



RADIO TEST REPORT

FCC ID : UDX-60093011
Equipment : 4x4 Wi-Fi 6 Access Point with External Antennas
Brand Name : Cisco
Model Name : MR46E-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.407

The product was received on Jun. 20, 2019, and testing was started from Jul. 03, 2019 and completed on Aug. 03, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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Photographs of EUT v01



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

Note: Reference to Sporton Project No.: 960317-01

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Viola 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
5250-5350	a, n (HT20), ac (VHT20), ax (HEW20)	5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5250-5350	n (HT40), ac (VHT40), ax (HEW40)	5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5250-5350	ac (VHT80), ax (HEW80)	5290	58 [1]
5470-5725		5530-5690	106-138 [3]

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1, 2, 4TX
5.25-5.35GHz	802.11n HT20	20	1, 2, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2, 4TX
5.25-5.35GHz	802.11n HT40	40	1, 2, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2, 4TX
5.25-5.35GHz	802.11ac VHT80	80	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2, 4TX
5.47-5.725GHz	802.11a	20	1, 2, 4TX
5.47-5.725GHz	802.11n HT20	20	1, 2, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2, 4TX



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ax HEW20	20	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2, 4TX
5.47-5.725GHz	802.11n HT40	40	1, 2, 4TX
5.47-5.725GHz	802.11n HT40-BF	40	2, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2, 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.



1.1.2 Antenna Information

Set	Brand	Official Model Number	Antenna Type	Connector	Gain (dBi)
1	Cisco	MA-ANT-3-A6	Dipole antenna	RP-TNC	Note 1
2	Cisco	MA-ANT-3-B6	Dipole antenna	RP-TNC	
3	Cisco	MA-ANT-3-C6	Omni antenna	RP-TNC	
4	Cisco	MA-ANT-3-D6	Omni-directional antenna	RP-TNC	
5	Cisco	MA-ANT-3-E6	Wide patch antenna	RP-TNC	
6	Cisco	MA-ANT-3-F6	Narrow patch antenna	RP-TNC	

Note1:

Radio 1 (2.4GHz)												
Set	Antenna Gain (dBi)				Cable Loss (dB)				True Gain (dBi)			
	Port 1	Port 2	Port 3	Port 4	Port 1	Port 2	Port 3	Port 4	Port 1	Port 2	Port 3	Port 4
1	3.80	3.80	3.80	3.80	1.01	0.41	0.41	1.00	2.79	3.39	3.39	2.80
2	3.00	3.00	3.00	3.00	1.01	0.41	0.41	1.00	1.99	2.59	2.59	2.00
3	4.90	4.90	4.90	4.90	1.01	0.41	0.41	1.00	3.89	4.49	4.49	3.90
4	2.90	2.90	2.90	2.90	1.01	0.41	0.41	1.00	1.89	2.49	2.49	1.90
5	7.00	7.00	7.00	7.00	1.01	0.41	0.41	1.00	5.99	6.59	6.59	6.00
6	11.20	11.20	11.20	11.20	1.01	0.41	0.41	1.00	10.19	10.79	10.79	10.20

Radio 2 (5GHz)												
Set	Antenna Gain (dBi)				Cable Loss (dB)				True Gain (dBi)			
	Port 1	Port 2	Port 3	Port 4	Port 1	Port 2	Port 3	Port 4	Port 1	Port 2	Port 3	Port 4
1	5.5	5.5	5.5	5.5	1.53	0.66	0.61	1.54	3.97	4.84	4.89	3.96
2	5.7	5.7	5.7	5.7	1.53	0.66	0.61	1.54	4.17	5.04	5.09	4.16
3	4.9	4.9	4.9	4.9	1.53	0.66	0.61	1.54	3.37	4.24	4.29	3.36
4	3.7	3.7	3.7	3.7	1.53	0.66	0.61	1.54	2.17	3.04	3.09	2.16
5	6.3	6.3	6.3	6.3	1.53	0.66	0.61	1.54	4.77	5.64	5.69	4.76
6	10.8	10.8	10.8	10.8	1.53	0.66	0.61	1.54	9.27	10.14	10.19	9.26



Radio 3 (2.4GHz + 5GHz)						
Set	Antenna Gain (dBi)		Cable Loss (dB)		True Gain (dBi)	
	Port 1		Port 1		Port 1	
	2.4GHz	5GHz	2.4GHz	5GHz	2.4GHz	5GHz
1	3.80	5.50	0.68	1.09	3.12	4.41
2	3.00	5.70	0.68	1.09	2.32	4.61
3	4.90	4.90	0.68	1.09	4.22	3.81
4	2.90	3.70	0.68	1.09	2.22	2.61
5	7.00	6.30	0.68	1.09	6.32	5.21
6	11.20	10.80	0.68	1.09	10.52	9.71

Radio 4 (Bluetooth)			
Set	Antenna Gain (dBi)	Cable Loss (dB)	True Gain (dBi)
	Port 1	Port 1	Port 1
1	3.80	0.56	3.24
2	3.00	0.56	2.44
3	4.90	0.56	4.34
4	2.90	0.56	2.34
5	7.00	0.56	6.44
6	11.20	0.56	10.64

Note2: The above information was declared by manufacturer.

Note3: The EUT has six set antennas.

The EUT has four radios, Radio 1 supports WLAN 2.4GHz (802.11b/g/n/ax mode), Radio 2 supports WLAN 5GHz (802.11a/n/ac/ax mode), Radio 3 supports WLAN 2.4GHz + 5GHz (scanning radio) and Radio 4 supports Bluetooth function.

Set 1 and Set 2 antennas are the same type antennas, only the highest gain antennas Set 1 for 2.4GHz, Set 2 for 5GHz were tested.

Note 4: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,2) = 10^{G3/20} ; NSS1(g1,2) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log \left[\frac{(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2}{N_{ANT}} \right] \Rightarrow 10 \log \left[\frac{(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2}{N_{ANT}} \right]$$

Where ;

Antenna Set 1

2.4G G1= 2.79 dBi ; G2= 3.39 dBi ; G3= 3.39 dBi ; G4= 2.8 dBi ;

4TX DG= 9.12dBi ; 2TX DG= 6.11dBi

Antenna Set 2

5G G1= 4.17 dBi ; G2= 5.04 dBi ; G3= 5.09 dBi ; G4= 4.16 dBi ;

4TX DG= 10.65dBi ; 2TX DG= 7.63dBi

Antenna Set 3

2.4G G1= 3.89 dBi ; G2= 4.49 dBi ; G3= 4.49 dBi ; G4= 3.9 dBi ;

4TX DG= 10.22dBi ; 2TX DG= 7.21dBi

5G G1= 3.37 dBi ; G2= 4.24 dBi ; G3= 4.29 dBi ; G4= 3.36 dBi ;

4TX DG= 9.85dBi ; 2TX DG= 6.83dBi

Antenna Set 4

2.4G G1= 1.89 dBi ; G2= 2.49 dBi ; G3= 2.49 dBi ; G4= 1.9 dBi ;

4TX DG= 8.22dBi ; 2TX DG= 5.21dBi

5G G1= 2.17 dBi ; G2= 3.04 dBi ; G3= 3.09 dBi ; G4= 2.16 dBi ;

4TX DG= 8.65dBi ; 2TX DG= 5.63dBi



Antenna Set 5

2.4G G1= 5.99 dBi ; G2= 6.59 dBi ; G3= 6.59 dBi ; G4= 6 dBi ;

4TX DG= 12.32dBi ; 2TX DG= 9.31dBi

5G G1= 4.77 dBi ; G2= 5.64 dBi ; G3= 5.69 dBi ; G4= 4.76 dBi ;

4TX DG= 11.25dBi ; 2TX DG= 8.23dBi

Antenna Set 6

2.4G G1= 10.19 dBi ; G2= 10.79 dBi ; G3= 10.79 dBi ; G4= 10.2 dBi ;

4TX DG= 16.52dB i ; 2TX DG= 13.51dBi

5G G1= 9.27 dBi ; G2= 10.14 dBi ; G3= 10.19 dBi ; G4= 9.26 dBi ;

4TX DG= 15.75dBi ; 2TX DG= 12.73dBi

<For Radio 1 (2.4GHz Functions) and Radio 2 (5GHz Functions)>

For 1TX/4RX:

Only Port 1 can be use as transmitting antenna

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 2TX/4RX:

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

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 4TX/4RX:

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

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

<For Radio 3 / 2.4GHz + 5GHz Functions>

Only Port 1 can be used as receiving antennas.

<For Radio 4 / Bluetooth Functions>

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

**1.1.3 Mode Test Duty Cycle****For Set 2, 5 and 6 antennas:****For 1T1S Mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.925	0.34	1.435m	1k
802.11ax HEW20	0.949	0.23	5.453m	300
802.11ax HEW40	0.958	0.19	5.456m	300
802.11ax HEW80	0.959	0.18	5.456m	300

For 2T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.925	0.34	1.435m	1k
802.11ax HEW20	0.957	0.19	5.456m	300
802.11ax HEW20-BF	0.973	0.12	1.766m	1k
802.11ax HEW40	0.959	0.18	5.456m	300
802.11ax HEW40-BF	0.978	0.1	1.766m	1k
802.11ax HEW80	0.959	0.18	5.456m	300
802.11ax HEW80-BF	0.922	0.35	1.69m	1k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.925	0.34	1.435m	1k
802.11ax HEW20	0.95	0.22	5.455m	300
802.11ax HEW20-BF	0.859	0.66	1.768m	1k
802.11ax HEW40	0.961	0.17	5.455m	300
802.11ax HEW40-BF	0.925	0.34	1.81m	1k
802.11ax HEW80	0.954	0.2	5.453m	300
802.11ax HEW80-BF	0.921	0.36	1.693m	1k

For Set 3 and 4 antennas:**For 1T1S Mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.925	0.34	1.435m	1k
802.11ax HEW20	0.951	0.22	5.455m	300
802.11ax HEW40	0.963	0.16	5.455m	300
802.11ax HEW80	0.95	0.22	5.455m	300



For 2T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.925	0.34	1.435m	1k
802.11ax HEW20	0.953	0.21	5.455m	300
802.11ax HEW20-BF	0.974	0.11	1.766m	1k
802.11ax HEW40	0.952	0.21	5.455m	300
802.11ax HEW40-BF	0.975	0.11	1.766m	1k
802.11ax HEW80	0.966	0.15	5.455m	300
802.11ax HEW80-BF	0.975	0.11	1.69m	1k

For 4T1S Mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.924	0.34	1.435m	1k
802.11ax HEW20	0.95	0.22	5.455m	300
802.11ax HEW20-BF	0.979	0.09	1.766m	1k
802.11ax HEW40	0.949	0.23	5.455m	300
802.11ax HEW40-BF	0.956	0.2	1.765m	1k
802.11ax HEW80	0.95	0.22	5.455m	300
802.11ax HEW80-BF	0.963	0.16	1.69m	1k

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	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	For 802.11n/ax in 2.4GHz and 802.11n/ac/ax in 5GHz.			
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
Function	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
TPC Function	<input checked="" type="checkbox"/>	With TPC	<input type="checkbox"/>	Without TPC
Channel Puncturing Function	<input type="checkbox"/>	Supported	<input checked="" type="checkbox"/>	Unsupported
Support RU	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
Test Software Version	For Non-beamforming: QSPR (v5.0-00186) For beamforming: Telnet (6.1.7601)			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Serway Li	24.6~25 / 65~69	Jul. 22, 2019 ~ Aug. 21, 2019
	TH02-CB	Mason Chan	16.7~25 / 58~69	Jul. 26, 2023 ~ Aug. 03, 2023
Radiated<1GHz	03CH06-CB	Roy Mai	22.5~23.9 / 59~61	May 25, 2023 ~ May 26, 2023
Radiated>1GHz	03CH01-CB	Eason Chen	27.1~28.3 / 62~66	Jul. 03, 2019 ~ Oct. 17, 2019
AC Conduction	CO01-CB	Gray Lee	22~23 / 65~66	Jun. 13, 2023

Note: The tested sample of the AC Conduction and Radiated test item were received on Sep. 22, 2022.

1.4 Measurement Uncertainty

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

Test date before Jun. 01, 2020

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



Test date before Jun. 01, 2023

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%

Test date after May 31, 2023

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For Set 2 antennas / 1TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	22.5
5300MHz	22.5
5320MHz	22.5
5500MHz	23
5580MHz	22.5
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	23
5300MHz	23
5320MHz	23
5500MHz	23
5580MHz	23
5700MHz	22.5
5720MHz Straddle 5.47-5.725GHz	24
5720MHz Straddle 5.725-5.85GHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	23
5310MHz	23
5510MHz	23
5550MHz	23
5670MHz	23
5710MHz Straddle 5.47-5.725GHz	24
5710MHz Straddle 5.725-5.85GHz	24
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	22.5
5530MHz	22.5
5610MHz	23
5690MHz Straddle 5.47-5.725GHz	24
5690MHz Straddle 5.725-5.85GHz	24



For Set 2 antennas / 2TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	17.5
5300MHz	17.5
5320MHz	17.5
5500MHz	17.5
5580MHz	17
5700MHz	17.5
5720MHz Straddle 5.47-5.725GHz	17.5
5720MHz Straddle 5.725-5.85GHz	17.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	18
5300MHz	18
5320MHz	18
5500MHz	18
5580MHz	18
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	18
5720MHz Straddle 5.725-5.85GHz	18
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	20
5310MHz	20
5510MHz	20
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	20
5530MHz	20
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	20.5
5690MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	21
5300MHz	21
5320MHz	21
5500MHz	20
5580MHz	20



Mode	PowerSetting
5700MHz	21
5720MHz Straddle 5.47-5.725GHz	21
5720MHz Straddle 5.725-5.85GHz	21
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	21
5310MHz	21
5510MHz	20
5550MHz	20
5670MHz	21
5710MHz Straddle 5.47-5.725GHz	21
5710MHz Straddle 5.725-5.85GHz	21
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	21
5530MHz	20
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	21
5690MHz Straddle 5.725-5.85GHz	21



For Set 2 antennas / 4TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	11
5300MHz	11
5320MHz	11
5500MHz	11
5580MHz	11
5700MHz	11.5
5720MHz Straddle 5.47-5.725GHz	11.5
5720MHz Straddle 5.725-5.85GHz	11.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	12
5300MHz	12
5320MHz	12
5500MHz	12
5580MHz	12
5700MHz	12.5
5720MHz Straddle 5.47-5.725GHz	12.5
5720MHz Straddle 5.725-5.85GHz	12.5
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	14.5
5310MHz	15
5510MHz	15
5550MHz	15
5670MHz	15.5
5710MHz Straddle 5.47-5.725GHz	15.5
5710MHz Straddle 5.725-5.85GHz	15.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	17.5
5530MHz	17.5
5610MHz	17.5
5690MHz Straddle 5.47-5.725GHz	17.5
5690MHz Straddle 5.725-5.85GHz	17.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17



Mode	PowerSetting
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	18
5720MHz Straddle 5.725-5.85GHz	18
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	17
5310MHz	17
5510MHz	17
5550MHz	17
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	19
5710MHz Straddle 5.725-5.85GHz	19
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	17
5530MHz	17
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	18
5690MHz Straddle 5.725-5.85GHz	18



For Radiated Emission:

Mode	Radiated Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz_	27
5300MHz_	27
5320MHz_	27
5500MHz_	27
5580MHz_	27
5700MHz_	27
5720MHz Straddle 5.47-5.725GHz_	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz_	27
5300MHz_	27
5320MHz_	27
5500MHz_	27
5580MHz_	27
5700MHz_	27
5720MHz Straddle 5.47-5.725GHz_	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz_	27
5310MHz_	27
5510MHz_	27
5550MHz_	27
5670MHz_	27
5710MHz Straddle 5.47-5.725GHz_	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz_	27
5530MHz_	27
5610MHz_	27
5690MHz Straddle 5.47-5.725GHz_	27
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	24
5310MHz	24



Mode	Radiated Setting
5510MHz	24
5550MHz	24
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	24
5530MHz	24
5610MHz	24
5690MHz Straddle 5.47-5.725GHz	24



For Set 3 antennas / 1TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	22.5
5300MHz	22.5
5320MHz	22
5500MHz	22.5
5580MHz	22
5700MHz	22.5
5720MHz Straddle 5.47-5.725GHz	22.5
5720MHz Straddle 5.725-5.85GHz	22.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	23
5300MHz	23
5320MHz	22.5
5500MHz	23
5580MHz	22.5
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	23
5310MHz	23
5510MHz	22
5550MHz	23
5670MHz	22.5
5710MHz Straddle 5.47-5.725GHz	23.5
5710MHz Straddle 5.725-5.85GHz	23.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	23
5530MHz	21.5
5610MHz	22.5
5690MHz Straddle 5.47-5.725GHz	23.5
5690MHz Straddle 5.725-5.85GHz	23.5



For Set 3 antennas / 2TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	18.5
5300MHz	18.5
5320MHz	18
5500MHz	18
5580MHz	18
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	18
5720MHz Straddle 5.725-5.85GHz	18
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	19
5300MHz	19
5320MHz	19
5500MHz	19
5580MHz	19
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	20
5310MHz	20
5510MHz	20
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	20
5530MHz	20
5610MHz	19.5
5690MHz Straddle 5.47-5.725GHz	20.5
5690MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	23
5300MHz	23
5320MHz	23
5500MHz	22
5580MHz	22



Mode	PowerSetting
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	23
5310MHz	23
5510MHz	22
5550MHz	22
5670MHz	23
5710MHz Straddle 5.47-5.725GHz	24
5710MHz Straddle 5.725-5.85GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	23
5530MHz	22
5610MHz	22
5690MHz Straddle 5.47-5.725GHz	23
5690MHz Straddle 5.725-5.85GHz	23



For Set 3 antennas / 4TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	12
5300MHz	12
5320MHz	12
5500MHz	12
5580MHz	12
5700MHz	12.5
5720MHz Straddle 5.47-5.725GHz	12.5
5720MHz Straddle 5.725-5.85GHz	12.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	13
5300MHz	13
5320MHz	13
5500MHz	13
5580MHz	13
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	16
5310MHz	16
5510MHz	16
5550MHz	16
5670MHz	16
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	16.5
5530MHz	16.5
5610MHz	16.5
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	19
5300MHz	19
5320MHz	19
5500MHz	18
5580MHz	18



Mode	PowerSetting
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	18
5720MHz Straddle 5.725-5.85GHz	18
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	19
5310MHz	19
5510MHz	18
5550MHz	18
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	18
5710MHz Straddle 5.725-5.85GHz	18
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	19
5530MHz	18
5610MHz	18
5690MHz Straddle 5.47-5.725GHz	19
5690MHz Straddle 5.725-5.85GHz	19



For Radiated Emission:

Mode	Radiated Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	27
5310MHz	27
5510MHz	27
5550MHz	27
5670MHz	27
5710MHz Straddle 5.47-5.725GHz	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	27
5530MHz	27
5610MHz	27
5690MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	24
5310MHz	24



Mode	Radiated Setting
5510MHz	24
5550MHz	24
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	24
5530MHz	24
5610MHz	24
5690MHz Straddle 5.47-5.725GHz	24



For Set 4 antennas / 1TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	22.5
5300MHz	22.5
5320MHz	22
5500MHz	22.5
5580MHz	22
5700MHz	22.5
5720MHz Straddle 5.47-5.725GHz	22.5
5720MHz Straddle 5.725-5.85GHz	22.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	23
5300MHz	23
5320MHz	22.5
5500MHz	23
5580MHz	22.5
5700MHz	22.5
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	23
5310MHz	23
5510MHz	22.5
5550MHz	23
5670MHz	23
5710MHz Straddle 5.47-5.725GHz	23.5
5710MHz Straddle 5.725-5.85GHz	23.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	23
5530MHz	22
5610MHz	22.5
5690MHz Straddle 5.47-5.725GHz	23.5
5690MHz Straddle 5.725-5.85GHz	23.5



For Set 4 antennas / 2TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	19.5
5300MHz	19.5
5320MHz	19.5
5500MHz	19.5
5580MHz	19
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	19.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	20
5580MHz	19.5
5700MHz	20
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	20
5310MHz	20
5510MHz	20
5550MHz	20
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	20
5530MHz	20
5610MHz	19.5
5690MHz Straddle 5.47-5.725GHz	20.5
5690MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	23
5300MHz	23
5320MHz	23
5500MHz	22
5580MHz	22



Mode	PowerSetting
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	23
5310MHz	23
5510MHz	22
5550MHz	22
5670MHz	23
5710MHz Straddle 5.47-5.725GHz	24
5710MHz Straddle 5.725-5.85GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	23
5530MHz	22
5610MHz	22
5690MHz Straddle 5.47-5.725GHz	23
5690MHz Straddle 5.725-5.85GHz	23



For Set 4 antennas / 4TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	13
5300MHz	13
5320MHz	13
5500MHz	13
5580MHz	13
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	13.5
5300MHz	14
5320MHz	14
5500MHz	13.5
5580MHz	13.5
5700MHz	13.5
5720MHz Straddle 5.47-5.725GHz	13.5
5720MHz Straddle 5.725-5.85GHz	13.5
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	16.5
5310MHz	16.5
5510MHz	16.5
5550MHz	16.5
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17.5
5710MHz Straddle 5.725-5.85GHz	17.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	16.5
5530MHz	16.5
5610MHz	16.5
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	20
5300MHz	20
5320MHz	20
5500MHz	19
5580MHz	19



Mode	PowerSetting
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	19
5720MHz Straddle 5.725-5.85GHz	19
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	20
5310MHz	20
5510MHz	19
5550MHz	19
5670MHz	19
5710MHz Straddle 5.47-5.725GHz	19
5710MHz Straddle 5.725-5.85GHz	19
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	20
5530MHz	19
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	19
5690MHz Straddle 5.725-5.85GHz	19



For Radiated Emission:

Mode	Radiated Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	27
5310MHz	27
5510MHz	27
5550MHz	27
5670MHz	27
5710MHz Straddle 5.47-5.725GHz	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	27
5530MHz	27
5610MHz	27
5690MHz Straddle 5.47-5.725GHz	27
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	27
5300MHz	27



Mode	Radiated Setting
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	27
5310MHz	27
5510MHz	27
5550MHz	27
5670MHz	27
5710MHz Straddle 5.47-5.725GHz	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	27
5530MHz	27
5610MHz	27
5690MHz Straddle 5.47-5.725GHz	27



For Set 5 antennas / 1TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	22.5
5300MHz	22.5
5320MHz	22.5
5500MHz	23
5580MHz	22.5
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	23
5300MHz	23
5320MHz	23
5500MHz	23
5580MHz	23
5700MHz	23
5720MHz Straddle 5.47-5.725GHz	24
5720MHz Straddle 5.725-5.85GHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	23
5310MHz	23
5510MHz	22.5
5550MHz	23
5670MHz	23
5710MHz Straddle 5.47-5.725GHz	24
5710MHz Straddle 5.725-5.85GHz	24
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	22.5
5530MHz	22.5
5610MHz	23
5690MHz Straddle 5.47-5.725GHz	24
5690MHz Straddle 5.725-5.85GHz	24



For Set 5 antennas / 2TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	16
5300MHz	16
5320MHz	16
5500MHz	16
5580MHz	16
5700MHz	16.5
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	16.5
5300MHz	16.5
5320MHz	16.5
5500MHz	17
5580MHz	16.5
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	19.5
5310MHz	19.5
5510MHz	19.5
5550MHz	19.5
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	20
5530MHz	20
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	20.5
5690MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	19
5300MHz	19
5320MHz	19
5500MHz	19
5580MHz	19



Mode	PowerSetting
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	19
5310MHz	19
5510MHz	19
5550MHz	19
5670MHz	19
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	19
5530MHz	19
5610MHz	19
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20



For Set 5 antennas / 4TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	10.5
5300MHz	10.5
5320MHz	10.5
5500MHz	10.5
5580MHz	10.5
5700MHz	11
5720MHz Straddle 5.47-5.725GHz	11
5720MHz Straddle 5.725-5.85GHz	11
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	11.5
5300MHz	11.5
5320MHz	11.5
5500MHz	11.5
5580MHz	11.5
5700MHz	12
5720MHz Straddle 5.47-5.725GHz	12
5720MHz Straddle 5.725-5.85GHz	12
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	14
5310MHz	14.5
5510MHz	14.5
5550MHz	14.5
5670MHz	15
5710MHz Straddle 5.47-5.725GHz	15
5710MHz Straddle 5.725-5.85GHz	15
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	17.5
5530MHz	17.5
5610MHz	17.5
5690MHz Straddle 5.47-5.725GHz	17.5
5690MHz Straddle 5.725-5.85GHz	17.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	16
5300MHz	16
5320MHz	16
5500MHz	16
5580MHz	16



Mode	PowerSetting
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	16
5310MHz	16
5510MHz	16
5550MHz	16
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	18
5710MHz Straddle 5.725-5.85GHz	18
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	16
5530MHz	16
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17



For Radiated Emission:

Mode	Radiated Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	27
5310MHz	27
5510MHz	27
5550MHz	27
5670MHz	27
5710MHz Straddle 5.47-5.725GHz	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	27
5530MHz	27
5610MHz	27
5690MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	24
5310MHz	24



Mode	Radiated Setting
5510MHz	24
5550MHz	24
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	24
5530MHz	24
5610MHz	24
5690MHz Straddle 5.47-5.725GHz	24



For Set 6 antennas / 1TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX	-
5260MHz	19.5
5300MHz	19.5
5320MHz	19
5500MHz	19.5
5580MHz	19
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	19.5
5720MHz Straddle 5.725-5.85GHz	19.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5260MHz	19.5
5300MHz	19.5
5320MHz	19.5
5500MHz	19.5
5580MHz	19.5
5700MHz	20
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5270MHz	19.5
5310MHz	19.5
5510MHz	19.5
5550MHz	19.5
5670MHz	20
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5290MHz	19.5
5530MHz	20
5610MHz	19.5
5690MHz Straddle 5.47-5.725GHz	21
5690MHz Straddle 5.725-5.85GHz	21



For Set 6 antennas / 2TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	12
5300MHz	12
5320MHz	12
5500MHz	12
5580MHz	12
5700MHz	12.5
5720MHz Straddle 5.47-5.725GHz	12
5720MHz Straddle 5.725-5.85GHz	12
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	12.5
5300MHz	12.5
5320MHz	12.5
5500MHz	13
5580MHz	12.5
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	15.5
5310MHz	15.5
5510MHz	16
5550MHz	16
5670MHz	16
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	16
5530MHz	16
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	16.5
5690MHz Straddle 5.725-5.85GHz	16.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	15
5300MHz	15
5320MHz	15
5500MHz	15
5580MHz	15



Mode	PowerSetting
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	15
5310MHz	15
5510MHz	15
5550MHz	15
5670MHz	15
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	15
5530MHz	15
5610MHz	15
5690MHz Straddle 5.47-5.725GHz	16
5690MHz Straddle 5.725-5.85GHz	16



For Set 6 antennas / 4TX:

For Conducted measurement and Band Edge Emission test:

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	6
5300MHz	6
5320MHz	6
5500MHz	6
5580MHz	6
5700MHz	6.5
5720MHz Straddle 5.47-5.725GHz	6.5
5720MHz Straddle 5.725-5.85GHz	6.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	6.5
5300MHz	6.5
5320MHz	6.5
5500MHz	6.5
5580MHz	6.5
5700MHz	7
5720MHz Straddle 5.47-5.725GHz	7
5720MHz Straddle 5.725-5.85GHz	7
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	9.5
5310MHz	10
5510MHz	10
5550MHz	10
5670MHz	10.5
5710MHz Straddle 5.47-5.725GHz	10.5
5710MHz Straddle 5.725-5.85GHz	10.5
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	13
5530MHz	13
5610MHz	13
5690MHz Straddle 5.47-5.725GHz	13.5
5690MHz Straddle 5.725-5.85GHz	13.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	12
5300MHz	12
5320MHz	12
5500MHz	12
5580MHz	12



Mode	PowerSetting
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	12
5310MHz	12
5510MHz	12
5550MHz	12
5670MHz	12
5710MHz Straddle 5.47-5.725GHz	13
5710MHz Straddle 5.725-5.85GHz	13
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	12
5530MHz	12
5610MHz	12
5690MHz Straddle 5.47-5.725GHz	13
5690MHz Straddle 5.725-5.85GHz	13



For Radiated Emission:

Mode	Radiated Setting
802.11a_Nss1,(6Mbps)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5260MHz	27
5300MHz	27
5320MHz	27
5500MHz	27
5580MHz	27
5700MHz	27
5720MHz Straddle 5.47-5.725GHz	27
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5270MHz	27
5310MHz	27
5510MHz	27
5550MHz	27
5670MHz	27
5710MHz Straddle 5.47-5.725GHz	27
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5290MHz	27
5530MHz	27
5610MHz	27
5690MHz Straddle 5.47-5.725GHz	27
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	24
5300MHz	24
5320MHz	24
5500MHz	24
5580MHz	24
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	24



Mode	Radiated Setting
5310MHz	24
5510MHz	24
5550MHz	24
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	24
5530MHz	24
5610MHz	24
5690MHz Straddle 5.47-5.725GHz	24



2.2 The Worst Case Measurement Configuration

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Test Mode	Refer to note
1	EUT (Radio 2) + Antenna Set 2
2	EUT (Radio 2) + Antenna Set 3
3	EUT (Radio 2) + Antenna Set 4
4	EUT (Radio 2) + Antenna Set 5
5	EUT (Radio 2) + Antenna Set 6



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
<p>1. Aftering evaluating, EUT in X axis has been evaluated as the worst case. So the measurement will follow this same test configuration.</p> <p>2. The EUT with antenna set 2, set 3 in Z axis, set 3 in Y axis, set 6 were performed the testing, EUT with antenna set 3 in Y axis has been evaluated as the worst case. So the measurement will follow this same test configuration.</p> <p>3. The EUT with adapter 1~2 and PoE 1~2 were performed the testing, EUT with adapter 1 has been evaluated as the worst case. So the measurement will follow this same test configuration.</p> <p>4. The radio 3 (2.4GHz/5GHz) of EUT were performed the testing, radio 3 (2.4GHz) of EUT has been evaluated as the worst case. So the measurement will follow this same test configuration.</p>	
1	EUT in X axis (Radio 1 + Radio 2 + Radio 3: 2.4GHz + Radio 4) + Adapter 1 + Set 3 in Y axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode > 1GHz	CTX
<p>After evaluating, the worst case axis was found as below. So the measurement will follow this same test configuration.</p> <p>For antenna set 3 and set 4: After evaluating, the worst case axis was found as below. So the measurement will follow this same test configuration.</p> <p>Antenna Set 2: For Radiated Emission: EUT in Z axis For Band Edge Emission: EUT in Z axis</p> <p>Antenna Set 3: For Radiated Emission: EUT in X axis + Antenna in Y axis For Band Edge Emission: EUT in X axis + Antenna in Y axis</p> <p>Antenna Set 4: For Radiated Emission: EUT in Z axis + Antenna in Z axis For Band Edge Emission: EUT in Z axis + Antenna in Z axis</p> <p>Antenna Set 5: For Radiated Emission: EUT in Z axis For Band Edge Emission: EUT in Z axis</p> <p>Antenna Set 6: For Radiated Emission: EUT in Z axis For Band Edge Emission: EUT in Z axis</p>	
Test Mode	Refer to note

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
	The EUT was performed at X axis, Y axis and Z axis, the worst case was found as Unwanted Emissions above 1GHz. So the measurement will follow this same test configuration.
1	EUT in X axis: Radio 1 (WLAN 2.4GHz) + Radio 2 (WLAN 5GHz)
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	EUT: Radio 1 (WLAN 2.4GHz) + Radio 2 (WLAN 5GHz) + Radio 4 (Bluetooth)
Refer to Sporton Test Report No.: FA960317-14 for Co-location RF Exposure Evaluation.	

Note1: For AC power-line conducted emissions, the higher gain antennas “Set 6 (Narrow patch antenna)” only was tested and recorded in the report.

Note2: The PoE below are for measurement only, would not be marketed.
PoE information as below:

Power	Brand	Model
PoE 1	CISCO	MA-INJ-5
PoE 2	CISCO	MA-INJ-4

Note3: Test Mode:

Test Item	Test Mode							
	802.11a			802.11ax HEW20/40/80				
	1T1S	2T1S	4T1S	CDD 1T1S	CDD 2T1S	CDD 4T1S	TxBF 2T1S	TxBF 4T1S
Maximum Conducted Output Power	V	V	V	V	V	V	V	V
Emission Bandwidth	V	V	V	V	V	V	V	V
Peak Power Spectral Density	V	V	V	V	V	V	V	V
Radiated Emission	Cover by 4T1S Max setting	Cover by 4T1S Max setting	V	Cover by CDD 4T1S Max setting	Cover by CDD 4T1S Max setting	V	Cover by CDD 4T1S Max setting	V
Band Edge Emission	V	V	V	V	V	V	V	V

Note4: 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.



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

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

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet (6.1.7601).
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less than 98%.

2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	P/N	Rating
Adapter 1	CISCO	KSAS0361200250HU	-	Input: 100-240V, 50/60Hz, 1.0A Output: 12V, 2.5A
Adapter 2	CISCO	MA-PWR-30W-US	640-39010-A	Input: 100-240V, 50-60Hz, 0.8A Max. Output: 12V, 2.5A 30W
Other				
Wall-mounted rack*1				



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	2.5G LAN PC	DELL	T3400	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	Scan Radio (2.4G or 5G) NB	DELL	E6430	N/A
E	PoE 2	CISCO	MA-INJ-4	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB (LAN)	DELL	E6430	N/A
B	NB (WIFI 2.4G)	DELL	E6430	N/A
C	NB (WIFI 5G)	DELL	E6430	N/A
D	NB (WIFI Scan Radio 2.4G/5G)	DELL	E6430	N/A

For Radiated and RF Conducted:

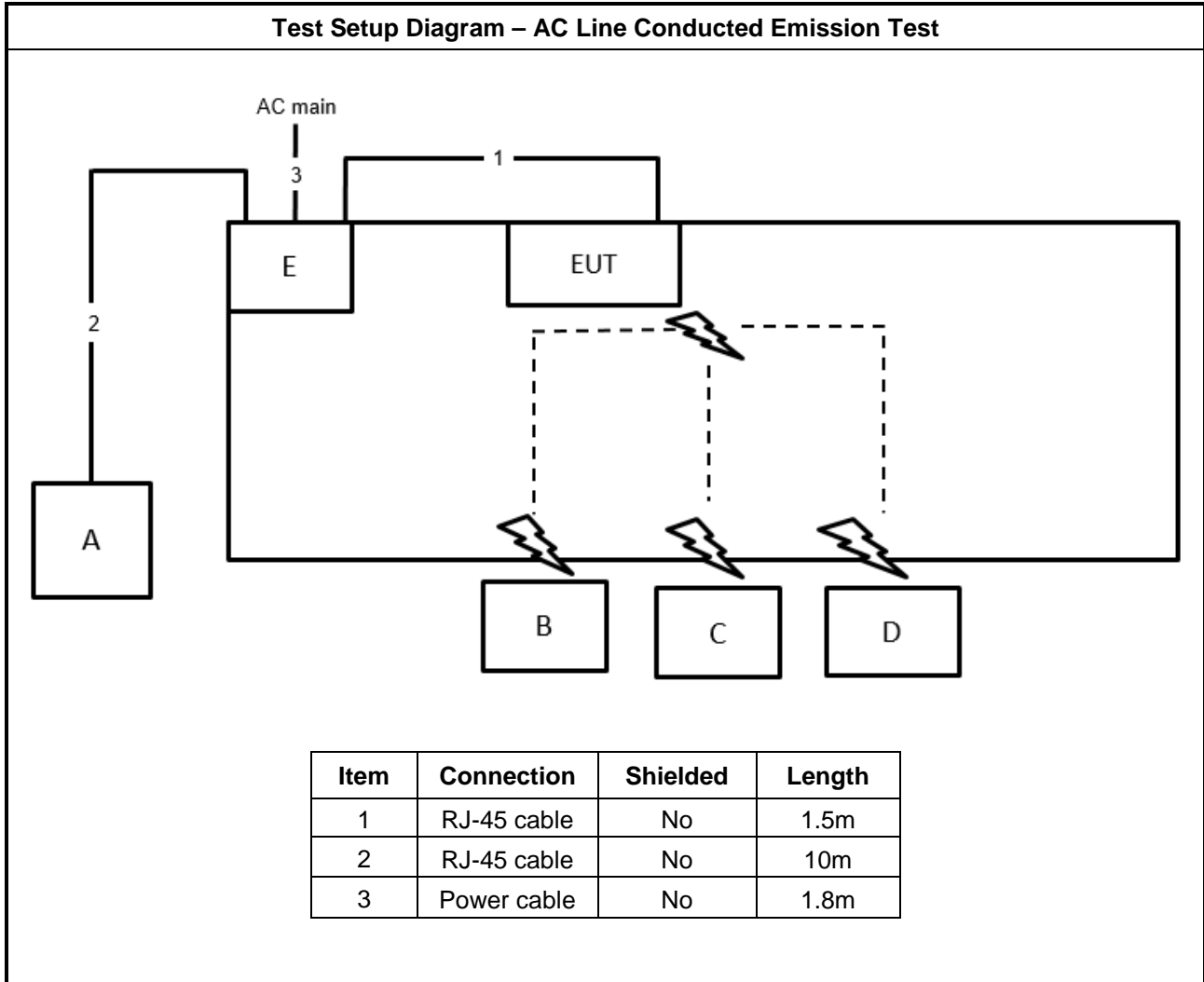
<For Non-beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

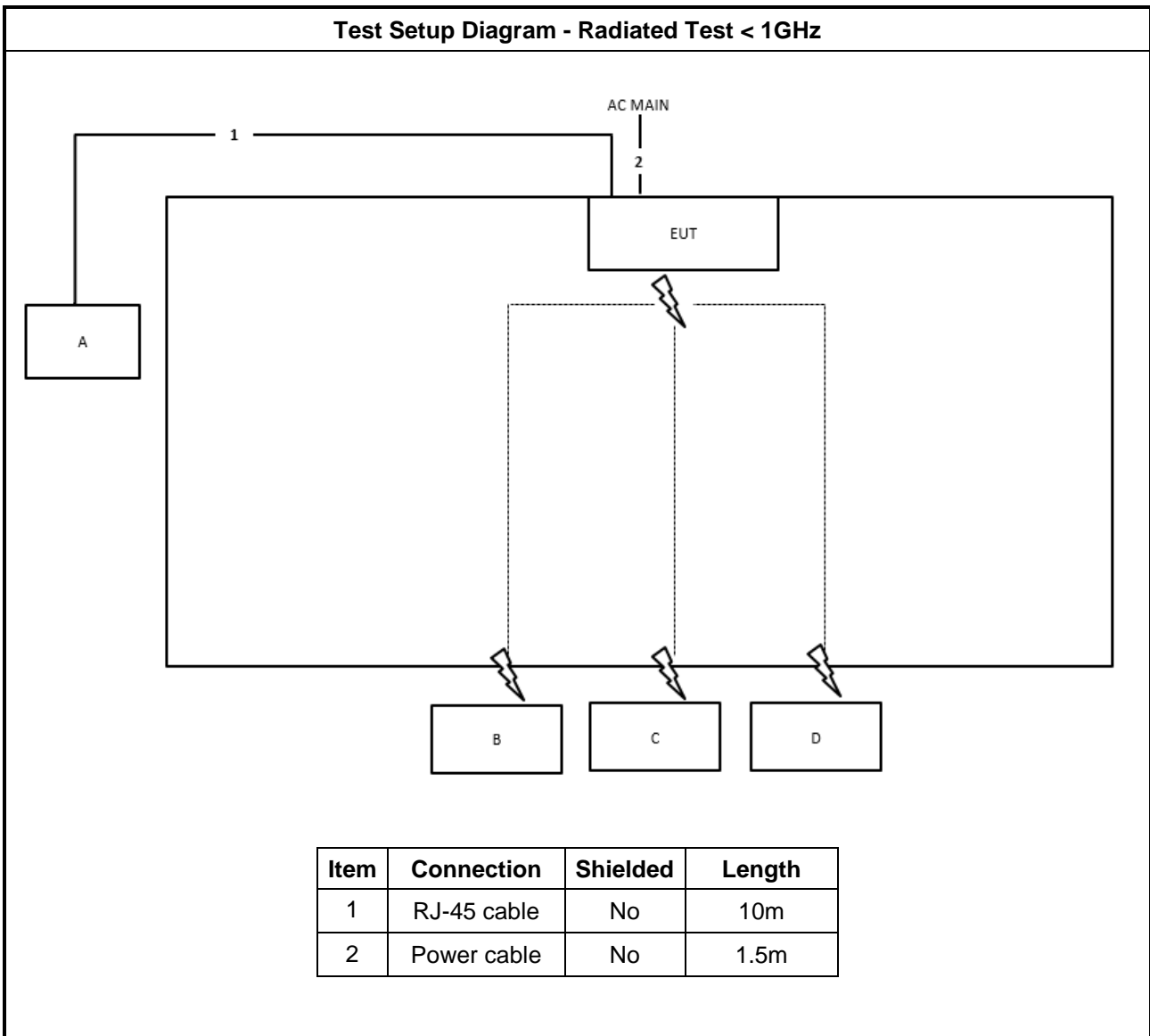
<For Beamforming mode>

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	RX Device	CISCO	MR46E-HW	UDX-60093010

