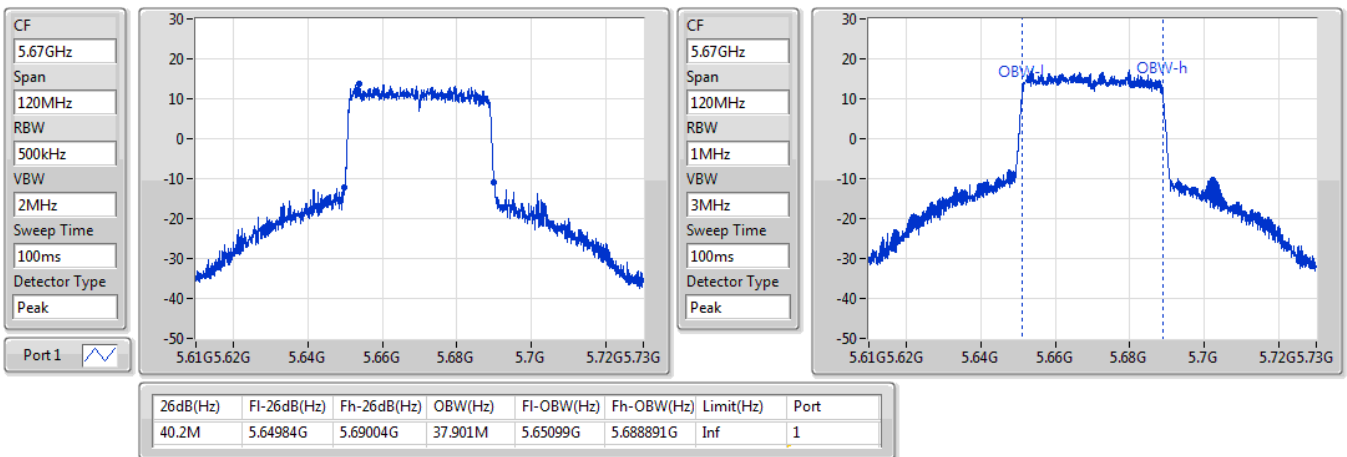


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5550MHz

27/07/2022

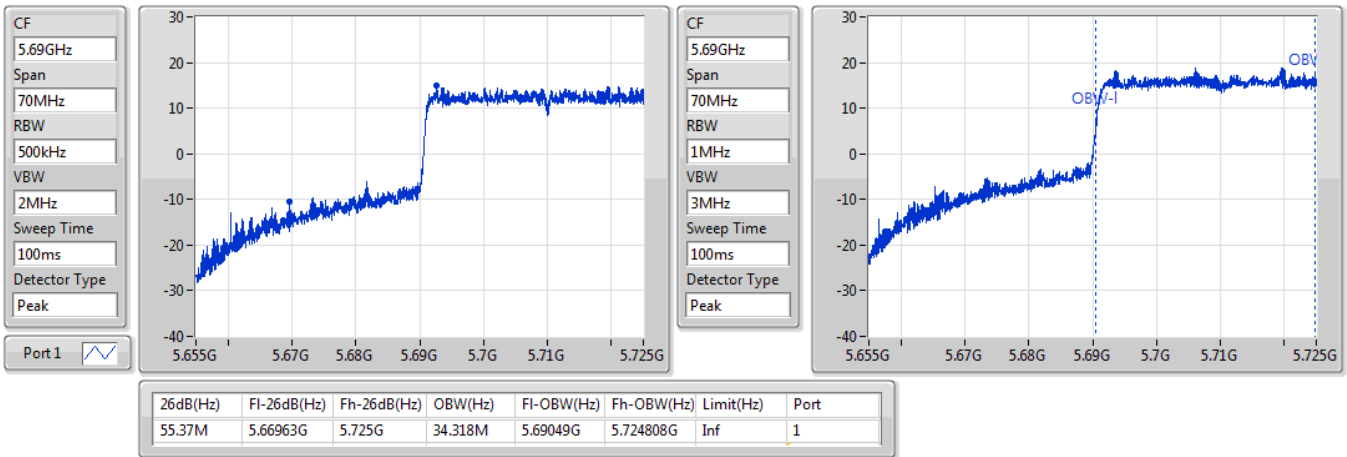

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5670MHz

27/07/2022

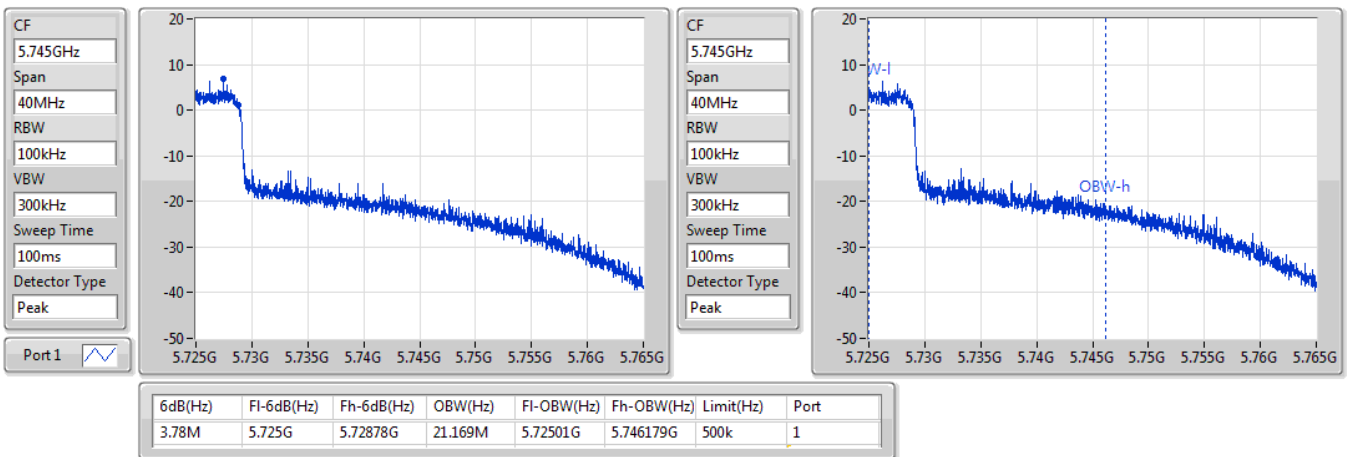


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5710MHz Straddle 5.67-5.725GHz

27/07/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5710MHz Straddle 5.725-5.85GHz

27/07/2022

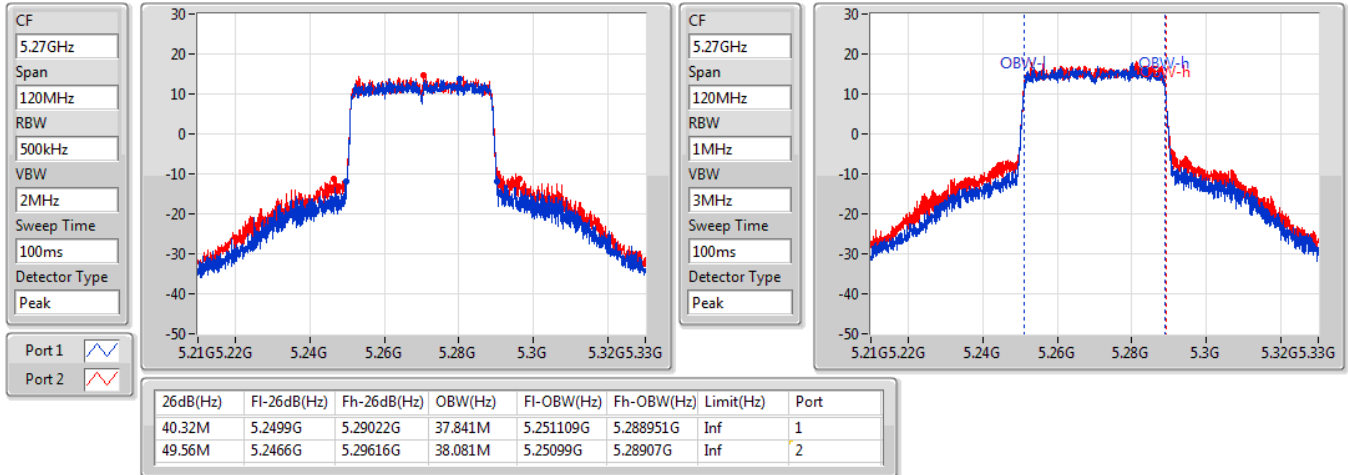


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5270MHz

27/07/2022

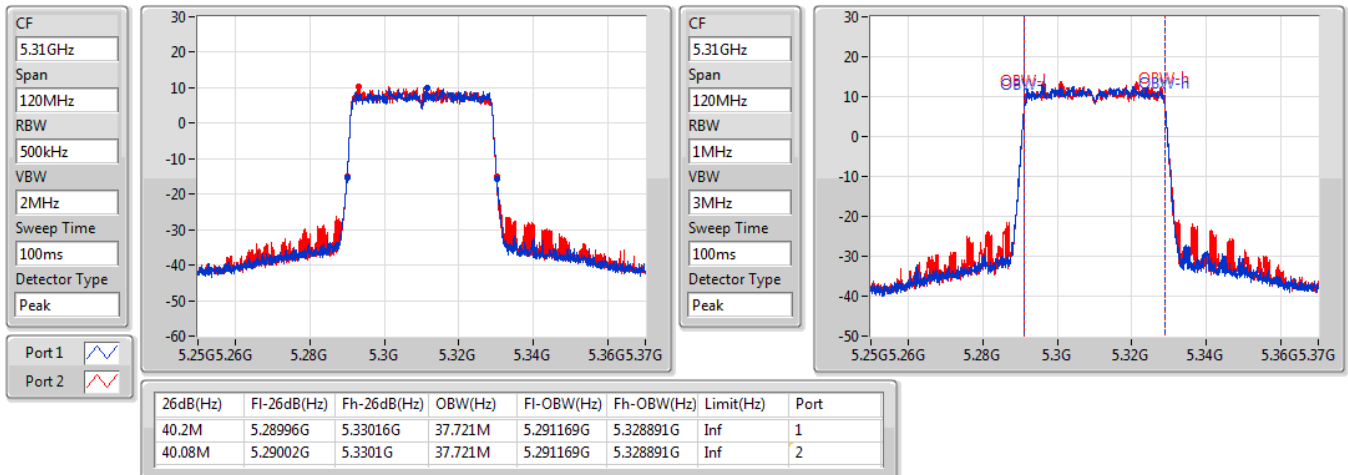


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5310MHz

27/07/2022

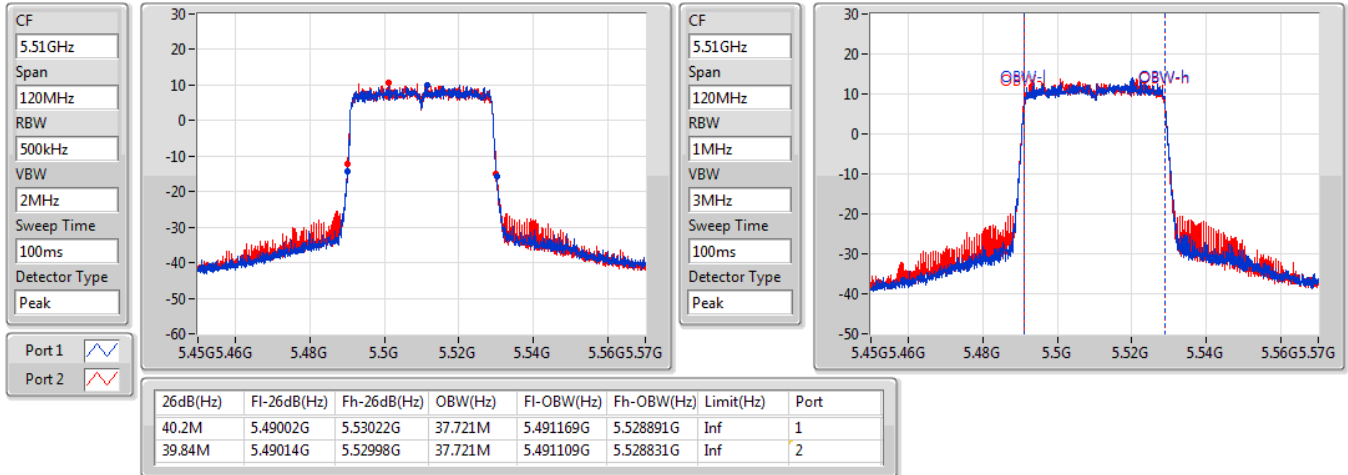


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5510MHz

27/07/2022

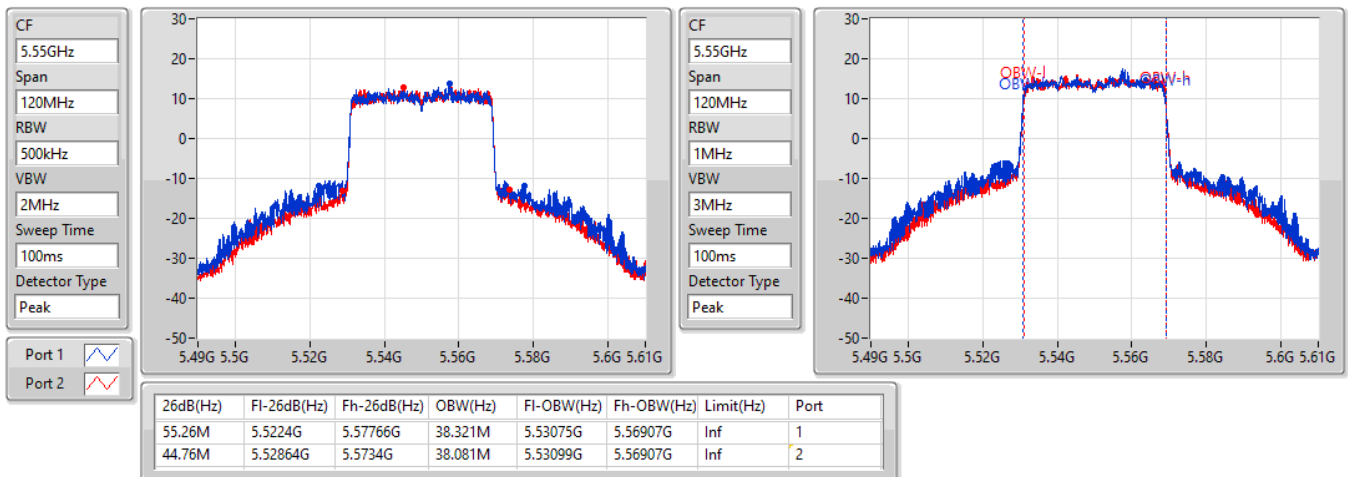


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5550MHz

13/08/2022

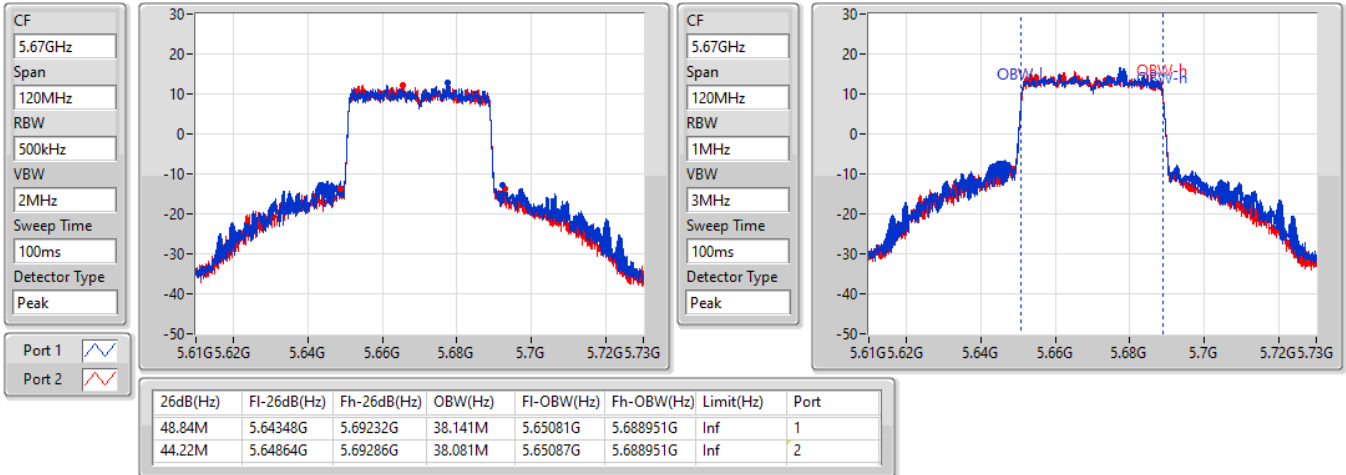


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5670MHz

13/08/2022

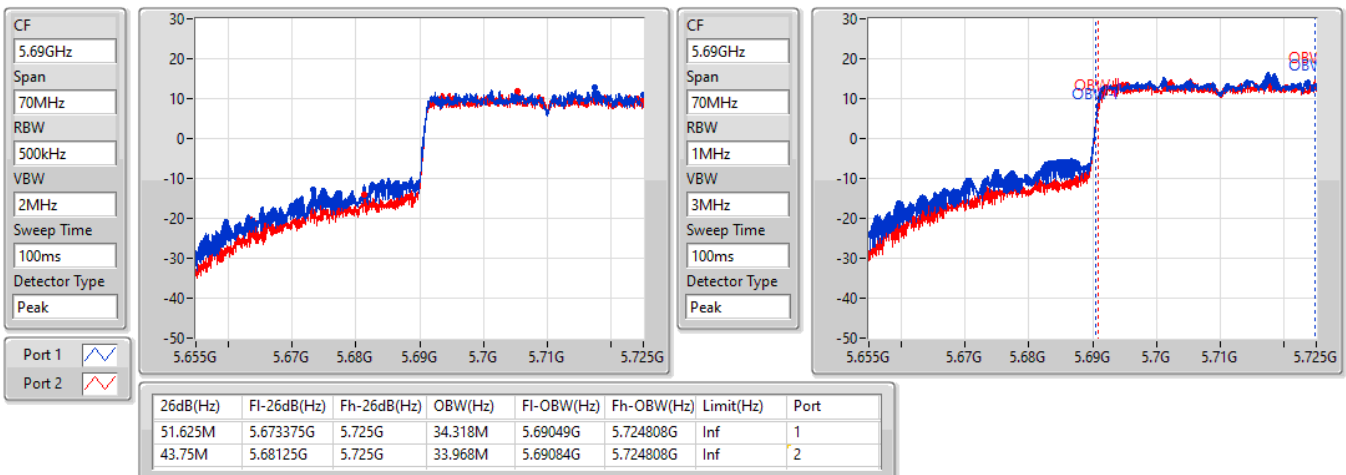


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

13/08/2022

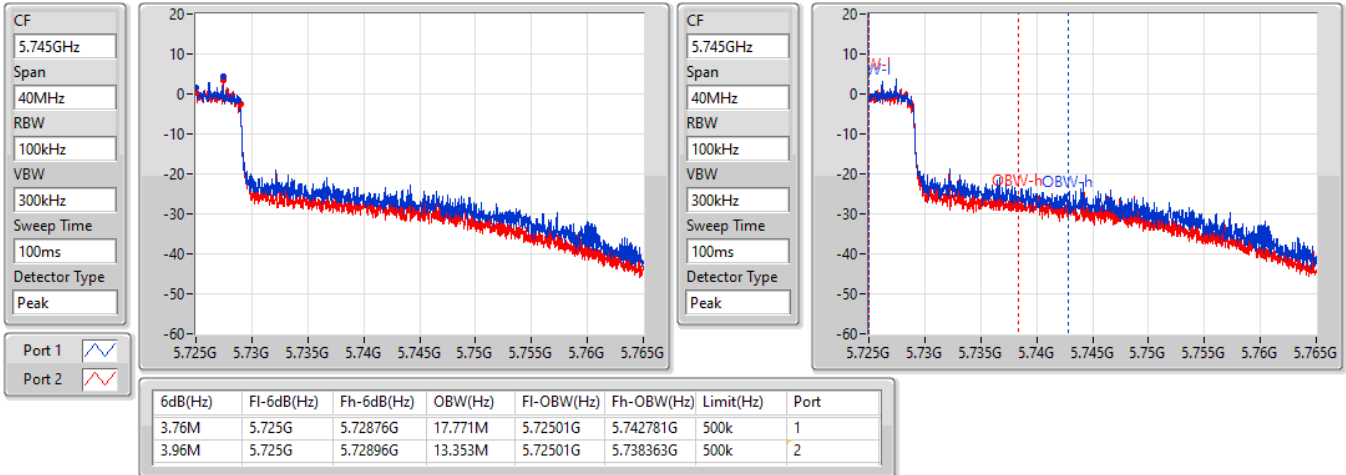


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

13/08/2022

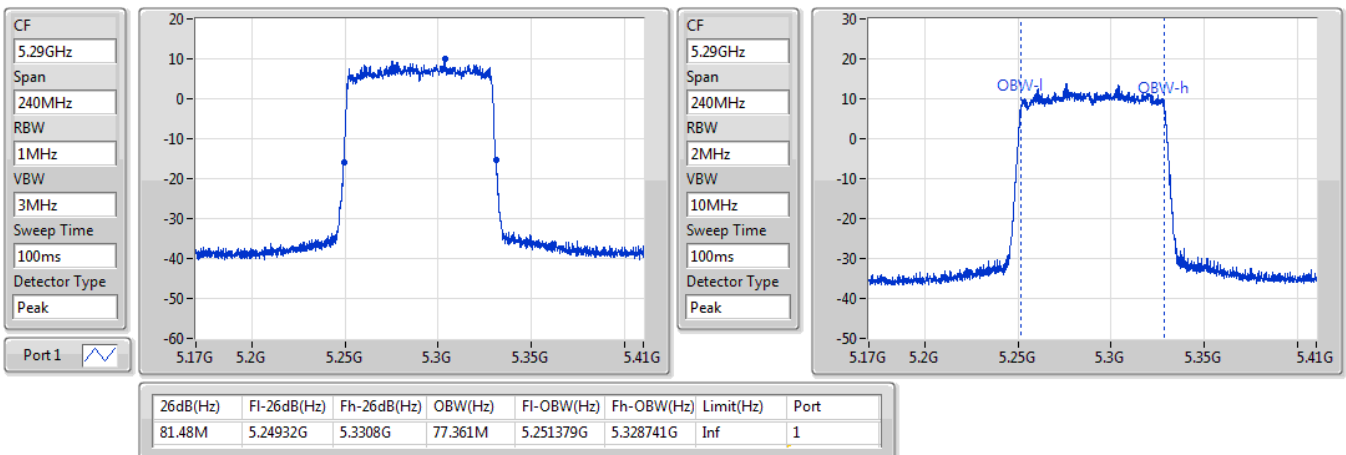


802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)

EBW

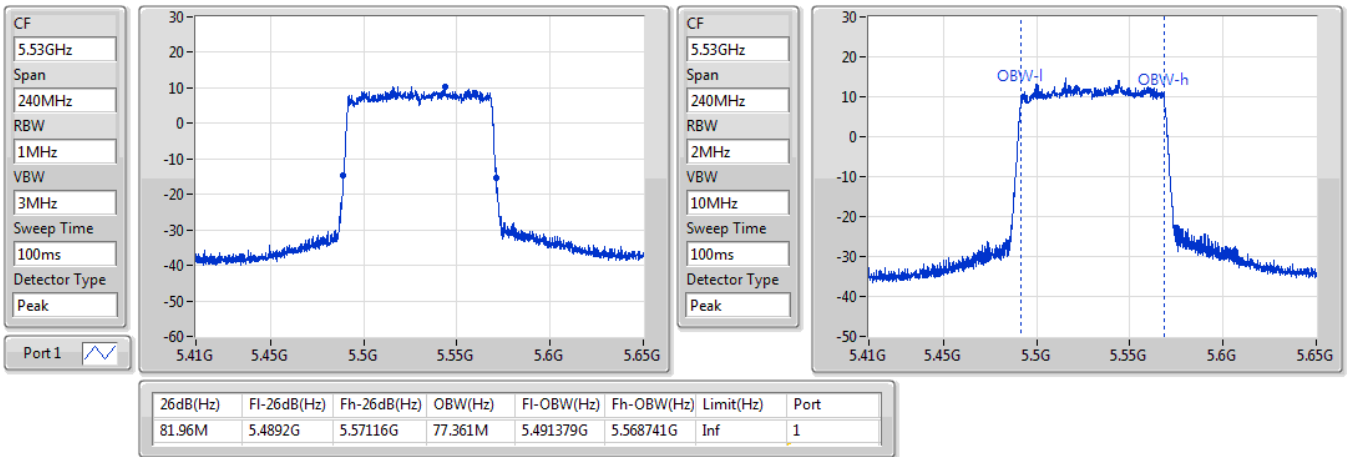
5290MHz

27/07/2022

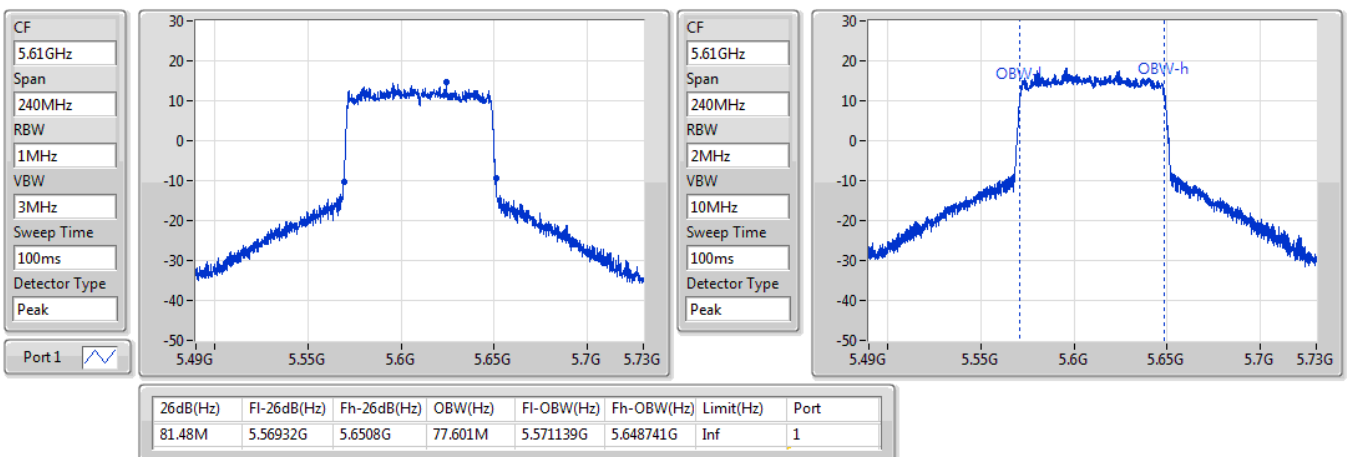


802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)
EBW
5530MHz

27/07/2022

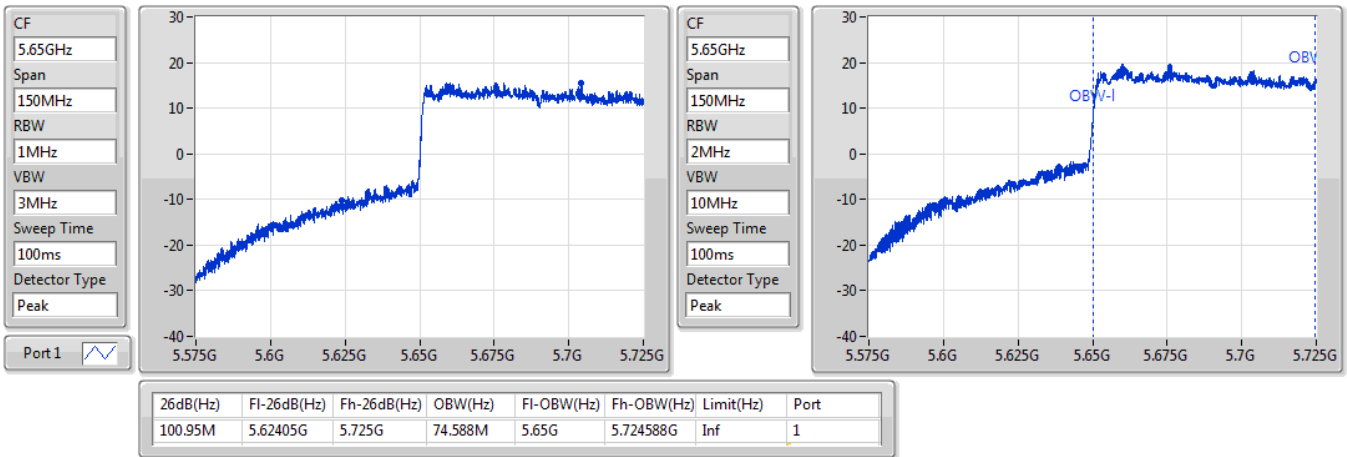

802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)
EBW
5610MHz

27/07/2022

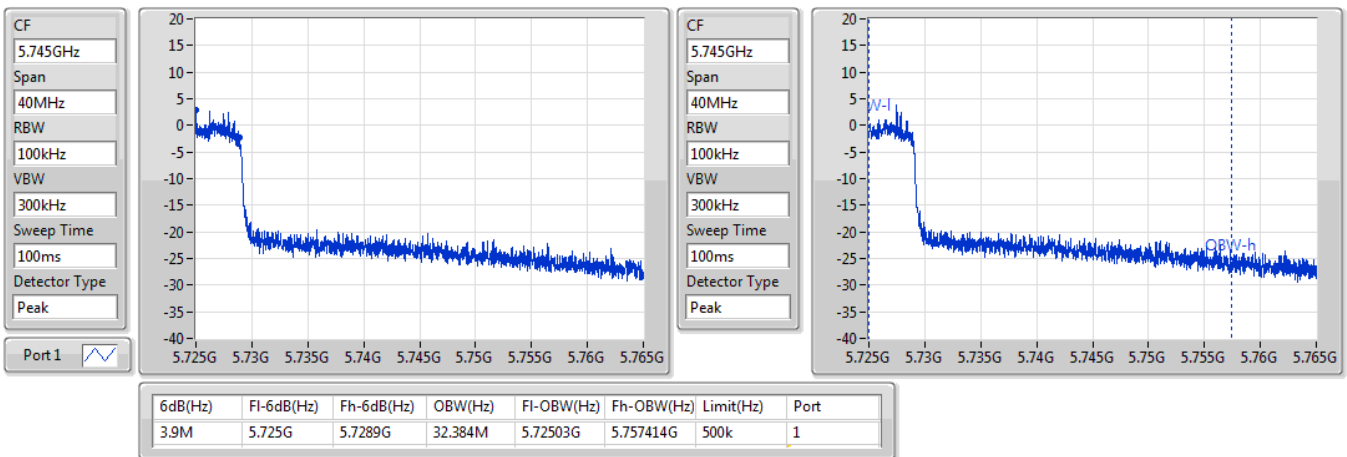


802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)
EBW
5690MHz Straddle 5.47-5.725GHz

27/07/2022

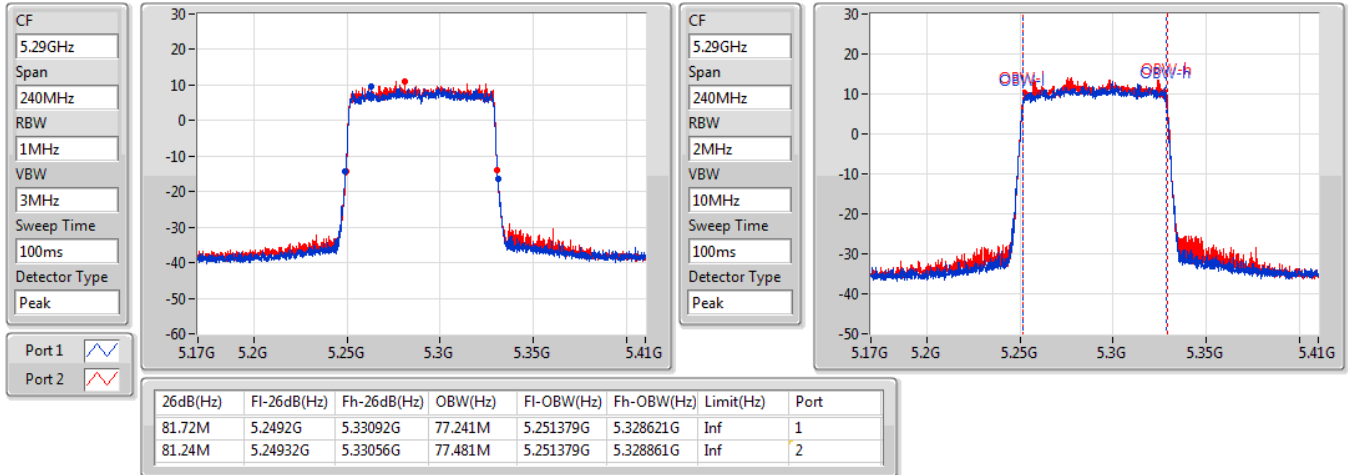

802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)
EBW
5690MHz Straddle 5.725-5.85GHz

27/07/2022

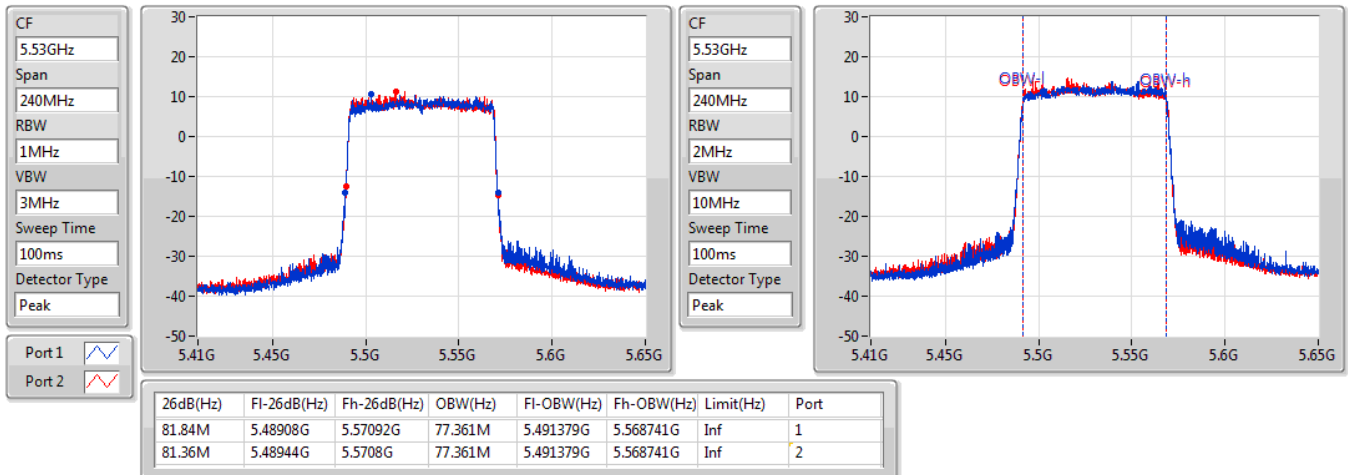


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

27/07/2022

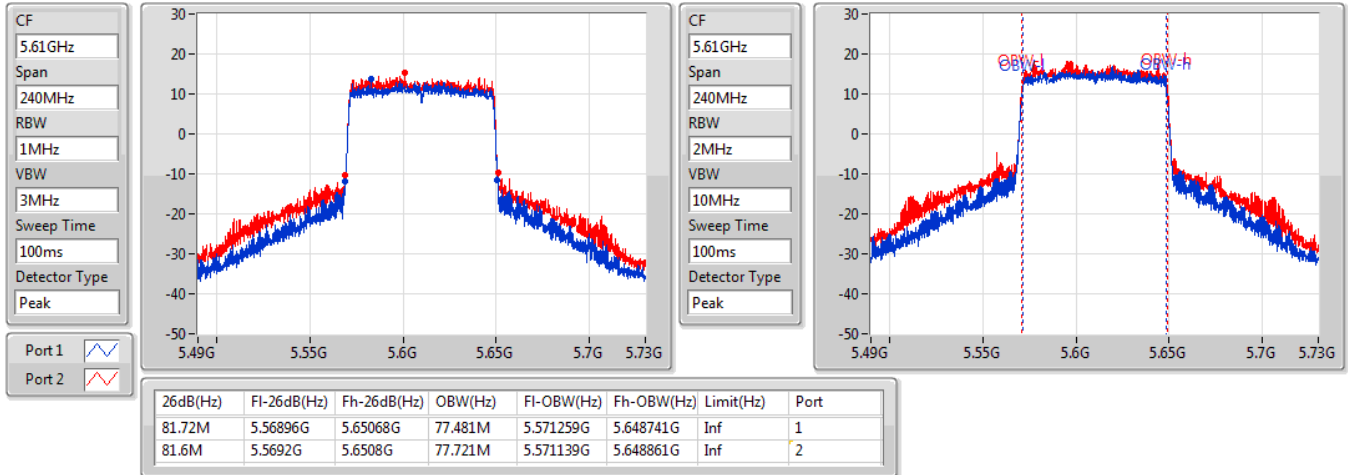

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

27/07/2022

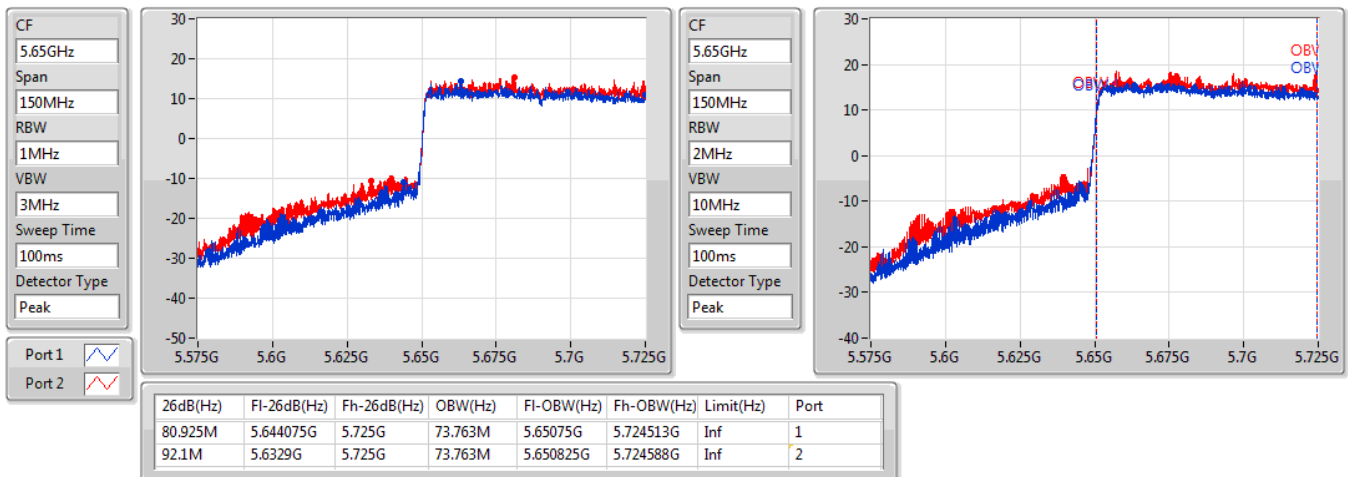


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

27/07/2022

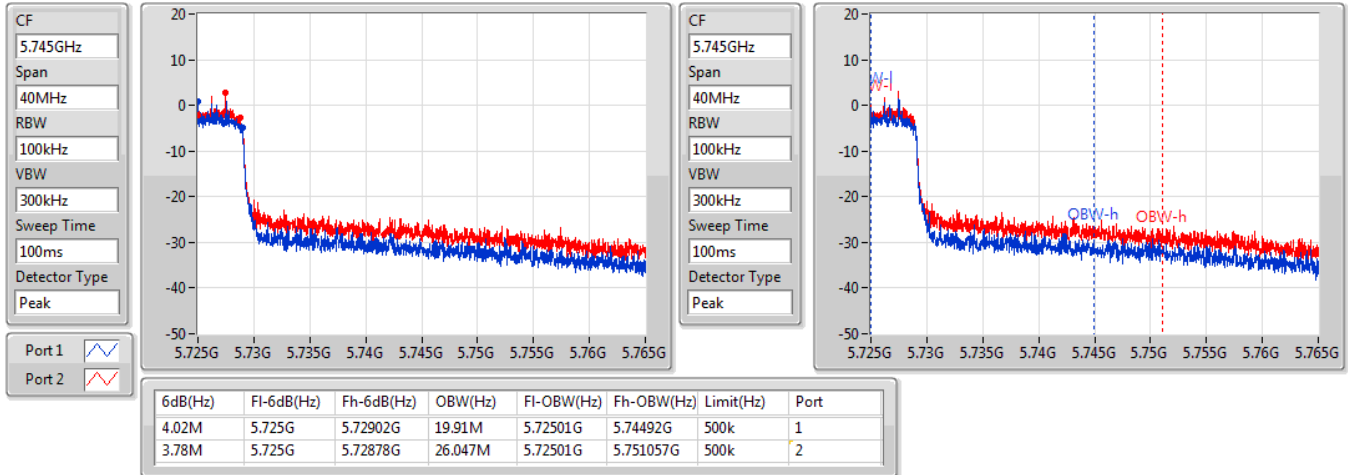

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

27/07/2022

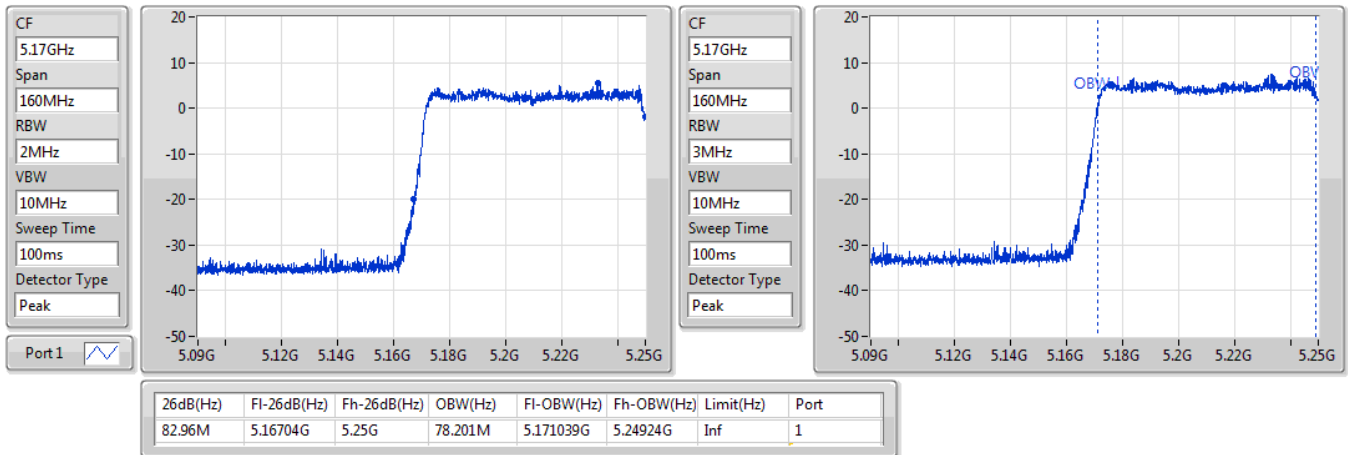


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/07/2022

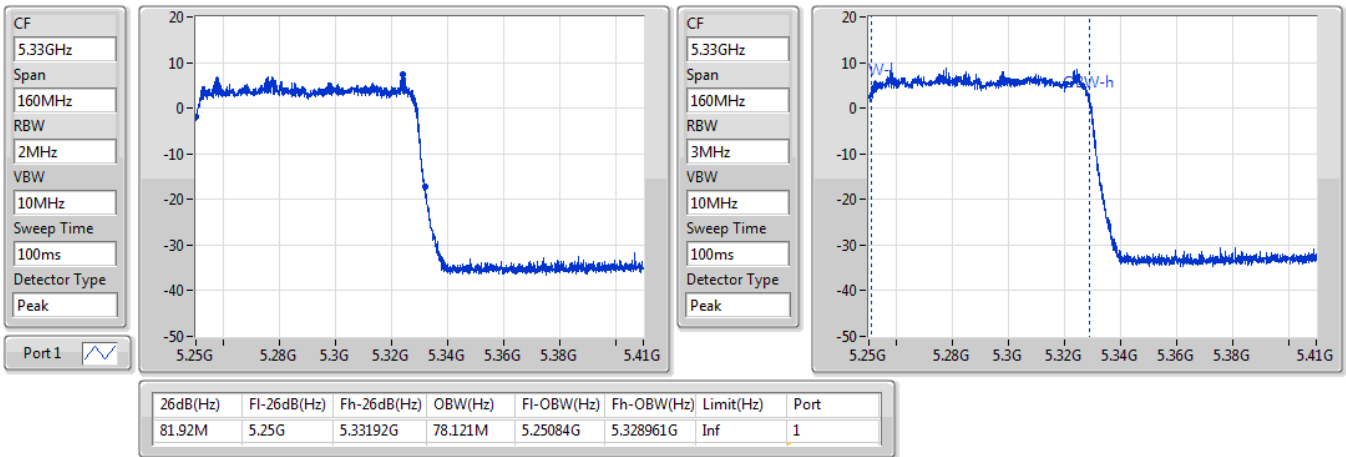

802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)
EBW
5250MHz Straddle 5.15-5.25GHz

