

FCC Test Report

FCC ID : UDX-60099010
Equipment : Wi-Fi 6 Access Point
Brand Name : CISCO
Model Name : MR36-HW
Applicant : Cisco Systems
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.407

The product was received on Jun. 20, 2019, and testing was started from Jun. 20, 2019 and completed on Jul. 31, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	9
1.3 Testing Location Information	10
1.4 Measurement Uncertainty	10
2 TEST CONFIGURATION OF EUT.....	11
2.1 Test Condition	11
2.2 Test Channel Mode	11
2.3 The Worst Case Measurement Configuration.....	16
2.4 Support Equipment.....	18
2.5 Test Setup Diagram	19
3 TRANSMITTER TEST RESULT	21
3.1 AC Power-line Conducted Emissions	21
3.2 Emission Bandwidth	22
3.3 Maximum Conducted Output Power	23
3.4 Peak Power Spectral Density.....	25
3.5 Unwanted Emissions.....	27
3.6 Test Equipment and Calibration Data	31
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF EMISSION BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY	
APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS	
TEST SETUP PHOTOS V01	
PHOTOGRAPHS OF EUT V01	



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 Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Note : From Sporton Project No.:FR962029AN.

Declaration of Conformity:

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

Comments and explanations:

None

Reviewed by: Jackson Tsai

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 RF General Information

Radio 1_Non-Beamforming

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax(HEW 20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax(HEW 40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax(HEW 80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX

Radio 1_Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX

Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX

Radio 2_Non-Beamforming

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

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX
5.725-5.85GHz	802.11a	20	1TX
5.15-5.25GHz	802.11ac VHT20	20	1TX
5.725-5.85GHz	802.11ac VHT20	20	1TX
5.15-5.25GHz	802.11ac VHT40	40	1TX
5.725-5.85GHz	802.11ac VHT40	40	1TX
5.15-5.25GHz	802.11ac VHT80	80	1TX
5.725-5.85GHz	802.11ac VHT80	80	1TX

Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The resource unit of HEW 20, HEW 40, HEW80 only support full loading.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	PIFA	I-PEX
2	-	-	PIFA	I-PEX
3	-	-	PIFA	I-PEX
4	-	-	PIFA	I-PEX
5	-	-	PIFA	I-PEX
6	-	-	PIFA	I-PEX

Ant.	Port	Gain (dBi)									
		Radio 1					Radio 2				
		2.4G	5G				2.4G	5G			
			B1	B2	B3	B4		B1	B2	B3	B4
1	1	4.22	-	-	-	-	-	-	-	-	-
2	2	4.68	-	-	-	-	-	-	-	-	-
3	3	-	4.67	4.67	5.29	4.77	-	-	-	-	-
4	4	-	4.91	4.91	4.98	4.9	-	-	-	-	-
5	5	-	-	-	-	-	3.02	3.06	3.06	2.57	2.38
6	6	-	-	-	-	-	-	-	-	-	2.91

Note 1: The EUT has six antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/ac/ax mode (2TX/2RX) (Radio 1)

Support diversity function and pre-tested on each single chain, Ant. 1 (port 1) and Ant. 2(port 2) can be used as transmitting/receiving antenna.

For IEEE 802.11 b/g/n/ac mode (1TX/1RX) (Radio 2)

Ant. 5 (port 5) can be used as transmitting/receiving antenna.

For 5GHz function:

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

Support diversity function and pre-tested on each single chain, Ant. 3 (port 3) and Ant. 4(port 4) can be used as transmitting/receiving antenna.

For IEEE 802.11 a/n/ac mode (1TX/1RX) (Radio 2)

Ant. 5 (port 5) can be used as transmitting/receiving antenna.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX) (Radio 3)

Ant. 6 (port 6) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle
Radio 1_Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.926	0.33	1.434m	1k
802.11ac VHT20	0.952	0.21	5.431m	300
802.11ac VHT40	0.951	0.22	5.43m	300
802.11ac VHT80	0.951	0.22	5.431m	300
802.11ax HEW20	0.956	0.2	5.447m	300
802.11ax HEW40	0.954	0.2	5.447m	300
802.11ax HEW80	0.957	0.19	5.447m	300

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

Radio 1 Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.939	0.27	1.759m	1k
802.11ac VHT40-BF	0.933	0.3	1.695m	1k
802.11ac VHT80-BF	0.929	0.32	1.942m	1k
802.11ax HEW20-BF	0.917	0.38	1.759m	1k
802.11ax HEW40-BF	0.892	0.5	1.695m	1k
802.11ax HEW80-BF	0.927	0.33	1.95m	1k

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

Radio 2 Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.965	0.15	2.034m	1k
802.11ac VHT20	0.966	0.15	1.906m	1k
802.11ac VHT40	0.932	0.31	940.625u	3k
802.11ac VHT80	0.874	0.58	462.5u	3k

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

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR962029AN

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

Modifications	Performance Checking
Update Model Name: MR36-HW	N/A

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ KDB 789033 D02 v02r01
- ♦ KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction (Non-Beamforming)	CO01-HY	Justin	23.5~24.4°C / 58.3~67.3 %	24/Jun/2019~13/Jul/2019
AC Conduction (Beamforming)	CO01-HY	Edward	24.2~25.3°C / 57.8~59.6%	23/Jul/2019
RF Conducted	TH06-HY	Dexter	24.3~25.7°C / 54~58%	25/Jun/2019~31/Jul/2019
Radiated (Non-Beamforming)	03CH09-HY	Lego	23.5~26.9°C / 45~58%	20/Jun/2019~28/Jun/2019
Radiated (Beamforming)	03CH09-HY	Ryan	22.8~23.9°C / 41~57%	18/Jul/2019~19/Jul/2019

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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Radio 1_Non-Beamforming

Test Software Version	QRCT V4.0 00123
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Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-
5180MHz	20



Mode	Power Setting
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-
5190MHz	17.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-
5190MHz	18.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	18.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-



Mode	Power Setting
5210MHz	17.5
5775MHz	20
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-
5210MHz	18.5
5775MHz	20
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	17
5775MHz	19.5
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-
5190MHz	17.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-



Mode	Power Setting
5190MHz	18.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	18.5
5230MHz	20
5755MHz	20
5795MHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-
5210MHz	17.5
5775MHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-
5210MHz	18.5
5775MHz	20
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	17
5775MHz	19.5

Radio 1 Beamforming

Test Software	DoS
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Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	17
5755MHz	17
5795MHz	17



Mode	Power Setting
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	17
5775MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	17
5775MHz	17

Radio 2 Non-Beamforming

Test Software Version	QRCT V4.0 00123
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Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT20_Nss1,(MCS0)_1TX	-
5180MHz	19
5200MHz	20
5240MHz	20
5745MHz	20

Mode	Power Setting
5785MHz	20
5825MHz	20
802.11ac VHT40_Nss1,(MCS0)_1TX	-
5190MHz	13
5230MHz	20
5755MHz	20
5795MHz	20
802.11ac VHT80_Nss1,(MCS0)_1TX	-
5210MHz	12
5775MHz	19.5

2.3 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
Operating Mode	CTX
1	Adapter mode_Radio 1_Non-Beamforming
2	Adapter mode_Radio 1_Beamforming
3	Adapter mode_Radio 2_Non-Beamforming
4	PoE mode_Radio 1_Non-Beamforming
5	PoE mode_Radio 1_Beamforming
6	PoE mode_Radio 2_Non-Beamforming

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4G (Radio1) + 5G (Radio1) + BT (Radio3) + WLAN 2.4G (Radio2)
2	WLAN 2.4G (Radio1) + 5G (Radio1) + BT (Radio3) + WLAN 5G (Radio2)
Refer to Sporton Test Report No.: FA962029 for Co-location RF Exposure Evaluation.	

2.4 Support Equipment

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC adapter	Cisco	MA-PWR-30W-US	-
2	PoE	CISCO	MA-INJ-4	-
3	Notebook (remote)	DELL	E5530	DoC
4	Client AP (remote)	CISCO	AXL	DoC

Note: Support equipment No.1 & 2 & 4 was provided by customer.

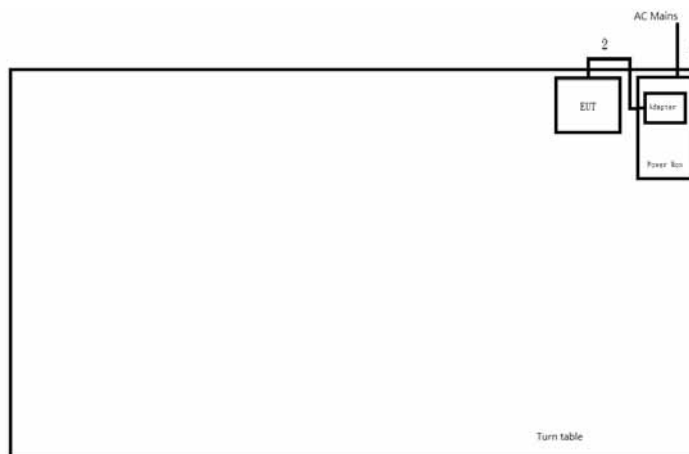
Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Power Source	GW	APS-9102	-

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC adapter	CISCO	MA-PWR-30W-US	-
2	PoE	CISCO	MA-INJ-4	-
3	Notebook (remote)	DELL	E5530	DoC
4	Client AP (remote)	CISCO	AXL	DoC

Note: Support equipment No.1 & 2 & 4 was provided by customer.

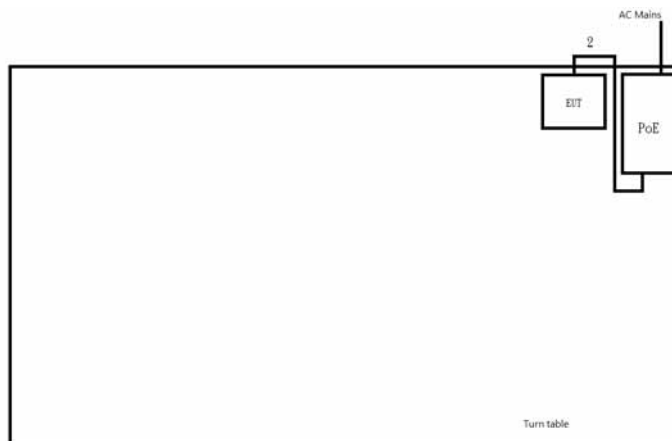
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test - Adapter mode

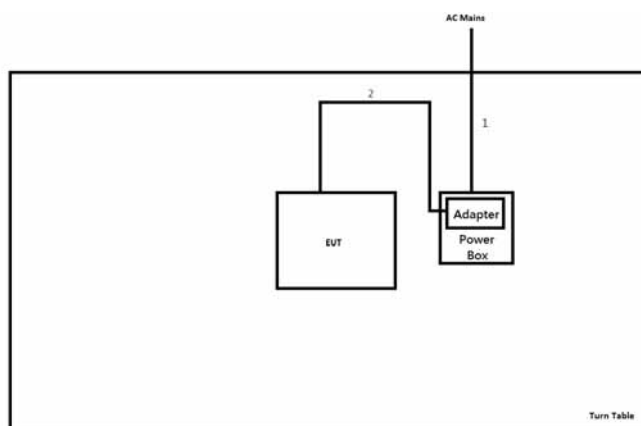


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.5	-

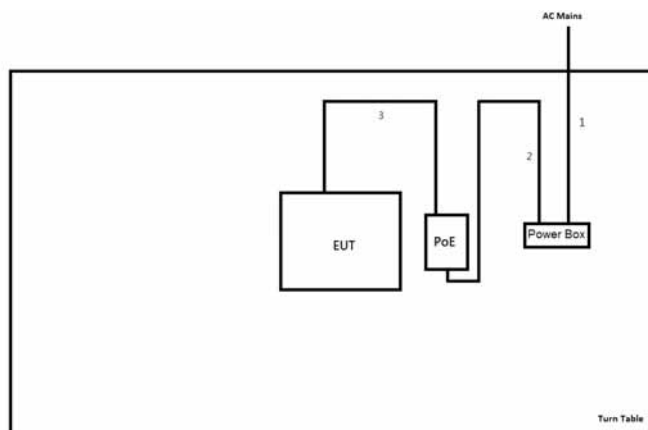
Test Setup Diagram – AC Line Conducted Emission Test - PoE mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	Lan cable	No	1.5	-

Test Setup Diagram - Radiated Test - Adapter mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	DC Power line	No	1.5	-

Test Setup Diagram - Radiated Test – PoE mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	AC Power line	No	1.5	-
3	LAN cable	No	2.0	-

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.

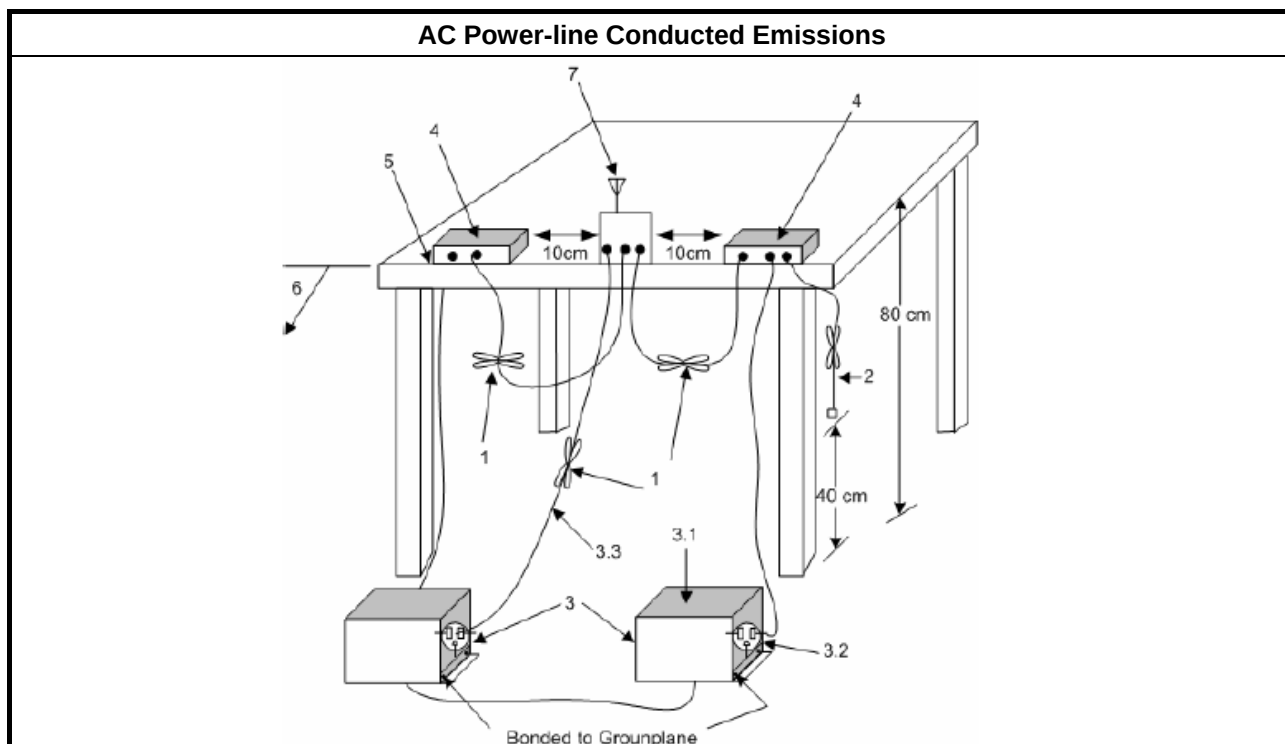
3.1.2 Measuring Instruments

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 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

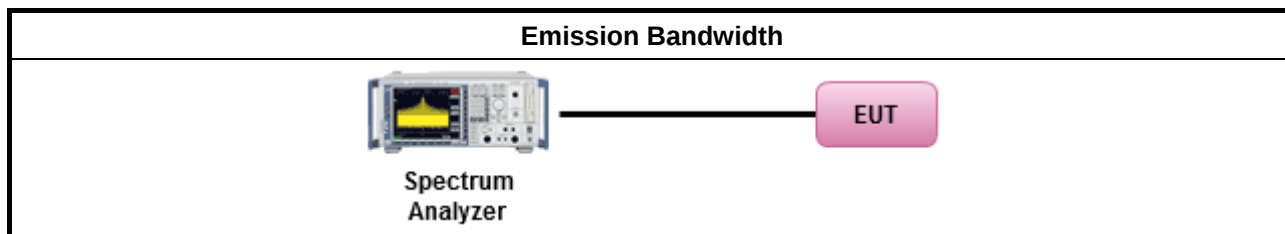
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

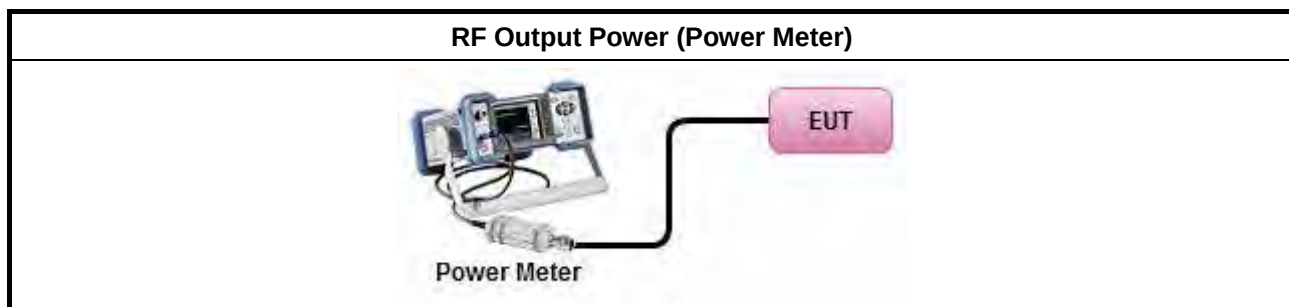
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

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

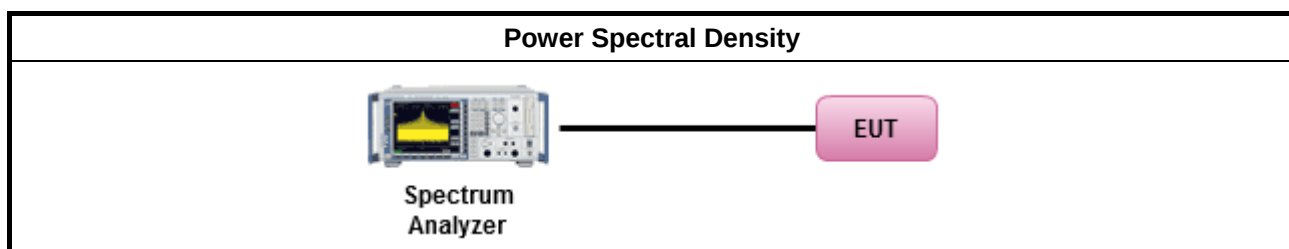
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐ Refer as KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	Duty cycle ≥ 98%
☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).	Duty cycle < 98%
☒ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

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

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

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

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

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

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall

be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

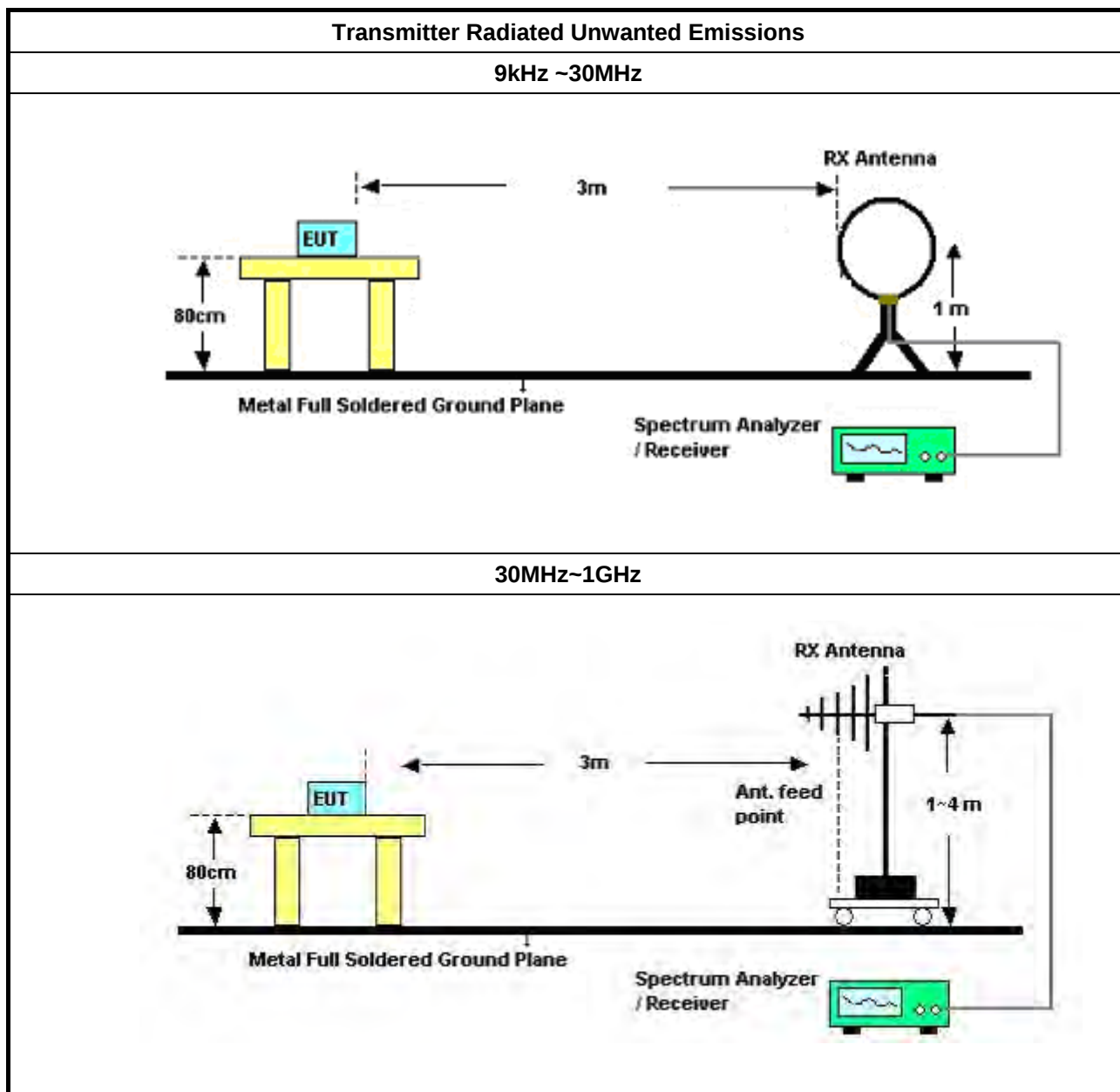
3.5.2 Measuring Instruments

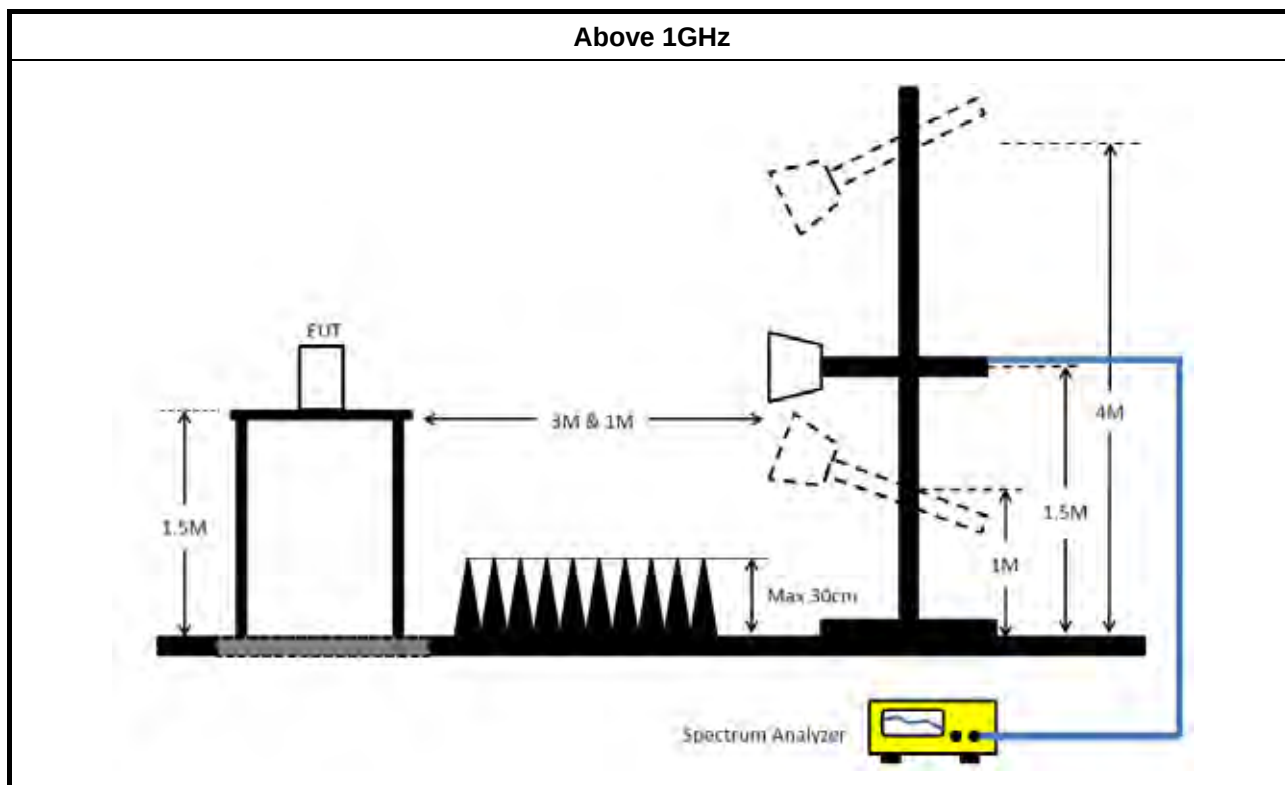
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
	☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV 216	101274	9kHz ~ 30MHz	03/Jun/2019	02/Jun/2020
RF Cable-CON	MTJ	RG142	CB001-CO	9kHz ~ 30MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11003G	F308010045	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561F	9495	9kHz ~ 30MHz	11/Oct/2018	10/Oct/2019

NCR : Non-Calibration Require
Instrument for Radiated Test (Non-Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
Microwave Preamplifier with 10 dB Pad	EMC	EMC051845 & WK0602-10	980240 & 01	1GHz ~ 18GHz	11/Jan/2019	10/Jan/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+ SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020

**Instrument for Radiated Test (Beamforming)**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz~26.5GHz	15/Jul/2019	14/Jul/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020

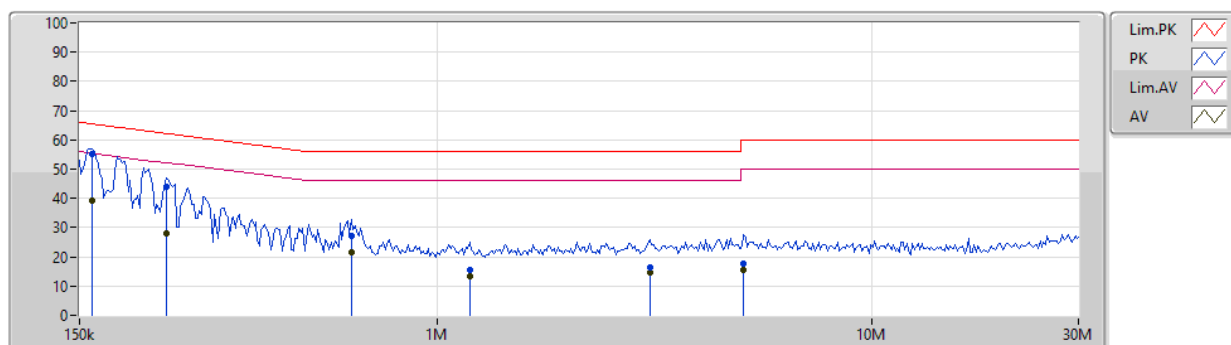
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter mode_Radio 1_Non-Beamforming		

24/06/2019

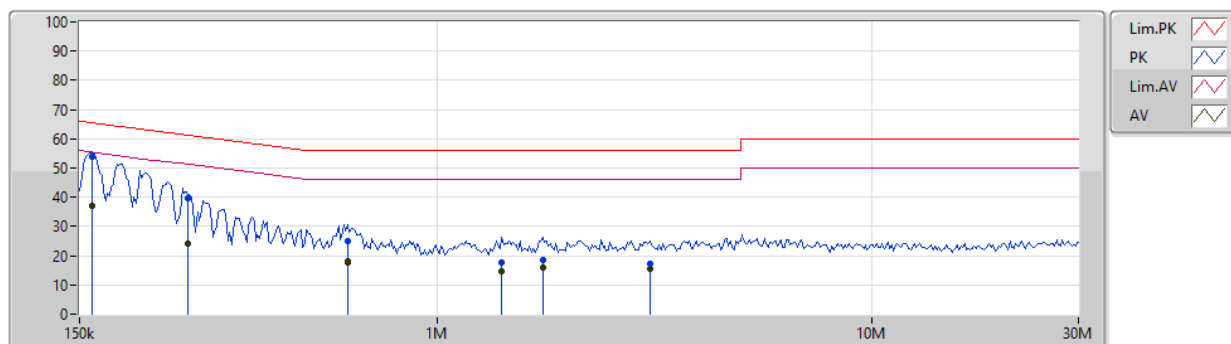


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	160.82k	55.34	65.43	-10.09	19.52	Neutral	"Worst"	35.82	9.65	0.01	9.86			
AV	160.82k	39.14	55.43	-16.29	19.52	Neutral	-	19.62	9.65	0.01	9.86			
QP	237.069k	43.96	62.20	-18.24	19.51	Neutral	-	24.45	9.64	0.01	9.86			
AV	237.069k	27.96	52.20	-24.24	19.51	Neutral	-	8.45	9.64	0.01	9.86			
QP	634.878k	27.24	56.00	-28.76	19.51	Neutral	-	7.73	9.64	0.01	9.86			
AV	634.878k	21.44	46.00	-24.56	19.51	Neutral	-	1.93	9.64	0.01	9.86			
QP	1.188M	15.47	56.00	-40.53	19.52	Neutral	-	-4.05	9.64	0.02	9.86			
AV	1.188M	13.38	46.00	-32.62	19.52	Neutral	-	-6.14	9.64	0.02	9.86			
QP	3.089M	16.25	56.00	-39.75	19.58	Neutral	-	-3.33	9.66	0.04	9.88			
AV	3.089M	14.59	46.00	-31.41	19.58	Neutral	-	-4.99	9.66	0.04	9.88			
QP	5.08M	17.69	60.00	-42.31	19.60	Neutral	-	-1.91	9.67	0.05	9.88			
AV	5.08M	15.35	50.00	-34.65	19.60	Neutral	-	-4.25	9.67	0.05	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter mode_Radio 1_Non-Beamforming		

24/06/2019

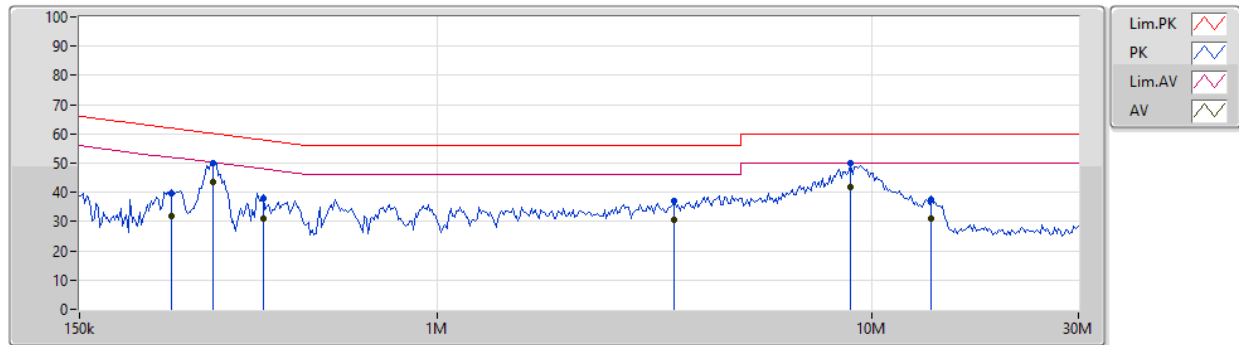


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	160.82k	53.84	65.43	-11.59	19.48	Line	"Worst"	34.36	9.61	0.01	9.86			
AV	160.82k	37.19	55.43	-18.24	19.48	Line	-	17.71	9.61	0.01	9.86			
QP	267.135k	39.68	61.20	-21.52	19.48	Line	-	20.20	9.61	0.01	9.86			
AV	267.135k	24.25	51.20	-26.95	19.48	Line	-	4.77	9.61	0.01	9.86			
QP	622.369k	25.10	56.00	-30.90	19.48	Line	-	5.62	9.61	0.01	9.86			
AV	622.369k	18.07	46.00	-27.93	19.48	Line	-	-1.41	9.61	0.01	9.86			
QP	622.369k	25.10	56.00	-30.90	19.48	Line	-	5.62	9.61	0.01	9.86			
AV	622.369k	17.62	46.00	-28.38	19.48	Line	-	-1.86	9.61	0.01	9.86			
QP	1.407M	17.67	56.00	-38.33	19.50	Line	-	-1.83	9.61	0.03	9.86			
AV	1.407M	14.85	46.00	-31.15	19.50	Line	-	-4.65	9.61	0.03	9.86			
QP	1.752M	18.52	56.00	-37.48	19.52	Line	-	-1.00	9.62	0.03	9.87			
AV	1.752M	15.80	46.00	-30.20	19.52	Line	-	-3.72	9.62	0.03	9.87			
QP	3.089M	17.38	56.00	-38.62	19.55	Line	-	-2.17	9.63	0.04	9.88			
AV	3.089M	15.32	46.00	-30.68	19.55	Line	-	-4.23	9.63	0.04	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter mode_Radio 1_Beamforming		

23/07/2019

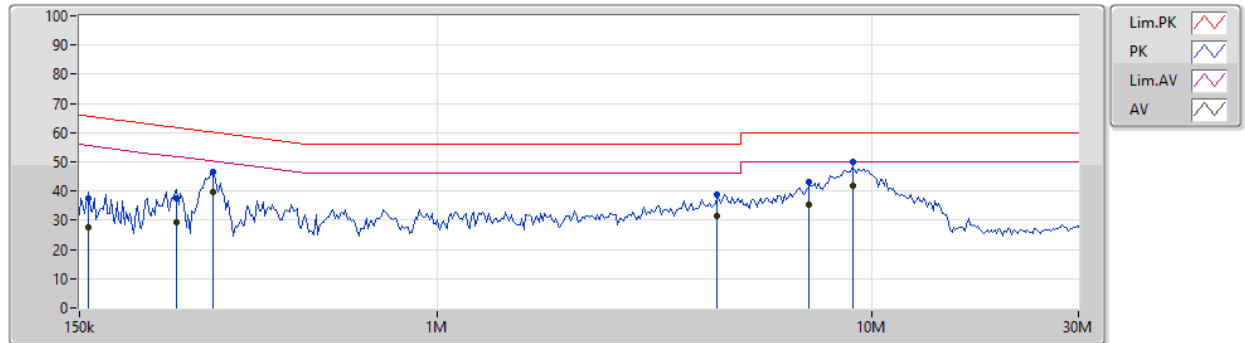


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	244.252k	39.52	61.95	-22.43	19.47	Neutral	-	20.05	9.59	0.01	9.87			
AV	244.252k	32.07	51.95	-19.88	19.47	Neutral	-	12.60	9.59	0.01	9.87			
QP	304.025k	49.95	60.13	-10.18	19.48	Neutral	-	30.47	9.59	0.01	9.88			
AV	304.025k	43.32	50.13	-6.81	19.48	Neutral	"Worst"	23.84	9.59	0.01	9.88			
QP	397.728k	38.07	57.89	-19.82	19.48	Neutral	-	18.59	9.59	0.01	9.88			
AV	397.728k	31.01	47.89	-16.88	19.48	Neutral	-	11.53	9.59	0.01	9.88			
QP	3.515M	37.14	56.00	-18.86	19.54	Neutral	-	17.60	9.61	0.04	9.89			
AV	3.515M	30.72	46.00	-15.28	19.54	Neutral	-	11.18	9.61	0.04	9.89			
QP	8.957M	49.91	60.00	-10.09	19.62	Neutral	-	30.29	9.66	0.07	9.89			
AV	8.957M	42.02	50.00	-7.98	19.62	Neutral	-	22.40	9.66	0.07	9.89			
QP	13.74M	37.46	60.00	-22.54	19.66	Neutral	-	17.80	9.67	0.09	9.90			
AV	13.74M	30.96	50.00	-19.04	19.66	Neutral	-	11.30	9.67	0.09	9.90			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter mode_Radio 1_Beamforming		

23/07/2019

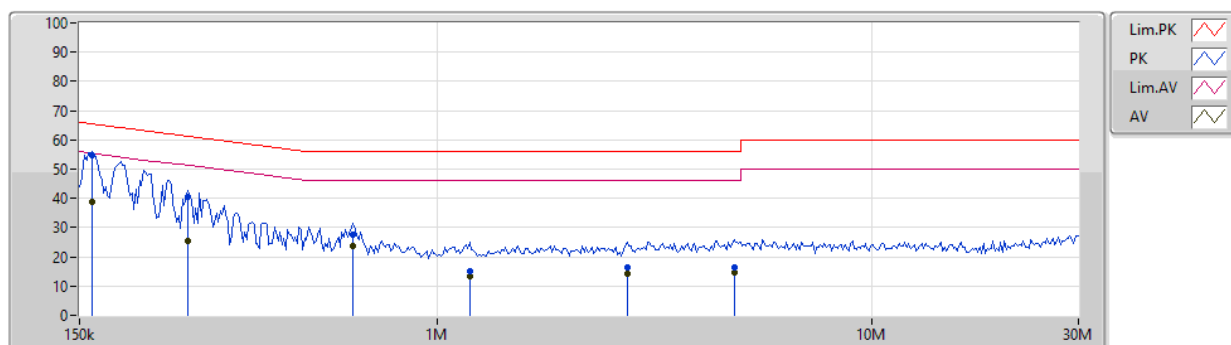


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	157.652k	37.33	65.58	-28.25	19.48	Line	-	17.85	9.60	0.01	9.87			
AV	157.652k	27.62	55.58	-27.96	19.48	Line	-	8.14	9.60	0.01	9.87			
QP	251.653k	37.56	61.70	-24.14	19.48	Line	-	18.08	9.60	0.01	9.87			
AV	251.653k	29.35	51.70	-22.35	19.48	Line	-	9.87	9.60	0.01	9.87			
QP	304.025k	46.68	60.13	-13.45	19.48	Line	-	27.20	9.59	0.01	9.88			
AV	304.025k	39.56	50.13	-10.57	19.48	Line	-	20.08	9.59	0.01	9.88			
QP	4.419M	38.72	56.00	-17.28	19.57	Line	-	19.15	9.63	0.05	9.89			
AV	4.419M	31.44	46.00	-14.56	19.57	Line	-	11.87	9.63	0.05	9.89			
QP	7.196M	42.94	60.00	-17.06	19.61	Line	-	23.33	9.66	0.06	9.89			
AV	7.196M	35.27	50.00	-14.73	19.61	Line	-	15.66	9.66	0.06	9.89			
QP	9.047M	50.16	60.00	-9.84	19.63	Line	-	30.53	9.67	0.07	9.89			
AV	9.047M	41.89	50.00	-8.11	19.63	Line	"Worst"	22.26	9.67	0.07	9.89			

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	Adapter mode_Radio 2_Non-Beamforming		

13/07/2019

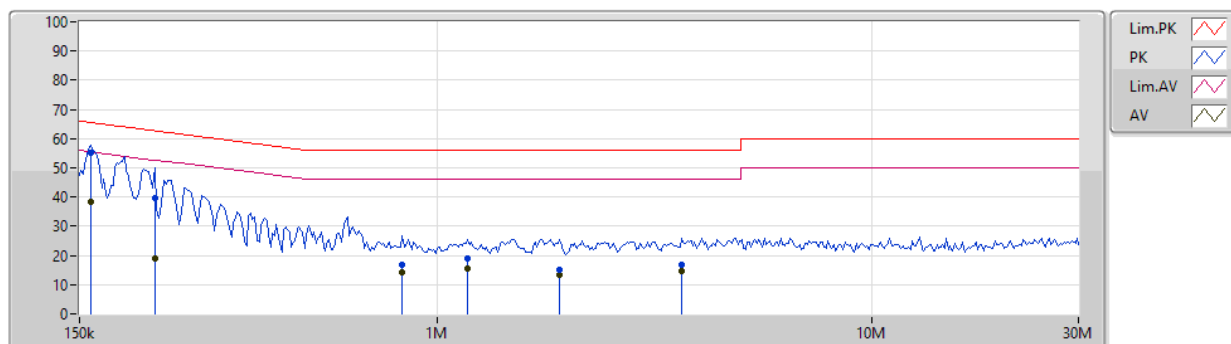


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	160.82k	54.77	65.43	-10.66	19.52	Neutral	"Worst"	35.25	9.65	0.01	9.86			
AV	160.82k	38.61	55.43	-16.82	19.52	Neutral	-	19.09	9.65	0.01	9.86			
QP	267.135k	40.59	61.20	-20.61	19.51	Neutral	-	21.08	9.64	0.01	9.86			
AV	267.135k	25.39	51.20	-25.81	19.51	Neutral	-	5.88	9.64	0.01	9.86			
QP	641.227k	27.47	56.00	-28.53	19.51	Neutral	-	7.96	9.64	0.01	9.86			
AV	641.227k	23.83	46.00	-22.17	19.51	Neutral	-	4.32	9.64	0.01	9.86			
QP	1.188M	15.28	56.00	-40.72	19.52	Neutral	-	-4.24	9.64	0.02	9.86			
AV	1.188M	13.32	46.00	-32.68	19.52	Neutral	-	-6.20	9.64	0.02	9.86			
QP	2.741M	16.25	56.00	-39.75	19.56	Neutral	-	-3.31	9.65	0.04	9.87			
AV	2.741M	14.41	46.00	-31.59	19.56	Neutral	-	-5.15	9.65	0.04	9.87			
QP	4.833M	16.54	56.00	-39.46	19.60	Neutral	-	-3.06	9.67	0.05	9.88			
AV	4.833M	14.77	46.00	-31.23	19.60	Neutral	-	-4.83	9.67	0.05	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Line
Operating Function	Adapter mode_Radio 2_Non-Beamforming		

13/07/2019

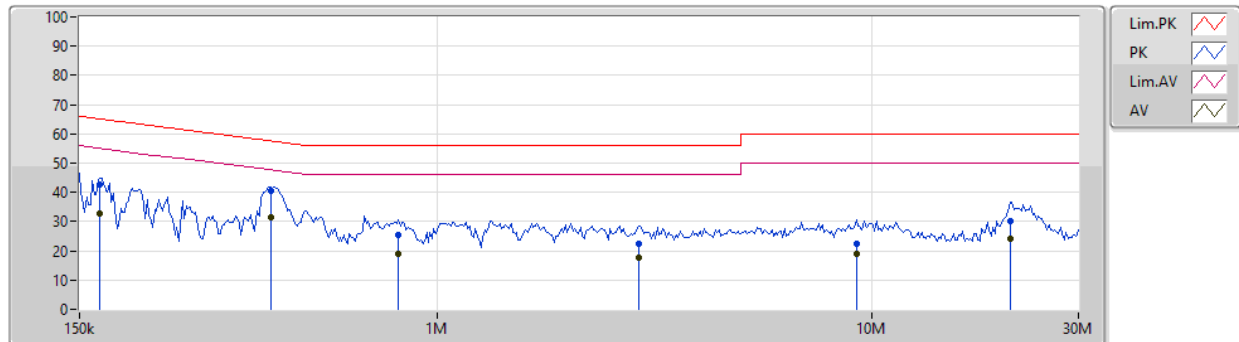


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159.228k	55.01	65.50	-10.49	19.48	Line	"Worst"	35.53	9.61	0.01	9.86			
AV	159.228k	38.18	55.50	-17.32	19.48	Line	-	18.70	9.61	0.01	9.86			
QP	223.33k	39.47	62.69	-23.22	19.48	Line	-	19.99	9.61	0.01	9.86			
AV	223.33k	18.80	52.69	-33.89	19.48	Line	-	-0.68	9.61	0.01	9.86			
QP	830.553k	16.75	56.00	-39.25	19.49	Line	-	-2.74	9.61	0.02	9.86			
AV	830.553k	14.04	46.00	-31.96	19.49	Line	-	-5.45	9.61	0.02	9.86			
QP	1.177M	19.15	56.00	-36.85	19.49	Line	-	-0.34	9.61	0.02	9.86			
AV	1.177M	15.73	46.00	-30.27	19.49	Line	-	-3.76	9.61	0.02	9.86			
QP	1.916M	14.89	56.00	-41.11	19.52	Line	-	-4.63	9.62	0.03	9.87			
AV	1.916M	13.32	46.00	-32.68	19.52	Line	-	-6.20	9.62	0.03	9.87			
QP	3.658M	16.66	56.00	-39.34	19.55	Line	-	-2.89	9.63	0.04	9.88			
AV	3.658M	14.80	46.00	-31.20	19.55	Line	-	-4.75	9.63	0.04	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	3	Power Phase	Neutral
Operating Function	PoE mode_Radio 1_Non-Beamforming		

13/07/2019

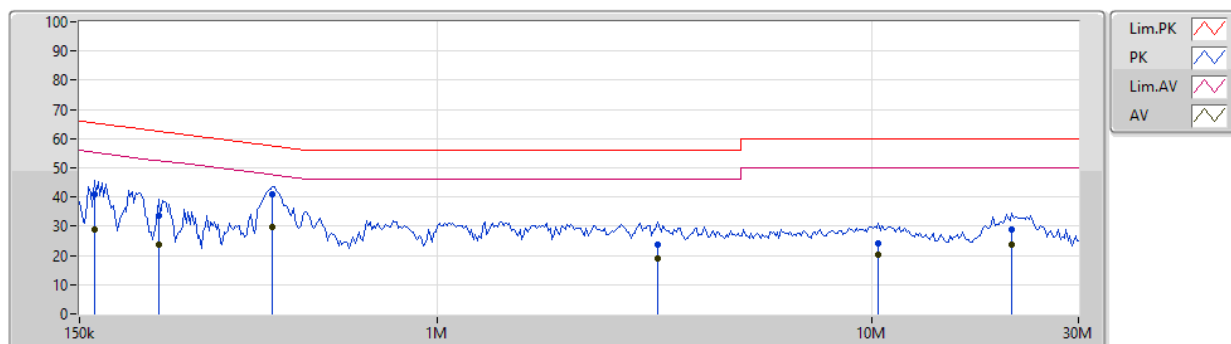


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	167.35k	42.64	65.08	-22.44	19.52	Neutral	-	23.12	9.65	0.01	9.86			
AV	167.35k	32.76	55.08	-22.32	19.52	Neutral	-	13.24	9.65	0.01	9.86			
QP	413.877k	40.73	57.57	-16.84	19.51	Neutral	-	21.22	9.64	0.01	9.86			
AV	413.877k	31.60	47.57	-15.97	19.51	Neutral	"Worst"	12.09	9.64	0.01	9.86			
QP	814.188k	25.56	56.00	-30.44	19.52	Neutral	-	6.04	9.64	0.02	9.86			
AV	814.188k	19.01	46.00	-26.99	19.52	Neutral	-	-0.51	9.64	0.02	9.86			
QP	2.91M	22.36	56.00	-33.64	19.58	Neutral	-	2.78	9.66	0.04	9.88			
AV	2.91M	17.81	46.00	-28.19	19.58	Neutral	-	-1.77	9.66	0.04	9.88			
QP	9.229M	22.59	60.00	-37.41	19.68	Neutral	-	2.91	9.71	0.07	9.90			
AV	9.229M	18.84	50.00	-31.16	19.68	Neutral	-	-0.84	9.71	0.07	9.90			
QP	20.869M	30.09	60.00	-29.91	19.78	Neutral	-	10.31	9.71	0.11	9.96			
AV	20.869M	24.10	50.00	-25.90	19.78	Neutral	-	4.32	9.71	0.11	9.96			

AC Power-line Conducted Emissions Result

Operating Mode	3	Power Phase	Line
Operating Function	PoE mode_Radio 1_Non-Beamforming		

13/07/2019

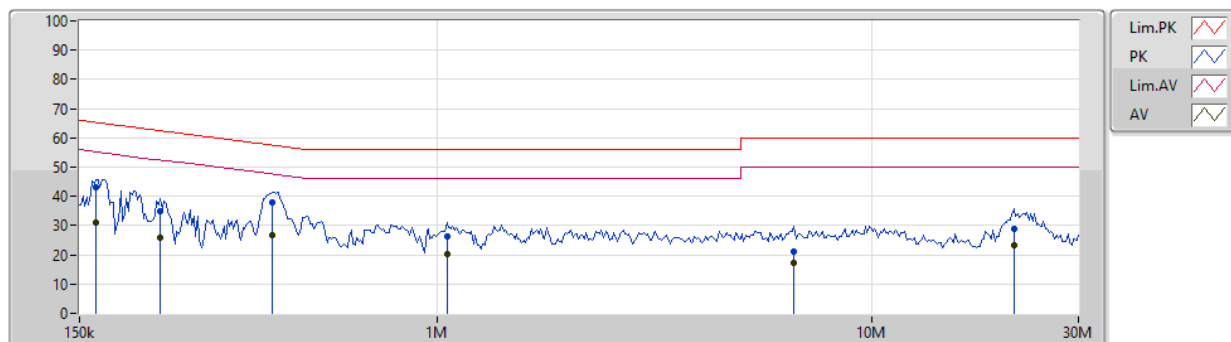


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	162.429k	40.80	65.33	-24.53	19.48	Line	-	21.32	9.61	0.01	9.86			
AV	162.429k	29.03	55.33	-26.30	19.48	Line	-	9.55	9.61	0.01	9.86			
QP	227.818k	33.45	62.52	-29.07	19.48	Line	-	13.97	9.61	0.01	9.86			
AV	227.818k	23.67	52.52	-28.85	19.48	Line	-	4.19	9.61	0.01	9.86			
QP	418.016k	41.10	57.49	-16.39	19.48	Line	"Worst"	21.62	9.61	0.01	9.86			
AV	418.016k	29.59	47.49	-17.90	19.48	Line	-	10.11	9.61	0.01	9.86			
QP	3.214M	23.71	56.00	-32.29	19.55	Line	-	4.16	9.63	0.04	9.88			
AV	3.214M	18.88	46.00	-27.12	19.55	Line	-	-0.67	9.63	0.04	9.88			
QP	10.399M	24.22	60.00	-35.78	19.63	Line	-	4.59	9.66	0.07	9.90			
AV	10.399M	20.14	50.00	-29.86	19.63	Line	-	0.51	9.66	0.07	9.90			
QP	21.077M	29.00	60.00	-31.00	19.69	Line	-	9.31	9.62	0.11	9.96			
AV	21.077M	23.60	50.00	-26.40	19.69	Line	-	3.91	9.62	0.11	9.96			

AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Neutral
Operating Function	PoE mode_Radio 2_Non-Beamforming		

13/07/2019

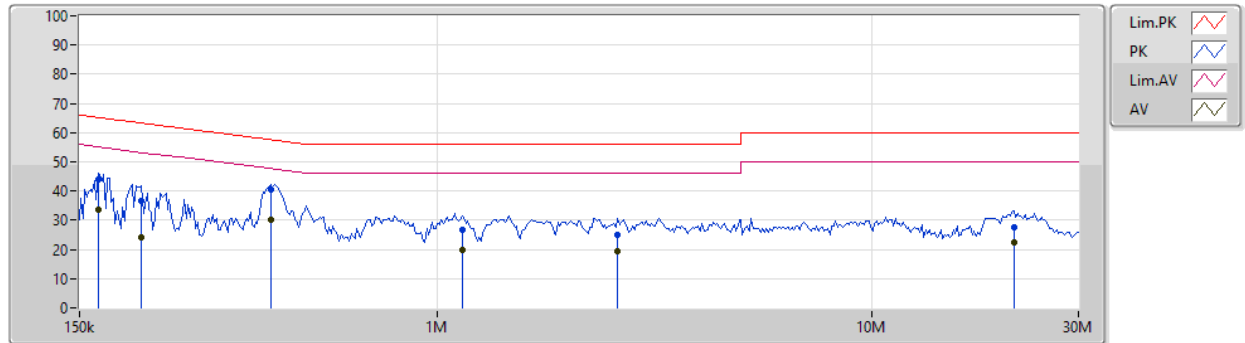


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	164.053k	43.09	65.25	-22.16	19.52	Neutral	-	23.57	9.65	0.01	9.86			
AV	164.053k	31.23	55.25	-24.02	19.52	Neutral	-	11.71	9.65	0.01	9.86			
QP	230.097k	35.06	62.44	-27.38	19.51	Neutral	-	15.55	9.64	0.01	9.86			
AV	230.097k	25.99	52.44	-26.45	19.51	Neutral	-	6.48	9.64	0.01	9.86			
QP	418.016k	37.91	57.49	-19.58	19.51	Neutral	"Worst"	18.40	9.64	0.01	9.86			
AV	418.016k	26.70	47.49	-20.79	19.51	Neutral	-	7.19	9.64	0.01	9.86			
QP	1.055M	26.42	56.00	-29.58	19.52	Neutral	-	6.90	9.64	0.02	9.86			
AV	1.055M	20.38	46.00	-25.62	19.52	Neutral	-	0.86	9.64	0.02	9.86			
QP	6.646M	21.00	60.00	-39.00	19.64	Neutral	-	1.36	9.69	0.06	9.89			
AV	6.646M	17.44	50.00	-32.56	19.64	Neutral	-	-2.20	9.69	0.06	9.89			
QP	21.288M	29.00	60.00	-31.00	19.78	Neutral	-	9.22	9.71	0.11	9.96			
AV	21.288M	23.20	50.00	-26.80	19.78	Neutral	-	3.42	9.71	0.11	9.96			

AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Line
Operating Function	PoE mode_Radio 2_Non-Beamforming		

13/07/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	165.693k	43.95	65.18	-21.23	19.48	Line	-	24.47	9.61	0.01	9.86			
AV	165.693k	33.56	55.18	-21.62	19.48	Line	-	14.08	9.61	0.01	9.86			
QP	208.304k	36.66	63.27	-26.61	19.48	Line	-	17.18	9.61	0.01	9.86			
AV	208.304k	24.26	53.27	-29.01	19.48	Line	-	4.78	9.61	0.01	9.86			
QP	413.877k	40.69	57.57	-16.88	19.48	Line	"Worst"	21.21	9.61	0.01	9.86			
AV	413.877k	30.24	47.57	-17.33	19.48	Line	-	10.76	9.61	0.01	9.86			
QP	1.142M	26.74	56.00	-29.26	19.49	Line	-	7.25	9.61	0.02	9.86			
AV	1.142M	19.95	46.00	-26.05	19.49	Line	-	0.46	9.61	0.02	9.86			
QP	2.608M	24.98	56.00	-31.02	19.53	Line	-	5.45	9.62	0.04	9.87			
AV	2.608M	19.57	46.00	-26.43	19.53	Line	-	0.04	9.62	0.04	9.87			
QP	21.288M	27.70	60.00	-32.30	19.69	Line	-	8.01	9.62	0.11	9.96			
AV	21.288M	22.41	50.00	-27.59	19.69	Line	-	2.72	9.62	0.11	9.96			

