



RADIO TEST REPORT

FCC ID : MSQ-RTAX4S00
Equipment : AX7800 Tri Band WiFi Router
AX6600 Tri Band WiFi Router
Brand Name : ASUS
Model Name : ZenWiFi XT9/ASUS ZenWiFi
XT9/XT8/BR-XT9/ZenWiFi Business BR-XT9/XT9
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112,
Taiwan
Manufacturer (1) : Compal Networking(KunShan) CO., LTD.
No.520,Nan Bang RD., Economic & Technical
Development Zone, KunShan,JiangSu,China
Manufacturer (2) : ARCADYAN TECHNOLOGY (VIETNAM) CO., LTD.
No. D4-5-6, Thang Long Industrial Park (Vinh
Phuc), Thien Ke Commune, Binh Xuyen District,
Vinh Phuc Province, Vietnam
Standard : 47 CFR FCC Part 15.407

The product was received on Oct. 19, 2021, and testing was started from Nov. 21, 2021 and completed on Mar. 23, 2022. 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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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4



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	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

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

Reviewed by: Sam Chen**Report Producer: Wendy Pan**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5725-5895		5845-5885	169-177[3]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5725-5895		5835-5875	167-175[2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5725-5895		5855	171[1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]
5725-5895		5815	163[1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2
5.15-5.25GHz	802.11n HT20	20	2
5.15-5.25GHz	802.11n HT20-BF	20	2
5.15-5.25GHz	802.11ac VHT20	20	2
5.15-5.25GHz	802.11ac VHT20-BF	20	2
5.15-5.25GHz	802.11ax HEW20	20	2
5.15-5.25GHz	802.11ax HEW20-BF	20	2
5.15-5.25GHz	802.11n HT40	40	2
5.15-5.25GHz	802.11n HT40-BF	40	2
5.15-5.25GHz	802.11ac VHT40	40	2
5.15-5.25GHz	802.11ac VHT40-BF	40	2



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW40	40	2
5.15-5.25GHz	802.11ax HEW40-BF	40	2
5.15-5.25GHz	802.11ac VHT80	80	2
5.15-5.25GHz	802.11ac VHT80-BF	80	2
5.15-5.25GHz	802.11ax HEW80	80	2
5.15-5.25GHz	802.11ax HEW80-BF	80	2
5.15-5.25GHz	802.11ac HEW160	160	2
5.15-5.25GHz	802.11ac HEW160-BF	160	2
5.15-5.25GHz	802.11ax HEW160	160	2
5.15-5.25GHz	802.11ax HEW160-BF	160	2
5.25-5.35GHz	802.11a	20	2
5.25-5.35GHz	802.11n HT20	20	2
5.25-5.35GHz	802.11n HT20-BF	20	2
5.25-5.35GHz	802.11ac VHT20	20	2
5.25-5.35GHz	802.11ac VHT20-BF	20	2
5.25-5.35GHz	802.11ax HEW20	20	2
5.25-5.35GHz	802.11ax HEW20-BF	20	2
5.25-5.35GHz	802.11n HT40	40	2
5.25-5.35GHz	802.11n HT40-BF	40	2
5.25-5.35GHz	802.11ac VHT40	40	2
5.25-5.35GHz	802.11ac VHT40-BF	40	2
5.25-5.35GHz	802.11ax HEW40	40	2
5.25-5.35GHz	802.11ax HEW40-BF	40	2
5.25-5.35GHz	802.11ac VHT80	80	2
5.25-5.35GHz	802.11ac VHT80-BF	80	2
5.25-5.35GHz	802.11ax HEW80	80	2
5.25-5.35GHz	802.11ax HEW80-BF	80	2
5.25-5.35GHz	802.11ac VHT160	160	2
5.25-5.35GHz	802.11ac VHT160-BF	160	2
5.25-5.35GHz	802.11ax HEW160	160	2
5.25-5.35GHz	802.11ax HEW160-BF	160	2
5.47-5.725GHz	802.11a	20	4
5.47-5.725GHz	802.11n HT20	20	4
5.47-5.725GHz	802.11n HT20-BF	20	4
5.47-5.725GHz	802.11ac VHT20	20	4
5.47-5.725GHz	802.11ac VHT20-BF	20	4
5.47-5.725GHz	802.11ax HEW20	20	4
5.47-5.725GHz	802.11ax HEW20-BF	20	4
5.47-5.725GHz	802.11n HT40	40	4
5.47-5.725GHz	802.11n HT40-BF	40	4



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ac VHT40	40	4
5.47-5.725GHz	802.11ac VHT40-BF	40	4
5.47-5.725GHz	802.11ax HEW40	40	4
5.47-5.725GHz	802.11ax HEW40-BF	40	4
5.47-5.725GHz	802.11ac VHT80	80	4
5.47-5.725GHz	802.11ac VHT80-BF	80	4
5.47-5.725GHz	802.11ax HEW80	80	4
5.47-5.725GHz	802.11ax HEW80-BF	80	4
5.47-5.725GHz	802.11ac VHT160	160	4
5.47-5.725GHz	802.11ac VHT160-BF	160	4
5.47-5.725GHz	802.11ax HEW160	160	4
5.47-5.725GHz	802.11ax HEW160-BF	160	4
5.725-5.895GHz	802.11a	20	4
5.725-5.895GHz	802.11n HT20	20	4
5.725-5.895GHz	802.11n HT20-BF	20	4
5.725-5.895GHz	802.11ac VHT20	20	4
5.725-5.895GHz	802.11ac VHT20-BF	20	4
5.725-5.895GHz	802.11ax HEW20	20	4
5.725-5.895GHz	802.11ax HEW20-BF	20	4
5.725-5.895GHz	802.11n HT40	40	4
5.725-5.895GHz	802.11n HT40-BF	40	4
5.725-5.895GHz	802.11ac VHT40	40	4
5.725-5.895GHz	802.11ac VHT40-BF	40	4
5.725-5.895GHz	802.11ax HEW40	40	4
5.725-5.895GHz	802.11ax HEW40-BF	40	4
5.725-5.895GHz	802.11ac VHT80	80	4
5.725-5.895GHz	802.11ac VHT80-BF	80	4
5.725-5.895GHz	802.11ax HEW80	80	4
5.725-5.895GHz	802.11ax HEW80-BF	80	4
5.725-5.895GHz	802.11ac VHT160	160	4
5.725-5.895GHz	802.11ac VHT160-BF	160	4
5.725-5.895GHz	802.11ax HEW160	160	4
5.725-5.895GHz	802.11ax HEW160-BF	160	4

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port			Brand Name	Model Name (Part Number)	Ant. Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz UNII 1~ UNII 2A	WLAN 5GHz UNII 2C~ UNII 4					
1	2	2	-	PSA	RFDPA230508I MLB902	Dipole	I-PEX	Note2
2	1	1	-	PSA	RFDPA230508I MLB902	Dipole	I-PEX	
3	-	-	3	PSA	RFDPA230508I MLB902	Dipole	I-PEX	
4	-	-	1	PSA	RFDPA230508I MLB902	Dipole	I-PEX	
5	-	-	2	PSA	RFDPA230508I MLB902	Dipole	I-PEX	
6	-	-	4	PSA	RFDPA230508I MLB902	Dipole	I-PEX	

Note1: The above information was declared by manufacturer.

Note2:

Ant.	Antenna Gain (dBi)					
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4
1	3.86	4.25	4.45	-	-	-
2	3.94	4.53	4.52	-	-	-
3	-	-	-	3.8	4.05	4.73
4	-	-	-	4.06	4.23	4.23
5	-	-	-	3.66	3.65	4.78
6	-	-	-	4.32	4.76	5.08

Directional Gain (dBi)											
WLAN 2.4GHz		WLAN 5GHz UNII 1		WLAN 5GHz UNII 2A		WLAN 5GHz UNII 2C		WLAN 5GHz UNII 3		WLAN 5GHz UNII 4	
2T1S	2T2S	2T1S	2T2S	2T1S	2T2S	4T1S	4T2S	4T1S	4T2S	4T1S	4T2S
5.38	2.46	5.83	2.82	5.56	2.8	6.86	4.32	7.11	4.76	7.71	5.08

Note3: The directional gain is measured which follows the procedure of KDB 662911 D03.

The antenna report is provided in the operational description for this application.

For 2.4GHz and 5GHz UNII 1~UNII 2A function:

For IEEE 802.11a/b/g/n/VHT/ac/ax mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz UNII 2C~UNII 4 function:

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

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

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

**1.1.3 Mode Test Duty Cycle****For UNII 1~UNII 2A:****For non-beamforming 2T1S mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.992	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

For non-beamforming 2T2S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20	0.991	0.04	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40	0.991	0.04	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80	0.991	0.04	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW160	0.991	0.04	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

For beamforming 2T1S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.982	0.08	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40-BF	0.964	0.16	4.358m	300
802.11ax HEW80-BF	0.959	0.18	4.141m	300
802.11ax HEW160-BF	0.963	0.16	5.16m	300

For UNII 2C~UNII 3:**For non-beamforming 4T1S mode:**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.992	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

For beamforming 4T1S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.958	0.19	2.926m	1k
802.11ax HEW40-BF	0.923	0.35	4.358m	300
802.11ax HEW80-BF	0.974	0.11	4.141m	300
802.11ax HEW160-BF	0.97	0.13	5.16m	300

For beamforming 4T2S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.958	0.19	4.365m	300
802.11ax HEW40-BF	0.988	0.05	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80-BF	0.967	0.15	4.83m	300
802.11ax HEW160-BF	0.968	0.14	5.17m	300



For UNII 4:

For non-beamforming 4T1S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.992	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

For beamforming 4T1S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.958	0.19	4.365m	300
802.11ax HEW40-BF	0.988	0.05	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW80-BF	0.967	0.15	4.83m	300
802.11ax HEW160-BF	0.969	0.14	5.162m	300

For beamforming 4T2S mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.978	0.1	4.365m	300
802.11ax HEW40-BF	0.976	0.11	5.083m	300
802.11ax HEW80-BF	0.952	0.21	4.83m	300
802.11ax HEW160-BF	0.958	0.19	5.169m	300

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

**1.1.4 EUT Operational Condition**

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
Device Type (UNII 4)	☒	Indoor Access Point	☒	Subordinate
	☐	Indoor Client		
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	Mtool V3.1.0.3, accessMTool_3_2_1_1, DOS [ver 6.1.7601]			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Brand Name	Equipment Name	Model Name	Description
ASUS	AX7800 Tri Band WiFi Router, AX6600 Tri Band WiFi Router	ZenWiFi XT9	All the equipment names and model names are identical, the different equipment names and model names served as a marketing strategy.
		ASUS ZenWiFi XT9	
		XT8	
		BR-XT9	
		ZenWiFi Business BR-XT9	
		XT9	

Note: From the above model: XT9 was selected as representative model for the test and its data was recorded in this report.

The above information was declared by manufacturer.

1.1.6 Table for Components Source Information

Items	Main Source	Second Source
Reserve resistor position for I/O board	V	N/A

Note: The above information was declared by manufacturer.

1.1.7 Table for EUT information

EUT	Reserve resistor position for I/O board
EUT 1	Main Source
EUT 2	Second Source

Note: The EUT 1 was performed testing for all items.

1.1.8 Table for EUT Supports Function

Function	Support Type	Remark
AP Router	Master	Support 2.4GHz/5GHz UNII 1-4
Bridge	Slave without radar detection	Support 2.4GHz/5GHz UNII 1-4
Mesh	Master	Support 2.4GHz/5GHz UNII 2C-4

Note: The AP Router (Master) mode has been tested and recorded in this test report.

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 D03 v01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01
- ♦ FCC KDB 291074 U-NII-4 - 5.9 Band DR01-44460_Draft

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Owen Hsu	19.2~20.1 / 63~67	Jan. 20, 2022 ~ Mar. 23, 2022
Radiated<1GH	03CH04-CB	Simmon Cheng	24.4-25.5 / 55-58	Nov. 21, 2021 ~ Feb. 17, 2022
Radiated>1GH	03CH06-CB	Simmon Cheng	23.5-24.4 / 56-59	Nov. 21, 2021 ~ Feb. 17, 2022
Radiated>1GH Co-Location	03CH05-CB	Simmon Cheng	22.7-23.8 / 55-58	Nov. 21, 2021 ~ Feb. 17, 2022
AC Conduction	CO01-CB	Peter Wu	22~24 / 57~58	Dec. 09, 2021



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

For UNII 1~UNII 2A:

For non-beamforming 2T1S mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	93
5200MHz	101
5240MHz	91
5260MHz	73
5300MHz	76
5320MHz	80

For non-beamforming 2T2S mode:

Mode	Power Setting
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5180MHz	94
5200MHz	100
5240MHz	92
5260MHz	72
5300MHz	74
5320MHz	79
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5190MHz	89
5230MHz	91
5270MHz	73
5310MHz	79
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5210MHz	88
5290MHz	76
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	75
5250MHz Straddle 5.25-5.35GHz	75

**For beamforming 2T1S mode:**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	92
5200MHz	99
5240MHz	92
5260MHz	72
5300MHz	75
5320MHz	79
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	87
5230MHz	91
5270MHz	73
5310MHz	79
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	85
5290MHz	76
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	69
5250MHz Straddle 5.25-5.35GHz	69



For UNII 2C~UNII 3:

For non-beamforming 4T1S mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5500MHz	69
5580MHz	65
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	67
5720MHz Straddle 5.725-5.85GHz	67
5745MHz	94
5785MHz	93
5825MHz	90

For beamforming 4T1S mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5500MHz	67
5580MHz	63
5700MHz	65
5720MHz Straddle 5.47-5.725GHz	65
5720MHz Straddle 5.725-5.85GHz	65
5745MHz	93
5785MHz	92
5825MHz	89
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5510MHz	66
5550MHz	62
5670MHz	64
5710MHz Straddle 5.47-5.725GHz	64
5710MHz Straddle 5.725-5.85GHz	64
5755MHz	93
5795MHz	91
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5530MHz	67
5610MHz	64
5690MHz Straddle 5.47-5.725GHz	64
5690MHz Straddle 5.725-5.85GHz	64
5775MHz	94
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5570MHz	64

**For beamforming 4T2S mode:**

Mode	Power Setting
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5500MHz	69
5580MHz	65
5700MHz	67
5720MHz Straddle 5.47-5.725GHz	66
5720MHz Straddle 5.725-5.85GHz	66
5745MHz	94
5785MHz	92
5825MHz	89
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5510MHz	68
5550MHz	64
5670MHz	66
5710MHz Straddle 5.47-5.725GHz	67
5710MHz Straddle 5.725-5.85GHz	67
5755MHz	93
5795MHz	91
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5530MHz	69
5610MHz	66
5690MHz Straddle 5.47-5.725GHz	66
5690MHz Straddle 5.725-5.85GHz	66
5775MHz	94
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5570MHz	66

**For UNII 4:****For non-beamforming 4T1S mode:**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5845MHz	79
5865MHz	79
5885MHz	79

For beamforming 4T1S mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5845MHz	80
5865MHz	80
5885MHz	64
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5835MHz	89
5875MHz	90
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5855MHz	89
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5815MHz	76

For beamforming 4T2S mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5845MHz	86
5865MHz	86
5885MHz	68
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5835MHz	94
5875MHz	95
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5855MHz	95
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5815MHz	75

Note:

- ♦ Evaluated HEW20/HEW40/HEW80/HEW160 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.

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 1 + Adapter 1
2	EUT 1 + Adapter 2
For operating mode 1 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 Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Test Mode	EUT 1

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position for Unwanted Emissions above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + WLAN 2.4GHz + Adapter 1
2	EUT 1 in Y axis + WLAN 2.4GHz +Adapter 2
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3~Mode 4 will follow this same test mode.	
3	EUT 1 in Y axis + WLAN 5GHz (UNII 1~UNII 2A) + Adapter 1
4	EUT 1 in Y axis + WLAN 5GHz (UNII 2C~UNII 4) + Adapter 1
For operating mode 3 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis

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 position for Unwanted Emissions above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + WLAN 2.4GHz + WLAN 5GHz (UNII 1~UNII 2A)
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 1 + WLAN 2.4GHz + WLAN 5GHz (UNII 1~UNII 2A) + WLAN 5GHz (UNII 2C~UNII 4)
Refer to Sporton Test Report No.: FA162917-01 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

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

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS [ver 6.1.7601].
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	Color
Adapter 1	LEI	MU36D1120300-A1	INPUT: 100-240V~50/60Hz, 1.0A OUTPUT: 12V, 3A	White
Adapter 2	APD	WA-36N12FU	INPUT: 100-240V~, 50-60Hz, 0.9A, Max. OUTPUT: 12.0V, 3.0A	White
Adapter 3	LEI	MU36D1120300-A1	INPUT: 100-240V~50/60Hz, 1.0A OUTPUT: 12V, 3A	Black
Adapter 4	APD	WA-36N12FU	INPUT: 100-240V~, 50-60Hz, 0.9A, Max. OUTPUT: 12.0V, 3.0A	Black
Other				
RJ-45 cable*1: Non-shielded, 1.5m				

Note: The difference between Adapter1 & Adapter 3 is only color, there is only adapter 1 tested and recorded in this report.

The difference between Adapter2 & Adapter 4 is only color, there is only adapter 2 tested and recorded in this report.



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN1 NB	DELL	E6430	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G-L NB	DELL	E6430	N/A
D	2.5G WAN PC	DELL	T3400	N/A
E	5G-H NB	DELL	E6430	N/A
F	Flash disk3.0	Transcend	JetFlash-700	N/A
G	LAN3 NB	DELL	E6430	N/A

For Radiated (below 1GHz) and Radiated (above 1GHz / Non-beamforming mode):

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

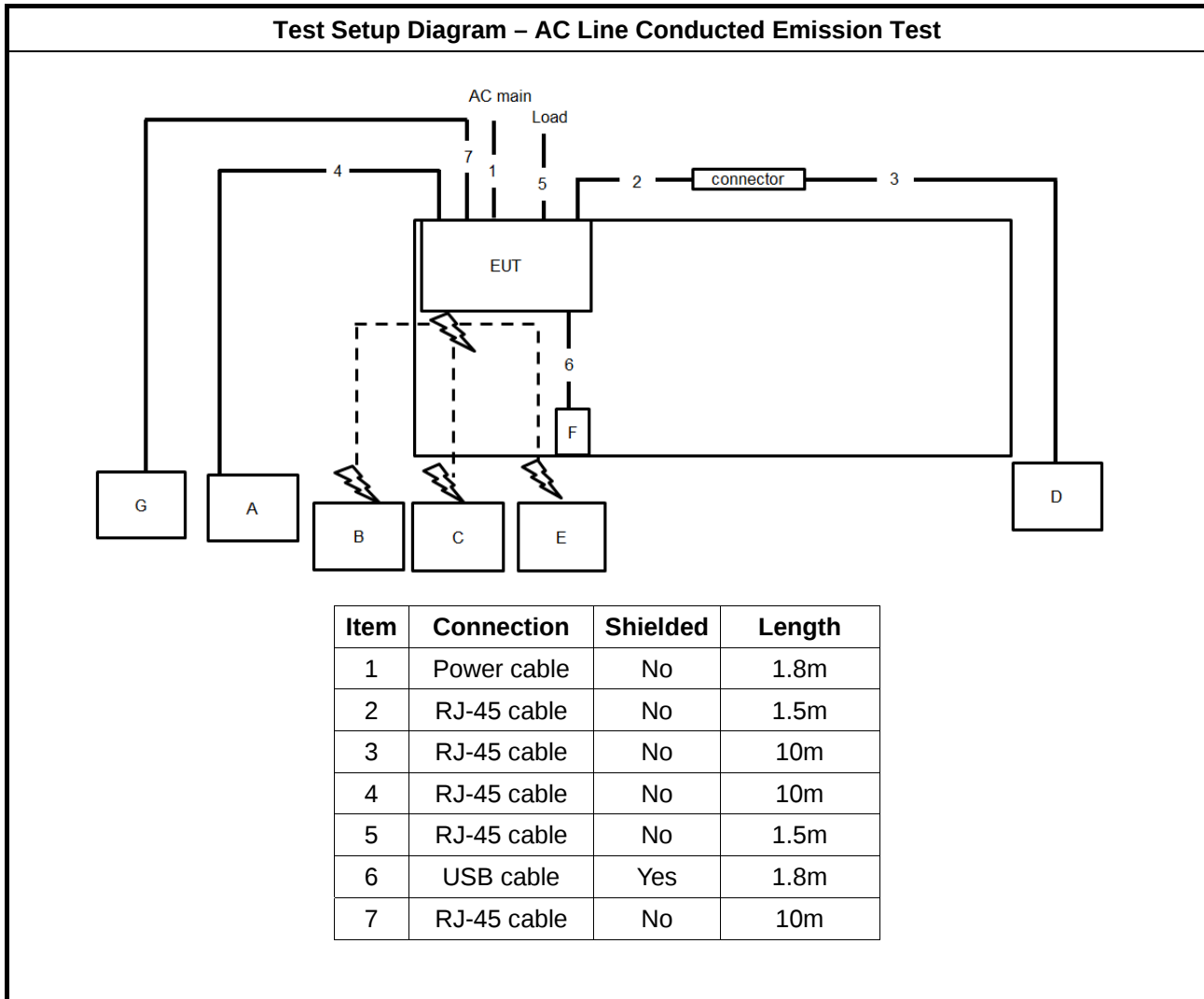
For Radiated (above 1GHz / Beamforming mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP	ASUS	XT9	MSQ-RTAX4S00
C	Notebook	DELL	E4300	N/A

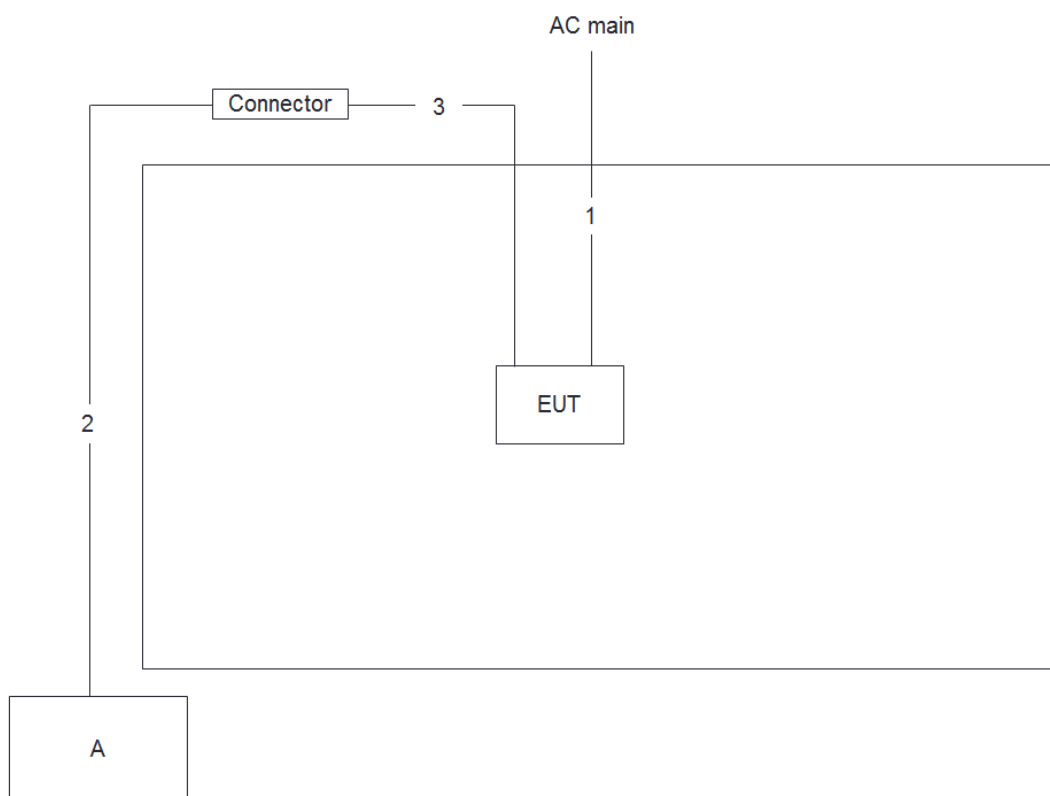
For RF Conducted:

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

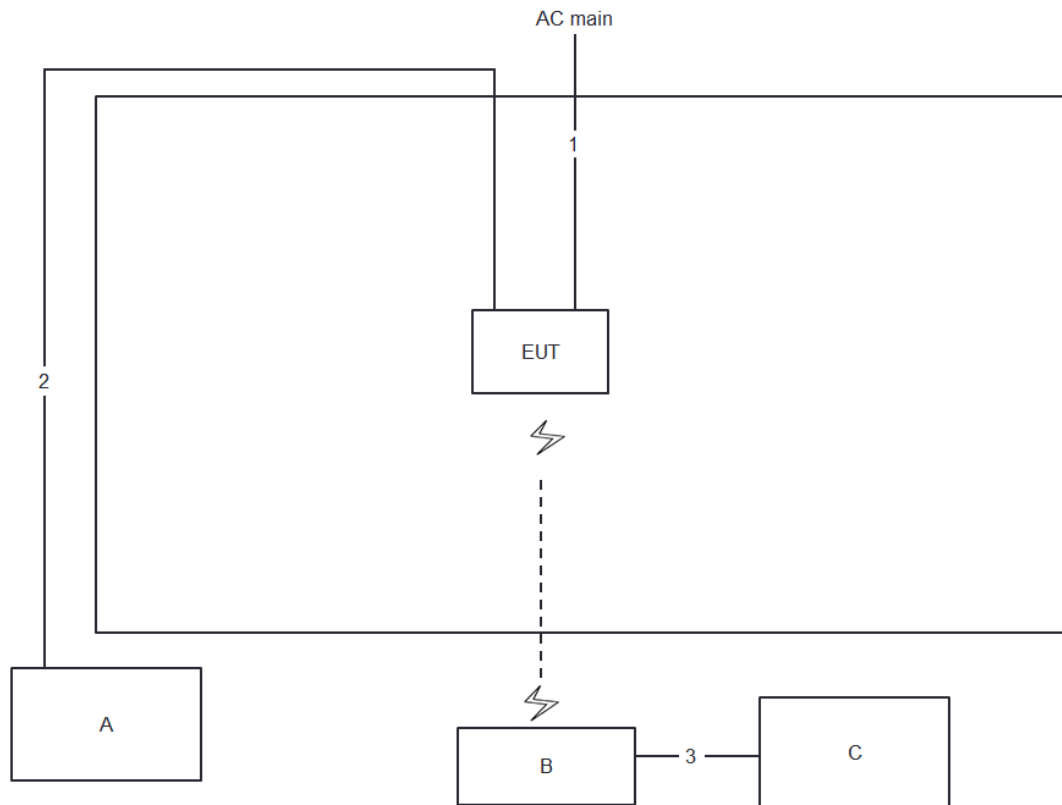
2.6 Test Setup Diagram



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



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

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


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

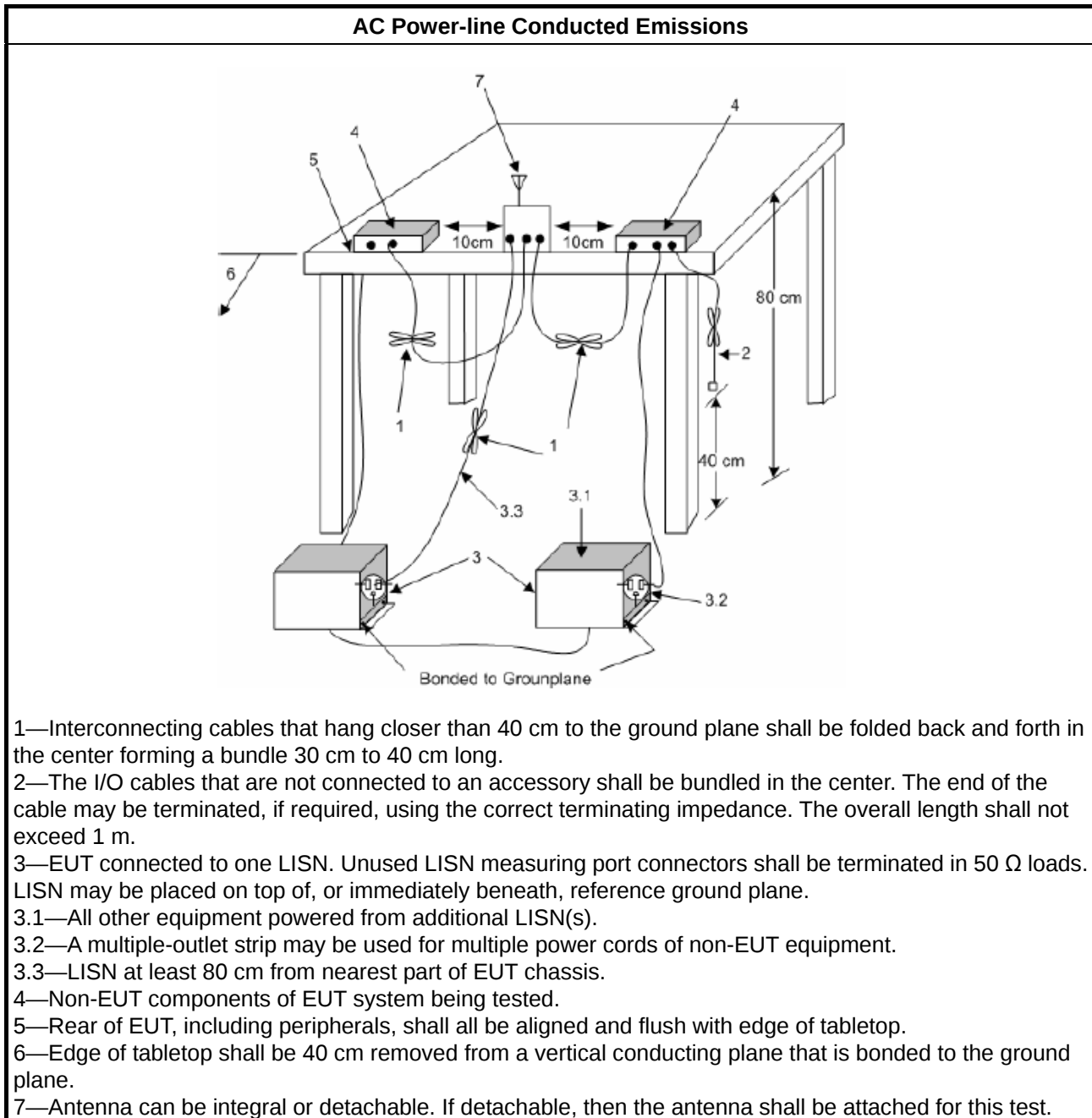
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 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	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq 500\text{kHz}$.
☒	For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq 500\text{kHz}$.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq 500\text{kHz}$.

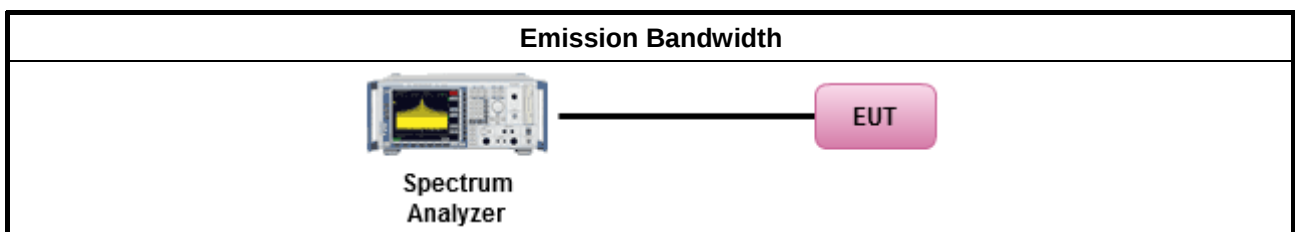
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup





3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Output Power

3.3.1 Limit

Maximum Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
Maximum EIRP Limit	
☒ For the 5.85-5.895 GHz band:	
☐	- Indoor AP & subordinate device < 36 dBm - Client device < 30 dBm
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.



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

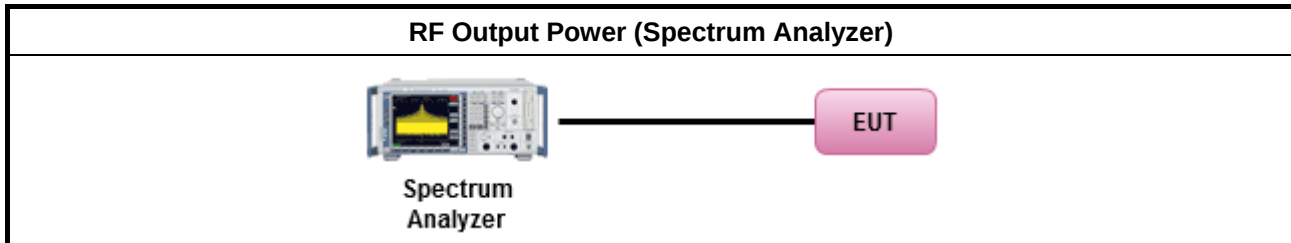
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

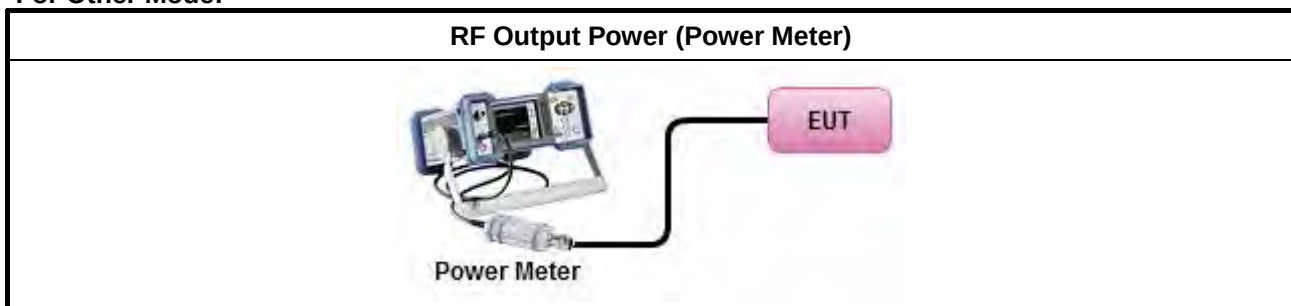
Test Method	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
☒	For conducted measurement.
	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$
☐	For radiated measurement.
	- Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. - Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.3.4 Test Setup

For UNII 2C Straddle channel Mode:



For Other Mode:



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
EIRP Power Spectral Density Limit	
☒ For the 5.85-5.895 GHz band:	
	- Indoor AP & subordinate device < 20dBm/MHz - Client device < 14dBm/MHz
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -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 $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
☐ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that the same method as used to determine the conducted output	



power shall be used to determine the power spectral density. And power spectral density in dBm/MHz
 G_{TX} = the maximum transmitting antenna directional gain in dBi.

3.4.2 Measuring Instruments

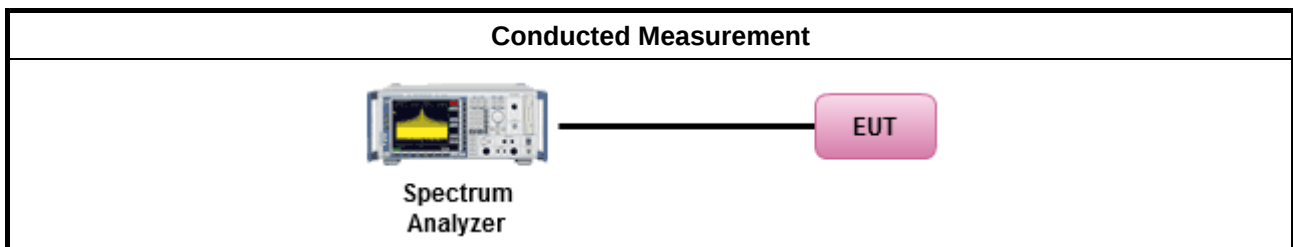
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as FCC KDB 789033 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]
☒	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
☐	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
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
☒ For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm])	

Test Method	
	$EIRP_{total} = PPSD_{total} + DG$
☐	For radiated measurement.
	Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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



Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
☒ 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of -7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz. (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

3.5.2 Measuring Instruments

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

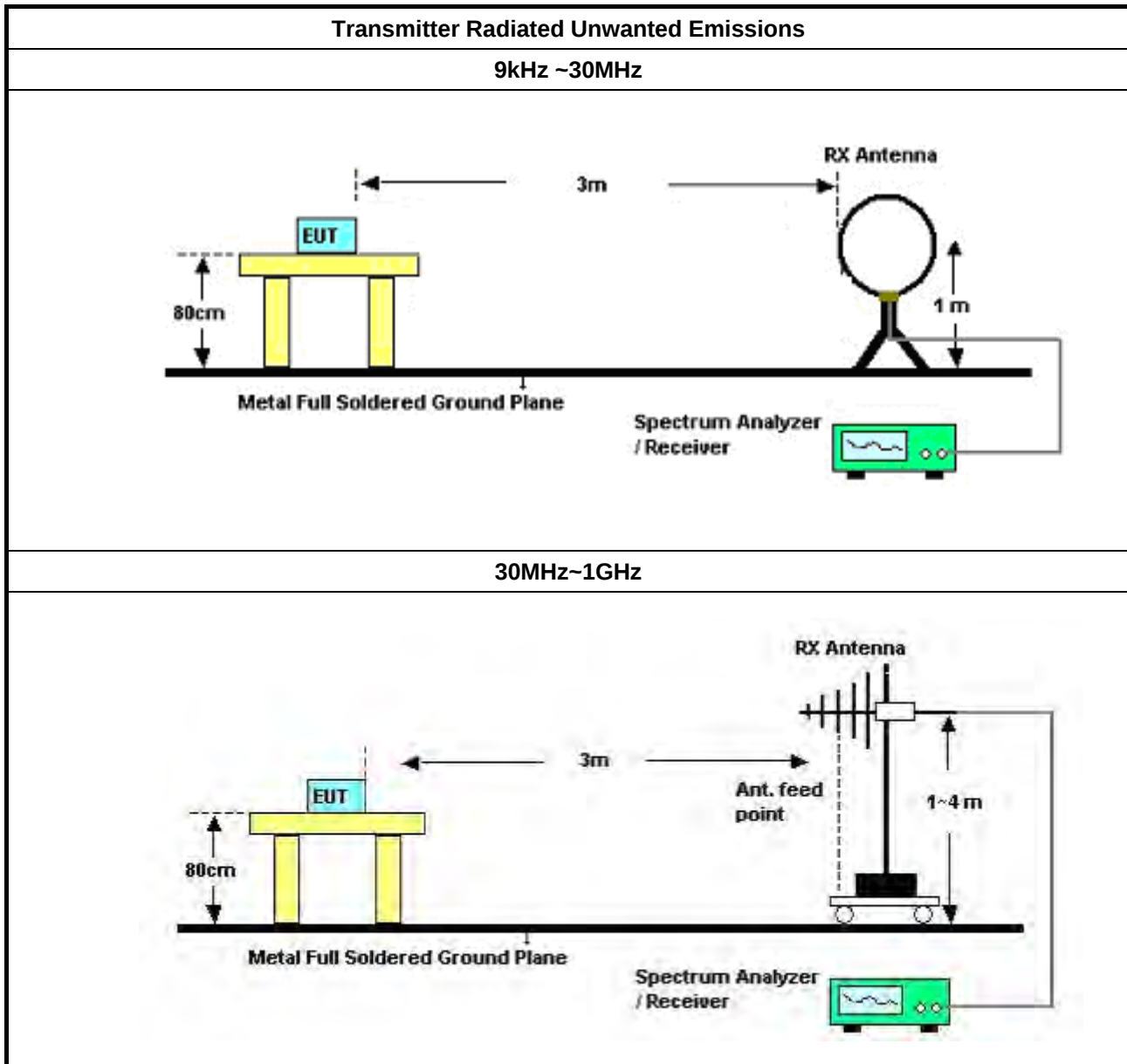
3.5.3 Test Procedures

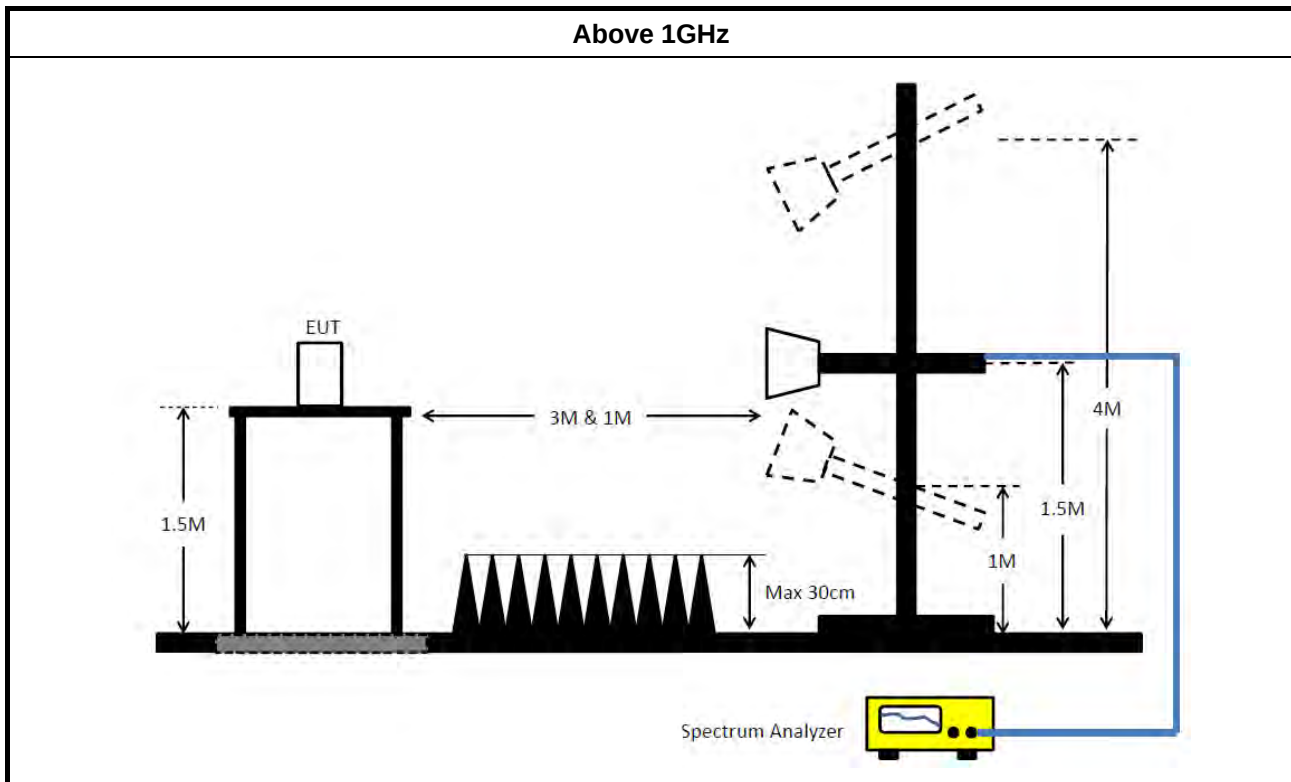
Test Method
- Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). - The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor]. - For the transmitter unwanted emissions shall be measured using following options below: - Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.



Test Method	
	▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
▪ For radiated measurement.	
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
▪ The any unwanted emissions level shall not exceed the fundamental emission level.	
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = 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	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 08, 2021	Aug. 07, 2022	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMC	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 09, 2021	Oct. 08, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 17, 2020	Dec. 16, 2021	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 16, 2021	Dec. 15, 2022	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-30	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 21, 2022	Feb. 20, 2023	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 21, 2022	Feb. 20, 2023	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

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



Conducted Emissions at Powerline

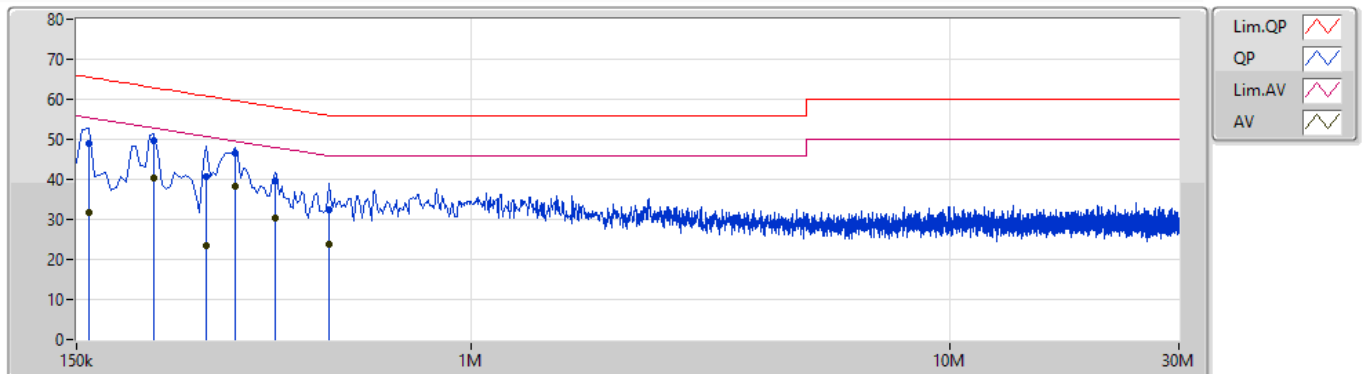
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	312k	42.28	49.92	-7.64	Neutral

Mode 1

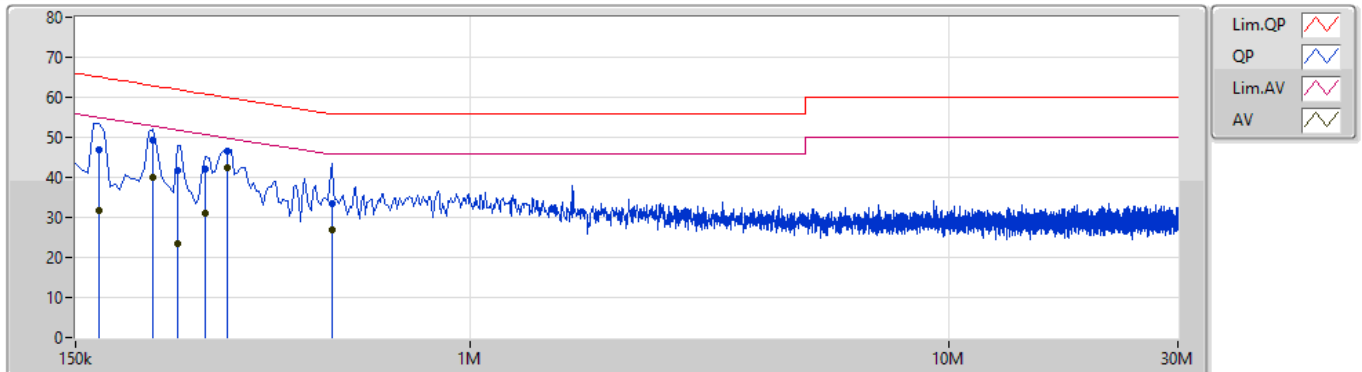
09/12/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159k	48.93	65.52	-16.59	9.89	Line	-	39.04	0.04	0.04	9.81			
AV	159k	31.59	55.52	-23.93	9.89	Line	-	21.70	0.04	0.04	9.81			
QP	217.5k	49.78	62.92	-13.14	9.89	Line	-	39.89	0.04	0.04	9.81			
AV	217.5k	40.31	52.92	-12.61	9.89	Line	-	30.42	0.04	0.04	9.81			
QP	280.5k	40.70	60.80	-20.10	9.89	Line	-	30.81	0.04	0.04	9.81			
AV	280.5k	23.51	50.80	-27.29	9.89	Line	-	13.62	0.04	0.04	9.81			
QP	321k	46.38	59.67	-13.29	9.90	Line	-	36.48	0.04	0.04	9.82			
AV	321k	38.36	49.67	-11.31	9.90	Line	"Worst"	28.46	0.04	0.04	9.82			
QP	388.5k	39.68	58.10	-18.42	9.90	Line	-	29.78	0.04	0.04	9.82			
AV	388.5k	30.24	48.10	-17.86	9.90	Line	-	20.34	0.04	0.04	9.82			
QP	505.5k	32.36	56.00	-23.64	9.91	Line	-	22.45	0.05	0.04	9.82			
AV	505.5k	23.77	46.00	-22.23	9.91	Line	-	13.86	0.05	0.04	9.82			

Mode 1

09/12/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	168k	46.77	65.06	-18.29	9.88	Neutral	-	36.89	0.03	0.04	9.81			
AV	168k	31.67	55.06	-23.39	9.88	Neutral	-	21.79	0.03	0.04	9.81			
QP	217.5k	49.27	62.92	-13.65	9.88	Neutral	-	39.39	0.03	0.04	9.81			
AV	217.5k	39.90	52.92	-13.02	9.88	Neutral	-	30.02	0.03	0.04	9.81			
QP	244.5k	41.57	61.95	-20.38	9.88	Neutral	-	31.69	0.03	0.04	9.81			
AV	244.5k	23.61	51.95	-28.34	9.88	Neutral	-	13.73	0.03	0.04	9.81			
QP	280.5k	41.90	60.80	-18.90	9.88	Neutral	-	32.02	0.03	0.04	9.81			
AV	280.5k	31.01	50.80	-19.79	9.88	Neutral	-	21.13	0.03	0.04	9.81			
QP	312k	46.48	59.92	-13.44	9.89	Neutral	-	36.59	0.03	0.04	9.82			
AV	312k	42.28	49.92	-7.64	9.89	Neutral	"Worst"	32.39	0.03	0.04	9.82			
QP	514.5k	33.38	56.00	-22.62	9.90	Neutral	-	23.48	0.04	0.04	9.82			
AV	514.5k	26.78	46.00	-19.22	9.90	Neutral	-	16.88	0.04	0.04	9.82			

For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T1S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB	Min-OBW
				(Hz)	(Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	42.36M	24.888M	24M9D1D	24.48M	17.391M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	23.73M	17.211M	17M2D1D	21.36M	16.882M

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

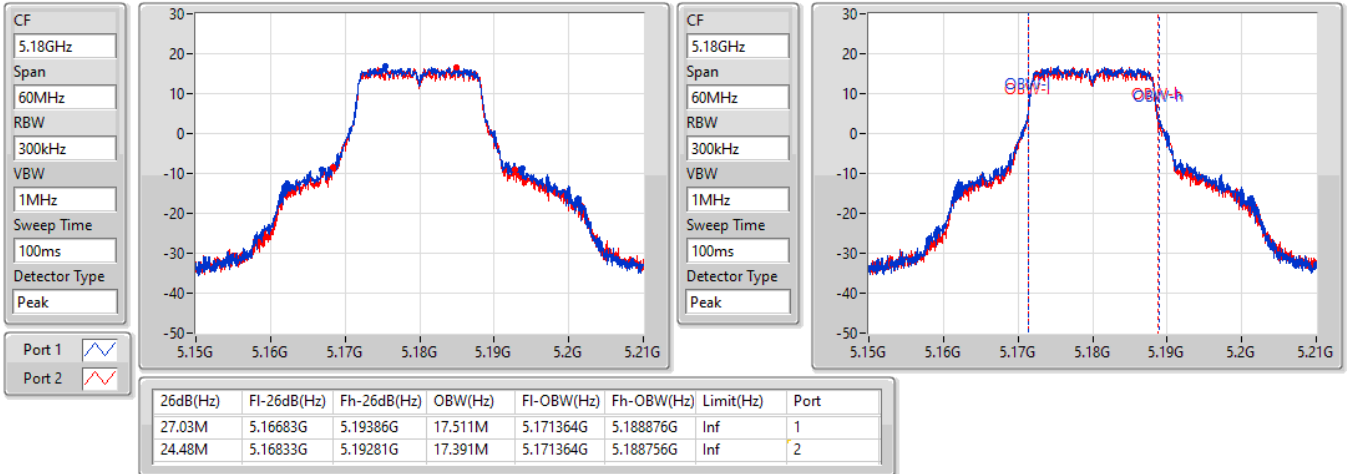
Result

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	-	-	-	-	-	-
5180MHz	Pass	Inf	27.03M	17.511M	24.48M	17.391M
5200MHz	Pass	Inf	42.36M	24.888M	42.33M	23.568M
5240MHz	Pass	Inf	36.21M	18.681M	36.27M	17.931M
5260MHz	Pass	Inf	21.36M	17.001M	21.96M	16.882M
5300MHz	Pass	Inf	21.42M	17.031M	21.75M	16.912M
5320MHz	Pass	Inf	23.73M	17.211M	21.99M	17.091M

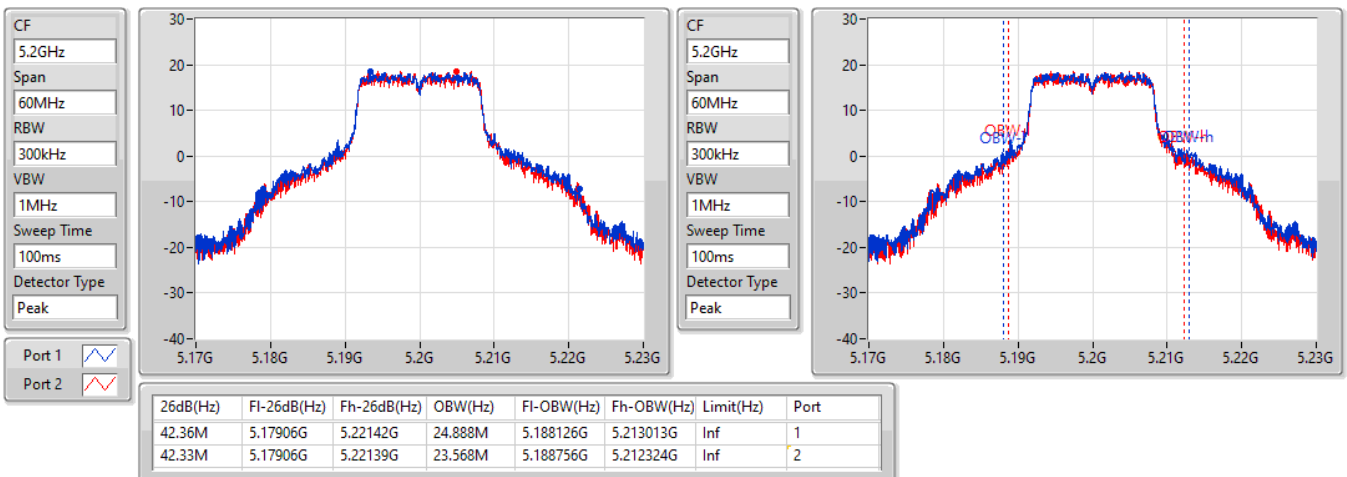
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_2TX
EBW
5180MHz

20/01/2022

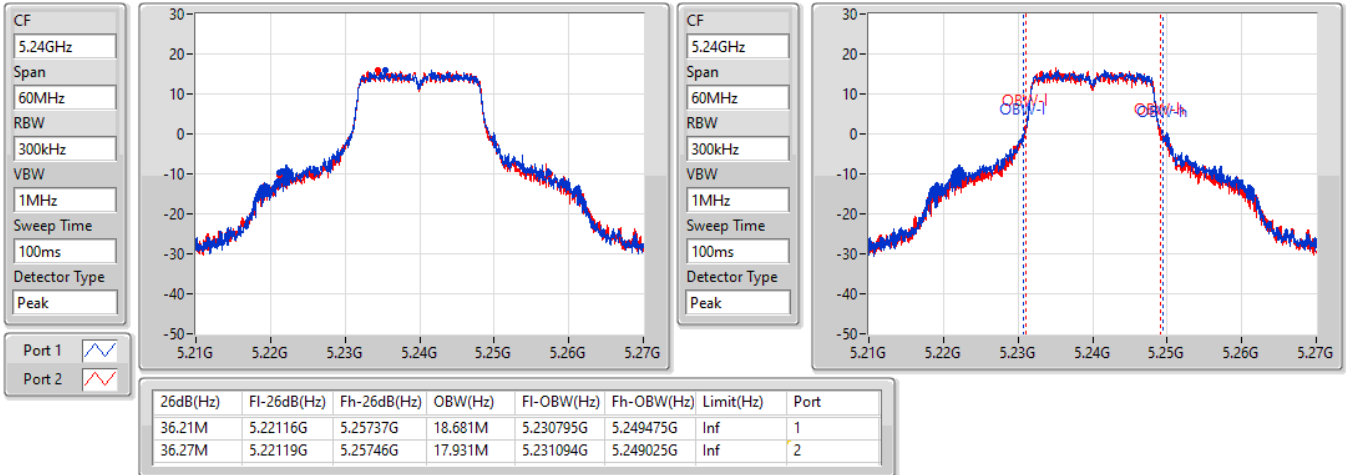

802.11a_Nss1,(6Mbps)_2TX
EBW
5200MHz

20/01/2022

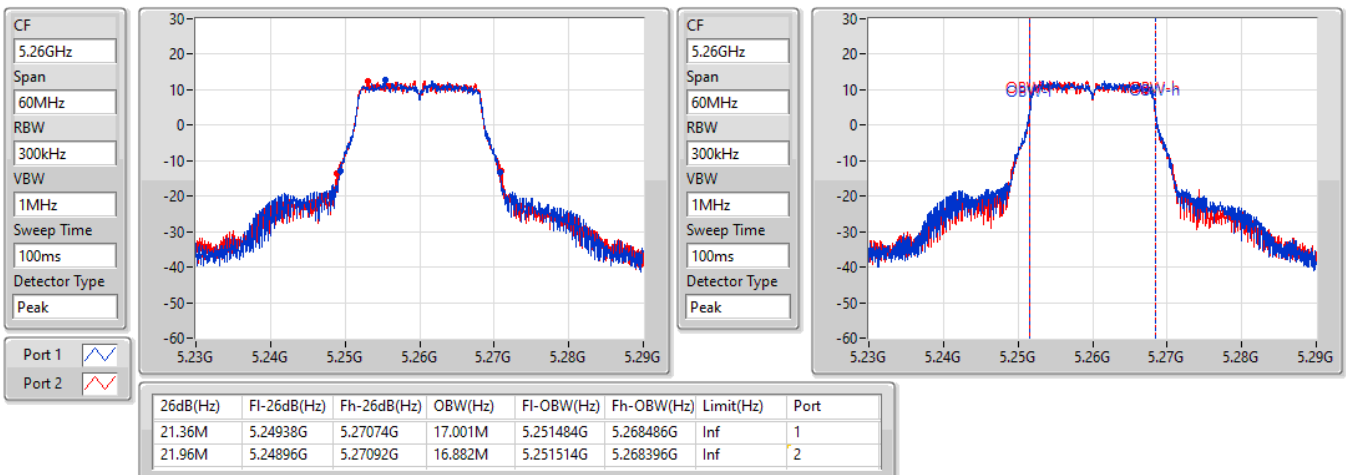


802.11a_Nss1,(6Mbps)_2TX
EBW
5240MHz

20/01/2022

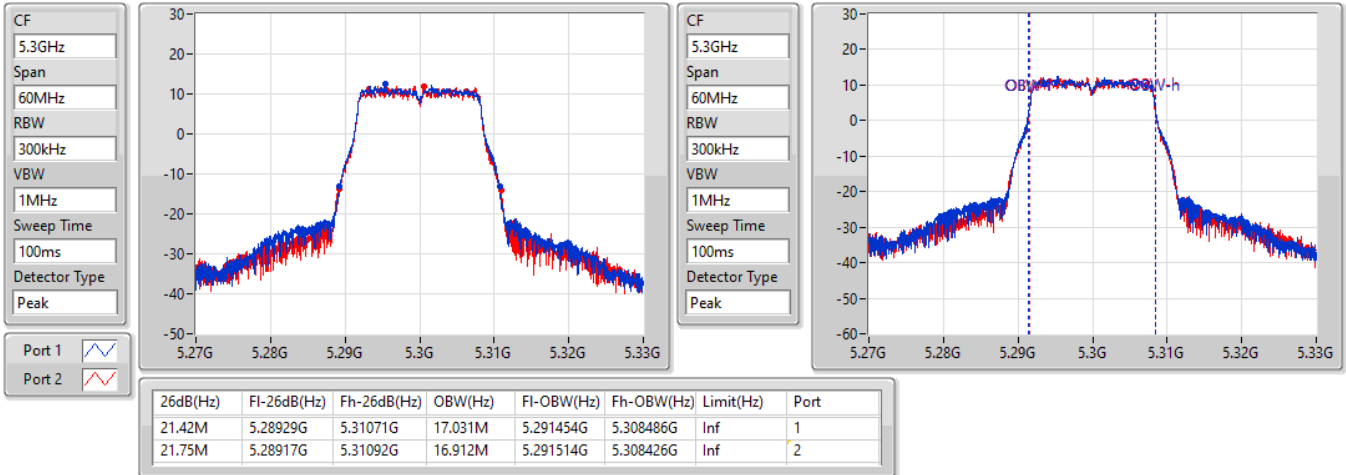

802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

20/01/2022

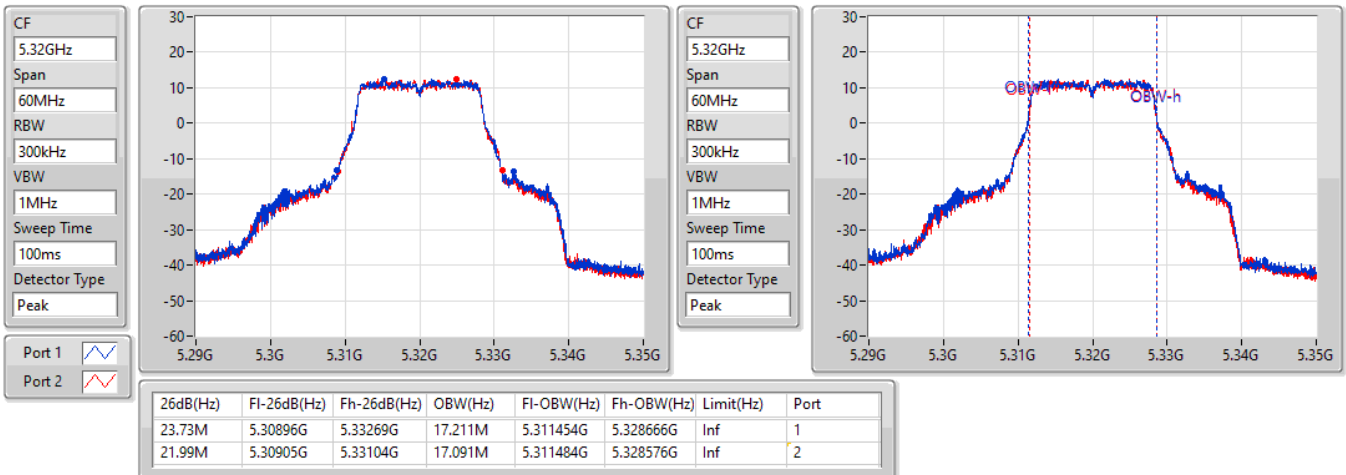


802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

20/01/2022


802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

20/01/2022



For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T2S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	45.72M	24.318M	24M3D1D	26.46M	19.22M
802.11ax HEW40_Nss2,(MCS0)_2TX	74.58M	39.16M	39M2D1D	47.04M	38.081M
802.11ax HEW80_Nss2,(MCS0)_2TX	85.32M	77.841M	77M8D1D	81.72M	77.721M
802.11ax HEW160_Nss2,(MCS0)_2TX	129.2M	79M	79M0D1D	127.52M	78.361M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	22.35M	19.25M	19M2D1D	21.39M	19.04M
802.11ax HEW40_Nss2,(MCS0)_2TX	46.02M	38.081M	38M1D1D	39.72M	37.781M
802.11ax HEW80_Nss2,(MCS0)_2TX	82.32M	77.841M	77M8D1D	81.84M	77.721M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.4M	78.201M	78M2D1D	82.16M	78.041M

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

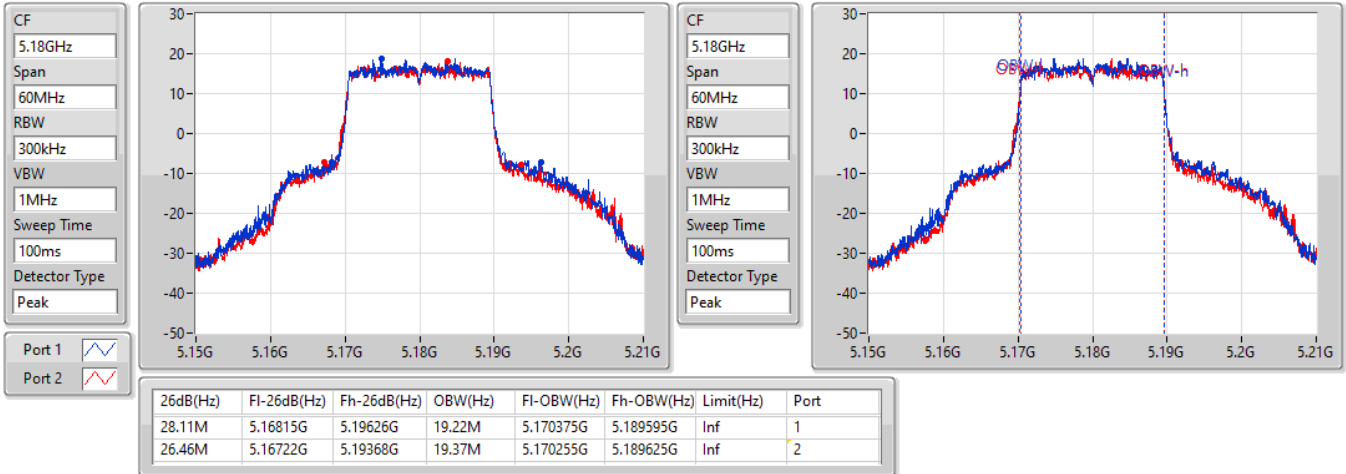
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	28.11M	19.22M	26.46M	19.37M
5200MHz	Pass	Inf	45.72M	24.318M	41.01M	21.289M
5240MHz	Pass	Inf	40.35M	19.79M	36.87M	19.64M
5260MHz	Pass	Inf	21.45M	19.04M	21.39M	19.16M
5300MHz	Pass	Inf	21.45M	19.04M	21.45M	19.16M
5320MHz	Pass	Inf	22.35M	19.16M	21.75M	19.25M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	47.04M	38.081M	49.2M	38.081M
5230MHz	Pass	Inf	74.58M	39.16M	71.04M	38.741M
5270MHz	Pass	Inf	40.26M	37.781M	39.72M	37.781M
5310MHz	Pass	Inf	46.02M	38.081M	43.56M	37.961M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	85.32M	77.841M	81.72M	77.721M
5290MHz	Pass	Inf	82.32M	77.721M	81.84M	77.841M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	127.52M	78.361M	129.2M	79M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.16M	78.041M	82.4M	78.201M

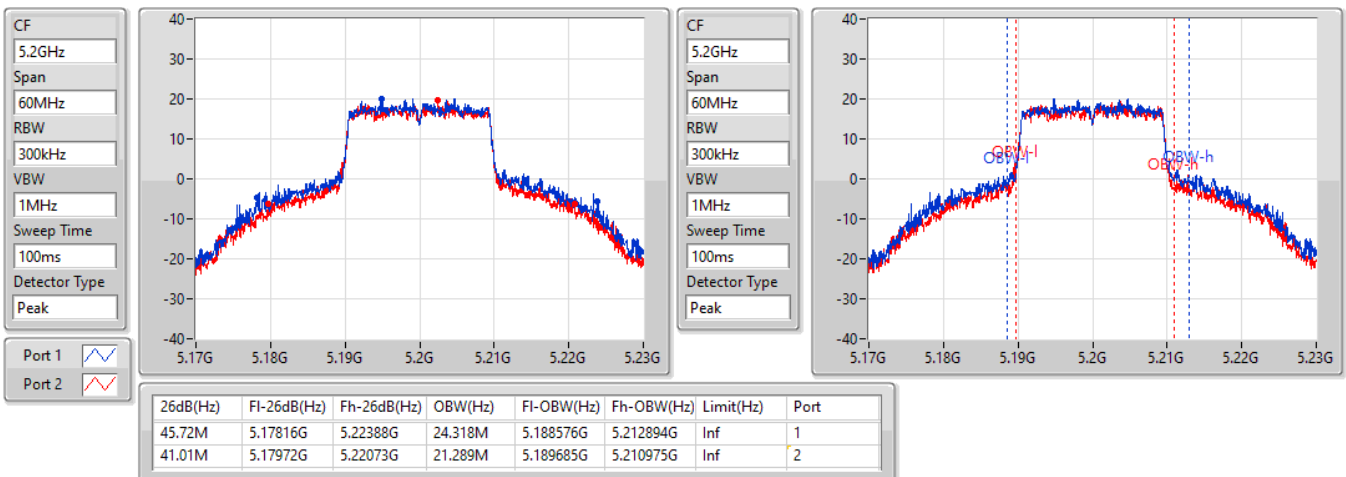
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5180MHz