27/07/2022

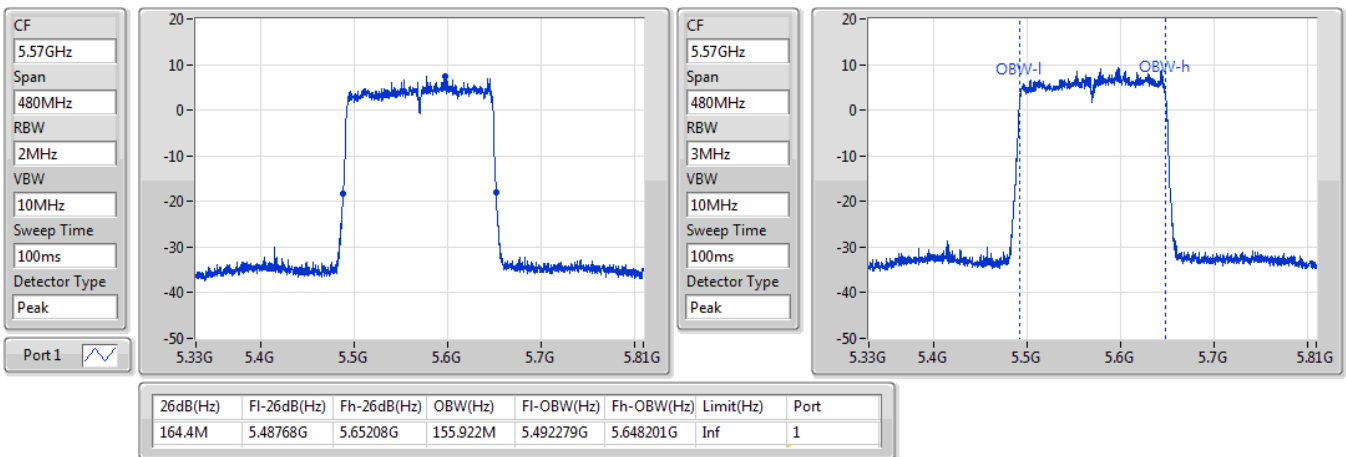


802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)
EBW
5250MHz Straddle 5.25-5.35GHz

27/07/2022

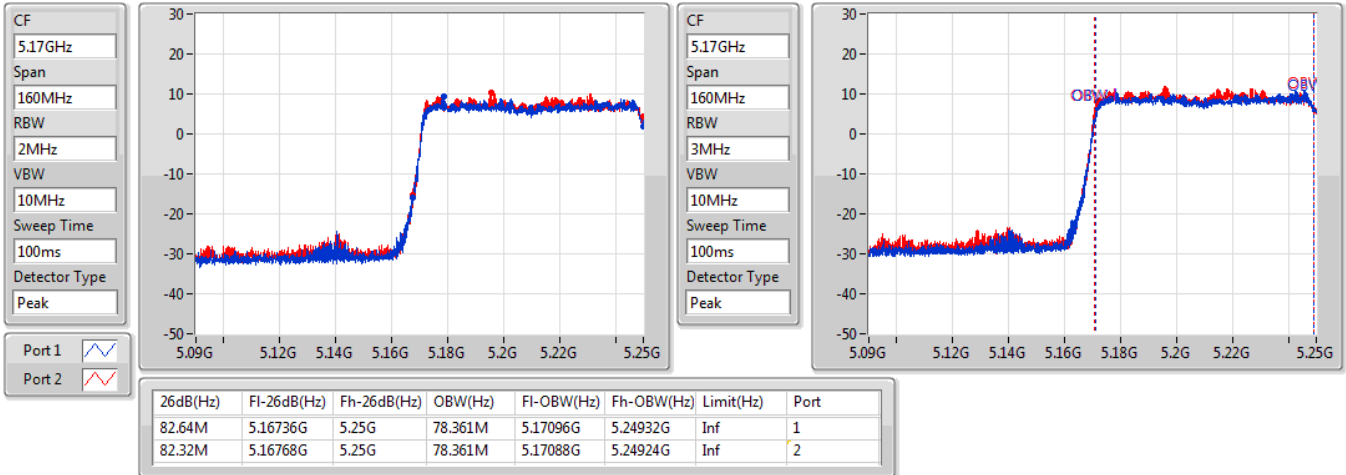

802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)
EBW
5570MHz

27/07/2022

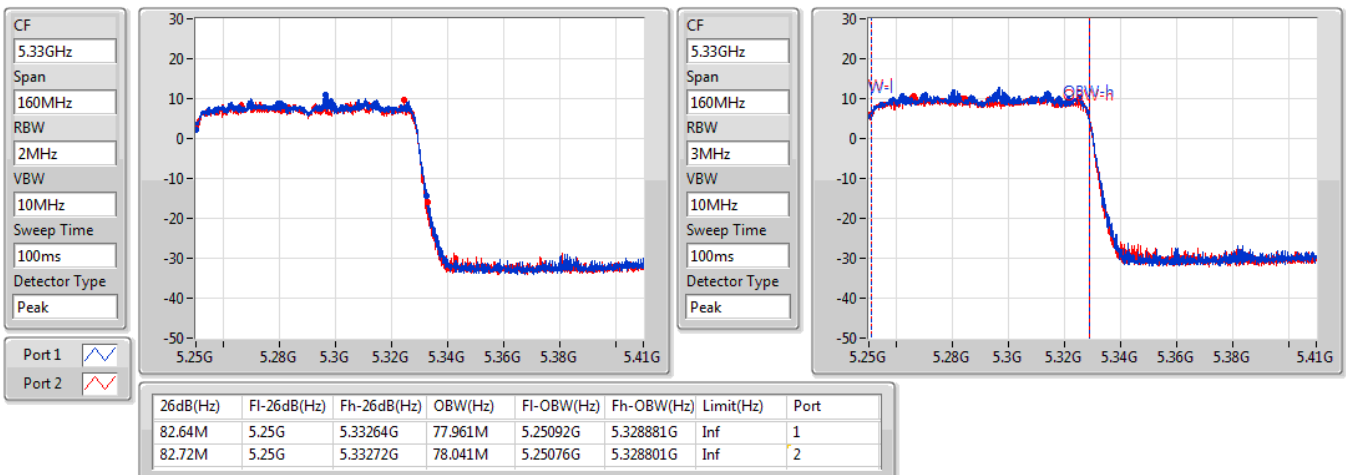


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

27/07/2022


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

27/07/2022

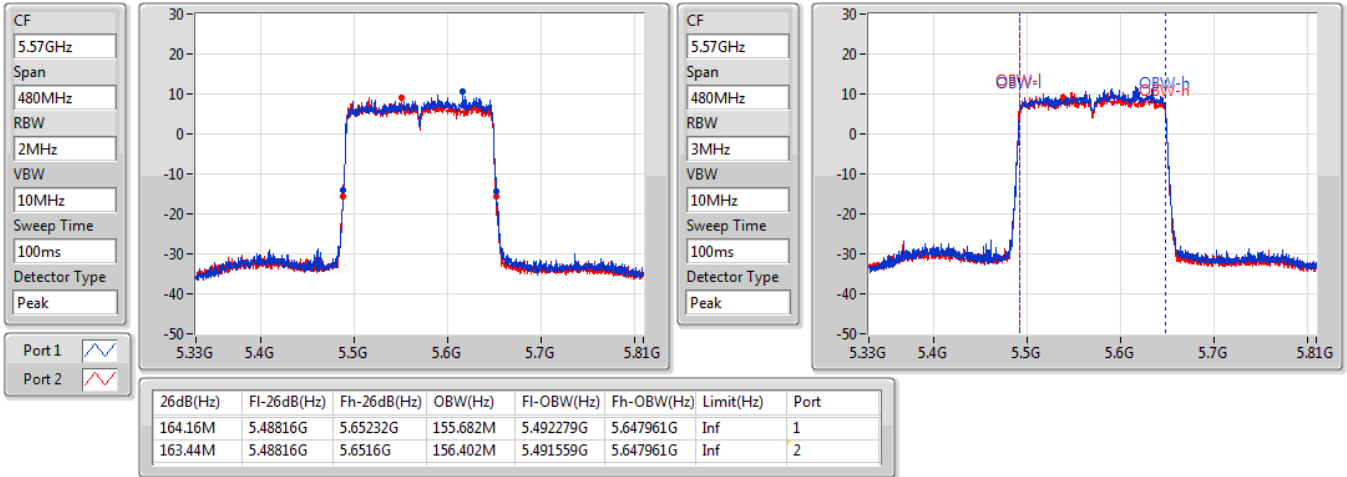


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

27/07/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	83.12M	78.121M	78M2D1D	83.12M	78.121M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.64M	78.361M	78M4D1D	82.56M	78.281M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	33.87M	17.871M	17M9D1D	22.56M	17.331M
802.11a_Nss1,(6Mbps)_2TX	21.72M	17.181M	17M2D1D	21.3M	16.882M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	39.81M	19.7M	19M7D1D	22.92M	19.16M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.96M	19.19M	19M2D1D	21.6M	19.16M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	63.42M	38.381M	38M4D1D	40.32M	37.781M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.2M	37.841M	37M9D1D	40.14M	37.721M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	81.36M	77.361M	77M4D1D	81.36M	77.361M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.96M	77.361M	77M4D1D	81.12M	77.361M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	81.92M	78.121M	78M2D1D	81.92M	78.121M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.8M	78.041M	78M0D1D	82.56M	77.881M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	37.26M	18.021M	18M0D1D	20.04M	14.123M
802.11a_Nss1,(6Mbps)_2TX	21.75M	17.241M	17M3D1D	15.69M	13.508M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	32.19M	19.4M	19M4D1D	21.81M	14.903M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.81M	19.19M	19M2D1D	15.735M	14.558M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	60.96M	38.141M	38M2D1D	40.08M	34.423M
802.11ax HEW40_Nss2,(MCS0)_2TX	41.46M	37.961M	38M0D1D	40.14M	33.863M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	105.48M	78.321M	78M4D1D	81.48M	74.438M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.84M	77.601M	77M7D1D	75.825M	73.613M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	164.4M	155.922M	156MD1D	164.4M	155.922M
802.11ax HEW160_Nss2,(MCS0)_2TX	164.4M	155.922M	156MD1D	164.4M	155.682M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	3.18M	7.416M	7M42D1D	3.18M	7.416M
802.11a_Nss1,(6Mbps)_2TX	3.26M	4.298M	4M30D1D	3.16M	4.218M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	4.52M	10.635M	10M7D1D	4.52M	10.635M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.48M	4.898M	4M90D1D	4.46M	4.898M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	3.84M	20.85M	20M9D1D	3.84M	20.85M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.92M	9.595M	9M60D1D	3.82M	8.036M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	3.86M	31.884M	31M9D1D	3.86M	31.884M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.84M	15.432M	15M5D1D	3.78M	8.456M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			33.87M	17.871M
5300MHz	Pass	Inf			29.49M	17.601M
5320MHz	Pass	Inf			22.56M	17.331M
5500MHz	Pass	Inf			21.66M	17.181M
5580MHz	Pass	Inf			37.26M	18.021M
5700MHz	Pass	Inf			21.72M	17.211M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			20.04M	14.123M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.18M	7.416M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.54M	17.181M	21.51M	16.912M
5300MHz	Pass	Inf	21.72M	17.181M	21.3M	16.882M
5320MHz	Pass	Inf	21.72M	17.181M	21.45M	16.882M
5500MHz	Pass	Inf	21.69M	17.121M	21.54M	16.882M
5580MHz	Pass	Inf	21.66M	17.181M	21.48M	16.882M
5700MHz	Pass	Inf	21.75M	17.241M	21.63M	16.942M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	13.658M	15.69M	13.508M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.26M	4.298M	3.16M	4.218M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			39.81M	19.7M
5300MHz	Pass	Inf			36M	19.46M
5320MHz	Pass	Inf			22.92M	19.16M
5500MHz	Pass	Inf			21.99M	19.07M
5580MHz	Pass	Inf			32.19M	19.4M
5700MHz	Pass	Inf			21.81M	19.16M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			23.475M	14.903M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			4.52M	10.635M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.6M	19.16M	21.63M	19.19M
5300MHz	Pass	Inf	21.63M	19.16M	21.96M	19.16M
5320MHz	Pass	Inf	21.87M	19.16M	21.72M	19.16M
5500MHz	Pass	Inf	21.72M	19.1M	21.75M	19.19M
5580MHz	Pass	Inf	21.81M	19.16M	21.75M	19.16M
5700MHz	Pass	Inf	21.78M	19.16M	21.72M	19.13M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.735M	14.558M	15.735M	14.588M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.898M	4.48M	4.898M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5270MHz	Pass	Inf			63.42M	38.381M
5310MHz	Pass	Inf			40.32M	37.781M
5510MHz	Pass	Inf			40.08M	37.721M
5550MHz	Pass	Inf			60.96M	38.141M
5670MHz	Pass	Inf			42.12M	37.961M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			52.08M	34.423M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.84M	20.85M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40.14M	37.721M	40.2M	37.841M
5310MHz	Pass	Inf	40.2M	37.721M	40.14M	37.781M
5510MHz	Pass	Inf	40.2M	37.721M	40.2M	37.781M
5550MHz	Pass	Inf	40.92M	37.901M	41.46M	37.961M
5670MHz	Pass	Inf	40.26M	37.721M	40.14M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	41.44M	33.863M	41.16M	33.898M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.82M	8.036M	3.92M	9.595M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5290MHz	Pass	Inf			81.36M	77.361M
5530MHz	Pass	Inf			81.48M	77.481M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf			105.48M	78.321M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			101.025M	74.438M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			3.86M	31.884M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.96M	77.361M	81.12M	77.361M
5530MHz	Pass	Inf	81.84M	77.361M	81.36M	77.361M
5610MHz	Pass	Inf	81.6M	77.361M	81.48M	77.601M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.613M	75.825M	73.613M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	8.456M	3.84M	15.432M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf			83.12M	78.121M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf			81.92M	78.121M
5570MHz	Pass	Inf			164.4M	155.922M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.64M	78.361M	82.56M	78.281M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	77.881M	82.8M	78.041M
5570MHz	Pass	Inf	164.4M	155.682M	164.4M	155.922M

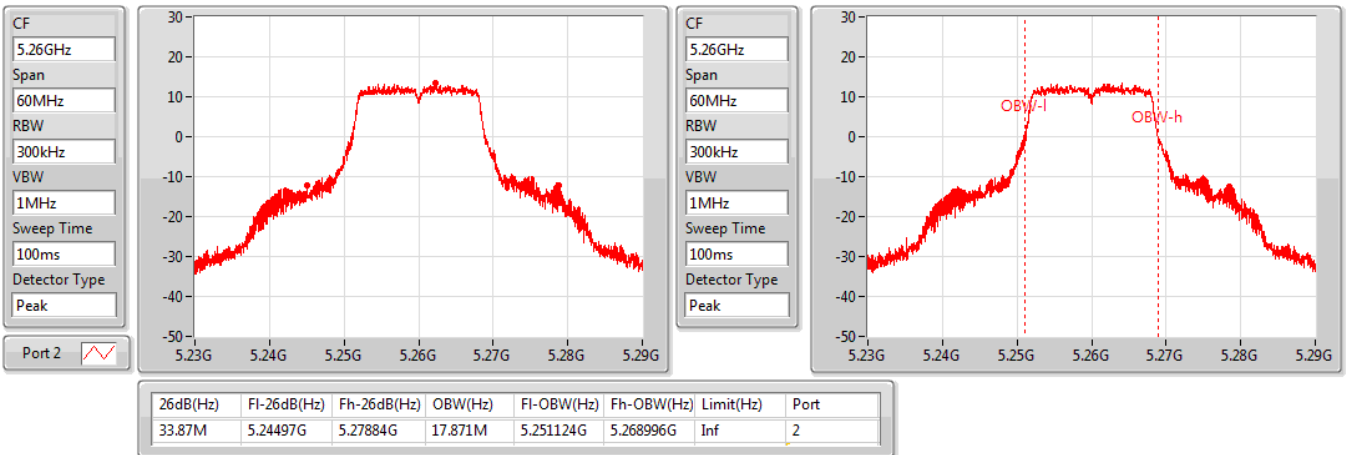
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5260MHz

27/07/2022

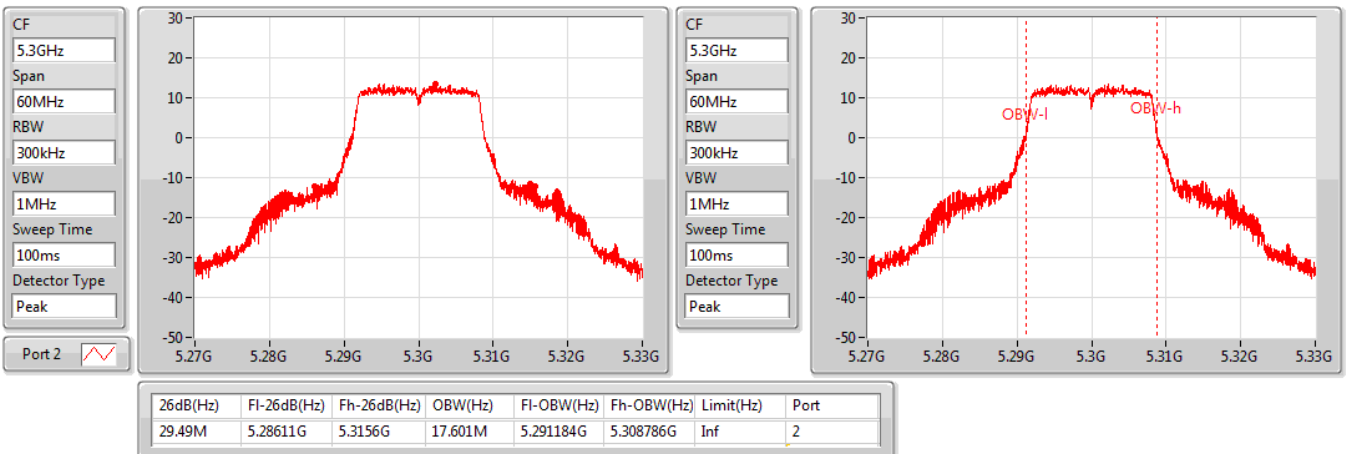


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5300MHz

27/07/2022

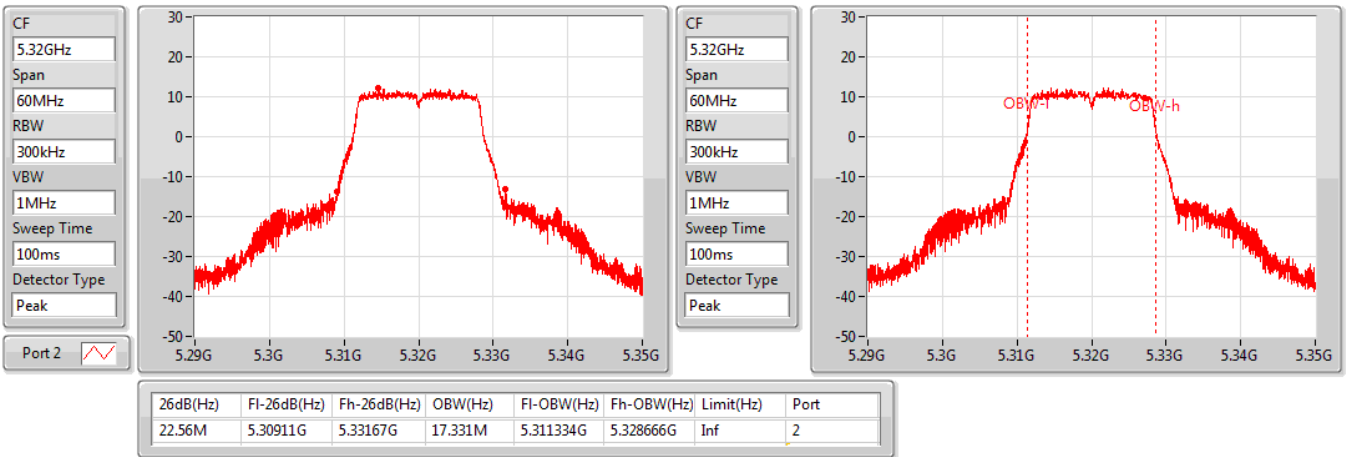


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5320MHz

27/07/2022

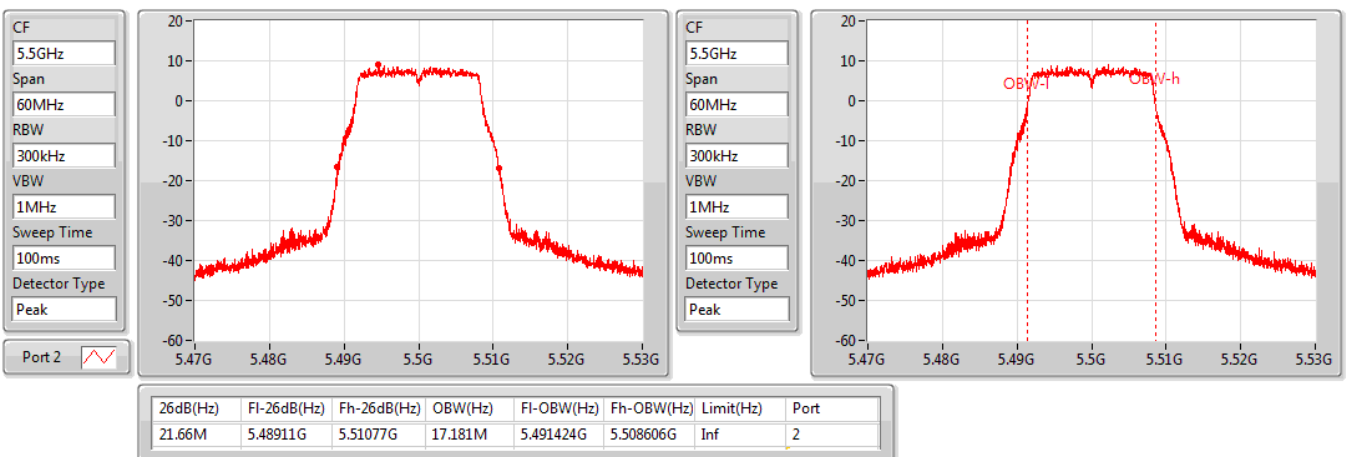


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5500MHz

27/07/2022

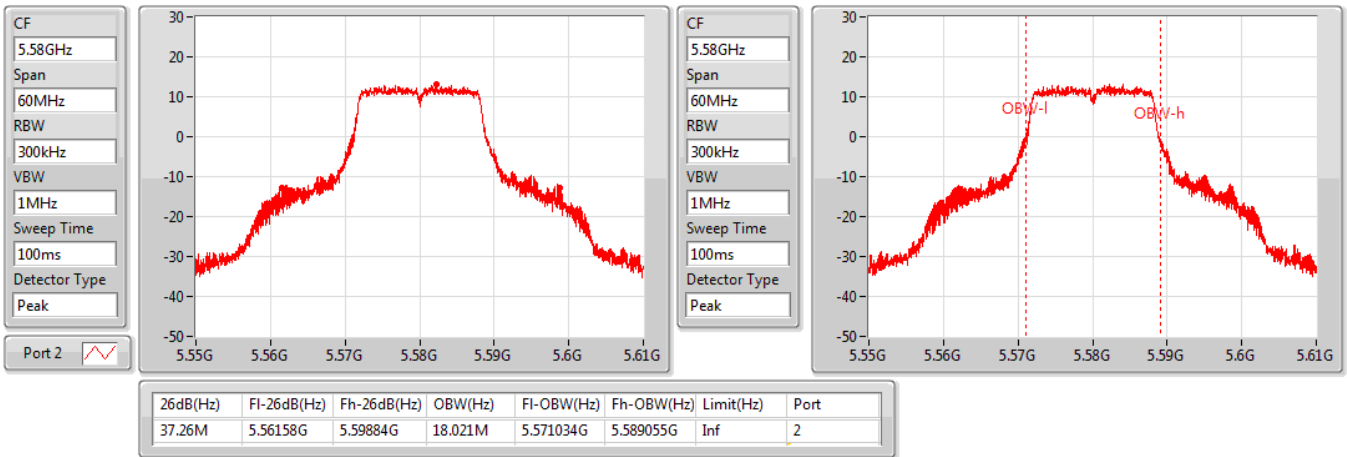


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5580MHz

28/07/2022

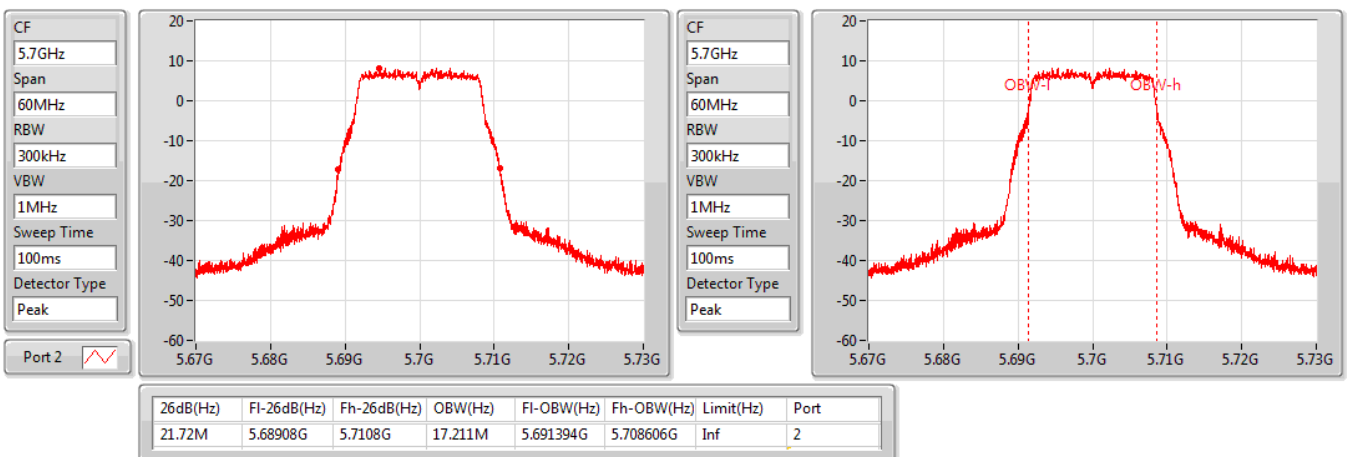


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

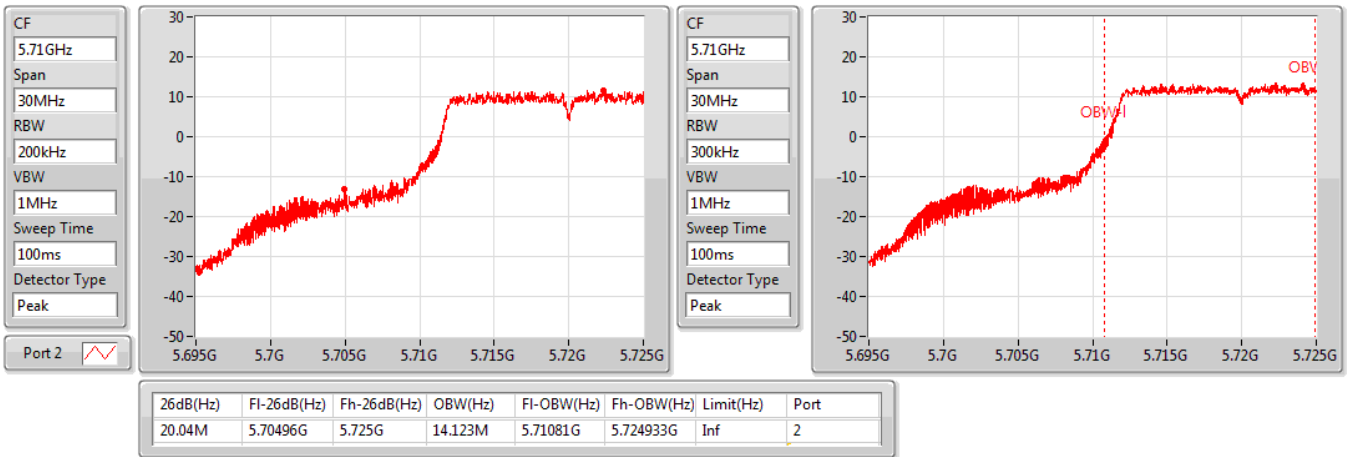
5700MHz

27/07/2022

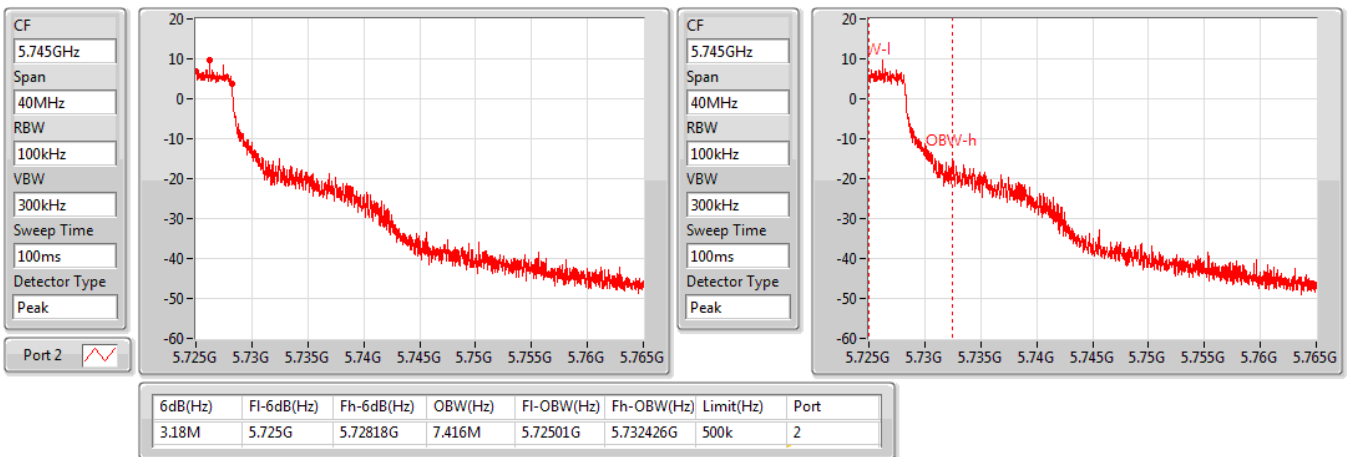


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5720MHz Straddle 5.67-5.725GHz

27/07/2022

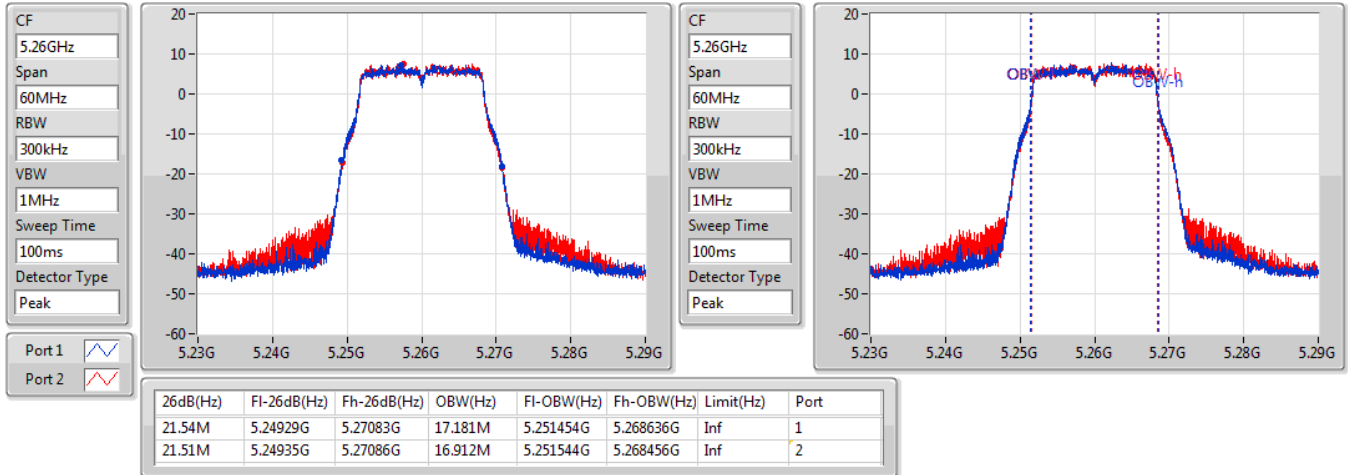

802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5720MHz Straddle 5.725-5.85GHz