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	19.89M	16.432M	16M4D1D	19.77M	16.402M
802.11a_Nss1,(6Mbps)_1TX(Port2)	19.98M	16.402M	16M4D1D	19.86M	16.372M
802.11a_Nss1,(6Mbps)_2TX	20.25M	16.402M	16M4D1D	19.59M	16.372M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	21M	17.601M	17M6D1D	20.88M	17.601M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	21.27M	17.601M	17M6D1D	20.73M	17.601M
802.11ac VHT20_Nss1,(MCS0)_2TX	21.36M	17.631M	17M6D1D	21.09M	17.571M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	41.22M	36.102M	36M1D1D	40.86M	36.042M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	41.22M	36.102M	36M1D1D	41.1M	36.042M
802.11ac VHT40_Nss1,(MCS0)_2TX	41.1M	36.102M	36M1D1D	40.26M	36.042M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	82.08M	75.562M	75M6D1D	82.08M	75.562M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	81.96M	75.562M	75M6D1D	81.96M	75.562M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.2M	75.322M	75M3D1D	81.6M	75.322M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	21.36M	18.921M	18M9D1D	21.21M	18.891M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	21.54M	18.981M	19M0D1D	21.33M	18.921M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.32M	18.951M	19M0D1D	21.27M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	41.1M	37.781M	37M8D1D	40.98M	37.721M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	42M	37.781M	37M8D1D	40.92M	37.721M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.76M	37.781M	37M8D1D	40.62M	37.661M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	82.08M	76.882M	76M9D1D	82.08M	76.882M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	82.68M	77.001M	77M0D1D	82.68M	77.001M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.8M	77.241M	77M2D1D	81.72M	77.001M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	16.32M	16.402M	16M4D1D	16.29M	16.372M
802.11a_Nss1,(6Mbps)_1TX(Port2)	16.32M	16.402M	16M4D1D	16.29M	16.372M
802.11a_Nss1,(6Mbps)_2TX	16.32M	16.432M	16M4D1D	16.29M	16.402M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	17.55M	17.601M	17M6D1D	17.55M	17.571M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	17.55M	17.601M	17M6D1D	17.49M	17.601M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.55M	17.631M	17M6D1D	17.25M	17.601M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	36.3M	36.102M	36M1D1D	35.4M	36.042M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	36.06M	36.102M	36M1D1D	35.28M	36.102M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.94M	36.222M	36M2D1D	35.28M	36.102M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	73.8M	75.442M	75M4D1D	73.8M	75.442M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	75.36M	75.562M	75M6D1D	75.36M	75.562M
802.11ac VHT80_Nss1,(MCS0)_2TX	74.28M	75.682M	75M7D1D	70.92M	75.562M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	18.87M	18.951M	19M0D1D	18.39M	18.921M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.93M	18.951M	19M0D1D	18.84M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.99M	18.951M	19M0D1D	18.36M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	37.86M	37.841M	37M8D1D	37.8M	37.781M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.62M	37.781M	37M8D1D	37.56M	37.781M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.62M	37.781M	37M8D1D	37.5M	37.661M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	71.28M	77.121M	77M1D1D	71.28M	77.121M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	76.32M	77.361M	77M4D1D	76.32M	77.361M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.8M	77.241M	77M2D1D	76.44M	77.121M



Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	19.77M	16.432M		
5200MHz	Pass	Inf	19.89M	16.402M		
5240MHz	Pass	Inf	19.8M	16.402M		
5745MHz	Pass	500k	16.29M	16.402M		
5785MHz	Pass	500k	16.29M	16.402M		
5825MHz	Pass	500k	16.32M	16.372M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			19.98M	16.372M
5200MHz	Pass	Inf			19.89M	16.402M
5240MHz	Pass	Inf			19.86M	16.402M
5745MHz	Pass	500k			16.29M	16.372M
5785MHz	Pass	500k			16.32M	16.402M
5825MHz	Pass	500k			16.29M	16.372M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.8M	16.372M	20.25M	16.402M
5200MHz	Pass	Inf	19.98M	16.402M	20.22M	16.402M
5240MHz	Pass	Inf	19.71M	16.402M	19.59M	16.402M
5745MHz	Pass	500k	16.29M	16.402M	16.29M	16.402M
5785MHz	Pass	500k	16.29M	16.402M	16.29M	16.432M
5825MHz	Pass	500k	16.29M	16.402M	16.32M	16.402M
802.11ac_VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	20.88M	17.601M		
5200MHz	Pass	Inf	20.91M	17.601M		
5240MHz	Pass	Inf	21M	17.601M		
5745MHz	Pass	500k	17.55M	17.601M		
5785MHz	Pass	500k	17.55M	17.601M		
5825MHz	Pass	500k	17.55M	17.571M		
802.11ac_VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			20.91M	17.601M
5200MHz	Pass	Inf			21.27M	17.601M
5240MHz	Pass	Inf			20.73M	17.601M
5745MHz	Pass	500k			17.55M	17.601M
5785MHz	Pass	500k			17.49M	17.601M
5825MHz	Pass	500k			17.55M	17.601M
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.09M	17.571M	21.24M	17.631M
5200MHz	Pass	Inf	21.09M	17.571M	21.36M	17.601M
5240MHz	Pass	Inf	21.12M	17.601M	21.09M	17.601M
5745MHz	Pass	500k	17.52M	17.601M	17.28M	17.631M
5785MHz	Pass	500k	17.25M	17.631M	17.55M	17.601M
5825MHz	Pass	500k	17.55M	17.631M	17.55M	17.631M
802.11ac_VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5190MHz	Pass	Inf	40.86M	36.102M		

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5230MHz	Pass	Inf	41.22M	36.042M		
5755MHz	Pass	500k	35.4M	36.042M		
5795MHz	Pass	500k	36.3M	36.102M		
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5190MHz	Pass	Inf			41.22M	36.102M
5230MHz	Pass	Inf			41.1M	36.042M
5755MHz	Pass	500k			36.06M	36.102M
5795MHz	Pass	500k			35.28M	36.102M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.1M	36.102M	40.26M	36.102M
5230MHz	Pass	Inf	41.1M	36.042M	40.5M	36.102M
5755MHz	Pass	500k	35.94M	36.222M	35.88M	36.102M
5795MHz	Pass	500k	35.28M	36.162M	35.28M	36.162M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5210MHz	Pass	Inf	82.08M	75.562M		
5775MHz	Pass	500k	73.8M	75.442M		
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5210MHz	Pass	Inf			81.96M	75.562M
5775MHz	Pass	500k			75.36M	75.562M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.2M	75.322M	81.6M	75.322M
5775MHz	Pass	500k	74.28M	75.562M	70.92M	75.682M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	21.36M	18.891M		
5200MHz	Pass	Inf	21.21M	18.891M		
5240MHz	Pass	Inf	21.36M	18.921M		
5745MHz	Pass	500k	18.39M	18.921M		
5785MHz	Pass	500k	18.87M	18.951M		
5825MHz	Pass	500k	18.87M	18.951M		
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			21.33M	18.981M
5200MHz	Pass	Inf			21.51M	18.921M
5240MHz	Pass	Inf			21.54M	18.951M
5745MHz	Pass	500k			18.87M	18.891M
5785MHz	Pass	500k			18.93M	18.951M
5825MHz	Pass	500k			18.84M	18.921M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.69M	18.951M	21.69M	18.891M
5200MHz	Pass	Inf	22.32M	18.921M	21.42M	18.891M
5240MHz	Pass	Inf	21.27M	18.921M	21.27M	18.921M
5745MHz	Pass	500k	18.75M	18.951M	18.42M	18.891M
5785MHz	Pass	500k	18.96M	18.951M	18.69M	18.951M
5825MHz	Pass	500k	18.99M	18.921M	18.36M	18.951M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5190MHz	Pass	Inf	41.1M	37.781M		

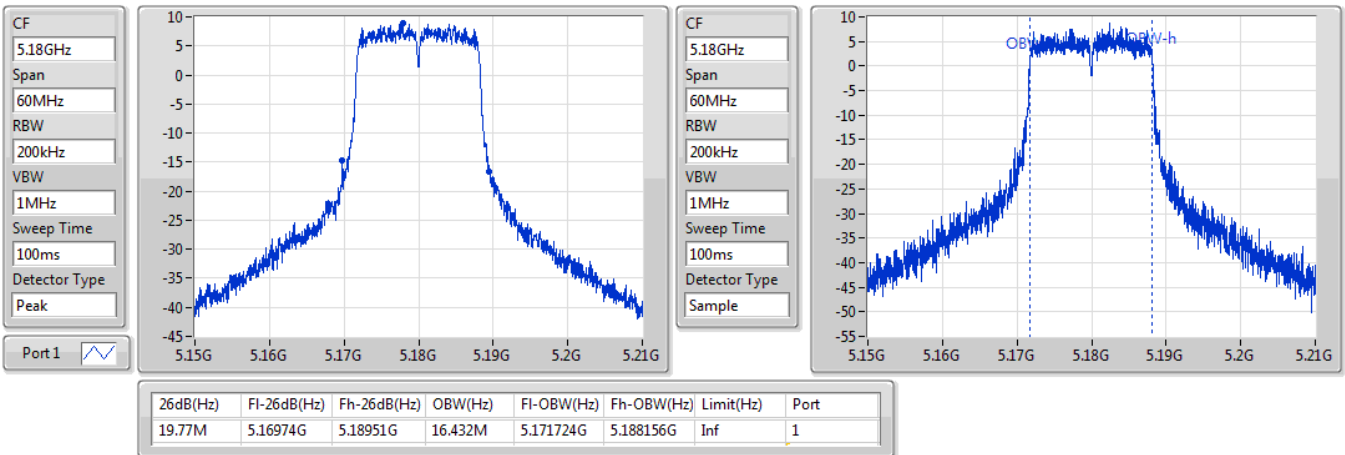
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5230MHz	Pass	Inf	40.98M	37.721M		
5755MHz	Pass	500k	37.8M	37.781M		
5795MHz	Pass	500k	37.86M	37.841M		
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5190MHz	Pass	Inf			40.92M	37.721M
5230MHz	Pass	Inf			42M	37.781M
5755MHz	Pass	500k			37.62M	37.781M
5795MHz	Pass	500k			37.56M	37.781M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.04M	37.661M	40.62M	37.721M
5230MHz	Pass	Inf	40.92M	37.721M	41.76M	37.781M
5755MHz	Pass	500k	37.62M	37.661M	37.62M	37.721M
5795MHz	Pass	500k	37.56M	37.781M	37.5M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5210MHz	Pass	Inf	82.08M	76.882M		
5775MHz	Pass	500k	71.28M	77.121M		
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5210MHz	Pass	Inf			82.68M	77.001M
5775MHz	Pass	500k			76.32M	77.361M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.8M	77.001M	81.72M	77.241M
5775MHz	Pass	500k	76.44M	77.121M	76.8M	77.241M

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

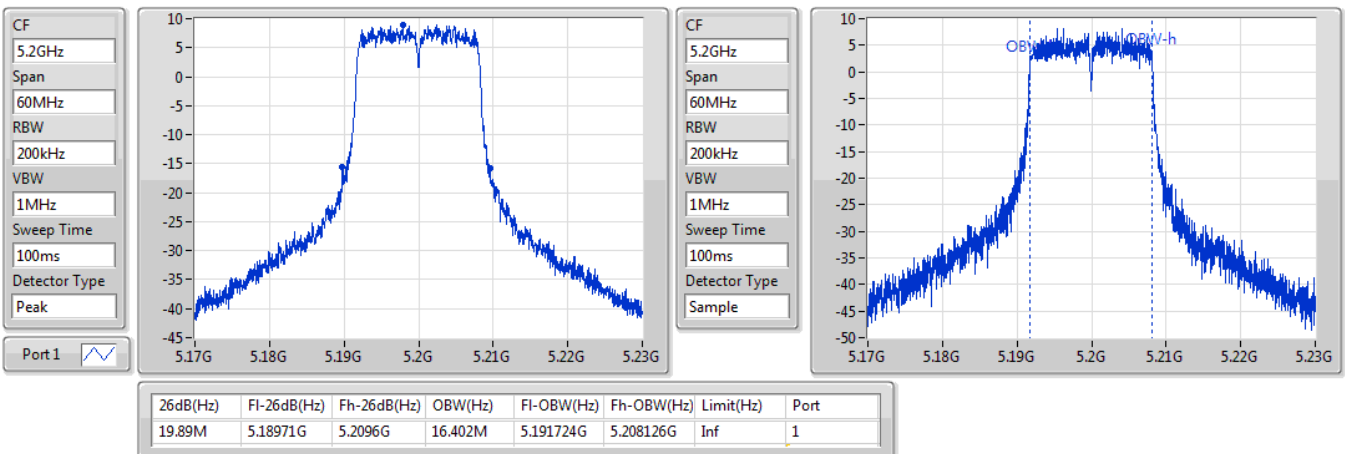
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5180MHz

