



RADIO TEST REPORT

FCC ID : UDX-600104010
Equipment : Wi-Fi 6E Access Point
Brand Name : Cisco
Model Name : MR57-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.407

The product was received on Oct. 06, 2021, and testing was started from Oct. 16, 2021 and completed on Jan. 20, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Cliff Chang

Sporton International Inc. Hsinchu Laboratory

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History of this test report

[illegible]



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Equivalent Isotopically Radiated Power (E.I.R.P.)	PASS	-
3.4	15.407(a)	Peak Power Spectral Density (E.I.R.P.)	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	PASS	-
3.7	15.407(g)	Frequency Stability	PASS	-

Declaration of Conformity:

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

Comments and Explanations:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen**Report Producer: Jessie Wei**

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-7125	ax (HEW20)	5955-7115	1-233 [59]
5925-7125	ax (HEW40)	5965-7085	3-227 [29]
5925-7125	ax (HEW80)	5985-7025	7-215 [14]
5925-7125	ax (HEW160)	6025-6985	15-207 [7]

Band	Mode	BWch (MHz)	Nant
5925-7125GHz	802.11ax HEW20	20	1TX, 2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW20-BF	20	2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW40	40	1TX, 2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW40-BF	40	2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW80	80	1TX, 2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW80-BF	80	2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW160	160	1TX, 2TX, 4TX / 4RX
5925-7125GHz	802.11ax HEW160-BF	160	2TX, 4TX / 4RX

Note:

- HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The channel defined in the IEEE Standard P802.11ax™/D6.1.


1.1.2 Antenna Information

Ant.	Port					Brand	P/N	Ant. Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz UNII 1~3	WLAN 5GHz UNII 2C~4	WLAN 6GHz UNII 5~8	Bluetooth					
1	4	4	-	-	-	CISCO	95XKAN15.G42	PIFA	I-PEX	Note1
2	3	3	-	-	-	CISCO	95XKAN15.G43	PIFA	I-PEX	
3	2	2	-	-	-	CISCO	95XKAN15.G44	PIFA	I-PEX	
4	1	1	-	-	-	CISCO	95XKAN15.G45	PIFA	I-PEX	
5	-	-	2	2	-	CISCO	95XKAN15.G46	Dipole	I-PEX	
6	-	-	1	1	-	CISCO	95XKAN15.G47	Dipole	I-PEX	
7	-	-	4	4	-	CISCO	95XKAN15.G48	Dipole	I-PEX	
8	-	-	3	3	-	CISCO	95XKAN15.G49	Dipole	I-PEX	
9	1	1	-	-	-	CISCO	95XKAN15.G51	PIFA	I-PEX	
10	-	-	-	-	1	CISCO	95XKAN15.G50	PIFA	I-PEX	

Note1:

Ant.	Antenna Gain (dBi)											Remark
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4	WLAN 6GHz UNII 5	WLAN 6GHz UNII 6	WLAN 6GHz UNII 7	WLAN 6GHz UNII 8	Blue tooth	
1	1.87	4.07	4.09	2.45	1.97	-	-	-	-	-	-	Radio 1
2	2.68	3.7	4.21	3	3.84	-	-	-	-	-	-	Radio 1
3	2.7	3.29	3.51	2.33	3.03	-	-	-	-	-	-	Radio 1
4	1.52	1.8	1.7	1.44	1.61	-	-	-	-	-	-	Radio 1
5	-	-	-	3.52	3.3	4.84	5.05	4.08	4.27	3.47	-	Radio 2
6	-	-	-	3.54	4.33	4.28	4.71	3.72	3.49	4.02	-	Radio 2
7	-	-	-	4.28	4.45	4.6	4.64	4.40	4.31	3.39	-	Radio 2
8	-	-	-	4.13	4.39	4.75	4.76	3.51	4.21	4.03	-	Radio 2
9	3.80	6.29	6.29	6.29	6.29	-	-	-	-	-	-	Radio 3
10	-	-	-	-	-	-	-	-	-	-	3.65	Radio 4

Note2:

Item	Directional Gain (dBi)						Remark
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4	
2T1S	3.93	4.36	4.68	3.36	3.75	-	Radio 1
4T1S	5.7	6.45	6.36	5.06	5.18	-	
2T1S	-	-	-	5.32	6.01	5.57	Radio 2
4T1S	-	-	-	5.65	6.75	6.43	

Note3: Radio 1 (WLAN 2.4/5GHz UNII 1~3), Radio 2 (5GHz UNII 2C, 3, 4): The directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.
This EUT doesn't enable UNII 2A, 2C.



Note4: The above information was declared by manufacturer.

The EUT has ten antennas.

For WLAN 2.4GHz function (Radio 1):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For WLAN 5GHz function (Radio 1 and Radio 2):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For 6GHz function (Radio 2):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For Scanning Radio 3:

For WLAN 2.4GHz function

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

Only Port 1 can be used as receiving functions.

For WLAN 5GHz function

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

Only Port 1 can be used as receiving functions.

For Bluetooth function (Radio 4):

For Bluetooth mode (1TX/1RX):

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

1.1.3 Table for Radio function

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

Note: The above information was declared by manufacturer.

1.1.4 Table for EUT Operation Function

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

Note: The above information was declared by manufacturer.

**1.1.5 Mode Test Duty Cycle****<Non-Beamforming Mode>****For 1T1S:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.864	0.63	5.451m	300
802.11ax HEW40	0.922	0.35	5.452m	300
802.11ax HEW80	0.937	0.28	5.452m	300
802.11ax HEW160	0.94	0.27	5.452m	300

For 2T1S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.918	0.37	5.452m	300
802.11ax HEW40	0.929	0.32	5.452m	300
802.11ax HEW80	0.921	0.36	5.452m	300
802.11ax HEW160	0.92	0.36	5.452m	300

For 4T1S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.937	0.28	5.452m	300
802.11ax HEW40	0.922	0.35	5.452m	300
802.11ax HEW80	0.94	0.27	5.452m	300
802.11ax HEW160	0.926	0.33	5.452m	300

<Beamforming Mode>**For 2T1S:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.946	0.24	1.764m	1k
802.11ax HEW40-BF	0.948	0.23	1.976m	1k
802.11ax HEW80-BF	0.949	0.23	1.892m	1k
802.11ax HEW160-BF	0.49	3.1	14.375u	10k

For 4T1S:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.946	0.24	1.764m	1k
802.11ax HEW40-BF	0.948	0.23	1.976m	1k
802.11ax HEW80-BF	0.949	0.23	1.892m	1k
802.11ax HEW160-BF	0.49	3.1	14.375u	10k

Note:

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

**1.1.6 EUT Operational Condition**

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz, n/ac/ax in 5GHz and ax in 6GHz.			
Device Type	☒	Indoor Access Point	☐	Subordinate
	☐	Indoor Client	☐	Standard Power Access Point
	☐	Dual Client	☐	Standard Client
	☐	Fixed Client		
Test Software Version	QSRP(Version 5.0-00199)・DOS [ver 6.1.7601]			
Software / Firmware Version for CBP	28-fighters-202201182253-G3dc7a6af-L15bb45df-jenkins-rel-bin			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.407
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v02r01

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

- ♦ FCC KDB 987594 D02 v01r01
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted (Other test items)	TH03-CB	Owen Hsu	24.8~26.2 / 63~67	Oct. 21, 2021~ Dec. 23, 2021
Radiated below 1GHz	03CH05-CB	Kevin Huang	24.4~25.5 / 55~58	Nov. 11, 2021~ Nov. 12, 2021
Radiated above 1GHz	03CH04-CB	Paul Chen	24.4~25.5 / 55~58	Oct. 16, 2021~ Dec. 13, 2021
AC Conduction	CO01-CB	Peter Wu	22~23 / 59~60	Nov. 17, 2021
RF Conducted (Contention-Based Protocol test)	DF01-CB	Benson Su	21.7~22.2 / 62~64	Dec. 02, 2021~ Jan. 20, 2022



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

<Non-Beamforming Mode>

For 1T1S:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5955MHz	13.5
6175MHz	12.5
6415MHz	13.5
6435MHz	14
6475MHz	16
6515MHz	16
6535MHz	13.5
6695MHz	13.5
6855MHz	15
6875MHz Straddle 6.525-6.875GHz	15
6895MHz	14.5
6995MHz	14.5
7095MHz	14
7115MHz	10
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5965MHz	16
6165MHz	17.5
6405MHz	19.5
6445MHz	17
6485MHz	16.5
6525MHz Straddle 6.425-6.525GHz	16.5
6565MHz	17
6685MHz	18.5
6845MHz	18.5
6885MHz Straddle 6.525-6.875GHz	18
6925MHz	18
7005MHz	17.5
7085MHz	10
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5985MHz	18.5
6145MHz	20
6385MHz	20



Mode	Power Setting
6465MHz	20
6545MHz Straddle 6.425-6.525GHz	20.5
6625MHz	20.5
6705MHz	21
6785MHz	21
6865MHz Straddle 6.525-6.875GHz	22.5
6945MHz	22.5
7025MHz	20
802.11ax HEW160_Nss1,(MCS0)_1TX	-
6025MHz	18
6185MHz	23
6345MHz	23
6505MHz Straddle 6.425-6.525GHz	23
6665MHz	23
6825MHz Straddle 6.525-6.875GHz	23
6985MHz	18.5

For 2T1S:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5955MHz	9.5
6175MHz	9.5
6415MHz	9.5
6435MHz	9.5
6475MHz	9.5
6515MHz	9
6535MHz	8.5
6695MHz	8.5
6855MHz	10
6875MHz Straddle 6.525-6.875GHz	10
6895MHz	10
6995MHz	10
7095MHz	9.5
7115MHz	9
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5965MHz	12.5
6165MHz	12.5
6405MHz	12.5
6445MHz	12.5
6485MHz	12.5



Mode	Power Setting
6525MHz Straddle 6.425-6.525GHz	12
6565MHz	12
6685MHz	11.5
6845MHz	13.5
6885MHz Straddle 6.525-6.875GHz	13
6925MHz	13
7005MHz	12.5
7085MHz	12.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5985MHz	15.5
6145MHz	15.5
6385MHz	15
6465MHz	15
6545MHz Straddle 6.425-6.525GHz	15
6625MHz	15
6705MHz	14.5
6785MHz	16
6865MHz Straddle 6.525-6.875GHz	16.5
6945MHz	15.5
7025MHz	16
802.11ax HEW160_Nss1,(MCS0)_2TX	-
6025MHz	17.5
6185MHz	18
6345MHz	18
6505MHz Straddle 6.425-6.525GHz	18
6665MHz	17.5
6825MHz Straddle 6.525-6.875GHz	19
6985MHz	17.5

For 4T1S:

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5955MHz	3.5
6175MHz	4
6415MHz	5.5
6435MHz	5.5
6475MHz	5.5
6515MHz	5
6535MHz	5
6695MHz	5.5



Mode	Power Setting
6855MHz	7
6875MHz Straddle 6.525-6.875GHz	7
6895MHz	8.5
6995MHz	7
7095MHz	9
7115MHz	8
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5965MHz	6
6165MHz	7
6405MHz	8.5
6445MHz	9
6485MHz	9
6525MHz Straddle 6.425-6.525GHz	9
6565MHz	8
6685MHz	8.5
6845MHz	10
6885MHz Straddle 6.525-6.875GHz	10
6925MHz	9.5
7005MHz	10.5
7085MHz	9.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	10
6145MHz	10.5
6385MHz	11
6465MHz	11.5
6545MHz Straddle 6.425-6.525GHz	11.5
6625MHz	12
6705MHz	12
6785MHz	13
6865MHz Straddle 6.525-6.875GHz	13.5
6945MHz	12.5
7025MHz	12.5
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	13
6185MHz	14
6345MHz	13.5
6505MHz Straddle 6.425-6.525GHz	14.5
6665MHz	14
6825MHz Straddle 6.525-6.875GHz	16



Mode	Power Setting
6985MHz	16

<Beamforming Mode>**For 2T1S:**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS3)_2TX	-
5955MHz	12
6175MHz	8
6415MHz	10
6435MHz	11
6475MHz	11
6515MHz	11
6535MHz	11
6695MHz	10
6855MHz	13
6875MHz Straddle 6.525-6.875GHz	12
6895MHz	12
6995MHz	11
7095MHz	11
7115MHz	12
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	-
5965MHz	13
6165MHz	11
6405MHz	13
6445MHz	14
6485MHz	14
6525MHz Straddle 6.425-6.525GHz	14
6565MHz	13
6685MHz	14
6845MHz	16
6885MHz Straddle 6.525-6.875GHz	16
6925MHz	15
7005MHz	14
7085MHz	14
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	-
5985MHz	16
6145MHz	17
6385MHz	16
6465MHz	17
6545MHz Straddle 6.425-6.525GHz	17



Mode	Power Setting
6625MHz	17
6705MHz	17
6785MHz	18
6865MHz Straddle 6.525-6.875GHz	18
6945MHz	17
7025MHz	17
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	-
6025MHz	20
6185MHz	20
6345MHz	20
6505MHz Straddle 6.425-6.525GHz	20
6665MHz	20
6825MHz Straddle 6.525-6.875GHz	20
6985MHz	20

For 4T1S:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	-
5955MHz	7
6175MHz	7
6415MHz	9
6435MHz	9
6475MHz	9
6515MHz	9
6535MHz	9
6695MHz	9
6855MHz	11
6875MHz Straddle 6.525-6.875GHz	12
6895MHz	11
6995MHz	10
7095MHz	10
7115MHz	10
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	-
5965MHz	10
6165MHz	10
6405MHz	13
6445MHz	13
6485MHz	13
6525MHz Straddle 6.425-6.525GHz	14
6565MHz	12



Mode	Power Setting
6685MHz	14
6845MHz	15
6885MHz Straddle 6.525-6.875GHz	15
6925MHz	15
7005MHz	15
7085MHz	14
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	-
5985MHz	14
6145MHz	14
6385MHz	15
6465MHz	16
6545MHz Straddle 6.425-6.525GHz	17
6625MHz	17
6705MHz	18
6785MHz	18
6865MHz Straddle 6.525-6.875GHz	20
6945MHz	18
7025MHz	19
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	-
6025MHz	16
6185MHz	16
6345MHz	17
6505MHz Straddle 6.425-6.525GHz	18
6665MHz	17
6825MHz Straddle 6.525-6.875GHz	19
6985MHz	17

Note: Non-Beamforming supports MCS0~11 and Beamforming supports MCS3-11.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	R1:2.4GHz/5GHz Low Band+R2:5GHz High band+R3:2.4GHz+R4:Bluetooth+Adapter
2	R1:2.4GHz/5GHz Low Band+R2:5GHz High band+R3:5GHz+R4:Bluetooth+Adapter
3	R1:2.4GHz/5GHz Full Band+R2:6E+R3:2.4GHz+R4:Bluetooth+Adapter
4	R1:2.4GHz/5GHz Full Band+R2:6E+R3:5GHz+R4:Bluetooth+Adapter
Mode 1 has been evaluated to be the worst case among Mode 1~4, thus measurement for Mode 5~6 will follow this same test mode.	
5	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+PoE 1
6	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+PoE 2
For operating mode 5 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Contention Based Protocol Frequency Stability
Test Condition	Conducted measurement at transmit chains
Operating Mode	
1	1T1S
2	2T1S
3	4T1S

The Worst Case Mode for Following Conformance Tests	
Tests Item	Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.)
Test Condition	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration. Radiated measurement
Operating Mode	
1	1T1S
2	2T1S
3	4T1S

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	Normal Link
1	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
2	EUT in Y axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
3	EUT in X axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~6 will follow this same test mode.	
4	EUT in X axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Bluetooth+Adapter
5	EUT in X axis-R1: 2.4GHz/5GHz Full Band+R2: 6E+R3: 2.4GHz+R4: Bluetooth+Adapter
6	EUT in X axis-R1: 2.4GHz/5GHz Full Band+R2: 6E+R3: 5GHz+R4: Bluetooth+Adapter
Mode 3 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7~8 will follow this same test mode.	
7	EUT in X axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+PoE 1
8	EUT in X axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+PoE 2
For operating mode 7 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found as below. So the measurement will follow this same test configuration.	
1	For 1T1S: EUT in Y axis
2	For 2T1S: EUT in Y axis
3	For 4T1S: EUT in Y axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission MASK
Test Condition	Conducted measurement at transmit chains
Operating Mode	
1	1T1S
2	2T1S
3	4T1S

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R4: Bluetooth
2	R1: 2.4GHz/5GHz Full Band+R2: 6E+R4: Bluetooth
Refer to Sporton Test Report No.: FA181947-01 for Co-location RF Exposure Evaluation.	

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

Adapter and PoEs information as below:

Power	Brand	Model
Adapter	Cisco	MA-PWR-50WAC
PoE 1	Cisco	MA-INJ-4
PoE 2	PHIHONG	POE60U-1BT-X



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

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

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS [ver 6.1.7601].
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Wall-mounted rack*1

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 1	Cisco	MA-INJ-4	N/A
B	PoE PC	DELL	T3400	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G-L NB	DELL	E6430	N/A
E	LAN PC	DELL	T3400	N/A
F	Flash disk3.0	Transcend	JetFlash-700	N/A
G	5G-H NB	DELL	E6430	N/A

**For Radiated (below 1GHz):**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	2.4G NB	DELL	E4300	N/A
B	5G-L NB	Apple	Mac Book	N/A
C	5G-H NB	Apple	Mac Book	N/A
D	NB	Apple	Mac Book	N/A
E	Flash disk3.0	Silicon Power	B06	N/A
F	PC	HP	SGH8190LP1	N/A
G	PoE 1	Cisco	MA-INJ-4	N/A

For Radiated (above 1GHz):**<Non-Beamforming Mode>**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	Cisco	MA-PWR-50WAC	N/A

<Beamforming Mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP	WNC	RXAQ-MR1	N/A
C	Notebook	DELL	E4300	N/A
D	Adapter	Cisco	MA-PWR-50WAC	N/A

**For RF Conducted (Other test items):
<Non-Beamforming Mode>**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Adapter	Cisco	MA-PWR-50WAC	N/A

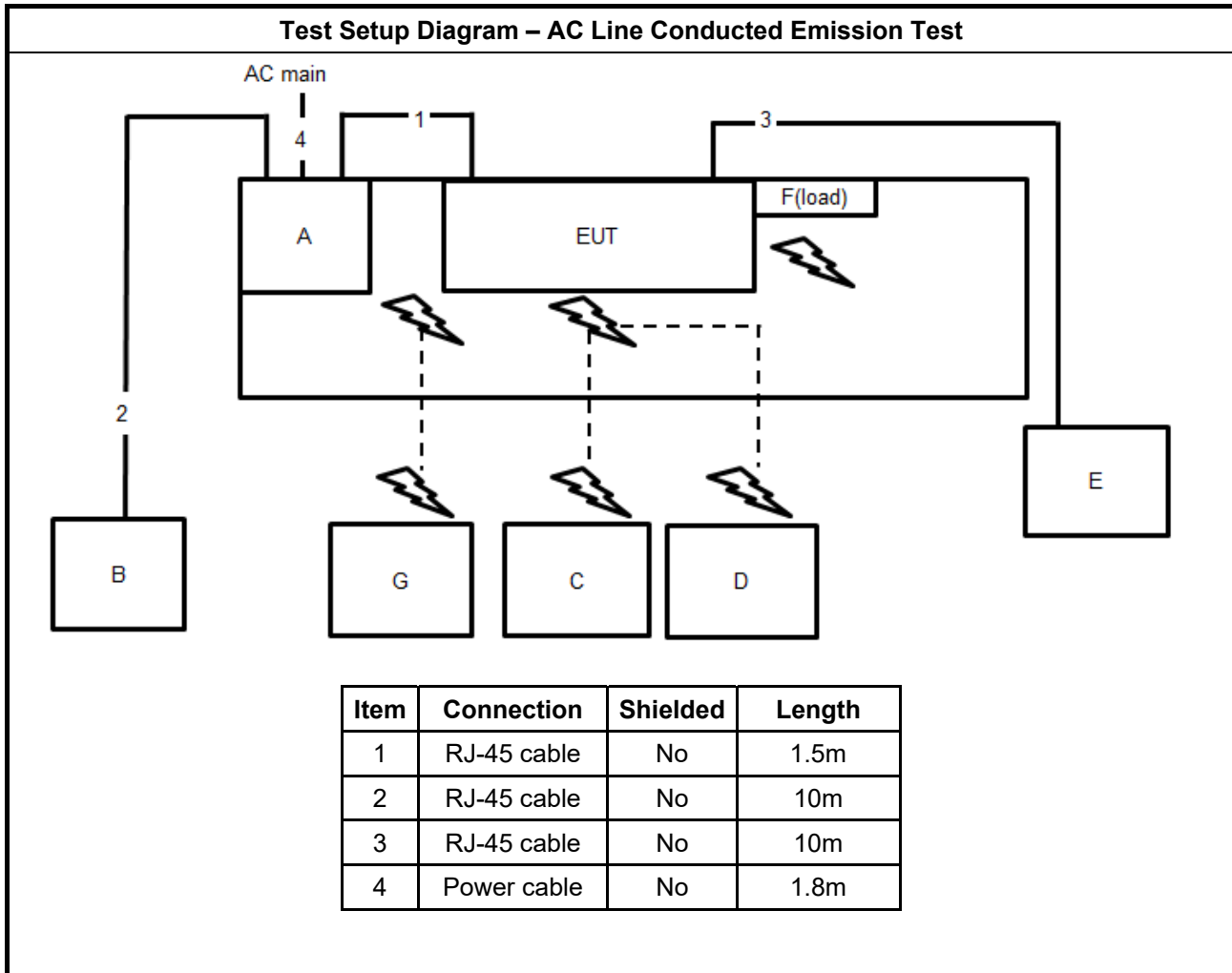
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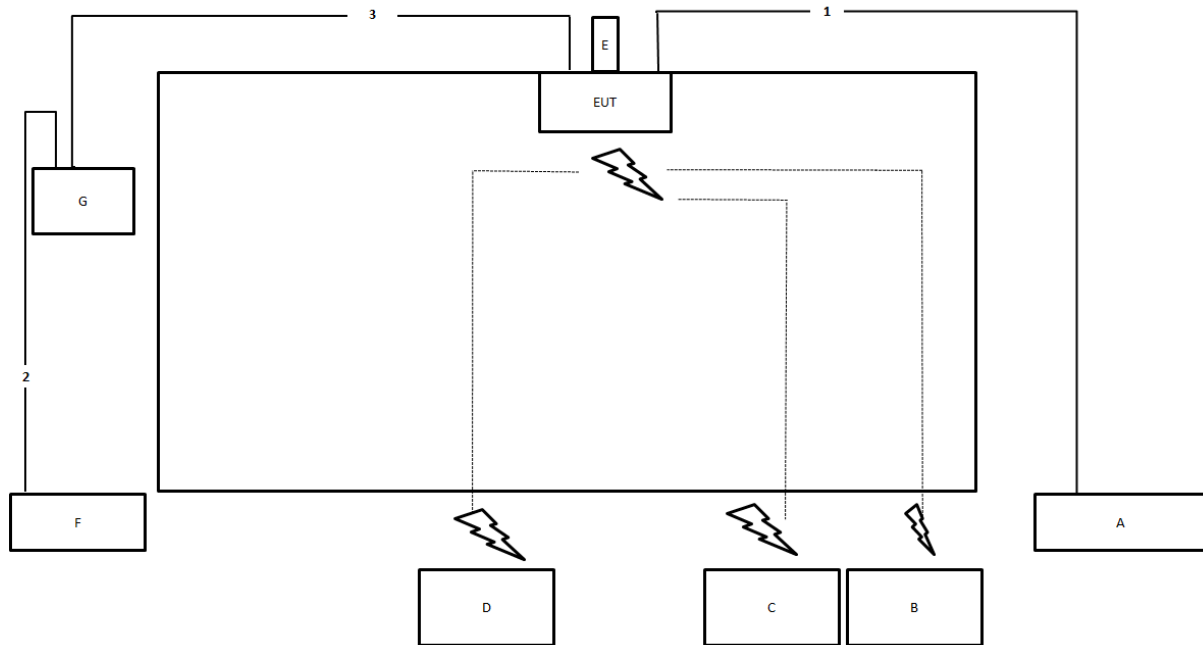
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN AP	WNC	RXAQ-MR1	N/A
D	Adapter	Cisco	MA-PWR-50WAC	N/A

For RF Conducted (Contention-Based Protocol test):

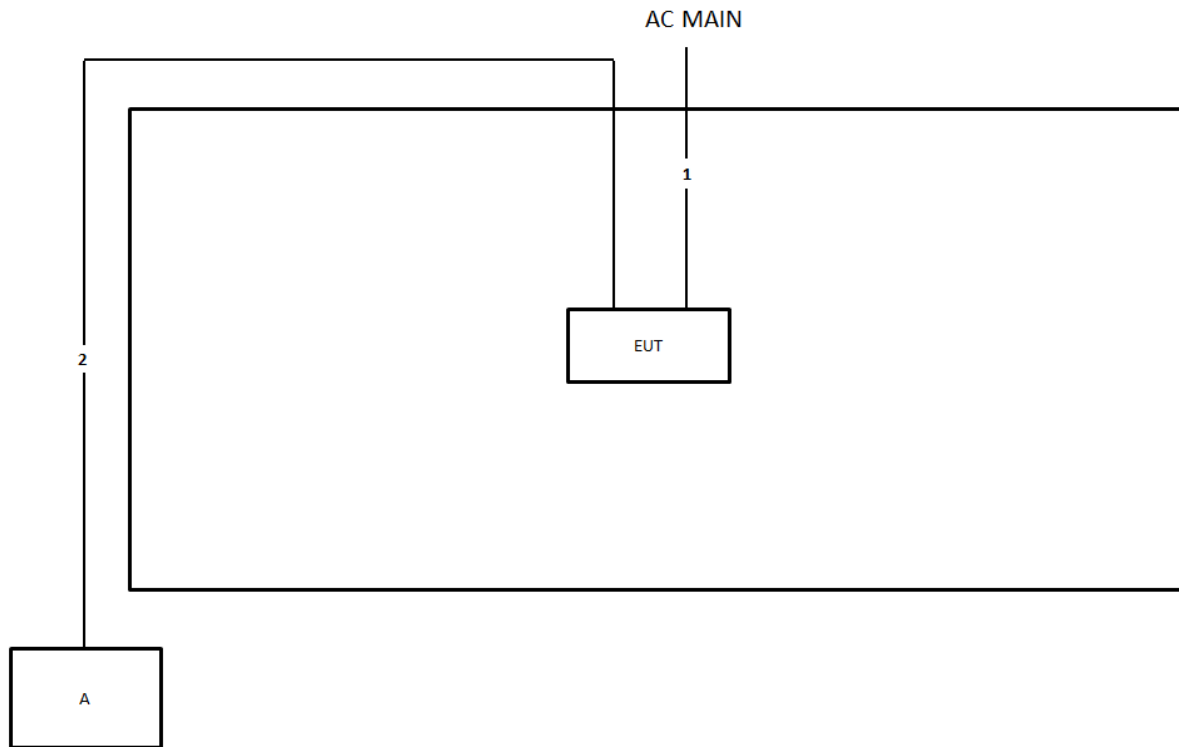
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN module	Intel	AX210NGW	PD9AX210NG
D	Adapter	Cisco	MA-PWR-50WAC	N/A

2.6 Test Setup Diagram



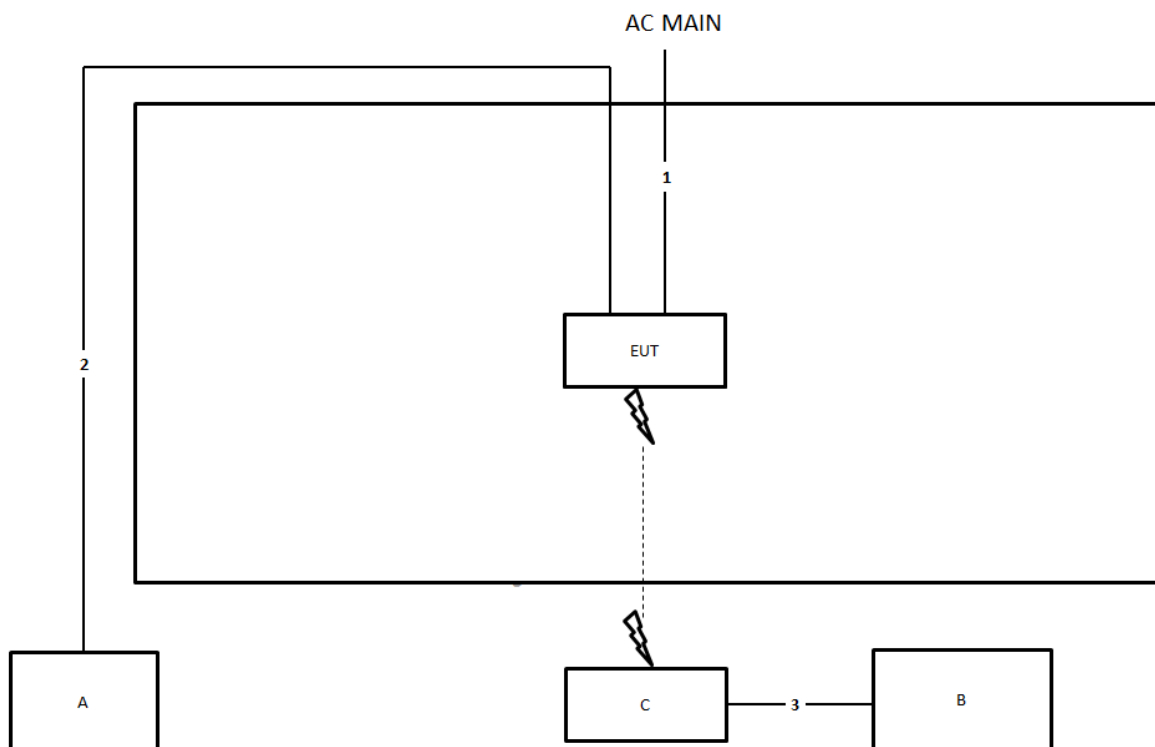
Test Setup Diagram - Radiated Test < 1GHz


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

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


Item	Connection	Shielded	Length
1	Power cable	No	3.4m
2	RJ-45 cable	No	10m

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



Item	Connection	Shielded	Length
1	Power cable	No	3.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

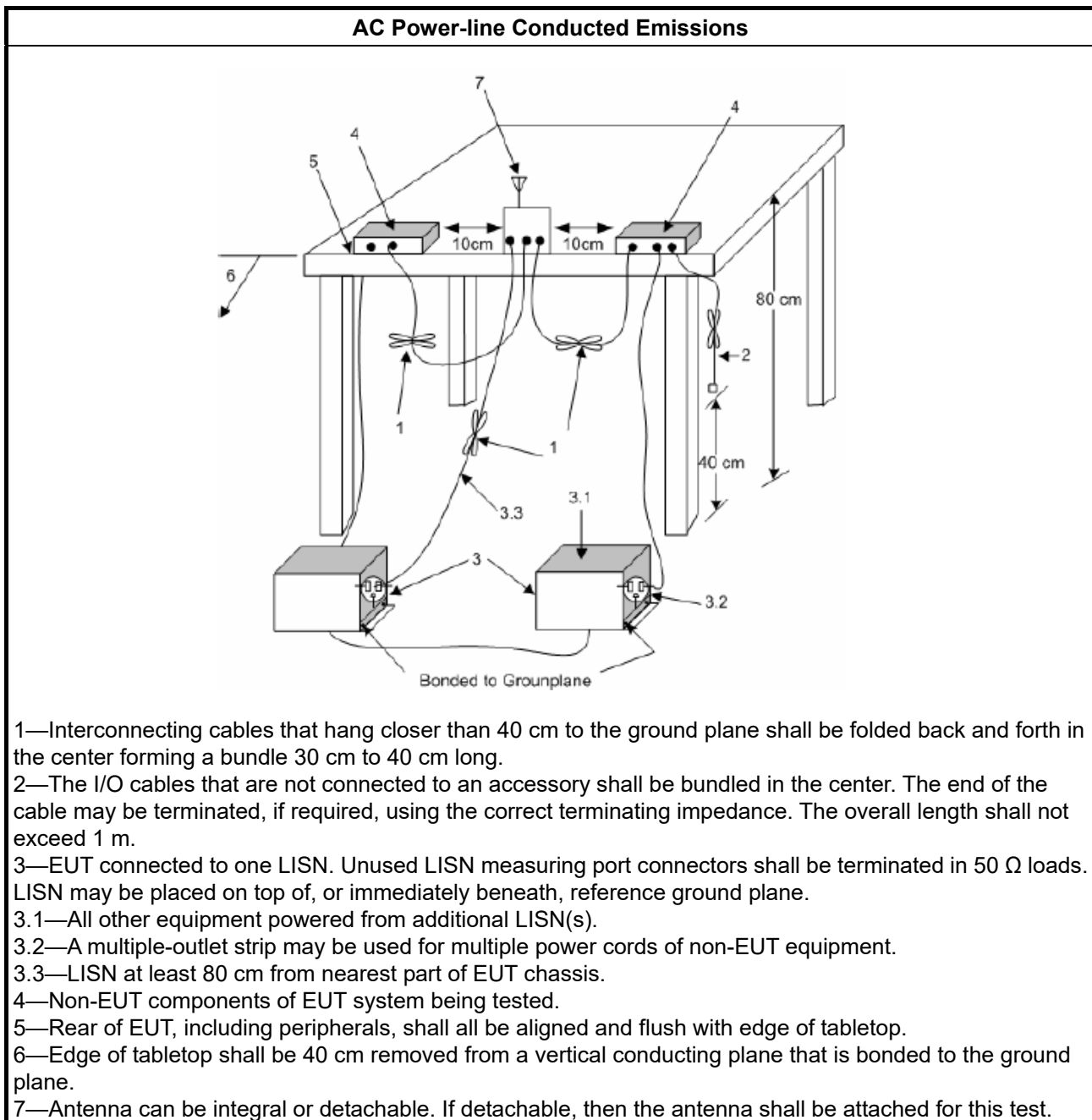
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5925-6425 GHz band, N/A
☒	For the 6425-6525 GHz band, N/A
☒	For the 6525-6875 GHz band, N/A
☒	For the 6875-7125 GHz band, N/A
RLAN Devices	
☐	For the 5925-6425 GHz band, N/A
☐	For the 6425-6525 GHz band, N/A
☐	For the 6525-6875 GHz band, N/A
☐	For the 6875-7125 GHz band, N/A

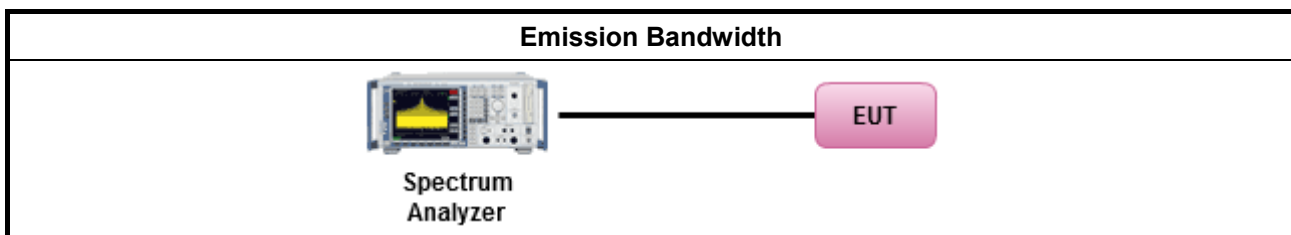
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	According to KDB 987594 D02 clause II.C, measurement procedure shall refer to FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)

3.3.1 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit

Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit	
UNII Devices	
☒ For the 5.925 ~ 6.425 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.425 ~ 6.525 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.525 ~ 6.875 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.875 ~ 7.125 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
RLAN Devices	
☐ For the 5.925 ~ 7.125 GHz band:	
	■ For RLAN devices(Indoor) other than client devices < 30 dBm / occupied bandwidth.
	■ For client devices(Indoor) < 24 dBm / occupied bandwidth.



3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
According to FCC KDB 987594 D02 clause II.E, the test measurement procedure shall refer to KDB 789033.	
Average over on/off periods with duty factor	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging). Spectrum analyzer setting: RBW/VBW : 1/3MHz ; Detector : RMS ; Trace mode : Average ; Sweep Count 100.
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	
☐	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
☐ For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	
☒ For radiated measurement.	
Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.	

Note :

The test is the final test result, It includes antenna /cable loss factor & FSL factor.

The EIRP calculation refer to "KDB 412172 D01 Determining ERP and EIRP v01r01"

EIRP Formula :

$$EIRP(dBm) = PR(dBm)$$

where;

PR(dBm) : Power measurement level include antenna/cable loss

LP : Free Space Loss(dB)

PR Formula :

$$PR(dBm) = P_{Meas}(dBm) - GR(dBi) + LC(dB)$$

where;

P Meas(dBm) : Power measurement level

GR(dBi) : Gain of the receive(measurement) antenna (dBi)

LC(dB) : Measurement cable loss (dB)

LP(FSL factor) Formula :

$$LP(dB) = 20 \log F + 20 \log D - 27.54$$

where;

F(MHz) : EUT center frequency

D(m) : Measurement distance

For Example:

Test mode HE20 Non BF 4T1S 5955MHz EIRP measurement

PR Formula :

$$PR(dBm) = -38.31 - 10.49 + 4.48 = -44.32$$

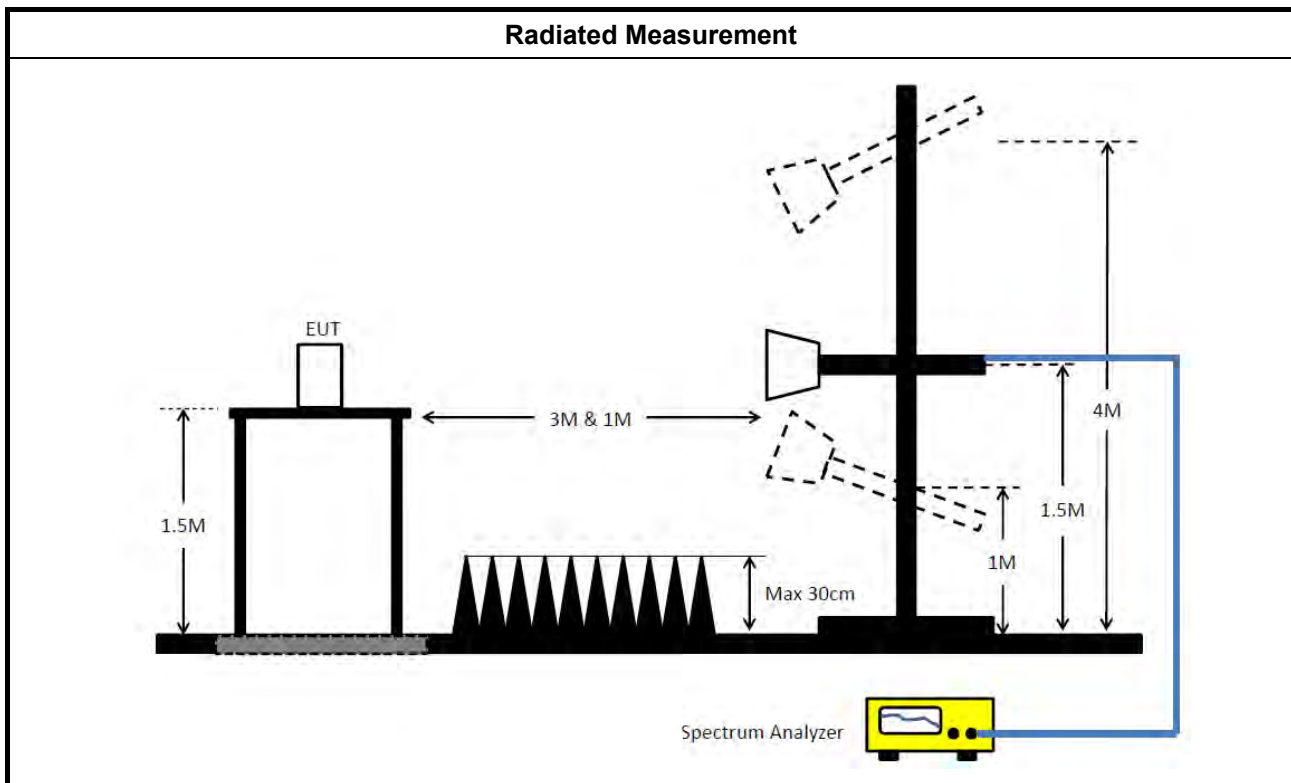
LP(FSL factor) Formula :

$$LP(dB) = 20 \log(5955) + 20 \log(3) - 27.5 = 57.54$$

EIRP Formula :

$$EIRP(dBm) = -44.32 + 57.54 = 13.22$$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Equivalent Isotopically Radiated Power (E.I.R.P)

Refer as Appendix C

3.4 Peak Power Spectral Density (E.I.R.P.)

3.4.1 Peak Power Spectral Density (E.I.R.P.) Limit

Peak Power Spectral Density (E.I.R.P.) Limit	
UNII Devices	
☒	For the 5.925 ~ 6.425 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.425 ~ 6.525 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.525 ~ 6.875 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.875 ~ 7.125 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
RLAN Devices	
☐	For the 5.925 ~ 7.125 GHz band:
☐	For RLAN devices(Indoor) other than client devices < 5 dBm / MHz.
☐	For client devices(Indoor) < -1 dBm / MHz.

3.4.2 Measuring Instruments

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



3.4.3 Test Procedures

Test Method	
According to KDB 987594 D02 clause II.F, the measurement procedure shall refer to KDB 789033. Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
☐	For conducted measurement.
If the EUT supports multiple transmit chains using options given below:	
☐	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	
☒	For radiated measurement.
Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	

**Test Method**

- Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

Note :

The test is the final test result, It includes antenna /cable loss factor & FSL factor.

The EIRP PSD calculation refer to "KDB 412172 D01 Determining ERP and EIRP v01r01"

EIRP PSD Formula :

EIRP PSD(dBm/MHz)

where;

PR(dBm/MHz) : Power measurement level include antenna/cable loss

LP : Free Space Loss(dB)

PR Formula :

$PR(dBm/MHz) = P \text{ Meas}(dBm/MHz) - GR(dBi) + LC(dB)$

where;

P Meas(dBm/MHz) : PSD measurement level

GR(dBi) : Gain of the receive(measurement) antenna (dBi)

LC(dB) : Measurement cable loss (dB)

LP(FSL factor) Formula :

$LP(dB) = 20 \log F + 20 \log D - 27.54$

where;

F(MHz) : EUT center frequency

D(m) : Measurement distance

For Example:

Test mode HE20 Non BF 4T1S 5955MHz EIRP PSD measurement

PR Formula :

$PR(dBm/MHz) = -46.11 - 11.29 + 4.48 = -52.93$

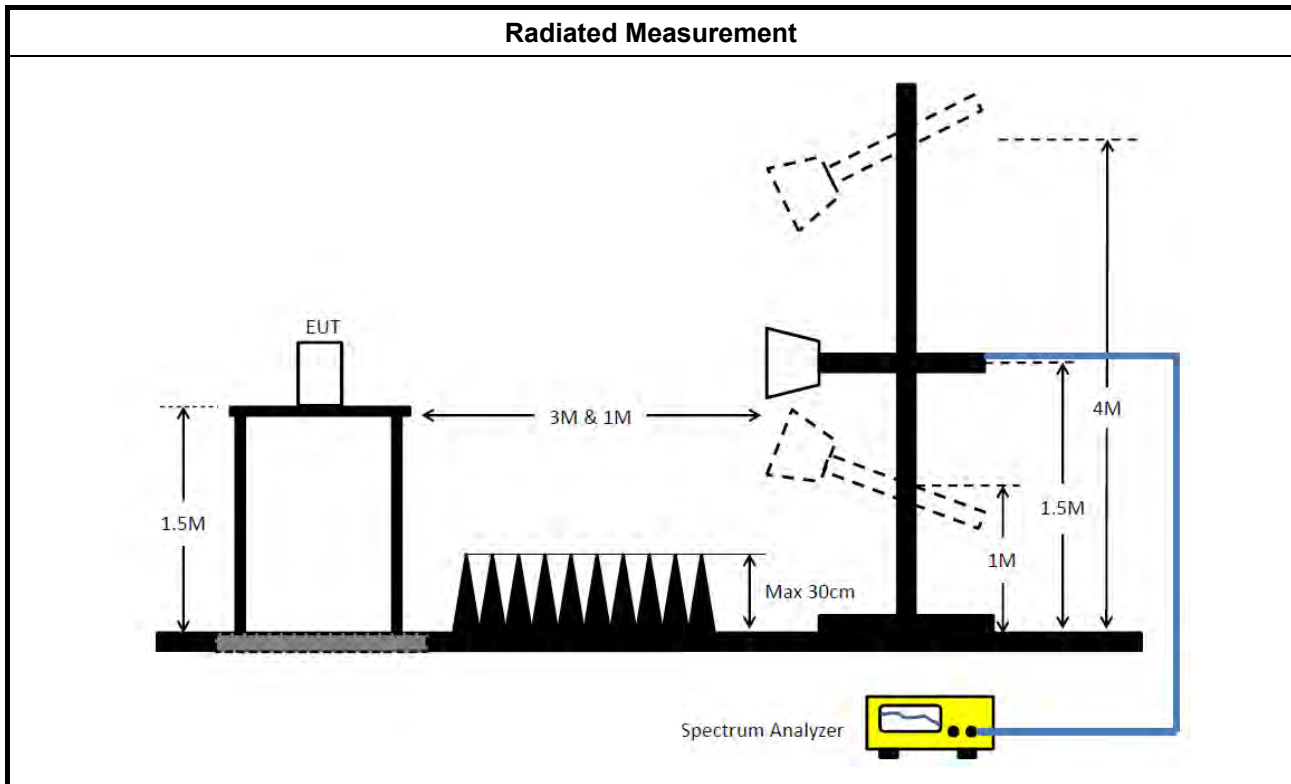
LP(FSL factor) Formula :

$LP(dB) = 20 \log(5960.4) + 20 \log(3) - 27.5 = 57.55$

EIRP PSD Formula

$EIRP \text{ PSD}(dBm/MHz) = -52.93 + 57.55 = 4.62$

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density (E.I.R.P.)

Refer as Appendix D

3.5 Unwanted Emissions

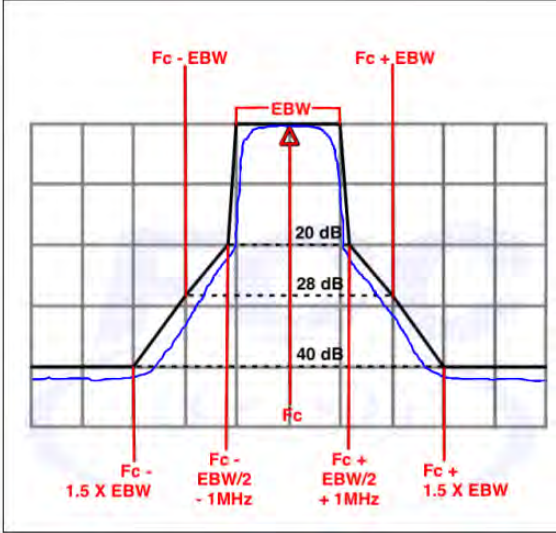
3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$).
EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit	
Frequency	Limit
Any outside the 5.945 – 7.125 GHz emission	e.i.r.p. -27 dBm [68.2 dBuV/m@3m] Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \log(\text{standard distance}/\text{test distance}) = 20 \log(3/1) = 9.54\text{dB}$. EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m. Note 2:-27 dBm EIRP OOBE is measured RMS which is a deviation from the current 15E rules for 5 GHz bands. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.
Frequency	Emission MASK Limit
5.945 – 7.125 GHz	Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB. 



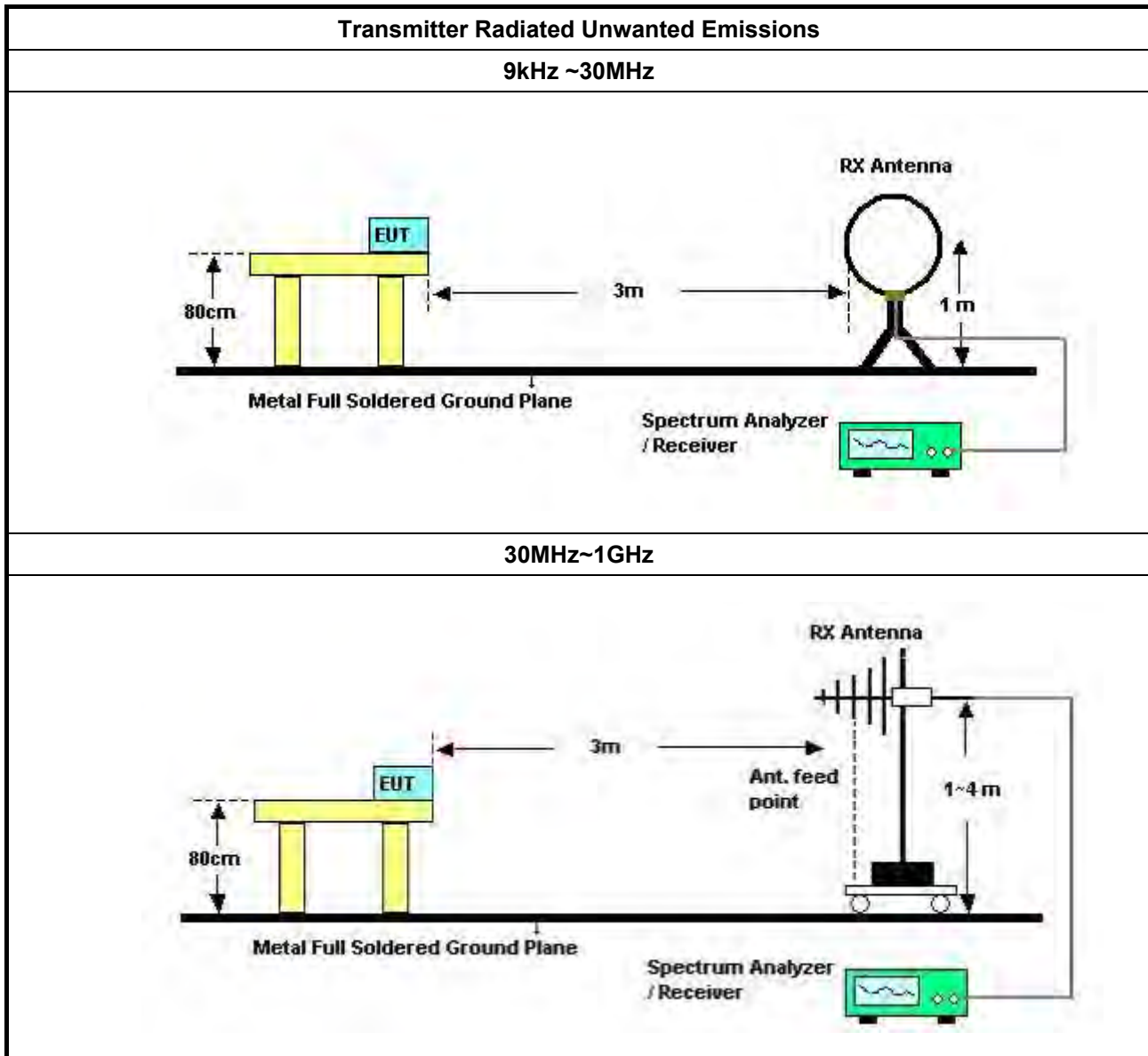
3.5.2 Measuring Instruments

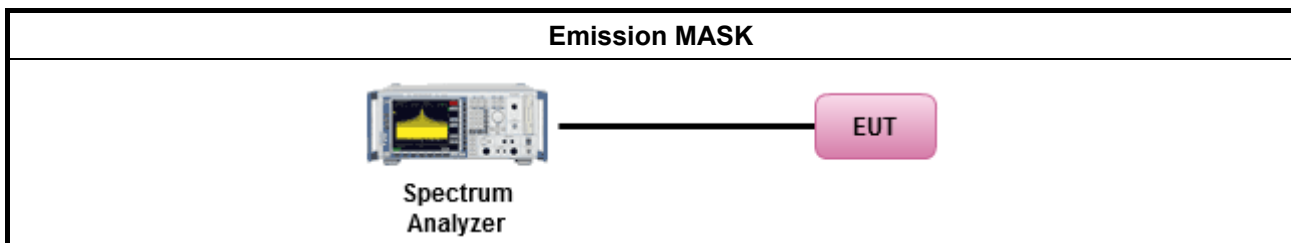
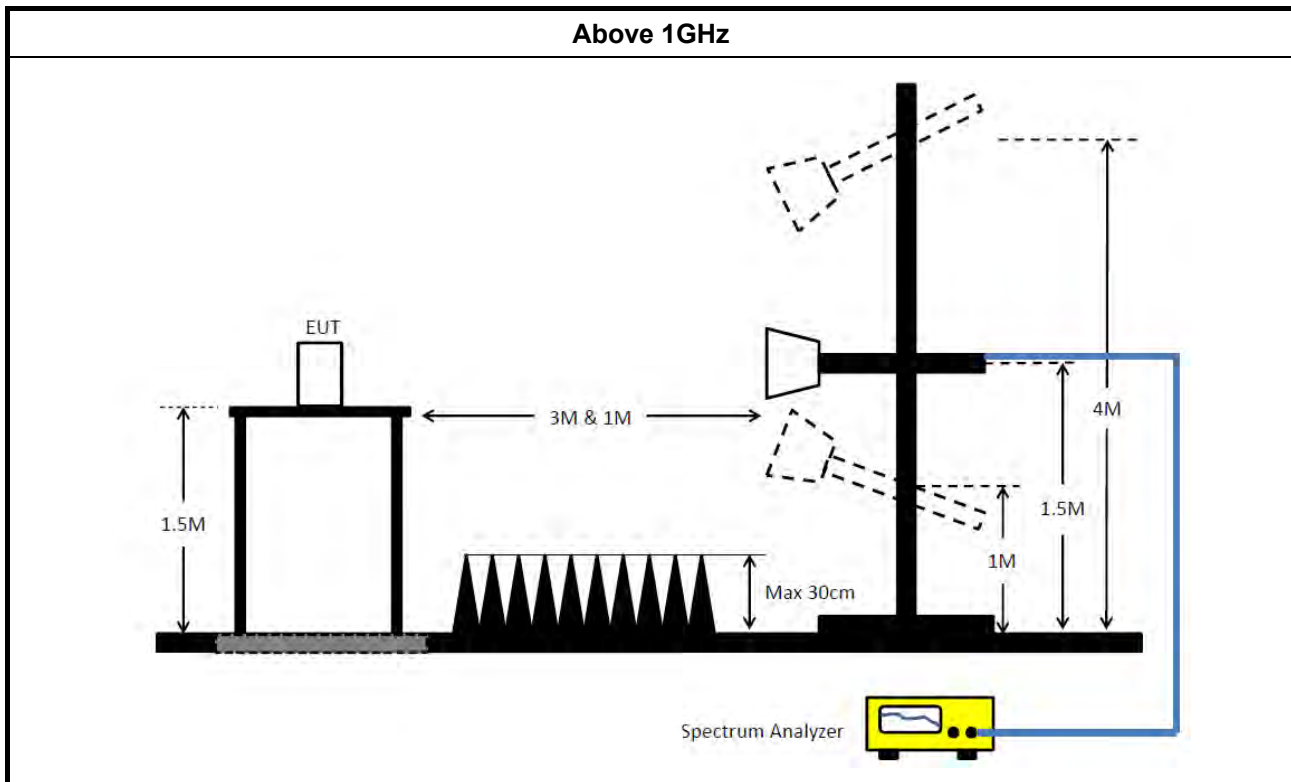
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
According to KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK). Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
	☐ Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	☒ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.(For restricted band average measurement)
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
For emission MASK shall be measured using following options below:	
	☒ Refer as FCC draft KDB 987594 D02, J) In-Band Emissions
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable)
= Level

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

EUT can detect an AWGN signal with 90% (or better) level of certainty.

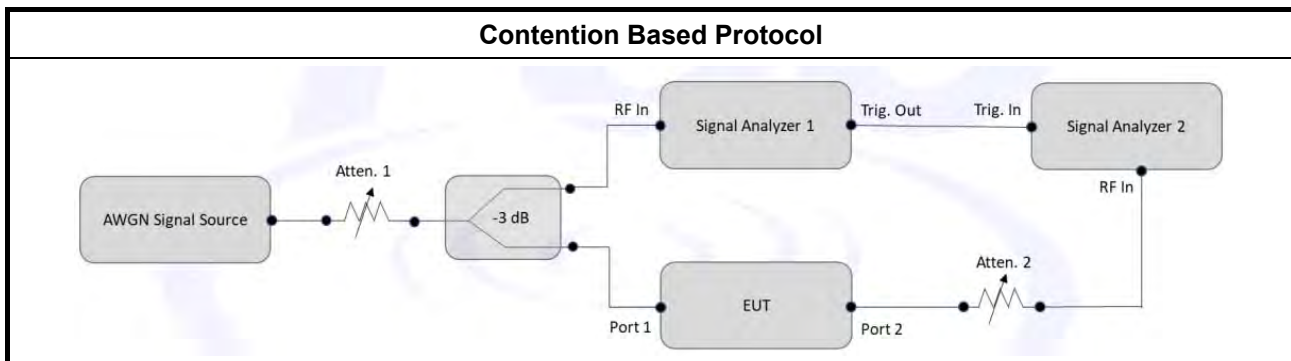
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
■	For Contention Based Protocol shall be measured using following options below:
☒	Refer as FCC draft KDB 987594 D02, I) In-Band Emissions

3.6.4 Test Setup



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit	
	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

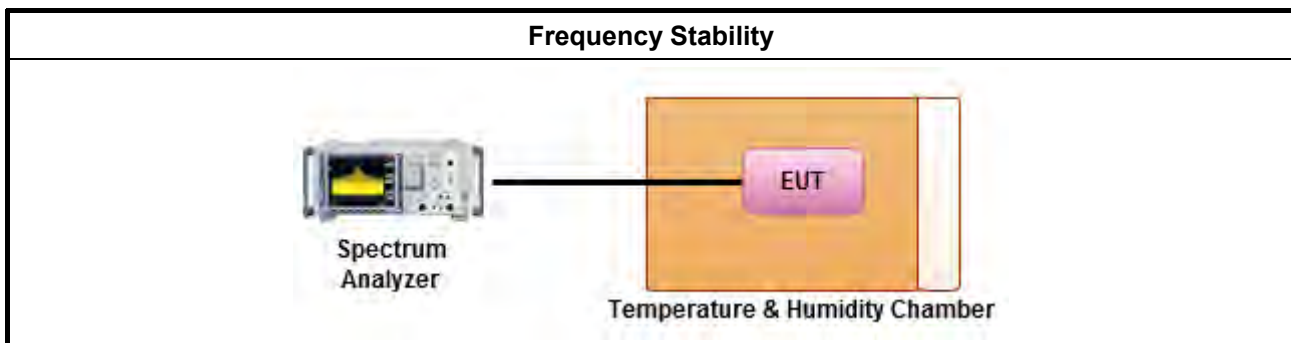
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
	Refer as ANSI C63.10, clause 6.8 for frequency stability tests
	Frequency stability with respect to ambient temperature
	Frequency stability when varying supply voltage
	Extreme temperature is -30°C~50°C.

3.7.4 Test Setup



3.7.5 Test Result of Frequency Stability

Refer as Appendix G



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 25, 2021	Feb. 24, 2022	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 23, 2020	Oct. 22, 2021	Radiation (03CH04-CB)
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 23, 2021	Jun. 22, 2022	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz ~26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Conducted (DF01-CB)
Signal generator	R&S	SMB100A	177785	1MHz-40GHz	Sep. 23, 2021	Sep. 22, 2022	Conducted (DF01-CB)
VEKTOR SIGNAL GENERATOR	R&S	SMW200A	109426	100KHz- 7.5GHz	Dec. 23, 2020	Dec. 22, 2021	Conducted (DF01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
MXG Vector Signal Generator	KEYSIGHT	N5182B	MY53052408	9kHz~6GHz	Jan. 20, 2021	Jan. 19, 2022	Conducted (DF01-CB)
VEKTOR SIGNAL GENERATOR	R&S	SMW200A	109426	100KHz- 7.5GHz	Dec. 28, 2021	Dec. 27, 2022	Conducted (DF01-CB)
RF Power Divider	STI	2 Way	DV-2way -05	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Power Divider	STI	2 Way	DV-2way -06	1GHz ~ 8GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Power Divider	MTJ	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-52	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-53	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-54	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-56	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-60	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (DF01-CB)
100MS/s Digitizer	N.I	USB-5133	F65206	N/A	Nov. 25, 2021	Nov. 24, 2022	Conducted (DF01-CB)

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

NCR means Non-Calibration required.