27/07/2022

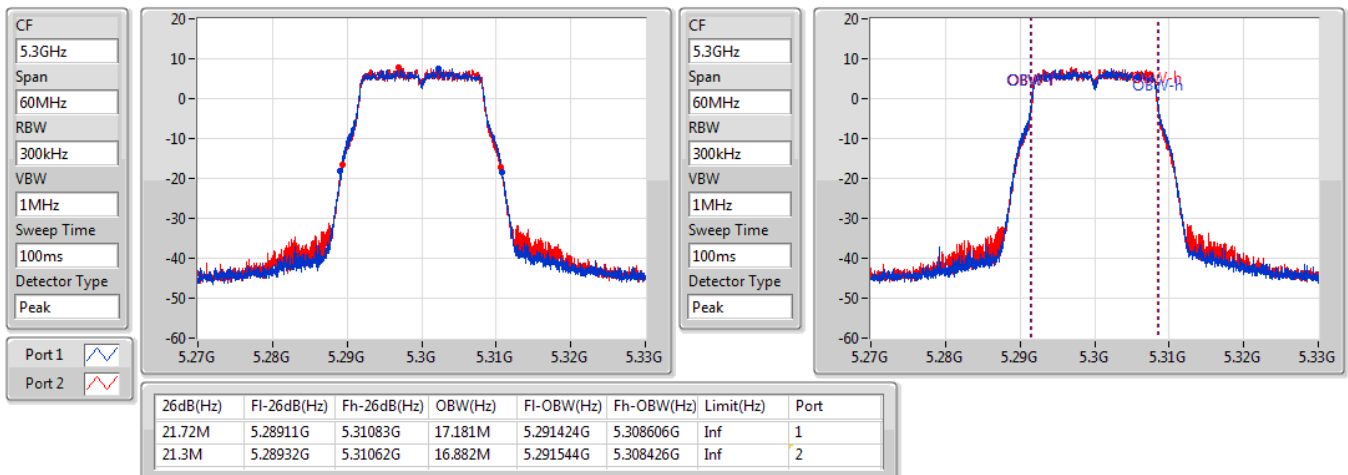


802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

28/07/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

28/07/2022

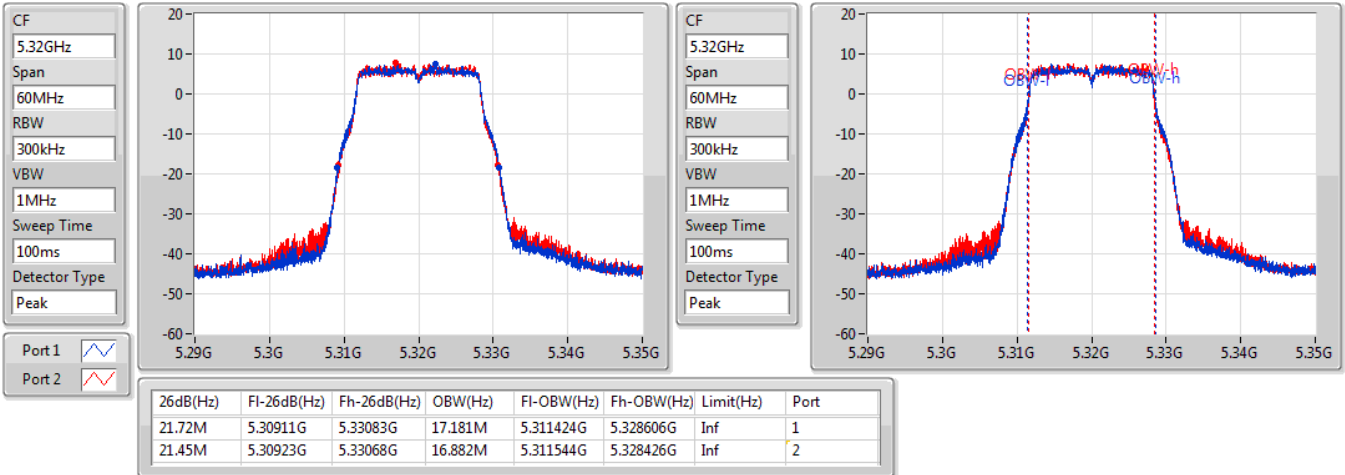


802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

28/07/2022

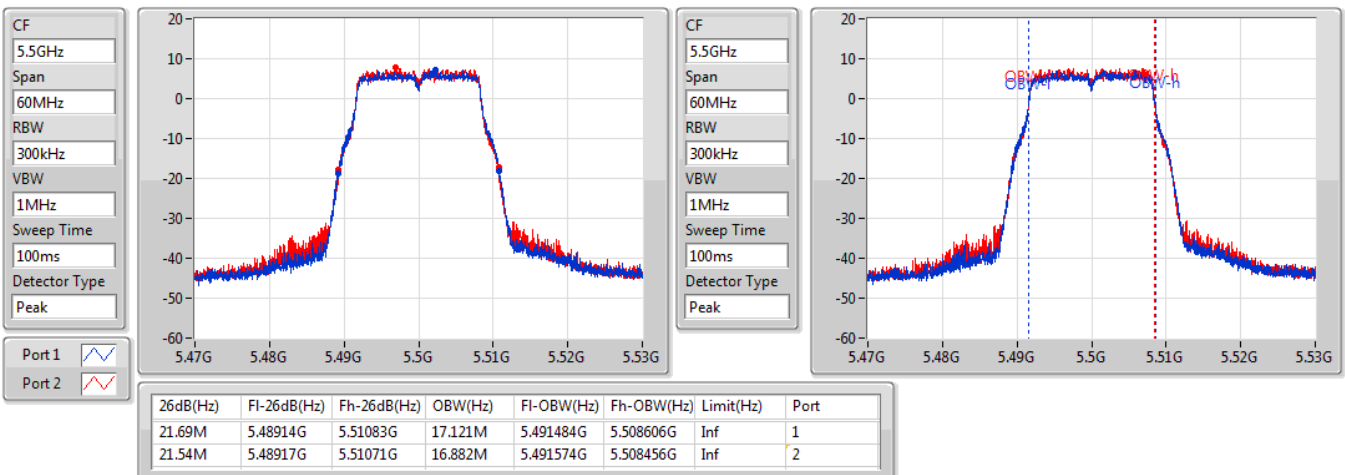


802.11a_Nss1,(6Mbps)_2TX

EBW

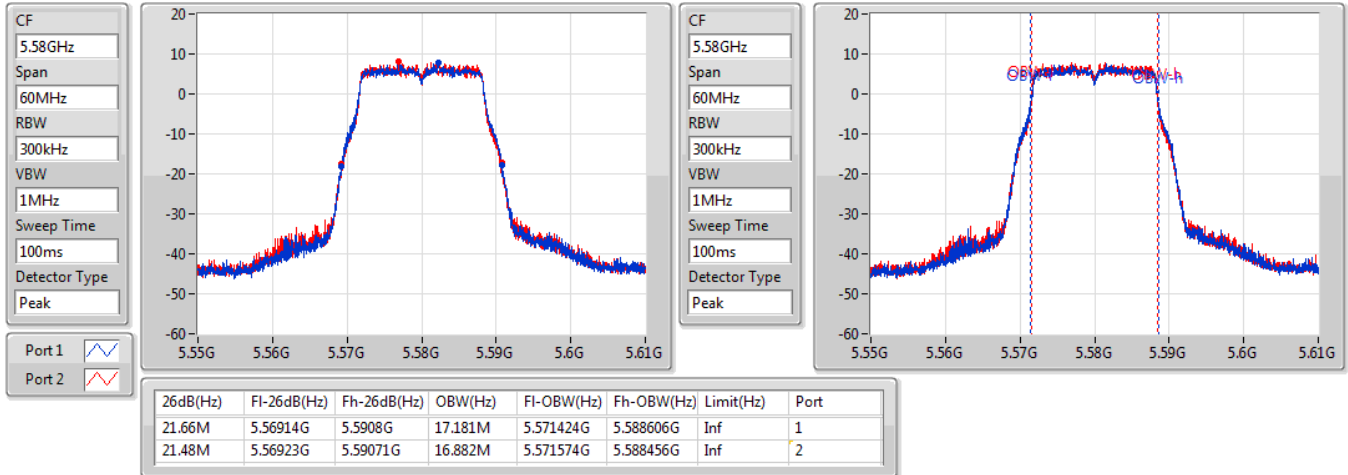
5500MHz

28/07/2022

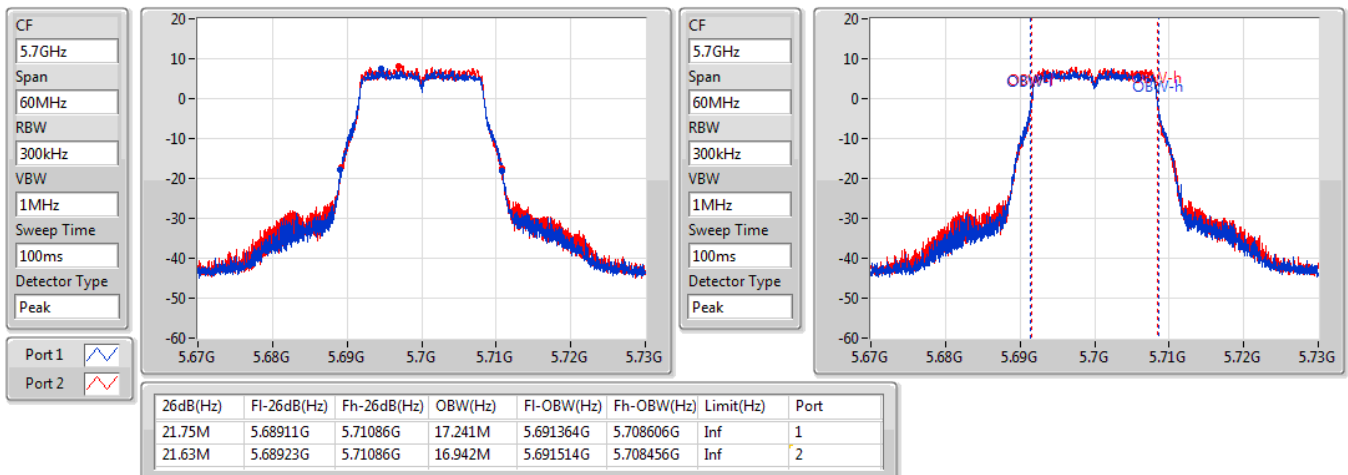


802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

28/07/2022

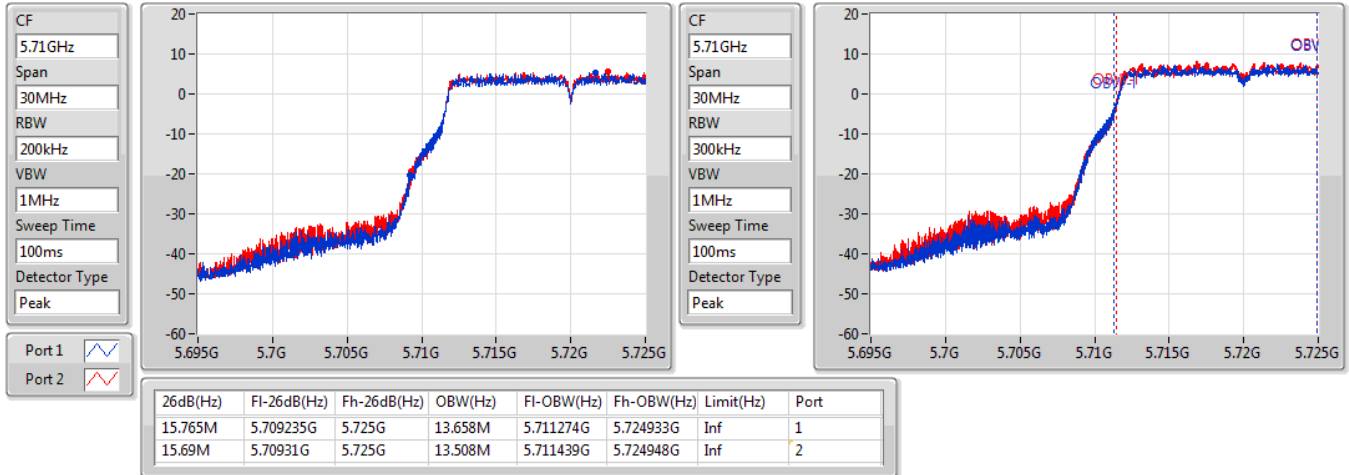

802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

28/07/2022

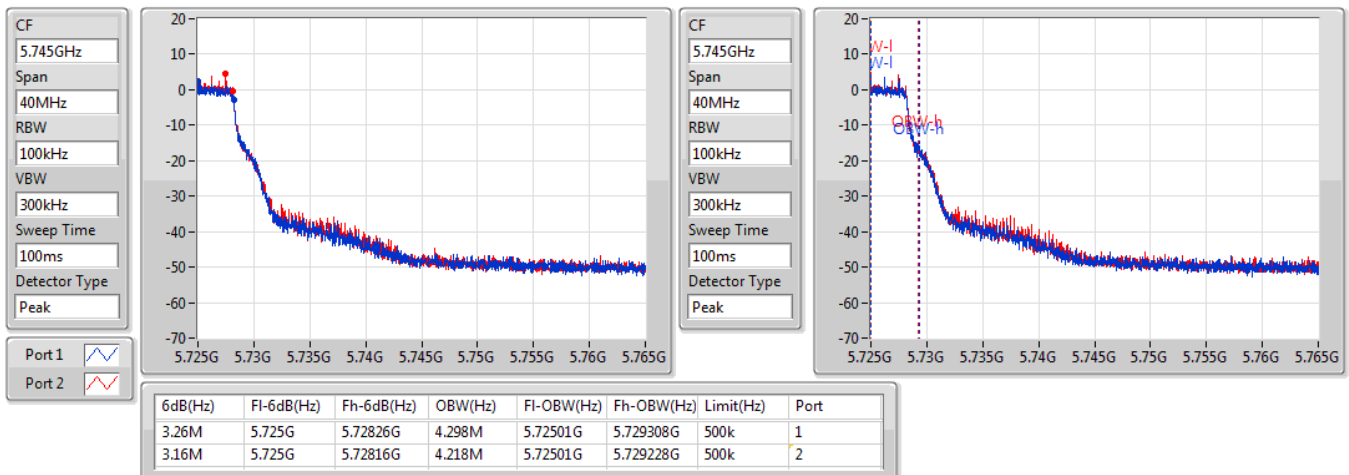


802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/07/2022

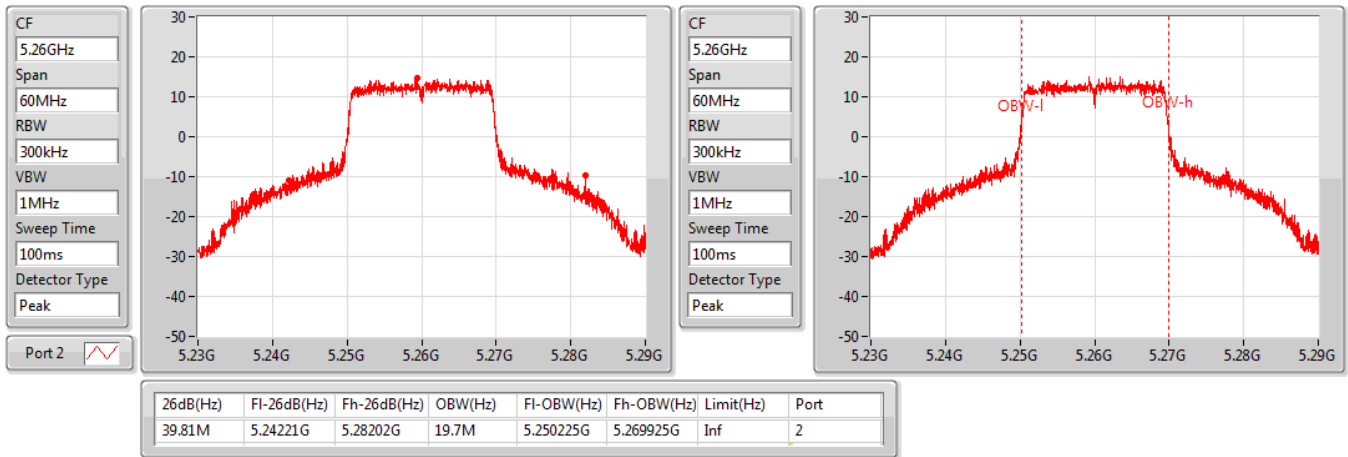

802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/07/2022

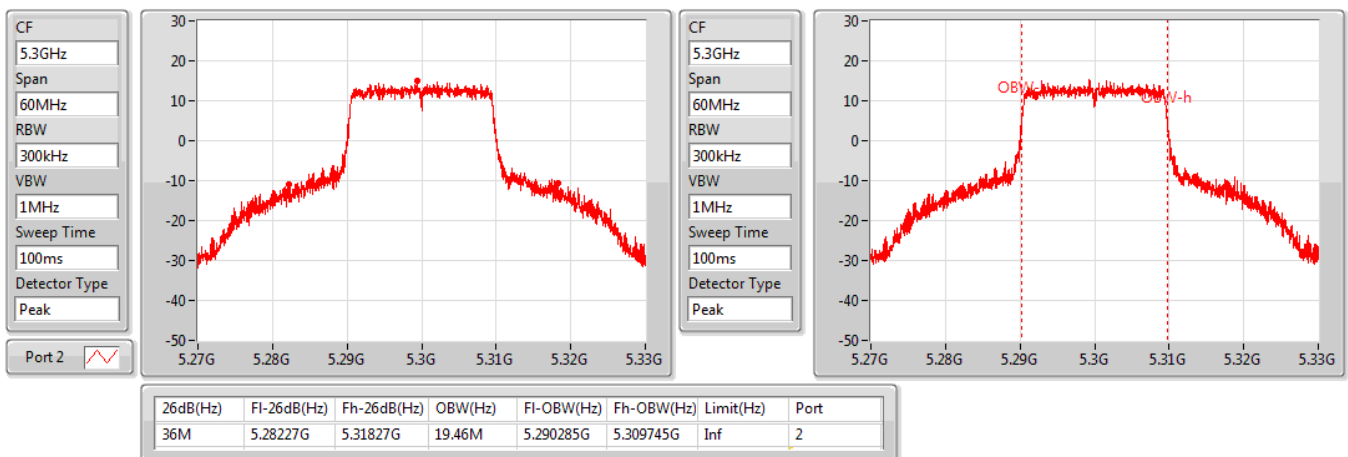


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5260MHz

28/07/2022

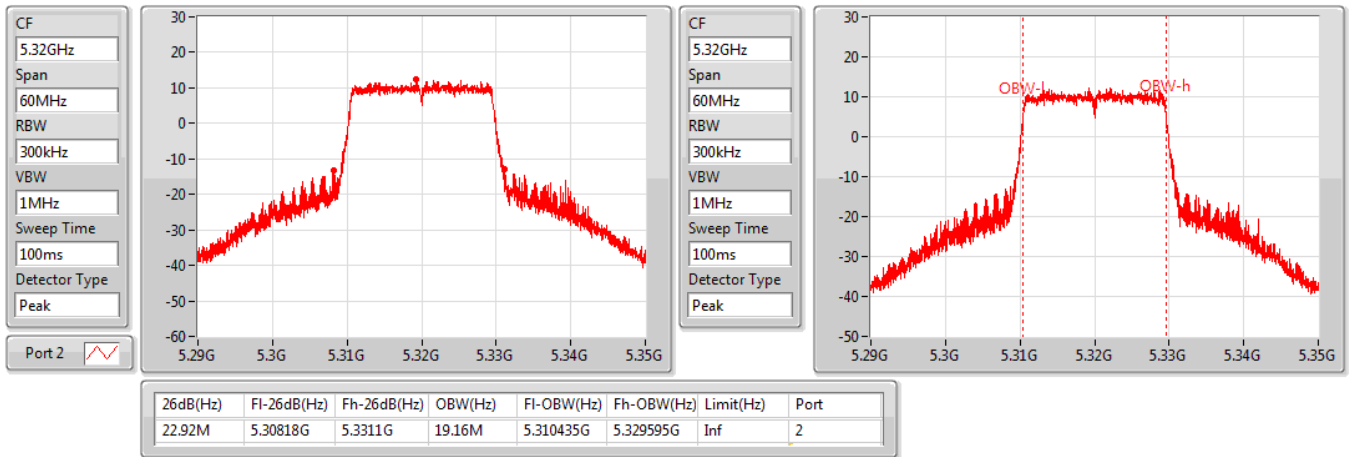

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5300MHz

28/07/2022

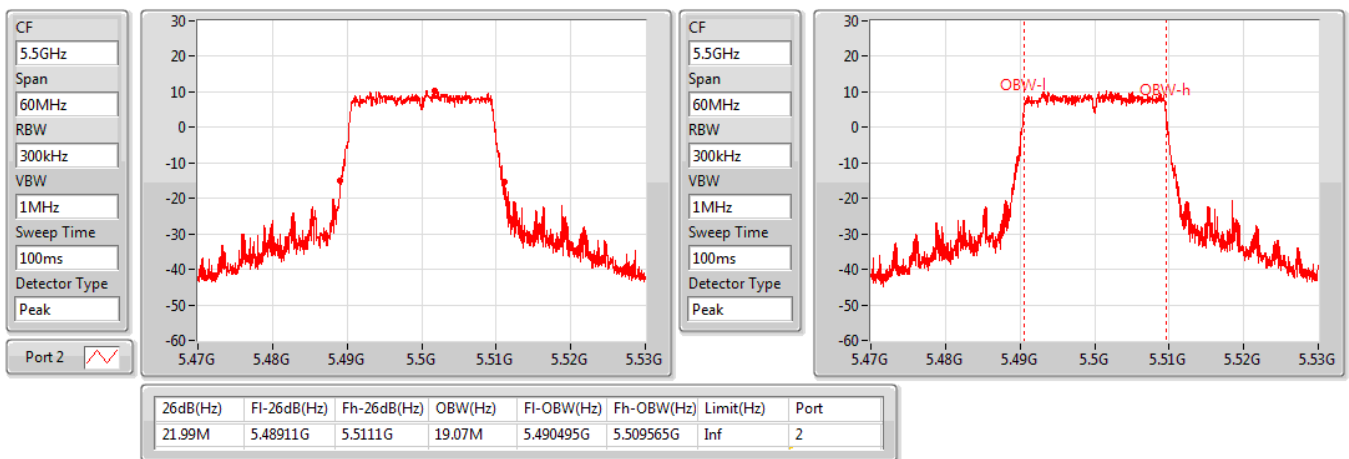


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5320MHz

28/07/2022


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5500MHz

28/07/2022

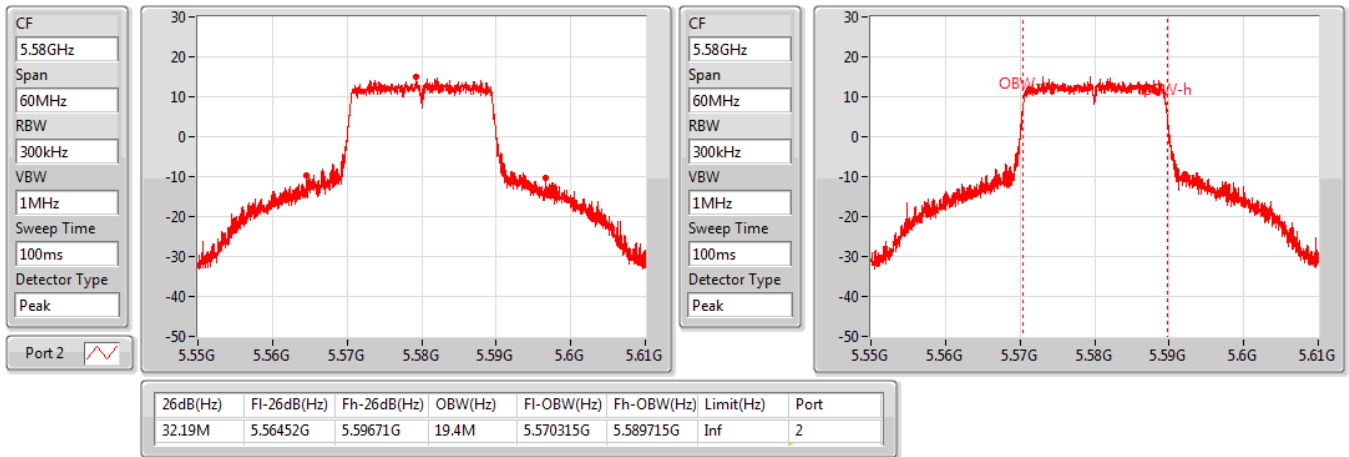


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5580MHz

28/07/2022

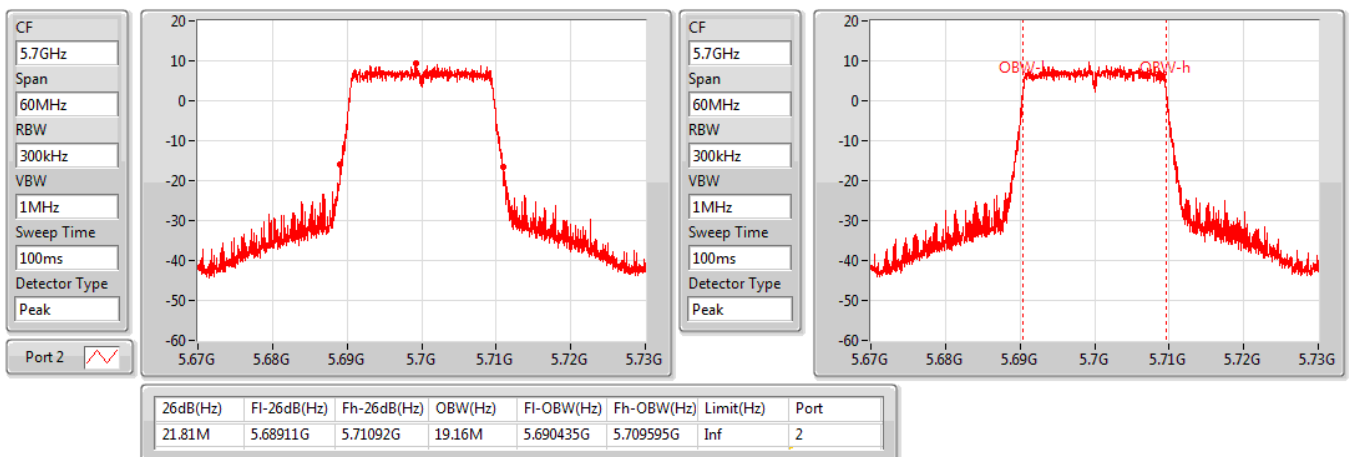


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

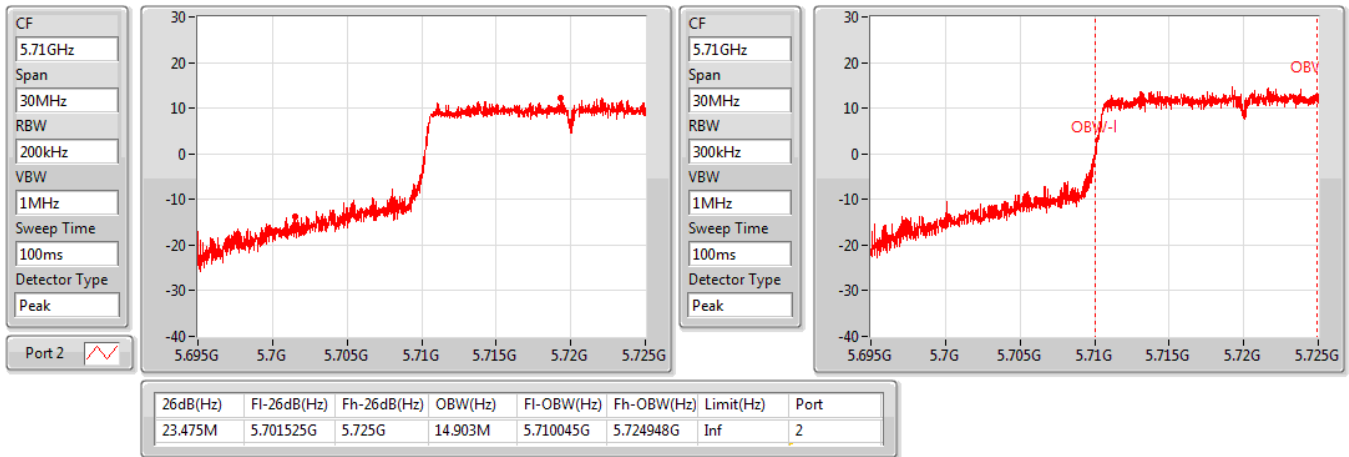
5700MHz

28/07/2022

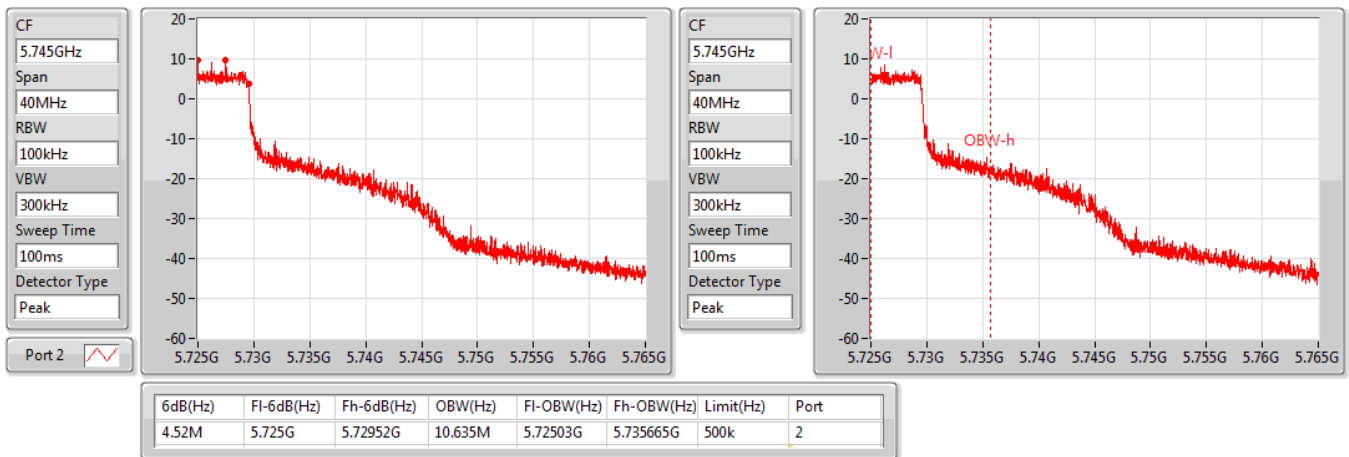


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.47-5.725GHz

28/07/2022

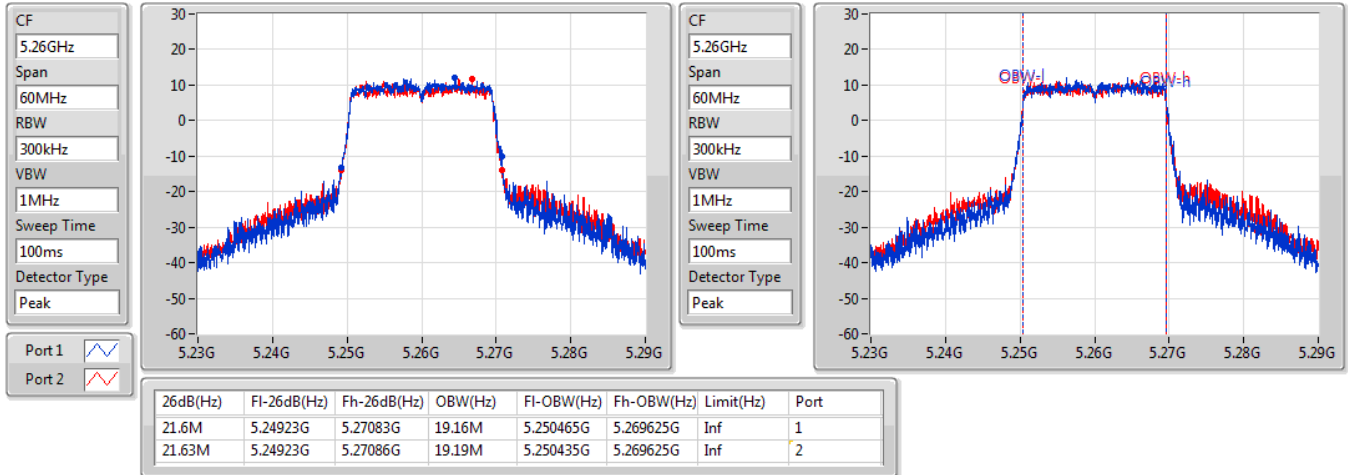

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.725-5.85GHz

28/07/2022

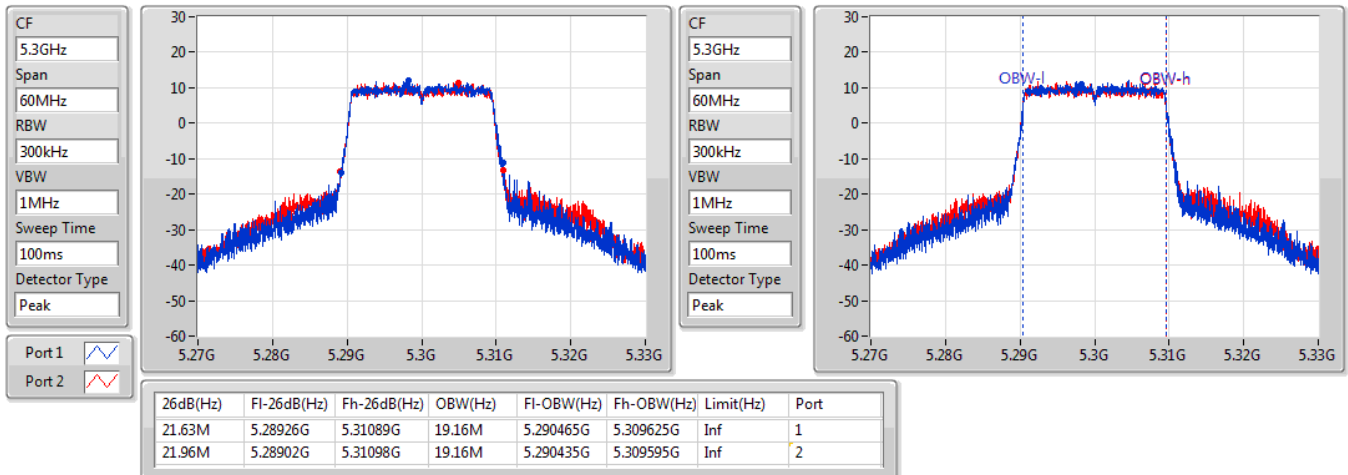


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5260MHz

28/07/2022


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

28/07/2022

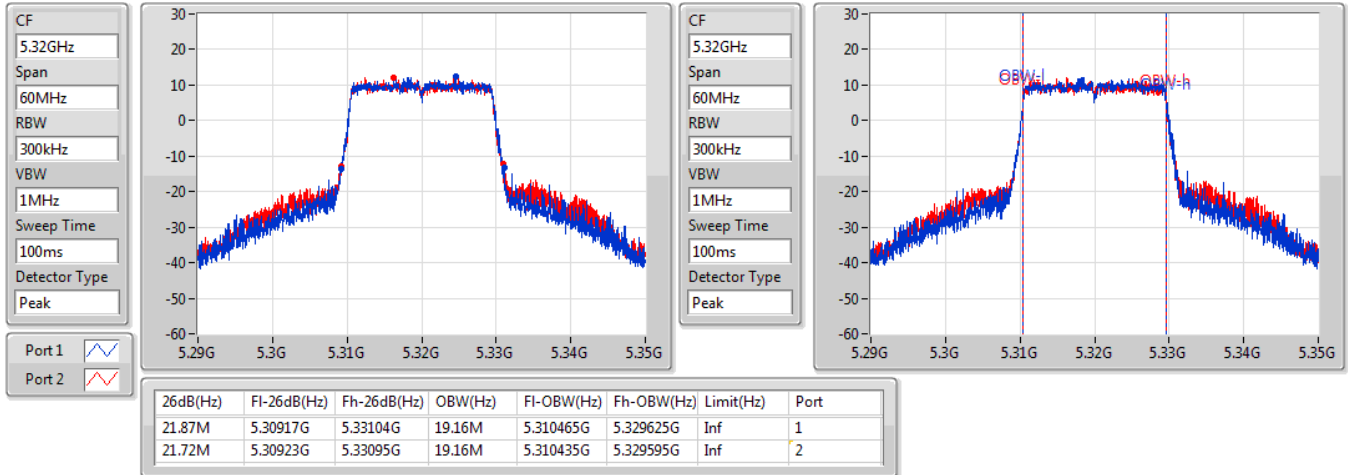


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5320MHz

28/07/2022

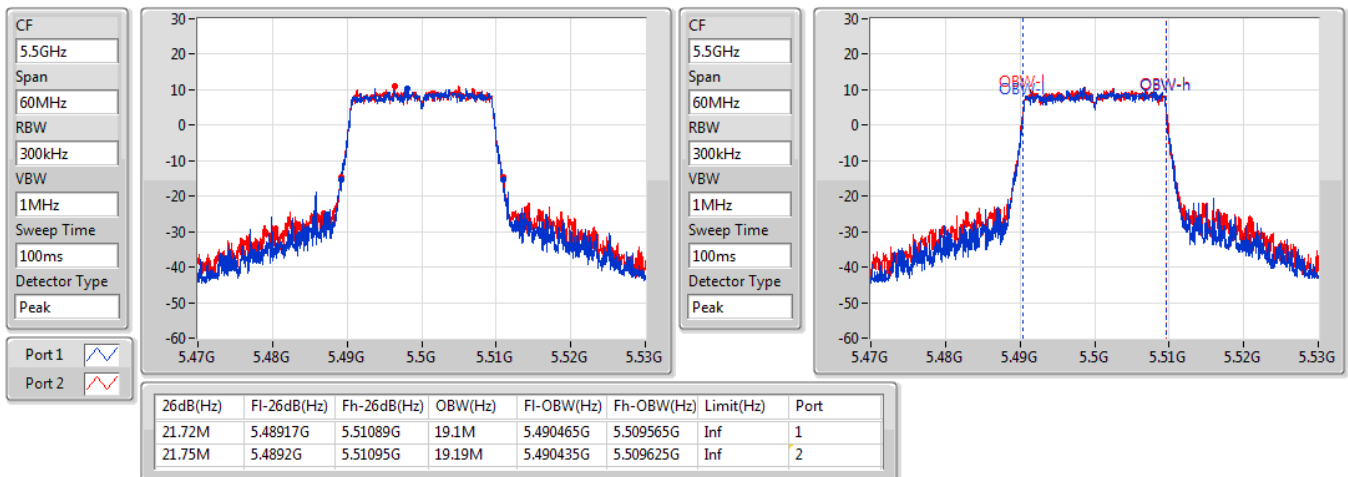


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5500MHz

28/07/2022

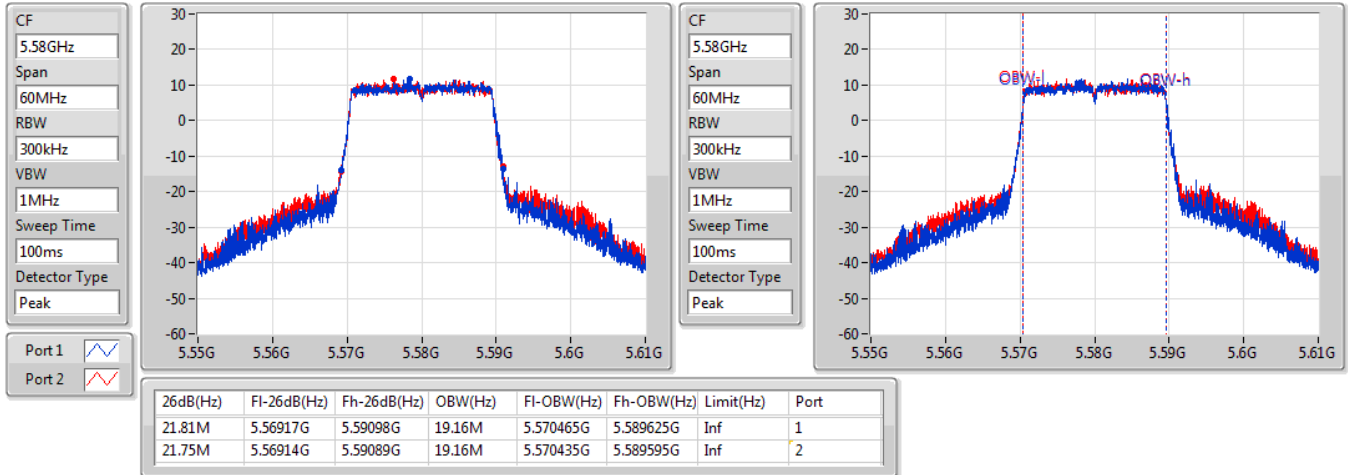


