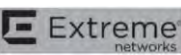


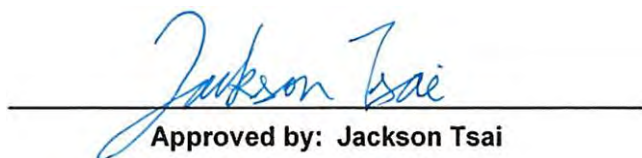


FCC Radio Test Report

FCC ID : QXO-AP3000
Equipment : Access Point
Brand Name :  Extreme
networks or Extreme Networks
Model Name : AP3000-WW, AP3000X-WW
Applicant : Extreme Networks, Inc.
2121 RDU Center Drive, Morrisville,
NC 27560, United States
Manufacturer : Extreme Networks, Inc.
2121 RDU Center Drive, Morrisville,
NC 27560, United States
Standard : 47 CFR FCC Part 15.247

The product was received on Apr. 07, 2022, and testing was started from Apr. 25, 2022 and completed on Sep. 12, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, 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	11
1.3 Testing Location Information	11
1.4 Measurement Uncertainty	11
2 TEST CONFIGURATION OF EUT.....	12
2.1 Test Channel Mode	12
2.2 The Worst Case Measurement Configuration	20
2.3 Accessories	21
2.4 Support Equipment.....	21
2.5 Test Setup Diagram	22
3 TRANSMITTER TEST RESULT	27
3.1 AC Power-line Conducted Emissions	27
3.2 DTS Bandwidth.....	29
3.3 Maximum Conducted Output Power	30
3.4 Power Spectral Density	32
3.5 Emissions in Non-restricted Frequency Bands	33
3.6 Emissions in Restricted Frequency Bands.....	34
4 TEST EQUIPMENT AND CALIBRATION DATA.....	38
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY	
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS	
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS	
APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION	
APPENDIX H. TEST PHOTOS	
PHOTOGRAPHS OF EUT V03	



History of this test report

Report No.	Version	Description	Issued Date
FR232478AC	01	Initial issue of report	Nov. 18, 2022
FR232478AC	02	1.External Antenna (AP3000X) were added.(Ant.11,12) 2.Photographs Of EUT was update. (This report is the latest version replacing for the report issued on Nov. 18, 2022.)	Dec. 26, 2022

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	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

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

Comments and explanations:

None

Reviewed by: Barry Hsiao

Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), ax(HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ax(HEW40)	2422-2452	3-9 [7]

Non-Beamforming_Internal, Dipole, Omni, Panel

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX(Port2)
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	1TX(Port2)
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX(Port2)
2.4-2.4835GHz	802.11ax HEW20	20	2TX
2.4-2.4835GHz	802.11ax HEW40	40	1TX(Port2)
2.4-2.4835GHz	802.11ax HEW40	40	2TX

Beamforming_Internal, Dipole, Omni, Panel

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	2TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Internal Antenna (AP3000)

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

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

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

Note 1: The EUT has five antennas.

For 2.4GHz function:

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

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

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

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

For 5GHz function:

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

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

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

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

For 6GHz function:

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

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

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

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

For BT function:

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

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

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX)

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

External Antenna (AP3000X)

Ant.	Brand	Model Name	Antenna Type	Connector	Remark
1	WNC	ML2452-APA2-02	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
2	WNC	ML2452-APA2-02	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
3	AWAN	7102A0545000	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
4	AWAN	7102A0545000	Dipole	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
5	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	Radio 1_5G+ Radio 2_2.4G
6	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	Radio 1_5G+ Radio 2_2.4G
7	MARS	MA-WC2458-2H	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
8	AWAN	7102A0547000	Dipole	I-Pex	Radio 2_6E
9	AWAN	7102A0546000	Dipole	I-Pex	Radio 2_6E
10	Senao	5718A0694300	PIFA	I-Pex	Radio 3_ BT+802.15.4
11	Ventev	M6030040O1D3620DP	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G
12	Ventev	M6040060O2D2402	Panel	Reverse SMA	Radio 1_5G+ Radio 2_2.4G

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

Note 1: The EUT has twelve antennas.

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

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

For 2.4GHz function:

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

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

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

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

For 5GHz function:

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

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

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

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

For 6GHz function:

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

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

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

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

For BT function:

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

Ant. 10 could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX)

Ant. 10 could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Beamforming Function	☒ With beamforming	☐ Without beamforming	
Resource Unit(802.11ax)	☒ Full RU	☐ Partial RU	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
☐	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming_Internal

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_1TX(Port2)	0.949	0.23	12.419m	100
802.11b_Nss1,(1Mbps)_2TX	0.949	0.23	12.419m	100
802.11g_Nss1,(6Mbps)_1TX(Port2)	0.951	0.22	2.066m	1k
802.11g_Nss1,(6Mbps)_2TX	0.951	0.22	2.066m	1k
802.11ax HEW20_Nss2,(MCS0)_1TX(Port2)	0.978	0.1	1.488m	1k
802.11ax HEW20_Nss2,(MCS0)_2TX	0.978	0.1	1.488m	1k
802.11ax HEW40_Nss2,(MCS0)_1TX(Port2)	0.961	0.17	782.188u	3k
802.11ax HEW40_Nss2,(MCS0)_2TX	0.961	0.17	782.188u	3k

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

Non-Beamforming_Dipole

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_1TX(Port2)	0.949	0.23	12.418m	100
802.11b_Nss1,(1Mbps)_2TX	0.949	0.23	12.418m	100
802.11g_Nss1,(6Mbps)_1TX(Port2)	0.949	0.23	2.065m	1k
802.11g_Nss1,(6Mbps)_2TX	0.949	0.23	2.065m	1k
802.11ax HEW20_Nss2,(MCS0)_1TX(Port2)	0.979	0.09	1.488m	1k
802.11ax HEW20_Nss2,(MCS0)_2TX	0.979	0.09	1.488m	1k
802.11ax HEW40_Nss2,(MCS0)_1TX(Port2)	0.962	0.17	781.25u	3k
802.11ax HEW40_Nss2,(MCS0)_2TX	0.962	0.17	781.25u	3k

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

Non-Beamforming_Omni

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_1TX(Port2)	0.949	0.23	12.418m	100
802.11b_Nss1,(1Mbps)_2TX	0.949	0.23	12.418m	100
802.11g_Nss1,(6Mbps)_1TX(Port2)	0.949	0.23	2.065m	1k
802.11g_Nss1,(6Mbps)_2TX	0.949	0.23	2.065m	1k
802.11ax HEW20_Nss2,(MCS0)_1TX(Port2)	0.979	0.09	1.488m	1k
802.11ax HEW20_Nss2,(MCS0)_2TX	0.979	0.09	1.488m	1k
802.11ax HEW40_Nss2,(MCS0)_1TX(Port2)	0.962	0.17	781.25u	3k
802.11ax HEW40_Nss2,(MCS0)_2TX	0.962	0.17	781.25u	3k

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

Non-Beamforming_Panel

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_1TX(Port2)	0.949	0.23	12.418m	100
802.11b_Nss1,(1Mbps)_2TX	0.949	0.23	12.418m	100
802.11g_Nss1,(6Mbps)_1TX(Port2)	0.949	0.23	2.065m	1k
802.11g_Nss1,(6Mbps)_2TX	0.949	0.23	2.065m	1k
802.11ax HEW20_Nss2,(MCS0)_1TX(Port2)	0.979	0.09	1.488m	1k
802.11ax HEW20_Nss2,(MCS0)_2TX	0.979	0.09	1.488m	1k
802.11ax HEW40_Nss2,(MCS0)_1TX(Port2)	0.962	0.17	781.25u	3k
802.11ax HEW40_Nss2,(MCS0)_2TX	0.962	0.17	781.25u	3k

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

Beamforming_Internal

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.95	0.22	2.926m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.949	0.23	2.926m	1k

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

Beamforming_Dipole

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.882	0.55	1.498m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.959	0.18	4.358m	300

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

Beamforming_Omni

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.899	0.46	1.498m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.969	0.14	4.358m	300

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

Beamforming_Panel

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.876	0.57	1.498m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.958	0.19	4.358m	300

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

1.1.5 Table for Multiple Listing

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

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

1.2 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

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

- ♦ KDB 558074 D01 v05r02
- ♦ KDB 662911 D01 v02r01
- ♦ KDB 662911 D03 v01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO01-HY	Jack	22.0~22.5°C / 55~57%	12/May/2022~13/May/2022
RF Conducted	TH01-HY	Johnny	22.3~25.6°C / 51~60%	09/May/2022~12/Sep/2022
Radiated	03CH02-HY	Lego	21.5~22.3°C / 51~56%	25/Apr/2022~06/Sep/2022
Radiated (Co-location)	03CH03-HY	Edward	21.5~22.3°C / 51~56%	22/Aug/2022
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Non-Beamforming

Test Software Version	accessMTool_REL_3_2_1_5
-----------------------	-------------------------

Non-Beamforming_Internal

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	83
2417MHz	85
2437MHz	87
2457MHz	86
2462MHz	85
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	87
2437MHz	87
2457MHz	87
2462MHz	84
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	70
2417MHz	76
2437MHz	88
2457MHz	74
2462MHz	68
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	66
2417MHz	66
2437MHz	85
2457MHz	69
2462MHz	66
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	70
2417MHz	76
2437MHz	85
2457MHz	71
2462MHz	57



Mode	Power Setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	63
2417MHz	66
2437MHz	79
2457MHz	69
2462MHz	62
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	64
2427MHz	65
2437MHz	70
2447MHz	62
2452MHz	63
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	62
2427MHz	61
2437MHz	68
2447MHz	61
2452MHz	60

Non-Beamforming_Dipole

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	77
2417MHz	78
2437MHz	84
2457MHz	82
2462MHz	81
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	72
2417MHz	77
2437MHz	78
2457MHz	78
2462MHz	78
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	60
2417MHz	67



Mode	Power Setting
2437MHz	79
2457MHz	67
2462MHz	62
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	58
2417MHz	57
2437MHz	78
2457MHz	57
2462MHz	57
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	63
2417MHz	68
2437MHz	80
2457MHz	68
2462MHz	51
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	63
2417MHz	66
2437MHz	79
2457MHz	66
2462MHz	60
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	56
2427MHz	59
2437MHz	61
2447MHz	59
2452MHz	57
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	57
2427MHz	56
2437MHz	62
2447MHz	60
2452MHz	56

**Non-Beamforming_Omni**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	77
2437MHz	77
2462MHz	79
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	69
2417MHz	69
2437MHz	72
2462MHz	72
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	59
2417MHz	66
2437MHz	81
2457MHz	66
2462MHz	60
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	56
2417MHz	63
2437MHz	79
2457MHz	63
2462MHz	60
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	48
2417MHz	63
2437MHz	78
2457MHz	63
2462MHz	48
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	55
2417MHz	62
2437MHz	75
2457MHz	62
2462MHz	57
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	57



Mode	Power Setting
2427MHz	57
2437MHz	58
2447MHz	53
2452MHz	51
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	53
2427MHz	56
2437MHz	61
2447MHz	59
2452MHz	55

Non-Beamforming_Panel

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port2)	-
2412MHz	77
2417MHz	78
2437MHz	86
2457MHz	78
2462MHz	77
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	73
2417MHz	77
2437MHz	87
2457MHz	80
2462MHz	77
802.11g_Nss1,(6Mbps)_1TX(Port2)	-
2412MHz	59
2417MHz	68
2437MHz	78
2457MHz	65
2462MHz	61
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	55
2417MHz	59
2437MHz	77
2457MHz	65



Mode	Power Setting
2462MHz	57
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-
2412MHz	50
2417MHz	61
2437MHz	76
2457MHz	64
2462MHz	48
802.11ax HEW20_Nss2,(MCS0)_2TX	-
2412MHz	56
2417MHz	62
2437MHz	73
2457MHz	62
2462MHz	55
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-
2422MHz	48
2427MHz	49
2437MHz	56
2447MHz	52
2452MHz	53
802.11ax HEW40_Nss2,(MCS0)_2TX	-
2422MHz	52
2427MHz	52
2437MHz	57
2447MHz	53
2452MHz	62

**Beamforming**

Test Software Version	Dos 6.1
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Beamforming_Internal

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	60
2417MHz	69
2437MHz	80
2457MHz	68
2462MHz	62
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	58
2427MHz	58
2437MHz	65
2447MHz	62
2452MHz	62

Beamforming_Dipole

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	59
2417MHz	65
2437MHz	78
2457MHz	63
2462MHz	53
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	55
2427MHz	55
2437MHz	59
2447MHz	61
2452MHz	53

**Beamforming_Omni**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	56
2417MHz	62
2437MHz	72
2457MHz	58
2462MHz	55
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	51
2427MHz	51
2437MHz	58
2447MHz	56
2452MHz	52

Beamforming_Panel

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	52
2417MHz	58
2437MHz	72
2457MHz	59
2462MHz	52
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	50
2427MHz	51
2437MHz	55
2447MHz	47
2452MHz	48

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

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

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

2.3 Accessories

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

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

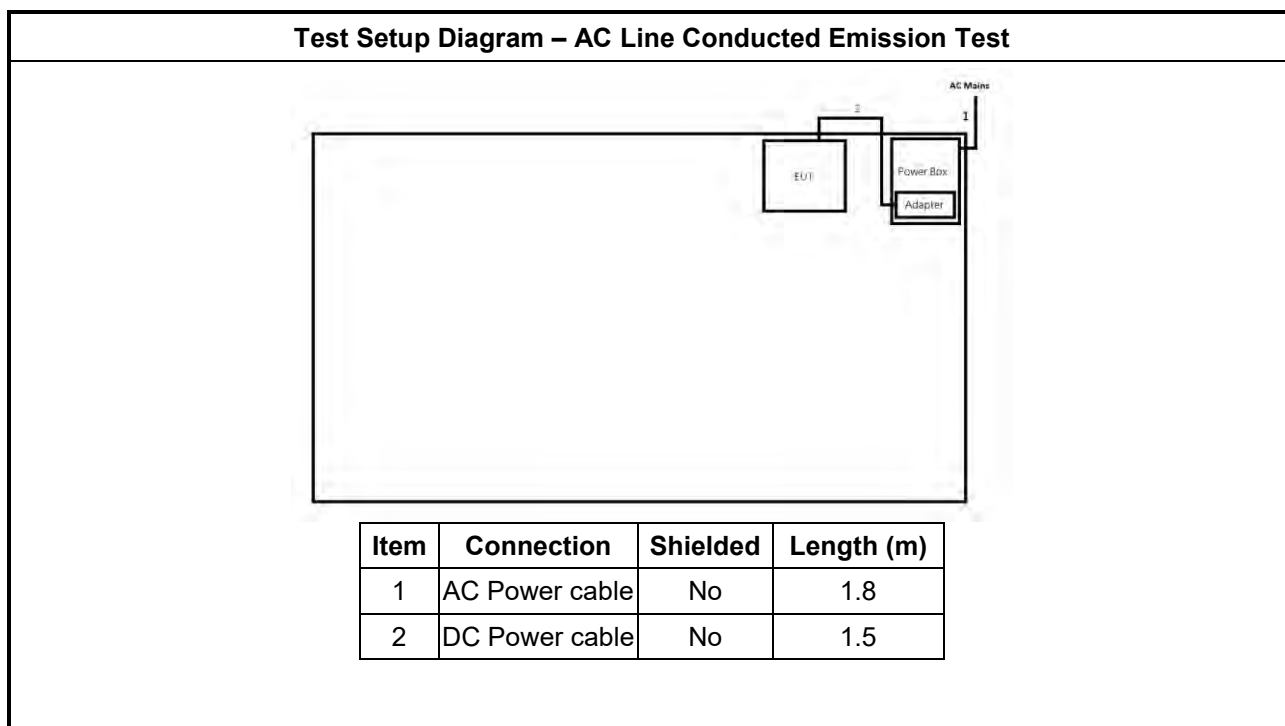
2.4 Support Equipment

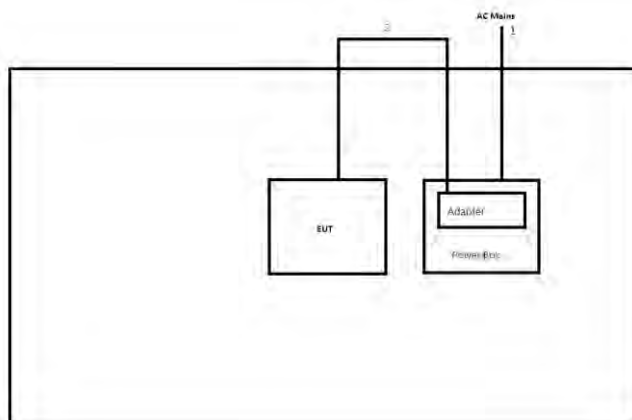
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	AC Power Cable	Power sync	PW-GPC180-3	-	-
2	AC Adapter	Powertron Electronics Corp.	PA1024-120IB200	-	-

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

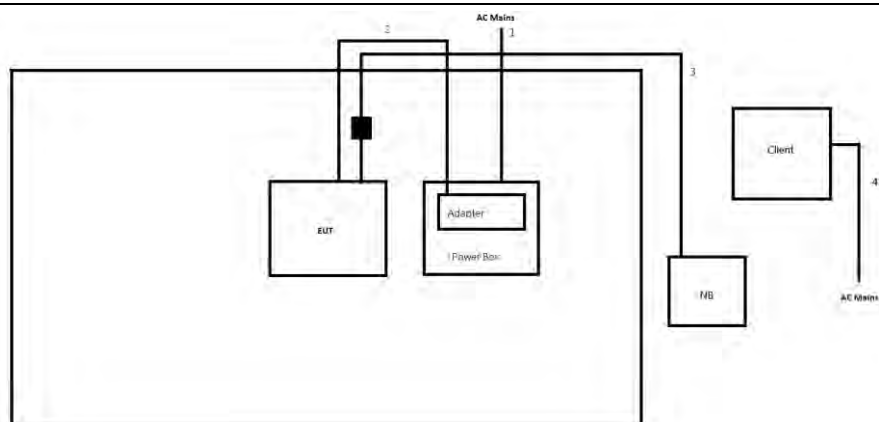
Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	5220M	-	-
2	Adapter for NB	HP	PPP012L-E	-	-
3	Adapter	Powertron Electronics Corp.	PA1024-120IB200	-	-
4	Omni Antenna	Extreme	ML-2452-HPAG5A8-01	-	-
5	Panel Antenna	MARS	MA-WC2458-2H	-	-

2.5 Test Setup Diagram

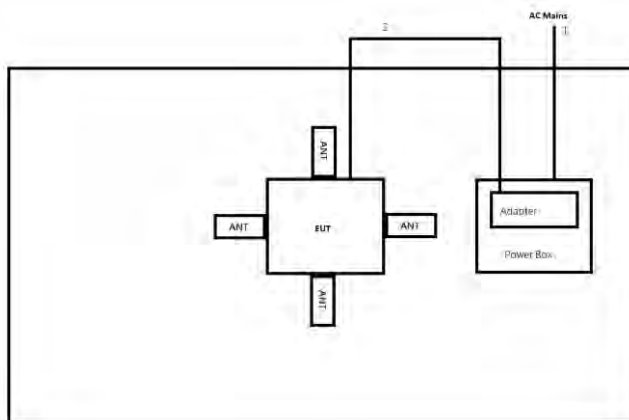


Test Setup Diagram - Radiated Test (Non-Beamforming_Internal)


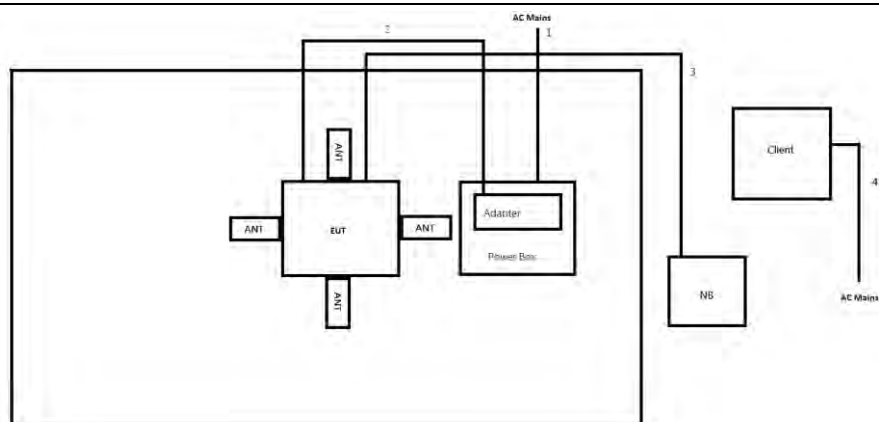
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Beamforming_Internal)


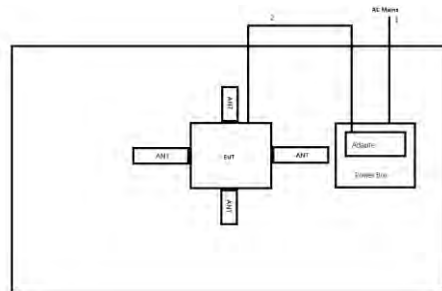
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RJ45 Cable	No	10.0
4	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Non-Beamforming_Dipole)


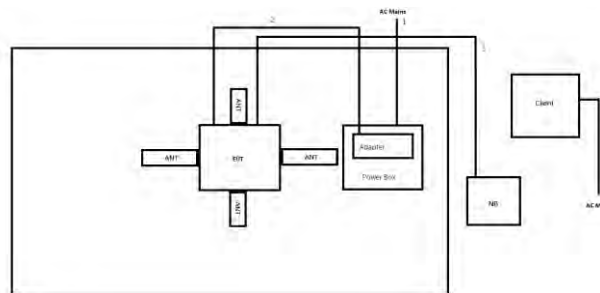
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Beamforming_Dipole)


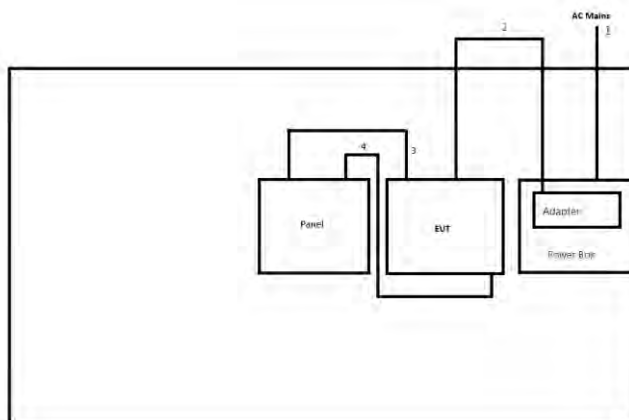
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	RJ45 Cable	No	10.0
4	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Non-Beamforming_Omni)


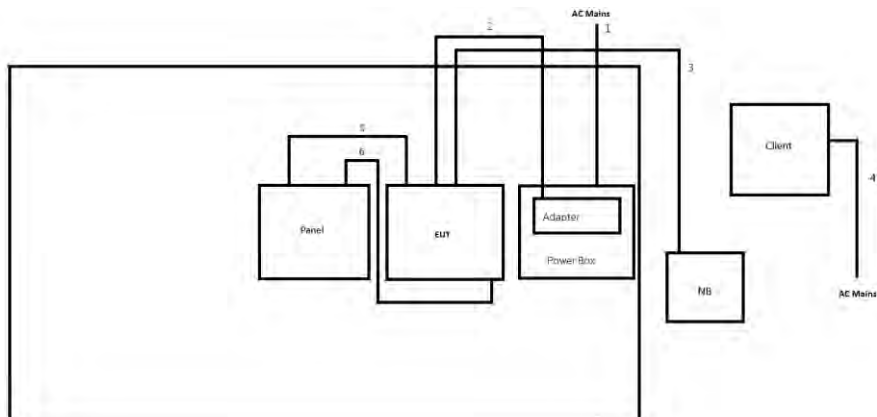
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5

Test Setup Diagram - Radiated Test (Beamforming_Omni)


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

Test Setup Diagram - Radiated Test (Non-Beamforming_Panel)


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

Test Setup Diagram - Radiated Test (Beamforming_Panel)


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

3 Transmitter Test Result

3.1 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

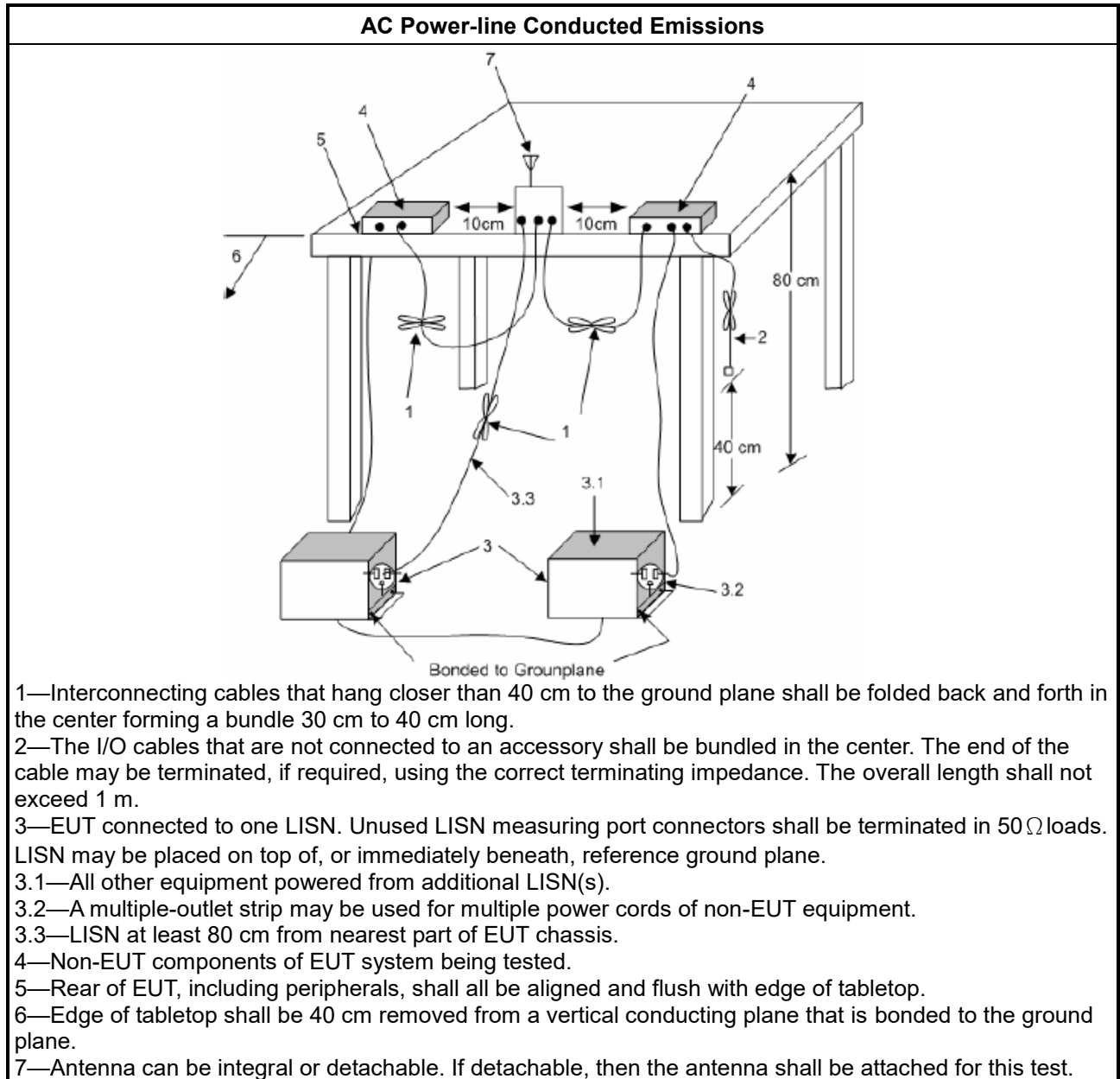
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

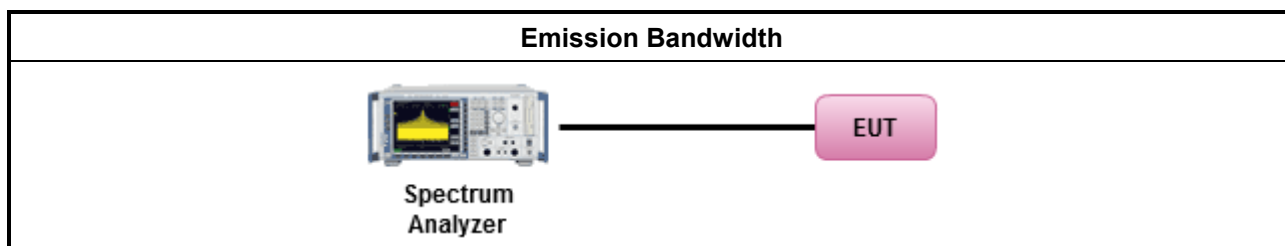
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied 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	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

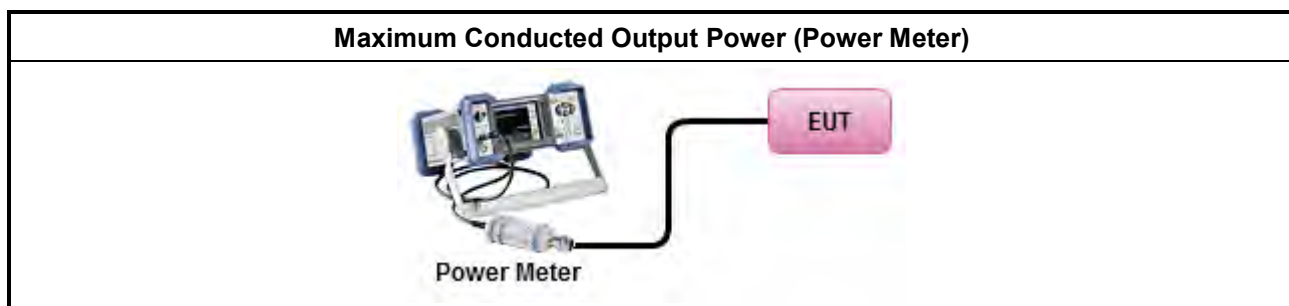
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a 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 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) ≤ 8 dBm/3kHz

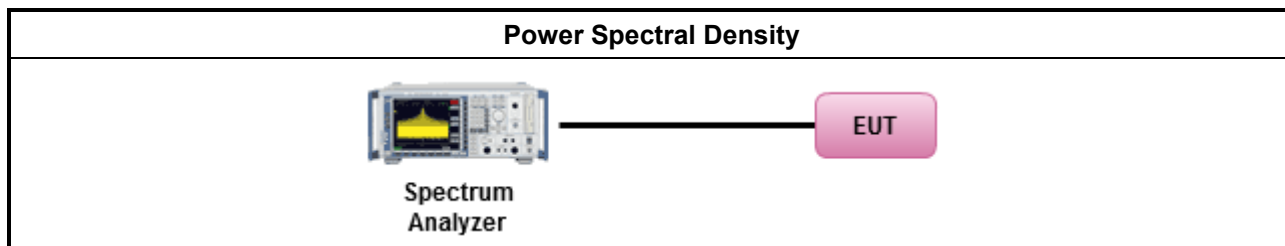
3.4.2 Measuring Instruments

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. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

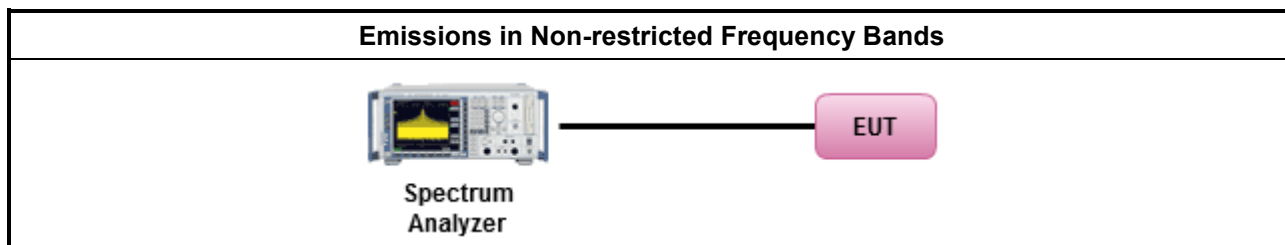
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions 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.

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

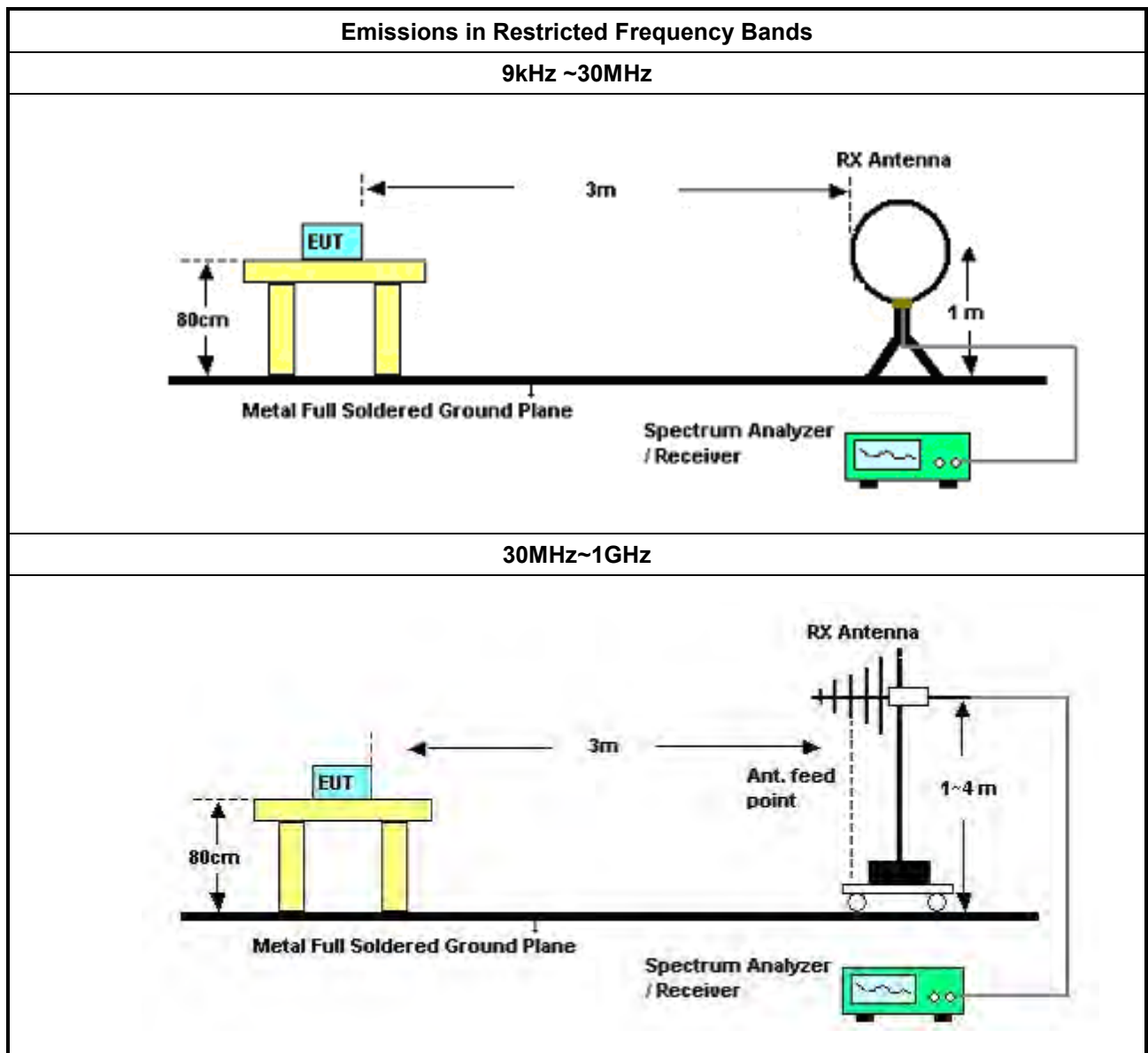
Test Method	
	The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].
	Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	For the transmitter unwanted emissions shall be measured using following options below:
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	For the transmitter band-edge emissions shall be measured using following options below:
	Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	Use the following spectrum analyzer settings:
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

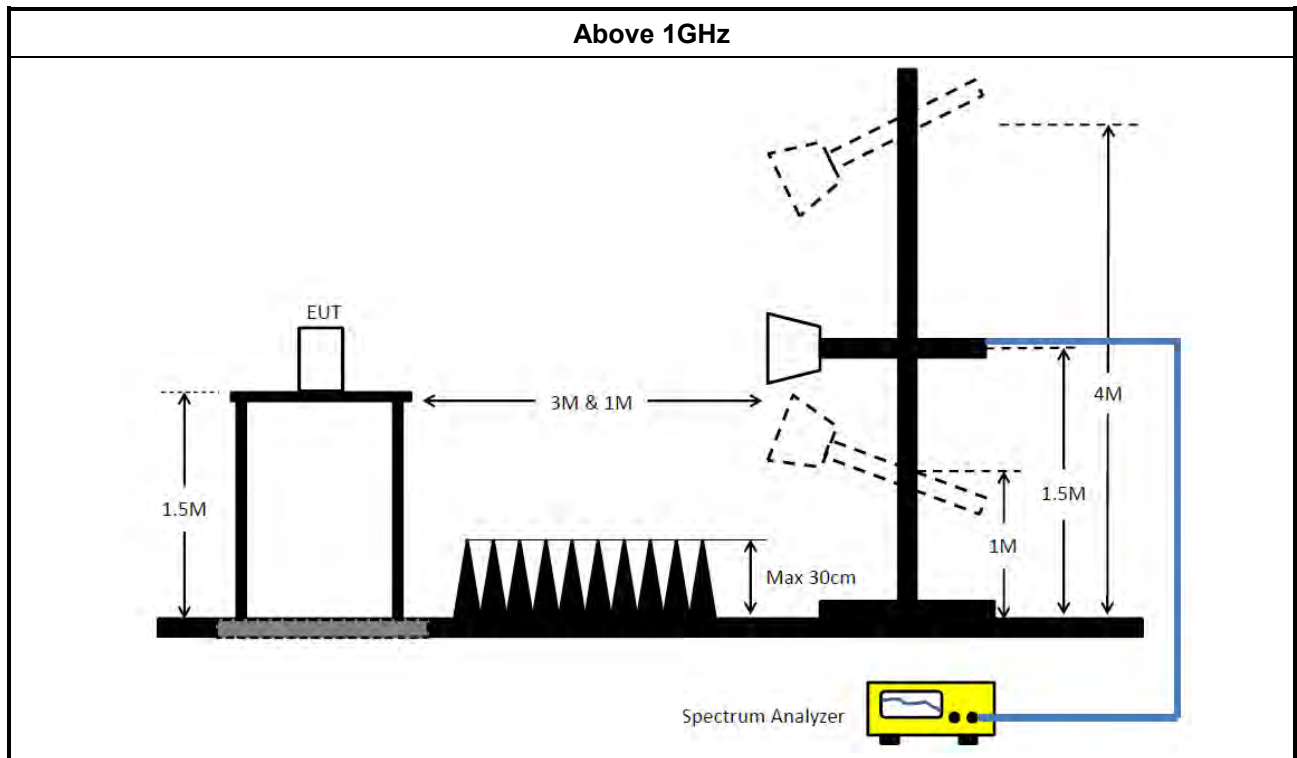
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	02/Jun/2021	01/Jun/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	12/Jan/2022	11/Jan/2023
Cable	MTJ	RG 142	CO01-cable-01	9 kHz ~ 1GHz	12/Jul/2021	11/Jul/2022
Pulse Limiter	R&S	EHS3-Z2	100920	9kHz ~ 30MHz	29/Oct/2021	28/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	01/Apr/2022	31/Mar/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	21/Feb/2022	20/Feb/2023
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	21/Feb/2022	20/Feb/2023
SENSE-15247_DTS	Sporton	V5.10.8.3	N/A	N/A	N/A	N/A

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	02/Aug/2021	01/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	01/Aug/2021	31/Jul/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	31/Jul/2022	30/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	30/Jul/2022	29/Jul/2023
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	08/Apr/2022	07/Apr/2023
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2021	28/Jun/2022
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	28/Jun/2022	27/Jun/2023
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	03/Nov/2021	02/Nov/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	14/Sep/2021	13/Sep/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 01543	1GHz~18GHz	04/Jun/2021	03/Jun/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	04/May/2022	03/May/2023
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	04/May/2022	03/May/2023
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192 /4	1GHz~40GHz	01/Apr/2022	31/Mar/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz~40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	02/Jun/2021	01/Jun/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	13/May/2022	12/May/2023
SENSE-15247_DTS	Sporton	V5.10.7.15	N/A	N/A	N/A	N/A

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	02/Aug/2022	01/Aug/2023
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	12/Oct/2021	11/Oct/2022
Microwave Preamplifier	Agilent	8449BA	3008A02326	1 GHz ~ 26.5 GHz	14/Jul/2022	13/Jul/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz ~18GHz	14/Sep/2021	13/Sep/2022
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	03CH03-cable-01	1GHz~40GHz	27/Jul/2022	26/Jul/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
SENSE-EMI	Sporton	V5.10.8.6	NA	NA	NA	NA



Conducted Emissions at Powerline

Appendix A

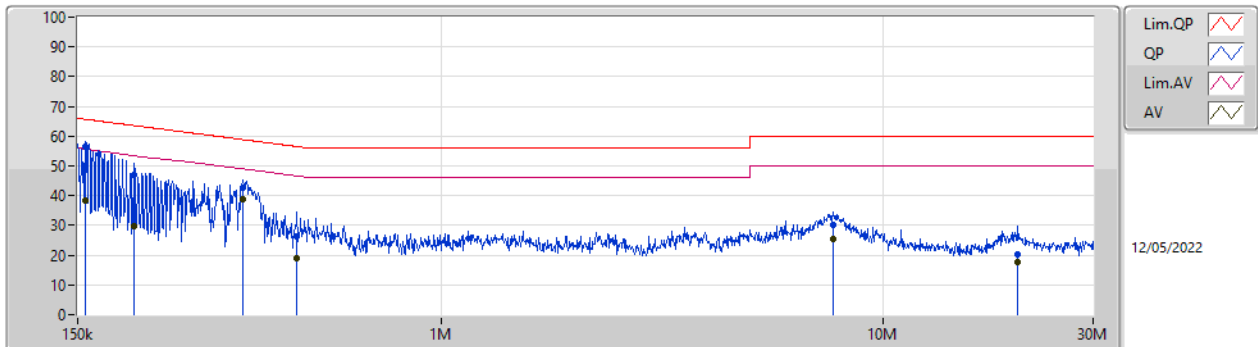
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	156.109k	56.54	65.67	-9.13	Line

Mode Configure

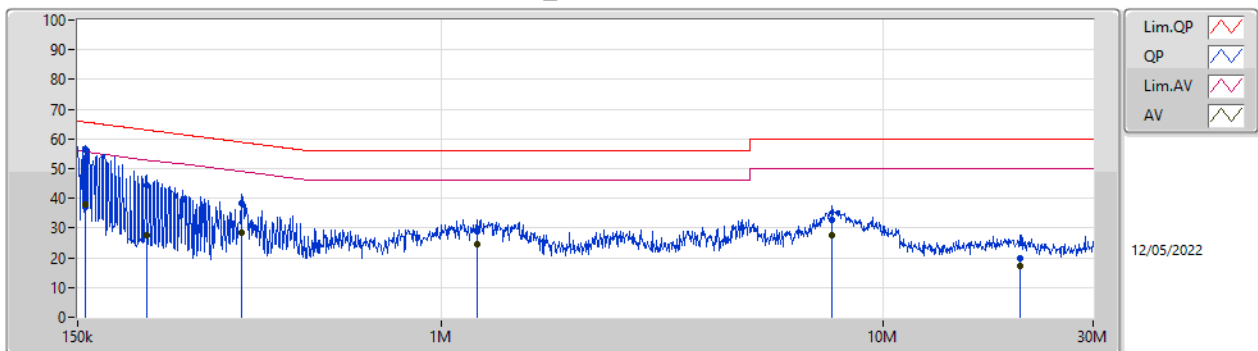
Mode	Result	Type	Freq (Hz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	156.109k	56.54	65.67	-9.13	Line	-
Mode 1	Pass	AV	156.109k	38.47	55.67	-17.20	Line	-
Mode 1	Pass	QP	201.551k	47.05	63.55	-16.50	Line	-
Mode 1	Pass	AV	201.551k	29.69	53.55	-23.86	Line	-
Mode 1	Pass	QP	355.282k	42.75	58.83	-16.08	Line	-
Mode 1	Pass	AV	355.282k	38.70	48.83	-10.13	Line	-
Mode 1	Pass	QP	471.701k	26.17	56.48	-30.31	Line	-
Mode 1	Pass	AV	471.701k	18.86	46.48	-27.62	Line	-
Mode 1	Pass	QP	7.745M	30.31	60.00	-29.69	Line	-
Mode 1	Pass	AV	7.745M	25.32	50.00	-24.68	Line	-
Mode 1	Pass	QP	20.269M	20.43	60.00	-39.57	Line	-
Mode 1	Pass	AV	20.269M	17.80	50.00	-32.20	Line	-
Mode 1	Pass	QP	156.109k	56.41	65.67	-9.26	Neutral	-
Mode 1	Pass	AV	156.109k	37.83	55.67	-17.84	Neutral	-
Mode 1	Pass	QP	214.845k	44.47	63.02	-18.55	Neutral	-
Mode 1	Pass	AV	214.845k	27.39	53.02	-25.63	Neutral	-
Mode 1	Pass	QP	353.867k	38.51	58.87	-20.36	Neutral	-
Mode 1	Pass	AV	353.867k	28.37	48.87	-20.50	Neutral	-
Mode 1	Pass	QP	1.205M	29.00	56.00	-27.00	Neutral	-
Mode 1	Pass	AV	1.205M	24.63	46.00	-21.37	Neutral	-
Mode 1	Pass	QP	7.683M	32.63	60.00	-27.37	Neutral	-
Mode 1	Pass	AV	7.683M	27.44	50.00	-22.56	Neutral	-
Mode 1	Pass	QP	20.431M	19.99	60.00	-40.01	Neutral	-
Mode 1	Pass	AV	20.431M	17.17	50.00	-32.83	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)				
QP	156.109k	56.54	65.67	-9.13	19.36	Line	-	37.18	9.60	0.07	9.69				
AV	156.109k	38.47	55.67	-17.20	19.36	Line	-	19.11	9.60	0.07	9.69				
QP	201.551k	47.05	63.55	-16.50	19.37	Line	-	27.68	9.61	0.07	9.69				
AV	201.551k	29.69	53.55	-23.86	19.37	Line	-	10.32	9.61	0.07	9.69				
QP	355.282k	42.75	58.83	-16.08	19.39	Line	-	23.36	9.60	0.09	9.70				
AV	355.282k	38.70	48.83	-10.13	19.39	Line	-	19.31	9.60	0.09	9.70				
QP	471.701k	26.17	56.48	-30.31	19.39	Line	-	6.78	9.60	0.09	9.70				
AV	471.701k	18.86	46.48	-27.62	19.39	Line	-	-0.53	9.60	0.09	9.70				
QP	7.745M	30.31	60.00	-29.69	19.56	Line	-	10.75	9.64	0.21	9.71				
AV	7.745M	25.32	50.00	-24.68	19.56	Line	-	5.76	9.64	0.21	9.71				
QP	20.269M	20.43	60.00	-39.57	19.64	Line	-	0.79	9.59	0.32	9.73				
AV	20.269M	17.80	50.00	-32.20	19.64	Line	-	-1.84	9.59	0.32	9.73				

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)				
QP	156.109k	56.41	65.67	-9.26	19.35	Neutral	-	37.06	9.59	0.07	9.69				
AV	156.109k	37.83	55.67	-17.84	19.35	Neutral	-	18.48	9.59	0.07	9.69				
QP	214.845k	44.47	63.02	-18.55	19.35	Neutral	-	25.12	9.59	0.07	9.69				
AV	214.845k	27.39	53.02	-25.63	19.35	Neutral	-	8.04	9.59	0.07	9.69				
QP	353.867k	38.51	58.87	-20.36	19.37	Neutral	-	19.14	9.58	0.09	9.70				
AV	353.867k	28.37	48.87	-20.50	19.37	Neutral	-	9.00	9.58	0.09	9.70				
QP	1.205M	29.00	56.00	-27.00	19.39	Neutral	-	9.61	9.59	0.11	9.69				
AV	1.205M	24.63	46.00	-21.37	19.39	Neutral	-	5.24	9.59	0.11	9.69				
QP	7.683M	32.63	60.00	-27.37	19.56	Neutral	-	13.07	9.64	0.21	9.71				
AV	7.683M	27.44	50.00	-22.56	19.56	Neutral	-	7.88	9.64	0.21	9.71				
QP	20.431M	19.99	60.00	-40.01	19.73	Neutral	-	0.26	9.68	0.32	9.73				
AV	20.431M	17.17	50.00	-32.83	19.73	Neutral	-	-2.56	9.68	0.32	9.73				

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	7.05M	10.47M	10M5G1D	7.025M	10.42M
802.11b_Nss1,(1Mbps)_2TX	8M	11.444M	11M4G1D	7.025M	10.37M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.325M	17.091M	17M1D1D	16.325M	16.742M
802.11g_Nss1,(6Mbps)_2TX	16.325M	17.066M	17M1D1D	16.325M	16.692M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.975M	19.14M	19M1D1D	18.9M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.95M	19.115M	19M1D1D	18.8M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.45M	37.681M	37M7D1D	37.35M	37.631M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.65M	37.881M	37M9D1D	36.7M	37.681M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

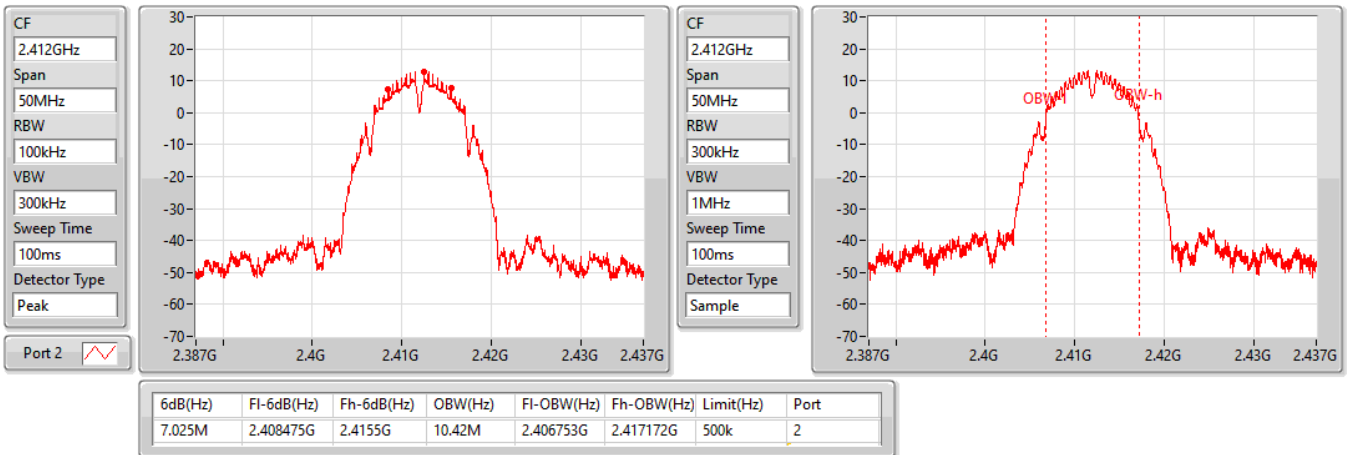
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7.025M	10.42M
2437MHz	Pass	500k			7.05M	10.47M
2462MHz	Pass	500k			7.025M	10.445M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	11.144M	7.025M	10.395M
2437MHz	Pass	500k	8M	11.444M	7.05M	10.37M
2462MHz	Pass	500k	7.025M	10.795M	7.05M	10.395M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.325M	16.742M
2437MHz	Pass	500k			16.325M	17.091M
2462MHz	Pass	500k			16.325M	16.742M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.742M	16.325M	16.767M
2437MHz	Pass	500k	16.325M	16.892M	16.325M	17.066M
2462MHz	Pass	500k	16.325M	16.692M	16.325M	16.742M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.975M	19.065M
2437MHz	Pass	500k			18.9M	19.14M
2462MHz	Pass	500k			18.95M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M	18.8M	19.04M
2437MHz	Pass	500k	18.925M	19.04M	18.875M	19.115M
2462MHz	Pass	500k	18.9M	19.065M	18.85M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			37.45M	37.681M
2437MHz	Pass	500k			37.35M	37.681M
2452MHz	Pass	500k			37.45M	37.631M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.4M	37.731M	37.65M	37.881M
2437MHz	Pass	500k	37M	37.731M	36.7M	37.731M
2452MHz	Pass	500k	36.9M	37.681M	37.45M	37.781M

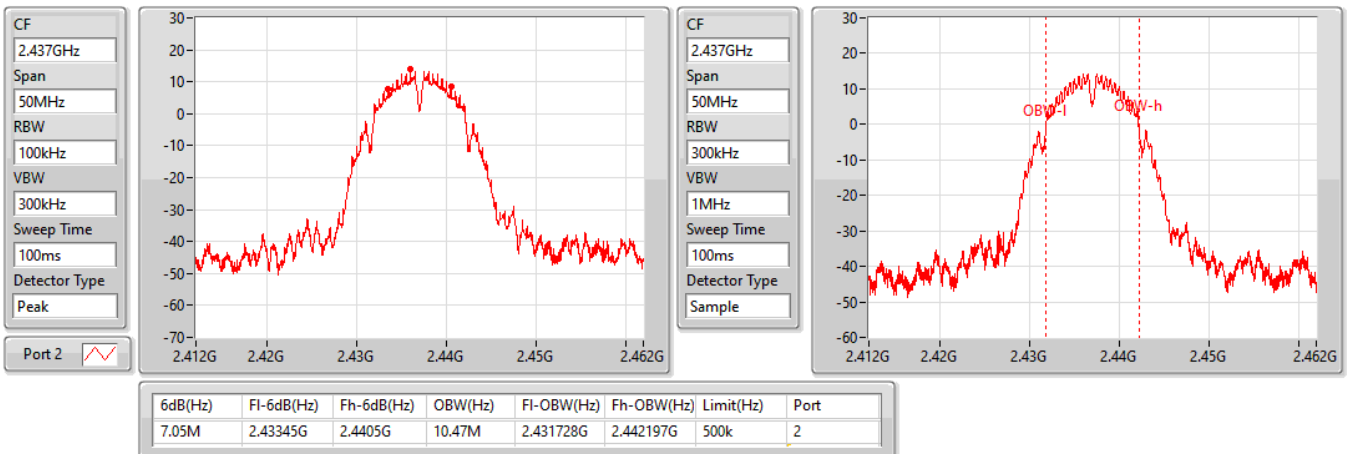
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2412MHz

09/05/2022


802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2437MHz

09/05/2022

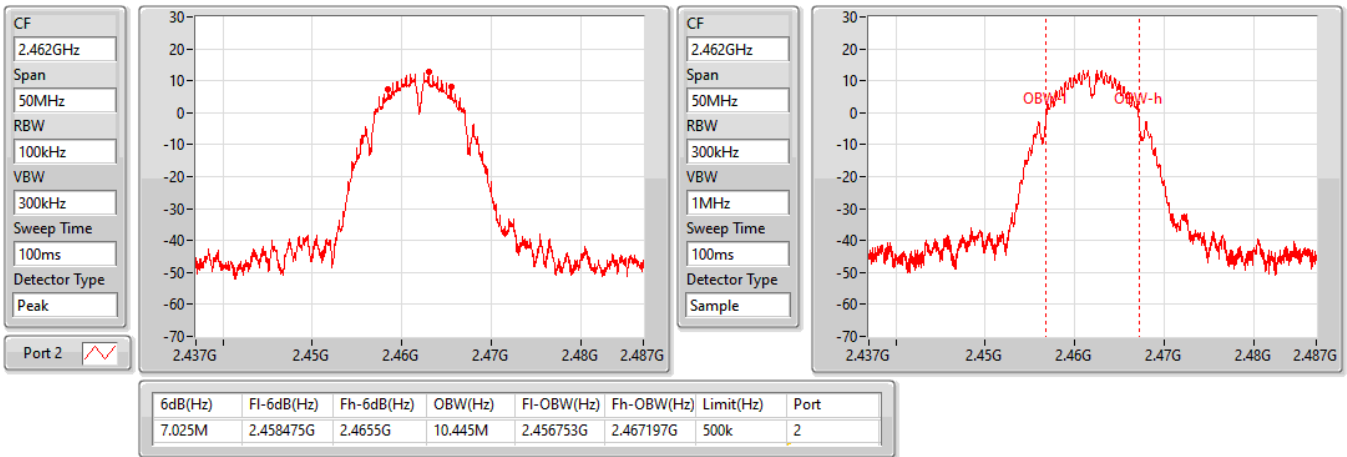


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2462MHz

09/05/2022

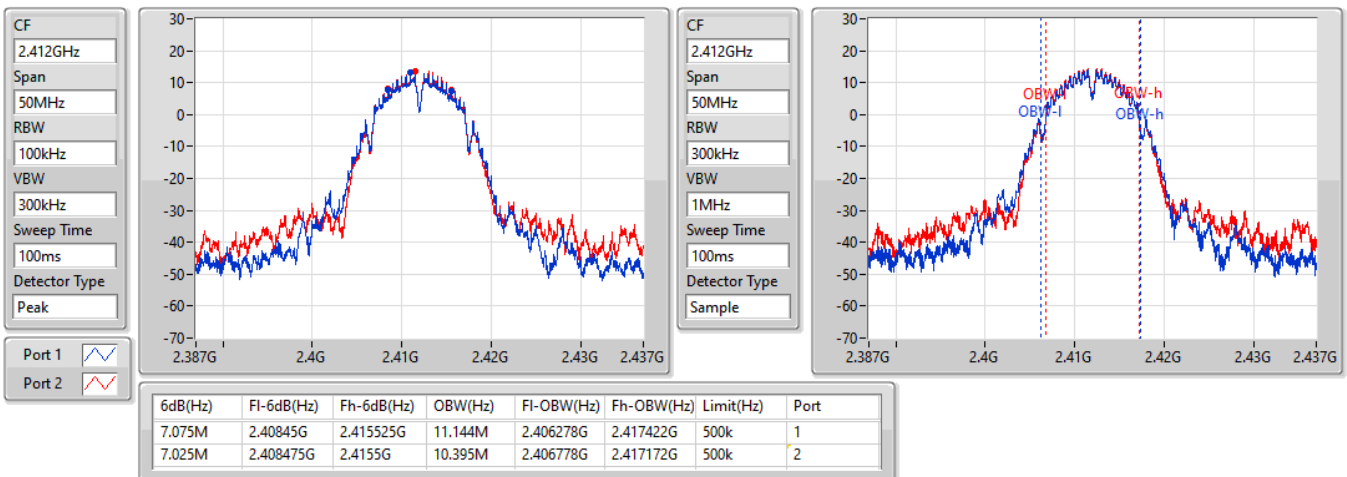


802.11b_Nss1,(1Mbps)_2TX

EBW

2412MHz

09/05/2022

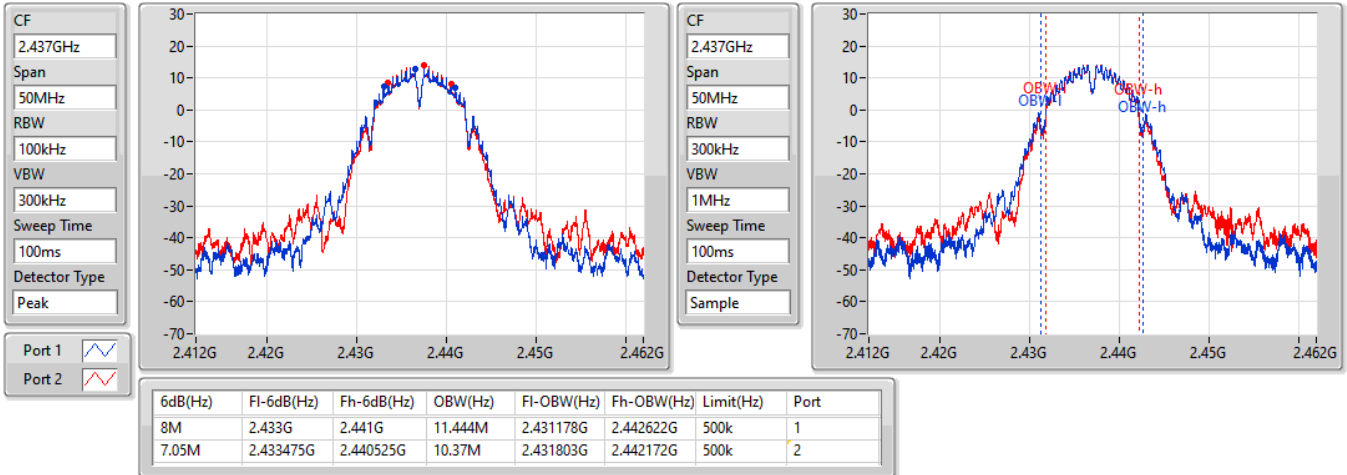


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

09/05/2022

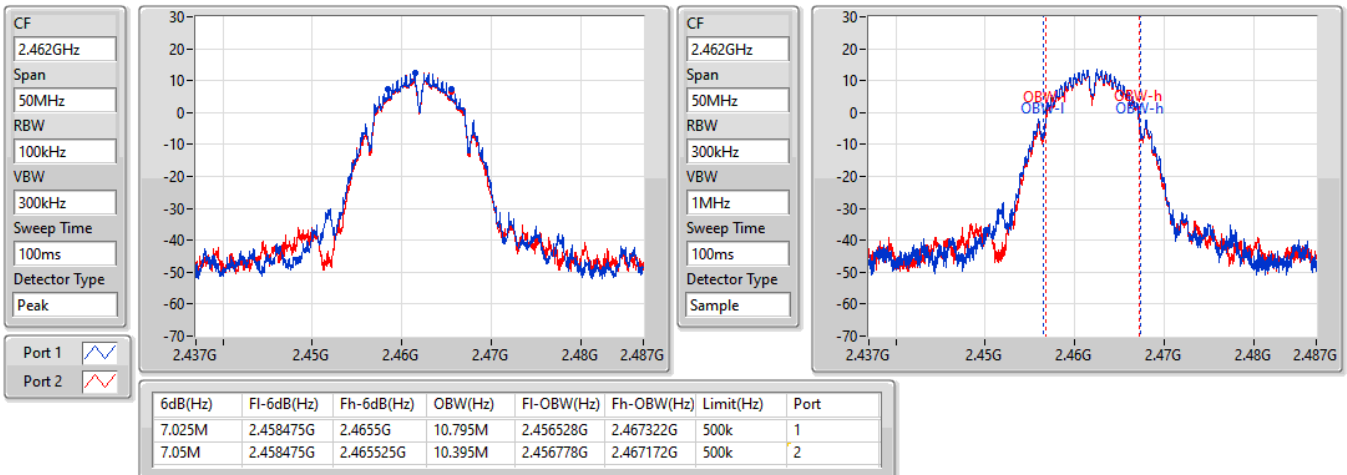


802.11b_Nss1,(1Mbps)_2TX

EBW

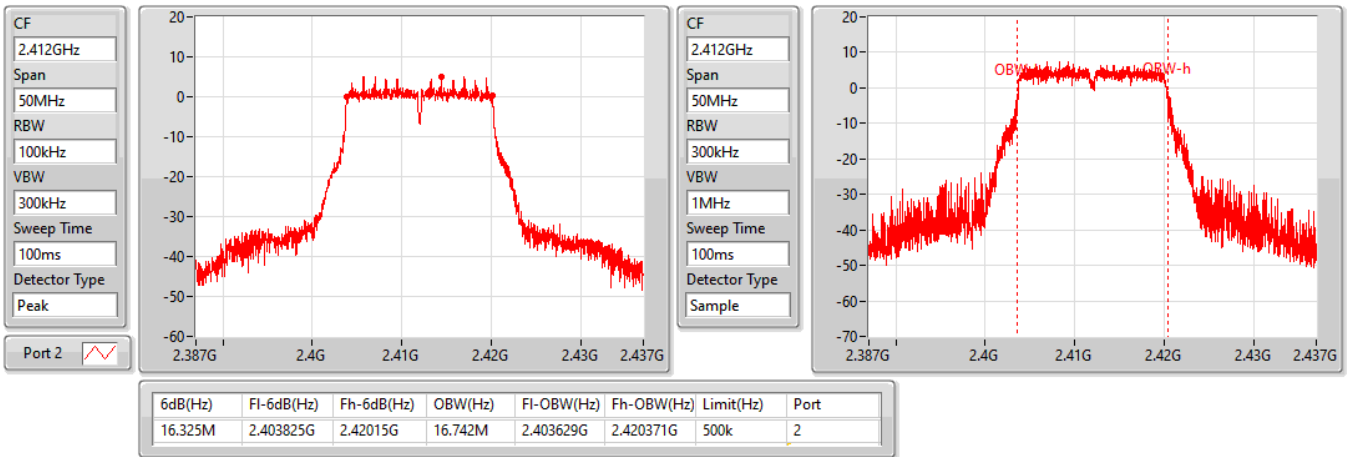
2462MHz

09/05/2022

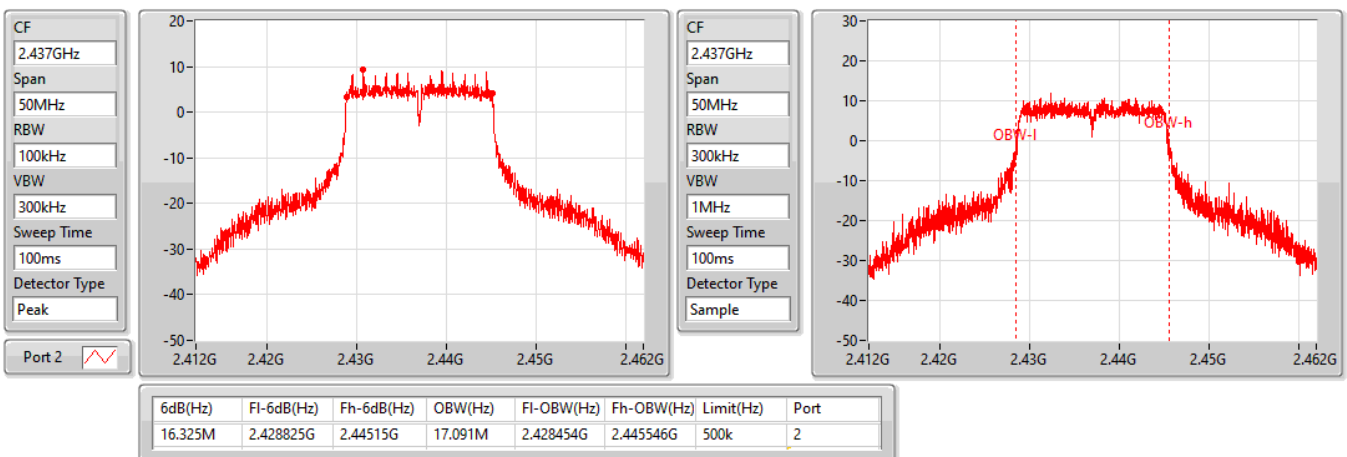


802.11g_Nss1,(6Mbps)_1TX(Port2)
EBW
2412MHz

09/05/2022


802.11g_Nss1,(6Mbps)_1TX(Port2)
EBW
2437MHz

09/05/2022

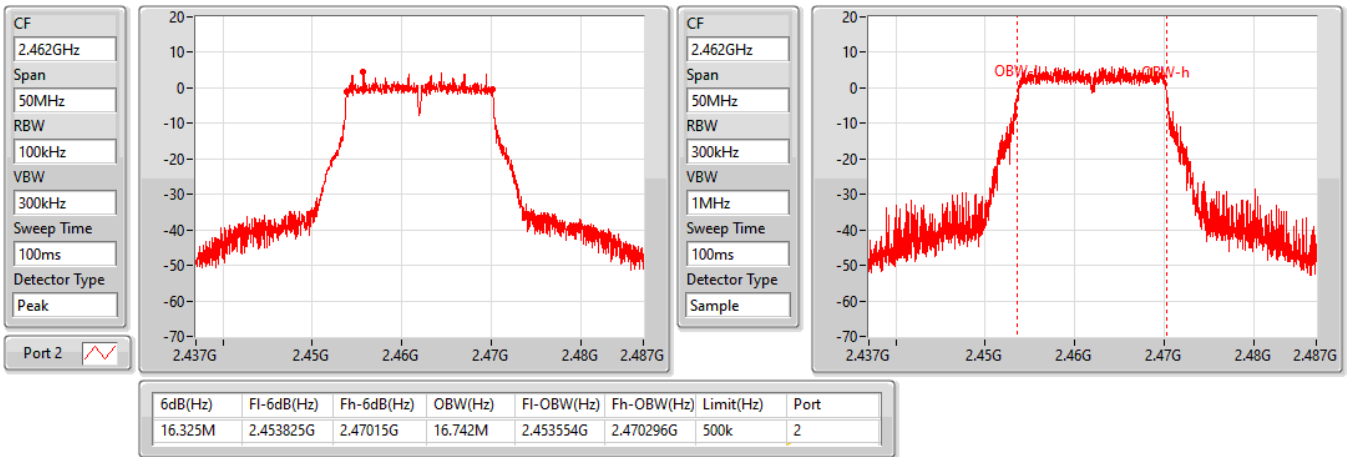


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2462MHz

09/05/2022

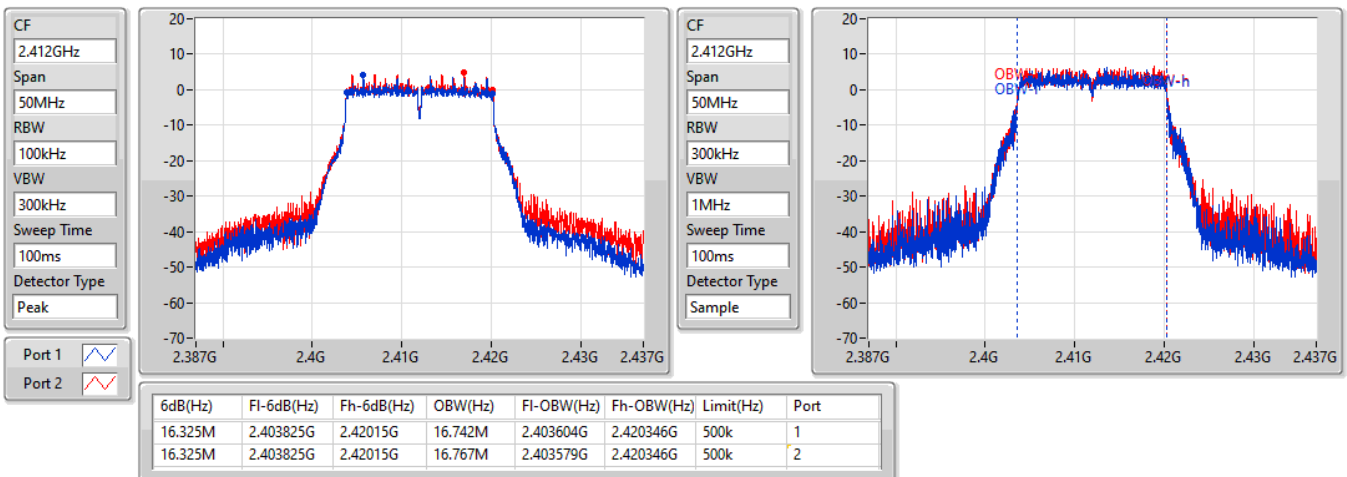


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

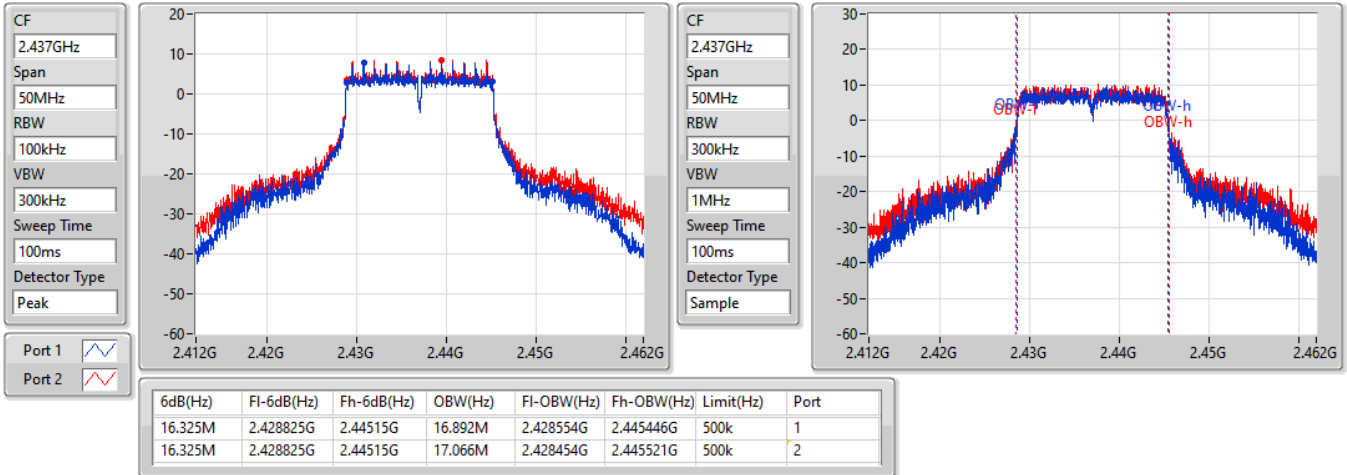
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802.11g_Nss1,(6Mbps)_2TX

