



RADIO TEST REPORT

FCC ID : LDK-9160S2579
Equipment : Catalyst Wireless 9166D1 Series Wi-Fi 6E Access Point
Brand Name : CISCO
Model Name : CW9166D1-B, CW9166D1-MR
Applicant : Cisco Systems Inc
125 West Tasman Drive San Jose California United States 95134-1706
Manufacturer : Cisco Systems Inc
125 West Tasman Drive San Jose California United States 95134-1706
Standard : 47 CFR FCC Part 15.407

The product was received on Jan. 17, 2023, and testing was started from Mar. 13, 2023 and completed on May 18, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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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
1.1.3	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	-

Conformity Assessment Condition:

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

Disclaimer:

1. The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.

Reviewed by: Sam Chen**Report Producer: Vicky Huang**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
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]
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]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

<Radio 1>

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



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.15-5.25GHz	802.11ac VHT80+80	80	2, 4TX/4RX
5.15-5.25GHz	802.11ac VHT80+80-BF	80	2, 4TX/4RX
5.15-5.25GHz	802.11ax HEW80+80	80	2, 4TX/4RX
5.15-5.25GHz	802.11ax HEW80+80-BF	80	2, 4TX/4RX
5.25-5.35GHz	802.11a	20	1, 2, 4TX/4RX
5.25-5.35GHz	802.11n HT20	20	1, 2, 4TX/4RX
5.25-5.35GHz	802.11n HT20-BF	20	2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT20	20	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT20-BF	20	2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.25-5.35GHz	802.11n HT40	40	1, 2, 4TX/4RX
5.25-5.35GHz	802.11n HT40-BF	40	2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT40	40	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT40-BF	40	2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT80	80	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT80-BF	80	2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT80+80	80	2, 4TX/4RX
5.25-5.35GHz	802.11ac VHT80+80-BF	80	2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW80+80	80	2, 4TX/4RX
5.25-5.35GHz	802.11ax HEW80+80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11a	20	1, 2, 4TX/4RX
5.47-5.725GHz	802.11n HT20	20	1, 2, 4TX/4RX
5.47-5.725GHz	802.11n HT20-BF	20	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT20	20	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT20-BF	20	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.47-5.725GHz	802.11n HT40	40	1, 2, 4TX/4RX
5.47-5.725GHz	802.11n HT40-BF	40	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT40	40	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT40-BF	40	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT80	80	1, 2, 4TX/4RX



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ac VHT80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT80+80	80	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT80+80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80+80	80	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80+80-BF	80	2, 4TX/4RX
5.725-5.85GHz	802.11a	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11n HT40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT80	80	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT80-BF	80	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW80-BF	80	2, 4TX/4RX

<Radio 2>

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



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ac VHT80	80	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT160	160	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ac VHT160-BF	160	2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW160	160	1, 2, 4TX/4RX
5.47-5.725GHz	802.11ax HEW160-BF	160	2, 4TX/4RX
5.725-5.85GHz	802.11a	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.725-5.85GHz	802.11n HT40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11n HT40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT80	80	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ac VHT80-BF	80	2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.725-5.85GHz	802.11ax HEW80-BF	80	2, 4TX/4RX

<Radio 3>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX/2RX
5.15-5.25GHz	802.11n HT20	20	1TX/2RX
5.15-5.25GHz	802.11ac VHT20	20	1TX/2RX
5.15-5.25GHz	802.11ax HEW20	20	1TX/2RX
5.15-5.25GHz	802.11n HT40	40	1TX/2RX
5.15-5.25GHz	802.11ac VHT40	40	1TX/2RX
5.15-5.25GHz	802.11ax HEW40	40	1TX/2RX
5.15-5.25GHz	802.11ac VHT80	80	1TX/2RX
5.15-5.25GHz	802.11ax HEW80	80	1TX/2RX
5.15-5.35GHz	802.11ac VHT160	160	1TX/2RX
5.15-5.35GHz	802.11ax HEW160	160	1TX/2RX
5.25-5.35GHz	802.11a	20	1TX/2RX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11n HT20	20	1TX/2RX
5.25-5.35GHz	802.11ac VHT20	20	1TX/2RX
5.25-5.35GHz	802.11ax HEW20	20	1TX/2RX
5.25-5.35GHz	802.11n HT40	40	1TX/2RX
5.25-5.35GHz	802.11ac VHT40	40	1TX/2RX
5.25-5.35GHz	802.11ax HEW40	40	1TX/2RX
5.25-5.35GHz	802.11ac VHT80	80	1TX/2RX
5.25-5.35GHz	802.11ax HEW80	80	1TX/2RX
5.47-5.725GHz	802.11a	20	1TX/2RX
5.47-5.725GHz	802.11n HT20	20	1TX/2RX
5.47-5.725GHz	802.11ac VHT20	20	1TX/2RX
5.47-5.725GHz	802.11ax HEW20	20	1TX/2RX
5.47-5.725GHz	802.11n HT40	40	1TX/2RX
5.47-5.725GHz	802.11ac VHT40	40	1TX/2RX
5.47-5.725GHz	802.11ax HEW40	40	1TX/2RX
5.47-5.725GHz	802.11ac VHT80	80	1TX/2RX
5.47-5.725GHz	802.11ax HEW80	80	1TX/2RX
5.47-5.725GHz	802.11ac VHT160	160	1TX/2RX
5.47-5.725GHz	802.11ax HEW160	160	1TX/2RX
5.725-5.85GHz	802.11a	20	1TX/2RX
5.725-5.85GHz	802.11n HT20	20	1TX/2RX
5.725-5.85GHz	802.11ac VHT20	20	1TX/2RX
5.725-5.85GHz	802.11ax HEW20	20	1TX/2RX
5.725-5.85GHz	802.11n HT40	40	1TX/2RX
5.725-5.85GHz	802.11ac VHT40	40	1TX/2RX
5.725-5.85GHz	802.11ax HEW40	40	1TX/2RX
5.725-5.85GHz	802.11ac VHT80	80	1TX/2RX
5.725-5.85GHz	802.11ax HEW80	80	1TX/2RX

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 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 Table for 80+80 MHz Mode**

<Radio 1>

Type	Channel No.	Frequency
1	42+58	5210+5290 MHz
2	106+122	5530+5610 MHz

1.1.3 Antenna Information

Ant.	Brand	Model Name	Ant. Type	Connector	Gain (dBi)
1	CISCO	95XEAM15.G04 WIFI 2/5G_4	Dipole	I-PEX	Note2
2	CISCO	95XEAM15.G03 WIFI 2/5G_3	Dipole	I-PEX	
3	CISCO	95XEAM15.G02 WIFI 2/5G_2	Dipole	I-PEX	
4	CISCO	95XEAM15.G01 WIFI 2/5G_1	Dipole	I-PEX	
5	CISCO	95XEAM15.G05 WIFI 5/6G_1	Dipole	I-PEX	
6	CISCO	95XEAM15.G06 WIFI 5/6G_2	Dipole	I-PEX	
7	CISCO	95XEAM15.G07 WIFI 5/6G_3	Dipole	I-PEX	
8	CISCO	95XEAM15.G08 WIFI 5/6G_4	Dipole	I-PEX	
9	CISCO	95XEAM15.G10 AUX_2	Dipole	I-PEX	
10	CISCO	95XEAM15.G09 AUX_1	Dipole	I-PEX	
11	CISCO	95XEAM15.G11 IOT	Loop	I-PEX	

Ant.	Port										
	R1: WLAN 2.4GHz			R1: WLAN 5GHz UNII 1~3			R2: WLAN 5GHz UNII 2C~3/ WLAN 6GHz			R3: WLAN 2.4GHz / 5GHz UNII 1~3/ WLAN 6GHz	R4: Bluetooth/ Zigbee
	1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX	1TX/2RX	1TX
1	-	-	3	-	-	3	-	-	-	-	-
2	-	2	2	-	2	2	-	-	-	-	-
3	1	1	1	1	1	1	-	-	-	-	-
4	-	-	4	-	-	4	-	-	-	-	-
5	-	-	-	-	-	-	-	2	2	-	-
6	-	-	-	-	-	-	1	1	1	-	-
7	-	-	-	-	-	-	-	-	3	-	-
8	-	-	-	-	-	-	-	-	4	-	-
9	-	-	-	-	-	-	-	-	-	1	-
10	-	-	-	-	-	-	-	-	-	2	-
11	-	-	-	-	-	-	-	-	-	-	1

Note1: R means Radio.



Note2:

Ant.	Antenna Gain (dBi)					
	R1: WLAN 2.4GHz	R1: WLAN 5GHz UNII 1~3				
		5.2G	5.3G	5.6G	5.785G	
1	6.57	5.21	4.46	4.78	5.2	
2	4.11	4.59	4.32	4.02	4.45	
3	5.46	4.55	3.8	3.49	3.89	
4	6.55	4.84	4.48	3.62	5.02	
Ant.	R2: WLAN 5GHz UNII 2C~3/WLAN 6GHz					
	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
	5	7.48	6.28	6.49	5.9	7.49
6	7.11	8.01	6	4.87	7.65	8.32
7	7.24	6.68	5.88	4.86	7.37	7.26
8	6.57	7.32	6.34	7.31	6.46	6.82
Ant.	R3: WLAN 2.4GHz/5GHz UNII 1~3/WLAN 6GHz					
	WLAN 2.4GHz		WLAN 5GHz UNII 1~3		WLAN 6GHz	
	9	6.9	6.6		6.8	
10						
Ant.	R4: Bluetooth/Zigbee					
	8.8					
11						

Note3:

Item	Directional Gain (dBi)					
	R1: WLAN 2.4GHz	R1: WLAN 5GHz UNII 1~3				
		5.2G	5.3G	5.6G	5.785G	
2T1S	5.49	5.02	4.37	4.05	4.48	
2T2S	5.46	4.59	4.32	4.02	4.45	
4T1S	8.71	8.02	7.47	6.91	7.51	
4T2S	6.57	5.21	4.48	4.78	5.2	
4T4S	6.57	5.21	4.48	4.78	5.2	
Item	R2: WLAN 5GHz UNII 2C~3/WLAN 6GHz					
	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
2T1S	7.66	8.11	6.51	6.24	7.67	8.38
2T2S	7.48	8.01	6.49	5.9	7.65	8.32
4T1S	9.91	10.4	9.21	9.03	10.32	10.71
4T2S	7.48	8.01	6.49	7.31	7.65	8.32
4T4S	7.48	8.01	6.49	7.31	7.65	8.32

Note4: 80+80MHz Directional gain information

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

Ex.

Directional Gain (NSS1) formula:

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

NSS1(g1,1) = $10^{G1/20}$; NSS1(g1,2) = $10^{G2/20}$; NSS1(g1,3) = $10^{G3/20}$; NSS1(g1,4) = $10^{G4/20}$

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

DG = 10 log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))² / N_{ANT}] => 10

log[($10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20}$)² / N_{ANT}]

Where ;

For 80+80

5G Band1 G1 = 5.21 dBi; G2 = 4.59 dBi; G3 = 4.55 dBi; G4 = 4.84 dBi

5G Band2 G1 = 4.46 dBi; G2 = 4.32 dBi; G3 = 3.80 dBi; G4 = 4.48 dBi

5G Band3 G1 = 4.78 dBi; G2 = 4.02 dBi; G3 = 3.49 dBi; G4 = 3.62 dBi

For 2T1S

5G Band1 DG = 4.55 dBi

5G Band2 DG = 4.48 dBi

For 4T1S

5G Band1 DG = 7.58 dBi

5G Band2 DG = 7.48 dBi

For 2T2S

5G Band3 DG = 3.62 dBi

For 4T2S

5G Band3 DG = 7.01 dBi

Note5: The above information (except gain of Radio 1 and Radio 2) was declared by manufacturer.

Note6: Radio 1 (WLAN 2.4/5GHz UNII 1~3(except 80+80MHz)), Radio 2 (5GHz UNII 2C~3/6GHz UNII 5~8): The directional gain is measured which follows the procedure of KDB 662911 D03.

Radio 1 (5GHz UNII 1~2C(80+80MHz)): Maximum Directional Gain following KDB662911 D01

Note7: The EUT has eleven antennas.

For WLAN 2.4GHz function (Radio 1):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX



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

For WLAN 5GHz function (Radio 1 and Radio 2):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For Radio 1 80+80MHz 2TX

Only Port 1 and Port 4 can be use as transmitting antenna.

Port 1 and Port 4 could transmit simultaneously.

For 4RX

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

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

For WLAN 6GHz UNII 5~8 (Radio 2):

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

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

Port 1 and Port 2 could transmit simultaneously.

For 4TX

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

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

For 4RX

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

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

For Scanning Radio 3:

For WLAN 2.4GHz function

For 802.11b/g/n/VHT/ax mode (1TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For WLAN 5GHz function

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

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For WLAN 6GHz UNII 5~8:

For IEEE 802.11ax mode (1TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For Bluetooth/Zigbee function (Radio 4):

For Bluetooth/Zigbee mode (1TX/1RX):

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

**1.1.4 Mode Test Duty Cycle****<Radio 1>****For 20/40/80MHz**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)	0.916	0.38	1.432m	1k
802.11ax HEW20_Nss1,(MCS0)	0.8	0.97	5.446m	300
802.11ax HEW20-BF_Nss1,(MCS0)	0.799	0.97	5.446m	300
802.11ax HEW40_Nss1,(MCS0)	0.798	0.98	5.446m	300
802.11ax HEW40-BF_Nss1,(MCS0)	0.797	0.99	5.446m	300
802.11ax HEW80_Nss1,(MCS0)	0.796	0.99	5.446m	300
802.11ax HEW80-BF_Nss1,(MCS0)	0.796	0.99	5.446m	300

For 80+80MHz

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW80+80_Nss1,(MCS0)_2TX	0.782	1.07	5.445m	300
802.11ax HEW80+80_Nss2,(MCS0)_2TX	0.782	1.07	5.445m	300
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	0.782	1.07	5.445m	300
802.11ax HEW80+80_Nss2,(MCS0)_4TX	0.814	0.89	5.446m	300
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	0.814	0.89	5.446m	300

<Radio 2>**For 20/40/80/160MHz**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)	0.925	0.34	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)	0.794	1	5.446m	300
802.11ax HEW20-BF_Nss1,(MCS0)	0.807	0.93	5.446m	300
802.11ax HEW40_Nss1,(MCS0)	0.787	1.04	5.446m	300
802.11ax HEW40-BF_Nss1,(MCS0)	0.792	1.01	5.446m	300
802.11ax HEW80_Nss1,(MCS0)	0.817	0.88	5.446m	300
802.11ax HEW80-BF_Nss1,(MCS0)	0.793	1.01	5.446m	300
802.11ax HEW160_Nss1,(MCS0)	0.785	1.05	5.446m	300
802.11ax HEW160-BF_Nss1,(MCS0)	0.79	1.02	5.446m	300

<Radio 3>**For 20/40/80/160MHz**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a_Nss1,(6Mbps)	0.942	0.26	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)	0.798	0.98	5.446m	300
802.11ax HEW40_Nss1,(MCS0)	0.787	1.04	5.446m	300
802.11ax HEW80_Nss1,(MCS0)	0.792	1.01	5.446m	300
802.11ax HEW160_Nss1,(MCS0)	0.79	1.02	5.446m	300

Note:

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

**1.1.5 EUT Operational Condition**

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in Radio1-2.4GHz, n/ac/ax in Radio1, 2-5GHz and ax in Radio2-6GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
TPC Function	☒	With TPC	☐	Without TPC
Channel Puncturing Function	☐	Supported	☒	Unsupported
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	Tera Term V4.75			

Note: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

Model Name	SW	R1: 2.4GHz	R1: 5GHz Low Band or R1: 5GHz Full Band	R2: 5GHz High Band or 6GHz	R3: 2.4GHz/ 5GHz/6GHz	R4: Bluetooth or Zigbee
CW9166D1-B	Cisco	V	V (With 80+80MHz)	V	V	V (Disable Zigbee function by SW)
CW9166D1-MR	Meraki	V	V (Without 80+80MHz)	V	V	V

Note1: From the above models, model: CW9166D1-MR (Test BWch (MHz): 20/40/80/160 MHz) and model: CW9166D1-B (Test BWch (MHz): 80+80MHz) were selected as representative model for the test and their data were recorded in this report.

Note2: The above information was declared by manufacturer.

1.1.7 Table for Radio function

Function Radio	WLAN 2.4GHz	WLAN 5GHz UNII 1~2A	WLAN 5GHz UNII 2C~3	WLAN 6GHz	Bluetooth	Zigbee
1 (Iron Radio)	V	V	V	-	-	-
2 (Pine Radio)	-	-	V	V	-	-
3 (Scanning Radio)	V	V	V	V	-	-
4	-	-	-	-	V	V

Note1: The above information was declared by manufacturer.

Note2: For WLAN 2.4GHz: The Radio 1 and Radio 3 can't operate at the same frequency.

For WLAN 5GHz: The Radio 1 ~ 3 can't operate at the same frequency.

For WLAN 6GHz: The Radio 2 ~ 3 can't operate at the same frequency simultaneously.

**1.1.8 Table for EUT Operation Function**

Mode	Operation Function
1	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth
2	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Bluetooth
3	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Bluetooth
4	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Bluetooth
5	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Bluetooth
6	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Bluetooth
7	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee
8	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Zigbee
9	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Zigbee
10	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee
11	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Zigbee
12	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Zigbee

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 662911 D03 v01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	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 ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted (For other tests)	TH03-CB	Gino Huang	22.6~24.3 / 59~63	Mar. 23, 2023~ Apr. 26, 2023
RF Conducted (For 80+80MHz test)	TH03-CB	Gino Huang	23.1~24.4 / 59~62	Apr. 26, 2023~ May 18, 2023
Radiated for below 1GHz	10CH01-CB	Elvin Yeh	23~24 / 56~57	Apr. 21, 2023
Radiated for above 1GHz-cabinet	03CH04-CB	Richard Pai	20.2-21.3 / 56-57	Mar. 13, 2023~ May 08, 2023
Radiated for above 1GHz-co-location	03CH06-CB	Richard Pai	21.7-22.8 / 56-59	Apr. 19, 2023
AC Conduction	CO01-CB	Summer Li	22~23 / 53~54	Apr. 21, 2023~ Apr. 24, 2023



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)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.4 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

<Radio 1: 1T1S, 2T1S, 4T1S>

For 20/40/80MHz

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	16.5
5230MHz	17
5270MHz	17



Mode	Power Setting
5310MHz	17
5510MHz	16
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	16
5290MHz	16
5530MHz	15.5
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	16.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17



Mode	Power Setting
5700MHz	16.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	17
5270MHz	17
5310MHz	16.5
5510MHz	15.5
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	15.5
5290MHz	15.5
5530MHz	15
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	15.5
5200MHz	17
5240MHz	17
5260MHz	14.5
5300MHz	14.5
5320MHz	15
5500MHz	14.5
5580MHz	15.5
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	17
5785MHz	17



Mode	Power Setting
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	15
5200MHz	17
5240MHz	17
5260MHz	15.5
5300MHz	15
5320MHz	15.5
5500MHz	15
5580MHz	15
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	13.5
5230MHz	17
5270MHz	17
5310MHz	15
5510MHz	14
5550MHz	17
5670MHz	15.5
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	11.5
5290MHz	12.5
5530MHz	12.5
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	16
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	17
5200MHz	17
5240MHz	17



Mode	Power Setting
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	17
5700MHz	16.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	16
5230MHz	17
5270MHz	17
5310MHz	16.5
5510MHz	15.5
5550MHz	17
5670MHz	17
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	15.5
5290MHz	15.5
5530MHz	15
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	15
5200MHz	17
5240MHz	17
5260MHz	15.5
5300MHz	15
5320MHz	15.5
5500MHz	15
5580MHz	15



Mode	Power Setting
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	13.5
5230MHz	17
5270MHz	15.5
5310MHz	15
5510MHz	14
5550MHz	16
5670MHz	15.5
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	11.5
5290MHz	12.5
5530MHz	12.5
5610MHz	16.5
5690MHz Straddle 5.47-5.725GHz	16.5
5690MHz Straddle 5.725-5.85GHz	16.5
5775MHz	16

**For 80+80MHz**

Mode	Power Setting
802.11ax HEW80+80_Nss1,(MCS0)_1TX	-
#5210MHz,5290MHz	16.5
5210MHz,#5290MHz	16.5
802.11ax HEW80+80_Nss2,(MCS0)_2TX	-
#5530MHz,#5610MHz	15.5
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-
#5210MHz,5290MHz	8.5
5210MHz,#5290MHz	8.5
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	13
802.11ax HEW80+80-BF_Nss1,(MCS0)_2TX	-
#5210MHz,5290MHz	8.5
5210MHz,#5290MHz	8.5
802.11ax HEW80+80-BF_Nss2,(MCS0)_4TX	-
#5530MHz,#5610MHz	13

**<Radio 2: 1T1S, 2T1S, 4T1S>
For 20/40/80/160MHz**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5500MHz	17
5580MHz	17
5700MHz	16.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5500MHz	16.5
5580MHz	17
5700MHz	16
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5510MHz	14.5
5550MHz	17
5670MHz	16.5
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5530MHz	14.5
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	17
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5570MHz	14
802.11a_Nss1,(6Mbps)_2TX	-
5500MHz	16.5
5580MHz	17
5700MHz	16



Mode	Power Setting
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5500MHz	15.5
5580MHz	17
5700MHz	15.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5510MHz	14
5550MHz	17
5670MHz	15.5
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5530MHz	13
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	16.5
802.11ax HEW160_Nss1,(MCS0)_2TX	-
5570MHz	12.5
802.11a_Nss1,(6Mbps)_4TX	-
5500MHz	13.5
5580MHz	13
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW20_Nss1,(MCS0)_4TX	-



Mode	Power Setting
5500MHz	13.5
5580MHz	13.5
5700MHz	13.5
5720MHz Straddle 5.47-5.725GHz	13.5
5720MHz Straddle 5.725-5.85GHz	13.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5510MHz	12.5
5550MHz	15
5670MHz	14.5
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
5755MHz	17
5795MHz	17
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5530MHz	10
5610MHz	15
5690MHz Straddle 5.47-5.725GHz	15
5690MHz Straddle 5.725-5.85GHz	15
5775MHz	15
802.11ax HEW160_Nss1,(MCS0)_4TX	-
5570MHz	9.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5500MHz	15.5
5580MHz	17
5700MHz	15.5
5720MHz Straddle 5.47-5.725GHz	17
5720MHz Straddle 5.725-5.85GHz	17
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5510MHz	14
5550MHz	17
5670MHz	15.5
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	17



Mode	Power Setting
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5530MHz	13
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	16.5
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5570MHz	12.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5500MHz	13.5
5580MHz	13
5700MHz	13
5720MHz Straddle 5.47-5.725GHz	13.5
5720MHz Straddle 5.725-5.85GHz	13.5
5745MHz	17
5785MHz	17
5825MHz	17
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5510MHz	12.5
5550MHz	13
5670MHz	13
5710MHz Straddle 5.47-5.725GHz	13.5
5710MHz Straddle 5.725-5.85GHz	13.5
5755MHz	17
5795MHz	17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5530MHz	10
5610MHz	13
5690MHz Straddle 5.47-5.725GHz	13
5690MHz Straddle 5.725-5.85GHz	13
5775MHz	15
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5570MHz	9.5

**<Radio 3: 1T1S>
For 20/40/80/160MHz**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	18.5
5200MHz	20
5240MHz	20
5260MHz	20
5300MHz	20
5320MHz	18.5
5500MHz	19.5
5580MHz	20
5700MHz	17.5
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	18
5200MHz	20
5240MHz	20
5260MHz	20
5300MHz	20
5320MHz	18
5500MHz	18.5
5580MHz	20
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	17
5230MHz	20
5270MHz	20
5310MHz	17
5510MHz	16.5
5550MHz	20
5670MHz	17



Mode	Power Setting
5710MHz Straddle 5.47-5.725GHz	20
5710MHz Straddle 5.725-5.85GHz	20
5755MHz	20
5795MHz	20
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	16.5
5290MHz	16.5
5530MHz	16.5
5610MHz	18.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
5775MHz	19
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	17
5250MHz Straddle 5.25-5.35GHz	17
5570MHz	17

Note1: 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.