2.6 Test Setup Diagram

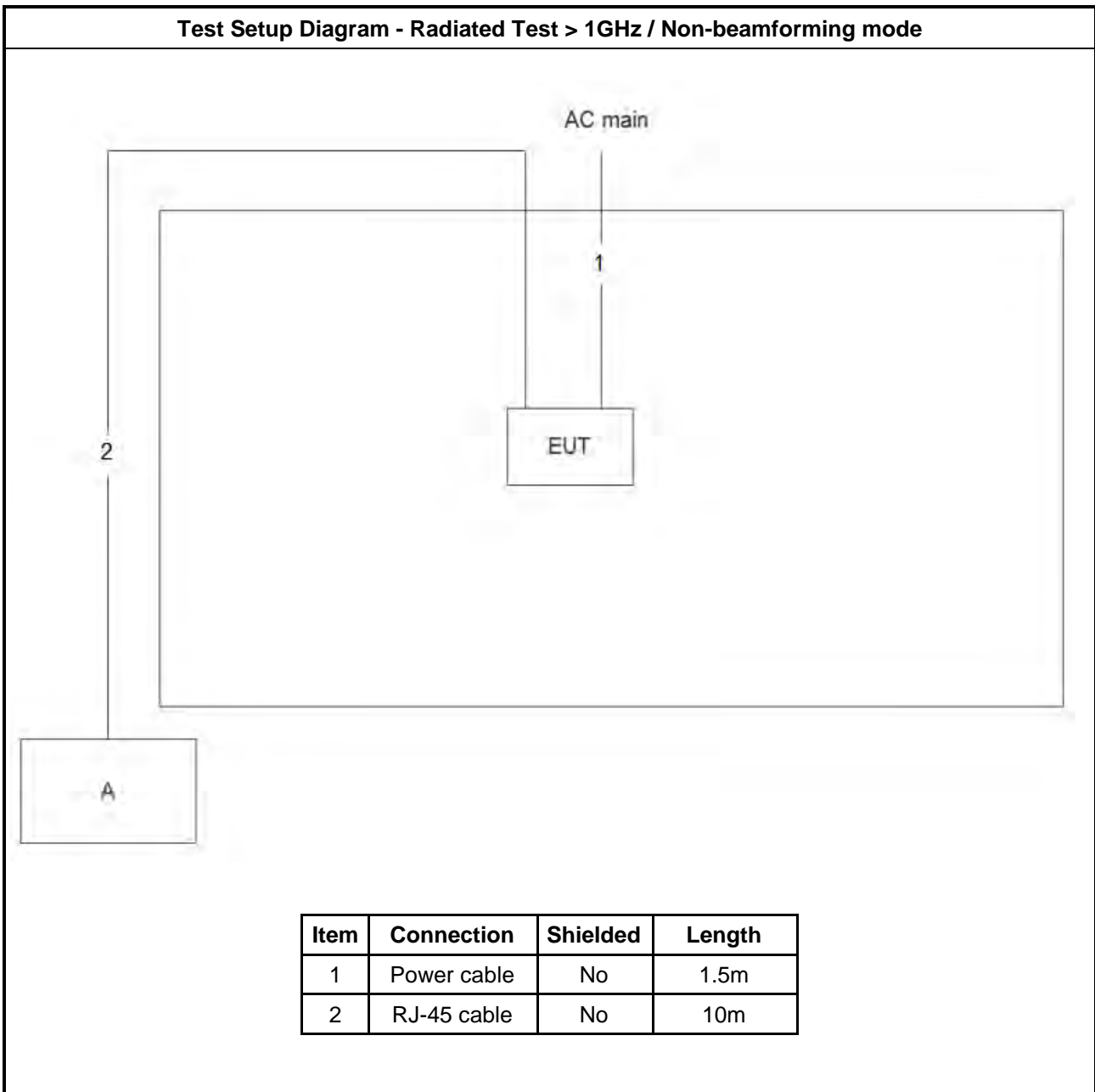


Test Setup Diagram - Radiated Test < 1GHz



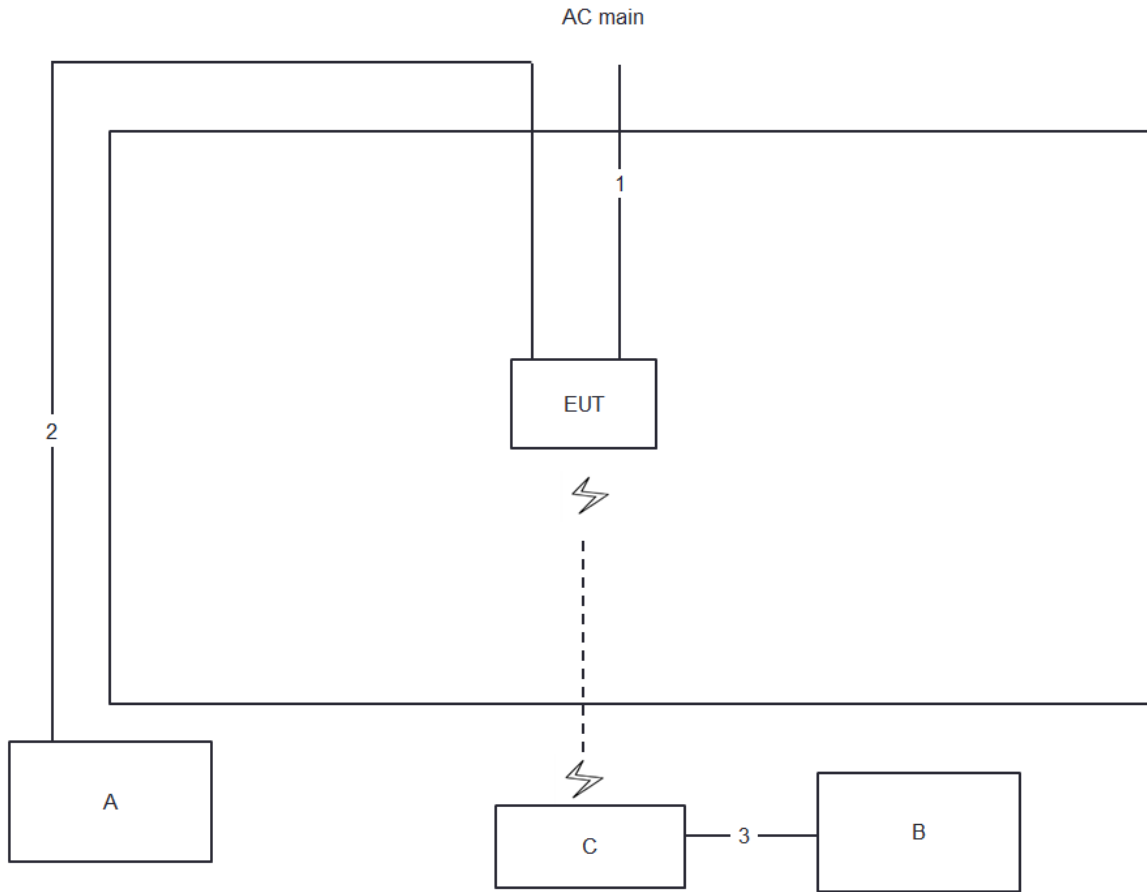
Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz / Non-beamforming mode



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

Test Setup Diagram - Radiated Test > 1GHz / Beamforming mode



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

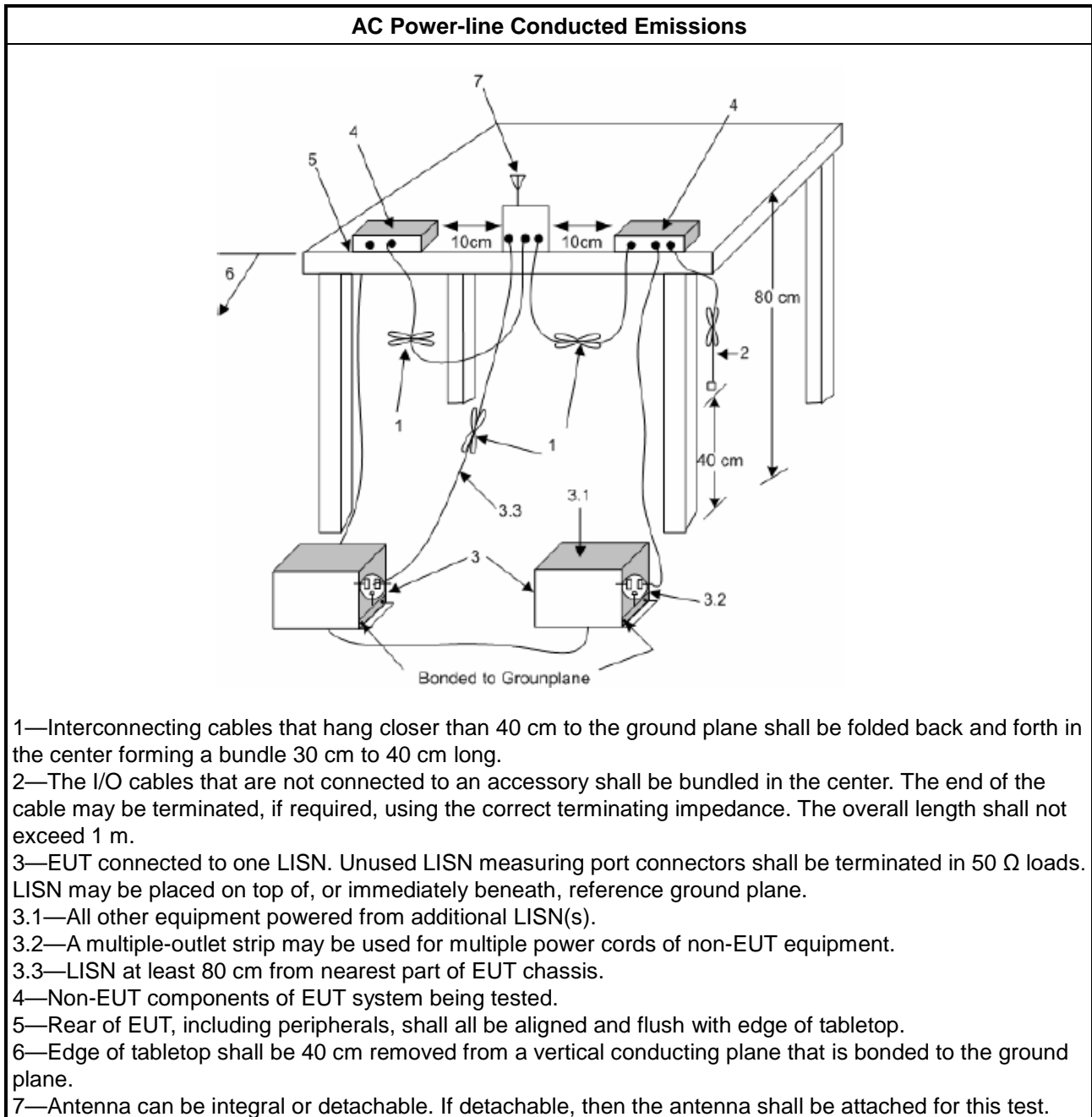
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.
LE-LAN Devices	
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

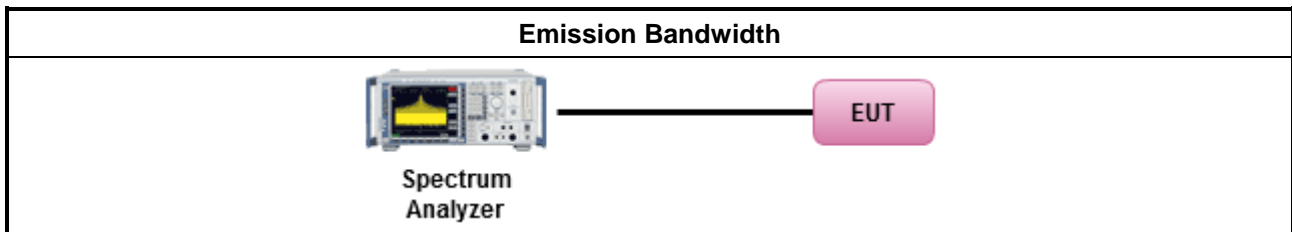
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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 $\leq 125mW$ [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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	For the 5.725-5.85 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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

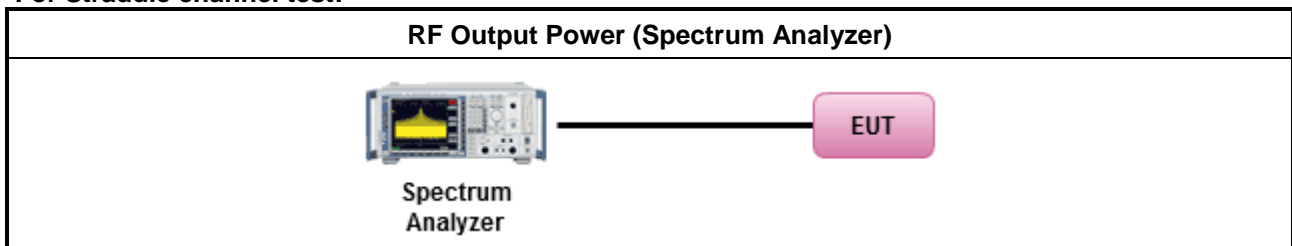
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

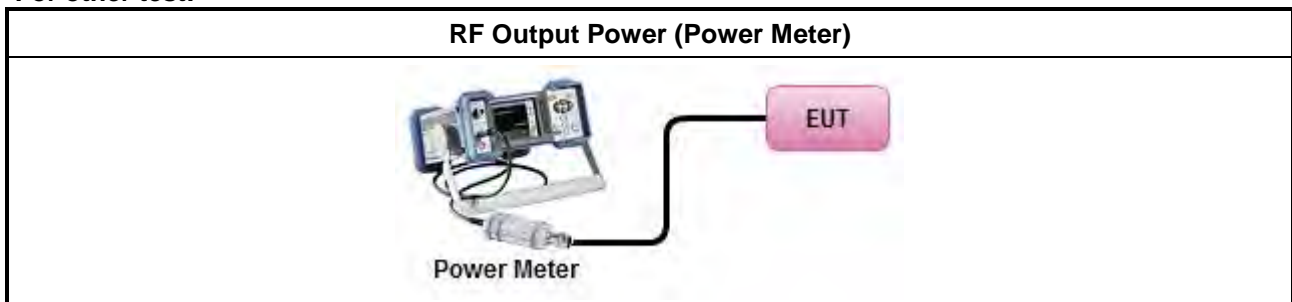
Test Method	
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
Average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup

For Straddle channel test:



For other test:



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	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ 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 $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	<ul style="list-style-type: none"> ▪ 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 $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 ($\theta-8$) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 ($\theta-40$) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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.
<p>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.</p>	

3.4.2 Measuring Instruments

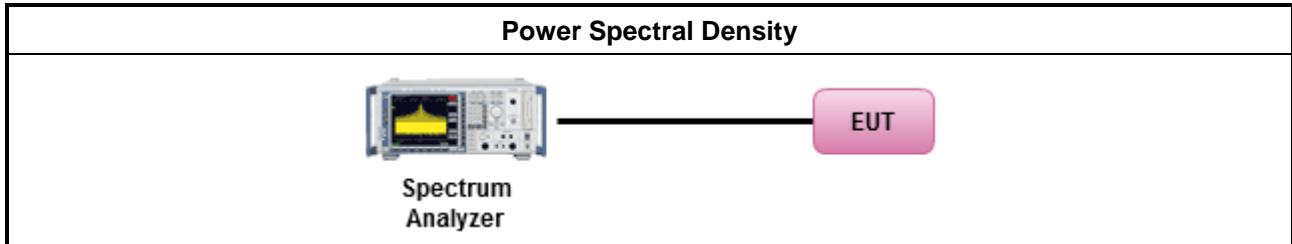
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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: 	
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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,
<input type="checkbox"/>	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.
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ 	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter 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
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 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).

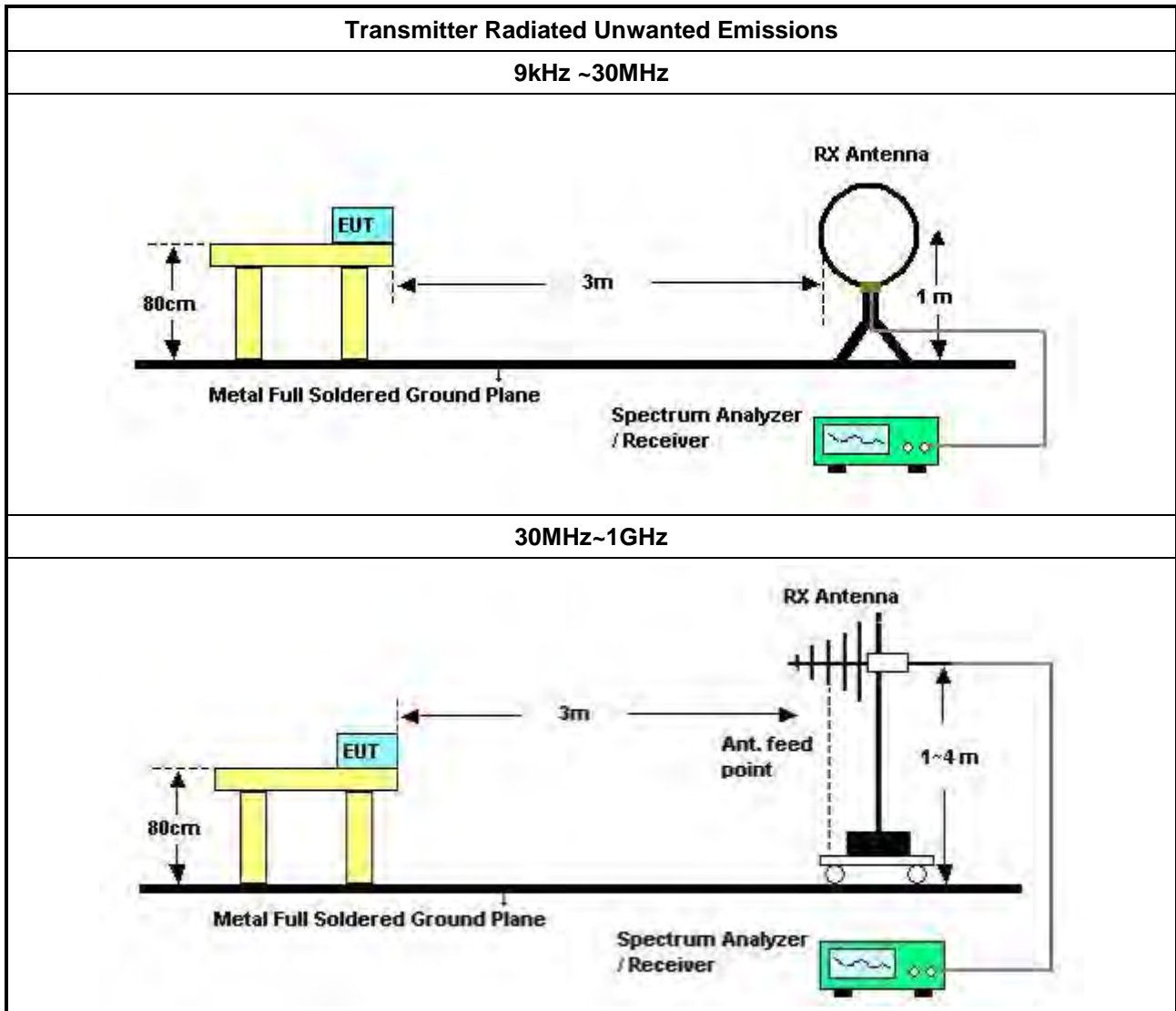
3.5.2 Measuring Instruments

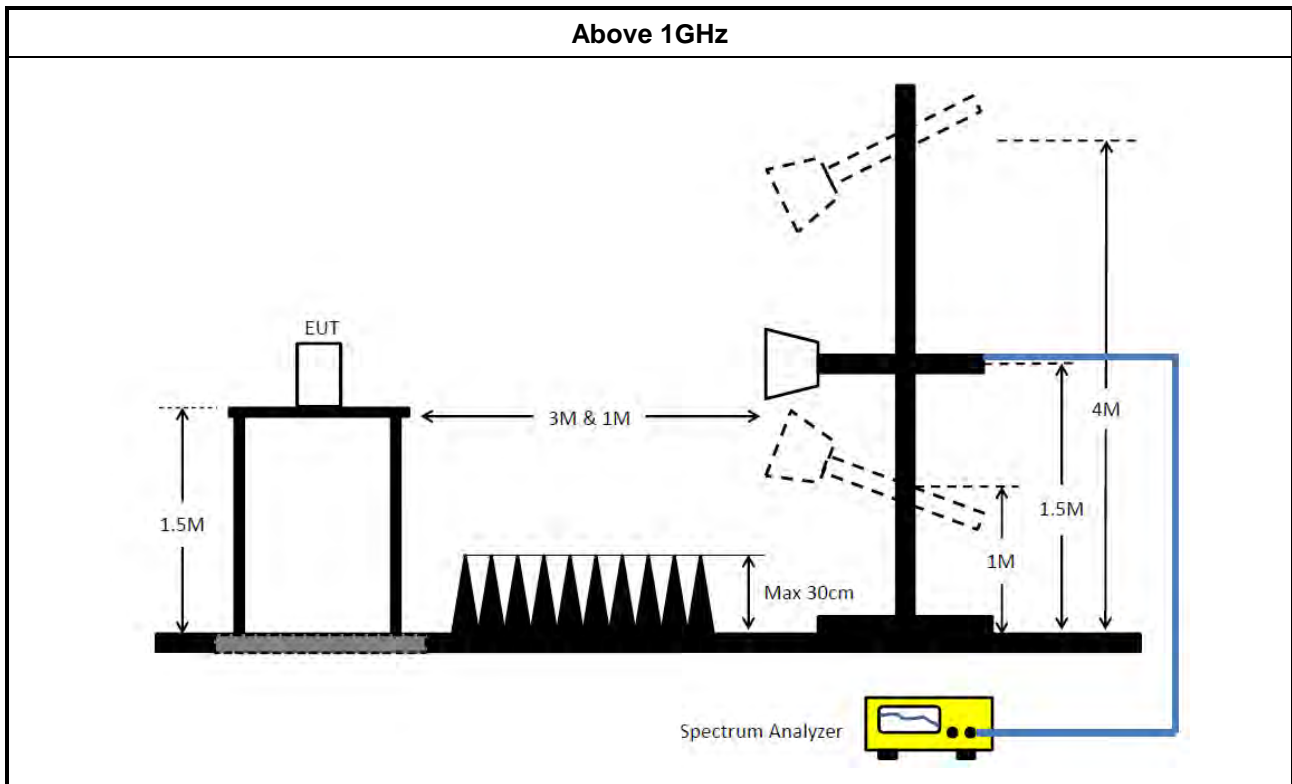
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method																	
	<ul style="list-style-type: none"> ▪ 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). 																
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 																
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 5%;"></td> <td> <input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW). </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit. </td> </tr> </table> </td> </tr> </table> 		<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. 		<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 5%;"></td> <td> <input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW). </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit. </td> </tr> </table> 		<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).		<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).		<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.		<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.		<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.		<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. 																
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 5%;"></td> <td> <input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW). </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. </td> </tr> <tr> <td></td> <td> <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit. </td> </tr> <tr> <td></td> <td> <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit. </td> </tr> </table> 		<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).		<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).		<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.		<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.		<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.		<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.				
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).																
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).																
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	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.																
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.																
	<ul style="list-style-type: none"> ▪ For radiated measurement. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. </td> </tr> </table> 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. 		<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 										
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 																
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. 																
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 																
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 																
	<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported. 																

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: $\text{Antenna factor (AF)} + \text{Cable loss (CL)} + \text{Read level (Raw)} - \text{Preamp factor (PA)} (\text{if applicable}) = \text{Level}$.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz~100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH06-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH06-CB	30 MHz ~ 1 GHz	Aug. 04, 2022	Aug. 03, 2023	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Jul. 31, 2022	Jul. 30, 2023	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	Nov. 04, 2022	Nov. 03, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH06-CB)
RF Cable-low	Woken	RG402	Low Cable-24+68	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-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. 27, 2019	Jun. 26, 2020	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-04	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-04+23	30MHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Oct. 30, 2018	Oct. 29, 2019	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

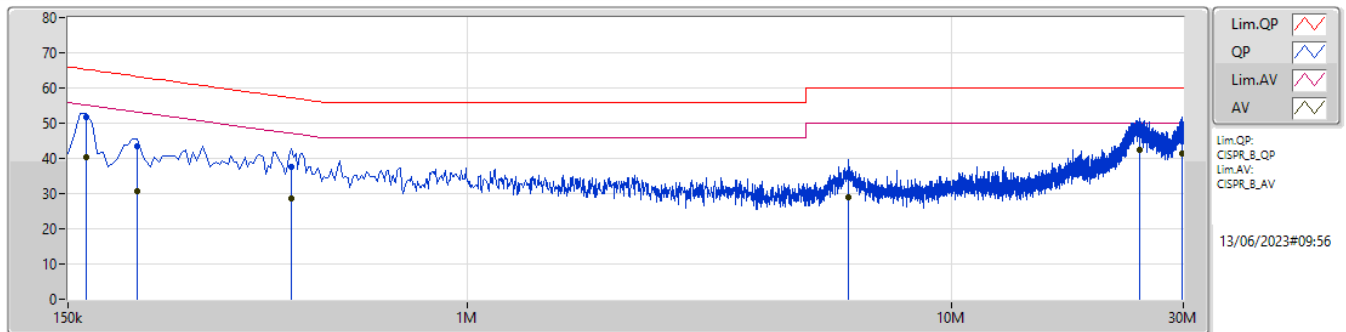
N.C.R. means Non-Calibration required.



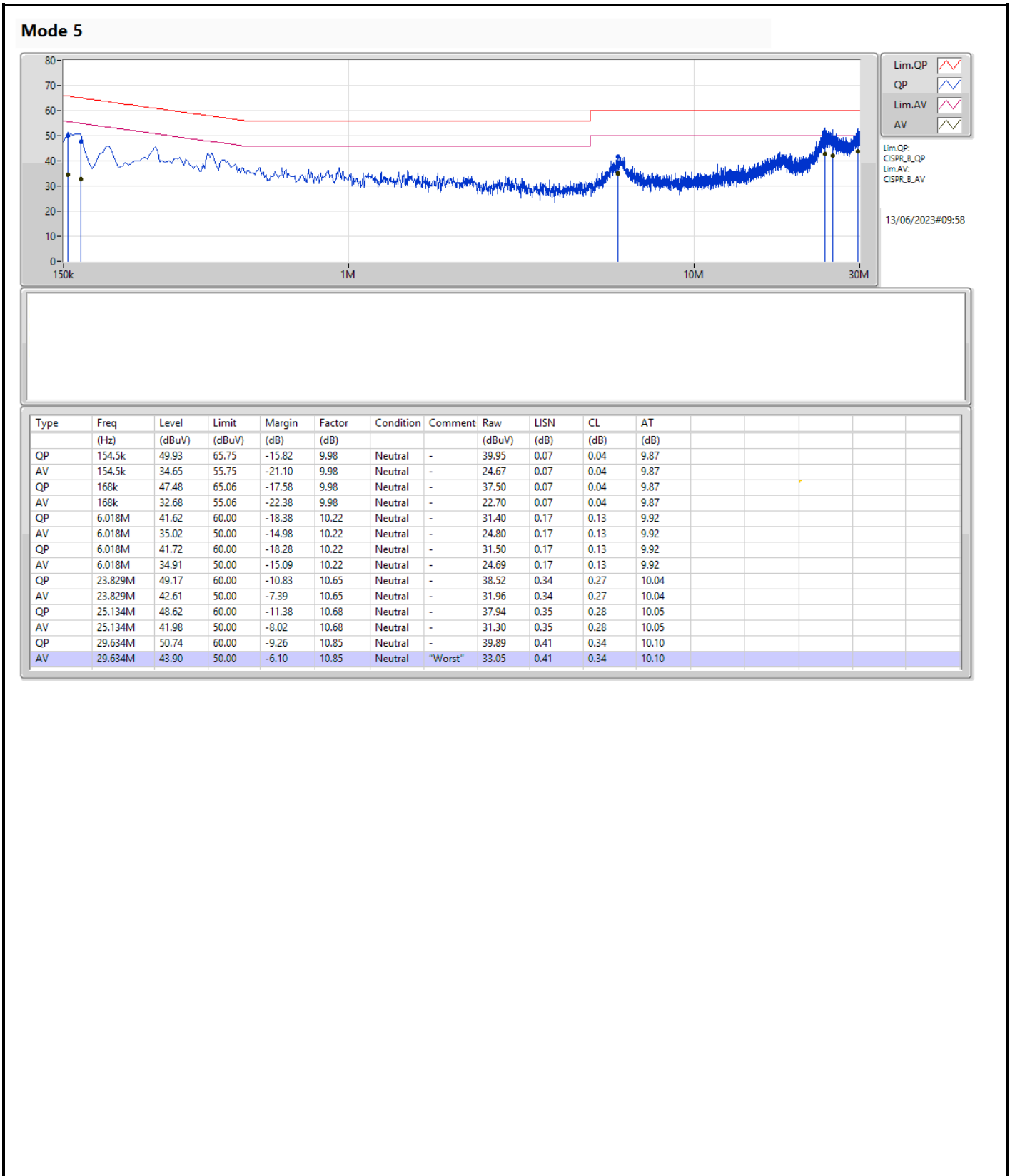
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 5	Pass	AV	29.634M	43.90	50.00	-6.10	Neutral

Mode 5



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	163.5k	51.64	65.27	-13.63	10.00	Line	-	41.64	0.09	0.04	9.87
AV	163.5k	40.22	55.27	-15.05	10.00	Line	-	30.22	0.09	0.04	9.87
QP	208.5k	43.46	63.27	-19.81	9.98	Line	-	33.48	0.08	0.04	9.86
AV	208.5k	30.55	53.27	-22.72	9.98	Line	-	20.57	0.08	0.04	9.86
QP	433.5k	37.48	57.19	-19.71	10.05	Line	-	27.43	0.09	0.06	9.90
AV	433.5k	28.79	47.19	-18.40	10.05	Line	-	18.74	0.09	0.06	9.90
QP	6.126M	35.79	60.00	-24.21	10.26	Line	-	25.53	0.21	0.13	9.92
AV	6.126M	28.99	50.00	-21.01	10.26	Line	-	18.73	0.21	0.13	9.92
QP	24.401M	48.31	60.00	-11.69	10.63	Line	-	37.68	0.31	0.27	10.05
AV	24.401M	42.35	50.00	-7.65	10.63	Line	"Worst"	31.72	0.31	0.27	10.05
QP	29.882M	48.29	60.00	-11.71	10.77	Line	-	37.52	0.33	0.34	10.10
AV	29.882M	41.39	50.00	-8.61	10.77	Line	-	30.62	0.33	0.34	10.10



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	20.64M	16.402M	16M4D1D	20.49M	16.372M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.08M	18.921M	18M9D1D	21.75M	18.861M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.58M	37.721M	37M7D1D	41.28M	37.661M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.2M	76.882M	76M9D1D	82.2M	76.882M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	20.76M	16.432M	16M4D1D	15.375M	13.238M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.14M	18.951M	19M0D1D	17.055M	14.498M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.34M	37.781M	37M8D1D	36.12M	33.758M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.68M	77.121M	77M1D1D	76.35M	73.163M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	3.1M	3.718M	3M72D1D	3.1M	3.718M
802.11ax HEW20_Nss1,(MCS0)_1TX	4.4M	4.598M	4M60D1D	4.4M	4.598M
802.11ax HEW40_Nss1,(MCS0)_1TX	3.98M	8.916M	8M92D1D	3.98M	8.916M
802.11ax HEW80_Nss1,(MCS0)_1TX	3.9M	21.929M	21M9D1D	3.9M	21.929M

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	-	-	-	-
5260MHz	Pass	Inf	20.58M	16.372M
5300MHz	Pass	Inf	20.49M	16.402M
5320MHz	Pass	Inf	20.64M	16.372M
5500MHz	Pass	Inf	20.61M	16.402M
5580MHz	Pass	Inf	20.55M	16.402M
5700MHz	Pass	Inf	20.76M	16.432M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.375M	13.238M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.718M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5260MHz	Pass	Inf	21.9M	18.891M
5300MHz	Pass	Inf	22.08M	18.861M
5320MHz	Pass	Inf	21.75M	18.921M
5500MHz	Pass	Inf	21.39M	18.921M
5580MHz	Pass	Inf	22.14M	18.951M
5700MHz	Pass	Inf	21.66M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.055M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.4M	4.598M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5270MHz	Pass	Inf	41.28M	37.721M
5310MHz	Pass	Inf	41.58M	37.661M
5510MHz	Pass	Inf	40.98M	37.721M
5550MHz	Pass	Inf	41.34M	37.661M
5670MHz	Pass	Inf	41.16M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.12M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	8.916M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5290MHz	Pass	Inf	82.2M	76.882M
5530MHz	Pass	Inf	82.44M	77.121M
5610MHz	Pass	Inf	82.68M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.35M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	21.929M

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;

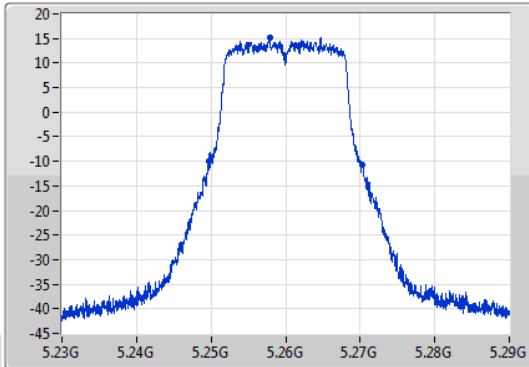
802.11a_Nss1,(6Mbps)_1TX

EBW

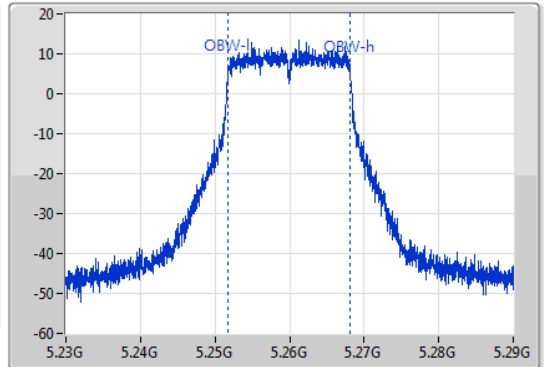
5260MHz

02/08/2019

CF
5.26GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak
Port1



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.24965G	5.27023G	16.372M	5.251754G	5.268126G	Inf	1

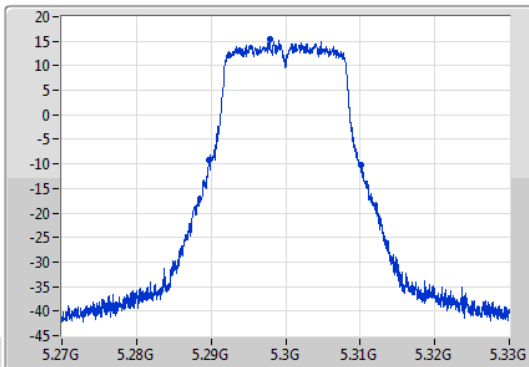
802.11a_Nss1,(6Mbps)_1TX

EBW

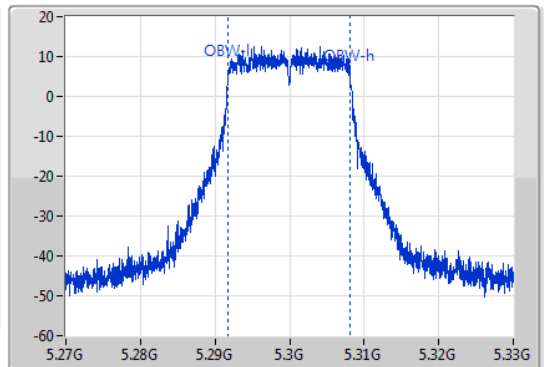
5300MHz

02/08/2019

CF
5.3GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak
Port1



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



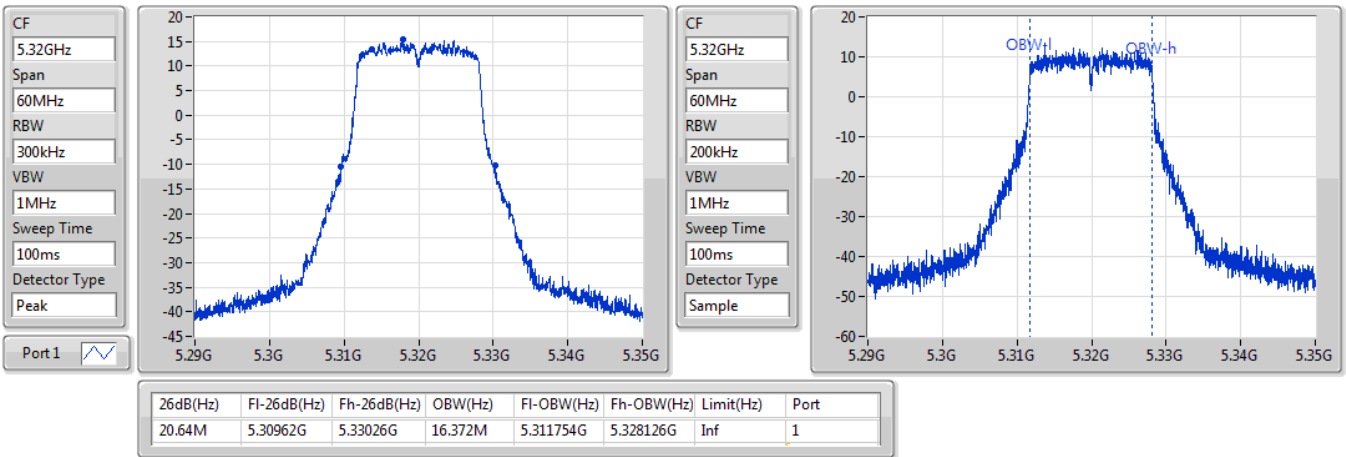
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.49M	5.28968G	5.31017G	16.402M	5.291754G	5.308156G	Inf	1