Conducted Emissions at Powerline

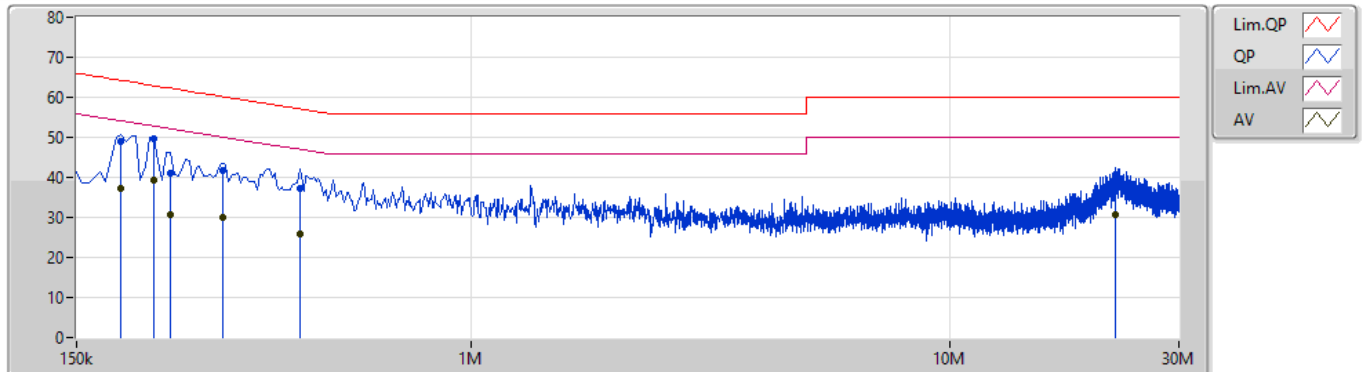
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 5	Pass	QP	217.5k	52.77	62.92	-10.15	Neutral

Mode 5

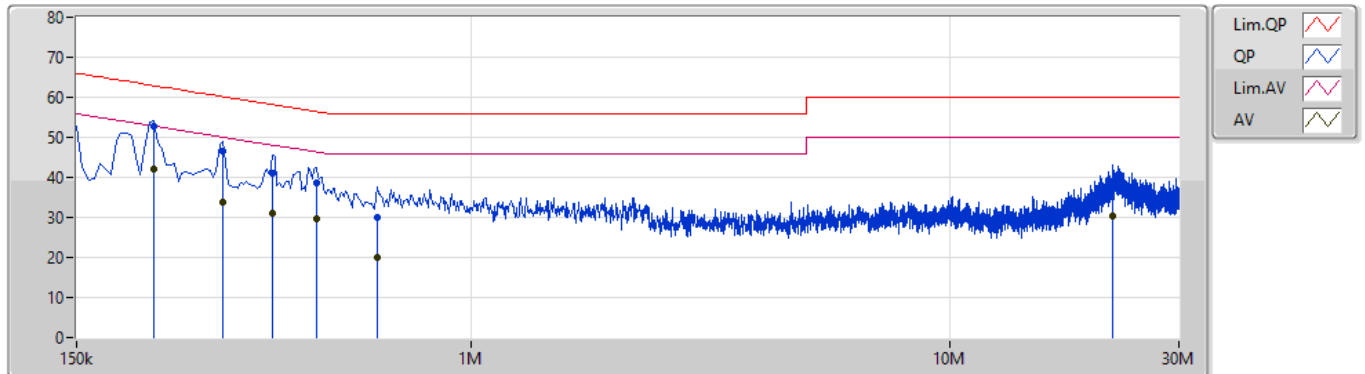
17/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	186k	48.91	64.20	-15.29	9.89	Line	-	39.02	0.04	0.04	9.81			
AV	186k	37.25	54.20	-16.95	9.89	Line	-	27.36	0.04	0.04	9.81			
QP	217.5k	49.69	62.92	-13.23	9.89	Line	"Worst"	39.80	0.04	0.04	9.81			
AV	217.5k	39.26	52.92	-13.66	9.89	Line	-	29.37	0.04	0.04	9.81			
QP	235.5k	41.17	62.25	-21.08	9.89	Line	-	31.28	0.04	0.04	9.81			
AV	235.5k	30.67	52.25	-21.58	9.89	Line	-	20.78	0.04	0.04	9.81			
QP	303k	41.70	60.17	-18.47	9.90	Line	-	31.80	0.04	0.04	9.82			
AV	303k	30.00	50.17	-20.17	9.90	Line	-	20.10	0.04	0.04	9.82			
QP	438k	37.30	57.11	-19.81	9.90	Line	-	27.40	0.04	0.04	9.82			
AV	438k	25.89	47.11	-21.22	9.90	Line	-	15.99	0.04	0.04	9.82			
QP	22.137M	37.90	60.00	-22.10	10.58	Line	-	27.32	0.33	0.25	10.00			
AV	22.137M	30.75	50.00	-19.25	10.58	Line	-	20.17	0.33	0.25	10.00			

Mode 5

17/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	217.5k	52.77	62.92	-10.15	9.88	Neutral	"Worst"	42.89	0.03	0.04	9.81			
AV	217.5k	42.14	52.92	-10.78	9.88	Neutral	-	32.26	0.03	0.04	9.81			
QP	303k	46.44	60.17	-13.73	9.89	Neutral	-	36.55	0.03	0.04	9.82			
AV	303k	33.88	50.17	-16.29	9.89	Neutral	-	23.99	0.03	0.04	9.82			
QP	384k	41.02	58.20	-17.18	9.89	Neutral	-	31.13	0.03	0.04	9.82			
AV	384k	31.12	48.20	-17.08	9.89	Neutral	-	21.23	0.03	0.04	9.82			
QP	474k	38.58	56.44	-17.86	9.89	Neutral	-	28.69	0.03	0.04	9.82			
AV	474k	29.57	46.44	-16.87	9.89	Neutral	-	19.68	0.03	0.04	9.82			
QP	636k	29.94	56.00	-26.06	9.91	Neutral	-	20.03	0.04	0.04	9.83			
AV	636k	20.11	46.00	-25.89	9.91	Neutral	-	10.20	0.04	0.04	9.83			
QP	21.881M	37.32	60.00	-22.68	10.56	Neutral	-	26.76	0.32	0.24	10.00			
AV	21.881M	30.21	50.00	-19.79	10.56	Neutral	-	19.65	0.32	0.24	10.00			

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	22.02M	19.13M	19M1D1D	21.93M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	61.56M	38.321M	38M3D1D	40.62M	37.841M
802.11ax HEW80_Nss1,(MCS0)_1TX	159.72M	94.753M	94M8D1D	140.4M	79.16M
802.11ax HEW160_Nss1,(MCS0)_1TX	449.28M	301.769M	302MD1D	249.84M	156.162M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	22.11M	19.16M	19M2D1D	21.93M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.86M	37.901M	37M9D1D	40.56M	37.841M
802.11ax HEW80_Nss1,(MCS0)_1TX	155.16M	84.918M	84M9D1D	147M	78.921M
802.11ax HEW160_Nss1,(MCS0)_1TX	434.4M	295.532M	296MD1D	434.4M	295.532M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	22.08M	19.13M	19M1D1D	21.885M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	47.64M	38.141M	38M1D1D	40.62M	37.901M
802.11ax HEW80_Nss1,(MCS0)_1TX	190.08M	124.738M	125MD1D	150.24M	80.72M
802.11ax HEW160_Nss1,(MCS0)_1TX	447.84M	310.165M	310MD1D	408.72M	282.579M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	21.93M	19.16M	19M2D1D	21.84M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	96.6M	58.711M	58M7D1D	40.92M	38.081M
802.11ax HEW80_Nss1,(MCS0)_1TX	218.16M	158.921M	159MD1D	210.48M	151.484M
802.11ax HEW160_Nss1,(MCS0)_1TX	406.56M	299.37M	299MD1D	406.56M	299.37M

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

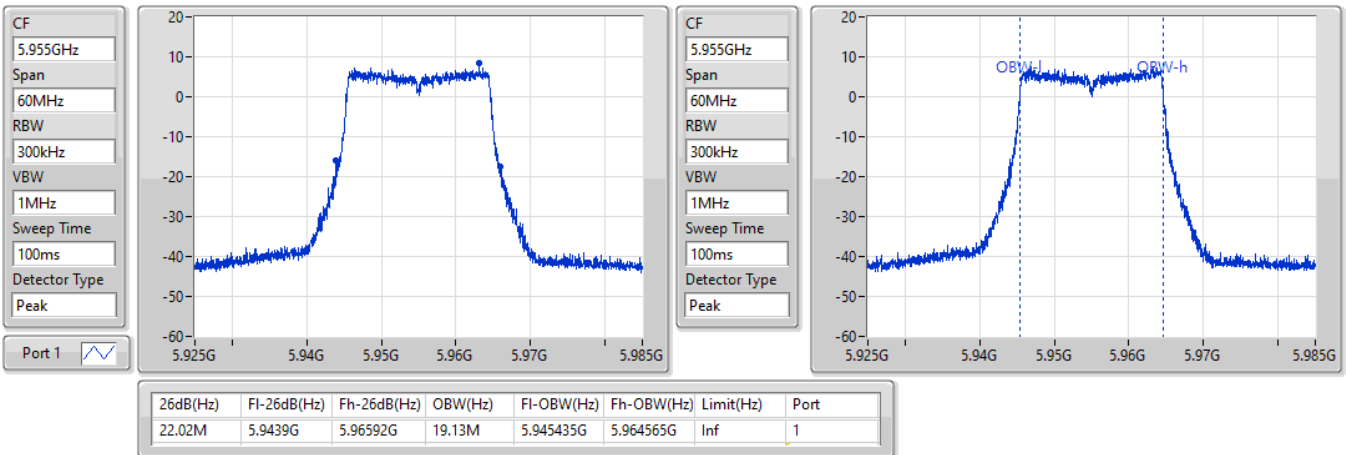
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5955MHz	Pass	Inf	22.02M	19.13M
6175MHz	Pass	Inf	21.99M	19.13M
6415MHz	Pass	Inf	21.93M	19.13M
6435MHz	Pass	Inf	21.93M	19.1M
6475MHz	Pass	Inf	22.05M	19.13M
6515MHz	Pass	Inf	22.11M	19.16M
6535MHz	Pass	Inf	22.08M	19.13M
6695MHz	Pass	Inf	21.9M	19.13M
6855MHz	Pass	Inf	22.08M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	21.885M	19.13M
6895MHz	Pass	Inf	21.93M	19.13M
6995MHz	Pass	Inf	21.87M	19.13M
7095MHz	Pass	Inf	21.93M	19.16M
7115MHz	Pass	Inf	21.84M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5965MHz	Pass	Inf	40.62M	37.841M
6165MHz	Pass	Inf	42.24M	38.021M
6405MHz	Pass	Inf	61.56M	38.321M
6445MHz	Pass	Inf	40.86M	37.841M
6485MHz	Pass	Inf	40.56M	37.901M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	40.74M	37.841M
6565MHz	Pass	Inf	40.62M	37.901M
6685MHz	Pass	Inf	47.64M	38.141M
6845MHz	Pass	Inf	41.28M	37.961M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.74M	37.901M
6925MHz	Pass	Inf	40.92M	38.081M
7005MHz	Pass	Inf	54.9M	38.261M
7085MHz	Pass	Inf	96.6M	58.711M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5985MHz	Pass	Inf	140.4M	79.16M
6145MHz	Pass	Inf	159.72M	94.753M
6385MHz	Pass	Inf	143.16M	80M
6465MHz	Pass	Inf	147M	78.921M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	155.16M	84.918M
6625MHz	Pass	Inf	172.32M	98.111M
6705MHz	Pass	Inf	167.04M	101.229M
6785MHz	Pass	Inf	150.24M	80.72M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	190.08M	124.738M
6945MHz	Pass	Inf	210.48M	151.484M
7025MHz	Pass	Inf	218.16M	158.921M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
6025MHz	Pass	Inf	249.84M	156.162M
6185MHz	Pass	Inf	423.12M	300.57M
6345MHz	Pass	Inf	449.28M	301.769M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	434.4M	295.532M
6665MHz	Pass	Inf	447.84M	310.165M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	408.72M	282.579M
6985MHz	Pass	Inf	406.56M	299.37M

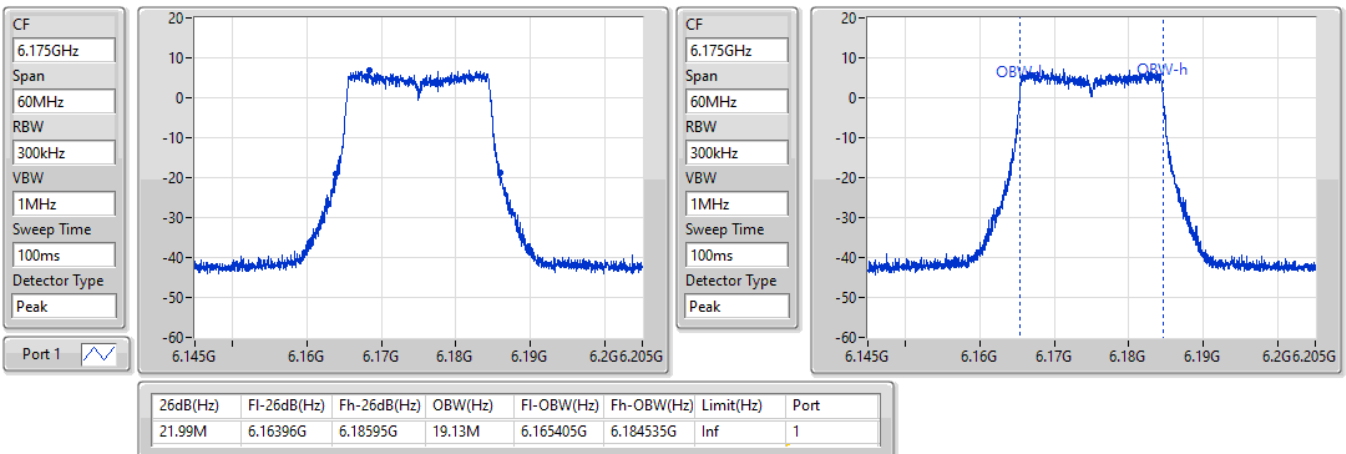
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5955MHz

18/11/2021

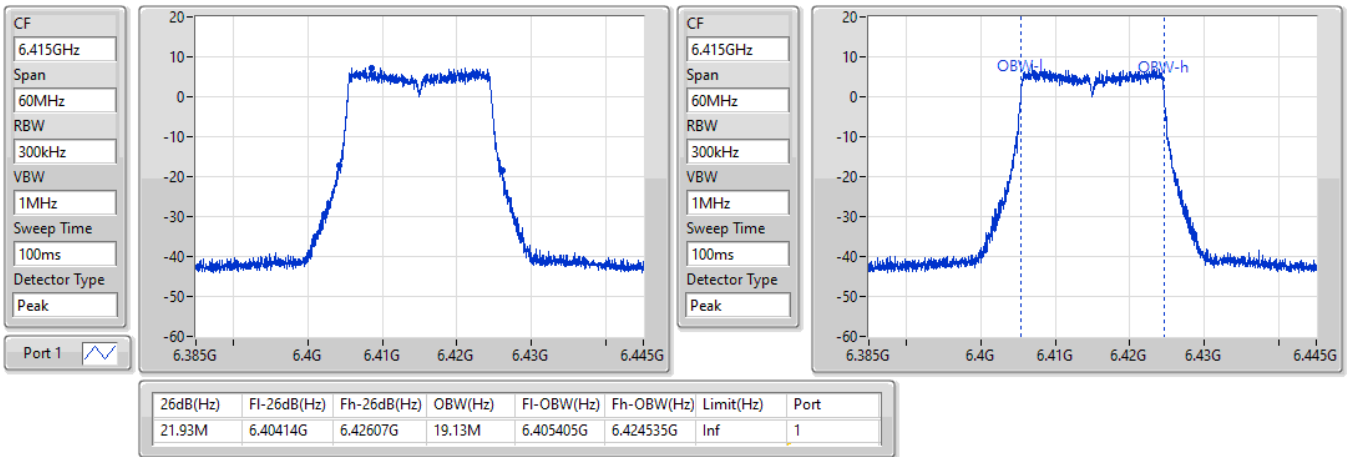

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6175MHz

18/11/2021

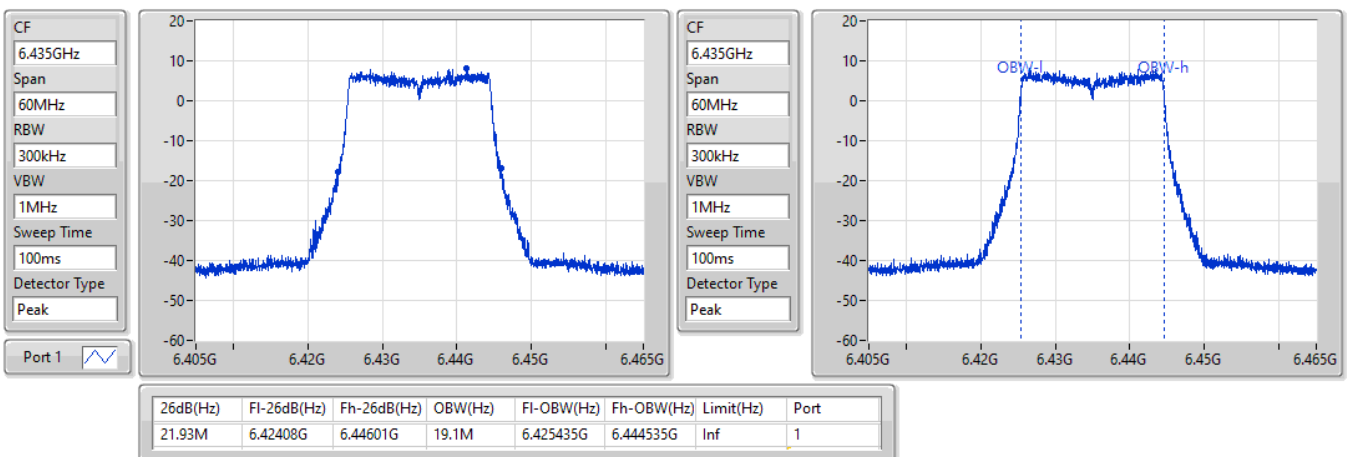


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6415MHz

18/11/2021

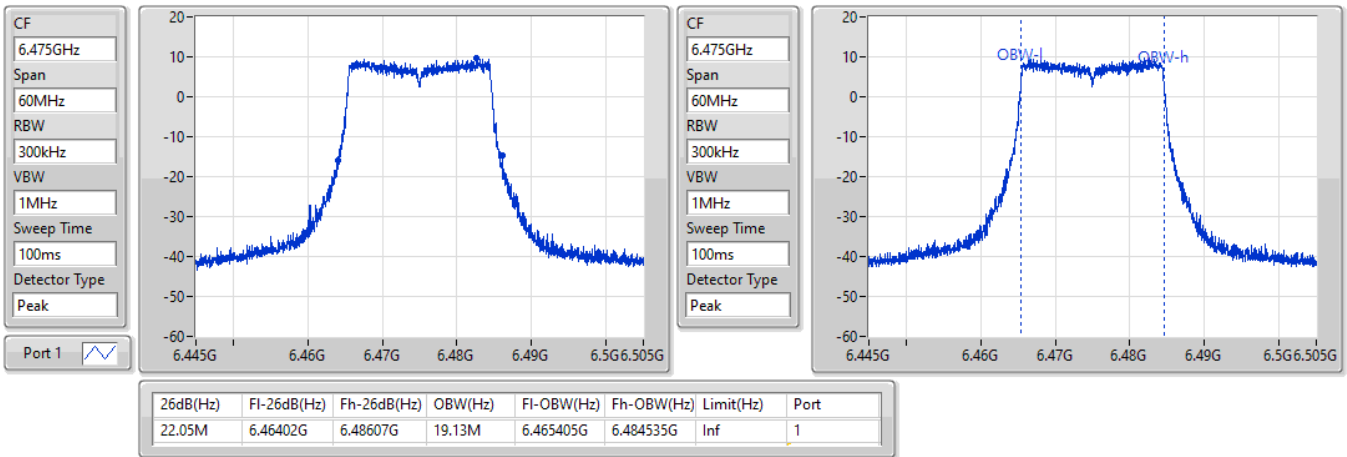

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6435MHz

18/11/2021

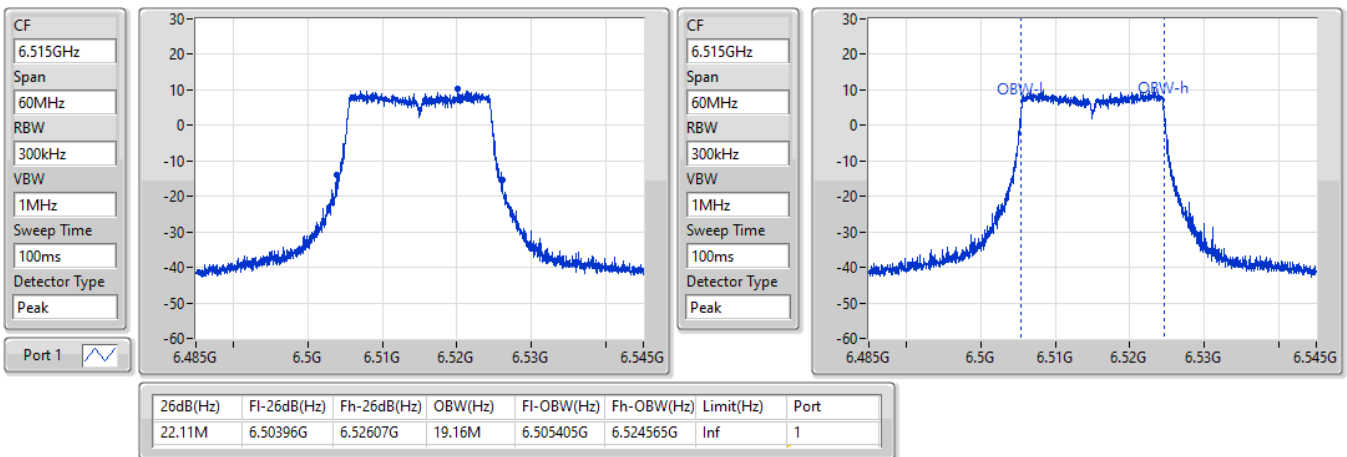


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6475MHz

18/11/2021

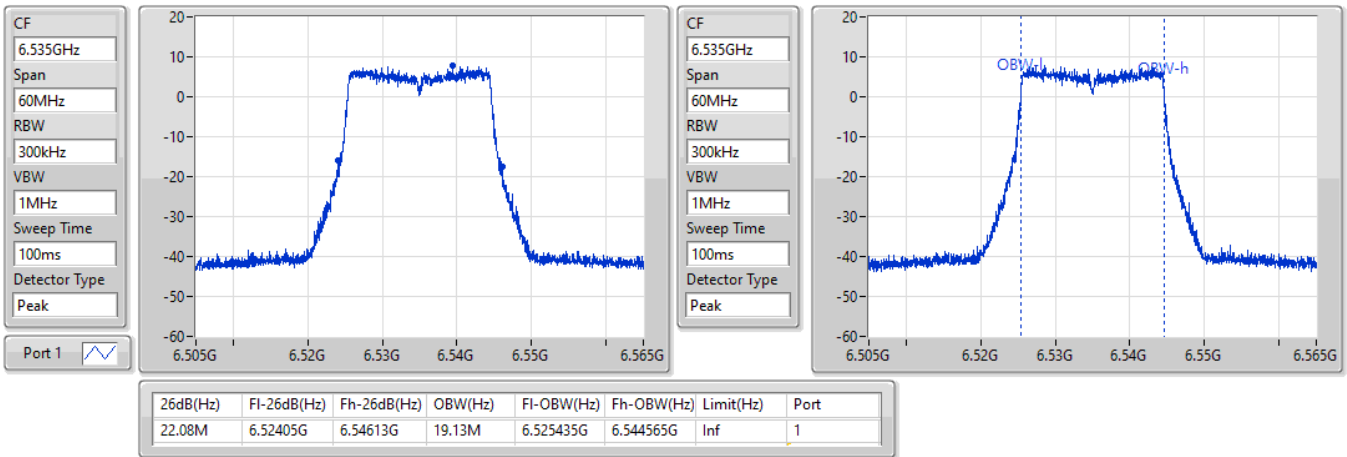

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6515MHz

18/11/2021

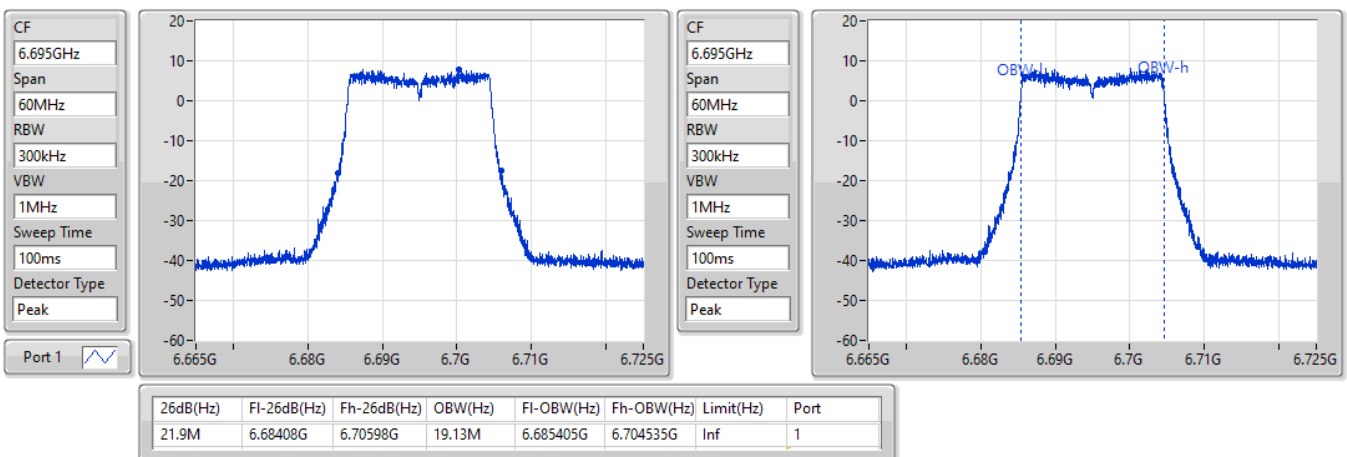


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6535MHz

18/11/2021

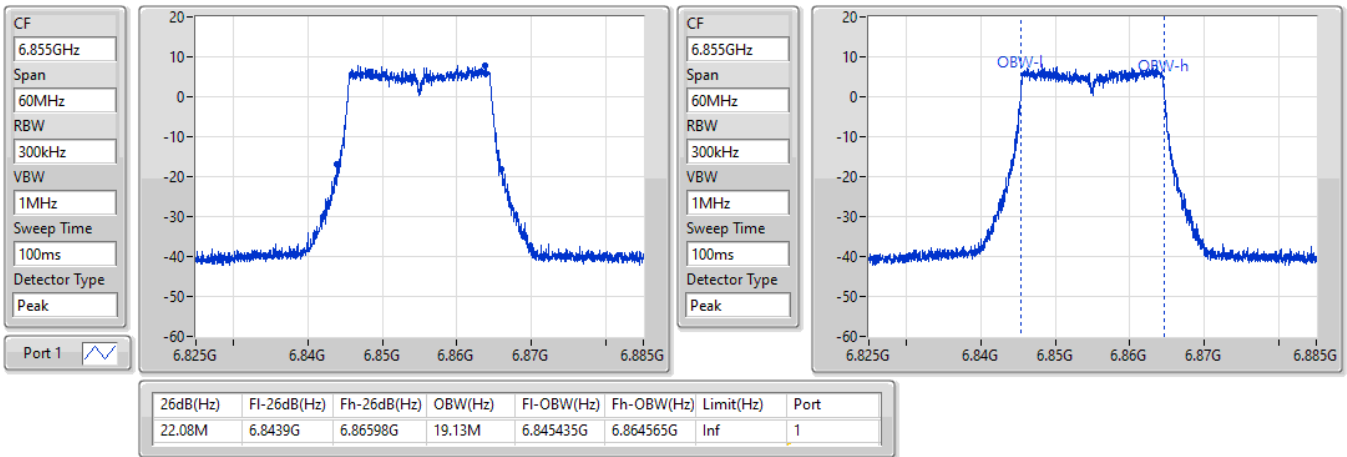

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6695MHz

18/11/2021

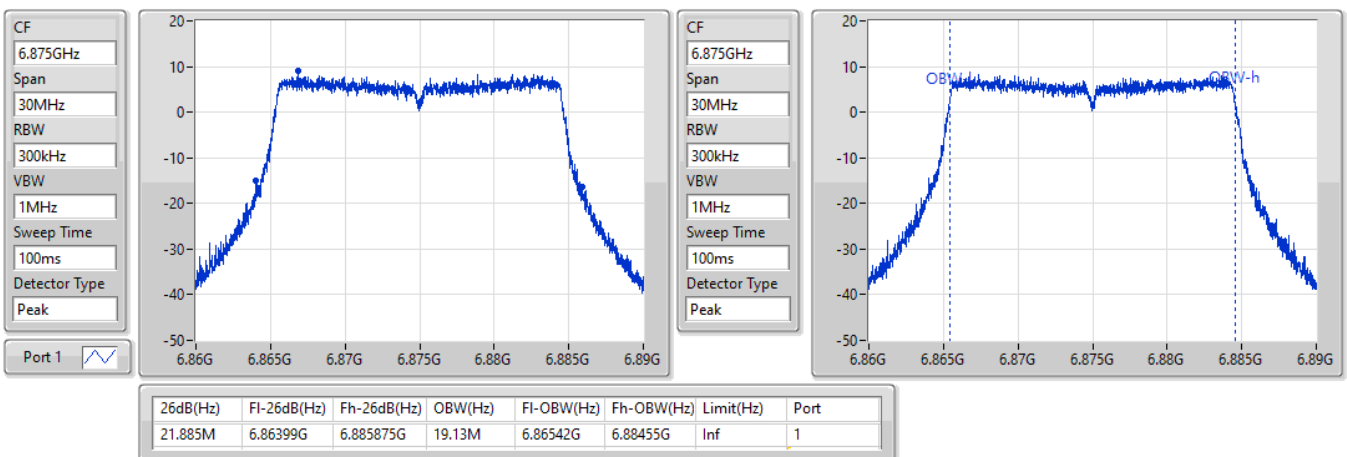


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6855MHz

18/11/2021

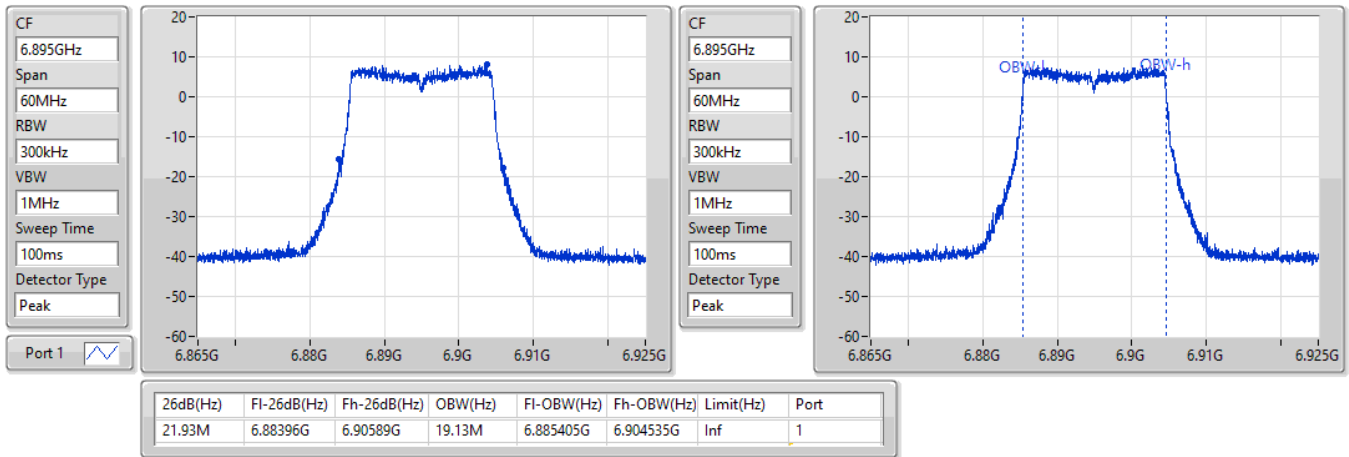

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6875MHz Straddle 6.525-6.875GHz

18/11/2021

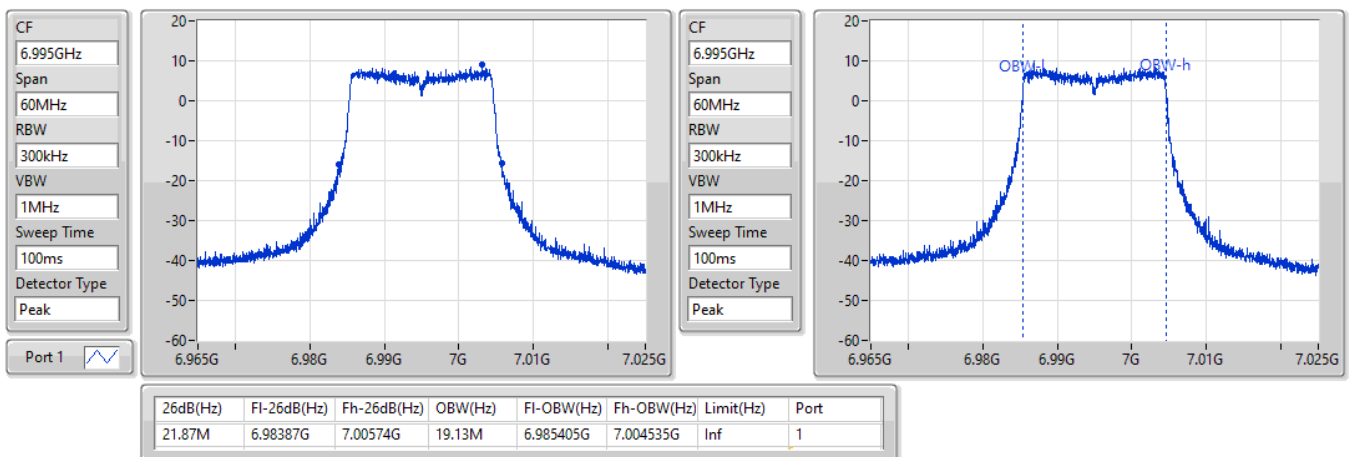


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6895MHz

18/11/2021

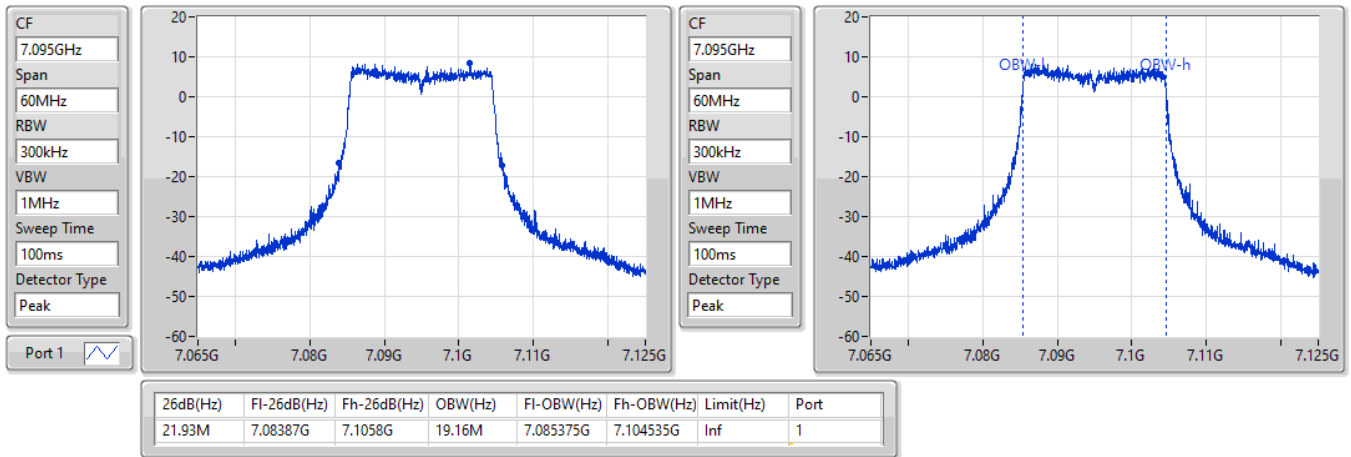

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6995MHz

18/11/2021

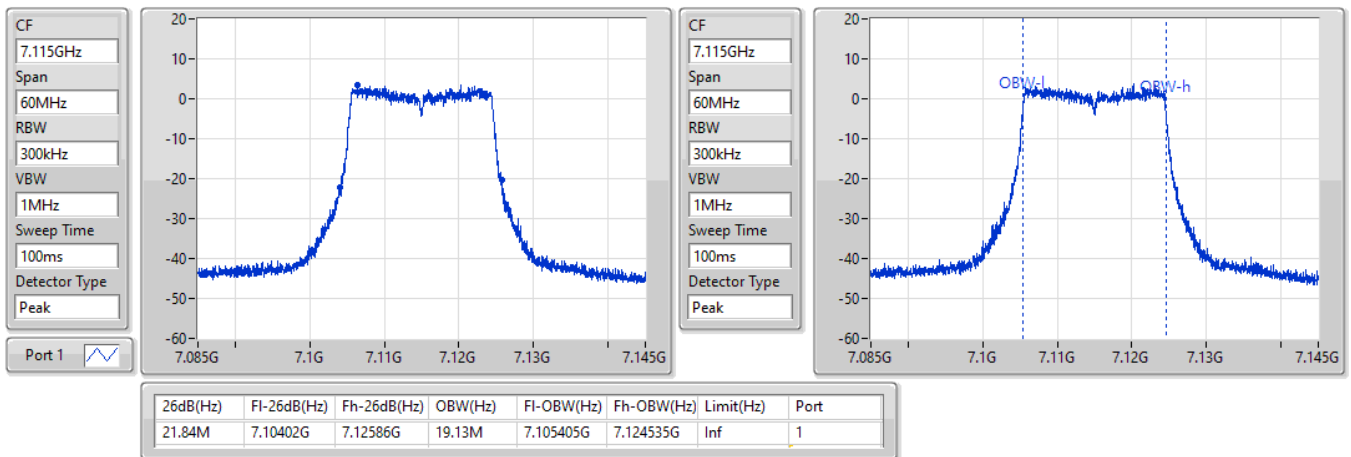


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
7095MHz

18/11/2021

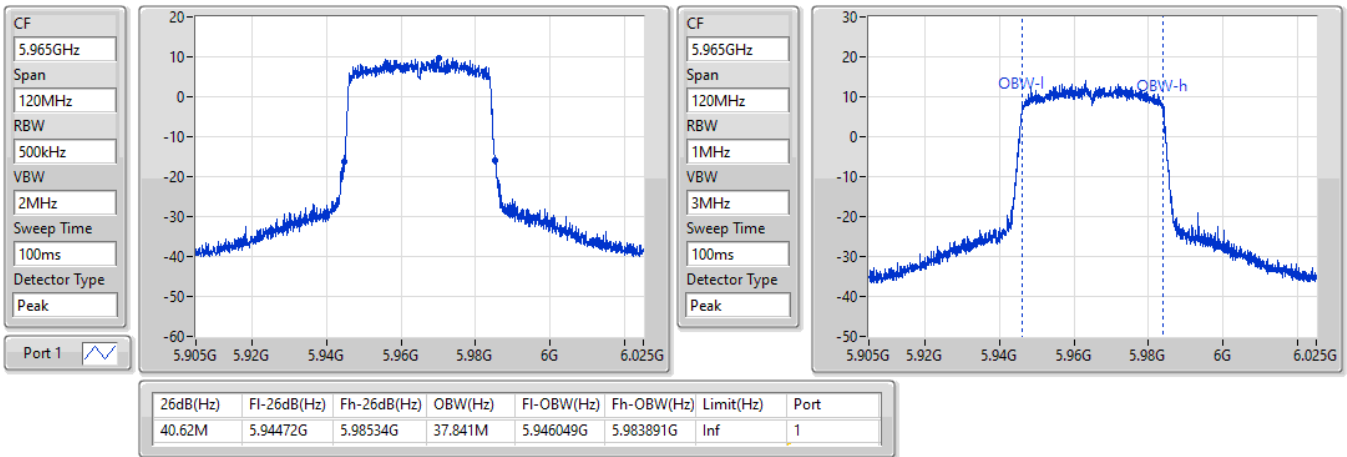

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
7115MHz

18/11/2021

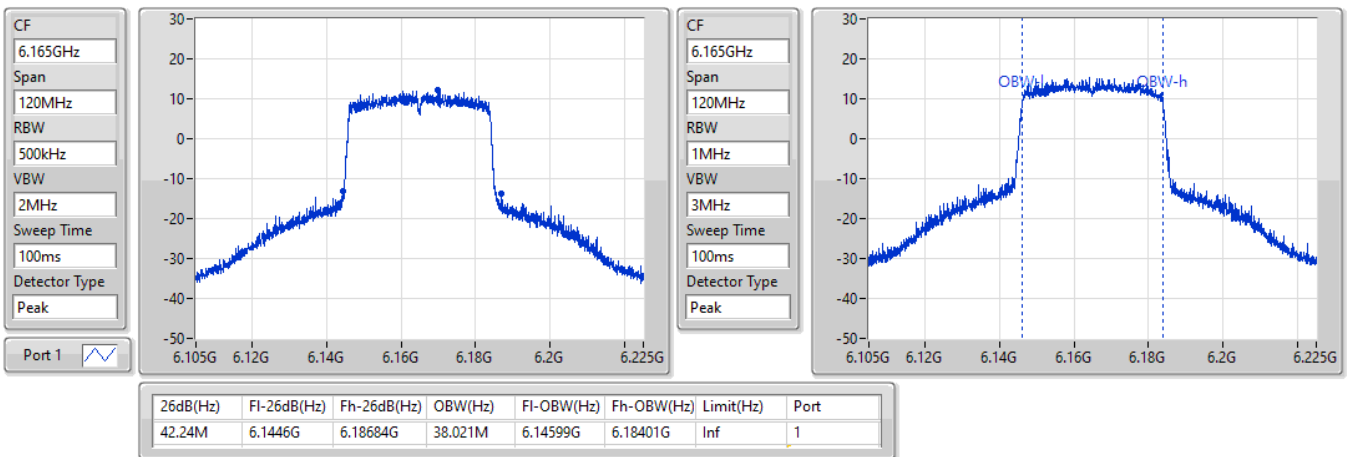


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5965MHz

18/11/2021

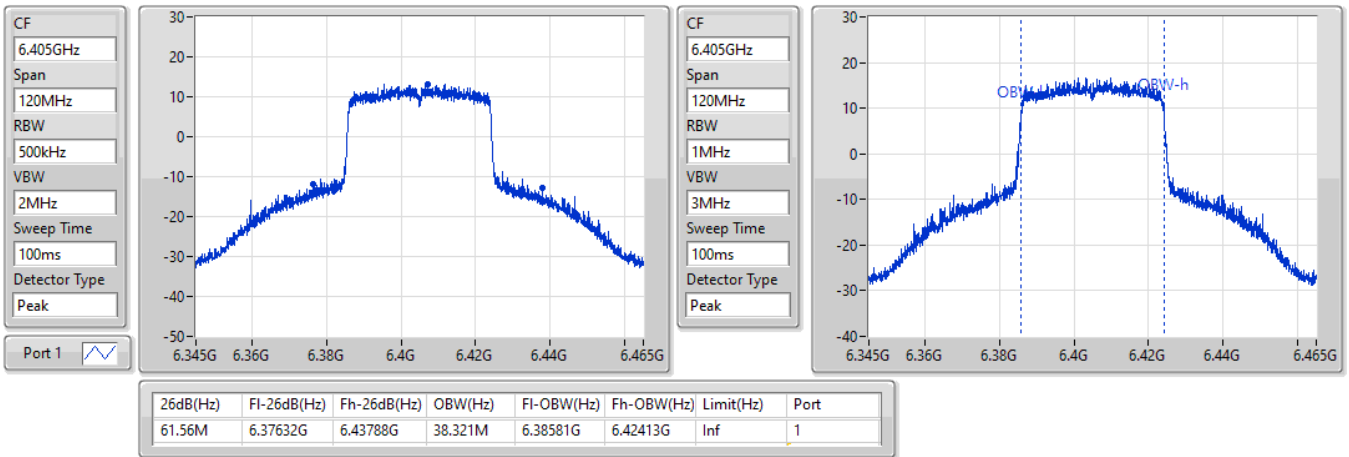

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6165MHz

18/11/2021

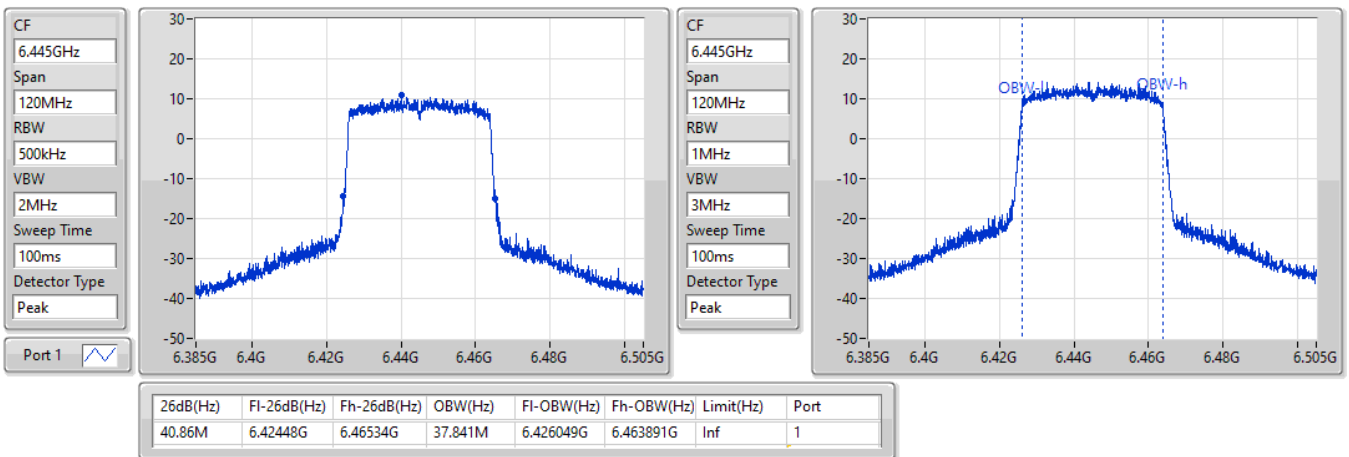


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6405MHz

18/11/2021

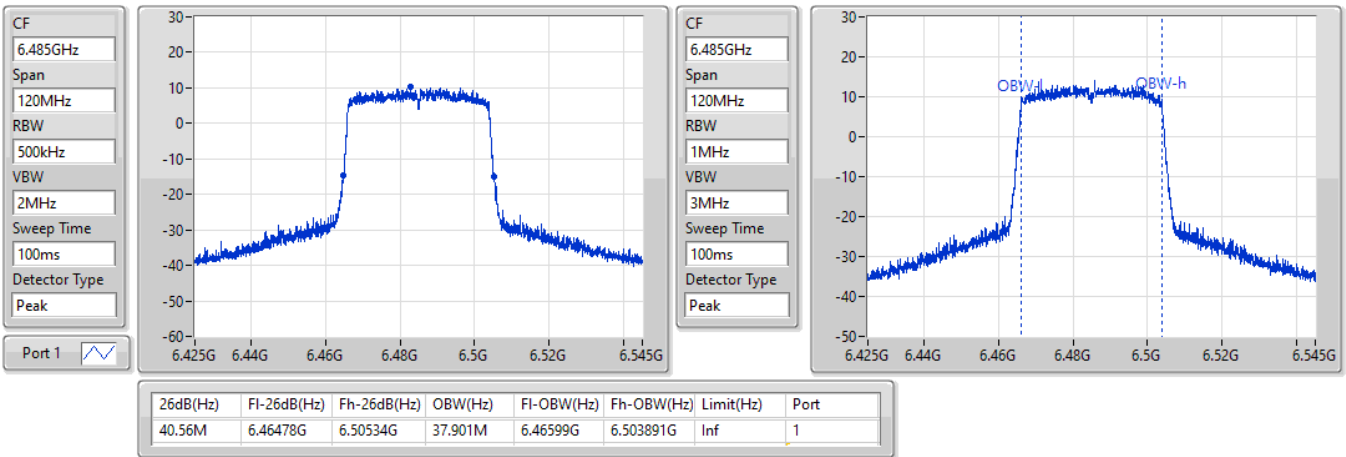

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6445MHz

18/11/2021

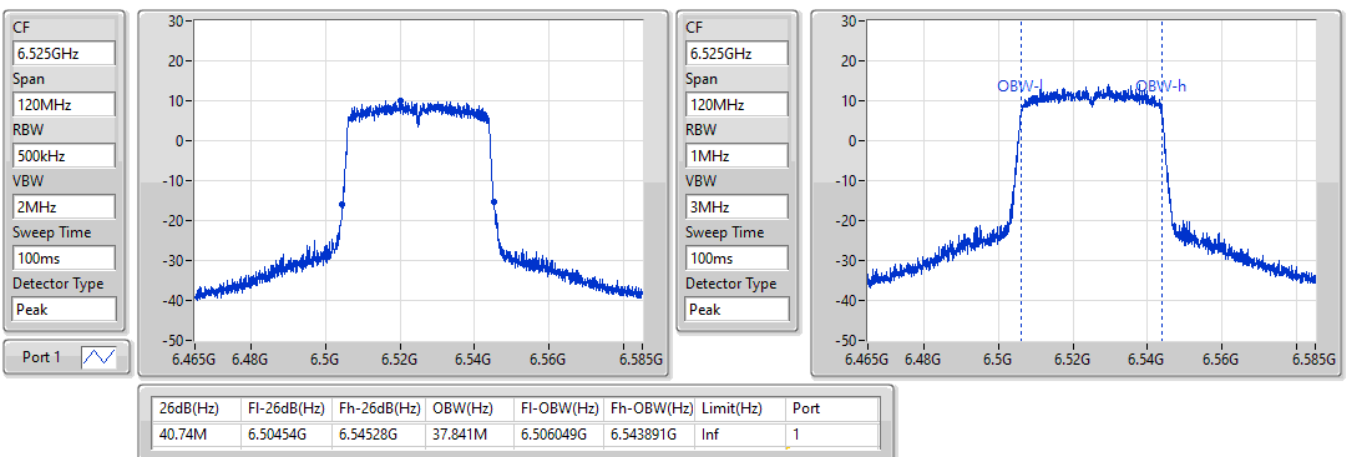


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6485MHz

18/11/2021

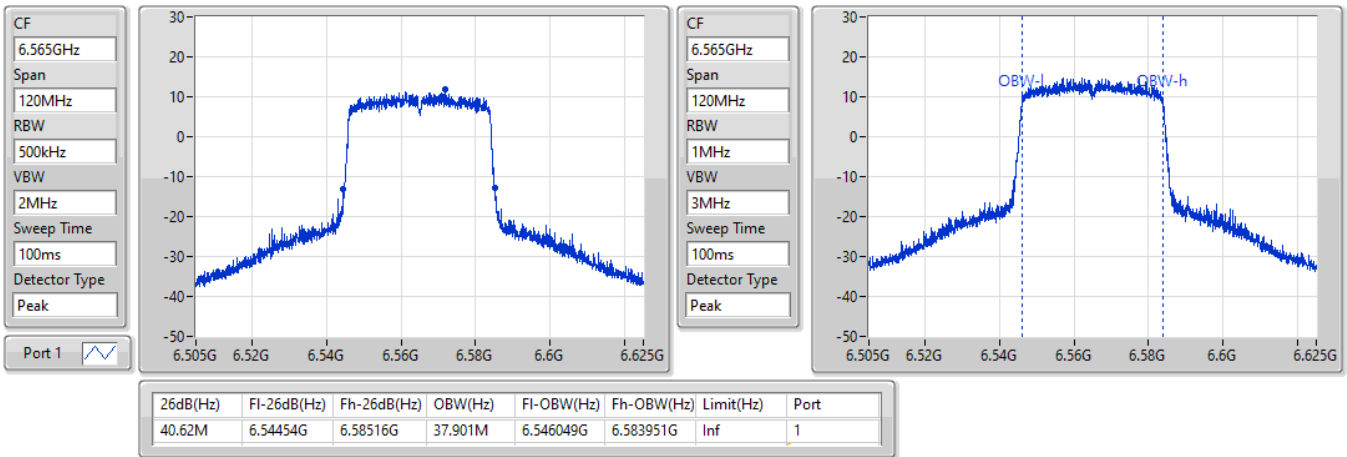

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6525MHz Straddle 6.425-6.525GHz

18/11/2021

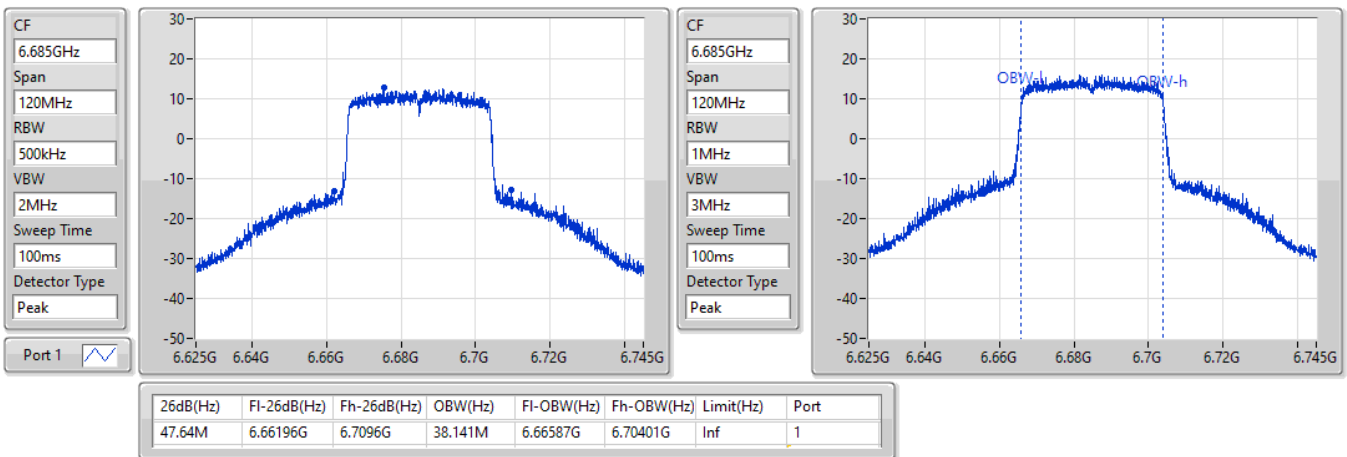


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6565MHz

18/11/2021

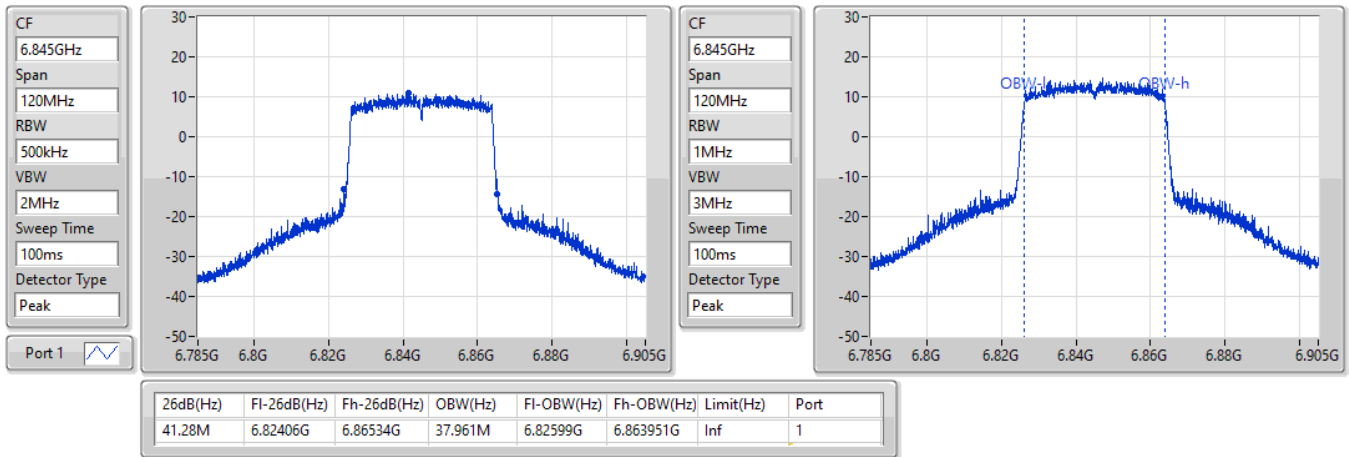

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6685MHz

18/11/2021

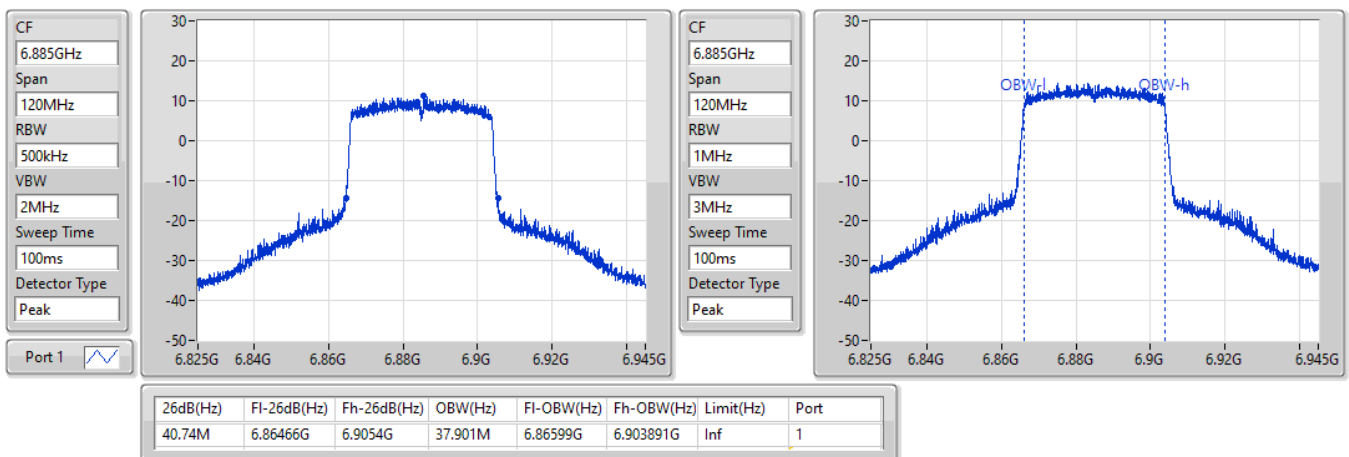


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6845MHz

18/11/2021

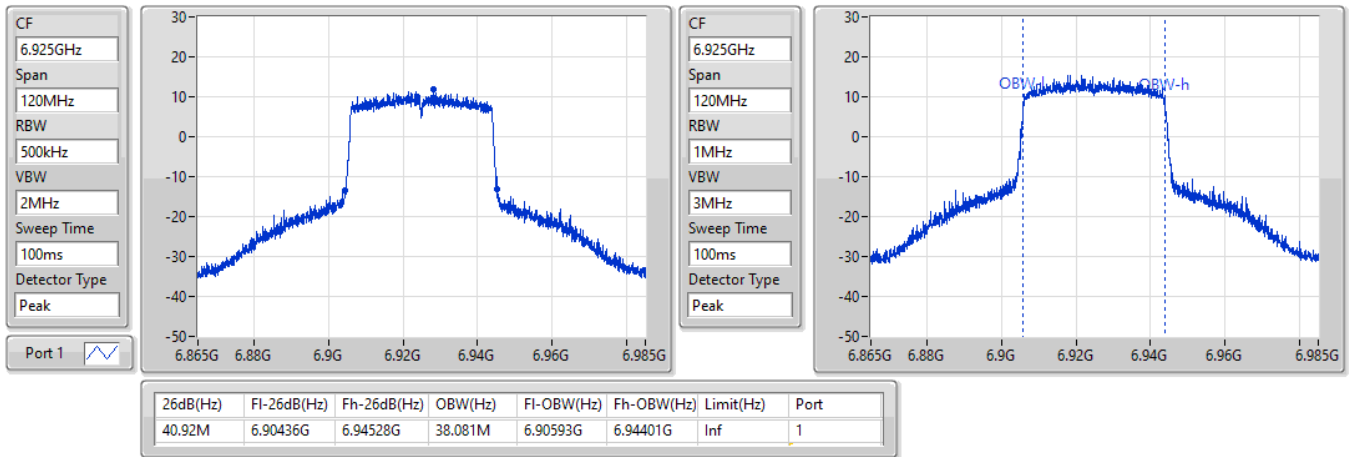

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6885MHz Straddle 6.525-6.875GHz

18/11/2021

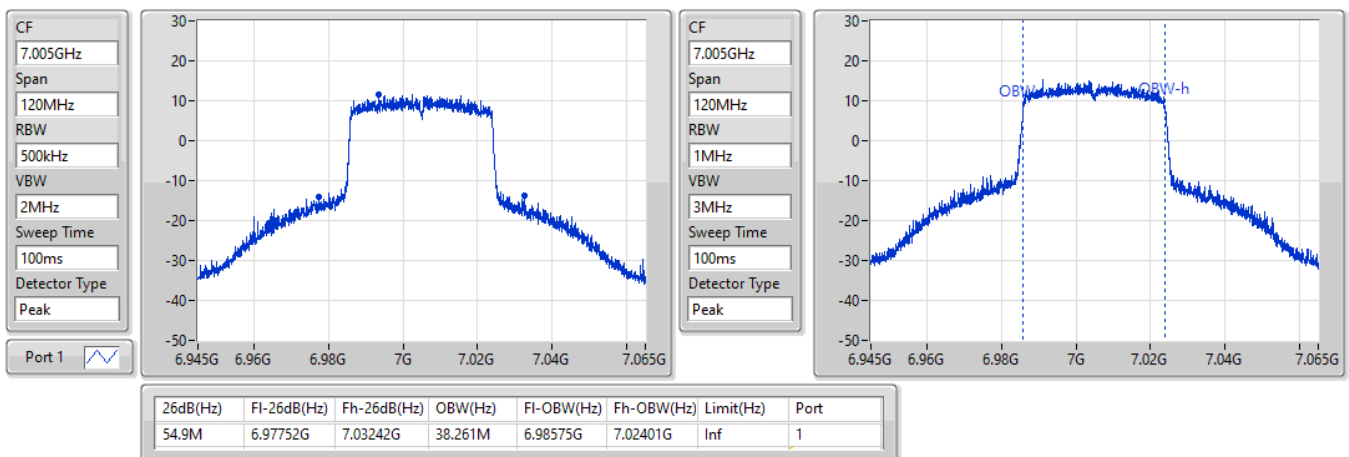


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6925MHz

18/11/2021

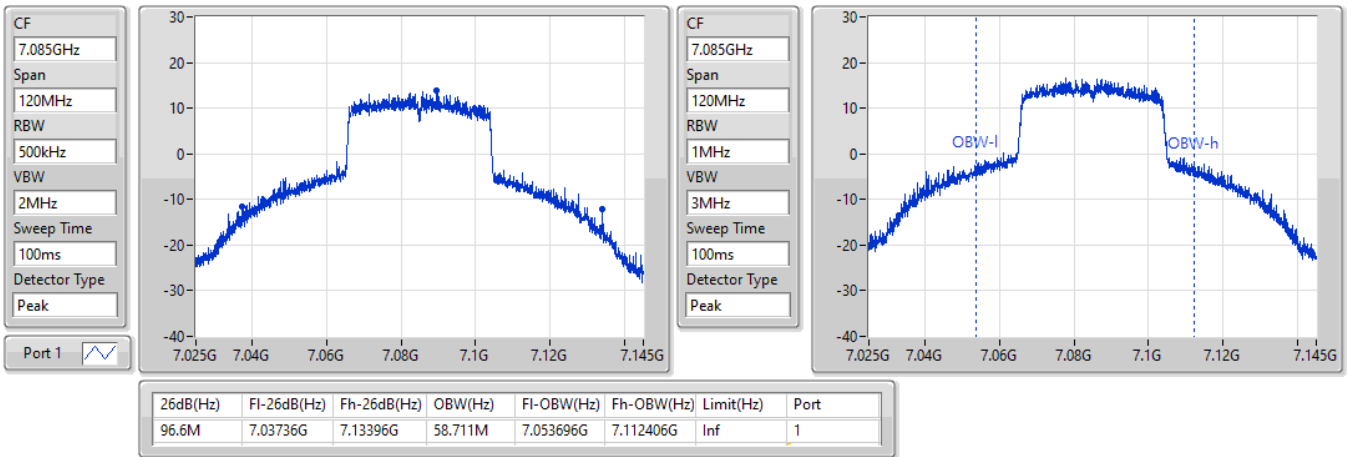

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
7005MHz

18/11/2021

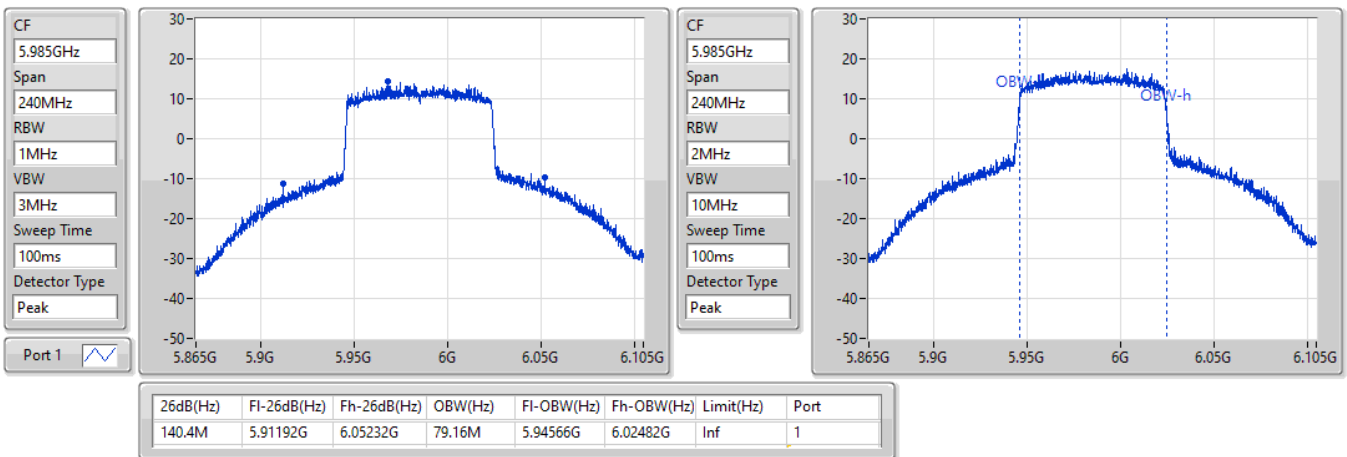


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
7085MHz

18/11/2021

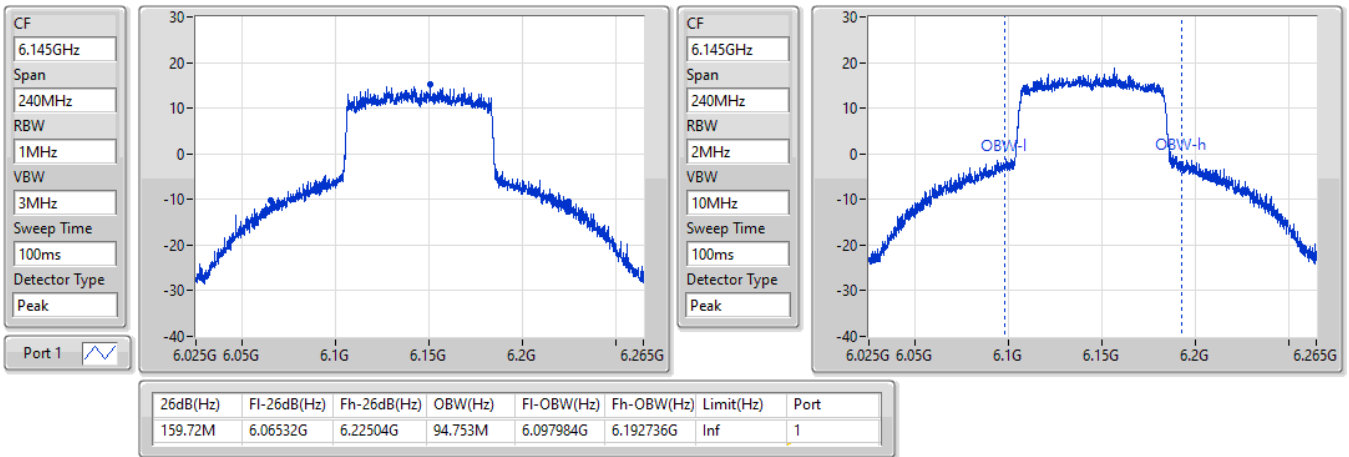

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5985MHz

18/11/2021

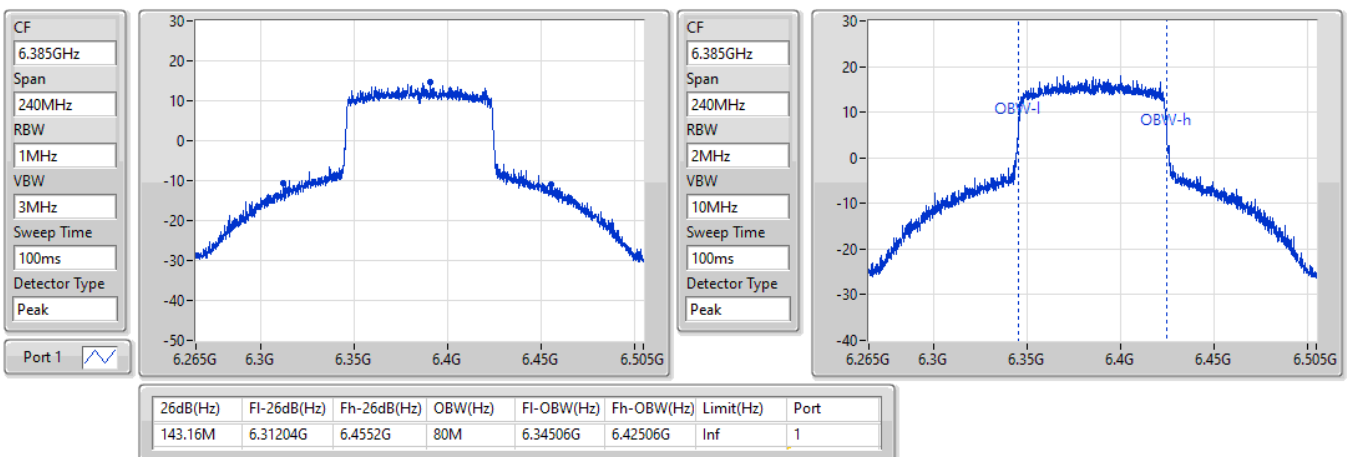


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6145MHz

18/11/2021

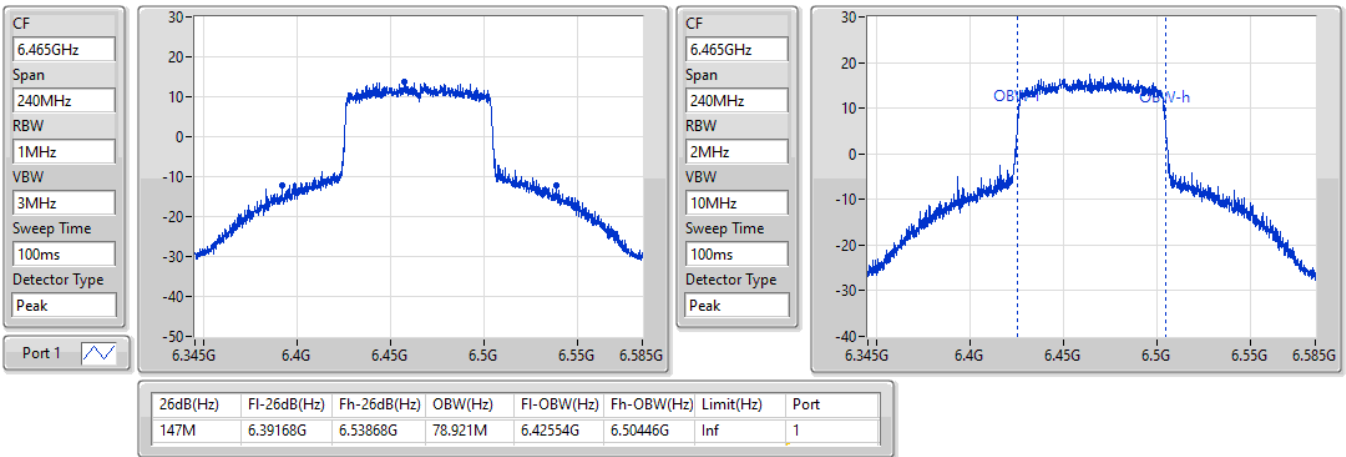

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6385MHz

18/11/2021

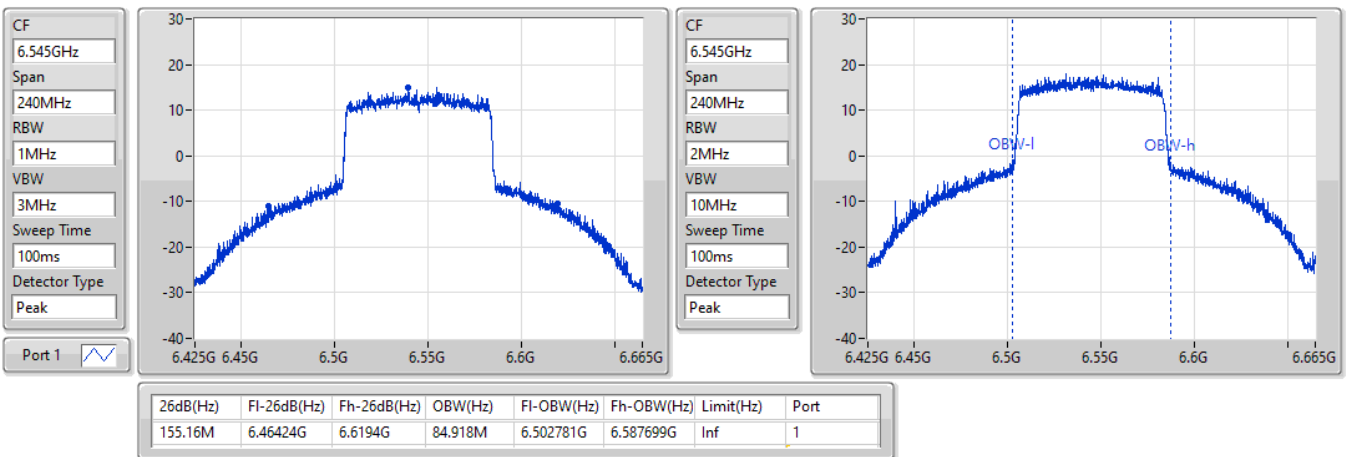


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6465MHz

18/11/2021

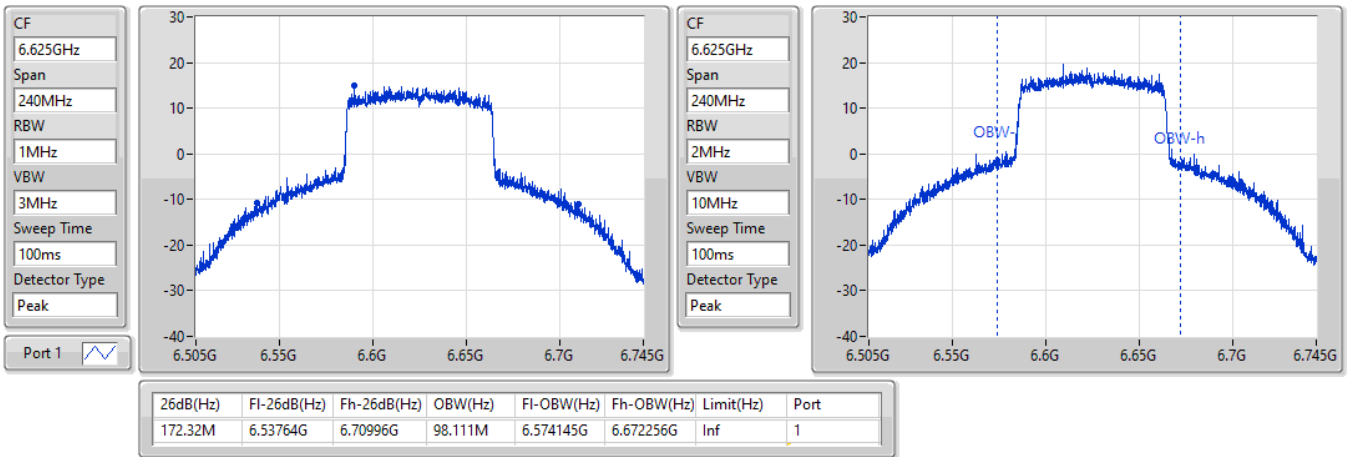

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6545MHz Straddle 6.425-6.525GHz