Note2: The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.



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(WLAN and Bluetooth), CTX(Zigbee)
1	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
2	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Bluetooth+Adapter
3	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Bluetooth+Adapter
4	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Bluetooth+Adapter
5	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Bluetooth+Adapter
6	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Bluetooth+Adapter
7	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+Adapter
8	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Zigbee+Adapter
9	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Zigbee+Adapter
10	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+Adapter
11	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Zigbee+Adapter
12	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Zigbee+Adapter
Mode 7 has been evaluated to be the worst case among Mode 1~12, thus measurement for Mode 13~17 will follow this same test mode.	
13	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+PoE1
14	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+PoE2
15	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+PoE3
16	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+PoE4
17	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee+PoE5
For operating mode 13 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
1	R1: 1T1S, 2T1S, 4T1S
2	R1: 80+80MHz
3	R2: 1T1S, 2T1S, 4T1S
4	R3: 1T1S



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link(WLAN and Bluetooth), CTX(Zigbee)
1	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
2	EUT in Y axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
3	EUT in X axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth+Adapter
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ 14 will follow this same test mode.	
4	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Bluetooth+Adapter
5	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Bluetooth+Adapter
6	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Bluetooth +Adapter
7	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Bluetooth +Adapter
8	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Bluetooth +Adapter
9	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee +Adapter
10	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Zigbee +Adapter
11	EUT in Z axis-R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Zigbee +Adapter
12	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee +Adapter
13	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Zigbee+Adapter
14	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Zigbee+Adapter
Mode 12 has been evaluated to be the worst case among Mode 1~14, thus measurement for Mode 15 ~ 19 will follow this same test mode.	
15	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+PoE1
16	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+PoE2
17	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+PoE3
18	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+PoE4
19	EUT in Z axis-R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee+PoE5
For operating mode 12 is the worst case and it was record in this test report.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Conducted measurement at transmit chains
Operating Mode > 1GHz	CTX(Harmonic and bandedge)
1	R1: 1T1S, 2T1S, 4T1S
2	R1: 80+80MHz
3	R2: 1T1S, 2T1S, 4T1S
4	R3: 1T1S
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(Cabinet)
After evaluating, and the worst case was found as below. So the measurement will follow this same test configuration.	
1	R1: 1T1S_EUT in X axis
2	R1: 2T1S_EUT in X axis
3	R1: 4T1S_EUT in X axis
4	R2: 1T1S_EUT in X axis
5	R2: 2T1S_EUT in X axis
6	R2: 4T1S_EUT in X axis
7	R3: 1T1S_EUT in Z 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
After evaluating, and the worst case was found as below. So the measurement will follow this same test configuration.	
1	EUT in Z axis-R1:2.4GHz/5GHz Low Band
2	EUT in Z axis-R1:2.4GHz/5GHz Full Band
For operating mode 1 is the worst case and it was record in this test report.	
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	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Bluetooth
2	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Bluetooth
3	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Bluetooth
4	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Bluetooth
5	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Bluetooth
6	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Bluetooth
7	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 2.4GHz+R4: Zigbee
8	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 5GHz+R4: Zigbee
9	R1: 2.4GHz/5GHz Low Band+R2: 5GHz High band+R3: 6GHz+R4: Zigbee
10	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 2.4GHz+R4: Zigbee
11	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 5GHz+R4: Zigbee
12	R1: 2.4GHz/5GHz Full Band+R2: 6GHz+R3: 6GHz+R4: Zigbee
Refer to Sporton Test Report No.: FA313002 for Co-location RF Exposure Evaluation.	

Note: The Adapter and PoEs are for measurement only, would not be marketed.

Adapter and PoEs information as below:

Power	Brand	Model
Adapter	UMEC	MA-PWR-50WAC
PoE 1	PHIHONG	POEA33U-1ATE (MA-INJ-4)
PoE 2	PHIHONG	POE60U-1BT-X (MA-INJ-6)
PoE 3	Delta	ADH-65AR B (AIR-PWRINJ7)
PoE 4	Microchip	PD-9001GR/AT/AC (AIR-PWRINJ6)
PoE 5	PHIHONG	POE29U-1AT (AIR-PWRINJ6)



2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Wall-mounted rack*1

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE IN LAN PC	DELL	T3400	N/A
B	6G Client	CISCO	CM66D	N/A
C	6G NB	DELL	PP13S	N/A
D	5G NB	DELL	PP13S	N/A
E	2.4G NB	DELL	PP13S	N/A
F	Flash disk3.0	TDK	TF30	N/A
G	PoE 1	PHIHONG	POEA33U-1ATE (MA-INJ-4)	N/A

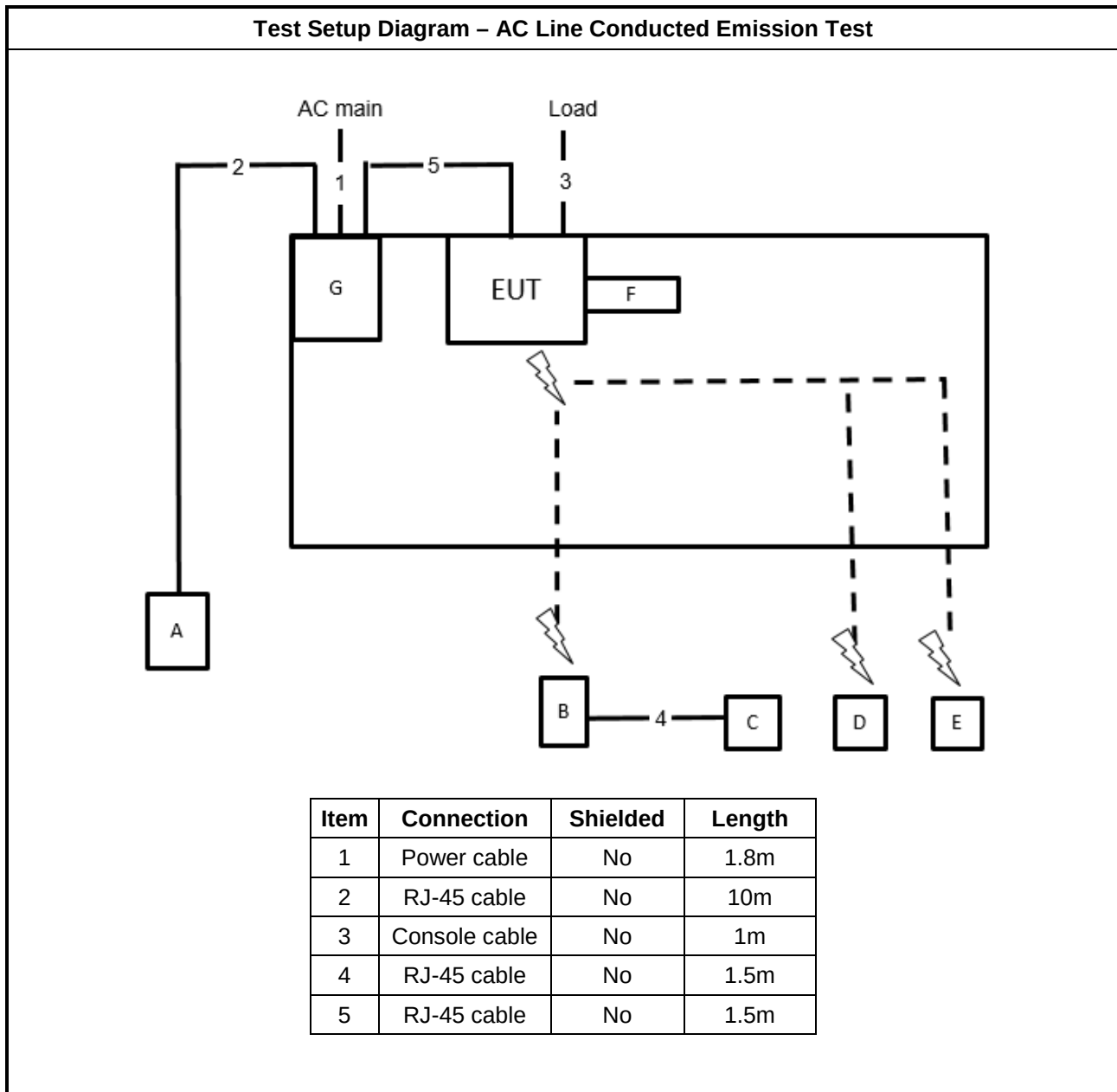
For Radiated (below 1GHz):

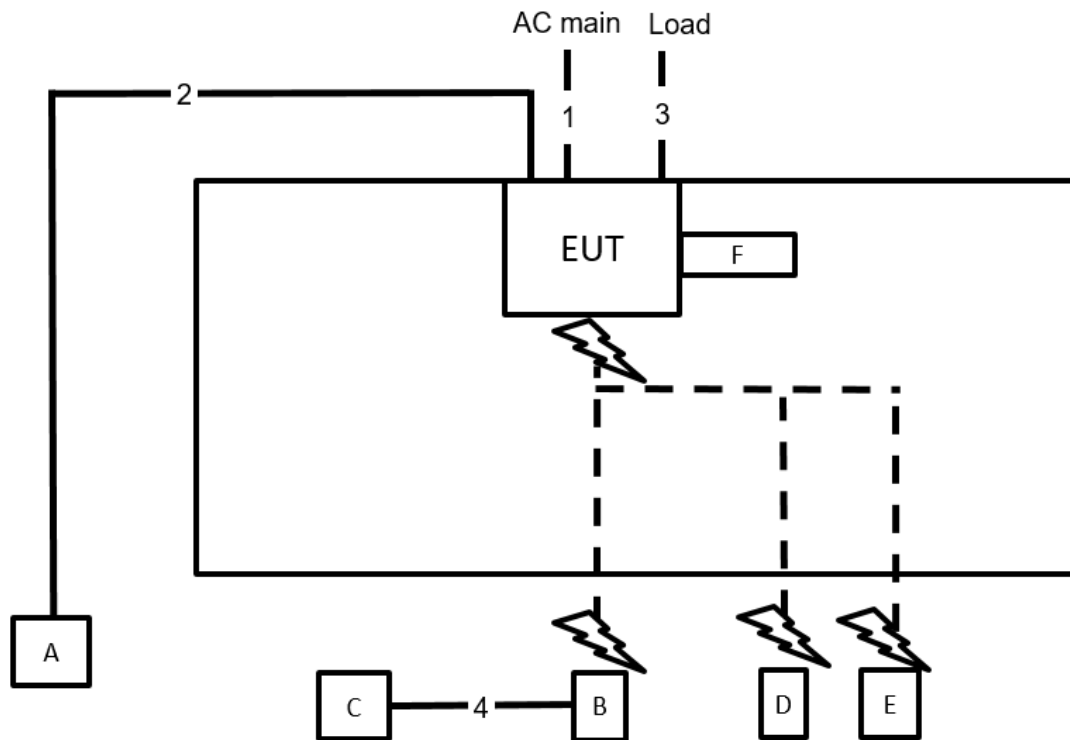
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN PC	DELL	T3400	N/A
B	6G Client	CISCO	CM66D	N/A
C	6G NB	DELL	PP13S	N/A
D	2.4G NB	DELL	PP13S	N/A
E	5G NB	DELL	PP13S	N/A
F	Flash disk3.0	TDK	TF30	N/A
G	Adapter	UMEC	MA-PWR-50WAC	N/A

For Radiated (above 1GHz)-Cabinet and RF Conducted:

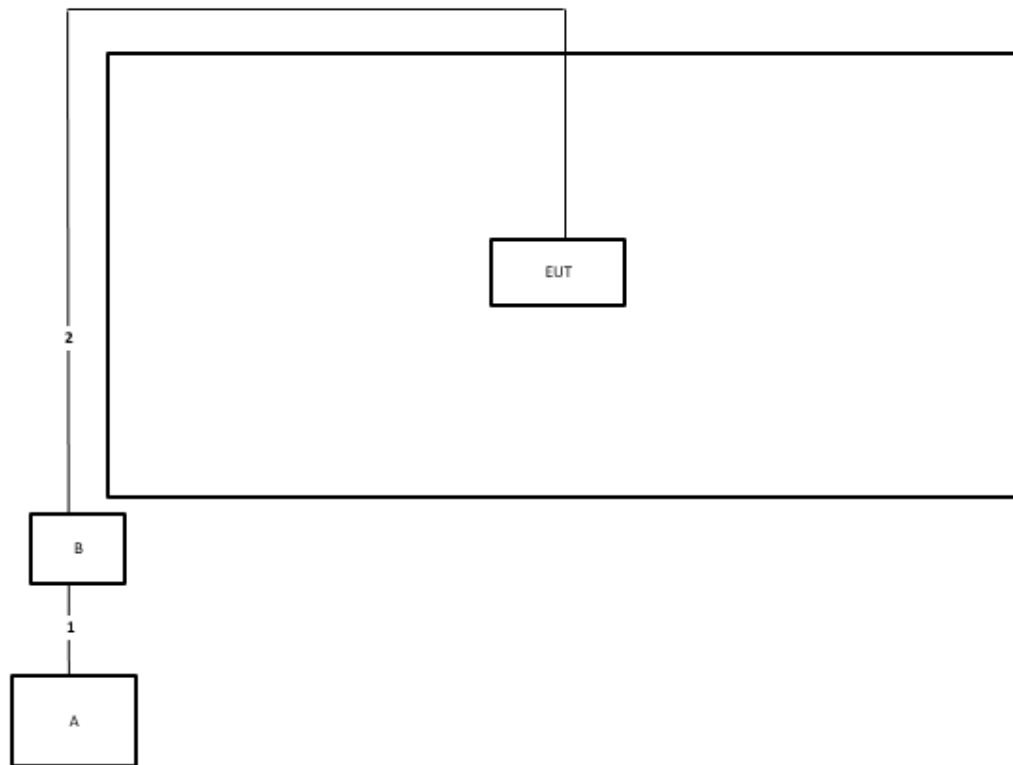
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE 5	PHIHONG	POE29U-1AT (AIR-PWRINJ6)	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	3.6m
2	RJ-45 cable	No	10m
3	Console cable	No	1m
4	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz for Cabinet


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

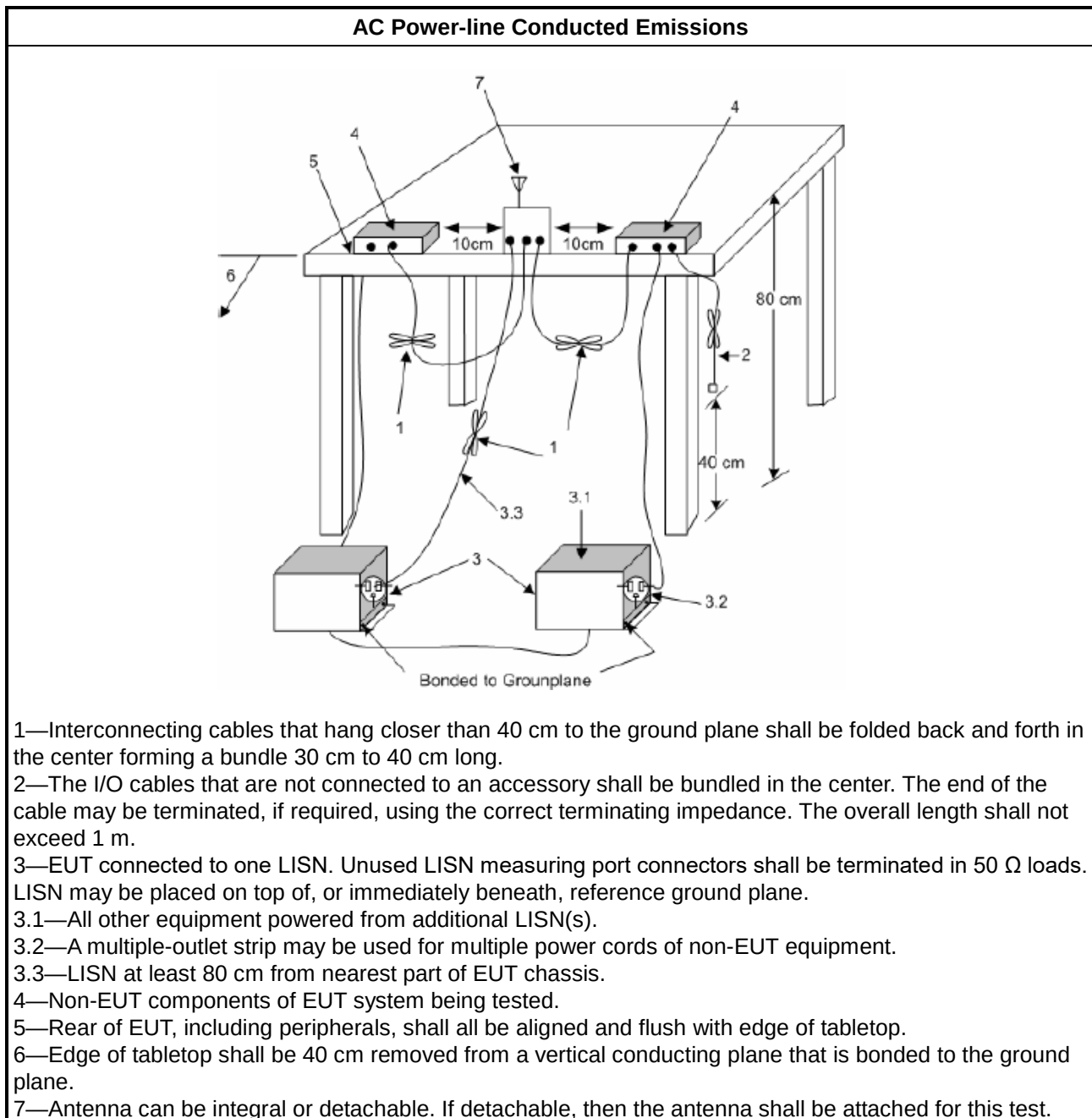
3.1.2 Measuring Instruments

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:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- 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 $\geq 500\text{kHz}$.
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 $\geq 500\text{kHz}$.

