FCC RADIO TEST REPORT

FCC ID	:	QXO-AP510E
Equipment	:	802.11ax Access Point
Brand Name	:	Extreme Networks
Model Name	:	AP510e
Applicant	:	Extreme Networks, Inc. 6480 Via Del Oro, San Jose, CA 95119
Manufacturer	:	Extreme Networks, Inc. 6480 Via Del Oro, San Jose, CA 95119
Standard	:	47 CFR FCC Part 15.407

The product was received on Nov. 09, 2018, and testing was started from Nov. 22, 2018 and completed on Mar. 15, 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

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History of this test report

Report No.	Version	Description	Issued Date
FR8O1739-03AD	01	Initial issue of report	Apr. 10, 2019
FR8O1739-03AD	02	Revising the test mode information to "SDM" from "CDD" of 2T2S / 4T4S function.	Apr. 15, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

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
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.15-5.25GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.725-5.85GHz	802.11a	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ax HEW20	20	1TX, 2TX, 4TX

5.725-5.85GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.725-5.85GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX, 4TX

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

1.1.3 Mode Test Duty Cycle

For Radio 1:
For 1T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.958	0.186	2.065m	1k
802.11ax HEW20	0.986	0.061	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.97	0.132	910u	3k
802.11ax HEW80	0.945	0.246	473.75u	3k

For 2T2S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.97	0.132	925u	3k
802.11ax HEW40	0.948	0.232	506.25u	3k
802.11ax HEW80	0.915	0.386	290u	10k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.958	0.186	2.065m	1k
802.11ax HEW20	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.969	0.137	910u	3k
802.11ax HEW80	0.945	0.246	473.75u	3k
802.11ax HEW20-BF	0.872	0.595	1.5m	1k
802.11ax HEW40-BF	0.902	0.448	827.5u	3k
802.11ax HEW80-BF	0.929	0.32	401.875u	3k

For 4T4S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.951	0.218	538.125u	3k
802.11ax HEW40	0.925	0.339	330u	10k
802.11ax HEW80	0.891	0.501	223.125u	10k

For Radio 2:
For 1T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.958	0.186	2.065m	1k
802.11ax HEW20	0.986	0.061	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.972	0.123	910u	3k
802.11ax HEW80	0.945	0.246	473.75u	3k

For 2T2S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.97	0.132	926.25u	3k
802.11ax HEW40	0.948	0.232	506.25u	3k
802.11ax HEW80	0.915	0.386	290u	10k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.953	0.209	2.068m	1k
802.11ax HEW20	0.983	0.074	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.973	0.119	910u	3k
802.11ax HEW80	0.946	0.241	473.75u	3k
802.11ax HEW20-BF	0.894	0.487	1.498m	1k
802.11ax HEW40-BF	0.881	0.55	2.343m	1k
802.11ax HEW80-BF	0.938	0.278	2.804m	1k

For 4T4S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20	0.952	0.214	537.5u	3k
802.11ax HEW40	0.923	0.348	330u	10k
802.11ax HEW80	0.889	0.511	221.25u	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	☒	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
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:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01

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 (Below 1GHz)	03CH01-CB	Stim Sung	22~24°C / 54~58%	Nov. 22, 2018~Mar. 04, 2019
Radiated (Above 1GHz for Co-location)	03CH01-CB	Stim Sung	22~24°C / 54~58%	Nov. 22, 2018
Radiated (Above 1GHz for other tests)	03CH01-CB	Jay Luo	20~22°C / 55~60%	Jan. 22, 2019~Mar. 15, 2019
AC Conduction	CO02-CB	Deven Huang	23°C / 60%	Nov. 26, 2018

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 Radio 1:
For Indoor use for 5G Band 1 and Indoor/Outdoor use for 5G Band 4:
For Mode 1: (Ant. 5 Panel antenna / 3 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	75	18.75
5200MHz	85	21.25
5240MHz	82	20.5
5745MHz	82	20.5
5785MHz	82	20.5
5825MHz	82	20.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	72	18
5200MHz	90	22.5
5240MHz	86	21.5
5745MHz	88	22
5785MHz	82	20.5
5825MHz	83	20.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	64	16
5230MHz	85	21.25
5755MHz	92	23
5795MHz	93	23.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	66	16.5
5775MHz	77	19.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	67	16.75
5200MHz	84	21
5240MHz	86	21.5
5745MHz	88	22
5785MHz	82	20.5
5825MHz	83	20.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	61	15.25
5230MHz	79	19.75
5755MHz	84	21
5795MHz	87	21.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	60	15
5775MHz	71	17.75

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	82
5200MHz	85
5240MHz	82
5745MHz	82
5785MHz	82
5825MHz	82
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	85
5200MHz	90
5240MHz	86
5745MHz	88
5785MHz	82
5825MHz	83
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	88
5230MHz	89
5755MHz	92
5795MHz	93
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	97
5775MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	61	15.25
5200MHz	80	20
5240MHz	82	20.5
5745MHz	82	20.5
5785MHz	82	20.5
5825MHz	82	20.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	63	15.75
5200MHz	81	20.25
5240MHz	86	21.5
5745MHz	88	22
5785MHz	82	20.5
5825MHz	83	20.75
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	57	14.25
5230MHz	72	18
5755MHz	70	17.5
5795MHz	80	20
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	56	14
5775MHz	64	16
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	61	15.25
5200MHz	72	18
5240MHz	80	20
5745MHz	83	20.75
5785MHz	82	20.5
5825MHz	83	20.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	55	13.75
5230MHz	66	16.5
5755MHz	72	18
5795MHz	77	19.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	52	13
5775MHz	62	15.5

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	63	15.75
5200MHz	80	20
5240MHz	86	21.5
5745MHz	88	22
5785MHz	82	20.5
5825MHz	83	20.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	56	14
5230MHz	73	18.25
5755MHz	73	18.25
5795MHz	78	19.5
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	54	13.5
5775MHz	68	17

For Mode 2: (Ant. 6 Omni antenna / 6 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	71	17.75
5200MHz	88	22
5240MHz	90	22.5
5745MHz	94	23.5
5785MHz	87	21.75
5825MHz	81	20.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	69	17.25
5200MHz	86	21.5
5240MHz	88	22
5745MHz	98	24.5
5785MHz	84	21
5825MHz	81	20.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	63	15.75
5230MHz	77	19.25
5755MHz	80	20
5795MHz	88	22
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	61	15.25
5775MHz	69	17.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	65	16.25
5200MHz	80	20
5240MHz	88	22
5745MHz	94	23.5
5785MHz	84	21
5825MHz	81	20.25
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	61	15.25
5230MHz	75	18.75
5755MHz	76	19
5795MHz	82	20.5
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	58	14.5
5775MHz	63	15.75

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	87
5200MHz	90
5240MHz	90
5745MHz	94
5785MHz	87
5825MHz	81
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	89
5200MHz	97
5240MHz	99
5745MHz	98
5785MHz	84
5825MHz	81
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	93
5230MHz	90
5755MHz	110
5795MHz	98
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	105
5775MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	59	14.75
5200MHz	75	18.75
5240MHz	76	19
5745MHz	94	23.5
5785MHz	87	21.75
5825MHz	81	20.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	62	15.5
5200MHz	78	19.5
5240MHz	77	19.25
5745MHz	90	22.5
5785MHz	84	21
5825MHz	81	20.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	70	17.5
5755MHz	72	18
5795MHz	77	19.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	52	13
5775MHz	60	15
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	51	12.75
5200MHz	66	16.5
5240MHz	66	16.5
5745MHz	67	16.75
5785MHz	67	16.75
5825MHz	67	16.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	46	11.5
5230MHz	66	16.5
5755MHz	62	15.5
5795MHz	64	16
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	49	12.25
5775MHz	53	13.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	61	15.25
5200MHz	75	18.75
5240MHz	87	21.75
5745MHz	96	24
5785MHz	84	21
5825MHz	81	20.25
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	67	16.75
5755MHz	73	18.25
5795MHz	77	19.25
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	41	10.25
5775MHz	62	15.5

For Mode 3: (Ant. 11 Panel antenna / 8.7 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	74	18.5
5200MHz	90	22.5
5240MHz	88	22
5745MHz	89	22.25
5785MHz	86	21.5
5825MHz	82	20.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	71	17.75
5200MHz	87	21.75
5240MHz	84	21
5745MHz	91	22.75
5785MHz	87	21.75
5825MHz	85	21.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	63	15.75
5230MHz	80	20
5755MHz	91	22.75
5795MHz	95	23.75
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	63	15.75
5775MHz	77	19.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	66	16.5
5200MHz	81	20.25
5240MHz	84	21
5745MHz	91	22.75
5785MHz	87	21.75
5825MHz	85	21.25
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	62	15.5
5230MHz	76	19
5755MHz	84	21
5795MHz	84	21
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	60	15
5775MHz	70	17.5

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	89
5200MHz	93
5240MHz	88
5745MHz	89
5785MHz	86
5825MHz	82
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	87
5200MHz	90
5240MHz	84
5745MHz	91
5785MHz	87
5825MHz	85
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	89
5230MHz	86
5755MHz	95
5795MHz	95
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	94
5775MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	58	14.5
5200MHz	64	16
5240MHz	64	16
5745MHz	89	22.25
5785MHz	86	21.5
5825MHz	82	20.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	62	15.5
5200MHz	66	16.5
5240MHz	66	16.5
5745MHz	91	22.75
5785MHz	87	21.75
5825MHz	85	21.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	56	14
5230MHz	72	18
5755MHz	76	19
5795MHz	82	20.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	53	13.25
5775MHz	64	16
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	53	13.25
5200MHz	57	14.25
5240MHz	57	14.25
5745MHz	56	14
5785MHz	56	14
5825MHz	56	14
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	49	12.25
5230MHz	58	14.5
5755MHz	54	13.5
5795MHz	53	13.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	51	12.75
5775MHz	55	13.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	62	15.5
5200MHz	77	19.25
5240MHz	84	21
5745MHz	91	22.75
5785MHz	87	21.75
5825MHz	85	21.25
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	72	18
5755MHz	74	18.5
5795MHz	80	20
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	47	11.75
5775MHz	66	16.5

For Outdoor use for 5G Band 1:
For Mode 1: (Ant. 5 Panel antenna / 3 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	64	16
5200MHz	64	16
5240MHz	64	16
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	63	15.75
5200MHz	63	15.75
5240MHz	62	15.5
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	63	15.75
5230MHz	62	15.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	62	15.5

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	51	12.75
5200MHz	51	12.75
5240MHz	51	12.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	51	12.75
5230MHz	51	12.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	52	13

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	40	10
5200MHz	40	10
5240MHz	41	10.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	40	10
5200MHz	40	10
5240MHz	40	10
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	40	10
5230MHz	40	10
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	40	10
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	12	3
5200MHz	12	3
5240MHz	12	3
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	12	3
5230MHz	12	3
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	12	3

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	39	9.75
5200MHz	39	9.75
5240MHz	40	10
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	40	10
5230MHz	40	10
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	40	10

For Mode 2: (Ant. 6 Omni antenna / 6 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	71	17.75
5200MHz	88	22
5240MHz	90	22.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	69	17.25
5200MHz	86	21.5
5240MHz	88	22
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	63	15.75
5230MHz	77	19.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	61	15.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	65	16.25
5200MHz	80	20
5240MHz	88	22
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	61	15.25
5230MHz	75	18.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	58	14.5

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	59	14.75
5200MHz	75	18.75
5240MHz	76	19
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	62	15.5
5200MHz	78	19.5
5240MHz	77	19.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	70	17.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	52	13
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	51	12.75
5200MHz	54	13.5
5240MHz	54	13.5
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	46	11.5
5230MHz	55	13.75
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	49	12.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	61	15.25
5200MHz	75	18.75
5240MHz	87	21.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	67	16.75
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	41	10.25

For Mode 3: (Ant. 11 Panel antenna / 8.7 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	53	13.25
5200MHz	53	13.25
5240MHz	53	13.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	52	13
5200MHz	52	13
5240MHz	51	12.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	52	13
5230MHz	52	13
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	52	13

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	41	10.25
5200MHz	41	10.25
5240MHz	41	10.25
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	41	10.25
5230MHz	41	10.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	41	10.25

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	29	7.25
5200MHz	29	7.25
5240MHz	30	7.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	28	7
5200MHz	28	7
5240MHz	28	7
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	28	7
5230MHz	29	7.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	28	7
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	1	0.25
5200MHz	1	0.25
5240MHz	1	0.25
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	1	0.25
5230MHz	1	0.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	1	0.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	29	7.25
5200MHz	29	7.25
5240MHz	29	7.25
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	29	7.25
5230MHz	29	7.25
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	29	7.25

For Radio 2:
For Indoor use for 5G Band 1 and Indoor/Outdoor use for 5G Band 4:
For Mode 1: (Ant. 5 Panel antenna / 3 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	67	16.75
5200MHz	80	20
5240MHz	75	18.75
5745MHz	78	19.5
5785MHz	84	21
5825MHz	85	21.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	64	16
5200MHz	82	20.5
5240MHz	76	19
5745MHz	86	21.5
5785MHz	92	23
5825MHz	91	22.75
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	58	14.5
5230MHz	74	18.5
5755MHz	81	20.25
5795MHz	81	20.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	59	14.75
5775MHz	71	17.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	57	14.25
5200MHz	76	19
5240MHz	76	19
5745MHz	86	21.5
5785MHz	92	23
5825MHz	91	22.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	53	13.25
5230MHz	70	17.5
5755MHz	79	19.75
5795MHz	85	21.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	50	12.5
5775MHz	65	16.25

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	76
5200MHz	80
5240MHz	75
5745MHz	78
5785MHz	84
5825MHz	85
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	85
5200MHz	85
5240MHz	76
5745MHz	86
5785MHz	92
5825MHz	91
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	84
5230MHz	78
5755MHz	89
5795MHz	110
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	93
5775MHz	110

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	62	15.5
5200MHz	78	19.5
5240MHz	75	18.75
5745MHz	78	19.5
5785MHz	84	21
5825MHz	85	21.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	55	13.75
5200MHz	71	17.75
5240MHz	76	19
5745MHz	86	21.5
5785MHz	92	23
5825MHz	90	22.5
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	50	12.5
5230MHz	65	16.25
5755MHz	68	17
5795MHz	70	17.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	46	11.5
5775MHz	60	15
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	58	14.5
5200MHz	75	18.75
5240MHz	76	19
5745MHz	83	20.75
5785MHz	83	20.75
5825MHz	83	20.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	53	13.25
5230MHz	69	17.25
5755MHz	73	18.25
5795MHz	79	19.75
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	55	13.75
5775MHz	63	15.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	56	14
5200MHz	72	18
5240MHz	76	19
5745MHz	86	21.5
5785MHz	92	23
5825MHz	91	22.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	49	12.25
5230MHz	65	16.25
5755MHz	74	18.5
5795MHz	78	19.5
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	48	12
5775MHz	63	15.75

For Mode 2: (Ant. 6 Omni antenna / 6 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	66	16.5
5200MHz	70	17.5
5240MHz	70	17.5
5745MHz	75	18.75
5785MHz	79	19.75
5825MHz	75	18.75
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	63	15.75
5200MHz	72	18
5240MHz	72	18
5745MHz	79	19.75
5785MHz	81	20.25
5825MHz	72	18
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	56	14
5230MHz	70	17.5
5755MHz	79	19.75
5795MHz	79	19.75
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	56	14
5775MHz	67	16.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	55	13.75
5200MHz	72	18
5240MHz	72	18
5745MHz	79	19.75
5785MHz	81	20.25
5825MHz	72	18
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	50	12.5
5230MHz	67	16.75
5755MHz	73	18.25
5795MHz	80	20
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	47	11.75
5775MHz	61	15.25

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	73
5200MHz	70
5240MHz	70
5745MHz	75
5785MHz	79
5825MHz	75
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	76
5200MHz	72
5240MHz	72
5745MHz	79
5785MHz	81
5825MHz	72
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	73
5230MHz	73
5755MHz	89
5795MHz	89
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	78
5775MHz	83

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	50	12.5
5200MHz	67	16.75
5240MHz	66	16.5
5745MHz	75	18.75
5785MHz	79	19.75
5825MHz	75	18.75
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	50	12.5
5200MHz	66	16.5
5240MHz	67	16.75
5745MHz	79	19.75
5785MHz	81	20.25
5825MHz	72	18
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	38	9.5
5230MHz	60	15
5755MHz	67	16.75
5795MHz	73	18.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	38	9.5
5775MHz	54	13.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	56	14
5200MHz	66	16.5
5240MHz	66	16.5
5745MHz	67	16.75
5785MHz	67	16.75
5825MHz	67	16.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	48	12
5230MHz	65	16.25
5755MHz	65	16.25
5795MHz	65	16.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	50	12.5
5775MHz	58	14.5

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	51	12.75
5200MHz	66	16.5
5240MHz	71	17.75
5745MHz	79	19.75
5785MHz	81	20.25
5825MHz	72	18
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	38	9.5
5230MHz	60	15
5755MHz	68	17
5795MHz	73	18.25
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	38	9.5
5775MHz	57	14.25

For Mode 3: (Ant. 11 Panel antenna / 8.7 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	69	17.25
5200MHz	74	18.5
5240MHz	71	17.75
5745MHz	86	21.5
5785MHz	97	24.25
5825MHz	95	23.75
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	66	16.5
5200MHz	81	20.25
5240MHz	75	18.75
5745MHz	75	18.75
5785MHz	81	20.25
5825MHz	81	20.25
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	60	15
5230MHz	73	18.25
5755MHz	84	21
5795MHz	85	21.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	58	14.5
5775MHz	71	17.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	58	14.5
5200MHz	75	18.75
5240MHz	75	18.75
5745MHz	75	18.75
5785MHz	81	20.25
5825MHz	81	20.25
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	53	13.25
5230MHz	70	17.5
5755MHz	81	20.25
5795MHz	83	20.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	51	12.75
5775MHz	65	16.25

For 4T1S Mode:
For Radiated Emission:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	71
5200MHz	74
5240MHz	71
5745MHz	86
5785MHz	97
5825MHz	95
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	78
5200MHz	85
5240MHz	75
5745MHz	75
5785MHz	81
5825MHz	81
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	77
5230MHz	73
5755MHz	88
5795MHz	91
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	84
5775MHz	86

For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	58	14.5
5200MHz	58	14.5
5240MHz	57	14.25
5745MHz	81	20.25
5785MHz	81	20.25
5825MHz	81	20.25
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	55	13.75
5200MHz	59	14.75
5240MHz	59	14.75
5745MHz	75	18.75
5785MHz	81	20.25
5825MHz	81	20.25
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	44	11
5230MHz	62	15.5
5755MHz	69	17.25
5795MHz	74	18.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	46	11.5
5775MHz	58	14.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	56	14
5200MHz	58	14.5
5240MHz	57	14.25
5745MHz	56	14
5785MHz	56	14
5825MHz	56	14
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	41	10.25
5230MHz	56	14
5755MHz	54	13.5
5795MHz	54	13.5
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	50	12.5
5775MHz	55	13.75

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	59	14.75
5200MHz	73	18.25
5240MHz	75	18.75
5745MHz	75	18.75
5785MHz	81	20.25
5825MHz	81	20.25
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	48	12
5230MHz	66	16.5
5755MHz	72	18
5795MHz	75	18.75
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	51	12.75
5775MHz	60	15

For Outdoor use for 5G Band 1:
For Mode 1: (Ant. 5 Panel antenna / 3 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	60	15
5200MHz	60	15
5240MHz	60	15
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	59	14.75
5200MHz	59	14.75
5240MHz	58	14.5
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	57	14.25
5230MHz	57	14.25
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	57	14.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	46	11.5
5200MHz	46	11.5
5240MHz	45	11.25
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	46	11.5
5230MHz	45	11.25
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	46	11.5

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	35	8.75
5200MHz	35	8.75
5240MHz	35	8.75
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	35	8.75
5200MHz	34	8.5
5240MHz	34	8.5
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	34	8.5
5230MHz	33	8.25
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	34	8.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	12	3
5200MHz	12	3
5240MHz	11	2.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	11	2.75
5230MHz	11	2.75
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	12	3

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	35	8.75
5200MHz	34	8.5
5240MHz	34	8.5
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	34	8.5
5230MHz	34	8.5
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	34	8.5

For Mode 2: (Ant. 6 Omni antenna / 6 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	66	16.5
5200MHz	70	17.5
5240MHz	70	17.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	63	15.75
5200MHz	72	18
5240MHz	72	18
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	56	14
5230MHz	70	17.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	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	-	-
5180MHz	55	13.75
5200MHz	72	18
5240MHz	72	18
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	50	12.5
5230MHz	67	16.75
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	47	11.75

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	50	12.5
5200MHz	67	16.75
5240MHz	66	16.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	50	12.5
5200MHz	66	16.5
5240MHz	67	16.75
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	38	9.5
5230MHz	60	15
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	38	9.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	56	14
5200MHz	56	14
5240MHz	56	14
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	48	12
5230MHz	54	13.5
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	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	-	-
5180MHz	51	12.75
5200MHz	66	16.5
5240MHz	71	17.75
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	38	9.5
5230MHz	60	15
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	38	9.5

For Mode 3: (Ant. 11 Panel antenna / 8.7 dBi)
For 1T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-
5180MHz	49	12.25
5200MHz	49	12.25
5240MHz	49	12.25
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-
5180MHz	49	12.25
5200MHz	49	12.25
5240MHz	48	12
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-
5190MHz	48	12
5230MHz	48	12
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-
5210MHz	48	12

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-
5180MHz	36	9
5200MHz	36	9
5240MHz	35	8.75
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-
5190MHz	35	8.75
5230MHz	34	8.5
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-
5210MHz	36	9

For 4T1S Mode:
For Conducted measurement and Band Edge Emission test:

Mode	Power Setting	Power Setting (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-
5180MHz	25	6.25
5200MHz	25	6.25
5240MHz	24	6
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-
5180MHz	25	6.25
5200MHz	24	6
5240MHz	23	5.75
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-
5190MHz	24	6
5230MHz	23	5.75
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-
5210MHz	23	5.75
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-
5180MHz	2	0.5
5200MHz	2	0.5
5240MHz	1	0.25
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-
5190MHz	1	0.25
5230MHz	1	0.25
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-
5210MHz	1	0.25

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

Mode	Power Setting	Power Setting (dBm)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-
5180MHz	25	6.25
5200MHz	25	6.25
5240MHz	24	6
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-
5190MHz	24	6
5230MHz	23	5.75
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-
5210MHz	25	6.25

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests											
Tests Item	AC power-line conducted emissions										
Condition	AC power-line conducted measurement for line and neutral										
Operating Mode	Normal Link										
	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.										
	Radio 1 with 2.4GHz function	Radio 1 with 5GHz function	Radio 2 with 5GHz function	Radio 3 with Bluetooth	Radio 3 with Thread	Ant.	EUT GE1	EUT GE2	Adapter	PoE connect with EUT GE1	PoE connect with EUT GE2
1	●	-	●	●	-	● Ant.11-12	●	●	●	-	-
2	-	●	●	●	-	● Ant.11-12	●	●	●	-	-
3	●	-	●	-	●	● Ant.11-12	●	●	●	-	-
4	-	●	●	-	●	● Ant.11-12	●	●	●	-	-
5 Note	●	-	●	-	●	● Ant.11-12	●	●	-	●	-
6 Note	●	-	●	-	●	● Ant.11-12	●	●	-	-	●
Note: Mode 3 has been evaluated to be the worst case among Mode 1~4, thus measurement for Mode 5 ~6 will follow this same test mode.											
Mode 5 generated the worst test result, so it was recorded in this report.											

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Operating Mode	CTX
There are 13 antennas in the antenna table list, antenna 5、6 and antenna 11 for WLAN-5GHz were selected for EUT respectively to perform the test and recorded in this report.	
1	EUT + Ant. 5 Panel antenna / 3 dBi (Refer to note 1)
2	EUT + Ant. 6 Omni antenna / 6 dBi (Refer to note 1)
3	EUT + Ant. 11 Panel antenna / 8.7 dBi (Refer to note 1)

The Worst Case Mode for Following Conformance Tests												
Tests Item	Unwanted Emissions											
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.											
Operating Mode < 1GHz	Normal Link											
	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.											
	Axis	Radio 1 with 2.4GHz function	Radio 1 with 5GHz function	Radio 2 with 5GHz function	Radio 3 with Bluetooth	Radio 3 with Thread	Ant.	EUT GE1	EUT GE2	Adapter	PoE connect with EUT GE1	PoE connect with EUT GE2
1	● Z axis	●	-	●	●	-	● Ant.11-12	●	●	●	-	-
2	● Y axis	●	-	●	●	-	● Ant.11-12	●	●	●	-	-
3	● X axis	●	-	●	●	-	● Ant.11-12	●	●	●	-	-
4 Note1	● Z axis	-	●	●	●	-	● Ant.11-12	●	●	●	-	-
5 Note1	● Z axis	●	-	●	-	●	● Ant.11-12	●	●	●	-	-
6 Note1	● Z axis	-	●	●	-	●	● Ant.11-12	●	●	●	-	-
7 Note2	● Z axis	●	-	●	●	-	● Ant.11-12	●	●	-	●	-
8 Note2	● Z axis	●	-	●	●	-	● Ant.11-12	●	●	-	-	●
Note1: Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~6 will follow this same test mode. Note2: Mode 1 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7~8 will follow this same test mode												
Mode 7 generated the worst test result, so it was recorded in this report.												

Operating Mode > 1GHz	CTX (Refer to note 1)

There are 13 antennas in the antenna table list, antenna 5、6 and antenna 11 for WLAN-5GHz were selected for EUT respectively to perform the test and recorded in this report.

For Radio 1:
For Ant. 5 Panel 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 X axis. So the measurement will follow this same test configuration.
For Band Edge Emission
1T1S, 2T2S 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.
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. 6 Omni antenna / 6 dBi:
For Radiated Emission
5G Band 1-4T1S 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.
5G Band 4-4T1S 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 Y 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 X axis. So the measurement will follow this same test configuration.
For Ant. 11 Panel antenna / 8.7 dBi:
For Radiated Emission
5G Band 1-4T1S 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.
5G Band 4-4T1S 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 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.
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 Radio 2:
For Ant. 5 Panel 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 Z 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 Y axis. So the measurement will follow this same test configuration.
For Ant. 6 Omni antenna / 6 dBi:
For Radiated Emission
5G Band 1 4T1S 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.
5G Band 4 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 Y axis. So the measurement will follow this same test configuration.
For Ant. 11 Panel antenna / 8.7 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, 4T1S, 4T4S 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.
2T2S 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.

<table>
<tr><td rowspan="2">1</td><td colspan="2">(Ant. 5 Panel antenna / 3 dBi)</td></tr>
<tr><td>For Radio 1:
Harmonic: EUT in X axis
Bandedge:
EUT in X axis (1T1S, 2T2S)
EUT in Z axis (4T1S, 4T4S)</td><td>For Radio 2:
Harmonic: EUT in Z axis
Bandedge: EUT in Y axis</td></tr>
<tr><td rowspan="2">2</td><td colspan="2">(Ant. 6 Omni antenna / 6 dBi)</td></tr>
<tr><td>For Radio 1:
Harmonic:
EUT in X axis (Band 1)
EUT in Y axis (Band 4)
Bandedge:
EUT in X axis (2T2S, 4T1S, 4T4S)
EUT in Y axis (1T1S)</td><td>For Radio 2:
Harmonic:
EUT in X axis (Band 1)
EUT in Y axis (Band 4)
Bandedge: EUT in Y axis</td></tr>
<tr><td rowspan="2">3</td><td colspan="2">(Ant. 11 Panel antenna / 8.7 dBi)</td></tr>
<tr><td>For Radio 1:
Harmonic:
EUT in X axis (Band 1)
EUT in Y axis (Band 4)
Bandedge:
EUT in X axis (1T1S, 2T2S)
EUT in Z axis (4T1S, 4T4S)</td><td>For Radio 2:
Harmonic: EUT in Y axis
Bandedge:
EUT in X axis (2T2S)
EUT in Y axis (1T1S, 4T1S, 4T4S)</td></tr>
</table>

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz (Radio 1) + WLAN 5GHz (Radio 2)
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + Bluetooth (Radio 3)
2	WLAN 5GHz (Radio 1) + WLAN 5GHz (Radio 2) + Bluetooth (Radio 3)
3	WLAN 2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + Thread (Radio 3)
4	WLAN 5GHz (Radio 1) + WLAN 5GHz (Radio 2) + Thread (Radio 3)
Refer to Sporton Test Report No.: FA8O1739-03 for Co-location RF Exposure Evaluation.	