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5580MHz

28/07/2022

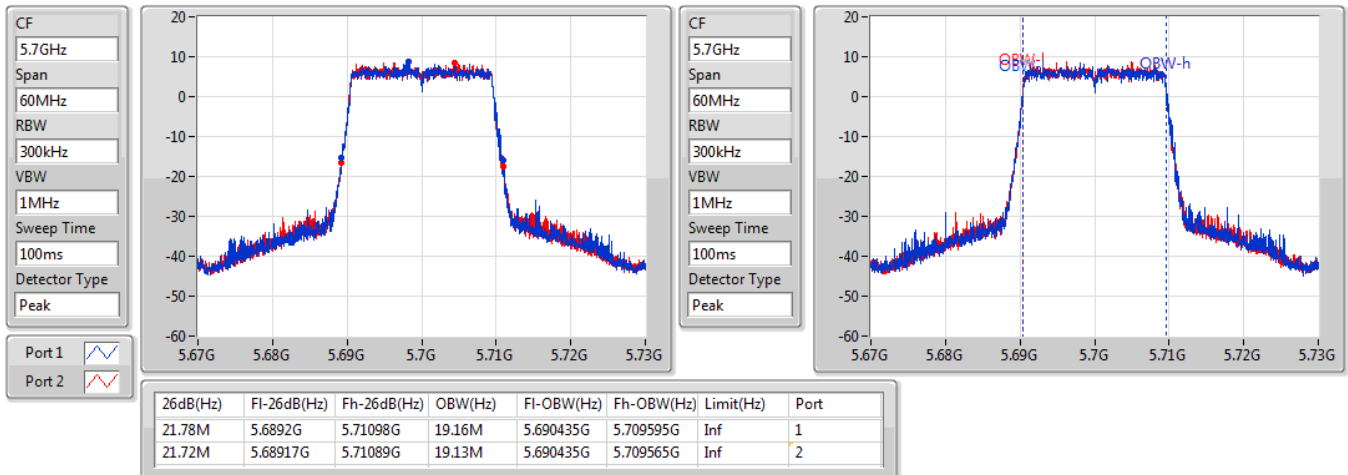


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

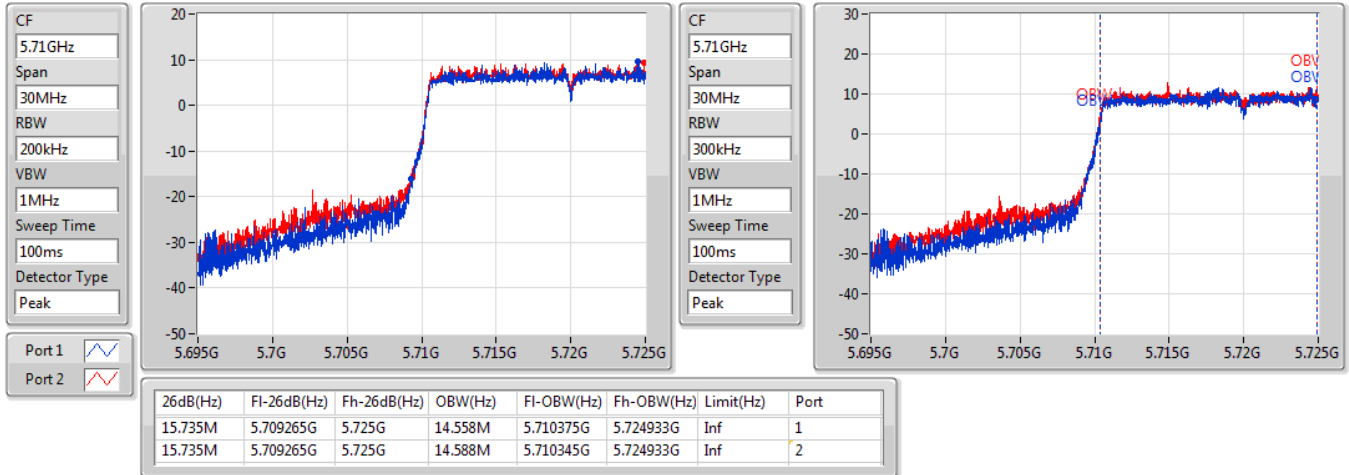
5700MHz

28/07/2022

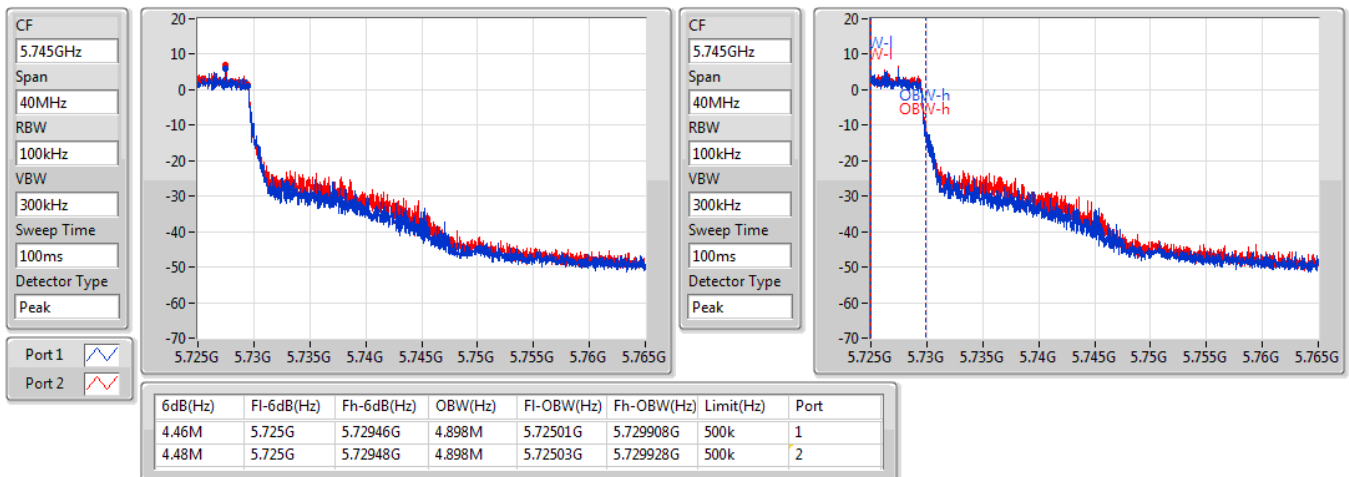


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/07/2022

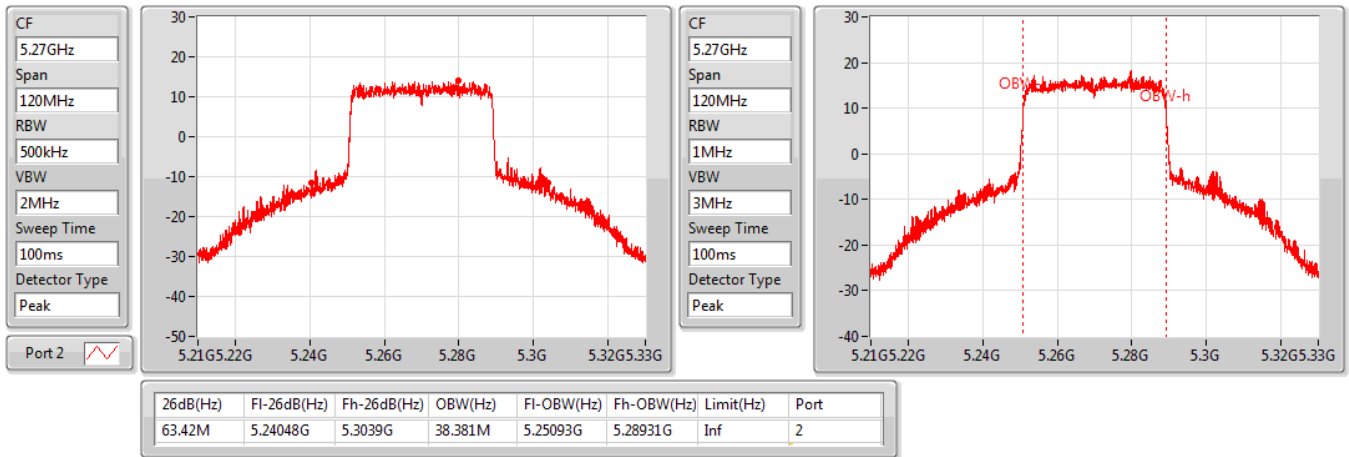

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/07/2022

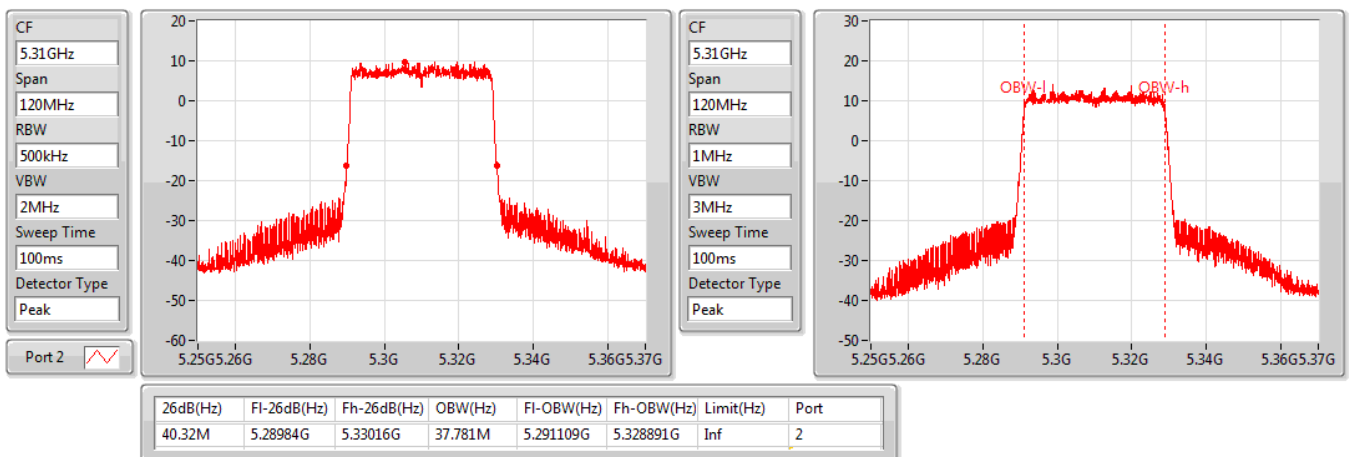


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5270MHz

28/07/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5310MHz

28/07/2022

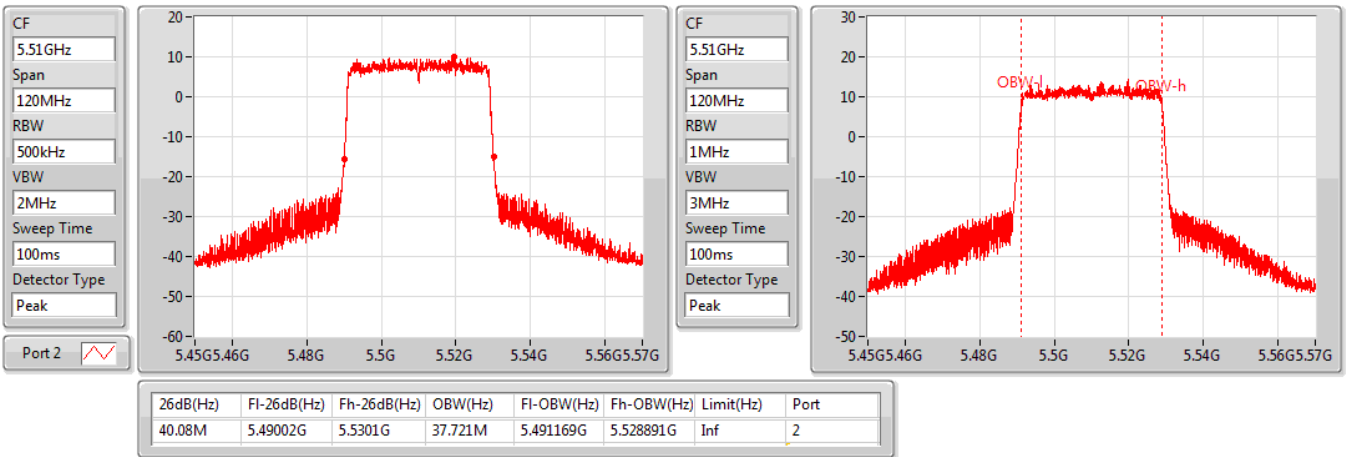


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5510MHz

28/07/2022

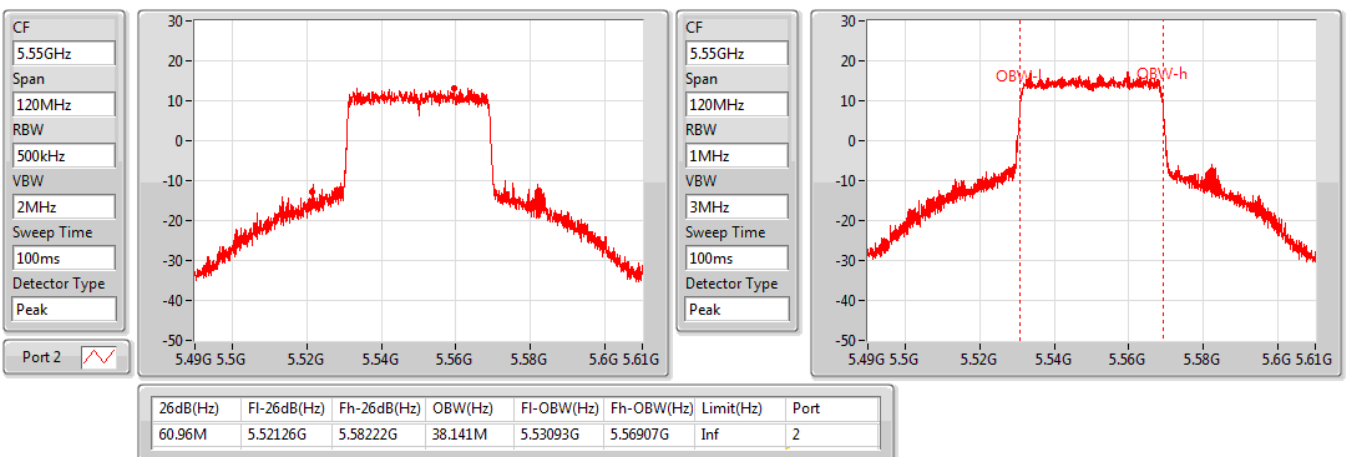


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5550MHz

28/07/2022

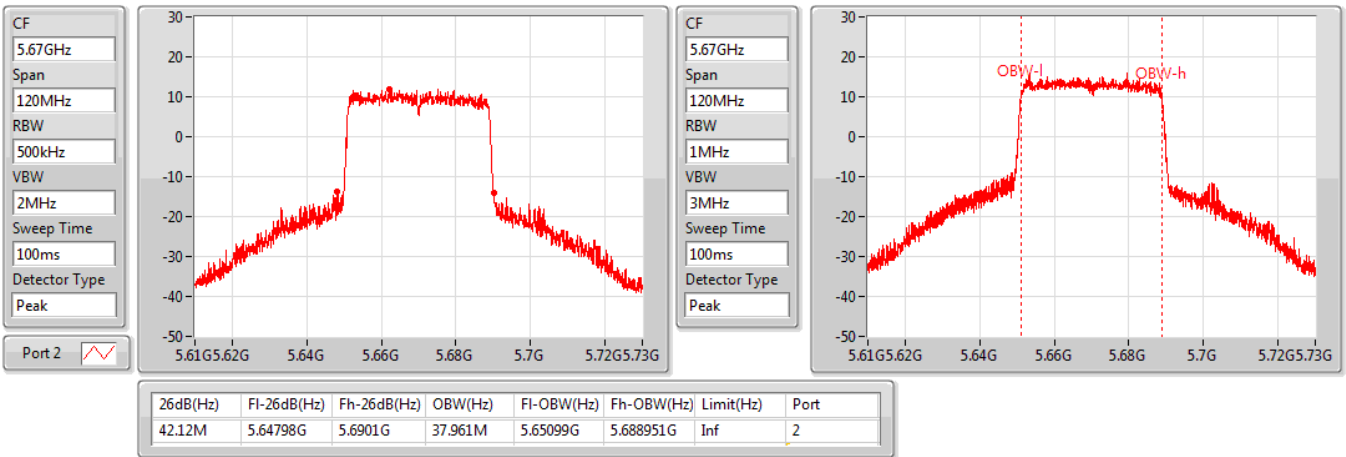


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5670MHz

28/07/2022

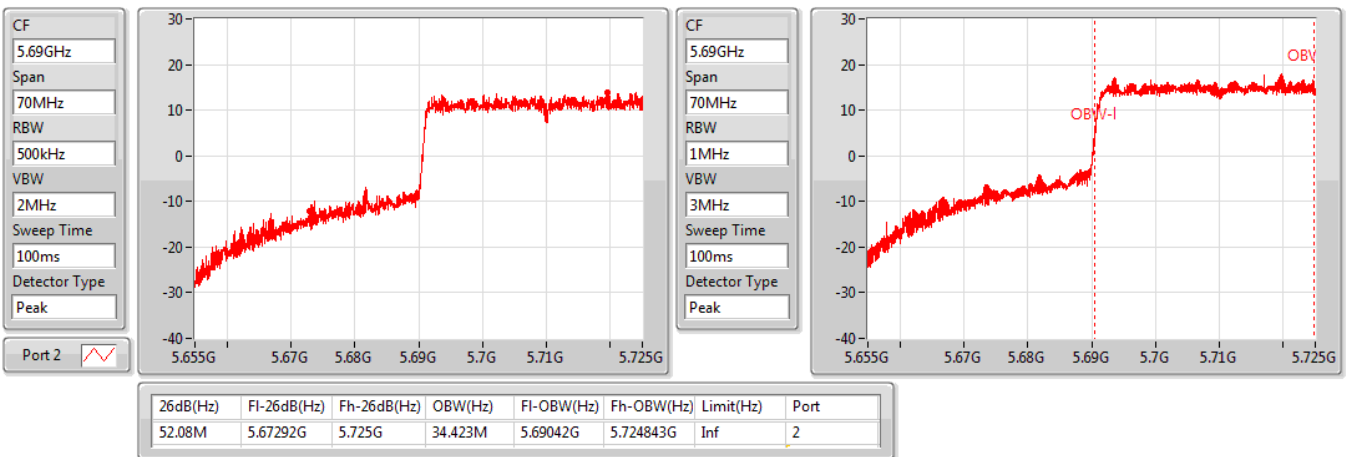


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

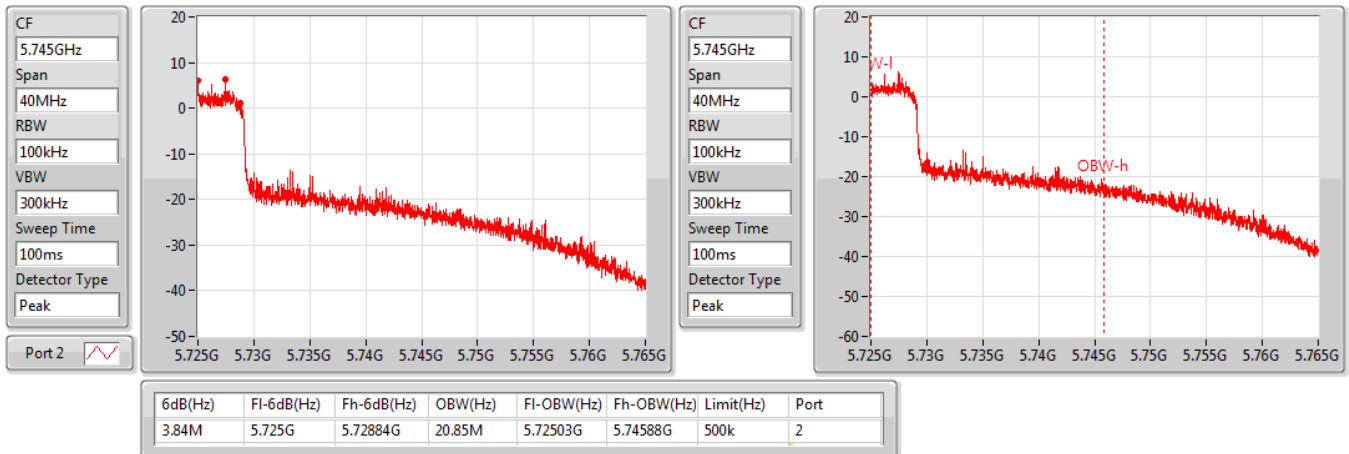
5710MHz Straddle 5.47-5.725GHz

28/07/2022

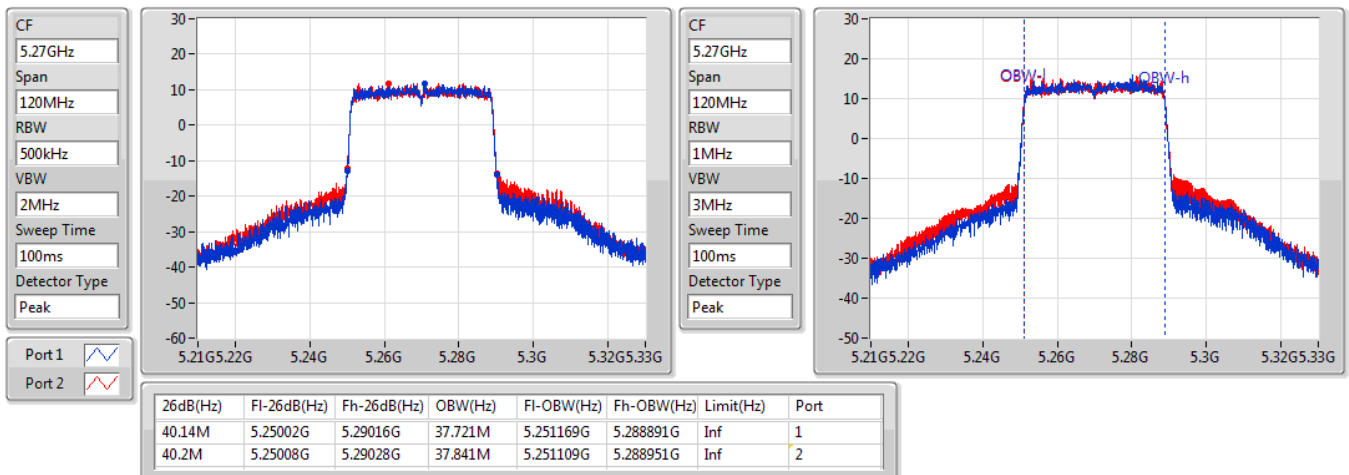


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5710MHz Straddle 5.725-5.85GHz

28/07/2022


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5270MHz

28/07/2022

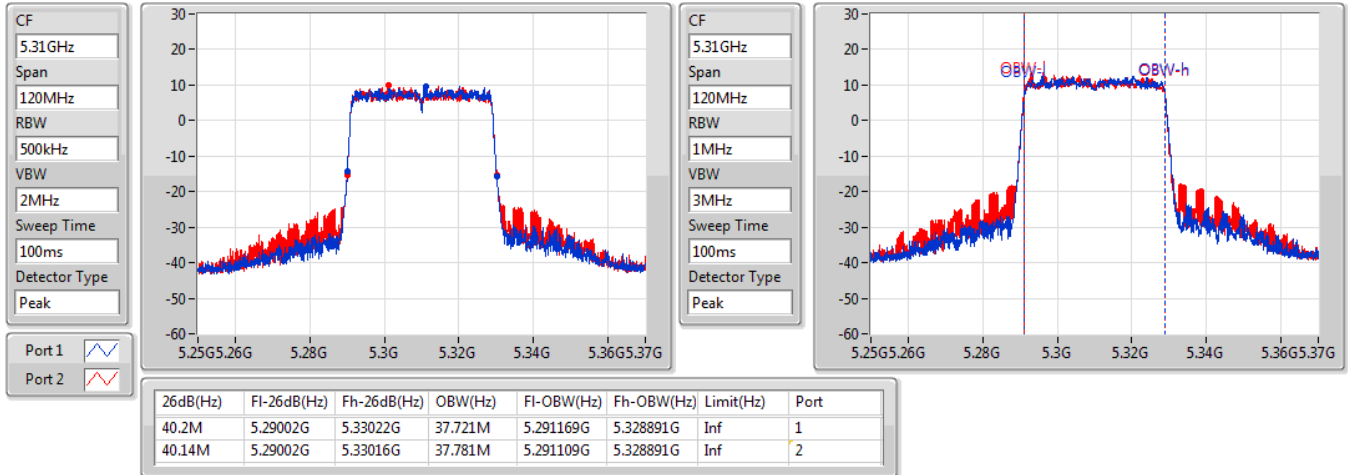


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5310MHz

28/07/2022

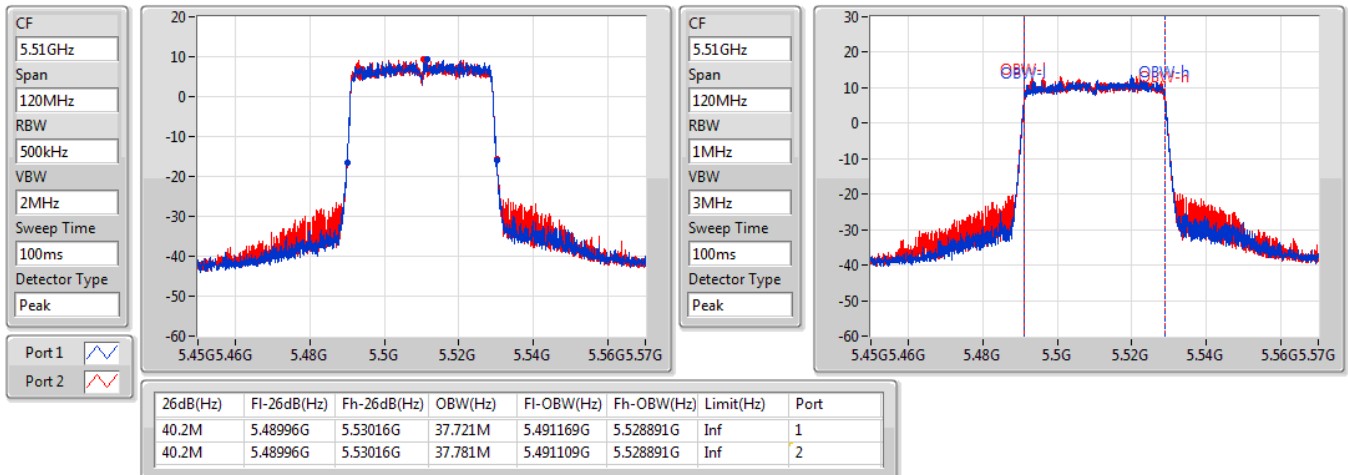


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5510MHz

28/07/2022

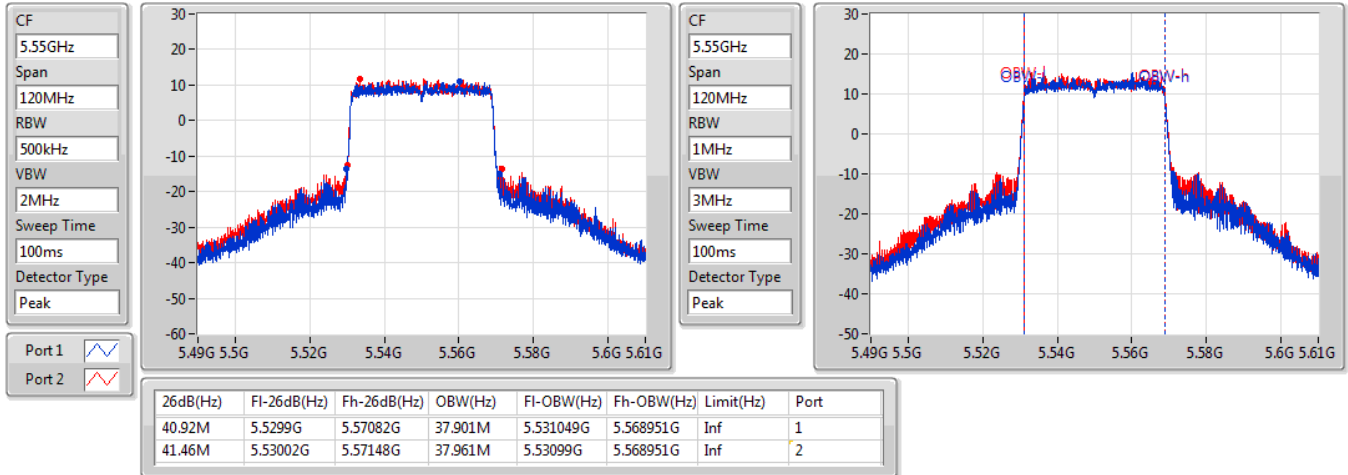


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5550MHz

28/07/2022

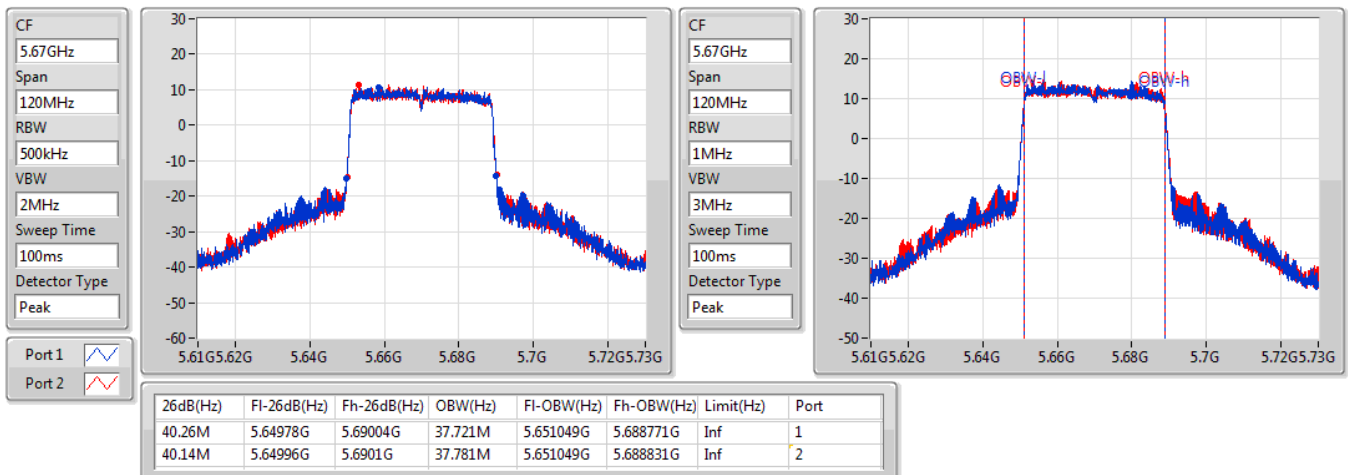


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

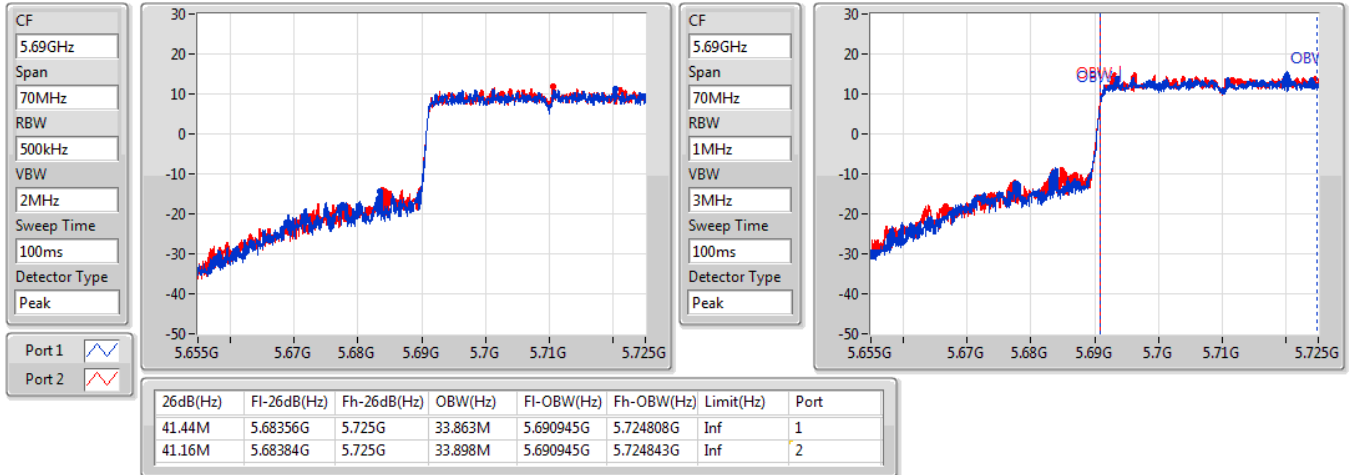
5670MHz

28/07/2022

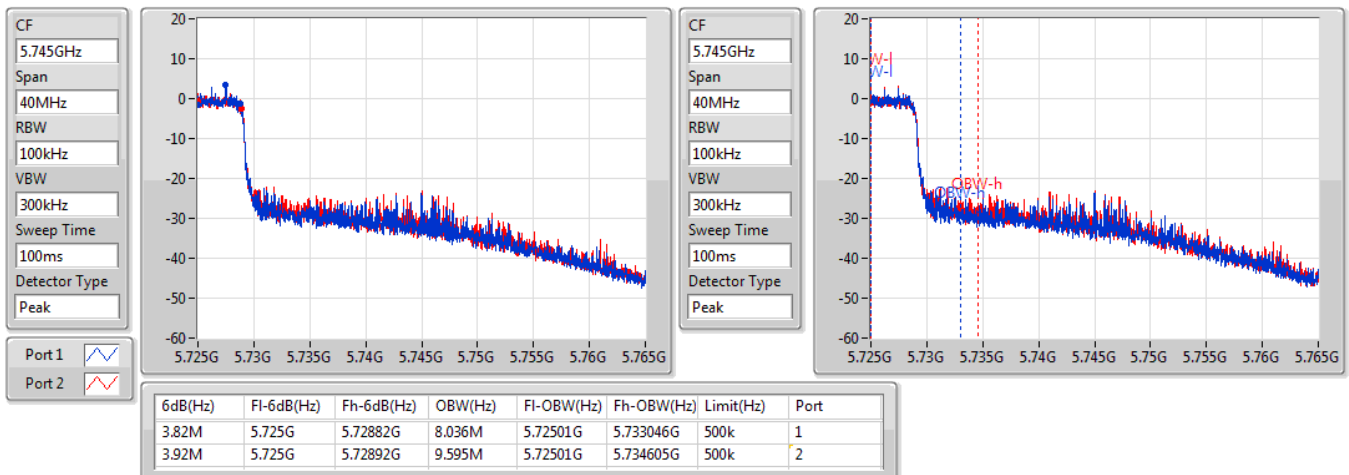


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

28/07/2022


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

28/07/2022

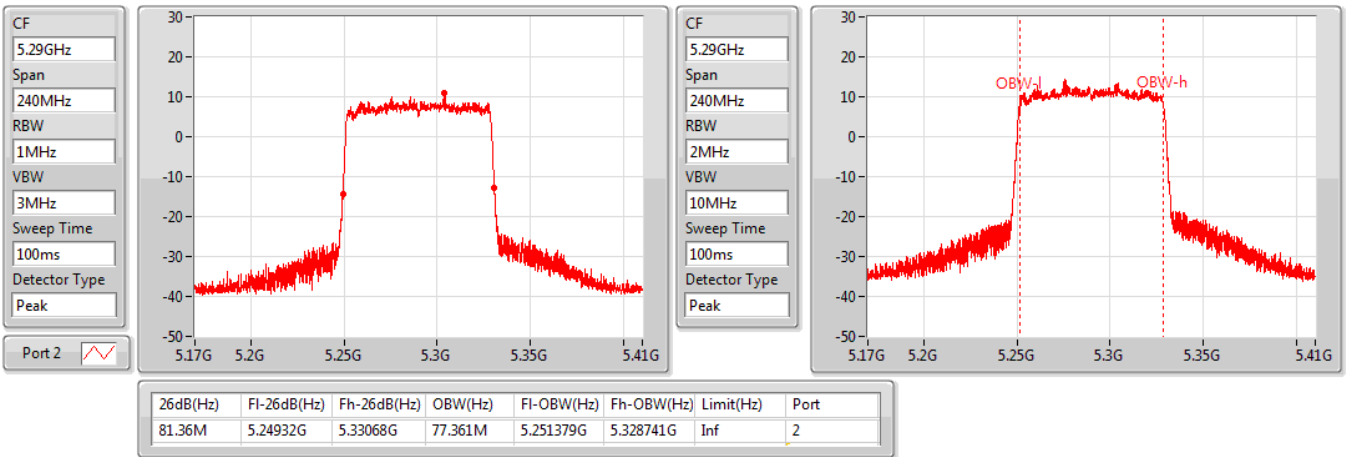


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)

EBW

5290MHz

28/07/2022

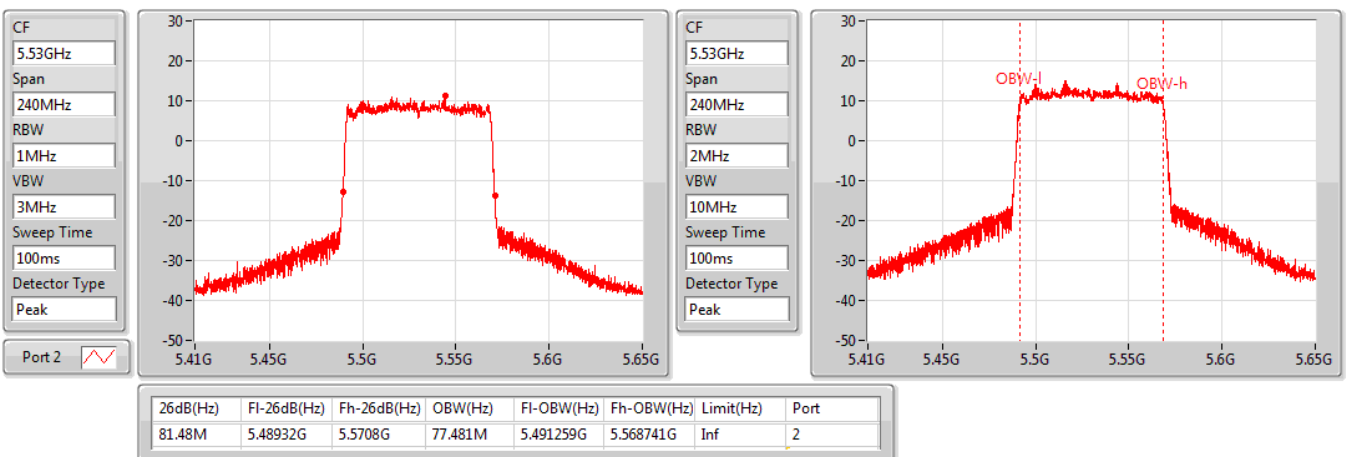


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)