2437MHz

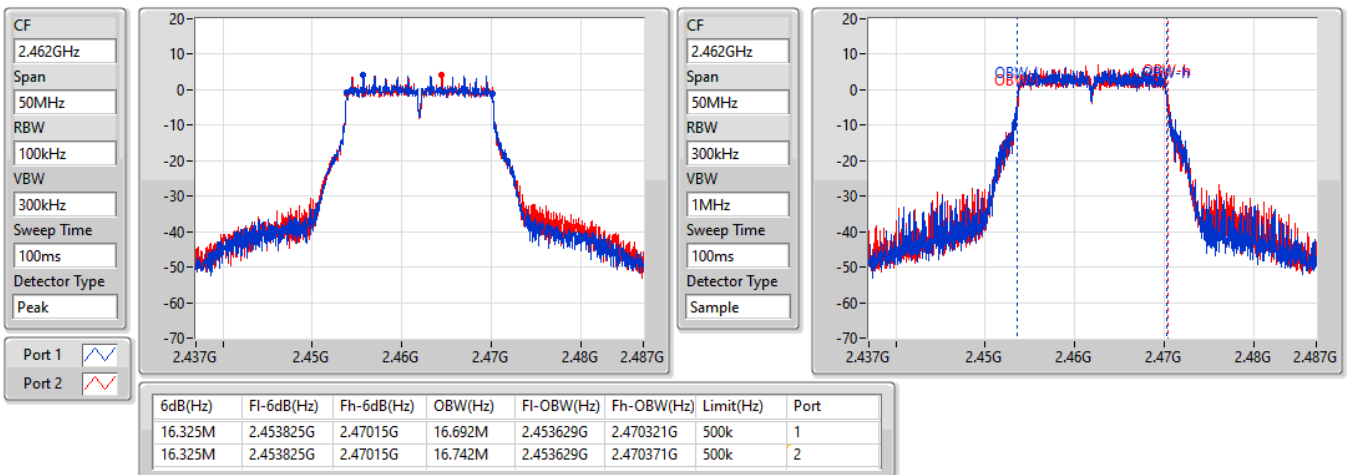
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802.11g_Nss1,(6Mbps)_2TX

2462MHz

09/05/2022

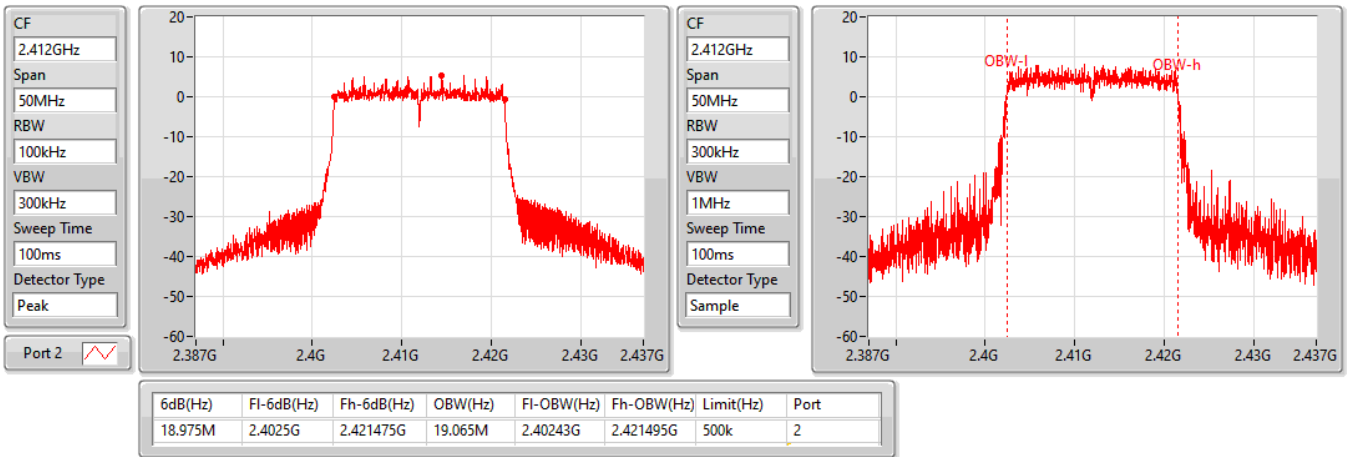


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

09/05/2022

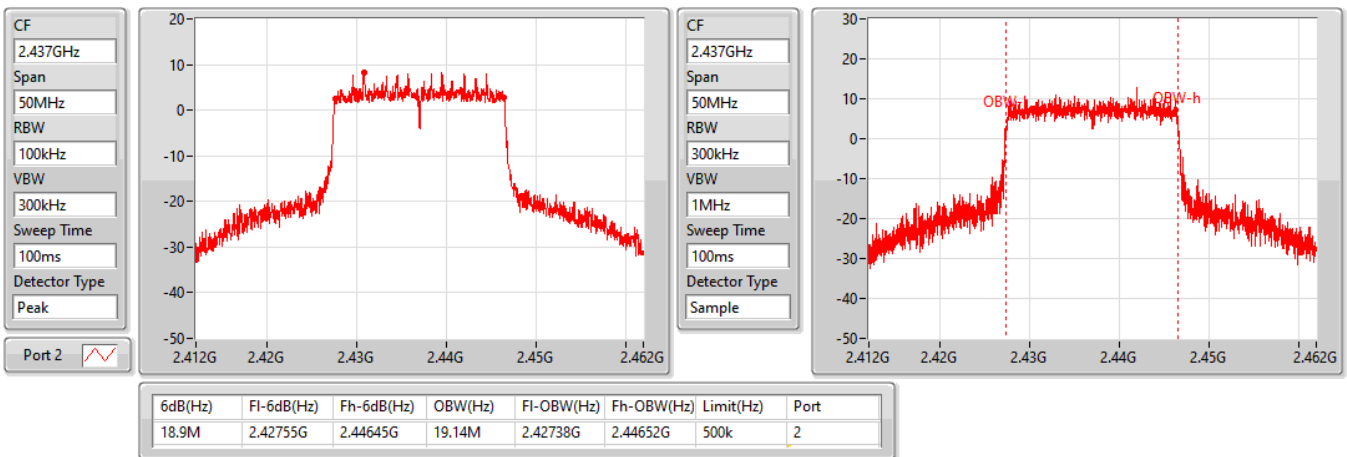


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

09/05/2022

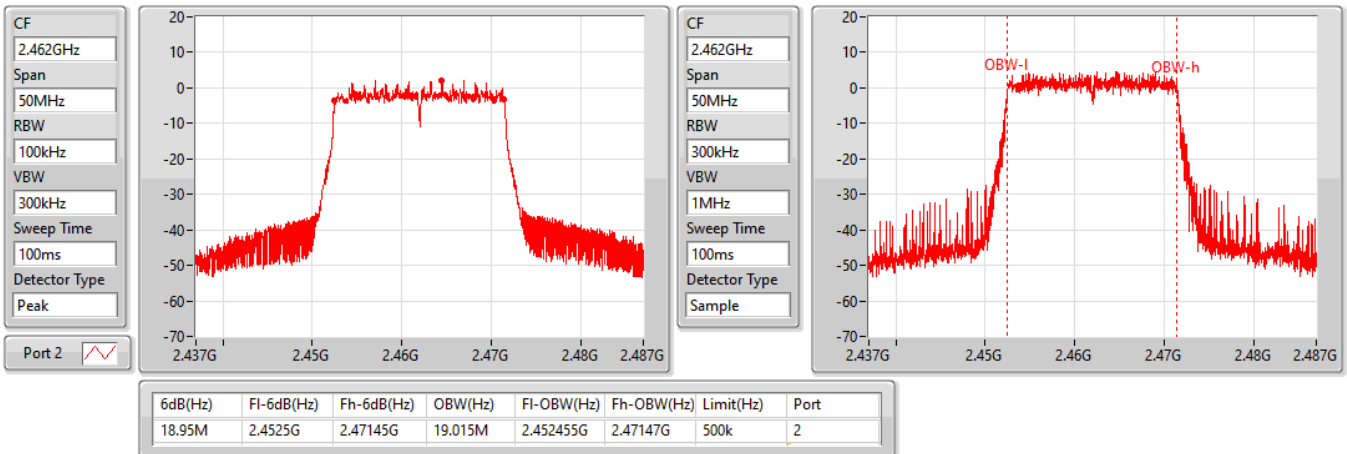


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2462MHz

09/05/2022

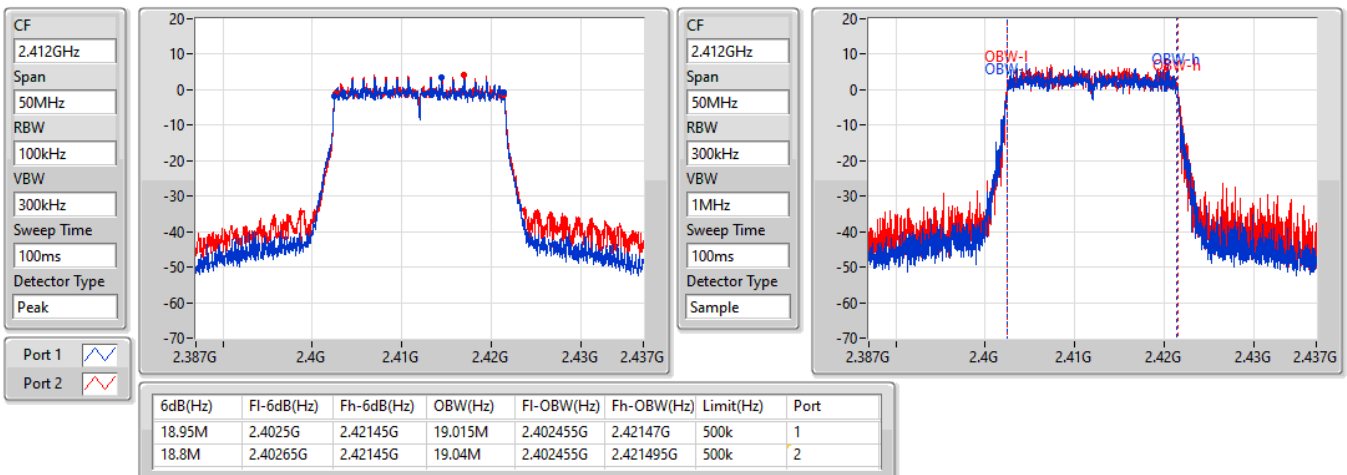


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

2412MHz

09/05/2022

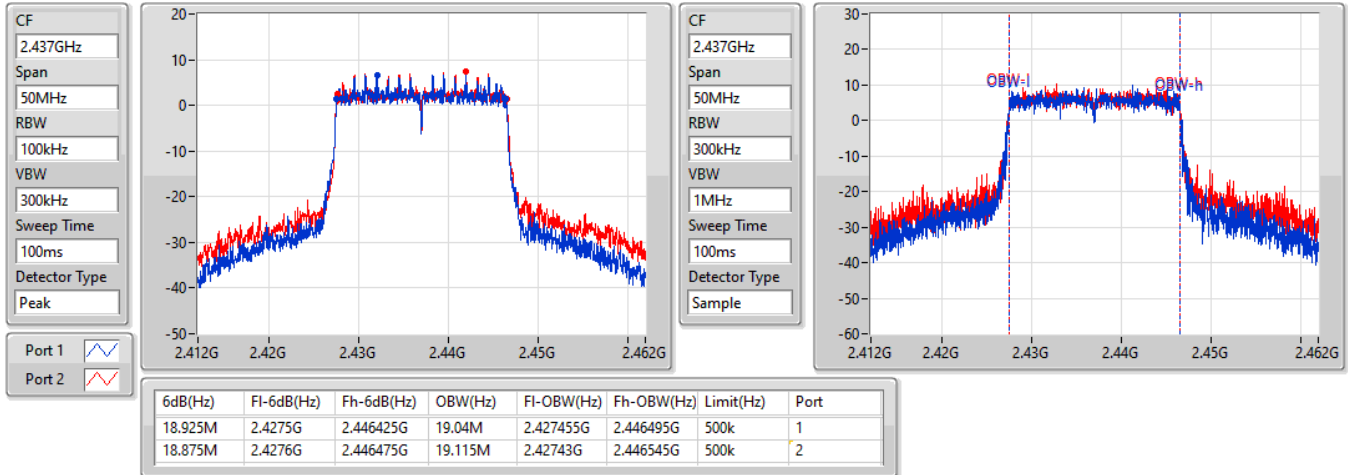


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

2437MHz

09/05/2022

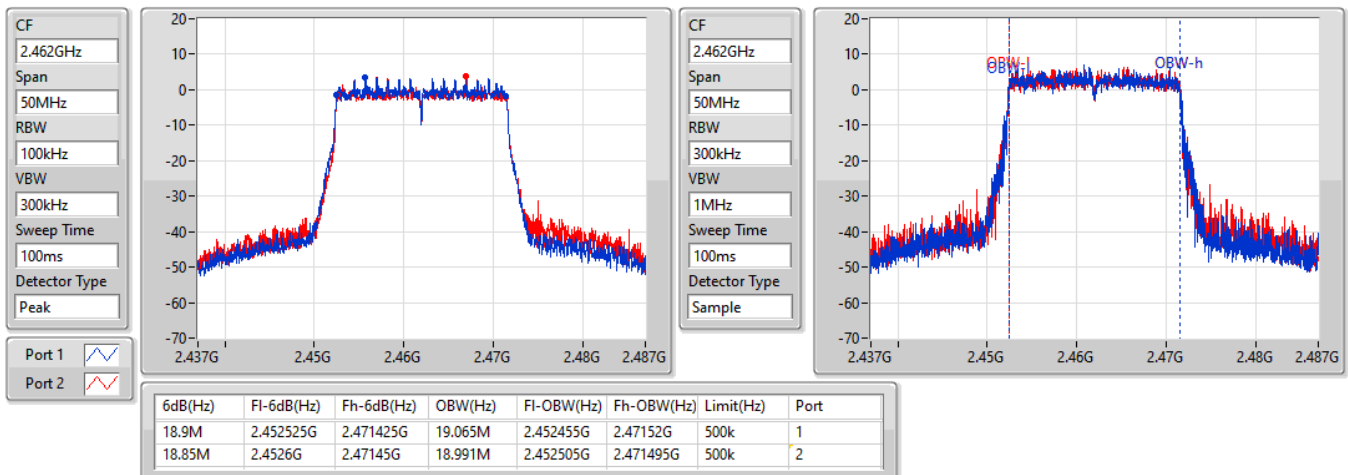


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

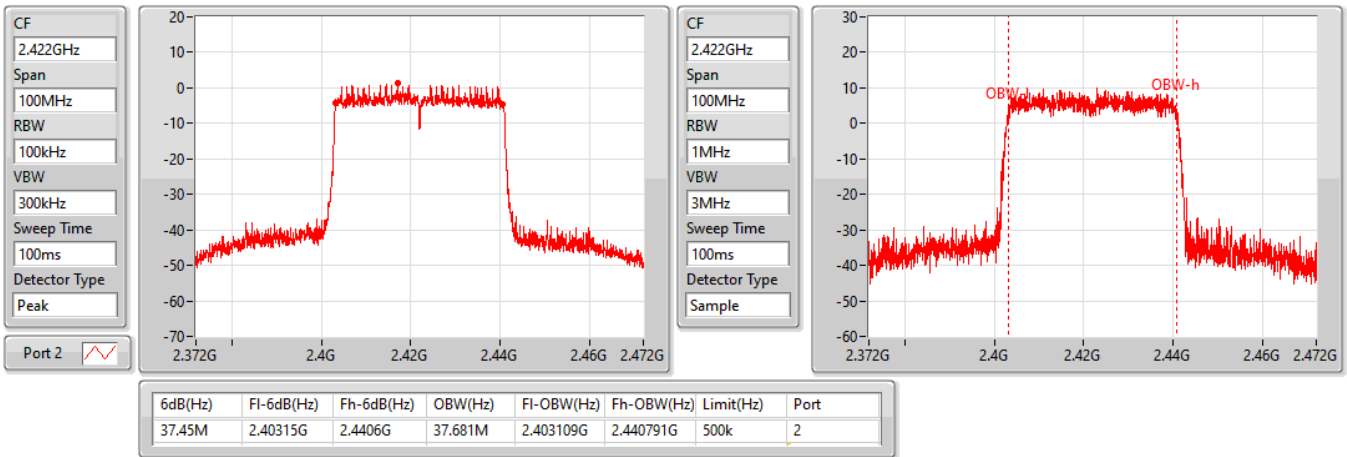
2462MHz

09/05/2022

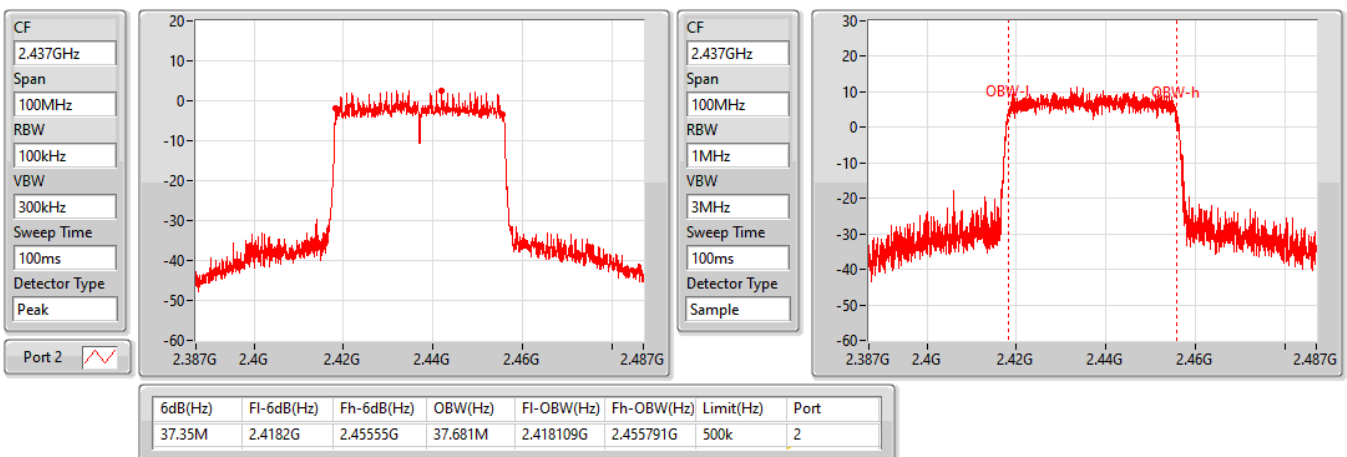


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2422MHz

09/05/2022


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2437MHz

09/05/2022

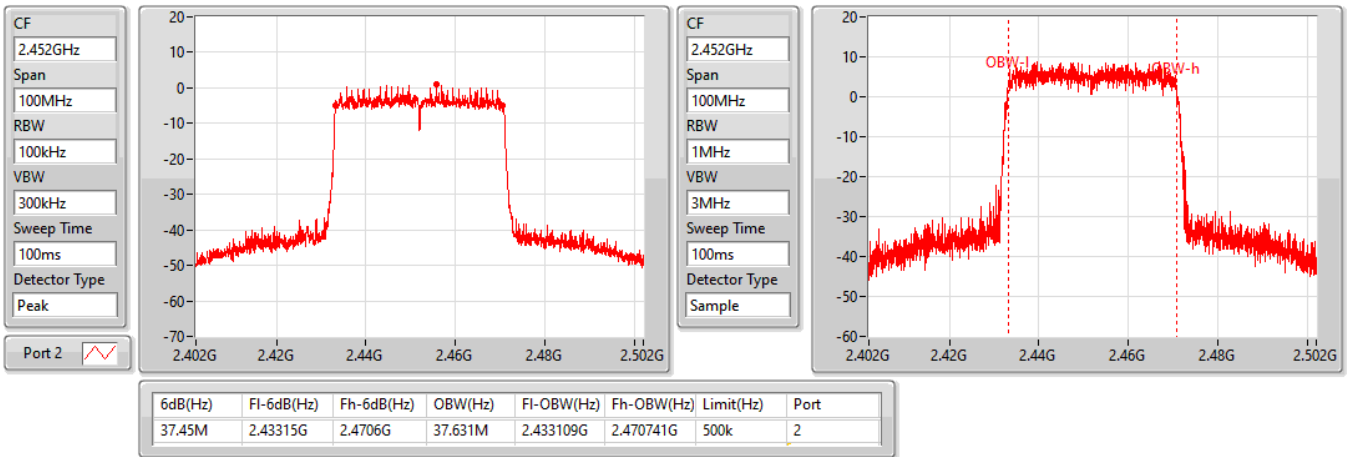


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

09/05/2022

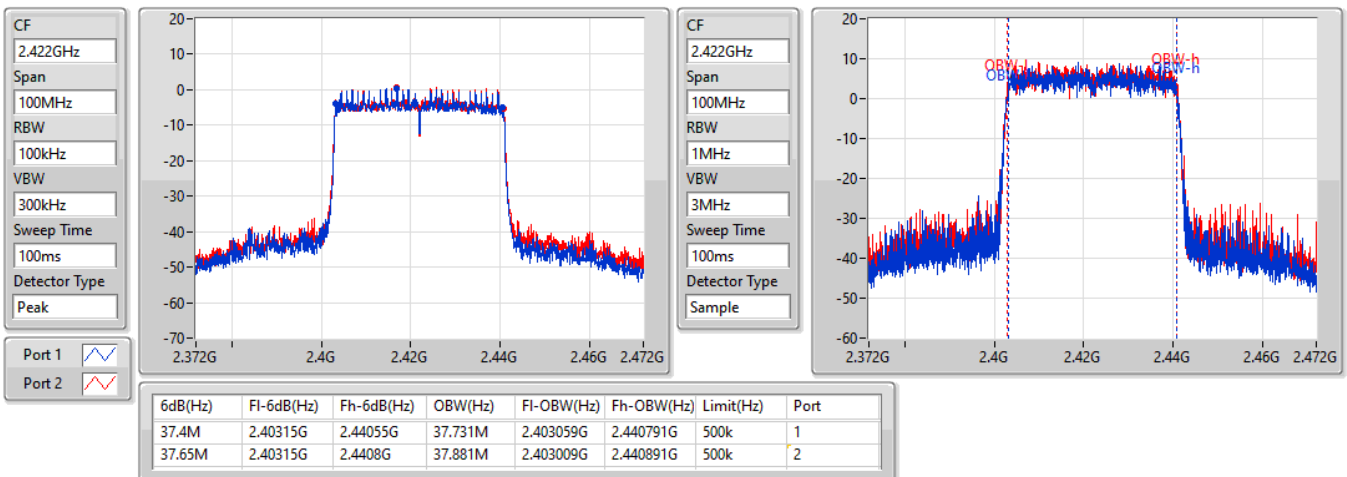


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2422MHz

09/05/2022

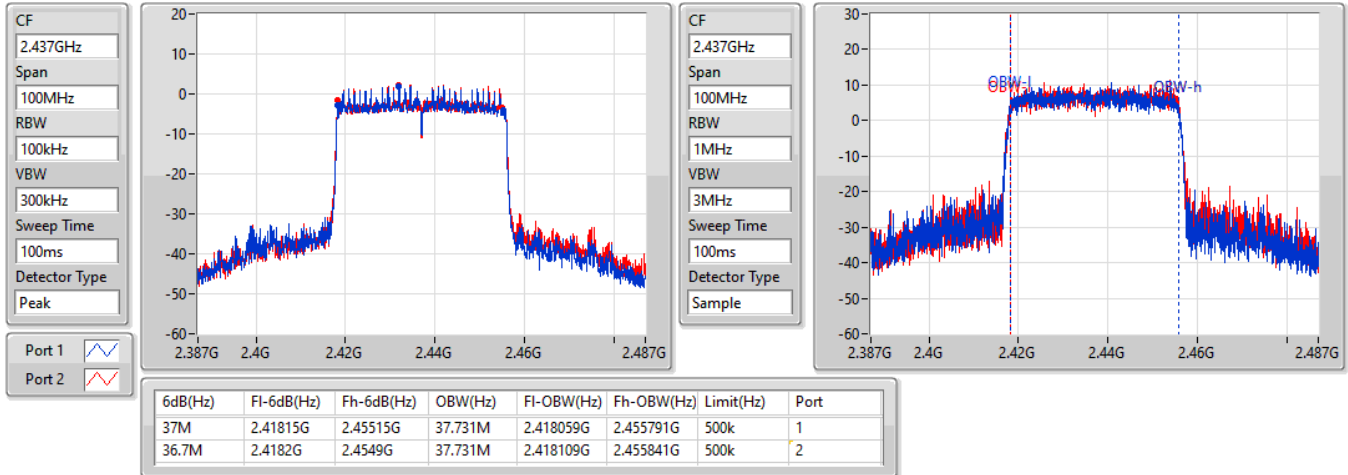


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2437MHz

09/05/2022

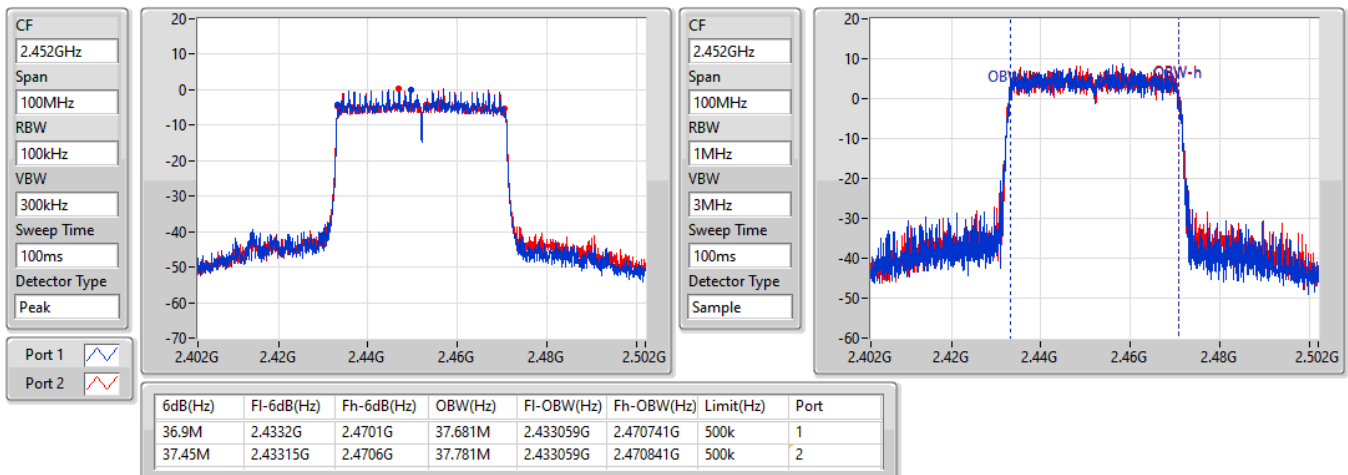


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2452MHz

09/05/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	7.475M	10.745M	10M8G1D	7M	10.345M
802.11b_Nss1,(1Mbps)_2TX	7.5M	10.82M	10M9G1D	6.5M	10.245M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.325M	16.892M	16M9D1D	16.325M	16.792M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.942M	17M0D1D	16.325M	16.667M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.95M	19.115M	19M2D1D	18.85M	19.04M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.95M	19.09M	19M1D1D	18.825M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.35M	37.681M	37M7D1D	36.7M	37.531M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.35M	37.731M	37M8D1D	36.5M	37.631M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

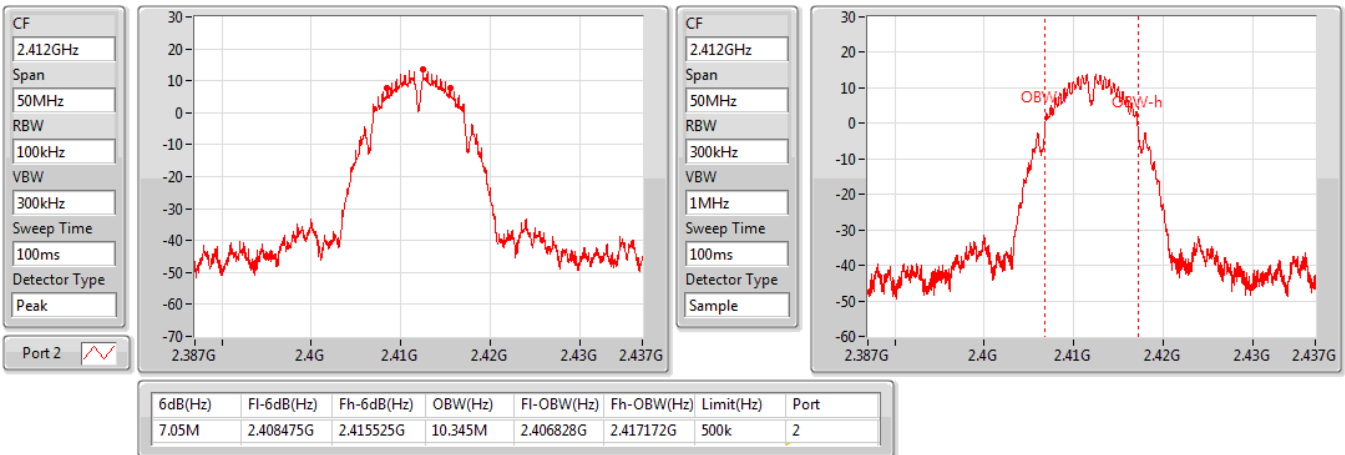
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7.05M	10.345M
2437MHz	Pass	500k			7M	10.645M
2462MHz	Pass	500k			7.475M	10.745M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.025M	10.295M	7.05M	10.37M
2437MHz	Pass	500k	7.025M	10.545M	7.05M	10.245M
2462MHz	Pass	500k	6.5M	10.82M	7.5M	10.545M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.325M	16.792M
2437MHz	Pass	500k			16.325M	16.892M
2462MHz	Pass	500k			16.325M	16.792M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.767M	16.325M	16.667M
2437MHz	Pass	500k	16.325M	16.767M	16.325M	16.942M
2462MHz	Pass	500k	16.325M	16.767M	16.325M	16.717M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.925M	19.04M
2437MHz	Pass	500k			18.95M	19.115M
2462MHz	Pass	500k			18.85M	19.04M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.9M	19.09M	18.95M	19.015M
2437MHz	Pass	500k	18.95M	19.065M	18.825M	19.09M
2462MHz	Pass	500k	18.825M	18.991M	18.95M	19.065M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			37.35M	37.681M
2437MHz	Pass	500k			37M	37.681M
2452MHz	Pass	500k			36.7M	37.531M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.35M	37.681M	37M	37.731M
2437MHz	Pass	500k	37.05M	37.631M	36.85M	37.681M
2452MHz	Pass	500k	36.5M	37.631M	37M	37.681M

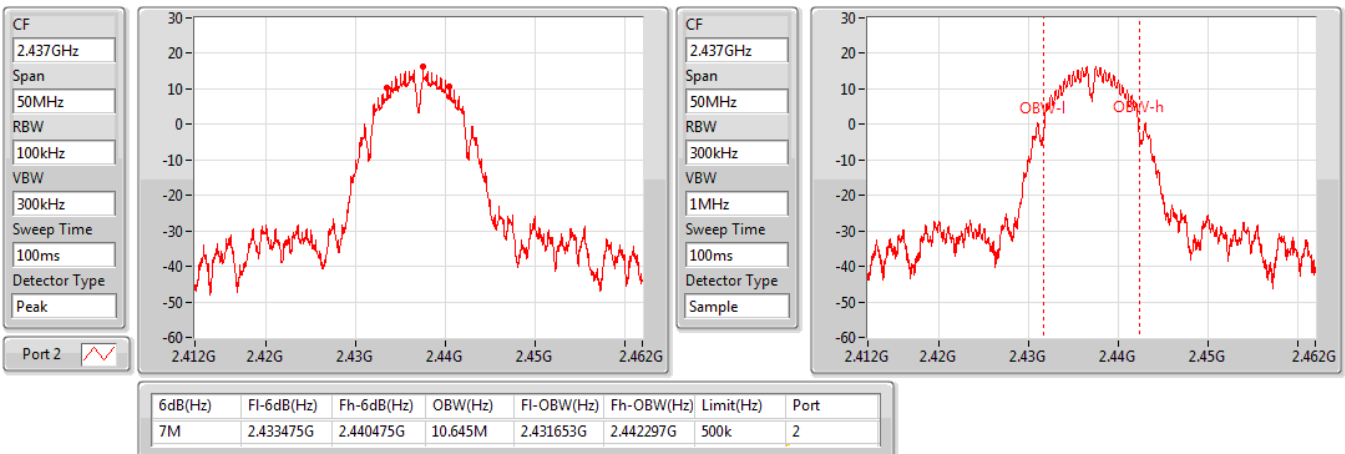
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2412MHz

25/07/2022


802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2437MHz

25/07/2022

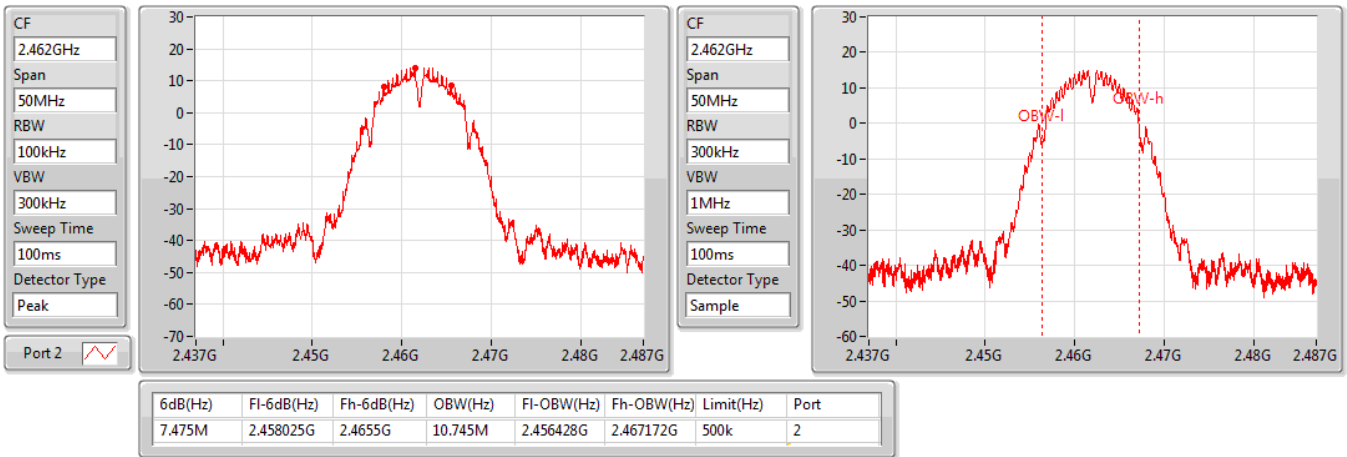


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2462MHz

25/07/2022

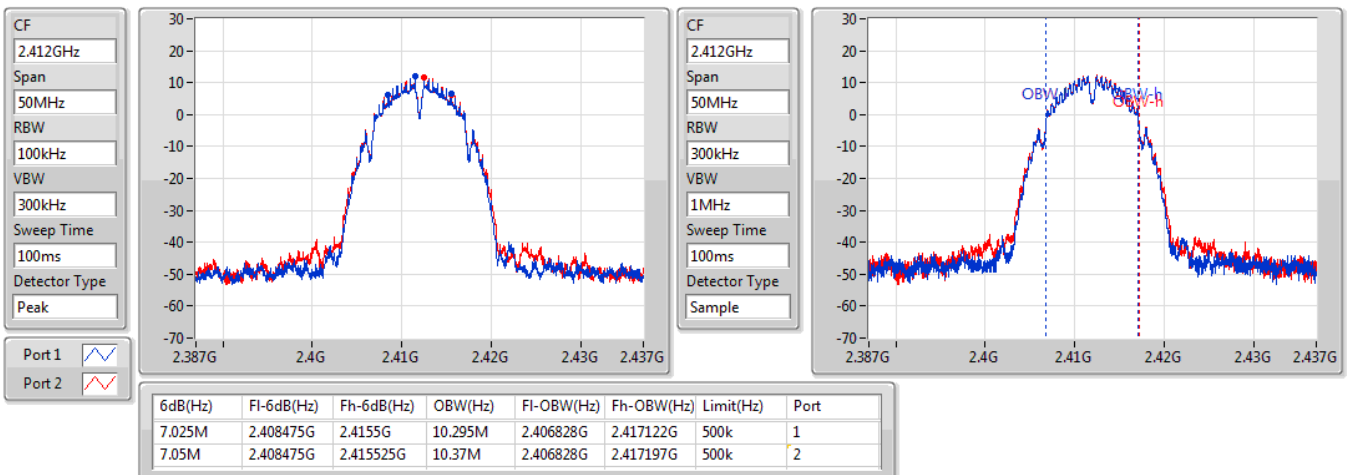


802.11b_Nss1,(1Mbps)_2TX

EBW

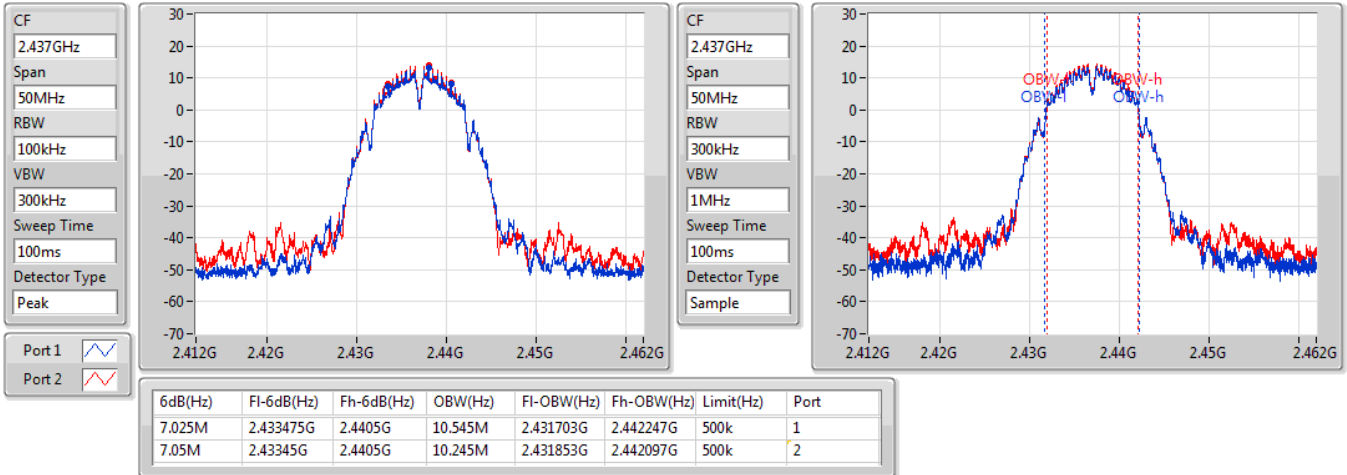
2412MHz

25/07/2022

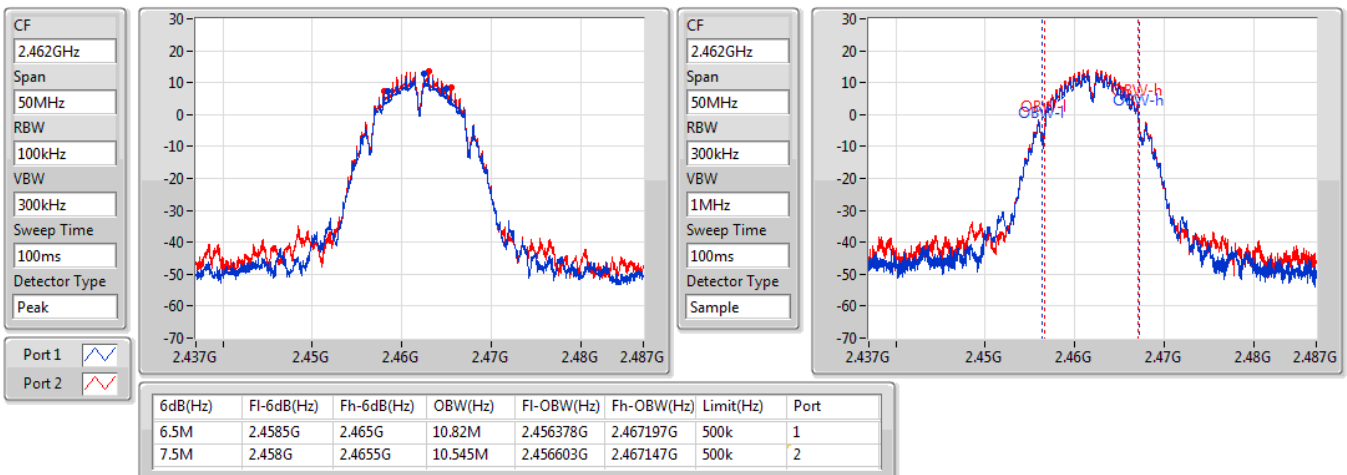


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

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802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