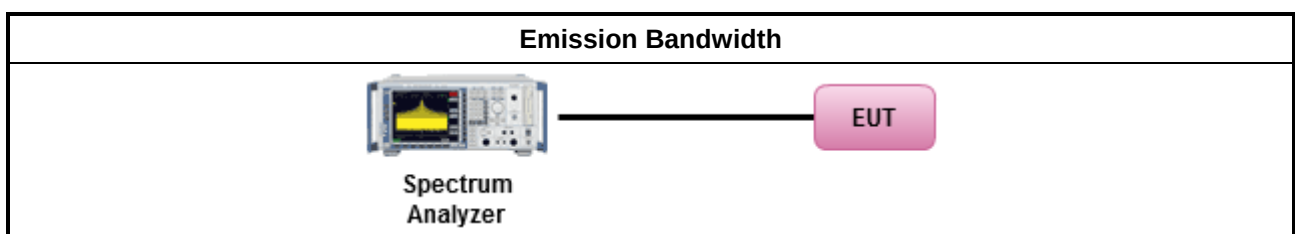
3.2.2 Measuring Instruments

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 $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

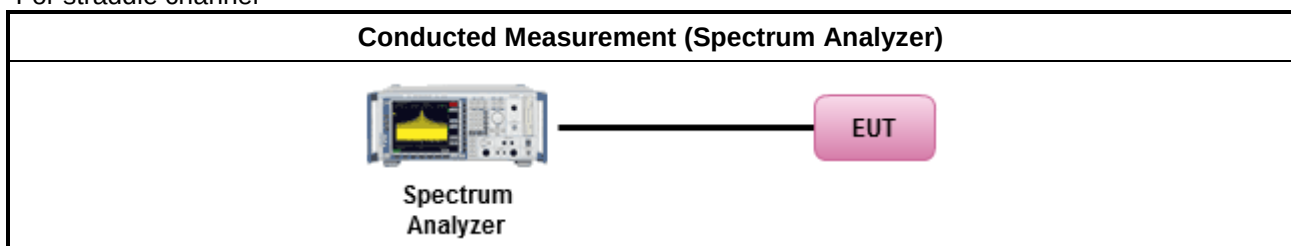
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

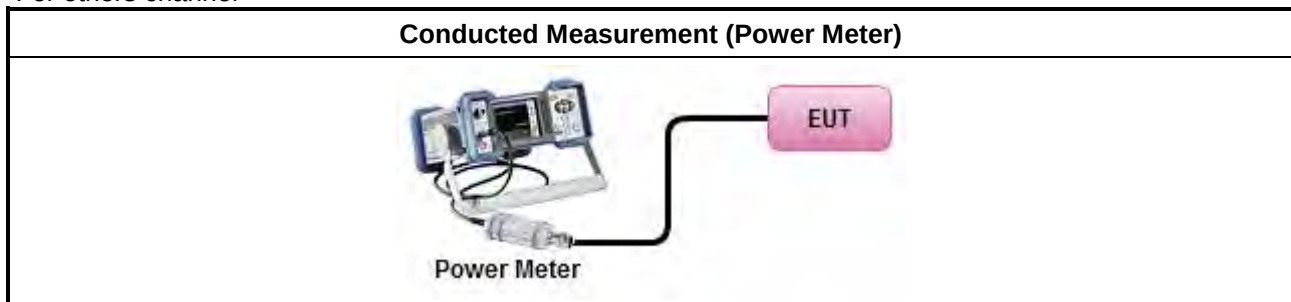
Test Method	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty 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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$
☐	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.

3.3.4 Test Setup

For straddle channel



For others channel





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.
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 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-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 he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	



3.4.2 Measuring Instruments

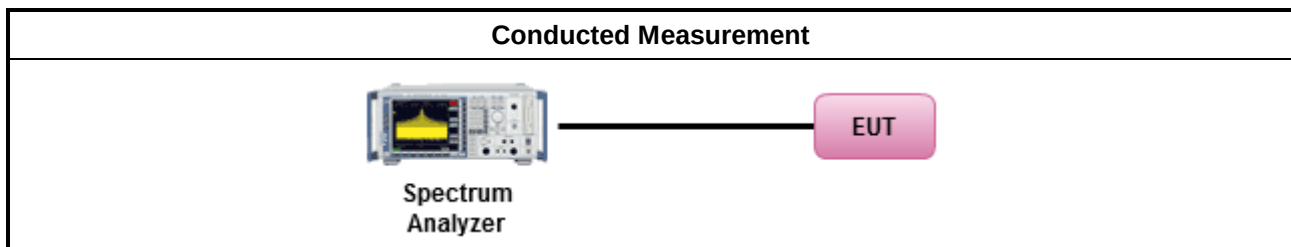
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as FCC KDB 789033 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]) $EIRP_{total} = PPSD_{total} + DG$	
☐ For radiated measurement.	
Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	

Test Method	
	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.

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

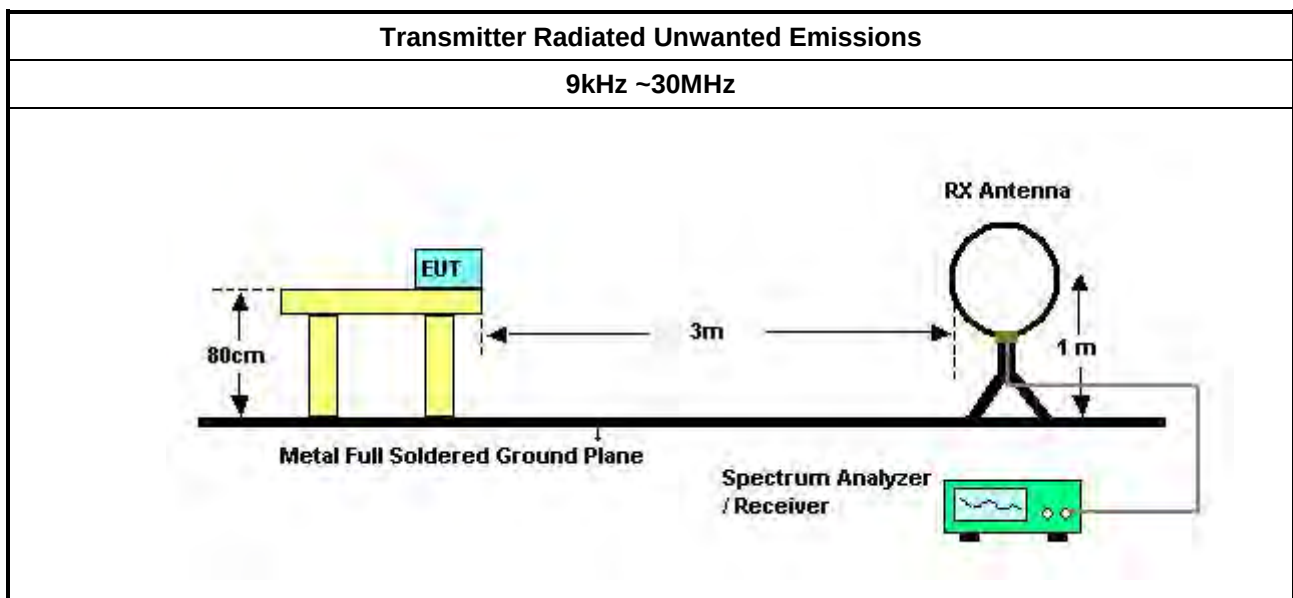
Refer a test equipment and calibration data table in this test report.

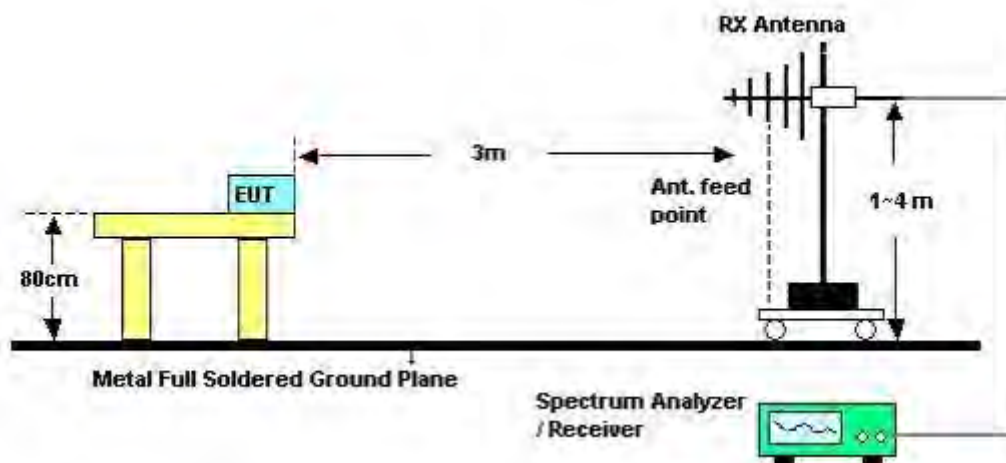
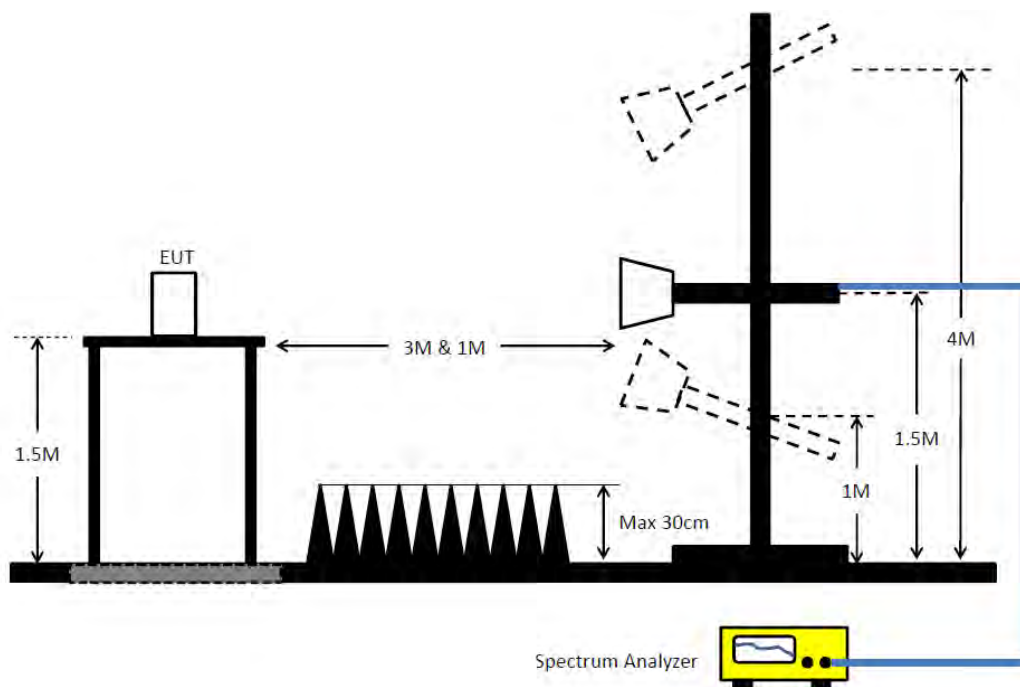
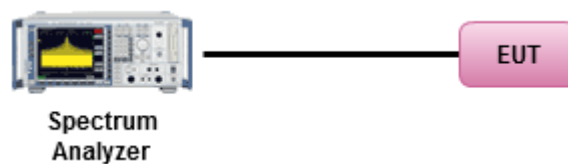
3.5.3 Test Procedures

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.
	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.	

Test Method	
For conducted and cabinet radiation measurement, refer as FCC KDB 789033 D02, clause G)3).	
	For conducted unwanted emissions into non-restricted bands (relative emission limits). Devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.5.4 Test Setup



30MHz~1GHz

Above 1GHz

Transmitter Conducted Unwanted Emissions




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	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 20, 2022	Dec. 19, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 18, 2023	Jan. 17, 2024	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 10, 2023	Mar. 09, 2024	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 10, 2023	Mar. 09, 2024	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 18, 2022	Oct. 17, 2023	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 18, 2022	Oct. 17, 2023	Radiation (10CH01-CB)
EMI Test Receiver	Rohde& Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 11, 2022	Jul. 10, 2023	Radiation (10CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 06, 2022	May 05, 2023	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenuator	Chase & EMCI	CBL6111A &N-6-06	1543 &AT-N0609	30MHz ~ 1GHz	Jun. 25, 2022	Jun. 24, 2023	Radiation (10CH01-CB)
Amplifier	EM	EM101	060703	10MHz ~ 1GHz	Oct. 19, 2022	Oct. 18, 2023	Radiation (10CH01-CB)
Low Cable	TITAN	T318E	low cable-03	30MHz ~ 1GHz	Oct. 18, 2022	Oct. 17, 2023	Radiation (10CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
Horn Antenna	ETS-Lindgren	3115	00143147	750MHz~18GHz	Oct. 12, 2022	Oct. 11, 2023	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 28, 2022	Mar. 27, 2023	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	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	Sep. 30, 2022	Sep. 29, 2023	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 09, 2022	Aug. 08, 2023	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	Aug. 02, 2022	Aug. 01, 2023	Radiation (03CH06-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-68	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+68	1GHz~18GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz ~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



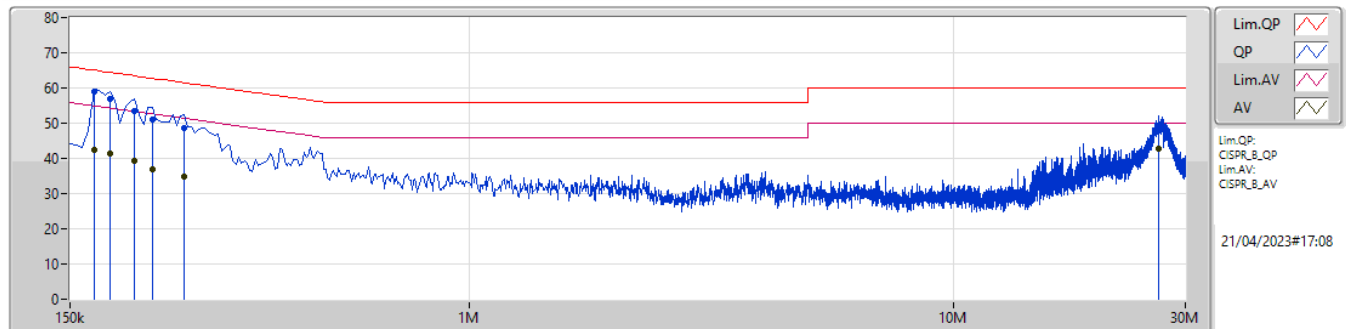
Conducted Emissions at Powerline

Appendix A

Summary

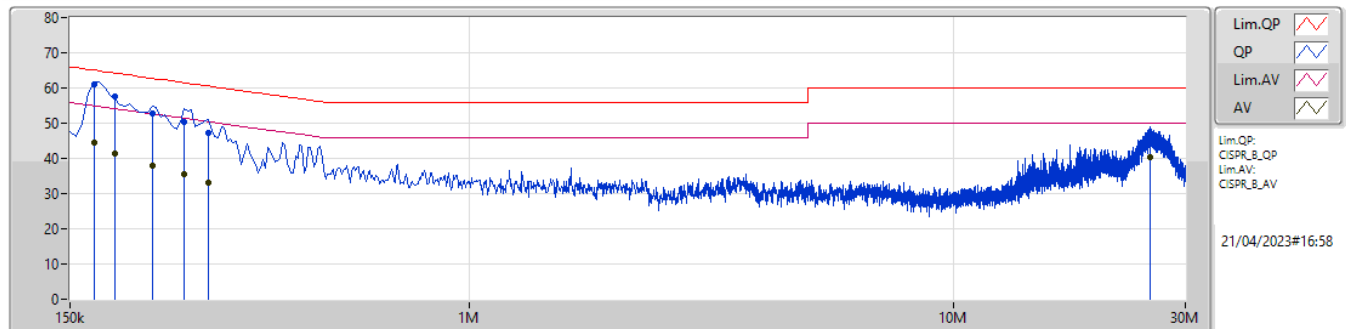
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 13	Pass	QP	168k	60.92	65.06	-4.14	Neutral

Mode 13



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	168k	59.03	65.06	-6.03	9.97	Line	"Worst"	49.06	0.06	0.04	9.87						
AV	168k	42.42	55.06	-12.64	9.97	Line	-	32.45	0.06	0.04	9.87						
QP	181.5k	57.06	64.41	-7.35	9.96	Line	-	47.10	0.06	0.04	9.86						
AV	181.5k	41.28	54.41	-13.13	9.96	Line	-	31.32	0.06	0.04	9.86						
QP	204k	53.32	63.44	-10.12	9.96	Line	-	43.36	0.06	0.04	9.86						
AV	204k	39.26	53.44	-14.18	9.96	Line	-	29.30	0.06	0.04	9.86						
QP	222k	51.01	62.75	-11.74	9.97	Line	-	41.04	0.06	0.04	9.87						
AV	222k	36.81	52.75	-15.94	9.97	Line	-	26.84	0.06	0.04	9.87						
QP	258k	48.54	61.49	-12.95	9.98	Line	-	38.56	0.06	0.05	9.87						
AV	258k	34.98	51.49	-16.51	9.98	Line	-	25.00	0.06	0.05	9.87						
QP	26.457M	48.74	60.00	-11.26	10.74	Line	-	38.00	0.37	0.30	10.07						
AV	26.457M	42.83	50.00	-7.17	10.74	Line	-	32.09	0.37	0.30	10.07						

Mode 13



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	168k	60.92	65.06	-4.14	9.98	Neutral	"Worst"	50.94	0.07	0.04	9.87						
AV	168k	44.32	55.06	-10.74	9.98	Neutral	-	34.34	0.07	0.04	9.87						
QP	186k	57.49	64.20	-6.71	9.97	Neutral	-	47.52	0.07	0.04	9.86						
AV	186k	41.21	54.20	-12.99	9.97	Neutral	-	31.24	0.07	0.04	9.86						
QP	222k	52.93	62.75	-9.82	9.98	Neutral	-	42.95	0.07	0.04	9.87						
AV	222k	37.82	52.75	-14.93	9.98	Neutral	-	27.84	0.07	0.04	9.87						
QP	258k	50.27	61.49	-11.22	9.99	Neutral	-	40.28	0.07	0.05	9.87						
AV	258k	35.45	51.49	-16.04	9.99	Neutral	-	25.46	0.07	0.05	9.87						
QP	289.5k	47.13	60.53	-13.40	10.00	Neutral	-	37.13	0.07	0.05	9.88						
AV	289.5k	33.23	50.53	-17.30	10.00	Neutral	-	23.23	0.07	0.05	9.88						
QP	25.427M	46.12	60.00	-13.88	10.65	Neutral	-	35.47	0.31	0.29	10.05						
AV	25.427M	40.27	50.00	-9.73	10.65	Neutral	-	29.62	0.31	0.29	10.05						

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.965M	16.36M	16M4D1D	19.635M	16.36M
802.11a_Nss1,(6Mbps)_2TX	19.745M	16.382M	16M4D1D	19.14M	16.338M
802.11a_Nss1,(6Mbps)_4TX	20.295M	16.426M	16M4D1D	18.755M	16.294M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.12M	18.916M	18M9D1D	21.01M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.23M	18.941M	18M9D1D	20.9M	18.891M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.835M	18.991M	19M0D1D	20.735M	18.866M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.81M	37.631M	37M6D1D	40.48M	37.581M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.14M	37.731M	37M7D1D	40.48M	37.531M
802.11ax HEW40_Nss1,(MCS0)_4TX	43.23M	37.631M	37M6D1D	40.15M	37.481M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.06M	76.862M	76M9D1D	82.06M	76.862M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.62M	76.862M	76M9D1D	81.4M	76.862M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.84M	76.962M	77M0D1D	81.18M	76.662M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.525M	16.338M	16M3D1D	19.085M	16.338M
802.11a_Nss1,(6Mbps)_2TX	19.195M	16.382M	16M4D1D	18.92M	16.294M
802.11a_Nss1,(6Mbps)_4TX	19.14M	16.404M	16M4D1D	18.59M	16.25M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.23M	18.916M	18M9D1D	21.01M	18.891M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.45M	18.941M	18M9D1D	20.9M	18.866M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.615M	18.941M	18M9D1D	20.515M	18.841M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.59M	37.631M	37M6D1D	40.37M	37.581M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.81M	37.681M	37M7D1D	40.37M	37.531M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.81M	37.681M	37M7D1D	40.26M	37.531M
802.11ax HEW80_Nss1,(MCS0)_1TX	81.62M	76.762M	76M8D1D	81.62M	76.762M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.84M	76.762M	76M8D1D	81.84M	76.662M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.06M	76.862M	76M9D1D	81.4M	76.762M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.855M	16.36M	16M4D1D	15.345M	13.283M
802.11a_Nss1,(6Mbps)_2TX	20.735M	16.47M	16M5D1D	15.3M	13.268M
802.11a_Nss1,(6Mbps)_4TX	20.295M	16.514M	16M5D1D	15.12M	13.268M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.23M	18.941M	18M9D1D	15.63M	14.498M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.23M	18.991M	19M0D1D	15.15M	14.453M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.34M	19.015M	19M0D1D	15.15M	14.333M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.92M	37.631M	37M6D1D	35.315M	33.723M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.7M	37.631M	37M6D1D	34.86M	33.513M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.25M	37.831M	37M8D1D	34.93M	33.443M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.28M	76.962M	77M0D1D	76.575M	72.939M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.06M	76.962M	77M0D1D	76.05M	72.489M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.72M	77.261M	77M3D1D	75.6M	72.489M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.28M	16.58M	16M6D1D	3.08M	3.558M
802.11a_Nss1,(6Mbps)_2TX	16.335M	16.734M	16M7D1D	2.82M	4.118M
802.11a_Nss1,(6Mbps)_4TX	16.335M	16.888M	16M9D1D	3.06M	3.358M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.81M	19.065M	19M1D1D	4.38M	4.518M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.81M	19.19M	19M2D1D	4.36M	4.498M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.92M	19.215M	19M2D1D	4.04M	4.438M
802.11ax HEW40_Nss1,(MCS0)_1TX	35.75M	37.881M	37M9D1D	3.9M	5.177M
802.11ax HEW40_Nss1,(MCS0)_2TX	36.3M	37.931M	37M9D1D	3.98M	6.737M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.95M	38.231M	38M2D1D	3.78M	5.477M
802.11ax HEW80_Nss1,(MCS0)_1TX	71.28M	77.361M	77M4D1D	4.04M	10.815M
802.11ax HEW80_Nss1,(MCS0)_2TX	75.68M	77.261M	77M3D1D	4M	11.534M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.44M	77.461M	77M5D1D	3.7M	11.174M