802.11a_Nss1,(6Mbps)_1TX

EBW

5320MHz

02/08/2019

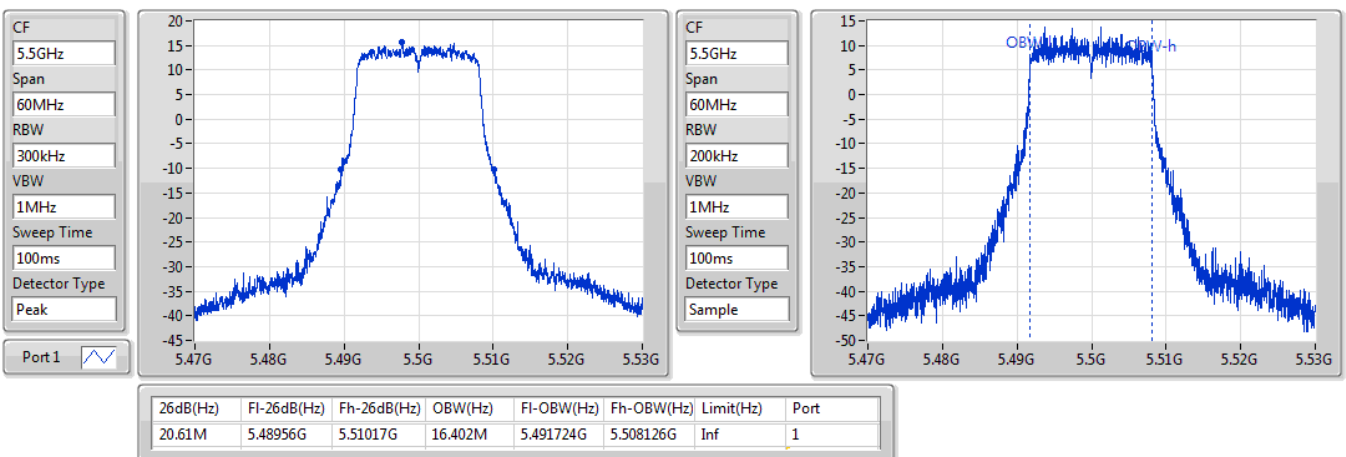


802.11a_Nss1,(6Mbps)_1TX

EBW

5500MHz

02/08/2019

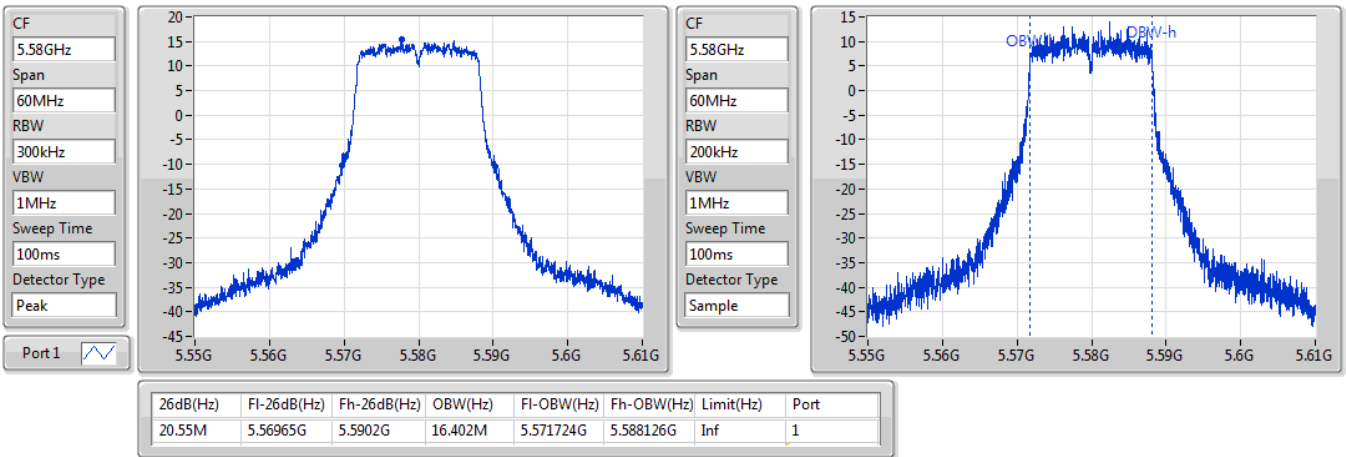


802.11a_Nss1,(6Mbps)_1TX

EBW

5580MHz

02/08/2019

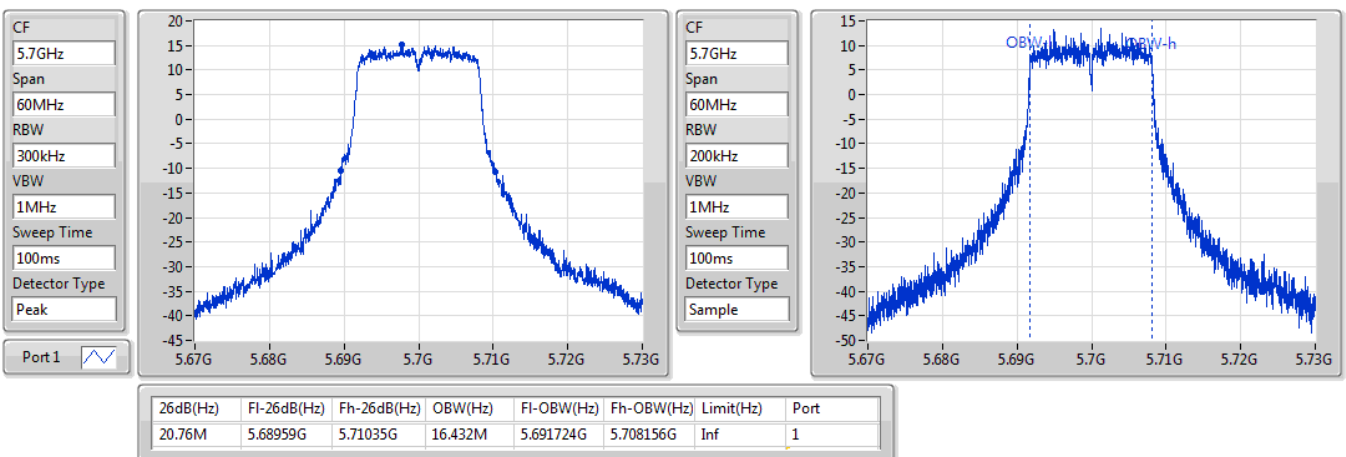


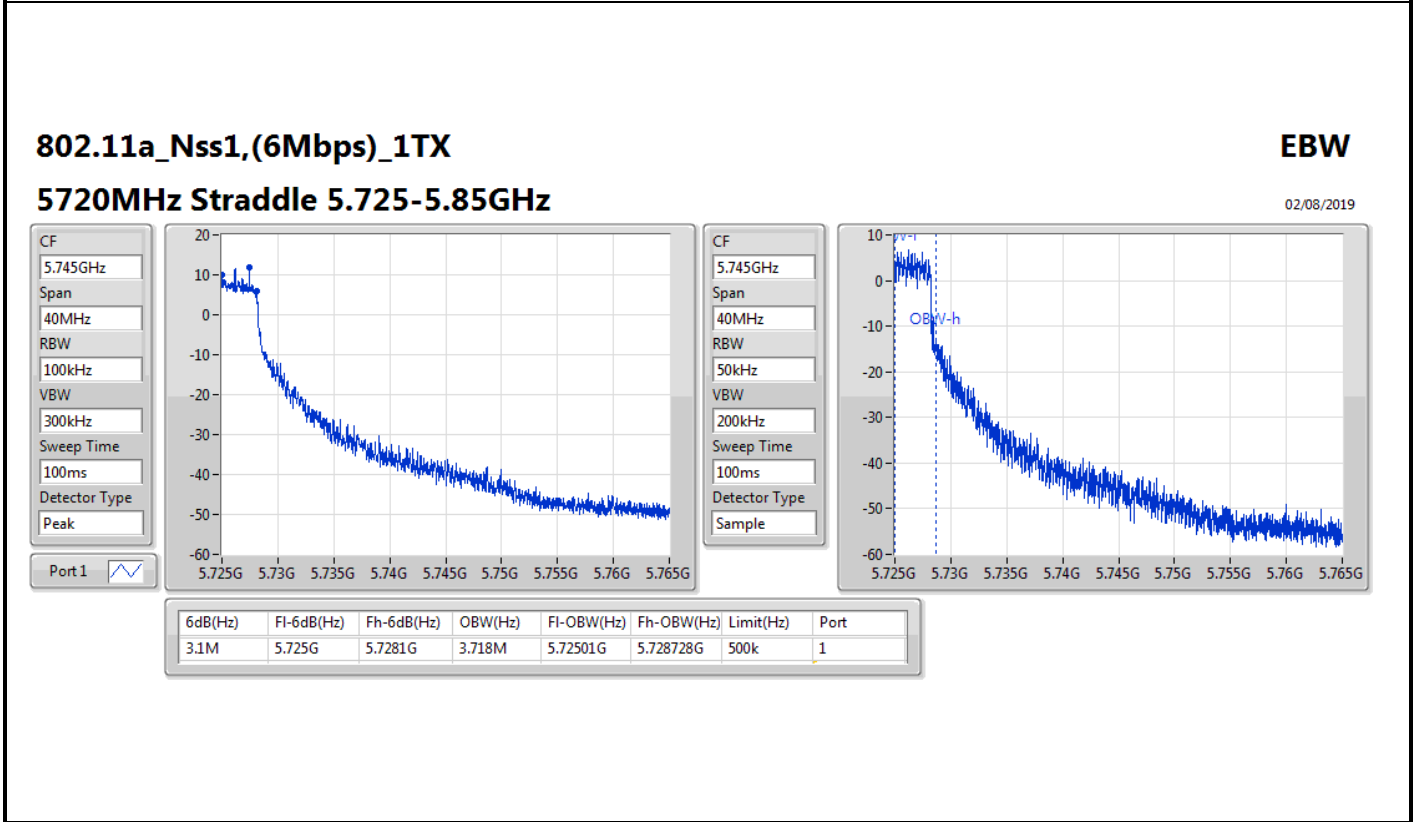
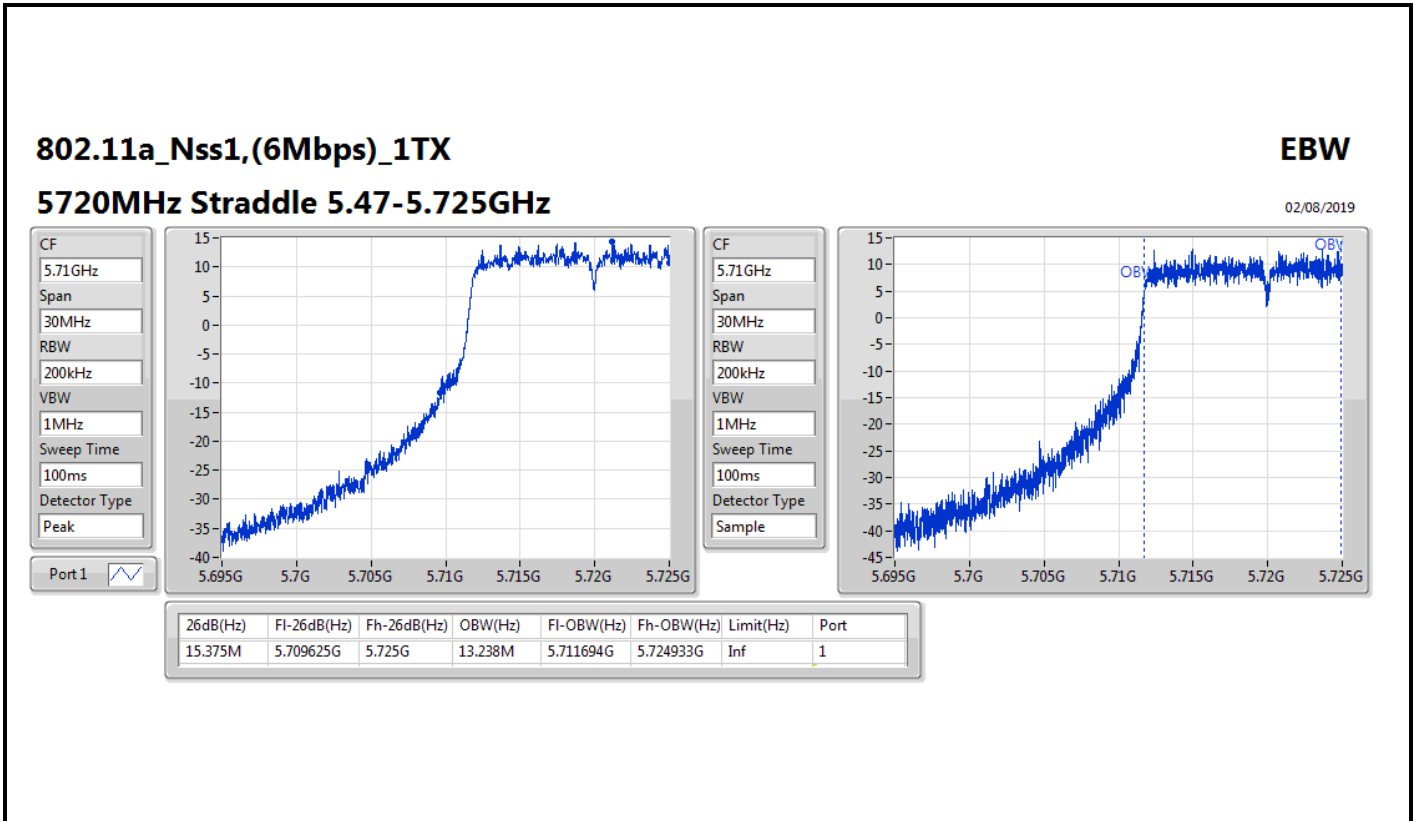
802.11a_Nss1,(6Mbps)_1TX

EBW

5700MHz

02/08/2019



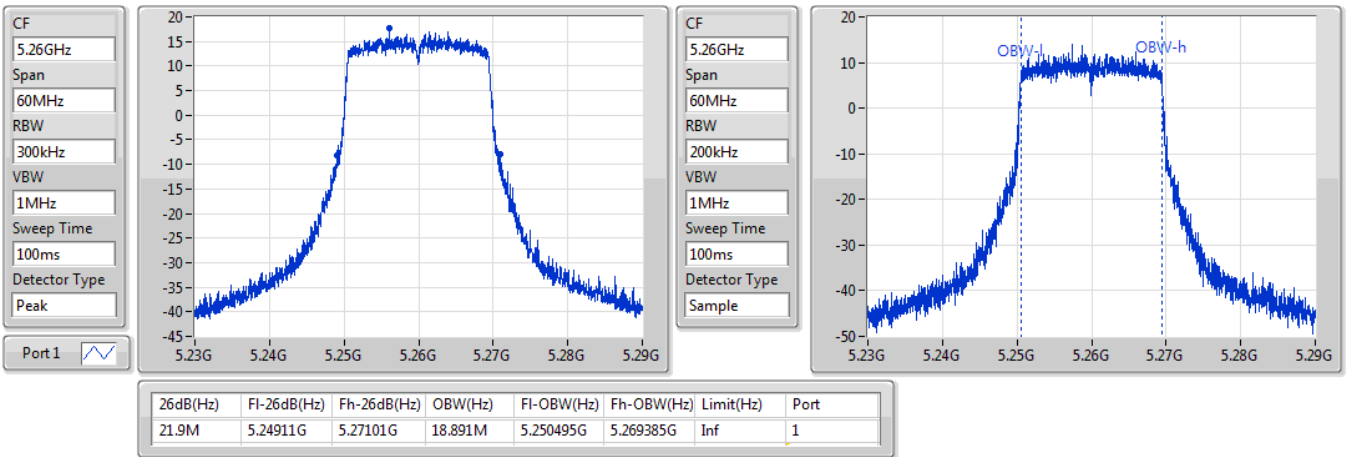


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5260MHz

02/08/2019

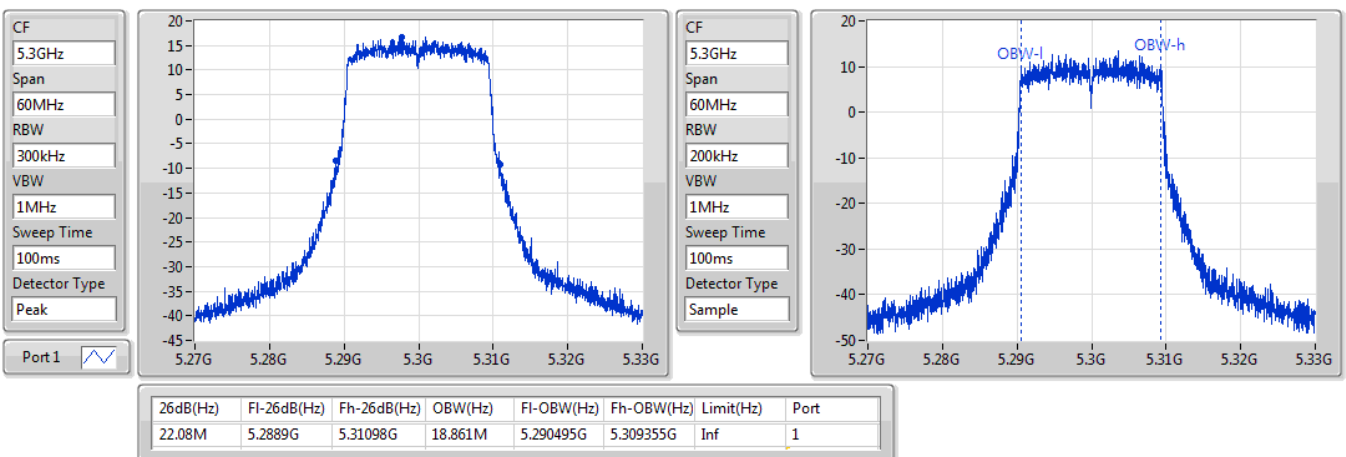


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5300MHz

02/08/2019

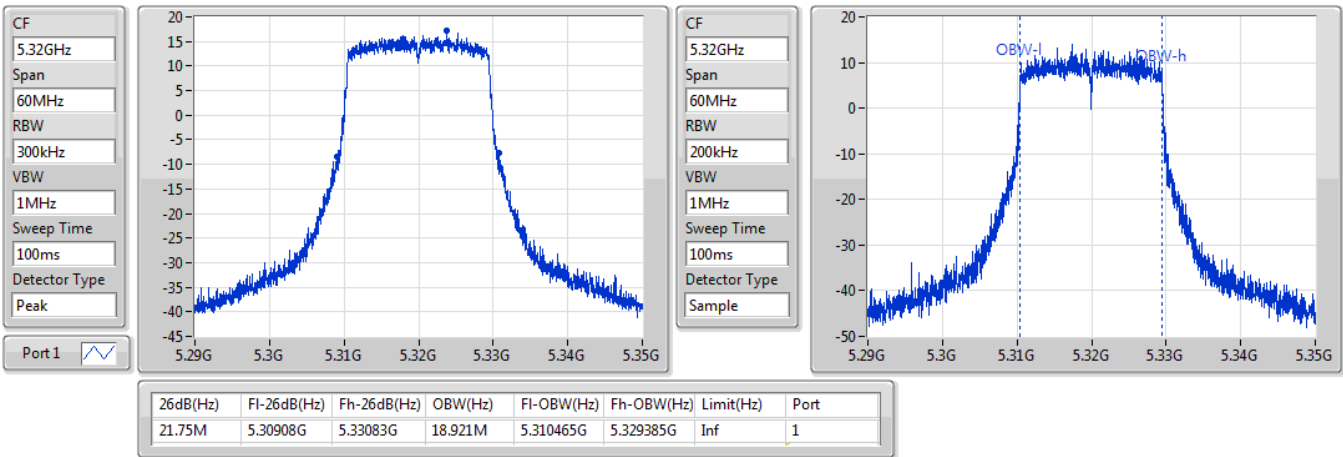


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5320MHz

02/08/2019

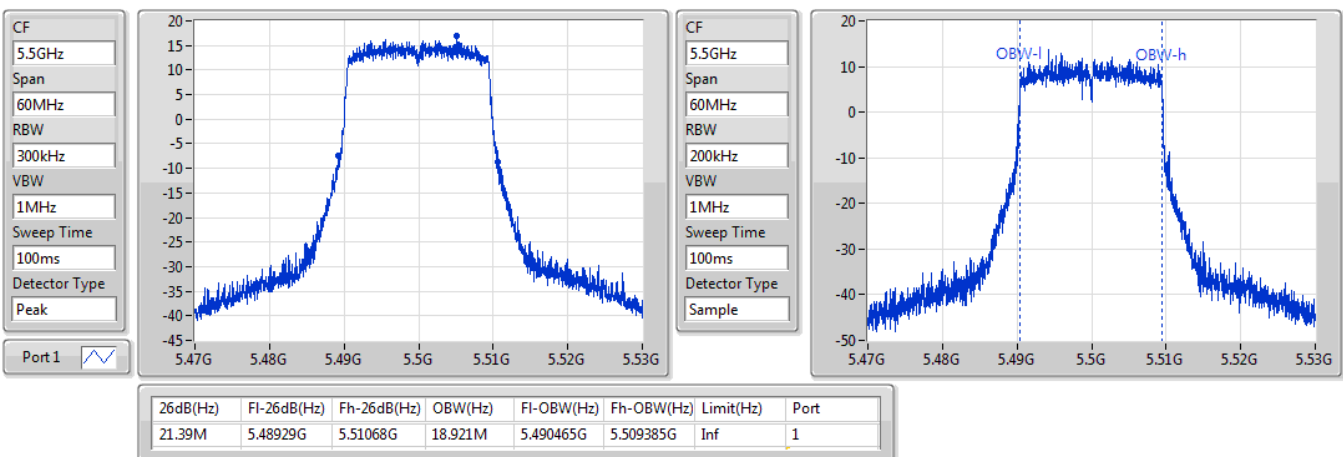


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5500MHz

02/08/2019

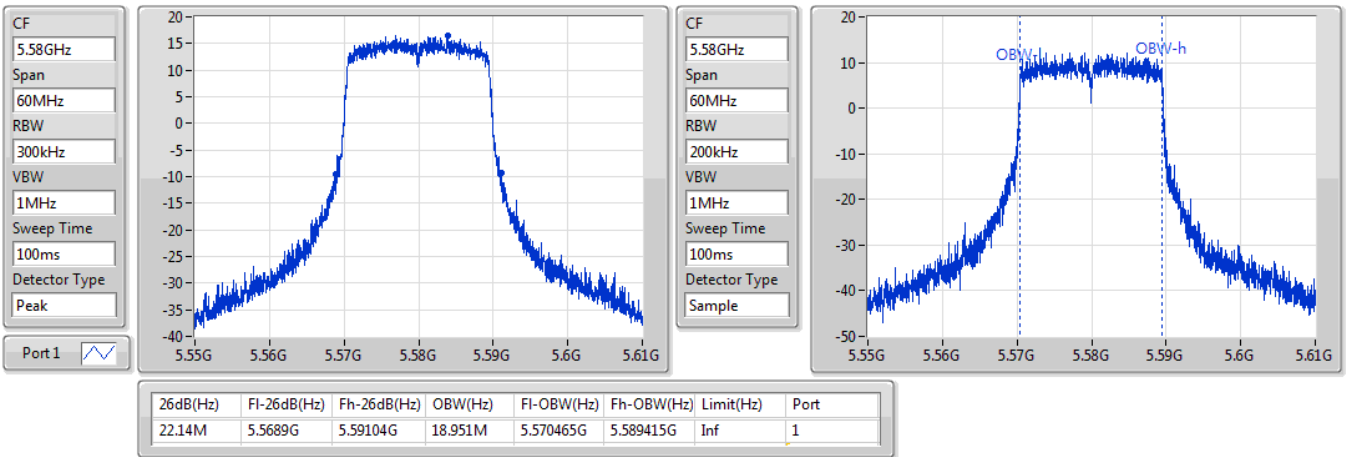


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5580MHz

02/08/2019

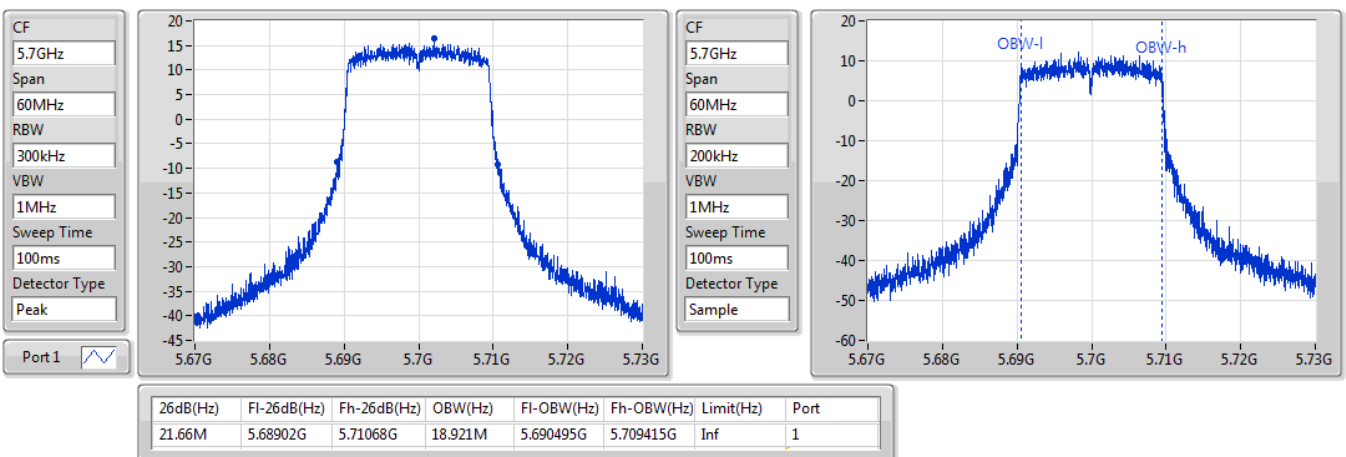


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5700MHz

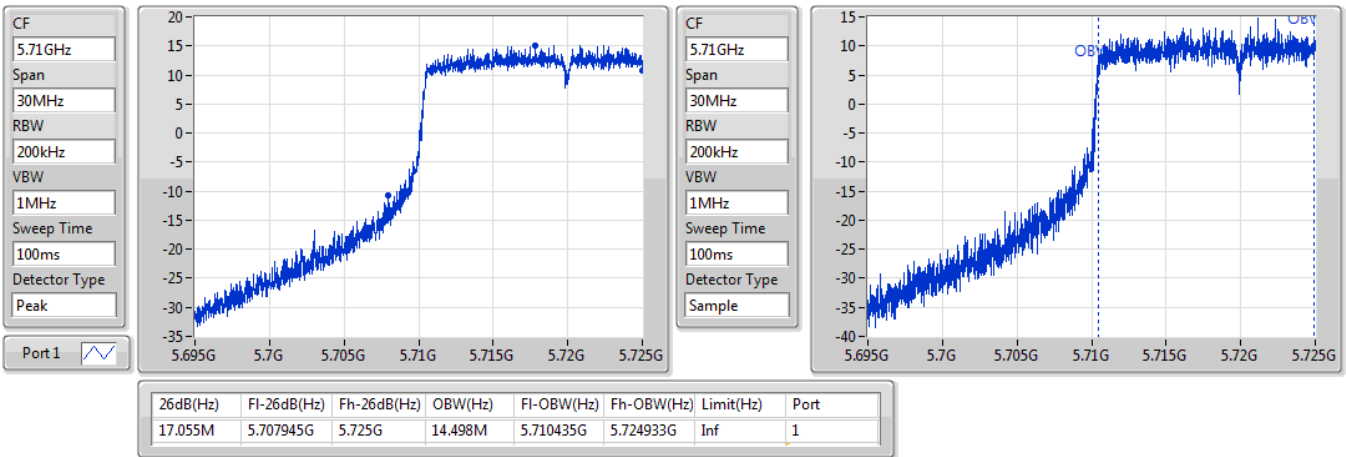
02/08/2019



802.11ax HEW20_Nss1,(MCS0)_1TX
5720MHz Straddle 5.47-5.725GHz

EBW

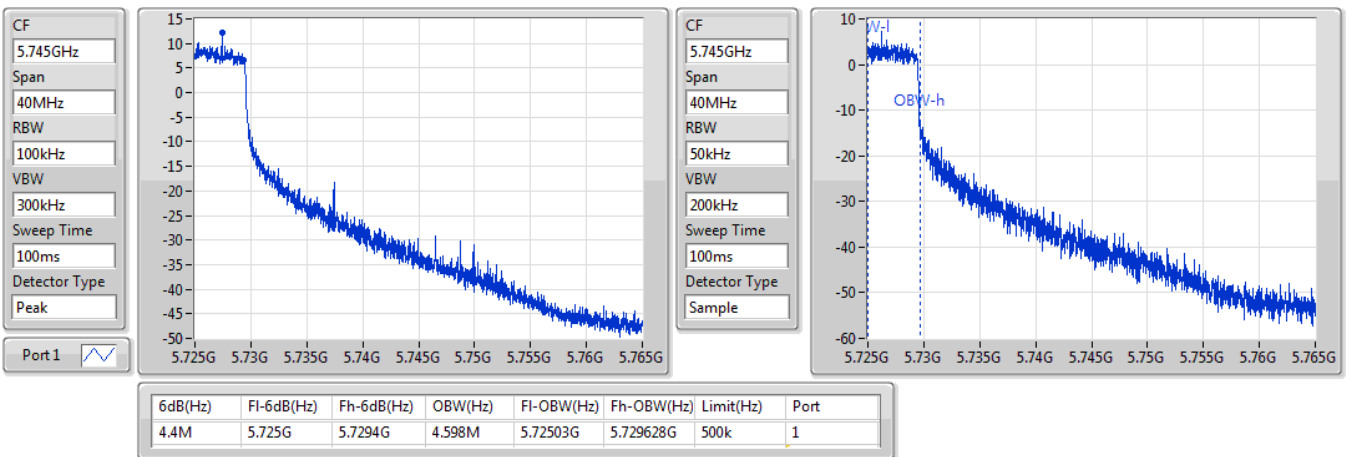
02/08/2019



802.11ax HEW20_Nss1,(MCS0)_1TX
5720MHz Straddle 5.725-5.85GHz

EBW

02/08/2019

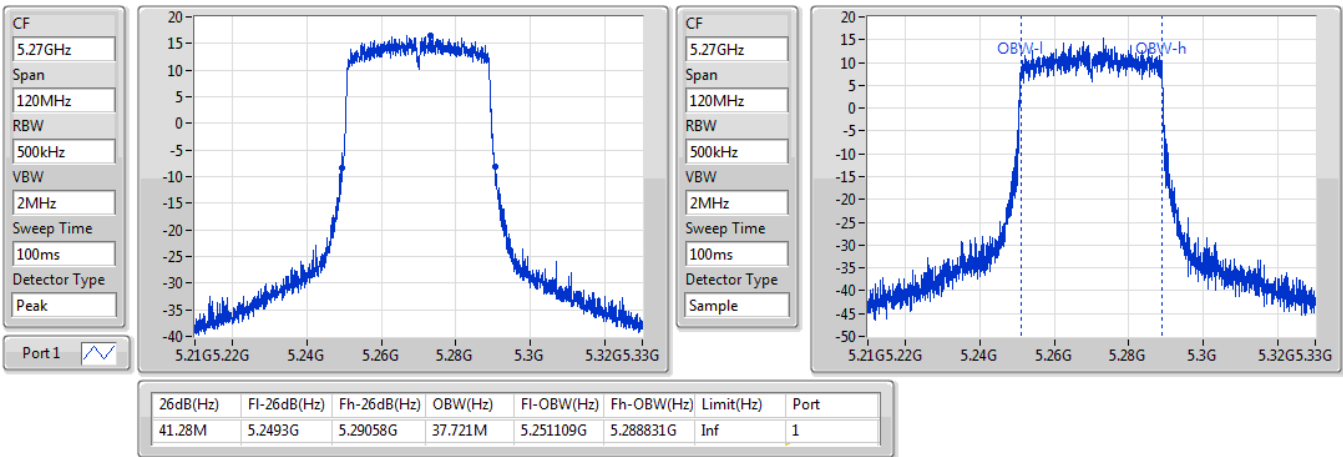


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5270MHz

02/08/2019

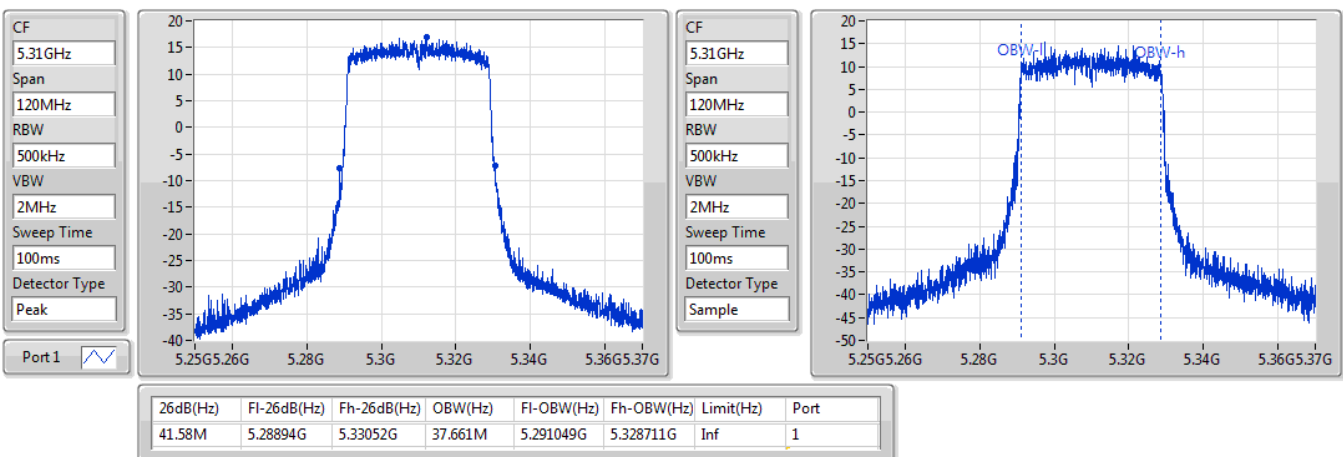


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5310MHz

02/08/2019

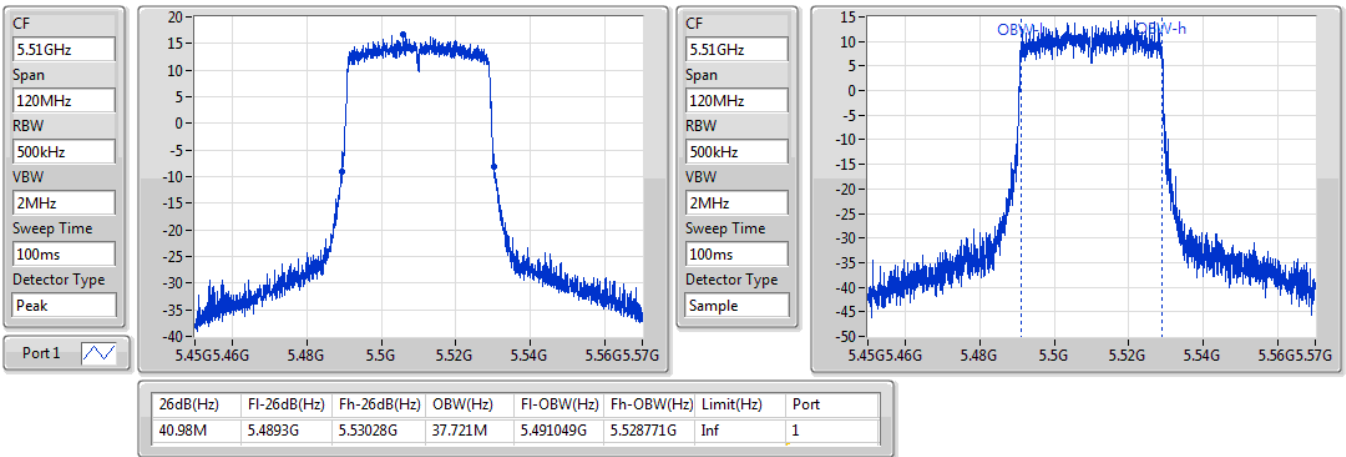


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5510MHz

02/08/2019

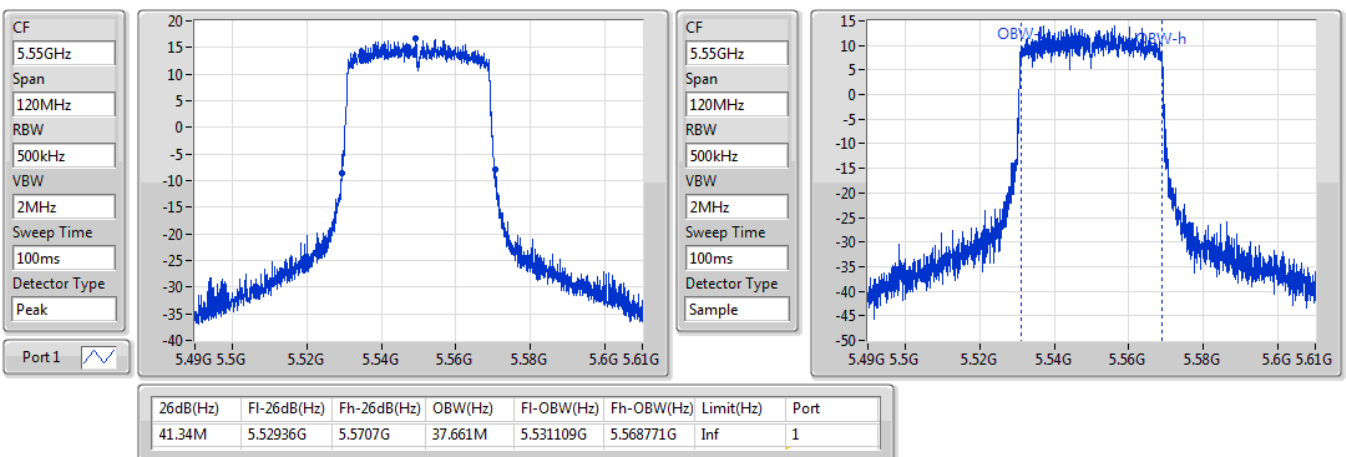


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5550MHz

02/08/2019



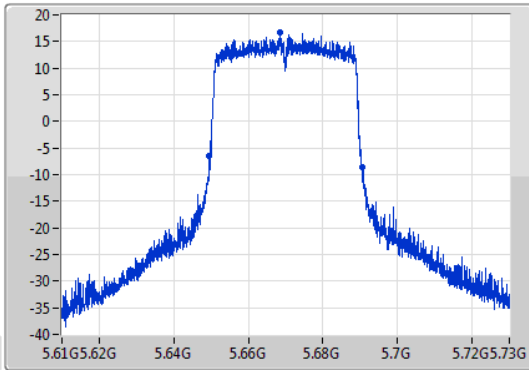
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

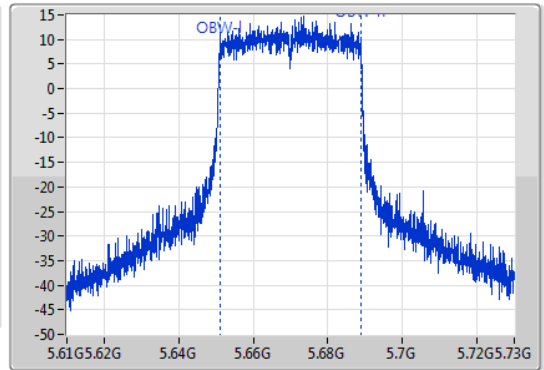
5670MHz

02/08/2019

CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.16M	5.64936G	5.69052G	37.781M	5.651049G	5.688831G	Inf	1

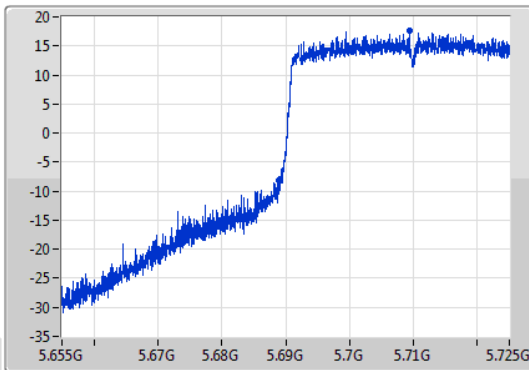
802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

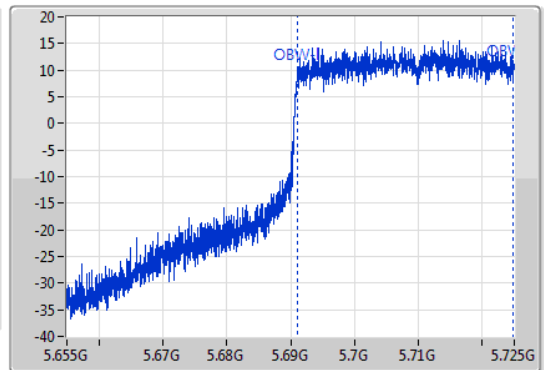
5710MHz Straddle 5.47-5.725GHz

02/08/2019

CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample

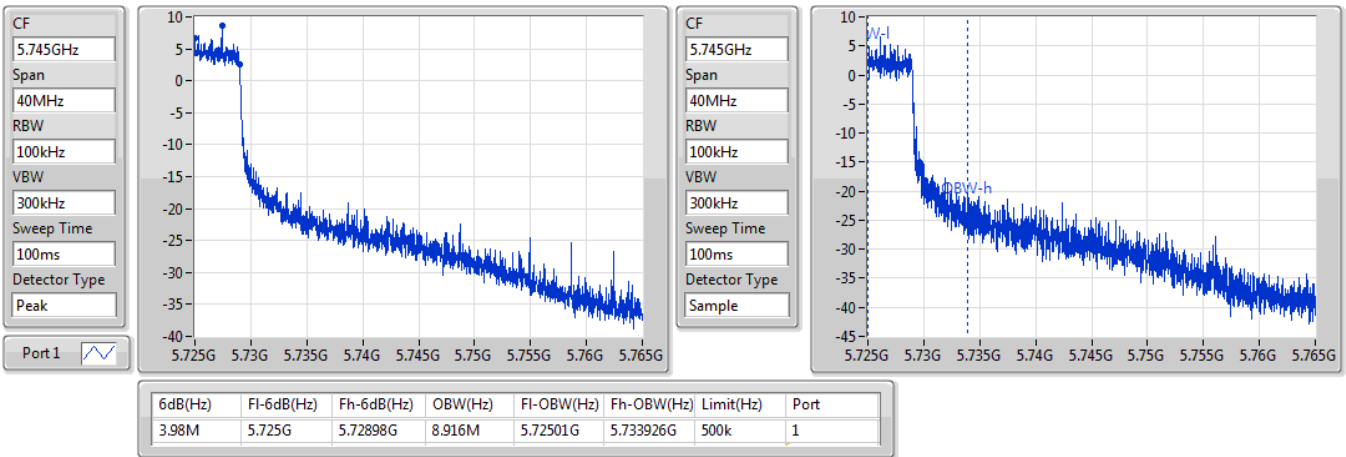


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.12M	5.68888G	5.725G	33.758M	5.691049G	5.724808G	Inf	1