25/07/2022

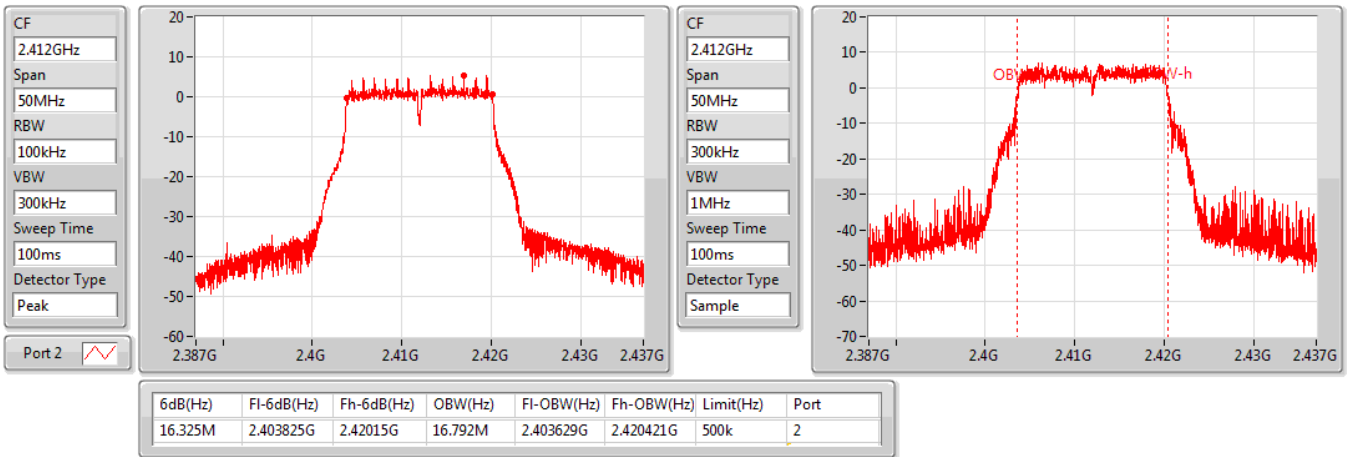


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2412MHz

26/07/2022

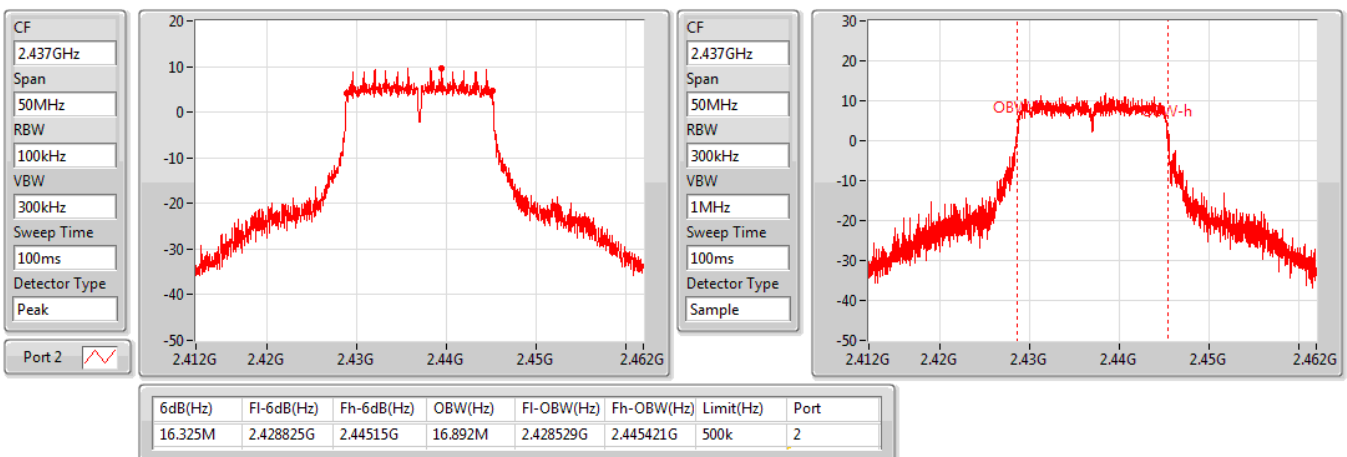


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2437MHz

26/07/2022

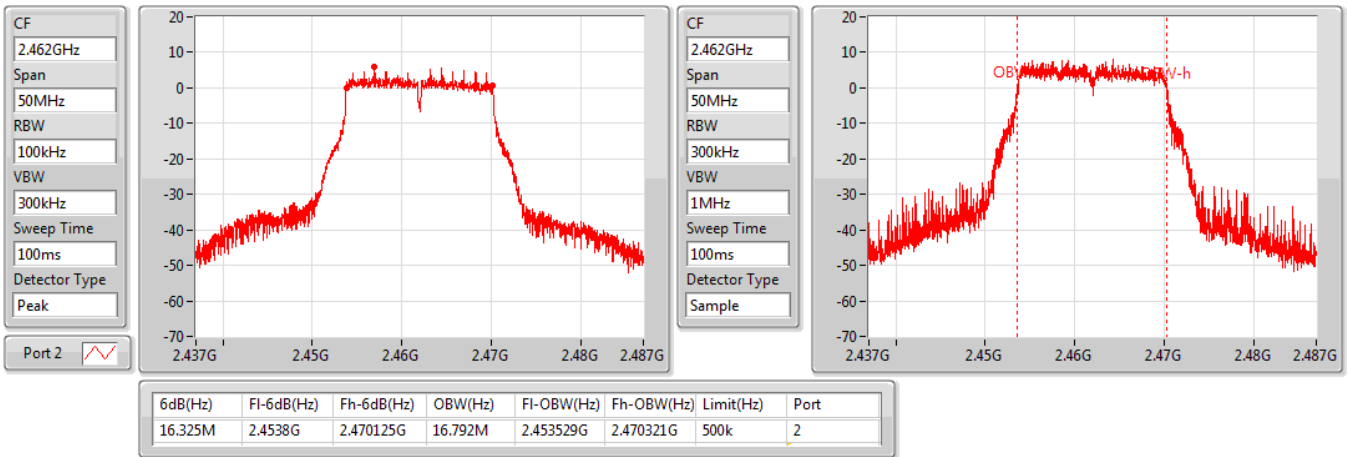


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2462MHz

26/07/2022

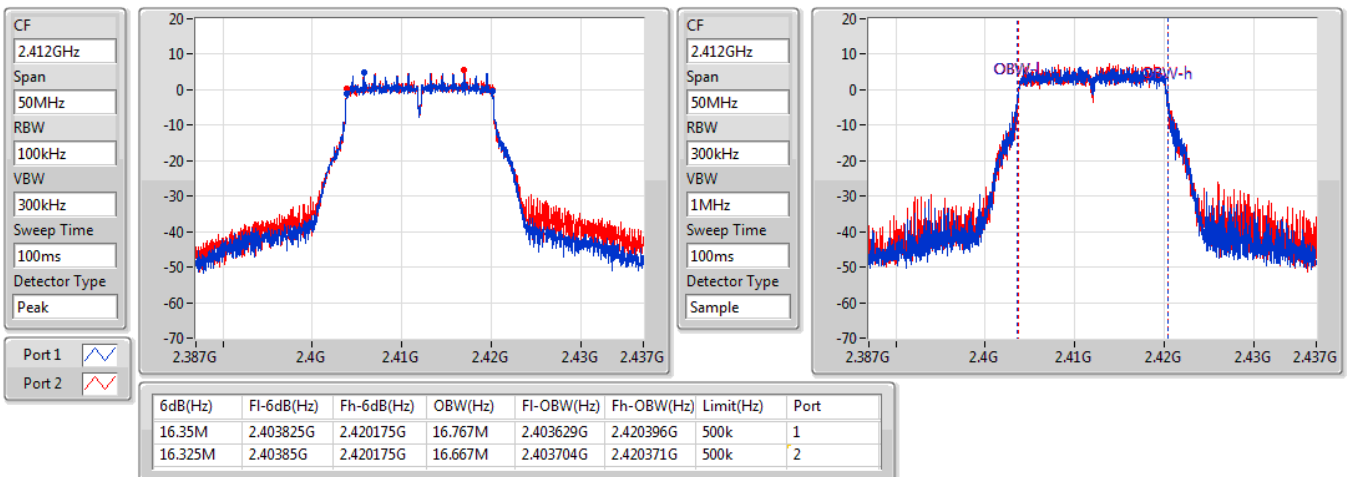


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

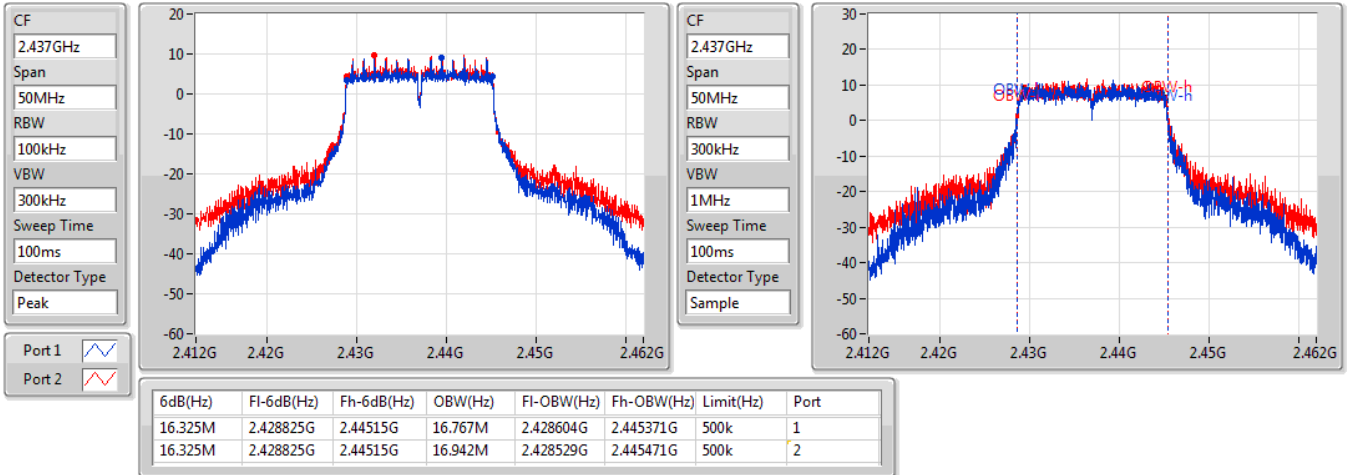
26/07/2022



802.11g_Nss1,(6Mbps)_2TX

2437MHz

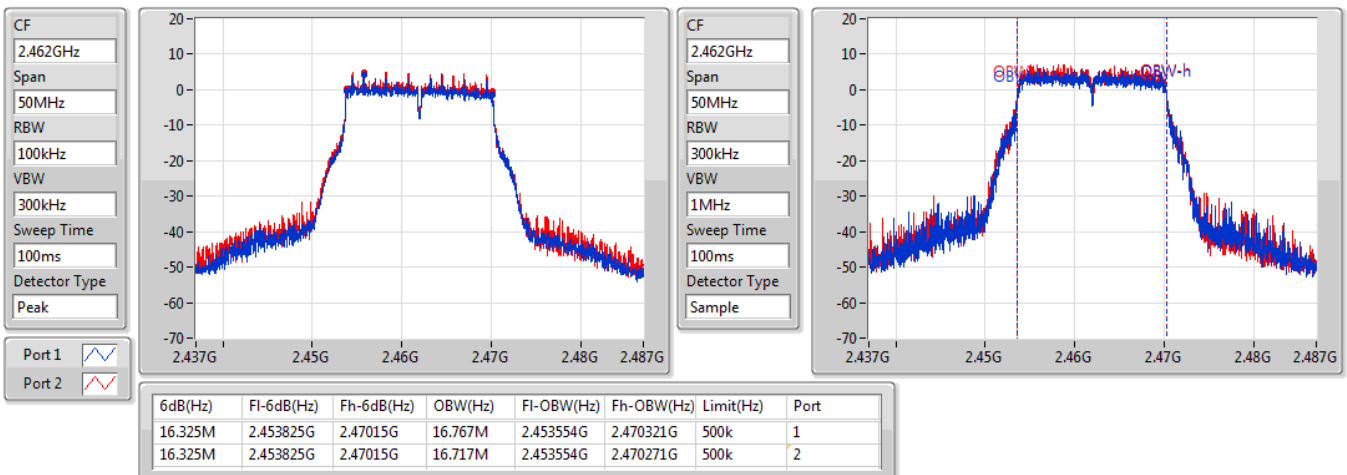
26/07/2022



802.11g_Nss1,(6Mbps)_2TX

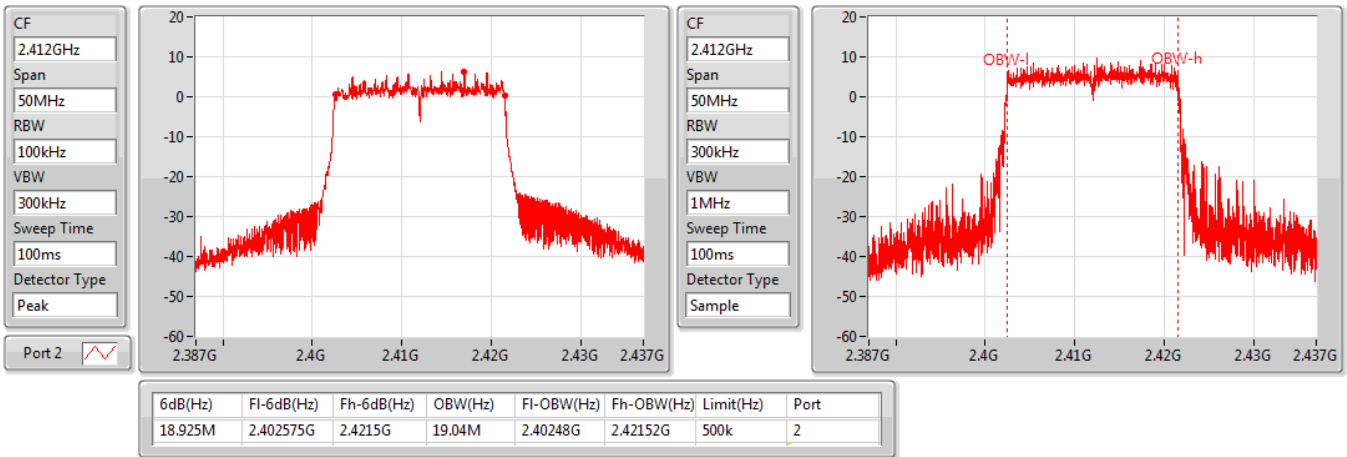
2462MHz

26/07/2022

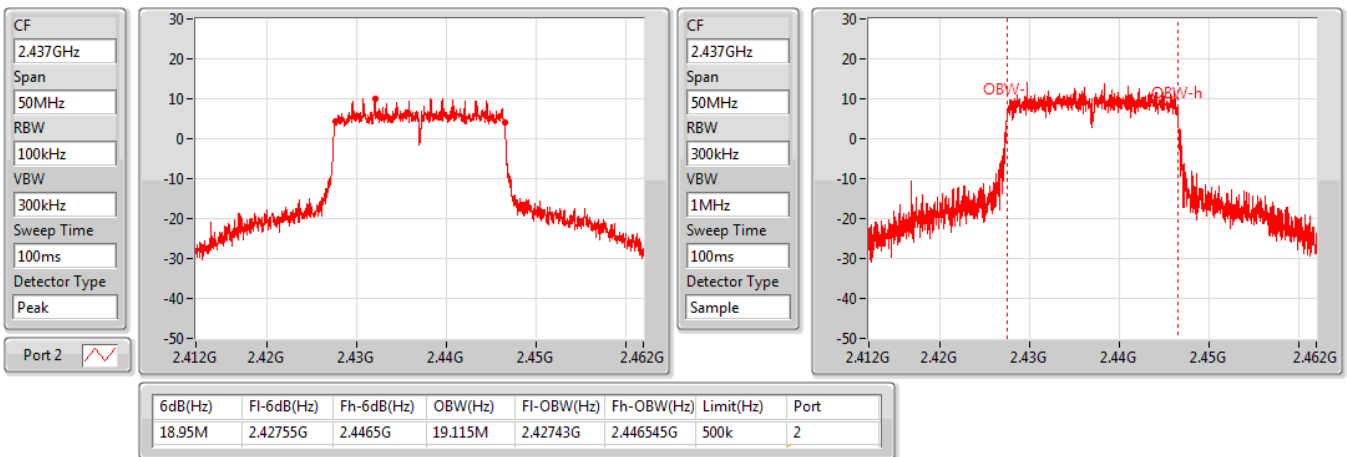


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2412MHz

26/07/2022


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2437MHz

26/07/2022

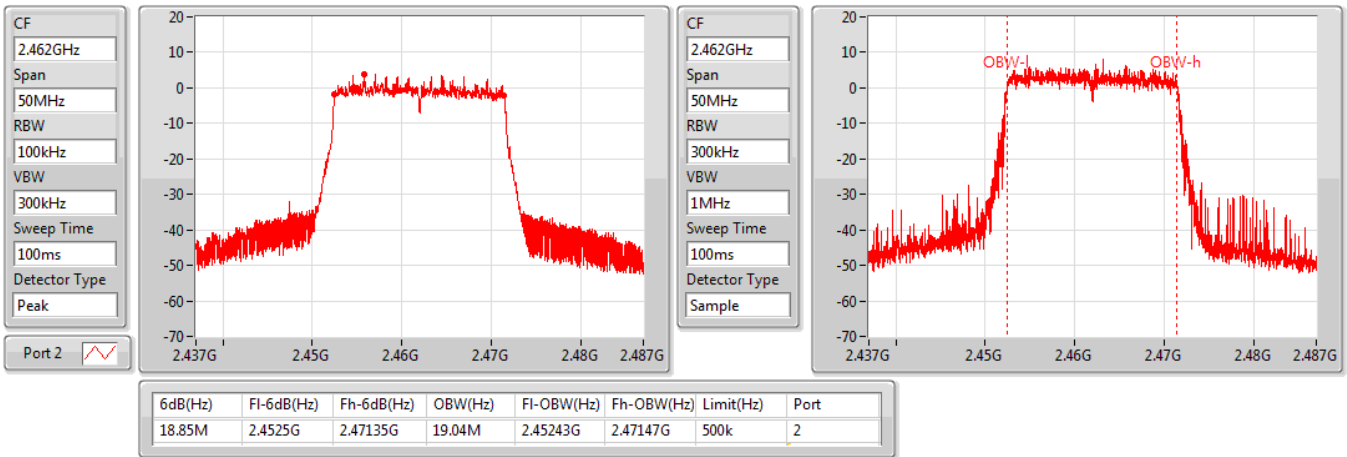


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2462MHz

26/07/2022

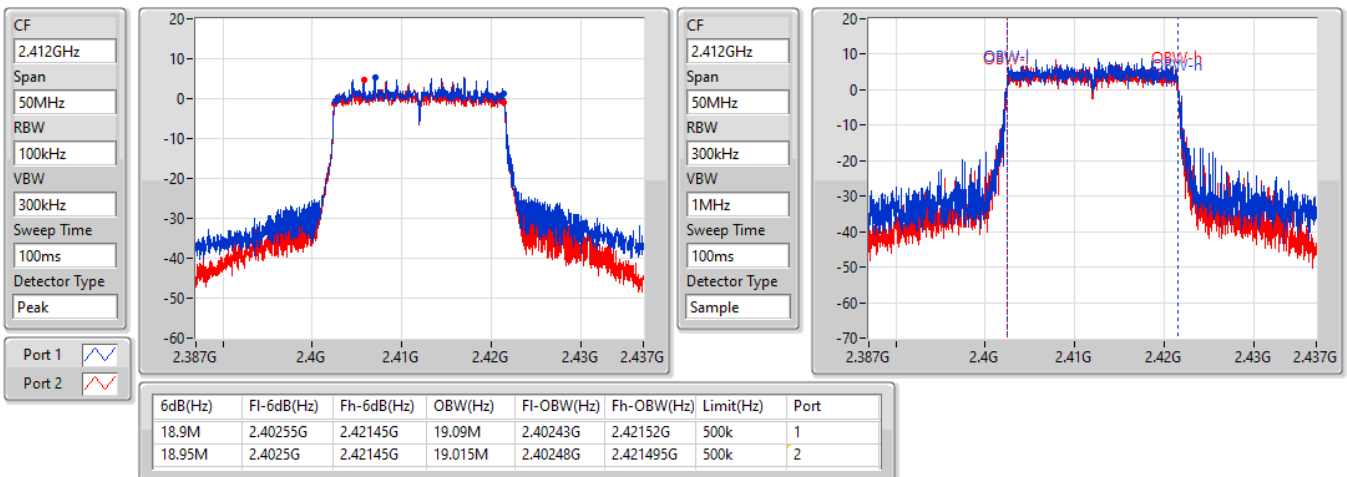


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

2412MHz

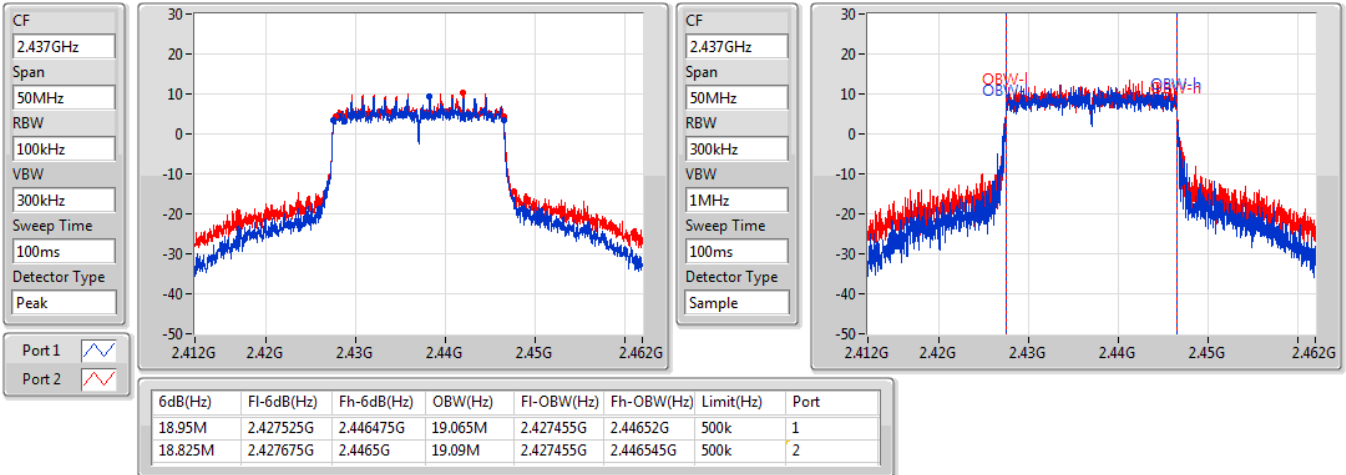
13/08/2022



802.11ax HEW20_Nss2,(MCS0)_2TX

2437MHz

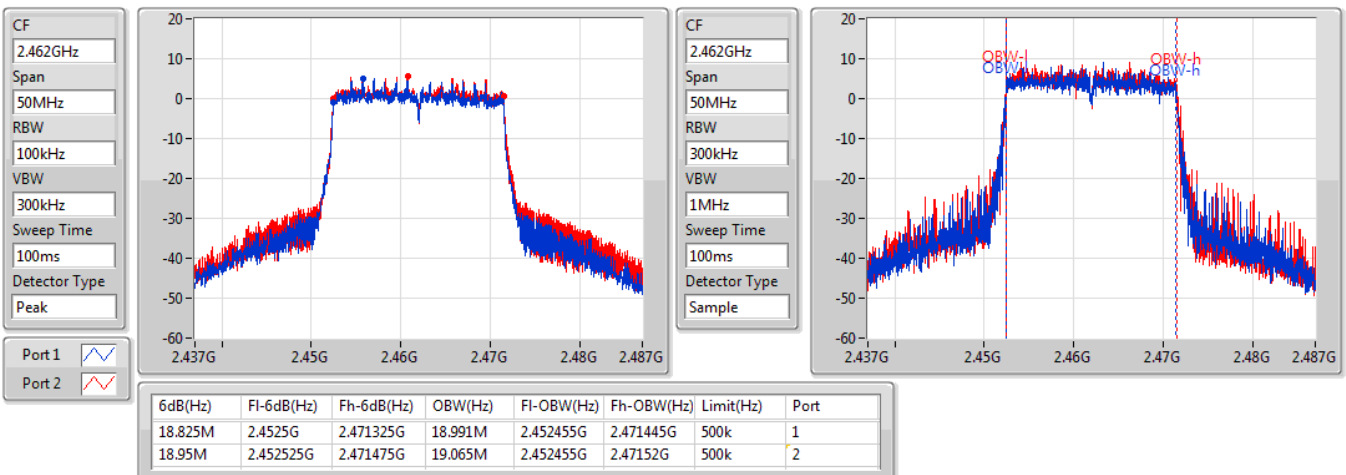
26/07/2022



802.11ax HEW20_Nss2,(MCS0)_2TX

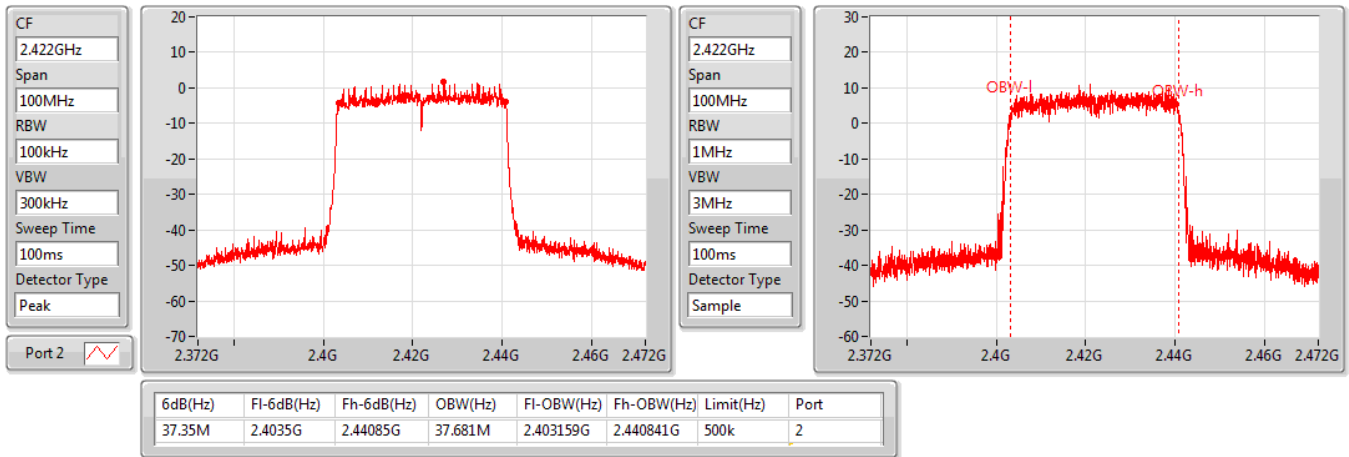
2462MHz

26/07/2022

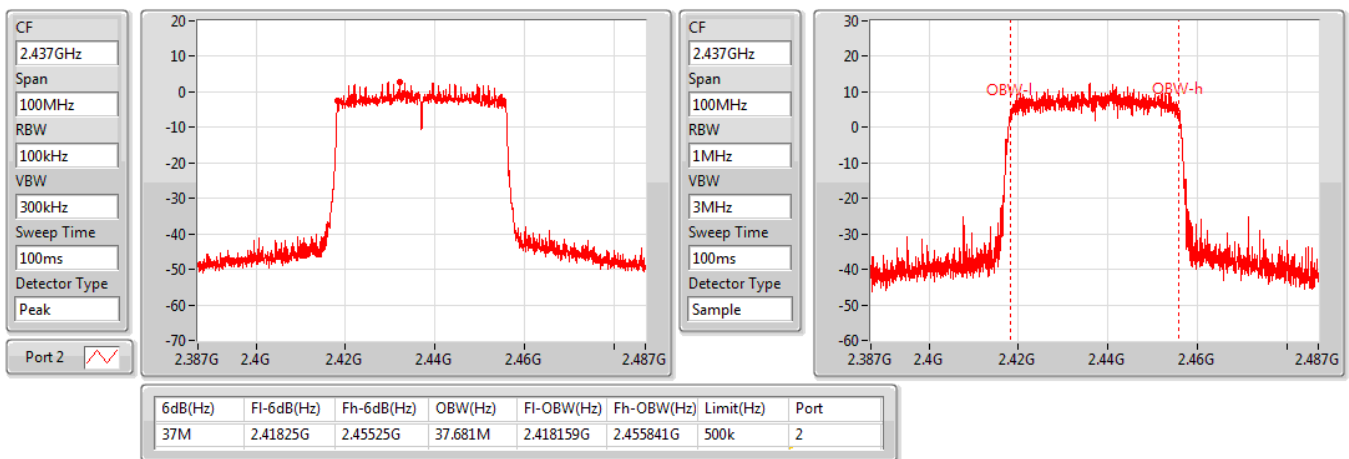


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2422MHz

26/07/2022

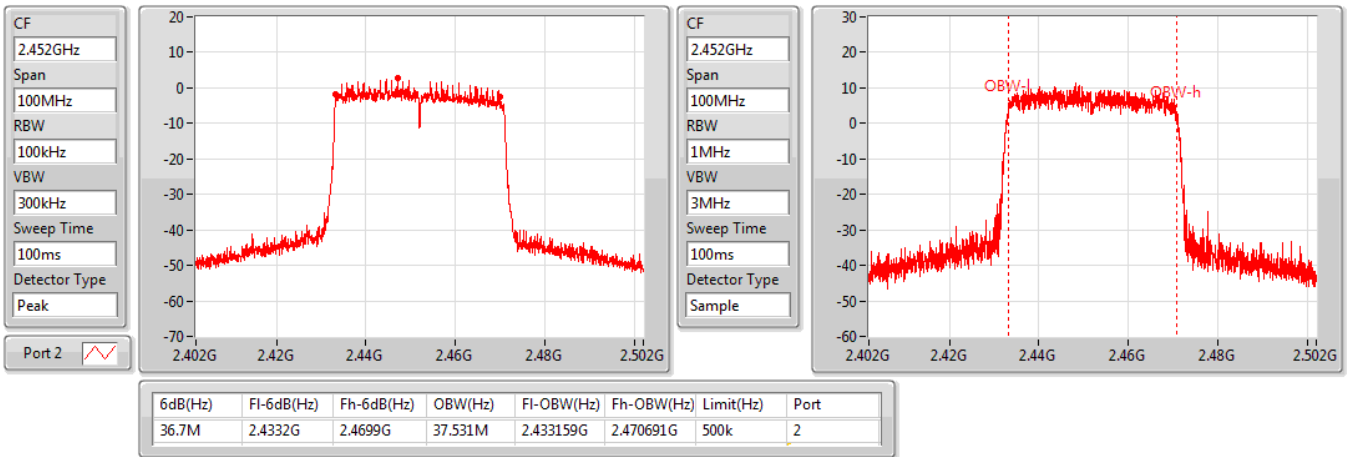

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2437MHz

26/07/2022

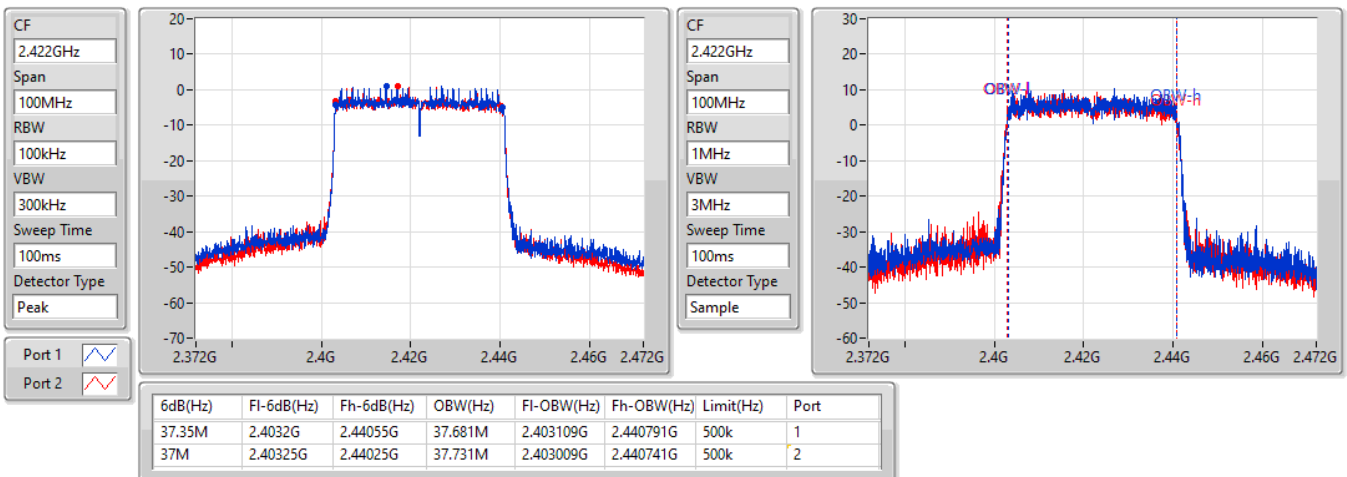


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2452MHz

26/07/2022

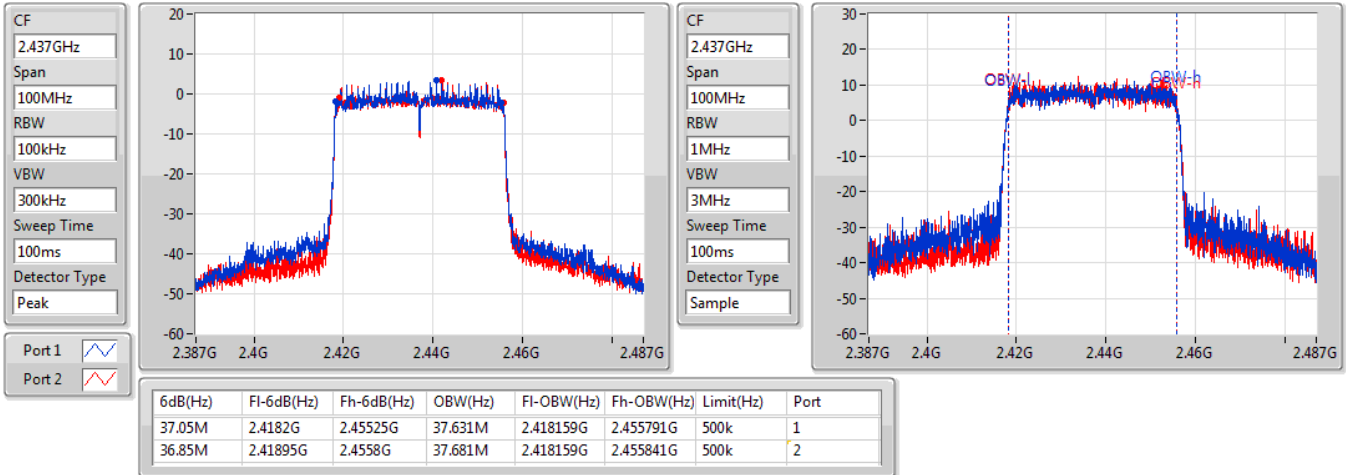

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
2422MHz

13/08/2022

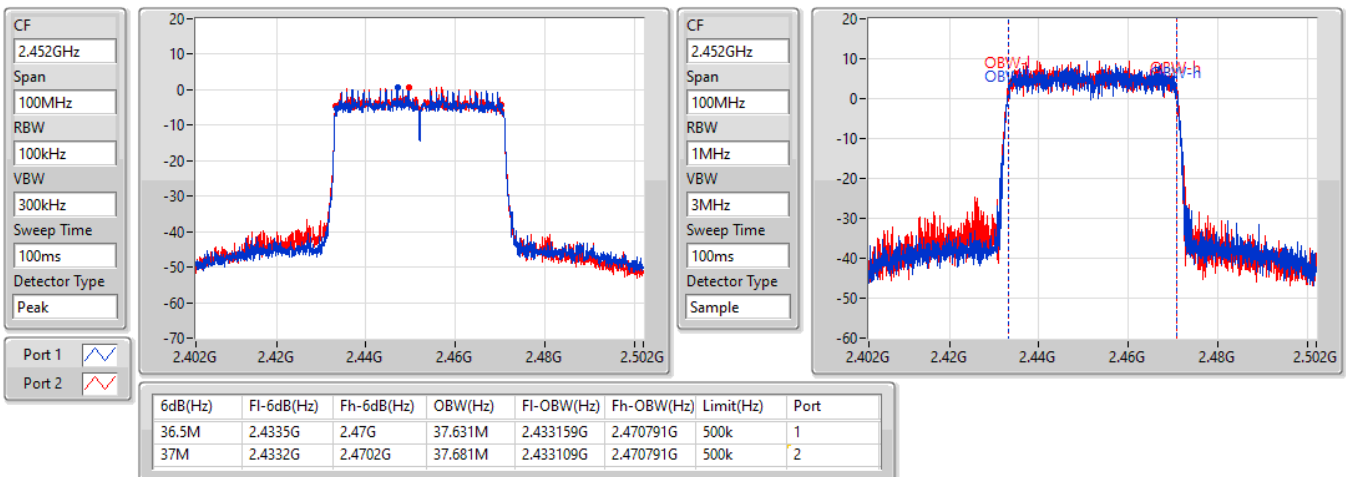


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
2437MHz

26/07/2022


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
2452MHz

13/08/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	7.05M	10.795M	10M8G1D	7M	10.32M
802.11b_Nss1,(1Mbps)_2TX	7.55M	10.545M	10M6G1D	6.575M	10.295M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.325M	17.166M	17M2D1D	16.325M	16.767M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.992M	17M0D1D	16.3M	16.717M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.975M	19.09M	19M1D1D	18.925M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.95M	19.065M	19M1D1D	18.825M	18.966M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.6M	37.731M	37M8D1D	37.05M	37.581M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.55M	37.781M	37M8D1D	36.25M	37.581M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

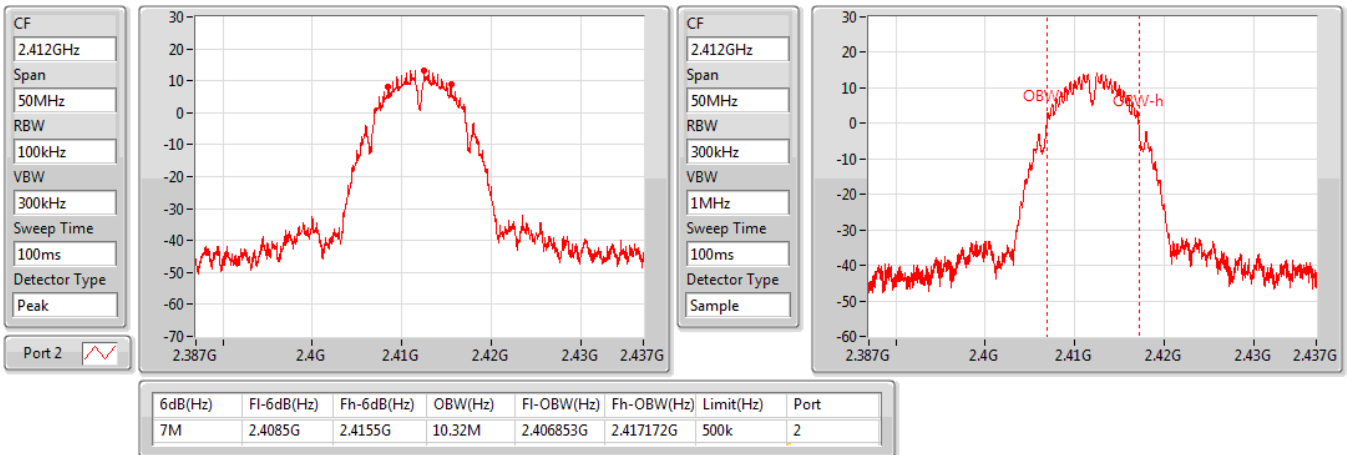
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7M	10.32M
2437MHz	Pass	500k			7.05M	10.345M
2462MHz	Pass	500k			7.05M	10.795M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	6.575M	10.295M	7.05M	10.395M
2437MHz	Pass	500k	7.55M	10.42M	7.025M	10.37M
2462MHz	Pass	500k	7.05M	10.52M	7.025M	10.545M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.325M	16.792M
2437MHz	Pass	500k			16.325M	17.166M
2462MHz	Pass	500k			16.325M	16.767M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.767M	16.325M	16.717M
2437MHz	Pass	500k	16.325M	16.892M	16.325M	16.992M
2462MHz	Pass	500k	16.3M	16.717M	16.325M	16.767M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.975M	19.015M
2437MHz	Pass	500k			18.925M	19.09M
2462MHz	Pass	500k			18.925M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.825M	19.015M	18.9M	18.991M
2437MHz	Pass	500k	18.825M	19.065M	18.9M	19.04M
2462MHz	Pass	500k	18.95M	19.015M	18.925M	18.966M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			37.6M	37.731M
2437MHz	Pass	500k			37.1M	37.681M
2452MHz	Pass	500k			37.05M	37.581M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.3M	37.781M	37.15M	37.731M
2437MHz	Pass	500k	37.55M	37.731M	36.5M	37.681M
2452MHz	Pass	500k	36.7M	37.581M	36.25M	37.631M

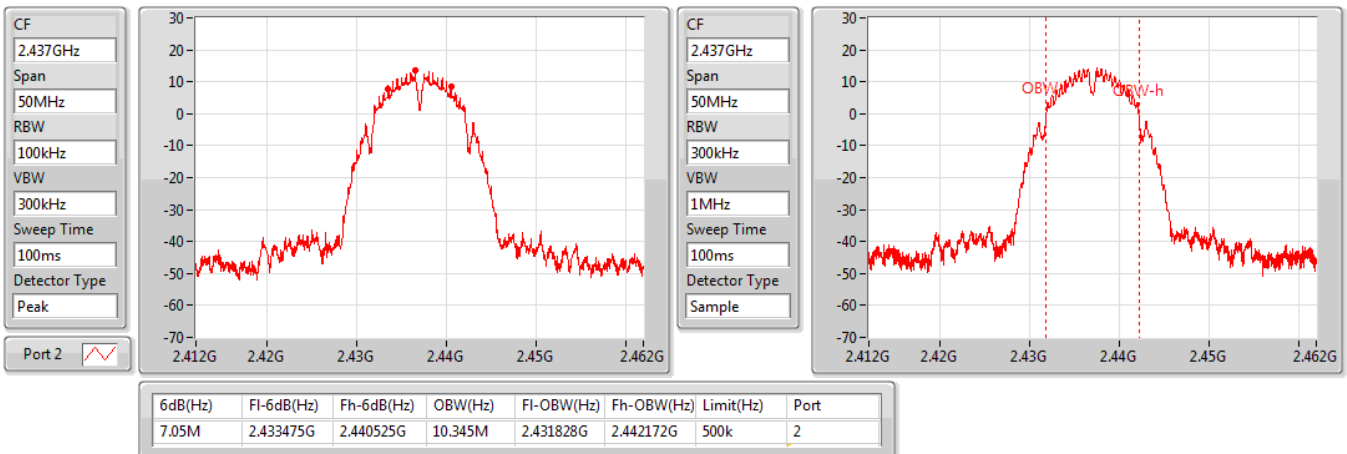
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2412MHz

26/07/2022

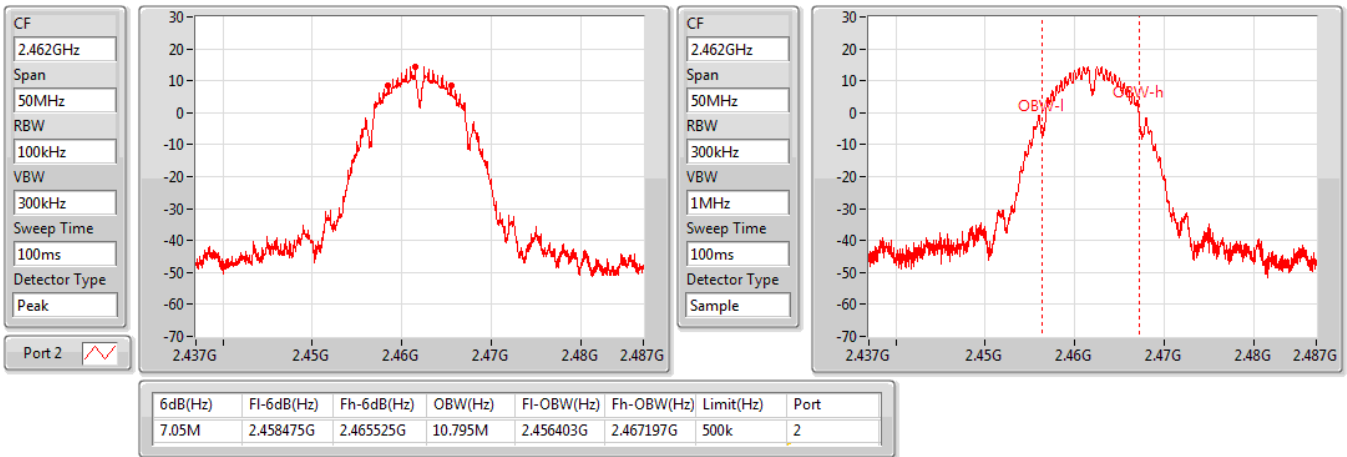

802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2437MHz

26/07/2022

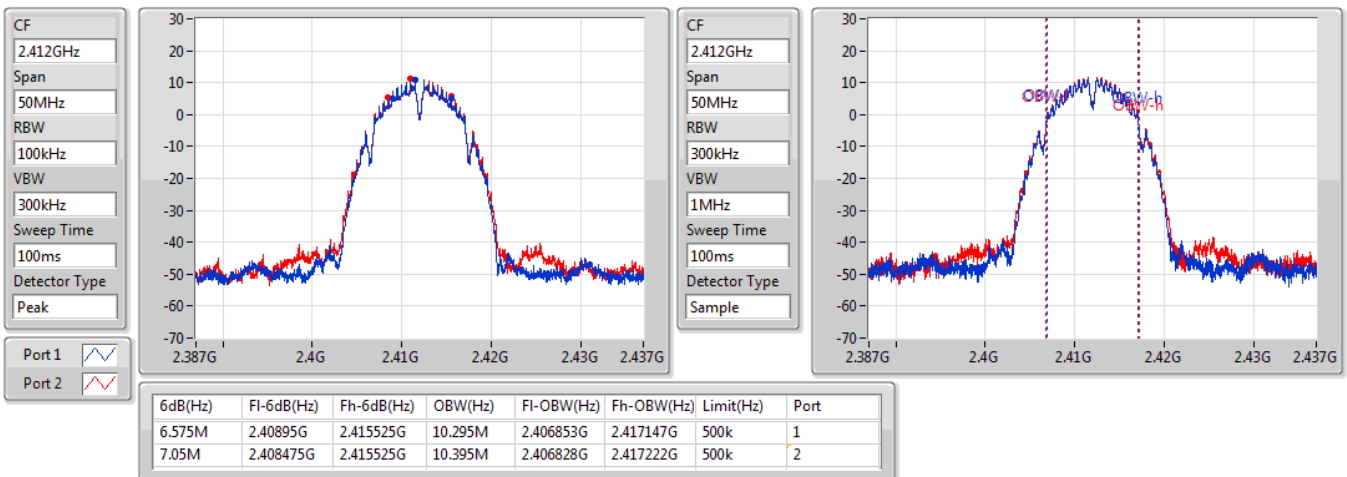


802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2462MHz

26/07/2022


802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

26/07/2022

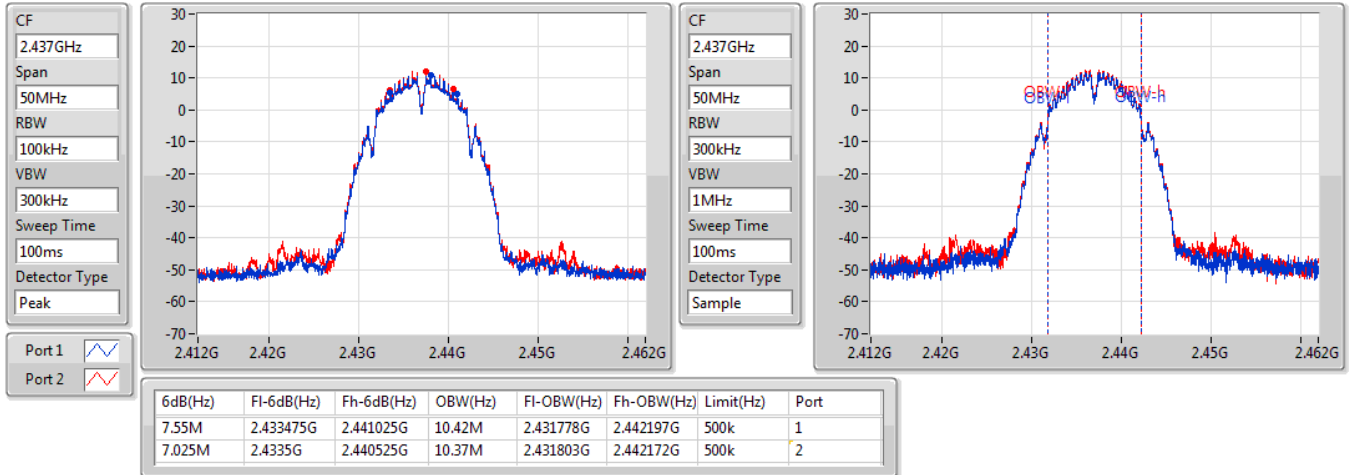


802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

26/07/2022

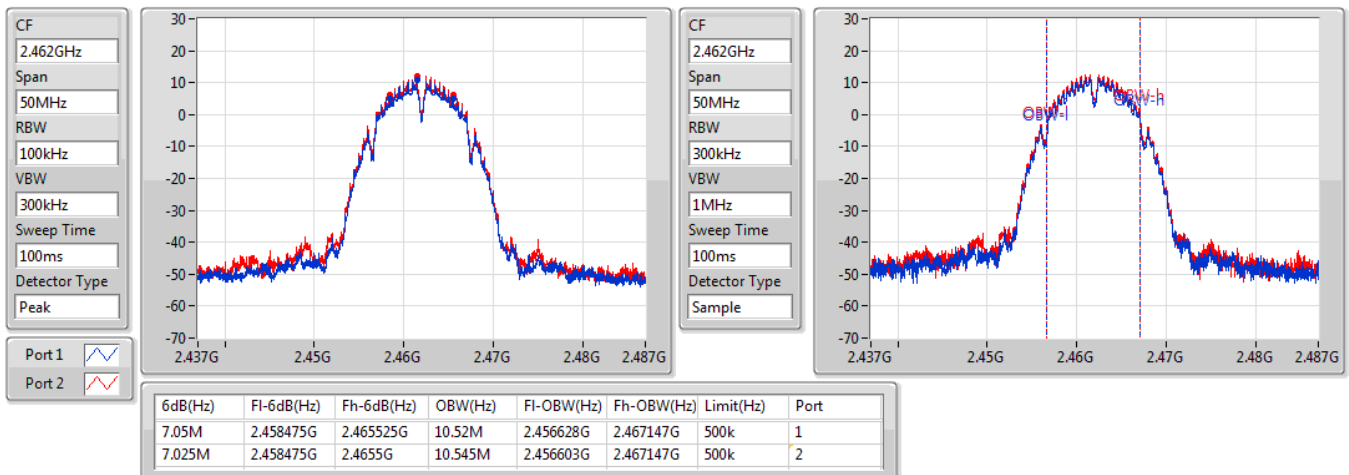


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

26/07/2022

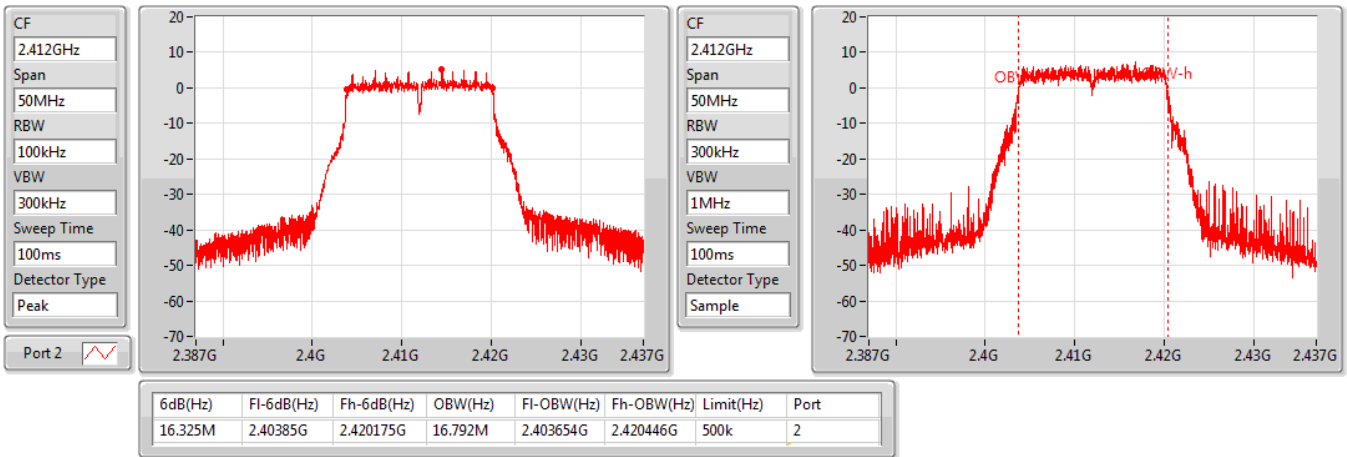


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2412MHz

26/07/2022

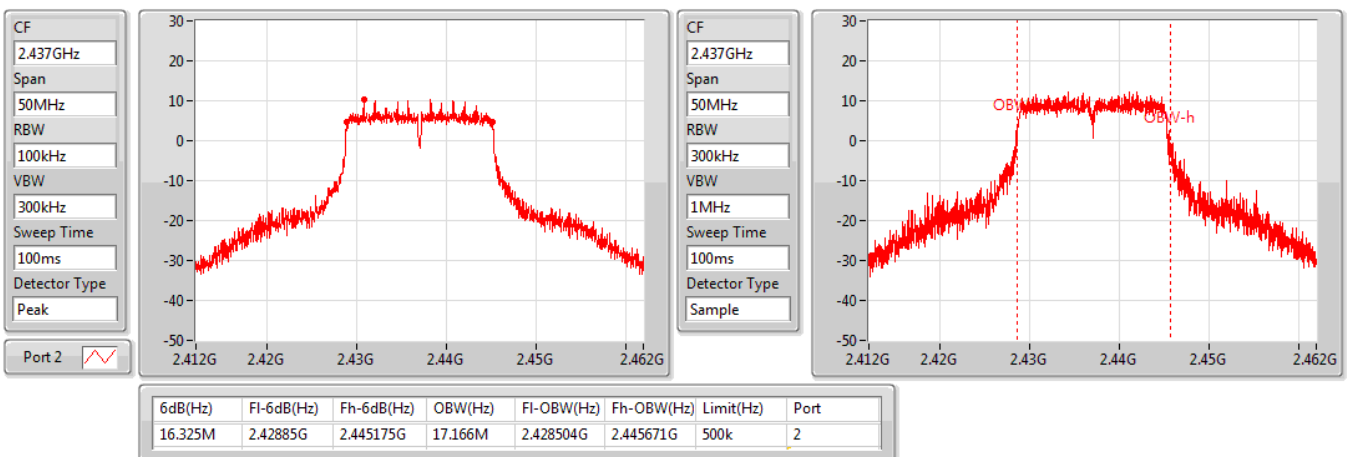


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2437MHz

26/07/2022

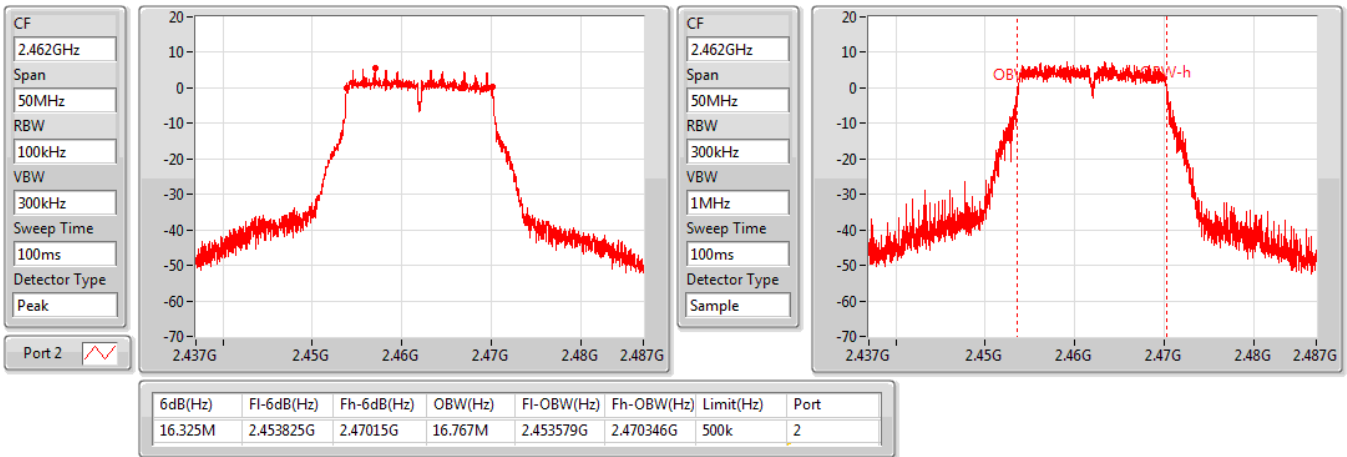


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2462MHz

26/07/2022

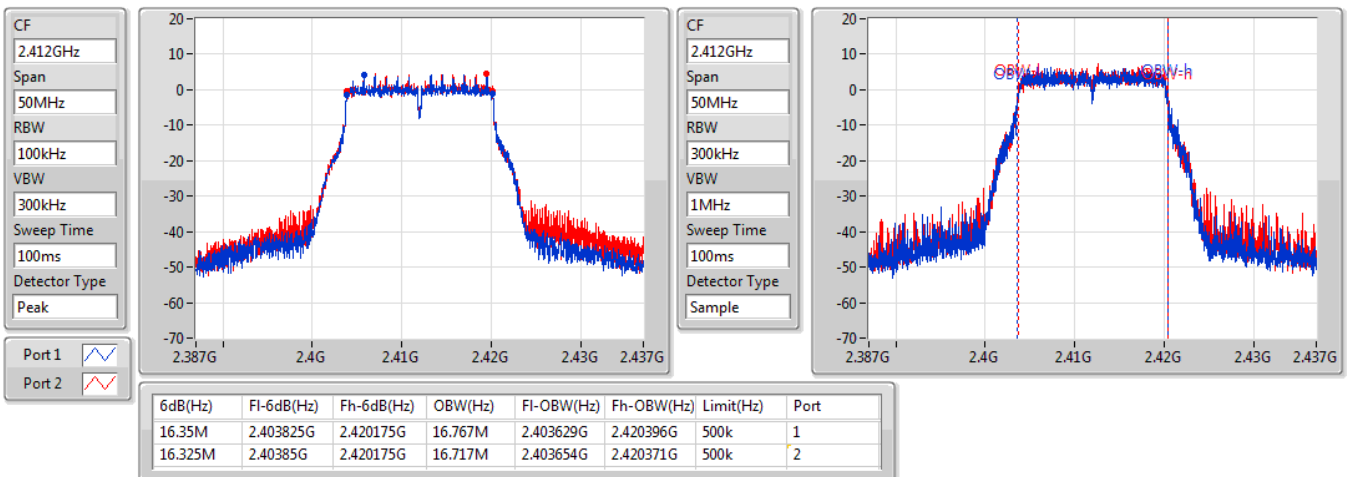


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

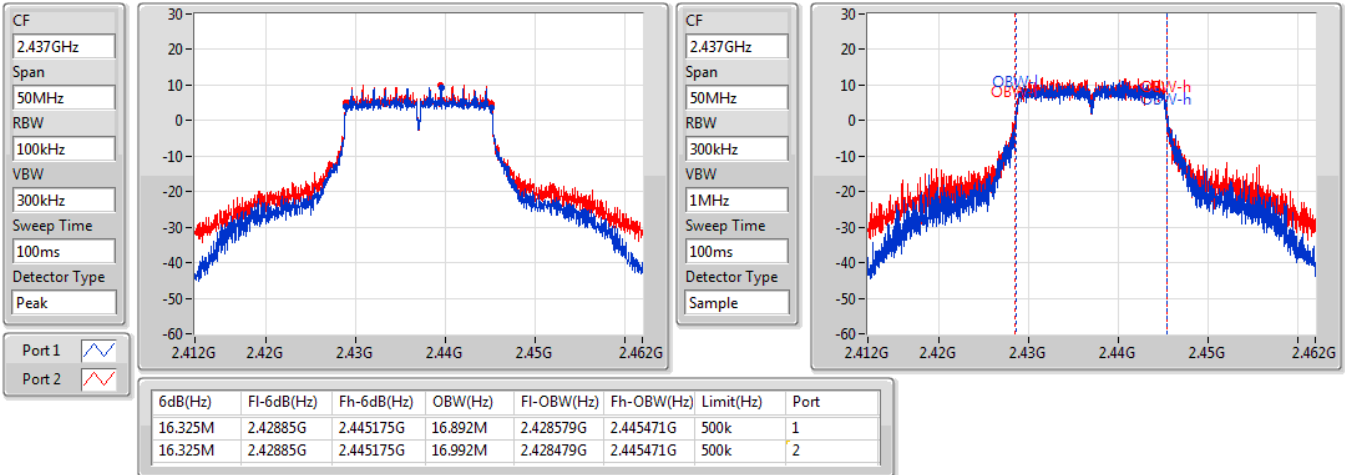
26/07/2022



802.11g_Nss1,(6Mbps)_2TX

2437MHz

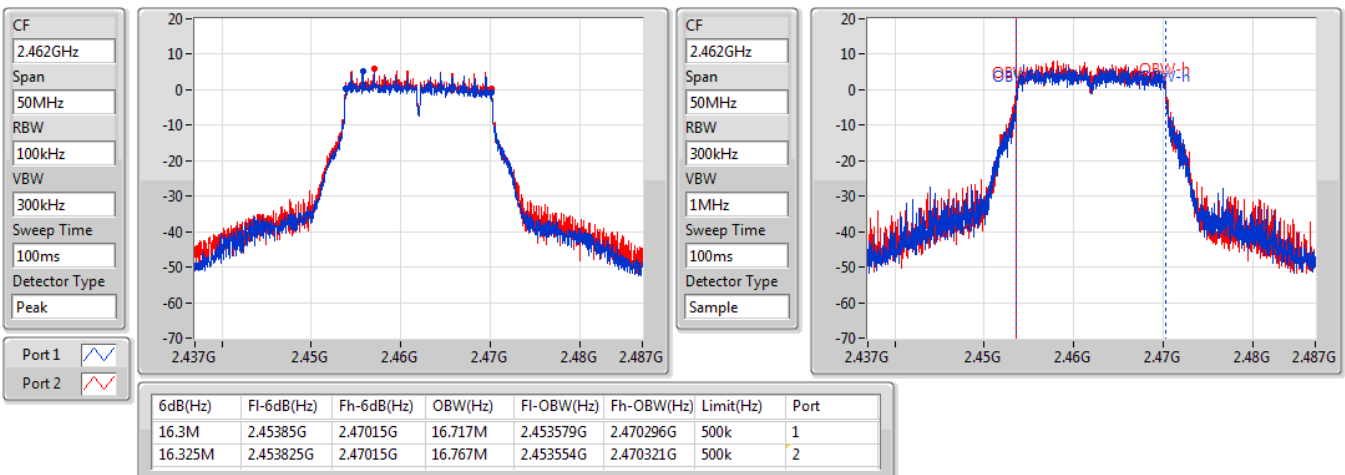
26/07/2022



802.11g_Nss1,(6Mbps)_2TX

2462MHz

26/07/2022

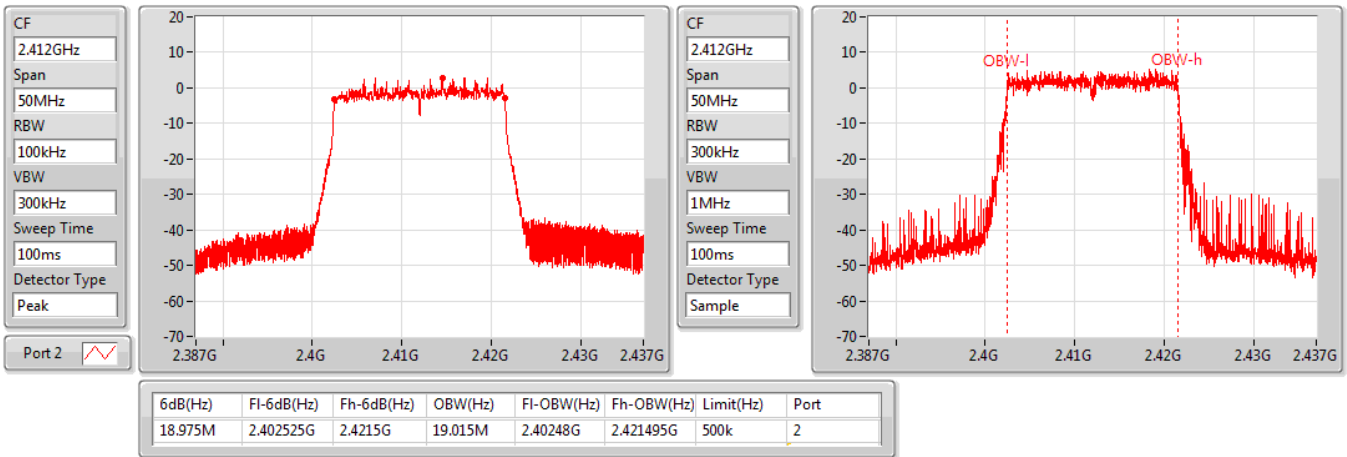


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

2412MHz

26/07/2022

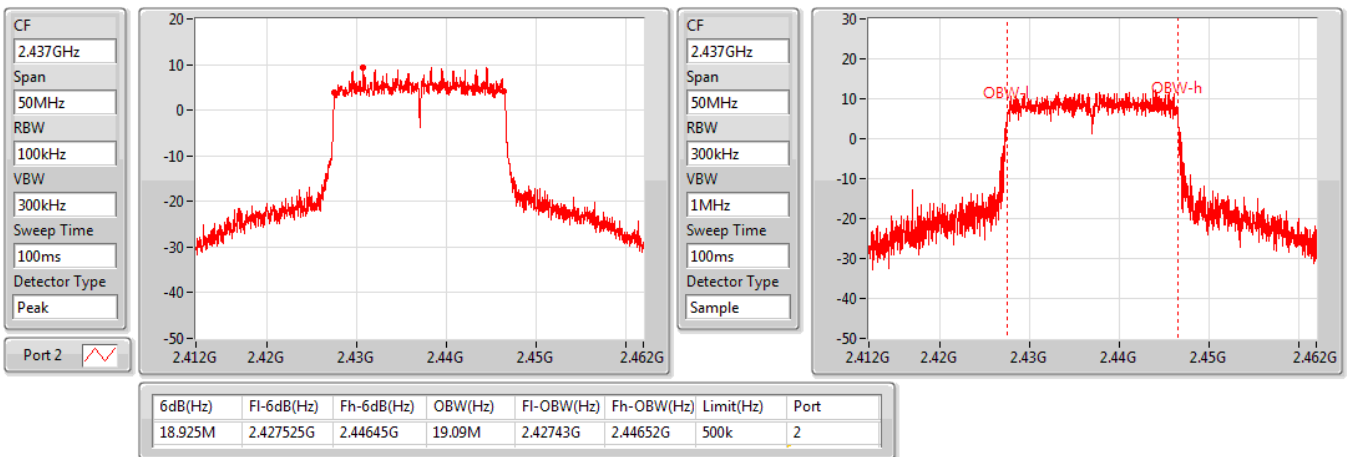


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

EBW

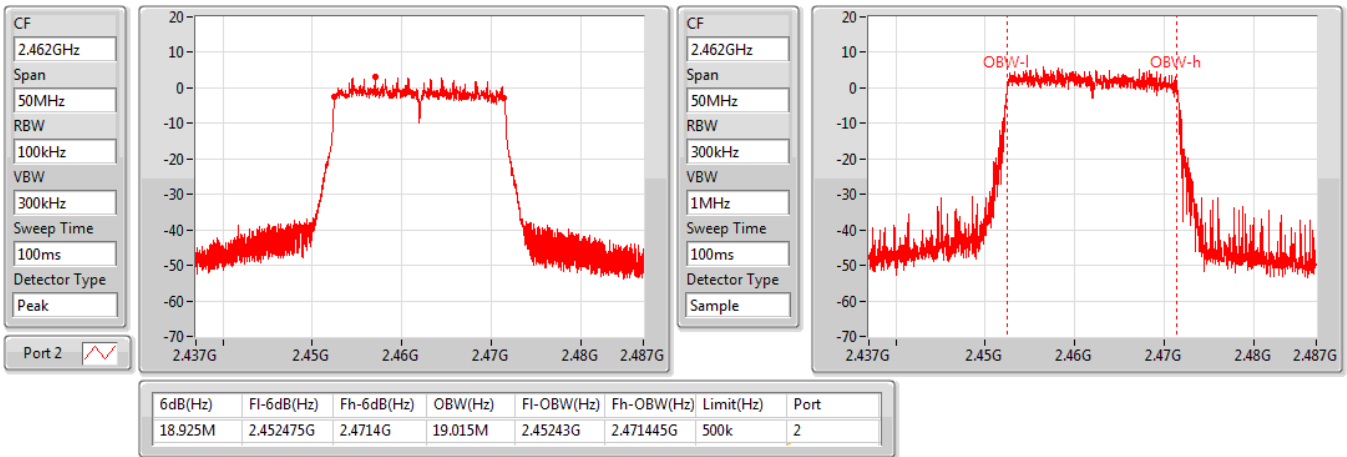
2437MHz

26/07/2022

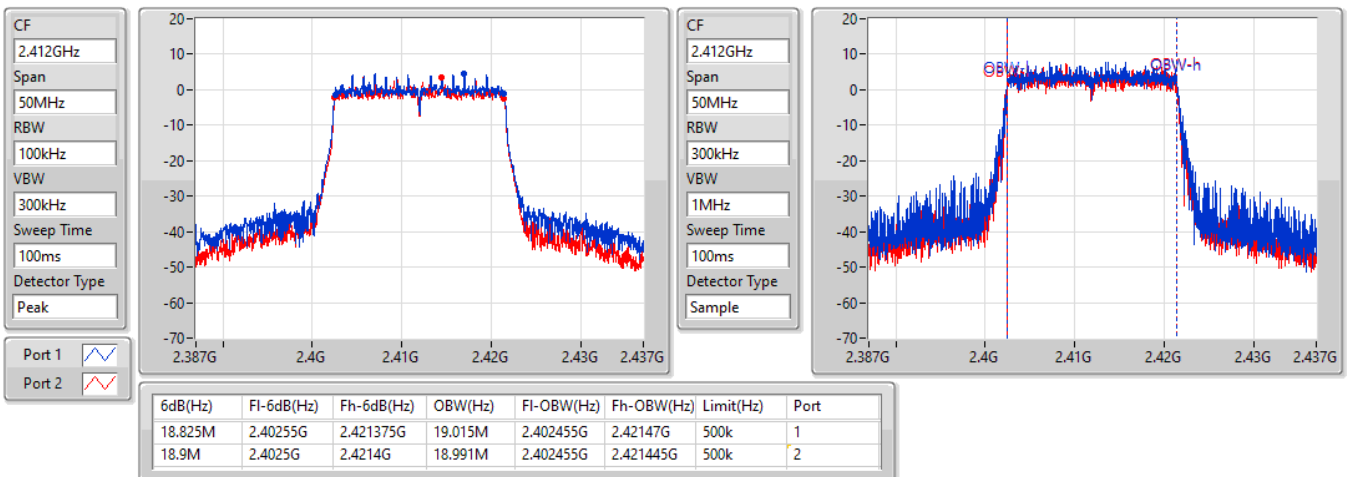


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2462MHz

26/07/2022


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
2412MHz

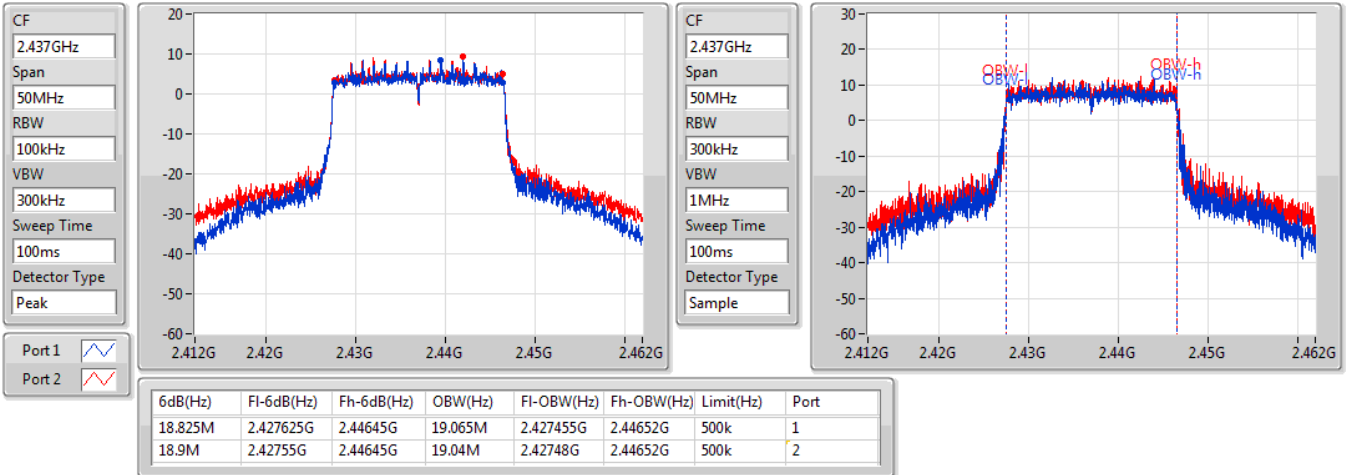
13/08/2022



802.11ax HEW20_Nss2,(MCS0)_2TX

2437MHz

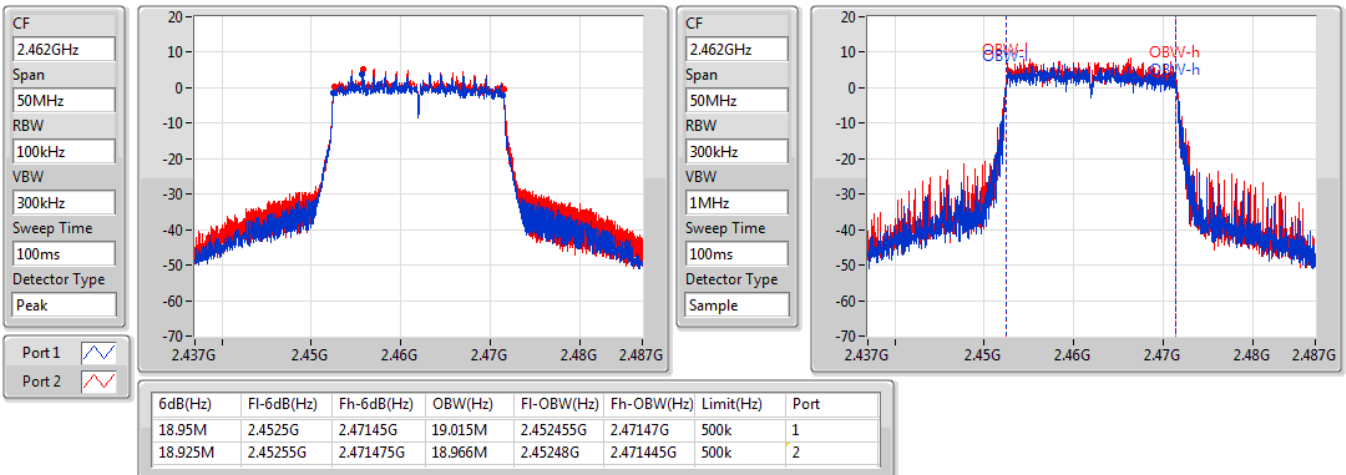
26/07/2022



802.11ax HEW20_Nss2,(MCS0)_2TX

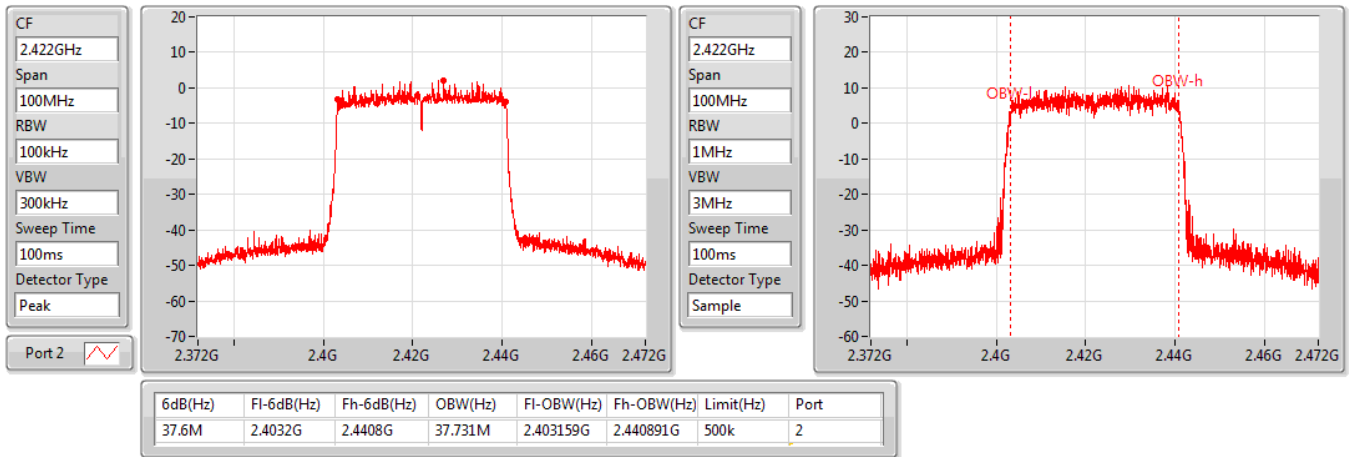
2462MHz

26/07/2022

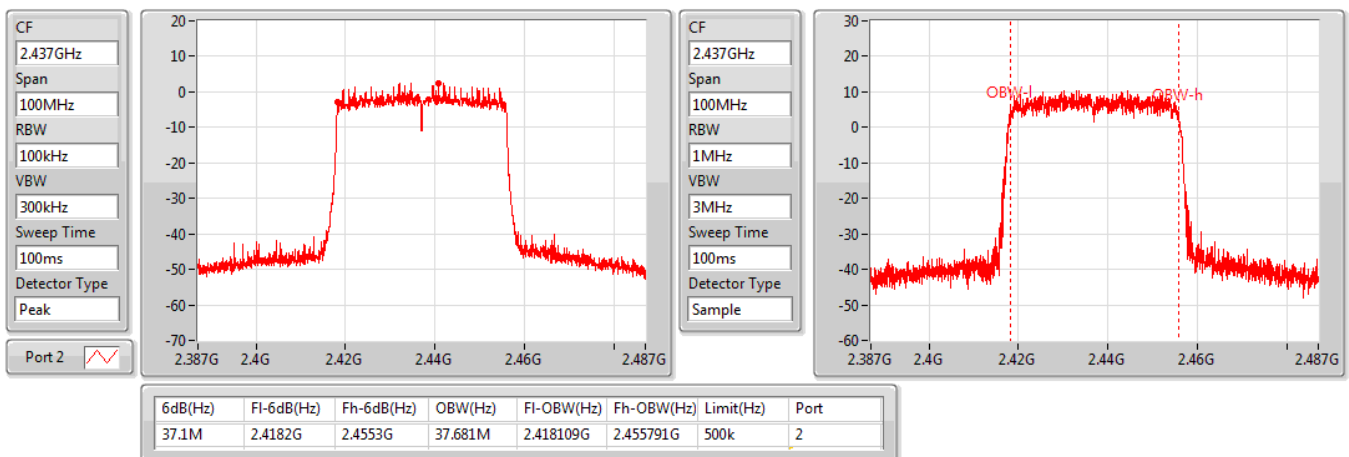


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2422MHz

26/07/2022

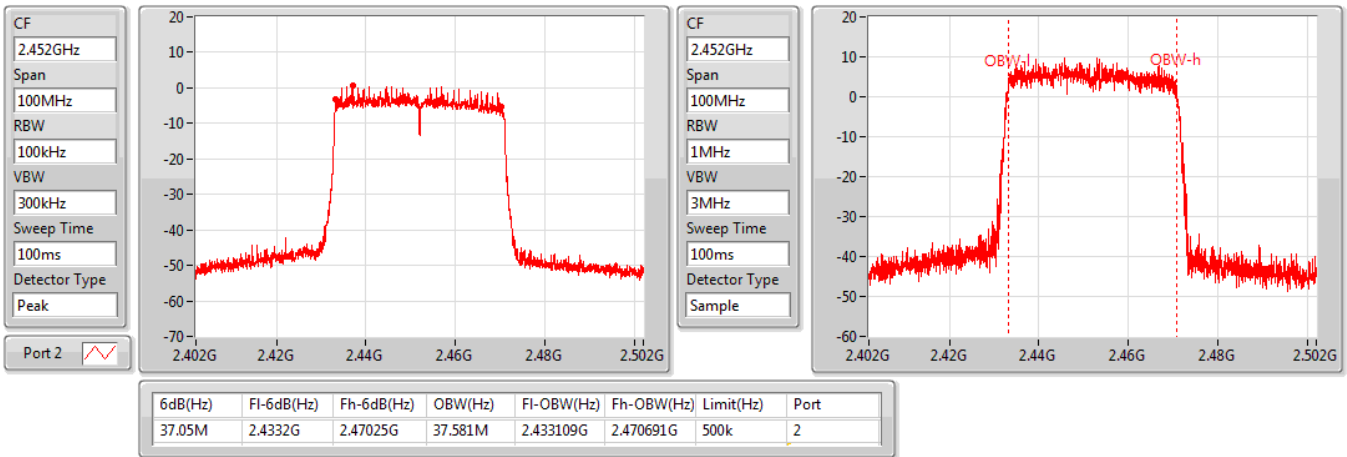

802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2437MHz

26/07/2022

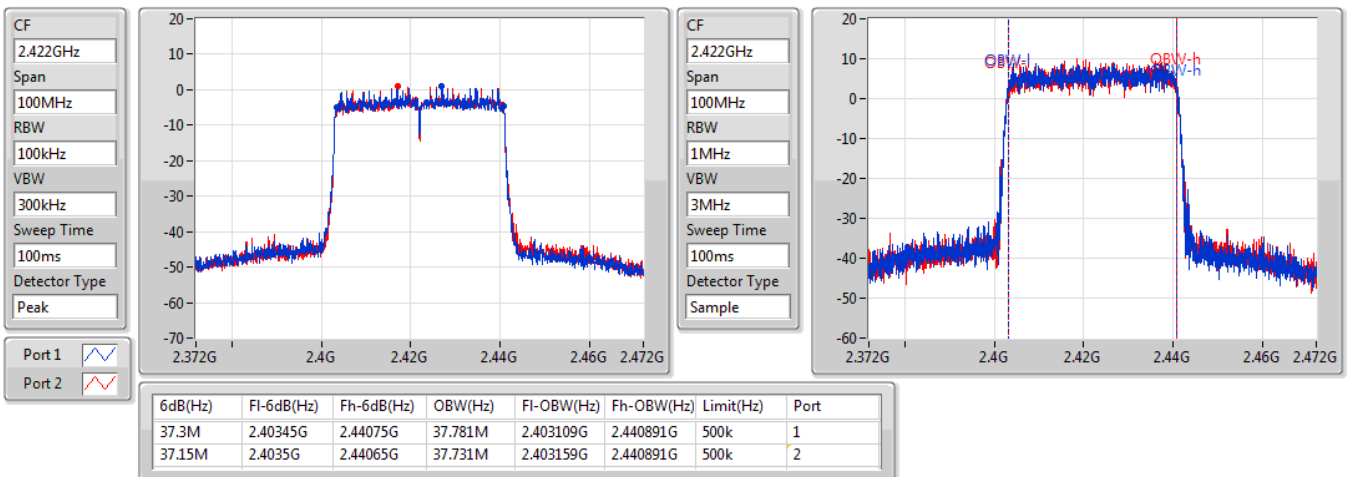


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)
EBW
2452MHz

26/07/2022


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
2422MHz

26/07/2022

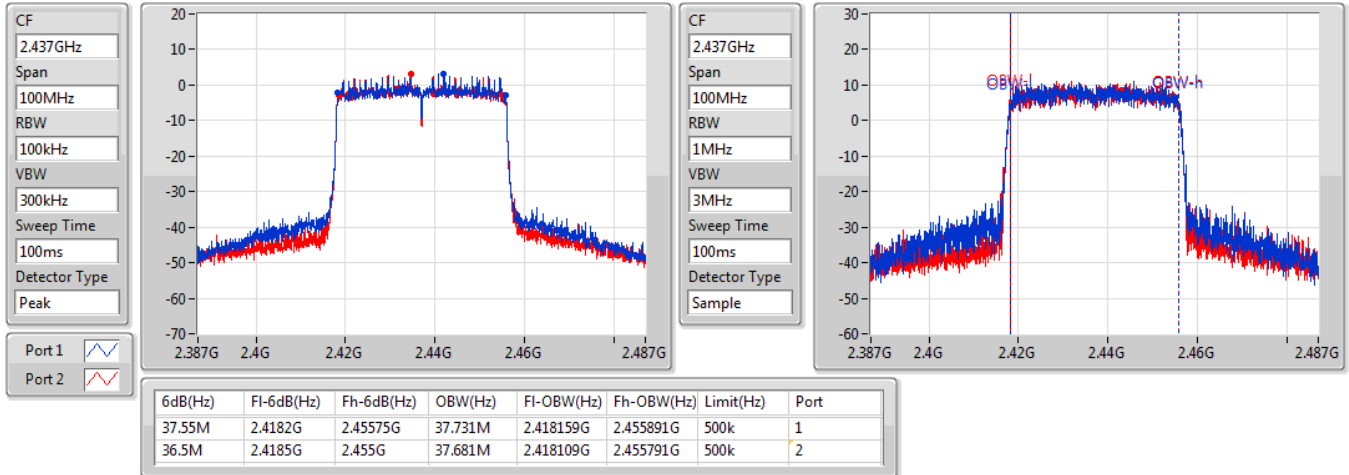


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2437MHz

26/07/2022

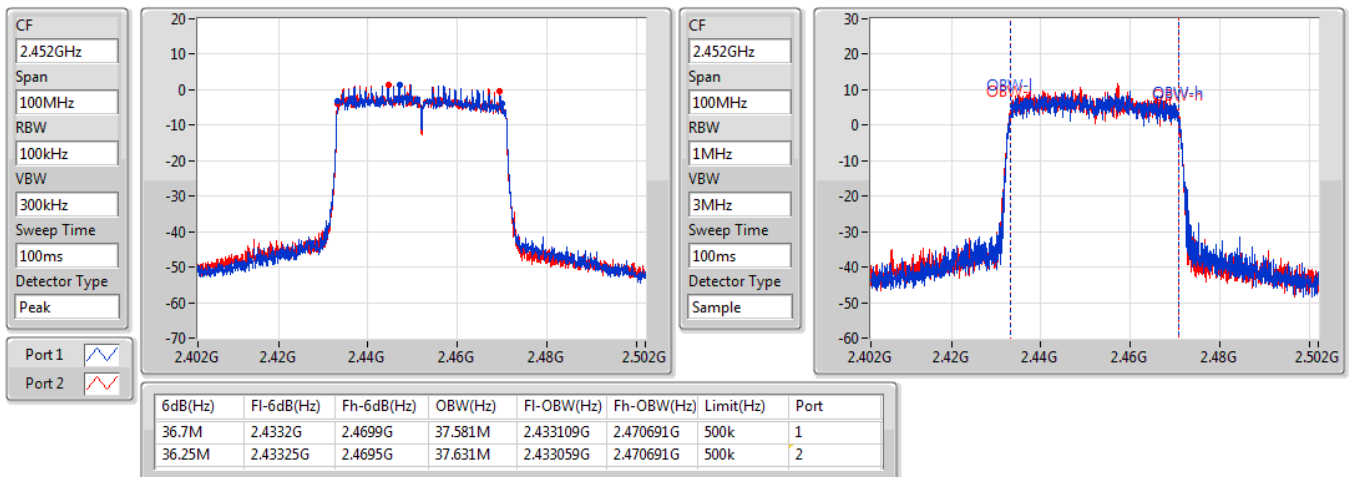


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2452MHz

26/07/2022



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	7.025M	11.894M	11M9G1D	7M	10.32M
802.11b_Nss1,(1Mbps)_2TX	7.05M	12.394M	12M4G1D	6.575M	10.345M
802.11g_Nss1,(6Mbps)_1TX(Port2)	16.35M	16.867M	16M9D1D	16.05M	16.742M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.917M	17M0D1D	16.3M	16.717M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	19M	19.04M	19M0D1D	18.925M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	19M	19.065M	19M1D1D	18.85M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.5M	37.831M	37M9D1D	36.75M	37.631M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.55M	37.731M	37M8D1D	36.05M	37.631M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; 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)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			7M	10.32M
2437MHz	Pass	500k			7M	11.894M
2462MHz	Pass	500k			7.025M	10.67M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.05M	10.345M	6.575M	10.37M
2437MHz	Pass	500k	7M	11.894M	7M	12.394M
2462MHz	Pass	500k	7.025M	10.72M	7.05M	10.595M
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			16.325M	16.767M
2437MHz	Pass	500k			16.35M	16.867M
2462MHz	Pass	500k			16.05M	16.742M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.792M	16.325M	16.742M
2437MHz	Pass	500k	16.35M	16.842M	16.3M	16.917M
2462MHz	Pass	500k	16.325M	16.742M	16.35M	16.717M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	500k			18.95M	19.015M
2437MHz	Pass	500k			19M	19.04M
2462MHz	Pass	500k			18.925M	19.015M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	19M	19.015M	18.95M	19.065M
2437MHz	Pass	500k	18.95M	18.991M	18.9M	19.065M
2462MHz	Pass	500k	18.85M	19.015M	18.975M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	500k			37.5M	37.831M
2437MHz	Pass	500k			37.05M	37.631M
2452MHz	Pass	500k			36.75M	37.631M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.731M	36.75M	37.681M
2437MHz	Pass	500k	37.05M	37.681M	36.05M	37.631M
2452MHz	Pass	500k	36.85M	37.681M	36.05M	37.631M

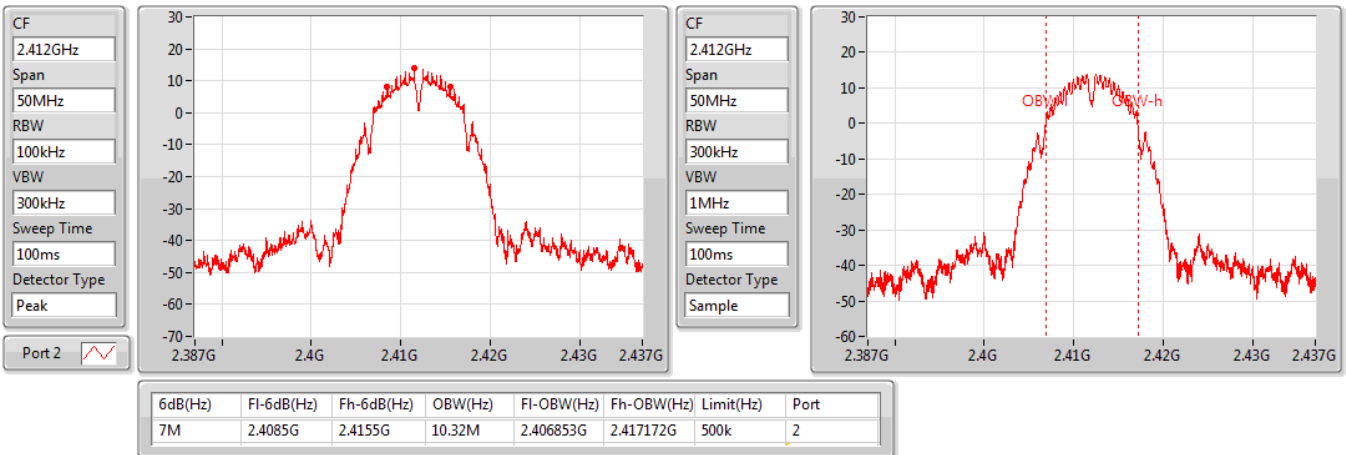
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