18/11/2021

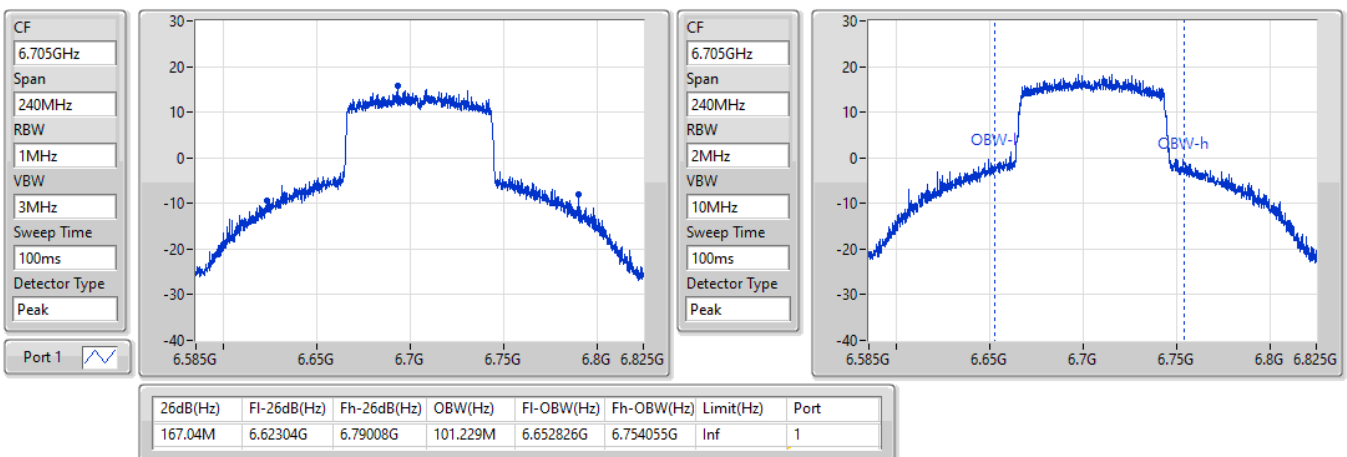


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6625MHz

18/11/2021

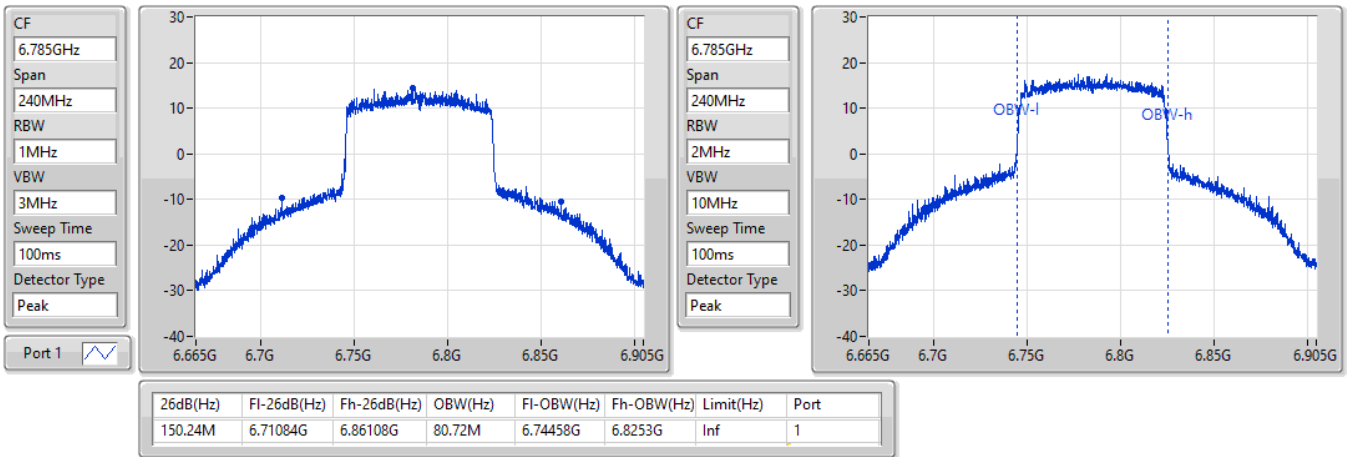

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6705MHz

18/11/2021

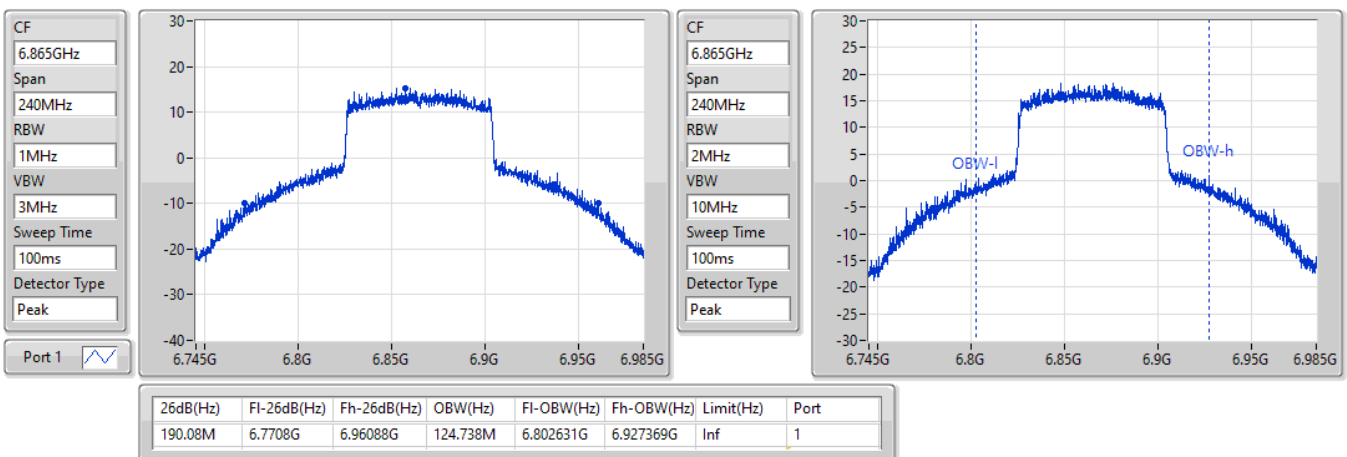


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6785MHz

18/11/2021

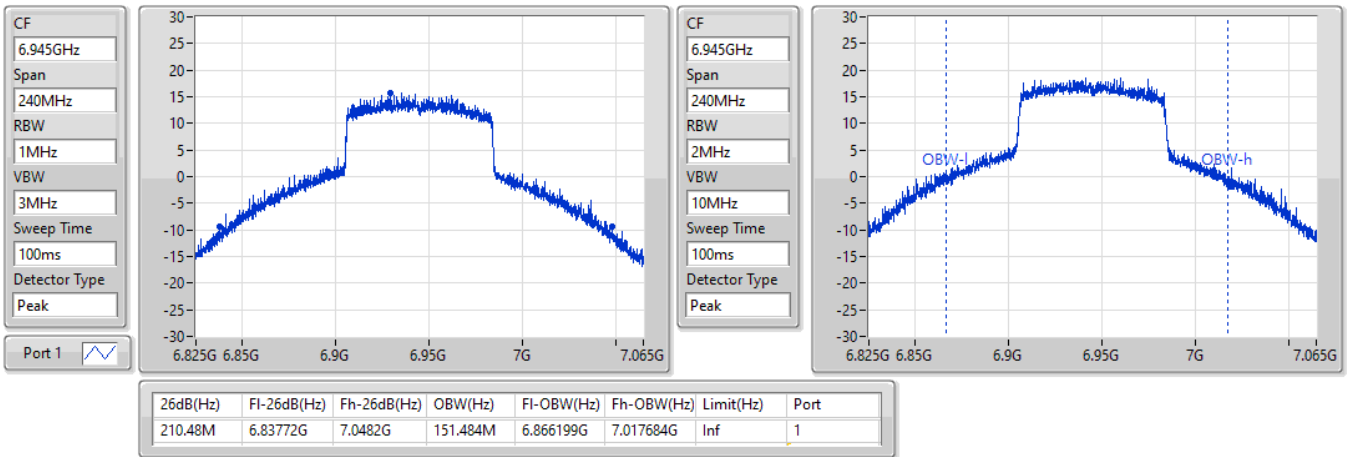

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6865MHz Straddle 6.525-6.875GHz

18/11/2021

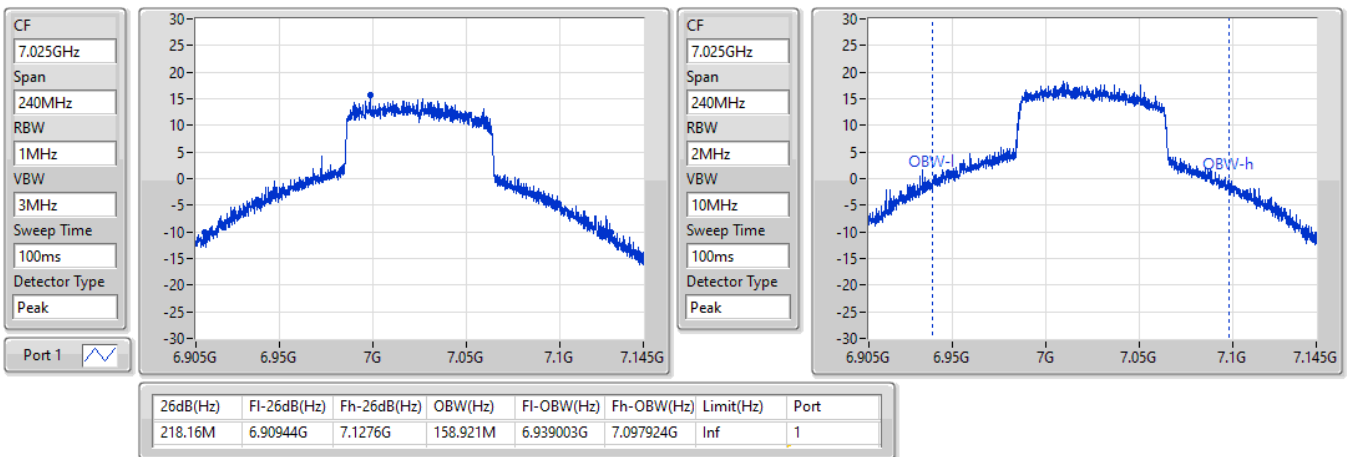


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6945MHz

18/11/2021

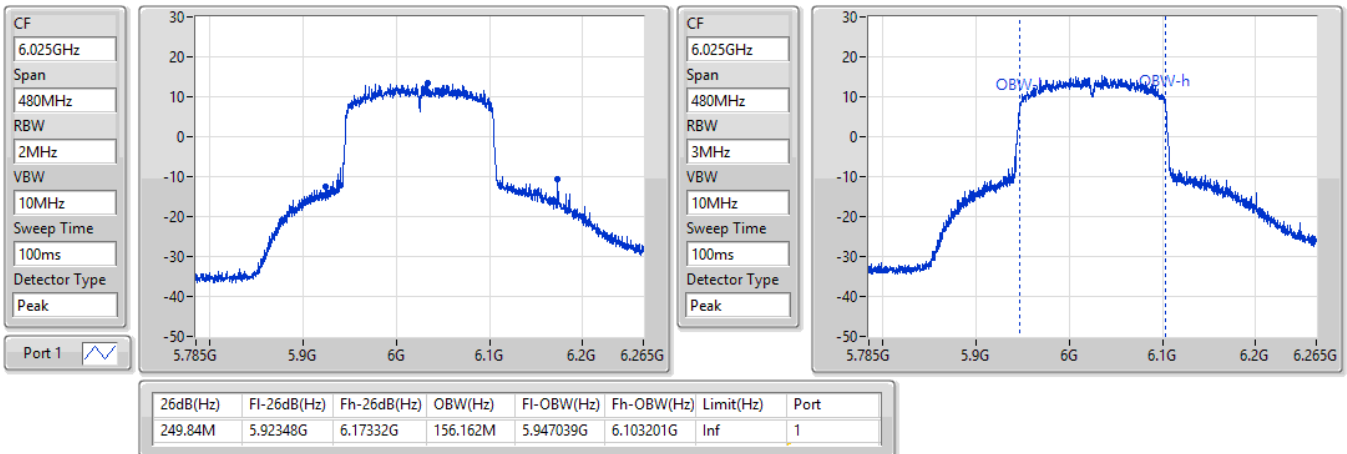

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
7025MHz

18/11/2021

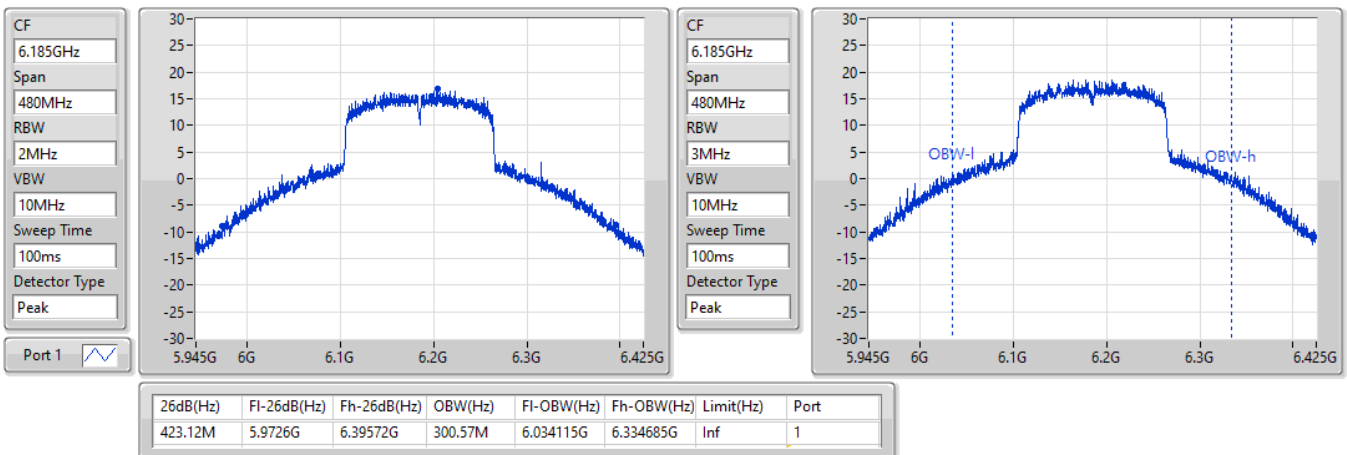


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6025MHz

20/11/2021

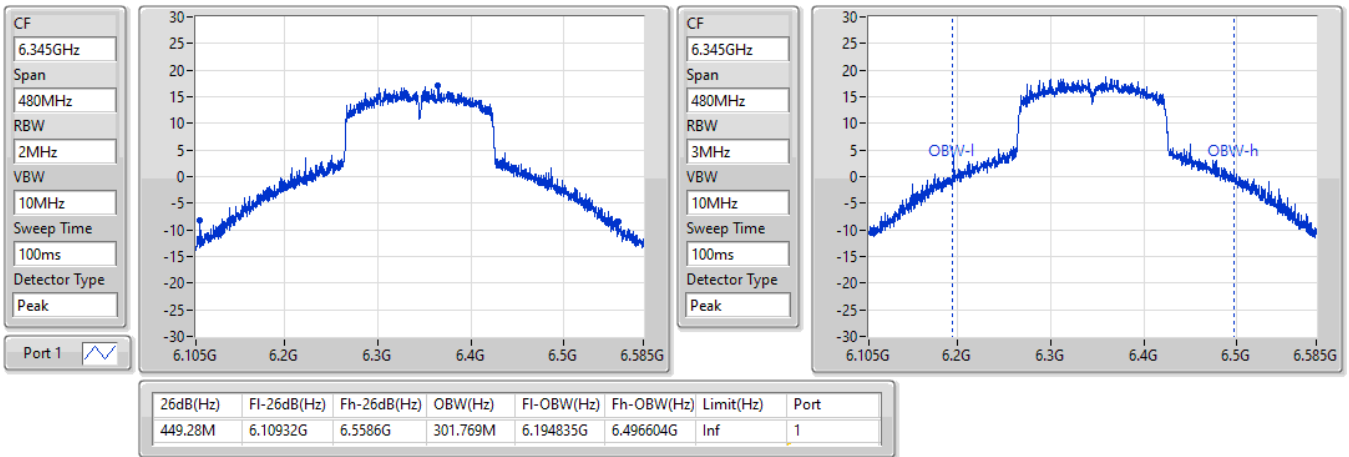

802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6185MHz

18/11/2021

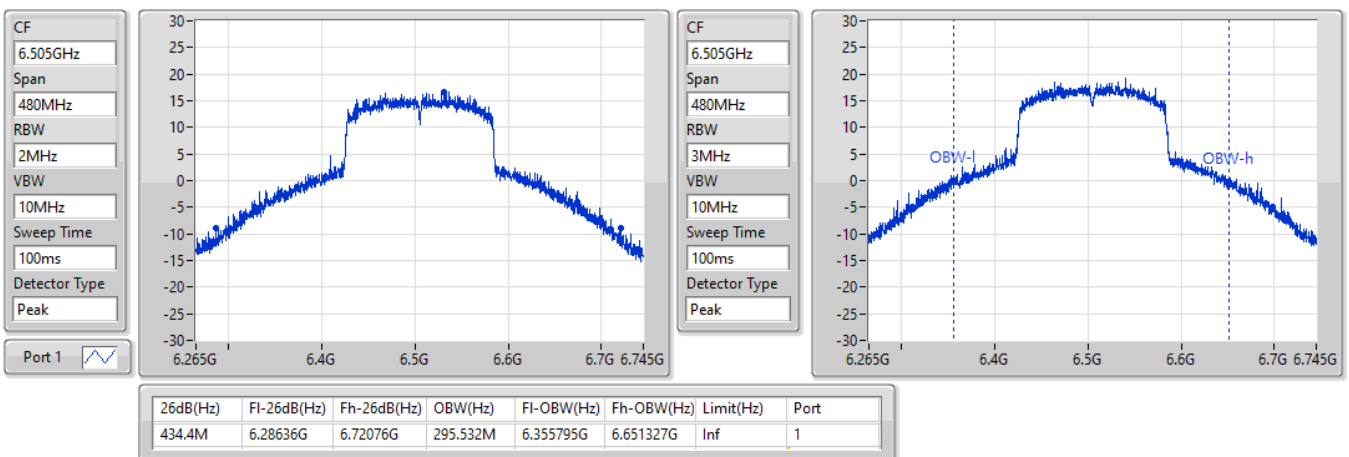


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6345MHz

18/11/2021

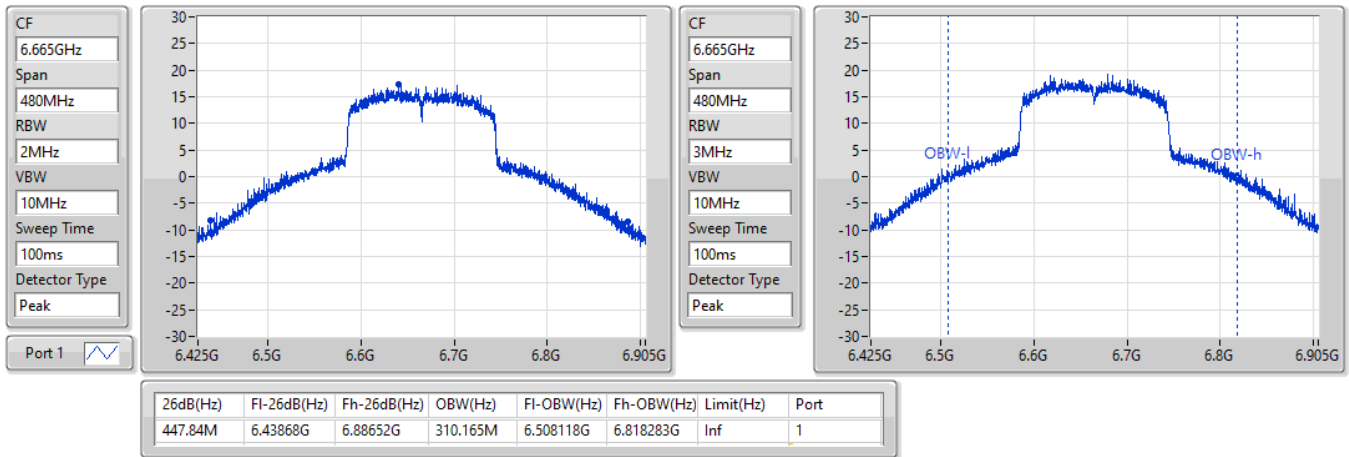

802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6505MHz Straddle 6.425-6.525GHz

18/11/2021

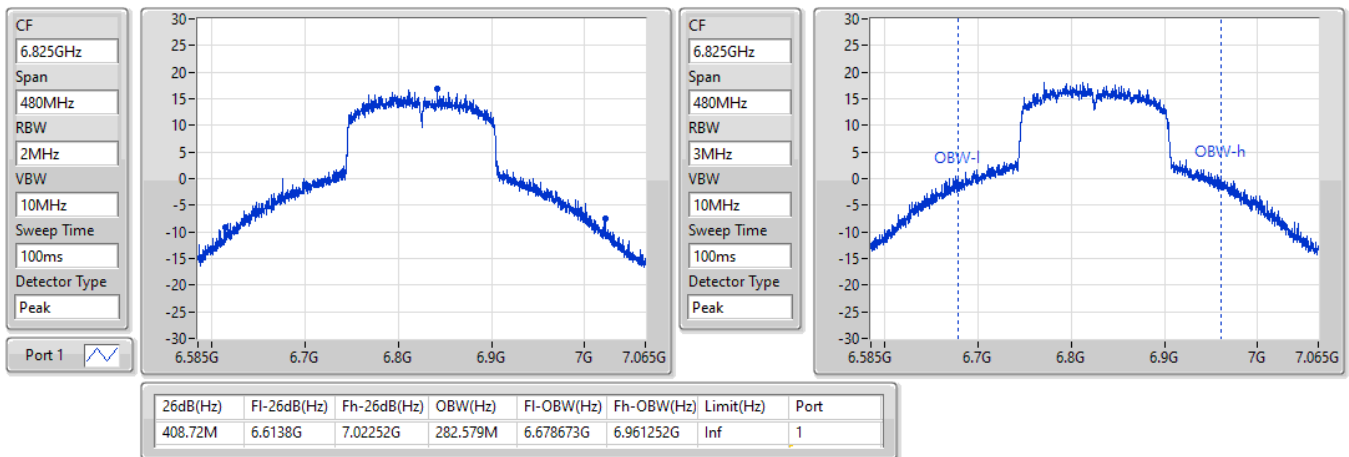


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6665MHz

18/11/2021


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6825MHz Straddle 6.525-6.875GHz

18/11/2021

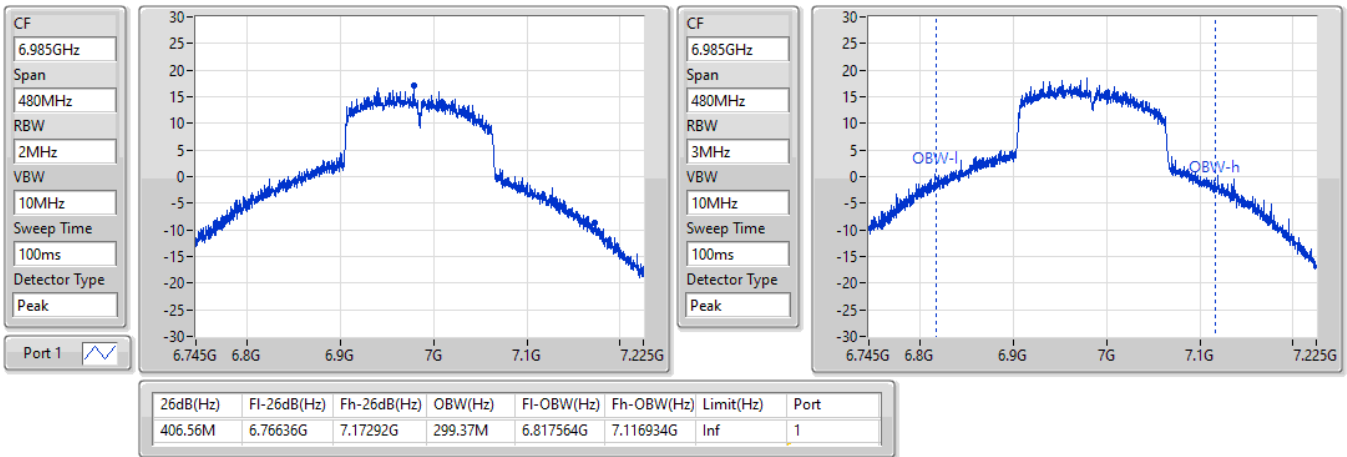


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6985MHz

18/11/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	22.29M	19.16M	19M2D1D	21.75M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.68M	37.901M	37M9D1D	40.32M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.8M	77.601M	77M6D1D	82.08M	77.361M
802.11ax HEW160_Nss1,(MCS0)_2TX	248.16M	157.601M	158MD1D	163.68M	155.682M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	22.05M	19.19M	19M2D1D	21.75M	19.1M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.8M	37.841M	37M8D1D	40.14M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.8M	77.481M	77M5D1D	82.2M	77.241M
802.11ax HEW160_Nss1,(MCS0)_2TX	167.04M	155.682M	156MD1D	164.64M	155.442M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	22.2M	19.19M	19M2D1D	21.84M	19.07M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.68M	37.901M	37M9D1D	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.44M	77.601M	77M6D1D	82.2M	77.241M
802.11ax HEW160_Nss1,(MCS0)_2TX	214.56M	156.402M	156MD1D	165.84M	155.922M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	22.38M	19.16M	19M2D1D	21.9M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.56M	37.901M	37M9D1D	40.32M	37.841M
802.11ax HEW80_Nss1,(MCS0)_2TX	92.16M	77.721M	77M7D1D	82.56M	77.361M
802.11ax HEW160_Nss1,(MCS0)_2TX	240M	156.402M	156MD1D	202.56M	156.162M

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

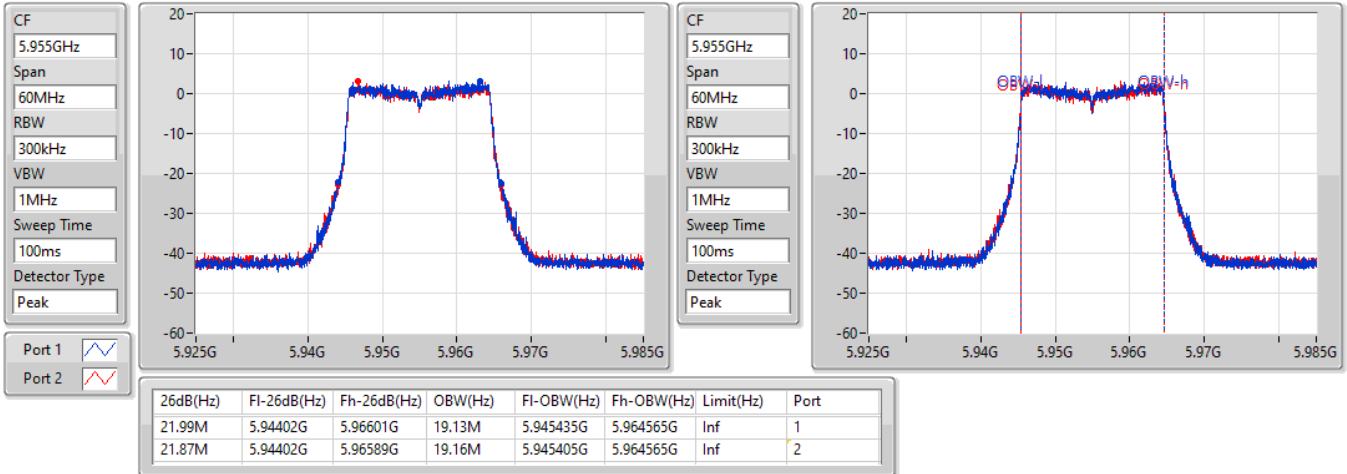
Result

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_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	21.99M	19.13M	21.87M	19.16M
6175MHz	Pass	Inf	21.75M	19.13M	22.26M	19.13M
6415MHz	Pass	Inf	21.75M	19.16M	22.29M	19.16M
6435MHz	Pass	Inf	21.87M	19.1M	21.75M	19.13M
6475MHz	Pass	Inf	22.02M	19.13M	21.78M	19.16M
6515MHz	Pass	Inf	21.9M	19.1M	22.05M	19.19M
6535MHz	Pass	Inf	21.84M	19.07M	22.2M	19.16M
6695MHz	Pass	Inf	21.99M	19.13M	22.14M	19.13M
6855MHz	Pass	Inf	22.08M	19.16M	22.02M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	22.08M	19.16M	21.93M	19.19M
6895MHz	Pass	Inf	22.2M	19.13M	22.17M	19.13M
6995MHz	Pass	Inf	22.14M	19.13M	21.93M	19.16M
7095MHz	Pass	Inf	21.96M	19.13M	22.2M	19.16M
7115MHz	Pass	Inf	22.38M	19.13M	21.9M	19.16M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	40.5M	37.781M	40.68M	37.841M
6165MHz	Pass	Inf	40.38M	37.841M	40.38M	37.901M
6405MHz	Pass	Inf	40.32M	37.781M	40.5M	37.781M
6445MHz	Pass	Inf	40.56M	37.781M	40.44M	37.781M
6485MHz	Pass	Inf	40.38M	37.781M	40.8M	37.841M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	40.14M	37.781M	40.2M	37.841M
6565MHz	Pass	Inf	40.26M	37.841M	40.38M	37.901M
6685MHz	Pass	Inf	40.68M	37.841M	40.38M	37.781M
6845MHz	Pass	Inf	40.5M	37.781M	40.44M	37.781M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.44M	37.841M	40.56M	37.901M
6925MHz	Pass	Inf	40.44M	37.841M	40.56M	37.901M
7005MHz	Pass	Inf	40.38M	37.841M	40.56M	37.841M
7085MHz	Pass	Inf	40.44M	37.841M	40.32M	37.841M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	82.08M	77.481M	82.8M	77.361M
6145MHz	Pass	Inf	82.68M	77.601M	82.2M	77.361M
6385MHz	Pass	Inf	82.32M	77.481M	82.44M	77.481M
6465MHz	Pass	Inf	82.8M	77.481M	82.32M	77.361M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	82.56M	77.241M	82.2M	77.241M
6625MHz	Pass	Inf	82.32M	77.361M	82.2M	77.361M
6705MHz	Pass	Inf	82.2M	77.241M	82.2M	77.361M
6785MHz	Pass	Inf	82.2M	77.361M	82.2M	77.601M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	82.44M	77.361M	82.2M	77.601M
6945MHz	Pass	Inf	82.56M	77.361M	82.56M	77.481M
7025MHz	Pass	Inf	82.56M	77.601M	92.16M	77.721M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	248.16M	157.601M	208.56M	156.642M
6185MHz	Pass	Inf	241.92M	157.361M	183.6M	156.162M
6345MHz	Pass	Inf	173.76M	156.642M	163.68M	155.682M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	167.04M	155.682M	164.64M	155.442M
6665MHz	Pass	Inf	167.28M	155.922M	165.84M	155.922M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	214.56M	156.402M	173.52M	156.162M
6985MHz	Pass	Inf	240M	156.402M	202.56M	156.162M

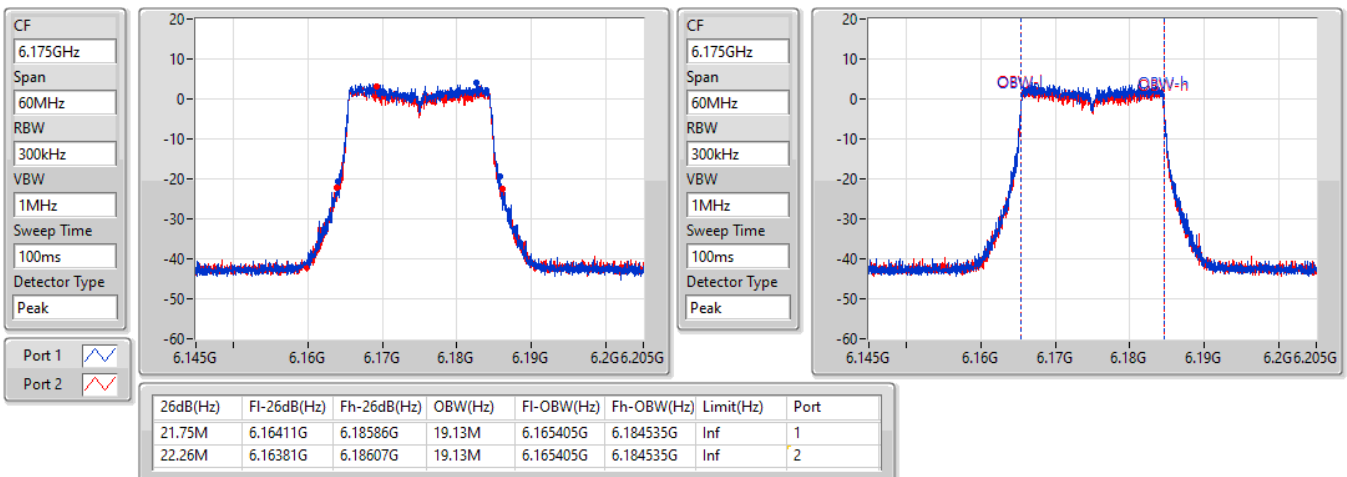
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5955MHz

18/11/2021

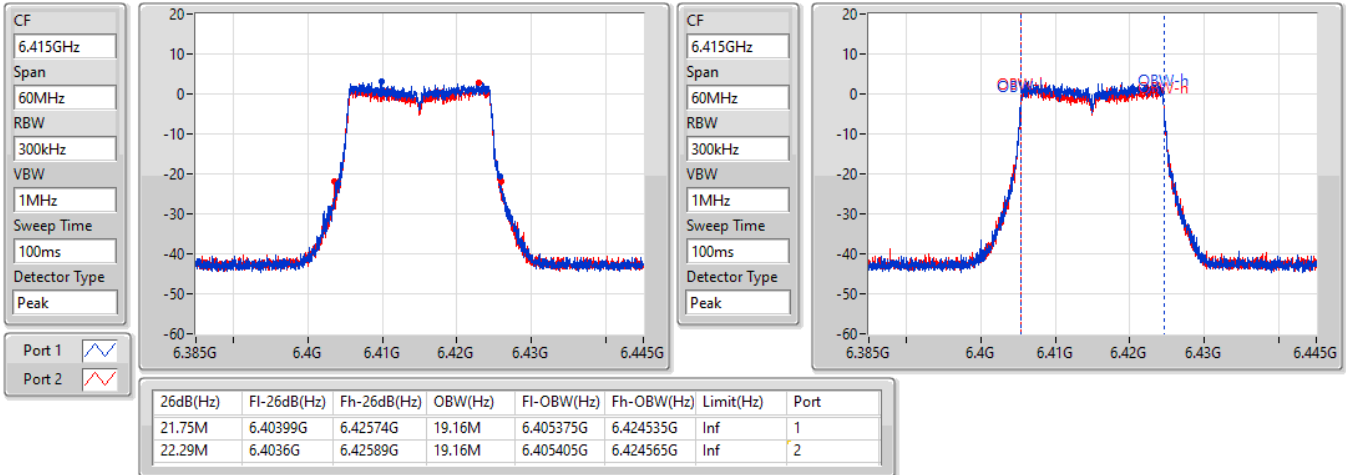

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6175MHz

18/11/2021

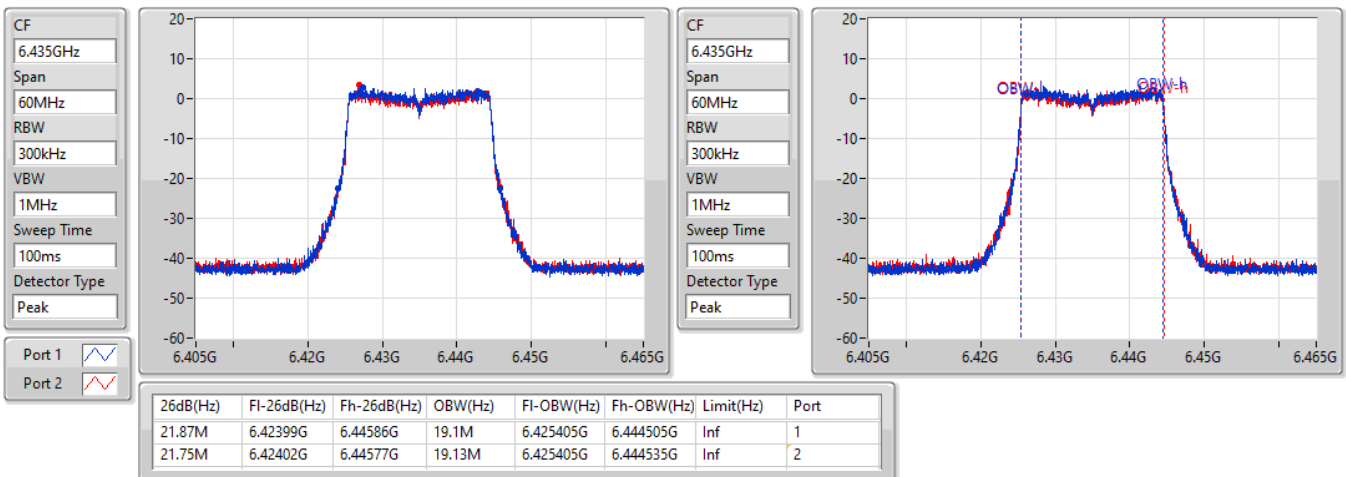


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6415MHz

18/11/2021

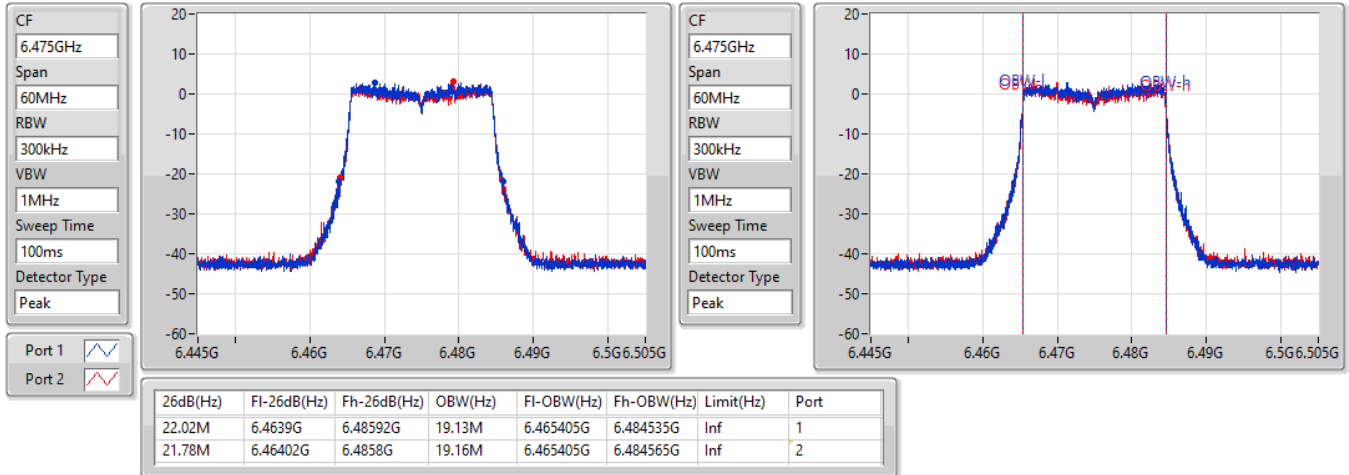

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6435MHz

18/11/2021

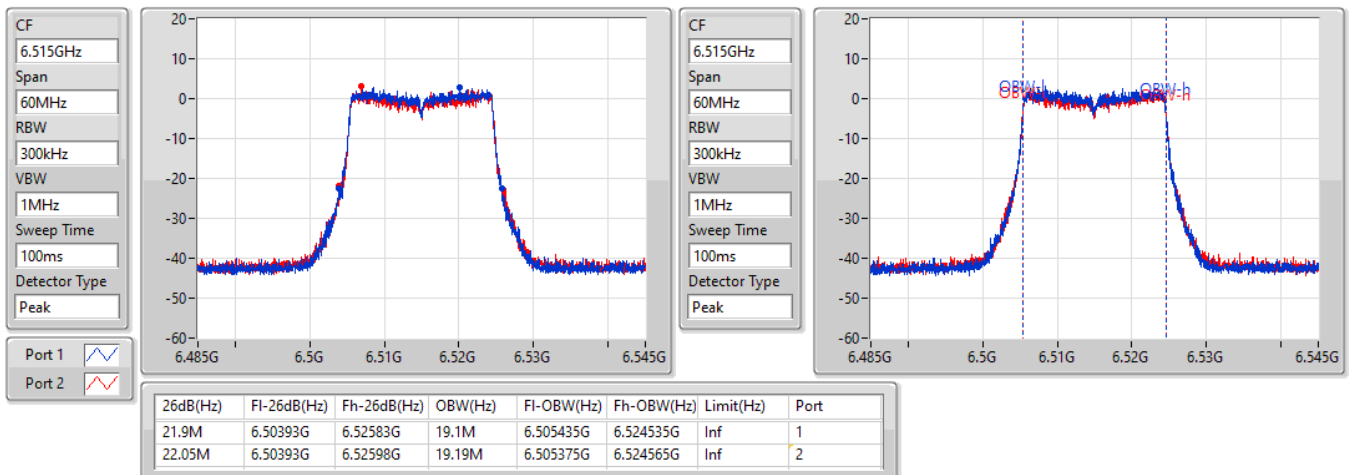


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6475MHz

18/11/2021

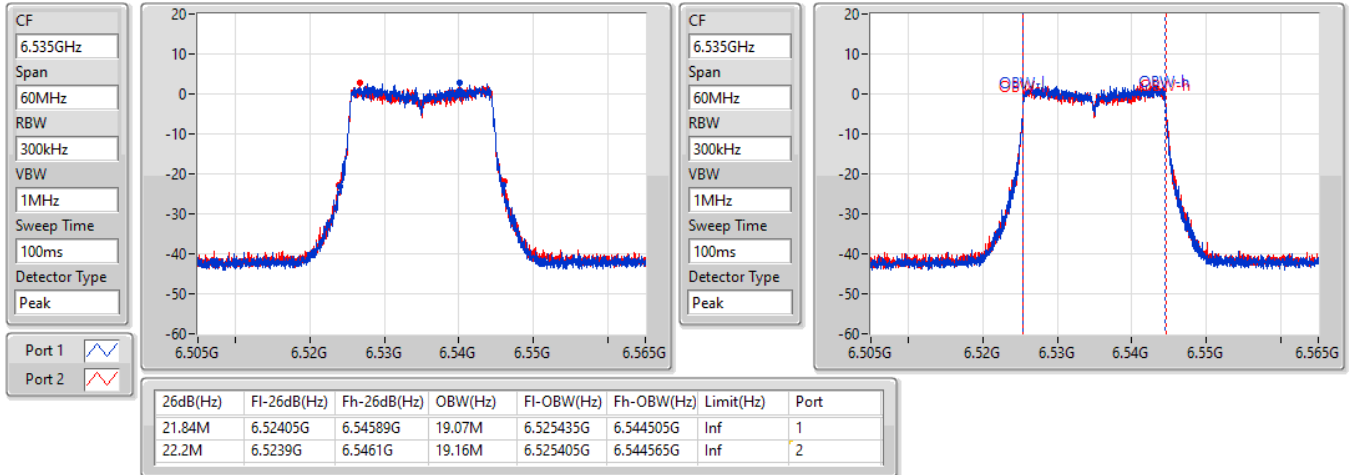

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6515MHz

18/11/2021

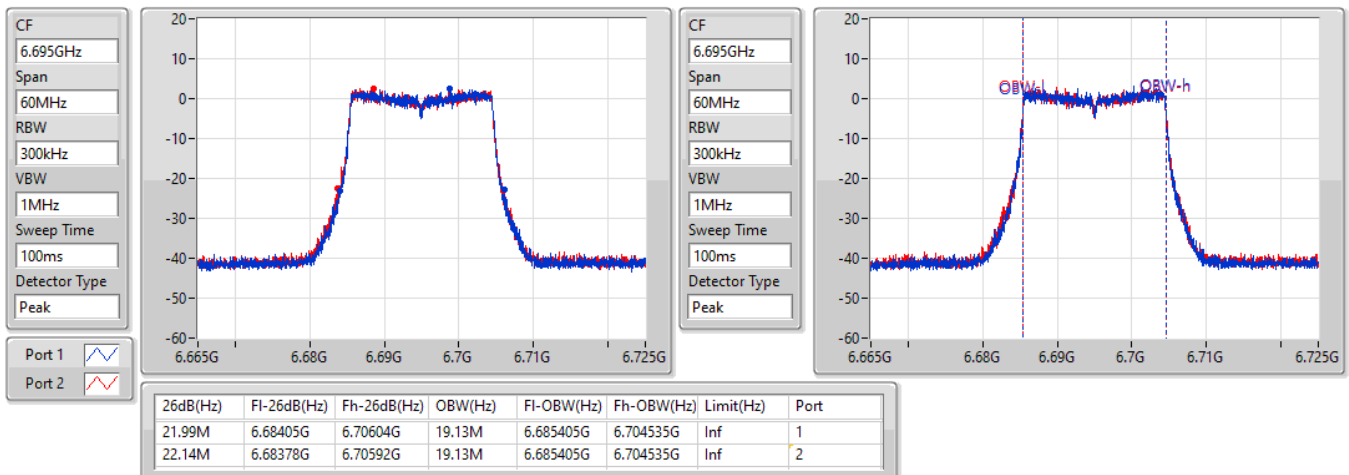


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6535MHz

18/11/2021

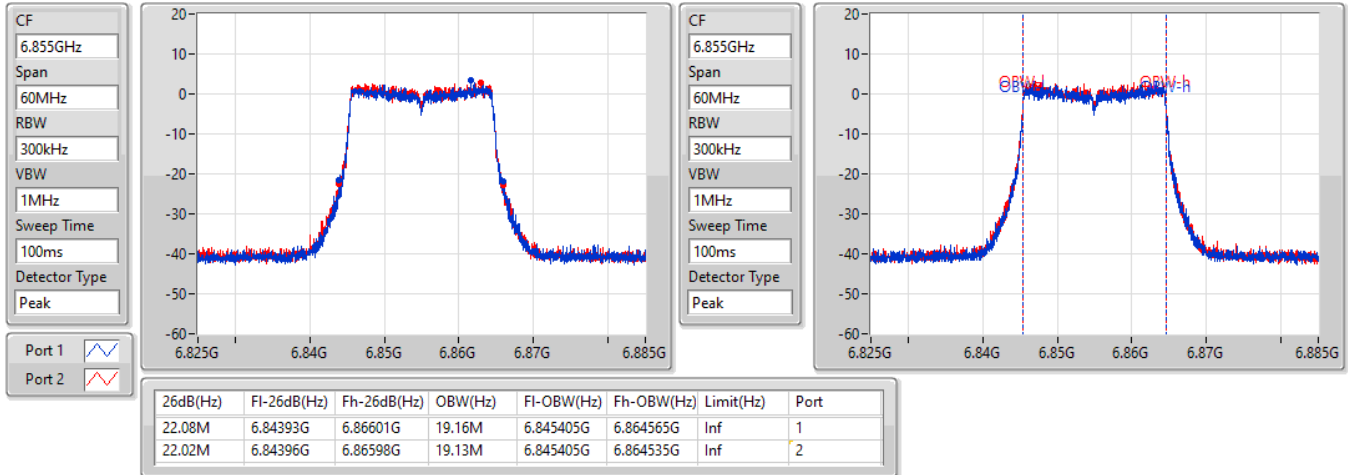

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6695MHz

18/11/2021

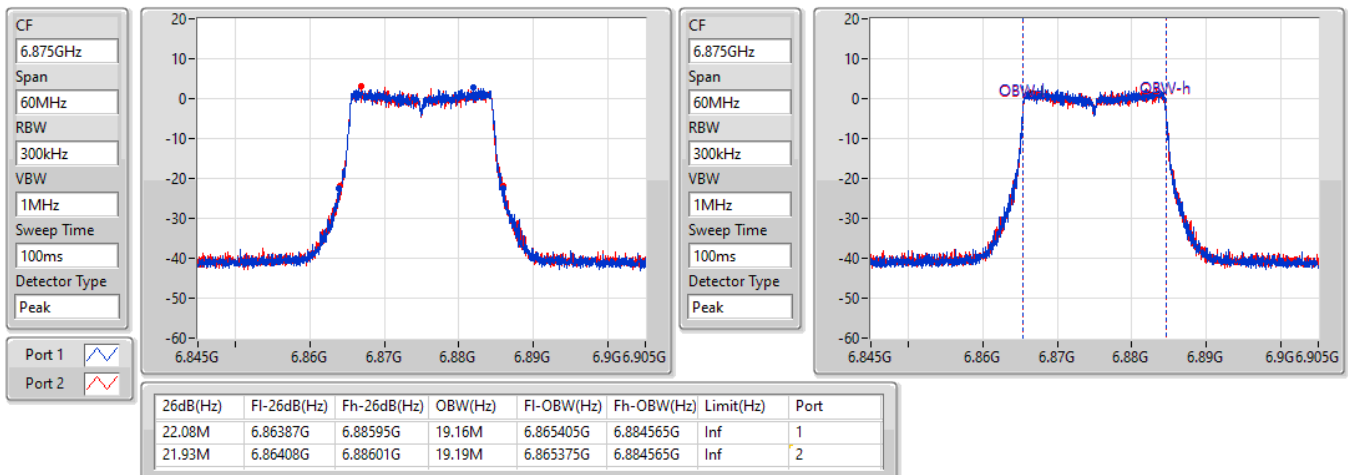


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6855MHz

18/11/2021

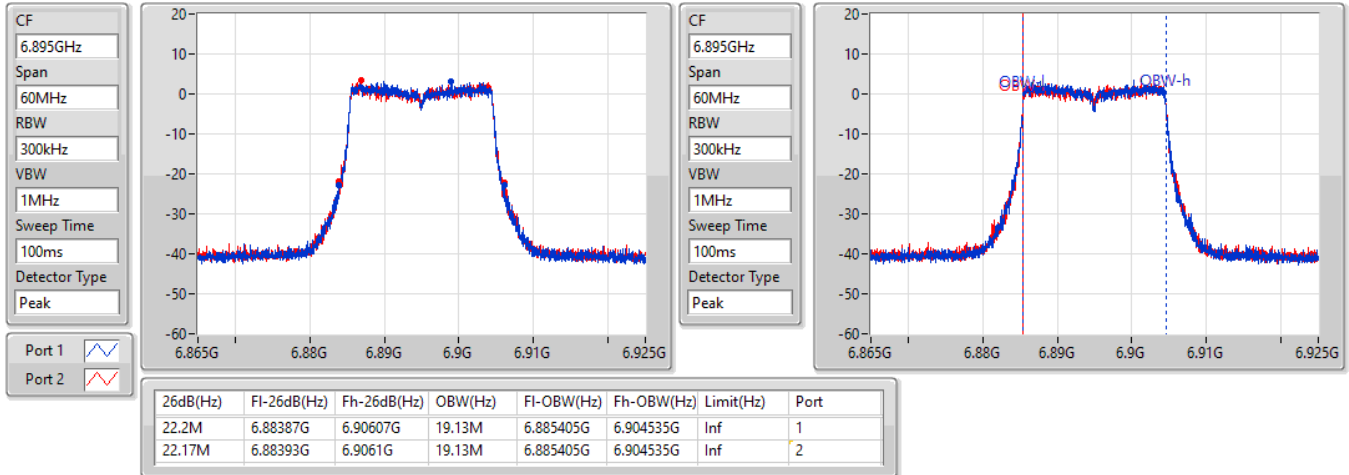

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6875MHz Straddle 6.525-6.875GHz

18/11/2021

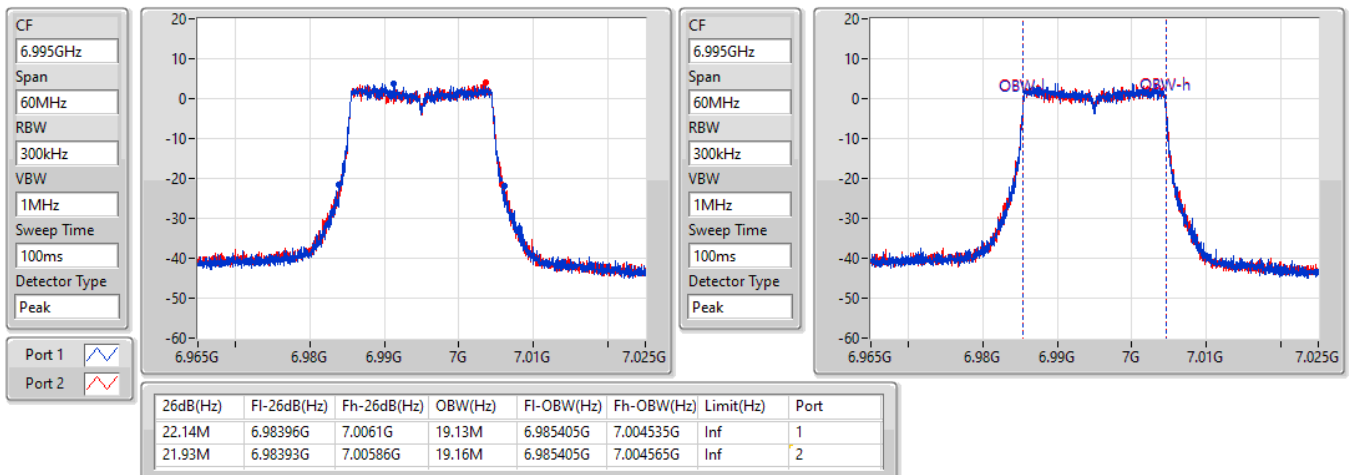


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6895MHz

18/11/2021

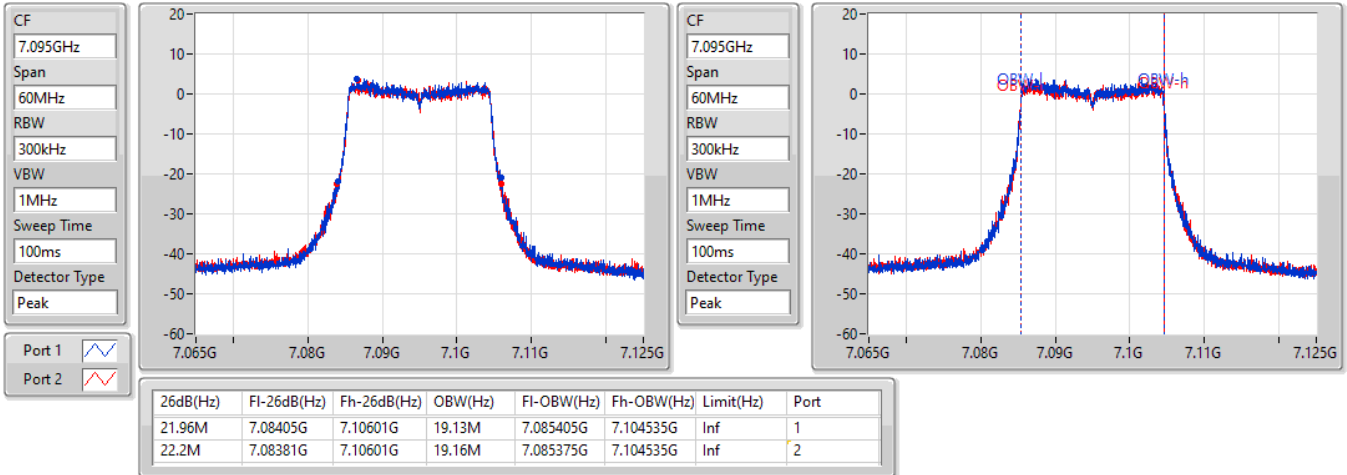

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6995MHz

18/11/2021

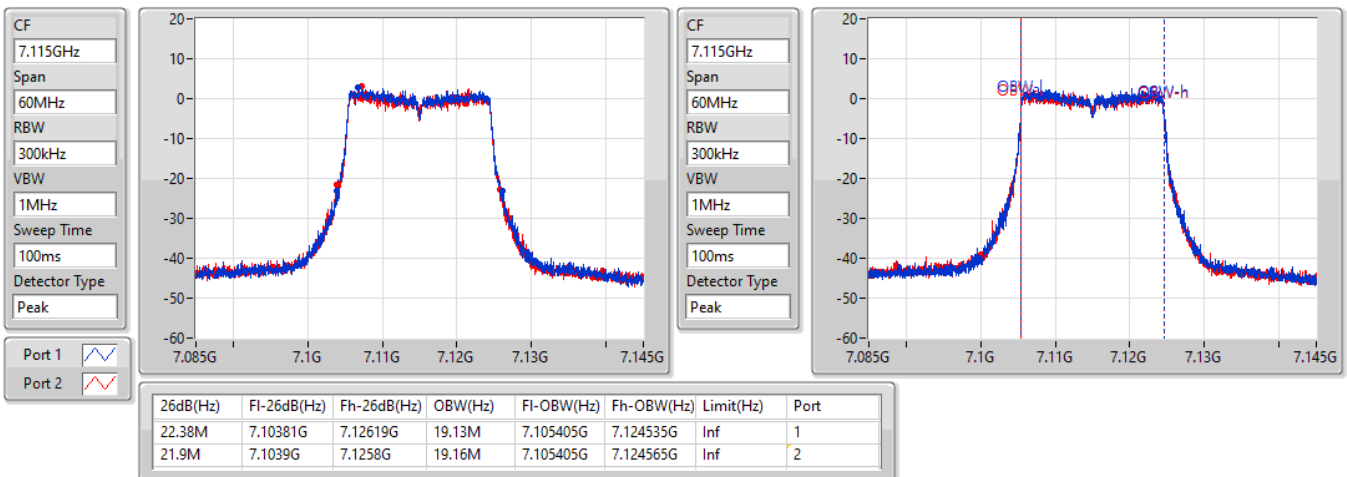


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
7095MHz

18/11/2021

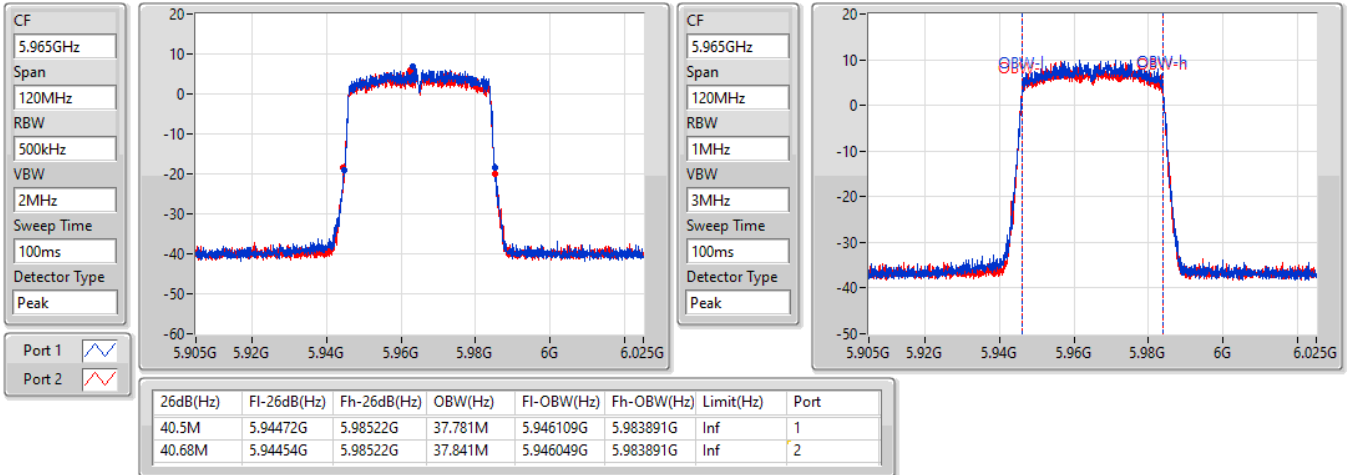

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
7115MHz

18/11/2021

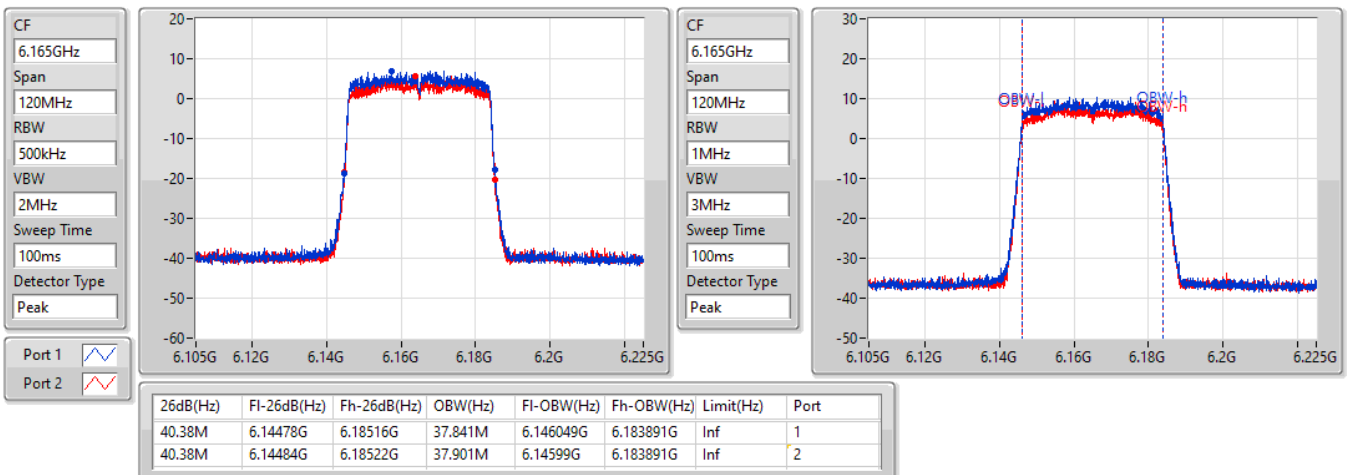


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5965MHz

18/11/2021

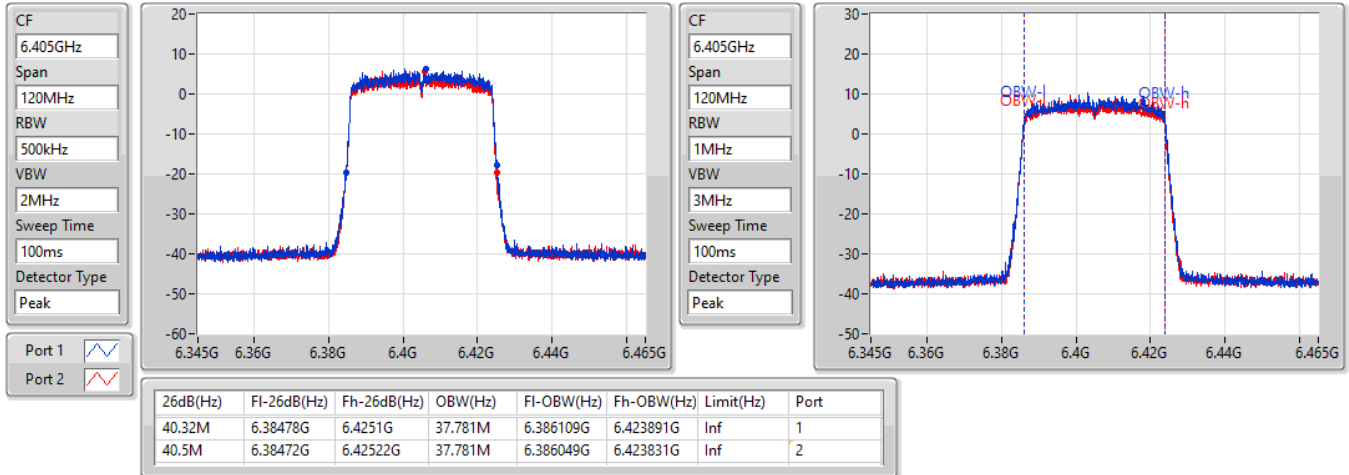

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6165MHz

18/11/2021

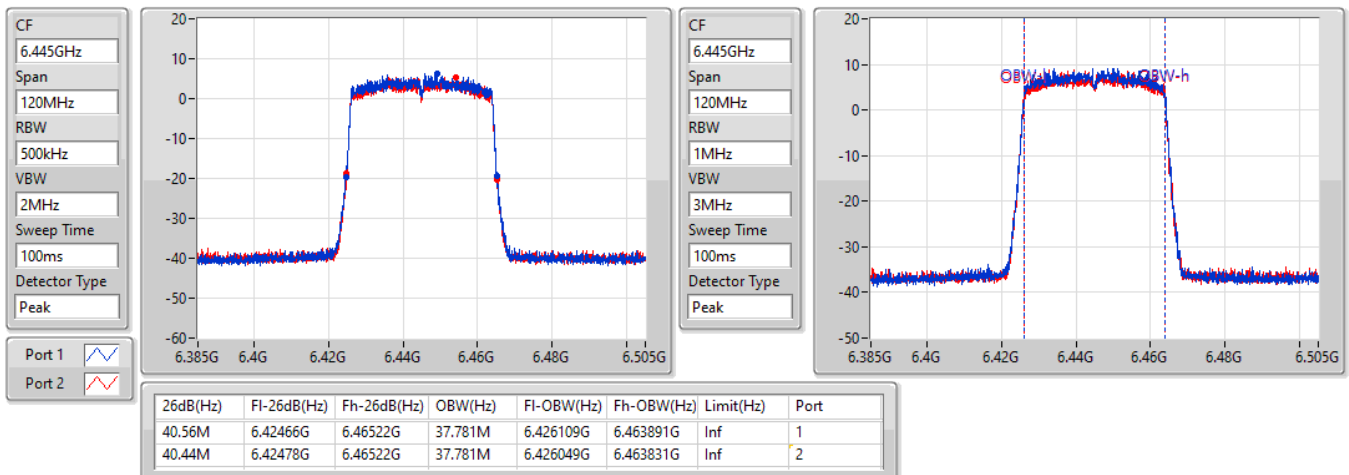


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6405MHz

18/11/2021

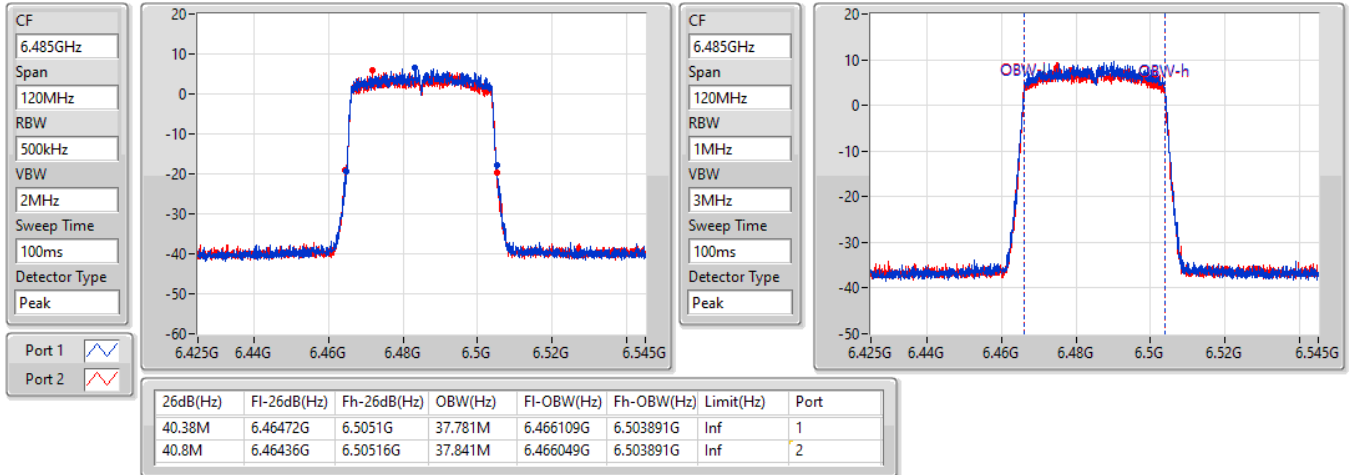

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6445MHz

18/11/2021

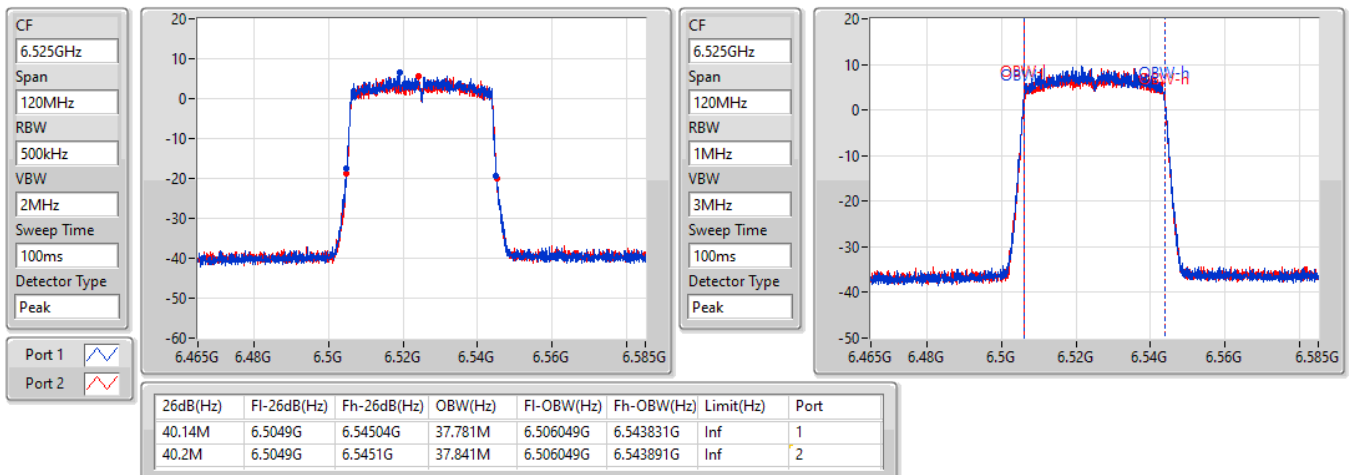


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6485MHz

18/11/2021

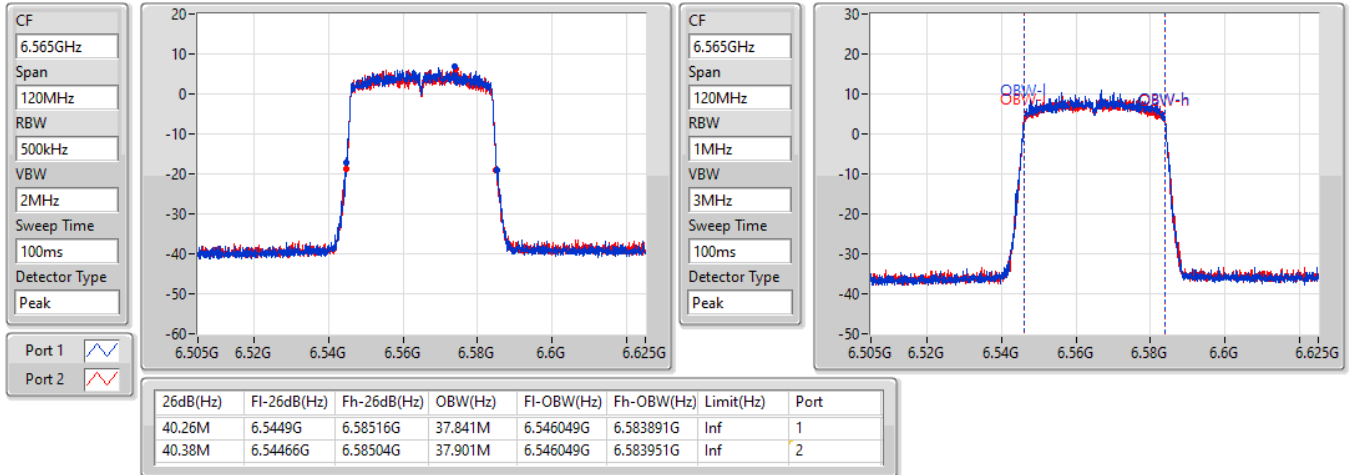

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6525MHz Straddle 6.425-6.525GHz