25/06/2019

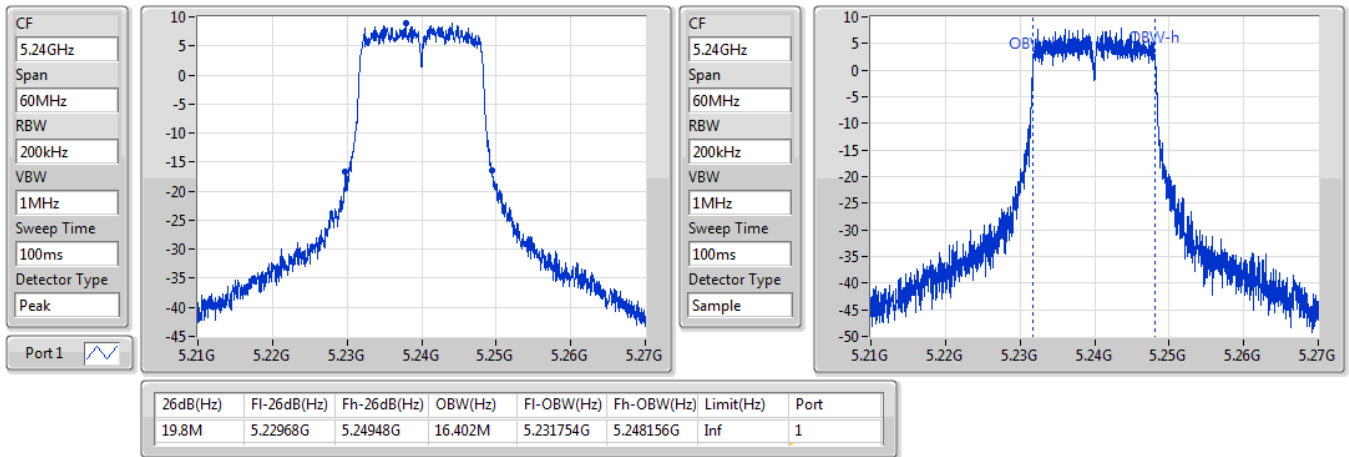

802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5200MHz

25/06/2019

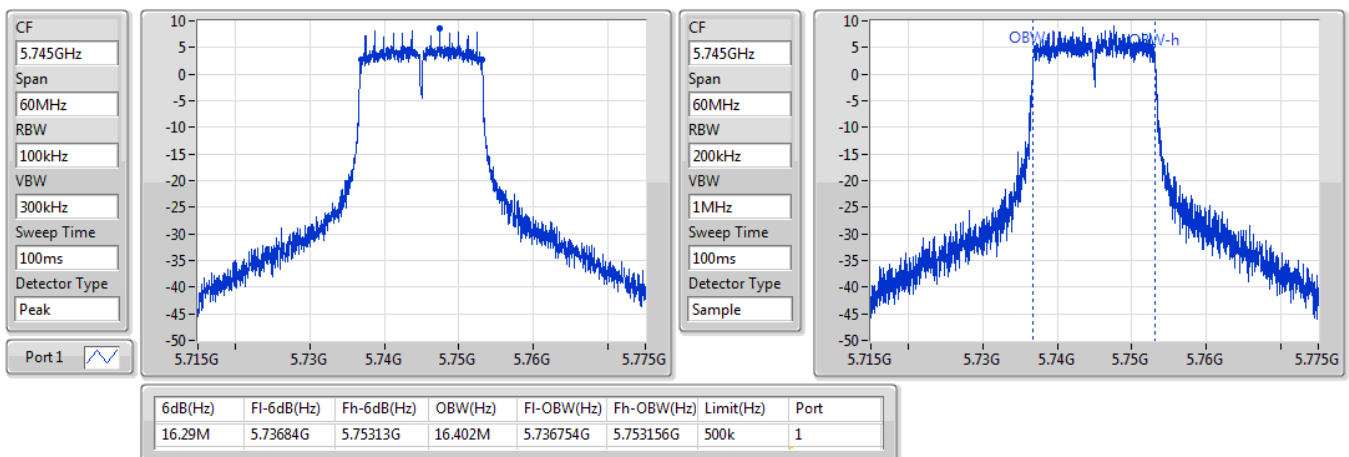


802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5240MHz

25/06/2019

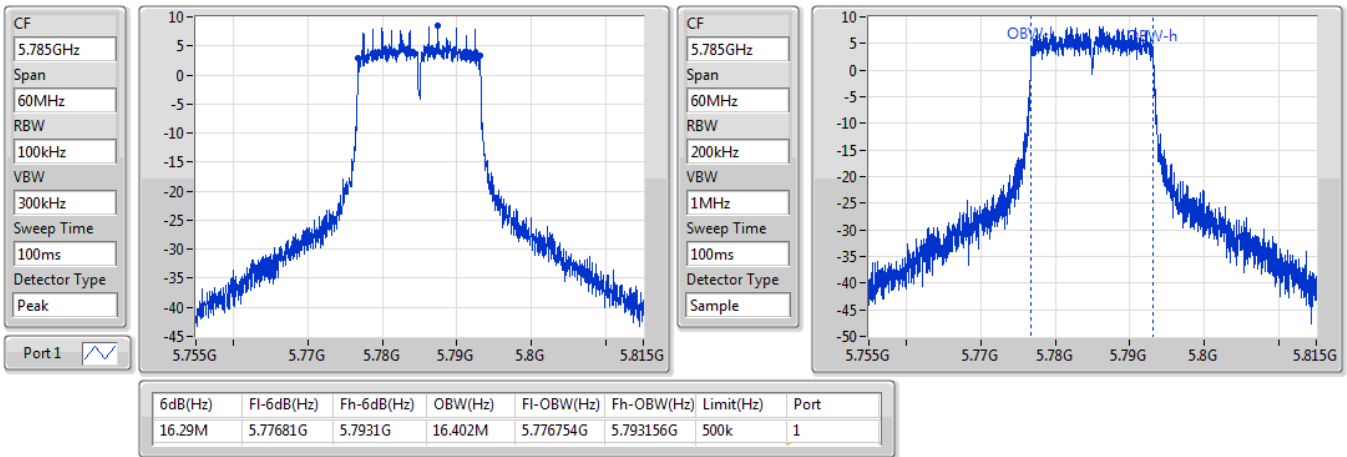

802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5745MHz

25/06/2019

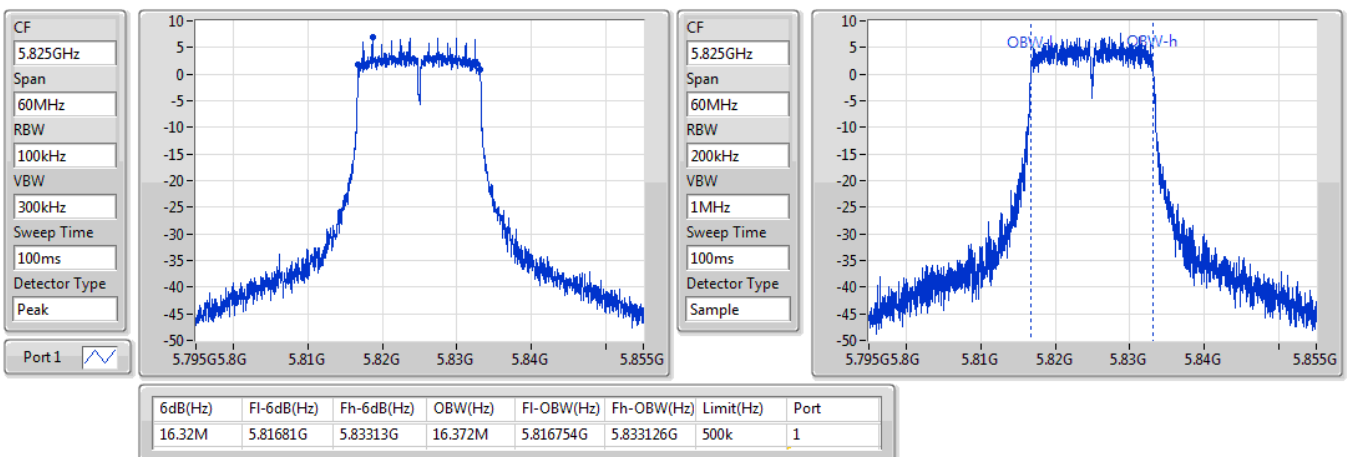


802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5785MHz

25/06/2019

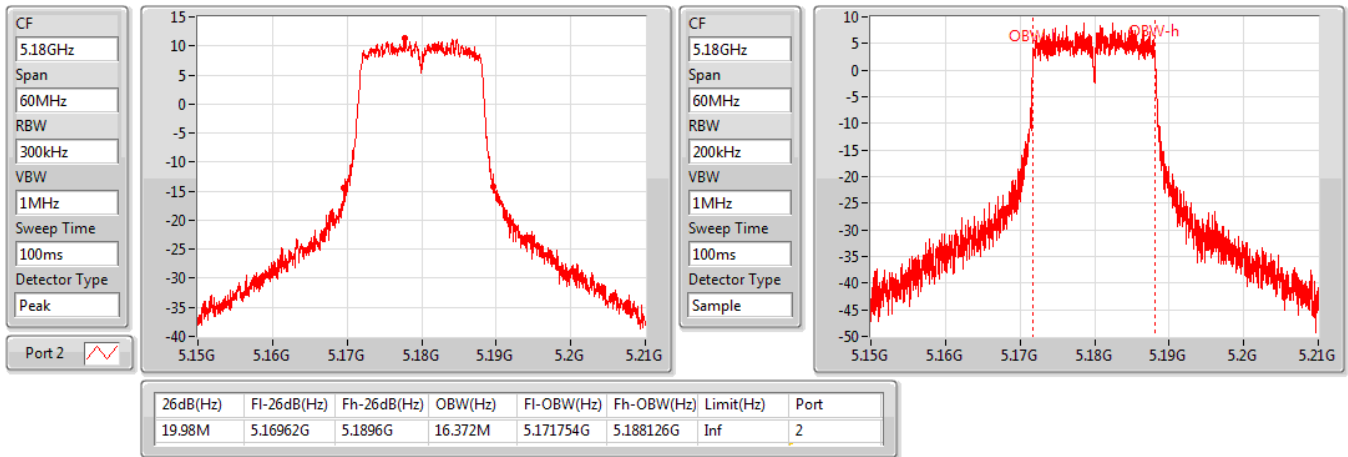

802.11a_Nss1,(6Mbps)_1TX(Port1)
EBW
5825MHz

25/06/2019

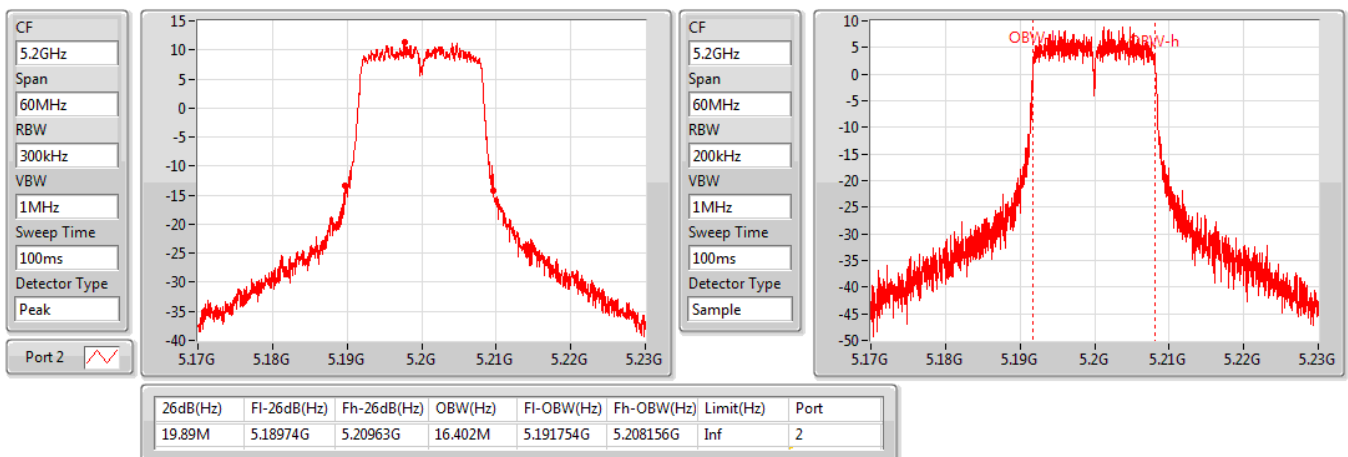


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5180MHz

25/06/2019

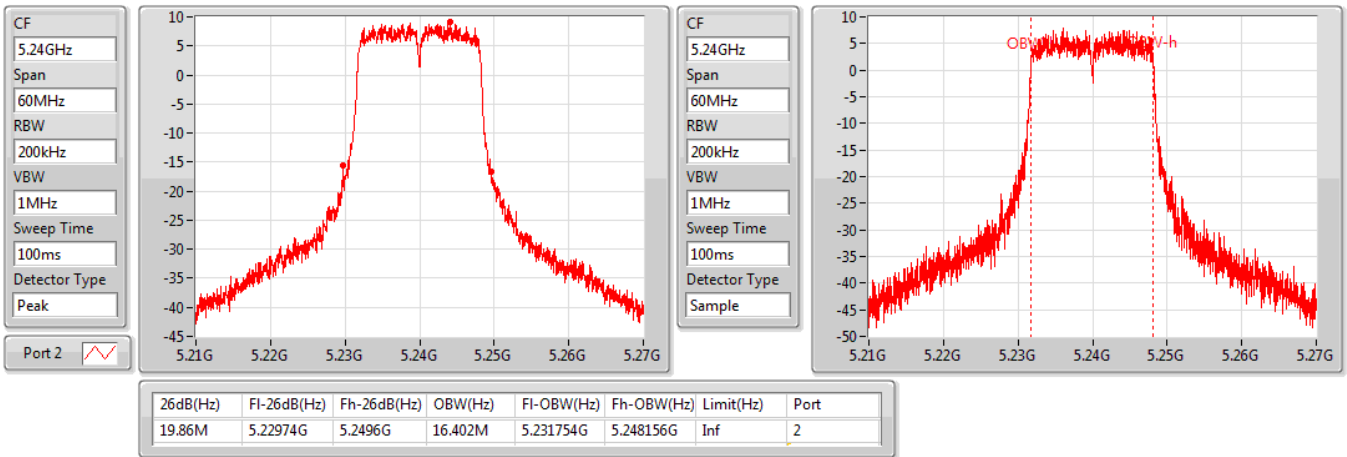

802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5200MHz

25/06/2019

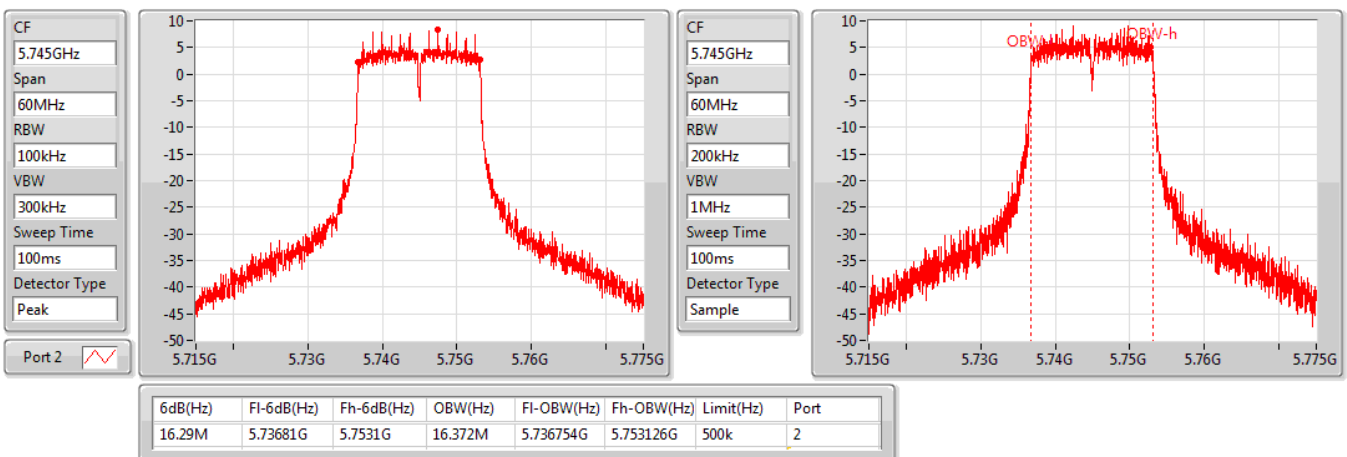


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5240MHz

25/06/2019

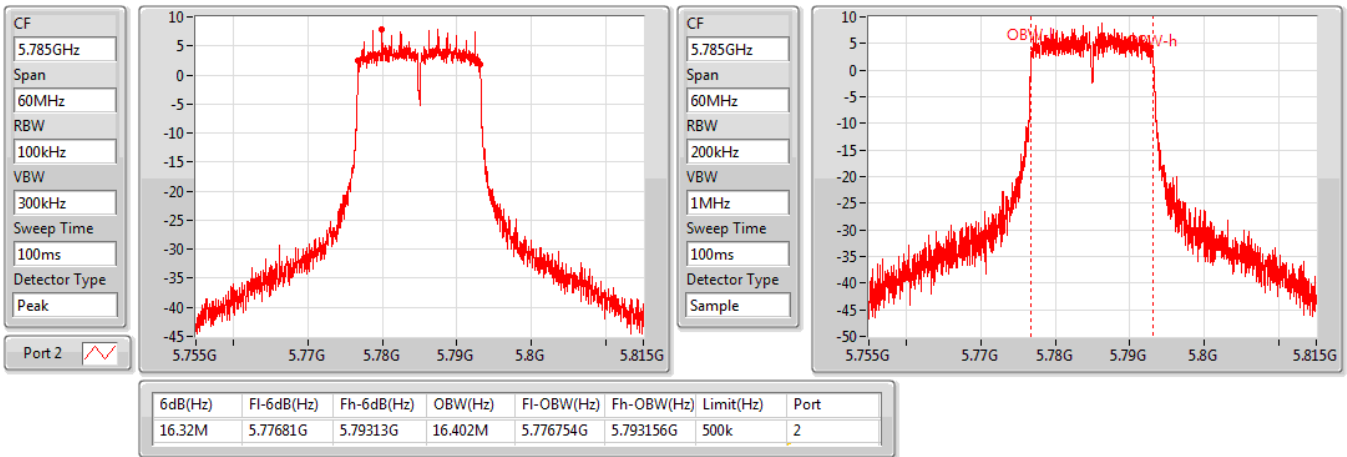

802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5745MHz

25/06/2019

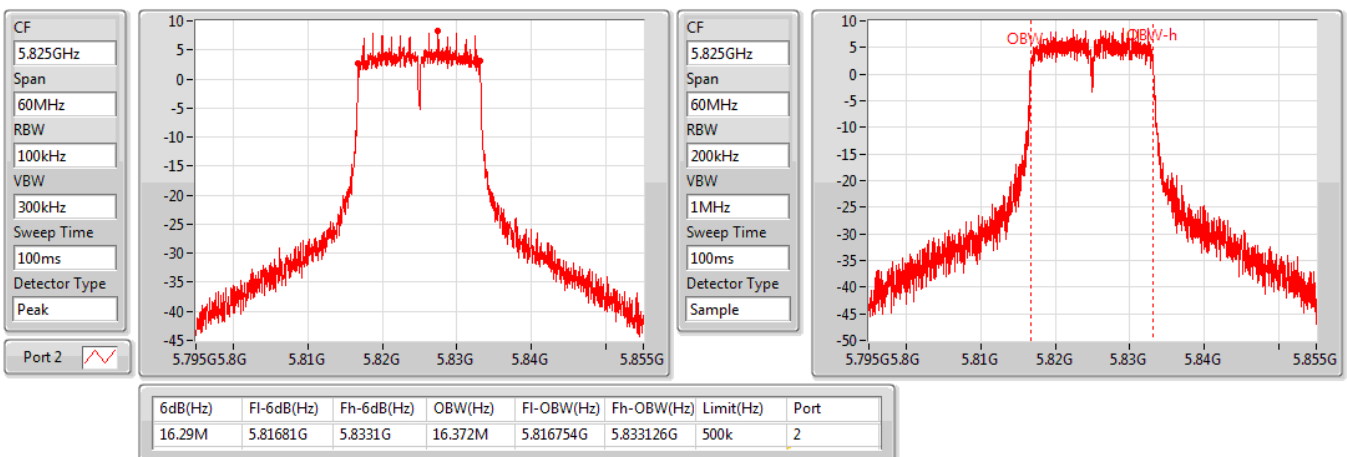


802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5785MHz

25/06/2019

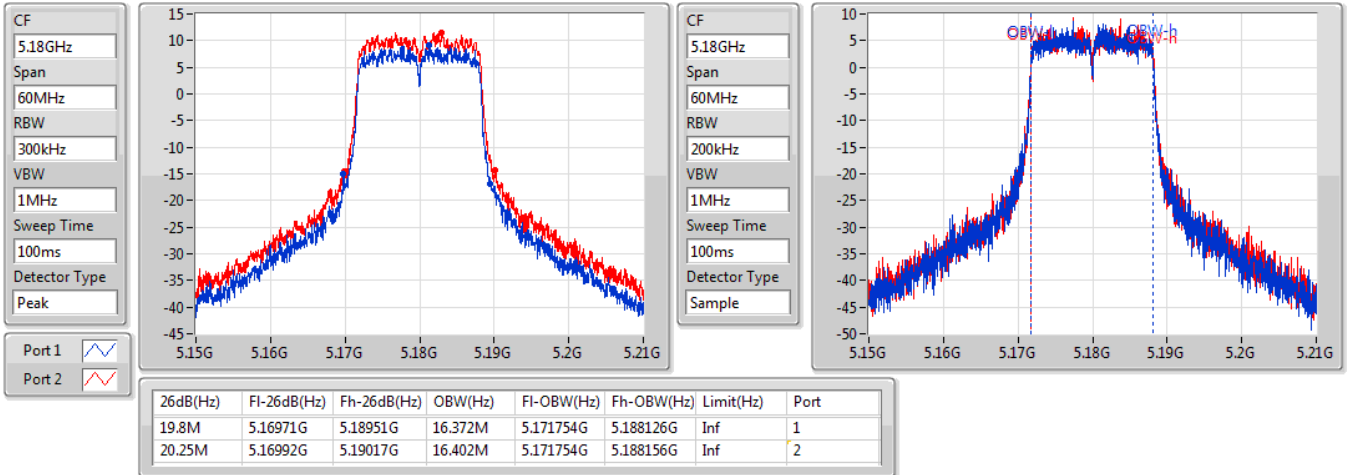

802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW
5825MHz

25/06/2019

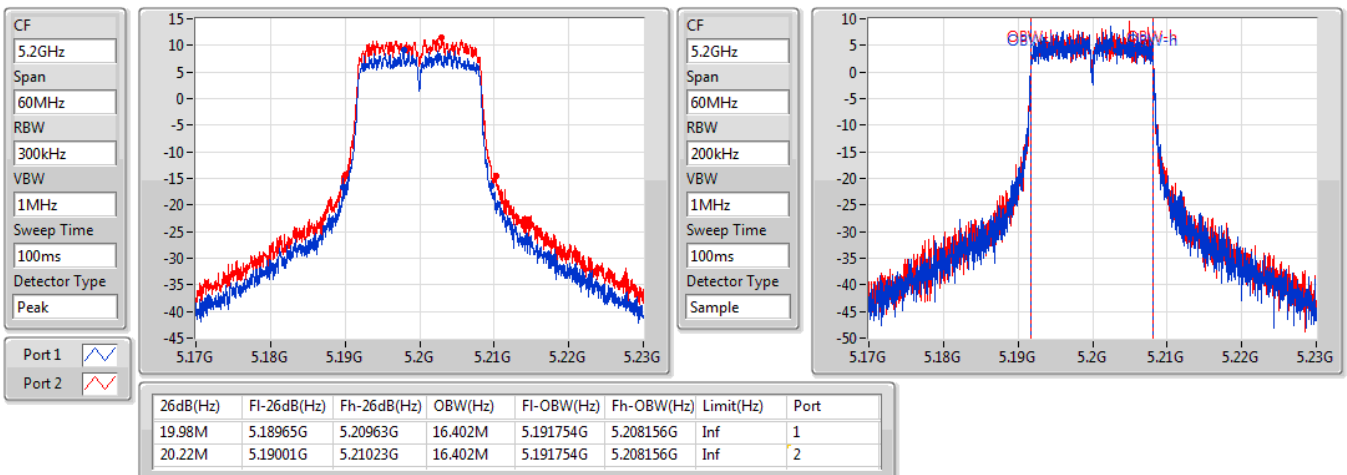


802.11a_Nss1,(6Mbps)_2TX
EBW
5180MHz

25/06/2019

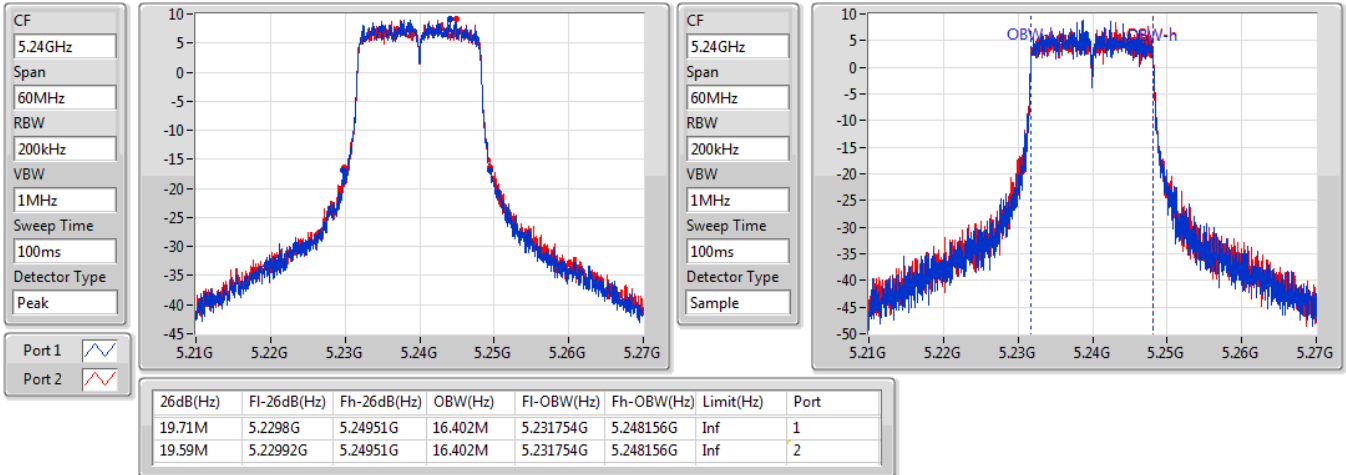

802.11a_Nss1,(6Mbps)_2TX
EBW
5200MHz

25/06/2019

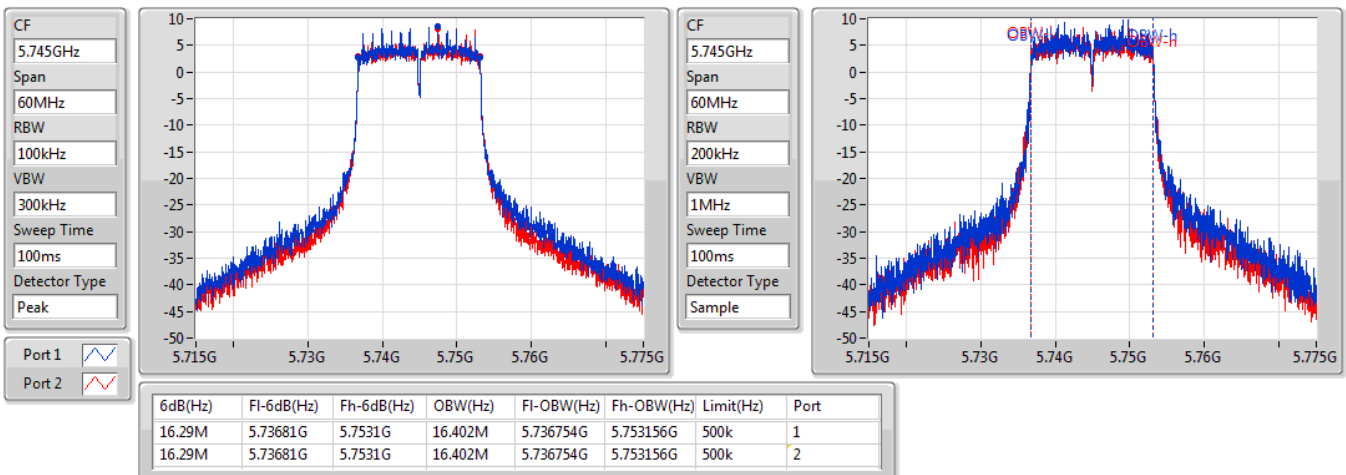


802.11a_Nss1,(6Mbps)_2TX
EBW
5240MHz

25/06/2019


802.11a_Nss1,(6Mbps)_2TX
EBW
5745MHz

25/06/2019

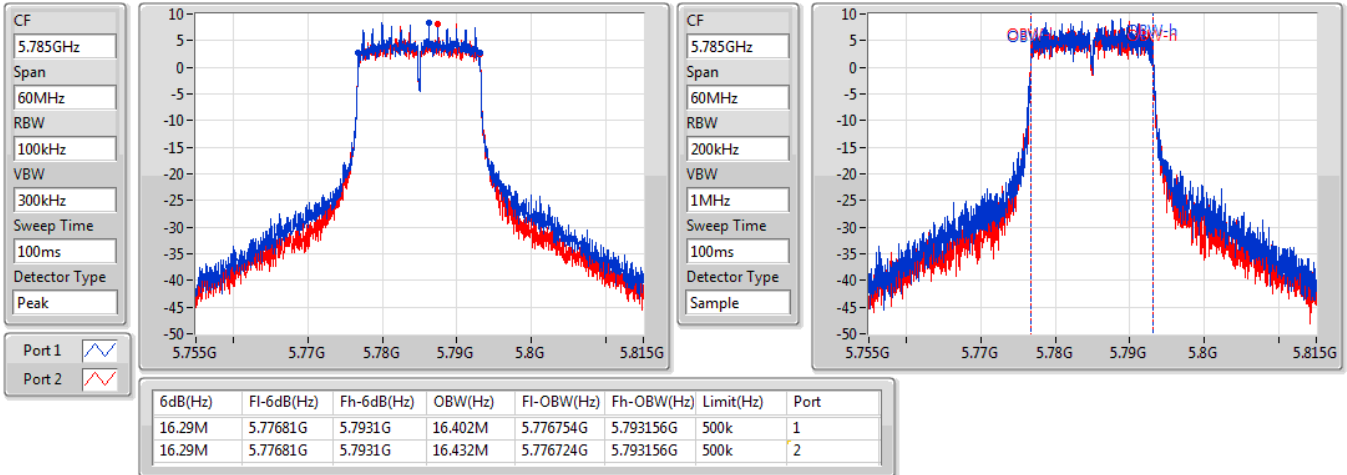


802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

25/06/2019

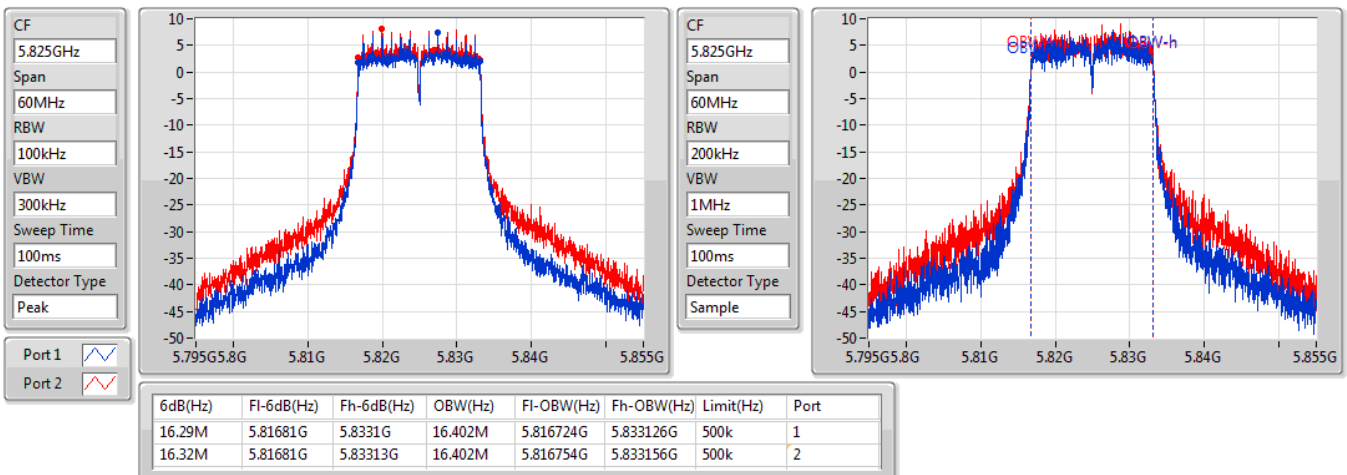


802.11a_Nss1,(6Mbps)_2TX

EBW

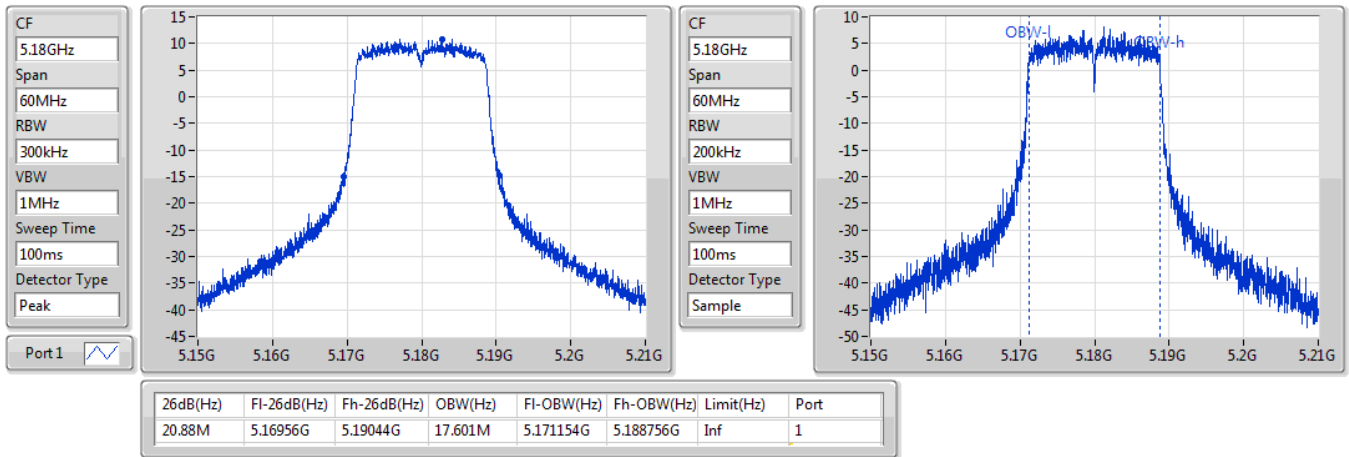
5825MHz

25/06/2019

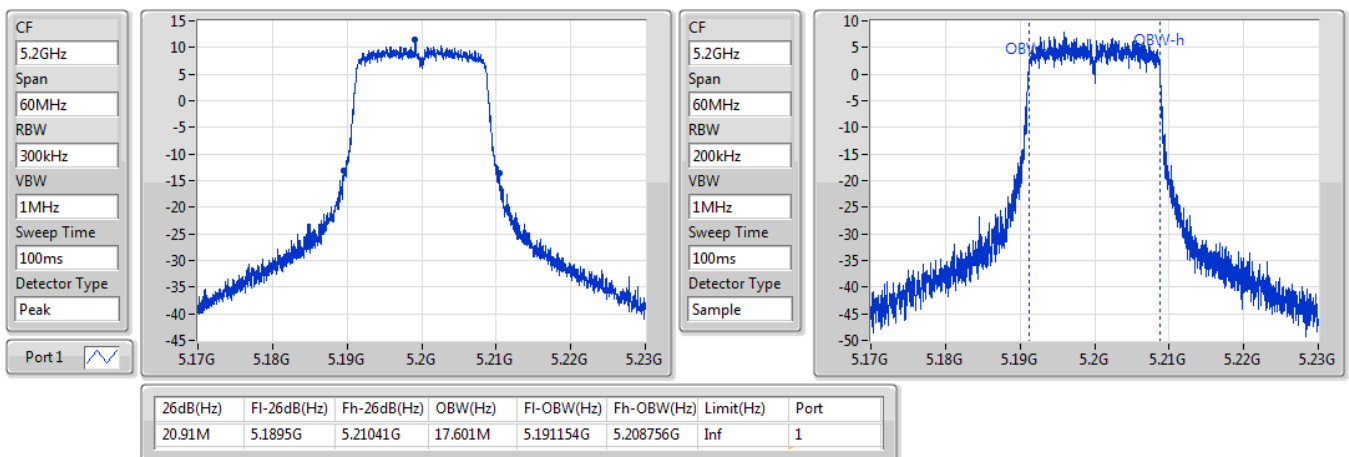


802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5180MHz

25/06/2019

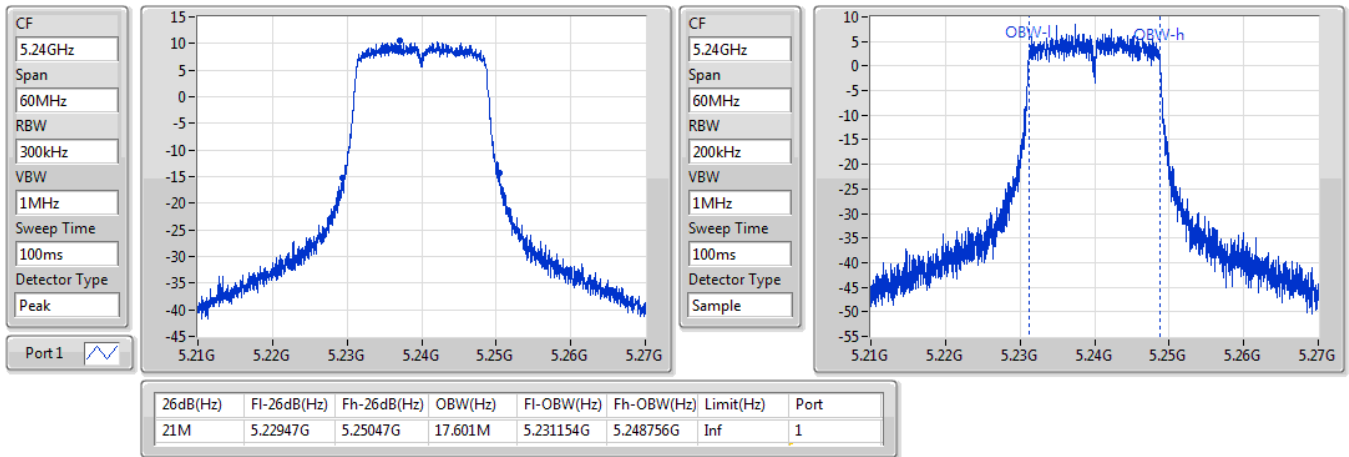

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5200MHz

25/06/2019

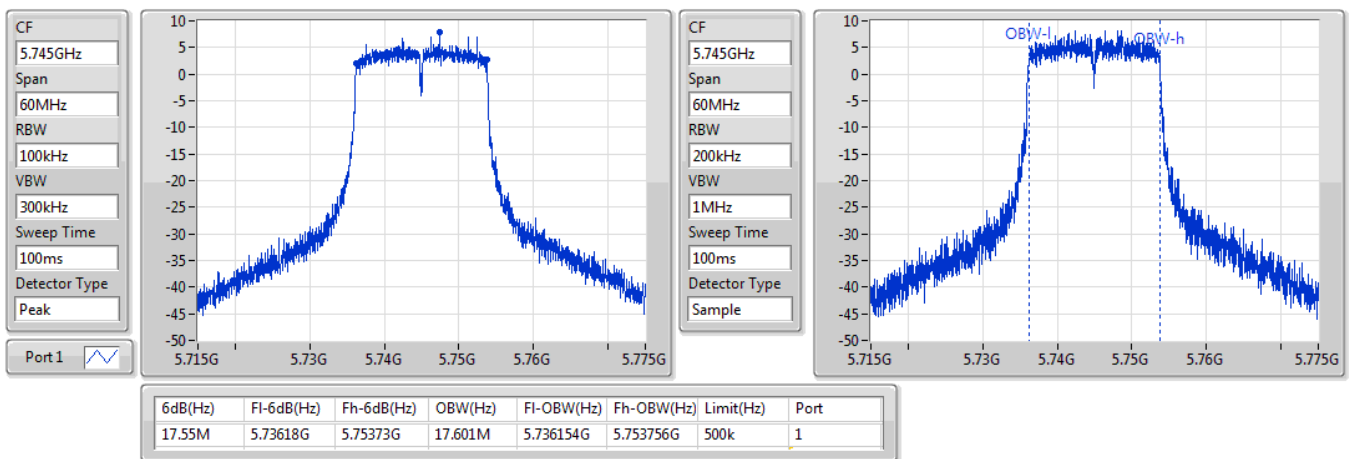


802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5240MHz

25/06/2019

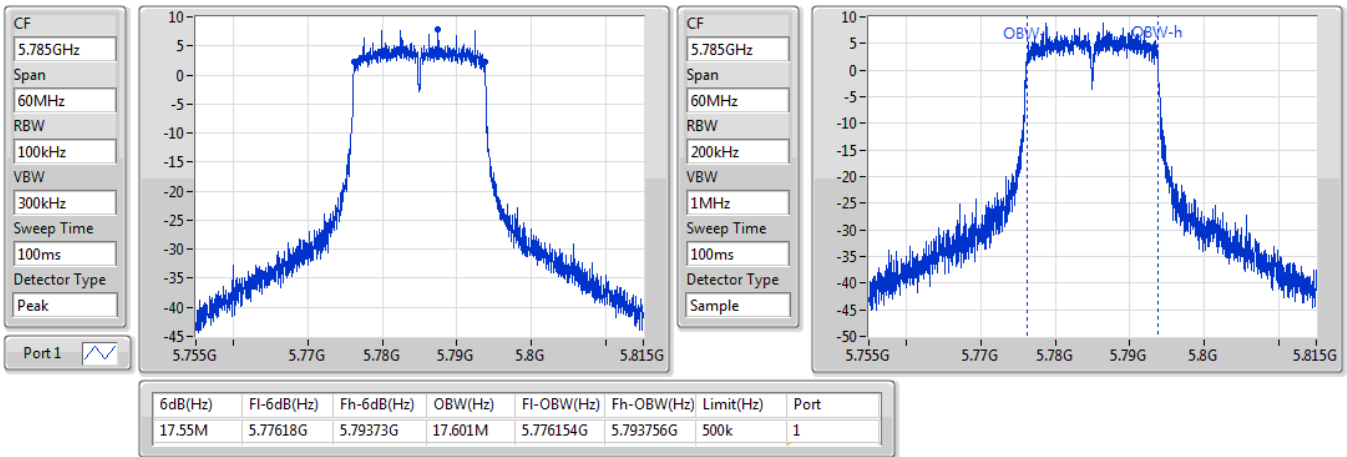

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5745MHz

25/06/2019

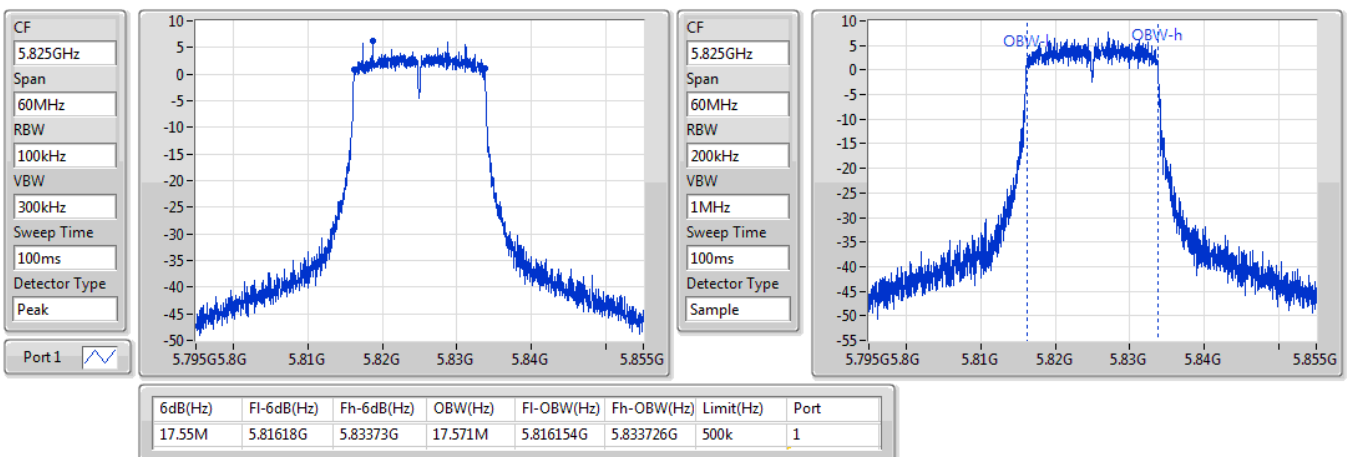


802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5785MHz

25/06/2019

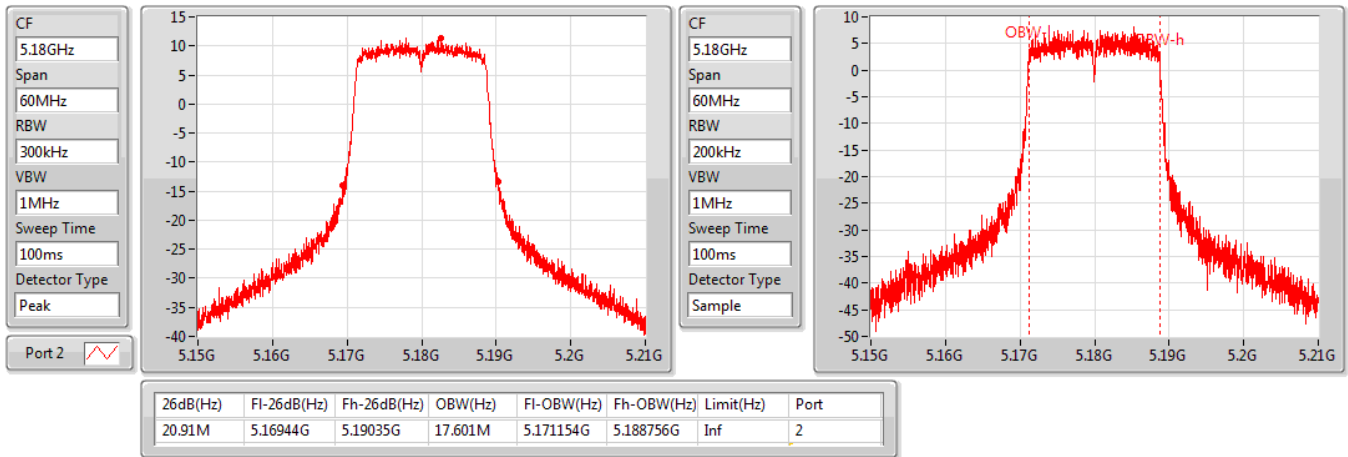

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW
5825MHz

25/06/2019

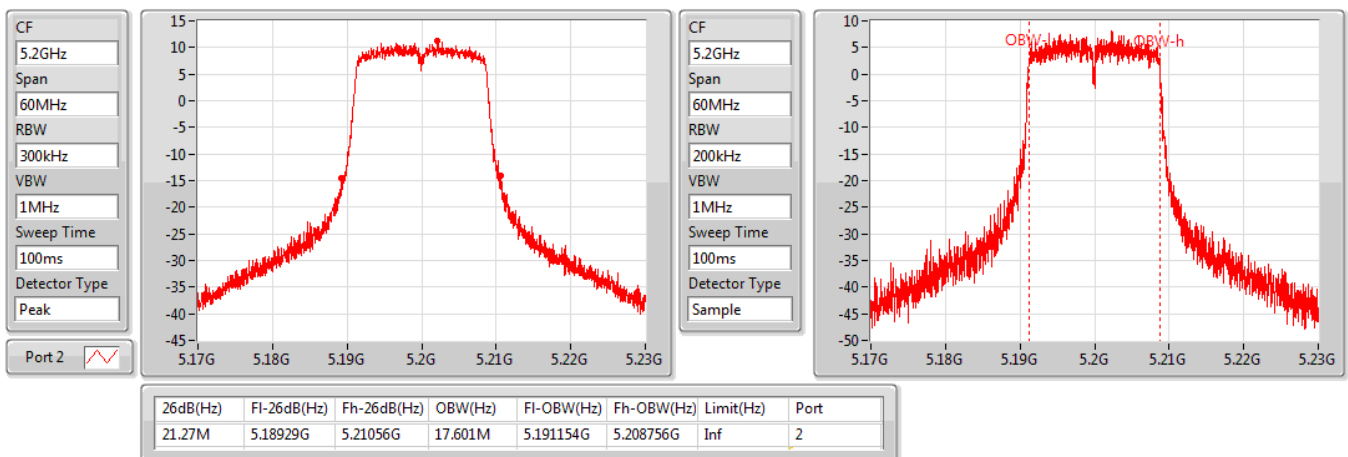


802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5180MHz

25/06/2019

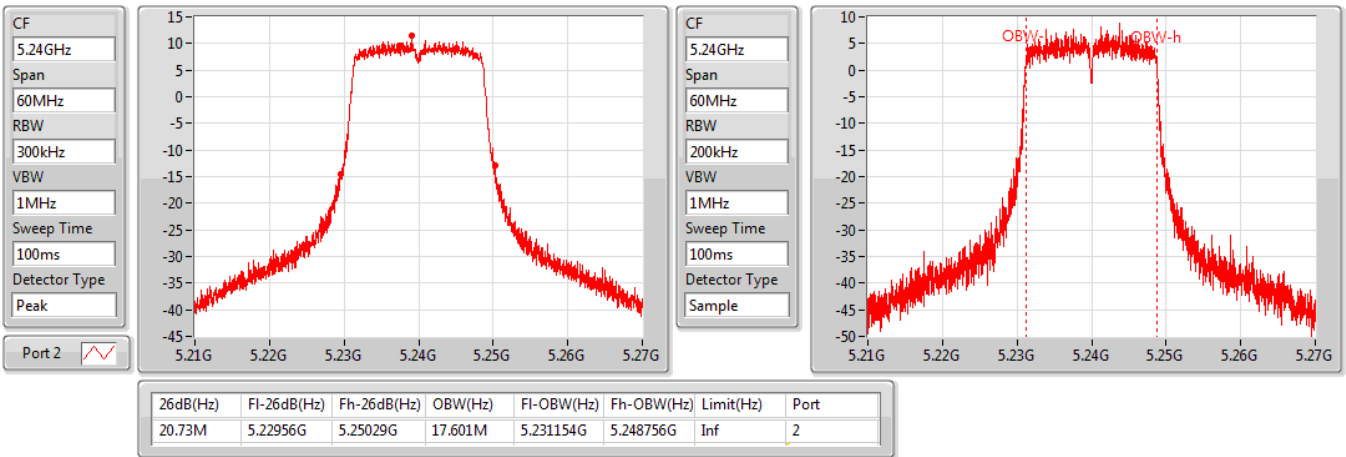

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5200MHz

25/06/2019

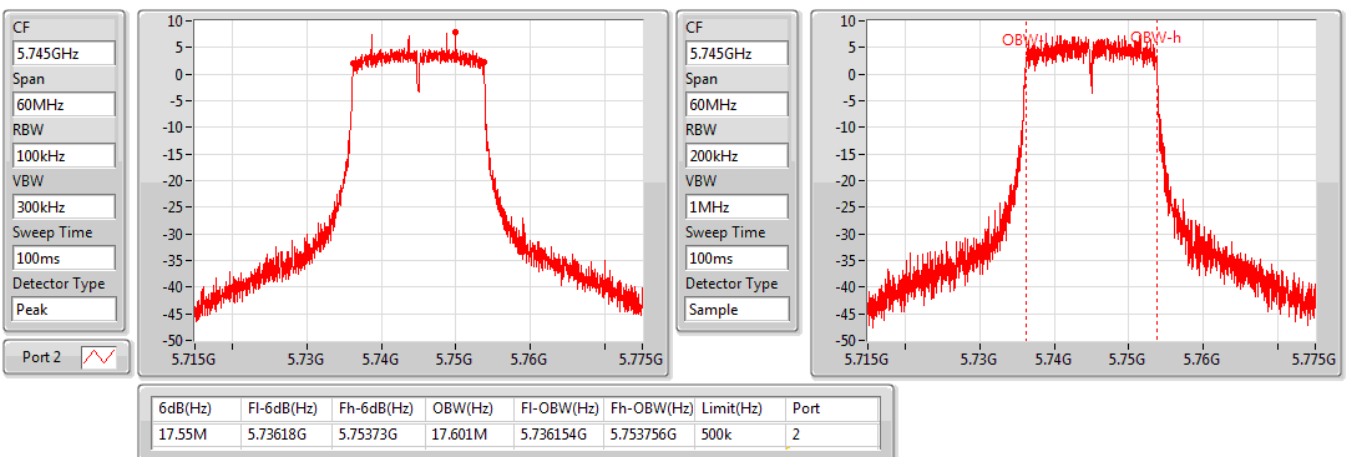


802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5240MHz

25/06/2019

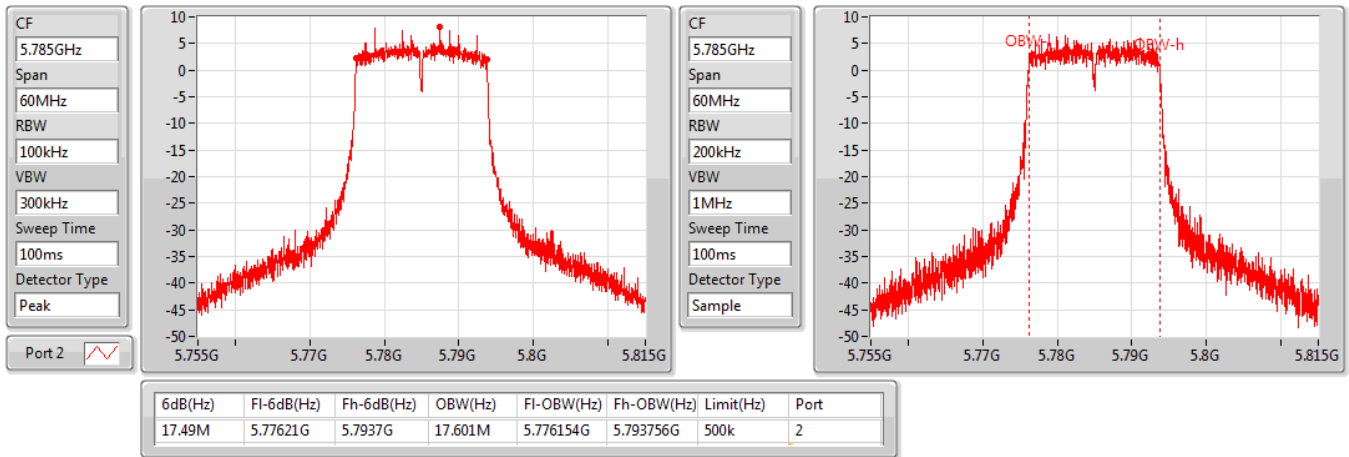

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5745MHz

25/06/2019

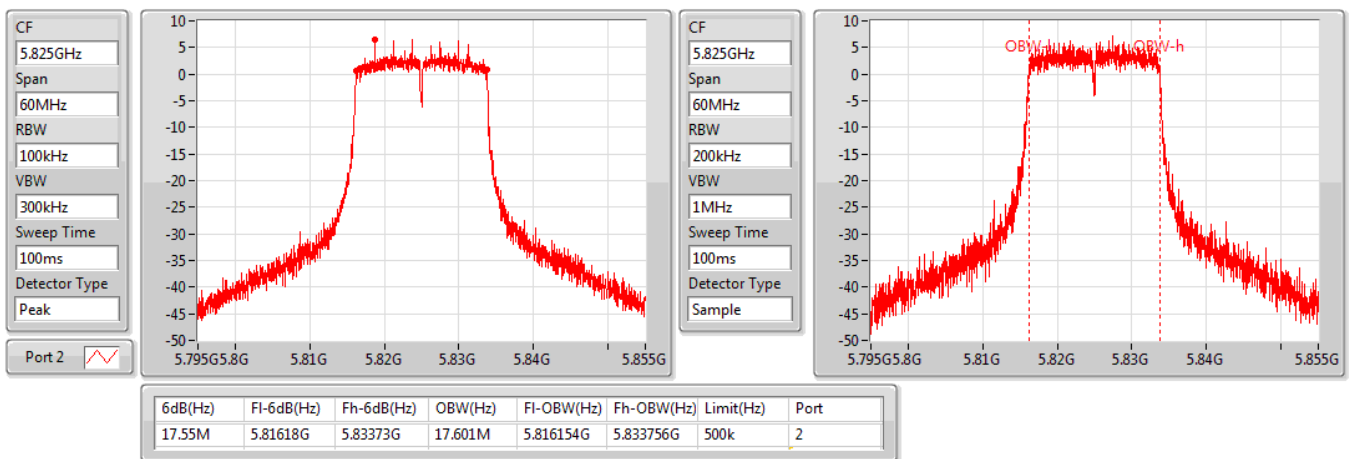


802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5785MHz

25/06/2019

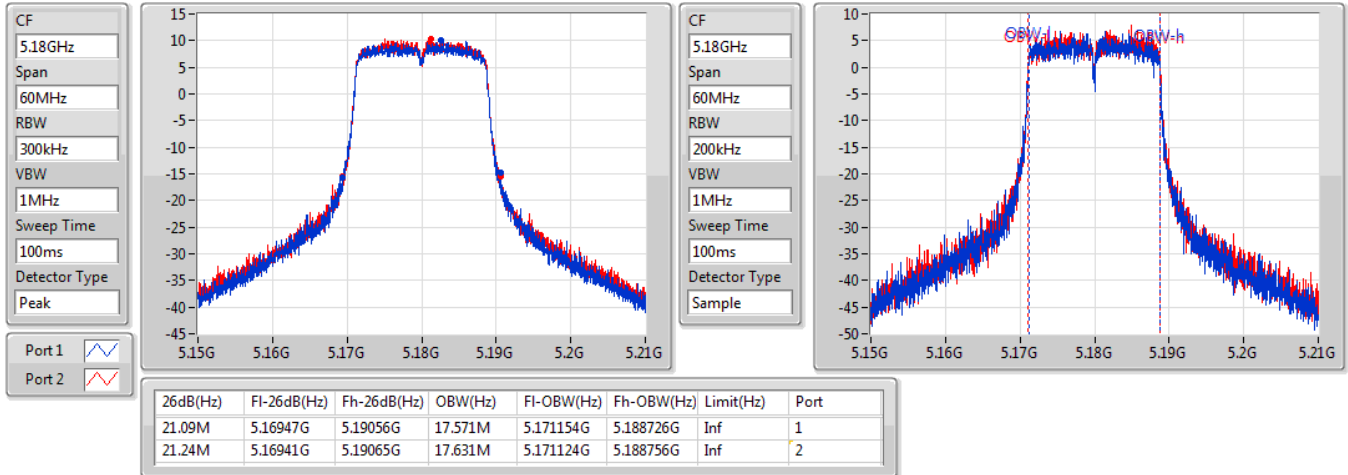

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)
EBW
5825MHz

25/06/2019

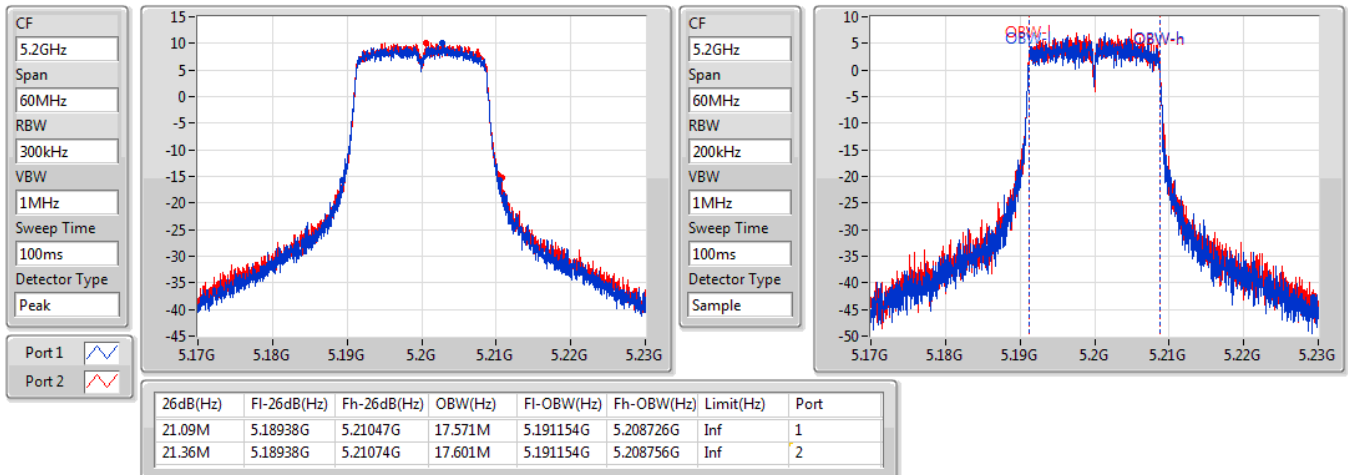


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5180MHz

25/06/2019

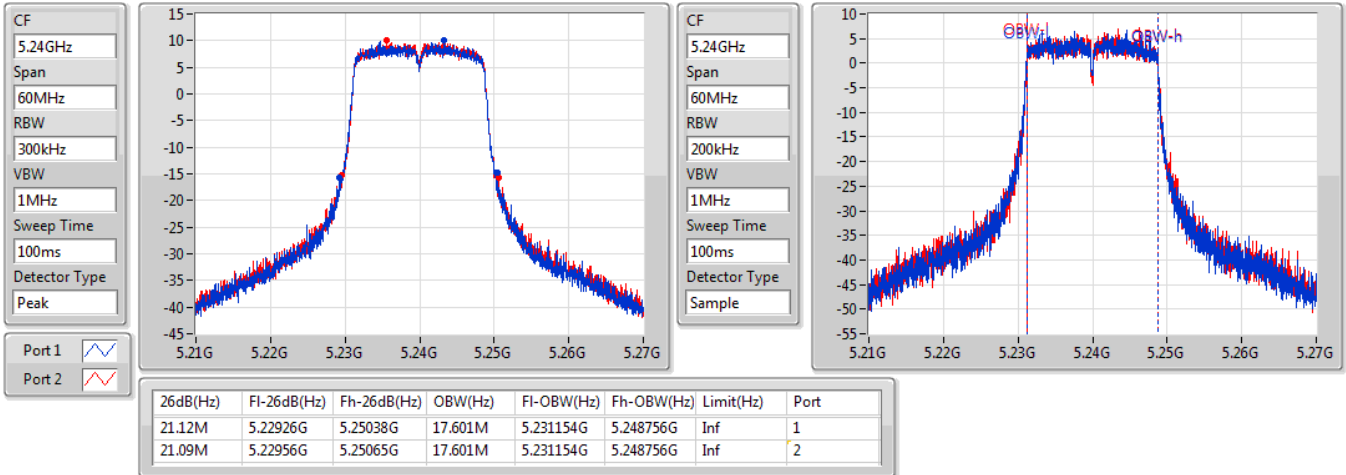

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5200MHz

25/06/2019

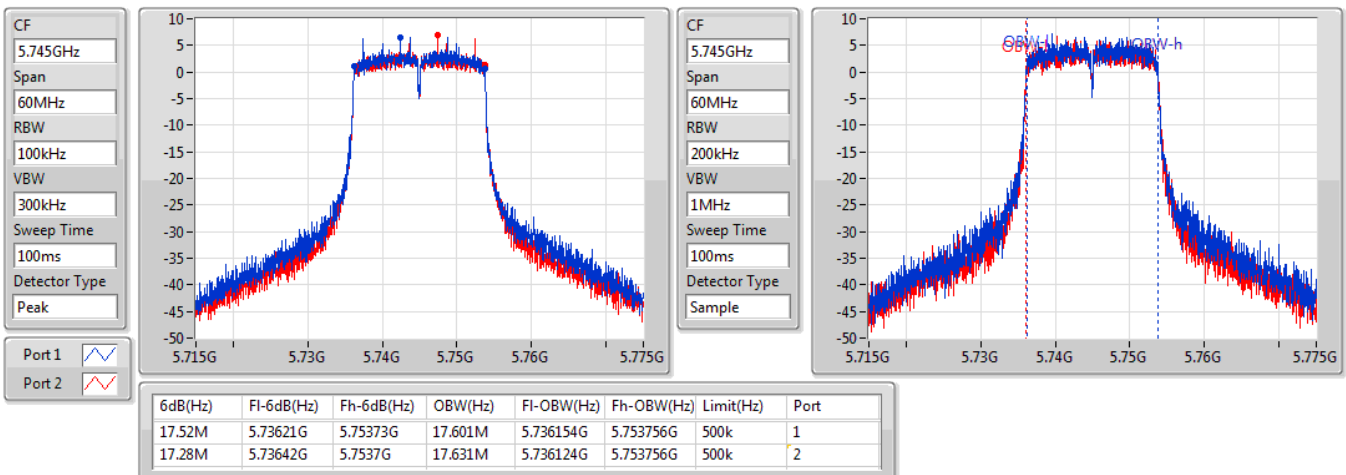


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5240MHz

25/06/2019


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
5745MHz

25/06/2019

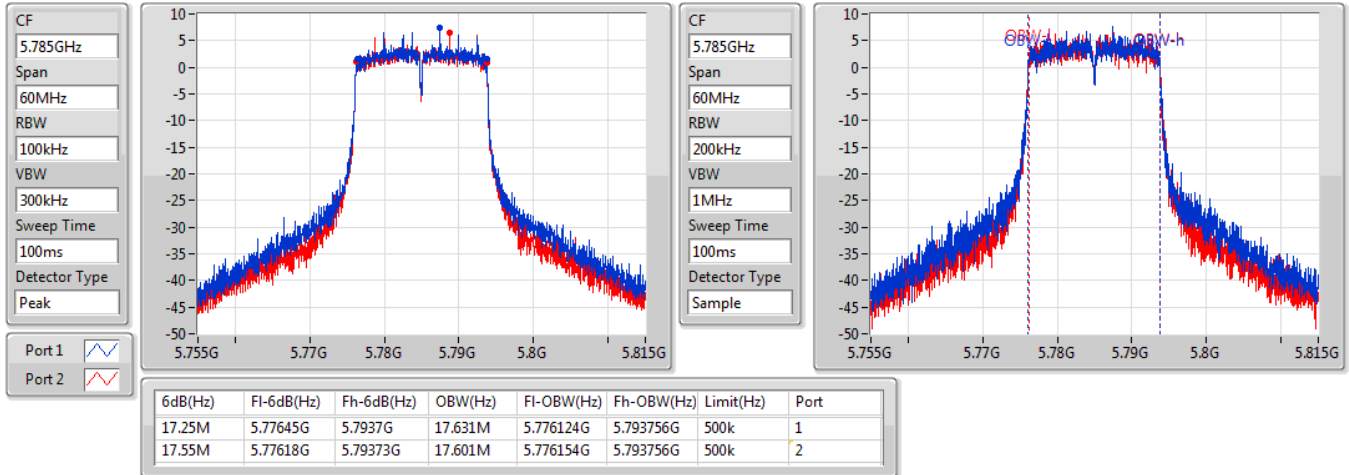


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5785MHz

25/06/2019

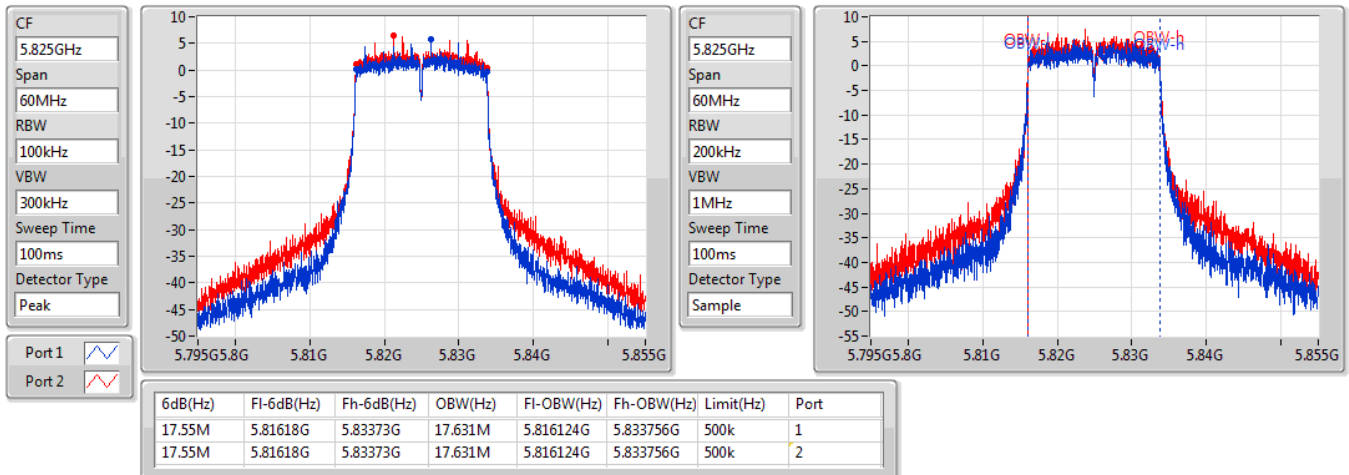


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

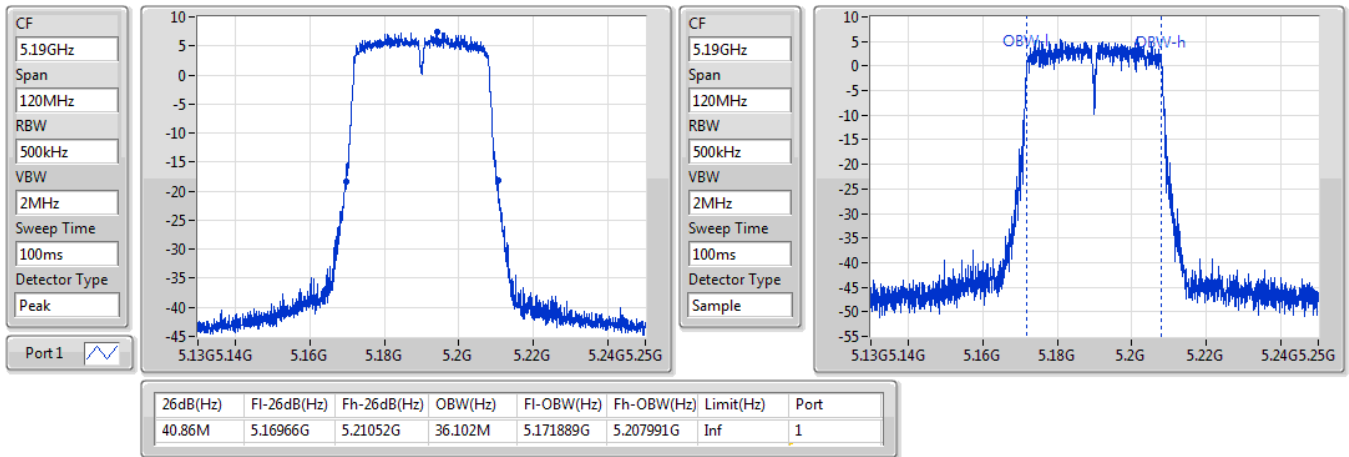
5825MHz

25/06/2019

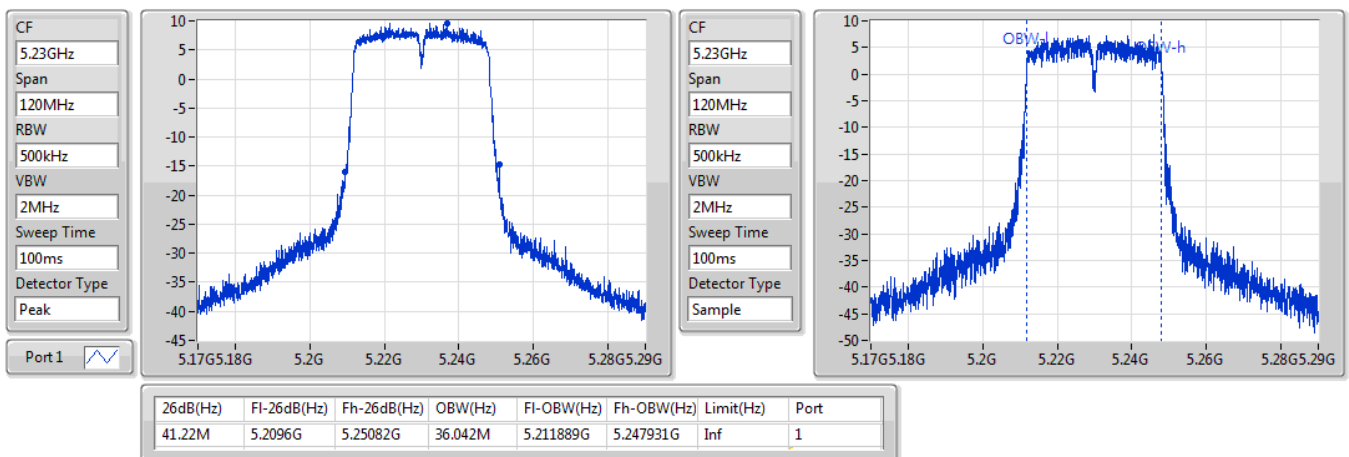


802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)
EBW
5190MHz

25/06/2019

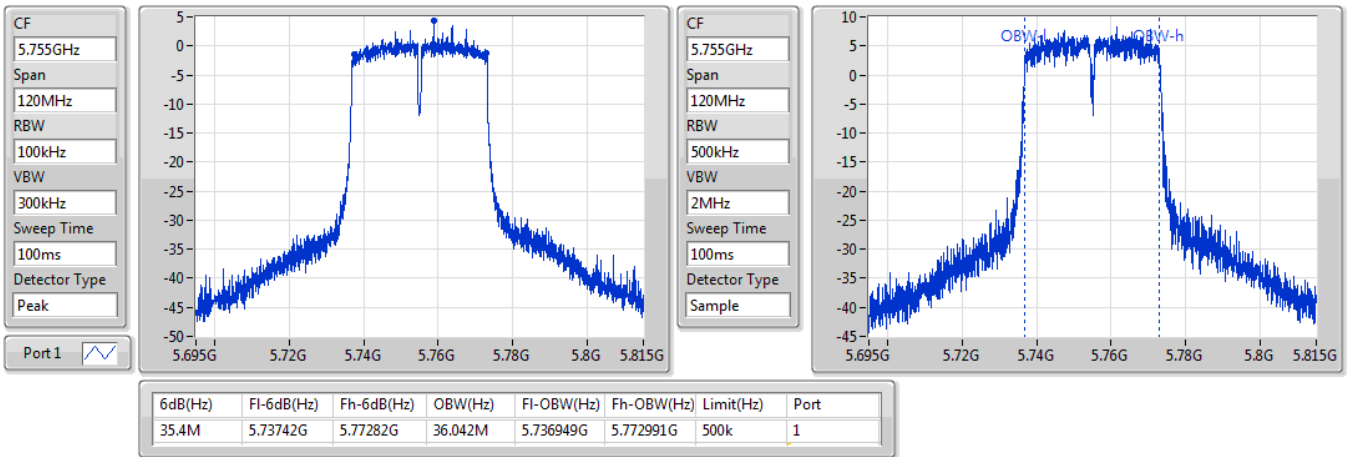

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)
EBW
5230MHz

25/06/2019

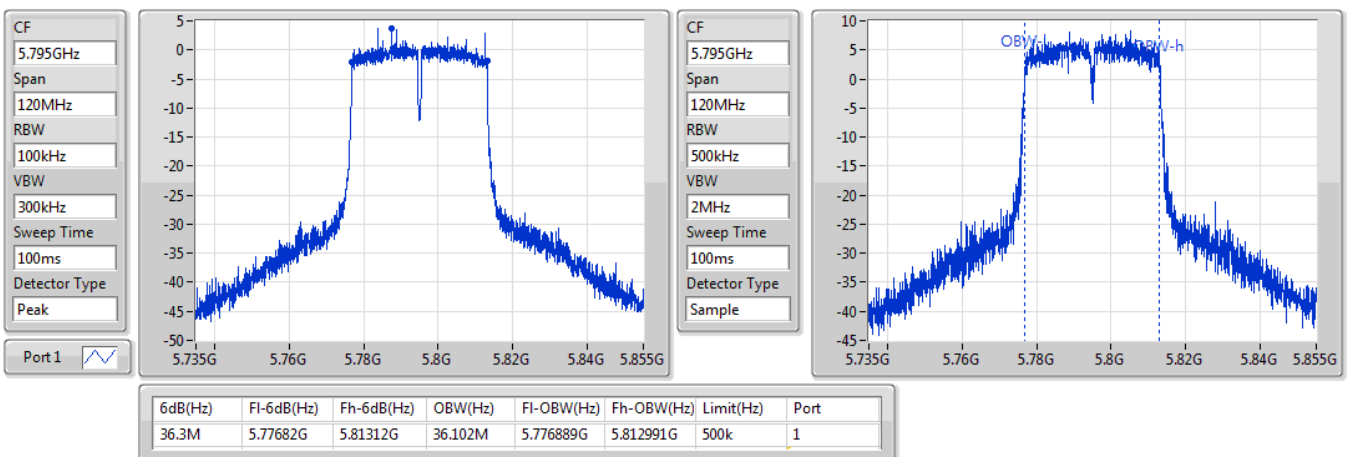


802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)
EBW
5755MHz

25/06/2019