802.11ax HEW40_Nss1,(MCS0)_1TX
5710MHz Straddle 5.725-5.85GHz

EBW

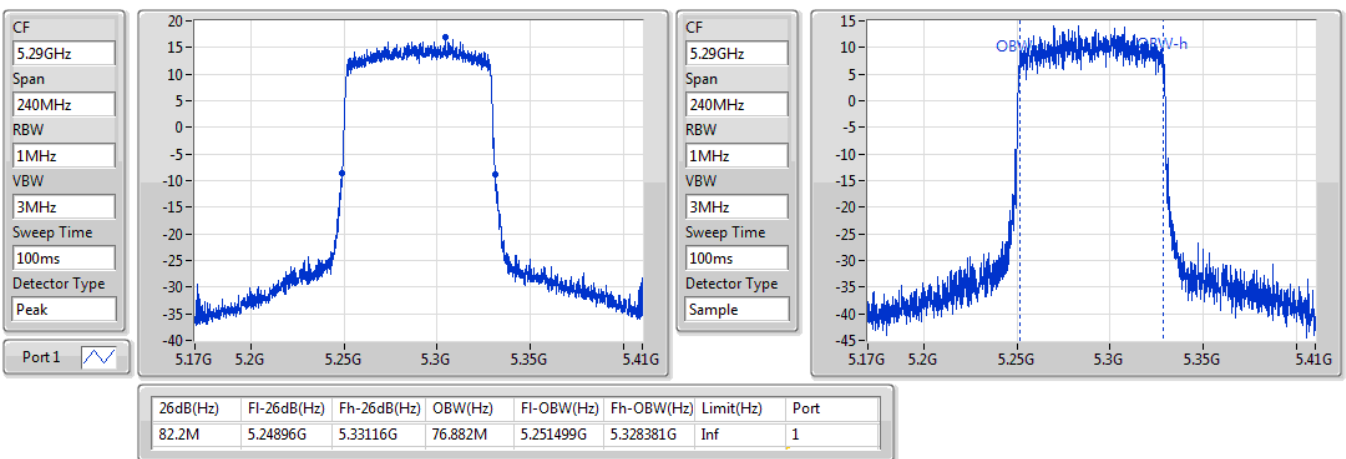
02/08/2019



802.11ax HEW80_Nss1,(MCS0)_1TX
5290MHz

EBW

02/08/2019

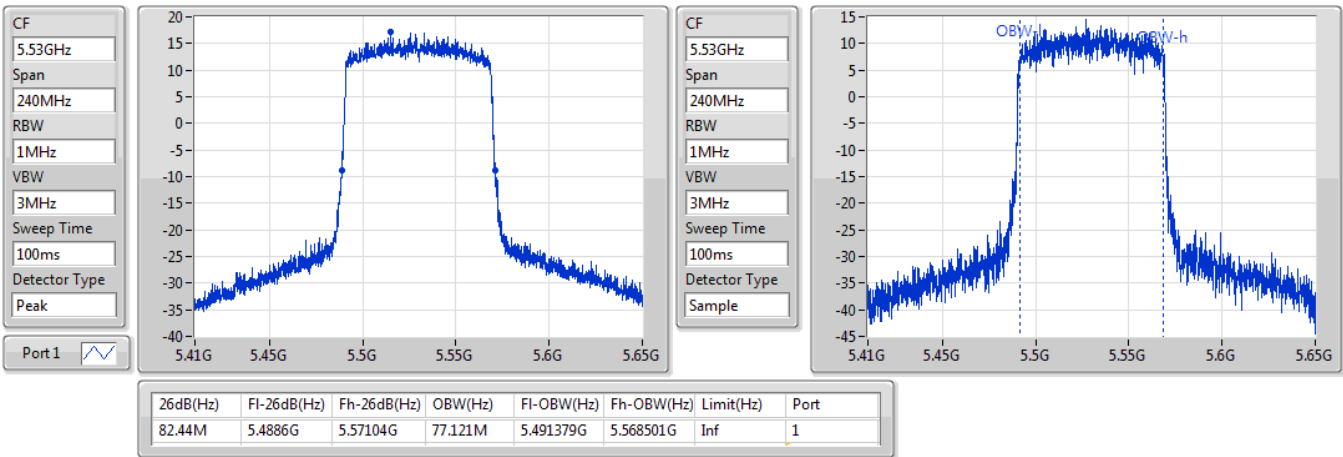


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5530MHz

02/08/2019

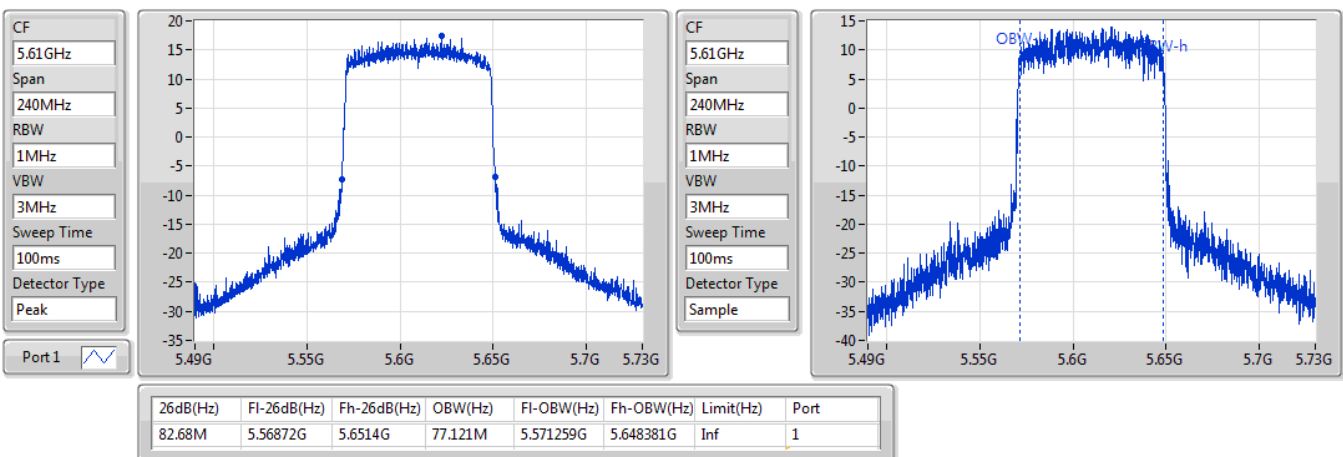


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5610MHz

02/08/2019

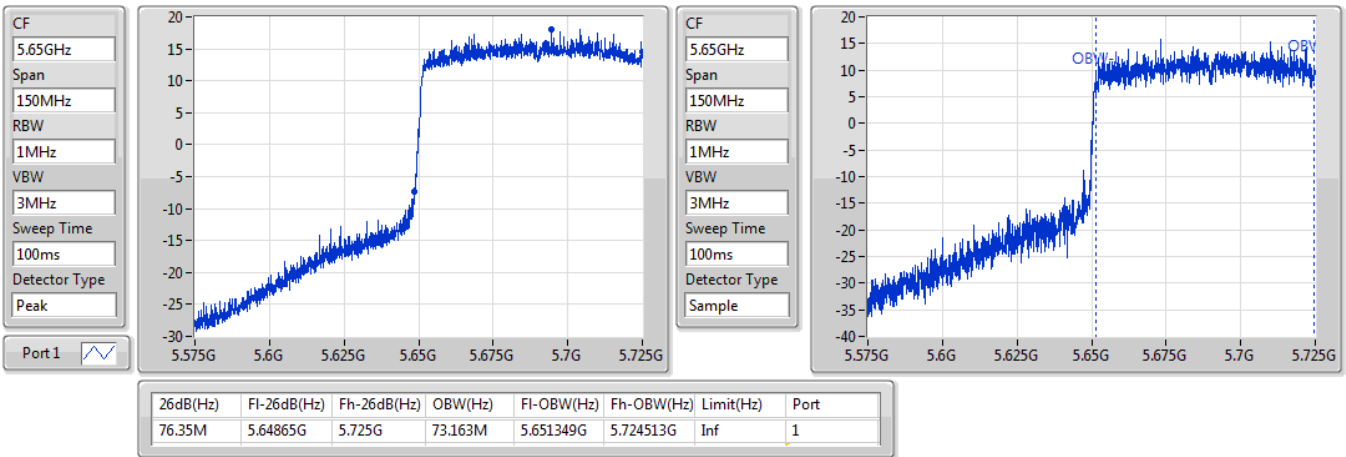


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.47-5.725GHz

02/08/2019

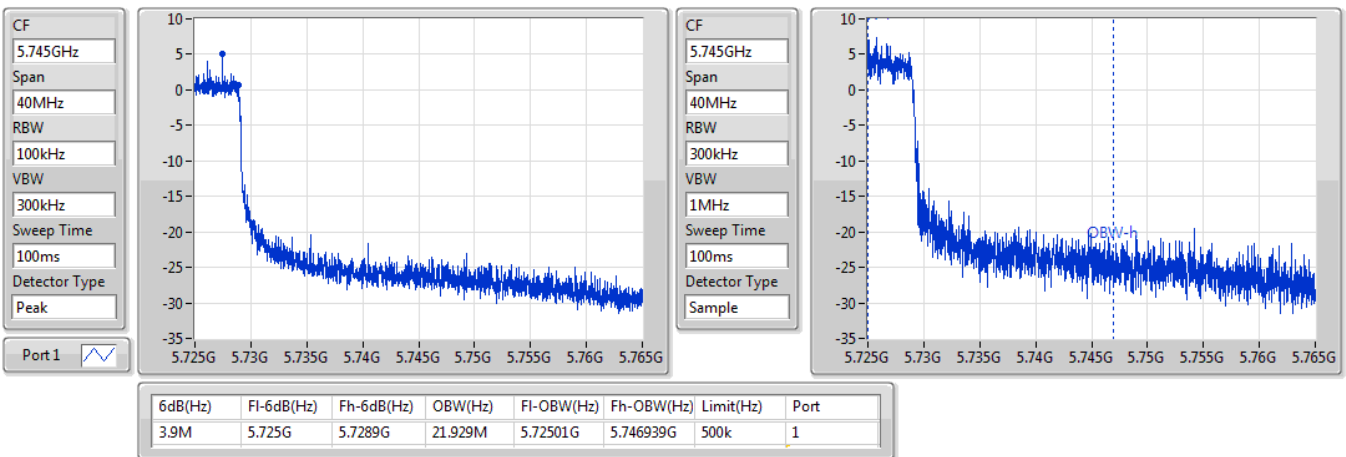


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.725-5.85GHz

02/08/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.76M	16.432M	16M4D1D	20.4M	16.372M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.87M	18.921M	18M9D1D	21.66M	18.861M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.16M	37.721M	37M7D1D	40.62M	37.661M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.44M	77.001M	77MOD1D	82.08M	76.882M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.76M	16.432M	16M4D1D	15.24M	13.223M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.99M	18.951M	19MOD1D	15.96M	14.468M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.46M	37.781M	37M8D1D	35.49M	33.758M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.8M	77.241M	77M2D1D	76.425M	72.939M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.08M	3.578M	3M58D1D	3.08M	3.558M
802.11ax HEW20_Nss1,(MCS0)_2TX	4.38M	4.498M	4M50D1D	4.12M	4.478M
802.11ax HEW40_Nss1,(MCS0)_2TX	3.9M	4.058M	4M06D1D	3.88M	4.038M
802.11ax HEW80_Nss1,(MCS0)_2TX	4.04M	4.138M	4M14D1D	3.9M	4.098M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	20.64M	16.372M	20.67M	16.432M
5300MHz	Pass	Inf	20.46M	16.372M	20.4M	16.402M
5320MHz	Pass	Inf	20.76M	16.402M	20.4M	16.402M
5500MHz	Pass	Inf	20.55M	16.372M	20.46M	16.402M
5580MHz	Pass	Inf	20.55M	16.402M	20.58M	16.402M
5700MHz	Pass	Inf	20.64M	16.402M	20.76M	16.432M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.315M	13.223M	15.24M	13.268M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.558M	3.08M	3.578M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.84M	18.861M	21.72M	18.891M
5300MHz	Pass	Inf	21.66M	18.921M	21.78M	18.921M
5320MHz	Pass	Inf	21.87M	18.921M	21.75M	18.921M
5500MHz	Pass	Inf	21.96M	18.891M	21.9M	18.891M
5580MHz	Pass	Inf	21.51M	18.921M	21.75M	18.921M
5700MHz	Pass	Inf	21.99M	18.951M	21.75M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.96M	14.498M	16.05M	14.468M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.38M	4.478M	4.12M	4.498M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40.68M	37.721M	40.62M	37.661M
5310MHz	Pass	Inf	41.16M	37.661M	40.92M	37.721M
5510MHz	Pass	Inf	41.22M	37.721M	41.04M	37.721M
5550MHz	Pass	Inf	41.22M	37.721M	41.46M	37.661M
5670MHz	Pass	Inf	40.74M	37.721M	41.34M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.49M	33.758M	35.595M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	4.038M	3.9M	4.058M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	82.44M	77.001M	82.08M	76.882M
5530MHz	Pass	Inf	82.8M	77.001M	82.56M	77.241M
5610MHz	Pass	Inf	82.44M	77.121M	82.32M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.425M	73.313M	76.8M	72.939M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	4.098M	4.04M	4.138M

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

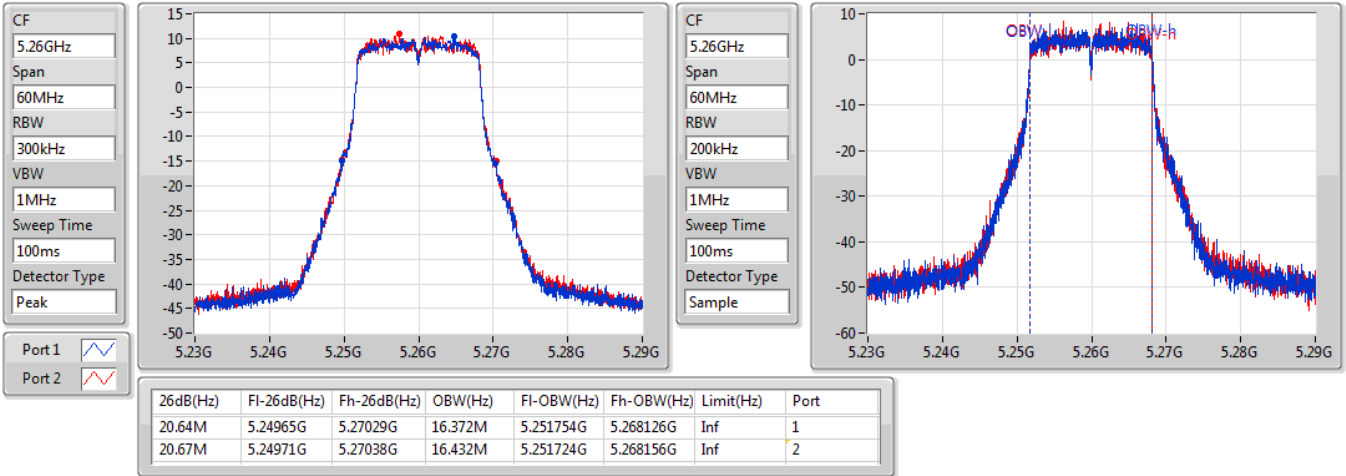
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_2TX

EBW

5260MHz

01/08/2019

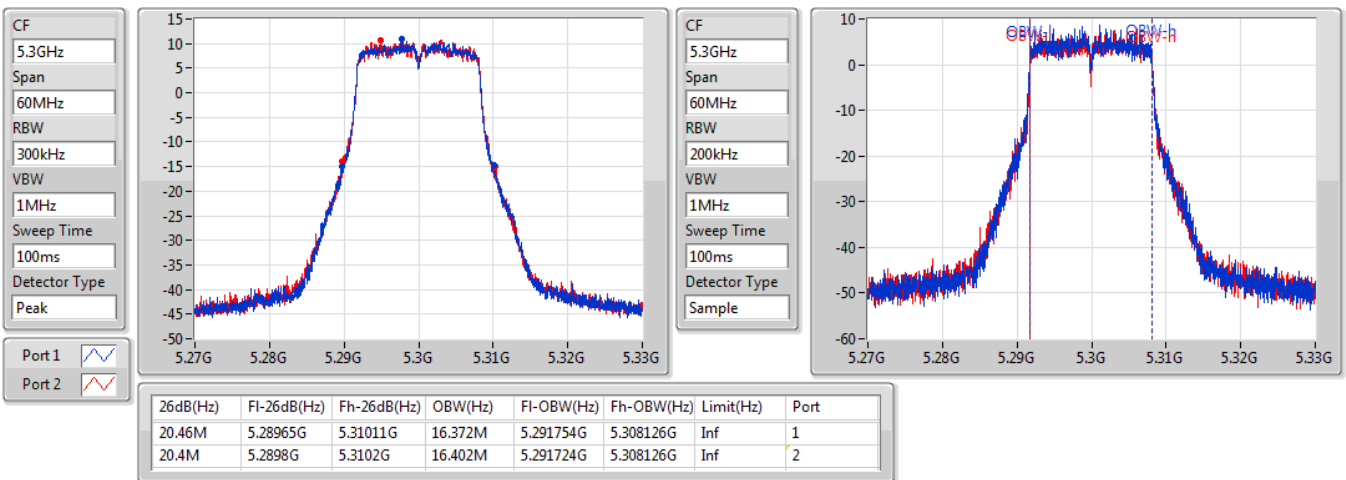


802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

01/08/2019



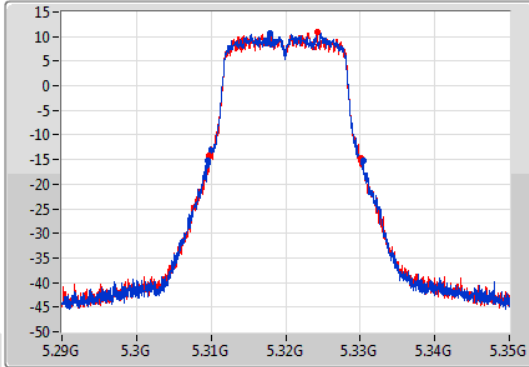
802.11a_Nss1,(6Mbps)_2TX

EBW

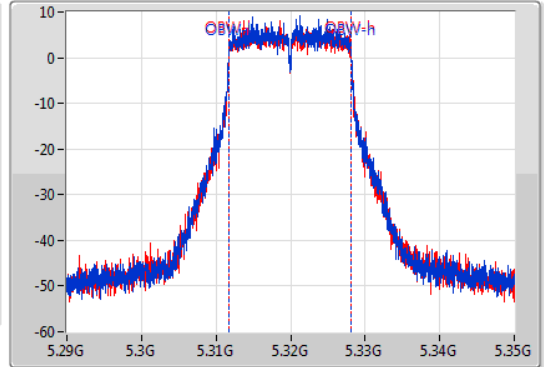
5320MHz

01/08/2019

CF
5.32GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.76M	5.30962G	5.33038G	16.402M	5.311724G	5.328126G	Inf	1
20.4M	5.30974G	5.33014G	16.402M	5.311724G	5.328126G	Inf	2

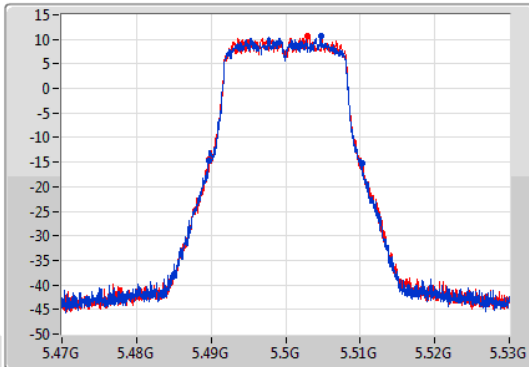
802.11a_Nss1,(6Mbps)_2TX

EBW

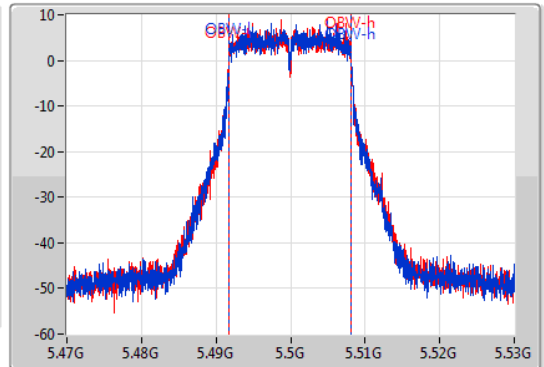
5500MHz

01/08/2019

CF
5.5GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.55M	5.48965G	5.5102G	16.372M	5.491754G	5.508126G	Inf	1
20.46M	5.48974G	5.5102G	16.402M	5.491724G	5.508126G	Inf	2

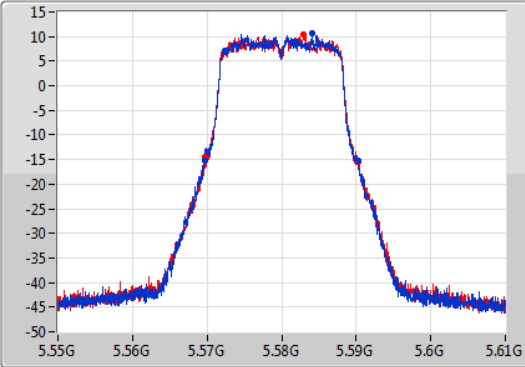
802.11a_Nss1,(6Mbps)_2TX

EBW

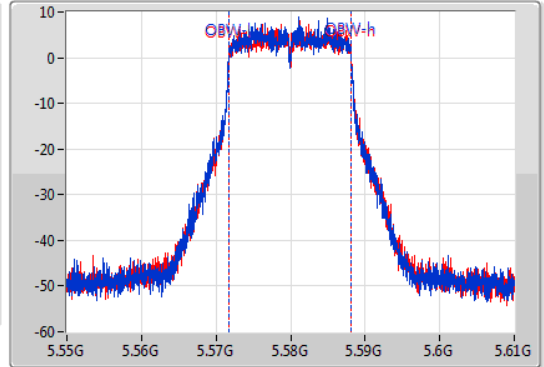
5580MHz

01/08/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.55M	5.56965G	5.5902G	16.402M	5.571724G	5.588126G	Inf	1
20.58M	5.56977G	5.59035G	16.402M	5.571724G	5.588126G	Inf	2

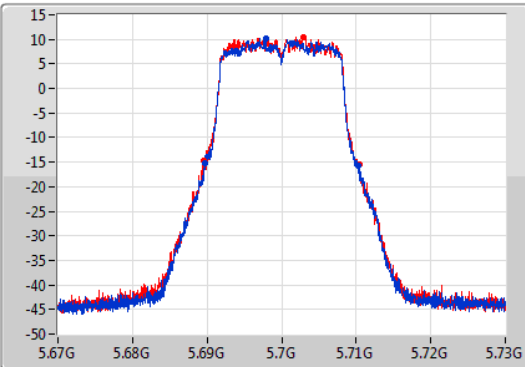
802.11a_Nss1,(6Mbps)_2TX

EBW

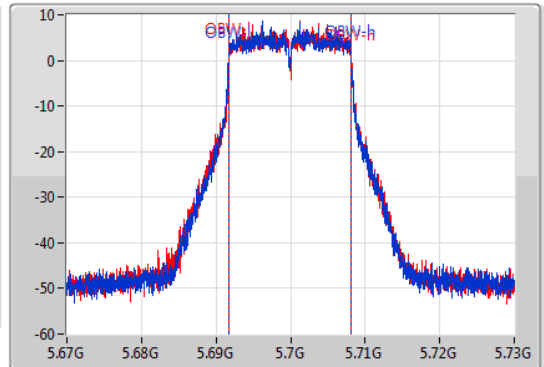
5700MHz

01/08/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



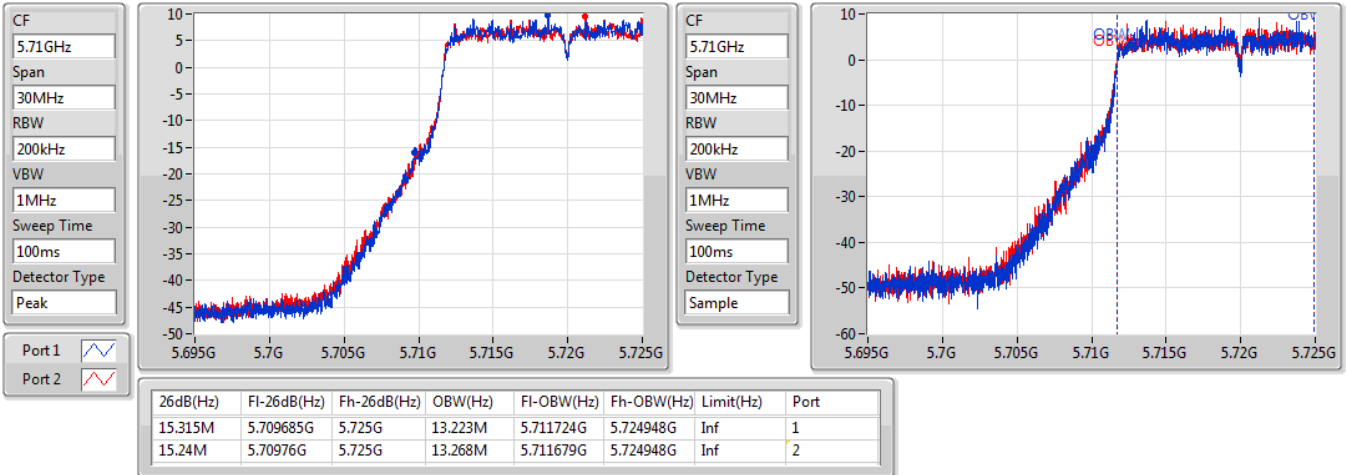
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.64M	5.68968G	5.71032G	16.402M	5.691724G	5.708126G	Inf	1
20.76M	5.68962G	5.71038G	16.432M	5.691724G	5.708156G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

01/08/2019

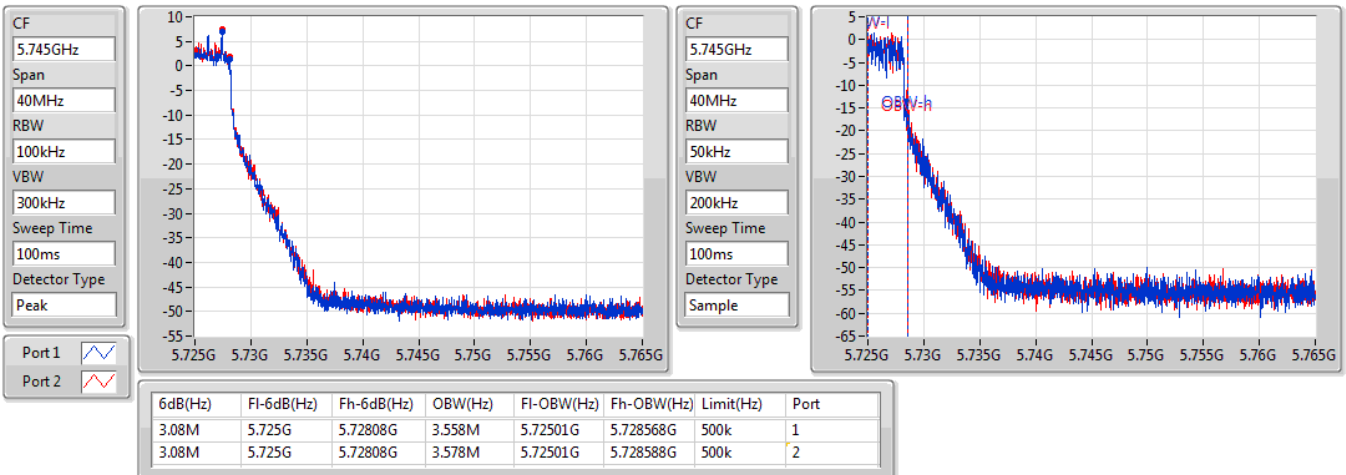


802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

01/08/2019





802.11ax HEW20_Nss1,(MCS0)_2TX

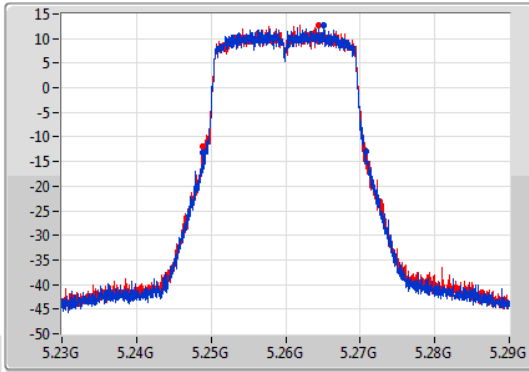
EBW

5260MHz

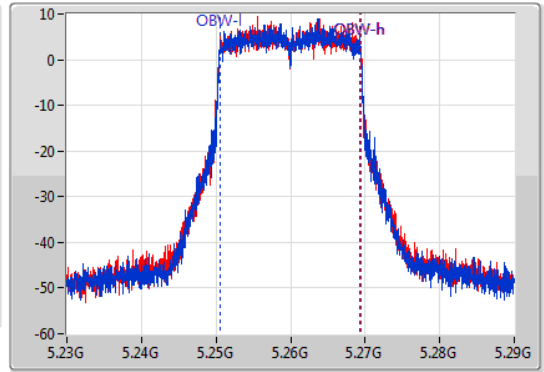
01/08/2019

CF
5.26GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1 
Port 2 



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.84M	5.24896G	5.2708G	18.861M	5.250495G	5.269355G	Inf	1
21.72M	5.24896G	5.27068G	18.891M	5.250495G	5.269385G	Inf	2



802.11ax HEW20_Nss1,(MCS0)_2TX

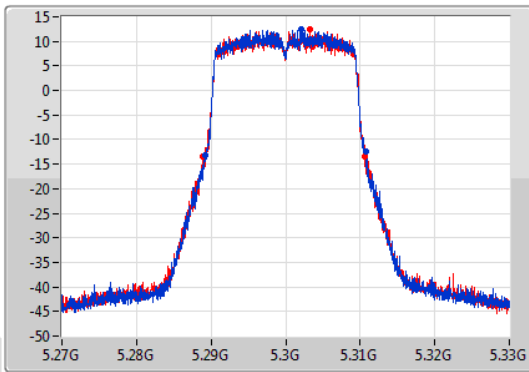
EBW

5300MHz

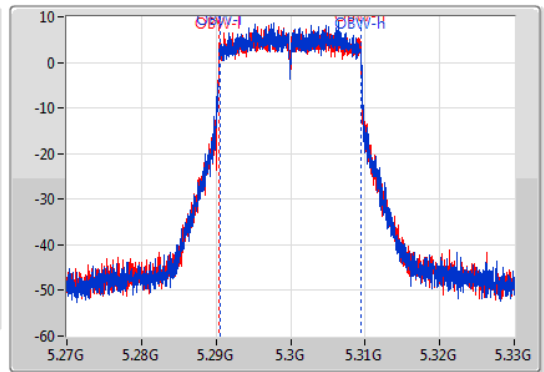
01/08/2019

CF
5.3GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1 
Port 2 



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



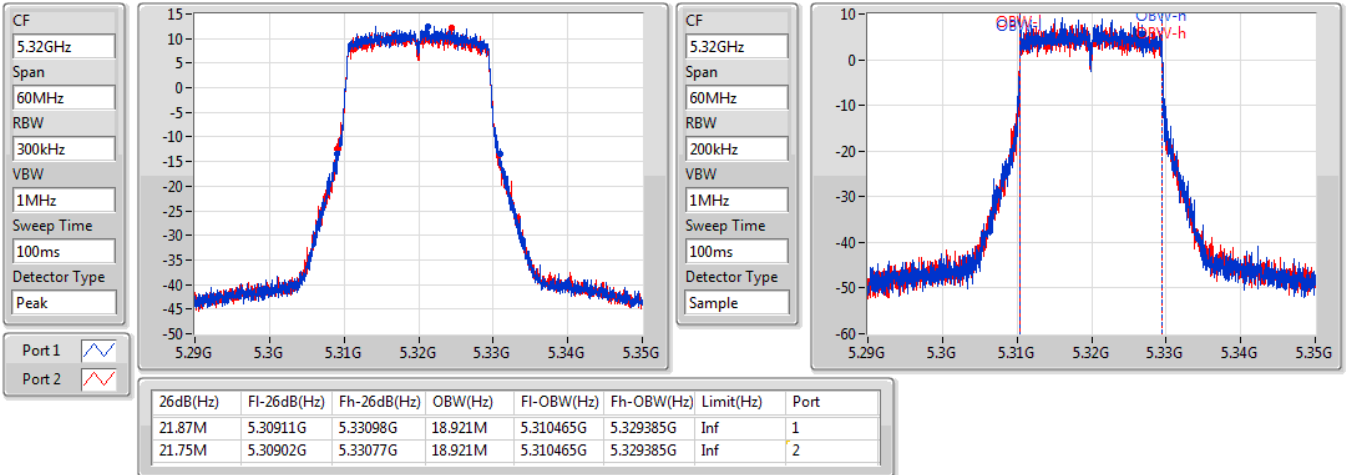
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.66M	5.2892G	5.31086G	18.921M	5.290495G	5.309415G	Inf	1
21.78M	5.28881G	5.31059G	18.921M	5.290465G	5.309385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5320MHz

01/08/2019

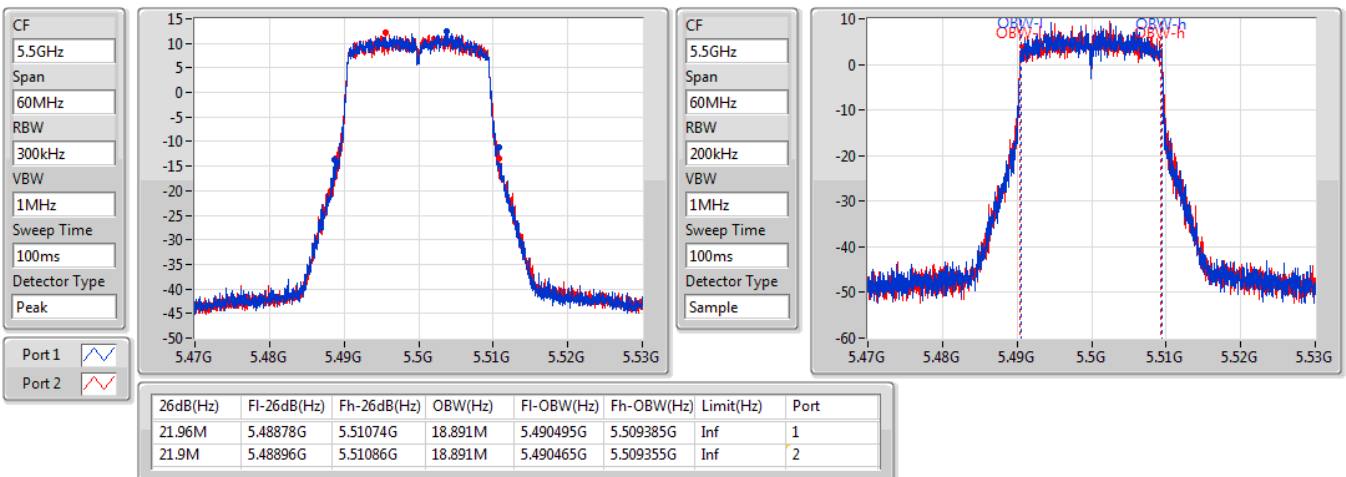


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5500MHz

01/08/2019



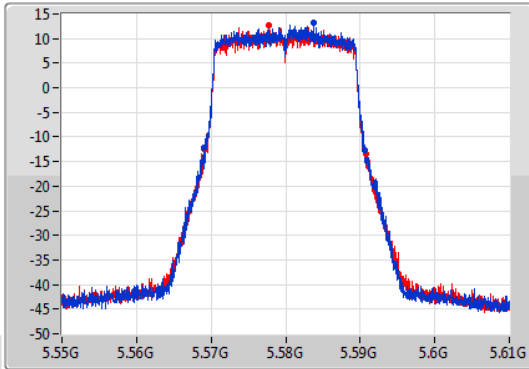
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

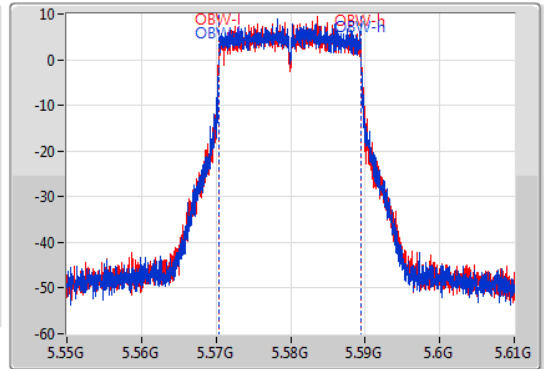
5580MHz

01/08/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.51M	5.56911G	5.59062G	18.921M	5.570465G	5.589385G	Inf	1
21.75M	5.56911G	5.59086G	18.921M	5.570465G	5.589385G	Inf	2

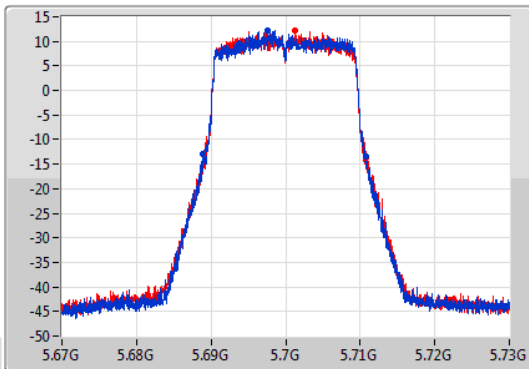
802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

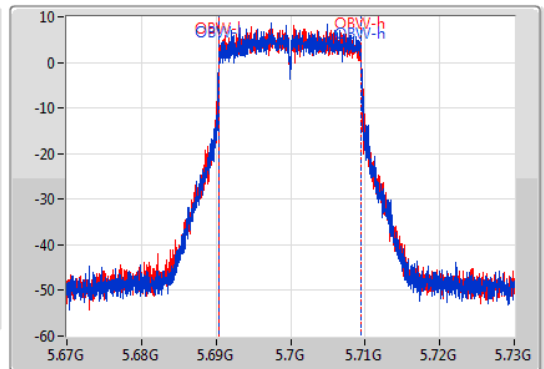
5700MHz

01/08/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



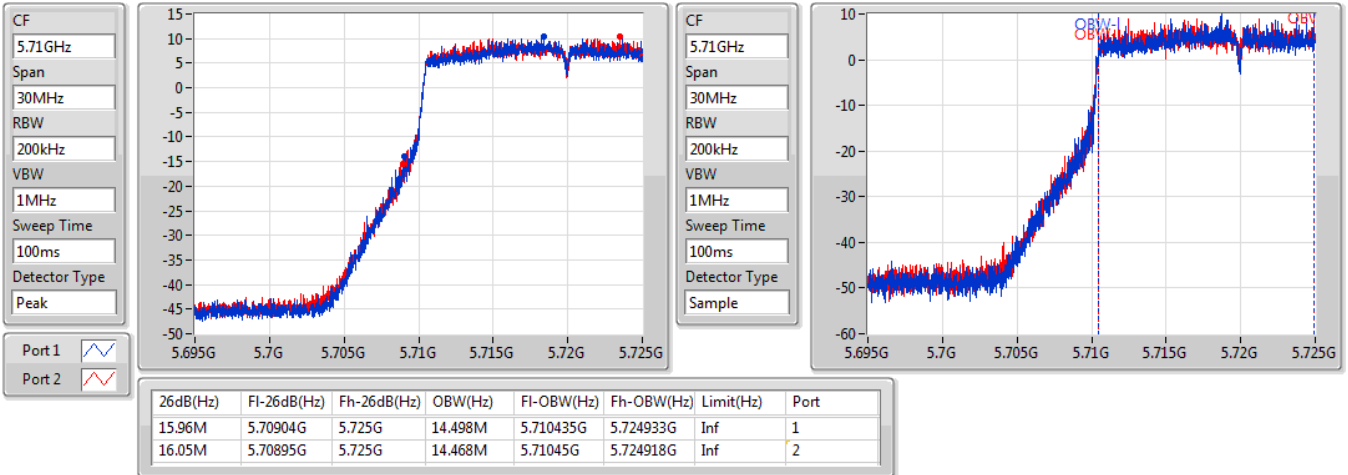
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.99M	5.68887G	5.71086G	18.951M	5.690465G	5.709415G	Inf	1
21.75M	5.68911G	5.71086G	18.921M	5.690465G	5.709385G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

