NCC RADIO TEST REPORT

Equipment	:	無線接入點
Brand Name	:	Extreme Networks
Model Name	:	AP510e
Applicant	:	香港商極進網路有限公司台灣分公司 臺北市松山區復勢里南京東路 4 段 126 號 5 樓
Manufacturer	:	啟碁科技股份有限公司 新竹科學工業園區新竹縣園區二路 20 號
Standard	:	LP0002 Section 3.10.1 (2018-01-10)

The product was received on Nov. 09, 2018, and testing was started from Jan. 25, 2019 and completed on May 31, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
TR8O1739-06AC	01	Initial issue of report	Jun. 25, 2019
TR8O1739-06AC	02	Revise the test data for the Emissions in Non-restricted Frequency Bands test.	Jul. 02, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	3.10.1.4	Antenna Requirement	PASS	-
3.1	2.3	AC Power-line Conducted Emissions	PASS	-
3.2	3.10.1.6	DTS Bandwidth	PASS	-
3.3	3.10.1.2	Maximum Conducted Output Power	PASS	-
3.4	3.10.1.6	Power Spectral Density	PASS	-
3.5	3.10.1.5	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	3.10.1.5	Emissions in Restricted Frequency Bands	PASS	-
Note: From Sporton Project No.: 8O1739-03				

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:

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

Reviewed by: Sam Chen
Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
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]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11g	20	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11n HT20	20	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX, 4TX
2.4-2.4835GHz	802.11n HT40	40	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	2TX, 4TX

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.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Radio	Elevation angle above 30 degree Max Gain (dBi)
1	Extreme Networks	ML-2452-APA2-01	Omni	RP SMA male	1, 2	-
2	Extreme Networks	ML-2452-APA2-02	Omni	RP SMA male	1, 2	-
3	Extreme Networks	ML-2452-HPA5-036	Omni	RP SMA male	1, 2	-
4	Extreme Networks	ML-2452-HPAG4A6-01	Omni	N Male	1, 2	5.7
5	Extreme Networks	ML-2452-PNA5-01R	Panel	N Male	1, 2	5.26
6	Extreme Networks	ML-2452-HPAG5A8-01	Omni	N Male	1, 2	-6.05
7	Extreme Networks	ML-2452-PTA4M4-036	Omni	RP SMA male	1, 2	-
8	Extreme Networks	WS-AO-DQ04360N	Omni	N Male	1, 2	
9	Extreme Networks	ML-2452-SEC6M4-036	Panel	RP SMA male	1, 2	-
10	Extreme Networks	WS-AI-DQ05120	Panel	RP SMA male	1, 2	-
11	Extreme Networks	ML-2452-PNA7-01R	Panel	RP SMA male	1, 2, 3	7.9
12	Extreme Networks	ML-2499-HPA8-01	Omni	N Male	3	-
13	Extreme Networks	AI-DQ04360S	Omni	RP SMA male	1, 2	-

Note1:

Ant.	Antenna Gain(dBi)				Cable loss(dB)				True Gain(dBi)			
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread
1	3.17	4.85	-	-	1	2	-	-	2.17	2.85	-	-
2	3.17	4.85	-	-	1	2	-	-	2.17	2.85	-	-
3	3.9	5.7	-	-	1	2	-	-	2.9	3.7	-	-
4	4	7.3	-	-	1	2	-	-	3	5.3	-	-
5	4.5	5	-	-	1	2	-	-	3.5	3	-	-
6	5	8	-	-	1	2	-	-	4	6	-	-
7	5	6.6	-	-	1	2	-	-	4	4.6	-	-
8	5.5	6	-	-	1	2	-	-	4.5	4	-	-
9	6.92	7.23	-	-	1	2	-	-	5.92	5.23	-	-
10	6.92	7.23	-	-	1	2	-	-	5.92	5.23	-	-
11	7.8	10.7	7.8	7.8	1	2	1	1	6.8	8.7	6.8	6.8
12	-	-	8	8	-	-	1	1	-	-	7	7
13	5.5	6	-	-	1	2	-	-	4.5	4	-	-

Note2: The above information was declared by manufacturer.

Note3:

For 2.4GHz function:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For 5GHz function:

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For Bluetooth and Thread mode (1TX/1RX):

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

Note 4: After evaluating, antenna 7 generated the worst case, so it was selected to test and record in the test report.

1.1.3 Mode Test Duty Cycle

For 1T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.949	0.227	12.418m	100
802.11g	0.934	0.297	2.065m	1k
802.11ax HEW20	0.969	0.137	1.749m	1k
802.11ax HEW40	0.943	0.255	908.333u	3k

For 2T2S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.95	0.223	779.733u	3k
802.11ax HEW40	0.919	0.367	421.867u	3k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.952	0.214	12.416m	100
802.11g	0.946	0.241	2.065m	1k
802.11ax HEW20	0.976	0.106	1.749m	1k
802.11ax HEW40	0.946	0.241	908.333u	3k
802.11ax HEW20-BF	0.963	0.164	2.93m	1k
802.11ax HEW40-BF	0.929	0.32	1.494m	1k

For 4T4S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.946	0.241	536.167u	3k
802.11ax HEW40	0.885	0.531	259.333u	10k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	For 802.11ax in 2.4GHz and 802.11n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	accessMtool 3.0.0.6			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT support function

The EUT has three radios, the information as following table:

Radio	Function		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth/Thread
1	V	V	-
2	-	V	-
3	-	-	V

Function	Radio	Support Type	Support Band
AP	1,2,3	Master	WLAN 2.4GHz/Bluetooth/Thread/WLAN 5GHz Band 1~4
Client	1	Slave without Radar Detection (Sensor Mode)	WLAN 2.4GHz/WLAN 5GHz Band 1+4
Bridge	1,2,3	Master	WLAN 2.4GHz/Bluetooth/Thread/WLAN 5GHz Band 1+4
Mesh	1,2,3	Master	WLAN 2.4GHz/Bluetooth/Thread/WLAN 5GHz Band 1+4

Note: The above information was declared by manufacturer.

1.1.6 Table for EUT operation function

Mode	Radio 1	Radio 2	Radio 3
1	2.4G(Master-AP)	5G-Full Band(Master-AP)	Bluetooth/Thread
2	5G Band 1+4 / 2.4G Slave without Radar Detection (Sensor Mode)	5G-Full Band(Master-AP)	Bluetooth/Thread
3	5G-Low Band(Master-AP)	5G-High Band(Master-AP)	Bluetooth/Thread

Note: 1. The above information was declared by manufacturer.
2. The Mode 2 was same as client function of section 1.1.5.

1.2 Testing Applied Standards

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

- NCC LP0002 (2018-01-10)
- ANSI C63.10-2013
- FCC KDB 558074 D01 v05r02
- FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location							
☐	HWA YA	ADD	:	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)			
		TEL	:	886-3-327-3456	FAX	:	886-3-327-0973
☒	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065	FAX	:	886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Jay Luo	20~23°C / 55~60%	Jan. 25, 2019~Mar. 04, 2019
Radiated (Unintentional Below 1GHz)	03CH01-CB	Cola Fan	22~24°C / 50~60%	May 29, 2019~May 30, 2019
Radiated (Intentional Below 1GHz)	03CH01-CB	Cola Fan	22~24°C / 50~60%	May 29, 2019~May 30, 2019
Radiated (Unintentional Above 1GHz)	03CH01-CB	Cola Fan	22~24°C / 50~60%	May 29, 2019~May 30, 2019
Radiated (Intentional Above 1GHz)	03CH01-CB	Jay Luo	20~22°C / 55~60%	Jan. 22, 2019~Mar. 15, 2019
AC Conduction	CO01-CB	Max Lin	23.2~24.3°C / 58.1~59.6%	May 31, 2019

Test site Designation No. TW0006 with FCC.
Test site registered number IC 4086B with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For Mode 1: (Ant. 4 Omni antenna / 3 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-
2412MHz	81	20.25
2417MHz	86	21.5
2422MHz	87	21.75
2427MHz	88	22
2432MHz	89	22.25
2437MHz	89	22.25
2442MHz	88	22
2447MHz	85	21.25
2452MHz	84	21
2457MHz	81	20.25
2462MHz	79	19.75
802.11g_Nss1,(6Mbps)_1TX	-	-
2412MHz	58	14.5
2417MHz	68	17
2422MHz	69	17.25
2427MHz	73	18.25
2432MHz	74	18.5
2437MHz	79	19.75
2442MHz	75	18.75
2447MHz	71	17.75
2452MHz	68	17
2457MHz	65	16.25
2462MHz	58	14.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
2412MHz	58	14.5
2417MHz	64	16
2422MHz	65	16.25
2427MHz	72	18
2432MHz	75	18.75
2437MHz	77	19.25
2442MHz	72	18
2447MHz	64	16

Mode	Power Setting	Power Setting (dBm)
2452MHz	62	15.5
2457MHz	60	15
2462MHz	49	12.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
2422MHz	57	14.25
2427MHz	58	14.5
2432MHz	59	14.75
2437MHz	61	15.25
2442MHz	61	15.25
2447MHz	57	14.25
2452MHz	56	14

For 2T2S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
2412MHz	61	15.25
2417MHz	66	16.5
2422MHz	71	17.75
2427MHz	73	18.25
2437MHz	73	18.25
2442MHz	71	17.75
2447MHz	70	17.5
2452MHz	66	16.5
2457MHz	60	15
2462MHz	55	13.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
2422MHz	51	12.75
2427MHz	55	13.75
2432MHz	56	14
2437MHz	56	14
2442MHz	56	14
2447MHz	54	13.5
2452MHz	47	11.75

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	110
2437MHz	89
2462MHz	97
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW40_Nss1,(MCS0)_4TX	
2422MHz	110
2437MHz	110
2452MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-
2412MHz	78	19.5
2417MHz	78	19.5
2422MHz	82	20.5
2427MHz	84	21
2432MHz	85	21.25
2437MHz	86	21.5
2442MHz	83	20.75
2447MHz	82	20.5
2452MHz	81	20.25
2457MHz	78	19.5
2462MHz	78	19.5
802.11g_Nss1,(6Mbps)_4TX	-	-
2412MHz	50	12.5
2417MHz	57	14.25
2422MHz	63	15.75
2427MHz	67	16.75
2432MHz	68	17
2437MHz	68	17
2442MHz	68	17
2447MHz	64	16
2452MHz	62	15.5
2457MHz	59	14.75
2462MHz	49	12.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
2412MHz	49	12.25
2417MHz	54	13.5
2422MHz	59	14.75
2427MHz	60	15
2432MHz	64	16
2437MHz	64	16
2442MHz	64	16
2447MHz	57	14.25
2452MHz	57	14.25
2457MHz	49	12.25
2462MHz	44	11
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
2422MHz	49	12.25
2427MHz	51	12.75

Mode	Power Setting	Power Setting (dBm)
2432MHz	52	13
2437MHz	52	13
2442MHz	50	12.5
2447MHz	49	12.25
2452MHz	47	11.75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
2412MHz	56	14
2417MHz	60	15
2422MHz	69	17.25
2427MHz	73	18.25
2437MHz	73	18.25
2442MHz	68	17
2447MHz	60	15
2452MHz	64	16
2457MHz	56	14
2462MHz	50	12.5
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
2422MHz	52	13
2437MHz	52	13
2452MHz	52	13

For 4T4S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
2412MHz	54	13.5
2417MHz	61	15.25
2422MHz	64	16
2427MHz	69	17.25
2437MHz	69	17.25
2442MHz	68	17
2447MHz	65	16.25
2452MHz	62	15.5
2457MHz	58	14.5
2462MHz	52	13
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
2422MHz	46	11.5
2427MHz	48	12
2432MHz	51	12.75
2437MHz	51	12.75
2442MHz	50	12.5
2447MHz	47	11.75
2452MHz	45	11.25

For Mode 2: (Ant. 7 Omni antenna / 4 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-
2412MHz	83	20.75
2417MHz	88	22
2422MHz	88	22
2427MHz	89	22.25
2432MHz	90	22.5
2437MHz	90	22.5
2442MHz	89	22.25
2447MHz	86	21.5
2452MHz	86	21.5
2457MHz	83	20.75
2462MHz	81	20.25
802.11g_Nss1,(6Mbps)_1TX	-	-
2412MHz	66	16.5
2417MHz	72	18
2422MHz	76	19
2427MHz	79	19.75
2432MHz	82	20.5
2437MHz	82	20.5
2442MHz	80	20
2447MHz	77	19.25
2452MHz	73	18.25
2457MHz	68	17
2462MHz	61	15.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
2412MHz	60	15
2417MHz	70	17.5
2422MHz	70	17.5
2427MHz	76	19
2432MHz	79	19.75
2437MHz	79	19.75
2442MHz	78	19.5
2447MHz	75	18.75
2452MHz	65	16.25
2457MHz	63	15.75
2462MHz	52	13
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
2422MHz	60	15

Mode	Power Setting	Power Setting (dBm)
2427MHz	61	15.25
2432MHz	62	15.5
2437MHz	64	16
2442MHz	62	15.5
2447MHz	60	15
2452MHz	59	14.75

For 2T2S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
2412MHz	59	14.75
2417MHz	64	16
2422MHz	68	17
2427MHz	72	18
2432MHz	75	18.75
2437MHz	76	19
2442MHz	73	18.25
2447MHz	70	17.5
2452MHz	68	17
2457MHz	62	15.5
2462MHz	56	14
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
2422MHz	58	14.5
2427MHz	58	14.5
2432MHz	59	14.75
2437MHz	61	15.25
2442MHz	60	15
2447MHz	57	14.25
2452MHz	56	14

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	110
2437MHz	110
2452MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-
2412MHz	78	19.5
2417MHz	80	20
2422MHz	85	21.25
2427MHz	86	21.5
2437MHz	86	21.5
2442MHz	85	21.25
2447MHz	85	21.25
2452MHz	82	20.5
2457MHz	80	20
2462MHz	78	19.5
802.11g_Nss1,(6Mbps)_4TX	-	-
2412MHz	52	13
2417MHz	61	15.25
2422MHz	64	16
2427MHz	67	16.75
2432MHz	68	17
2437MHz	74	18.5
2442MHz	70	17.5
2447MHz	68	17
2452MHz	62	15.5
2457MHz	58	14.5
2462MHz	52	13
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
2412MHz	52	13
2417MHz	56	14
2422MHz	62	15.5
2427MHz	62	15.5
2432MHz	67	16.75
2437MHz	67	16.75
2442MHz	62	15.5
2447MHz	59	14.75
2452MHz	58	14.5
2457MHz	50	12.5
2462MHz	44	11
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
2422MHz	53	13.25
2427MHz	53	13.25
2432MHz	54	13.5

Mode	Power Setting	Power Setting (dBm)
2437MHz	56	14
2442MHz	54	13.5
2447MHz	52	13
2452MHz	49	12.25
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
2412MHz	57	14.25
2417MHz	61	15.25
2422MHz	66	16.5
2427MHz	72	18
2437MHz	72	18
2442MHz	70	17.5
2447MHz	68	17
2452MHz	61	15.25
2457MHz	54	13.5
2462MHz	49	12.25
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
2422MHz	50	12.5
2427MHz	51	12.75
2432MHz	55	13.75
2437MHz	60	15
2442MHz	54	13.5
2447MHz	54	13.5
2452MHz	50	12.5

For 4T4S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
2412MHz	57	14.25
2417MHz	62	15.5
2422MHz	65	16.25
2427MHz	69	17.25
2432MHz	72	18
2437MHz	72	18
2442MHz	71	17.75
2447MHz	67	16.75
2452MHz	64	16
2457MHz	59	14.75
2462MHz	55	13.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
2422MHz	46	11.5
2427MHz	47	11.75
2432MHz	51	12.75
2437MHz	55	13.75
2442MHz	50	12.5
2447MHz	50	12.5
2452MHz	47	11.75

For Mode 3: (Ant. 11 Panel antenna / 6.8 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-
2412MHz	79	19.75
2417MHz	85	21.25
2437MHz	85	21.25
2452MHz	85	21.25
2457MHz	83	20.75
2462MHz	79	19.75
802.11g_Nss1,(6Mbps)_1TX	-	-
2412MHz	57	14.25
2417MHz	67	16.75
2422MHz	65	16.25
2427MHz	72	18
2432MHz	72	18
2437MHz	78	19.5
2442MHz	74	18.5
2447MHz	73	18.25
2452MHz	70	17.5
2457MHz	66	16.5
2462MHz	58	14.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
2412MHz	54	13.5
2417MHz	65	16.25
2422MHz	65	16.25
2427MHz	72	18
2437MHz	72	18
2442MHz	72	18
2447MHz	65	16.25
2452MHz	63	15.75
2457MHz	62	15.5
2462MHz	50	12.5
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
2422MHz	56	14
2427MHz	59	14.75
2432MHz	60	15
2437MHz	60	15
2442MHz	60	15
2447MHz	58	14.5
2452MHz	55	13.75

For 2T2S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
2412MHz	56	14
2417MHz	61	15.25
2422MHz	66	16.5
2427MHz	69	17.25
2432MHz	72	18
2437MHz	73	18.25
2442MHz	71	17.75
2447MHz	69	17.25
2452MHz	64	16
2457MHz	61	15.25
2462MHz	56	14
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
2422MHz	54	13.5
2427MHz	56	14
2432MHz	57	14.25
2437MHz	59	14.75
2442MHz	57	14.25
2447MHz	55	13.75
2452MHz	53	13.25

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	110
2437MHz	85
2462MHz	87
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	110
2437MHz	110
2462MHz	110
802.11ax HEW40_Nss1,(MCS0)_4TX	
2422MHz	110
2437MHz	110
2452MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-
2412MHz	77	19.25
2417MHz	78	19.5
2422MHz	81	20.25
2427MHz	85	21.25
2437MHz	85	21.25
2442MHz	85	21.25
2447MHz	77	19.25
2452MHz	74	18.5
2457MHz	74	18.5
2462MHz	73	18.25
802.11g_Nss1,(6Mbps)_4TX	-	-
2412MHz	49	12.25
2417MHz	58	14.5
2422MHz	60	15
2427MHz	66	16.5
2432MHz	67	16.75
2437MHz	69	17.25
2442MHz	68	17
2447MHz	65	16.25
2452MHz	63	15.75
2457MHz	59	14.75
2462MHz	48	12
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
2412MHz	45	11.25
2417MHz	52	13
2422MHz	60	15
2427MHz	60	15
2432MHz	60	15
2437MHz	64	16
2442MHz	59	14.75
2447MHz	58	14.5
2452MHz	56	14
2457MHz	50	12.5
2462MHz	40	10
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
2422MHz	47	11.75
2427MHz	49	12.25
2432MHz	50	12.5

Mode	Power Setting	Power Setting (dBm)
2437MHz	52	13
2442MHz	49	12.25
2447MHz	47	11.75
2452MHz	45	11.25
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
2412MHz	47	11.75
2417MHz	51	12.75
2422MHz	57	14.25
2427MHz	64	16
2437MHz	64	16
2442MHz	64	16
2447MHz	57	14.25
2452MHz	56	14
2457MHz	52	13
2462MHz	48	12
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
2422MHz	51	12.75
2427MHz	52	13
2437MHz	52	13
2442MHz	52	13
2447MHz	47	11.75
2452MHz	47	11.75

For 4T4S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
2412MHz	54	13.5
2417MHz	58	14.5
2422MHz	61	15.25
2427MHz	66	16.5
2432MHz	69	17.25
2437MHz	69	17.25
2442MHz	67	16.75
2447MHz	64	16
2452MHz	59	14.75
2457MHz	54	13.5
2462MHz	50	12.5
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
2422MHz	40	10
2427MHz	41	10.25
2432MHz	47	11.75
2437MHz	49	12.25
2442MHz	48	12
2447MHz	41	10.25
2452MHz	40	10

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Test Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Intentional – CTX Unintentional – CRX
	There are 13 antennas in the antenna table list, antenna 11 for WLAN and antenna 12 for Bluetooth, Thread were selected for EUT respectively to perform the test and recorded in this report.
	For WLAN 2.4GHz The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For WLAN 5GHz** Radio 1:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. Radio 2:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Bluetooth:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Thread:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at X axis. So the measurement will follow this same test configuration.
1	EUT in Y axis (WLAN 2.4GHz / Radio 1) + Ant. 11 Panel antenna / 6.8 dBi + Adapter
2	EUT in Y axis (WLAN 5GHz / Radio 1) + Ant. 11 Panel antenna / 8.7 dBi + Adapter
3	EUT in Y axis (WLAN 5GHz / Radio 2) + Ant. 11 Panel antenna / 8.7 dBi + Adapter
4	EUT in Y axis (Bluetooth / Radio 3) + Ant. 12 Omni antenna / 7 dBi + Adapter
5	EUT in X axis (Thread / Radio 3) + Ant. 12 Omni antenna / 7 dBi + Adapter
Mode 1 has been evaluated to be the worst case among Mode 1~5, thus measurement for Mode 6 will follow this same test mode.	
6	EUT in Y axis (WLAN 2.4GHz / Radio 1) + Ant. 11 Panel antenna / 6.8 dBi + PoE
Mode 1 generated the worst test result, so it was recorded in this report.	

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
Operating Mode	CTX
There are 13 antennas in the antenna table list, antenna 4、7 and antenna 11 for WLAN-2.4GHz were selected for EUT respectively to perform the test and recorded in this report.	
1	EUT + Ant. 4 Omni antenna / 3 dBi (Refer to note 1)
2	EUT + Ant. 7 Omni antenna / 4 dBi (Refer to note 1)
3	EUT + Ant. 11 Panel antenna / 6.8 dBi (Refer to note 1)

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	Intentional – CTX Unintentional – CRX
	There are 13 antennas in the antenna table list, antenna 11 for WLAN and antenna 12 for Bluetooth, Thread were selected for EUT respectively to perform the test and recorded in this report.
	For WLAN 2.4GHz The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For WLAN 5GHz** Radio 1:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. Radio 2:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Bluetooth:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Thread:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at X axis. So the measurement will follow this same test configuration.

1	EUT in Y axis (WLAN 2.4GHz / Radio 1) + Ant. 11 Panel antenna / 6.8 dBi + Adapter
2	EUT in Y axis (WLAN 5GHz / Radio 1) + Ant. 11 Panel antenna / 8.7 dBi + Adapter
3	EUT in Y axis (WLAN 5GHz / Radio 2) + Ant. 11 Panel antenna / 8.7 dBi + Adapter
4	EUT in Y axis (Bluetooth / Radio 3) + Ant. 12 Omni antenna / 7 dBi + Adapter
5	EUT in X axis (Thread / Radio 3) + Ant. 12 Omni antenna / 7 dBi + Adapter
Mode 1 has been evaluated to be the worst case among Mode 1~5, thus measurement for Mode 6 will follow this same test mode.	
6	EUT in Y axis (WLAN 2.4GHz / Radio 1) + Ant. 11 Panel antenna / 6.8 dBi + PoE
Mode 1 generated the worst test result, so it was recorded in this report.	
Operating Mode > 1GHz 1GHz~5th Harmonic	Unintentional - CRX
	There are 13 antennas in the antenna table list, antenna 11 for WLAN and antenna 12 for Bluetooth, Thread were selected for EUT respectively to perform the test and recorded in this report.
	For WLAN 2.4GHz The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For WLAN 5GHz** Radio 1:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. Radio 2:The EUT was performed at X axis、Y axis and Z axis position for Unwanted Emissions Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Bluetooth:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Thread:** The EUT was performed at X axis、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional (Radiated Emission) above 1GHz and the worst case was found at X axis. So the measurement will follow this same test configuration.
1	EUT in Y axis (WLAN 2.4GHz / Radio 1) + Ant. 11 Panel antenna / 6.8 dBi
2	EUT in Y axis (WLAN 5GHz / Radio 1) + Ant. 11 Panel antenna / 8.7 dBi
3	EUT in Y axis (WLAN 5GHz / Radio 2) + Ant. 11 Panel antenna / 8.7 dBi
4	EUT in Y axis (Bluetooth / Radio 3) + Ant. 12 Omni antenna / 7 dBi
5	EUT in X axis (Thread / Radio 3) + Ant. 12 Omni antenna / 7 dBi
Mode 3 generated the worst test result, so it was recorded in this report.	

Operating Mode > 1GHz 1GHz~10th Harmonic	Intentional - CTX (Refer to note 1)
There are 13 antennas in the antenna table list, antenna 4、7 and antenna 11 for WLAN-2.4GHz were selected for EUT respectively to perform the test and recorded in this report.	
For Ant. 4 Omni antenna / 3 dBi: **For Radiated Emission** 4T1S Mode: The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Band Edge Emission** 1T1S Mode: The EUT was performed at X、Y axis and Z axis and the worst case was found at X axis. So the measurement will follow this same test configuration. 2T2S, 4T1S, 4T4S Mode: The EUT was performed at X、Y axis and Z axis and the worst case was found at Z axis. So the measurement will follow this same test configuration. **For Ant. 7 Omni antenna / 4 dBi:** The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Ant. 11 Panel antenna / 6.8 dBi:** **For Radiated Emission** 4T1S Mode: The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Band Edge Emission** 1T1S, 2T2S, 4T1S, 4T4S Mode: The EUT was performed at X、Y axis and Z axis and the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	(Ant. 4 Omni antenna / 3 dBi) Harmonic: EUT in Y axis Bandedge: EUT in X axis (1T1S) EUT in Z axis (2T2S, 4T1S, 4T4S)
2	(Ant. 7 Omni antenna / 4 dBi) Harmonic: EUT in Y axis Bandedge: EUT in Y axis
3	(Ant. 11 Panel antenna / 6.8 dBi) Harmonic: EUT in Y axis Bandedge: EUT in X axis

Note:
1. Test Mode:

Test Mode											
Test Item	802.11b		802.11g		802.11ax HEW20/40						
	1T1S	4T1S	1T1S	4T1S	CDD 1T1S	SDM 2T2S	CDD 4T1S	SDM 4T4S	TxBF 2T2S	TxBF 4T1S	TxBF 4T4S
Maximum Conducted Output Power	V	V	V	V	V	V	V	V	-	V	-
DTS Bandwidth	V	V	V	V	V	V	V	V	-	V	-
Power Spectral Density	V	V	V	V	V	V	V	V	-	V	-
Emissions in Non-restricted Frequency Bands	V	V	V	V	V	V	V	V	-	V	-
Radiated Emission	Cover by CDD 4T1S Max setting	V	Cover by CDD 4T1S Max setting	V	Cover by CDD 4T1S Max setting	Cover by CDD 4T1S Max setting	Max setting	Cover by CDD 4T1S Max setting	-	Cover by CDD 4T1S Max setting	-
Band Edge Emission	V	V	V	V	V	V	V	V	-	V	-

2.802.11ax modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz, therefore investigated worst case to representative mode in test report.
3.The Adapter and PoE was for measurement only, would not be marketed.
The detail information as below:

Power	Brand	Model
Adapter	Powertron Electronics Corp	PA1045-120HIB300
PoE	Microsemi	PD-9001GR/AT/AC

2.3 EUT Operation during Test

For CTX/CRX Mode:
non-beamforming mode:
The EUT was programmed to be in continuously transmitting/receiving mode.

beamforming mode:
For Conducted Mode:
The EUT was programmed to be in continuously transmitting/receiving mode.
For Radiated Mode:
During the test, the following programs under WIN 7 were executed.
The program was executed as follows:
1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Telnet.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB
Intentional – CTX and Unintentional – CRX

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Flash disk3.0	Transcend	JetFlash-700	N/A
B	LAN NB	DELL	E6430	N/A
C	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

For Test Site No: 03CH01-CB
Intentional – CTX and Unintentional – CRX (below 1GHz)
Unintentional – CRX (above 1GHz-1GHz~5th Harmonic)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	Flash disk3.0	Silicon Power	B06	N/A
C	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

For Test Site No: 03CH01-CB
Intentional – CTX (above 1GHz-1GHz~10th Harmonic, Non-Beamforming Mode)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
E	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

For Test Site No: 03CH01-CB
Intentional – CTX (above 1GHz-1GHz~10th Harmonic, Beamforming Mode)

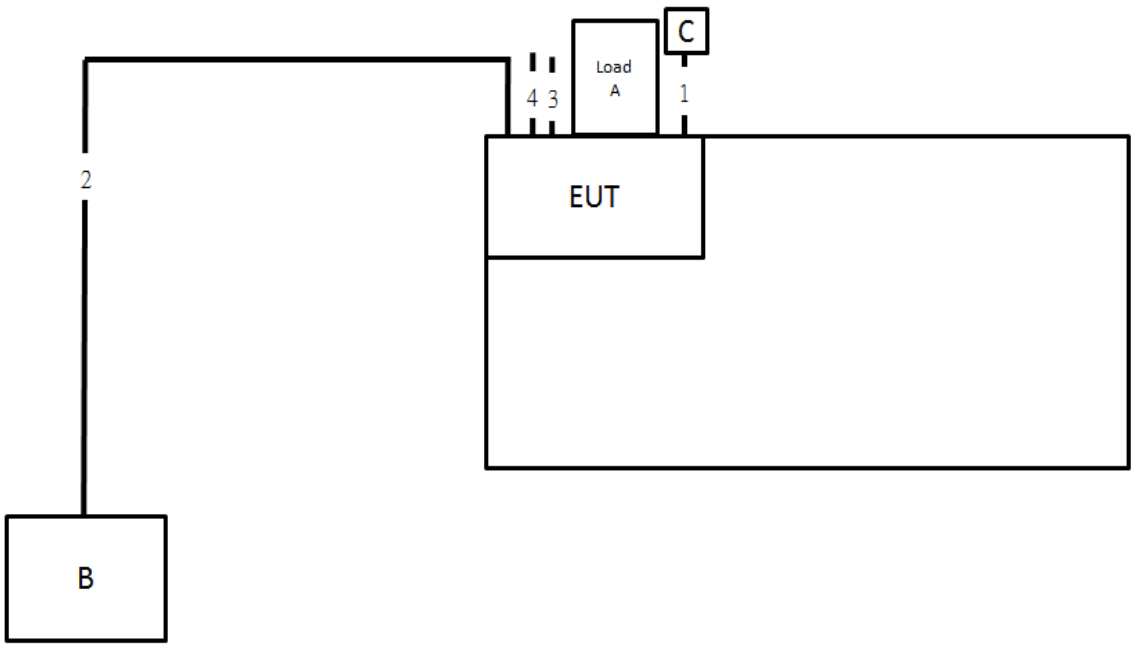
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	WLAN AP	Extreme Networks	AP510i	QXO-AP510I
C	NB	DELL	E4300	N/A
E	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

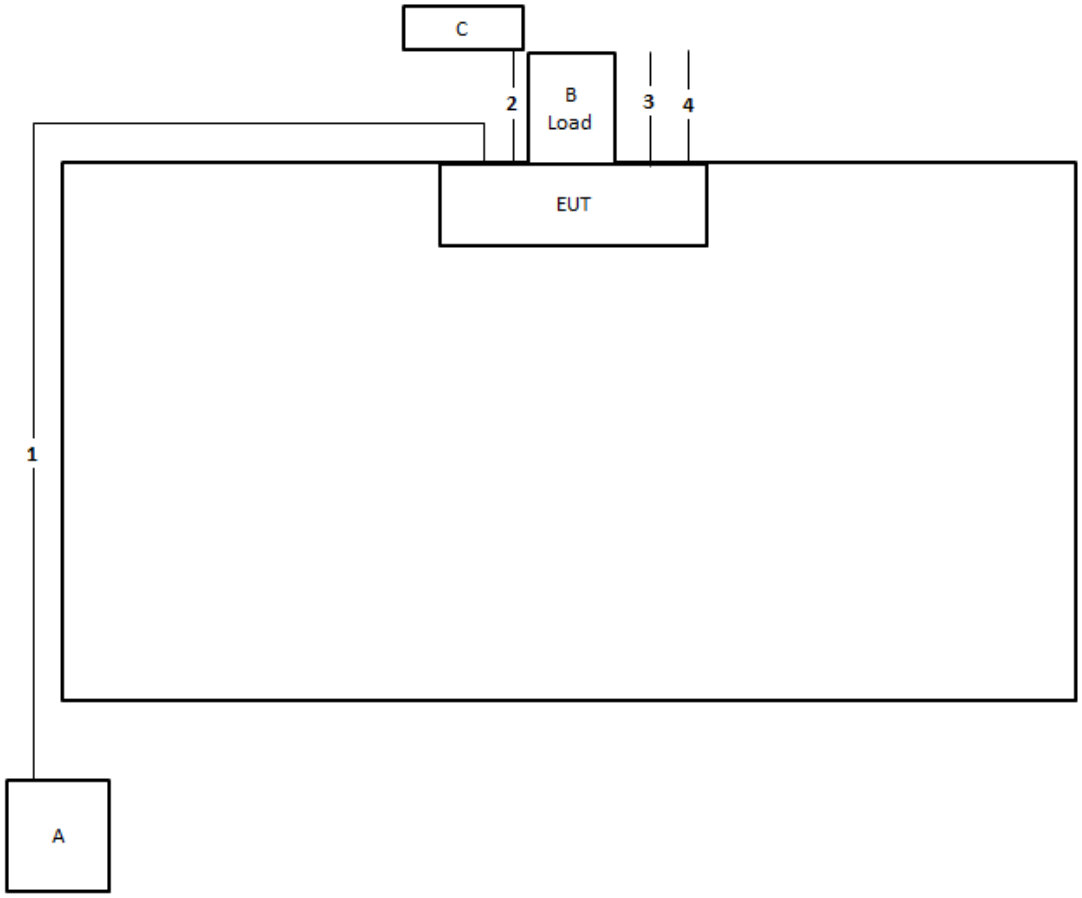
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test
Intentional – CTX and Unintentional – CRX



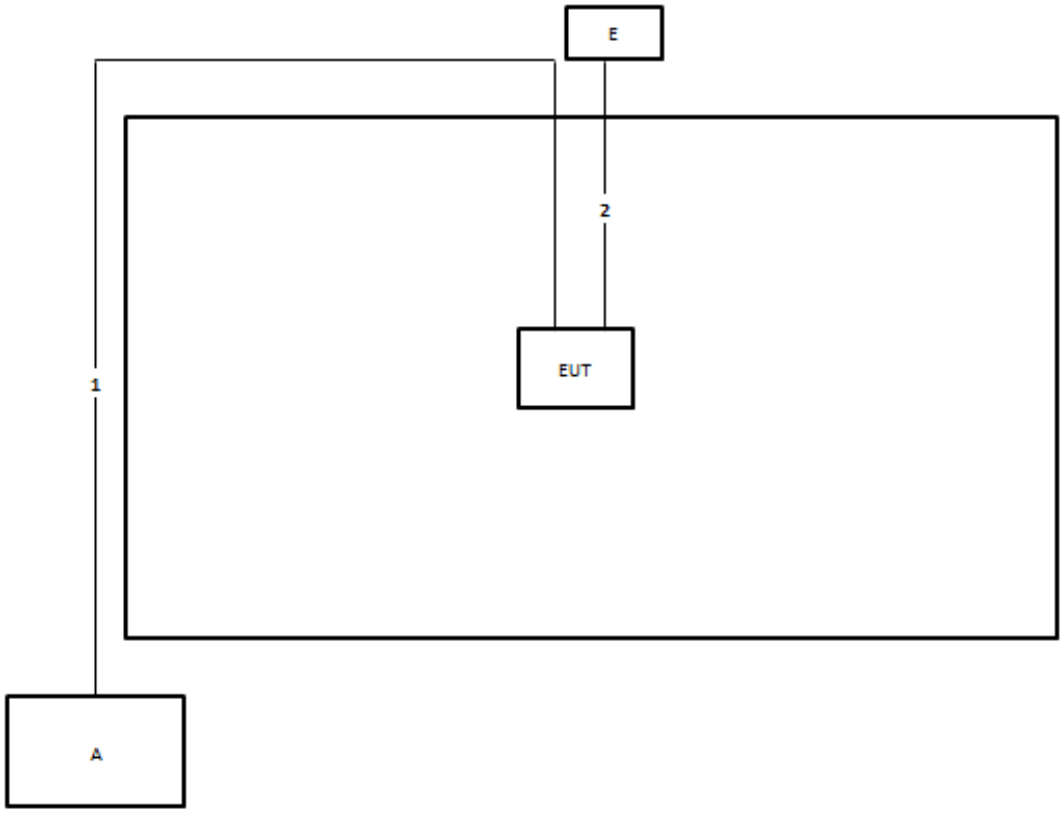
Item	Connection	Brand Name	Model Name	Shielded	Length
1	Power cable	Powertron Electronics Corp	PA1045-120HIB300	No	1.5m
2	RJ-45 cable	PowerSync	C65B10FL	No	10m
3	Console cable	Copartner	E119932	No	1.8m
4	RJ-45 cable	PowerSync	C65B10FL	No	1.5m

Test Setup Diagram - Radiated Test
Intentional – CTX and Unintentional – CRX (below 1GHz)
Unintentional – CRX (above 1GHz-1GHz~5th Harmonic)



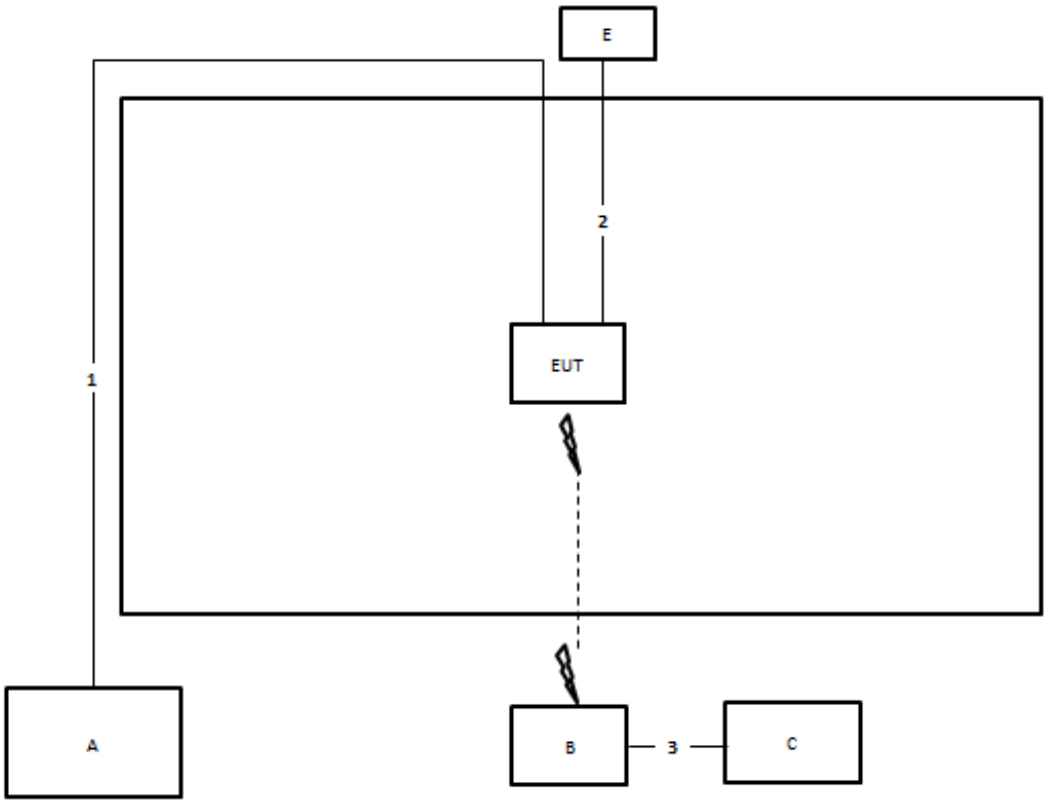
Item	Connection	Brand Name	Model Name	Shielded	Length
1	RJ-45 cable	PowerSync	C65B10FL	No	10m
2	Power cable	Powertron Electronics Corp	PA1045-120HIB300	No	1.5m
3	RJ-45 cable	PowerSync	C65B10FL	No	1.5m
4	Console cable	Copartner	E119932	No	1.8m

Test Setup Diagram - Radiated Test
Intentional – CTX (above 1GHz-1GHz~10th Harmonic, Non-Beamforming Mode)



Item	Connection	Brand Name	Model Name	Shielded	Length
1	RJ-45 cable	PowerSync	C65B10FL	No	10m
2	Power cable	Powertron Electronics Corp	PA1045-120HIB300	No	1.5m

Test Setup Diagram - Radiated Test
Intentional – CTX (above 1GHz-1GHz~10th Harmonic, Beamforming Mode)



Item	Connection	Brand Name	Model Name	Shielded	Length
1	RJ-45 cable	PowerSync	C65B10FL	No	10m
2	Power cable	Powertron Electronics Corp	PA1045-120HIB300	No	1.5m
3	RJ-45 cable	PowerSync	C65B10FL	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

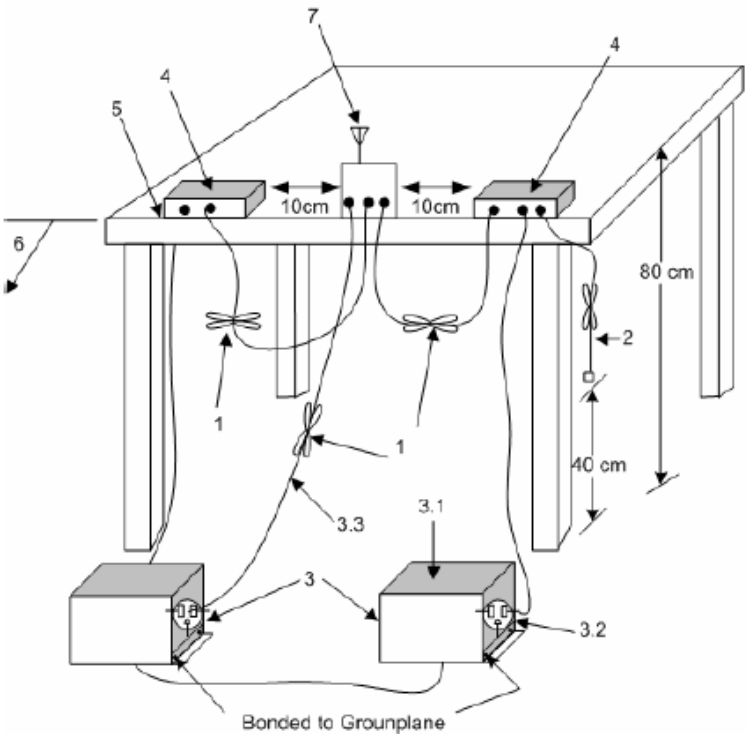
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 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 ≥ 500 kHz.

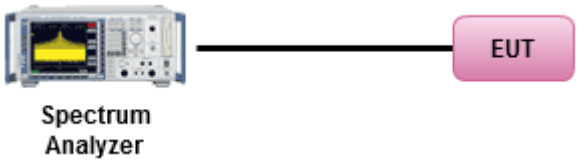
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


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
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 FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
	Measurement using a power meter (PM)
	☒ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	☐ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)

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.

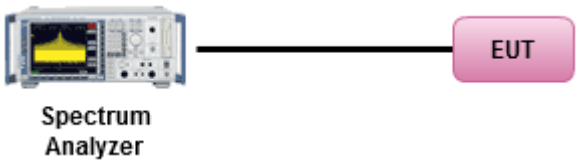
3.4.3 Test Procedures

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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.2 Method PKPSD.	
	[duty cycle ≥ 98% or external video / power trigger]	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPSD-1.	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPSD-2.	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPSD-3.	
	duty cycle < 98% and average over on/off periods with duty factor	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.4 Method AVGPSD-1A. (alternative).	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPSD-2A. (alternative)	
	☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPSD-3A. (alternative)	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,

		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup

Power Spectral Density



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 (dBc)**
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 PSD 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 PSD level.