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)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.635M	16.36M						
5200MHz	Pass	Inf	19.635M	16.36M						
5240MHz	Pass	Inf	19.965M	16.36M						
5260MHz	Pass	Inf	19.525M	16.338M						
5300MHz	Pass	Inf	19.195M	16.338M						
5320MHz	Pass	Inf	19.085M	16.338M						
5500MHz	Pass	Inf	19.745M	16.36M						
5580MHz	Pass	Inf	19.855M	16.36M						
5700MHz	Pass	Inf	19.58M	16.36M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.345M	13.283M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.558M						
5745MHz	Pass	500k	16.28M	16.492M						
5785MHz	Pass	500k	16.225M	16.558M						
5825MHz	Pass	500k	16.28M	16.58M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.01M	18.891M						
5200MHz	Pass	Inf	21.12M	18.916M						
5240MHz	Pass	Inf	21.12M	18.916M						
5260MHz	Pass	Inf	21.23M	18.891M						
5300MHz	Pass	Inf	21.12M	18.916M						
5320MHz	Pass	Inf	21.01M	18.916M						
5500MHz	Pass	Inf	20.845M	18.916M						
5580MHz	Pass	Inf	21.065M	18.941M						
5700MHz	Pass	Inf	21.23M	18.916M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.63M	14.498M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.38M	4.518M						
5745MHz	Pass	500k	18.755M	18.991M						
5785MHz	Pass	500k	18.81M	18.991M						
5825MHz	Pass	500k	18.755M	19.065M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.48M	37.581M						
5230MHz	Pass	Inf	40.81M	37.631M						
5270MHz	Pass	Inf	40.59M	37.631M						
5310MHz	Pass	Inf	40.37M	37.581M						
5510MHz	Pass	Inf	40.26M	37.581M						
5550MHz	Pass	Inf	40.92M	37.631M						
5670MHz	Pass	Inf	40.26M	37.581M						
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.315M	33.723M						
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	5.177M						
5755MHz	Pass	500k	34.76M	37.731M						
5795MHz	Pass	500k	35.75M	37.881M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.06M	76.862M						
5290MHz	Pass	Inf	81.62M	76.762M						
5530MHz	Pass	Inf	81.84M	76.862M						
5610MHz	Pass	Inf	82.28M	76.962M						
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.575M	72.939M						
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	10.815M						
5775MHz	Pass	500k	71.28M	77.361M						
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.745M	16.382M	19.14M	16.338M				
5200MHz	Pass	Inf	19.69M	16.338M	19.14M	16.382M				
5240MHz	Pass	Inf	19.14M	16.382M	19.58M	16.36M				
5260MHz	Pass	Inf	18.975M	16.294M	19.085M	16.36M				



EBW_Radio 1-1T1S, 2T1S, 4T1S

Appendix B.1

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)
5300MHz	Pass	Inf	18.975M	16.316M	18.92M	16.382M				
5320MHz	Pass	Inf	18.975M	16.36M	19.195M	16.338M				
5500MHz	Pass	Inf	18.975M	16.404M	19.085M	16.36M				
5580MHz	Pass	Inf	19.415M	16.25M	19.25M	16.382M				
5700MHz	Pass	Inf	18.865M	16.47M	20.735M	16.426M				
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.3M	13.268M	15.72M	13.298M				
5720MHz Straddle 5.725-5.85GHz	Pass	500k	2.82M	4.118M	3.08M	4.718M				
5745MHz	Pass	500k	15.675M	16.558M	16.28M	16.47M				
5785MHz	Pass	500k	15.675M	16.646M	16.335M	16.514M				
5825MHz	Pass	500k	15.73M	16.734M	15.675M	16.712M				
802.11ax HEW20_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.23M	18.916M	20.955M	18.891M				
5200MHz	Pass	Inf	21.12M	18.941M	20.9M	18.891M				
5240MHz	Pass	Inf	21.175M	18.941M	20.9M	18.891M				
5260MHz	Pass	Inf	20.9M	18.941M	21.34M	18.891M				
5300MHz	Pass	Inf	21.45M	18.866M	20.9M	18.916M				
5320MHz	Pass	Inf	20.955M	18.941M	20.9M	18.891M				
5500MHz	Pass	Inf	20.845M	18.966M	20.9M	18.916M				
5580MHz	Pass	Inf	20.185M	18.716M	21.23M	18.916M				
5700MHz	Pass	Inf	20.625M	18.991M	21.23M	18.941M				
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.15M	14.453M	16.5M	14.543M				
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.36M	4.498M	4.36M	4.738M				
5745MHz	Pass	500k	15.29M	18.916M	18.37M	18.966M				
5785MHz	Pass	500k	16.72M	19.04M	18.48M	19.015M				
5825MHz	Pass	500k	18.535M	19.165M	18.81M	19.19M				
802.11ax HEW40_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.14M	37.581M	40.7M	37.531M				
5230MHz	Pass	Inf	40.48M	37.731M	40.48M	37.581M				
5270MHz	Pass	Inf	40.59M	37.681M	40.37M	37.531M				
5310MHz	Pass	Inf	40.48M	37.631M	40.81M	37.581M				
5510MHz	Pass	Inf	40.26M	37.331M	40.04M	37.531M				
5550MHz	Pass	Inf	40.15M	37.381M	40.48M	37.631M				
5670MHz	Pass	Inf	39.49M	37.331M	40.7M	37.631M				
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.86M	33.513M	35.665M	33.758M				
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	6.737M	4.04M	12.474M				
5755MHz	Pass	500k	36.3M	37.881M	35.64M	37.781M				
5795MHz	Pass	500k	32.12M	37.881M	28.82M	37.931M				
802.11ax HEW80_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.62M	76.862M	81.4M	76.862M				
5290MHz	Pass	Inf	81.84M	76.762M	81.84M	76.662M				
5530MHz	Pass	Inf	81.62M	76.762M	81.4M	76.862M				
5610MHz	Pass	Inf	81.62M	76.662M	82.06M	76.962M				
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.05M	72.489M	76.725M	73.013M				
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	11.534M	4M	24.168M				
5775MHz	Pass	500k	73.26M	77.261M	75.68M	77.261M				
802.11a_Nss1.(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.14M	16.316M	18.755M	16.294M	18.92M	16.338M	18.975M	16.36M
5200MHz	Pass	Inf	19.745M	16.404M	19.58M	16.404M	20.075M	16.316M	19.14M	16.36M
5240MHz	Pass	Inf	19.525M	16.294M	19.085M	16.316M	20.295M	16.426M	20.295M	16.404M
5260MHz	Pass	Inf	18.755M	16.25M	18.645M	16.316M	18.865M	16.294M	19.03M	16.36M
5300MHz	Pass	Inf	19.14M	16.404M	18.7M	16.316M	18.865M	16.316M	18.81M	16.36M
5320MHz	Pass	Inf	19.03M	16.36M	18.59M	16.272M	18.865M	16.316M	19.03M	16.36M
5500MHz	Pass	Inf	18.59M	16.25M	18.26M	16.03M	19.14M	16.382M	18.865M	16.316M
5580MHz	Pass	Inf	20.295M	16.514M	18.315M	16.118M	19.69M	16.36M	19.47M	16.36M
5700MHz	Pass	Inf	18.315M	16.118M	18.37M	16.118M	18.92M	16.338M	18.92M	16.382M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.405M	13.328M	15.375M	13.418M	15.12M	13.268M	15.3M	13.328M



EBW_Radio 1-1T1S, 2T1S, 4T1S

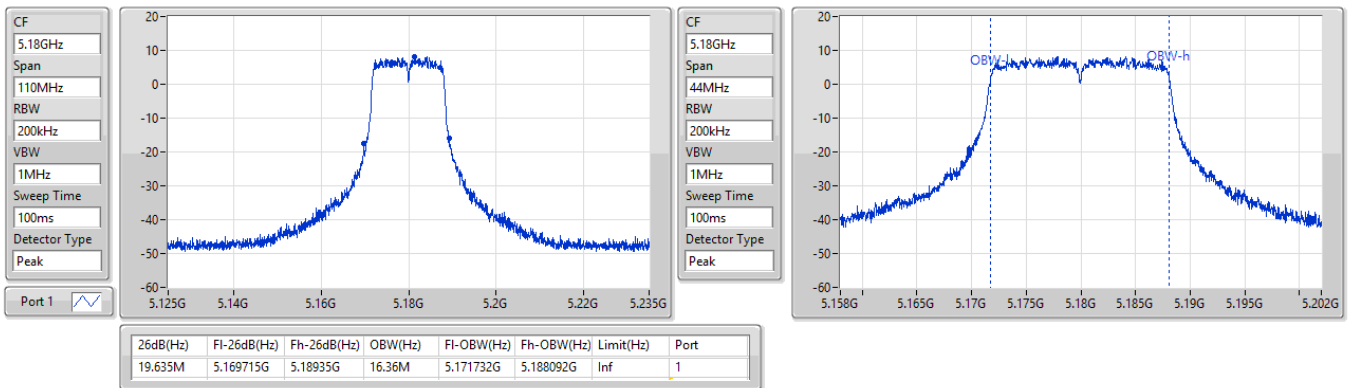
Appendix B.1

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)
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.06M	3.558M	3.06M	3.378M	3.06M	3.358M	3.08M	3.438M
5745MHz	Pass	500k	14.41M	16.382M	16.335M	16.712M	16.335M	16.47M	14.08M	16.382M
5785MHz	Pass	500k	15.29M	16.514M	14.96M	16.228M	16.335M	16.47M	15.29M	16.624M
5825MHz	Pass	500k	15.675M	16.888M	15.015M	16.536M	15.73M	16.492M	15.62M	16.668M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.79M	18.866M	21.175M	18.991M	21.12M	18.941M	21.065M	18.916M
5200MHz	Pass	Inf	20.735M	18.891M	21.615M	18.991M	21.835M	18.966M	21.23M	18.916M
5240MHz	Pass	Inf	20.845M	18.891M	21.395M	18.991M	21.505M	18.966M	21.67M	18.891M
5260MHz	Pass	Inf	20.9M	18.916M	20.9M	18.916M	21.01M	18.941M	21.175M	18.941M
5300MHz	Pass	Inf	20.845M	18.916M	20.515M	18.866M	20.955M	18.866M	21.065M	18.866M
5320MHz	Pass	Inf	21.065M	18.916M	20.68M	18.866M	21.615M	18.941M	20.845M	18.841M
5500MHz	Pass	Inf	21.12M	18.966M	20.075M	18.566M	21.34M	18.916M	20.79M	18.791M
5580MHz	Pass	Inf	20.955M	18.991M	20.24M	18.716M	21.01M	18.891M	21.01M	18.791M
5700MHz	Pass	Inf	20.405M	18.666M	21.34M	19.015M	21.23M	18.941M	20.735M	18.816M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.72M	14.573M	15.15M	14.378M	16.095M	14.558M	15.165M	14.333M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.558M	4.04M	4.458M	4.4M	4.478M	4.36M	4.438M
5745MHz	Pass	500k	15.51M	18.916M	15.73M	18.666M	17.82M	18.891M	18.425M	19.065M
5785MHz	Pass	500k	15.95M	19.065M	13.365M	18.741M	18.755M	19.015M	18.92M	19.19M
5825MHz	Pass	500k	16.61M	19.015M	16.72M	18.916M	18.48M	19.04M	18.81M	19.215M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.59M	37.581M	40.37M	37.631M	40.37M	37.481M	40.15M	37.631M
5230MHz	Pass	Inf	40.59M	37.631M	40.81M	37.631M	40.7M	37.531M	43.23M	37.631M
5270MHz	Pass	Inf	40.37M	37.631M	40.48M	37.581M	40.59M	37.631M	40.81M	37.631M
5310MHz	Pass	Inf	40.26M	37.631M	40.26M	37.531M	40.37M	37.531M	40.26M	37.681M
5510MHz	Pass	Inf	40.37M	37.431M	40.7M	37.831M	40.37M	37.531M	40.26M	37.631M
5550MHz	Pass	Inf	41.03M	37.781M	40.15M	37.131M	41.25M	37.631M	40.81M	37.731M
5670MHz	Pass	Inf	39.6M	37.231M	39.82M	37.731M	39.93M	37.631M	39.82M	37.481M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.93M	33.443M	35.14M	33.793M	35.21M	33.758M	35.14M	33.618M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.84M	5.477M	4.02M	14.473M	4M	8.236M	3.78M	8.956M
5755MHz	Pass	500k	33.66M	37.881M	34.32M	38.031M	35.31M	37.681M	36.41M	38.031M
5795MHz	Pass	500k	33.66M	37.881M	30.91M	37.581M	36.08M	37.831M	37.95M	38.231M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	76.862M	81.18M	76.962M	81.62M	76.662M	81.62M	76.762M
5290MHz	Pass	Inf	81.4M	76.862M	81.4M	76.762M	82.06M	76.862M	81.84M	76.862M
5530MHz	Pass	Inf	80.96M	76.362M	82.06M	77.261M	81.62M	76.662M	81.62M	76.762M
5610MHz	Pass	Inf	82.28M	77.161M	81.62M	76.862M	82.72M	76.862M	81.84M	76.462M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.6M	72.489M	77.325M	73.013M	76.2M	73.013M	75.9M	72.789M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	11.174M	4.02M	27.526M	3.98M	20.45M	3.7M	19.45M
5775MHz	Pass	500k	69.96M	76.562M	77.44M	77.461M	68.86M	76.862M	73.48M	77.361M

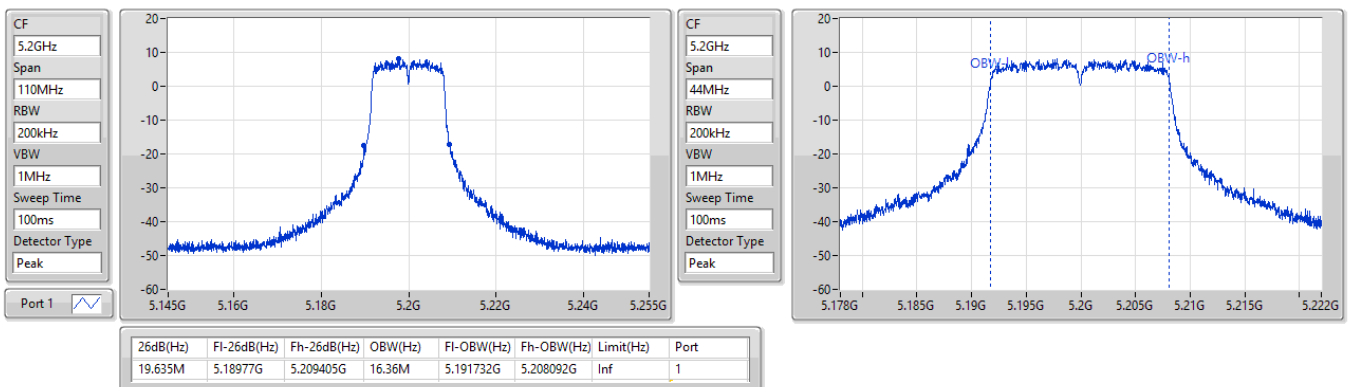
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5180MHz

24/03/2023

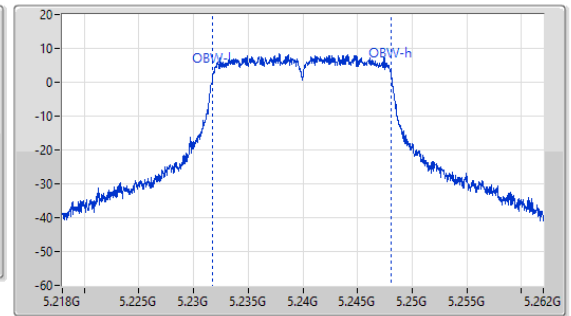
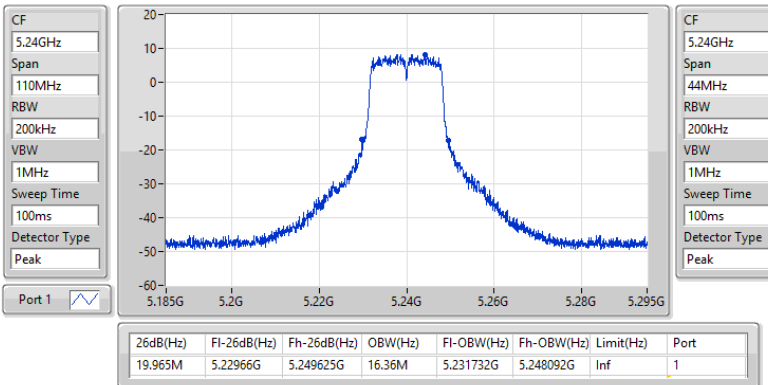

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5200MHz

24/03/2023

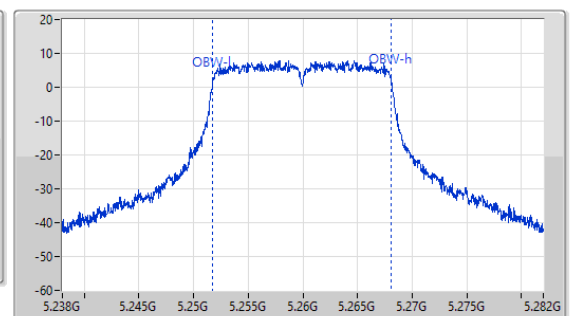
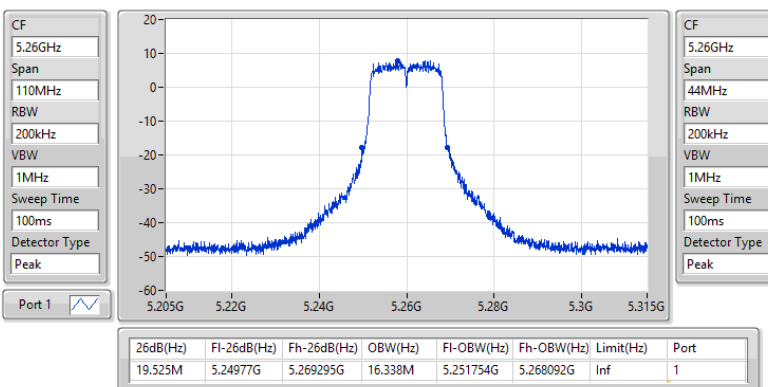


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5240MHz

24/03/2023

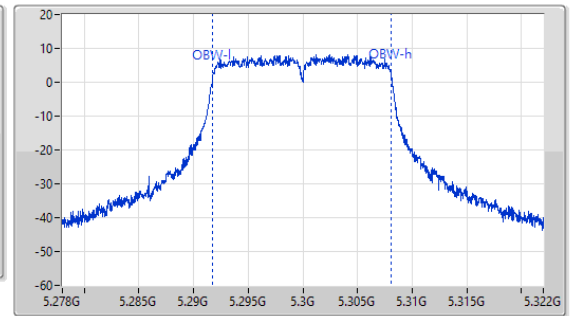
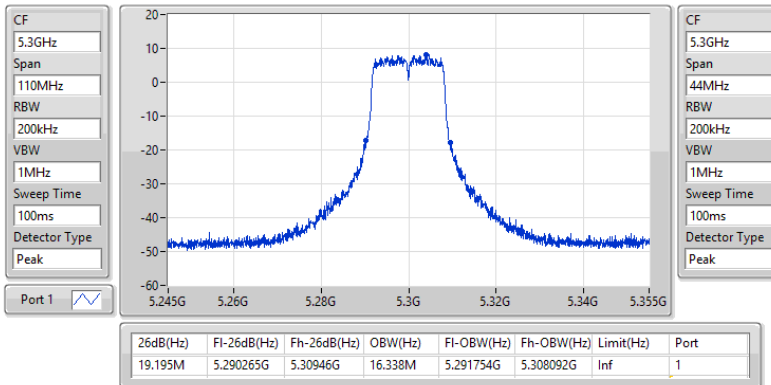