Note:
1. Test Mode:

Test Mode									
Test Item	**802.11a**		**802.11ax HEW20/40/80**						
	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	-
Emission Bandwidth	V	V	V	V	V	V	-	V	-
Peak Power Spectral Density	V	V	V	V	V	V	-	V	-
Radiated Emission	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	-

2. 802.11ax modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz and 802.11ac mode for 20/40/80MHz, 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 Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting 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 module and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO02-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Flash disk3.0	Transcend	JetFlash-700	N/A
B	GE1 PC	DELL	T3400	N/A
C	GE2 NB	DELL	E6430	N/A
D	2.4G/5G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A
F	802.11ax Access Point (Device)	Extreme Networks	AP-510e	N/A
G	Device NB	DELL	E6430	N/A
H	PoE	Microsemi	PD-9001GR/AT/AC	N/A

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	CE1 PC	ASUS	N/A	N/A
B	GE2 NB	DELL	E4300	N/A
C	2.4G/5G NB	DELL	E4300	N/A
D	5G NB	DELL	E4300	N/A
E	802.11ax Access Point (Device)	Extreme Networks	AP-510e	N/A
F	Device NB	DELL	E4300	N/A
G	Flash disk3.0	Transcend	JetFlash-700	N/A
H	PoE	Microsemi	PD-9001GR/AT/AC	N/A

For Test Site No: 03CH01-CB (above 1GHz, 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 (above 1GHz, Beamforming Mode)

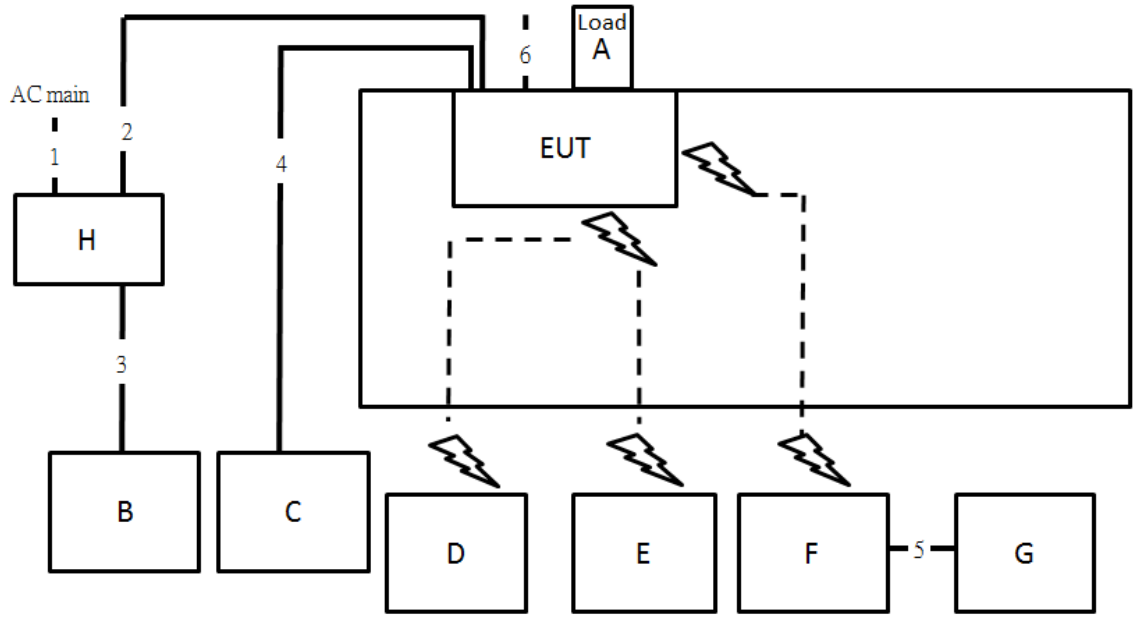
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
D	WLAN module	Boardcom	BCM 943684MCH5	N/A
C	NB	DELL	E4300	N/A
E	Adapter	Powertron Electronics Corp	PA1045-120HIB300	N/A

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

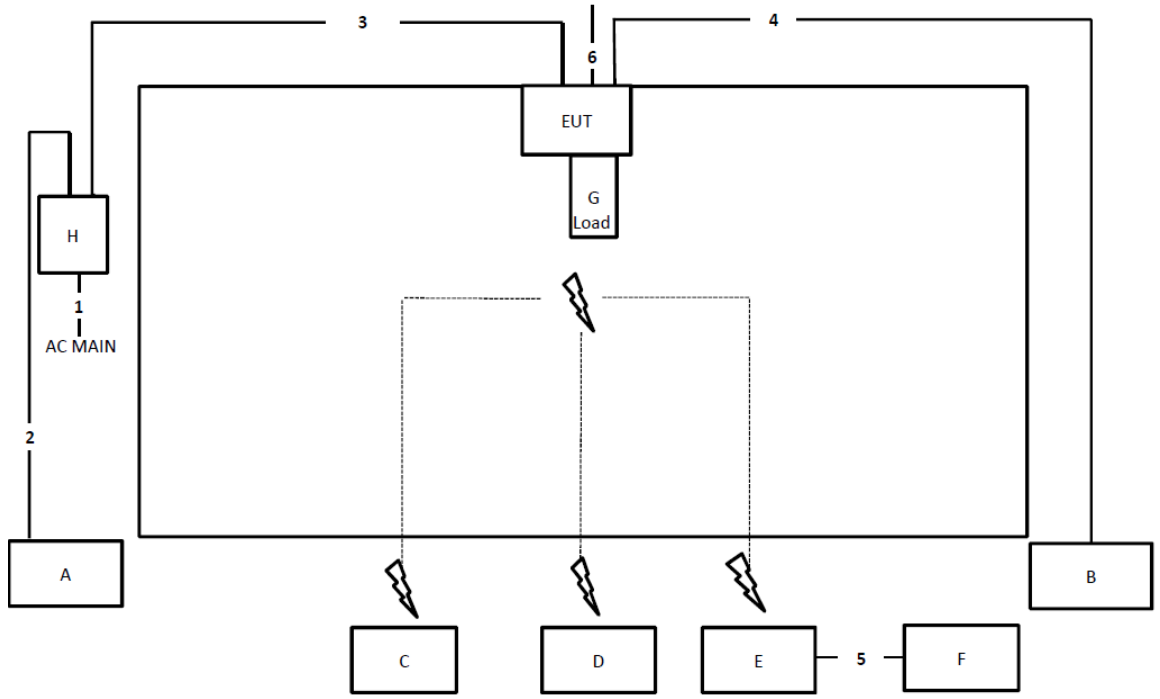
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



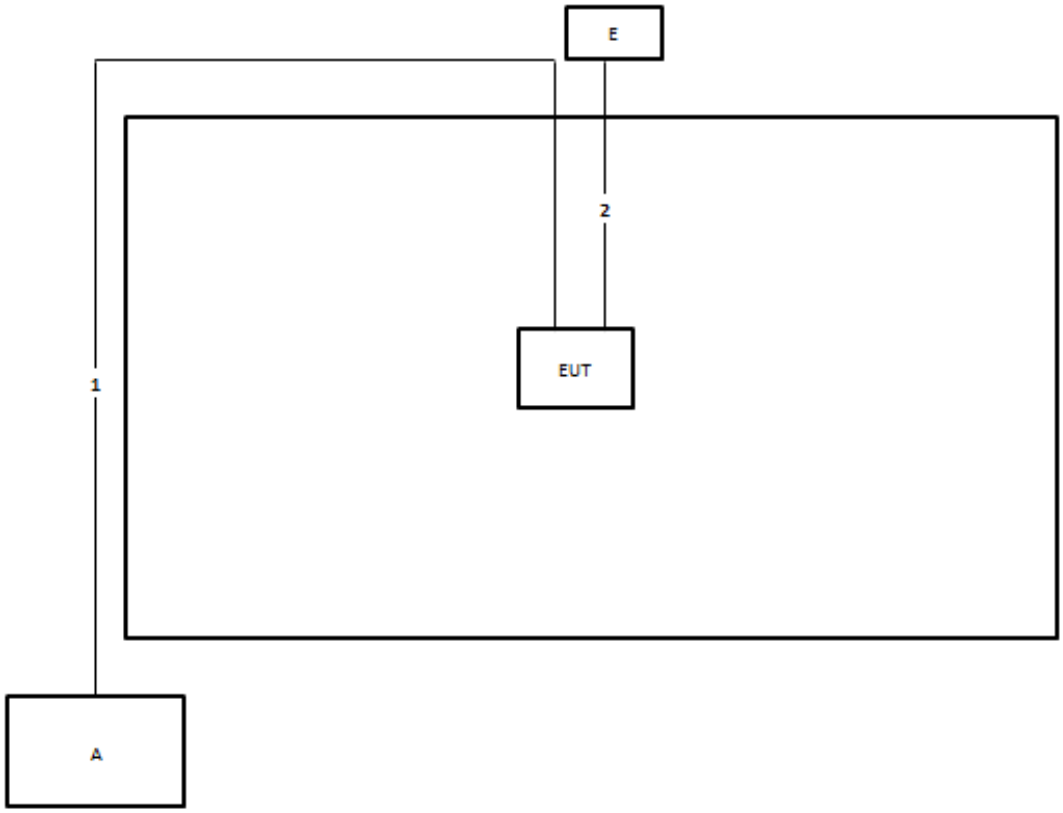
Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	3m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	3m
6	Console cable	No	1.8m

Test Setup Diagram - Radiated Test < 1GHz



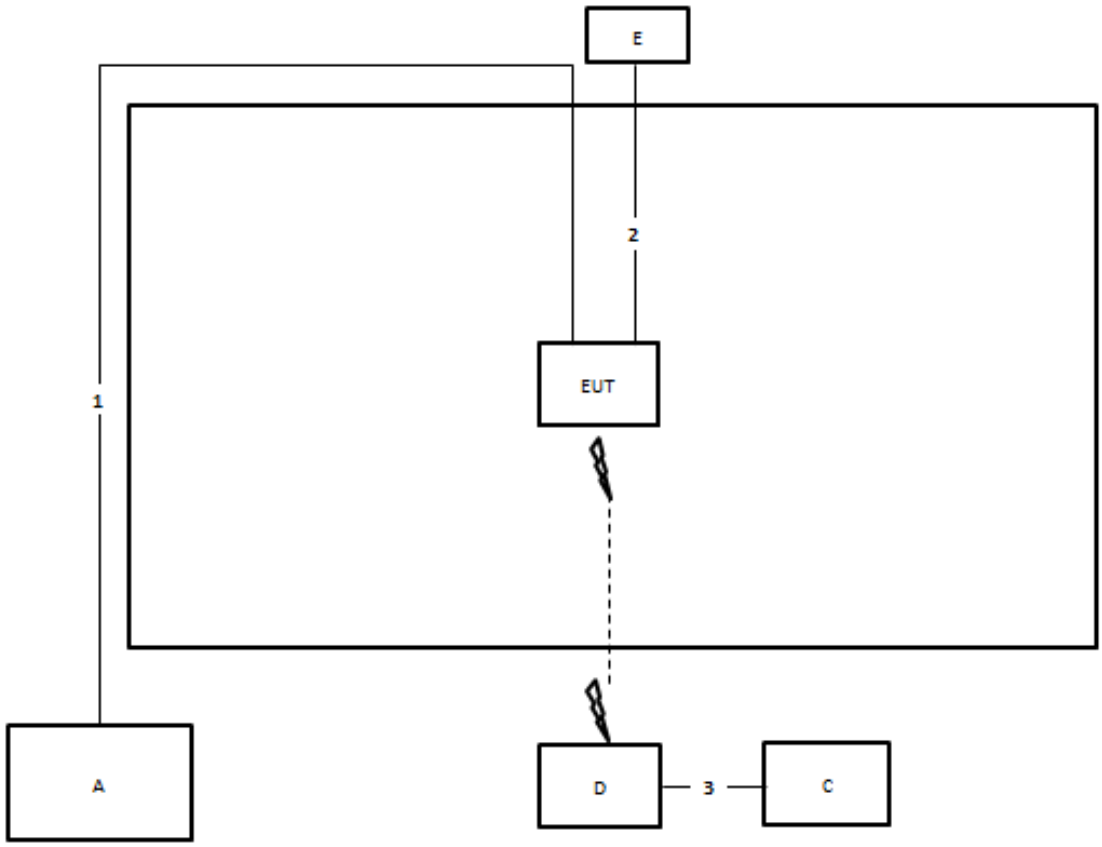
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	10m
6	Console cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz, Non-Beamforming Mode



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

Test Setup Diagram - Radiated Test > 1GHz, Beamforming Mode



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

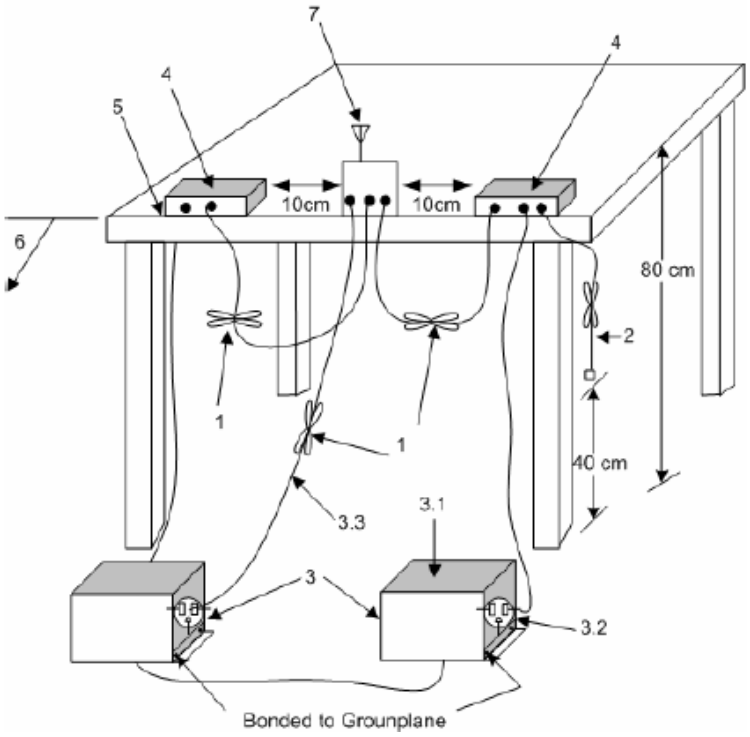
Refer a test equipment and calibration data table in this test report.

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 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

3.2.2 Measuring Instruments

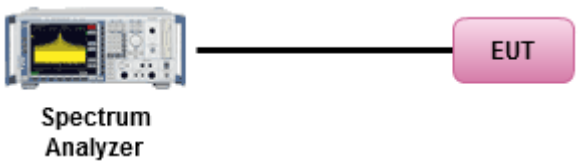
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

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

3.2.4 Test Setup

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	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

RF Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

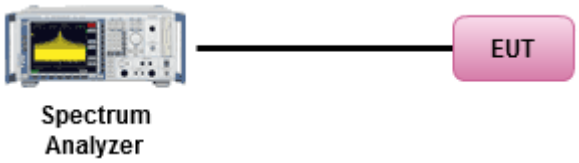
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☐ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Measuring Instruments

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

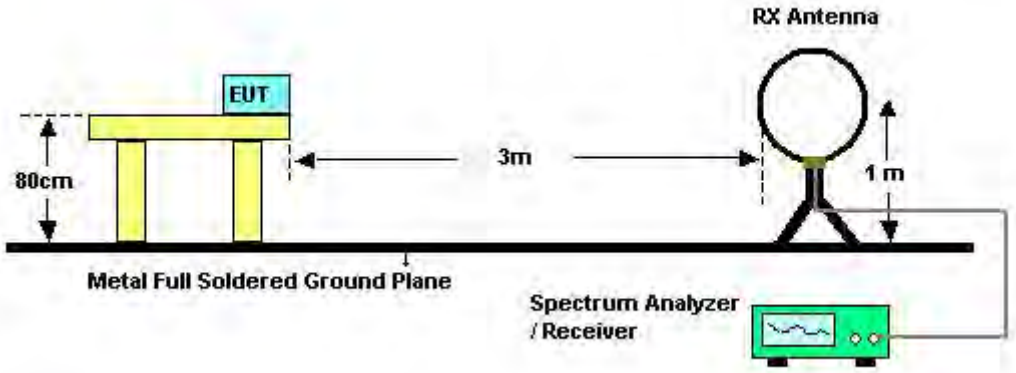
3.5.3 Test Procedures

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

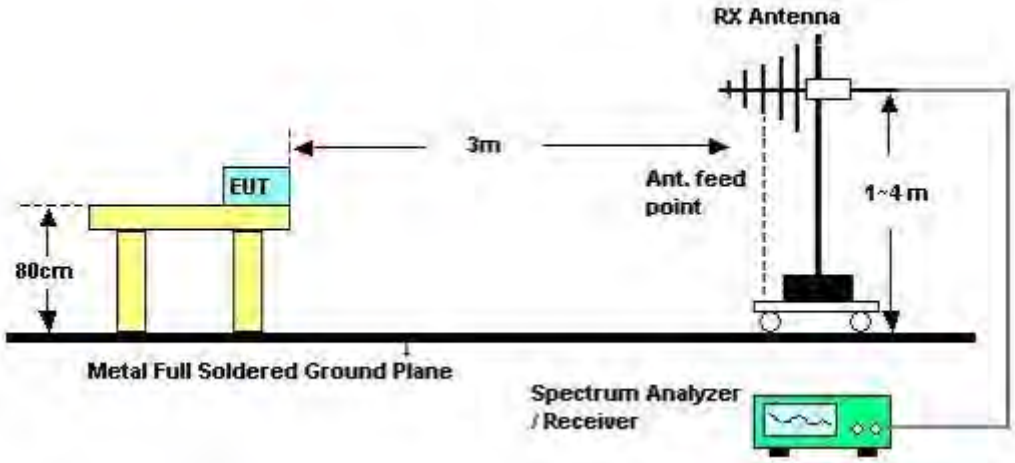
3.5.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

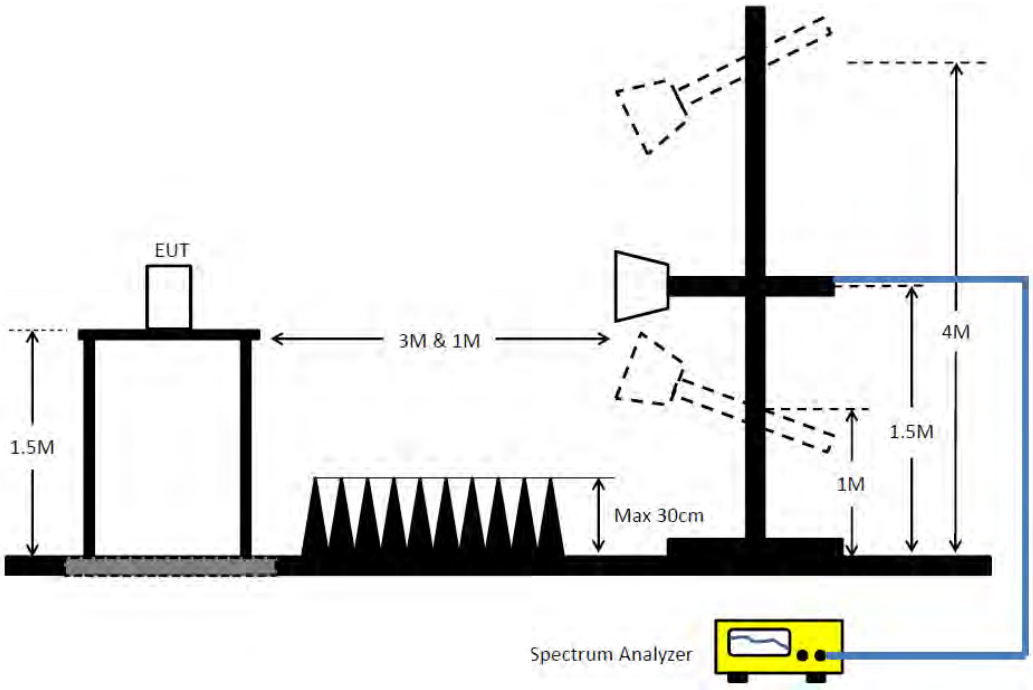
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Transmitter Unwanted Emissions (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.

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

4 Test Equipment and Calibration Data

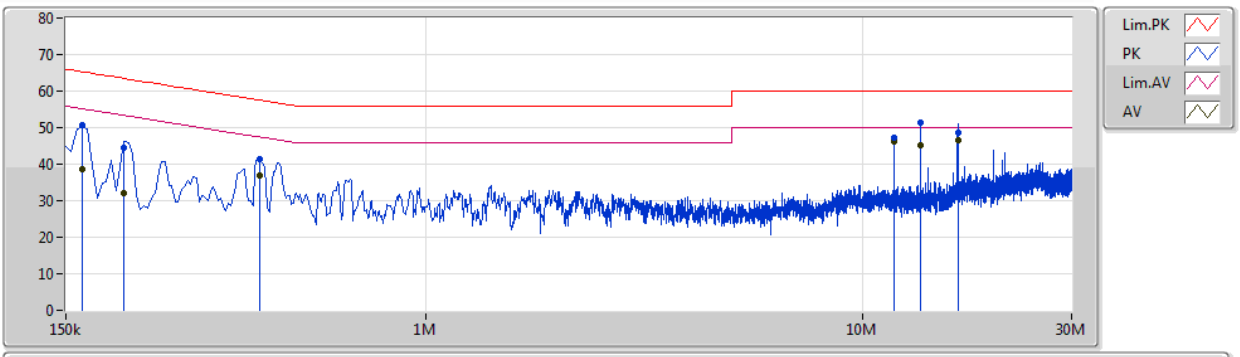
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 17, 2018	Jan. 16, 2019	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Nov. 06, 2018	Nov. 05, 2019	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-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. 16, 2018	Mar. 15, 2019	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 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz~26.5GHz	Jan. 09, 2018	Jan. 08, 2019	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~8 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz~40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
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.

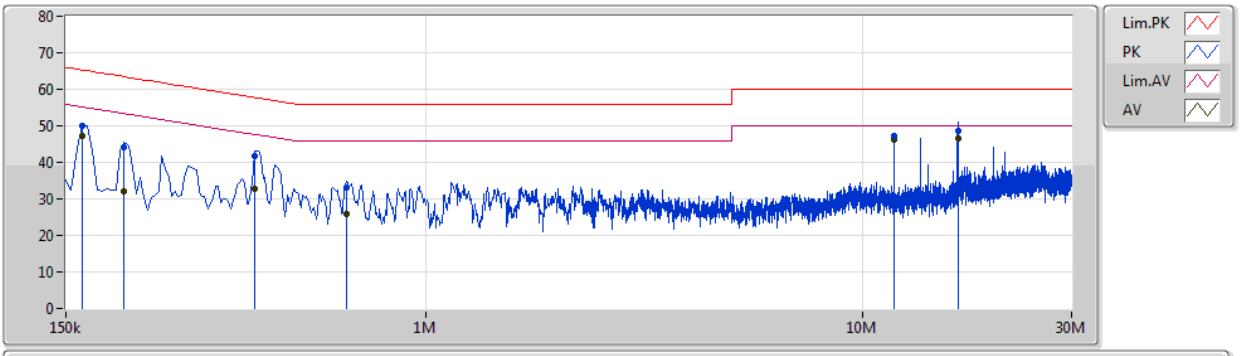
Test Mode	Mode 5	**Frequency Range**	0.15 MHz to 30 MHz

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	50.57	65.27	-14.70	10.18	Line	-	40.39	10.16	0.02	-
AV	163.5k	38.48	55.27	-16.79	10.18	Line	-	28.30	10.16	0.02	-
QP	204k	44.47	63.44	-18.97	10.18	Line	-	34.29	10.16	0.02	-
AV	204k	32.09	53.44	-21.35	10.18	Line	-	21.91	10.16	0.02	-
QP	415.5k	41.28	57.53	-16.25	10.18	Line	-	31.10	10.16	0.02	-
AV	415.5k	36.85	47.53	-10.68	10.18	Line	-	26.67	10.16	0.02	-
QP	11.76M	47.14	60.00	-12.86	10.43	Line	-	36.71	10.34	0.09	-
AV	11.76M	46.28	50.00	-3.72	10.43	Line	-	35.85	10.34	0.09	-
QP	13.56M	51.50	60.00	-8.50	10.46	Line	-	41.04	10.36	0.10	-
AV	13.56M	45.23	50.00	-4.77	10.46	Line	-	34.77	10.36	0.10	-
QP	16.467M	48.54	60.00	-11.46	10.49	Line	-	38.05	10.38	0.11	-
AV	16.467M	46.51	50.00	-3.49	10.49	Line	"Worst"	36.02	10.38	0.11	-

Neutral



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	163.5k	50.12	65.27	-15.15	10.19	Neutral	-	39.93	10.17	0.02	-
AV	163.5k	47.23	55.27	-8.04	10.19	Neutral	-	37.04	10.17	0.02	-
QP	204k	44.04	63.44	-19.40	10.19	Neutral	-	33.85	10.17	0.02	-
AV	204k	32.15	53.44	-21.29	10.19	Neutral	-	21.96	10.17	0.02	-
QP	406.5k	41.68	57.72	-16.04	10.19	Neutral	-	31.49	10.17	0.02	-
AV	406.5k	32.86	47.72	-14.86	10.19	Neutral	-	22.67	10.17	0.02	-
QP	658.5k	33.03	56.00	-22.97	10.20	Neutral	-	22.83	10.18	0.02	-
AV	658.5k	25.83	46.00	-20.17	10.20	Neutral	-	15.63	10.18	0.02	-
QP	11.76M	47.17	60.00	-12.83	10.43	Neutral	-	36.74	10.34	0.09	-
AV	11.76M	46.29	50.00	-3.71	10.43	Neutral	-	35.86	10.34	0.09	-
QP	16.467M	48.60	60.00	-11.40	10.48	Neutral	-	38.12	10.37	0.11	-
AV	16.467M	46.59	50.00	-3.41	10.48	Neutral	"Worst"	36.11	10.37	0.11	-

For Radio 1:
For Indoor use for 5G Band 1 and Indoor/Outdoor use for 5G Band 4:
Mode 1: (Ant. 5 Panel 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)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	42.525M	17.166M	17M2D1D	27.4M	16.667M
802.11ax HEW20_Nss1,(MCS0)_1TX	45M	23.813M	23M8D1D	26.6M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX	77.55M	38.081M	38M1D1D	39.95M	37.531M
802.11ax HEW80_Nss1,(MCS0)_1TX	81.3M	76.962M	77M0D1D	81.3M	76.962M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.325M	18.766M	18M8D1D	16.3M	17.216M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.875M	24.988M	25M0D1D	18.45M	19.24M
802.11ax HEW40_Nss1,(MCS0)_1TX	36.45M	62.119M	62M1D1D	36.05M	60.27M
802.11ax HEW80_Nss1,(MCS0)_1TX	75.8M	77.961M	78M0D1D	75.8M	77.961M

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

Result

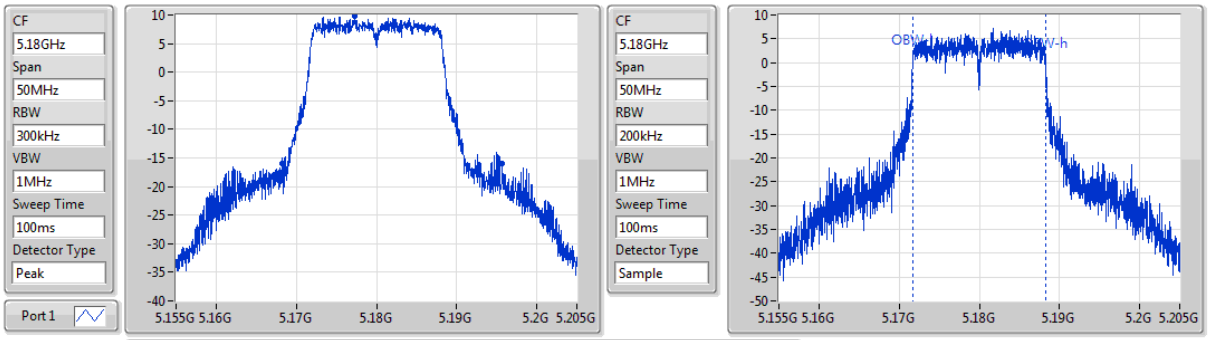
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	27.4M	16.667M
5200MHz	Pass	Inf	42.525M	17.166M
5240MHz	Pass	Inf	40.975M	16.867M
5745MHz	Pass	500k	16.325M	17.666M
5785MHz	Pass	500k	16.3M	18.766M
5825MHz	Pass	500k	16.3M	17.216M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	26.6M	18.991M
5200MHz	Pass	Inf	45M	23.813M
5240MHz	Pass	Inf	42M	19.29M
5745MHz	Pass	500k	18.45M	24.988M
5785MHz	Pass	500k	18.775M	19.29M
5825MHz	Pass	500k	18.875M	19.24M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	39.95M	37.531M
5230MHz	Pass	Inf	77.55M	38.081M
5755MHz	Pass	500k	36.45M	60.27M
5795MHz	Pass	500k	36.05M	62.119M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	81.3M	76.962M
5775MHz	Pass	500k	75.8M	77.961M