EBW

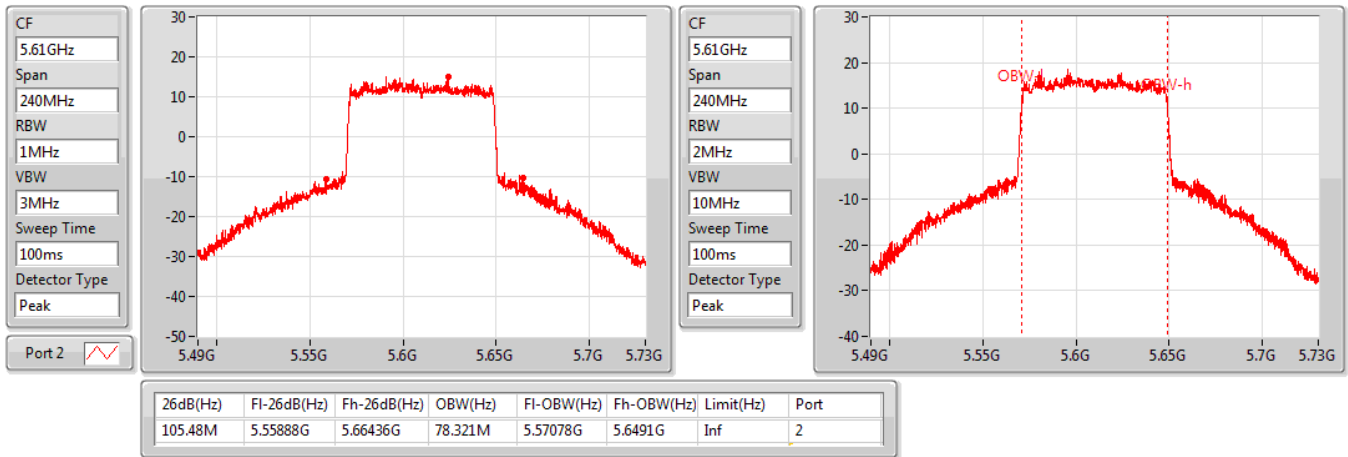
5530MHz

28/07/2022

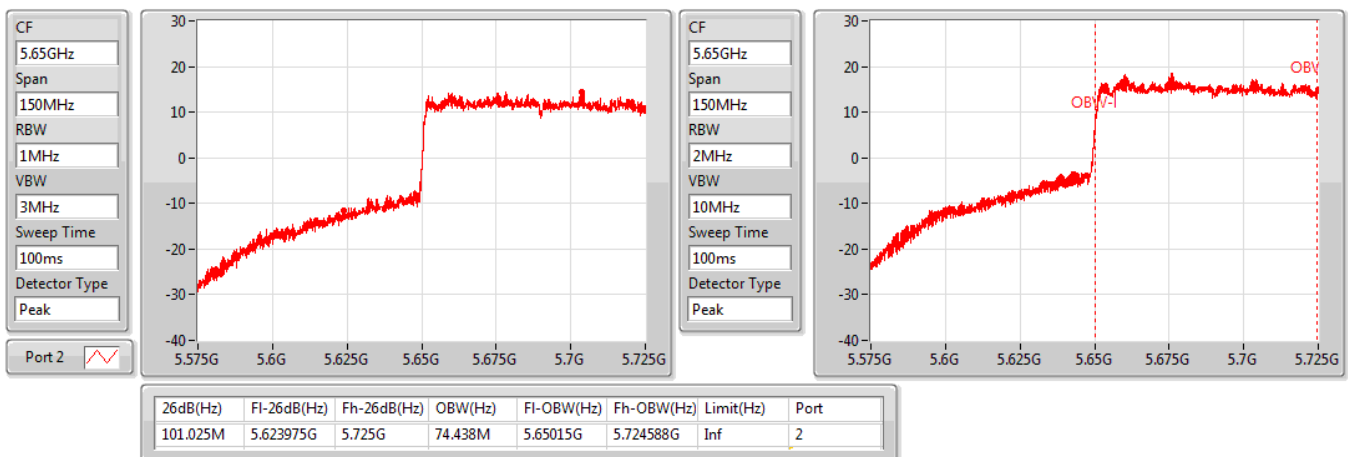


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5610MHz

28/07/2022

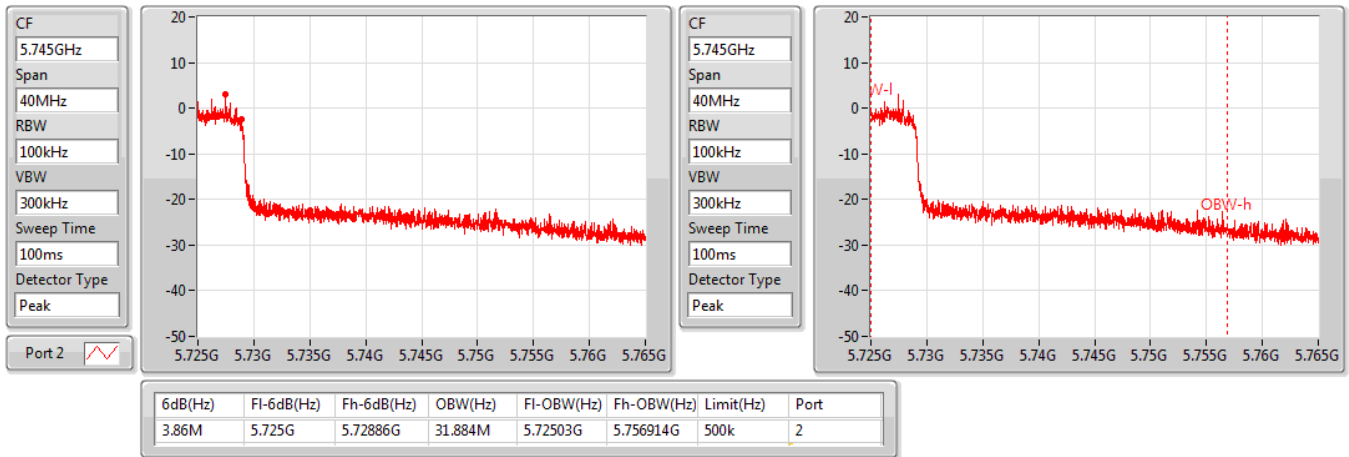

802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.47-5.725GHz

28/07/2022

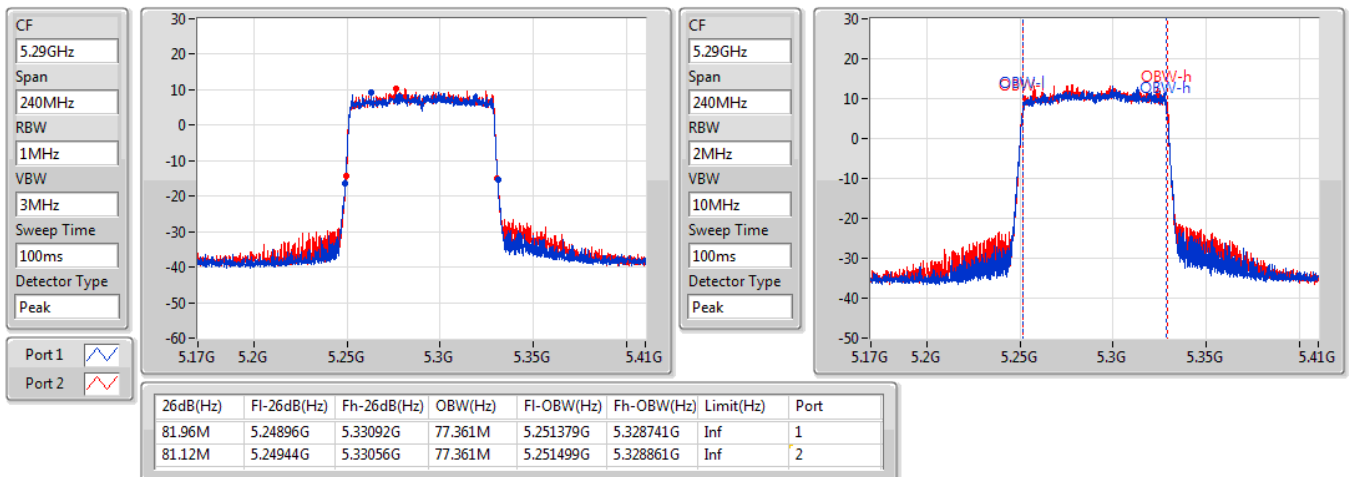


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.725-5.85GHz

28/07/2022

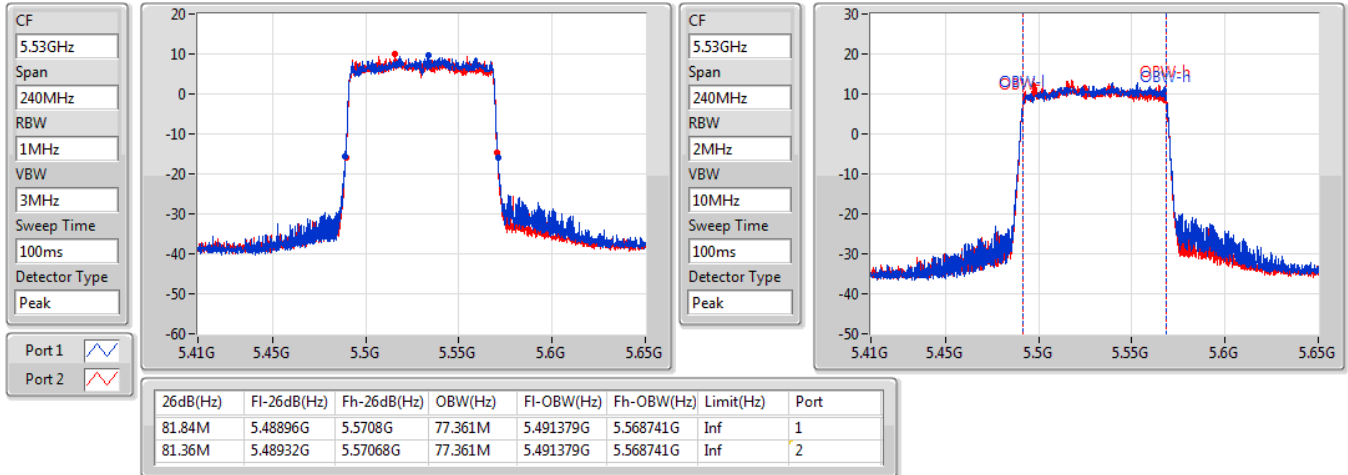

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

28/07/2022

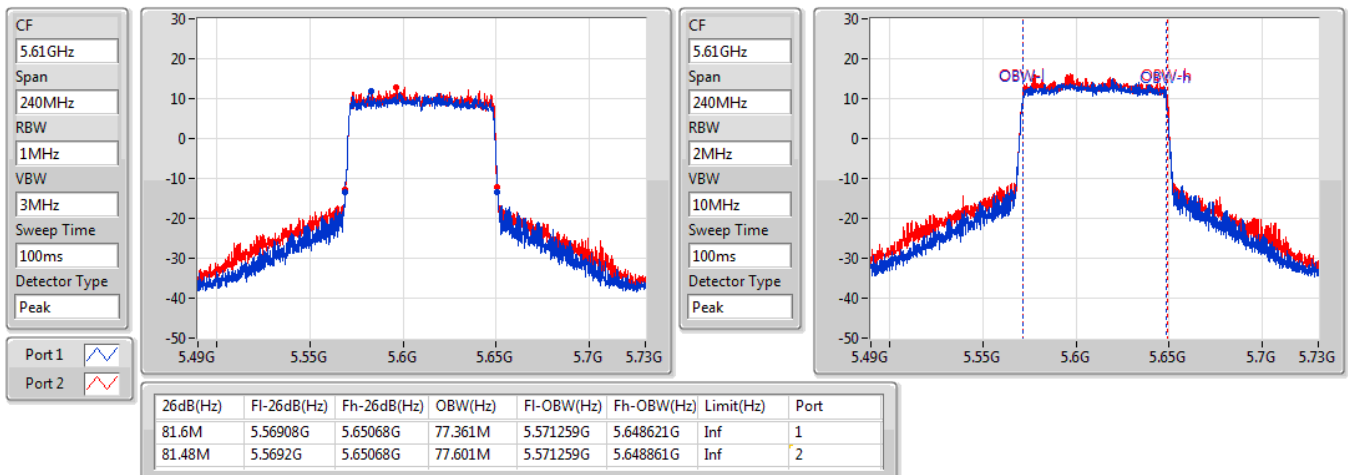


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

28/07/2022


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

28/07/2022

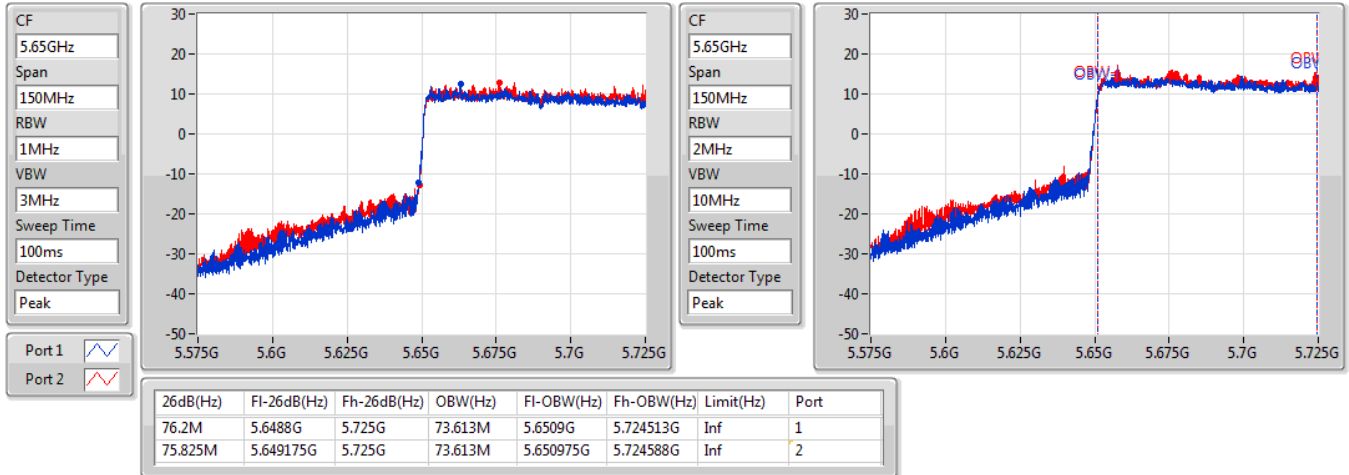


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

28/07/2022

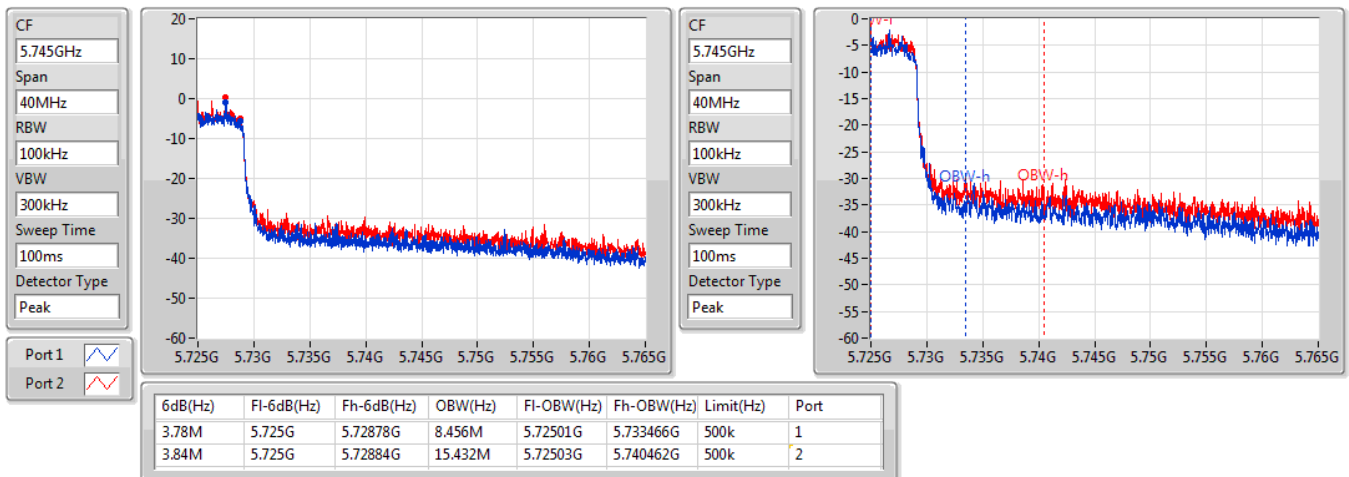


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

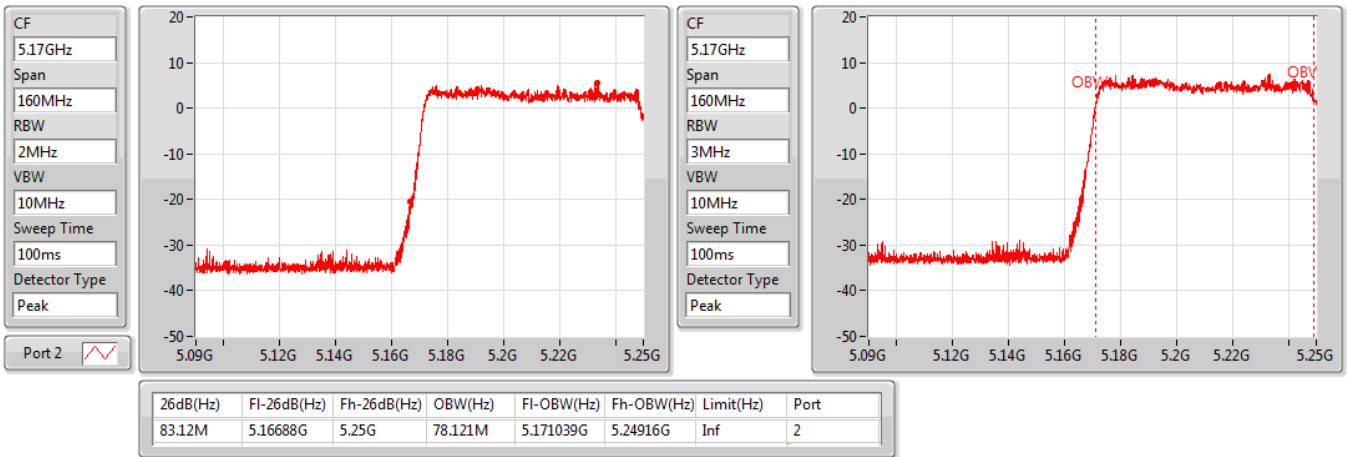
5690MHz Straddle 5.725-5.85GHz

28/07/2022

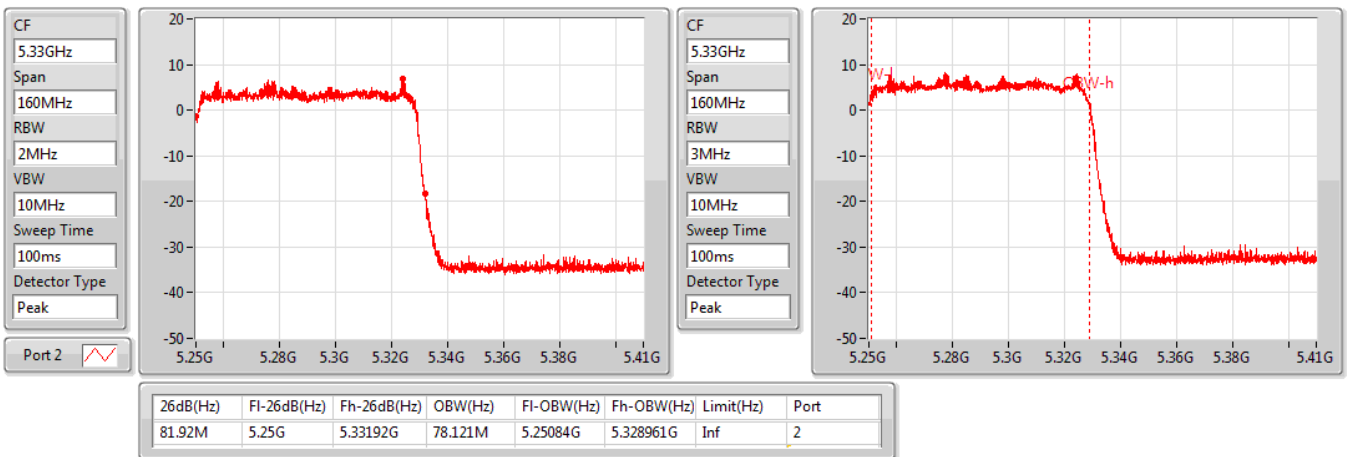


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5250MHz Straddle 5.15-5.25GHz

28/07/2022

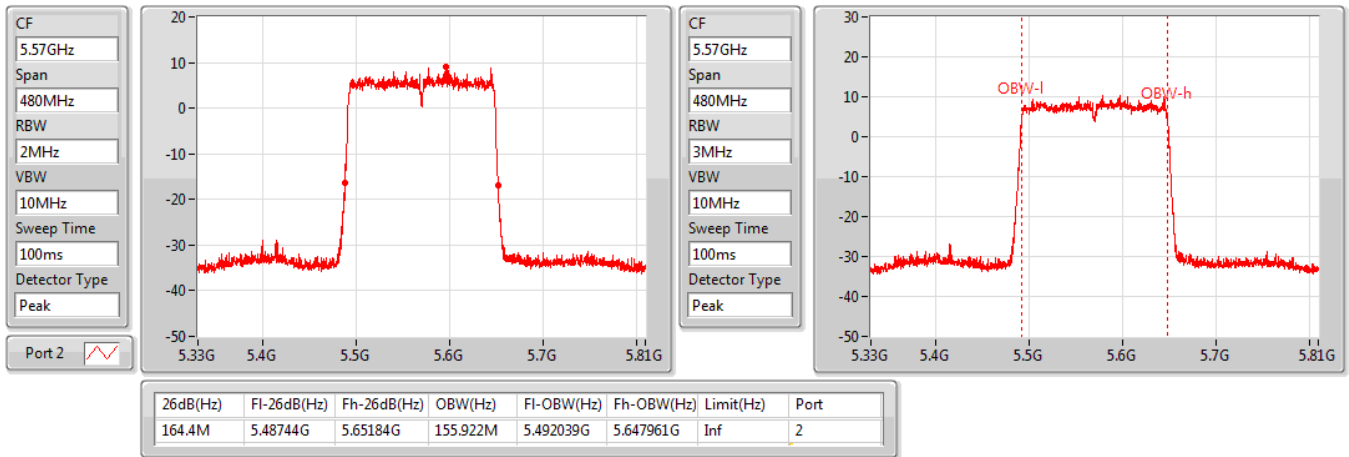

802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5250MHz Straddle 5.25-5.35GHz

28/07/2022

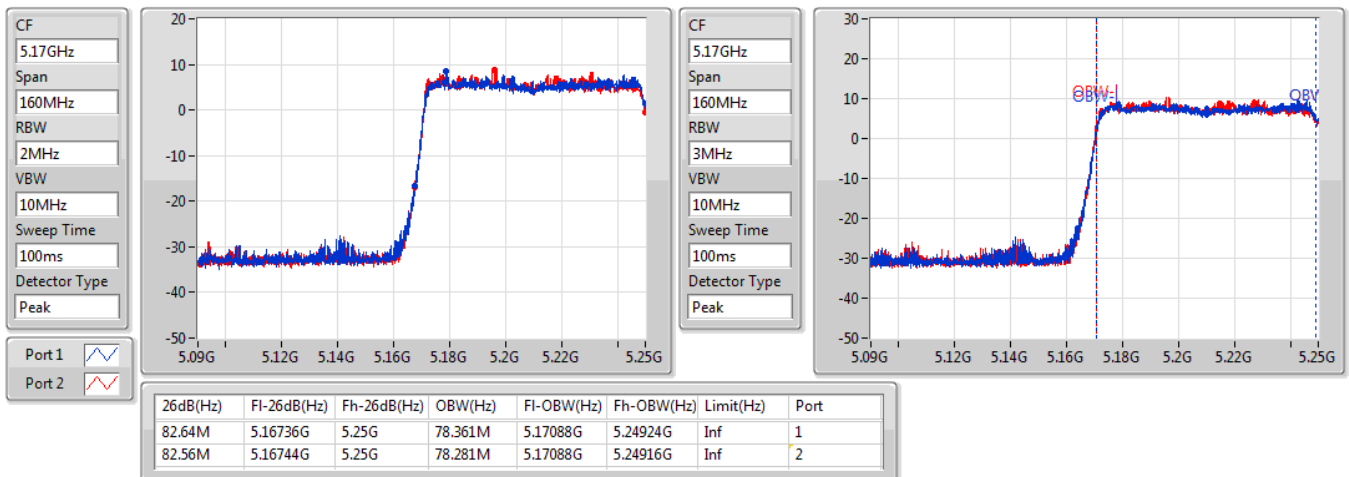


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5570MHz

28/07/2022


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

28/07/2022

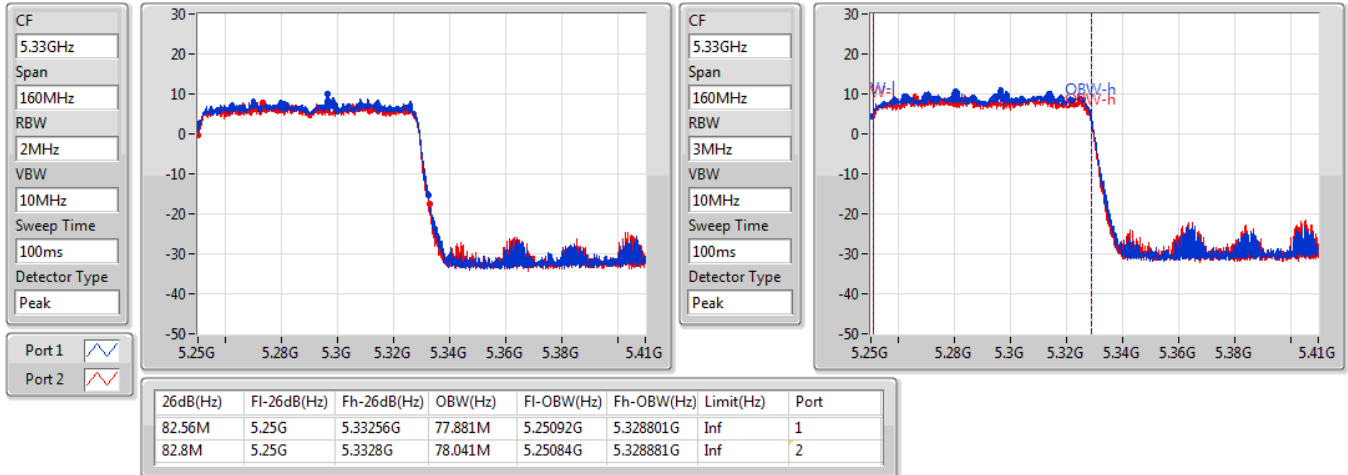


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

28/07/2022

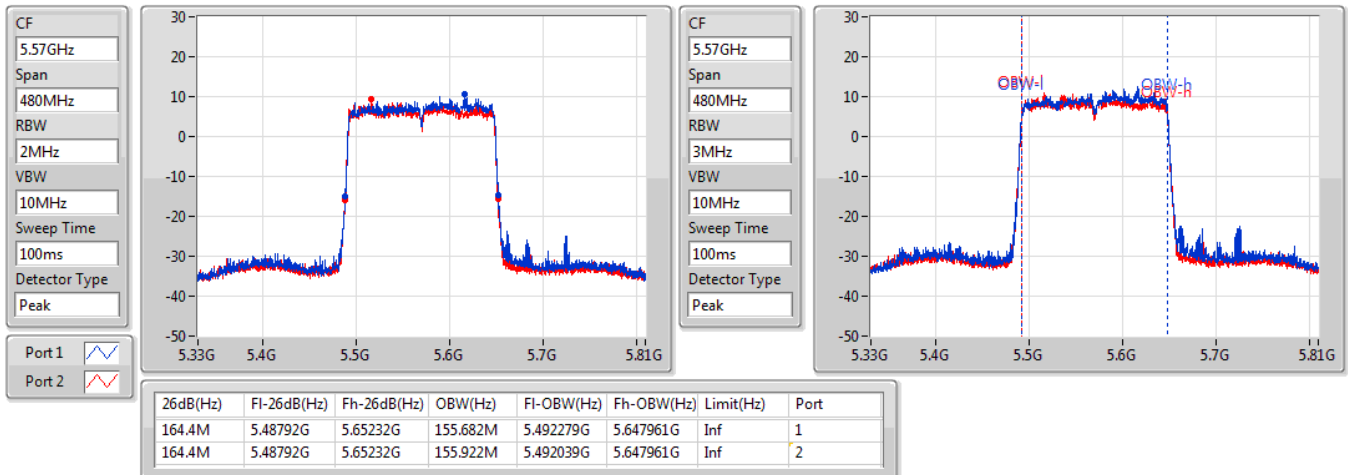


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

28/07/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	82.96M	78.281M	78M3D1D	82.96M	78.281M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.8M	78.361M	78M4D1D	82.16M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	39.81M	19.82M	19M9D1D	37.68M	18.711M
802.11a_Nss1,(6Mbps)_2TX	21.75M	17.181M	17M2D1D	21.54M	16.882M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	37.62M	19.76M	19M8D1D	27.15M	19.28M
802.11ax HEW20_Nss2,(MCS0)_2TX	24.96M	19.22M	19M3D1D	21.63M	19.19M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	71.4M	38.741M	38M8D1D	40.14M	37.901M
802.11ax HEW40_Nss2,(MCS0)_2TX	41.28M	37.961M	38M0D1D	40.14M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	81.36M	77.481M	77M5D1D	81.36M	77.481M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.6M	77.481M	77M5D1D	81.12M	77.361M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	82.4M	78.041M	78M0D1D	82.4M	78.041M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.88M	78.121M	78M2D1D	82.48M	77.961M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	37.59M	18.531M	18M6D1D	23.355M	14.903M
802.11a_Nss1,(6Mbps)_2TX	21.69M	17.181M	17M2D1D	15.69M	13.508M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	36.15M	19.49M	19M5D1D	21.81M	14.918M
802.11ax HEW20_Nss2,(MCS0)_2TX	22.14M	19.22M	19M3D1D	15.735M	14.618M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	76.98M	39.34M	39M4D1D	40.14M	34.773M
802.11ax HEW40_Nss2,(MCS0)_2TX	52.14M	38.021M	38M0D1D	40.02M	33.933M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	131.88M	79.16M	79M2D1D	81.72M	74.438M
802.11ax HEW80_Nss2,(MCS0)_2TX	86.475M	77.961M	78M0D1D	81M	73.763M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	164.16M	155.922M	156MD1D	164.16M	155.922M
802.11ax HEW160_Nss2,(MCS0)_2TX	165.12M	156.162M	156MD1D	163.92M	155.922M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	3.16M	9.835M	9M84D1D	3.16M	9.835M
802.11a_Nss1,(6Mbps)_2TX	3.16M	4.338M	4M34D1D	3.16M	4.218M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	4.5M	10.595M	10M6D1D	4.5M	10.595M
802.11ax HEW20_Nss2,(MCS0)_2TX	4.52M	5.377M	5M38D1D	4.46M	4.978M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	3.84M	21.529M	21M6D1D	3.84M	21.529M
802.11ax HEW40_Nss2,(MCS0)_2TX	3.94M	15.532M	15M6D1D	3.82M	13.333M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	3.84M	32.404M	32M5D1D	3.84M	32.404M
802.11ax HEW80_Nss2,(MCS0)_2TX	3.88M	25.467M	25M5D1D	3.86M	18.031M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			37.68M	19.22M
5300MHz	Pass	Inf			39.81M	19.82M
5320MHz	Pass	Inf			37.89M	18.711M
5500MHz	Pass	Inf			28.47M	17.481M
5580MHz	Pass	Inf			37.59M	18.531M
5700MHz	Pass	Inf			25.71M	17.451M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			23.355M	14.903M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.16M	9.835M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.69M	17.181M	21.54M	16.882M
5300MHz	Pass	Inf	21.75M	17.181M	21.54M	16.882M
5320MHz	Pass	Inf	21.6M	17.181M	21.6M	16.912M
5500MHz	Pass	Inf	21.69M	17.151M	21.48M	16.912M
5580MHz	Pass	Inf	21.6M	17.181M	21.57M	16.882M
5700MHz	Pass	Inf	21.66M	17.181M	21.66M	16.942M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	13.643M	15.69M	13.508M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.16M	4.338M	3.16M	4.218M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			37.62M	19.76M
5300MHz	Pass	Inf			36.21M	19.61M
5320MHz	Pass	Inf			27.15M	19.28M
5500MHz	Pass	Inf			21.87M	19.16M
5580MHz	Pass	Inf			36.15M	19.49M
5700MHz	Pass	Inf			21.81M	19.16M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			24.105M	14.918M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			4.5M	10.595M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.75M	19.19M	22.23M	19.22M
5300MHz	Pass	Inf	24.96M	19.19M	21.75M	19.19M
5320MHz	Pass	Inf	21.63M	19.19M	22.08M	19.22M
5500MHz	Pass	Inf	22.14M	19.13M	21.6M	19.22M
5580MHz	Pass	Inf	21.6M	19.16M	21.99M	19.16M
5700MHz	Pass	Inf	21.69M	19.13M	21.84M	19.16M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.735M	14.618M	16.455M	14.663M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.978M	4.52M	5.377M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5270MHz	Pass	Inf			71.4M	38.741M
5310MHz	Pass	Inf			40.14M	37.901M
5510MHz	Pass	Inf			40.14M	37.901M
5550MHz	Pass	Inf			76.98M	39.1M
5670MHz	Pass	Inf			72.48M	39.34M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			52.185M	34.773M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.84M	21.529M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40.2M	37.841M	41.28M	37.961M
5310MHz	Pass	Inf	40.2M	37.781M	40.14M	37.901M
5510MHz	Pass	Inf	40.2M	37.721M	40.08M	37.781M
5550MHz	Pass	Inf	40.02M	37.961M	41.04M	37.961M
5670MHz	Pass	Inf	52.14M	38.021M	44.1M	38.021M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	44.8M	33.933M	41.58M	34.073M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	13.333M	3.82M	15.532M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5290MHz	Pass	Inf			81.36M	77.481M
5530MHz	Pass	Inf			81.72M	77.601M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5610MHz	Pass	Inf			131.88M	79.16M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			101.025M	74.438M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			3.84M	32.404M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.6M	77.361M	81.12M	77.481M
5530MHz	Pass	Inf	81.84M	77.361M	81.12M	77.361M
5610MHz	Pass	Inf	81.96M	77.601M	81.72M	77.961M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	81M	73.838M	86.475M	73.763M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	18.031M	3.86M	25.467M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf			82.96M	78.281M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf			82.4M	78.041M
5570MHz	Pass	Inf			164.16M	155.922M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.8M	78.361M	82.16M	78.361M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.48M	77.961M	82.88M	78.121M
5570MHz	Pass	Inf	163.92M	155.922M	165.12M	156.162M

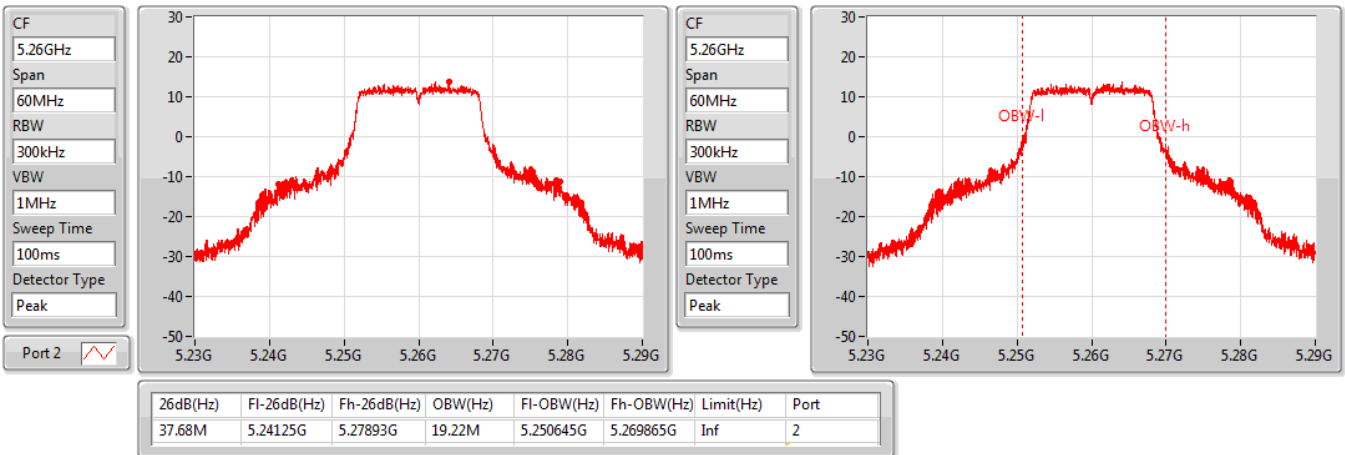
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5260MHz

28/07/2022

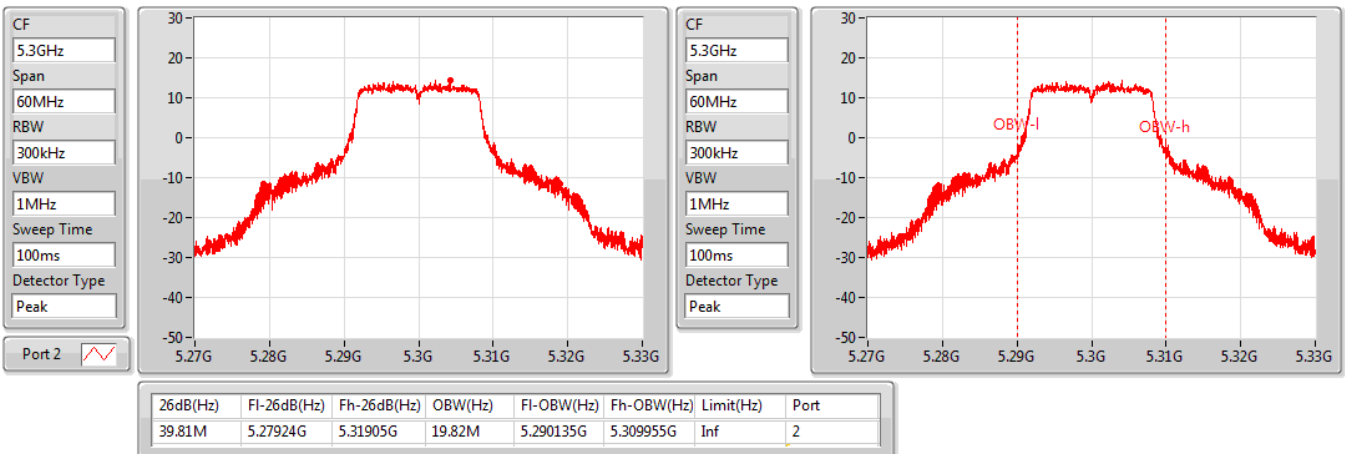


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5300MHz

28/07/2022

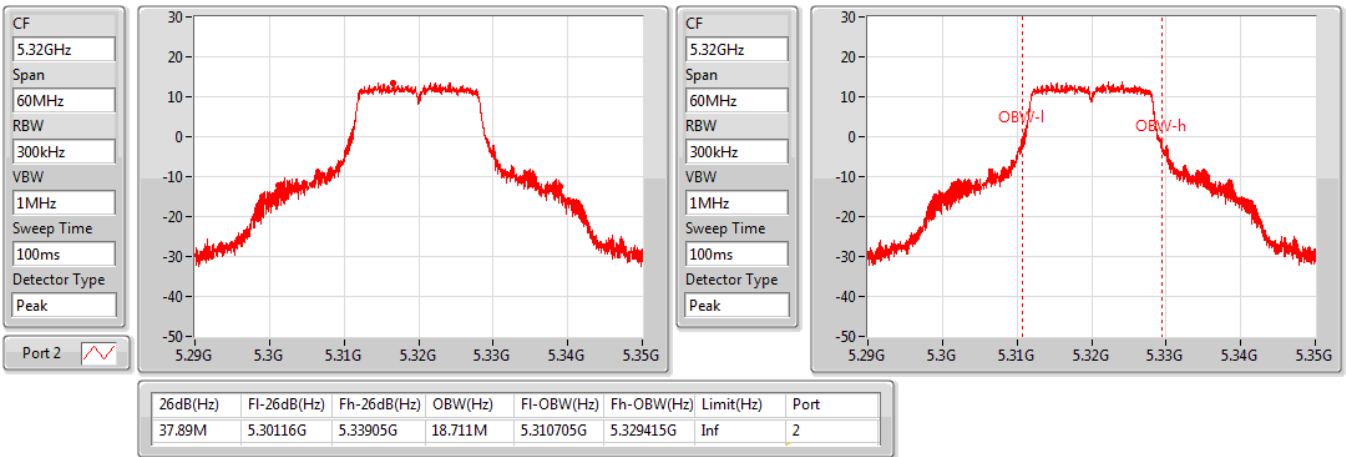


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5320MHz

28/07/2022

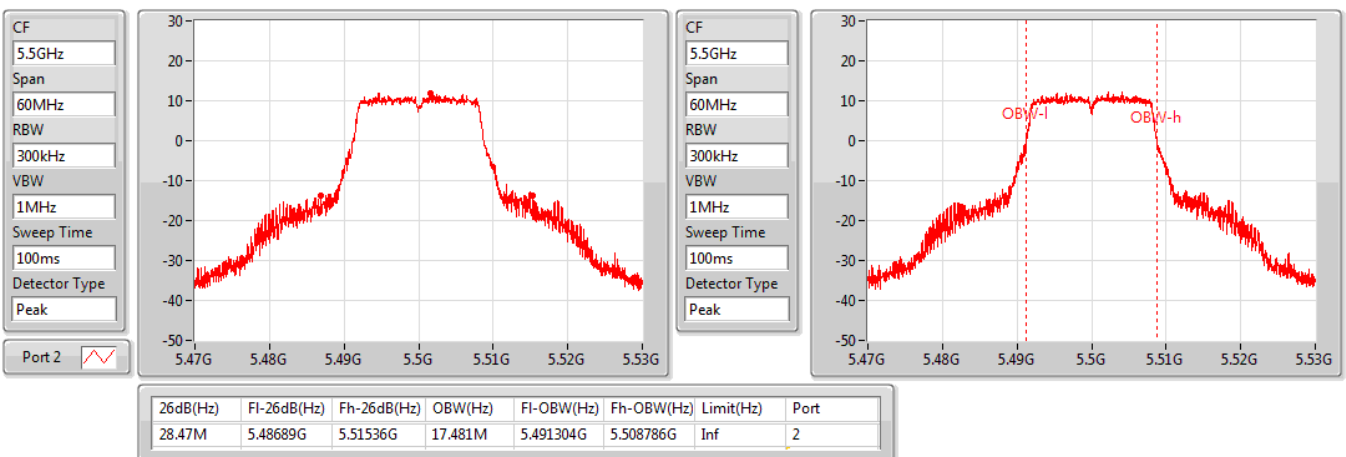


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5500MHz

28/07/2022

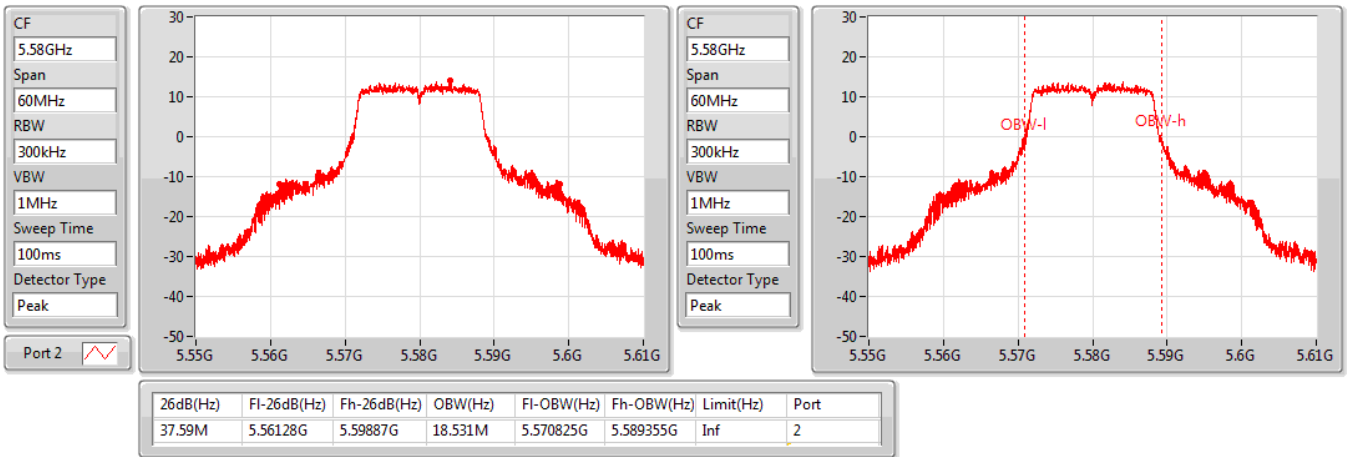


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5580MHz

28/07/2022

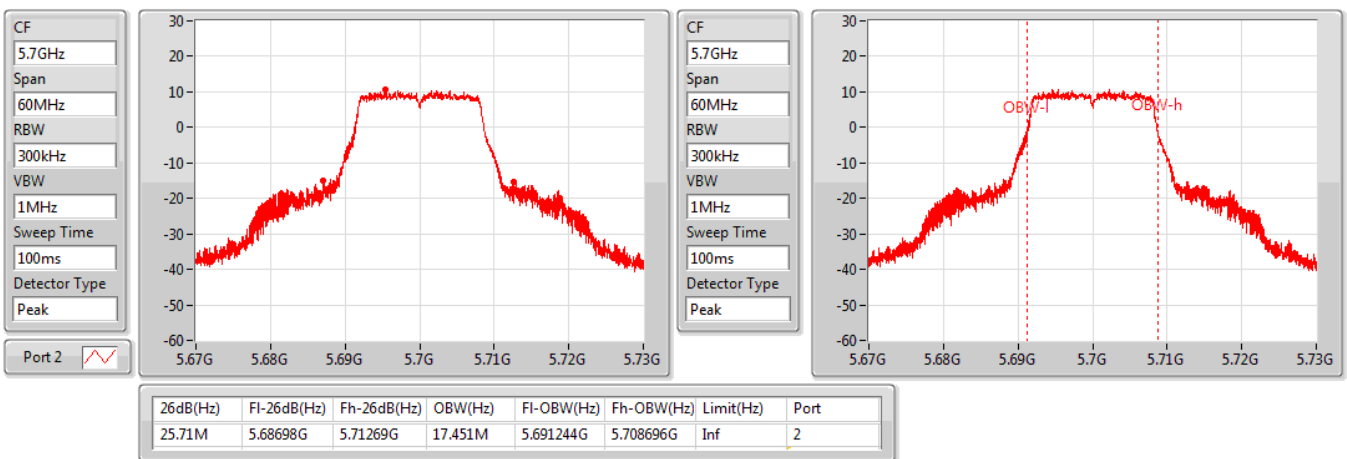


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

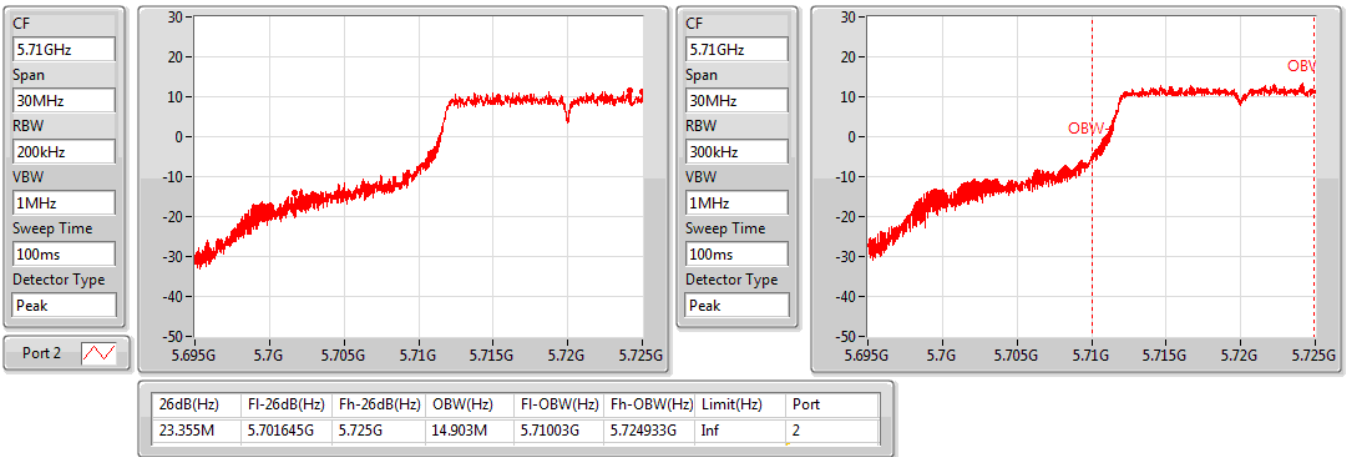
5700MHz

28/07/2022

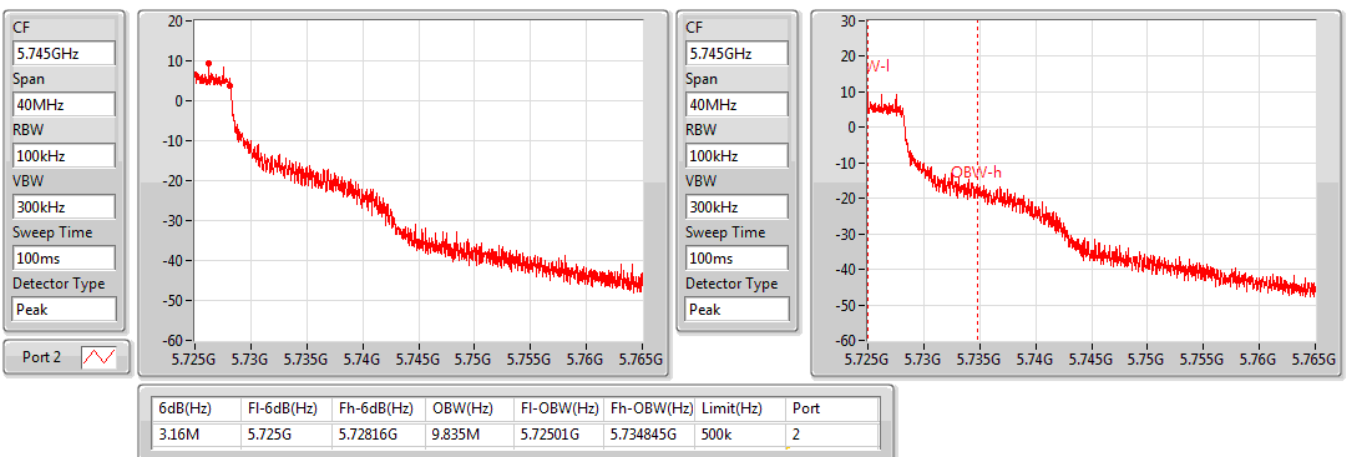


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5720MHz Straddle 5.67-5.725GHz