18/11/2021

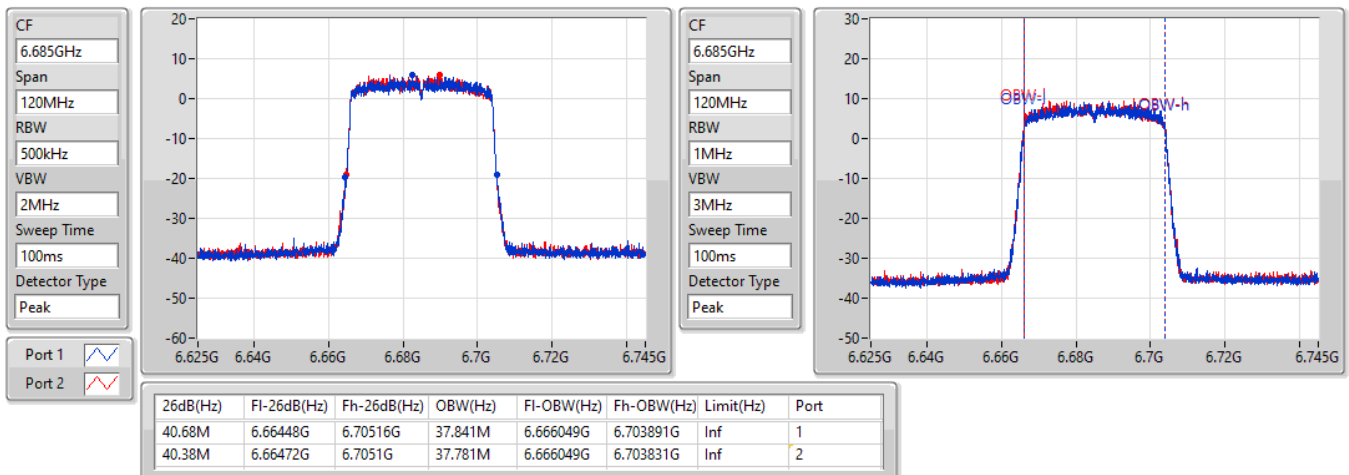


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6565MHz

18/11/2021

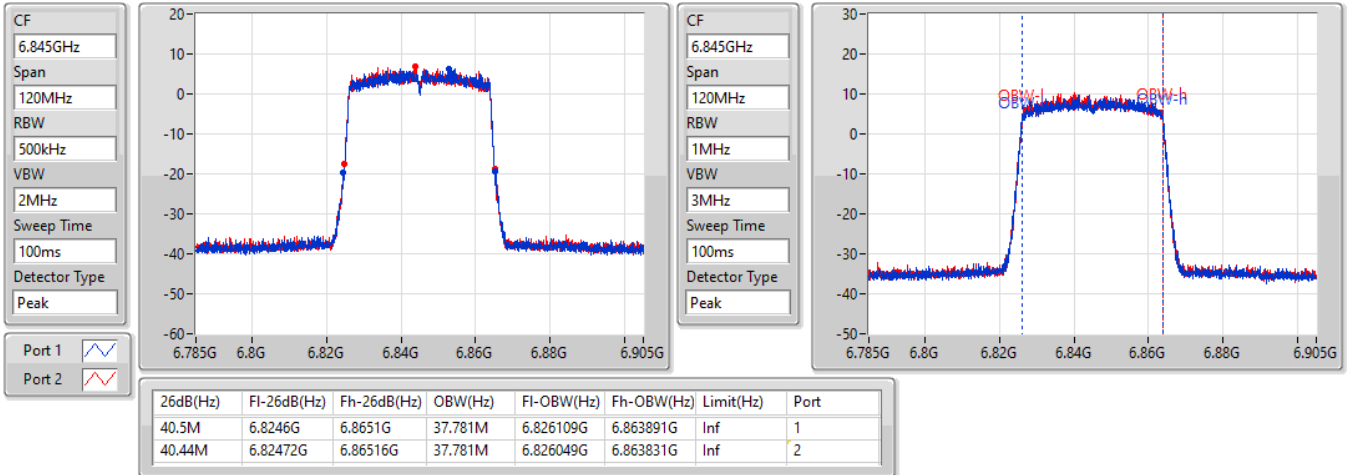

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6685MHz

18/11/2021

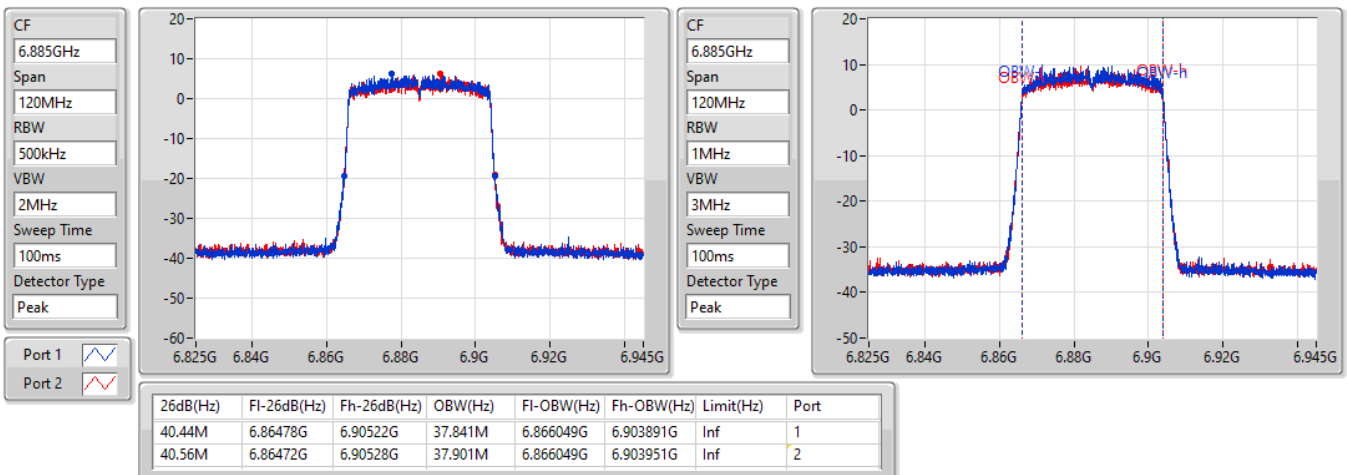


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6845MHz

18/11/2021

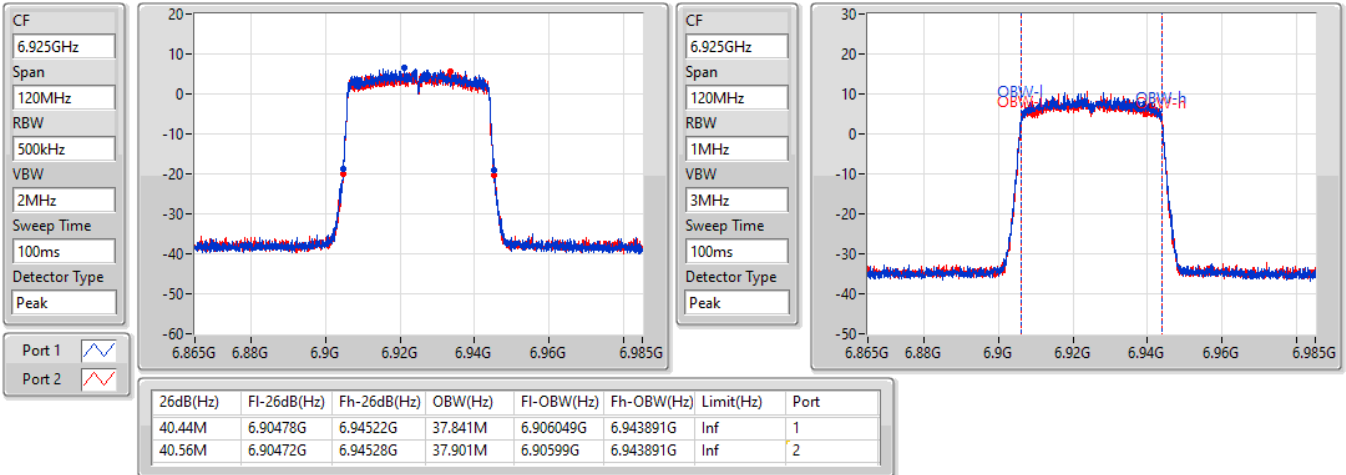

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6885MHz Straddle 6.525-6.875GHz

18/11/2021

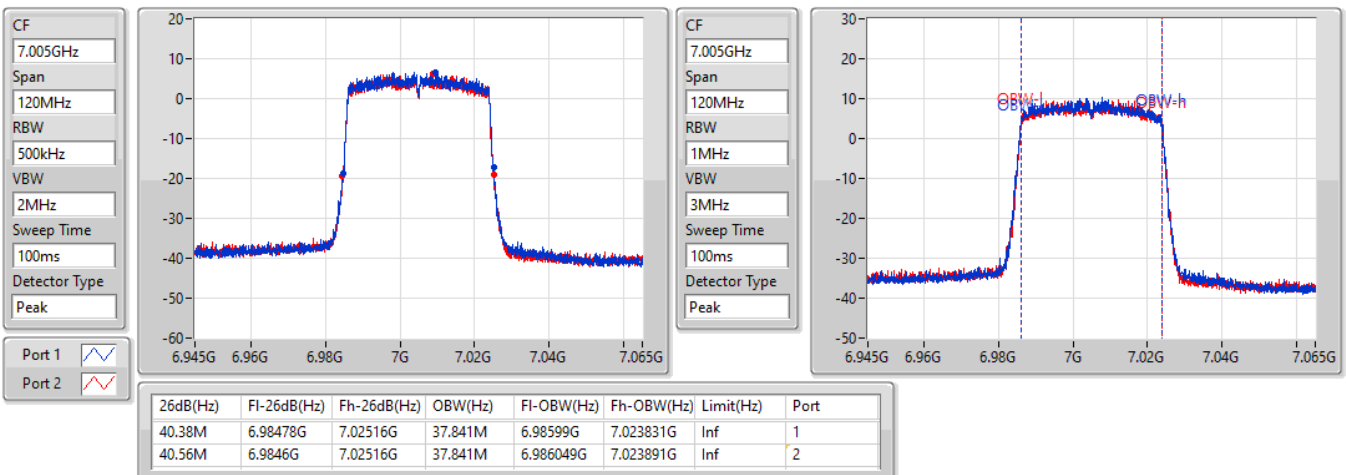


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
6925MHz

18/11/2021

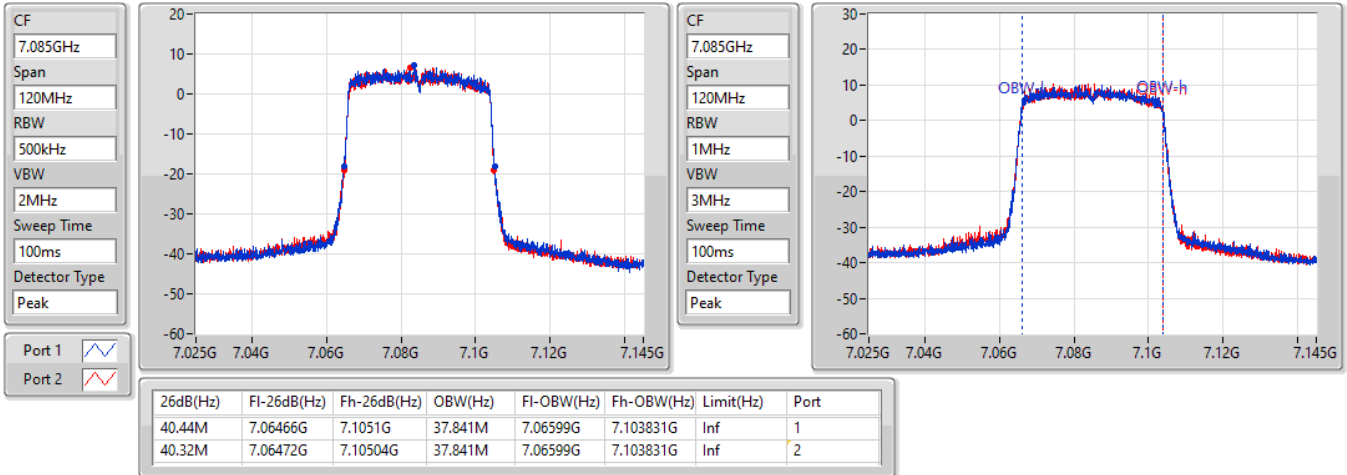

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
7005MHz

18/11/2021

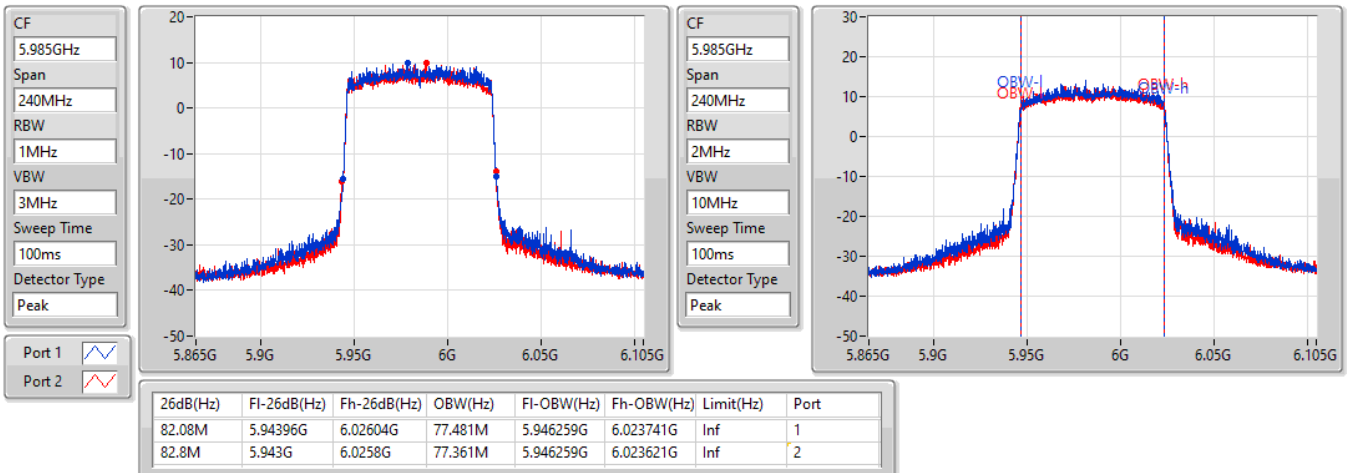


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
7085MHz

18/11/2021

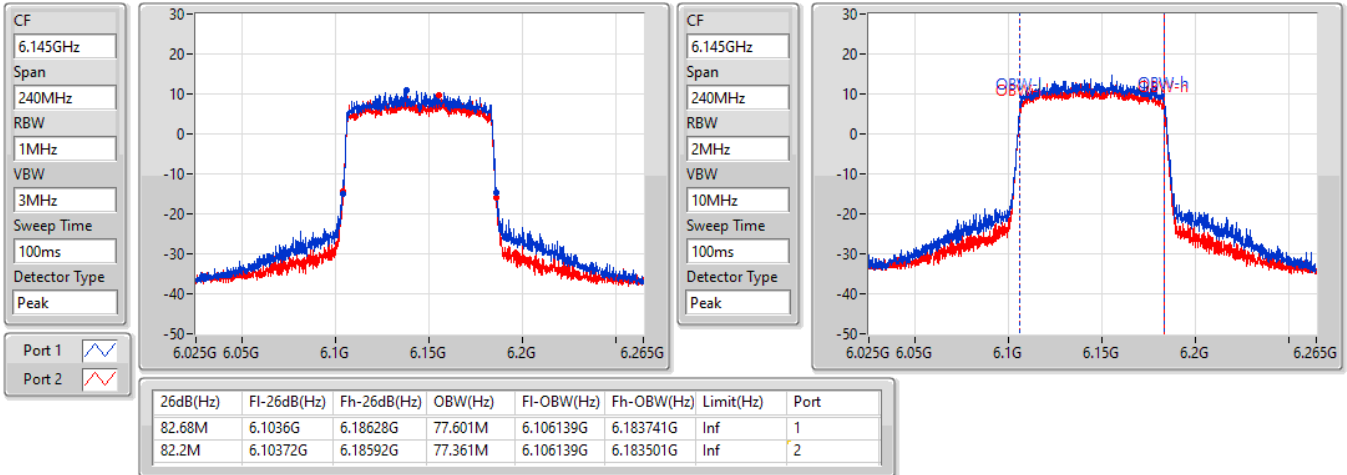

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5985MHz

18/11/2021

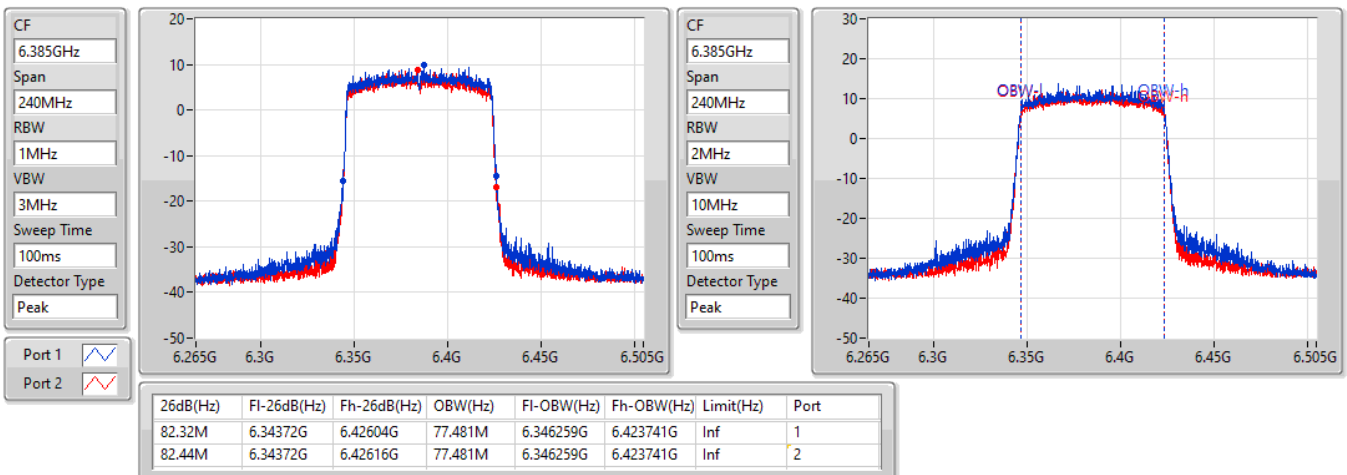


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6145MHz

18/11/2021

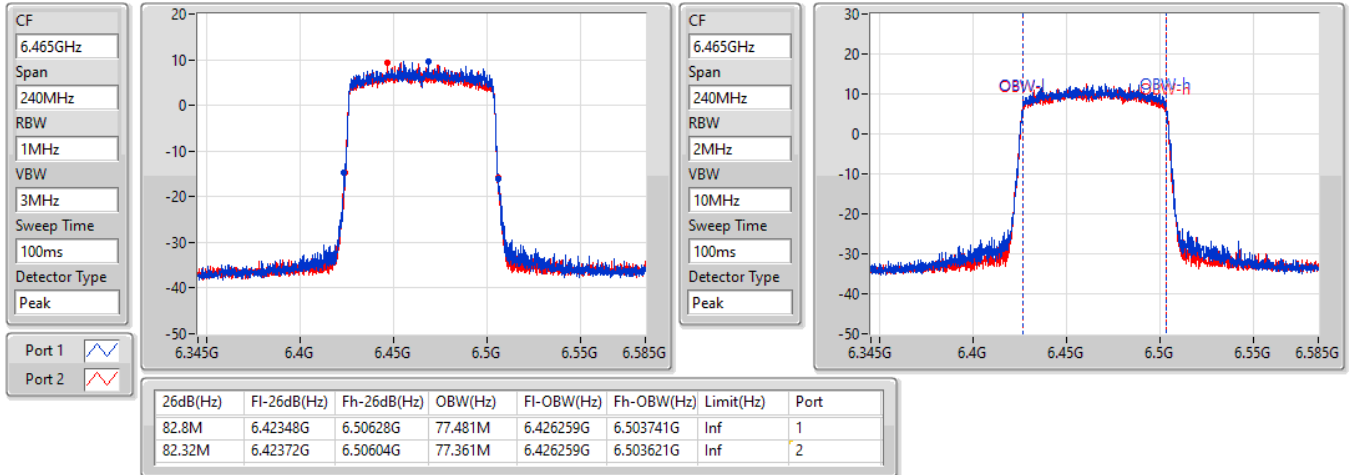

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6385MHz

18/11/2021

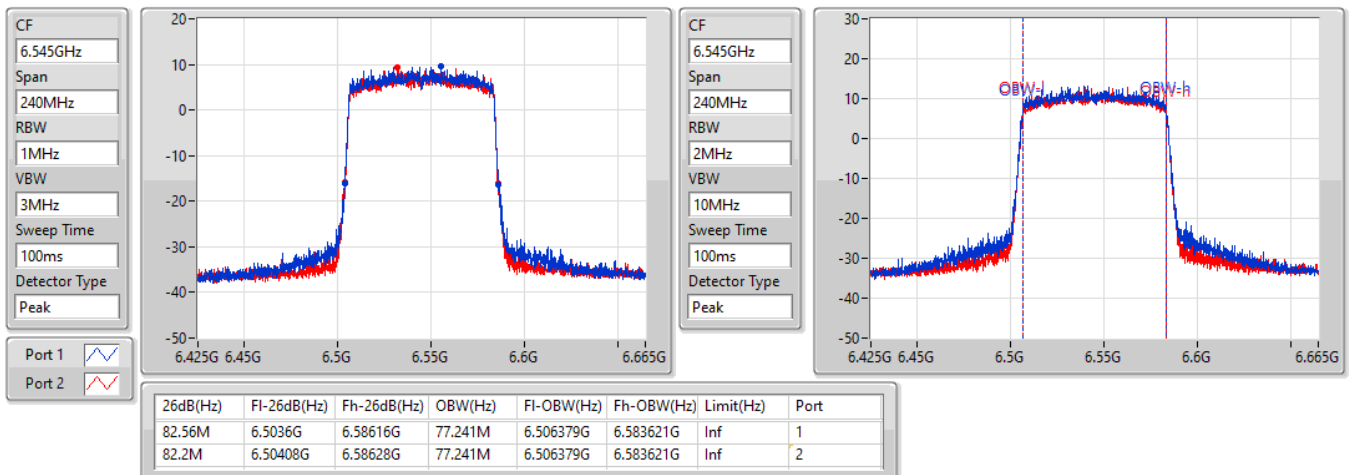


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6465MHz

18/11/2021

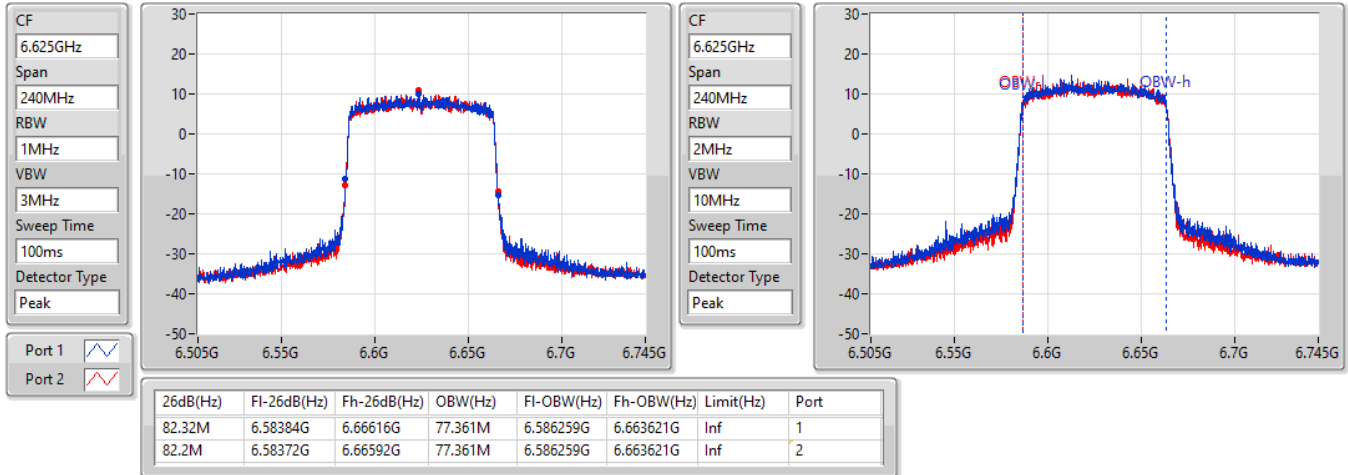

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6545MHz Straddle 6.425-6.525GHz

18/11/2021

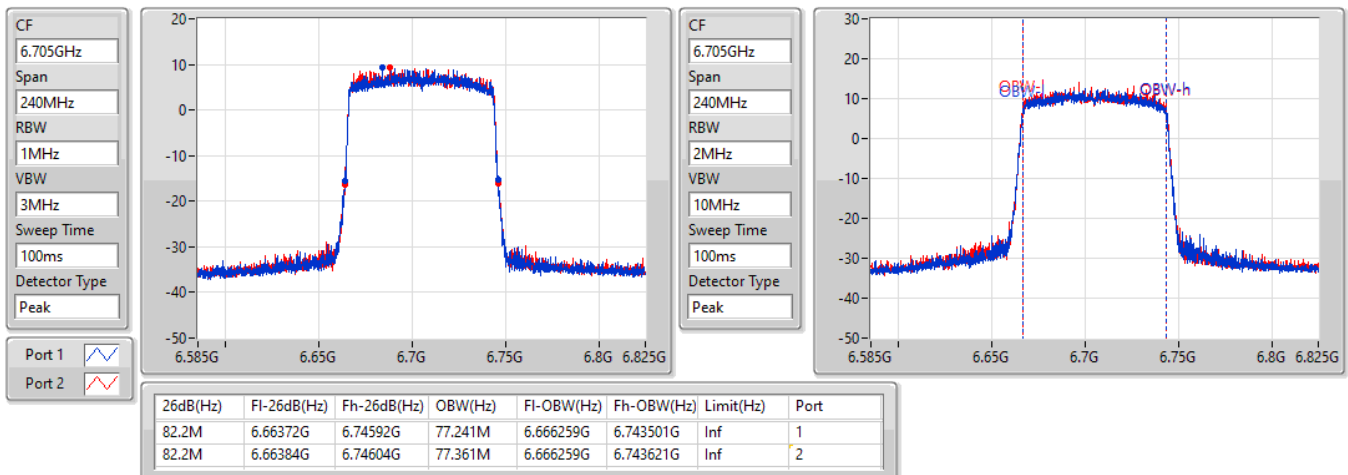


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6625MHz

18/11/2021

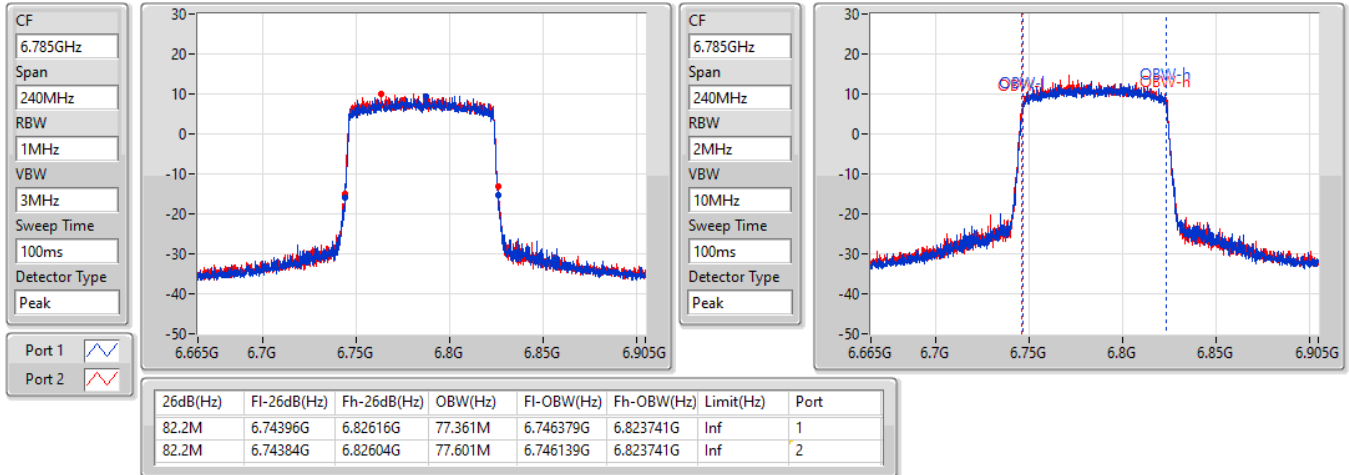

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6705MHz

18/11/2021

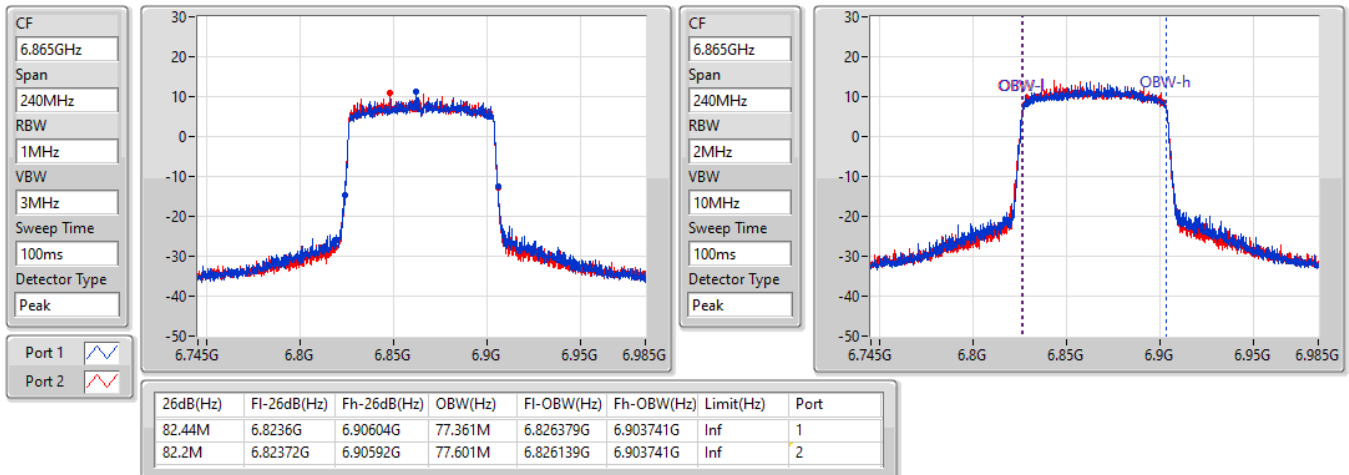


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6785MHz

18/11/2021

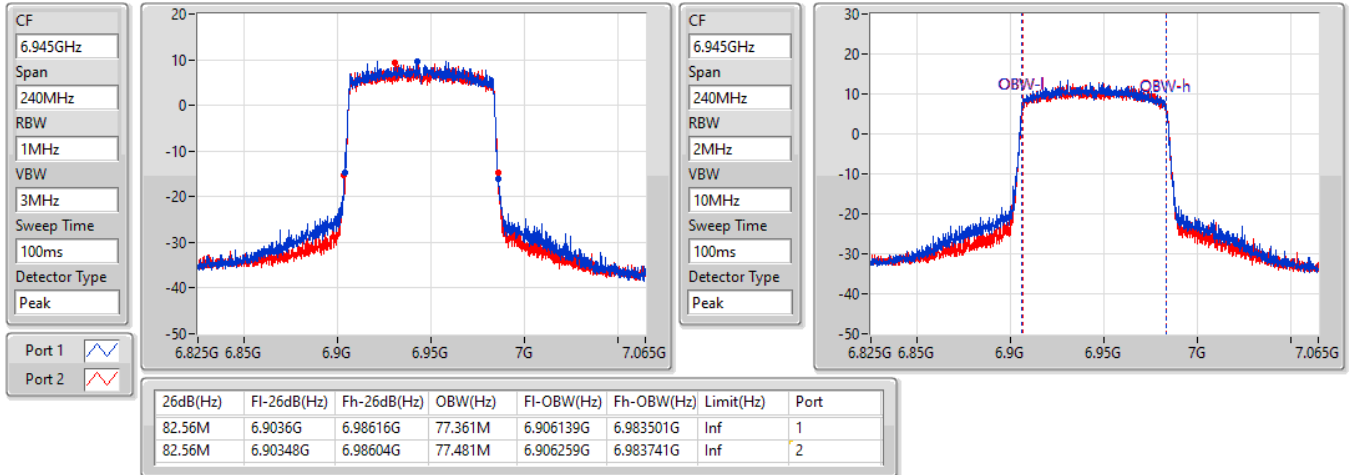

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6865MHz Straddle 6.525-6.875GHz

18/11/2021

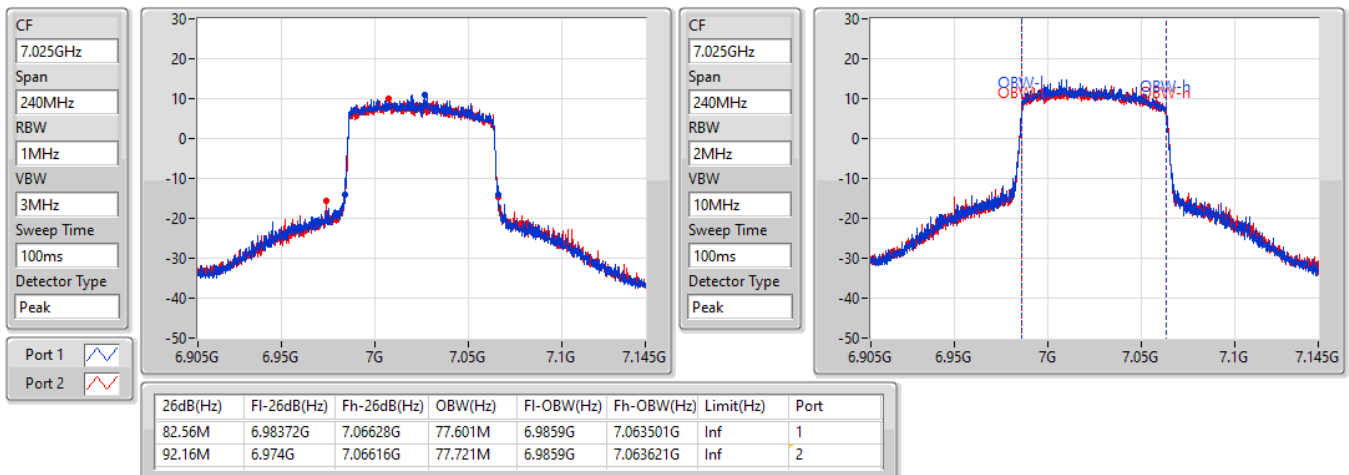


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
6945MHz

18/11/2021

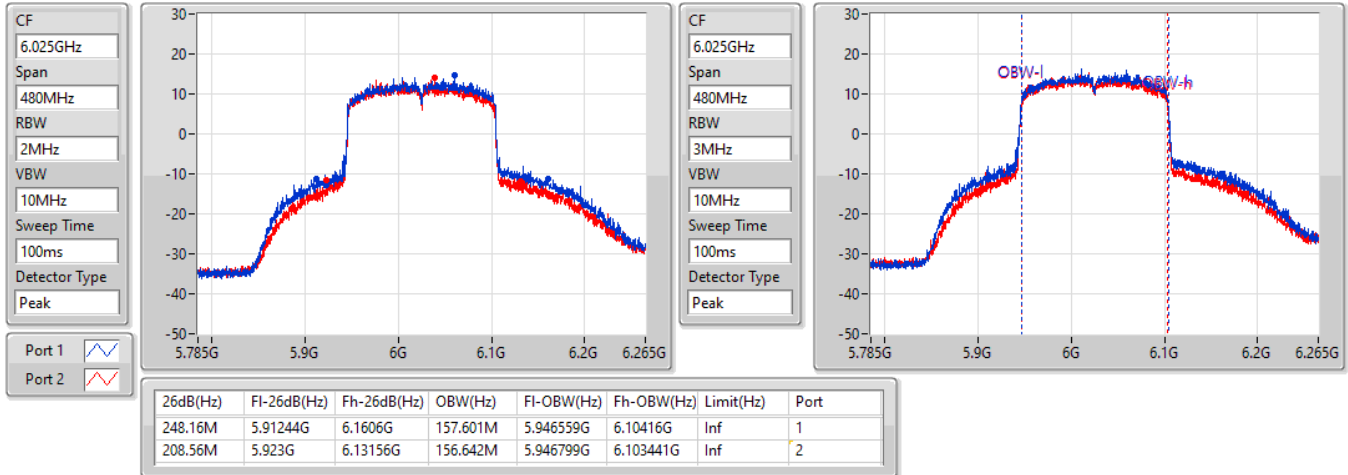

802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
7025MHz

18/11/2021

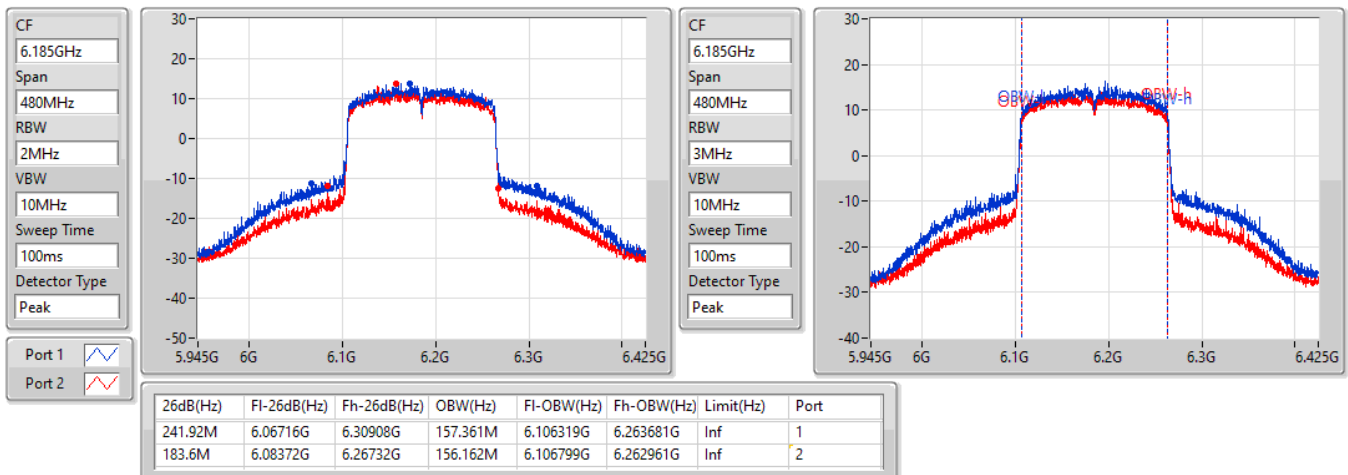


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6025MHz

18/11/2021

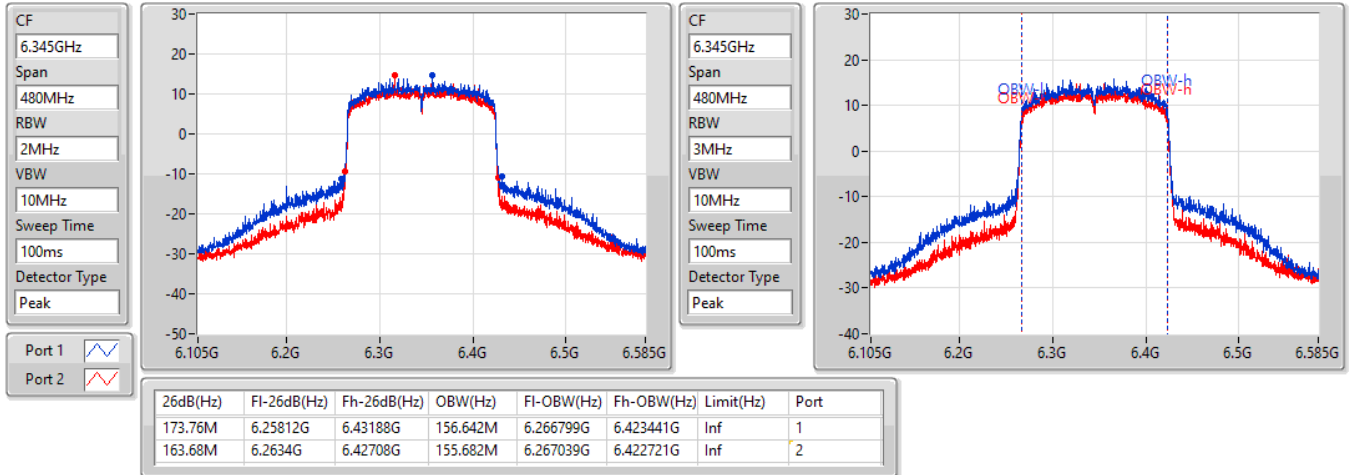

802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6185MHz

18/11/2021

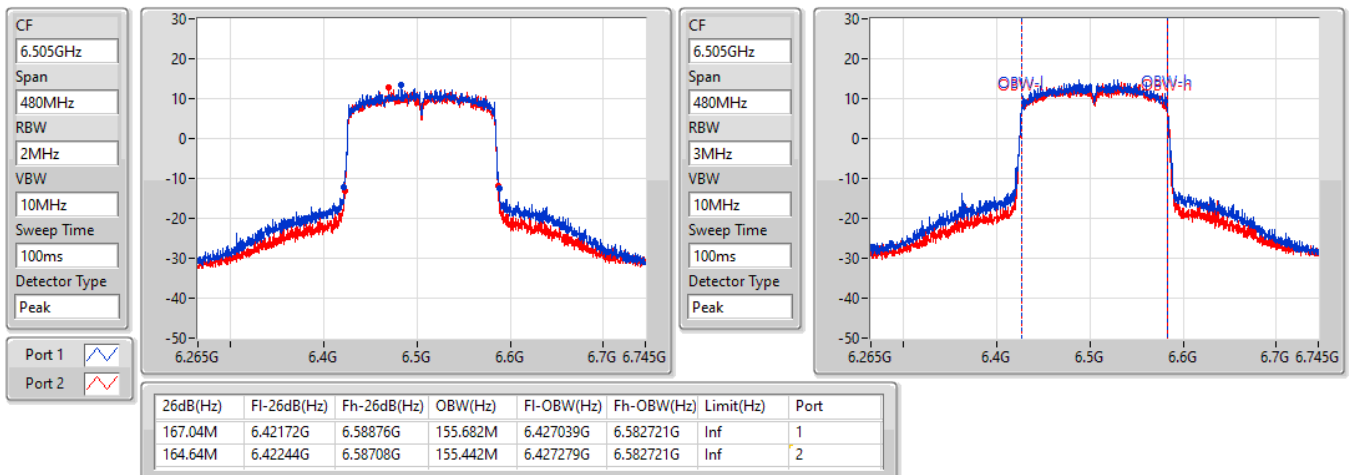


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6345MHz

18/11/2021

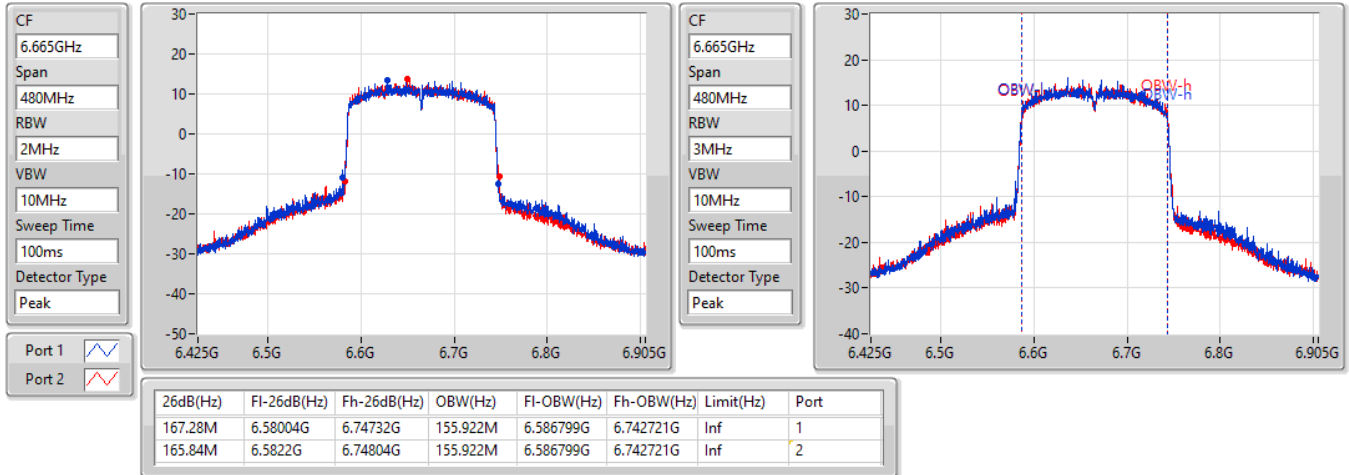

802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6505MHz Straddle 6.425-6.525GHz

18/11/2021

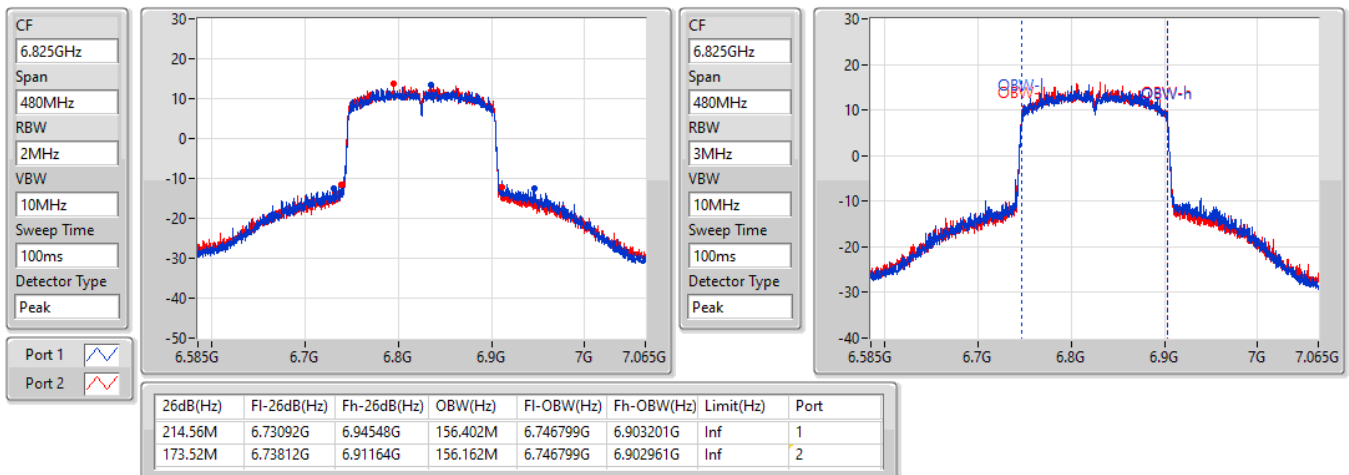


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6665MHz

18/11/2021


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6825MHz Straddle 6.525-6.875GHz

18/11/2021

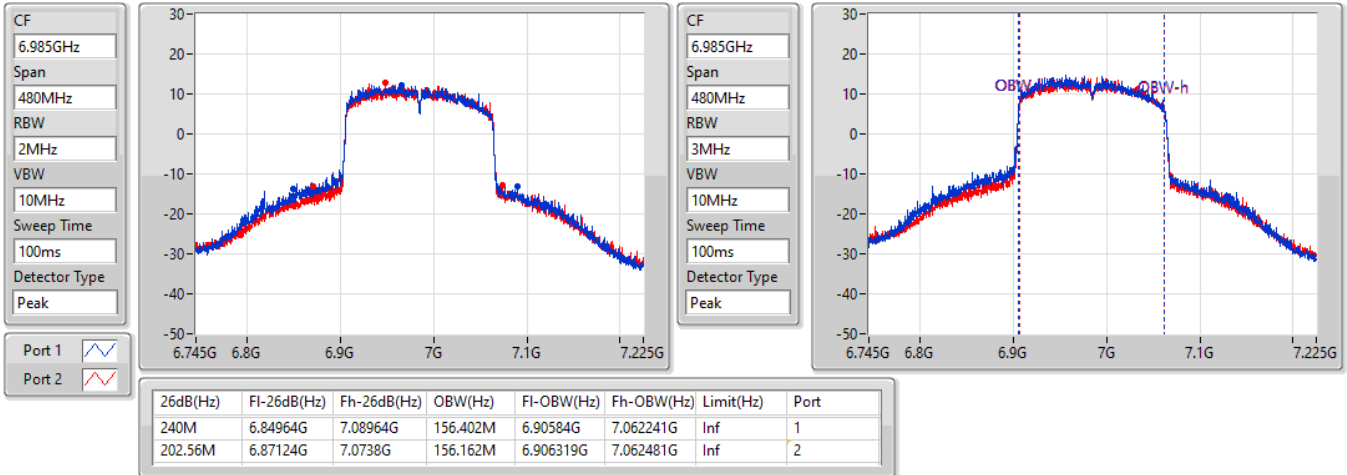


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6985MHz

18/11/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_2TX	22.17M	19.13M	19M1D1D	21.75M	19.1M
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	40.5M	37.841M	37M8D1D	40.14M	37.721M
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	84.6M	77.721M	77M7D1D	81.24M	77.001M
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	263.28M	155.682M	156MD1D	160.8M	153.523M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_2TX	22.41M	19.13M	19M1D1D	21.93M	19.1M
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	40.98M	37.901M	37M9D1D	40.32M	37.721M
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	82.08M	78.201M	78M2D1D	81.24M	77.001M
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	198.72M	155.442M	155MD1D	159.84M	154.723M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_2TX	22.26M	19.13M	19M1D1D	21.57M	19.07M
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	40.56M	37.781M	37M8D1D	40.02M	37.721M
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	83.04M	77.481M	77M5D1D	80.64M	76.282M
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	270.24M	155.922M	156MD1D	160.08M	152.564M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_2TX	22.05M	19.16M	19M2D1D	21.36M	19.1M
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	48.18M	37.841M	37M8D1D	40.26M	37.721M
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	81.6M	77.841M	77M8D1D	81M	76.282M
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	259.92M	154.243M	154MD1D	172.32M	154.003M

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

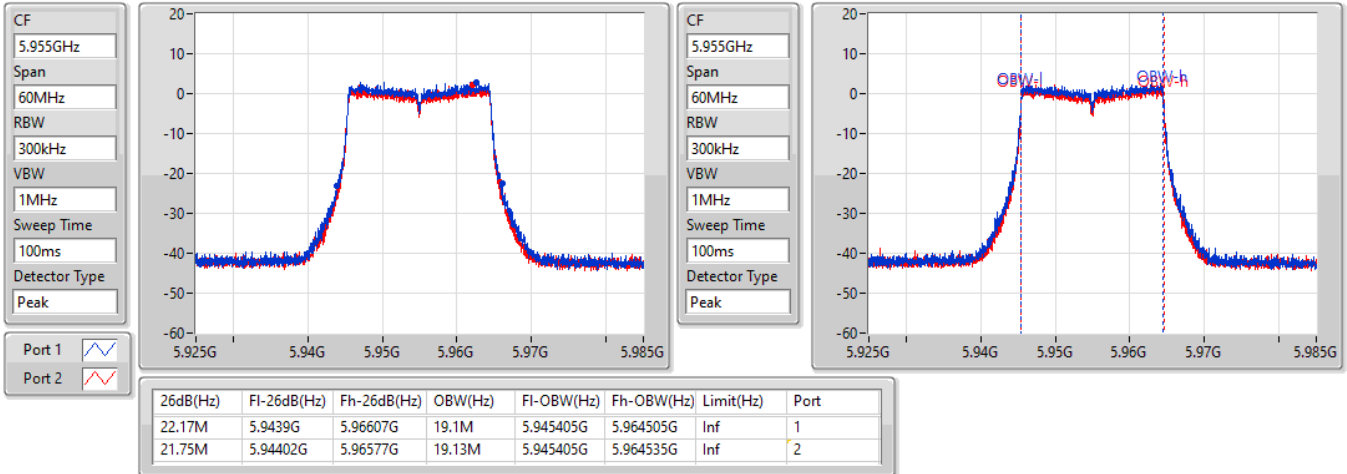
Result

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,(MCS3)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	22.17M	19.1M	21.75M	19.13M
6175MHz	Pass	Inf	22.08M	19.13M	21.9M	19.13M
6415MHz	Pass	Inf	22.14M	19.1M	21.81M	19.1M
6435MHz	Pass	Inf	21.93M	19.13M	21.93M	19.13M
6475MHz	Pass	Inf	22.14M	19.1M	21.93M	19.1M
6515MHz	Pass	Inf	22.41M	19.1M	22.05M	19.1M
6535MHz	Pass	Inf	21.84M	19.07M	21.57M	19.1M
6695MHz	Pass	Inf	21.78M	19.07M	21.9M	19.1M
6855MHz	Pass	Inf	22.2M	19.1M	21.93M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	22.26M	19.13M	22.17M	19.13M
6895MHz	Pass	Inf	21.84M	19.13M	21.87M	19.1M
6995MHz	Pass	Inf	21.93M	19.16M	21.93M	19.13M
7095MHz	Pass	Inf	21.36M	19.13M	21.78M	19.13M
7115MHz	Pass	Inf	22.05M	19.1M	21.84M	19.1M
802.11ax HEW40-BF_Nss1,(MCS3)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	40.38M	37.721M	40.5M	37.841M
6165MHz	Pass	Inf	40.2M	37.781M	40.32M	37.841M
6405MHz	Pass	Inf	40.14M	37.721M	40.32M	37.841M
6445MHz	Pass	Inf	40.44M	37.721M	40.62M	37.841M
6485MHz	Pass	Inf	40.98M	37.721M	40.5M	37.841M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	40.32M	37.721M	40.92M	37.901M
6565MHz	Pass	Inf	40.26M	37.781M	40.56M	37.721M
6685MHz	Pass	Inf	40.32M	37.781M	40.32M	37.781M
6845MHz	Pass	Inf	40.02M	37.781M	40.5M	37.781M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.14M	37.781M	40.5M	37.781M
6925MHz	Pass	Inf	44.52M	37.781M	40.44M	37.721M
7005MHz	Pass	Inf	40.5M	37.781M	40.26M	37.841M
7085MHz	Pass	Inf	48.18M	37.781M	40.38M	37.781M
802.11ax HEW80-BF_Nss1,(MCS3)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	81.24M	77.361M	84.6M	77.121M
6145MHz	Pass	Inf	82.32M	77.721M	82.2M	77.001M
6385MHz	Pass	Inf	81.48M	77.241M	82.68M	77.361M
6465MHz	Pass	Inf	81.24M	77.001M	81.72M	77.241M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	81.6M	78.201M	82.08M	77.361M
6625MHz	Pass	Inf	81M	77.361M	81.96M	76.282M
6705MHz	Pass	Inf	80.64M	77.361M	81.48M	76.402M
6785MHz	Pass	Inf	81.24M	76.282M	83.04M	77.361M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	80.76M	77.001M	82.32M	77.481M
6945MHz	Pass	Inf	81M	77.841M	81.6M	76.282M
7025MHz	Pass	Inf	81M	77.721M	81.6M	77.361M
802.11ax HEW160-BF_Nss1,(MCS3)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	168.96M	154.963M	242.88M	155.682M
6185MHz	Pass	Inf	258.24M	153.523M	263.28M	155.202M
6345MHz	Pass	Inf	160.8M	153.523M	227.52M	155.442M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	159.84M	154.723M	198.72M	155.442M
6665MHz	Pass	Inf	160.08M	152.564M	270.24M	155.922M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	160.56M	154.963M	262.08M	154.483M
6985MHz	Pass	Inf	172.32M	154.003M	259.92M	154.243M

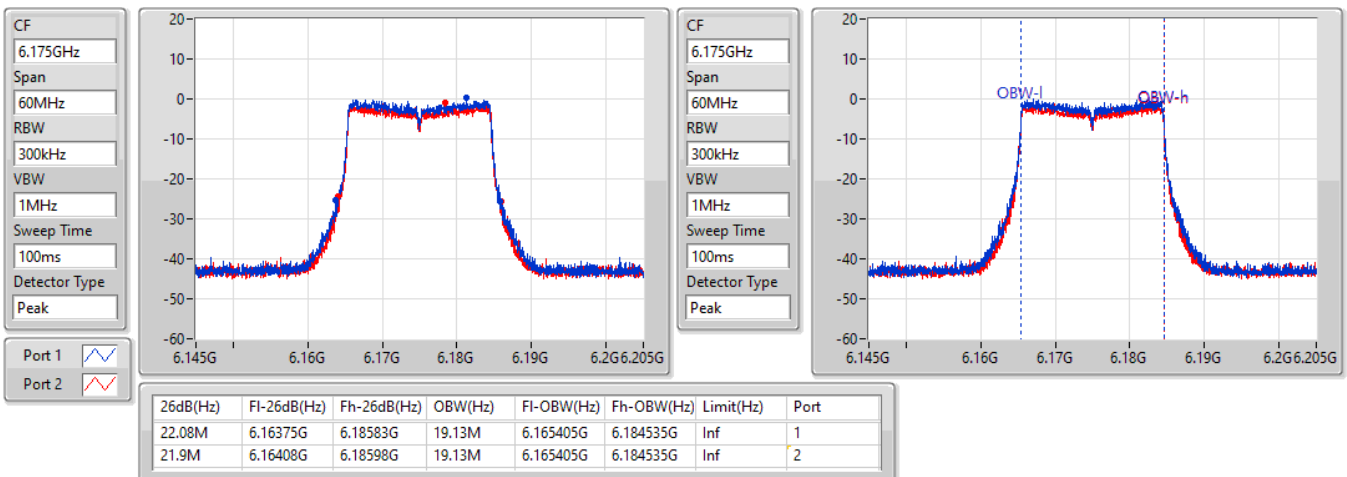
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
5955MHz