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

802.11a_Nss1,(6Mbps)_1TX **EBW**

5180MHz

18/02/2019

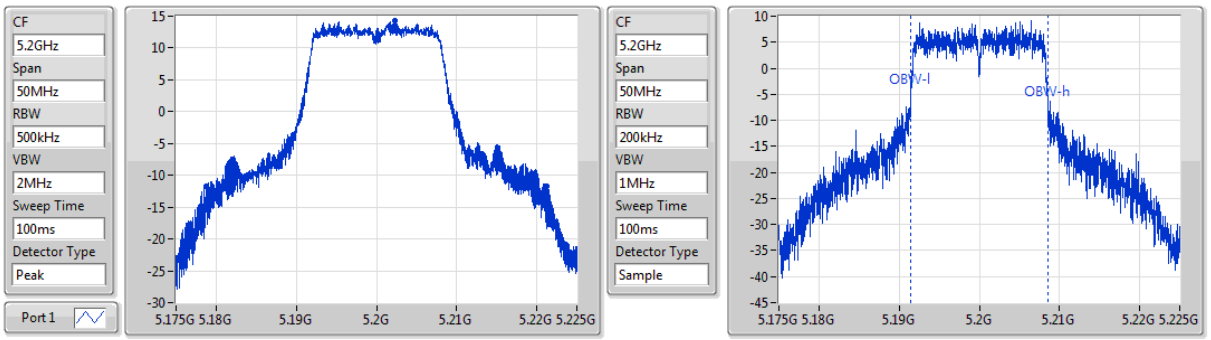


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.4M	5.168275G	5.195675G	16.667M	5.171654G	5.188321G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5200MHz

18/02/2019

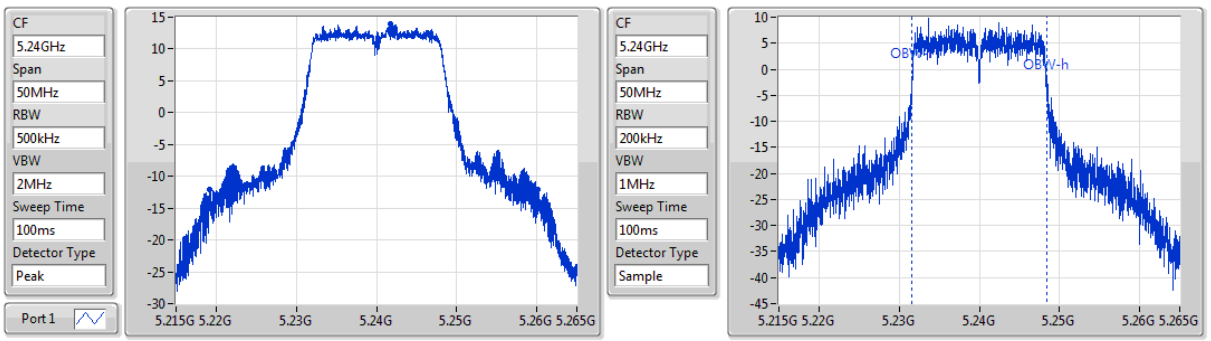


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.525M	5.1787G	5.221225G	17.166M	5.191404G	5.208571G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5240MHz

18/02/2019

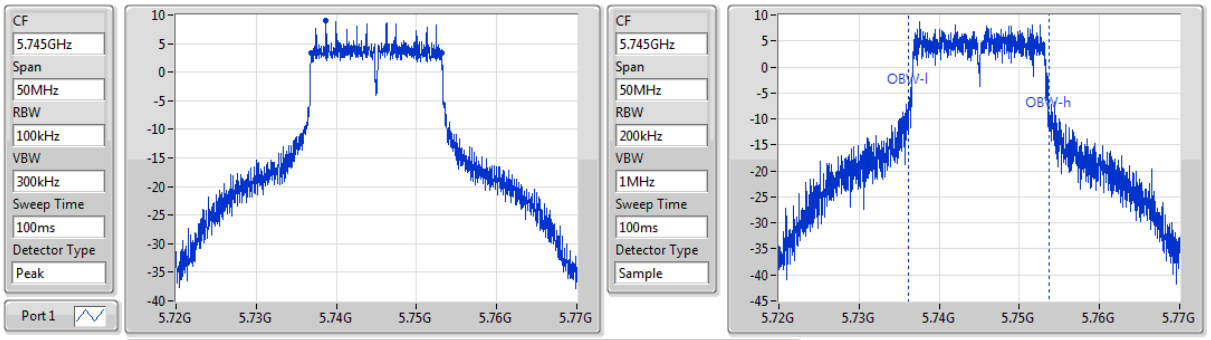


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.975M	5.219125G	5.2601G	16.867M	5.231579G	5.248446G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5745MHz

18/02/2019

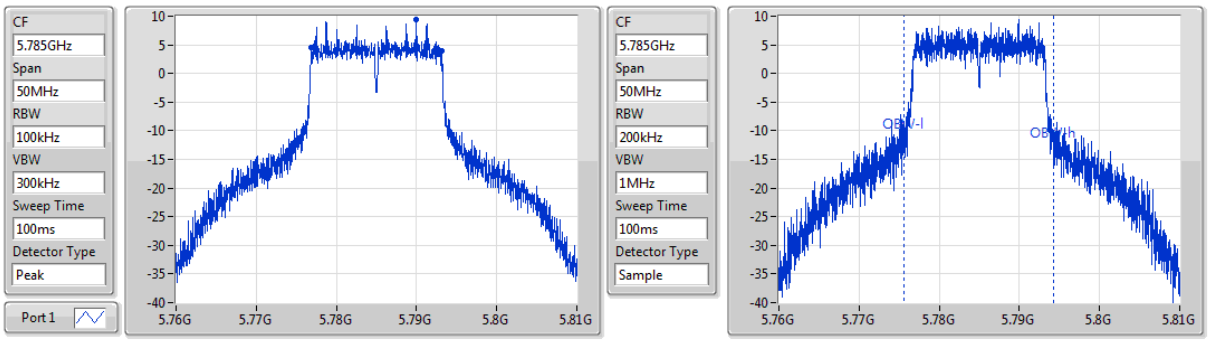


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.736825G	5.75315G	17.666M	5.736104G	5.753771G	500k	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5785MHz

18/02/2019

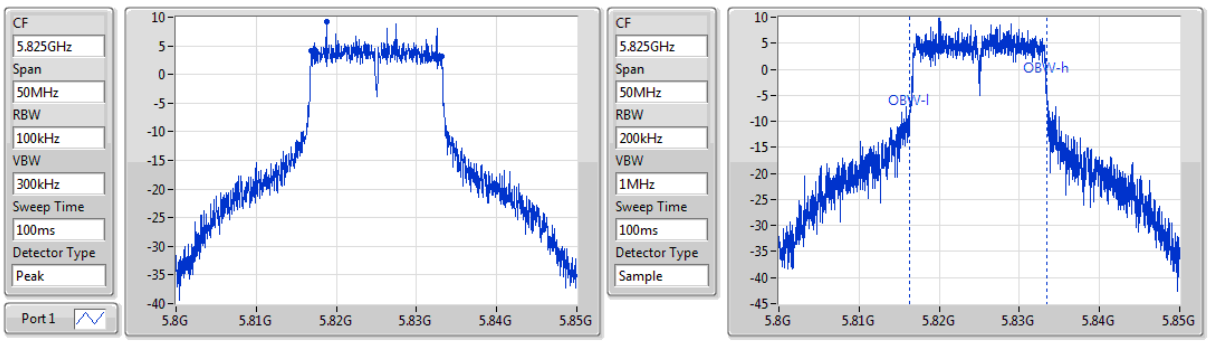


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.77685G	5.79315G	18.766M	5.775555G	5.79432G	500k	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5825MHz

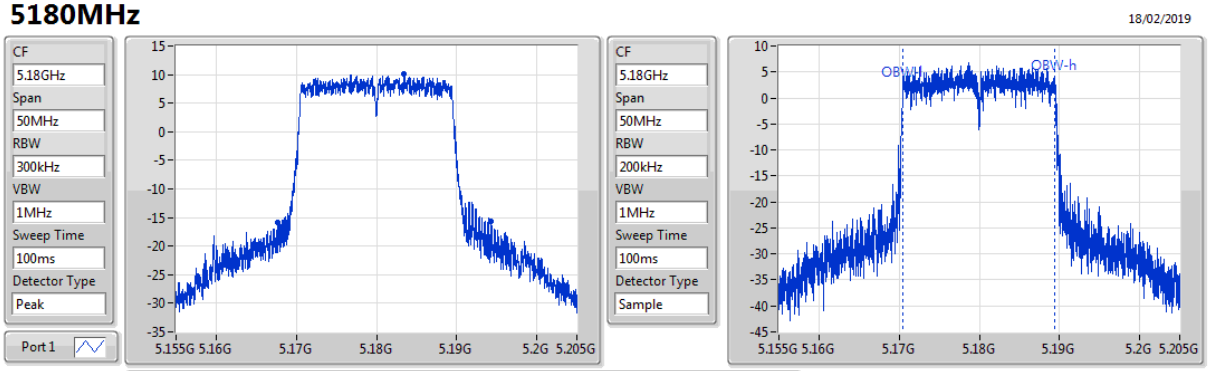
18/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.81685G	5.83315G	17.216M	5.816254G	5.833471G	500k	1

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

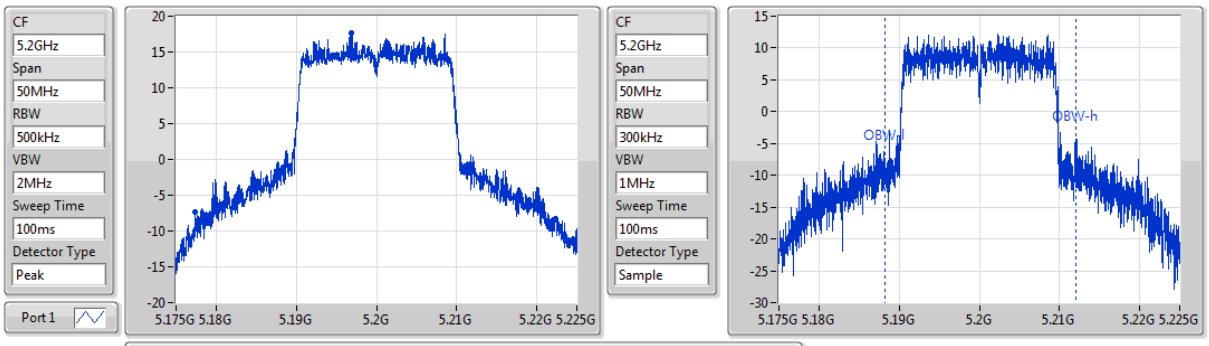
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.6M	5.167725G	5.194325G	18.991M	5.17048G	5.18947G	Inf	1

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

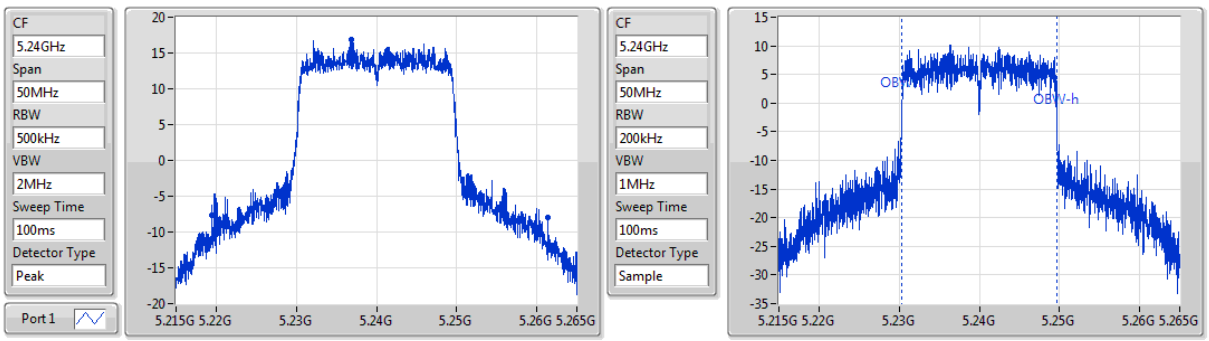
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45M	5.177375G	5.222375G	23.813M	5.188281G	5.212094G	Inf	1

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

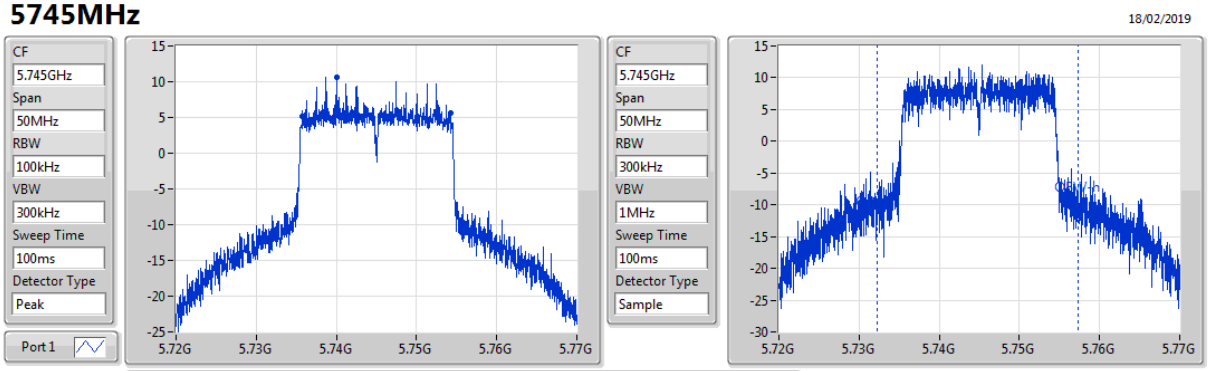
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42M	5.219425G	5.261425G	19.29M	5.230355G	5.249645G	Inf	1

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

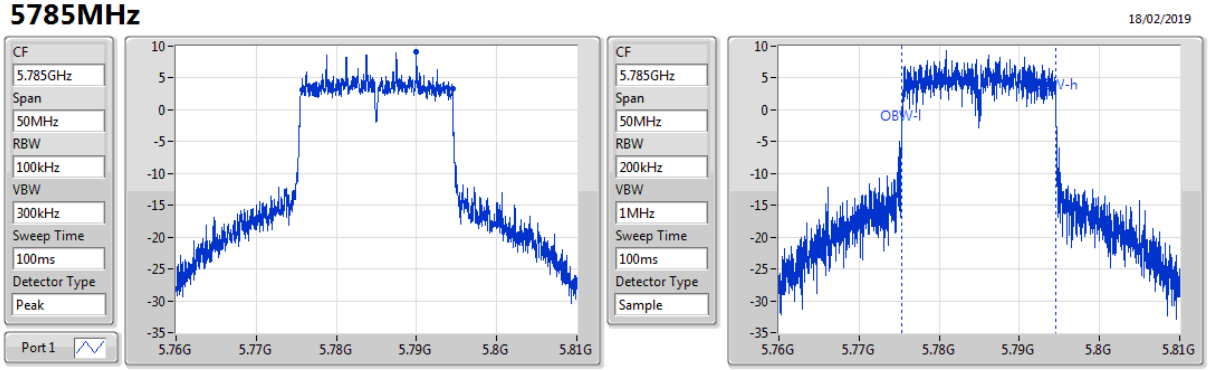
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.45M	5.73575G	5.7542G	24.988M	5.732306G	5.757294G	500k	1

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

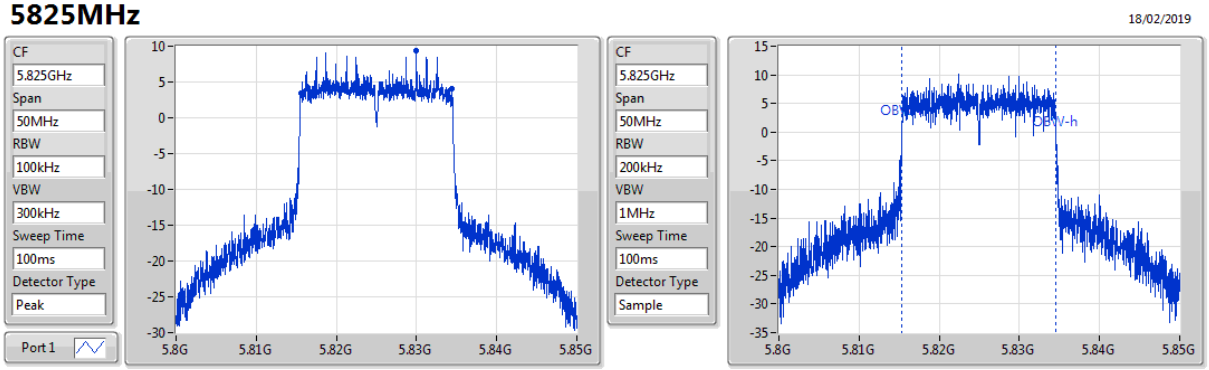
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.775M	5.7757G	5.794475G	19.29M	5.775305G	5.794595G	500k	1

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

5825MHz

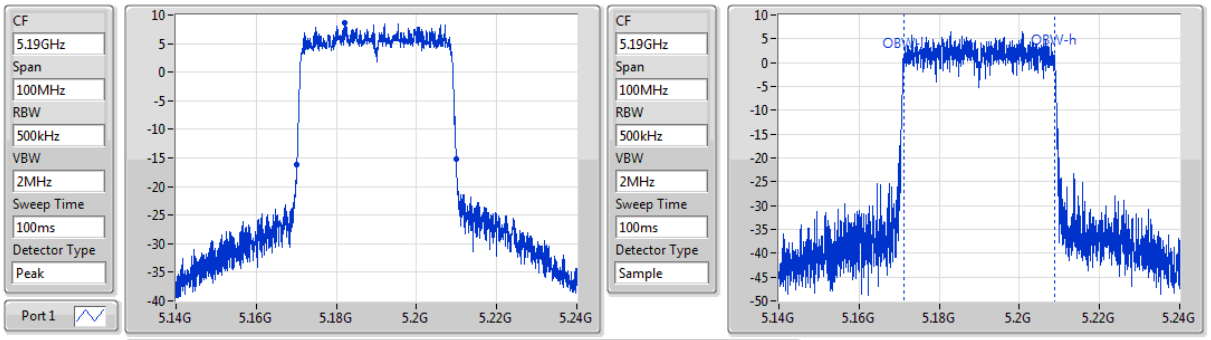


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	5.81555G	5.834425G	19.24M	5.815355G	5.834595G	500k	1

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

5190MHz

18/02/2019

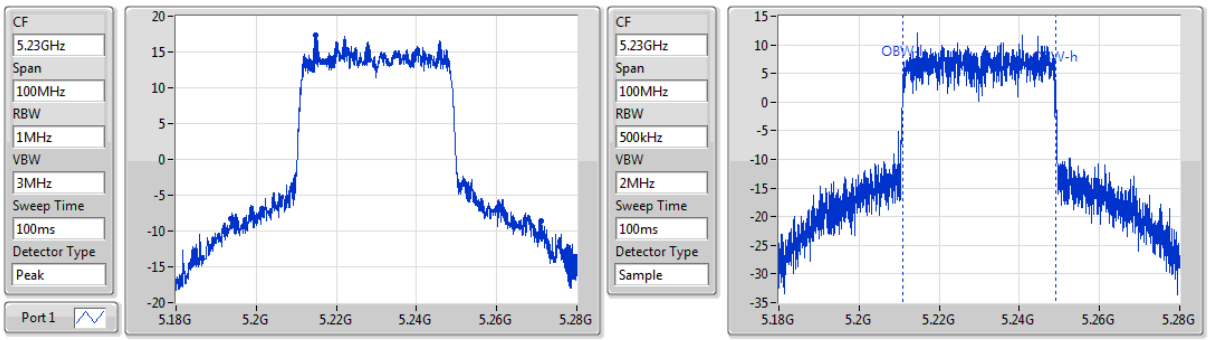


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.95M	5.17005G	5.21G	37.531M	5.171209G	5.208741G	Inf	1

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

5230MHz

18/02/2019

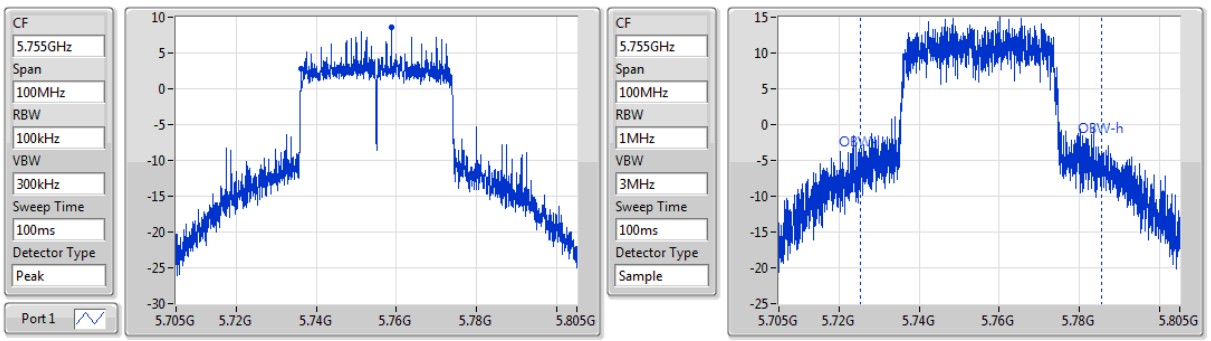


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.55M	5.19365G	5.2712G	38.081M	5.21096G	5.24904G	Inf	1

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

5755MHz

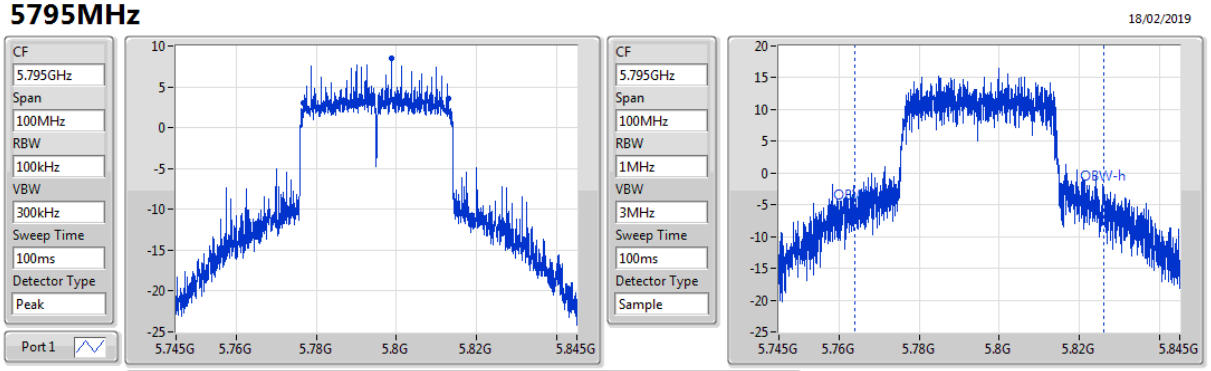
18/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.45M	5.7362G	5.77265G	60.27M	5.725315G	5.785585G	500k	1

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

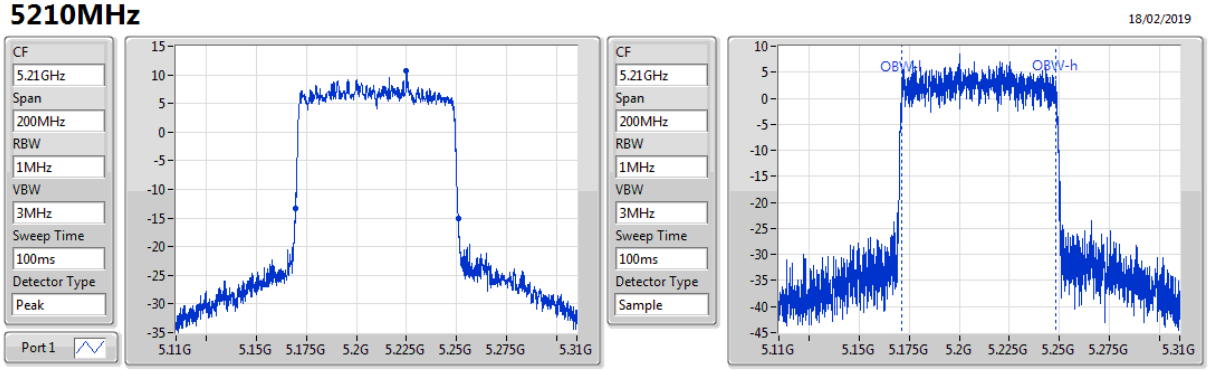
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.05M	5.77685G	5.8129G	62.119M	5.763816G	5.825935G	500k	1

802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

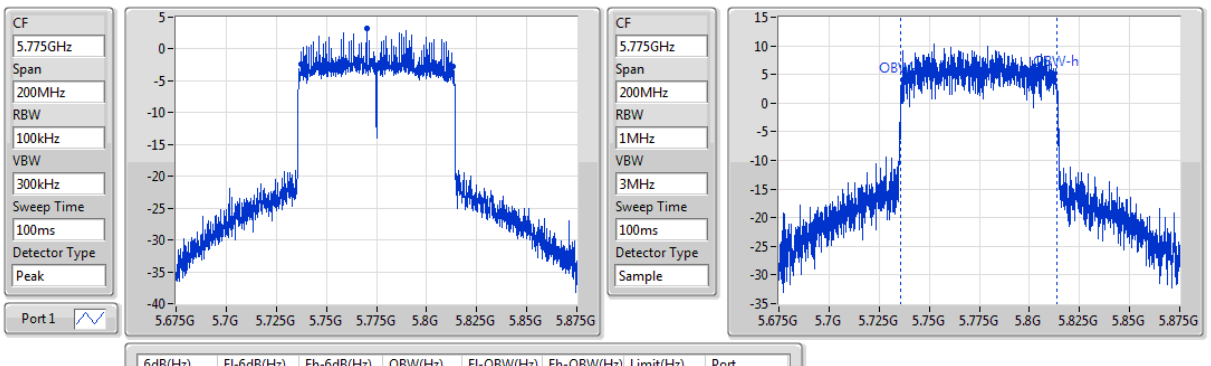
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.3M	5.1695G	5.2508G	76.962M	5.171419G	5.248381G	Inf	1

802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.8M	5.7373G	5.8131G	77.961M	5.73592G	5.813881G	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)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	43.35M	19.24M	19M2D1D	21.375M	18.966M
802.11ax HEW40_Nss2,(MCS0)_2TX	65.55M	37.731M	37M7D1D	39.95M	37.481M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.7M	76.962M	77M0D1D	81.5M	76.962M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	18.85M	24.238M	24M2D1D	18.575M	19.24M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.65M	52.224M	52M2D1D	35.9M	42.229M
802.11ax HEW80_Nss2,(MCS0)_2TX	76.4M	77.361M	77M4D1D	75.2M	77.161M