20/01/2022

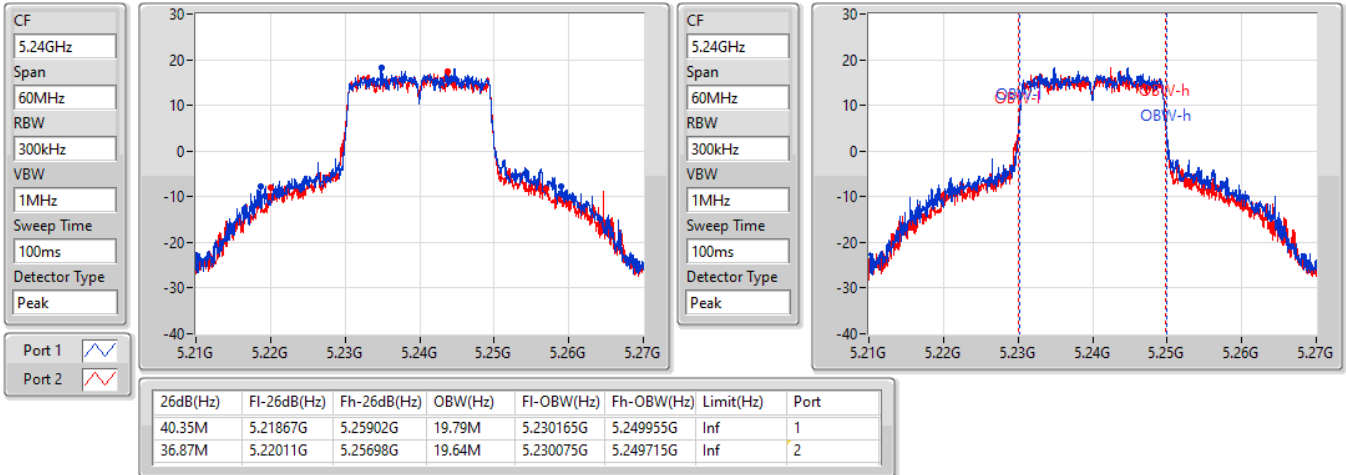

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5200MHz

20/01/2022

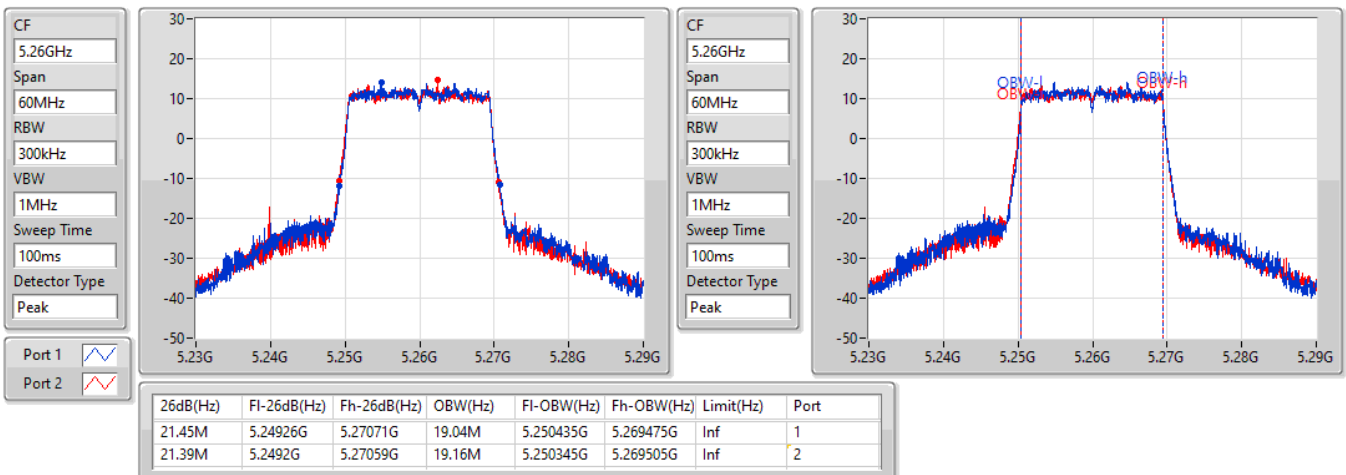


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5240MHz

20/01/2022

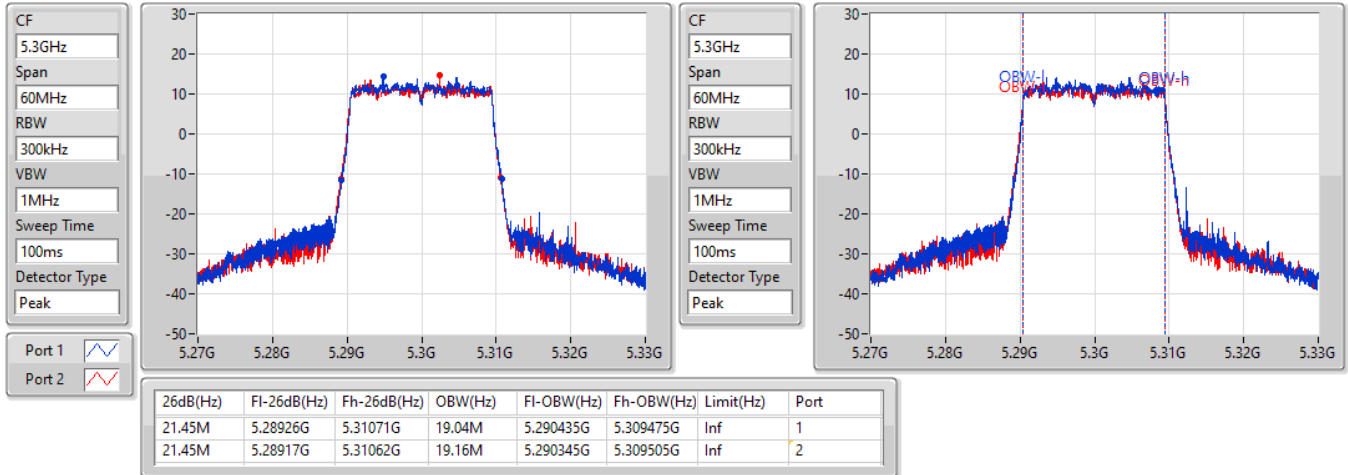

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5260MHz

20/01/2022

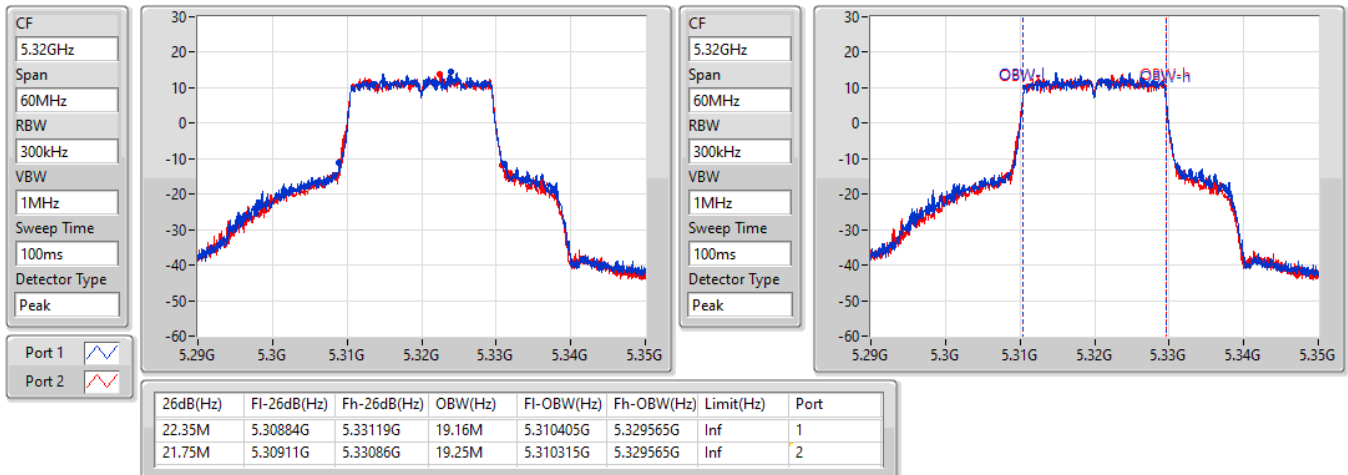


802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5300MHz

20/01/2022

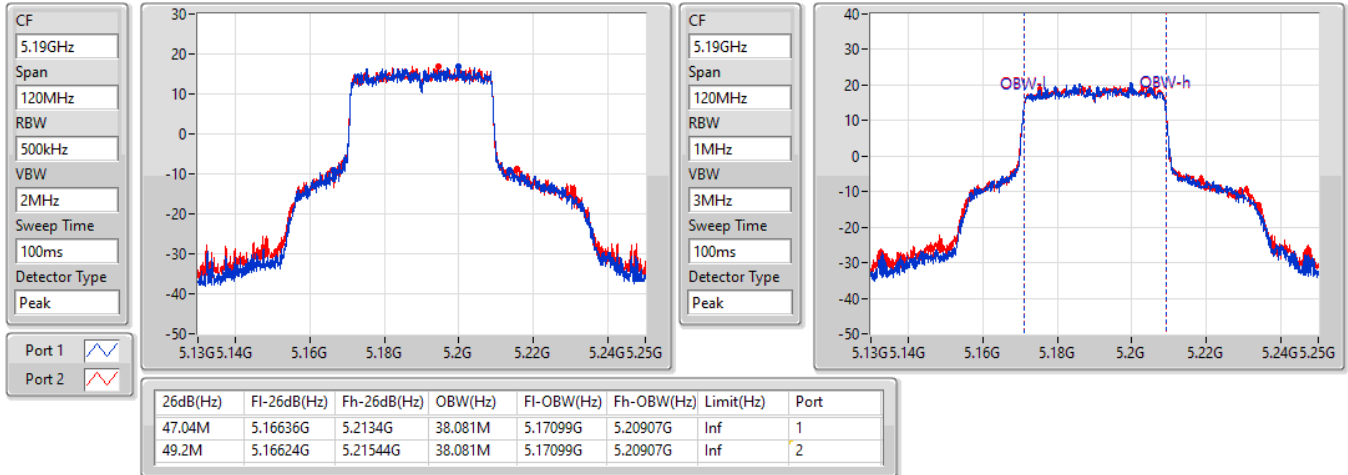

802.11ax HEW20_Nss2,(MCS0)_2TX
EBW
5320MHz

20/01/2022

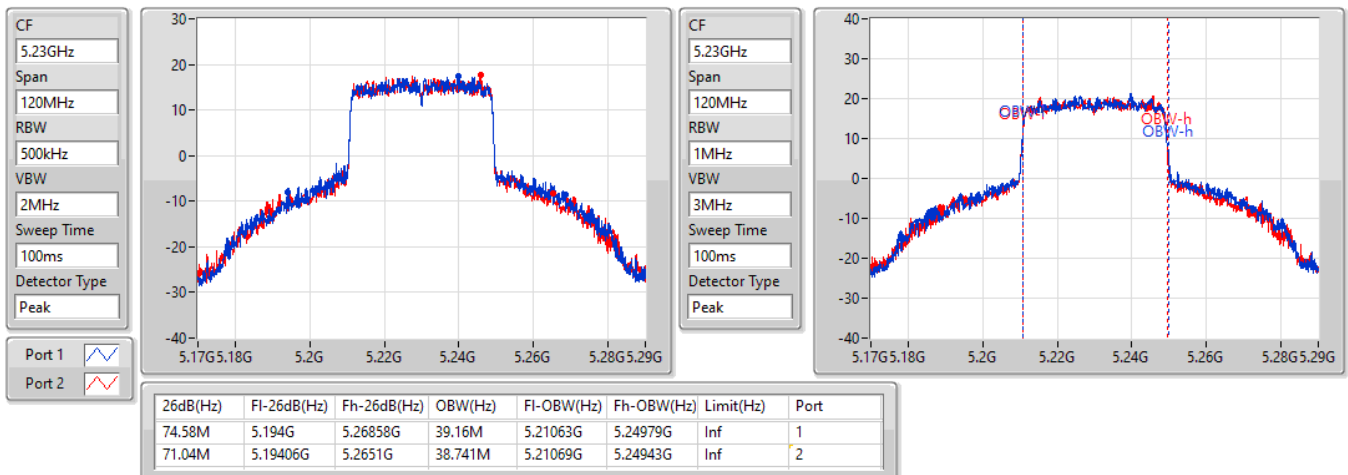


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5190MHz

20/01/2022

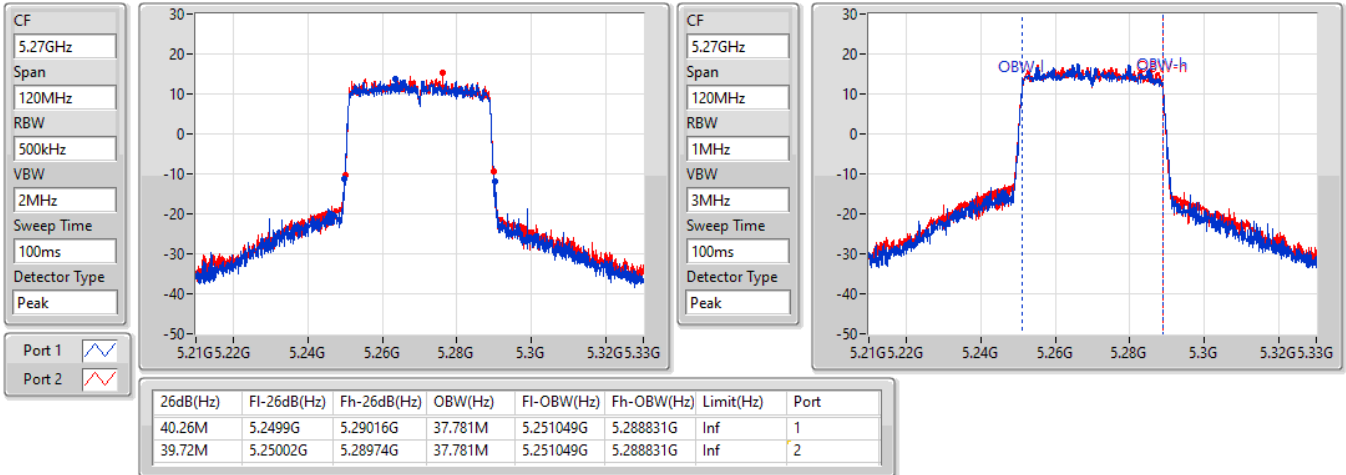

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5230MHz

20/01/2022

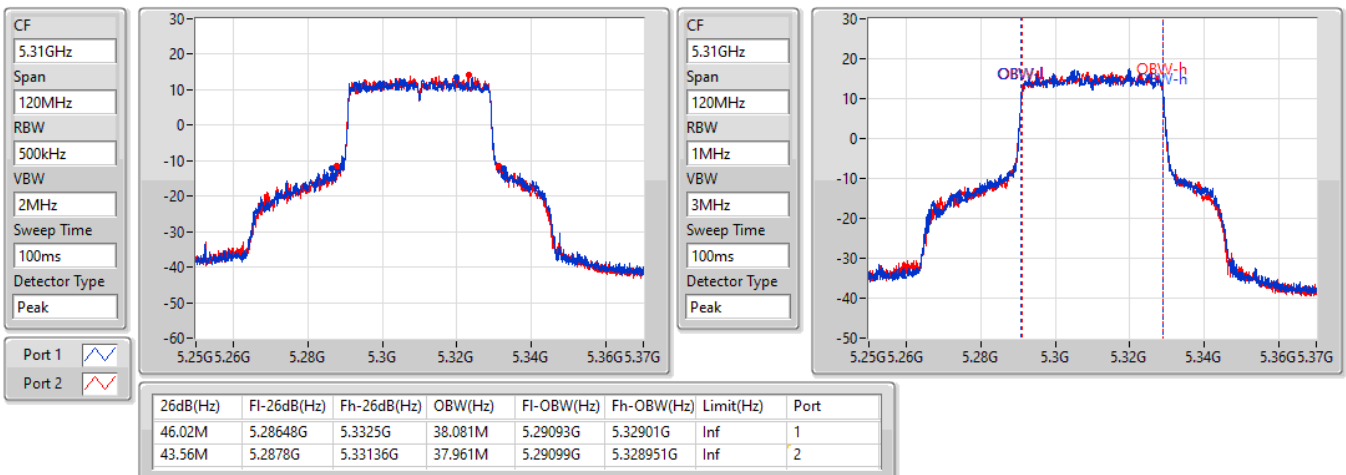


802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5270MHz

20/01/2022

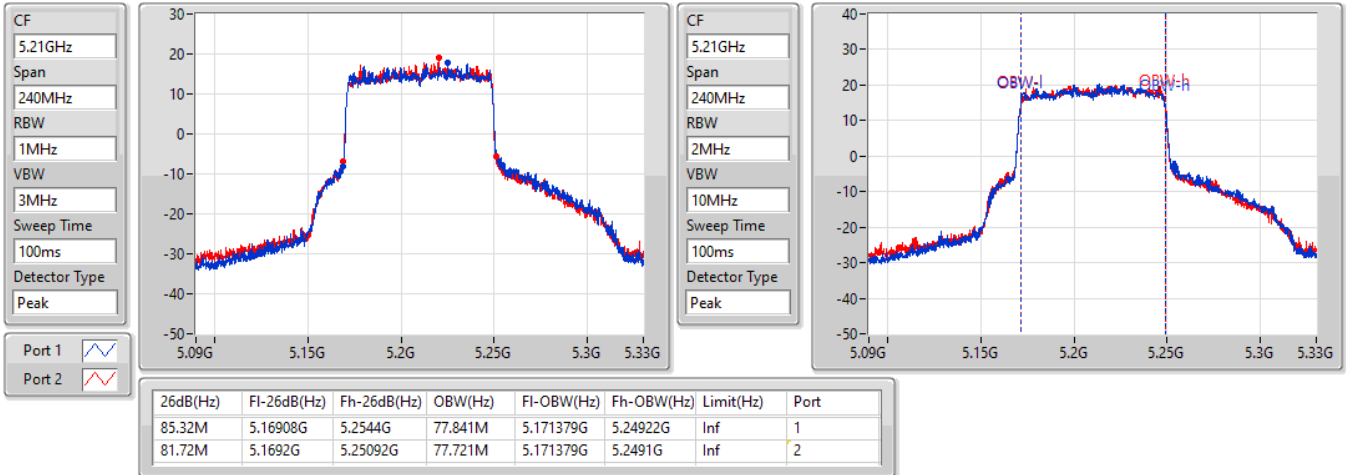

802.11ax HEW40_Nss2,(MCS0)_2TX
EBW
5310MHz

20/01/2022

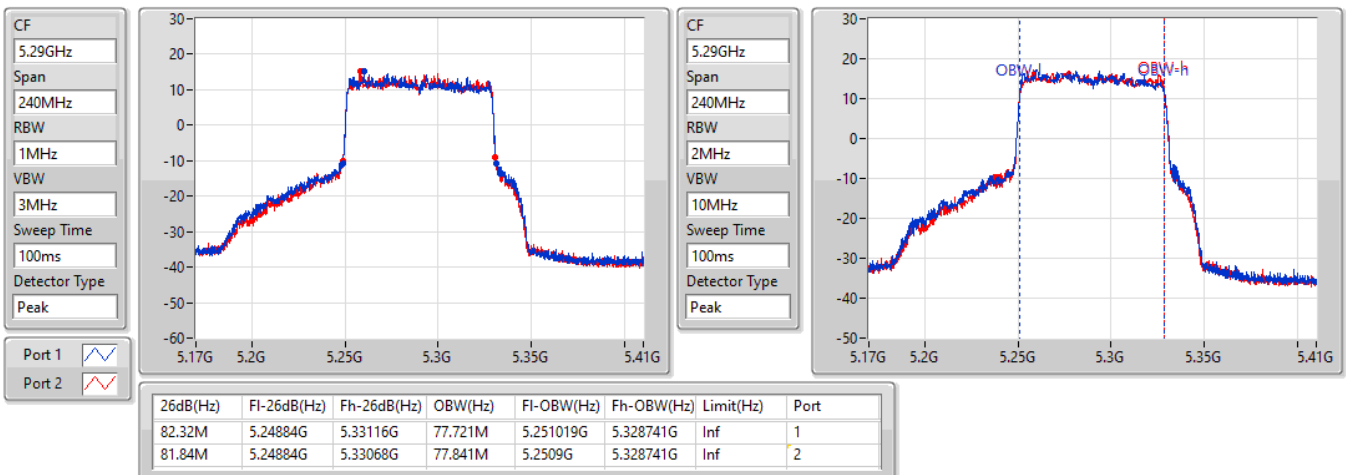


802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5210MHz

20/01/2022

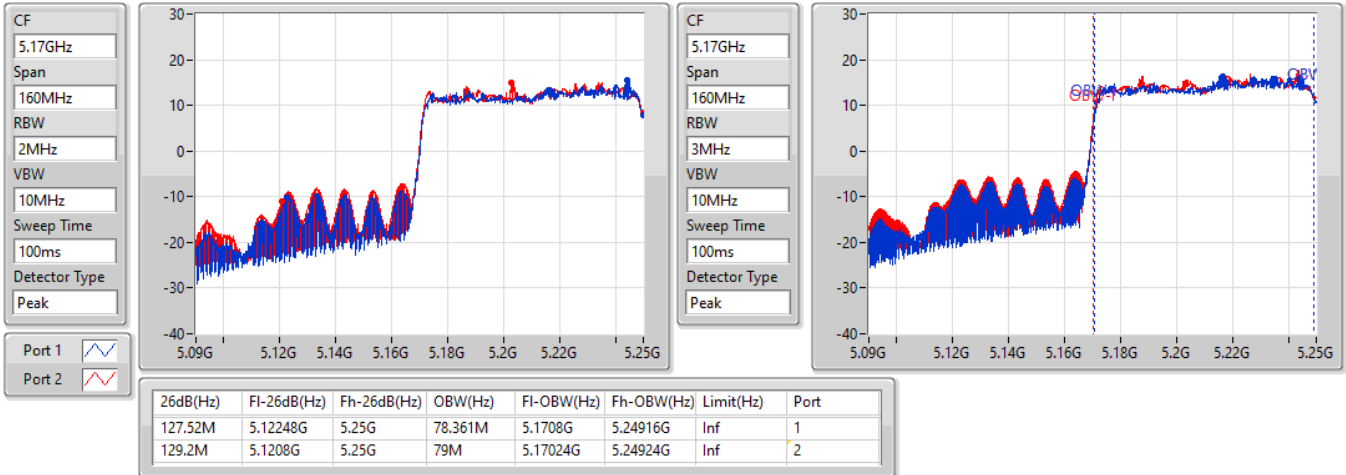

802.11ax HEW80_Nss2,(MCS0)_2TX
EBW
5290MHz

20/01/2022

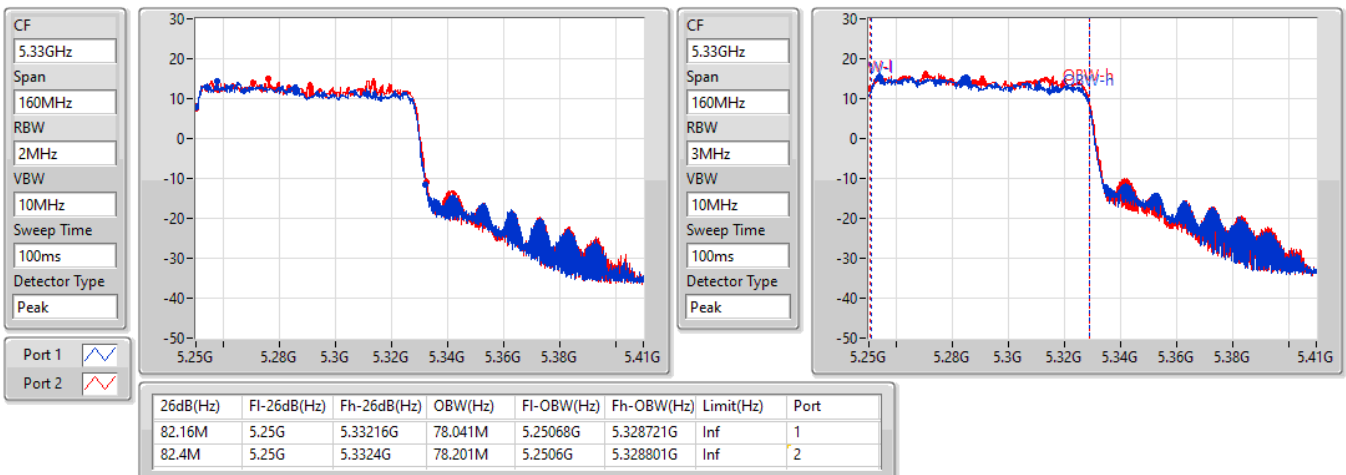


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

20/01/2022


802.11ax HEW160_Nss2,(MCS0)_2TX
EBW
5250MHz Straddle 5.25-5.35GHz

20/01/2022



For UNII 1~UNII 2A:

Test Mode: beamforming 2T1S

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	44.67M	22.759M	22M8D1D	26.25M	19.25M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	74.64M	38.981M	39M0D1D	43.2M	37.961M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	84.12M	77.721M	77M7D1D	83.88M	77.601M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	82.32M	78.041M	78M0D1D	82.24M	77.961M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.6M	19.22M	19M2D1D	21.63M	19.13M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	44.7M	38.021M	38M0D1D	39.9M	37.781M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	91.56M	77.841M	77M8D1D	84.36M	77.721M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	82.72M	78.121M	78M1D1D	82.4M	78.121M

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

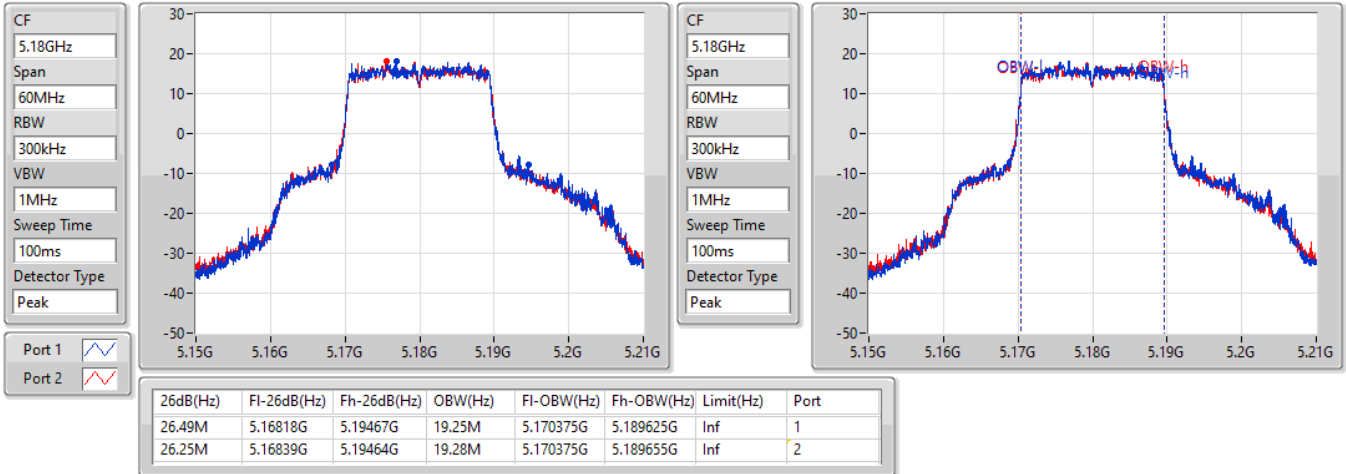
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	26.49M	19.25M	26.25M	19.28M
5200MHz	Pass	Inf	44.67M	22.759M	38.49M	20.81M
5240MHz	Pass	Inf	37.08M	19.88M	34.44M	19.67M
5260MHz	Pass	Inf	21.63M	19.13M	21.66M	19.16M
5300MHz	Pass	Inf	21.66M	19.13M	21.75M	19.19M
5320MHz	Pass	Inf	24.6M	19.19M	22.11M	19.22M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	43.8M	37.961M	43.2M	37.961M
5230MHz	Pass	Inf	74.64M	38.981M	73.44M	38.801M
5270MHz	Pass	Inf	40.26M	37.781M	39.9M	37.781M
5310MHz	Pass	Inf	44.7M	38.021M	42.72M	37.901M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	84.12M	77.721M	83.88M	77.601M
5290MHz	Pass	Inf	91.56M	77.841M	84.36M	77.721M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.24M	77.961M	82.32M	78.041M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.72M	78.121M	82.4M	78.121M

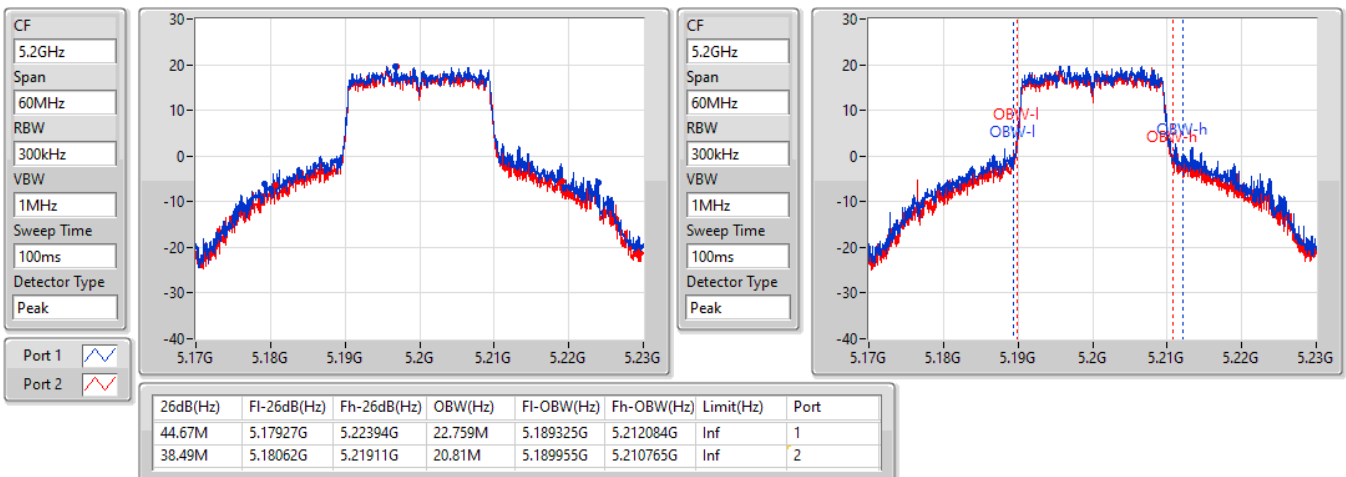
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

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

20/01/2022

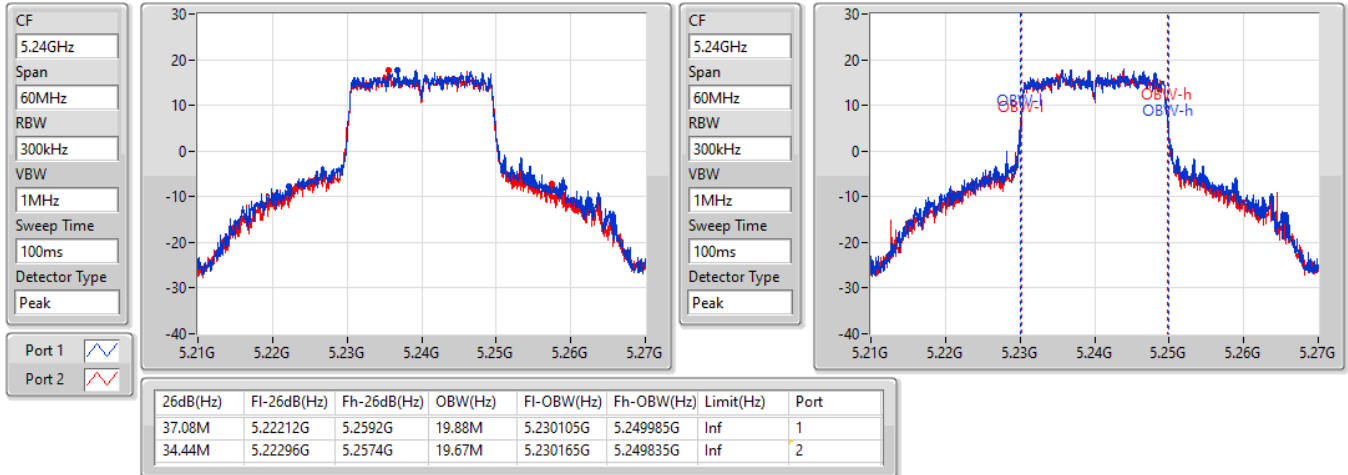

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5200MHz

20/01/2022

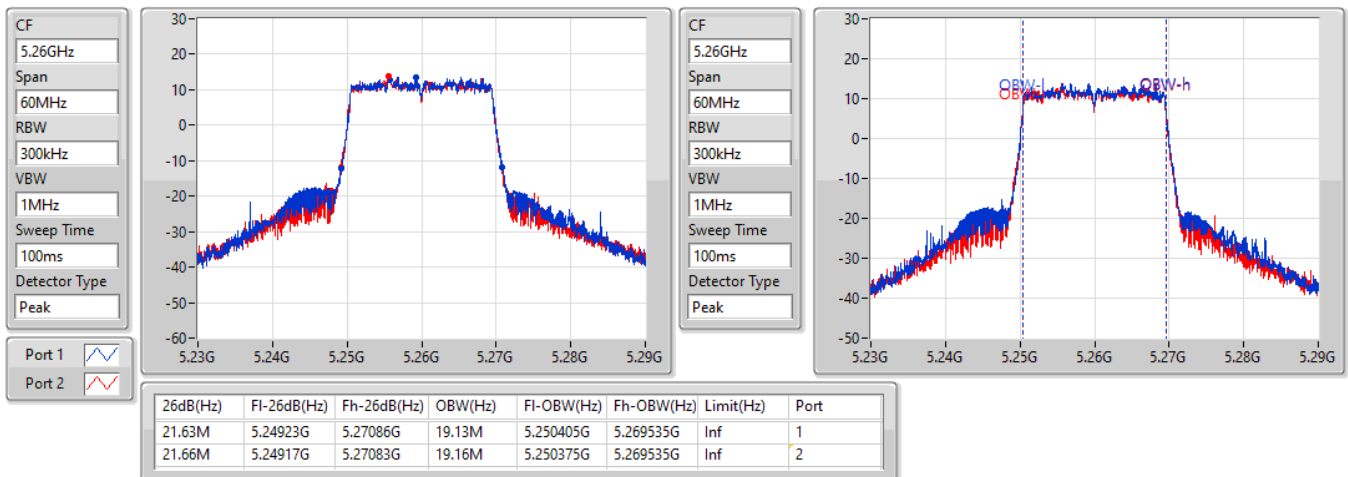


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5240MHz

20/01/2022

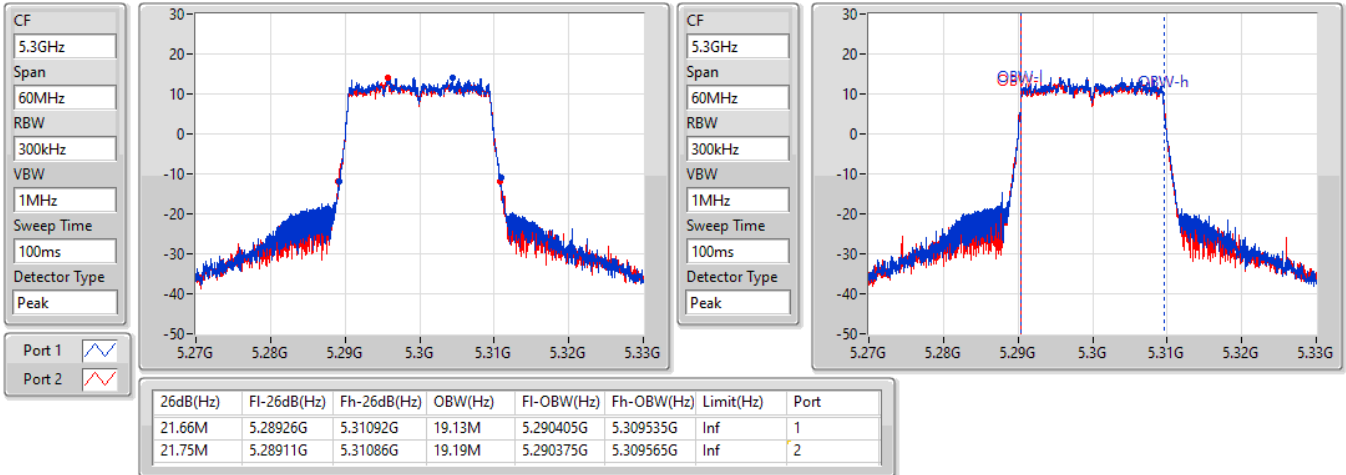

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5260MHz

20/01/2022

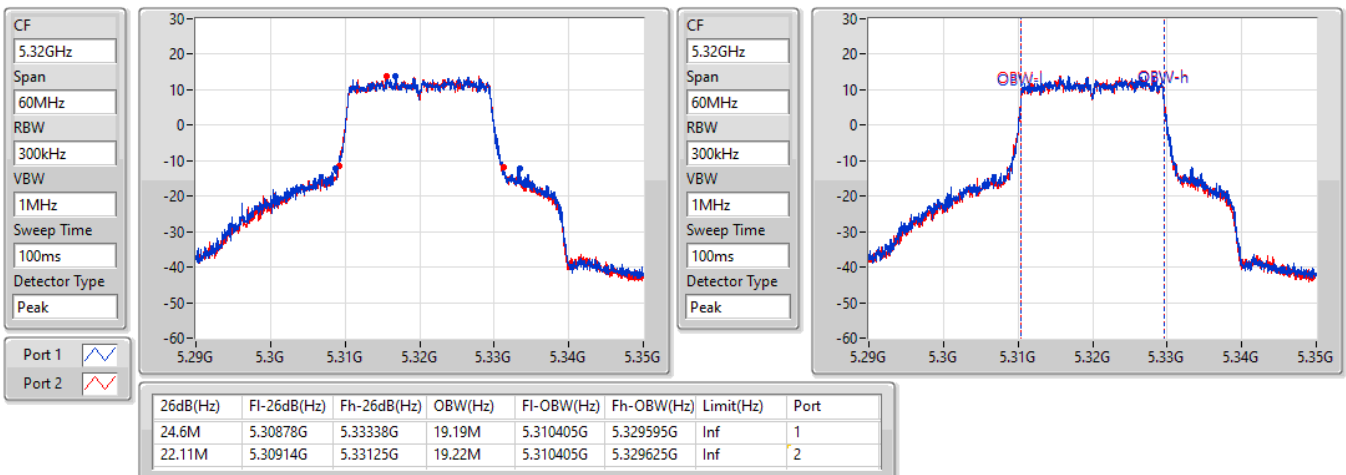


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5300MHz

20/01/2022

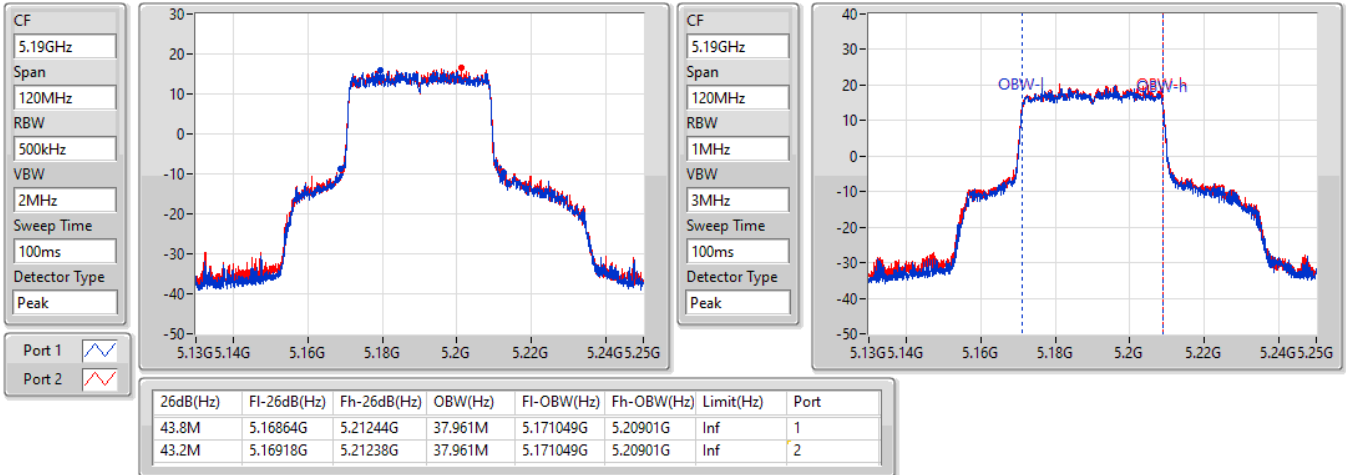

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
5320MHz

20/01/2022

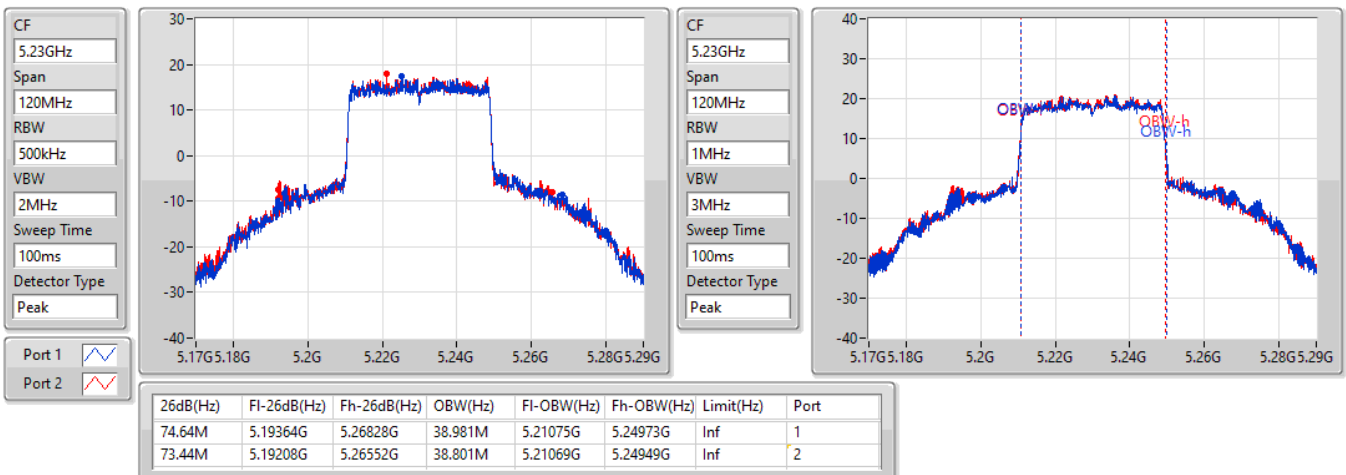


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5190MHz

20/01/2022

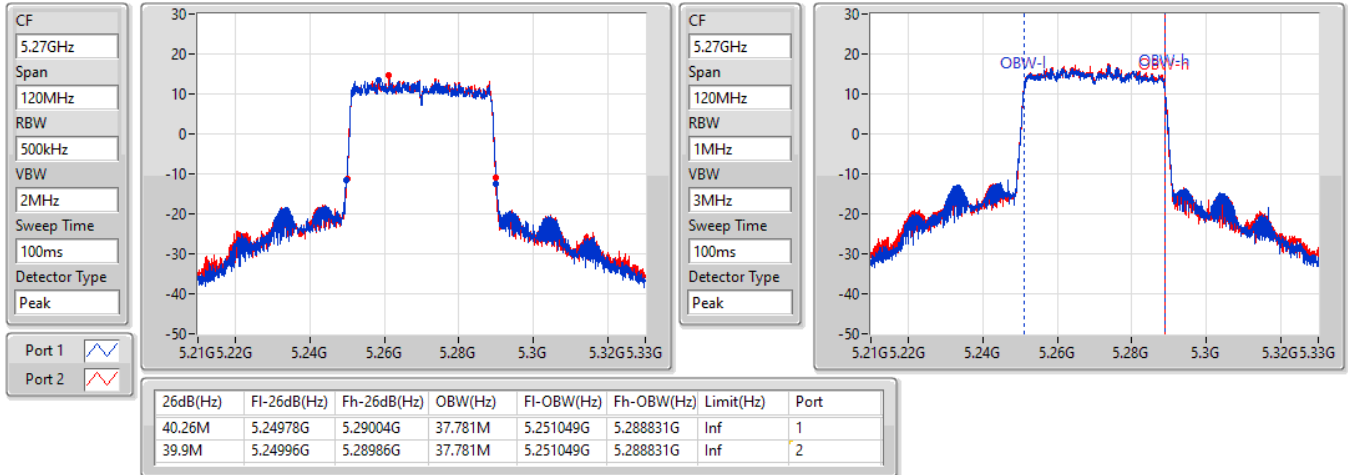

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5230MHz

20/01/2022

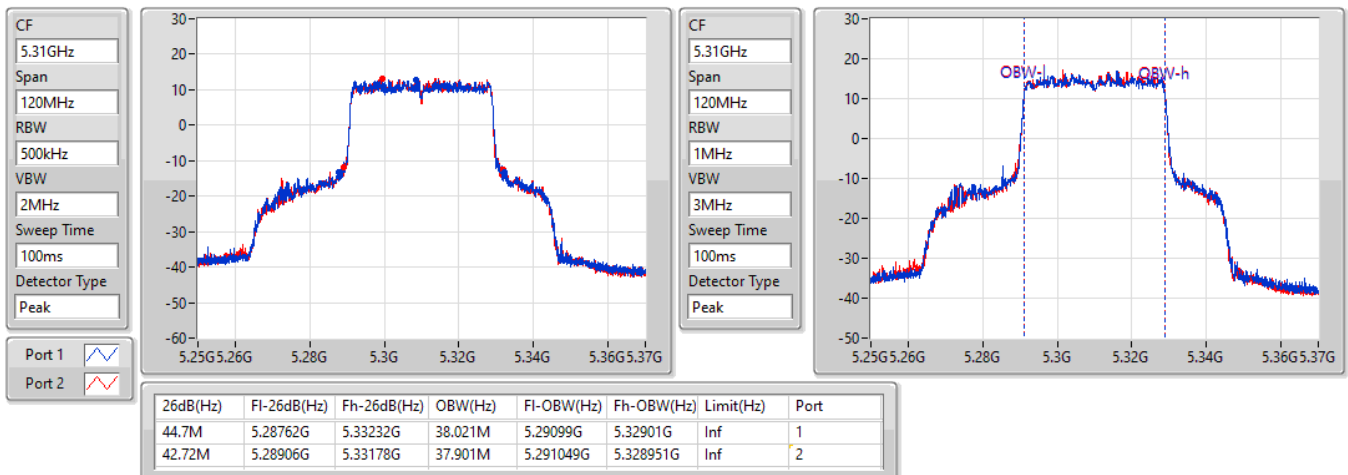


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5270MHz

20/01/2022

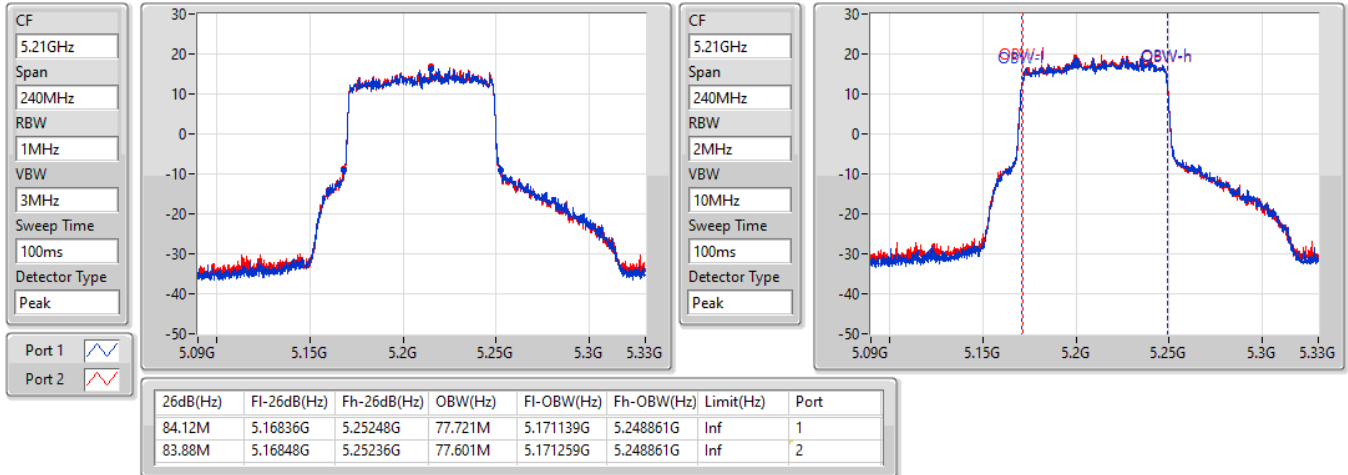

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
5310MHz

20/01/2022

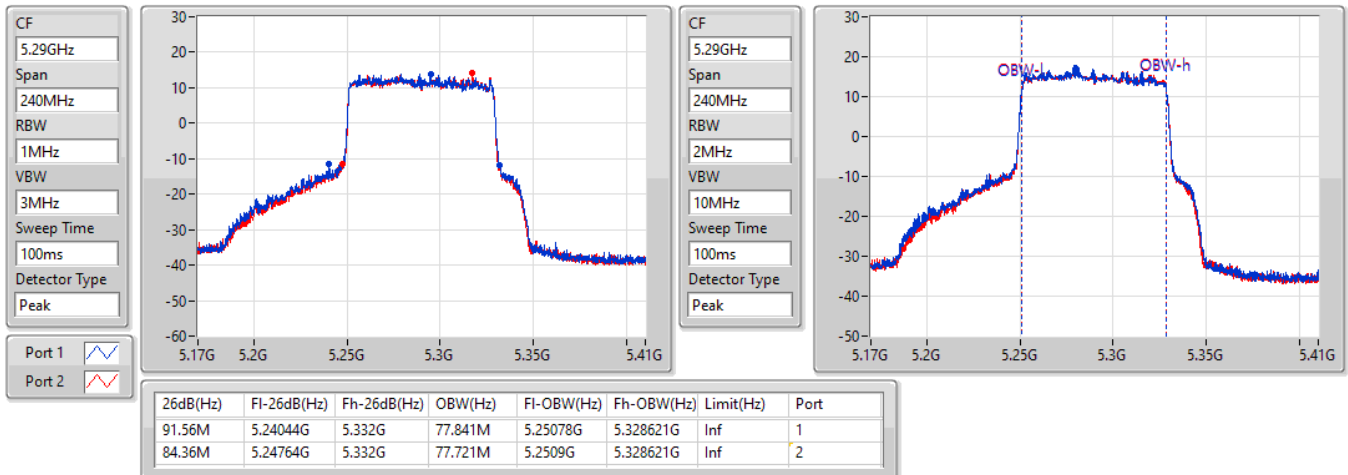


802.11ax HEW80-BF_Nss1,(MCS0)_2TX
EBW
5210MHz

20/01/2022

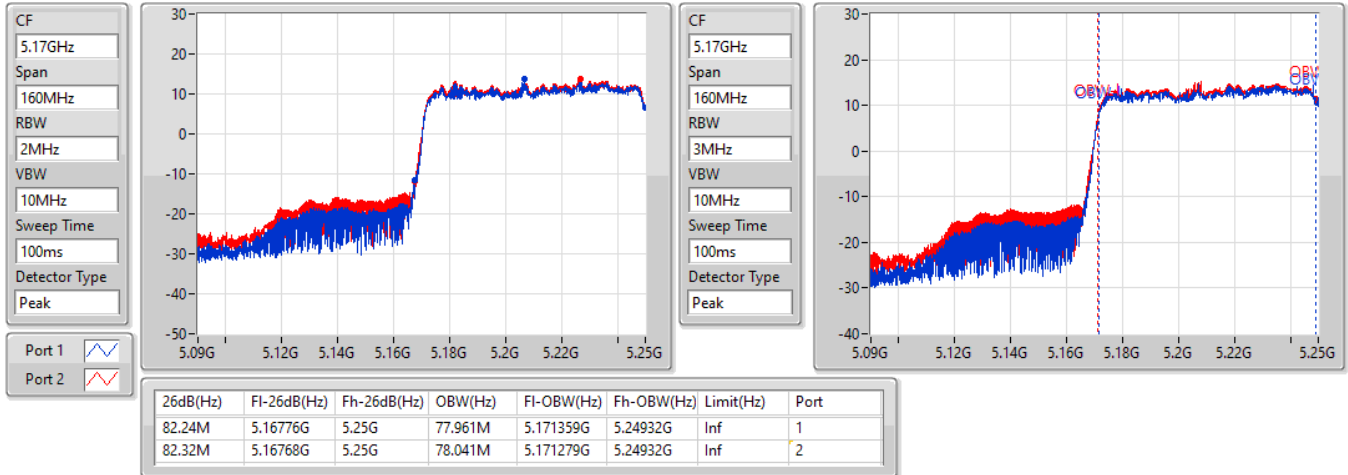

802.11ax HEW80-BF_Nss1,(MCS0)_2TX
EBW
5290MHz

20/01/2022

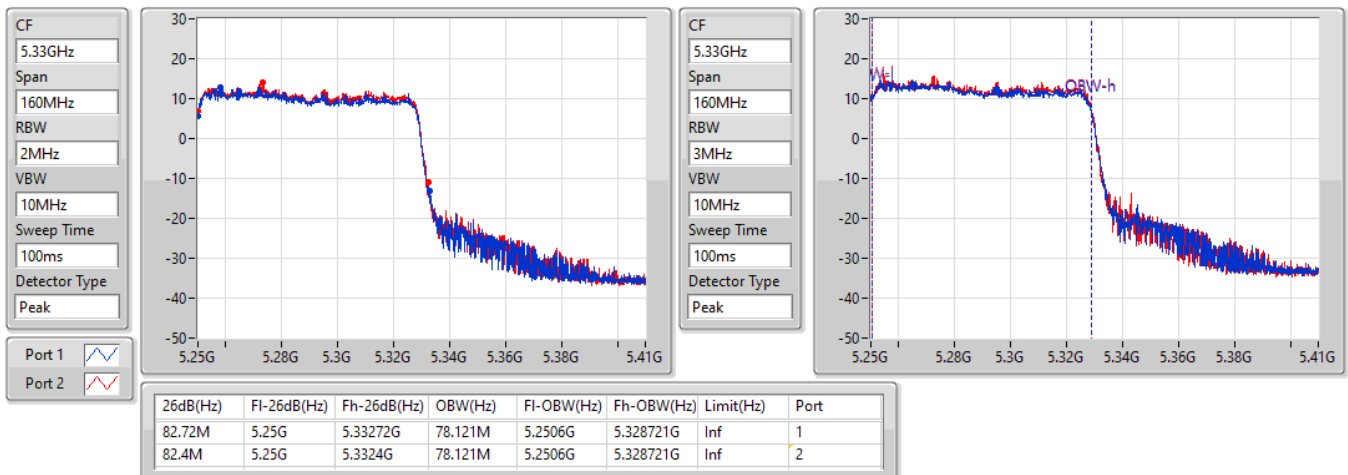


802.11ax HEW160-BF_Nss1,(MCS0)_2TX
EBW
5250MHz Straddle 5.15-5.25GHz

20/01/2022


802.11ax HEW160-BF_Nss1,(MCS0)_2TX
EBW
5250MHz Straddle 5.25-5.35GHz

20/01/2022



For UNII 2C~UNII 3:

Test Mode: non-beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.13M	17.391M	17M4D1D	15.6M	13.523M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.32M	17.781M	17M8D1D	3.14M	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

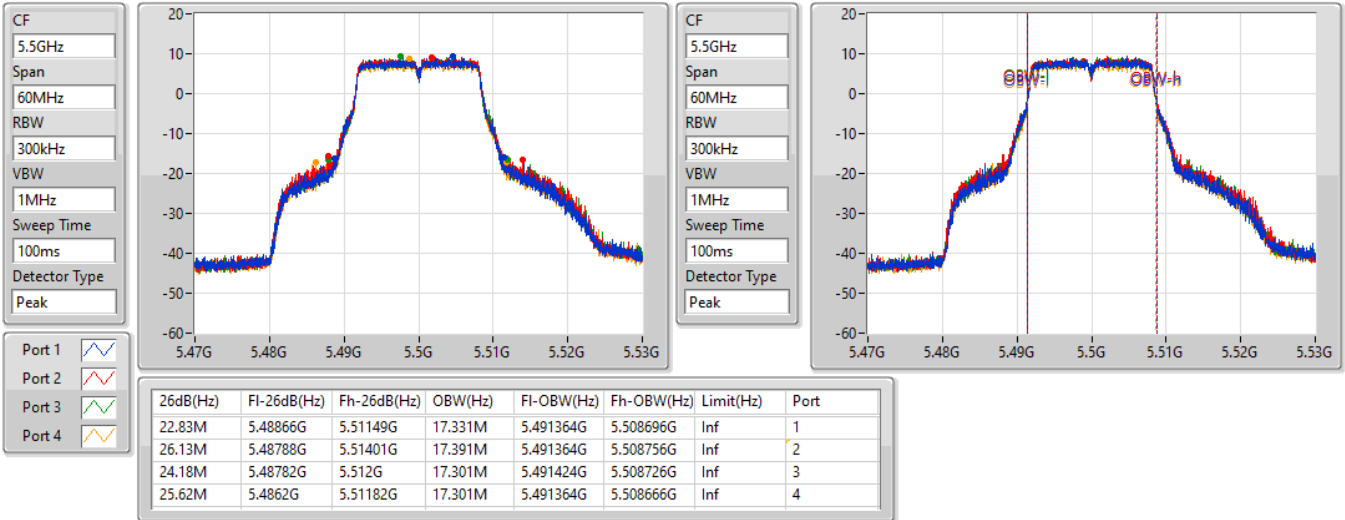
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	22.83M	17.331M	26.13M	17.391M	24.18M	17.301M	25.62M	17.301M
5580MHz	Pass	Inf	21.75M	17.091M	21.6M	17.061M	21.6M	17.001M	21.48M	17.031M
5700MHz	Pass	Inf	21.69M	17.151M	21.6M	17.061M	21.6M	16.972M	21.54M	17.001M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.87M	13.673M	15.66M	13.613M	15.645M	13.523M	15.6M	13.583M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	4.178M	3.16M	4.098M	3.14M	4.138M	3.16M	4.118M
5745MHz	Pass	500k	16.29M	17.511M	16.29M	17.361M	16.02M	17.391M	16.32M	17.361M
5785MHz	Pass	500k	16.29M	17.691M	16.32M	17.421M	16.29M	17.451M	16.32M	17.211M
5825MHz	Pass	500k	16.32M	17.781M	16.32M	17.331M	16.29M	17.301M	16.32M	17.301M

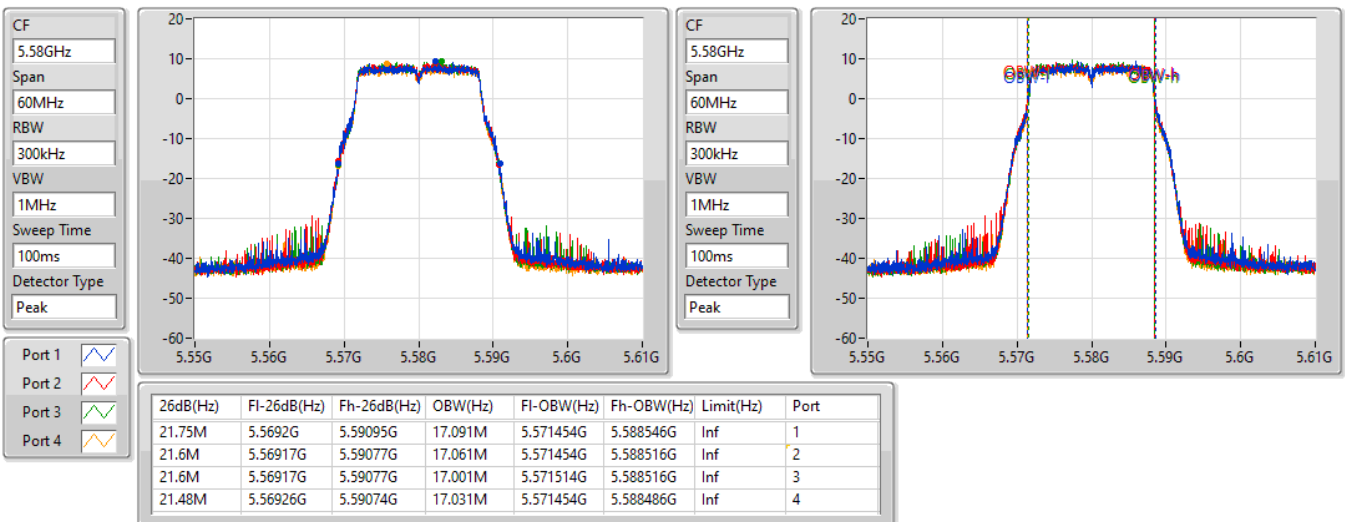
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