01/08/2019

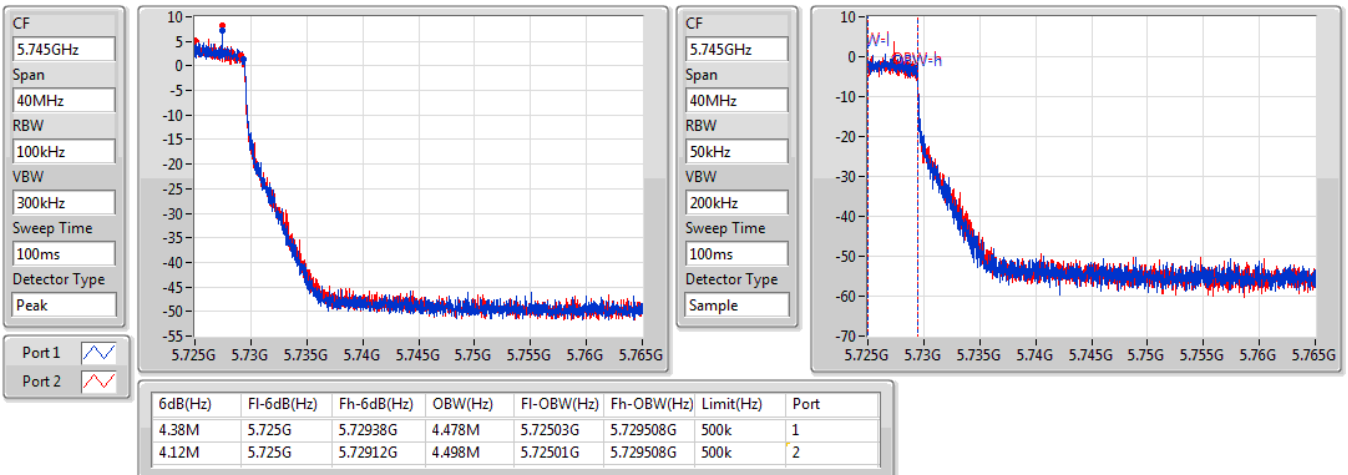


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

01/08/2019



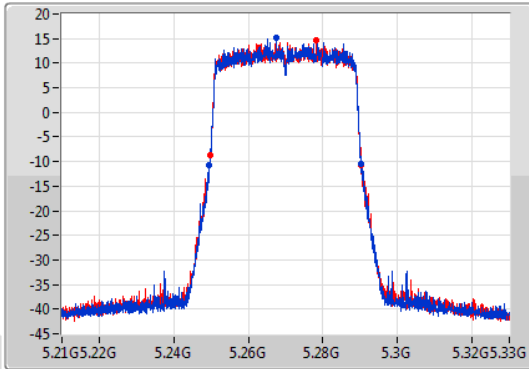
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

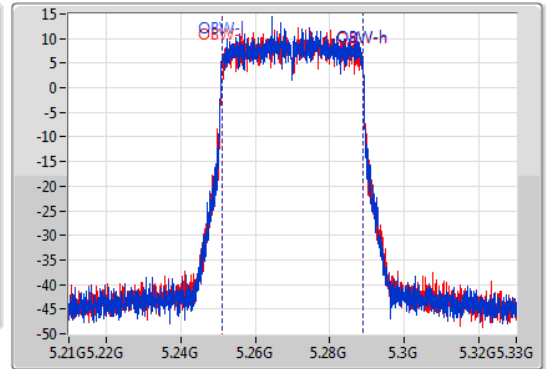
5270MHz

01/08/2019

CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.68M	5.2496G	5.29028G	37.721M	5.251049G	5.288771G	Inf	1
40.62M	5.24966G	5.29028G	37.661M	5.251109G	5.288771G	Inf	2

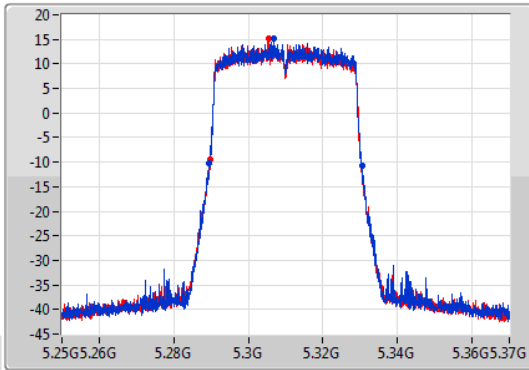
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

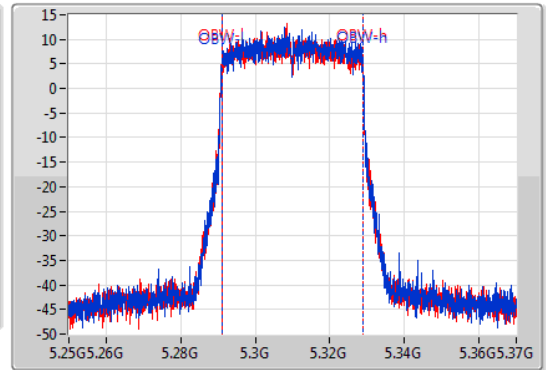
5310MHz

01/08/2019

CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.16M	5.28948G	5.33064G	37.661M	5.291109G	5.328771G	Inf	1
40.92M	5.28972G	5.33064G	37.721M	5.291049G	5.328771G	Inf	2

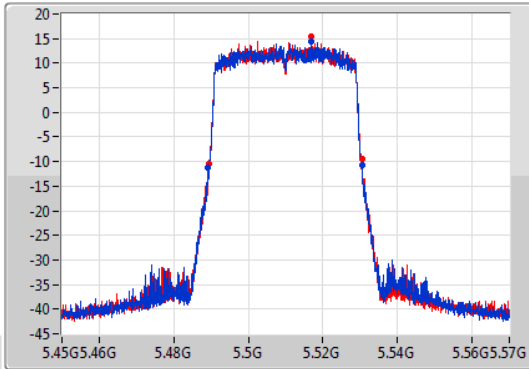
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

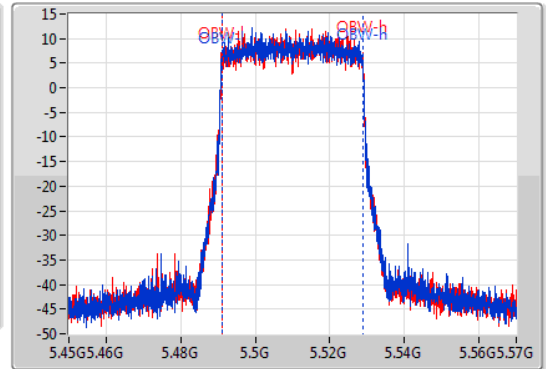
5510MHz

01/08/2019

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.22M	5.48924G	5.53046G	37.721M	5.491049G	5.528771G	Inf	1
41.04M	5.48942G	5.53046G	37.721M	5.491049G	5.528771G	Inf	2

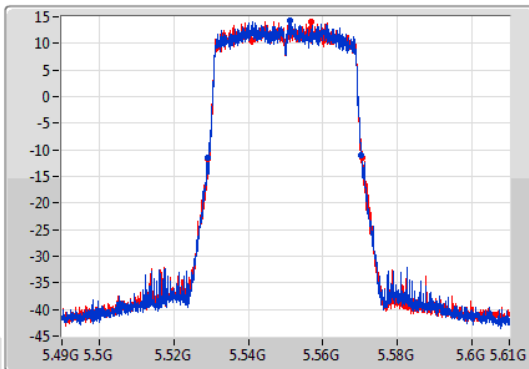
802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

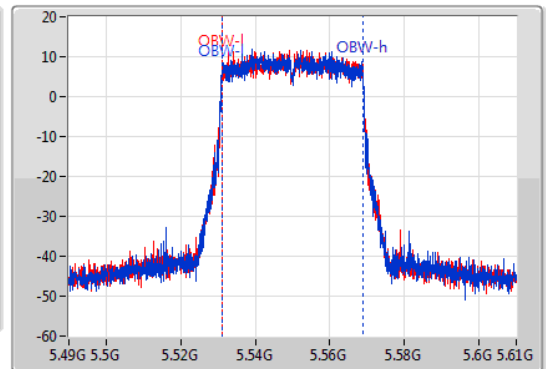
5550MHz

01/08/2019

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



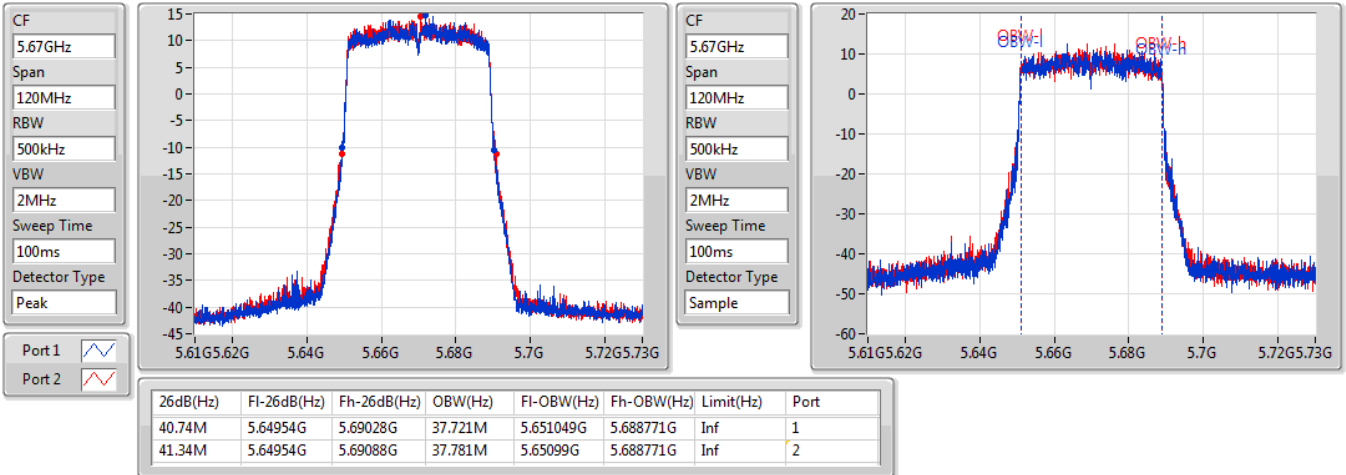
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.22M	5.52912G	5.57034G	37.721M	5.531049G	5.568771G	Inf	1
41.46M	5.52924G	5.5707G	37.661M	5.531109G	5.568771G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5670MHz

01/08/2019

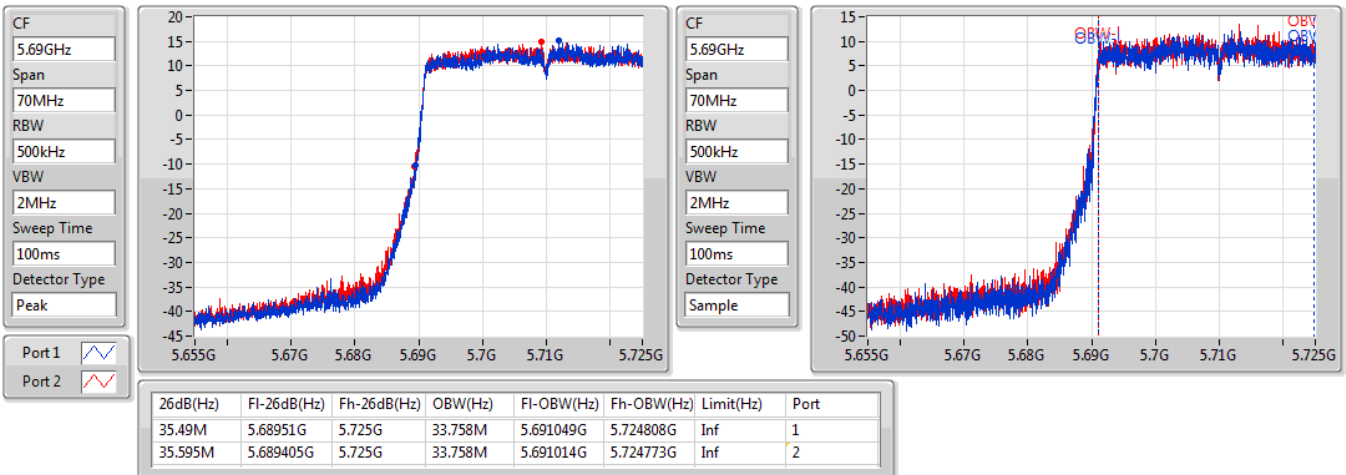


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

01/08/2019

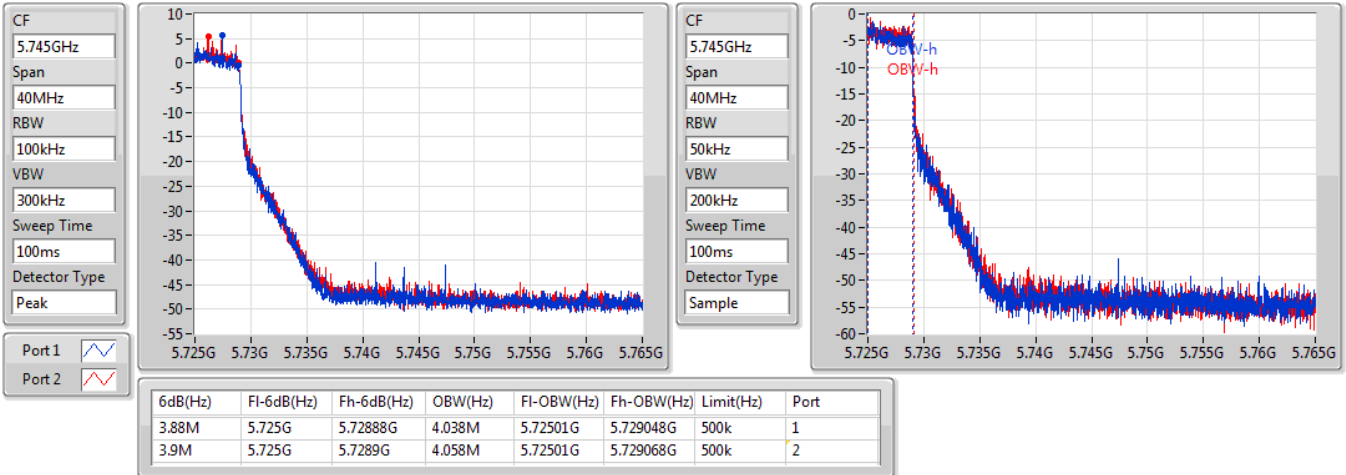


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

01/08/2019

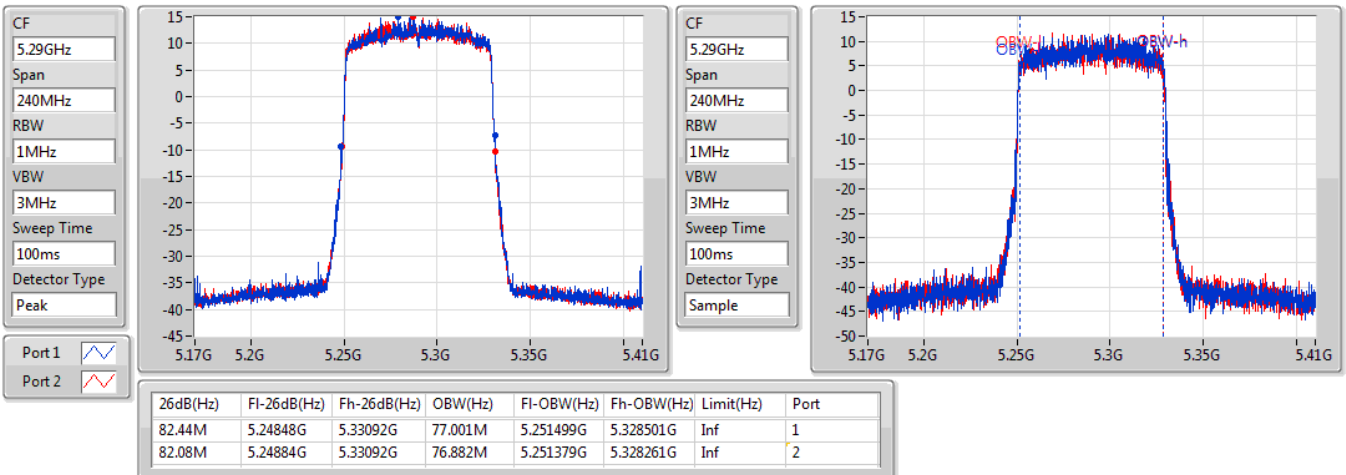


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5290MHz

01/08/2019

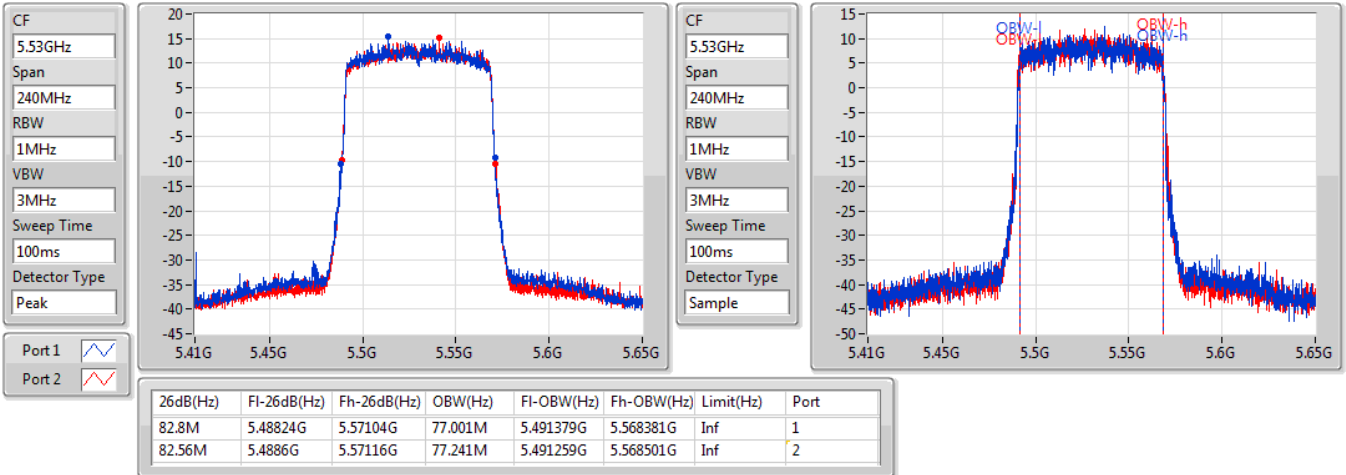


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5530MHz

01/08/2019

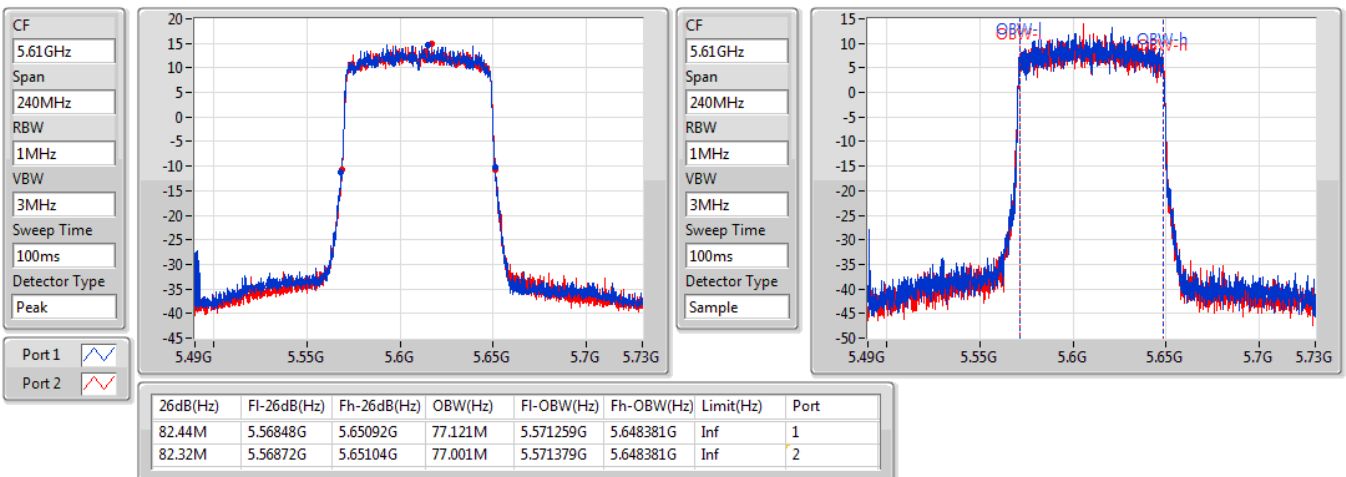


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5610MHz

01/08/2019

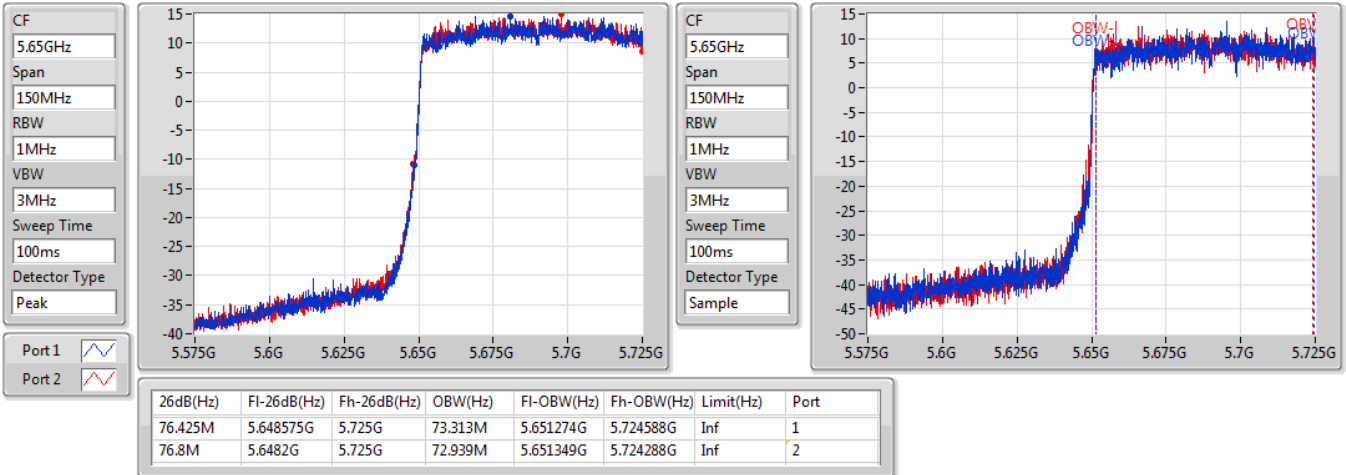


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

01/08/2019

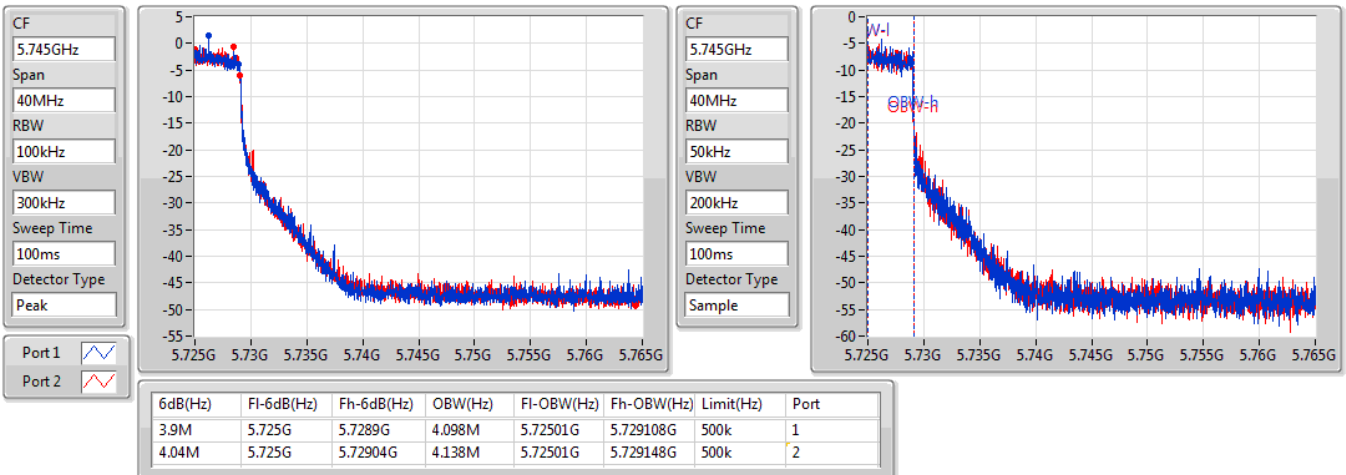


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

01/08/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.05M	18.891M	18M9D1D	21.54M	18.861M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	41.22M	37.781M	37M8D1D	40.38M	37.601M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.6M	77.001M	77M0D1D	81.6M	76.882M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	21.93M	18.921M	18M9D1D	15.795M	14.468M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	41.04M	37.781M	37M8D1D	35.385M	33.723M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.72M	77.001M	77M0D1D	75.675M	72.939M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	4.36M	4.478M	4M48D1D	4.16M	4.478M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	4.04M	4.078M	4M08D1D	3.96M	4.038M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4M	4.098M	4M10D1D	3.94M	4.078M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.99M	18.891M	21.54M	18.891M
5300MHz	Pass	Inf	21.6M	18.861M	21.78M	18.861M
5320MHz	Pass	Inf	21.72M	18.891M	22.05M	18.861M
5500MHz	Pass	Inf	21.75M	18.921M	21.63M	18.861M
5580MHz	Pass	Inf	21.69M	18.891M	21.84M	18.831M
5700MHz	Pass	Inf	21.57M	18.861M	21.93M	18.861M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.795M	14.468M	15.945M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.36M	4.478M	4.16M	4.478M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	40.8M	37.781M	40.38M	37.601M
5310MHz	Pass	Inf	41.22M	37.721M	40.8M	37.661M
5510MHz	Pass	Inf	40.92M	37.781M	40.38M	37.661M
5550MHz	Pass	Inf	40.86M	37.721M	41.04M	37.721M
5670MHz	Pass	Inf	40.74M	37.661M	40.86M	37.601M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.665M	33.793M	35.385M	33.723M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.038M	4.04M	4.078M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	81.6M	77.001M	81.6M	76.882M
5530MHz	Pass	Inf	81.72M	76.882M	81.36M	77.001M
5610MHz	Pass	Inf	81.24M	77.001M	81.36M	76.762M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.675M	72.939M	75.825M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	4.078M	3.94M	4.098M

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;

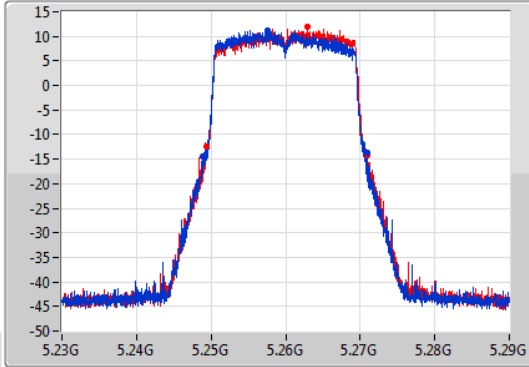
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

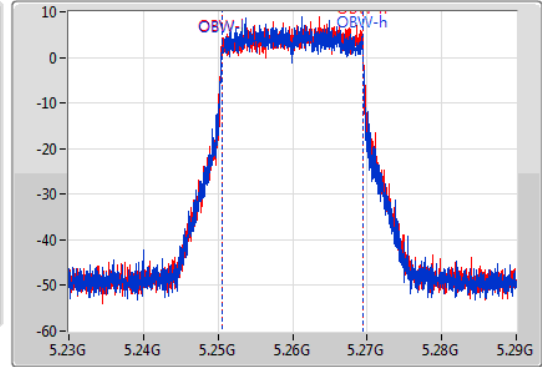
5260MHz

06/08/2019

CF
5.26GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.99M	5.2489G	5.27089G	18.891M	5.250495G	5.269385G	Inf	1
21.54M	5.24935G	5.27089G	18.891M	5.250495G	5.269385G	Inf	2

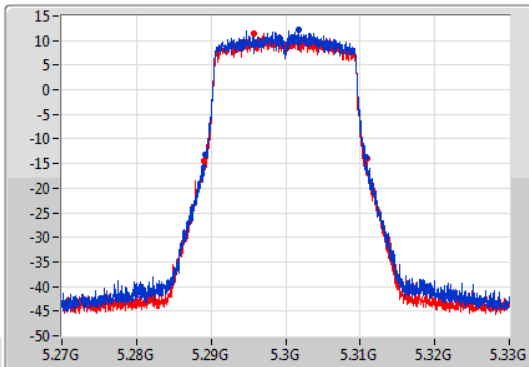
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

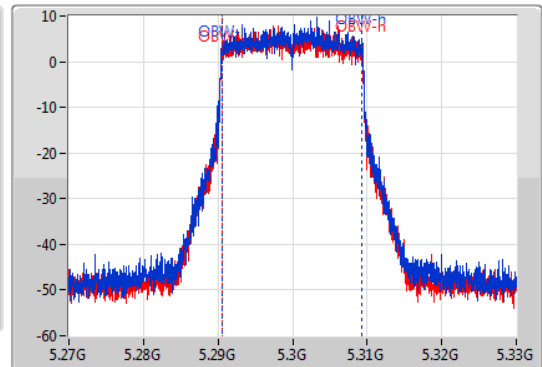
5300MHz

06/08/2019

CF
5.3GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



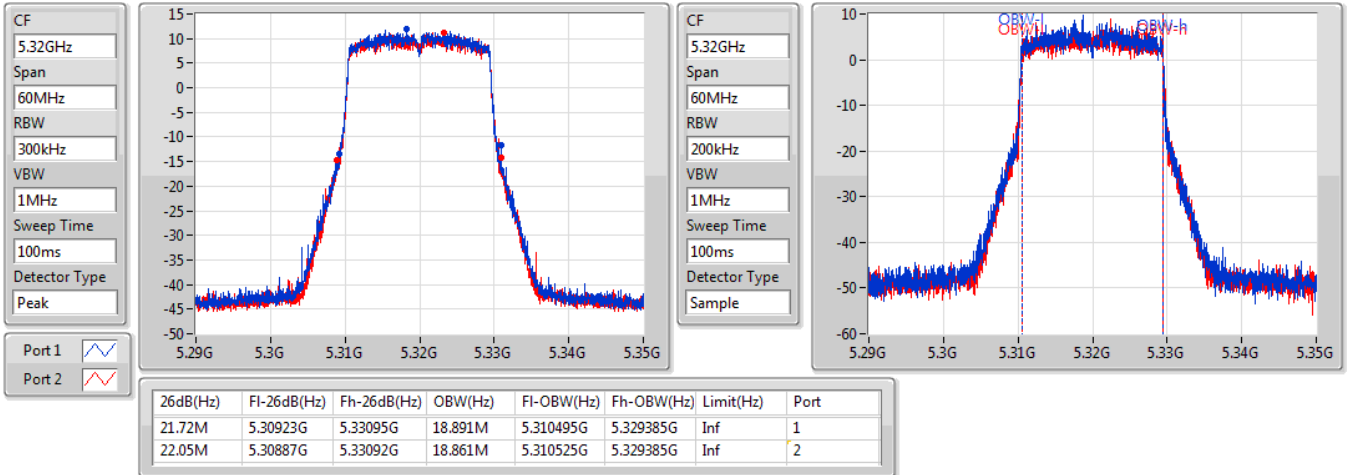
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.6M	5.28914G	5.31074G	18.861M	5.290495G	5.309355G	Inf	1
21.78M	5.28911G	5.31089G	18.861M	5.290495G	5.309355G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5320MHz

06/08/2019

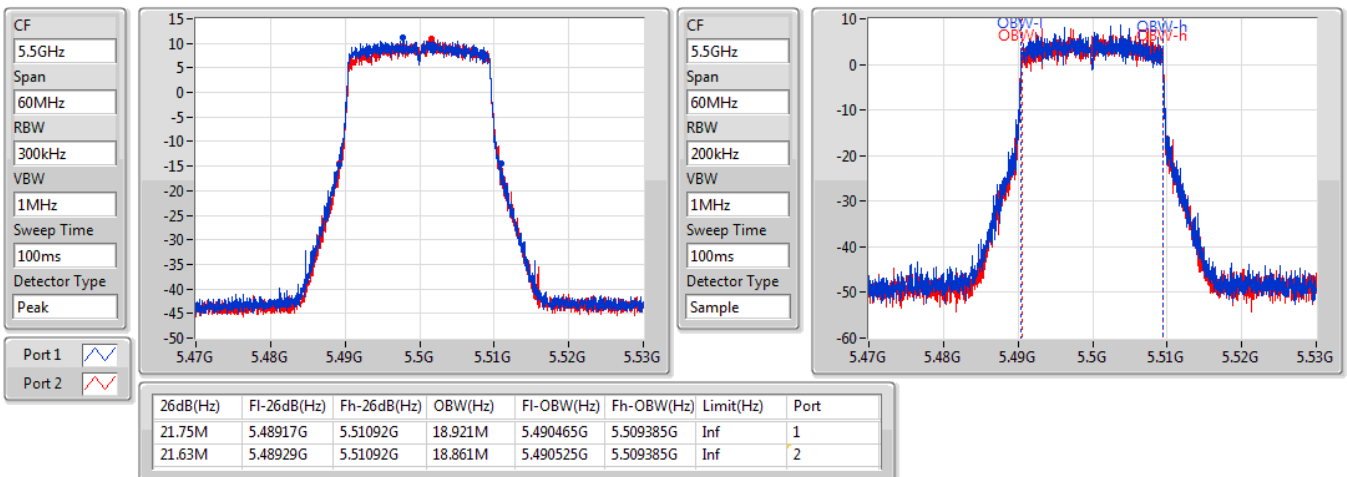


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5500MHz

06/08/2019



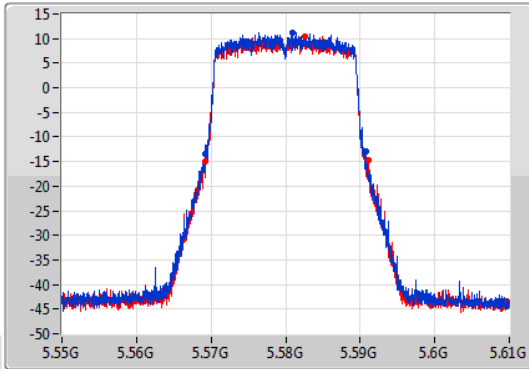
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

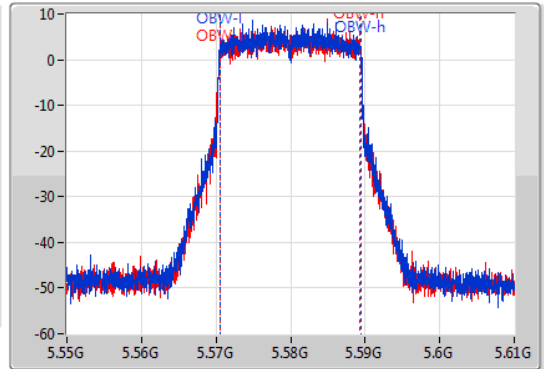
5580MHz

06/08/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.56917G	5.59086G	18.891M	5.570495G	5.589385G	Inf	1
21.84M	5.5692G	5.59104G	18.831M	5.570495G	5.589325G	Inf	2

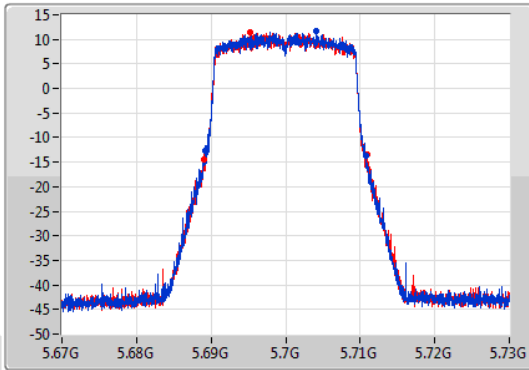
802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

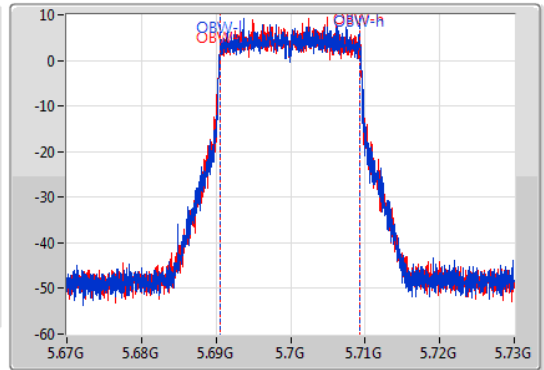
5700MHz

06/08/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



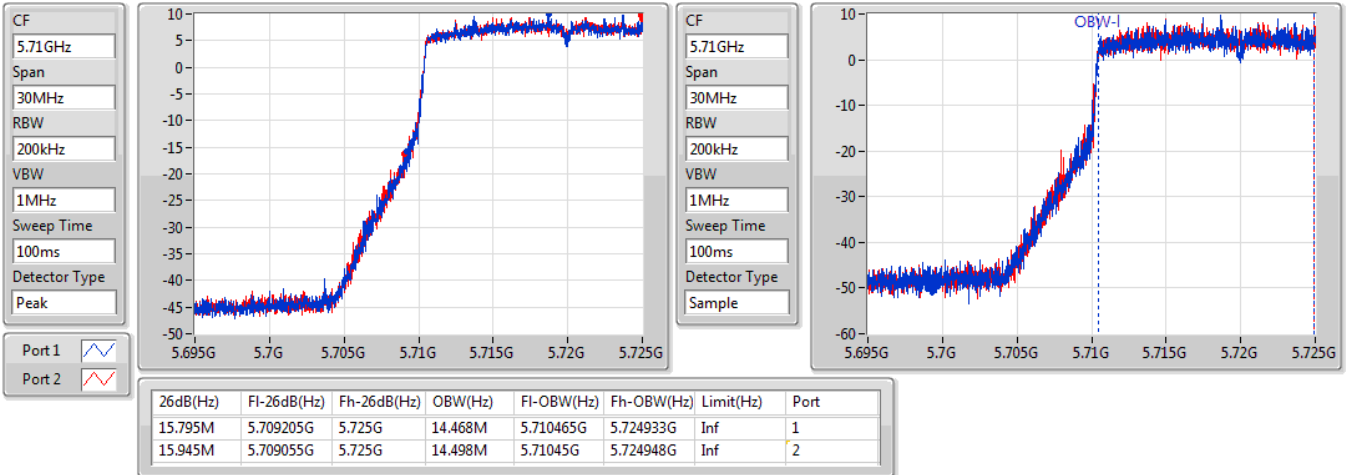
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.57M	5.68914G	5.71071G	18.861M	5.690495G	5.709355G	Inf	1
21.93M	5.68899G	5.71092G	18.861M	5.690495G	5.709355G	Inf	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

06/08/2019

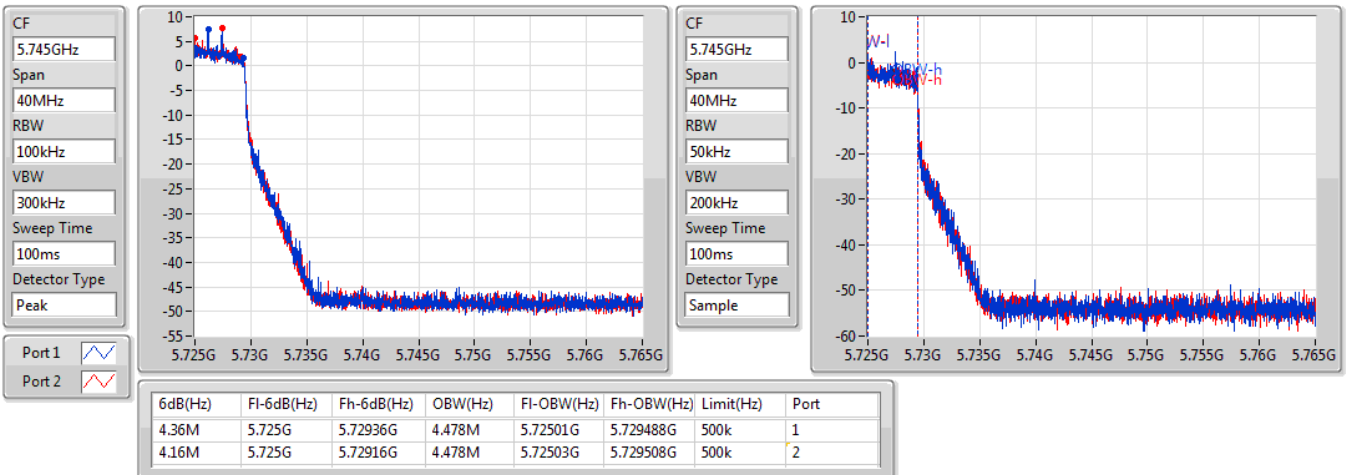


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

06/08/2019



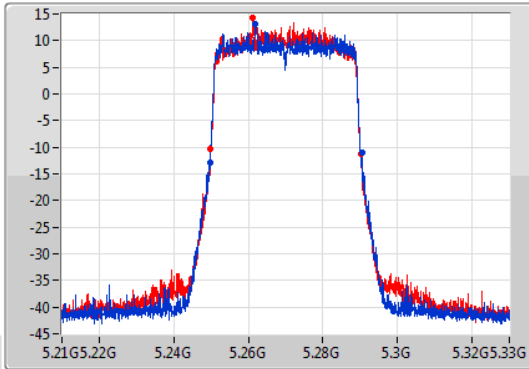
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