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

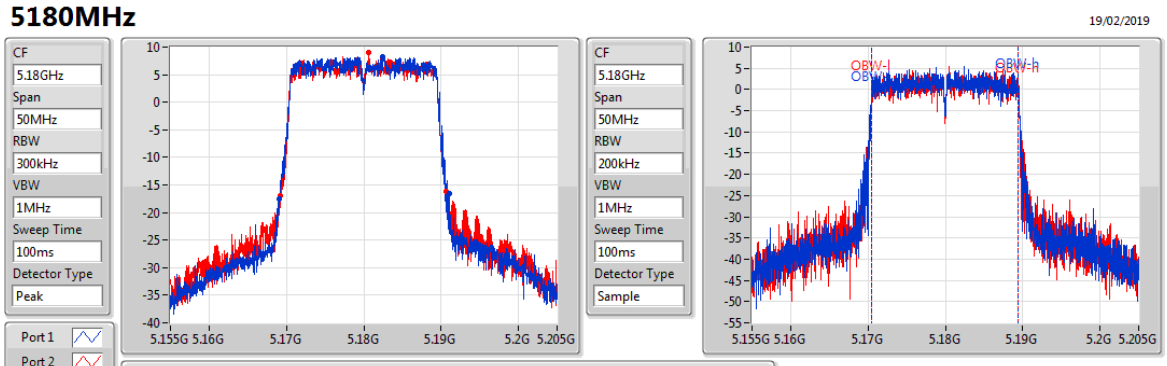
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.025M	18.966M	21.375M	18.966M
5200MHz	Pass	Inf	38.65M	19.065M	42.725M	19.19M
5240MHz	Pass	Inf	41.275M	19.24M	43.35M	19.24M
5745MHz	Pass	500k	18.775M	23.413M	18.6M	24.238M
5785MHz	Pass	500k	18.85M	19.29M	18.575M	19.24M
5825MHz	Pass	500k	18.7M	19.315M	18.75M	19.615M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40M	37.481M	39.95M	37.481M
5230MHz	Pass	Inf	65.55M	37.681M	60M	37.731M
5755MHz	Pass	500k	35.9M	46.527M	37.6M	42.229M
5795MHz	Pass	500k	36.35M	52.224M	37.65M	50.875M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.7M	76.962M	81.5M	76.962M
5775MHz	Pass	500k	76.4M	77.361M	75.2M	77.161M

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

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

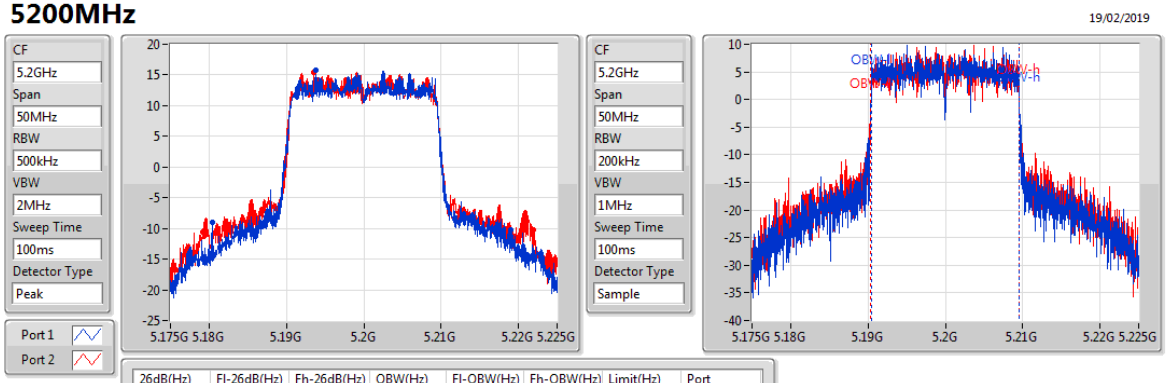
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.025M	5.169025G	5.19105G	18.966M	5.170505G	5.18947G	Inf	1
21.375M	5.16925G	5.190625G	18.966M	5.17048G	5.189445G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

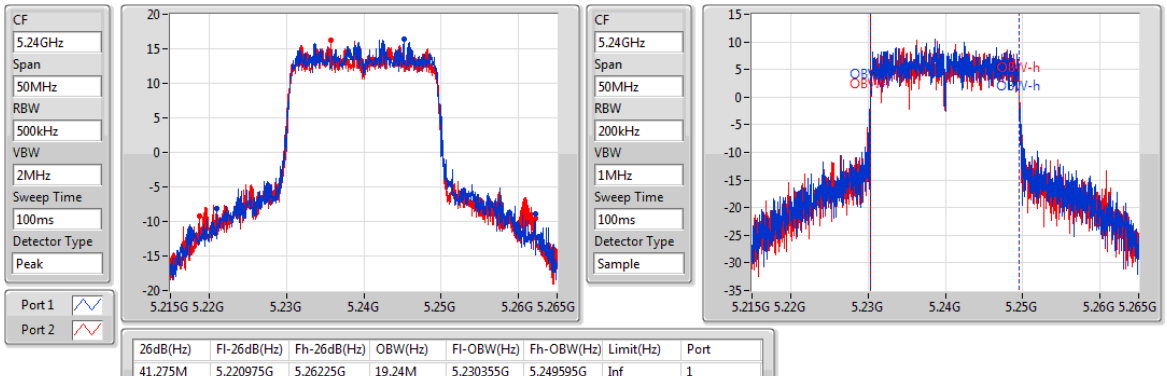
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.65M	5.180375G	5.219025G	19.065M	5.190455G	5.20952G	Inf	1
42.725M	5.179175G	5.2219G	19.19M	5.19038G	5.20957G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX EBW

5240MHz

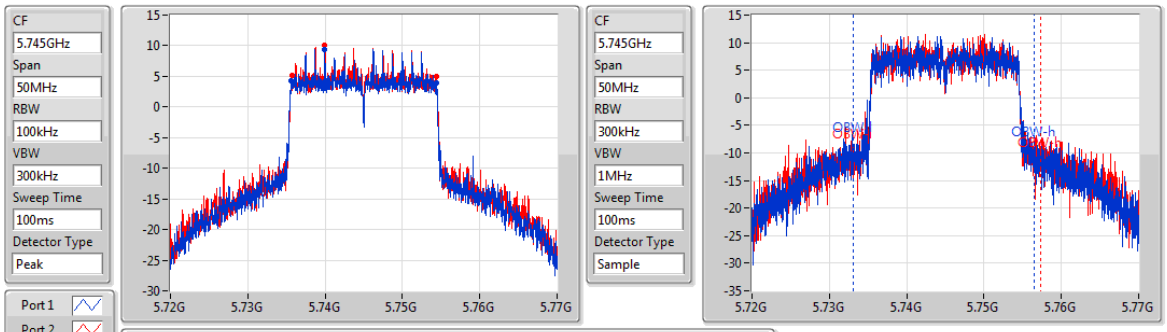


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.275M	5.220975G	5.26225G	19.24M	5.230355G	5.249595G	Inf	1
43.35M	5.2188G	5.26215G	19.24M	5.230355G	5.249595G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

5745MHz

19/02/2019

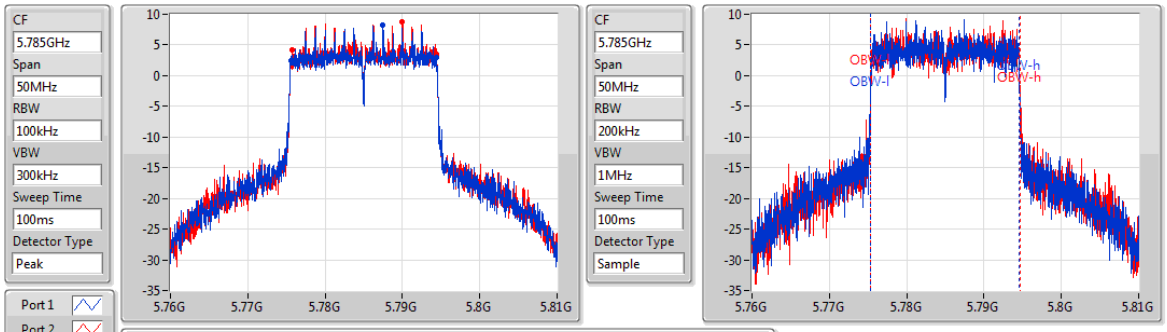


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.775M	5.735625G	5.7544G	23.413M	5.733106G	5.756519G	500k	1
18.6M	5.735775G	5.754375G	24.238M	5.733031G	5.757269G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

5785MHz

19/02/2019

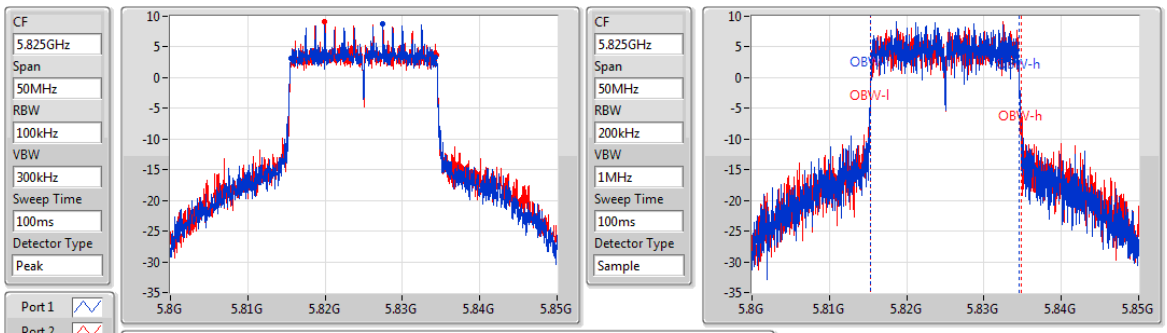


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.85M	5.775575G	5.794425G	19.29M	5.775305G	5.794595G	500k	1
18.575M	5.7758G	5.794375G	19.24M	5.77538G	5.79462G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

5825MHz

19/02/2019

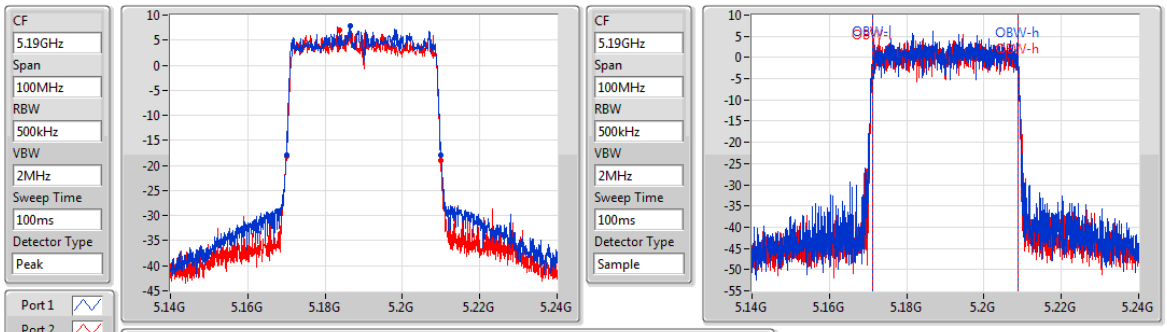


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.7M	5.815575G	5.834275G	19.315M	5.81528G	5.834595G	500k	1
18.75M	5.81565G	5.8344G	19.615M	5.815255G	5.83487G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX **EBW**

5190MHz

19/02/2019

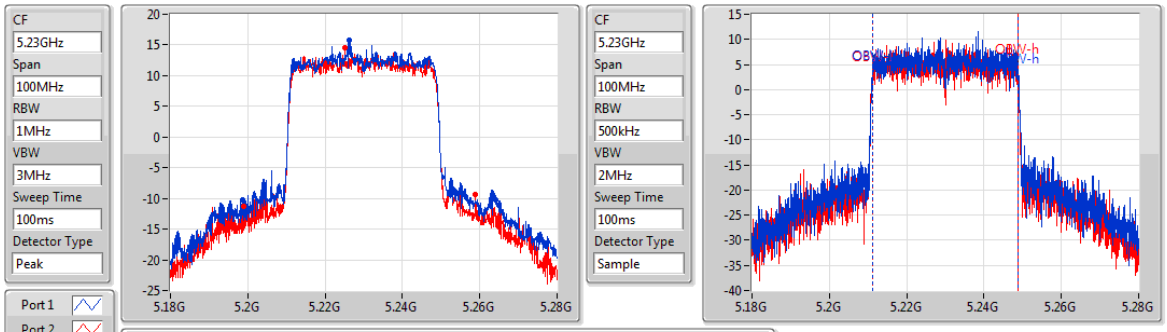


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40M	5.16995G	5.20995G	37.481M	5.171209G	5.208691G	Inf	1
39.95M	5.16995G	5.2099G	37.481M	5.171209G	5.208691G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX **EBW**

5230MHz

19/02/2019

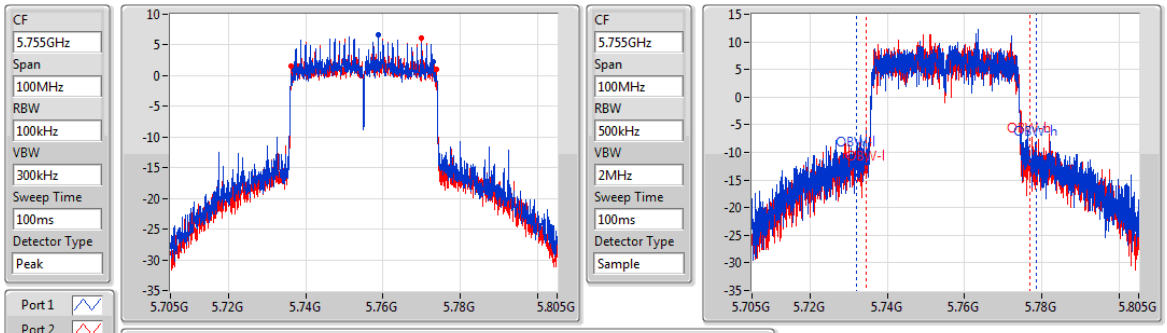


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
65.55M	5.1987G	5.26425G	37.681M	5.211159G	5.248841G	Inf	1
60M	5.19895G	5.25895G	37.731M	5.211109G	5.248841G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX **EBW**

5755MHz

19/02/2019

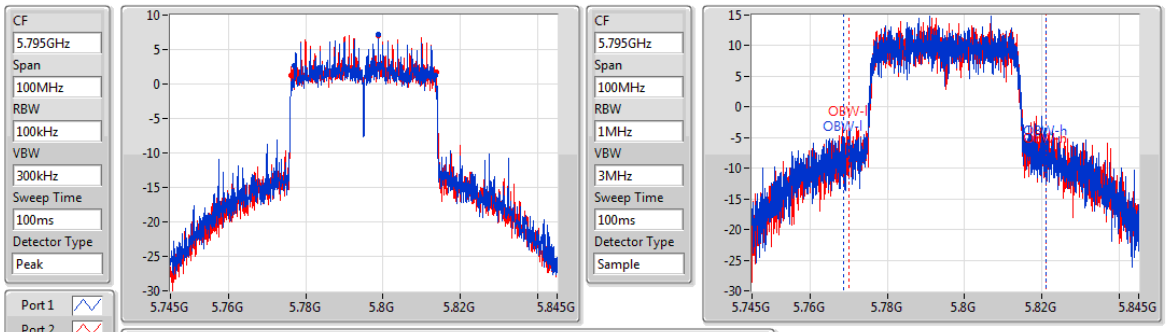


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	5.7371G	5.773G	46.527M	5.732111G	5.778638G	500k	1
37.6M	5.7362G	5.7738G	42.229M	5.73451G	5.776739G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX **EBW**

5795MHz

19/02/2019

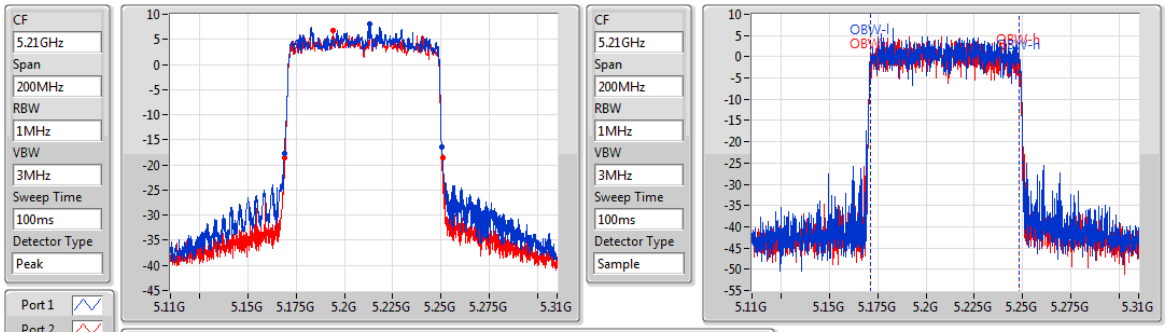


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	5.77715G	5.8135G	52.224M	5.768813G	5.821037G	500k	1
37.65M	5.77615G	5.8138G	50.875M	5.770162G	5.821037G	500k	2

802.11ax HEW80_Nss2,(MCS0)_2TX **EBW**

5210MHz

19/02/2019

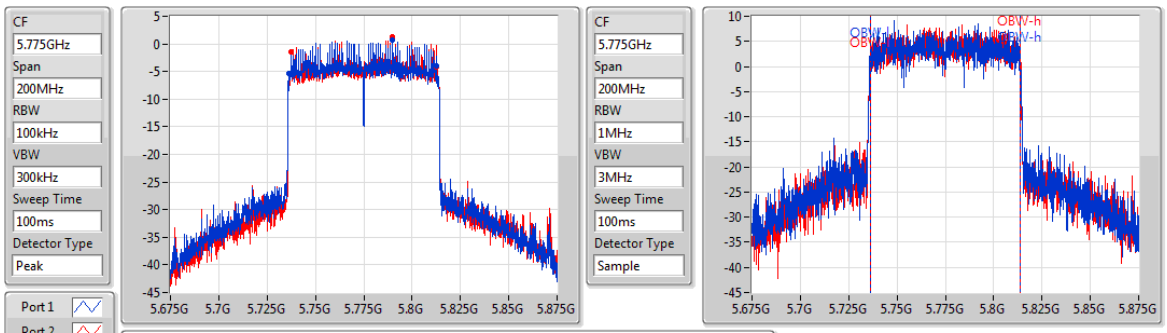


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.7M	5.1689G	5.2506G	76.962M	5.171419G	5.248381G	Inf	1
81.5M	5.1692G	5.2507G	76.962M	5.171419G	5.248381G	Inf	2

802.11ax HEW80_Nss2,(MCS0)_2TX **EBW**

5775MHz

19/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.4M	5.7363G	5.8127G	77.361M	5.736219G	5.813581G	500k	1
75.2M	5.7374G	5.8126G	77.161M	5.736319G	5.813481G	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)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	42.35M	17.266M	17M3D1D	21.475M	16.542M
802.11ax HEW20_Nss1,(MCS0)_4TX	42.725M	19.49M	19M5D1D	21.475M	18.941M
802.11ax HEW40_Nss1,(MCS0)_4TX	60.1M	37.581M	37M6D1D	39.9M	37.431M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.4M	77.261M	77M3D1D	81.1M	76.962M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.35M	19.09M	19M1D1D	16.3M	17.641M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.925M	25.437M	25M4D1D	18.675M	19.265M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.5M	38.581M	38M6D1D	36.95M	37.631M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.5M	77.261M	77M3D1D	76.9M	76.962M

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

Result

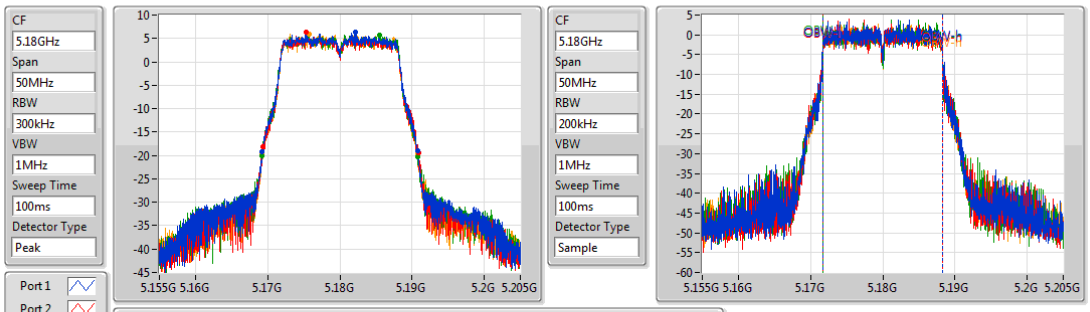
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.475M	16.592M	21.575M	16.592M	21.6M	16.592M	21.575M	16.542M
5200MHz	Pass	Inf	38.55M	16.842M	38.35M	16.917M	40.8M	17.016M	36.675M	16.692M
5240MHz	Pass	Inf	39.3M	16.842M	38.7M	16.992M	42.35M	17.266M	36.7M	16.692M
5745MHz	Pass	500k	16.35M	18.666M	16.3M	17.641M	16.3M	19.09M	16.325M	17.816M
5785MHz	Pass	500k	16.325M	18.366M	16.325M	17.966M	16.3M	18.316M	16.325M	17.966M
5825MHz	Pass	500k	16.325M	18.216M	16.325M	18.316M	16.35M	18.441M	16.3M	17.816M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.75M	18.941M	21.675M	18.991M	23.15M	18.966M	21.475M	18.941M
5200MHz	Pass	Inf	40.65M	19.065M	39.075M	19.14M	40.975M	19.165M	29.5M	19.04M
5240MHz	Pass	Inf	41.075M	19.24M	41.1M	19.44M	42.725M	19.49M	40.975M	19.09M
5745MHz	Pass	500k	18.675M	25.287M	18.8M	24.388M	18.7M	25.437M	18.85M	23.438M
5785MHz	Pass	500k	18.925M	19.79M	18.825M	19.365M	18.925M	19.765M	18.85M	19.265M
5825MHz	Pass	500k	18.9M	19.49M	18.9M	19.765M	18.825M	20.09M	18.925M	19.49M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.9M	37.581M	40.1M	37.431M	40.2M	37.581M	40.1M	37.581M
5230MHz	Pass	Inf	44.05M	37.581M	46.35M	37.581M	60.1M	37.581M	40.2M	37.531M
5755MHz	Pass	500k	37.4M	37.631M	37.5M	37.681M	37.25M	37.731M	37.3M	37.731M
5795MHz	Pass	500k	37.45M	38.231M	36.95M	38.031M	37.25M	38.581M	37.1M	38.181M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.3M	77.161M	81.4M	76.962M	81.1M	77.261M	81.3M	76.962M
5775MHz	Pass	500k	77.5M	77.161M	77M	77.161M	76.9M	76.962M	77M	77.261M

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

802.11a_Nss1,(6Mbps)_4TX **EBW**

5180MHz

19/02/2019

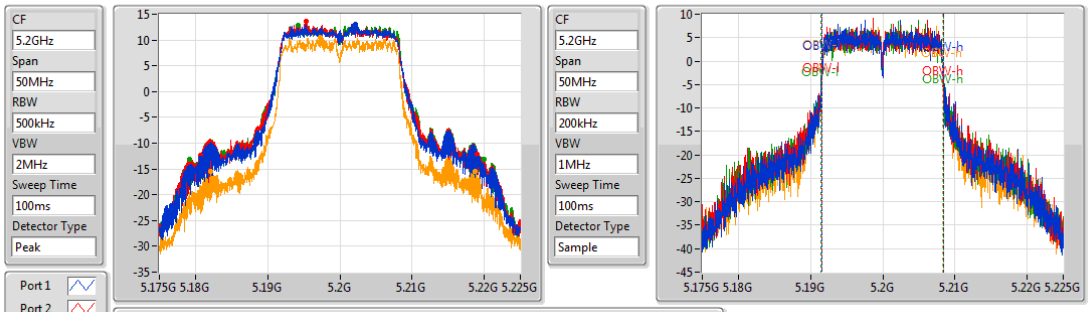


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.475M	5.16925G	5.190725G	16.592M	5.171704G	5.188296G	Inf	1
21.575M	5.169325G	5.1909G	16.592M	5.171679G	5.188271G	Inf	2
21.6M	5.16925G	5.19085G	16.592M	5.171704G	5.188296G	Inf	3
21.575M	5.16925G	5.190825G	16.542M	5.171704G	5.188246G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5200MHz

19/02/2019

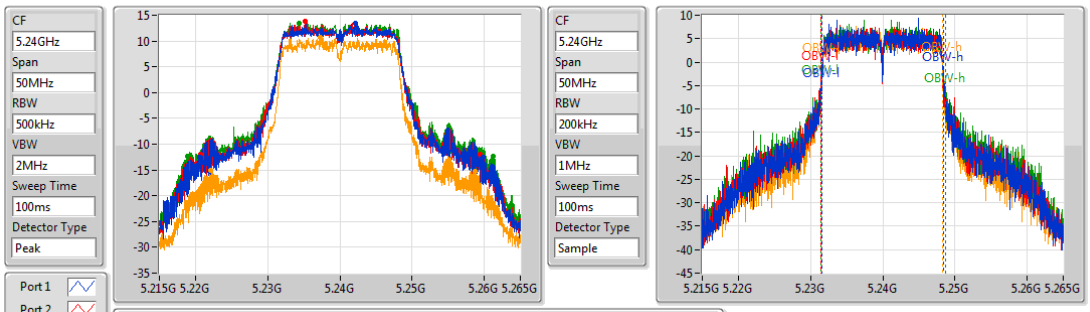


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.55M	5.18065G	5.2192G	16.842M	5.191579G	5.208421G	Inf	1
38.35M	5.180725G	5.219075G	16.917M	5.191504G	5.208421G	Inf	2
40.8M	5.179175G	5.219975G	17.016M	5.191479G	5.208496G	Inf	3
36.675M	5.182125G	5.2188G	16.692M	5.191629G	5.208321G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5240MHz

19/02/2019

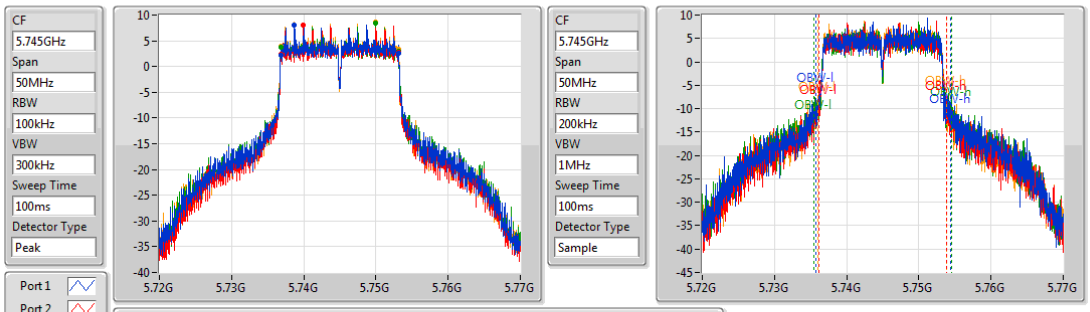


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.3M	5.220575G	5.259875G	16.842M	5.231554G	5.248396G	Inf	1
38.7M	5.220725G	5.259425G	16.992M	5.231454G	5.248446G	Inf	2
42.35M	5.2189G	5.26125G	17.266M	5.231379G	5.248646G	Inf	3
36.7M	5.2221G	5.2588G	16.692M	5.231629G	5.248321G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5745MHz

19/02/2019

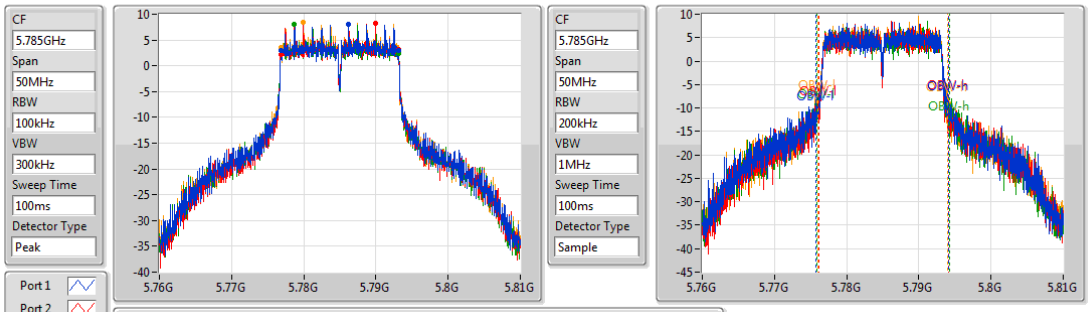


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	5.7368G	5.75315G	18.666M	5.735755G	5.75442G	500k	1
16.3M	5.736825G	5.753125G	17.641M	5.736154G	5.753796G	500k	2
16.3M	5.736825G	5.753125G	19.09M	5.73543G	5.75452G	500k	3
16.325M	5.736825G	5.75315G	17.816M	5.736004G	5.753821G	500k	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5785MHz