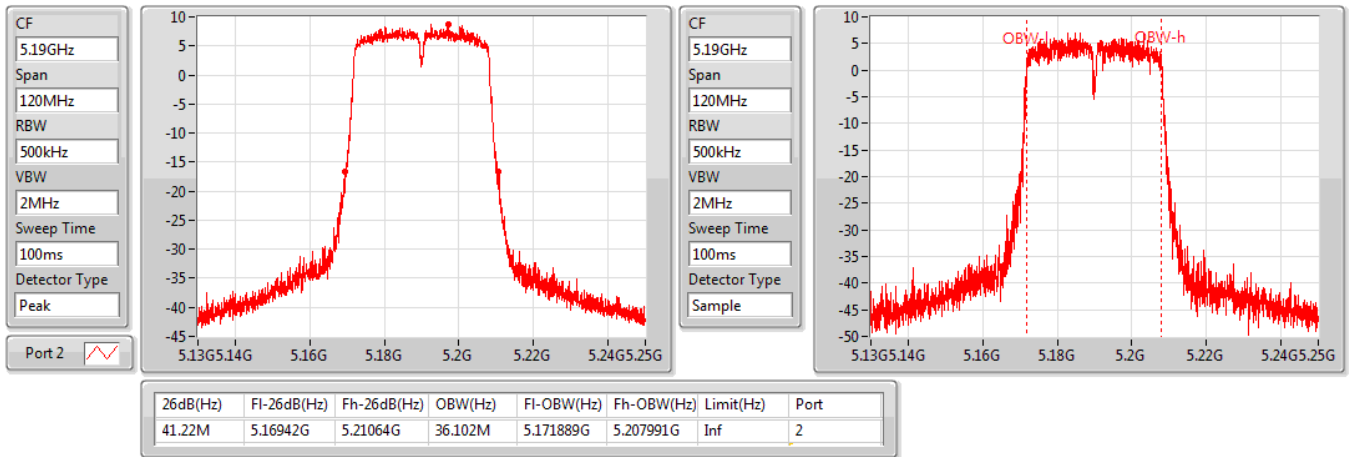

802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)
EBW
5795MHz

25/06/2019

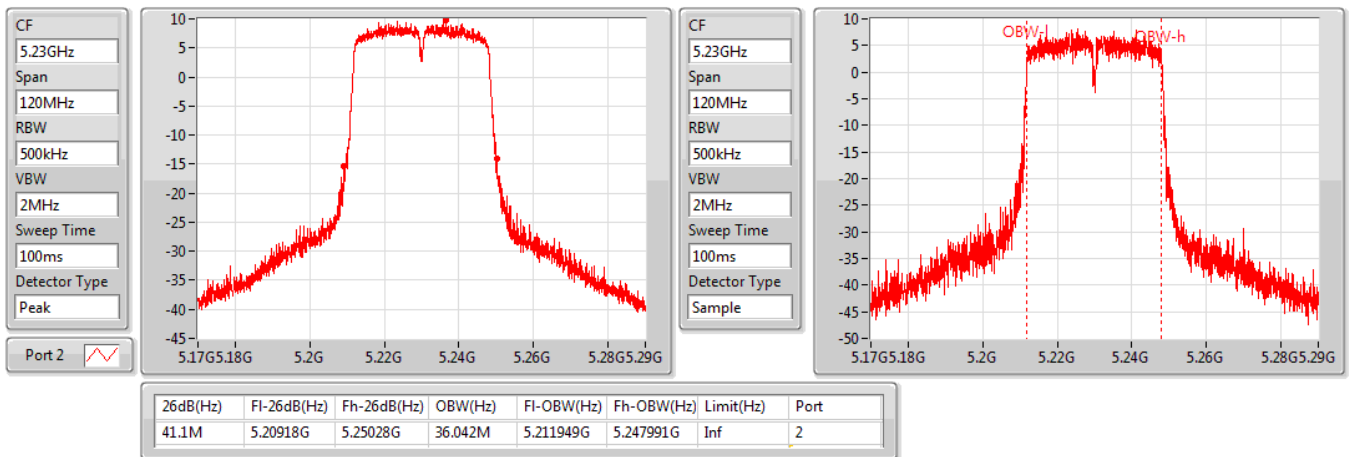


802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)
EBW
5190MHz

25/06/2019

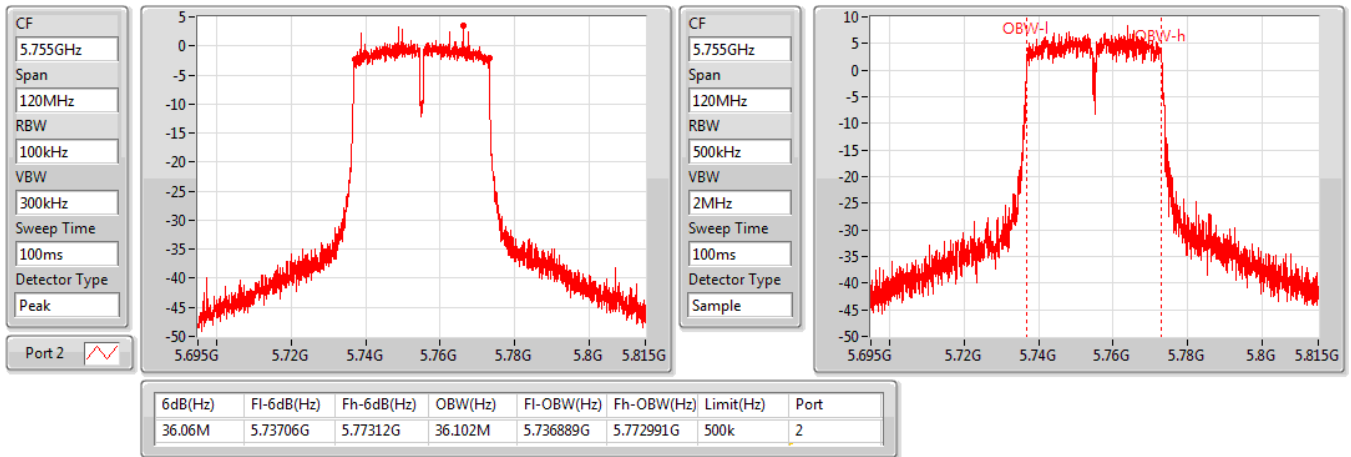

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)
EBW
5230MHz

25/06/2019

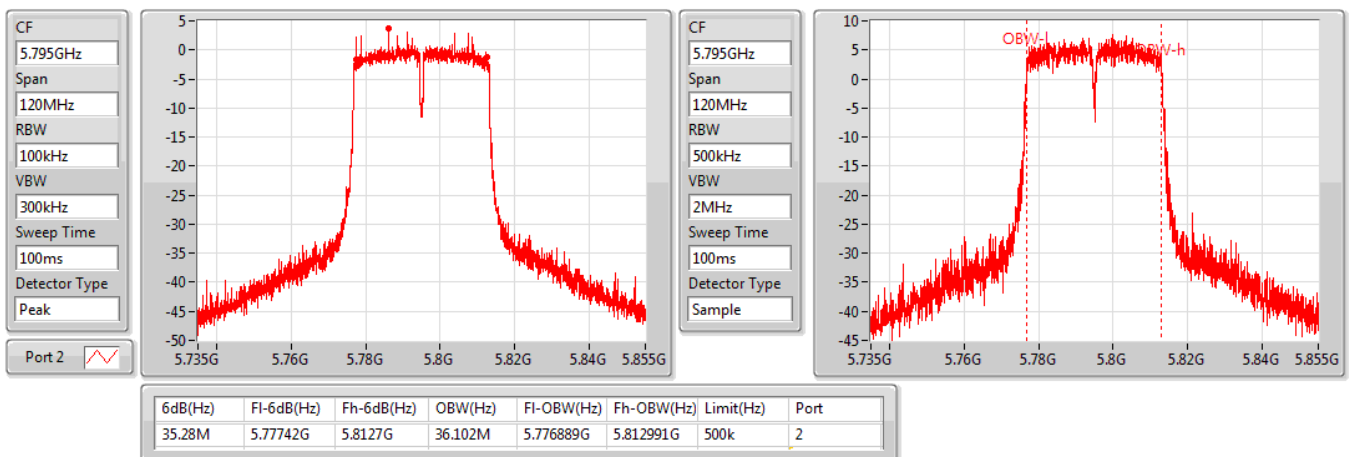


802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)
EBW
5755MHz

25/06/2019

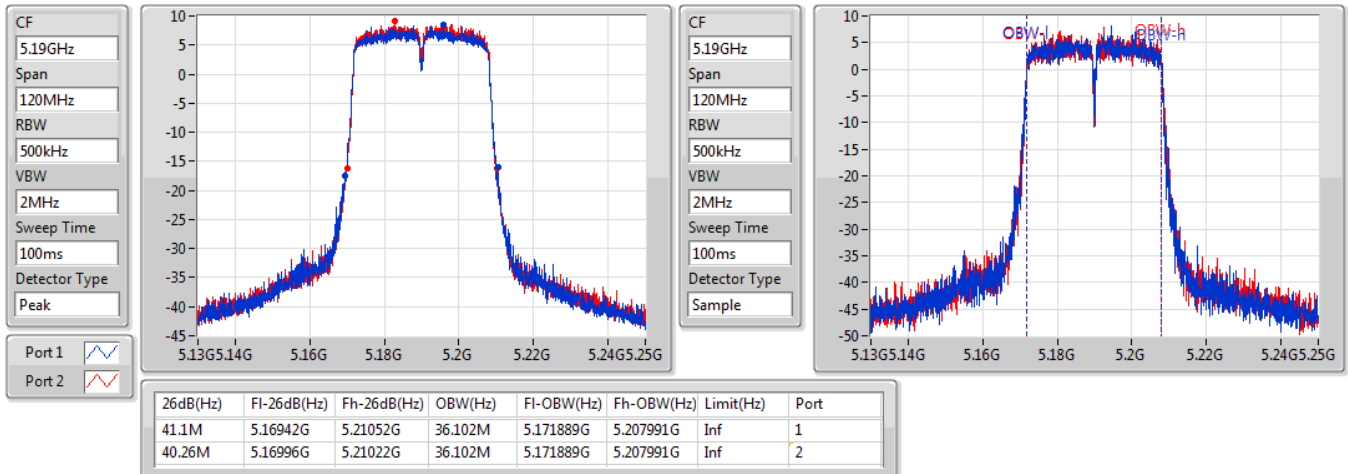

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)
EBW
5795MHz

25/06/2019

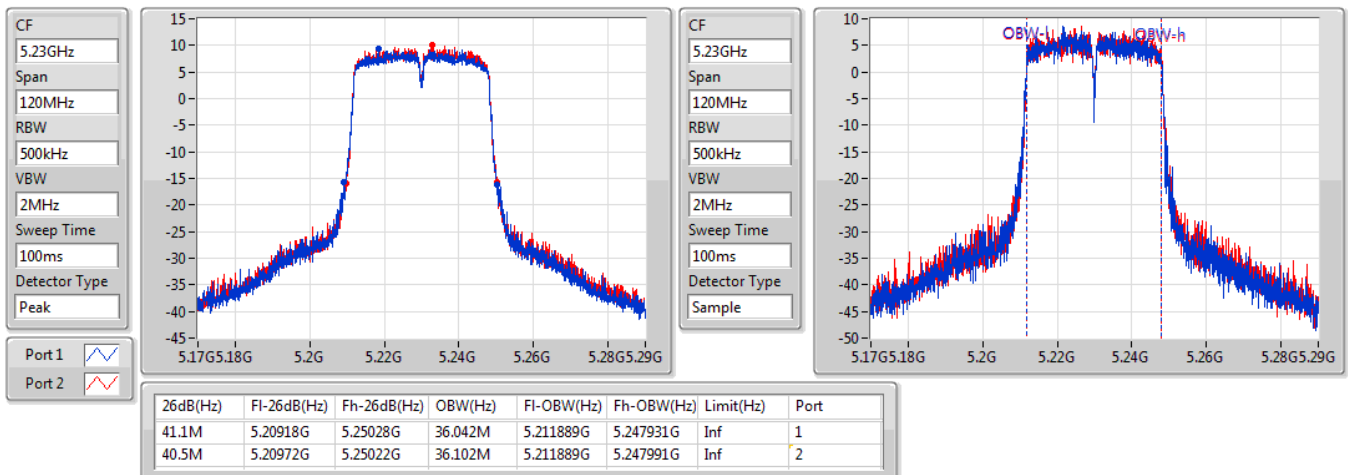


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5190MHz

25/06/2019


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
5230MHz

25/06/2019

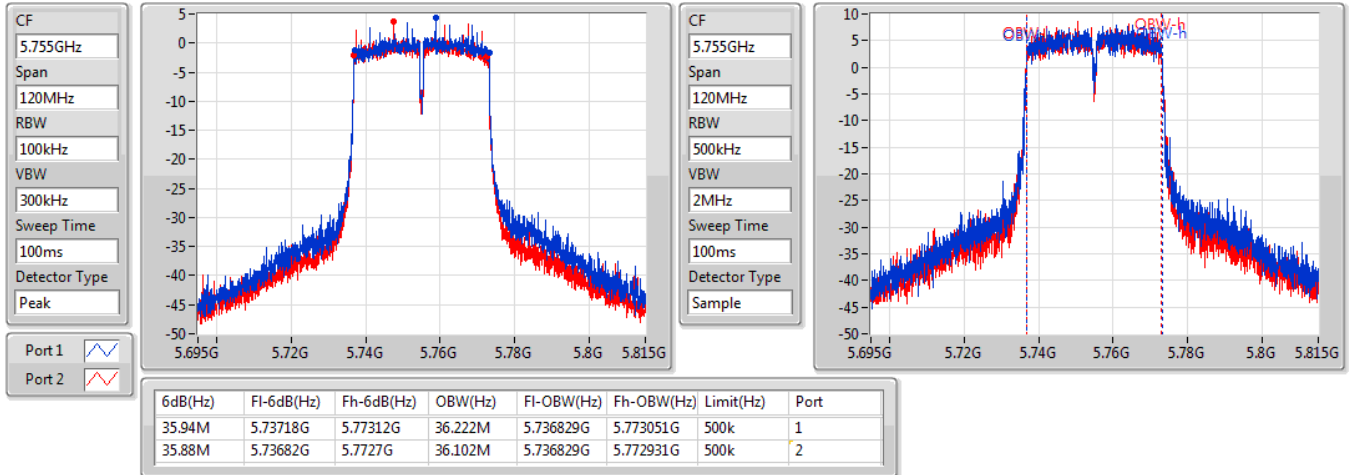


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5755MHz

25/06/2019

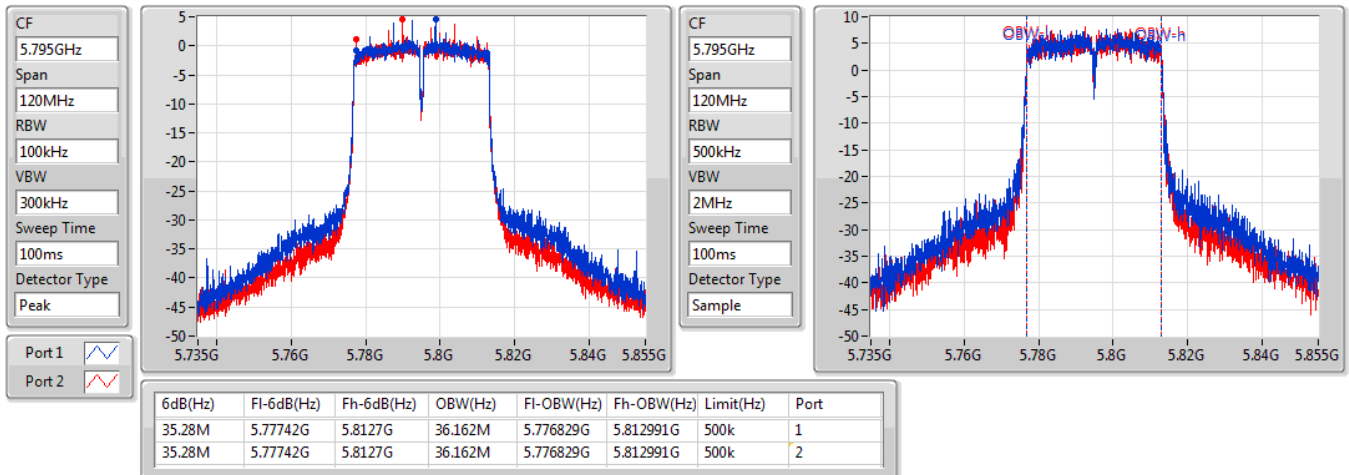


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

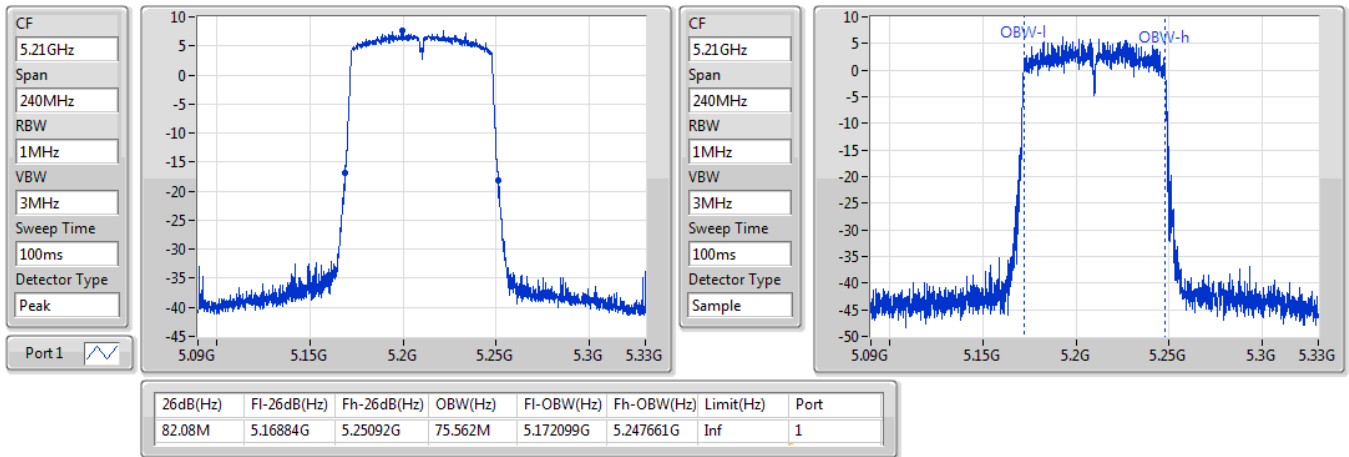
5795MHz

25/06/2019

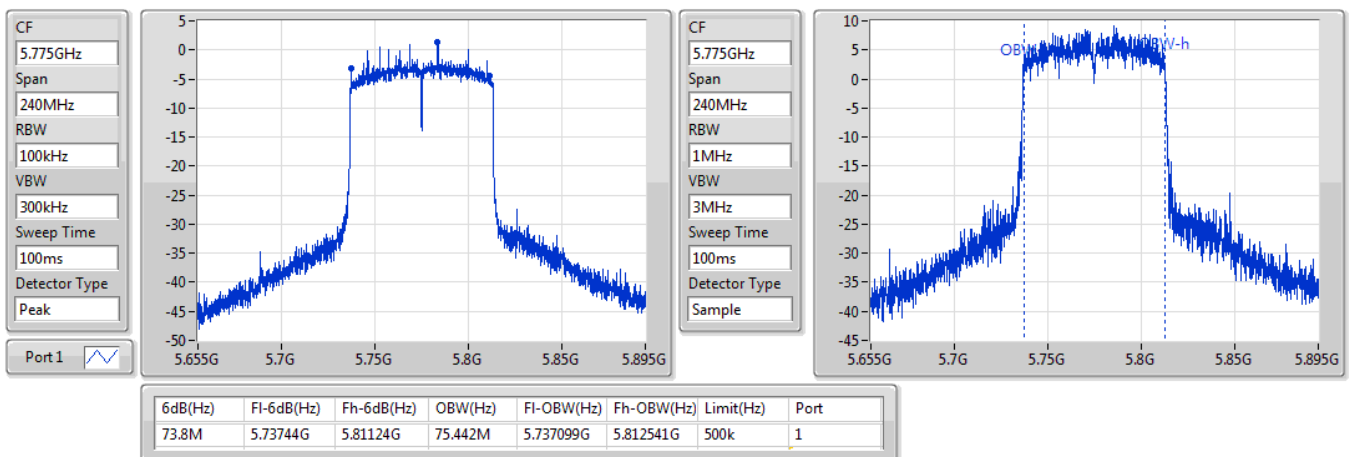


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)
EBW
5210MHz

25/06/2019

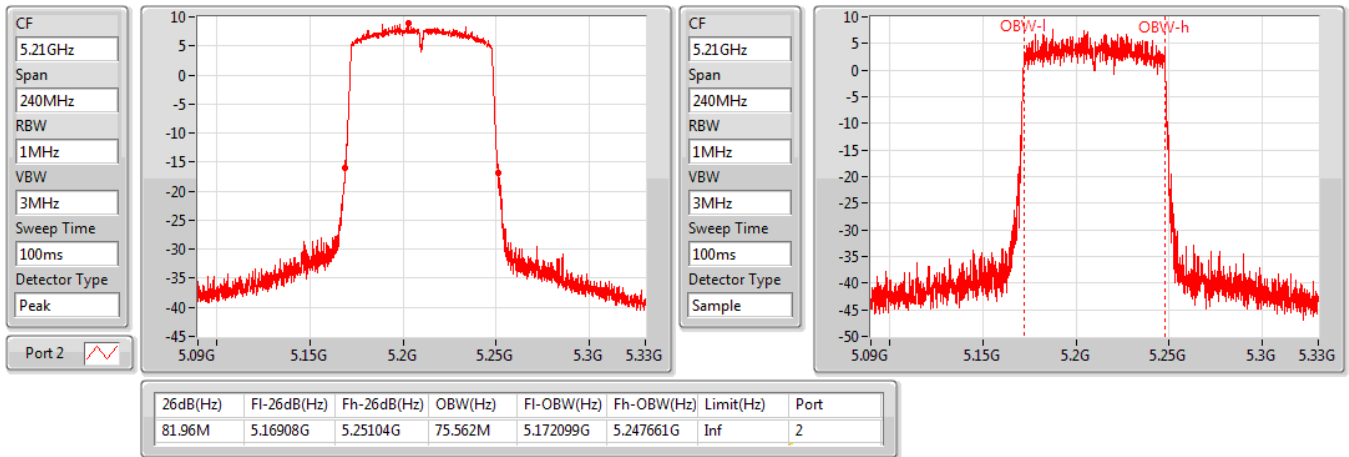

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)
EBW
5775MHz

25/06/2019

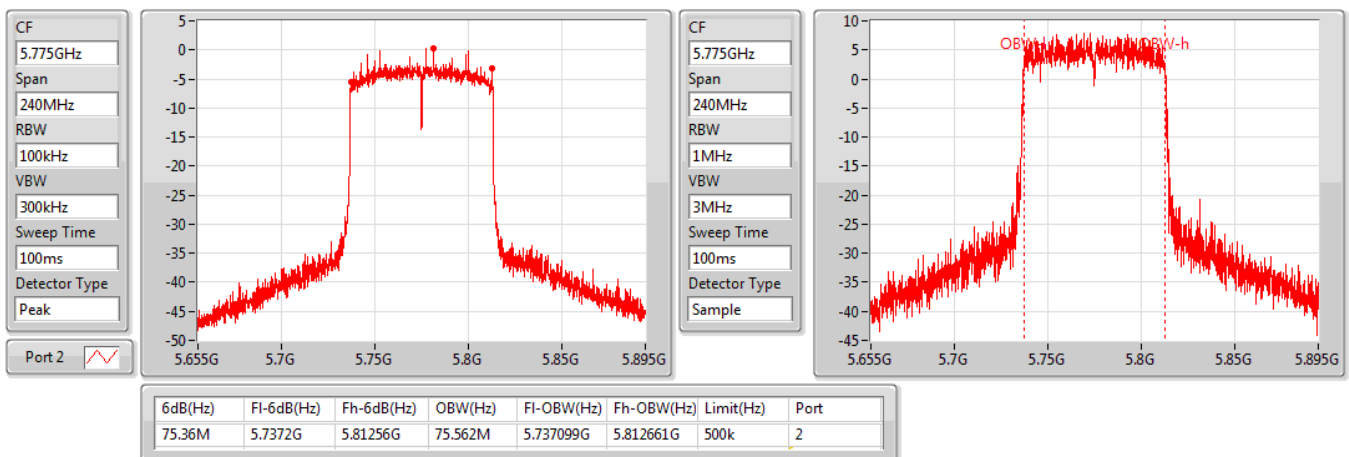


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)
EBW
5210MHz

25/06/2019

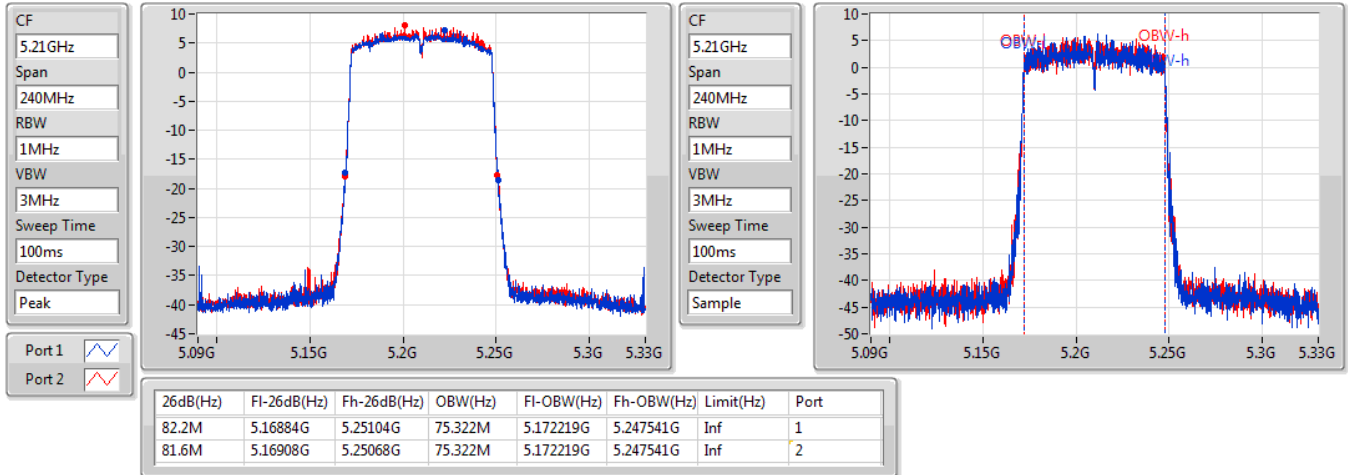

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)
EBW
5775MHz

25/06/2019

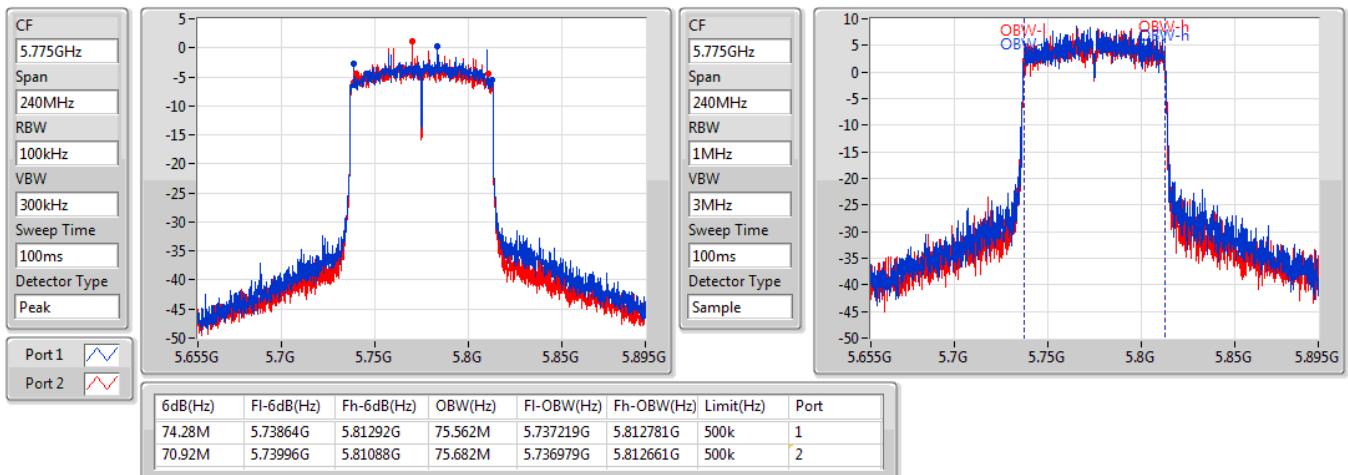


802.11ac VHT80_Nss1,(MCS0)_2TX
EBW
5210MHz

25/06/2019

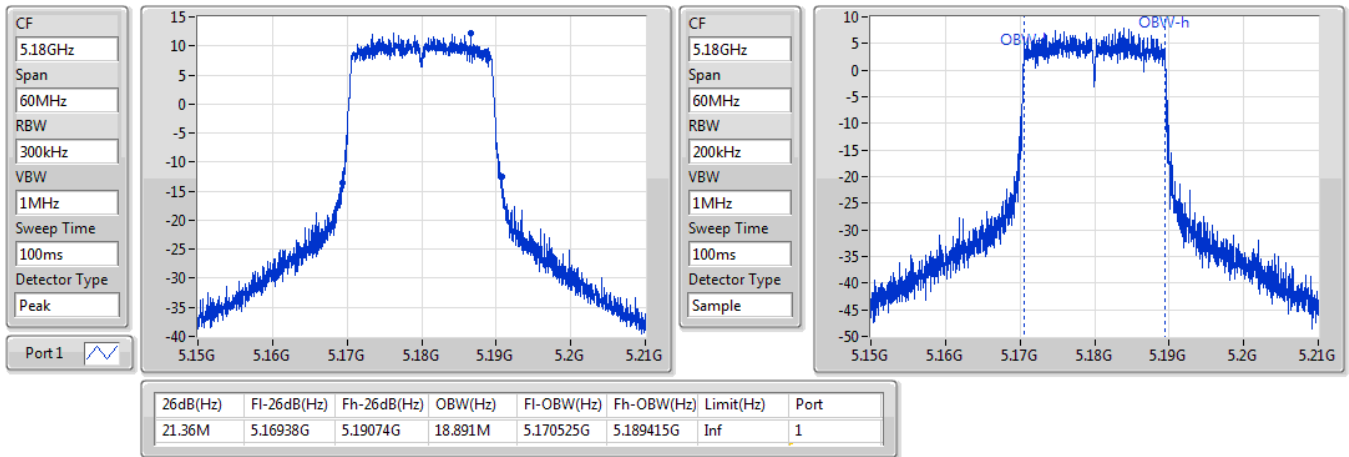

802.11ac VHT80_Nss1,(MCS0)_2TX
EBW
5775MHz

25/06/2019

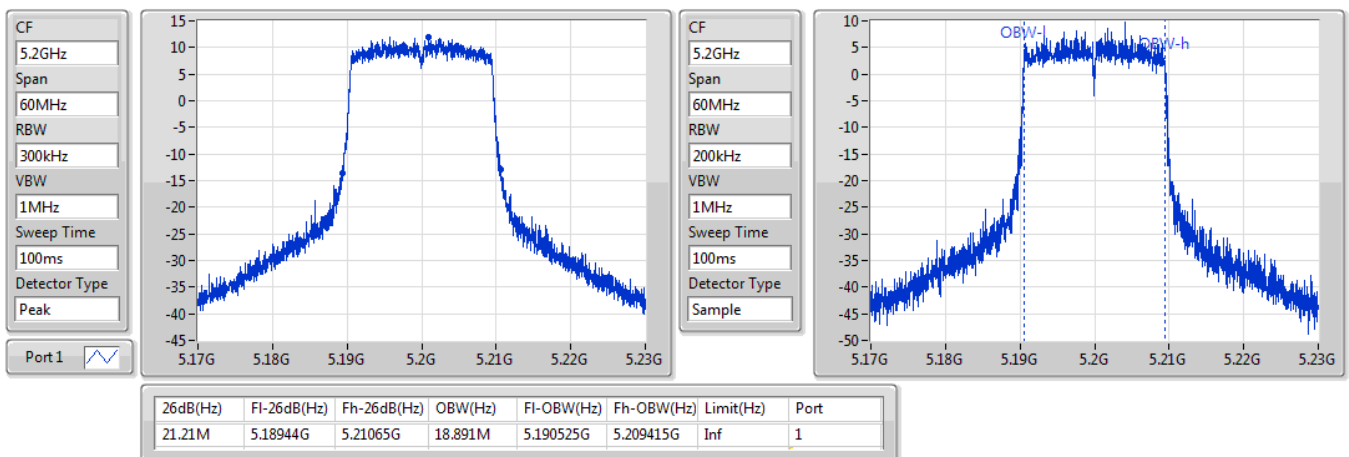


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5180MHz

25/06/2019

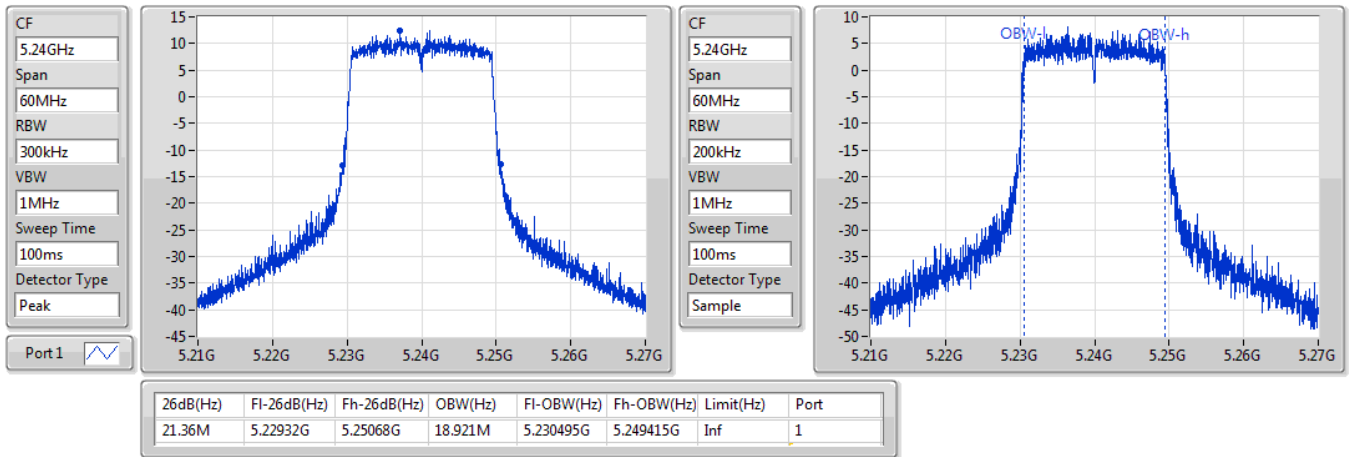

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5200MHz

25/06/2019

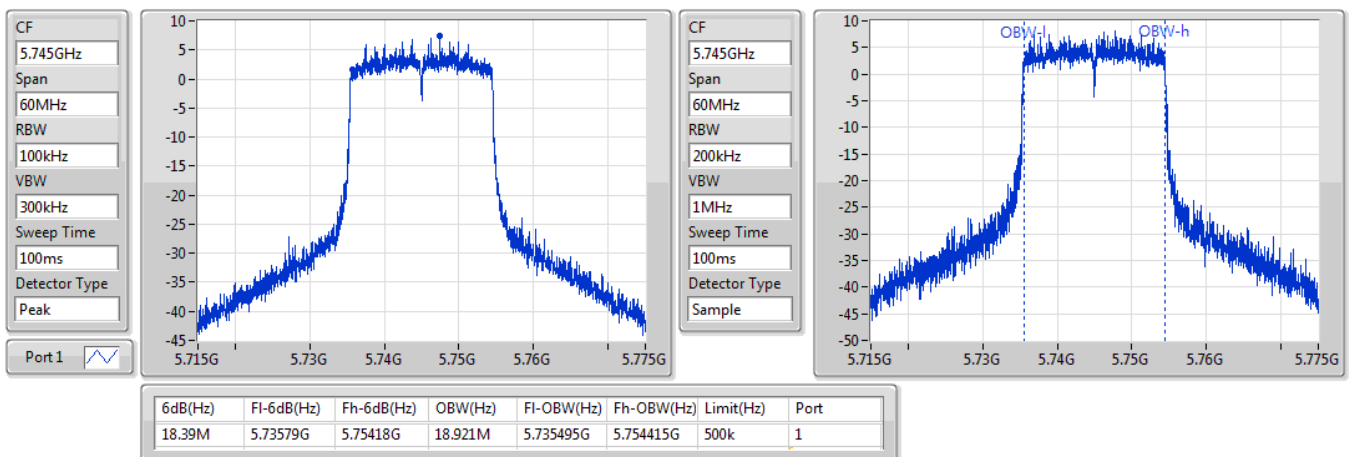


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5240MHz

25/06/2019

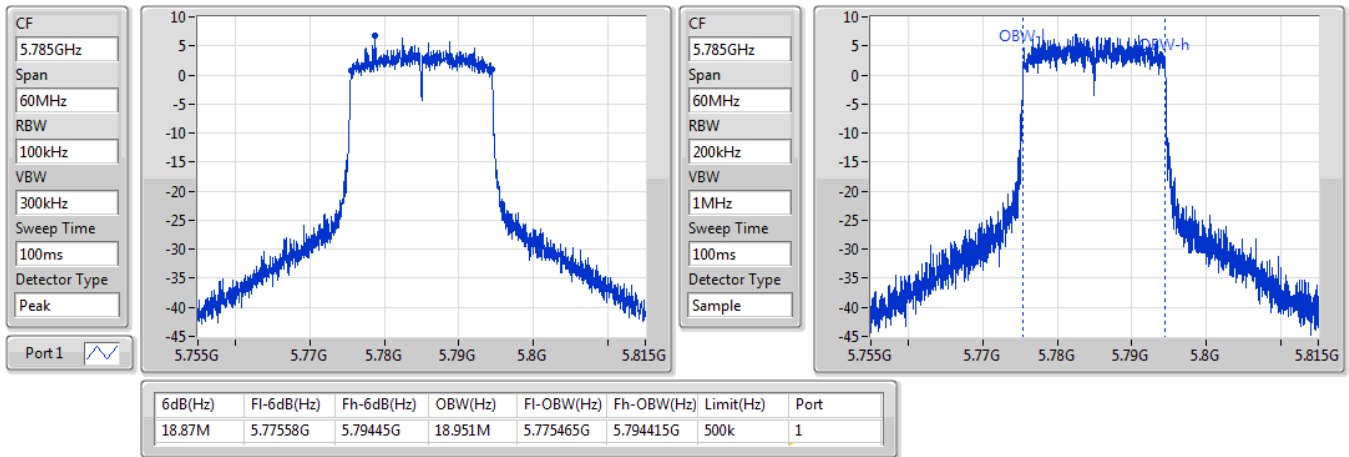

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5745MHz

25/06/2019

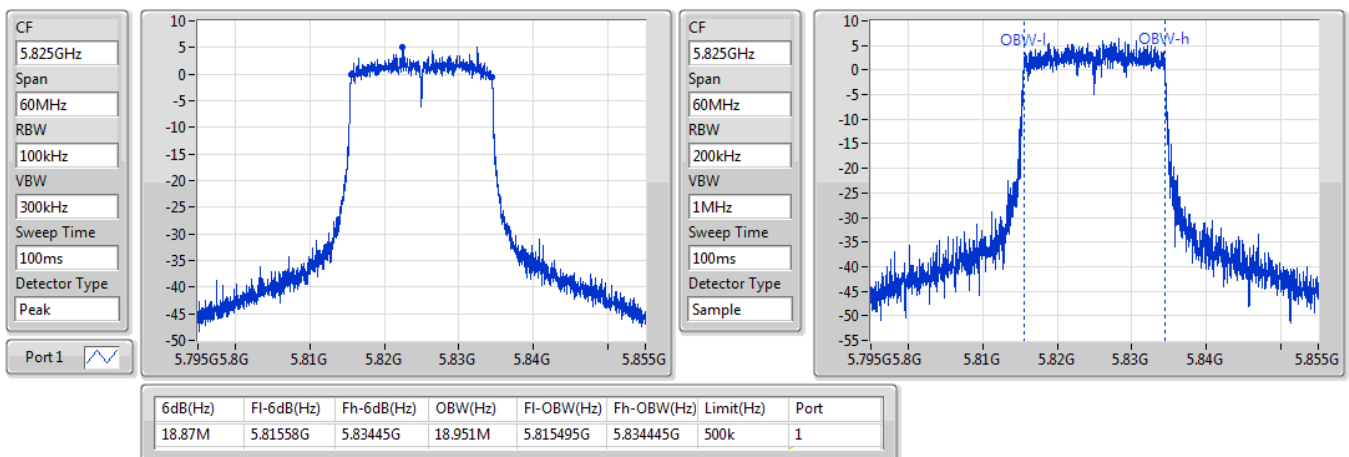


802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5785MHz

25/06/2019

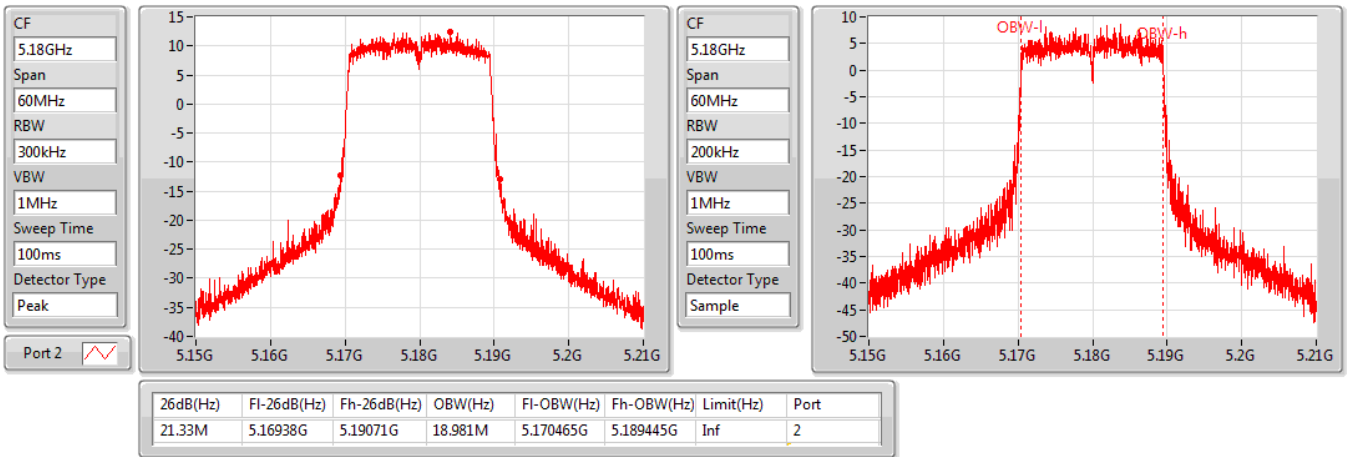

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)
EBW
5825MHz

25/06/2019

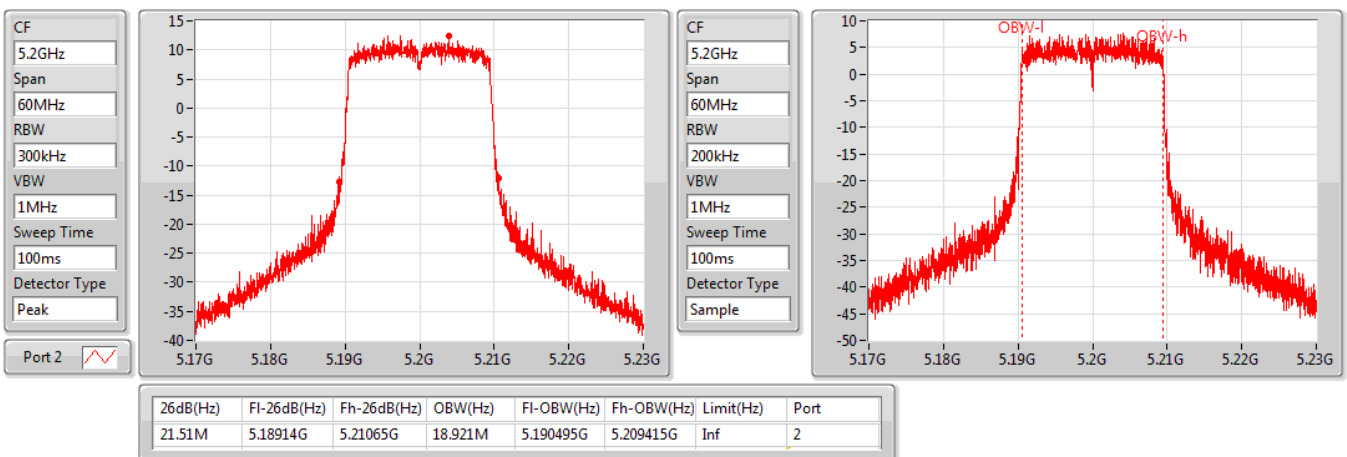


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5180MHz

25/06/2019

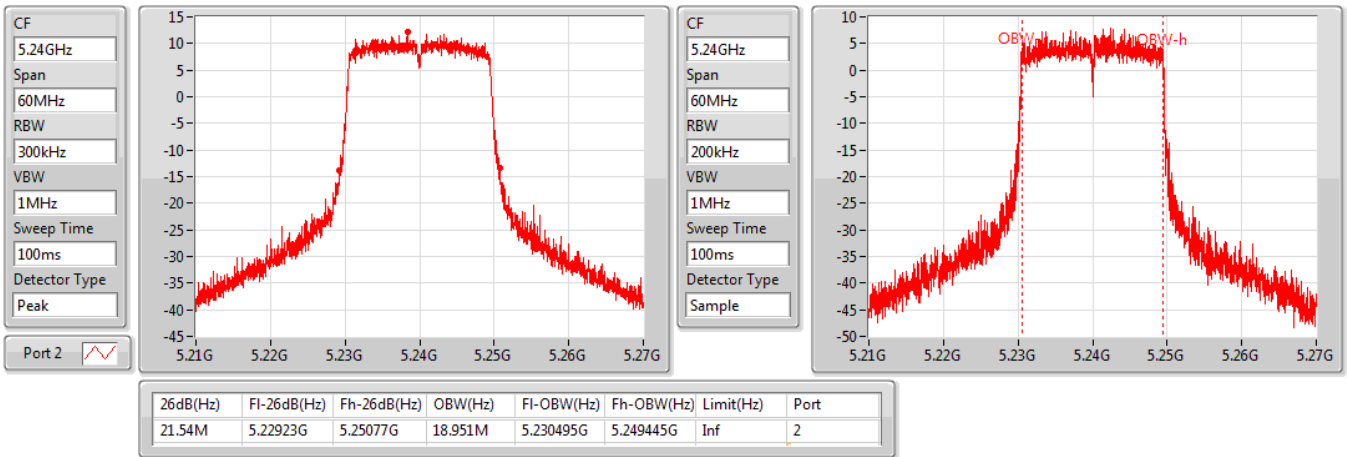

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5200MHz

25/06/2019

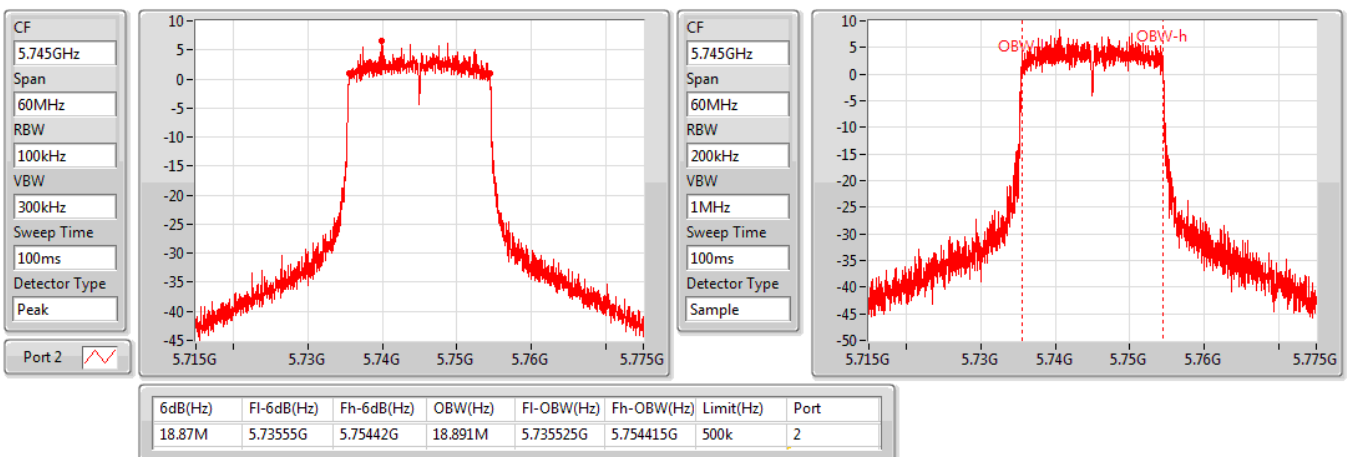


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5240MHz

25/06/2019

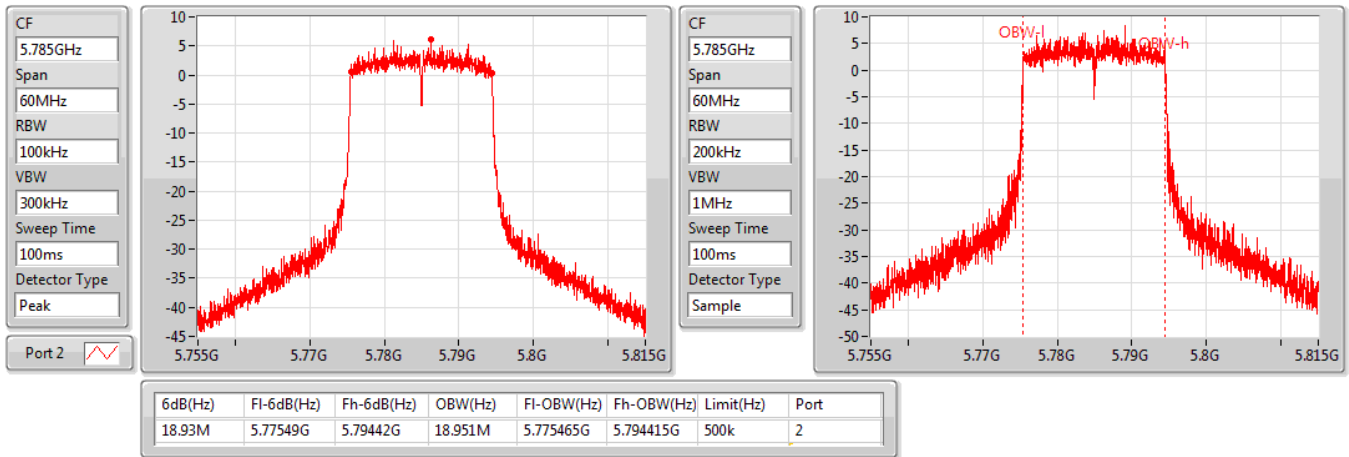

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5745MHz

25/06/2019

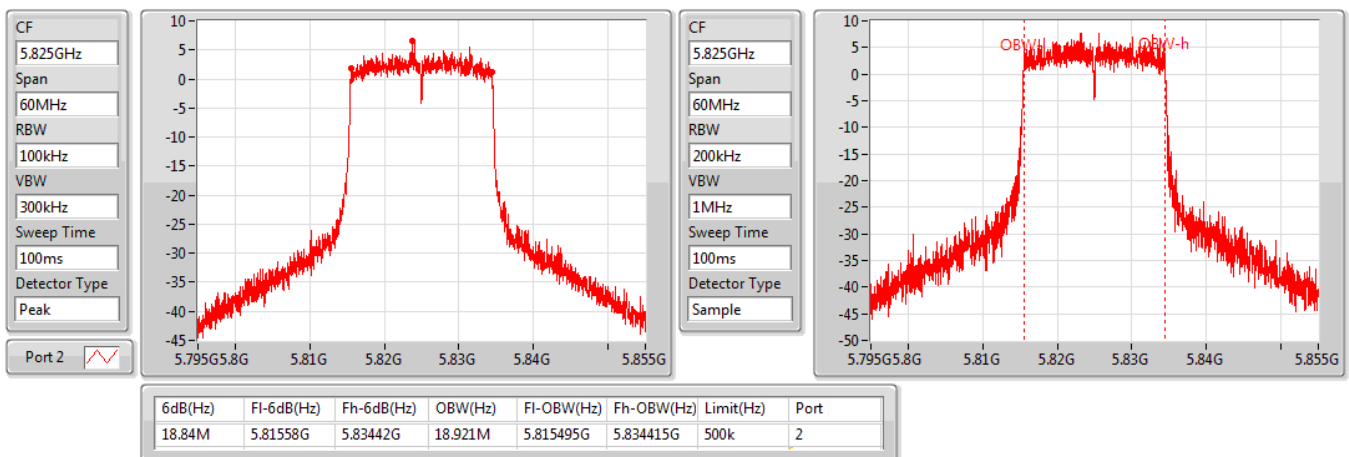


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5785MHz

25/06/2019

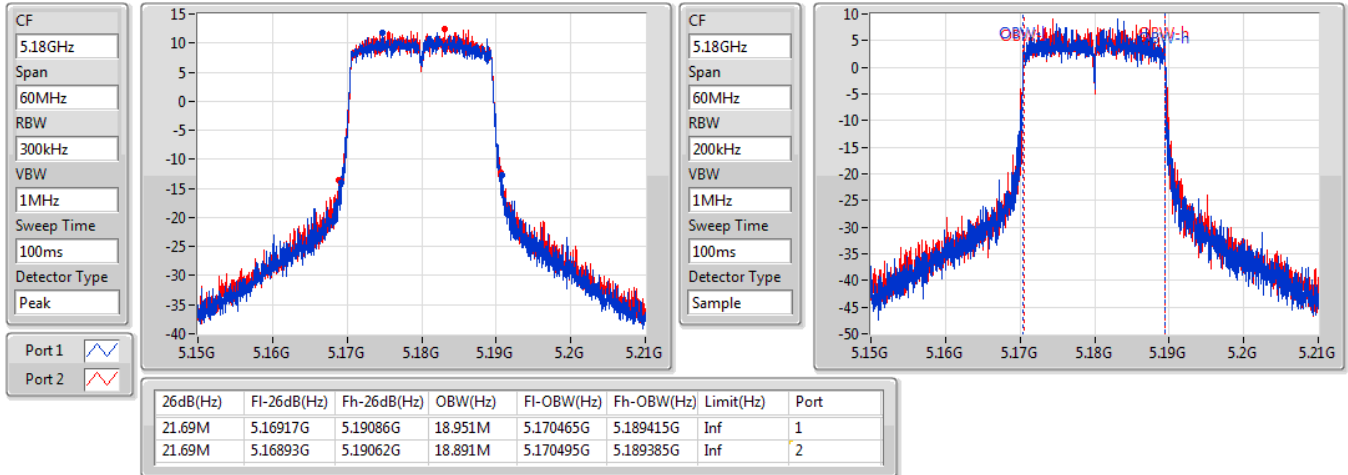

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
5825MHz

25/06/2019

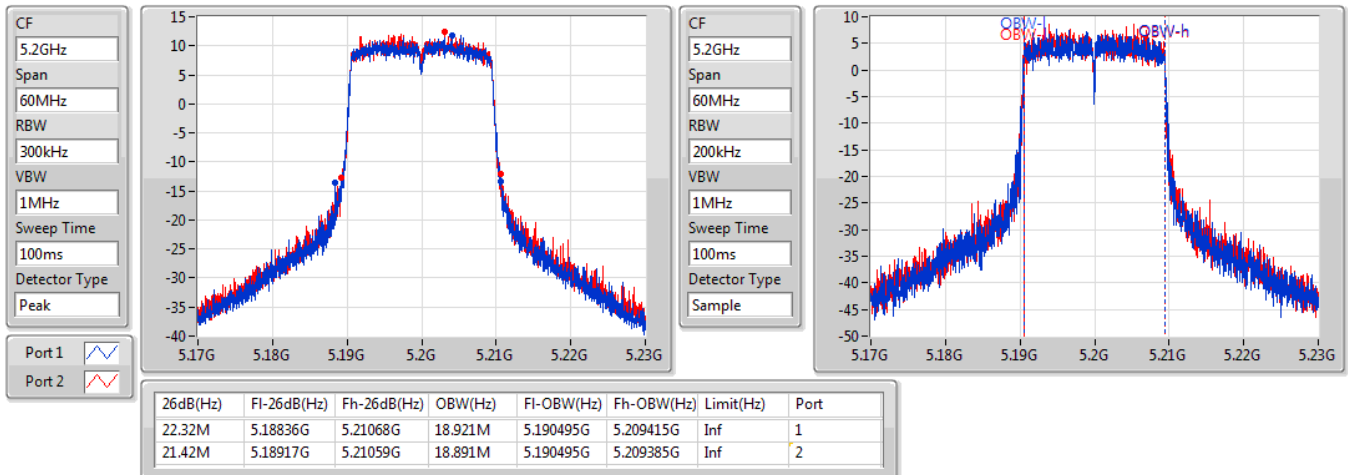


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5180MHz

25/06/2019

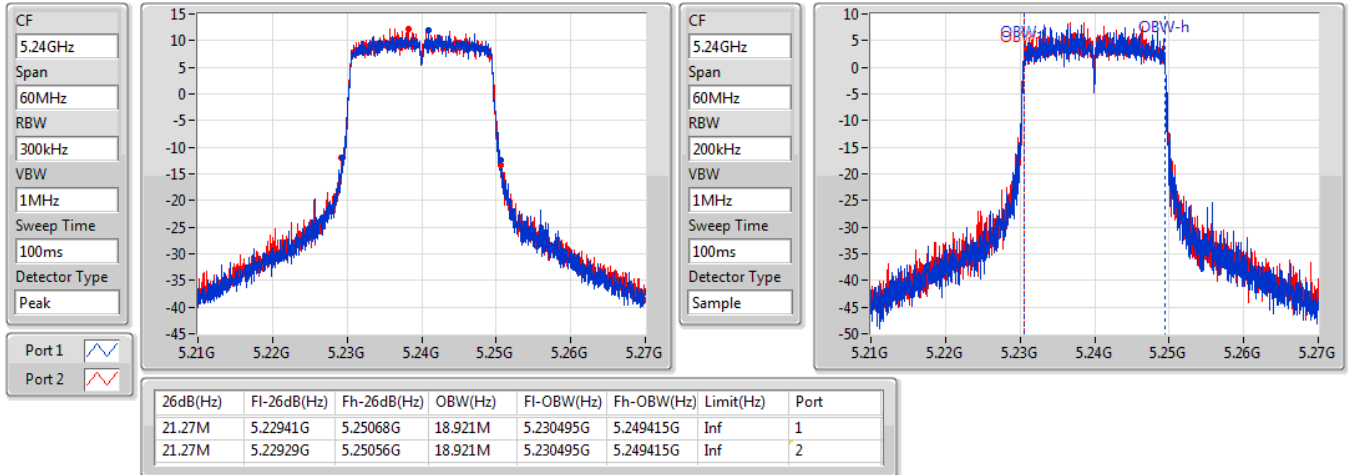

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5200MHz

25/06/2019

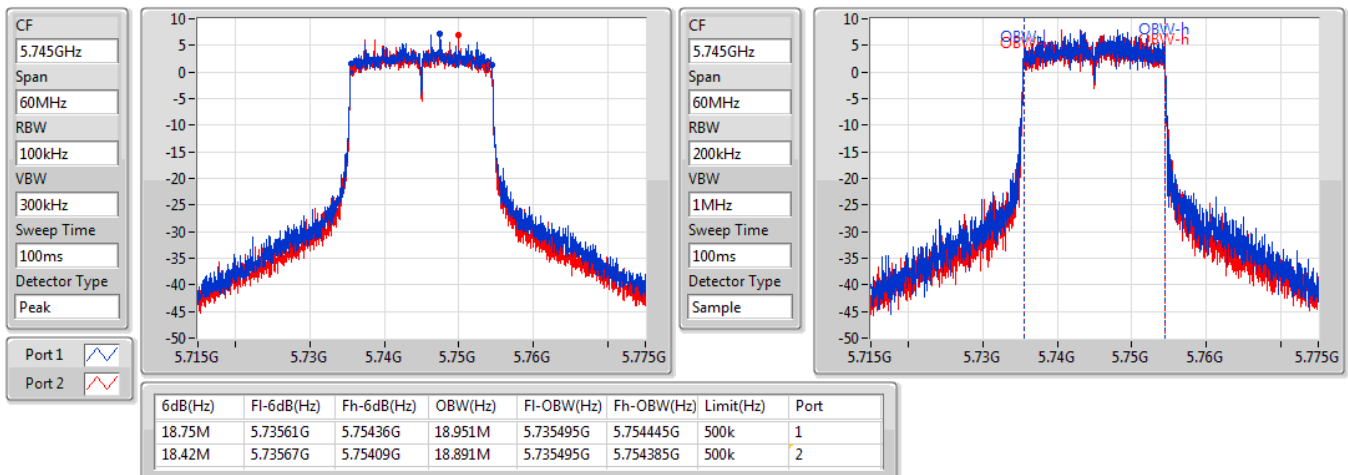


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5240MHz

25/06/2019


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5745MHz

25/06/2019

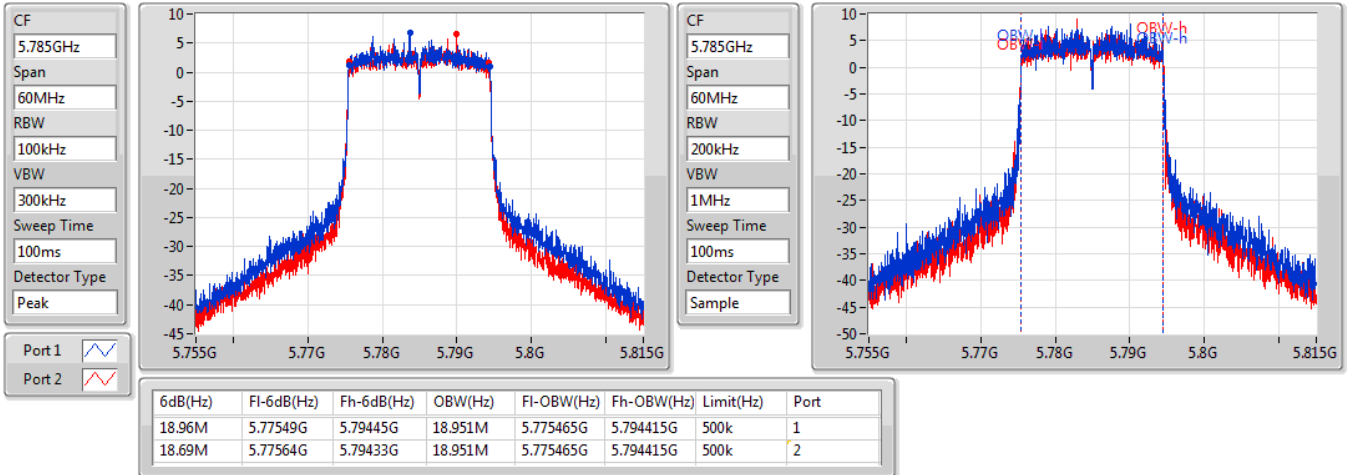


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

25/06/2019

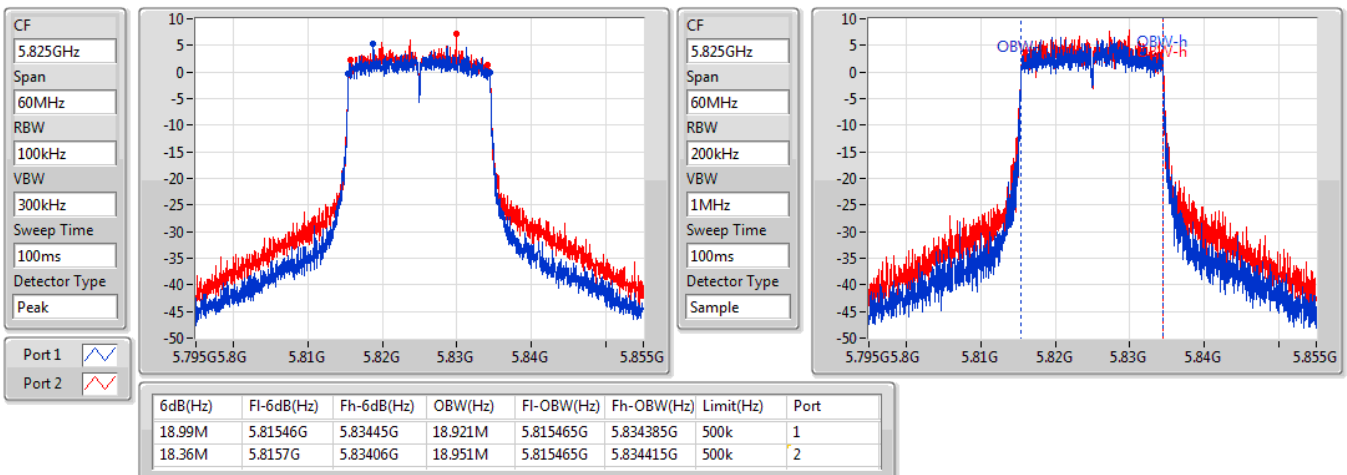


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

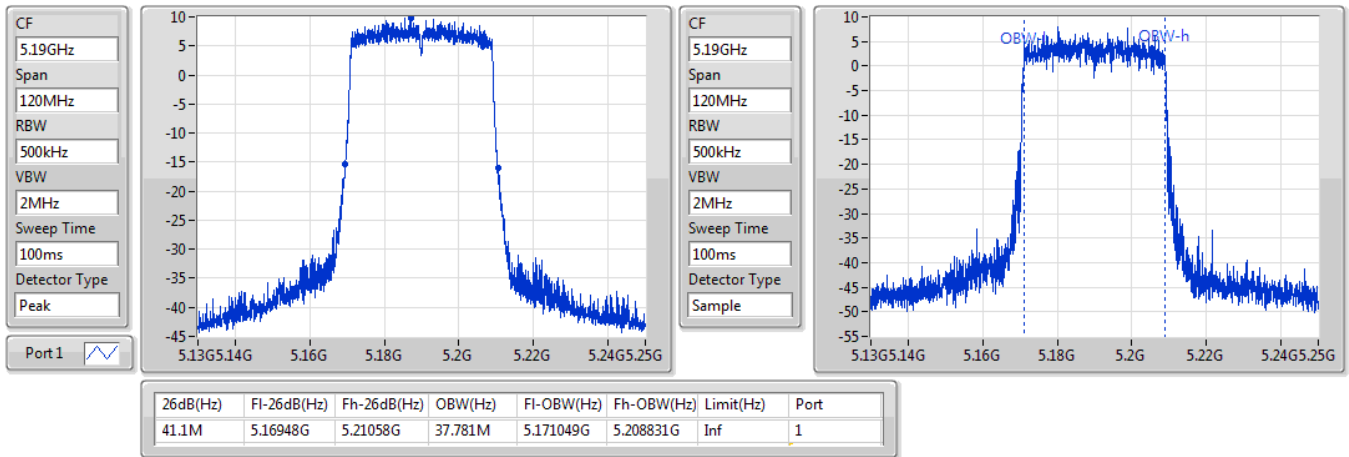
5825MHz

25/06/2019

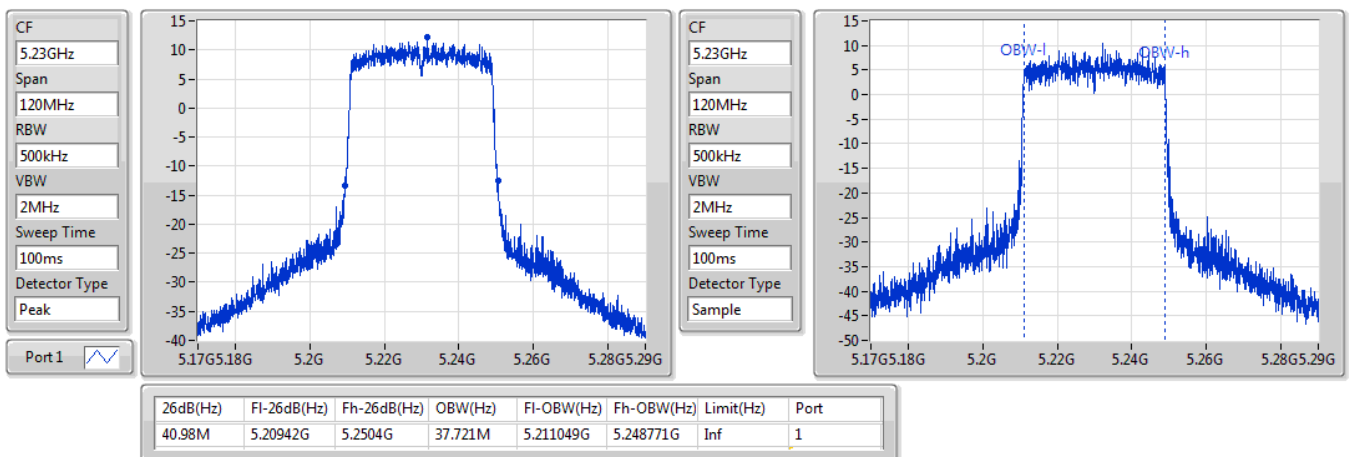


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5190MHz

25/06/2019

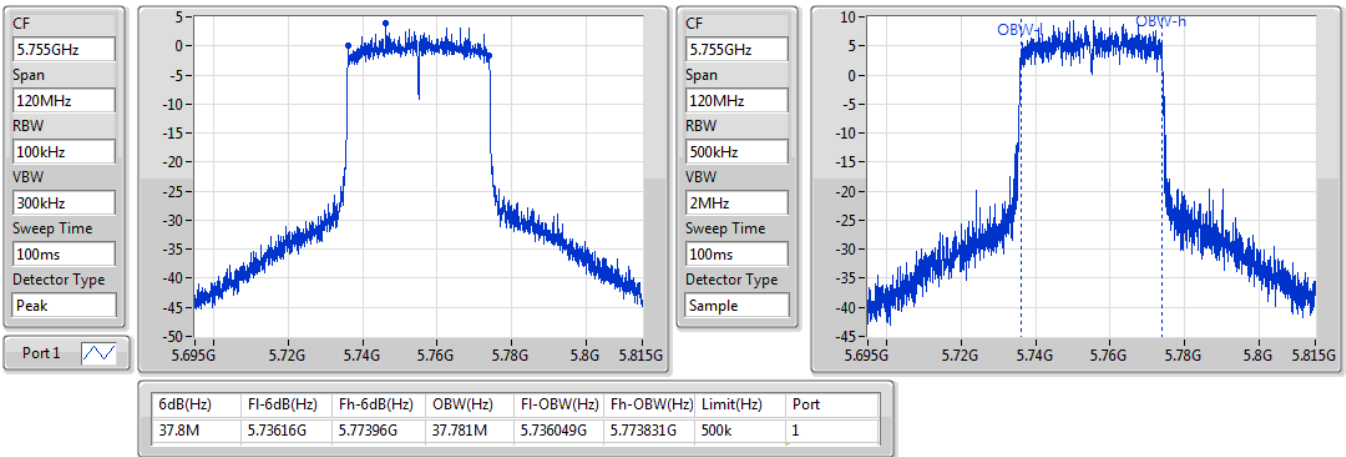

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5230MHz

25/06/2019

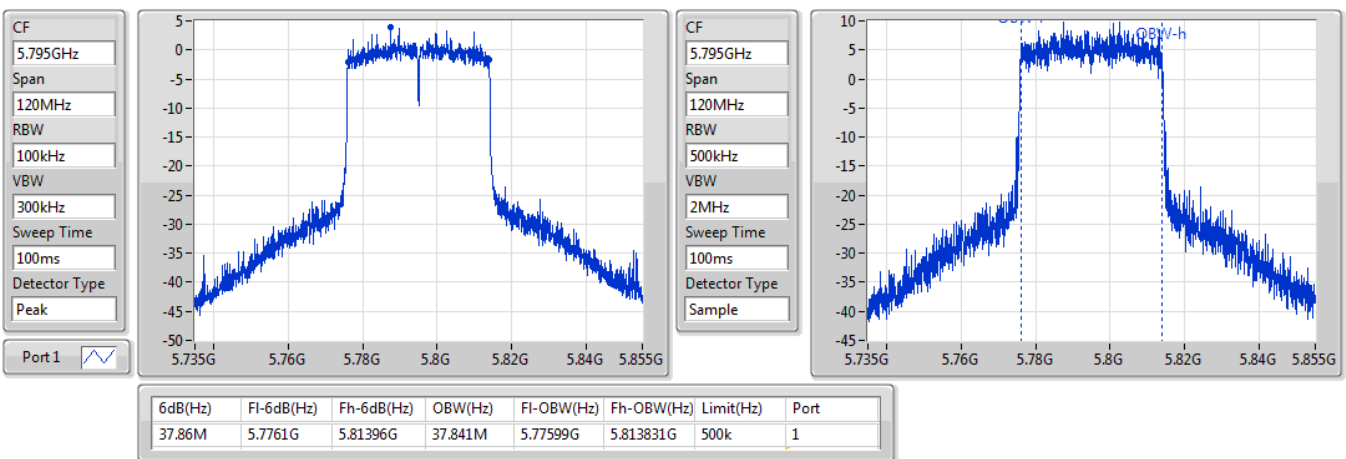


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5755MHz

25/06/2019

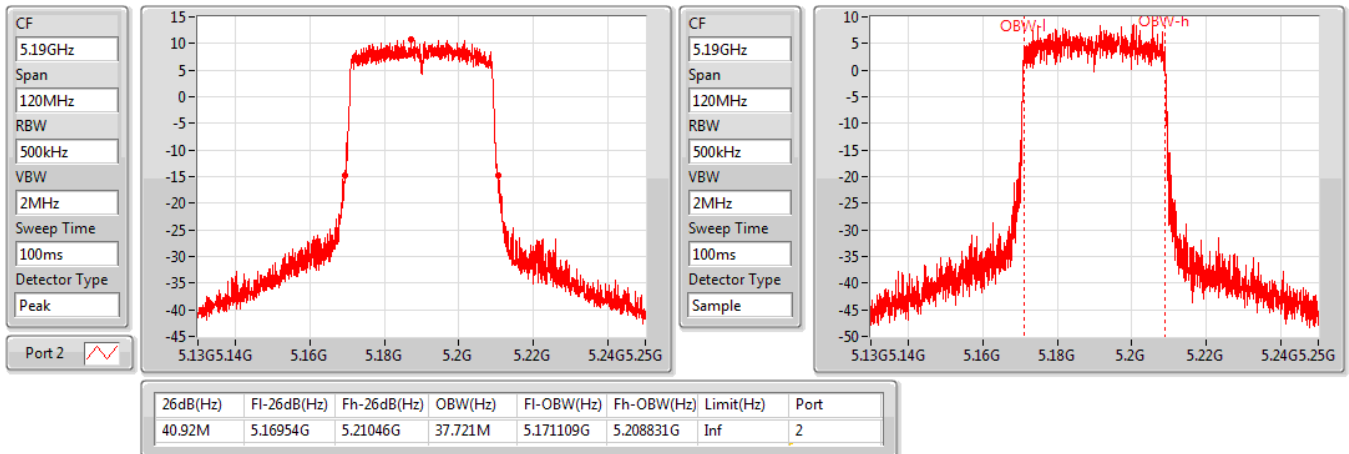

802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)
EBW
5795MHz

25/06/2019

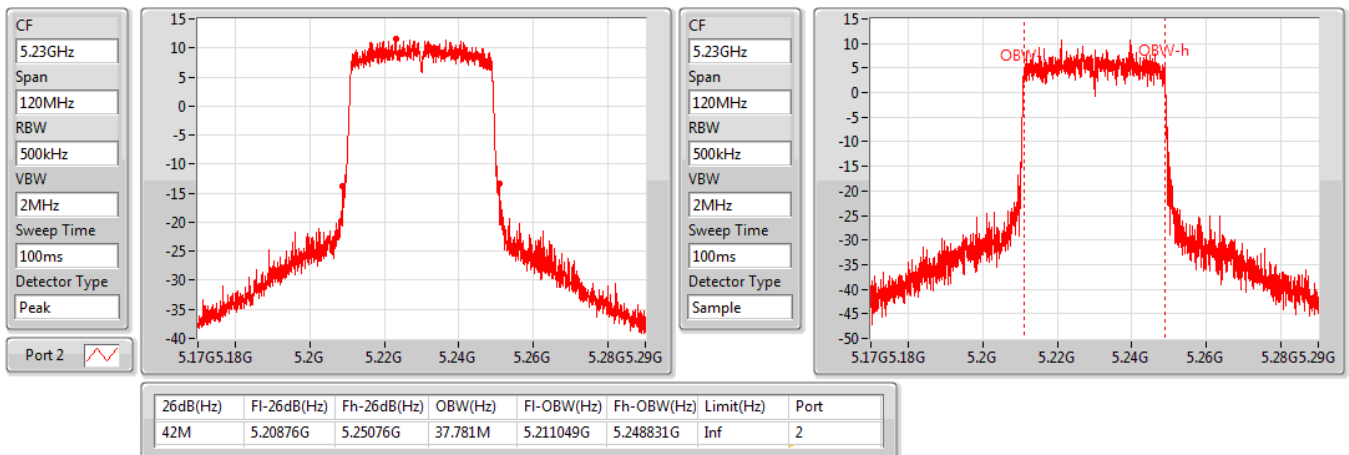