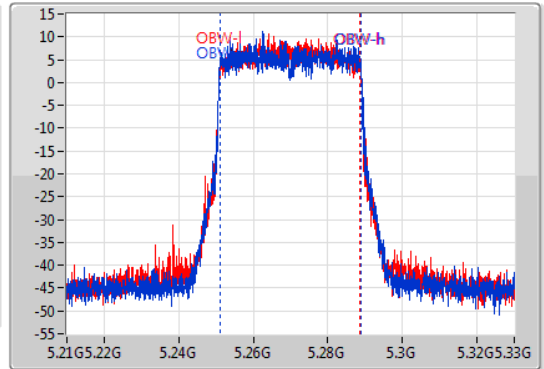
5270MHz

06/08/2019

CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.8M	5.24966G	5.29046G	37.781M	5.251049G	5.288831G	Inf	1
40.38M	5.24972G	5.2901G	37.601M	5.251109G	5.288711G	Inf	2

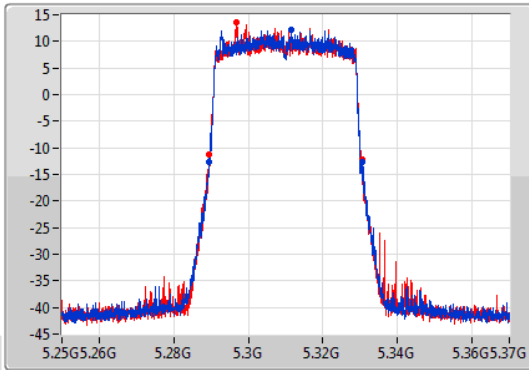
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

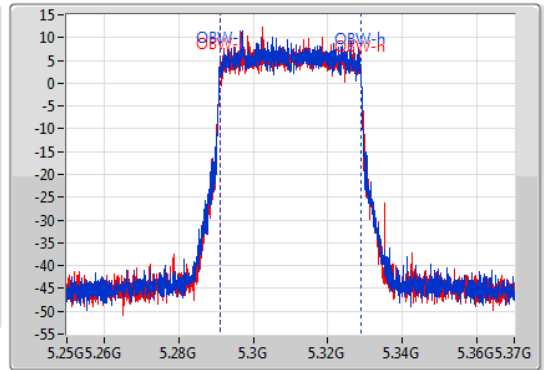
5310MHz

06/08/2019

CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.22M	5.28948G	5.3307G	37.721M	5.291049G	5.328771G	Inf	1
40.8M	5.2896G	5.3304G	37.661M	5.291109G	5.328771G	Inf	2

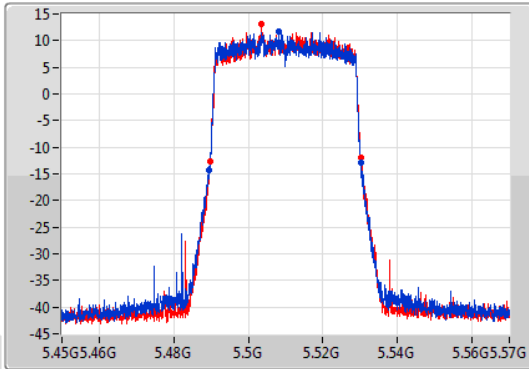
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

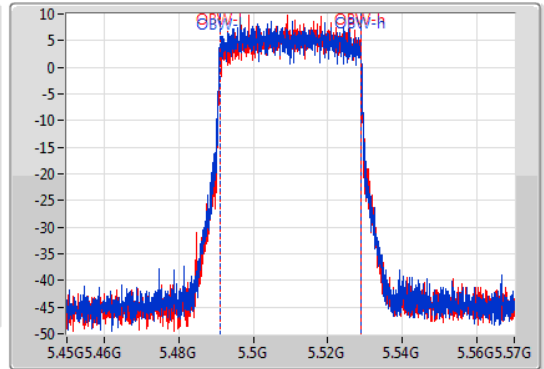
5510MHz

06/08/2019

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.92M	5.48936G	5.53028G	37.781M	5.49099G	5.528771G	Inf	1
40.38M	5.48972G	5.5301G	37.661M	5.491109G	5.528771G	Inf	2

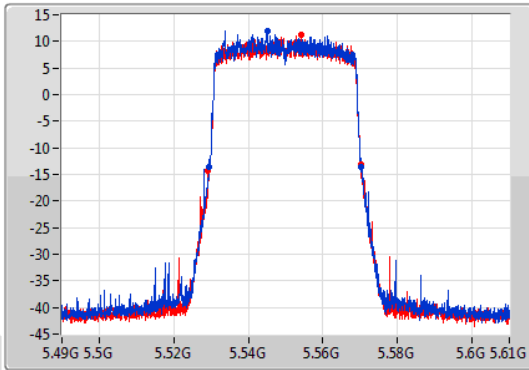
802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

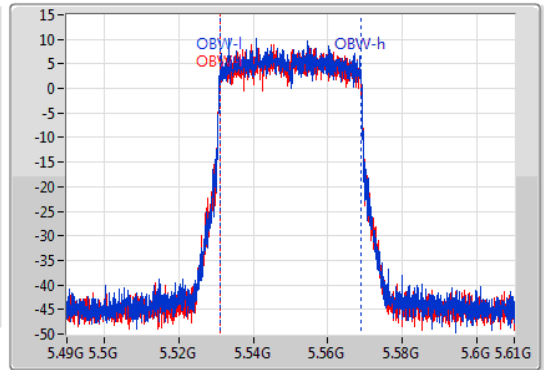
5550MHz

06/08/2019

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



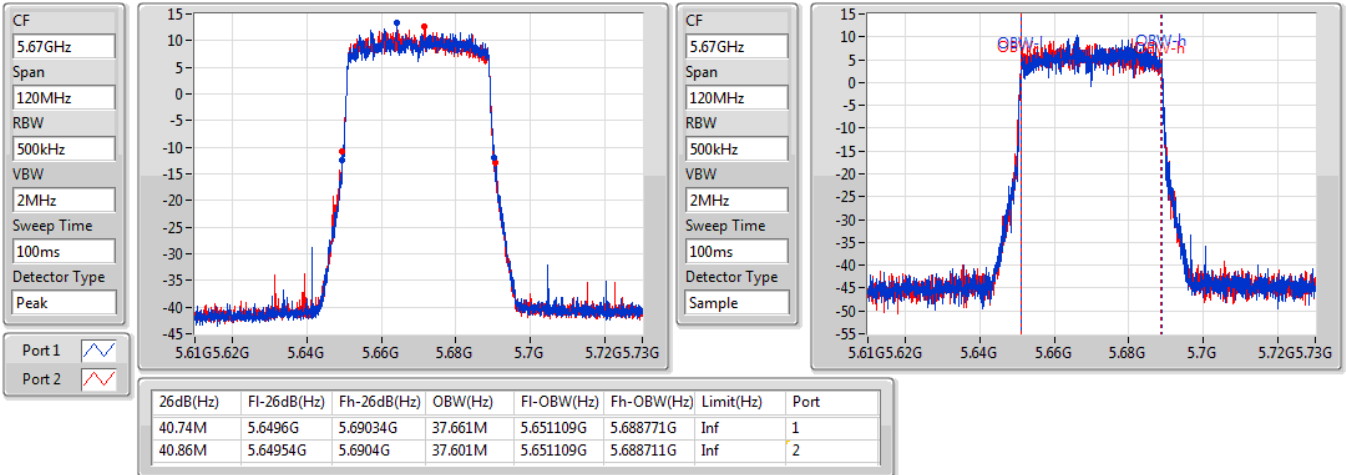
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.86M	5.52948G	5.57034G	37.721M	5.531049G	5.568771G	Inf	1
41.04M	5.52918G	5.57022G	37.721M	5.531049G	5.568771G	Inf	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5670MHz

06/08/2019

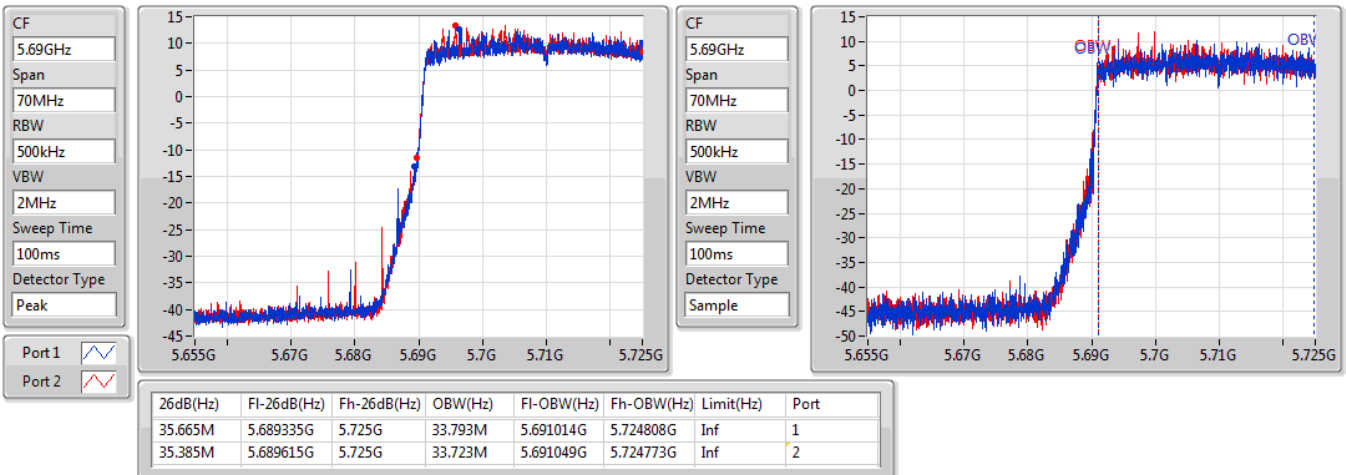


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

06/08/2019

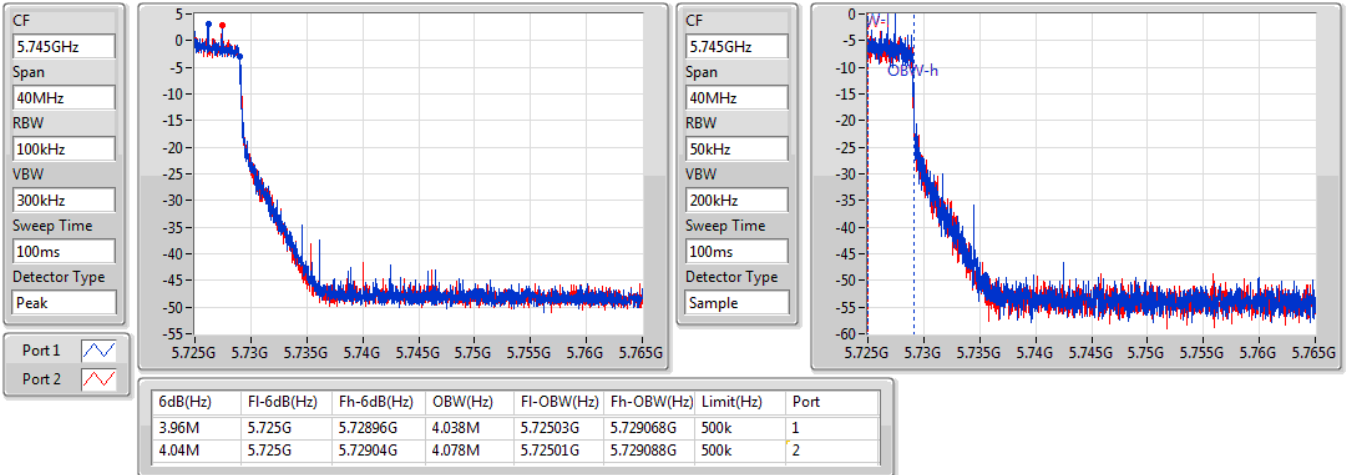


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

06/08/2019

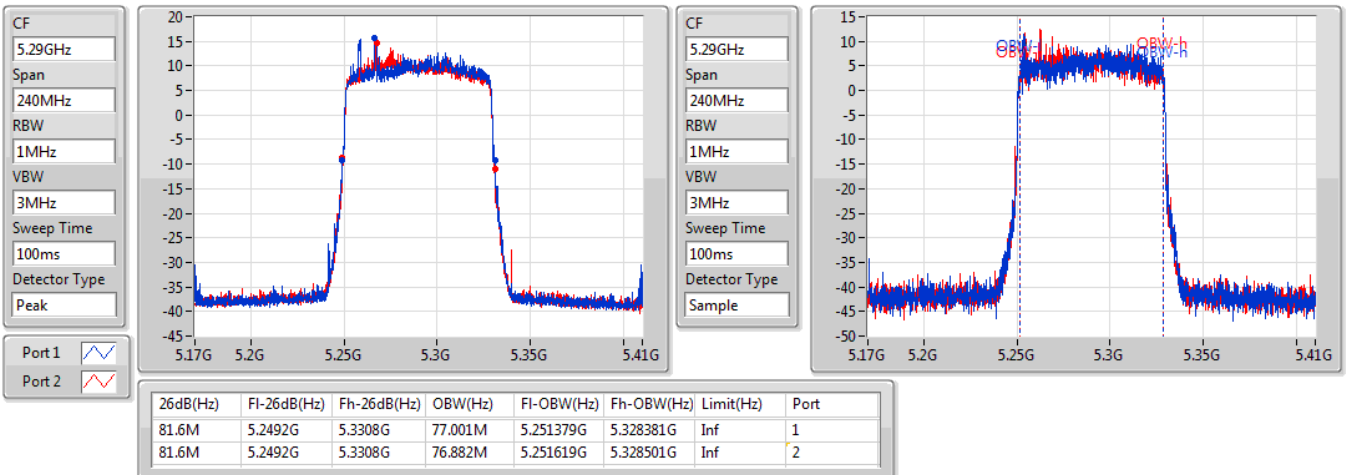


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5290MHz

06/08/2019



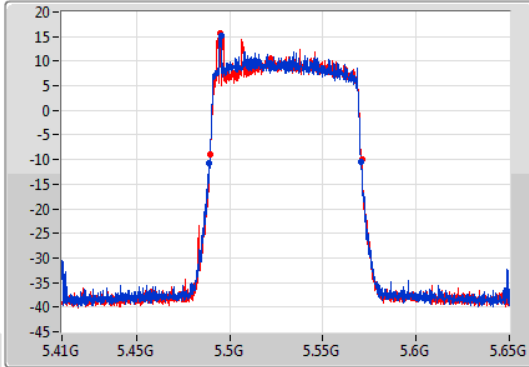
802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

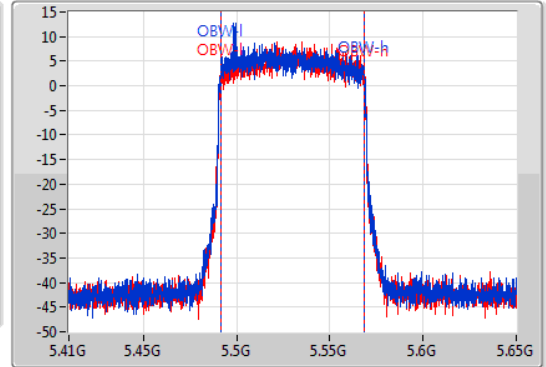
5530MHz

06/08/2019

CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.72M	5.48896G	5.57068G	76.882M	5.491379G	5.568261G	Inf	1
81.36M	5.48944G	5.5708G	77.001M	5.491379G	5.568381G	Inf	2

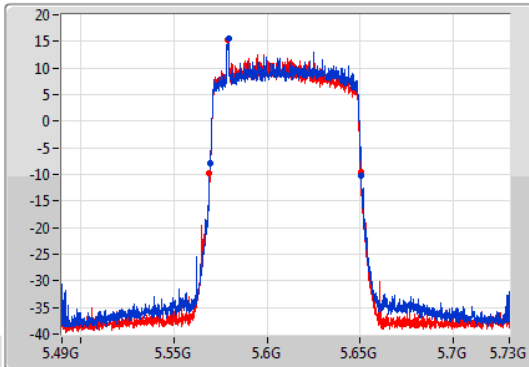
802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

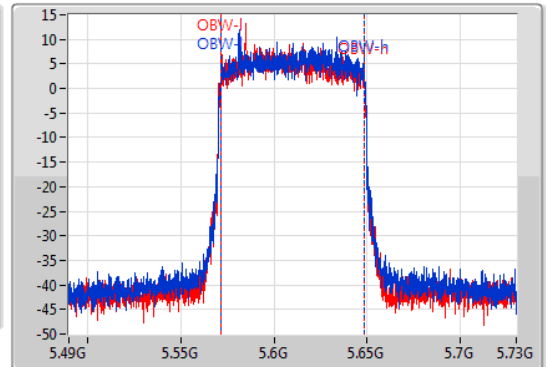
5610MHz

06/08/2019

CF
5.61GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.61GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



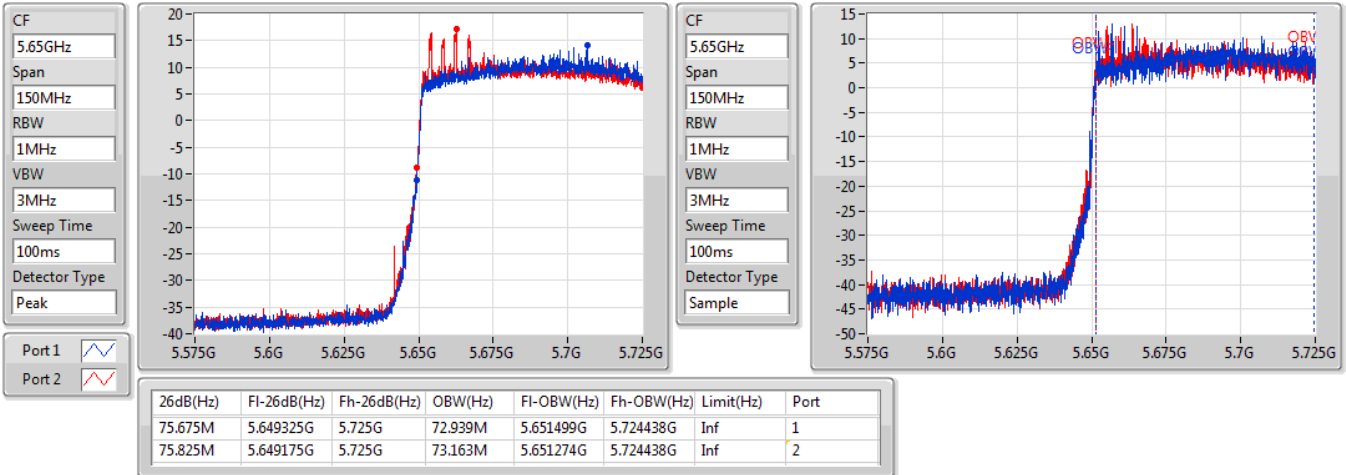
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.24M	5.56932G	5.65056G	77.001M	5.571499G	5.648501G	Inf	1
81.36M	5.5692G	5.65056G	76.762M	5.571499G	5.648261G	Inf	2

802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

06/08/2019

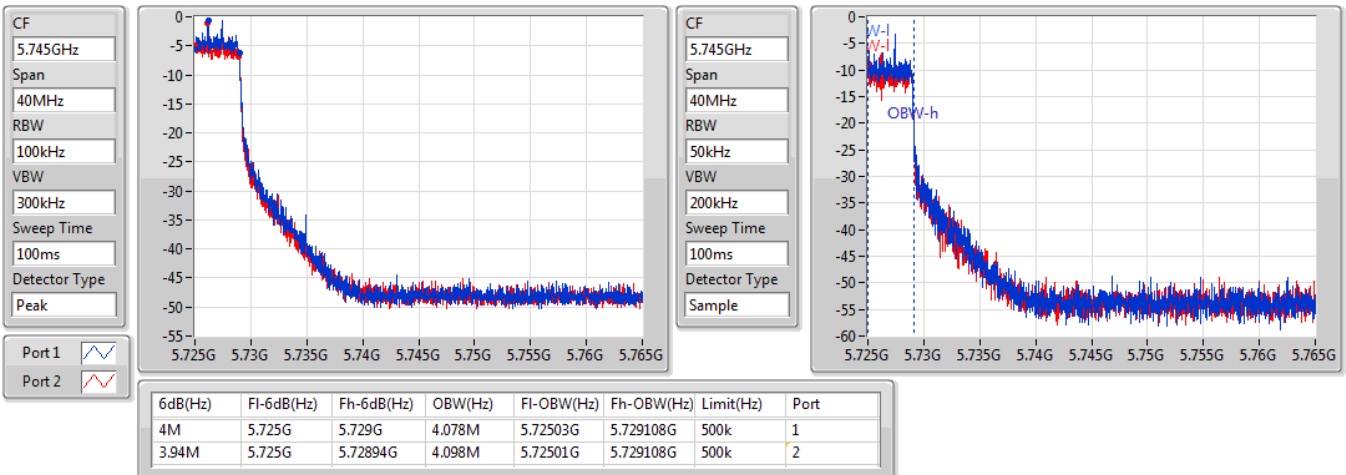


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

06/08/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.76M	16.432M	16M4D1D	20.49M	16.372M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.17M	18.951M	19M0D1D	21.63M	18.891M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.46M	37.721M	37M7D1D	40.98M	37.661M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.8M	77.001M	77M0D1D	81.96M	76.762M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.73M	16.462M	16M5D1D	15.18M	13.223M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.08M	18.951M	19M0D1D	15.93M	14.483M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.4M	37.841M	37M8D1D	35.525M	33.758M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.241M	77M2D1D	76.125M	73.013M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	3.2M	3.558M	3M56D1D	3.08M	3.498M
802.11ax HEW20_Nss1,(MCS0)_4TX	4.5M	4.498M	4M50D1D	4.36M	4.478M
802.11ax HEW40_Nss1,(MCS0)_4TX	4.04M	4.058M	4M06D1D	3.9M	4.018M
802.11ax HEW80_Nss1,(MCS0)_4TX	4M	4.178M	4M18D1D	3.9M	4.078M

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	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	20.49M	16.372M	20.52M	16.372M	20.52M	16.432M	20.67M	16.402M
5300MHz	Pass	Inf	20.55M	16.372M	20.64M	16.372M	20.52M	16.432M	20.67M	16.402M
5320MHz	Pass	Inf	20.52M	16.372M	20.55M	16.372M	20.76M	16.402M	20.58M	16.372M
5500MHz	Pass	Inf	20.49M	16.372M	20.61M	16.402M	20.7M	16.402M	20.73M	16.402M
5580MHz	Pass	Inf	20.64M	16.462M	20.67M	16.432M	19.86M	16.372M	20.55M	16.372M
5700MHz	Pass	Inf	20.55M	16.402M	20.73M	16.402M	20.7M	16.432M	20.52M	16.342M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.33M	13.223M	15.3M	13.268M	15.24M	13.268M	15.18M	13.238M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.2M	3.558M	3.08M	3.518M	3.08M	3.498M	3.08M	3.498M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.9M	18.891M	22.17M	18.951M	21.72M	18.891M	22.11M	18.921M
5300MHz	Pass	Inf	21.93M	18.891M	21.75M	18.891M	21.63M	18.891M	21.75M	18.891M
5320MHz	Pass	Inf	21.99M	18.921M	22.08M	18.921M	21.69M	18.921M	21.93M	18.891M
5500MHz	Pass	Inf	21.6M	18.921M	21.72M	18.891M	21.84M	18.921M	21.45M	18.921M
5580MHz	Pass	Inf	21.63M	18.891M	21.66M	18.831M	21.84M	18.921M	22.08M	18.921M
5700MHz	Pass	Inf	21.36M	18.921M	21.99M	18.921M	21.72M	18.951M	21.84M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.93M	14.498M	16.11M	14.483M	16.245M	14.498M	15.945M	14.513M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.38M	4.498M	4.36M	4.498M	4.5M	4.498M	4.38M	4.478M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	41.28M	37.661M	41.04M	37.661M	41.46M	37.721M	41.46M	37.661M
5310MHz	Pass	Inf	40.98M	37.661M	41.28M	37.661M	40.98M	37.721M	41.46M	37.721M
5510MHz	Pass	Inf	41.28M	37.601M	40.8M	37.601M	40.98M	37.601M	41.34M	37.721M
5550MHz	Pass	Inf	41.4M	37.721M	40.74M	37.601M	41.16M	37.781M	41.28M	37.841M
5670MHz	Pass	Inf	41.1M	37.781M	41.28M	37.601M	40.74M	37.661M	40.8M	37.781M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.525M	33.793M	35.56M	33.793M	35.595M	33.828M	35.665M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	4.038M	4.02M	4.038M	4.04M	4.058M	4.04M	4.018M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.32M	77.001M	82.08M	76.762M	82.8M	76.762M	81.96M	76.882M
5530MHz	Pass	Inf	82.44M	76.882M	82.2M	76.882M	82.68M	77.241M	82.32M	77.121M
5610MHz	Pass	Inf	82.56M	77.121M	82.68M	77.001M	81.96M	77.001M	82.44M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.125M	73.238M	76.275M	73.013M	76.2M	73.238M	76.2M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.078M	3.9M	4.138M	3.92M	4.178M	4M	4.078M

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

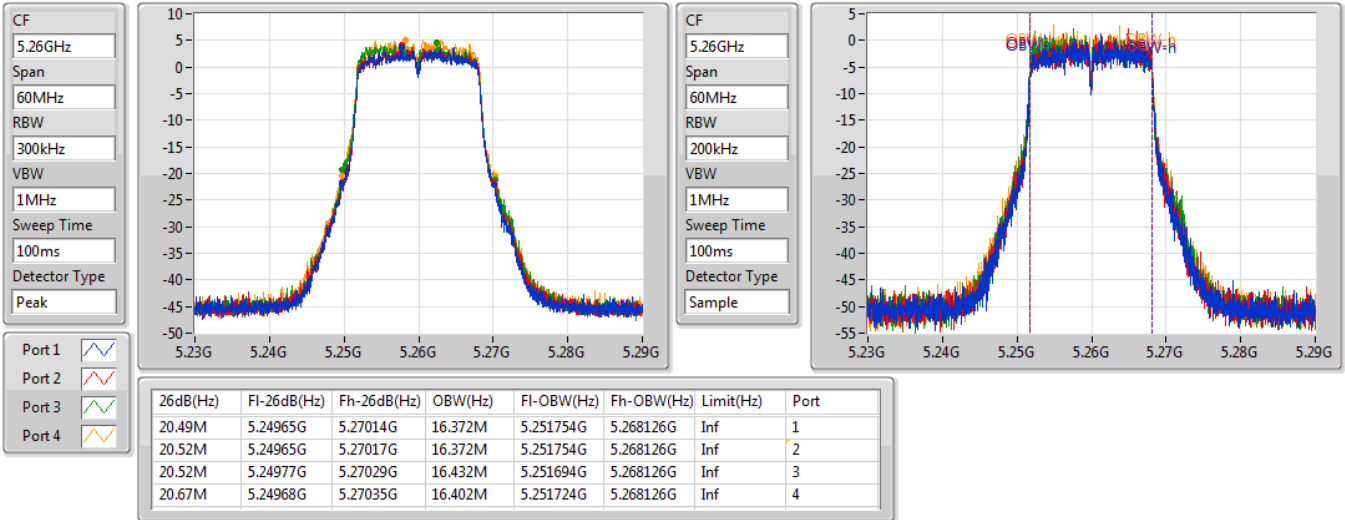
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX

EBW

5260MHz

31/07/2019

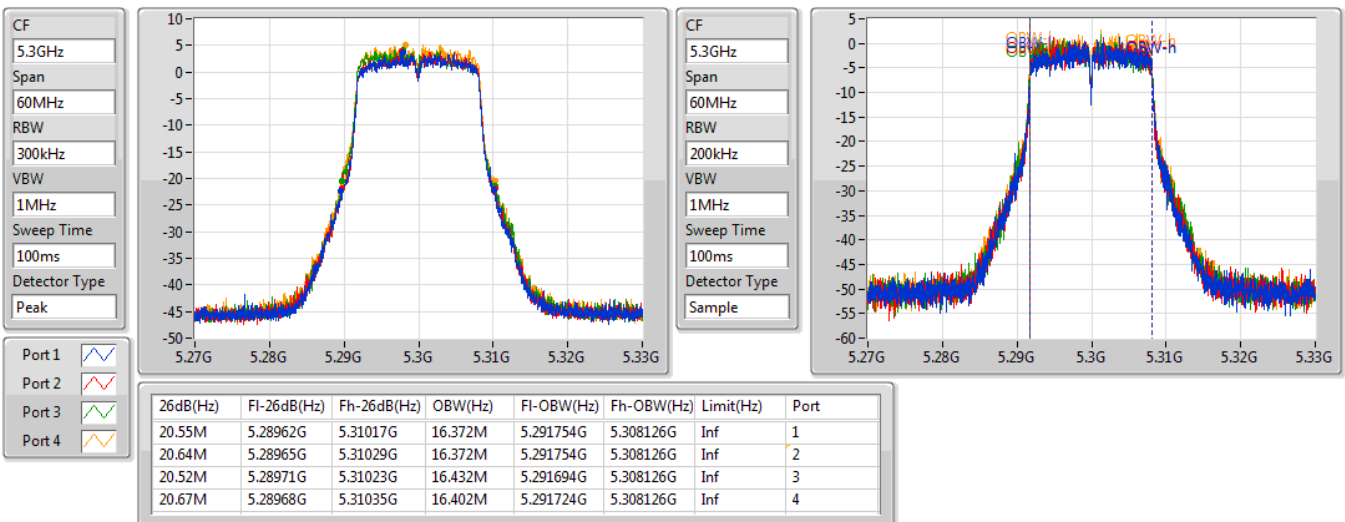


802.11a_Nss1,(6Mbps)_4TX

EBW

5300MHz

31/07/2019



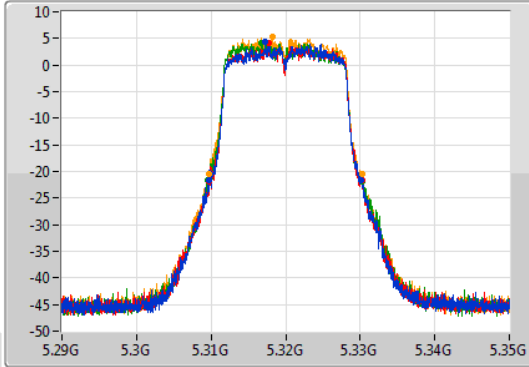
802.11a_Nss1,(6Mbps)_4TX

EBW

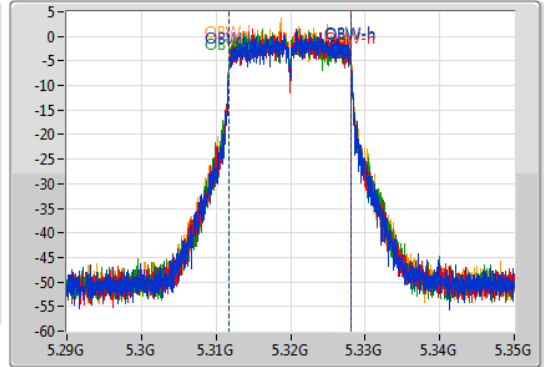
5320MHz

31/07/2019

CF
5.32GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.52M	5.30965G	5.33017G	16.372M	5.311754G	5.328126G	Inf	1
20.55M	5.30965G	5.3302G	16.372M	5.311754G	5.328126G	Inf	2
20.76M	5.30953G	5.33029G	16.402M	5.311724G	5.328126G	Inf	3
20.58M	5.30974G	5.33032G	16.372M	5.311754G	5.328126G	Inf	4

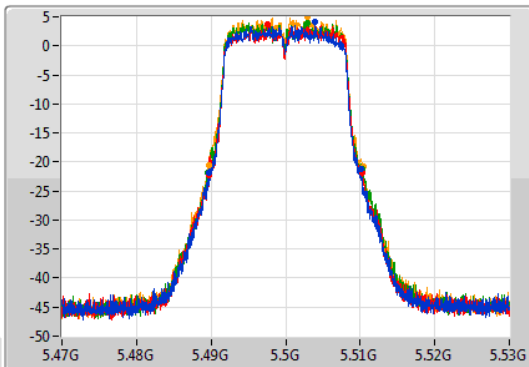
802.11a_Nss1,(6Mbps)_4TX

EBW

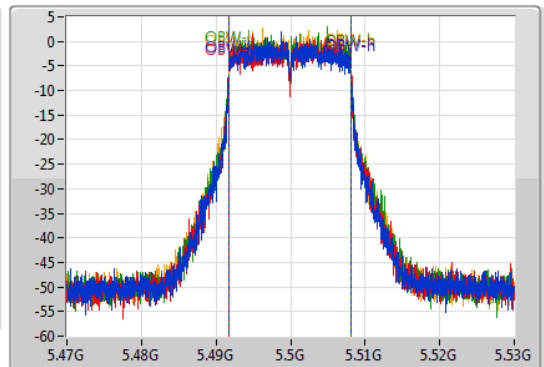
5500MHz

31/07/2019

CF
5.5GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.49M	5.48965G	5.51014G	16.372M	5.491724G	5.508096G	Inf	1
20.61M	5.48971G	5.51032G	16.402M	5.491724G	5.508126G	Inf	2
20.7M	5.48959G	5.51029G	16.402M	5.491724G	5.508126G	Inf	3
20.73M	5.48965G	5.51038G	16.402M	5.491724G	5.508126G	Inf	4

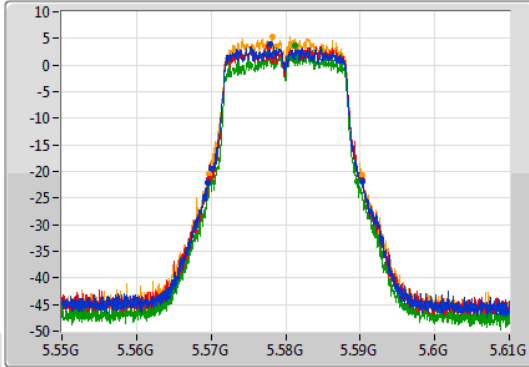
802.11a_Nss1,(6Mbps)_4TX

EBW

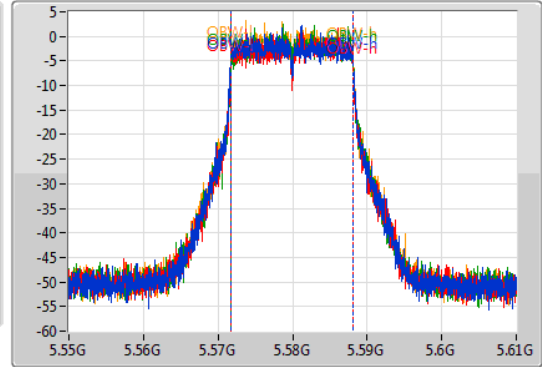
5580MHz

31/07/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.64M	5.56962G	5.59026G	16.462M	5.571694G	5.588156G	Inf	1
20.67M	5.56965G	5.59032G	16.432M	5.571724G	5.588156G	Inf	2
19.86M	5.56983G	5.58969G	16.372M	5.571754G	5.588126G	Inf	3
20.55M	5.56968G	5.59023G	16.372M	5.571754G	5.588126G	Inf	4

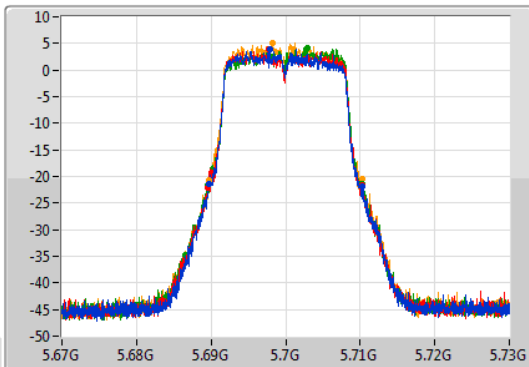
802.11a_Nss1,(6Mbps)_4TX

EBW

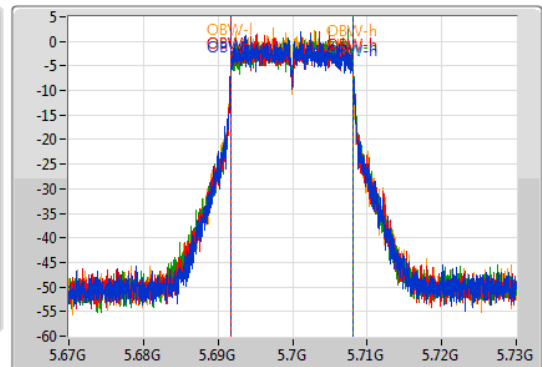
5700MHz

31/07/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



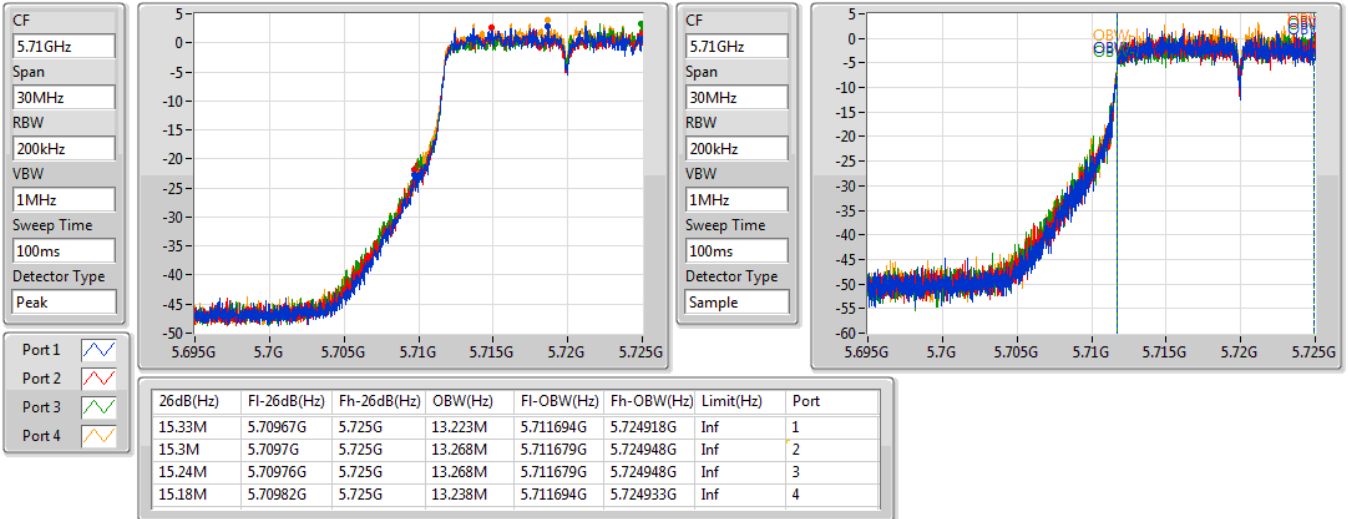
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.55M	5.68965G	5.7102G	16.402M	5.691724G	5.708126G	Inf	1
20.73M	5.68962G	5.71035G	16.402M	5.691724G	5.708126G	Inf	2
20.7M	5.68959G	5.71029G	16.432M	5.691724G	5.708156G	Inf	3
20.52M	5.68968G	5.7102G	16.342M	5.691754G	5.708096G	Inf	4

802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

31/07/2019

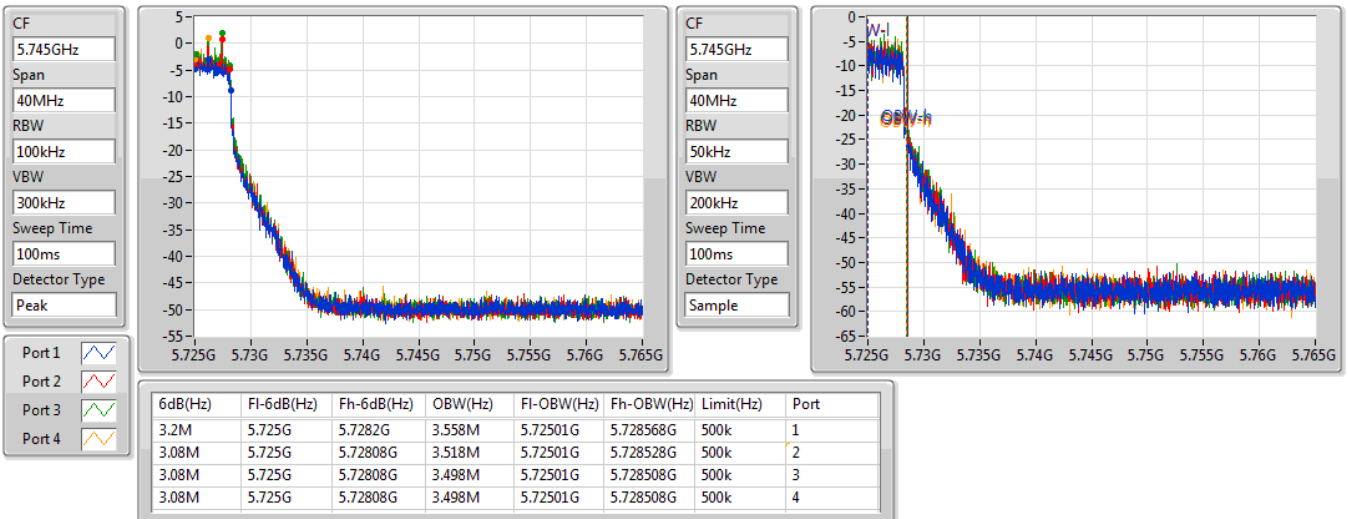


802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

31/07/2019



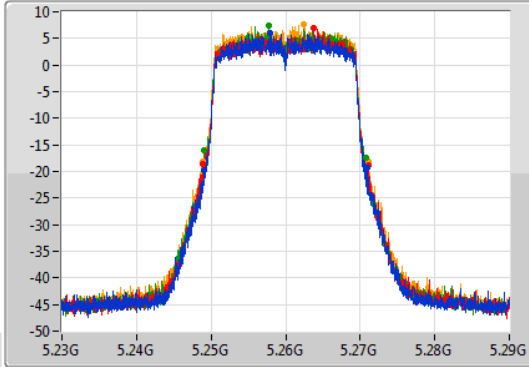
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