19/02/2019

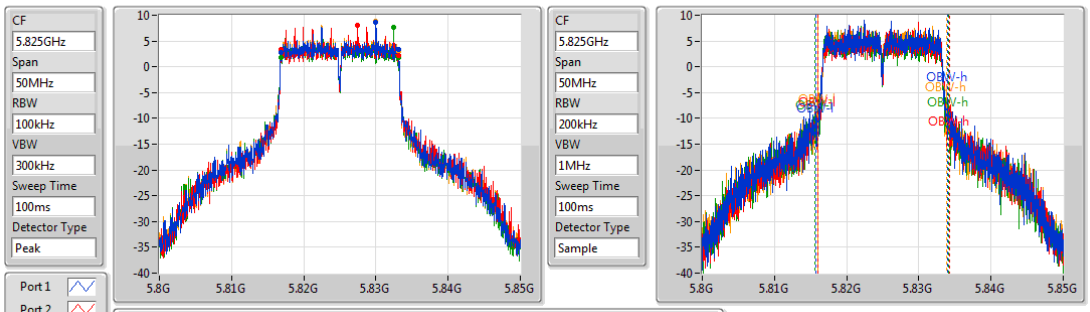


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.776825G	5.79315G	18.366M	5.775705G	5.79407G	500k	1
16.325M	5.7768G	5.793125G	17.966M	5.776154G	5.79412G	500k	2
16.3M	5.776825G	5.793125G	18.316M	5.77593G	5.794245G	500k	3
16.325M	5.776825G	5.79315G	17.966M	5.775955G	5.793921G	500k	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5825MHz

19/02/2019

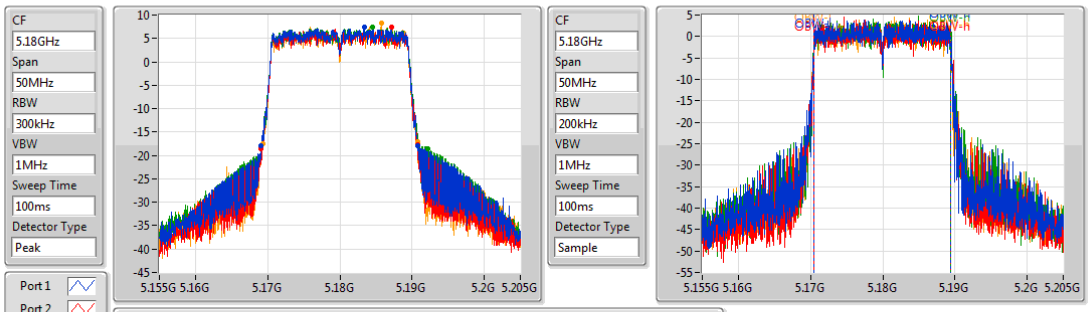


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	5.8168G	5.833125G	18.216M	5.815805G	5.83402G	500k	1
16.325M	5.816825G	5.83315G	18.316M	5.815955G	5.83427G	500k	2
16.35M	5.8168G	5.83315G	18.441M	5.81563G	5.83407G	500k	3
16.3M	5.816825G	5.833125G	17.816M	5.816079G	5.833896G	500k	4

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

5180MHz

19/02/2019

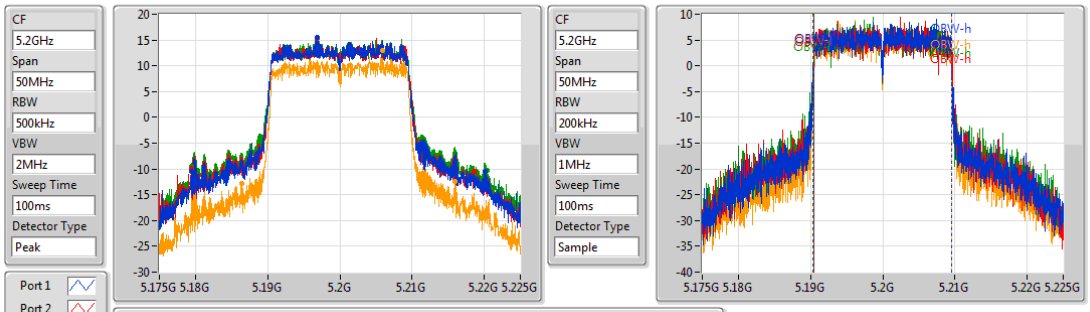


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.1691G	5.19085G	18.941M	5.170505G	5.189445G	Inf	1
21.675M	5.169125G	5.1908G	18.991M	5.17048G	5.18947G	Inf	2
23.15M	5.1691G	5.19225G	18.966M	5.170505G	5.18947G	Inf	3
21.475M	5.169325G	5.1908G	18.941M	5.170505G	5.189445G	Inf	4

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

5200MHz

19/02/2019

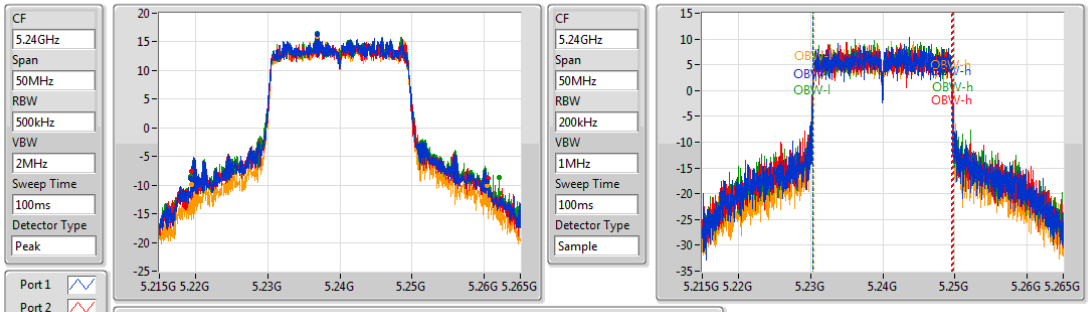


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.65M	5.17945G	5.2201G	19.065M	5.19043G	5.209495G	Inf	1
39.075M	5.17945G	5.218525G	19.14M	5.19043G	5.20957G	Inf	2
40.975M	5.179425G	5.2204G	19.165M	5.19038G	5.209545G	Inf	3
29.5M	5.18645G	5.21595G	19.04M	5.190455G	5.209495G	Inf	4

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

5240MHz

19/02/2019

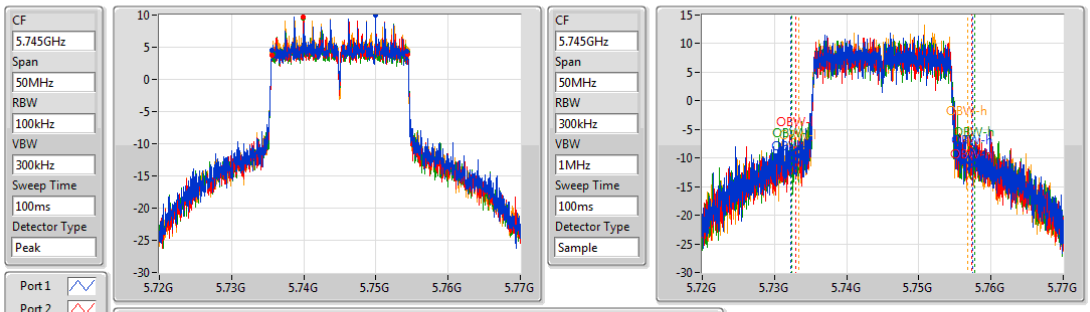


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.075M	5.219375G	5.26045G	19.24M	5.230355G	5.249595G	Inf	1
41.1M	5.21945G	5.26055G	19.44M	5.230255G	5.249695G	Inf	2
42.725M	5.219375G	5.2621G	19.49M	5.23028G	5.24977G	Inf	3
40.975M	5.21945G	5.260425G	19.09M	5.23043G	5.24952G	Inf	4

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

5745MHz

19/02/2019

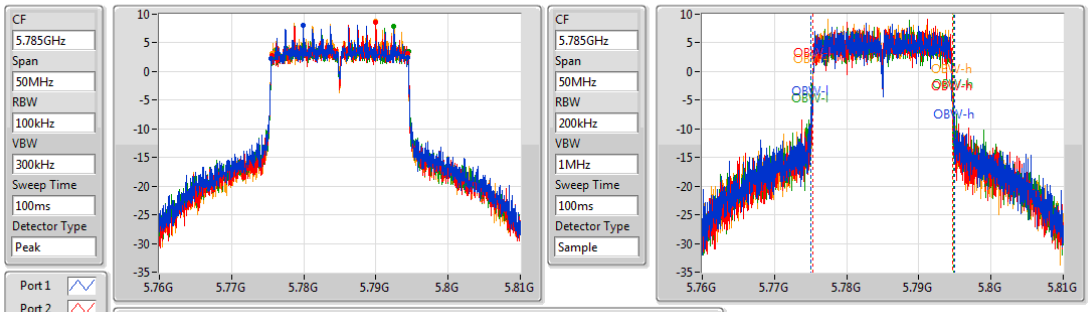


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.675M	5.735625G	5.7543G	25.287M	5.732206G	5.757494G	500k	1
18.8M	5.7356G	5.7544G	24.388M	5.732906G	5.757294G	500k	2
18.7M	5.73575G	5.75445G	25.437M	5.732356G	5.757794G	500k	3
18.85M	5.73555G	5.7544G	23.438M	5.733331G	5.756769G	500k	4

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

5785MHz

19/02/2019

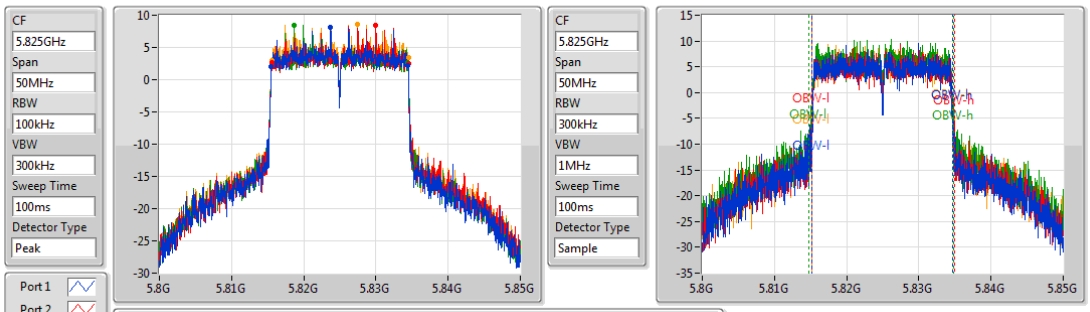


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.925M	5.775525G	5.79445G	19.79M	5.775105G	5.794895G	500k	1
18.825M	5.77555G	5.794375G	19.365M	5.77533G	5.794695G	500k	2
18.925M	5.77555G	5.794475G	19.765M	5.77508G	5.794845G	500k	3
18.85M	5.77555G	5.7944G	19.265M	5.775355G	5.79462G	500k	4

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

5825MHz

19/02/2019

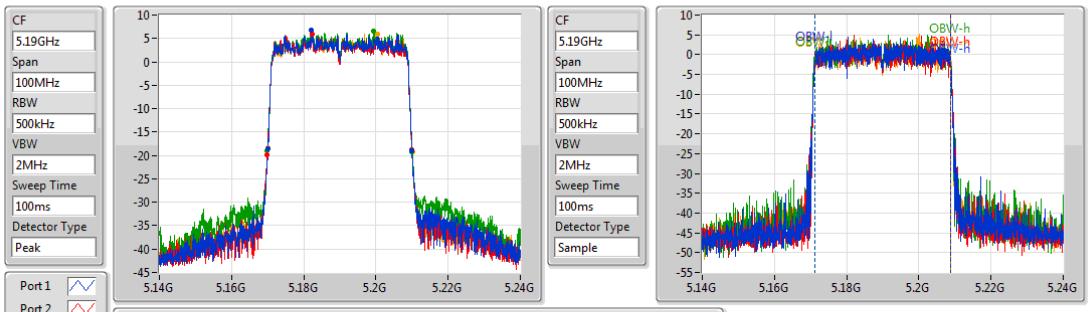


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.815525G	5.834425G	19.49M	5.815155G	5.834645G	500k	1
18.9M	5.8156G	5.8345G	19.765M	5.815205G	5.83497G	500k	2
18.825M	5.815575G	5.8344G	20.09M	5.81478G	5.83487G	500k	3
18.925M	5.81555G	5.834475G	19.49M	5.815205G	5.834695G	500k	4

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

5190MHz

19/02/2019

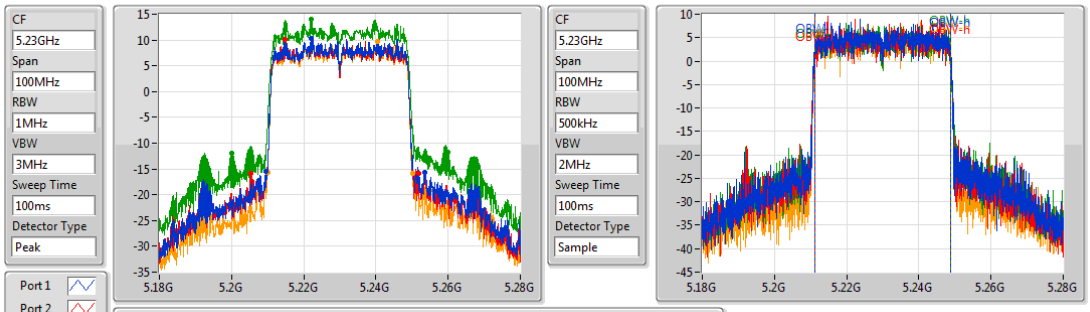


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.9M	5.17005G	5.20995G	37.581M	5.171159G	5.208741G	Inf	1
40.1M	5.1699G	5.21G	37.431M	5.171259G	5.208691G	Inf	2
40.2M	5.16985G	5.21005G	37.581M	5.171159G	5.208741G	Inf	3
40.1M	5.17G	5.2101G	37.581M	5.171159G	5.208741G	Inf	4

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

5230MHz

19/02/2019

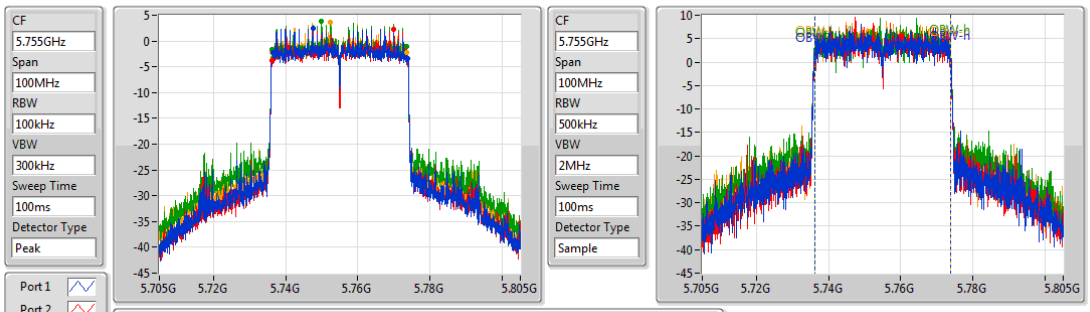


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.05M	5.20945G	5.2535G	37.581M	5.211159G	5.248741G	Inf	1
46.35M	5.2054G	5.25175G	37.581M	5.211209G	5.248791G	Inf	2
60.1M	5.19995G	5.26005G	37.581M	5.211209G	5.248791G	Inf	3
40.2M	5.20995G	5.25015G	37.531M	5.211209G	5.248741G	Inf	4

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

5755MHz

19/02/2019

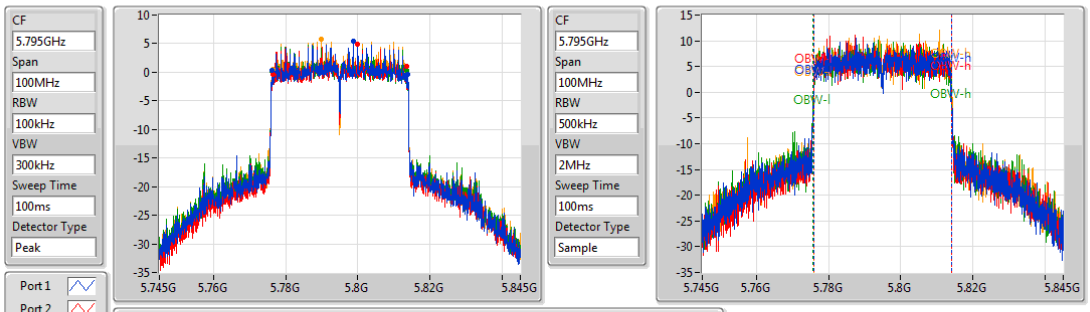


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.4M	5.73645G	5.77385G	37.631M	5.736109G	5.773741G	500k	1
37.5M	5.7362G	5.7737G	37.681M	5.736109G	5.773791G	500k	2
37.25M	5.7362G	5.77345G	37.731M	5.736109G	5.773841G	500k	3
37.3M	5.7362G	5.7735G	37.731M	5.736059G	5.773791G	500k	4

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

5795MHz

19/02/2019

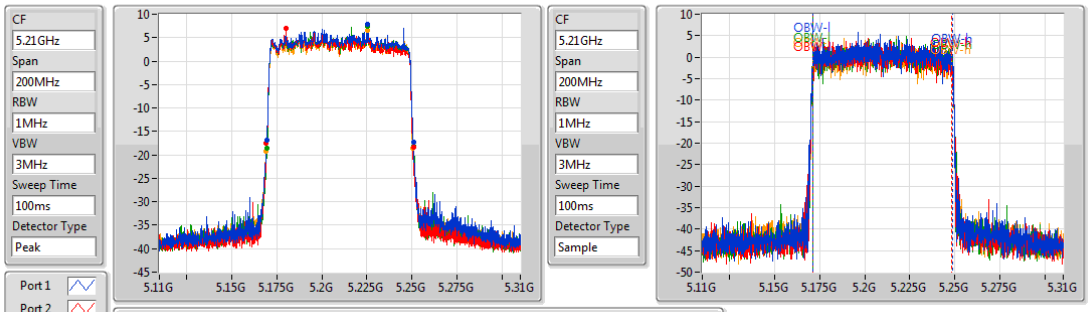


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	5.77625G	5.8137G	38.231M	5.77581G	5.81404G	500k	1
36.95M	5.7765G	5.81345G	38.031M	5.77596G	5.813991G	500k	2
37.25M	5.7762G	5.81345G	38.581M	5.77561G	5.81419G	500k	3
37.1M	5.77645G	5.81355G	38.181M	5.77591G	5.81409G	500k	4

802.11ax HEW80_Nss1,(MCS0)_4TX **EBW**

5210MHz

19/02/2019

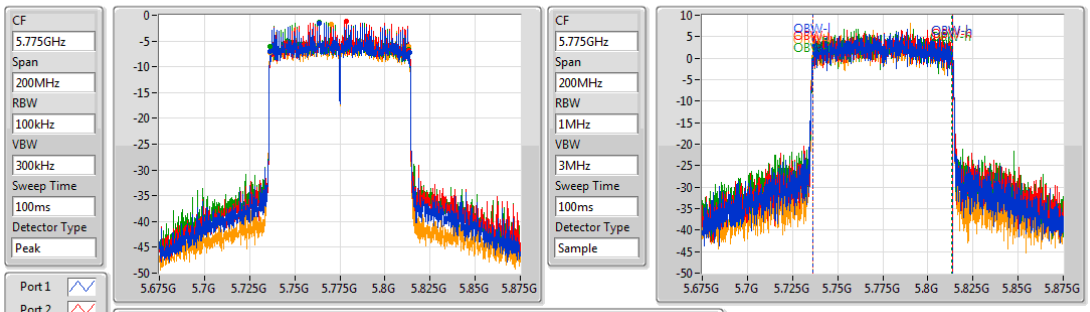


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.3M	5.1694G	5.2507G	77.161M	5.171419G	5.248581G	Inf	1
81.4M	5.1693G	5.2507G	76.962M	5.171319G	5.248281G	Inf	2
81.1M	5.1696G	5.2507G	77.261M	5.171319G	5.248581G	Inf	3
81.3M	5.1691G	5.2504G	76.962M	5.171419G	5.248381G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX **EBW**

5775MHz

19/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.5M	5.7363G	5.8138G	77.161M	5.736319G	5.813481G	500k	1
77M	5.7363G	5.8133G	77.161M	5.736419G	5.813581G	500k	2
76.9M	5.7363G	5.8132G	76.962M	5.736319G	5.813281G	500k	3
77M	5.7362G	5.8132G	77.261M	5.736219G	5.813481G	500k	4

For Beamforming / 4T1S mode
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	42.375M	19.365M	19M4D1D	21.375M	18.941M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	44.2M	37.631M	37M6D1D	40M	37.531M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.4M	77.061M	77M1D1D	81M	76.962M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.875M	29.71M	29M7D1D	18.675M	23.363M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.6M	49.825M	49M8D1D	36.8M	37.931M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.3M	77.361M	77M4D1D	76.1M	77.061M

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

Result

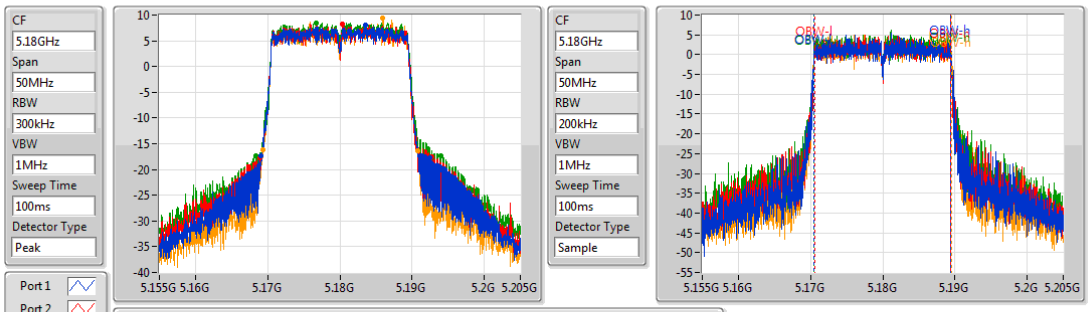
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.35M	18.966M	23.85M	18.941M	25.625M	18.966M	21.375M	19.015M
5200MHz	Pass	Inf	36.425M	19.015M	36.4M	18.991M	40.9M	19.165M	25.4M	18.991M
5240MHz	Pass	Inf	40.95M	19.14M	41.05M	19.215M	42.375M	19.365M	39.275M	19.09M
5745MHz	Pass	500k	18.675M	25.737M	18.775M	27.411M	18.775M	29.71M	18.775M	24.088M
5785MHz	Pass	500k	18.875M	24.038M	18.725M	27.486M	18.825M	27.986M	18.85M	23.363M
5825MHz	Pass	500k	18.825M	26.512M	18.675M	29.035M	18.675M	28.311M	18.7M	24.688M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40M	37.531M	40.1M	37.531M	40.1M	37.631M	40.15M	37.531M
5230MHz	Pass	Inf	44.2M	37.631M	40.1M	37.631M	41.85M	37.531M	40.15M	37.581M
5755MHz	Pass	500k	37.45M	37.931M	37.35M	39.23M	37.6M	38.481M	37.4M	38.081M
5795MHz	Pass	500k	37.55M	38.781M	36.8M	49.825M	37.55M	48.426M	37.05M	39.63M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.4M	76.962M	81.2M	76.962M	81M	77.061M	81.2M	76.962M
5775MHz	Pass	500k	77.3M	77.261M	76.1M	77.361M	76.8M	77.261M	76.6M	77.061M

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

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

5180MHz

19/02/2019

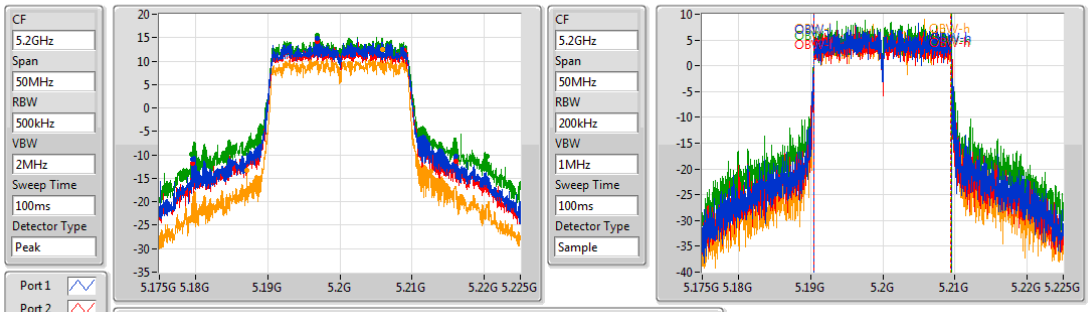


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.35M	5.1691G	5.19245G	18.966M	5.170505G	5.18947G	Inf	1
23.85M	5.168875G	5.192725G	18.941M	5.17053G	5.18947G	Inf	2
25.625M	5.1684G	5.194025G	18.966M	5.170505G	5.18947G	Inf	3
21.375M	5.16935G	5.190725G	19.015M	5.170505G	5.18952G	Inf	4

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

5200MHz

19/02/2019

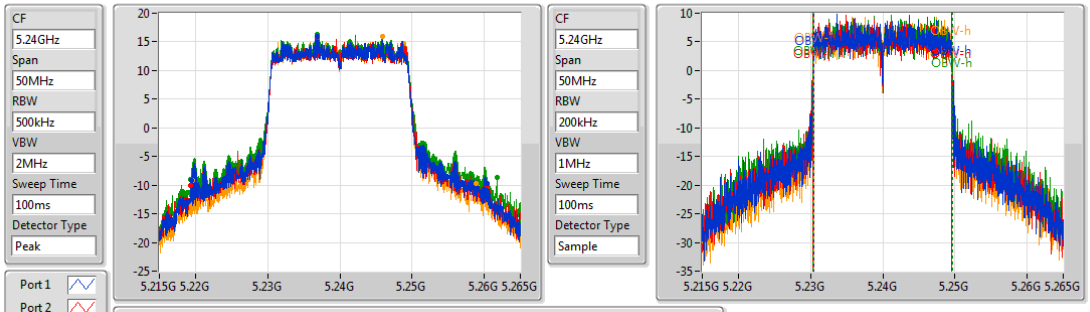


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.425M	5.179625G	5.21605G	19.015M	5.19048G	5.209495G	Inf	1
36.4M	5.17965G	5.21605G	18.991M	5.19048G	5.20947G	Inf	2
40.9M	5.17945G	5.22035G	19.165M	5.190405G	5.20957G	Inf	3
25.4M	5.18715G	5.21255G	18.991M	5.19048G	5.20947G	Inf	4

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

5240MHz

20/02/2019

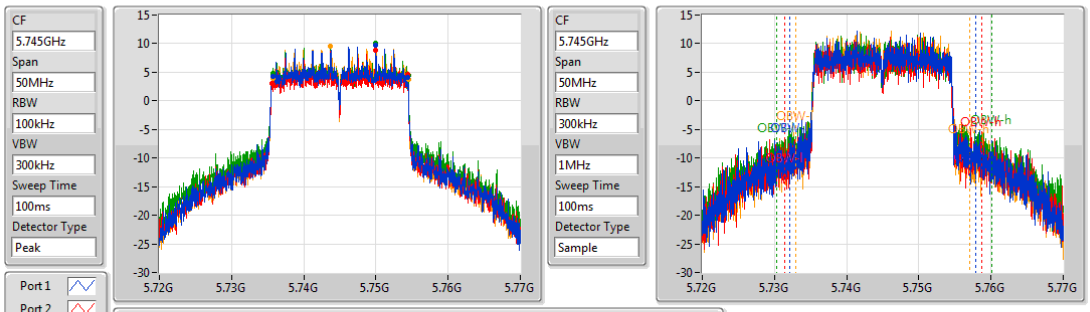


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.95M	5.219425G	5.260375G	19.14M	5.230405G	5.249545G	Inf	1
41.05M	5.219375G	5.260425G	19.215M	5.230355G	5.24957G	Inf	2
42.375M	5.219375G	5.26175G	19.365M	5.230355G	5.24972G	Inf	3
39.275M	5.219575G	5.25885G	19.09M	5.23043G	5.24952G	Inf	4