2412MHz

26/07/2022

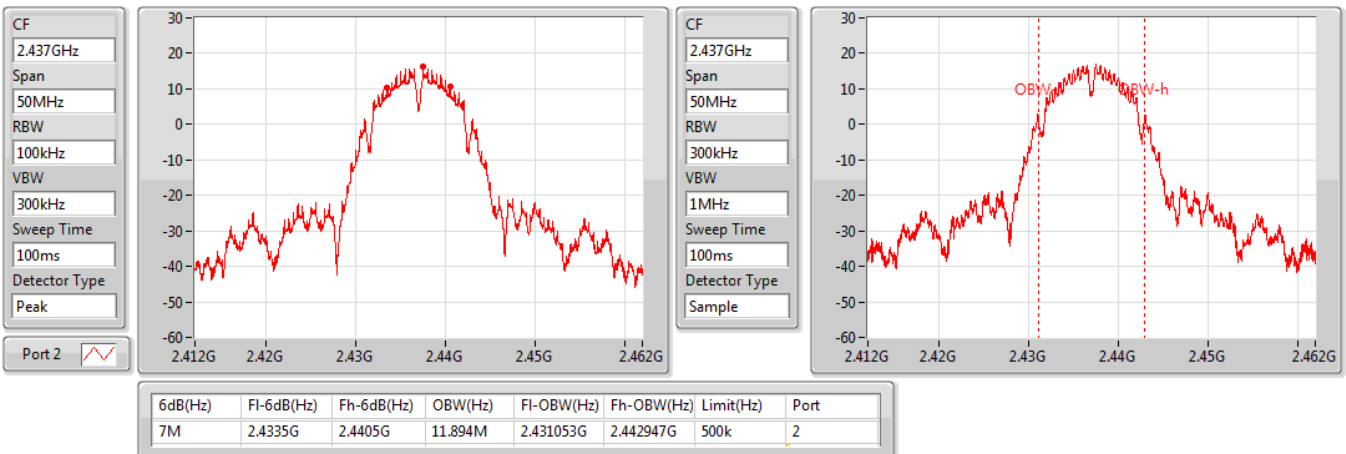


802.11b_Nss1,(1Mbps)_1TX(Port2)

EBW

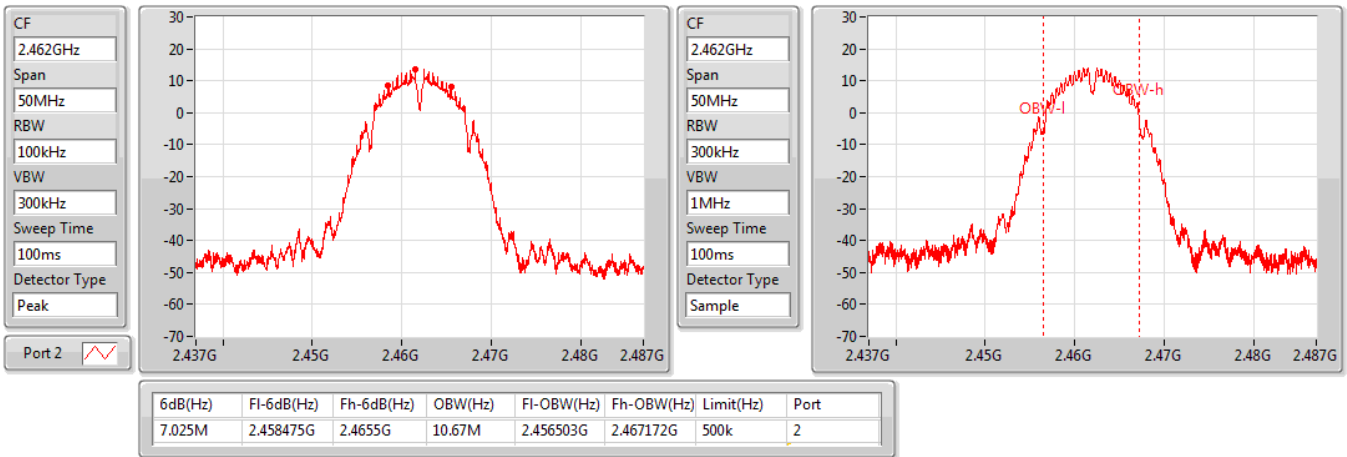
2437MHz

26/07/2022

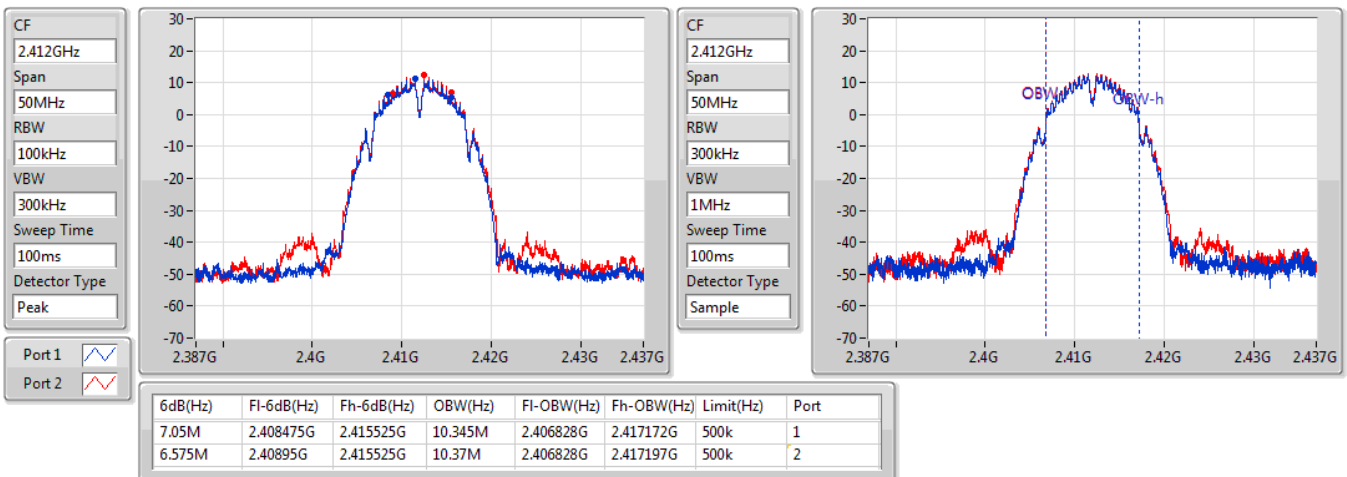


802.11b_Nss1,(1Mbps)_1TX(Port2)
EBW
2462MHz

26/07/2022


802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

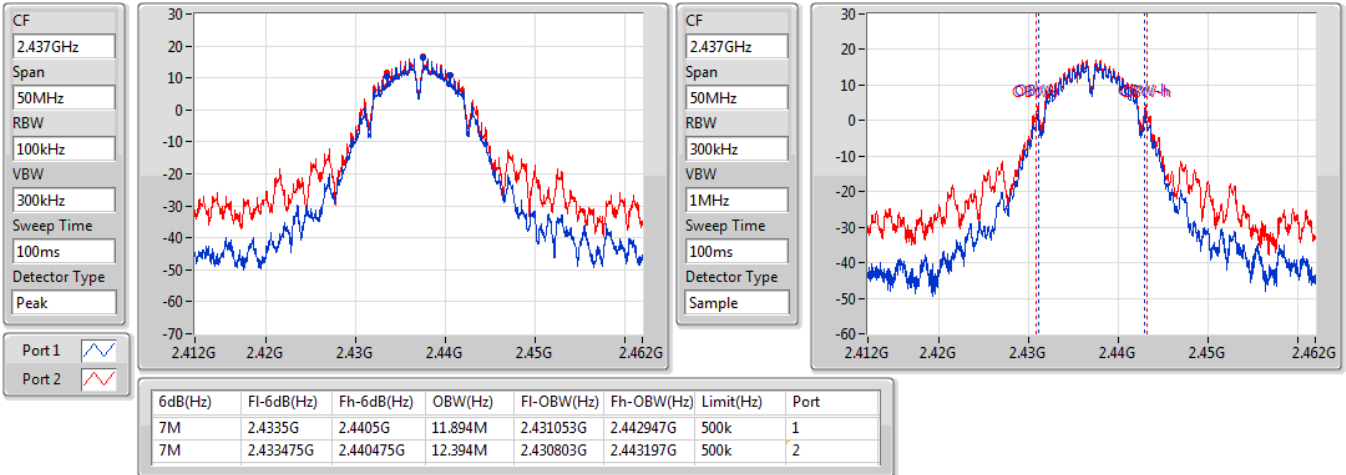
26/07/2022



802.11b_Nss1,(1Mbps)_2TX

2437MHz

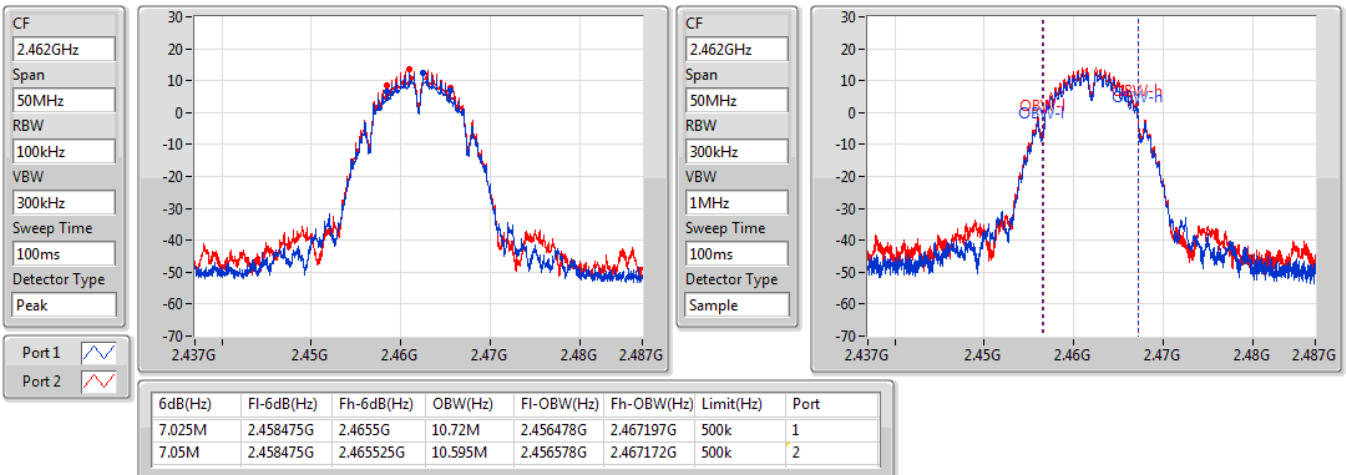
26/07/2022



802.11b_Nss1,(1Mbps)_2TX

2462MHz

26/07/2022

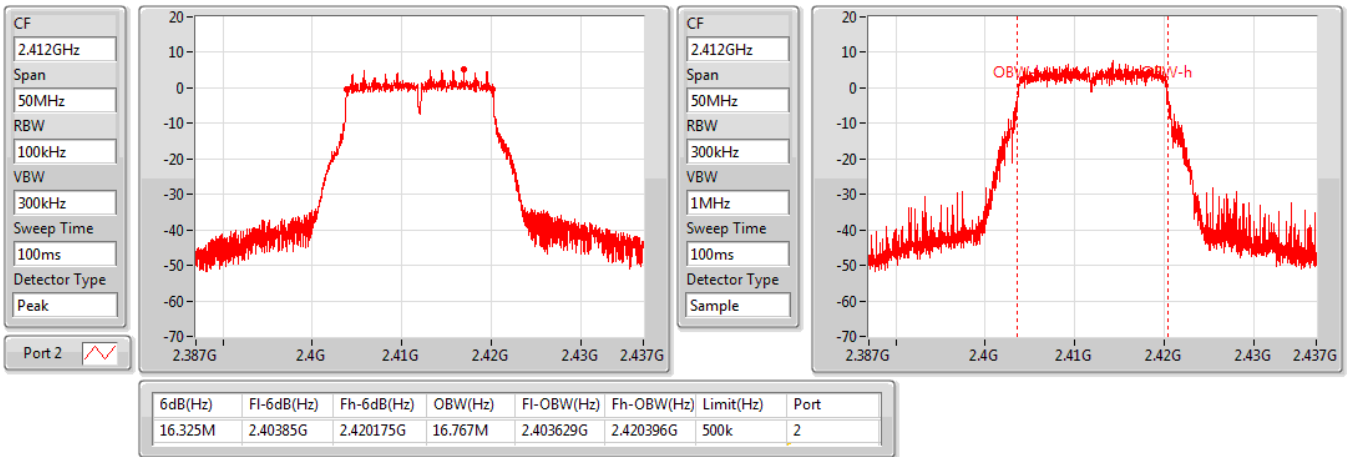


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2412MHz

26/07/2022

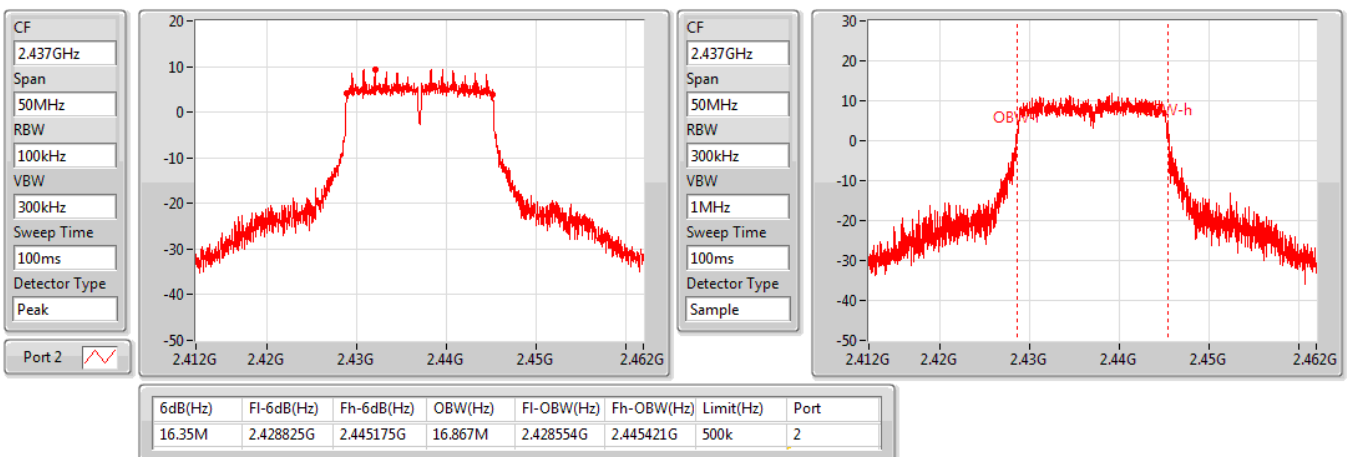


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2437MHz

26/07/2022

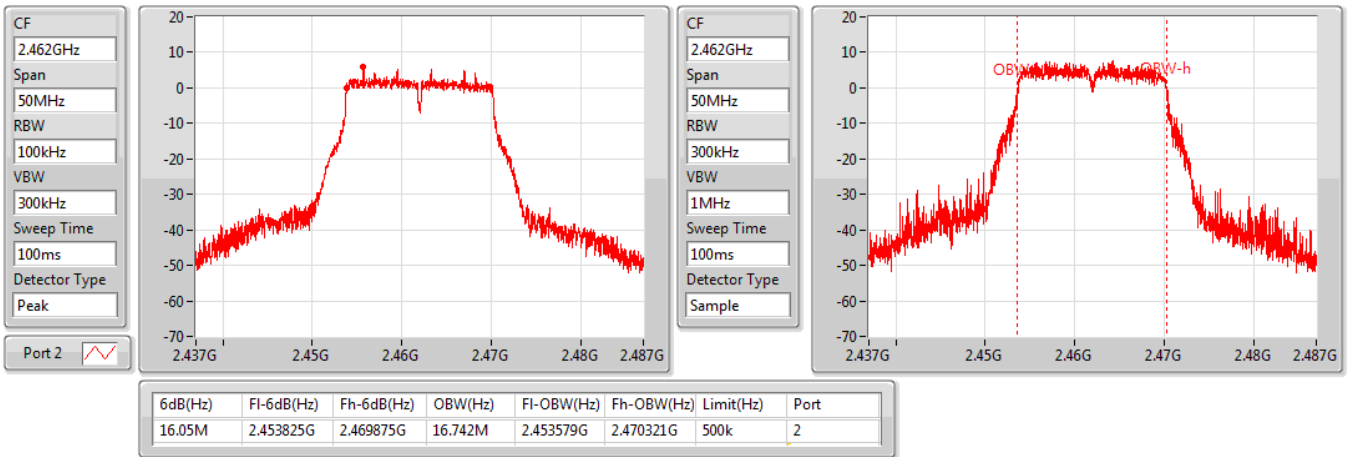


802.11g_Nss1,(6Mbps)_1TX(Port2)

EBW

2462MHz

26/07/2022

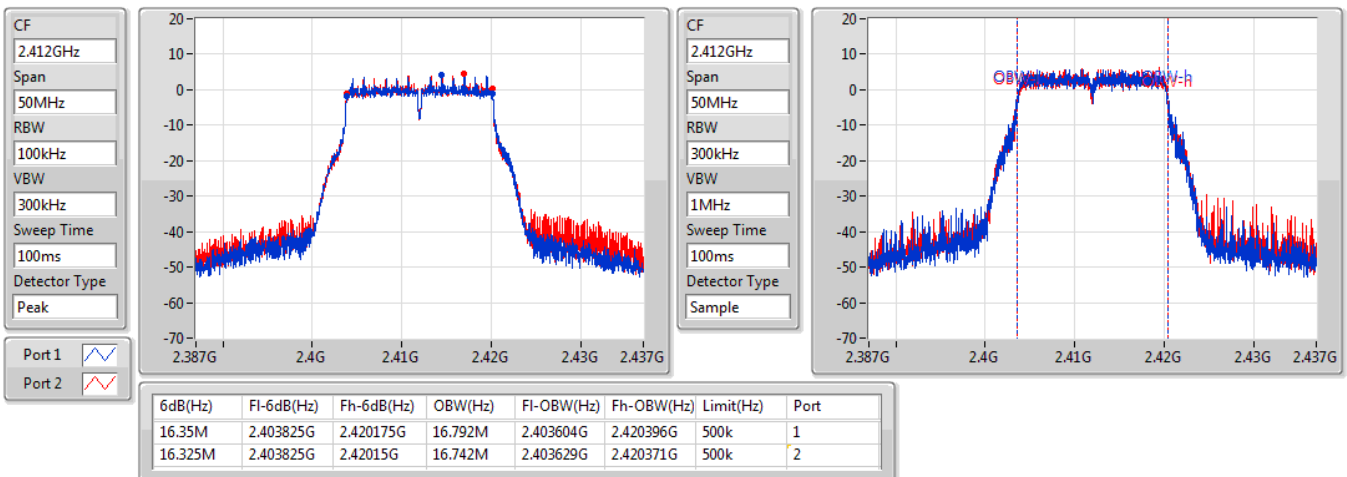


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

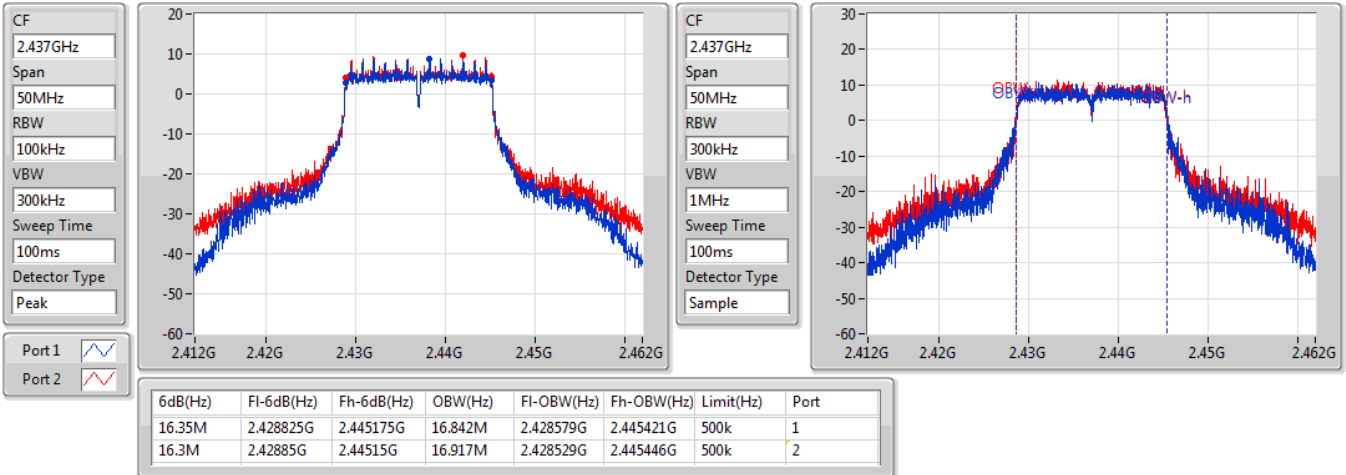
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802.11g_Nss1,(6Mbps)_2TX

2437MHz

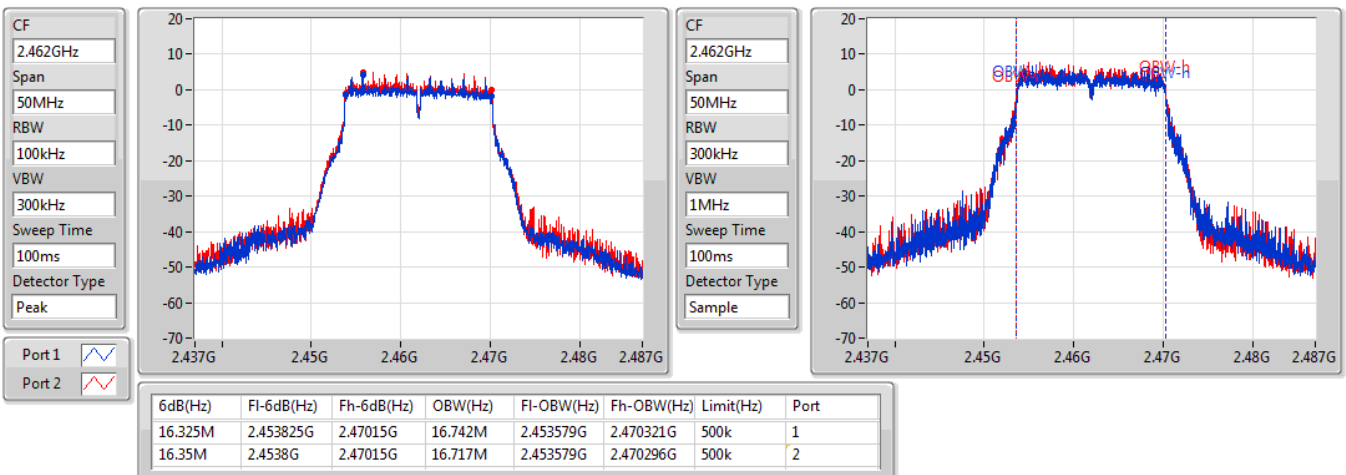
26/07/2022



802.11g_Nss1,(6Mbps)_2TX

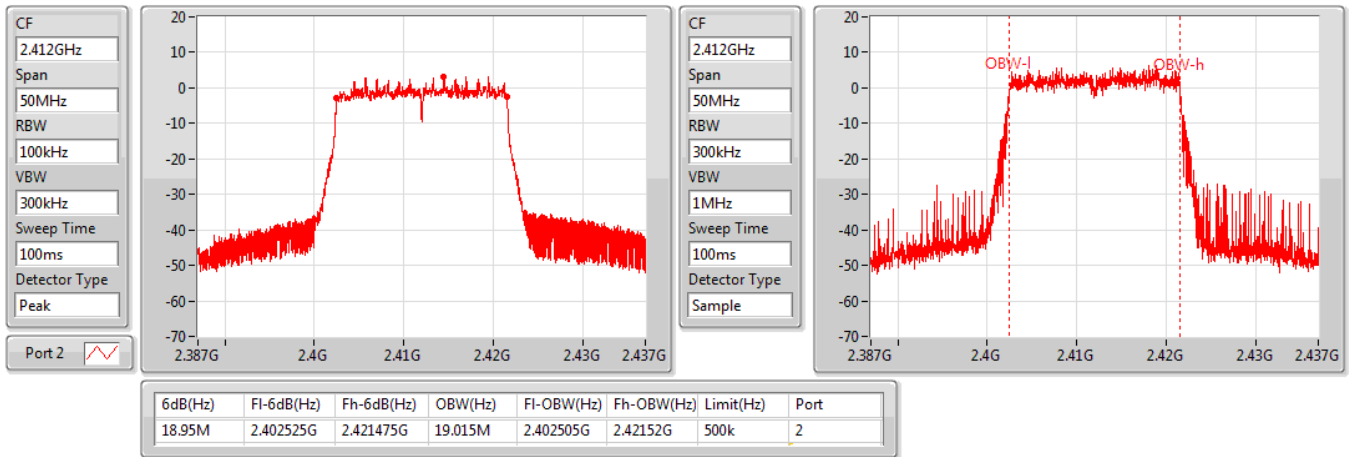
2462MHz

26/07/2022

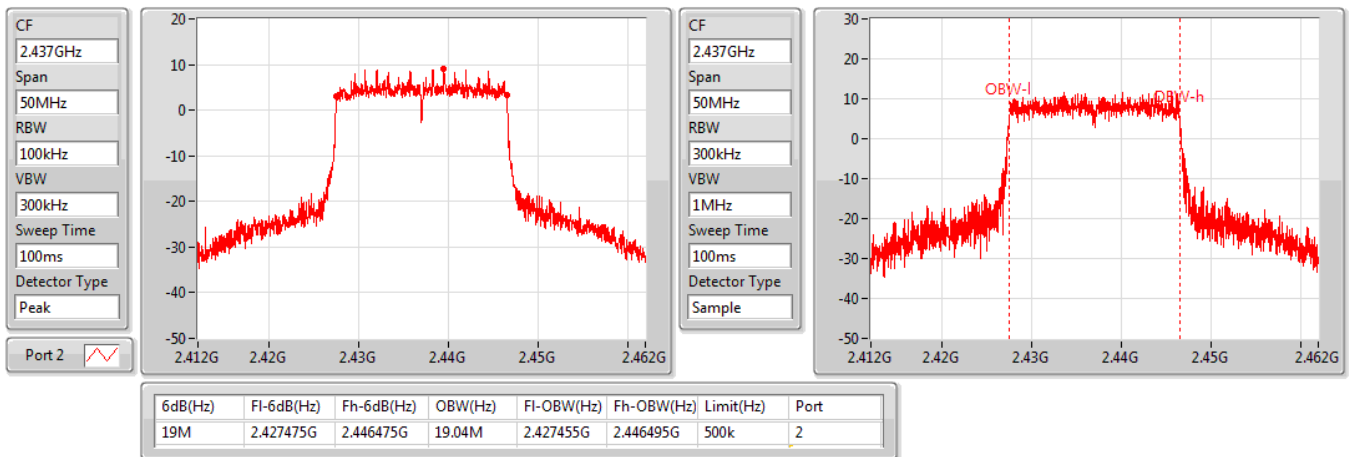


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2412MHz

26/07/2022

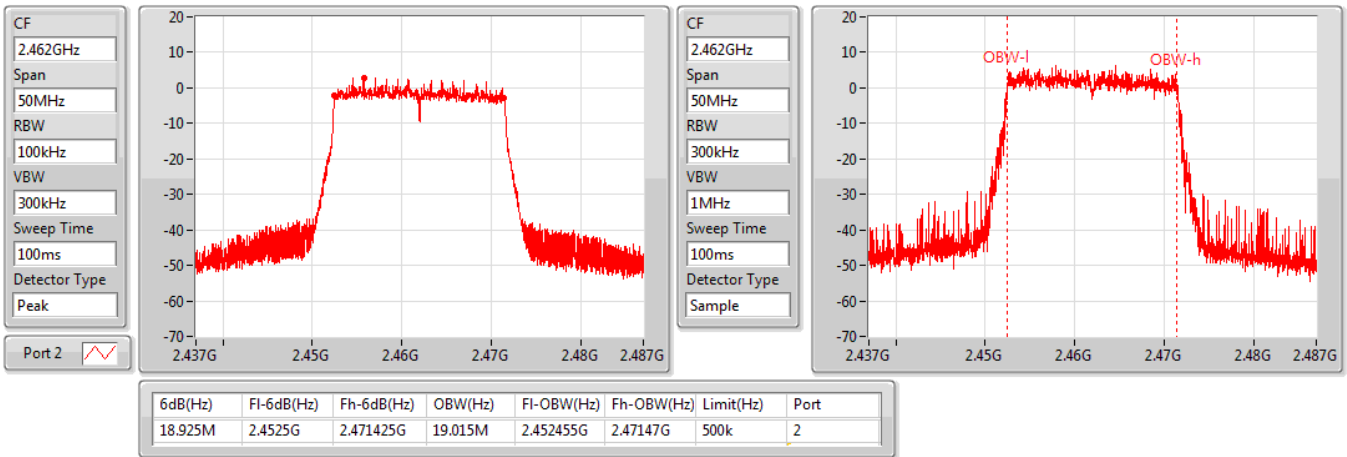

802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2437MHz

26/07/2022

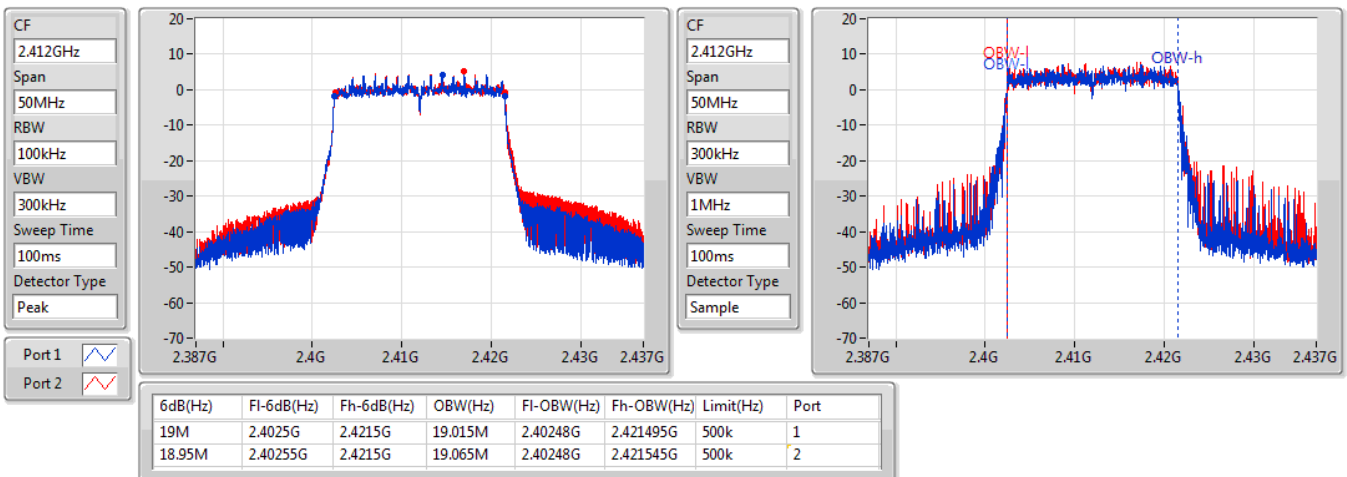


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)
EBW
2462MHz

26/07/2022


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
2412MHz

26/07/2022

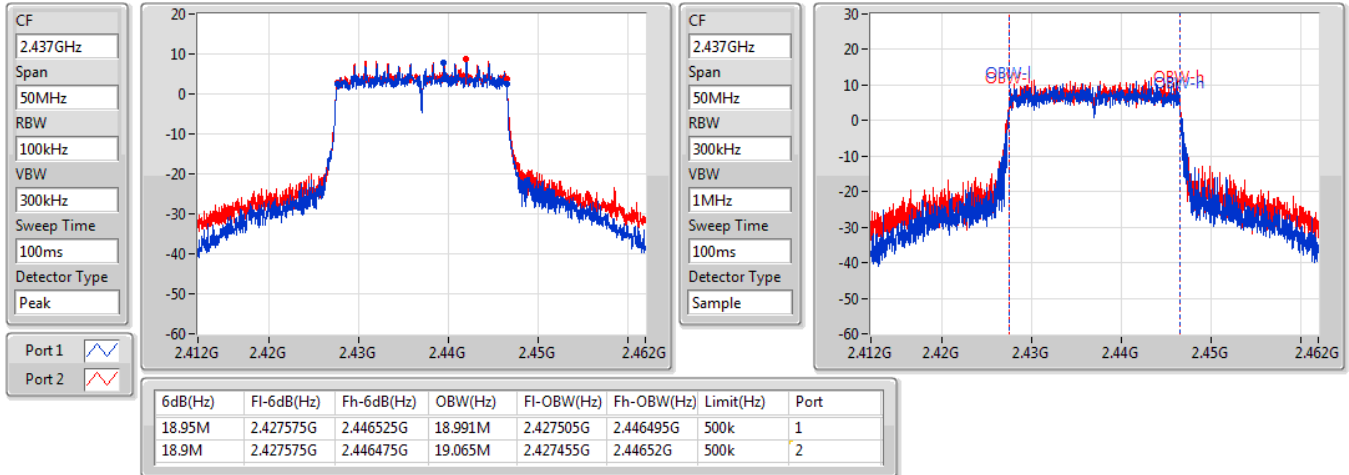


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

2437MHz

26/07/2022

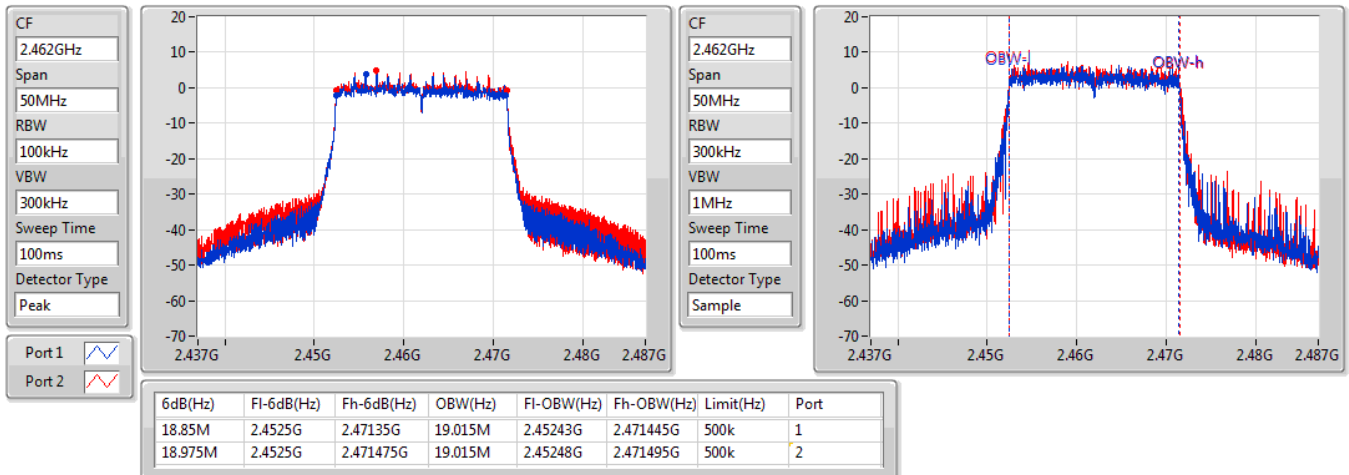


802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

2462MHz

26/07/2022

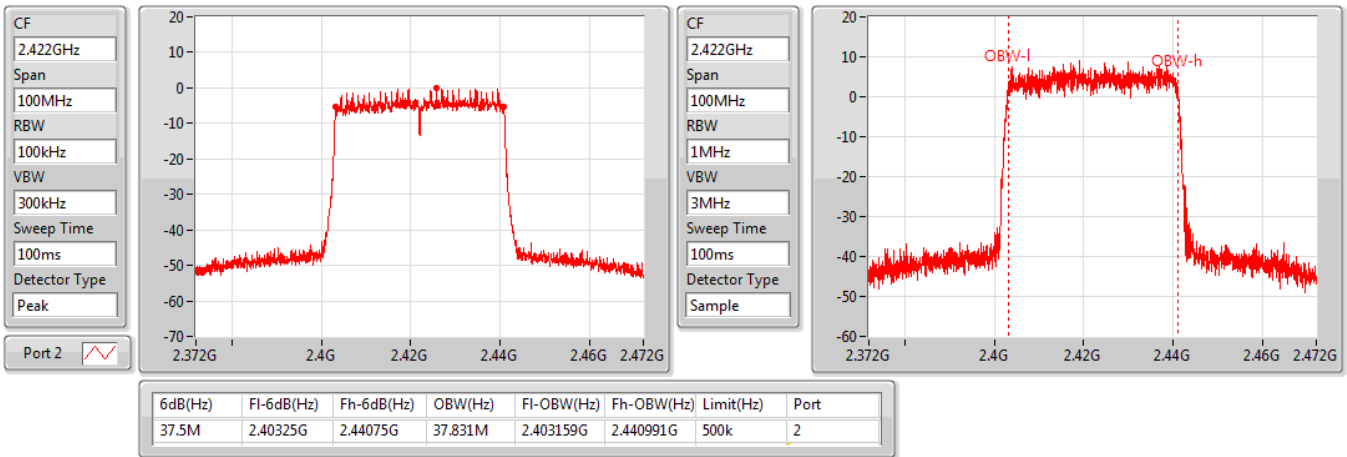


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2422MHz

26/07/2022

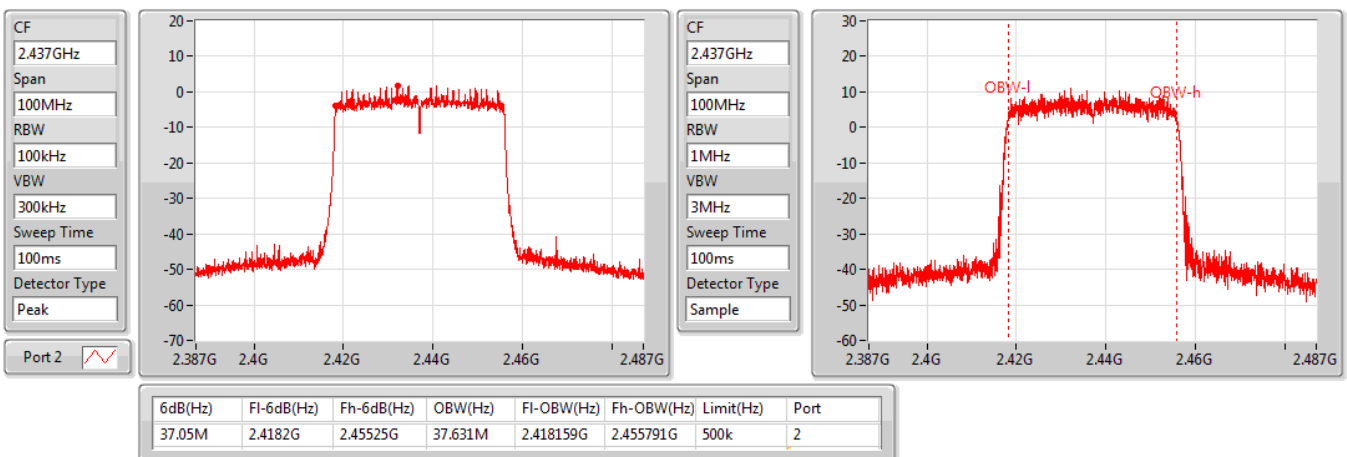


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2437MHz

26/07/2022

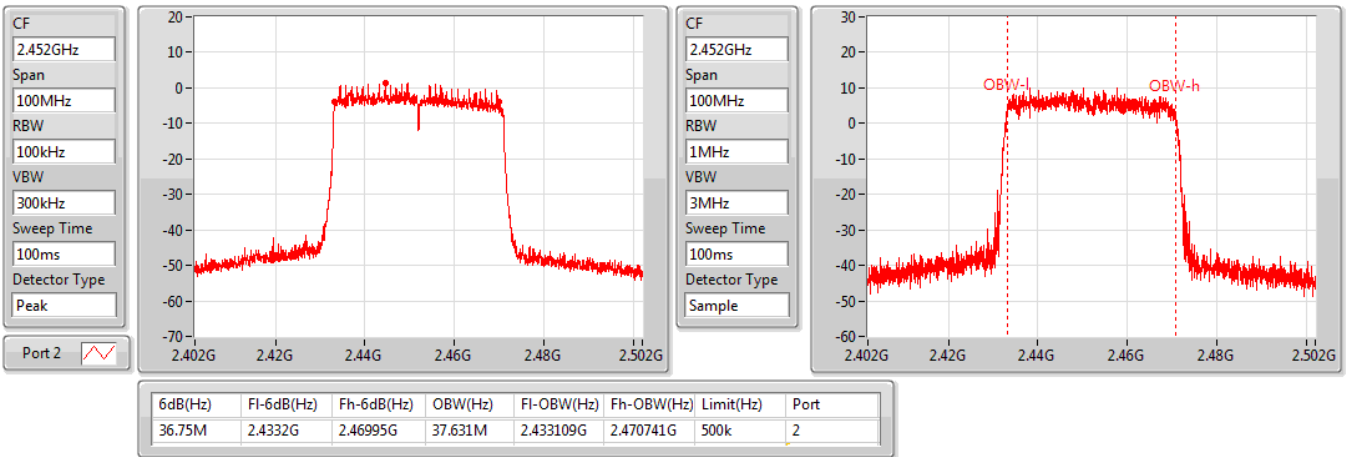


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

EBW

2452MHz

26/07/2022

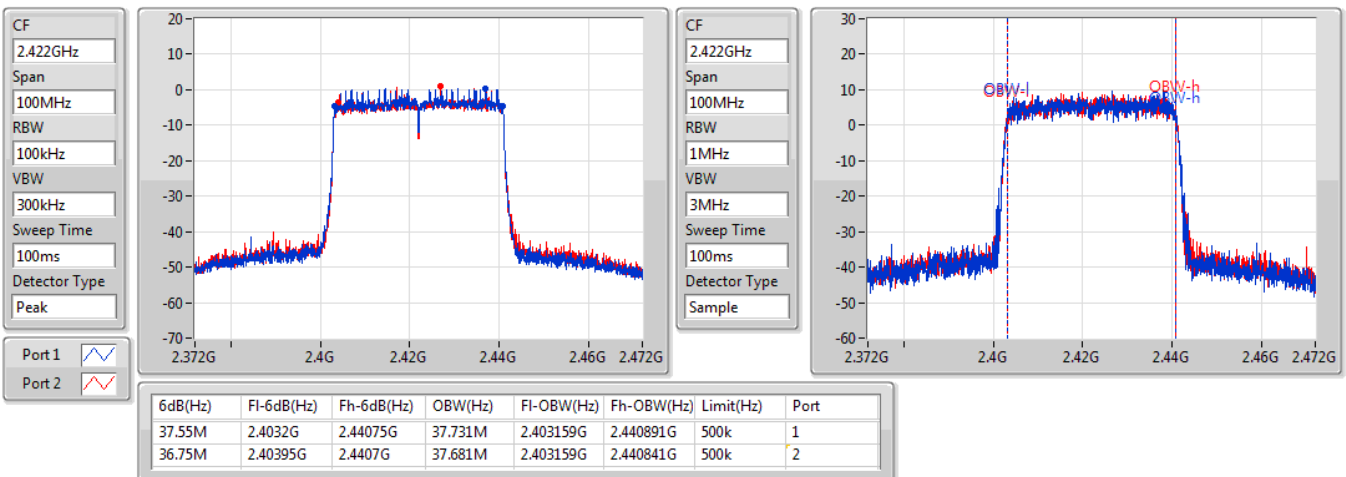


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2422MHz

26/07/2022

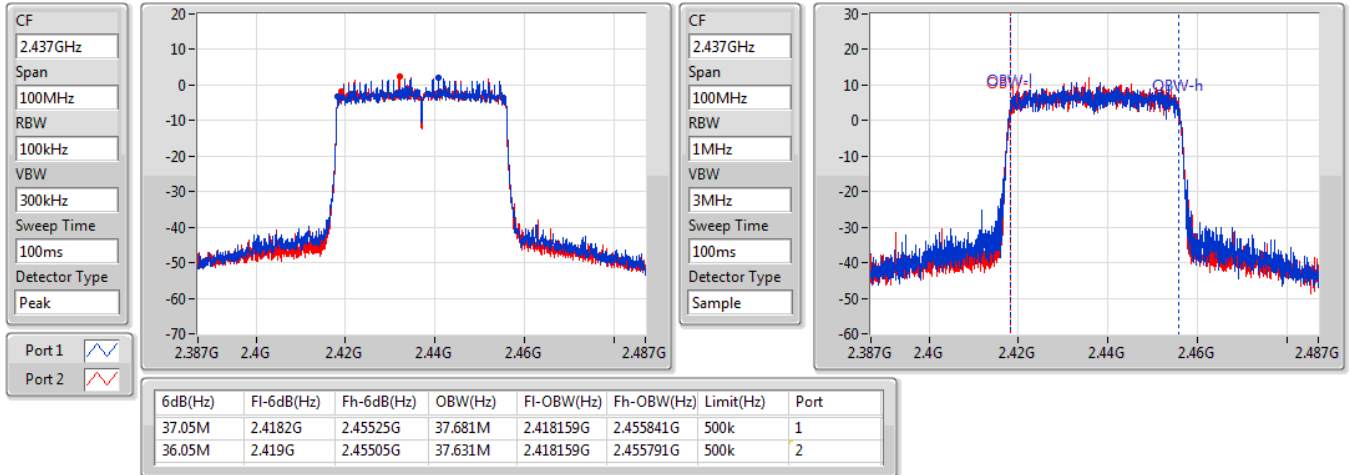


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2437MHz

26/07/2022

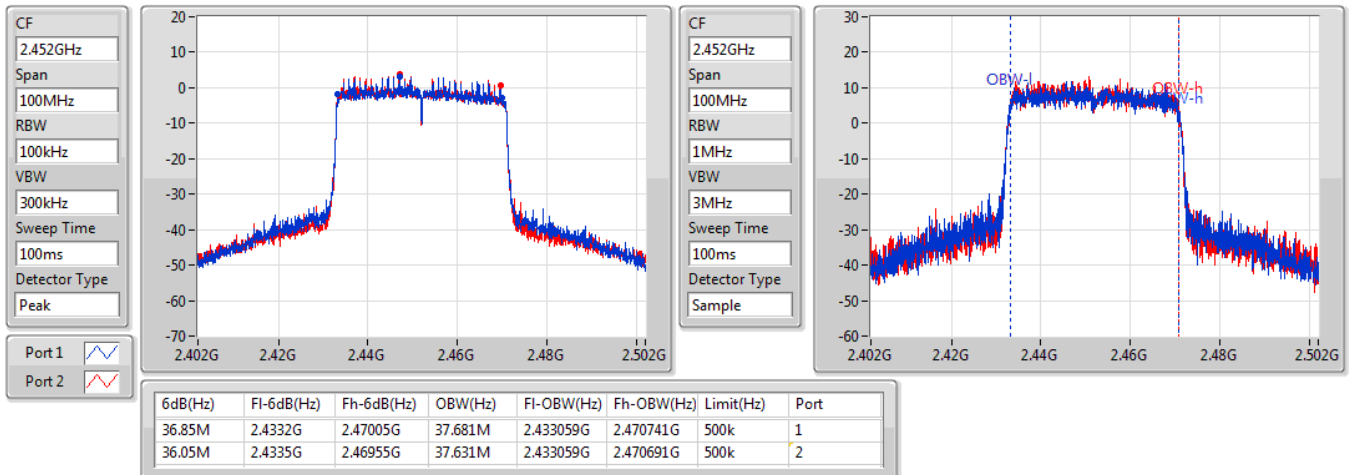


802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

2452MHz

26/07/2022





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.95M	19.09M	19M1D1D	18.75M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.6M	37.831M	37M8D1D	35.45M	37.631M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

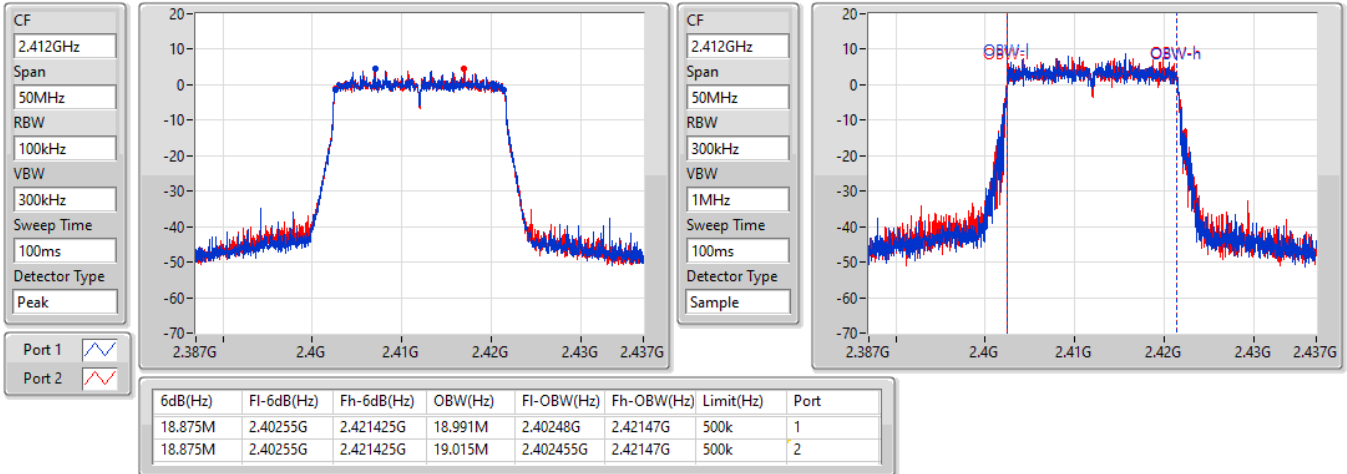
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.875M	18.991M	18.875M	19.015M
2437MHz	Pass	500k	18.75M	19.065M	18.95M	19.09M
2462MHz	Pass	500k	18.925M	19.015M	18.925M	19.015M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.681M	35.45M	37.631M
2437MHz	Pass	500k	37.5M	37.681M	37.6M	37.831M
2452MHz	Pass	500k	37.5M	37.831M	35.7M	37.781M

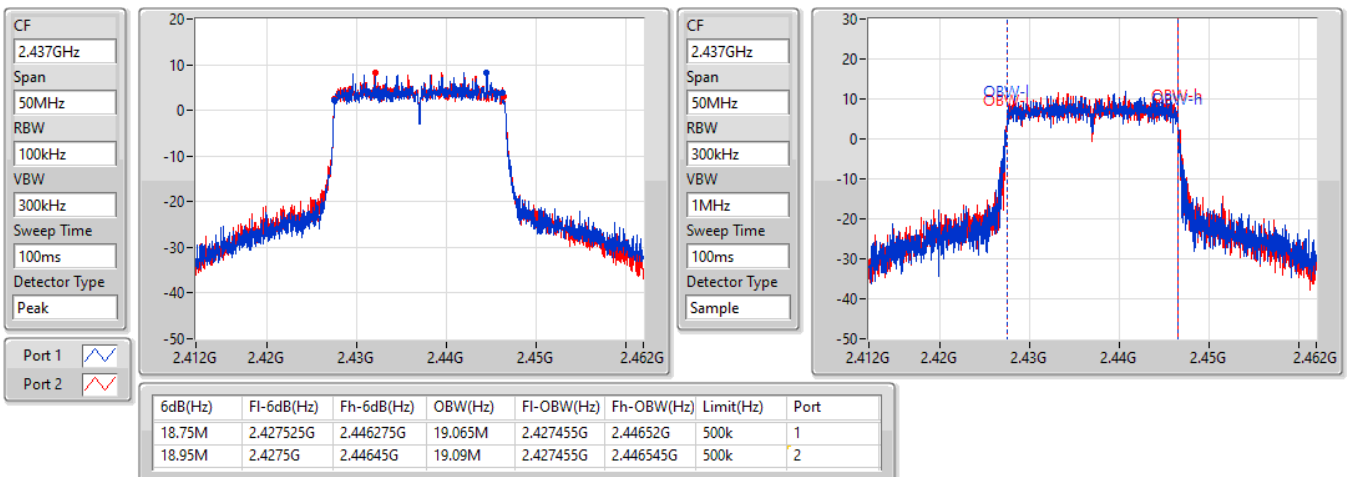
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

23/05/2022


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

23/05/2022

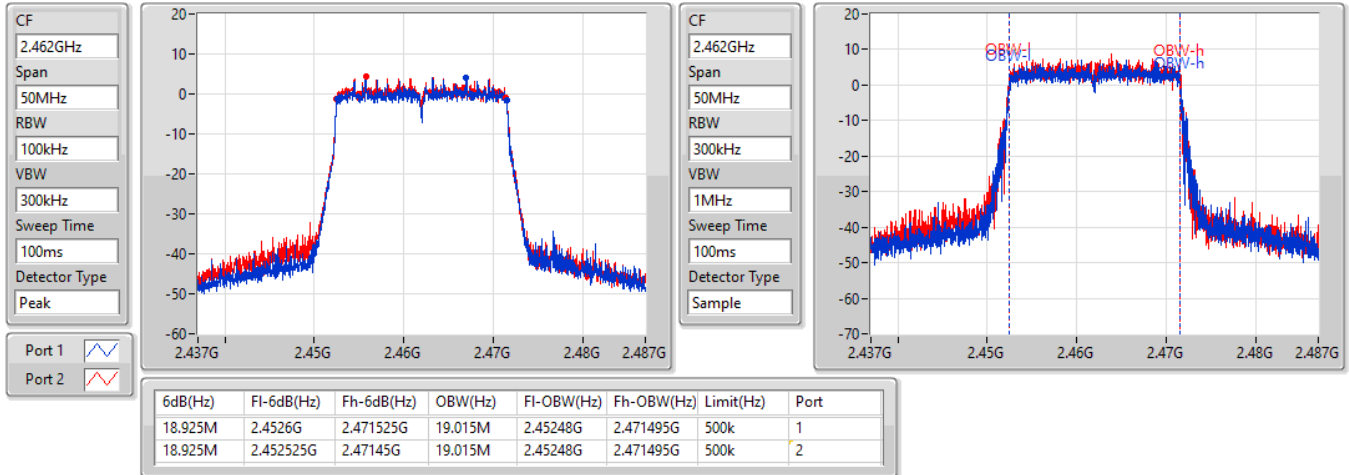


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2462MHz

23/05/2022

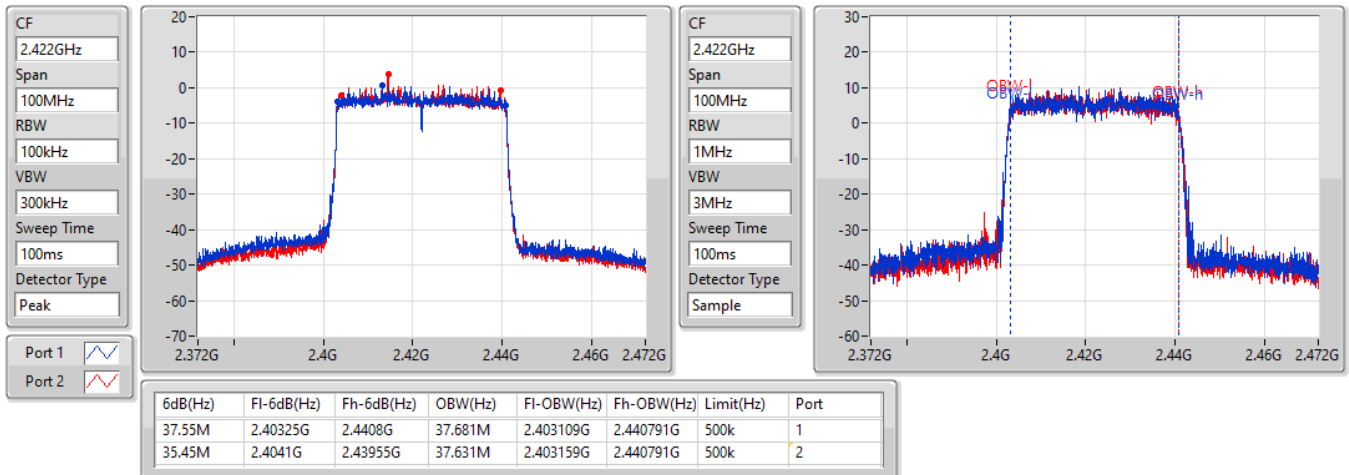


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

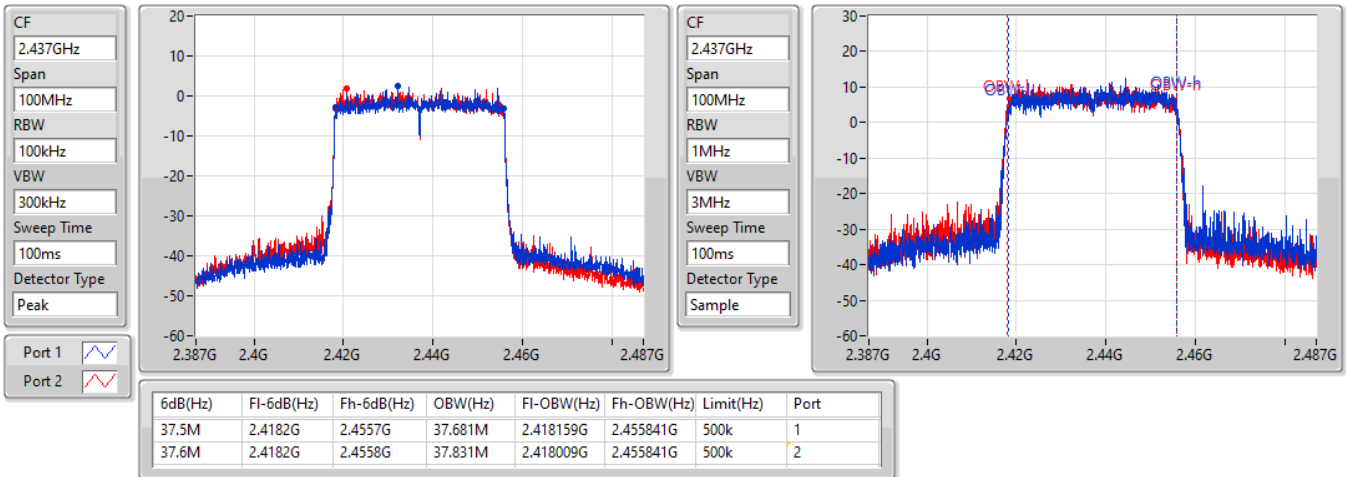
2422MHz

23/05/2022

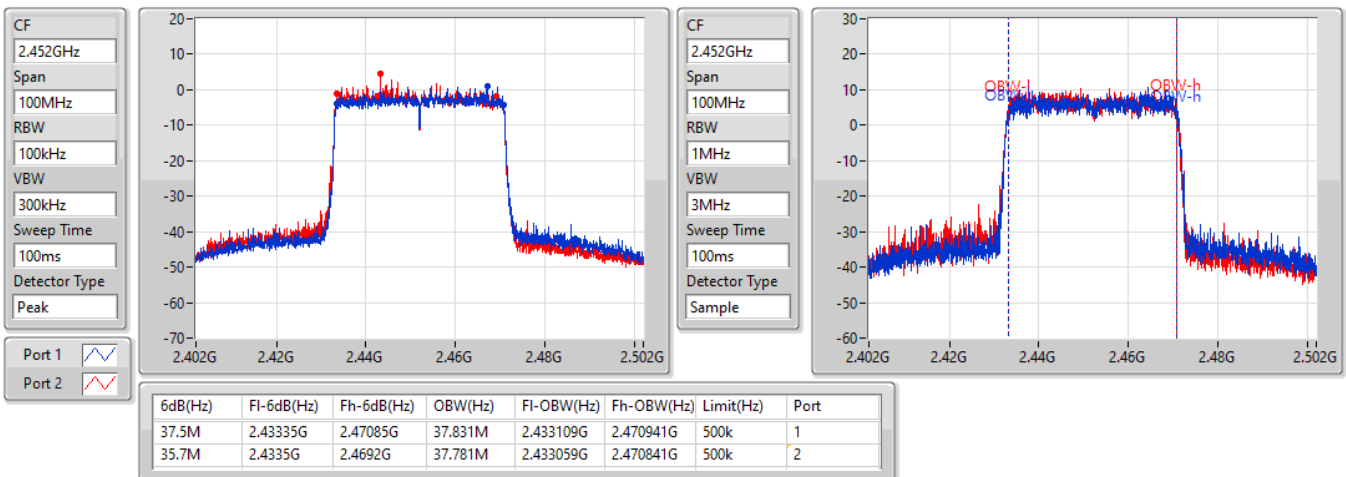


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

23/05/2022


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

23/05/2022





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19M	19.14M	19M2D1D	18.875M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.7M	37.881M	37M9D1D	36.8M	37.681M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

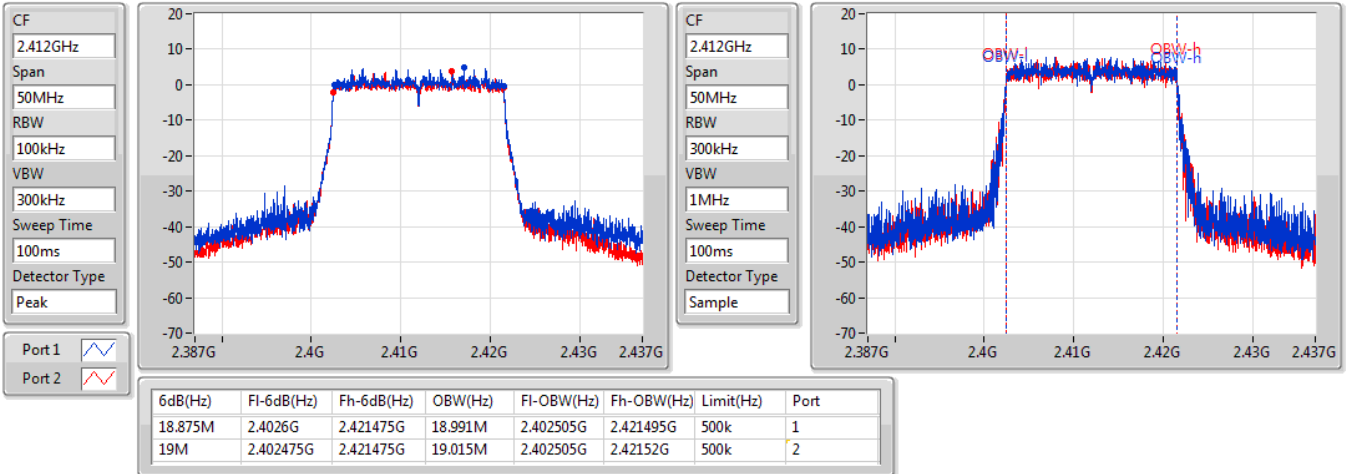
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.875M	18.991M	19M	19.015M
2437MHz	Pass	500k	18.925M	19.14M	18.9M	19.09M
2462MHz	Pass	500k	18.875M	19.015M	18.95M	19.04M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.05M	37.681M	37.25M	37.681M
2437MHz	Pass	500k	36.9M	37.831M	37.25M	37.731M
2452MHz	Pass	500k	36.8M	37.831M	37.7M	37.881M

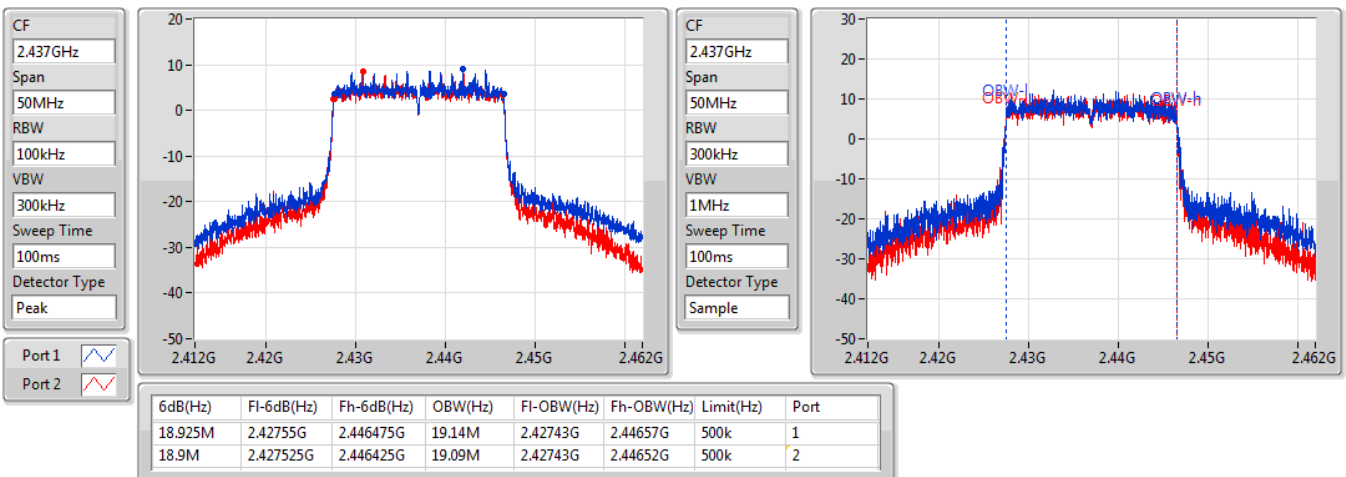
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