3.5.2 Measuring Instruments

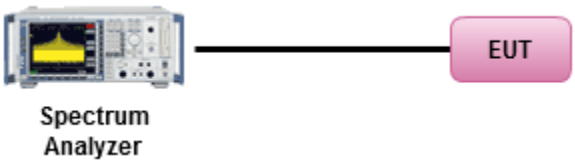
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



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

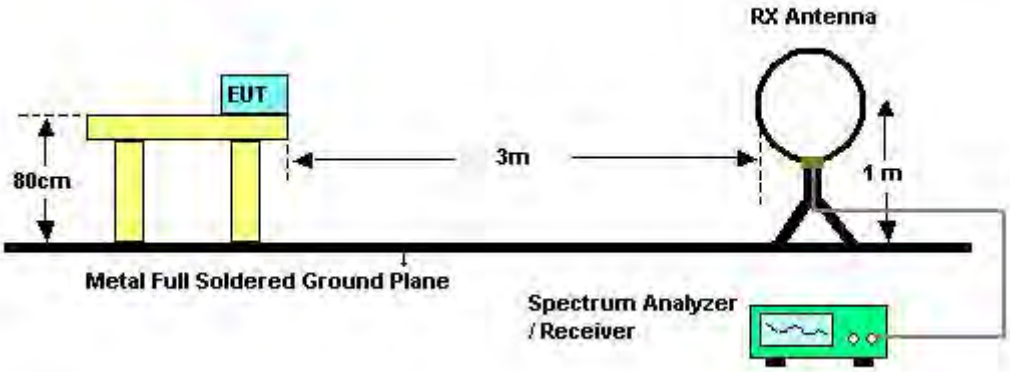
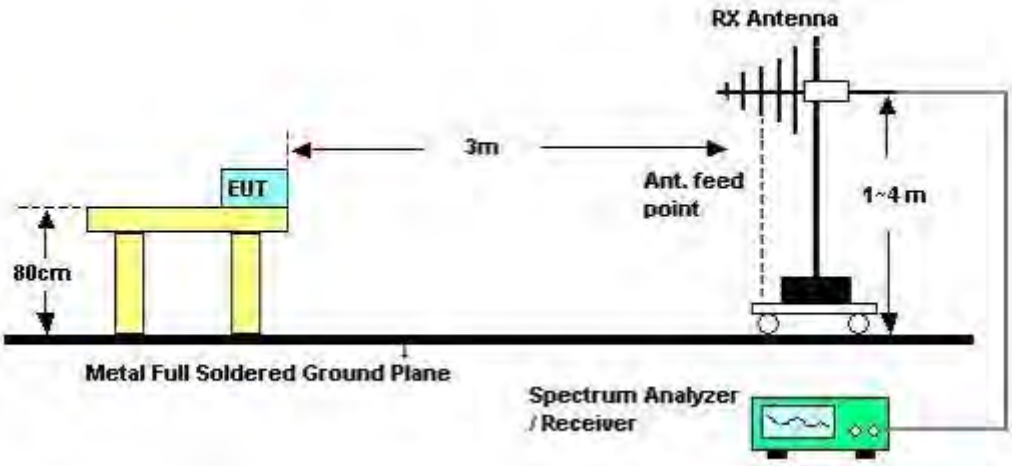
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

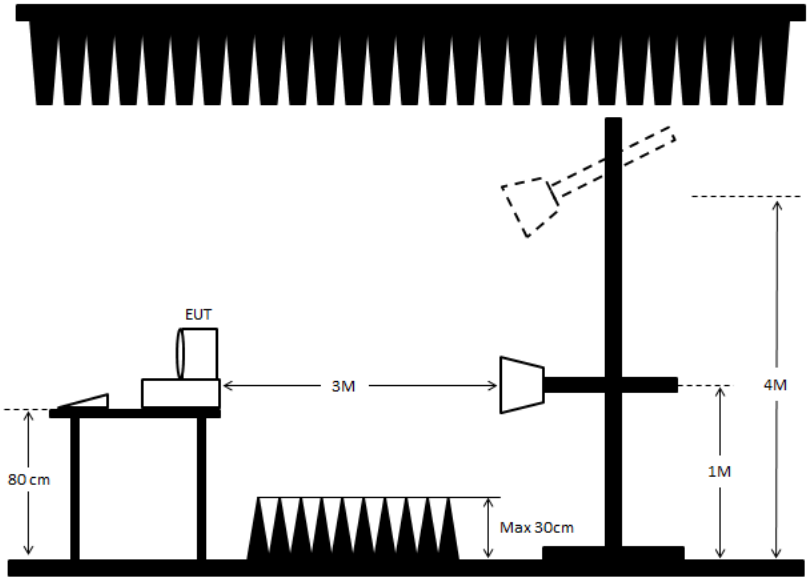
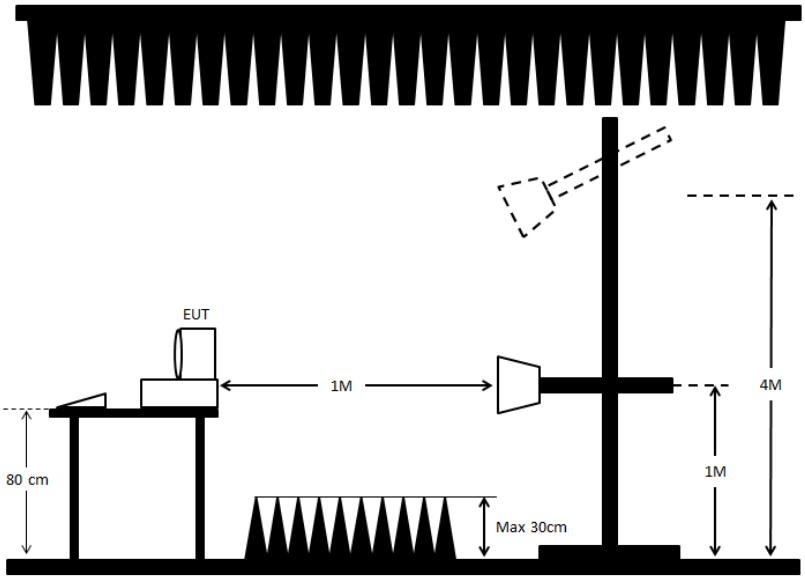
Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle ≥98%).
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB		
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.		

3.6.4 Test Setup

For Intentional – CTX and Unintentional – CRX (below 1GHz)

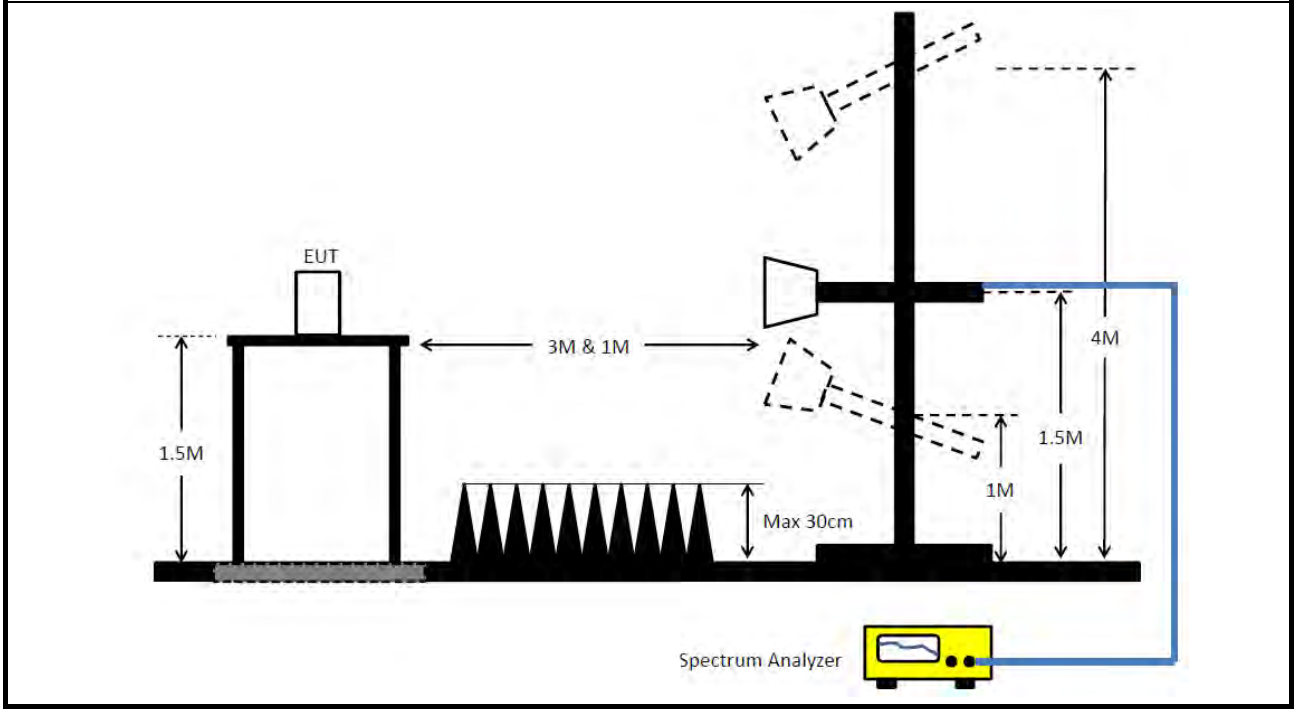
Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


For Unintentional – CRX (above 1GHz-1GHz~5th Harmonic)

Emissions in Restricted Frequency Bands
1,000~18,000 MHz

18,000~30,000 MHz


For Intentional – CTX (above 1GHz-1GHz~10th Harmonic)

Above 1GHz



3.6.5 Emissions in Restricted Frequency Bands (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

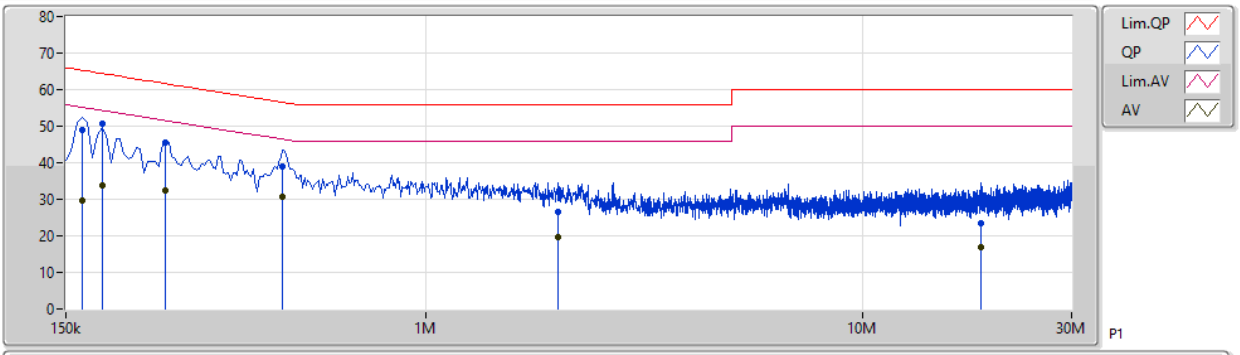
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 24, 2018	Dec. 23, 2019	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019	Jan. 10, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 13, 2018	Nov. 12, 2019	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz–26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz–26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz–26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz–26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz–26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz–26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 05, 2018	Nov. 04, 2019	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

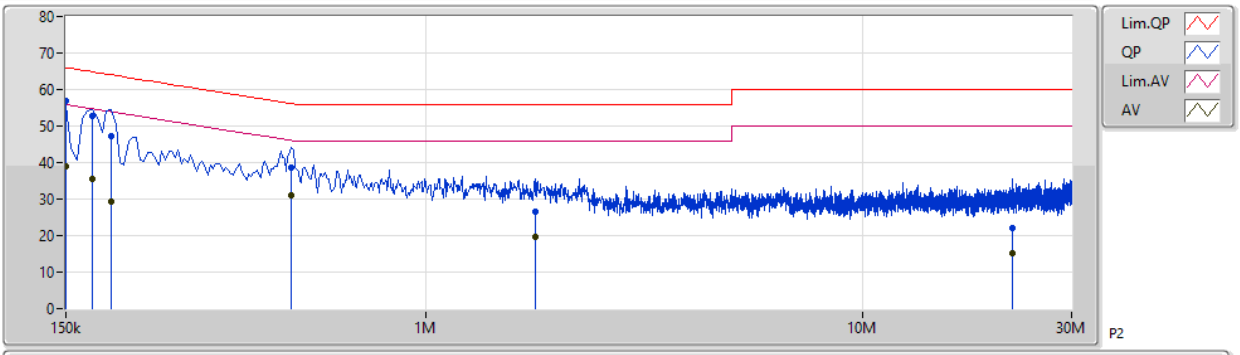
Test Mode	Mode 1	**Frequency Range**	0.15 MHz to 30 MHz
Operating Function	Intentional – CTX		

Line



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	163.5k	49.12	65.27	-16.15	9.90	Line	-	39.22	0.05	0.06	9.79
AV	163.5k	29.59	55.27	-25.68	9.90	Line	-	19.69	0.05	0.06	9.79
QP	181.5k	50.79	64.41	-13.62	9.91	Line	"Worst"	40.88	0.06	0.06	9.79
AV	181.5k	33.82	54.41	-20.59	9.91	Line	-	23.91	0.06	0.06	9.79
QP	253.5k	45.42	61.64	-16.22	9.92	Line	-	35.50	0.06	0.06	9.80
AV	253.5k	32.26	51.64	-19.38	9.92	Line	-	22.34	0.06	0.06	9.80
QP	469.5k	38.96	56.52	-17.56	9.94	Line	-	29.02	0.06	0.07	9.81
AV	469.5k	30.63	46.52	-15.89	9.94	Line	-	20.69	0.06	0.07	9.81
QP	2.009M	26.48	56.00	-29.52	10.04	Line	-	16.44	0.09	0.12	9.83
AV	2.009M	19.73	46.00	-26.27	10.04	Line	-	9.69	0.09	0.12	9.83
QP	18.672M	23.47	60.00	-36.53	10.49	Line	-	12.98	0.28	0.24	9.97
AV	18.672M	16.76	50.00	-33.24	10.49	Line	-	6.27	0.28	0.24	9.97

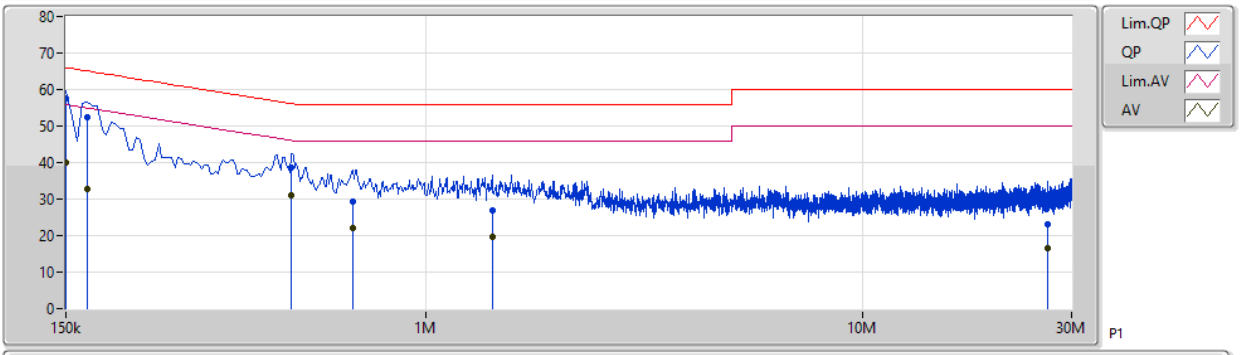
Neutral



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	56.89	66.00	-9.11	9.89	Neutral	"Worst"	47.00	0.04	0.06	9.79
AV	150k	38.97	56.00	-17.03	9.89	Neutral	-	29.08	0.04	0.06	9.79
QP	172.5k	52.62	64.83	-12.21	9.89	Neutral	-	42.73	0.04	0.06	9.79
AV	172.5k	35.55	54.83	-19.28	9.89	Neutral	-	25.66	0.04	0.06	9.79
QP	190.5k	47.17	64.01	-16.84	9.89	Neutral	-	37.28	0.04	0.06	9.79
AV	190.5k	29.20	54.01	-24.81	9.89	Neutral	-	19.31	0.04	0.06	9.79
QP	492k	38.62	56.13	-17.51	9.92	Neutral	-	28.70	0.04	0.07	9.81
AV	492k	30.97	46.13	-15.16	9.92	Neutral	-	21.05	0.04	0.07	9.81
QP	1.775M	26.42	56.00	-29.58	10.01	Neutral	-	16.41	0.07	0.11	9.83
AV	1.775M	19.60	46.00	-26.40	10.01	Neutral	-	9.59	0.07	0.11	9.83
QP	21.962M	21.93	60.00	-38.07	10.58	Neutral	-	11.35	0.28	0.30	10.00
AV	21.962M	15.02	50.00	-34.98	10.58	Neutral	-	4.44	0.28	0.30	10.00

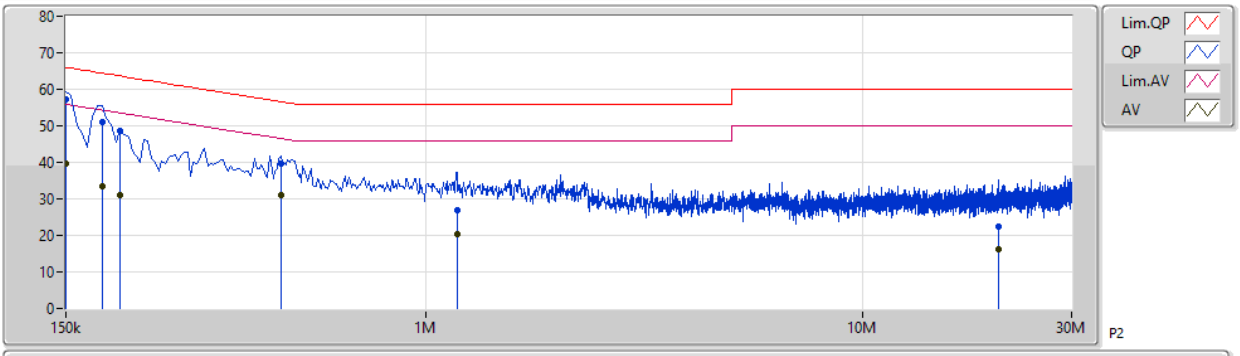
Test Mode	Mode 1	**Frequency Range**	0.15 MHz to 30 MHz
Operating Function	Unintentional – CRX		

Line



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	57.63	66.00	-8.37	9.90	Line	"Worst"	47.73	0.05	0.06	9.79
AV	150k	40.16	56.00	-15.84	9.90	Line	-	30.26	0.05	0.06	9.79
QP	168k	52.28	65.06	-12.78	9.90	Line	-	42.38	0.05	0.06	9.79
AV	168k	32.61	55.06	-22.45	9.90	Line	-	22.71	0.05	0.06	9.79
QP	492k	38.68	56.13	-17.45	9.94	Line	-	28.74	0.06	0.07	9.81
AV	492k	31.02	46.13	-15.11	9.94	Line	-	21.08	0.06	0.07	9.81
QP	681k	29.21	56.00	-26.79	9.97	Line	-	19.24	0.07	0.08	9.82
AV	681k	22.04	46.00	-23.96	9.97	Line	-	12.07	0.07	0.08	9.82
QP	1.419M	26.93	56.00	-29.07	10.02	Line	-	16.91	0.08	0.11	9.83
AV	1.419M	19.74	46.00	-26.26	10.02	Line	-	9.72	0.08	0.11	9.83
QP	26.525M	23.17	60.00	-36.83	10.71	Line	-	12.46	0.34	0.34	10.03
AV	26.525M	16.42	50.00	-33.58	10.71	Line	-	5.71	0.34	0.34	10.03

Neutral



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	57.32	66.00	-8.68	9.89	Neutral	"Worst"	47.43	0.04	0.06	9.79
AV	150k	39.75	56.00	-16.25	9.89	Neutral	-	29.86	0.04	0.06	9.79
QP	181.5k	51.19	64.41	-13.22	9.89	Neutral	-	41.30	0.04	0.06	9.79
AV	181.5k	33.38	54.41	-21.03	9.89	Neutral	-	23.49	0.04	0.06	9.79
QP	199.5k	48.46	63.63	-15.17	9.89	Neutral	-	38.57	0.04	0.06	9.79
AV	199.5k	31.10	53.63	-22.53	9.89	Neutral	-	21.21	0.04	0.06	9.79
QP	465k	39.57	56.61	-17.04	9.91	Neutral	-	29.66	0.04	0.06	9.81
AV	465k	31.12	46.61	-15.49	9.91	Neutral	-	21.21	0.04	0.06	9.81
QP	1.176M	27.01	56.00	-28.99	9.98	Neutral	-	17.03	0.06	0.10	9.82
AV	1.176M	20.27	46.00	-25.73	9.98	Neutral	-	10.29	0.06	0.10	9.82
QP	20.391M	22.50	60.00	-37.50	10.51	Neutral	-	11.99	0.26	0.26	9.99
AV	20.391M	16.05	50.00	-33.95	10.51	Neutral	-	5.54	0.26	0.26	9.99

For Mode 1: (Ant. 4 Omni antenna / 3 dBi)
For Non-beamforming / 1T1S mode
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	8.5M	14.018M	14M0G1D	7.05M	11.669M
802.11g_Nss1,(6Mbps)_1TX	16.325M	18.266M	18M3D1D	16.3M	16.542M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.975M	19.14M	19M1D1D	18.875M	18.916M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.55M	37.531M	37M5D1D	37.2M	37.531M

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

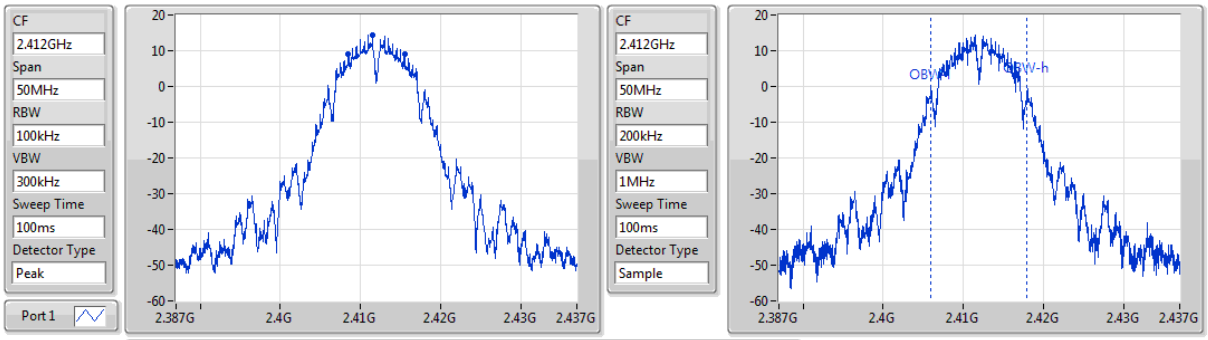
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.05M	11.969M
2437MHz	Pass	500k	8.5M	14.018M
2462MHz	Pass	500k	7.05M	11.669M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.567M
2437MHz	Pass	500k	16.3M	18.266M
2462MHz	Pass	500k	16.325M	16.542M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.975M	18.941M
2437MHz	Pass	500k	18.875M	19.14M
2462MHz	Pass	500k	18.975M	18.916M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.45M	37.531M
2437MHz	Pass	500k	37.55M	37.531M
2452MHz	Pass	500k	37.2M	37.531M

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

802.11b_Nss1,(1Mbps)_1TX — EBW

2412MHz

25/01/2019

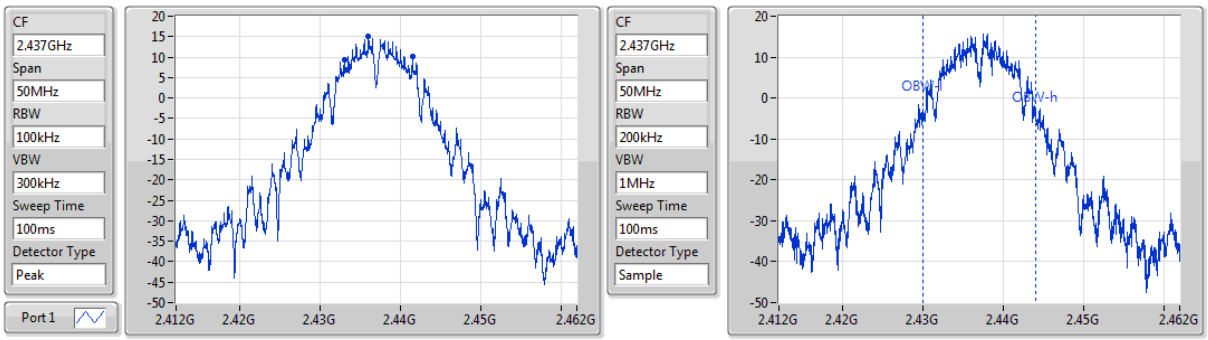


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.408475G	2.415525G	11.969M	2.405978G	2.417947G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2437MHz

25/01/2019

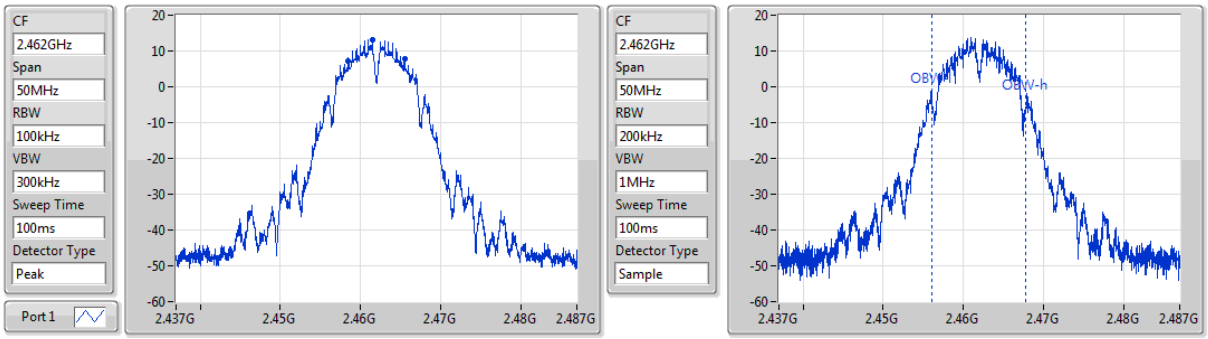


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.5M	2.433G	2.4415G	14.018M	2.429954G	2.443972G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2462MHz

25/01/2019

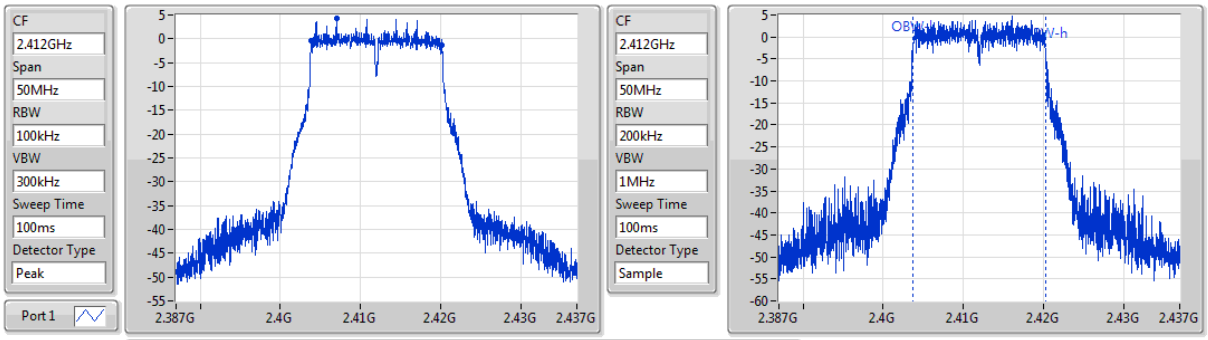


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.45845G	2.4655G	11.669M	2.456103G	2.467772G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2412MHz

25/01/2019

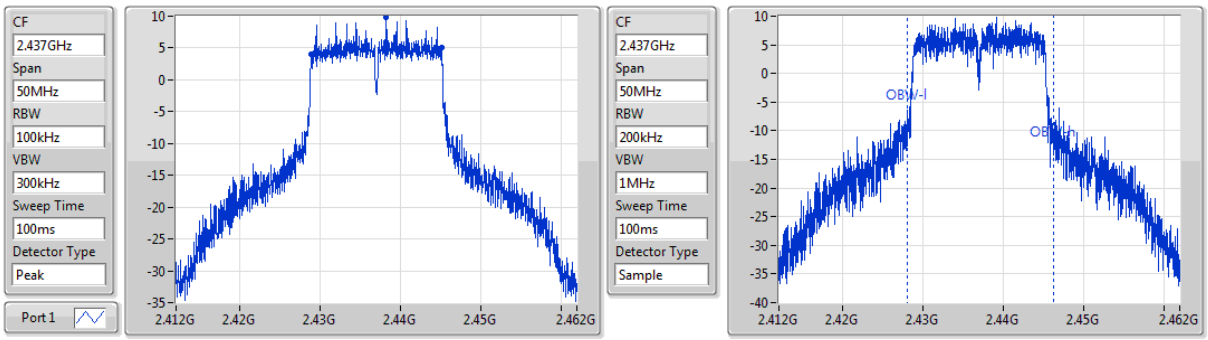


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.40385G	2.420175G	16.567M	2.403704G	2.420271G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2437MHz

25/01/2019

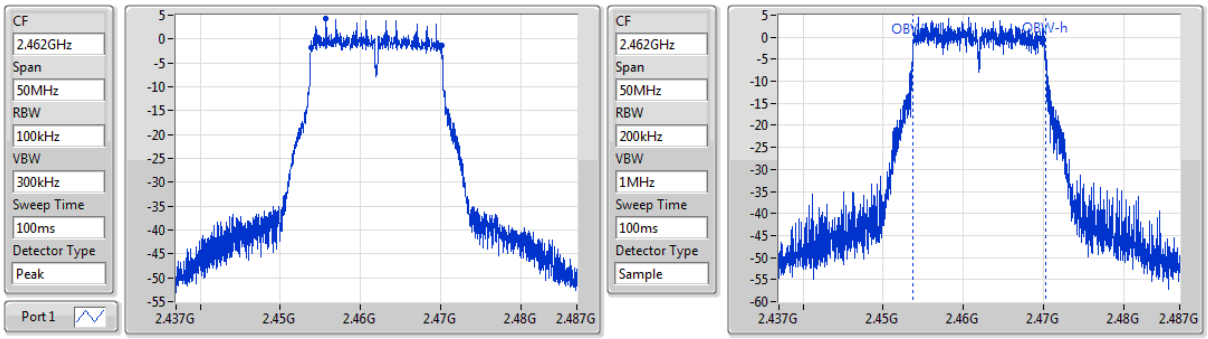


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	18.266M	2.428004G	2.44627G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2462MHz

25/01/2019

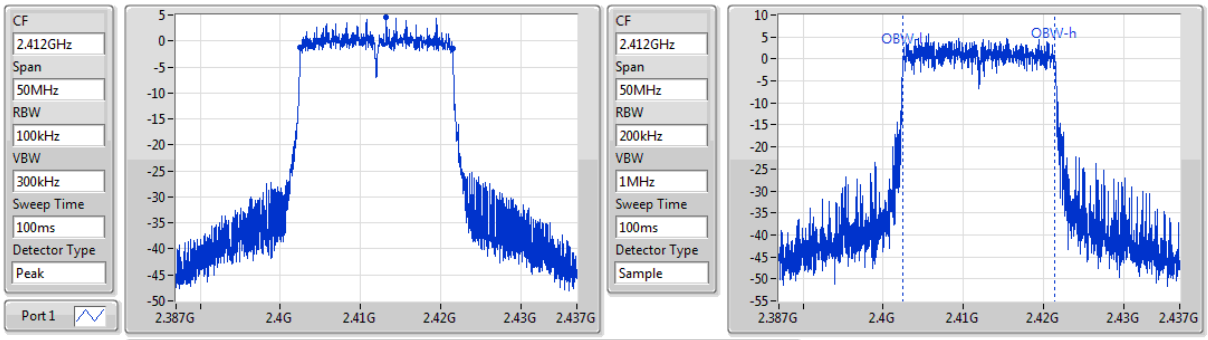


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.542M	2.453704G	2.470246G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX — EBW

2412MHz

25/01/2019

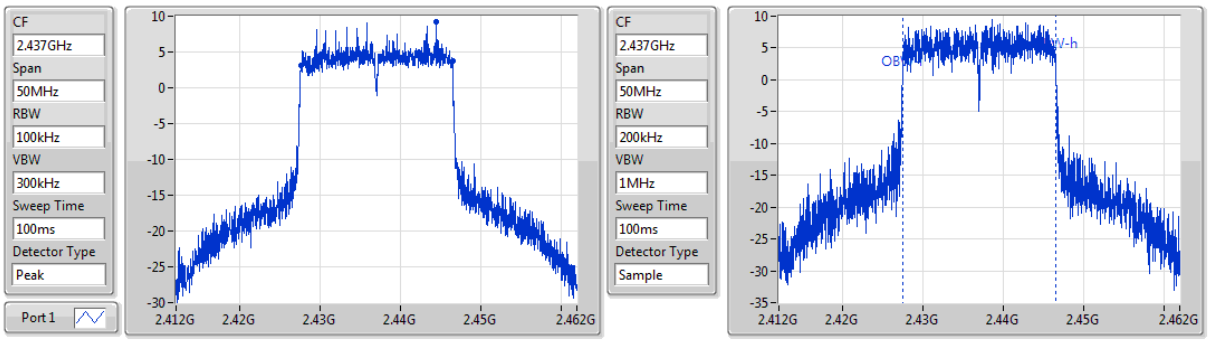


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	18.941M	2.402505G	2.421445G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX — EBW

2437MHz

25/01/2019

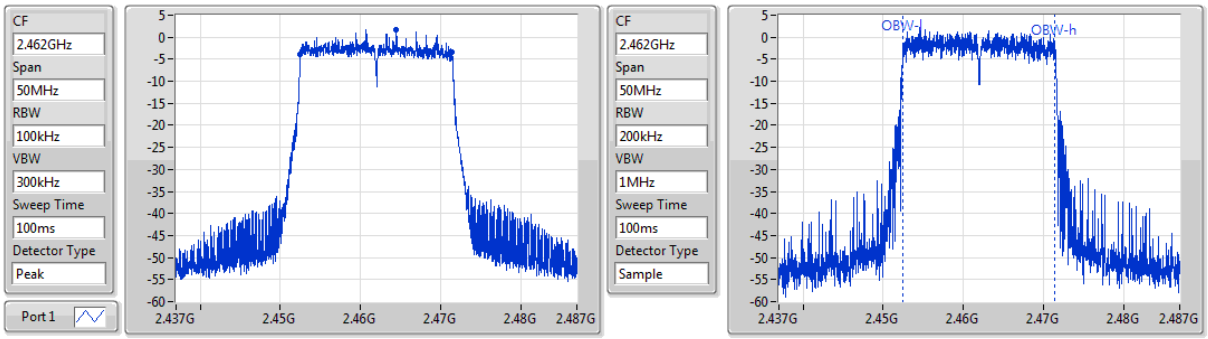


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.4276G	2.446475G	19.14M	2.42743G	2.44657G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX — EBW

2462MHz

25/01/2019

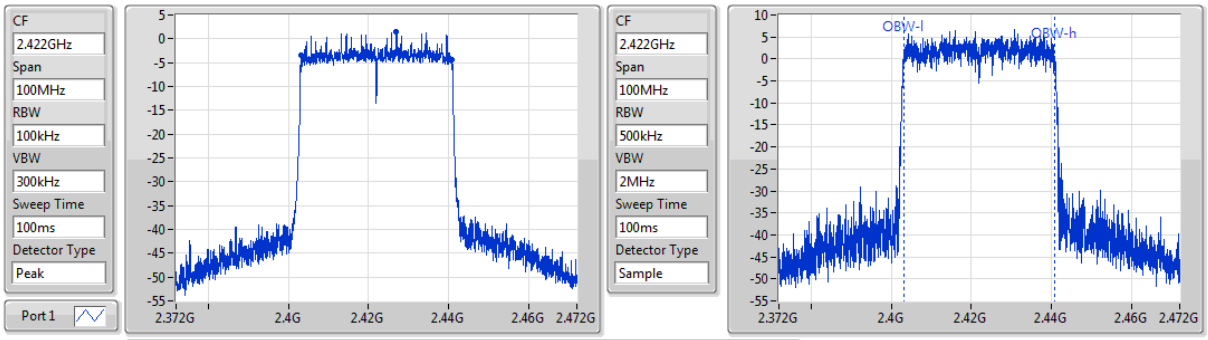


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452475G	2.47145G	18.916M	2.452505G	2.47142G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2422MHz

25/01/2019

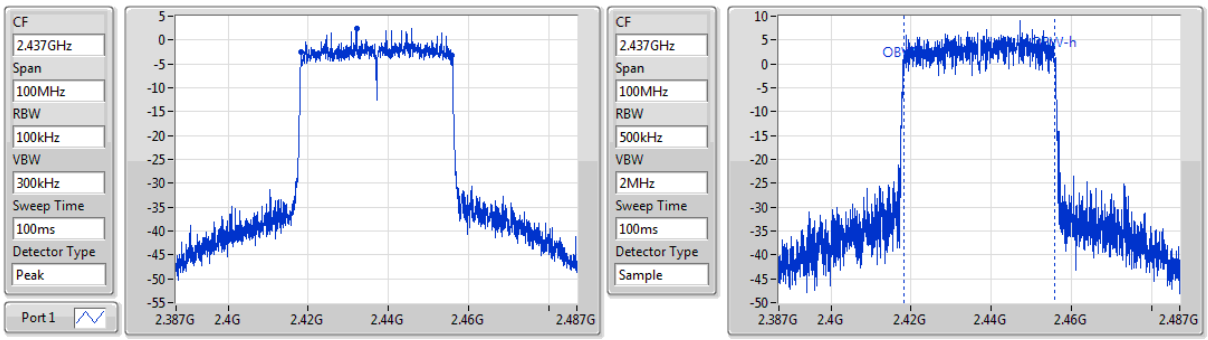


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	2.40325G	2.4407G	37.531M	2.403209G	2.440741G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2437MHz

25/01/2019

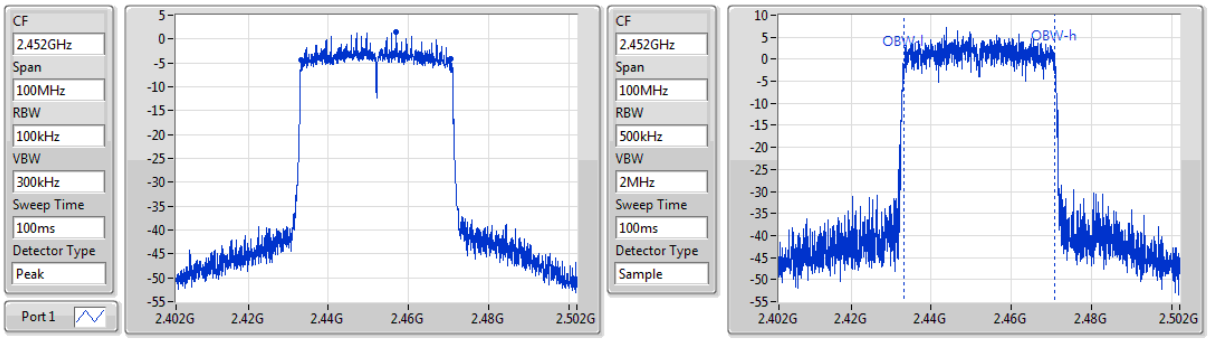


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.41825G	2.4558G	37.531M	2.418259G	2.455791G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2452MHz

25/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.4333G	2.4705G	37.531M	2.433259G	2.470791G	500k	1

For Non-beamforming / 2T2S mode
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_Nss2,(MCS0)_2TX	18.975M	19.04M	19M0D1D	18.25M	18.916M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.55M	37.581M	37M6D1D	35.15M	37.431M

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

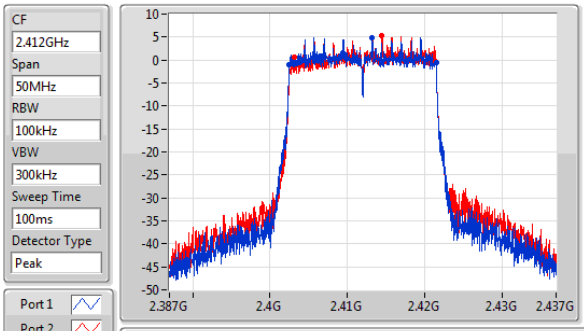
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	18.941M	18.25M	18.916M
2437MHz	Pass	500k	18.8M	18.991M	18.925M	19.04M
2462MHz	Pass	500k	18.85M	18.991M	18.75M	18.941M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37M	37.481M	35.15M	37.431M
2437MHz	Pass	500k	36.85M	37.531M	37.25M	37.531M
2452MHz	Pass	500k	36.5M	37.581M	37.55M	37.581M

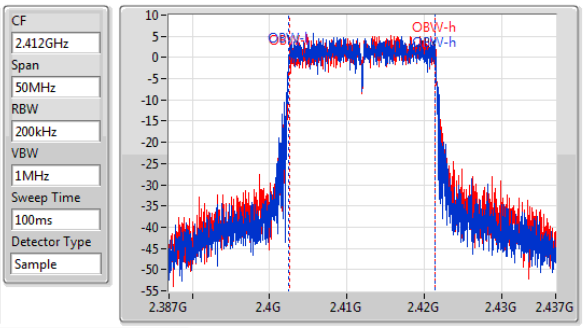
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2412MHz

25/01/2019



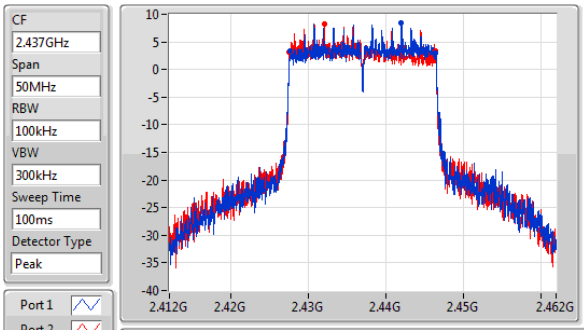


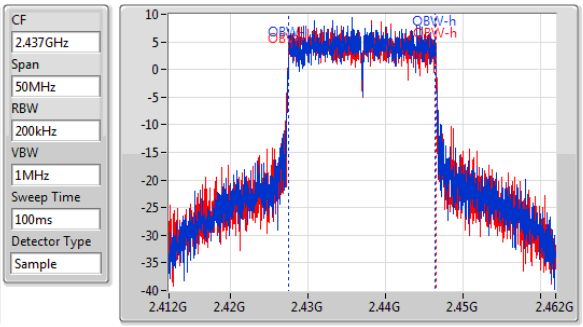
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4025G	2.421475G	18.941M	2.402505G	2.421445G	500k	1
18.25M	2.4032G	2.42145G	18.916M	2.402555G	2.42147G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2437MHz

25/01/2019



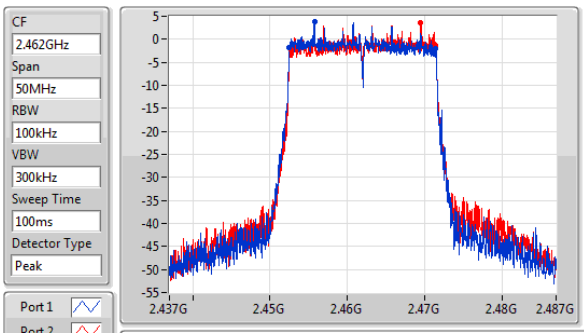


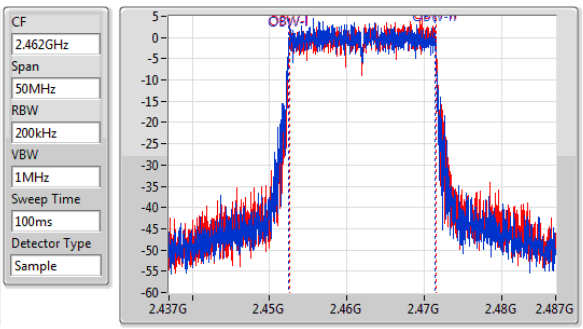
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.8M	2.42765G	2.44645G	18.991M	2.42748G	2.44647G	500k	1
18.925M	2.427475G	2.4464G	19.04M	2.427455G	2.446495G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2462MHz

25/01/2019



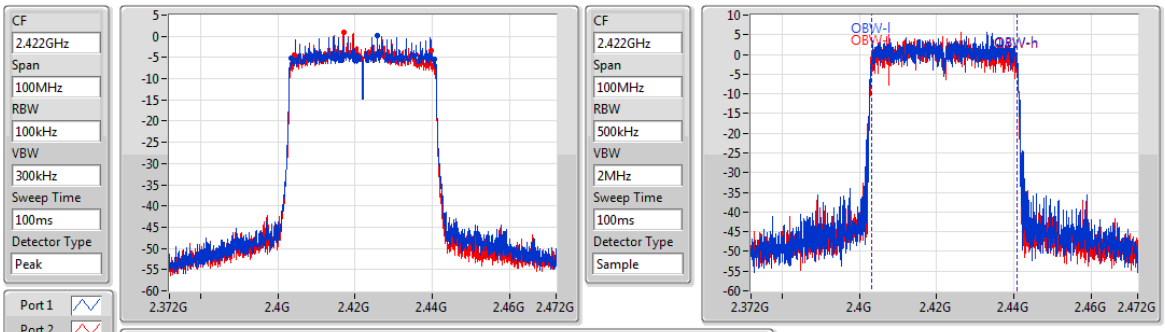


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.85M	2.4525G	2.47135G	18.991M	2.45248G	2.47147G	500k	1
18.75M	2.452675G	2.471425G	18.941M	2.452555G	2.471495G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2422MHz

25/01/2019

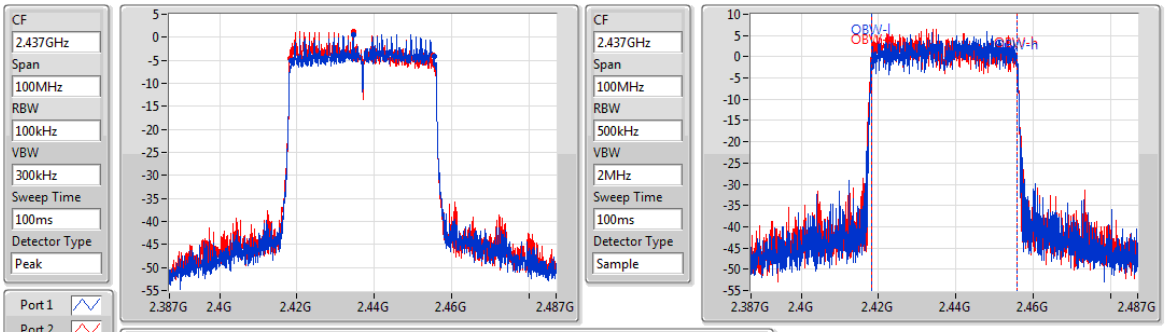


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37M	2.4035G	2.4405G	37.481M	2.403259G	2.440741G	500k	1
35.15M	2.4044G	2.43955G	37.431M	2.403259G	2.440691G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2437MHz

25/01/2019

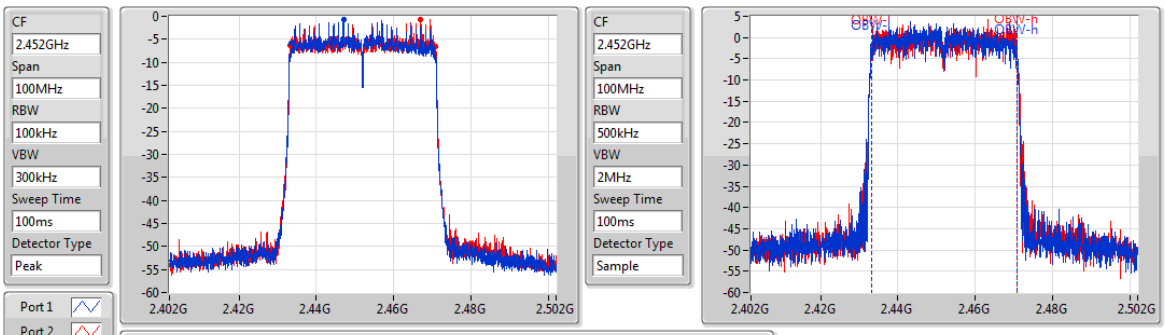


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	2.4186G	2.45545G	37.531M	2.418209G	2.455741G	500k	1
37.25M	2.4181G	2.45535G	37.531M	2.418159G	2.455691G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2452MHz

25/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.5M	2.43355G	2.47005G	37.581M	2.433109G	2.470691G	500k	1
37.55M	2.43325G	2.4708G	37.581M	2.433209G	2.470791G	500k	2