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

5745MHz

20/02/2019

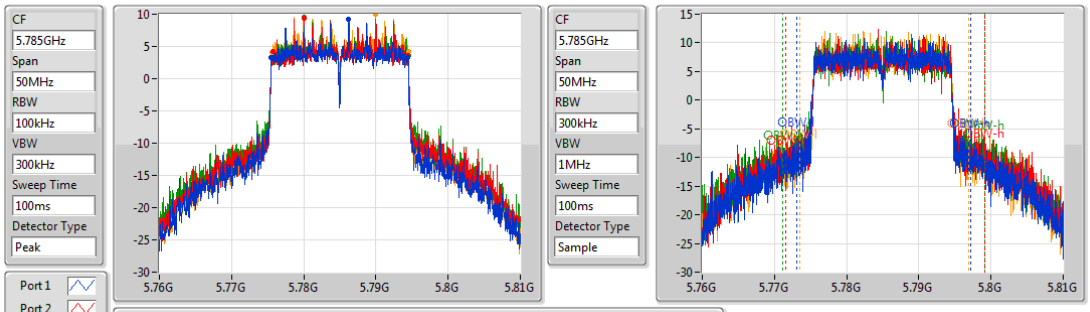


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.675M	5.735725G	5.7544G	25.737M	5.732156G	5.757894G	500k	1
18.775M	5.7356G	5.754375G	27.411M	5.731357G	5.758768G	500k	2
18.775M	5.7357G	5.754475G	29.71M	5.730357G	5.760067G	500k	3
18.775M	5.7357G	5.754475G	24.088M	5.732956G	5.757044G	500k	4

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

5785MHz

20/02/2019

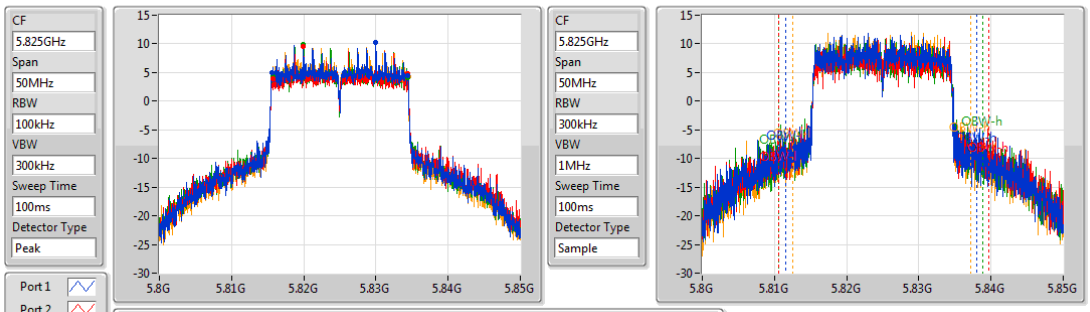


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	5.775525G	5.7944G	24.038M	5.773131G	5.797169G	500k	1
18.725M	5.775725G	5.79445G	27.486M	5.771582G	5.799068G	500k	2
18.825M	5.775675G	5.7945G	27.986M	5.771107G	5.799093G	500k	3
18.85M	5.775625G	5.794475G	23.363M	5.773556G	5.796919G	500k	4

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

5825MHz

20/02/2019

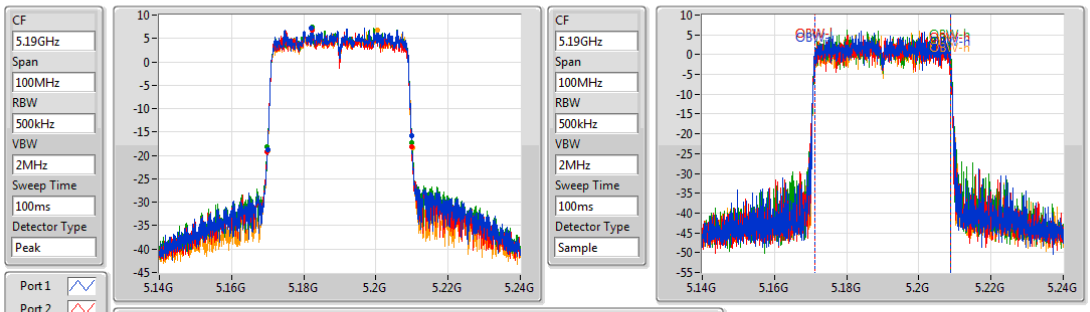


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.825M	5.815625G	5.83445G	26.512M	5.811507G	5.838018G	500k	1
18.675M	5.8157G	5.834375G	29.035M	5.810632G	5.839668G	500k	2
18.675M	5.8157G	5.834375G	28.311M	5.810557G	5.838868G	500k	3
18.7M	5.815775G	5.834475G	24.688M	5.812556G	5.837244G	500k	4

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

5190MHz

20/02/2019

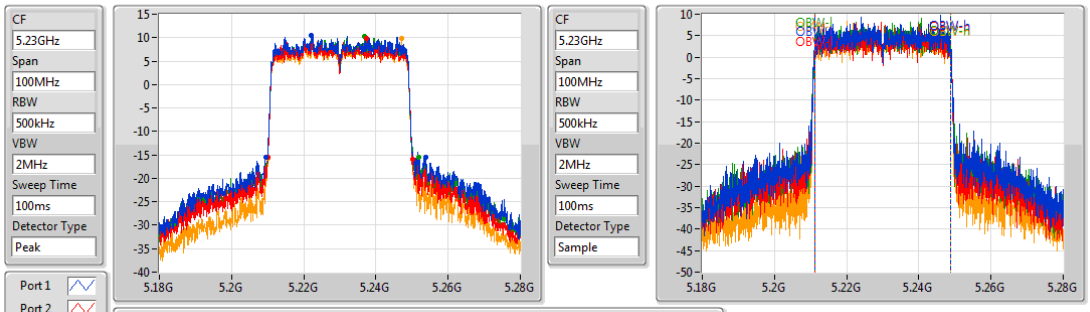


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40M	5.16995G	5.20995G	37.531M	5.171209G	5.208741G	Inf	1
40.1M	5.1699G	5.21G	37.531M	5.171159G	5.208691G	Inf	2
40.1M	5.1699G	5.21G	37.631M	5.171159G	5.208791G	Inf	3
40.15M	5.16995G	5.2101G	37.531M	5.171209G	5.208741G	Inf	4

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

5230MHz

20/02/2019

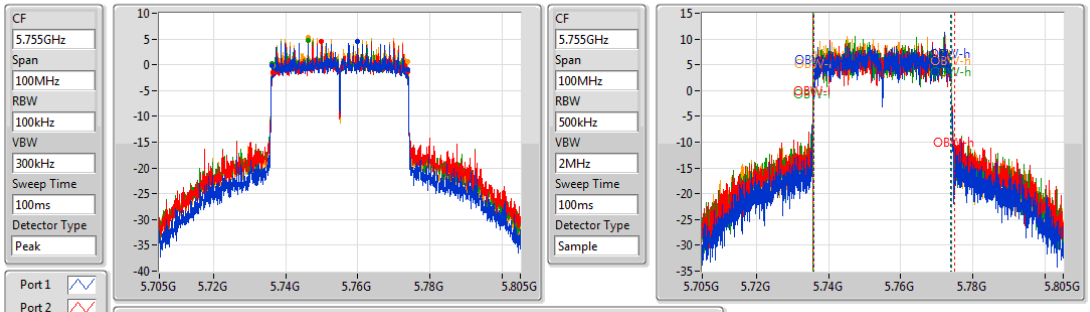


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.2M	5.20955G	5.25375G	37.631M	5.211159G	5.248791G	Inf	1
40.1M	5.21G	5.2501G	37.631M	5.211159G	5.248791G	Inf	2
41.85M	5.2099G	5.25175G	37.531M	5.211209G	5.248741G	Inf	3
40.15M	5.21G	5.25015G	37.581M	5.211209G	5.248791G	Inf	4

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

5755MHz

20/02/2019

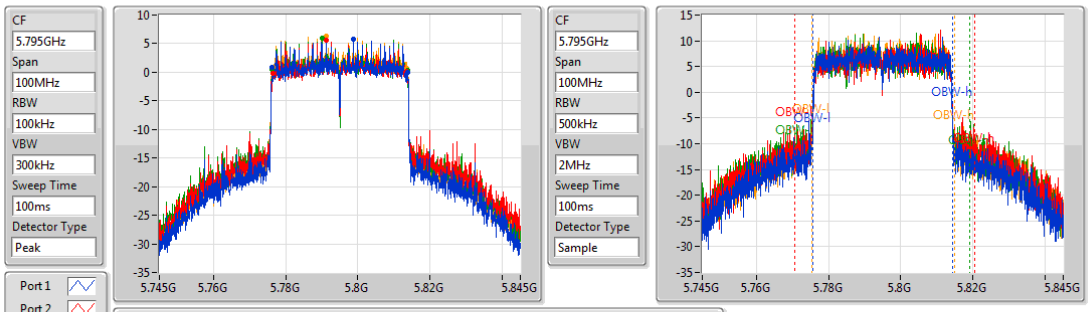


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.45M	5.73625G	5.7737G	37.931M	5.73596G	5.773891G	500k	1
37.35M	5.7364G	5.77375G	39.23M	5.73571G	5.77494G	500k	2
37.6M	5.73625G	5.77385G	38.481M	5.73566G	5.77414G	500k	3
37.4M	5.73635G	5.77375G	38.081M	5.73591G	5.773991G	500k	4

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

5795MHz

20/02/2019

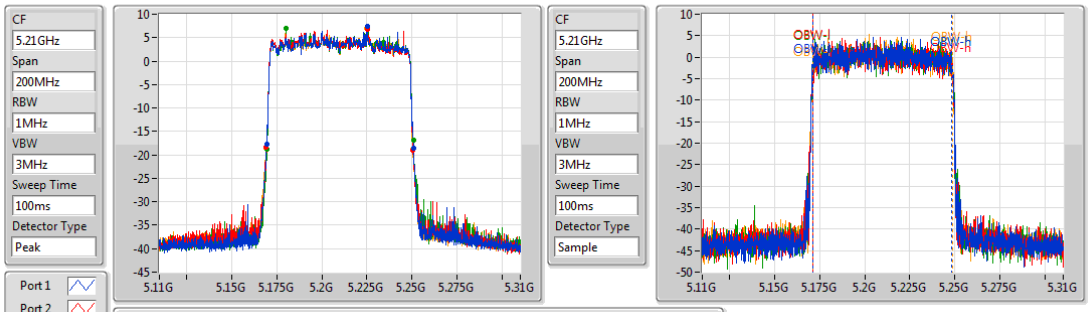


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.55M	5.7762G	5.81375G	38.781M	5.77551G	5.81429G	500k	1
36.8M	5.7766G	5.8134G	49.825M	5.770662G	5.820487G	500k	2
37.55M	5.7763G	5.81385G	48.426M	5.770612G	5.819038G	500k	3
37.05M	5.7765G	5.81355G	39.63M	5.77526G	5.81489G	500k	4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX **EBW**

5210MHz

20/02/2019

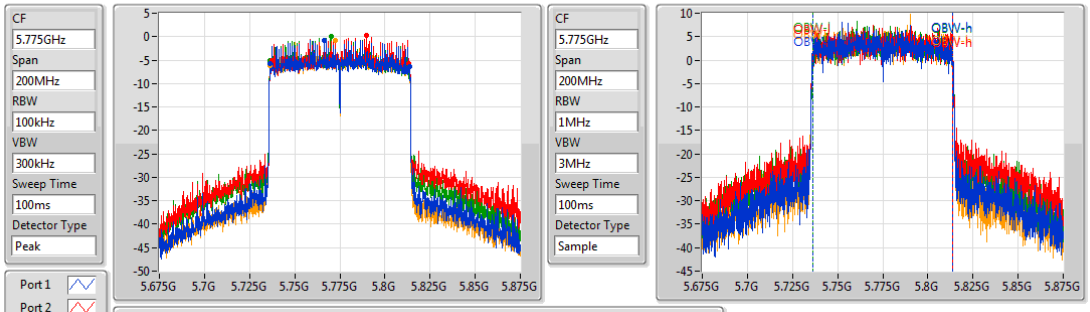


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.4M	5.1694G	5.2508G	76.962M	5.171419G	5.248381G	Inf	1
81.2M	5.1693G	5.2505G	76.962M	5.171319G	5.248281G	Inf	2
81M	5.1697G	5.2507G	77.061M	5.171319G	5.248381G	Inf	3
81.2M	5.1692G	5.2504G	76.962M	5.171519G	5.248481G	Inf	4

802.11ax HEW80-BF_Nss1,(MCS0)_4TX **EBW**

5775MHz

20/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.3M	5.7365G	5.8138G	77.261M	5.736319G	5.813581G	500k	1
76.1M	5.7372G	5.8133G	77.361M	5.736319G	5.813681G	500k	2
76.8M	5.7364G	5.8132G	77.261M	5.736319G	5.813581G	500k	3
76.6M	5.7365G	5.8131G	77.061M	5.736419G	5.813481G	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)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	45.425M	19.365M	19M4D1D	21.45M	18.916M
802.11ax HEW40_Nss4,(MCS0)_4TX	55.35M	37.631M	37M6D1D	40.1M	37.431M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.8M	77.061M	77M1D1D	81.4M	76.862M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss4,(MCS0)_4TX	19.05M	25.237M	25M2D1D	18.125M	19.19M
802.11ax HEW40_Nss4,(MCS0)_4TX	37.5M	38.331M	38M3D1D	36.5M	37.831M
802.11ax HEW80_Nss4,(MCS0)_4TX	76.9M	77.261M	77M3D1D	76.1M	77.061M

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

Result

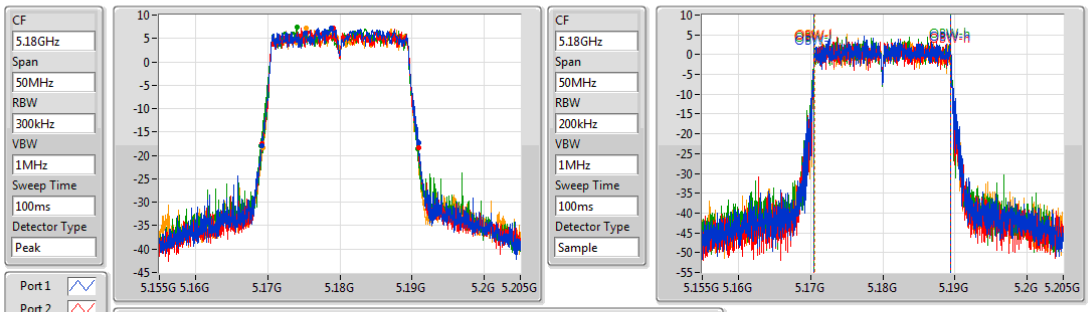
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.75M	18.966M	21.7M	18.966M	21.725M	18.966M	21.45M	18.916M
5200MHz	Pass	Inf	32.075M	19.04M	37.3M	19.115M	37.85M	19.09M	29.95M	18.991M
5240MHz	Pass	Inf	42.95M	19.265M	45.425M	19.29M	43.925M	19.365M	39.425M	19.09M
5745MHz	Pass	500k	18.65M	25.237M	18.125M	24.038M	18.675M	23.788M	18.8M	22.964M
5785MHz	Pass	500k	18.7M	19.265M	18.575M	19.265M	18.675M	19.515M	19.05M	19.19M
5825MHz	Pass	500k	18.9M	19.49M	18.55M	19.365M	18.7M	22.164M	18.875M	19.215M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.25M	37.581M	40.25M	37.481M	40.15M	37.431M	40.25M	37.581M
5230MHz	Pass	Inf	49.95M	37.631M	49.9M	37.581M	55.35M	37.631M	40.1M	37.631M
5755MHz	Pass	500k	37M	37.831M	36.65M	37.831M	37.5M	37.831M	37.1M	37.881M
5795MHz	Pass	500k	37.15M	37.981M	36.5M	38.031M	36.9M	38.331M	37.15M	38.081M
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.4M	76.862M	81.4M	77.061M	81.8M	76.962M	81.8M	76.962M
5775MHz	Pass	500k	76.3M	77.261M	76.1M	77.161M	76.4M	77.061M	76.9M	77.061M

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

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5180MHz

19/02/2019

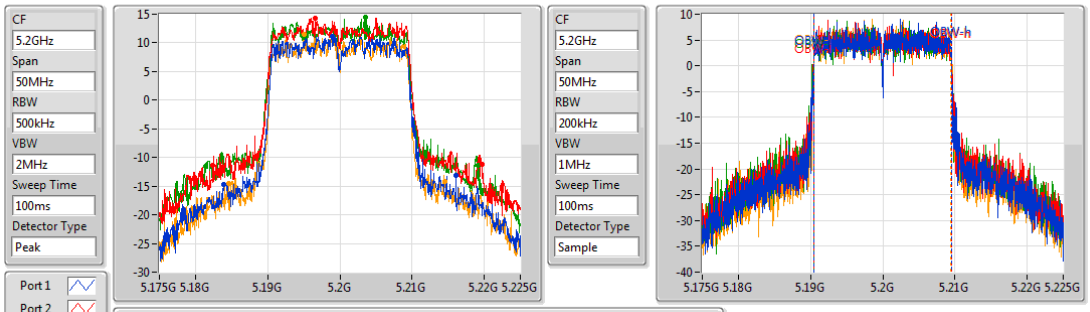


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.16915G	5.1909G	18.966M	5.170505G	5.18947G	Inf	1
21.7M	5.169175G	5.190875G	18.966M	5.17048G	5.189445G	Inf	2
21.725M	5.169025G	5.19075G	18.966M	5.17048G	5.189445G	Inf	3
21.45M	5.169325G	5.190775G	18.916M	5.17053G	5.189445G	Inf	4

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5200MHz

19/02/2019

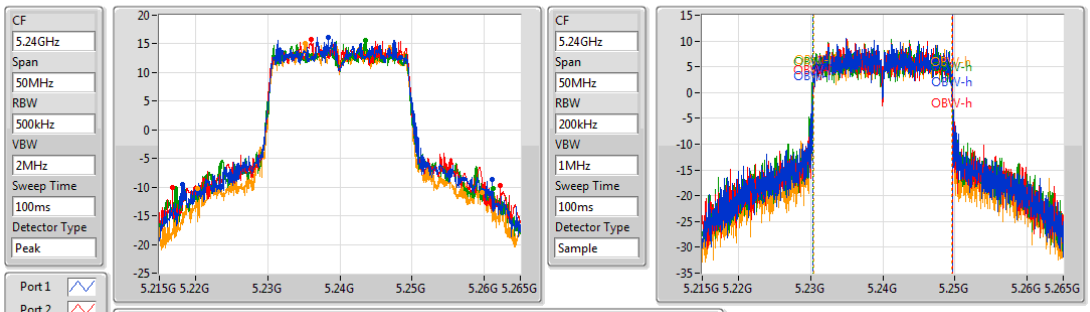


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.075M	5.183975G	5.21605G	19.04M	5.190455G	5.209495G	Inf	1
37.3M	5.18235G	5.21965G	19.115M	5.19043G	5.209545G	Inf	2
37.85M	5.18135G	5.2192G	19.09M	5.190405G	5.209495G	Inf	3
29.95M	5.18465G	5.2146G	18.991M	5.19048G	5.20947G	Inf	4

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5240MHz

19/02/2019

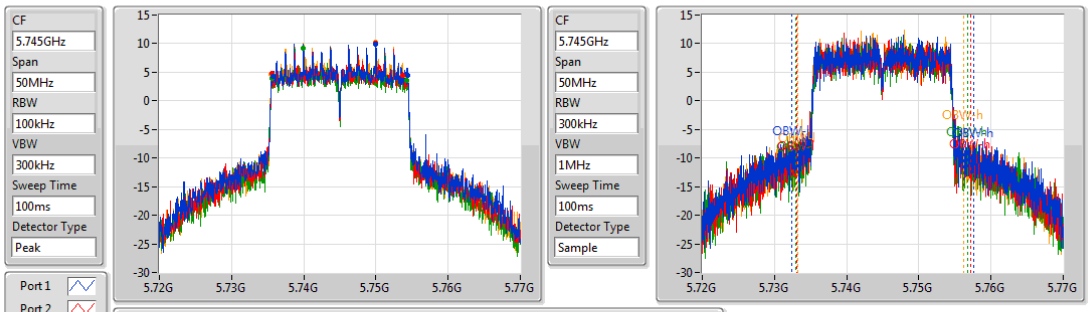


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.95M	5.2182G	5.26115G	19.265M	5.230355G	5.24962G	Inf	1
45.425M	5.216825G	5.26225G	19.29M	5.230355G	5.249645G	Inf	2
43.925M	5.21725G	5.261175G	19.365M	5.230255G	5.24962G	Inf	3
39.425M	5.220275G	5.2597G	19.09M	5.23043G	5.24952G	Inf	4

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5745MHz

19/02/2019

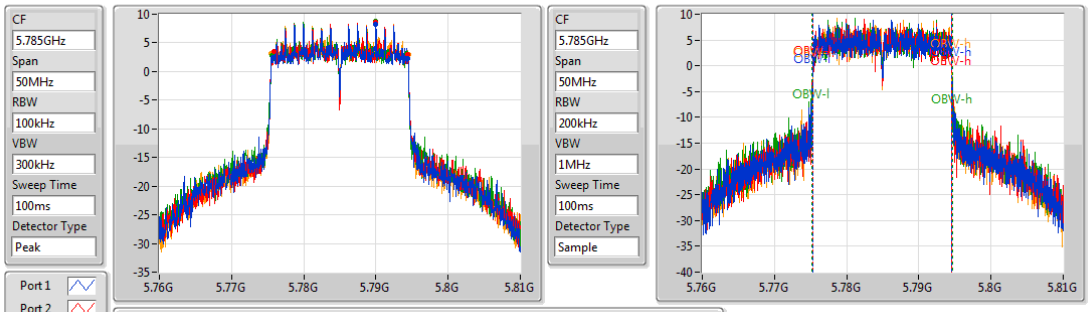


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.65M	5.73575G	5.7544G	25.237M	5.732406G	5.757644G	500k	1
18.125M	5.7356G	5.753725G	24.038M	5.733106G	5.757144G	500k	2
18.675M	5.73555G	5.754225G	23.788M	5.732981G	5.756769G	500k	3
18.8M	5.73545G	5.75425G	22.964M	5.733206G	5.756169G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5785MHz

19/02/2019

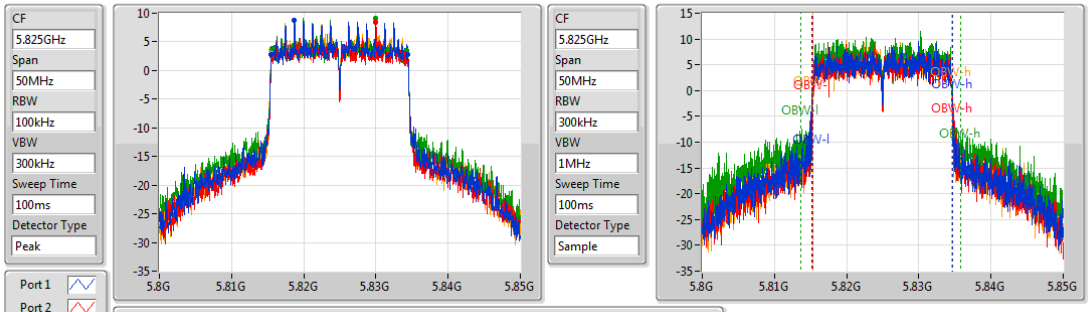


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.7M	5.775725G	5.794425G	19.265M	5.77533G	5.794595G	500k	1
18.575M	5.775825G	5.7944G	19.265M	5.77533G	5.794595G	500k	2
18.675M	5.77555G	5.794225G	19.515M	5.775205G	5.79472G	500k	3
19.05M	5.77545G	5.7945G	19.19M	5.775355G	5.794545G	500k	4

802.11ax HEW20_Nss4,(MCS0)_4TX **EBW**

5825MHz

19/02/2019

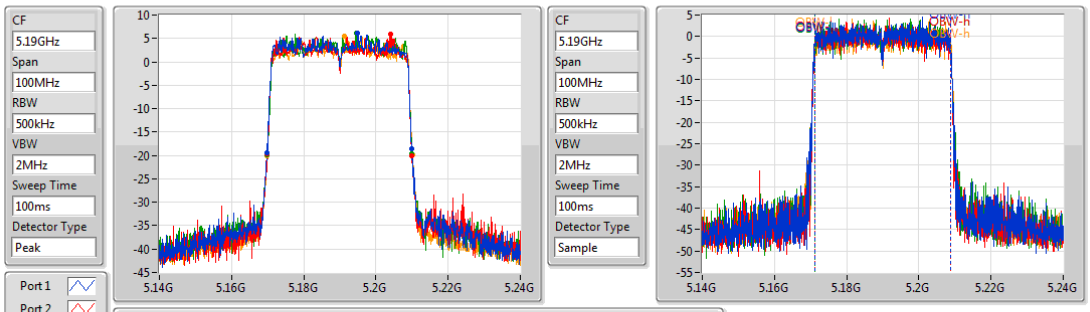


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	5.815525G	5.834425G	19.49M	5.81513G	5.83462G	500k	1
18.55M	5.8156G	5.83415G	19.365M	5.81533G	5.834695G	500k	2
18.7M	5.81555G	5.83425G	22.164M	5.813581G	5.835745G	500k	3
18.875M	5.81545G	5.834325G	19.215M	5.815355G	5.83457G	500k	4

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

5190MHz

19/02/2019

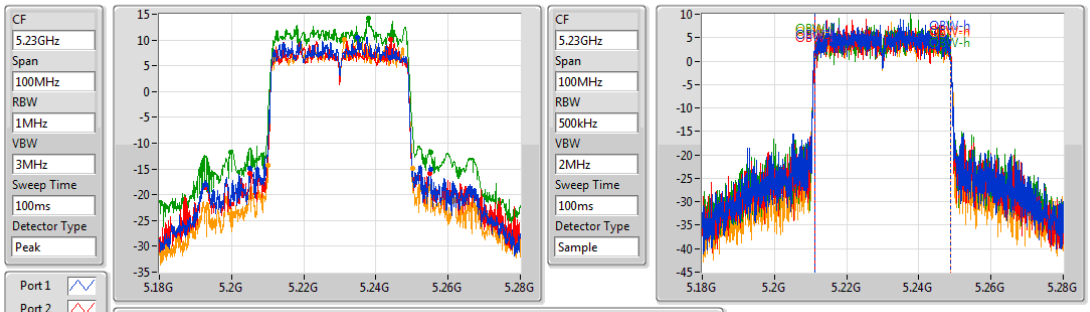


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.25M	5.1698G	5.21005G	37.581M	5.171159G	5.208741G	Inf	1
40.25M	5.16975G	5.21G	37.481M	5.171209G	5.208691G	Inf	2
40.15M	5.16985G	5.21G	37.431M	5.171259G	5.208691G	Inf	3
40.25M	5.1699G	5.21015G	37.581M	5.171209G	5.208791G	Inf	4

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

5230MHz

19/02/2019

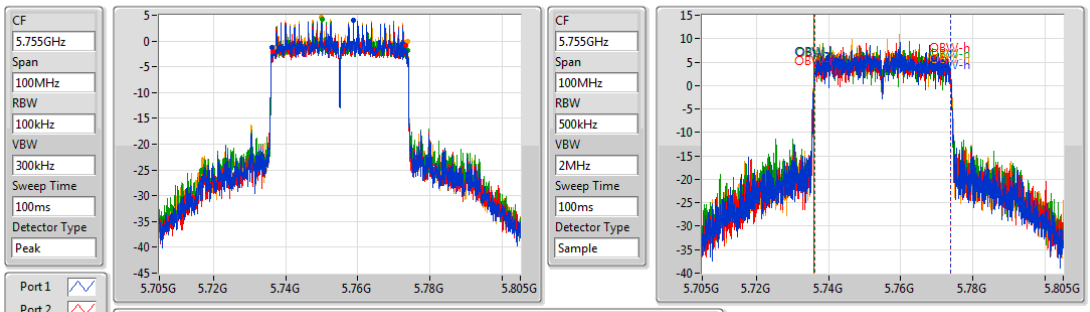


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
49.95M	5.20515G	5.2551G	37.631M	5.211109G	5.248741G	Inf	1
49.9M	5.20515G	5.25505G	37.581M	5.211209G	5.248791G	Inf	2
55.35M	5.1998G	5.25515G	37.631M	5.211159G	5.248791G	Inf	3
40.1M	5.21G	5.2501G	37.631M	5.211159G	5.248791G	Inf	4