08/08/2022


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

08/08/2022

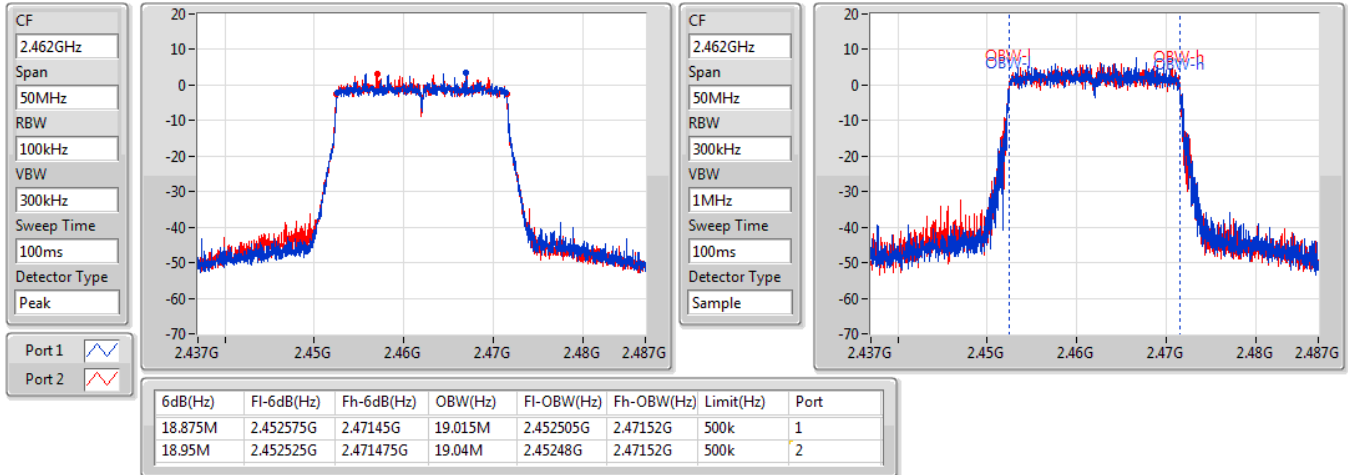


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2462MHz

08/08/2022

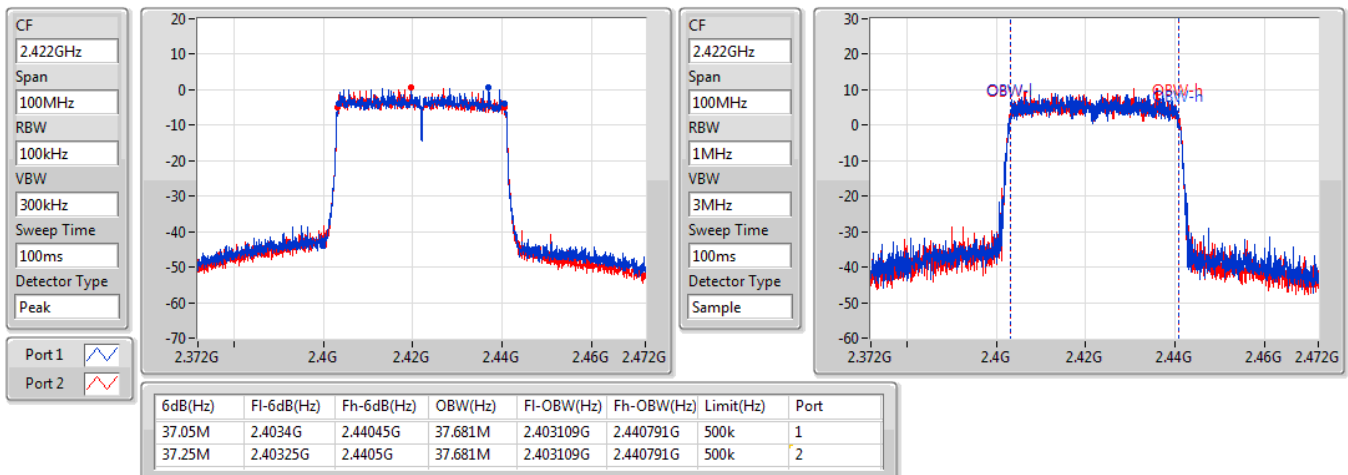


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2422MHz

08/08/2022

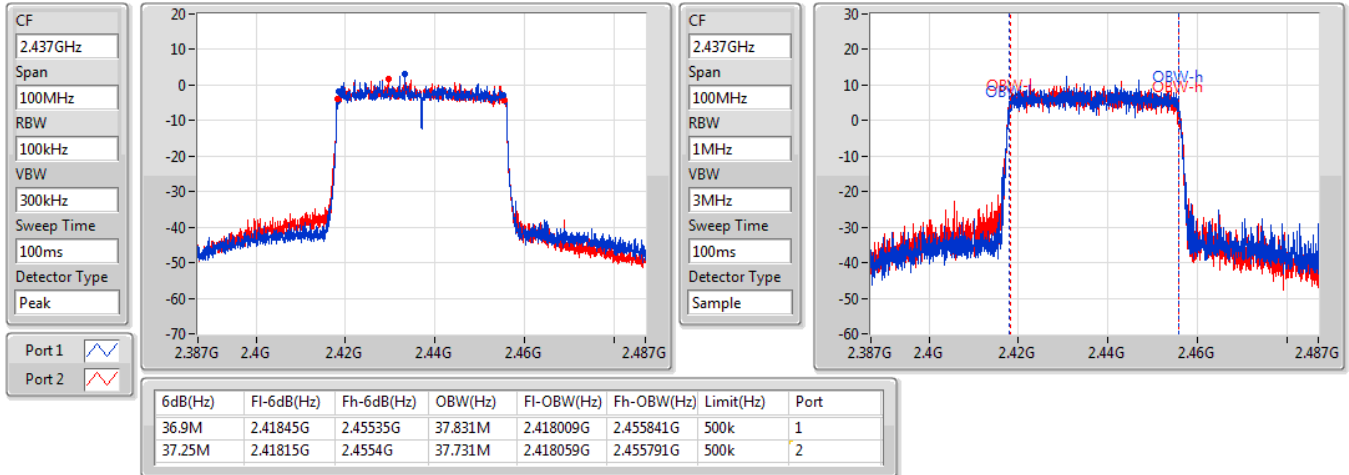


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2437MHz

08/08/2022

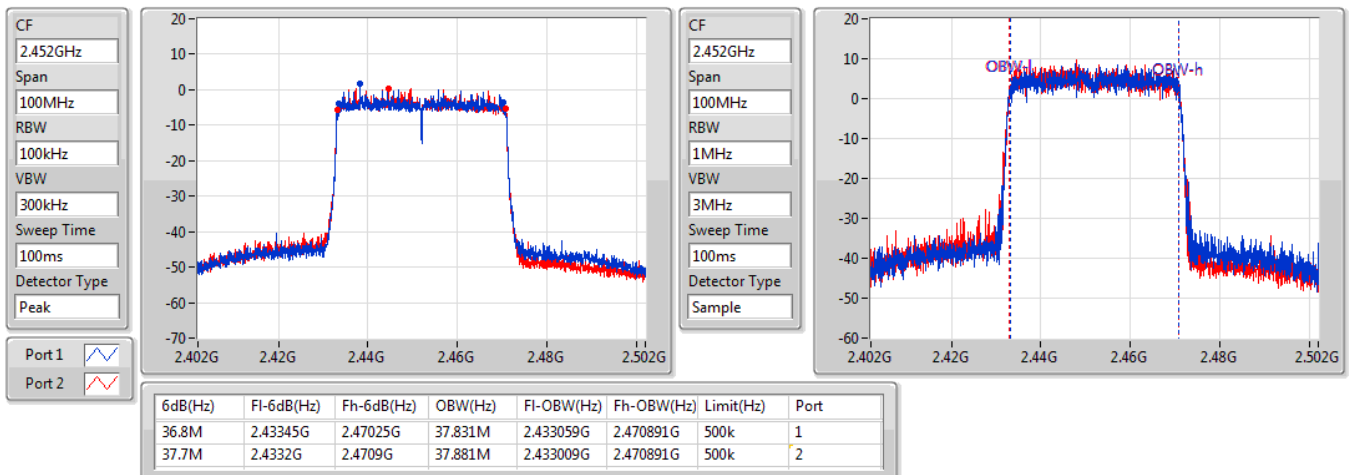


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2452MHz

08/08/2022





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19.025M	19.04M	19M0D1D	18.875M	18.966M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.4M	37.931M	38M0D1D	36.6M	37.731M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

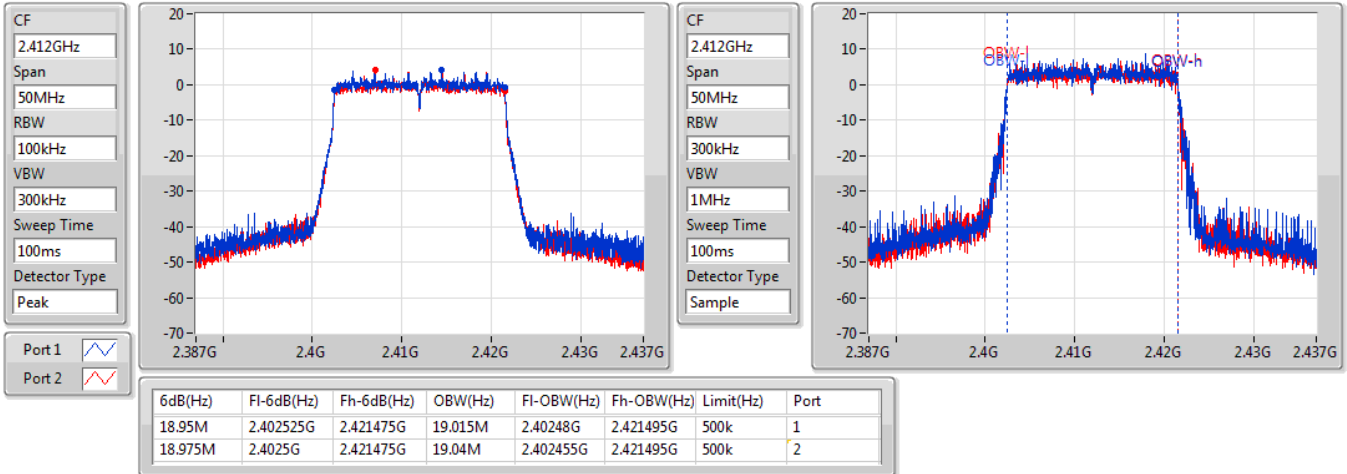
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M	18.975M	19.04M
2437MHz	Pass	500k	18.875M	19.015M	18.975M	18.991M
2462MHz	Pass	500k	18.9M	18.966M	19.025M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.25M	37.781M	37.4M	37.781M
2437MHz	Pass	500k	37.35M	37.781M	36.6M	37.731M
2452MHz	Pass	500k	36.75M	37.931M	37.1M	37.731M

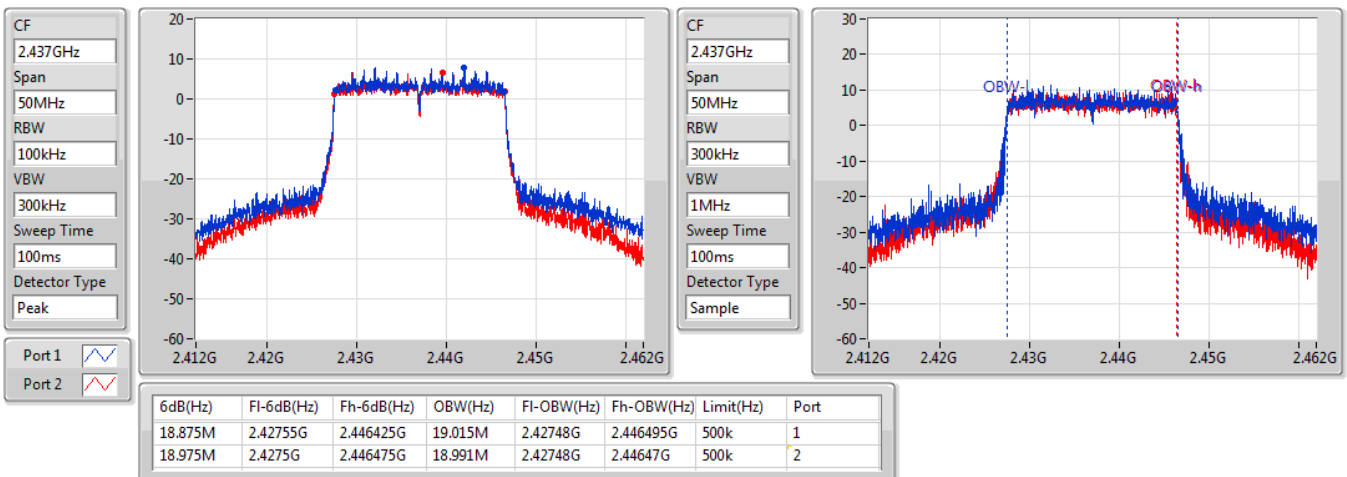
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

08/08/2022

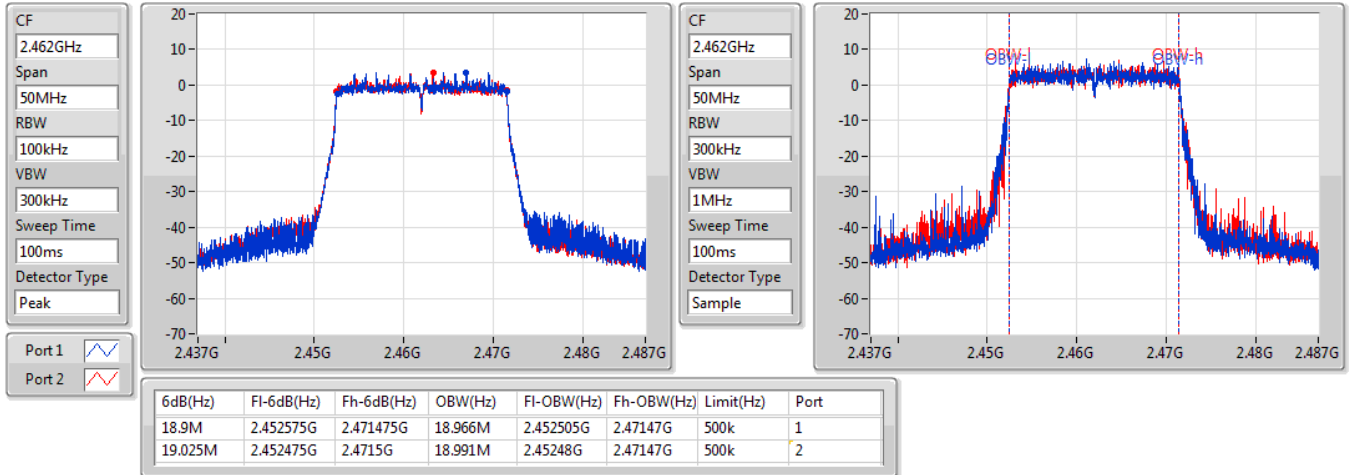

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

08/08/2022

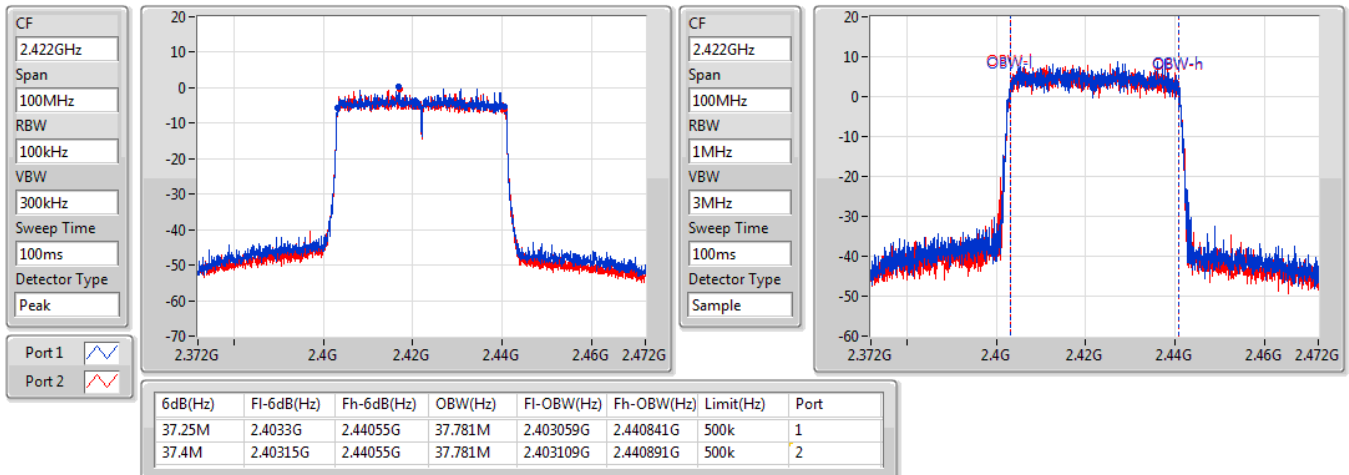


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2462MHz

08/08/2022

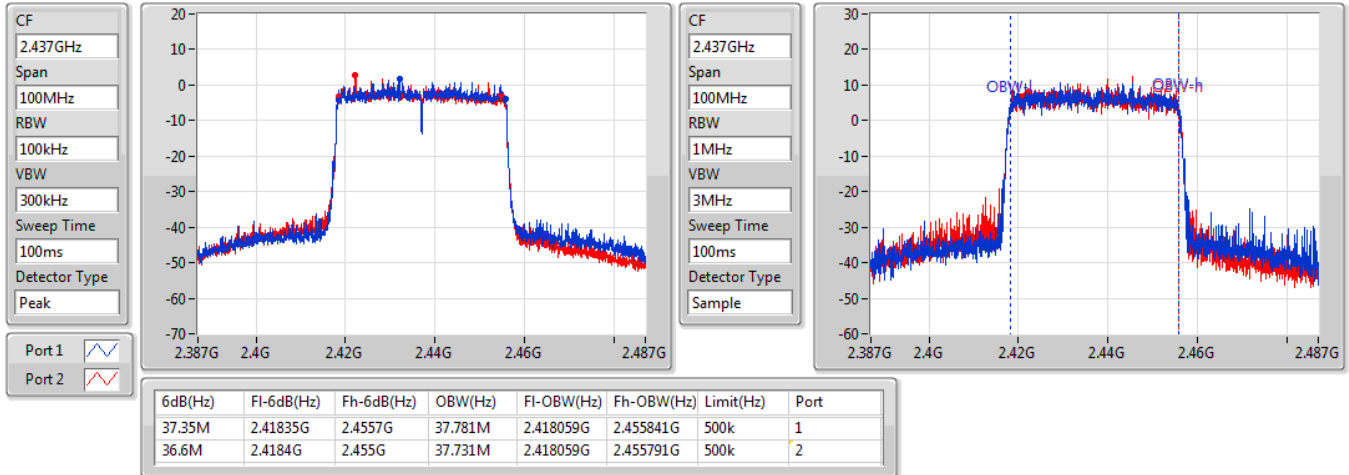

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2422MHz

08/08/2022

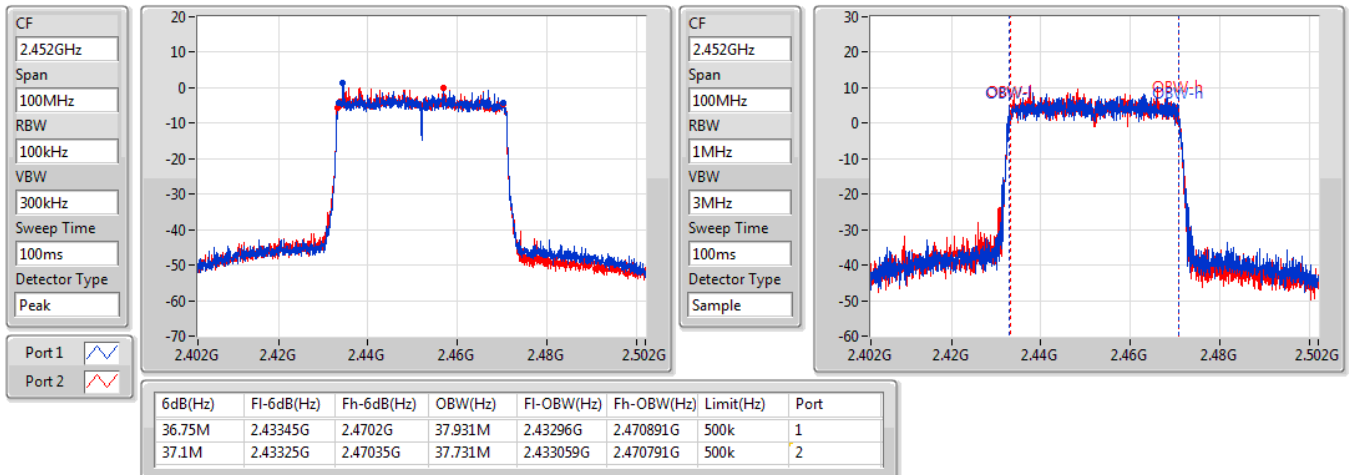


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

08/08/2022


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

08/08/2022





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19M	19.04M	19M0D1D	18.925M	19.015M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.65M	37.781M	37M8D1D	35.6M	37.681M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

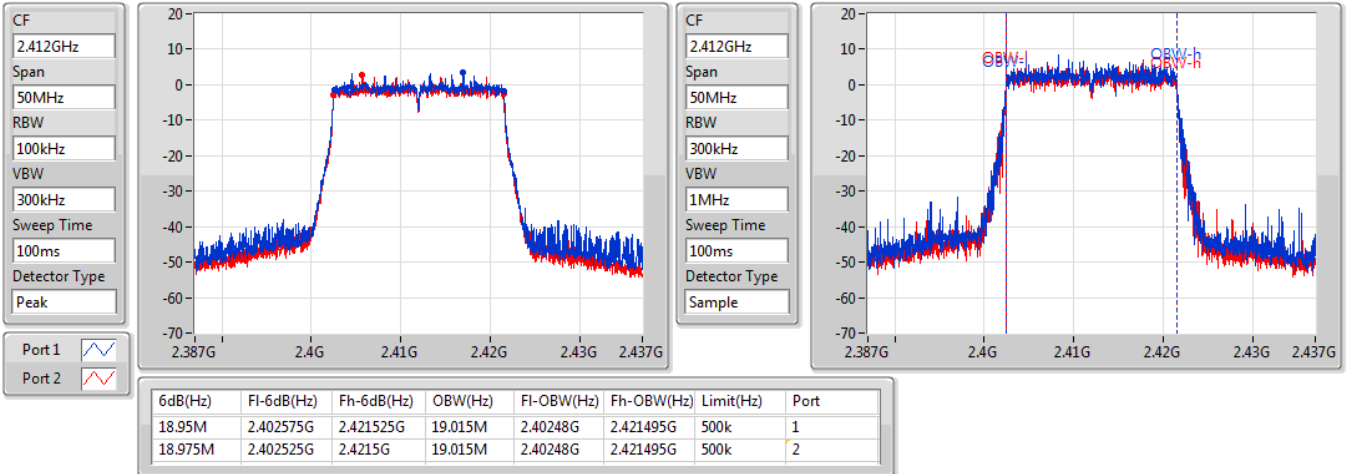
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	19.015M	18.975M	19.015M
2437MHz	Pass	500k	18.925M	19.015M	19M	19.04M
2462MHz	Pass	500k	18.975M	19.04M	18.925M	19.015M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.781M	37.65M	37.681M
2437MHz	Pass	500k	35.6M	37.781M	37.45M	37.781M
2452MHz	Pass	500k	37.4M	37.731M	37.65M	37.681M

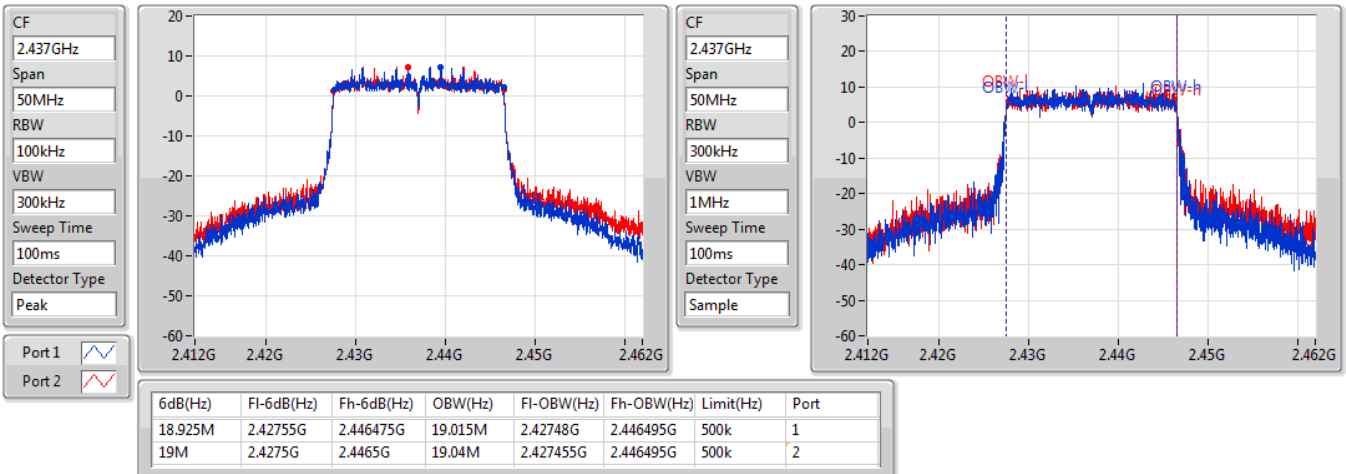
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

08/08/2022


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

08/08/2022

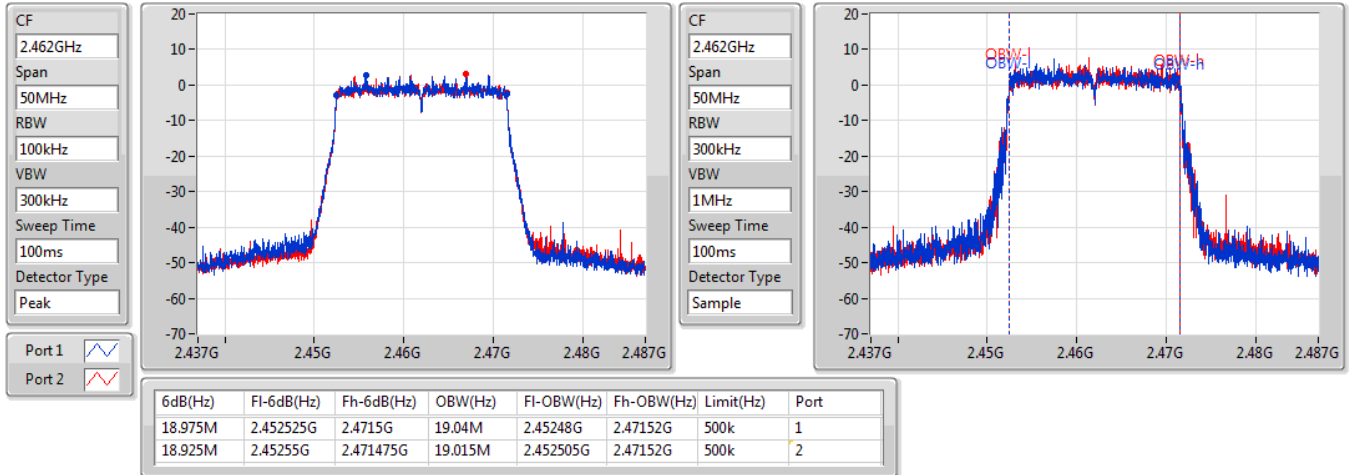


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2462MHz

08/08/2022

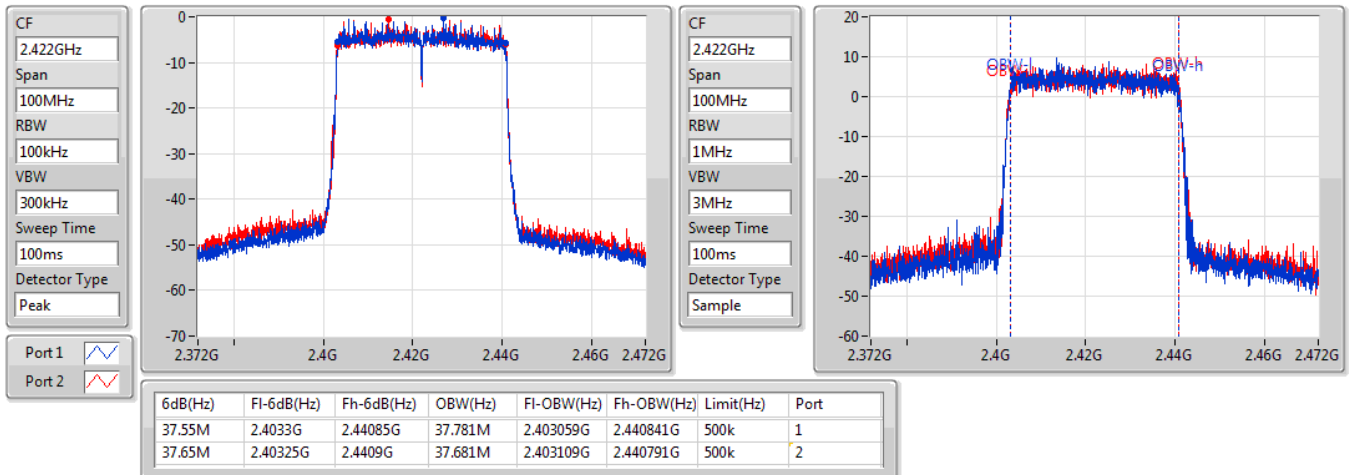


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2422MHz

08/08/2022

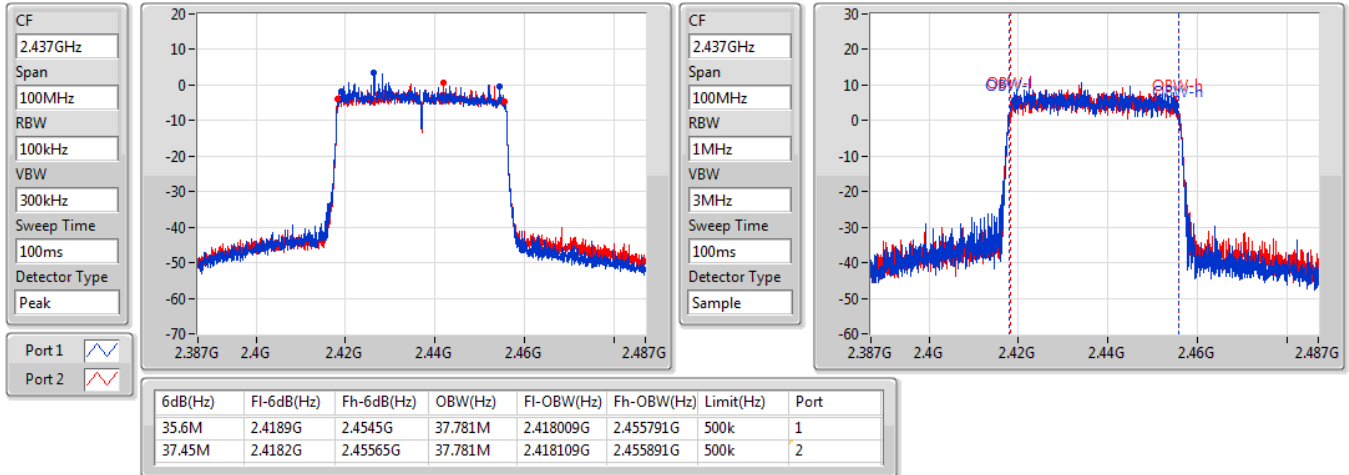


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2437MHz

08/08/2022

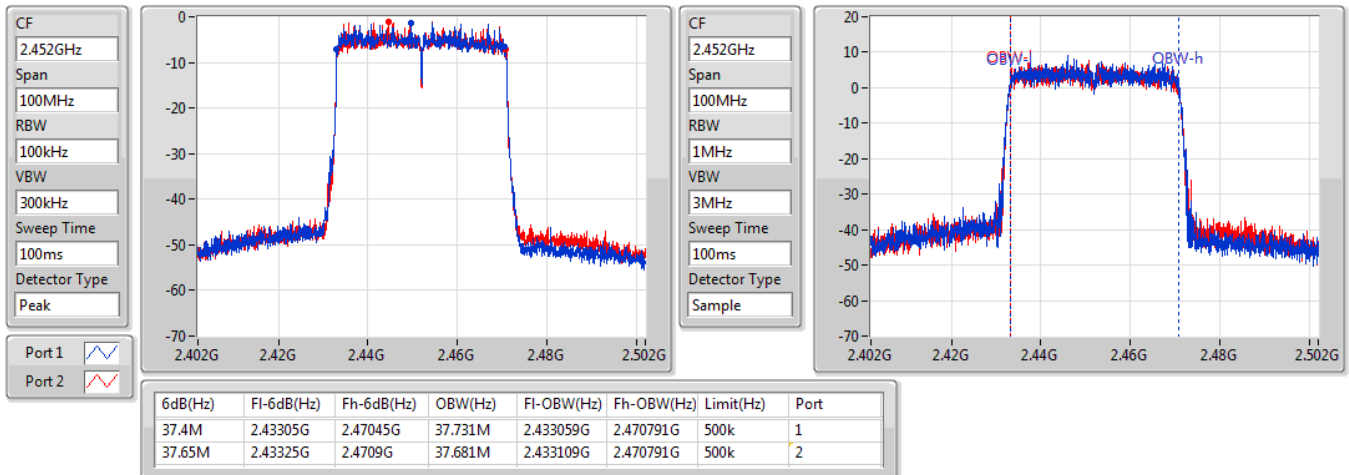


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

2452MHz

08/08/2022





Average Power_Non-Beamforming_Internal

Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	22.13	0.16331
802.11b_Nss1,(1Mbps)_2TX	25.04	0.31915
802.11g_Nss1,(6Mbps)_1TX(Port2)	21.11	0.12912
802.11g_Nss1,(6Mbps)_2TX	23.25	0.21135
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	20.51	0.11246
802.11ax HEW20_Nss2,(MCS0)_2TX	22.24	0.16749
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	17.60	0.05754
802.11ax HEW40_Nss2,(MCS0)_2TX	20.00	0.10000



Average Power_Non-Beamforming_Internal

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	20.98	20.98	30.00
2417MHz	Pass	4.40	-	21.46	21.46	30.00
2437MHz	Pass	4.40	-	22.13	22.13	30.00
2457MHz	Pass	4.40	-	21.57	21.57	30.00
2462MHz	Pass	4.40	-	21.20	21.20	30.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.40	21.71	22.33	25.04	30.00
2437MHz	Pass	4.40	21.99	22.04	25.03	30.00
2457MHz	Pass	4.40	22.02	21.86	24.95	30.00
2462MHz	Pass	4.40	21.45	20.84	24.17	30.00
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	17.25	17.25	30.00
2417MHz	Pass	4.40	-	18.49	18.49	30.00
2437MHz	Pass	4.40	-	21.11	21.11	30.00
2457MHz	Pass	4.40	-	17.70	17.70	30.00
2462MHz	Pass	4.40	-	16.55	16.55	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.40	16.04	16.58	19.33	30.00
2417MHz	Pass	4.40	16.17	16.75	19.48	30.00
2437MHz	Pass	4.40	19.98	20.48	23.25	30.00
2457MHz	Pass	4.40	17.18	16.84	20.02	30.00
2462MHz	Pass	4.40	16.41	16.36	19.40	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	17.68	17.68	30.00
2417MHz	Pass	4.40	-	18.83	18.83	30.00
2437MHz	Pass	4.40	-	20.51	20.51	30.00
2457MHz	Pass	4.40	-	17.52	17.52	30.00
2462MHz	Pass	4.40	-	14.67	14.67	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.85	15.76	16.45	19.13	30.00
2417MHz	Pass	2.85	16.43	16.92	19.69	30.00
2437MHz	Pass	2.85	18.95	19.50	22.24	30.00
2457MHz	Pass	2.85	17.30	17.20	20.26	30.00
2462MHz	Pass	2.85	15.93	15.86	18.91	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	4.40	-	16.25	16.25	30.00
2427MHz	Pass	4.40	-	16.39	16.39	30.00
2437MHz	Pass	4.40	-	17.60	17.60	30.00
2447MHz	Pass	4.40	-	15.48	15.48	30.00
2452MHz	Pass	4.40	-	15.86	15.86	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.85	15.29	15.73	18.53	30.00
2427MHz	Pass	2.85	14.99	15.50	18.26	30.00
2437MHz	Pass	2.85	16.87	17.11	20.00	30.00
2447MHz	Pass	2.85	15.30	15.32	18.32	30.00
2452MHz	Pass	2.85	15.09	15.04	18.08	30.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	23.15	0.20654
802.11b_Nss1,(1Mbps)_2TX	23.76	0.23768
802.11g_Nss1,(6Mbps)_1TX(Port2)	20.66	0.11641
802.11g_Nss1,(6Mbps)_2TX	23.29	0.21330
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	21.44	0.13932
802.11ax HEW20_Nss2,(MCS0)_2TX	23.97	0.24946
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	17.13	0.05164
802.11ax HEW40_Nss2,(MCS0)_2TX	20.21	0.10495



Average Power_Non-Beamforming_Dipole

Appendix C.2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	20.66	20.66	30.00
2417MHz	Pass	3.23	-	20.97	20.97	30.00
2437MHz	Pass	3.23	-	23.15	23.15	30.00
2457MHz	Pass	3.23	-	22.46	22.46	30.00
2462MHz	Pass	3.23	-	21.97	21.97	30.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.23	18.82	19.09	21.97	30.00
2417MHz	Pass	3.23	20.12	20.80	23.48	30.00
2437MHz	Pass	3.23	20.30	21.16	23.76	30.00
2457MHz	Pass	3.23	19.93	20.94	23.47	30.00
2462MHz	Pass	3.23	19.88	20.97	23.47	30.00
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	16.45	16.45	30.00
2417MHz	Pass	3.23	-	17.92	17.92	30.00
2437MHz	Pass	3.23	-	20.66	20.66	30.00
2457MHz	Pass	3.23	-	17.87	17.87	30.00
2462MHz	Pass	3.23	-	16.78	16.78	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.23	15.99	16.20	19.11	30.00
2417MHz	Pass	3.23	15.85	15.99	18.93	30.00
2437MHz	Pass	3.23	19.87	20.66	23.29	30.00
2457MHz	Pass	3.23	15.15	16.16	18.69	30.00
2462MHz	Pass	3.23	15.35	16.10	18.75	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	17.49	17.49	30.00
2417MHz	Pass	3.23	-	18.36	18.36	30.00
2437MHz	Pass	3.23	-	21.44	21.44	30.00
2457MHz	Pass	3.23	-	18.74	18.74	30.00
2462MHz	Pass	3.23	-	14.98	14.98	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.23	17.43	16.56	20.03	30.00
2417MHz	Pass	3.23	18.15	18.19	21.18	30.00
2437MHz	Pass	3.23	20.52	21.36	23.97	30.00
2457MHz	Pass	3.23	17.50	18.40	20.98	30.00
2462MHz	Pass	3.23	16.12	17.11	19.65	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	3.23	-	15.65	15.65	30.00
2427MHz	Pass	3.23	-	16.44	16.44	30.00
2437MHz	Pass	3.23	-	17.13	17.13	30.00
2447MHz	Pass	3.23	-	16.58	16.58	30.00
2452MHz	Pass	3.23	-	16.28	16.28	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.23	15.71	15.28	18.51	30.00
2427MHz	Pass	3.23	15.75	15.81	18.79	30.00
2437MHz	Pass	3.23	17.13	17.27	20.21	30.00
2447MHz	Pass	3.23	15.95	16.29	19.13	30.00
2452MHz	Pass	3.23	15.02	15.24	18.14	30.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	21.63	0.14555
802.11b_Nss1,(1Mbps)_2TX	22.18	0.16520
802.11g_Nss1,(6Mbps)_1TX(Port2)	21.37	0.13709
802.11g_Nss1,(6Mbps)_2TX	23.69	0.23388
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	20.84	0.12134
802.11ax HEW20_Nss2,(MCS0)_2TX	22.97	0.19815
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	16.29	0.04256
802.11ax HEW40_Nss2,(MCS0)_2TX	19.93	0.09840



Average Power_Non-Beamforming_Omni

Appendix C.3

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	21.03	21.03	30.00
2437MHz	Pass	5.00	-	21.13	21.13	30.00
2462MHz	Pass	5.00	-	21.63	21.63	30.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.00	18.16	18.60	21.40	30.00
2417MHz	Pass	5.00	18.01	18.50	21.27	30.00
2437MHz	Pass	5.00	18.91	19.42	22.18	30.00
2462MHz	Pass	5.00	18.53	19.53	22.07	30.00
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	16.27	16.27	30.00
2417MHz	Pass	5.00	-	17.84	17.84	30.00
2437MHz	Pass	5.00	-	21.37	21.37	30.00
2457MHz	Pass	5.00	-	17.90	17.90	30.00
2462MHz	Pass	5.00	-	16.56	16.56	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.00	15.54	15.80	18.68	30.00
2417MHz	Pass	5.00	17.13	17.27	20.21	30.00
2437MHz	Pass	5.00	20.27	21.06	23.69	30.00
2457MHz	Pass	5.00	16.66	17.42	20.07	30.00
2462MHz	Pass	5.00	15.88	16.73	19.34	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	14.39	14.39	30.00
2417MHz	Pass	5.00	-	17.38	17.38	30.00
2437MHz	Pass	5.00	-	20.84	20.84	30.00
2457MHz	Pass	5.00	-	17.51	17.51	30.00
2462MHz	Pass	5.00	-	14.53	14.53	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.00	16.31	15.42	18.90	30.00
2417MHz	Pass	5.00	17.04	16.41	19.75	30.00
2437MHz	Pass	5.00	19.58	20.31	22.97	30.00
2457MHz	Pass	5.00	16.74	17.52	20.16	30.00
2462MHz	Pass	5.00	15.62	16.53	19.11	30.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	5.00	-	15.98	15.98	30.00
2427MHz	Pass	5.00	-	15.98	15.98	30.00
2437MHz	Pass	5.00	-	16.29	16.29	30.00
2447MHz	Pass	5.00	-	15.21	15.21	30.00
2452MHz	Pass	5.00	-	14.79	14.79	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.00	15.05	15.04	18.06	30.00
2427MHz	Pass	5.00	15.70	15.79	18.76	30.00
2437MHz	Pass	5.00	16.94	16.89	19.93	30.00
2447MHz	Pass	5.00	15.65	16.10	18.89	30.00
2452MHz	Pass	5.00	15.17	15.53	18.36	30.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	23.79	0.23933
802.11b_Nss1,(1Mbps)_2TX	26.59	0.45604
802.11g_Nss1,(6Mbps)_1TX(Port2)	20.67	0.11668
802.11g_Nss1,(6Mbps)_2TX	23.15	0.20654
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	20.36	0.10864
802.11ax HEW20_Nss2,(MCS0)_2TX	22.60	0.18197
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	15.71	0.03724
802.11ax HEW40_Nss2,(MCS0)_2TX	20.08	0.10186



Average Power_Non-Beamforming_Panel

Appendix C.4

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	20.84	20.84	28.50
2417MHz	Pass	7.50	-	20.68	20.68	28.50
2437MHz	Pass	7.50	-	23.79	23.79	28.50
2457MHz	Pass	7.50	-	21.18	21.18	28.50
2462MHz	Pass	7.50	-	20.99	20.99	28.50
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.50	18.90	19.62	22.29	28.50
2417MHz	Pass	7.50	20.22	20.85	23.56	28.50
2437MHz	Pass	7.50	23.13	23.99	26.59	28.50
2457MHz	Pass	7.50	20.48	21.78	24.19	28.50
2462MHz	Pass	7.50	19.56	20.91	23.30	28.50
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	16.25	16.25	28.50
2417MHz	Pass	7.50	-	18.26	18.26	28.50
2437MHz	Pass	7.50	-	20.67	20.67	28.50
2457MHz	Pass	7.50	-	17.70	17.70	28.50
2462MHz	Pass	7.50	-	16.78	16.78	28.50
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.50	15.30	15.45	18.39	28.50
2417MHz	Pass	7.50	16.34	16.27	19.32	28.50
2437MHz	Pass	7.50	19.95	20.32	23.15	28.50
2457MHz	Pass	7.50	16.88	17.73	20.34	28.50
2462MHz	Pass	7.50	15.33	16.13	18.76	28.50
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	14.63	14.63	28.50
2417MHz	Pass	7.50	-	17.02	17.02	28.50
2437MHz	Pass	7.50	-	20.36	20.36	28.50
2457MHz	Pass	7.50	-	17.83	17.83	28.50
2462MHz	Pass	7.50	-	14.40	14.40	28.50
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.50	15.76	16.13	18.96	28.50
2417MHz	Pass	7.50	17.06	16.77	19.93	28.50
2437MHz	Pass	7.50	19.26	19.90	22.60	28.50
2457MHz	Pass	7.50	16.67	17.56	20.15	28.50
2462MHz	Pass	7.50	15.06	15.87	18.49	28.50
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	7.50	-	13.96	13.96	28.50
2427MHz	Pass	7.50	-	14.09	14.09	28.50
2437MHz	Pass	7.50	-	15.71	15.71	28.50
2447MHz	Pass	7.50	-	14.97	14.97	28.50
2452MHz	Pass	7.50	-	15.28	15.28	28.50
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.50	14.75	14.79	17.78	28.50
2427MHz	Pass	7.50	14.36	14.56	17.47	28.50
2437MHz	Pass	7.50	16.02	16.25	19.15	28.50
2447MHz	Pass	7.50	14.80	15.14	17.98	28.50
2452MHz	Pass	7.50	16.84	17.29	20.08	28.50

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.32	0.17061
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	19.54	0.08995



Average Power_Beamforming_Internal

Appendix C.5

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.85	15.49	15.44	18.48	30.00
2417MHz	Pass	5.85	17.11	17.57	20.36	30.00
2437MHz	Pass	5.85	19.23	19.38	22.32	30.00
2457MHz	Pass	5.85	16.44	17.35	19.93	30.00
2462MHz	Pass	5.85	15.26	16.39	18.87	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.85	15.11	14.73	17.93	30.00
2427MHz	Pass	5.85	14.67	15.49	18.11	30.00
2437MHz	Pass	5.85	16.20	16.83	19.54	30.00
2447MHz	Pass	5.85	15.43	16.18	18.83	30.00
2452MHz	Pass	5.85	15.84	16.31	19.09	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.38	0.21777
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	19.86	0.09683



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.24	16.06	15.94	19.01	29.76
2417MHz	Pass	6.24	18.12	17.69	20.92	29.76
2437MHz	Pass	6.24	20.20	20.54	23.38	29.76
2457MHz	Pass	6.24	17.28	17.56	20.43	29.76
2462MHz	Pass	6.24	14.60	15.10	17.87	29.76
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.24	15.76	15.58	18.68	29.76
2427MHz	Pass	6.24	15.71	15.68	18.71	29.76
2437MHz	Pass	6.24	16.02	15.94	18.99	29.76
2447MHz	Pass	6.24	16.77	16.93	19.86	29.76
2452MHz	Pass	6.24	14.40	14.52	17.47	29.76

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	21.90	0.15488
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	19.07	0.08072



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.01	15.21	15.21	18.22	27.99
2417MHz	Pass	8.01	17.12	17.23	20.19	27.99
2437MHz	Pass	8.01	18.67	19.10	21.90	27.99
2457MHz	Pass	8.01	15.77	15.76	18.78	27.99
2462MHz	Pass	8.01	15.78	15.08	18.45	27.99
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	8.01	14.36	14.58	17.48	27.99
2427MHz	Pass	8.01	14.13	14.64	17.40	27.99
2437MHz	Pass	8.01	15.61	16.47	19.07	27.99
2447MHz	Pass	8.01	15.83	15.35	18.61	27.99
2452MHz	Pass	8.01	14.84	15.28	18.08	27.99

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.08	0.16144
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	17.98	0.06281



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	10.51	14.81	14.80	17.82	25.49
2417MHz	Pass	10.51	16.22	15.46	18.87	25.49
2437MHz	Pass	10.51	18.80	19.32	22.08	25.49
2457MHz	Pass	10.51	16.11	15.80	18.97	25.49
2462MHz	Pass	10.51	14.28	14.89	17.61	25.49
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	10.51	14.42	13.92	17.19	25.49
2427MHz	Pass	10.51	14.54	14.18	17.37	25.49
2437MHz	Pass	10.51	14.81	15.12	17.98	25.49
2447MHz	Pass	10.51	13.01	13.55	16.30	25.49
2452MHz	Pass	10.51	13.26	13.65	16.47	25.49

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	-1.83
802.11b_Nss1,(1Mbps)_2TX	0.55
802.11g_Nss1,(6Mbps)_1TX(Port2)	-5.63
802.11g_Nss1,(6Mbps)_2TX	-3.74
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-5.37
802.11ax HEW20_Nss2,(MCS0)_2TX	-6.04
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-12.10
802.11ax HEW40_Nss2,(MCS0)_2TX	-11.68

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	-1.96	-1.96	8.00
2437MHz	Pass	4.40	-	-1.83	-1.83	8.00
2462MHz	Pass	4.40	-	-1.90	-1.90	8.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.85	-1.15	-1.49	0.55	8.00
2437MHz	Pass	5.85	-1.85	-0.08	0.42	8.00
2462MHz	Pass	5.85	-1.98	-2.83	-0.59	8.00
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	-9.00	-9.00	8.00
2437MHz	Pass	4.40	-	-5.63	-5.63	8.00
2462MHz	Pass	4.40	-	-9.11	-9.11	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.85	-10.03	-9.75	-7.41	8.00
2437MHz	Pass	5.85	-6.07	-6.07	-3.74	8.00
2462MHz	Pass	5.85	-9.89	-8.70	-6.51	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	4.40	-	-8.08	-8.08	8.00
2437MHz	Pass	4.40	-	-5.37	-5.37	8.00
2462MHz	Pass	4.40	-	-13.08	-13.08	8.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.85	-11.66	-11.07	-9.06	8.00
2437MHz	Pass	2.85	-8.43	-8.18	-6.04	8.00
2462MHz	Pass	2.85	-11.49	-11.32	-9.01	8.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	4.40	-	-14.01	-14.01	8.00
2437MHz	Pass	4.40	-	-12.10	-12.10	8.00
2452MHz	Pass	4.40	-	-14.36	-14.36	8.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.85	-13.95	-14.12	-13.20	8.00
2437MHz	Pass	2.85	-12.79	-12.37	-11.68	8.00
2452MHz	Pass	2.85	-14.80	-14.79	-14.31	8.00

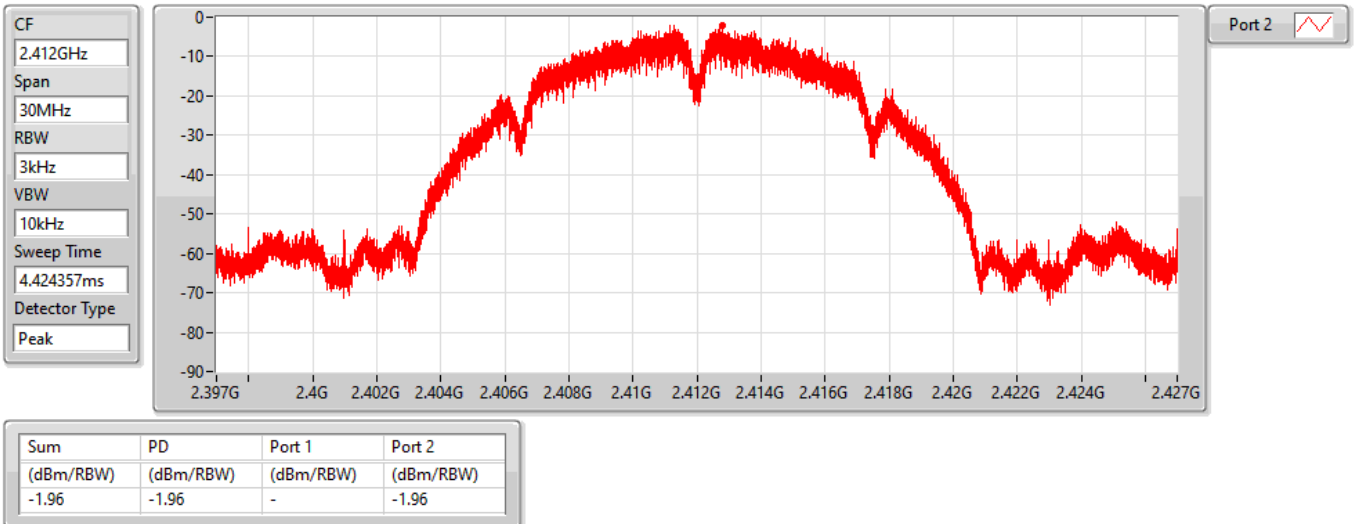
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2412MHz

09/05/2022

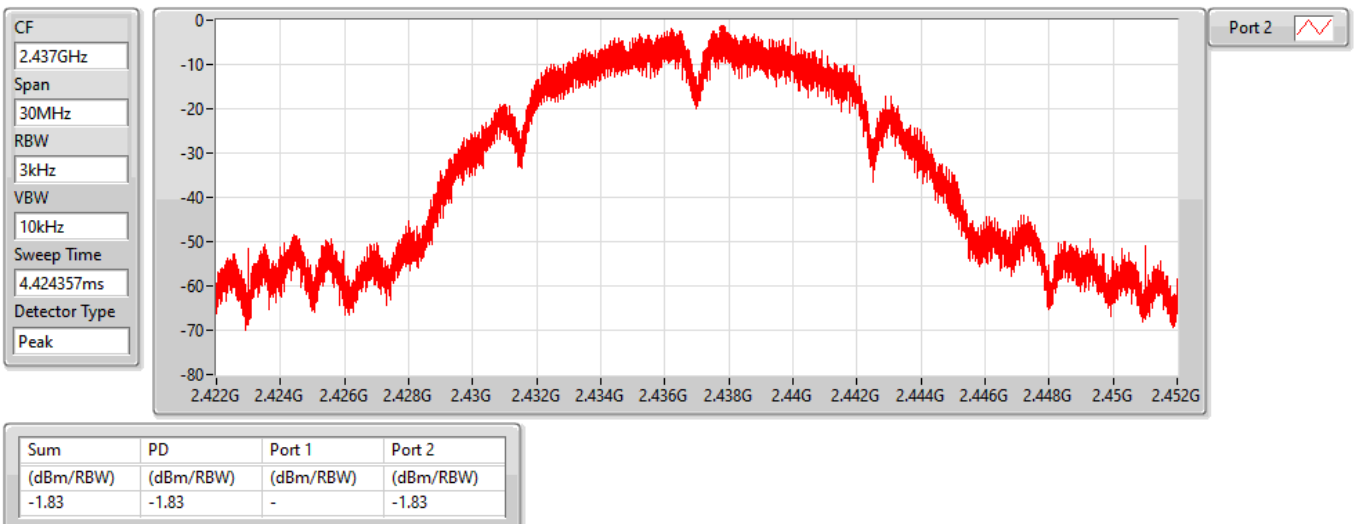


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2437MHz

09/05/2022



802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2462MHz

09/05/2022

CF
2.462GHz

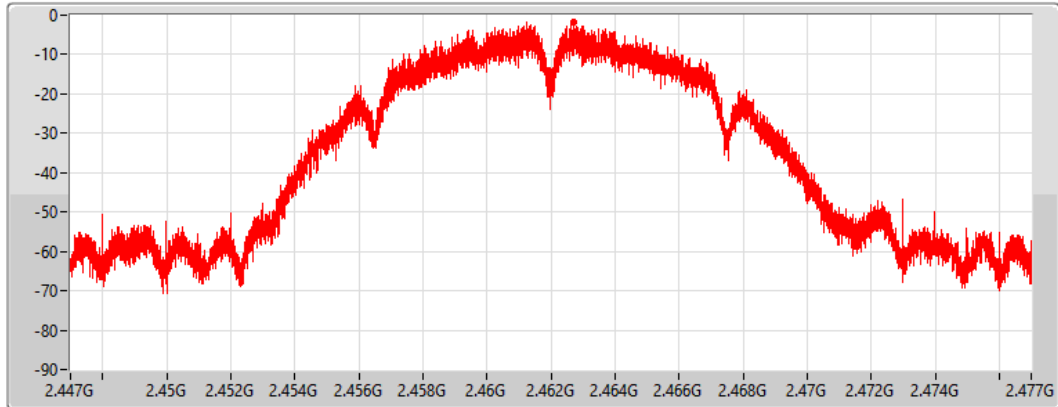
Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
4.424357ms

Detector Type
Peak



Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.90	-1.90	-	-1.90

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

09/05/2022

CF
2.412GHz

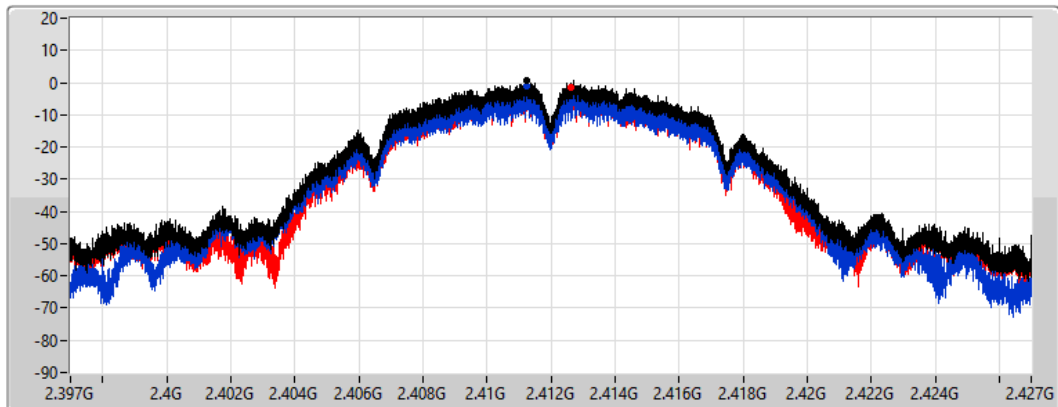
Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
4.424357ms

Detector Type
Peak



Sum 
Port 1 
Port 2 

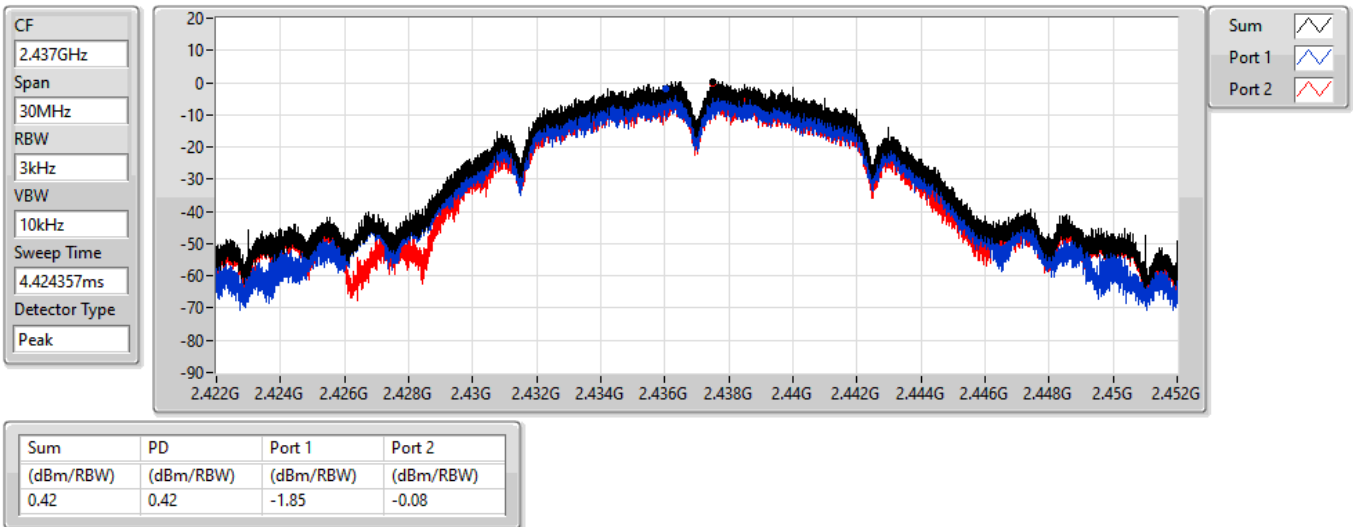
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.55	0.55	-1.15	-1.49

802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

09/05/2022

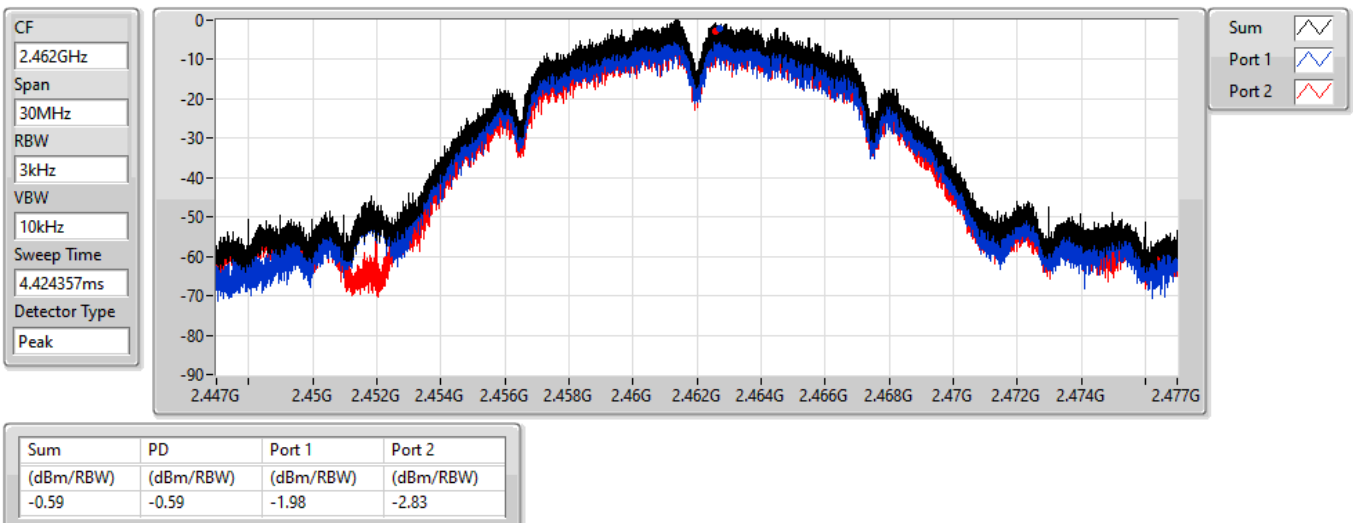


802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

09/05/2022

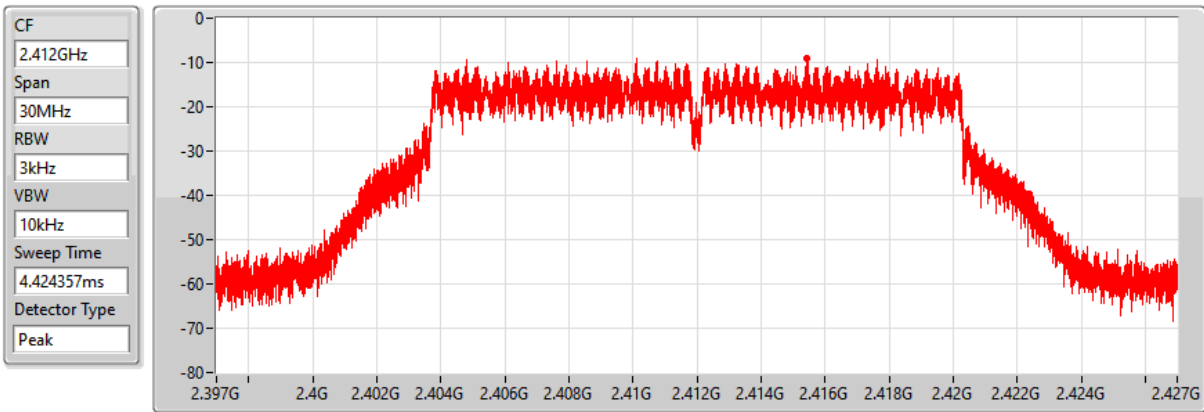


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2412MHz

09/05/2022



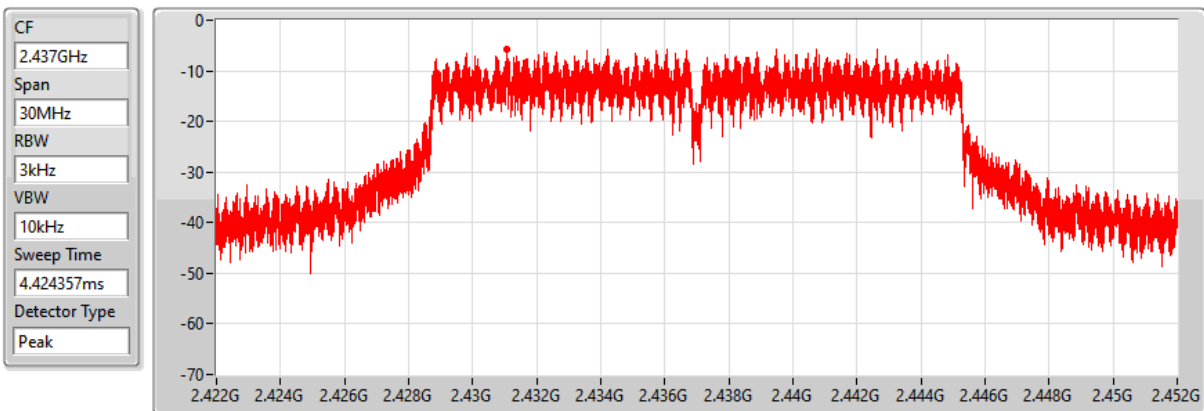
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.00	-9.00	-	-9.00

802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2437MHz

09/05/2022



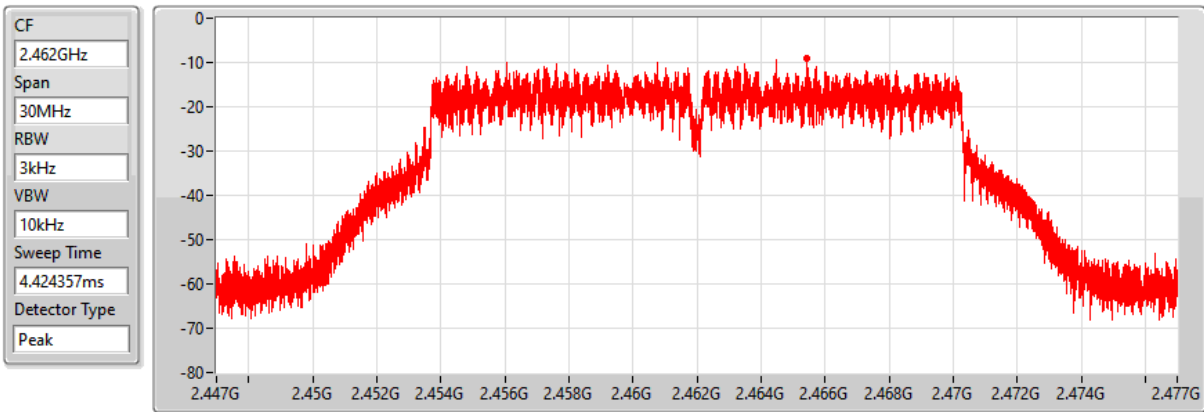
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-5.63	-5.63	-	-5.63

802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2462MHz

09/05/2022



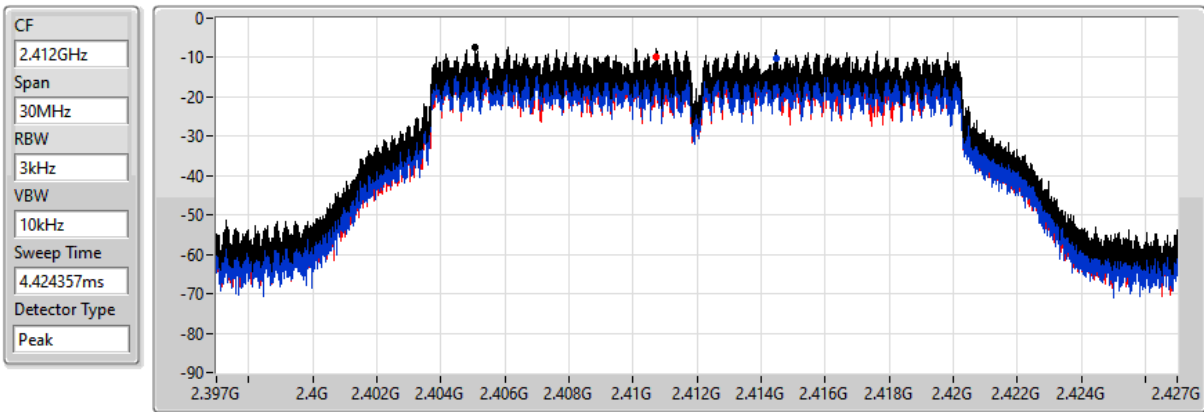
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.11	-9.11	-	-9.11

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

09/05/2022



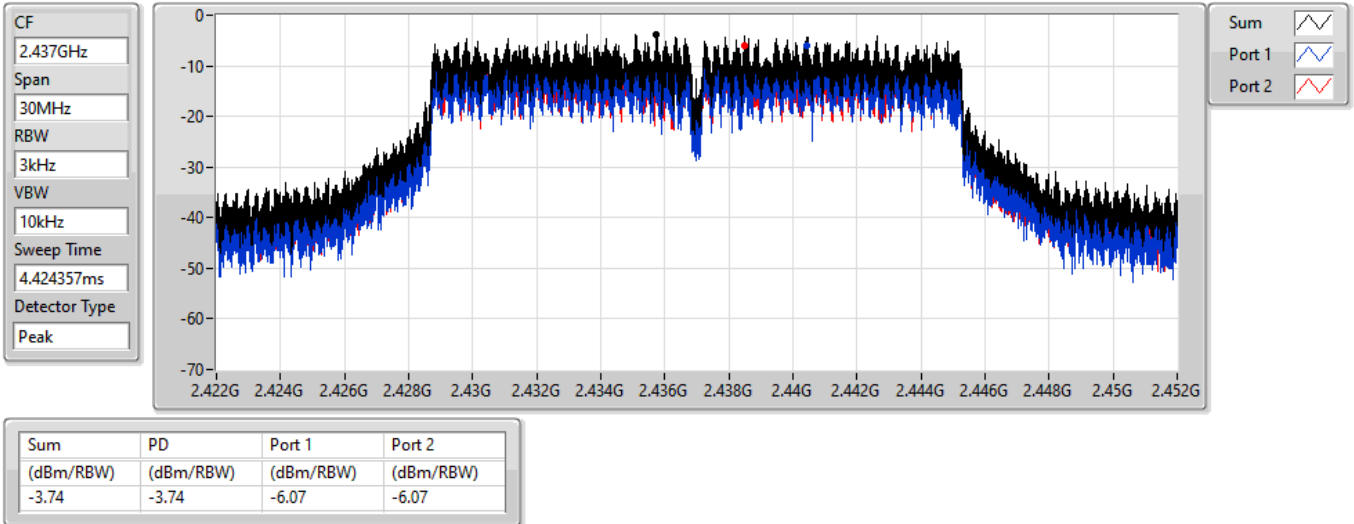
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-7.41	-7.41	-10.03	-9.75