20/01/2022

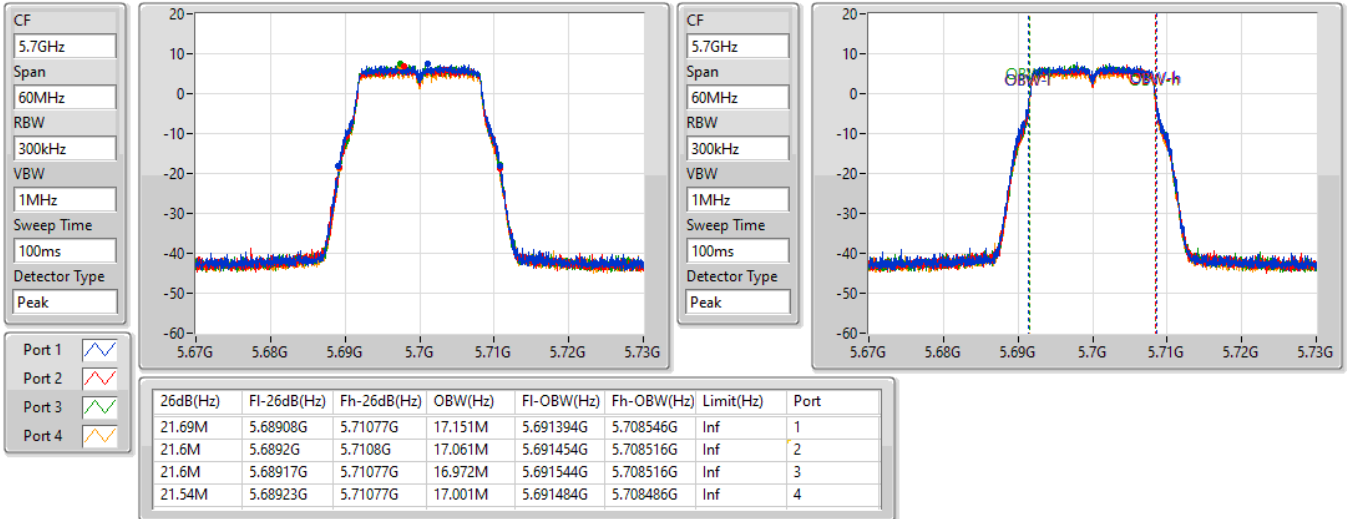

802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

20/01/2022

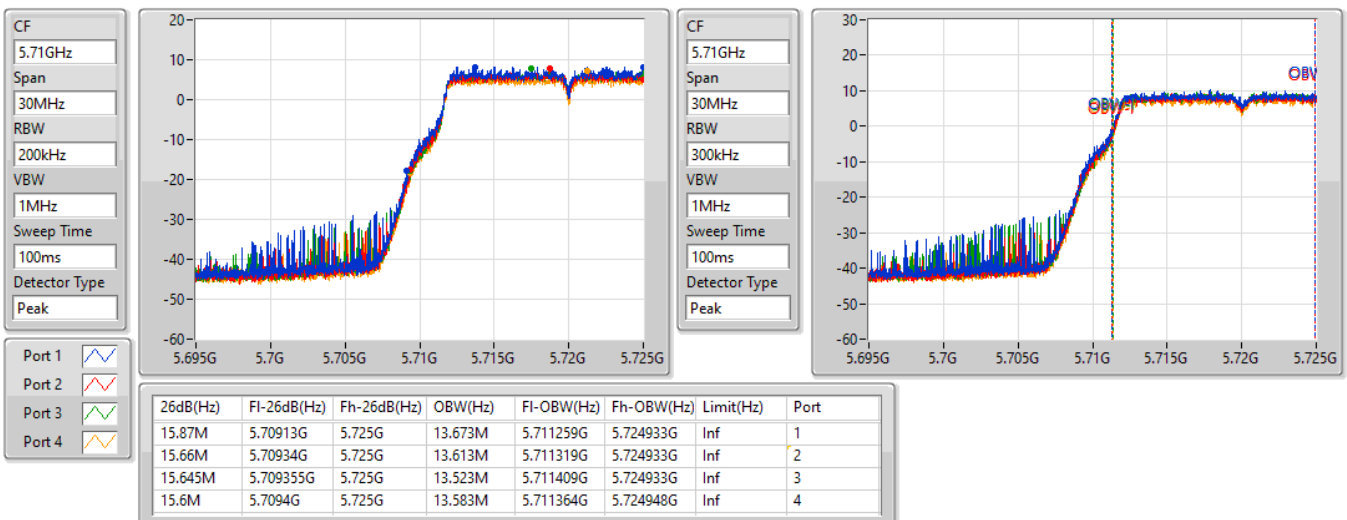


802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz

20/01/2022

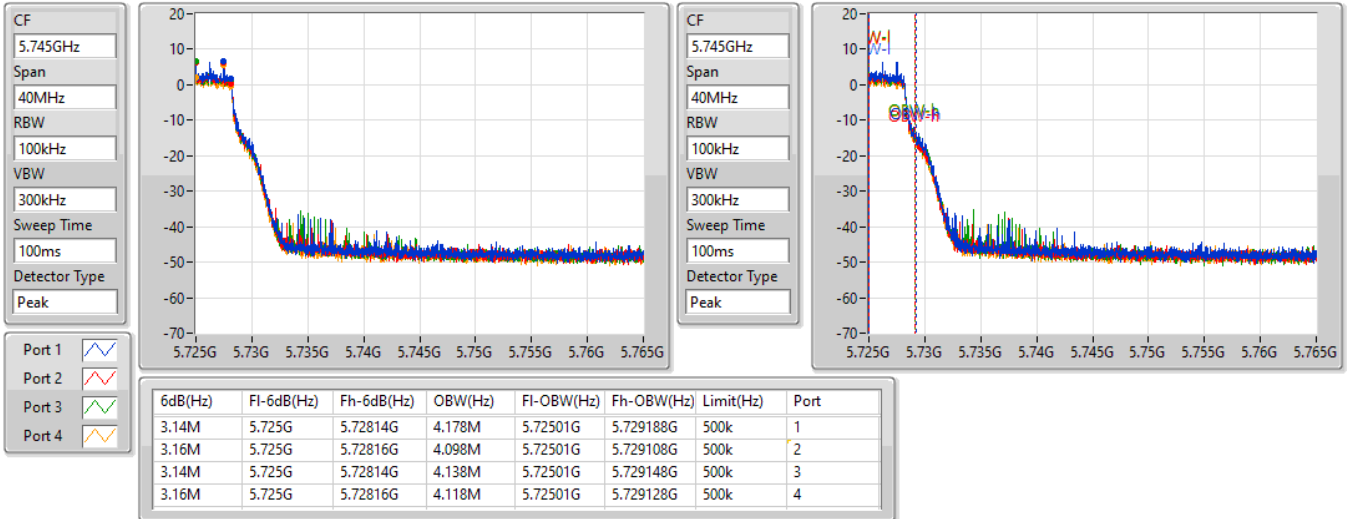

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

20/01/2022

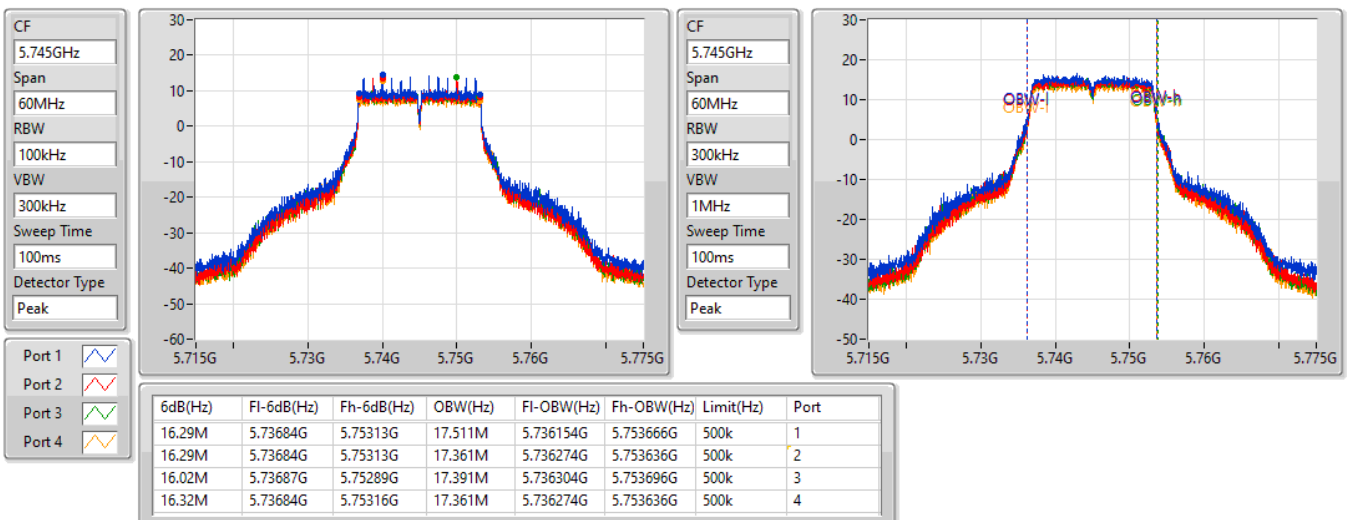


802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

20/01/2022

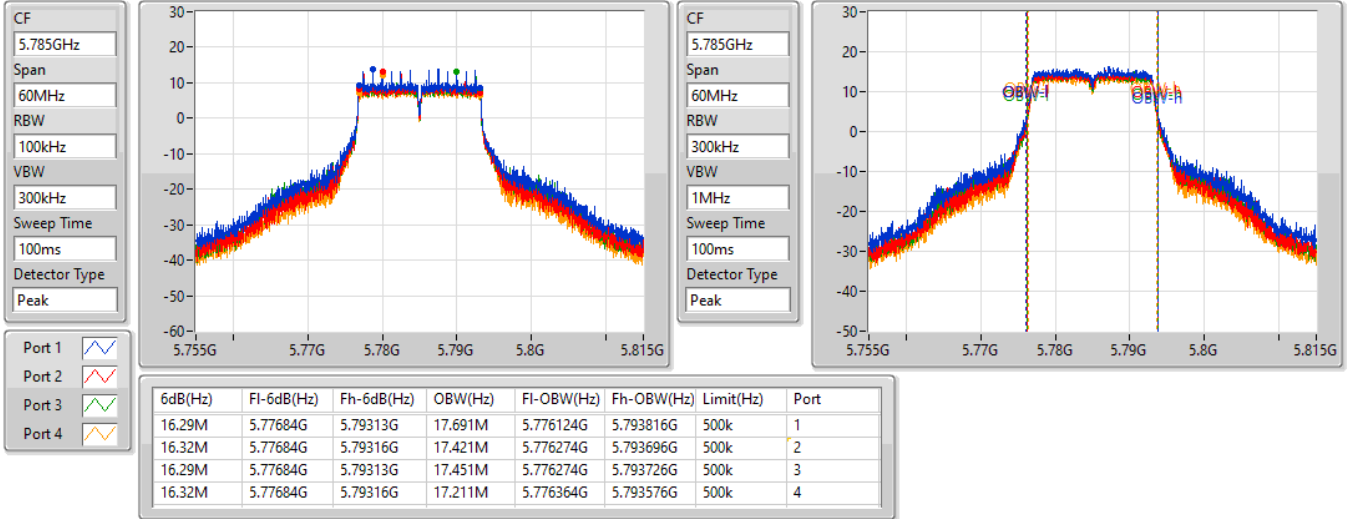

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

20/01/2022

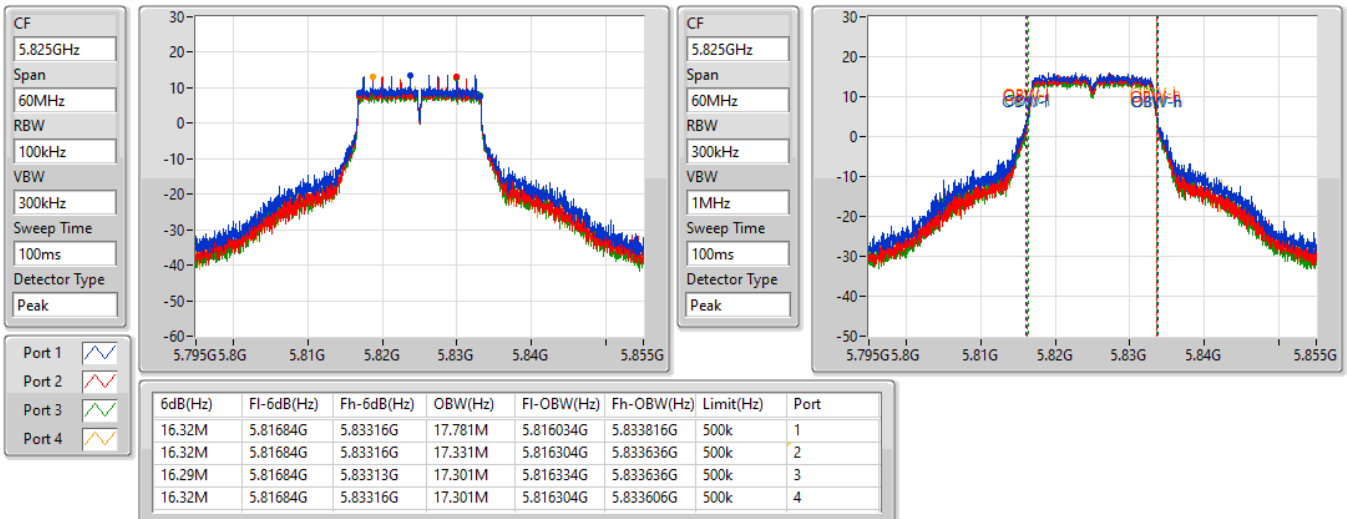


802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

20/01/2022


802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

20/01/2022



**For UNII 2C~UNII 3:****Test Mode: non-beamforming 4T1S:****Summary**

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.85GHz	-	-	-
802.11a_Nss1,(6Mbps)_4TX	34.2M	34M2D1D	5.72M

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

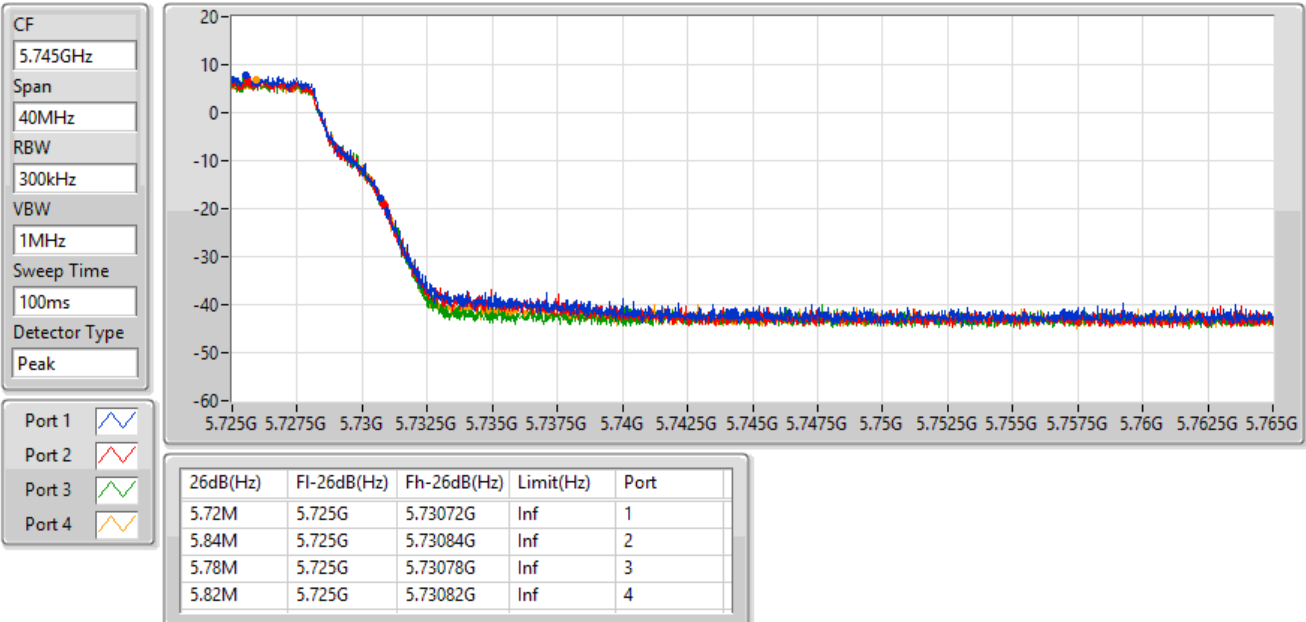
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	Inf	5.72M	5.84M	5.78M	5.82M
5745MHz	Pass	Inf	22.38M	24.93M	23.16M	22.32M
5785MHz	Pass	Inf	23.07M	23.82M	24.33M	22.65M
5825MHz	Pass	Inf	30.06M	34.2M	31.77M	31.41M

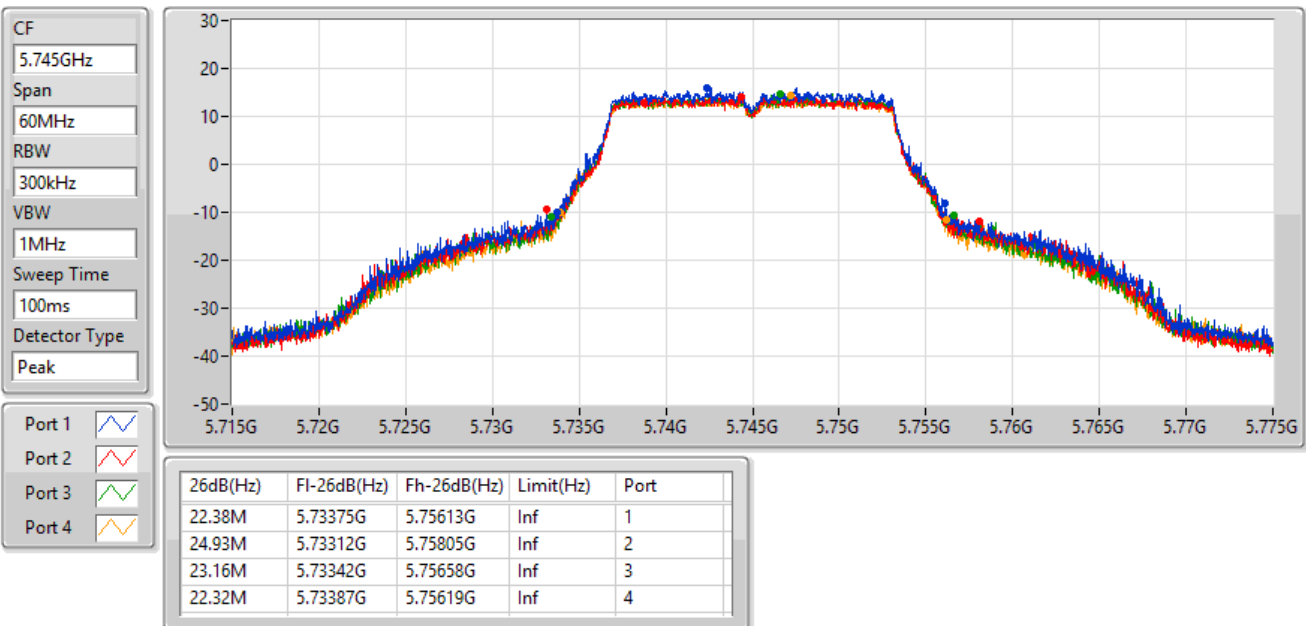
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

17/02/2022


802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

17/02/2022

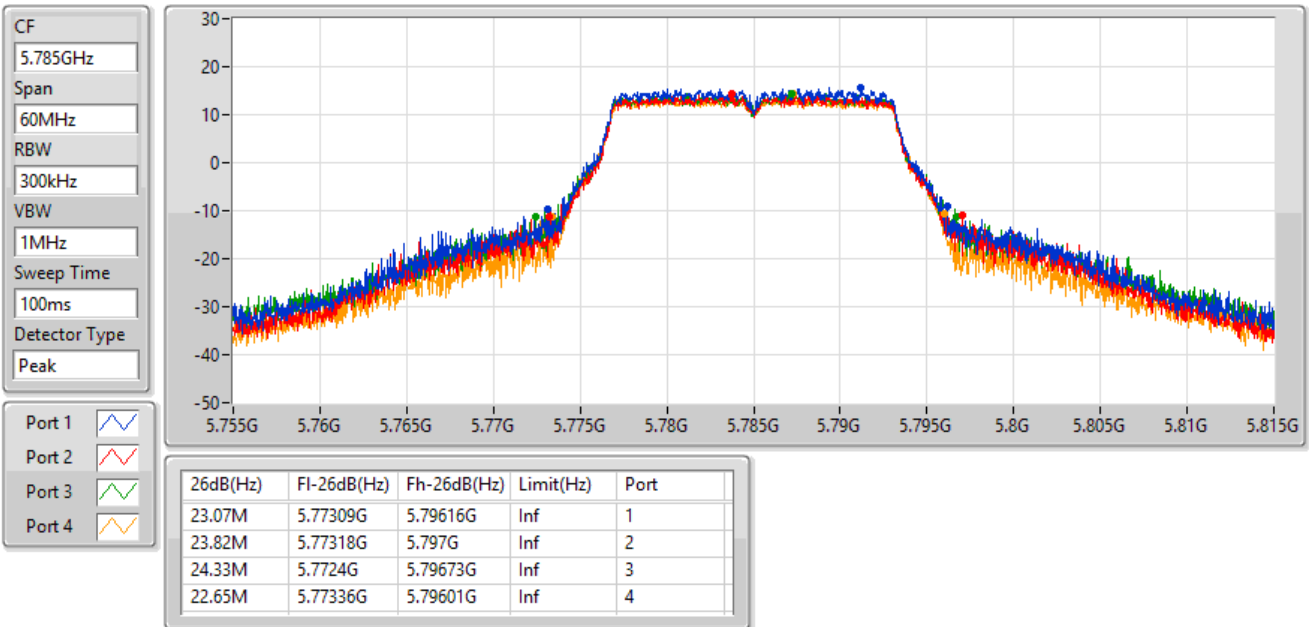


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

17/02/2022

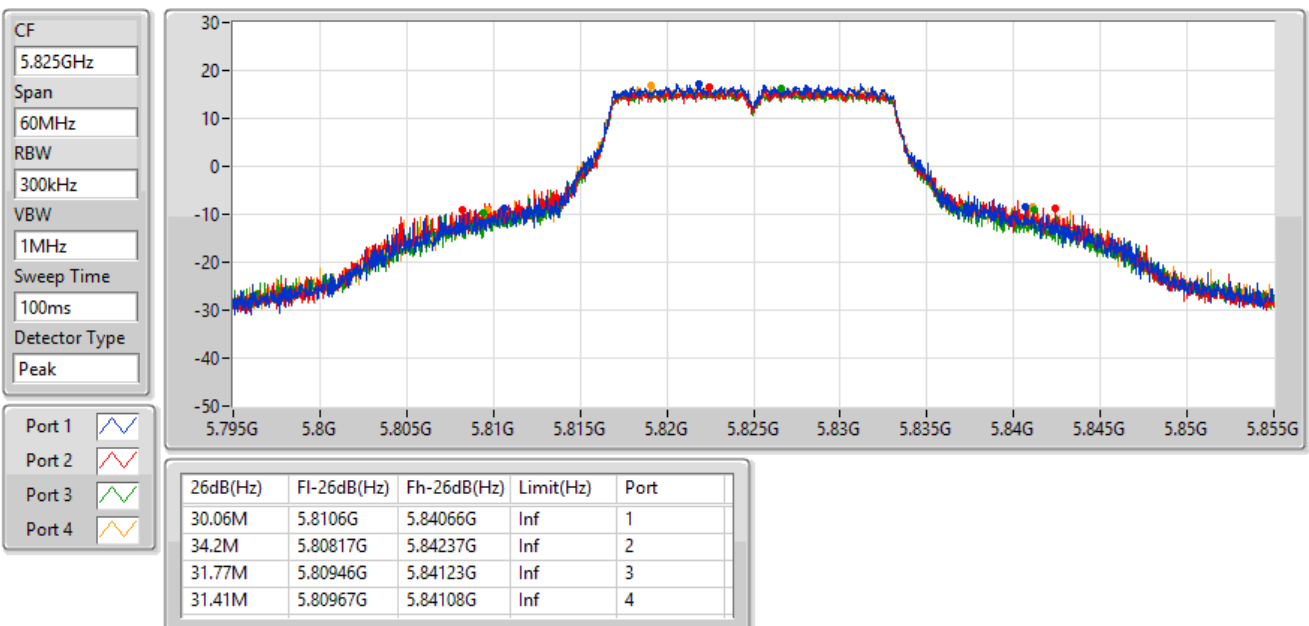


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

17/02/2022



For UNII 2C~UNII 3:

Test Mode: beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	25.89M	19.25M	19M2D1D	15.765M	14.543M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	44.16M	38.201M	38M2D1D	35.245M	33.828M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	84.6M	77.961M	78M0D1D	75.9M	73.463M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	165.84M	156.882M	157MD1D	164.4M	156.642M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.96M	19.37M	19M4D1D	4.4M	4.658M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.68M	38.501M	38M5D1D	3.84M	4.118M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.16M	78.201M	78M2D1D	3.78M	4.158M

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

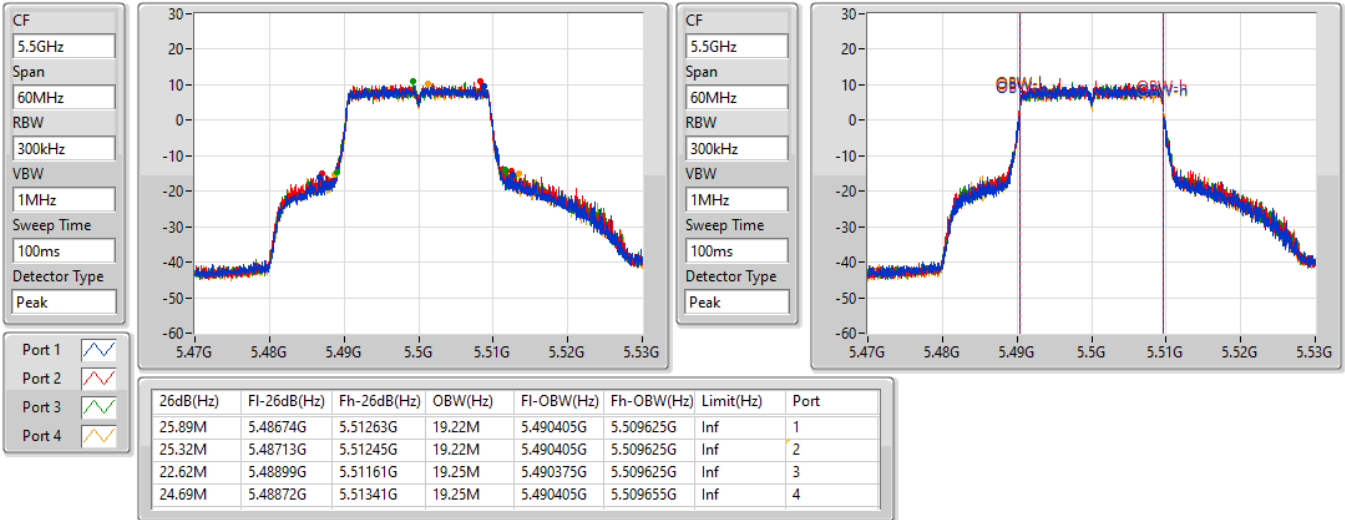
Result

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	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	25.89M	19.22M	25.32M	19.22M	22.62M	19.25M	24.69M	19.25M
5580MHz	Pass	Inf	21.96M	19.16M	21.66M	19.1M	21.66M	19.13M	21.63M	19.16M
5700MHz	Pass	Inf	21.93M	19.07M	21.72M	19.1M	21.6M	19.1M	21.81M	19.13M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.87M	14.603M	15.765M	14.543M	15.78M	14.573M	15.825M	14.603M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.678M	4.42M	4.678M	4.4M	4.658M	4.42M	4.678M
5745MHz	Pass	500k	18.81M	19.28M	18.42M	19.22M	18.6M	19.25M	18.27M	19.28M
5785MHz	Pass	500k	18.84M	19.37M	18.84M	19.22M	18.84M	19.25M	18.87M	19.22M
5825MHz	Pass	500k	18.96M	19.37M	18.9M	19.28M	18.84M	19.25M	18.87M	19.28M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	41.7M	38.141M	44.16M	38.201M	43.32M	38.141M	41.58M	38.141M
5550MHz	Pass	Inf	40.56M	37.961M	40.26M	37.961M	40.38M	38.021M	40.56M	37.961M
5670MHz	Pass	Inf	40.62M	37.961M	40.44M	37.961M	40.5M	37.961M	40.5M	37.961M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.28M	33.863M	35.35M	33.863M	35.245M	33.828M	35.245M	33.863M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.138M	3.9M	4.138M	3.84M	4.118M	3.84M	4.138M
5755MHz	Pass	500k	37.56M	38.321M	37.38M	38.201M	37.56M	38.261M	37.56M	38.201M
5795MHz	Pass	500k	37.68M	38.501M	37.5M	38.201M	37.5M	38.321M	37.56M	38.081M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	82.44M	77.961M	83.28M	77.841M	83.64M	77.961M	84.6M	77.841M
5610MHz	Pass	Inf	82.2M	77.721M	82.08M	77.601M	81.84M	77.601M	82.2M	77.721M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.9M	73.538M	75.975M	73.463M	75.975M	73.463M	75.975M	73.463M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	4.158M	3.82M	4.158M	3.82M	4.158M	3.78M	4.178M
5775MHz	Pass	500k	77.16M	78.201M	76.92M	78.201M	75.96M	78.201M	76.44M	78.201M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	165.84M	156.882M	165.36M	156.642M	164.4M	156.642M	164.4M	156.882M

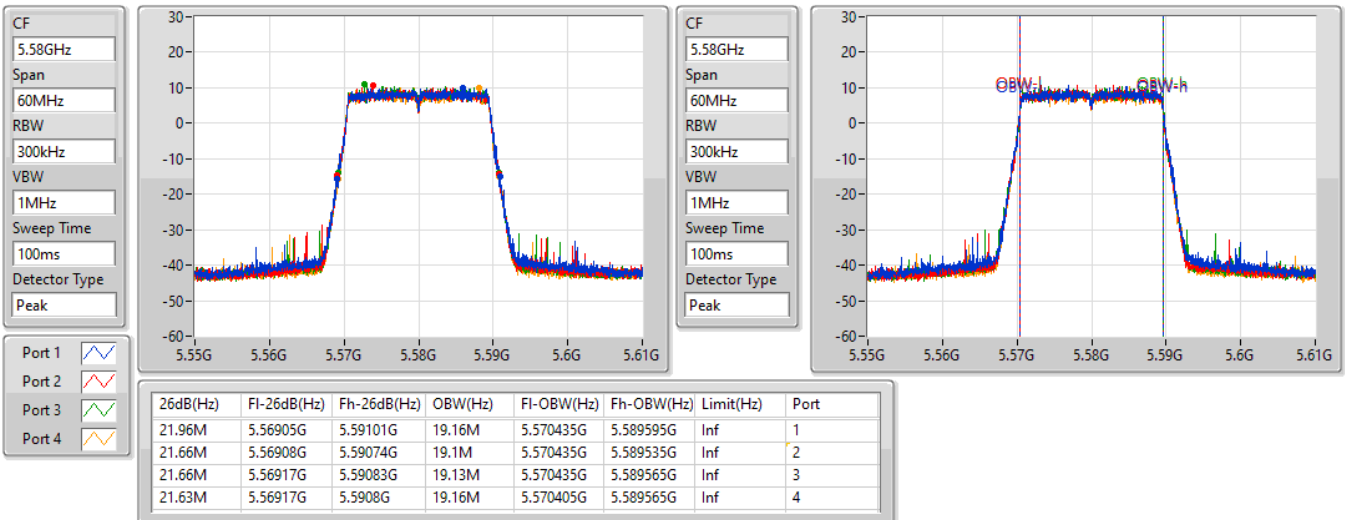
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

20/01/2022

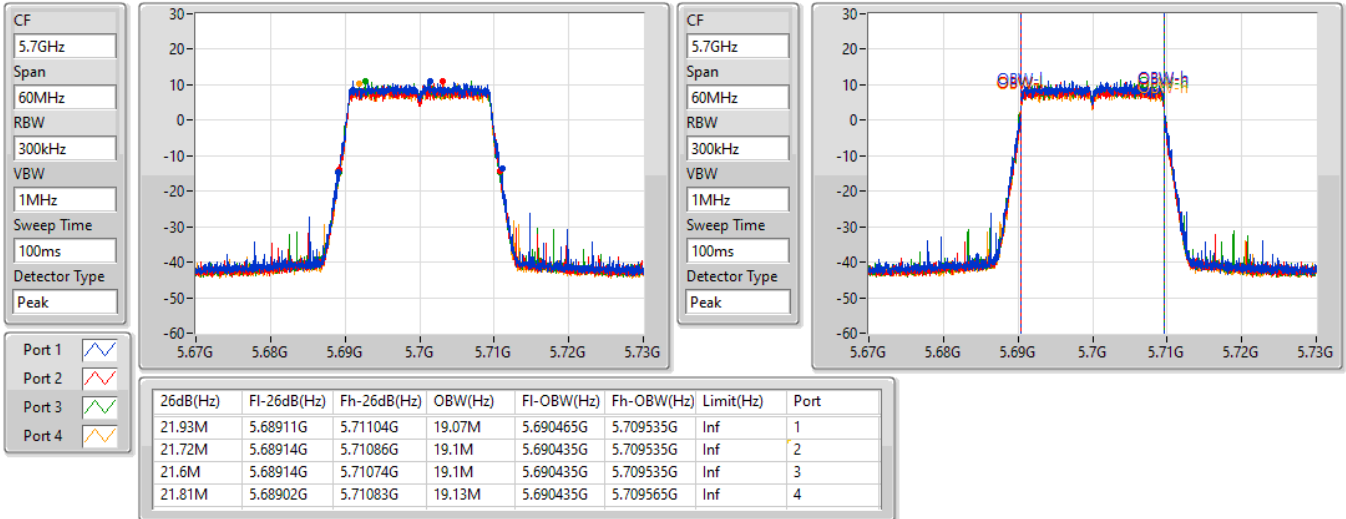

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

20/01/2022

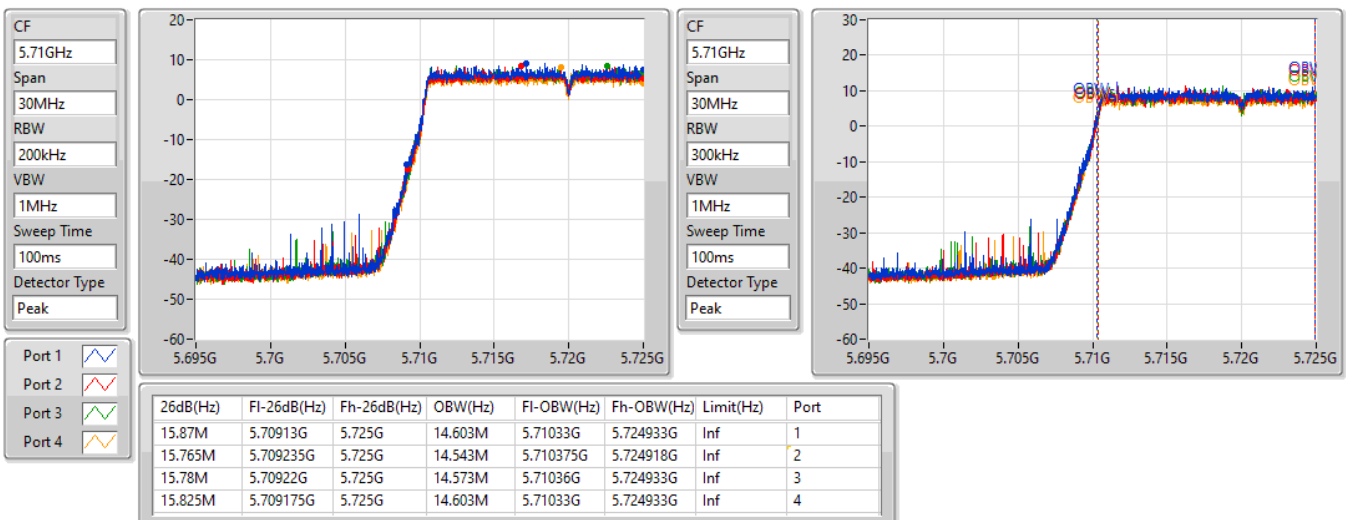


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

20/01/2022

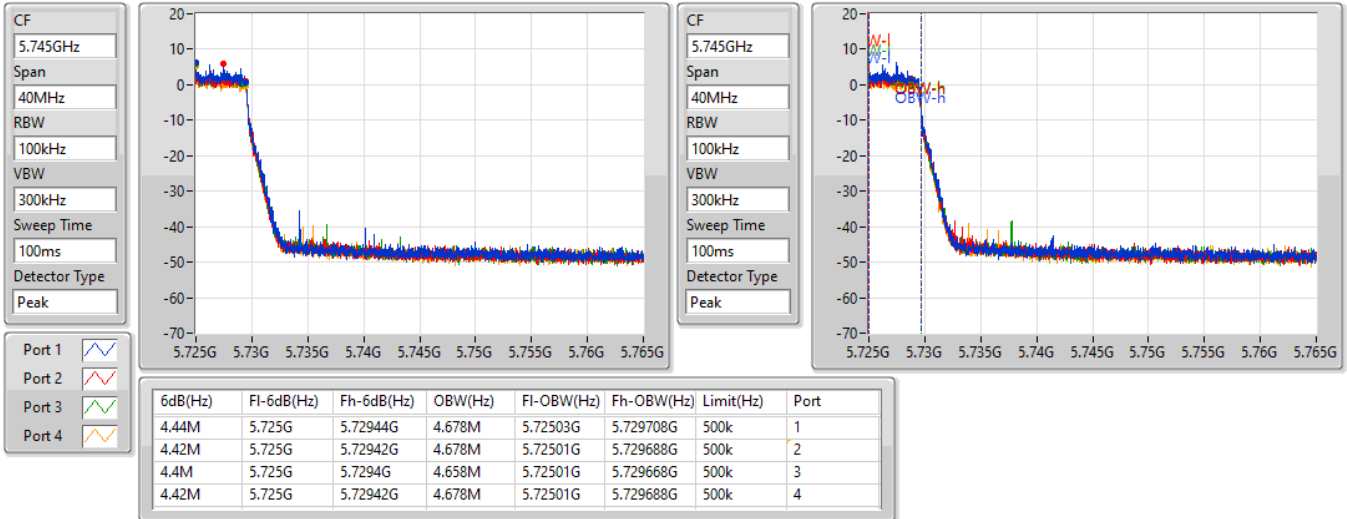

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

20/01/2022

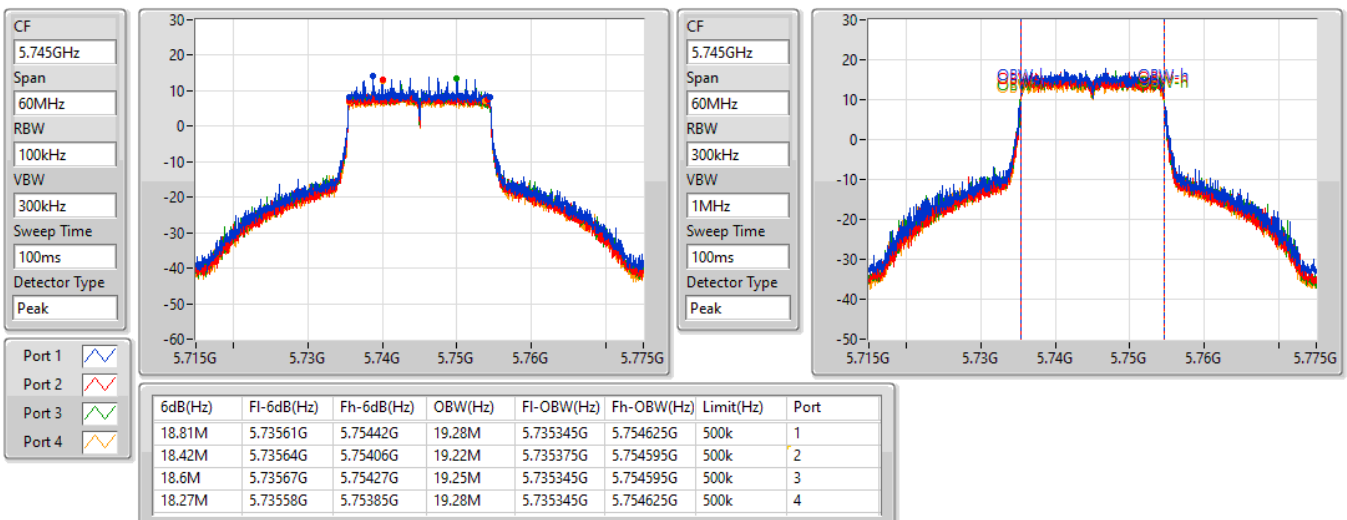


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

20/01/2022

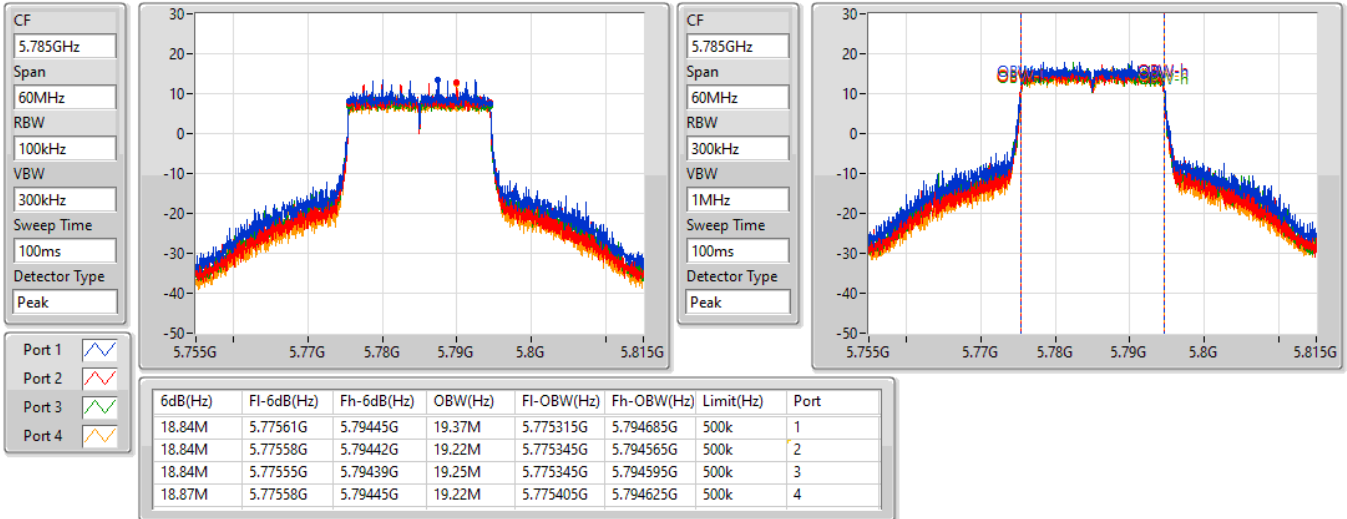

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz

20/01/2022

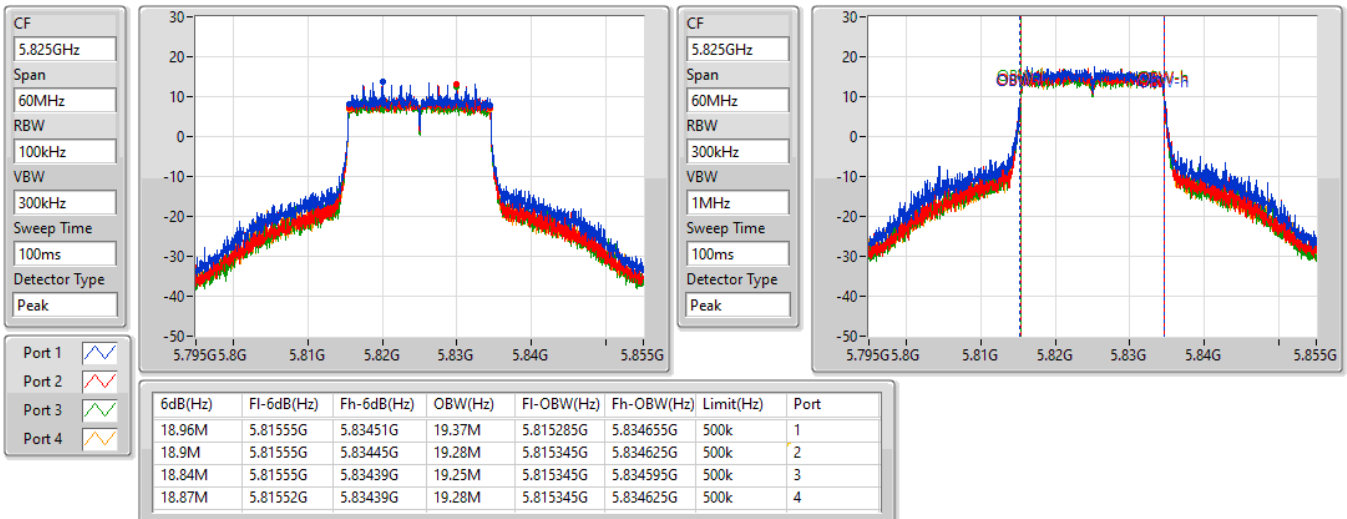


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5785MHz

20/01/2022

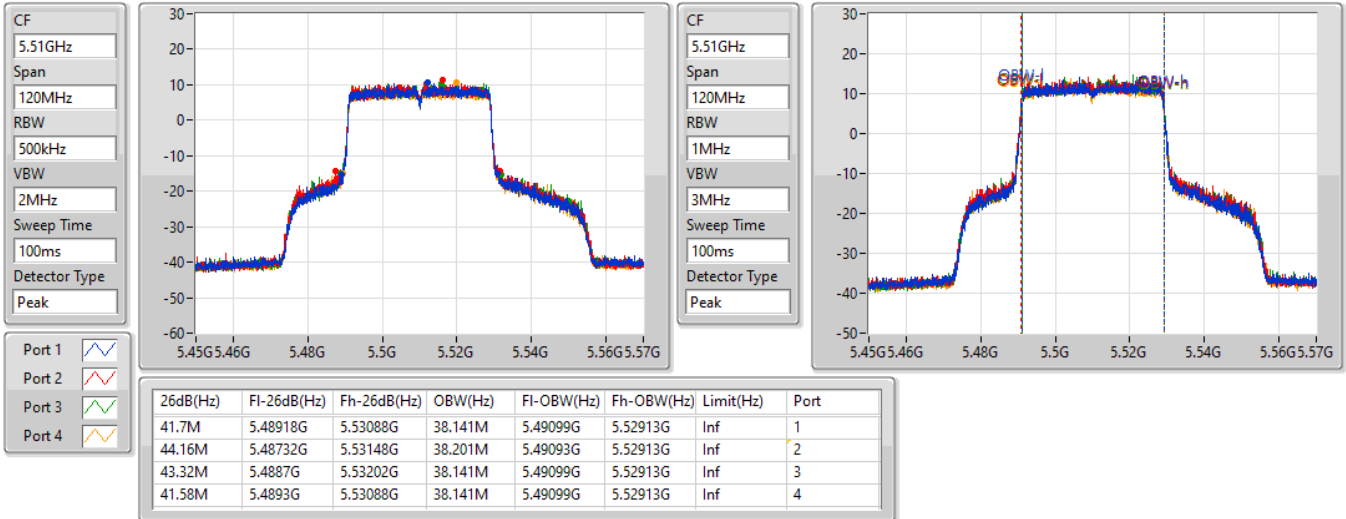

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5825MHz

20/01/2022

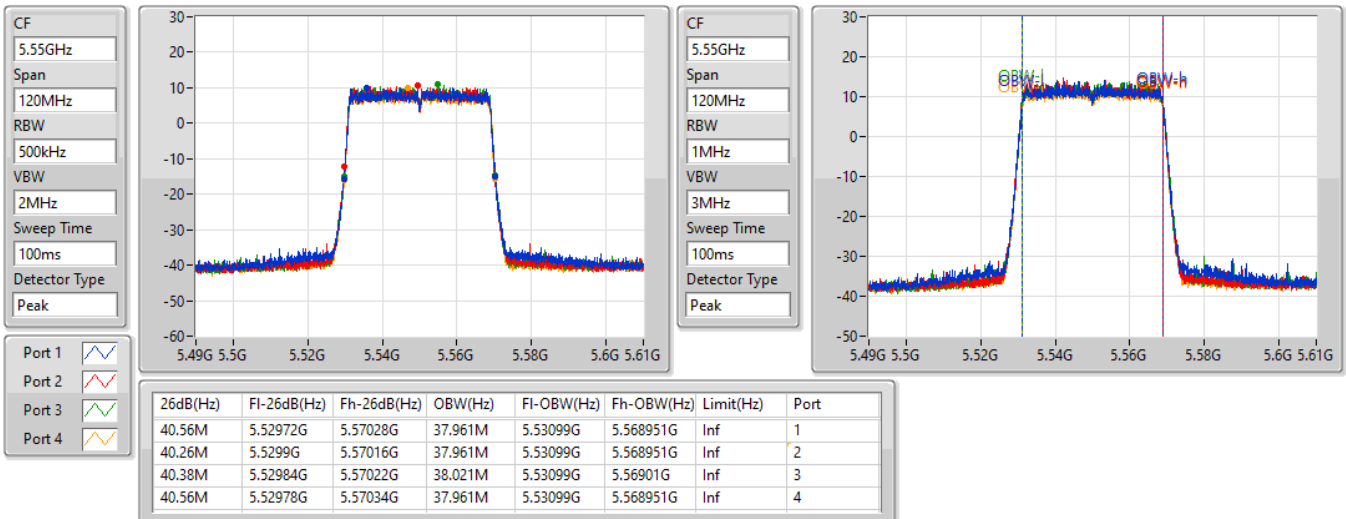


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

20/01/2022

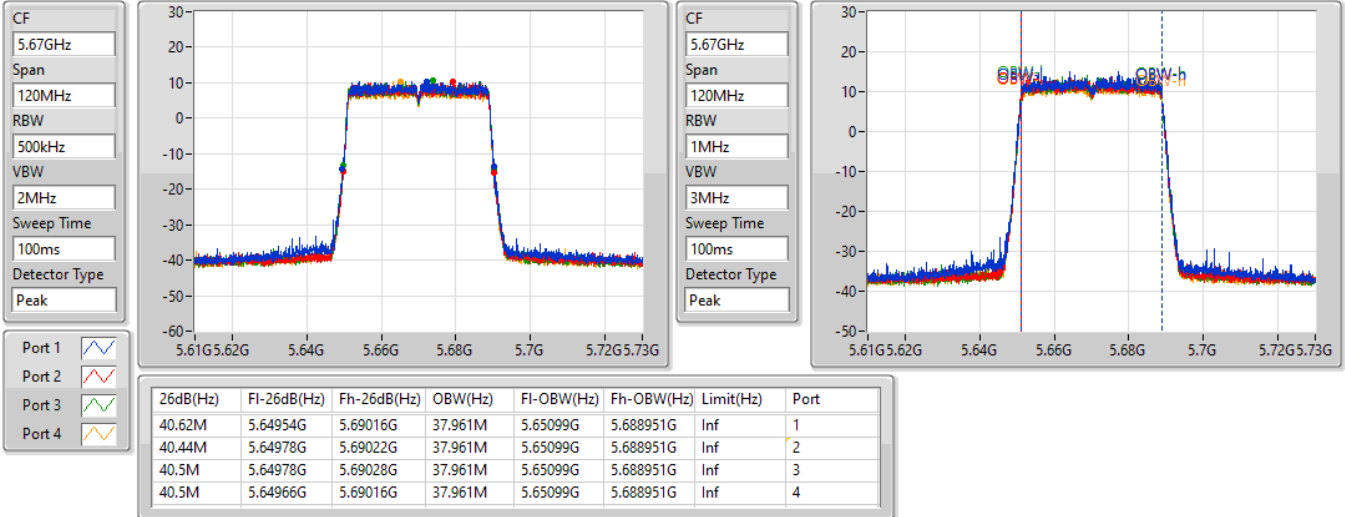

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

20/01/2022

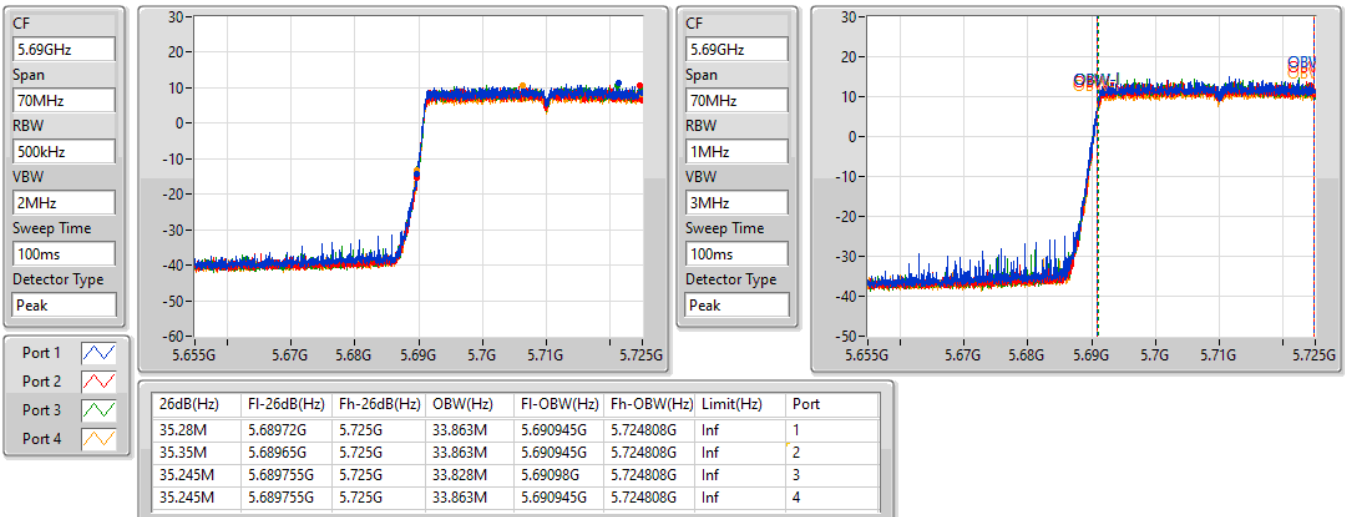


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz

20/01/2022

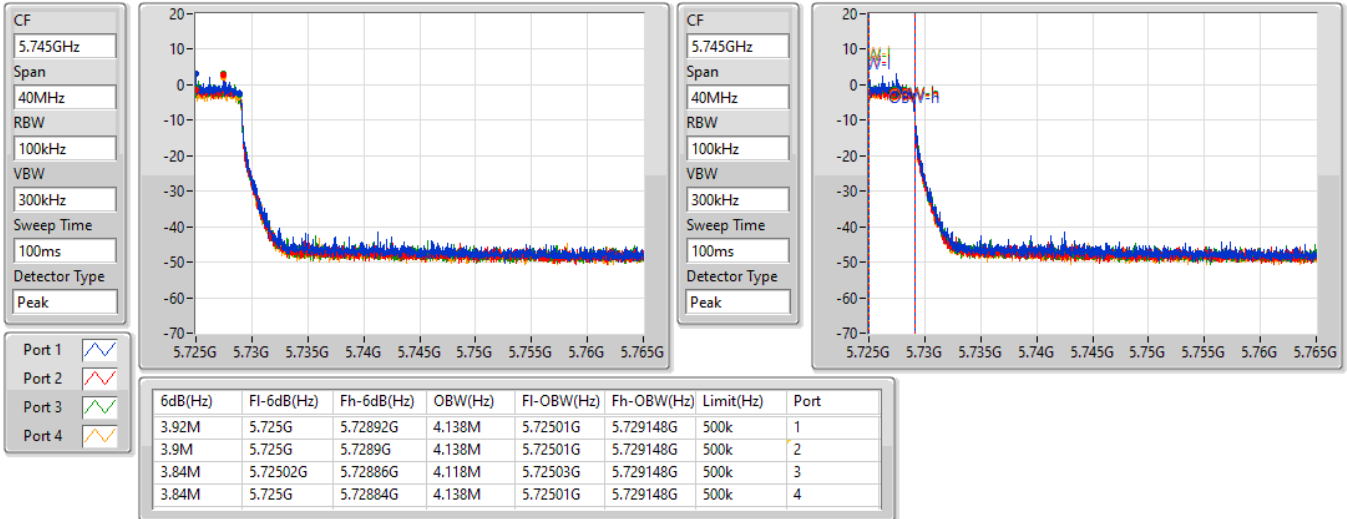

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

20/01/2022

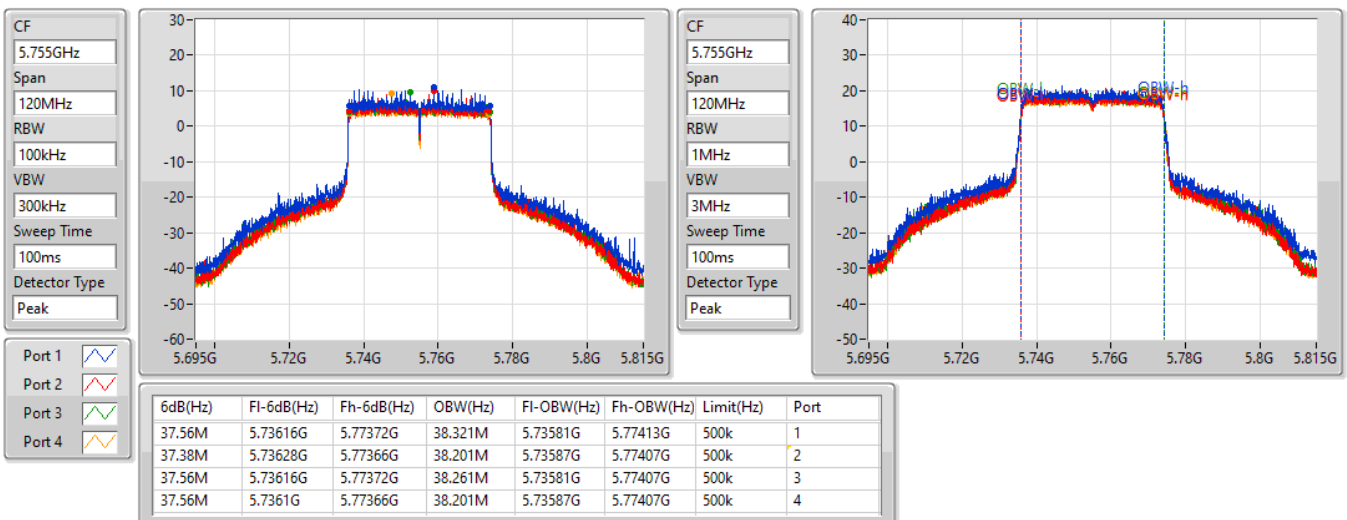


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

20/01/2022

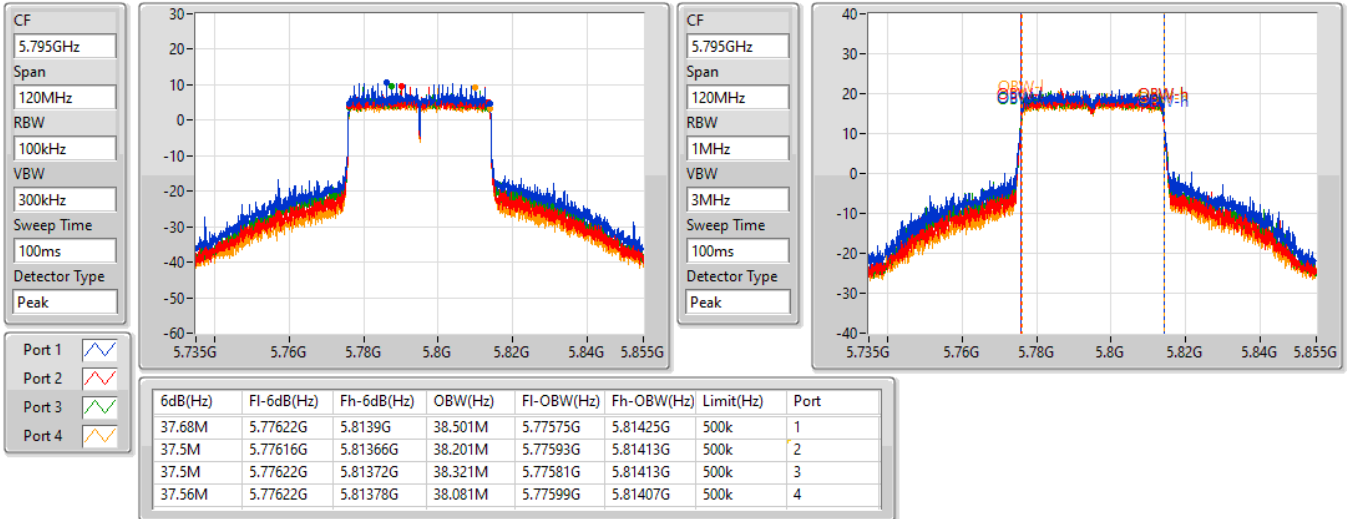

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz

20/01/2022

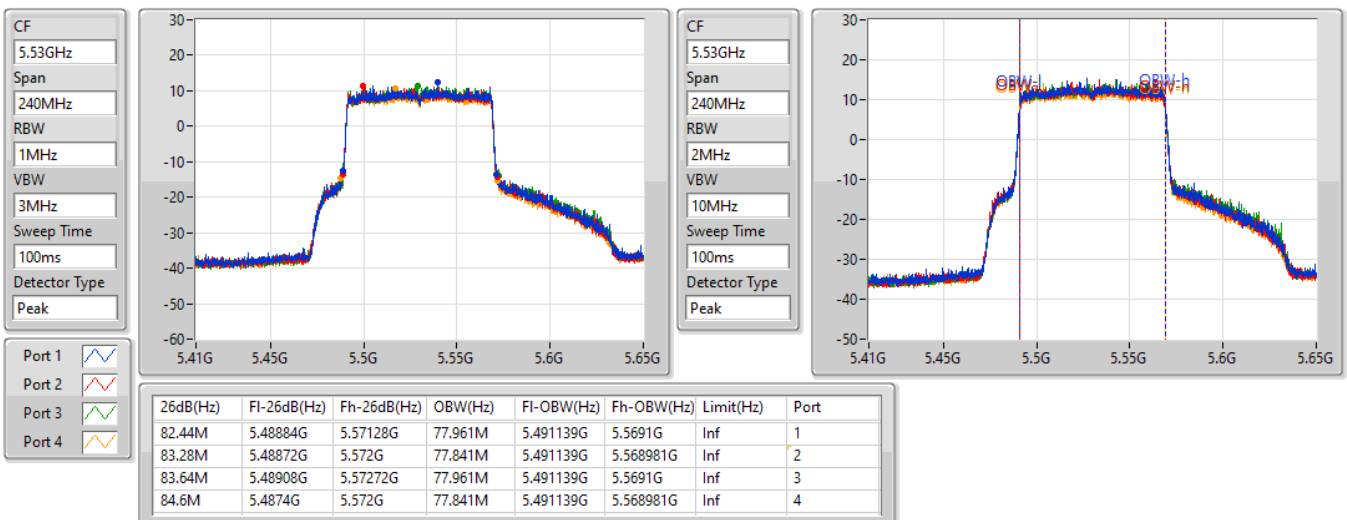


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5795MHz

20/01/2022

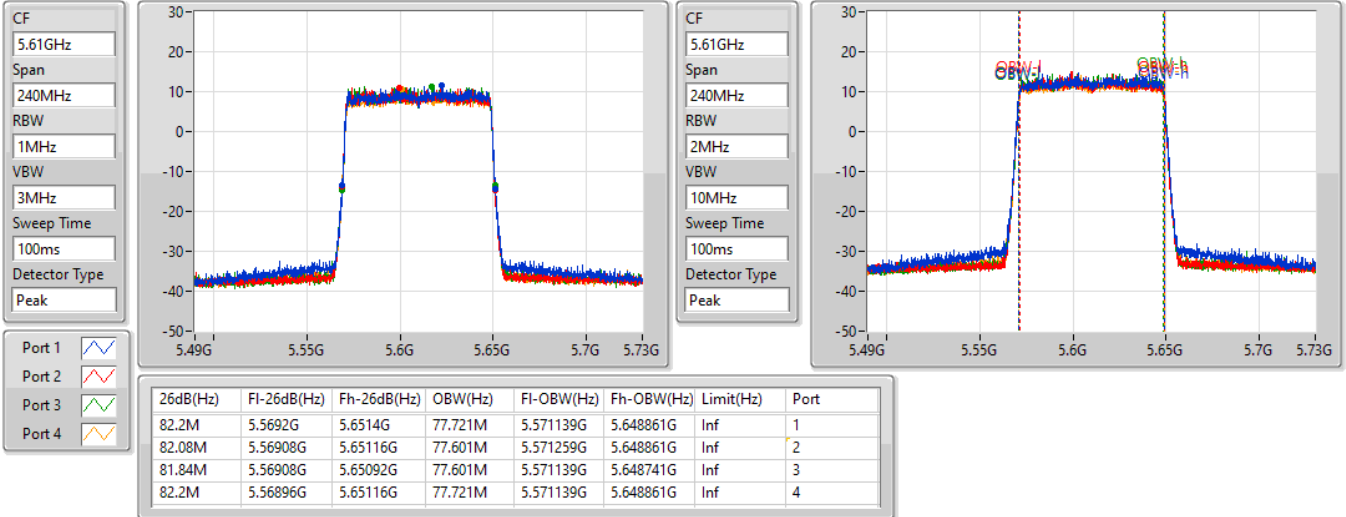

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

20/01/2022

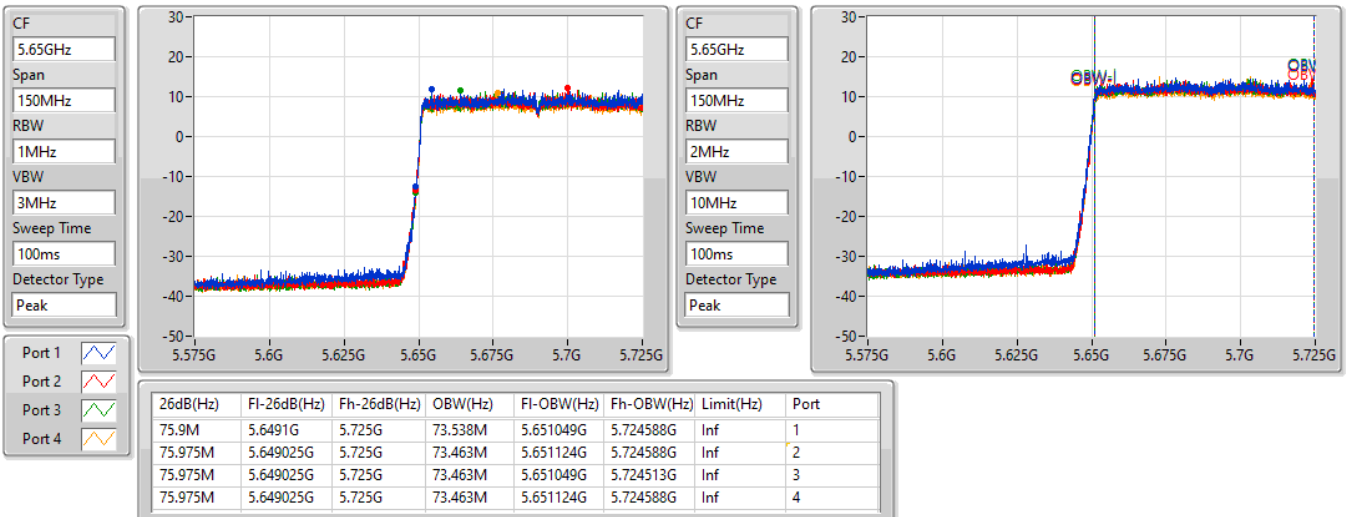


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

20/01/2022

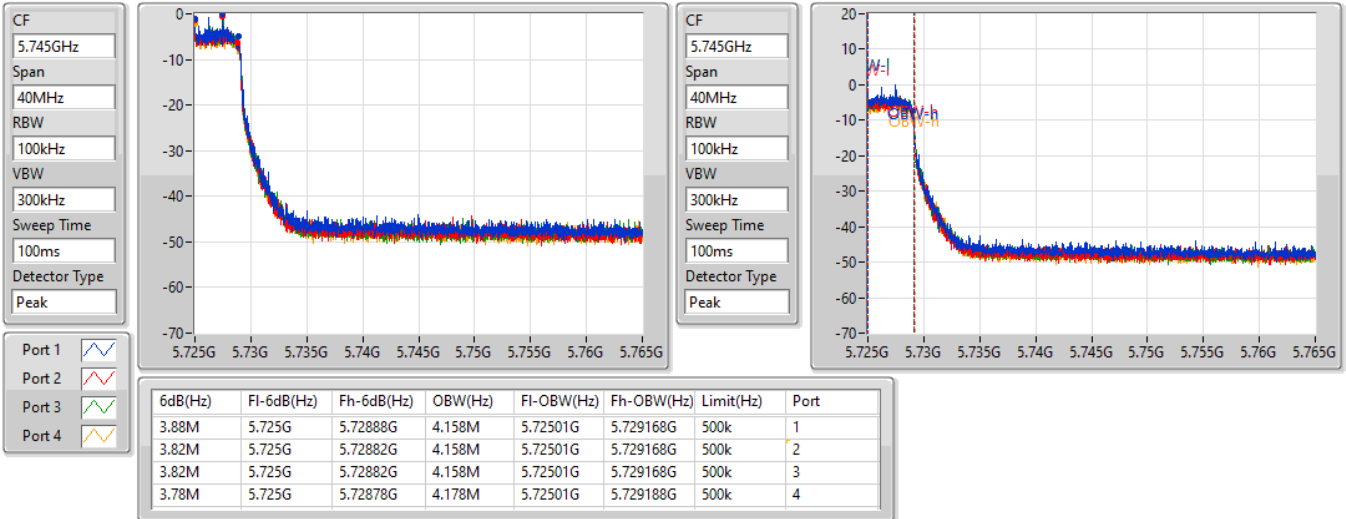

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

20/01/2022

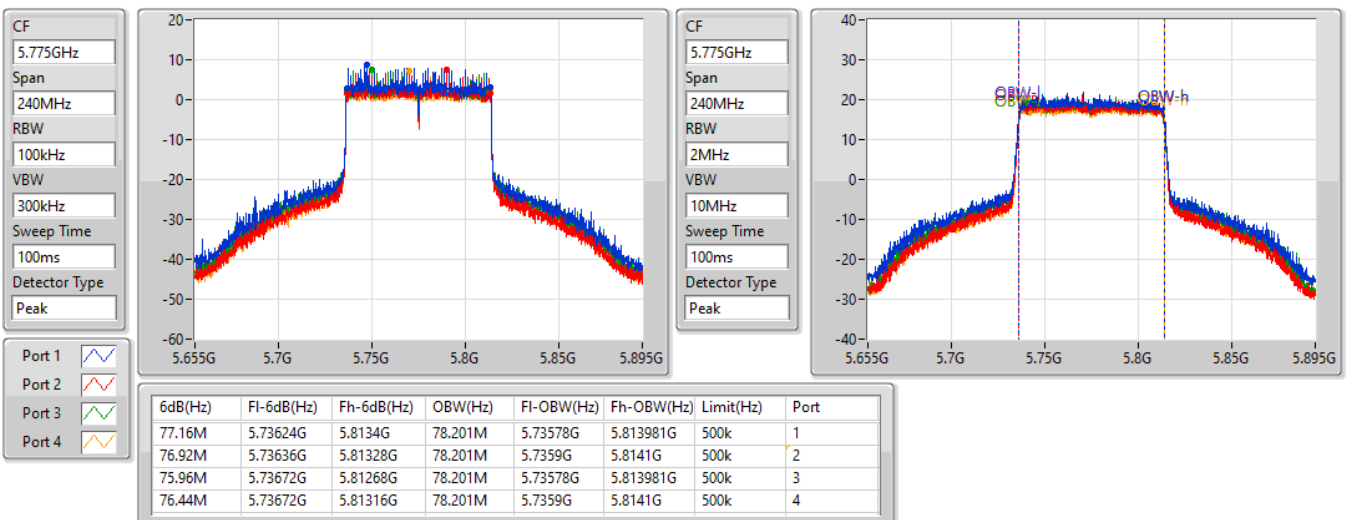


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

20/01/2022


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5775MHz

20/01/2022

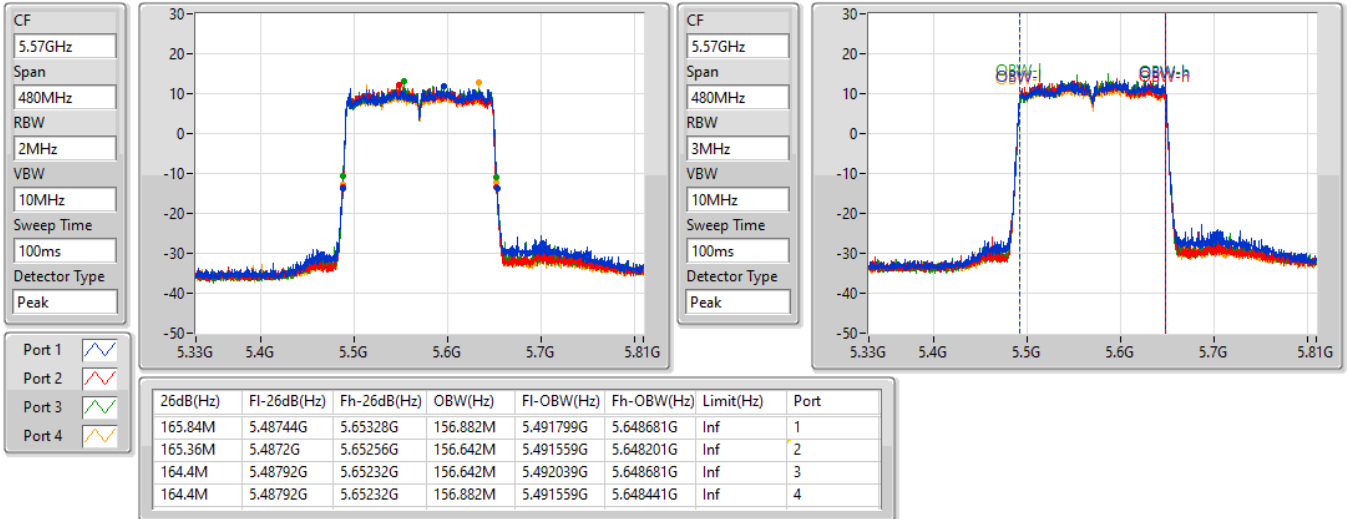


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5570MHz

20/01/2022





For UNII 2C~UNII 3:

Test Mode: beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.85GHz	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	40.92M	40M9D1D	5.72M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	48.18M	48M2D1D	5.74M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	92.04M	92M0D1D	7M

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

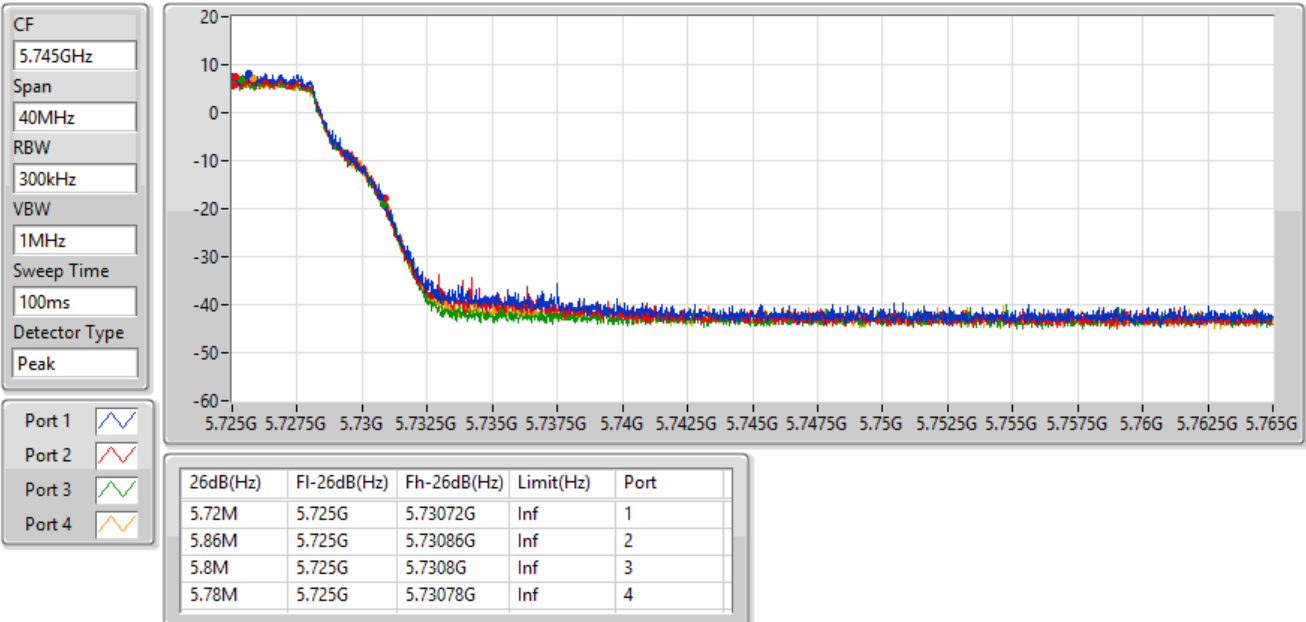
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	Inf	5.72M	5.86M	5.8M	5.78M
5745MHz	Pass	Inf	24.9M	24.27M	24.03M	23.46M
5785MHz	Pass	Inf	22.44M	25.05M	25.29M	29.82M
5825MHz	Pass	Inf	28.77M	40.92M	31.29M	32.34M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5710MHz Straddle 5.725-5.85GHz	Pass	Inf	5.9M	5.8M	5.74M	5.84M
5755MHz	Pass	Inf	43.92M	44.76M	48.18M	42.66M
5795MHz	Pass	Inf	41.52M	42.3M	41.46M	41.4M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5690MHz Straddle 5.725-5.85GHz	Pass	Inf	7.06M	7.32M	7M	7.34M
5775MHz	Pass	Inf	92.04M	84.84M	90.84M	87.12M

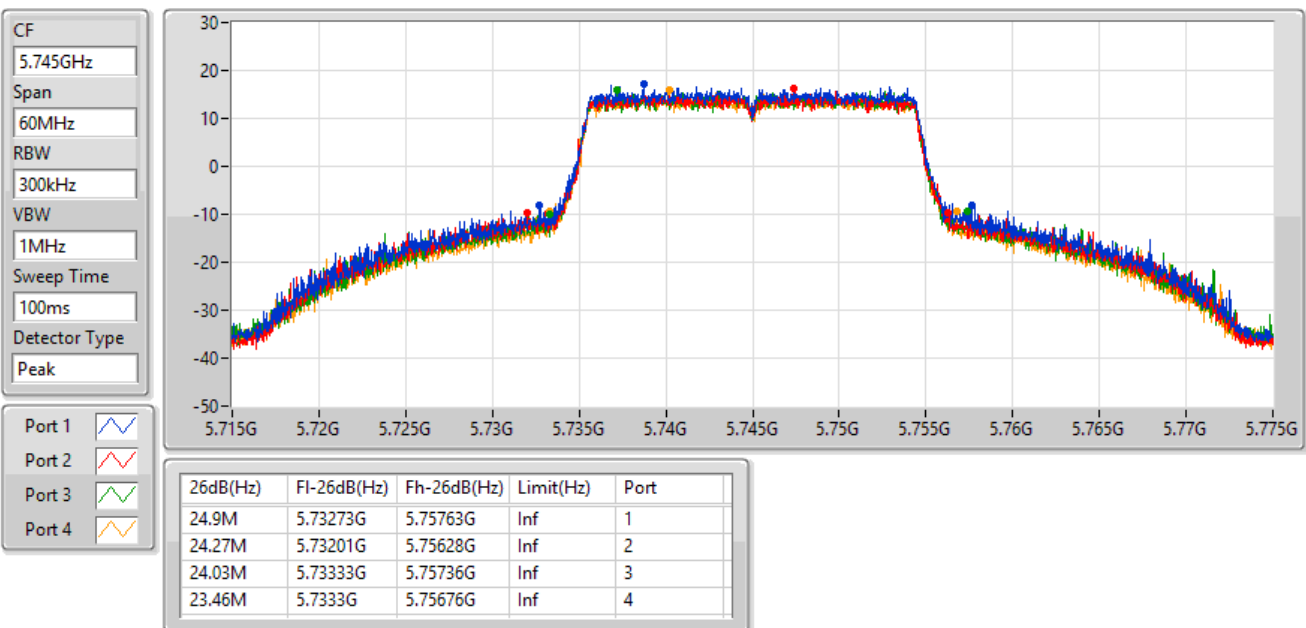
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

17/02/2022


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz

17/02/2022

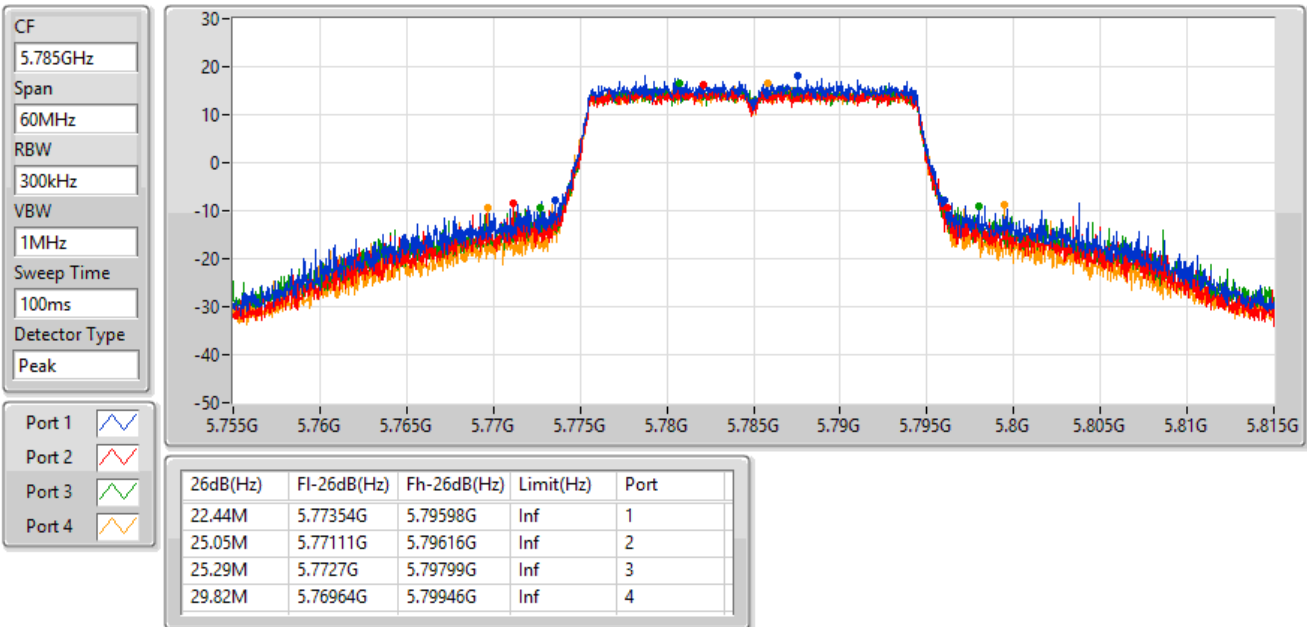


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

5785MHz

17/02/2022

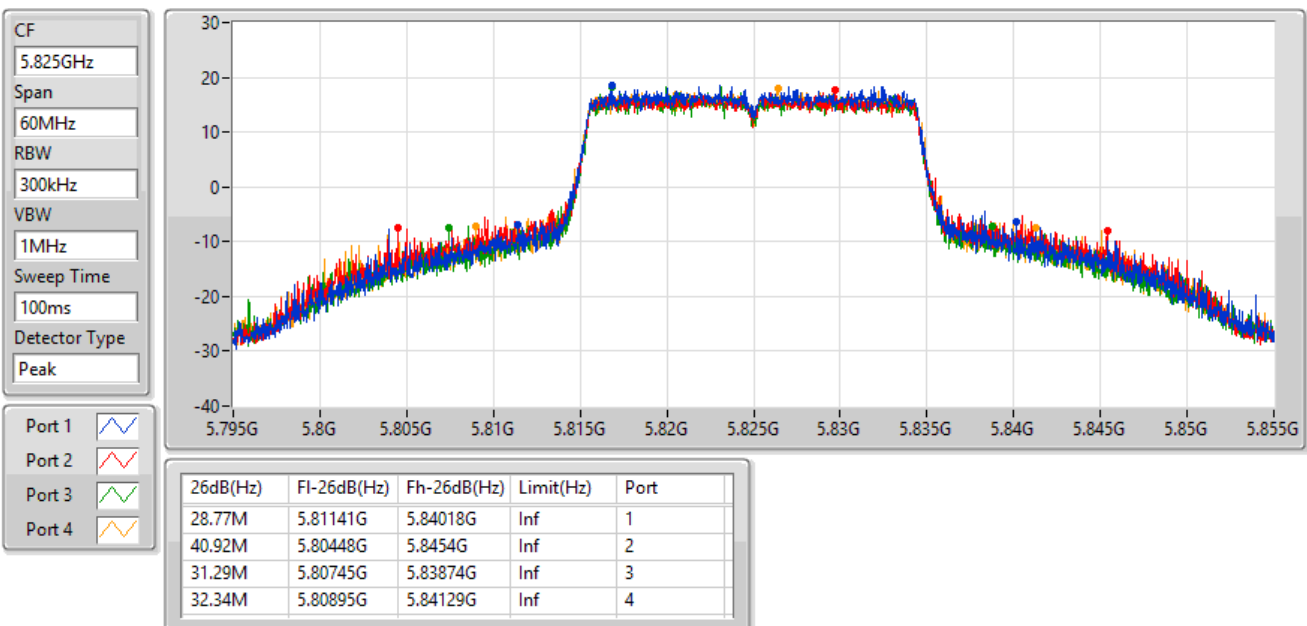


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

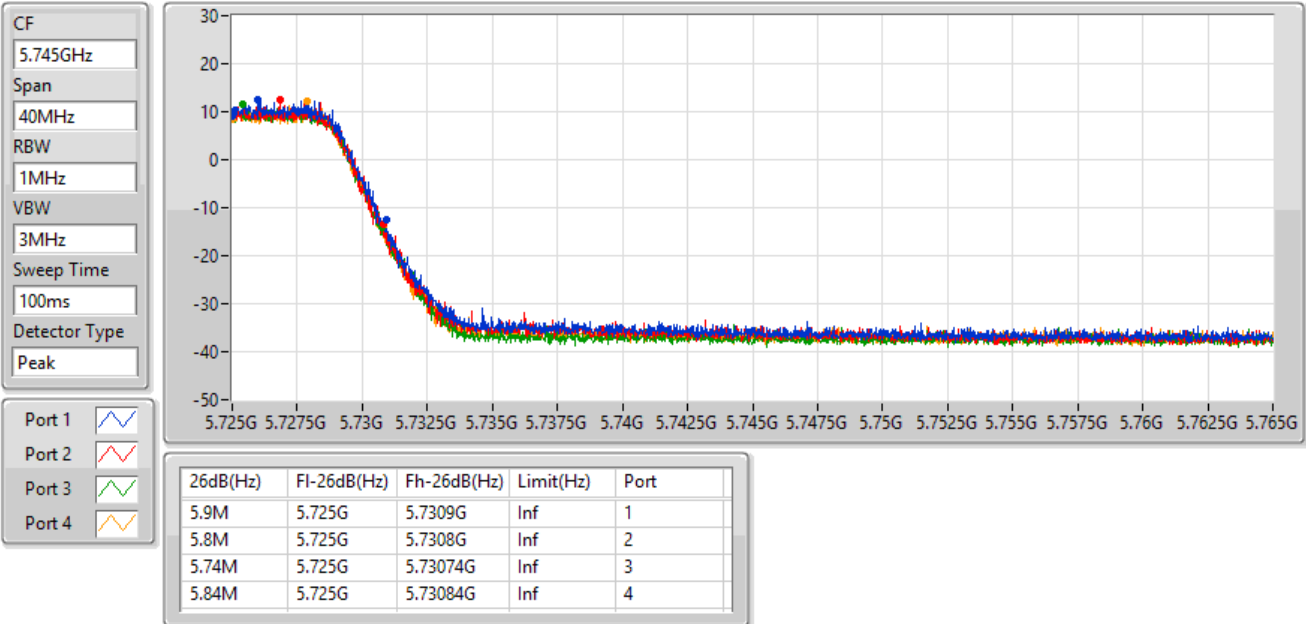
5825MHz

17/02/2022

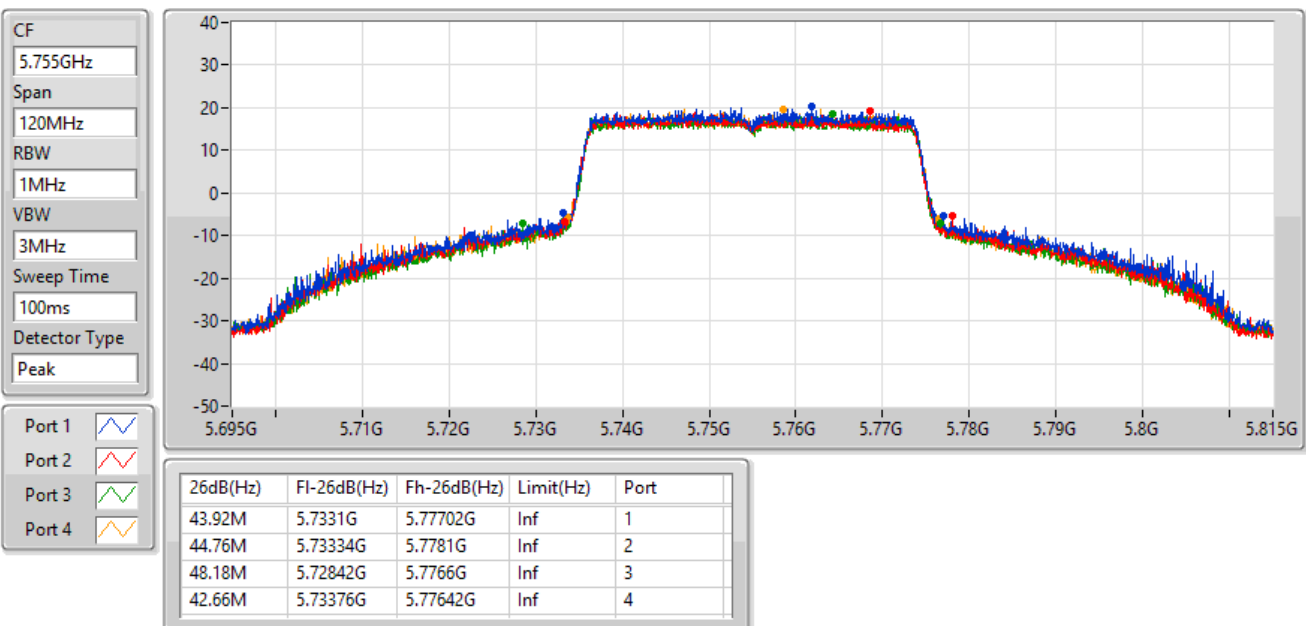


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

17/02/2022


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz

17/02/2022

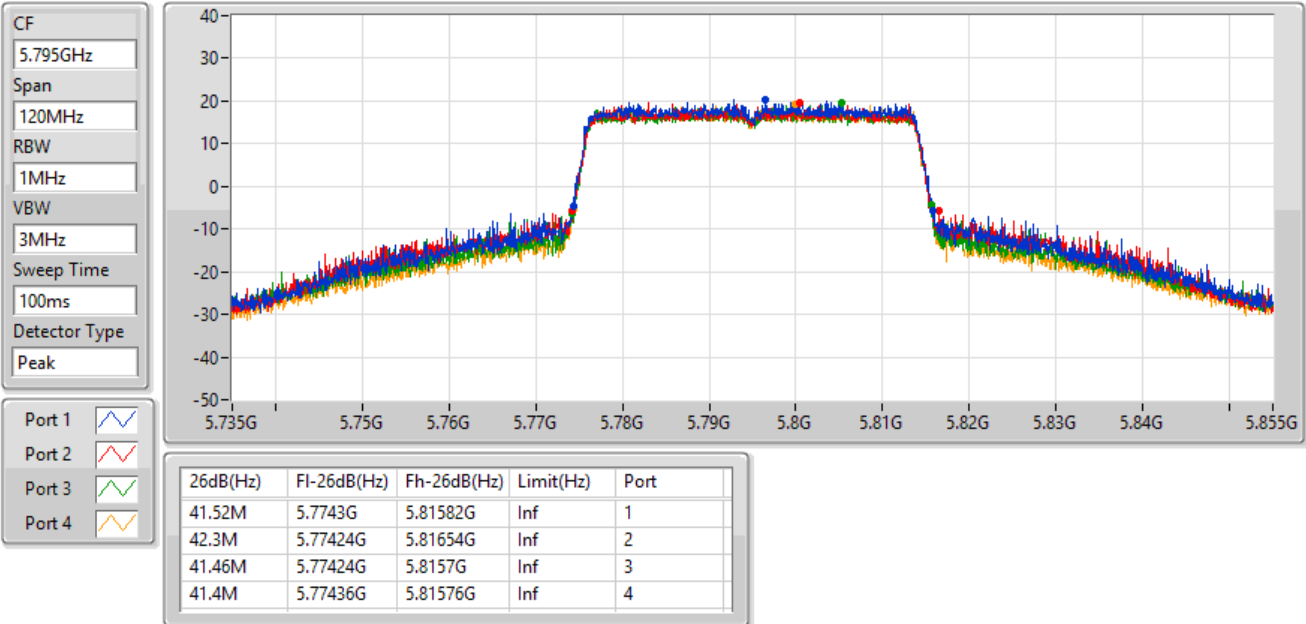


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

5795MHz

17/02/2022

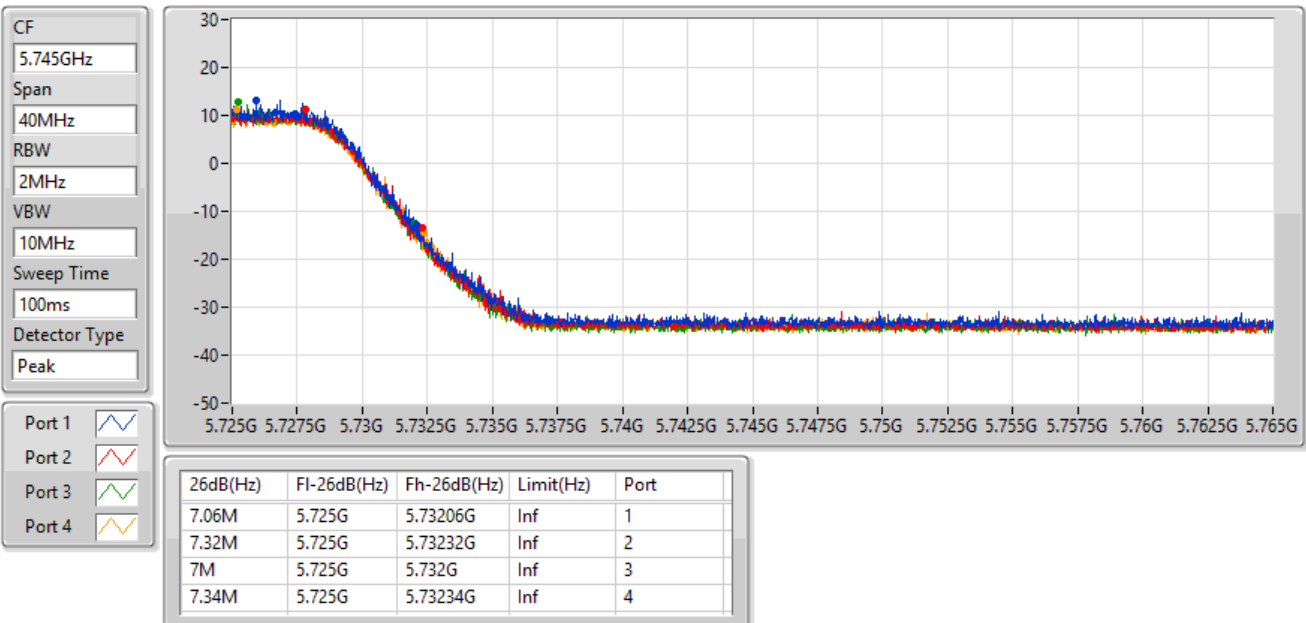


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.725-5.85GHz

17/02/2022

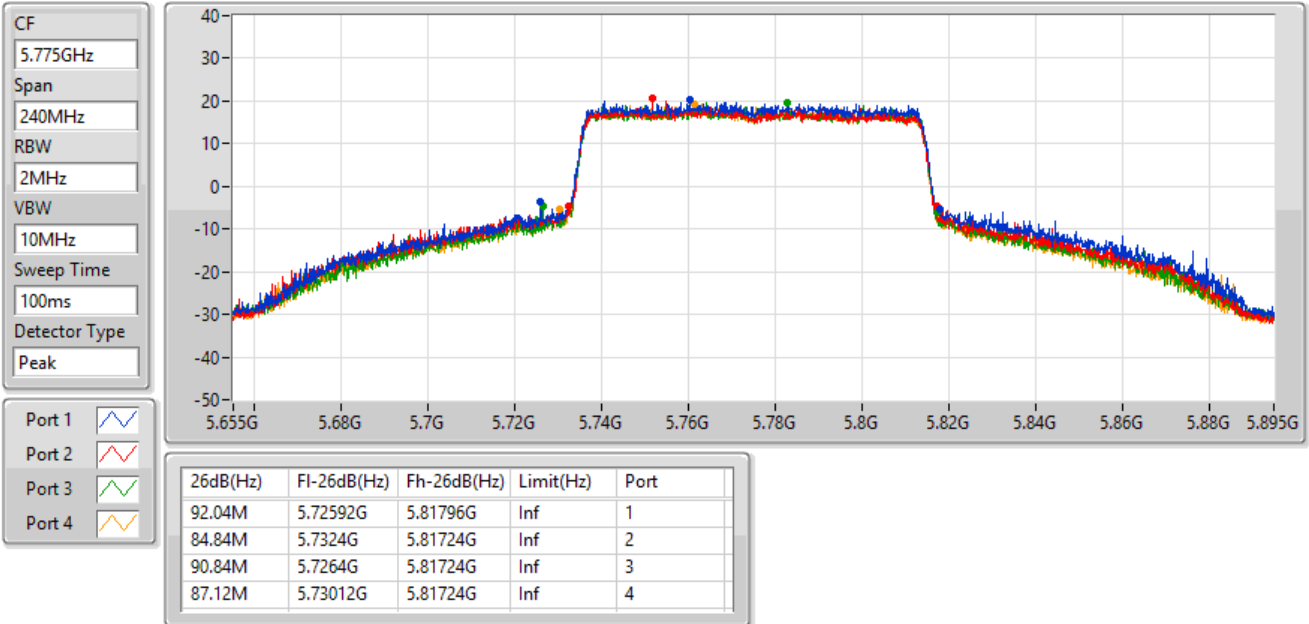


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

5775MHz

17/02/2022



For UNII 2C~UNII 3:

Test Mode: beamforming 4T2S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	28.41M	19.25M	19M2D1D	15.705M	14.558M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	47.28M	38.201M	38M2D1D	35.175M	33.828M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	90.12M	77.961M	78M0D1D	75.975M	73.388M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	165.12M	156.882M	157MD1D	164.88M	156.642M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	18.93M	19.4M	19M4D1D	4.44M	4.678M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	37.8M	38.501M	38M5D1D	3.84M	4.118M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	3.96M	4.178M	4M18D1D	3.74M	4.158M

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

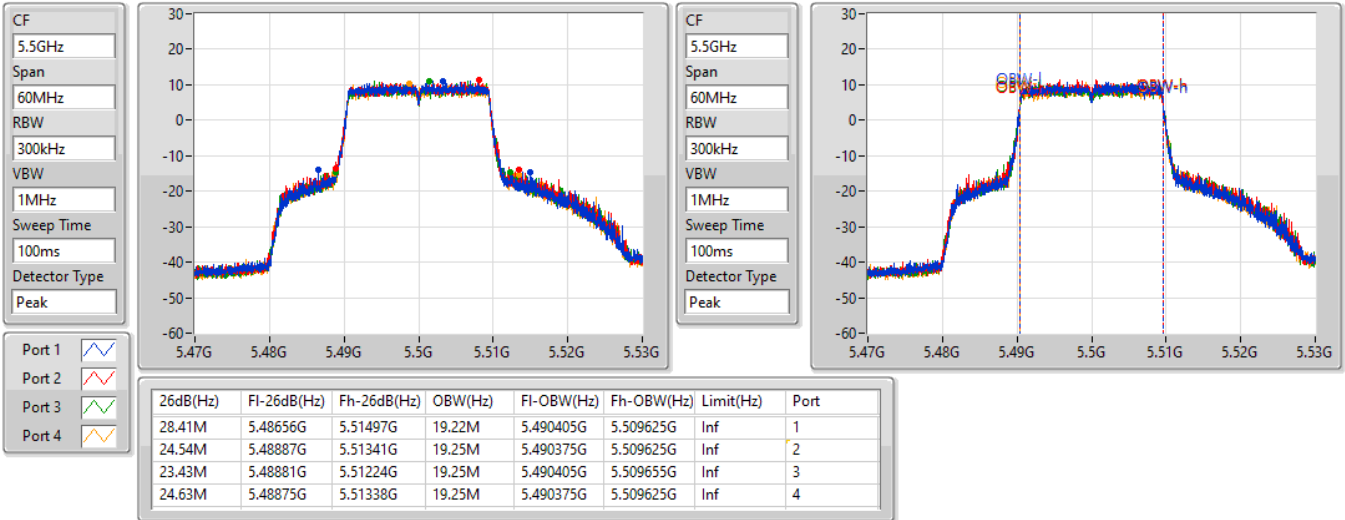
Result

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_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	28.41M	19.22M	24.54M	19.25M	23.43M	19.25M	24.63M	19.25M
5580MHz	Pass	Inf	21.75M	19.13M	21.75M	19.07M	21.69M	19.1M	21.69M	19.16M
5700MHz	Pass	Inf	21.81M	19.13M	21.6M	19.1M	21.69M	19.13M	21.69M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.705M	14.573M	15.75M	14.558M	15.855M	14.558M	15.84M	14.558M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.678M	4.44M	4.678M	4.5M	4.678M	4.46M	4.678M
5745MHz	Pass	500k	18.87M	19.31M	18.12M	19.19M	18.75M	19.25M	18.48M	19.31M
5785MHz	Pass	500k	18.72M	19.34M	18.87M	19.22M	18.75M	19.34M	18.93M	19.19M
5825MHz	Pass	500k	18.81M	19.4M	18.81M	19.22M	18.93M	19.31M	18.81M	19.22M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	44.16M	38.141M	47.28M	38.201M	44.34M	38.141M	42.96M	38.201M
5550MHz	Pass	Inf	40.62M	38.021M	40.5M	38.021M	40.62M	37.901M	40.5M	37.901M
5670MHz	Pass	Inf	40.68M	37.961M	40.62M	37.901M	40.68M	38.021M	40.5M	37.961M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.28M	33.863M	35.245M	33.863M	35.385M	33.898M	35.175M	33.828M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.118M	3.88M	4.138M	3.96M	4.118M	3.84M	4.138M
5755MHz	Pass	500k	37.68M	38.321M	37.62M	38.141M	37.44M	38.261M	37.38M	38.321M
5795MHz	Pass	500k	37.8M	38.501M	37.68M	38.261M	37.74M	38.321M	37.08M	38.141M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	90.12M	77.961M	88.2M	77.961M	85.32M	77.841M	82.8M	77.841M
5610MHz	Pass	Inf	81.72M	77.721M	82.2M	77.481M	82.32M	77.721M	81.84M	77.601M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.275M	73.463M	76.425M	73.388M	76.125M	73.538M	75.975M	73.538M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.158M	3.94M	4.158M	3.94M	4.158M	3.74M	4.178M
5775MHz										
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	164.88M	156.882M	165.12M	156.642M	164.88M	156.642M	165.12M	156.642M

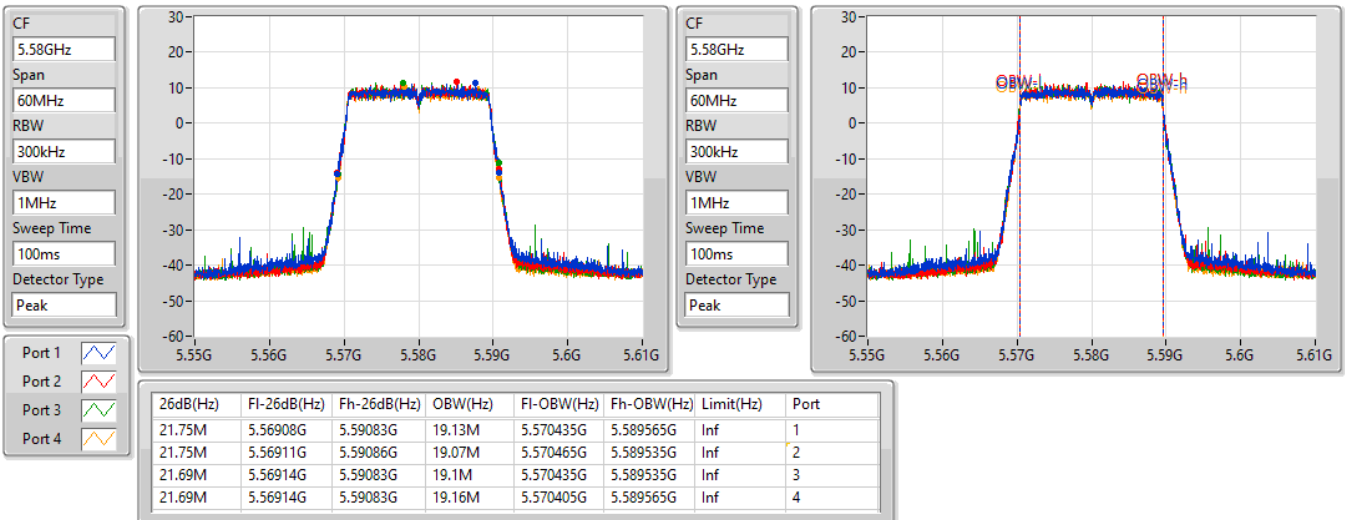
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5500MHz

20/01/2022

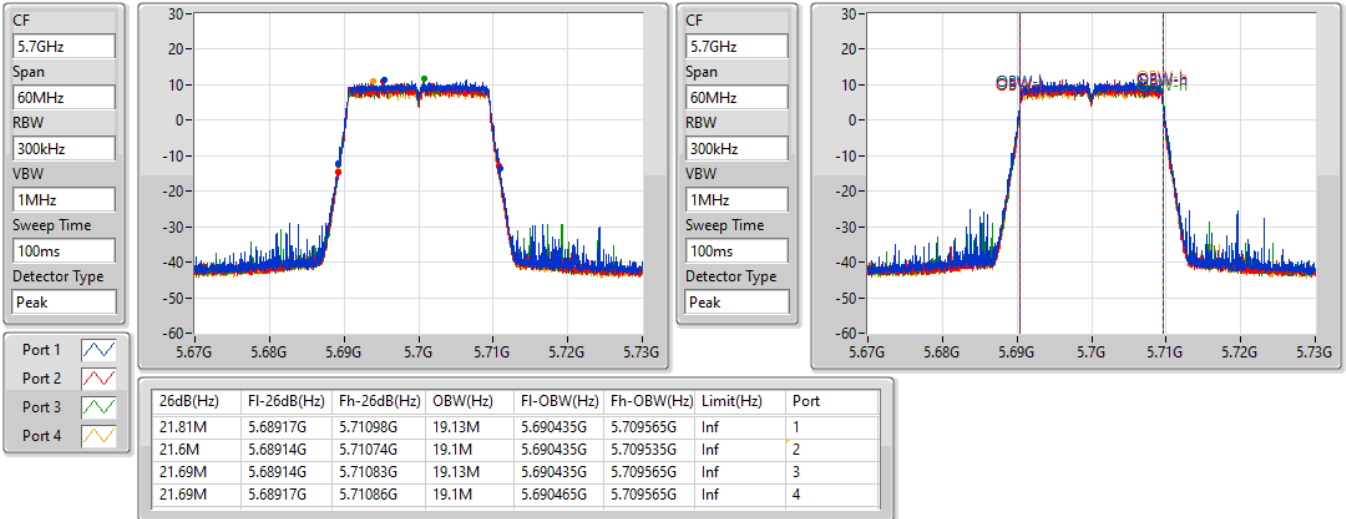

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5580MHz

20/01/2022

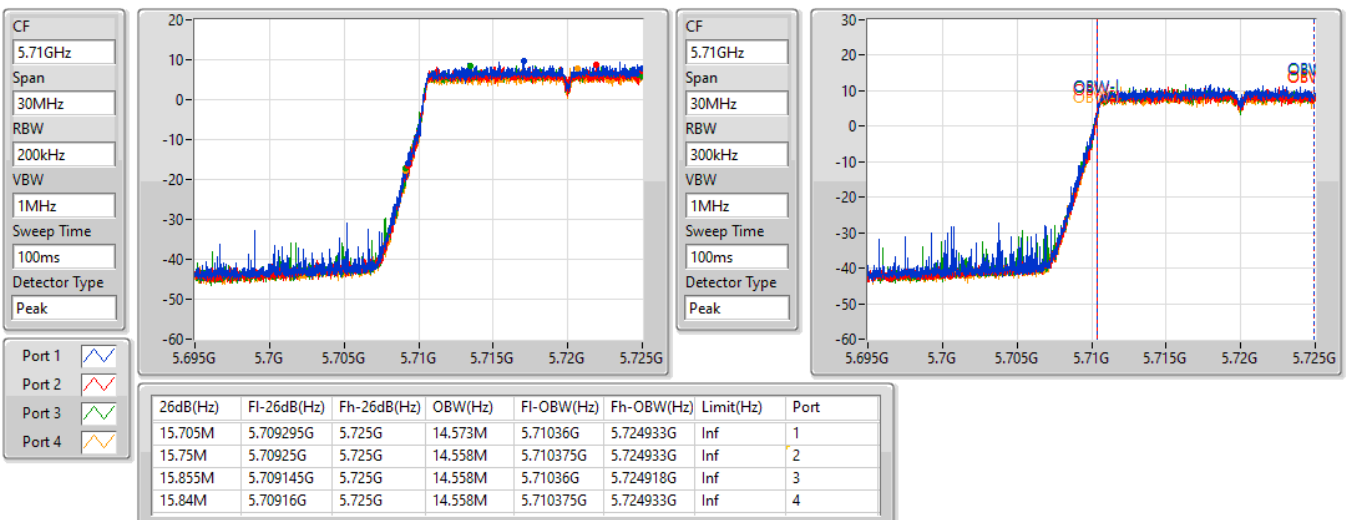


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5700MHz

20/01/2022

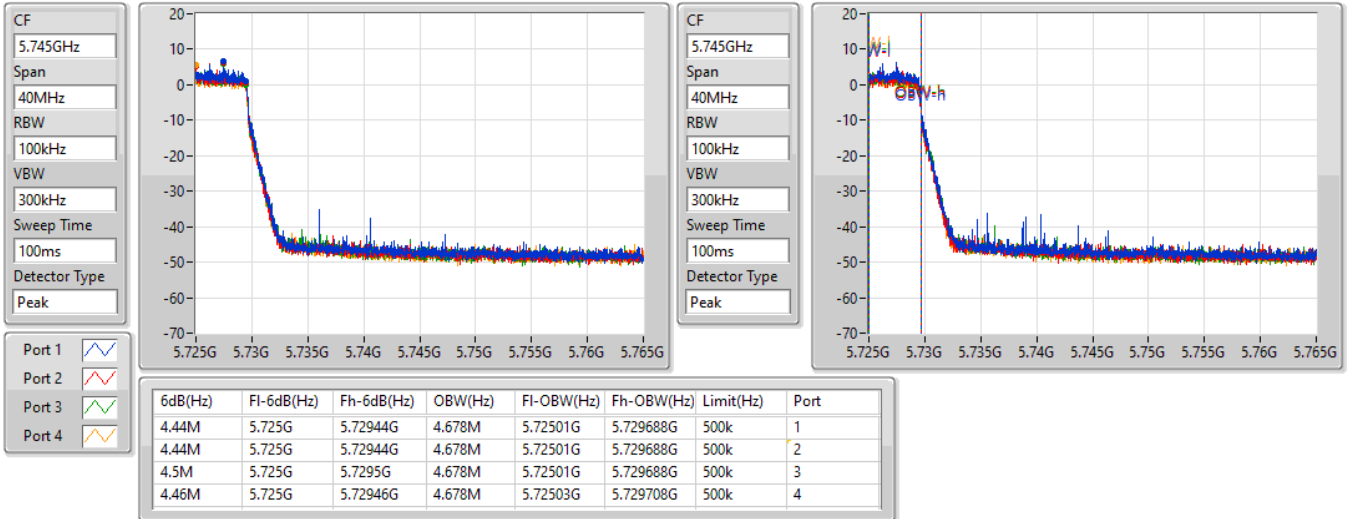

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

20/01/2022

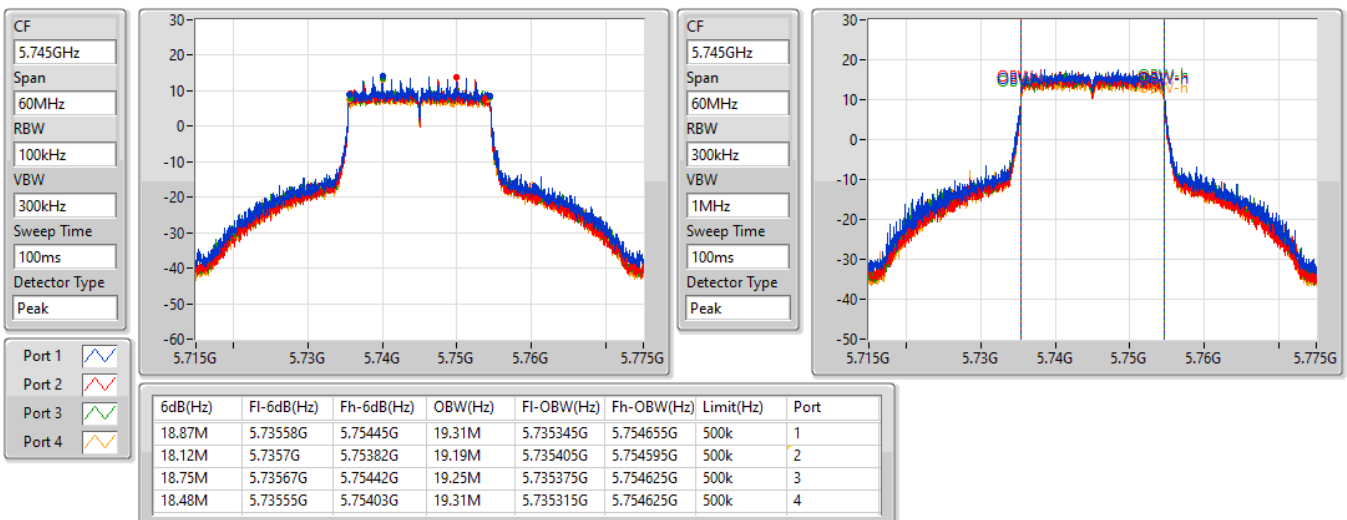


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

20/01/2022

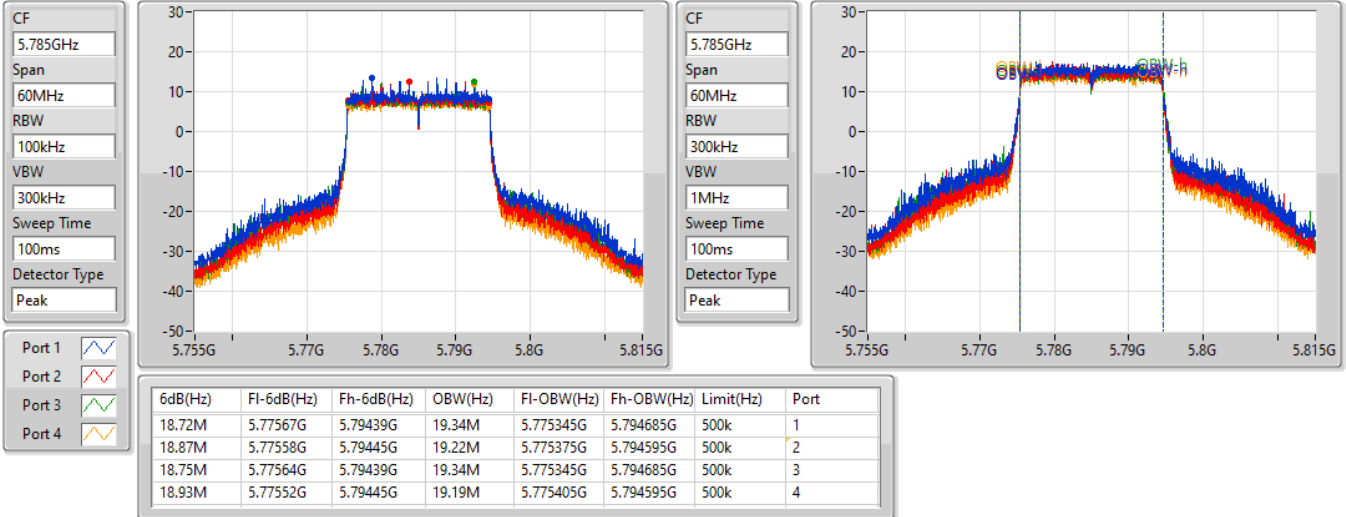

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5745MHz

20/01/2022

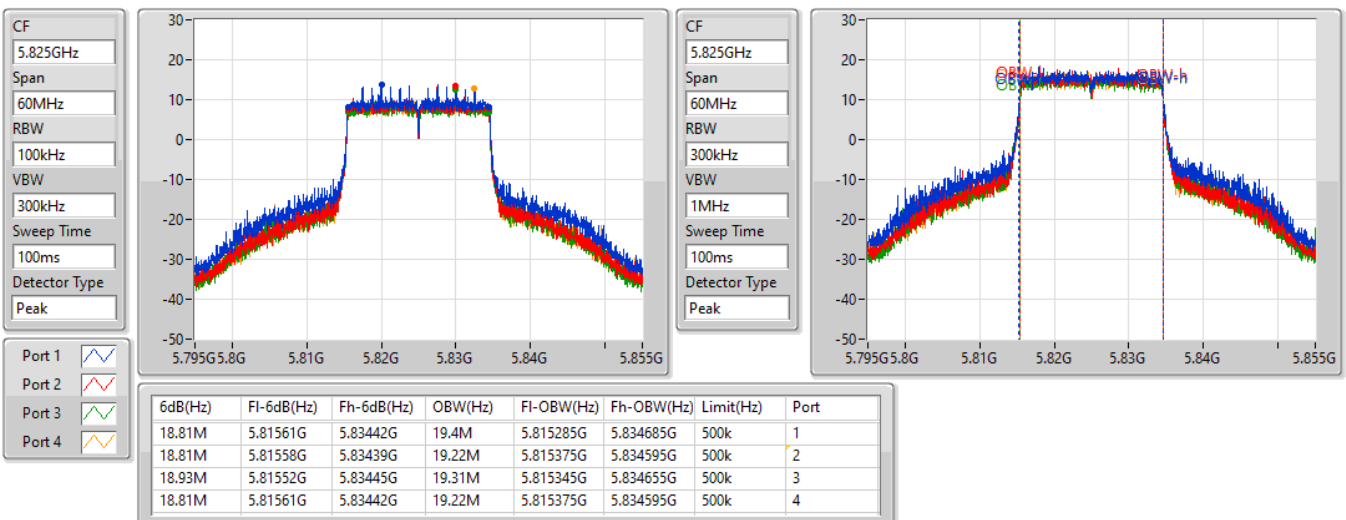


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5785MHz

20/01/2022

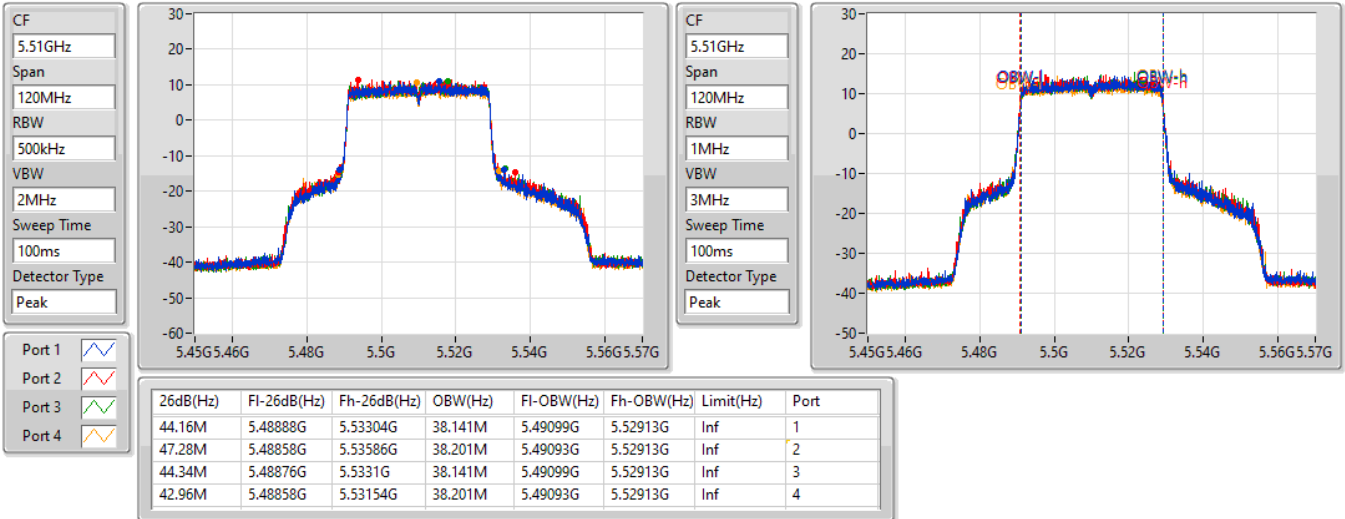

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5825MHz

20/01/2022

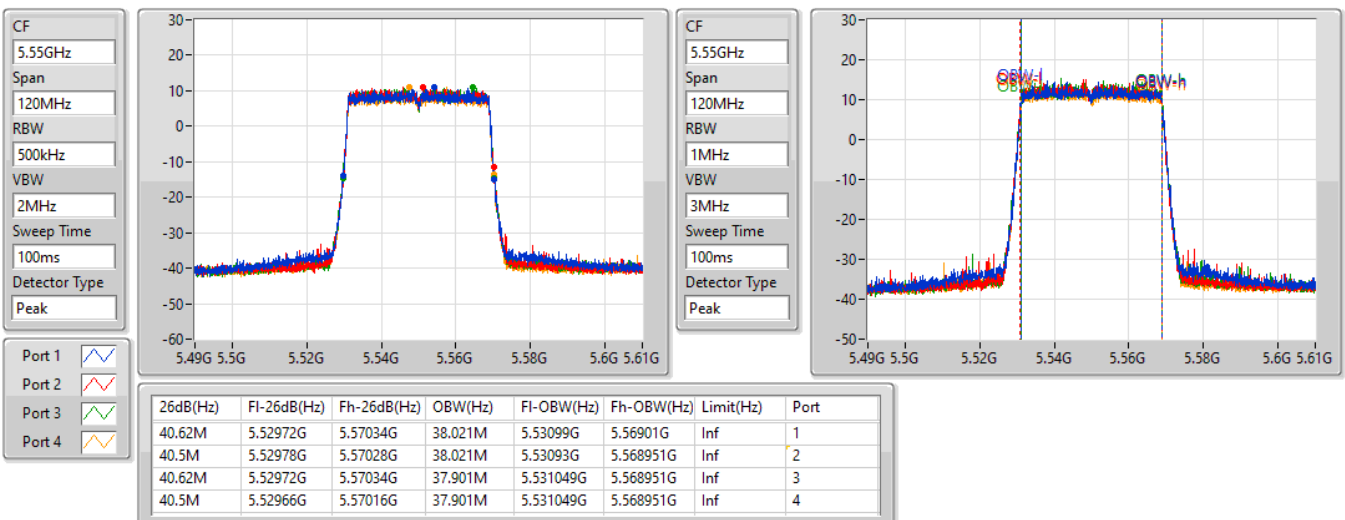


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5510MHz

20/01/2022

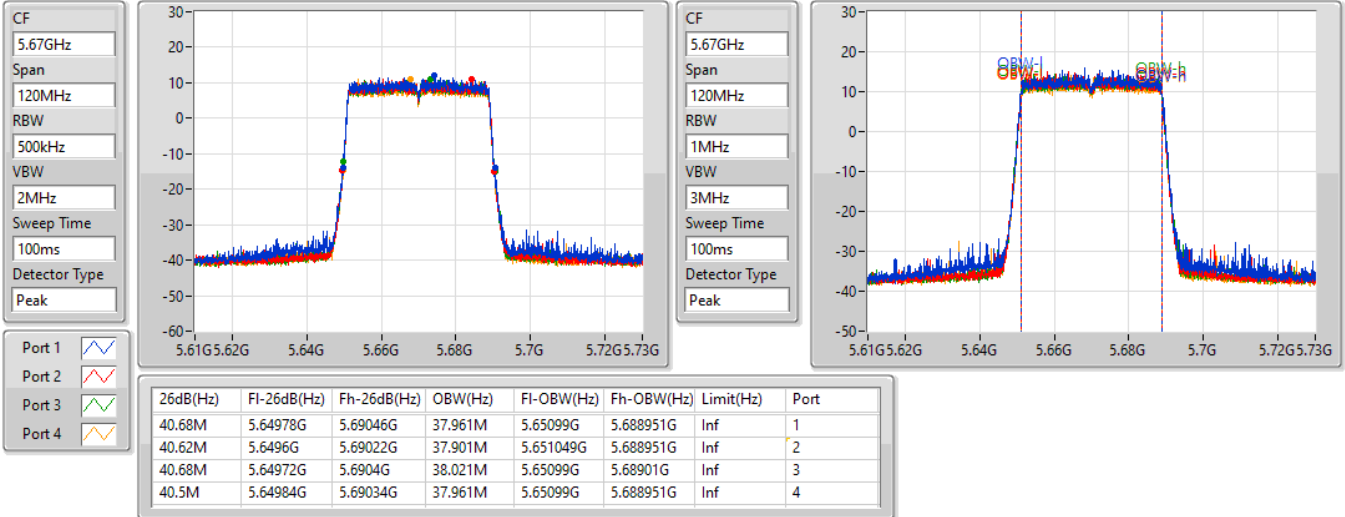

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5550MHz

20/01/2022

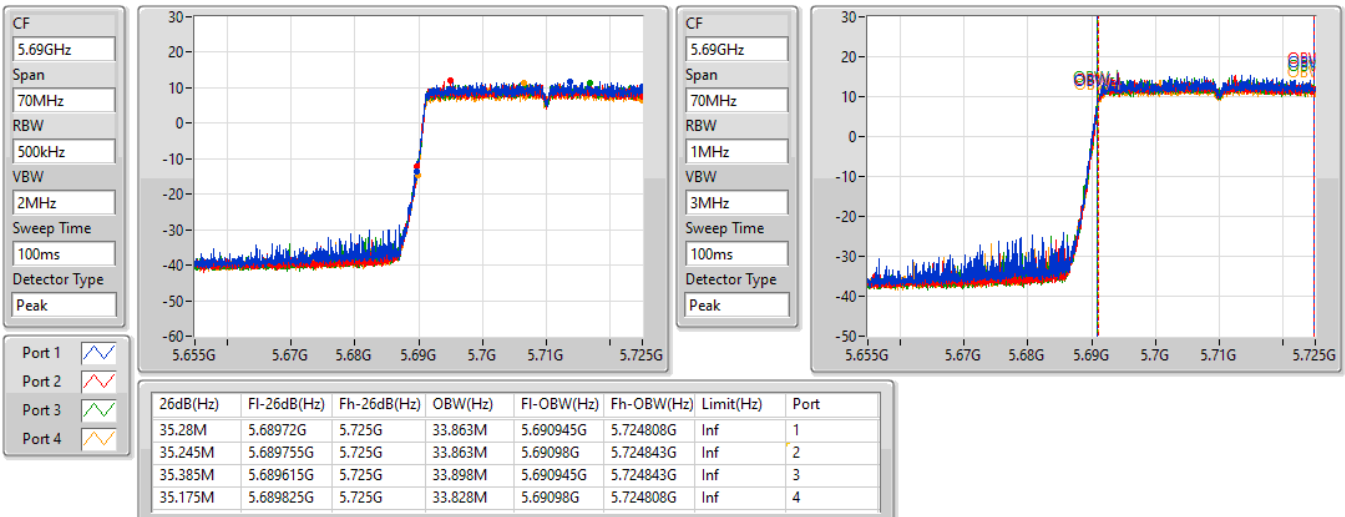


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5670MHz

20/01/2022

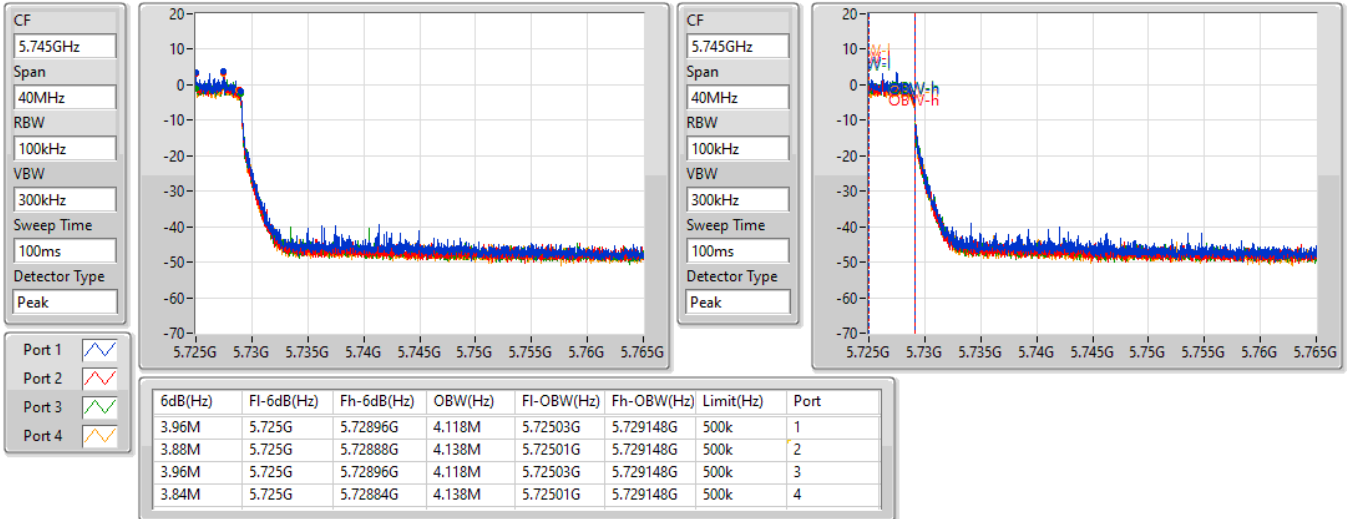

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

20/01/2022

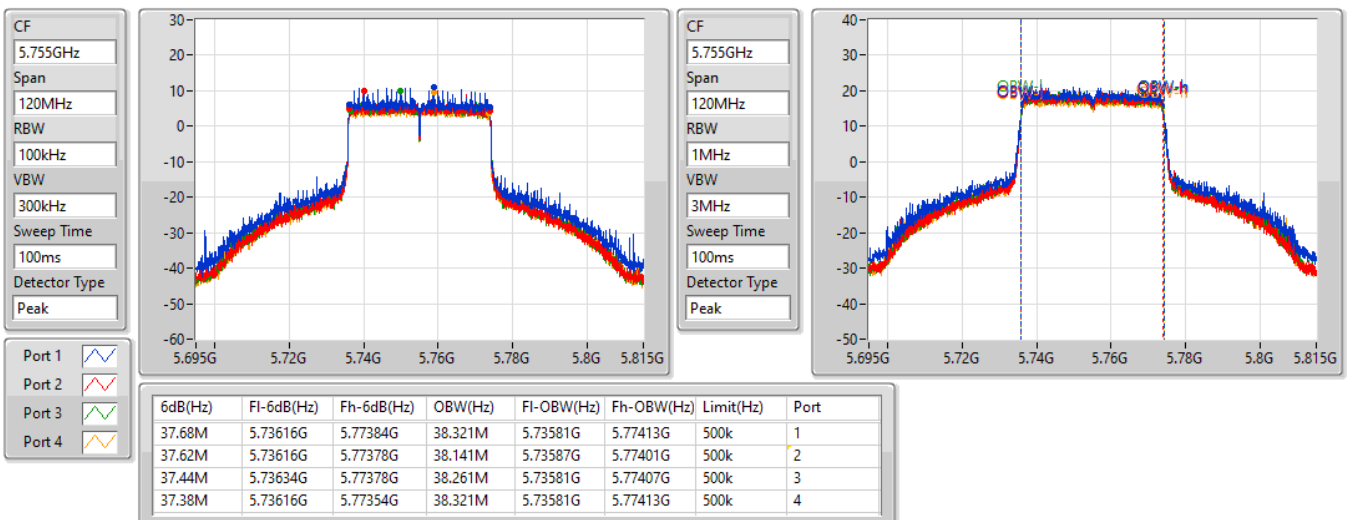


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

20/01/2022

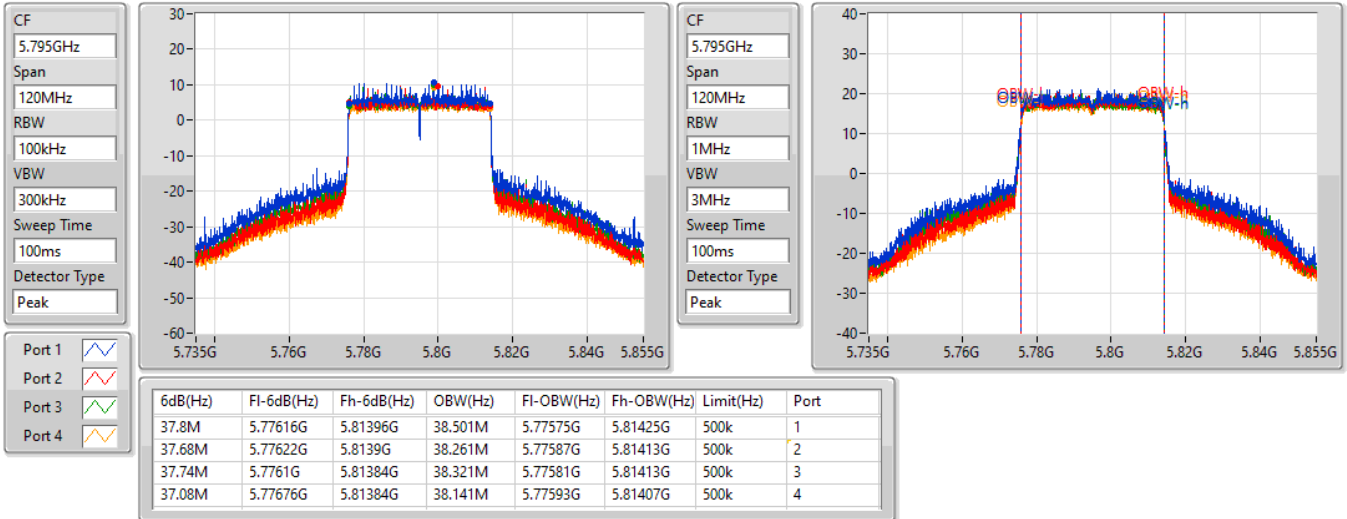

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5755MHz

20/01/2022

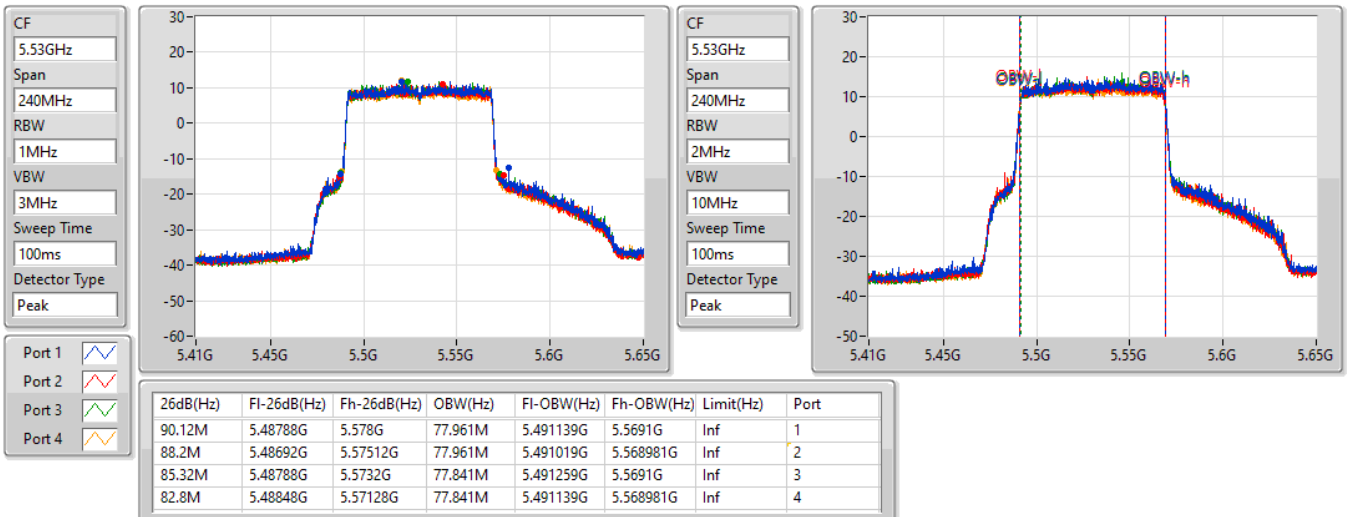


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5795MHz

20/01/2022

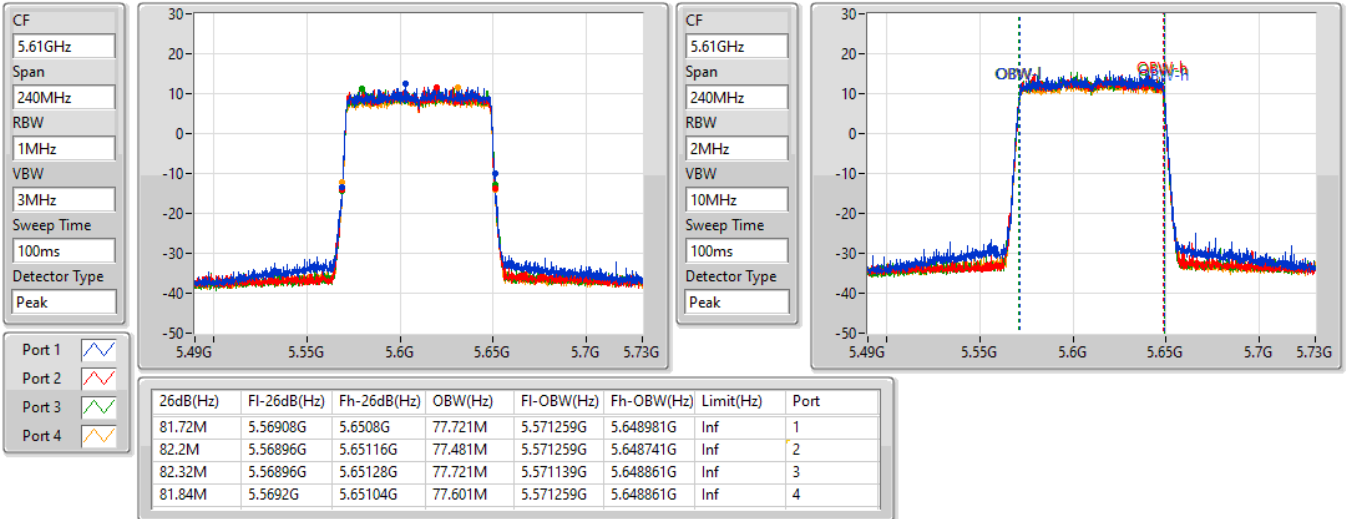

802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5530MHz

20/01/2022

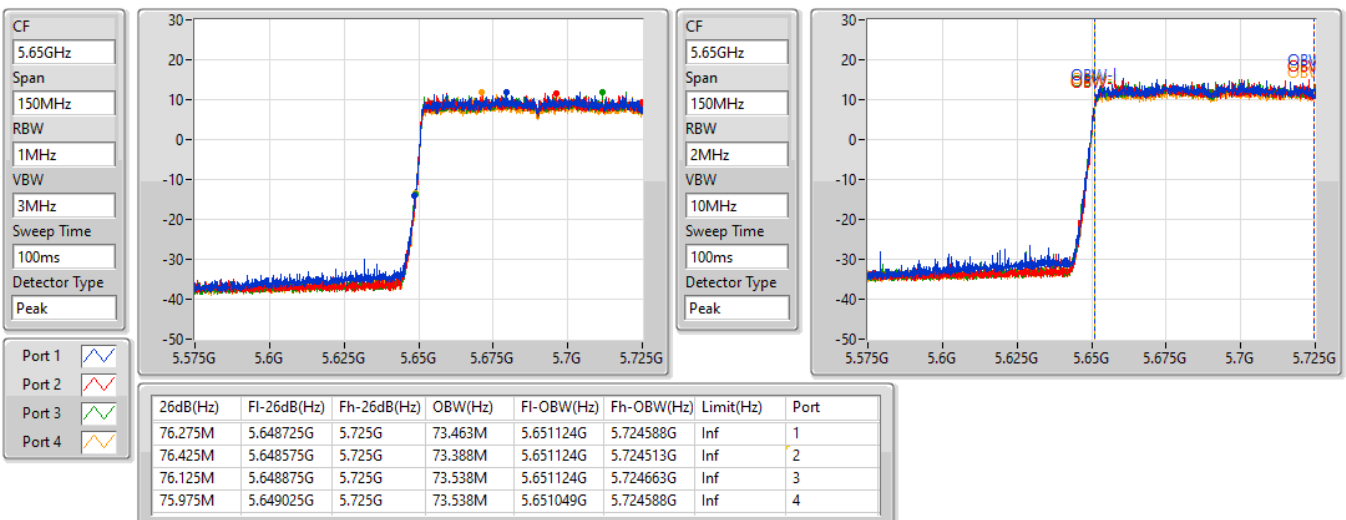


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5610MHz

20/01/2022

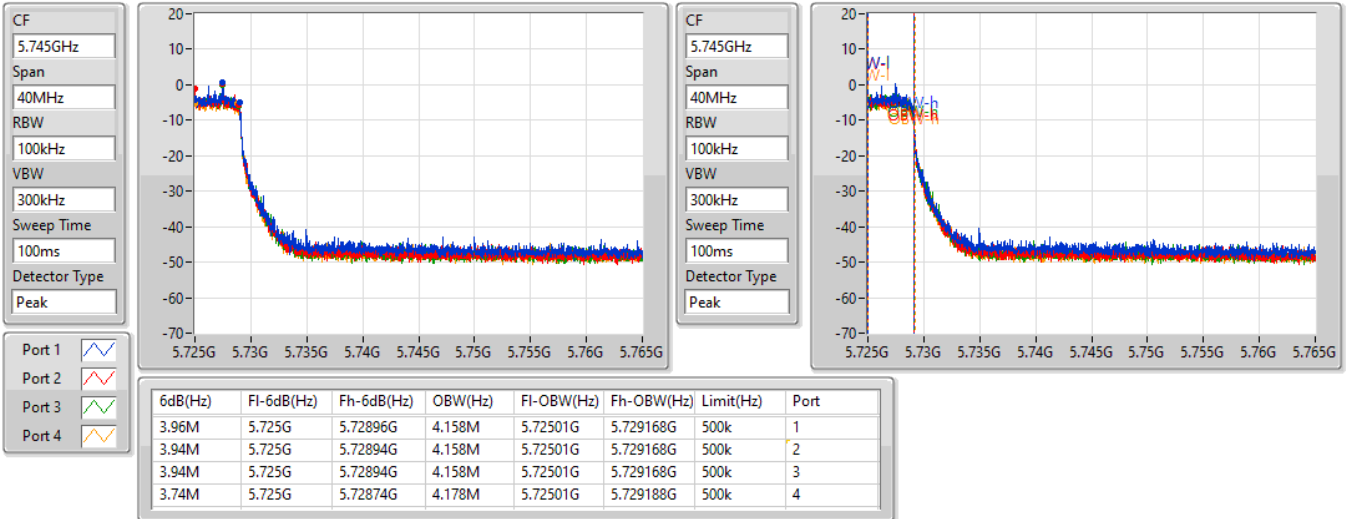

802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

20/01/2022

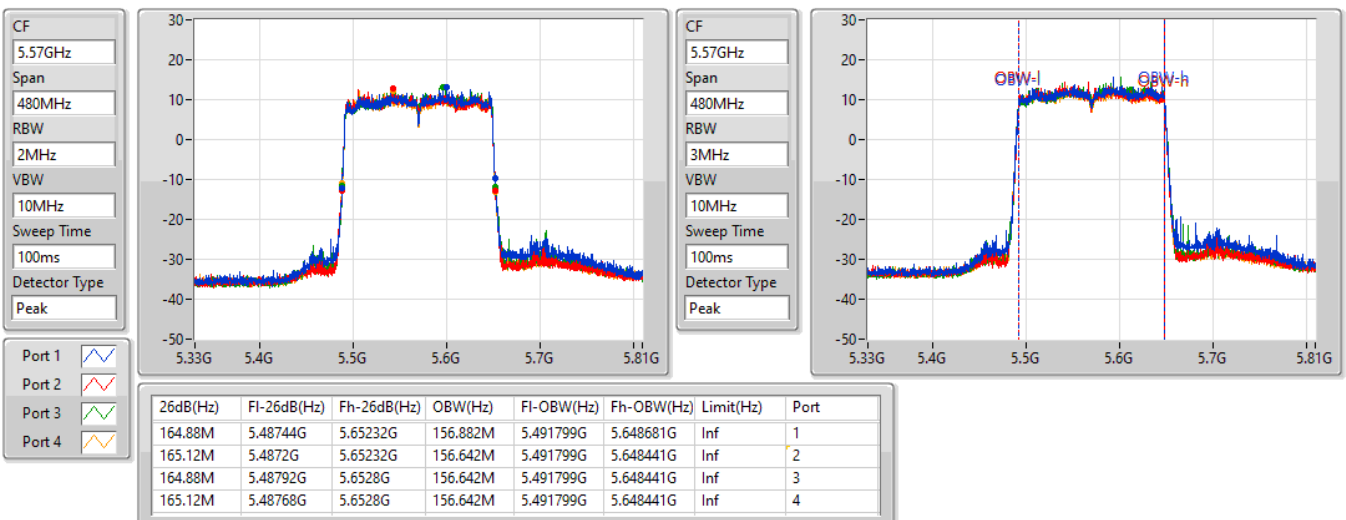


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

20/01/2022


802.11ax HEW160-BF_Nss2,(MCS0)_4TX
EBW
5570MHz

20/01/2022





For UNII 2C~UNII 3:

Test Mode: beamforming 4T2S:

Summary

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.85GHz	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	37.02M	37M0D1D	5.88M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	52.08M	52M1D1D	5.8M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	93M	93M0D1D	6.98M

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

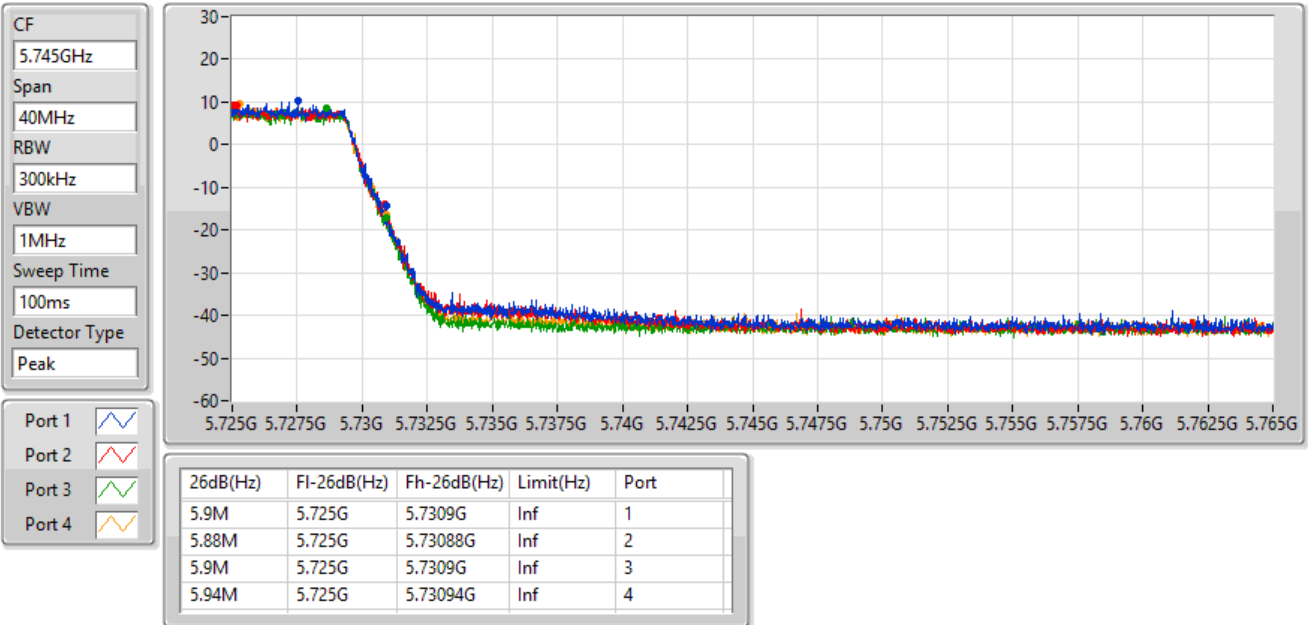
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	Inf	5.9M	5.88M	5.9M	5.94M
5745MHz	Pass	Inf	23.7M	24.57M	26.22M	24.63M
5785MHz	Pass	Inf	25.05M	23.07M	22.26M	22.11M
5825MHz	Pass	Inf	29.82M	37.02M	26.61M	31.95M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5710MHz Straddle 5.725-5.85GHz	Pass	Inf	5.8M	5.88M	5.8M	5.84M
5755MHz	Pass	Inf	47.46M	52.08M	42.78M	44.22M
5795MHz	Pass	Inf	48.3M	47.52M	42.36M	41.64M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5690MHz Straddle 5.725-5.85GHz	Pass	Inf	6.98M	7.22M	7.06M	7.5M
5775MHz	Pass	Inf	93M	88.44M	84.36M	86.28M

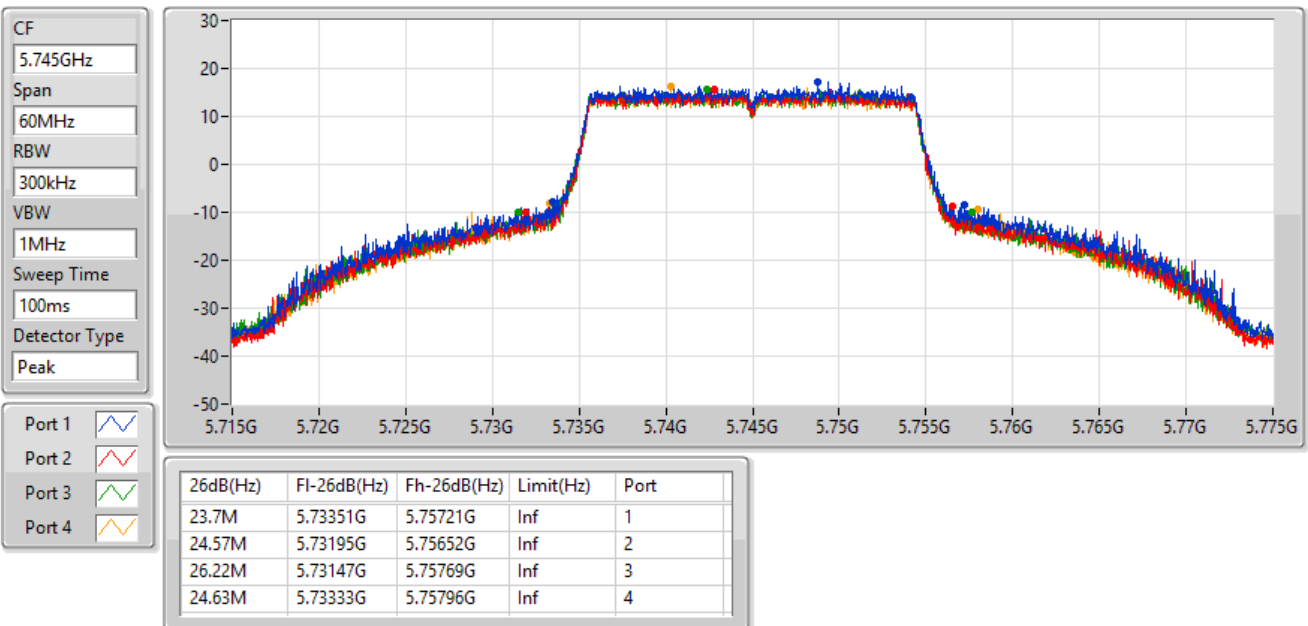
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

17/02/2022


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5745MHz

17/02/2022

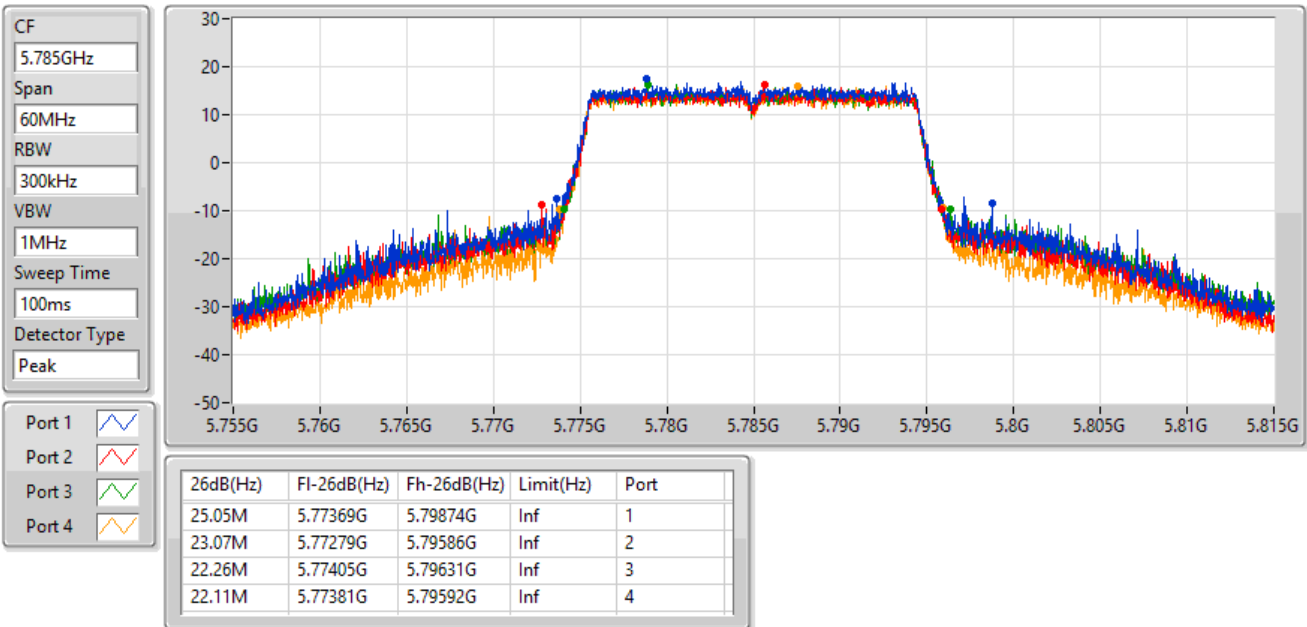


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

EBW

5785MHz

17/02/2022

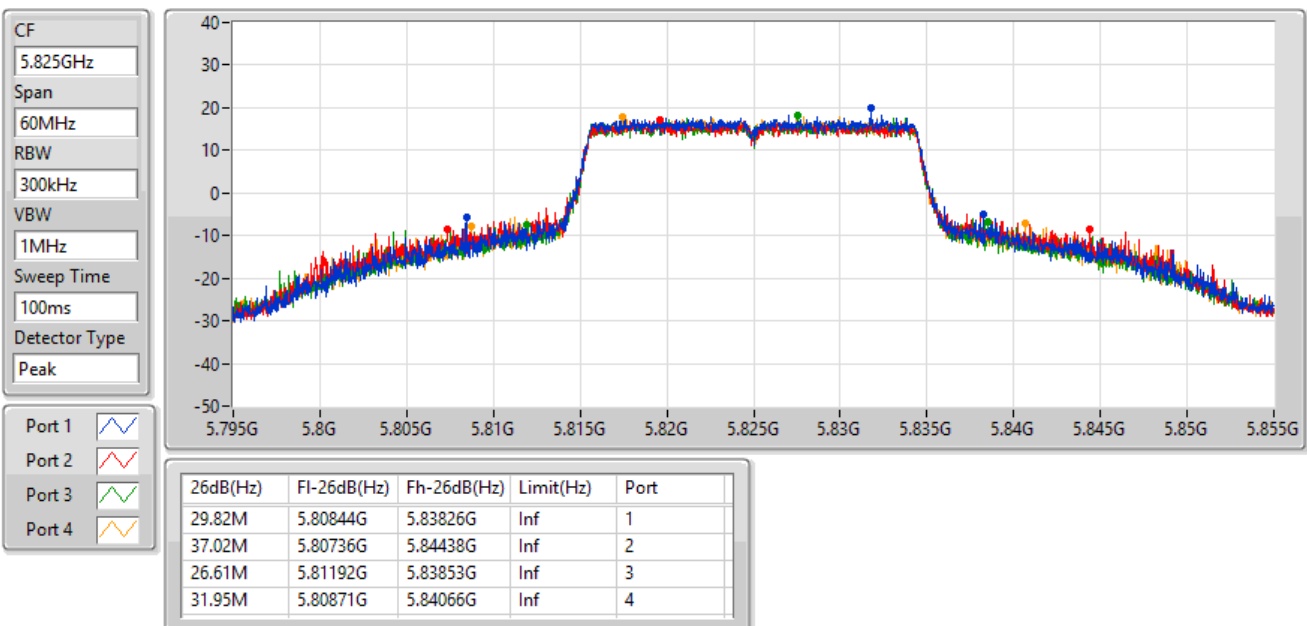


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

EBW

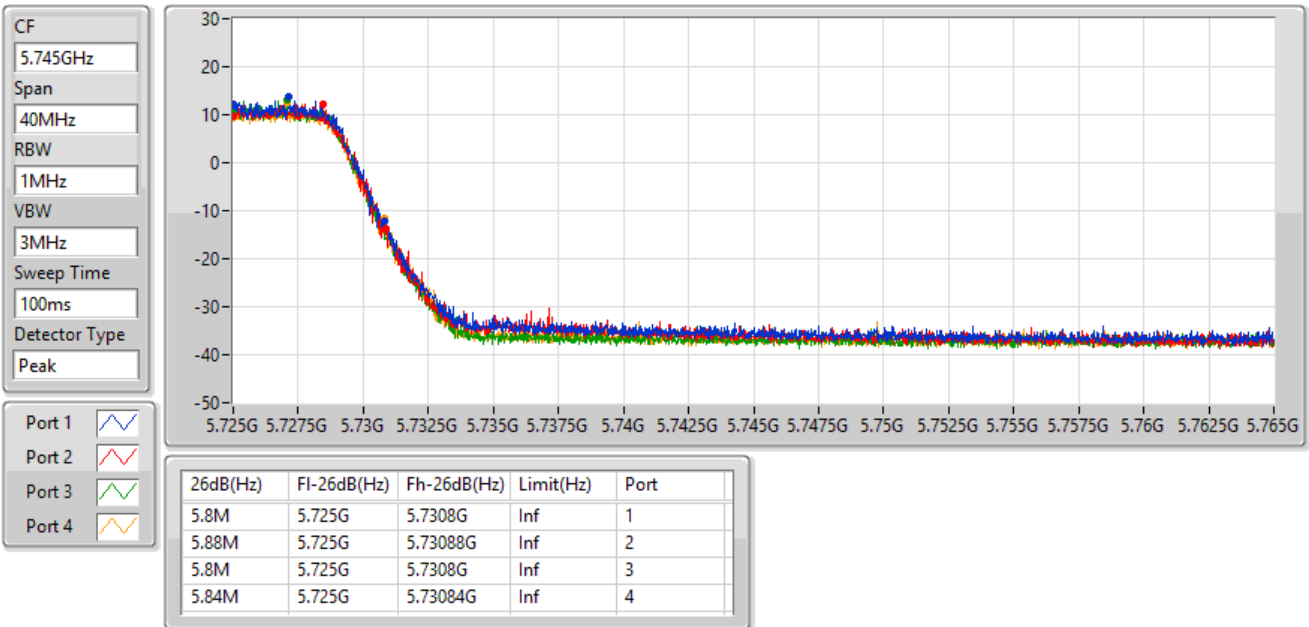
5825MHz

17/02/2022

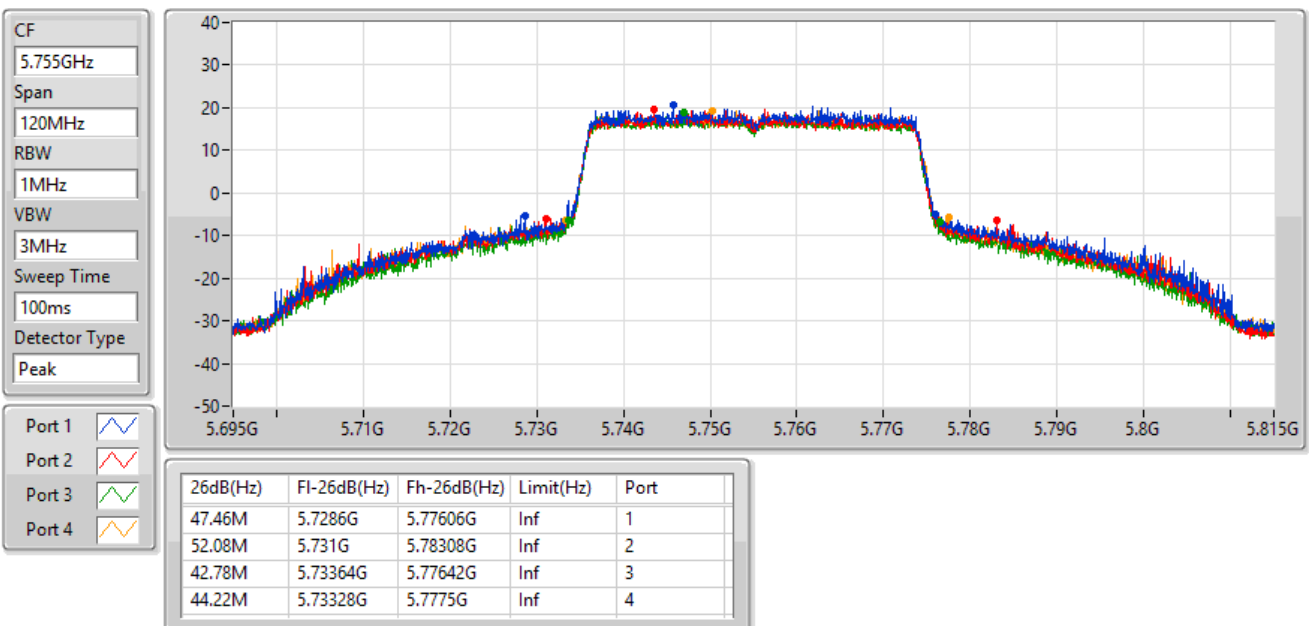


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

17/02/2022

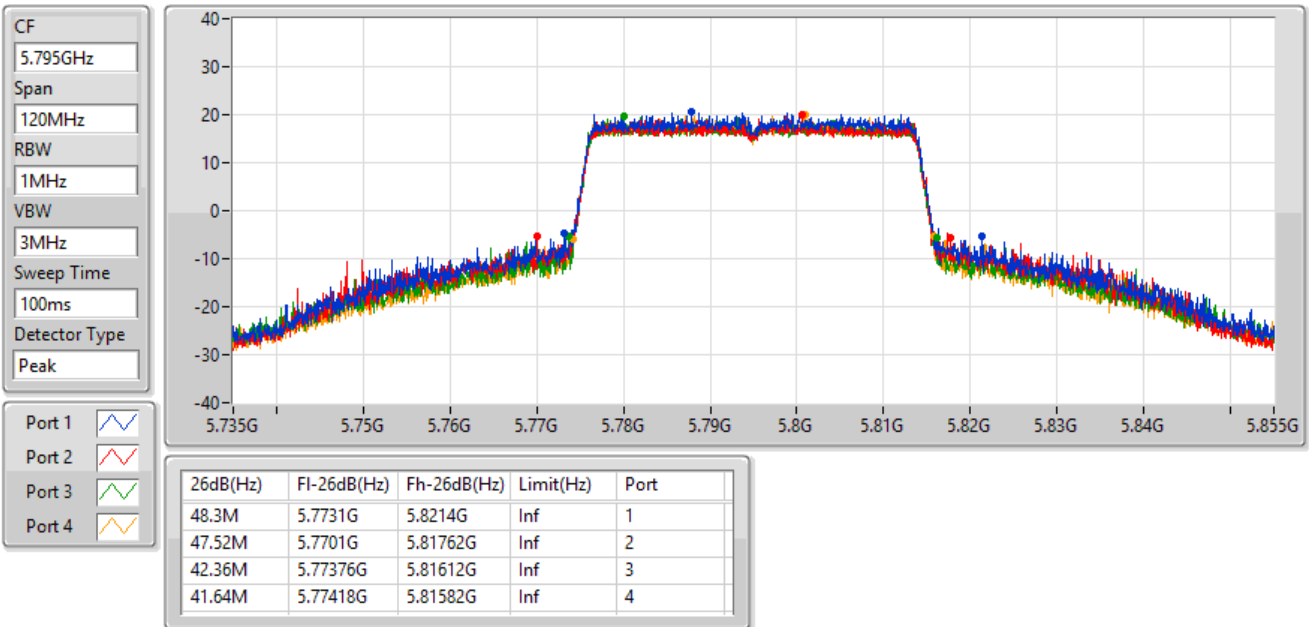

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5755MHz

17/02/2022

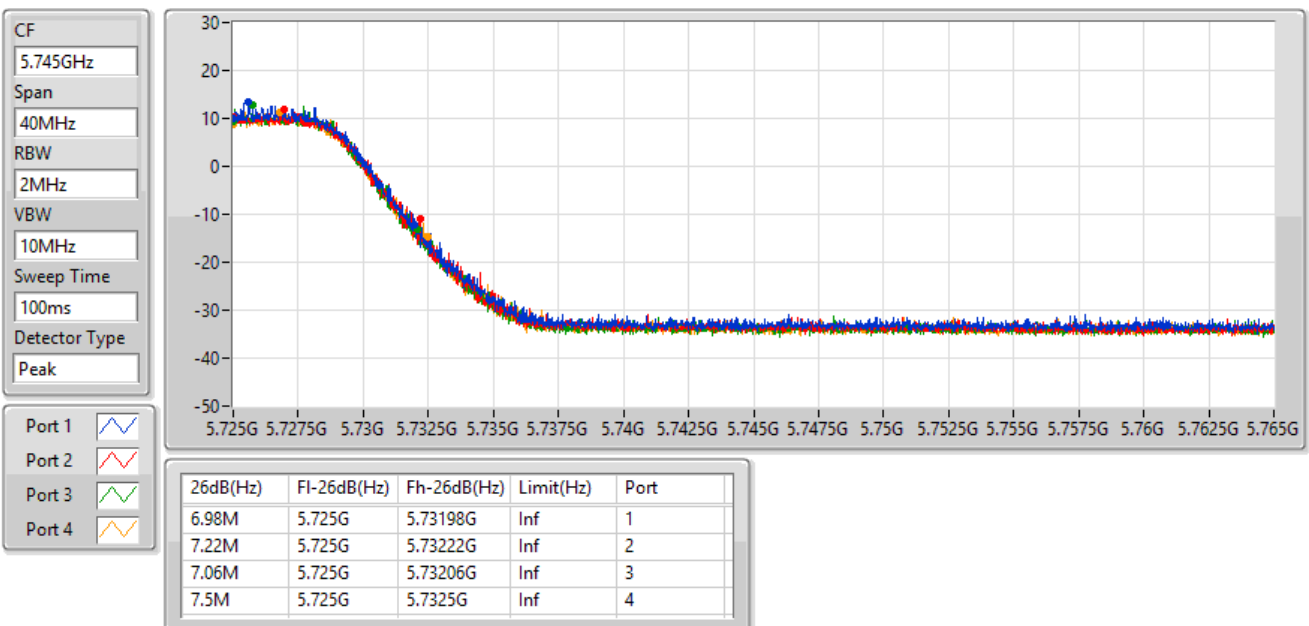


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5795MHz

17/02/2022


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

17/02/2022

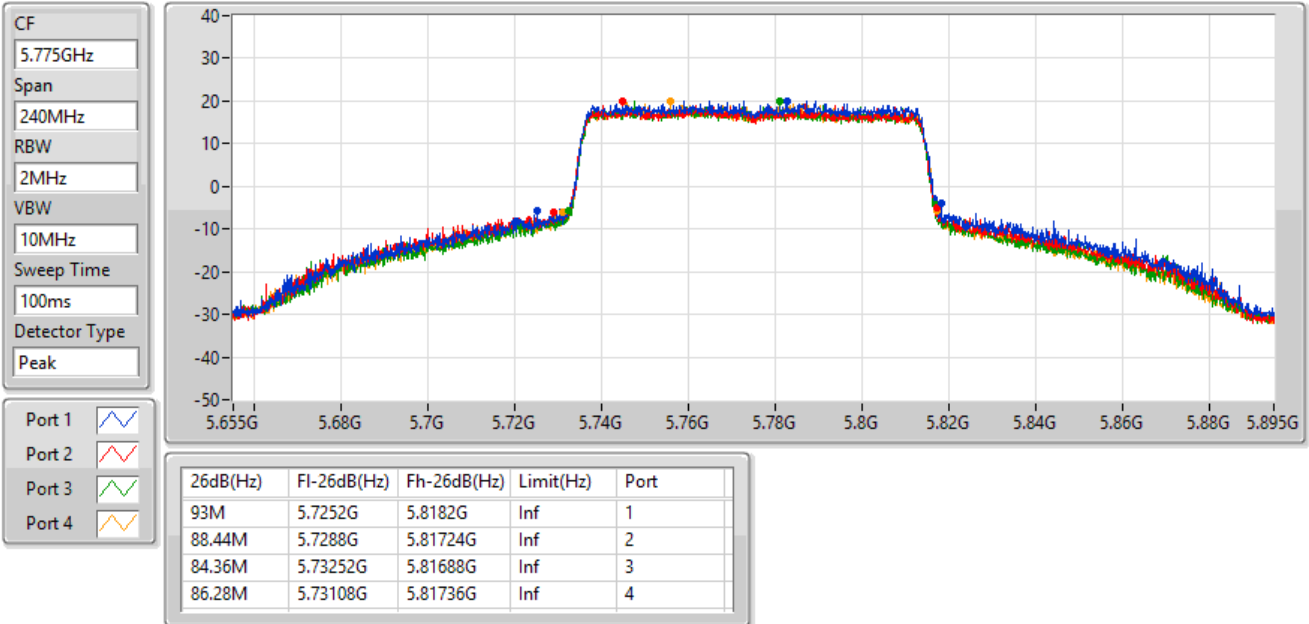


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

EBW

5775MHz

17/02/2022



For UNII 4:

Test Mode: non-beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.895GHz	-	-	-	-	-
802.11a_Nss1_(6Mbps)_4TX	16.53M	17.421M	17M4D1D	16.41M	17.211M

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

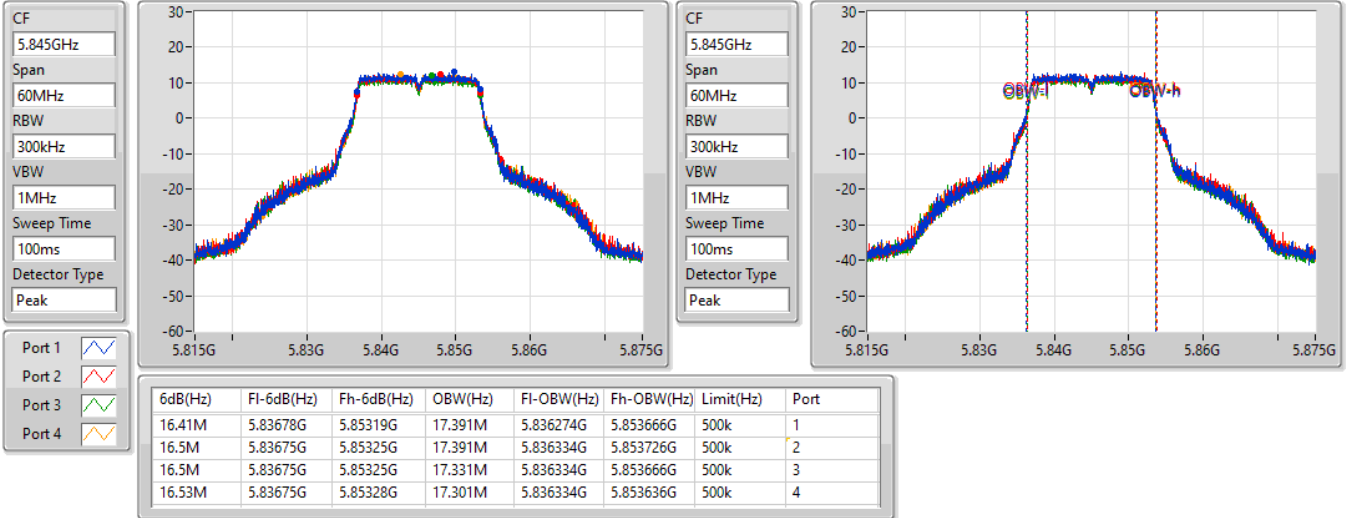
Result

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	-	-	-	-	-	-	-	-	-	-
5845MHz	Pass	500k	16.41M	17.391M	16.5M	17.391M	16.5M	17.331M	16.53M	17.301M
5865MHz	Pass	500k	16.44M	17.421M	16.53M	17.361M	16.5M	17.241M	16.5M	17.211M
5885MHz	Pass	500k	16.5M	17.391M	16.47M	17.301M	16.53M	17.331M	16.5M	17.241M

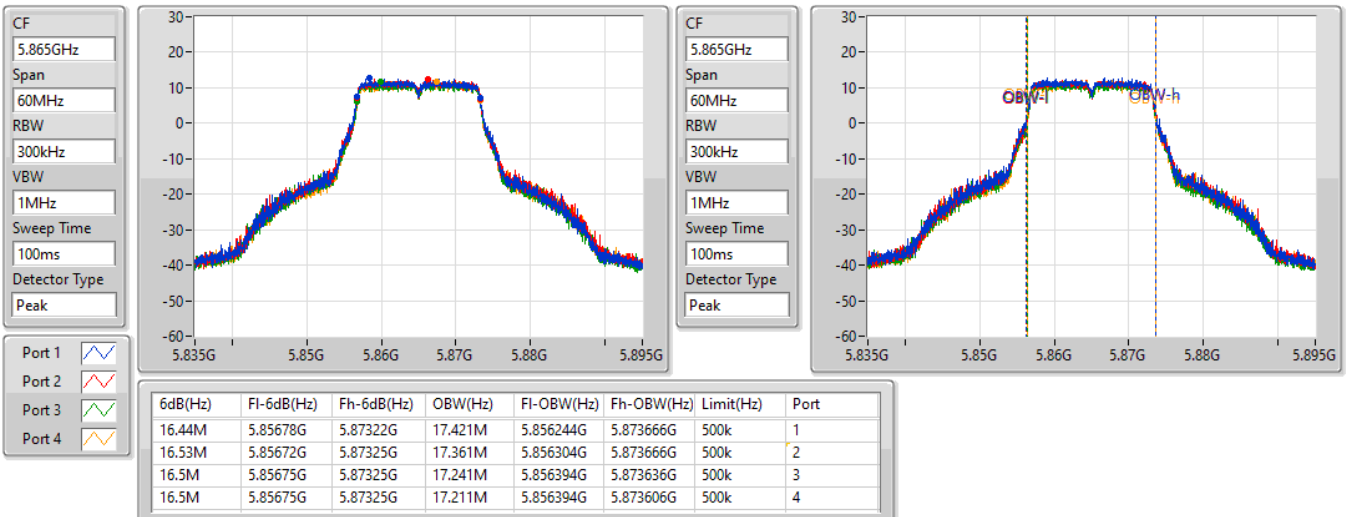
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11a_Nss1,(6Mbps)_4TX
EBW
5845MHz

25/01/2022


802.11a_Nss1,(6Mbps)_4TX
EBW
5865MHz

25/01/2022

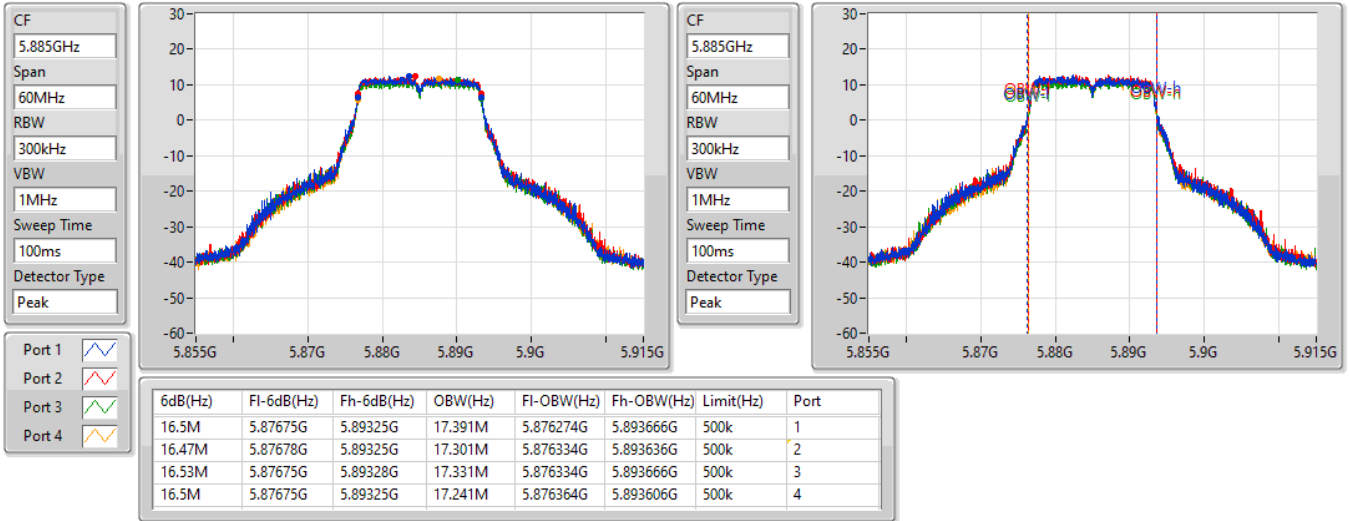


802.11a_Nss1,(6Mbps)_4TX

EBW

5885MHz

25/01/2022





For UNII 4:

Test Mode: non-beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.895GHz	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.25M	26M2D1D	22.41M

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 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-
5845MHz	Pass	Inf	24.78M	26.25M	25.05M	23.13M
5865MHz	Pass	Inf	22.86M	22.41M	25.89M	22.56M
5885MHz	Pass	Inf	24.93M	26.13M	22.56M	23.58M

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

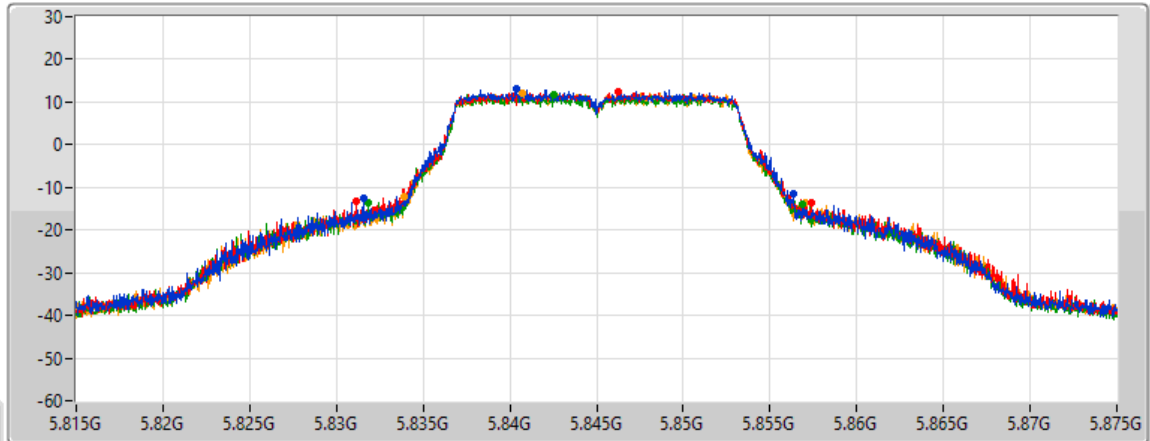
EBW

5845MHz

25/01/2022

CF
5.845GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1
Port 2
Port 3
Port 4



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
24.78M	5.83156G	5.85634G	Inf	1
26.25M	5.83117G	5.85742G	Inf	2
25.05M	5.8318G	5.85685G	Inf	3
23.13M	5.83387G	5.857G	Inf	4

802.11a_Nss1,(6Mbps)_4TX

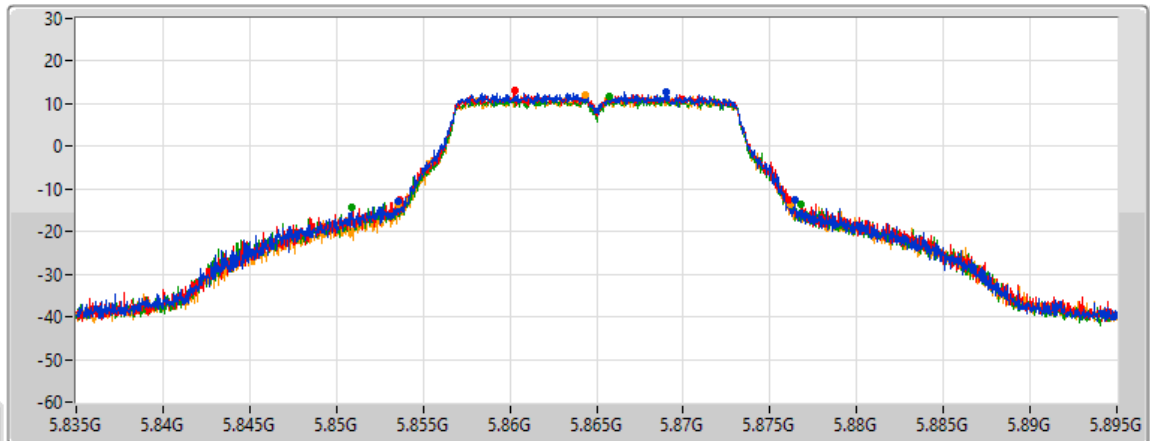
EBW

5865MHz

25/01/2022

CF
5.865GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

Port 1
Port 2
Port 3
Port 4



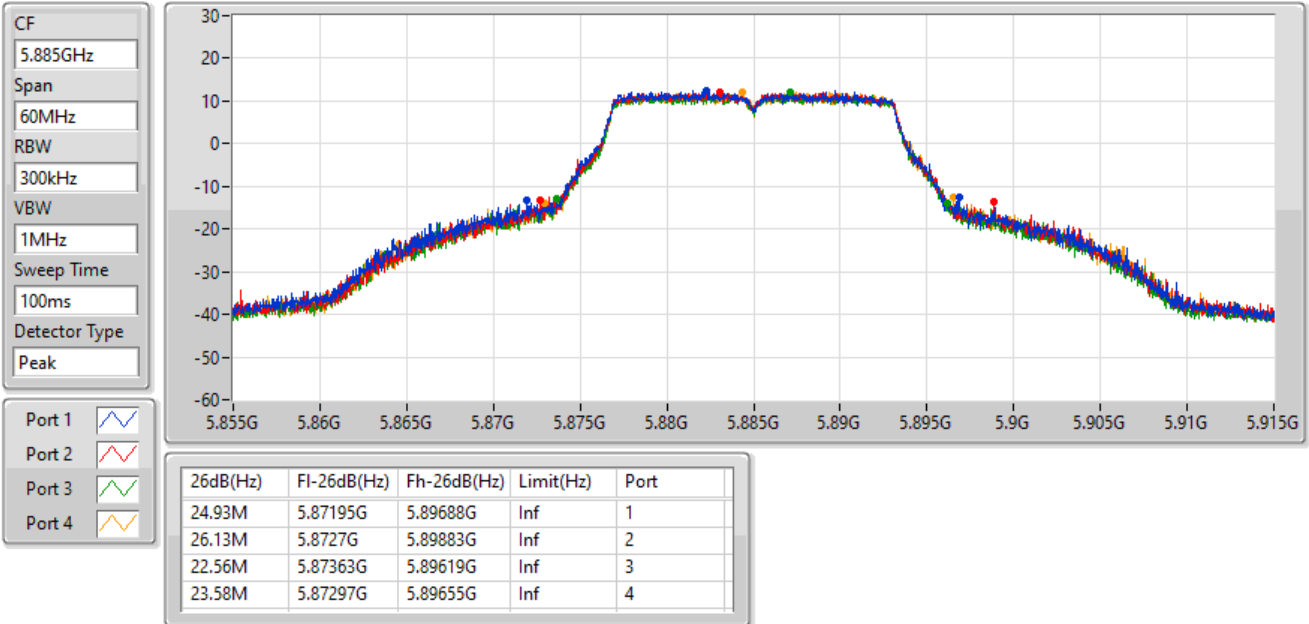
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
22.86M	5.85354G	5.8764G	Inf	1
22.41M	5.85369G	5.8761G	Inf	2
25.89M	5.8509G	5.87679G	Inf	3
22.56M	5.8536G	5.87616G	Inf	4

802.11a_Nss1,(6Mbps)_4TX

EBW

5885MHz

25/01/2022



For UNII 4:

Test Mode: beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.895GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.05M	19.28M	19M3D1D	18.87M	19.19M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	38.1M	38.321M	38M3D1D	37.86M	38.141M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	77.64M	78.201M	78M2D1D	77.4M	77.961M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	156.96M	156.882M	157MD1D	156.48M	156.642M

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

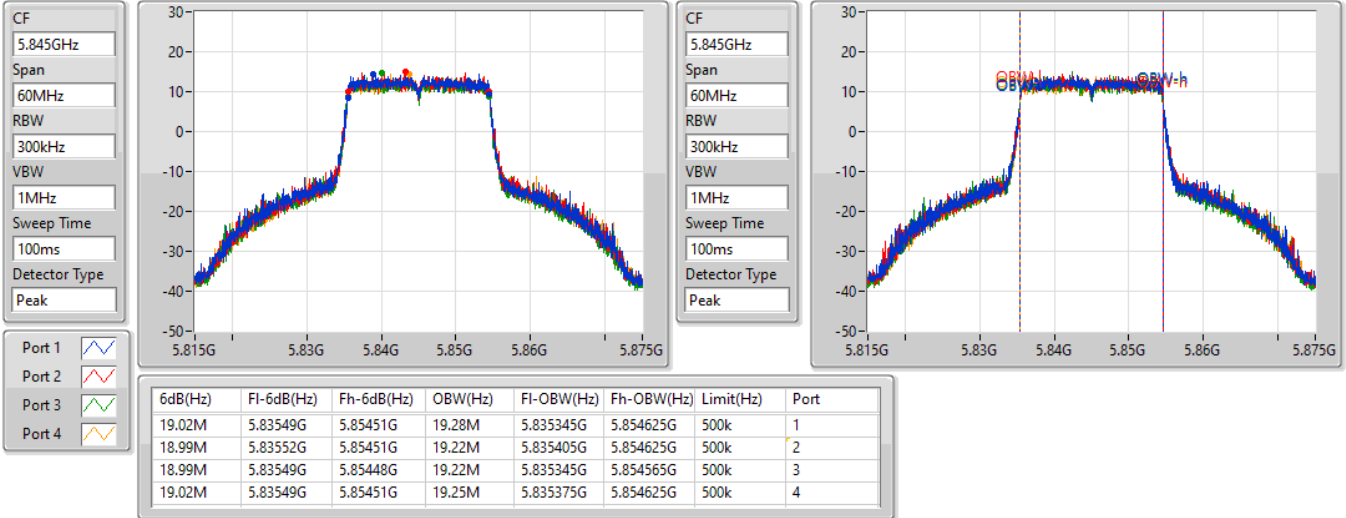
Result

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	-	-	-	-	-	-	-	-	-	-
5845MHz	Pass	500k	19.02M	19.28M	18.99M	19.22M	18.99M	19.22M	19.02M	19.25M
5865MHz	Pass	500k	18.99M	19.28M	18.99M	19.22M	19.02M	19.22M	18.99M	19.22M
5885MHz	Pass	500k	19.05M	19.19M	18.99M	19.25M	18.87M	19.22M	18.99M	19.28M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5835MHz	Pass	500k	37.98M	38.201M	37.92M	38.201M	38.04M	38.201M	37.92M	38.141M
5875MHz	Pass	500k	37.86M	38.321M	37.86M	38.201M	37.86M	38.261M	38.1M	38.141M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5855MHz	Pass	500k	77.64M	78.081M	77.4M	78.201M	77.64M	77.961M	77.64M	78.081M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5815MHz	Pass	500k	156.48M	156.642M	156.72M	156.882M	156.96M	156.882M	156.72M	156.882M

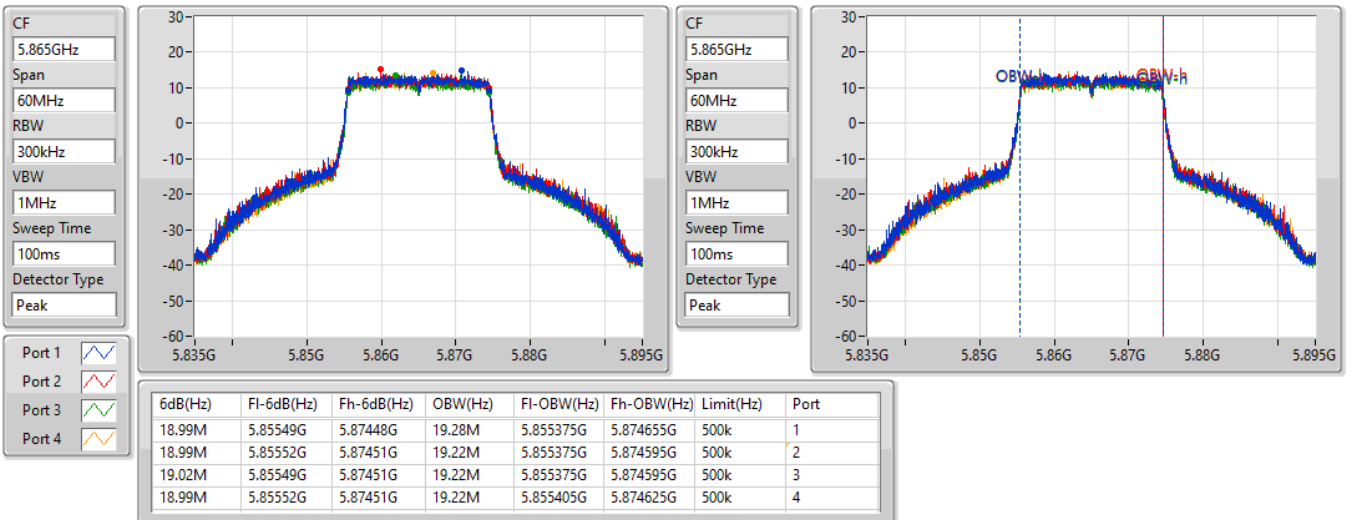
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5845MHz

25/01/2022

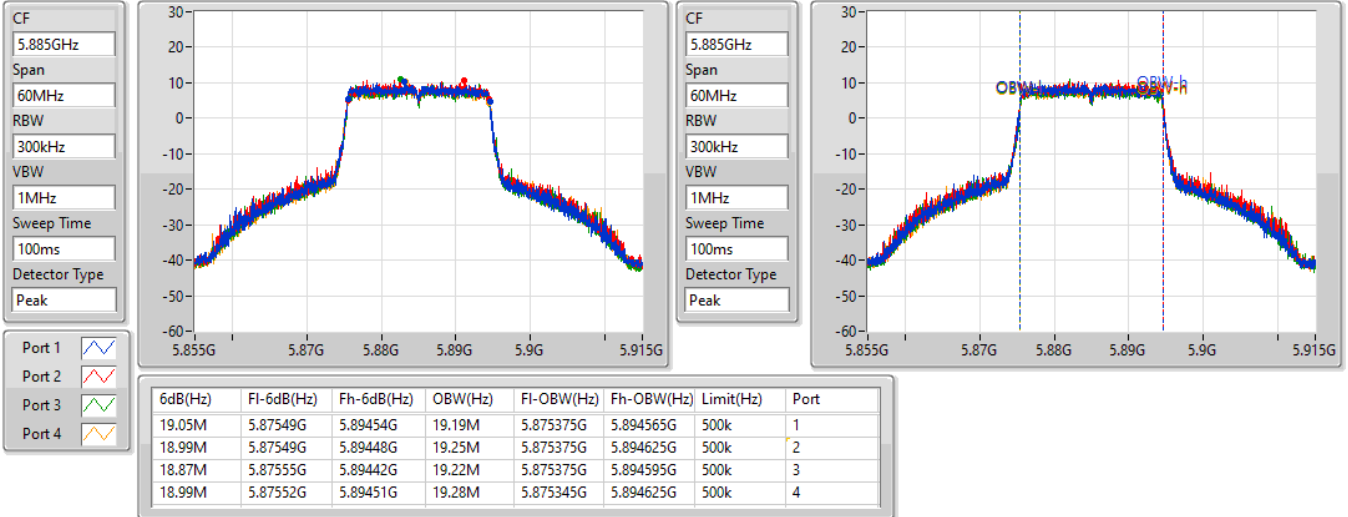

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5865MHz

25/01/2022

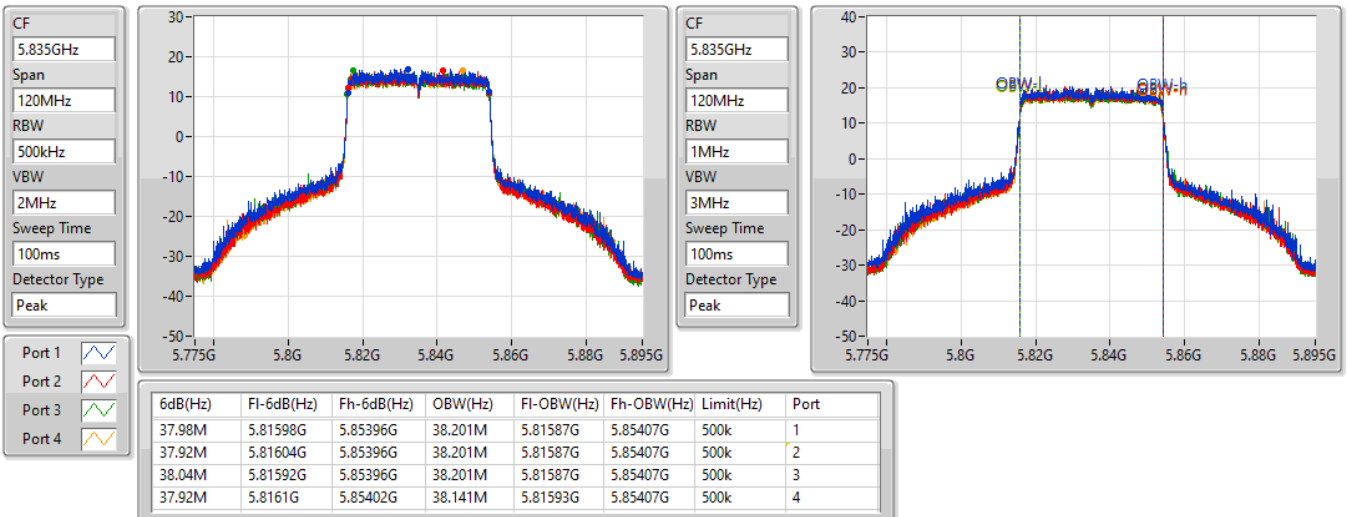


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5885MHz

25/01/2022


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5835MHz

25/01/2022

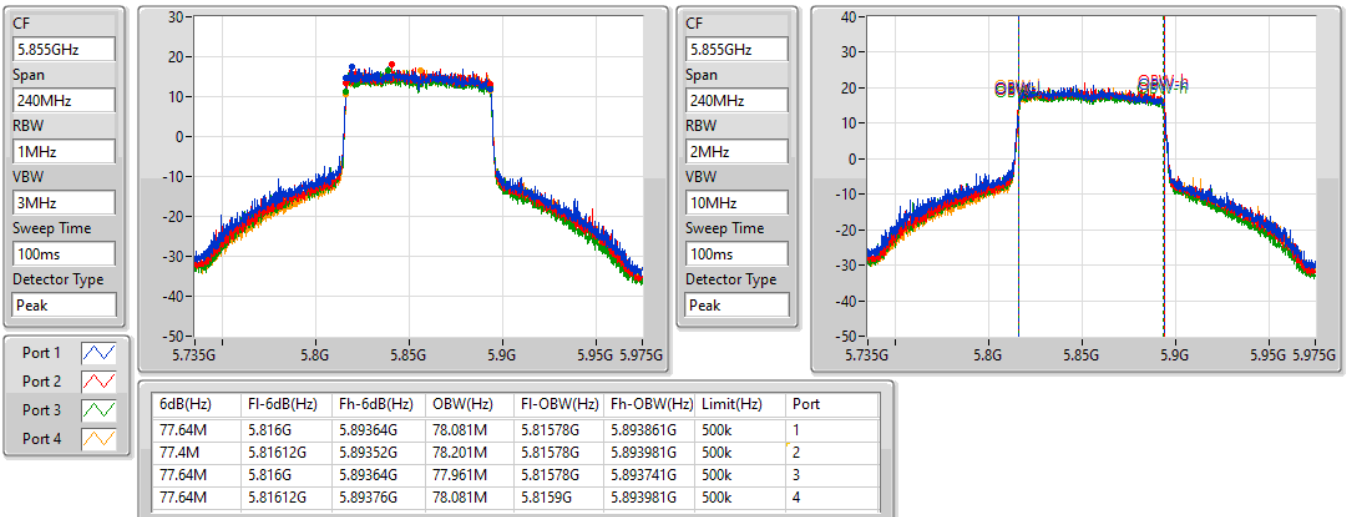


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5875MHz

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802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5855MHz

25/01/2022

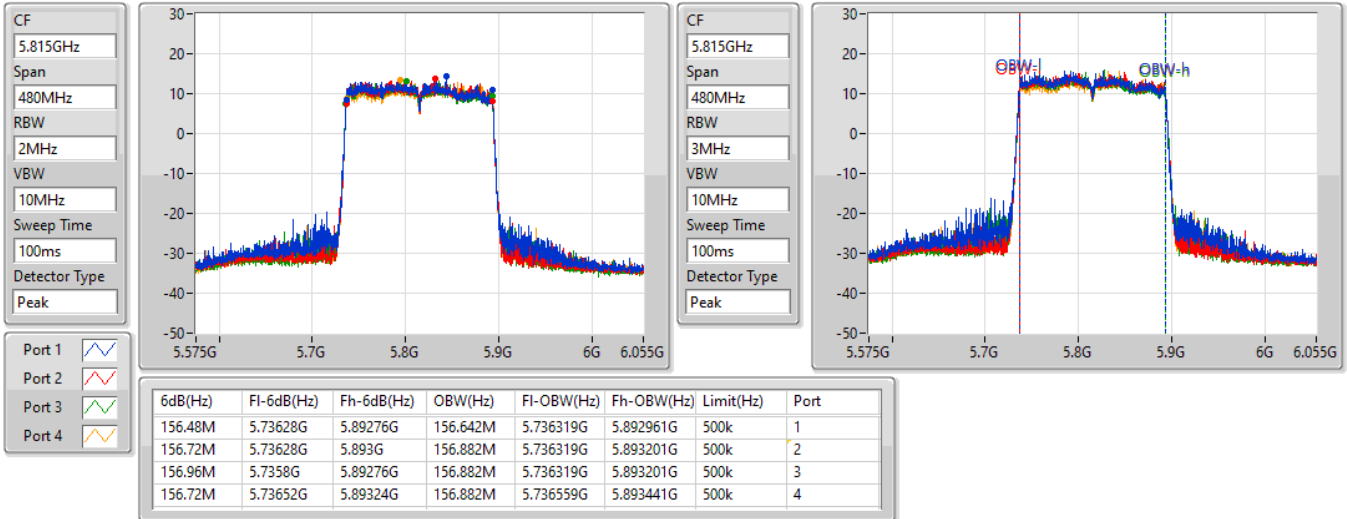


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5815MHz

25/01/2022





For UNII 4:

Test Mode: beamforming 4T1S:

Summary

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.895GHz	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	26.82M	26M8D1D	21.87M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	55.68M	55M7D1D	42.72M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	90.6M	90M6D1D	87M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	167.4M	167MD1D	166.32M

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

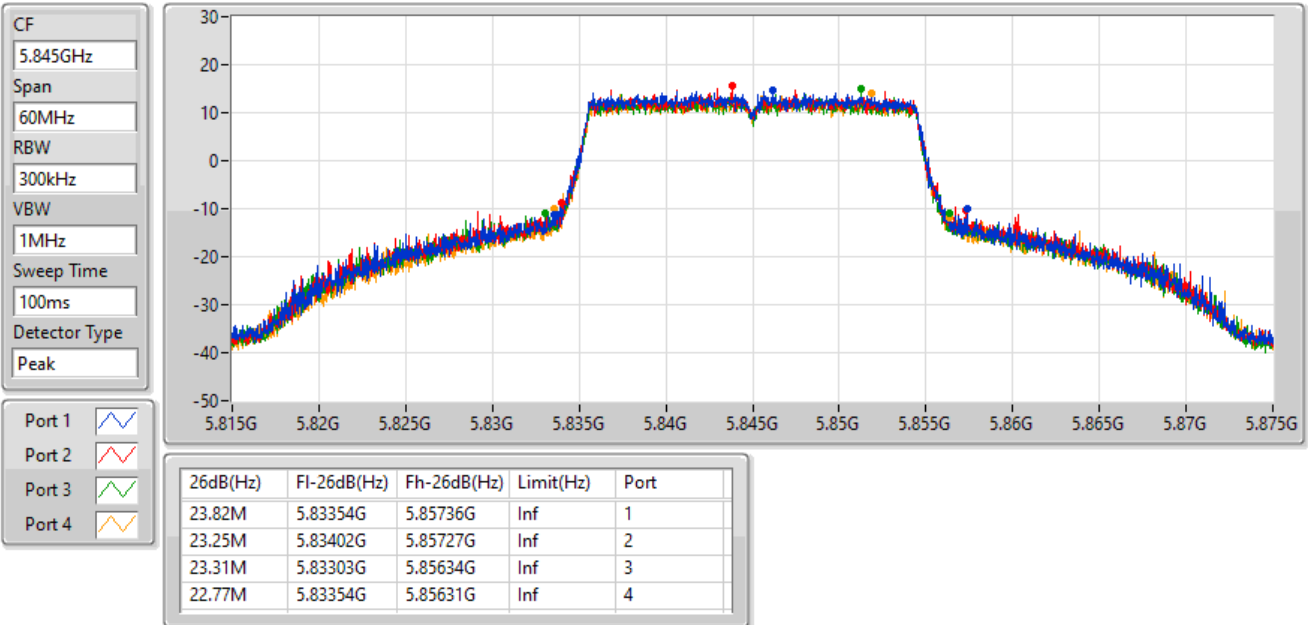
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5845MHz	Pass	Inf	23.82M	23.25M	23.31M	22.77M
5865MHz	Pass	Inf	24.42M	26.82M	22.05M	25.71M
5885MHz	Pass	Inf	22.35M	23.43M	24.03M	21.87M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5835MHz	Pass	Inf	43.32M	45.12M	43.38M	49.44M
5875MHz	Pass	Inf	49.8M	42.78M	55.68M	42.72M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5855MHz	Pass	Inf	88.92M	87M	90.6M	87.36M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-
5815MHz	Pass	Inf	166.68M	166.68M	166.32M	167.4M

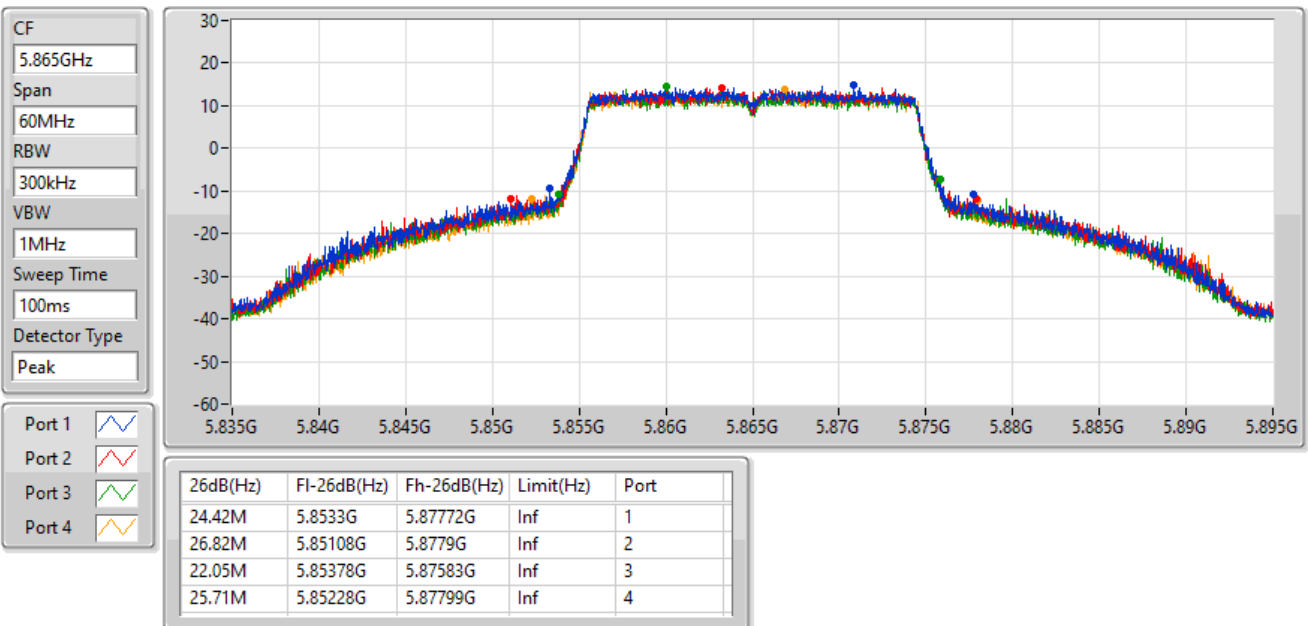
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5845MHz