For Non-beamforming / 4T1S mode
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)_4TX	7.525M	13.193M	13M2G1D	6.525M	11.244M
802.11g_Nss1,(6Mbps)_4TX	16.375M	16.667M	16M7D1D	16.275M	16.517M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.025M	18.991M	19M0D1D	18.7M	18.916M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.65M	37.631M	37M6D1D	35.75M	37.381M

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

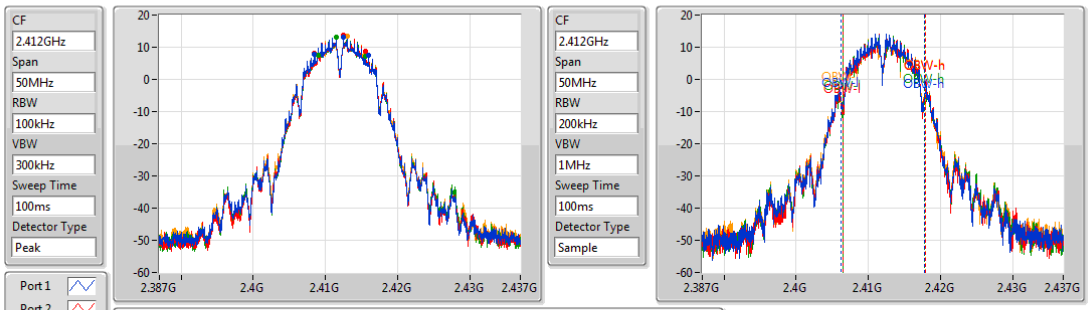
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.5M	11.444M	7M	11.344M	6.575M	11.244M	7M	11.769M
2437MHz	Pass	500k	7.05M	12.819M	6.575M	12.644M	7.025M	12.969M	7.525M	13.193M
2462MHz	Pass	500k	7.05M	11.519M	7.5M	11.619M	7.525M	11.319M	6.525M	11.944M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.517M	16.325M	16.542M	16.325M	16.517M	16.325M	16.567M
2437MHz	Pass	500k	16.325M	16.642M	16.3M	16.667M	16.325M	16.592M	16.325M	16.617M
2462MHz	Pass	500k	16.325M	16.542M	16.3M	16.592M	16.275M	16.542M	16.375M	16.542M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	19M	18.991M	18.775M	18.941M	18.7M	18.941M	18.95M	18.991M
2437MHz	Pass	500k	18.925M	18.966M	18.825M	18.966M	18.975M	18.966M	19.025M	18.991M
2462MHz	Pass	500k	18.975M	18.941M	18.95M	18.966M	18.975M	18.916M	19M	18.966M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.45M	37.531M	36.4M	37.431M	35.75M	37.381M	36.55M	37.431M
2437MHz	Pass	500k	37.25M	37.481M	37.3M	37.631M	37.15M	37.531M	37.15M	37.431M
2452MHz	Pass	500k	36.9M	37.481M	37.4M	37.631M	37.65M	37.631M	37.35M	37.631M

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

802.11b_Nss1,(1Mbps)_4TX **EBW**

2412MHz

25/01/2019

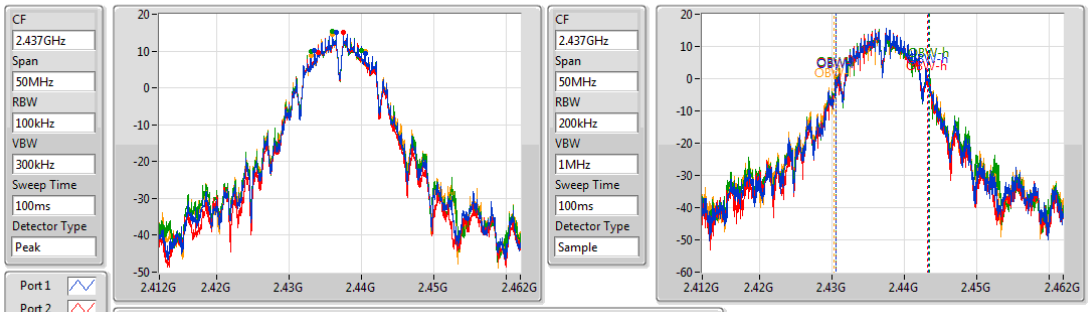


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.5M	2.408475G	2.415975G	11.444M	2.406278G	2.417722G	500k	1
7M	2.4085G	2.4155G	11.344M	2.406553G	2.417897G	500k	2
6.575M	2.40895G	2.415525G	11.244M	2.406553G	2.417797G	500k	3
7M	2.40845G	2.41545G	11.769M	2.406153G	2.417922G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2437MHz

25/01/2019

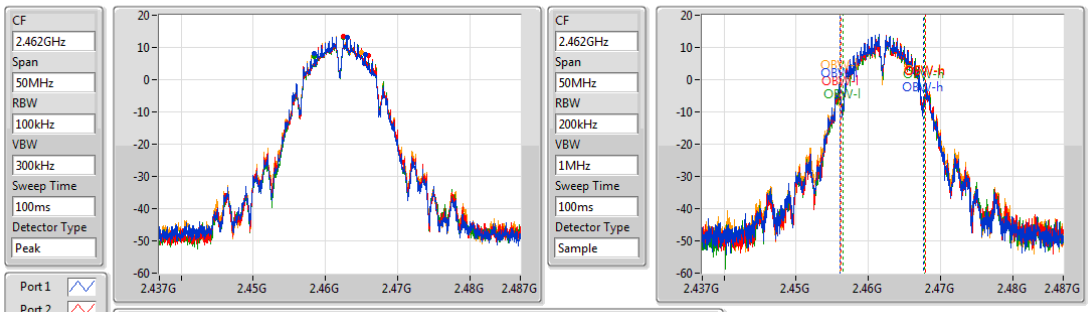


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.433475G	2.440525G	12.819M	2.430578G	2.443397G	500k	1
6.575M	2.43395G	2.440525G	12.644M	2.430578G	2.443222G	500k	2
7.025M	2.433G	2.440025G	12.969M	2.430503G	2.443472G	500k	3
7.525M	2.432975G	2.4405G	13.193M	2.430303G	2.443497G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2462MHz

25/01/2019

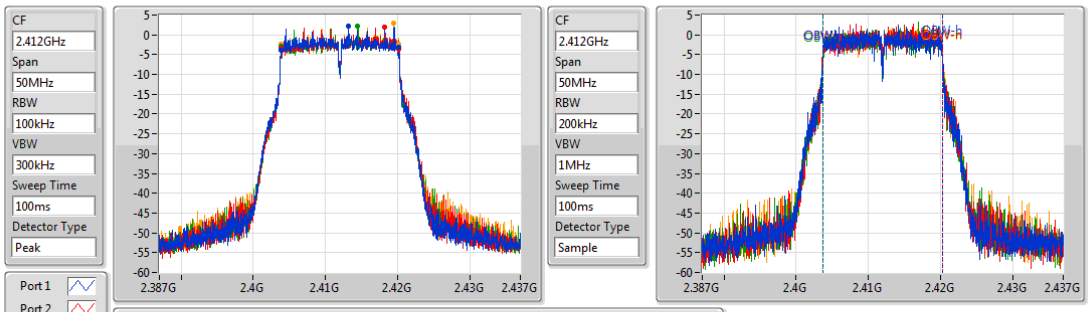


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.458475G	2.465525G	11.519M	2.456103G	2.467622G	500k	1
7.5M	2.4585G	2.466G	11.619M	2.456253G	2.467872G	500k	2
7.525M	2.458475G	2.466G	11.319M	2.456503G	2.467822G	500k	3
6.525M	2.4585G	2.465025G	11.944M	2.456028G	2.467972G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2412MHz

25/01/2019

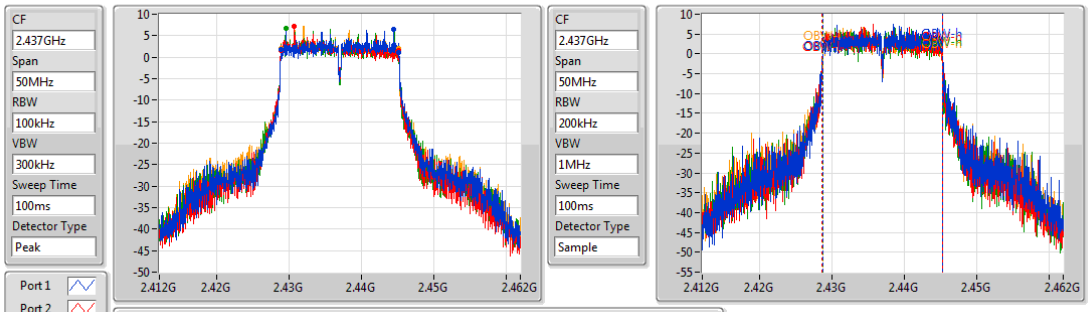


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.403825G	2.42015G	16.517M	2.403729G	2.420246G	500k	1
16.325M	2.40385G	2.420175G	16.542M	2.403754G	2.420296G	500k	2
16.325M	2.40385G	2.420175G	16.517M	2.403754G	2.420271G	500k	3
16.325M	2.40385G	2.420175G	16.567M	2.403704G	2.420271G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2437MHz

25/01/2019

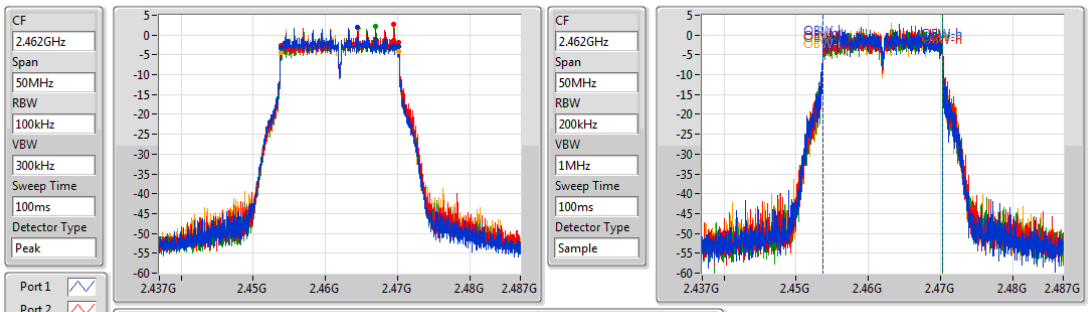


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	16.642M	2.428679G	2.445321G	500k	1
16.3M	2.428825G	2.445125G	16.667M	2.428604G	2.445271G	500k	2
16.325M	2.428825G	2.44515G	16.592M	2.428654G	2.445246G	500k	3
16.325M	2.428825G	2.44515G	16.617M	2.428654G	2.445271G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2462MHz

25/01/2019

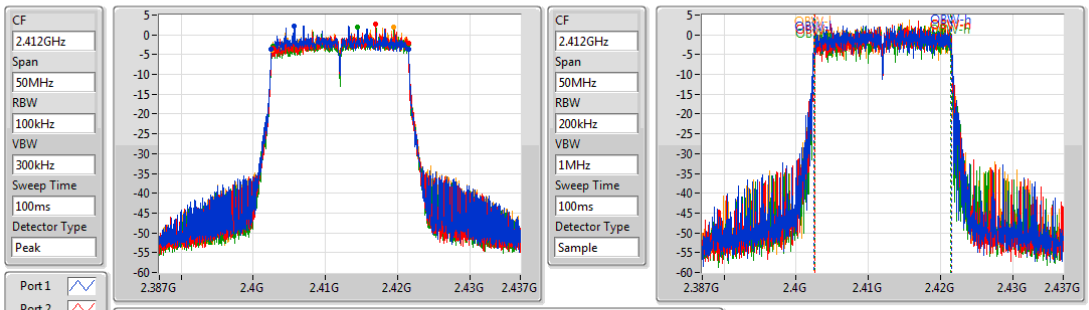


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.542M	2.453679G	2.470221G	500k	1
16.3M	2.45385G	2.47015G	16.592M	2.453754G	2.470346G	500k	2
16.275M	2.453875G	2.47015G	16.542M	2.453754G	2.470296G	500k	3
16.375M	2.4538G	2.470175G	16.542M	2.453704G	2.470246G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2412MHz

25/01/2019

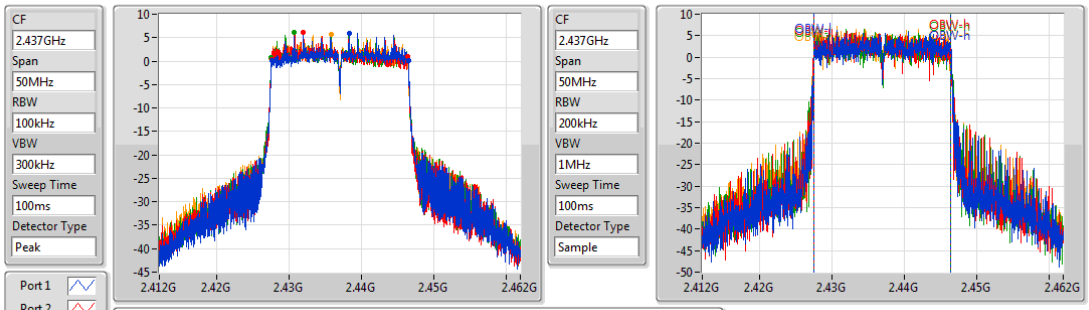


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4025G	2.4215G	18.991M	2.402505G	2.421495G	500k	1
18.775M	2.402725G	2.4215G	18.941M	2.402555G	2.421495G	500k	2
18.7M	2.402775G	2.421475G	18.941M	2.40253G	2.42147G	500k	3
18.95M	2.40255G	2.4215G	18.991M	2.402505G	2.421495G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2437MHz

25/01/2019

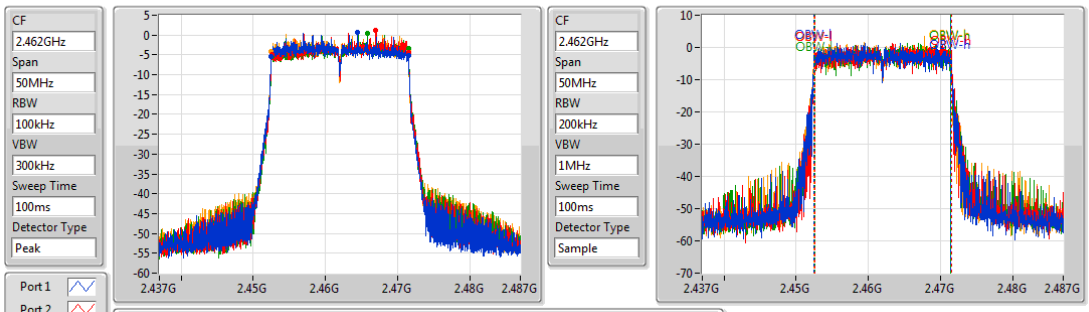


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.925M	2.427575G	2.4465G	18.966M	2.427505G	2.44647G	500k	1
18.825M	2.42755G	2.446375G	18.966M	2.42748G	2.446445G	500k	2
18.975M	2.4275G	2.446475G	18.966M	2.42748G	2.446445G	500k	3
19.025M	2.427475G	2.4465G	18.991M	2.42748G	2.44647G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2462MHz

25/01/2019

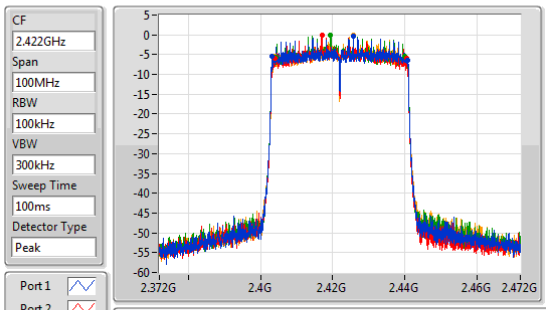


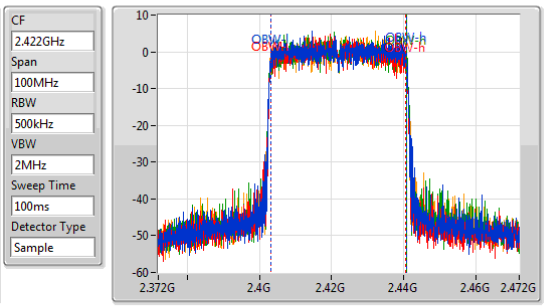
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4525G	2.471475G	18.941M	2.452505G	2.471445G	500k	1
18.95M	2.452575G	2.471525G	18.966M	2.45253G	2.471495G	500k	2
18.975M	2.45255G	2.471525G	18.916M	2.452555G	2.47147G	500k	3
19M	2.4525G	2.4715G	18.966M	2.45248G	2.471445G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2422MHz

25/01/2019



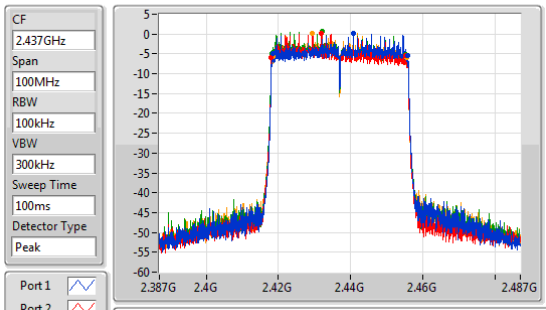


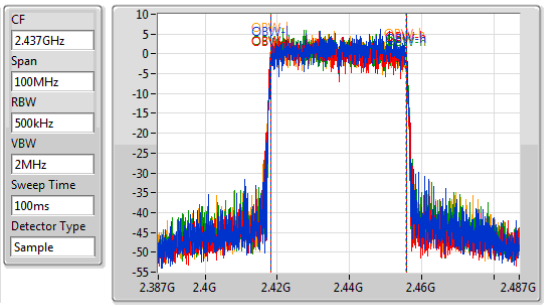
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	2.40325G	2.4407G	37.531M	2.403209G	2.440741G	500k	1
36.4M	2.4041G	2.4405G	37.431M	2.403209G	2.440641G	500k	2
35.75M	2.40435G	2.4401G	37.381M	2.403309G	2.440691G	500k	3
36.55M	2.404G	2.44055G	37.431M	2.403309G	2.440741G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2437MHz

25/01/2019



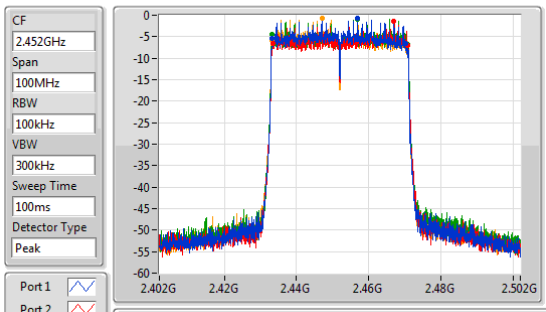


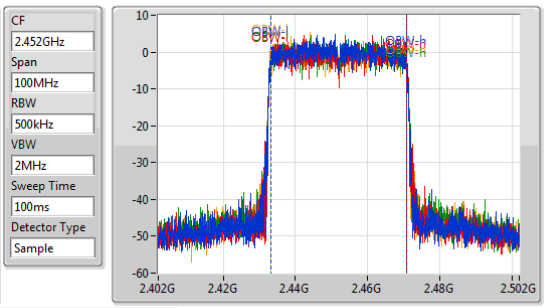
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.25M	2.4185G	2.45575G	37.481M	2.418259G	2.455741G	500k	1
37.3M	2.41805G	2.45535G	37.631M	2.418109G	2.455741G	500k	2
37.15M	2.4182G	2.45535G	37.531M	2.418159G	2.455691G	500k	3
37.15M	2.4184G	2.45555G	37.431M	2.418159G	2.455591G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2452MHz

25/01/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.9M	2.43325G	2.47015G	37.481M	2.433209G	2.470691G	500k	1
37.4M	2.4334G	2.4708G	37.631M	2.433159G	2.470791G	500k	2
37.65M	2.43325G	2.4709G	37.631M	2.433159G	2.470791G	500k	3
37.35M	2.4332G	2.47055G	37.631M	2.433059G	2.470691G	500k	4

For Beamforming / 4T1S mode
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)_4TX	19.075M	19.14M	19M1D1D	18.575M	18.916M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.7M	37.681M	37M7D1D	35.1M	37.381M

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

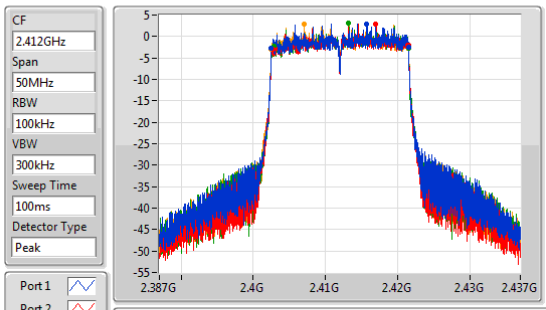
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	19.025M	18.941M	18.8M	18.916M	18.575M	18.991M	19.05M	18.966M
2437MHz	Pass	500k	18.85M	19.14M	18.95M	19.09M	18.65M	19.09M	18.9M	19.09M
2462MHz	Pass	500k	19.025M	18.966M	18.725M	18.966M	19.075M	18.941M	18.925M	18.941M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.55M	37.531M	36.05M	37.431M	35.1M	37.381M	37.2M	37.581M
2437MHz	Pass	500k	36.5M	37.531M	37.4M	37.631M	37.35M	37.631M	37.55M	37.531M
2452MHz	Pass	500k	37.7M	37.581M	37.45M	37.681M	37.55M	37.581M	36.65M	37.531M

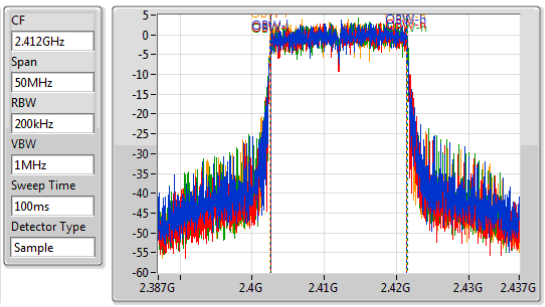
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX — EBW

2412MHz

26/01/2019



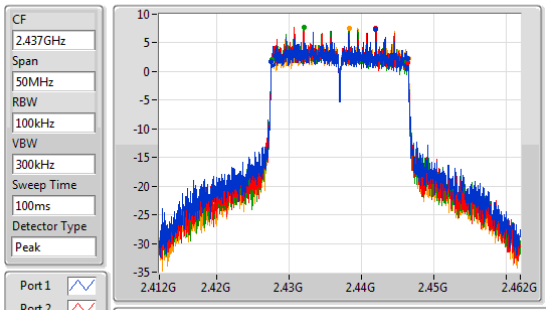


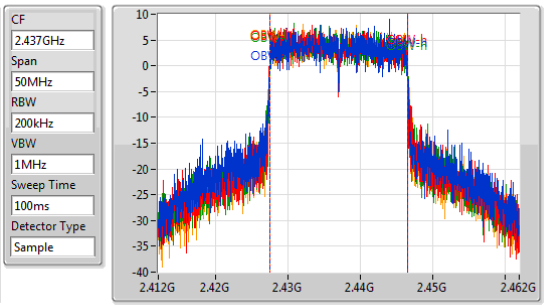
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.025M	2.402525G	2.42155G	18.941M	2.40253G	2.42147G	500k	1
18.8M	2.4027G	2.4215G	18.916M	2.402555G	2.42147G	500k	2
18.575M	2.402925G	2.4215G	18.991M	2.40253G	2.42152G	500k	3
19.05M	2.402475G	2.421525G	18.966M	2.402505G	2.42147G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX — EBW

2437MHz

26/01/2019



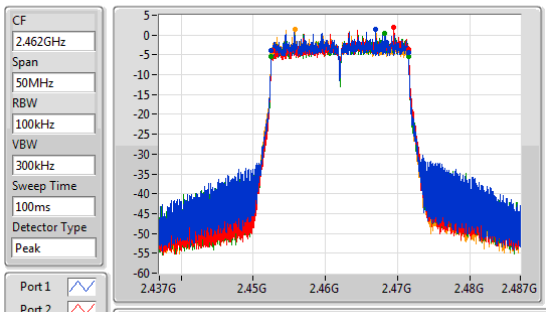


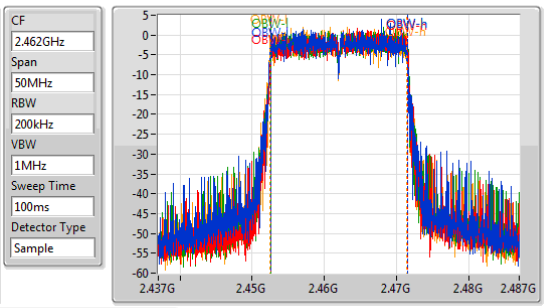
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.85M	2.427525G	2.446375G	19.14M	2.427405G	2.446545G	500k	1
18.95M	2.4275G	2.44645G	19.09M	2.42743G	2.44652G	500k	2
18.65M	2.42755G	2.4462G	19.09M	2.427455G	2.446545G	500k	3
18.9M	2.427575G	2.446475G	19.09M	2.427455G	2.446545G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX — EBW

2462MHz

26/01/2019



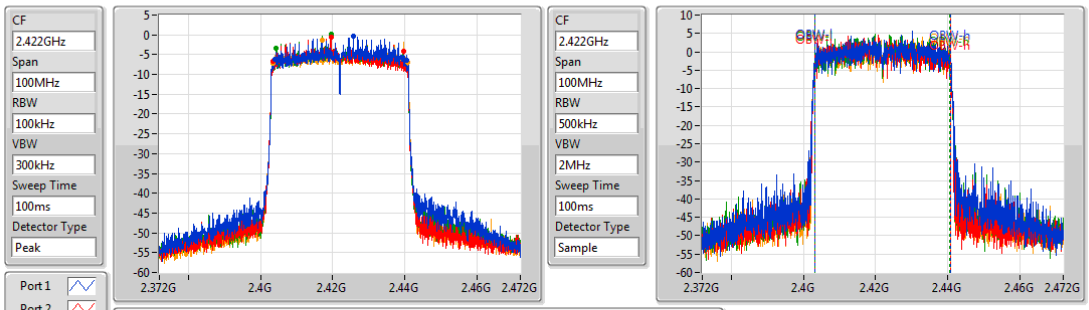


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.025M	2.4525G	2.471525G	18.966M	2.45253G	2.471495G	500k	1
18.725M	2.452775G	2.4715G	18.966M	2.452555G	2.47152G	500k	2
19.075M	2.4525G	2.471575G	18.941M	2.452555G	2.471495G	500k	3
18.925M	2.45255G	2.471475G	18.941M	2.452505G	2.471445G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2422MHz

26/01/2019

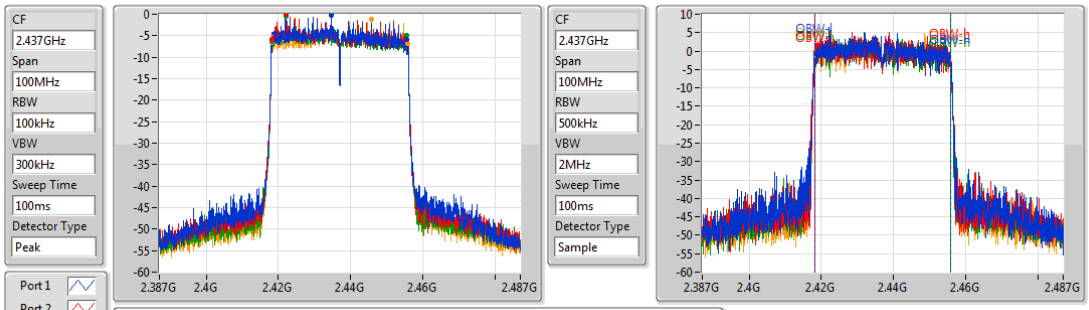


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.55M	2.404G	2.44055G	37.531M	2.403209G	2.440741G	500k	1
36.05M	2.4035G	2.43955G	37.431M	2.403259G	2.440691G	500k	2
35.1M	2.40445G	2.43955G	37.381M	2.403259G	2.440641G	500k	3
37.2M	2.4036G	2.4408G	37.581M	2.403209G	2.440791G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2437MHz

26/01/2019

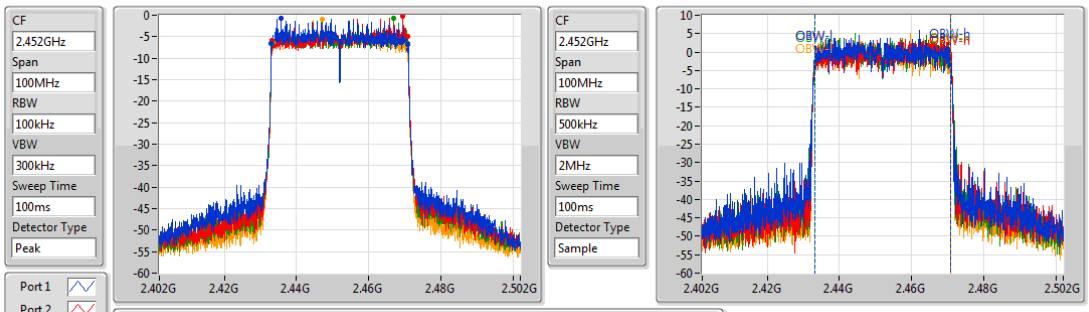


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.5M	2.419G	2.4555G	37.531M	2.418159G	2.455691G	500k	1
37.4M	2.4181G	2.4555G	37.631M	2.418109G	2.455741G	500k	2
37.35M	2.4181G	2.45545G	37.631M	2.418109G	2.455741G	500k	3
37.55M	2.41825G	2.4558G	37.531M	2.418209G	2.455741G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2452MHz

26/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.7M	2.43305G	2.47075G	37.581M	2.433159G	2.470741G	500k	1
37.45M	2.4333G	2.47075G	37.681M	2.433209G	2.470891G	500k	2
37.55M	2.43325G	2.4708G	37.581M	2.433209G	2.470791G	500k	3
36.65M	2.4335G	2.47015G	37.531M	2.433209G	2.470741G	500k	4

For Non-beamforming / 4T4S mode
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_Nss4,(MCS0)_4TX	19.075M	19.015M	19M0D1D	18.125M	18.891M
802.11ax HEW40_Nss4,(MCS0)_4TX	37.85M	37.731M	37M7D1D	35.65M	37.281M

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

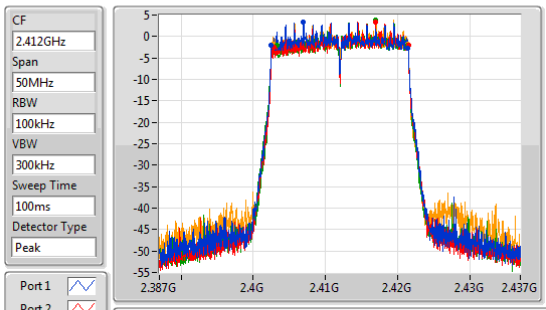
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	18.966M	18.575M	18.916M	18.125M	18.891M	18.725M	18.916M
2437MHz	Pass	500k	18.8M	18.916M	18.6M	19.015M	18.875M	18.991M	19.075M	18.941M
2462MHz	Pass	500k	18.875M	18.941M	18.95M	18.991M	18.85M	18.916M	19M	18.916M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.85M	37.581M	35.7M	37.431M	35.65M	37.281M	36.7M	37.481M
2437MHz	Pass	500k	37.1M	37.481M	36.65M	37.681M	36.75M	37.581M	37.1M	37.531M
2452MHz	Pass	500k	36.85M	37.481M	37.55M	37.731M	37.85M	37.581M	37.65M	37.631M

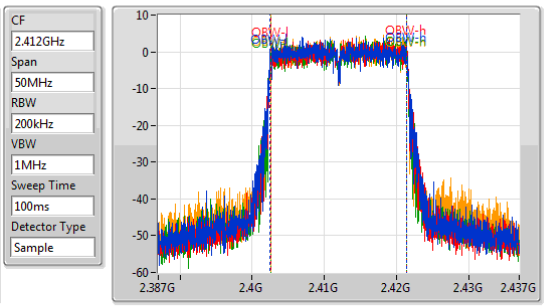
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2412MHz

25/01/2019



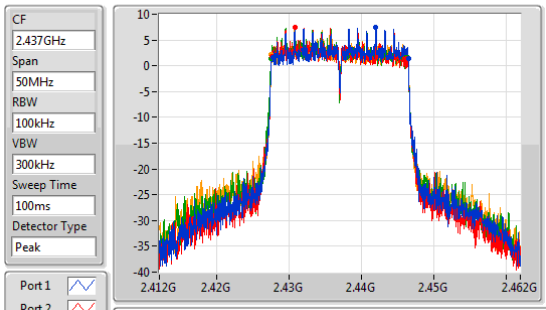


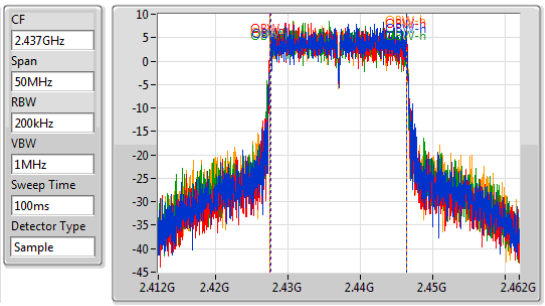
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.925M	2.402525G	2.42145G	18.966M	2.402505G	2.42147G	500k	1
18.575M	2.402925G	2.4215G	18.916M	2.402555G	2.42147G	500k	2
18.125M	2.40325G	2.421375G	18.891M	2.402555G	2.421445G	500k	3
18.725M	2.4027G	2.421425G	18.916M	2.402555G	2.42147G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2437MHz

25/01/2019



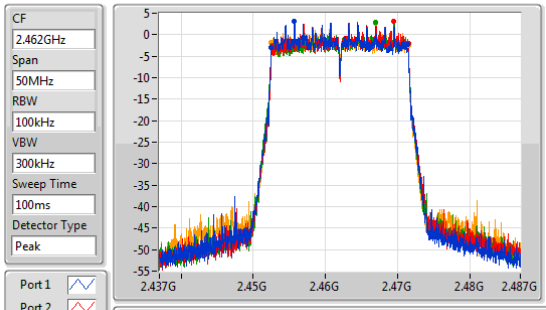


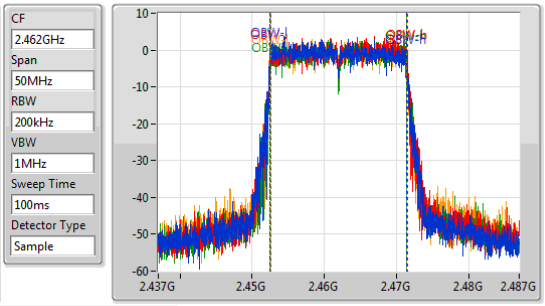
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.8M	2.427675G	2.446475G	18.916M	2.42753G	2.446445G	500k	1
18.6M	2.4276G	2.4462G	19.015M	2.427455G	2.44647G	500k	2
18.875M	2.427475G	2.44635G	18.991M	2.42748G	2.44647G	500k	3
19.075M	2.42745G	2.446525G	18.941M	2.427505G	2.446445G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2462MHz

25/01/2019



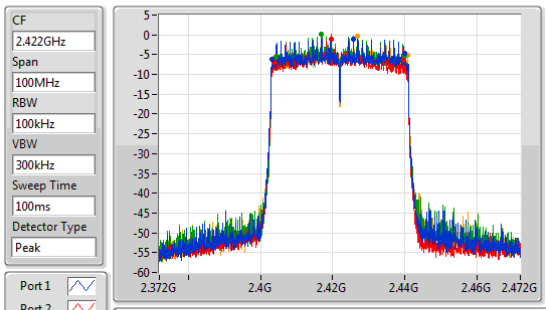


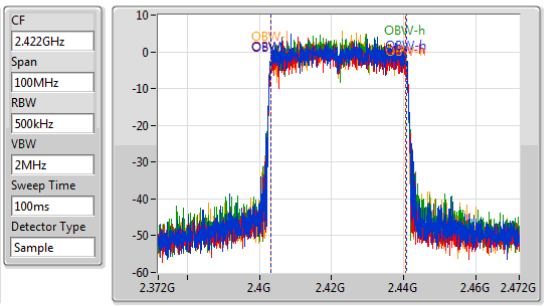
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.4525G	2.471375G	18.941M	2.452505G	2.471445G	500k	1
18.95M	2.452575G	2.471525G	18.991M	2.452505G	2.471495G	500k	2
18.85M	2.4526G	2.47145G	18.916M	2.452555G	2.47147G	500k	3
19M	2.452475G	2.471475G	18.916M	2.45253G	2.471445G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX EBW

2422MHz

25/01/2019



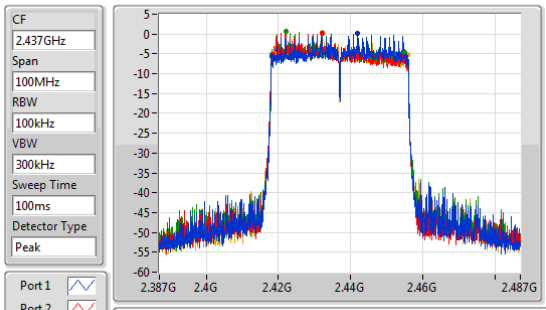


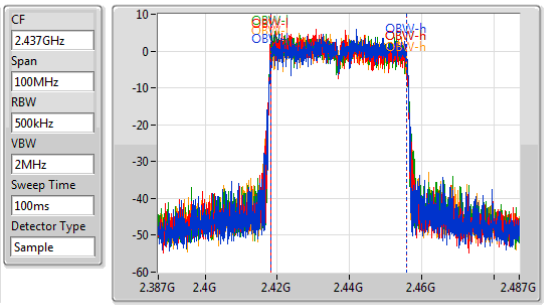
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	2.40325G	2.4401G	37.581M	2.403209G	2.440791G	500k	1
35.7M	2.40385G	2.43955G	37.431M	2.403209G	2.440641G	500k	2
35.65M	2.4042G	2.43985G	37.281M	2.403309G	2.440591G	500k	3
36.7M	2.40405G	2.44075G	37.481M	2.403259G	2.440741G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX EBW

2437MHz

25/01/2019



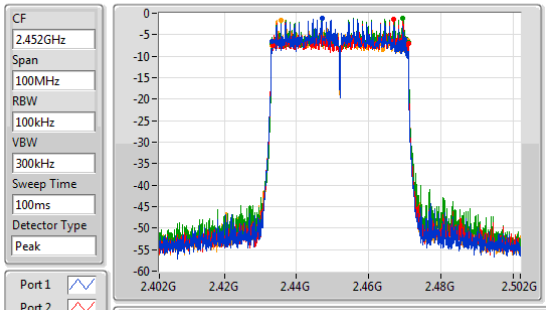


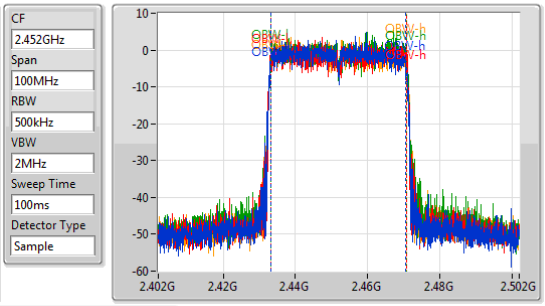
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.1M	2.41825G	2.45535G	37.481M	2.418309G	2.455791G	500k	1
36.65M	2.41835G	2.455G	37.681M	2.418059G	2.455741G	500k	2
36.75M	2.4181G	2.45485G	37.581M	2.418159G	2.455741G	500k	3
37.1M	2.41865G	2.45575G	37.531M	2.418159G	2.455691G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX EBW

2452MHz

25/01/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	2.43325G	2.4701G	37.481M	2.433159G	2.470641G	500k	1
37.55M	2.4334G	2.47095G	37.731M	2.433109G	2.470841G	500k	2
37.85M	2.4331G	2.47095G	37.581M	2.433209G	2.470791G	500k	3
37.65M	2.4331G	2.47075G	37.631M	2.433159G	2.470791G	500k	4

For Mode 2: (Ant. 7 Omni antenna / 4 dBi)
For Non-beamforming / 1T1S mode
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	8.975M	15.517M	15M5G1D	6.575M	11.919M
802.11g_Nss1,(6Mbps)_1TX	16.35M	21.564M	21M6D1D	16.325M	16.542M
802.11ax HEW20_Nss1,(MCS0)_1TX	19M	19.74M	19M7D1D	18.875M	18.941M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.5M	37.581M	37M6D1D	36.95M	37.481M

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

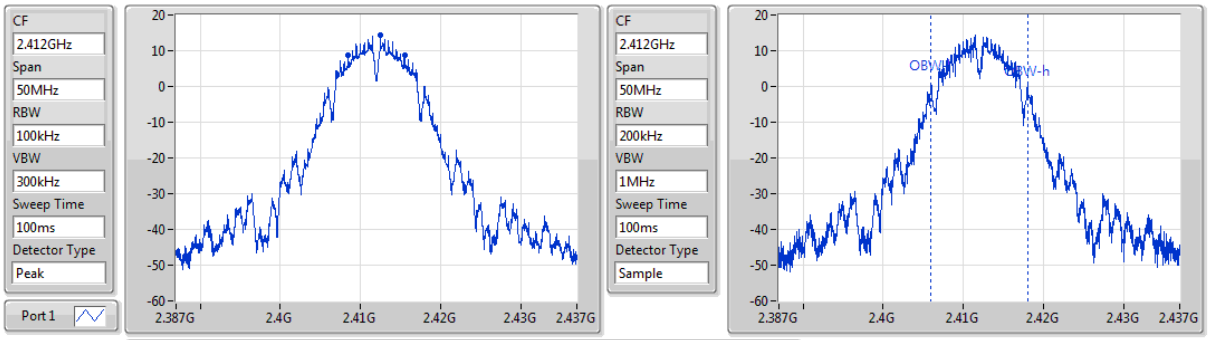
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.025M	12.169M
2437MHz	Pass	500k	8.975M	15.517M
2462MHz	Pass	500k	6.575M	11.919M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.35M	16.567M
2437MHz	Pass	500k	16.325M	21.564M
2462MHz	Pass	500k	16.35M	16.542M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.95M	18.966M
2437MHz	Pass	500k	18.875M	19.74M
2462MHz	Pass	500k	19M	18.941M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.5M	37.581M
2437MHz	Pass	500k	37.5M	37.581M
2452MHz	Pass	500k	36.95M	37.481M

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

802.11b_Nss1,(1Mbps)_1TX — EBW

2412MHz

31/01/2019

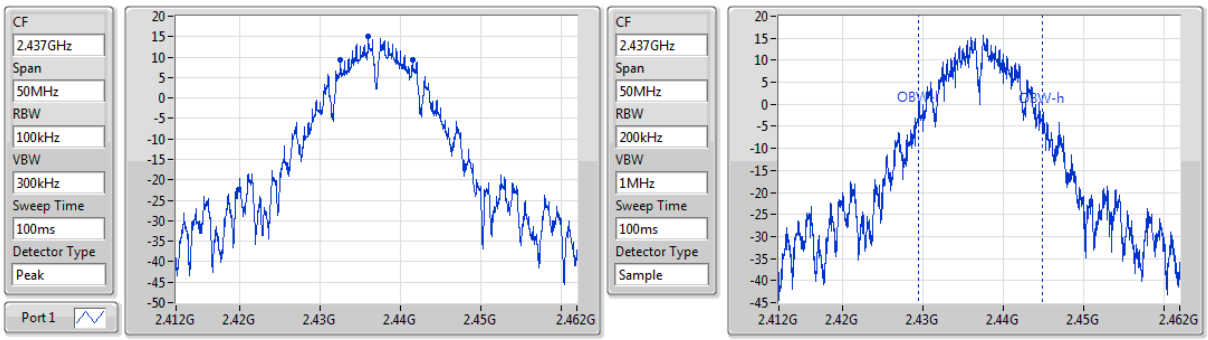


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.025M	2.408475G	2.4155G	12.169M	2.405903G	2.418072G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2437MHz

31/01/2019

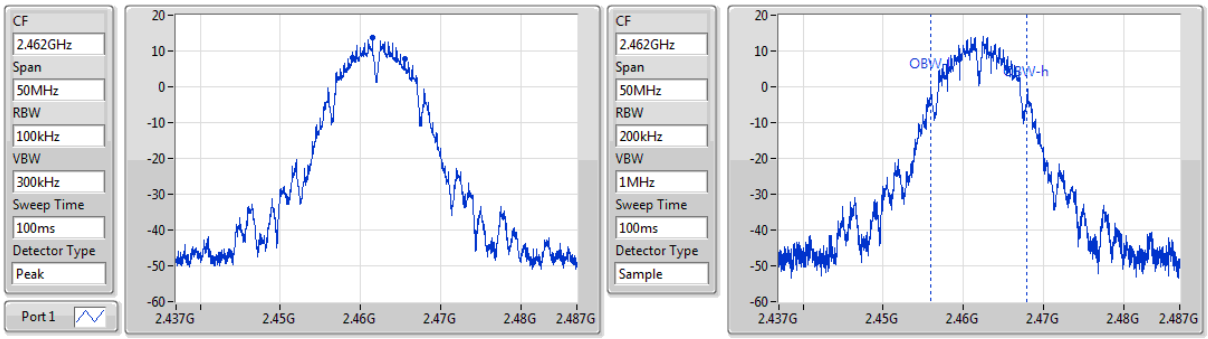


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.975M	2.4325G	2.441475G	15.517M	2.429354G	2.444871G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2462MHz