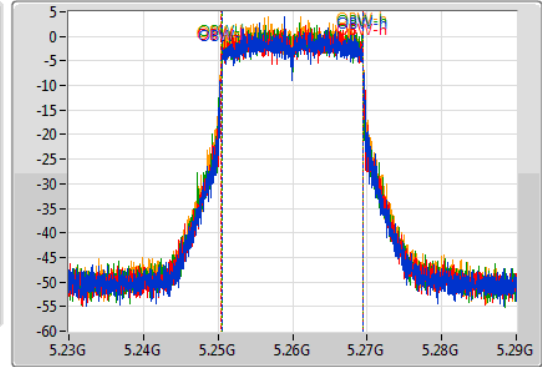
5260MHz

01/08/2019

CF
5.26GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.9M	5.24902G	5.27092G	18.891M	5.250495G	5.269385G	Inf	1
22.17M	5.24893G	5.2711G	18.951M	5.250465G	5.269415G	Inf	2
21.72M	5.24899G	5.27071G	18.891M	5.250495G	5.269385G	Inf	3
22.11M	5.24893G	5.27104G	18.921M	5.250465G	5.269385G	Inf	4

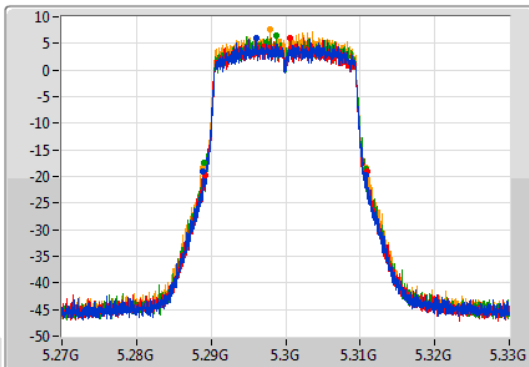
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

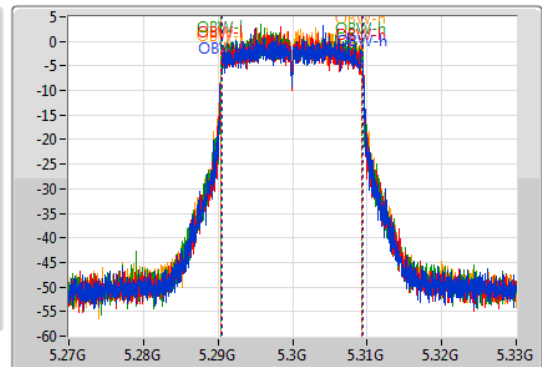
5300MHz

01/08/2019

CF
5.3GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.93M	5.2889G	5.31083G	18.891M	5.290495G	5.309385G	Inf	1
21.75M	5.2892G	5.31095G	18.891M	5.290465G	5.309355G	Inf	2
21.63M	5.28908G	5.31071G	18.891M	5.290465G	5.309355G	Inf	3
21.75M	5.28896G	5.31071G	18.891M	5.290465G	5.309355G	Inf	4

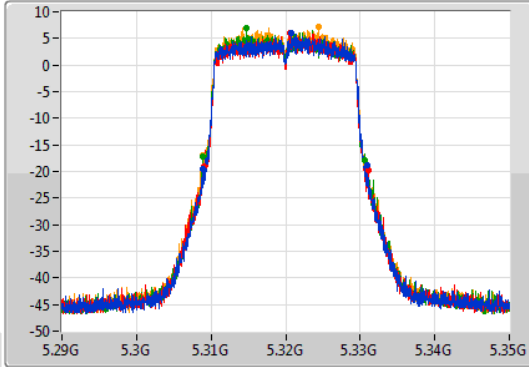
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

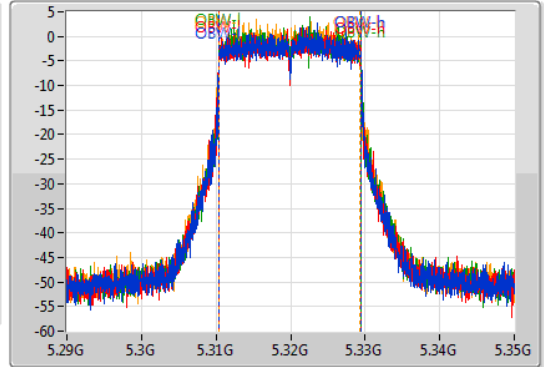
5320MHz

01/08/2019

CF: 5.32GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.32GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.99M	5.3089G	5.33089G	18.921M	5.310465G	5.329385G	Inf	1
22.08M	5.30908G	5.33116G	18.921M	5.310465G	5.329385G	Inf	2
21.69M	5.30893G	5.33062G	18.921M	5.310465G	5.329385G	Inf	3
21.93M	5.30884G	5.33077G	18.891M	5.310465G	5.329355G	Inf	4

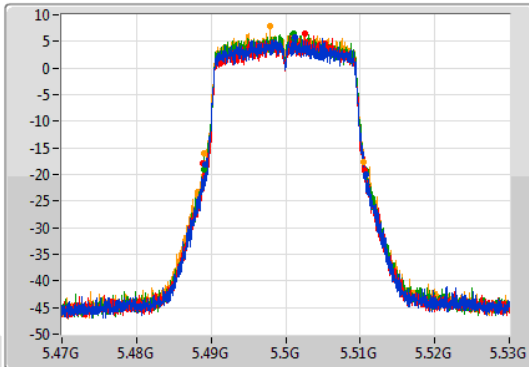
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

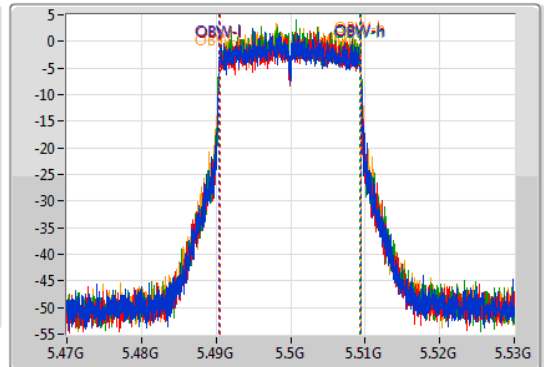
5500MHz

01/08/2019

CF: 5.5GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.5GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.6M	5.48917G	5.51077G	18.921M	5.490465G	5.509385G	Inf	1
21.72M	5.48896G	5.51068G	18.891M	5.490495G	5.509385G	Inf	2
21.84M	5.48899G	5.51083G	18.921M	5.490435G	5.509355G	Inf	3
21.45M	5.48905G	5.5105G	18.921M	5.490465G	5.509385G	Inf	4

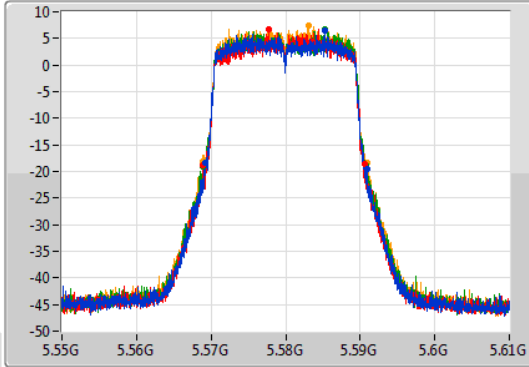
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

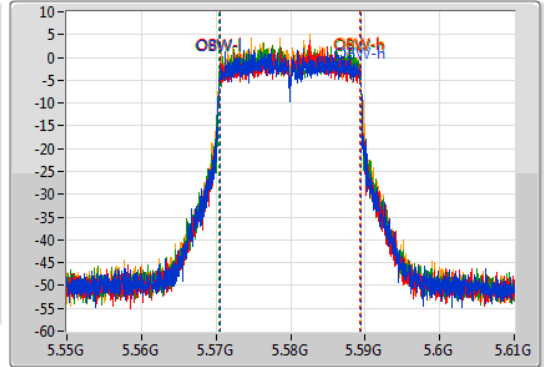
5580MHz

01/08/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.63M	5.56929G	5.59092G	18.891M	5.570495G	5.589385G	Inf	1
21.66M	5.5689G	5.59056G	18.831M	5.570525G	5.589355G	Inf	2
21.84M	5.56896G	5.5908G	18.921M	5.570465G	5.589385G	Inf	3
22.08M	5.56887G	5.59095G	18.921M	5.570465G	5.589385G	Inf	4

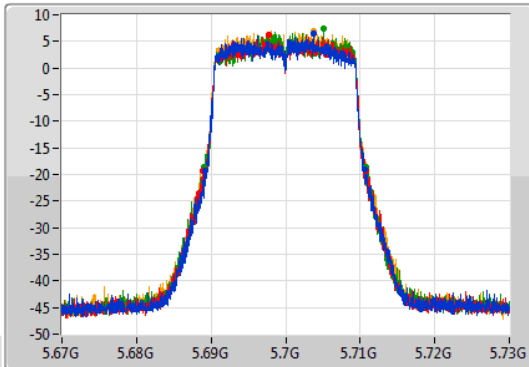
802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

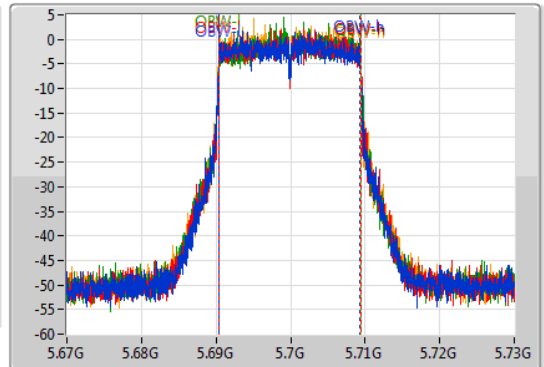
5700MHz

01/08/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



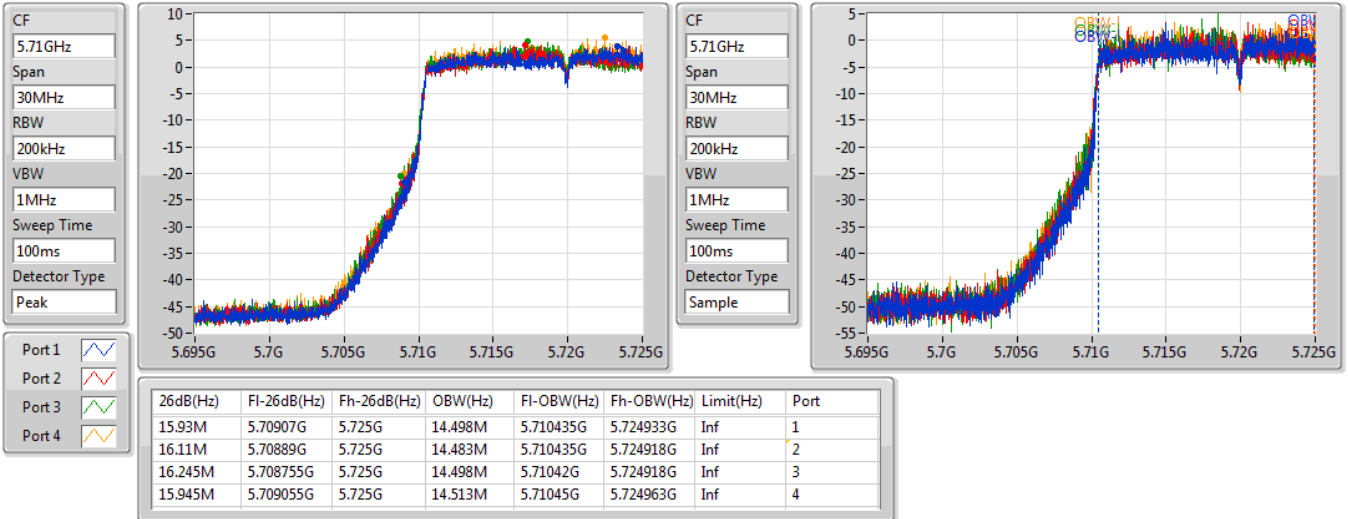
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.36M	5.68917G	5.71053G	18.921M	5.690435G	5.709355G	Inf	1
21.99M	5.68887G	5.71086G	18.921M	5.690465G	5.709385G	Inf	2
21.72M	5.68902G	5.71074G	18.951M	5.690435G	5.709385G	Inf	3
21.84M	5.68902G	5.71086G	18.921M	5.690465G	5.709385G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

01/08/2019

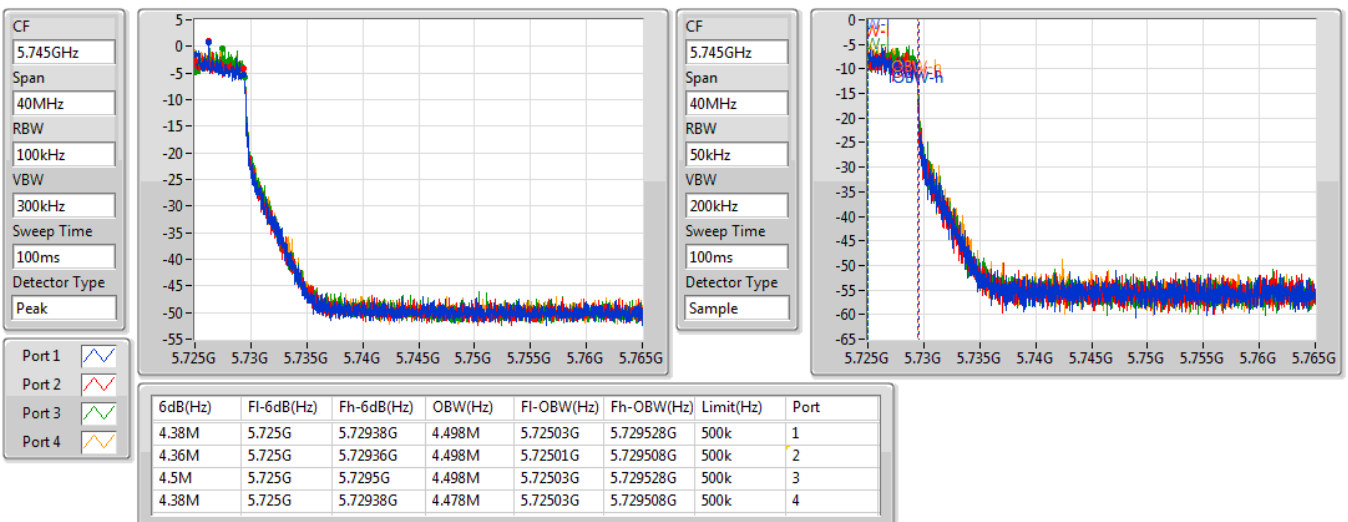


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

01/08/2019



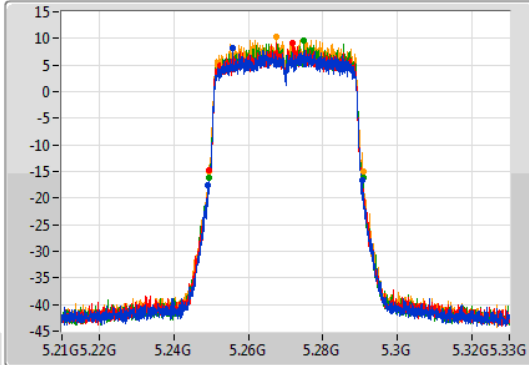
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

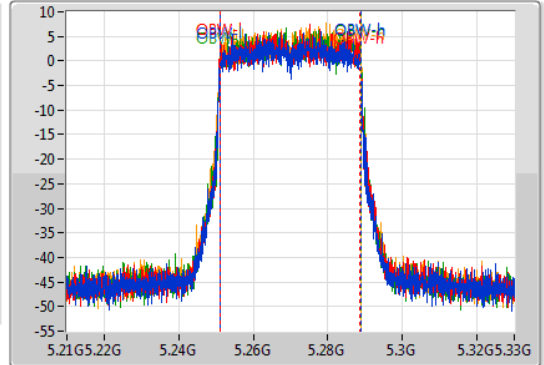
5270MHz

01/08/2019

CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.28M	5.24924G	5.29052G	37.661M	5.251109G	5.288771G	Inf	1
41.04M	5.24942G	5.29046G	37.661M	5.251049G	5.288711G	Inf	2
41.46M	5.2493G	5.29076G	37.721M	5.251049G	5.288771G	Inf	3
41.46M	5.24936G	5.29082G	37.661M	5.251109G	5.288771G	Inf	4

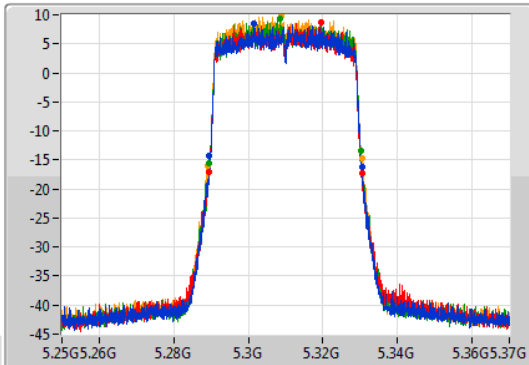
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

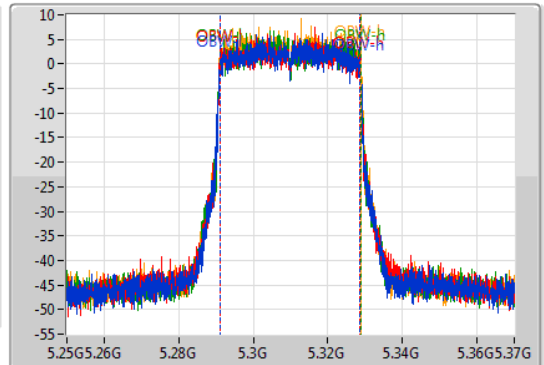
5310MHz

01/08/2019

CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.98M	5.28954G	5.33052G	37.661M	5.291049G	5.328711G	Inf	1
41.28M	5.28942G	5.3307G	37.661M	5.291049G	5.328711G	Inf	2
40.98M	5.28936G	5.33034G	37.721M	5.291049G	5.328771G	Inf	3
41.46M	5.28924G	5.3307G	37.721M	5.291049G	5.328771G	Inf	4

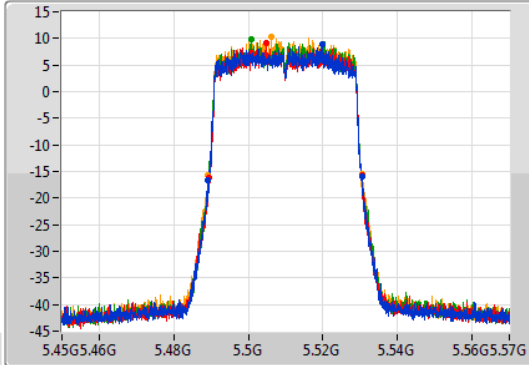
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

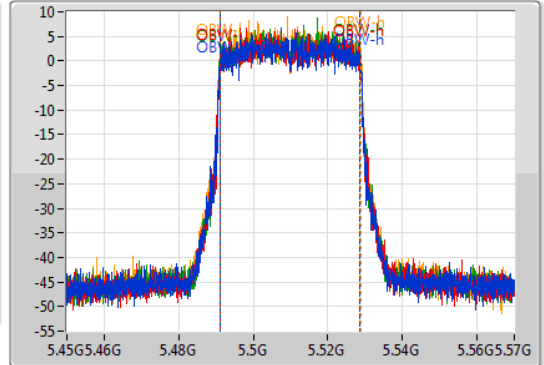
5510MHz

01/08/2019

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.28M	5.48924G	5.53052G	37.601M	5.491109G	5.528711G	Inf	1
40.8M	5.4896G	5.5304G	37.601M	5.491109G	5.528711G	Inf	2
40.98M	5.48948G	5.53046G	37.601M	5.491109G	5.528711G	Inf	3
41.34M	5.48912G	5.53046G	37.721M	5.491049G	5.528771G	Inf	4

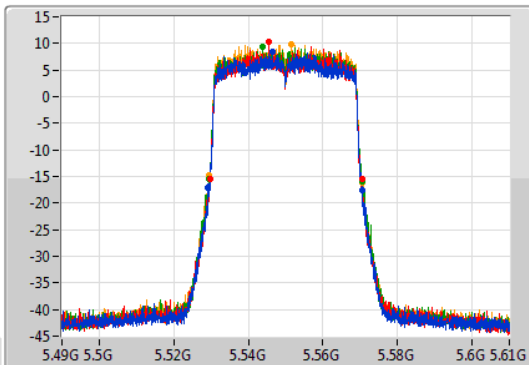
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

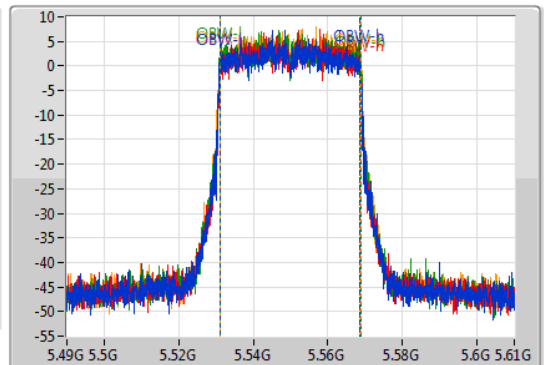
5550MHz

01/08/2019

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.4M	5.52918G	5.57058G	37.721M	5.53099G	5.568711G	Inf	1
40.74M	5.52972G	5.57046G	37.601M	5.531109G	5.568711G	Inf	2
41.16M	5.52948G	5.57064G	37.781M	5.53099G	5.568771G	Inf	3
41.28M	5.52936G	5.57064G	37.841M	5.53099G	5.568831G	Inf	4

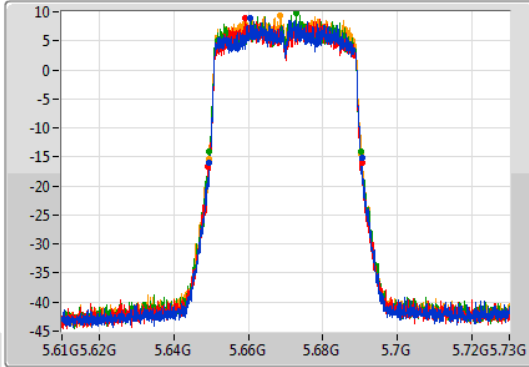
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

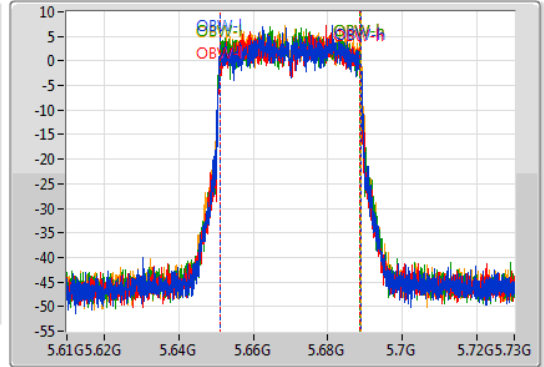
5670MHz

01/08/2019

CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.1M	5.64954G	5.69064G	37.781M	5.65099G	5.688771G	Inf	1
41.28M	5.64912G	5.6904G	37.601M	5.651109G	5.688711G	Inf	2
40.74M	5.6496G	5.69034G	37.661M	5.65099G	5.688651G	Inf	3
40.8M	5.64942G	5.69022G	37.781M	5.65099G	5.688771G	Inf	4

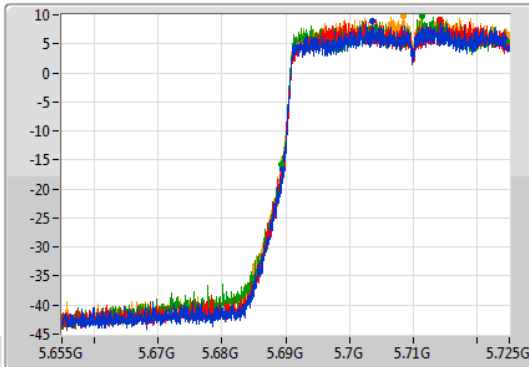
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

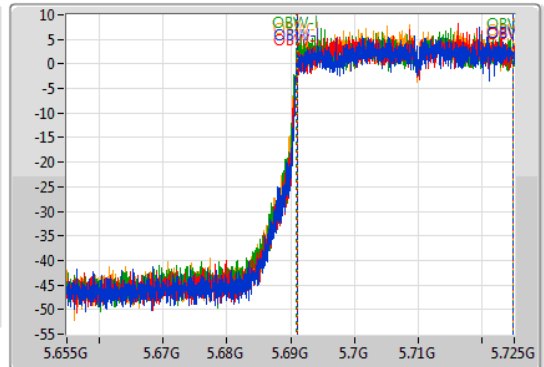
5710MHz Straddle 5.47-5.725GHz

01/08/2019

CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.525M	5.689475G	5.725G	33.793M	5.691014G	5.724808G	Inf	1
35.56M	5.68944G	5.725G	33.793M	5.691049G	5.724843G	Inf	2
35.595M	5.689405G	5.725G	33.828M	5.690945G	5.724773G	Inf	3
35.665M	5.689335G	5.725G	33.758M	5.691049G	5.724808G	Inf	4

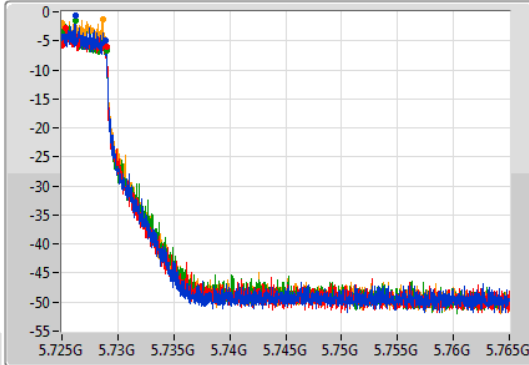
802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

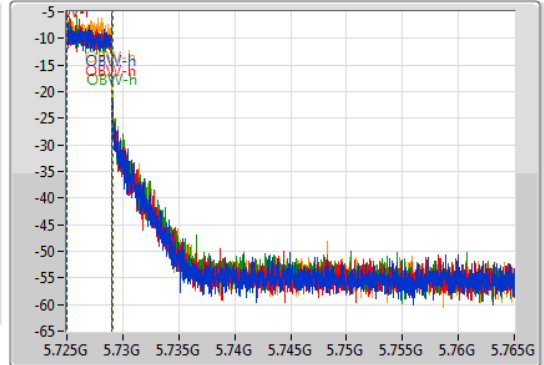
5710MHz Straddle 5.725-5.85GHz

01/08/2019

CF
5.745GHz
Span
40MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.745GHz
Span
40MHz
RBW
50kHz
VBW
200kHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.9M	5.725G	5.7289G	4.038M	5.72501G	5.729048G	500k	1
4.02M	5.725G	5.72902G	4.038M	5.72501G	5.729048G	500k	2
4.04M	5.725G	5.72904G	4.058M	5.72501G	5.729068G	500k	3
4.04M	5.725G	5.72904G	4.018M	5.72503G	5.729048G	500k	4

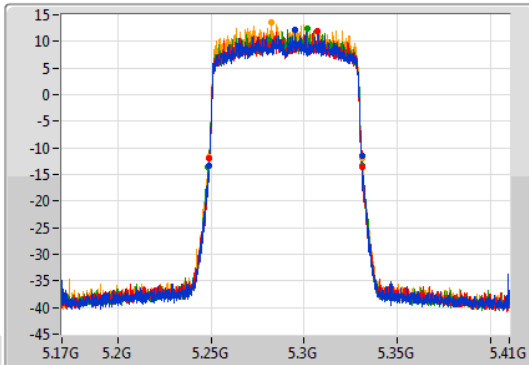
802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

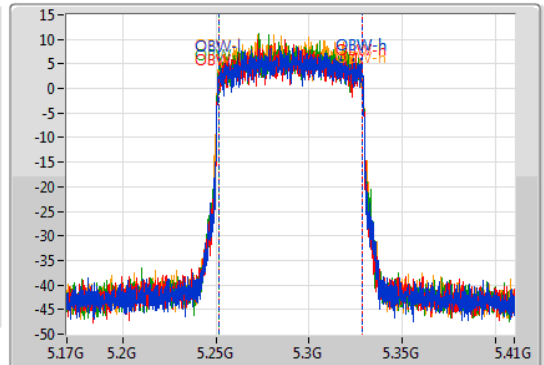
5290MHz

01/08/2019

CF
5.29GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.29GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.32M	5.2486G	5.33092G	77.001M	5.251499G	5.328501G	Inf	1
82.08M	5.24908G	5.33116G	76.762M	5.251499G	5.328261G	Inf	2
82.8M	5.24848G	5.33128G	76.762M	5.251499G	5.328261G	Inf	3
81.96M	5.24884G	5.3308G	76.882M	5.251379G	5.328261G	Inf	4

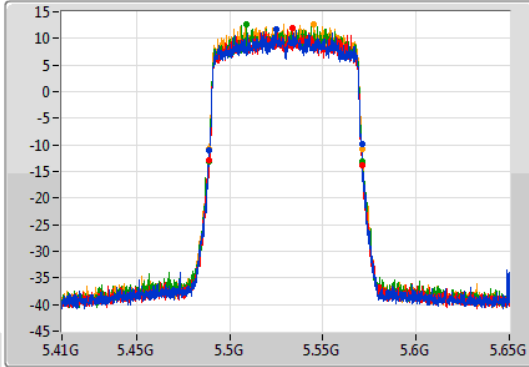
802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

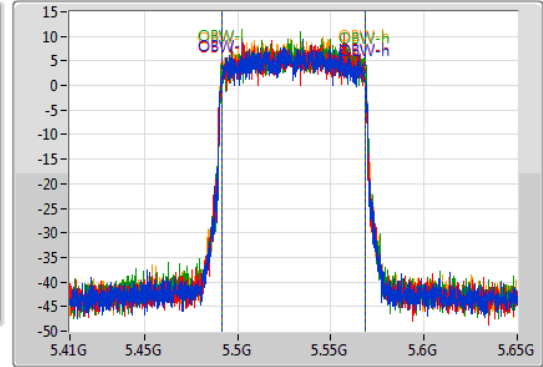
5530MHz

01/08/2019

CF: 5.53GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.53GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.44M	5.4886G	5.57104G	76.882M	5.491379G	5.568261G	Inf	1
82.2M	5.48896G	5.57116G	76.882M	5.491379G	5.568261G	Inf	2
82.68M	5.4886G	5.57128G	77.241M	5.491259G	5.568501G	Inf	3
82.32M	5.48872G	5.57104G	77.121M	5.491259G	5.568381G	Inf	4

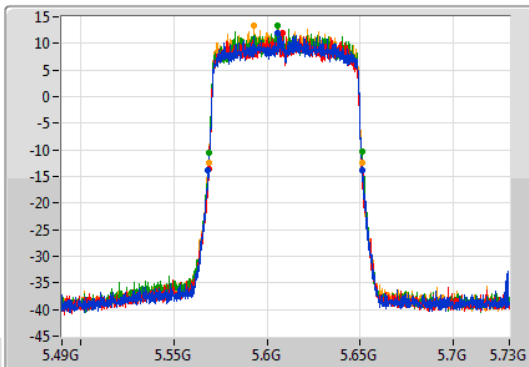
802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

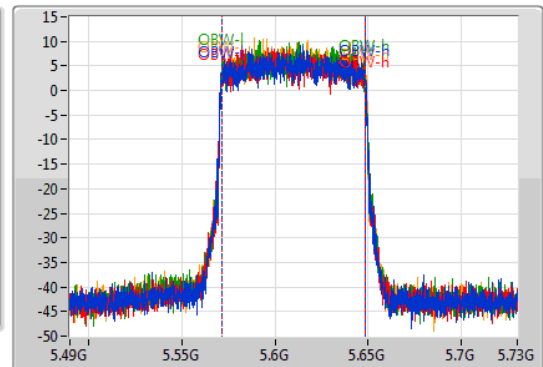
5610MHz

01/08/2019

CF: 5.61GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.61GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

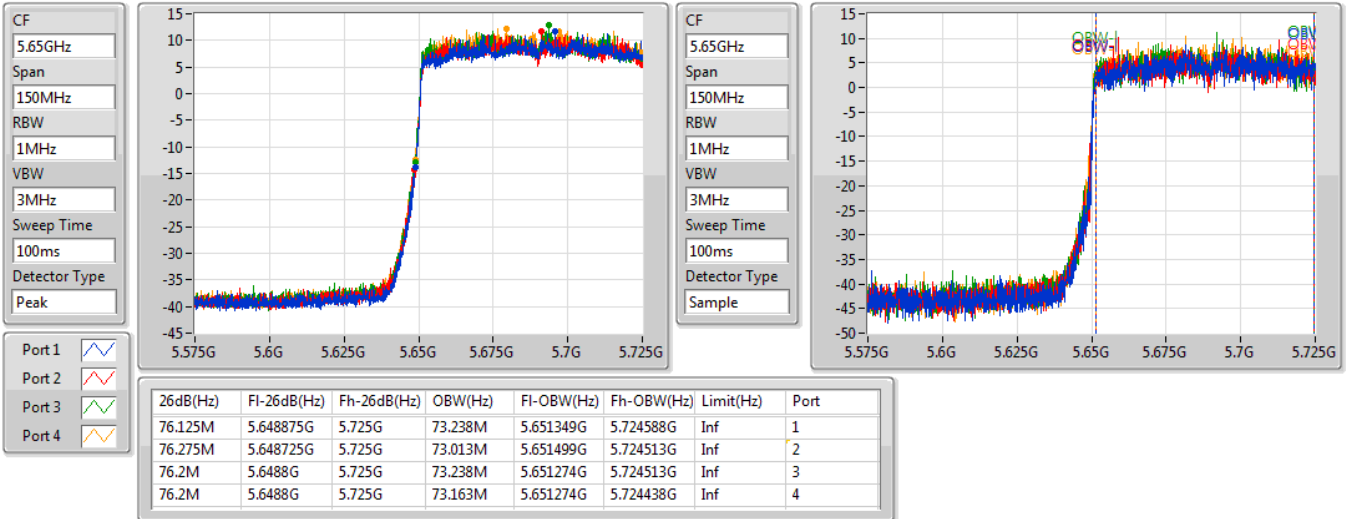
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.56M	5.56848G	5.65104G	77.121M	5.571259G	5.648381G	Inf	1
82.68M	5.5686G	5.65128G	77.001M	5.571379G	5.648381G	Inf	2
81.96M	5.56884G	5.6508G	77.001M	5.571379G	5.648381G	Inf	3
82.44M	5.5686G	5.65104G	77.001M	5.571379G	5.648381G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.47-5.725GHz

01/08/2019

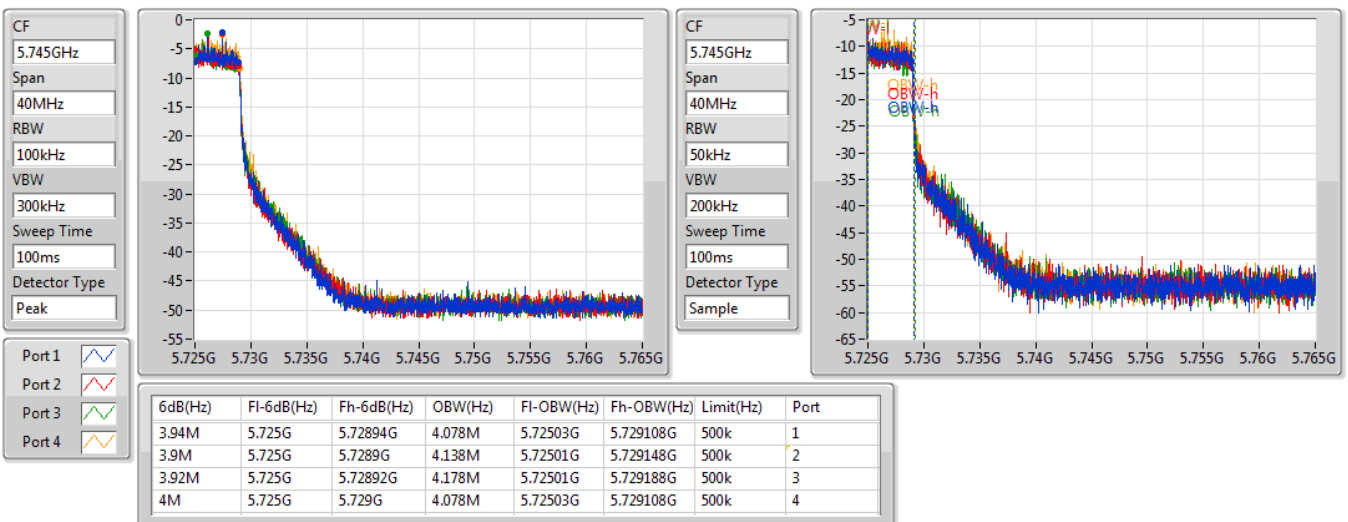


802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.725-5.85GHz

01/08/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.08M	18.921M	18M9D1D	21.48M	18.861M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	42.12M	37.721M	37M7D1D	40.74M	37.601M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.96M	77.121M	77M1D1D	81.12M	76.882M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.9M	18.921M	18M9D1D	15.63M	14.468M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	41.28M	37.781M	37M8D1D	35.455M	33.688M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.6M	77.121M	77M1D1D	75.3M	72.939M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	4.4M	4.478M	4M48D1D	4.1M	4.478M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	4M	4.078M	4M08D1D	3.96M	4.038M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.98M	4.438M	4M44D1D	3.94M	4.278M

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	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.99M	18.921M	21.84M	18.891M	21.63M	18.891M	21.9M	18.921M
5300MHz	Pass	Inf	21.75M	18.921M	21.6M	18.891M	21.69M	18.921M	21.75M	18.921M
5320MHz	Pass	Inf	22.08M	18.861M	21.48M	18.891M	21.63M	18.861M	21.93M	18.921M
5500MHz	Pass	Inf	21.81M	18.921M	21.66M	18.921M	21.3M	18.921M	21.45M	18.891M
5580MHz	Pass	Inf	21.87M	18.861M	21.87M	18.891M	20.46M	18.891M	21.9M	18.861M
5700MHz	Pass	Inf	21.72M	18.891M	21.57M	18.891M	21.45M	18.891M	21.33M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.63M	14.468M	15.825M	14.468M	15.645M	14.468M	15.78M	14.483M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.36M	4.478M	4.1M	4.478M	4.4M	4.478M	4.4M	4.478M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	42.12M	37.721M	41.22M	37.601M	40.74M	37.721M	40.98M	37.661M
5310MHz	Pass	Inf	41.58M	37.661M	41.04M	37.721M	40.98M	37.661M	40.8M	37.661M
5510MHz	Pass	Inf	40.44M	37.601M	41.04M	37.721M	40.2M	37.661M	40.44M	37.601M
5550MHz	Pass	Inf	40.86M	37.721M	40.86M	37.661M	41.1M	37.781M	40.38M	37.661M
5670MHz	Pass	Inf	39.78M	37.601M	40.86M	37.601M	40.5M	37.661M	41.28M	37.661M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.77M	33.793M	35.455M	33.688M	35.455M	33.688M	35.56M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.058M	3.96M	4.078M	4M	4.038M	3.96M	4.078M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.48M	77.121M	81.12M	77.001M	81.96M	77.001M	81.72M	76.882M
5530MHz	Pass	Inf	81.6M	77.121M	81.12M	76.882M	81.48M	77.001M	81.24M	77.121M
5610MHz	Pass	Inf	81M	77.121M	81.24M	77.121M	81.24M	77.001M	80.52M	77.121M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.013M	75.6M	72.939M	75.3M	73.163M	76.5M	73.013M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.278M	3.94M	4.438M	3.98M	4.298M	3.94M	4.278M