28/07/2022

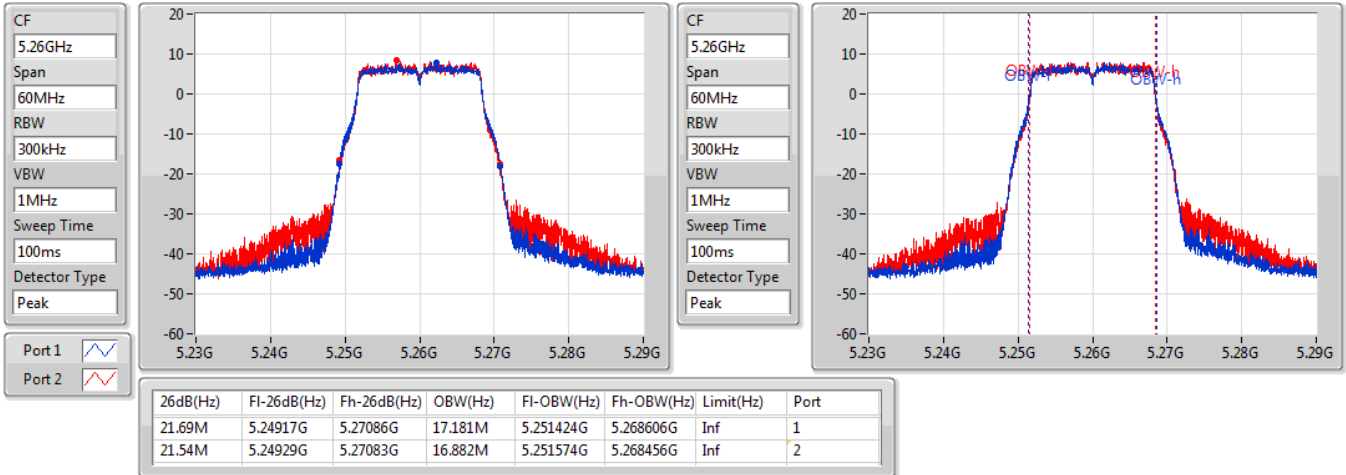

802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5720MHz Straddle 5.725-5.85GHz

28/07/2022

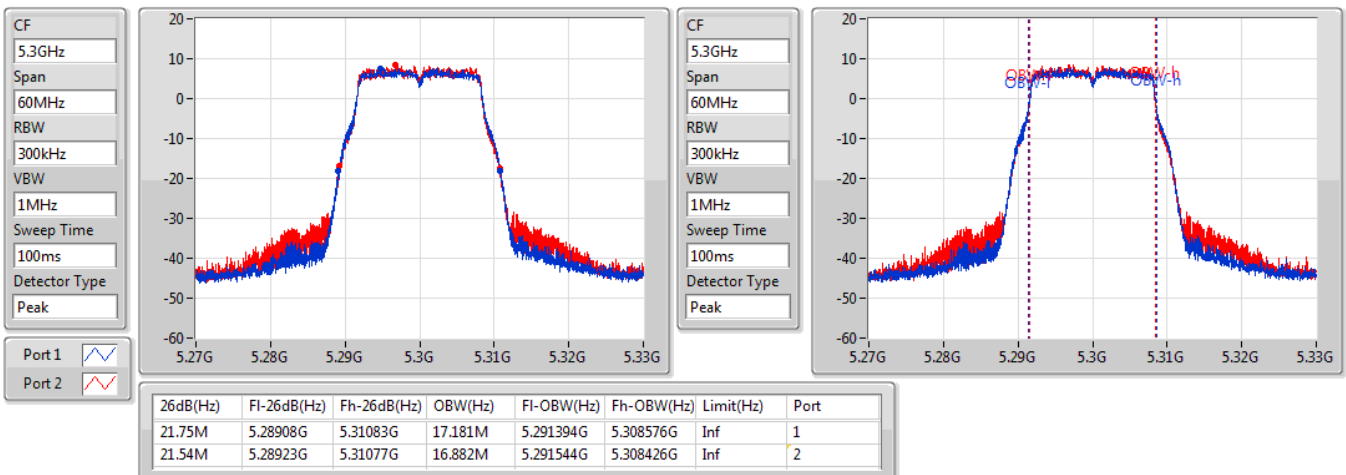


802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

28/07/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

28/07/2022

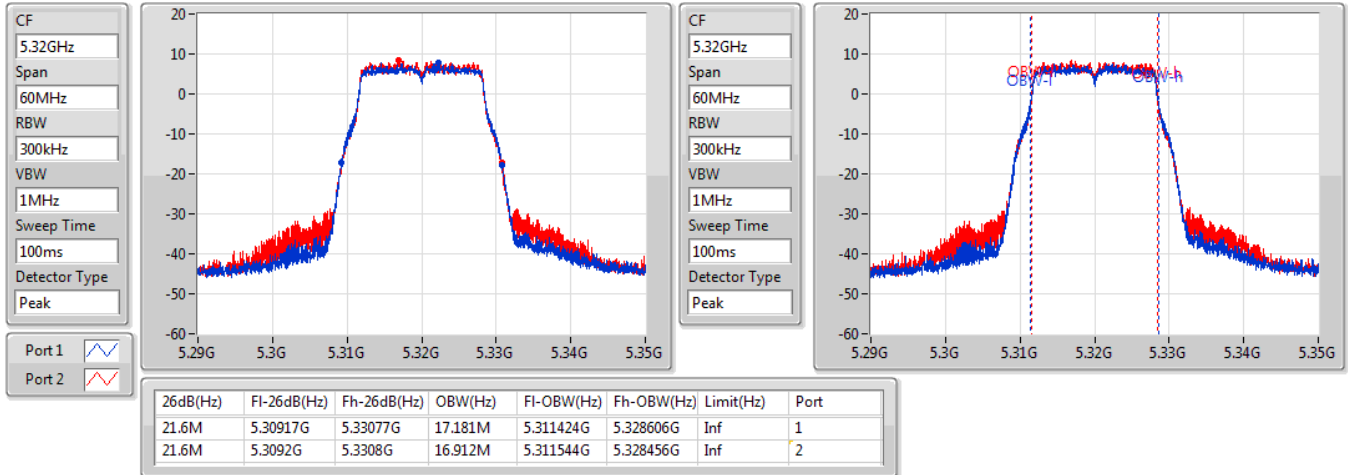


802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

28/07/2022

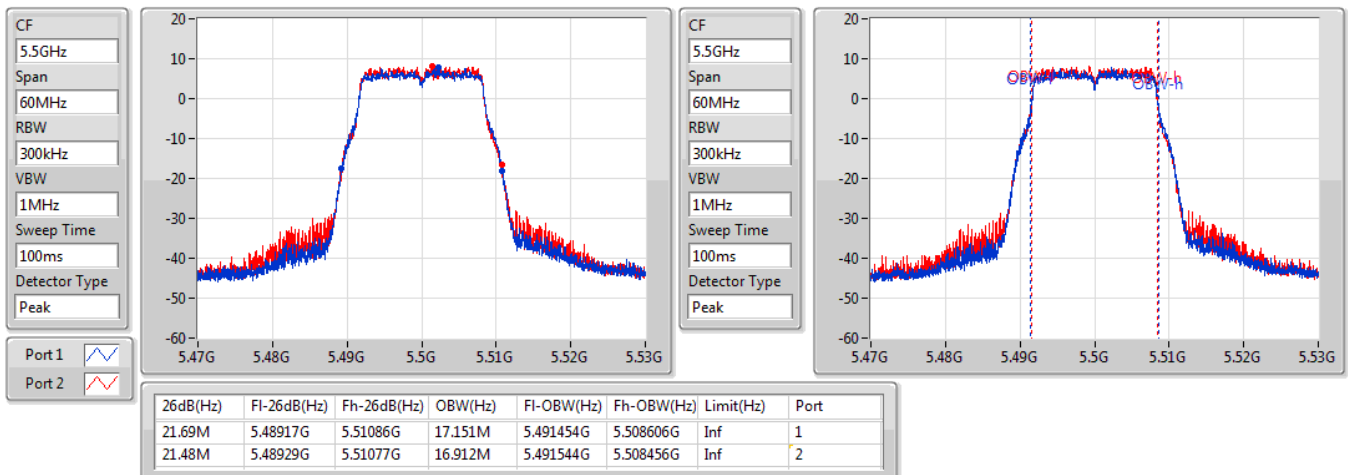


802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

28/07/2022

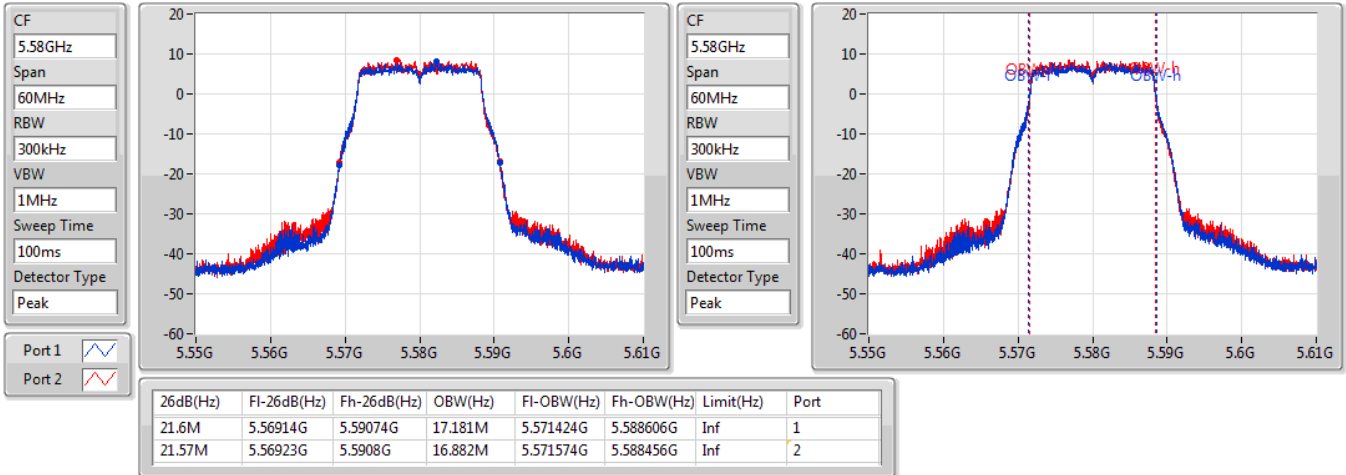


802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

28/07/2022

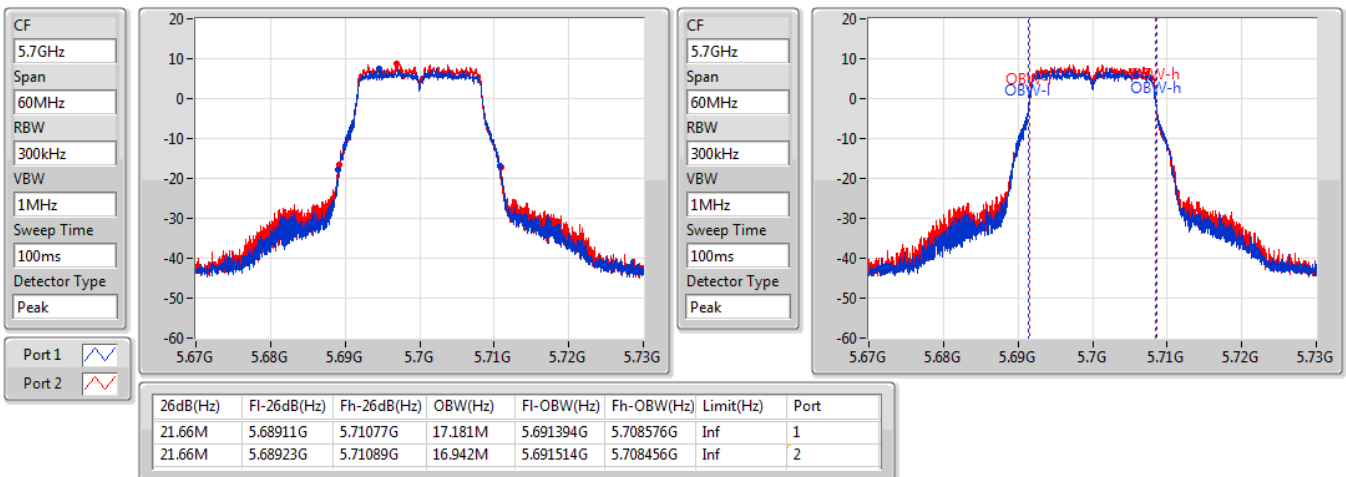


802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

28/07/2022

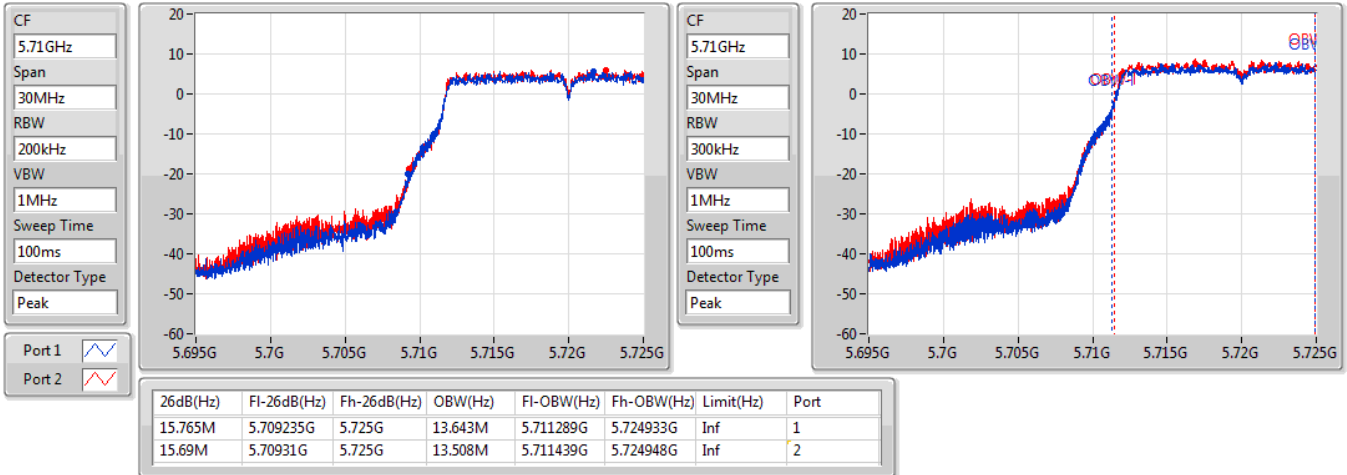


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

28/07/2022

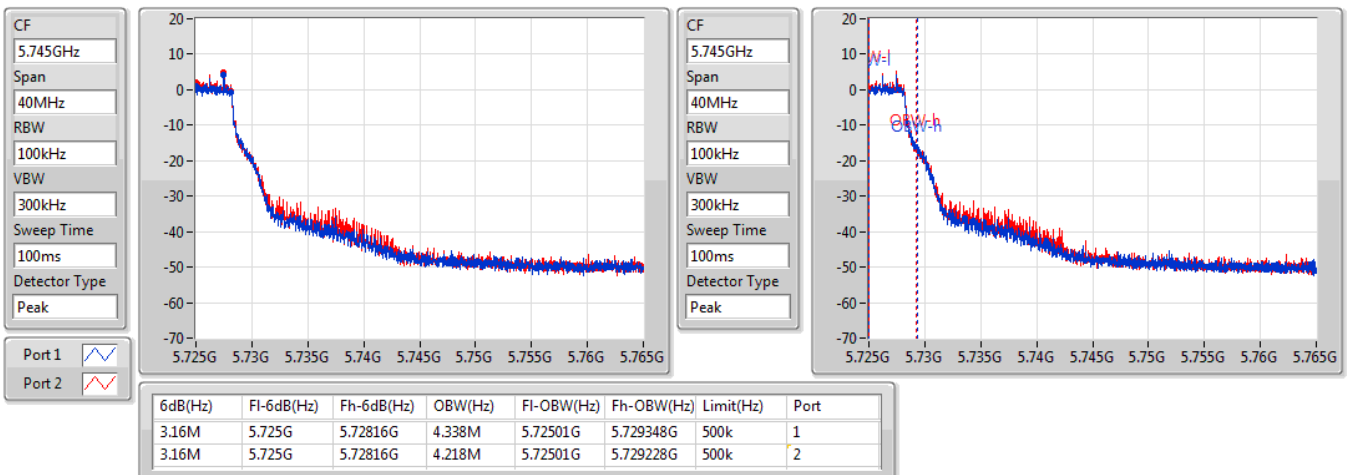


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

28/07/2022

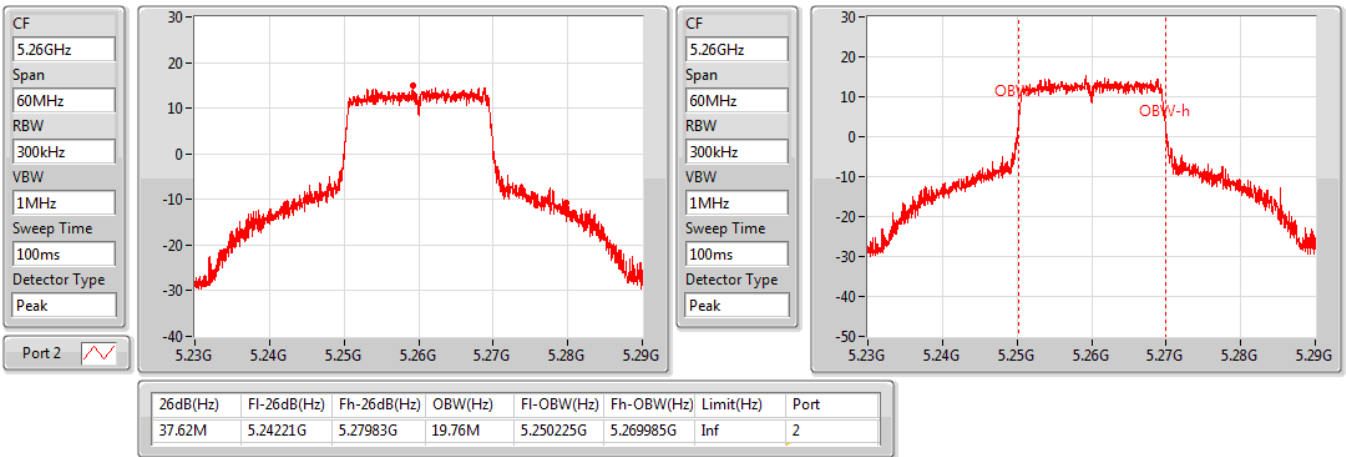


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5260MHz

28/07/2022

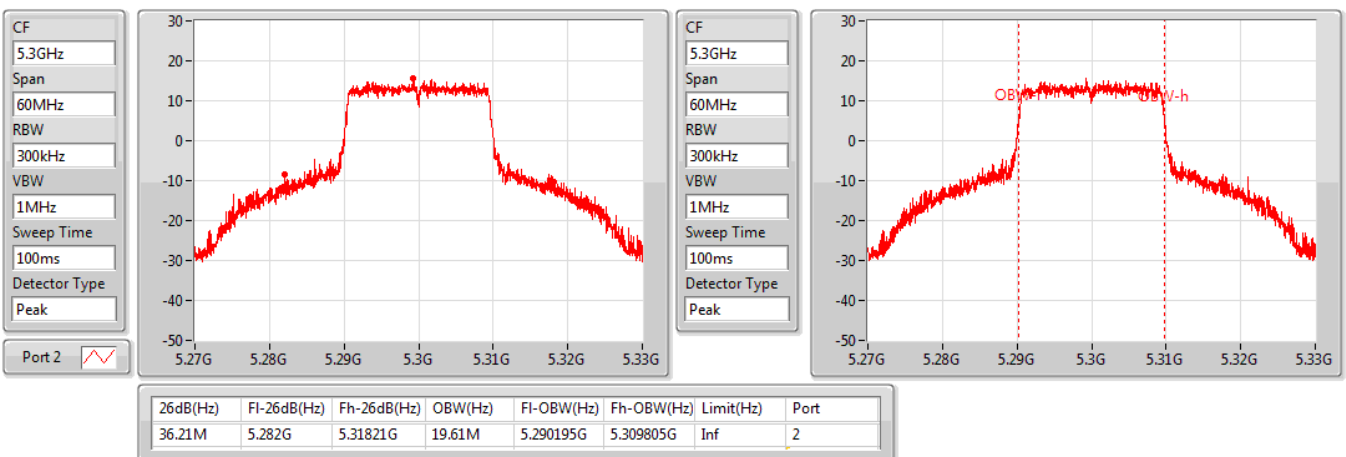


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5300MHz

28/07/2022

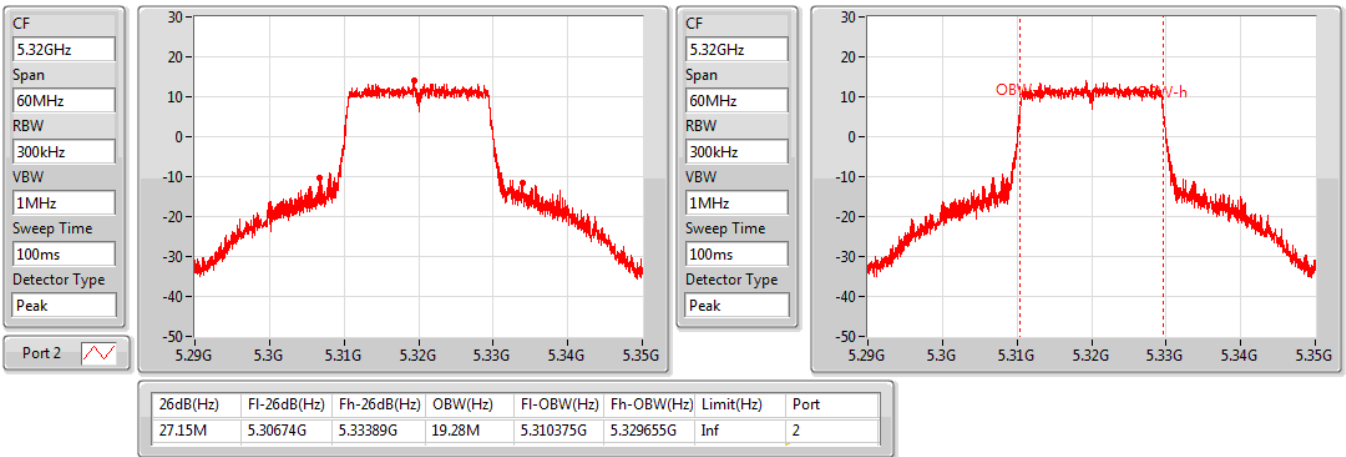


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

5320MHz

28/07/2022

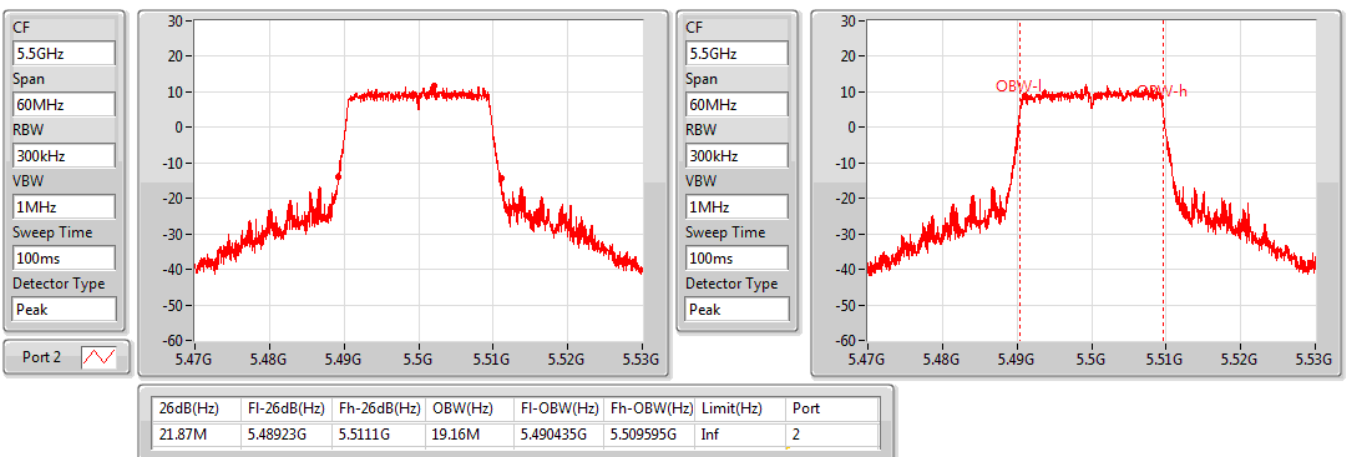


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

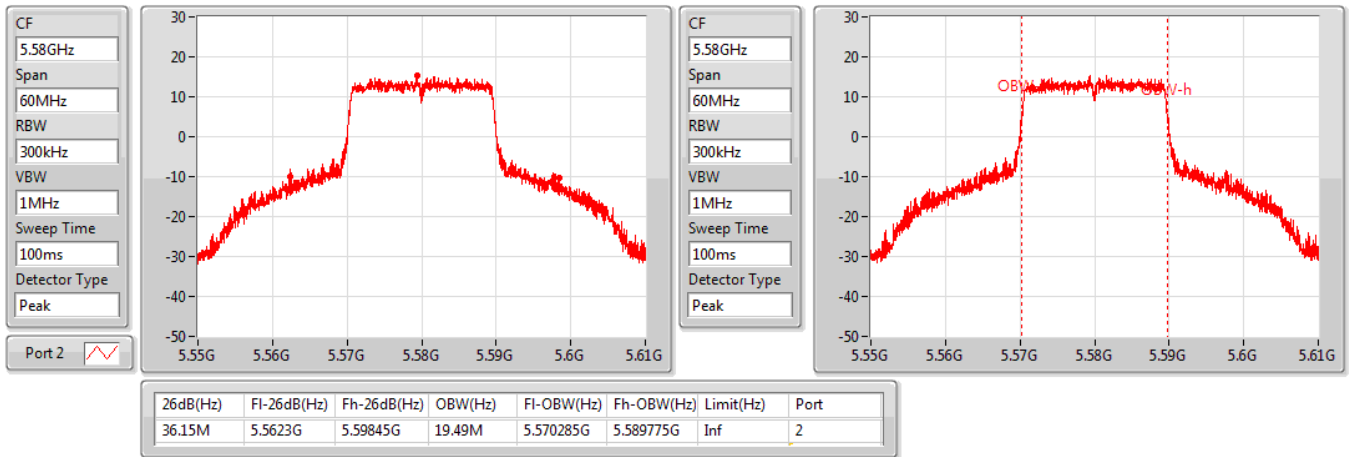
5500MHz

28/07/2022

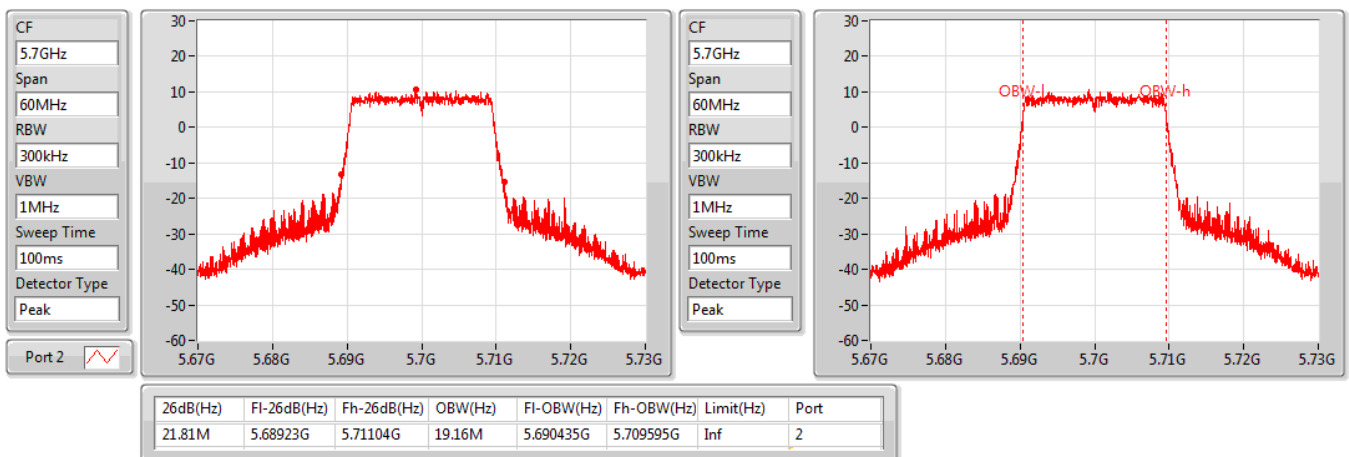


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5580MHz

28/07/2022

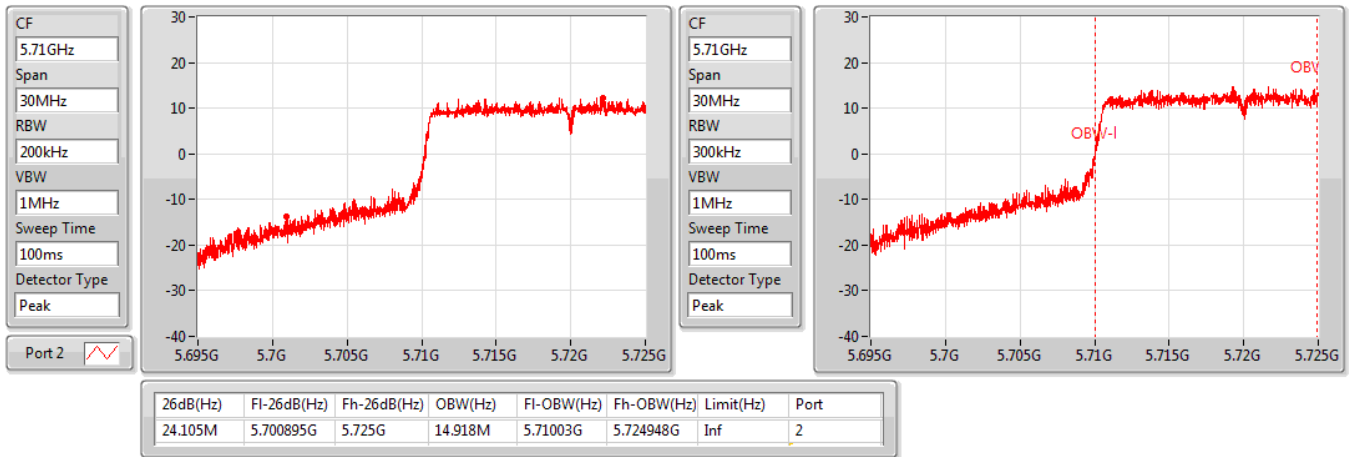

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5700MHz

28/07/2022

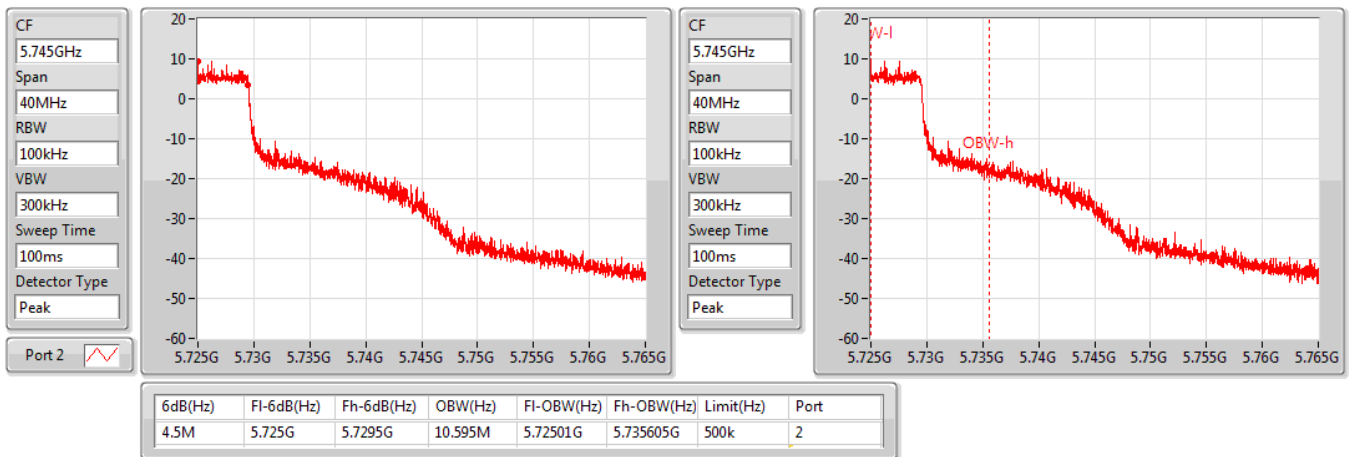


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.47-5.725GHz

28/07/2022

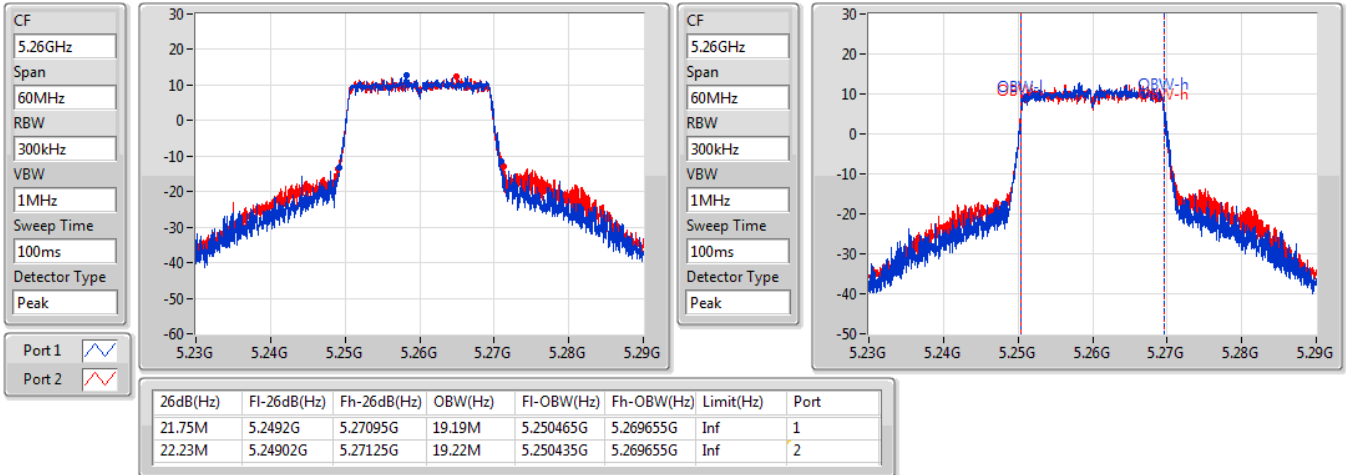

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5720MHz Straddle 5.725-5.85GHz