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

5755MHz

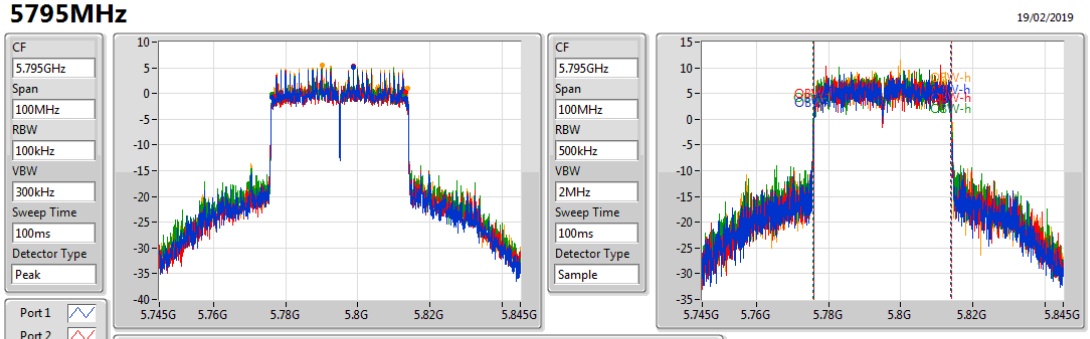
19/02/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37M	5.7362G	5.7732G	37.831M	5.736009G	5.773841G	500k	1
36.65M	5.7365G	5.77315G	37.831M	5.736009G	5.773841G	500k	2
37.5M	5.7362G	5.7737G	37.831M	5.736059G	5.773891G	500k	3
37.1M	5.73665G	5.77375G	37.881M	5.736059G	5.773941G	500k	4

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

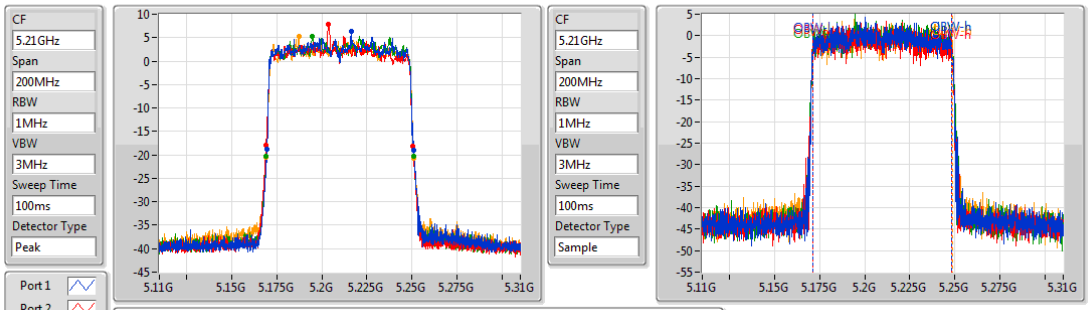
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.15M	5.7762G	5.81335G	37.981M	5.77596G	5.813941G	500k	1
36.5M	5.77665G	5.81315G	38.031M	5.77596G	5.813991G	500k	2
36.9M	5.7762G	5.8131G	38.331M	5.77576G	5.81409G	500k	3
37.15M	5.77665G	5.8138G	38.081M	5.77596G	5.81404G	500k	4

802.11ax HEW80_Nss4,(MCS0)_4TX **EBW**

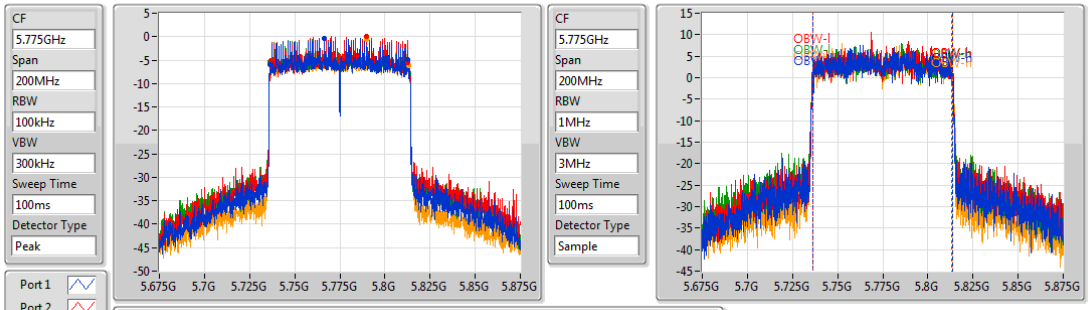
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.4M	5.1696G	5.251G	76.862M	5.171419G	5.248281G	Inf	1
81.4M	5.1692G	5.2506G	77.061M	5.171319G	5.248381G	Inf	2
81.8M	5.1691G	5.2509G	76.962M	5.171419G	5.248381G	Inf	3
81.8M	5.1693G	5.2511G	76.962M	5.171519G	5.248481G	Inf	4

802.11ax HEW80_Nss4,(MCS0)_4TX **EBW**

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.3M	5.7364G	5.8127G	77.261M	5.736319G	5.813581G	500k	1
76.1M	5.7366G	5.8127G	77.161M	5.736419G	5.813581G	500k	2
76.4M	5.7363G	5.8127G	77.061M	5.736319G	5.813381G	500k	3
76.9M	5.7362G	5.8131G	77.061M	5.736419G	5.813481G	500k	4

Mode 2: (Ant. 6 Omni antenna / 6 dBi)
For Non-beamforming / 1T1S mode
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	43.6M	19.515M	19M5D1D	21.975M	16.567M
802.11ax HEW20_Nss1,(MCS0)_1TX	41.525M	19.34M	19M3D1D	24.3M	18.991M
802.11ax HEW40_Nss1,(MCS0)_1TX	63.05M	37.731M	37M7D1D	39.85M	37.631M
802.11ax HEW80_Nss1,(MCS0)_1TX	81.4M	77.061M	77M1D1D	81.4M	77.061M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.3M	26.437M	26M4D1D	16.3M	18.216M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.725M	31.634M	31M6D1D	18.125M	19.515M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.05M	51.424M	51M4D1D	36.9M	38.331M
802.11ax HEW80_Nss1,(MCS0)_1TX	76.7M	77.161M	77M2D1D	76.7M	77.161M

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

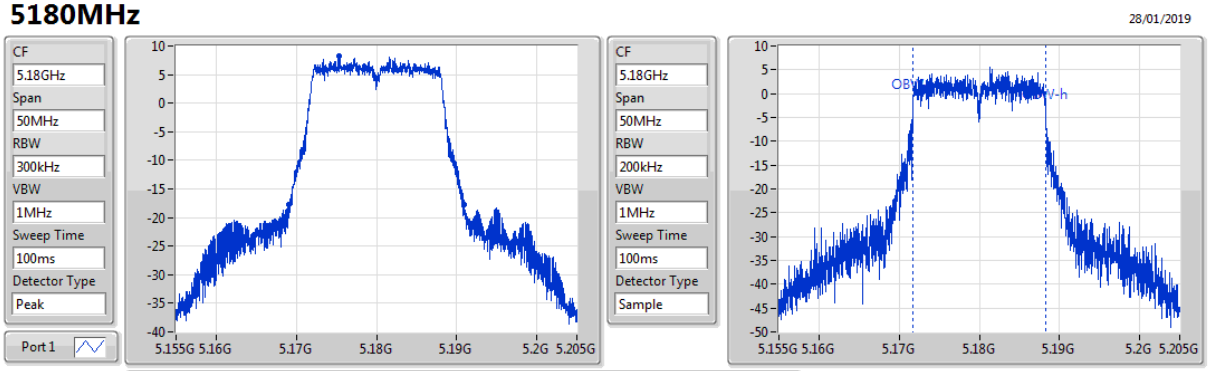
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	21.975M	16.567M
5200MHz	Pass	Inf	43.45M	19.09M
5240MHz	Pass	Inf	43.6M	19.515M
5745MHz	Pass	500k	16.3M	26.437M
5785MHz	Pass	500k	16.3M	22.939M
5825MHz	Pass	500k	16.3M	18.216M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	24.3M	18.991M
5200MHz	Pass	Inf	41.025M	19.315M
5240MHz	Pass	Inf	41.525M	19.34M
5745MHz	Pass	500k	18.125M	31.634M
5785MHz	Pass	500k	18.725M	20.99M
5825MHz	Pass	500k	18.675M	19.515M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	39.85M	37.631M
5230MHz	Pass	Inf	63.05M	37.731M
5755MHz	Pass	500k	37.05M	38.331M
5795MHz	Pass	500k	36.9M	51.424M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	81.4M	77.061M
5775MHz	Pass	500k	76.7M	77.161M

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

802.11a_Nss1,(6Mbps)_1TX **EBW**

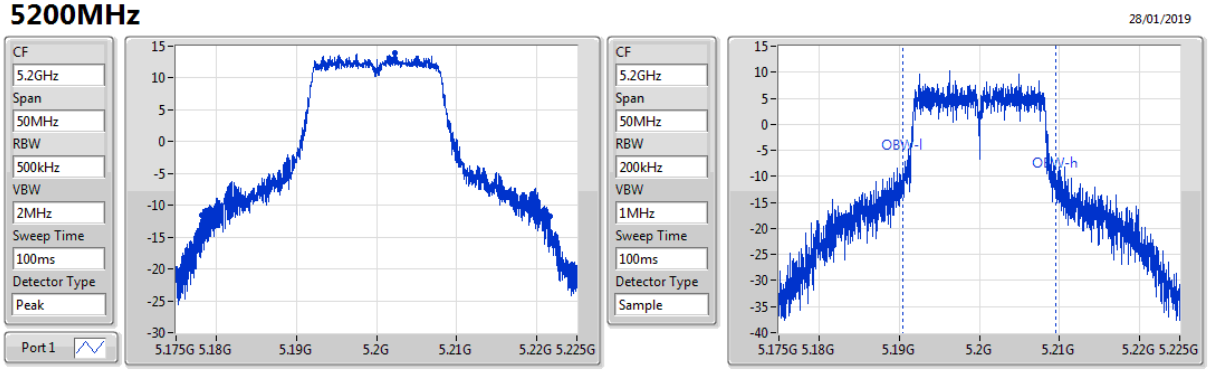
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.975M	5.169025G	5.191G	16.567M	5.171704G	5.188271G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

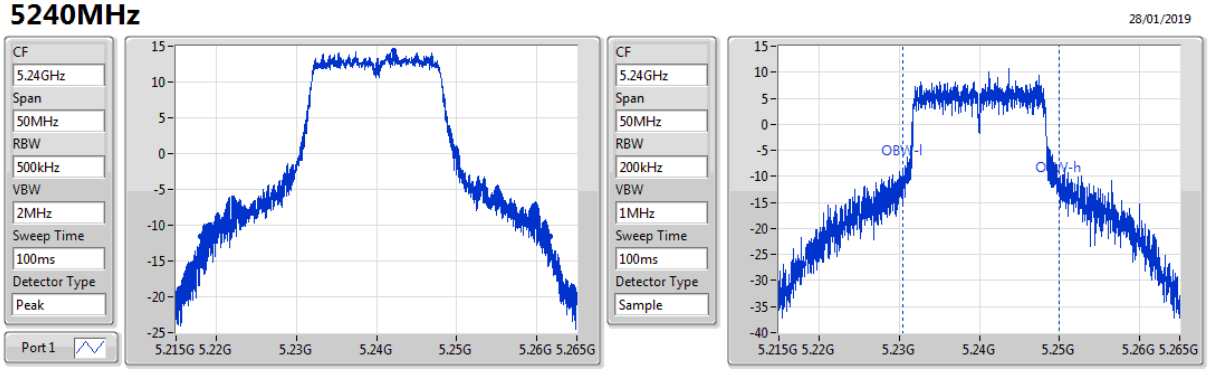
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.45M	5.17815G	5.2216G	19.09M	5.19043G	5.20952G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

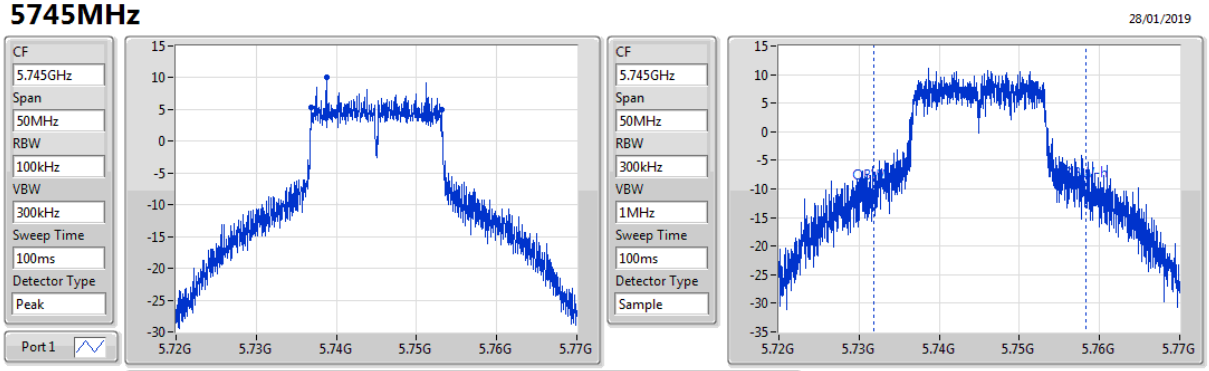
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.6M	5.21805G	5.26165G	19.515M	5.230455G	5.24997G	Inf	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

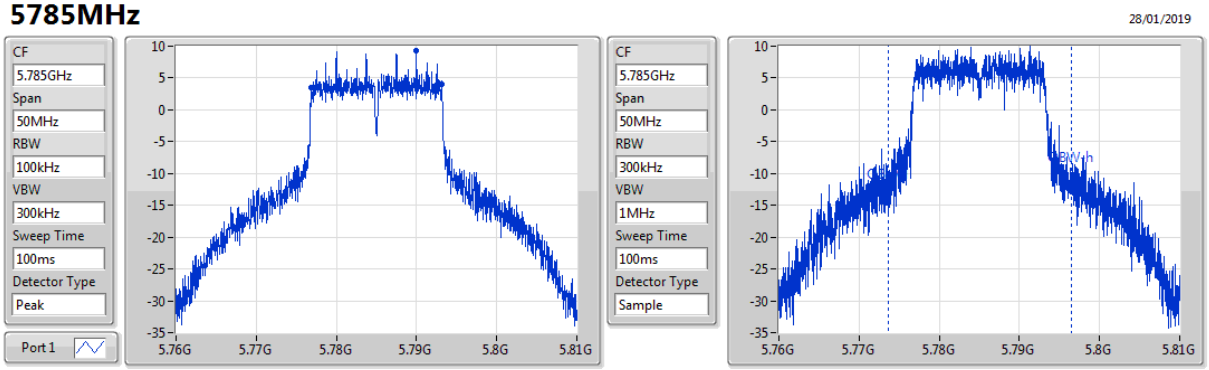
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.73685G	5.75315G	26.437M	5.731807G	5.758243G	500k	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

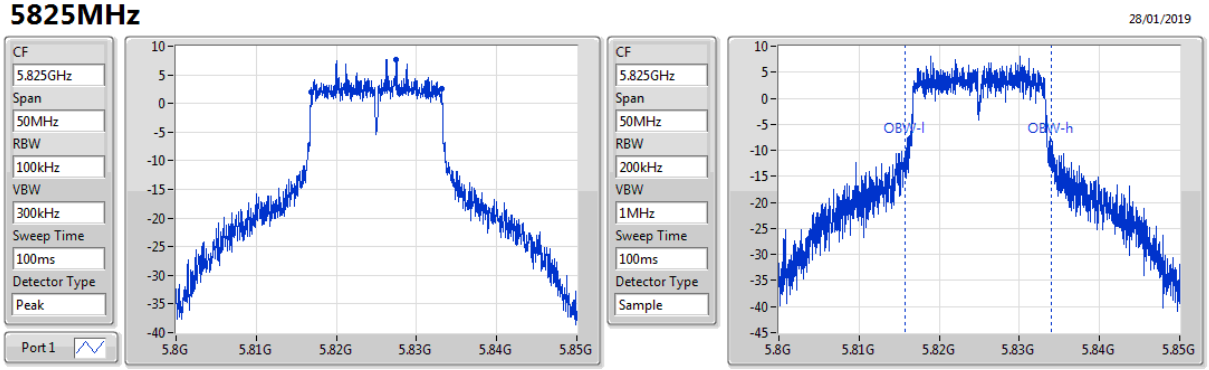
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.77685G	5.79315G	22.939M	5.773606G	5.796544G	500k	1

802.11a_Nss1,(6Mbps)_1TX **EBW**

5825MHz

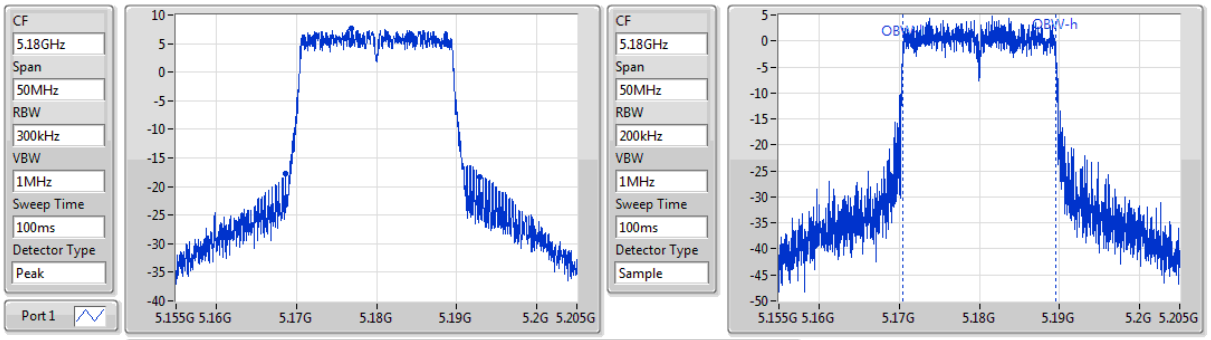


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.81685G	5.83315G	18.216M	5.81578G	5.833996G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5180MHz

28/01/2019

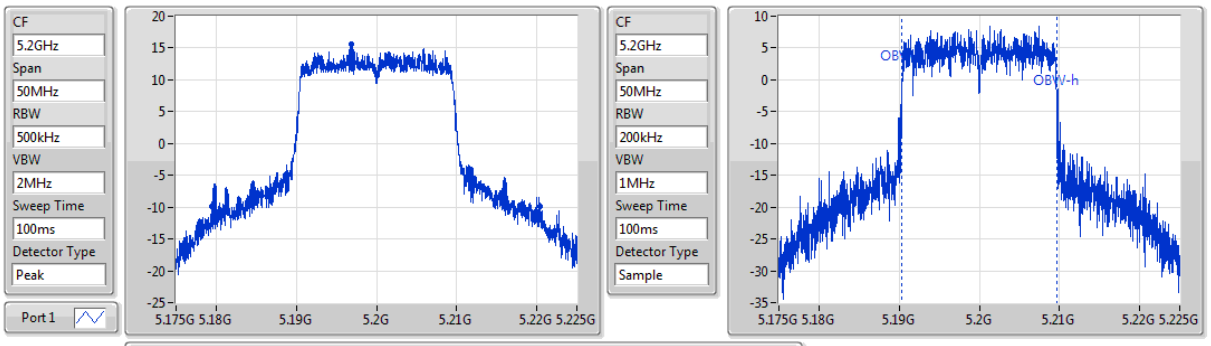


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.3M	5.168625G	5.192925G	18.991M	5.170505G	5.189495G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5200MHz

28/01/2019

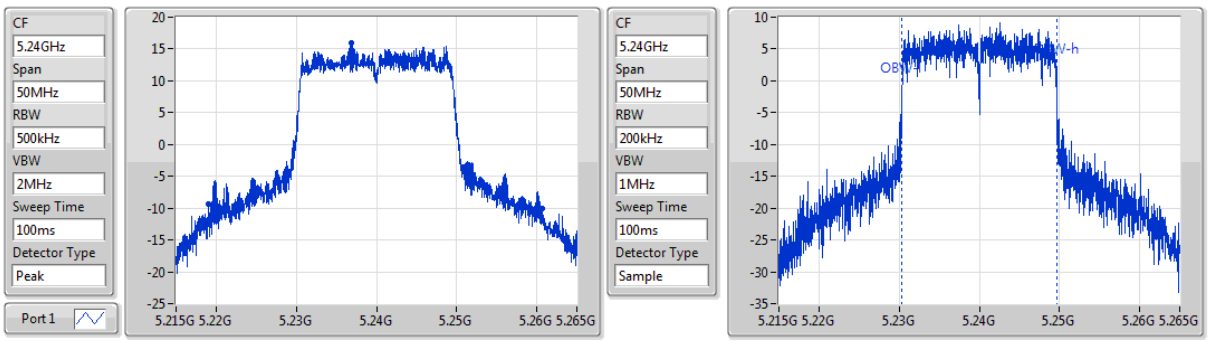


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.025M	5.1794G	5.220425G	19.315M	5.190355G	5.20967G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5240MHz

28/01/2019

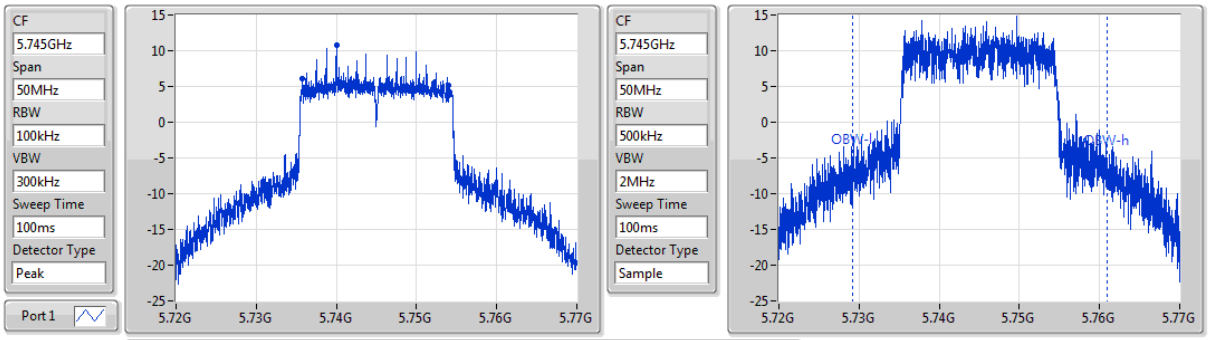


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.525M	5.2191G	5.260625G	19.34M	5.230355G	5.249695G	Inf	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5745MHz

28/01/2019

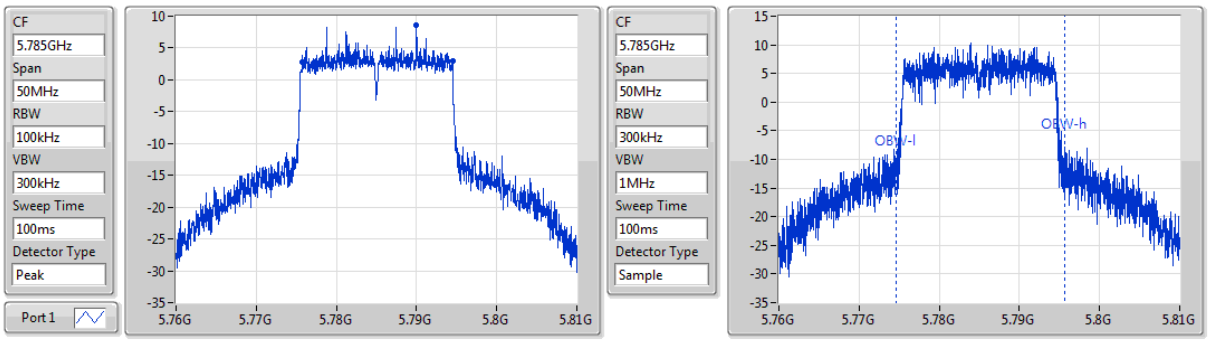


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.125M	5.7358G	5.753925G	31.634M	5.729258G	5.760892G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5785MHz

28/01/2019

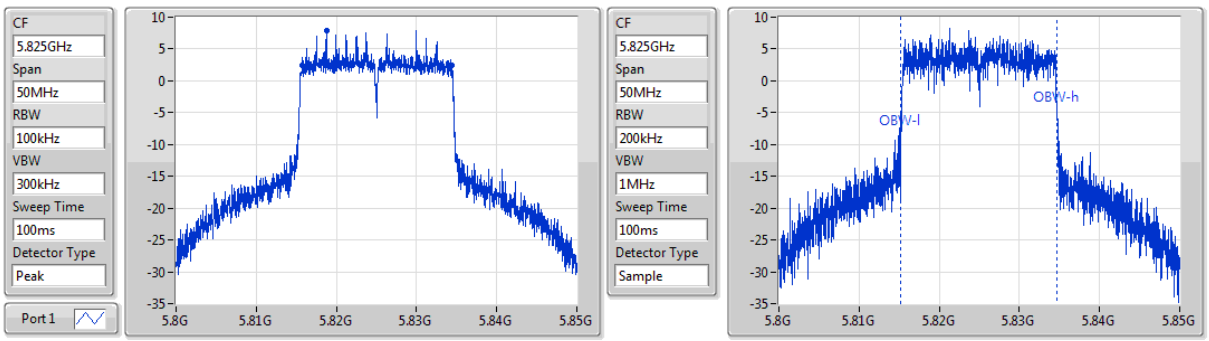


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.725M	5.77575G	5.794475G	20.99M	5.77463G	5.79562G	500k	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

5825MHz

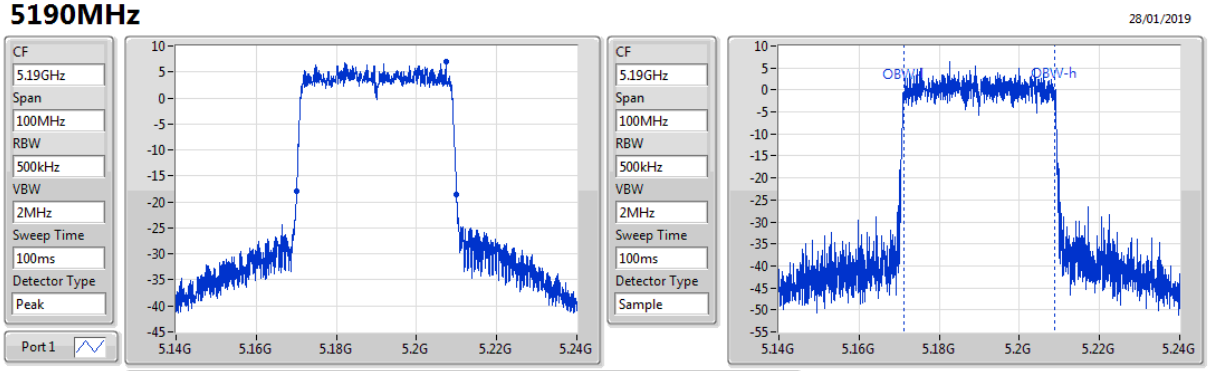
28/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.675M	5.81575G	5.834425G	19.515M	5.81518G	5.834695G	500k	1