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5190MHz

25/06/2019

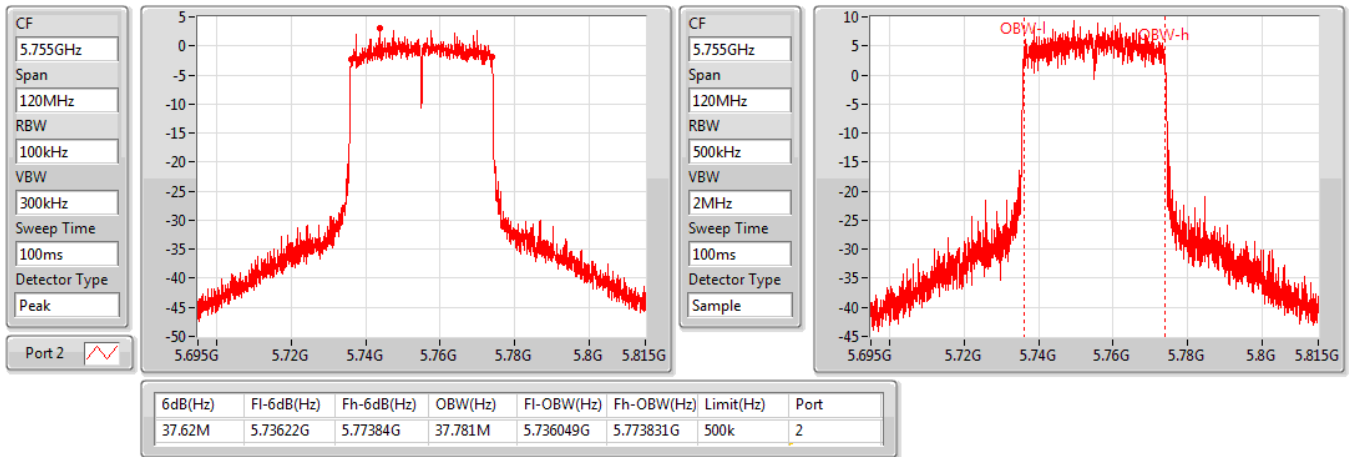

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5230MHz

25/06/2019

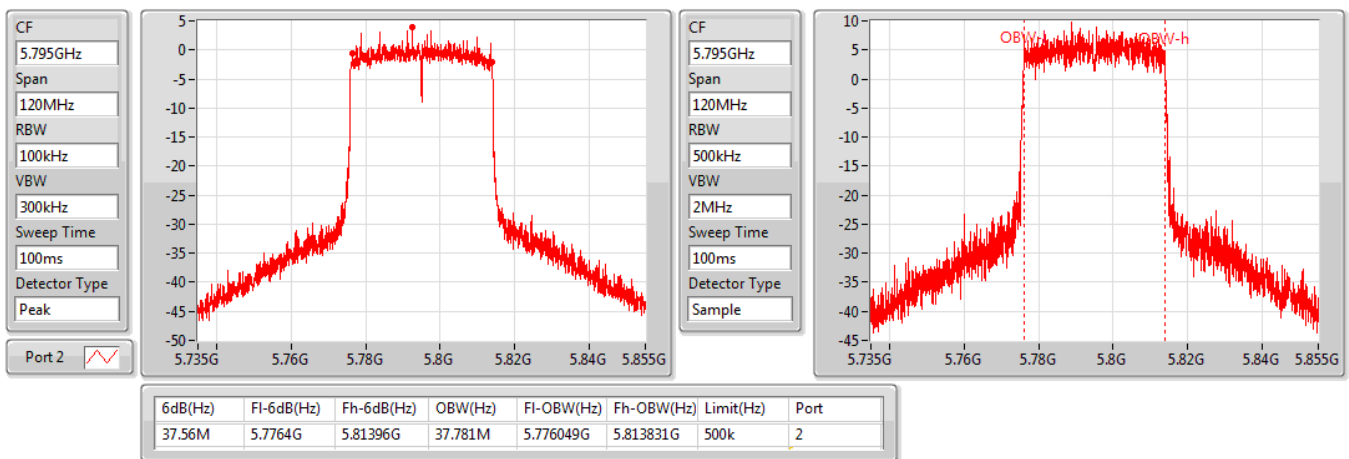


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5755MHz

25/06/2019

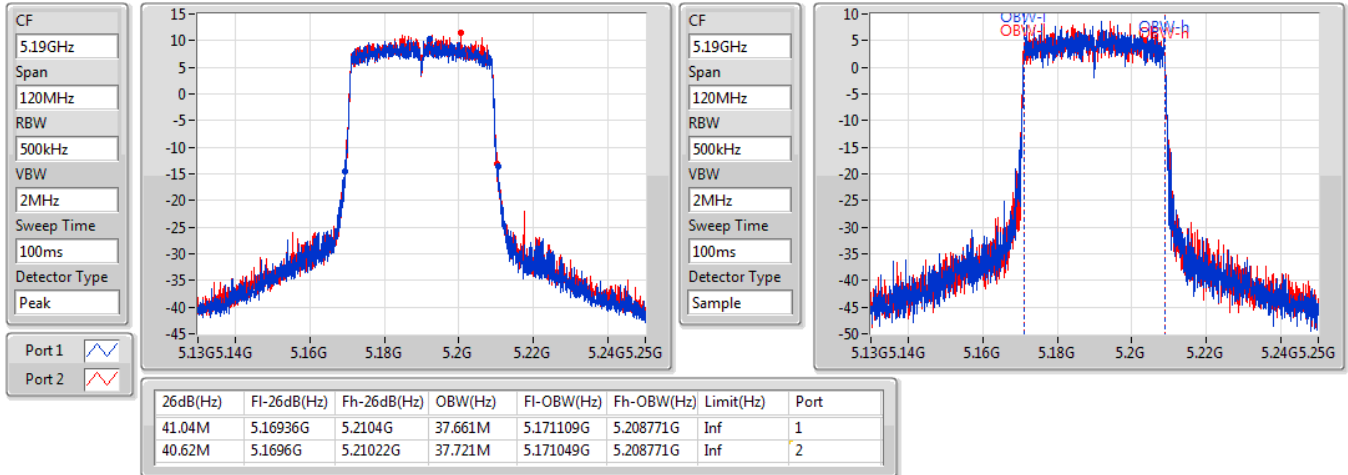

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
5795MHz

25/06/2019

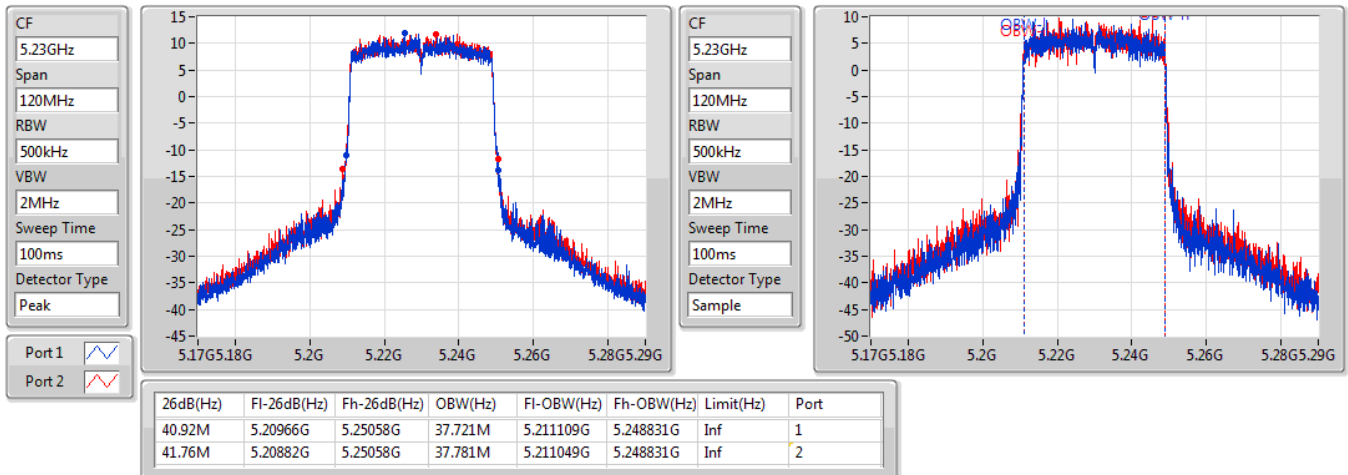


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5190MHz

25/06/2019

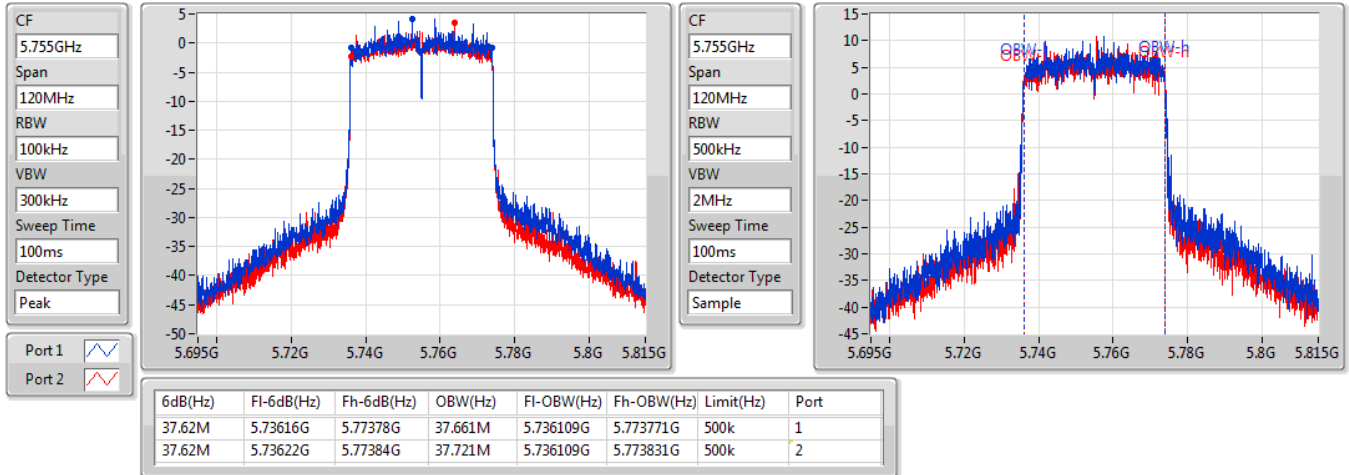

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5230MHz

25/06/2019

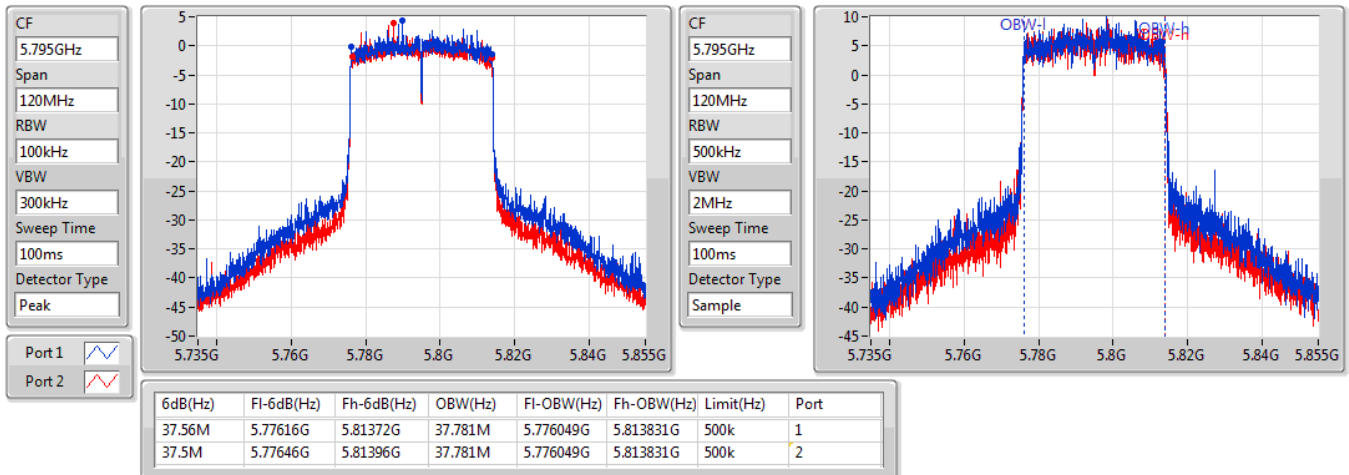


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5755MHz

25/06/2019


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5795MHz

25/06/2019

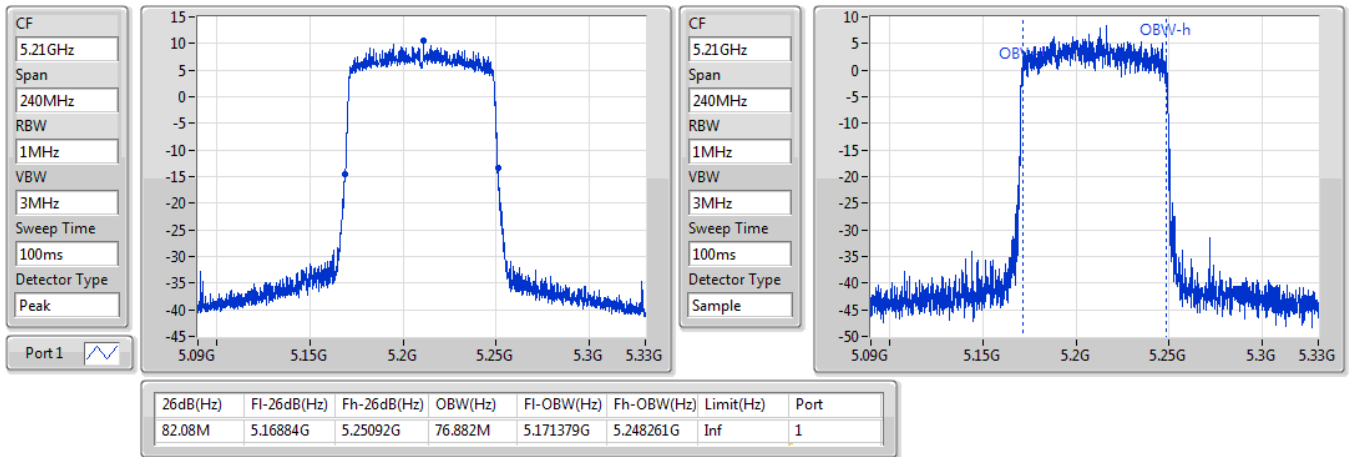


802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)

EBW

5210MHz

25/06/2019

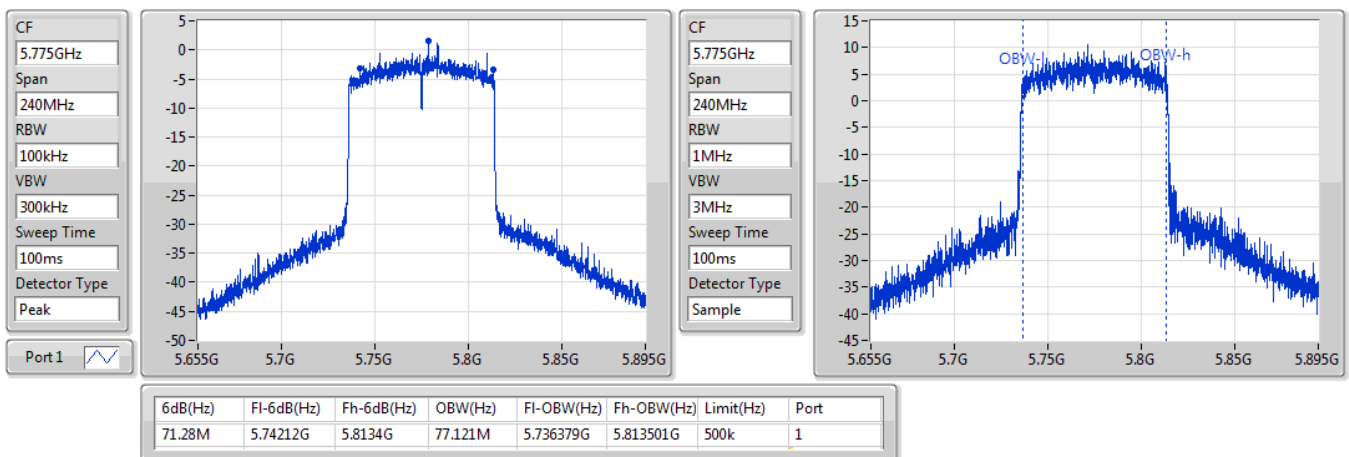


802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)

EBW

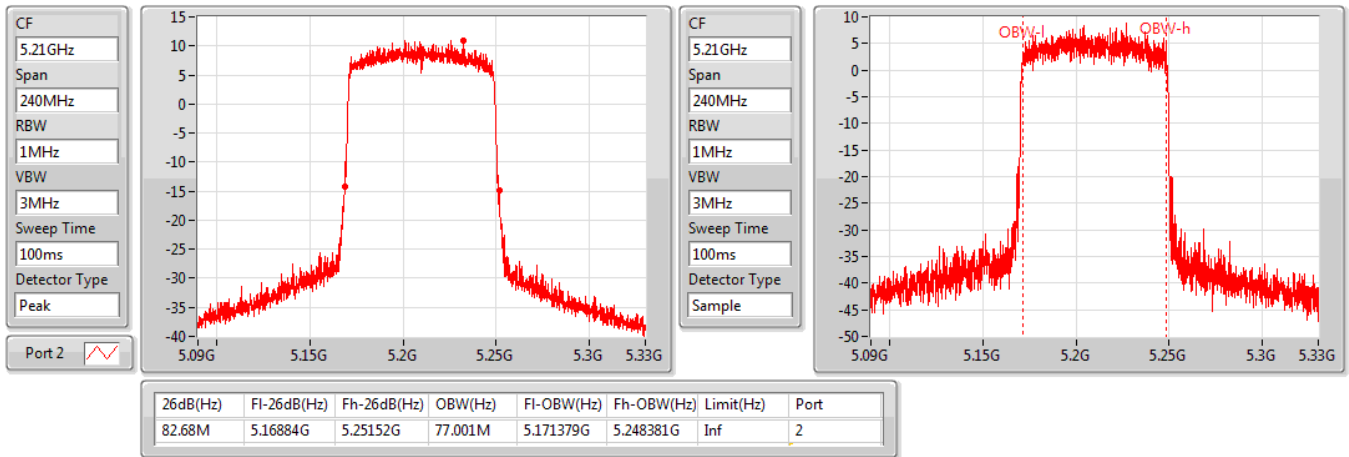
5775MHz

25/06/2019

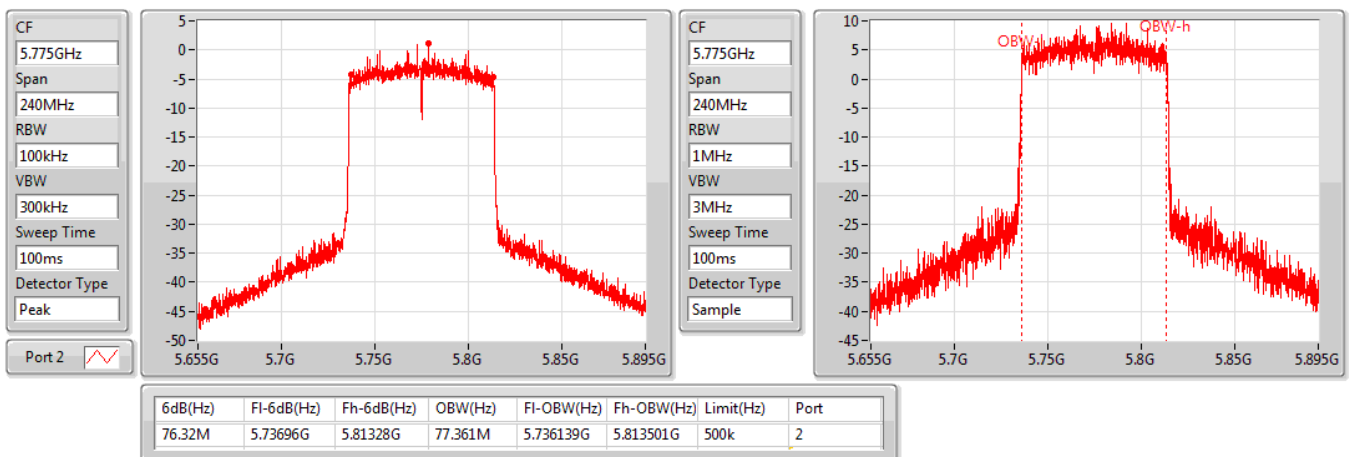


802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5210MHz

25/06/2019

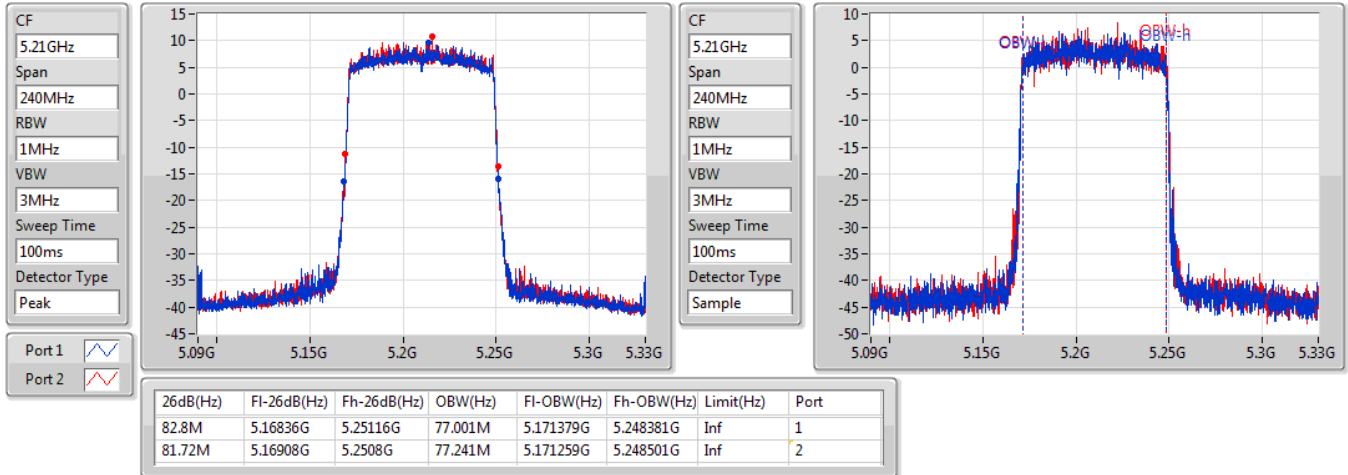

802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)
EBW
5775MHz

25/06/2019

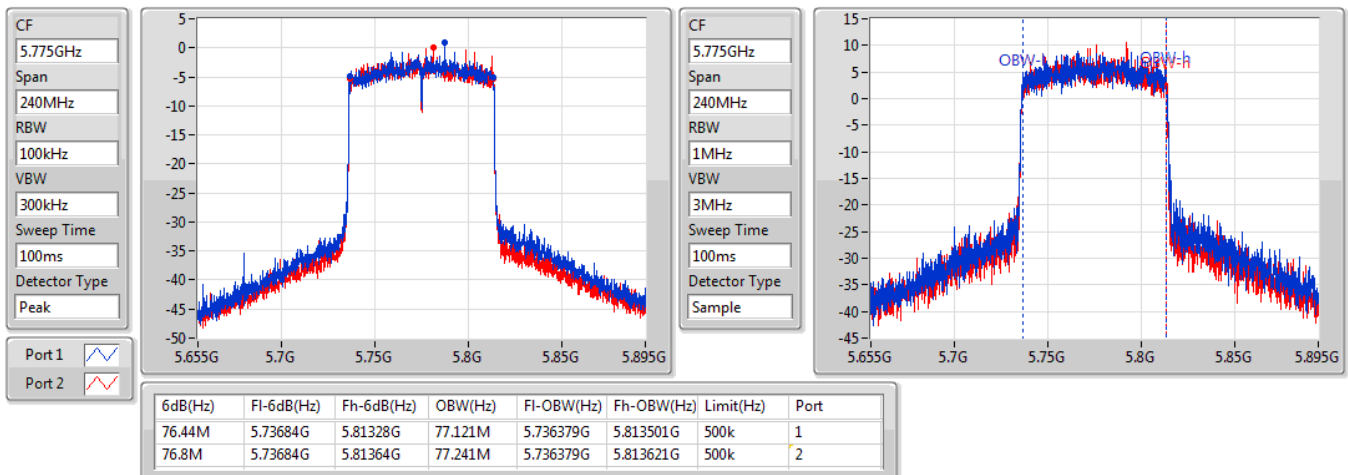


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5210MHz

25/06/2019


802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5775MHz

25/06/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.67M	17.601M	17M6D1D	20.43M	17.571M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.96M	36.162M	36M2D1D	39.48M	36.042M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	80.04M	75.562M	75M6D1D	79.56M	75.442M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.64M	17.601M	17M6D1D	20.37M	17.541M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	40.2M	36.162M	36M2D1D	39.6M	36.102M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.96M	75.802M	75M8D1D	81.6M	75.322M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.55M	17.631M	17M6D1D	17.13M	17.571M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	36.18M	36.162M	36M2D1D	35.46M	36.042M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	75.84M	75.562M	75M6D1D	73.2M	75.322M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.58M	17.631M	17M6D1D	17.1M	17.571M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	36.3M	36.162M	36M2D1D	35.28M	36.042M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	76.08M	75.442M	75M4D1D	75.6M	75.442M

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)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	20.43M	17.601M	20.55M	17.601M
5200MHz_TnomVnom	Pass	Inf	20.58M	17.571M	20.55M	17.601M
5240MHz_TnomVnom	Pass	Inf	20.67M	17.601M	20.61M	17.571M
5745MHz_TnomVnom	Pass	500k	17.37M	17.601M	17.25M	17.601M
5785MHz_TnomVnom	Pass	500k	17.55M	17.631M	17.49M	17.571M
5825MHz_TnomVnom	Pass	500k	17.13M	17.601M	17.25M	17.601M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	39.96M	36.042M	39.6M	36.042M
5230MHz_TnomVnom	Pass	Inf	39.6M	36.102M	39.48M	36.162M
5755MHz_TnomVnom	Pass	500k	36.12M	36.102M	36.12M	36.162M
5795MHz_TnomVnom	Pass	500k	35.46M	36.042M	36.18M	36.042M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	80.04M	75.442M	79.56M	75.562M
5775MHz_TnomVnom	Pass	500k	73.2M	75.322M	75.84M	75.562M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	20.37M	17.601M	20.58M	17.601M
5200MHz_TnomVnom	Pass	Inf	20.64M	17.571M	20.43M	17.571M
5240MHz_TnomVnom	Pass	Inf	20.43M	17.601M	20.64M	17.541M
5745MHz_TnomVnom	Pass	500k	17.1M	17.571M	17.58M	17.601M
5785MHz_TnomVnom	Pass	500k	17.4M	17.601M	17.22M	17.631M
5825MHz_TnomVnom	Pass	500k	17.13M	17.571M	17.22M	17.601M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	40.2M	36.102M	39.96M	36.162M
5230MHz_TnomVnom	Pass	Inf	39.6M	36.162M	39.84M	36.102M
5755MHz_TnomVnom	Pass	500k	35.28M	36.042M	36.3M	36.162M
5795MHz_TnomVnom	Pass	500k	36.24M	36.042M	35.88M	36.162M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	81.96M	75.802M	81.6M	75.322M
5775MHz_TnomVnom	Pass	500k	76.08M	75.442M	75.6M	75.442M

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

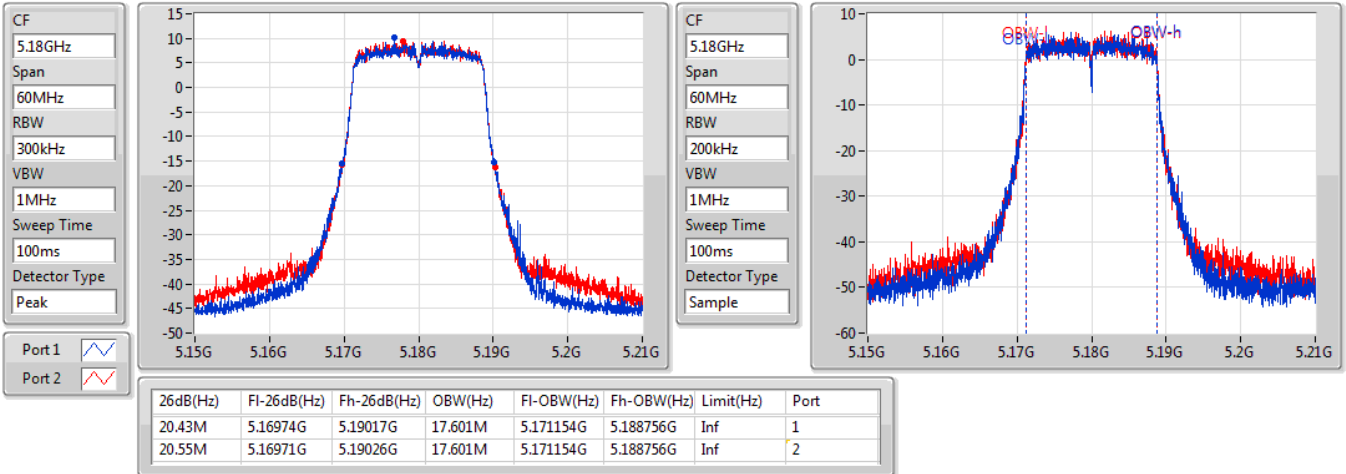
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