28/07/2022

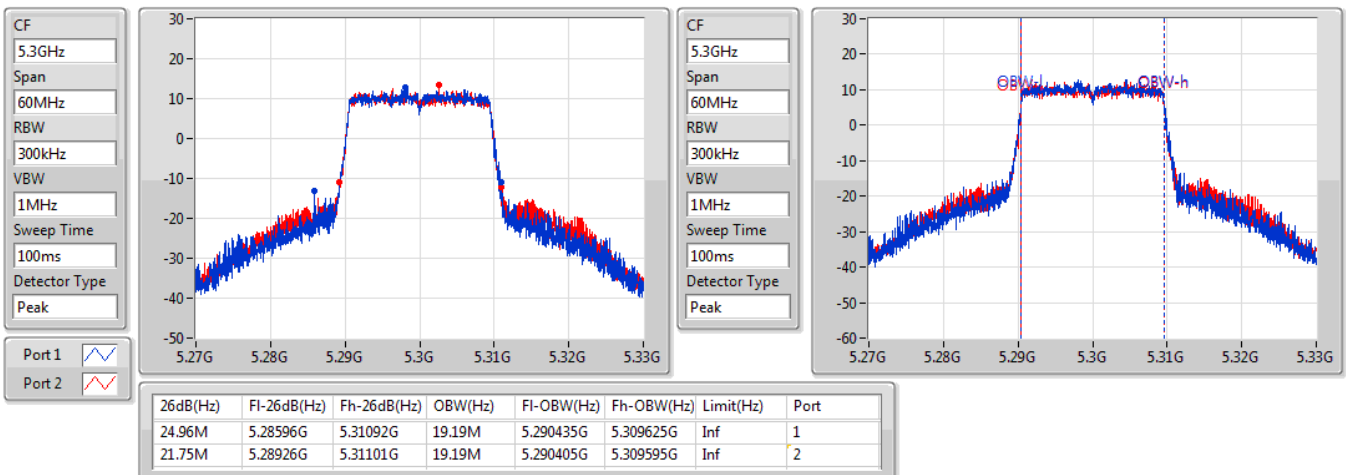


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5260MHz

28/07/2022


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

28/07/2022

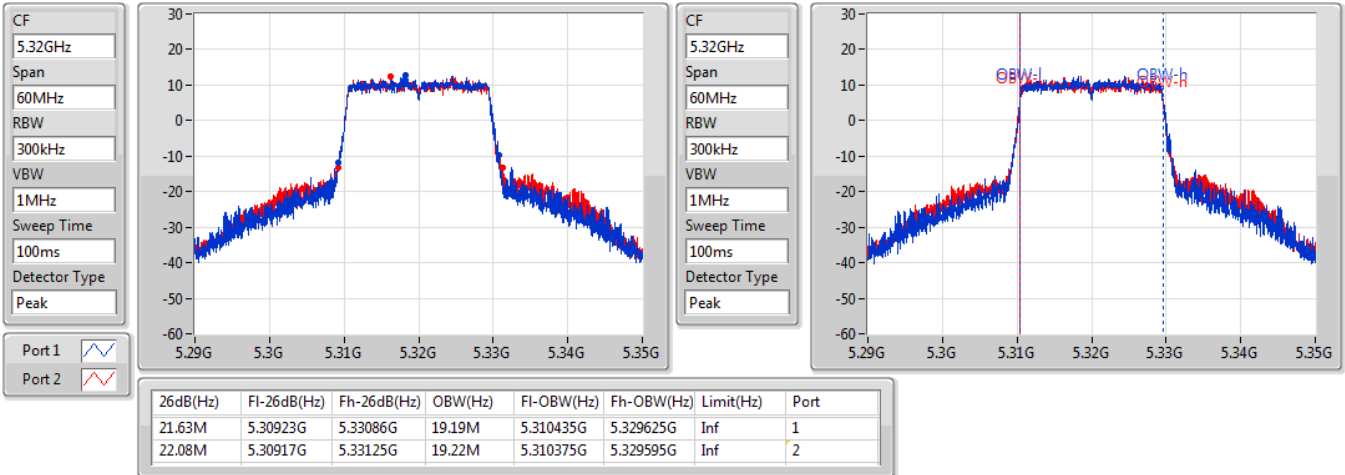


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5320MHz

28/07/2022

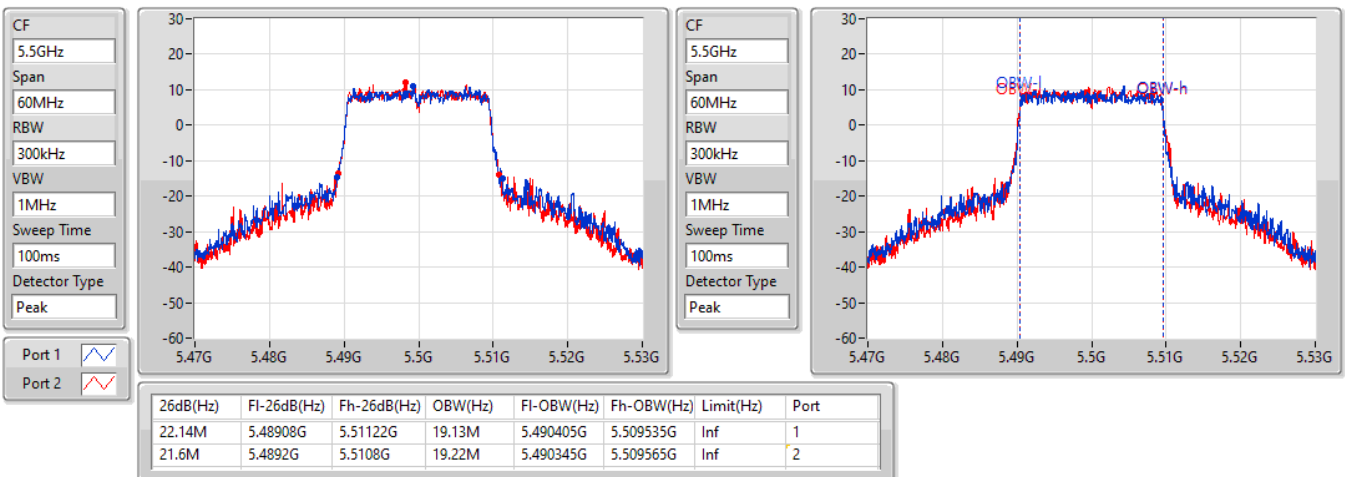


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5500MHz

13/08/2022

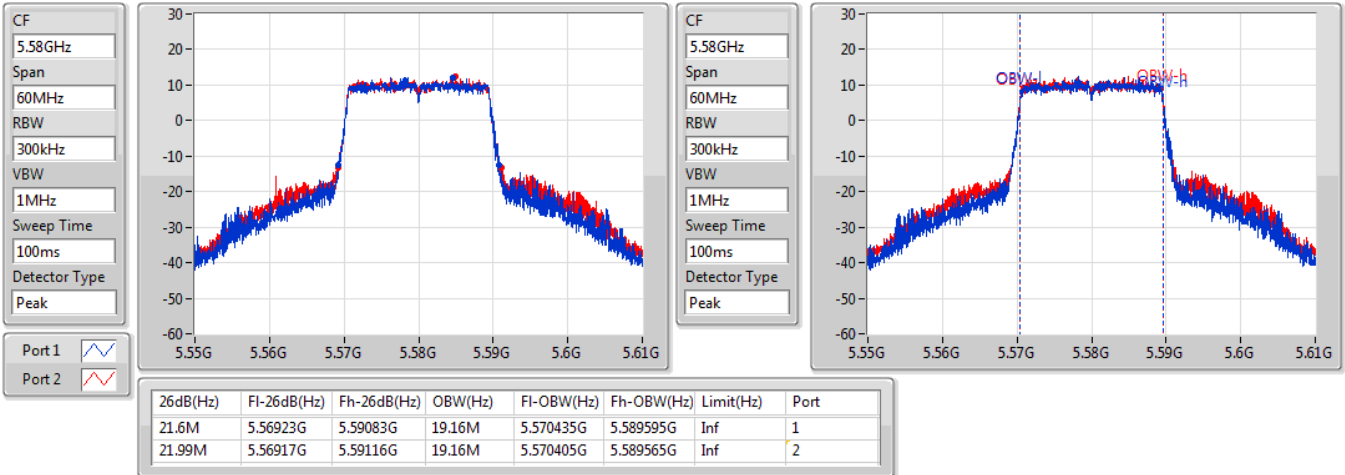


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5580MHz

28/07/2022

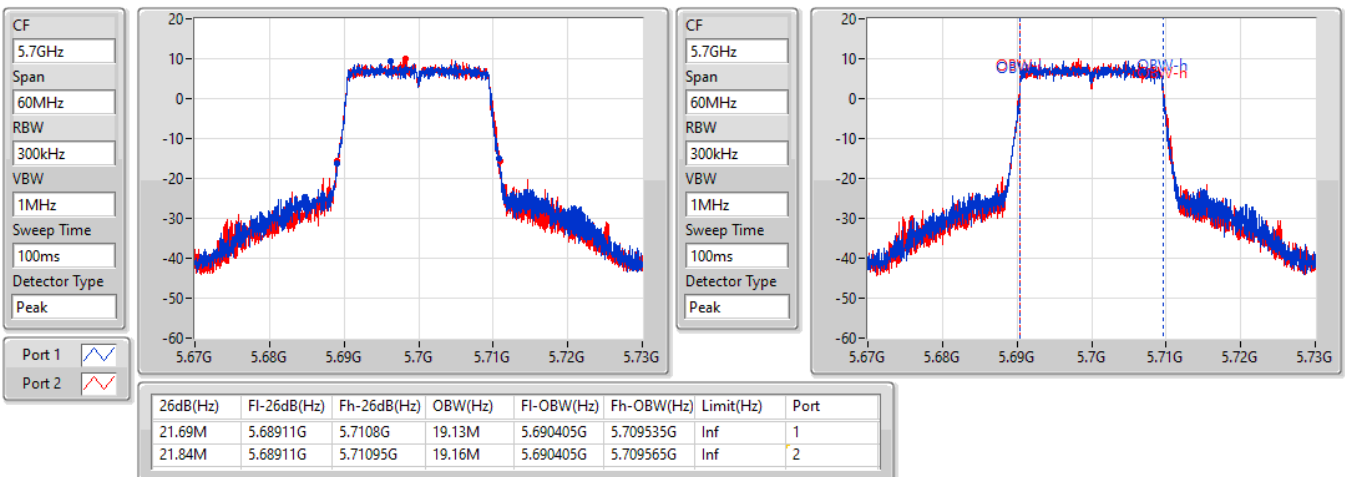


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5700MHz

13/08/2022

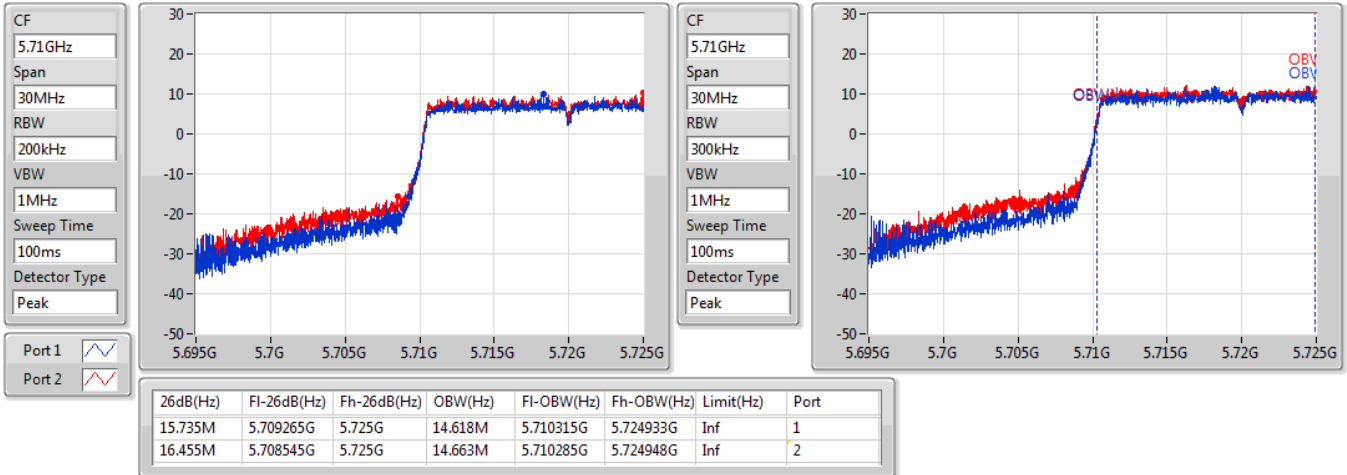


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

28/07/2022

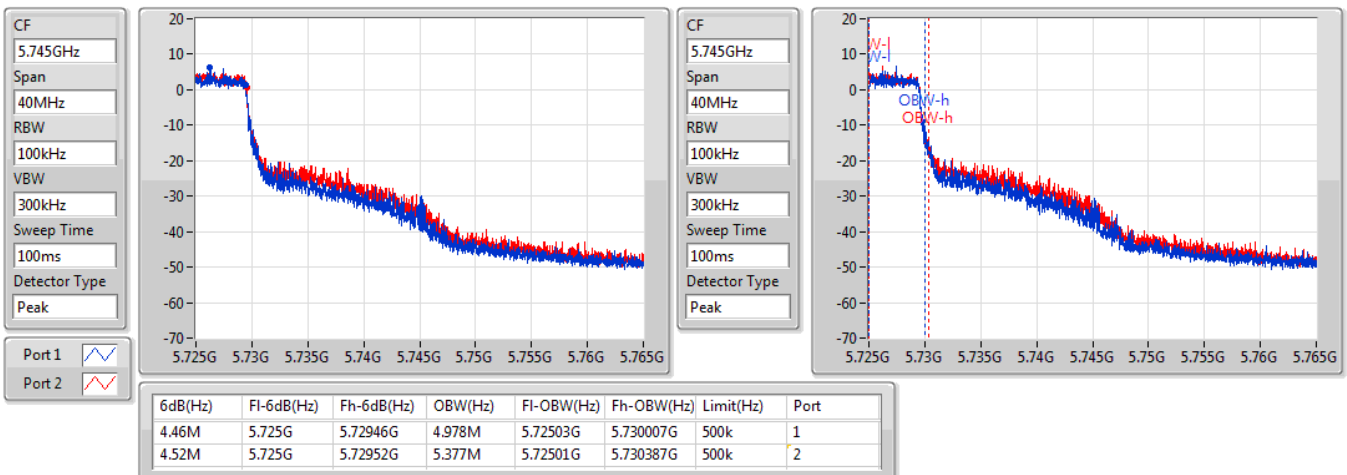


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

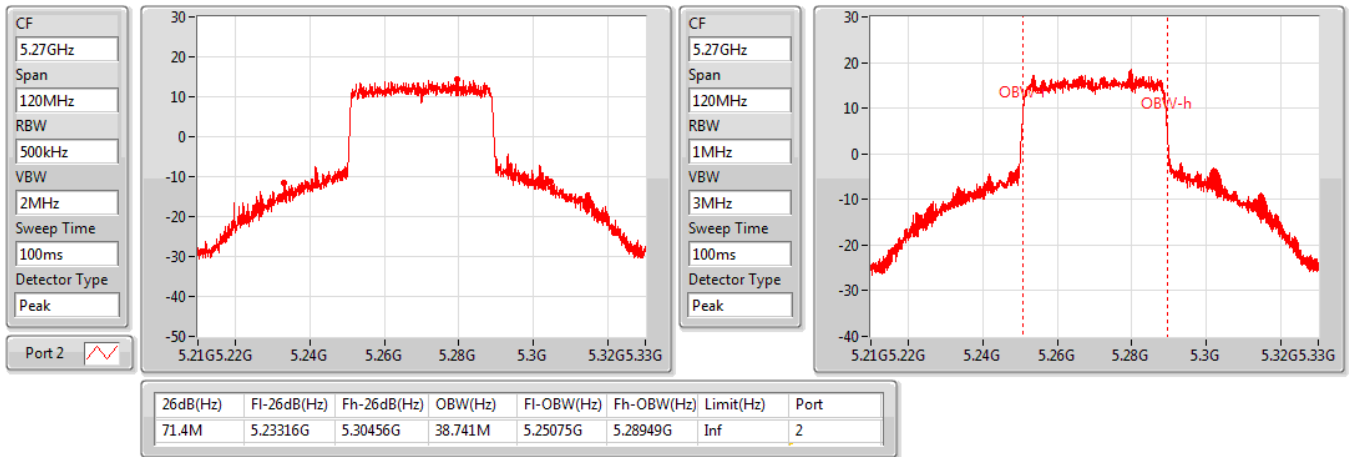
5720MHz Straddle 5.725-5.85GHz

28/07/2022

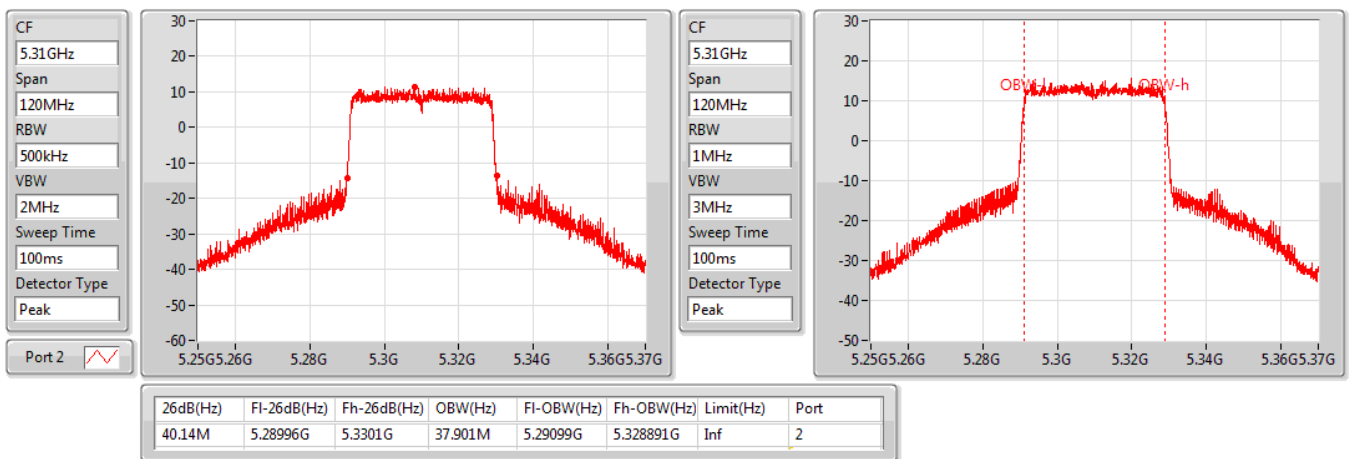


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5270MHz

28/07/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5310MHz

28/07/2022

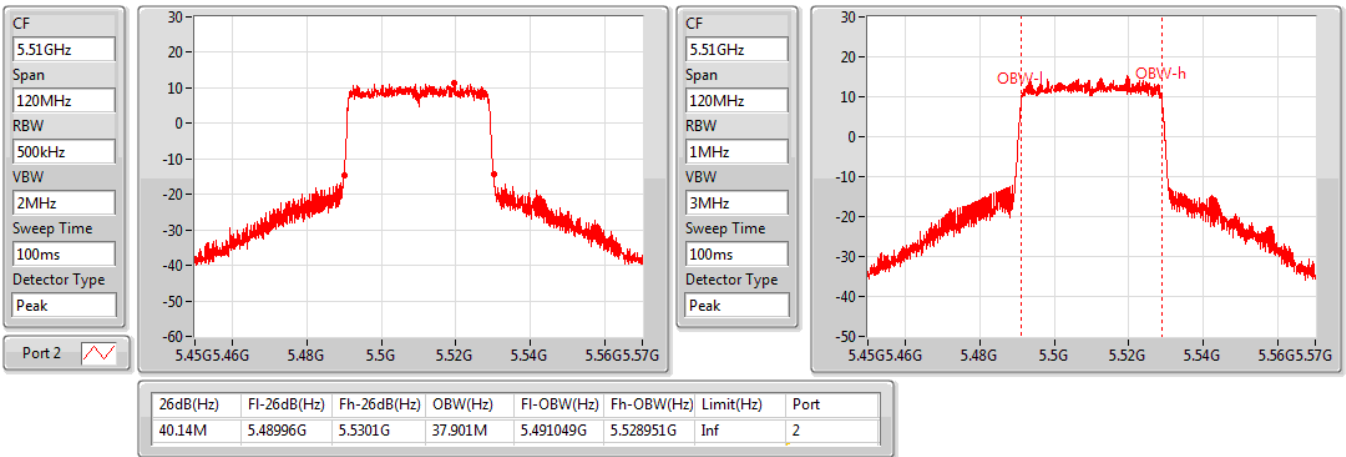


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5510MHz

28/07/2022

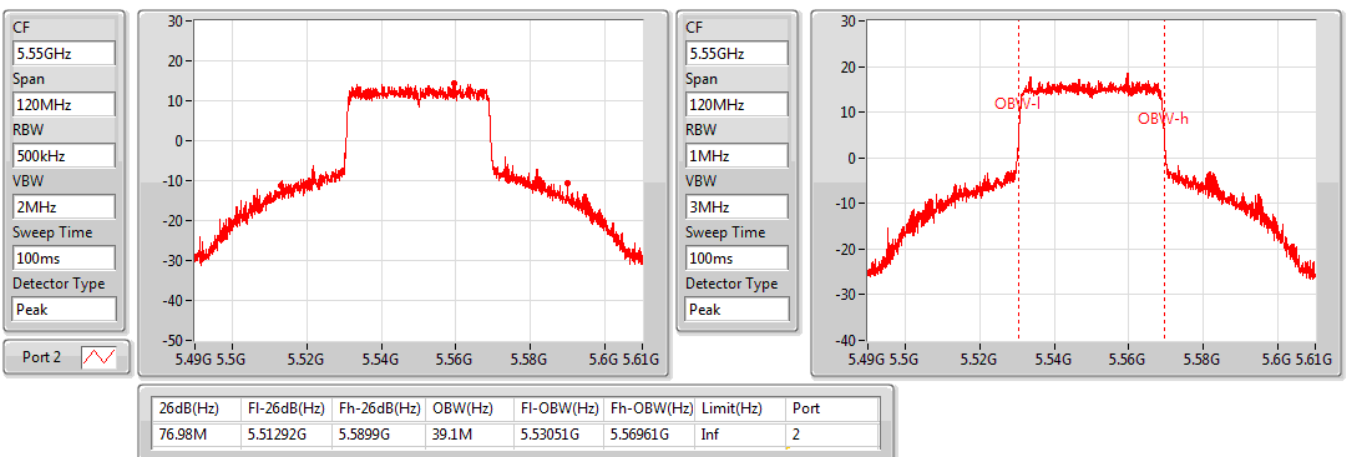


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

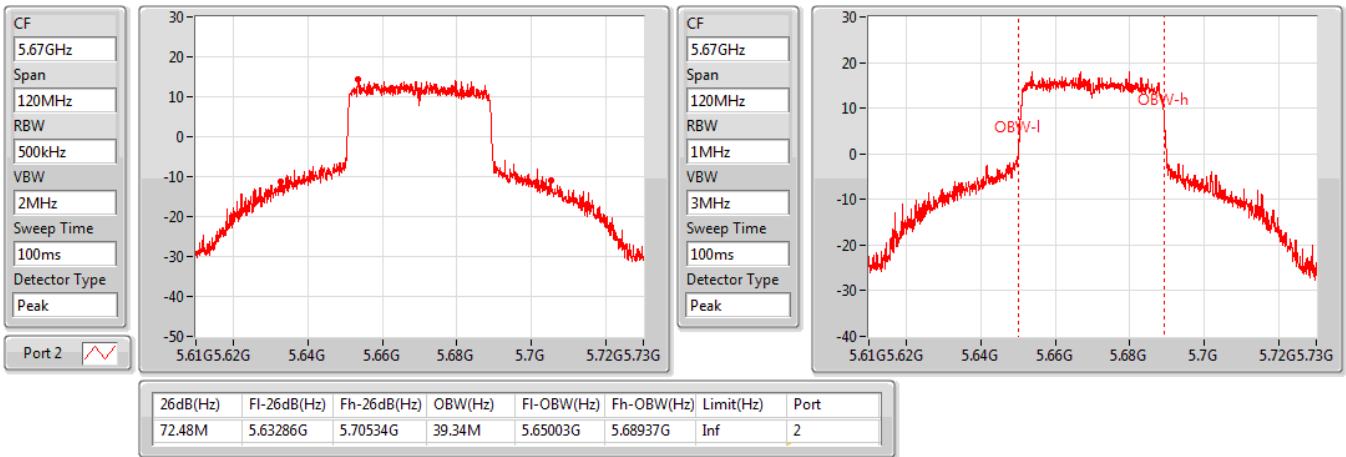
5550MHz

28/07/2022

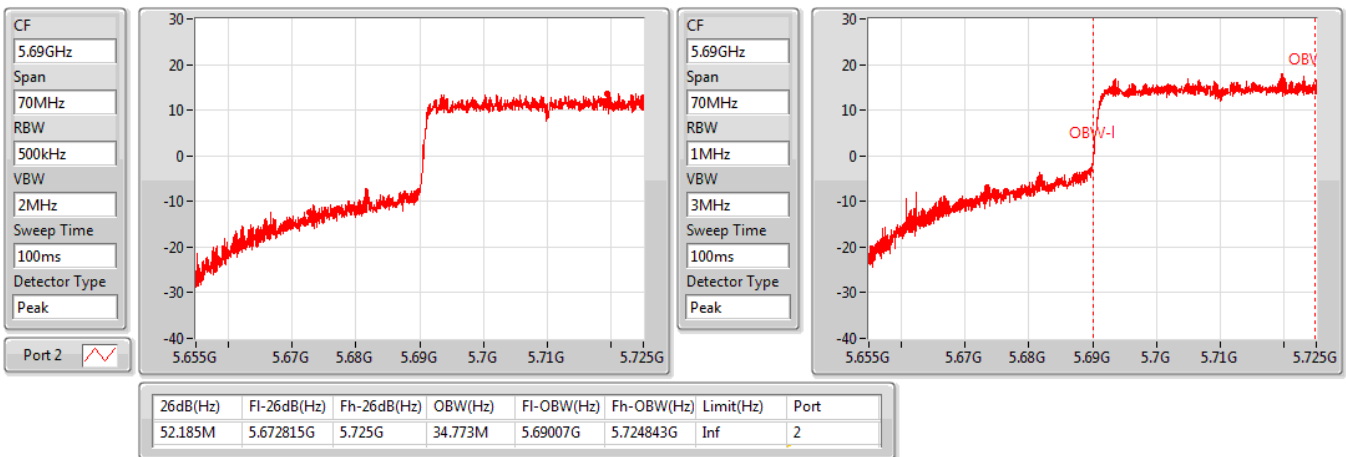


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5670MHz

28/07/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5710MHz Straddle 5.47-5.725GHz

28/07/2022

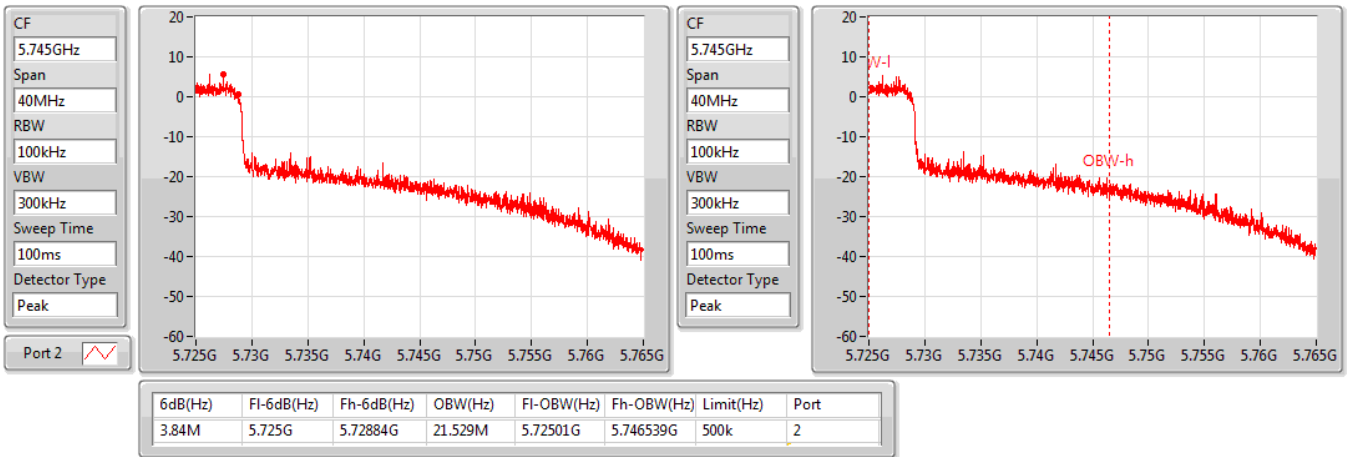


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

5710MHz Straddle 5.725-5.85GHz

28/07/2022

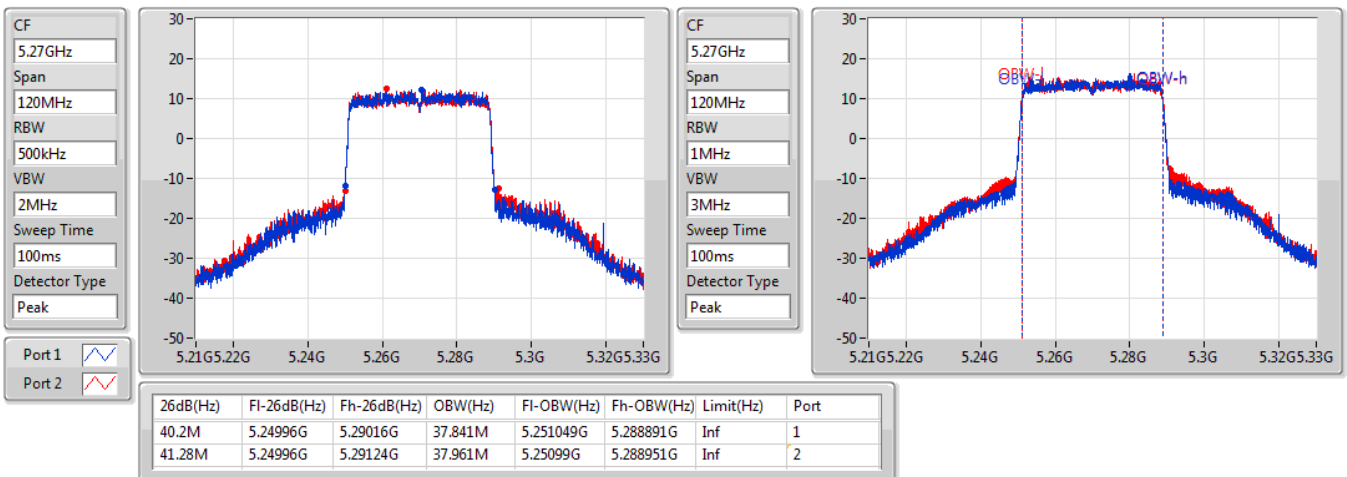


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5270MHz

28/07/2022

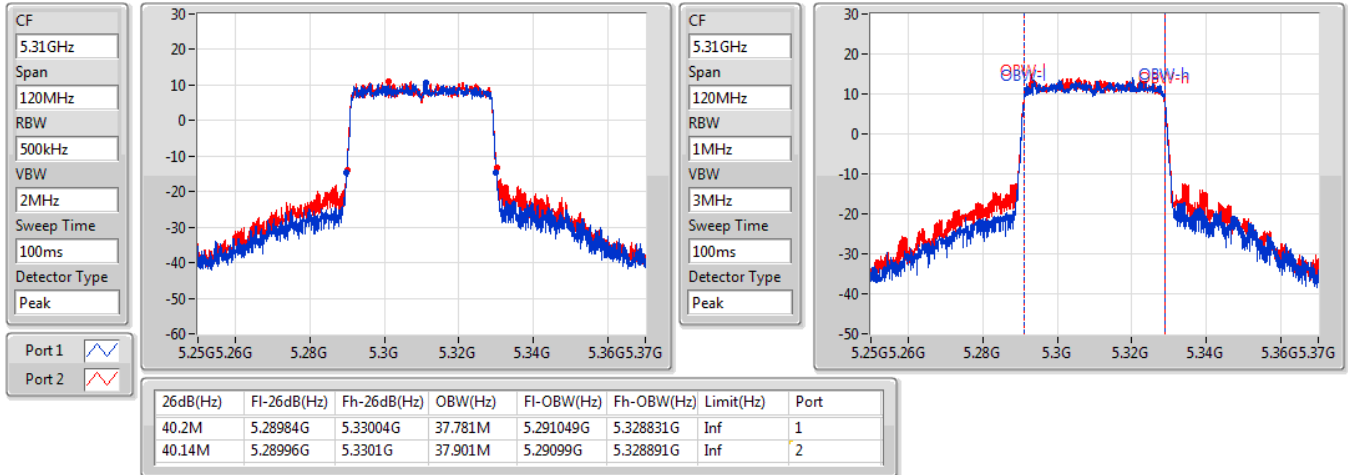


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5310MHz

28/07/2022

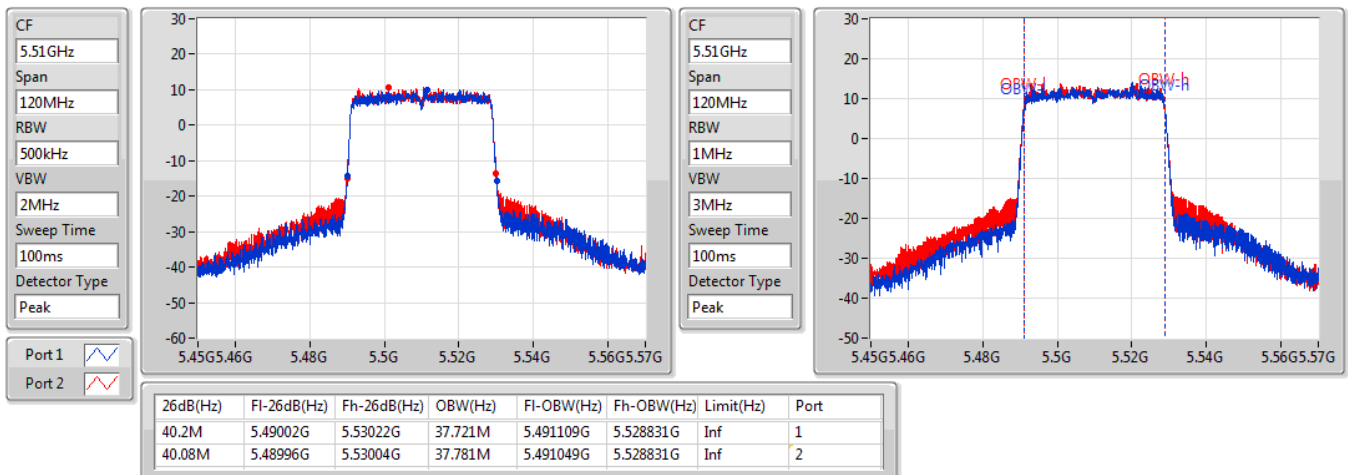


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5510MHz

28/07/2022

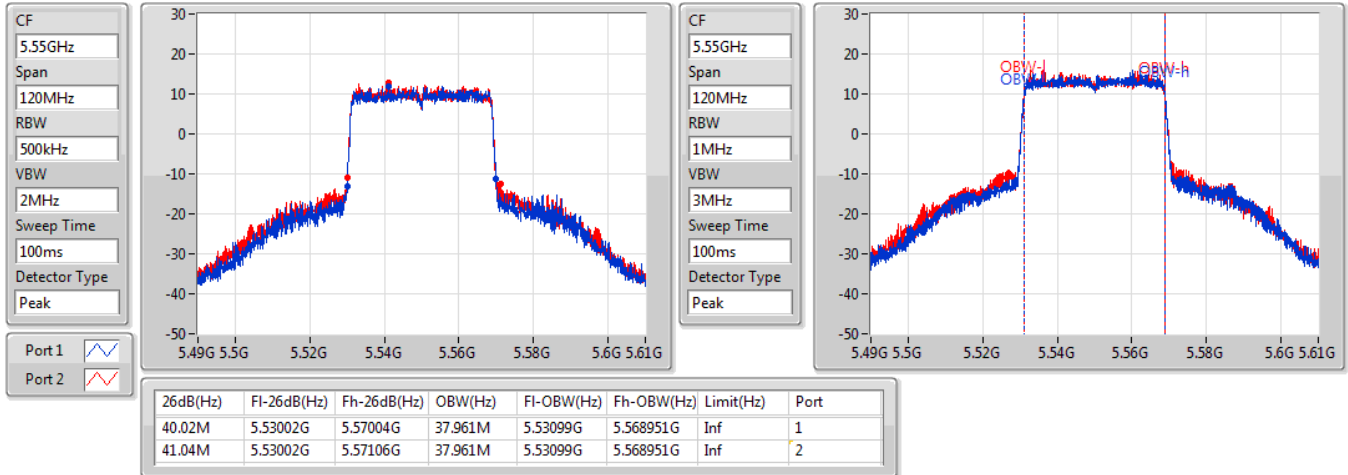


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5550MHz

28/07/2022

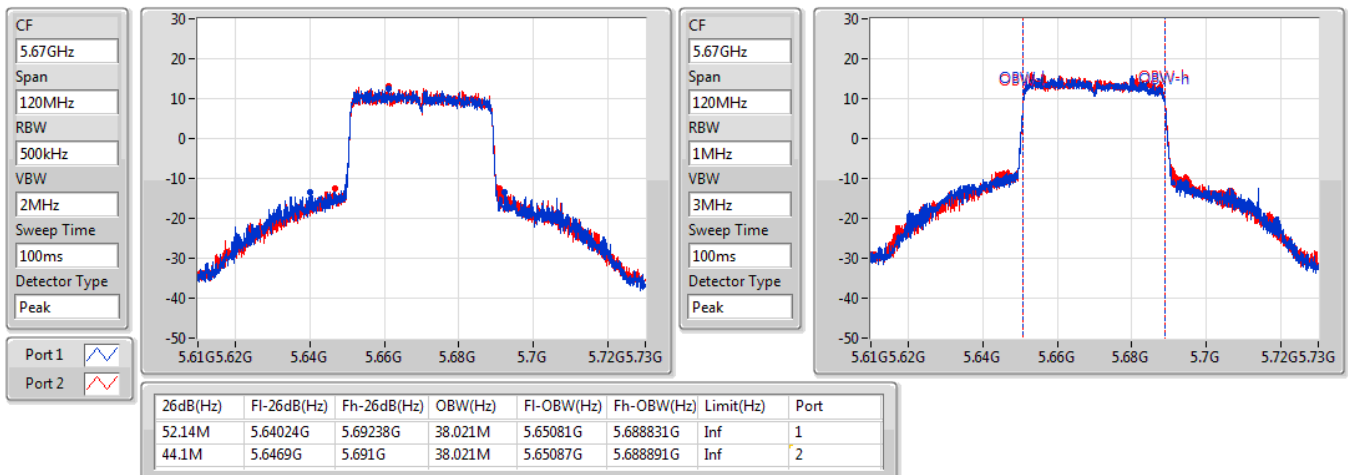


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5670MHz

28/07/2022

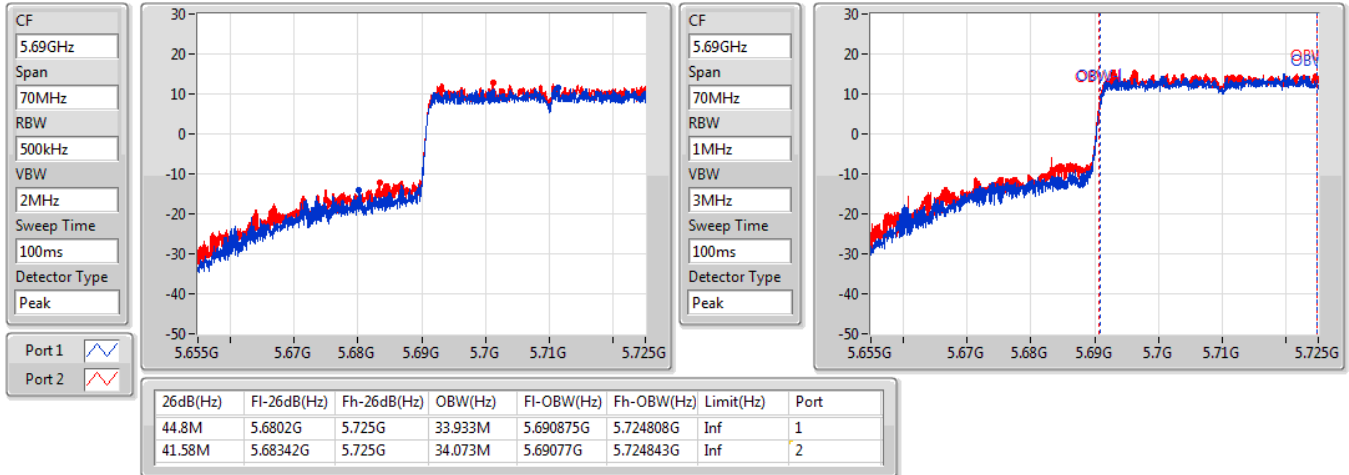


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

28/07/2022

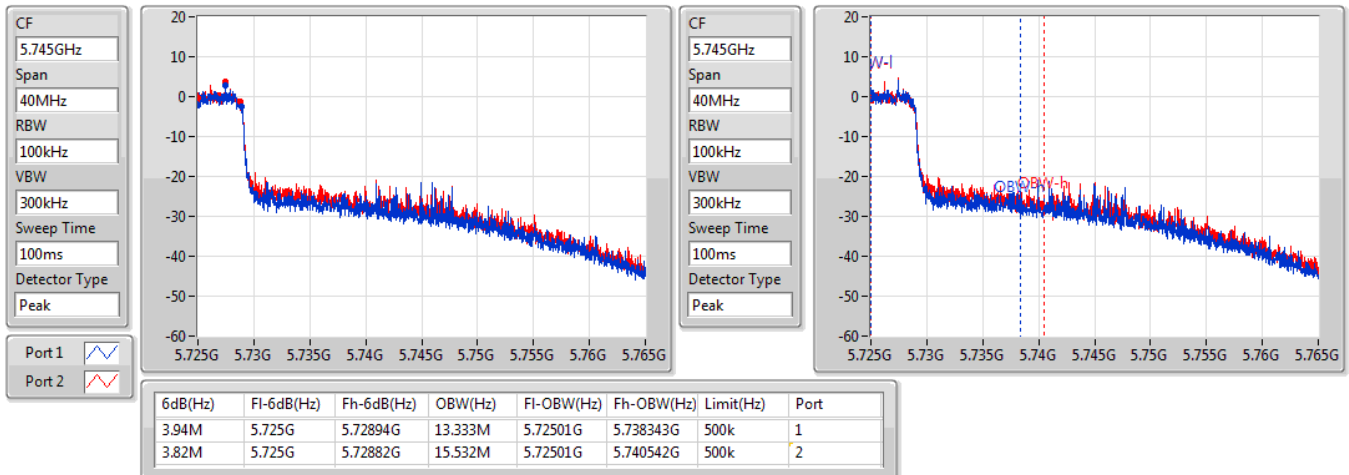


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

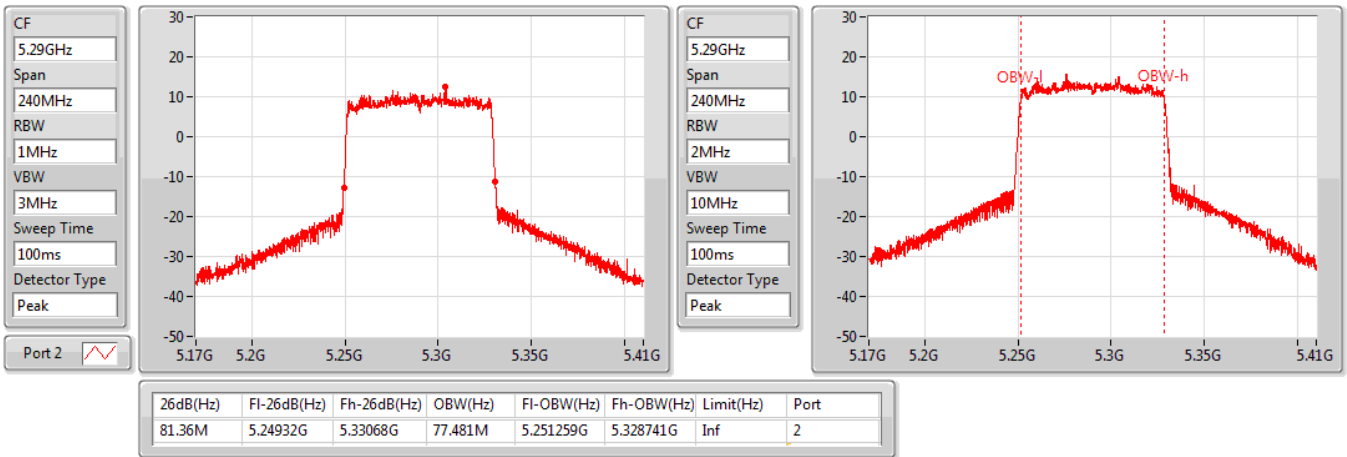
5710MHz Straddle 5.725-5.85GHz

28/07/2022

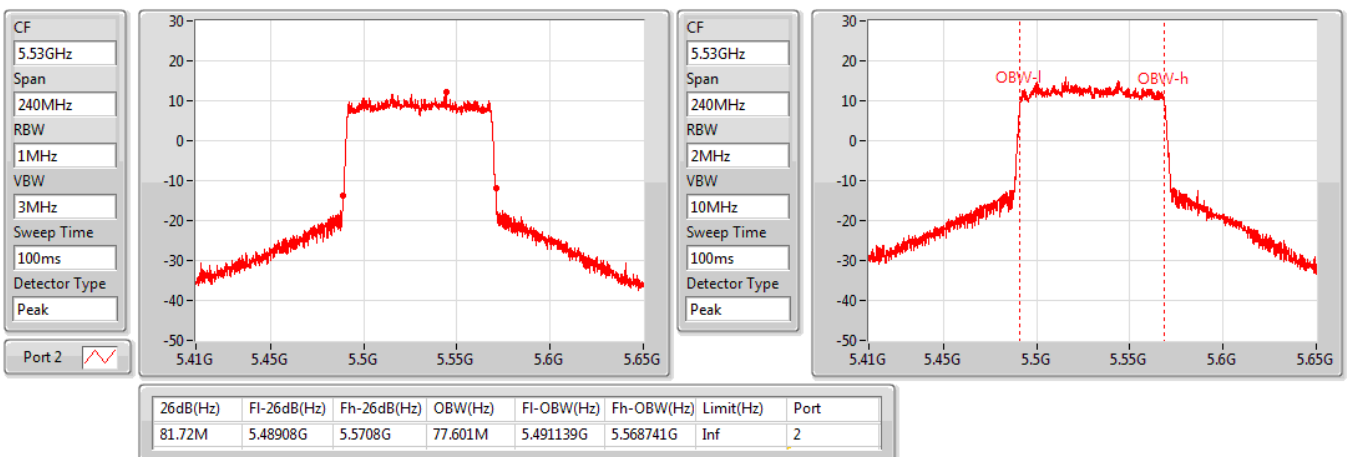


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5290MHz

28/07/2022


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5530MHz

28/07/2022

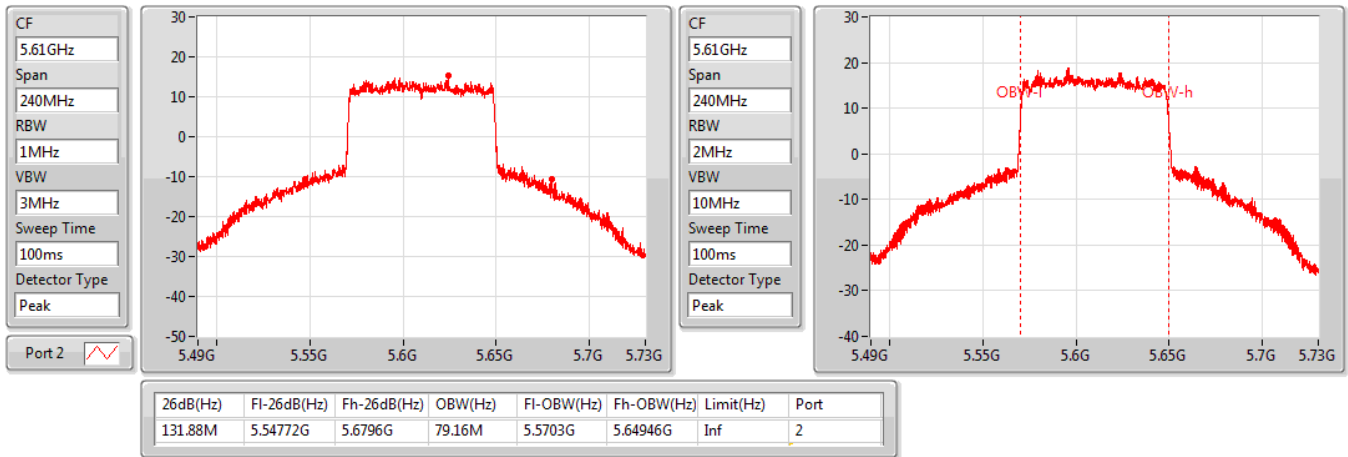


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)