10/12/2021

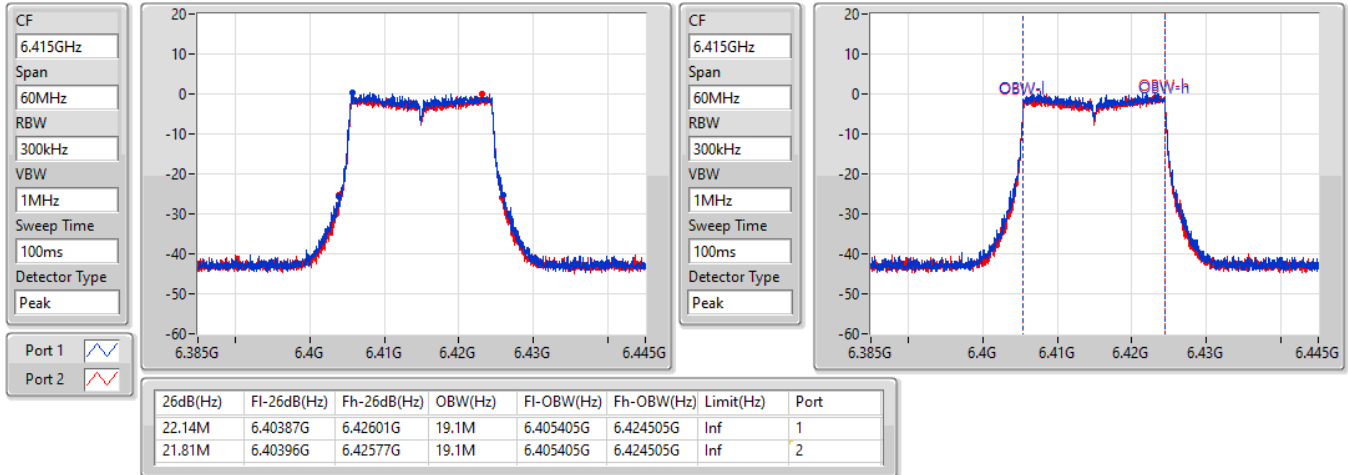

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6175MHz

10/12/2021

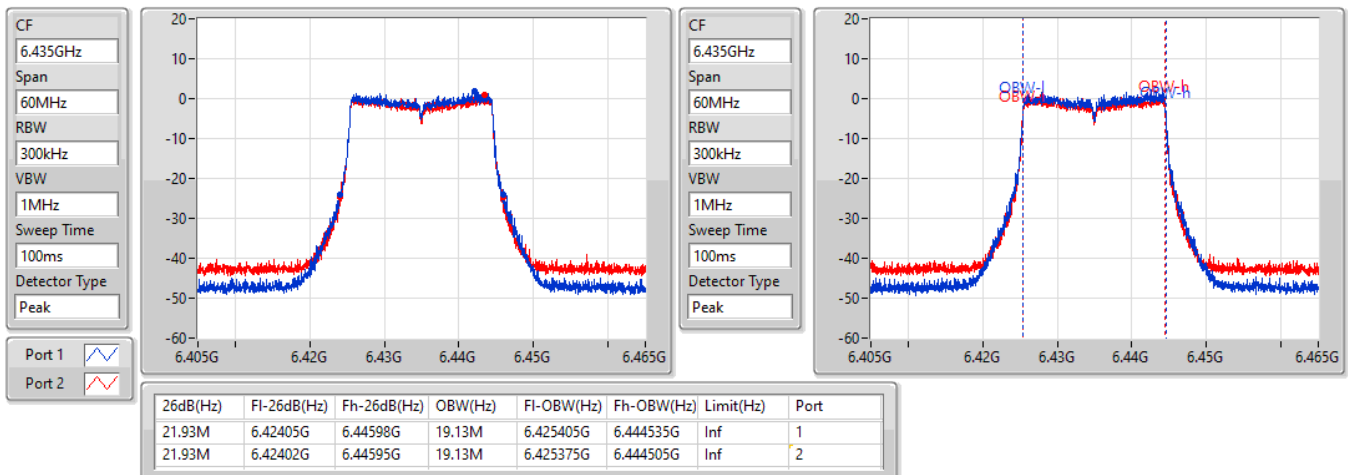


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6415MHz

10/12/2021

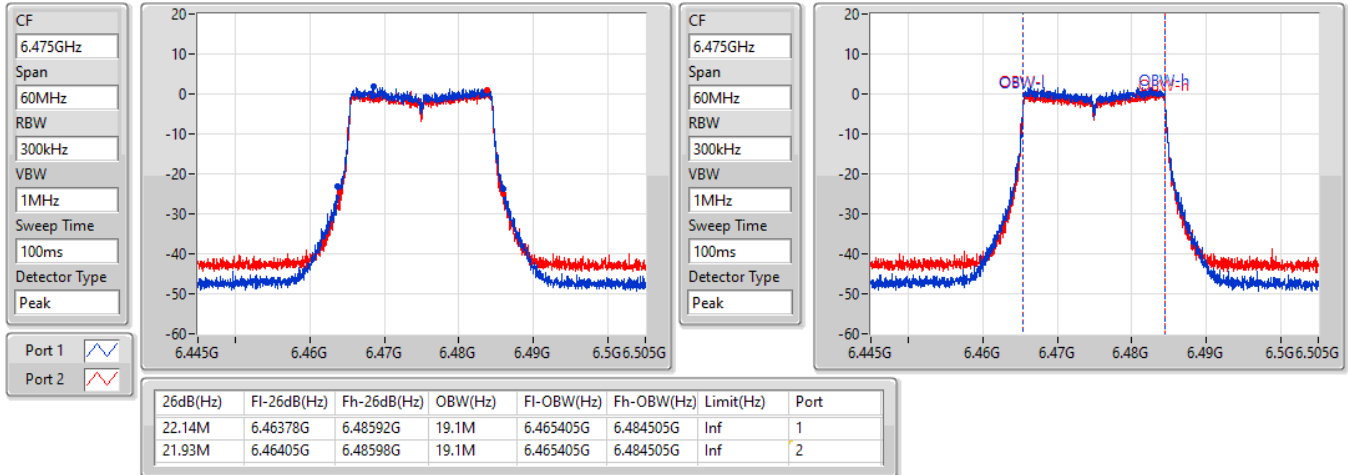

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6435MHz

10/12/2021

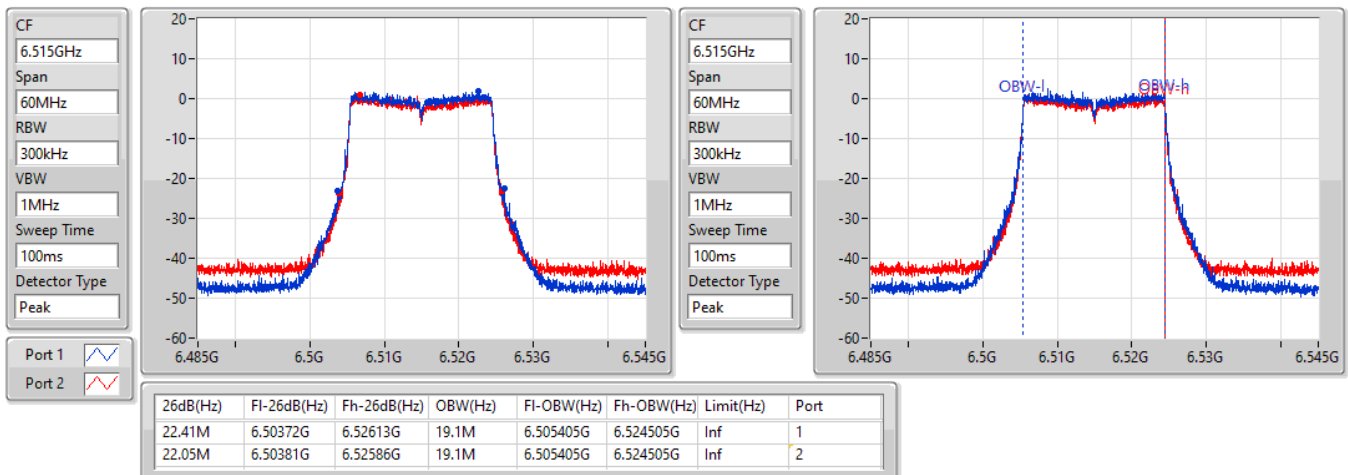


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6475MHz

10/12/2021

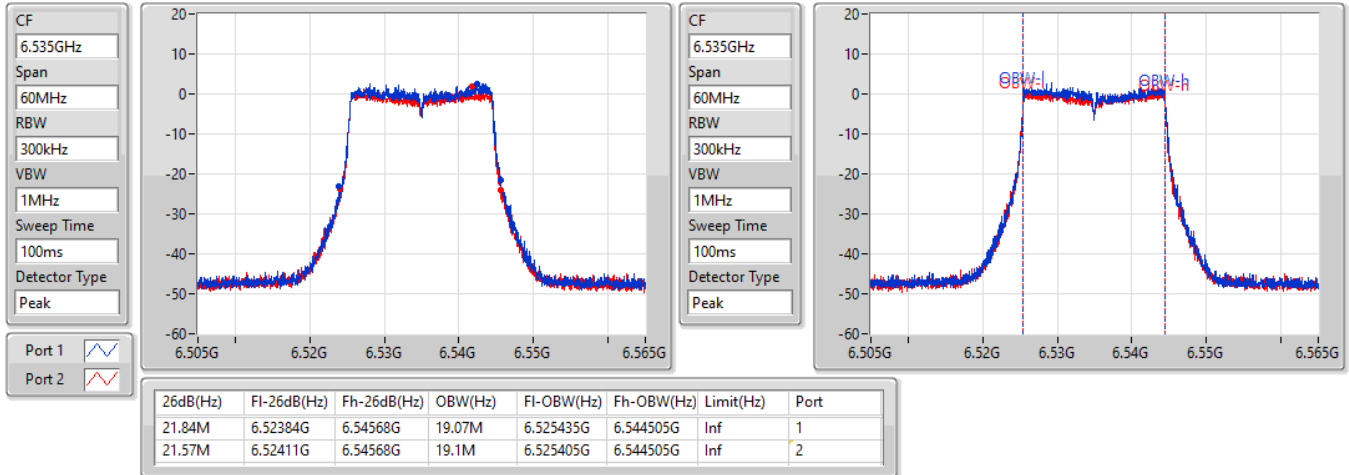

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6515MHz

10/12/2021

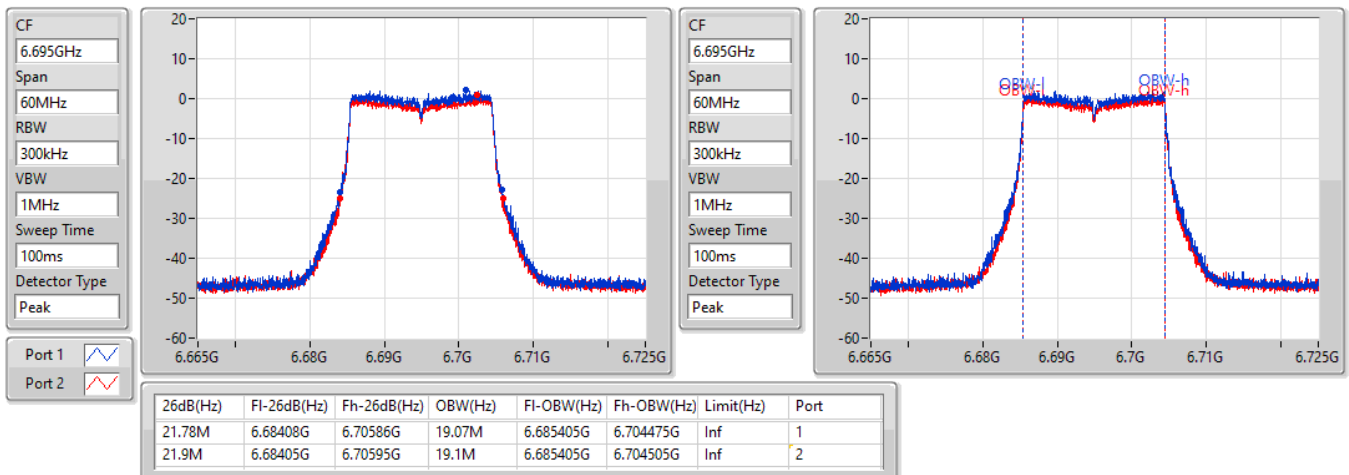


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6535MHz

10/12/2021

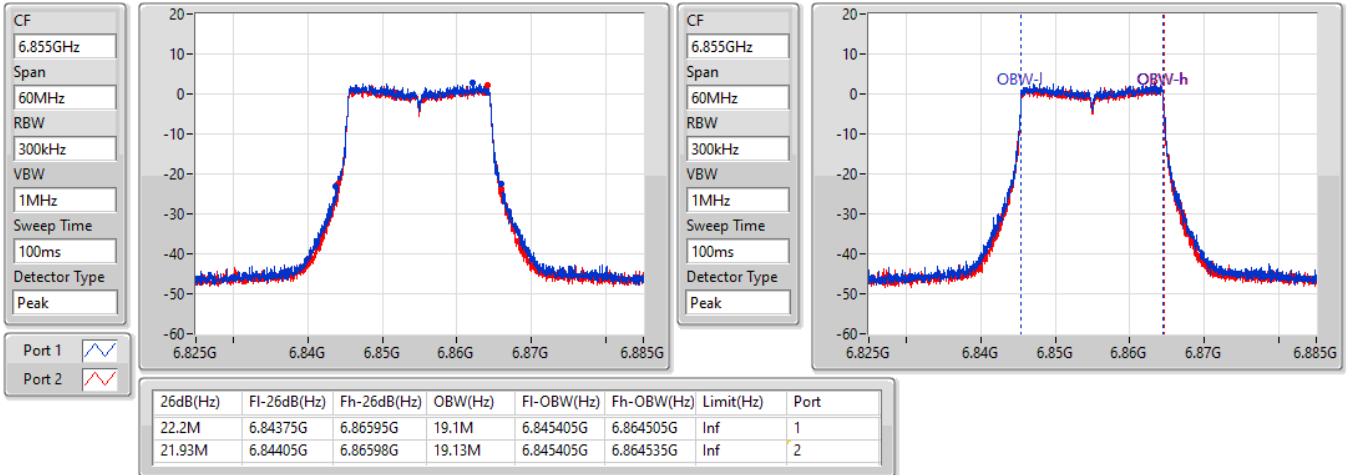

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6695MHz

10/12/2021

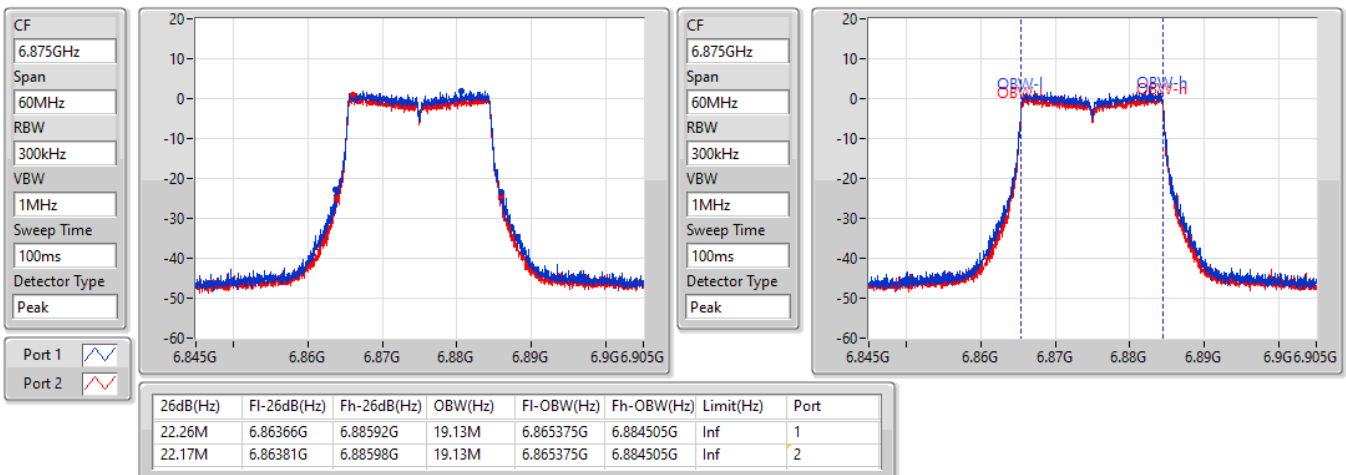


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6855MHz

10/12/2021

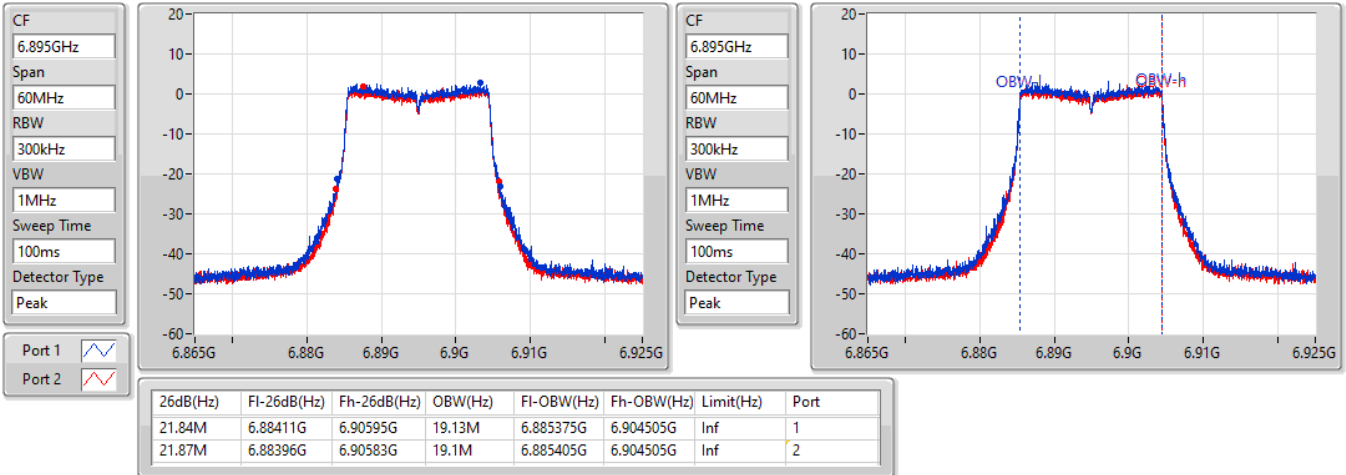

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6875MHz Straddle 6.525-6.875GHz

10/12/2021

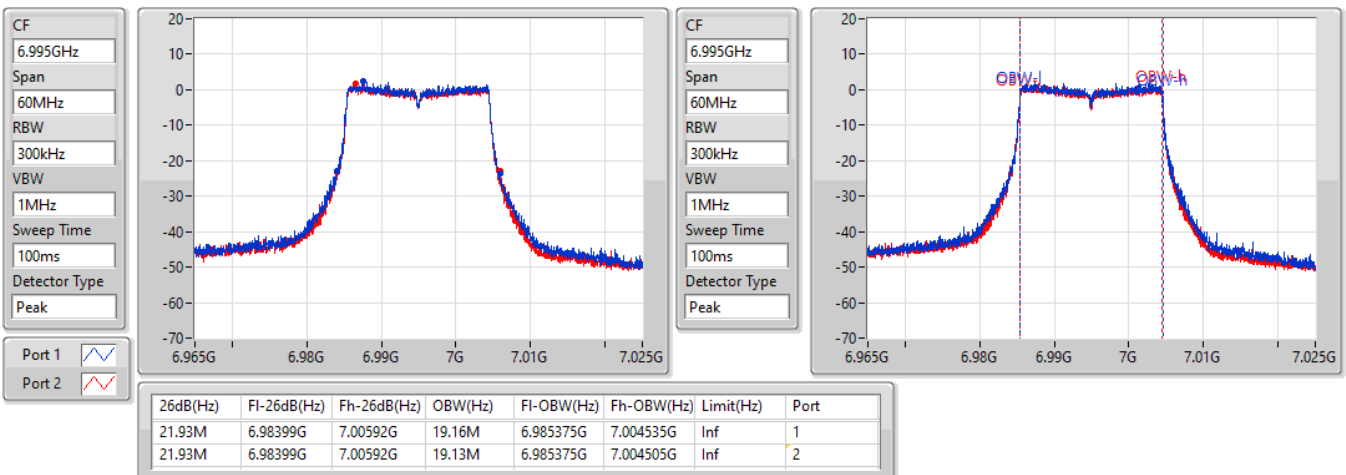


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6895MHz

10/12/2021

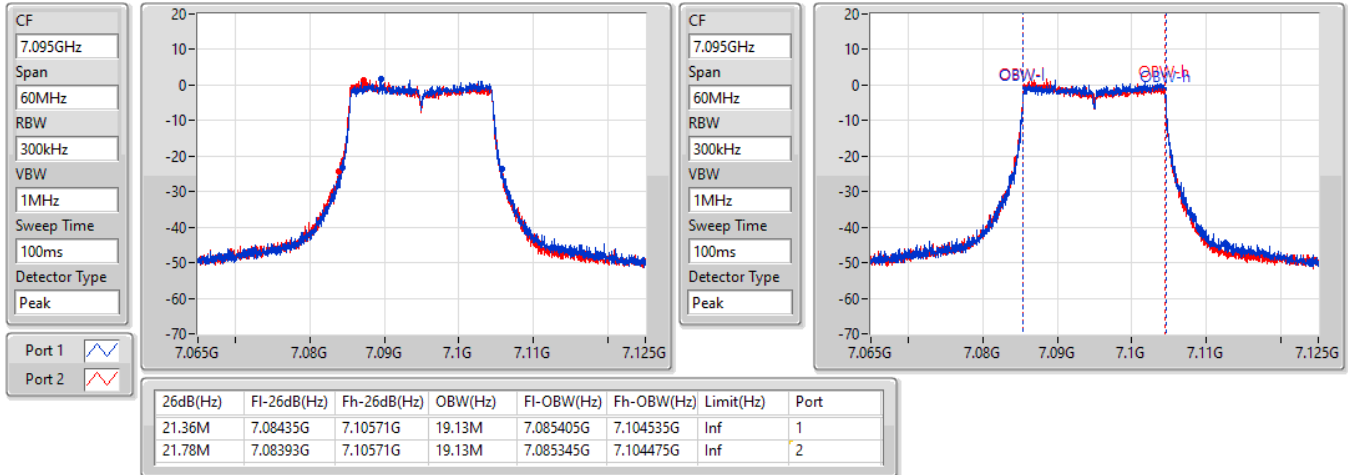

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
6995MHz

10/12/2021

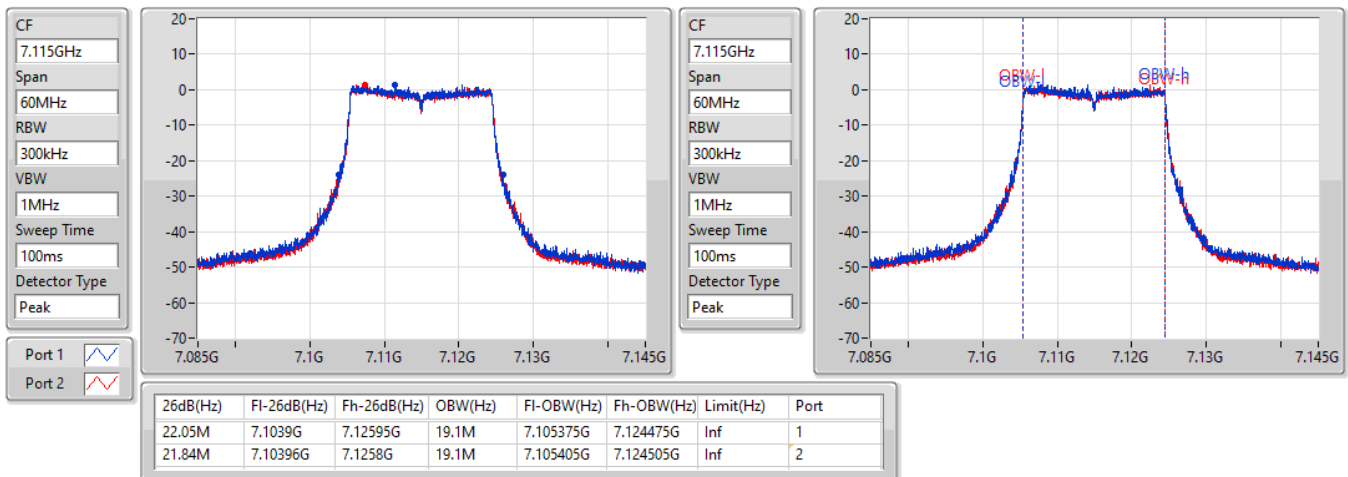


802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
7095MHz

10/12/2021

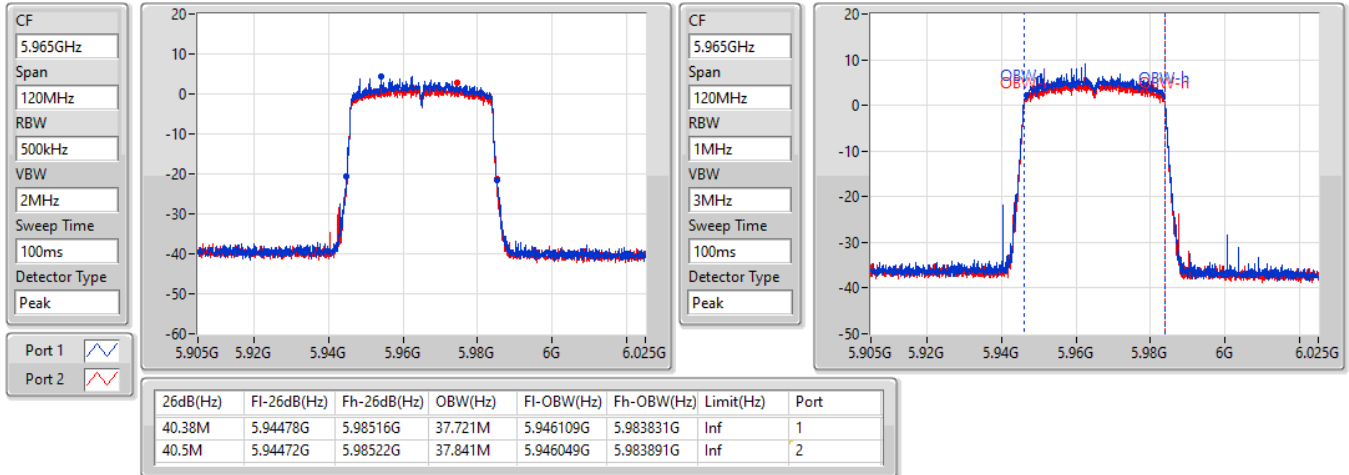

802.11ax HEW20-BF_Nss1,(MCS3)_2TX
EBW
7115MHz

10/12/2021

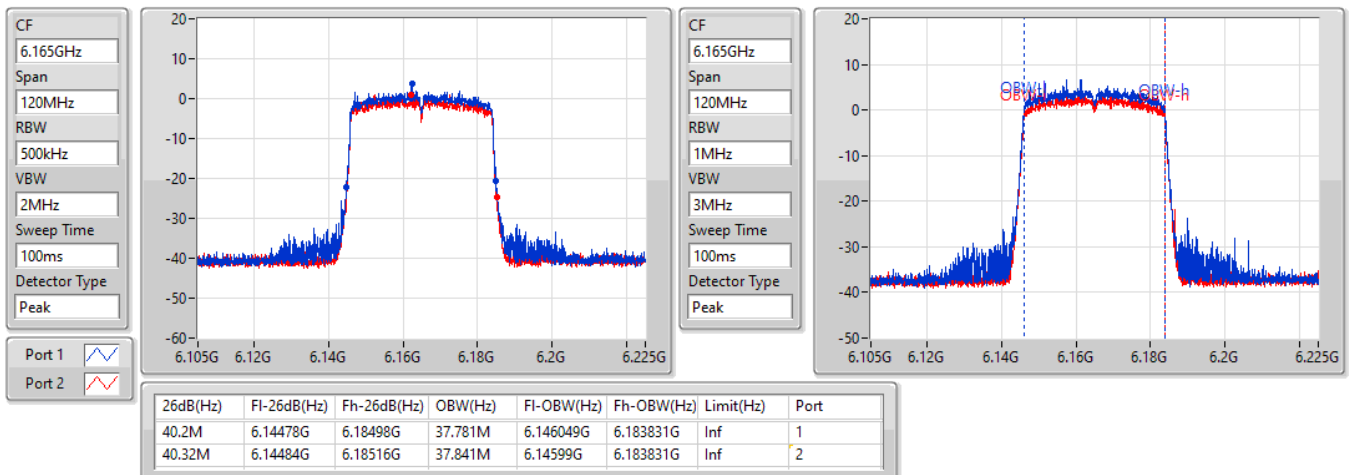


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
5965MHz

10/12/2021

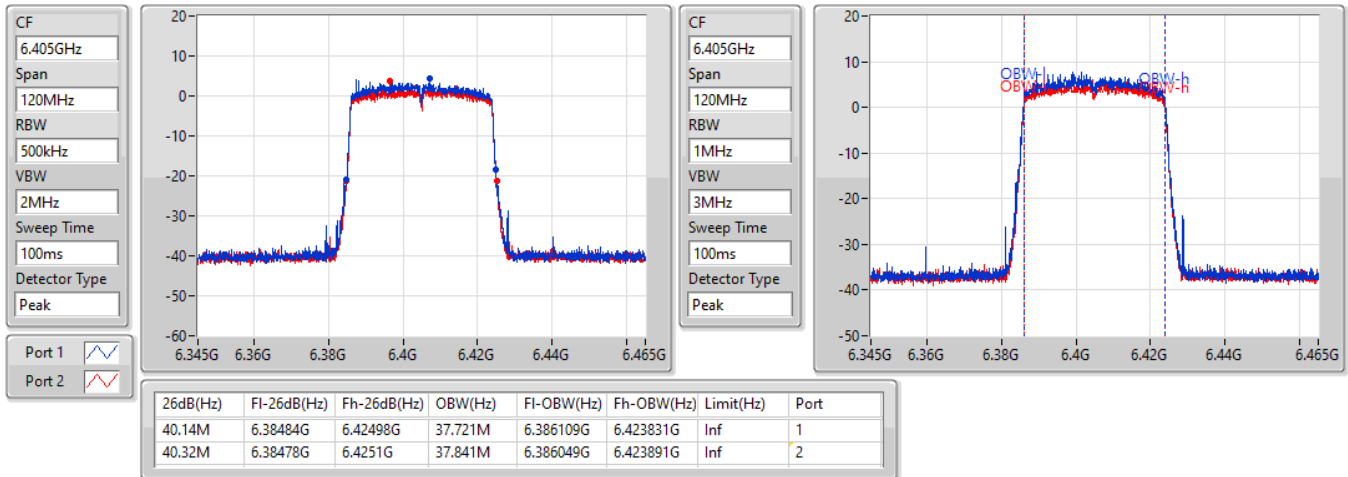

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6165MHz

10/12/2021

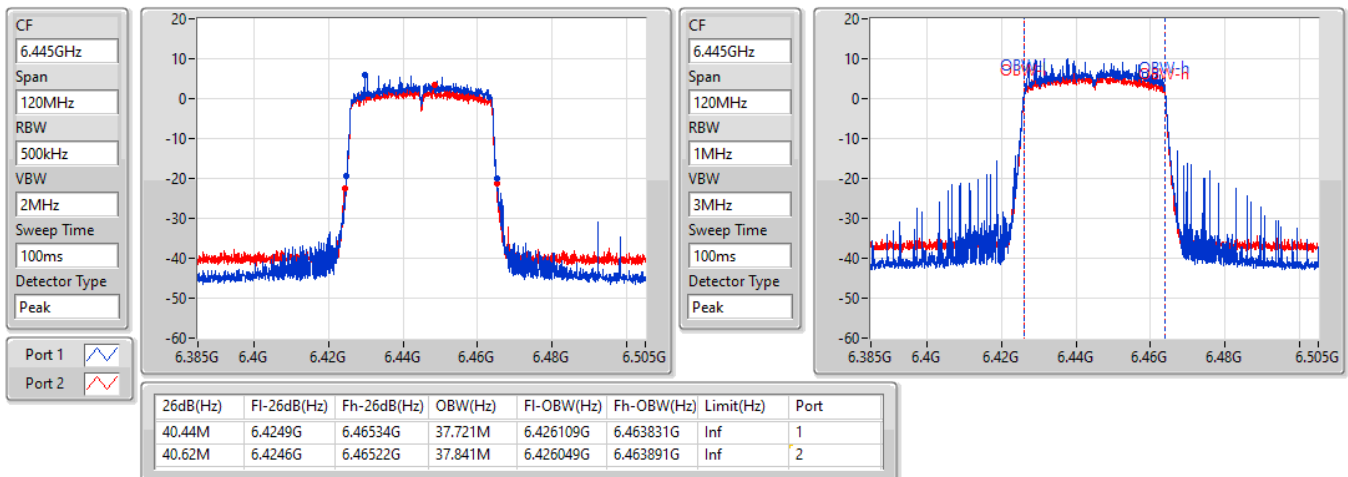


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6405MHz

10/12/2021

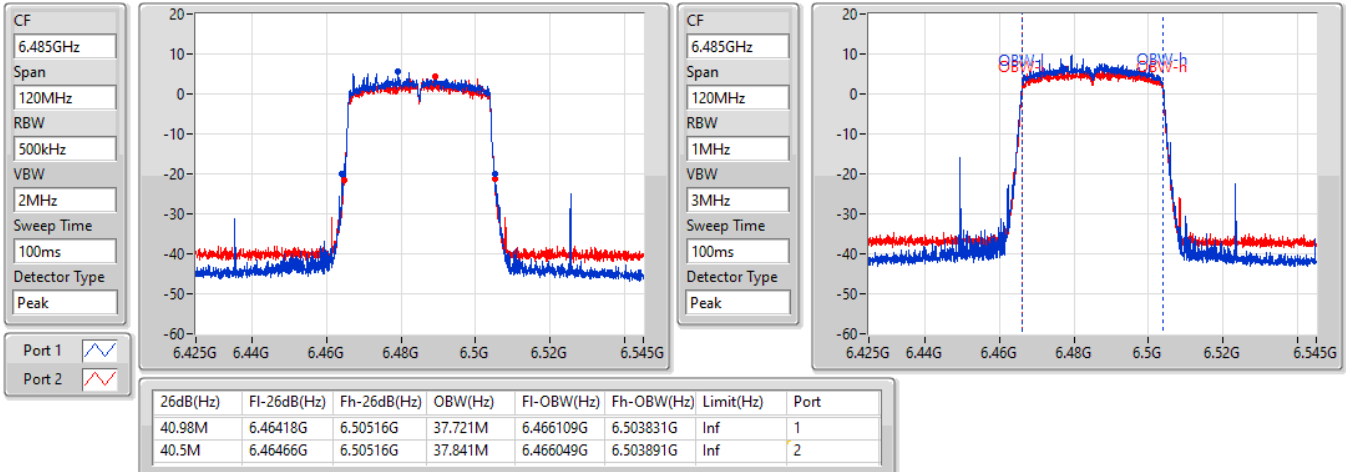

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6445MHz

10/12/2021

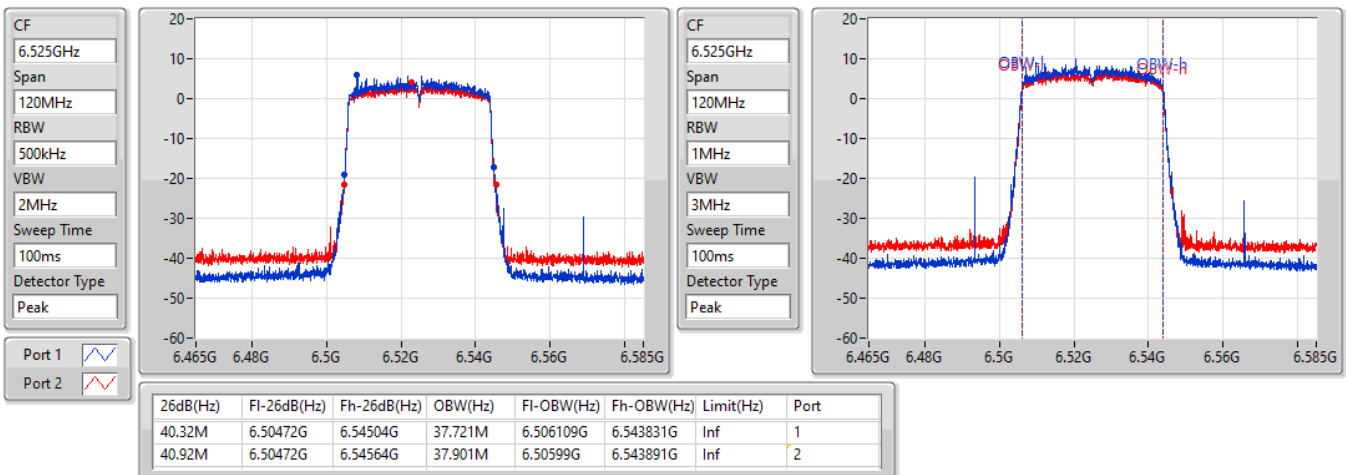


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6485MHz

10/12/2021

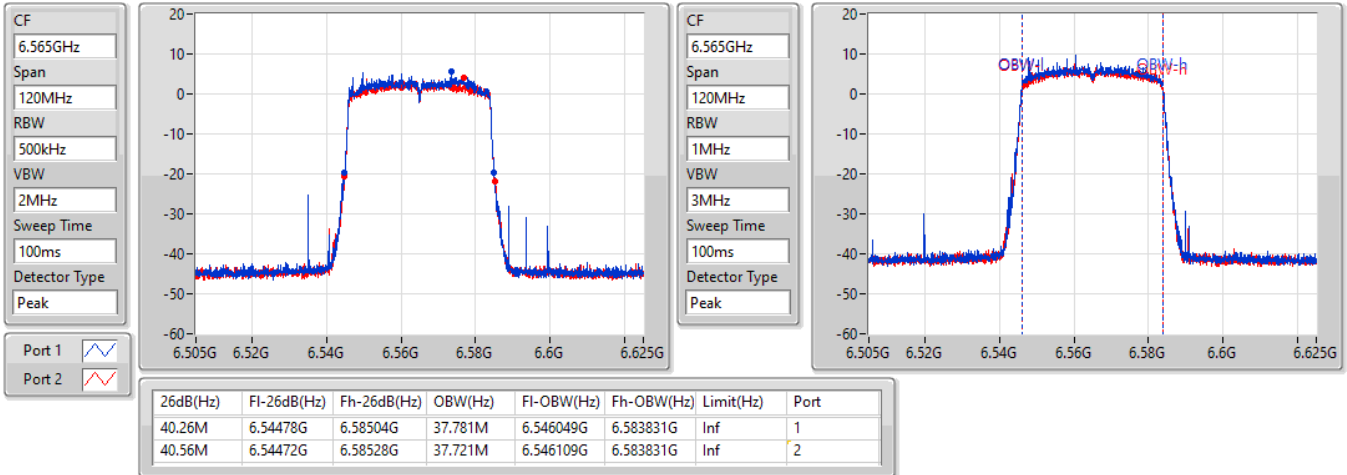

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6525MHz Straddle 6.425-6.525GHz

10/12/2021

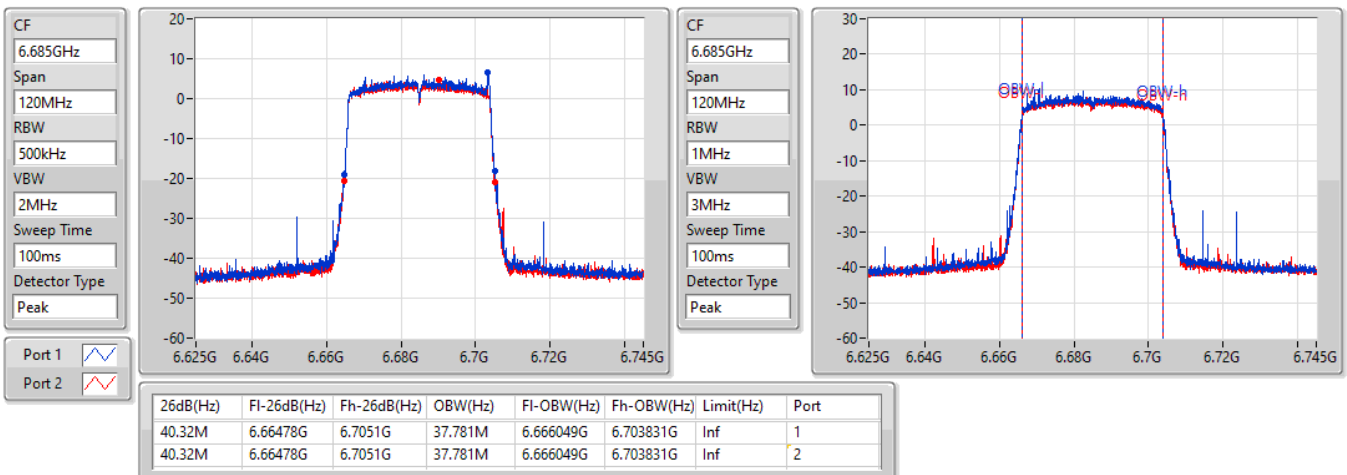


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6565MHz

10/12/2021

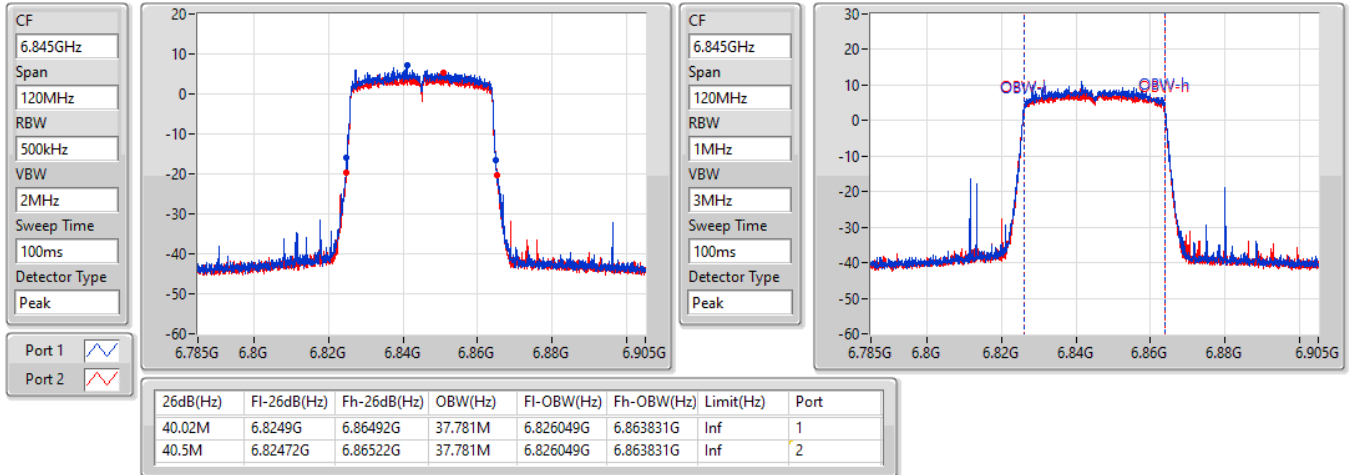

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6685MHz

10/12/2021

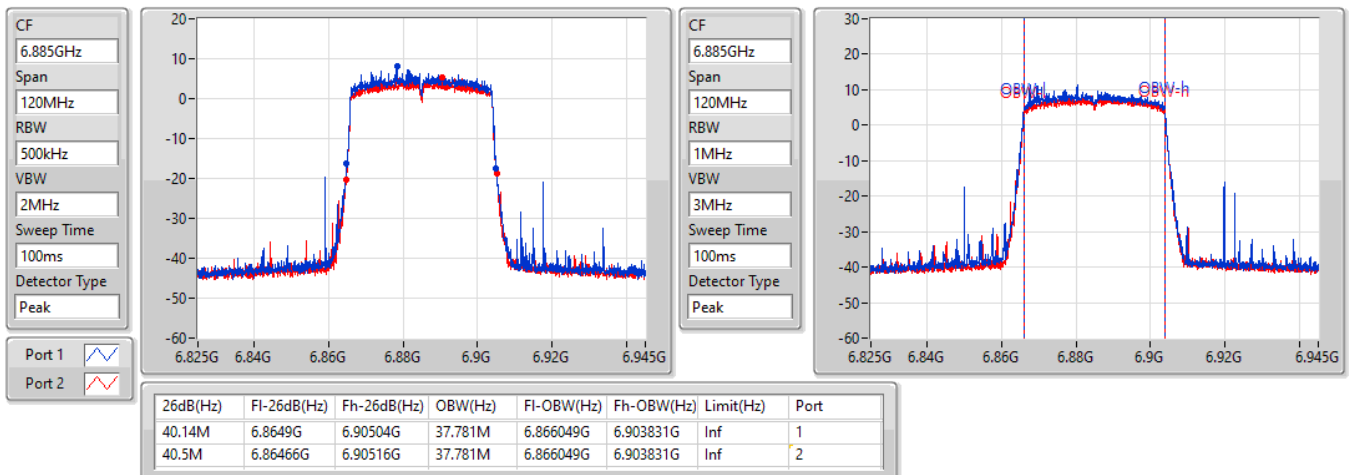


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6845MHz

10/12/2021

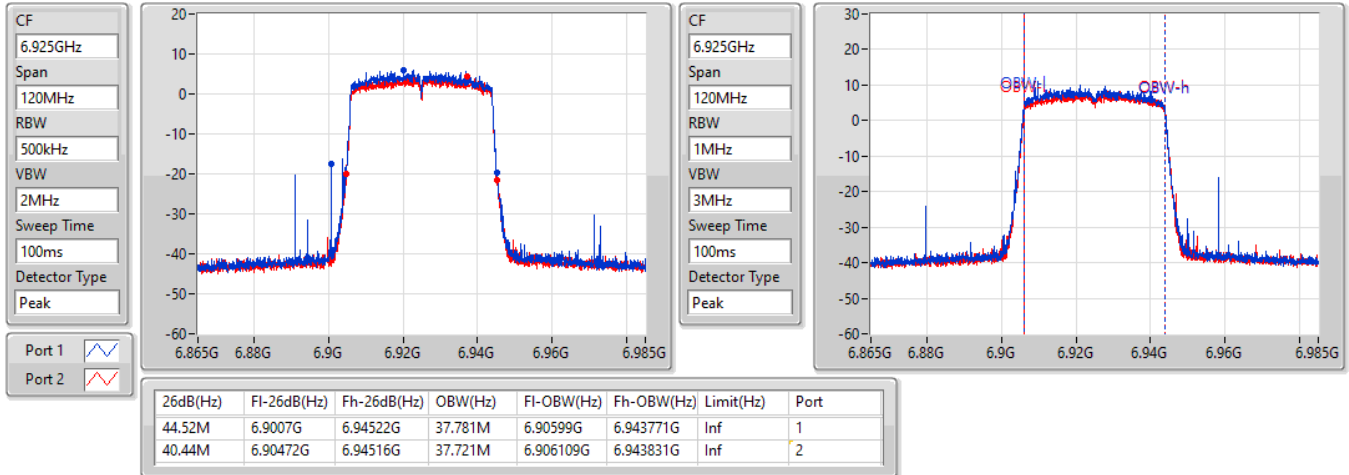

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6885MHz Straddle 6.525-6.875GHz

10/12/2021

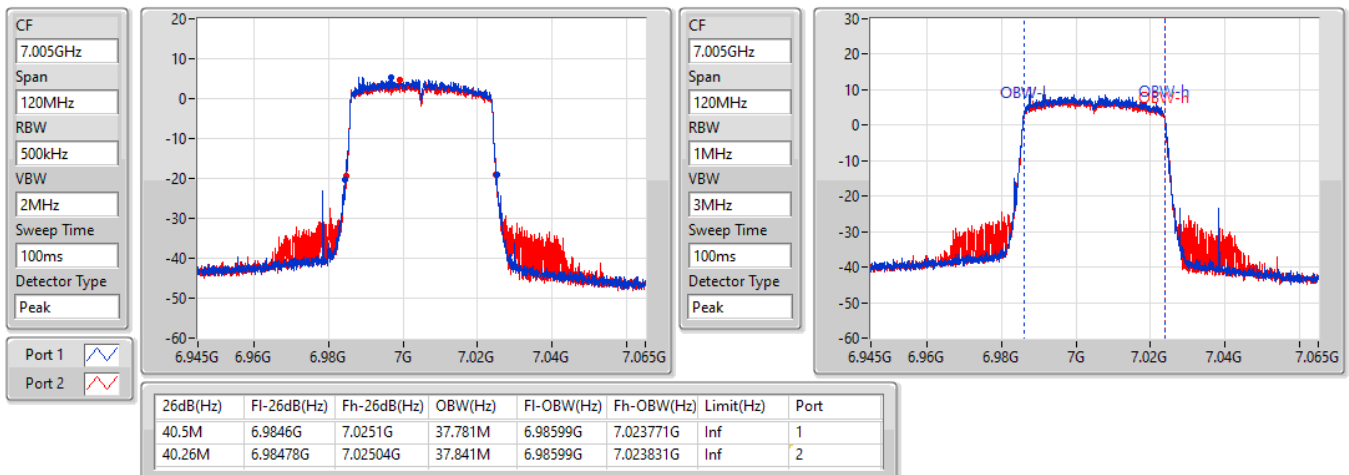


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
6925MHz

10/12/2021

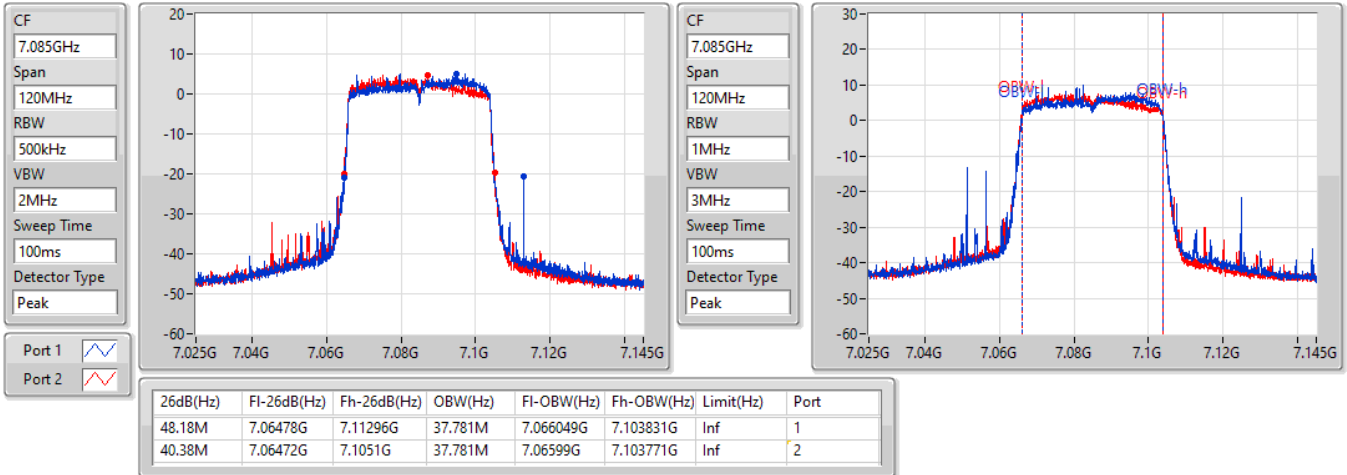

802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
7005MHz

10/12/2021

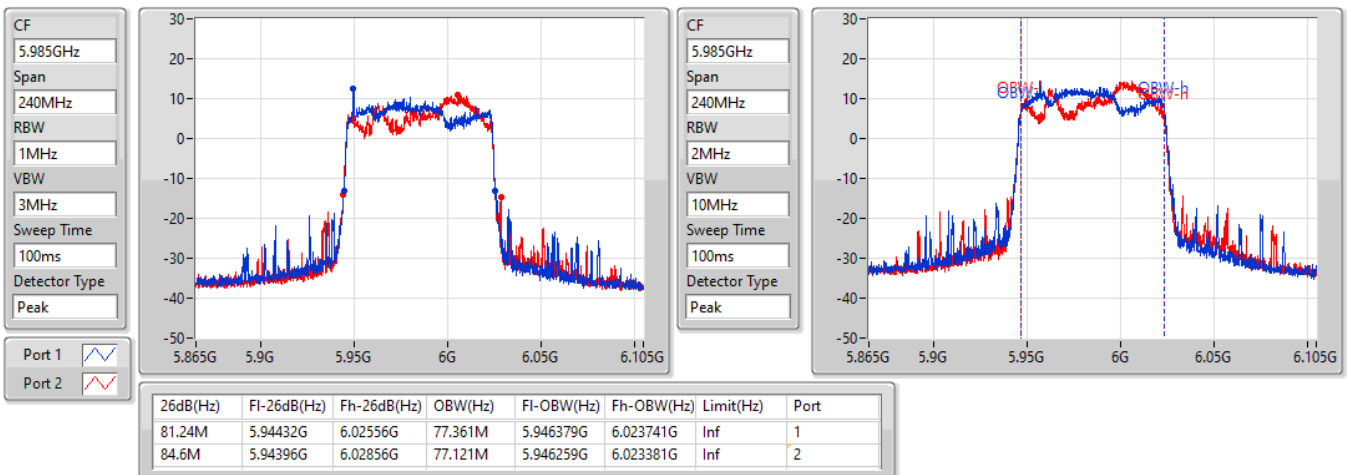


802.11ax HEW40-BF_Nss1,(MCS3)_2TX
EBW
7085MHz

10/12/2021

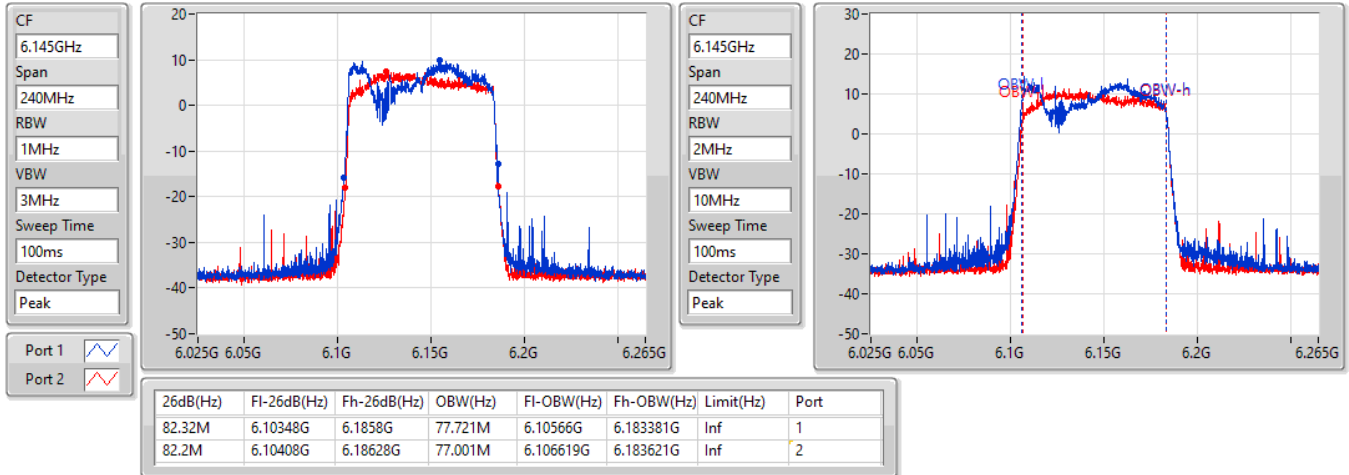

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
5985MHz

10/12/2021

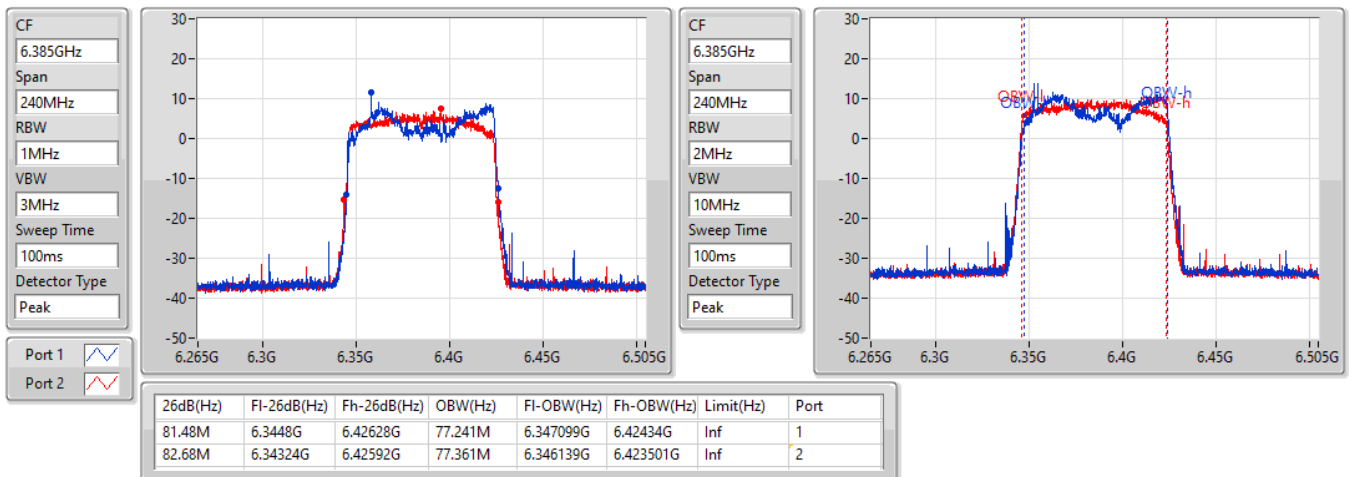


802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6145MHz

10/12/2021

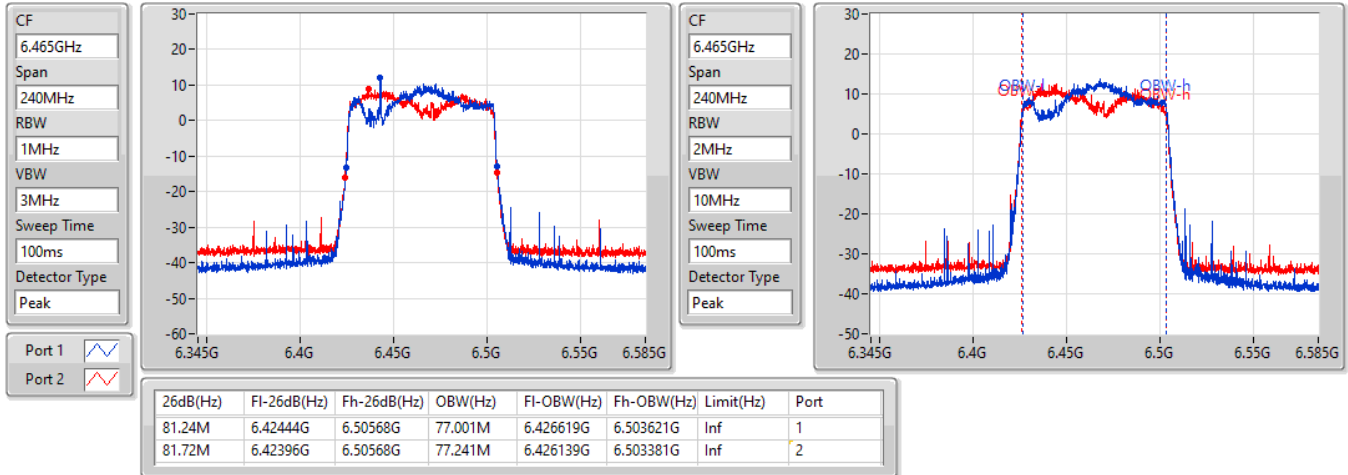

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6385MHz

10/12/2021

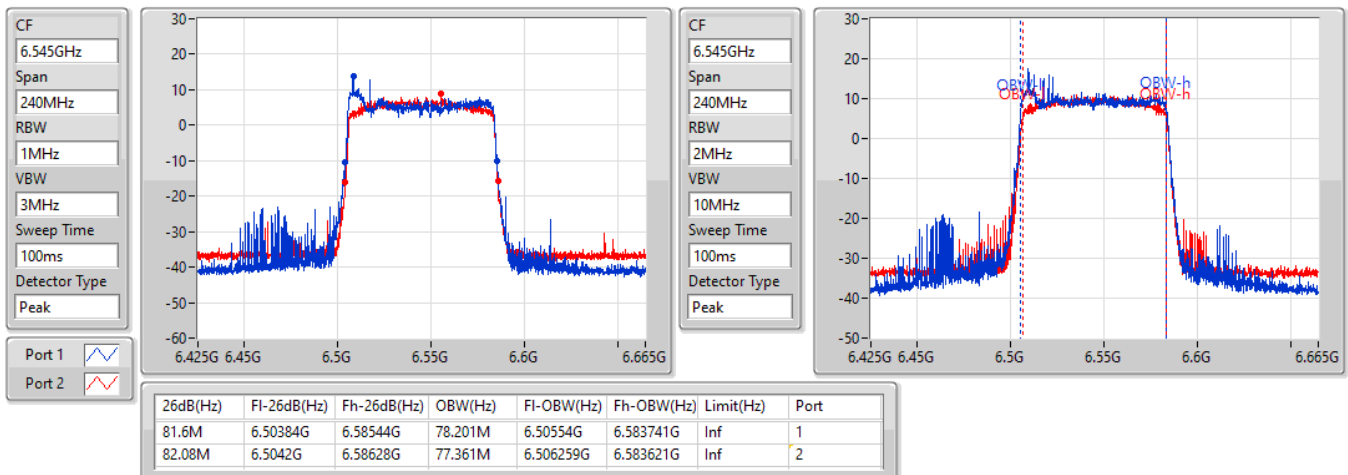


802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6465MHz

10/12/2021

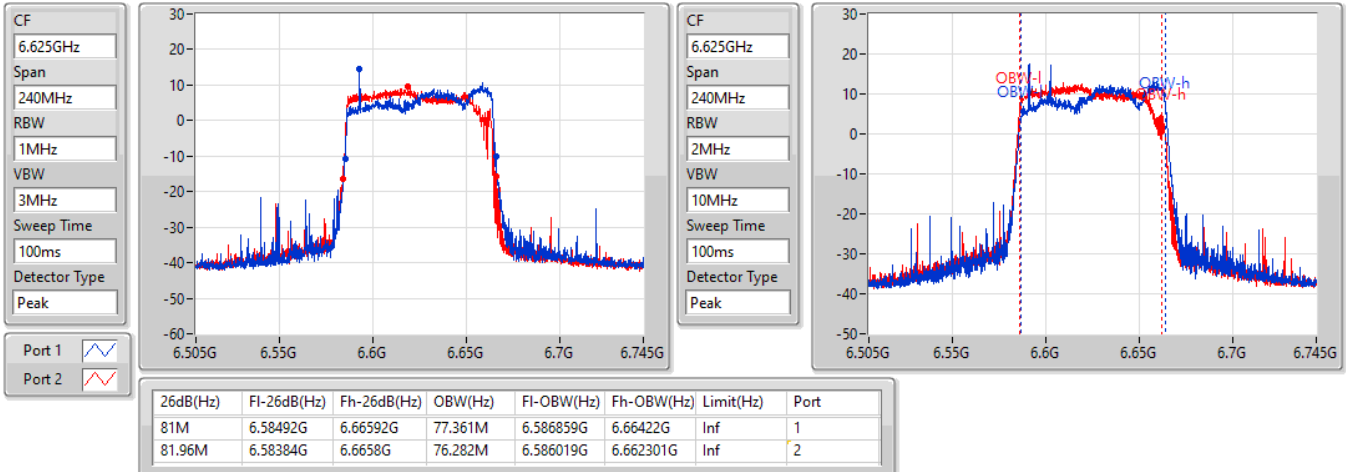

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6545MHz Straddle 6.425-6.525GHz

10/12/2021

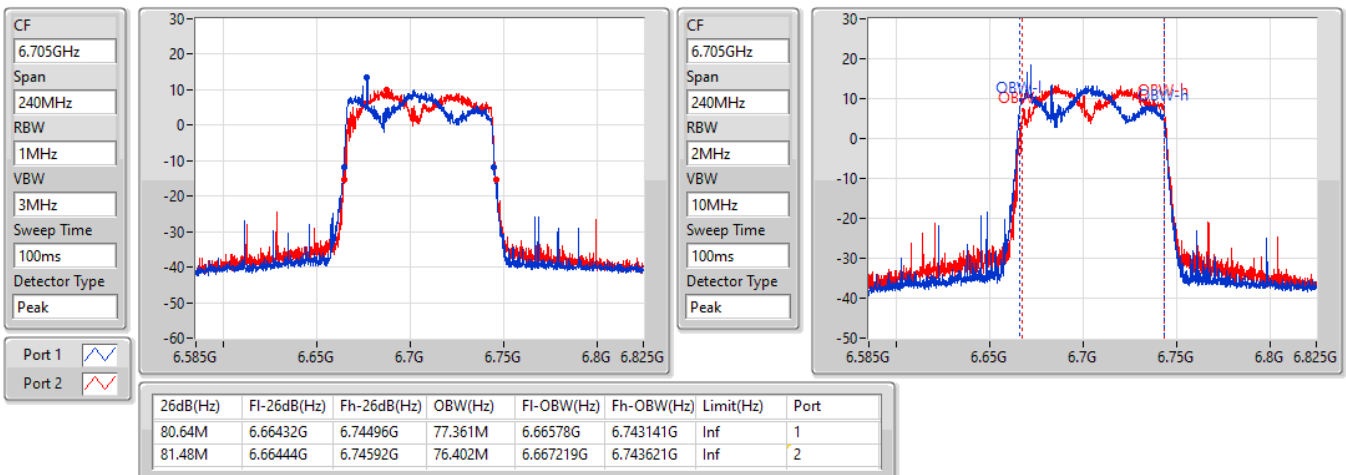


802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6625MHz

10/12/2021

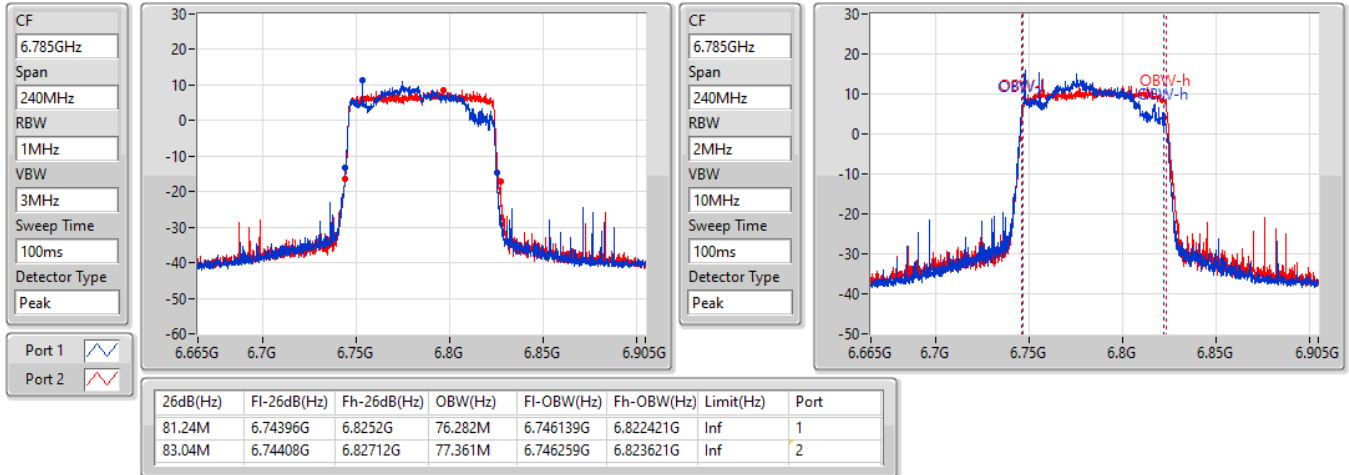

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6705MHz

10/12/2021

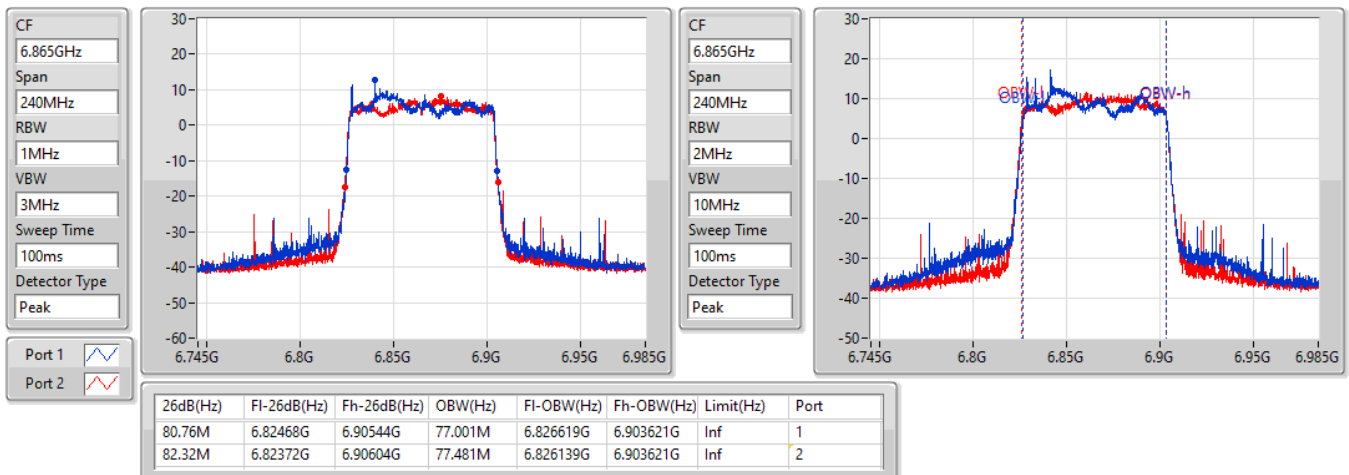


802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6785MHz

10/12/2021

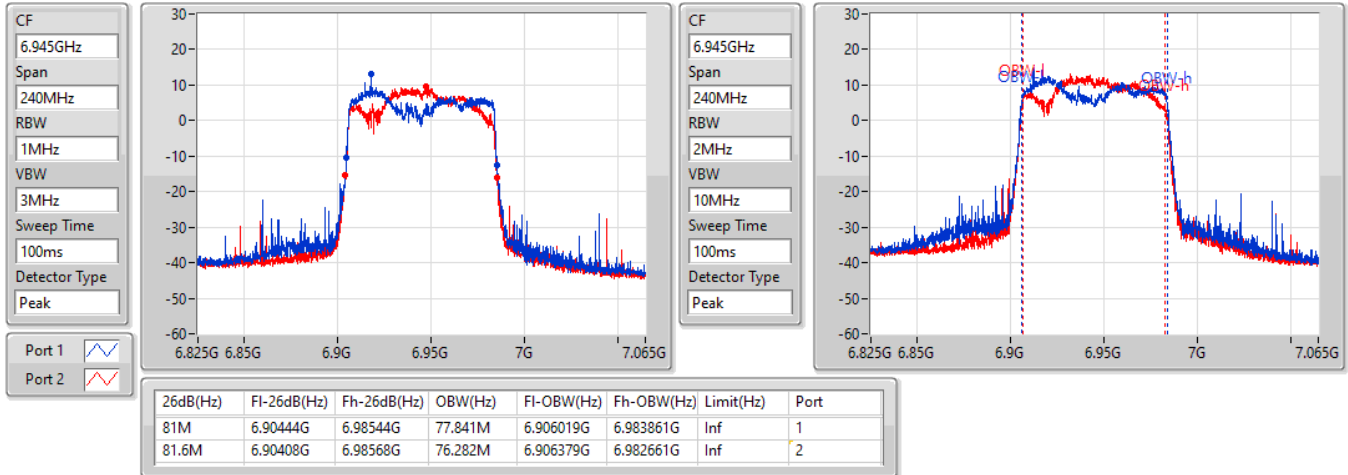

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6865MHz Straddle 6.525-6.875GHz