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5260MHz

25/03/2023

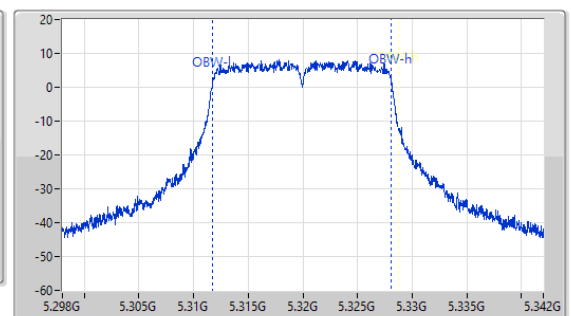
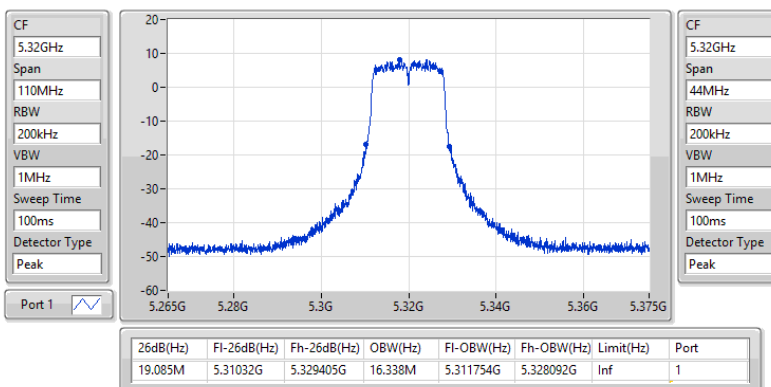


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5300MHz

25/03/2023

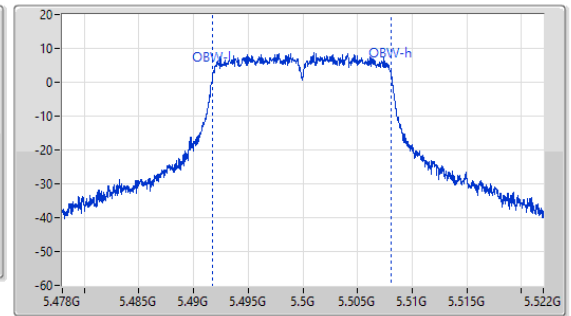
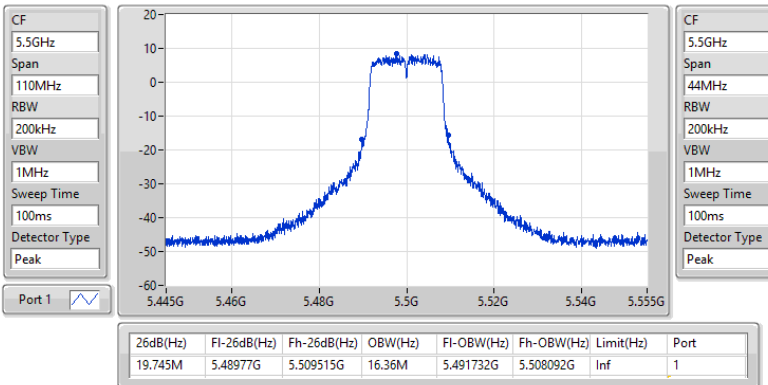

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5320MHz

25/03/2023

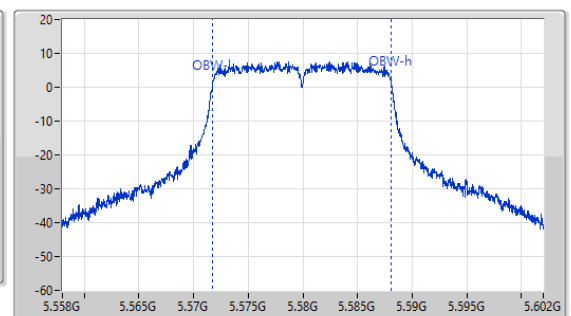
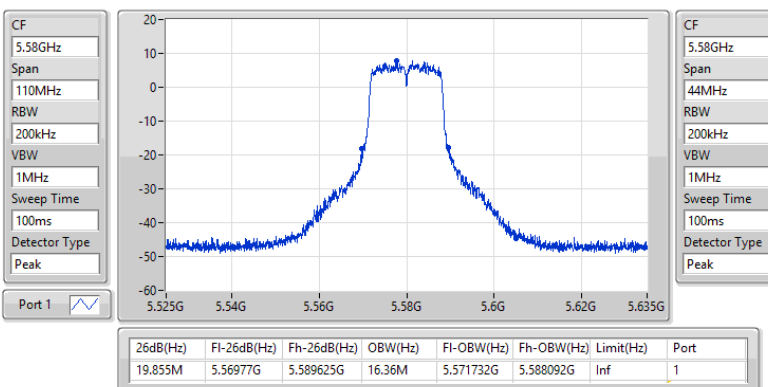


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

25/03/2023

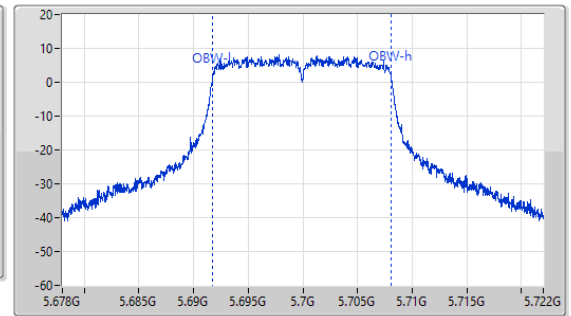
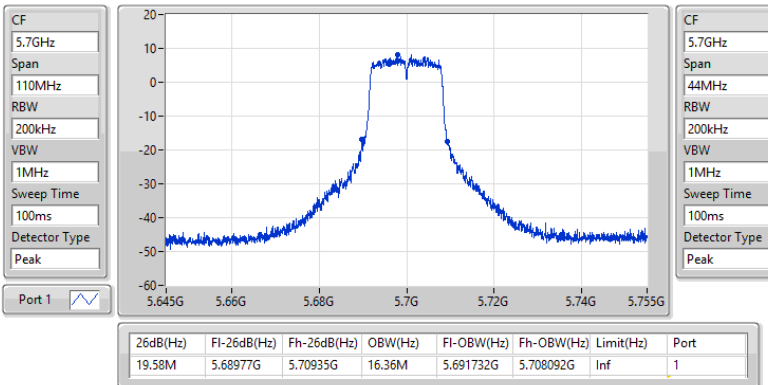

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

25/03/2023

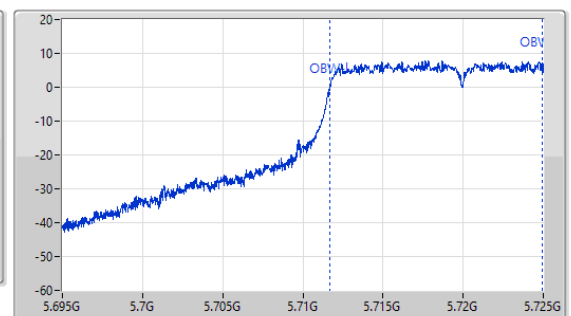
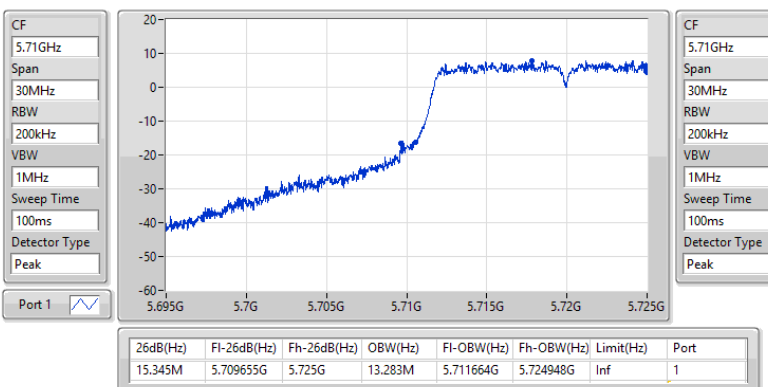


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

25/03/2023

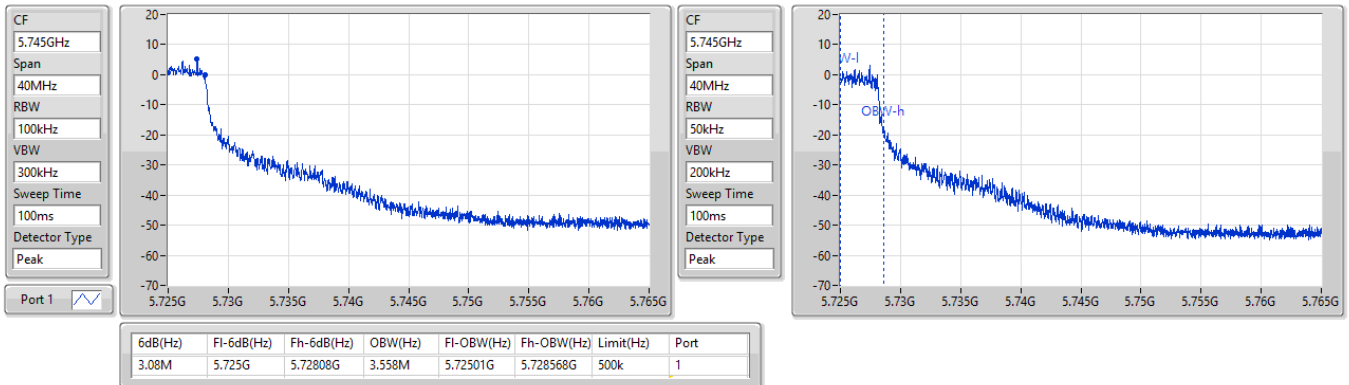

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

25/03/2023

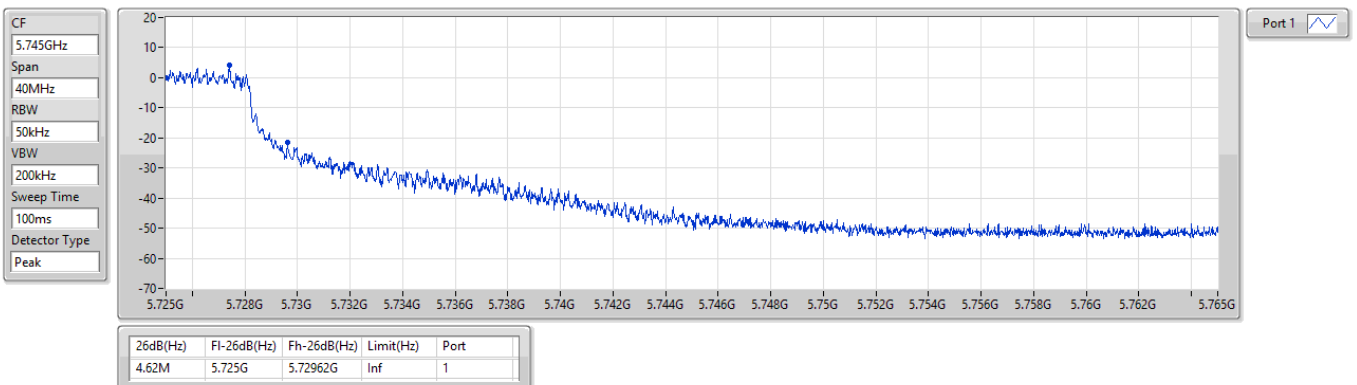


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

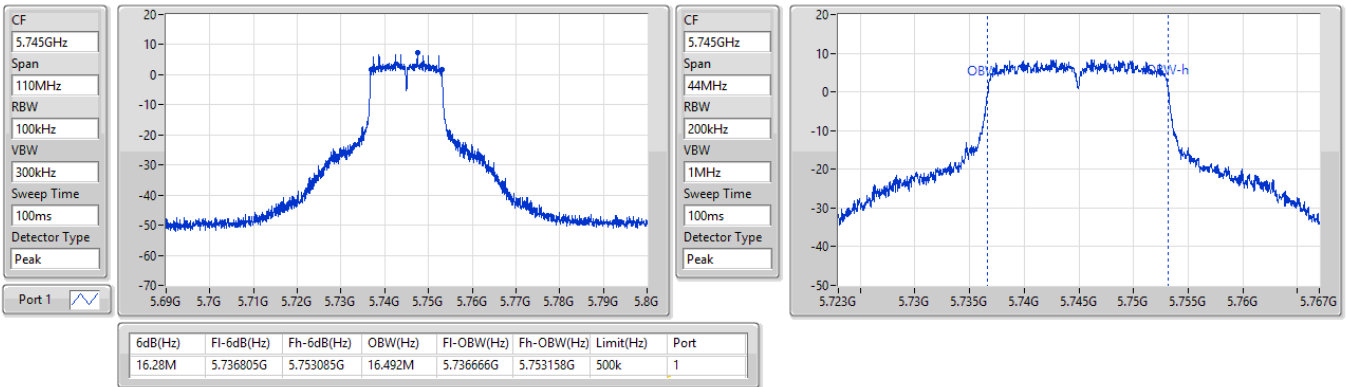

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

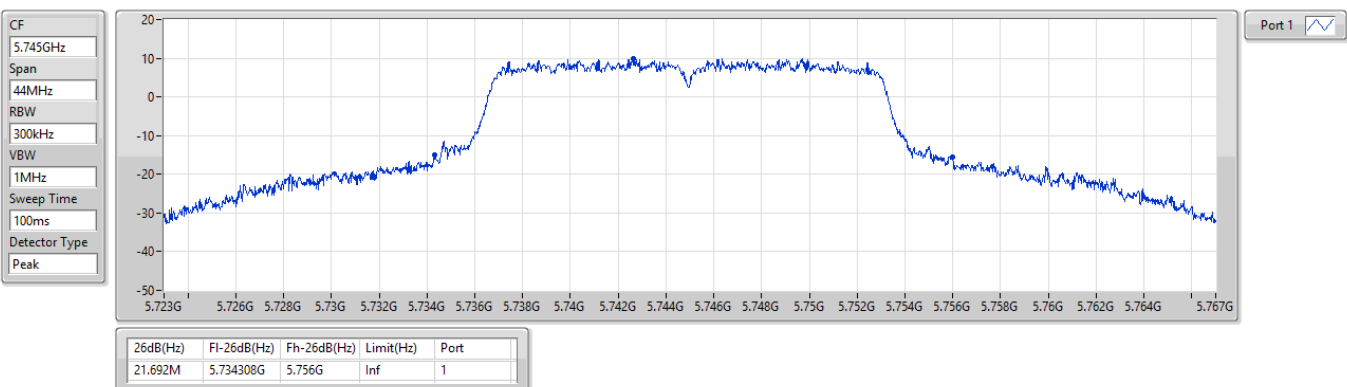


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

25/03/2023

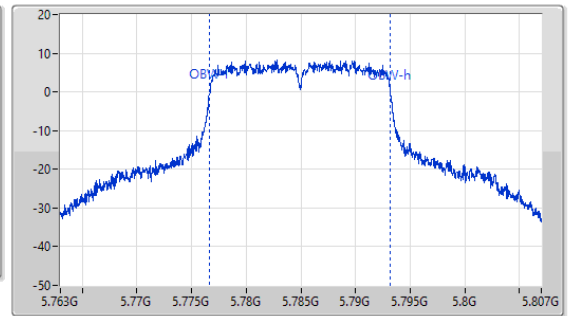
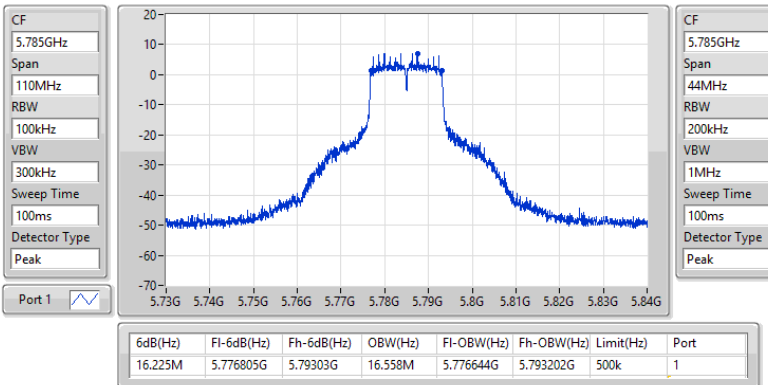

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

25/03/2023

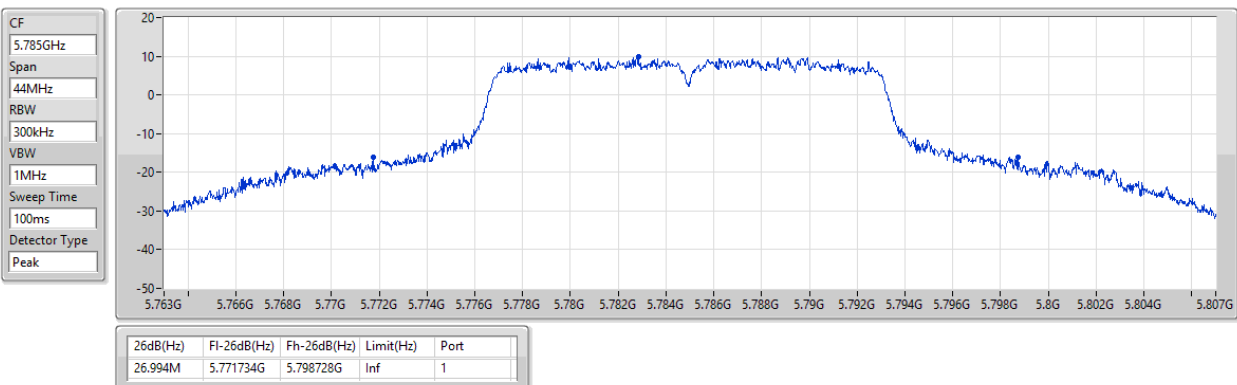


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

25/03/2023

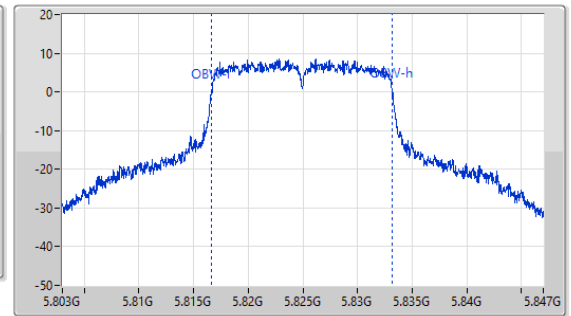
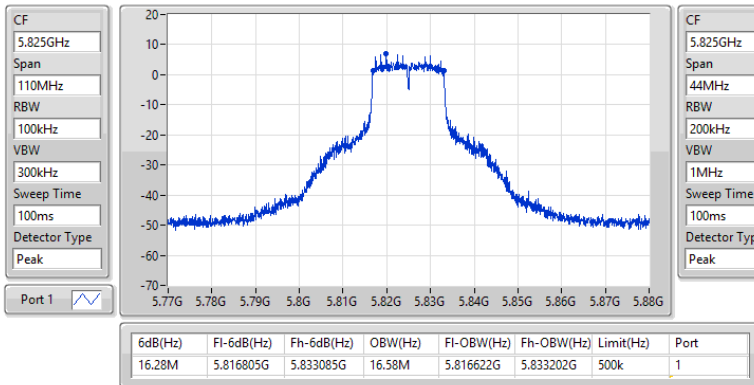

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

25/03/2023

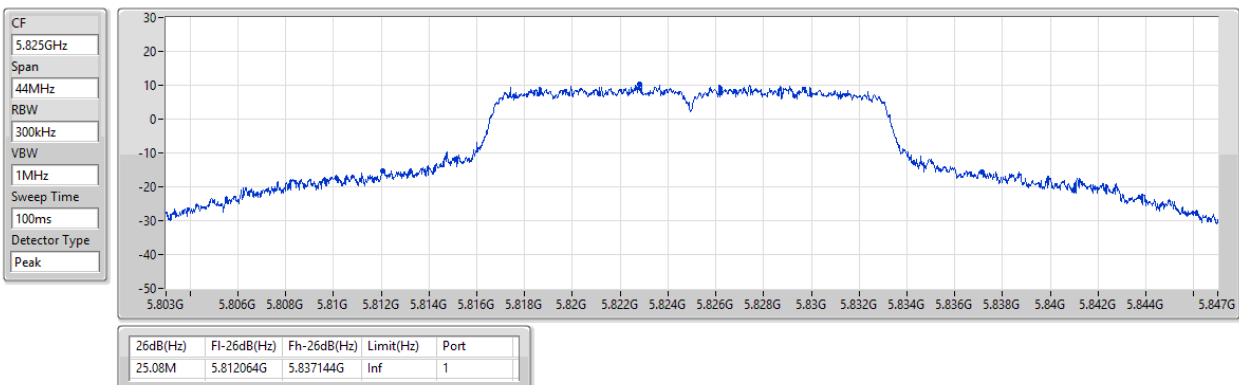


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

25/03/2023

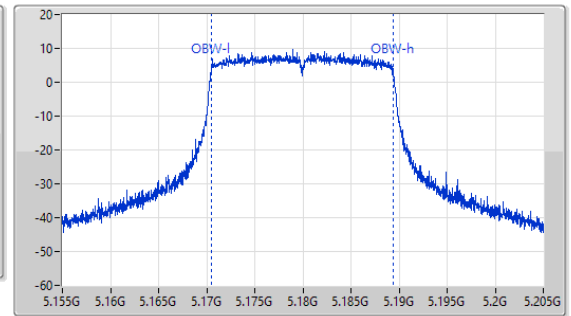
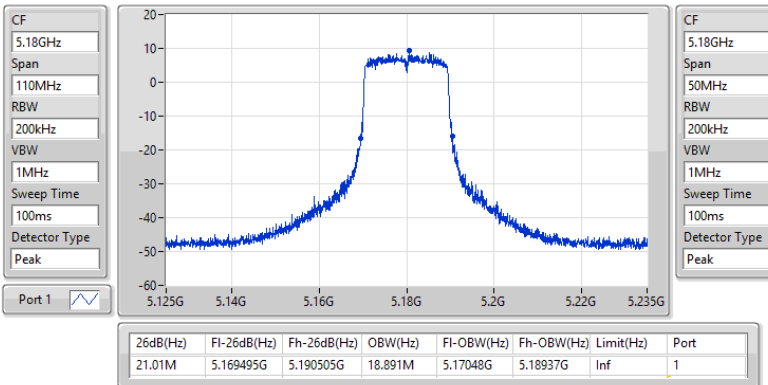