25/01/2022

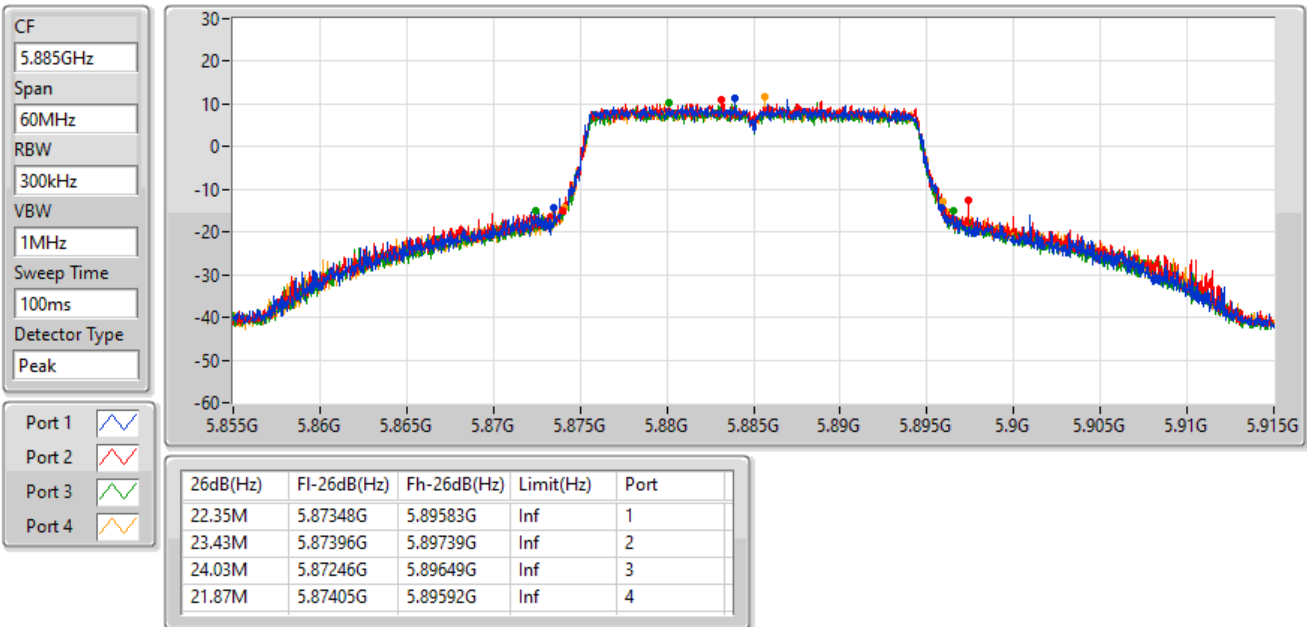

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5865MHz

25/01/2022

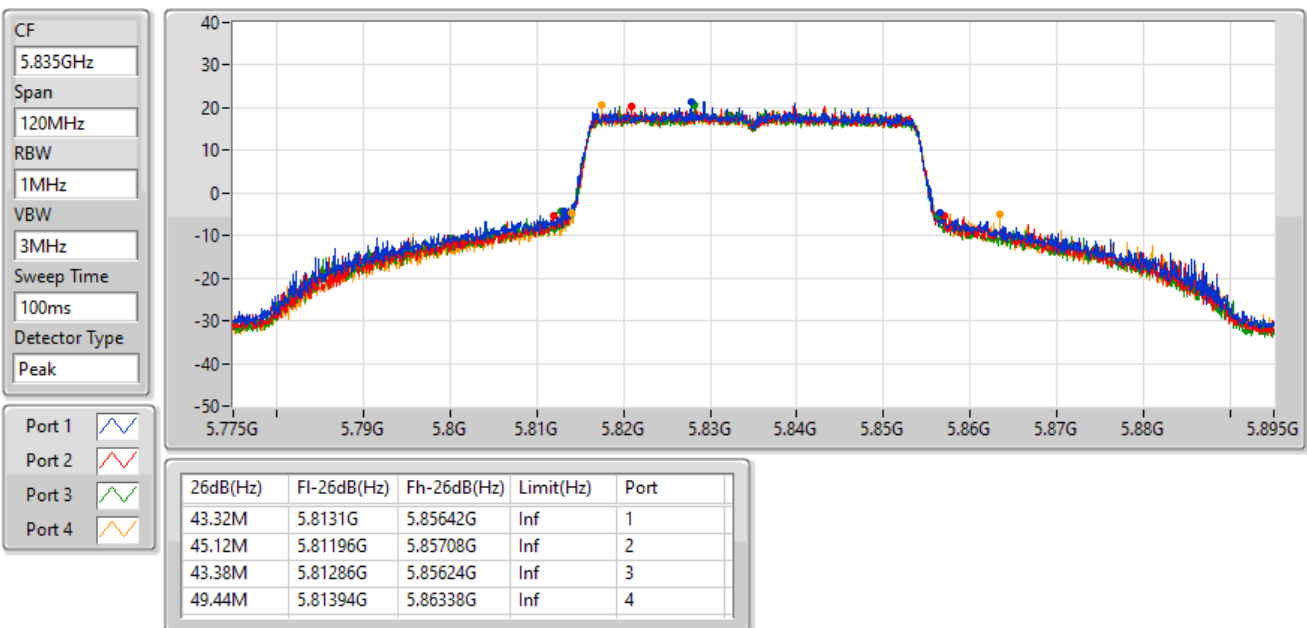


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5885MHz

25/01/2022

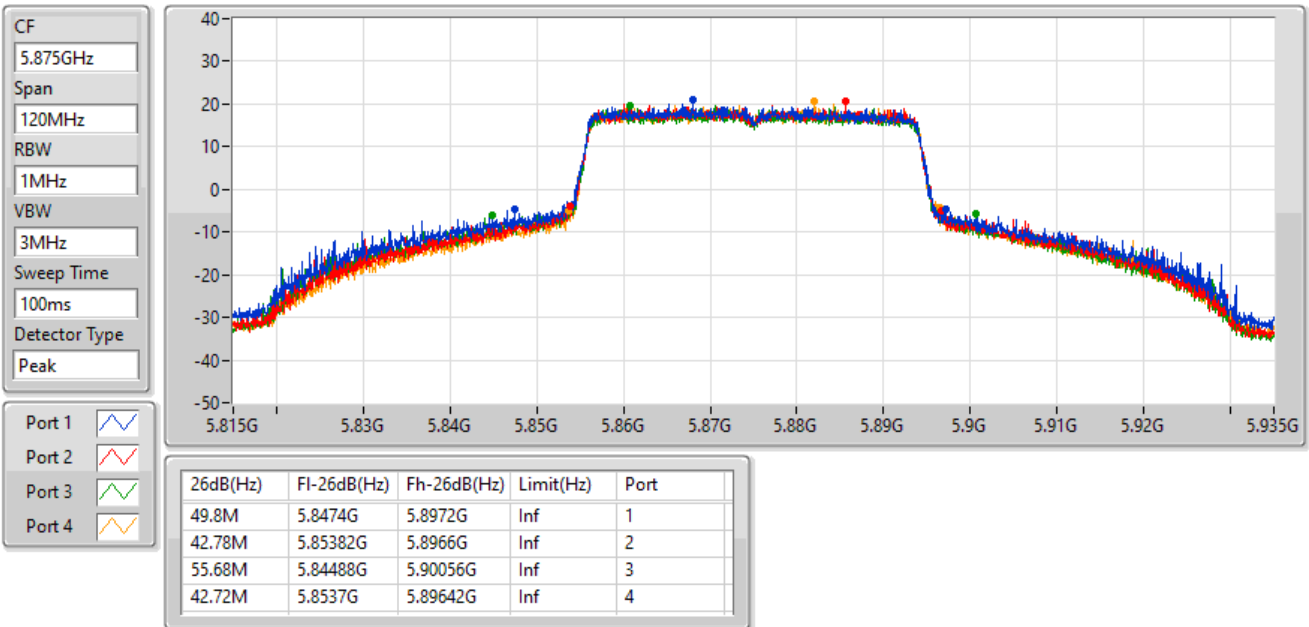

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5835MHz

25/01/2022

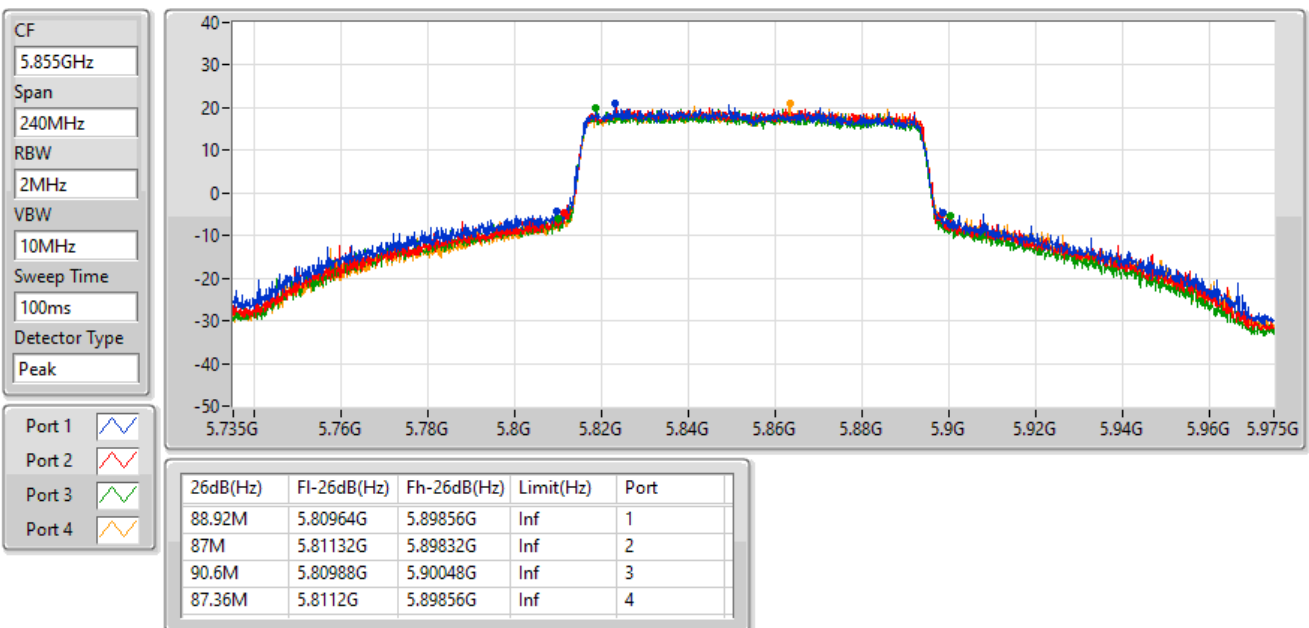


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5875MHz

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802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5855MHz

25/01/2022

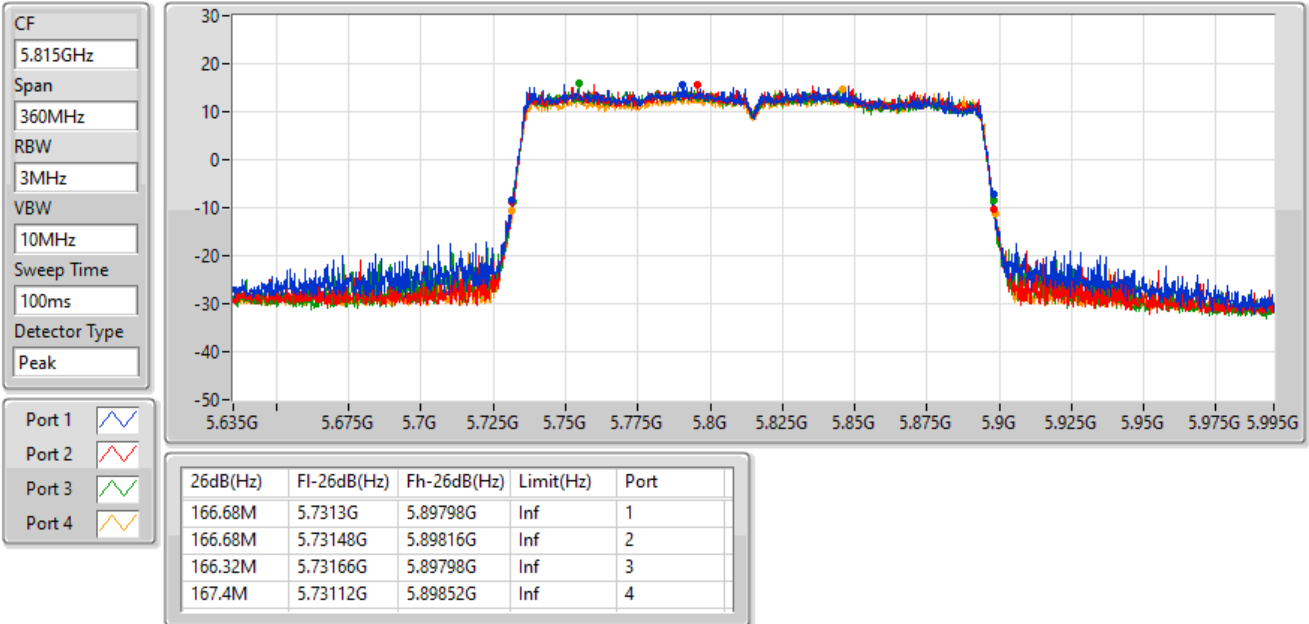


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5815MHz

25/01/2022



For UNII 4:

Test Mode: beamforming 4T2S:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.895GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	19.05M	19.28M	19M3D1D	18.96M	19.19M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	38.04M	38.801M	38M8D1D	37.68M	38.201M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	77.52M	78.801M	78M8D1D	77.4M	78.081M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	157.44M	157.121M	157MD1D	156M	156.642M

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

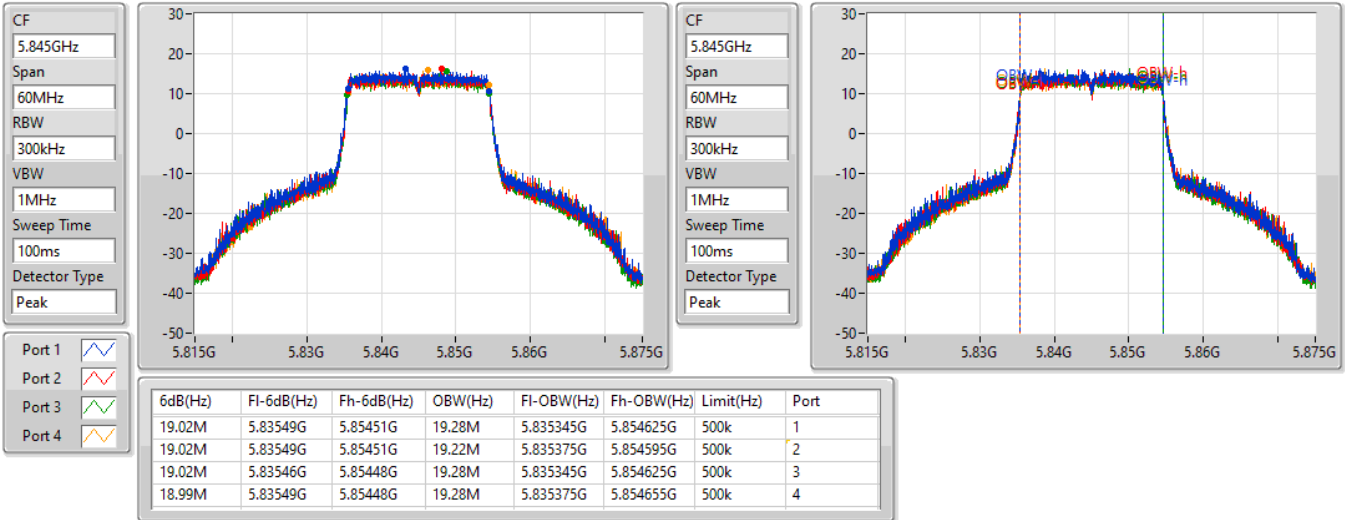
Result

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_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5845MHz	Pass	500k	19.02M	19.28M	19.02M	19.22M	19.02M	19.28M	18.99M	19.28M
5865MHz	Pass	500k	19.02M	19.25M	18.99M	19.22M	18.99M	19.25M	18.99M	19.22M
5885MHz	Pass	500k	18.99M	19.22M	18.99M	19.19M	18.96M	19.25M	19.05M	19.22M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5835MHz	Pass	500k	37.98M	38.381M	37.8M	38.261M	38.04M	38.321M	37.74M	38.201M
5875MHz	Pass	500k	37.86M	38.801M	37.68M	38.261M	37.98M	38.441M	37.74M	38.261M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5855MHz	Pass	500k	77.4M	78.801M	77.52M	78.201M	77.52M	78.201M	77.4M	78.081M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5815MHz	Pass	500k	156M	156.642M	157.2M	156.882M	157.2M	156.642M	157.44M	157.121M

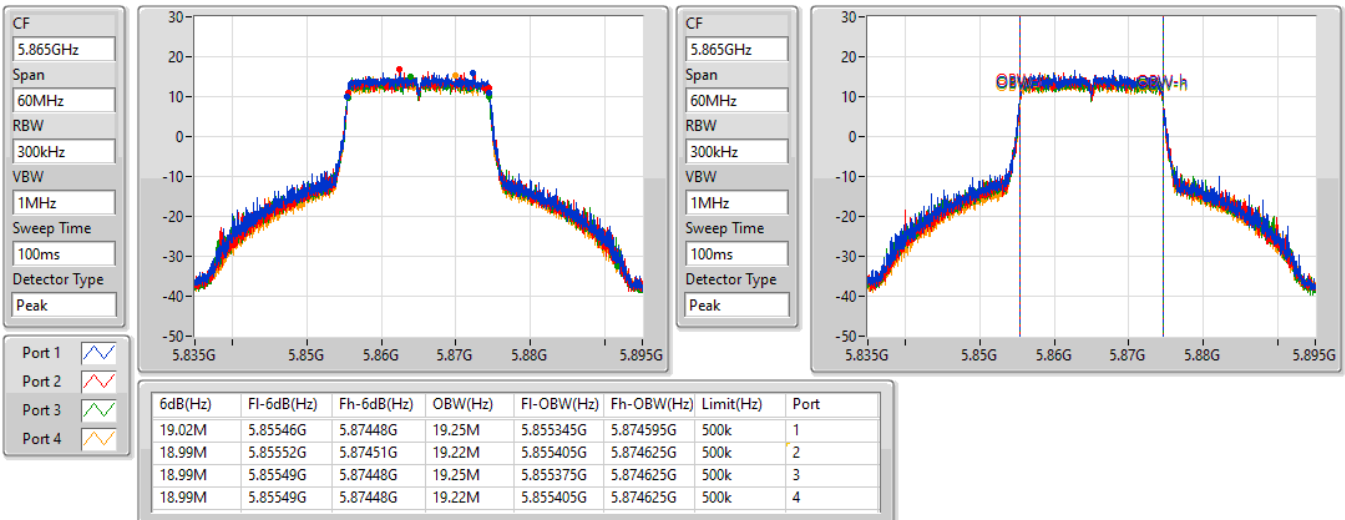
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5845MHz

25/01/2022

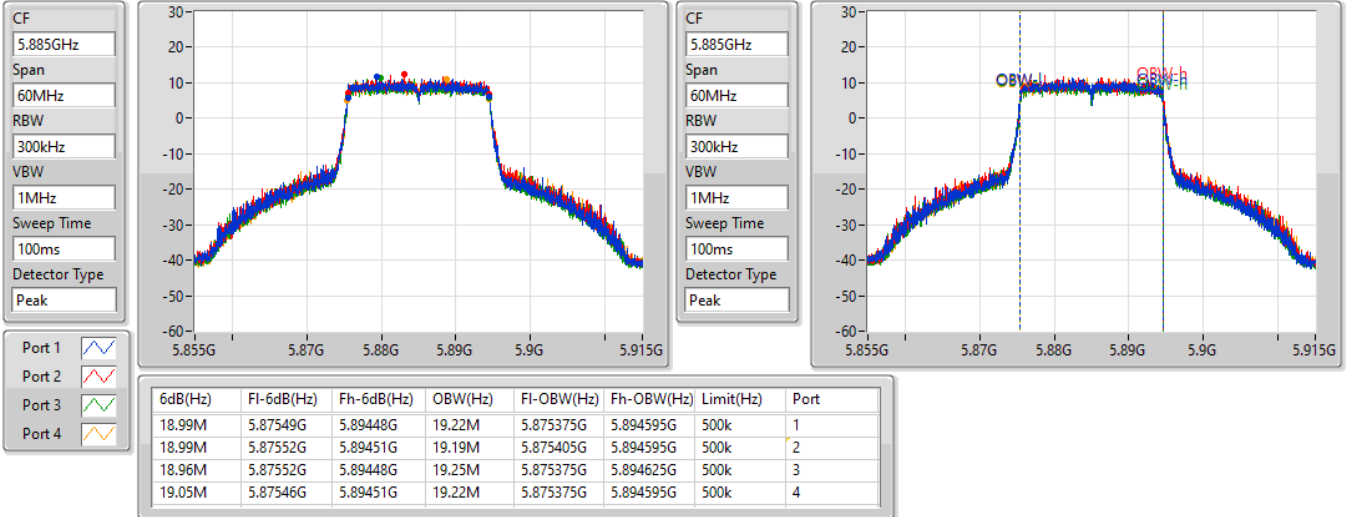

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5865MHz

25/01/2022

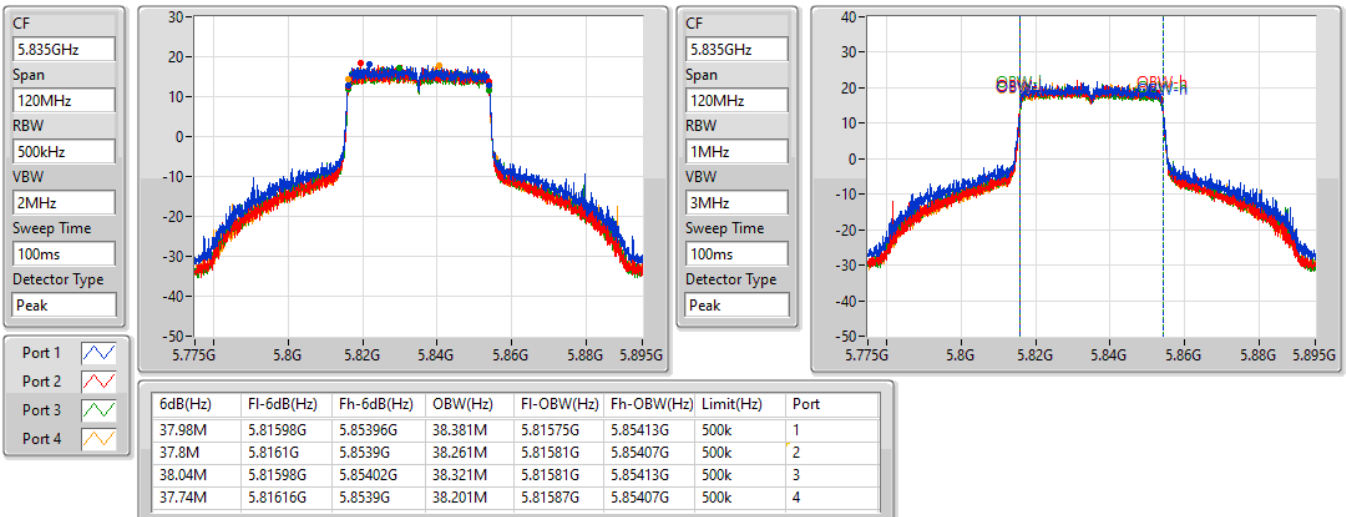


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5885MHz

25/01/2022

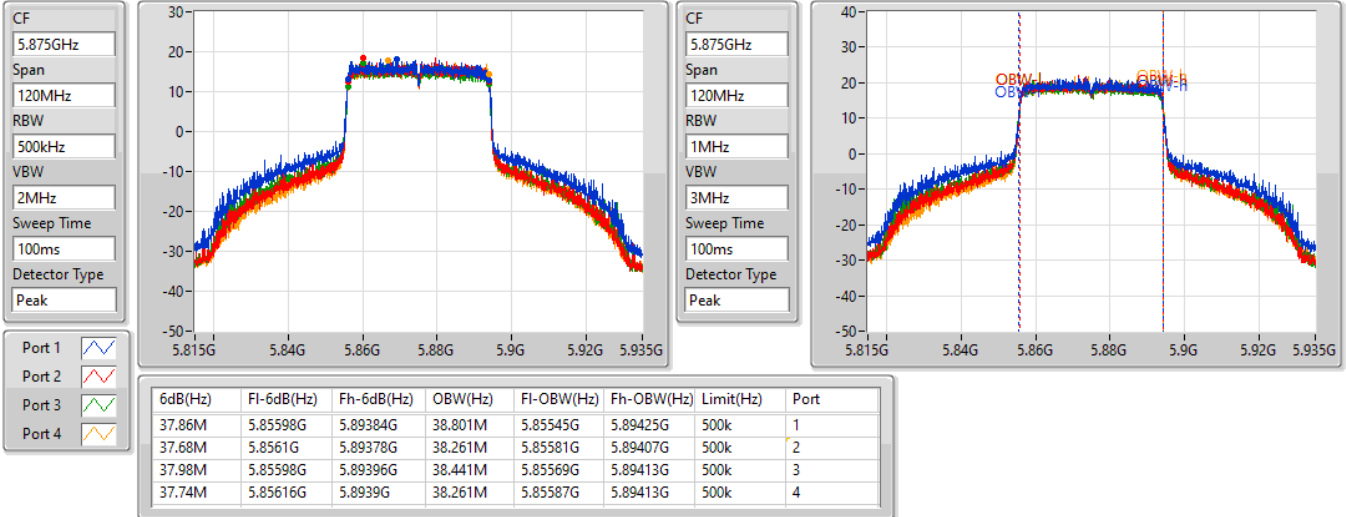

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5835MHz

25/01/2022



802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5875MHz

25/01/2022


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5855MHz

25/01/2022

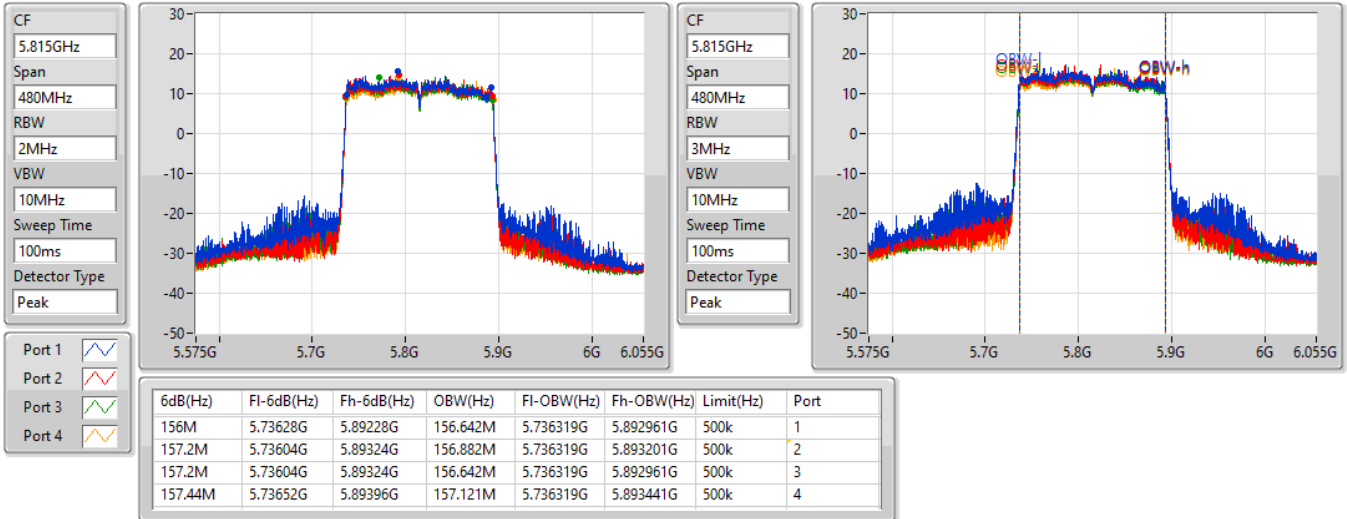


802.11ax HEW160-BF_Nss2,(MCS0)_4TX

EBW

5815MHz

25/01/2022





For UNII 4:

Test Mode: beamforming 4T2S:

Summary

Mode	Max-N dB (Hz)	ITU-Code	Min-N dB (Hz)
5.725-5.895GHz	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	27.15M	27M1D1D	22.08M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	76.38M	76M4D1D	43.02M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	136.44M	136MD1D	105.48M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	167.22M	167MD1D	166.14M

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

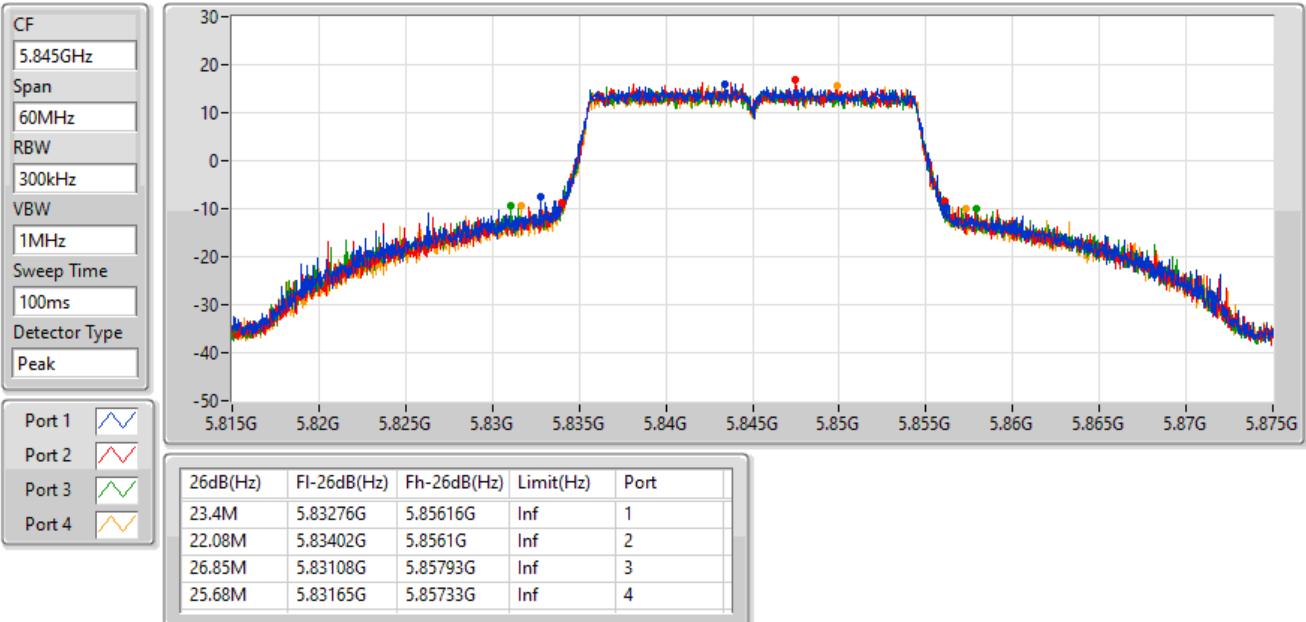
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 2-N dB (Hz)	Port 3-N dB (Hz)	Port 4-N dB (Hz)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5845MHz	Pass	Inf	23.4M	22.08M	26.85M	25.68M
5865MHz	Pass	Inf	26.79M	22.23M	23.4M	22.68M
5885MHz	Pass	Inf	22.26M	22.2M	27.15M	22.44M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5835MHz	Pass	Inf	69.6M	43.02M	61.2M	50.58M
5875MHz	Pass	Inf	76.38M	53.4M	56.58M	55.38M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5855MHz	Pass	Inf	136.44M	110.28M	112.56M	105.48M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-
5815MHz	Pass	Inf	166.68M	167.22M	166.14M	166.86M

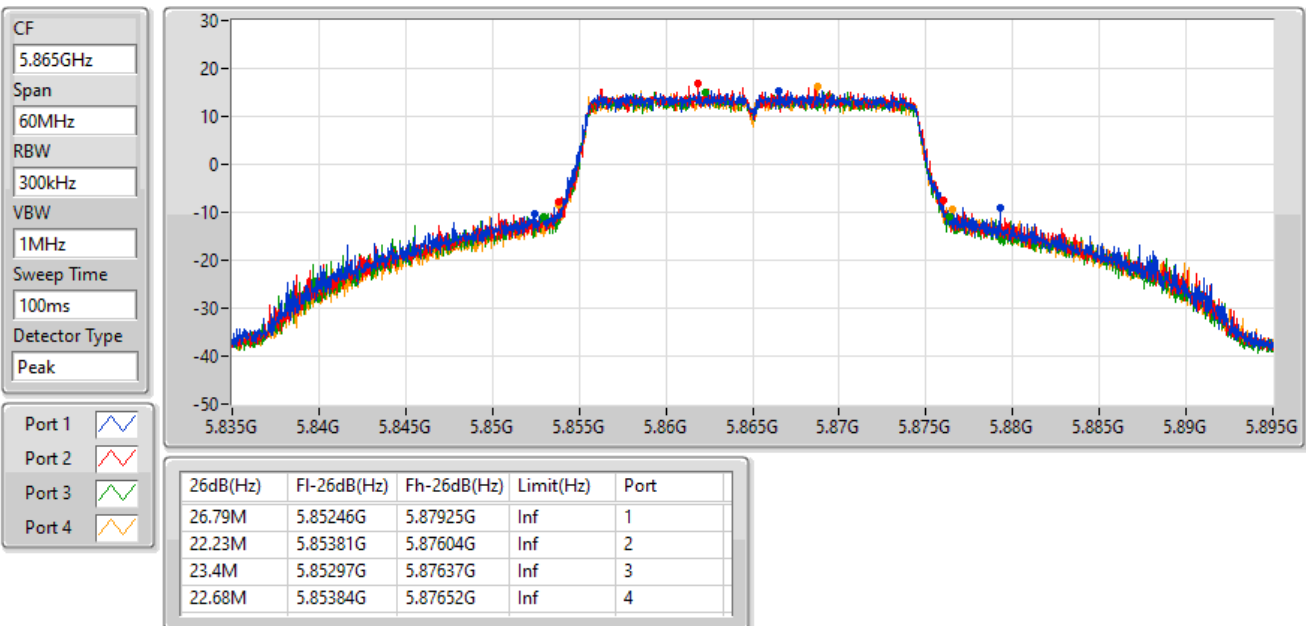
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5845MHz

25/01/2022

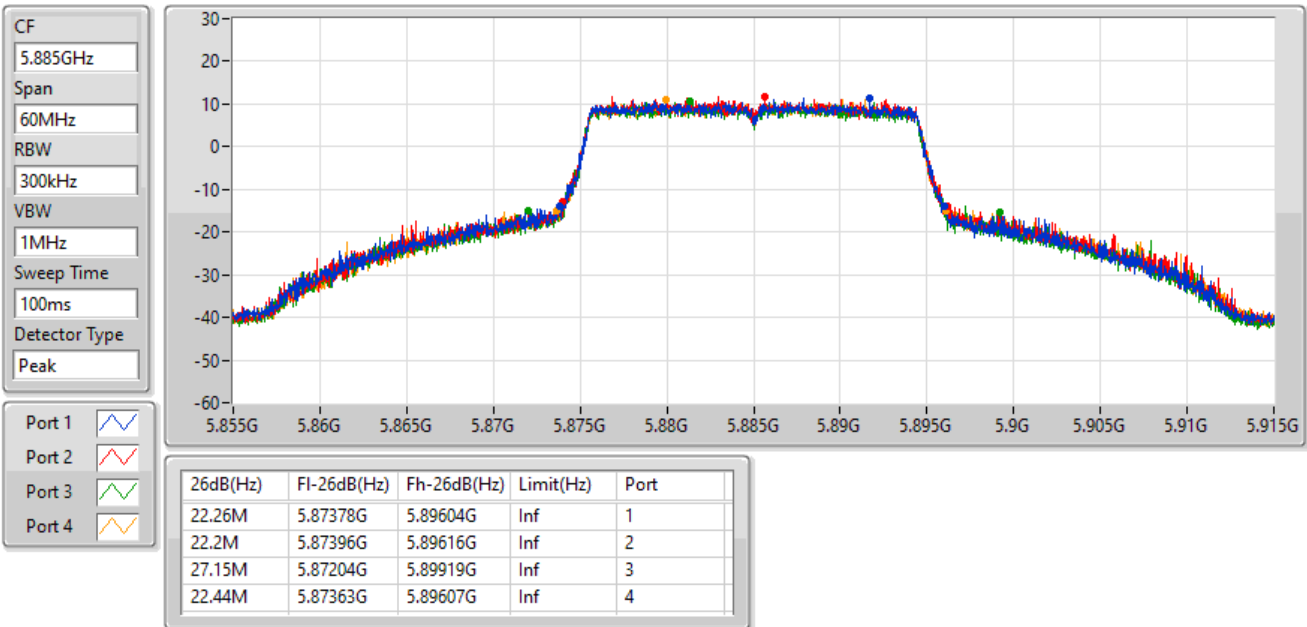

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5865MHz

25/01/2022

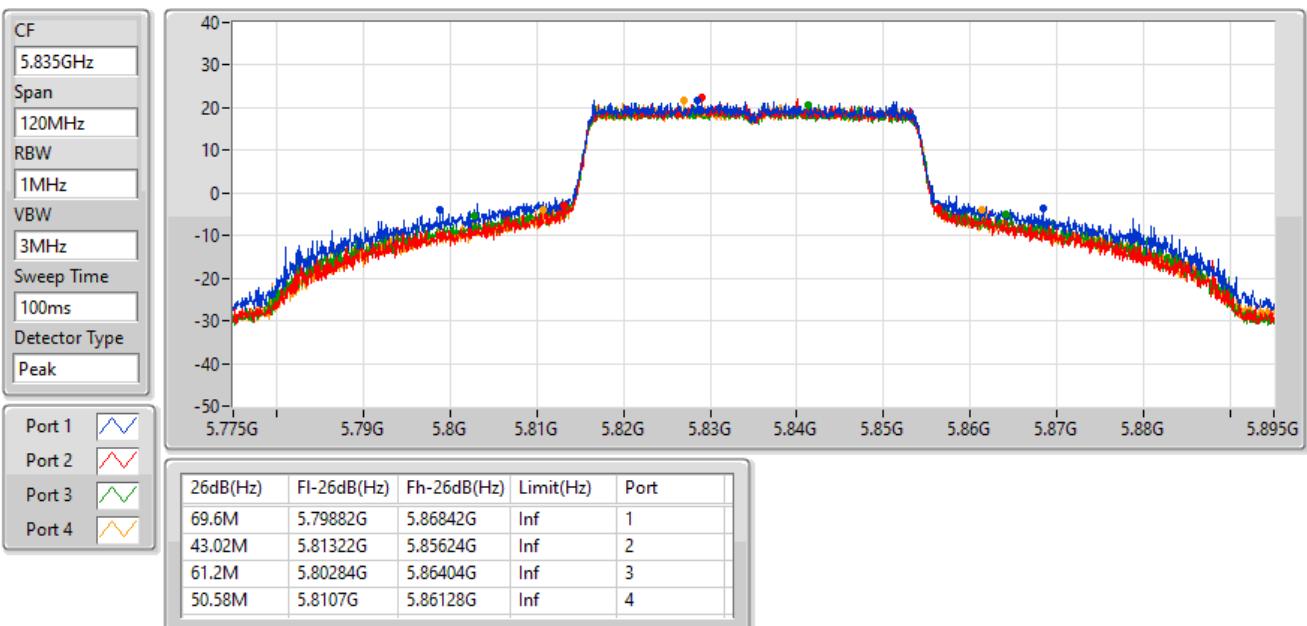


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5885MHz

25/01/2022

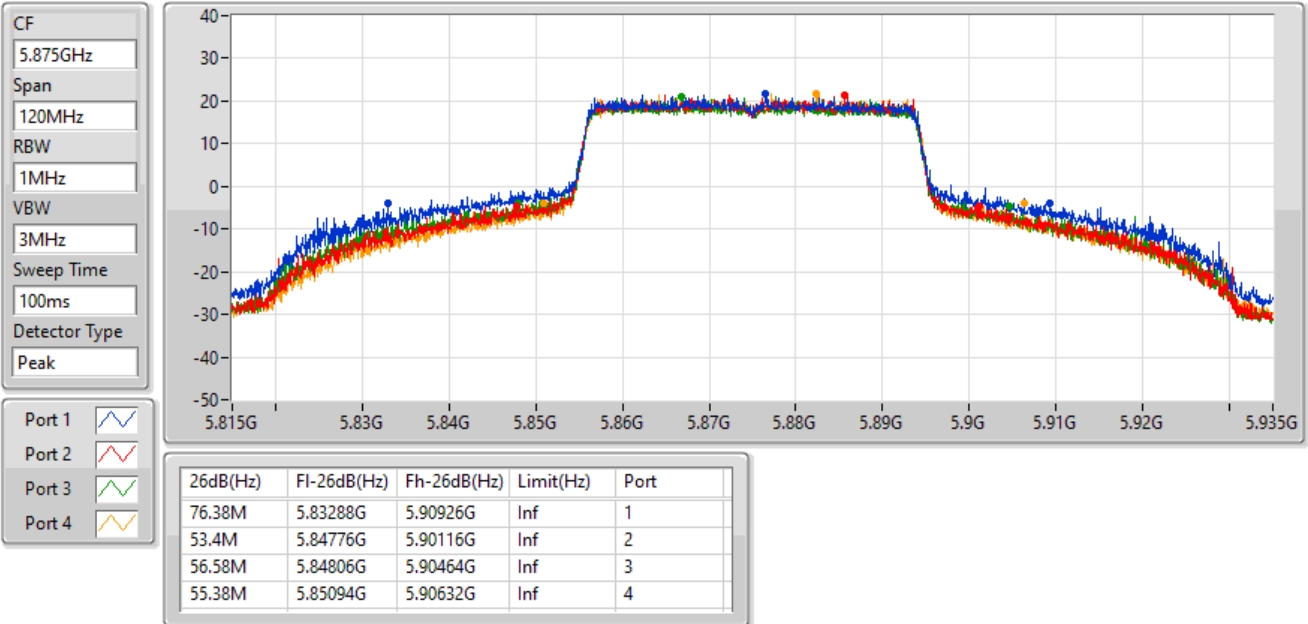

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5835MHz

25/01/2022

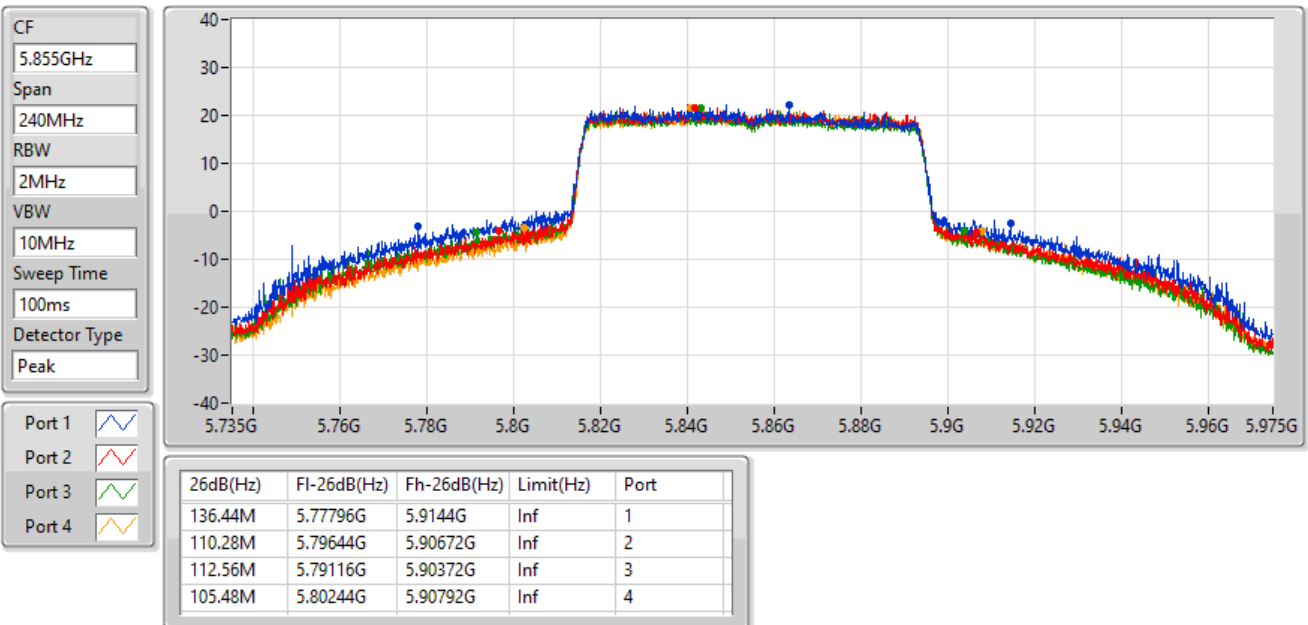


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5875MHz

25/01/2022


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5855MHz

25/01/2022

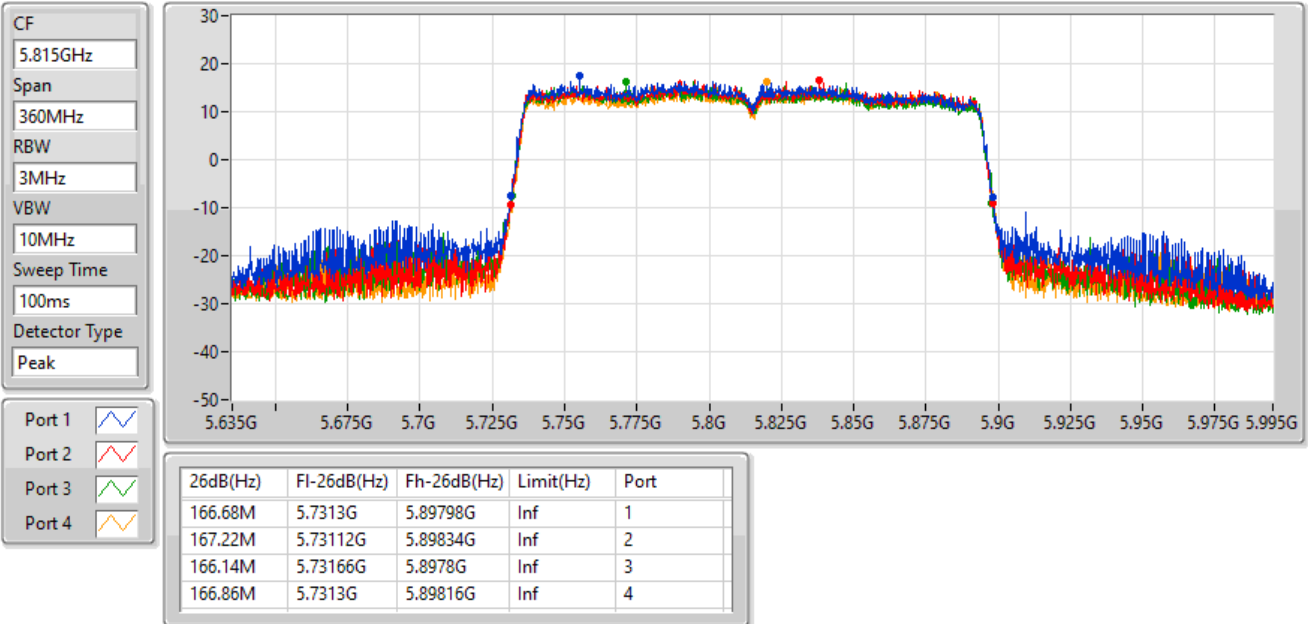


802.11ax HEW160-BF_Nss2,(MCS0)_4TX

EBW

5815MHz

25/01/2022





For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T1S:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.93	0.98401
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.89	0.24491



Average Power

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.53	25.16	24.94	28.06	30.00
5200MHz	Pass	4.53	27.02	26.82	29.93	30.00
5240MHz	Pass	4.53	24.32	24.23	27.29	30.00
5260MHz	Pass	4.52	20.71	20.82	23.78	23.98
5300MHz	Pass	4.52	20.89	20.76	23.84	23.98
5320MHz	Pass	4.52	21.01	20.74	23.89	23.98

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



For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T2S:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	29.70	0.93325
802.11ax HEW40_Nss2,(MCS0)_2TX	27.65	0.58210
802.11ax HEW80_Nss2,(MCS0)_2TX	27.00	0.50119
802.11ax HEW160_Nss2,(MCS0)_2TX	21.60	0.14454
5.25-5.35GHz	-	-
802.11ax HEW20_Nss2,(MCS0)_2TX	23.88	0.24434
802.11ax HEW40_Nss2,(MCS0)_2TX	23.97	0.24946
802.11ax HEW80_Nss2,(MCS0)_2TX	23.95	0.24831
802.11ax HEW160_Nss2,(MCS0)_2TX	21.28	0.13428

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.53	25.58	25.19	28.40	30.00
5200MHz	Pass	4.53	26.93	26.44	29.70	30.00
5240MHz	Pass	4.53	24.90	24.71	27.82	30.00
5260MHz	Pass	4.52	20.87	20.74	23.82	23.98
5300MHz	Pass	4.52	21.07	20.65	23.88	23.98
5320MHz	Pass	4.52	20.97	20.67	23.83	23.98
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.53	23.87	24.30	27.10	30.00
5230MHz	Pass	4.53	24.60	24.67	27.65	30.00
5270MHz	Pass	4.52	20.77	21.09	23.94	23.98
5310MHz	Pass	4.52	21.03	20.88	23.97	23.98
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.53	24.00	23.97	27.00	30.00
5290MHz	Pass	4.52	20.93	20.94	23.95	23.98
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.53	18.42	18.75	21.60	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.52	17.96	18.55	21.28	23.98

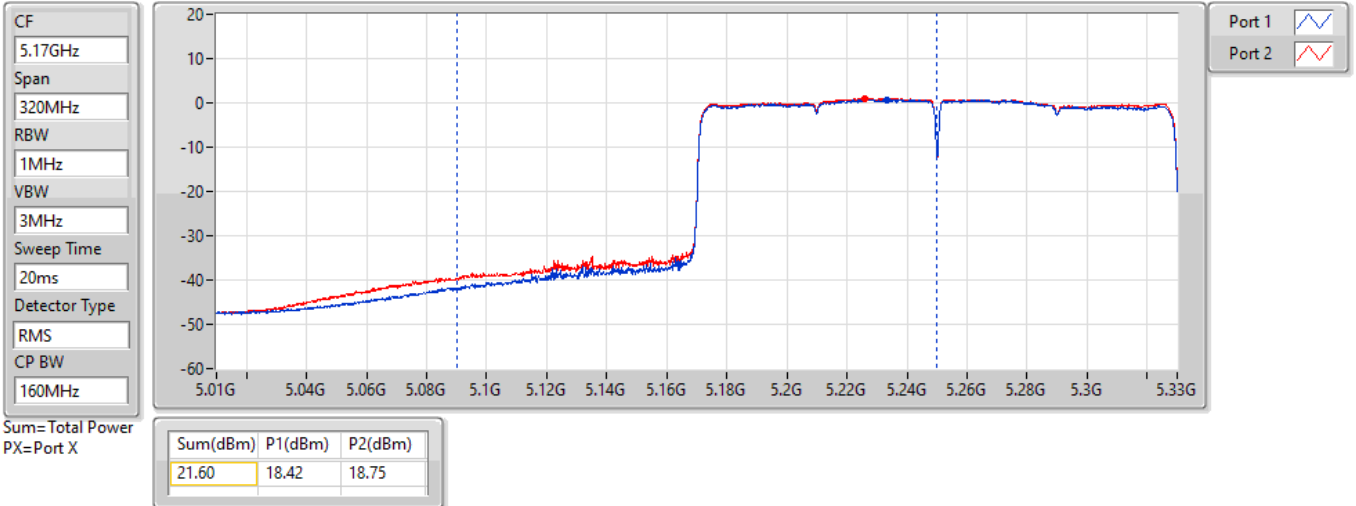
DG = Directional Gain; Port X = Port X output power

802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

20/01/2022

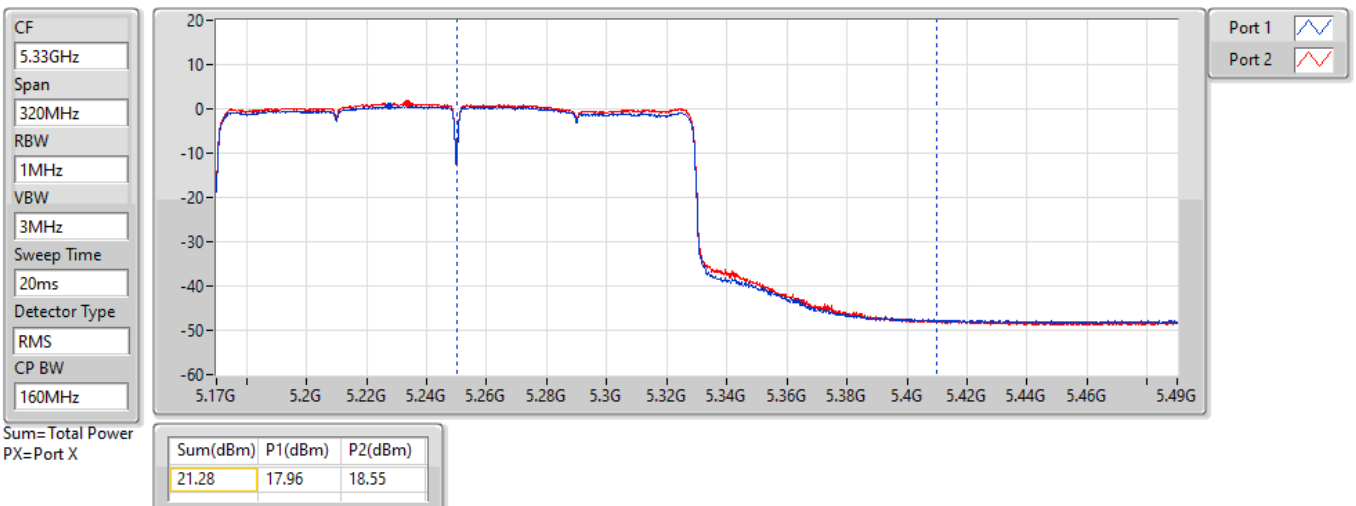


802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

20/01/2022





For UNII 1~UNII 2A:

Test Mode: beamforming 2T1S

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.57	0.90573
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	27.76	0.59704
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	26.04	0.40179
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	20.20	0.10471
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.92	0.24660
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.91	0.24604
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.79	0.23933
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	19.92	0.09817

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.83	24.94	25.06	28.01	30.00
5200MHz	Pass	5.83	26.76	26.34	29.57	30.00
5240MHz	Pass	5.83	24.78	24.81	27.81	30.00
5260MHz	Pass	5.56	20.76	20.92	23.85	23.98
5300MHz	Pass	5.56	21.08	20.73	23.92	23.98
5320MHz	Pass	5.56	20.78	20.82	23.81	23.98
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.83	23.29	23.70	26.51	30.00
5230MHz	Pass	5.83	24.71	24.78	27.76	30.00
5270MHz	Pass	5.56	20.83	20.95	23.90	23.98
5310MHz	Pass	5.56	20.84	20.95	23.91	23.98
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.83	22.87	23.19	26.04	30.00
5290MHz	Pass	5.56	20.79	20.76	23.79	23.98
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	5.83	16.88	17.47	20.20	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	5.56	16.61	17.19	19.92	23.98

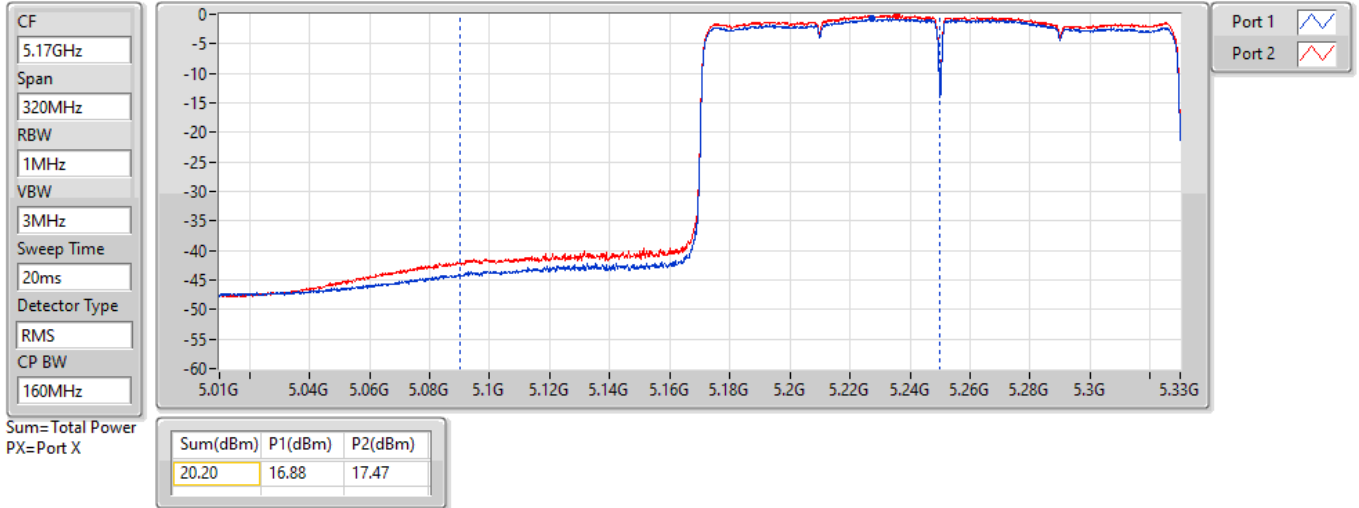
DG = Directional Gain; Port X = Port X output power

802.11ax HEW160-BF_Nss1,(MCS0)_2TX

AV Power

5250MHz Straddle 5.15-5.25GHz_TnomVnom

20/01/2022

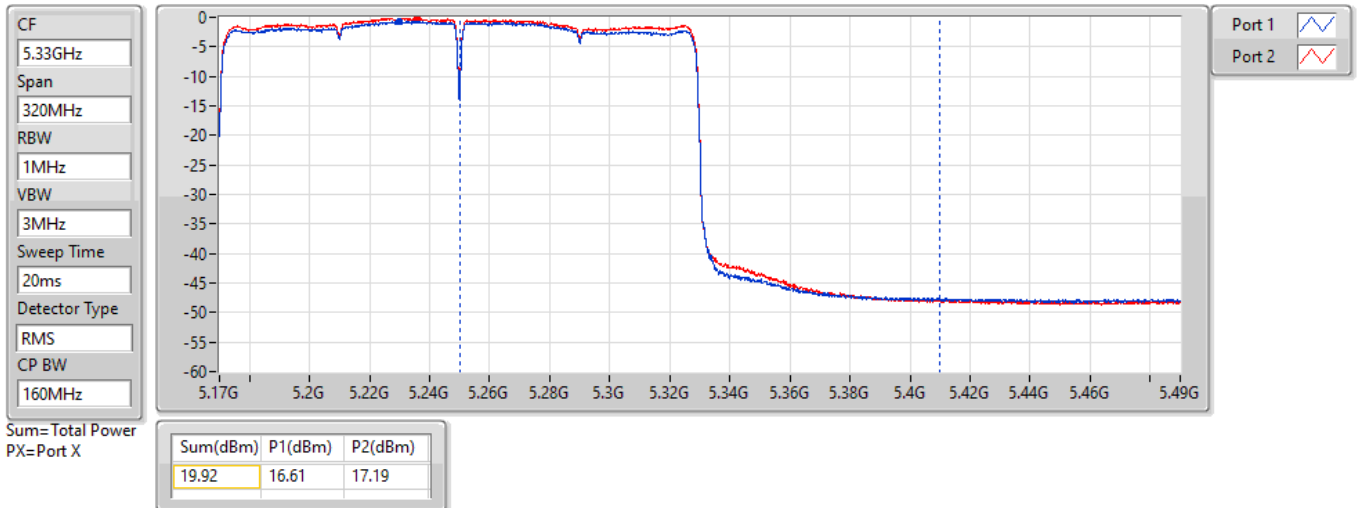


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom

20/01/2022





Average Power

Appendix C.4

For UNII 2C~UNII 3:

Test Mode: non-beamforming 4T1S:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	23.11	0.20464
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	29.89	0.97499



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1.(6Mbps)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	4.32	16.86	17.44	17.38	16.63	23.11	23.98
5580MHz	Pass	4.32	16.71	17.04	16.98	16.47	22.83	23.98
5700MHz	Pass	4.32	17.46	17.03	17.25	16.39	23.07	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.32	16.63	16.13	16.40	15.58	22.22	22.93
5720MHz Straddle 5.725-5.85GHz	Pass	4.76	10.46	10.05	10.20	9.42	16.07	30.00
5745MHz	Pass	4.76	24.68	23.88	23.72	23.03	29.89	30.00
5785MHz	Pass	4.76	24.59	23.78	23.70	23.12	29.85	30.00
5825MHz	Pass	4.76	24.32	23.82	23.28	23.77	29.83	30.00

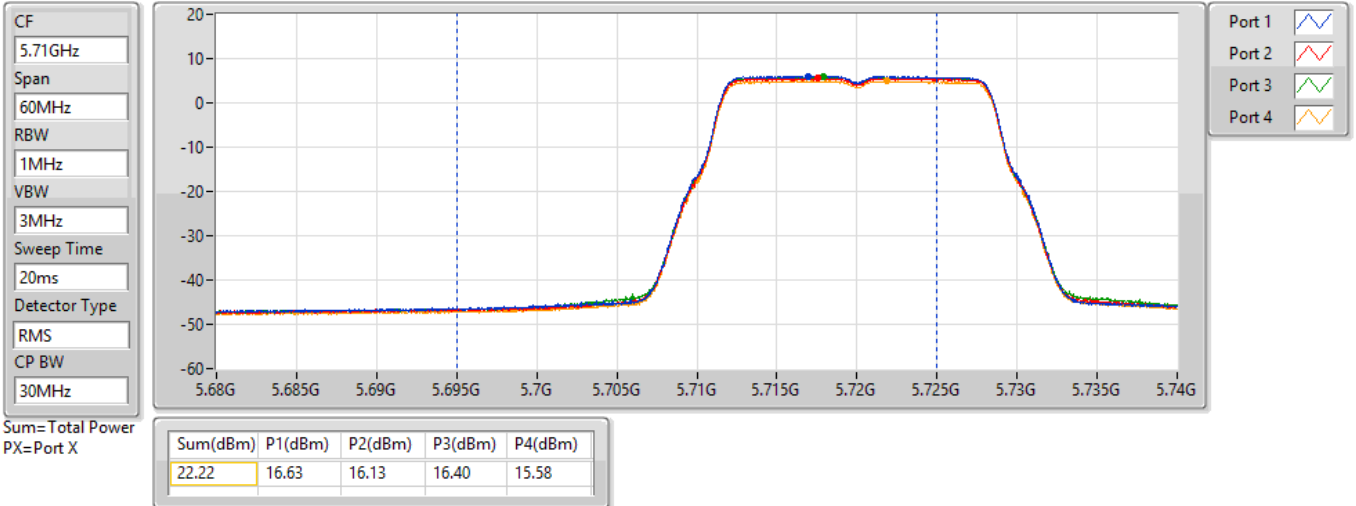
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

22/03/2022

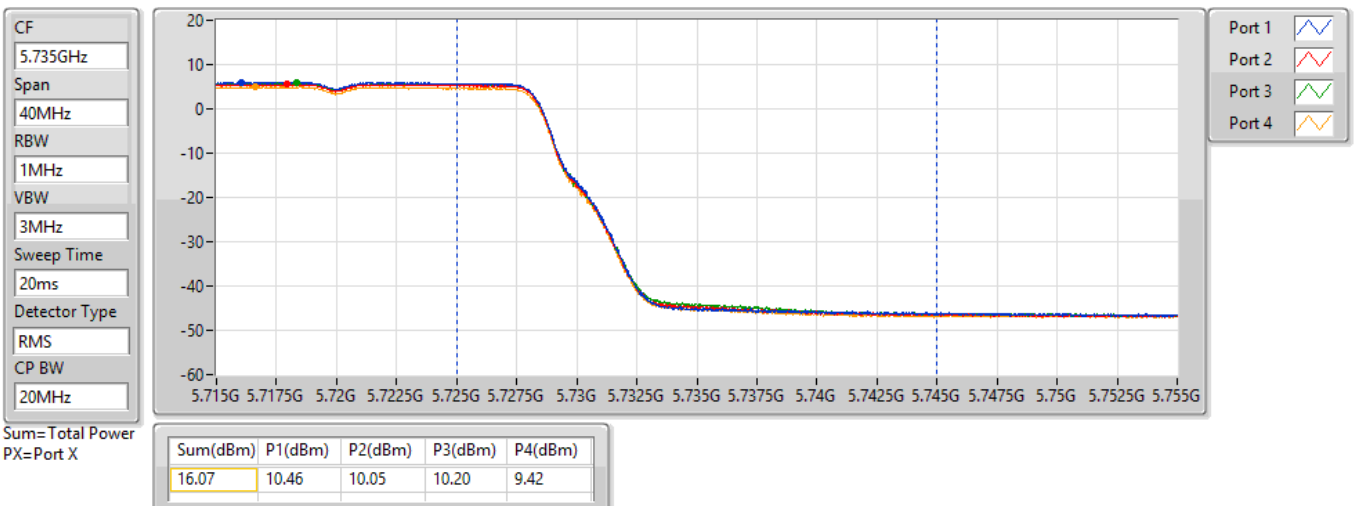


802.11a_Nss1,(6Mbps)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

22/03/2022





For UNII 2C~UNII 3:

Test Mode: beamforming 4T1S:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	23.01	0.19999
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.07	0.20277
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	23.07	0.20277
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	23.01	0.19999
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.87	0.77090
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	28.85	0.76736
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	28.83	0.76384

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	6.86	16.76	17.38	17.27	16.49	23.01	23.12
5580MHz	Pass	6.86	16.87	17.12	17.13	16.64	22.97	23.12
5700MHz	Pass	6.86	17.23	16.87	17.07	16.43	22.93	23.12
5720MHz Straddle 5.47-5.725GHz	Pass	6.86	16.24	15.87	16.23	15.28	21.94	22.12
5720MHz Straddle 5.725-5.85GHz	Pass	7.11	11.16	10.79	11.03	10.13	16.82	28.89
5745MHz	Pass	7.11	23.26	23.00	22.89	22.19	28.87	28.89
5785MHz	Pass	7.11	23.25	22.58	22.70	22.08	28.69	28.89
5825MHz	Pass	7.11	23.18	22.94	22.08	22.55	28.73	28.89
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5510MHz	Pass	6.86	16.85	17.24	17.39	16.31	22.99	23.12
5550MHz	Pass	6.86	17.10	17.25	17.33	16.48	23.07	23.12
5670MHz	Pass	6.86	17.07	16.96	17.07	16.43	22.91	23.12
5710MHz Straddle 5.47-5.725GHz	Pass	6.86	17.11	16.93	16.95	16.52	22.90	23.12
5710MHz Straddle 5.725-5.85GHz	Pass	7.11	7.34	7.18	7.36	6.78	13.19	28.89
5755MHz	Pass	7.11	23.58	22.54	22.72	22.00	28.77	28.89
5795MHz	Pass	7.11	23.70	22.73	22.56	22.16	28.85	28.89
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5530MHz	Pass	6.86	17.53	16.92	17.23	16.32	23.04	23.12
5610MHz	Pass	6.86	17.29	17.11	16.96	16.36	22.96	23.12
5690MHz Straddle 5.47-5.725GHz	Pass	6.86	17.38	17.07	17.27	16.41	23.07	23.12
5690MHz Straddle 5.725-5.85GHz	Pass	7.11	4.13	3.61	3.91	3.24	9.76	28.89
5775MHz	Pass	7.11	23.23	22.57	23.18	22.15	28.83	28.89
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5570MHz	Pass	6.86	17.12	17.09	17.25	16.45	23.01	23.12

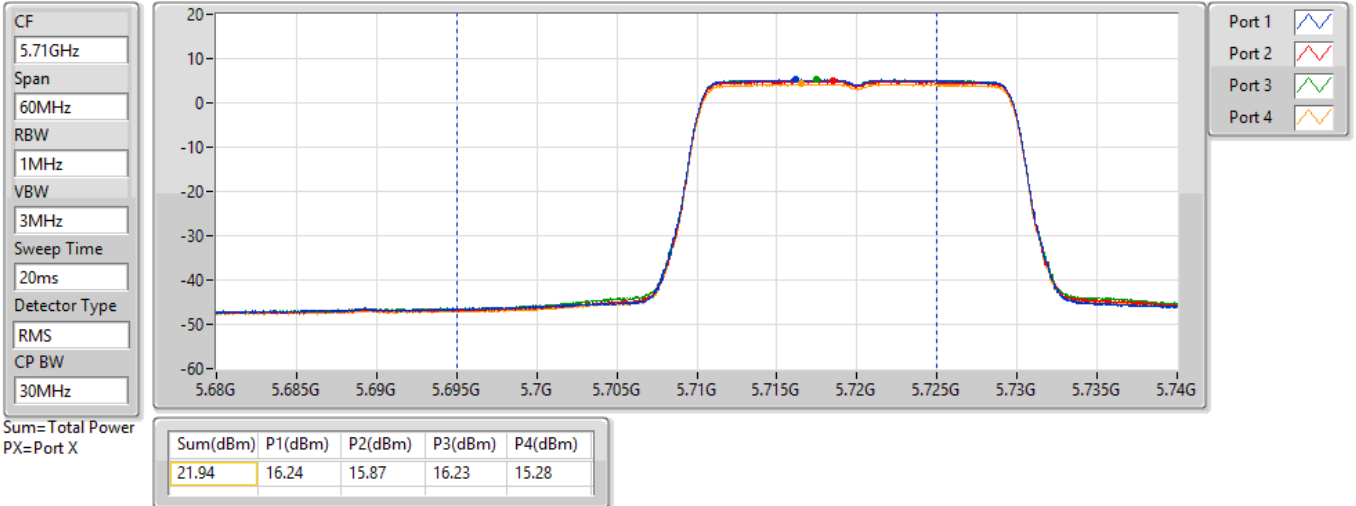
DG = Directional Gain; Port X = Port X output power