10/12/2021

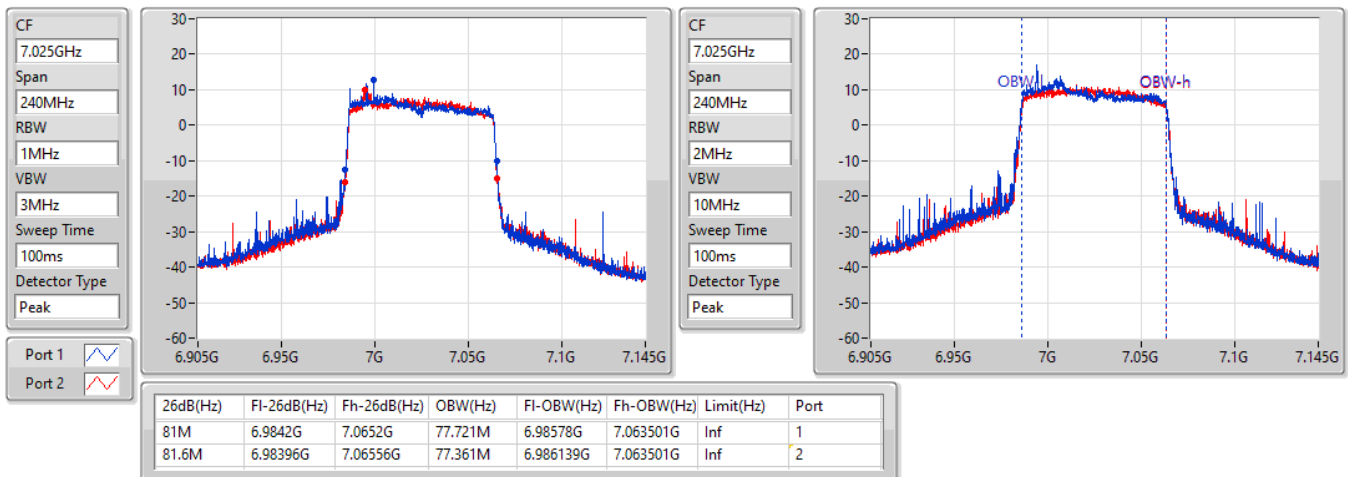


802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
6945MHz

10/12/2021

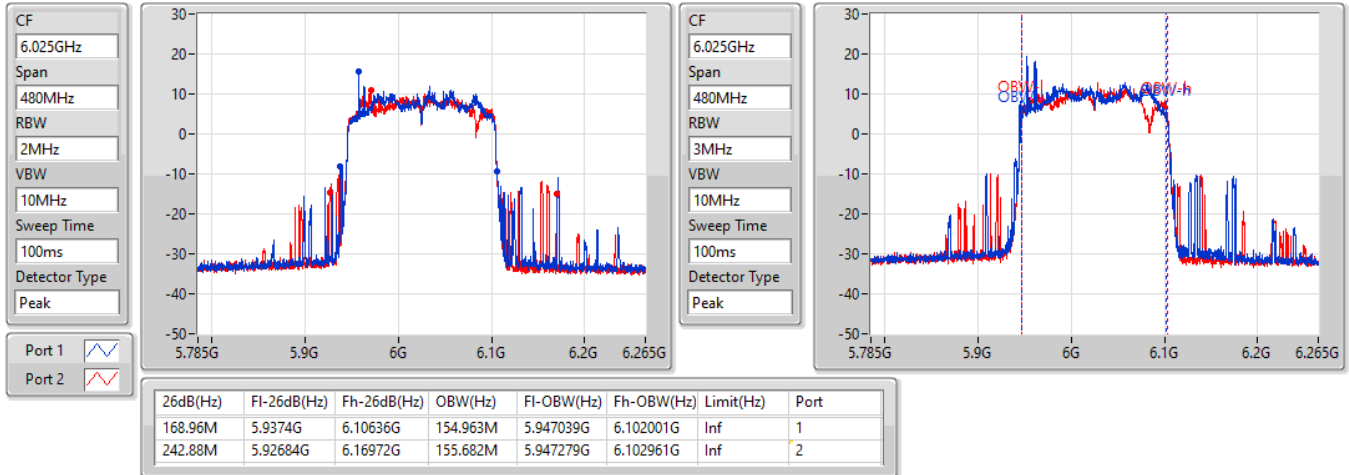

802.11ax HEW80-BF_Nss1,(MCS3)_2TX
EBW
7025MHz

10/12/2021

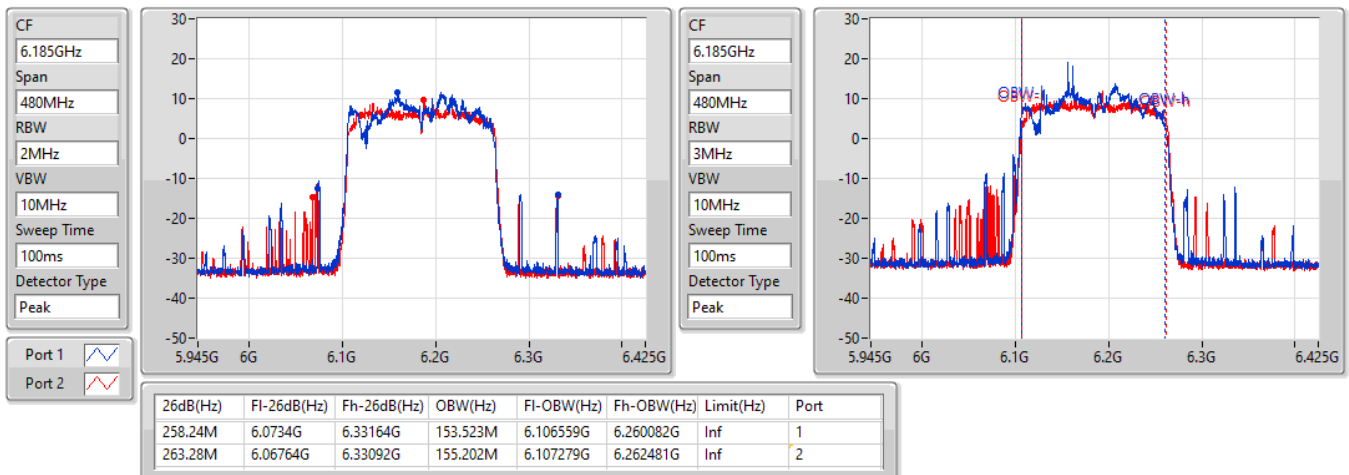


802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6025MHz

10/12/2021

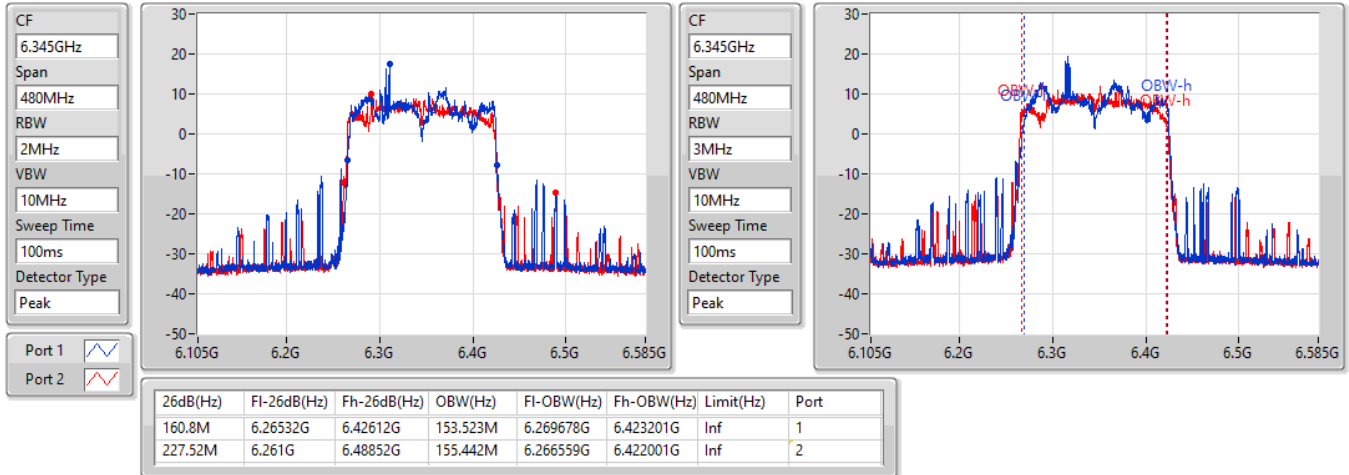

802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6185MHz

10/12/2021

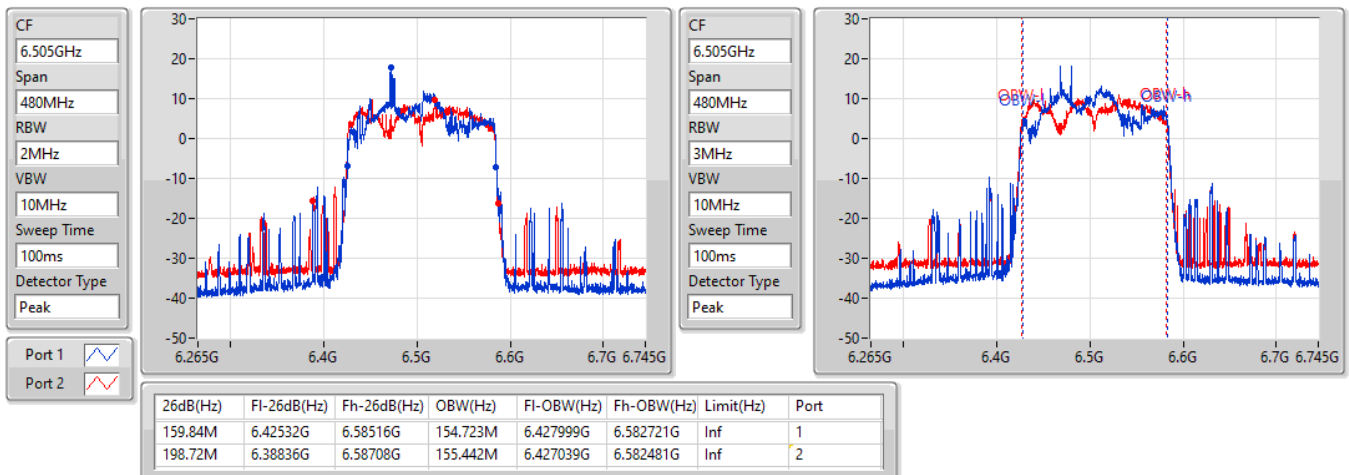


802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6345MHz

10/12/2021

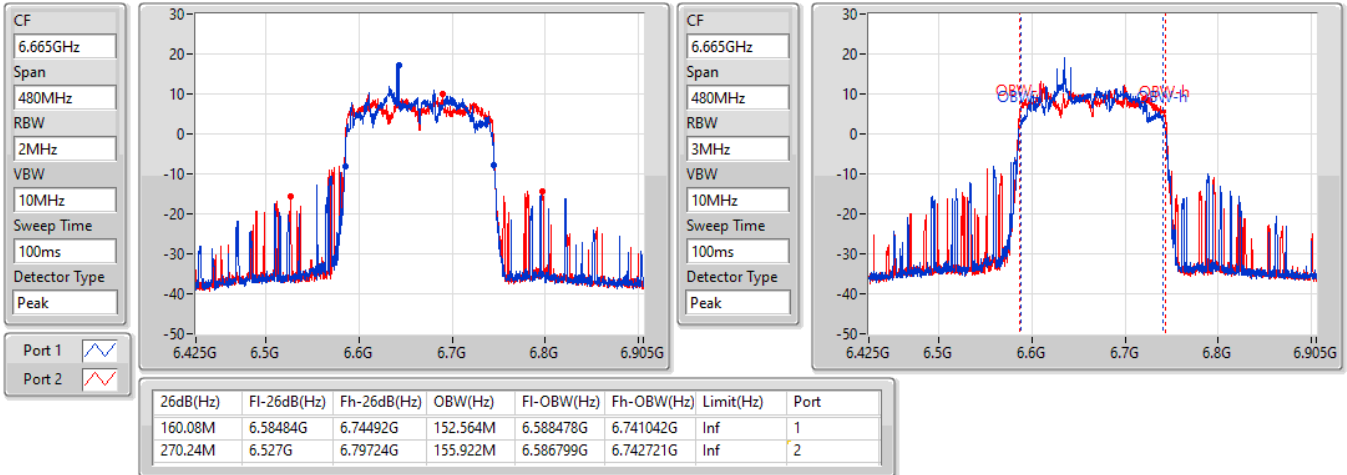

802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6505MHz Straddle 6.425-6.525GHz

10/12/2021

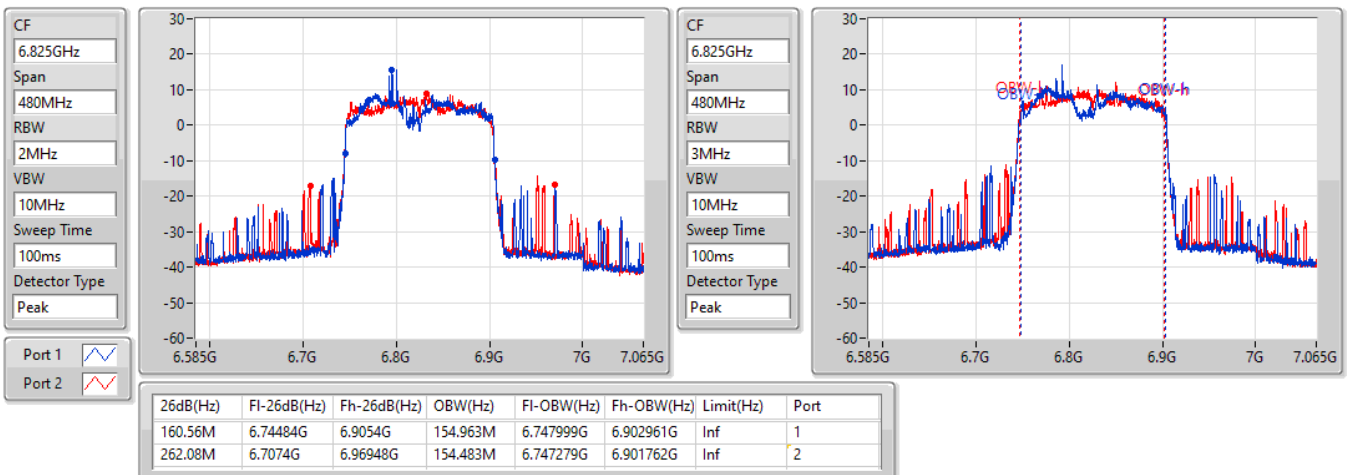


802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6665MHz

10/12/2021


802.11ax HEW160-BF_Nss1,(MCS3)_2TX
EBW
6825MHz Straddle 6.525-6.875GHz

10/12/2021

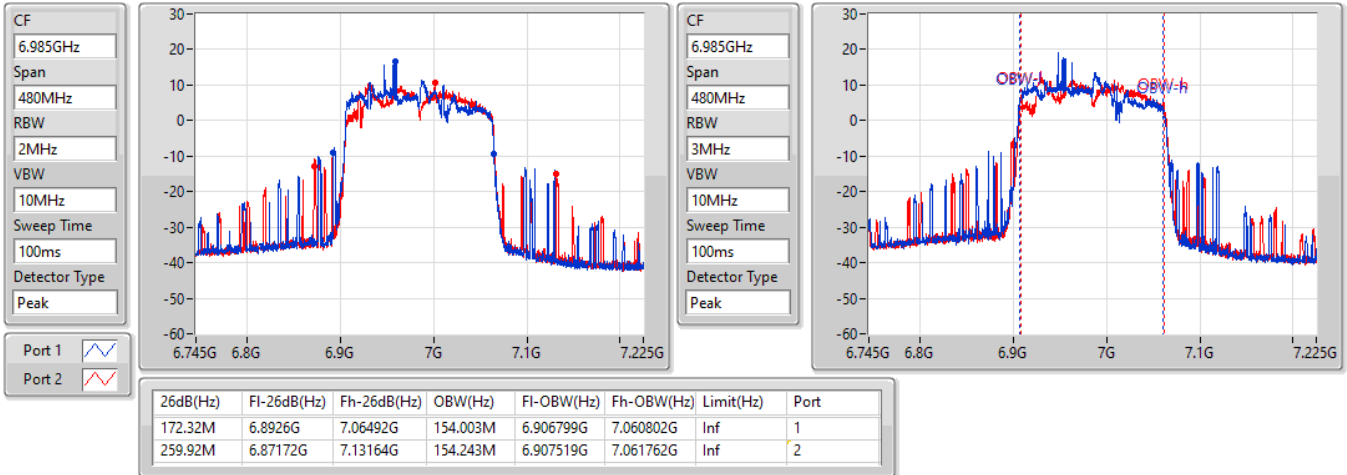


802.11ax HEW160-BF_Nss1,(MCS3)_2TX

EBW

6985MHz

10/12/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.38M	19.19M	19M2D1D	21.54M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.68M	37.901M	37M9D1D	40.32M	37.841M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.56M	77.481M	77M5D1D	82.08M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	164.16M	154.963M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.35M	19.16M	19M2D1D	21.6M	19.07M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.86M	37.961M	38M0D1D	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.8M	77.601M	77M6D1D	81.72M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.84M	155.202M	155MD1D	164.4M	154.963M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.23M	19.19M	19M2D1D	21.75M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.74M	37.901M	37M9D1D	40.2M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.56M	77.601M	77M6D1D	81.84M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	163.92M	154.243M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_4TX	22.26M	19.16M	19M2D1D	21.66M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.74M	37.901M	37M9D1D	40.2M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.32M	77.481M	77M5D1D	81.48M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.6M	155.202M	155MD1D	164.16M	154.723M

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

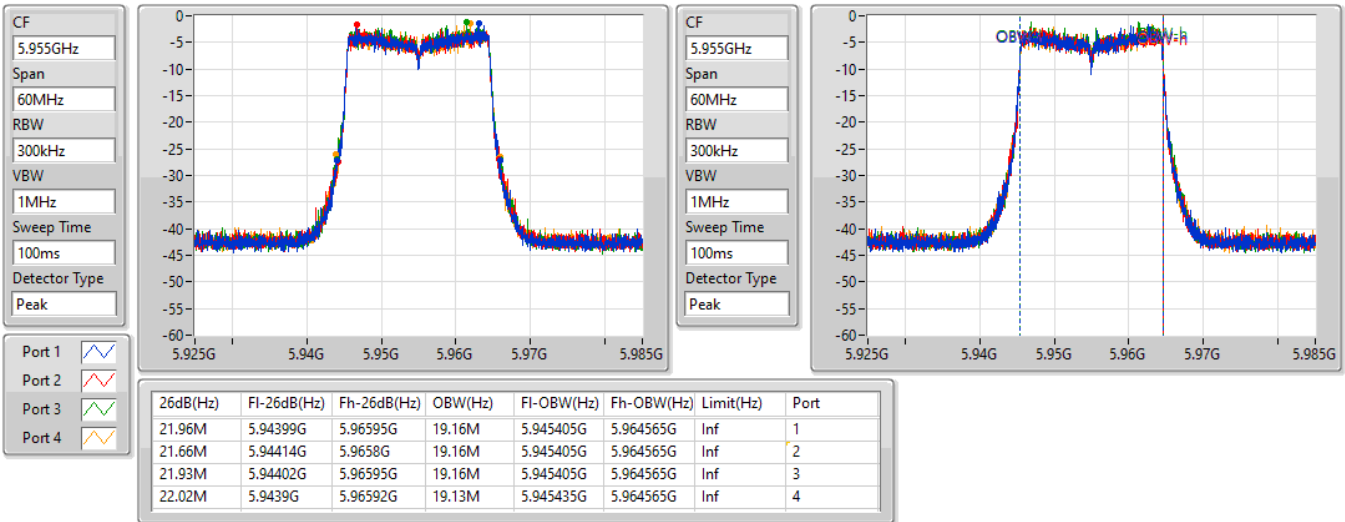
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	21.96M	19.16M	21.66M	19.16M	21.93M	19.16M	22.02M	19.13M
6175MHz	Pass	Inf	21.93M	19.13M	21.87M	19.19M	22.08M	19.13M	21.96M	19.13M
6415MHz	Pass	Inf	22.38M	19.13M	21.99M	19.13M	21.54M	19.13M	21.81M	19.1M
6435MHz	Pass	Inf	22.11M	19.13M	22.35M	19.16M	21.93M	19.1M	21.78M	19.13M
6475MHz	Pass	Inf	21.99M	19.07M	21.9M	19.16M	21.6M	19.13M	22.29M	19.13M
6515MHz	Pass	Inf	21.99M	19.13M	21.96M	19.16M	22.05M	19.16M	21.84M	19.13M
6535MHz	Pass	Inf	21.96M	19.1M	21.84M	19.19M	22.11M	19.13M	21.81M	19.13M
6695MHz	Pass	Inf	21.75M	19.13M	22.05M	19.13M	22.2M	19.13M	22.08M	19.13M
6855MHz	Pass	Inf	21.9M	19.1M	22.11M	19.13M	21.81M	19.16M	21.99M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	21.96M	19.13M	22.11M	19.16M	21.99M	19.13M	22.23M	19.13M
6895MHz	Pass	Inf	21.99M	19.13M	22.08M	19.13M	21.87M	19.13M	22.26M	19.16M
6995MHz	Pass	Inf	21.75M	19.16M	22.11M	19.16M	22.14M	19.1M	21.81M	19.13M
7095MHz	Pass	Inf	21.99M	19.13M	22.11M	19.16M	21.96M	19.1M	22.2M	19.16M
7115MHz	Pass	Inf	21.66M	19.1M	21.99M	19.13M	21.96M	19.1M	22.08M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	40.62M	37.841M	40.5M	37.901M	40.38M	37.901M	40.32M	37.901M
6165MHz	Pass	Inf	40.62M	37.841M	40.62M	37.841M	40.32M	37.901M	40.68M	37.841M
6405MHz	Pass	Inf	40.5M	37.841M	40.68M	37.901M	40.68M	37.901M	40.68M	37.841M
6445MHz	Pass	Inf	40.32M	37.781M	40.86M	37.901M	40.62M	37.841M	40.44M	37.961M
6485MHz	Pass	Inf	40.56M	37.901M	40.26M	37.841M	40.44M	37.841M	40.26M	37.901M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	40.32M	37.841M	40.56M	37.781M	40.32M	37.901M	40.32M	37.901M
6565MHz	Pass	Inf	40.56M	37.781M	40.74M	37.901M	40.38M	37.901M	40.26M	37.901M
6685MHz	Pass	Inf	40.56M	37.841M	40.2M	37.781M	40.38M	37.901M	40.38M	37.901M
6845MHz	Pass	Inf	40.38M	37.841M	40.38M	37.841M	40.68M	37.841M	40.62M	37.901M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.5M	37.841M	40.26M	37.841M	40.44M	37.841M	40.26M	37.841M
6925MHz	Pass	Inf	40.74M	37.841M	40.5M	37.901M	40.56M	37.901M	40.44M	37.781M
7005MHz	Pass	Inf	40.44M	37.781M	40.68M	37.841M	40.32M	37.841M	40.44M	37.841M
7085MHz	Pass	Inf	40.5M	37.841M	40.56M	37.781M	40.2M	37.841M	40.44M	37.841M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	82.2M	77.361M	82.56M	77.361M	82.2M	77.361M	82.32M	77.361M
6145MHz	Pass	Inf	82.56M	77.241M	82.44M	77.361M	82.2M	77.361M	82.56M	77.481M
6385MHz	Pass	Inf	82.08M	77.481M	82.44M	77.361M	82.44M	77.361M	82.32M	77.361M
6465MHz	Pass	Inf	81.96M	77.481M	82.8M	77.361M	82.44M	77.601M	81.96M	77.481M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	82.32M	77.361M	82.32M	77.361M	82.56M	77.361M	81.72M	77.361M
6625MHz	Pass	Inf	82.2M	77.241M	82.08M	77.361M	82.44M	77.361M	81.96M	77.241M
6705MHz	Pass	Inf	82.2M	77.361M	82.56M	77.481M	81.84M	77.361M	82.2M	77.361M
6785MHz	Pass	Inf	81.96M	77.241M	82.32M	77.601M	82.08M	77.241M	82.2M	77.241M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	82.32M	77.361M	82.44M	77.481M	82.08M	77.481M	82.2M	77.361M
6945MHz	Pass	Inf	82.32M	77.481M	82.32M	77.481M	82.32M	77.481M	82.08M	77.241M
7025MHz	Pass	Inf	82.32M	77.241M	82.32M	77.241M	81.48M	77.241M	81.84M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	164.4M	155.202M	164.4M	154.963M	164.16M	154.963M	164.88M	154.963M
6185MHz	Pass	Inf	164.88M	155.442M	165.12M	155.442M	164.4M	155.202M	164.88M	155.202M
6345MHz	Pass	Inf	164.4M	155.202M	164.16M	154.963M	164.88M	155.442M	165.12M	155.202M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	165.84M	155.202M	165.12M	154.963M	164.88M	155.202M	164.4M	155.202M
6665MHz	Pass	Inf	164.64M	154.963M	164.88M	155.202M	164.64M	154.243M	164.88M	155.202M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	165.12M	155.202M	165.12M	155.202M	163.92M	155.442M	164.64M	155.202M
6985MHz	Pass	Inf	165.6M	155.202M	165.36M	154.723M	164.64M	155.202M	164.16M	155.202M

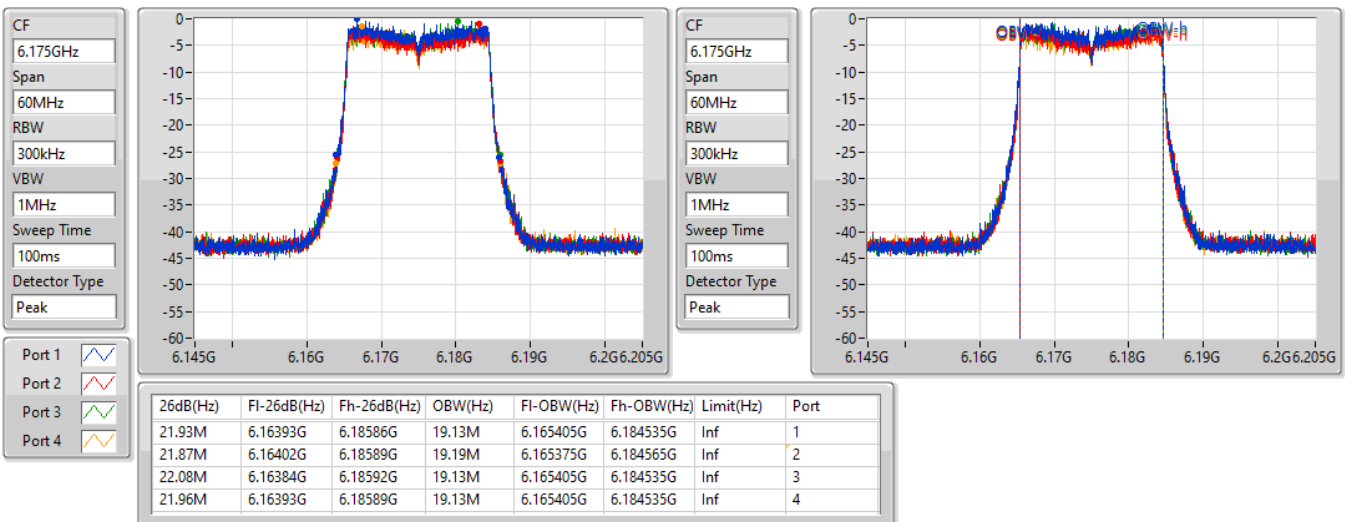
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5955MHz

18/11/2021

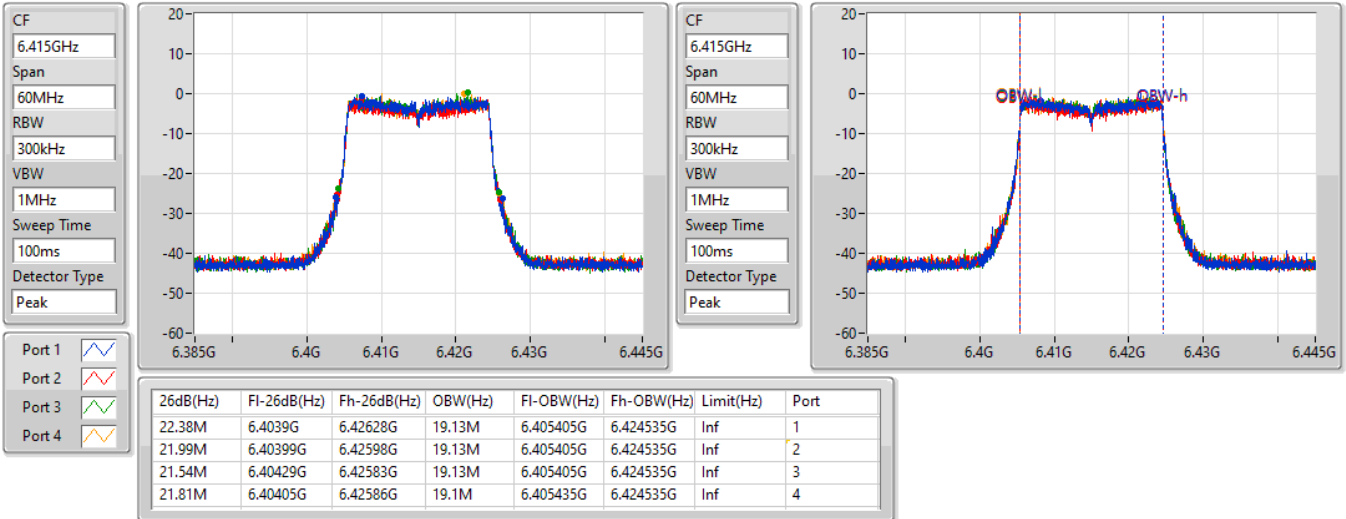

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6175MHz

18/11/2021

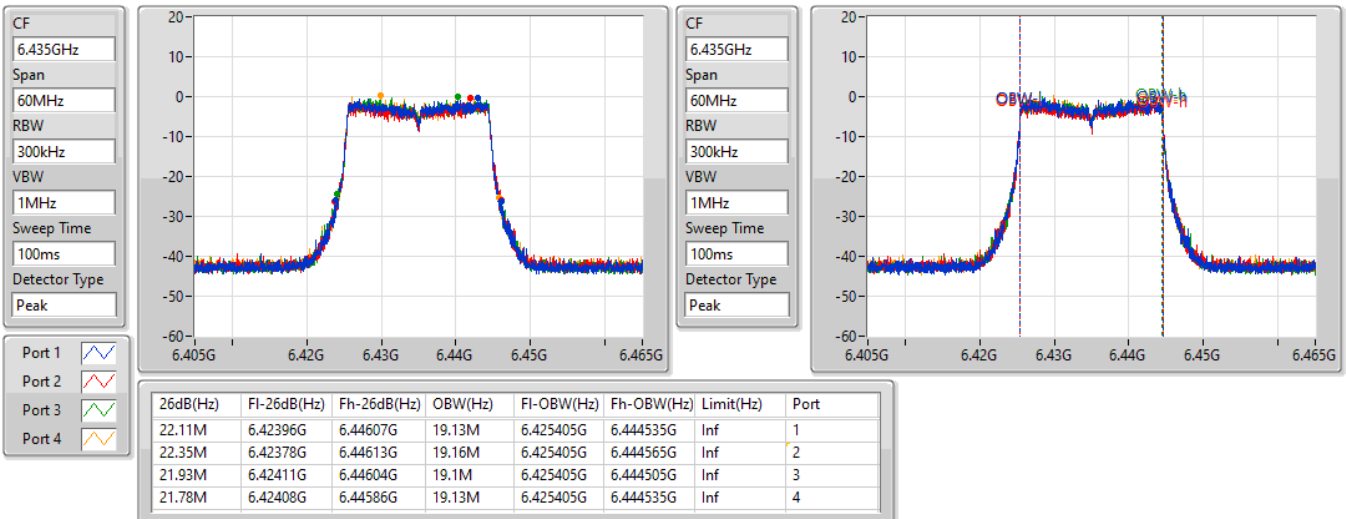


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6415MHz

18/11/2021

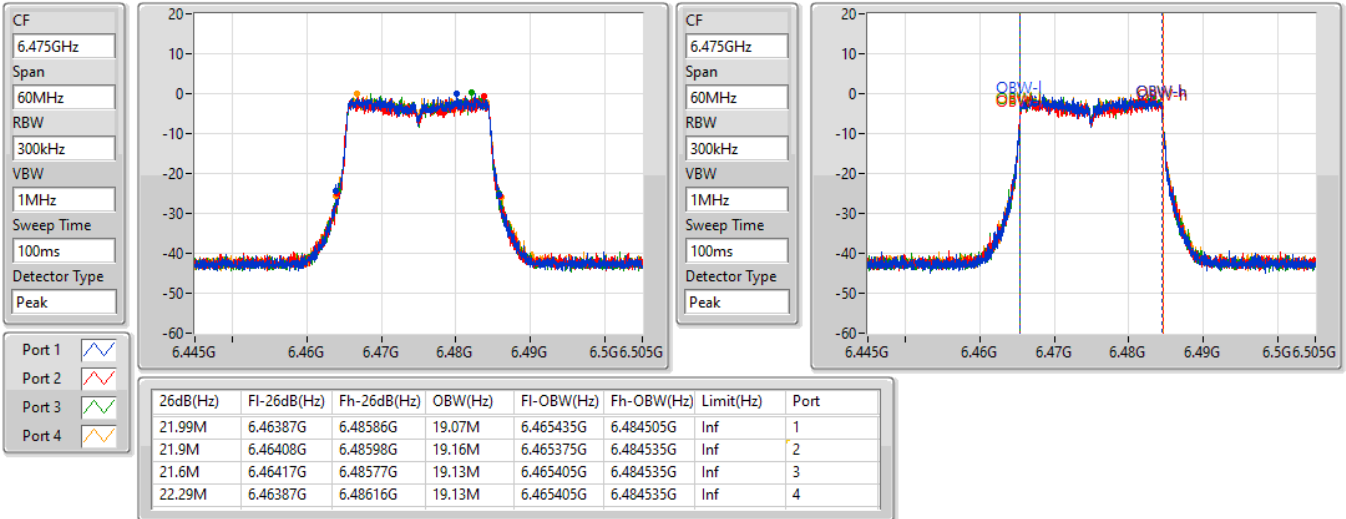

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6435MHz

18/11/2021

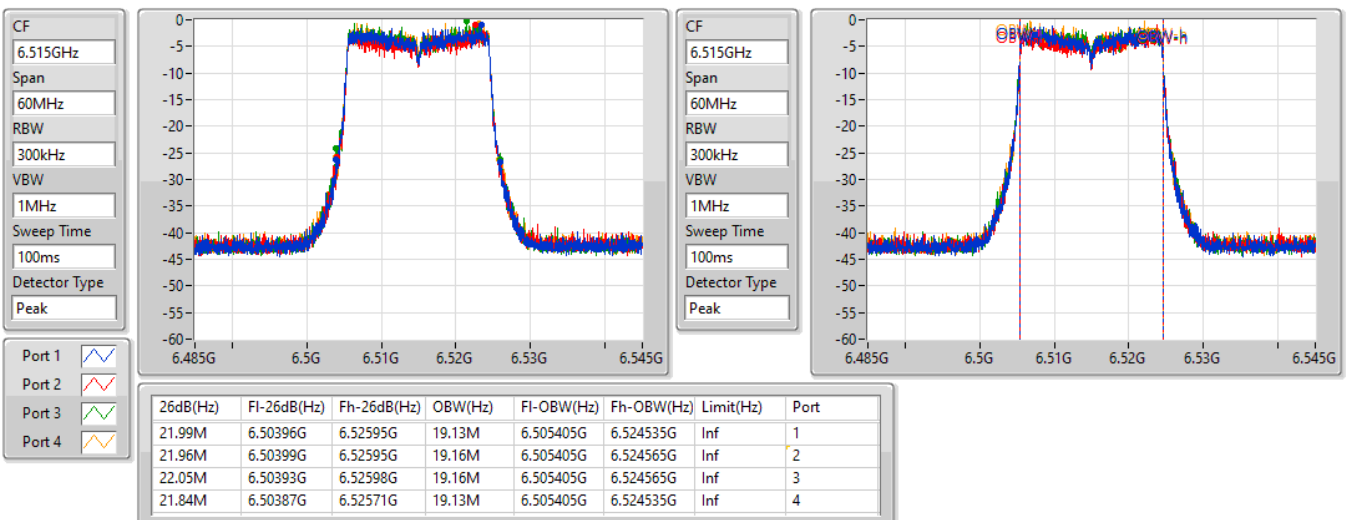


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6475MHz

18/11/2021

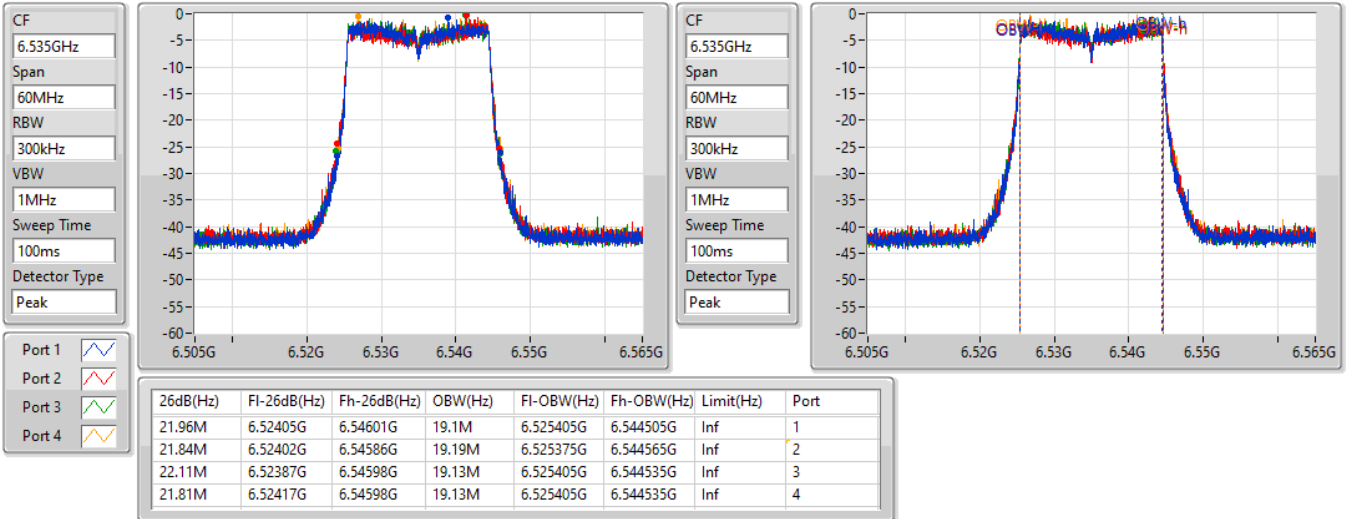

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6515MHz

18/11/2021

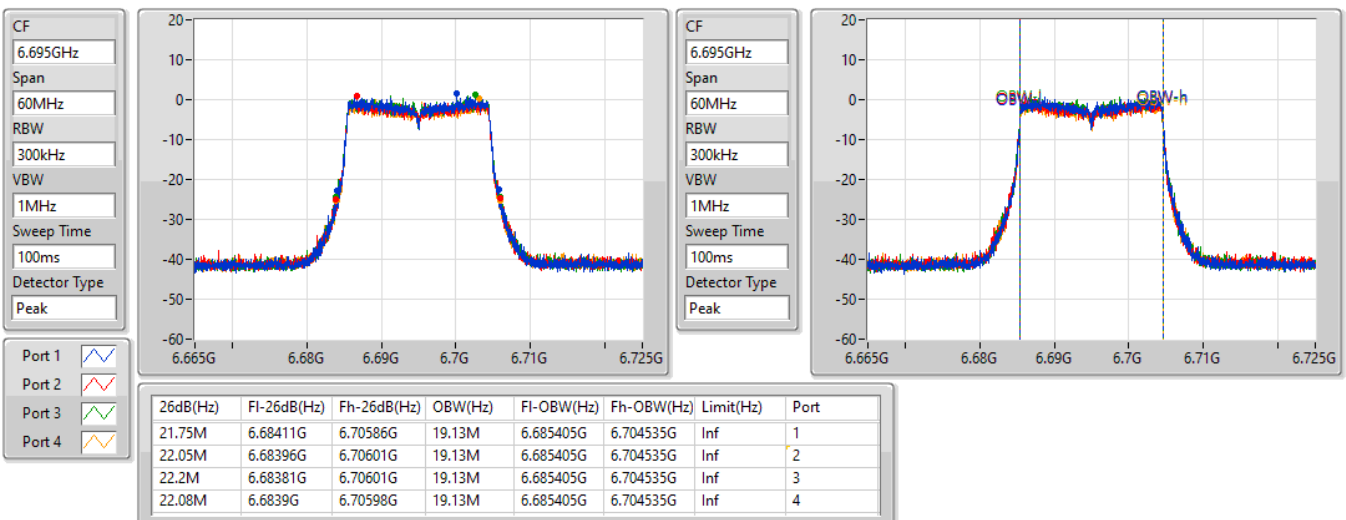


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6535MHz

18/11/2021

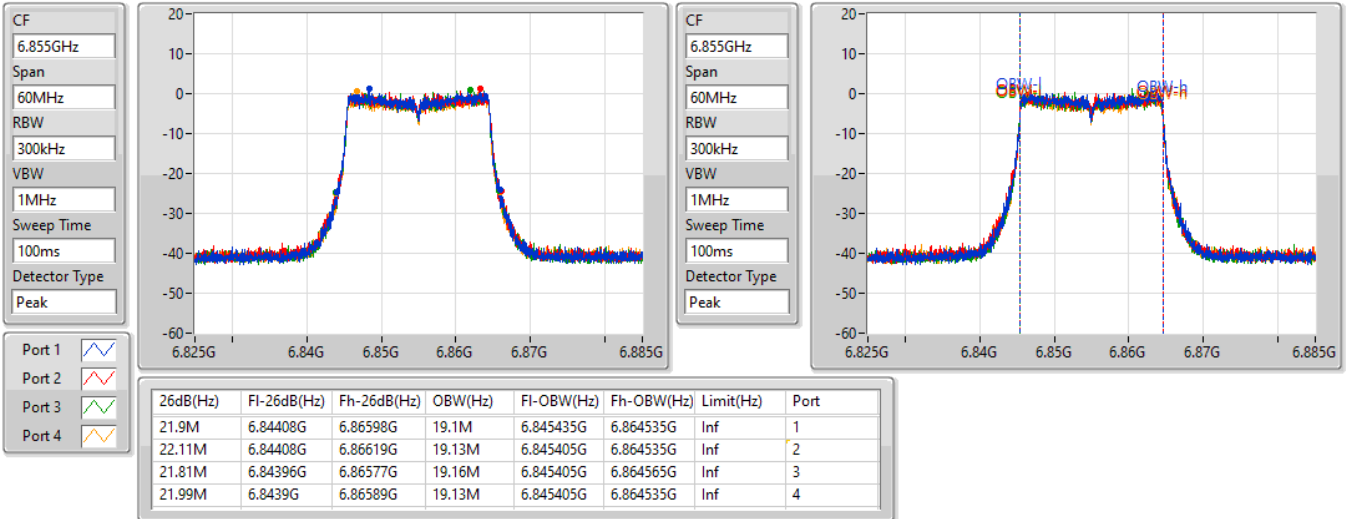

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6695MHz

18/11/2021

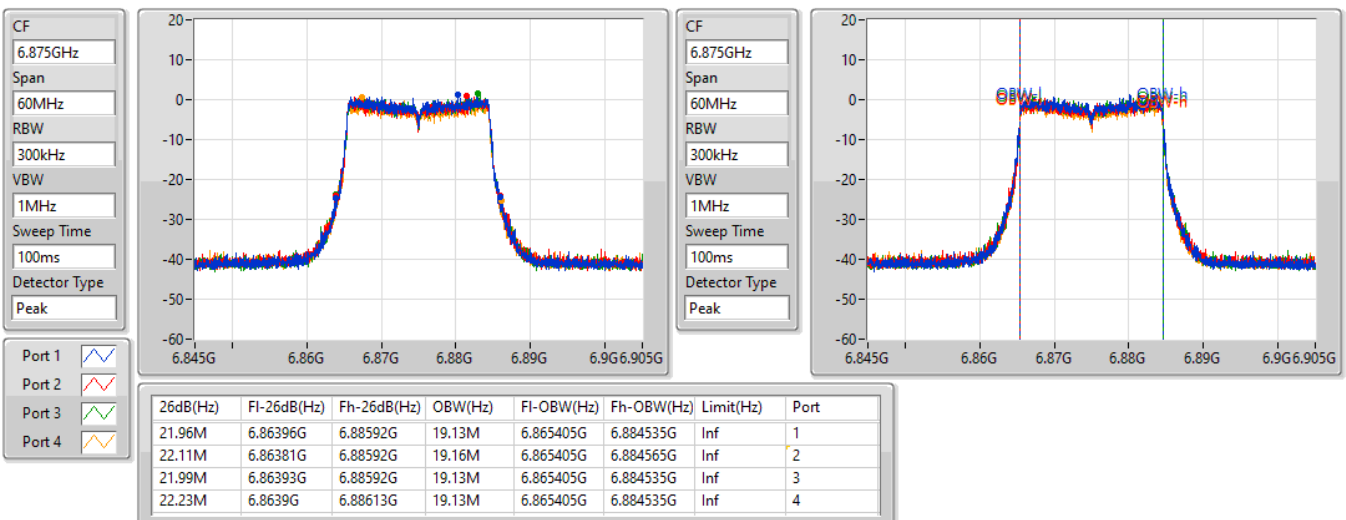


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6855MHz

18/11/2021

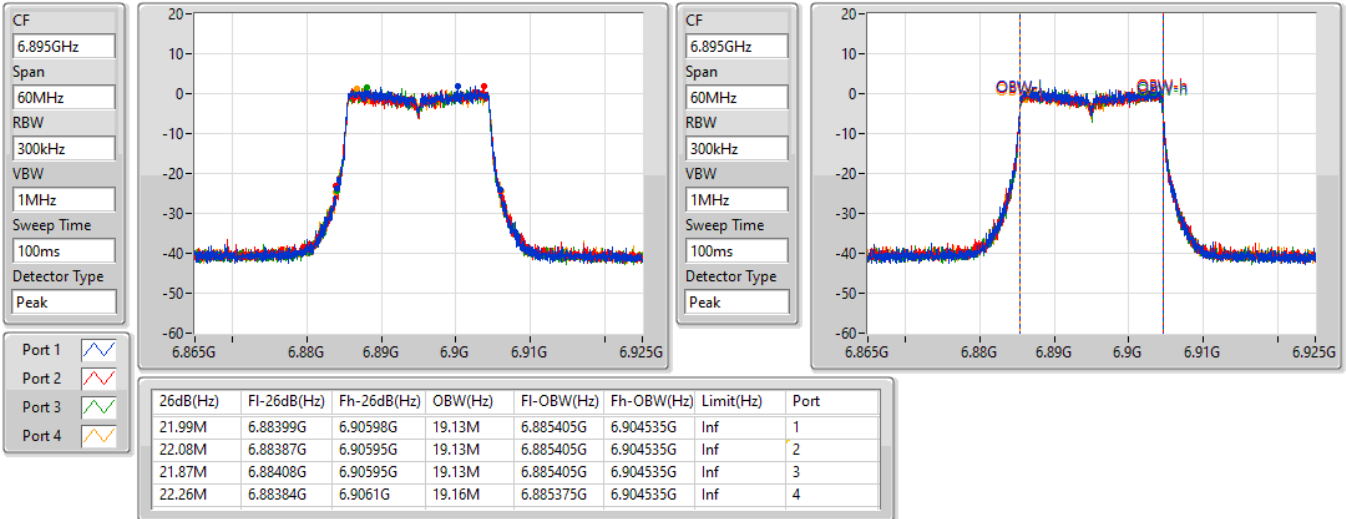

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6875MHz Straddle 6.525-6.875GHz

18/11/2021

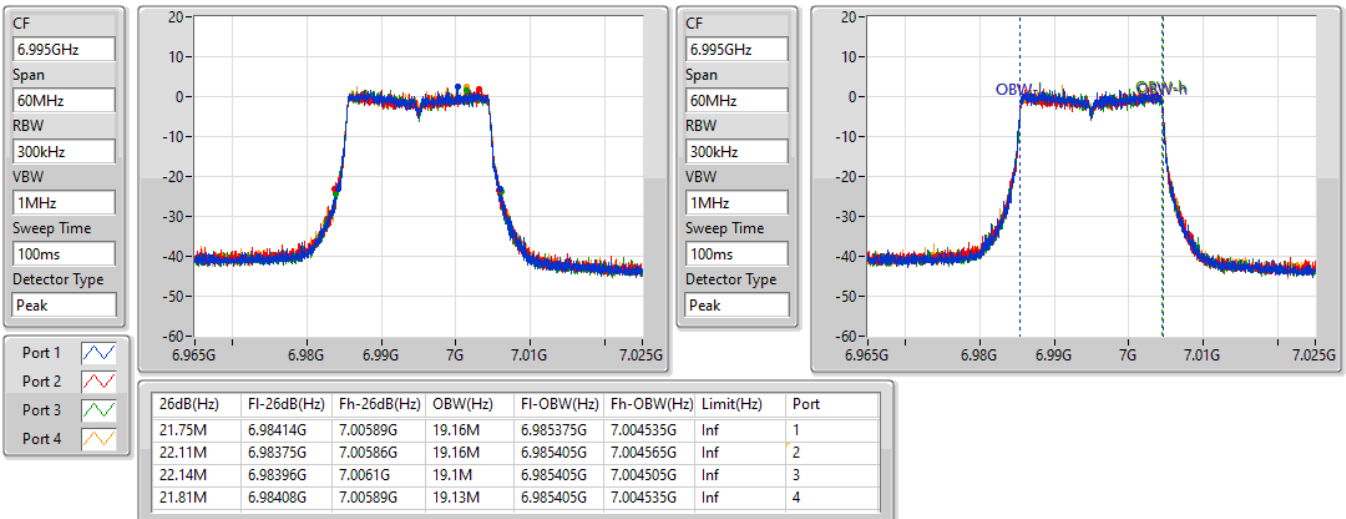


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6895MHz

18/11/2021

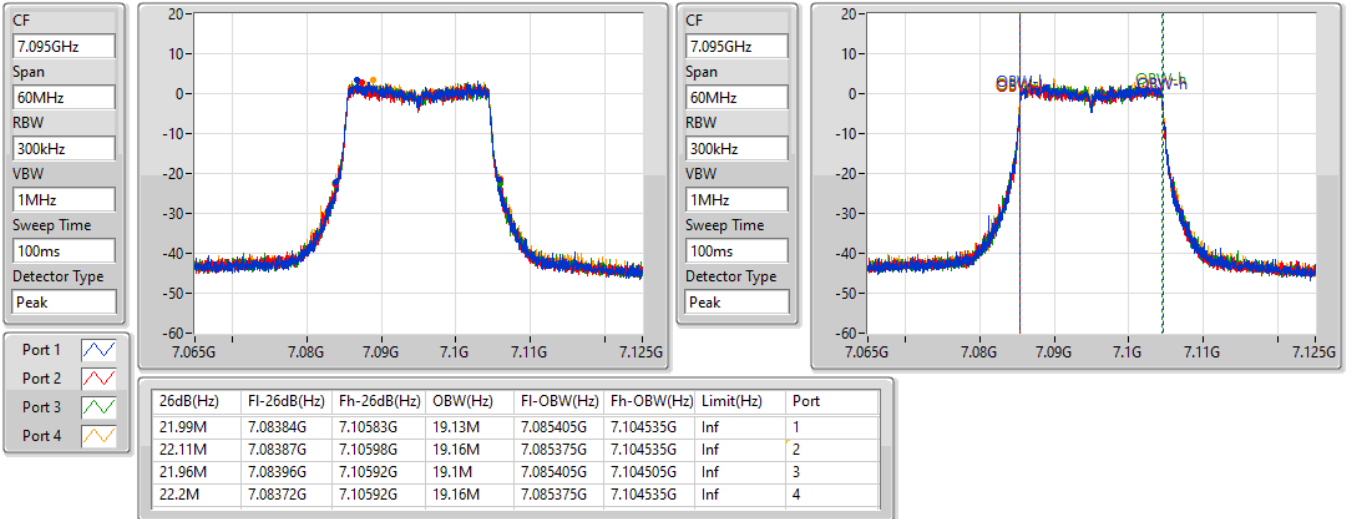

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
6995MHz

18/11/2021

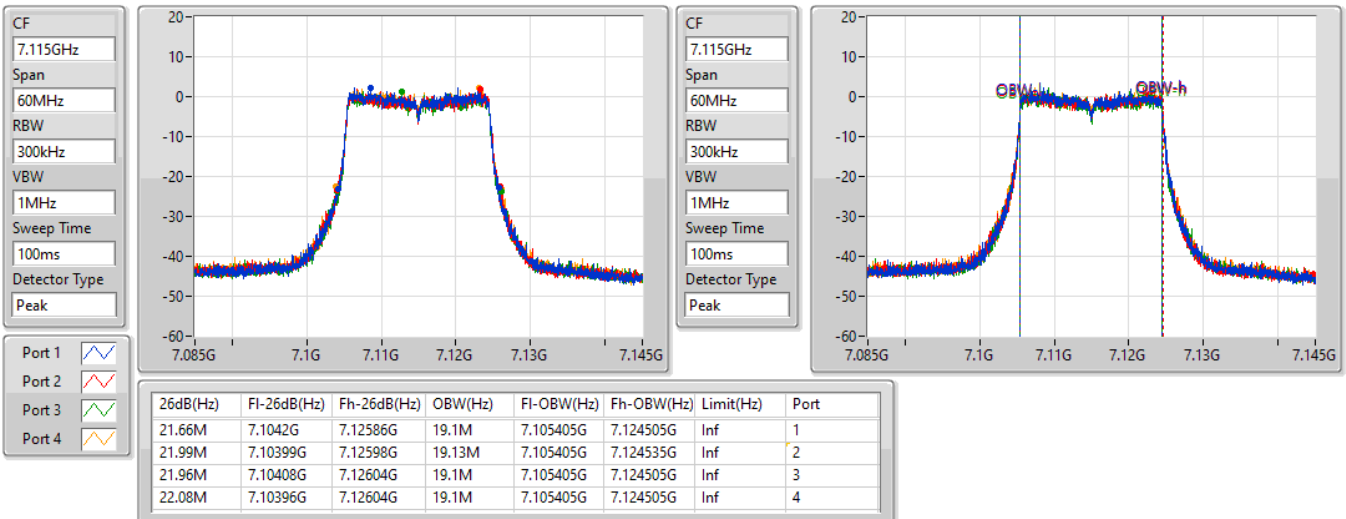


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
7095MHz

18/11/2021

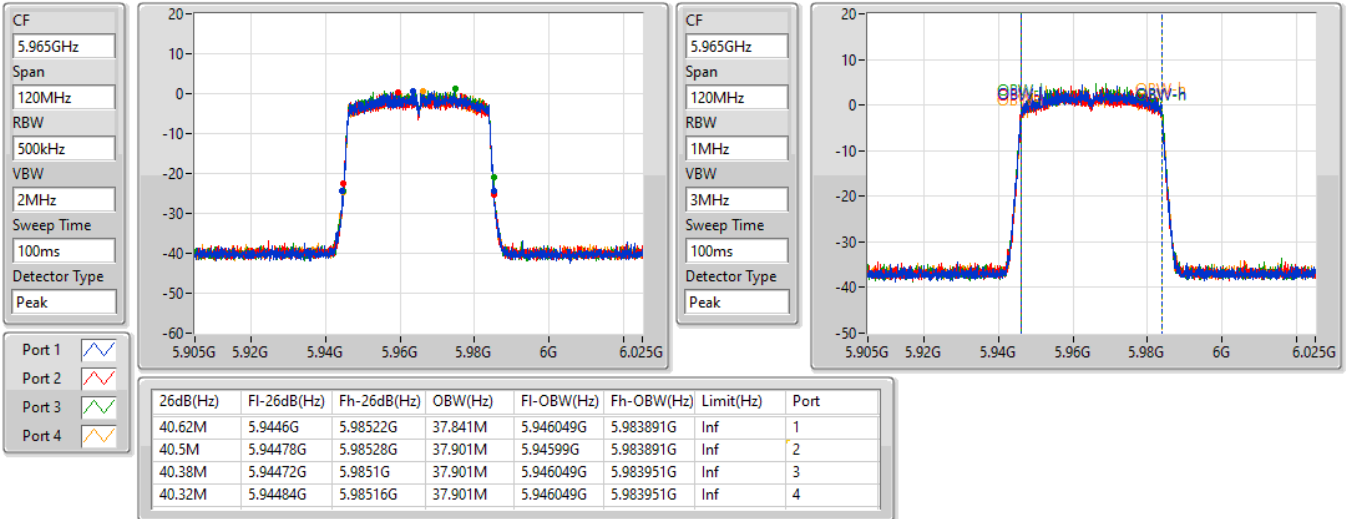

802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
7115MHz

18/11/2021

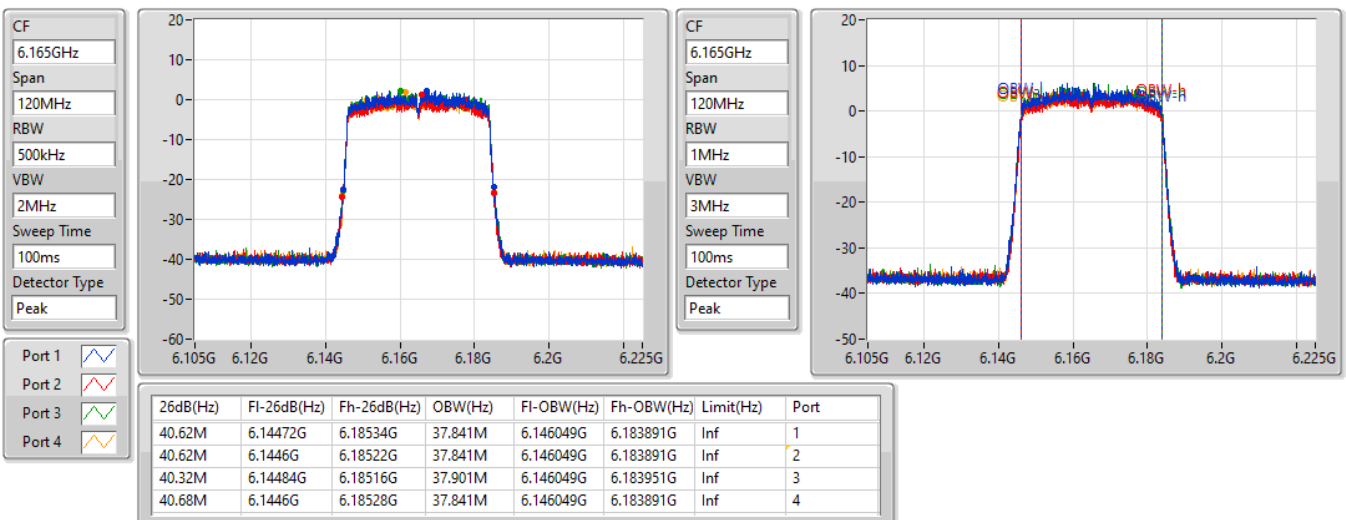


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5965MHz

18/11/2021

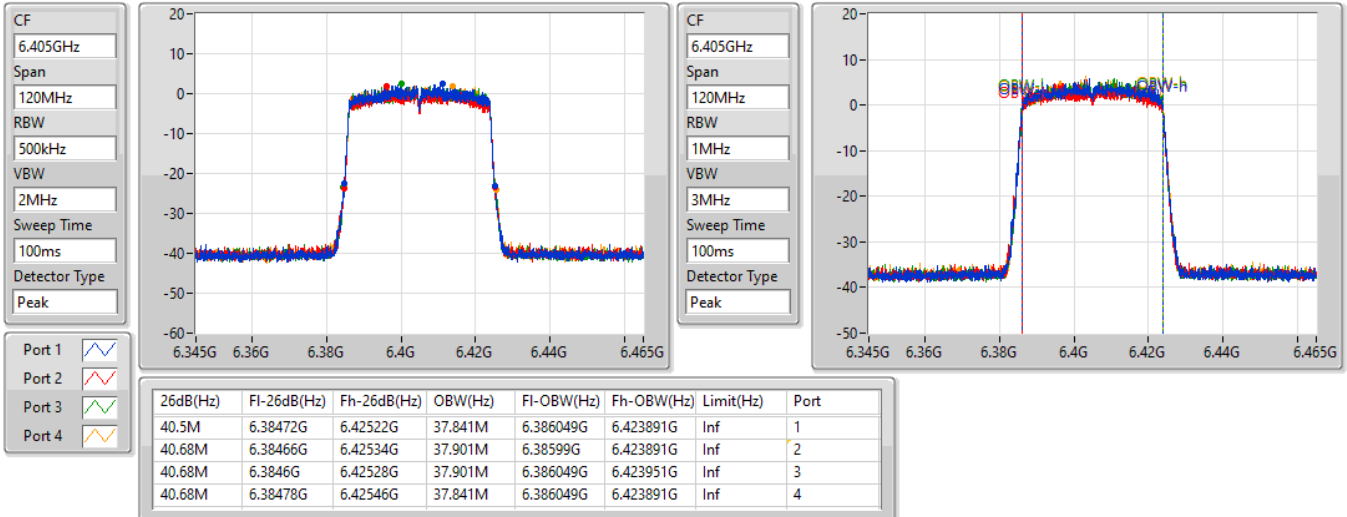

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6165MHz

18/11/2021

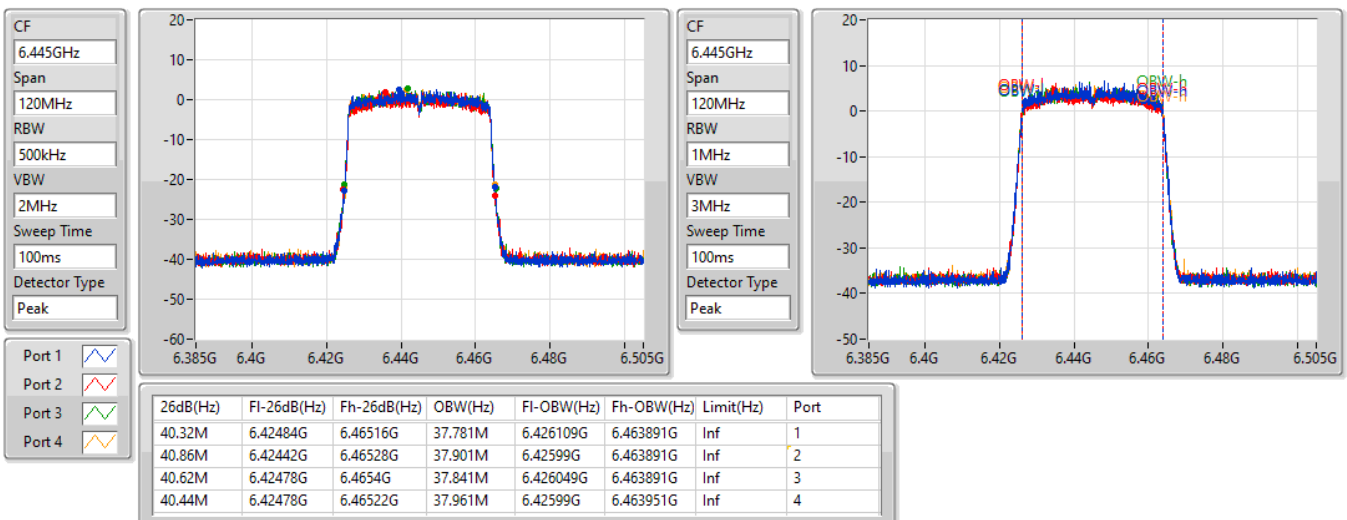


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6405MHz

18/11/2021

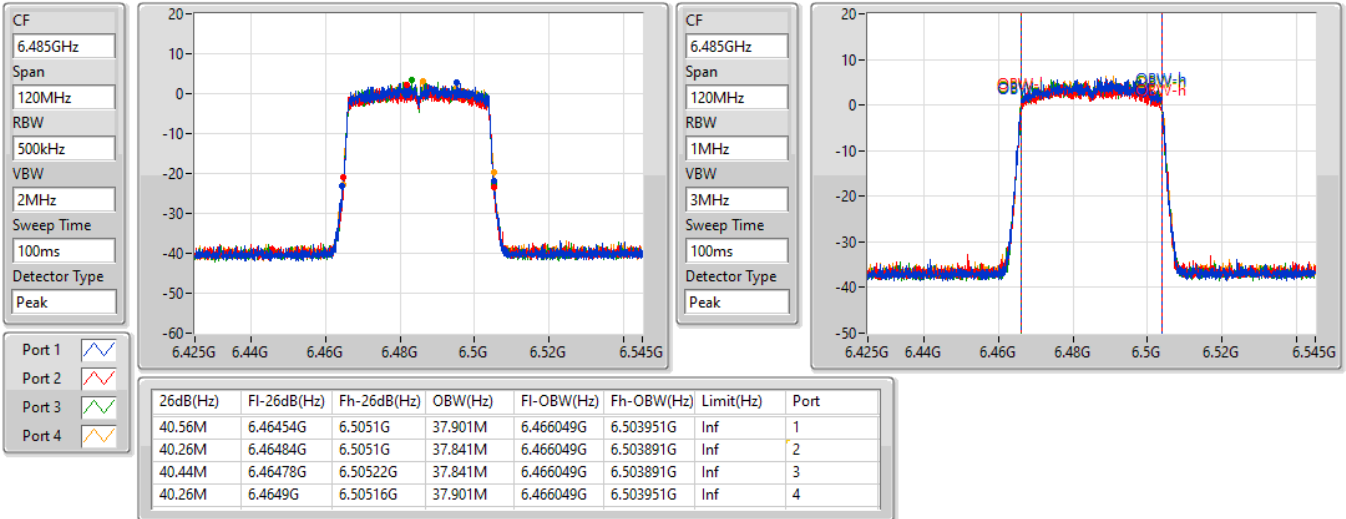

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6445MHz

18/11/2021

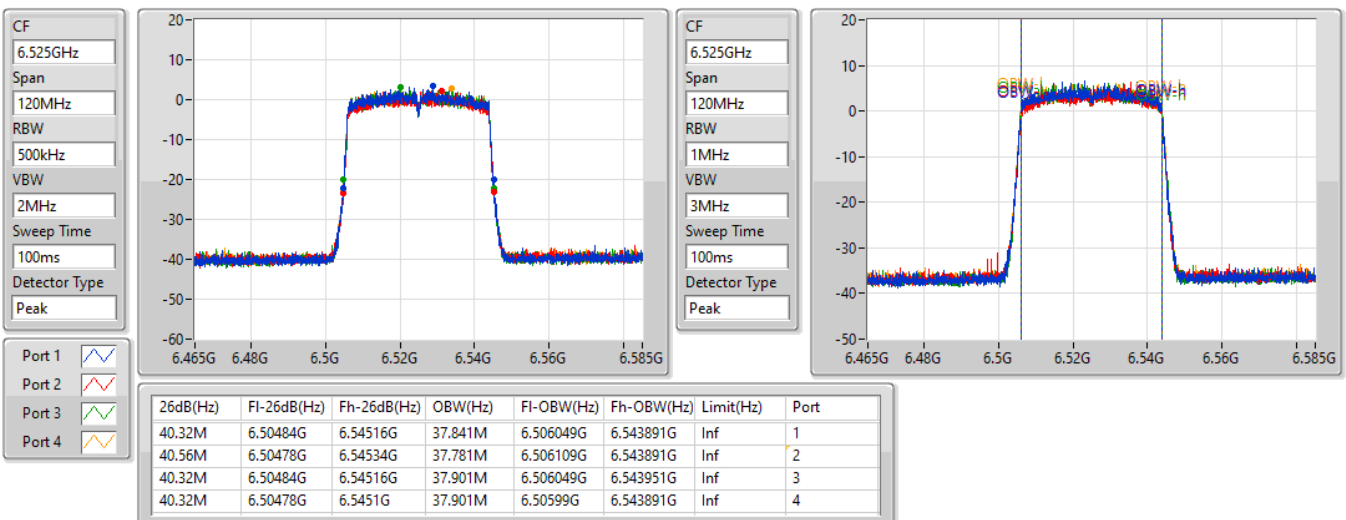


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6485MHz

18/11/2021

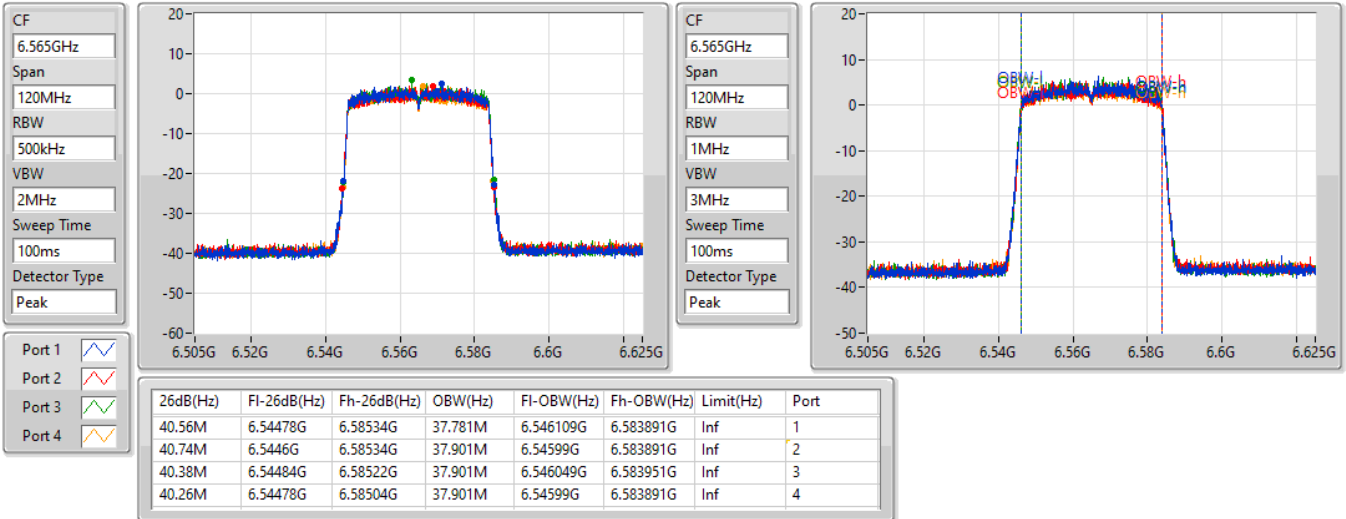

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6525MHz Straddle 6.425-6.525GHz