EBW

5610MHz

28/07/2022

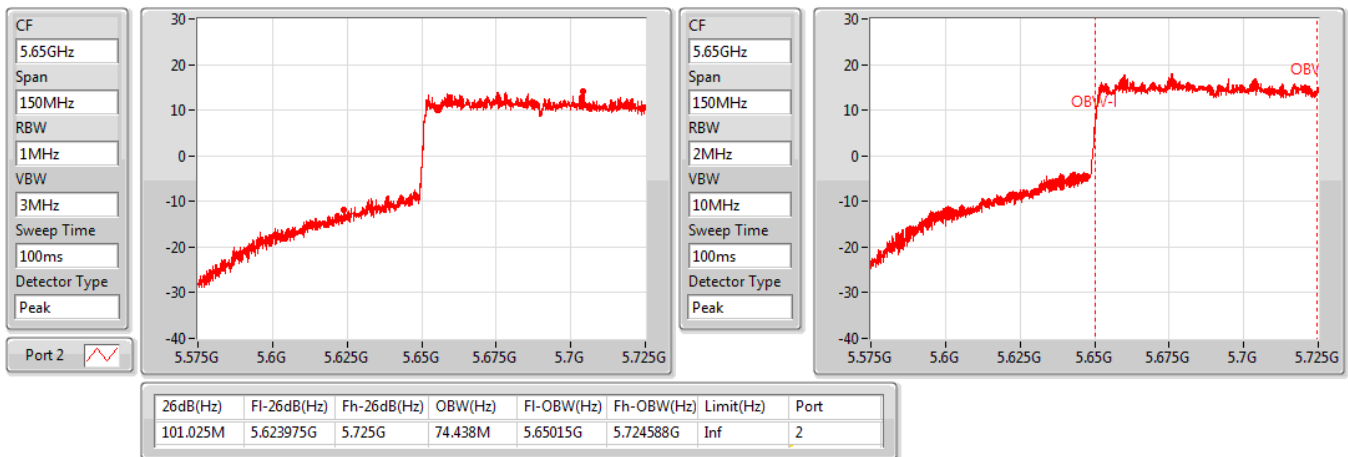


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)

EBW

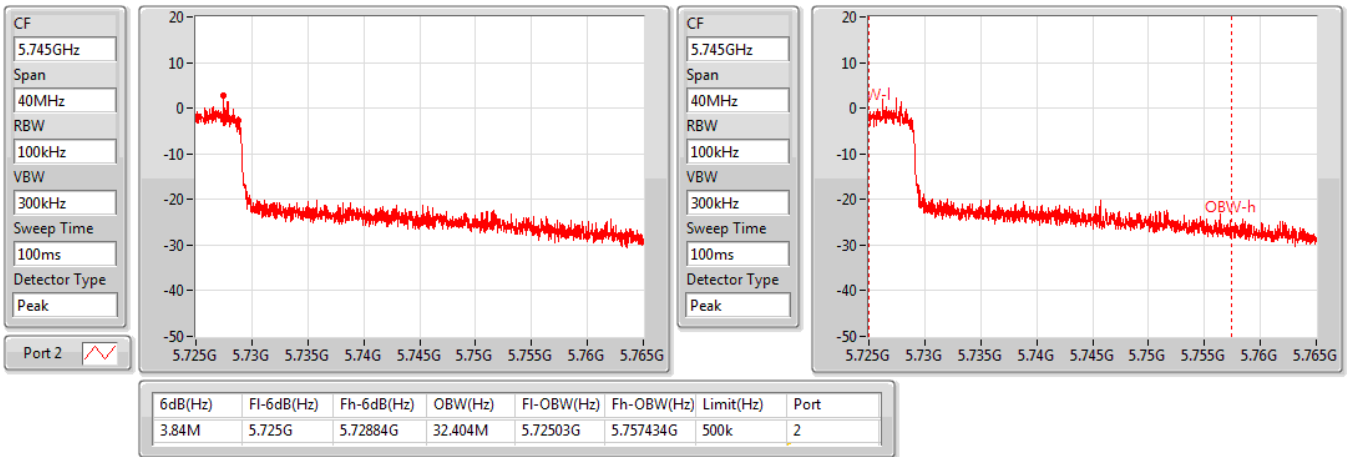
5690MHz Straddle 5.47-5.725GHz

28/07/2022

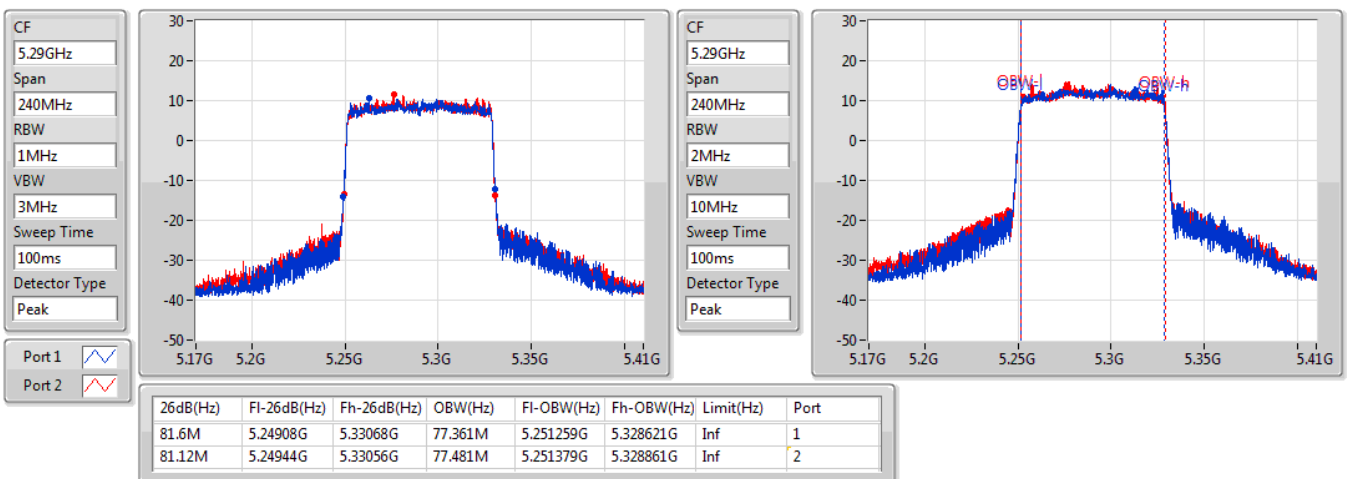


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5690MHz Straddle 5.725-5.85GHz

28/07/2022

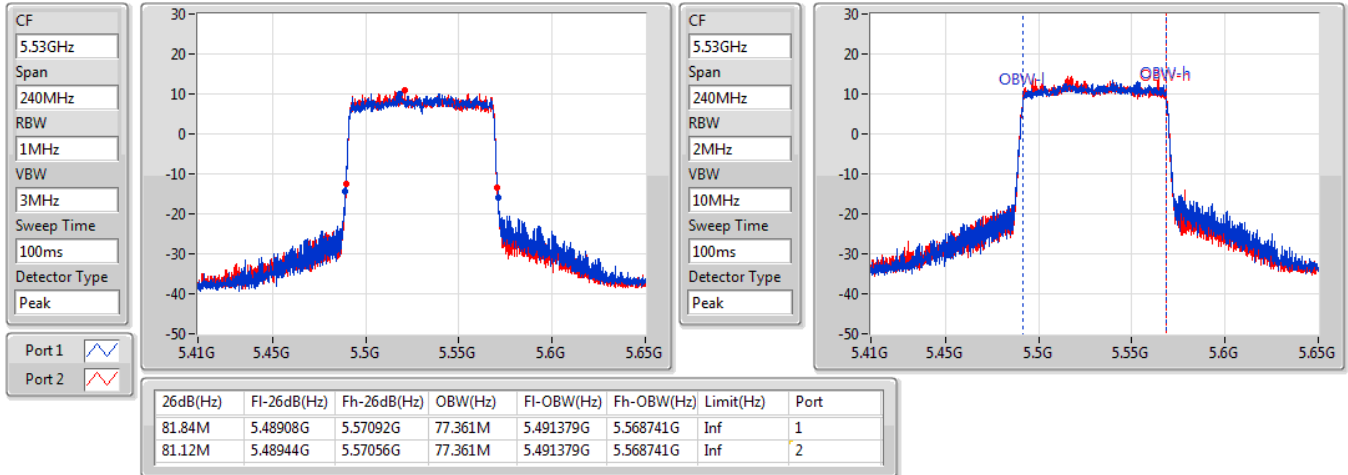

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

28/07/2022

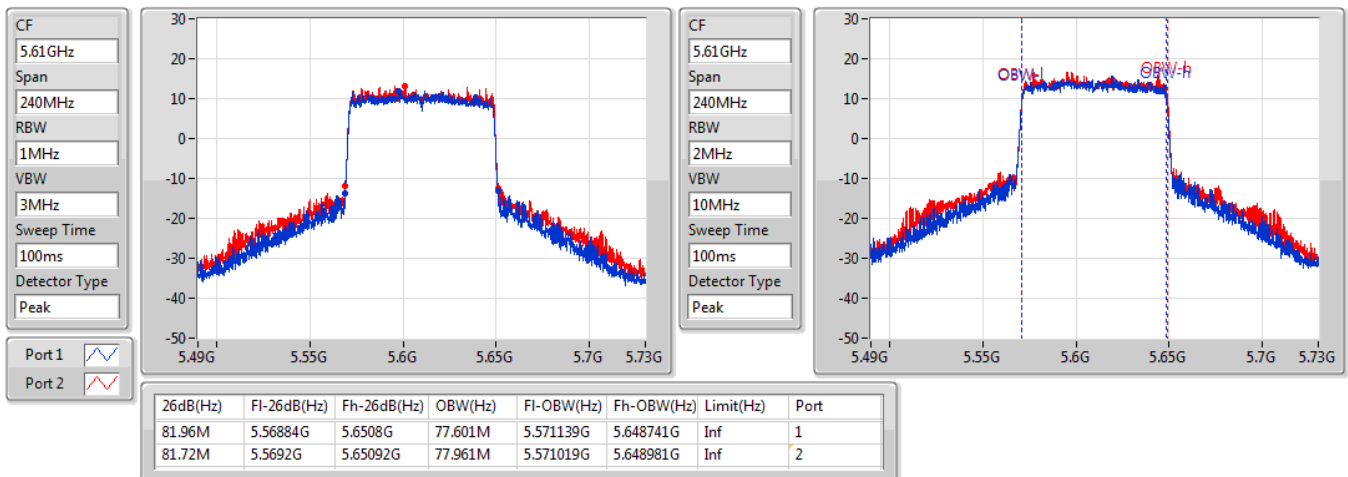


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5530MHz

28/07/2022


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5610MHz

28/07/2022

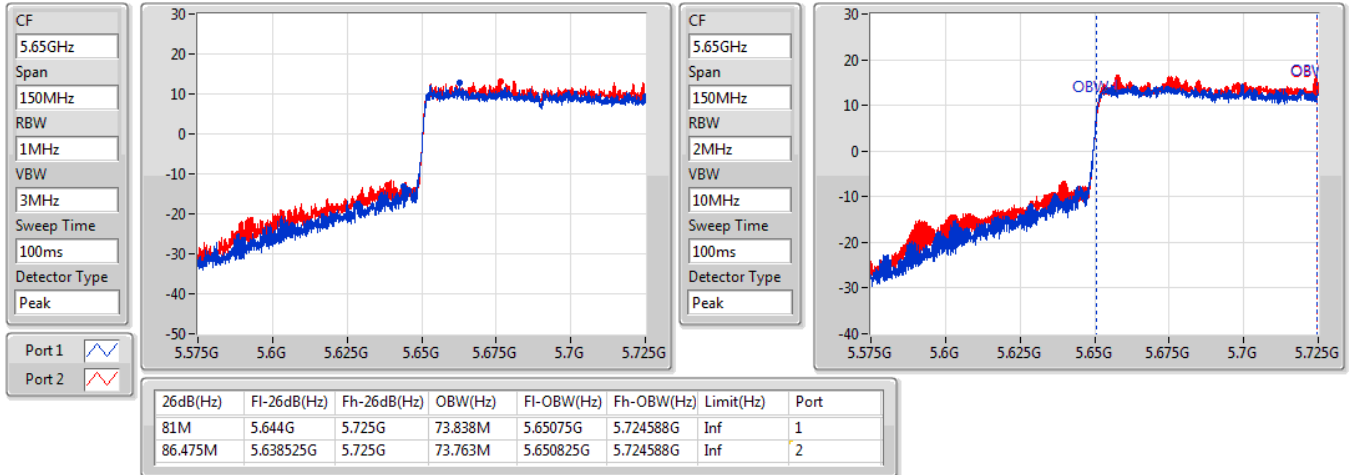


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

28/07/2022

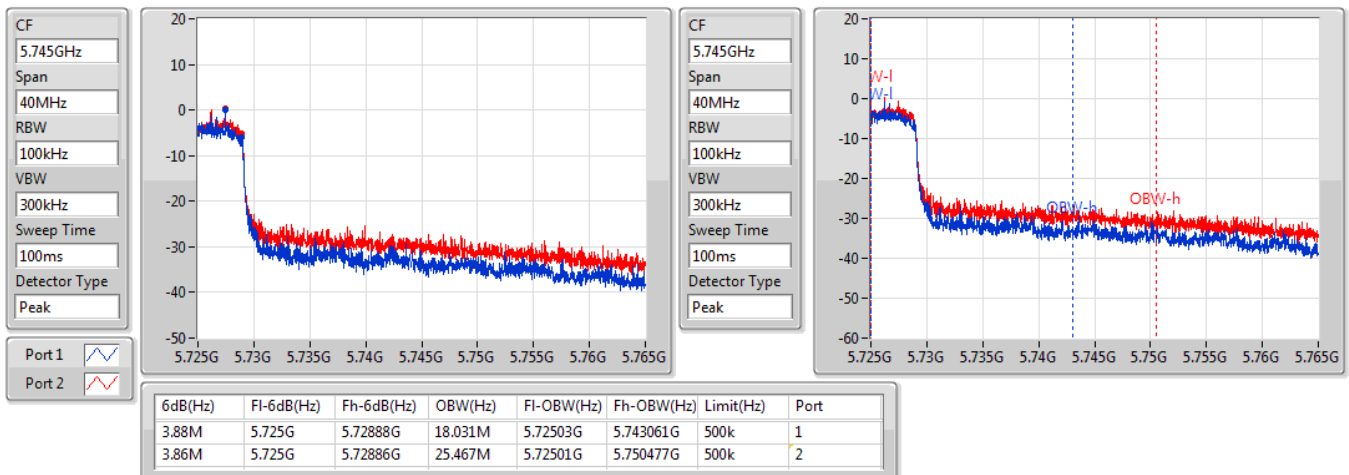


802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

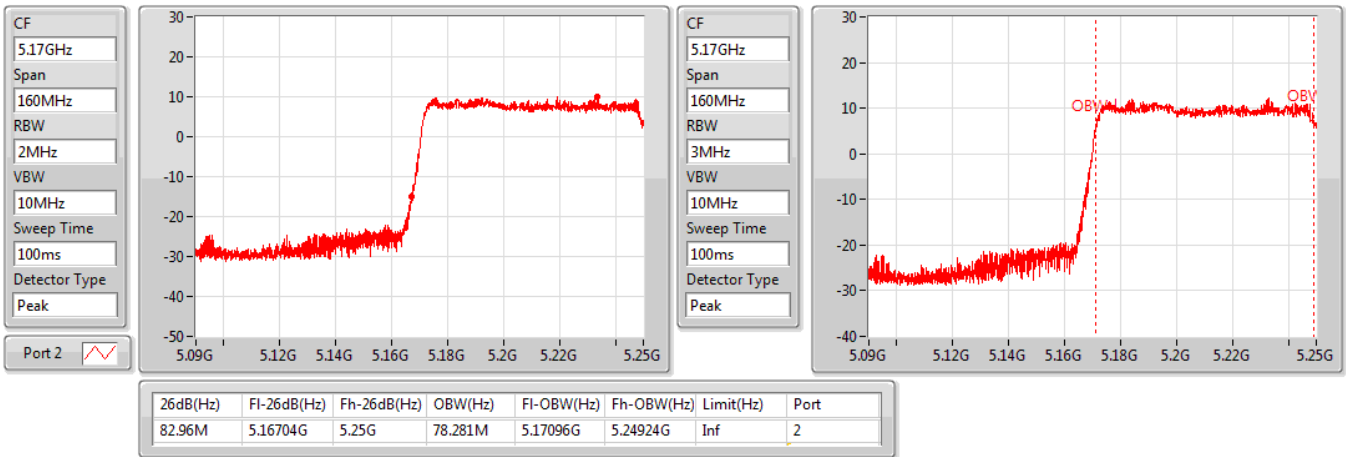
5690MHz Straddle 5.725-5.85GHz

28/07/2022

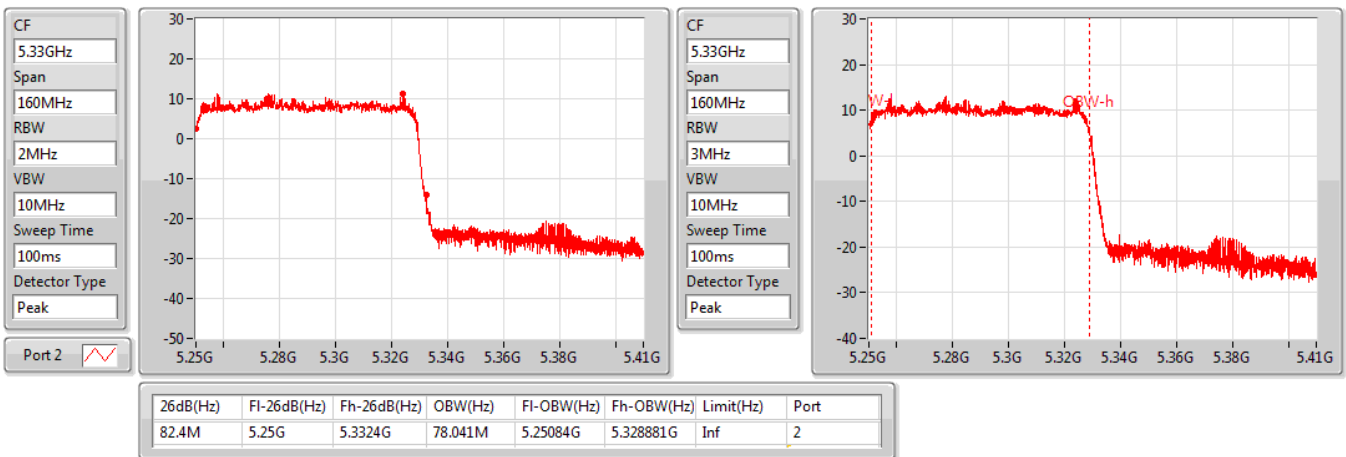


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5250MHz Straddle 5.15-5.25GHz

28/07/2022

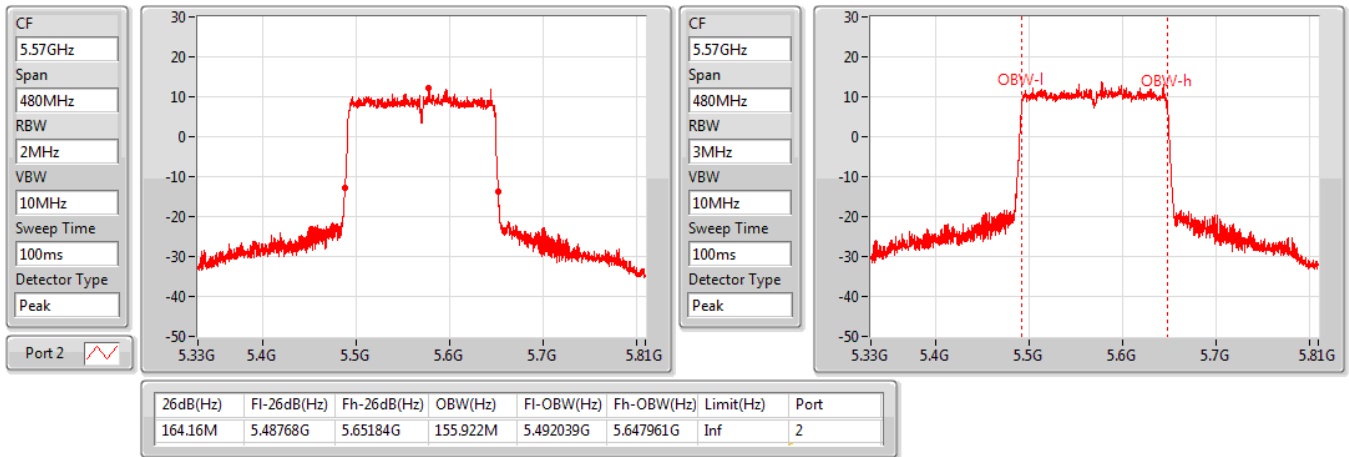

802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5250MHz Straddle 5.25-5.35GHz

28/07/2022

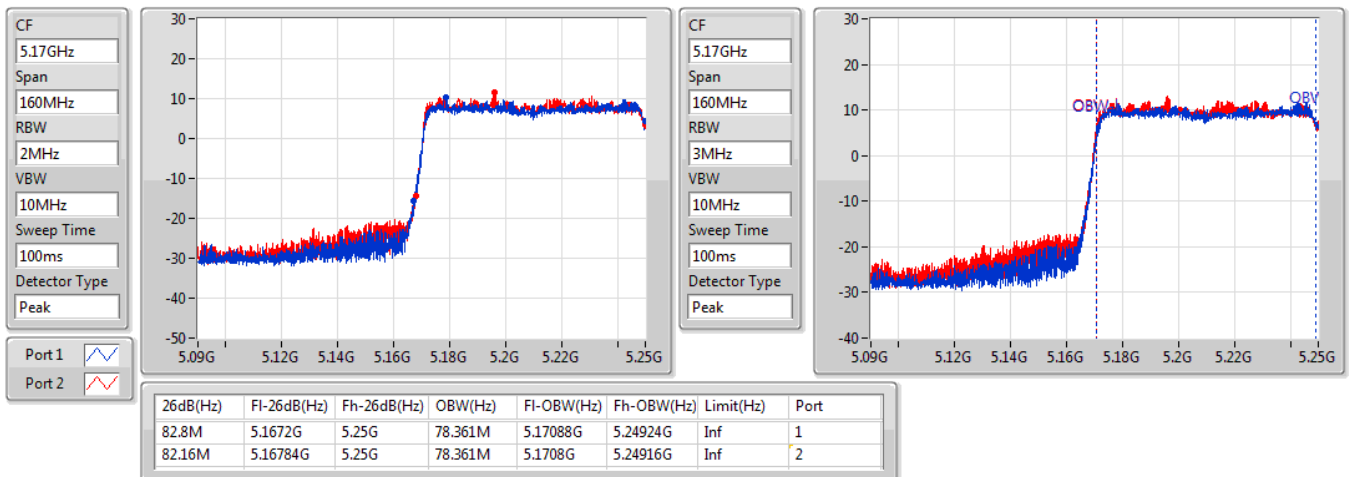


802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)
EBW
5570MHz

28/07/2022


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

28/07/2022

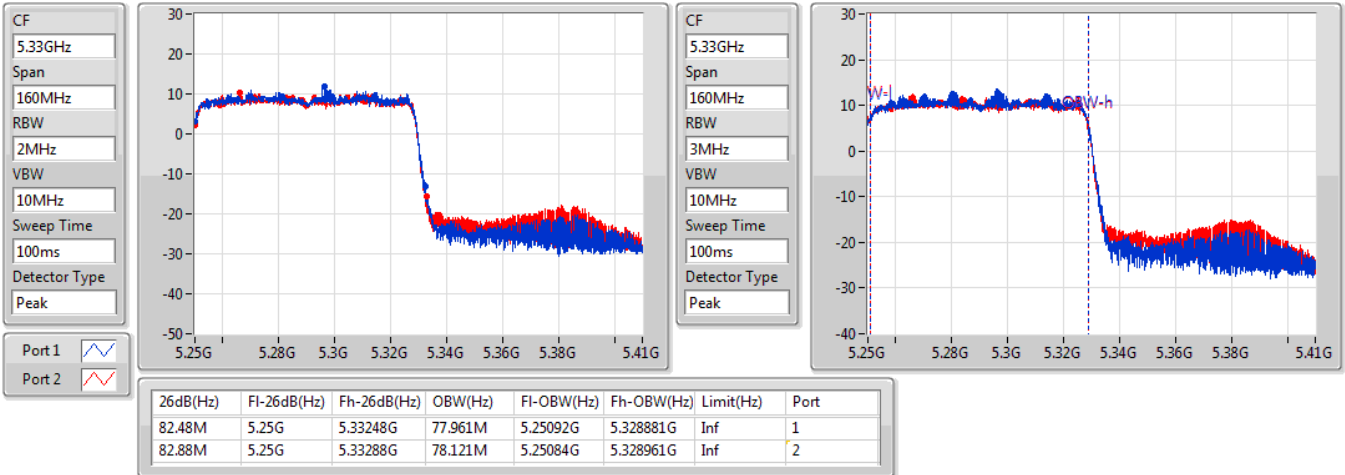


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

28/07/2022

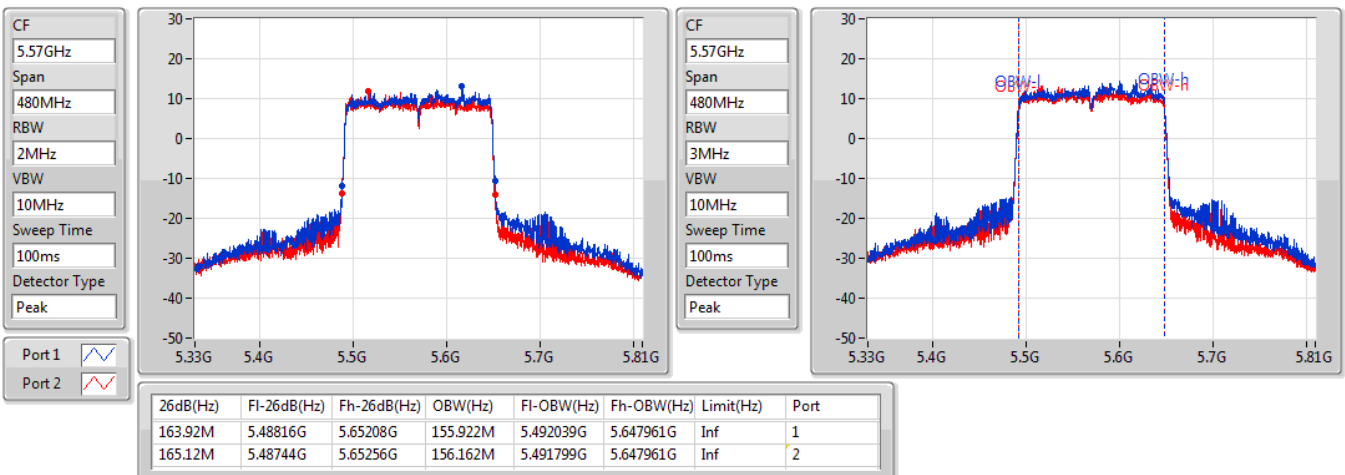


802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

28/07/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	81.84M	78.681M	78M7D1D	80.8M	78.201M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	37.14M	19.64M	19M6D1D	27.75M	19.16M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	64.98M	38.381M	38M4D1D	39.96M	37.661M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.36M	77.601M	77M6D1D	80.76M	77.361M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	82.4M	78.201M	78M2D1D	82.24M	78.121M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	35.31M	19.49M	19M5D1D	19.26M	14.723M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	52.98M	38.441M	38M4D1D	39.9M	34.423M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	86.4M	78.321M	78M3D1D	80.76M	73.913M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	163.92M	157.361M	157MD1D	162.24M	155.682M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	4.44M	8.896M	8M90D1D	4.4M	6.817M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	4.06M	22.669M	22M7D1D	3.66M	20.43M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	3.84M	32.284M	32M3D1D	3.76M	30.105M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	37.14M	19.64M	33.3M	19.37M
5300MHz	Pass	Inf	35.13M	19.4M	30.63M	19.31M
5320MHz	Pass	Inf	30.06M	19.19M	27.75M	19.16M
5500MHz	Pass	Inf	27.03M	19.16M	23.4M	19.13M
5580MHz	Pass	Inf	33.42M	19.49M	35.31M	19.4M
5700MHz	Pass	Inf	21.66M	19.07M	21.54M	19.07M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	21.39M	14.828M	19.26M	14.723M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	8.896M	4.4M	6.817M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	45.12M	38.381M	64.98M	38.321M
5310MHz	Pass	Inf	40.14M	37.661M	39.96M	37.661M
5510MHz	Pass	Inf	39.9M	37.421M	40.2M	38.141M
5550MHz	Pass	Inf	51.9M	38.441M	52.98M	38.141M
5670MHz	Pass	Inf	40.14M	37.781M	40.14M	38.321M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	50.015M	34.423M	48.895M	34.528M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.66M	20.43M	4.06M	22.669M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	80.76M	77.361M	81.36M	77.601M
5530MHz	Pass	Inf	81.6M	77.481M	80.76M	77.601M
5610MHz	Pass	Inf	81.24M	77.961M	81.72M	78.321M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	86.4M	73.913M	85.875M	74.288M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.84M	30.105M	3.76M	32.284M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.84M	78.201M	80.8M	78.681M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.24M	78.201M	82.4M	78.121M
5570MHz	Pass	Inf	163.92M	155.682M	162.24M	157.361M

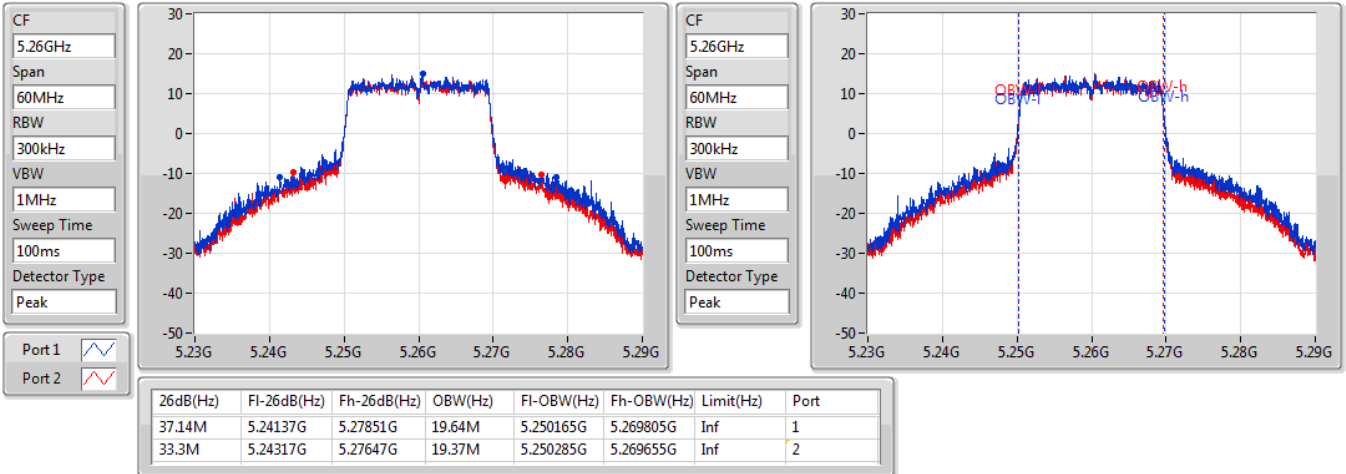
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5260MHz

08/06/2022

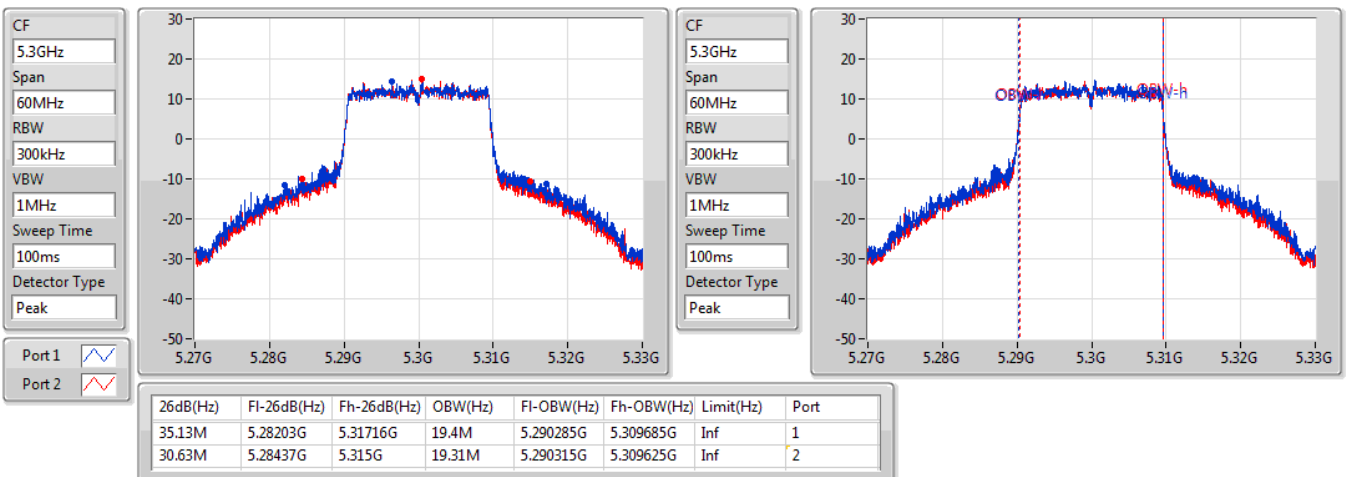


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5300MHz

08/06/2022

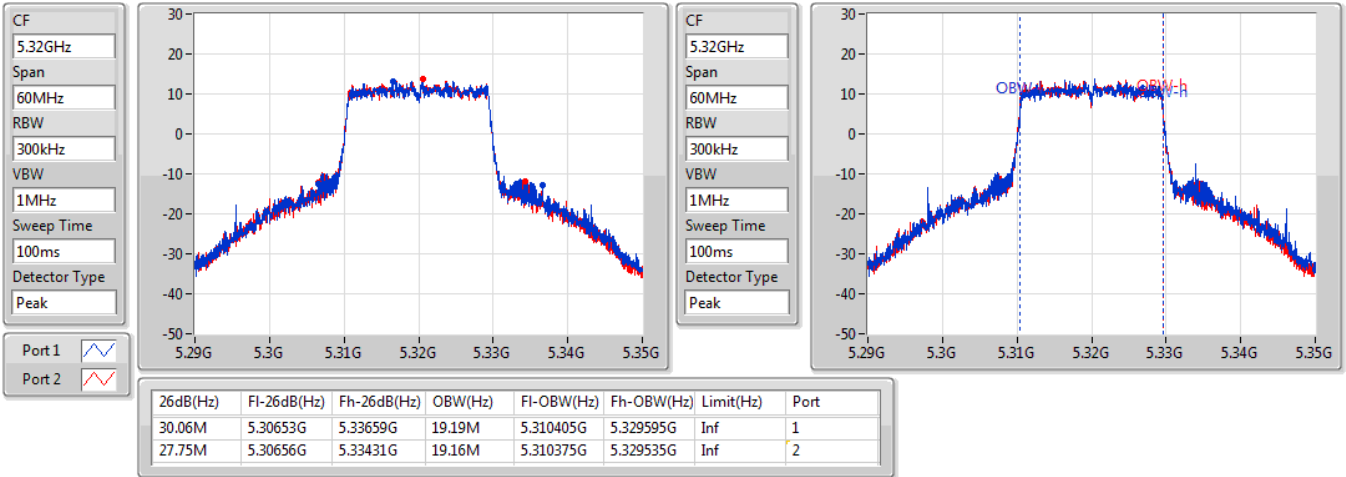


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5320MHz

08/06/2022

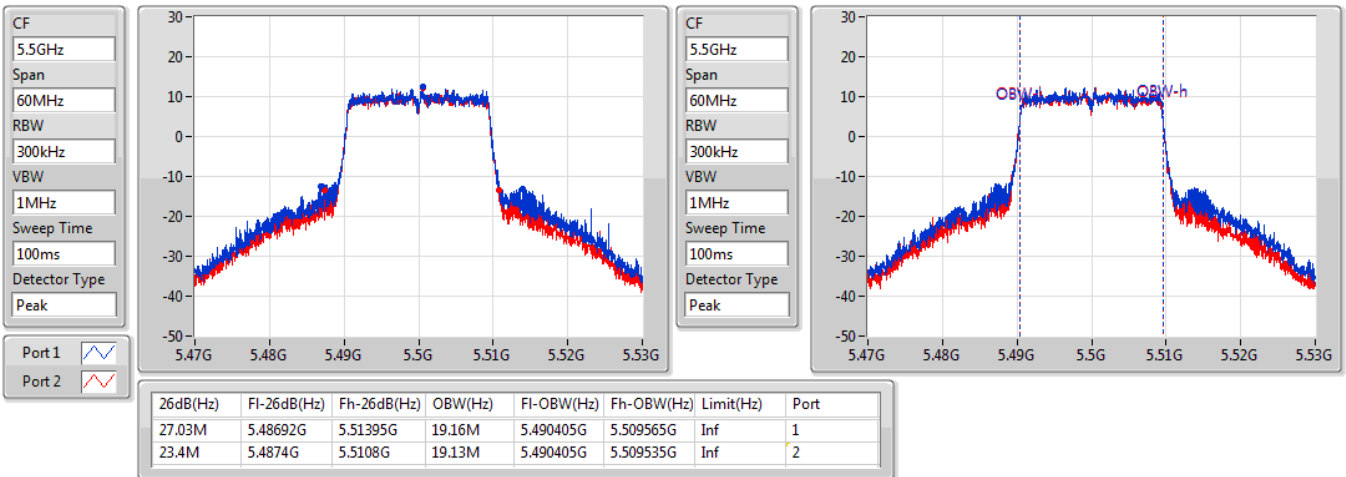


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5500MHz

08/06/2022

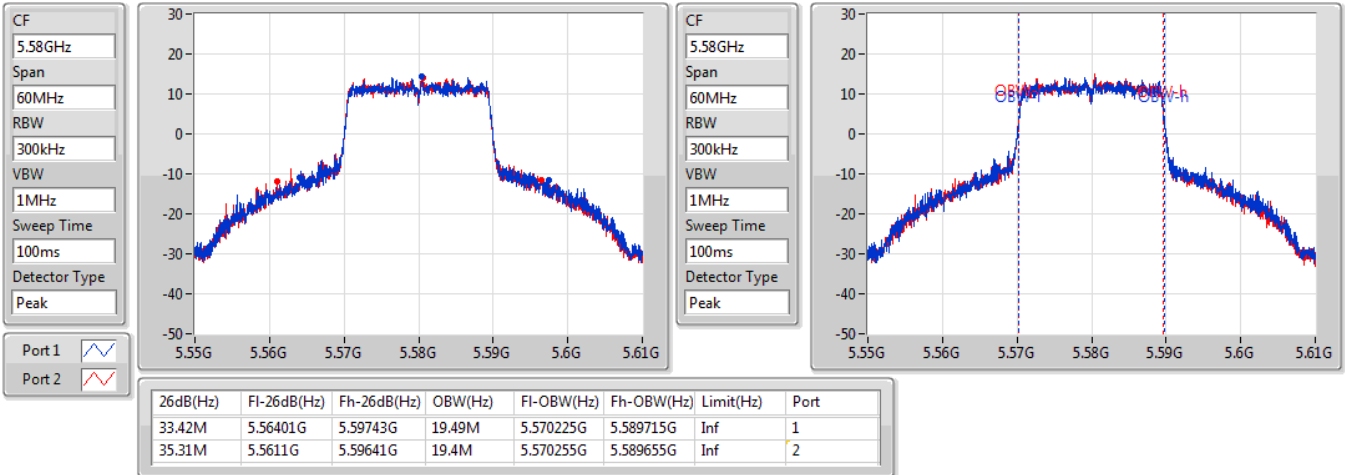


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5580MHz

08/06/2022



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5700MHz

08/06/2022