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

25/03/2023

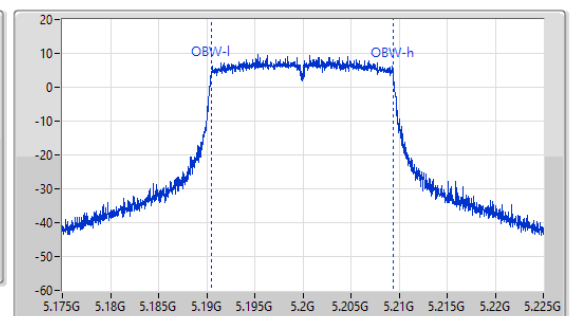
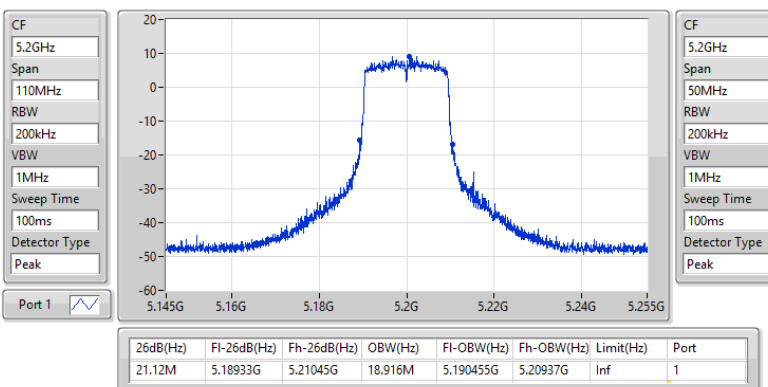


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5180MHz

25/03/2023

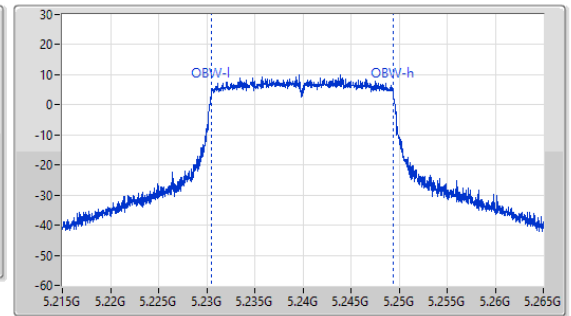
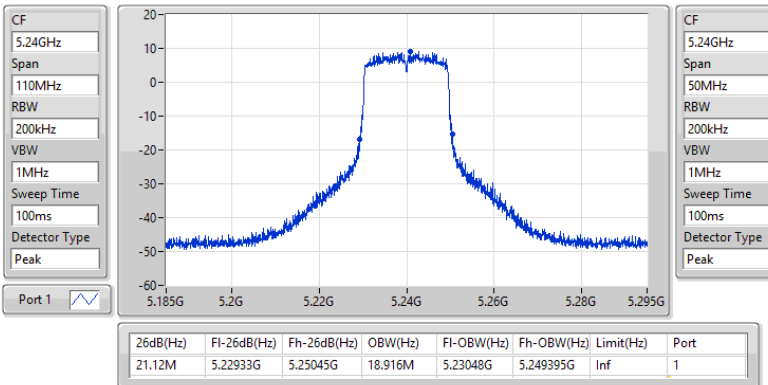

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5200MHz

25/03/2023

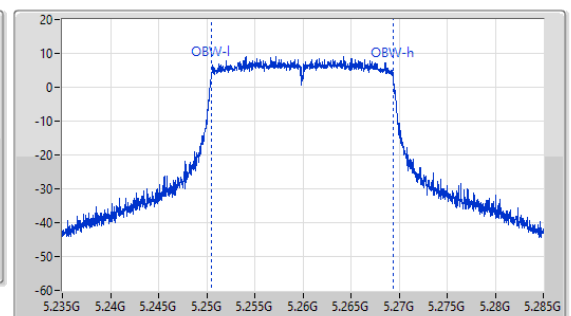
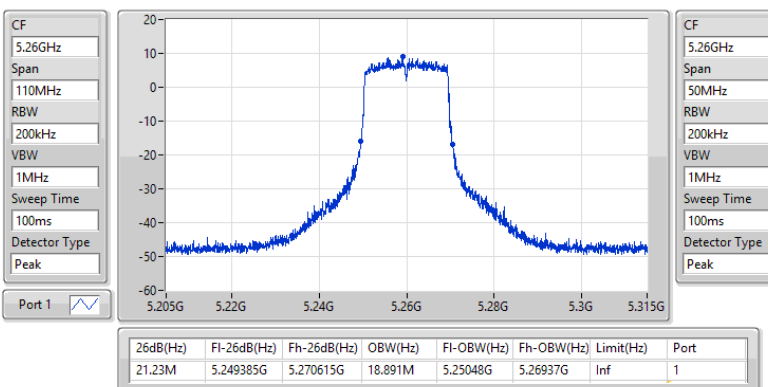


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5240MHz

25/03/2023

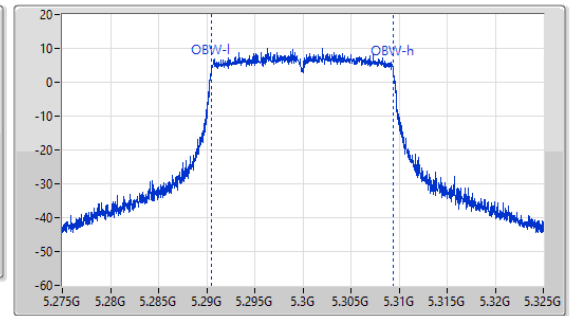
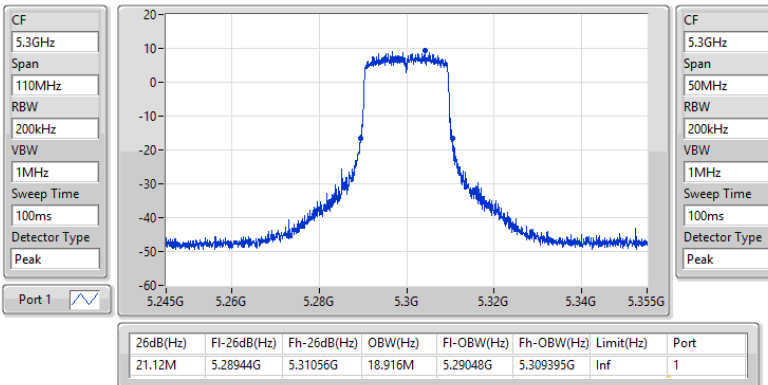

5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5260MHz

25/03/2023

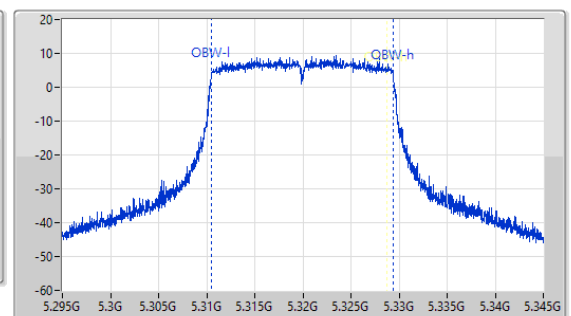
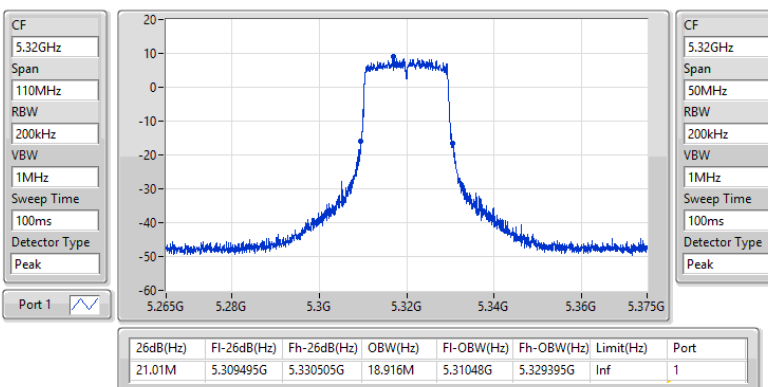


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5300MHz

25/03/2023

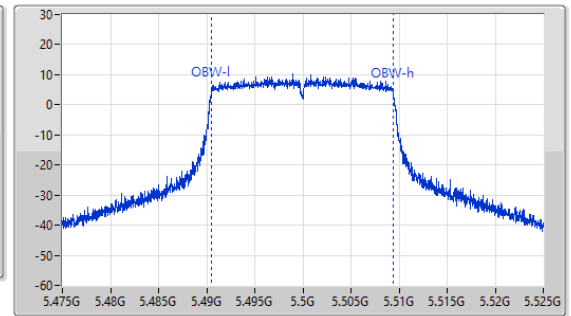
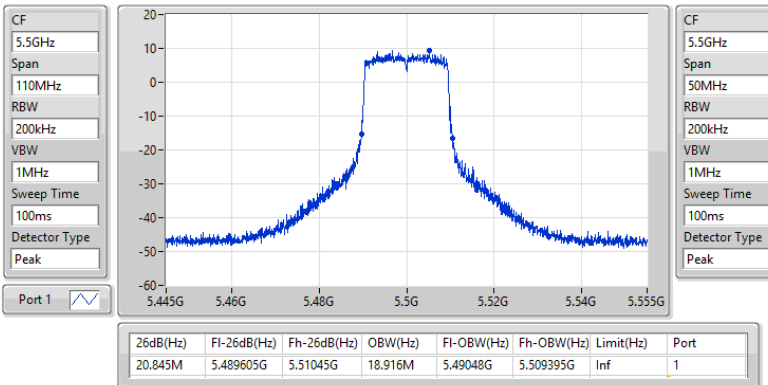

5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5320MHz

25/03/2023

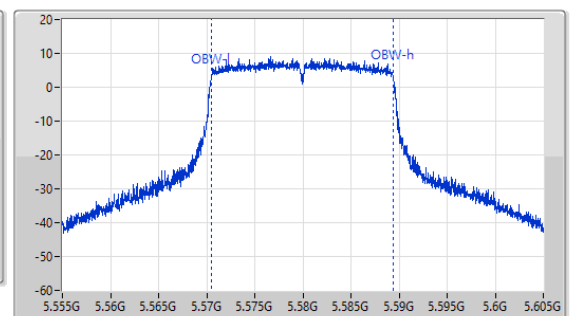
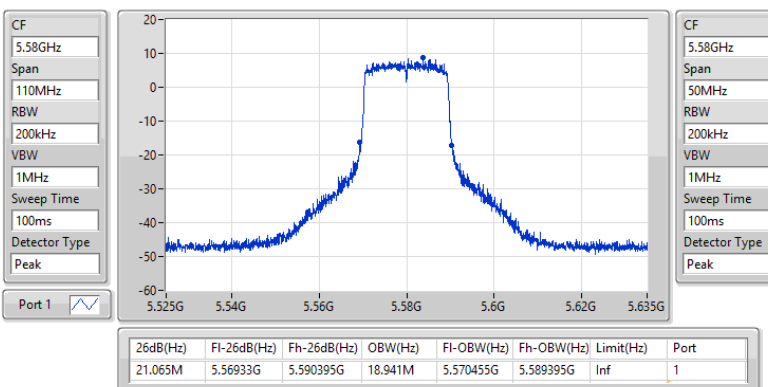


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

25/03/2023

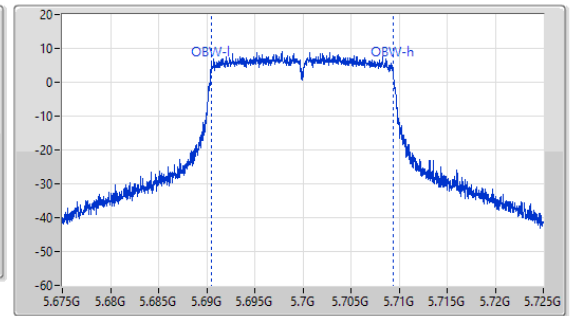
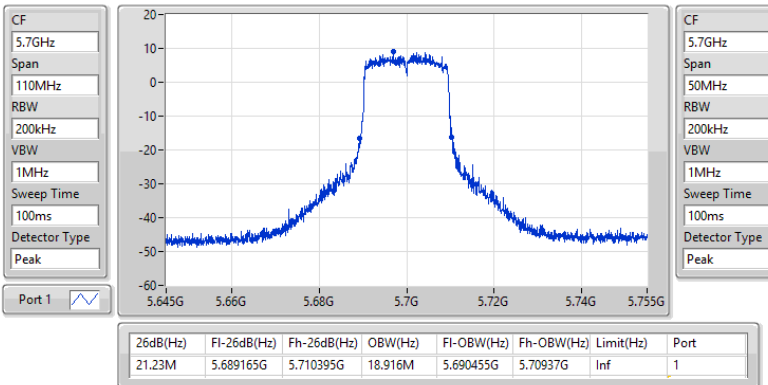

5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

25/03/2023

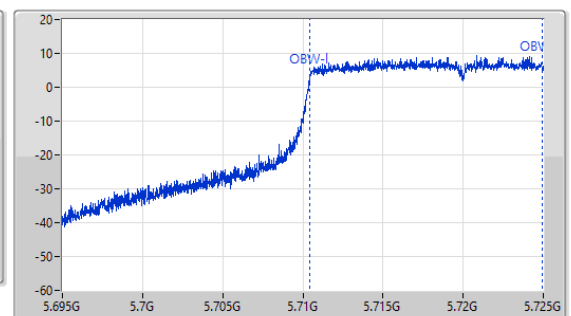
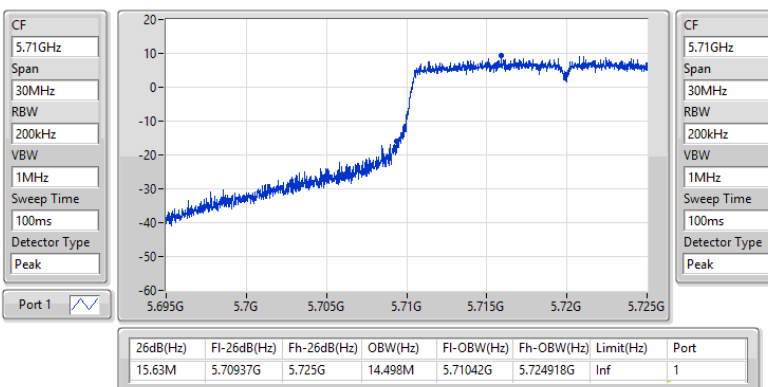


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

25/03/2023

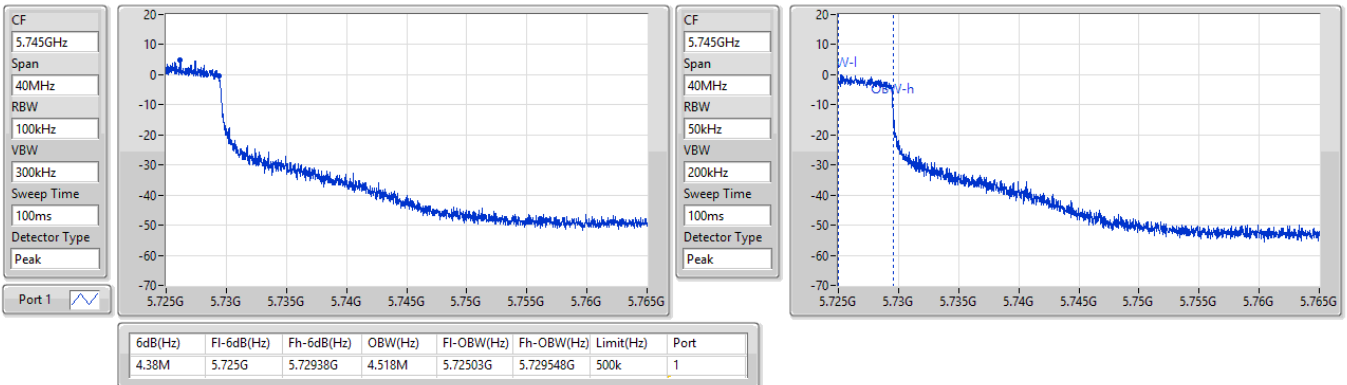

5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

25/03/2023

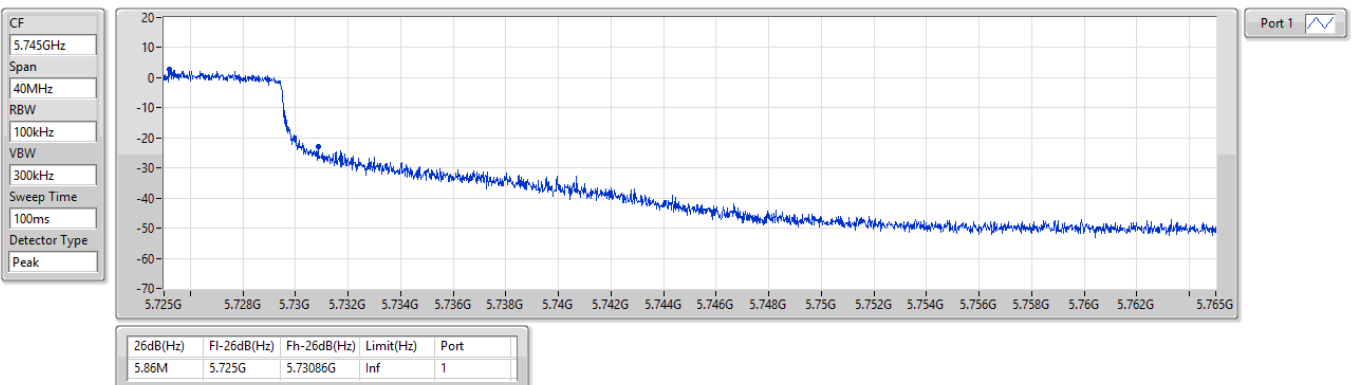


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

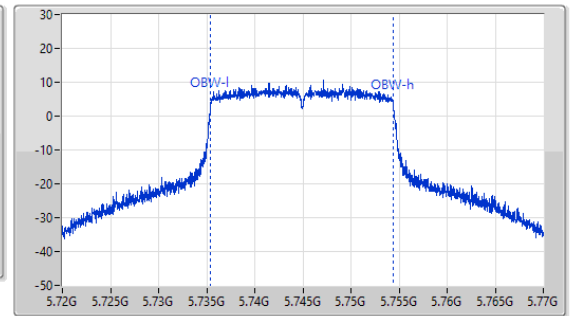
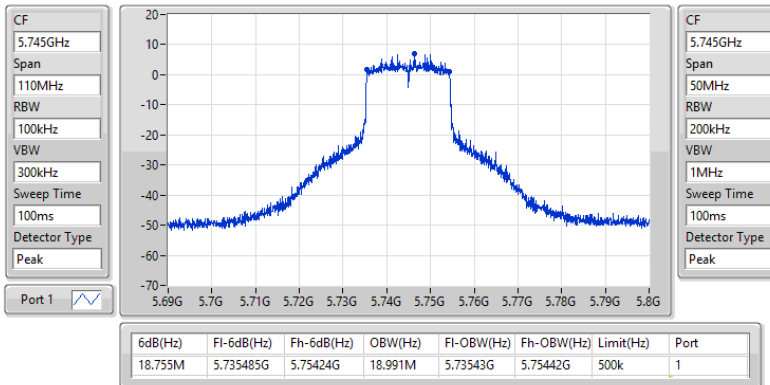