31/01/2019

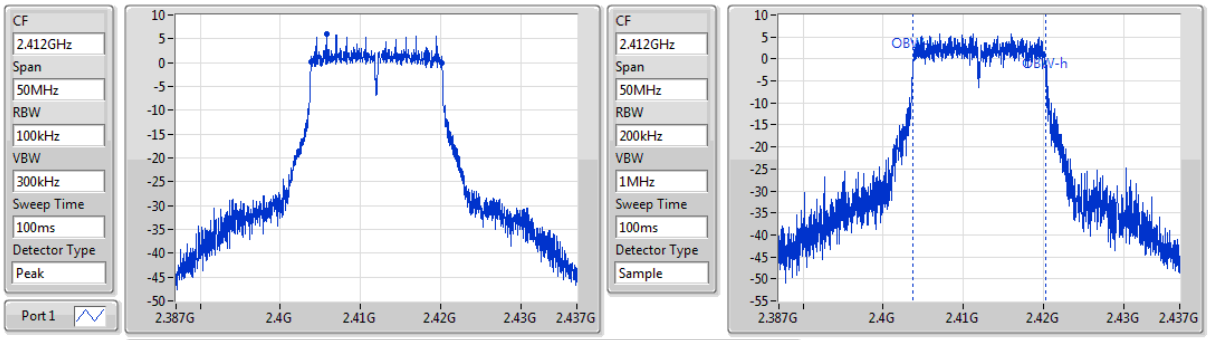


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.575M	2.45895G	2.465525G	11.919M	2.455978G	2.467897G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2412MHz

31/01/2019

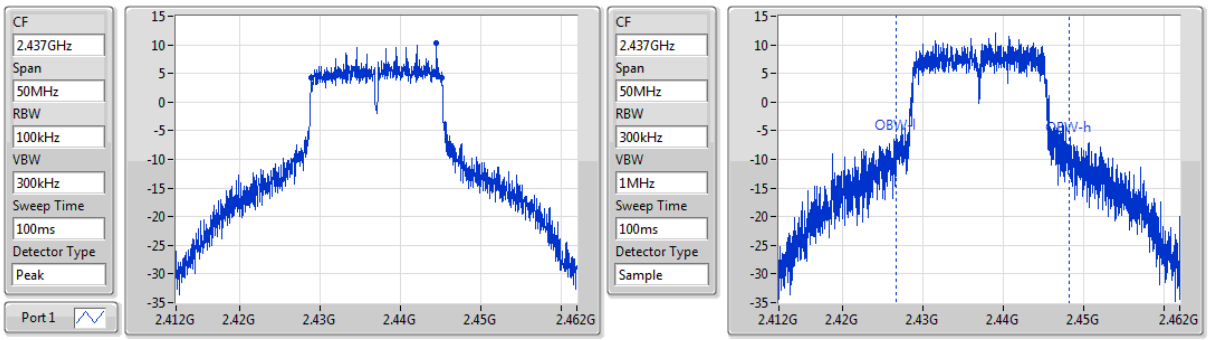


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.567M	2.403729G	2.420296G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2437MHz

31/01/2019

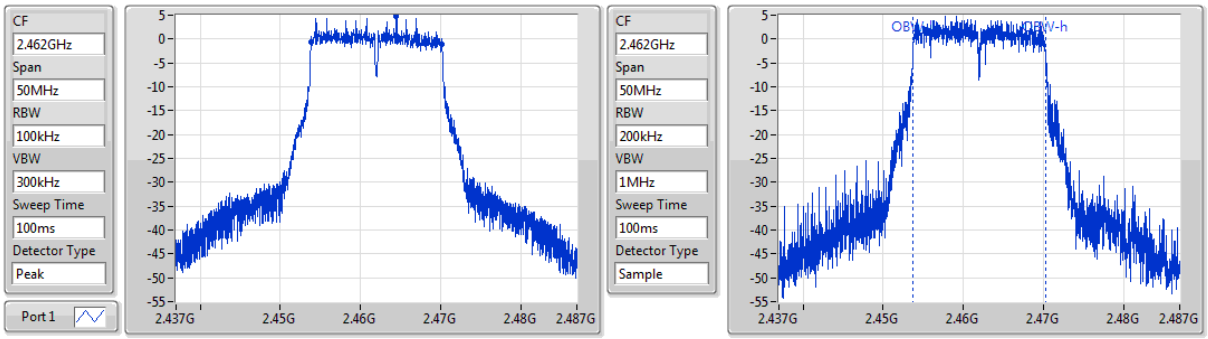


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	21.564M	2.42663G	2.448194G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2462MHz

31/01/2019

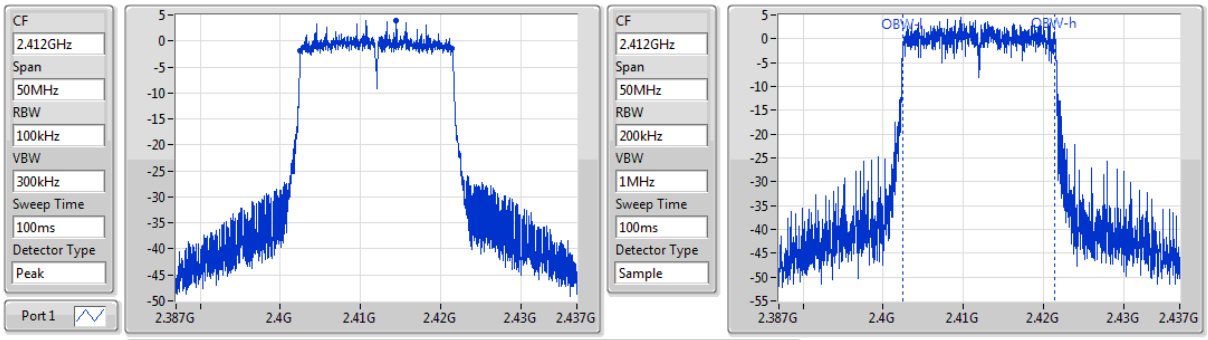


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.453825G	2.470175G	16.542M	2.453729G	2.470271G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2412MHz

31/01/2019

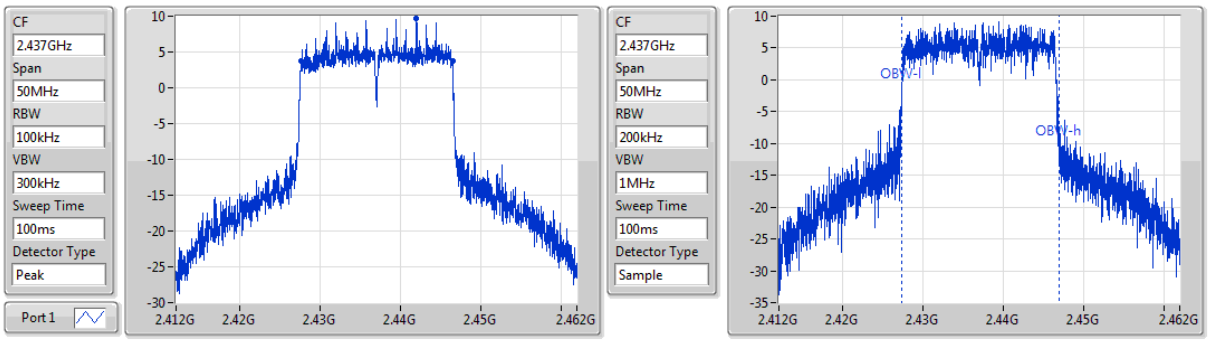


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4025G	2.42145G	18.966M	2.402505G	2.42147G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2437MHz

31/01/2019

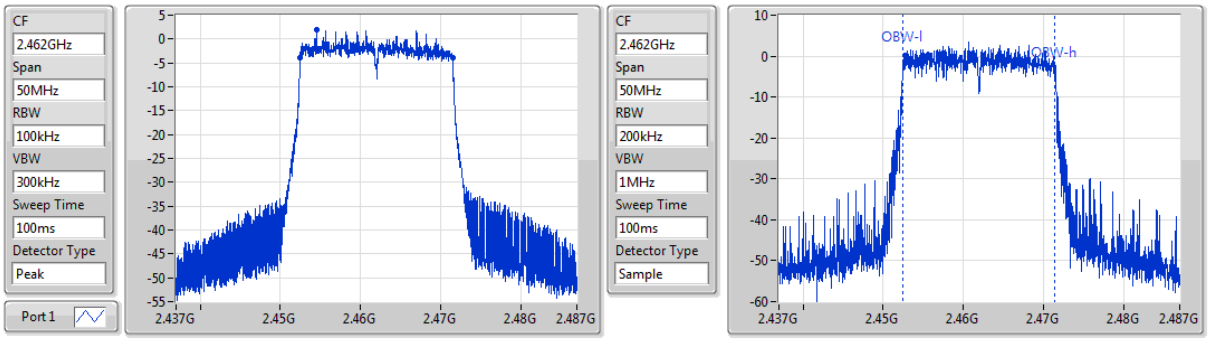


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.427625G	2.4465G	19.74M	2.42728G	2.44702G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2462MHz

31/01/2019

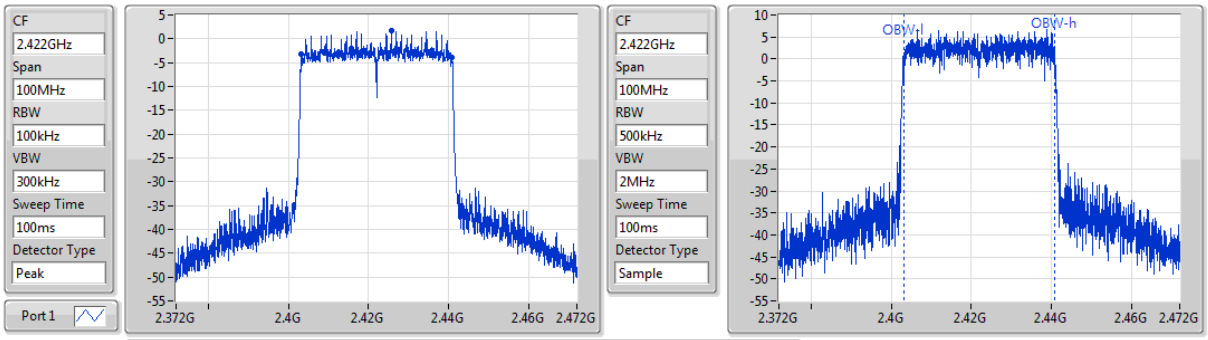


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4525G	2.4715G	18.941M	2.452505G	2.471445G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2422MHz

31/01/2019

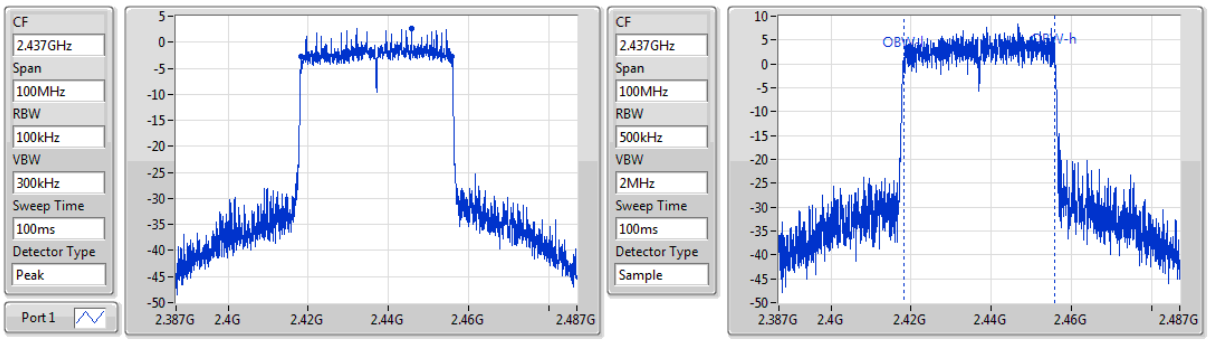


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.40325G	2.44075G	37.581M	2.403159G	2.440741G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2437MHz

31/01/2019

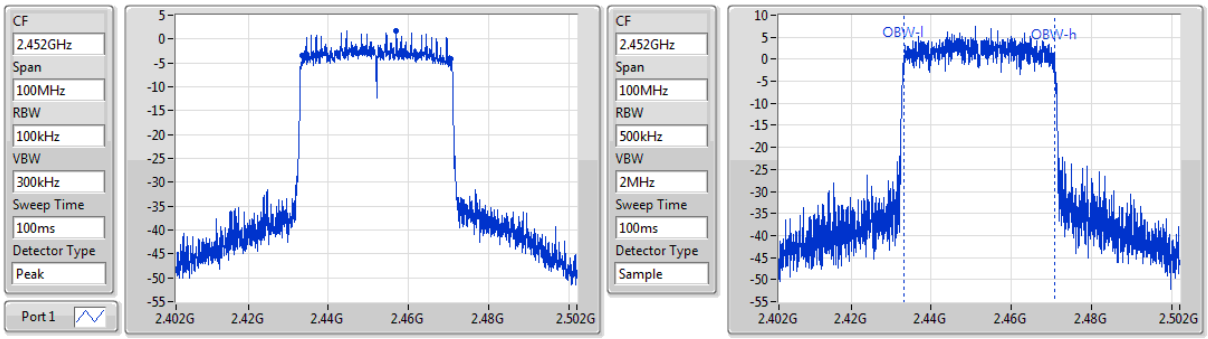


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.4183G	2.4558G	37.581M	2.418209G	2.455791G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2452MHz

31/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.95M	2.4335G	2.47045G	37.481M	2.433209G	2.470691G	500k	1

For Non-beamforming / 2T2S mode
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_Nss2,(MCS0)_2TX	18.975M	19.115M	19M1D1D	18.225M	18.866M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.6M	37.581M	37M6D1D	36.35M	37.281M

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

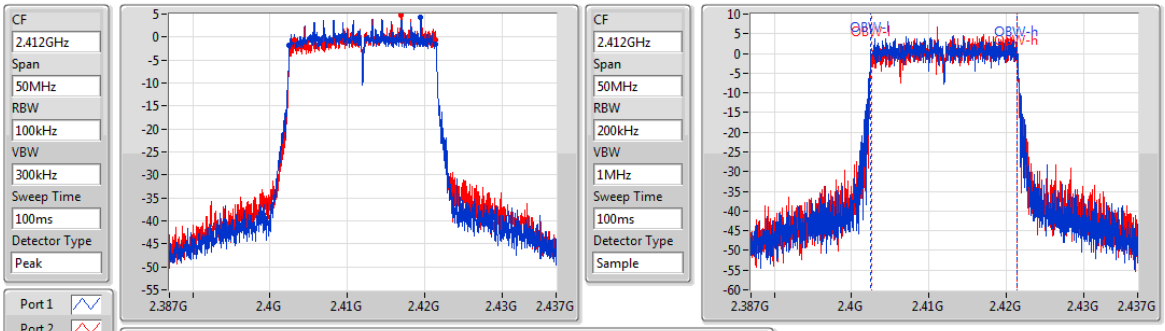
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	18.966M	18.225M	18.866M
2437MHz	Pass	500k	18.9M	19.115M	18.825M	19.115M
2462MHz	Pass	500k	18.975M	18.941M	18.45M	18.966M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.4M	37.531M	36.35M	37.281M
2437MHz	Pass	500k	37.6M	37.531M	36.7M	37.581M
2452MHz	Pass	500k	37.25M	37.581M	37.45M	37.581M

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

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2412MHz

31/01/2019

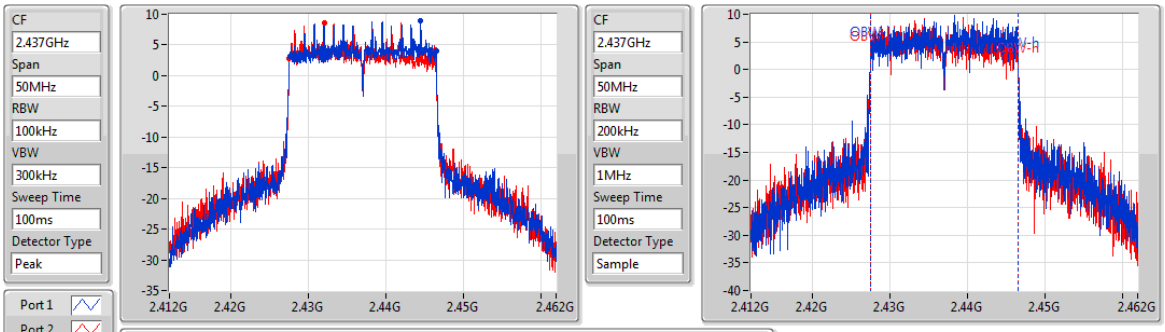


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.925M	2.402525G	2.42145G	18.966M	2.402505G	2.42147G	500k	1
18.225M	2.4032G	2.421425G	18.866M	2.40258G	2.421445G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2437MHz

31/01/2019

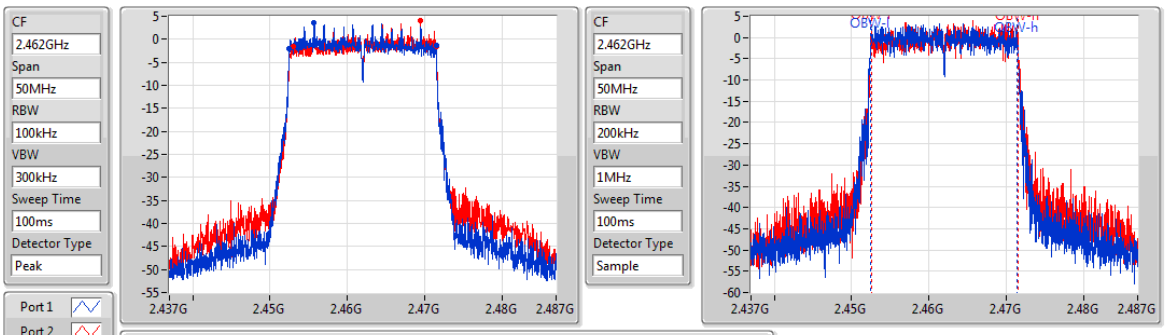


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	2.427575G	2.446475G	19.115M	2.427455G	2.44657G	500k	1
18.825M	2.427525G	2.44635G	19.115M	2.42743G	2.446545G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2462MHz

31/01/2019

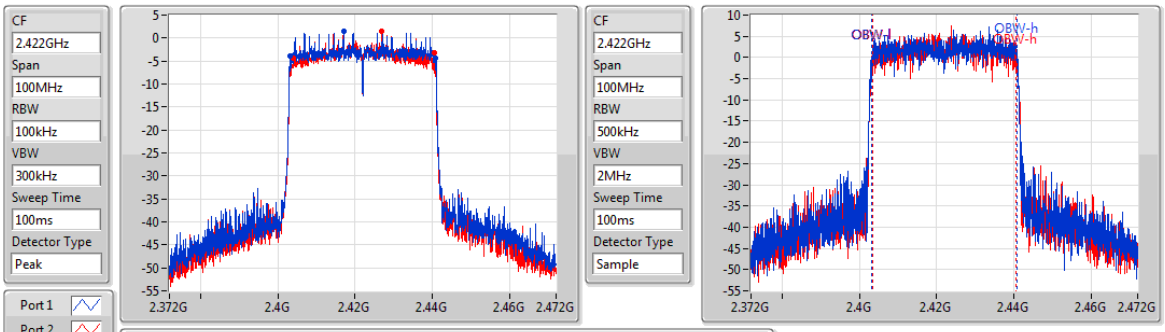


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452525G	2.4715G	18.941M	2.452505G	2.471445G	500k	1
18.45M	2.45305G	2.4715G	18.966M	2.45253G	2.471495G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2422MHz

31/01/2019

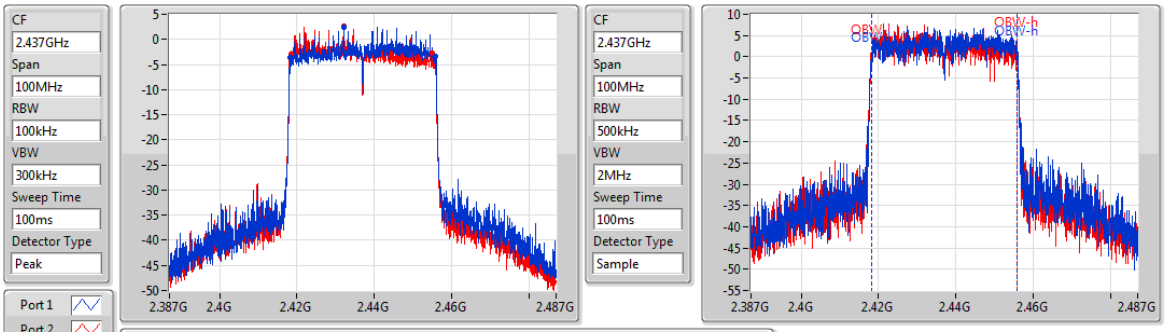


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.4M	2.4033G	2.4407G	37.531M	2.403259G	2.440791G	500k	1
36.35M	2.4041G	2.44045G	37.281M	2.403359G	2.440641G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2437MHz

31/01/2019

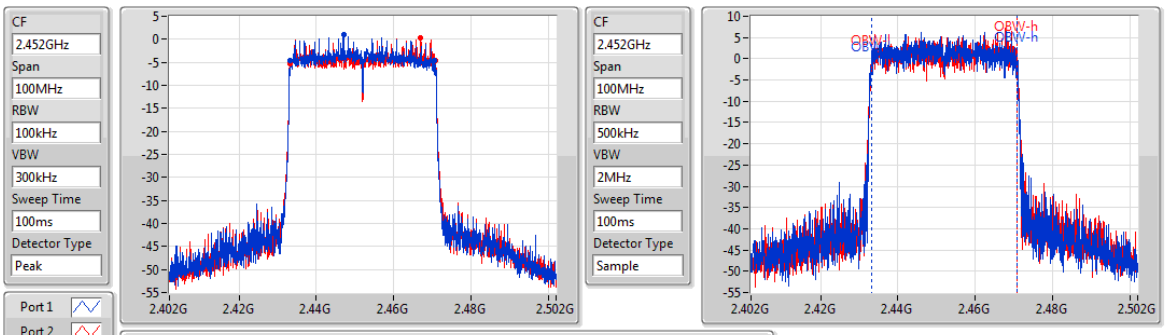


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.6M	2.4182G	2.4558G	37.531M	2.418259G	2.455791G	500k	1
36.7M	2.4184G	2.4551G	37.581M	2.418209G	2.455791G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2452MHz

31/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.25M	2.4332G	2.47045G	37.581M	2.433159G	2.470741G	500k	1
37.45M	2.4333G	2.47075G	37.581M	2.433209G	2.470791G	500k	2

For Non-beamforming / 4T1S mode
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)_4TX	7.525M	13.343M	13M3G1D	6.55M	11.094M
802.11g_Nss1,(6Mbps)_4TX	16.375M	16.867M	16M9D1D	16.1M	16.517M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.05M	19.015M	19M0D1D	18.725M	18.916M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.75M	37.731M	37M7D1D	36.2M	37.381M

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

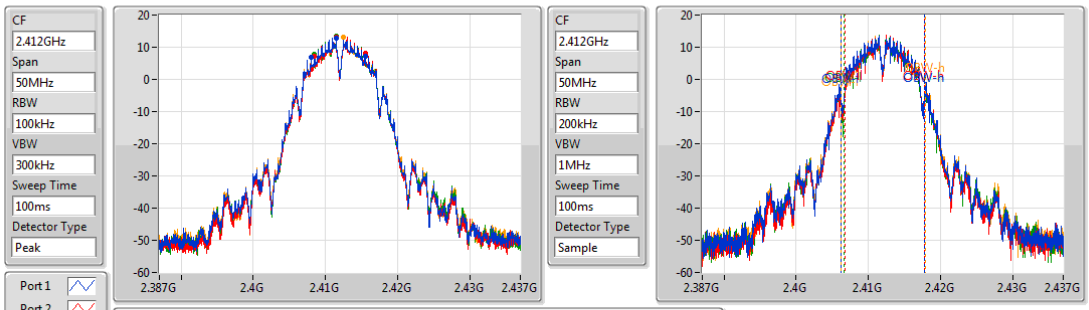
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.5M	11.569M	7.025M	11.119M	7M	11.094M	7.05M	11.694M
2437MHz	Pass	500k	7.05M	12.669M	7.475M	12.694M	7.525M	13.018M	7.025M	13.343M
2462MHz	Pass	500k	6.55M	11.469M	7.05M	11.794M	7.025M	11.769M	7.025M	11.869M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.542M	16.1M	16.567M	16.3M	16.567M	16.325M	16.517M
2437MHz	Pass	500k	16.3M	16.817M	16.3M	16.742M	16.35M	16.867M	16.325M	16.817M
2462MHz	Pass	500k	16.325M	16.567M	16.325M	16.592M	16.35M	16.542M	16.375M	16.592M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	18.966M	18.75M	18.916M	18.75M	18.916M	18.975M	18.966M
2437MHz	Pass	500k	18.725M	18.966M	19.025M	18.966M	19M	19.015M	19M	18.966M
2462MHz	Pass	500k	18.975M	18.966M	18.75M	18.966M	18.75M	18.941M	19.05M	18.941M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.2M	37.481M	36.35M	37.381M	36.2M	37.381M	36.6M	37.481M
2437MHz	Pass	500k	37.55M	37.531M	37.05M	37.581M	36.8M	37.681M	36.5M	37.531M
2452MHz	Pass	500k	37M	37.531M	37.75M	37.731M	37.5M	37.631M	37.55M	37.631M

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

802.11b_Nss1,(1Mbps)_4TX **EBW**

2412MHz

31/01/2019

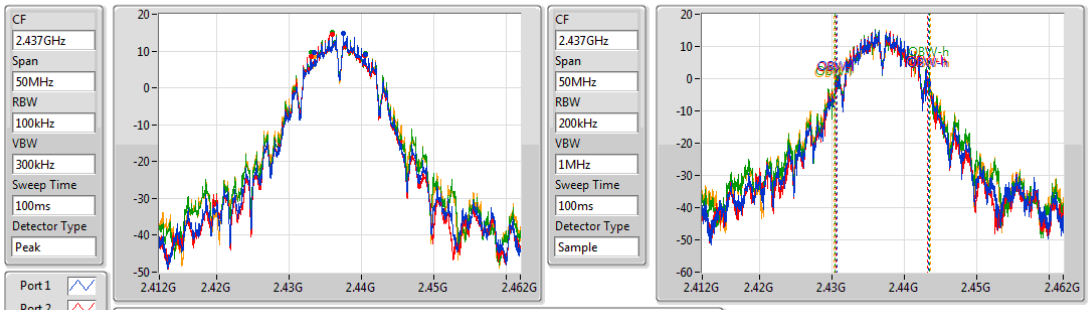


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.5M	2.408025G	2.415525G	11.569M	2.406228G	2.417797G	500k	1
7.025M	2.4085G	2.415525G	11.119M	2.406728G	2.417847G	500k	2
7M	2.4085G	2.4155G	11.094M	2.406678G	2.417772G	500k	3
7.05M	2.408475G	2.415525G	11.694M	2.406203G	2.417897G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2437MHz

31/01/2019

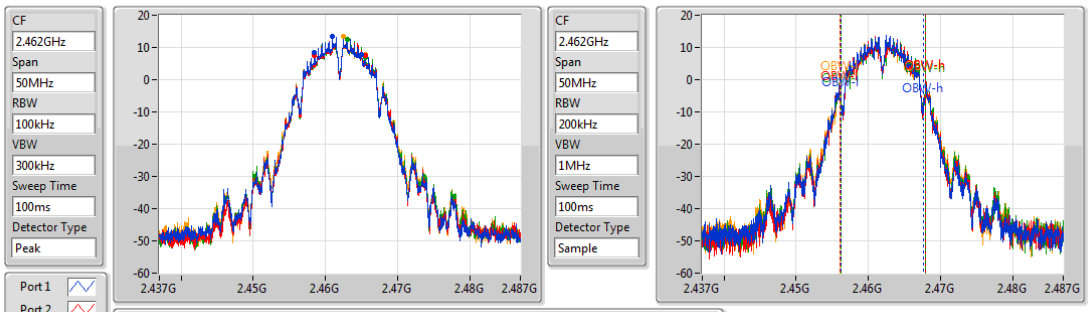


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.433475G	2.440525G	12.669M	2.430653G	2.443322G	500k	1
7.475M	2.433G	2.440475G	12.694M	2.430553G	2.443247G	500k	2
7.525M	2.433G	2.440525G	13.018M	2.430453G	2.443472G	500k	3
7.025M	2.433475G	2.4405G	13.343M	2.430228G	2.443572G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2462MHz

31/01/2019

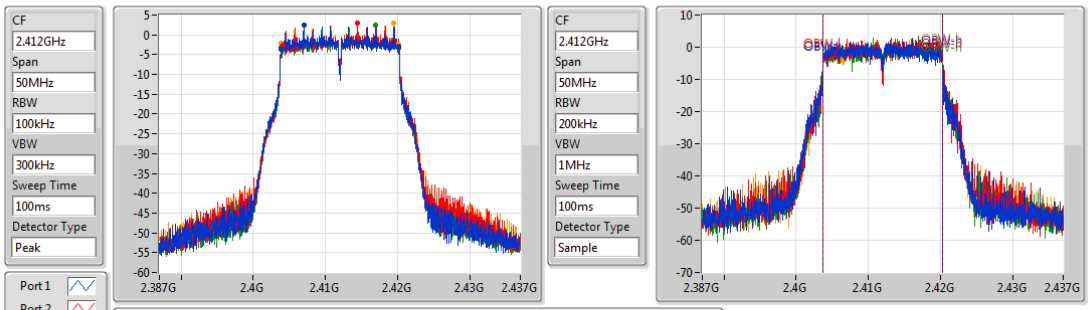


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.55M	2.458475G	2.465025G	11.469M	2.456178G	2.467647G	500k	1
7.05M	2.458475G	2.465525G	11.794M	2.456128G	2.467922G	500k	2
7.025M	2.4585G	2.465525G	11.769M	2.456178G	2.467947G	500k	3
7.025M	2.458475G	2.4655G	11.869M	2.456053G	2.467922G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2412MHz

31/01/2019

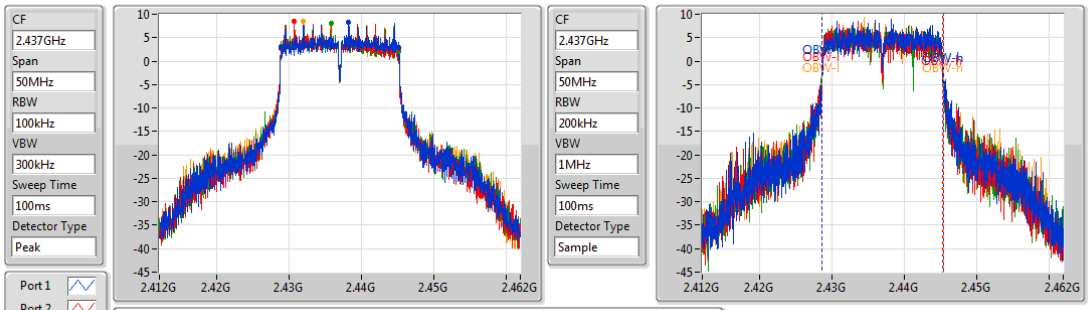


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.542M	2.403704G	2.420246G	500k	1
16.1M	2.404075G	2.420175G	16.567M	2.403754G	2.420321G	500k	2
16.3M	2.403875G	2.420175G	16.567M	2.403754G	2.420321G	500k	3
16.325M	2.40385G	2.420175G	16.517M	2.403754G	2.420271G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2437MHz

31/01/2019

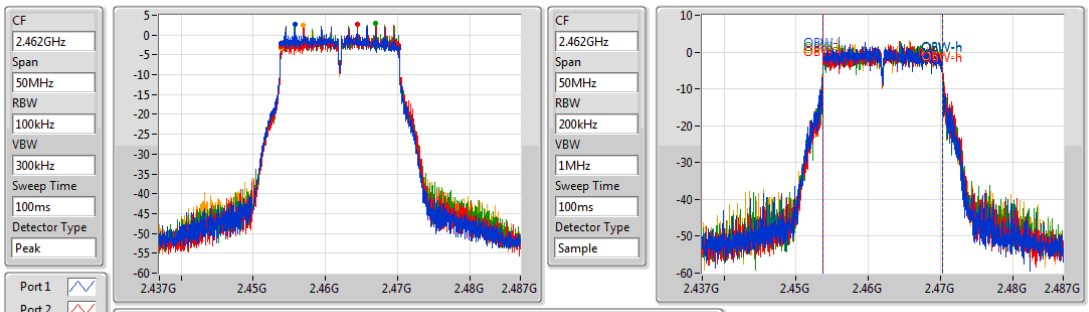


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	16.817M	2.428604G	2.445421G	500k	1
16.3M	2.428825G	2.445125G	16.742M	2.428604G	2.445346G	500k	2
16.35M	2.428825G	2.445175G	16.867M	2.428529G	2.445396G	500k	3
16.325M	2.428825G	2.44515G	16.817M	2.428554G	2.445371G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2462MHz

31/01/2019

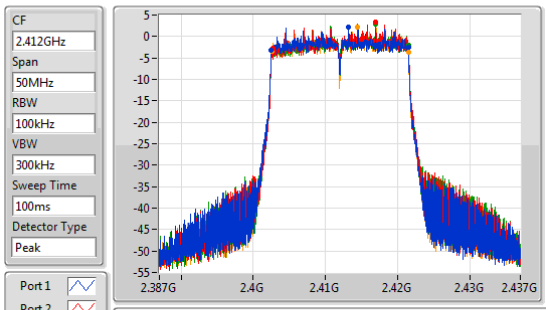


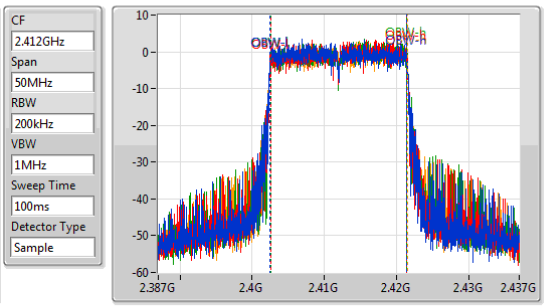
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.567M	2.453679G	2.470246G	500k	1
16.325M	2.45385G	2.470175G	16.592M	2.453754G	2.470346G	500k	2
16.35M	2.453825G	2.470175G	16.542M	2.453754G	2.470296G	500k	3
16.375M	2.4538G	2.470175G	16.592M	2.453654G	2.470246G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2412MHz

31/01/2019



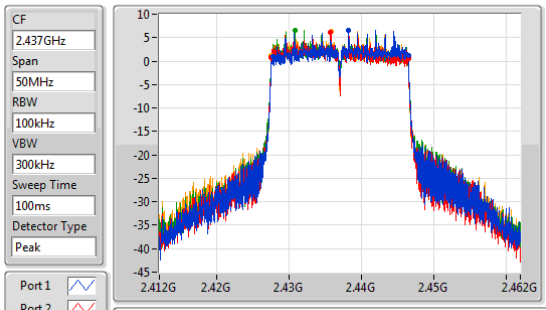


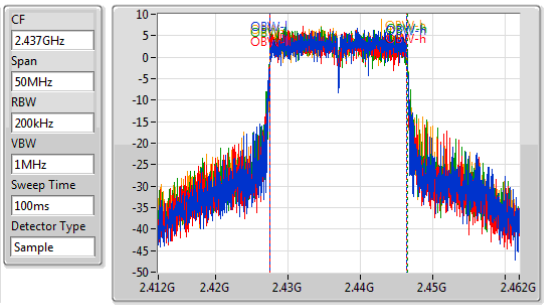
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	18.966M	2.402505G	2.42147G	500k	1
18.75M	2.402775G	2.421525G	18.916M	2.402555G	2.42147G	500k	2
18.75M	2.40275G	2.4215G	18.916M	2.402555G	2.42147G	500k	3
18.975M	2.402575G	2.42155G	18.966M	2.40253G	2.421495G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2437MHz

31/01/2019



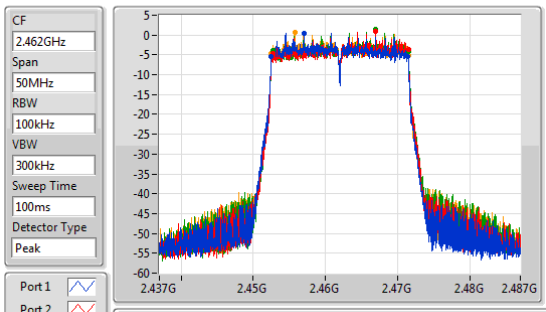


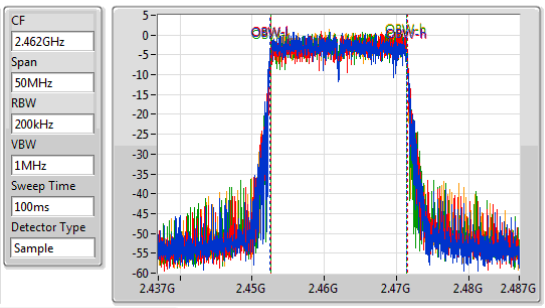
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.725M	2.42775G	2.446475G	18.966M	2.427505G	2.44647G	500k	1
19.025M	2.427475G	2.4465G	18.966M	2.42748G	2.446445G	500k	2
19M	2.427525G	2.446525G	19.015M	2.42748G	2.446495G	500k	3
19M	2.4275G	2.4465G	18.966M	2.42748G	2.446445G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2462MHz

31/01/2019



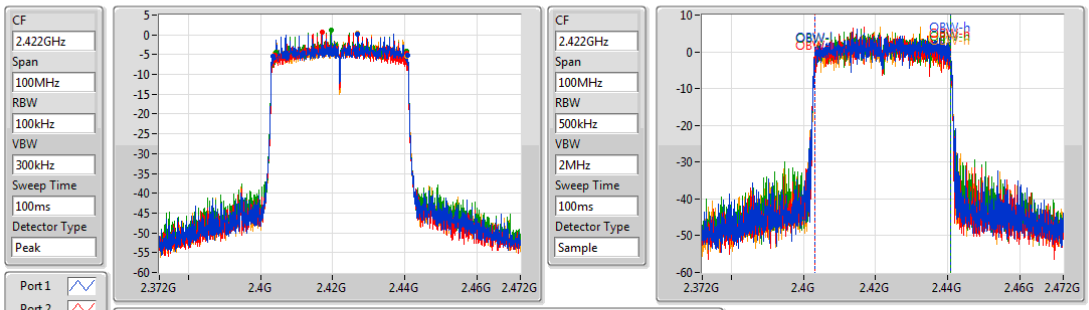


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452475G	2.47145G	18.966M	2.45248G	2.471445G	500k	1
18.75M	2.45275G	2.4715G	18.966M	2.45253G	2.471495G	500k	2
18.75M	2.45275G	2.4715G	18.941M	2.45253G	2.47147G	500k	3
19.05M	2.4525G	2.47155G	18.941M	2.45253G	2.47147G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2422MHz

31/01/2019

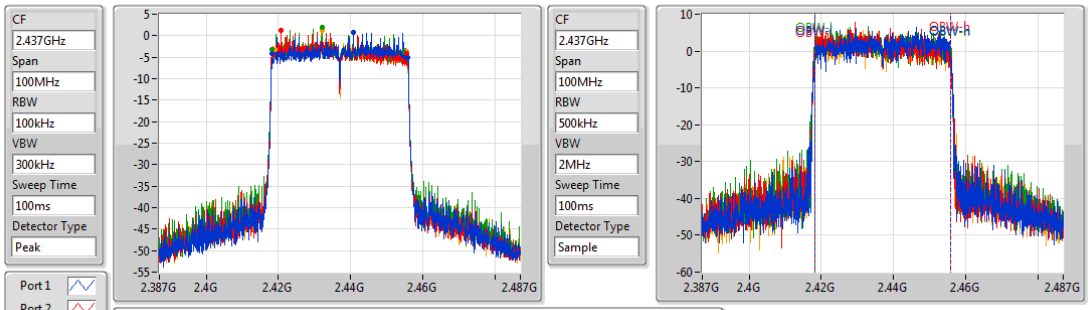


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.40355G	2.44075G	37.481M	2.403209G	2.440691G	500k	1
36.35M	2.40415G	2.4405G	37.381M	2.403309G	2.440691G	500k	2
36.2M	2.40425G	2.44045G	37.381M	2.403309G	2.440691G	500k	3
36.6M	2.404G	2.4406G	37.481M	2.403259G	2.440741G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2437MHz

31/01/2019

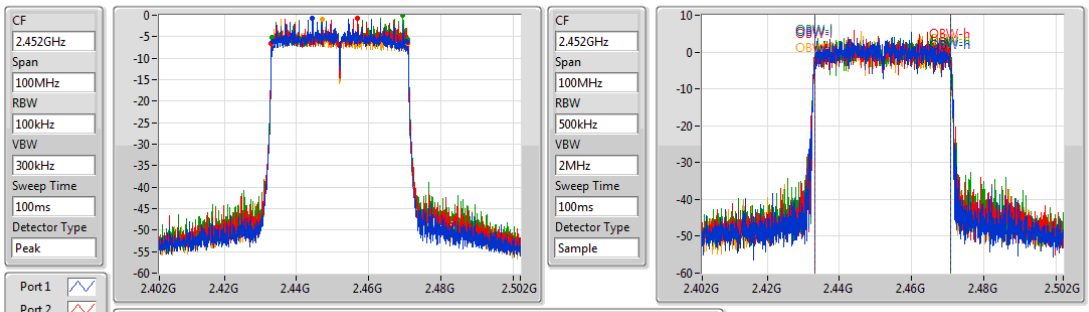


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.41825G	2.4558G	37.531M	2.418259G	2.455791G	500k	1
37.05M	2.41835G	2.4554G	37.581M	2.418109G	2.455691G	500k	2
36.8M	2.4183G	2.4551G	37.681M	2.418059G	2.455741G	500k	3
36.5M	2.41895G	2.45545G	37.531M	2.418159G	2.455691G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2452MHz

31/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37M	2.4335G	2.4705G	37.531M	2.433159G	2.470691G	500k	1
37.75M	2.43305G	2.4708G	37.731M	2.433109G	2.470841G	500k	2
37.5M	2.43325G	2.47075G	37.631M	2.433209G	2.470841G	500k	3
37.55M	2.43315G	2.4707G	37.631M	2.433109G	2.470741G	500k	4

For Beamforming / 4T1S mode
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)_4TX	19.025M	19.09M	19M1D1D	18.7M	18.916M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.55M	37.731M	37M7D1D	35.45M	37.331M

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

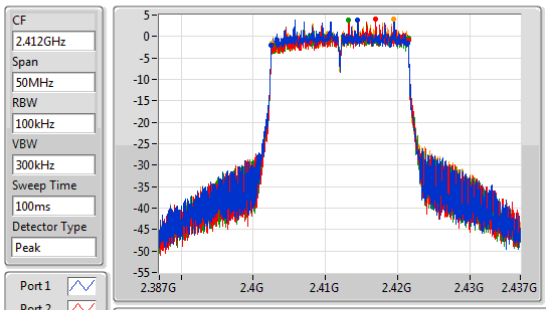
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	18.941M	18.9M	18.916M	18.75M	18.916M	18.925M	18.941M
2437MHz	Pass	500k	18.875M	19.04M	18.8M	19.065M	18.875M	19.04M	18.825M	19.09M
2462MHz	Pass	500k	18.7M	18.966M	18.775M	18.966M	18.825M	18.966M	19.025M	18.941M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.531M	36.9M	37.331M	35.45M	37.381M	36.75M	37.481M
2437MHz	Pass	500k	36.8M	37.531M	37.1M	37.631M	37.2M	37.581M	37.4M	37.581M
2452MHz	Pass	500k	36.85M	37.481M	37.35M	37.631M	37.5M	37.731M	37.25M	37.631M

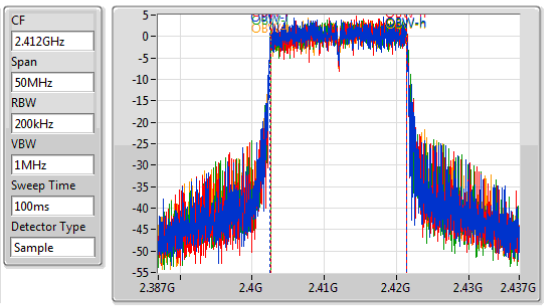
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2412MHz

01/02/2019



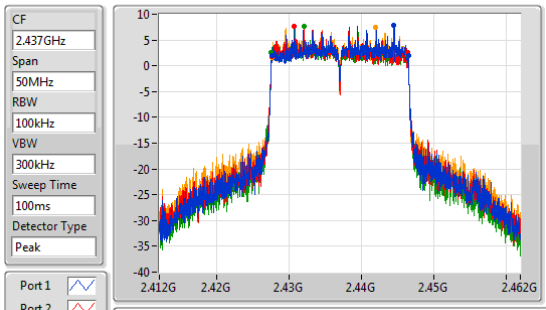


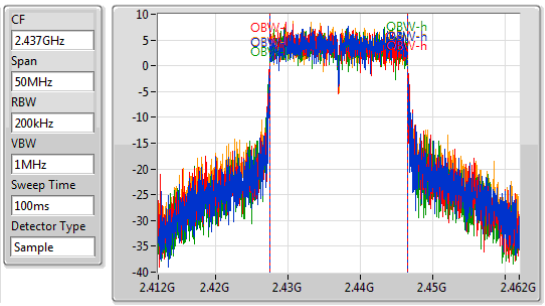
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4025G	2.42145G	18.941M	2.402505G	2.421445G	500k	1
18.9M	2.4026G	2.4215G	18.916M	2.402555G	2.42147G	500k	2
18.75M	2.40275G	2.4215G	18.916M	2.402555G	2.42147G	500k	3
18.925M	2.402575G	2.4215G	18.941M	2.40253G	2.42147G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2437MHz

01/02/2019



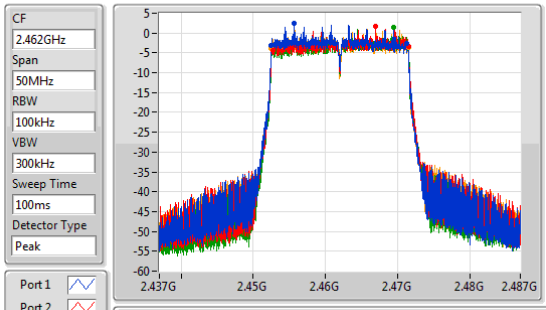


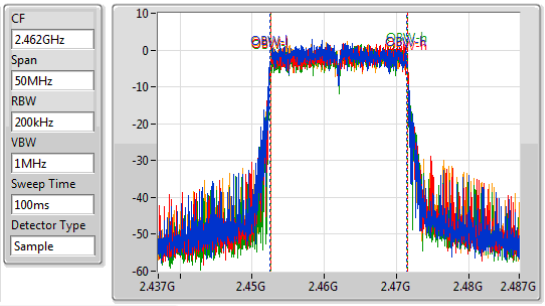
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.427625G	2.4465G	19.04M	2.42748G	2.44652G	500k	1
18.8M	2.427575G	2.446375G	19.065M	2.427455G	2.44652G	500k	2
18.875M	2.427525G	2.4464G	19.04M	2.427455G	2.446495G	500k	3
18.825M	2.42755G	2.446375G	19.09M	2.42743G	2.44652G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2462MHz