5180MHz

20/07/2019

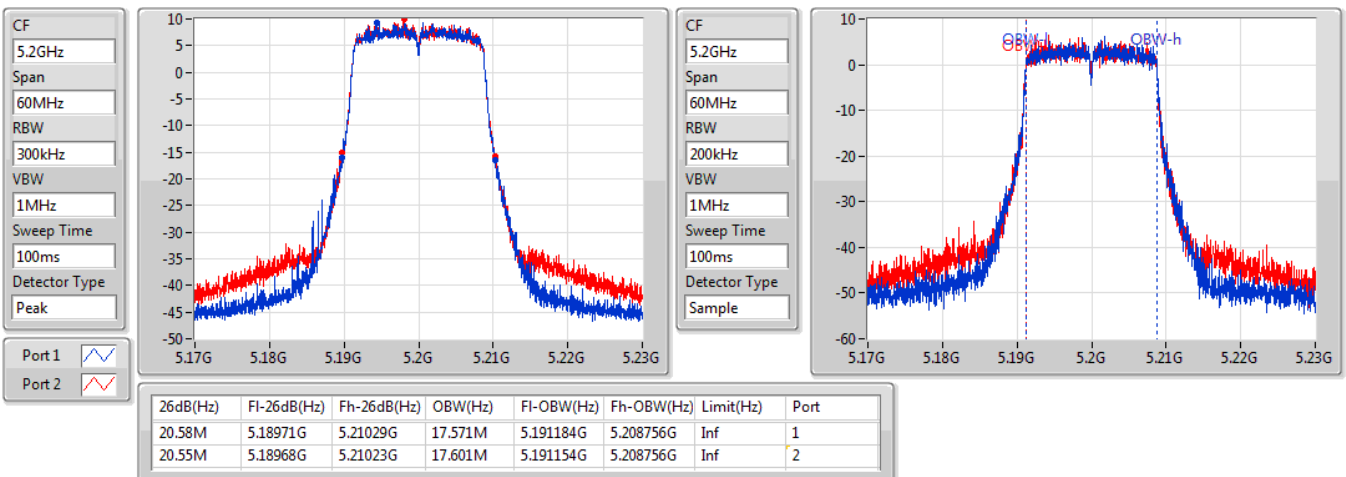


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

5200MHz

20/07/2019

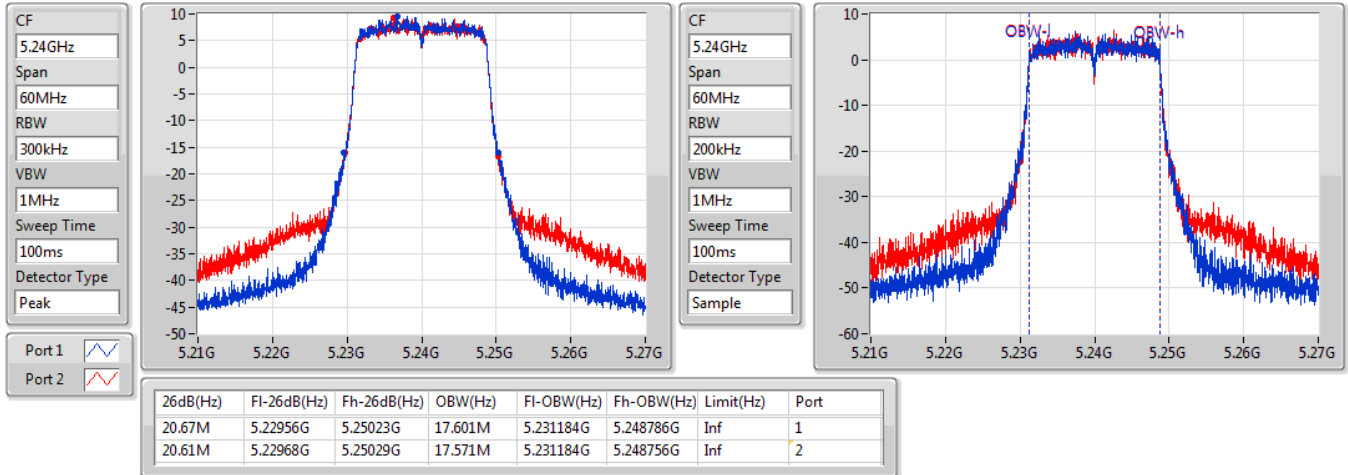


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

5240MHz

20/07/2019

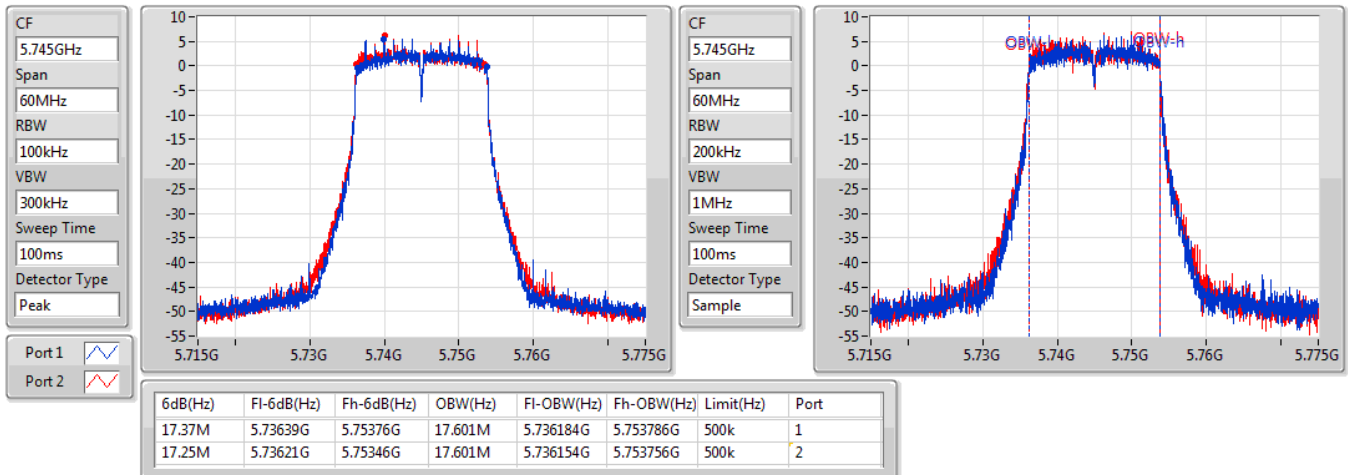


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

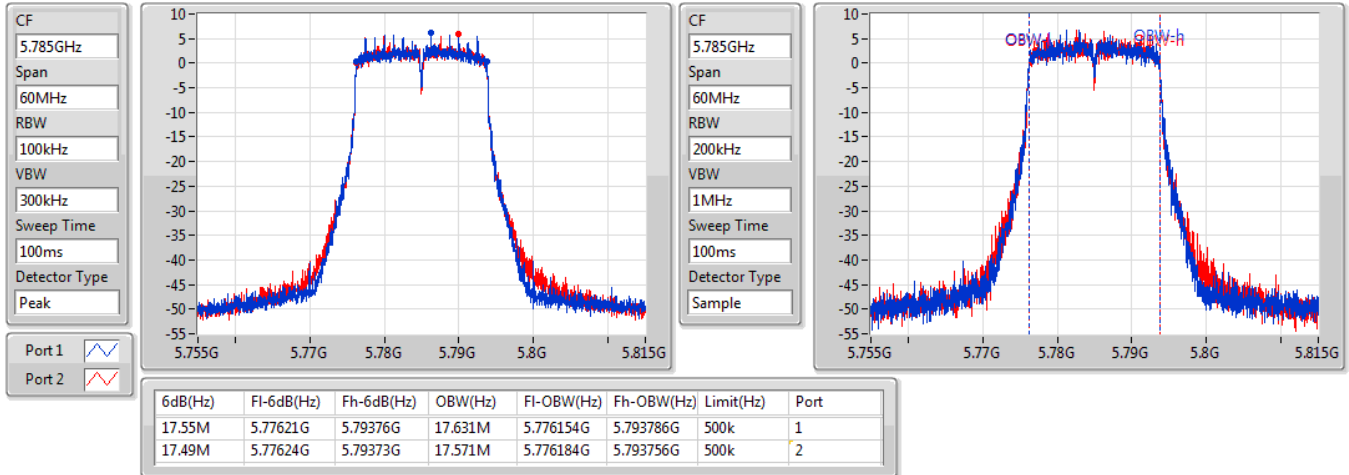
5745MHz

20/07/2019

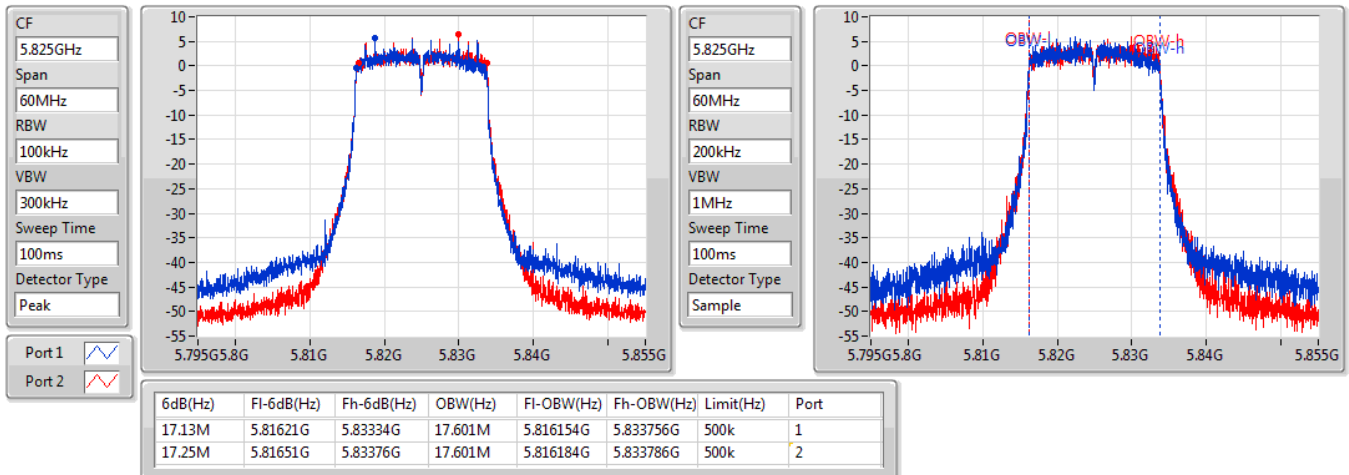


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5785MHz

20/07/2019


802.11ac VHT20-BF_Nss1,(MCS0)_2TX
EBW
5825MHz

20/07/2019

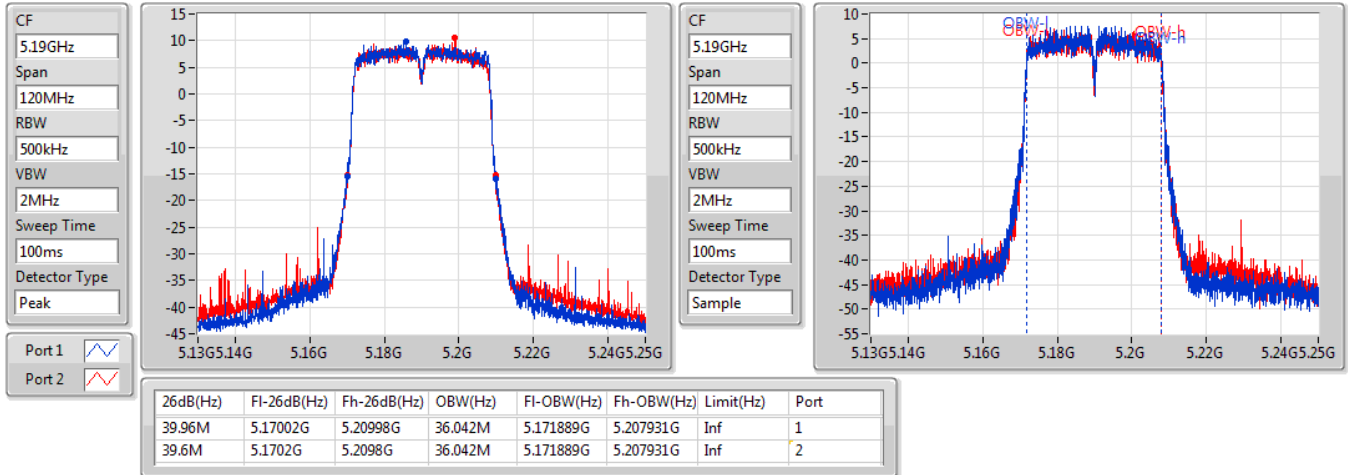


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5190MHz

20/07/2019

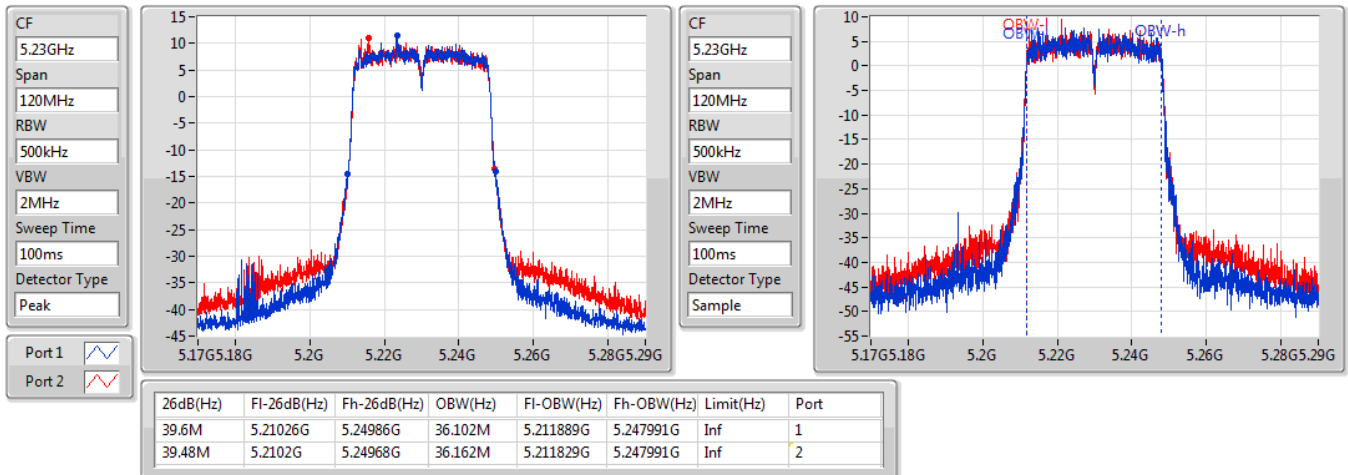


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5230MHz

20/07/2019

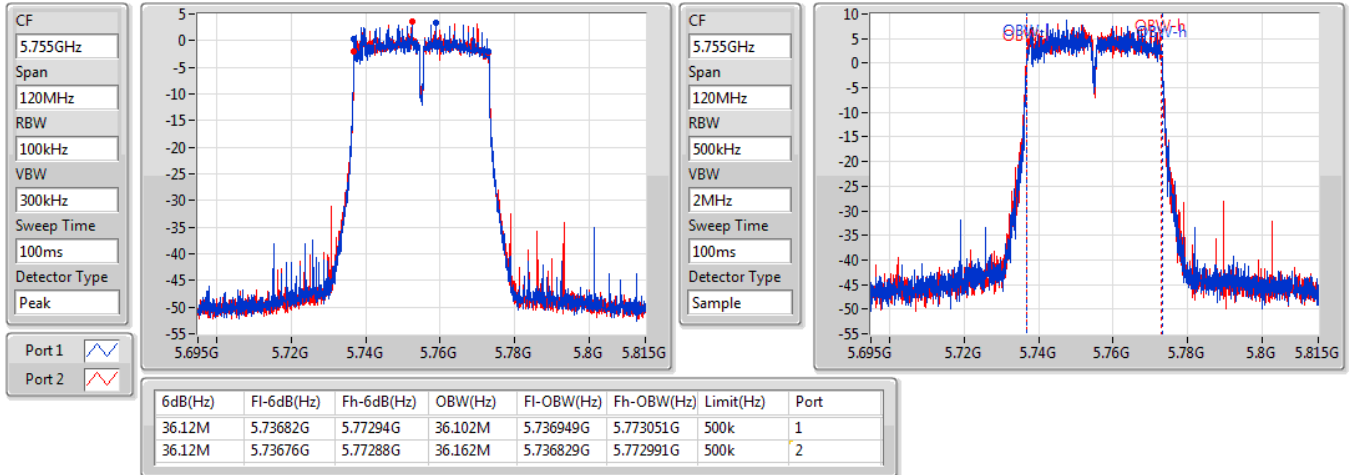


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5755MHz

20/07/2019

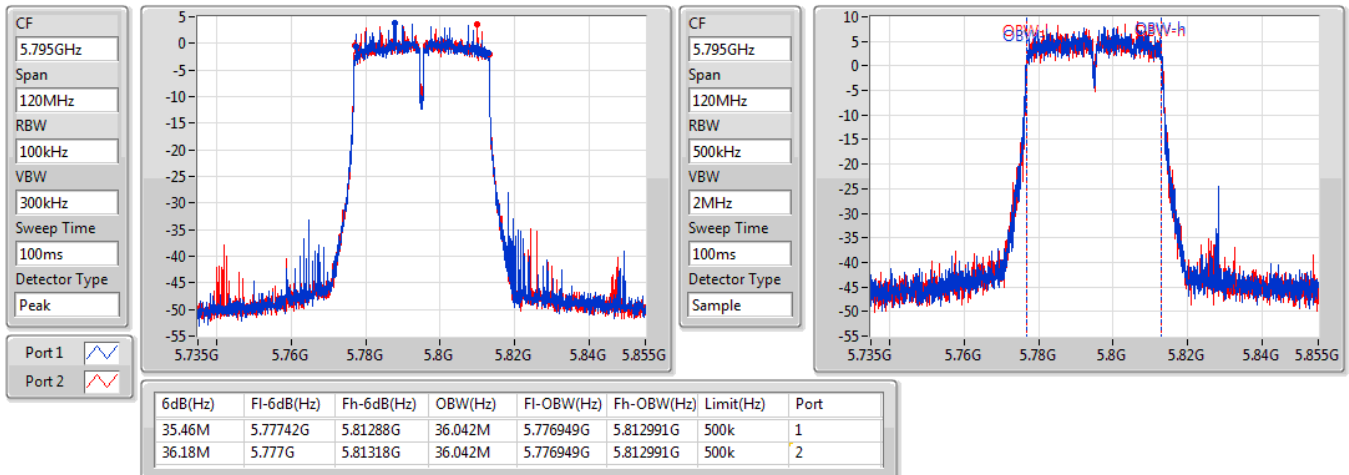


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5795MHz

20/07/2019

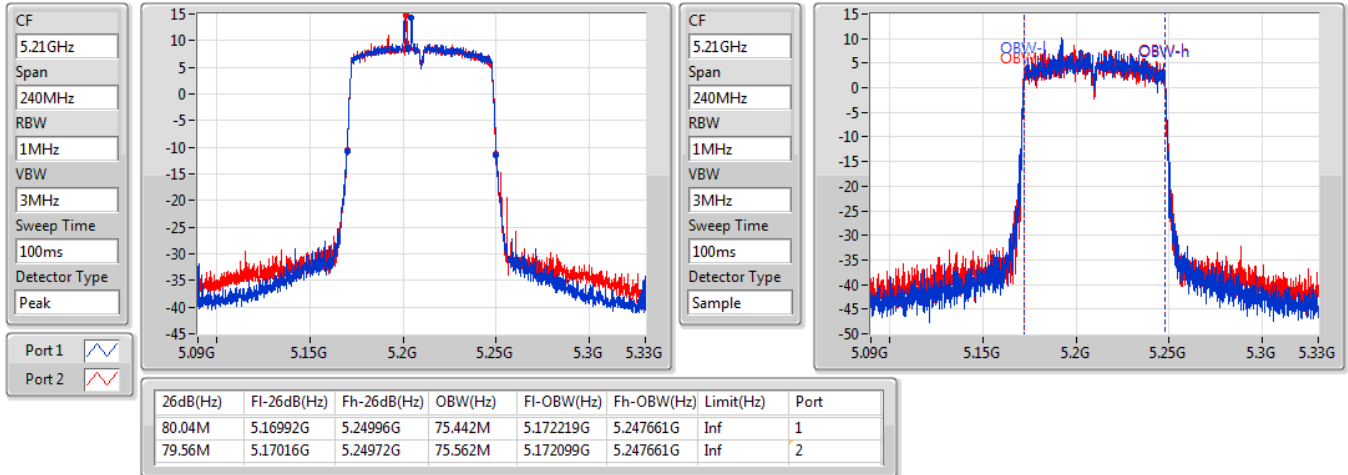


802.11ac VHT80-BF_Nss1,(MCS0)_2TX

EBW

5210MHz

20/07/2019

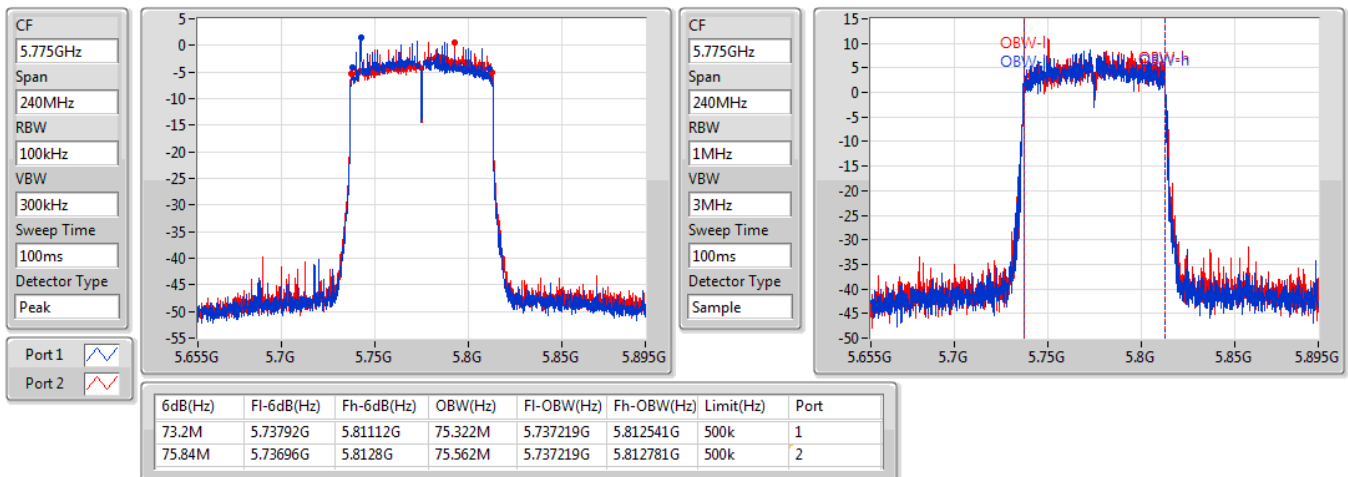


802.11ac VHT80-BF_Nss1,(MCS0)_2TX

EBW

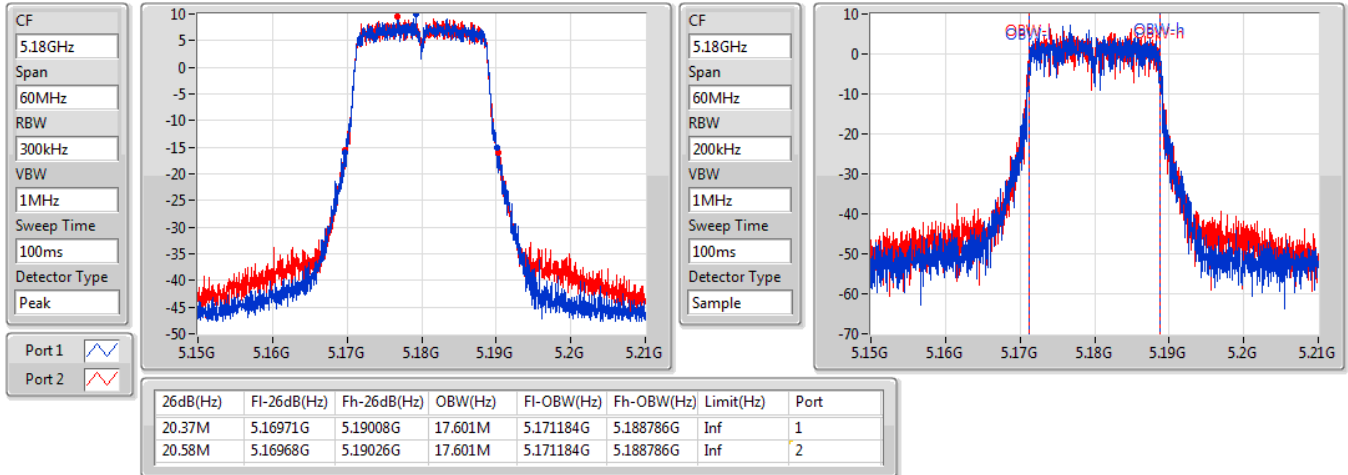
5775MHz

20/07/2019

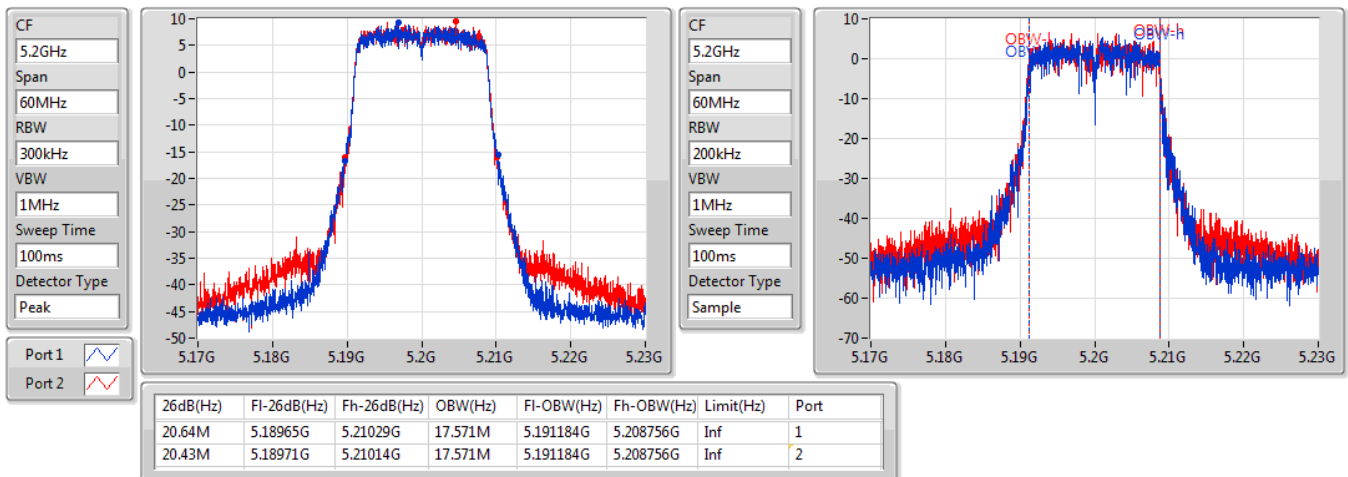


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5180MHz

20/07/2019


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5200MHz

20/07/2019

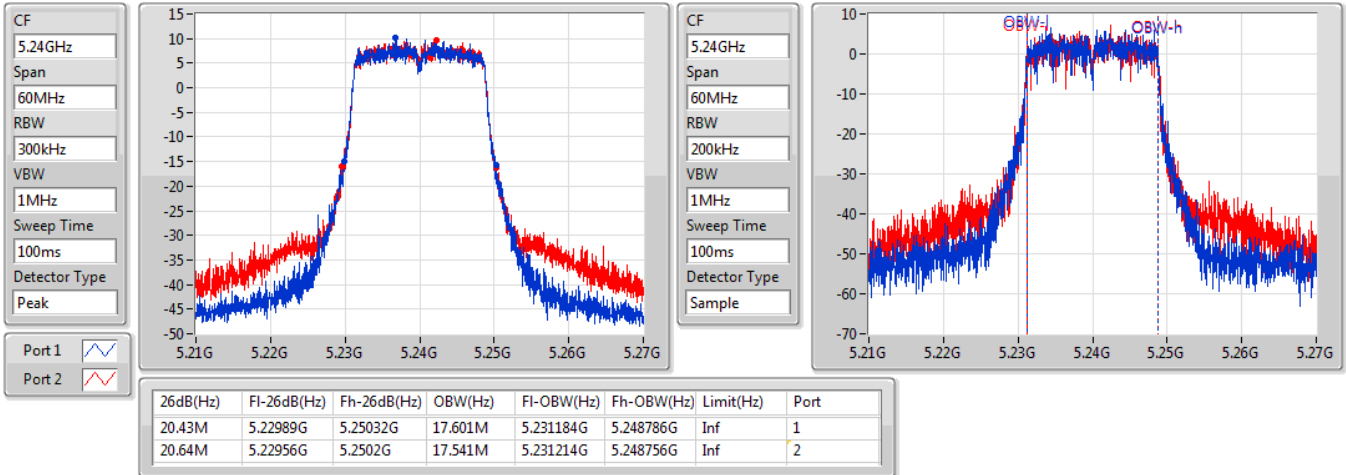


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5240MHz

20/07/2019

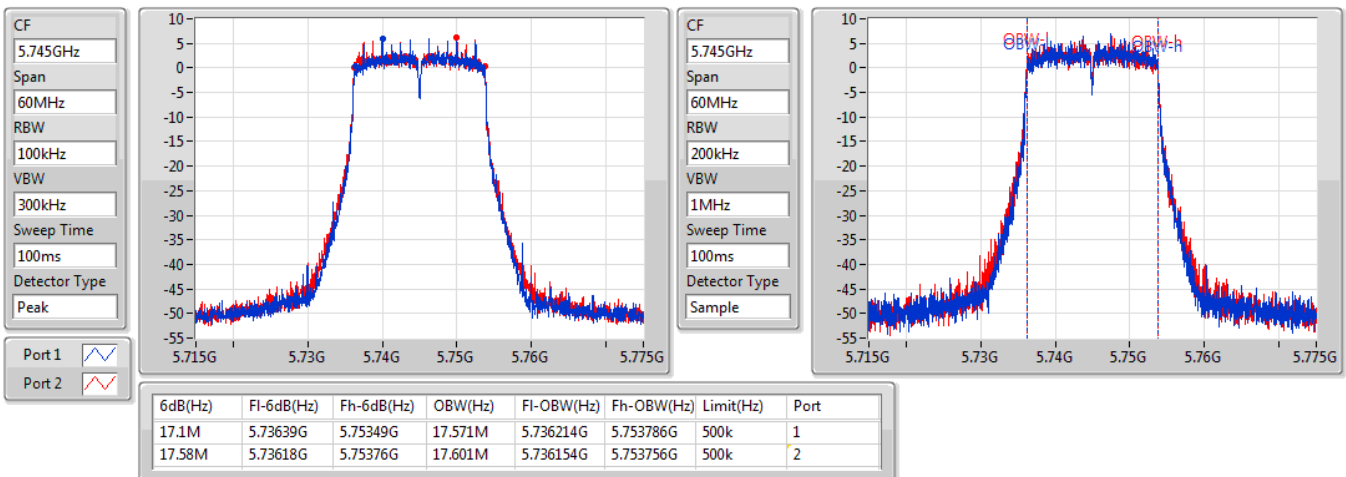


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5745MHz

20/07/2019

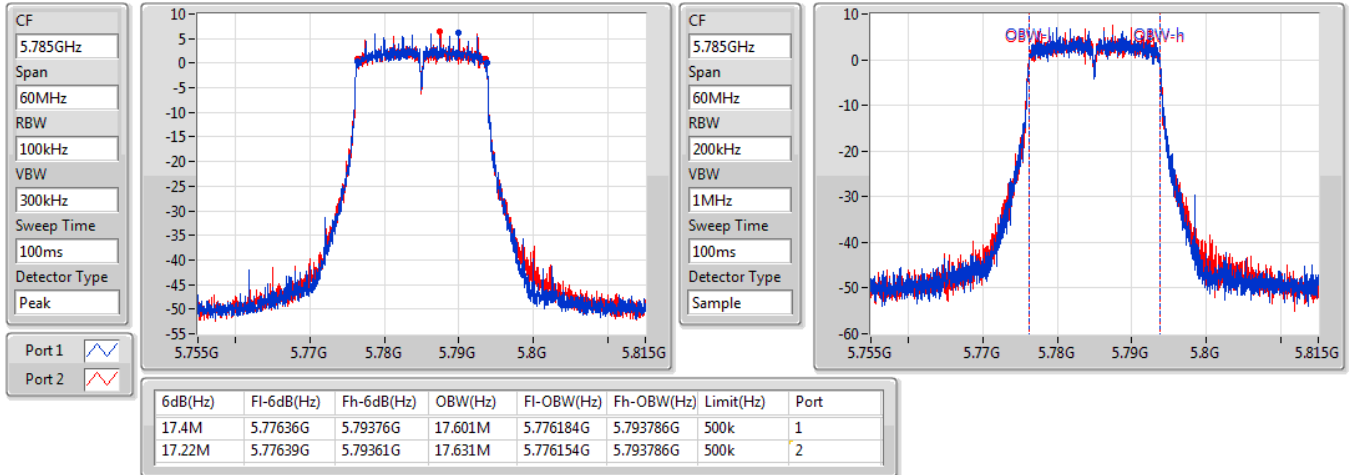


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5785MHz

20/07/2019

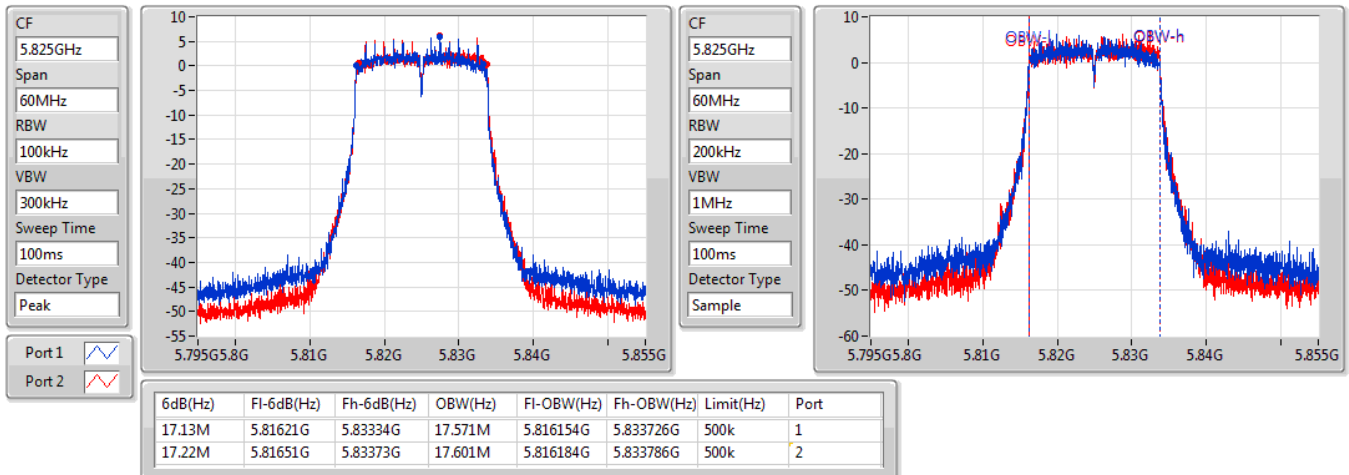


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

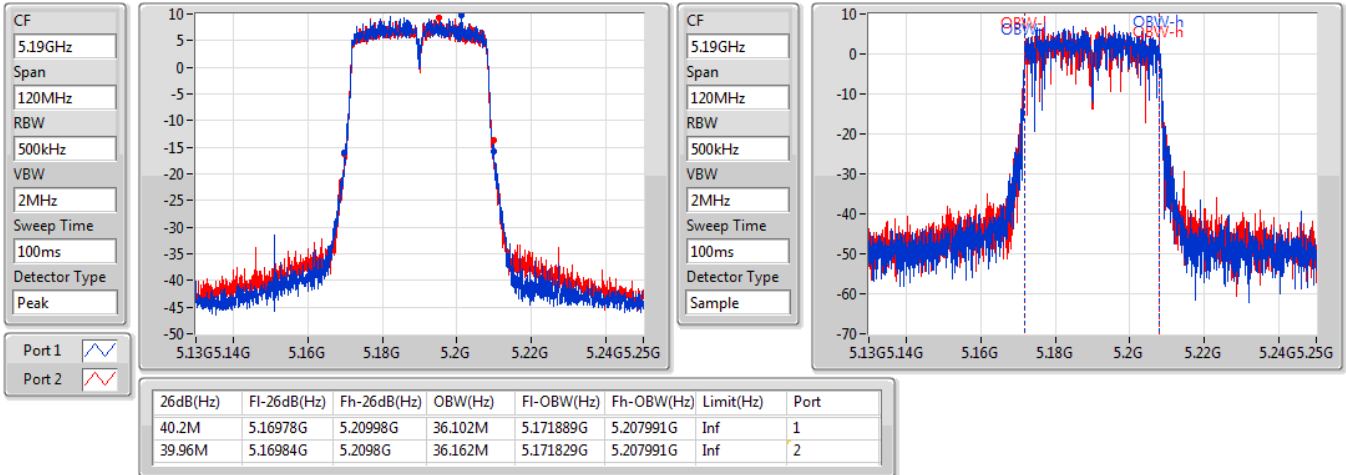
5825MHz

20/07/2019

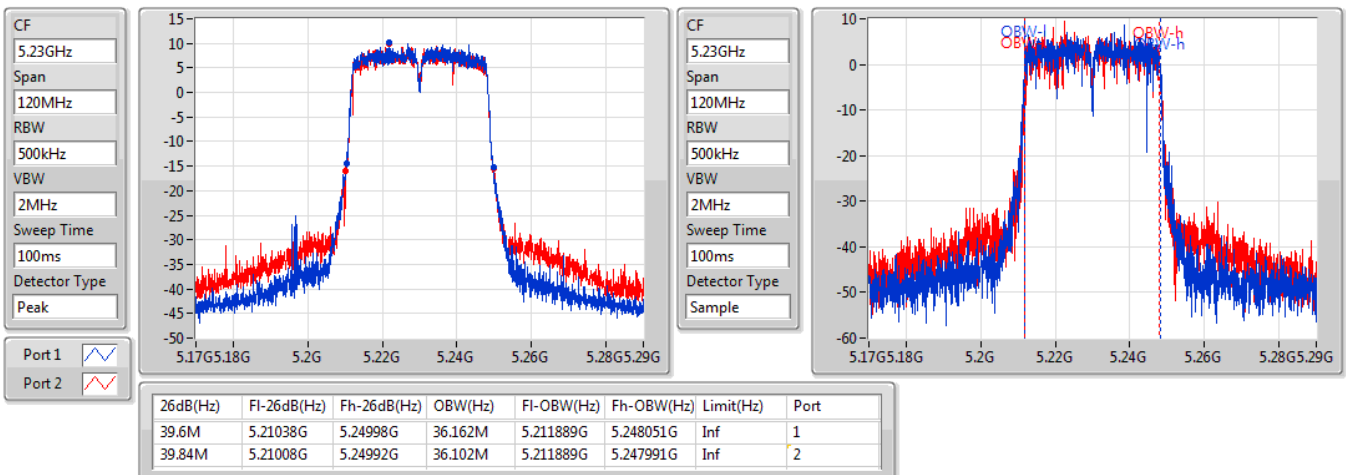


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5190MHz

20/07/2019


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5230MHz

20/07/2019

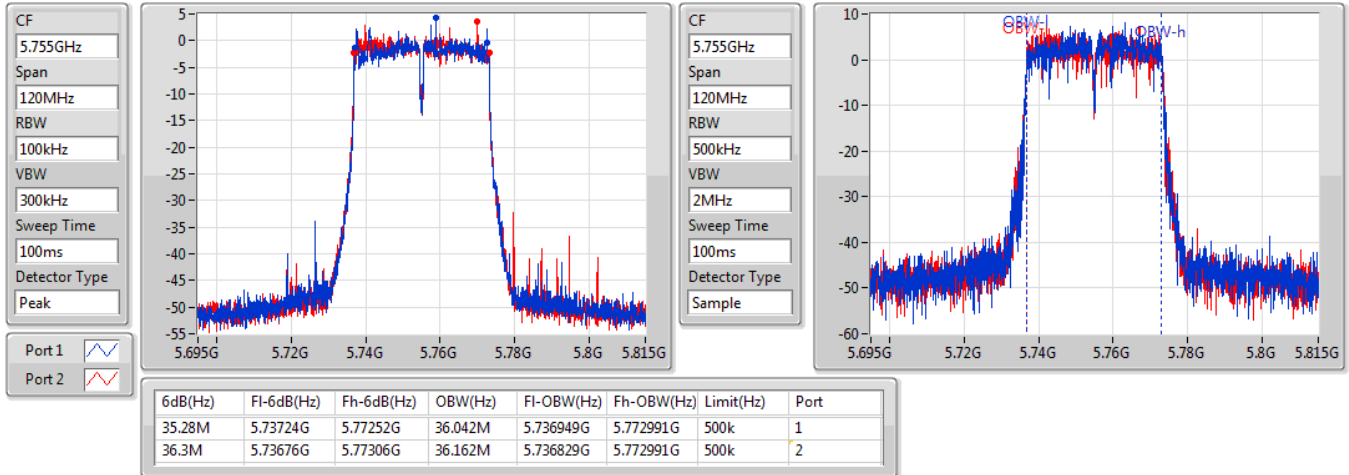


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5755MHz

20/07/2019

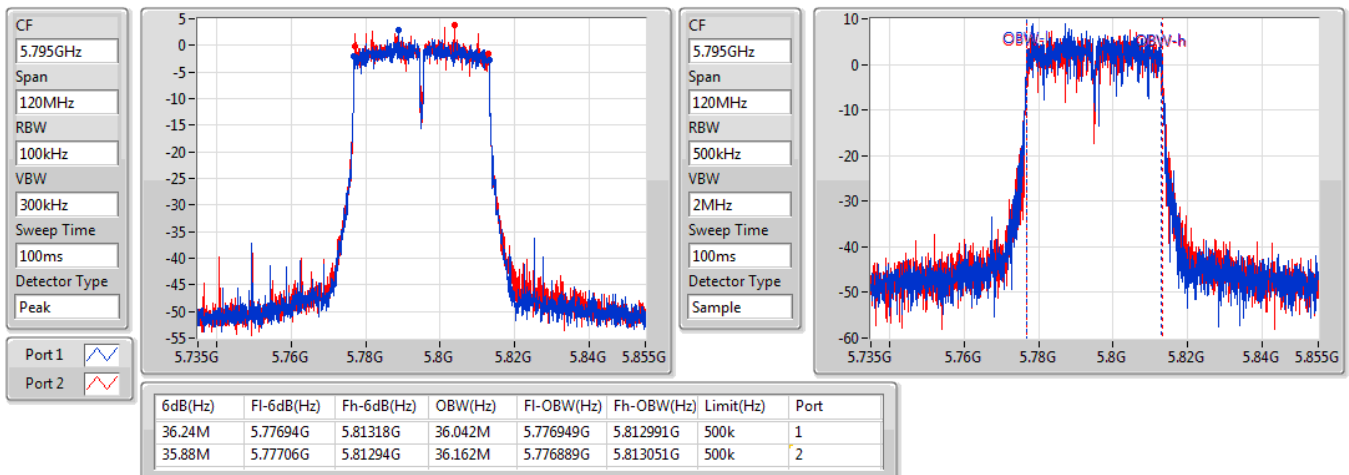


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5795MHz

20/07/2019

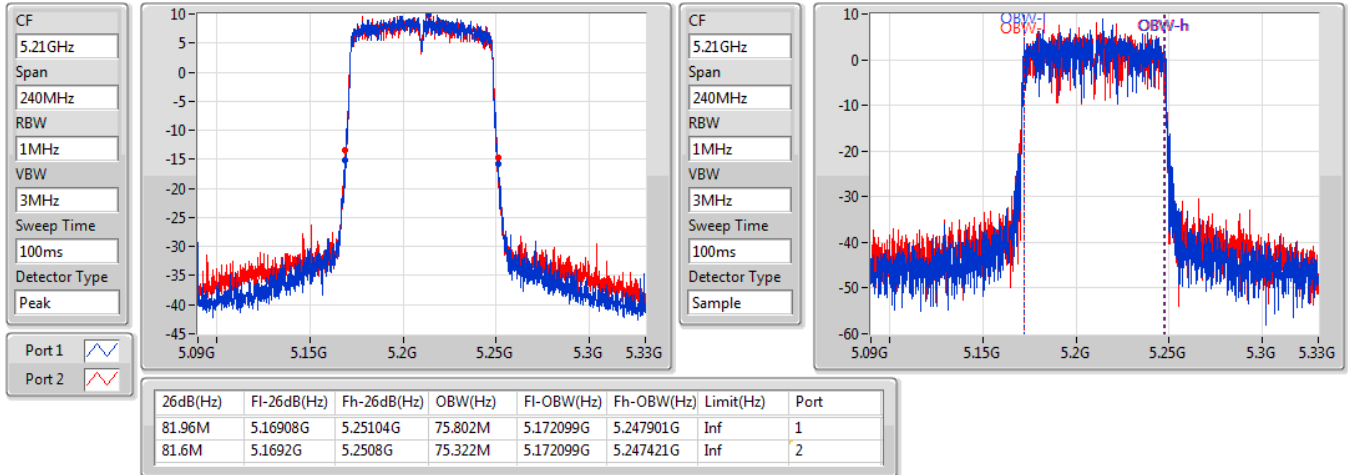


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5210MHz

20/07/2019

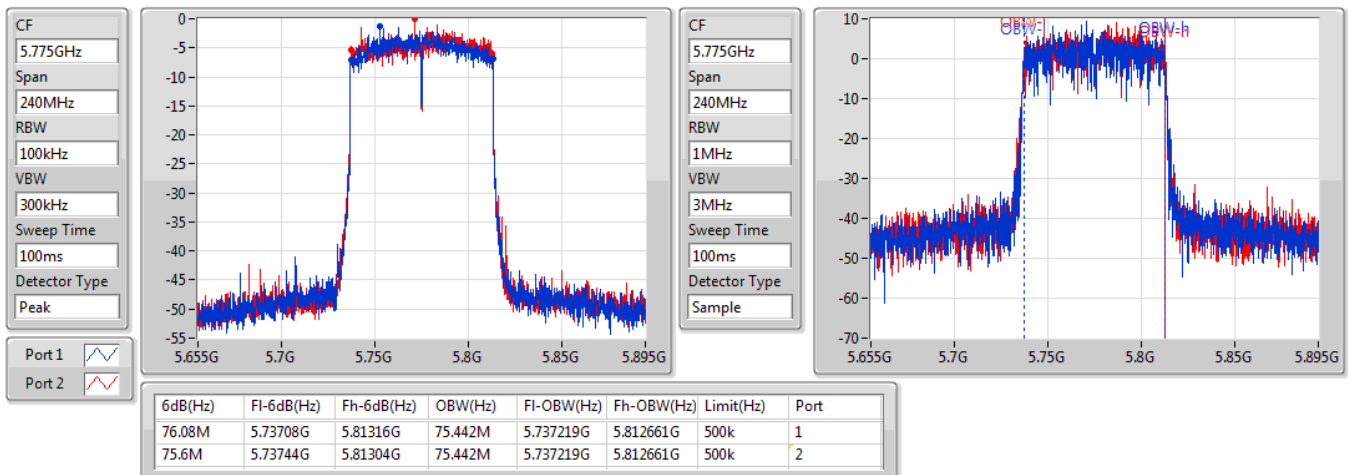


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5775MHz

20/07/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	39.24M	18.891M	18M9D1D	37.62M	18.291M
802.11ac VHT20_Nss1,(MCS0)_1TX	41.37M	19.88M	19M9D1D	38.4M	18.951M
802.11ac VHT40_Nss1,(MCS0)_1TX	68.22M	37.541M	37M5D1D	52.2M	36.522M
802.11ac VHT80_Nss1,(MCS0)_1TX	105.12M	76.162M	76M2D1D	105.12M	76.162M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	28.336M	28M3D1D	16.29M	23.748M
802.11ac VHT20_Nss1,(MCS0)_1TX	17.58M	29.235M	29M2D1D	17.31M	23.898M
802.11ac VHT40_Nss1,(MCS0)_1TX	35.7M	46.897M	46M9D1D	35.64M	45.877M
802.11ac VHT80_Nss1,(MCS0)_1TX	62.52M	87.676M	87M7D1D	62.52M	87.676M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

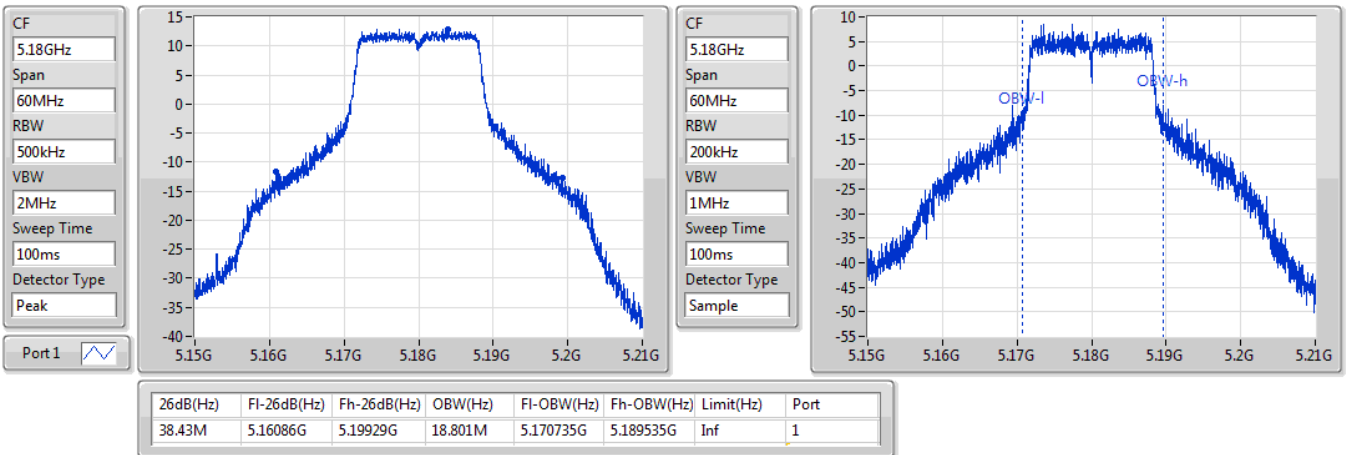
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	38.43M	18.801M
5200MHz	Pass	Inf	39.24M	18.891M
5240MHz	Pass	Inf	37.62M	18.291M
5745MHz	Pass	500k	16.29M	24.198M
5785MHz	Pass	500k	16.29M	23.748M
5825MHz	Pass	500k	16.29M	28.336M
802.11ac_VHT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	38.4M	18.951M
5200MHz	Pass	Inf	41.37M	19.88M
5240MHz	Pass	Inf	40.98M	19.52M
5745MHz	Pass	500k	17.31M	24.438M
5785MHz	Pass	500k	17.52M	23.898M
5825MHz	Pass	500k	17.58M	29.235M
802.11ac_VHT40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	52.2M	36.522M
5230MHz	Pass	Inf	68.22M	37.541M
5755MHz	Pass	500k	35.64M	45.877M
5795MHz	Pass	500k	35.7M	46.897M
802.11ac_VHT80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	105.12M	76.162M
5775MHz	Pass	500k	62.52M	87.676M

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

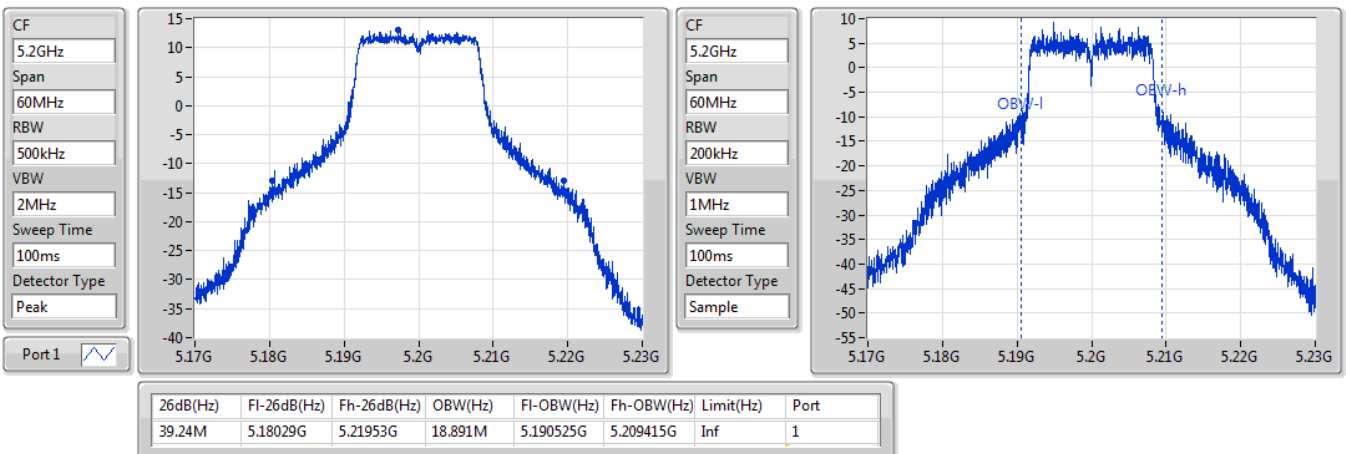
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX
EBW
5180MHz

28/06/2019

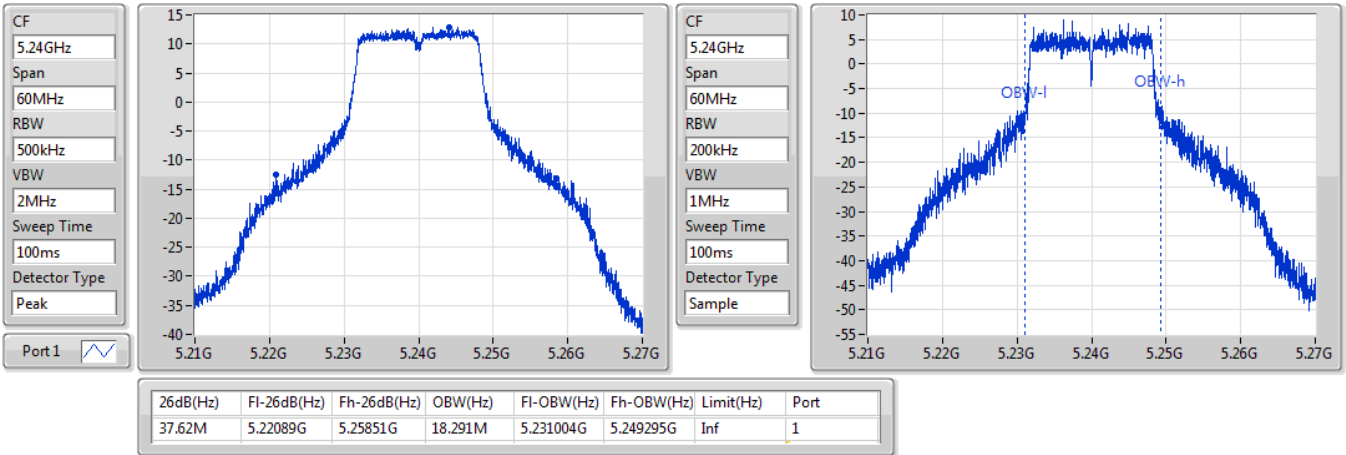

802.11a_Nss1,(6Mbps)_1TX
EBW
5200MHz

28/06/2019

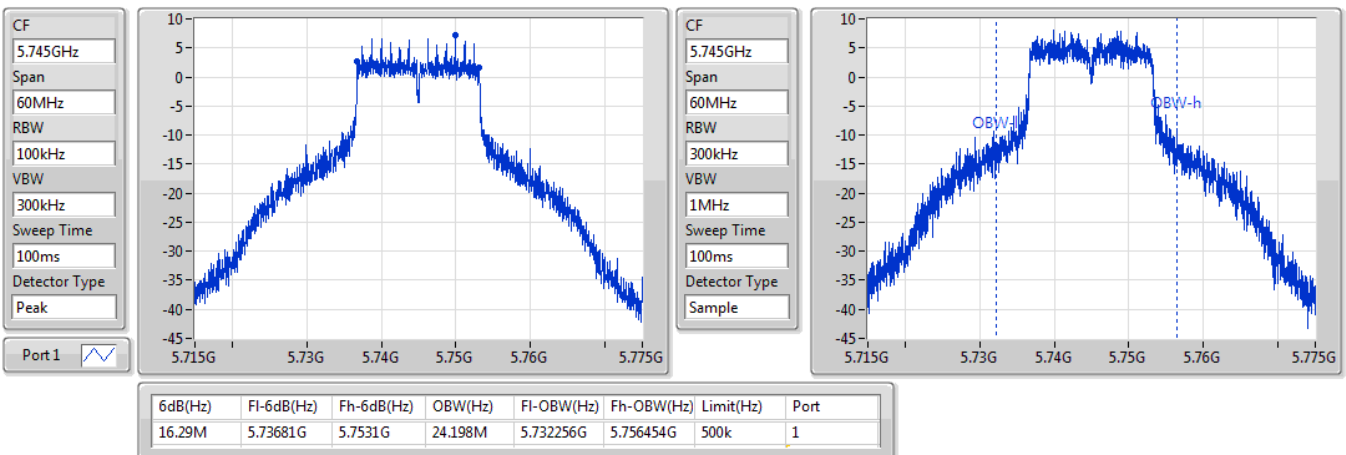


802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

28/06/2019

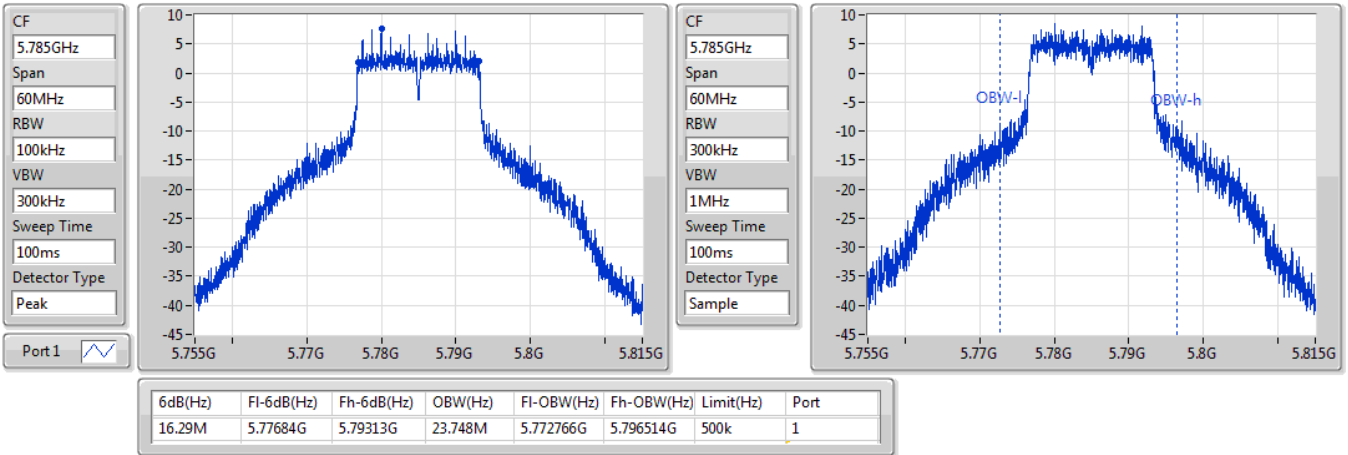

802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

28/06/2019

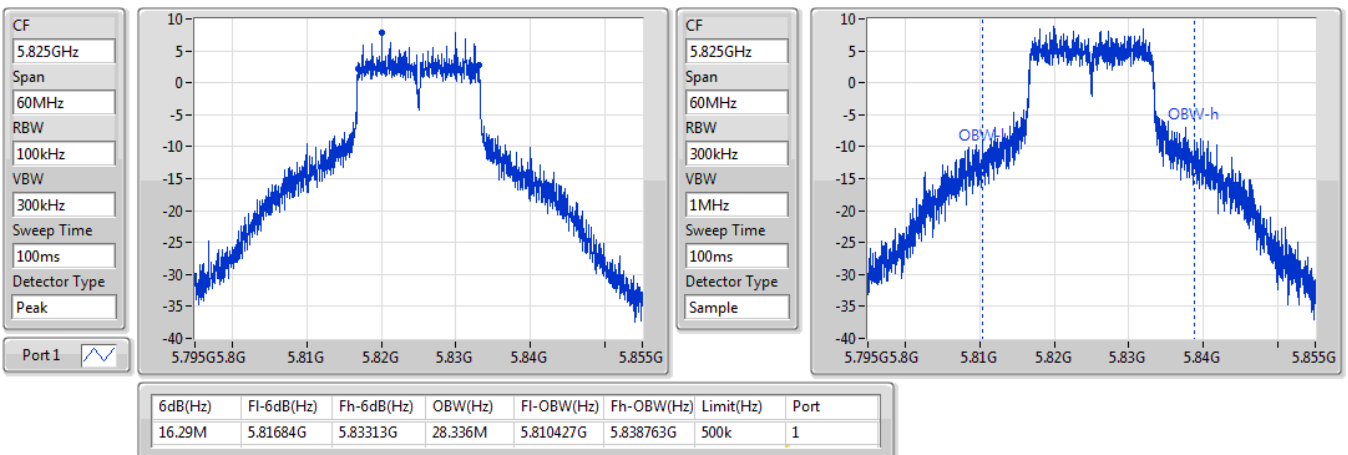


802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

28/06/2019

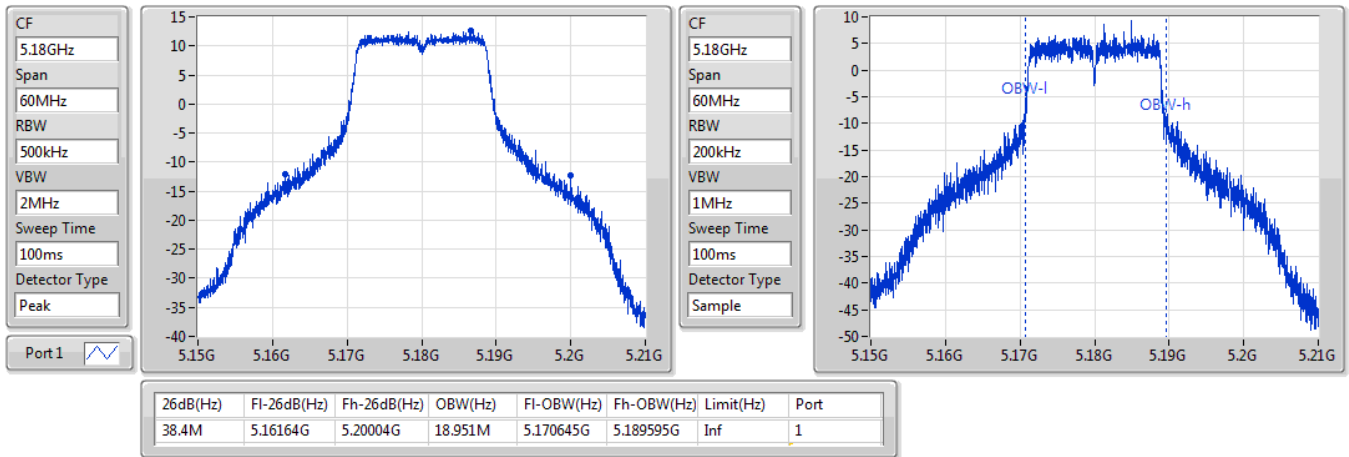

802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

28/06/2019

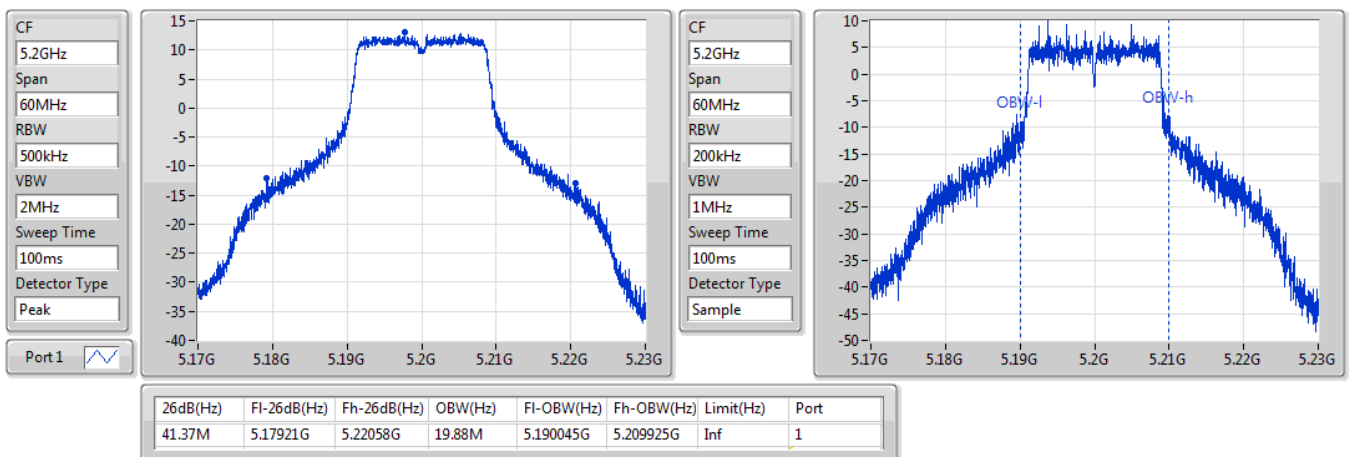


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5180MHz

28/06/2019

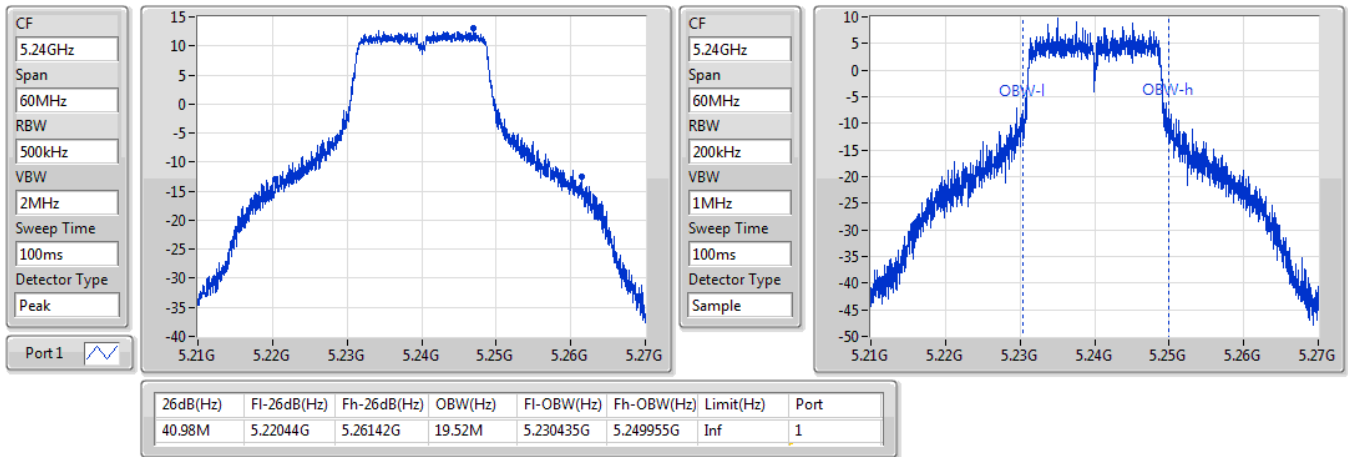

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5200MHz

28/06/2019

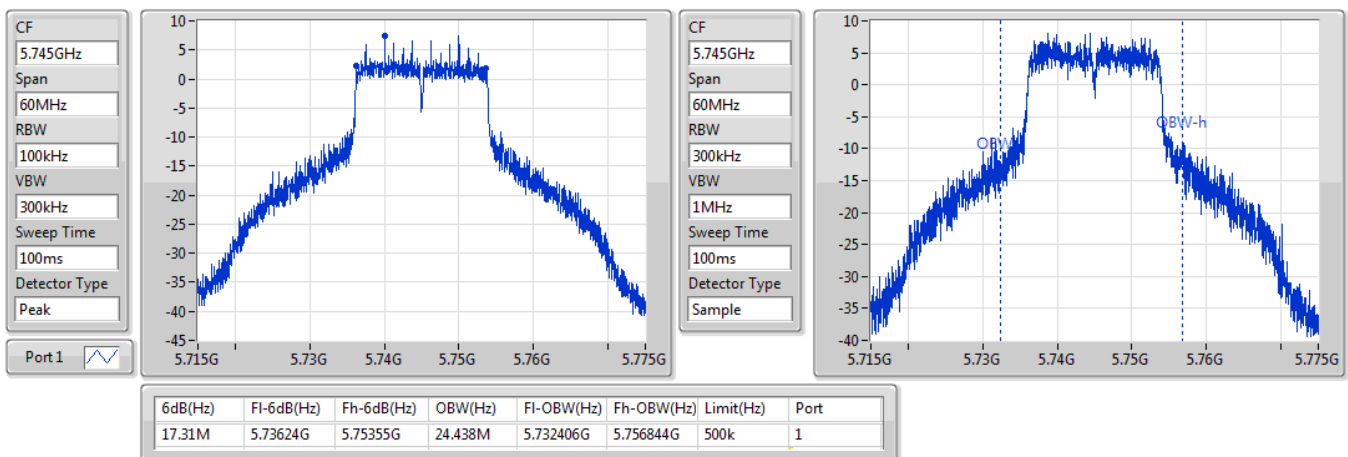


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5240MHz

28/06/2019

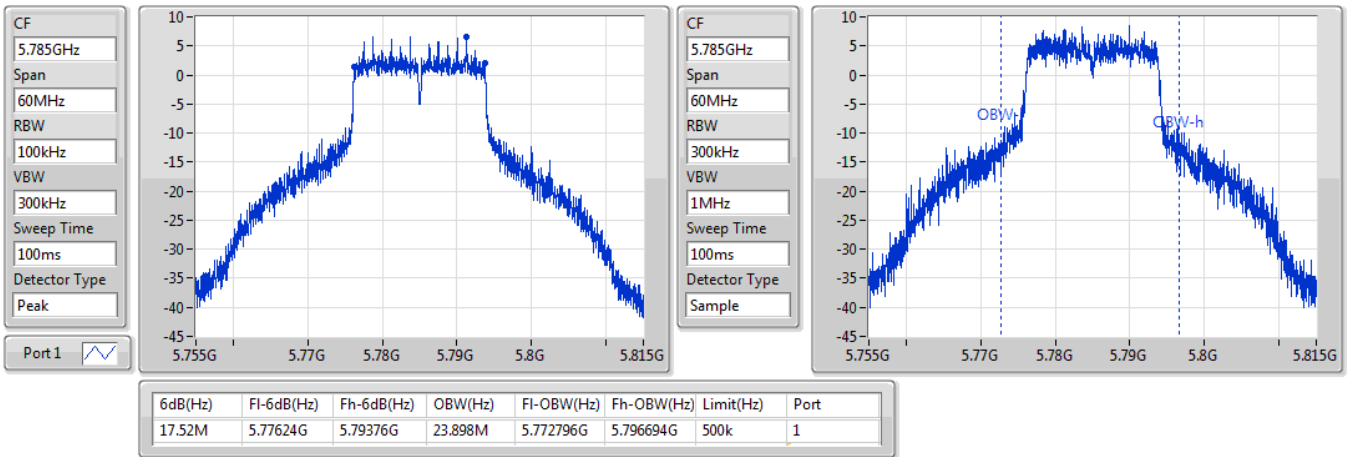

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5745MHz

28/06/2019

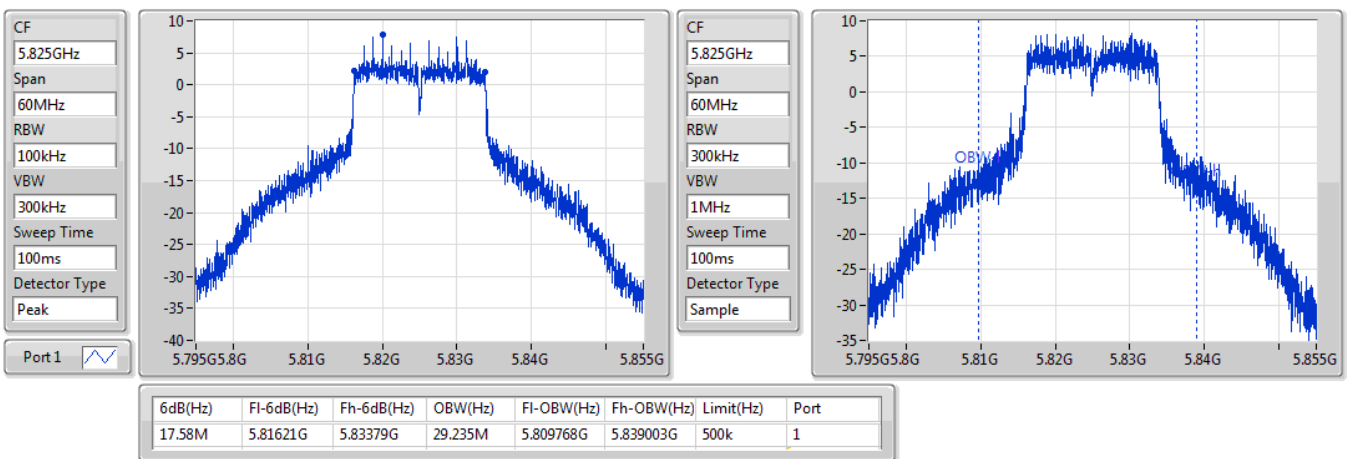


802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5785MHz

28/06/2019

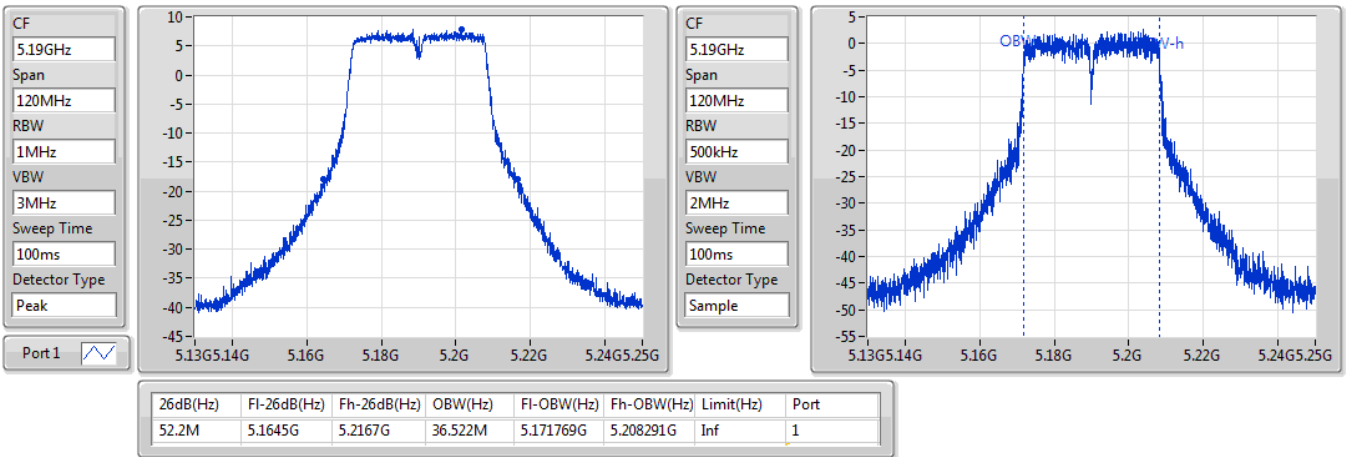

802.11ac VHT20_Nss1,(MCS0)_1TX
EBW
5825MHz

28/06/2019

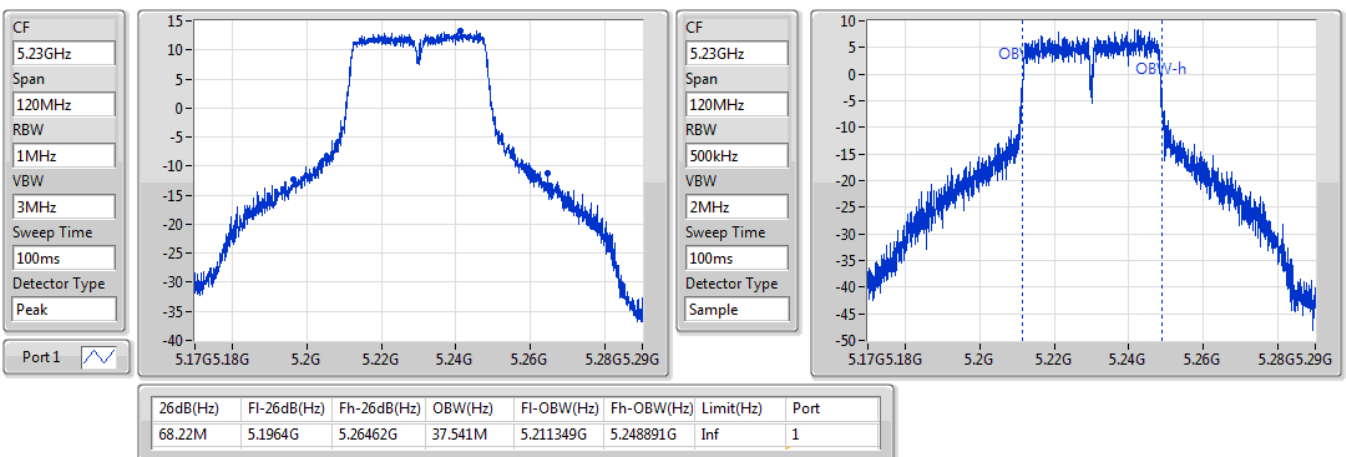


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5190MHz

28/06/2019

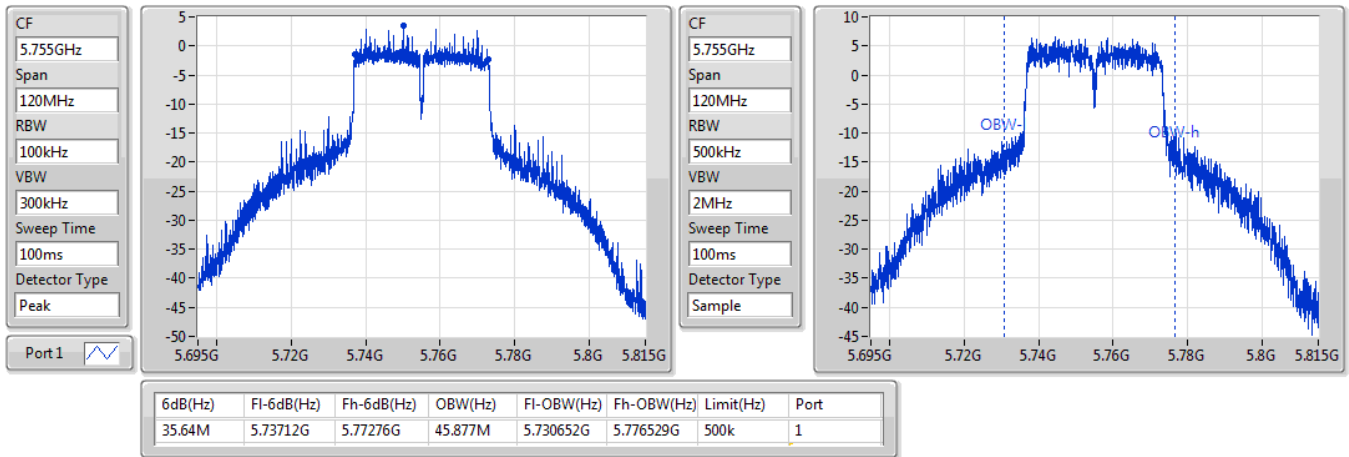

802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5230MHz

28/06/2019

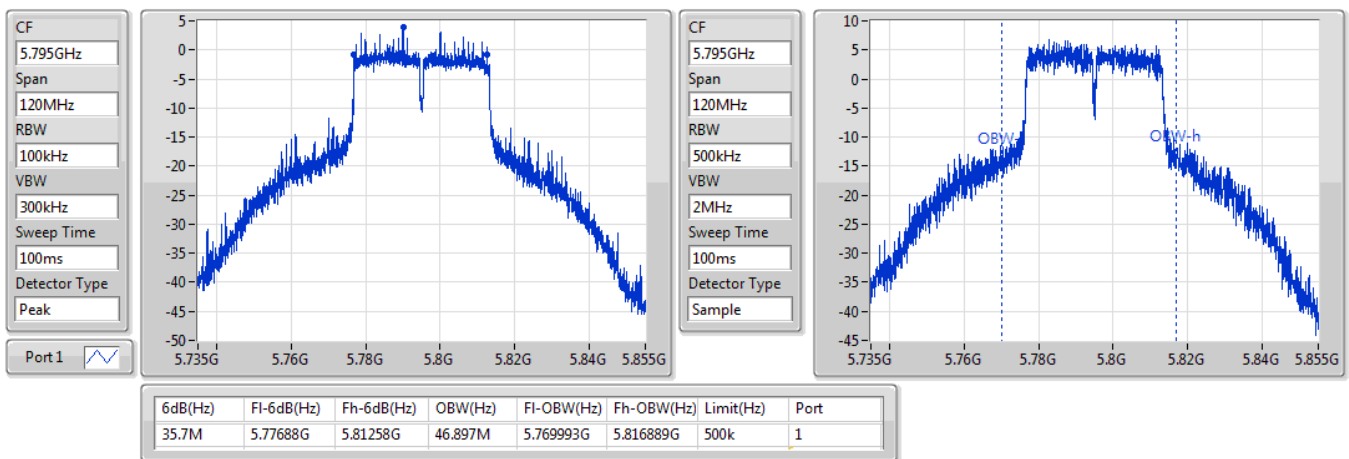


802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5755MHz

28/06/2019

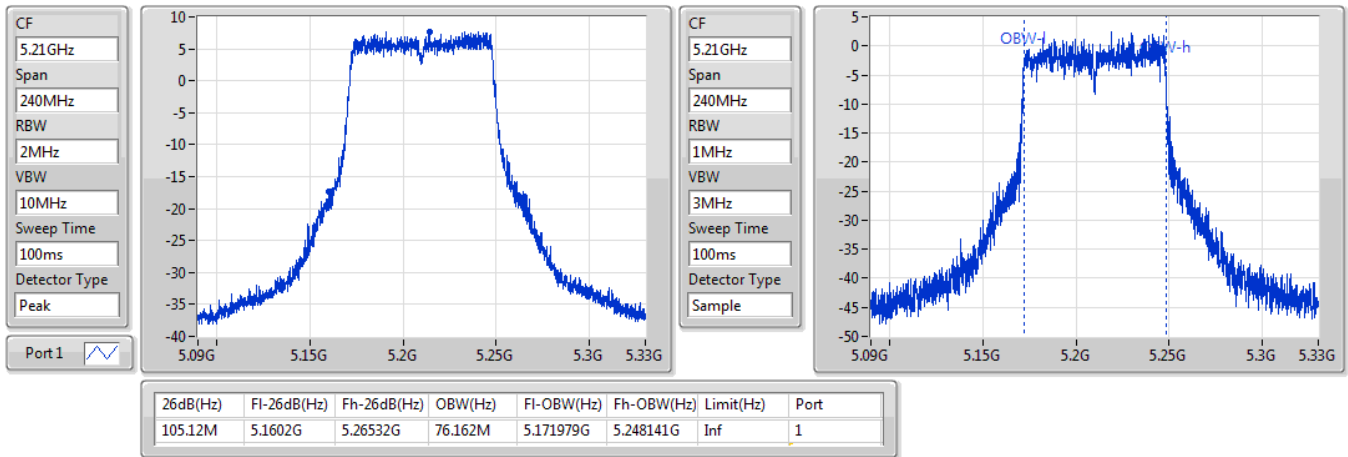

802.11ac VHT40_Nss1,(MCS0)_1TX
EBW
5795MHz

28/06/2019

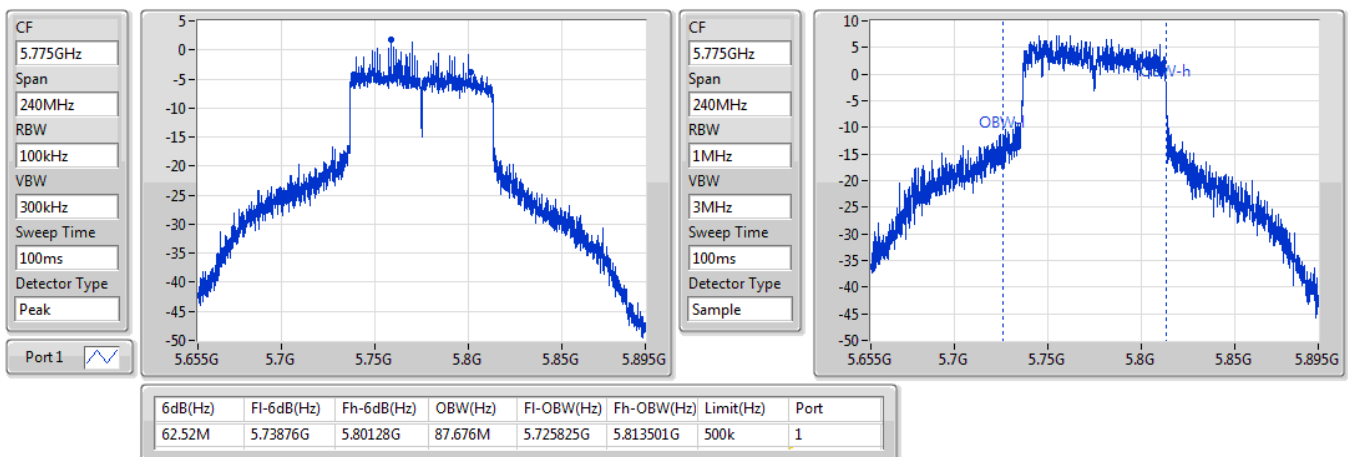


802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5210MHz

28/06/2019


802.11ac VHT80_Nss1,(MCS0)_1TX
EBW
5775MHz

28/06/2019



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	18.95	0.07852	23.62	0.23014
802.11a_Nss1,(6Mbps)_1TX(Port2)	19.27	0.08453	24.18	0.26182
802.11a_Nss1,(6Mbps)_2TX	22.14	0.16368	27.05	0.50699
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	18.76	0.07516	23.43	0.22029
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	19.20	0.08318	24.11	0.25763
802.11ac VHT20_Nss1,(MCS0)_2TX	22.08	0.16144	26.99	0.50003
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	18.78	0.07551	23.45	0.22131
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	19.00	0.07943	23.91	0.24604
802.11ac VHT40_Nss1,(MCS0)_2TX	21.84	0.15276	26.75	0.47315
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	16.46	0.04426	21.13	0.12972
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	17.41	0.05508	22.32	0.17061
802.11ac VHT80_Nss1,(MCS0)_2TX	18.93	0.07816	23.84	0.24210
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	19.01	0.07962	23.68	0.23335
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	19.44	0.08790	24.35	0.27227
802.11ax HEW20_Nss1,(MCS0)_2TX	22.18	0.16520	27.09	0.51168
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	18.84	0.07656	23.51	0.22439
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	19.05	0.08035	23.96	0.24889
802.11ax HEW40_Nss1,(MCS0)_2TX	22.03	0.15959	26.94	0.49431
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	16.65	0.04624	21.32	0.13552
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	17.71	0.05902	22.62	0.18281
802.11ax HEW80_Nss1,(MCS0)_2TX	19.29	0.08492	24.20	0.26303
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	19.55	0.09016	24.32	0.27040
802.11a_Nss1,(6Mbps)_1TX(Port2)	19.37	0.08650	24.27	0.26730
802.11a_Nss1,(6Mbps)_2TX	22.42	0.17458	27.32	0.53951
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	19.44	0.08790	24.21	0.26363
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	19.17	0.08260	24.07	0.25527
802.11ac VHT20_Nss1,(MCS0)_2TX	22.33	0.17100	27.23	0.52845
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	19.68	0.09290	24.45	0.27861
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	19.34	0.08590	24.24	0.26546
802.11ac VHT40_Nss1,(MCS0)_2TX	22.48	0.17701	27.38	0.54702
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	19.54	0.08995	24.31	0.26977
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	19.01	0.07962	23.91	0.24604
802.11ac VHT80_Nss1,(MCS0)_2TX	21.92	0.15560	26.82	0.48084
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	19.62	0.09162	24.39	0.27479
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	19.52	0.08954	24.42	0.27669
802.11ax HEW20_Nss1,(MCS0)_2TX	22.60	0.18197	27.50	0.56234
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	19.74	0.09419	24.51	0.28249
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	19.45	0.08810	24.35	0.27227
802.11ax HEW40_Nss1,(MCS0)_2TX	22.58	0.18113	27.48	0.55976
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	19.71	0.09354	24.48	0.28054
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	19.44	0.08790	24.34	0.27164
802.11ax HEW80_Nss1,(MCS0)_2TX	22.19	0.16558	27.09	0.51168