802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

09/05/2022

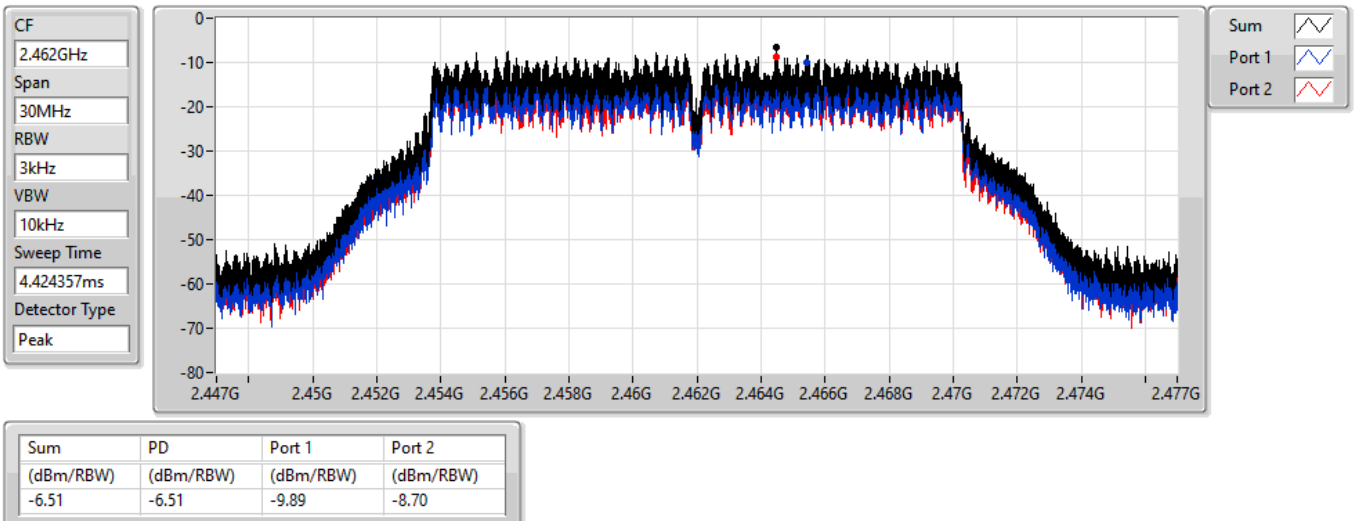


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

09/05/2022

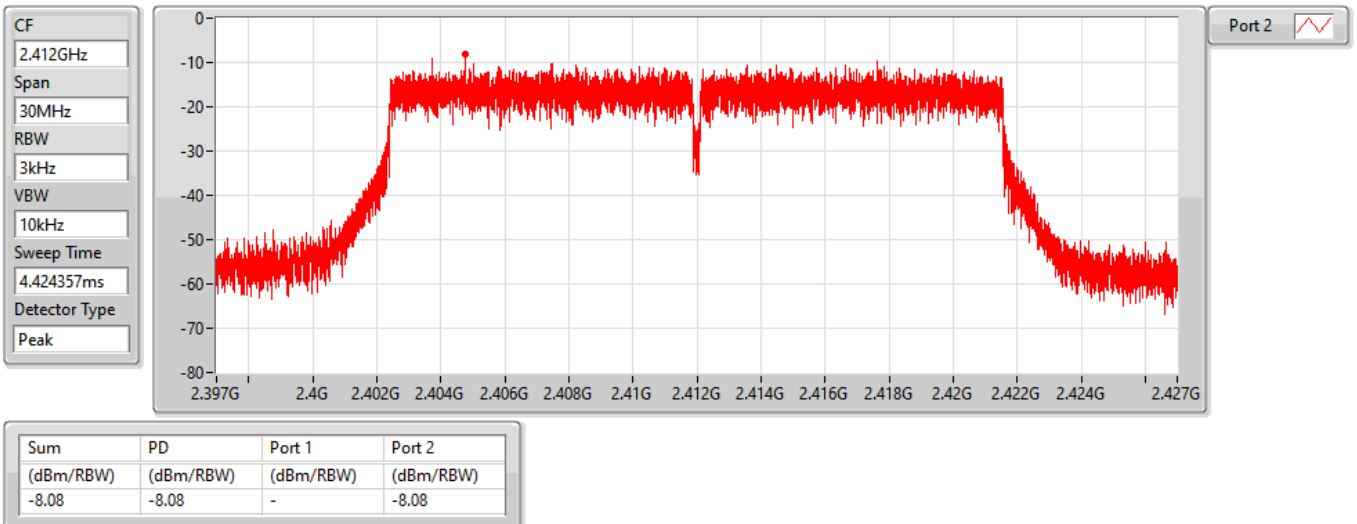


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2412MHz

09/05/2022

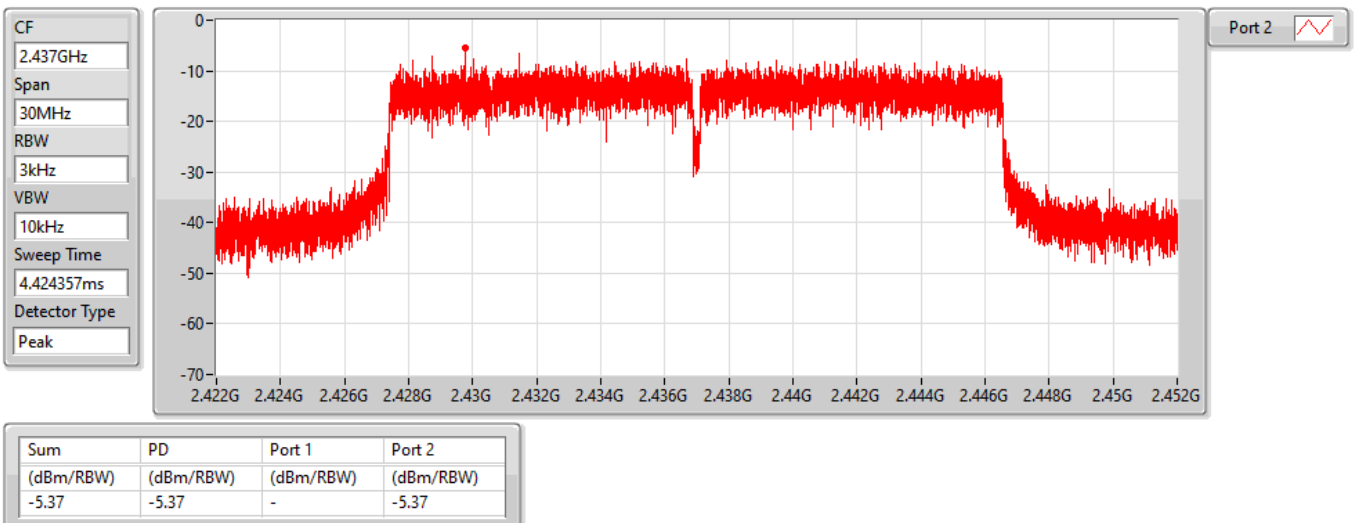


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

09/05/2022

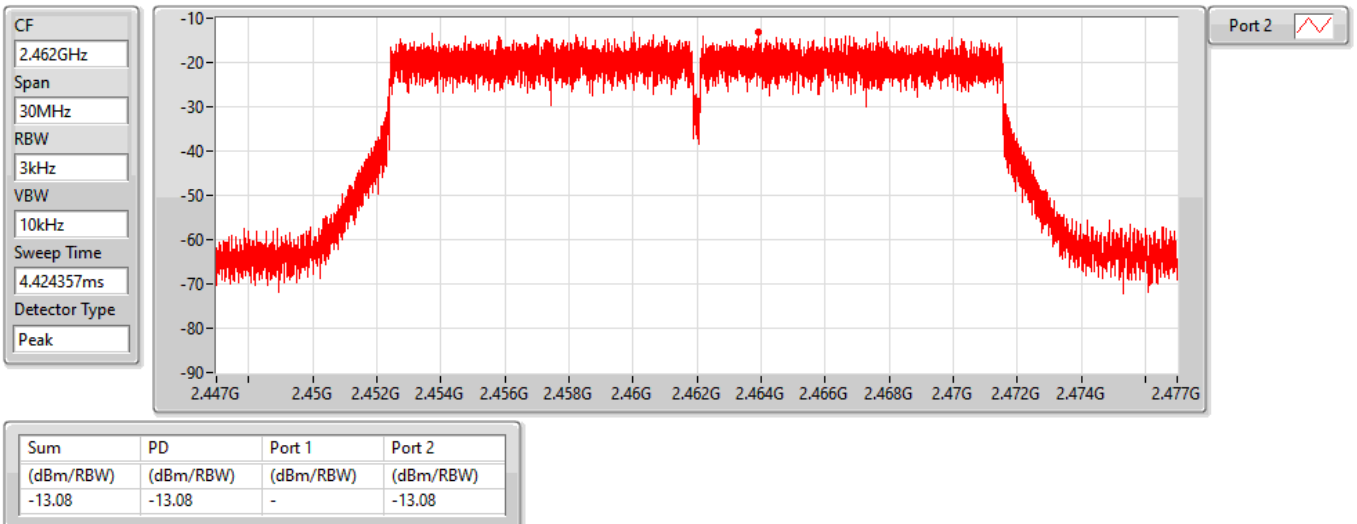


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2462MHz

09/05/2022

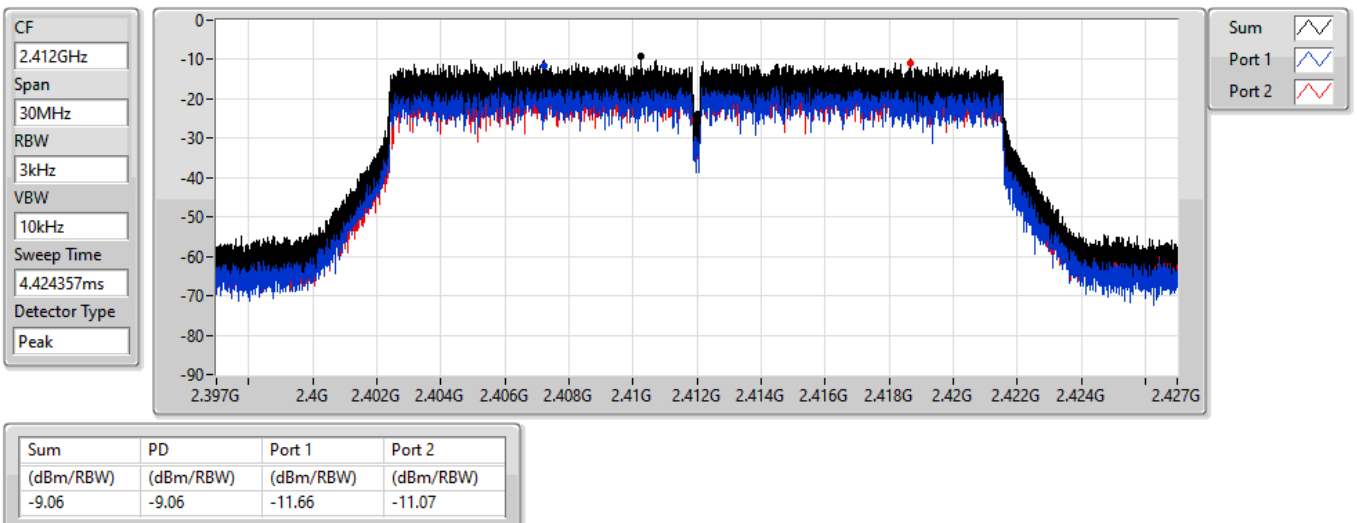


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2412MHz

09/05/2022

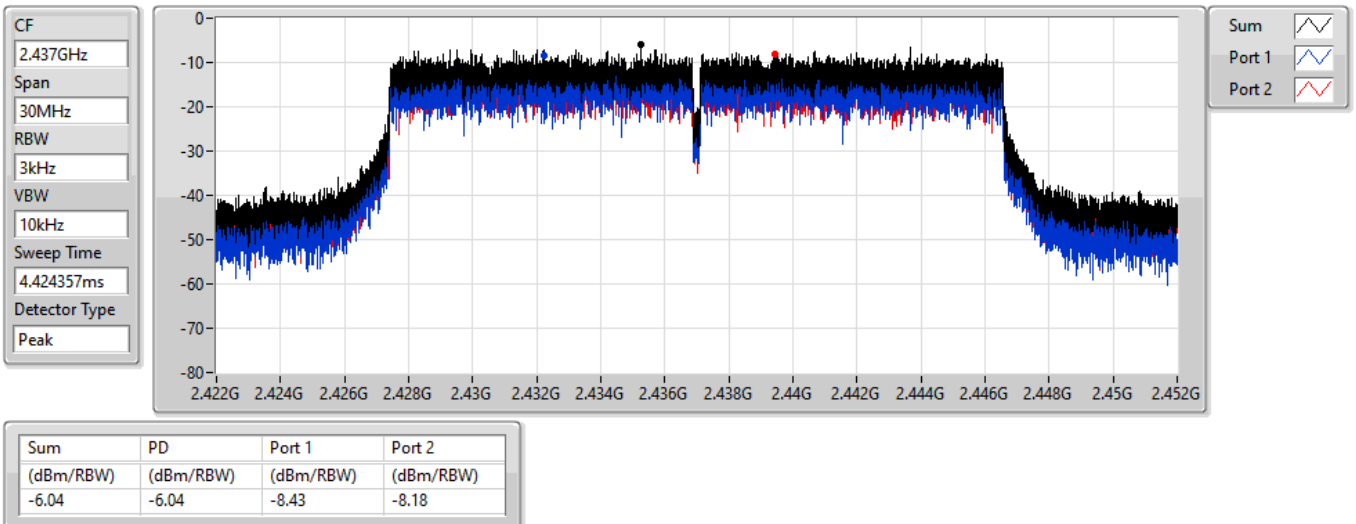


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2437MHz

09/05/2022

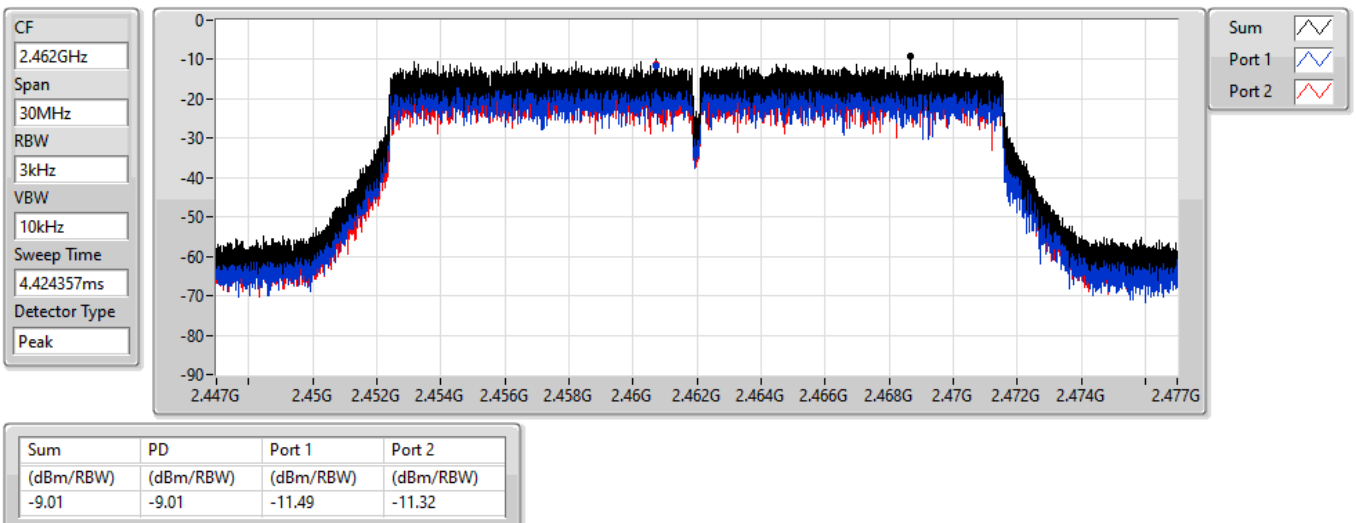


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2462MHz

09/05/2022

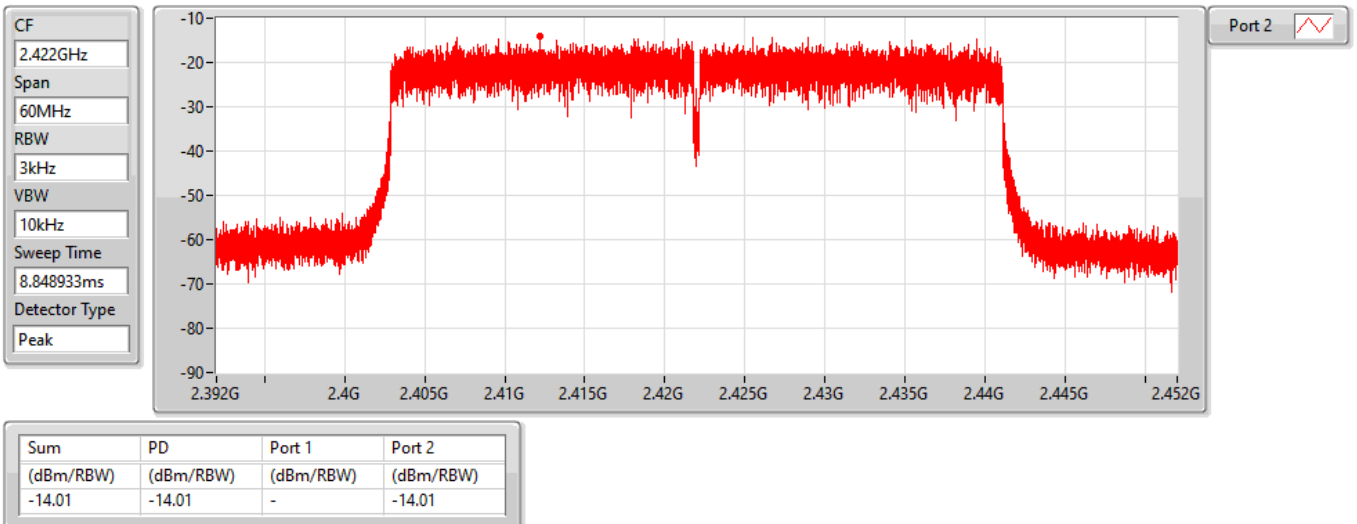


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2422MHz

09/05/2022

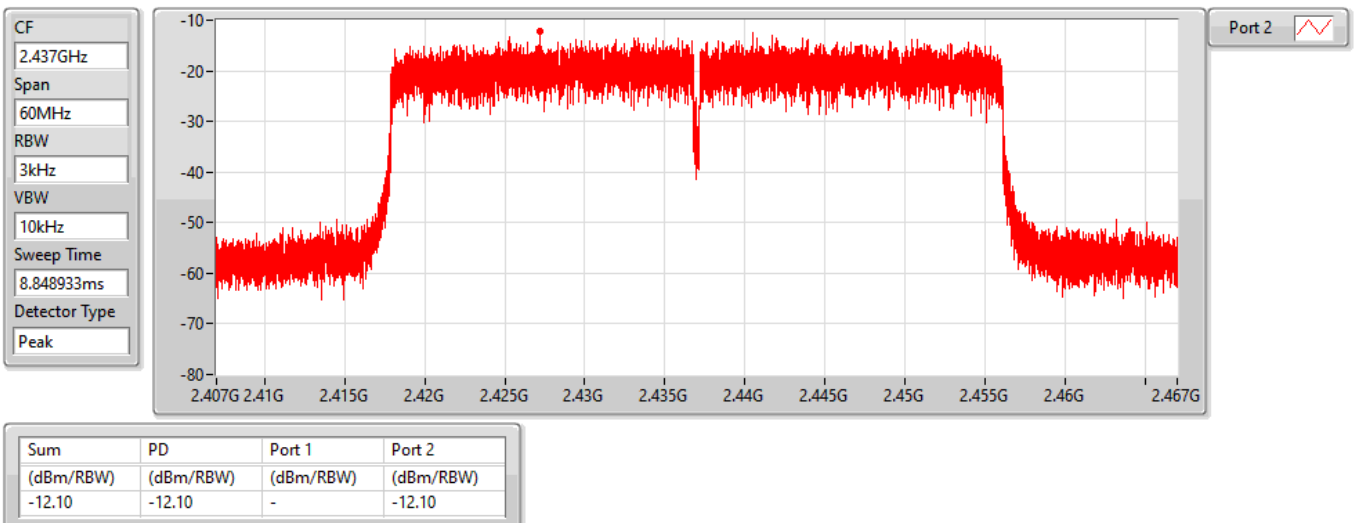


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

09/05/2022

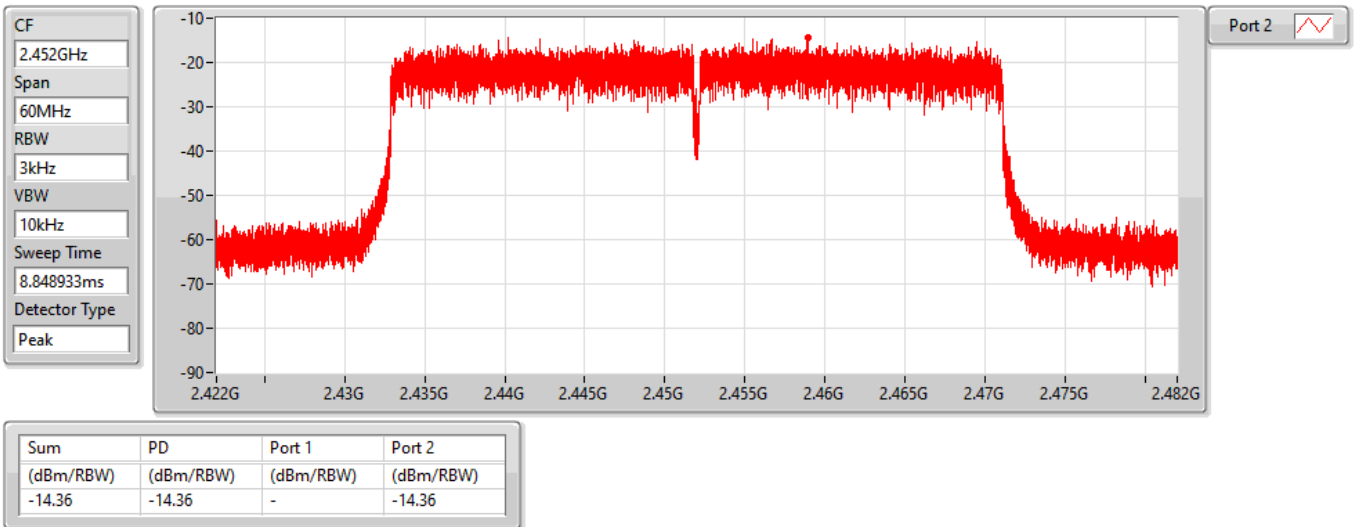


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2452MHz

09/05/2022

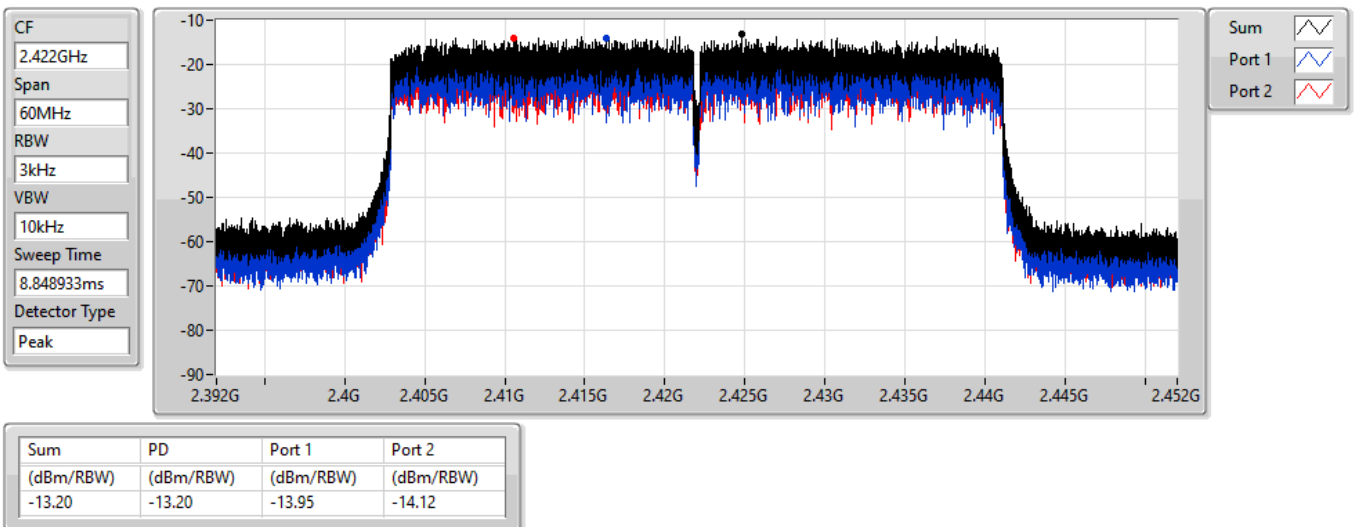


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2422MHz

09/05/2022

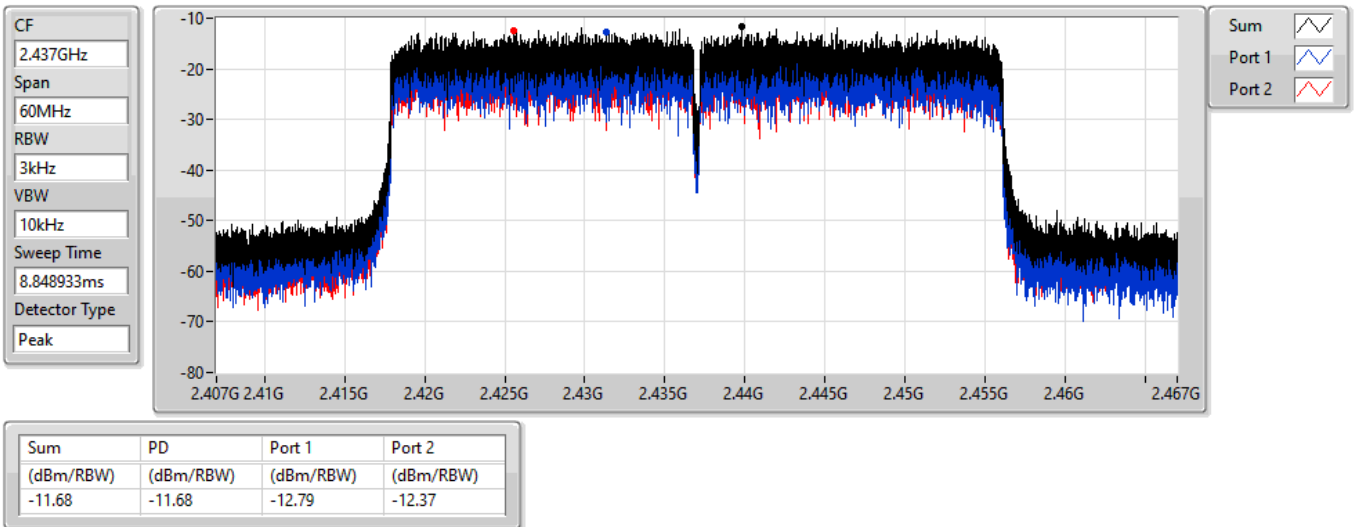


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2437MHz

09/05/2022

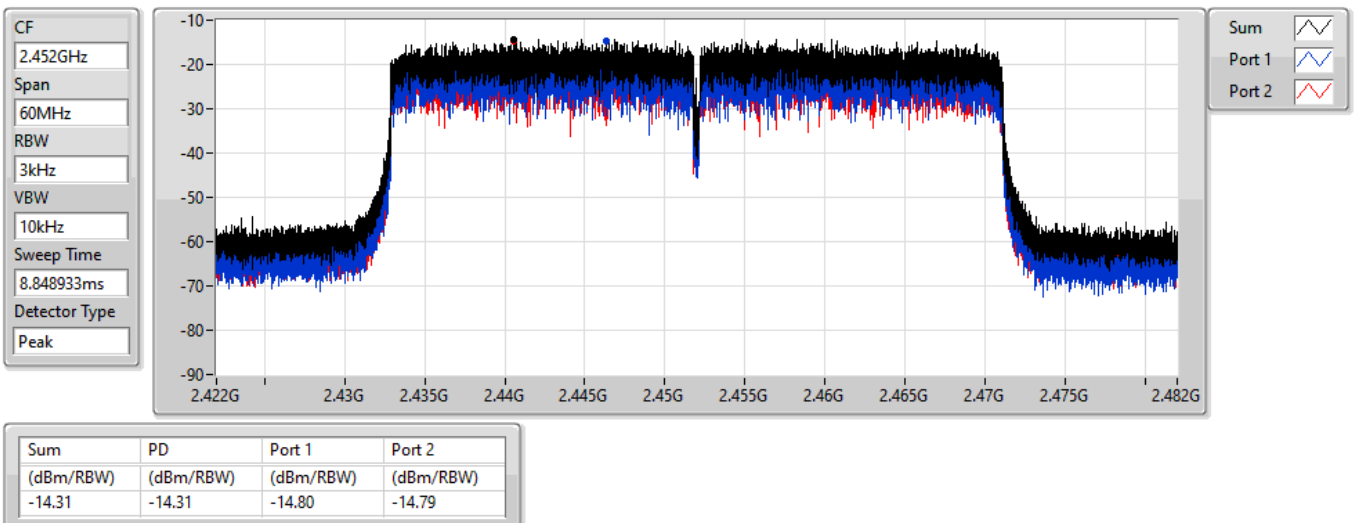


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2452MHz

09/05/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	0.54
802.11b_Nss1,(1Mbps)_2TX	1.05
802.11g_Nss1,(6Mbps)_1TX(Port2)	-4.51
802.11g_Nss1,(6Mbps)_2TX	-2.42
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-5.06
802.11ax HEW20_Nss2,(MCS0)_2TX	-1.09
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-11.6
802.11ax HEW40_Nss2,(MCS0)_2TX	-9.06

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	-1.27	-1.27	8.00
2437MHz	Pass	3.23	-	0.54	0.54	8.00
2462MHz	Pass	3.23	-	0.05	0.05	8.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.24	-3.32	-2.49	-1.43	7.76
2437MHz	Pass	6.24	-3.3	-0.88	1.05	7.76
2462MHz	Pass	6.24	-1.16	-1.82	0.49	7.76
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	-8.33	-8.33	8.00
2437MHz	Pass	3.23	-	-4.51	-4.51	8.00
2462MHz	Pass	3.23	-	-8.67	-8.67	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.24	-9.55	-8.09	-5.88	7.76
2437MHz	Pass	6.24	-5.18	-4.71	-2.42	7.76
2462MHz	Pass	6.24	-10.34	-8.31	-7.17	7.76
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	3.23	-	-7.36	-7.36	8.00
2437MHz	Pass	3.23	-	-5.06	-5.06	8.00
2462MHz	Pass	3.23	-	-9.24	-9.24	8.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.23	-6.99	-9.70	-5.52	8.00
2437MHz	Pass	3.23	-5.39	-3.11	-1.09	8.00
2462MHz	Pass	3.23	-8.17	-6.9	-4.48	8.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	3.23	-	-14.2	-14.20	8.00
2437MHz	Pass	3.23	-	-11.6	-11.60	8.00
2452MHz	Pass	3.23	-	-12.29	-12.29	8.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.23	-13.41	-13.81	-10.84	8.00
2437MHz	Pass	3.23	-11.7	-11.38	-9.06	8.00
2452MHz	Pass	3.23	-13.98	-14.32	-11.14	8.00

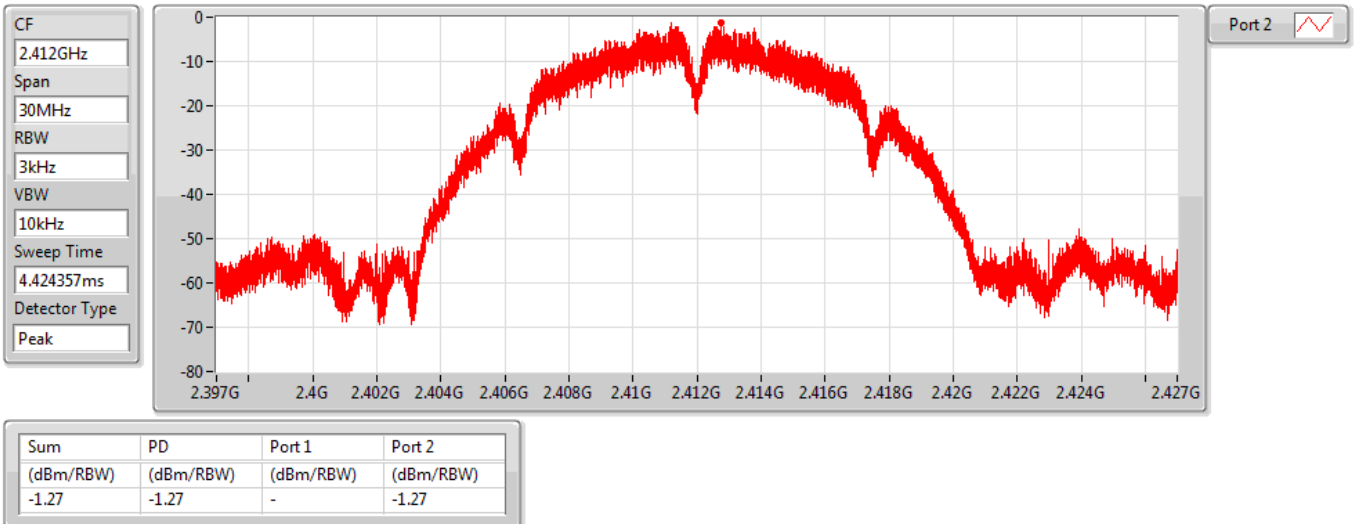
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2412MHz

25/07/2022

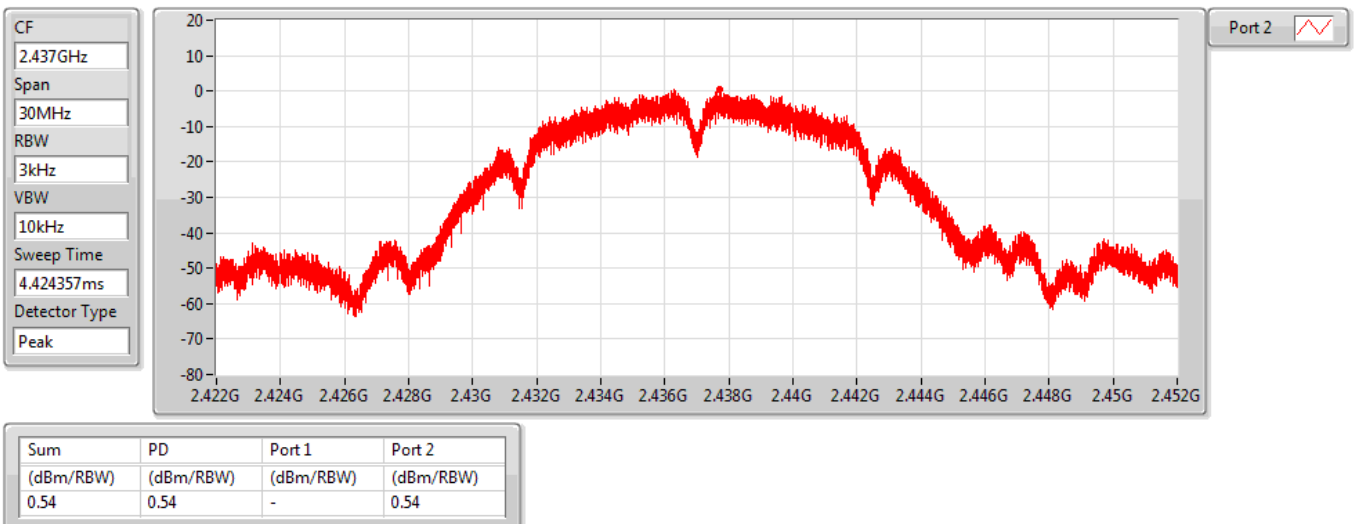


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2437MHz

25/07/2022

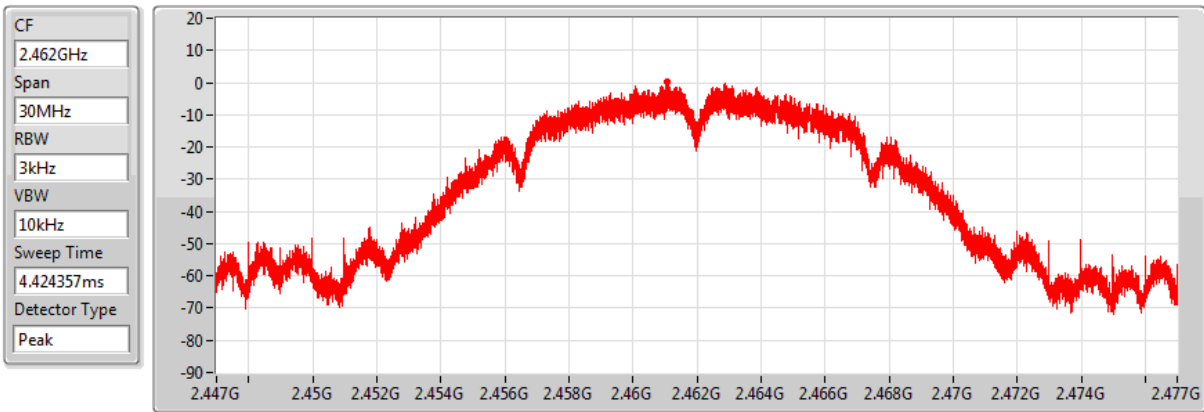


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2462MHz

25/07/2022



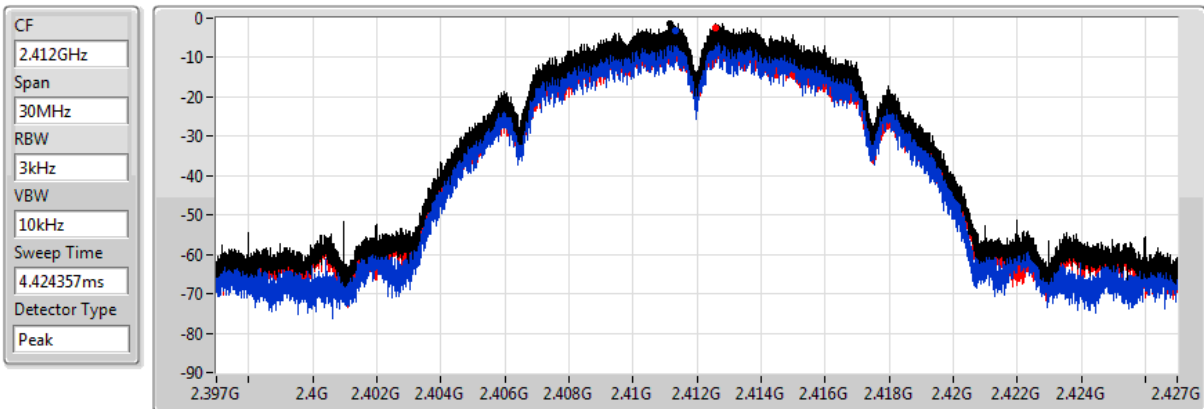
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.05	0.05	-	0.05

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

25/07/2022



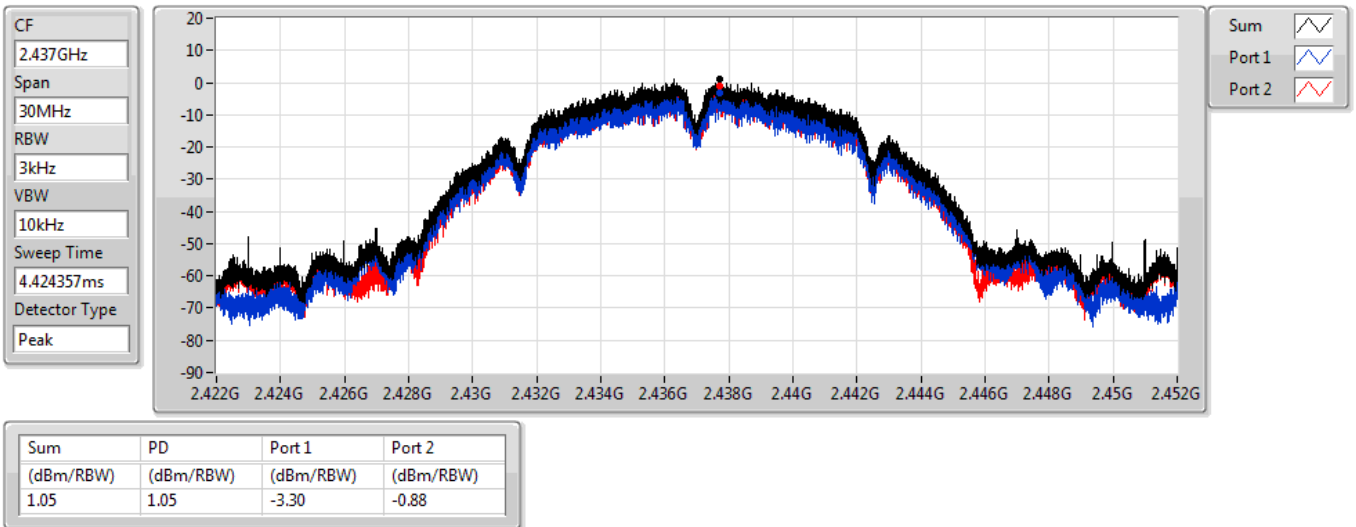
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.43	-1.43	-3.32	-2.49

802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

25/07/2022

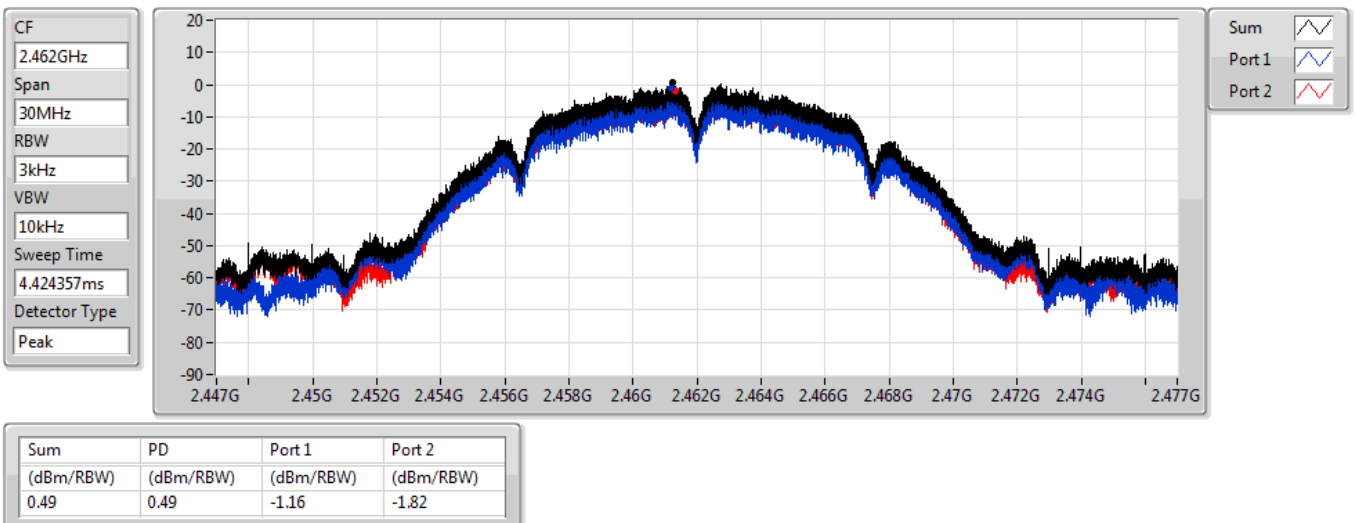


802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

25/07/2022

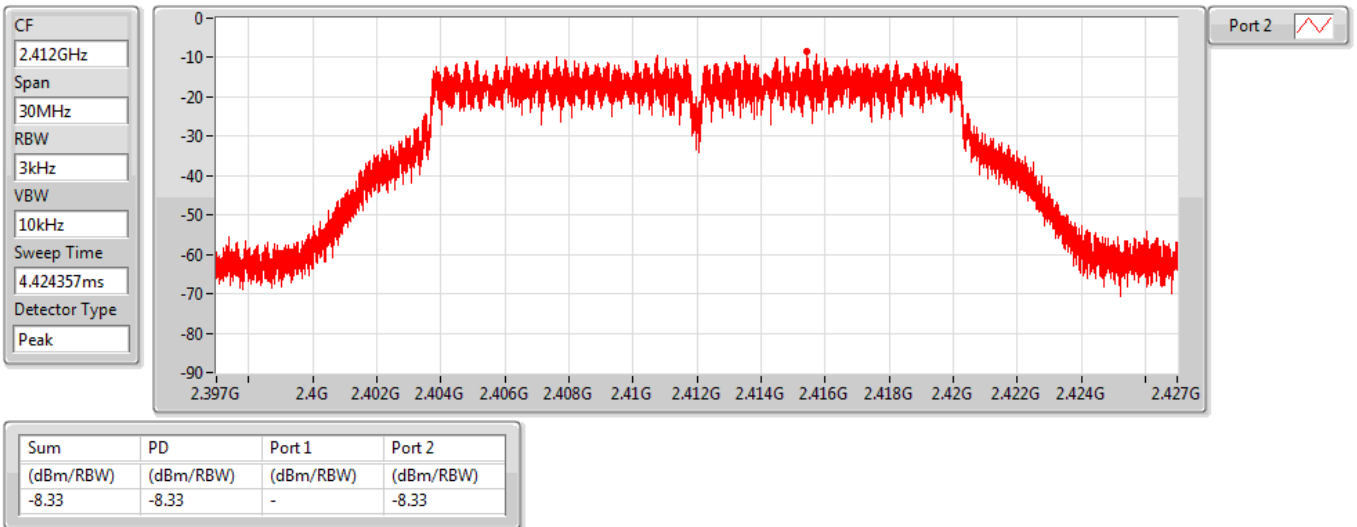


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2412MHz

26/07/2022

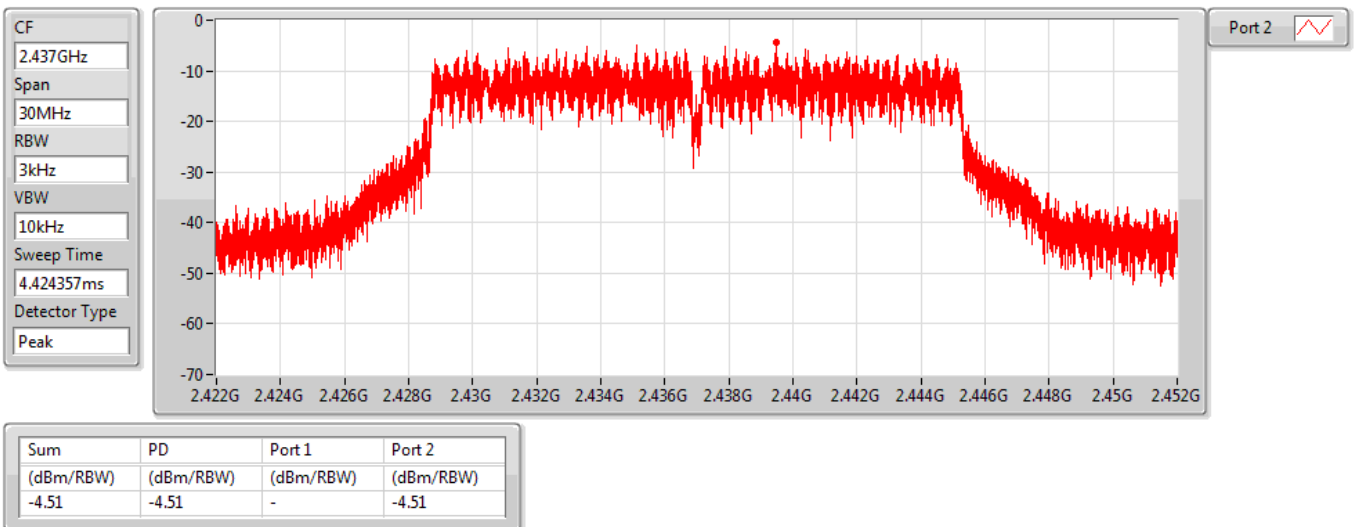


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2437MHz

26/07/2022

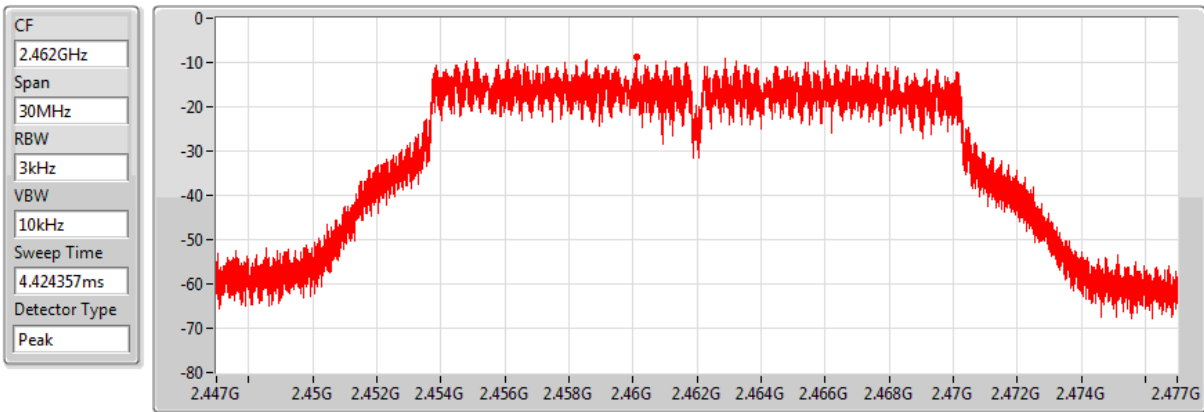


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2462MHz

26/07/2022



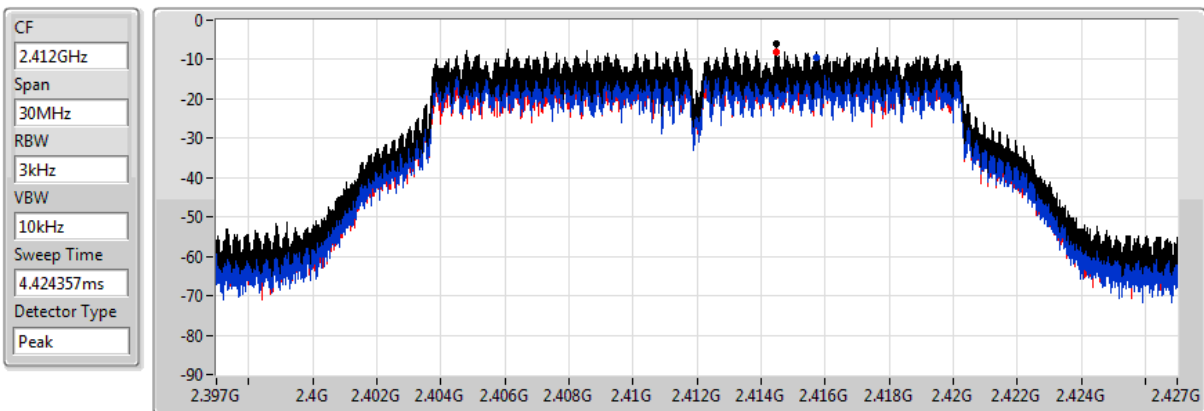
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.67	-8.67	-	-8.67

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

26/07/2022



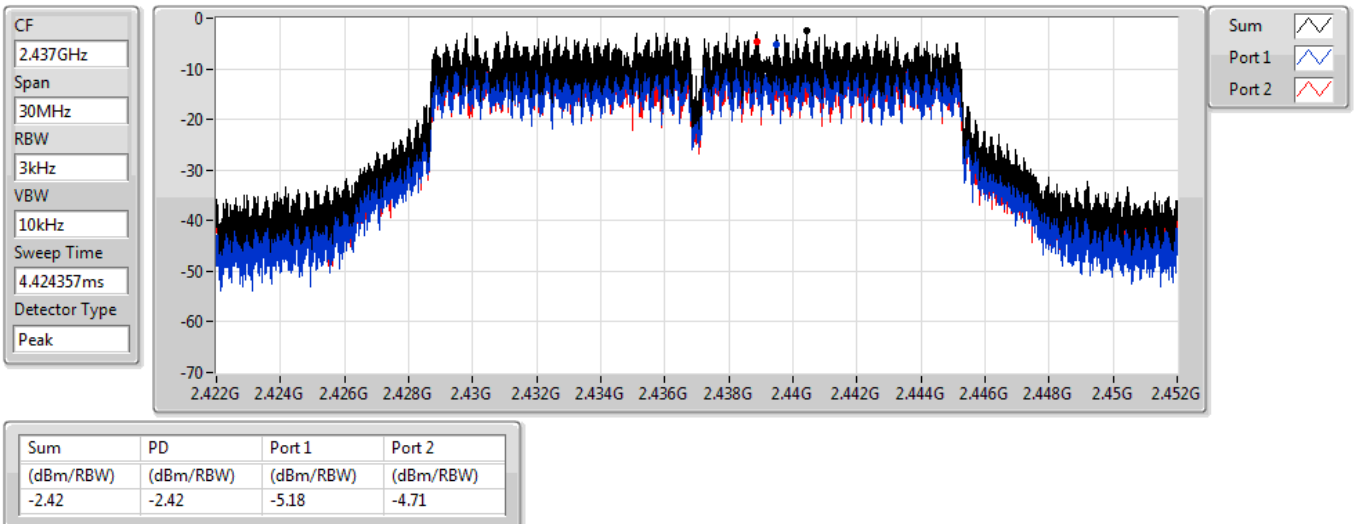
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.88	-5.88	-9.55	-8.09