18/11/2021

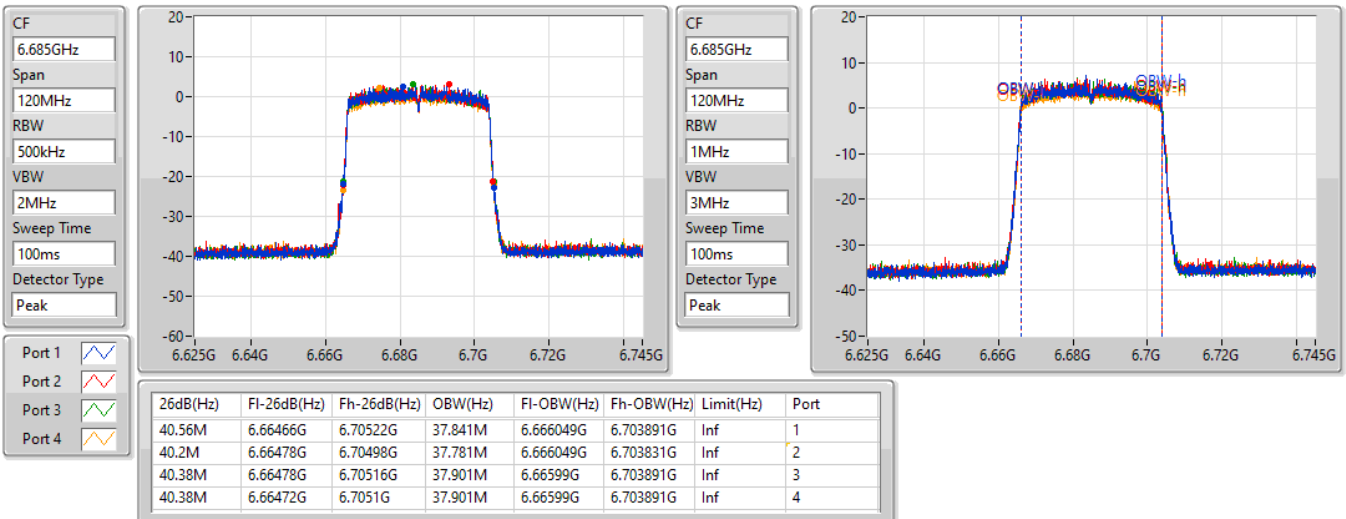


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6565MHz

18/11/2021

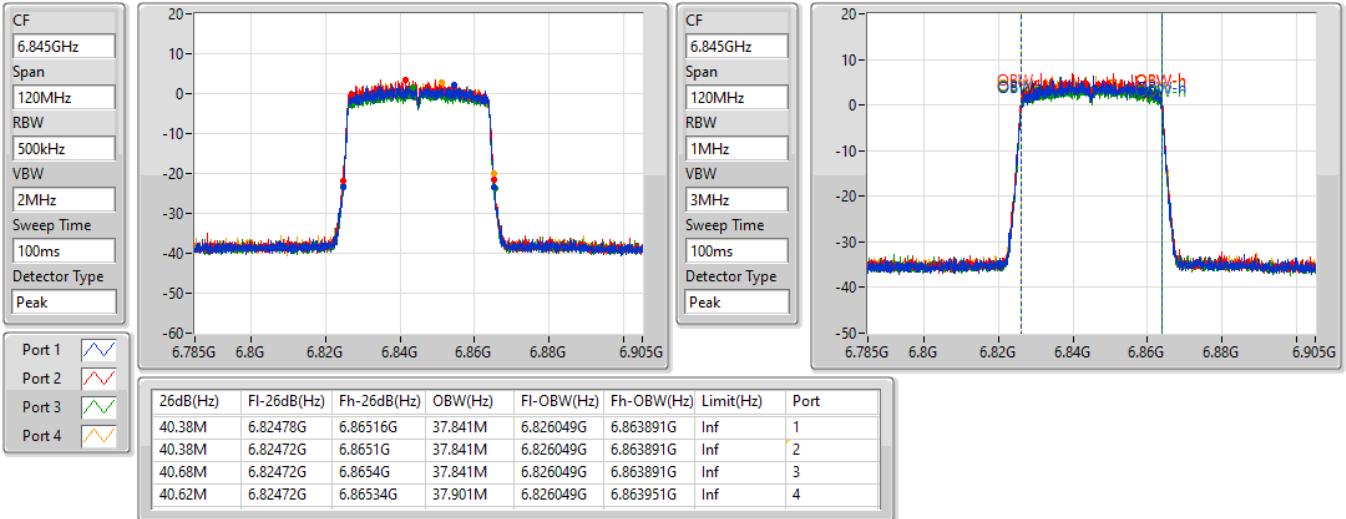

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6685MHz

18/11/2021

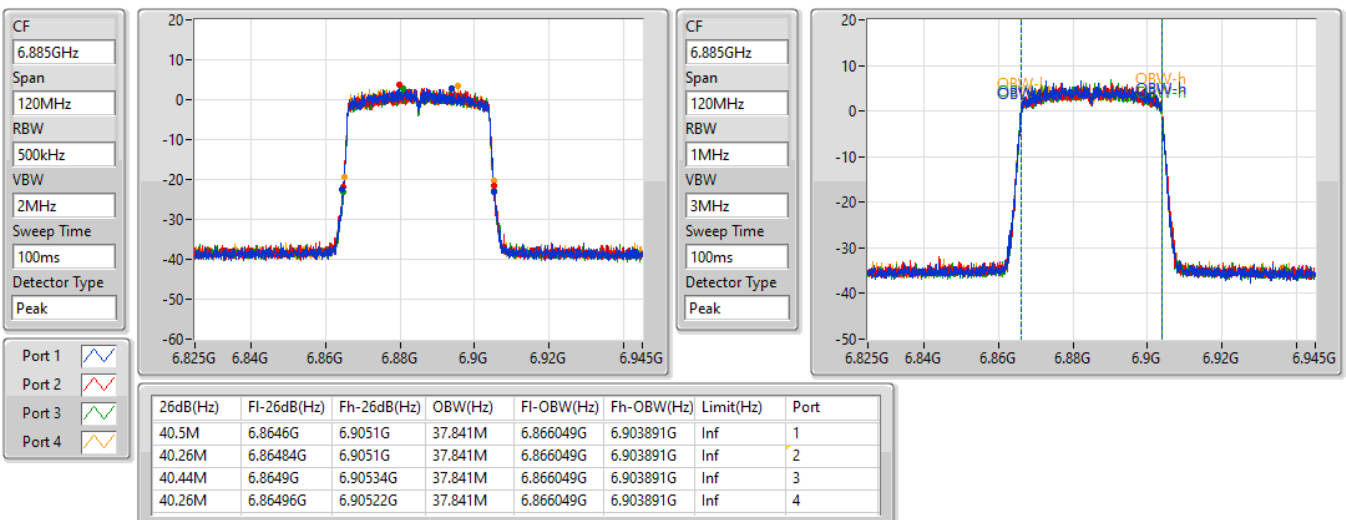


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6845MHz

18/11/2021

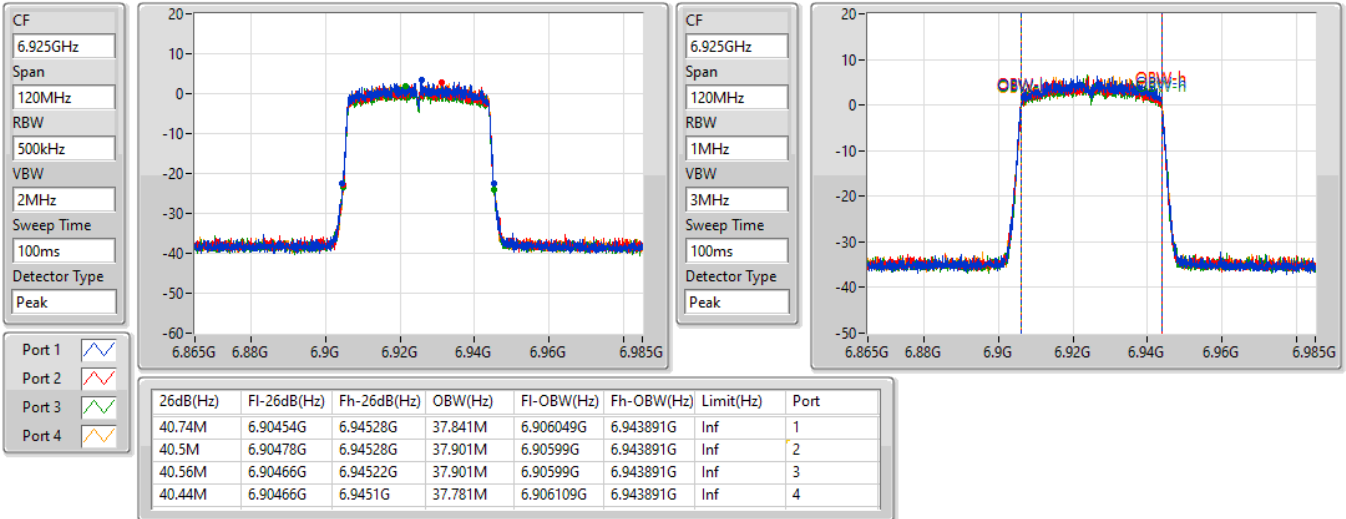

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6885MHz Straddle 6.525-6.875GHz

18/11/2021

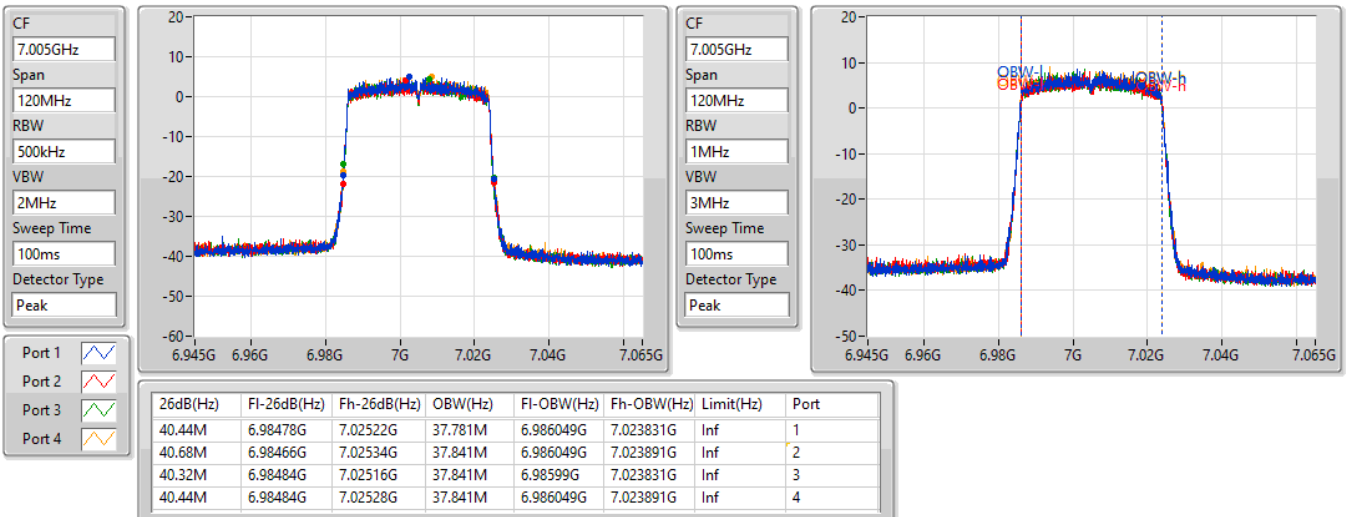


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
6925MHz

18/11/2021

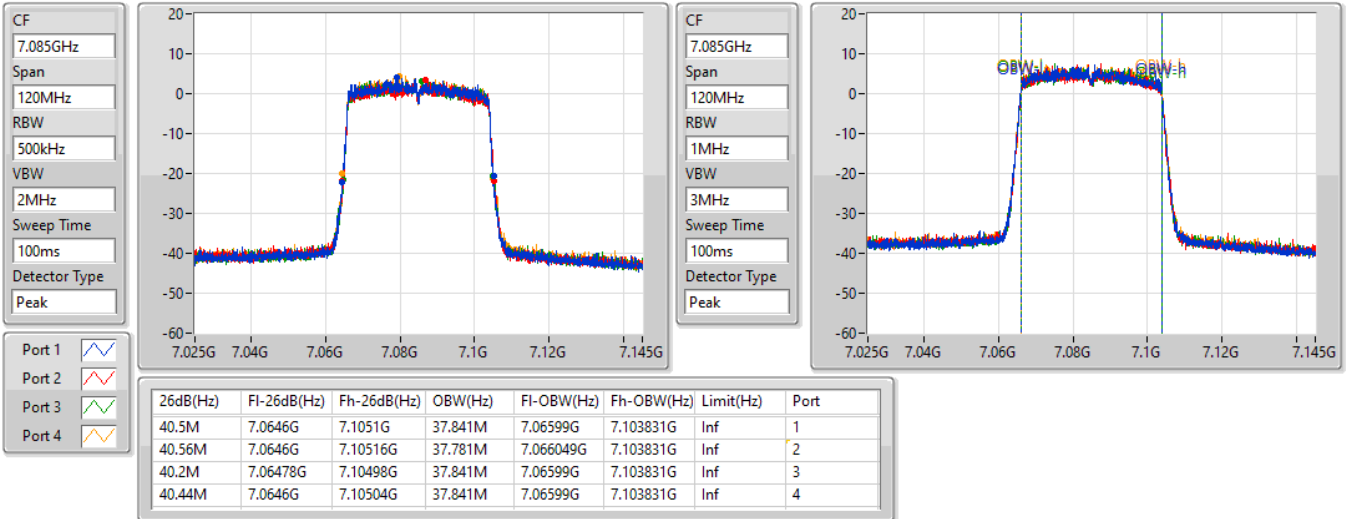

802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
7005MHz

18/11/2021

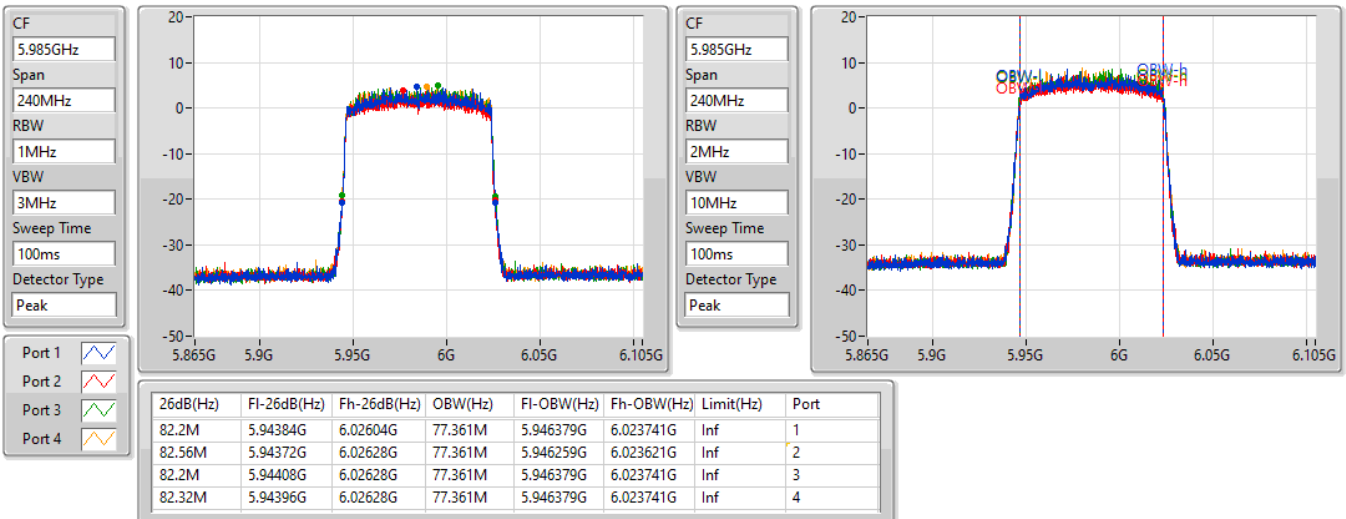


802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
7085MHz

18/11/2021

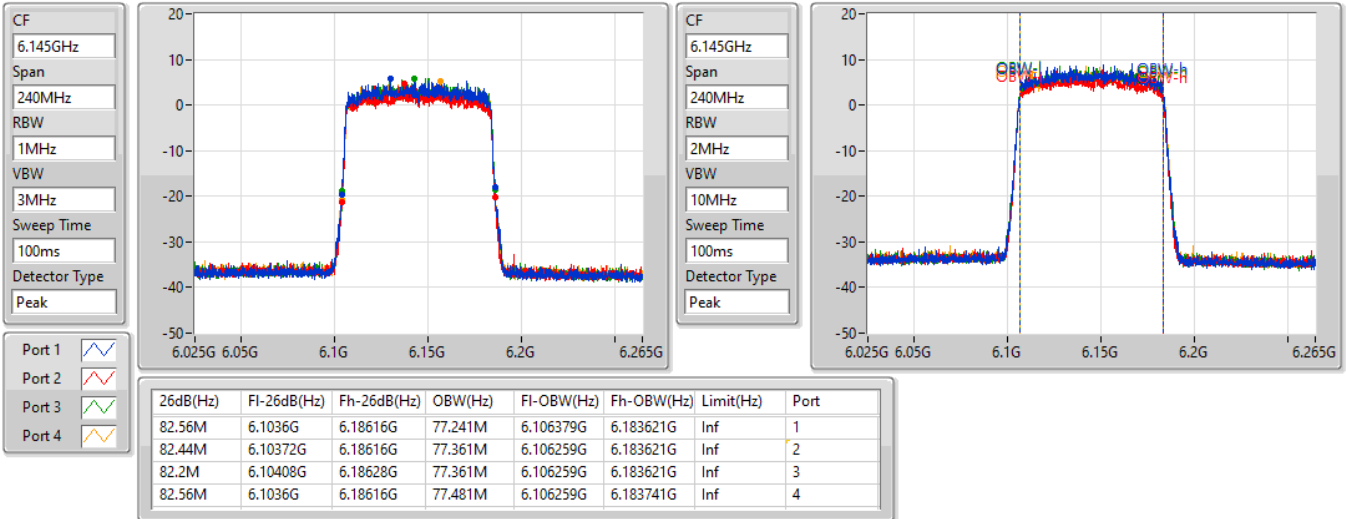

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5985MHz

18/11/2021

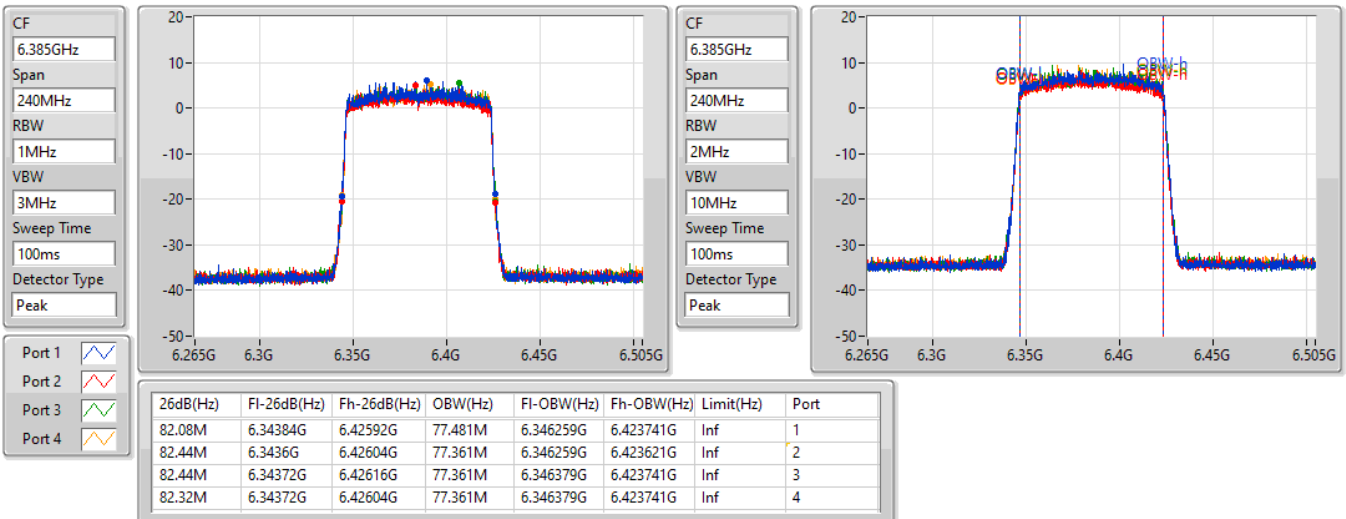


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6145MHz

18/11/2021

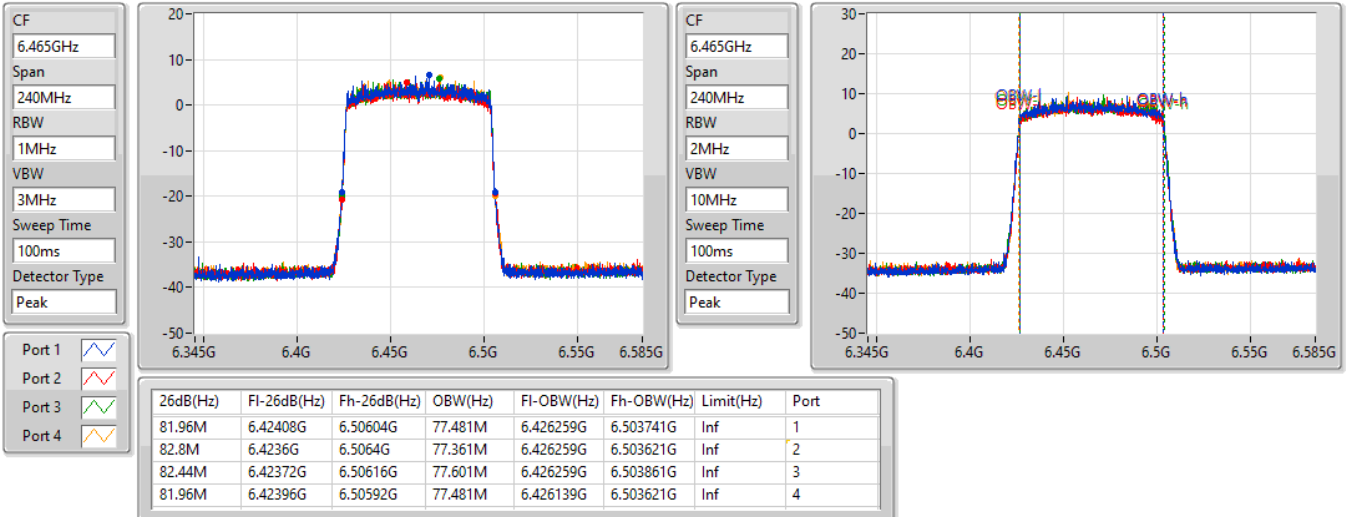

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6385MHz

18/11/2021

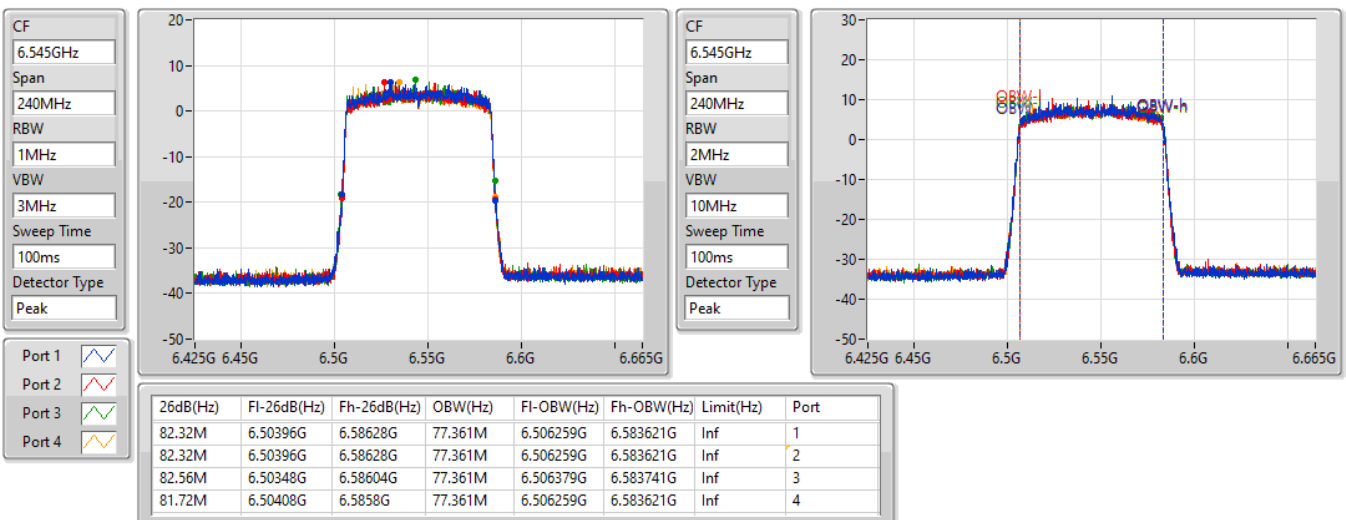


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6465MHz

18/11/2021

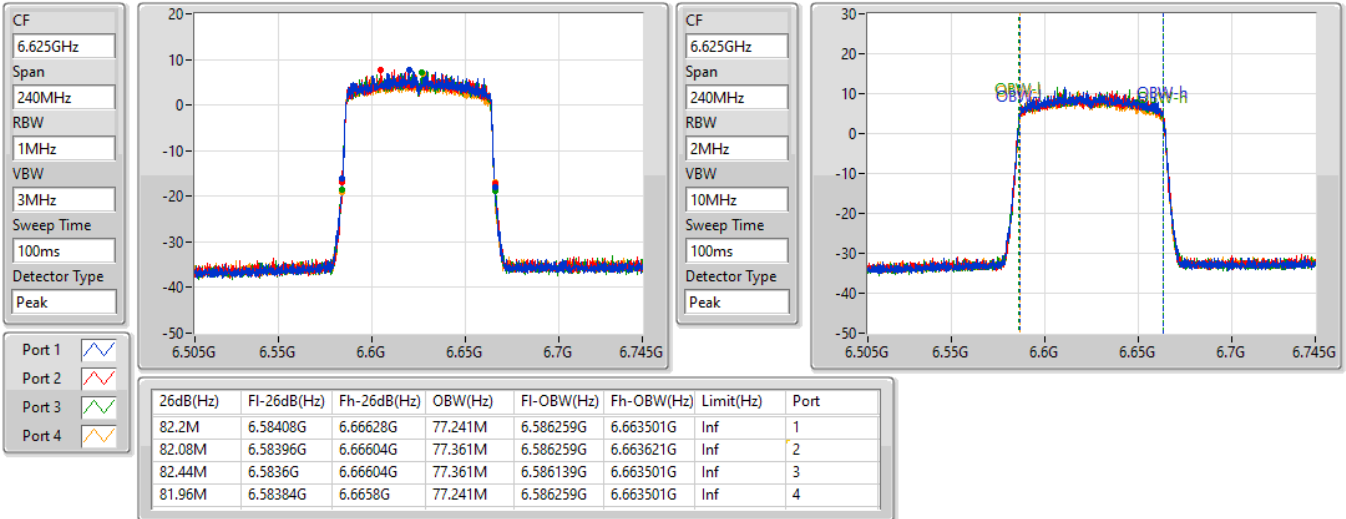

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6545MHz Straddle 6.425-6.525GHz

18/11/2021

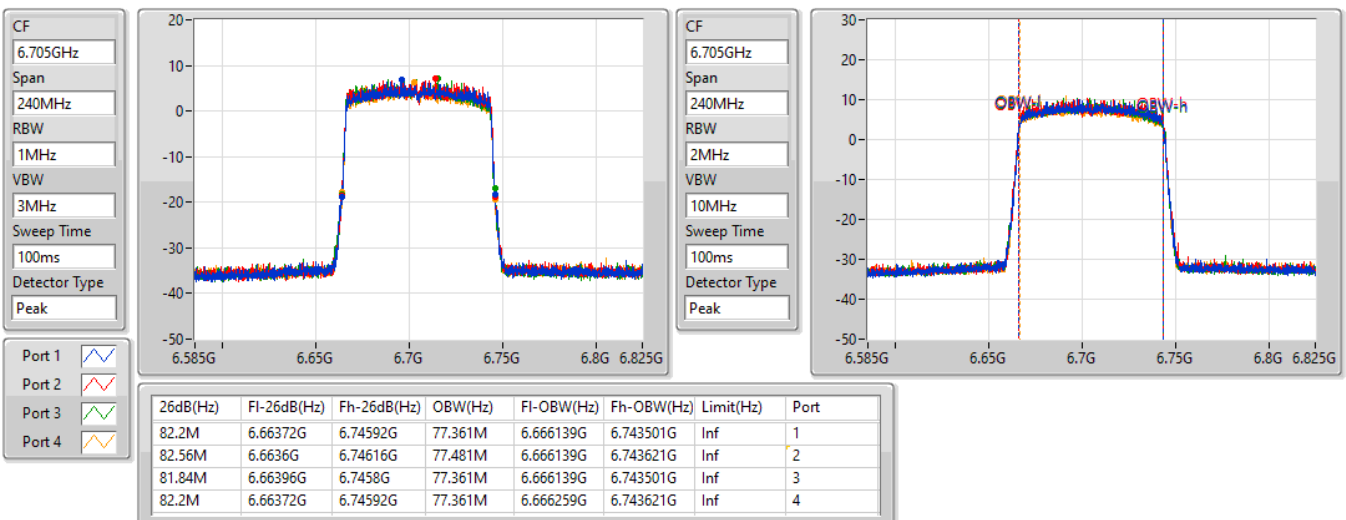


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6625MHz

18/11/2021

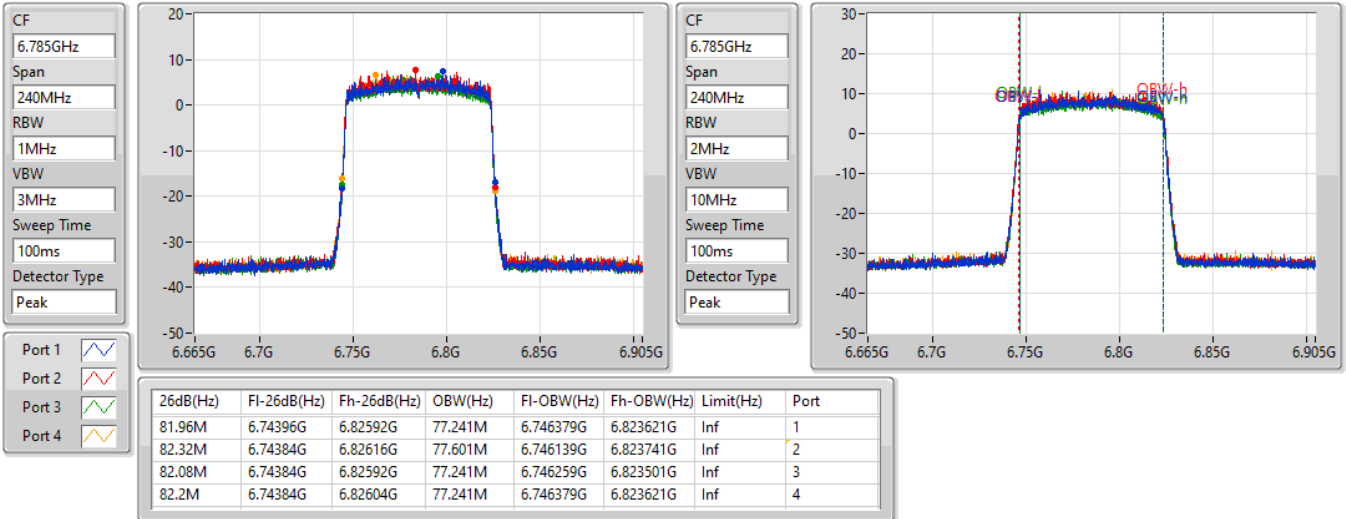

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6705MHz

18/11/2021

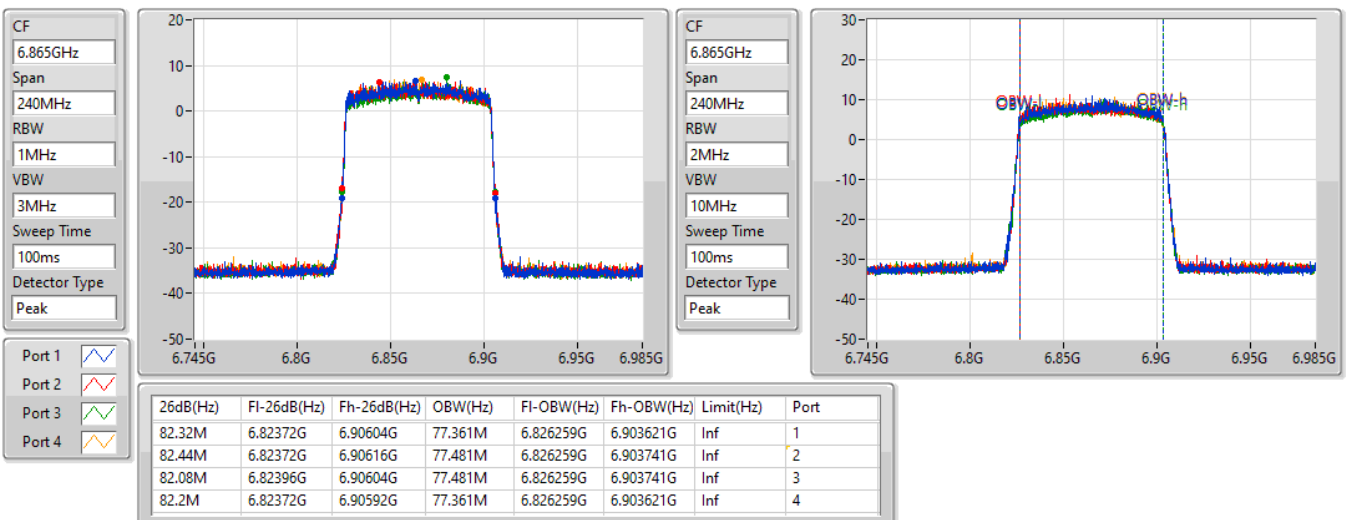


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6785MHz

18/11/2021

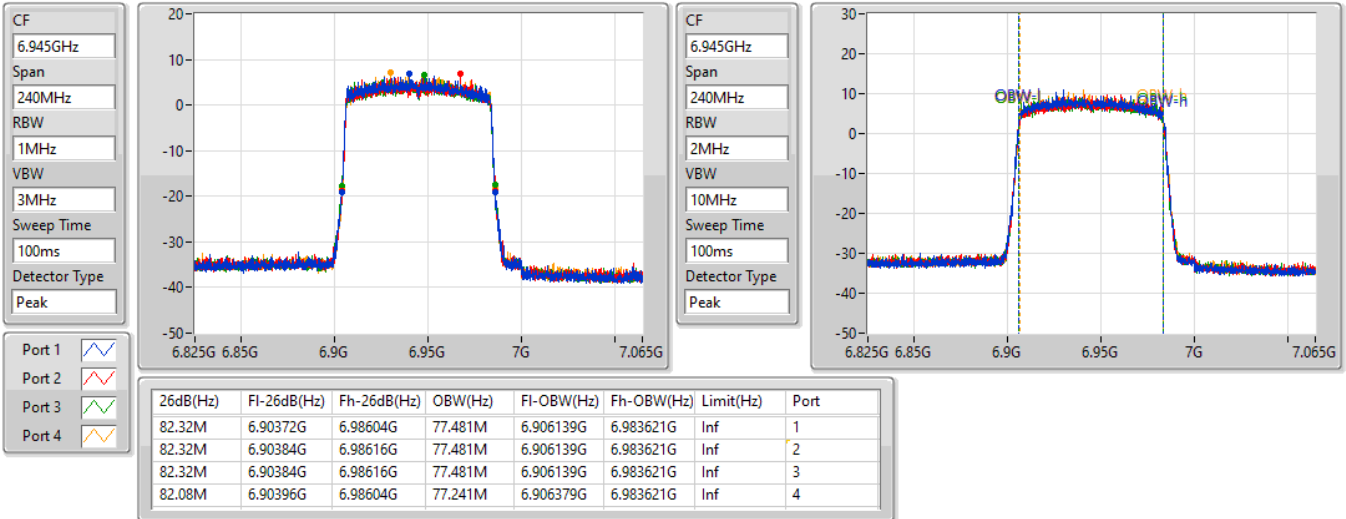

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6865MHz Straddle 6.525-6.875GHz

18/11/2021

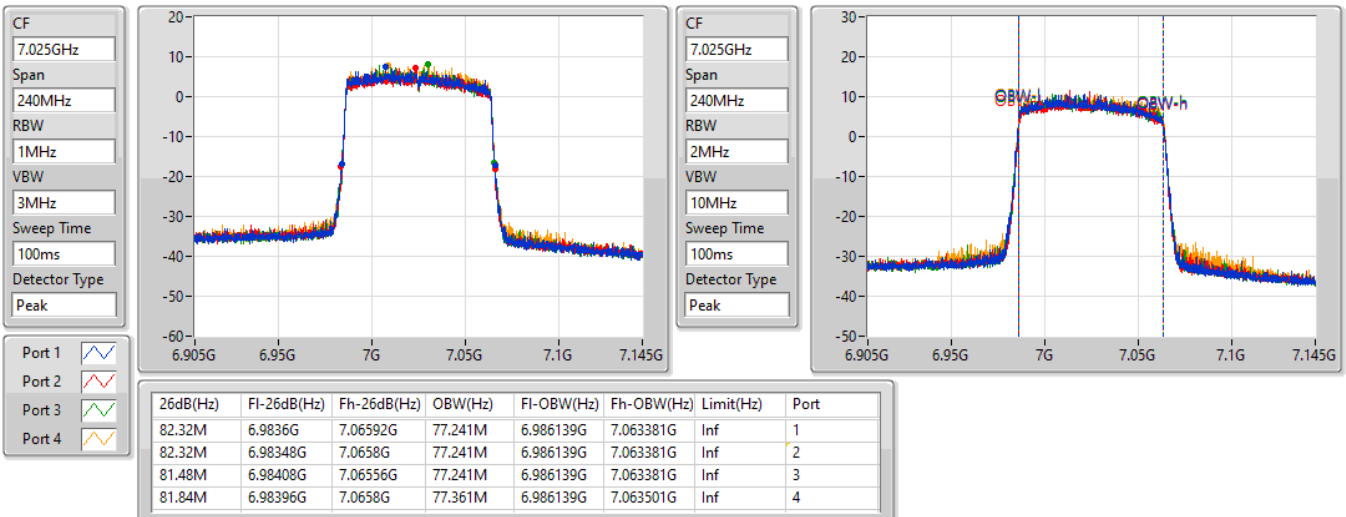


802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
6945MHz

18/11/2021

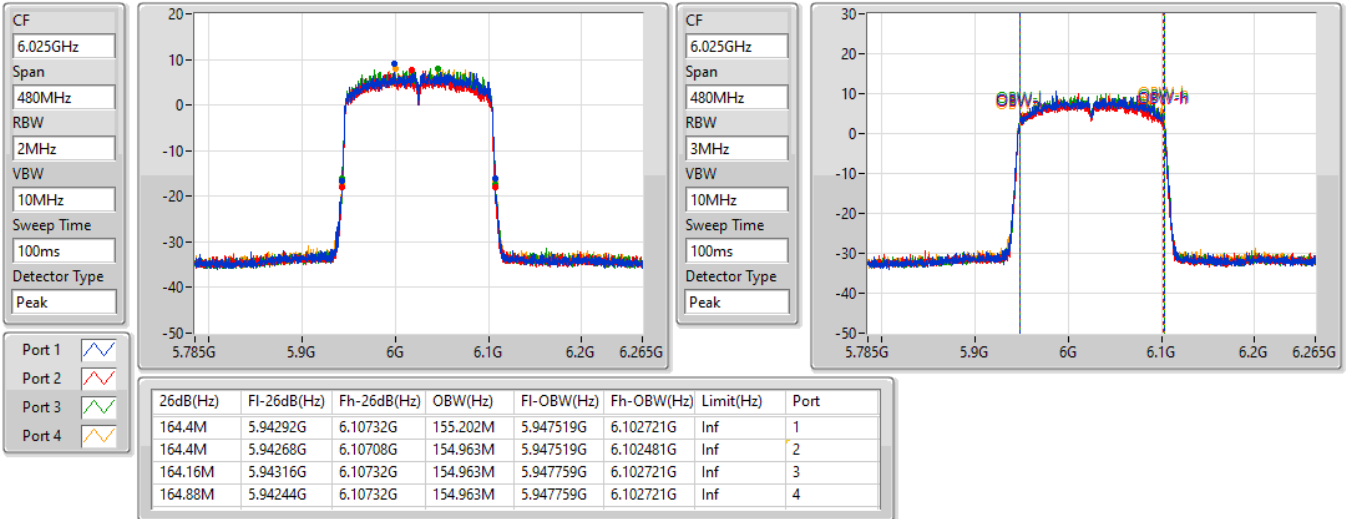

802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
7025MHz

18/11/2021

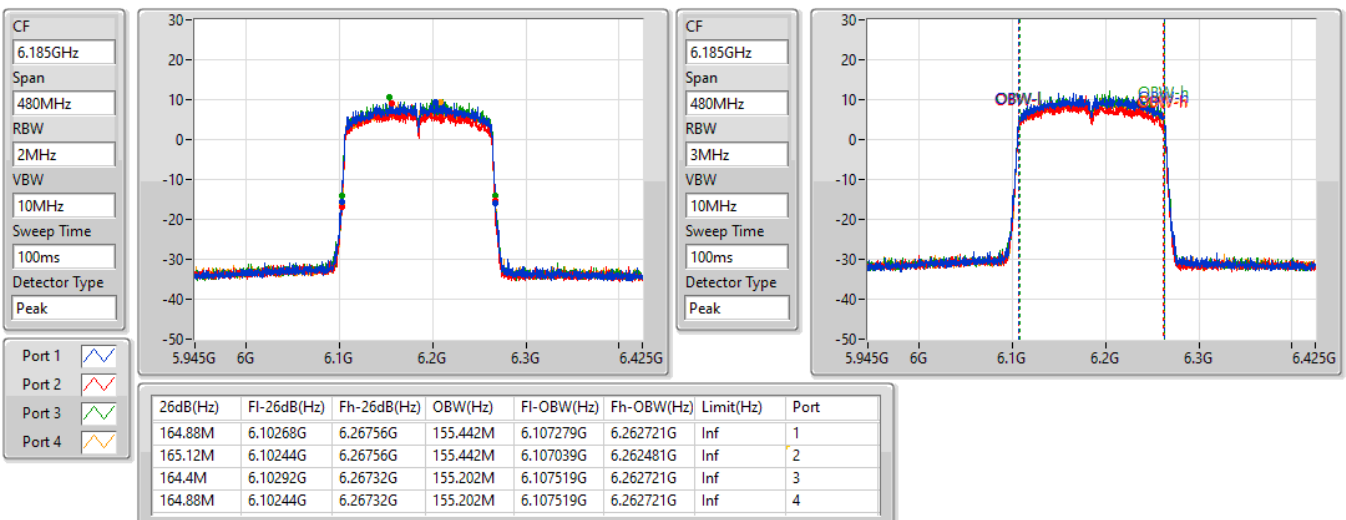


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6025MHz

18/11/2021

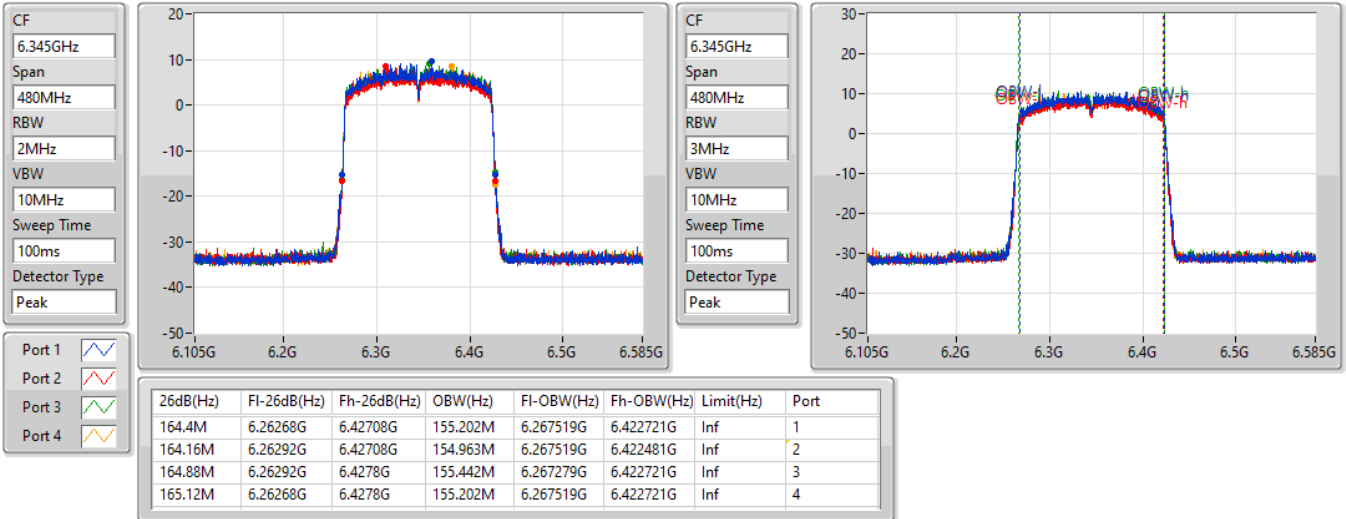

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6185MHz

18/11/2021

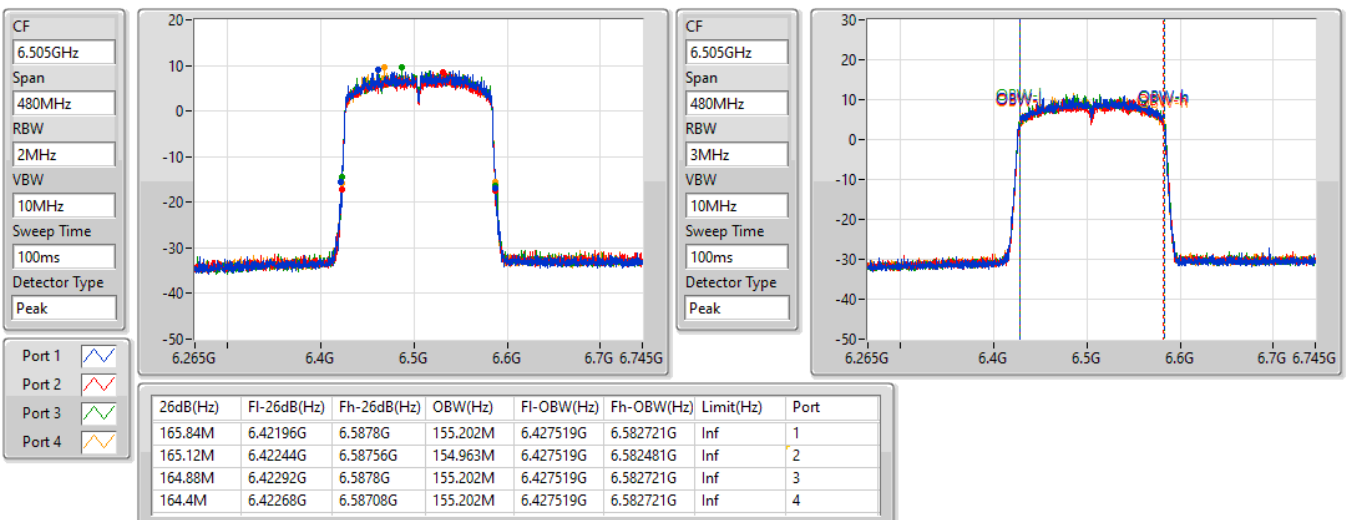


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6345MHz

18/11/2021

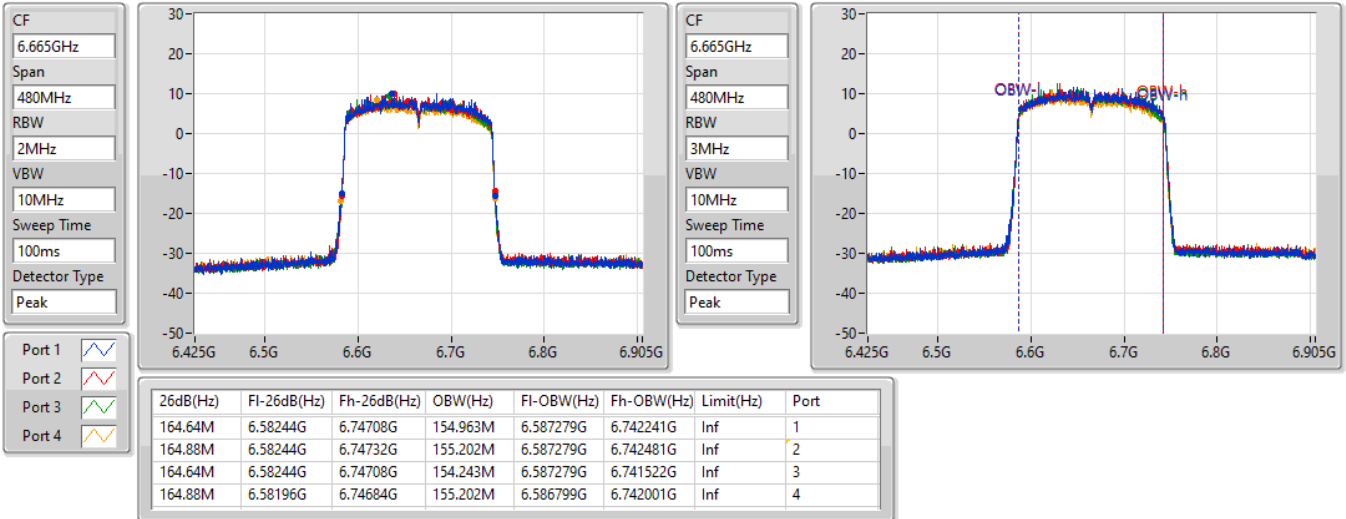

802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6505MHz Straddle 6.425-6.525GHz

18/11/2021

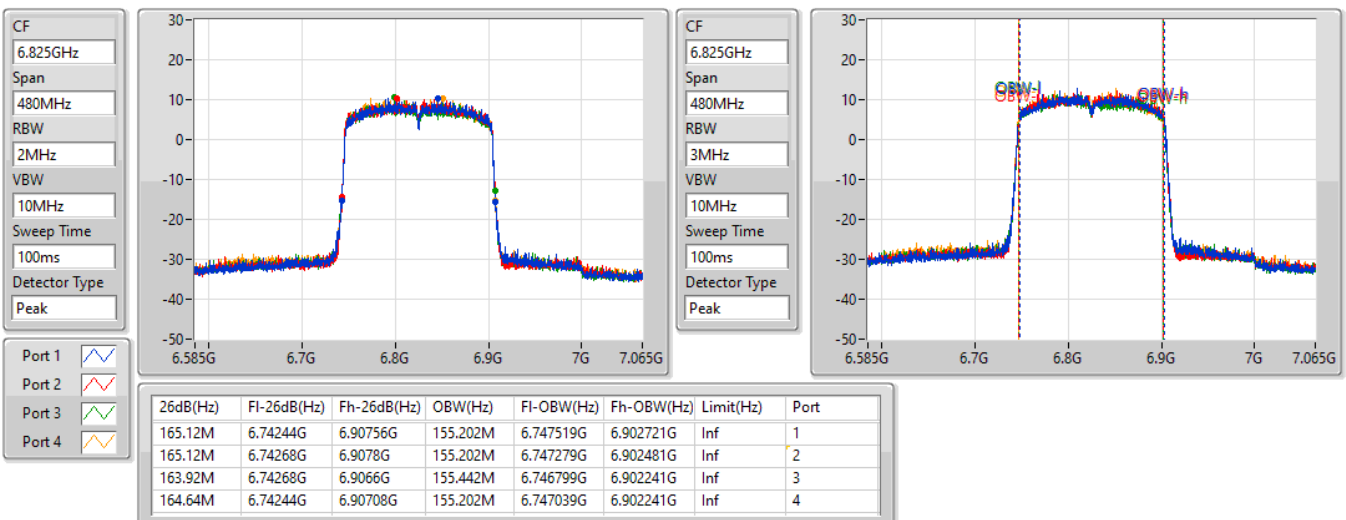


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6665MHz

18/11/2021


802.11ax HEW160_Nss1,(MCS0)_4TX
EBW
6825MHz Straddle 6.525-6.875GHz

18/11/2021

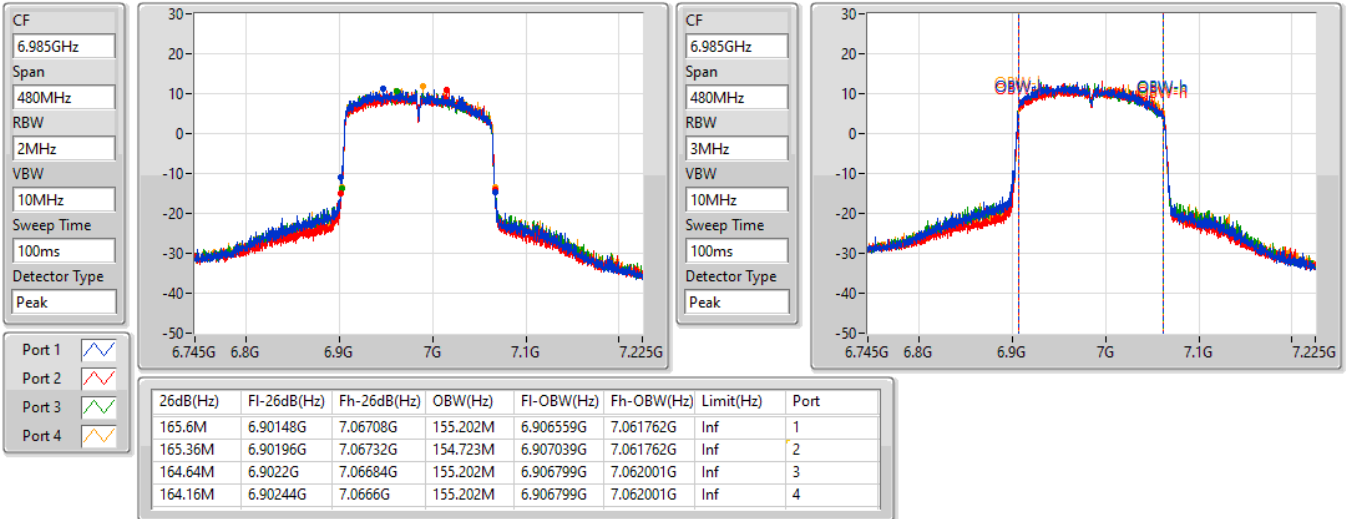


802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

6985MHz

18/11/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	21.93M	19.13M	19M1D1D	20.85M	19.07M
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	41.34M	37.841M	37M8D1D	39.6M	37.661M
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	83.28M	78.321M	78M3D1D	79.32M	76.522M
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	167.04M	157.601M	158MD1D	160.56M	152.564M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	22.14M	19.19M	19M2D1D	21M	18.981M
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	46.62M	37.961M	38M0D1D	39.54M	37.181M
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	82.56M	78.081M	78M1D1D	80.28M	76.282M
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	164.88M	156.402M	156MD1D	161.04M	153.763M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	22.53M	19.22M	19M2D1D	20.97M	18.951M
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	41.28M	37.901M	37M9D1D	39.66M	37.241M
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	84.12M	78.081M	78M1D1D	79.2M	75.322M
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	167.04M	157.121M	157MD1D	160.8M	151.604M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	22.08M	19.19M	19M2D1D	20.79M	18.771M
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	41.22M	38.321M	38M3D1D	39.6M	37.181M
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	82.92M	77.721M	77M7D1D	79.8M	75.562M
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	165.12M	155.442M	155MD1D	158.88M	150.405M

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

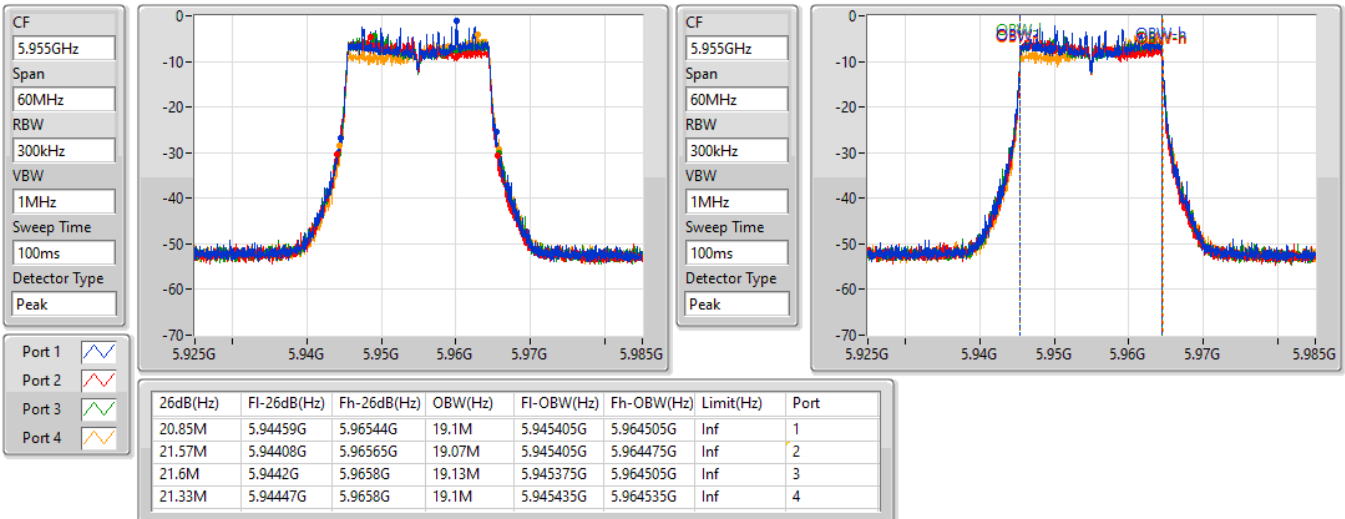
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS3)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	20.85M	19.1M	21.57M	19.07M	21.6M	19.13M	21.33M	19.1M
6175MHz	Pass	Inf	21.12M	19.1M	21.93M	19.13M	21M	19.07M	21.78M	19.1M
6415MHz	Pass	Inf	21.21M	19.13M	21.78M	19.1M	21.93M	19.1M	21.72M	19.1M
6435MHz	Pass	Inf	21.39M	19.1M	22.08M	19.1M	21.99M	19.13M	21.84M	19.13M
6475MHz	Pass	Inf	21.3M	19.04M	22.02M	19.1M	22.11M	19.13M	21.96M	19.16M
6515MHz	Pass	Inf	21M	19.13M	21.24M	18.981M	22.14M	19.19M	21.69M	19.04M
6535MHz	Pass	Inf	21M	18.951M	21.69M	19.1M	22.08M	19.07M	21.42M	19.07M
6695MHz	Pass	Inf	20.97M	18.981M	22.53M	19.13M	22.05M	19.1M	21.57M	19.1M
6855MHz	Pass	Inf	21M	19.04M	22.38M	19.22M	21.72M	19.1M	21.48M	19.13M
6875MHz Straddle 6.525-6.875GHz	Pass	Inf	21M	19.07M	21.57M	19.13M	22.02M	19.07M	21.48M	19.04M
6895MHz	Pass	Inf	21.54M	19.07M	21.6M	19.07M	21.99M	19.13M	21.84M	19.13M
6995MHz	Pass	Inf	21.42M	19.13M	22.08M	19.07M	21.75M	19.07M	21.63M	19.13M
7095MHz	Pass	Inf	21.33M	19.19M	21.54M	19.07M	21.39M	19.07M	21.57M	19.1M
7115MHz	Pass	Inf	20.79M	18.981M	22.02M	19.13M	21.51M	19.16M	21.3M	18.771M
802.11ax HEW40-BF_Nss1,(MCS3)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	39.6M	37.661M	41.34M	37.841M	40.62M	37.781M	41.1M	37.781M
6165MHz	Pass	Inf	39.72M	37.781M	40.26M	37.781M	40.92M	37.781M	41.28M	37.781M
6405MHz	Pass	Inf	39.6M	37.781M	40.2M	37.841M	40.74M	37.841M	40.5M	37.721M
6445MHz	Pass	Inf	40.26M	37.721M	40.62M	37.901M	41.1M	37.781M	40.68M	37.841M
6485MHz	Pass	Inf	39.54M	37.781M	42.06M	37.661M	40.44M	37.781M	40.56M	37.841M
6525MHz Straddle 6.425-6.525GHz	Pass	Inf	46.62M	37.181M	40.68M	37.721M	40.14M	37.541M	40.56M	37.961M
6565MHz	Pass	Inf	39.9M	37.841M	41.28M	37.721M	40.26M	37.541M	40.5M	37.901M
6685MHz	Pass	Inf	40.08M	37.901M	41.1M	37.601M	40.26M	37.661M	40.62M	37.901M
6845MHz	Pass	Inf	39.66M	37.241M	40.68M	37.901M	40.68M	37.601M	40.5M	37.901M
6885MHz Straddle 6.525-6.875GHz	Pass	Inf	40.2M	37.841M	40.8M	37.901M	40.56M	37.721M	40.38M	37.721M
6925MHz	Pass	Inf	40.14M	37.541M	40.44M	37.961M	40.38M	37.841M	40.26M	37.661M
7005MHz	Pass	Inf	39.96M	38.321M	40.2M	37.721M	40.2M	37.721M	41.22M	37.601M
7085MHz	Pass	Inf	39.72M	37.601M	39.6M	37.181M	40.68M	37.901M	41.16M	37.661M
802.11ax HEW80-BF_Nss1,(MCS3)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	80.64M	78.081M	83.16M	78.321M	81.6M	77.001M	81.84M	76.762M
6145MHz	Pass	Inf	81.12M	76.882M	83.28M	76.522M	82.44M	77.961M	82.32M	77.121M
6385MHz	Pass	Inf	79.32M	76.522M	81.96M	76.642M	82.92M	77.121M	82.44M	77.841M
6465MHz	Pass	Inf	80.28M	76.282M	82.32M	77.841M	81.48M	76.642M	82.56M	77.601M
6545MHz Straddle 6.425-6.525GHz	Pass	Inf	80.52M	78.081M	81.96M	77.001M	82.2M	77.601M	82.2M	77.121M
6625MHz	Pass	Inf	79.2M	75.562M	80.88M	75.322M	82.32M	77.241M	82.8M	77.961M
6705MHz	Pass	Inf	80.04M	77.601M	84.12M	77.001M	81.36M	76.642M	83.28M	77.601M
6785MHz	Pass	Inf	79.92M	76.642M	82.8M	77.121M	81.72M	76.882M	82.56M	77.841M
6865MHz Straddle 6.525-6.875GHz	Pass	Inf	81.36M	78.081M	82.92M	78.081M	81.84M	76.282M	81.96M	77.001M
6945MHz	Pass	Inf	81.12M	77.721M	82.92M	77.601M	81.48M	76.282M	81.84M	77.241M
7025MHz	Pass	Inf	79.8M	75.562M	82.68M	76.042M	81.36M	76.882M	82.32M	77.601M
802.11ax HEW160-BF_Nss1,(MCS3)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	160.56M	155.682M	164.64M	157.601M	166.08M	156.402M	162M	152.804M
6185MHz	Pass	Inf	164.64M	157.121M	163.92M	152.564M	167.04M	157.601M	162.72M	153.523M
6345MHz	Pass	Inf	161.04M	157.121M	164.4M	155.682M	165.6M	155.442M	165.36M	155.202M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	161.04M	153.763M	164.88M	156.402M	164.64M	155.682M	164.16M	154.243M
6665MHz	Pass	Inf	161.76M	154.003M	167.04M	156.882M	162.48M	151.604M	163.68M	156.162M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	160.8M	155.442M	162.72M	153.043M	162.24M	152.324M	166.56M	157.121M
6985MHz	Pass	Inf	158.88M	152.564M	161.04M	150.405M	165.12M	154.243M	165.12M	155.442M