01/02/2019



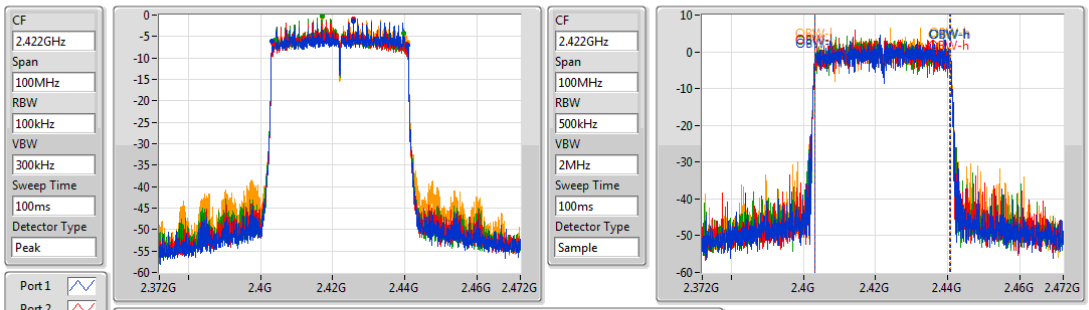


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.7M	2.452525G	2.471225G	18.966M	2.452505G	2.47147G	500k	1
18.775M	2.45275G	2.471525G	18.966M	2.45253G	2.471495G	500k	2
18.825M	2.4527G	2.471525G	18.966M	2.45253G	2.471495G	500k	3
19.025M	2.452475G	2.4715G	18.941M	2.45253G	2.47147G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2422MHz

01/02/2019

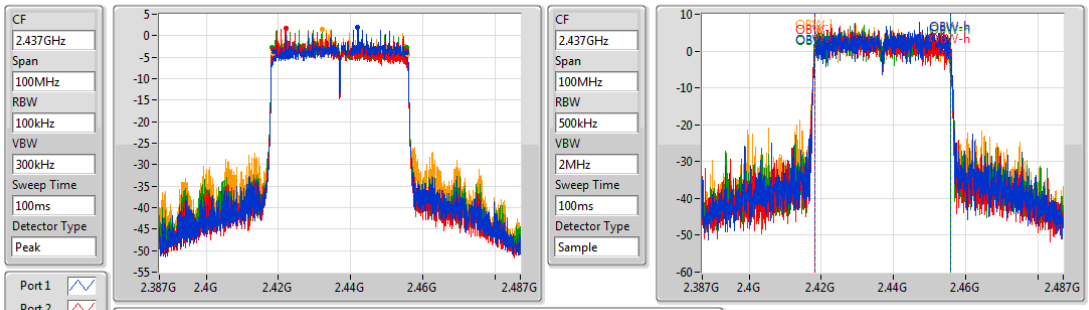


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.40325G	2.4408G	37.531M	2.403259G	2.440791G	500k	1
36.9M	2.4035G	2.4404G	37.331M	2.403309G	2.440641G	500k	2
35.45M	2.4041G	2.43955G	37.381M	2.403259G	2.440641G	500k	3
36.75M	2.404G	2.44075G	37.481M	2.403209G	2.440691G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2437MHz

01/02/2019

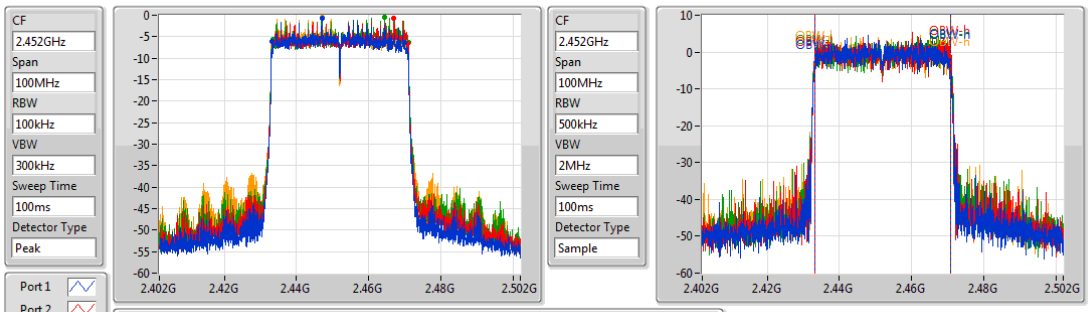


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.8M	2.41875G	2.45555G	37.531M	2.418259G	2.455791G	500k	1
37.1M	2.41835G	2.45545G	37.631M	2.418109G	2.455741G	500k	2
37.2M	2.41825G	2.45545G	37.581M	2.418159G	2.455741G	500k	3
37.4M	2.41835G	2.45575G	37.581M	2.418109G	2.455691G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2452MHz

01/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	2.43325G	2.4701G	37.481M	2.433209G	2.470691G	500k	1
37.35M	2.43345G	2.4708G	37.631M	2.433159G	2.470791G	500k	2
37.5M	2.4335G	2.471G	37.731M	2.433159G	2.470891G	500k	3
37.25M	2.43335G	2.4706G	37.631M	2.433159G	2.470791G	500k	4

For Non-beamforming / 4T4S mode
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_Nss4,(MCS0)_4TX	19.025M	19.015M	19M0D1D	18.175M	18.916M
802.11ax HEW40_Nss4,(MCS0)_4TX	37.7M	37.631M	37M6D1D	35.35M	37.381M

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

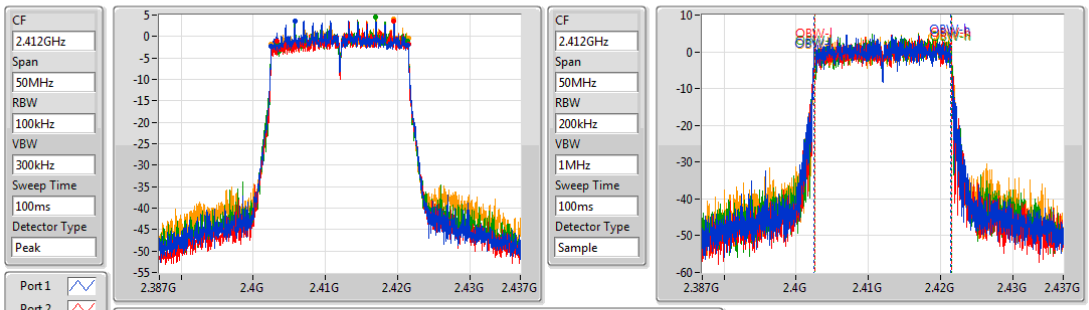
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	18.941M	18.25M	18.966M	18.175M	18.916M	19.025M	18.916M
2437MHz	Pass	500k	18.925M	18.991M	18.875M	18.991M	18.8M	19.015M	19.025M	19.015M
2462MHz	Pass	500k	18.825M	18.916M	18.95M	18.941M	18.875M	18.941M	19.025M	18.941M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.2M	37.581M	36.15M	37.431M	35.35M	37.381M	36.7M	37.581M
2437MHz	Pass	500k	37.15M	37.481M	36.2M	37.581M	37M	37.581M	36.85M	37.531M
2452MHz	Pass	500k	36.85M	37.431M	37.45M	37.631M	37.7M	37.531M	37.55M	37.581M

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

802.11ax HEW20_Nss4,(MCS0)_4TX — EBW

2412MHz

01/02/2019

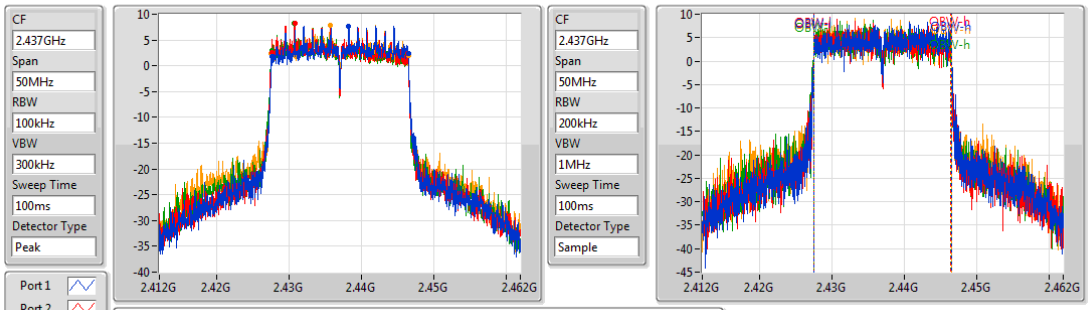


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4025G	2.42145G	18.941M	2.402505G	2.421445G	500k	1
18.25M	2.40325G	2.4215G	18.966M	2.40253G	2.421495G	500k	2
18.175M	2.40325G	2.421425G	18.916M	2.40258G	2.421495G	500k	3
19.025M	2.402475G	2.4215G	18.916M	2.402555G	2.42147G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX — EBW

2437MHz

01/02/2019

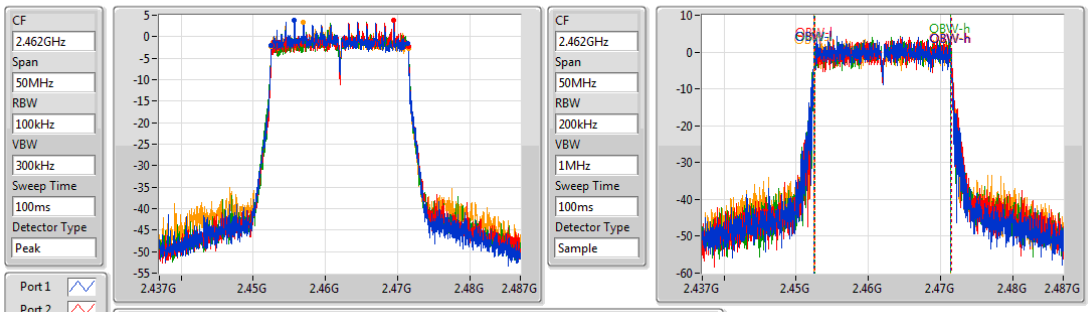


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.925M	2.42755G	2.446475G	18.991M	2.427505G	2.446495G	500k	1
18.875M	2.42755G	2.446425G	18.991M	2.42748G	2.44647G	500k	2
18.8M	2.42755G	2.44635G	19.015M	2.427455G	2.44647G	500k	3
19.025M	2.42745G	2.446475G	19.015M	2.42748G	2.446495G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX — EBW

2462MHz

01/02/2019

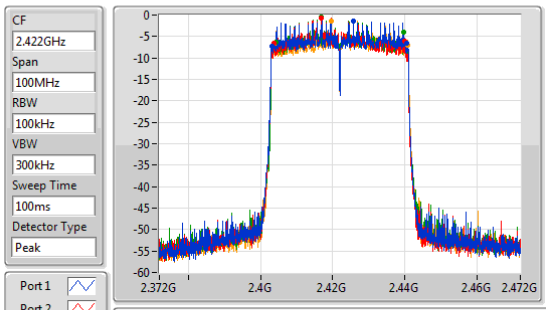


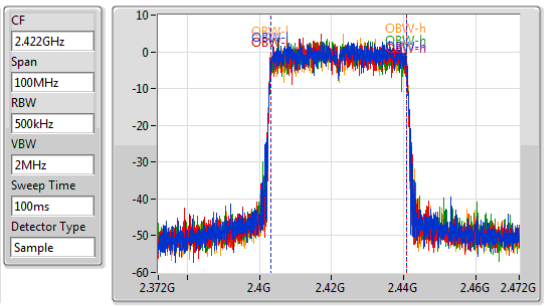
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.825M	2.452525G	2.47135G	18.916M	2.452505G	2.47142G	500k	1
18.95M	2.452575G	2.471525G	18.941M	2.452555G	2.471495G	500k	2
18.875M	2.452575G	2.47145G	18.941M	2.45253G	2.47147G	500k	3
19.025M	2.45245G	2.471475G	18.941M	2.452505G	2.471445G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2422MHz

01/02/2019



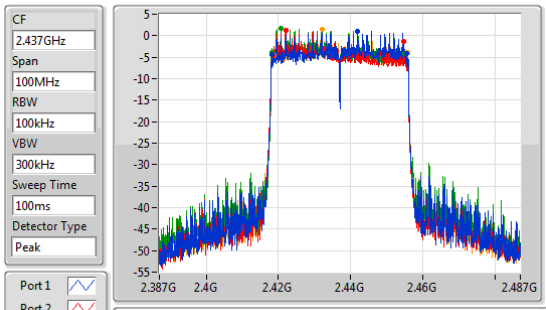


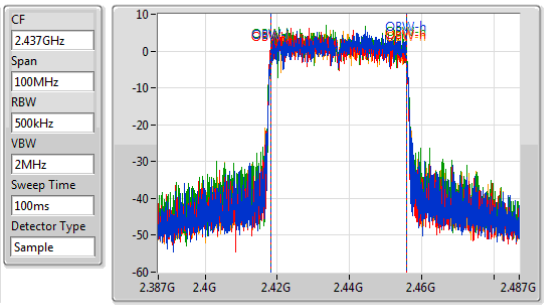
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.4032G	2.4404G	37.581M	2.403159G	2.440741G	500k	1
36.15M	2.4038G	2.43995G	37.431M	2.403259G	2.440691G	500k	2
35.35M	2.4042G	2.43955G	37.381M	2.403309G	2.440691G	500k	3
36.7M	2.4041G	2.4408G	37.581M	2.403209G	2.440791G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2437MHz

01/02/2019



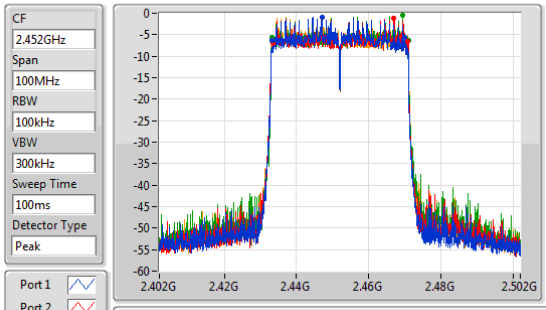


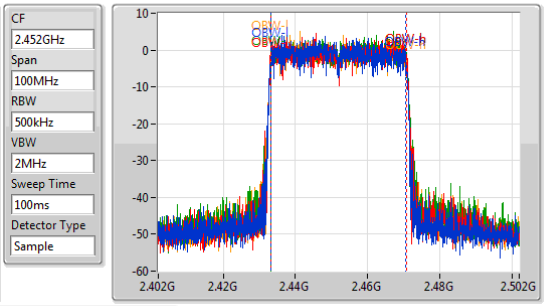
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.15M	2.41825G	2.4554G	37.481M	2.418259G	2.455741G	500k	1
36.2M	2.41835G	2.45455G	37.581M	2.418109G	2.455691G	500k	2
37M	2.4181G	2.4551G	37.581M	2.418109G	2.455691G	500k	3
36.85M	2.41885G	2.4557G	37.531M	2.418209G	2.455741G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2452MHz

01/02/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.85M	2.43325G	2.4701G	37.431M	2.433209G	2.470641G	500k	1
37.45M	2.43335G	2.4708G	37.631M	2.433209G	2.470841G	500k	2
37.7M	2.43325G	2.47095G	37.531M	2.433209G	2.470741G	500k	3
37.55M	2.43325G	2.4708G	37.581M	2.433109G	2.470691G	500k	4

Mode 3: (Ant. 11 Panel antenna / 6.8 dBi)
For Non-beamforming / 1T1S mode
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	7.05M	12.569M	12M6G1D	6.05M	11.644M
802.11g_Nss1,(6Mbps)_1TX	16.325M	17.991M	18M0D1D	16.3M	16.592M
802.11ax HEW20_Nss1,(MCS0)_1TX	19.025M	19.015M	19M0D1D	18.95M	18.916M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.5M	37.631M	37M6D1D	37.1M	37.531M

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

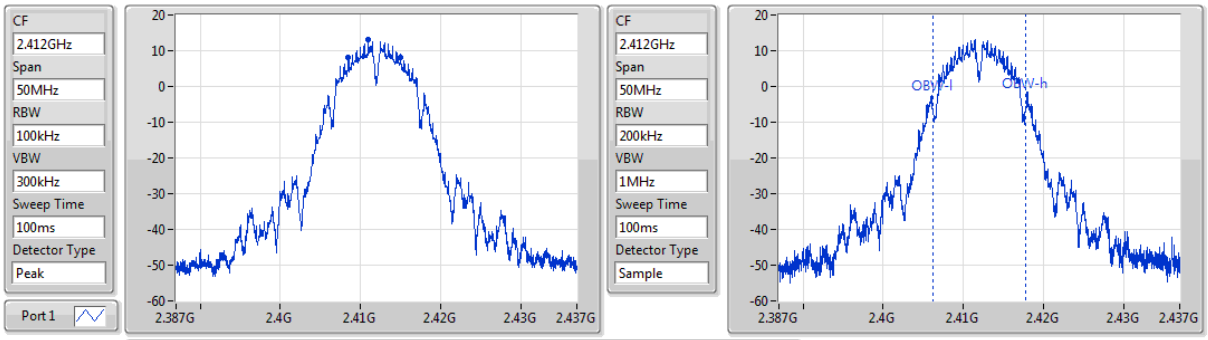
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	6.55M	11.644M
2437MHz	Pass	500k	7.05M	12.569M
2462MHz	Pass	500k	6.05M	11.844M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.592M
2437MHz	Pass	500k	16.3M	17.991M
2462MHz	Pass	500k	16.325M	16.592M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	19M	18.941M
2437MHz	Pass	500k	18.95M	19.015M
2462MHz	Pass	500k	19.025M	18.916M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	37.5M	37.631M
2437MHz	Pass	500k	37.1M	37.531M
2452MHz	Pass	500k	37.2M	37.531M

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

802.11b_Nss1,(1Mbps)_1TX — EBW

2412MHz

16/02/2019

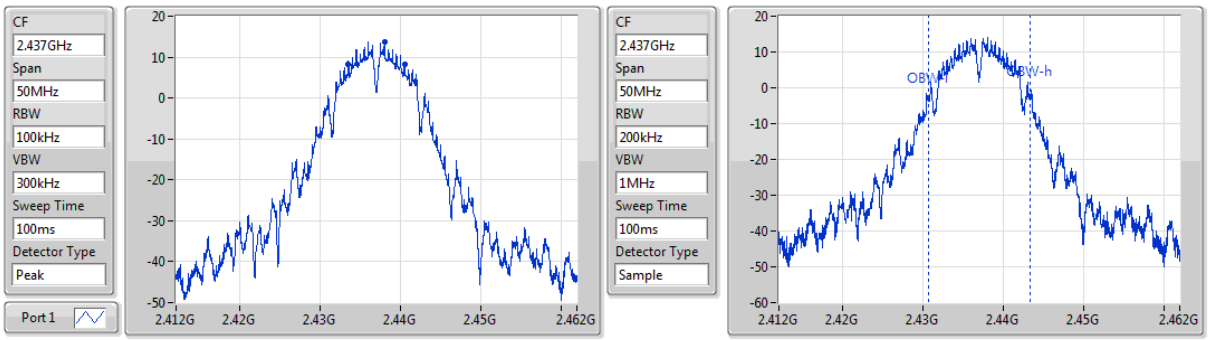


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.55M	2.408475G	2.415025G	11.644M	2.406178G	2.417822G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2437MHz

16/02/2019

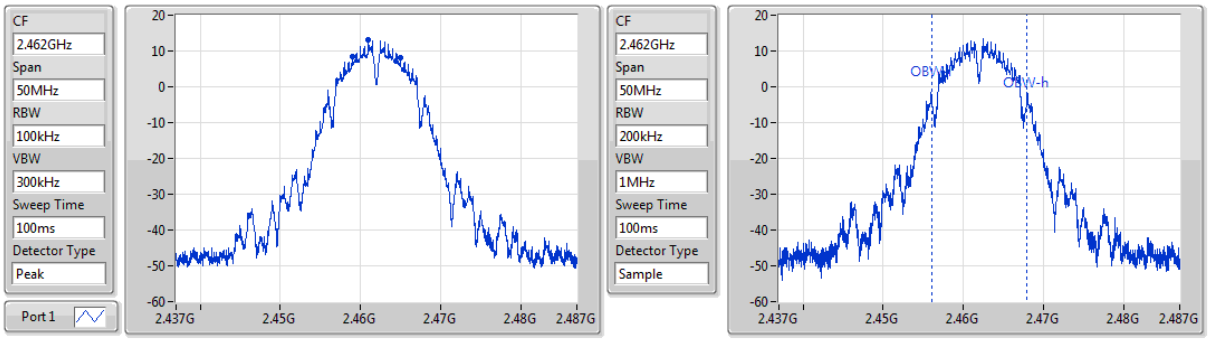


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.433475G	2.440525G	12.569M	2.430703G	2.443272G	500k	1

802.11b_Nss1,(1Mbps)_1TX — EBW

2462MHz

16/02/2019

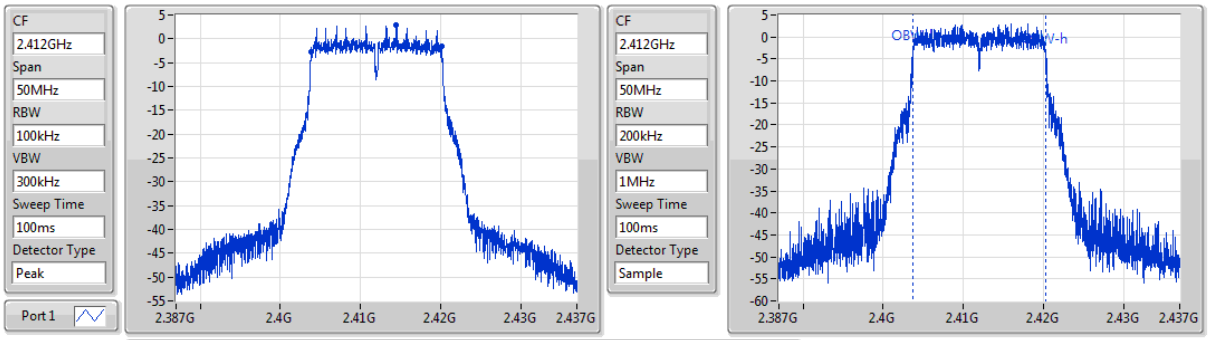


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.05M	2.458975G	2.465025G	11.844M	2.456028G	2.467872G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2412MHz

16/02/2019

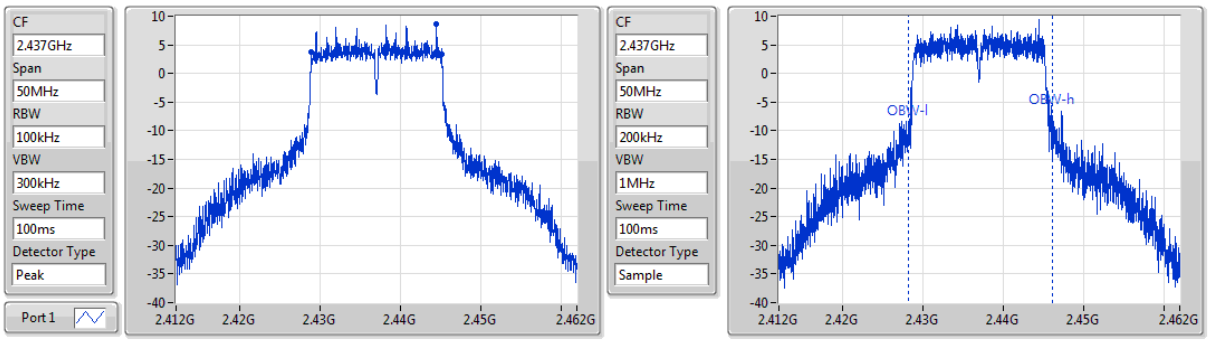


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.403825G	2.42015G	16.592M	2.403704G	2.420296G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2437MHz

16/02/2019

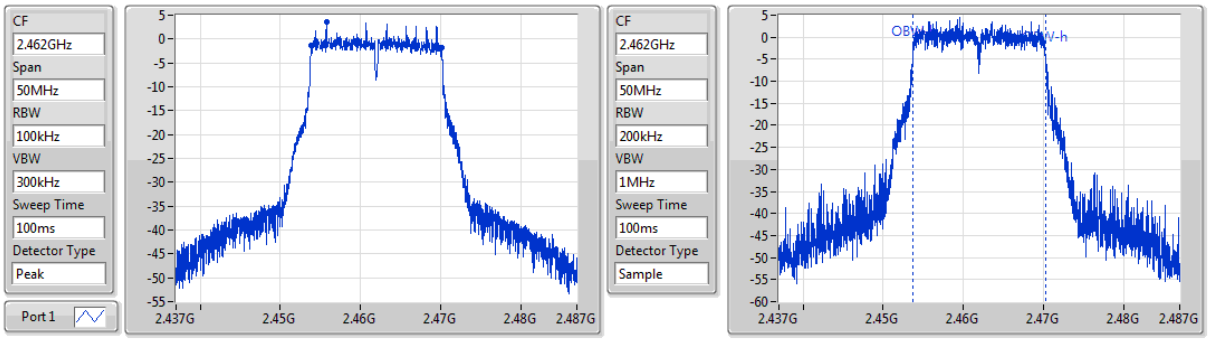


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	17.991M	2.428129G	2.44612G	500k	1

802.11g_Nss1,(6Mbps)_1TX — EBW

2462MHz

16/02/2019

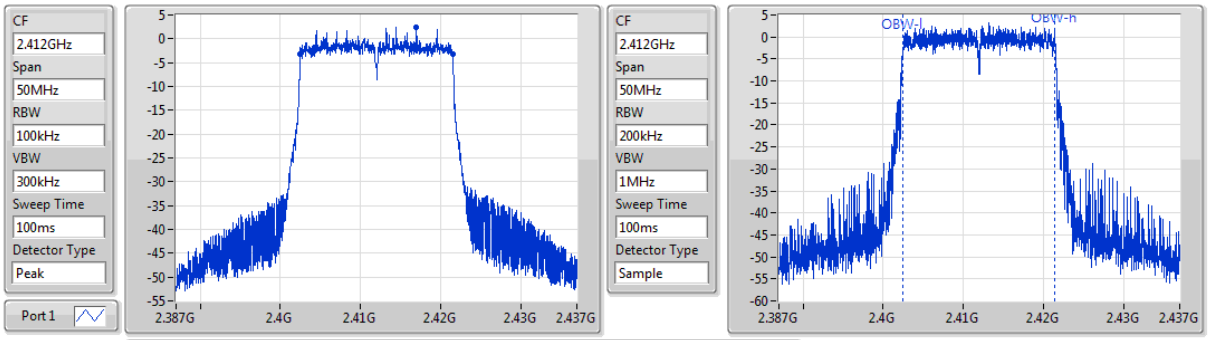


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.592M	2.453679G	2.470271G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2412MHz

16/02/2019

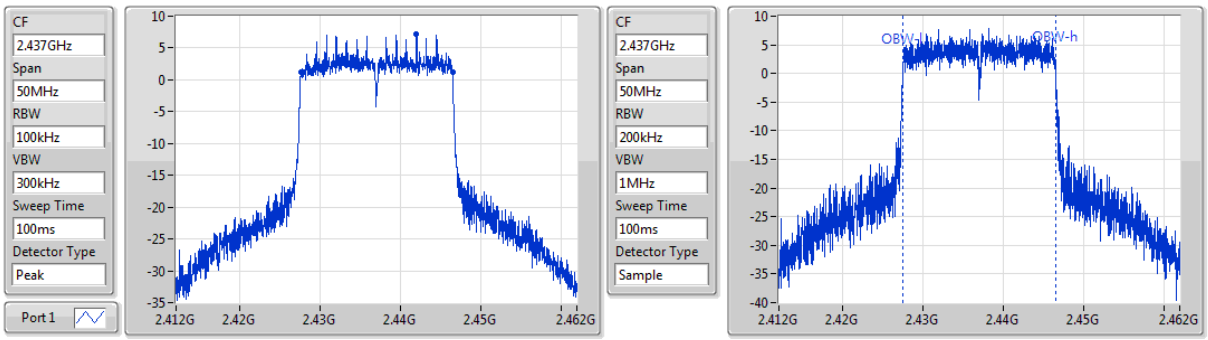


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4025G	2.4215G	18.941M	2.402505G	2.421445G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2437MHz

16/02/2019

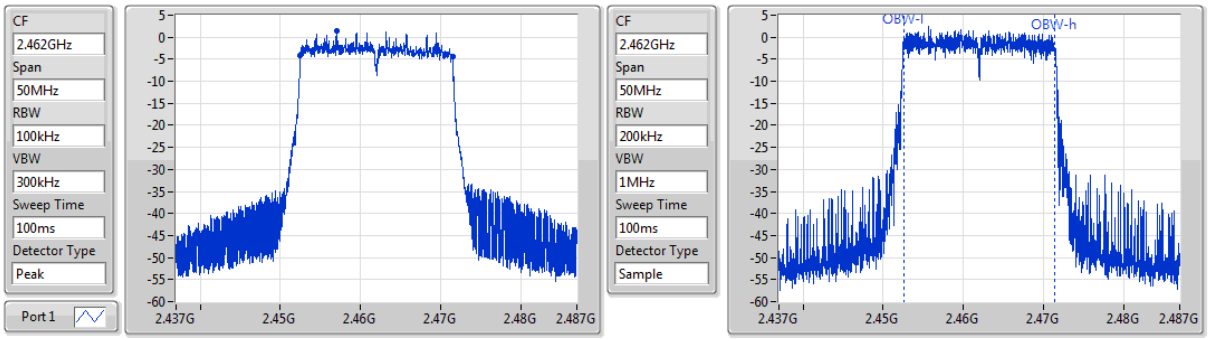


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.42755G	2.4465G	19.015M	2.42748G	2.446495G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

2462MHz

16/02/2019

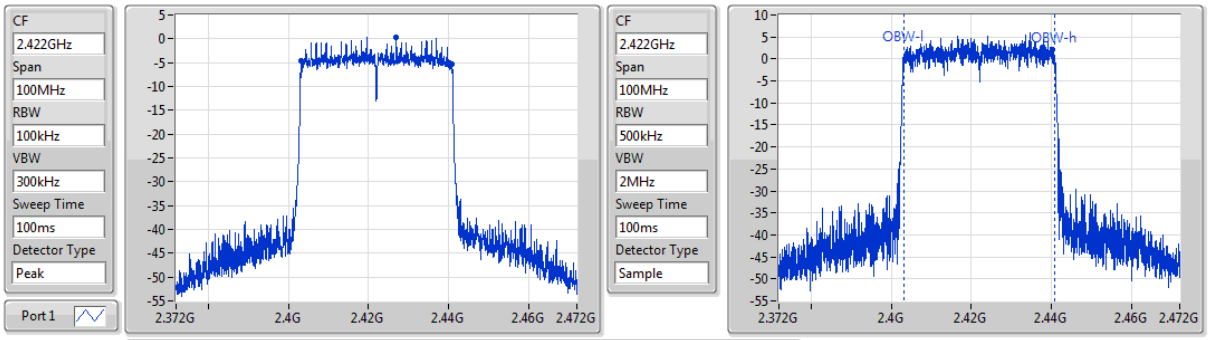


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.025M	2.452475G	2.4715G	18.916M	2.45253G	2.471445G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2422MHz

16/02/2019

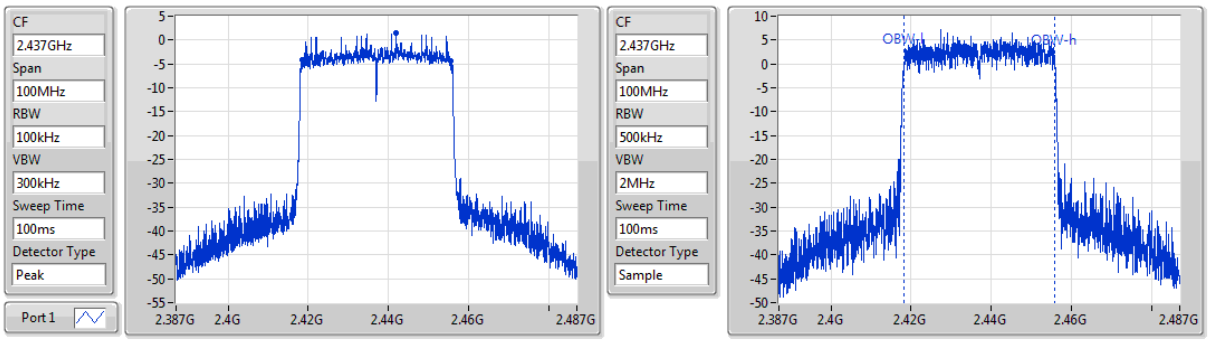


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.40325G	2.44075G	37.631M	2.403159G	2.440791G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2437MHz

16/02/2019

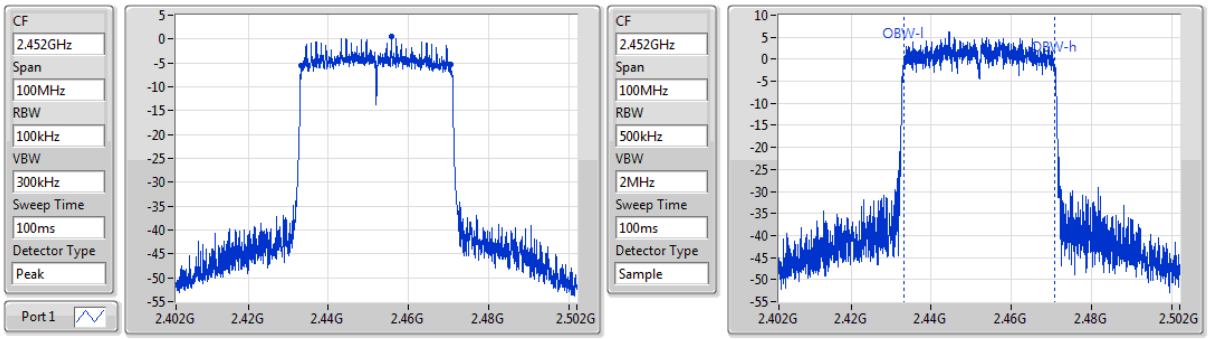


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.1M	2.41845G	2.45555G	37.531M	2.418259G	2.455791G	500k	1

802.11ax HEW40_Nss1,(MCS0)_1TX — EBW

2452MHz

16/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.4333G	2.4705G	37.531M	2.433159G	2.470691G	500k	1

For Non-beamforming / 2T2S mode
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_Nss2,(MCS0)_2TX	18.975M	19.115M	19M1D1D	18.675M	18.891M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.7M	37.581M	37M6D1D	36.15M	37.331M

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

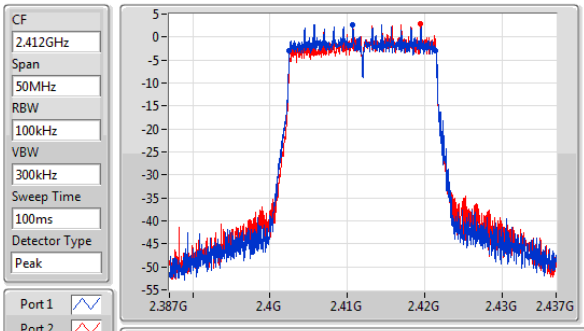
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	18.966M	18.675M	18.891M
2437MHz	Pass	500k	18.825M	19.065M	18.9M	19.115M
2462MHz	Pass	500k	18.975M	18.941M	18.725M	18.941M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.95M	37.481M	36.15M	37.331M
2437MHz	Pass	500k	36.95M	37.581M	37.15M	37.531M
2452MHz	Pass	500k	36.75M	37.531M	37.7M	37.531M

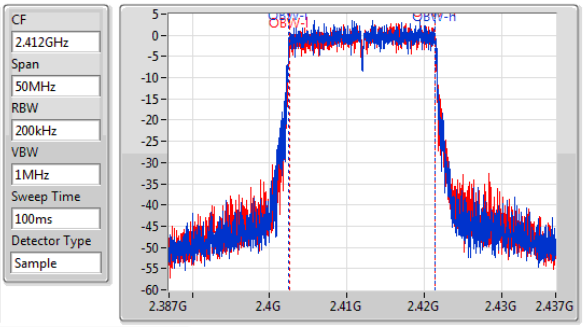
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2412MHz

16/02/2019



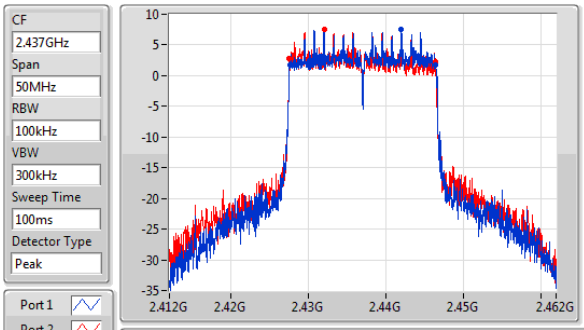


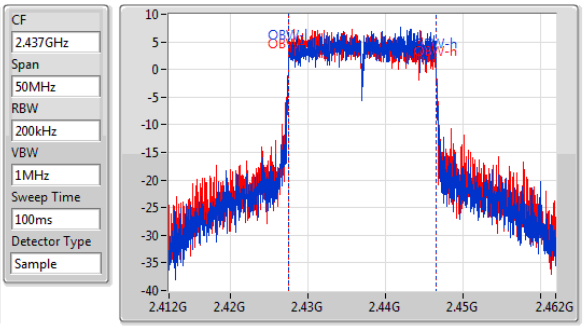
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.4025G	2.42145G	18.966M	2.402505G	2.42147G	500k	1
18.675M	2.402775G	2.42145G	18.891M	2.402555G	2.421445G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2437MHz

16/02/2019



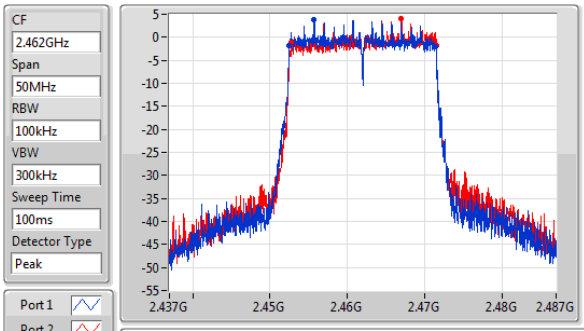


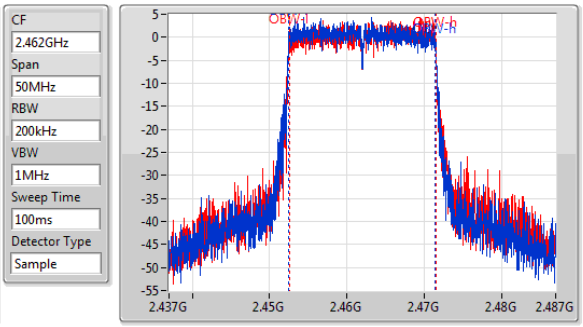
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.825M	2.4276G	2.446425G	19.065M	2.427455G	2.44652G	500k	1
18.9M	2.4275G	2.4464G	19.115M	2.42743G	2.446545G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

2462MHz

16/02/2019



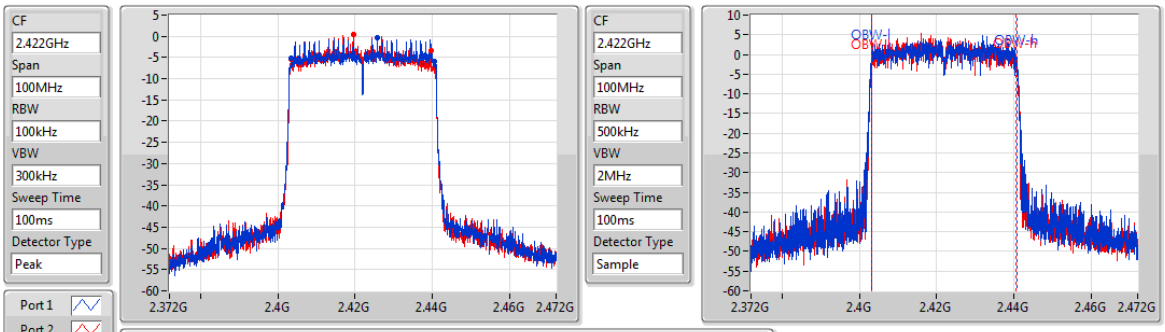


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452475G	2.47145G	18.941M	2.452505G	2.471445G	500k	1
18.725M	2.4528G	2.471525G	18.941M	2.452555G	2.471495G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2422MHz

16/02/2019

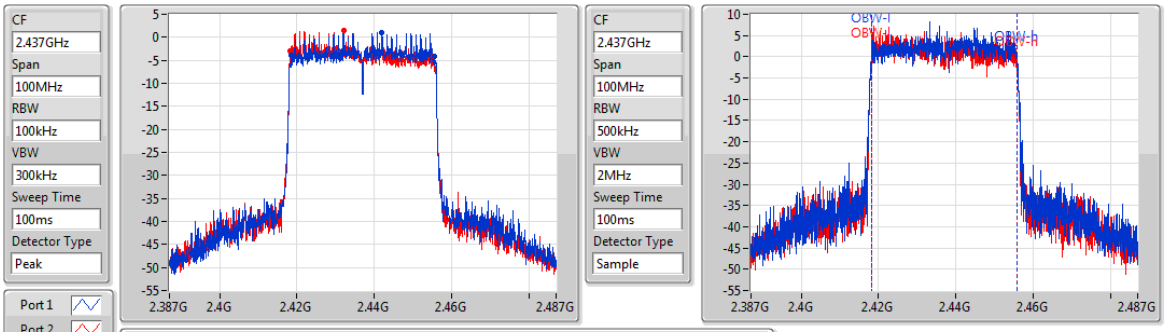


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.95M	2.40355G	2.4405G	37.481M	2.403259G	2.440741G	500k	1
36.15M	2.4034G	2.43955G	37.331M	2.403309G	2.440641G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2437MHz

16/02/2019

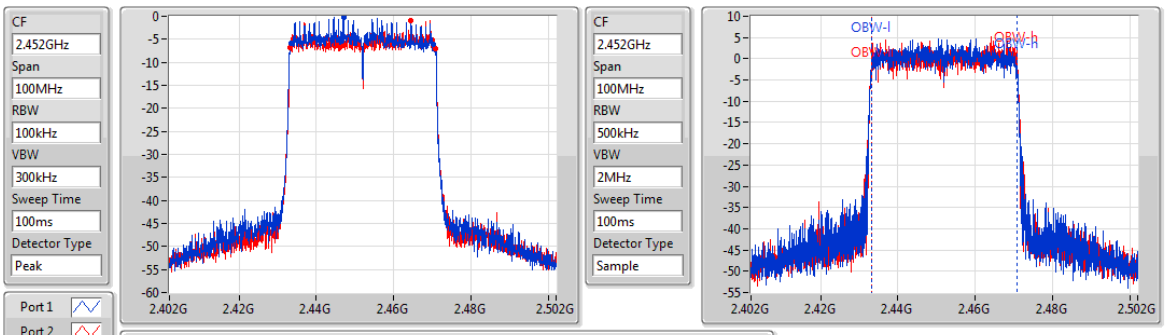


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.95M	2.41855G	2.4555G	37.581M	2.418159G	2.455741G	500k	1
37.15M	2.4182G	2.45535G	37.531M	2.418159G	2.455691G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

2452MHz

16/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.75M	2.4335G	2.47025G	37.531M	2.433159G	2.470691G	500k	1
37.7M	2.43315G	2.47085G	37.531M	2.433259G	2.470791G	500k	2

For Non-beamforming / 4T1S mode
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)_4TX	7.55M	13.018M	13M0G1D	6.525M	10.445M
802.11g_Nss1,(6Mbps)_4TX	16.375M	16.692M	16M7D1D	16.275M	16.517M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.05M	19.015M	19M0D1D	18.775M	18.916M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.7M	37.631M	37M6D1D	36.4M	37.431M

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

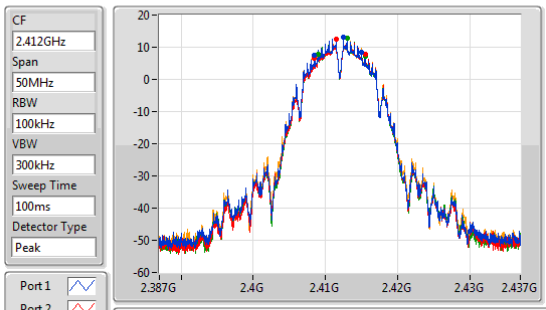
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	6.525M	11.319M	7.025M	11.094M	6.575M	10.97M	7M	11.719M
2437MHz	Pass	500k	7.025M	12.669M	7.025M	12.619M	7.025M	12.794M	7.075M	13.018M
2462MHz	Pass	500k	7.05M	10.57M	7.5M	10.77M	7.525M	10.445M	7.55M	10.77M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.617M	16.275M	16.542M	16.3M	16.517M	16.35M	16.617M
2437MHz	Pass	500k	16.3M	16.642M	16.3M	16.667M	16.35M	16.692M	16.35M	16.692M
2462MHz	Pass	500k	16.325M	16.592M	16.325M	16.567M	16.3M	16.592M	16.375M	16.567M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	18.966M	18.775M	18.941M	18.95M	18.916M	18.925M	18.916M
2437MHz	Pass	500k	18.95M	18.966M	18.9M	18.991M	19.05M	19.015M	19M	18.966M
2462MHz	Pass	500k	18.975M	18.966M	18.975M	18.991M	18.8M	18.941M	19.05M	18.966M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.55M	37.581M	36.95M	37.431M	36.4M	37.431M	36.8M	37.431M
2437MHz	Pass	500k	37.35M	37.631M	37.35M	37.631M	37.4M	37.631M	37.15M	37.481M
2452MHz	Pass	500k	37.2M	37.431M	37.45M	37.581M	36.95M	37.631M	37.7M	37.581M