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

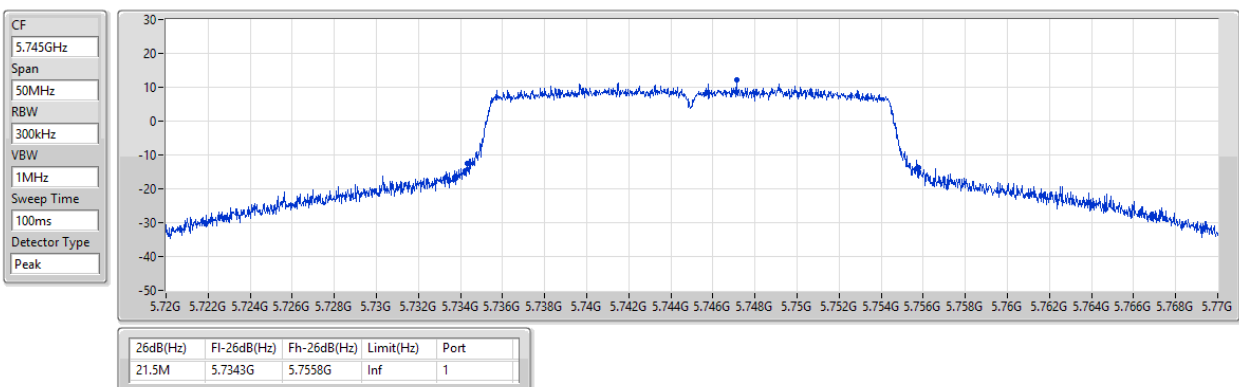


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5745MHz

25/03/2023

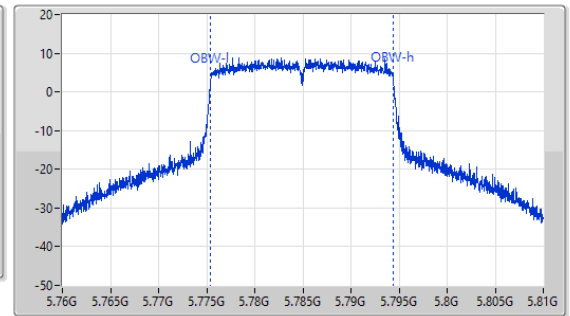
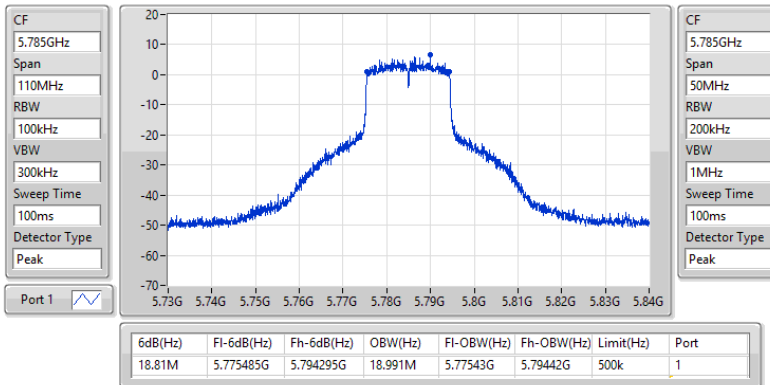

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5745MHz

25/03/2023

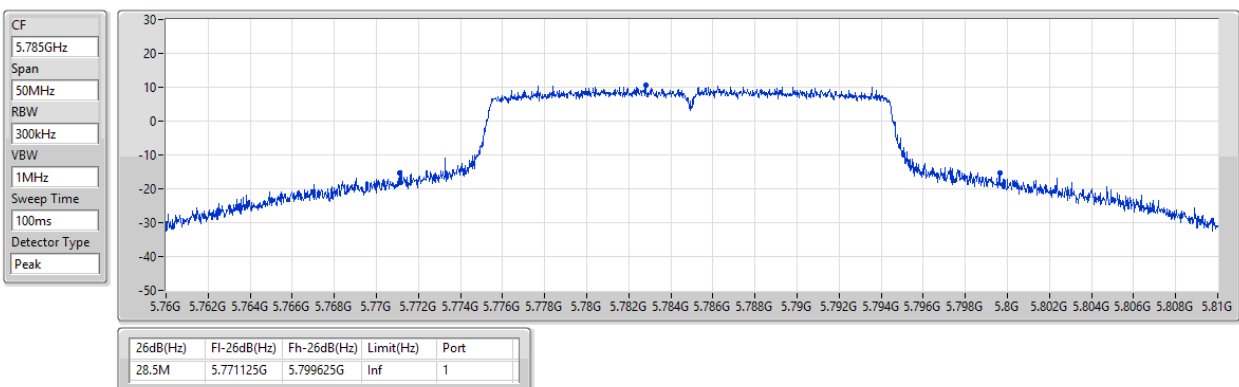


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EBW
5785MHz

25/03/2023

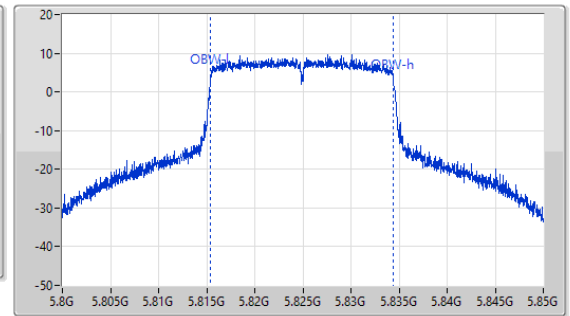
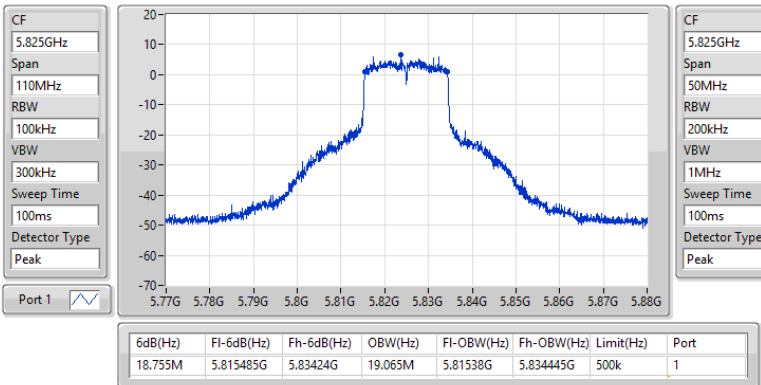

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5785MHz

25/03/2023

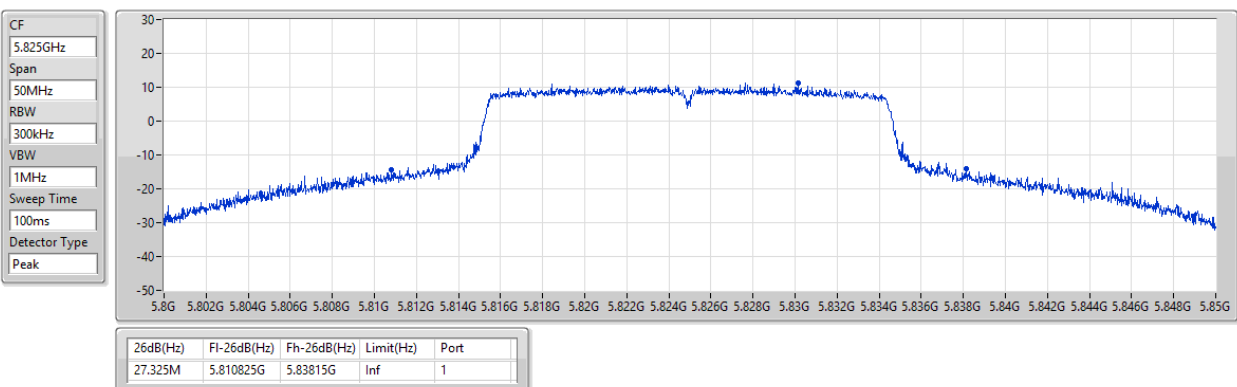


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5825MHz

25/03/2023

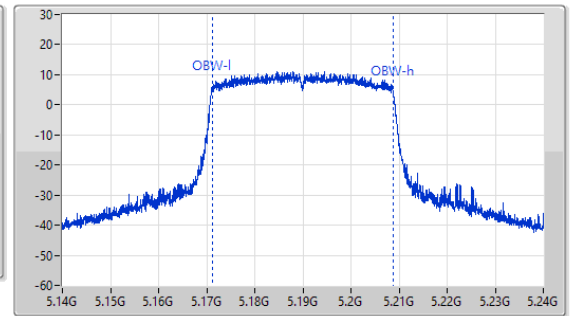
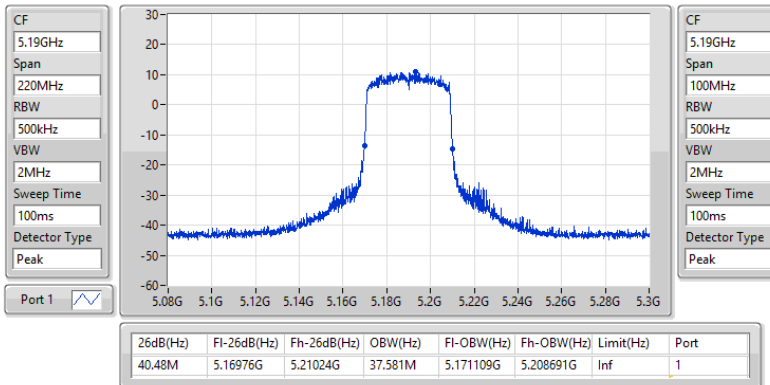

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5825MHz

25/03/2023

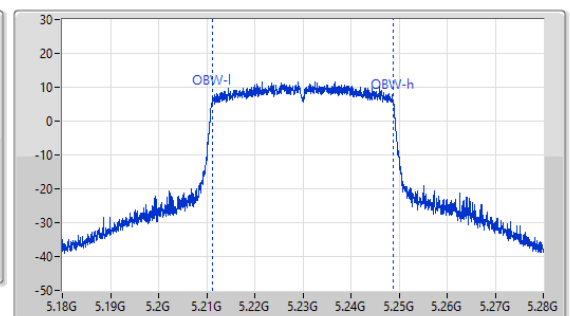
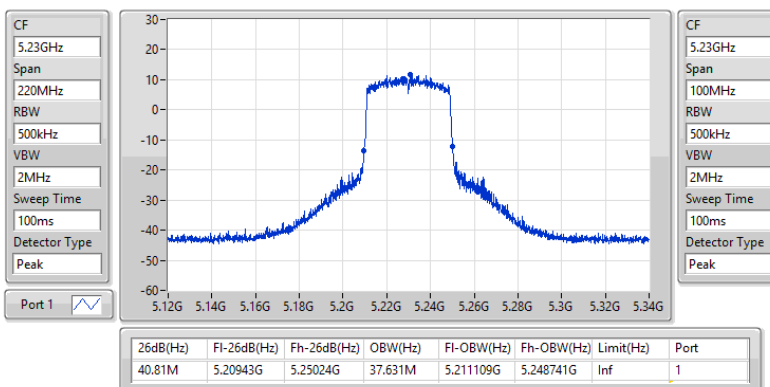


5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5190MHz

25/03/2023

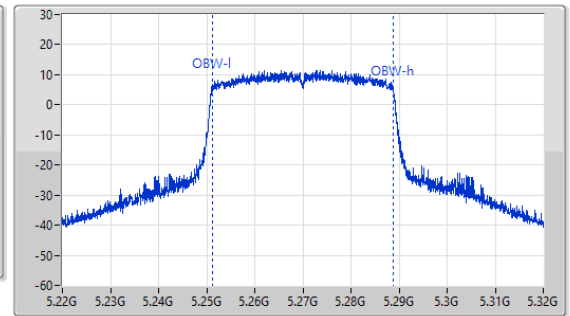
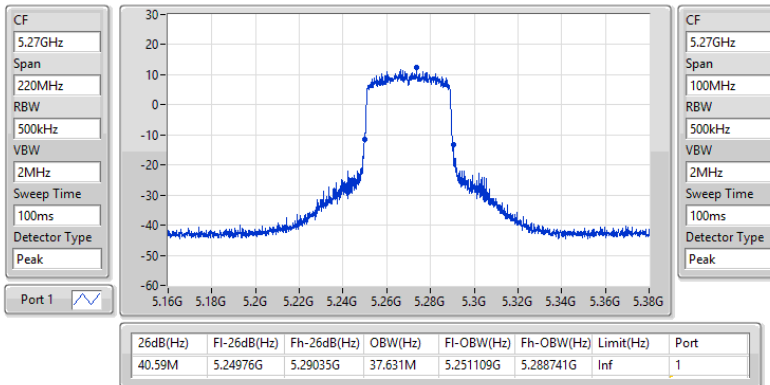

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5230MHz

25/03/2023

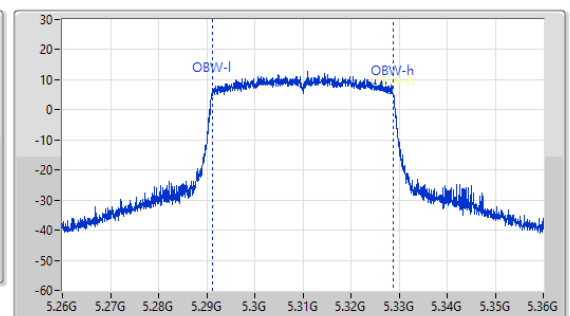
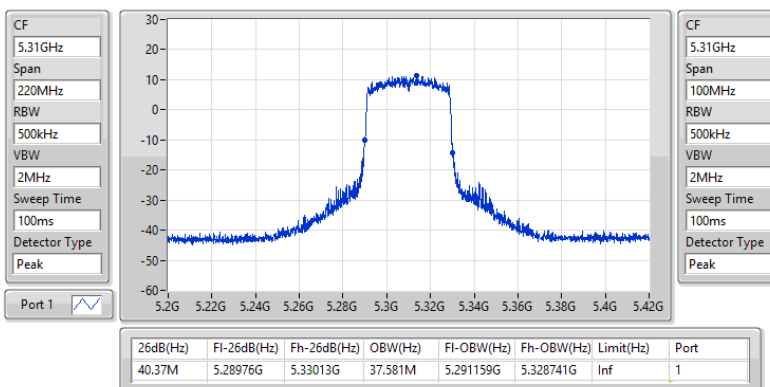


5.25-5.35GHz 802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5270MHz

25/03/2023

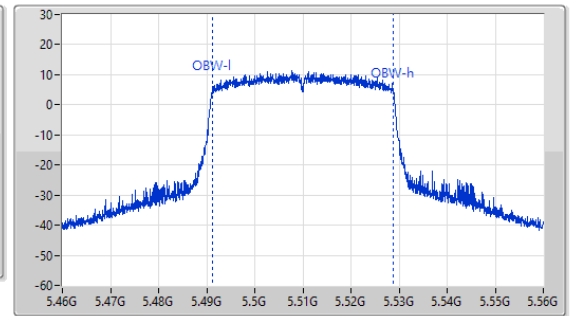
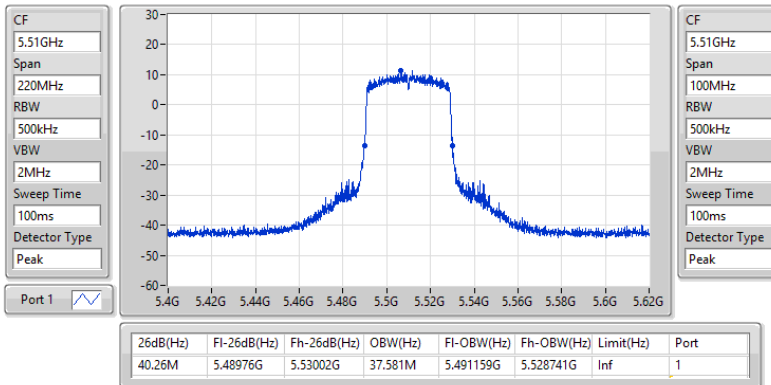

5.25-5.35GHz 802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5310MHz

25/03/2023

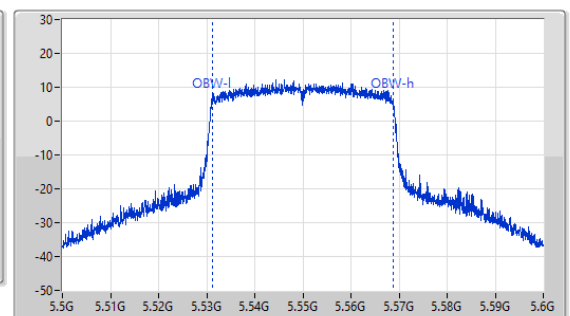
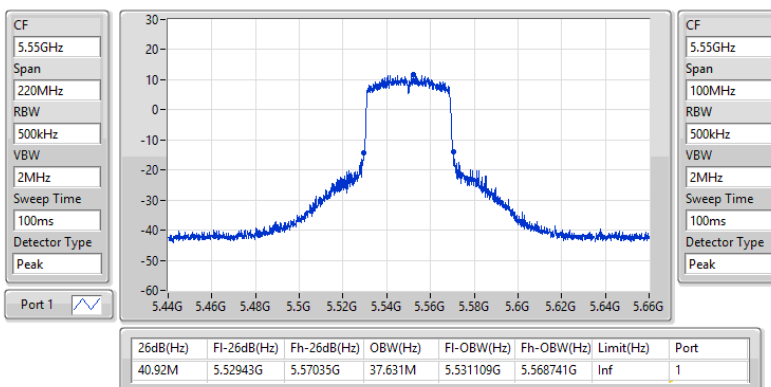


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5510MHz

25/03/2023

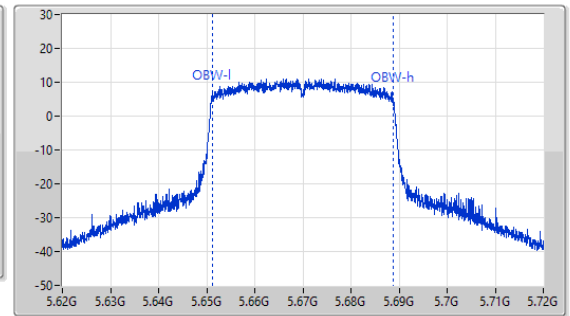
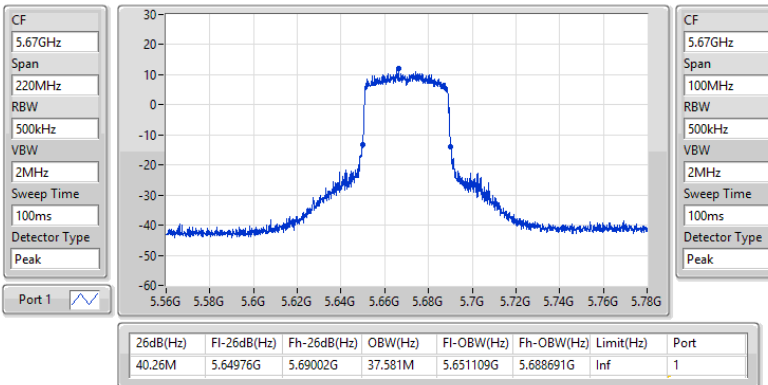

5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5550MHz

25/03/2023

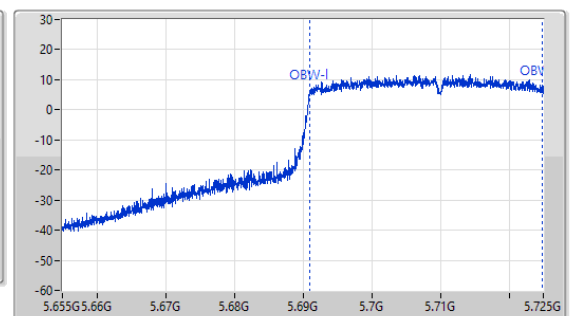
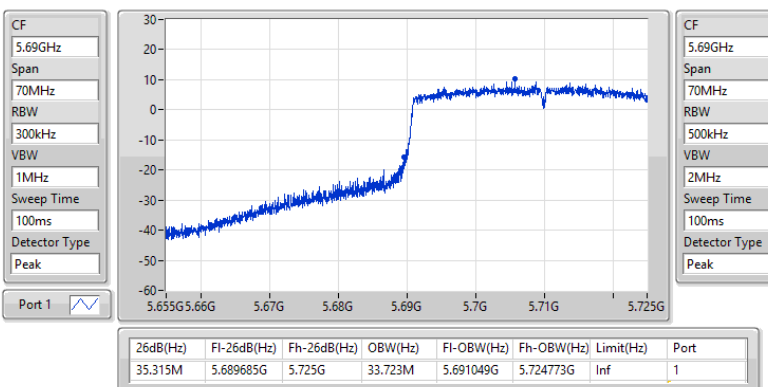