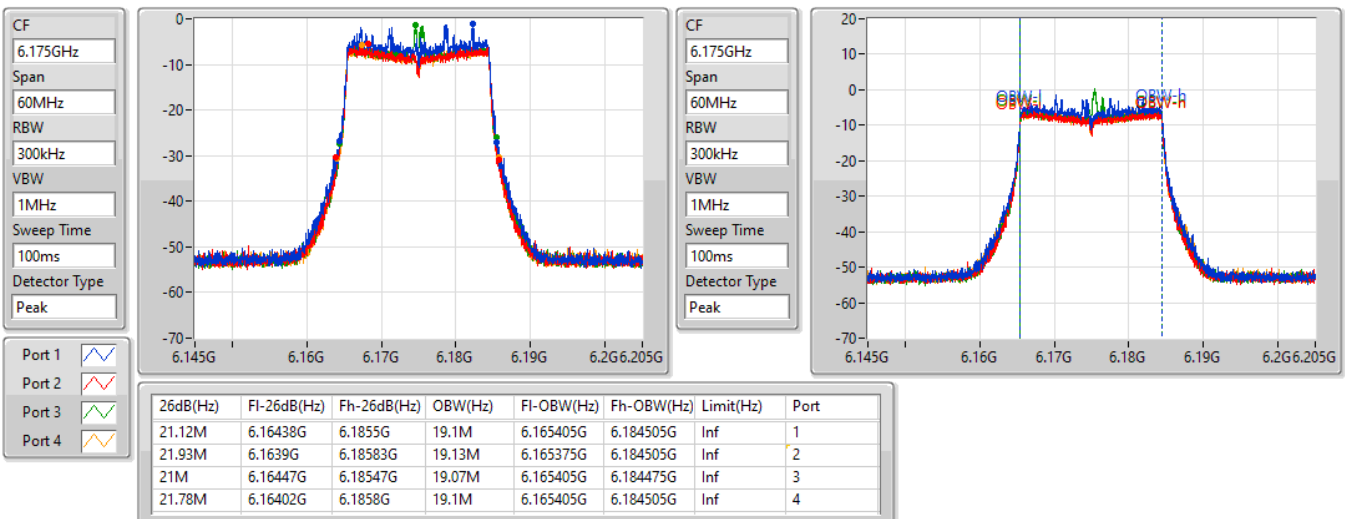
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
5955MHz

09/12/2021

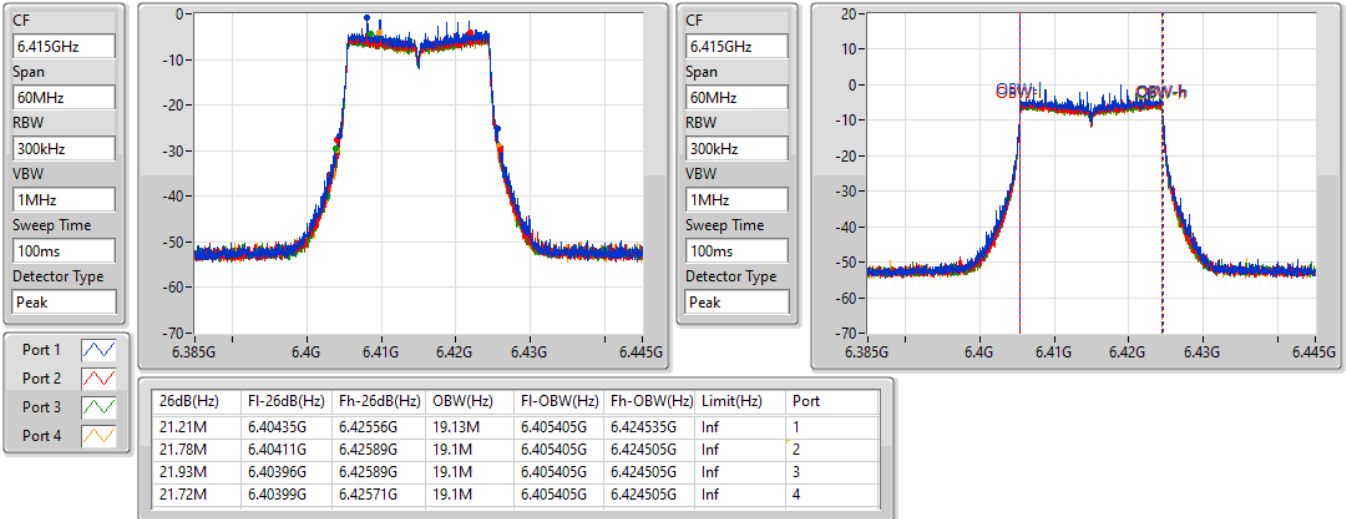

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6175MHz

09/12/2021

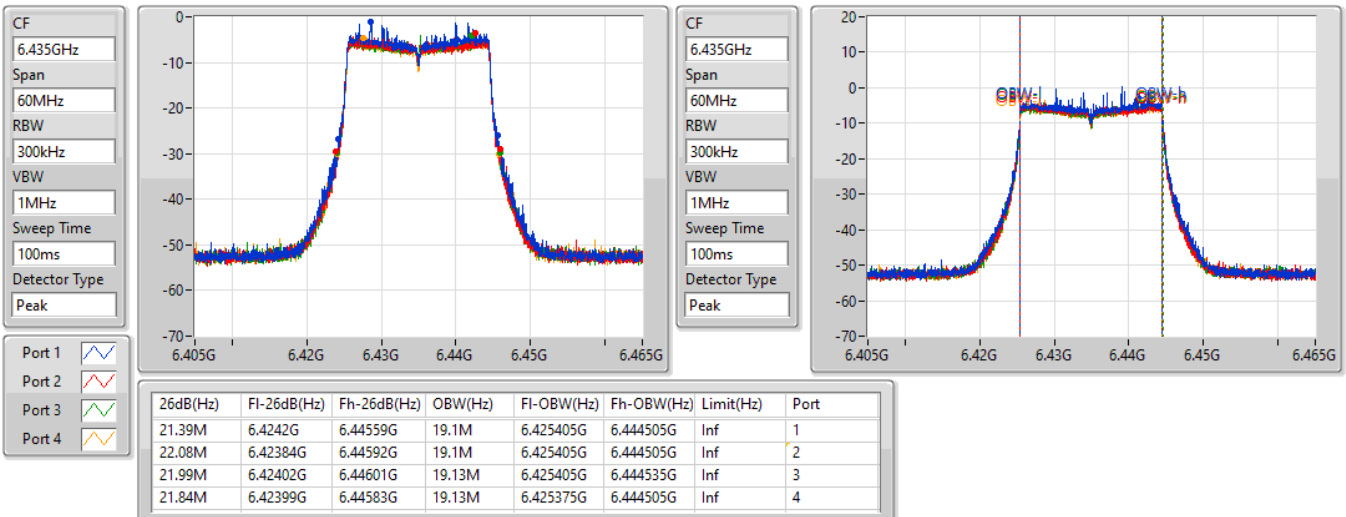


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6415MHz

09/12/2021

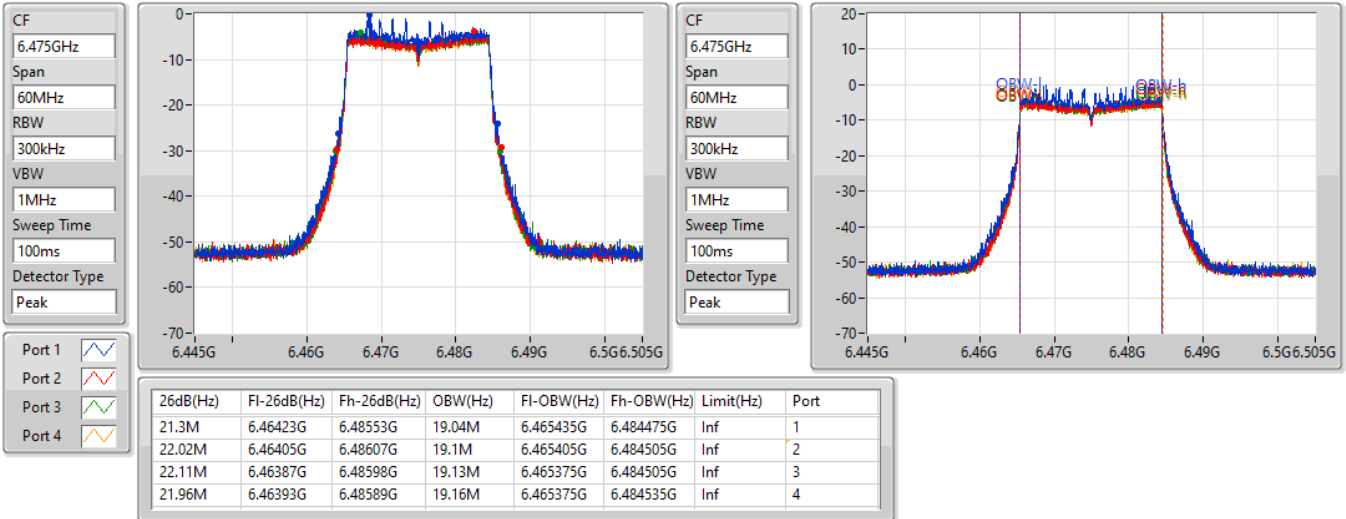

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6435MHz

09/12/2021

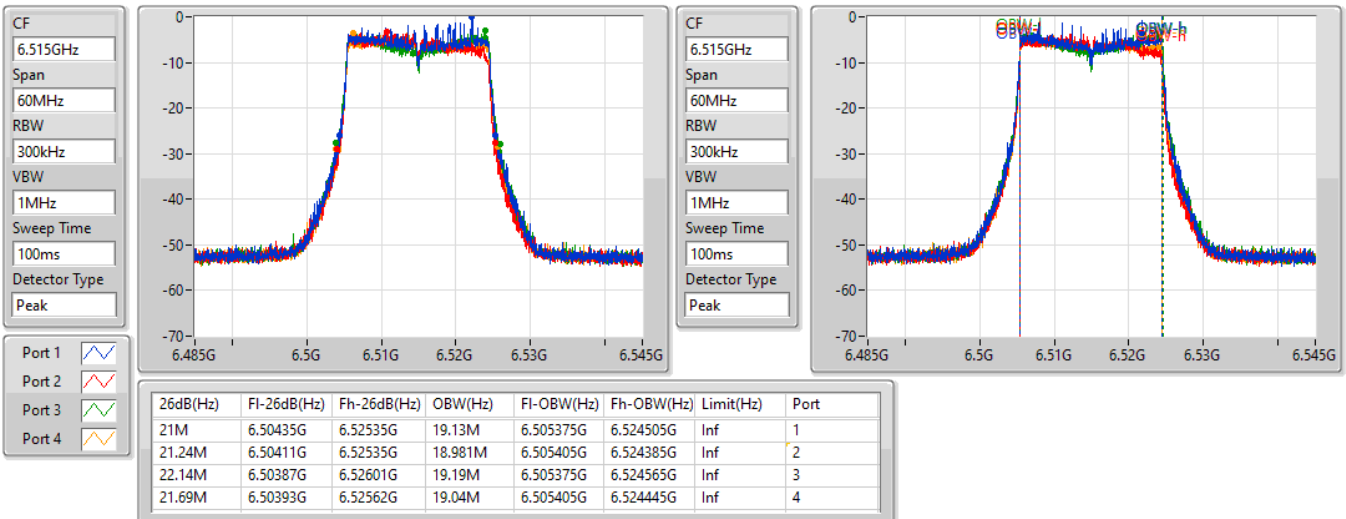


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6475MHz

09/12/2021

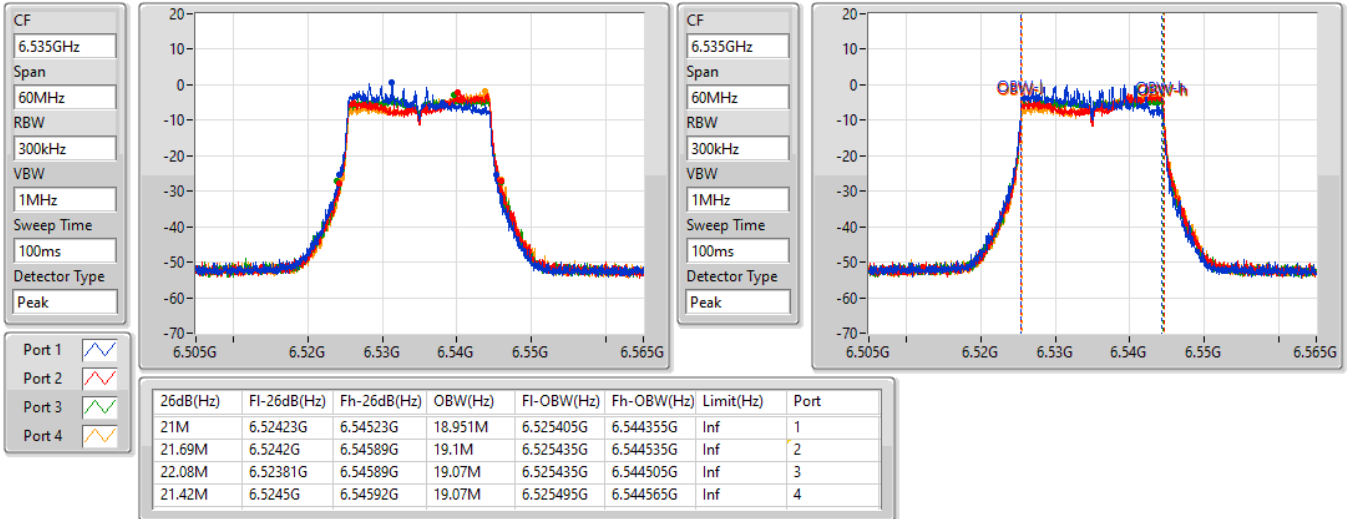

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6515MHz

09/12/2021

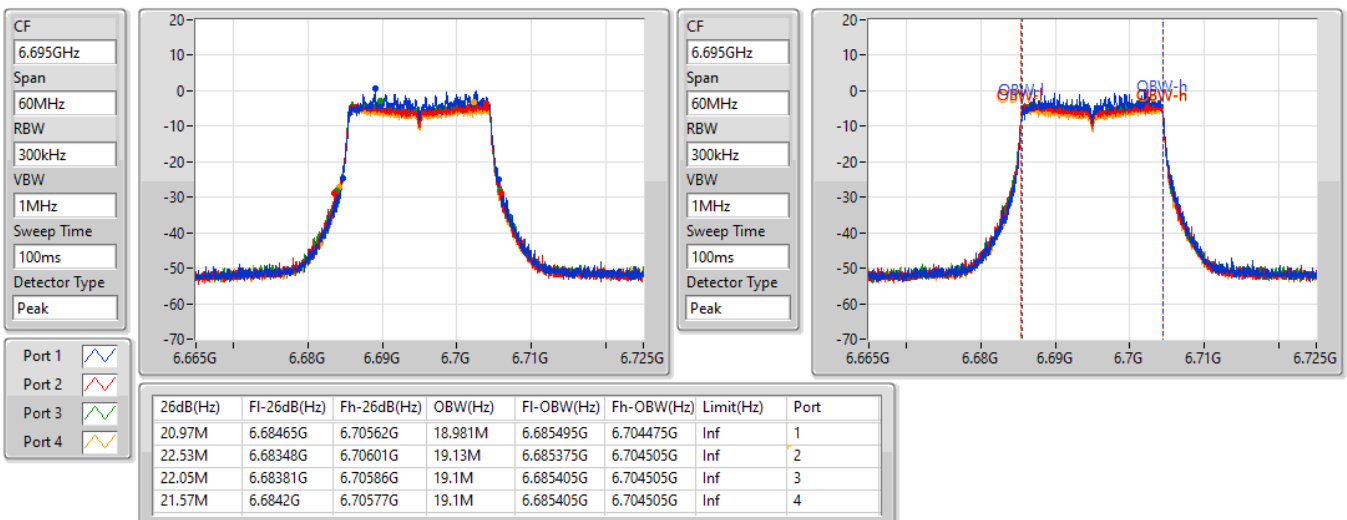


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6535MHz

09/12/2021

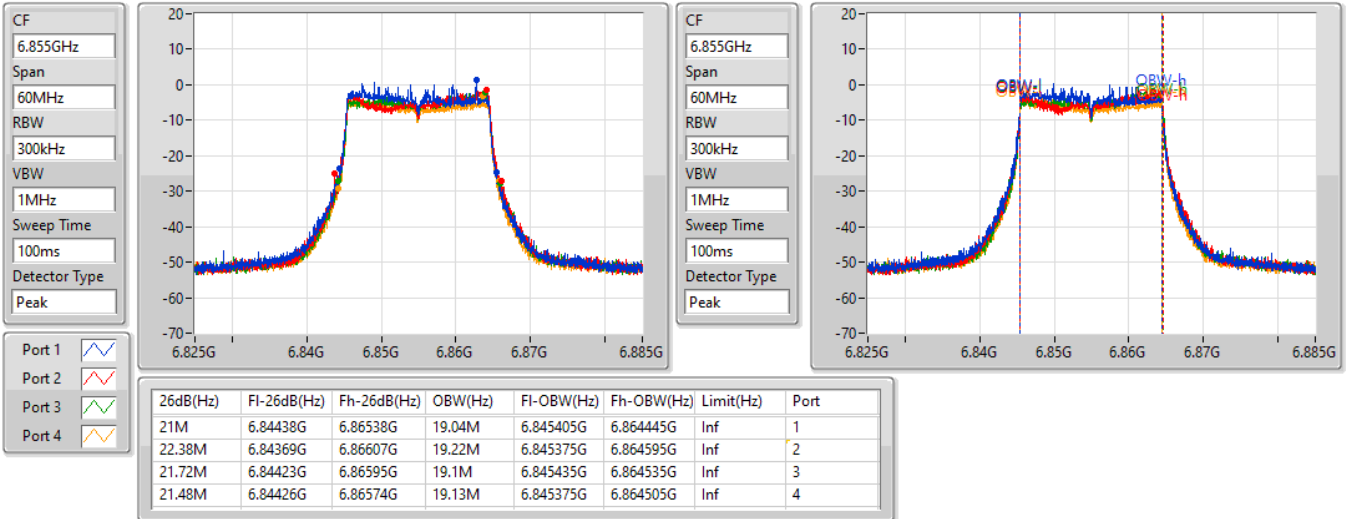

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6695MHz

09/12/2021

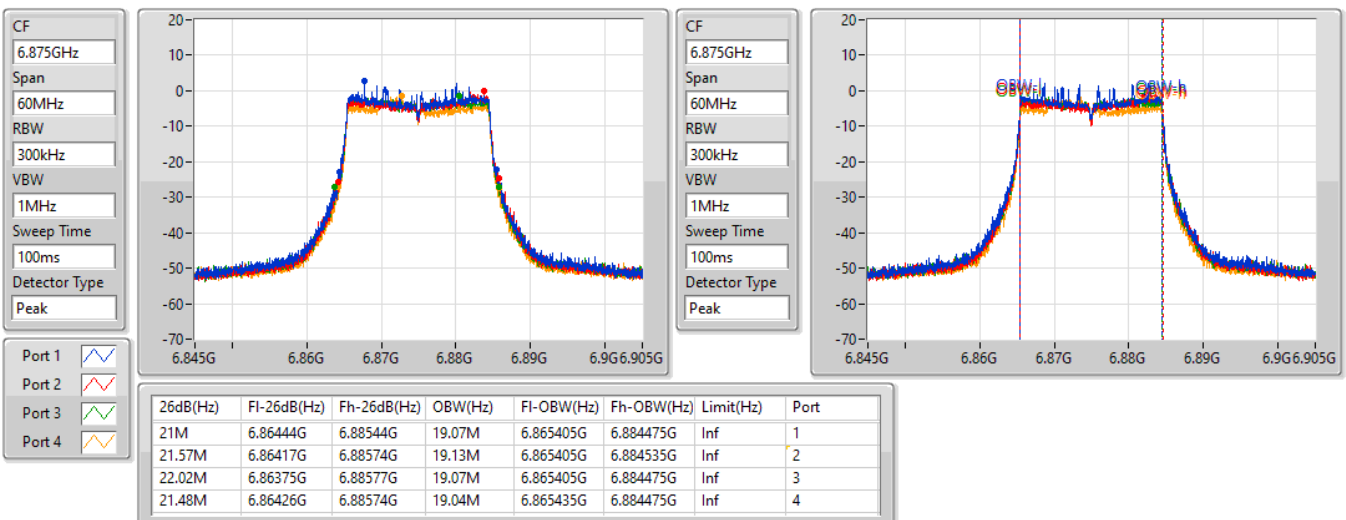


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6855MHz

09/12/2021

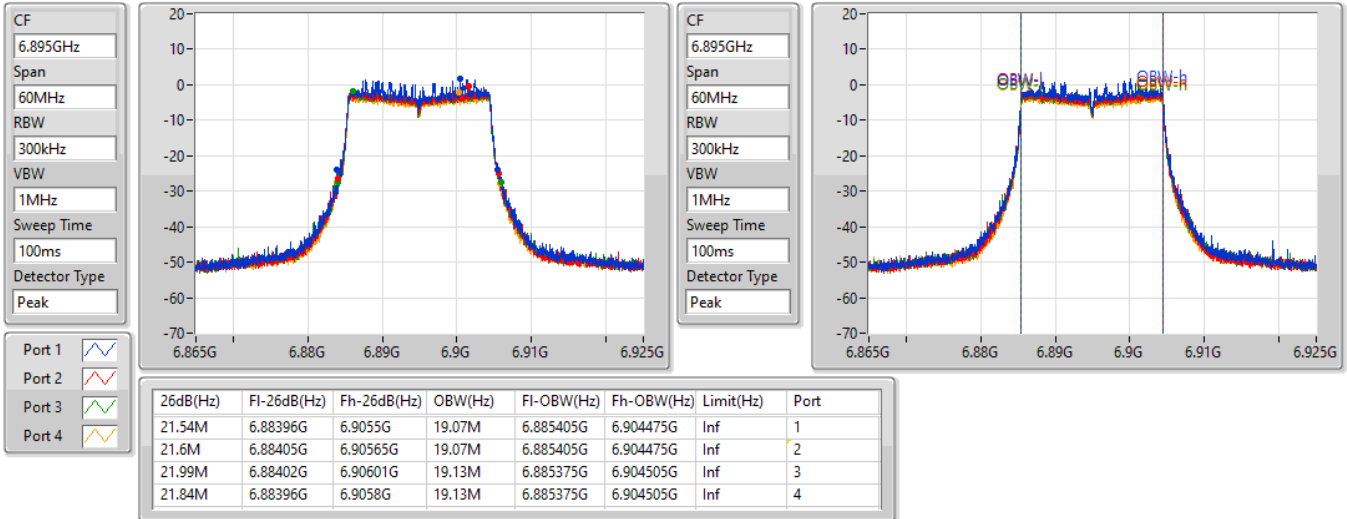

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6875MHz Straddle 6.525-6.875GHz

09/12/2021

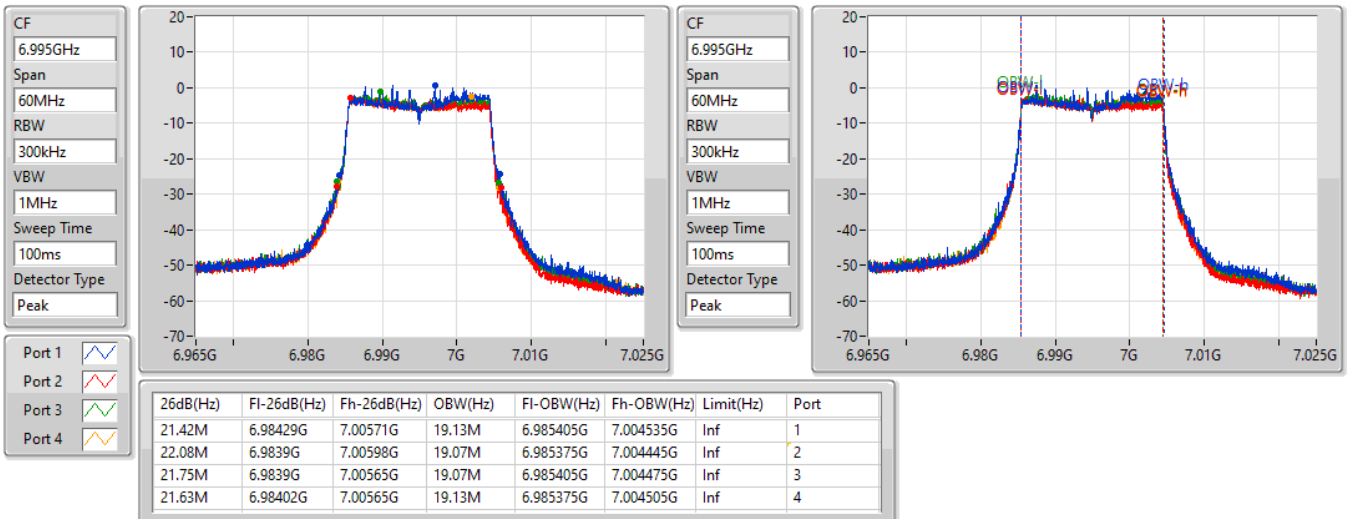


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6895MHz

09/12/2021

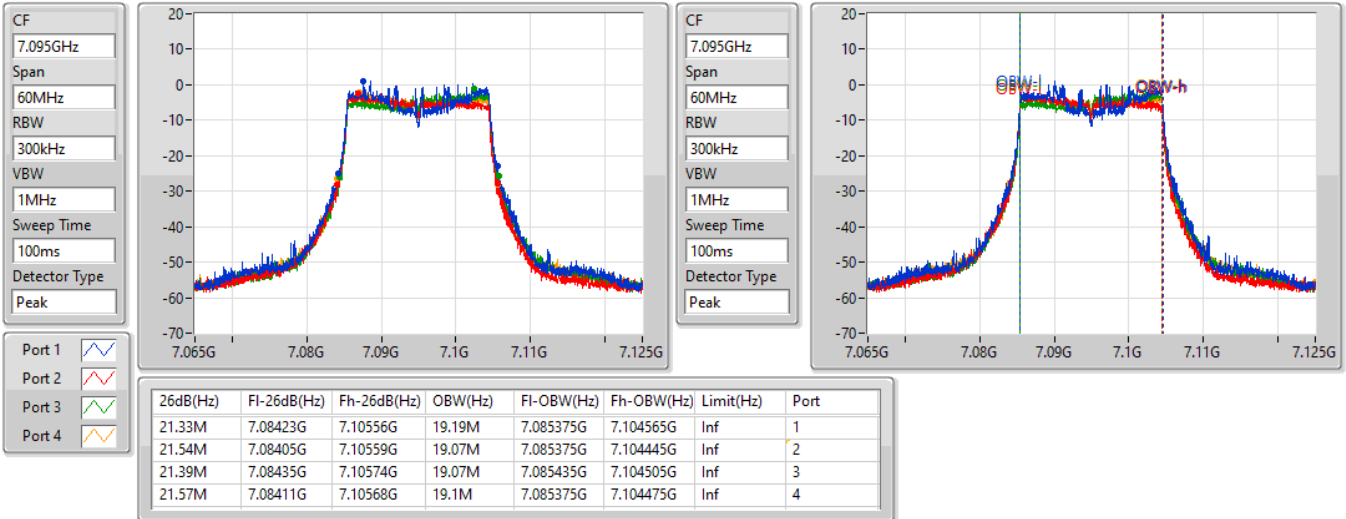

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
6995MHz

09/12/2021

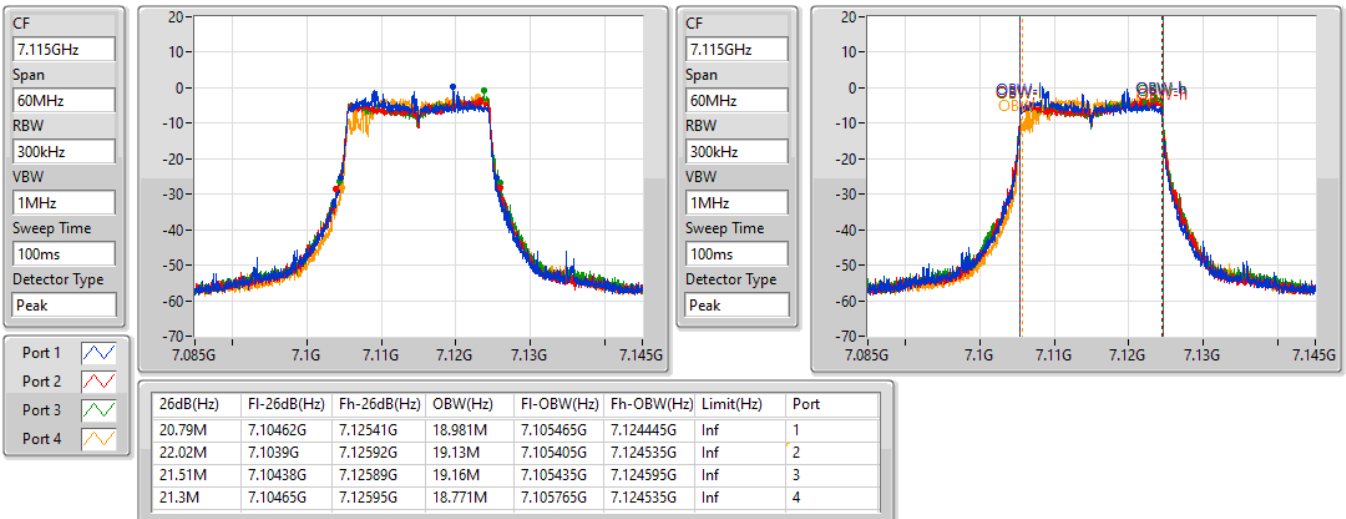


802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
7095MHz

09/12/2021

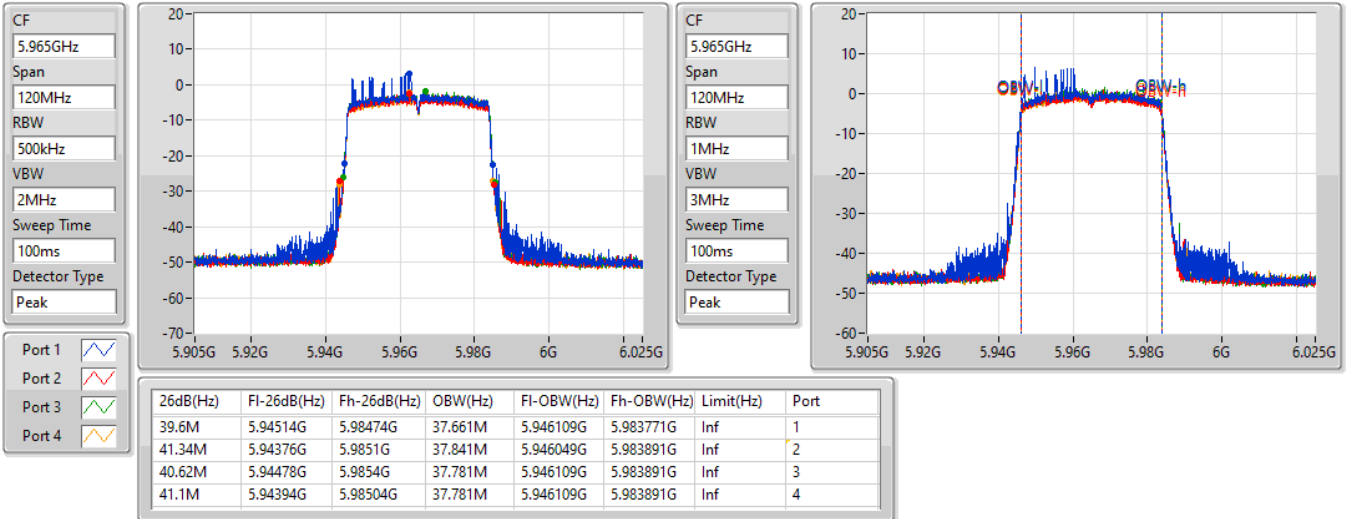

802.11ax HEW20-BF_Nss1,(MCS3)_4TX
EBW
7115MHz

09/12/2021

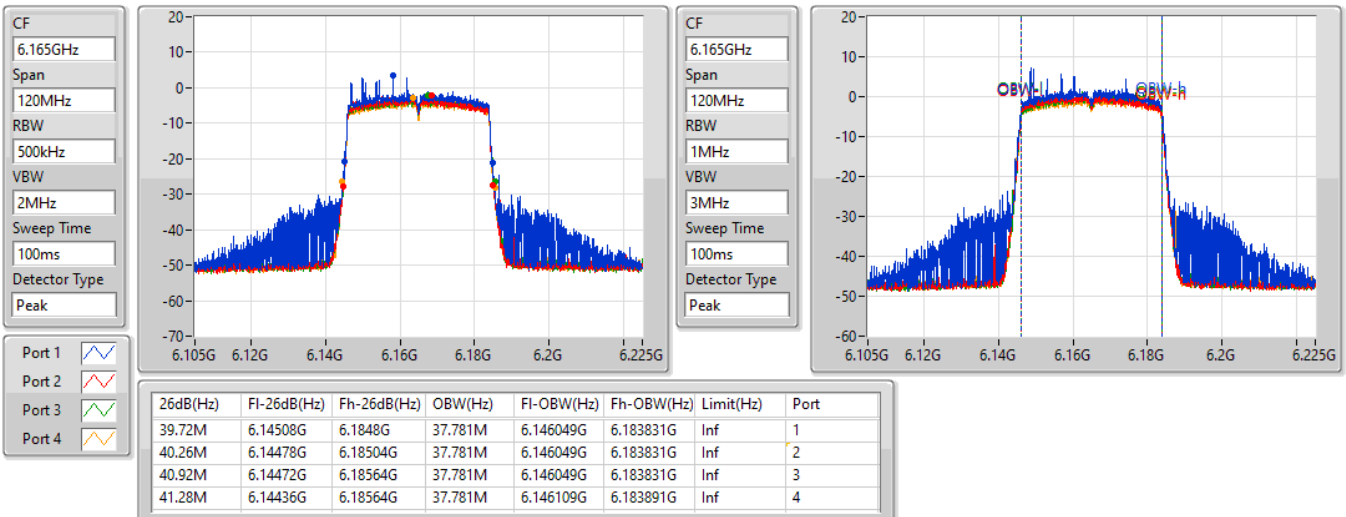


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
5965MHz

09/12/2021

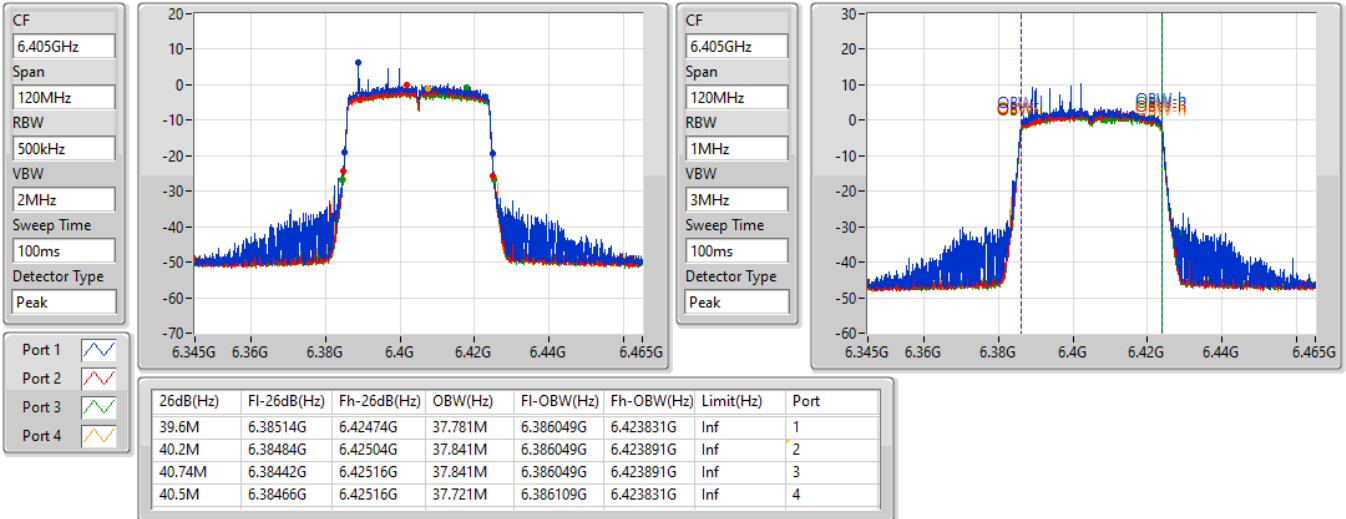

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6165MHz

09/12/2021

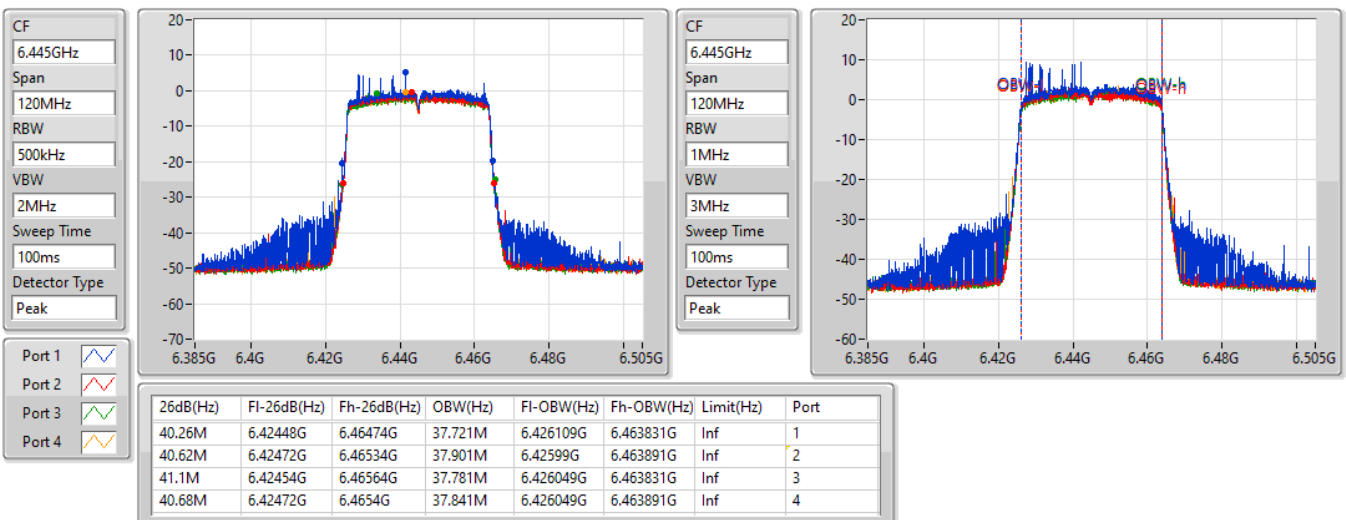


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6405MHz

09/12/2021

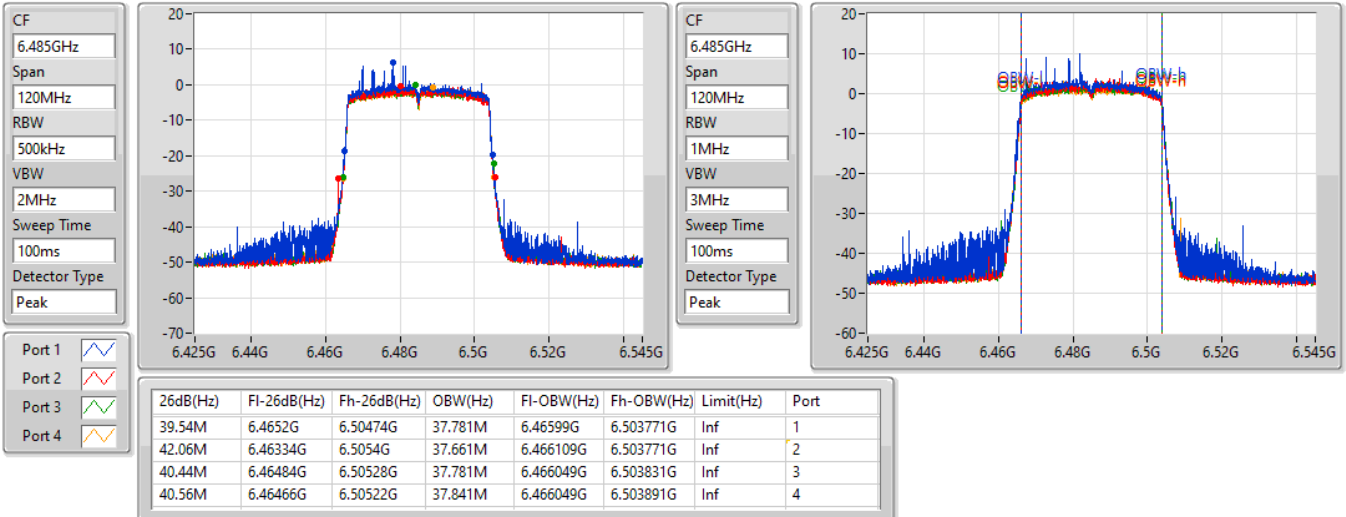

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6445MHz

09/12/2021

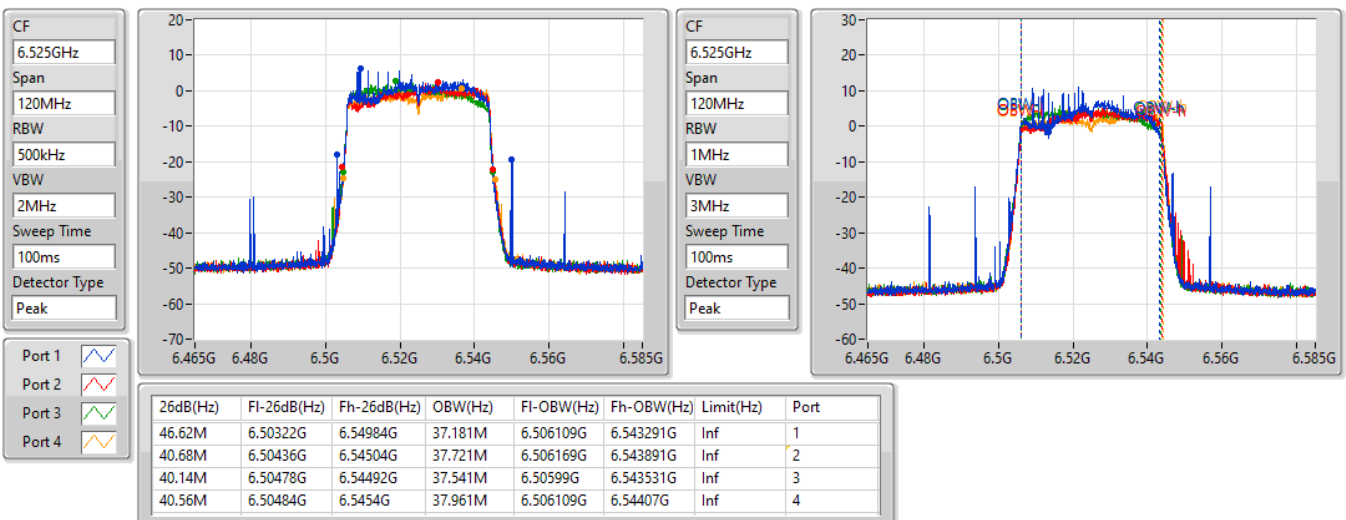


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6485MHz

09/12/2021

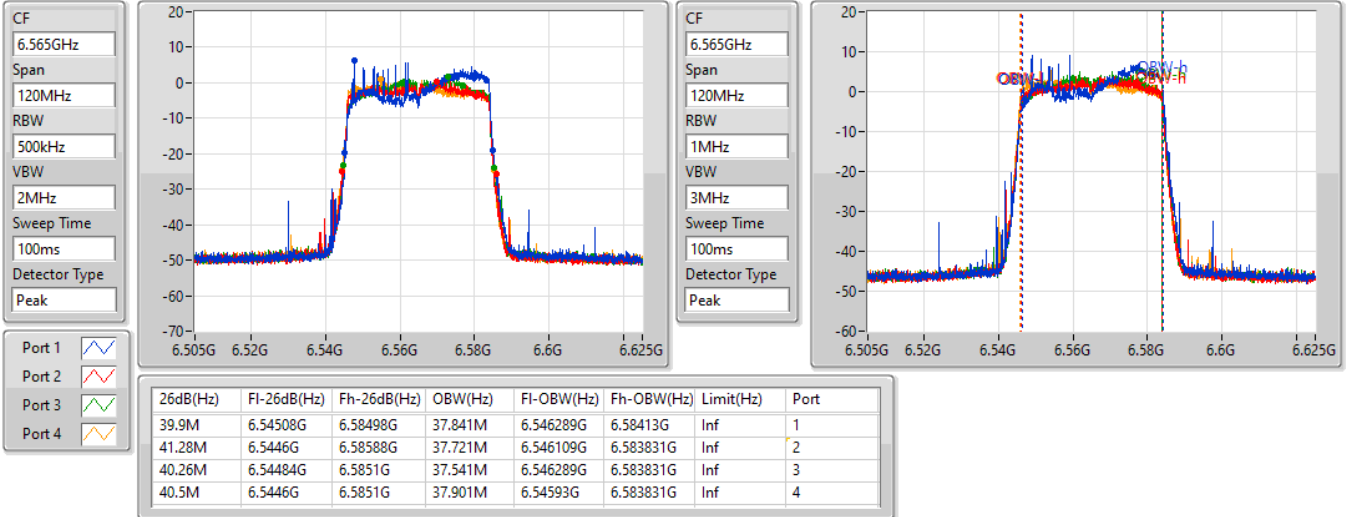

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6525MHz Straddle 6.425-6.525GHz

09/12/2021

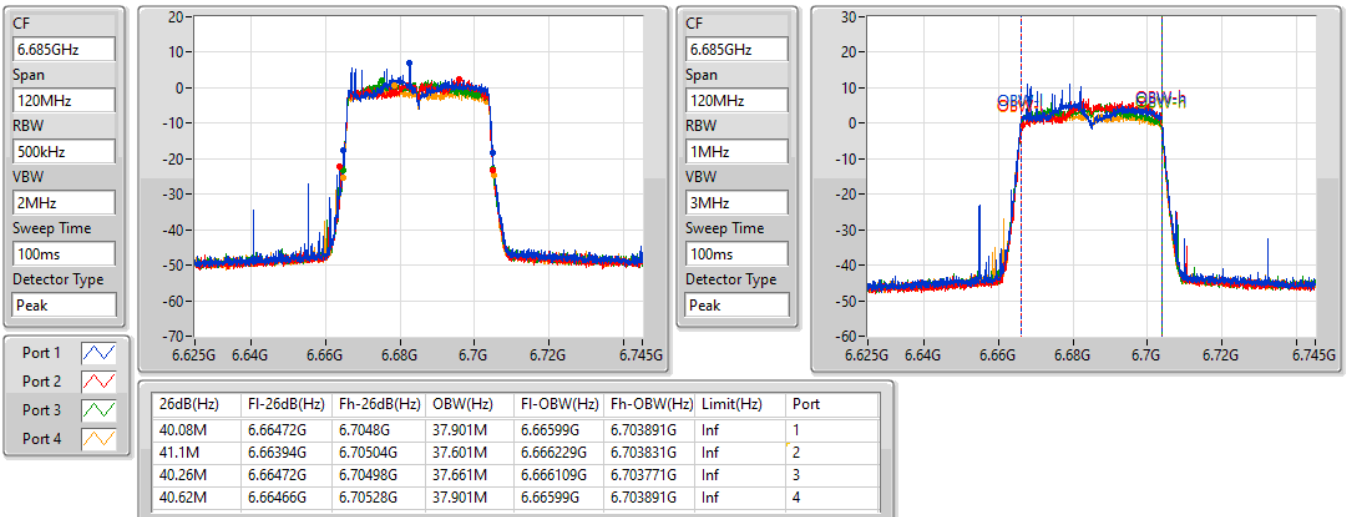


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6565MHz

09/12/2021

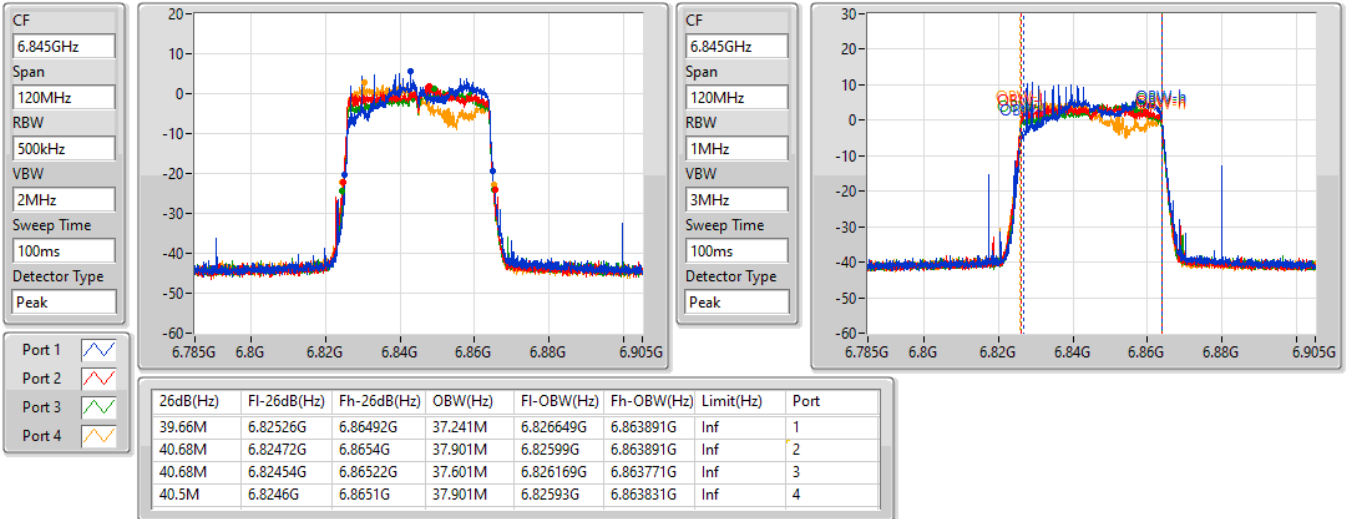

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6685MHz

09/12/2021

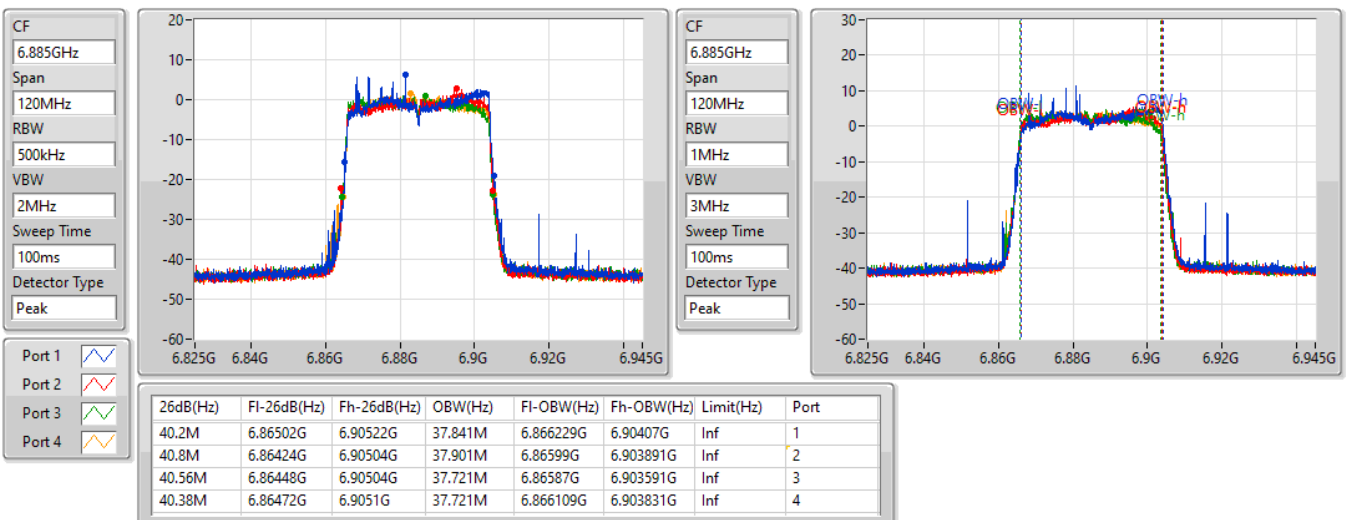


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6845MHz

09/12/2021

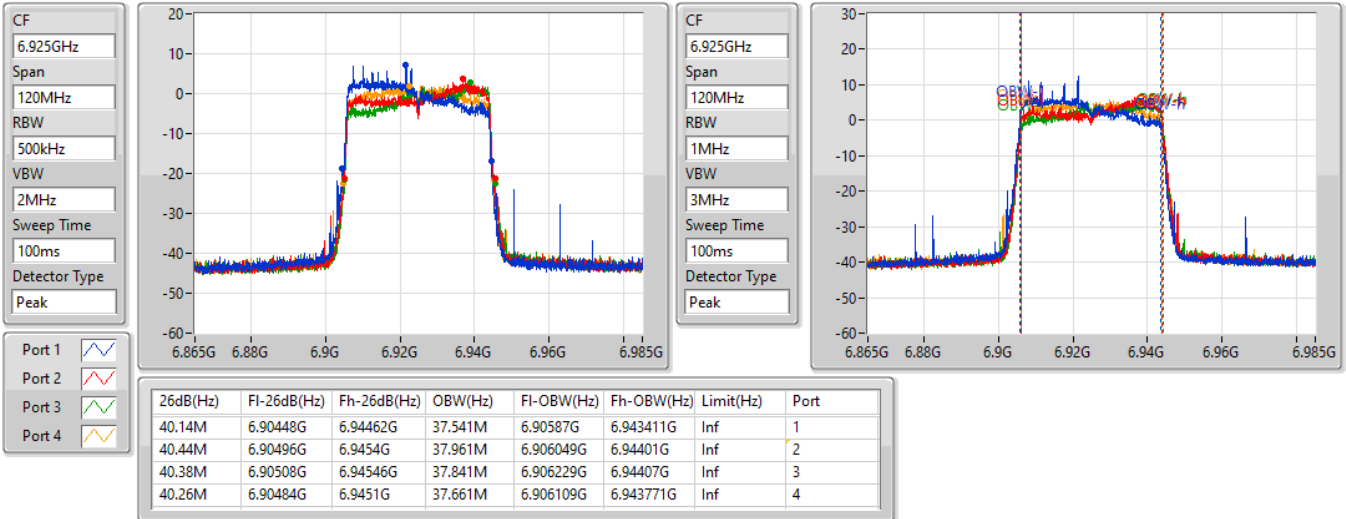

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6885MHz Straddle 6.525-6.875GHz

09/12/2021

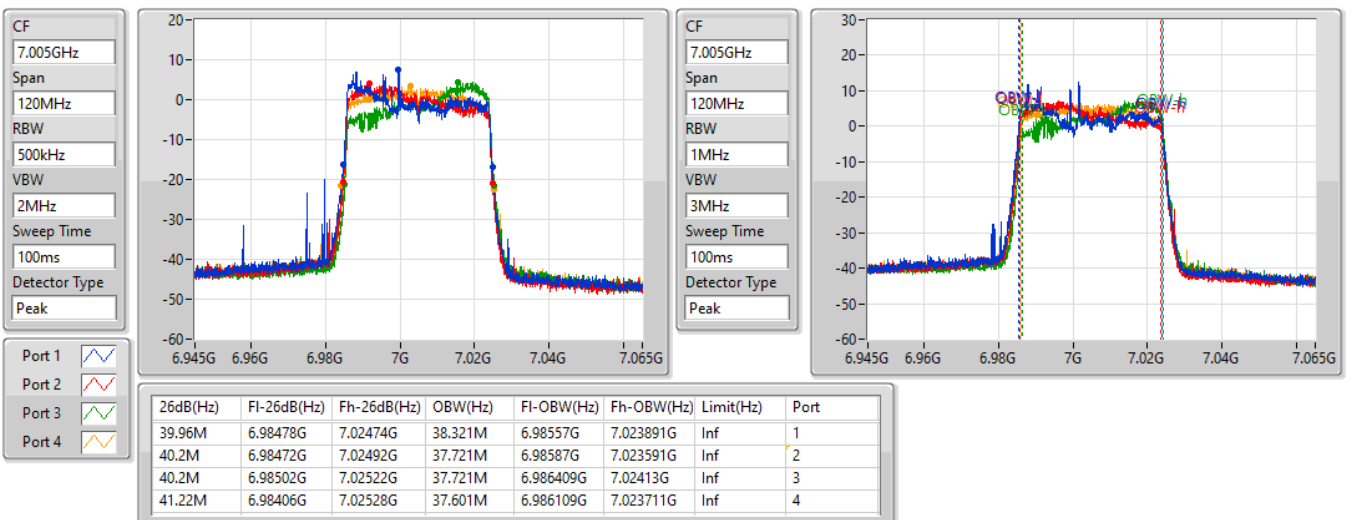


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
6925MHz

09/12/2021

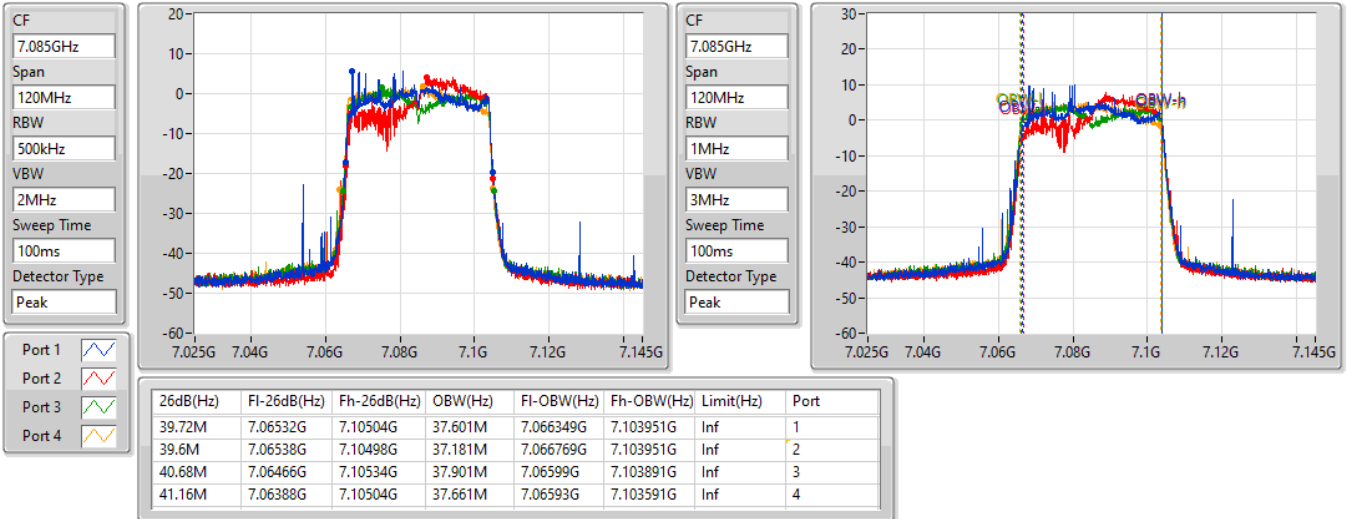

802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
7005MHz

09/12/2021

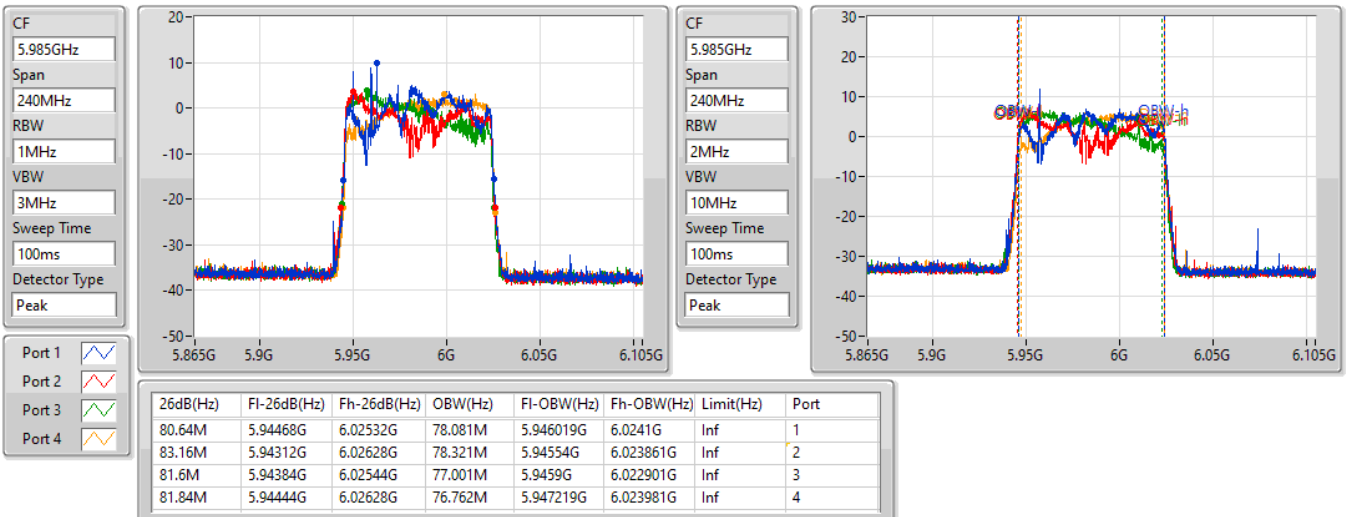


802.11ax HEW40-BF_Nss1,(MCS3)_4TX
EBW
7085MHz

09/12/2021

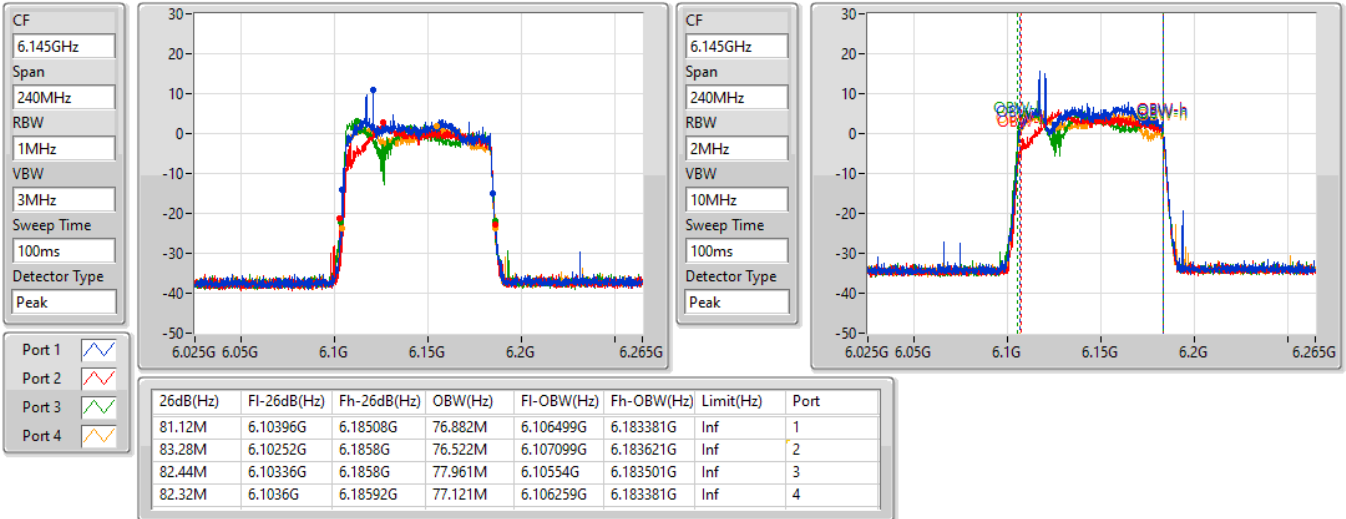

802.11ax HEW80-BF_Nss1,(MCS3)_4TX
EBW
5985MHz

09/12/2021



802.11ax HEW80-BF_Nss1,(MCS3)_4TX
EBW
6145MHz

09/12/2021


802.11ax HEW80-BF_Nss1,(MCS3)_4TX
EBW
6385MHz

09/12/2021