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

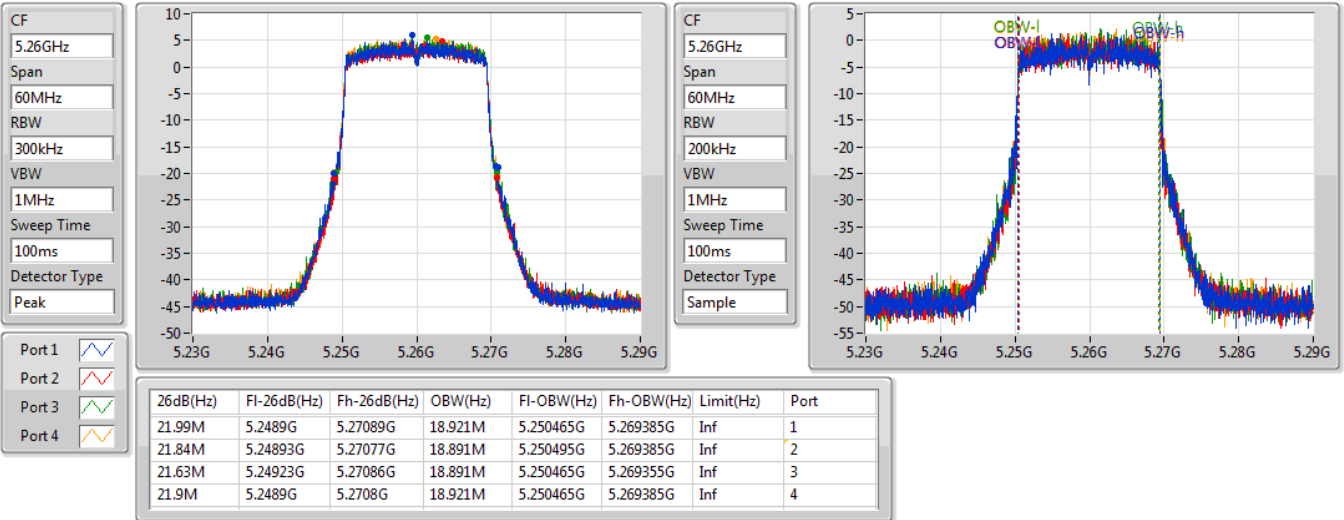
Port X-OBW = Port X 99% occupied bandwidth;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5260MHz

03/08/2019

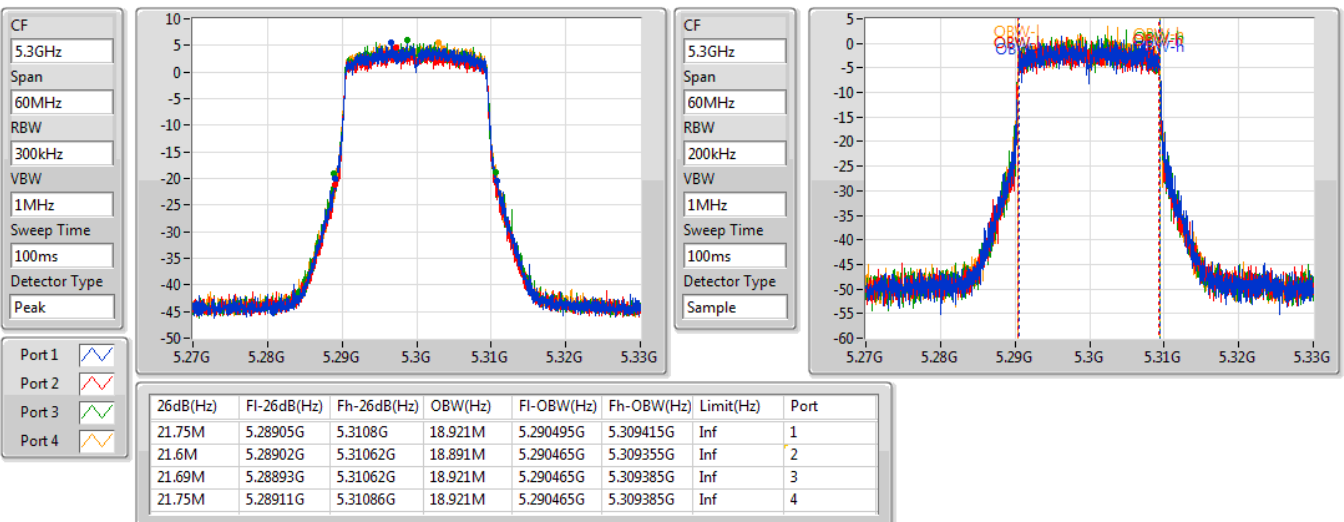


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5300MHz

03/08/2019



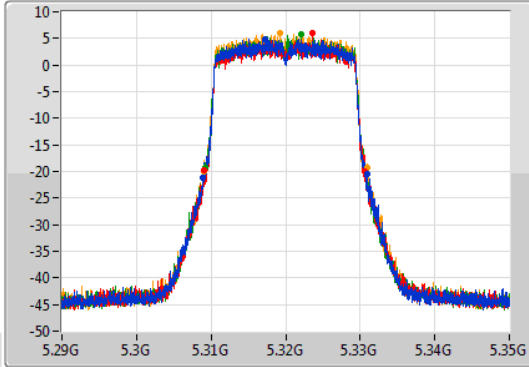
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

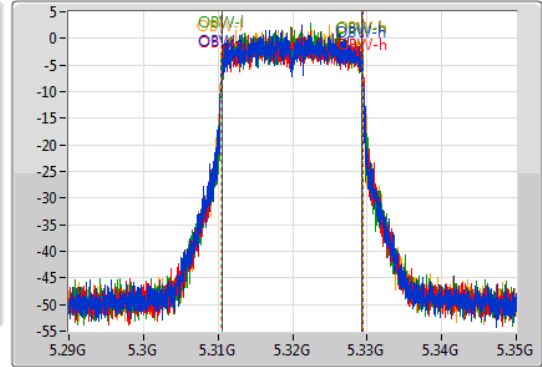
5320MHz

03/08/2019

CF
5.32GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.08M	5.3089G	5.33098G	18.861M	5.310495G	5.329355G	Inf	1
21.48M	5.30908G	5.33056G	18.891M	5.310495G	5.329385G	Inf	2
21.63M	5.3092G	5.33083G	18.861M	5.310495G	5.329355G	Inf	3
21.93M	5.30902G	5.33095G	18.921M	5.310465G	5.329385G	Inf	4

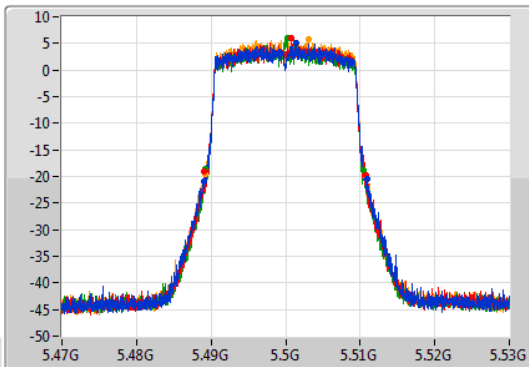
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

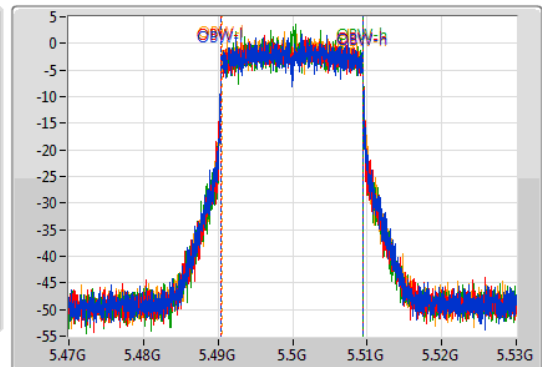
5500MHz

03/08/2019

CF
5.5GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.81M	5.48908G	5.51089G	18.921M	5.490465G	5.509385G	Inf	1
21.66M	5.48905G	5.51071G	18.921M	5.490465G	5.509385G	Inf	2
21.3M	5.48914G	5.51044G	18.921M	5.490465G	5.509385G	Inf	3
21.45M	5.48926G	5.51071G	18.891M	5.490495G	5.509385G	Inf	4

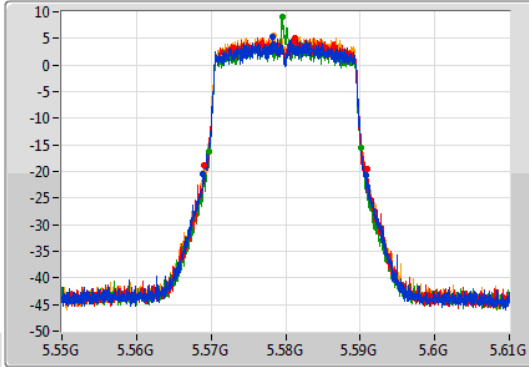
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

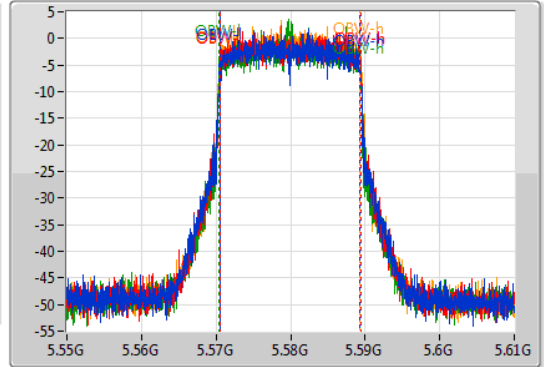
5580MHz

03/08/2019

CF: 5.58GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.58GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.87M	5.56887G	5.59074G	18.861M	5.570495G	5.589355G	Inf	1
21.87M	5.56902G	5.59089G	18.891M	5.570495G	5.589385G	Inf	2
20.46M	5.56971G	5.59017G	18.891M	5.570465G	5.589355G	Inf	3
21.9M	5.56911G	5.59101G	18.861M	5.570495G	5.589355G	Inf	4

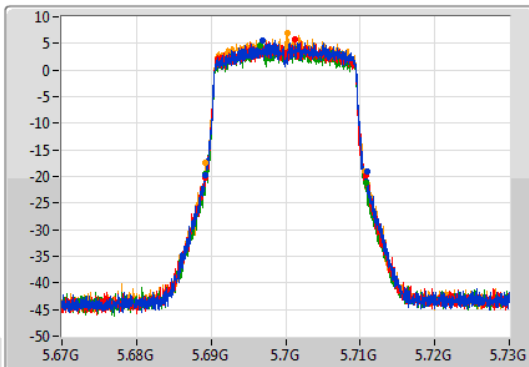
802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

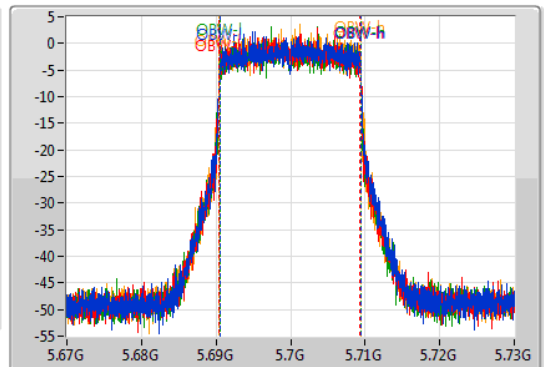
5700MHz

03/08/2019

CF: 5.7GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.7GHz
 Span: 60MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Sample



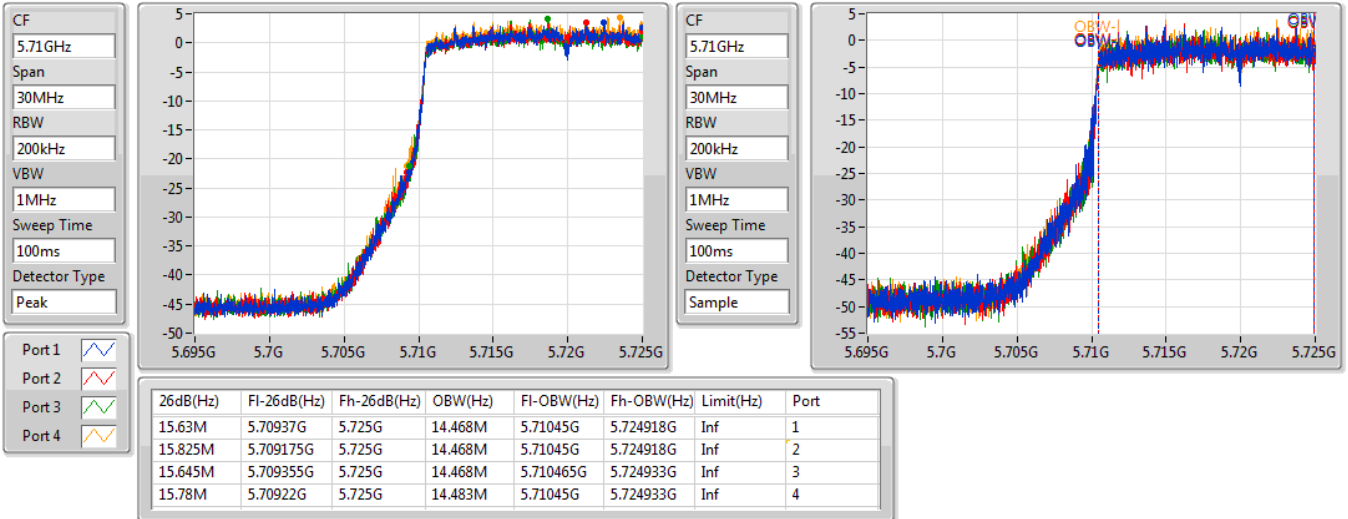
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.72M	5.6892G	5.71092G	18.891M	5.690495G	5.709385G	Inf	1
21.57M	5.68917G	5.71074G	18.891M	5.690465G	5.709355G	Inf	2
21.45M	5.68929G	5.71074G	18.891M	5.690495G	5.709385G	Inf	3
21.33M	5.68923G	5.71056G	18.921M	5.690465G	5.709385G	Inf	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

05/08/2019

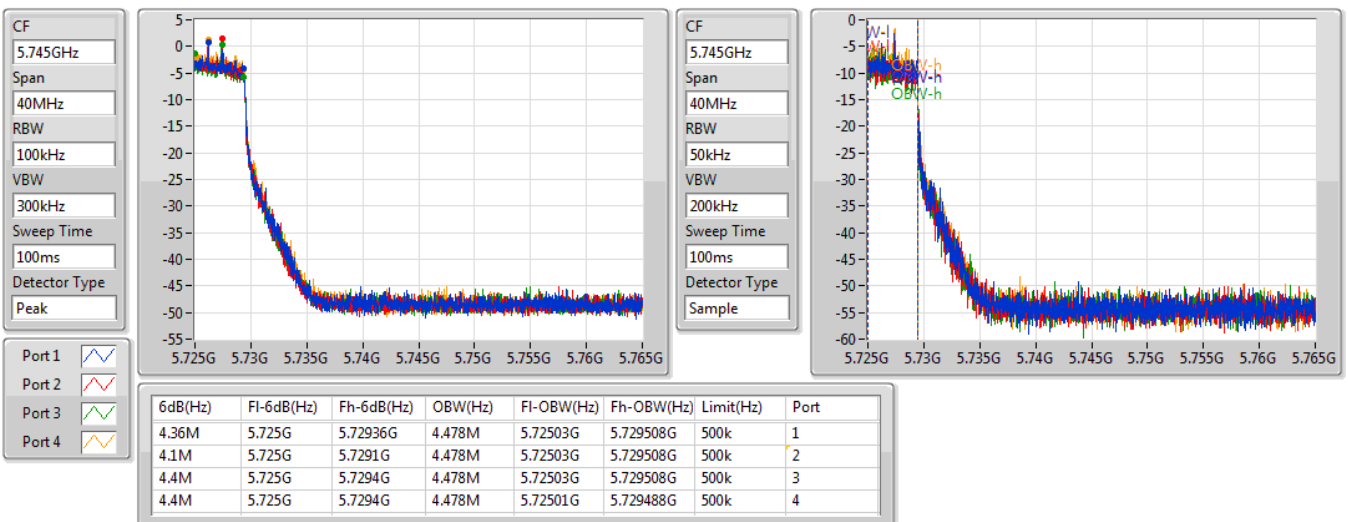


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

05/08/2019



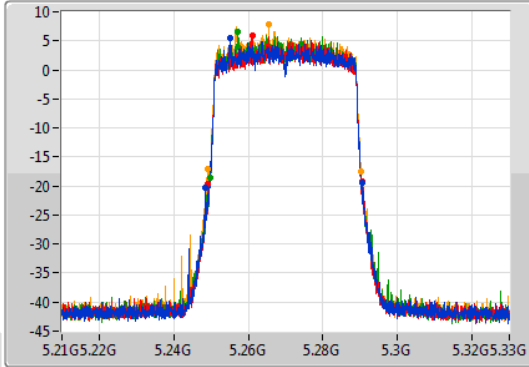
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

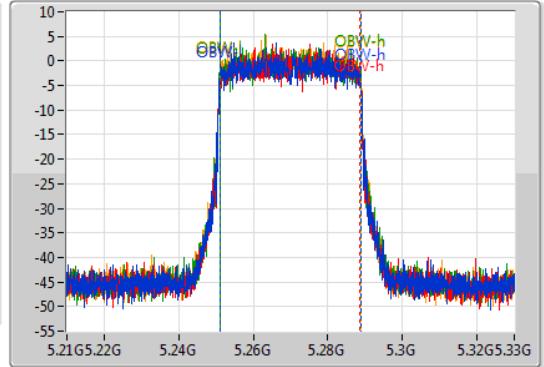
5270MHz

05/08/2019

CF: 5.27GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.27GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.12M	5.24834G	5.29046G	37.721M	5.251049G	5.288771G	Inf	1
41.22M	5.24924G	5.29046G	37.601M	5.251109G	5.288711G	Inf	2
40.74M	5.24966G	5.2904G	37.721M	5.251109G	5.288831G	Inf	3
40.98M	5.24924G	5.29022G	37.661M	5.251109G	5.288771G	Inf	4

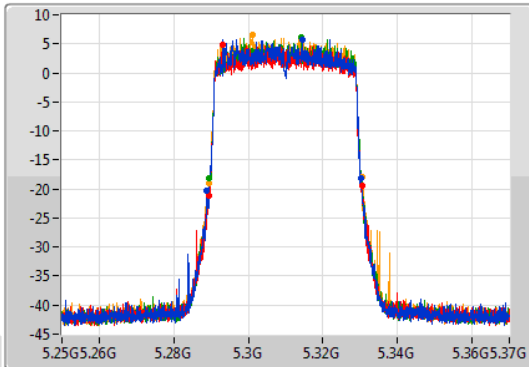
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

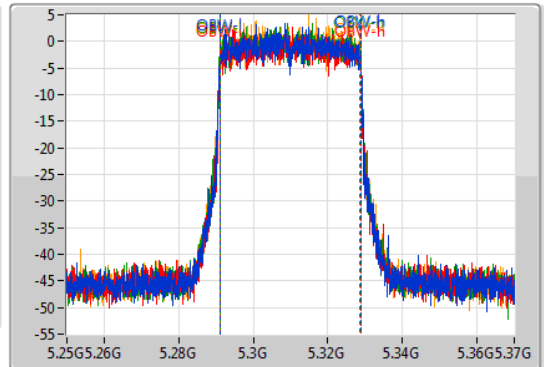
5310MHz

05/08/2019

CF: 5.31GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.31GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Sample



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.58M	5.28876G	5.33034G	37.661M	5.291109G	5.328771G	Inf	1
41.04M	5.28942G	5.33046G	37.721M	5.291049G	5.328771G	Inf	2
40.98M	5.28948G	5.33046G	37.661M	5.291049G	5.328711G	Inf	3
40.8M	5.2896G	5.3304G	37.661M	5.291109G	5.328771G	Inf	4

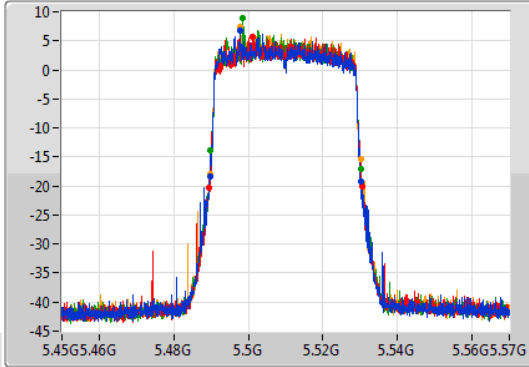
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

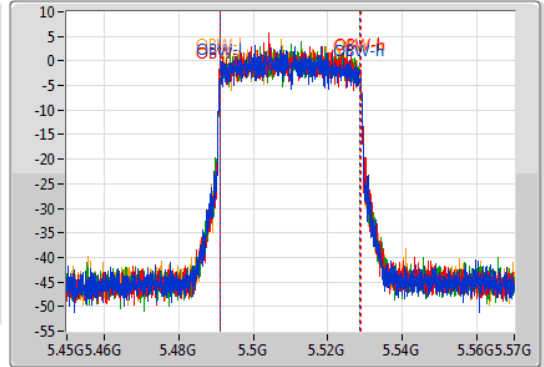
5510MHz

05/08/2019

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.44M	5.48966G	5.5301G	37.601M	5.491109G	5.528711G	Inf	1
41.04M	5.48954G	5.53058G	37.721M	5.491049G	5.528771G	Inf	2
40.2M	5.4899G	5.5301G	37.661M	5.491049G	5.528711G	Inf	3
40.44M	5.48978G	5.53022G	37.601M	5.491109G	5.528711G	Inf	4

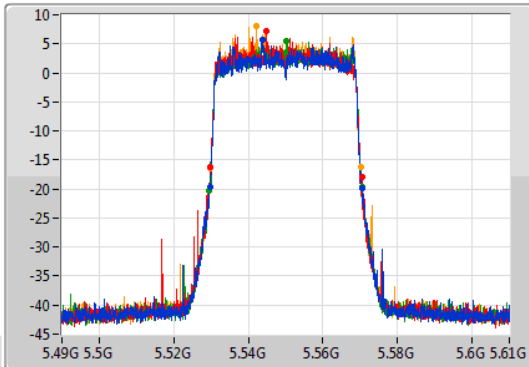
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

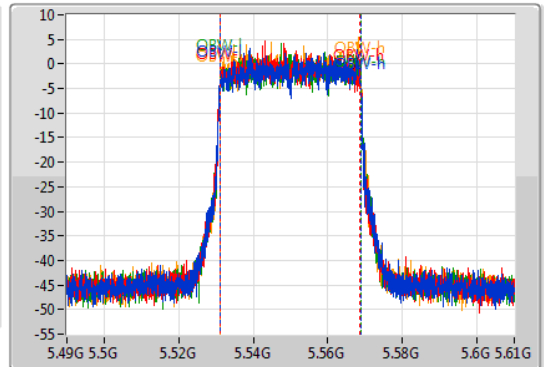
5550MHz

05/08/2019

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.86M	5.52966G	5.57052G	37.721M	5.531049G	5.568771G	Inf	1
40.86M	5.52972G	5.57058G	37.661M	5.531049G	5.568711G	Inf	2
41.1M	5.5296G	5.5707G	37.781M	5.531109G	5.568891G	Inf	3
40.38M	5.52978G	5.57016G	37.661M	5.531109G	5.568771G	Inf	4

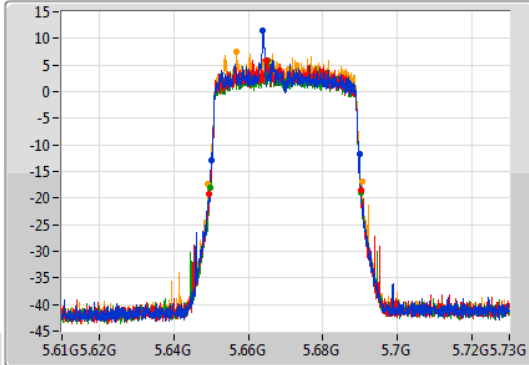
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

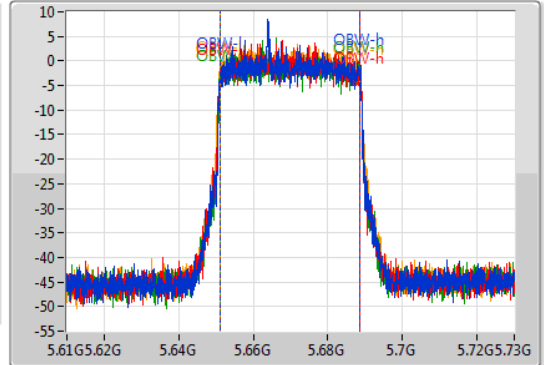
5670MHz

05/08/2019

CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.78M	5.64996G	5.68974G	37.601M	5.651109G	5.688711G	Inf	1
40.86M	5.64942G	5.69028G	37.601M	5.651109G	5.688711G	Inf	2
40.5M	5.64966G	5.69016G	37.661M	5.651049G	5.688711G	Inf	3
41.28M	5.64918G	5.69046G	37.661M	5.651049G	5.688711G	Inf	4

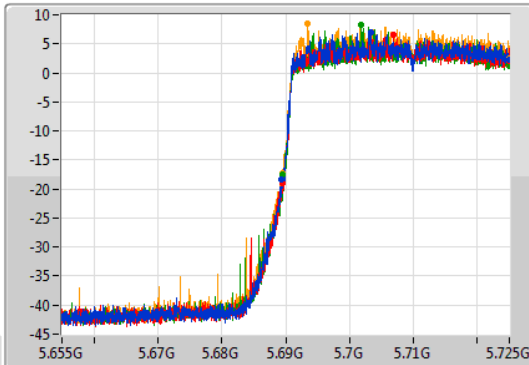
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

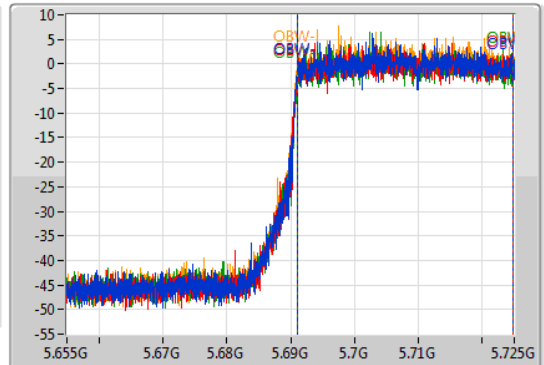
5710MHz Straddle 5.47-5.725GHz

05/08/2019

CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

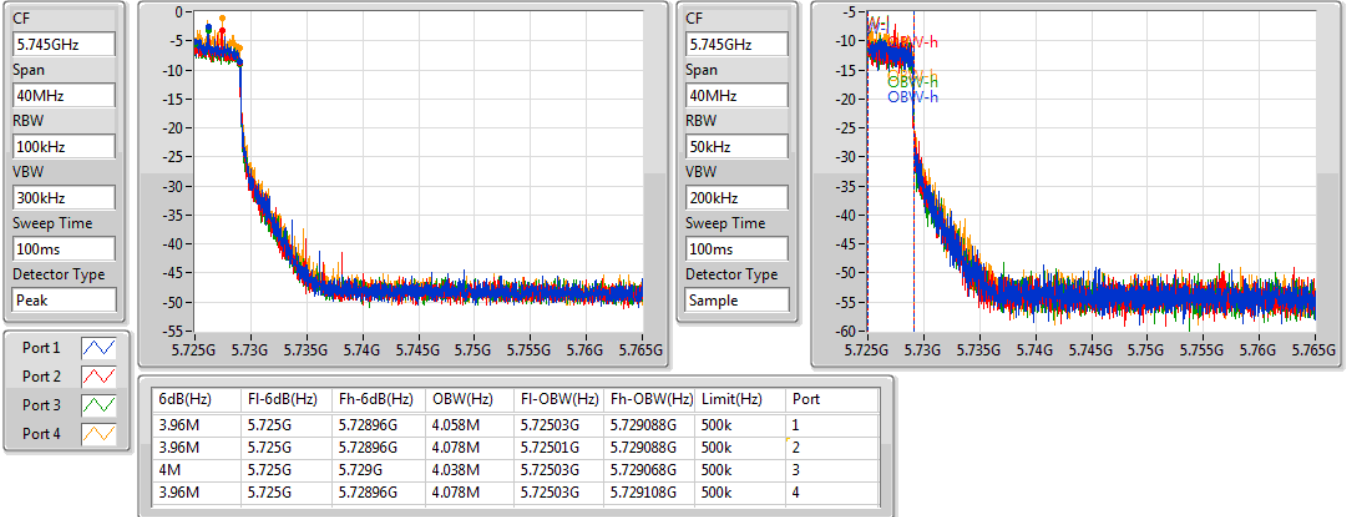
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.77M	5.68923G	5.725G	33.793M	5.691014G	5.724808G	Inf	1
35.455M	5.689545G	5.725G	33.688M	5.691049G	5.724738G	Inf	2
35.455M	5.689545G	5.725G	33.688M	5.691049G	5.724738G	Inf	3
35.56M	5.68944G	5.725G	33.758M	5.691014G	5.724773G	Inf	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

5710MHz Straddle 5.725-5.85GHz

05/08/2019

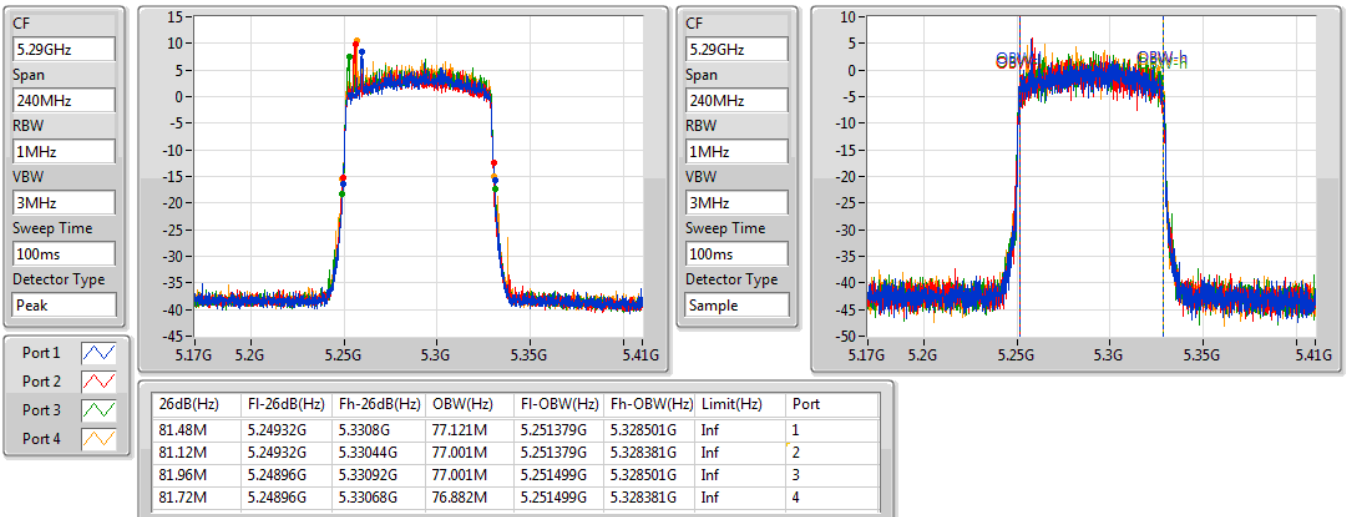


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

5290MHz

05/08/2019



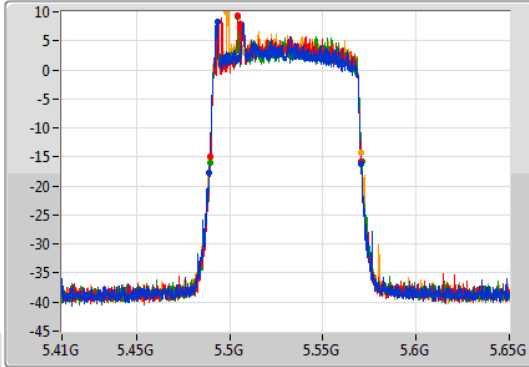
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

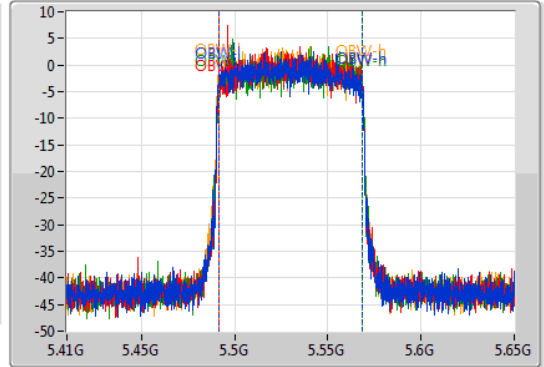
5530MHz

05/08/2019

CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.6M	5.48908G	5.57068G	77.121M	5.491259G	5.568381G	Inf	1
81.12M	5.48956G	5.57068G	76.882M	5.491499G	5.568381G	Inf	2
81.48M	5.48932G	5.5708G	77.001M	5.491379G	5.568381G	Inf	3
81.24M	5.48932G	5.57056G	77.121M	5.491259G	5.568381G	Inf	4

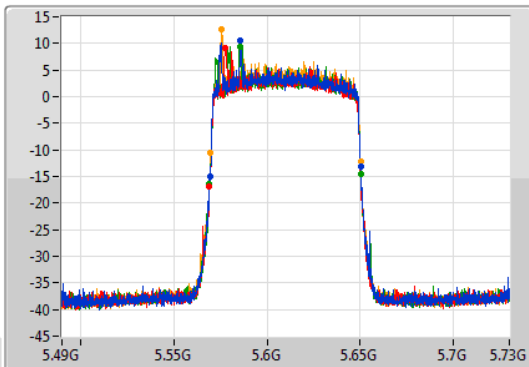
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

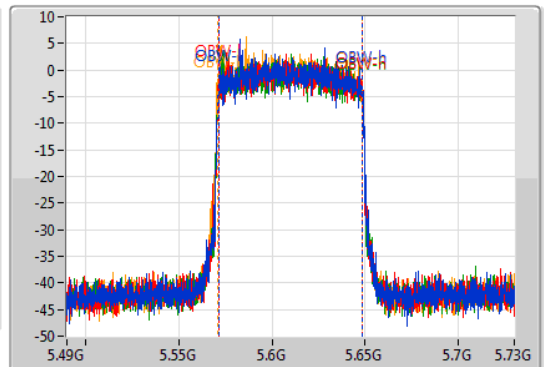
5610MHz

05/08/2019

CF
5.61GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.61GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81M	5.56932G	5.65032G	77.121M	5.571379G	5.648501G	Inf	1
81.24M	5.5692G	5.65044G	77.121M	5.571379G	5.648501G	Inf	2
81.24M	5.56908G	5.65032G	77.001M	5.571379G	5.648381G	Inf	3
80.52M	5.56968G	5.6502G	77.121M	5.571139G	5.648261G	Inf	4

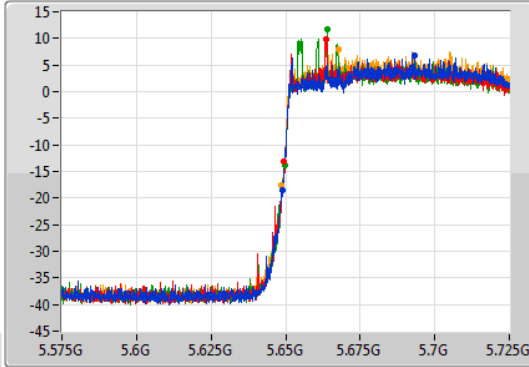
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

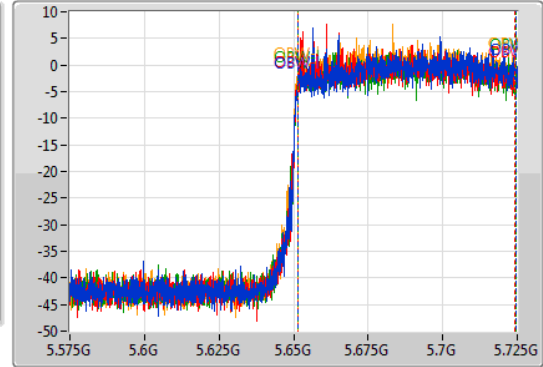
5690MHz Straddle 5.47-5.725GHz

05/08/2019

CF
5.65GHz
Span
150MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.65GHz
Span
150MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.2M	5.6488G	5.725G	73.013M	5.651499G	5.724513G	Inf	1
75.6M	5.6494G	5.725G	72.939M	5.651424G	5.724363G	Inf	2
75.3M	5.6497G	5.725G	73.163M	5.651349G	5.724513G	Inf	3
76.5M	5.6485G	5.725G	73.013M	5.651349G	5.724363G	Inf	4

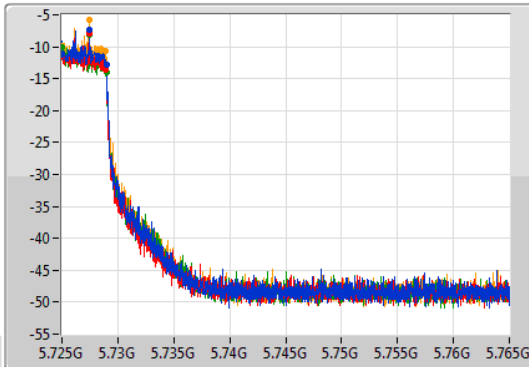
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

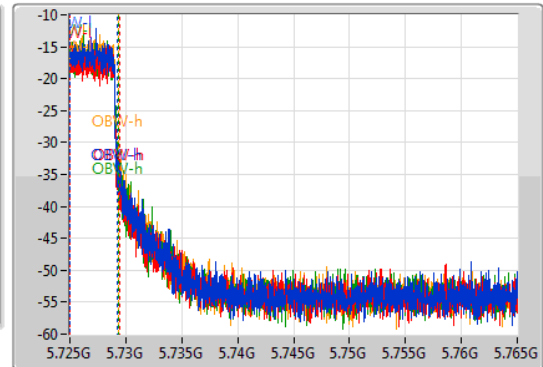
5690MHz Straddle 5.725-5.85GHz

05/08/2019

CF
5.745GHz
Span
40MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.745GHz
Span
40MHz
RBW
50kHz
VBW
200kHz
Sweep Time
100ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.96M	5.725G	5.72896G	4.278M	5.72501G	5.729288G	500k	1
3.94M	5.725G	5.72894G	4.438M	5.72503G	5.729468G	500k	2
3.98M	5.725G	5.72898G	4.298M	5.72503G	5.729328G	500k	3
3.94M	5.725G	5.72894G	4.278M	5.72503G	5.729308G	500k	4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	20.61M	16.432M	16M4D1D	20.46M	16.402M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.26M	18.891M	18M9D1D	21.78M	18.891M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.16M	37.781M	37M8D1D	40.98M	37.661M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.2M	77.001M	77M0D1D	82.2M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	20.76M	16.402M	16M4D1D	15.36M	13.223M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.41M	18.921M	18M9D1D	16.095M	14.468M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.34M	37.721M	37M7D1D	36.05M	33.793M
802.11ax HEW80_Nss1,(MCS0)_1TX	84M	77.241M	77M2D1D	76.65M	73.238M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	3.08M	3.618M	3M62D1D	3.08M	3.618M
802.11ax HEW20_Nss1,(MCS0)_1TX	4.4M	4.558M	4M56D1D	4.4M	4.558M
802.11ax HEW40_Nss1,(MCS0)_1TX	3.92M	5.797M	5M80D1D	3.92M	5.797M
802.11ax HEW80_Nss1,(MCS0)_1TX	4M	17.971M	18M0D1D	4M	17.971M

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	-	-	-	-
5260MHz	Pass	Inf	20.52M	16.402M
5300MHz	Pass	Inf	20.46M	16.432M
5320MHz	Pass	Inf	20.61M	16.402M
5500MHz	Pass	Inf	20.58M	16.402M
5580MHz	Pass	Inf	20.58M	16.402M
5700MHz	Pass	Inf	20.76M	16.402M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.36M	13.223M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.618M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5260MHz	Pass	Inf	22.26M	18.891M
5300MHz	Pass	Inf	21.78M	18.891M
5320MHz	Pass	Inf	21.84M	18.891M
5500MHz	Pass	Inf	22.41M	18.921M
5580MHz	Pass	Inf	22.02M	18.921M
5700MHz	Pass	Inf	21.99M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.095M	14.468M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.4M	4.558M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5270MHz	Pass	Inf	41.16M	37.781M
5310MHz	Pass	Inf	40.98M	37.661M
5510MHz	Pass	Inf	41.28M	37.661M
5550MHz	Pass	Inf	41.34M	37.721M
5670MHz	Pass	Inf	41.1M	37.661M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.05M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	5.797M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5290MHz	Pass	Inf	82.2M	77.001M
5530MHz	Pass	Inf	82.2M	77.121M
5610MHz	Pass	Inf	84M	77.241M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.65M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	17.971M

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;