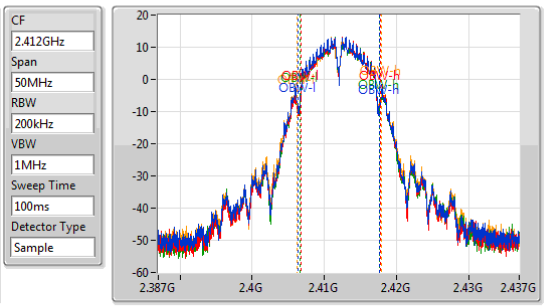
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_4TX **EBW**

2412MHz

15/02/2019



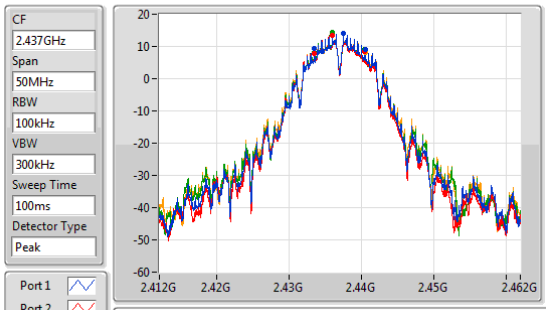


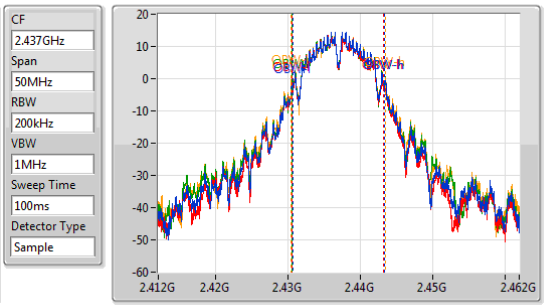
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.525M	2.4085G	2.415025G	11.319M	2.406328G	2.417647G	500k	1
7.025M	2.408475G	2.4155G	11.094M	2.406753G	2.417847G	500k	2
6.575M	2.40895G	2.415525G	10.97M	2.406703G	2.417672G	500k	3
7M	2.4085G	2.4155G	11.719M	2.406178G	2.417897G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2437MHz

15/02/2019



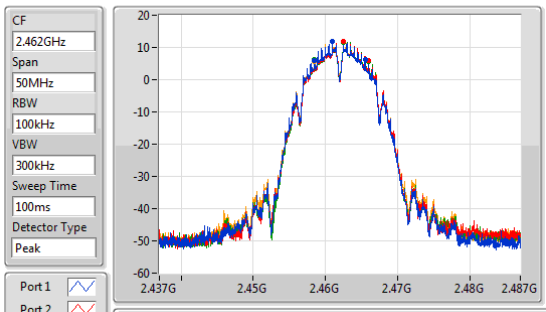


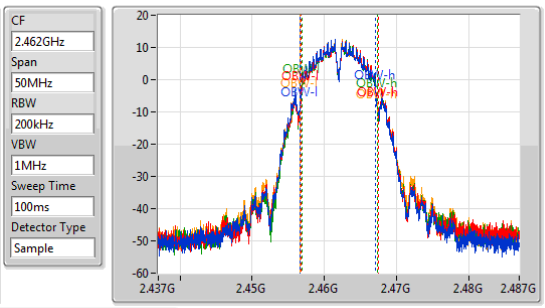
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.025M	2.433475G	2.4405G	12.669M	2.430653G	2.443322G	500k	1
7.025M	2.43345G	2.440475G	12.619M	2.430578G	2.443197G	500k	2
7.025M	2.43345G	2.440475G	12.794M	2.430553G	2.443347G	500k	3
7.075M	2.43345G	2.440525G	13.018M	2.430428G	2.443447G	500k	4

802.11b_Nss1,(1Mbps)_4TX **EBW**

2462MHz

15/02/2019



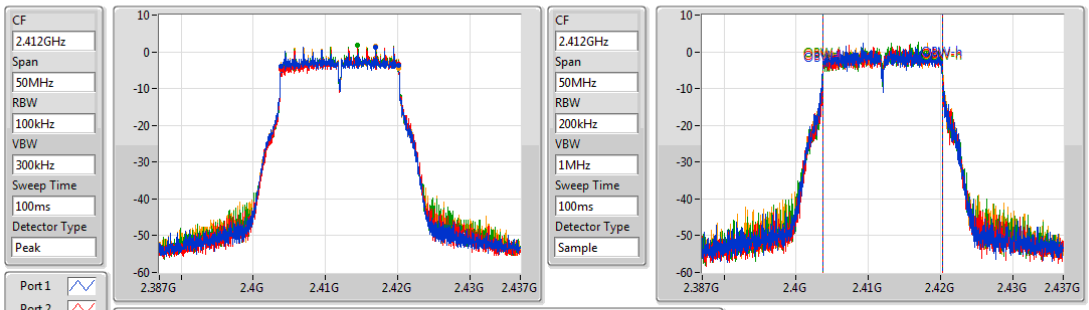


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.45845G	2.4655G	10.57M	2.456578G	2.467147G	500k	1
7.5M	2.4585G	2.466G	10.77M	2.456778G	2.467547G	500k	2
7.525M	2.458475G	2.466G	10.445M	2.456853G	2.467297G	500k	3
7.55M	2.45845G	2.466G	10.77M	2.456653G	2.467422G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2412MHz

15/02/2019

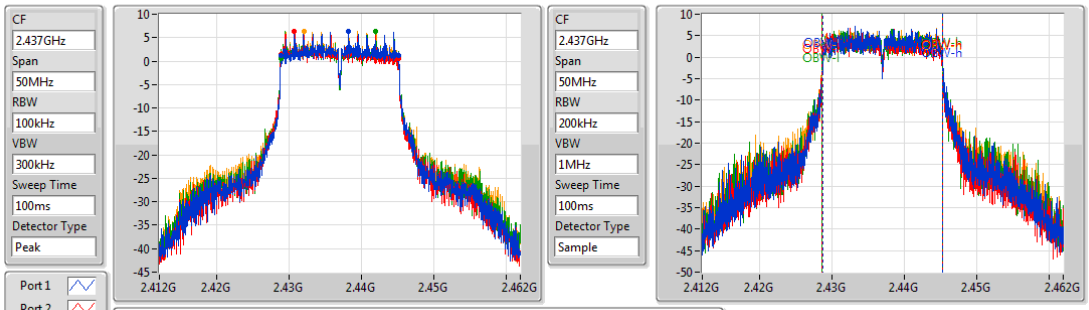


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.403825G	2.42015G	16.617M	2.403654G	2.420271G	500k	1
16.275M	2.403875G	2.42015G	16.542M	2.403754G	2.420296G	500k	2
16.3M	2.40385G	2.42015G	16.517M	2.403754G	2.420271G	500k	3
16.35M	2.403825G	2.420175G	16.617M	2.403704G	2.420321G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2437MHz

15/02/2019

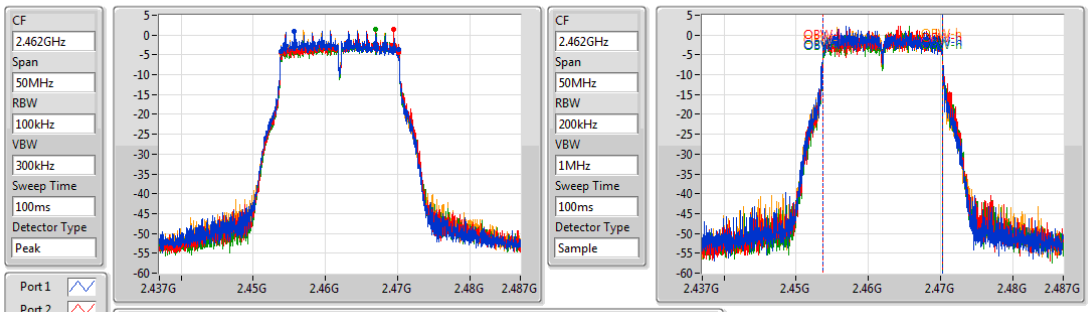


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	16.642M	2.428679G	2.445321G	500k	1
16.3M	2.428825G	2.445125G	16.667M	2.428604G	2.445271G	500k	2
16.35M	2.4288G	2.44515G	16.692M	2.428579G	2.445271G	500k	3
16.35M	2.4288G	2.44515G	16.692M	2.428604G	2.445296G	500k	4

802.11g_Nss1,(6Mbps)_4TX **EBW**

2462MHz

15/02/2019

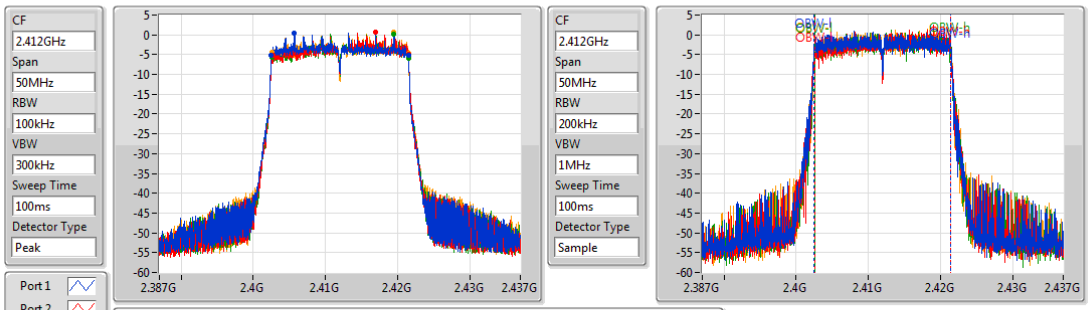


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.592M	2.453679G	2.470271G	500k	1
16.325M	2.45385G	2.470175G	16.567M	2.453754G	2.470321G	500k	2
16.3M	2.453875G	2.470175G	16.592M	2.453754G	2.470346G	500k	3
16.375M	2.4538G	2.470175G	16.567M	2.453679G	2.470246G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2412MHz

15/02/2019

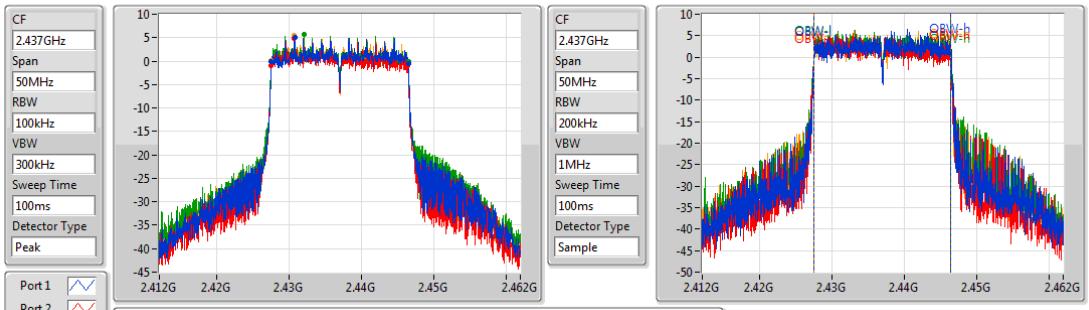


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4025G	2.421475G	18.966M	2.402505G	2.42147G	500k	1
18.775M	2.40275G	2.421525G	18.941M	2.40253G	2.42147G	500k	2
18.95M	2.402575G	2.421525G	18.916M	2.402555G	2.42147G	500k	3
18.925M	2.4026G	2.421525G	18.916M	2.402555G	2.42147G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2437MHz

15/02/2019

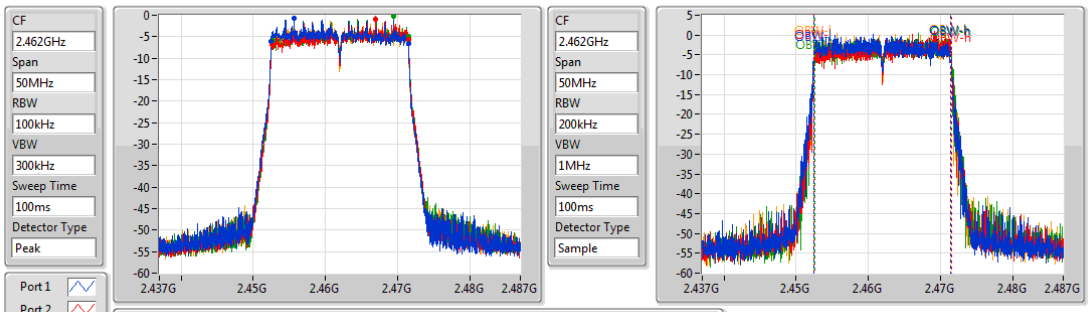


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.427525G	2.446475G	18.966M	2.427505G	2.44647G	500k	1
18.9M	2.427475G	2.446375G	18.991M	2.427455G	2.446445G	500k	2
19.05M	2.427475G	2.446525G	19.015M	2.427455G	2.44647G	500k	3
19M	2.427475G	2.446475G	18.966M	2.42748G	2.446445G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

2462MHz

15/02/2019

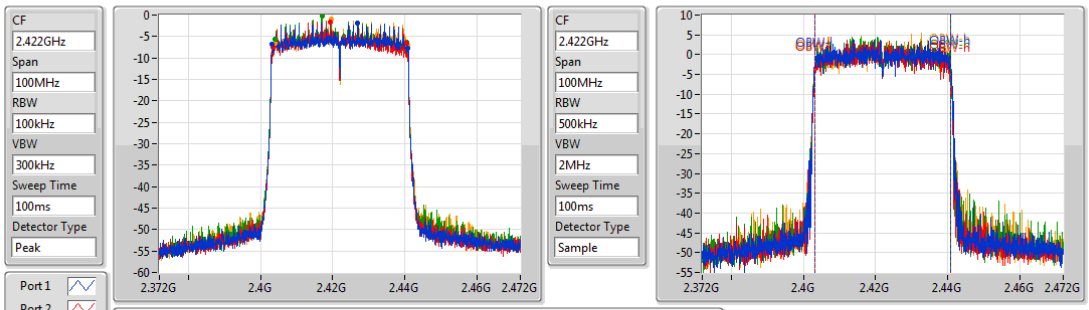


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4525G	2.471475G	18.966M	2.45248G	2.471445G	500k	1
18.975M	2.45255G	2.471525G	18.991M	2.452505G	2.471495G	500k	2
18.8M	2.452725G	2.471525G	18.941M	2.452555G	2.471495G	500k	3
19.05M	2.452475G	2.471525G	18.966M	2.45248G	2.471445G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2422MHz

15/02/2019

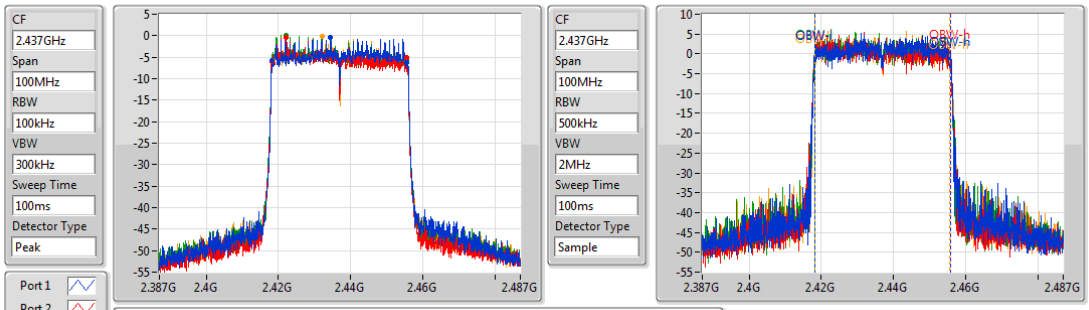


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	2.40325G	2.4408G	37.581M	2.403209G	2.440791G	500k	1
36.95M	2.4035G	2.44045G	37.431M	2.403259G	2.440691G	500k	2
36.4M	2.40405G	2.44045G	37.431M	2.403259G	2.440691G	500k	3
36.8M	2.40395G	2.44075G	37.431M	2.403259G	2.440691G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2437MHz

15/02/2019

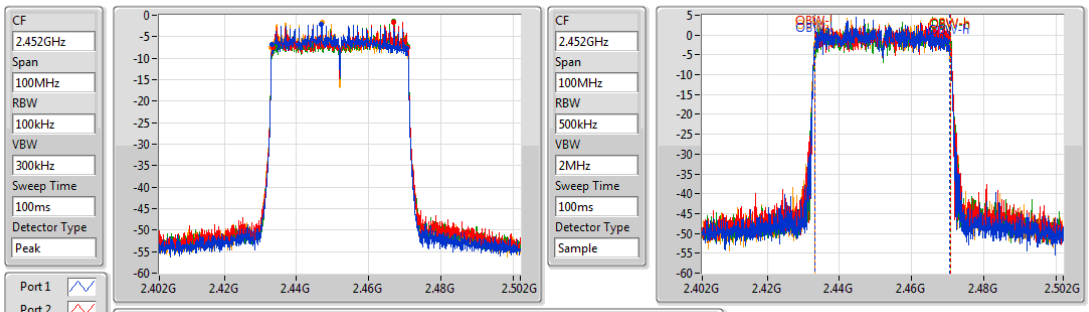


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.35M	2.4182G	2.45555G	37.631M	2.418159G	2.455791G	500k	1
37.35M	2.4181G	2.45545G	37.631M	2.418109G	2.455741G	500k	2
37.4M	2.4181G	2.4555G	37.631M	2.418059G	2.455691G	500k	3
37.15M	2.41835G	2.4555G	37.481M	2.418159G	2.455641G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2452MHz

15/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.43325G	2.47045G	37.431M	2.433209G	2.470641G	500k	1
37.45M	2.43335G	2.4708G	37.581M	2.433209G	2.470791G	500k	2
36.95M	2.4339G	2.47085G	37.631M	2.433209G	2.470841G	500k	3
37.7M	2.43305G	2.47075G	37.581M	2.433109G	2.470691G	500k	4

For Beamforming / 4T1S mode
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)_4TX	19.025M	19.015M	19M0D1D	18.75M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.85M	37.681M	37M7D1D	36.95M	37.381M

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

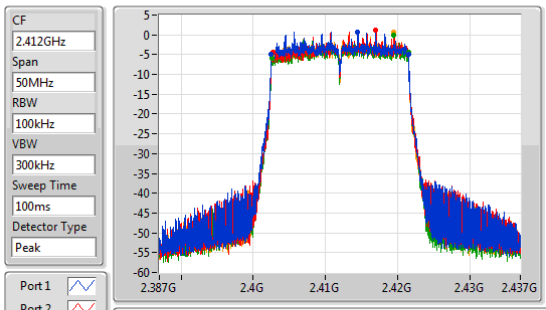
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.95M	18.966M	18.75M	18.916M	18.925M	18.891M	18.9M	18.916M
2437MHz	Pass	500k	19M	18.966M	18.9M	18.966M	18.975M	18.991M	19.025M	18.966M
2462MHz	Pass	500k	18.975M	18.966M	18.75M	18.941M	19M	19.015M	19.025M	18.966M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.5M	37.481M	36.95M	37.481M	37.15M	37.381M	37.05M	37.431M
2437MHz	Pass	500k	37.5M	37.531M	37.35M	37.531M	37.2M	37.631M	37.15M	37.531M
2452MHz	Pass	500k	37.2M	37.381M	37.85M	37.681M	37.45M	37.581M	37.65M	37.631M

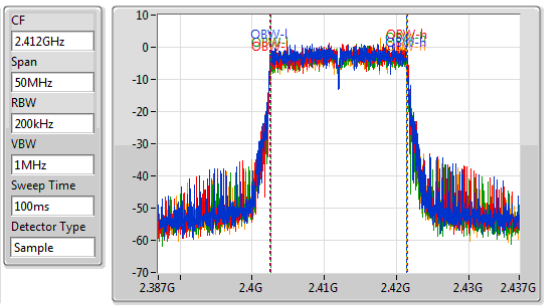
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2412MHz

19/02/2019



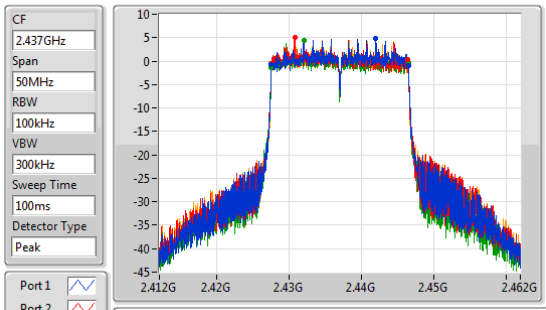


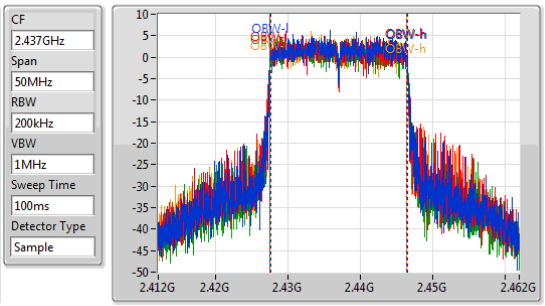
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.95M	2.402525G	2.421475G	18.966M	2.402505G	2.42147G	500k	1
18.75M	2.4028G	2.42155G	18.916M	2.40258G	2.421495G	500k	2
18.925M	2.402575G	2.4215G	18.891M	2.40258G	2.42147G	500k	3
18.9M	2.402625G	2.421525G	18.916M	2.402555G	2.42147G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2437MHz

19/02/2019



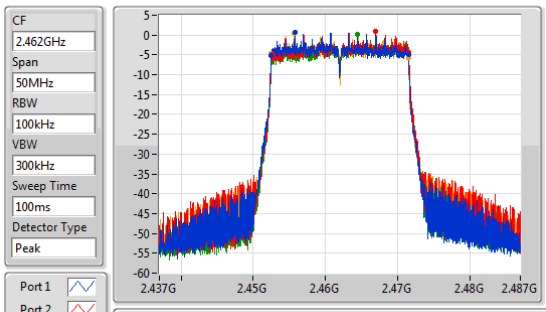


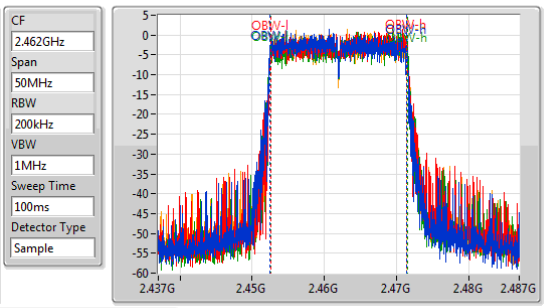
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.427525G	2.446525G	18.966M	2.42753G	2.446495G	500k	1
18.9M	2.4275G	2.4464G	18.966M	2.42748G	2.446445G	500k	2
18.975M	2.427525G	2.4465G	18.991M	2.42748G	2.44647G	500k	3
19.025M	2.4275G	2.446525G	18.966M	2.427505G	2.44647G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2462MHz

19/02/2019



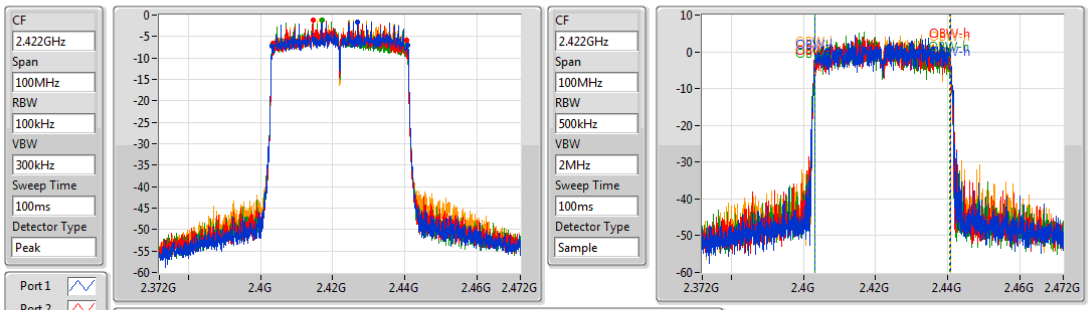


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.4525G	2.471475G	18.966M	2.452505G	2.47147G	500k	1
18.75M	2.452775G	2.471525G	18.941M	2.45253G	2.47147G	500k	2
19M	2.45255G	2.47155G	19.015M	2.45253G	2.471545G	500k	3
19.025M	2.4525G	2.471525G	18.966M	2.452505G	2.47147G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2422MHz

19/02/2019

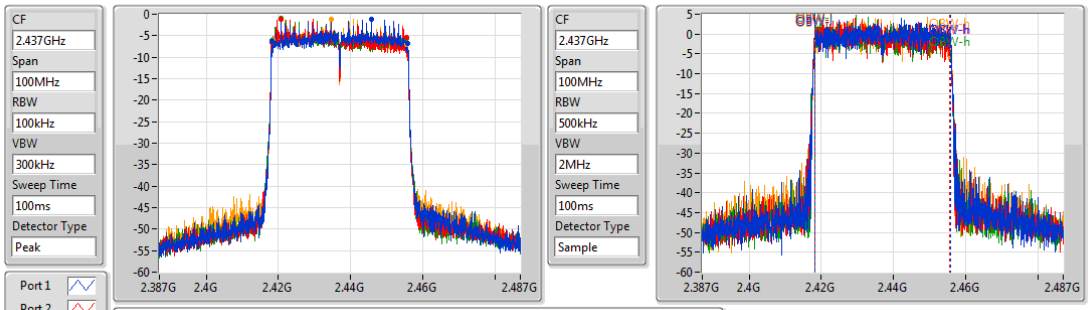


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.4033G	2.4408G	37.481M	2.403309G	2.440791G	500k	1
36.95M	2.4035G	2.44045G	37.481M	2.403209G	2.440691G	500k	2
37.15M	2.4033G	2.44045G	37.381M	2.403259G	2.440641G	500k	3
37.05M	2.4035G	2.44055G	37.431M	2.403259G	2.440691G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2437MHz

19/02/2019

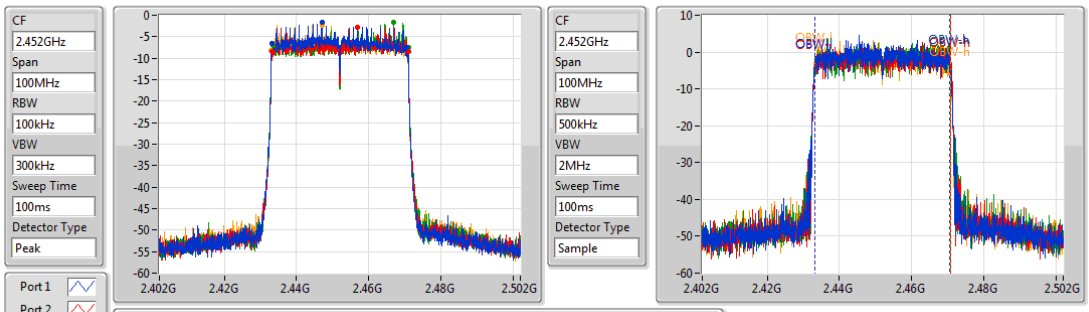


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.4183G	2.4558G	37.531M	2.418259G	2.455791G	500k	1
37.35M	2.4181G	2.45545G	37.531M	2.418109G	2.455641G	500k	2
37.2M	2.41825G	2.45545G	37.631M	2.418109G	2.455741G	500k	3
37.15M	2.41835G	2.4555G	37.531M	2.418259G	2.455791G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2452MHz

19/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.43325G	2.47045G	37.381M	2.433259G	2.470641G	500k	1
37.85M	2.4331G	2.47095G	37.681M	2.433159G	2.470841G	500k	2
37.45M	2.4335G	2.47095G	37.581M	2.433209G	2.470791G	500k	3
37.65M	2.43305G	2.4707G	37.631M	2.433109G	2.470741G	500k	4

For Non-beamforming / 4T4S mode
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_Nss4,(MCS0)_4TX	19.05M	19.015M	19M0D1D	18.575M	18.916M
802.11ax HEW40_Nss4,(MCS0)_4TX	37.7M	37.731M	37M7D1D	35.1M	37.381M

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

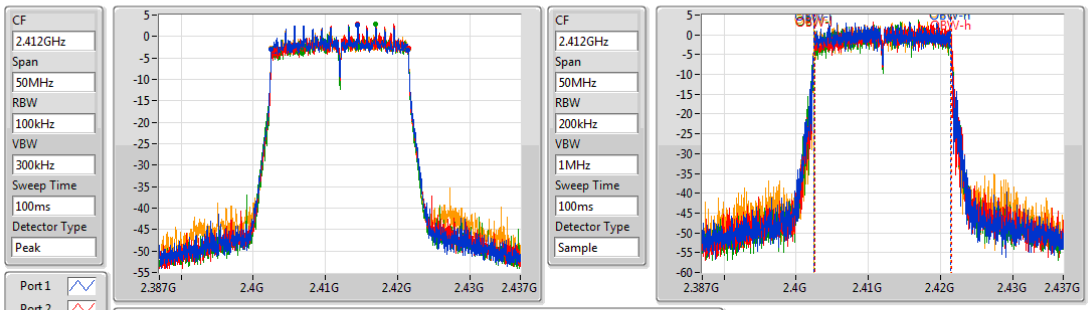
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	18.941M	18.575M	18.941M	18.825M	18.916M	19.05M	18.966M
2437MHz	Pass	500k	18.675M	18.991M	18.75M	18.966M	18.875M	19.015M	18.85M	19.015M
2462MHz	Pass	500k	18.9M	18.966M	18.925M	18.966M	18.85M	18.916M	19M	18.966M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.2M	37.531M	35.1M	37.431M	35.65M	37.381M	36.35M	37.481M
2437MHz	Pass	500k	37.15M	37.481M	36.7M	37.531M	37M	37.631M	37.15M	37.631M
2452MHz	Pass	500k	36.9M	37.431M	37.4M	37.731M	37.7M	37.581M	37.7M	37.681M

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

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2412MHz

16/02/2019

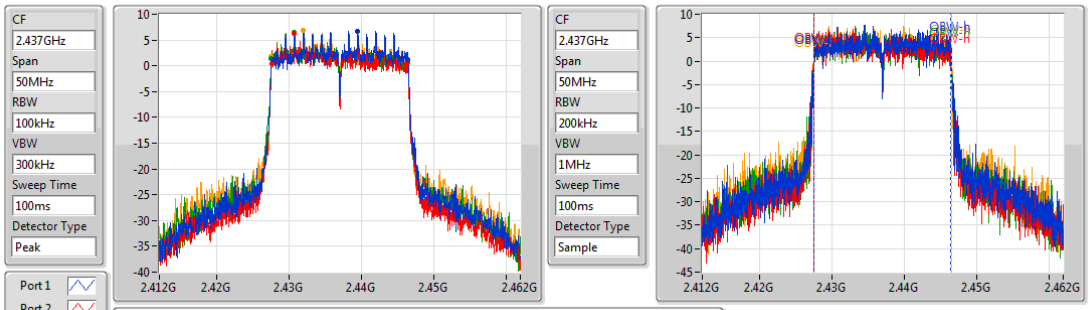


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402475G	2.42145G	18.941M	2.402505G	2.421445G	500k	1
18.575M	2.402925G	2.4215G	18.941M	2.402555G	2.421495G	500k	2
18.825M	2.4026G	2.421425G	18.916M	2.40253G	2.421445G	500k	3
19.05M	2.402475G	2.421525G	18.966M	2.402505G	2.42147G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2437MHz

16/02/2019

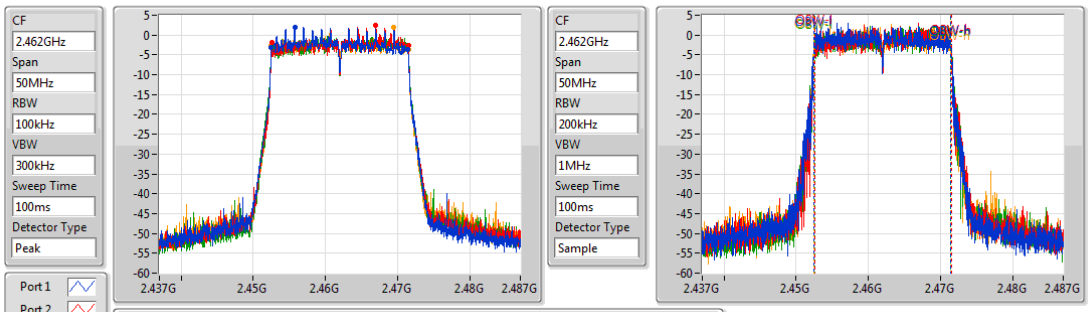


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.675M	2.42775G	2.446425G	18.991M	2.42748G	2.44647G	500k	1
18.75M	2.42755G	2.4463G	18.966M	2.427455G	2.44642G	500k	2
18.875M	2.427525G	2.4464G	19.015M	2.427455G	2.44647G	500k	3
18.85M	2.42745G	2.4463G	19.015M	2.42748G	2.446495G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX EBW

2462MHz

16/02/2019

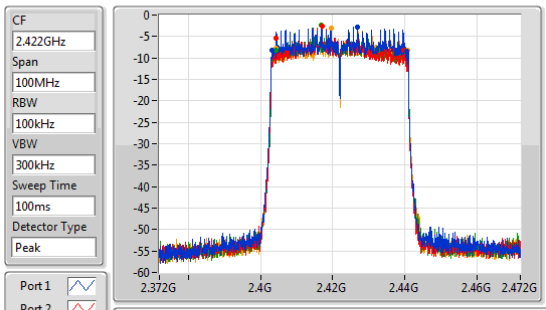


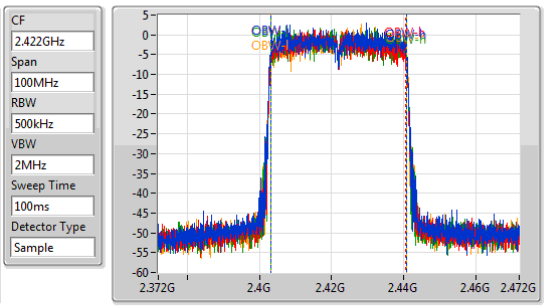
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	2.4525G	2.4714G	18.966M	2.45248G	2.471445G	500k	1
18.925M	2.452575G	2.4715G	18.966M	2.45253G	2.471495G	500k	2
18.85M	2.4526G	2.47145G	18.916M	2.452555G	2.47147G	500k	3
19M	2.452475G	2.471475G	18.966M	2.45248G	2.471445G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2422MHz

16/02/2019



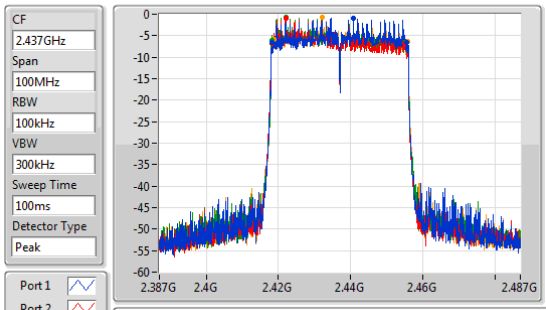


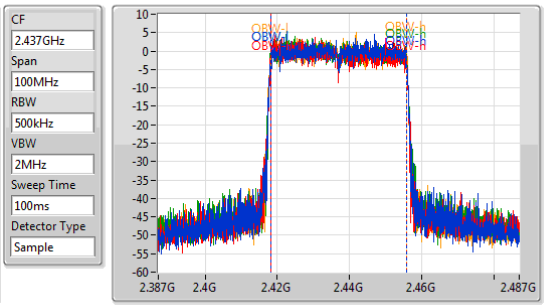
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.2M	2.4032G	2.4404G	37.531M	2.403209G	2.440741G	500k	1
35.1M	2.40445G	2.43955G	37.431M	2.403209G	2.440641G	500k	2
35.65M	2.4042G	2.43985G	37.381M	2.403309G	2.440691G	500k	3
36.35M	2.4044G	2.44075G	37.481M	2.403209G	2.440691G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2437MHz

16/02/2019



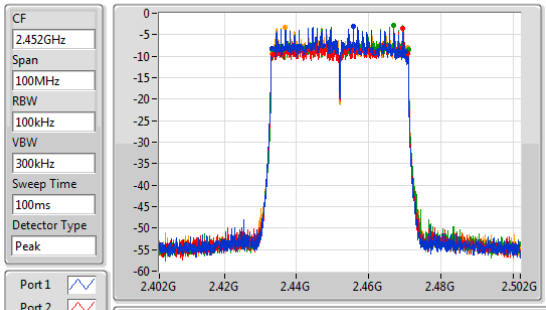


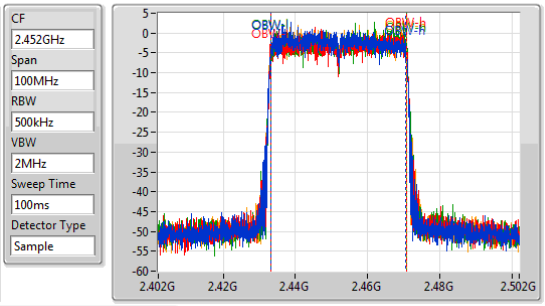
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.15M	2.41825G	2.4554G	37.481M	2.418209G	2.455691G	500k	1
36.7M	2.41825G	2.45495G	37.531M	2.418159G	2.455691G	500k	2
37M	2.4181G	2.4551G	37.631M	2.418109G	2.455741G	500k	3
37.15M	2.41865G	2.4558G	37.631M	2.418159G	2.455791G	500k	4

802.11ax HEW40_Nss4,(MCS0)_4TX **EBW**

2452MHz

16/02/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.9M	2.43325G	2.47015G	37.431M	2.433209G	2.470641G	500k	1
37.4M	2.4335G	2.4709G	37.731M	2.433109G	2.470841G	500k	2
37.7M	2.43325G	2.47095G	37.581M	2.433209G	2.470791G	500k	3
37.7M	2.4331G	2.4708G	37.681M	2.433109G	2.470791G	500k	4

For Mode 1: (Ant. 4 Omni antenna / 3 dBi)
For Non-beamforming / 1T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	23.34	0.21577
802.11g_Nss1,(6Mbps)_1TX	20.84	0.12134
802.11ax HEW20_Nss1,(MCS0)_1TX	20.51	0.11246
802.11ax HEW40_Nss1,(MCS0)_1TX	16.88	0.04875

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	3.00	21.82	21.82	30.00	20.25
2417MHz	Pass	3.00	22.78	22.78	30.00	21.5
2422MHz	Pass	3.00	22.92	22.92	30.00	21.75
2427MHz	Pass	3.00	23.17	23.17	30.00	22
2432MHz	Pass	3.00	23.31	23.31	30.00	22.25
2437MHz	Pass	3.00	23.34	23.34	30.00	22.25
2442MHz	Pass	3.00	23.11	23.11	30.00	22
2447MHz	Pass	3.00	22.48	22.48	30.00	21.25
2452MHz	Pass	3.00	22.33	22.33	30.00	21
2457MHz	Pass	3.00	21.79	21.79	30.00	20.25
2462MHz	Pass	3.00	21.29	21.29	30.00	19.75
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	
2412MHz	Pass	3.00	15.78	15.78	30.00	14.5
2417MHz	Pass	3.00	17.99	17.99	30.00	17
2422MHz	Pass	3.00	18.23	18.23	30.00	17.25
2427MHz	Pass	3.00	19.48	19.48	30.00	18.25
2432MHz	Pass	3.00	19.63	19.63	30.00	18.5
2437MHz	Pass	3.00	20.84	20.84	30.00	19.75
2442MHz	Pass	3.00	19.93	19.93	30.00	18.75
2447MHz	Pass	3.00	18.92	18.92	30.00	17.75
2452MHz	Pass	3.00	17.91	17.91	30.00	17
2457MHz	Pass	3.00	17.34	17.34	30.00	16.25
2462MHz	Pass	3.00	15.75	15.75	30.00	14.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	
2412MHz	Pass	3.00	16.02	16.02	30.00	14.5
2417MHz	Pass	3.00	17.18	17.18	30.00	16
2422MHz	Pass	3.00	17.55	17.55	30.00	16.25
2427MHz	Pass	3.00	19.44	19.44	30.00	18
2432MHz	Pass	3.00	20.09	20.09	30.00	18.75
2437MHz	Pass	3.00	20.51	20.51	30.00	19.25
2442MHz	Pass	3.00	19.35	19.35	30.00	18
2447MHz	Pass	3.00	17.67	17.67	30.00	16

AV Power Result

Appendix C.1

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2452MHz	Pass	3.00	16.75	16.75	30.00	15.5
2457MHz	Pass	3.00	16.28	16.28	30.00	15
2462MHz	Pass	3.00	13.49	13.49	30.00	12.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2422MHz	Pass	3.00	15.79	15.79	30.00	14.25
2427MHz	Pass	3.00	15.97	15.97	30.00	14.5
2432MHz	Pass	3.00	16.17	16.17	30.00	14.75
2437MHz	Pass	3.00	16.88	16.88	30.00	15.25
2442MHz	Pass	3.00	16.87	16.87	30.00	15.25
2447MHz	Pass	3.00	15.82	15.82	30.00	14.25
2452MHz	Pass	3.00	15.57	15.57	30.00	14

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

Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 2T2S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	22.46	0.17620
802.11ax HEW40_Nss2,(MCS0)_2TX	18.39	0.06902

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2412MHz	Pass	3.00	16.50	16.62	19.57	30.00	15.25
2417MHz	Pass	3.00	17.83	17.66	20.76	30.00	16.5
2422MHz	Pass	3.00	19.05	19.02	22.05	30.00	17.75
2427MHz	Pass	3.00	19.54	19.28	22.42	30.00	18.25
2437MHz	Pass	3.00	19.43	19.46	22.46	30.00	18.25
2442MHz	Pass	3.00	19.16	19.15	22.17	30.00	17.75
2447MHz	Pass	3.00	18.89	18.71	21.81	30.00	17.5
2452MHz	Pass	3.00	17.68	17.60	20.65	30.00	16.5
2457MHz	Pass	3.00	16.29	16.26	19.29	30.00	15
2462MHz	Pass	3.00	15.23	15.03	18.14	30.00	13.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2422MHz	Pass	3.00	14.42	14.24	17.34	30.00	12.75
2427MHz	Pass	3.00	15.32	15.20	18.27	30.00	13.75
2432MHz	Pass	3.00	15.39	15.32	18.37	30.00	14
2437MHz	Pass	3.00	15.37	15.39	18.39	30.00	14
2442MHz	Pass	3.00	15.42	15.16	18.30	30.00	14
2447MHz	Pass	3.00	15.12	15.06	18.10	30.00	13.5
2452MHz	Pass	3.00	13.29	13.26	16.29	30.00	11.75

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	28.78	0.75509
802.11g_Nss1,(6Mbps)_4TX	24.28	0.26792
802.11ax HEW20_Nss1,(MCS0)_4TX	23.44	0.22080
802.11ax HEW40_Nss1,(MCS0)_4TX	20.61	0.11508

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.00	21.30	21.25	21.24	21.29	27.29	30.00	19.5
2417MHz	Pass	3.00	21.23	21.17	21.06	21.42	27.24	30.00	19.5
2422MHz	Pass	3.00	21.97	22.19	21.90	22.14	28.07	30.00	20.5
2427MHz	Pass	3.00	22.39	22.32	22.32	22.47	28.40	30.00	21
2432MHz	Pass	3.00	22.46	22.38	22.57	22.48	28.49	30.00	21.25
2437MHz	Pass	3.00	22.85	22.71	22.81	22.66	28.78	30.00	21.5
2442MHz	Pass	3.00	22.20	21.99	22.14	22.17	28.15	30.00	20.75
2447MHz	Pass	3.00	22.13	21.99	21.91	21.85	27.99	30.00	20.5
2452MHz	Pass	3.00	21.86	21.74	21.78	21.80	27.82	30.00	20.25
2457MHz	Pass	3.00	21.07	21.09	20.90	21.03	27.04	30.00	19.5
2462MHz	Pass	3.00	21.13	21.25	20.99	21.13	27.15	30.00	19.5
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.00	13.67	13.81	13.71	13.94	19.80	30.00	12.5
2417MHz	Pass	3.00	15.63	15.13	15.08	15.97	21.49	30.00	14.25
2422MHz	Pass	3.00	16.93	16.79	16.78	16.99	22.89	30.00	15.75
2427MHz	Pass	3.00	18.03	17.77	17.73	18.03	23.91	30.00	16.75
2432MHz	Pass	3.00	18.15	18.09	18.03	18.40	24.19	30.00	17
2437MHz	Pass	3.00	18.46	18.04	18.29	18.25	24.28	30.00	17
2442MHz	Pass	3.00	18.21	18.35	18.25	17.96	24.22	30.00	17
2447MHz	Pass	3.00	17.22	17.14	17.20	17.30	23.24	30.00	16
2452MHz	Pass	3.00	16.66	16.25	16.08	16.84	22.49	30.00	15.5
2457MHz	Pass	3.00	15.75	16.01	16.08	15.87	21.95	30.00	14.75
2462MHz	Pass	3.00	13.55	13.62	13.01	13.55	19.46	30.00	12.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.00	14.22	13.82	13.41	13.99	19.89	30.00	12.25
2417MHz	Pass	3.00	14.99	14.65	14.86	14.86	20.86	30.00	13.5
2422MHz	Pass	3.00	16.13	15.86	16.11	16.41	22.15	30.00	14.75
2427MHz	Pass	3.00	16.68	16.44	16.66	16.52	22.60	30.00	15
2432MHz	Pass	3.00	17.42	17.09	17.28	17.61	23.37	30.00	16
2437MHz	Pass	3.00	17.55	17.36	17.42	17.35	23.44	30.00	16
2442MHz	Pass	3.00	17.37	17.12	17.30	17.50	23.35	30.00	16
2447MHz	Pass	3.00	15.65	15.50	15.59	15.89	21.68	30.00	14.25
2452MHz	Pass	3.00	15.54	15.73	15.65	15.72	21.68	30.00	14.25