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

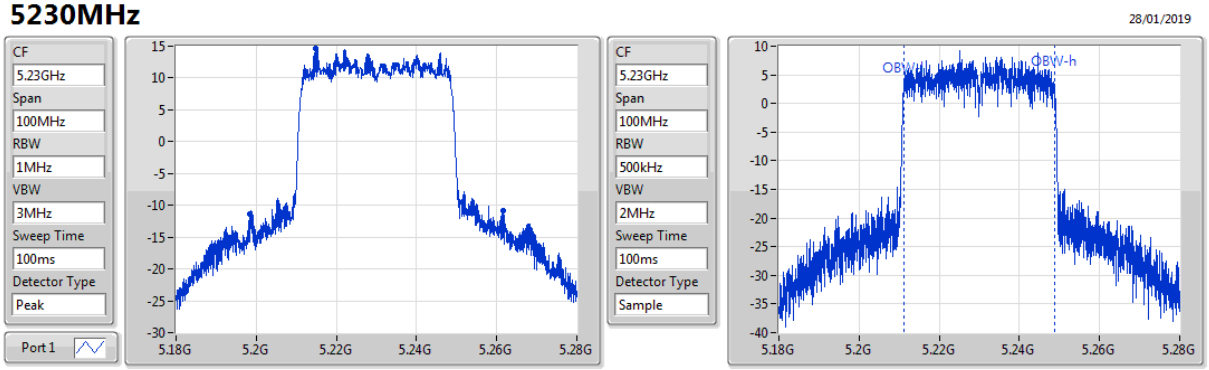
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.85M	5.17005G	5.2099G	37.631M	5.171159G	5.208791G	Inf	1

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

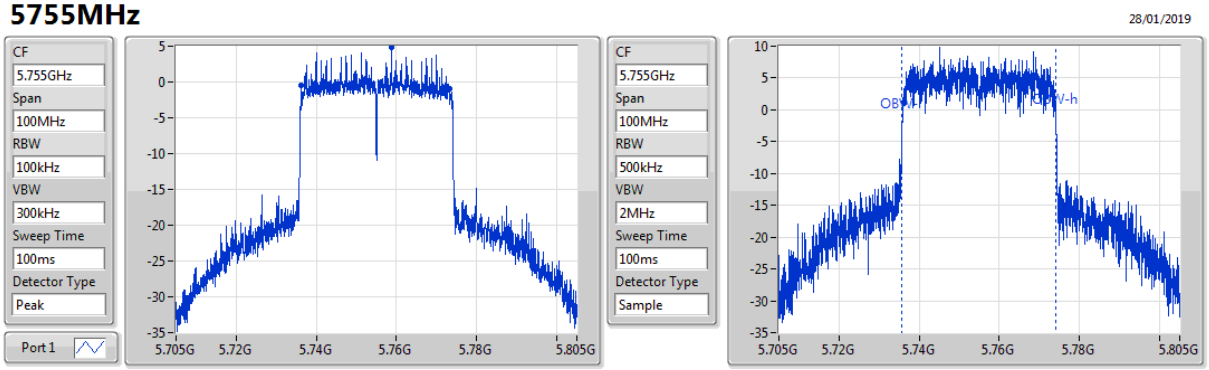
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
63.05M	5.19845G	5.2615G	37.731M	5.211109G	5.248841G	Inf	1

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

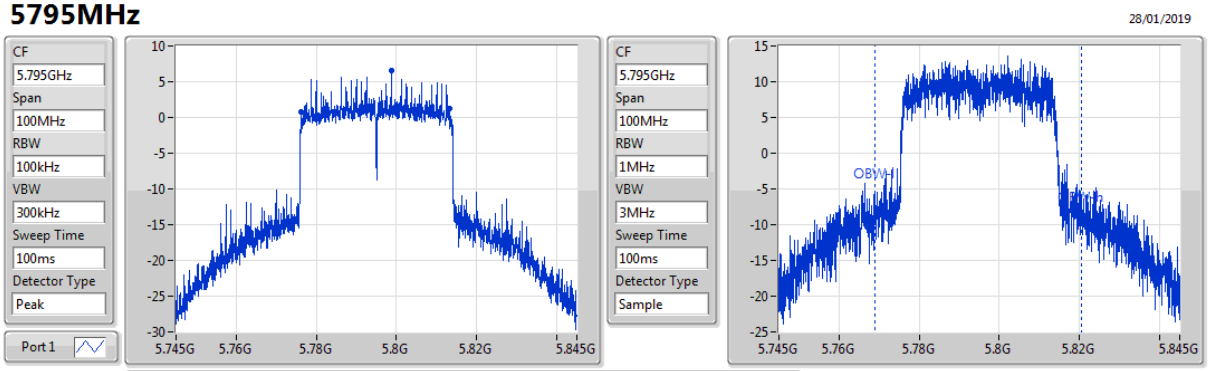
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.05M	5.7362G	5.77325G	38.331M	5.73576G	5.77409G	500k	1

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

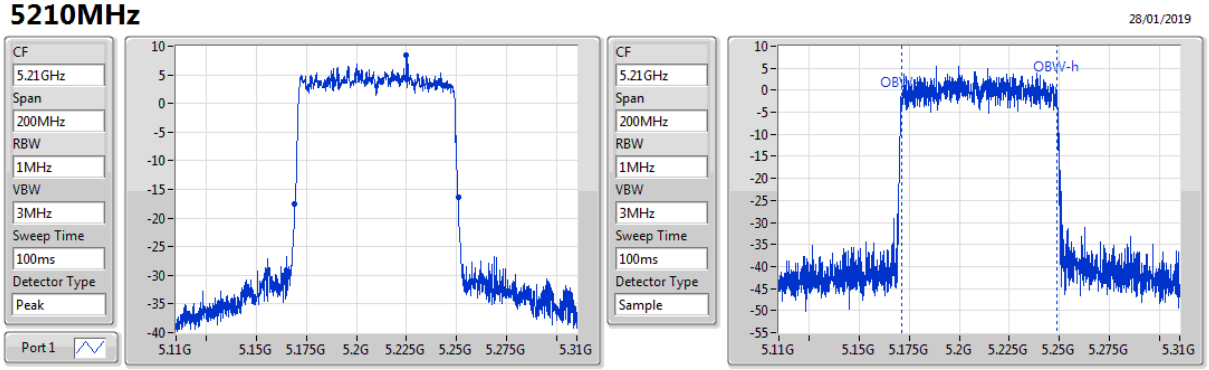
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.9M	5.77625G	5.81315G	51.424M	5.769013G	5.820437G	500k	1

802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

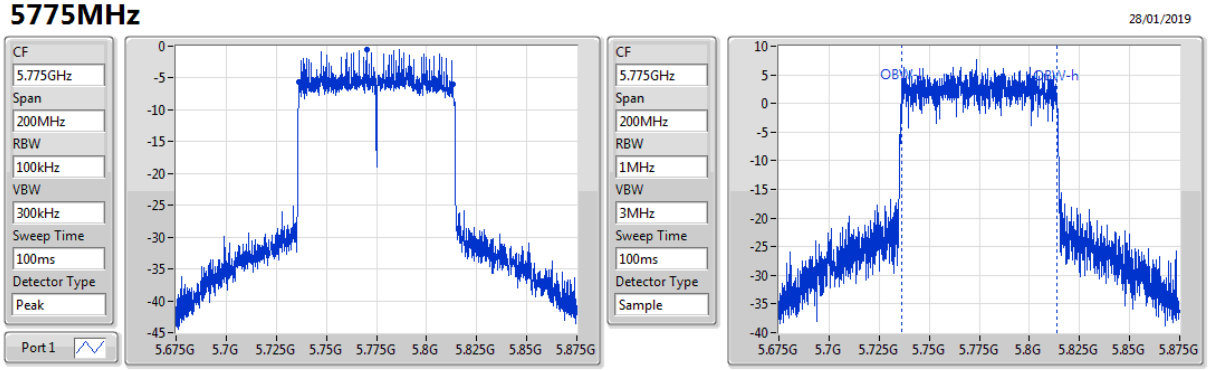
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.4M	5.1693G	5.2507G	77.061M	5.171419G	5.248481G	Inf	1

802.11ax HEW80_Nss1,(MCS0)_1TX **EBW**

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.7M	5.7365G	5.8132G	77.161M	5.736319G	5.813481G	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)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	43.5M	19.665M	19M7D1D	21.3M	18.916M
802.11ax HEW40_Nss2,(MCS0)_2TX	61.2M	37.681M	37M7D1D	39.9M	37.481M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.4M	77.061M	77M1D1D	81.1M	76.862M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	18.775M	29.56M	29M6D1D	18.425M	19.24M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.3M	39.43M	39M4D1D	36.95M	37.881M
802.11ax HEW80_Nss2,(MCS0)_2TX	75.9M	77.061M	77M1D1D	75.8M	76.962M

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

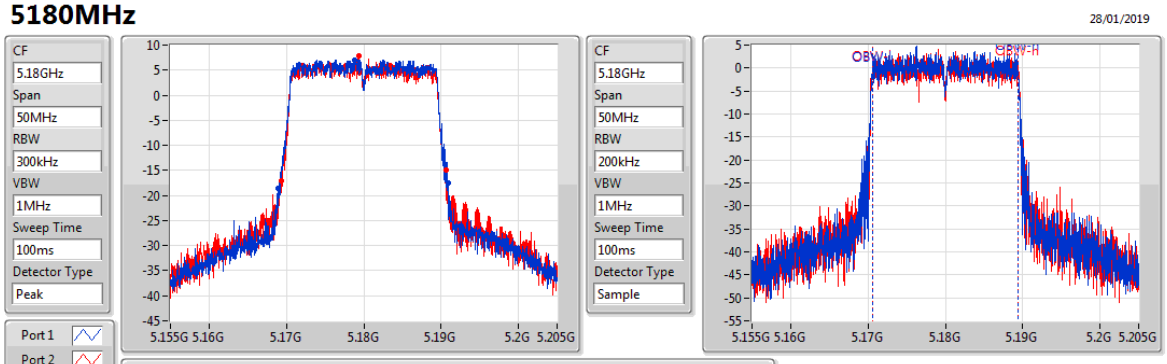
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.95M	18.916M	21.3M	18.941M
5200MHz	Pass	Inf	34.075M	19.04M	38.325M	19.015M
5240MHz	Pass	Inf	43.5M	19.665M	43.225M	19.615M
5745MHz	Pass	500k	18.425M	29.56M	18.6M	29.035M
5785MHz	Pass	500k	18.775M	20.215M	18.575M	19.715M
5825MHz	Pass	500k	18.75M	19.34M	18.65M	19.24M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.9M	37.631M	40.35M	37.481M
5230MHz	Pass	Inf	60.6M	37.681M	61.2M	37.631M
5755MHz	Pass	500k	37M	37.881M	37.25M	37.931M
5795MHz	Pass	500k	36.95M	39.43M	37.3M	39.03M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.1M	76.862M	81.4M	77.061M
5775MHz	Pass	500k	75.8M	76.962M	75.9M	77.061M

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

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

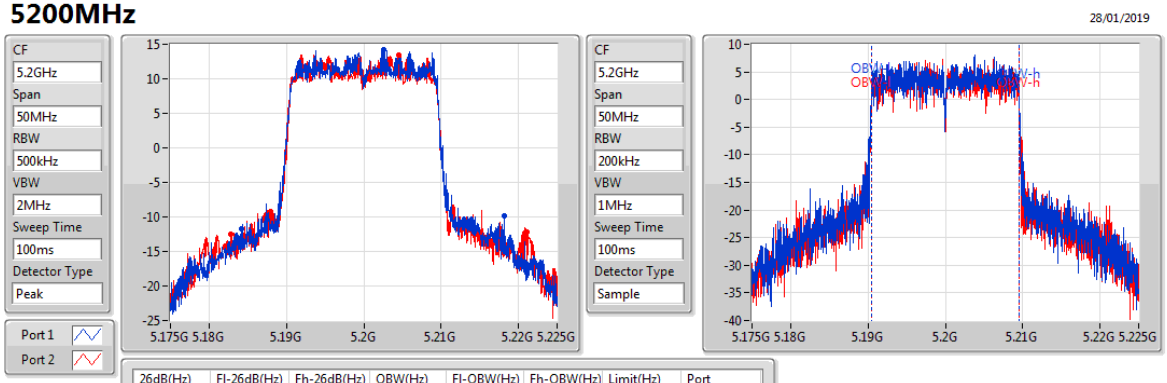
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.95M	5.168975G	5.190925G	18.916M	5.17053G	5.189445G	Inf	1
21.3M	5.169325G	5.190625G	18.941M	5.17053G	5.18947G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

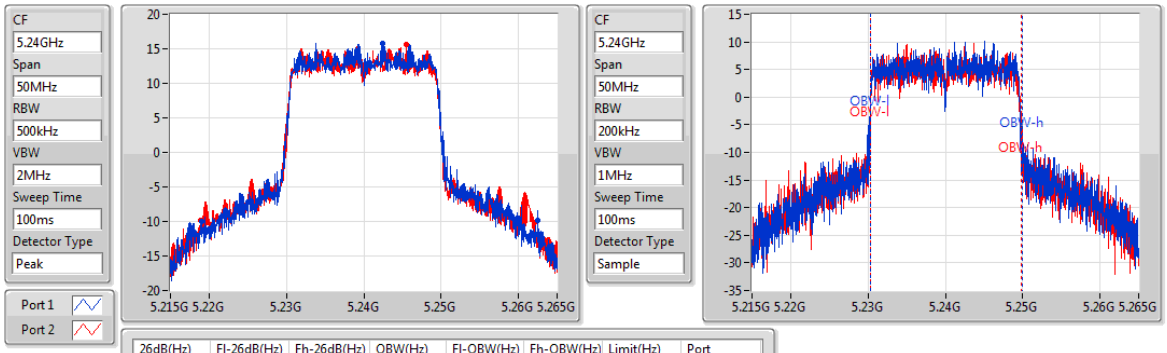
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.075M	5.18415G	5.218225G	19.04M	5.190455G	5.209495G	Inf	1
38.325M	5.182775G	5.2211G	19.015M	5.19048G	5.209495G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

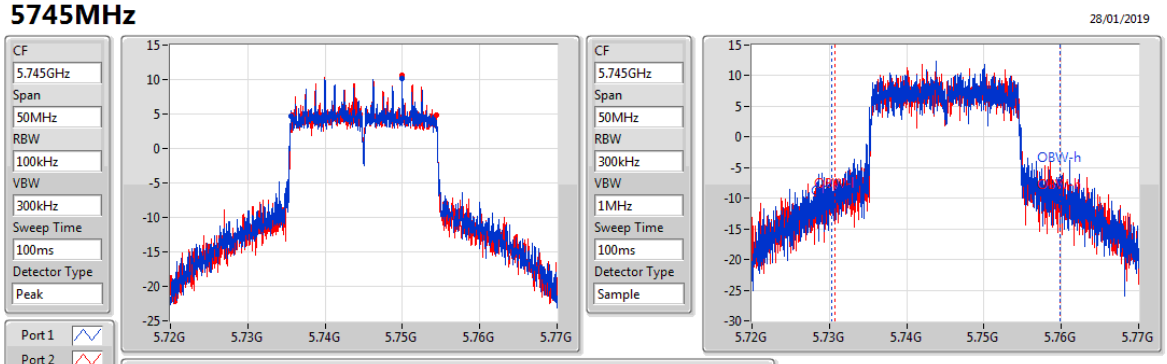
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.5M	5.21905G	5.26255G	19.665M	5.230305G	5.24997G	Inf	1
43.225M	5.218875G	5.2621G	19.615M	5.230255G	5.24987G	Inf	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

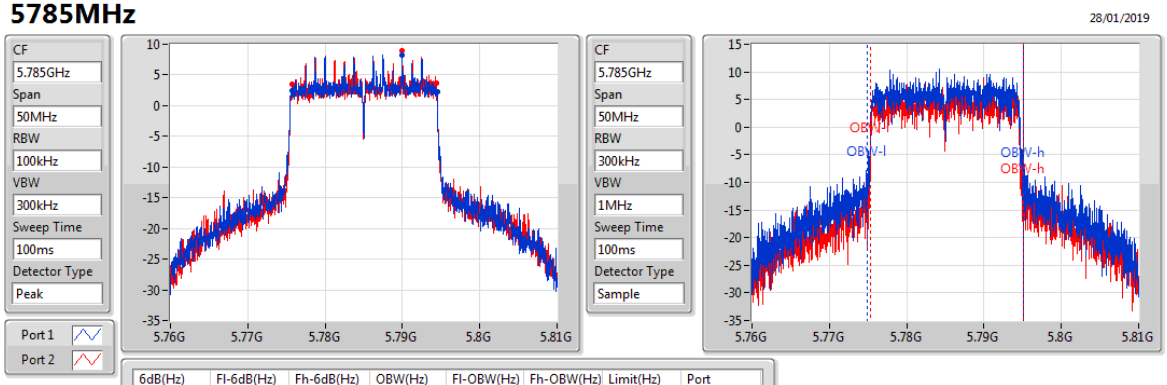
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.425M	5.735625G	5.75405G	29.56M	5.730282G	5.759843G	500k	1
18.6M	5.735775G	5.754375G	29.035M	5.730732G	5.759768G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

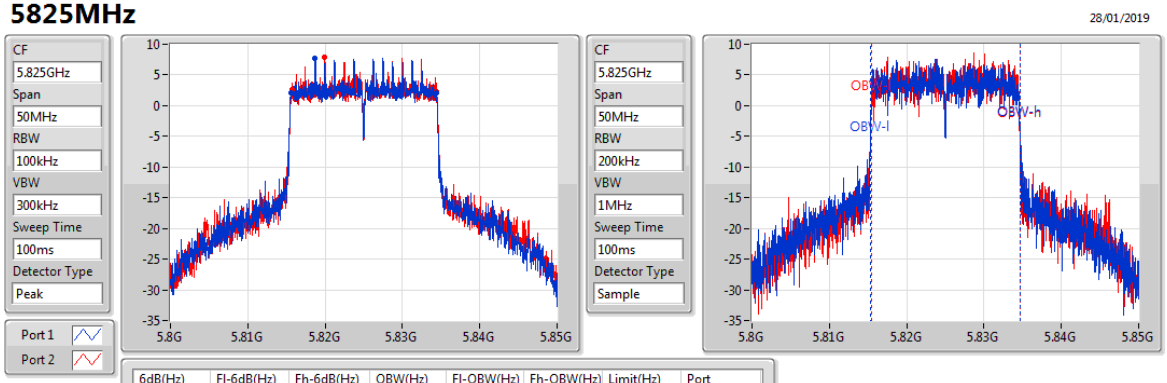
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.775M	5.7757G	5.794475G	20.215M	5.77493G	5.795145G	500k	1
18.575M	5.7758G	5.794375G	19.715M	5.775355G	5.79507G	500k	2

802.11ax HEW20_Nss2,(MCS0)_2TX **EBW**

5825MHz

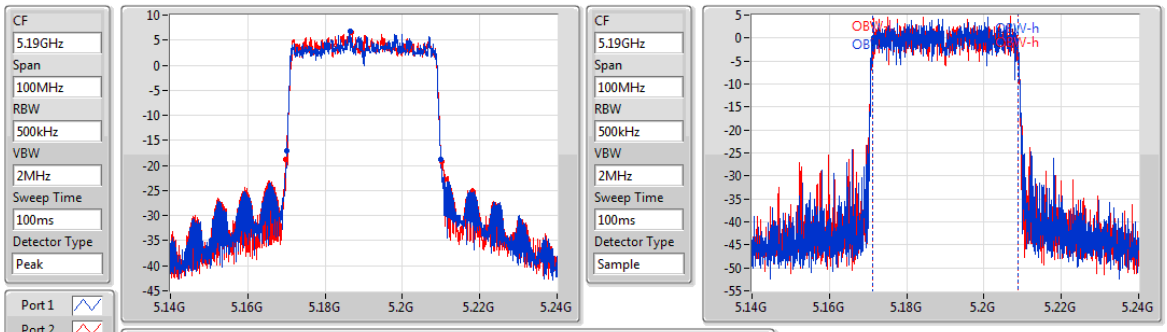


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.75M	5.8156G	5.83435G	19.34M	5.81528G	5.83462G	500k	1
18.65M	5.815775G	5.834425G	19.24M	5.815405G	5.834645G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5190MHz

28/01/2019

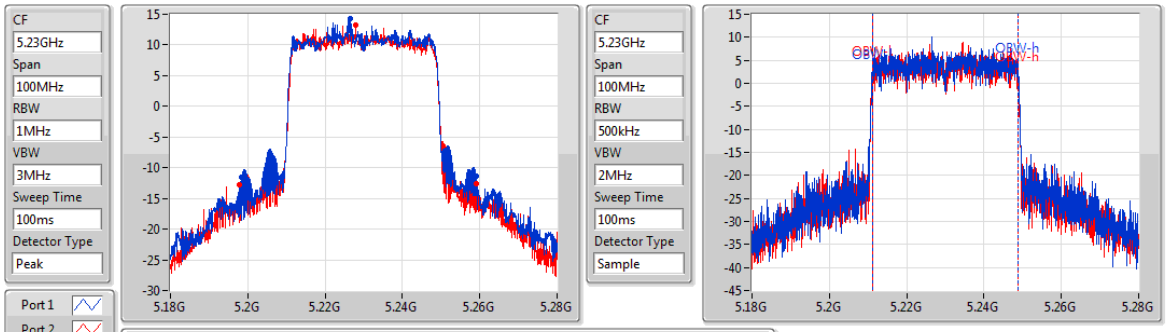


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.9M	5.17005G	5.20995G	37.631M	5.171109G	5.208741G	Inf	1
40.35M	5.1699G	5.21025G	37.481M	5.171209G	5.208691G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5230MHz

28/01/2019

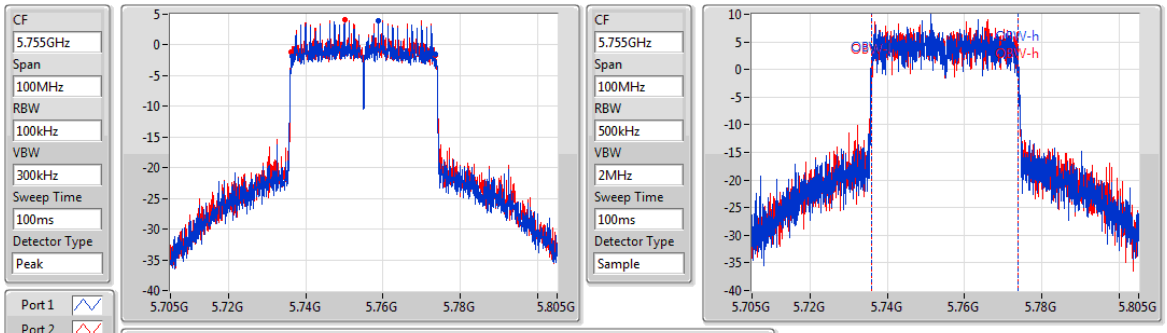


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
60.6M	5.1984G	5.259G	37.681M	5.211159G	5.248841G	Inf	1
61.2M	5.19795G	5.25915G	37.631M	5.211159G	5.248791G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

5755MHz

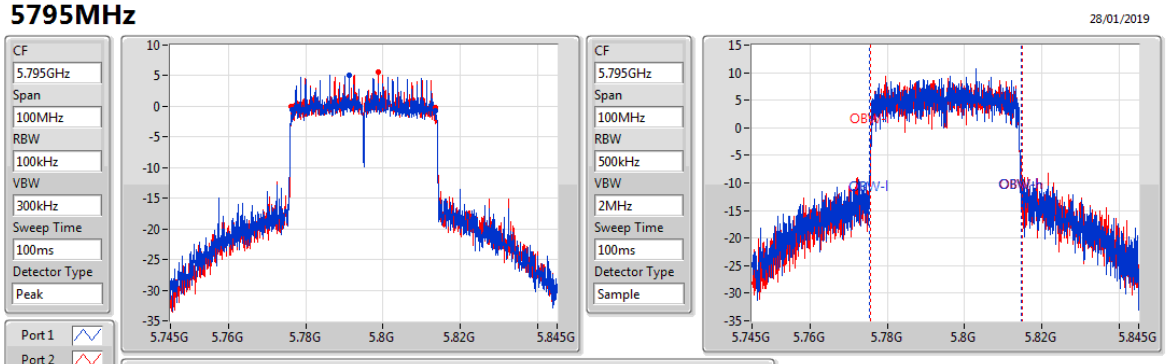
28/01/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37M	5.7365G	5.7735G	37.881M	5.736009G	5.773891G	500k	1
37.25M	5.73625G	5.7735G	37.931M	5.736009G	5.773941G	500k	2

802.11ax HEW40_Nss2,(MCS0)_2TX EBW

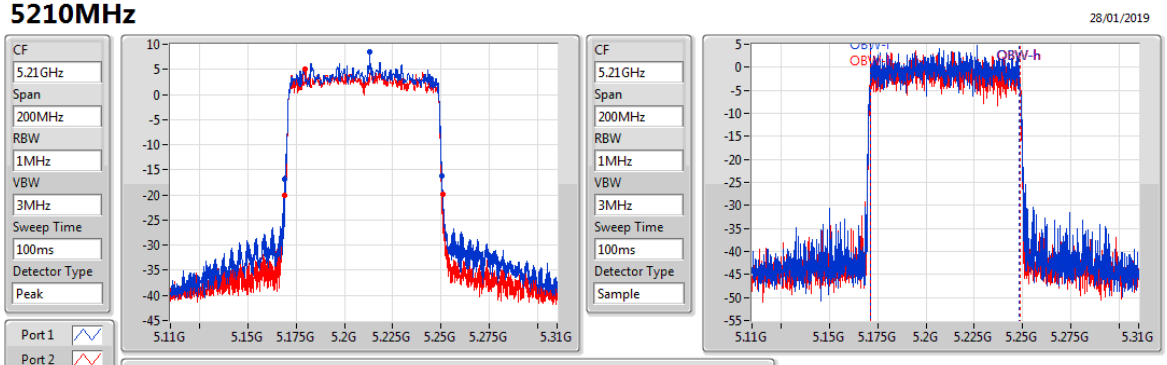
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.95M	5.77655G	5.8135G	39.43M	5.77526G	5.81469G	500k	1
37.3M	5.7762G	5.8135G	39.03M	5.77576G	5.81479G	500k	2

802.11ax HEW80_Nss2,(MCS0)_2TX EBW

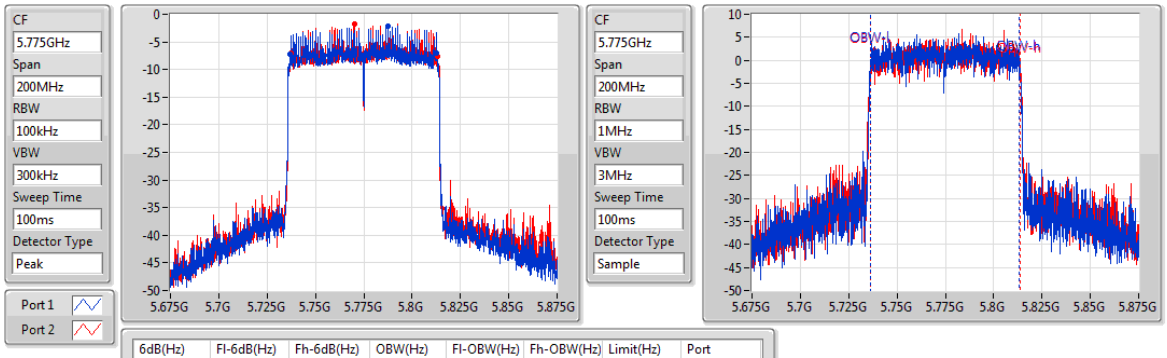
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.1M	5.1692G	5.2503G	76.862M	5.171519G	5.248381G	Inf	1
81.4M	5.1693G	5.2507G	77.061M	5.171419G	5.248481G	Inf	2

802.11ax HEW80_Nss2,(MCS0)_2TX EBW

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.8M	5.7369G	5.8127G	76.962M	5.736419G	5.813381G	500k	1
75.9M	5.7372G	5.8131G	77.061M	5.736419G	5.813481G	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)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	36.425M	16.642M	16M6D1D	21.525M	16.542M
802.11ax HEW20_Nss1,(MCS0)_4TX	45.25M	19.3M	19M3D1D	21.225M	18.941M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.35M	37.631M	37M6D1D	39.9M	37.481M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.7M	77.261M	77M3D1D	81.2M	76.862M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.325M	28.161M	28M2D1D	16.275M	17.266M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.925M	26.587M	26M6D1D	18.65M	19.19M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.5M	37.981M	38M0D1D	36.55M	37.731M
802.11ax HEW80_Nss1,(MCS0)_4TX	77M	77.261M	77M3D1D	76.5M	76.762M

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