802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

26/07/2022

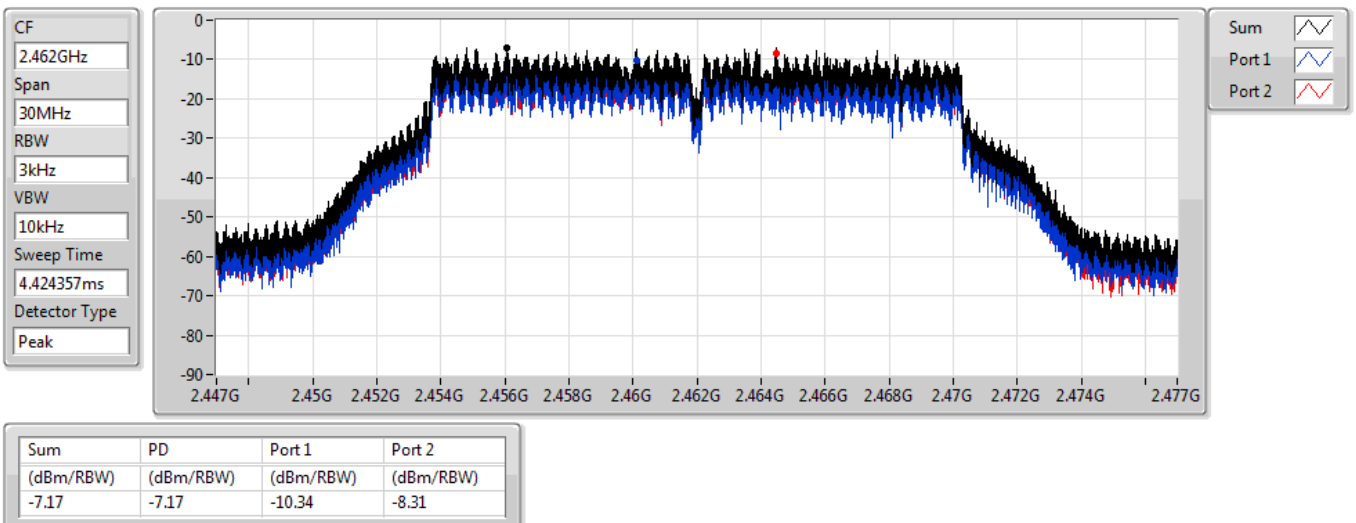


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

26/07/2022

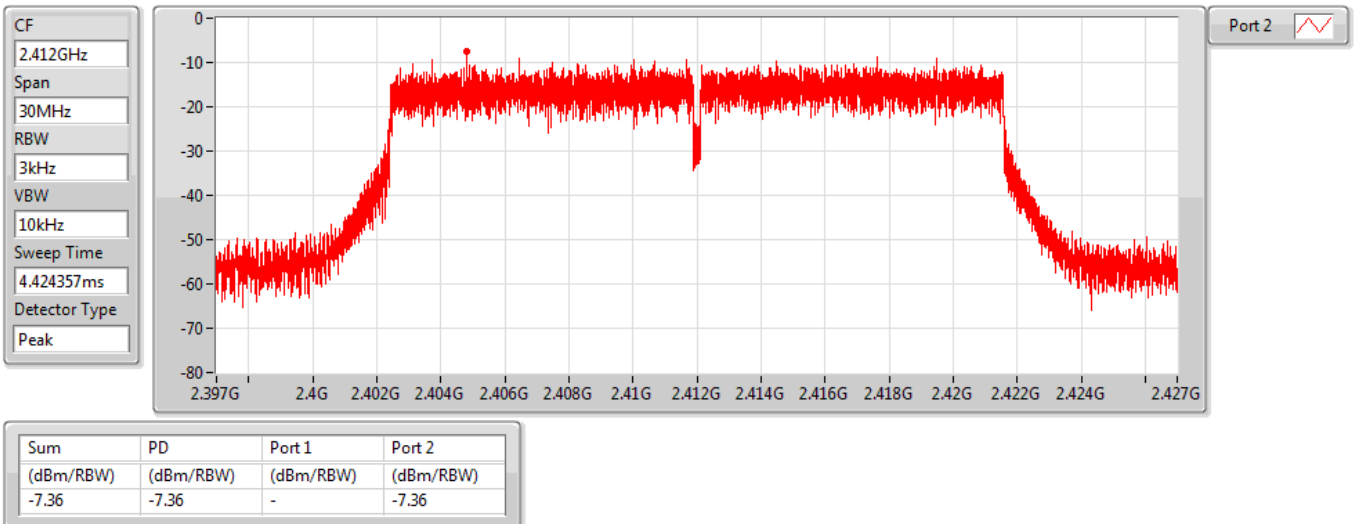


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2412MHz

26/07/2022

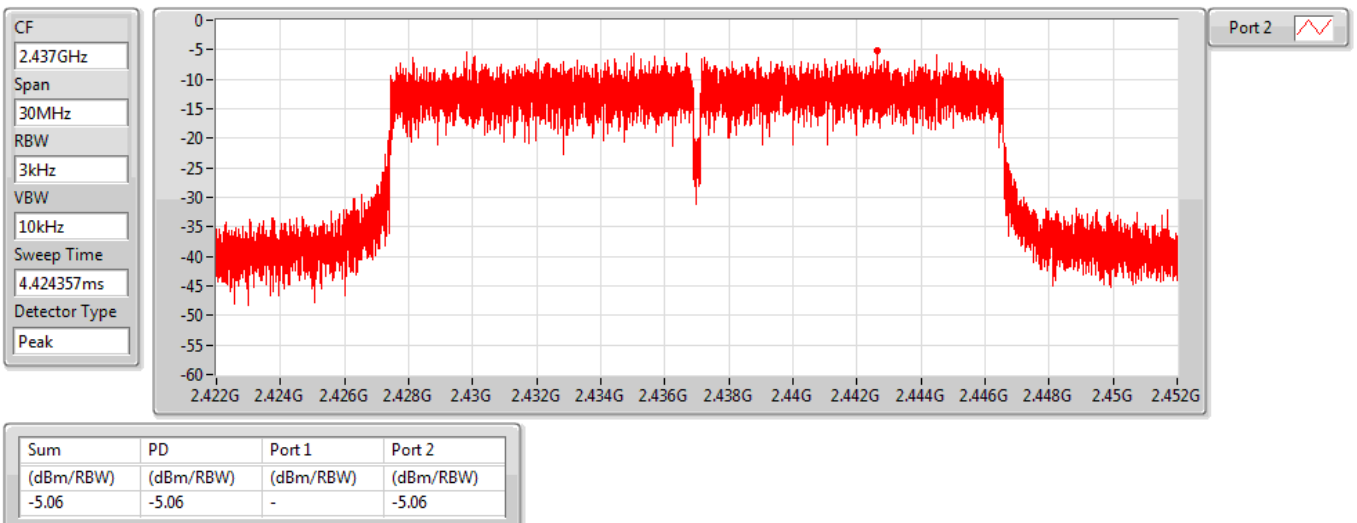


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

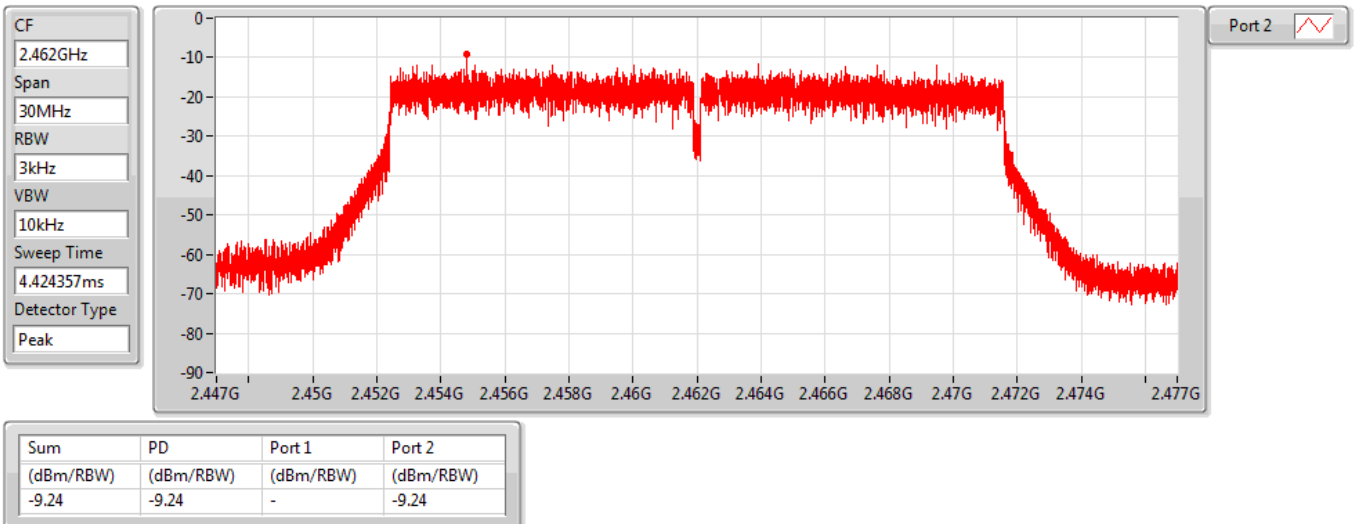


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2462MHz

26/07/2022

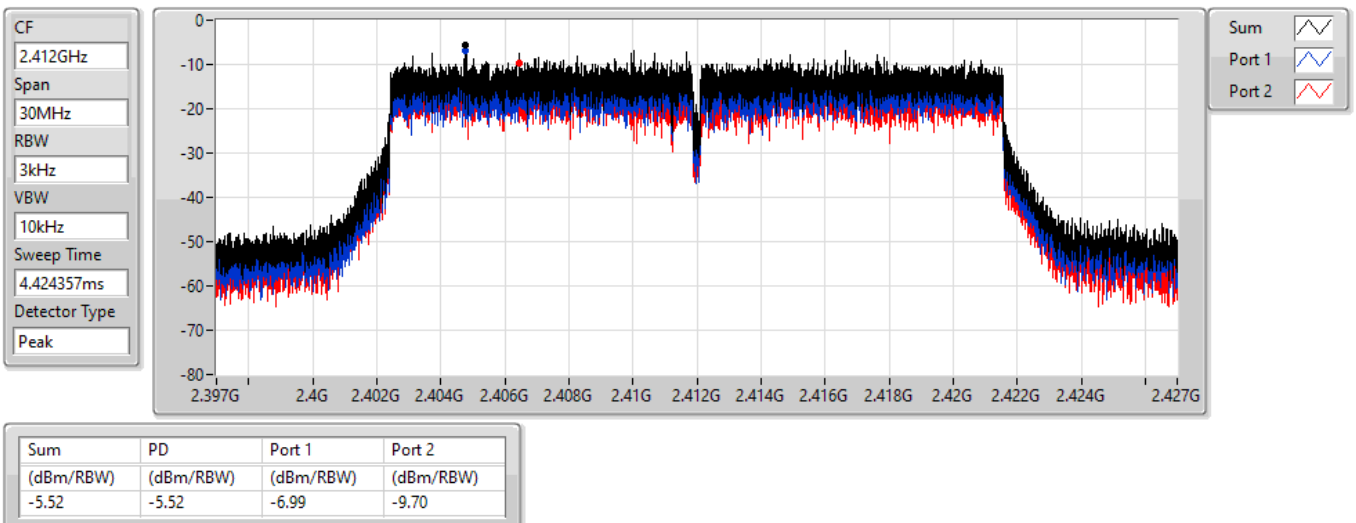


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2412MHz

13/08/2022

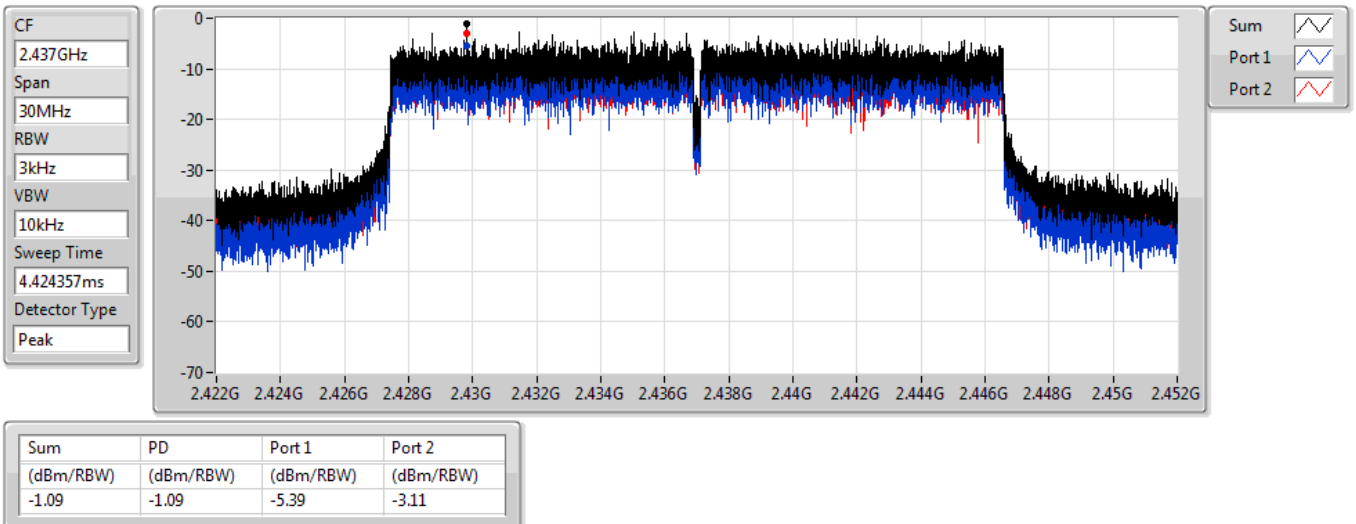


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

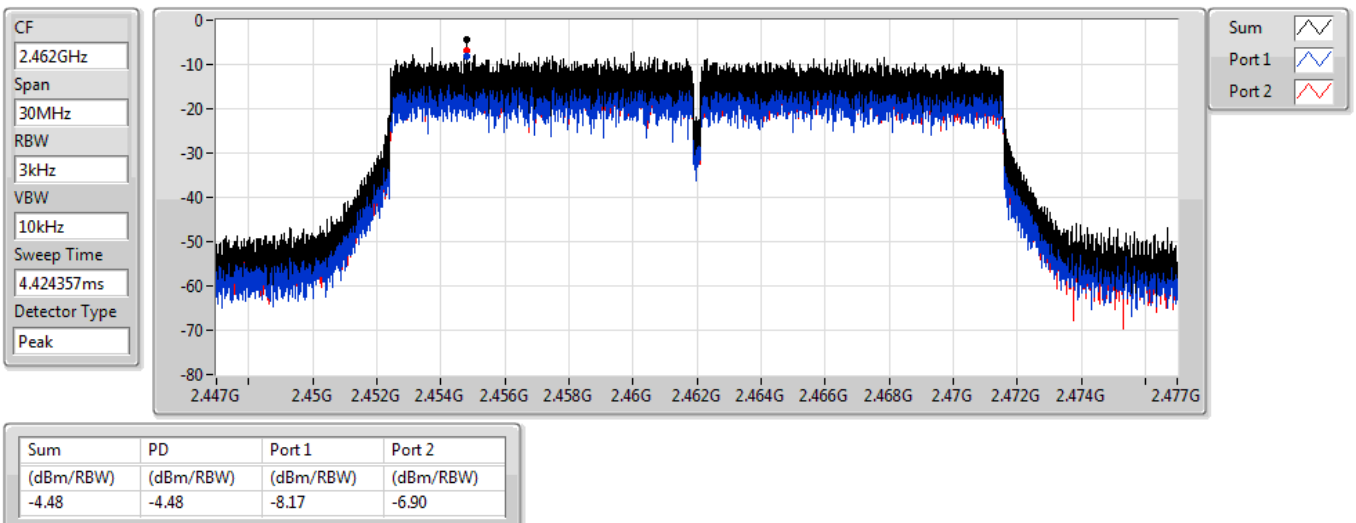


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2462MHz

26/07/2022

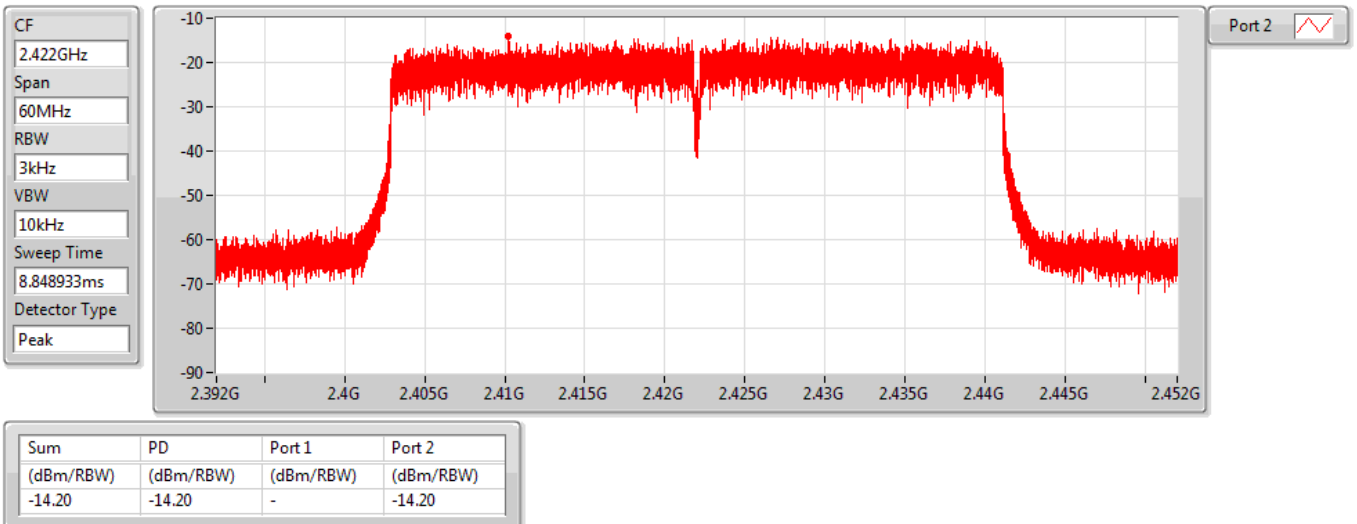


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2422MHz

26/07/2022

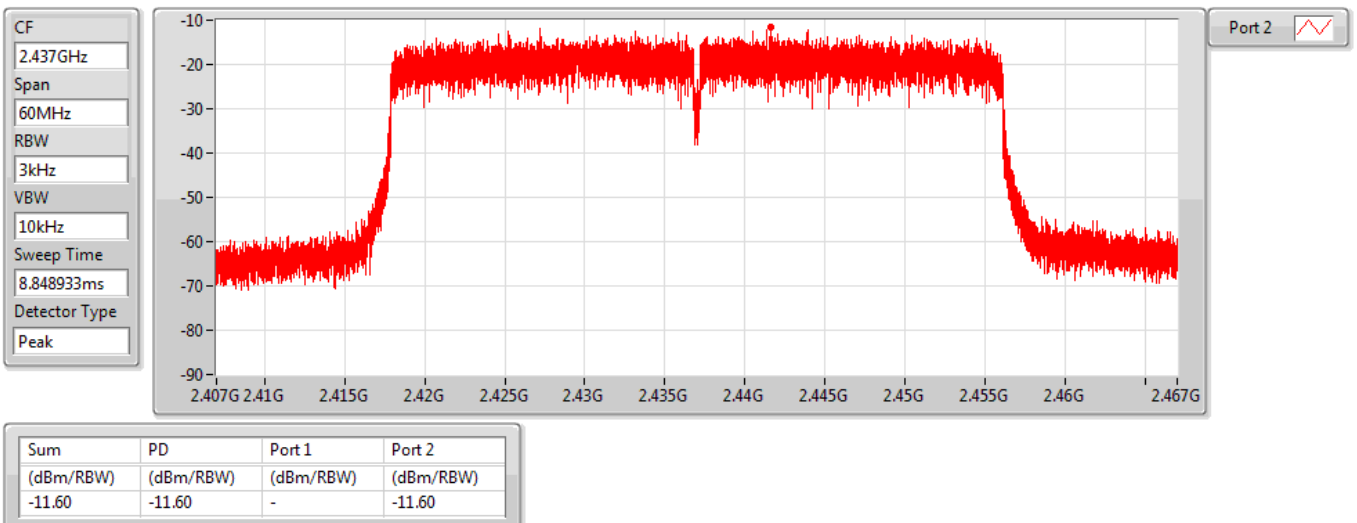


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

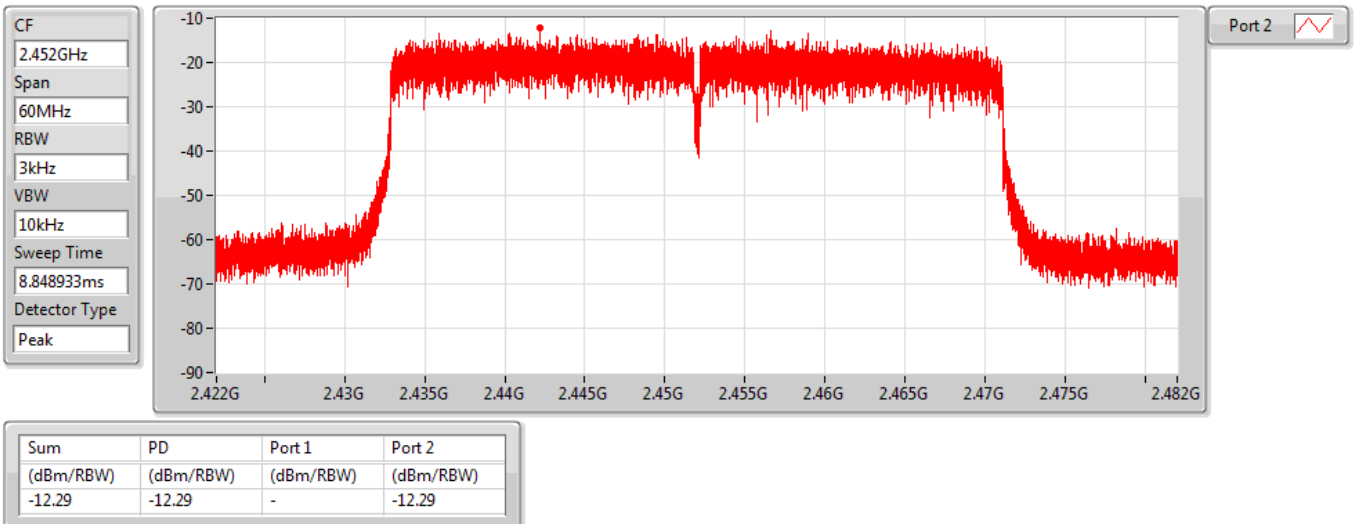


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2452MHz

26/07/2022

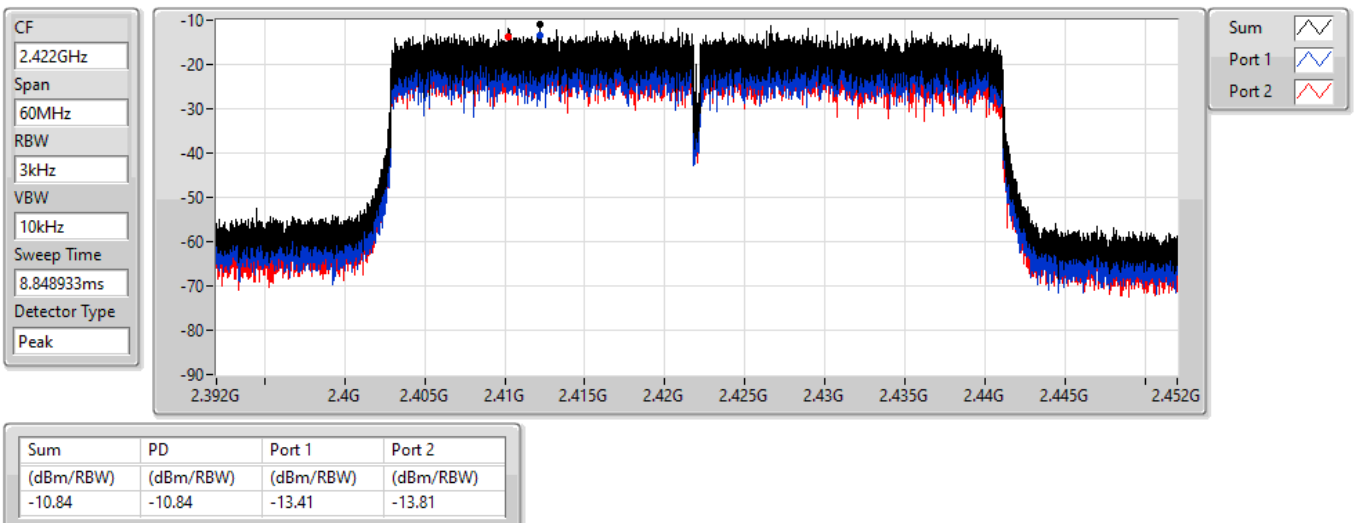


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2422MHz

13/08/2022

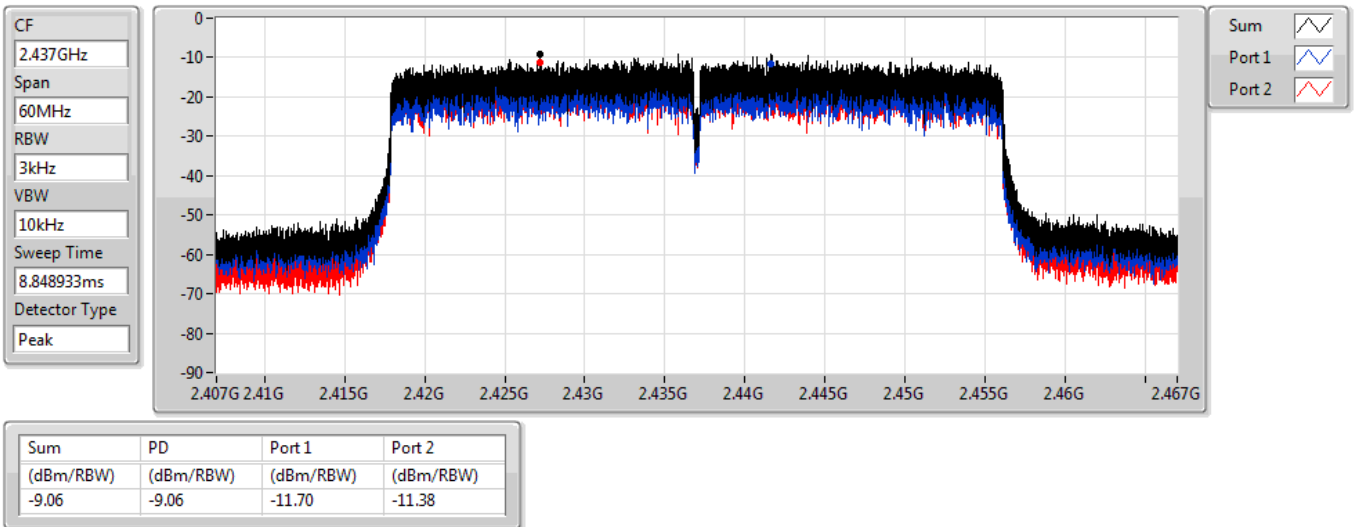


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

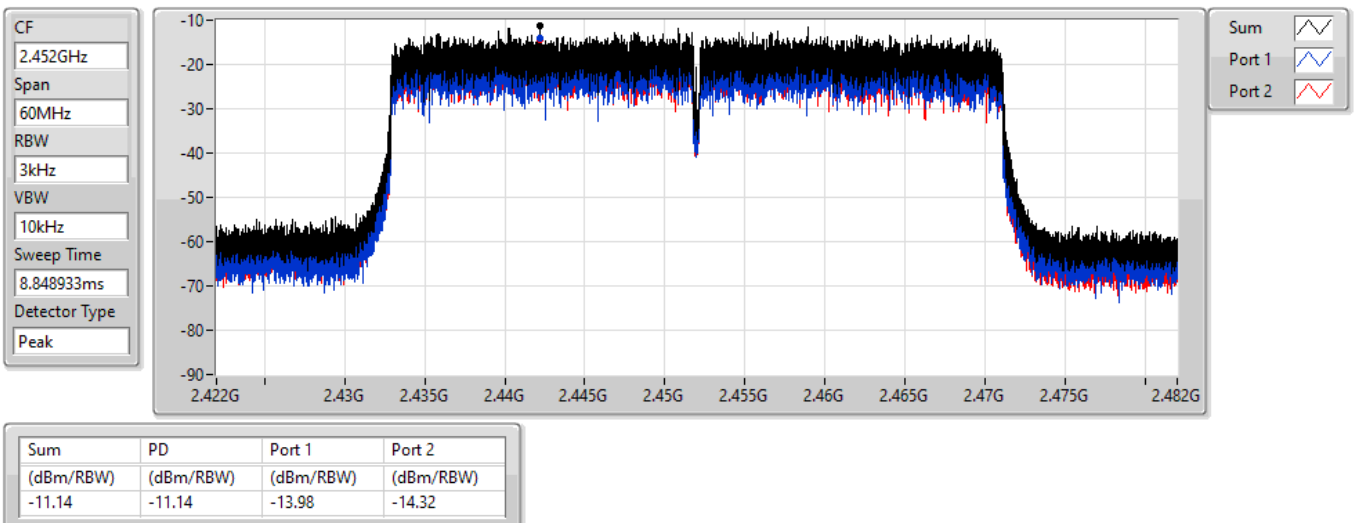


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2452MHz

13/08/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	-0.48
802.11b_Nss1,(1Mbps)_2TX	-0.01
802.11g_Nss1,(6Mbps)_1TX(Port2)	-4.28
802.11g_Nss1,(6Mbps)_2TX	-2.40
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-3.86
802.11ax HEW20_Nss2,(MCS0)_2TX	-2.81
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-12.56
802.11ax HEW40_Nss2,(MCS0)_2TX	-9.22

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	-0.78	-0.78	8.00
2437MHz	Pass	5.00	-	-1.18	-1.18	8.00
2462MHz	Pass	5.00	-	-0.48	-0.48	8.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.01	-4.21	-3.04	-1.58	5.99
2437MHz	Pass	8.01	-2.11	-1.99	-0.67	5.99
2462MHz	Pass	8.01	-2.58	-2.65	-0.01	5.99
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	-9.40	-9.40	8.00
2437MHz	Pass	5.00	-	-4.28	-4.28	8.00
2462MHz	Pass	5.00	-	-8.89	-8.89	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.01	-9.73	-9.21	-6.45	5.99
2437MHz	Pass	8.01	-5.01	-4.84	-2.40	5.99
2462MHz	Pass	8.01	-9.19	-8.95	-6.21	5.99
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	5.00	-	-12.01	-12.01	8.00
2437MHz	Pass	5.00	-	-3.86	-3.86	8.00
2462MHz	Pass	5.00	-	-11.62	-11.62	8.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.00	-10.17	-11.56	-8.75	8.00
2437MHz	Pass	5.00	-5.44	-5.99	-2.81	8.00
2462MHz	Pass	5.00	-9.24	-9.35	-6.28	8.00
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	5.00	-	-13.06	-13.06	8.00
2437MHz	Pass	5.00	-	-12.56	-12.56	8.00
2452MHz	Pass	5.00	-	-13.80	-13.80	8.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.00	-14.10	-13.82	-11.17	8.00
2437MHz	Pass	5.00	-12.30	-12.16	-9.22	8.00
2452MHz	Pass	5.00	-14.03	-13.52	-10.93	8.00

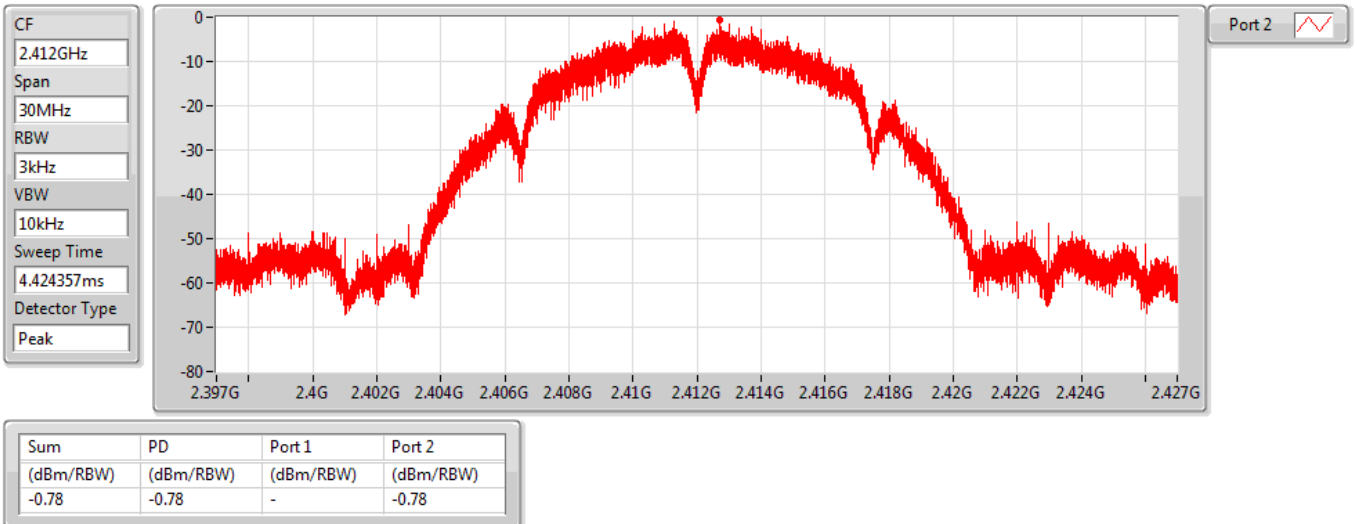
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2412MHz

26/07/2022

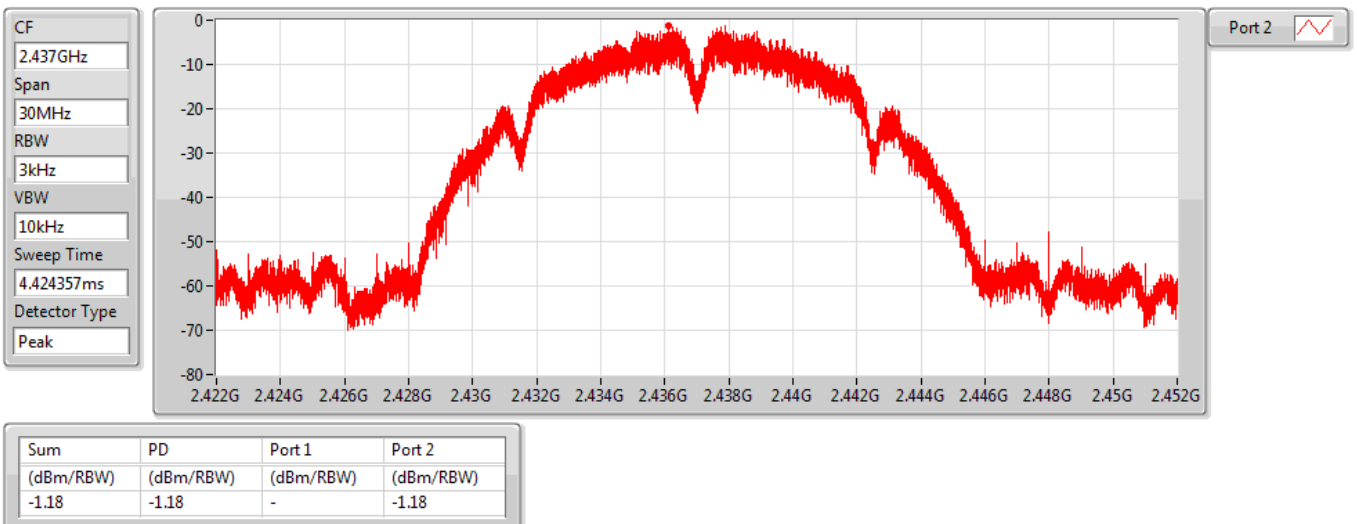


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2437MHz

26/07/2022

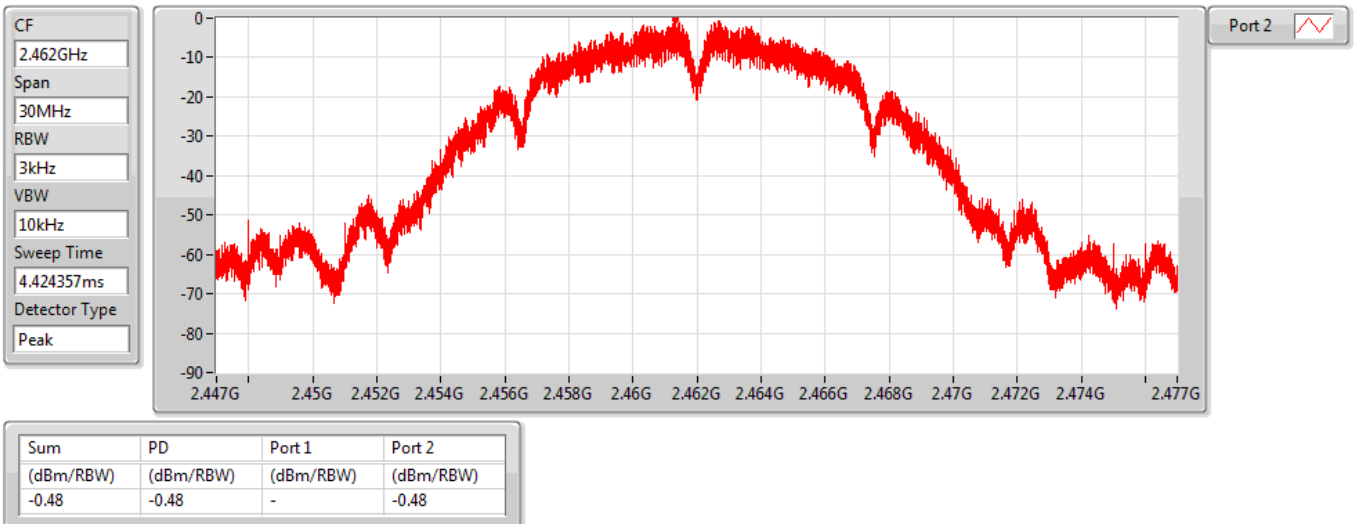


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2462MHz

26/07/2022

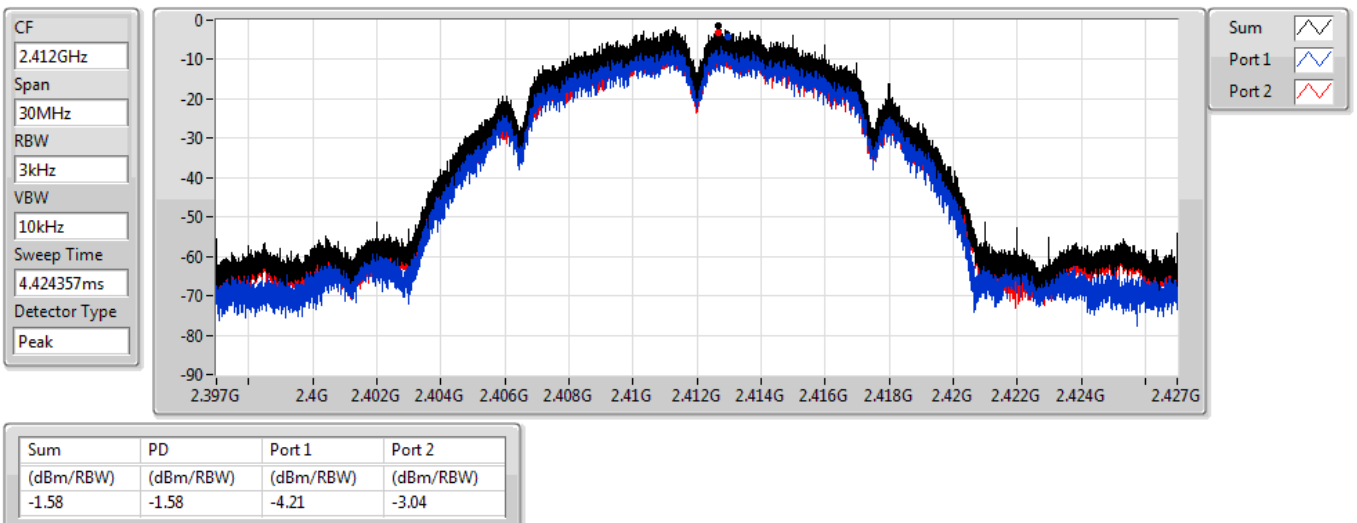


802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

26/07/2022

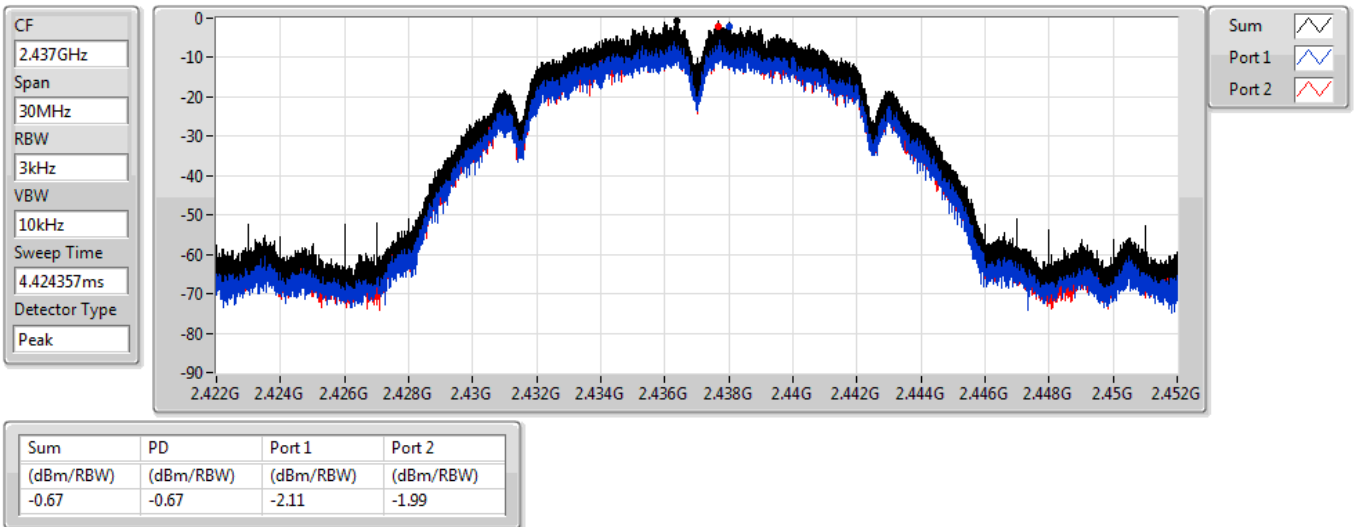


802.11b_Nss1,(1Mbps)_2TX

2437MHz

PSD

26/07/2022

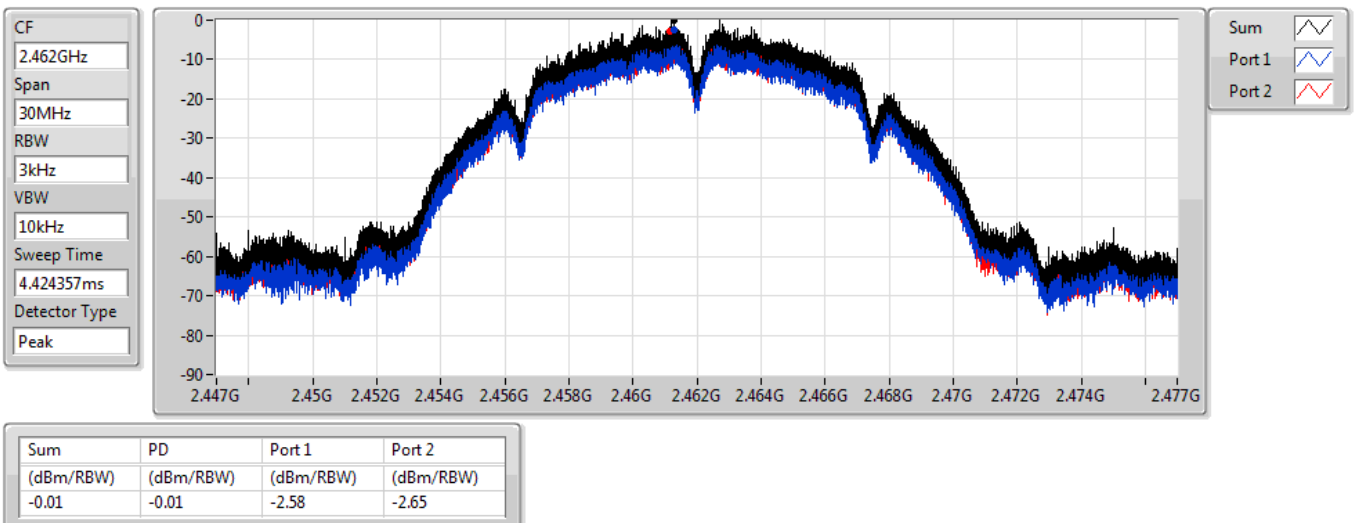


802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

26/07/2022

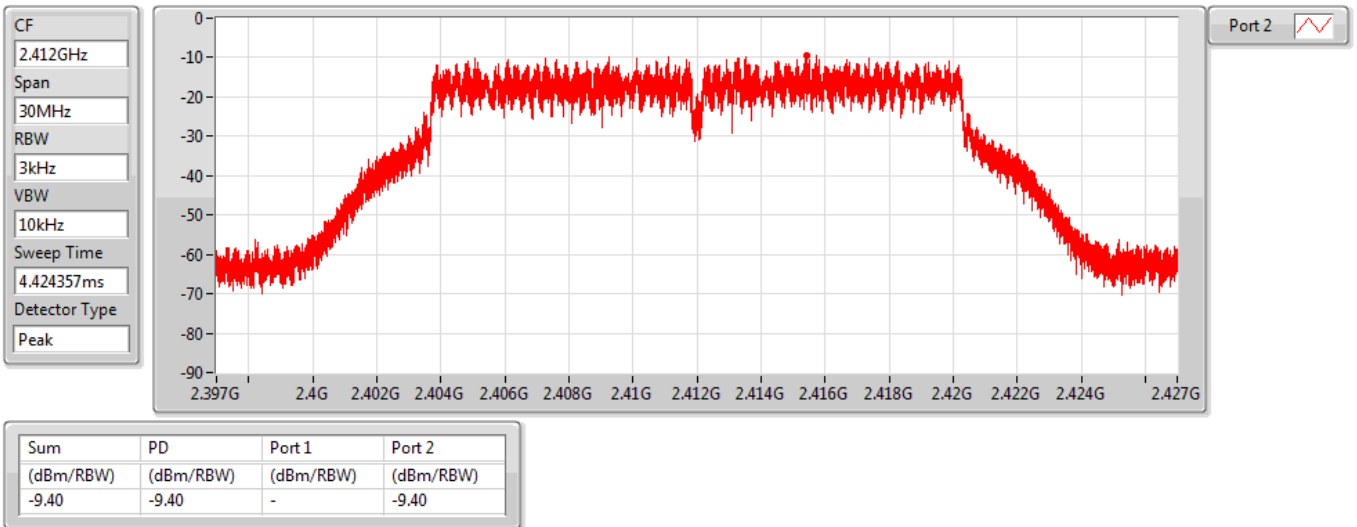


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2412MHz

26/07/2022

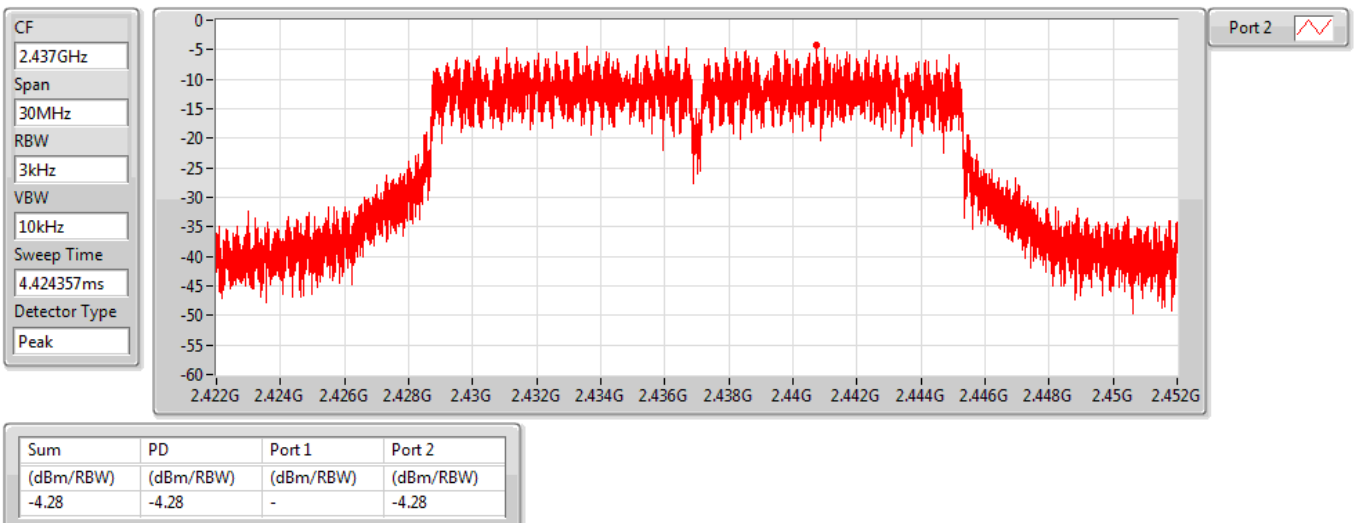


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2437MHz

26/07/2022

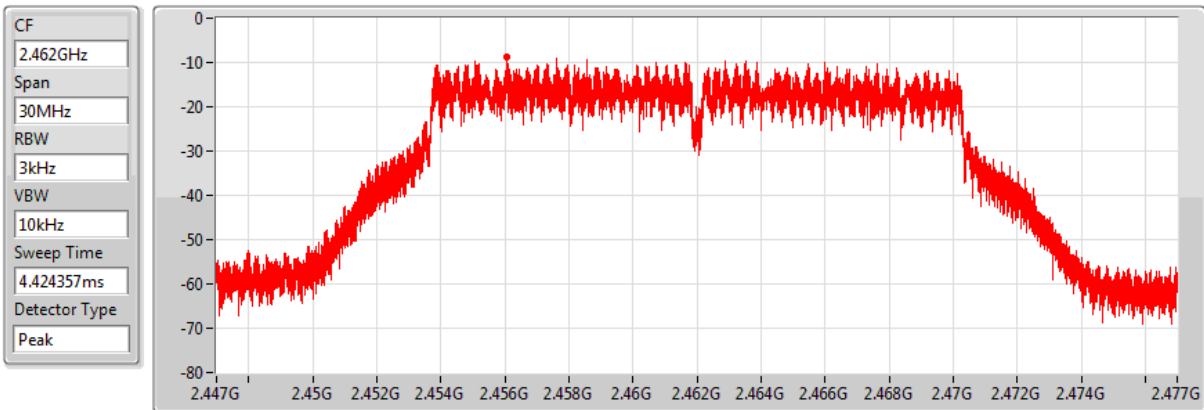


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2462MHz

26/07/2022



Port 2

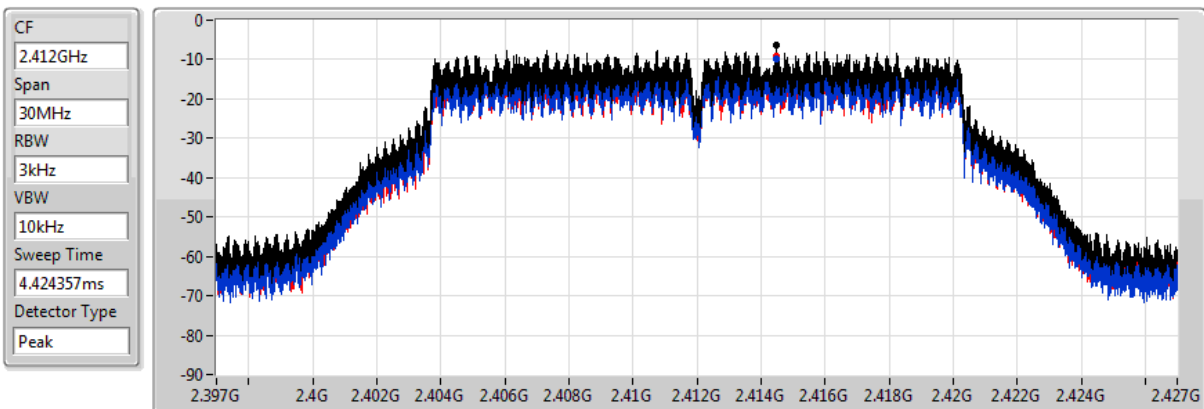
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.89	-8.89	-	-8.89

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

26/07/2022



Sum
Port 1
Port 2

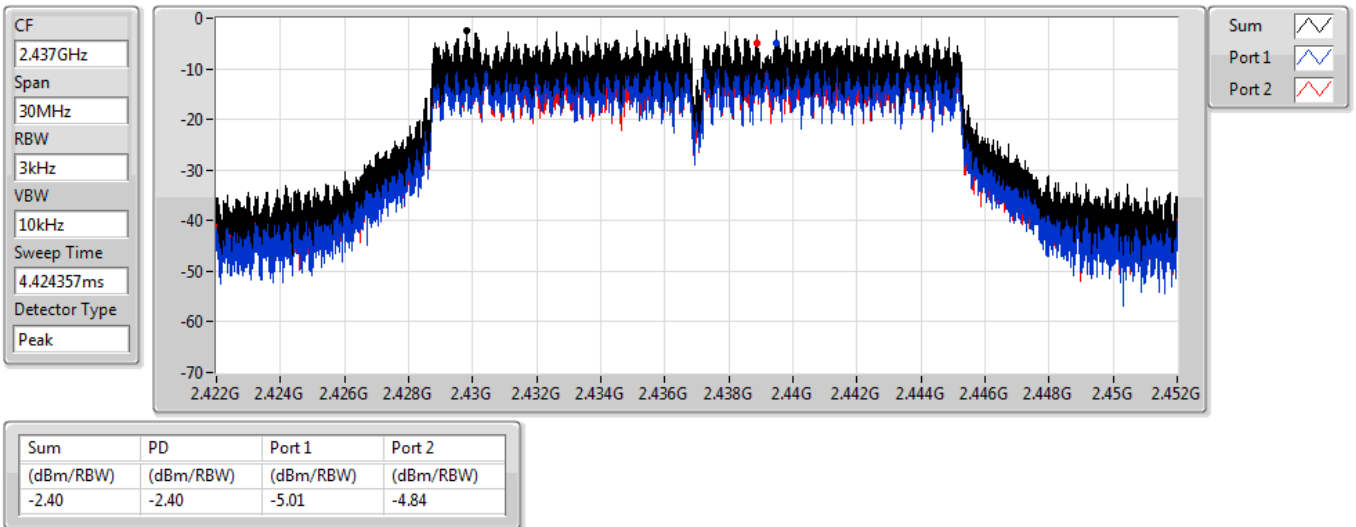
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.45	-6.45	-9.73	-9.21

802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

26/07/2022

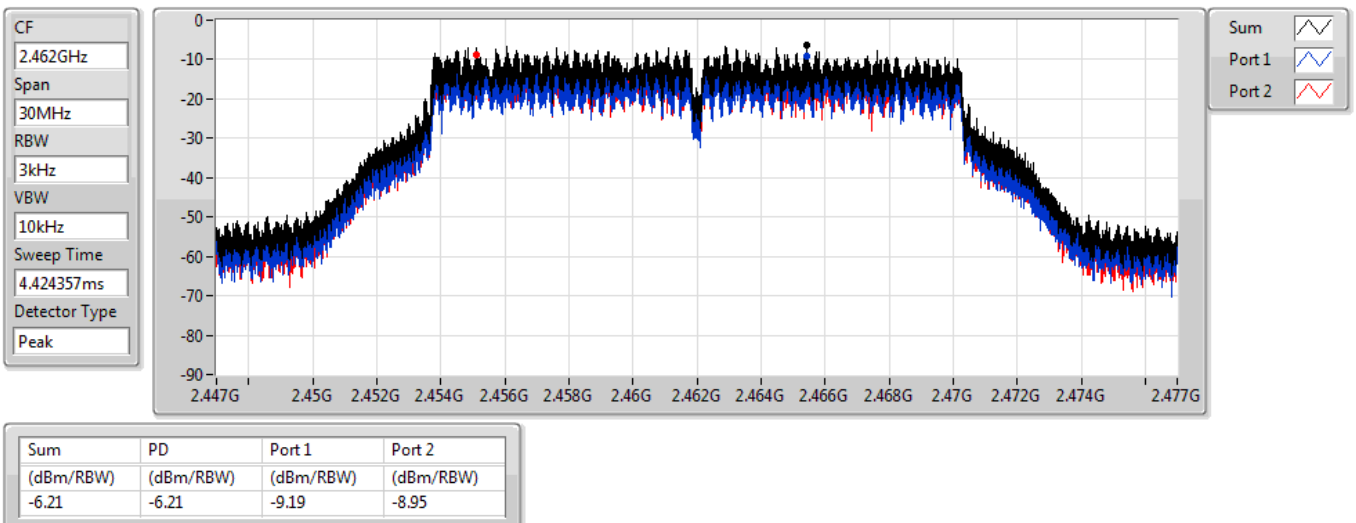


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

26/07/2022

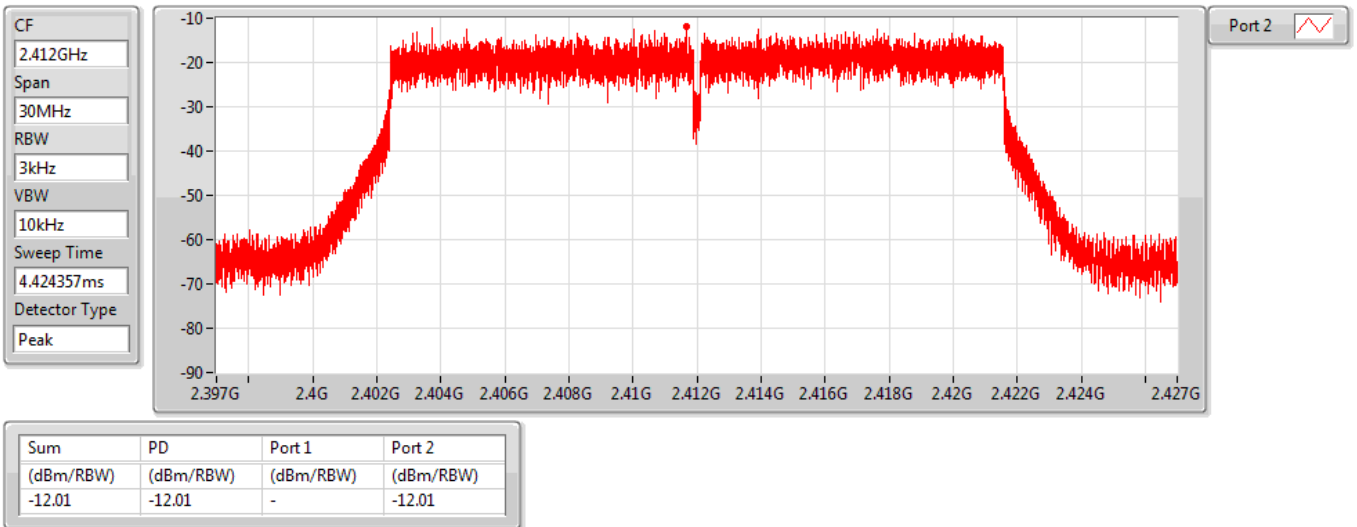


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2412MHz

26/07/2022

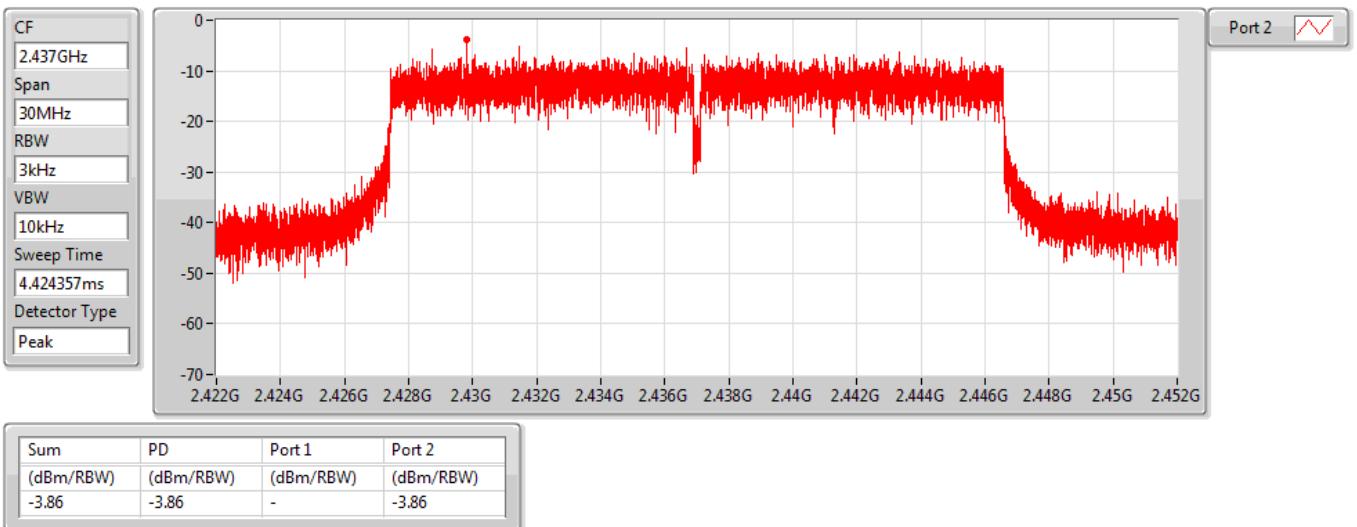


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

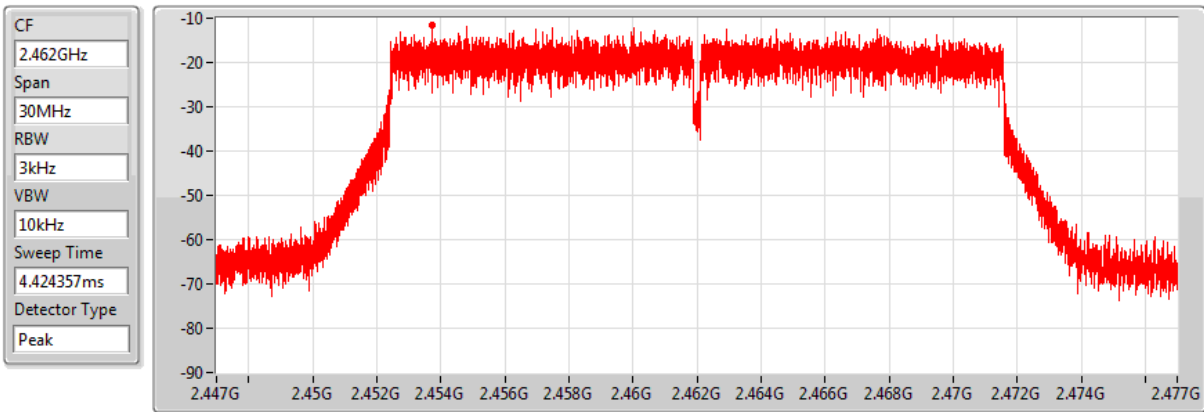


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2462MHz

26/07/2022



Port 2

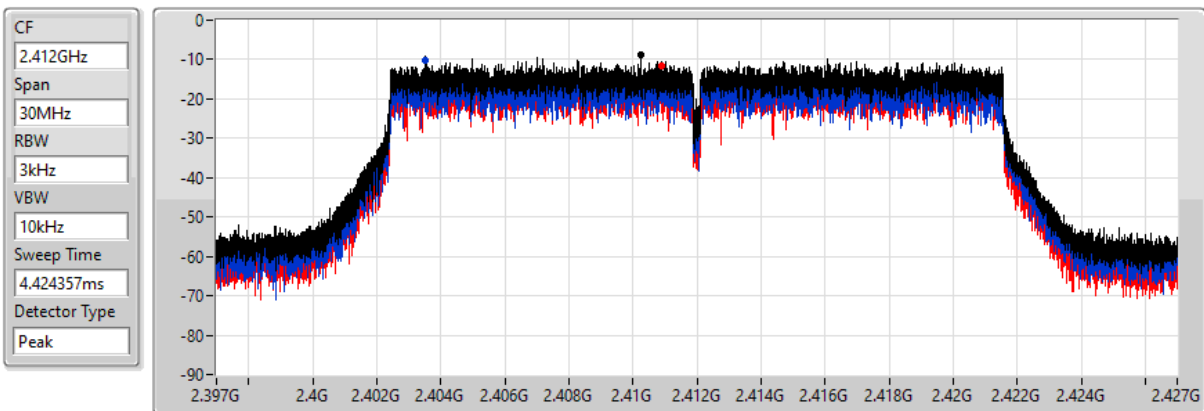
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-11.62	-11.62	-	-11.62

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2412MHz

13/08/2022



Sum
Port 1
Port 2

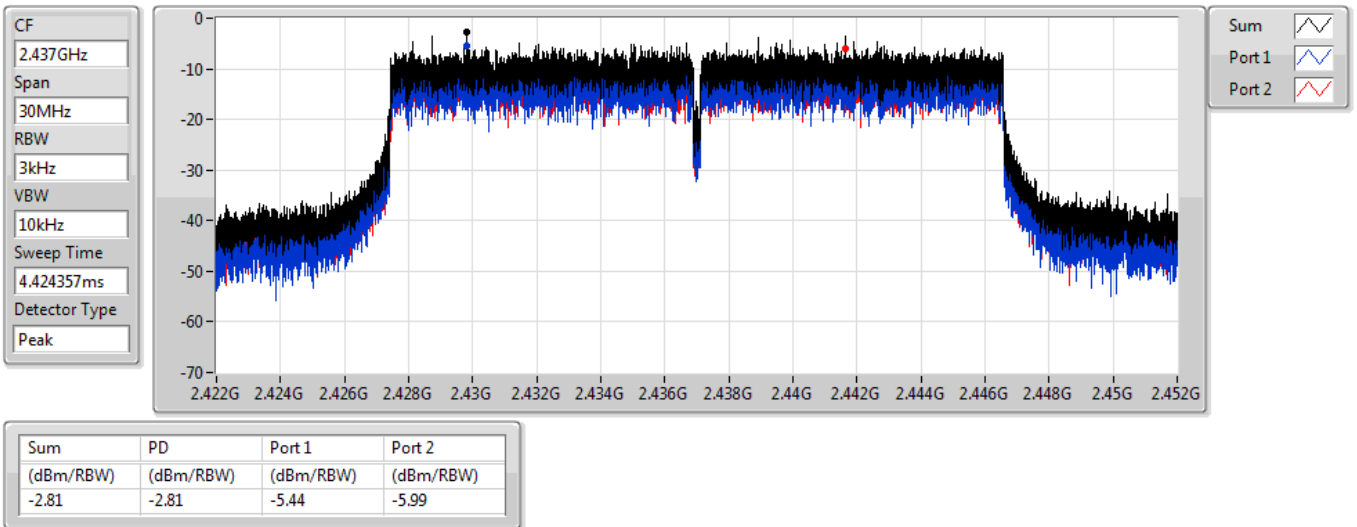
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.75	-8.75	-10.17	-11.56

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

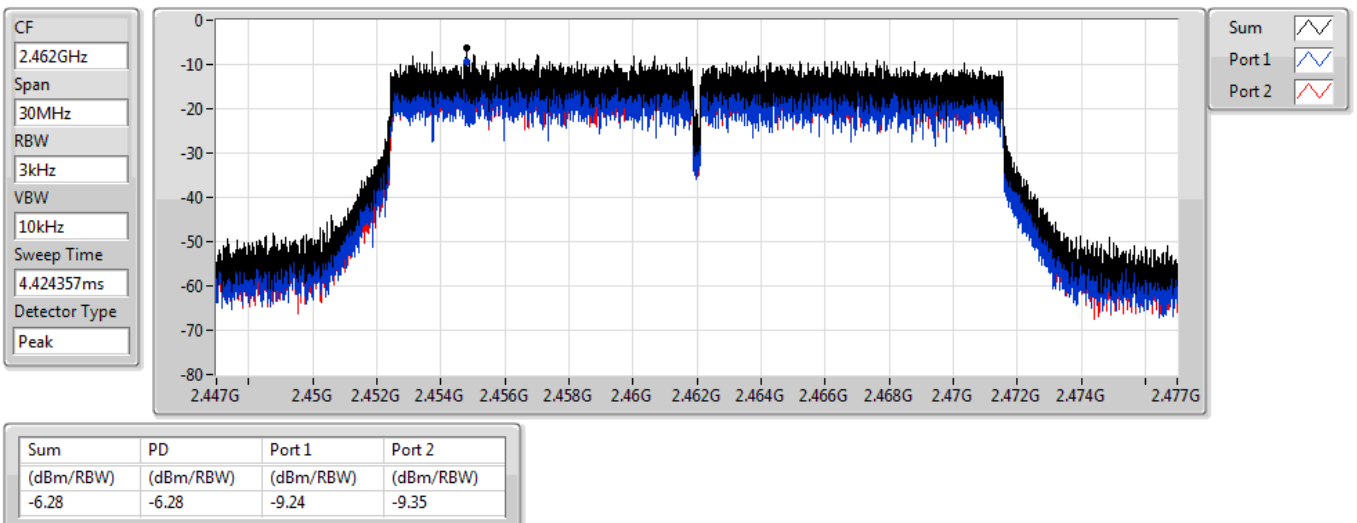


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2462MHz

26/07/2022

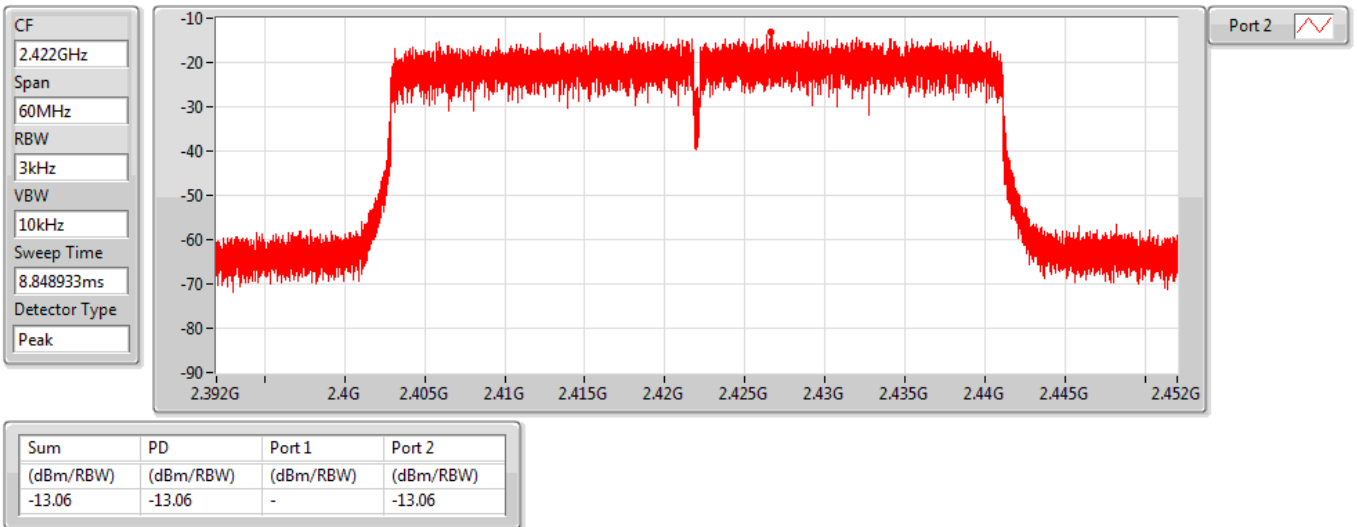


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2422MHz

26/07/2022

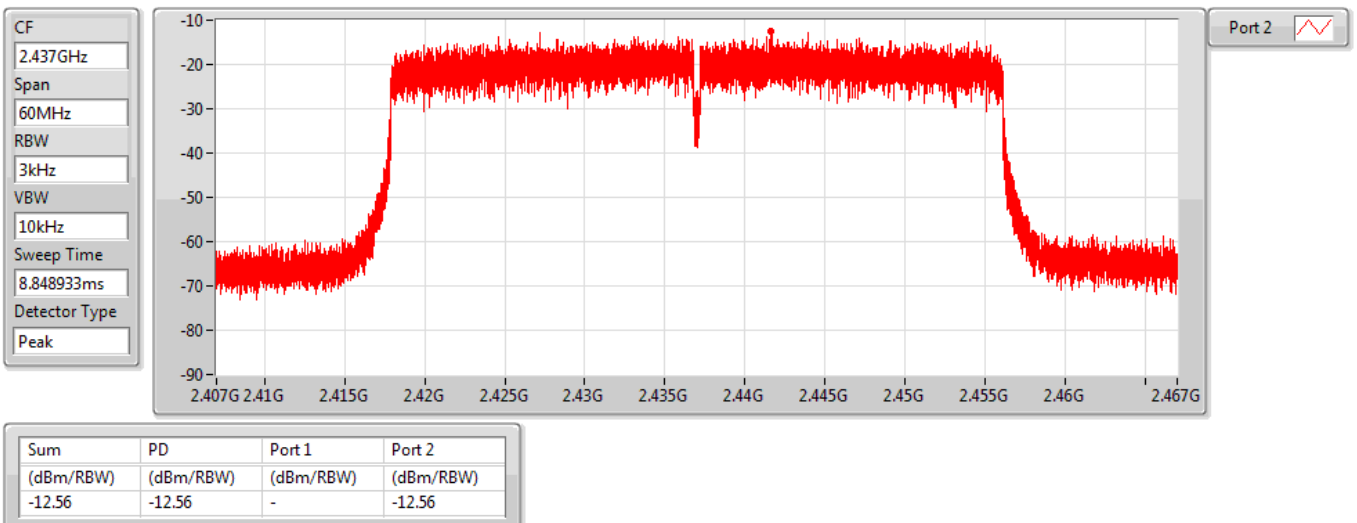


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

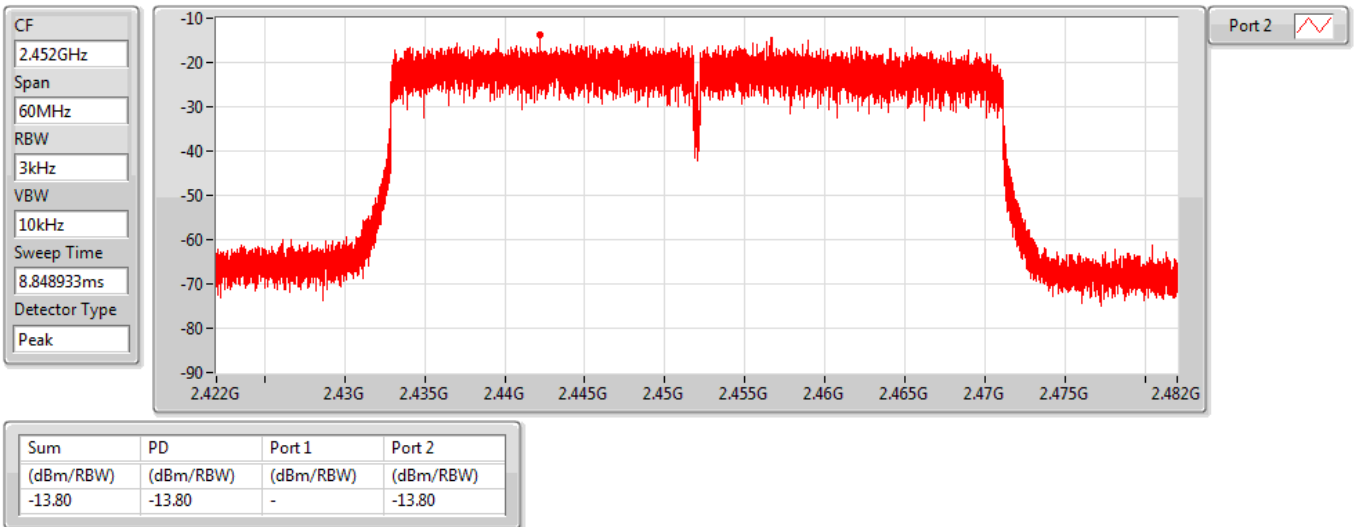


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2452MHz

26/07/2022

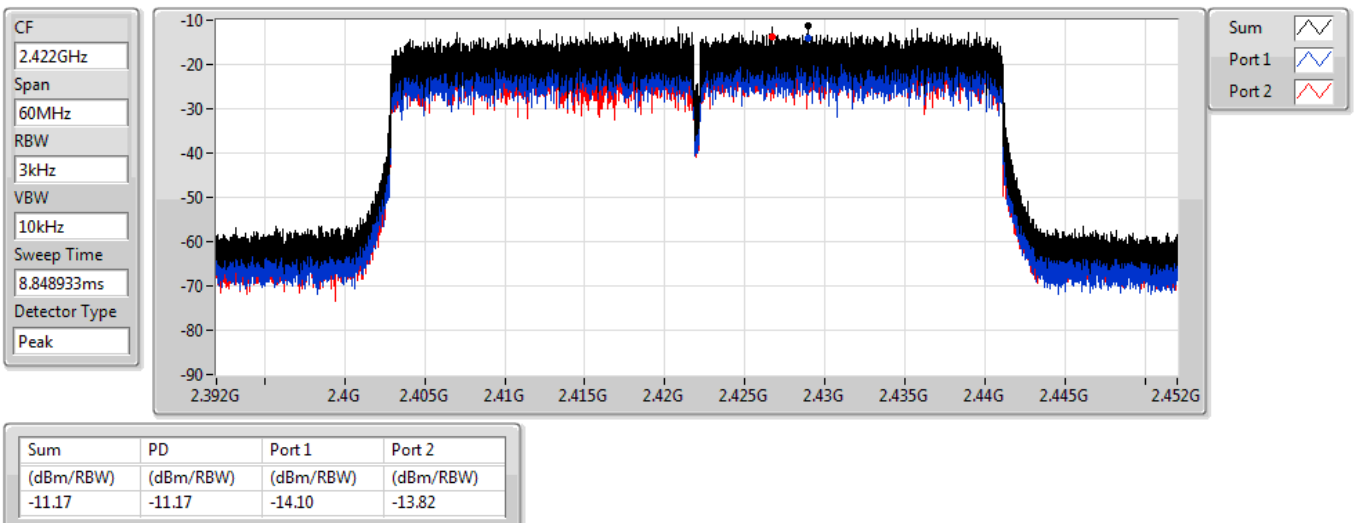


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2422MHz

26/07/2022

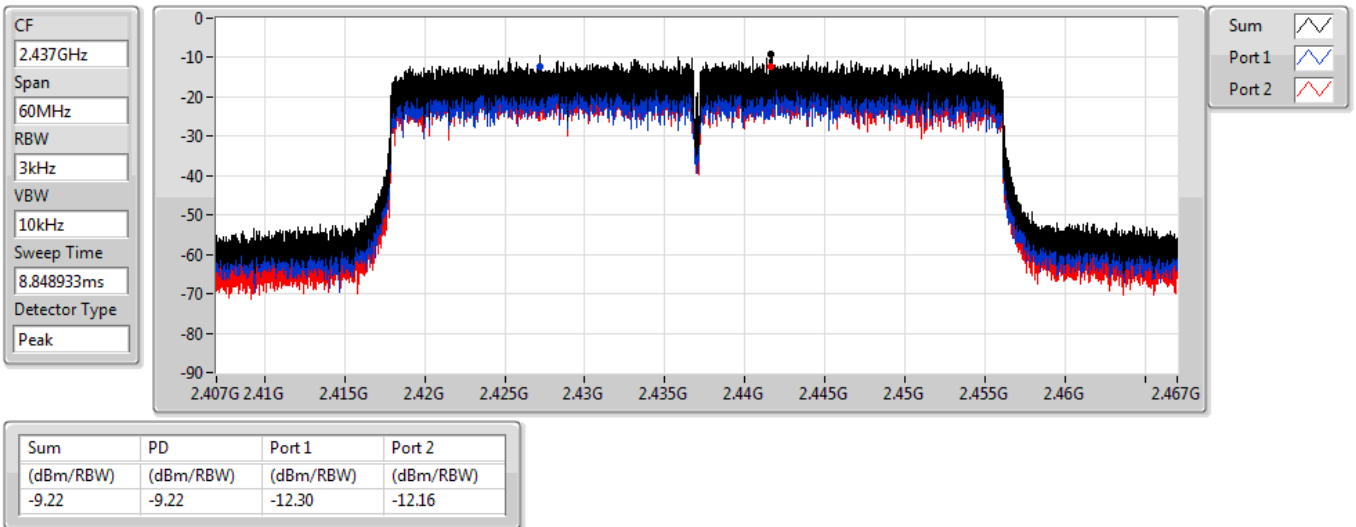


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

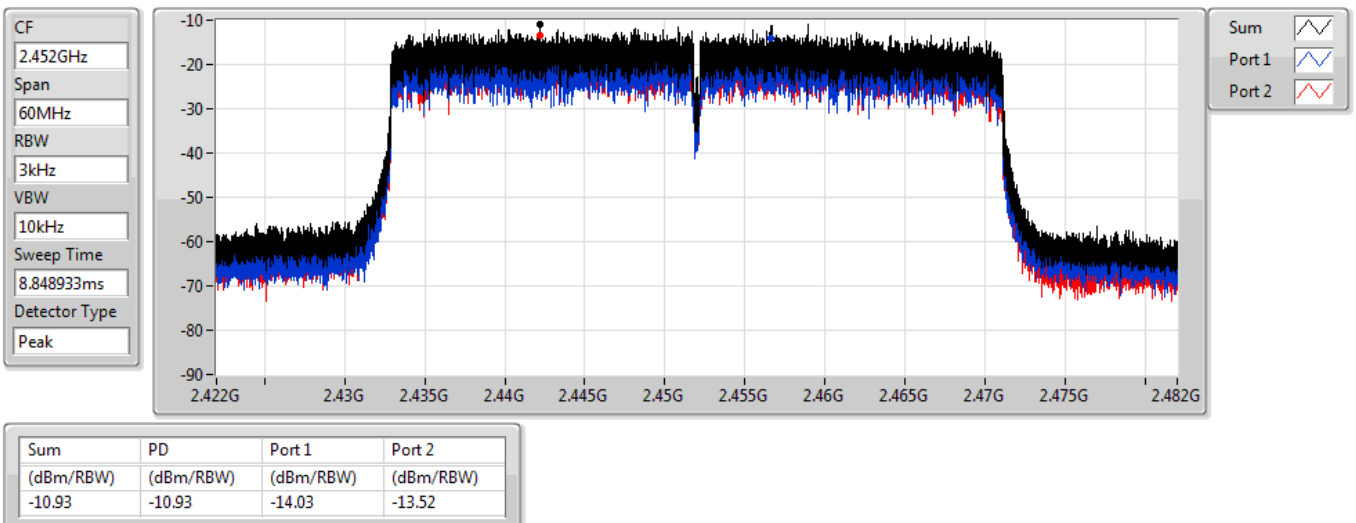


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2452MHz

26/07/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX(Port2)	1.94
802.11b_Nss1,(1Mbps)_2TX	0.09
802.11g_Nss1,(6Mbps)_1TX(Port2)	-4.38
802.11g_Nss1,(6Mbps)_2TX	-2.76
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-4.55
802.11ax HEW20_Nss2,(MCS0)_2TX	-3.03
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-13.08
802.11ax HEW40_Nss2,(MCS0)_2TX	-8.78