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2457MHz	Pass	3.00	13.83	13.83	13.57	13.78	19.77	30.00	12.25
2462MHz	Pass	3.00	12.34	12.32	12.26	12.69	18.43	30.00	11
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.00	13.92	13.62	13.97	13.84	19.86	30.00	12.25
2427MHz	Pass	3.00	14.52	14.17	15.04	14.28	20.54	30.00	12.75
2432MHz	Pass	3.00	14.23	14.31	14.86	14.70	20.55	30.00	13
2437MHz	Pass	3.00	14.54	14.16	14.94	14.68	20.61	30.00	13
2442MHz	Pass	3.00	13.69	13.55	14.74	14.00	20.04	30.00	12.5
2447MHz	Pass	3.00	13.46	13.65	14.33	13.58	19.79	30.00	12.25
2452MHz	Pass	3.00	13.69	13.23	13.54	13.45	19.50	30.00	11.75

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	25.28	0.33729
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	20.15	0.10351

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	15.23	15.03	15.05	15.44	21.21	26.98	14
2417MHz	Pass	9.02	16.18	15.87	16.22	16.48	22.21	26.98	15
2422MHz	Pass	9.02	18.23	18.10	18.38	18.59	24.35	26.98	17.25
2427MHz	Pass	9.02	19.23	19.13	19.10	19.23	25.19	26.98	18.25
2437MHz	Pass	9.02	19.13	19.40	19.12	19.39	25.28	26.98	18.25
2442MHz	Pass	9.02	17.85	17.69	18.12	18.35	24.03	26.98	17
2447MHz	Pass	9.02	16.09	16.11	16.19	16.51	22.25	26.98	15
2452MHz	Pass	9.02	17.13	16.81	17.00	17.30	23.08	26.98	16
2457MHz	Pass	9.02	14.88	14.62	14.94	15.12	20.91	26.98	14
2462MHz	Pass	9.02	13.48	13.34	13.39	13.60	19.47	26.98	12.5
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	14.51	13.77	14.10	13.72	20.06	26.98	13
2437MHz	Pass	9.02	14.29	14.34	13.96	13.90	20.15	26.98	13
2452MHz	Pass	9.02	14.27	14.17	14.05	13.83	20.10	26.98	13

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T4S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	24.69	0.29444
802.11ax HEW40_Nss4,(MCS0)_4TX	20.24	0.10568

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.00	14.89	14.66	14.56	15.07	20.82	30.00	13.5
2417MHz	Pass	3.00	16.86	16.47	16.42	16.86	22.68	30.00	15.25
2422MHz	Pass	3.00	17.52	17.19	17.35	17.52	23.42	30.00	16
2427MHz	Pass	3.00	18.46	17.94	18.60	18.67	24.45	30.00	17.25
2437MHz	Pass	3.00	18.77	18.57	18.70	18.64	24.69	30.00	17.25
2442MHz	Pass	3.00	18.46	18.45	18.51	18.16	24.42	30.00	17
2447MHz	Pass	3.00	17.88	17.79	17.54	17.79	23.77	30.00	16.25
2452MHz	Pass	3.00	17.00	16.76	16.56	17.18	22.90	30.00	15.5
2457MHz	Pass	3.00	15.89	15.99	15.76	16.16	21.97	30.00	14.5
2462MHz	Pass	3.00	14.35	14.46	14.13	14.21	20.31	30.00	13
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.00	12.68	12.91	13.40	13.13	19.06	30.00	11.5
2427MHz	Pass	3.00	13.21	13.24	13.59	13.31	19.36	30.00	12
2432MHz	Pass	3.00	14.07	13.79	14.58	14.41	20.24	30.00	12.75
2437MHz	Pass	3.00	14.19	14.11	14.39	14.18	20.24	30.00	12.75
2442MHz	Pass	3.00	14.18	14.09	14.38	13.81	20.14	30.00	12.5
2447MHz	Pass	3.00	13.34	13.14	13.52	13.12	19.30	30.00	11.75
2452MHz	Pass	3.00	12.69	12.72	13.29	12.65	18.87	30.00	11.25

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Mode 2: (Ant. 7 Omni antenna / 4 dBi)
For Non-beamforming / 1T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	23.43	0.22029
802.11g_Nss1,(6Mbps)_1TX	21.32	0.13552
802.11ax HEW20_Nss1,(MCS0)_1TX	20.84	0.12134
802.11ax HEW40_Nss1,(MCS0)_1TX	17.34	0.05420

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	22.21	22.21	30.00	20.75
2417MHz	Pass	4.00	23.09	23.09	30.00	22
2422MHz	Pass	4.00	23.05	23.05	30.00	22
2427MHz	Pass	4.00	23.26	23.26	30.00	22.25
2432MHz	Pass	4.00	23.40	23.40	30.00	22.5
2437MHz	Pass	4.00	23.43	23.43	30.00	22.5
2442MHz	Pass	4.00	23.26	23.26	30.00	22.25
2447MHz	Pass	4.00	22.73	22.73	30.00	21.5
2452MHz	Pass	4.00	22.75	22.75	30.00	21.5
2457MHz	Pass	4.00	22.25	22.25	30.00	20.75
2462MHz	Pass	4.00	21.70	21.70	30.00	20.25
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	17.66	17.66	30.00	16.5
2417MHz	Pass	4.00	19.15	19.15	30.00	18
2422MHz	Pass	4.00	19.86	19.86	30.00	19
2427MHz	Pass	4.00	20.72	20.72	30.00	19.75
2432MHz	Pass	4.00	21.28	21.28	30.00	20.5
2437MHz	Pass	4.00	21.32	21.32	30.00	20.5
2442MHz	Pass	4.00	20.96	20.96	30.00	20
2447MHz	Pass	4.00	20.25	20.25	30.00	19.25
2452MHz	Pass	4.00	19.36	19.36	30.00	18.25
2457MHz	Pass	4.00	18.04	18.04	30.00	17
2462MHz	Pass	4.00	16.58	16.58	30.00	15.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	16.55	16.55	30.00	15
2417MHz	Pass	4.00	18.92	18.92	30.00	17.5
2422MHz	Pass	4.00	18.85	18.85	30.00	17.5
2427MHz	Pass	4.00	20.28	20.28	30.00	19
2432MHz	Pass	4.00	20.82	20.82	30.00	19.75
2437MHz	Pass	4.00	20.84	20.84	30.00	19.75
2442MHz	Pass	4.00	20.60	20.60	30.00	19.5
2447MHz	Pass	4.00	20.18	20.18	30.00	18.75

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2452MHz	Pass	4.00	17.64	17.64	30.00	16.25
2457MHz	Pass	4.00	17.27	17.27	30.00	15.75
2462MHz	Pass	4.00	14.35	14.35	30.00	13
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2422MHz	Pass	4.00	16.46	16.46	30.00	15
2427MHz	Pass	4.00	16.79	16.79	30.00	15.25
2432MHz	Pass	4.00	17.05	17.05	30.00	15.5
2437MHz	Pass	4.00	17.34	17.34	30.00	16
2442MHz	Pass	4.00	17.12	17.12	30.00	15.5
2447MHz	Pass	4.00	16.32	16.32	30.00	15
2452MHz	Pass	4.00	16.25	16.25	30.00	14.75

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

Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 2T2S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	23.30	0.21380
802.11ax HEW40_Nss2,(MCS0)_2TX	19.64	0.09204

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2412MHz	Pass	4.00	16.19	15.99	19.10	30.00	14.75
2417MHz	Pass	4.00	17.68	17.17	20.44	30.00	16
2422MHz	Pass	4.00	18.47	18.17	21.33	30.00	17
2427MHz	Pass	4.00	19.35	19.25	22.31	30.00	18
2432MHz	Pass	4.00	20.13	19.89	23.02	30.00	18.75
2437MHz	Pass	4.00	20.43	20.14	23.30	30.00	19
2442MHz	Pass	4.00	19.73	19.30	22.53	30.00	18.25
2447MHz	Pass	4.00	18.89	18.71	21.81	30.00	17.5
2452MHz	Pass	4.00	18.37	17.84	21.12	30.00	17
2457MHz	Pass	4.00	17.01	16.73	19.88	30.00	15.5
2462MHz	Pass	4.00	15.32	15.37	18.36	30.00	14
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2422MHz	Pass	4.00	16.12	15.88	19.01	30.00	14.5
2427MHz	Pass	4.00	16.05	15.95	19.01	30.00	14.5
2432MHz	Pass	4.00	16.06	16.16	19.12	30.00	14.75
2437MHz	Pass	4.00	16.66	16.59	19.64	30.00	15.25
2442MHz	Pass	4.00	16.48	16.28	19.39	30.00	15
2447MHz	Pass	4.00	15.74	15.71	18.74	30.00	14.25
2452MHz	Pass	4.00	15.62	15.31	18.48	30.00	14

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	28.78	0.75509
802.11g_Nss1,(6Mbps)_4TX	25.54	0.35810
802.11ax HEW20_Nss1,(MCS0)_4TX	24.34	0.27164
802.11ax HEW40_Nss1,(MCS0)_4TX	21.54	0.14256

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	21.30	21.25	21.24	21.29	27.29	30.00	19.5
2417MHz	Pass	4.00	21.62	21.59	21.60	21.58	27.62	30.00	20
2422MHz	Pass	4.00	22.75	22.76	22.76	22.71	28.77	30.00	21.25
2427MHz	Pass	4.00	22.76	22.65	22.75	22.78	28.76	30.00	21.5
2437MHz	Pass	4.00	22.85	22.71	22.81	22.66	28.78	30.00	21.5
2442MHz	Pass	4.00	22.60	22.53	22.54	22.45	28.55	30.00	21.25
2447MHz	Pass	4.00	22.53	22.46	22.59	22.48	28.54	30.00	21.25
2452MHz	Pass	4.00	21.95	21.96	21.92	21.73	27.91	30.00	20.5
2457MHz	Pass	4.00	21.62	21.52	21.63	21.47	27.58	30.00	20
2462MHz	Pass	4.00	21.13	21.25	20.99	21.13	27.15	30.00	19.5
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	14.02	14.35	14.04	14.22	20.18	30.00	13
2417MHz	Pass	4.00	16.50	16.33	16.48	16.63	22.51	30.00	15.25
2422MHz	Pass	4.00	17.22	16.94	16.78	17.33	23.09	30.00	16
2427MHz	Pass	4.00	18.03	17.77	17.73	18.03	23.91	30.00	16.75
2432MHz	Pass	4.00	18.15	18.09	18.03	18.40	24.19	30.00	17
2437MHz	Pass	4.00	19.43	19.41	19.55	19.68	25.54	30.00	18.5
2442MHz	Pass	4.00	18.80	18.64	18.68	18.50	24.68	30.00	17.5
2447MHz	Pass	4.00	18.20	18.10	18.06	18.31	24.19	30.00	17
2452MHz	Pass	4.00	16.66	16.25	16.08	16.84	22.49	30.00	15.5
2457MHz	Pass	4.00	15.68	15.77	15.63	15.73	21.72	30.00	14.5
2462MHz	Pass	4.00	14.40	13.93	14.21	14.30	20.23	30.00	13
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	14.61	14.52	14.72	14.17	20.53	30.00	13
2417MHz	Pass	4.00	15.28	15.31	15.25	15.42	21.34	30.00	14
2422MHz	Pass	4.00	16.86	16.84	16.80	16.96	22.89	30.00	15.5
2427MHz	Pass	4.00	17.08	16.79	16.89	16.89	22.93	30.00	15.5
2432MHz	Pass	4.00	18.22	18.07	18.03	18.39	24.20	30.00	16.75
2437MHz	Pass	4.00	18.37	18.35	18.42	18.15	24.34	30.00	16.75
2442MHz	Pass	4.00	16.92	16.90	16.47	16.95	22.83	30.00	15.5
2447MHz	Pass	4.00	16.39	16.28	16.17	16.11	22.26	30.00	14.75
2452MHz	Pass	4.00	15.81	15.83	16.04	16.02	21.95	30.00	14.5
2457MHz	Pass	4.00	14.00	14.26	14.03	13.96	20.08	30.00	12.5

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2462MHz	Pass	4.00	12.34	12.32	12.26	12.69	18.43	30.00	11
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	4.00	14.86	14.58	15.32	14.51	20.85	30.00	13.25
2427MHz	Pass	4.00	14.67	14.65	15.21	14.70	20.83	30.00	13.25
2432MHz	Pass	4.00	14.90	15.01	15.44	14.94	21.10	30.00	13.5
2437MHz	Pass	4.00	15.51	15.54	15.67	15.37	21.54	30.00	14
2442MHz	Pass	4.00	15.16	14.90	15.44	14.97	21.14	30.00	13.5
2447MHz	Pass	4.00	14.54	14.62	14.64	14.49	20.59	30.00	13
2452MHz	Pass	4.00	13.84	13.86	14.25	13.74	19.95	30.00	12.25

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

Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	25.09	0.32285
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.15	0.16406

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	10.02	15.74	15.30	15.38	15.37	21.47	25.98	14.25
2417MHz	Pass	10.02	16.66	16.68	15.83	16.56	22.47	25.98	15.25
2422MHz	Pass	10.02	17.79	17.44	17.48	17.52	23.58	25.98	16.5
2427MHz	Pass	10.02	19.19	18.96	18.82	19.09	25.04	25.98	18
2437MHz	Pass	10.02	19.30	19.14	18.75	19.08	25.09	25.98	18
2442MHz	Pass	10.02	18.71	18.53	18.41	18.41	24.54	25.98	17.5
2447MHz	Pass	10.02	18.41	18.06	18.10	18.13	24.20	25.98	17
2452MHz	Pass	10.02	16.68	16.35	16.20	16.33	22.41	25.98	15.25
2457MHz	Pass	10.02	14.60	14.22	14.56	14.29	20.44	25.98	13.5
2462MHz	Pass	10.02	13.48	13.33	13.20	13.11	19.30	25.98	12.25
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	10.02	13.48	13.29	13.65	13.83	19.59	25.98	12.5
2427MHz	Pass	10.02	13.50	13.64	13.72	14.35	19.84	25.98	12.75
2432MHz	Pass	10.02	14.73	14.45	14.83	15.14	20.82	25.98	13.75
2437MHz	Pass	10.02	16.23	15.89	16.24	16.15	22.15	25.98	15
2442MHz	Pass	10.02	14.53	14.37	14.59	14.61	20.55	25.98	13.5
2447MHz	Pass	10.02	14.91	14.15	14.34	14.62	20.54	25.98	13.5
2452MHz	Pass	10.02	13.33	13.48	13.62	13.66	19.55	25.98	12.5

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T4S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	25.36	0.34356
802.11ax HEW40_Nss4,(MCS0)_4TX	21.24	0.13305

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.00	15.55	15.23	15.61	15.60	21.52	30.00	14.25
2417MHz	Pass	4.00	16.93	16.64	16.79	16.91	22.84	30.00	15.5
2422MHz	Pass	4.00	17.59	17.44	17.32	17.72	23.54	30.00	16.25
2427MHz	Pass	4.00	18.46	17.94	18.60	18.67	24.45	30.00	17.25
2432MHz	Pass	4.00	19.35	19.28	19.22	19.30	25.31	30.00	18
2437MHz	Pass	4.00	19.38	19.36	19.35	19.28	25.36	30.00	18
2442MHz	Pass	4.00	19.18	19.12	19.14	19.11	25.16	30.00	17.75
2447MHz	Pass	4.00	18.21	18.08	18.02	18.05	24.11	30.00	16.75
2452MHz	Pass	4.00	17.59	17.43	17.42	17.26	23.45	30.00	16
2457MHz	Pass	4.00	16.02	16.10	16.20	16.25	22.16	30.00	14.75
2462MHz	Pass	4.00	15.25	15.07	14.82	15.12	21.09	30.00	13.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	4.00	12.68	12.91	13.40	13.13	19.06	30.00	11.5
2427MHz	Pass	4.00	13.15	12.92	13.37	12.74	19.07	30.00	11.75
2432MHz	Pass	4.00	14.07	13.79	14.58	14.41	20.24	30.00	12.75
2437MHz	Pass	4.00	15.13	15.10	15.62	15.01	21.24	30.00	13.75
2442MHz	Pass	4.00	14.18	14.09	14.38	13.81	20.14	30.00	12.5
2447MHz	Pass	4.00	14.15	13.77	14.42	13.95	20.10	30.00	12.5
2452MHz	Pass	4.00	13.22	13.14	13.58	13.28	19.33	30.00	11.75

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

Mode 3: (Ant. 11 Panel antenna / 6.8 dBi)
For Non-beamforming / 1T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	22.51	0.17824
802.11g_Nss1,(6Mbps)_1TX	20.56	0.11376
802.11ax HEW20_Nss1,(MCS0)_1TX	19.45	0.08810
802.11ax HEW40_Nss1,(MCS0)_1TX	16.56	0.04529

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	6.80	21.30	21.30	29.20	19.75
2417MHz	Pass	6.80	22.50	22.50	29.20	21.25
2437MHz	Pass	6.80	22.51	22.51	29.20	21.25
2452MHz	Pass	6.80	22.50	22.50	29.20	21.25
2457MHz	Pass	6.80	22.24	22.24	29.20	20.75
2462MHz	Pass	6.80	21.29	21.29	29.20	19.75
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	6.80	15.49	15.49	29.20	14.25
2417MHz	Pass	6.80	17.76	17.76	29.20	16.75
2422MHz	Pass	6.80	17.28	17.28	29.20	16.25
2427MHz	Pass	6.80	19.11	19.11	29.20	18
2432MHz	Pass	6.80	19.13	19.13	29.20	18
2437MHz	Pass	6.80	20.56	20.56	29.20	19.5
2442MHz	Pass	6.80	19.55	19.55	29.20	18.5
2447MHz	Pass	6.80	19.39	19.39	29.20	18.25
2452MHz	Pass	6.80	18.53	18.53	29.20	17.5
2457MHz	Pass	6.80	17.61	17.61	29.20	16.5
2462MHz	Pass	6.80	15.75	15.75	29.20	14.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	6.80	14.96	14.96	29.20	13.5
2417MHz	Pass	6.80	17.51	17.51	29.20	16.25
2422MHz	Pass	6.80	17.55	17.55	29.20	16.25
2427MHz	Pass	6.80	19.44	19.44	29.20	18
2437MHz	Pass	6.80	19.45	19.45	29.20	18
2442MHz	Pass	6.80	19.35	19.35	29.20	18
2447MHz	Pass	6.80	17.89	17.89	29.20	16.25
2452MHz	Pass	6.80	16.96	16.96	29.20	15.75
2457MHz	Pass	6.80	16.71	16.71	29.20	15.5
2462MHz	Pass	6.80	13.79	13.79	29.20	12.5
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2422MHz	Pass	6.80	15.47	15.47	29.20	14
2427MHz	Pass	6.80	16.19	16.19	29.20	14.75

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2432MHz	Pass	6.80	16.53	16.53	29.20	15
2437MHz	Pass	6.80	16.56	16.56	29.20	15
2442MHz	Pass	6.80	16.51	16.51	29.20	15
2447MHz	Pass	6.80	16.04	16.04	29.20	14.5
2452MHz	Pass	6.80	15.28	15.28	29.20	13.75

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 2T2S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	22.46	0.17620
802.11ax HEW40_Nss2,(MCS0)_2TX	19.06	0.08054

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2412MHz	Pass	6.80	15.17	15.14	18.17	29.20	14
2417MHz	Pass	6.80	16.47	16.41	19.45	29.20	15.25
2422MHz	Pass	6.80	17.82	17.66	20.75	29.20	16.5
2427MHz	Pass	6.80	18.35	18.31	21.34	29.20	17.25
2432MHz	Pass	6.80	19.21	18.92	22.08	29.20	18
2437MHz	Pass	6.80	19.43	19.46	22.46	29.20	18.25
2442MHz	Pass	6.80	19.16	19.15	22.17	29.20	17.75
2447MHz	Pass	6.80	18.62	18.43	21.54	29.20	17.25
2452MHz	Pass	6.80	17.21	16.94	20.09	29.20	16
2457MHz	Pass	6.80	16.53	16.48	19.52	29.20	15.25
2462MHz	Pass	6.80	15.45	15.28	18.38	29.20	14
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-
2422MHz	Pass	6.80	15.04	14.92	17.99	29.20	13.5
2427MHz	Pass	6.80	15.54	15.42	18.49	29.20	14
2432MHz	Pass	6.80	15.68	15.53	18.62	29.20	14.25
2437MHz	Pass	6.80	16.09	16.01	19.06	29.20	14.75
2442MHz	Pass	6.80	15.63	15.43	18.54	29.20	14.25
2447MHz	Pass	6.80	15.35	15.28	18.33	29.20	13.75
2452MHz	Pass	6.80	14.87	14.65	17.77	29.20	13.25

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	28.50	0.70795
802.11g_Nss1,(6Mbps)_4TX	24.51	0.28249
802.11ax HEW20_Nss1,(MCS0)_4TX	23.44	0.22080
802.11ax HEW40_Nss1,(MCS0)_4TX	20.61	0.11508

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	6.80	21.01	20.98	20.95	21.04	27.02	29.20	19.25
2417MHz	Pass	6.80	21.23	21.17	21.06	21.42	27.24	29.20	19.5
2422MHz	Pass	6.80	21.73	21.75	21.58	21.84	27.75	29.20	20.25
2427MHz	Pass	6.80	22.45	22.37	22.41	22.56	28.47	29.20	21.25
2437MHz	Pass	6.80	22.58	22.37	22.51	22.44	28.50	29.20	21.25
2442MHz	Pass	6.80	22.43	22.22	22.39	22.52	28.41	29.20	21.25
2447MHz	Pass	6.80	21.02	20.77	20.84	20.71	26.86	29.20	19.25
2452MHz	Pass	6.80	20.11	20.18	20.26	20.35	26.25	29.20	18.5
2457MHz	Pass	6.80	20.04	19.98	20.07	20.13	26.08	29.20	18.5
2462MHz	Pass	6.80	20.03	20.01	19.88	20.05	26.01	29.20	18.25
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	6.80	13.41	13.54	13.46	13.66	19.54	29.20	12.25
2417MHz	Pass	6.80	15.85	15.37	15.32	16.19	21.72	29.20	14.5
2422MHz	Pass	6.80	16.01	15.87	15.94	16.21	22.03	29.20	15
2427MHz	Pass	6.80	17.66	17.42	17.46	17.72	23.59	29.20	16.5
2432MHz	Pass	6.80	17.86	17.71	17.66	17.96	23.82	29.20	16.75
2437MHz	Pass	6.80	18.69	18.25	18.52	18.49	24.51	29.20	17.25
2442MHz	Pass	6.80	18.21	18.35	18.25	17.96	24.22	29.20	17
2447MHz	Pass	6.80	17.45	17.39	17.45	17.58	23.49	29.20	16.25
2452MHz	Pass	6.80	16.93	16.55	16.36	17.05	22.75	29.20	15.75
2457MHz	Pass	6.80	15.75	16.01	16.08	15.87	21.95	29.20	14.75
2462MHz	Pass	6.80	13.29	13.34	12.76	13.27	19.19	29.20	12
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	6.80	12.91	12.75	12.43	12.75	18.73	29.20	11.25
2417MHz	Pass	6.80	14.53	14.14	14.19	14.37	20.33	29.20	13
2422MHz	Pass	6.80	16.41	16.12	16.37	16.63	22.41	29.20	15
2427MHz	Pass	6.80	16.68	16.44	16.66	16.52	22.60	29.20	15
2432MHz	Pass	6.80	16.23	16.09	16.19	16.64	22.31	29.20	15
2437MHz	Pass	6.80	17.55	17.36	17.42	17.35	23.44	29.20	16
2442MHz	Pass	6.80	16.01	16.03	16.15	16.22	22.12	29.20	14.75
2447MHz	Pass	6.80	15.92	15.76	15.84	16.12	21.93	29.20	14.5
2452MHz	Pass	6.80	15.32	15.48	15.31	15.47	21.42	29.20	14
2457MHz	Pass	6.80	14.08	14.04	13.84	14.02	20.02	29.20	12.5

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
2462MHz	Pass	6.80	11.70	11.13	11.41	11.38	17.43	29.20	10
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	6.80	13.22	12.97	13.45	13.23	19.24	29.20	11.75
2427MHz	Pass	6.80	13.95	13.63	14.32	13.75	19.94	29.20	12.25
2432MHz	Pass	6.80	13.82	13.77	14.43	14.15	20.07	29.20	12.5
2437MHz	Pass	6.80	14.54	14.16	14.94	14.68	20.61	29.20	13
2442MHz	Pass	6.80	13.43	13.28	14.47	13.72	19.77	29.20	12.25
2447MHz	Pass	6.80	13.05	13.09	13.61	13.05	19.23	29.20	11.75
2452MHz	Pass	6.80	13.07	12.66	12.97	12.89	18.92	29.20	11.25

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Beamforming / 4T1S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.05	0.20184
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	20.15	0.10351

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	12.82	13.36	13.07	12.44	12.79	18.95	23.18	11.75
2417MHz	Pass	12.82	14.35	13.52	13.75	13.84	19.90	23.18	12.75
2422MHz	Pass	12.82	15.62	15.26	15.25	15.33	21.39	23.18	14.25
2427MHz	Pass	12.82	17.14	16.99	16.63	16.95	22.95	23.18	16
2437MHz	Pass	12.82	17.32	17.06	16.59	17.11	23.05	23.18	16
2442MHz	Pass	12.82	17.19	16.98	16.72	17.06	23.01	23.18	16
2447MHz	Pass	12.82	15.89	15.00	15.19	15.55	21.44	23.18	14.25
2452MHz	Pass	12.82	15.10	15.14	14.95	15.10	21.09	23.18	14
2457MHz	Pass	12.82	14.50	13.45	13.70	14.50	20.08	23.18	13
2462MHz	Pass	12.82	13.16	13.13	12.61	12.97	18.99	23.18	12
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	12.82	13.71	13.79	13.82	14.09	19.88	23.18	12.75
2427MHz	Pass	12.82	13.98	13.69	13.85	14.51	20.04	23.18	13
2437MHz	Pass	12.82	14.29	14.34	13.96	13.90	20.15	23.18	13
2442MHz	Pass	12.82	14.15	13.78	13.74	14.25	20.01	23.18	13
2447MHz	Pass	12.82	12.79	12.97	12.82	13.06	18.93	23.18	11.75
2452MHz	Pass	12.82	13.08	12.59	12.65	12.92	18.84	23.18	11.75

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Non-beamforming / 4T4S mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	24.69	0.29444
802.11ax HEW40_Nss4,(MCS0)_4TX	19.72	0.09376

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	Conducted setting
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	6.80	14.89	14.66	14.56	15.07	20.82	29.20	13.5
2417MHz	Pass	6.80	15.71	15.76	15.73	15.98	21.82	29.20	14.5
2422MHz	Pass	6.80	16.65	16.32	16.57	16.71	22.59	29.20	15.25
2427MHz	Pass	6.80	17.72	17.36	17.68	17.75	23.65	29.20	16.5
2432MHz	Pass	6.80	18.53	18.34	18.51	18.60	24.52	29.20	17.25
2437MHz	Pass	6.80	18.77	18.57	18.70	18.64	24.69	29.20	17.25
2442MHz	Pass	6.80	18.19	18.16	18.23	17.92	24.15	29.20	16.75
2447MHz	Pass	6.80	17.54	17.46	17.28	17.49	23.46	29.20	16
2452MHz	Pass	6.80	16.15	15.94	15.96	16.32	22.12	29.20	14.75
2457MHz	Pass	6.80	14.93	14.85	14.66	14.92	20.86	29.20	13.5
2462MHz	Pass	6.80	13.84	13.97	13.71	13.74	19.84	29.20	12.5
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	6.80	11.91	11.34	11.68	11.41	17.61	29.20	10
2427MHz	Pass	6.80	11.96	11.52	12.29	11.77	17.91	29.20	10.25
2432MHz	Pass	6.80	13.07	12.61	13.33	13.38	19.13	29.20	11.75
2437MHz	Pass	6.80	13.68	13.59	13.93	13.60	19.72	29.20	12.25
2442MHz	Pass	6.80	13.53	13.48	13.61	13.31	19.50	29.20	12
2447MHz	Pass	6.80	11.98	11.25	11.88	11.47	17.68	29.20	10.25
2452MHz	Pass	6.80	11.55	11.02	11.64	11.42	17.43	29.20	10

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Note : Conducted setting = Pass conducted setting division 4

For Mode 1: (Ant. 4 Omni antenna / 3 dBi)
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	1.21
802.11g_Nss1,(6Mbps)_1TX	-4.73
802.11ax HEW20_Nss1,(MCS0)_1TX	-4.29
802.11ax HEW40_Nss1,(MCS0)_1TX	-11.28

RBW=3kHz.

Result

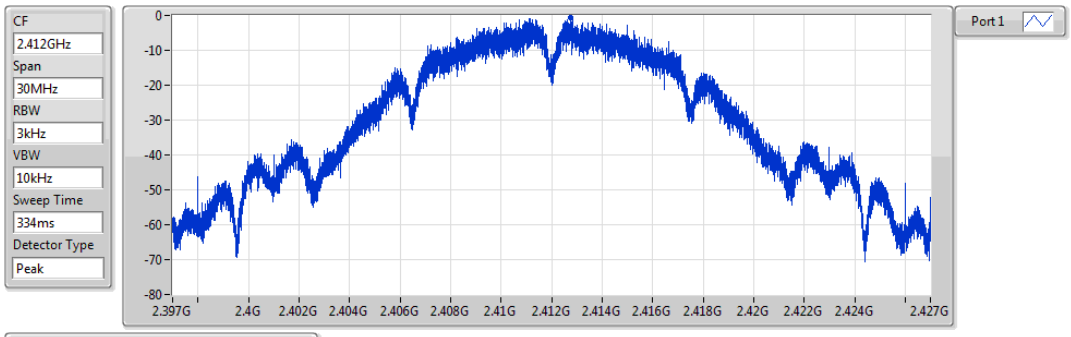
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-0.70	-0.70	8.00
2437MHz	Pass	3.00	1.21	1.21	8.00
2462MHz	Pass	3.00	-1.16	-1.16	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-10.12	-10.12	8.00
2437MHz	Pass	3.00	-4.73	-4.73	8.00
2462MHz	Pass	3.00	-10.35	-10.35	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-8.27	-8.27	8.00
2437MHz	Pass	3.00	-4.29	-4.29	8.00
2462MHz	Pass	3.00	-10.70	-10.70	8.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	3.00	-12.10	-12.10	8.00
2437MHz	Pass	3.00	-11.28	-11.28	8.00
2452MHz	Pass	3.00	-12.75	-12.75	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 Xpower density;

802.11b_Nss1,(1Mbps)_1TX PSD

2412MHz

25/01/2019

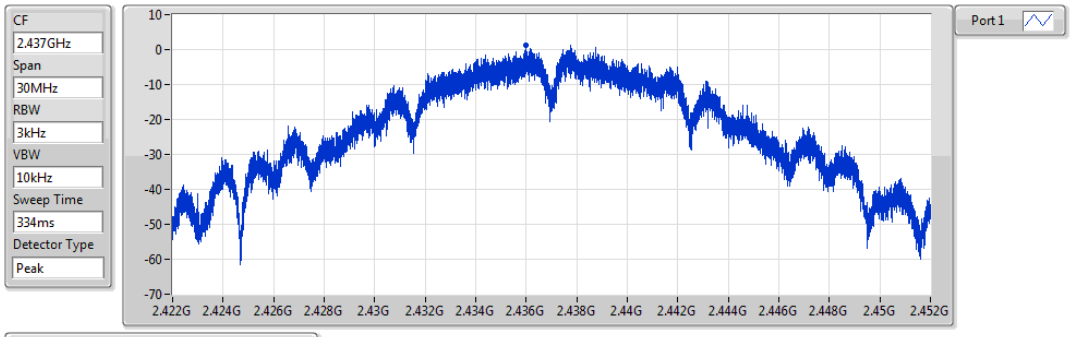


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.70	-0.70	-0.70

802.11b_Nss1,(1Mbps)_1TX PSD

2437MHz

25/01/2019

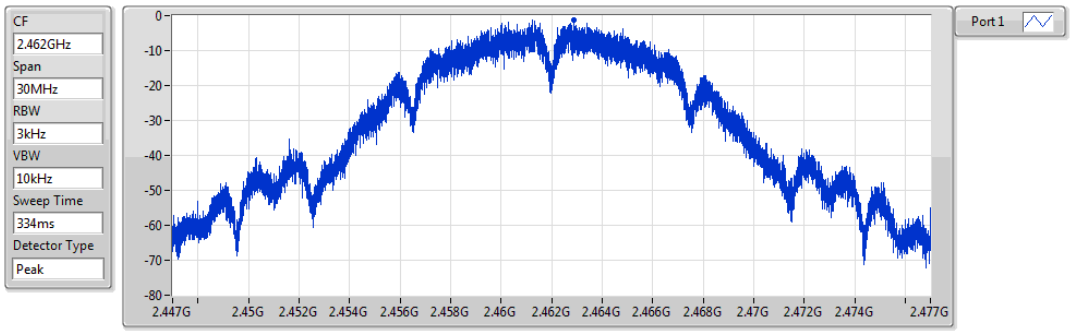


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.21	1.21	1.21

802.11b_Nss1,(1Mbps)_1TX PSD

2462MHz

25/01/2019

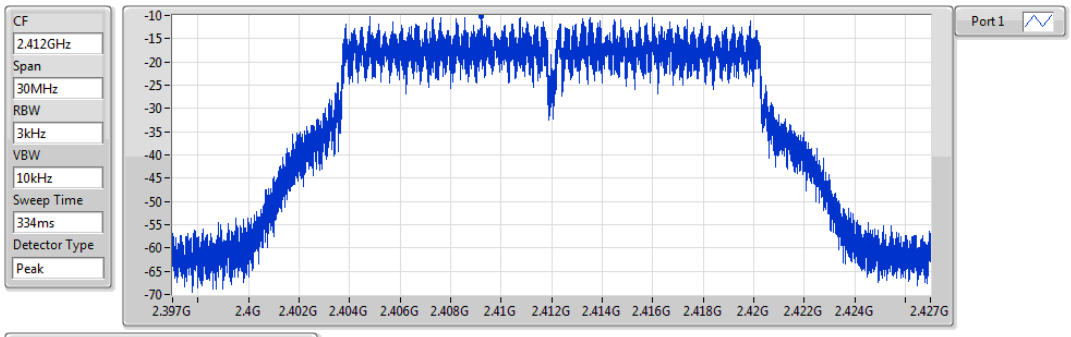


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.16	-1.16	-1.16

802.11g_Nss1,(6Mbps)_1TX **PSD**

2412MHz

25/01/2019

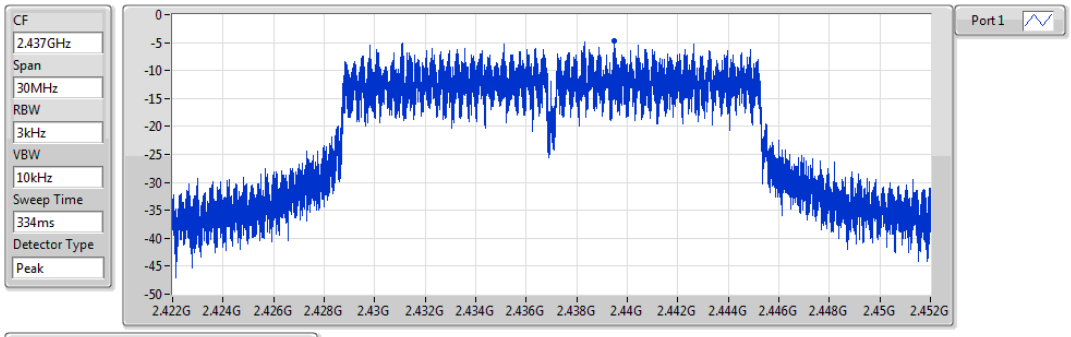


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.12	-10.12	-10.12

802.11g_Nss1,(6Mbps)_1TX **PSD**

2437MHz

25/01/2019

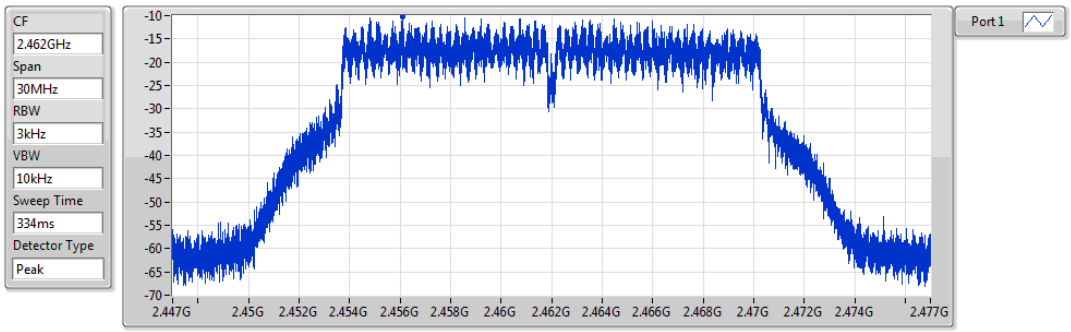


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.73	-4.73	-4.73

802.11g_Nss1,(6Mbps)_1TX **PSD**

2462MHz

25/01/2019

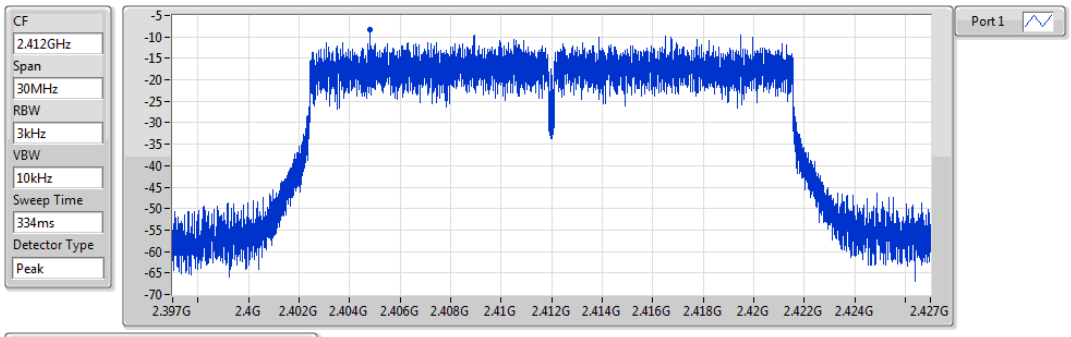


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.35	-10.35	-10.35

802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

2412MHz

25/01/2019

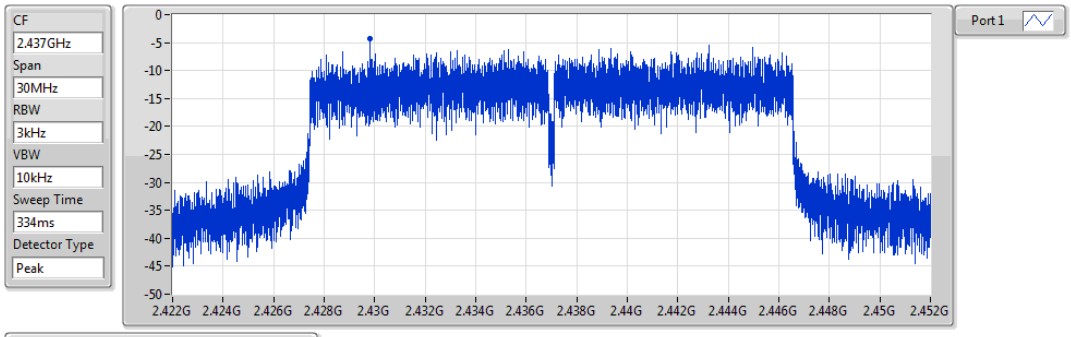


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.27	-8.27	-8.27

802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

2437MHz

25/01/2019

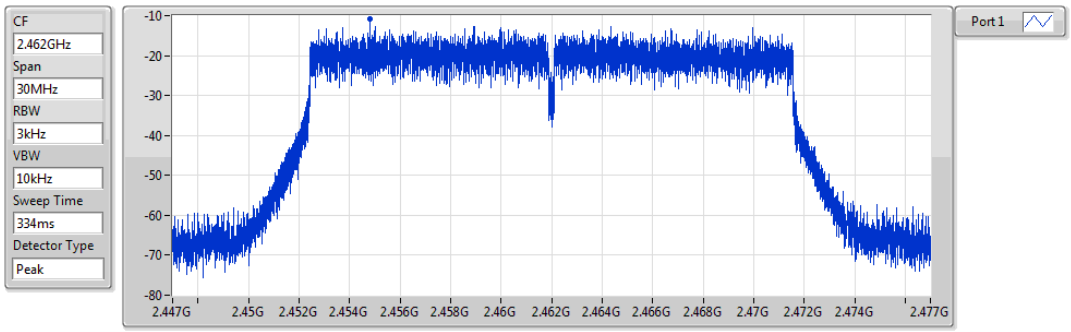


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.29	-4.29	-4.29

802.11ax HEW20_Nss1,(MCS0)_1TX **PSD**

2462MHz

25/01/2019

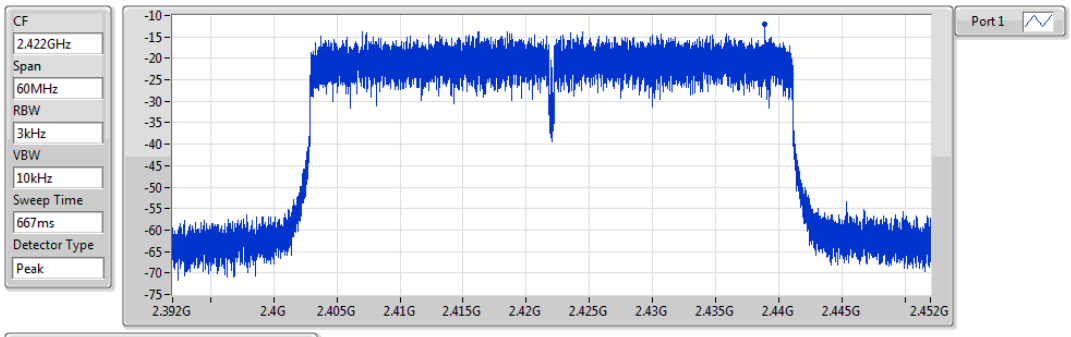


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.70	-10.70	-10.70

802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

2422MHz

25/01/2019

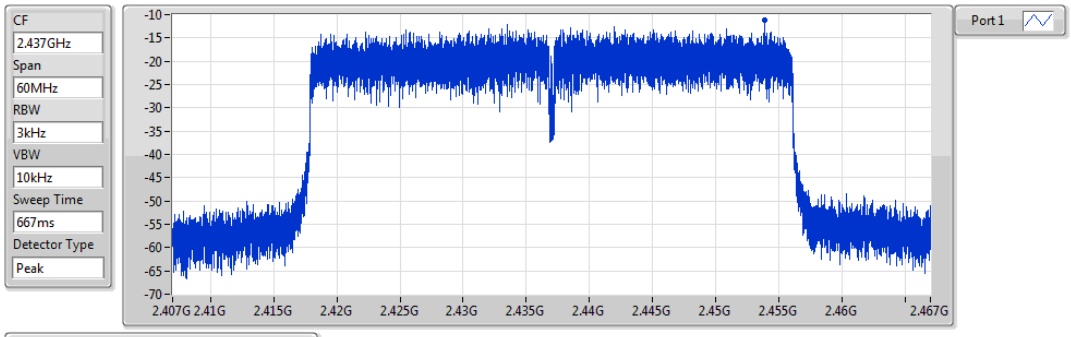


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.10	-12.10	-12.10

802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

2437MHz

25/01/2019

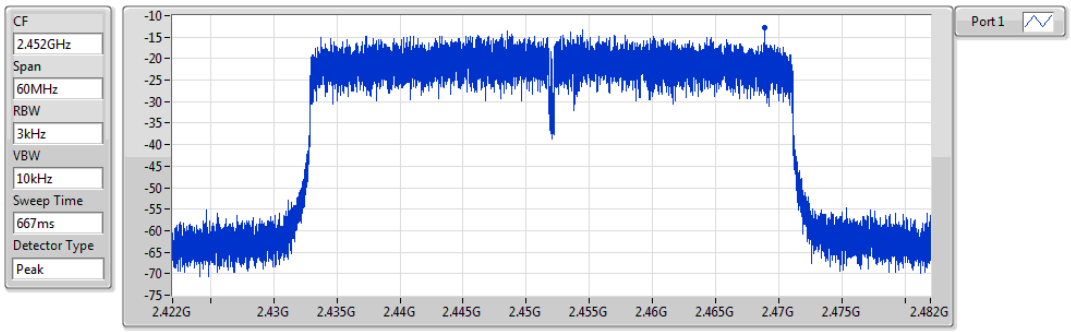


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.28	-11.28	-11.28

802.11ax HEW40_Nss1,(MCS0)_1TX **PSD**

2452MHz

25/01/2019



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.75	-12.75	-12.75

For Non-beamforming / 2T2S mode
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20_Nss2,(MCS0)_2TX	-4.59
802.11ax HEW40_Nss2,(MCS0)_2TX	-11.57

RBW=3kHz.