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

22/03/2022

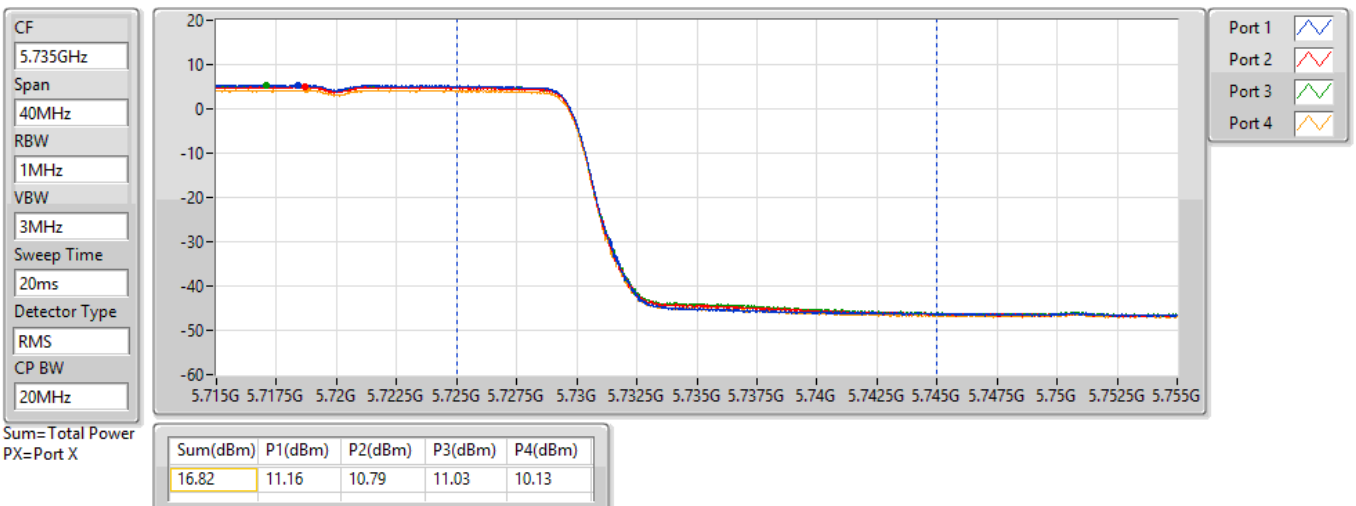


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

22/03/2022



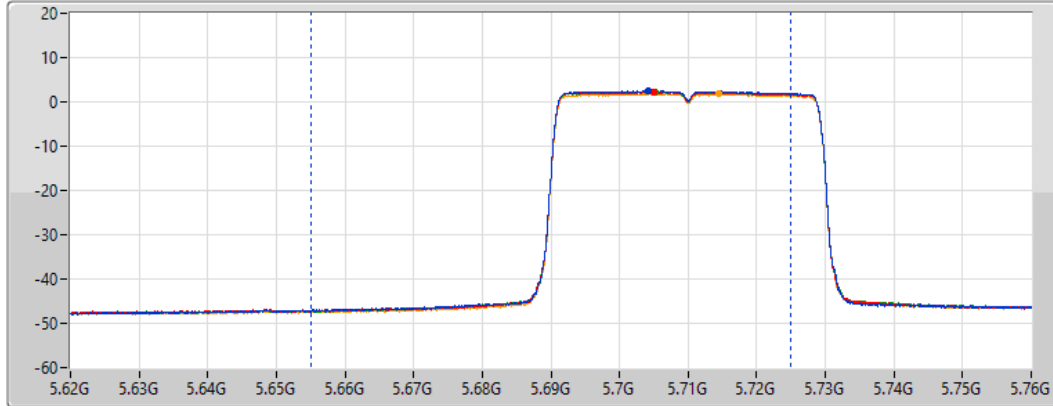
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

22/03/2022

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
70MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
22.90	17.11	16.93	16.95	16.52

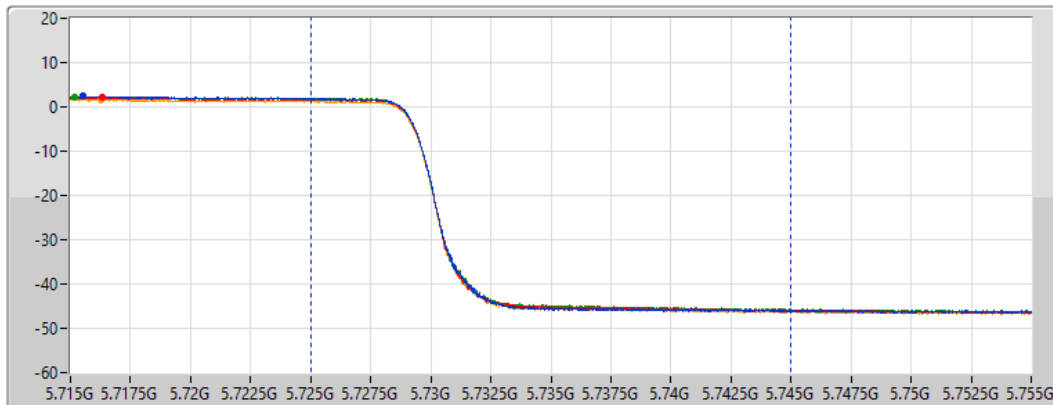
802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

22/03/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
13.19	7.34	7.18	7.36	6.78

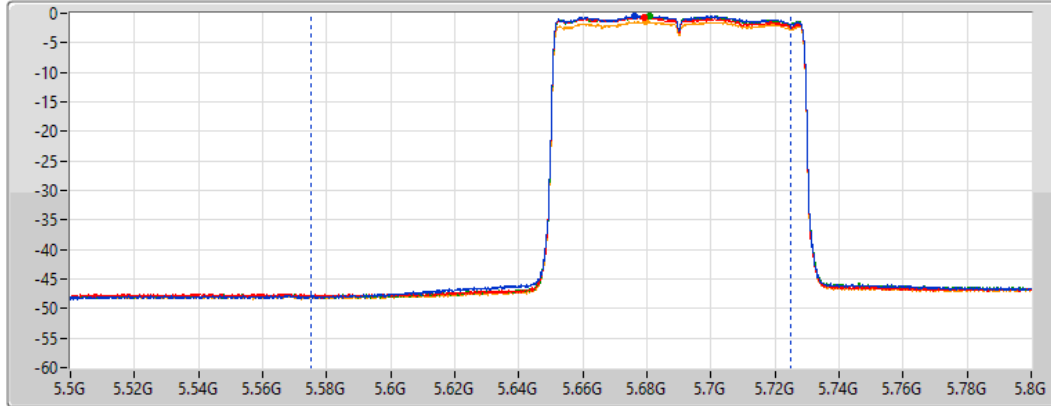
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

22/03/2022

CF
5.65GHz
Span
300MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
150MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.07	17.38	17.07	17.27	16.41

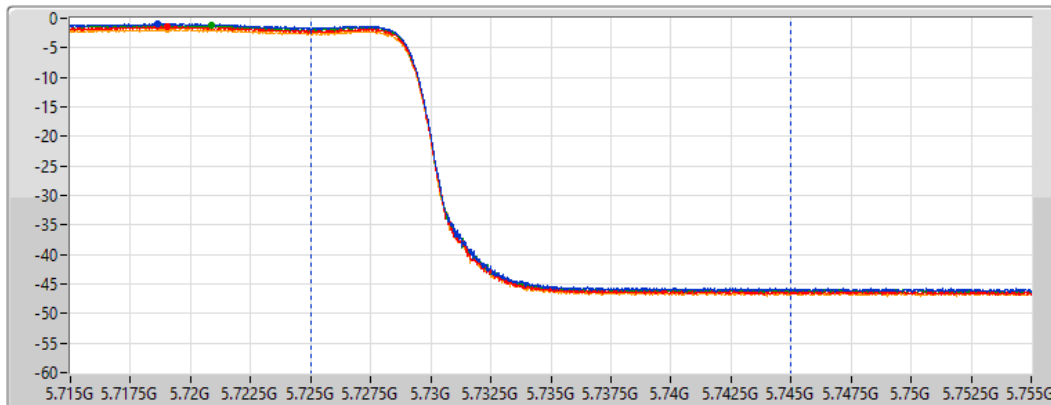
802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

22/03/2022

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2
Port 3
Port 4

Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
9.76	4.13	3.61	3.91	3.24



For UNII 2C~UNII 3:

Test Mode: beamforming 4T2S:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.93	0.24717
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.89	0.24491
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	23.89	0.24491
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	23.96	0.24889
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	29.93	0.98401
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	29.90	0.97724
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	29.86	0.96828

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	4.32	17.87	18.22	17.64	17.43	23.82	23.98
5580MHz	Pass	4.32	17.96	18.09	18.12	17.33	23.91	23.98
5700MHz	Pass	4.32	18.32	17.91	17.96	17.38	23.93	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	4.32	17.43	16.75	16.65	16.11	22.78	22.96
5720MHz Straddle 5.725-5.85GHz	Pass	4.76	12.30	11.57	11.55	11.03	17.66	30.00
5745MHz	Pass	4.76	24.56	24.02	23.70	23.26	29.93	30.00
5785MHz	Pass	4.76	24.57	23.81	23.63	23.20	29.85	30.00
5825MHz	Pass	4.76	24.48	23.80	23.33	23.76	29.88	30.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5510MHz	Pass	4.32	17.91	18.05	17.97	17.31	23.84	23.98
5550MHz	Pass	4.32	17.74	18.10	18.13	17.08	23.80	23.98
5670MHz	Pass	4.32	18.35	17.91	17.89	17.28	23.89	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	4.32	18.36	17.77	17.78	17.27	23.83	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	4.76	8.69	8.16	8.26	7.61	14.22	30.00
5755MHz	Pass	4.76	24.84	23.60	23.78	23.13	29.90	30.00
5795MHz	Pass	4.76	24.57	23.94	23.46	23.25	29.86	30.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5530MHz	Pass	4.32	18.10	17.85	17.93	17.38	23.84	23.98
5610MHz	Pass	4.32	18.17	17.93	17.99	17.33	23.89	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	4.32	18.18	17.85	17.71	17.30	23.79	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	4.76	5.10	4.62	4.62	4.10	10.64	30.00
5775MHz	Pass	4.76	24.59	23.60	23.95	23.09	29.86	30.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5570MHz	Pass	4.32	18.08	18.04	18.15	17.46	23.96	23.98

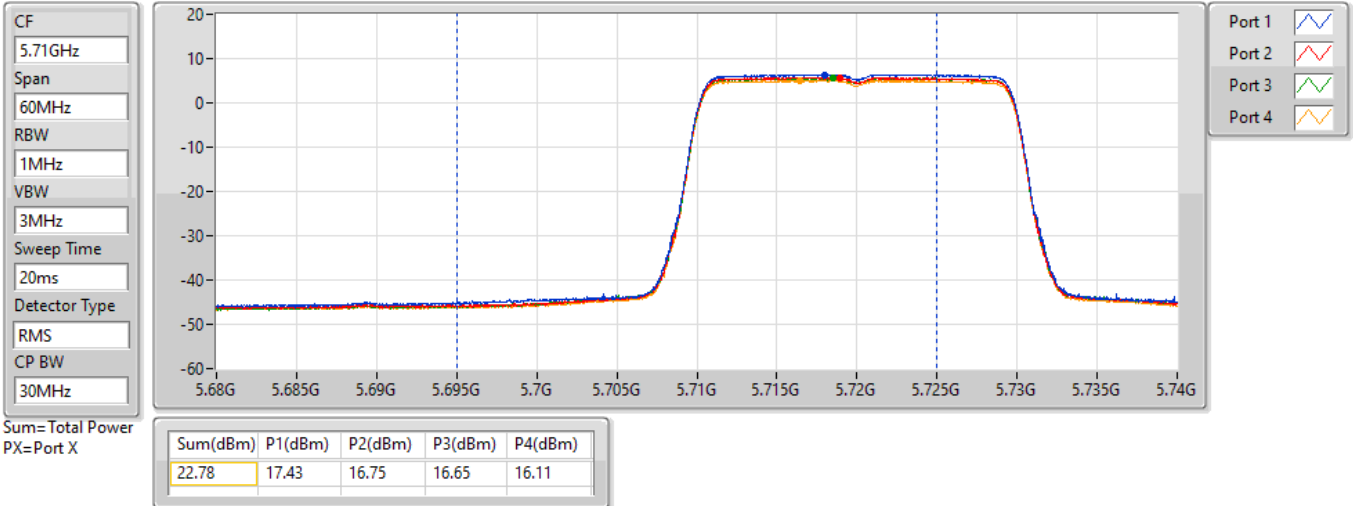
DG = Directional Gain; Port X = Port X output power

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

20/01/2022

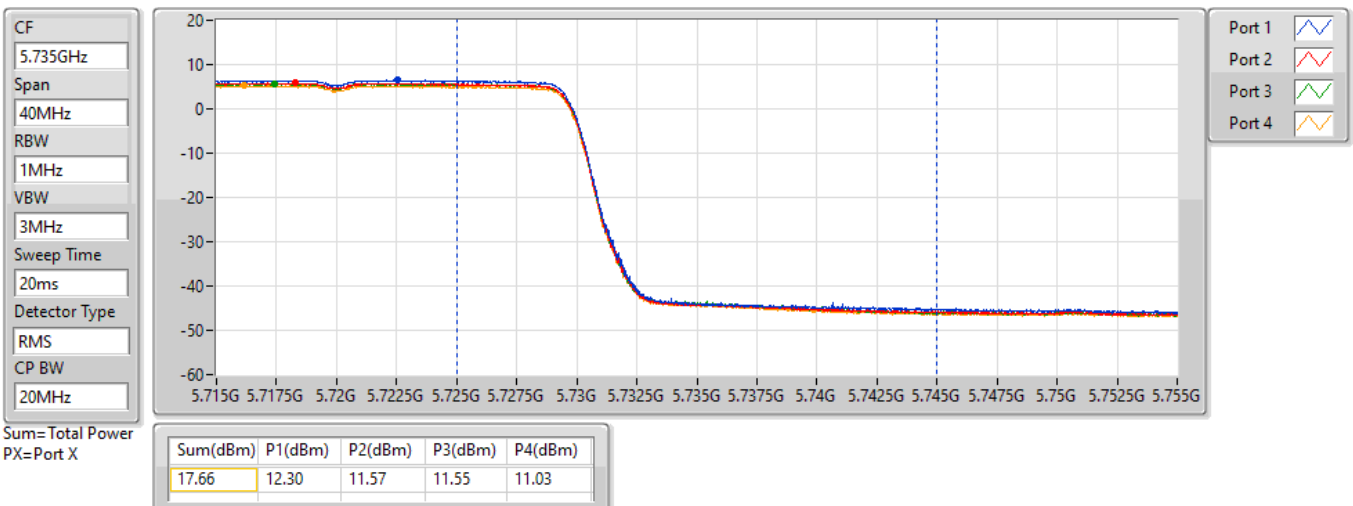


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

20/01/2022

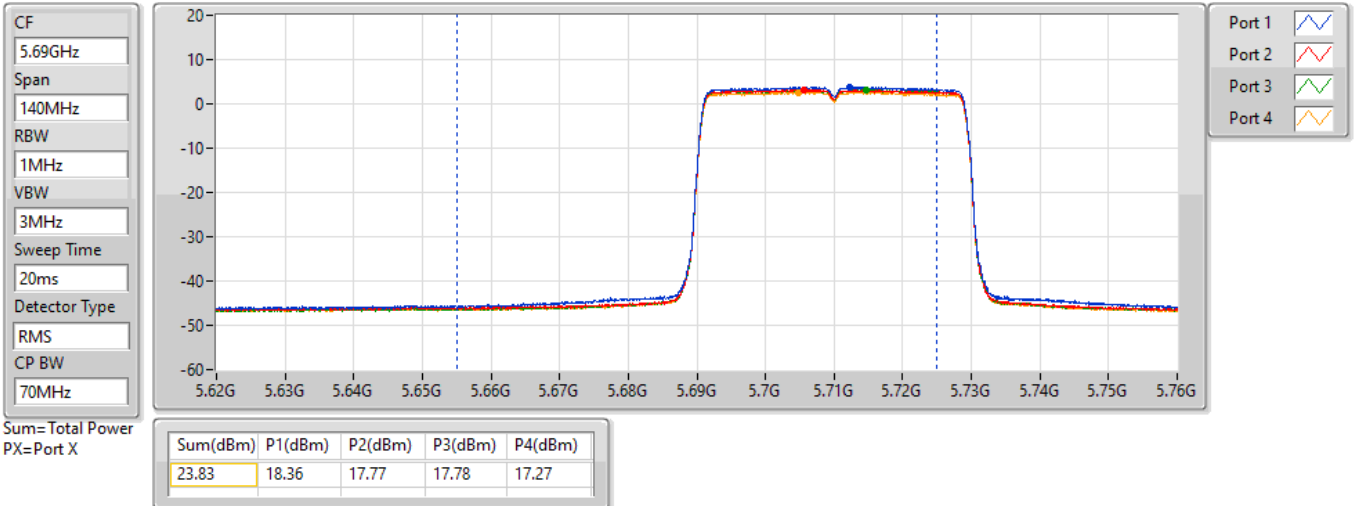


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TnomVnom

20/01/2022

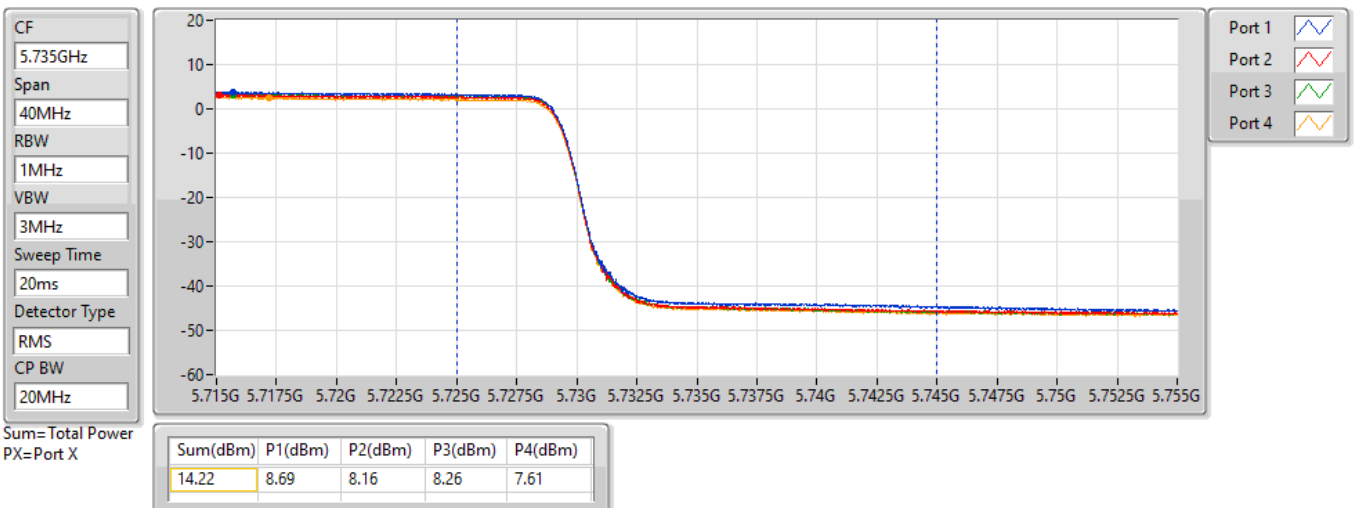


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

20/01/2022

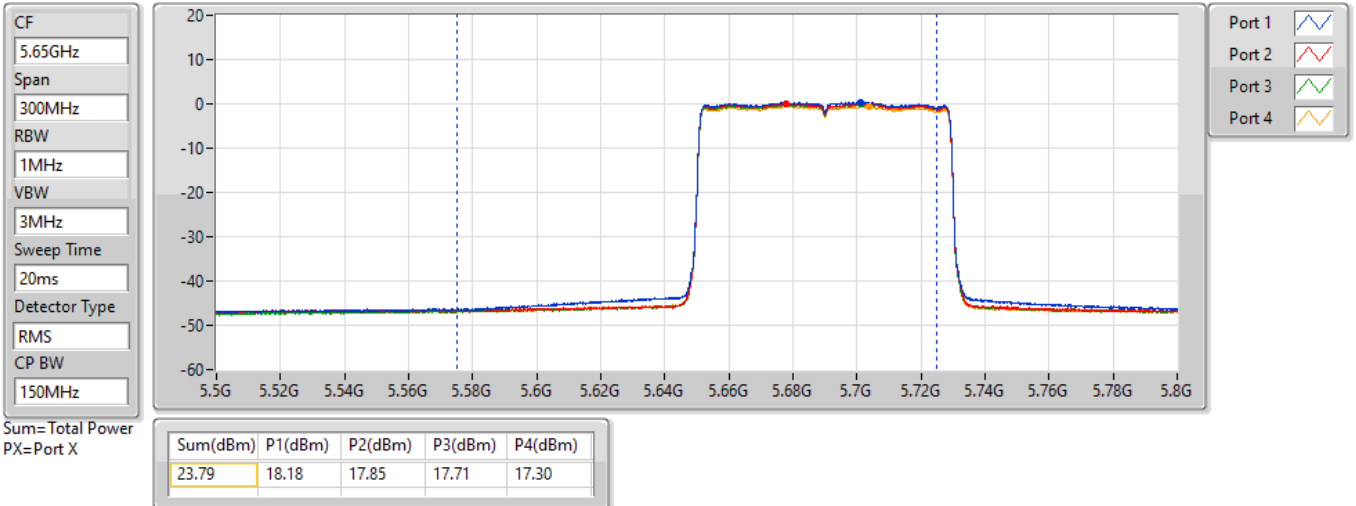


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz_TnomVnom

20/01/2022

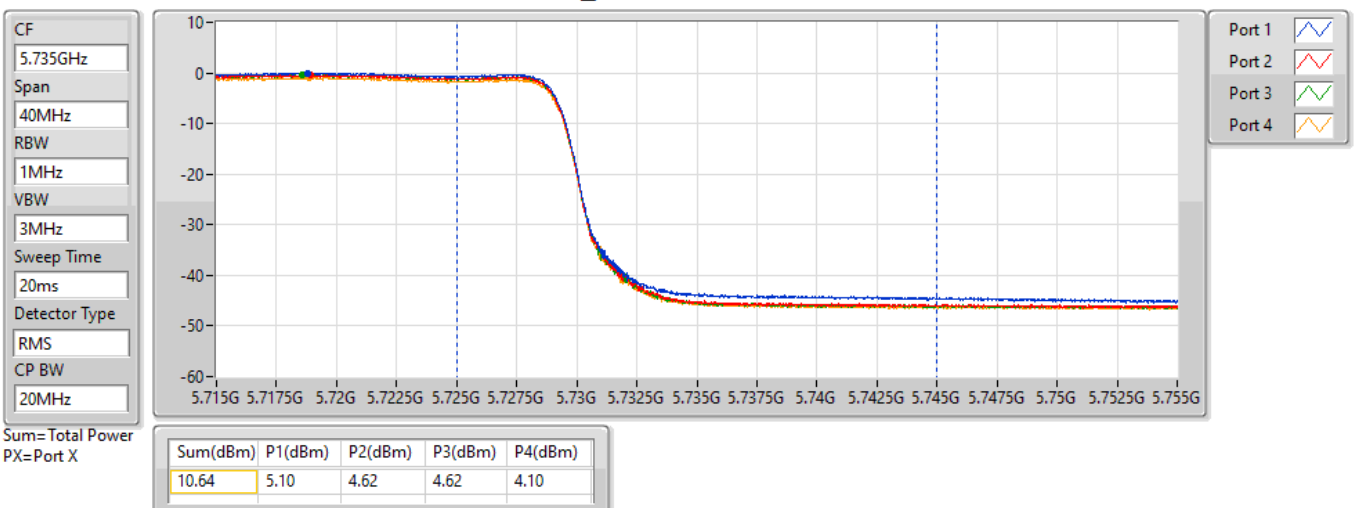


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

20/01/2022





Average Power

Appendix C.7

For UNII 4:

Test Mode: non-beamforming 4T1S:

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.895GHz	-	-	-	-
802.11a_Nss1.(6Mbps)_4TX	25.63	0.36559	30.71	1.17761



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1.(6Mbps)_4TX	-	-	-	-	-	-	-	-	-
5845MHz	Pass	5.08	19.21	19.77	19.59	19.66	25.58	30.66	36.00
5865MHz	Pass	5.08	20.15	19.78	19.11	19.33	25.63	30.71	36.00
5885MHz	Pass	5.08	20.00	19.48	18.92	19.43	25.49	30.57	36.00

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



For UNII 4:

Test Mode: beamforming 4T1S:

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.895GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	25.88	0.38726	33.59	2.28560
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	28.27	0.67143	35.98	3.96278
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	28.23	0.66527	35.94	3.92645
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	26.75	0.47315	34.46	2.79254

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5845MHz	Pass	7.71	20.28	20.03	19.60	19.47	25.88	Inf	33.59	36.00
5865MHz	Pass	7.71	19.98	19.81	19.27	19.58	25.69	Inf	33.40	36.00
5885MHz	Pass	7.71	17.19	17.55	16.81	16.84	23.13	Inf	30.84	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5835MHz	Pass	7.71	22.78	22.12	21.97	22.10	28.27	Inf	35.98	36.00
5875MHz	Pass	7.71	22.55	22.16	21.87	22.00	28.17	Inf	35.88	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5855MHz	Pass	7.71	22.66	22.48	21.57	22.03	28.23	Inf	35.94	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5815MHz	Pass	7.71	21.34	20.76	20.61	20.10	26.75	Inf	34.46	36.00

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



For UNII 4:

Test Mode: beamforming 4T2S:

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.725-5.895GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	28.67	0.73621	33.75	2.37137
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	30.76	1.19124	35.84	3.83707
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	30.90	1.23027	35.98	3.96278
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	26.54	0.45082	31.62	1.45211



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5845MHz	Pass	5.08	23.09	22.70	22.34	22.44	28.67	Inf	33.75	36.00
5865MHz	Pass	5.08	22.92	22.74	22.08	22.33	28.55	Inf	33.63	36.00
5885MHz	Pass	5.08	18.20	18.51	17.60	18.16	24.15	Inf	29.23	36.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5835MHz	Pass	5.08	25.14	24.83	24.37	24.59	30.76	Inf	35.84	36.00
5875MHz	Pass	5.08	25.16	24.74	24.36	24.64	30.76	Inf	35.84	36.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5855MHz	Pass	5.08	25.11	25.18	24.40	24.80	30.90	Inf	35.98	36.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5815MHz	Pass	5.08	21.06	20.63	20.23	20.08	26.54	Inf	31.62	36.00

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

For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T1S:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	16.97
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.90

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.83	12.38	12.01	15.14	17.00
5200MHz	Pass	5.83	14.16	13.88	16.97	17.00
5240MHz	Pass	5.83	11.33	11.24	14.26	17.00
5260MHz	Pass	5.56	7.88	7.74	10.76	11.00
5300MHz	Pass	5.56	7.95	7.67	10.77	11.00
5320MHz	Pass	5.56	8.02	7.80	10.90	11.00

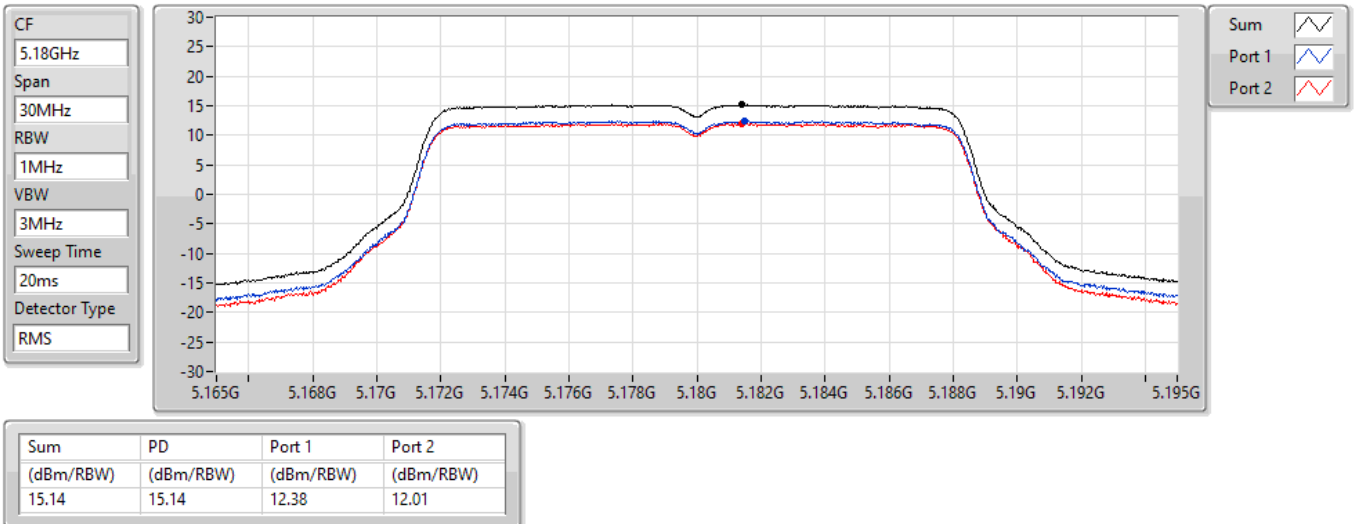
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11a_Nss1,(6Mbps)_2TX

PSD

5180MHz

20/01/2022

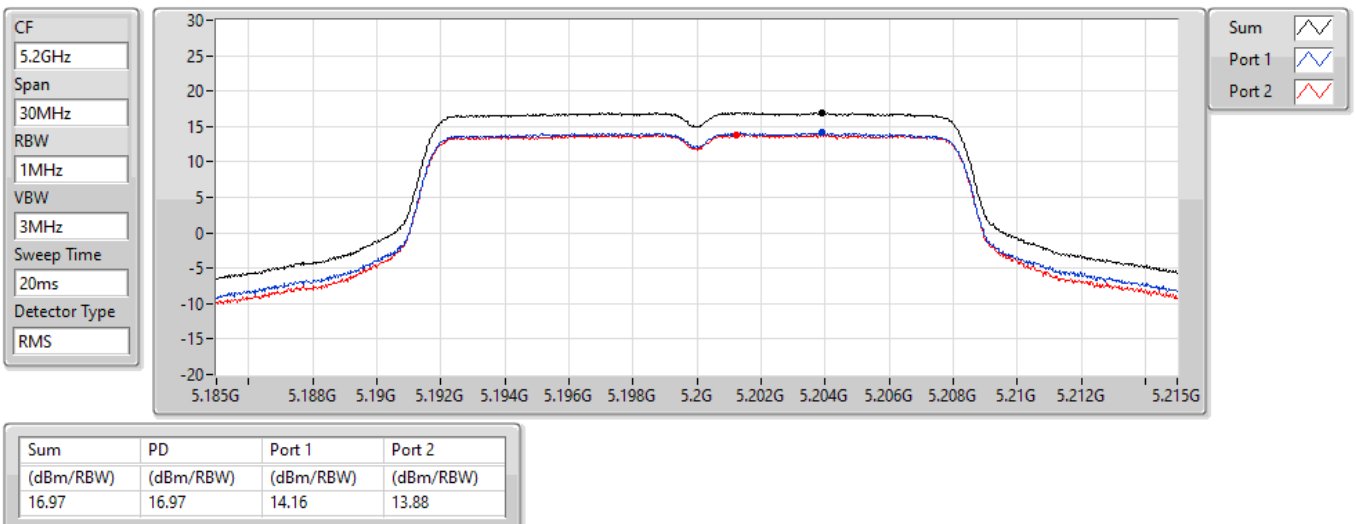


802.11a_Nss1,(6Mbps)_2TX

PSD

5200MHz

20/01/2022

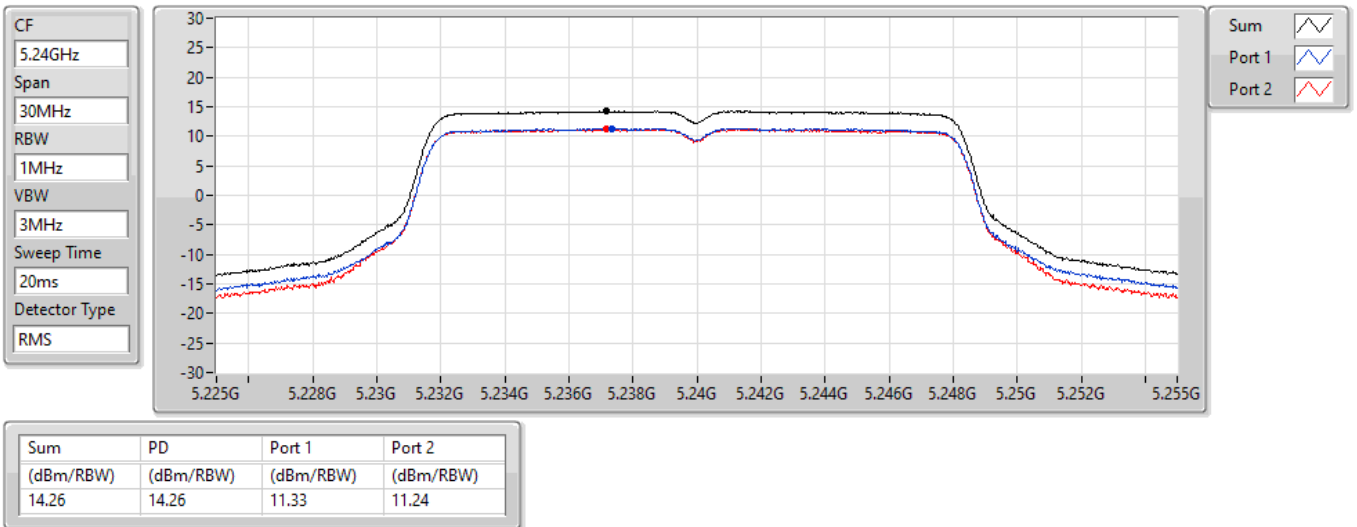


802.11a_Nss1,(6Mbps)_2TX

PSD

5240MHz

20/01/2022

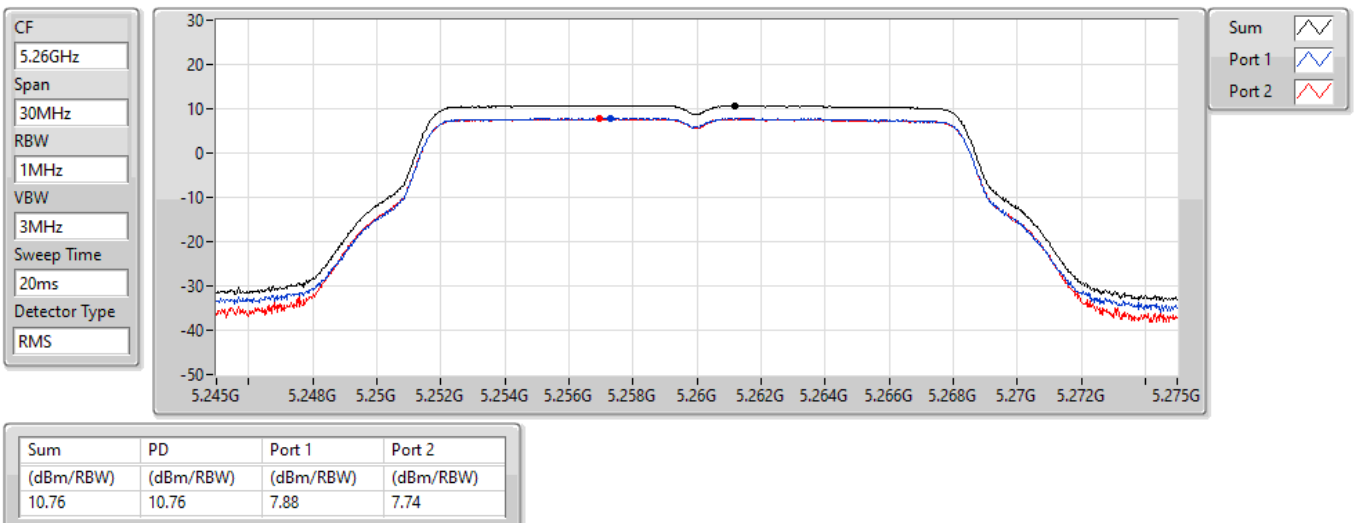


802.11a_Nss1,(6Mbps)_2TX

PSD

5260MHz

20/01/2022

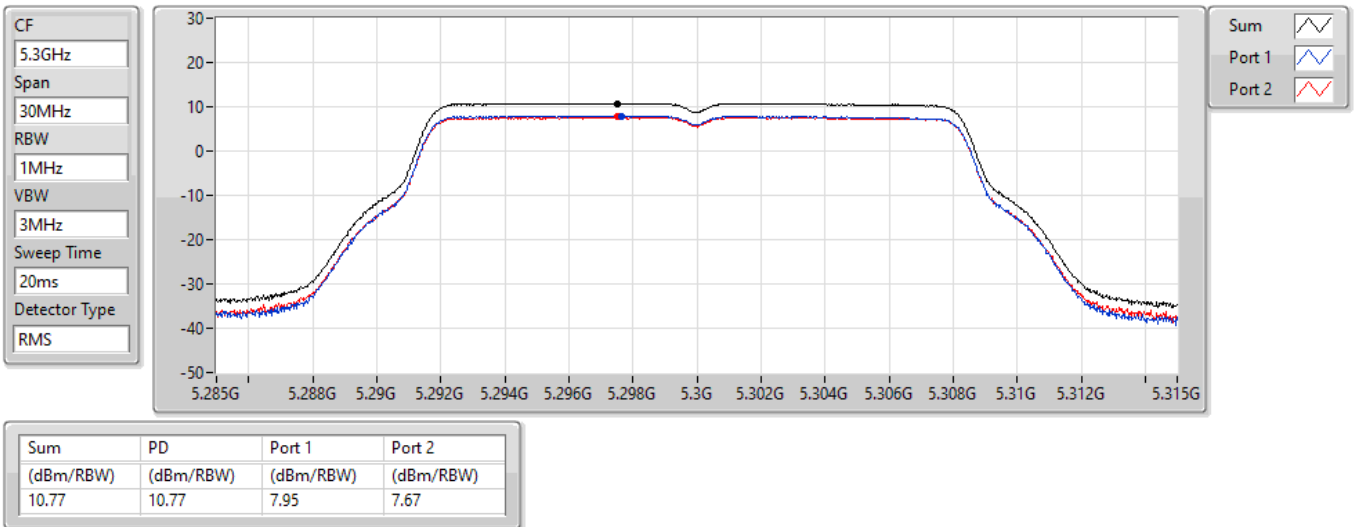


802.11a_Nss1,(6Mbps)_2TX

PSD

5300MHz

20/01/2022

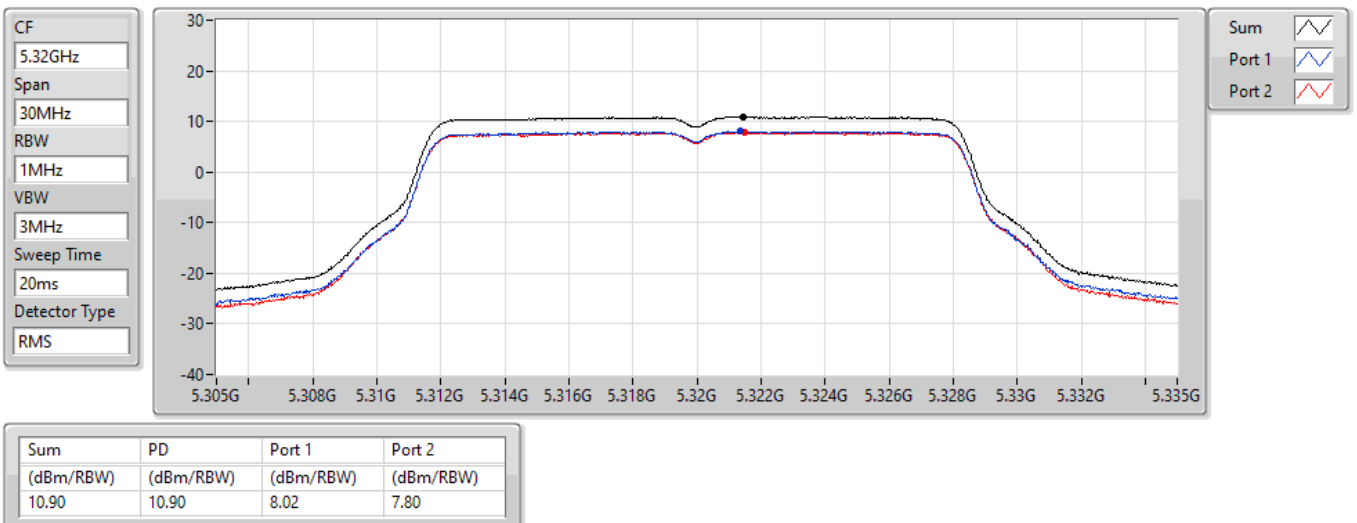


802.11a_Nss1,(6Mbps)_2TX

PSD

5320MHz

20/01/2022



For UNII 1~UNII 2A:

Test Mode: non-beamforming 2T2S:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW20_Nss2,(MCS0)_2TX	16.12
802.11ax HEW40_Nss2,(MCS0)_2TX	11.45
802.11ax HEW80_Nss2,(MCS0)_2TX	8.00
802.11ax HEW160_Nss2,(MCS0)_2TX	2.34
5.25-5.35GHz	-
802.11ax HEW20_Nss2,(MCS0)_2TX	10.31
802.11ax HEW40_Nss2,(MCS0)_2TX	7.67
802.11ax HEW80_Nss2,(MCS0)_2TX	4.87
802.11ax HEW160_Nss2,(MCS0)_2TX	2.13

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.82	12.07	11.73	14.84	17.00
5200MHz	Pass	2.82	13.47	12.94	16.12	17.00
5240MHz	Pass	2.82	11.40	11.15	14.23	17.00
5260MHz	Pass	2.80	7.32	7.32	10.25	11.00
5300MHz	Pass	2.80	7.47	6.91	10.14	11.00
5320MHz	Pass	2.80	7.49	7.25	10.31	11.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.82	7.80	8.07	10.88	17.00
5230MHz	Pass	2.82	8.51	8.45	11.45	17.00
5270MHz	Pass	2.80	4.62	4.80	7.67	11.00
5310MHz	Pass	2.80	4.57	4.80	7.67	11.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.82	4.94	5.09	8.00	17.00
5290MHz	Pass	2.80	1.91	1.90	4.87	11.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.82	-0.80	-0.47	2.34	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.80	-1.12	-0.63	2.13	11.00

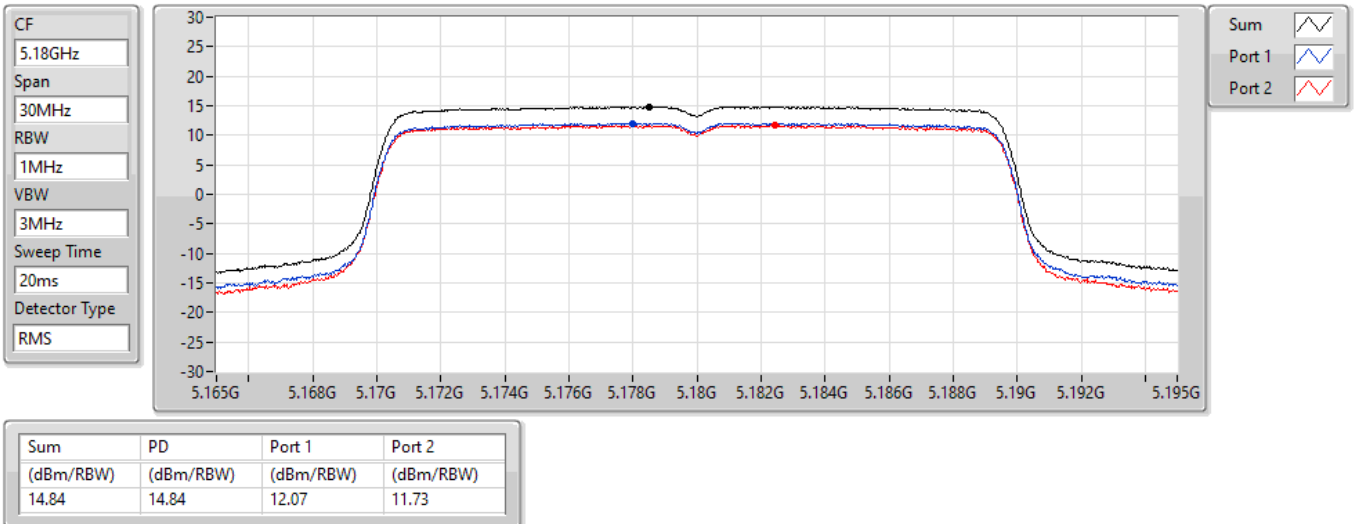
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5180MHz

20/01/2022

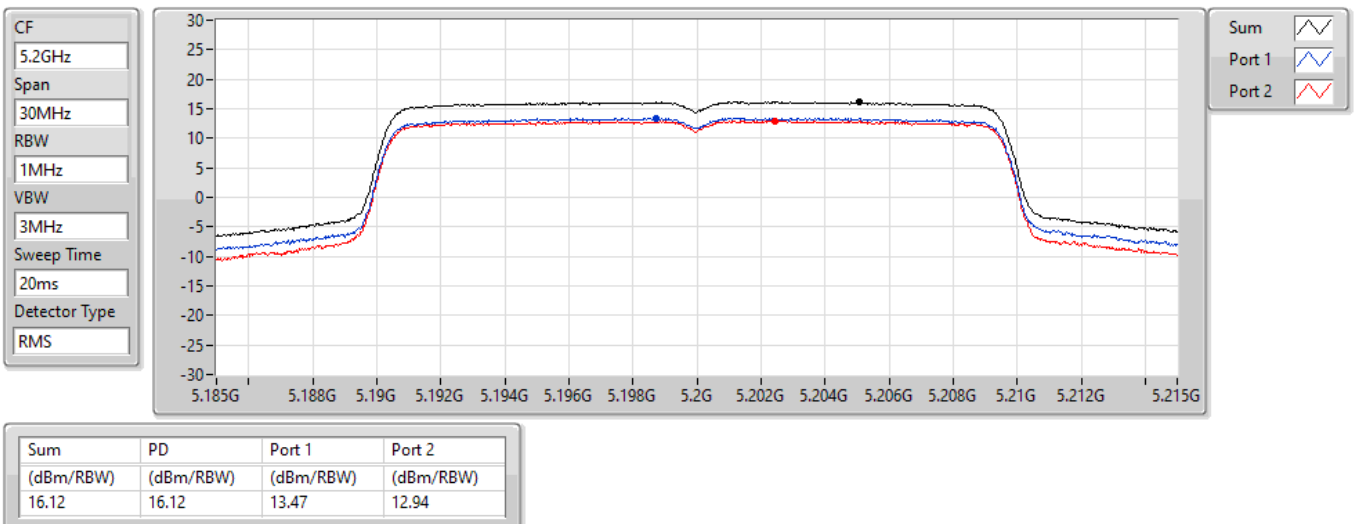


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5200MHz

20/01/2022

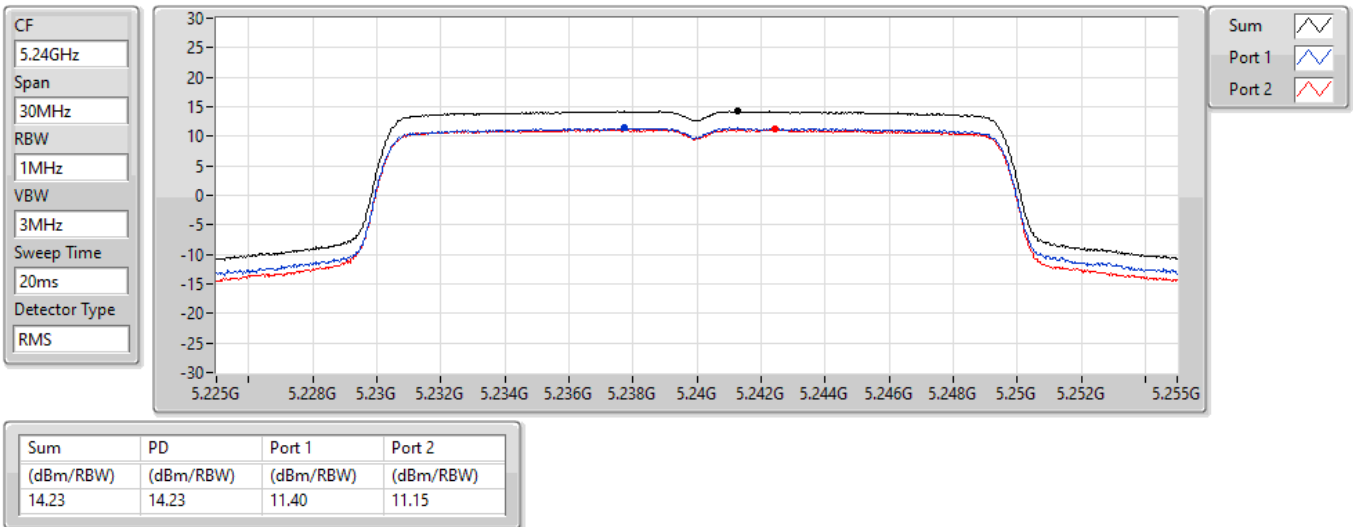


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5240MHz

20/01/2022

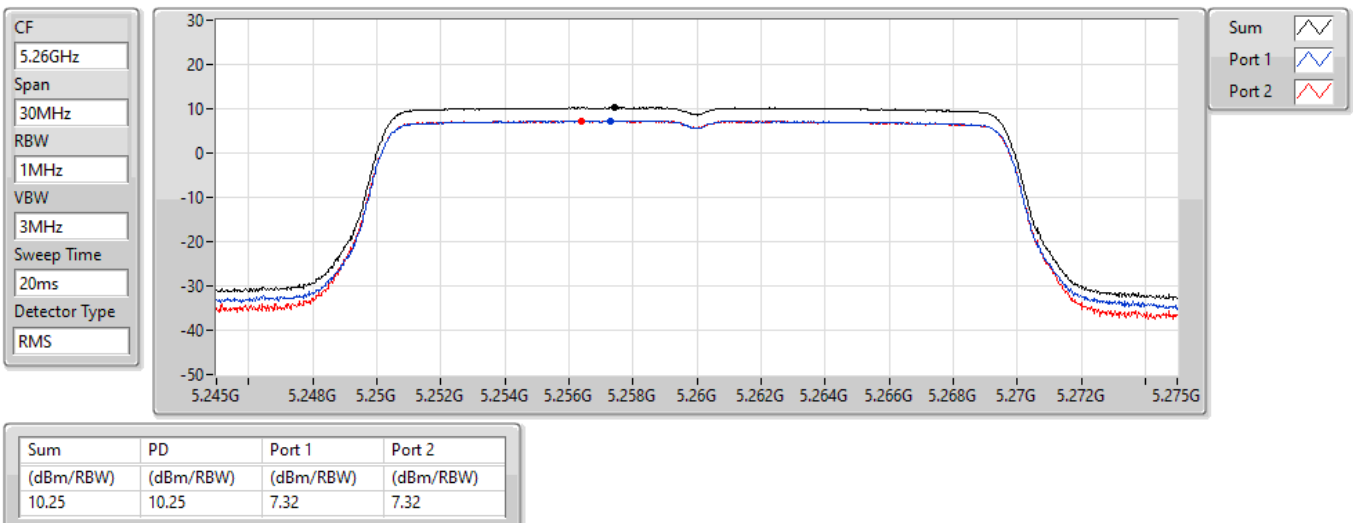


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5260MHz

20/01/2022

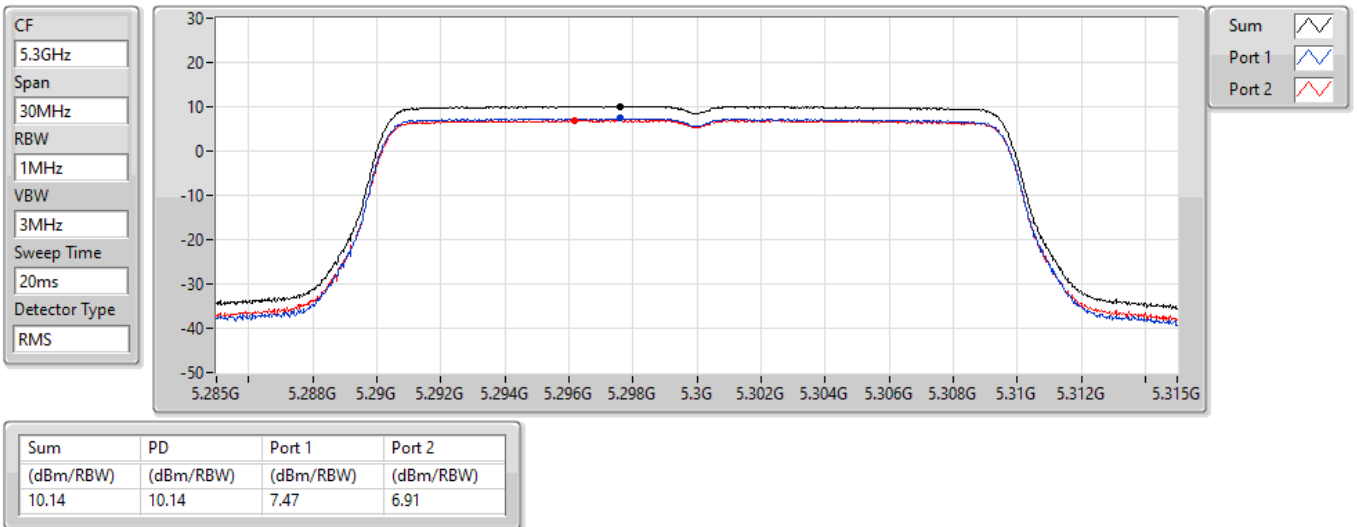


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5300MHz

20/01/2022

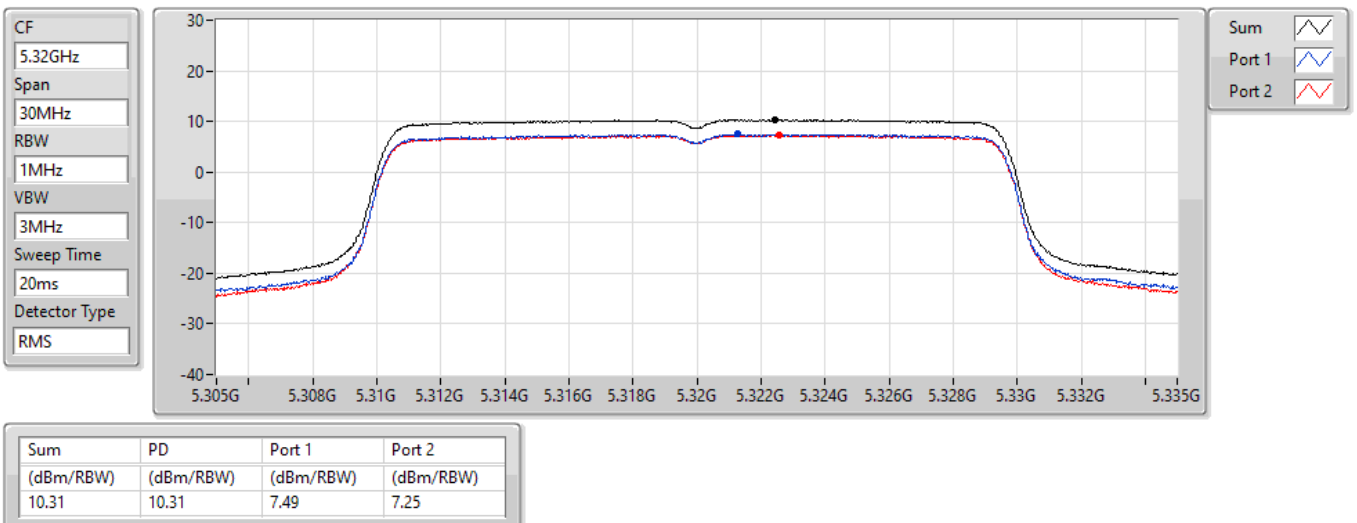


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5320MHz

20/01/2022

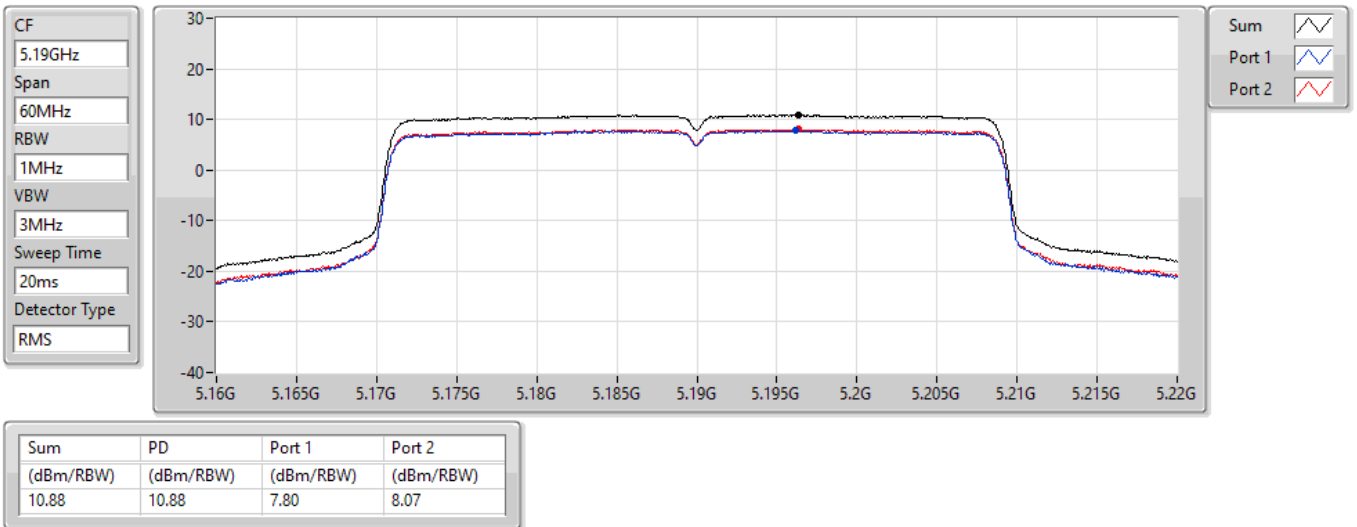


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5190MHz

20/01/2022

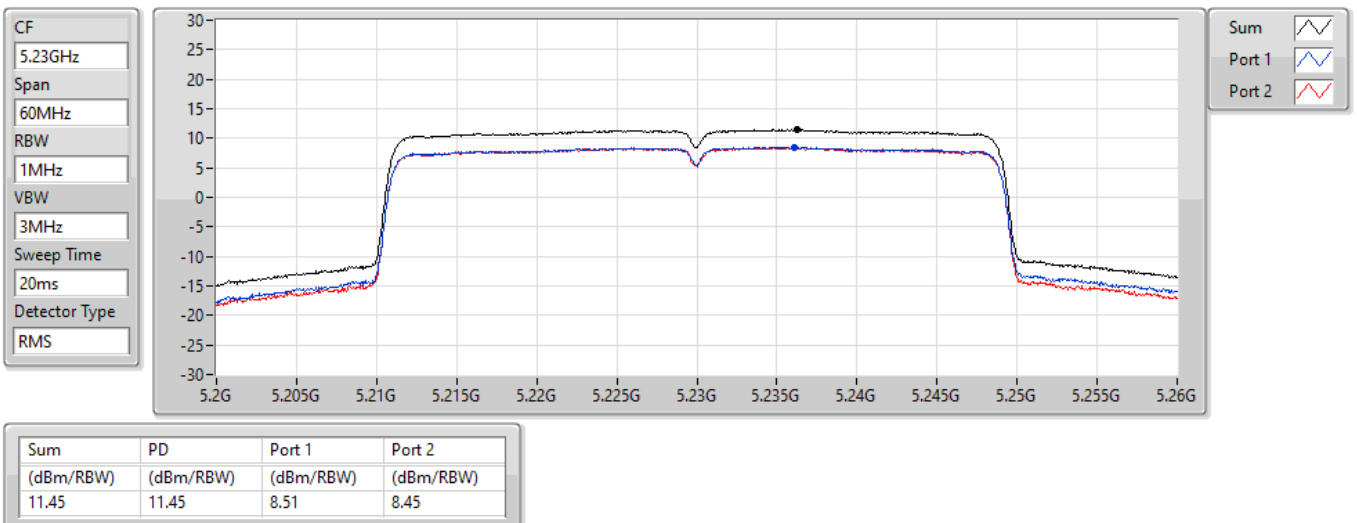


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5230MHz

20/01/2022

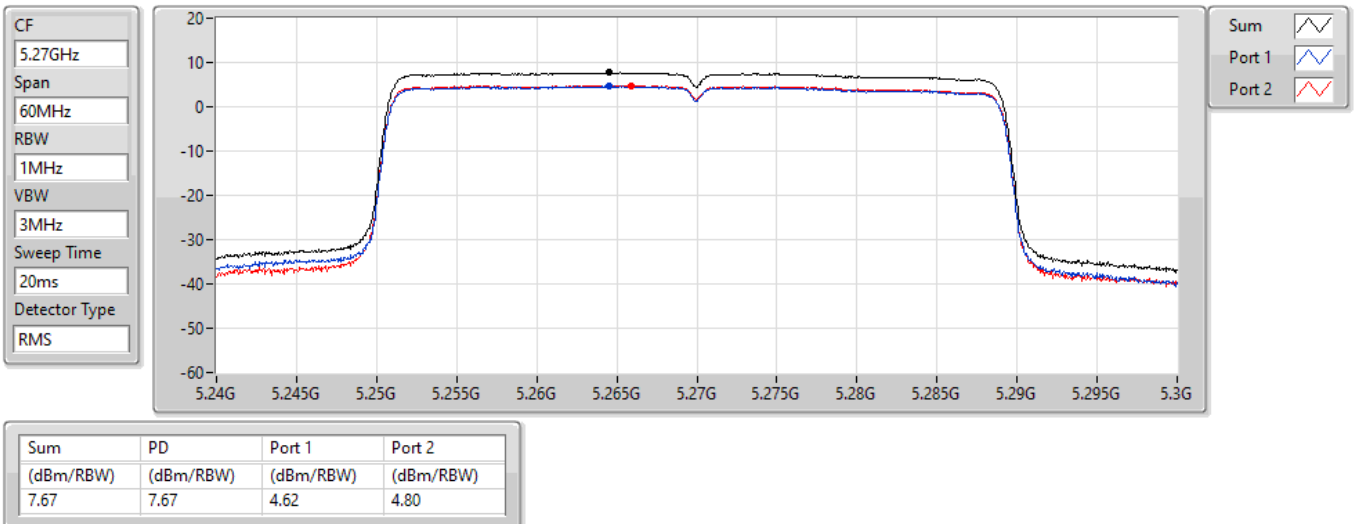


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5270MHz

20/01/2022

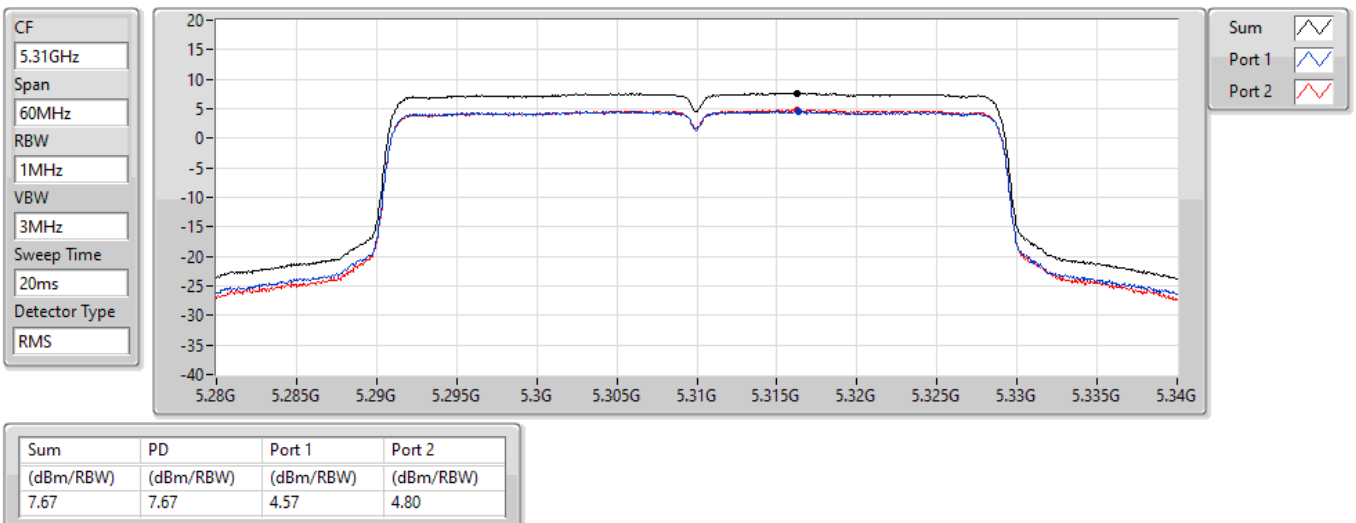


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5310MHz

20/01/2022

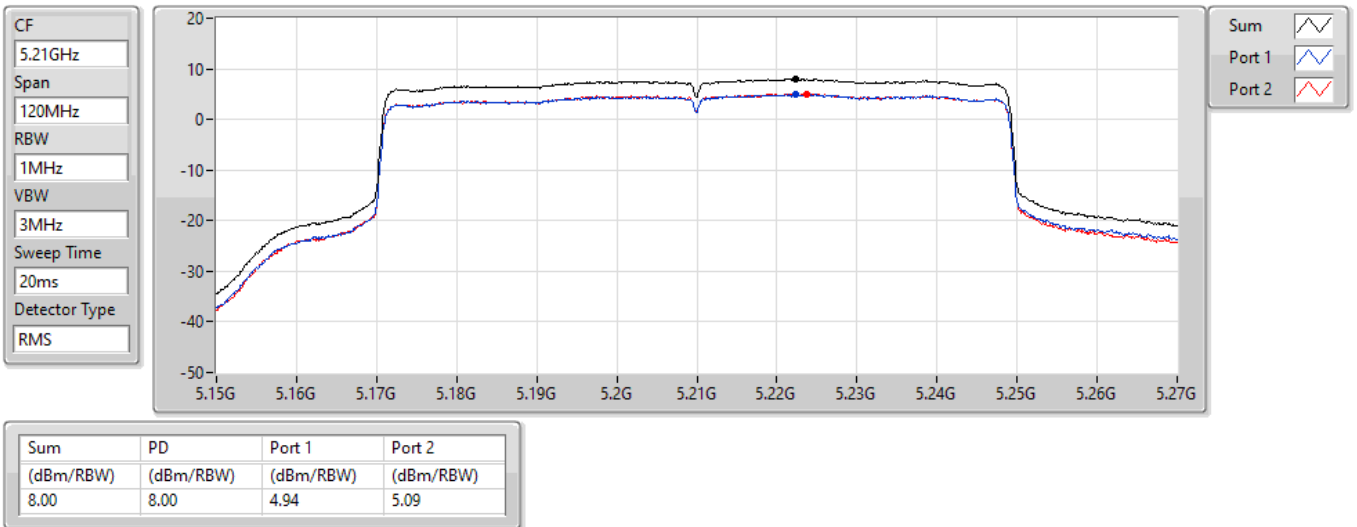


802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5210MHz

20/01/2022

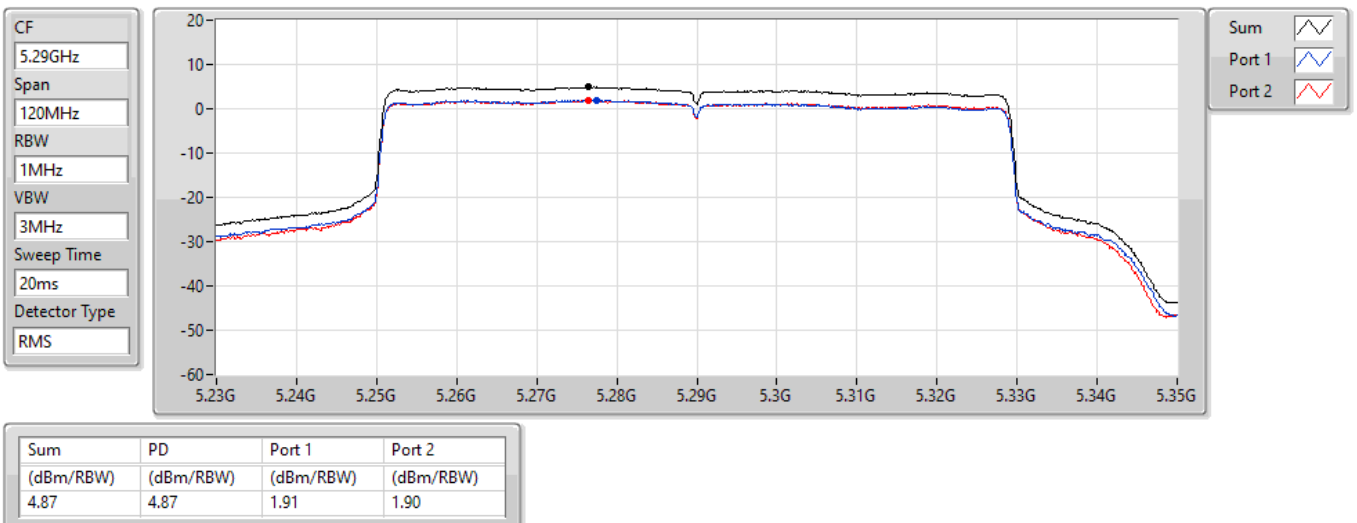


802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5290MHz

20/01/2022

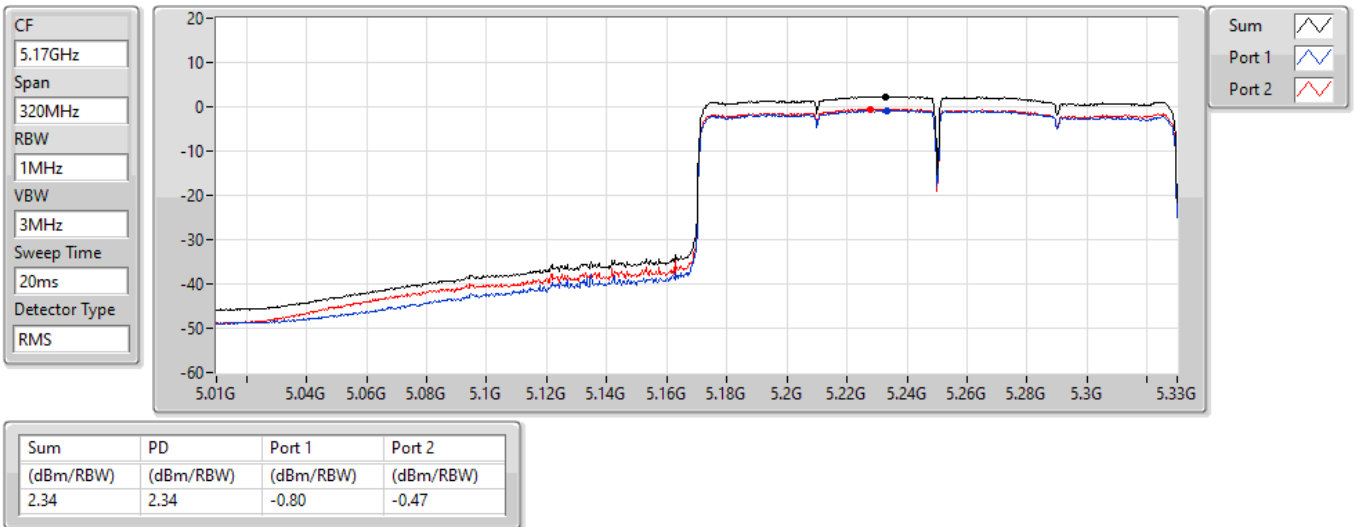


802.11ax HEW160_Nss2,(MCS0)_2TX

5250MHz Straddle 5.15-5.25GHz

PSD

20/01/2022

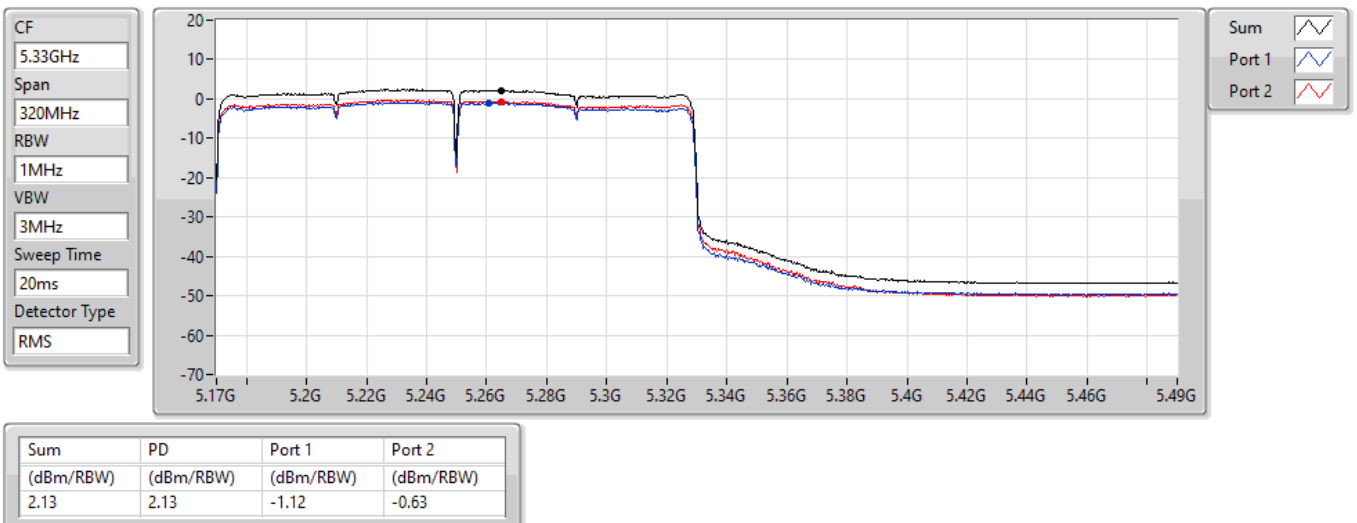


802.11ax HEW160_Nss2,(MCS0)_2TX

5250MHz Straddle 5.25-5.35GHz

PSD

20/01/2022



For UNII 1~UNII 2A:

Test Mode: beamforming 2T1S

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.08
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.55
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	7.15
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.97
5.25-5.35GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	10.41
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.79
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.96
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.73

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	5.83	11.49	11.57	14.49	17.00
5200MHz	Pass	5.83	13.31	12.91	16.08	17.00
5240MHz	Pass	5.83	11.38	11.29	14.29	17.00
5260MHz	Pass	5.56	7.37	7.43	10.31	11.00
5300MHz	Pass	5.56	7.60	7.25	10.41	11.00
5320MHz	Pass	5.56	7.37	7.33	10.32	11.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	5.83	7.16	7.50	10.32	17.00
5230MHz	Pass	5.83	8.61	8.56	11.55	17.00
5270MHz	Pass	5.56	4.76	4.89	7.79	11.00
5310MHz	Pass	5.56	4.56	4.65	7.57	11.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	5.83	4.07	4.49	7.15	17.00
5290MHz	Pass	5.56	2.06	1.86	4.96	11.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	5.83	-2.28	-1.71	0.97	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	5.56	-2.47	-2.03	0.73	11.00

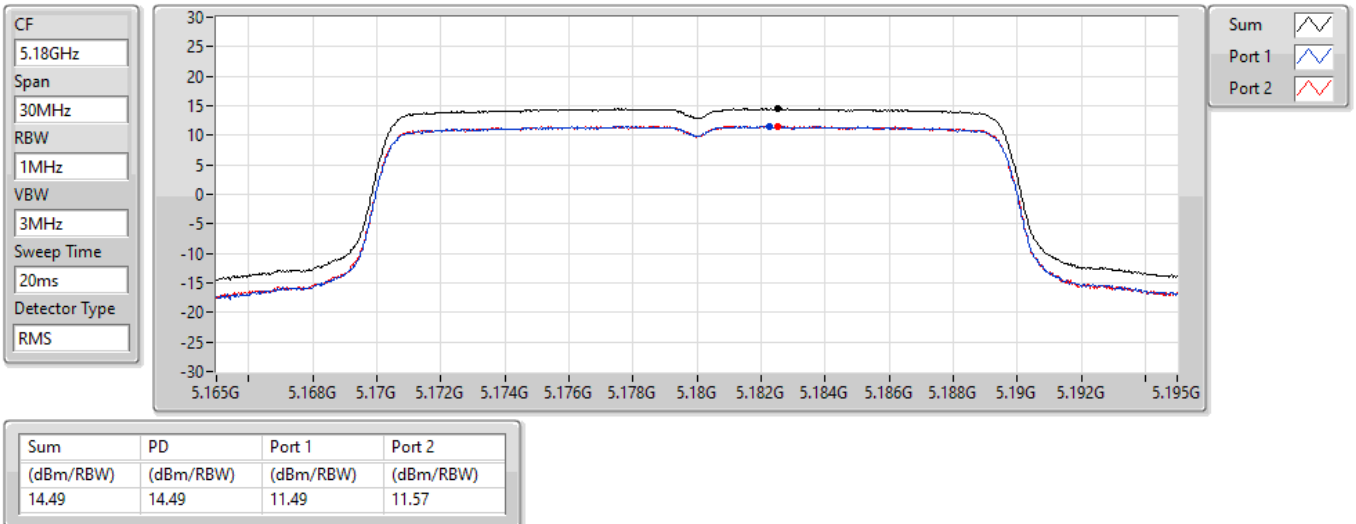
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5180MHz

20/01/2022

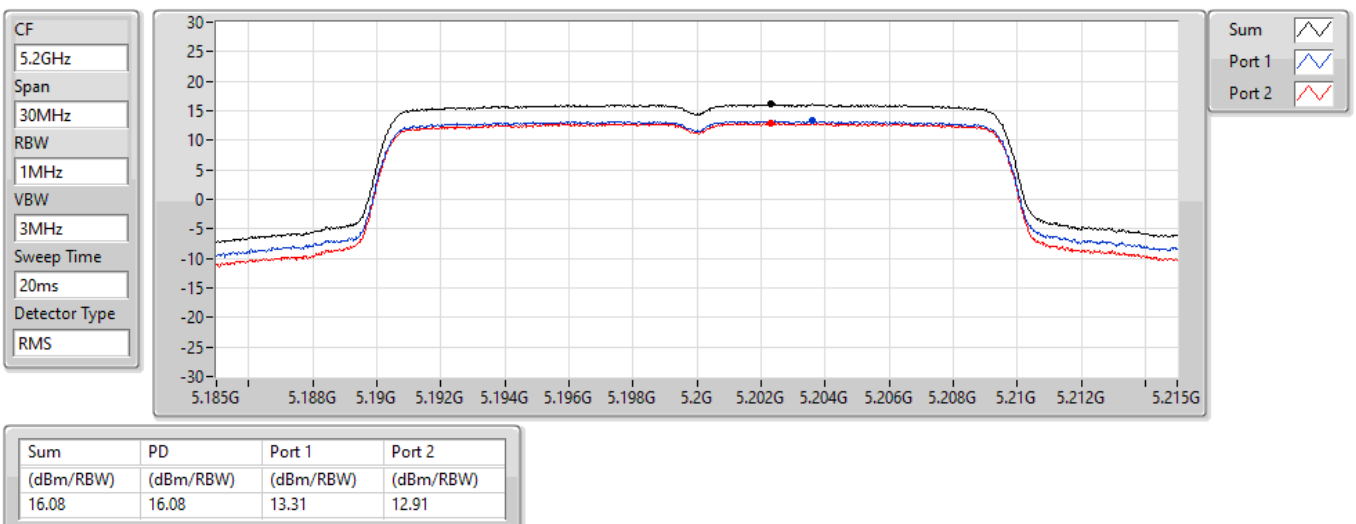


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5200MHz

20/01/2022

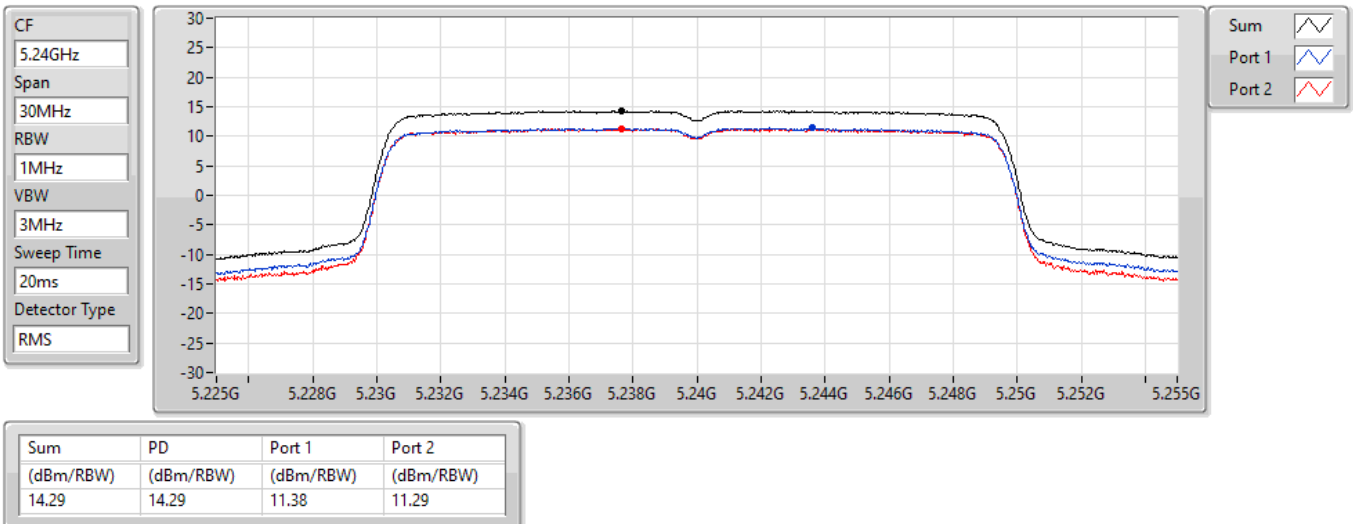


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5240MHz

20/01/2022

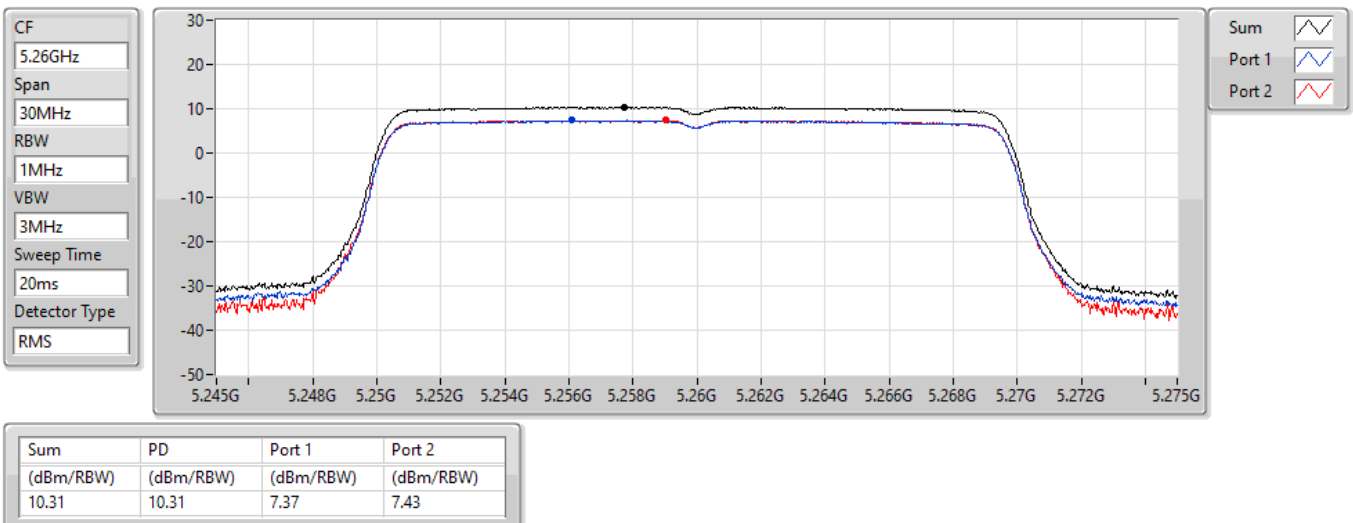


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5260MHz

20/01/2022

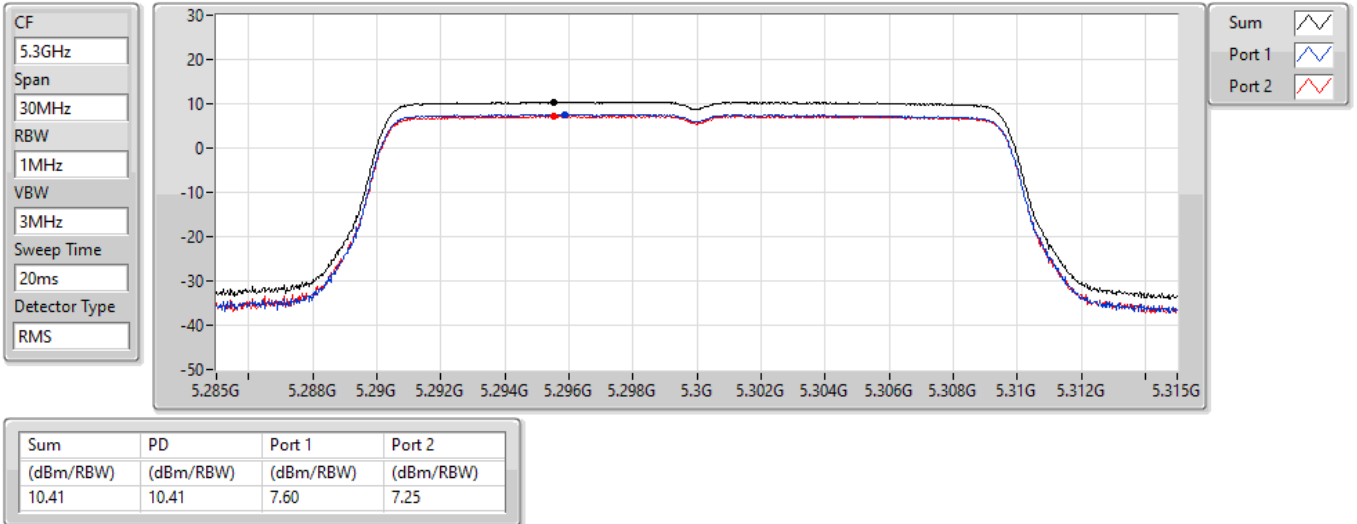


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5300MHz

20/01/2022

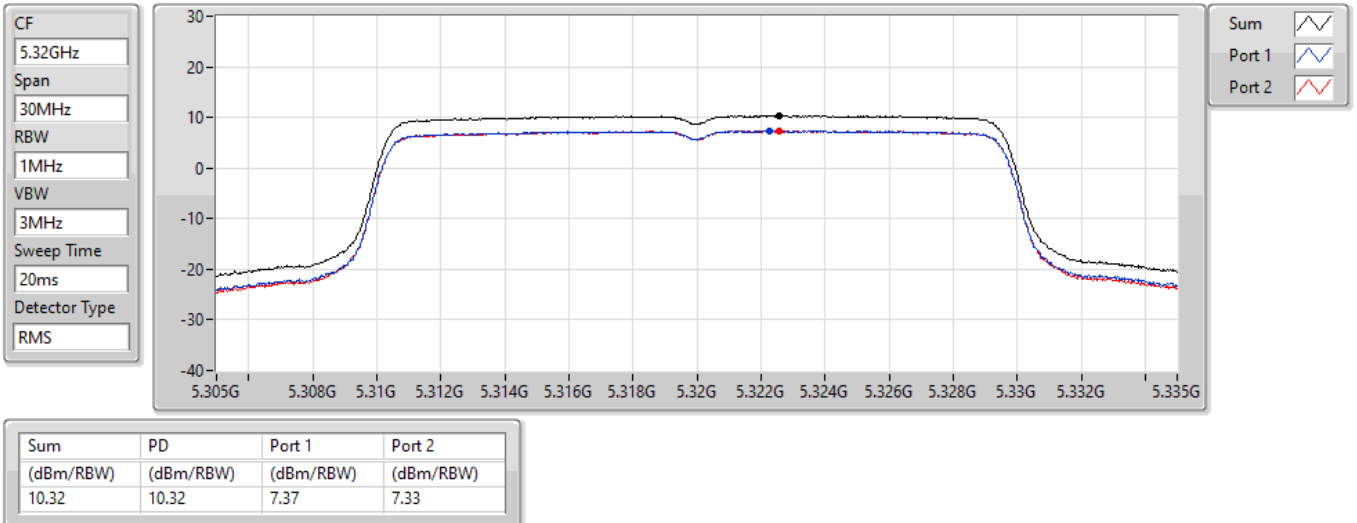


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

5320MHz

20/01/2022

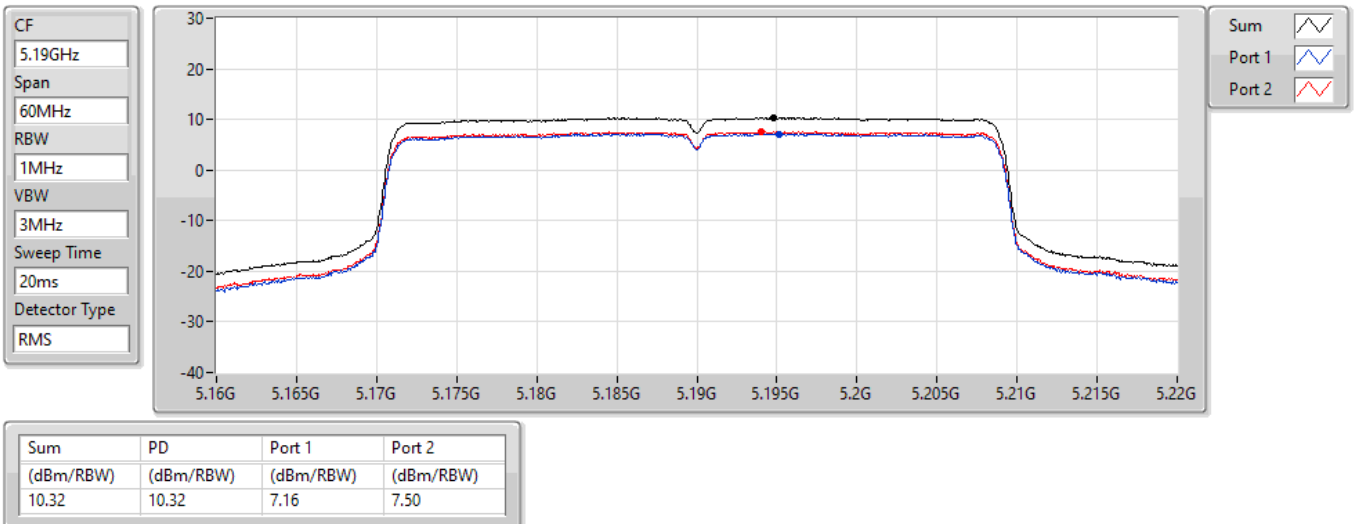


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5190MHz

20/01/2022

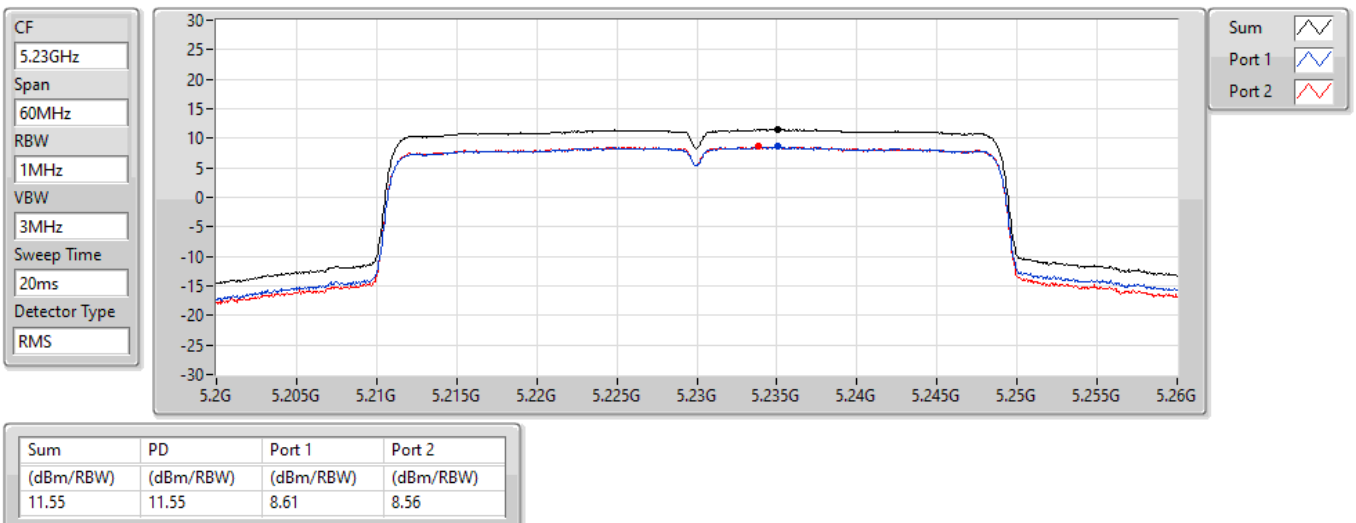


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5230MHz

20/01/2022

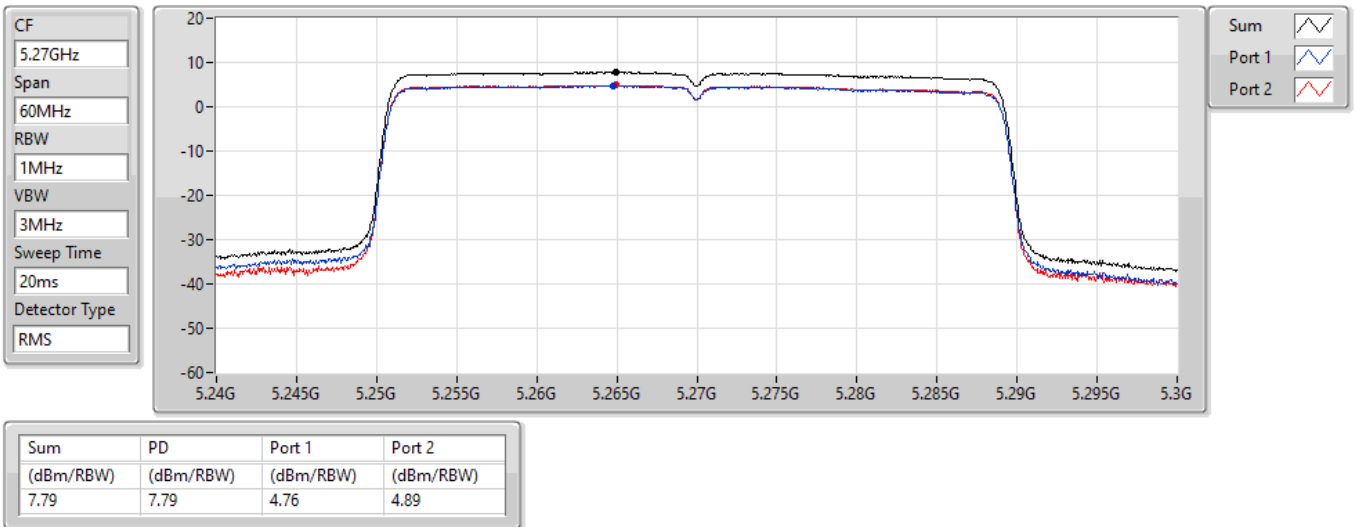


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5270MHz

20/01/2022

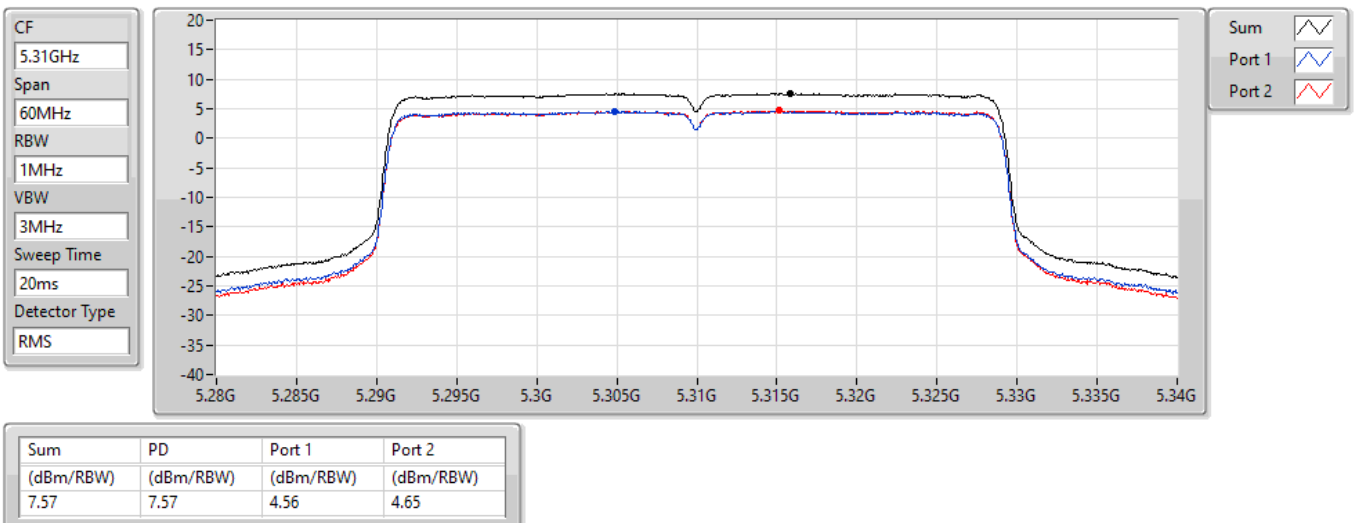


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

5310MHz

20/01/2022

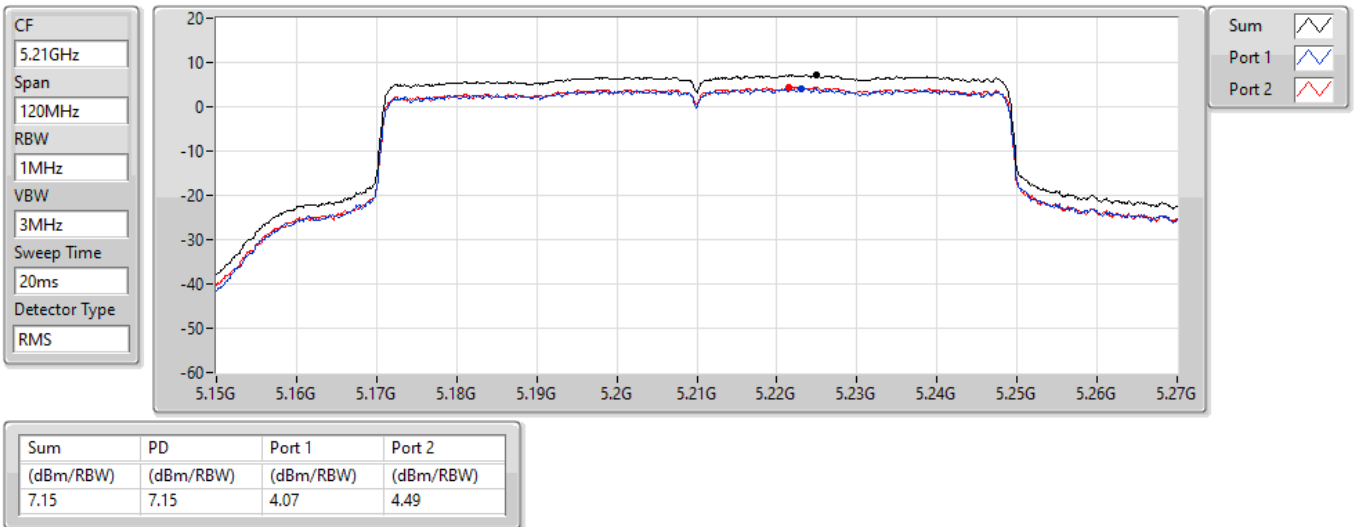


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

PSD

5210MHz

25/01/2022

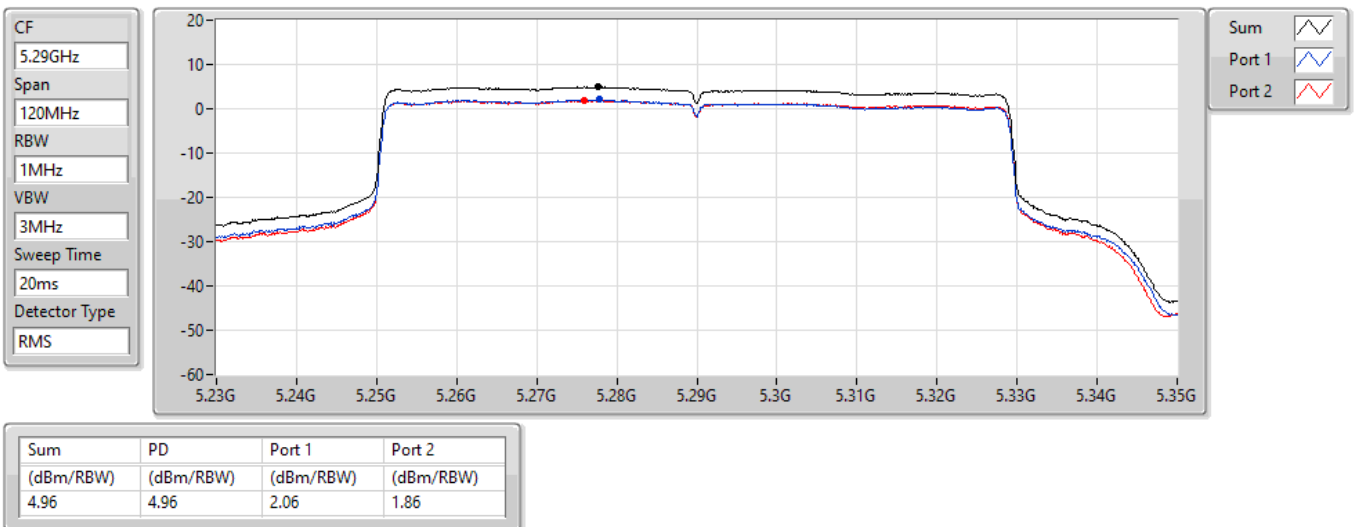


802.11ax HEW80-BF_Nss1,(MCS0)_2TX

PSD

5290MHz

20/01/2022

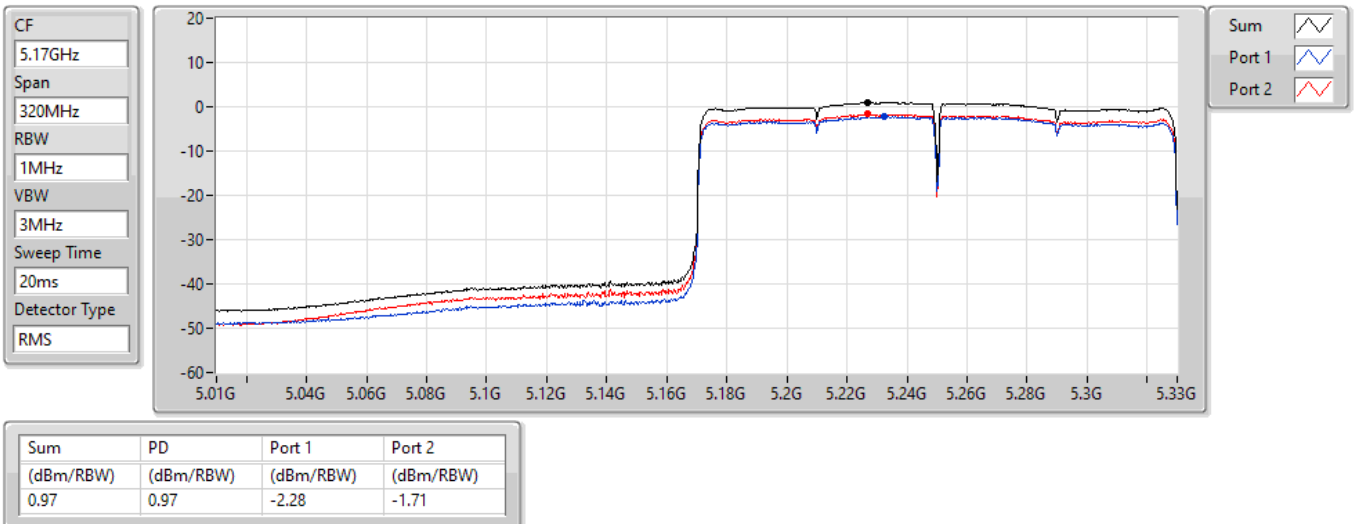


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5250MHz Straddle 5.15-5.25GHz

PSD

20/01/2022

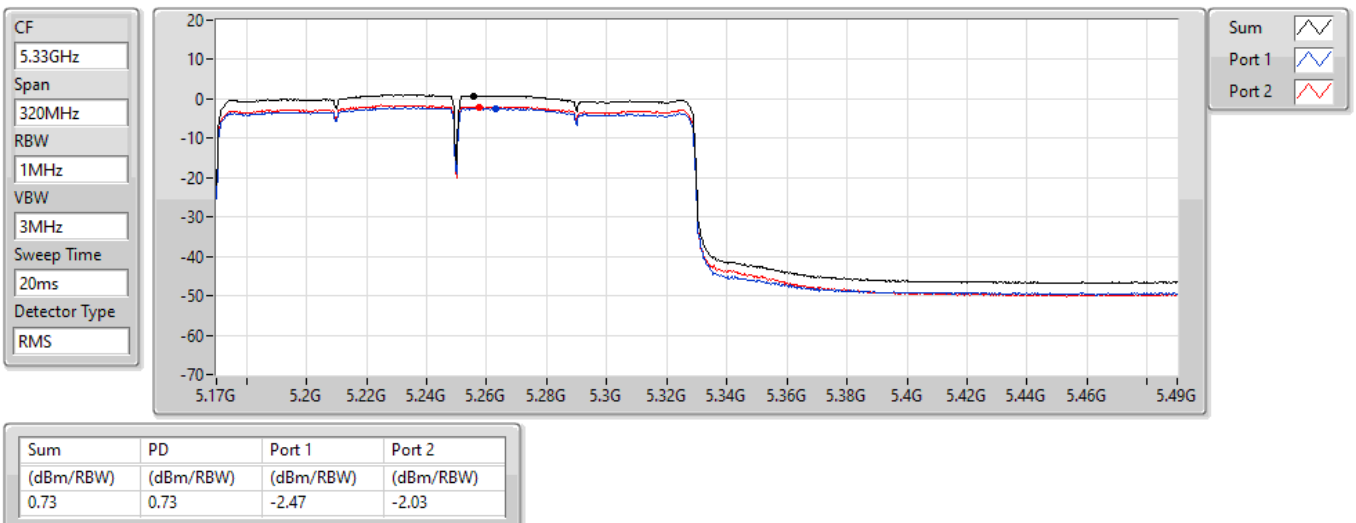


802.11ax HEW160-BF_Nss1,(MCS0)_2TX

5250MHz Straddle 5.25-5.35GHz

PSD

20/01/2022



For UNII 2C~UNII 3:

Test Mode: non-beamforming 4T1S:

Summary

Mode	PD (dBm/RBW)
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_4TX	10.08
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.32

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	6.86	4.02	4.43	4.36	3.62	10.05	10.14
5580MHz	Pass	6.86	3.98	4.16	4.31	3.64	9.98	10.14
5700MHz	Pass	6.86	4.42	4.02	4.45	3.47	10.07	10.14
5720MHz Straddle 5.47-5.725GHz	Pass	6.86	4.37	3.99	4.46	3.48	10.08	10.14
5720MHz Straddle 5.725-5.85GHz	Pass	7.11	2.70	2.35	2.53	1.67	8.29	28.89
5745MHz	Pass	7.11	10.06	9.50	9.35	8.54	15.32	28.89
5785MHz	Pass	7.11	9.94	9.22	9.04	8.63	15.18	28.89
5825MHz	Pass	7.11	10.00	9.31	8.87	9.20	15.29	28.89

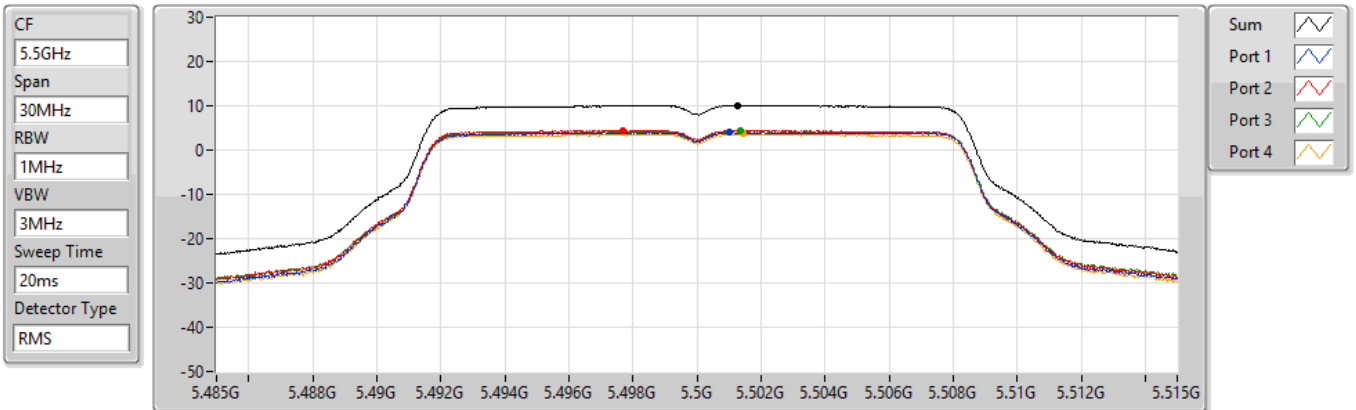
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5500MHz

22/03/2022

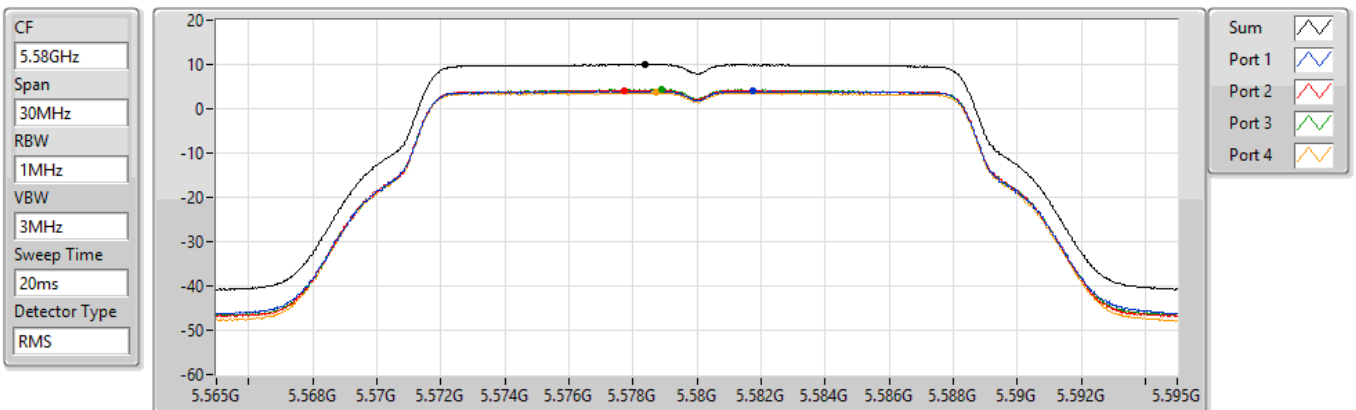


802.11a_Nss1,(6Mbps)_4TX

PSD

5580MHz

22/03/2022

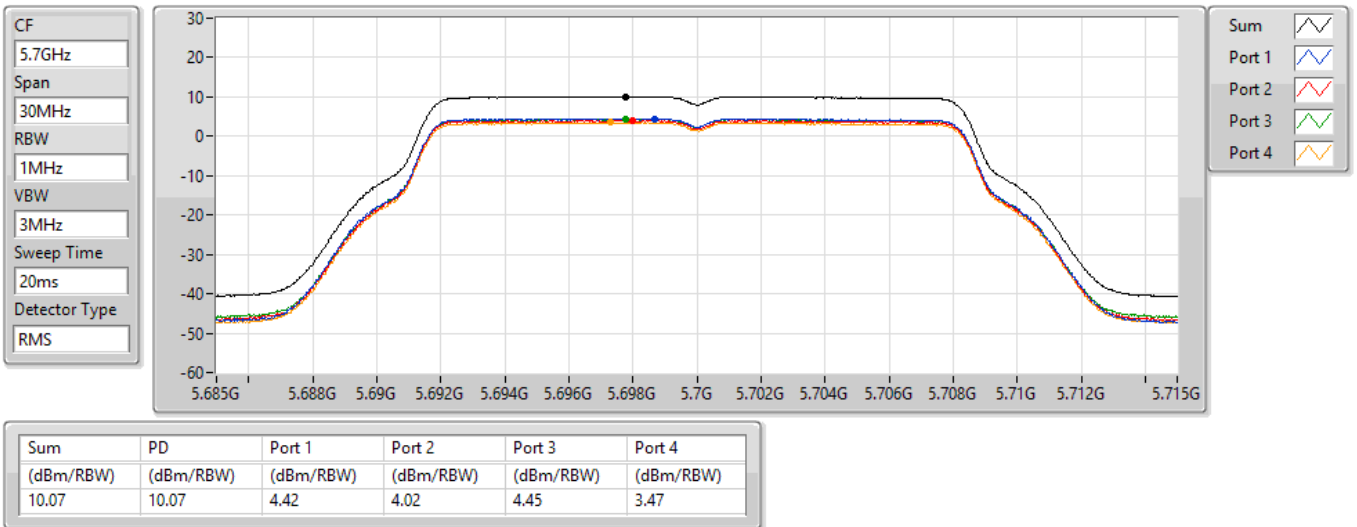


802.11a_Nss1,(6Mbps)_4TX

PSD

5700MHz

22/03/2022

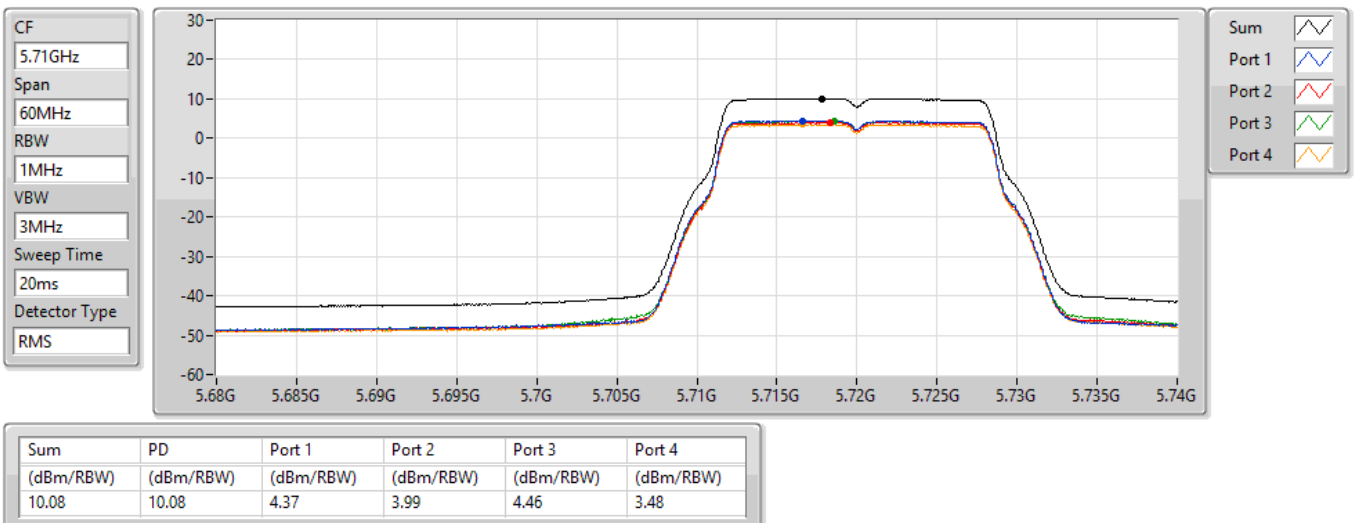


802.11a_Nss1,(6Mbps)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

22/03/2022

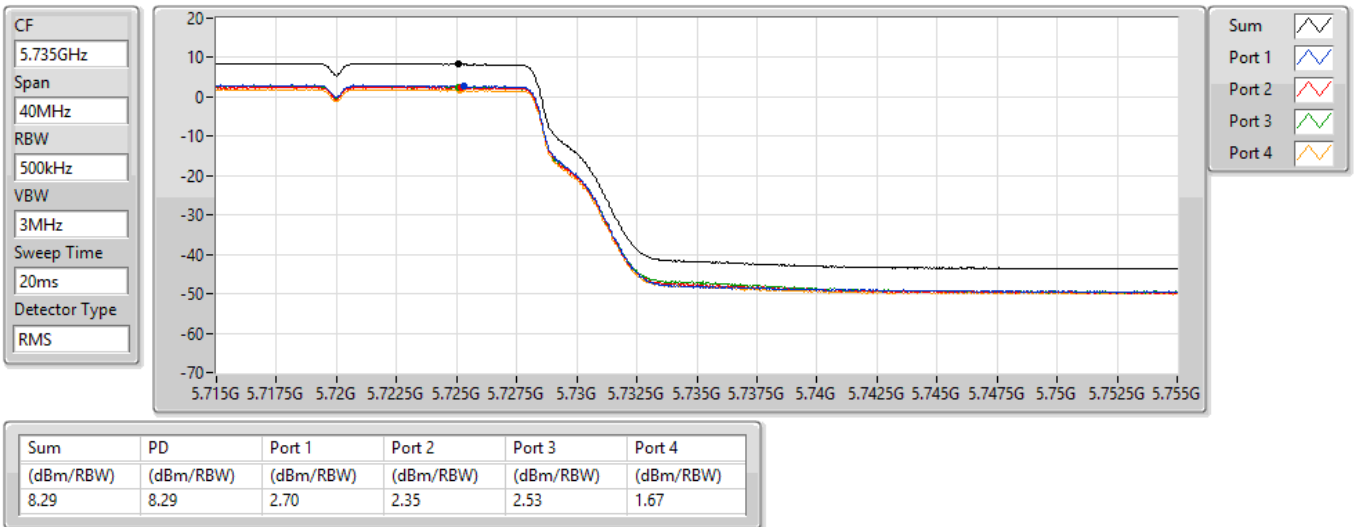


802.11a_Nss1,(6Mbps)_4TX

5720MHz Straddle 5.725-5.85GHz

PSD

22/03/2022

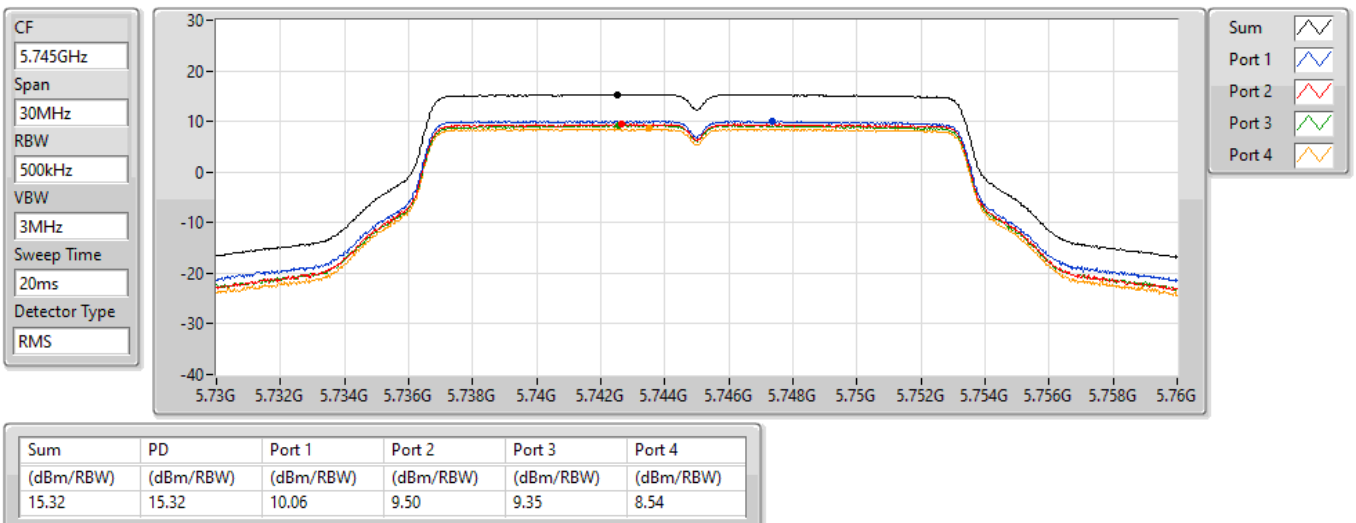


802.11a_Nss1,(6Mbps)_4TX

5745MHz

PSD

20/01/2022

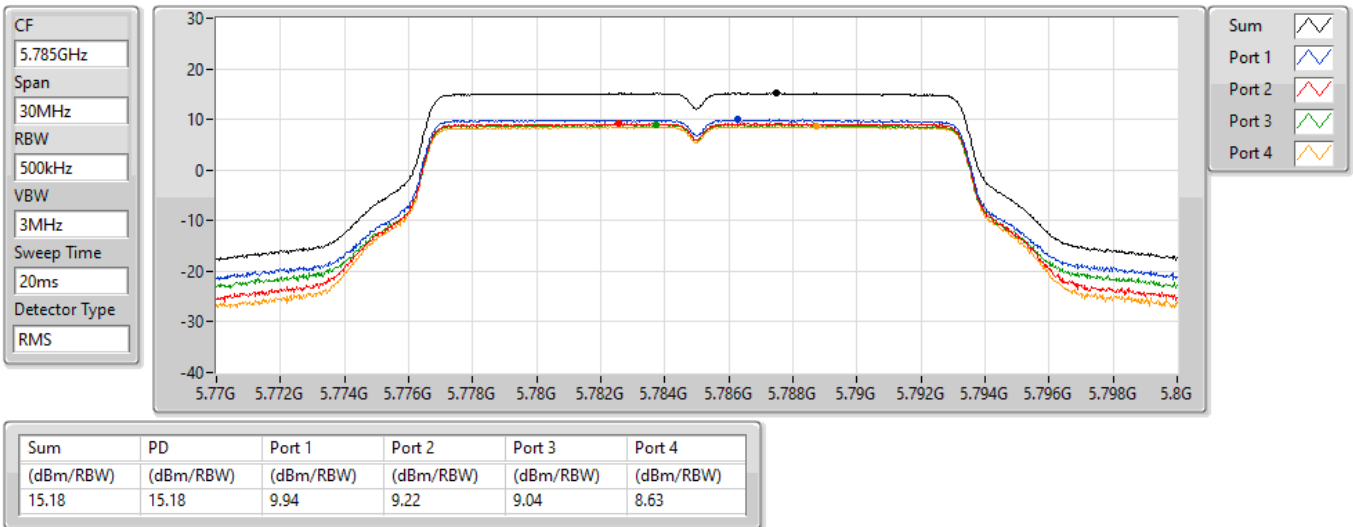


802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

20/01/2022

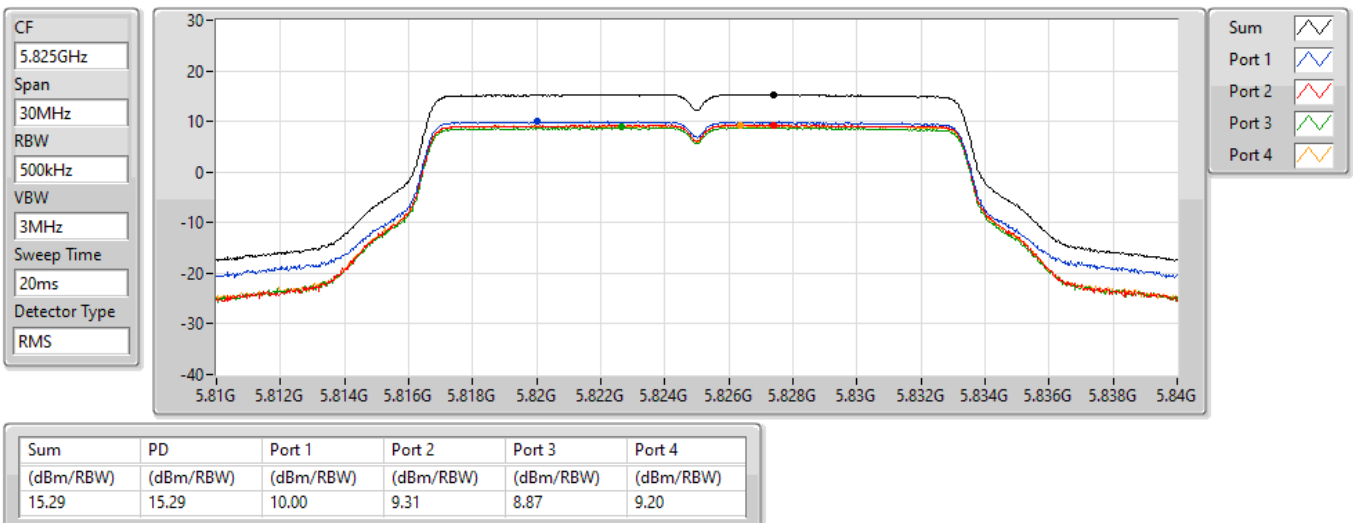


802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

20/01/2022



For UNII 2C~UNII 3:

Test Mode: beamforming 4T1S:

Summary

Mode	PD (dBm/RBW)
5.47-5.725GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	9.59
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	7.05
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.73
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	1.19
5.725-5.85GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	13.92
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	11.14
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	8.01

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5500MHz	Pass	6.86	3.70	4.03	3.87	3.06	9.59	10.14
5580MHz	Pass	6.86	3.54	3.85	3.73	3.29	9.55	10.14
5700MHz	Pass	6.86	3.66	3.36	3.77	2.93	9.41	10.14
5720MHz Straddle 5.47-5.725GHz	Pass	6.86	3.87	3.54	3.75	2.72	9.42	10.14
5720MHz Straddle 5.725-5.85GHz	Pass	7.11	2.16	1.82	2.03	1.02	7.73	28.89
5745MHz	Pass	7.11	8.52	8.06	8.08	7.24	13.92	28.89
5785MHz	Pass	7.11	8.48	7.86	7.91	7.18	13.78	28.89
5825MHz	Pass	7.11	8.42	7.85	7.41	7.55	13.77	28.89
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5510MHz	Pass	6.86	0.99	1.06	1.35	0.19	6.84	10.14
5550MHz	Pass	6.86	1.12	1.30	1.41	0.62	7.05	10.14
5670MHz	Pass	6.86	1.15	0.95	0.91	0.41	6.78	10.14
5710MHz Straddle 5.47-5.725GHz	Pass	6.86	0.96	0.77	0.80	0.34	6.68	10.14
5710MHz Straddle 5.725-5.85GHz	Pass	7.11	-1.05	-1.33	-1.13	-1.75	4.68	28.89
5755MHz	Pass	7.11	5.79	5.07	5.20	4.36	11.08	28.89
5795MHz	Pass	7.11	5.96	5.07	5.20	4.61	11.14	28.89
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5530MHz	Pass	6.86	-1.75	-2.23	-1.95	-2.94	3.73	10.14
5610MHz	Pass	6.86	-1.77	-2.30	-2.06	-2.96	3.68	10.14
5690MHz Straddle 5.47-5.725GHz	Pass	6.86	-1.76	-2.14	-2.09	-2.91	3.73	10.14
5690MHz Straddle 5.725-5.85GHz	Pass	7.11	-4.28	-4.77	-4.42	-5.07	1.37	28.89
5775MHz	Pass	7.11	2.67	1.83	2.40	1.33	8.01	28.89
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5570MHz	Pass	6.86	-4.62	-4.54	-4.58	-5.28	1.19	10.14

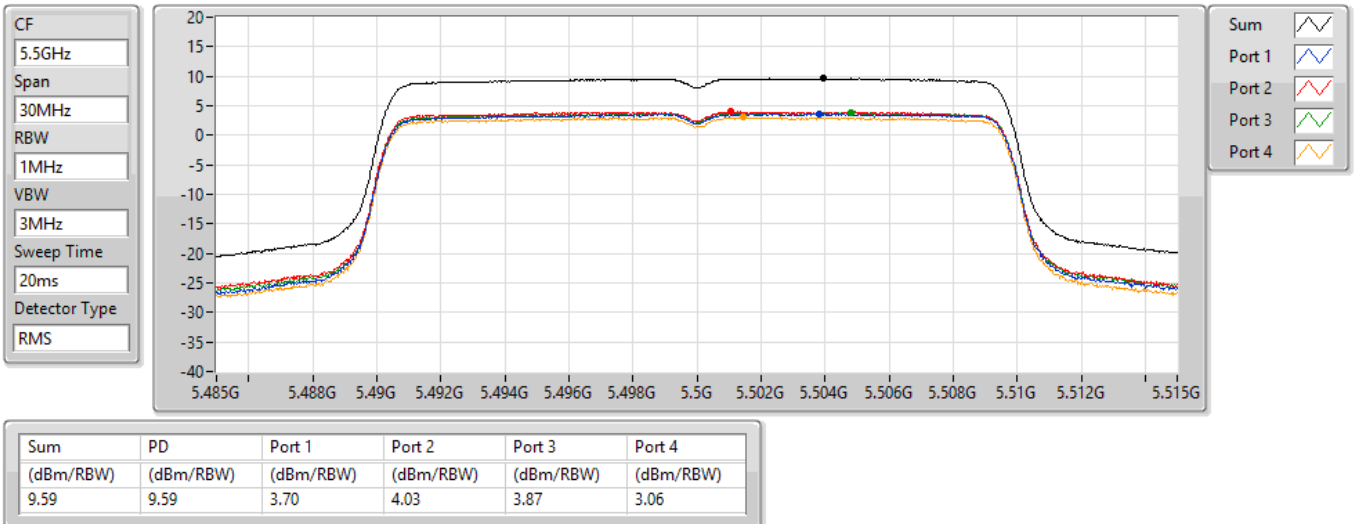
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

22/03/2022

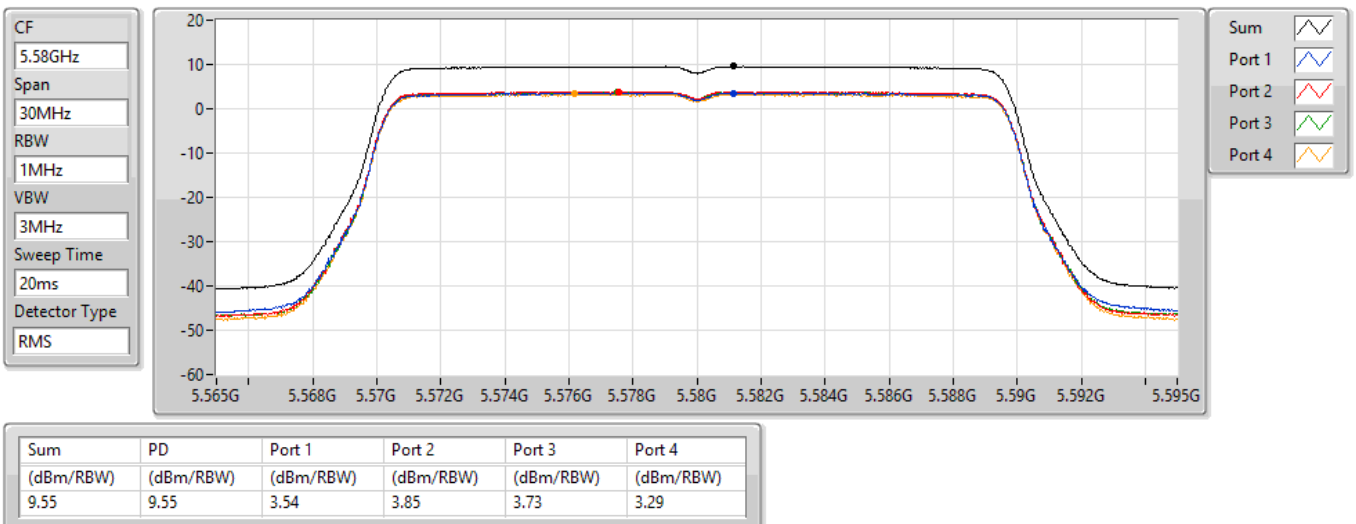


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

22/03/2022

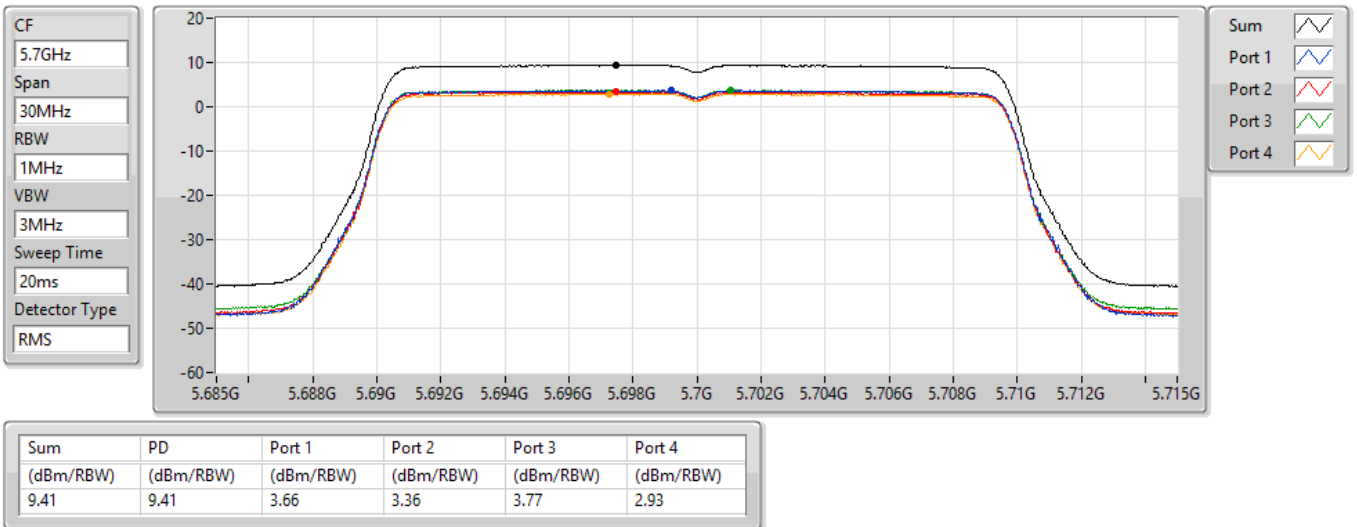


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

22/03/2022



802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

22/03/2022