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	18.95		18.95	30.00	23.62	36.00
5200MHz	Pass	4.67	18.94		18.94	30.00	23.61	36.00
5240MHz	Pass	4.67	18.69		18.69	30.00	23.36	36.00
5745MHz	Pass	4.77	19.55		19.55	30.00	24.32	36.00
5785MHz	Pass	4.77	19.51		19.51	30.00	24.28	36.00
5825MHz	Pass	4.77	18.34		18.34	30.00	23.11	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		19.23	19.23	30.00	24.14	36.00
5200MHz	Pass	4.91		19.27	19.27	30.00	24.18	36.00
5240MHz	Pass	4.91		18.96	18.96	30.00	23.87	36.00
5745MHz	Pass	4.90		19.26	19.26	30.00	24.16	36.00
5785MHz	Pass	4.90		19.19	19.19	30.00	24.09	36.00
5825MHz	Pass	4.90		19.37	19.37	30.00	24.27	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91	18.91	19.34	22.14	30.00	27.05	36.00
5200MHz	Pass	4.91	18.90	19.32	22.13	30.00	27.04	36.00
5240MHz	Pass	4.91	18.76	18.95	21.87	30.00	26.78	36.00
5745MHz	Pass	4.90	19.59	19.23	22.42	30.00	27.32	36.00
5785MHz	Pass	4.90	19.57	19.25	22.42	30.00	27.32	36.00
5825MHz	Pass	4.90	18.36	19.33	21.88	30.00	26.78	36.00
802.11ac_VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	18.76		18.76	30.00	23.43	36.00
5200MHz	Pass	4.67	18.76		18.76	30.00	23.43	36.00
5240MHz	Pass	4.67	18.61		18.61	30.00	23.28	36.00
5745MHz	Pass	4.77	19.44		19.44	30.00	24.21	36.00
5785MHz	Pass	4.77	19.34		19.34	30.00	24.11	36.00
5825MHz	Pass	4.77	18.21		18.21	30.00	22.98	36.00
802.11ac_VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		19.20	19.20	30.00	24.11	36.00
5200MHz	Pass	4.91		19.13	19.13	30.00	24.04	36.00
5240MHz	Pass	4.91		18.75	18.75	30.00	23.66	36.00
5745MHz	Pass	4.90		19.17	19.17	30.00	24.07	36.00
5785MHz	Pass	4.90		19.16	19.16	30.00	24.06	36.00
5825MHz	Pass	4.90		19.17	19.17	30.00	24.07	36.00
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91	18.89	19.24	22.08	30.00	26.99	36.00
5200MHz	Pass	4.91	18.77	19.14	21.97	30.00	26.88	36.00
5240MHz	Pass	4.91	18.68	18.76	21.73	30.00	26.64	36.00
5745MHz	Pass	4.90	19.59	19.04	22.33	30.00	27.23	36.00
5785MHz	Pass	4.90	19.36	19.08	22.23	30.00	27.13	36.00
5825MHz	Pass	4.90	18.21	19.27	21.78	30.00	26.68	36.00
802.11ac_VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.67	16.85		16.85	30.00	21.52	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5230MHz	Pass	4.67	18.78		18.78	30.00	23.45	36.00
5755MHz	Pass	4.77	19.68		19.68	30.00	24.45	36.00
5795MHz	Pass	4.77	19.67		19.67	30.00	24.44	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91		17.95	17.95	30.00	22.86	36.00
5230MHz	Pass	4.91		19.00	19.00	30.00	23.91	36.00
5755MHz	Pass	4.90		19.25	19.25	30.00	24.15	36.00
5795MHz	Pass	4.90		19.34	19.34	30.00	24.24	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91	17.64	17.93	20.80	30.00	25.71	36.00
5230MHz	Pass	4.91	18.75	18.90	21.84	30.00	26.75	36.00
5755MHz	Pass	4.90	19.60	19.24	22.43	30.00	27.33	36.00
5795MHz	Pass	4.90	19.66	19.28	22.48	30.00	27.38	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.67	16.46		16.46	30.00	21.13	36.00
5775MHz	Pass	4.77	19.54		19.54	30.00	24.31	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91		17.41	17.41	30.00	22.32	36.00
5775MHz	Pass	4.90		19.01	19.01	30.00	23.91	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91	15.83	16.01	18.93	30.00	23.84	36.00
5775MHz	Pass	4.90	19.01	18.80	21.92	30.00	26.82	36.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	18.85		18.85	30.00	23.52	36.00
5200MHz	Pass	4.67	19.01		19.01	30.00	23.68	36.00
5240MHz	Pass	4.67	18.74		18.74	30.00	23.41	36.00
5745MHz	Pass	4.77	19.62		19.62	30.00	24.39	36.00
5785MHz	Pass	4.77	19.56		19.56	30.00	24.33	36.00
5825MHz	Pass	4.77	18.47		18.47	30.00	23.24	36.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		19.44	19.44	30.00	24.35	36.00
5200MHz	Pass	4.91		19.32	19.32	30.00	24.23	36.00
5240MHz	Pass	4.91		18.98	18.98	30.00	23.89	36.00
5745MHz	Pass	4.90		19.38	19.38	30.00	24.28	36.00
5785MHz	Pass	4.90		19.28	19.28	30.00	24.18	36.00
5825MHz	Pass	4.90		19.52	19.52	30.00	24.42	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91	18.98	19.36	22.18	30.00	27.09	36.00
5200MHz	Pass	4.91	19.02	19.32	22.18	30.00	27.09	36.00
5240MHz	Pass	4.91	18.90	19.01	21.97	30.00	26.88	36.00
5745MHz	Pass	4.90	19.81	19.35	22.60	30.00	27.50	36.00
5785MHz	Pass	4.90	19.73	19.44	22.60	30.00	27.50	36.00
5825MHz	Pass	4.90	18.60	19.54	22.11	30.00	27.01	36.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.67	16.93		16.93	30.00	21.60	36.00



Average Power_Radio 1_Non-Beamforming

Appendix C.1

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5230MHz	Pass	4.67	18.84		18.84	30.00	23.51	36.00
5755MHz	Pass	4.77	19.74		19.74	30.00	24.51	36.00
5795MHz	Pass	4.77	19.74		19.74	30.00	24.51	36.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91		18.05	18.05	30.00	22.96	36.00
5230MHz	Pass	4.91		19.05	19.05	30.00	23.96	36.00
5755MHz	Pass	4.90		19.29	19.29	30.00	24.19	36.00
5795MHz	Pass	4.90		19.45	19.45	30.00	24.35	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91	17.79	18.14	20.98	30.00	25.89	36.00
5230MHz	Pass	4.91	18.88	19.15	22.03	30.00	26.94	36.00
5755MHz	Pass	4.90	19.81	19.23	22.54	30.00	27.44	36.00
5795MHz	Pass	4.90	19.61	19.53	22.58	30.00	27.48	36.00
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.67	16.65		16.65	30.00	21.32	36.00
5775MHz	Pass	4.77	19.71		19.71	30.00	24.48	36.00
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91		17.71	17.71	30.00	22.62	36.00
5775MHz	Pass	4.90		19.44	19.44	30.00	24.34	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91	16.15	16.40	19.29	30.00	24.20	36.00
5775MHz	Pass	4.90	19.29	19.07	22.19	30.00	27.09	36.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.64	0.11588	28.44	0.69823
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	20.77	0.11940	28.57	0.71945
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	20.62	0.11535	28.42	0.69502
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.70	0.11749	28.50	0.70795
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.92	0.12359	28.72	0.74473
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	20.75	0.11885	28.55	0.71614
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.80	0.12023	28.65	0.73282
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	20.97	0.12503	28.82	0.76208
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	20.82	0.12078	28.67	0.73621
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.93	0.12388	28.78	0.75509
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.99	0.12560	28.84	0.76560
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	21.04	0.12706	28.89	0.77446

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	7.80	17.42	17.66	20.55	28.20	28.35	36.00
5200MHz_TnomVnom	Pass	7.80	17.40	17.55	20.49	28.20	28.29	36.00
5240MHz_TnomVnom	Pass	7.80	17.65	17.60	20.64	28.20	28.44	36.00
5745MHz_TnomVnom	Pass	7.85	17.50	17.65	20.59	28.15	28.44	36.00
5785MHz_TnomVnom	Pass	7.85	17.80	17.77	20.80	28.15	28.65	36.00
5825MHz_TnomVnom	Pass	7.85	17.17	17.50	20.35	28.15	28.20	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	7.80	17.67	17.51	20.60	28.20	28.40	36.00
5230MHz_TnomVnom	Pass	7.80	17.74	17.78	20.77	28.20	28.57	36.00
5755MHz_TnomVnom	Pass	7.85	17.80	17.77	20.80	28.15	28.65	36.00
5795MHz_TnomVnom	Pass	7.85	18.01	17.90	20.97	28.15	28.82	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	7.80	17.51	17.70	20.62	28.20	28.42	36.00
5775MHz_TnomVnom	Pass	7.85	17.58	18.02	20.82	28.15	28.67	36.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	7.80	17.51	17.69	20.61	28.20	28.41	36.00
5200MHz_TnomVnom	Pass	7.80	17.52	17.56	20.55	28.20	28.35	36.00
5240MHz_TnomVnom	Pass	7.80	17.63	17.74	20.70	28.20	28.50	36.00
5745MHz_TnomVnom	Pass	7.85	17.56	17.69	20.64	28.15	28.49	36.00
5785MHz_TnomVnom	Pass	7.85	17.93	17.90	20.93	28.15	28.78	36.00
5825MHz_TnomVnom	Pass	7.85	17.49	17.46	20.49	28.15	28.34	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	7.80	17.73	17.53	20.64	28.20	28.44	36.00
5230MHz_TnomVnom	Pass	7.80	17.90	17.92	20.92	28.20	28.72	36.00
5755MHz_TnomVnom	Pass	7.85	17.90	17.84	20.88	28.15	28.73	36.00
5795MHz_TnomVnom	Pass	7.85	17.84	18.12	20.99	28.15	28.84	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	7.80	17.86	17.61	20.75	28.20	28.55	36.00
5775MHz_TnomVnom	Pass	7.85	17.92	18.13	21.04	28.15	28.89	36.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.15	0.08222	22.21	0.16634
802.11ac VHT20_Nss1,(MCS0)_1TX	19.30	0.08511	22.36	0.17219
802.11ac VHT40_Nss1,(MCS0)_1TX	18.67	0.07362	21.73	0.14894
802.11ac VHT80_Nss1,(MCS0)_1TX	11.82	0.01521	14.88	0.03076
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	17.92	0.06194	20.30	0.10715
802.11ac VHT20_Nss1,(MCS0)_1TX	17.95	0.06237	20.33	0.10789
802.11ac VHT40_Nss1,(MCS0)_1TX	17.34	0.05420	19.72	0.09376
802.11ac VHT80_Nss1,(MCS0)_1TX	16.67	0.04645	19.05	0.08035

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.06	19.15	19.15	30.00	22.21	36.00
5200MHz	Pass	3.06	19.01	19.01	30.00	22.07	36.00
5240MHz	Pass	3.06	18.94	18.94	30.00	22.00	36.00
5745MHz	Pass	2.38	17.29	17.29	30.00	19.67	36.00
5785MHz	Pass	2.38	17.44	17.44	30.00	19.82	36.00
5825MHz	Pass	2.38	17.92	17.92	30.00	20.30	36.00
802.11ac_VHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.06	18.92	18.92	30.00	21.98	36.00
5200MHz	Pass	3.06	19.30	19.30	30.00	22.36	36.00
5240MHz	Pass	3.06	19.26	19.26	30.00	22.32	36.00
5745MHz	Pass	2.38	17.48	17.48	30.00	19.86	36.00
5785MHz	Pass	2.38	17.45	17.45	30.00	19.83	36.00
5825MHz	Pass	2.38	17.95	17.95	30.00	20.33	36.00
802.11ac_VHT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5190MHz	Pass	3.06	13.30	13.30	30.00	16.36	36.00
5230MHz	Pass	3.06	18.67	18.67	30.00	21.73	36.00
5755MHz	Pass	2.38	17.16	17.16	30.00	19.54	36.00
5795MHz	Pass	2.38	17.34	17.34	30.00	19.72	36.00
802.11ac_VHT80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5210MHz	Pass	3.06	11.82	11.82	30.00	14.88	36.00
5775MHz	Pass	2.38	16.67	16.67	30.00	19.05	36.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	6.20	10.87
802.11a_Nss1,(6Mbps)_1TX(Port2)	6.60	11.51
802.11a_Nss1,(6Mbps)_2TX	9.47	17.27
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	5.79	10.46
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	6.17	11.08
802.11ac VHT20_Nss1,(MCS0)_2TX	8.42	16.22
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	2.17	6.84
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	2.45	7.36
802.11ac VHT40_Nss1,(MCS0)_2TX	5.42	13.22
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-3.17	1.50
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-2.03	2.88
802.11ac VHT80_Nss1,(MCS0)_2TX	-0.49	7.31
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	5.44	10.11
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	5.60	10.51
802.11ax HEW20_Nss1,(MCS0)_2TX	8.41	16.21
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	2.14	6.81
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	2.34	7.25
802.11ax HEW40_Nss1,(MCS0)_2TX	5.39	13.19
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-3.04	1.63
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-1.90	3.01
802.11ax HEW80_Nss1,(MCS0)_2TX	-0.30	7.50
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	5.38	10.15
802.11a_Nss1,(6Mbps)_1TX(Port2)	5.15	10.05
802.11a_Nss1,(6Mbps)_2TX	8.19	16.04
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	4.96	9.73
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	4.65	9.55
802.11ac VHT20_Nss1,(MCS0)_2TX	6.45	14.30
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	0.87	5.64
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	0.54	5.44
802.11ac VHT40_Nss1,(MCS0)_2TX	3.83	11.68
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-2.25	2.52
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-2.69	2.21
802.11ac VHT80_Nss1,(MCS0)_2TX	0.26	8.11
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	3.59	8.36
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	3.25	8.15
802.11ax HEW20_Nss1,(MCS0)_2TX	6.47	14.32
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	0.71	5.48
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	0.36	5.26
802.11ax HEW40_Nss1,(MCS0)_2TX	3.68	11.53
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-2.11	2.66
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-2.55	2.35
802.11ax HEW80_Nss1,(MCS0)_2TX	0.35	8.20



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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	6.20		6.20	17.00	10.87	23.00
5200MHz	Pass	4.67	6.20		6.20	17.00	10.87	23.00
5240MHz	Pass	4.67	6.05		6.05	17.00	10.72	23.00
5745MHz	Pass	4.77	5.38		5.38	30.00	10.15	36.00
5785MHz	Pass	4.77	5.35		5.35	30.00	10.12	36.00
5825MHz	Pass	4.77	4.13		4.13	30.00	8.90	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		6.60	6.60	17.00	11.51	23.00
5200MHz	Pass	4.91		6.55	6.55	17.00	11.46	23.00
5240MHz	Pass	4.91		6.25	6.25	17.00	11.16	23.00
5745MHz	Pass	4.90		5.06	5.06	30.00	9.96	36.00
5785MHz	Pass	4.90		5.03	5.03	30.00	9.93	36.00
5825MHz	Pass	4.90		5.15	5.15	30.00	10.05	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.80	6.27	6.67	9.47	15.20	17.27	23.00
5200MHz	Pass	7.80	6.34	6.52	9.44	15.20	17.24	23.00
5240MHz	Pass	7.80	6.20	6.20	9.18	15.20	16.98	23.00
5745MHz	Pass	7.85	5.39	5.17	8.19	28.15	16.04	36.00
5785MHz	Pass	7.85	5.28	5.09	8.12	28.15	15.97	36.00
5825MHz	Pass	7.85	4.23	5.09	7.64	28.15	15.49	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	5.79		5.79	17.00	10.46	23.00
5200MHz	Pass	4.67	5.78		5.78	17.00	10.45	23.00
5240MHz	Pass	4.67	5.66		5.66	17.00	10.33	23.00
5745MHz	Pass	4.77	4.96		4.96	30.00	9.73	36.00
5785MHz	Pass	4.77	4.86		4.86	30.00	9.63	36.00
5825MHz	Pass	4.77	3.69		3.69	30.00	8.46	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		6.17	6.17	17.00	11.08	23.00
5200MHz	Pass	4.91		6.12	6.12	17.00	11.03	23.00
5240MHz	Pass	4.91		5.77	5.77	17.00	10.68	23.00
5745MHz	Pass	4.90		4.65	4.65	30.00	9.55	36.00
5785MHz	Pass	4.90		3.16	3.16	30.00	8.06	36.00
5825MHz	Pass	4.90		3.32	3.32	30.00	8.22	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.80	5.33	5.55	8.42	15.20	16.22	23.00
5200MHz	Pass	7.80	5.30	5.45	8.35	15.20	16.15	23.00
5240MHz	Pass	7.80	5.04	5.15	8.09	15.20	15.89	23.00
5745MHz	Pass	7.85	3.63	3.42	6.45	28.15	14.30	36.00
5785MHz	Pass	7.85	3.56	3.36	6.41	28.15	14.26	36.00
5825MHz	Pass	7.85	2.64	3.48	6.04	28.15	13.89	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.67	0.21		0.21	17.00	4.88	23.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5230MHz	Pass	4.67	2.17		2.17	17.00	6.84	23.00
5755MHz	Pass	4.77	0.86		0.86	30.00	5.63	36.00
5795MHz	Pass	4.77	0.87		0.87	30.00	5.64	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91		1.39	1.39	17.00	6.30	23.00
5230MHz	Pass	4.91		2.45	2.45	17.00	7.36	23.00
5755MHz	Pass	4.90		0.41	0.41	30.00	5.31	36.00
5795MHz	Pass	4.90		0.54	0.54	30.00	5.44	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.80	1.38	1.47	4.41	15.20	12.21	23.00
5230MHz	Pass	7.80	2.41	2.41	5.42	15.20	13.22	23.00
5755MHz	Pass	7.85	1.09	0.63	3.81	28.15	11.66	36.00
5795MHz	Pass	7.85	1.05	0.68	3.83	28.15	11.68	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.67	-3.17		-3.17	17.00	1.50	23.00
5775MHz	Pass	4.77	-2.25		-2.25	30.00	2.52	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91		-2.03	-2.03	17.00	2.88	23.00
5775MHz	Pass	4.90		-2.69	-2.69	30.00	2.21	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.80	-3.54	-3.46	-0.49	15.20	7.31	23.00
5775MHz	Pass	7.85	-2.45	-2.96	0.26	28.15	8.11	36.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.67	5.44		5.44	17.00	10.11	23.00
5200MHz	Pass	4.67	5.27		5.27	17.00	9.94	23.00
5240MHz	Pass	4.67	5.04		5.04	17.00	9.71	23.00
5745MHz	Pass	4.77	3.59		3.59	30.00	8.36	36.00
5785MHz	Pass	4.77	3.48		3.48	30.00	8.25	36.00
5825MHz	Pass	4.77	2.27		2.27	30.00	7.04	36.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.91		5.60	5.60	17.00	10.51	23.00
5200MHz	Pass	4.91		5.48	5.48	17.00	10.39	23.00
5240MHz	Pass	4.91		5.08	5.08	17.00	9.99	23.00
5745MHz	Pass	4.90		3.25	3.25	30.00	8.15	36.00
5785MHz	Pass	4.90		3.10	3.10	30.00	8.00	36.00
5825MHz	Pass	4.90		3.22	3.22	30.00	8.12	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.80	5.32	5.56	8.41	15.20	16.21	23.00
5200MHz	Pass	7.80	5.35	5.48	8.40	15.20	16.20	23.00
5240MHz	Pass	7.80	5.14	5.23	8.18	15.20	15.98	23.00
5745MHz	Pass	7.85	3.72	3.32	6.47	28.15	14.32	36.00
5785MHz	Pass	7.85	3.63	3.23	6.39	28.15	14.24	36.00
5825MHz	Pass	7.85	2.51	3.35	5.92	28.15	13.77	36.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.67	0.23		0.23	17.00	4.90	23.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5230MHz	Pass	4.67	2.14		2.14	17.00	6.81	23.00
5755MHz	Pass	4.77	0.70		0.70	30.00	5.47	36.00
5795MHz	Pass	4.77	0.71		0.71	30.00	5.48	36.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	4.91		1.41	1.41	17.00	6.32	23.00
5230MHz	Pass	4.91		2.34	2.34	17.00	7.25	23.00
5755MHz	Pass	4.90		0.36	0.36	30.00	5.26	36.00
5795MHz	Pass	4.90		0.36	0.36	30.00	5.26	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.80	1.26	1.45	4.33	15.20	12.13	23.00
5230MHz	Pass	7.80	2.32	2.50	5.39	15.20	13.19	23.00
5755MHz	Pass	7.85	0.81	0.57	3.60	28.15	11.45	36.00
5795MHz	Pass	7.85	0.95	0.53	3.68	28.15	11.53	36.00
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.67	-3.04		-3.04	17.00	1.63	23.00
5775MHz	Pass	4.77	-2.11		-2.11	30.00	2.66	36.00
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	4.91		-1.90	-1.90	17.00	3.01	23.00
5775MHz	Pass	4.90		-2.55	-2.55	30.00	2.35	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.80	-3.35	-3.26	-0.30	15.20	7.50	23.00
5775MHz	Pass	7.85	-2.35	-2.71	0.35	28.15	8.20	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

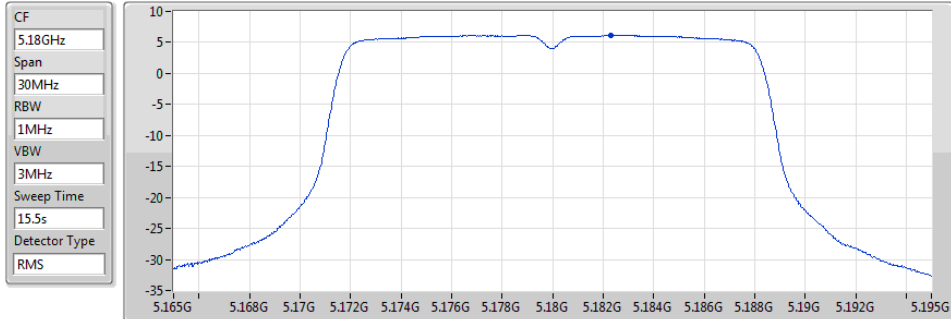
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5180MHz

25/06/2019



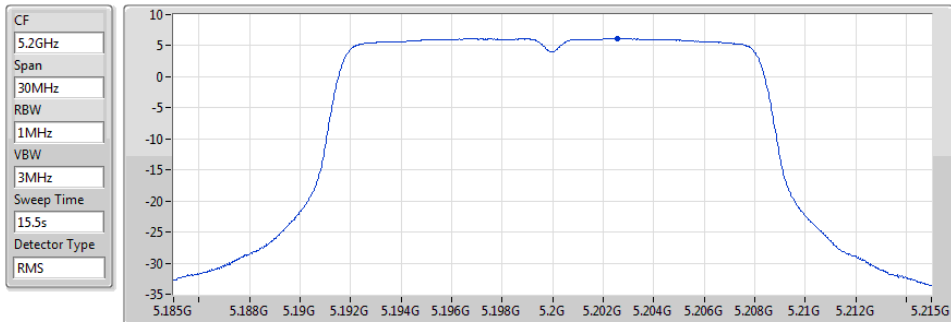
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.20	6.20	6.20

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5200MHz

25/06/2019



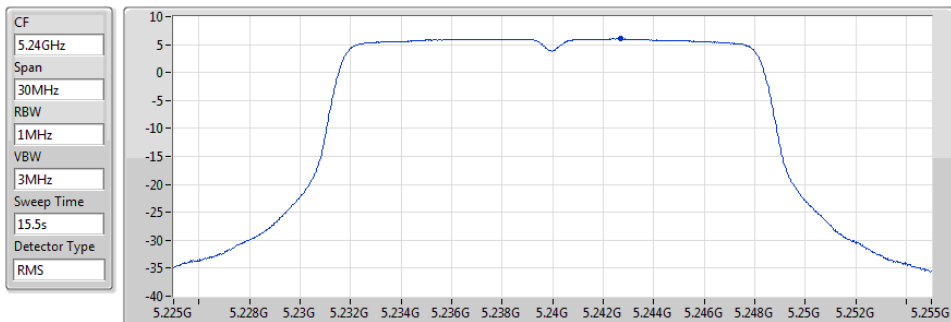
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.20	6.20	6.20

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5240MHz

25/06/2019



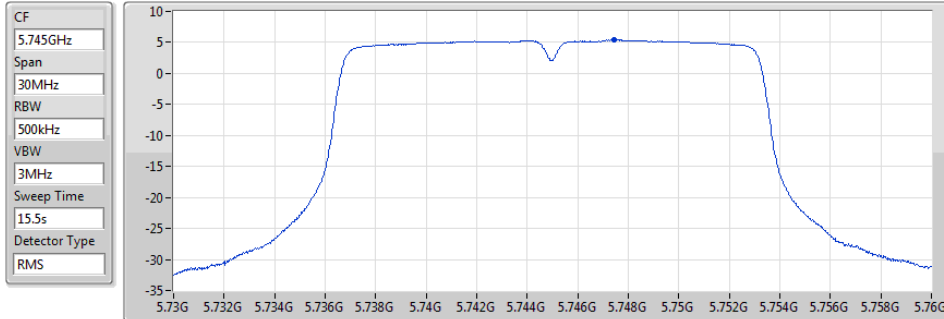
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.05	6.05	6.05

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5745MHz

25/06/2019



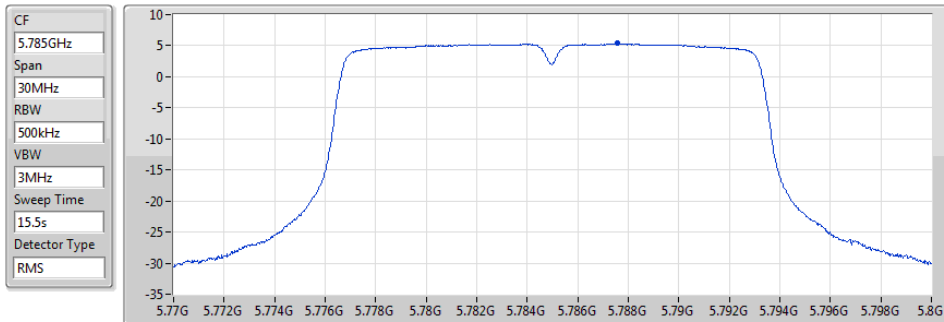
Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.38	5.38	5.38

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5785MHz

25/06/2019



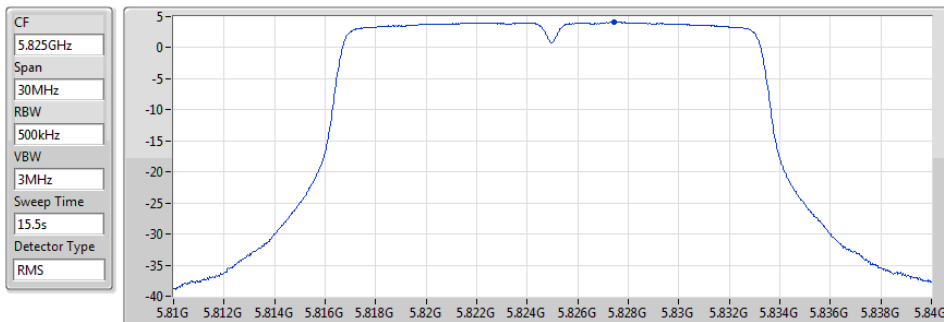
Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.35	5.35	5.35

802.11a_Nss1,(6Mbps)_1TX(Port1)

PSD

5825MHz

25/06/2019



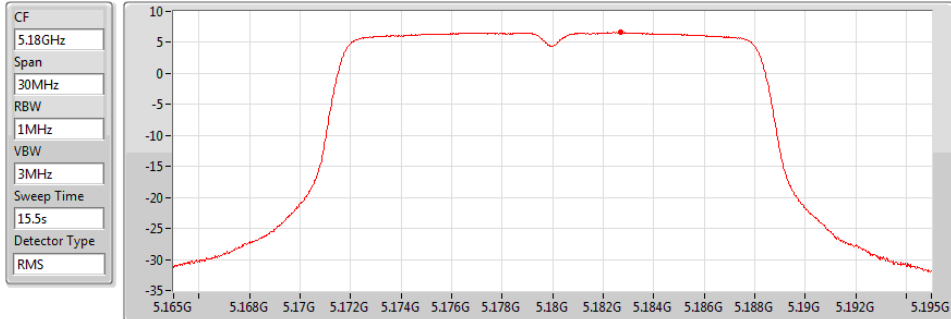
Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.13	4.13	4.13

802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5180MHz

25/06/2019



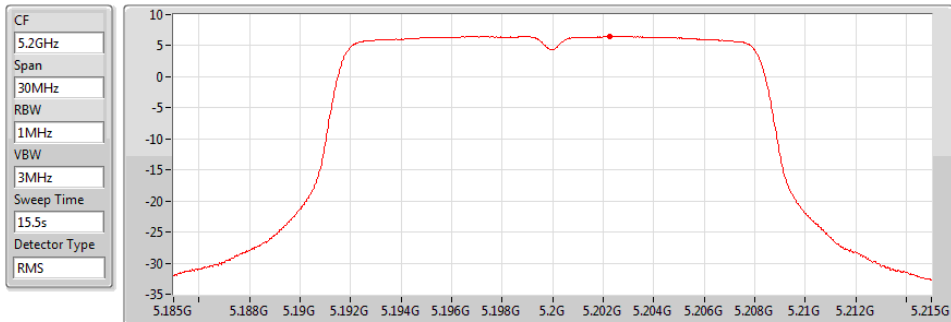
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.60	6.60		6.60

802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5200MHz

25/06/2019



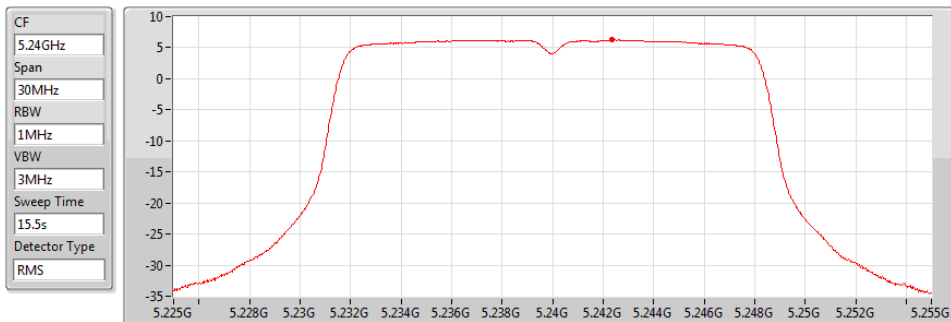
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.55	6.55		6.55

802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5240MHz

25/06/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.25	6.25		6.25

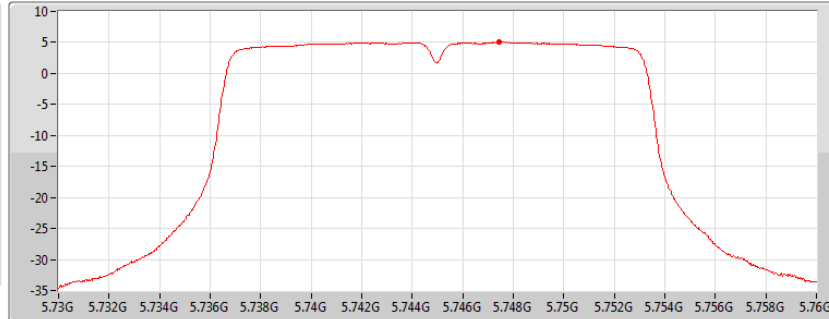
802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5745MHz

25/06/2019

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
15.5s
Detector Type
RMS



Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.06	5.06		5.06

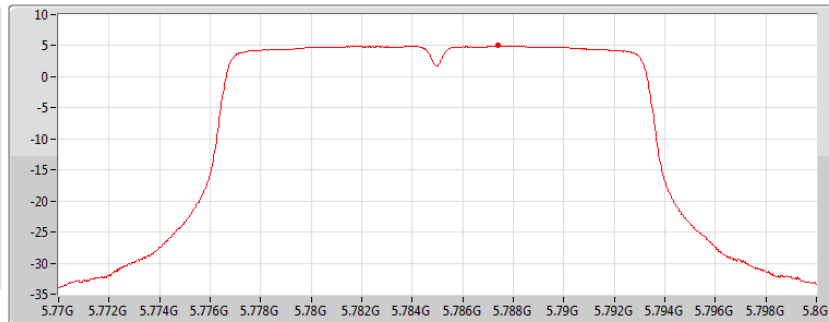
802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5785MHz

25/06/2019

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
15.5s
Detector Type
RMS



Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.03	5.03		5.03

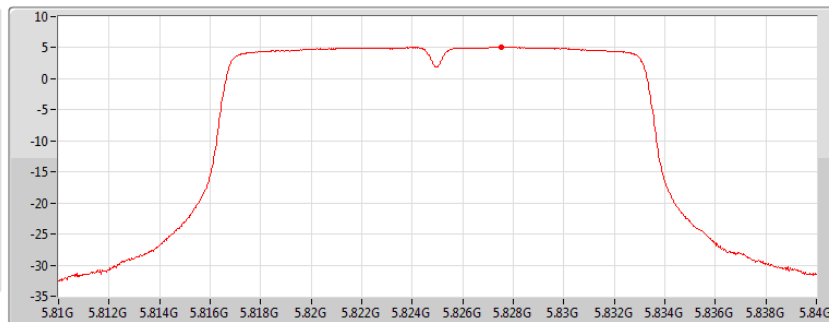
802.11a_Nss1,(6Mbps)_1TX(Port2)

PSD

5825MHz

25/06/2019

CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
15.5s
Detector Type
RMS



Port 2

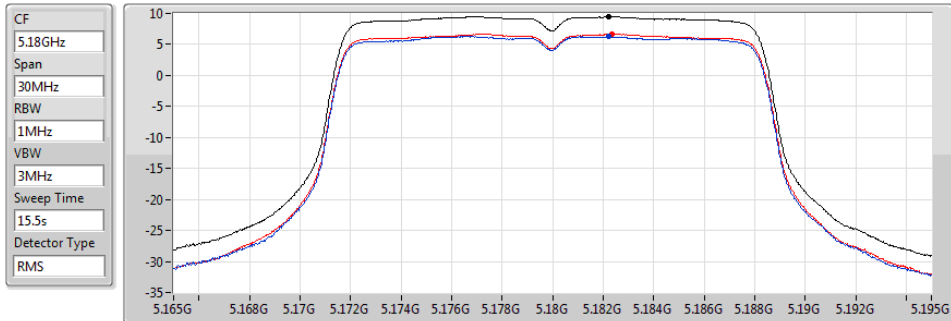
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.15	5.15		5.15

802.11a_Nss1,(6Mbps)_2TX

PSD

5180MHz

25/06/2019



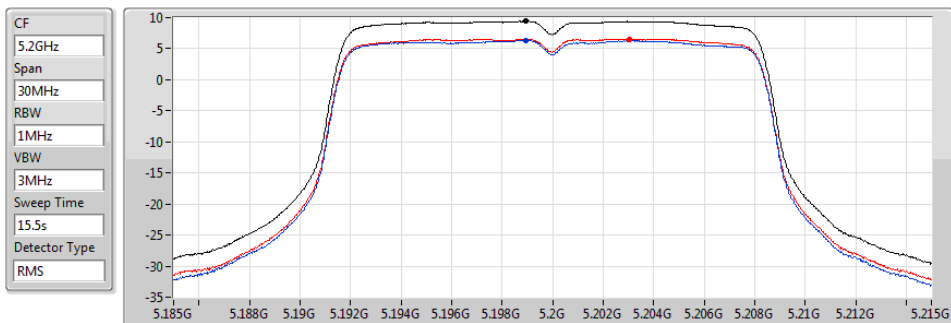
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.47	9.47	6.27	6.67

802.11a_Nss1,(6Mbps)_2TX

PSD

5200MHz

25/06/2019



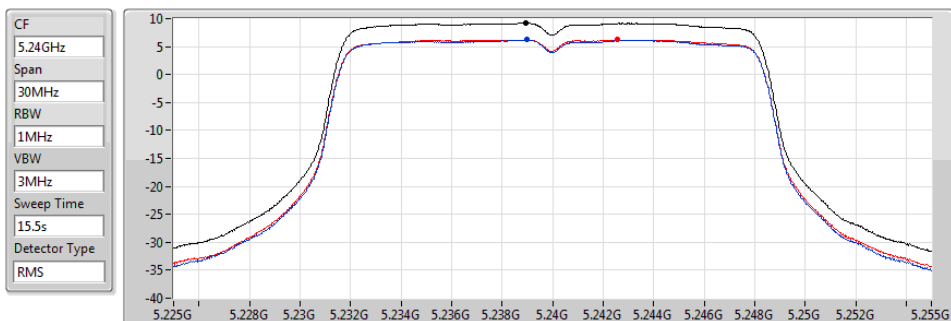
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.44	9.44	6.34	6.52

802.11a_Nss1,(6Mbps)_2TX

PSD

5240MHz

25/06/2019



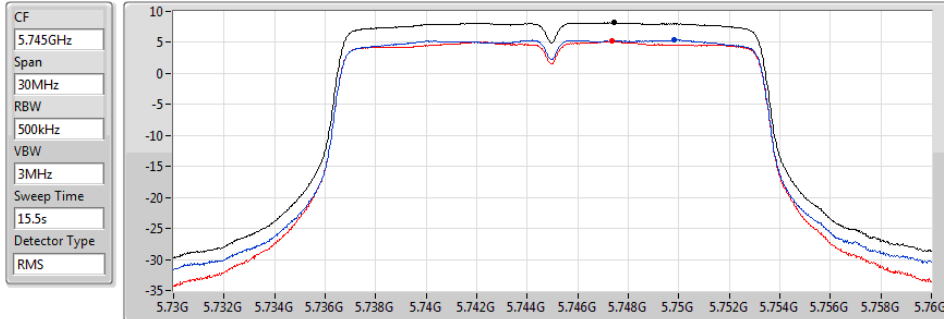
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.18	9.18	6.20	6.20

802.11a_Nss1,(6Mbps)_2TX

PSD

5745MHz

25/06/2019



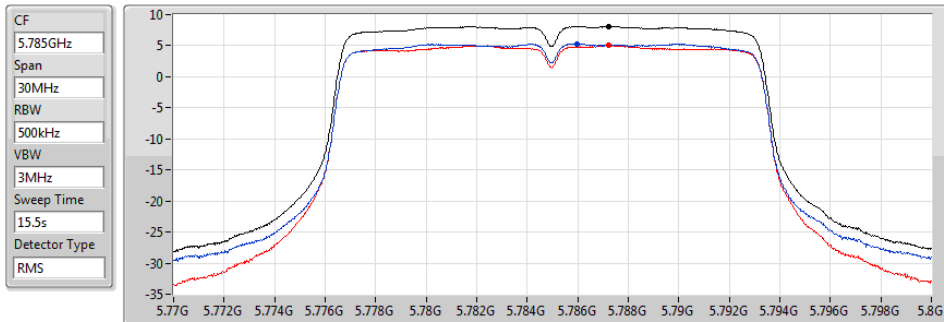
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.19	8.19	5.39	5.17

802.11a_Nss1,(6Mbps)_2TX

PSD

5785MHz

25/06/2019



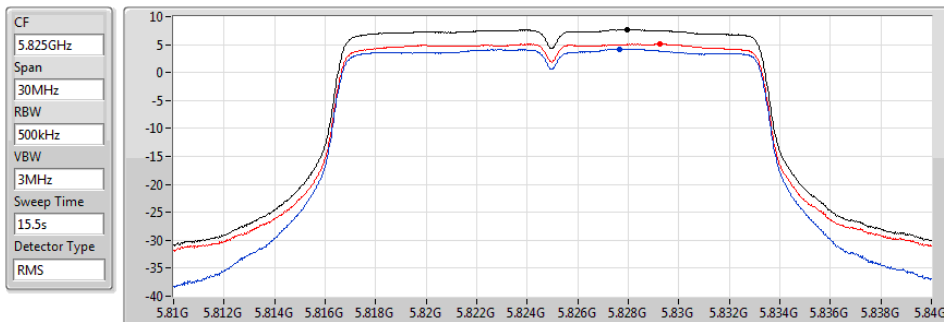
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.12	8.12	5.28	5.09

802.11a_Nss1,(6Mbps)_2TX

PSD

5825MHz

25/06/2019



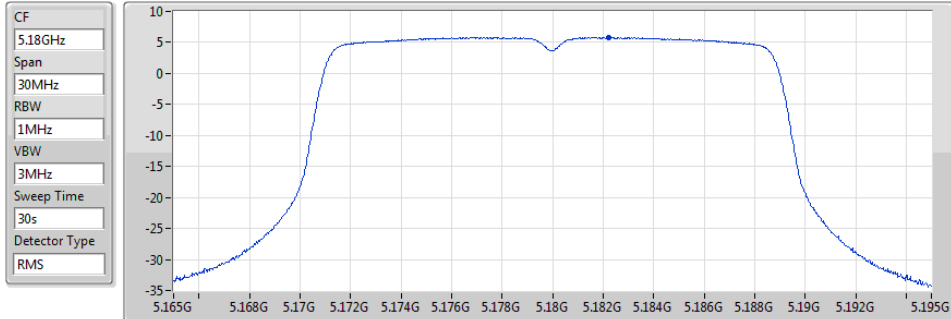
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.64	7.64	4.23	5.09

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5180MHz

25/06/2019



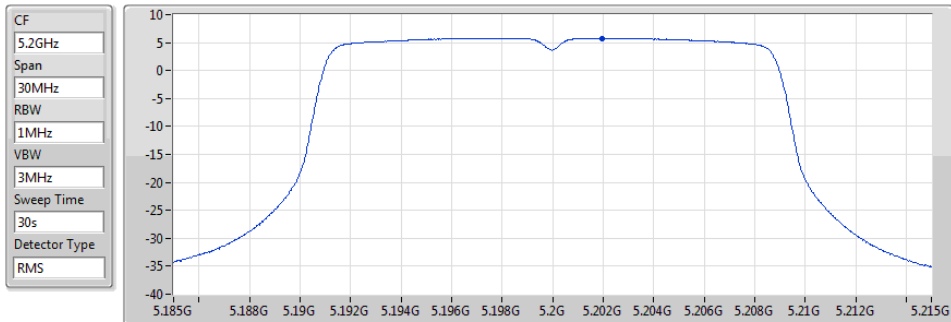
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.79	5.79	5.79

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5200MHz

25/06/2019



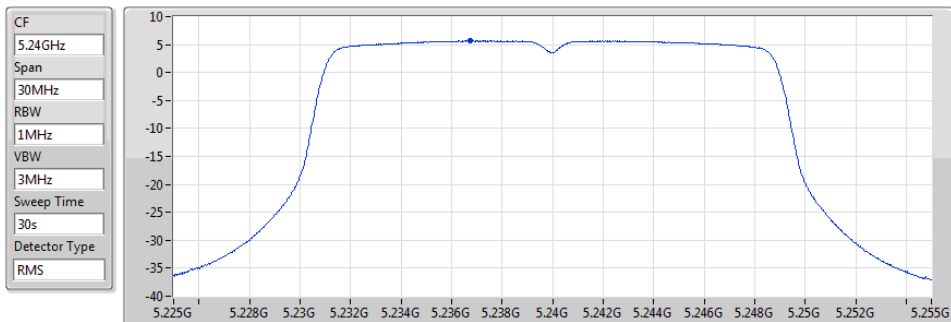
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.78	5.78	5.78

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5240MHz

25/06/2019



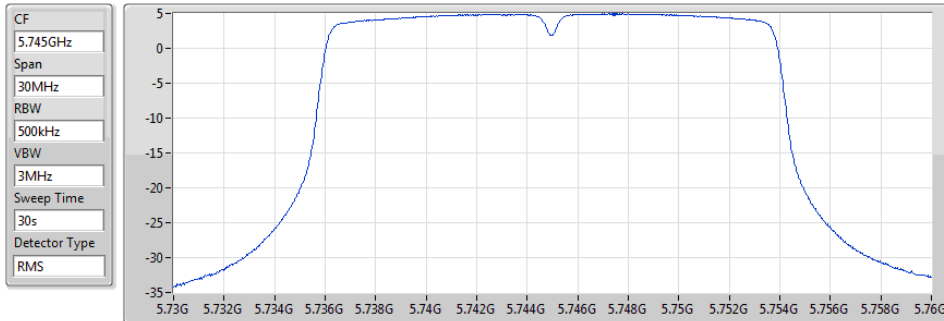
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.66	5.66	5.66

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5745MHz

25/06/2019



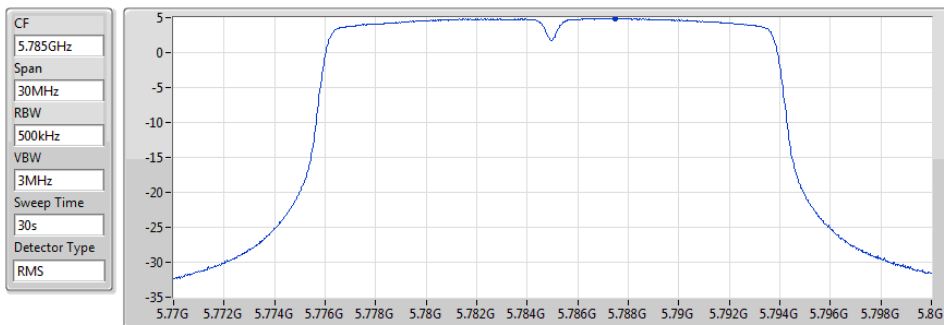
Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.96	4.96	4.96

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5785MHz

25/06/2019



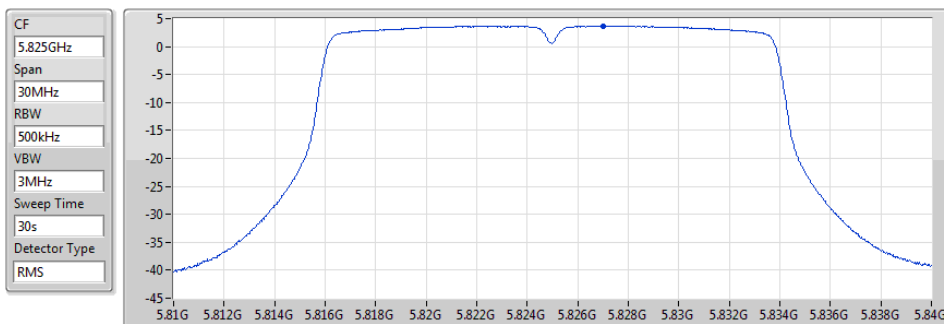
Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.86	4.86	4.86

802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

PSD

5825MHz

25/06/2019



Sum	PD	Port1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.69	3.69	3.69

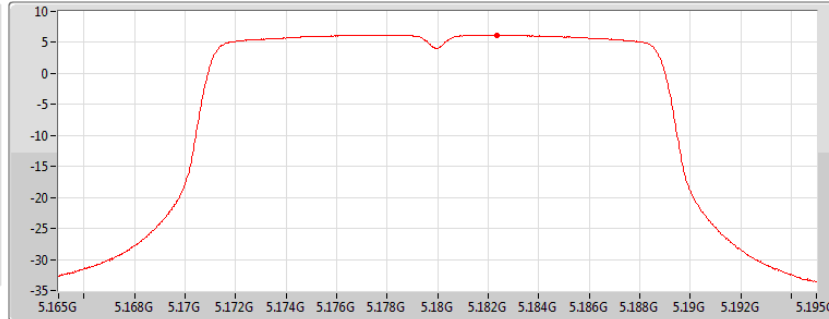
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5180MHz

25/06/2019

CF
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.17	6.17		6.17

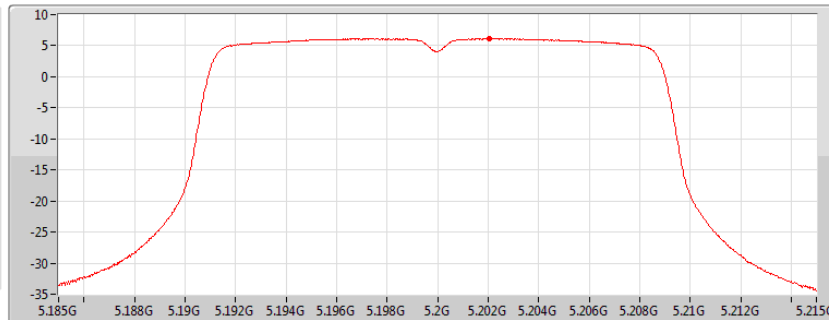
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5200MHz

25/06/2019

CF
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.12	6.12		6.12

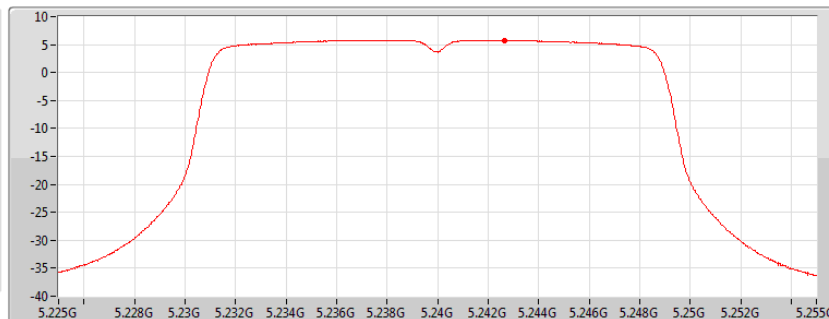
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5240MHz

25/06/2019

CF
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 2

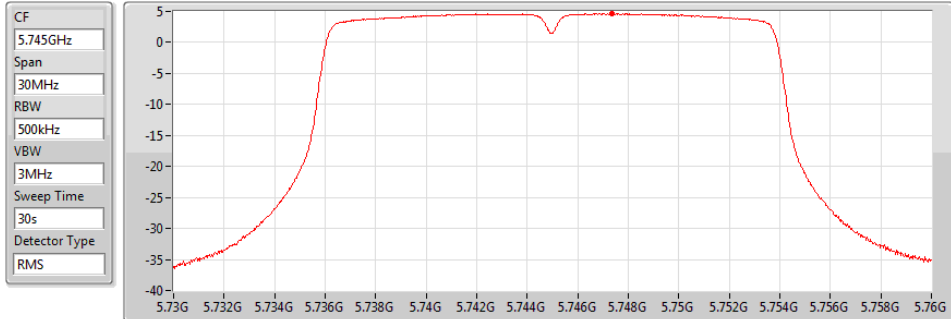
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.77	5.77		5.77

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5745MHz

25/06/2019



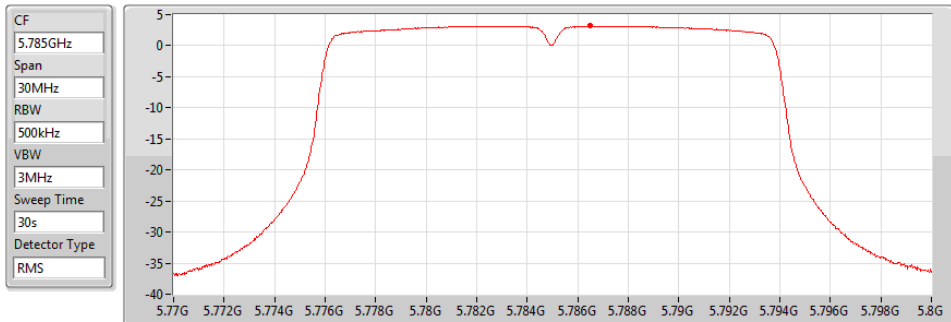
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.65	4.65		4.65

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5785MHz

25/06/2019



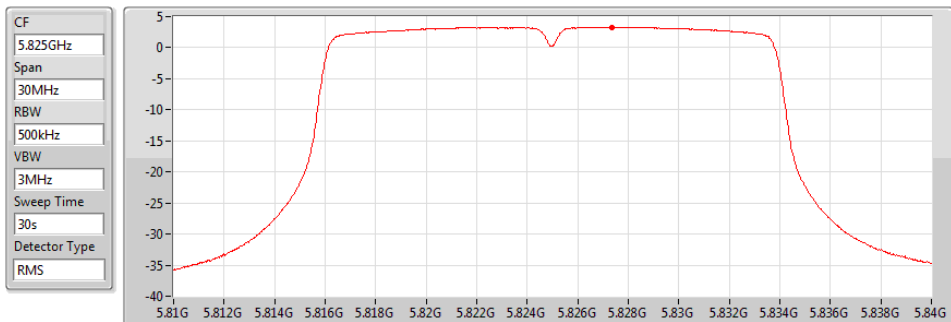
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.16	3.16		3.16

802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

PSD

5825MHz

25/06/2019



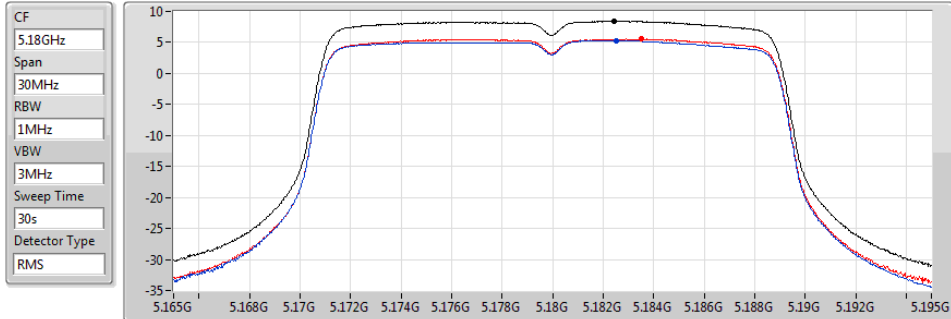
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.32	3.32		3.32