Result

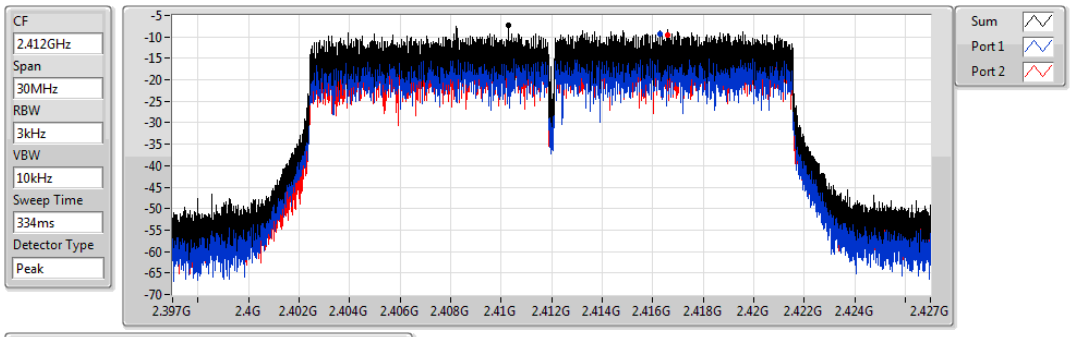
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.00	-9.35	-9.56	-7.39	8.00
2437MHz	Pass	3.00	-6.40	-6.08	-4.59	8.00
2462MHz	Pass	3.00	-10.80	-10.53	-9.23	8.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.00	-14.30	-14.16	-12.58	8.00
2437MHz	Pass	3.00	-14.17	-13.04	-11.57	8.00
2452MHz	Pass	3.00	-15.50	-15.63	-14.14	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 Xpower density;

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

2412MHz

25/01/2019

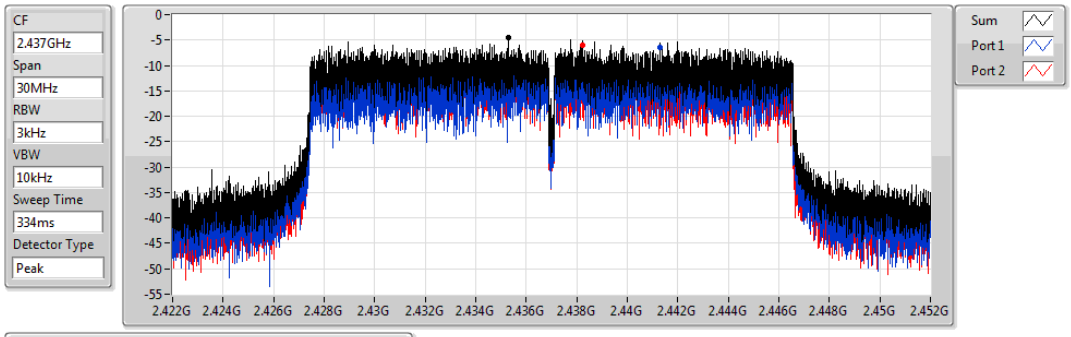


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.39	-7.39	-9.35	-9.56

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

2437MHz

25/01/2019

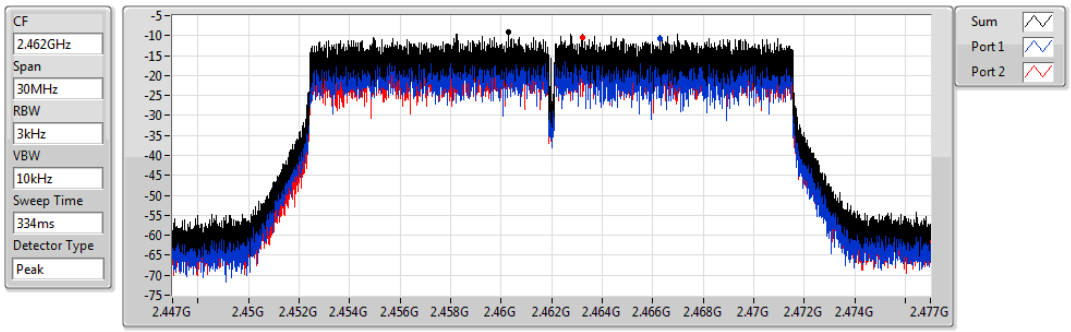


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.59	-4.59	-6.40	-6.08

802.11ax HEW20_Nss2,(MCS0)_2TX PSD

2462MHz

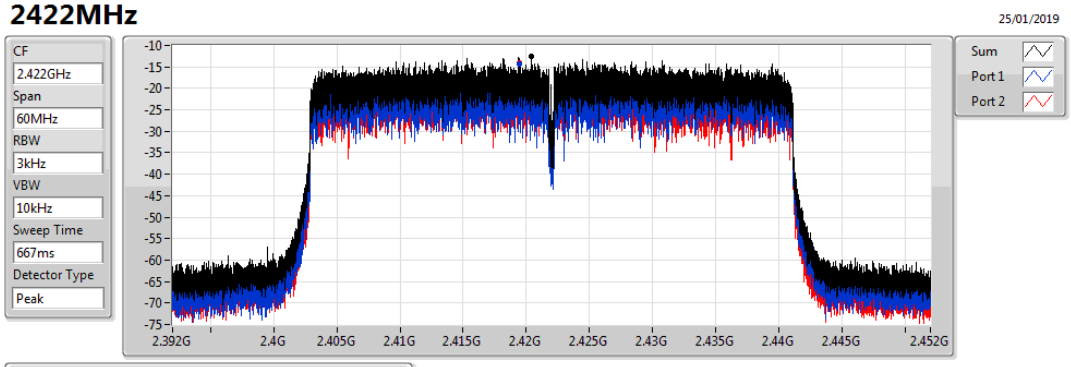
25/01/2019



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.23	-9.23	-10.80	-10.53

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

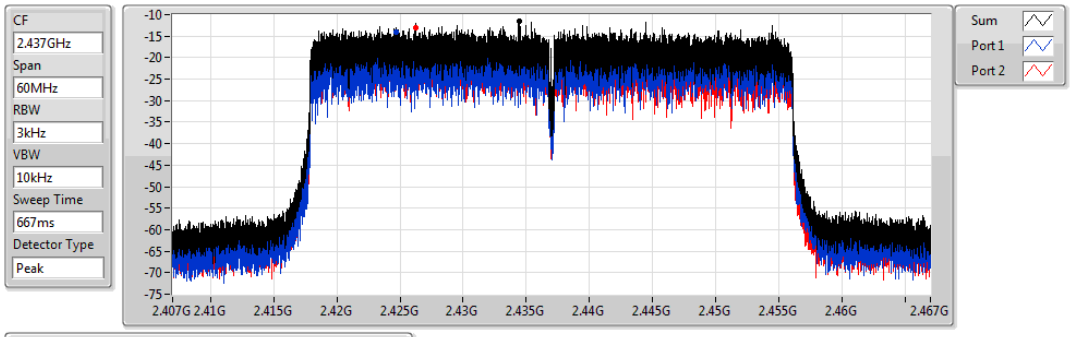
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.58	-12.58	-14.30	-14.16

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

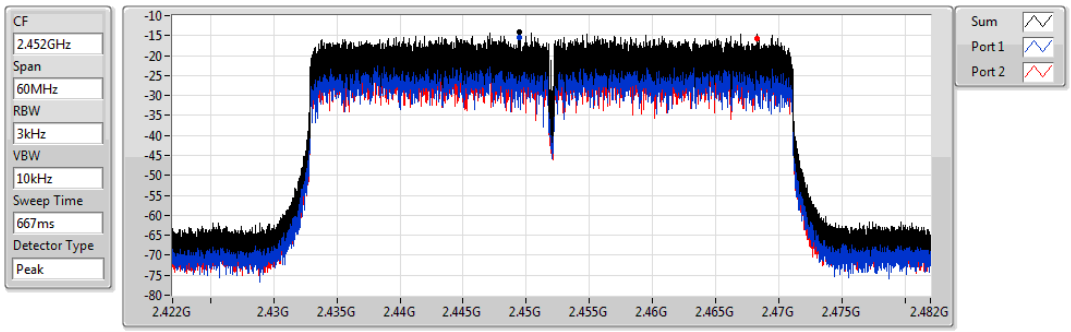
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.57	-11.57	-14.17	-13.04

802.11ax HEW40_Nss2,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.14	-14.14	-15.50	-15.63

For Non-beamforming / 4T1S mode
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	4.54
802.11g_Nss1,(6Mbps)_4TX	-2.45
802.11ax HEW20_Nss1,(MCS0)_4TX	-0.04
802.11ax HEW40_Nss1,(MCS0)_4TX	-7.95

RBW=3kHz.

Result

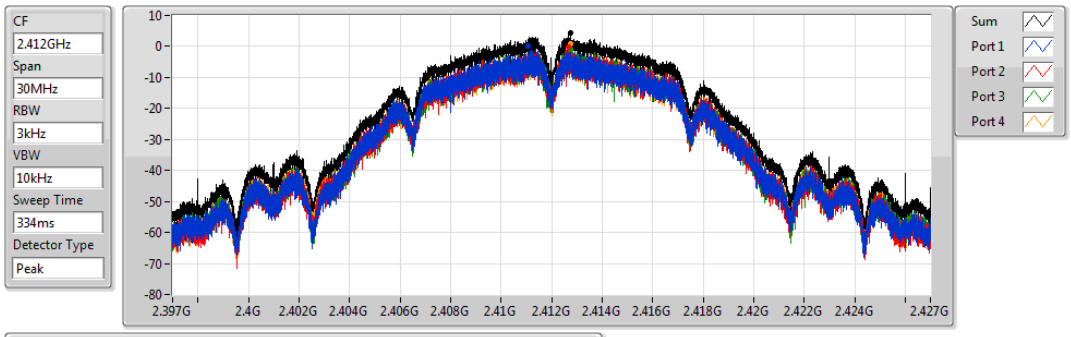
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	0.26	-0.13	-0.78	0.72	4.34	4.98
2437MHz	Pass	9.02	0.70	1.14	0.25	0.42	4.50	4.98
2462MHz	Pass	9.02	-1.07	-0.03	-0.50	-0.56	4.54	4.98
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-11.95	-11.09	-11.94	-11.94	-6.71	4.98
2437MHz	Pass	9.02	-7.28	-7.92	-7.21	-7.56	-2.45	4.98
2462MHz	Pass	9.02	-11.99	-12.06	-11.48	-12.21	-6.73	4.98
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-11.36	-11.42	-12.05	-10.20	-6.31	4.98
2437MHz	Pass	9.02	-7.33	-5.51	-5.97	-5.65	-0.04	4.98
2462MHz	Pass	9.02	-11.83	-12.21	-13.54	-11.82	-6.81	4.98
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	-14.43	-14.51	-14.71	-14.11	-9.03	4.98
2437MHz	Pass	9.02	-13.05	-14.53	-13.77	-13.67	-7.95	4.98
2452MHz	Pass	9.02	-15.72	-15.98	-13.48	-15.05	-9.30	4.98

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

802.11b_Nss1,(1Mbps)_4TX PSD

2412MHz

25/01/2019

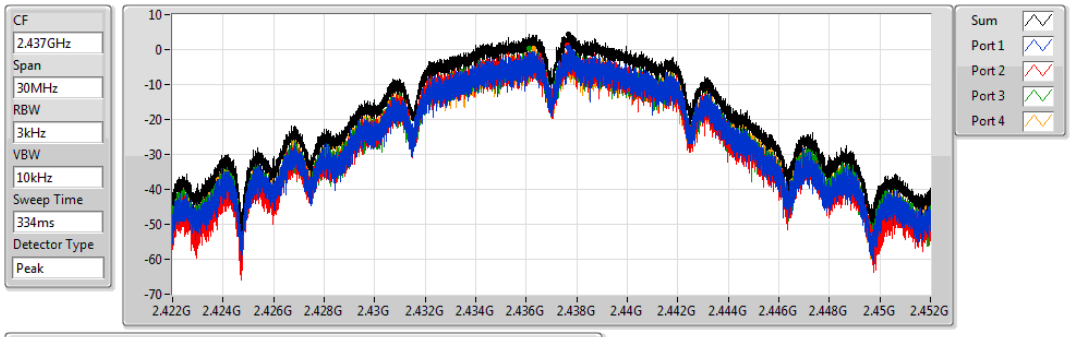


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.34	4.34	0.26	-0.13	-0.78	0.72

802.11b_Nss1,(1Mbps)_4TX PSD

2437MHz

25/01/2019

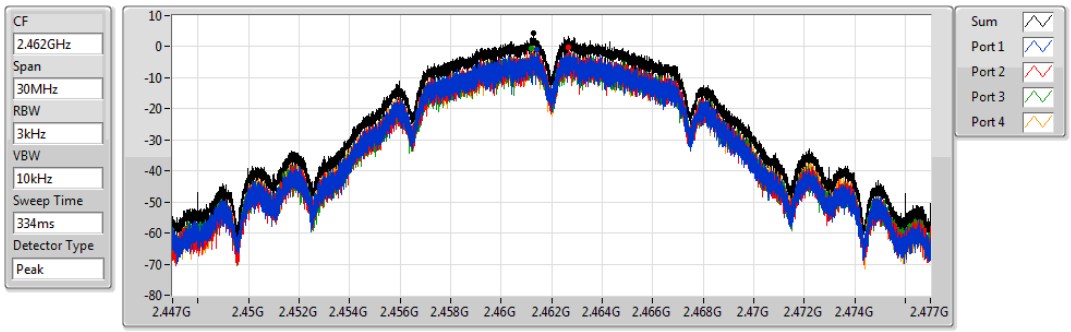


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.50	4.50	0.70	1.14	0.25	0.42

802.11b_Nss1,(1Mbps)_4TX PSD

2462MHz

25/01/2019

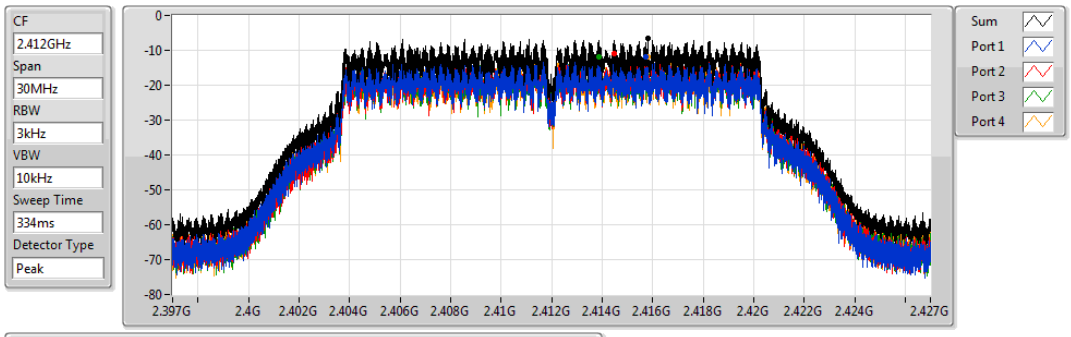


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.54	4.54	-1.07	-0.03	-0.50	-0.56

802.11g_Nss1,(6Mbps)_4TX PSD

2412MHz

25/01/2019

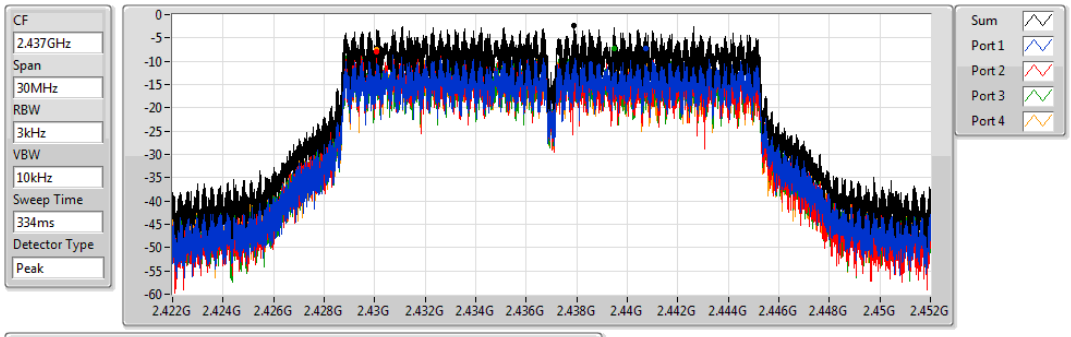


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.71	-6.71	-11.95	-11.09	-11.94	-11.94

802.11g_Nss1,(6Mbps)_4TX PSD

2437MHz

25/01/2019

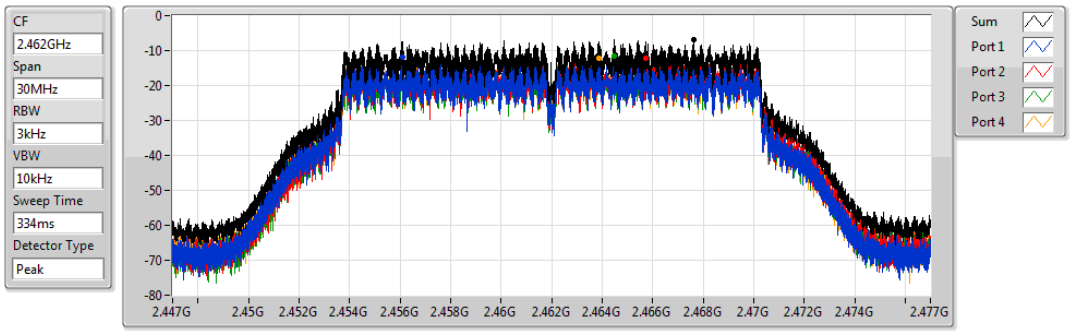


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.45	-2.45	-7.28	-7.92	-7.21	-7.56

802.11g_Nss1,(6Mbps)_4TX PSD

2462MHz

25/01/2019

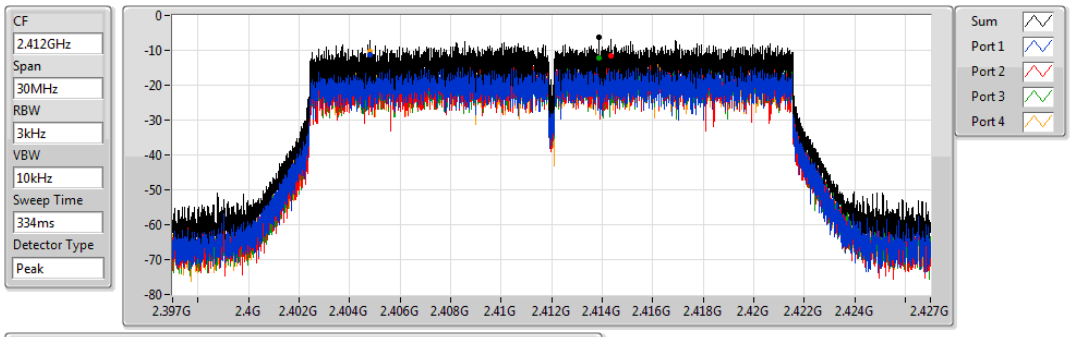


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.73	-6.73	-11.99	-12.06	-11.48	-12.21

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

2412MHz

25/01/2019

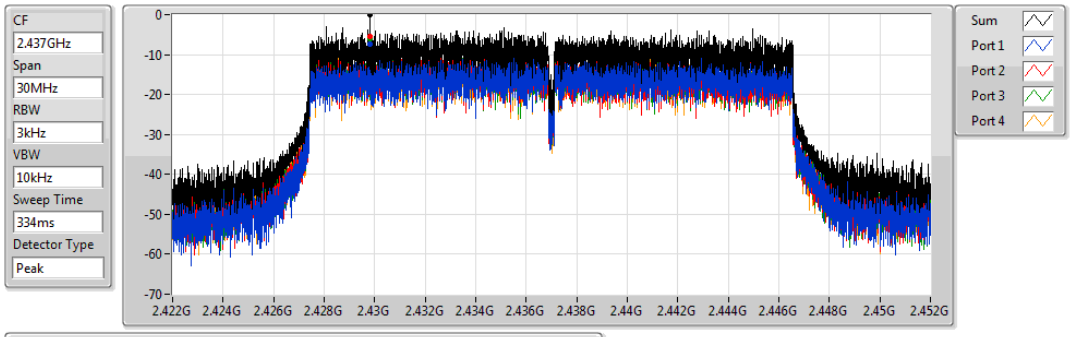


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.31	-6.31	-11.36	-11.42	-12.05	-10.20

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

2437MHz

25/01/2019

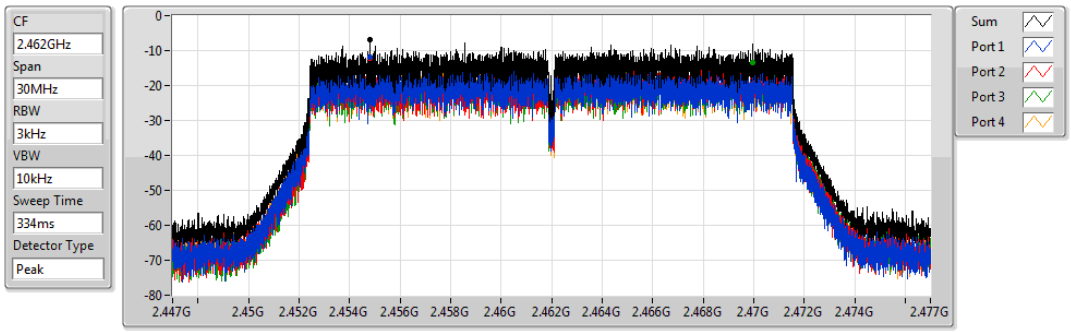


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.04	-0.04	-7.33	-5.51	-5.97	-5.65

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

2462MHz

25/01/2019

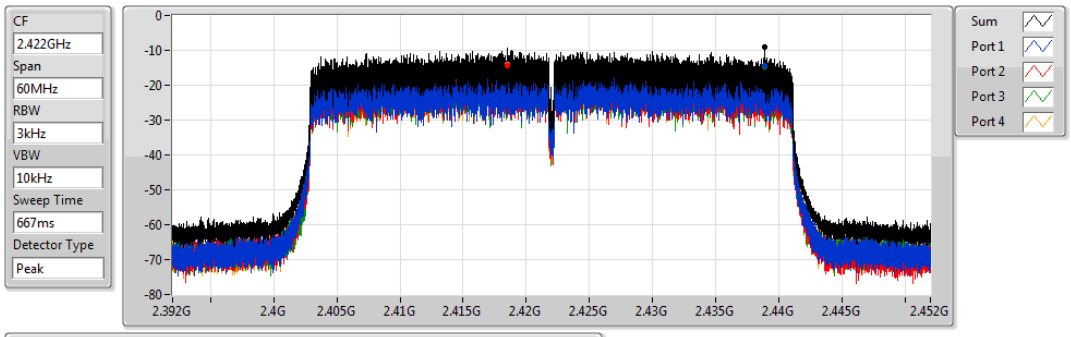


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.81	-6.81	-11.83	-12.21	-13.54	-11.82

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

2422MHz

25/01/2019

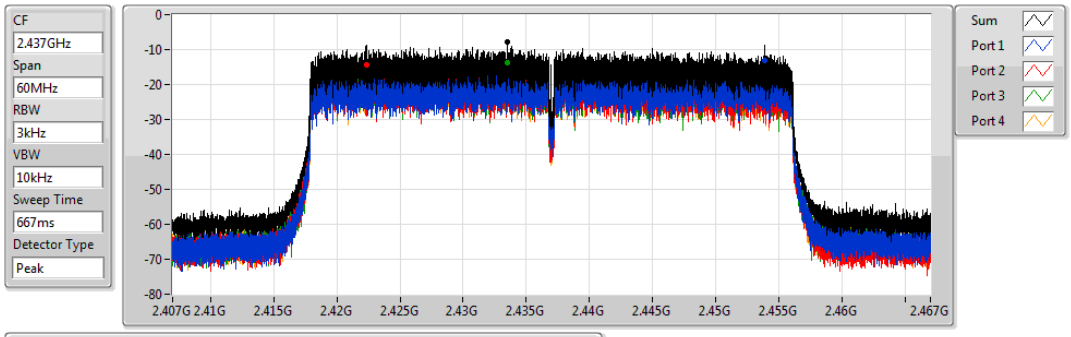


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.03	-9.03	-14.43	-14.51	-14.71	-14.11

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

2437MHz

25/01/2019

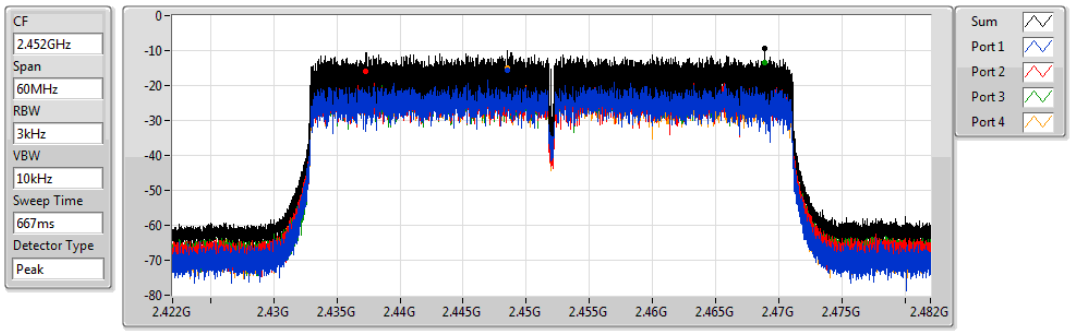


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.95	-7.95	-13.05	-14.53	-13.77	-13.67

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

2452MHz

25/01/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.30	-9.30	-15.72	-15.98	-13.48	-15.05

For Beamforming / 4T1S mode
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.11
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-8.78

RBW=3kHz.

Result

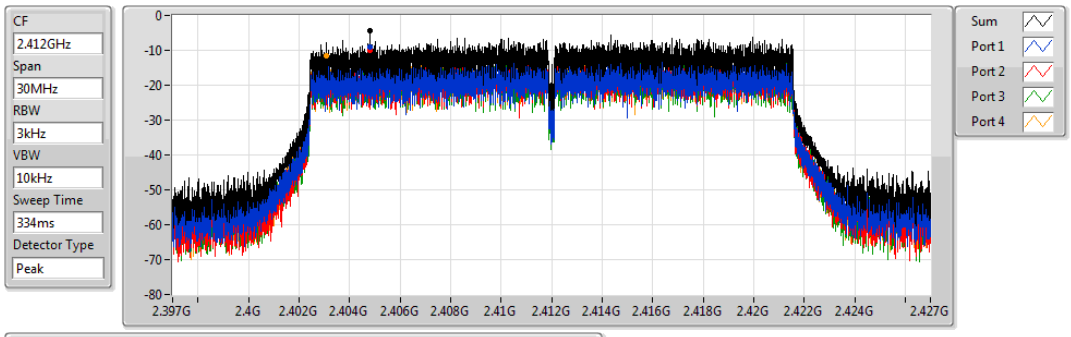
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-9.21	-10.14	-9.76	-11.62	-4.36	4.98
2437MHz	Pass	9.02	-6.00	-4.62	-5.21	-7.30	0.11	4.98
2462MHz	Pass	9.02	-10.89	-12.88	-12.80	-11.00	-6.17	4.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	-14.27	-14.95	-14.49	-15.03	-8.87	4.98
2437MHz	Pass	9.02	-14.24	-14.41	-15.01	-15.67	-9.40	4.98
2452MHz	Pass	9.02	-14.65	-13.09	-14.67	-15.34	-8.78	4.98

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

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2412MHz

26/01/2019

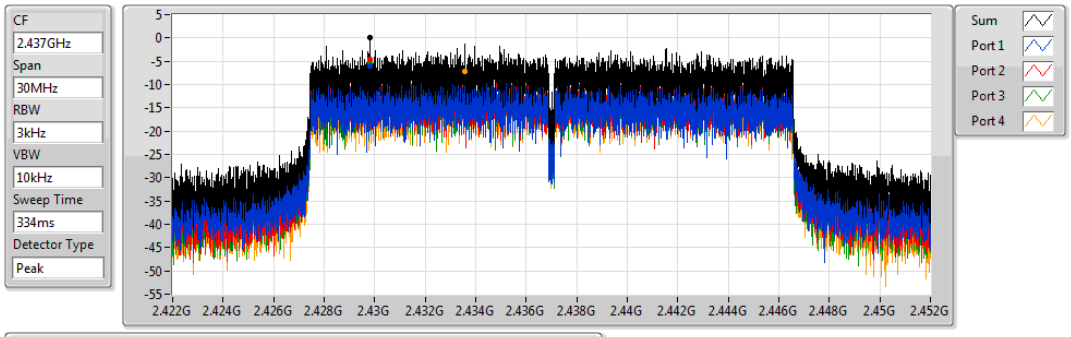


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.36	-4.36	-9.21	-10.14	-9.76	-11.62

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2437MHz

26/01/2019

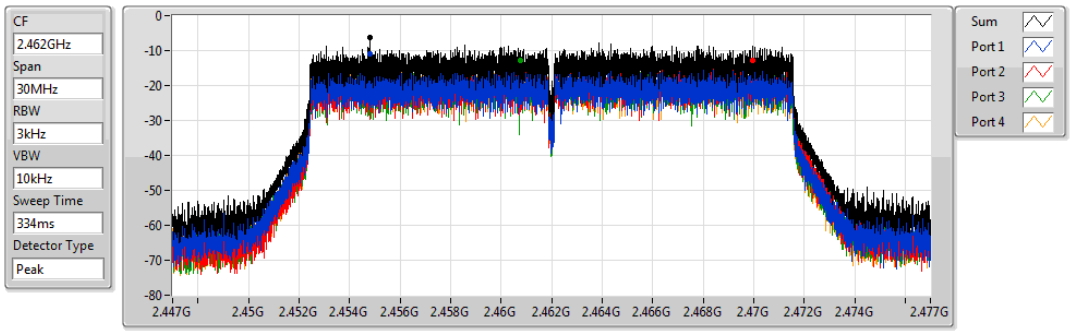


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.11	0.11	-6.00	-4.62	-5.21	-7.30

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2462MHz

26/01/2019

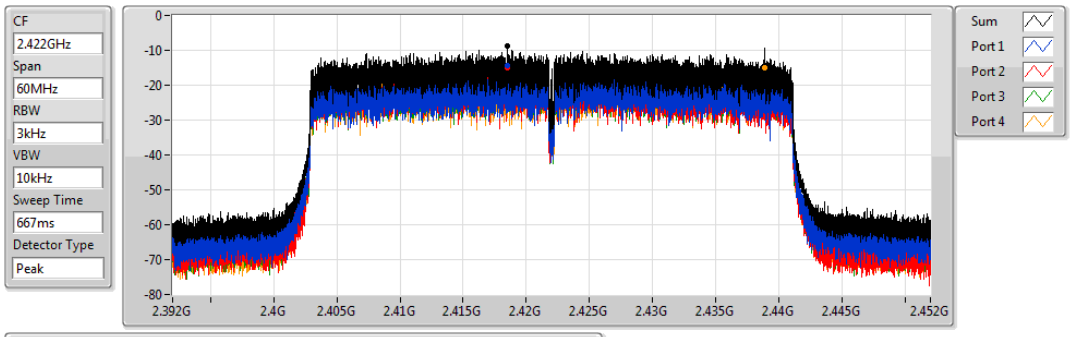


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.17	-6.17	-10.89	-12.88	-12.80	-11.00

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

2422MHz

26/01/2019

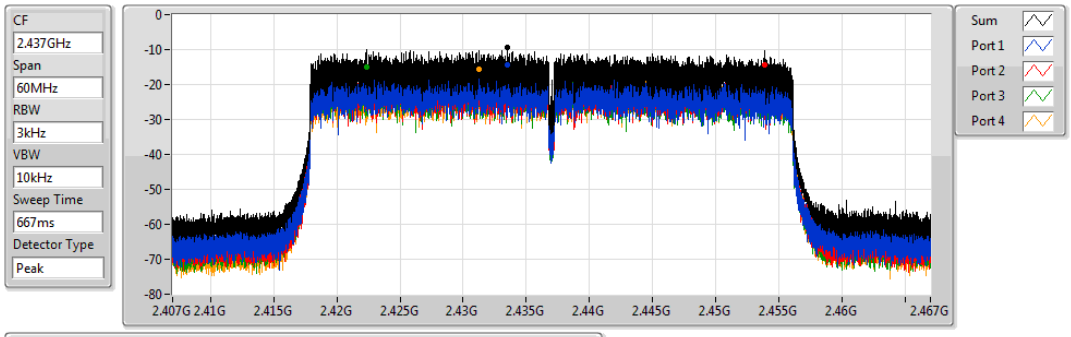


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.87	-8.87	-14.27	-14.95	-14.49	-15.03

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

2437MHz

26/01/2019

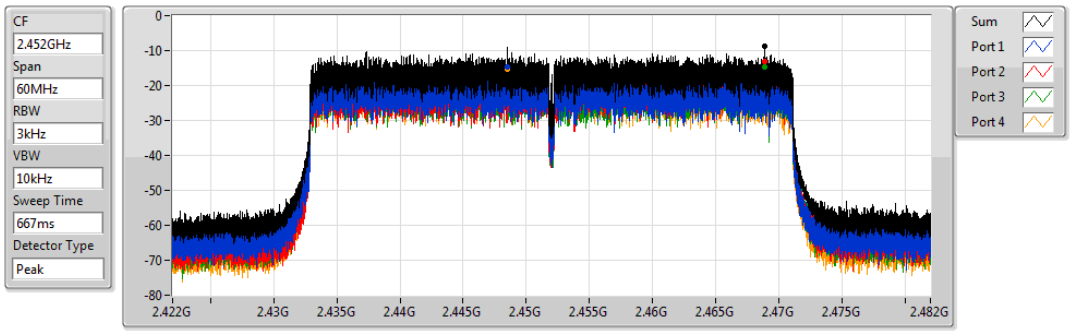


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.40	-9.40	-14.24	-14.41	-15.01	-15.67

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

2452MHz

26/01/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.78	-8.78	-14.65	-13.09	-14.67	-15.34

For Non-beamforming / 4T4S mode
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20_Nss4,(MCS0)_4TX	-3.78
802.11ax HEW40_Nss4,(MCS0)_4TX	-9.25

RBW=3kHz.

Result

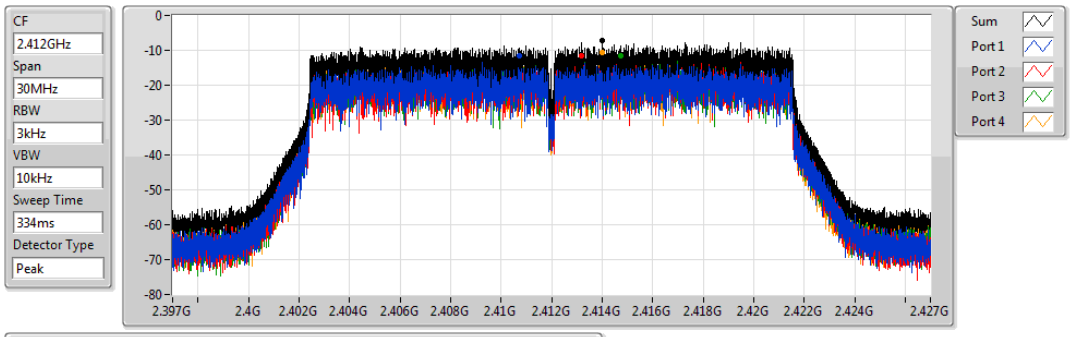
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	3.00	-11.62	-11.45	-11.65	-10.69	-7.18	8.00
2437MHz	Pass	3.00	-7.77	-8.05	-8.21	-7.23	-3.78	8.00
2462MHz	Pass	3.00	-12.05	-11.42	-12.69	-11.51	-8.34	8.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	3.00	-16.05	-15.54	-15.16	-14.07	-10.50	8.00
2437MHz	Pass	3.00	-15.29	-14.95	-14.57	-13.88	-9.25	8.00
2452MHz	Pass	3.00	-16.56	-15.82	-16.00	-16.00	-11.45	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 Xpower density;

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

2412MHz

25/01/2019

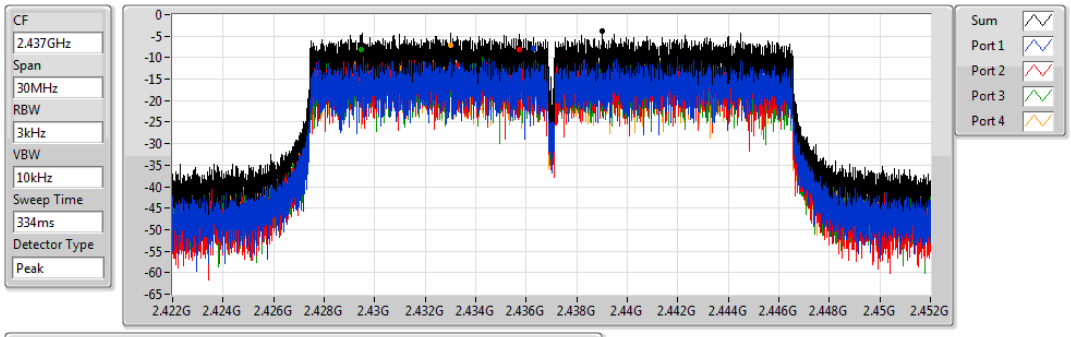


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.18	-7.18	-11.62	-11.45	-11.65	-10.69

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

2437MHz

25/01/2019

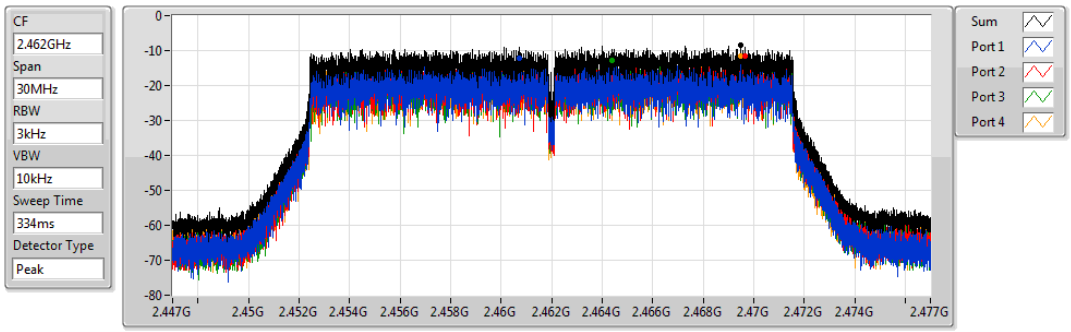


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.78	-3.78	-7.77	-8.05	-8.21	-7.23

802.11ax HEW20_Nss4,(MCS0)_4TX PSD

2462MHz

25/01/2019

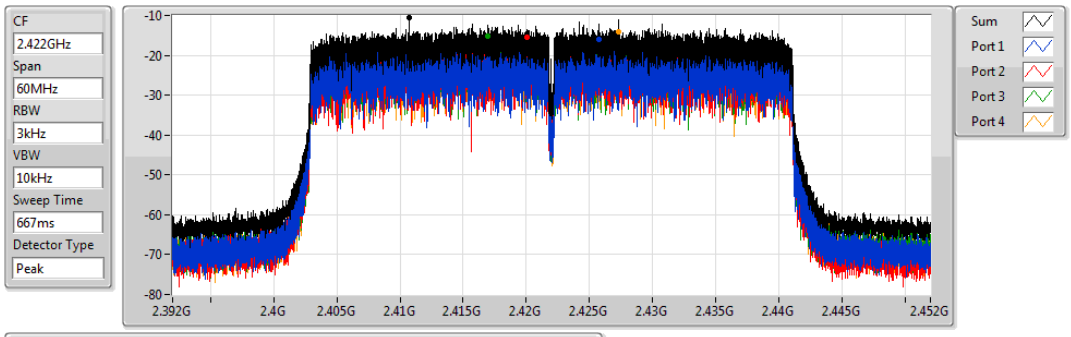


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.34	-8.34	-12.05	-11.42	-12.69	-11.51

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

2422MHz

25/01/2019

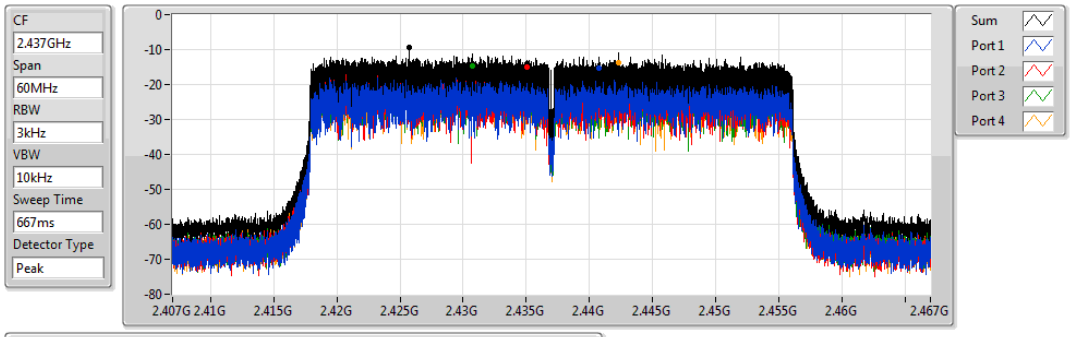


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.50	-10.50	-16.05	-15.54	-15.16	-14.07

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

2437MHz

25/01/2019

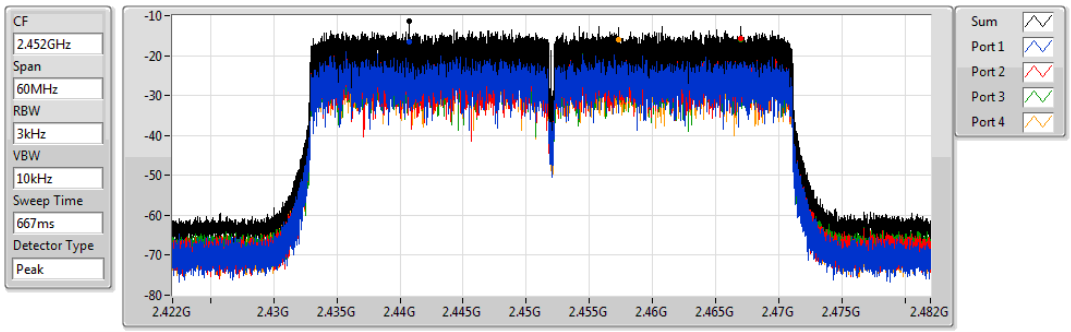


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.25	-9.25	-15.29	-14.95	-14.57	-13.88

802.11ax HEW40_Nss4,(MCS0)_4TX PSD

2452MHz

25/01/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.45	-11.45	-16.56	-15.82	-16.00	-16.00

For Mode 2: (Ant. 7 Omni antenna / 4 dBi)
For Non-beamforming / 1T1S mode
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	0.39
802.11g_Nss1,(6Mbps)_1TX	-4.02
802.11ax HEW20_Nss1,(MCS0)_1TX	-4.27
802.11ax HEW40_Nss1,(MCS0)_1TX	-10.40

RBW=3kHz.

Result

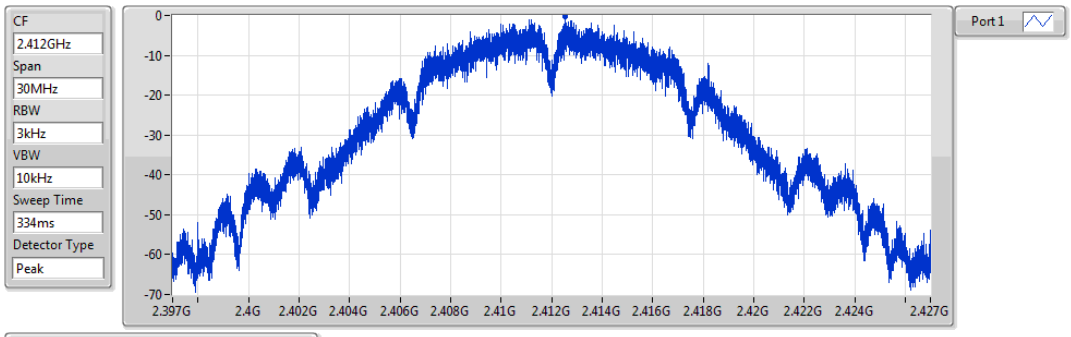
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	-0.21	-0.21	8.00
2437MHz	Pass	4.00	0.39	0.39	8.00
2462MHz	Pass	4.00	0.06	0.06	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	-8.46	-8.46	8.00
2437MHz	Pass	4.00	-4.02	-4.02	8.00
2462MHz	Pass	4.00	-9.26	-9.26	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	4.00	-9.26	-9.26	8.00
2437MHz	Pass	4.00	-4.27	-4.27	8.00
2462MHz	Pass	4.00	-11.78	-11.78	8.00
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	4.00	-11.50	-11.50	8.00
2437MHz	Pass	4.00	-10.40	-10.40	8.00
2452MHz	Pass	4.00	-12.45	-12.45	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 Xpower density;

802.11b_Nss1,(1Mbps)_1TX PSD

2412MHz

31/01/2019

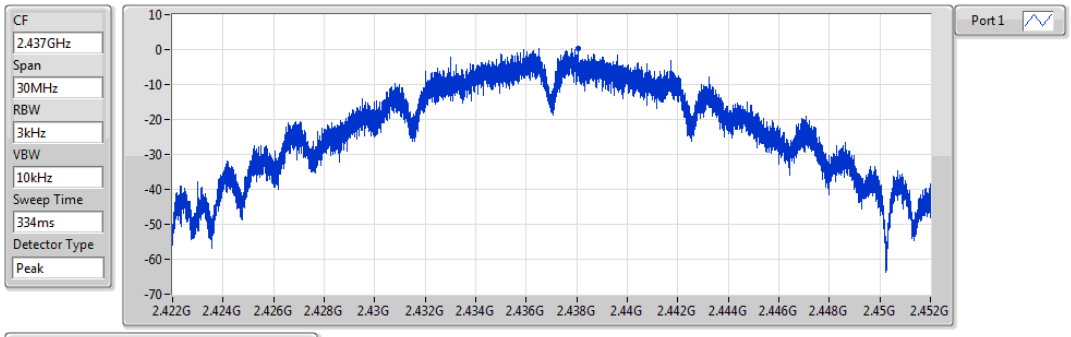


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.21	-0.21	-0.21

802.11b_Nss1,(1Mbps)_1TX PSD

2437MHz

31/01/2019

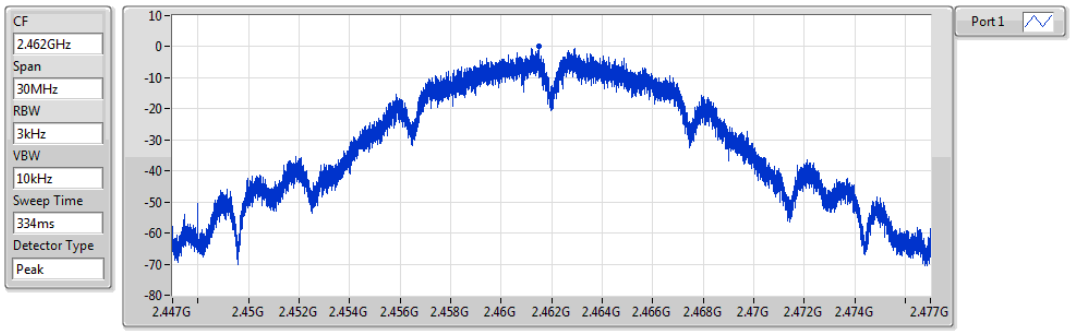


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.39	0.39	0.39

802.11b_Nss1,(1Mbps)_1TX PSD

2462MHz

31/01/2019



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.06	0.06	0.06