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	-1.95	-1.95	6.50
2437MHz	Pass	7.50	-	1.94	1.94	6.50
2462MHz	Pass	7.50	-	-0.48	-0.48	6.50
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	10.51	-3.26	-3.47	-1.57	3.49
2437MHz	Pass	10.51	-6.86	-6.26	-3.88	3.49
2462MHz	Pass	10.51	-2.89	-2.39	0.09	3.49
802.11g_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	-8.93	-8.93	6.50
2437MHz	Pass	7.50	-	-4.38	-4.38	6.50
2462MHz	Pass	7.50	-	-8.86	-8.86	6.50
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	10.51	-9.53	-10.22	-7.03	3.49
2437MHz	Pass	10.51	-4.84	-5.47	-2.76	3.49
2462MHz	Pass	10.51	-9.97	-8.84	-6.49	3.49
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2412MHz	Pass	7.50	-	-10.40	-10.40	6.50
2437MHz	Pass	7.50	-	-4.55	-4.55	6.50
2462MHz	Pass	7.50	-	-10.26	-10.26	6.50
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.50	-9.21	-8.30	-5.72	6.50
2437MHz	Pass	7.50	-5.63	-6.50	-3.03	6.50
2462MHz	Pass	7.50	-9.30	-8.17	-5.69	6.50
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
2422MHz	Pass	7.50	-	-14.96	-14.96	6.50
2437MHz	Pass	7.50	-	-13.08	-13.08	6.50
2452MHz	Pass	7.50	-	-13.15	-13.15	6.50
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.50	-14.16	-13.96	-11.12	6.50
2437MHz	Pass	7.50	-13.01	-12.49	-9.80	6.50
2452MHz	Pass	7.50	-11.68	-11.90	-8.78	6.50

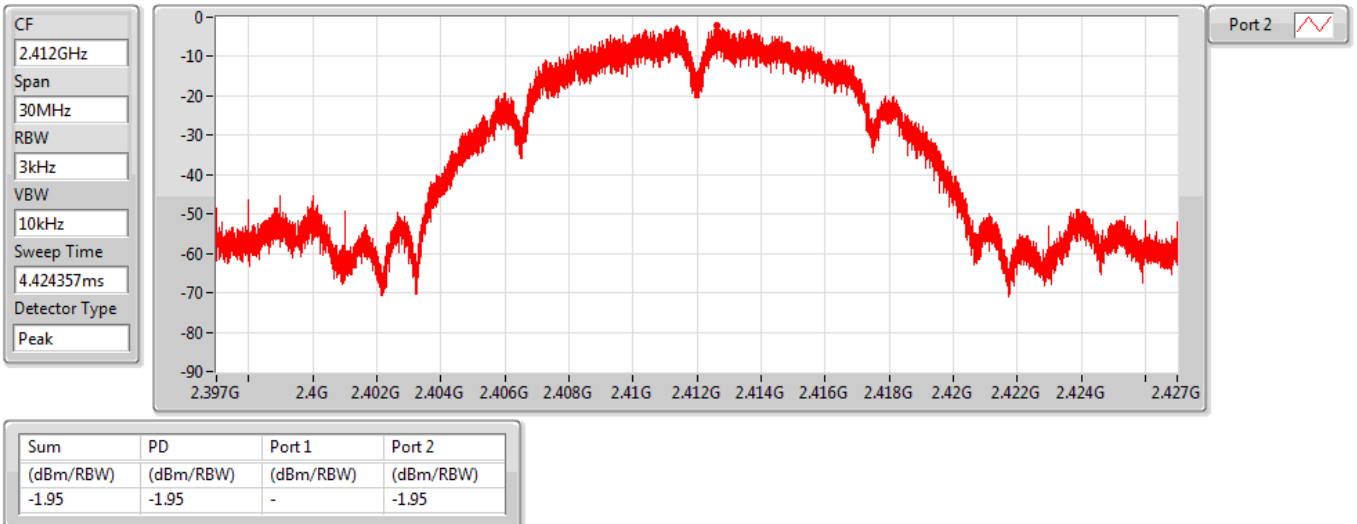
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2412MHz

26/07/2022

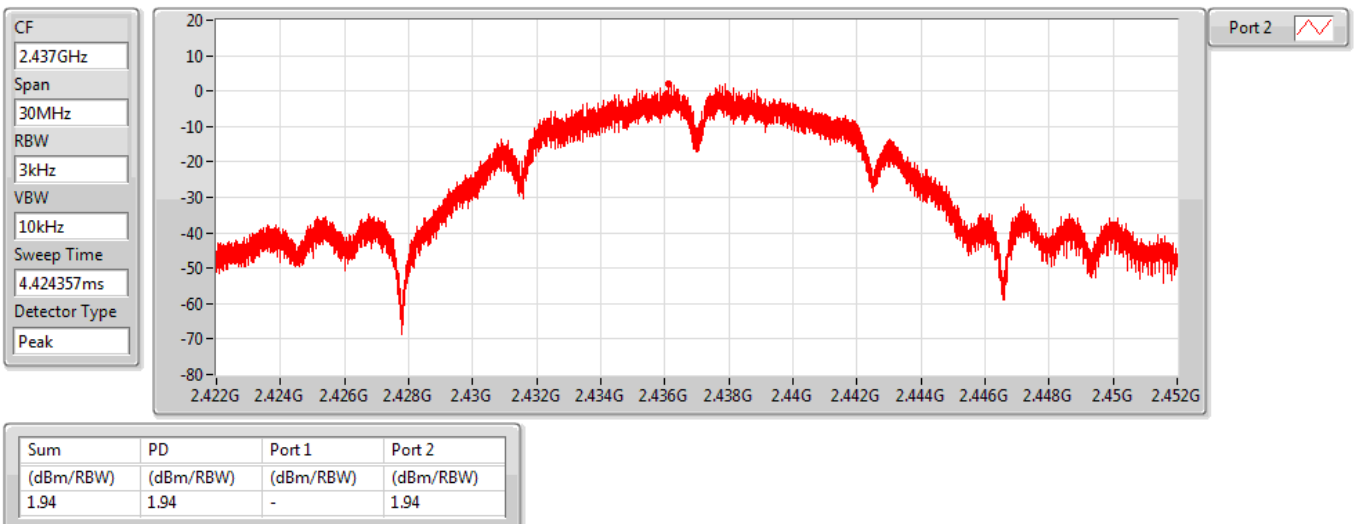


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2437MHz

26/07/2022

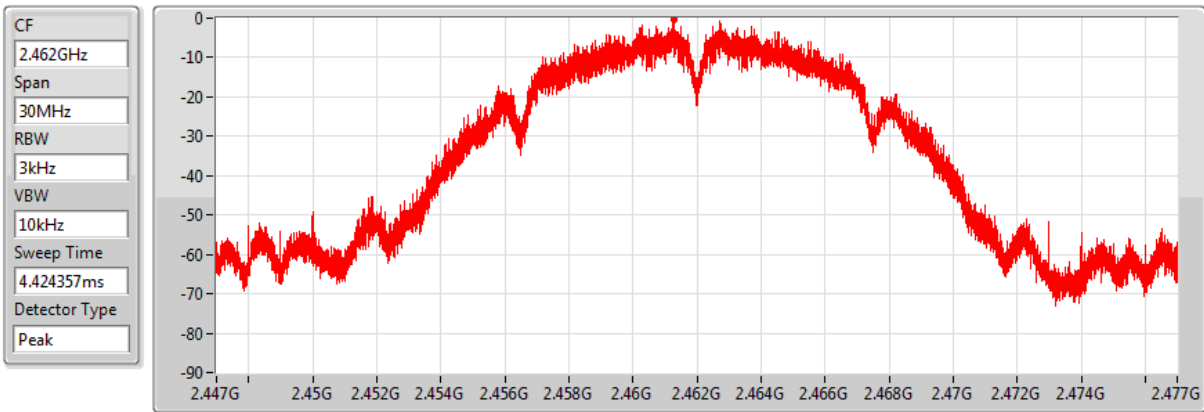


802.11b_Nss1,(1Mbps)_1TX(Port2)

PSD

2462MHz

26/07/2022



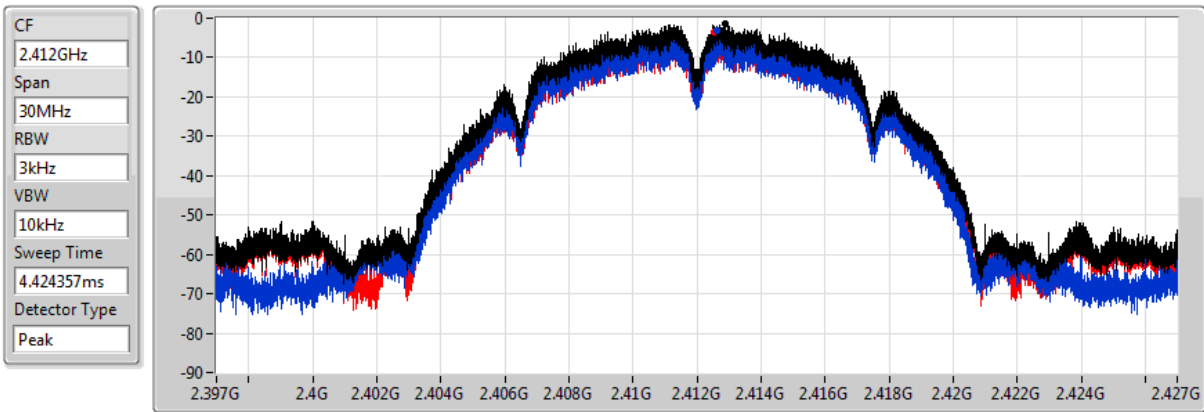
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.48	-0.48	-	-0.48

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

26/07/2022



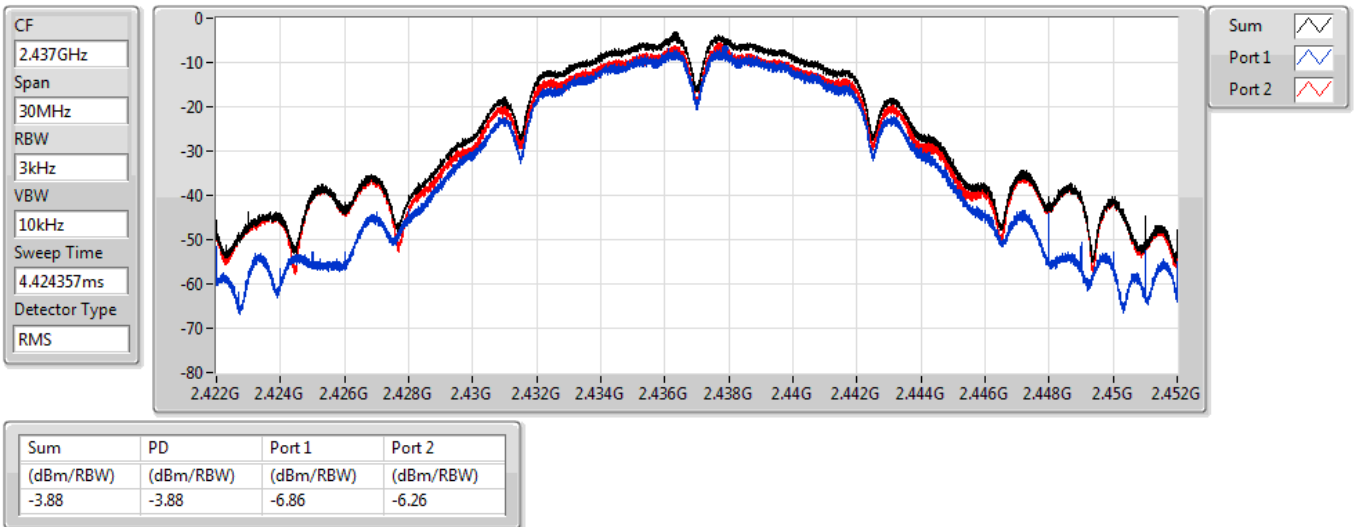
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.57	-1.57	-3.26	-3.47

802.11b_Nss1,(1Mbps)_2TX

2437MHz

PSD

26/07/2022

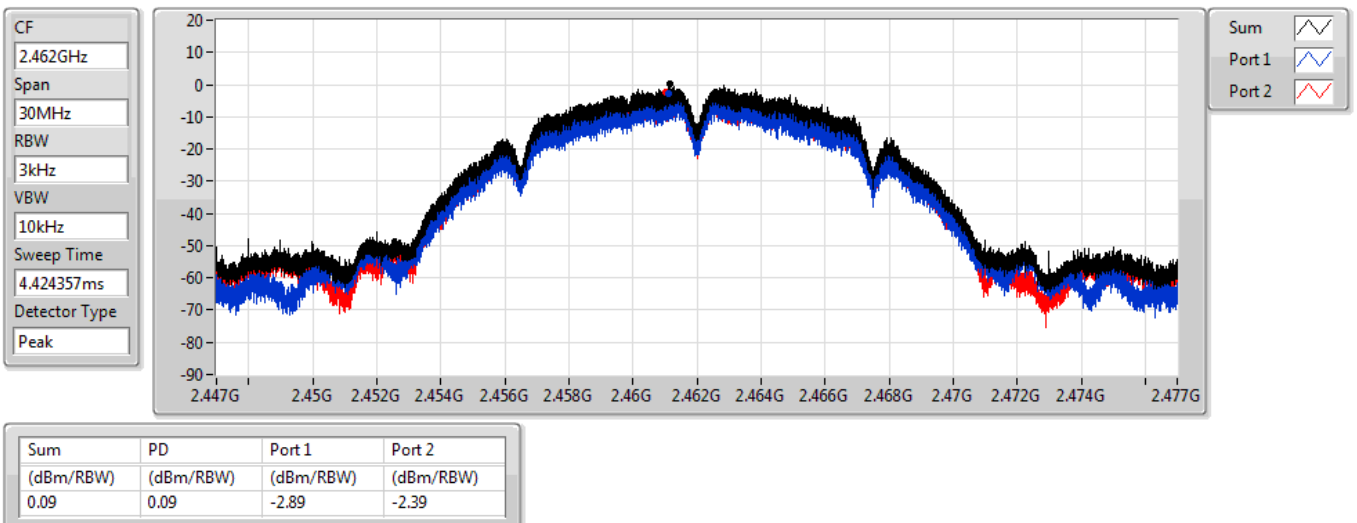


802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

26/07/2022

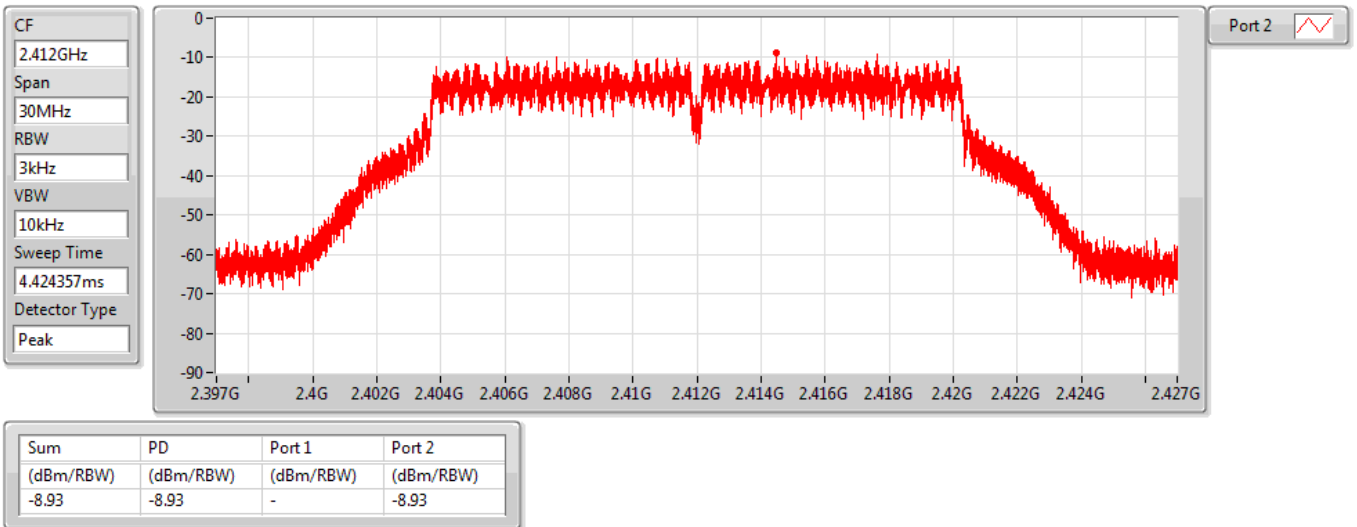


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2412MHz

26/07/2022

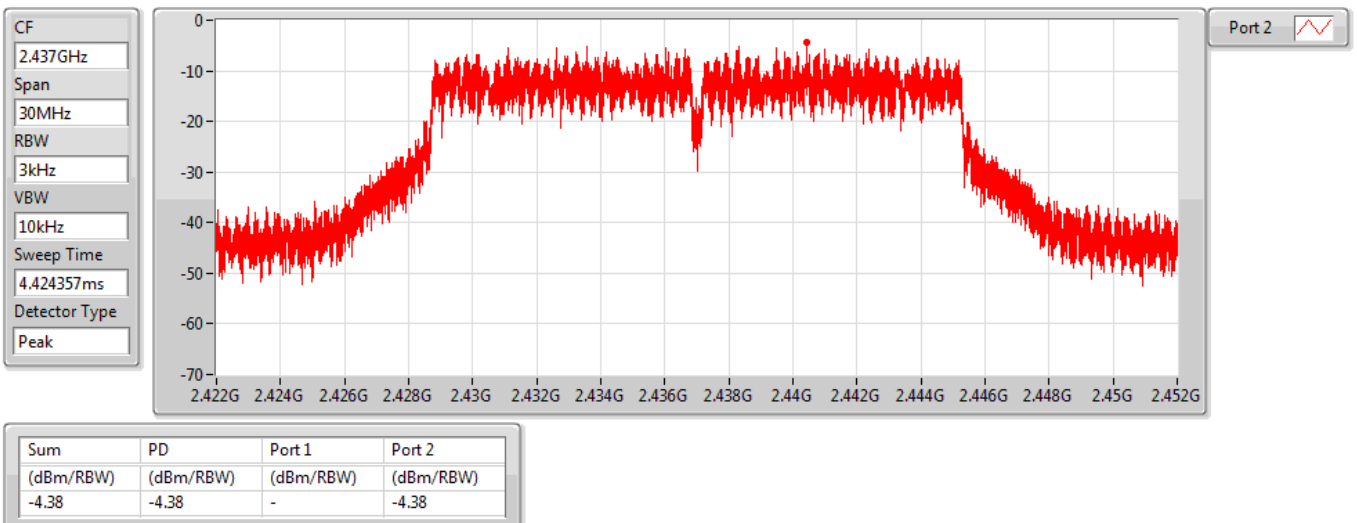


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2437MHz

26/07/2022

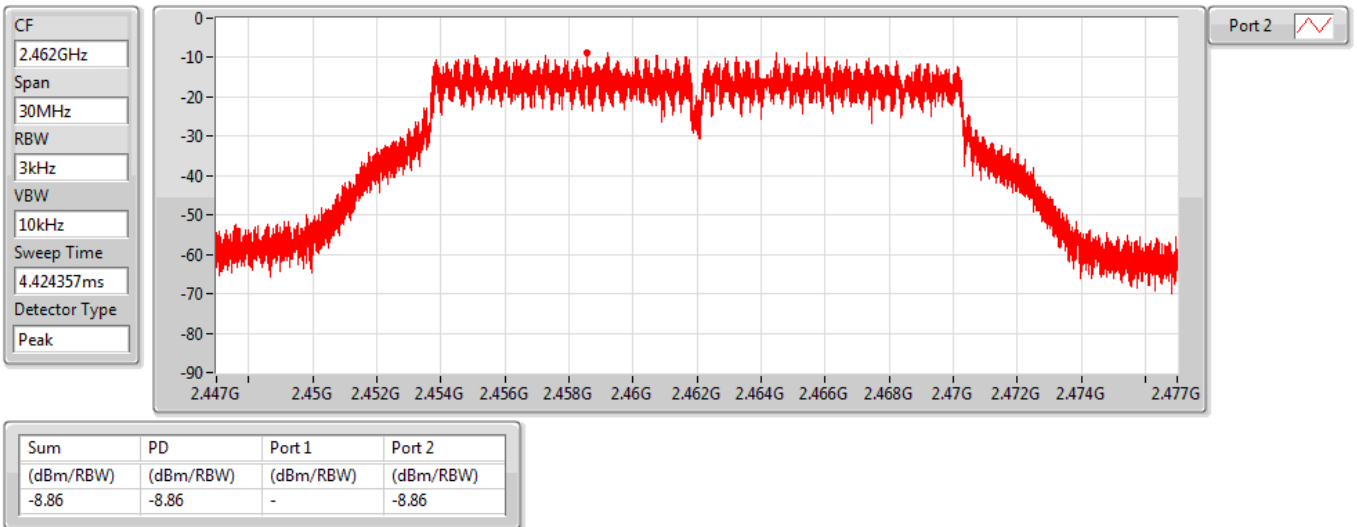


802.11g_Nss1,(6Mbps)_1TX(Port2)

PSD

2462MHz

26/07/2022

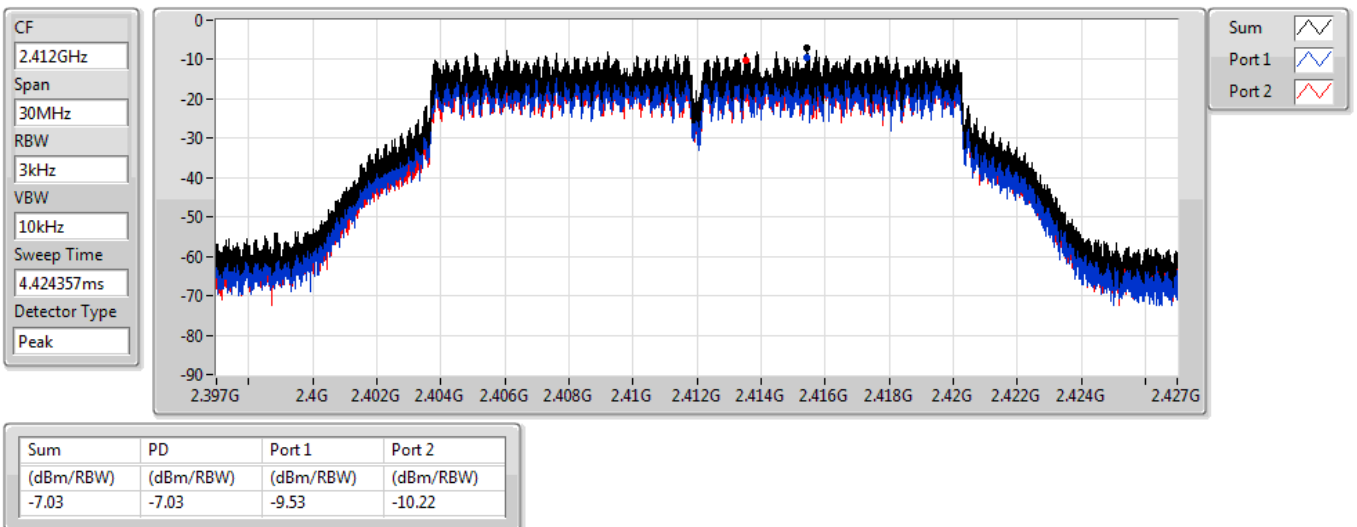


802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

26/07/2022

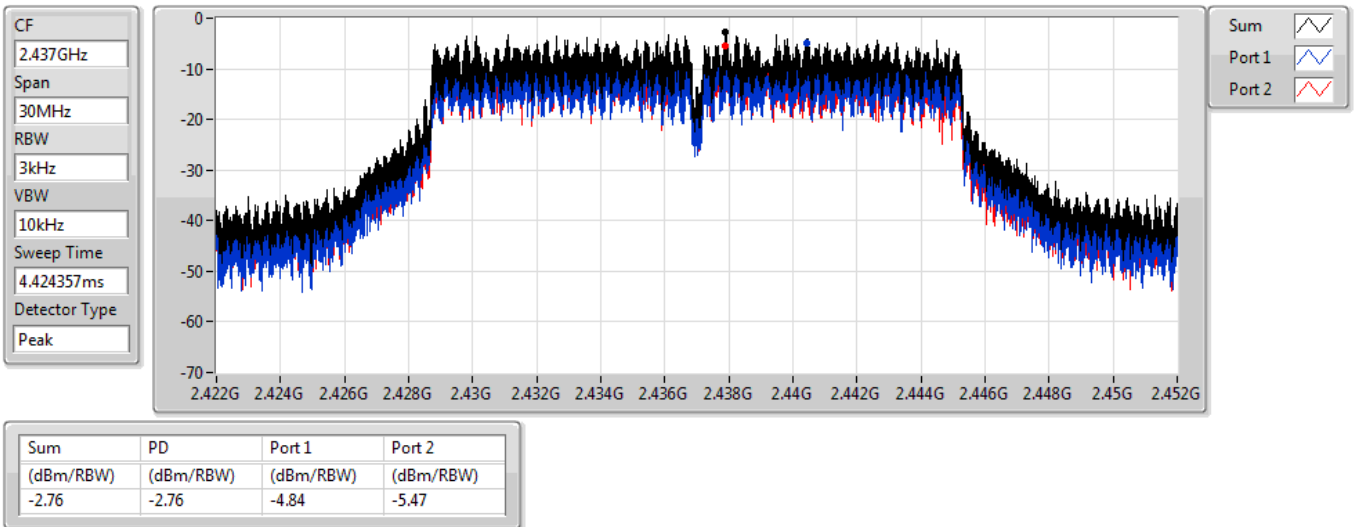


802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

26/07/2022

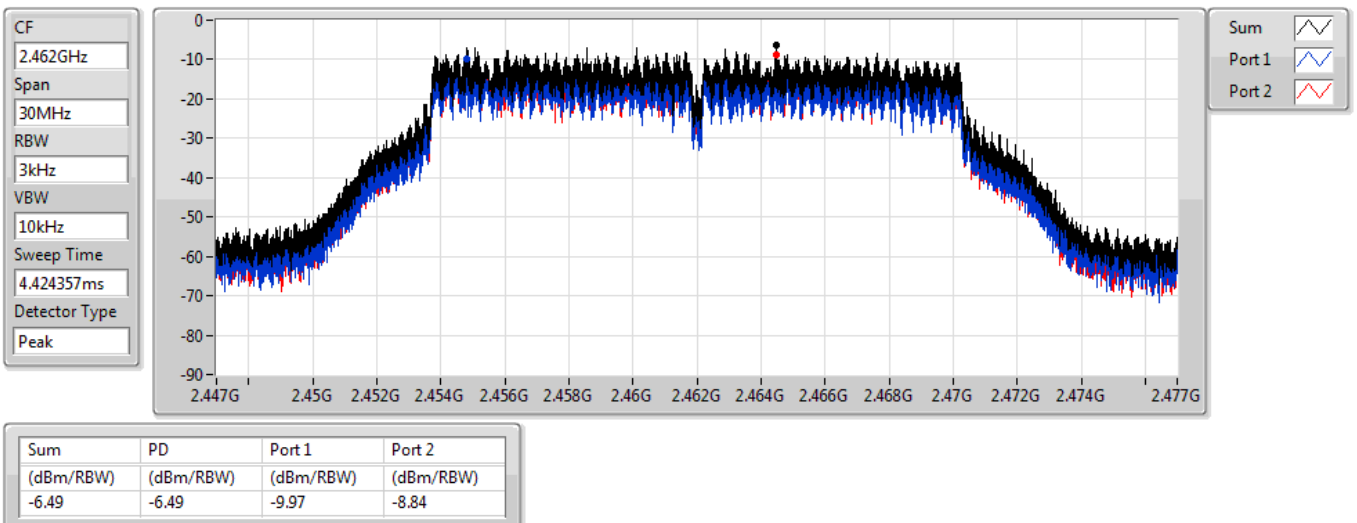


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

26/07/2022

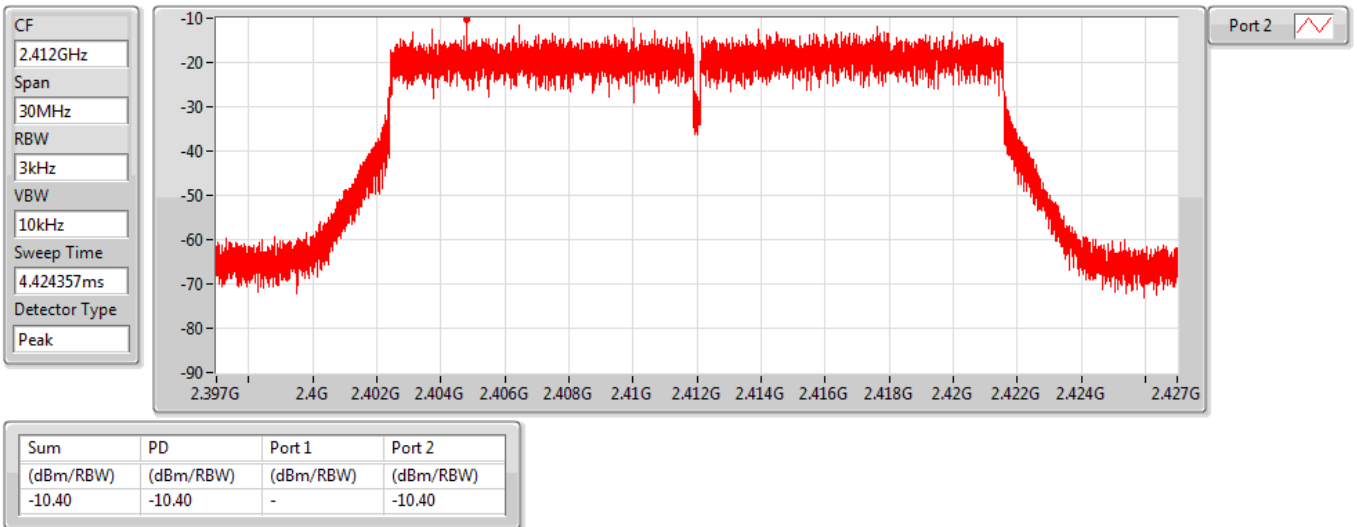


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2412MHz

26/07/2022

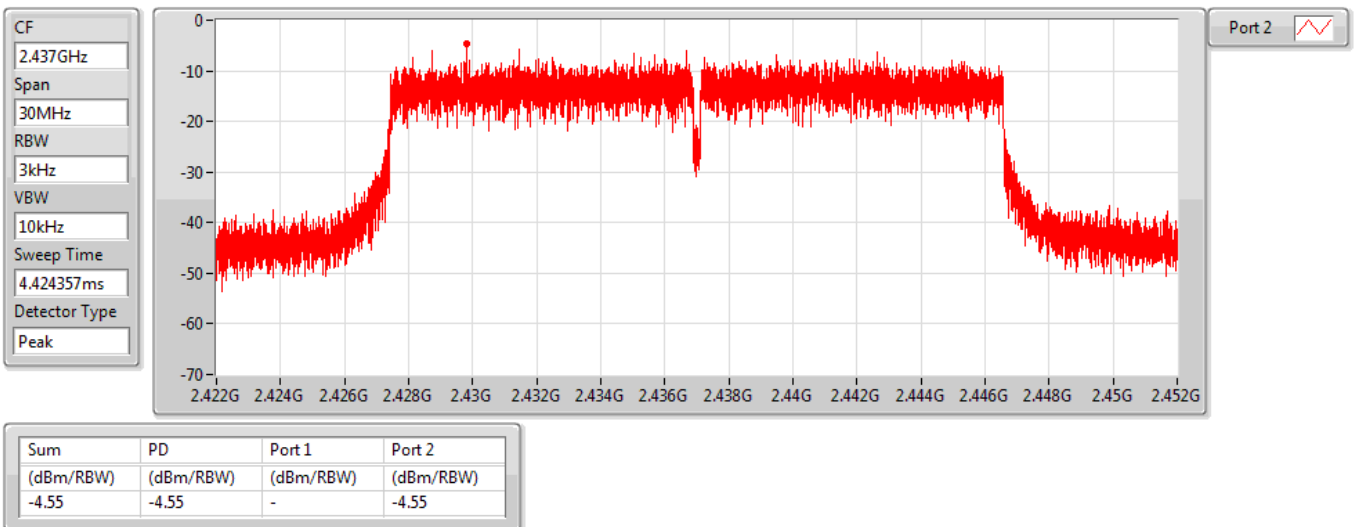


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

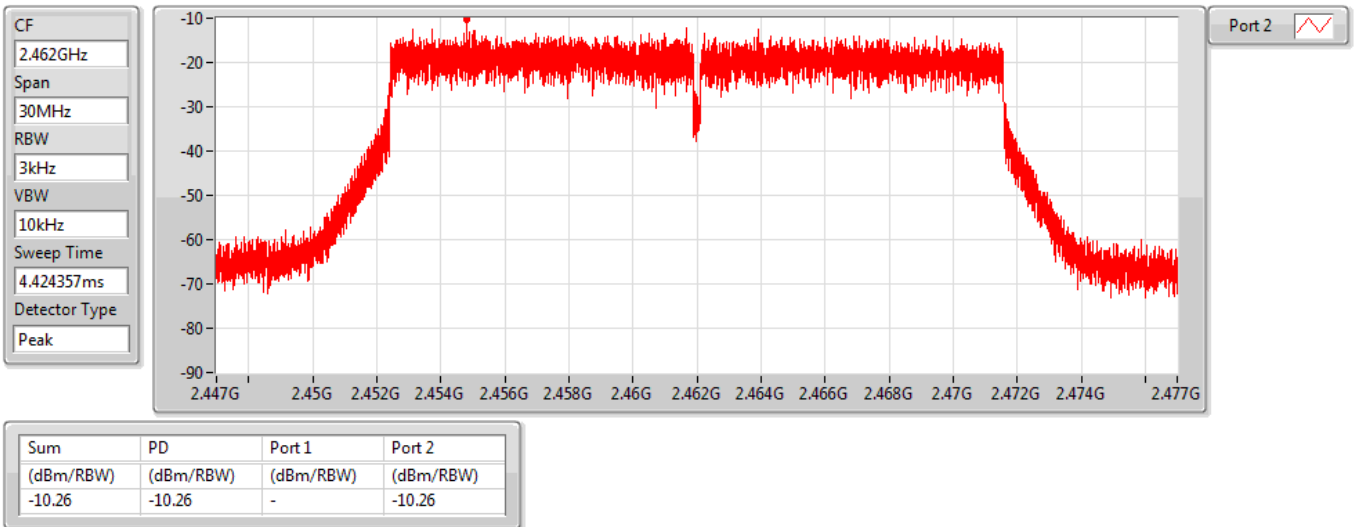


802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)

PSD

2462MHz

26/07/2022

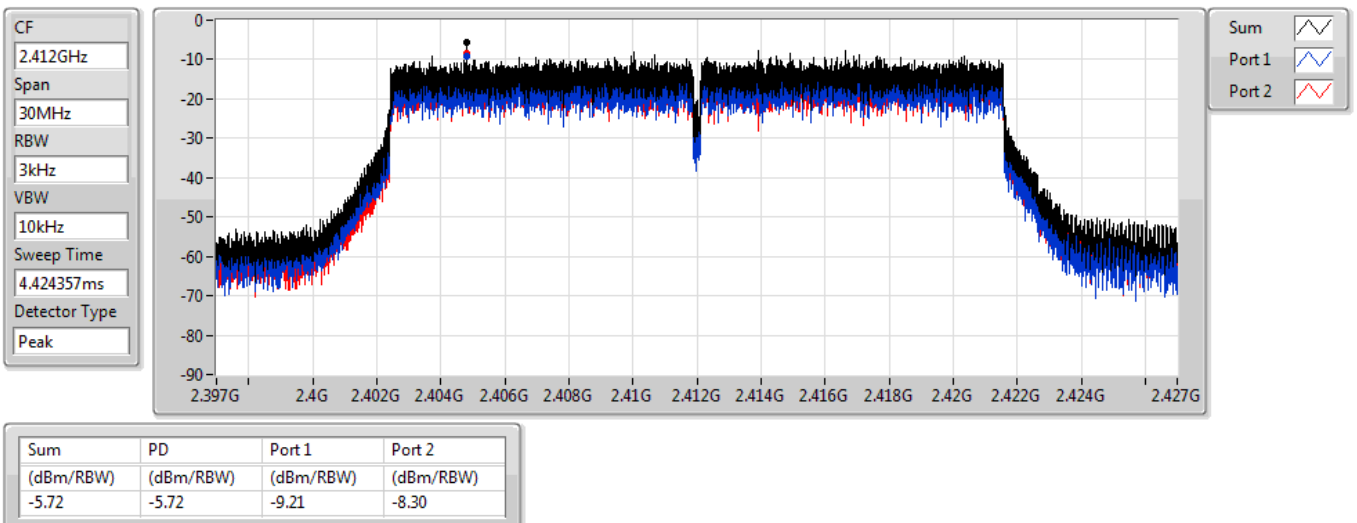


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2412MHz

26/07/2022

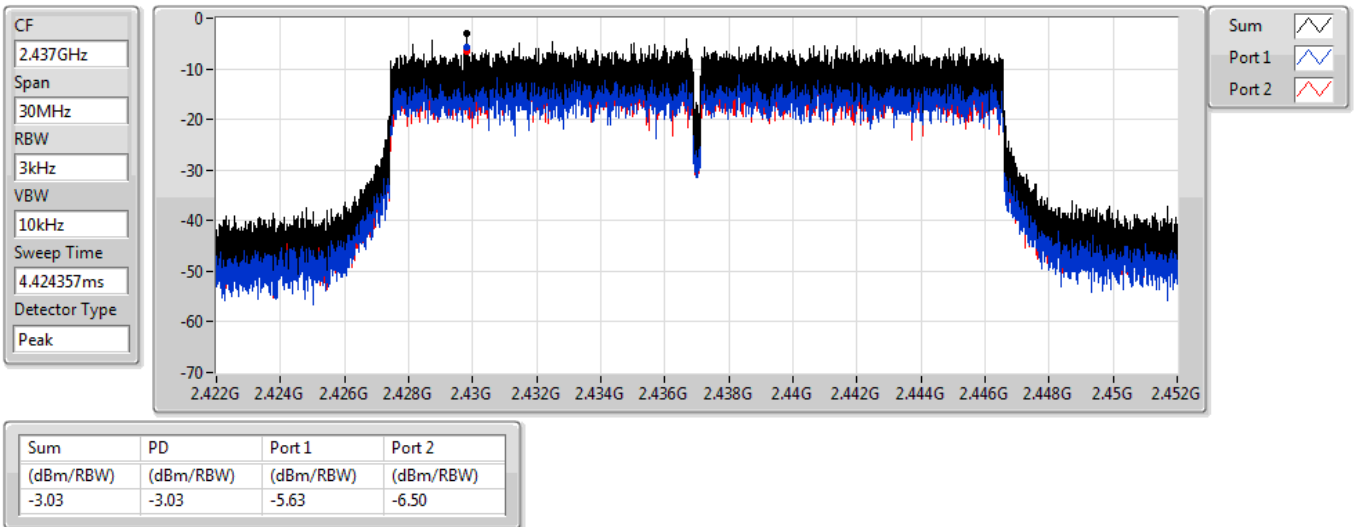


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

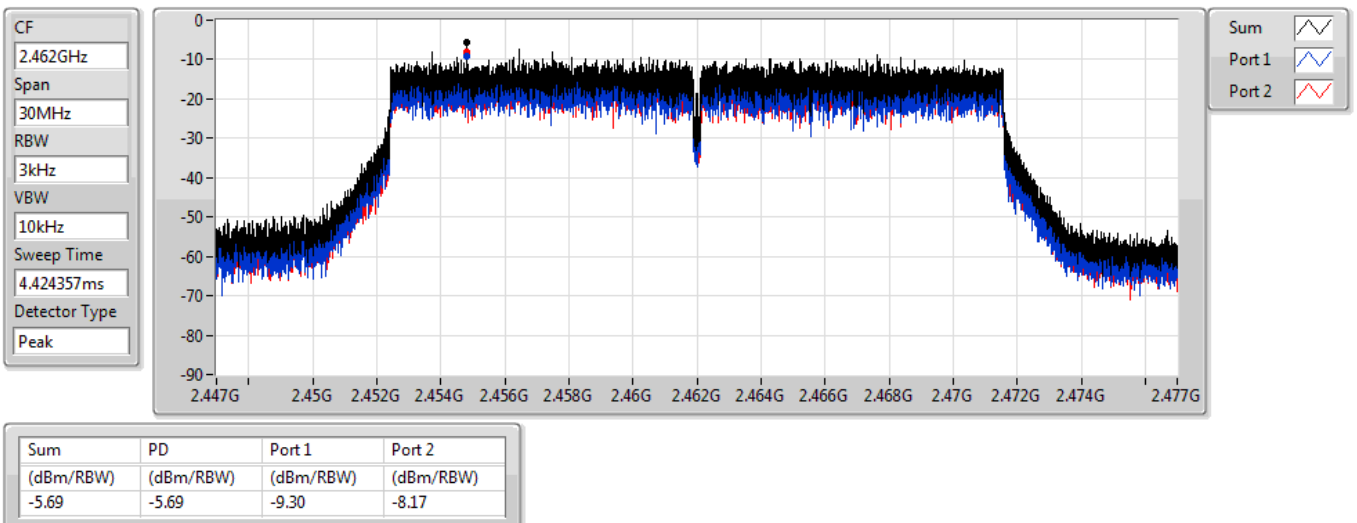


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

2462MHz

26/07/2022

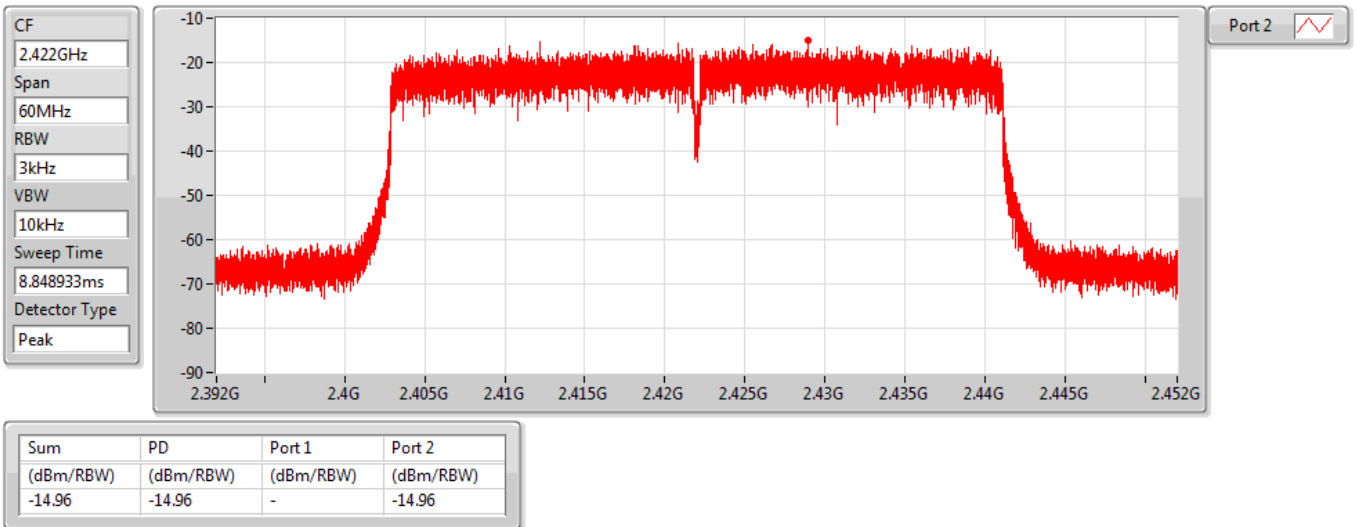


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2422MHz

26/07/2022

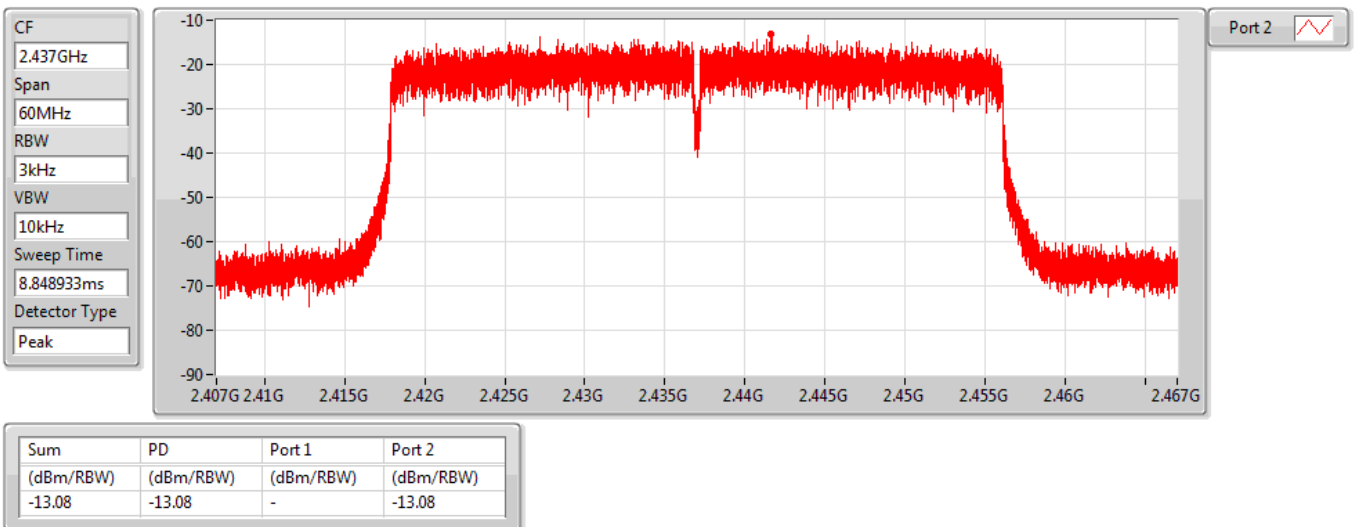


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2437MHz

26/07/2022

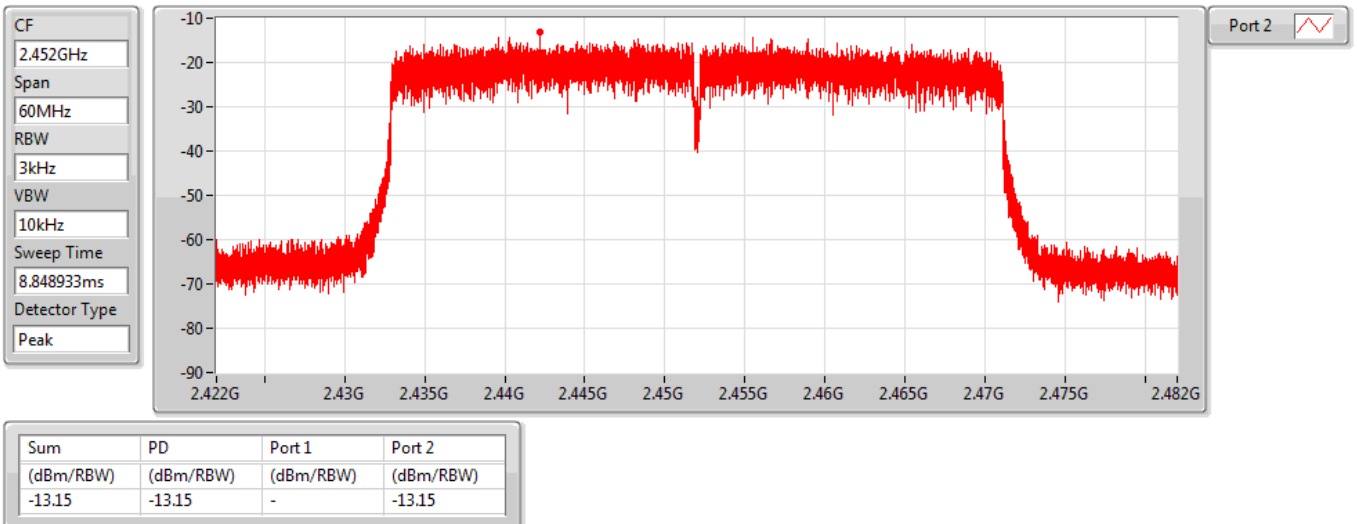


802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)

PSD

2452MHz

26/07/2022

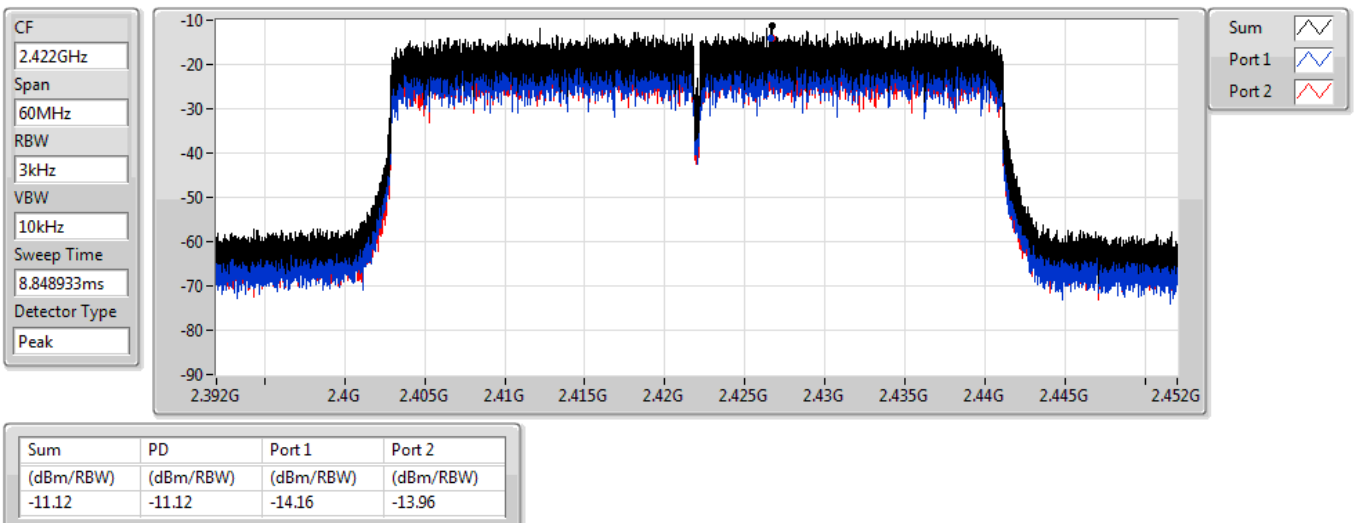


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2422MHz

26/07/2022

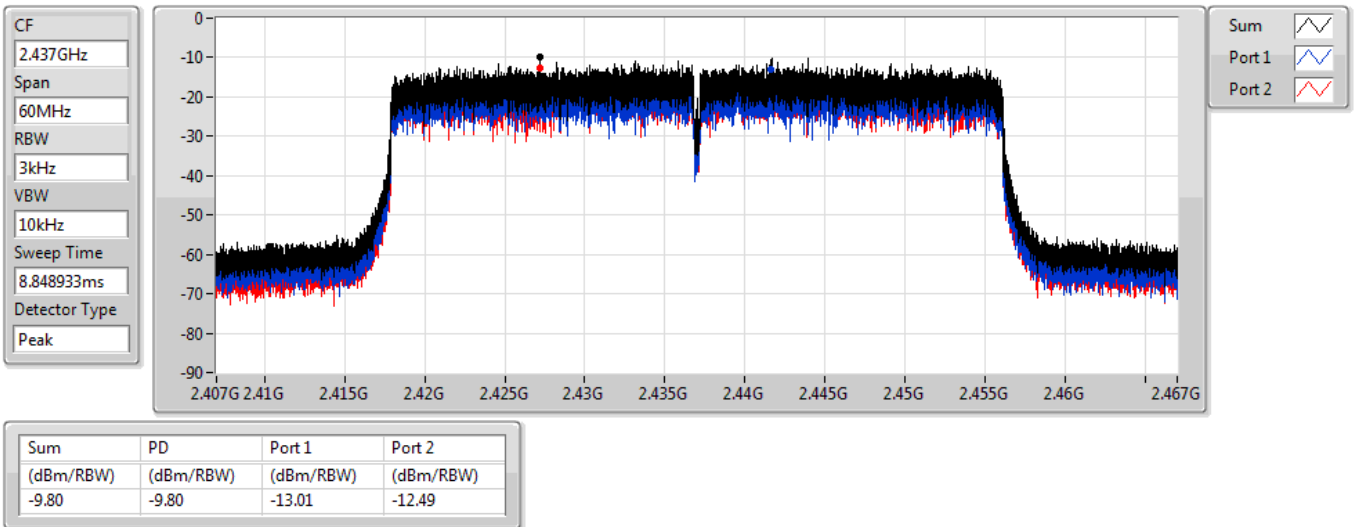


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2437MHz

26/07/2022

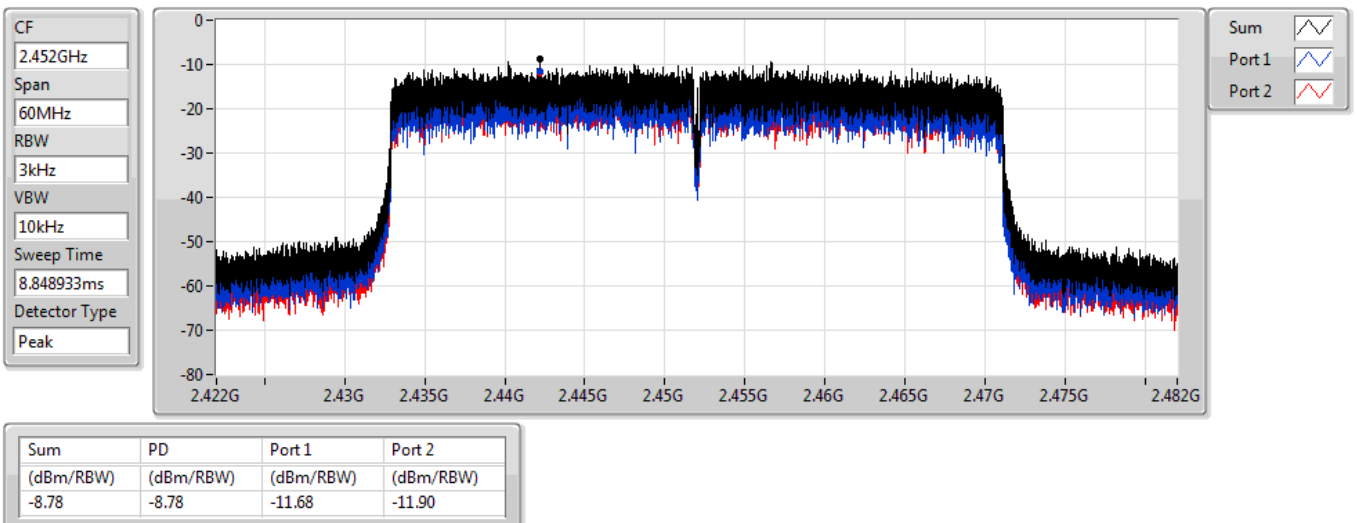


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

2452MHz

26/07/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-4.46
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-9.78

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.85	-10.22	-11.18	-8.72	8.00
2437MHz	Pass	5.85	-7.73	-6.63	-4.46	8.00
2462MHz	Pass	5.85	-11.11	-10.61	-8.13	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.85	-14.39	-13.45	-11.68	8.00
2437MHz	Pass	5.85	-11.26	-12.42	-10.04	8.00
2452MHz	Pass	5.85	-13.30	-12.28	-9.78	8.00

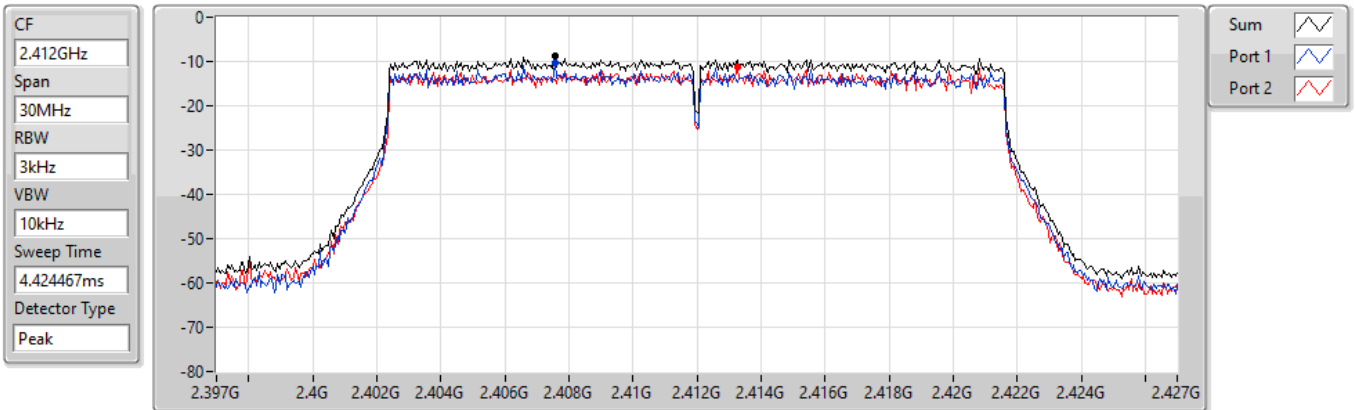
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2412MHz

23/05/2022

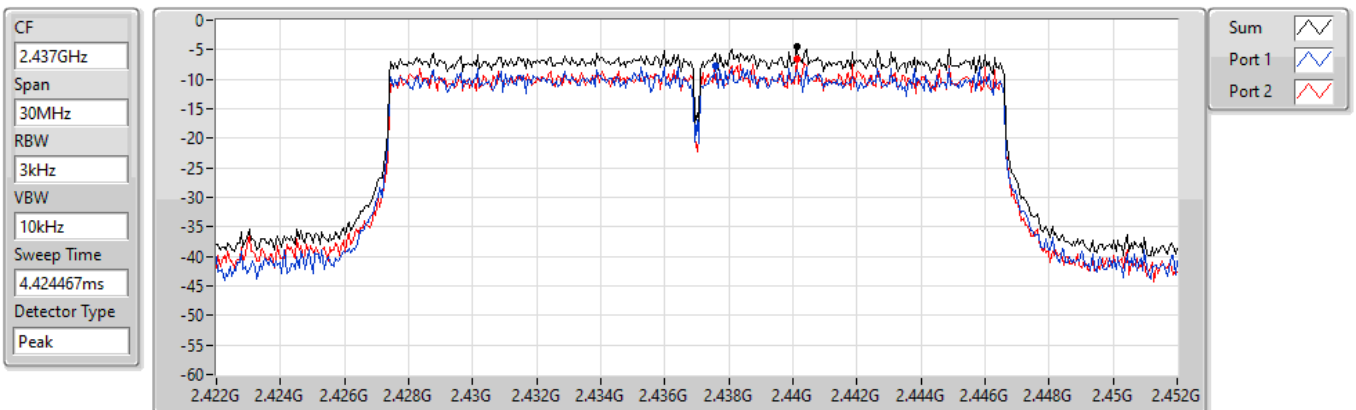


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

23/05/2022

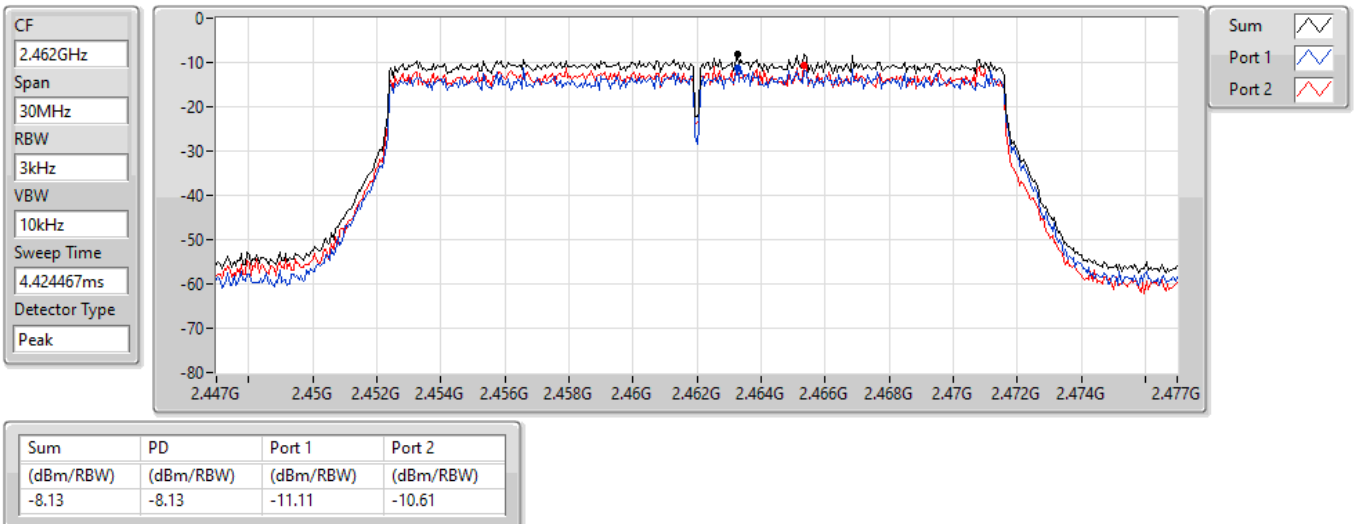


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2462MHz

23/05/2022

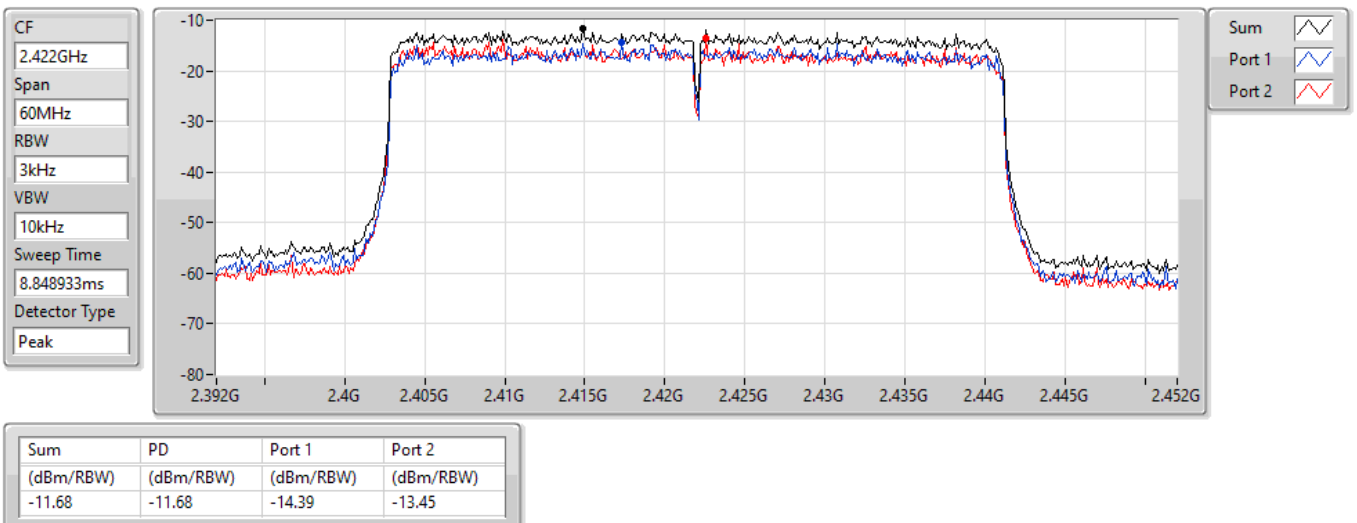


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2422MHz

23/05/2022

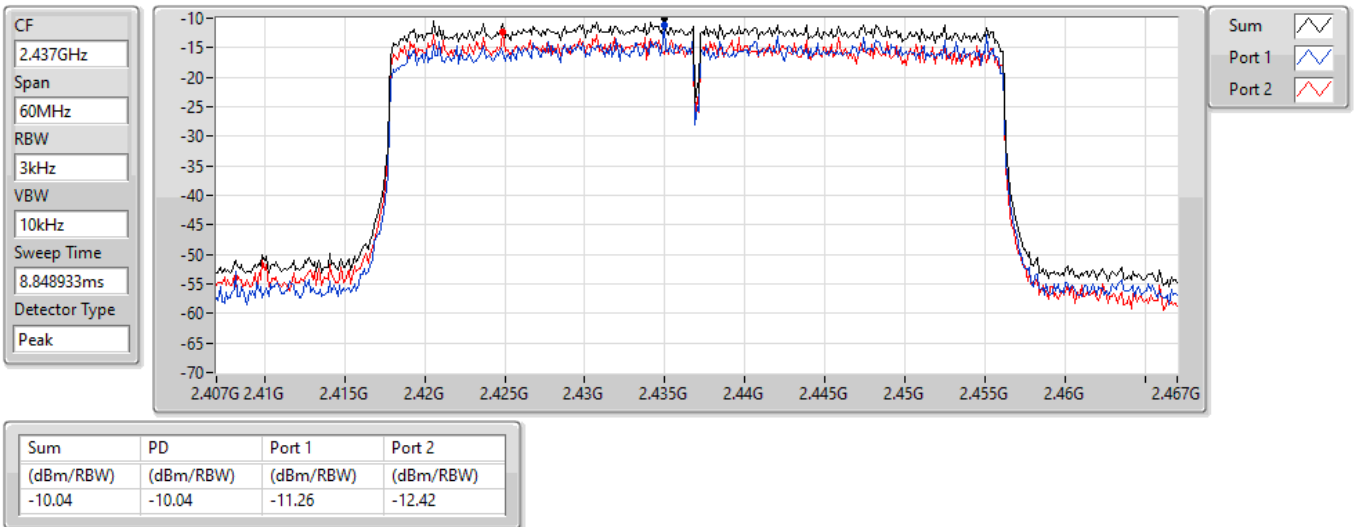


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

23/05/2022

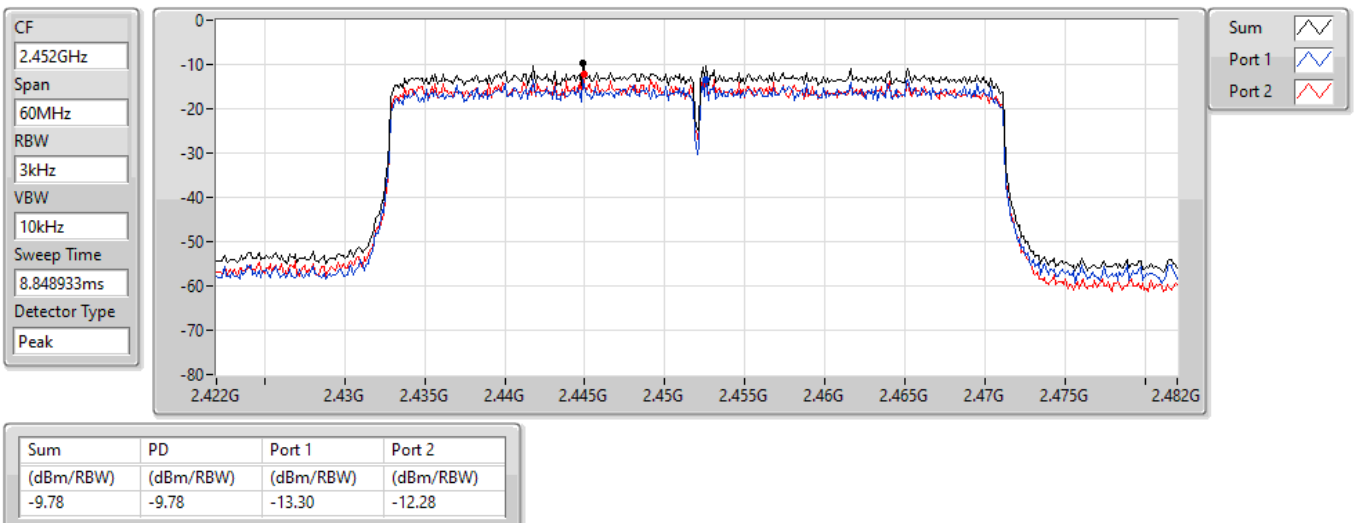


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2452MHz

23/05/2022





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-4.10
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-9.18

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.24	-10.15	-9.81	-7.34	7.76
2437MHz	Pass	6.24	-6.19	-7.37	-4.10	7.76
2462MHz	Pass	6.24	-12.25	-11.93	-9.77	7.76
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.24	-12.52	-13.94	-11.75	7.76
2437MHz	Pass	6.24	-11.62	-12.80	-9.18	7.76
2452MHz	Pass	6.24	-14.32	-14.13	-11.51	7.76

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;