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5180MHz

25/06/2019



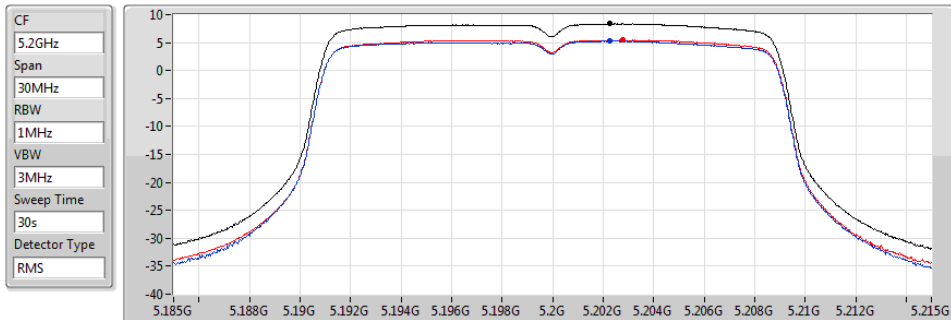
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.42	8.42	5.33	5.55

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5200MHz

25/06/2019



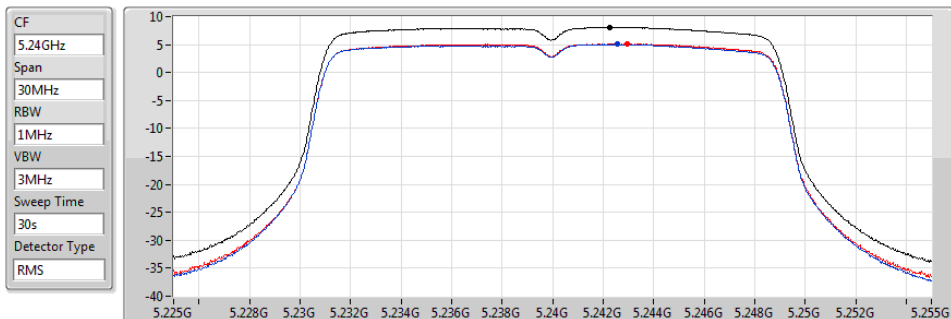
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.35	8.35	5.30	5.45

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5240MHz

25/06/2019



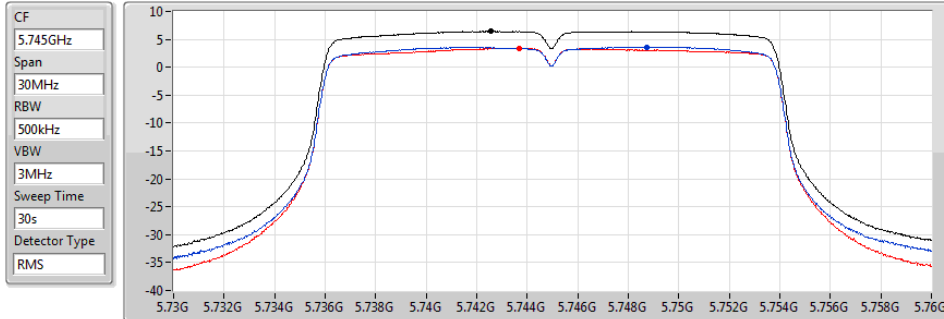
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.09	8.09	5.04	5.15

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5745MHz

25/06/2019



Sum
Port 1
Port 2

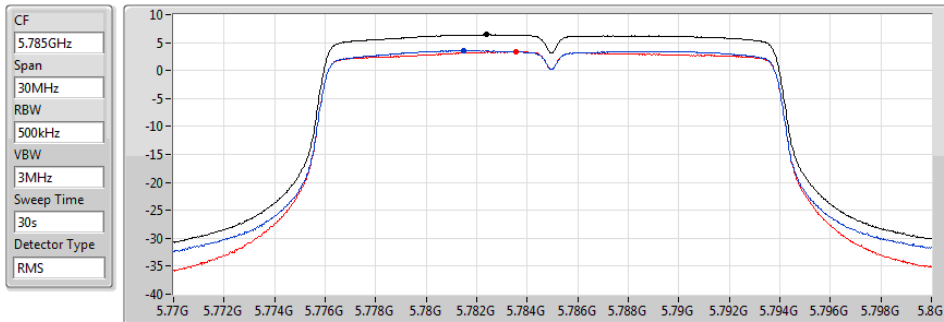
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.45	6.45	3.63	3.42

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5785MHz

25/06/2019



Sum
Port 1
Port 2

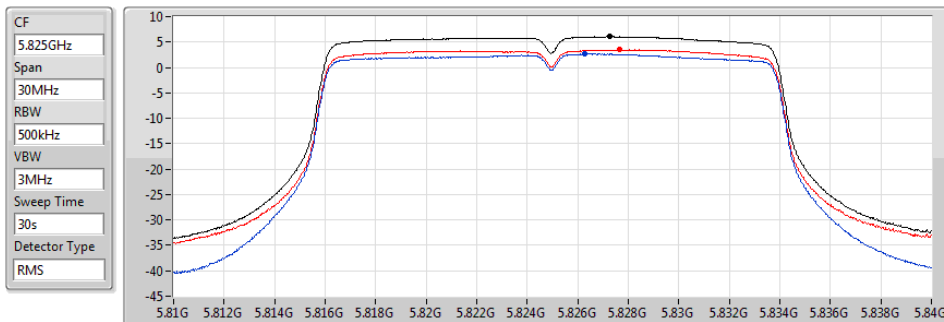
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.41	6.41	3.56	3.36

802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

5825MHz

25/06/2019



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.04	6.04	2.64	3.48

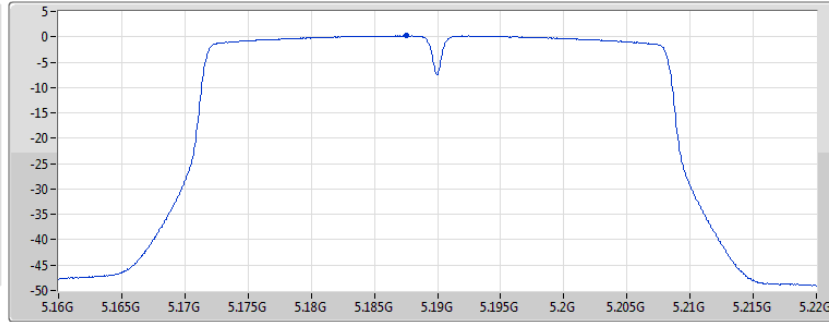
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)

PSD

5190MHz

25/06/2019

CF
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.21	0.21	0.21

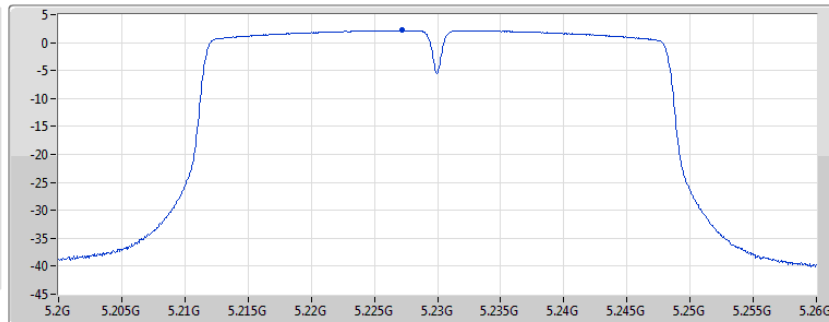
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)

PSD

5230MHz

25/06/2019

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
2.17	2.17	2.17

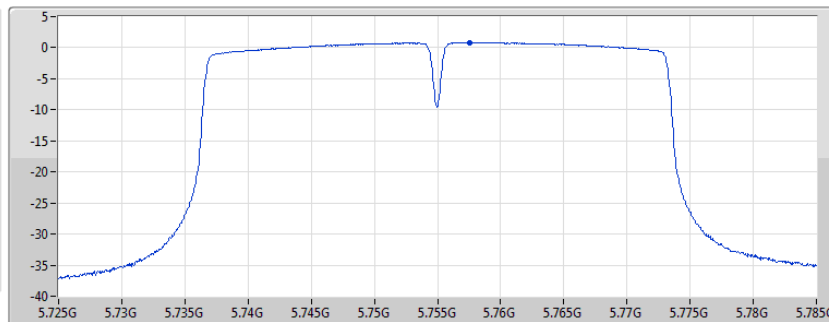
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)

PSD

5755MHz

25/06/2019

CF
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.86	0.86	0.86

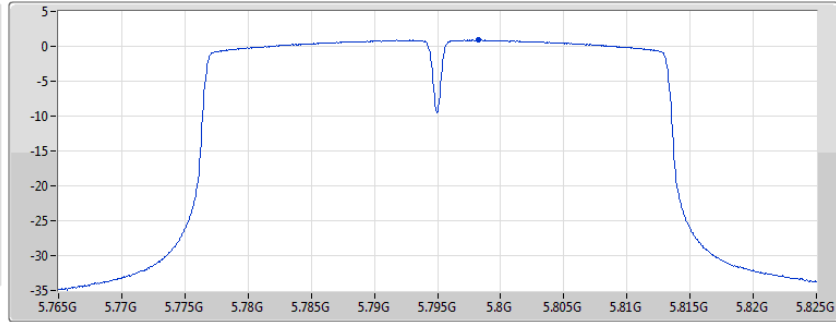
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)

PSD

5795MHz

25/06/2019

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.87	0.87	0.87

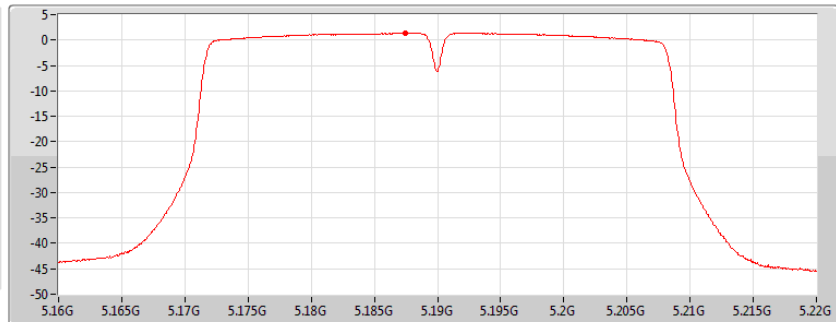
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)

PSD

5190MHz

25/06/2019

CF
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.39	1.39		1.39

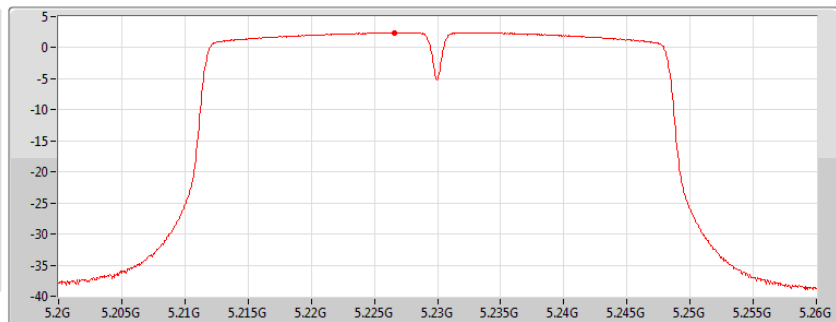
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)

PSD

5230MHz

25/06/2019

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Port 2

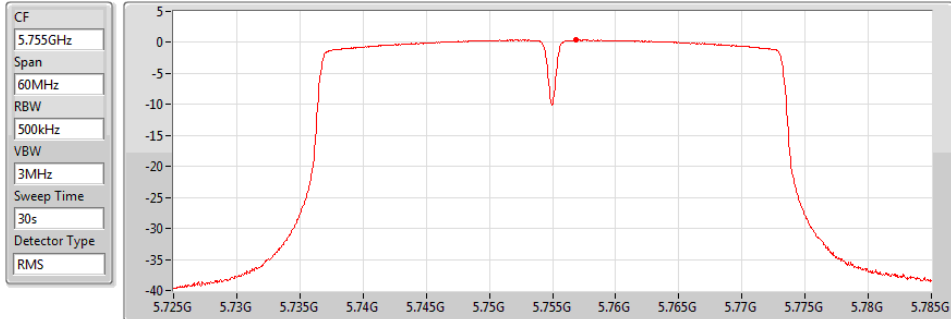
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.45	2.45		2.45

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)

PSD

5755MHz

25/06/2019



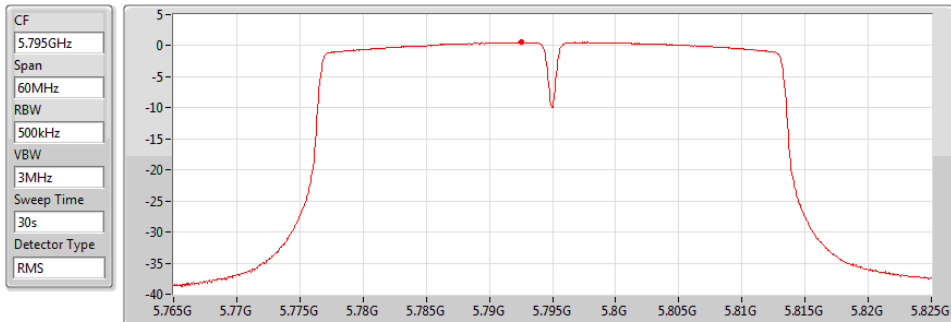
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.41	0.41		0.41

802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)

PSD

5795MHz

25/06/2019



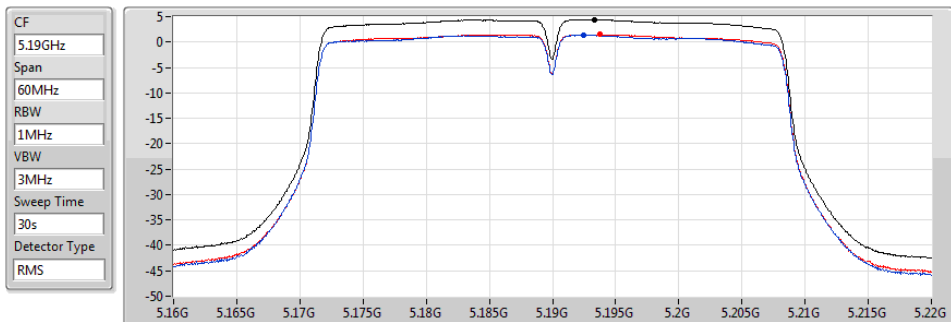
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.54	0.54		0.54

802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5190MHz

25/06/2019



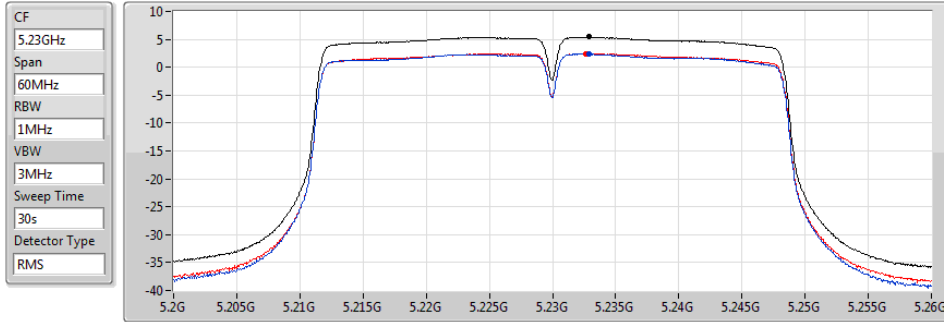
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.41	4.41	1.38	1.47

802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5230MHz

25/06/2019



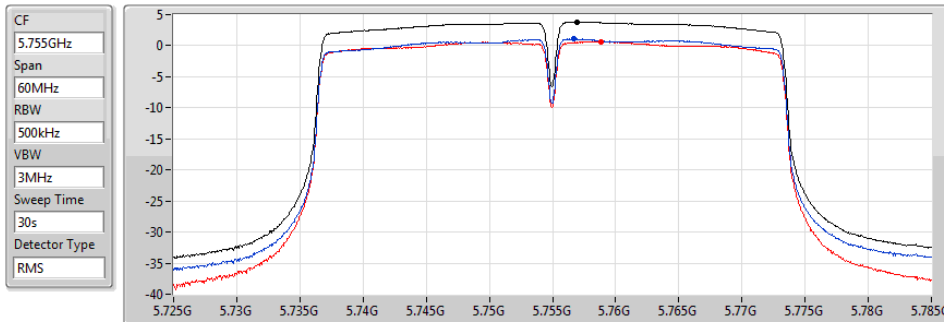
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.42	5.42	2.41	2.41

802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5755MHz

25/06/2019



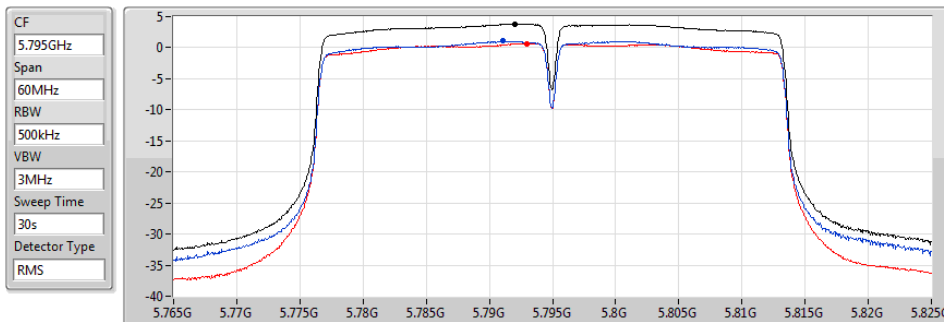
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.81	3.81	1.09	0.63

802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

5795MHz

25/06/2019



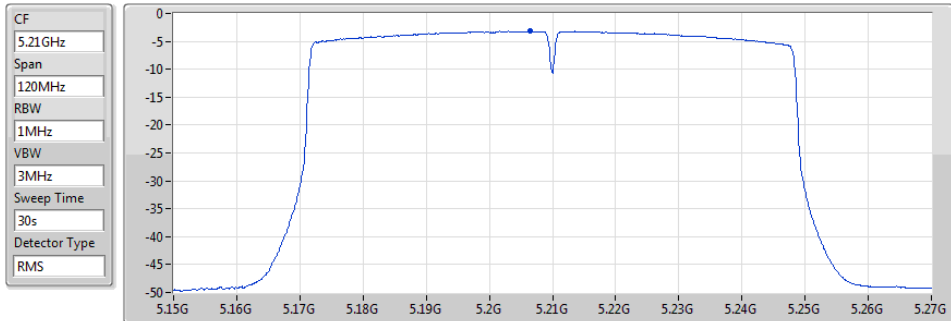
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.83	3.83	1.05	0.68

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

PSD

5210MHz

25/06/2019



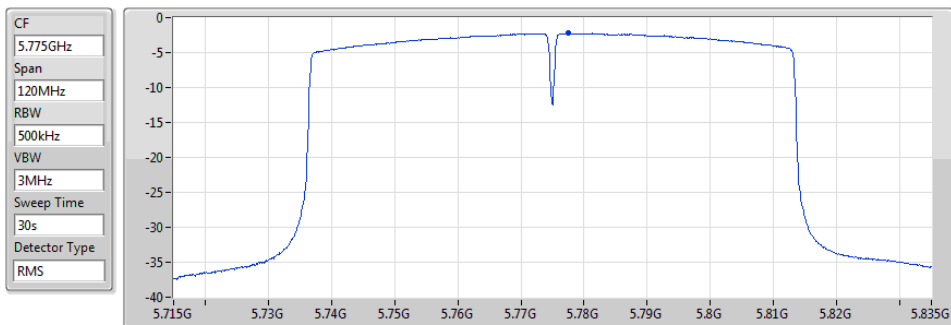
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-3.17	-3.17	-3.17

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

PSD

5775MHz

25/06/2019



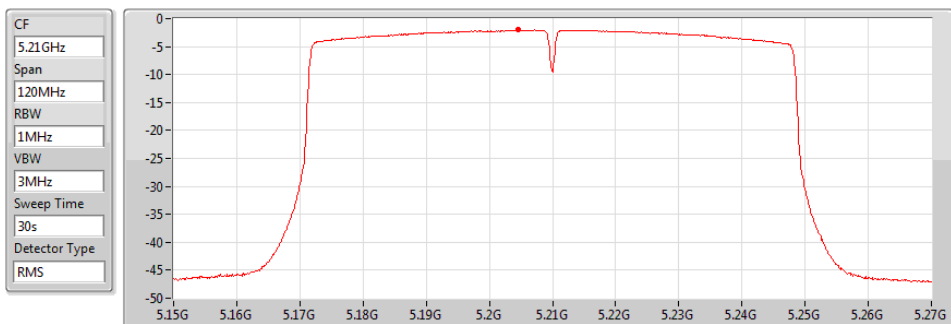
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-2.25	-2.25	-2.25

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

PSD

5210MHz

25/06/2019



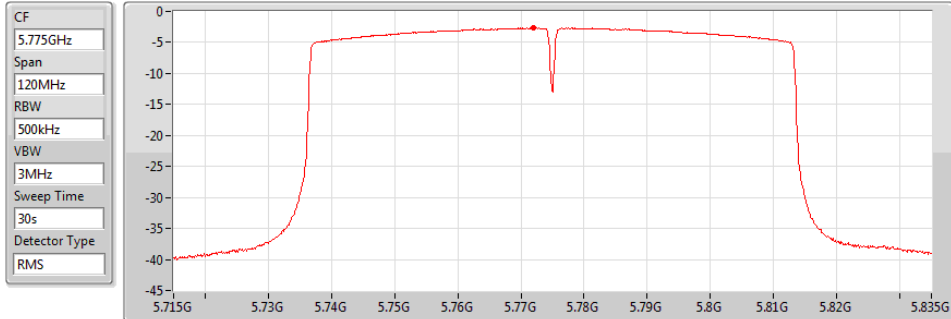
Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-2.03	-2.03		-2.03

802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

PSD

5775MHz

25/06/2019



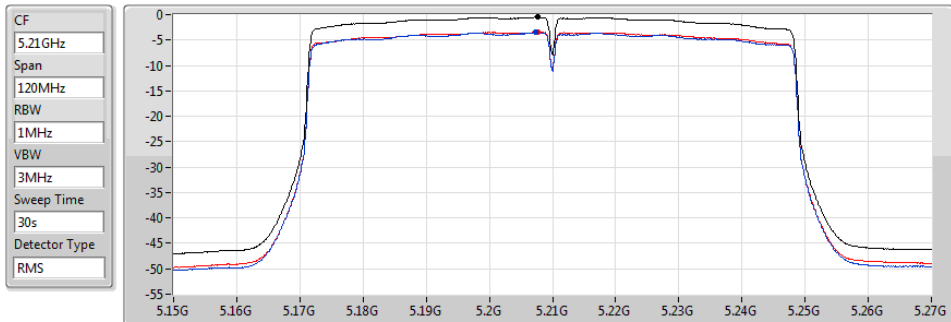
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-2.69	-2.69		-2.69

802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5210MHz

25/06/2019



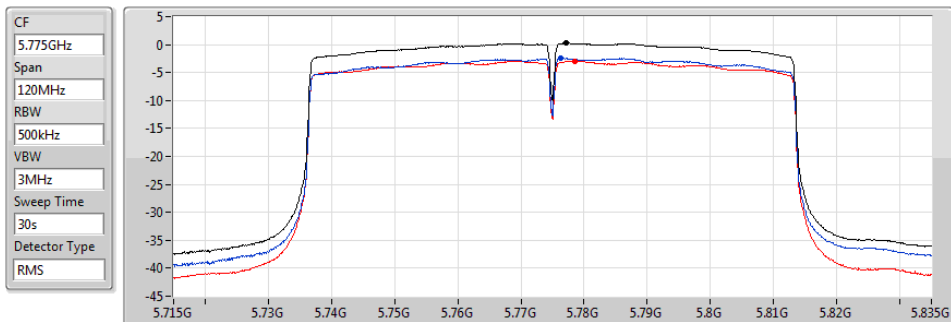
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-0.49	-0.49	-3.54	-3.46

802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5775MHz

25/06/2019



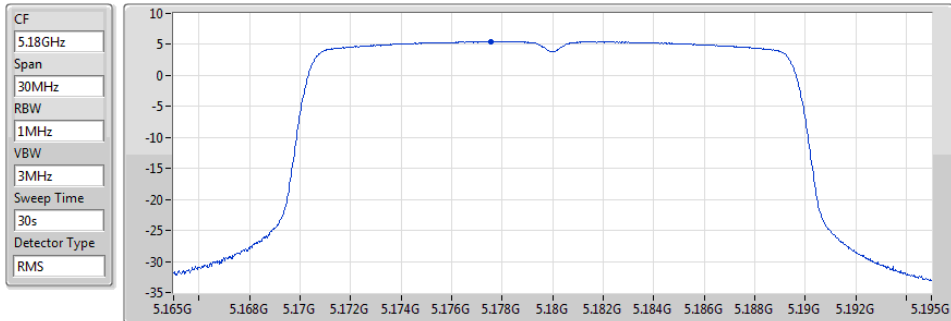
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.26	0.26	-2.45	-2.96

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5180MHz

25/06/2019



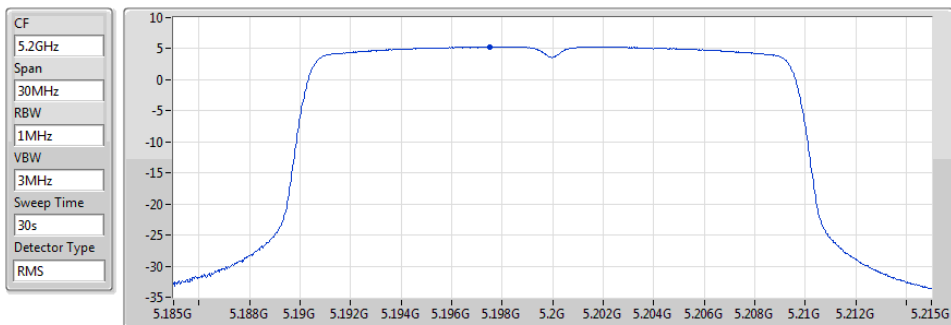
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.44	5.44	5.44

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5200MHz

25/06/2019



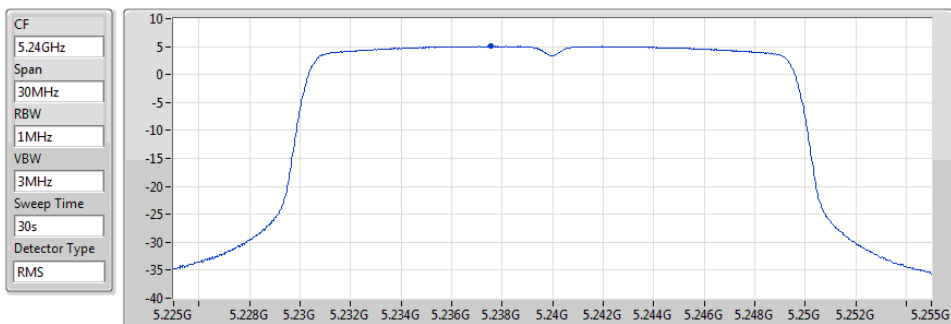
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.27	5.27	5.27

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5240MHz

25/06/2019



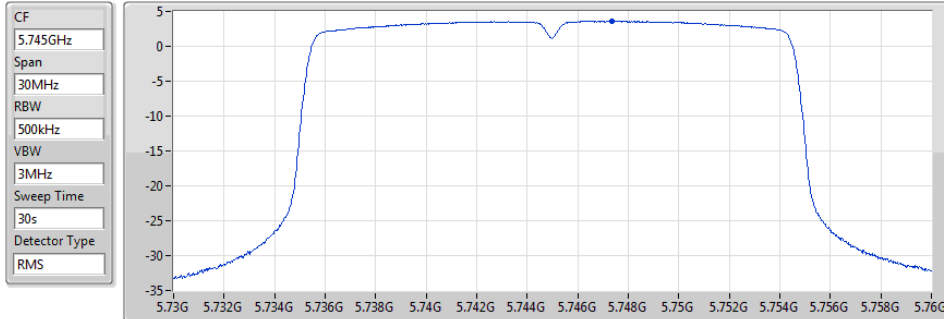
Sum	PD	Port1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.04	5.04	5.04

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5745MHz

25/06/2019



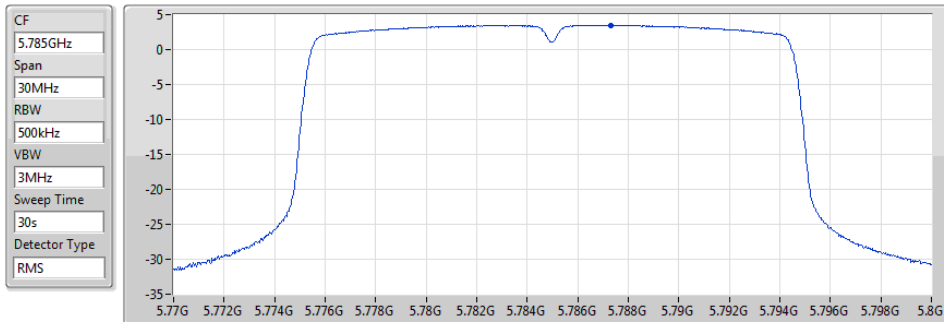
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.59	3.59	3.59

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5785MHz

25/06/2019



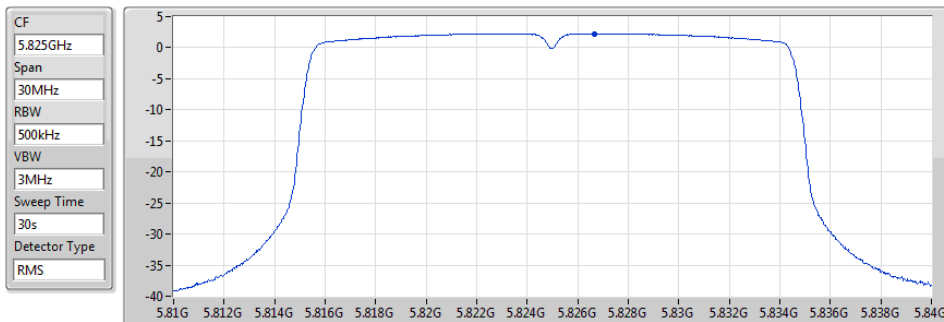
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.48	3.48	3.48

802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)

PSD

5825MHz

25/06/2019



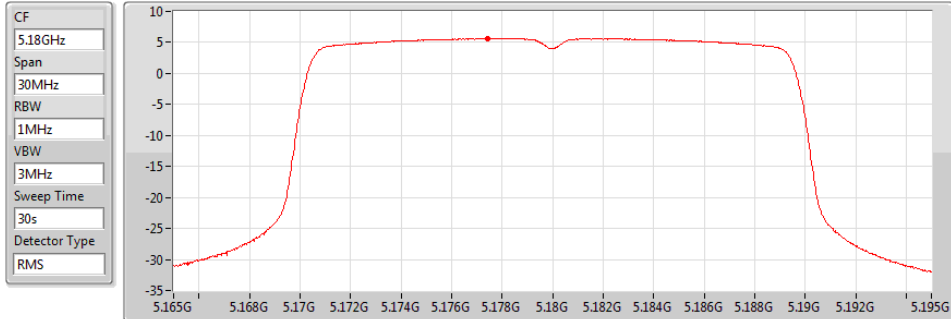
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
2.27	2.27	2.27

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5180MHz

25/06/2019



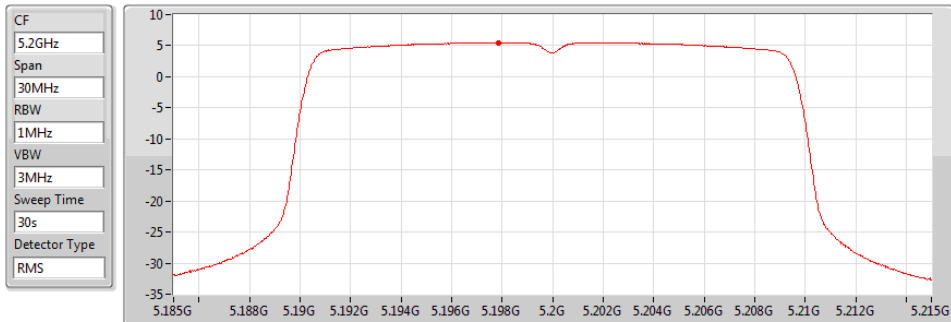
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.60	5.60		5.60

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5200MHz

25/06/2019



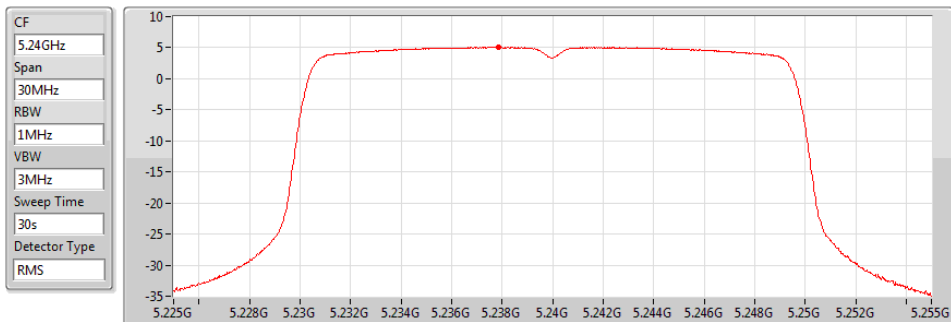
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.48	5.48		5.48

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5240MHz

25/06/2019



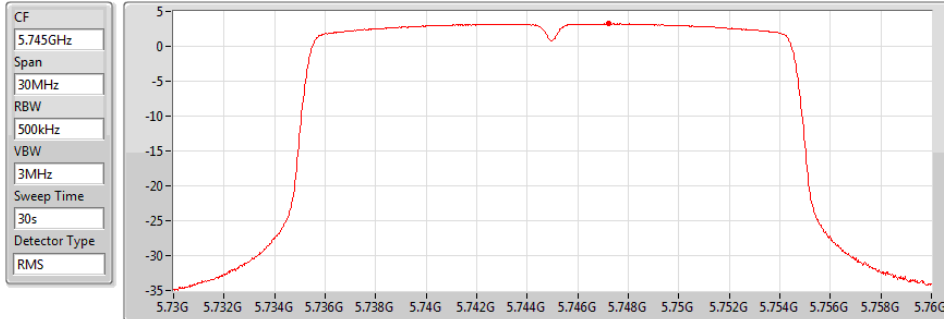
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.08	5.08		5.08

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5745MHz

25/06/2019



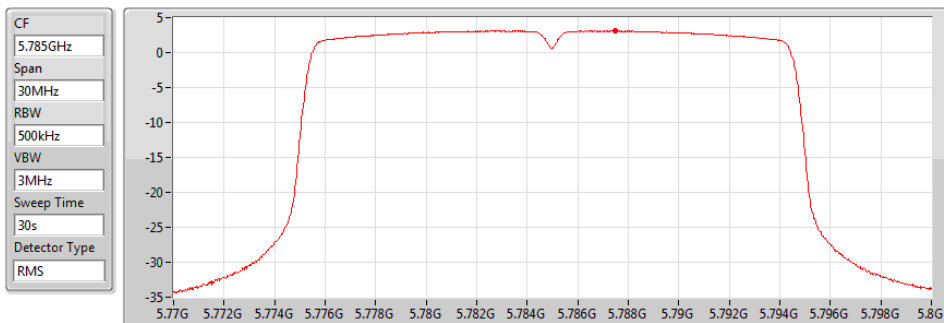
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.25	3.25		3.25

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5785MHz

25/06/2019



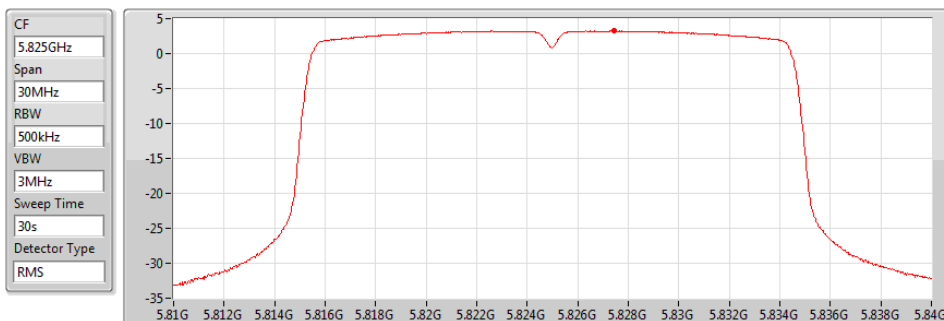
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.10	3.10		3.10

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

5825MHz

25/06/2019



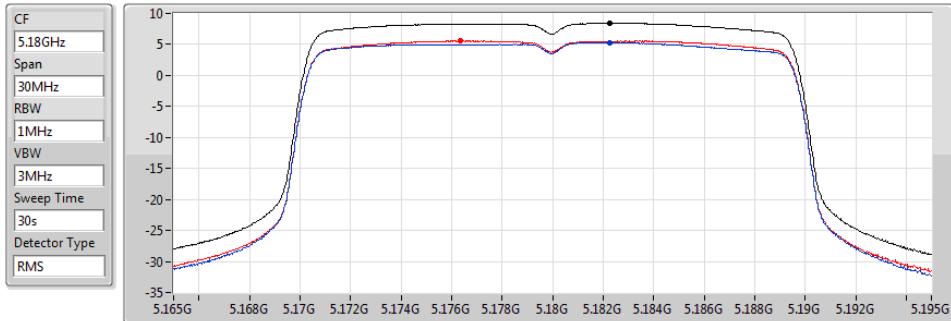
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
3.22	3.22		3.22

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5180MHz

25/06/2019



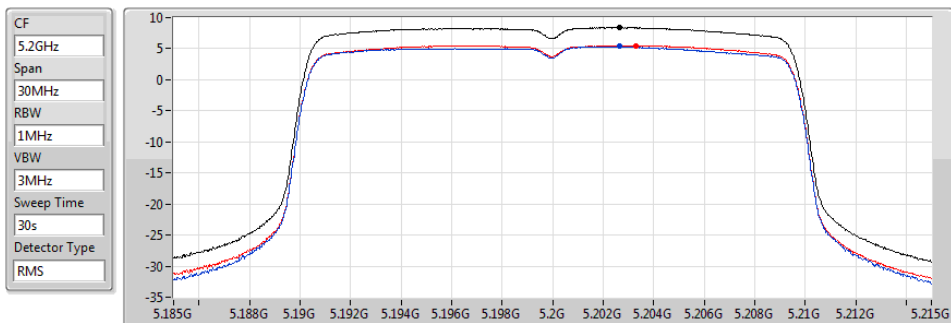
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.41	8.41	5.32	5.56

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5200MHz

25/06/2019



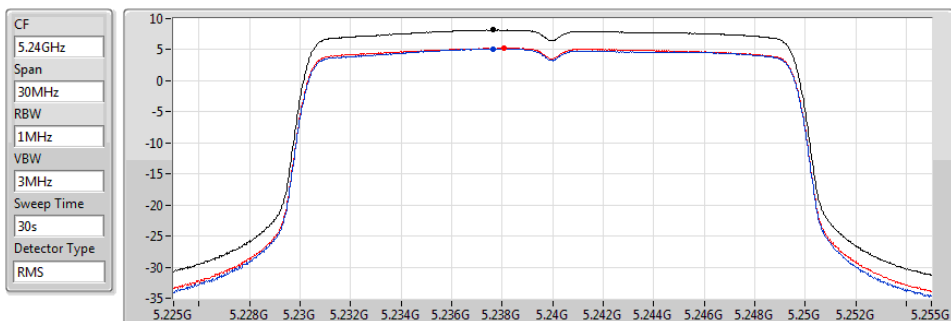
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.40	8.40	5.35	5.48

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5240MHz

25/06/2019



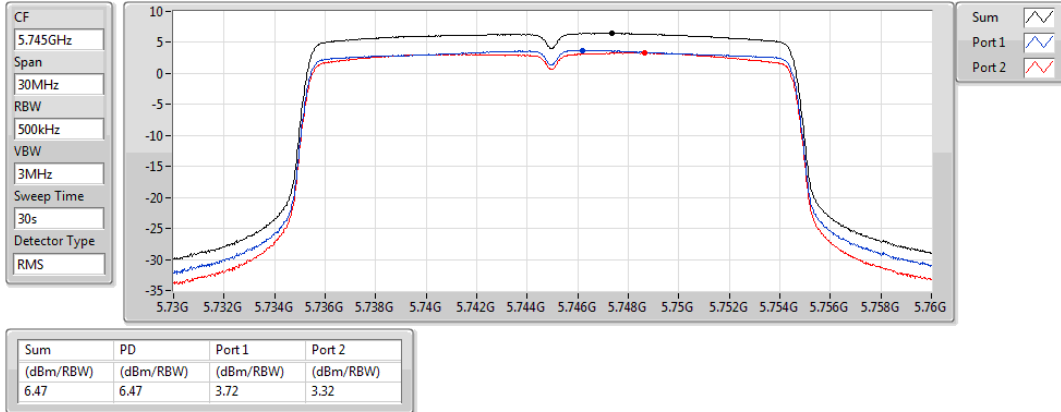
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.18	8.18	5.14	5.23

802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5745MHz

25/06/2019

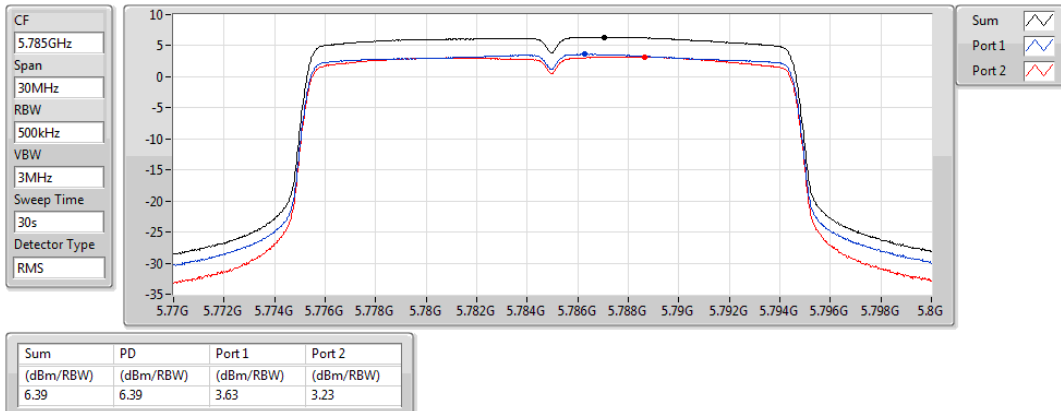


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5785MHz

25/06/2019

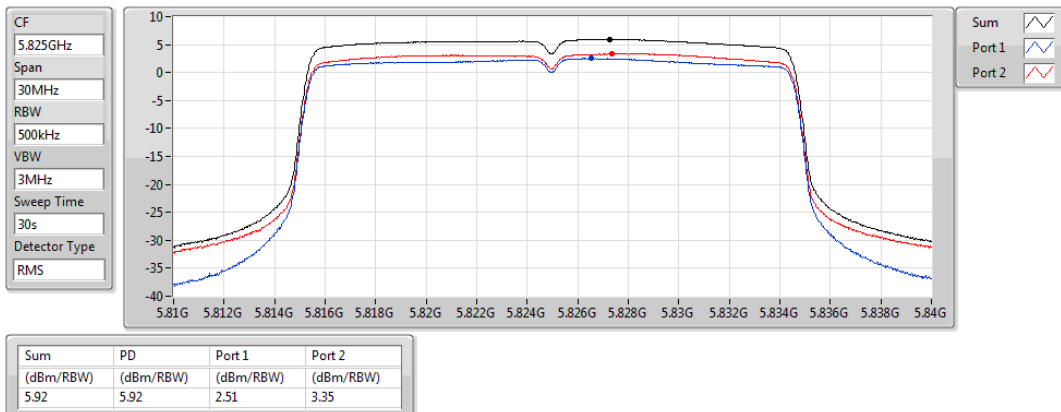


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

5825MHz

25/06/2019

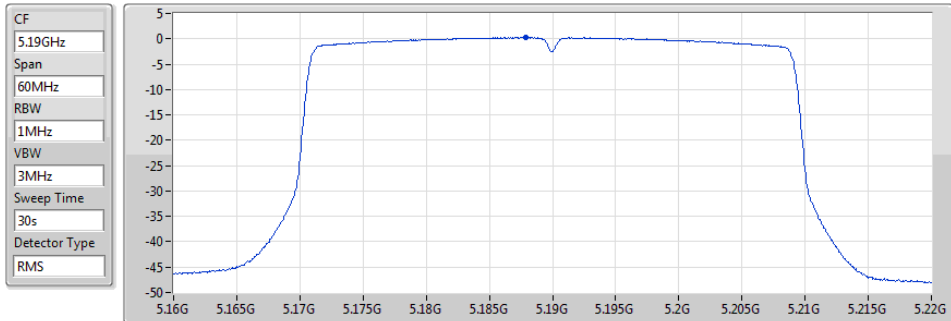


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)

PSD

5190MHz

25/06/2019

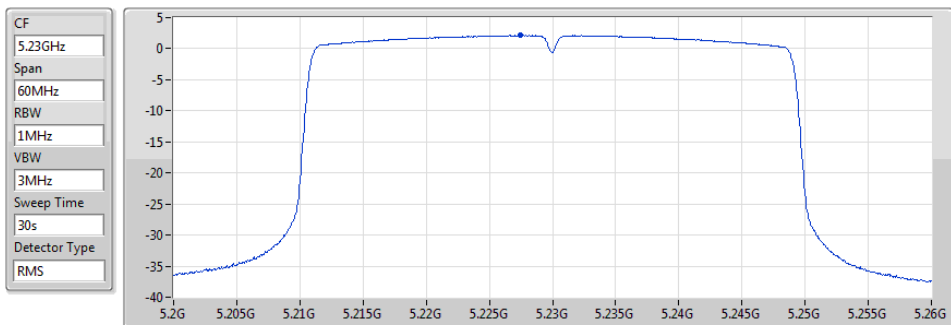


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)

PSD

5230MHz

25/06/2019

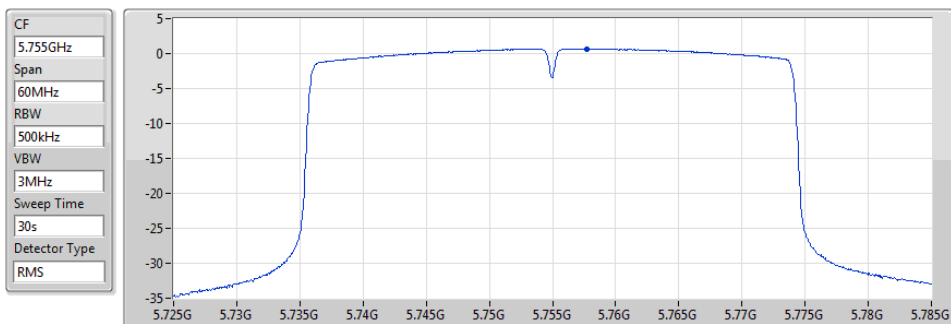


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)

PSD

5755MHz

25/06/2019

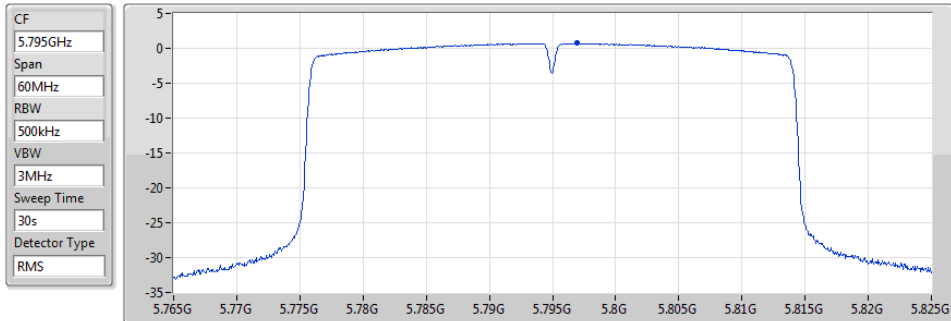


802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)

PSD

5795MHz

25/06/2019



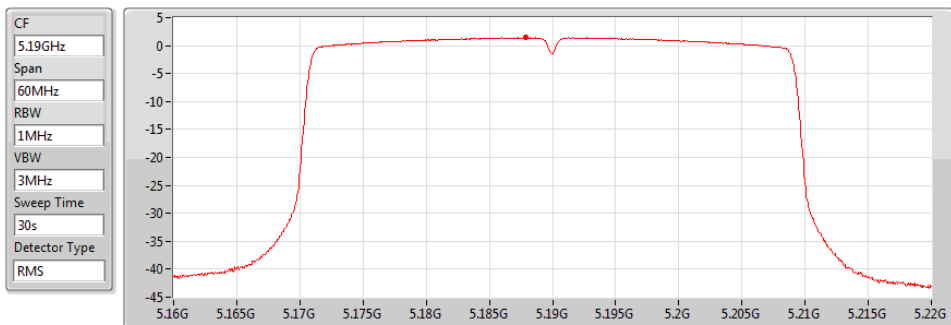
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.71	0.71	0.71

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

5190MHz

25/06/2019



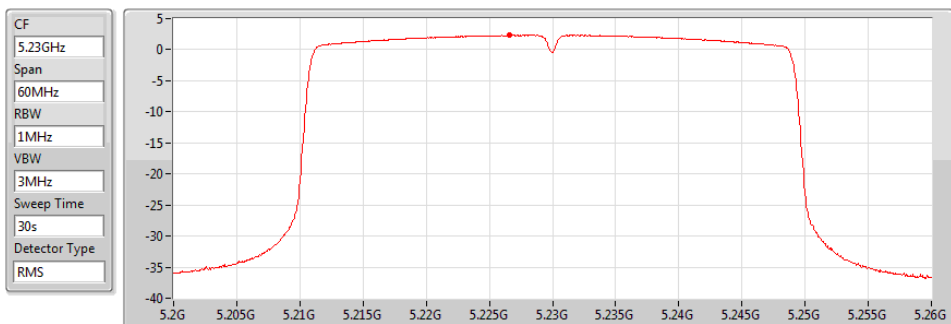
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.41	1.41		1.41

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

5230MHz

25/06/2019



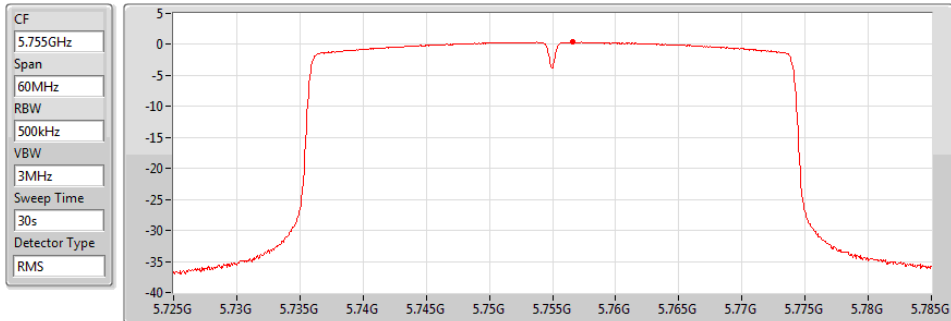
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.34	2.34		2.34

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

5755MHz

25/06/2019



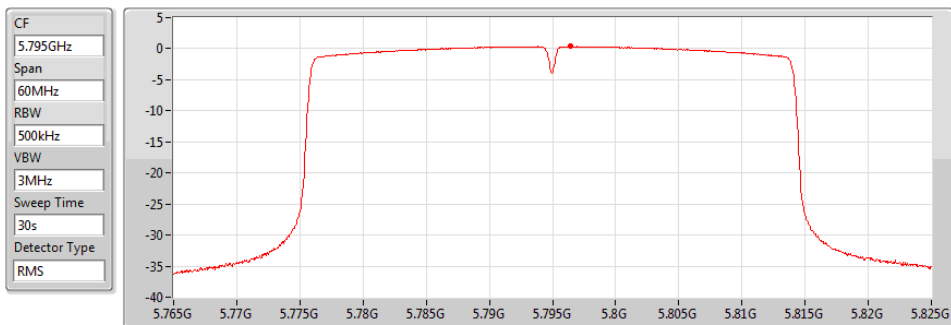
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.36	0.36		0.36

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

5795MHz

25/06/2019



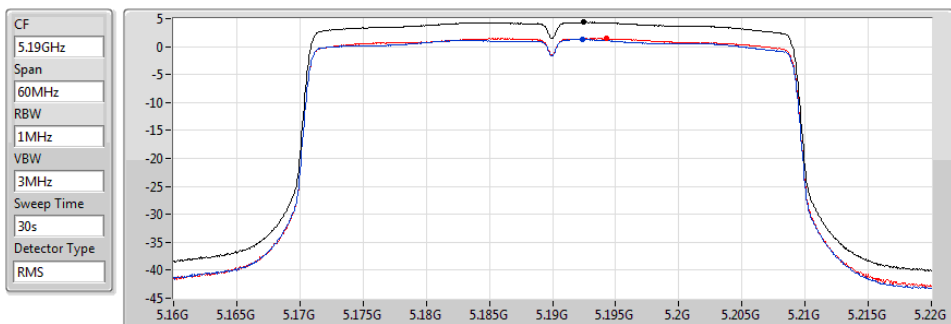
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.36	0.36		0.36

802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5190MHz

25/06/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.33	4.33	1.26	1.45

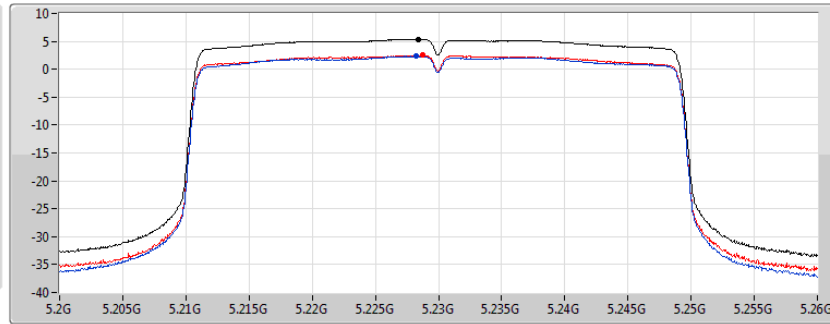
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5230MHz

25/06/2019

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.39	5.39	2.32	2.50

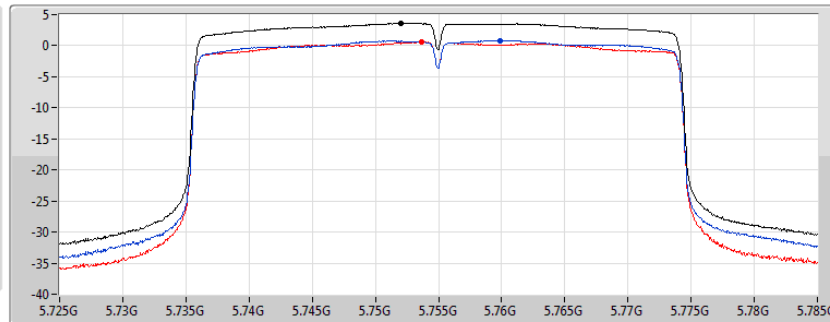
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5755MHz

25/06/2019

CF
5.755GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.60	3.60	0.81	0.57

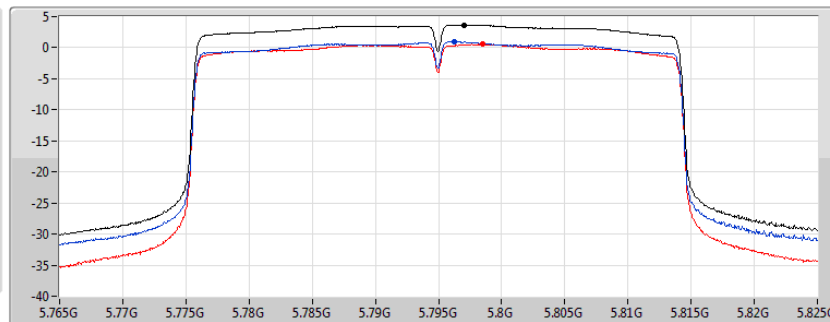
802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

5795MHz

25/06/2019

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
30s
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.68	3.68	0.95	0.53