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5670MHz

25/03/2023

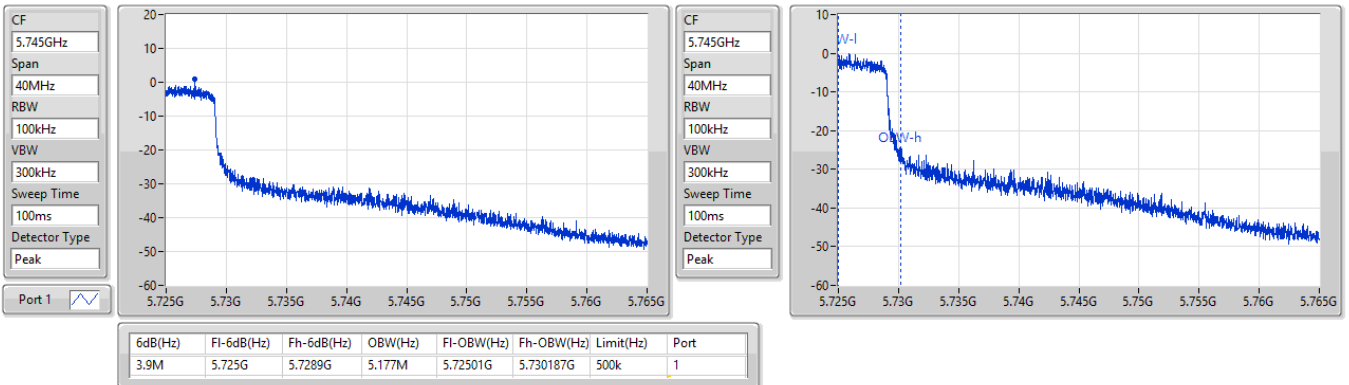

5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.47-5.725GHz

25/03/2023

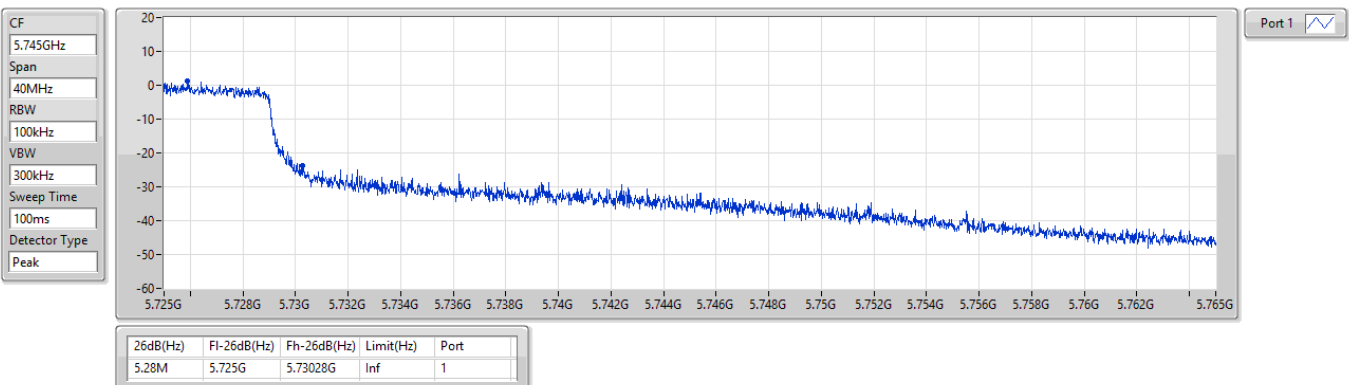


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023

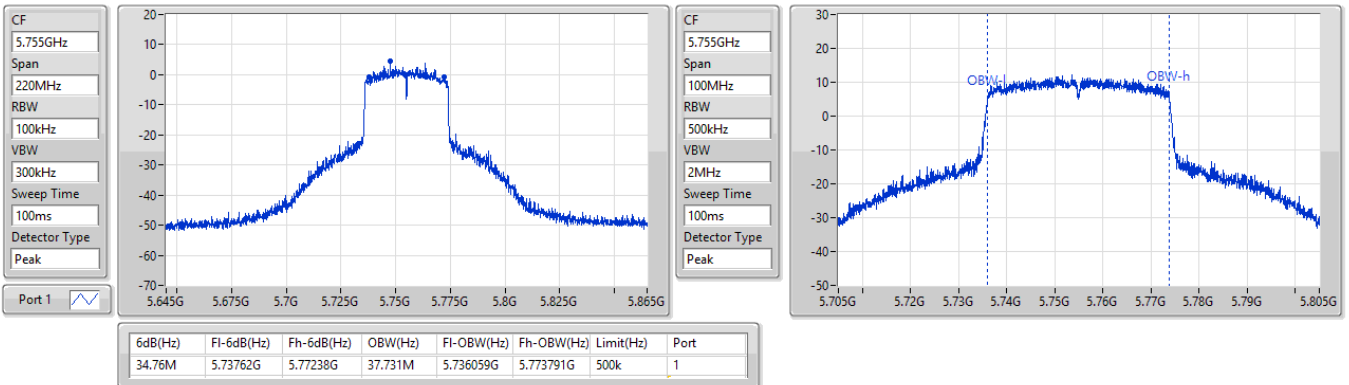

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023

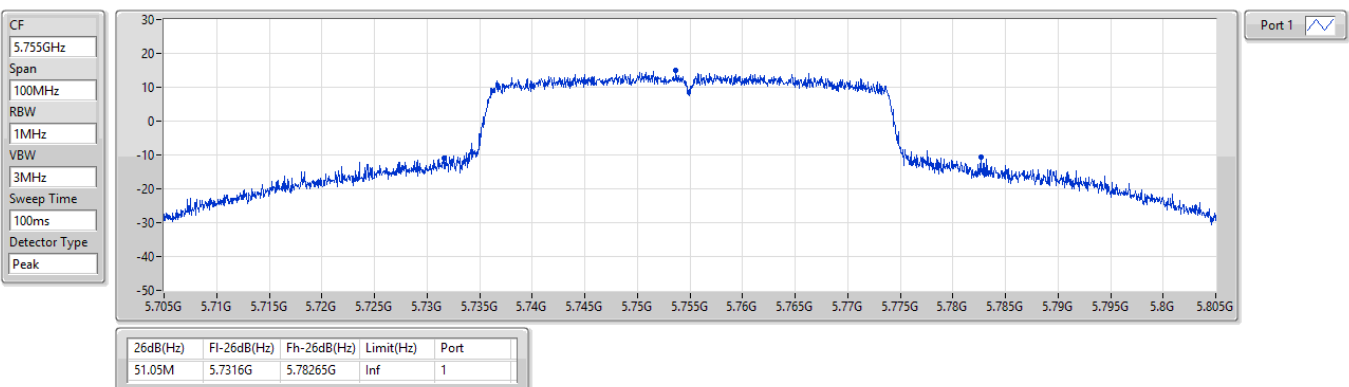


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5755MHz

25/03/2023

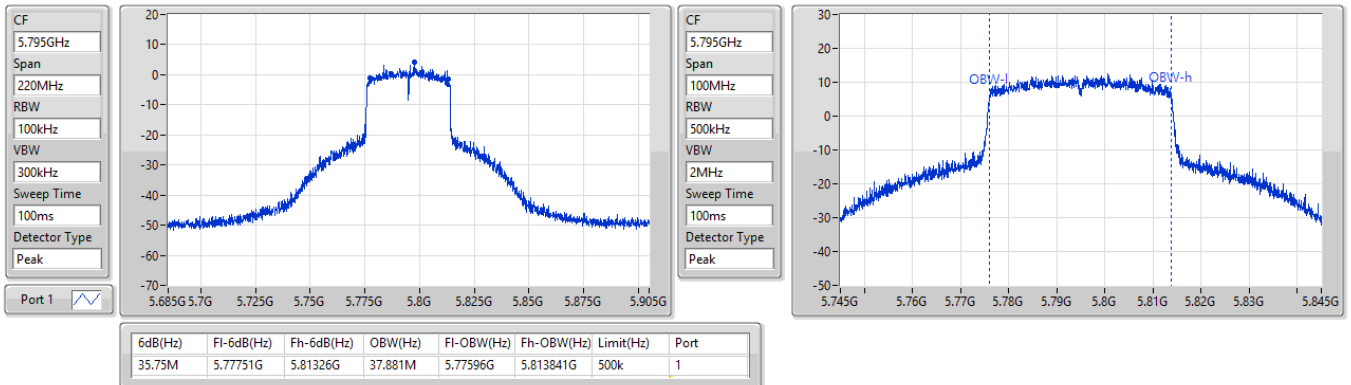

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5755MHz

25/03/2023

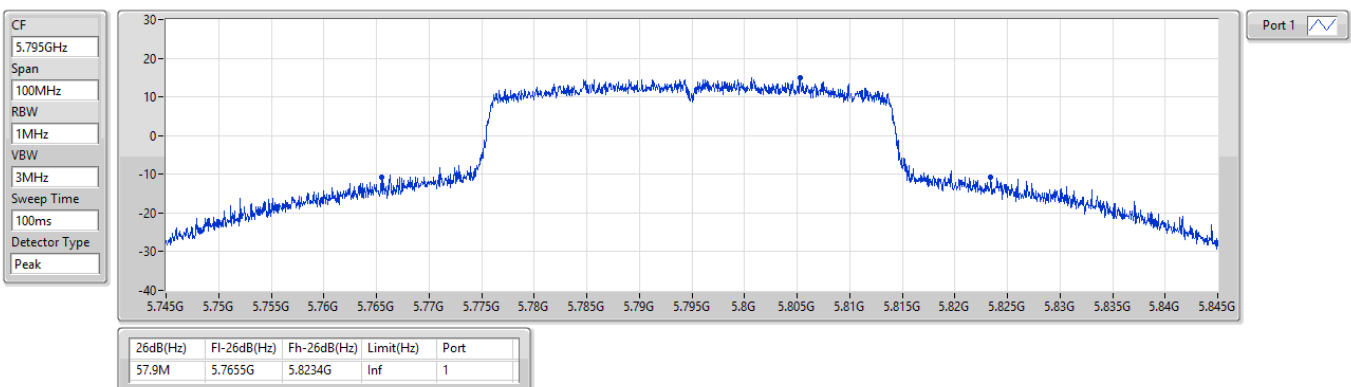


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5795MHz

25/03/2023

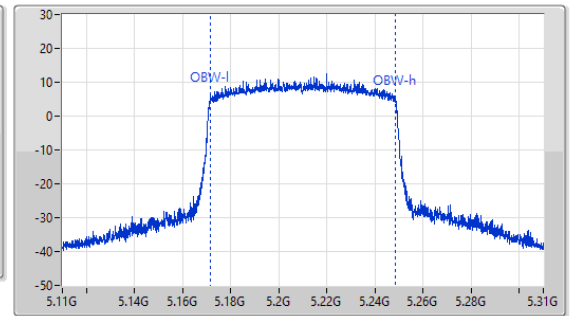
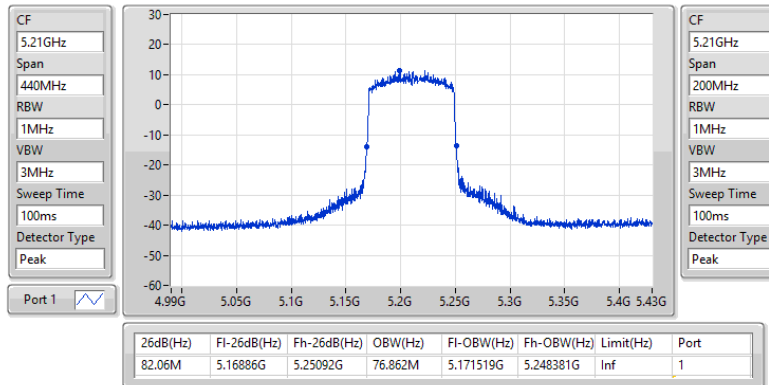

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5795MHz

25/03/2023

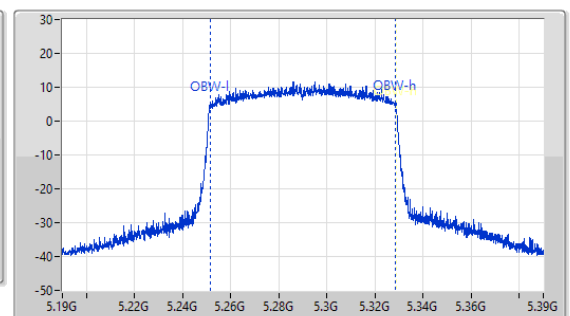
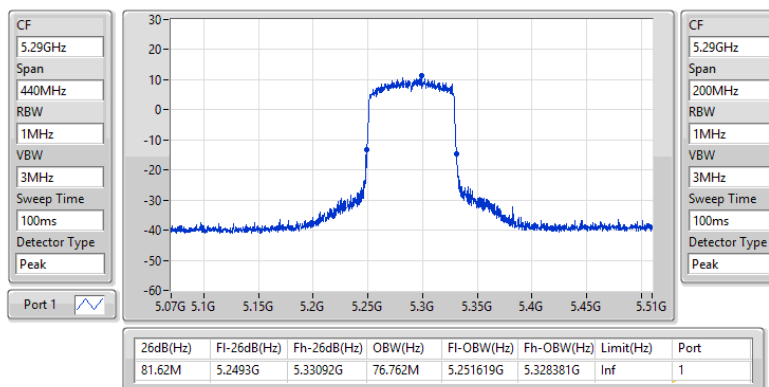


5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5210MHz

25/03/2023

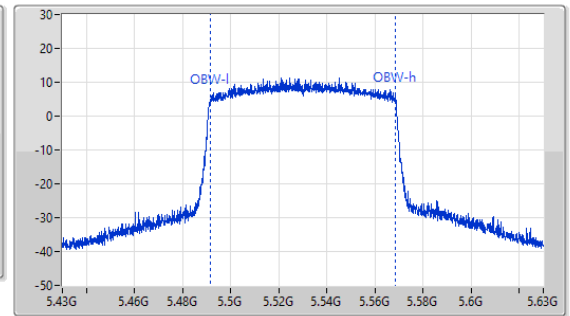
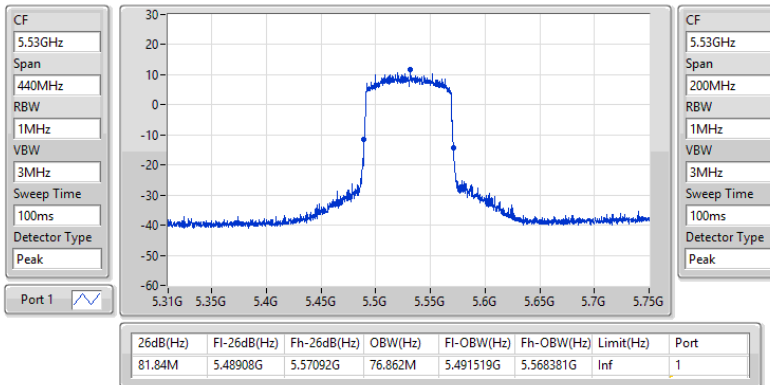

5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5290MHz

25/03/2023

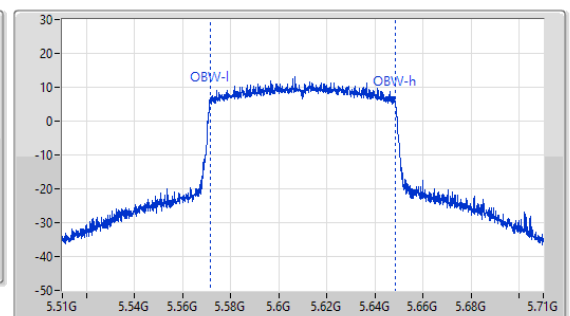
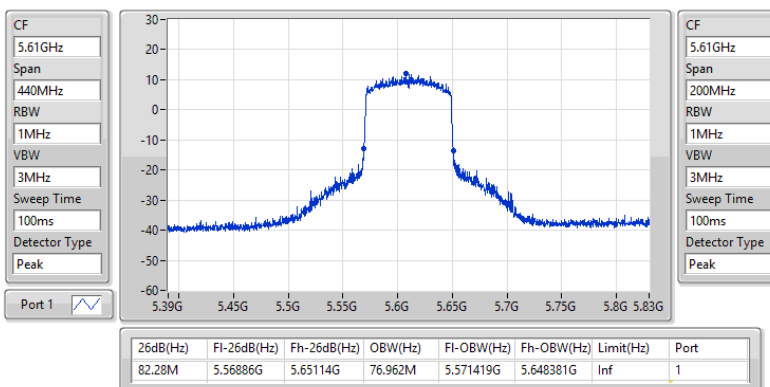


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5530MHz

25/03/2023

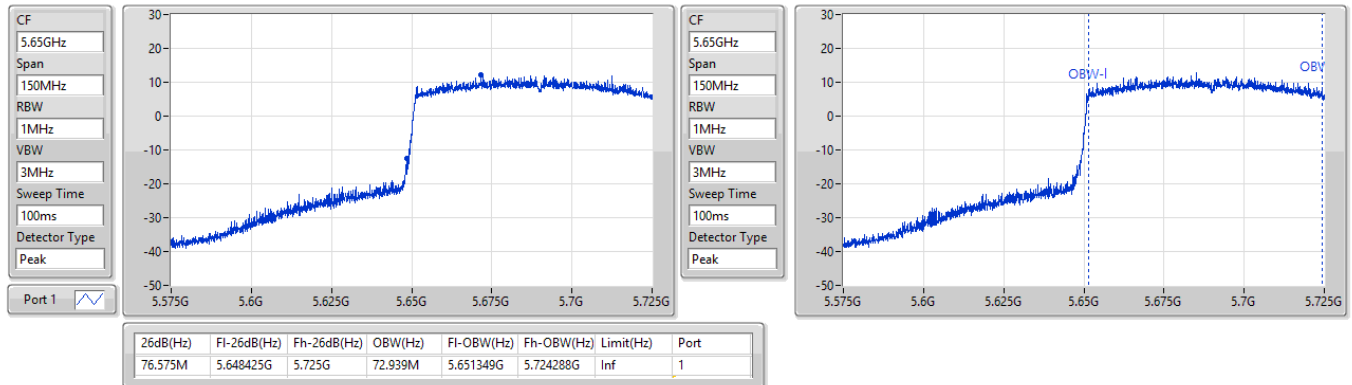

5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5610MHz

25/03/2023

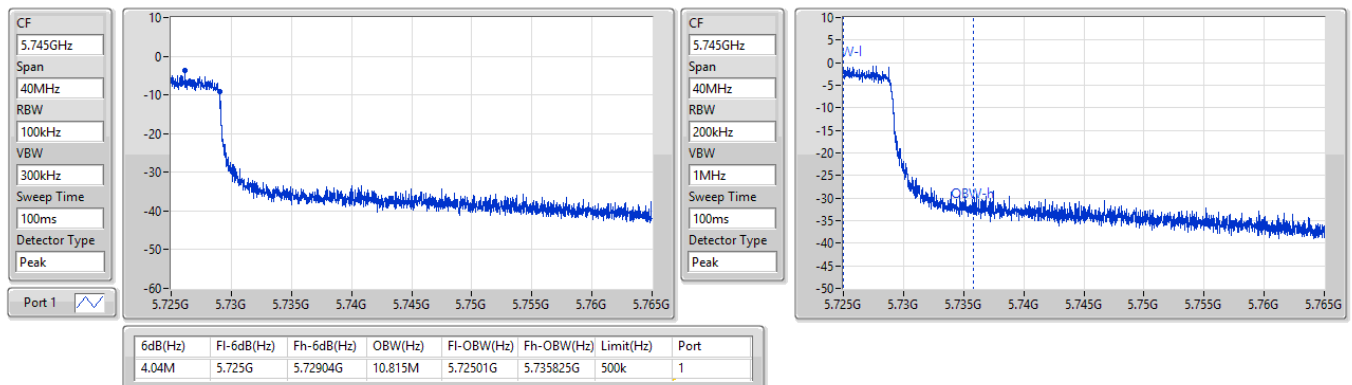


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.47-5.725GHz

25/03/2023


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5690MHz Straddle 5.725-5.85GHz

25/03/2023

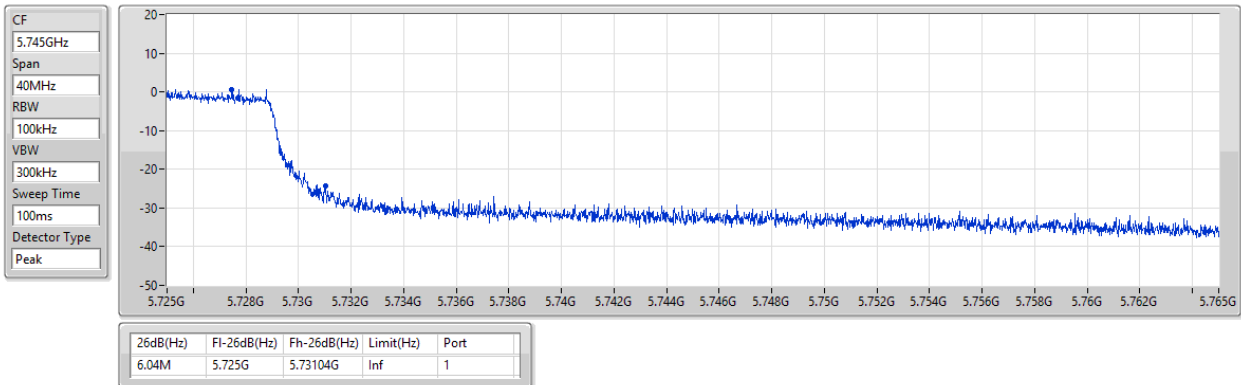


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.725-5.85GHz

25/03/2023

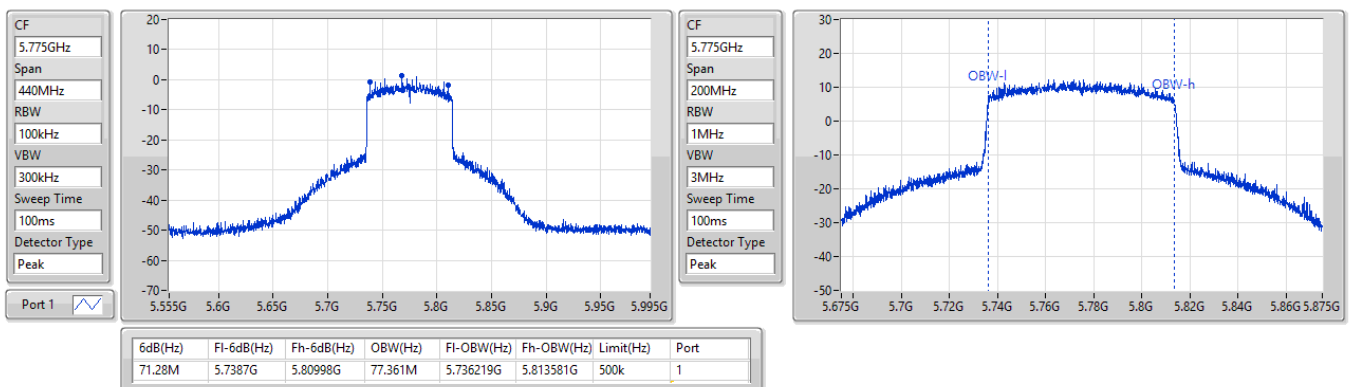


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

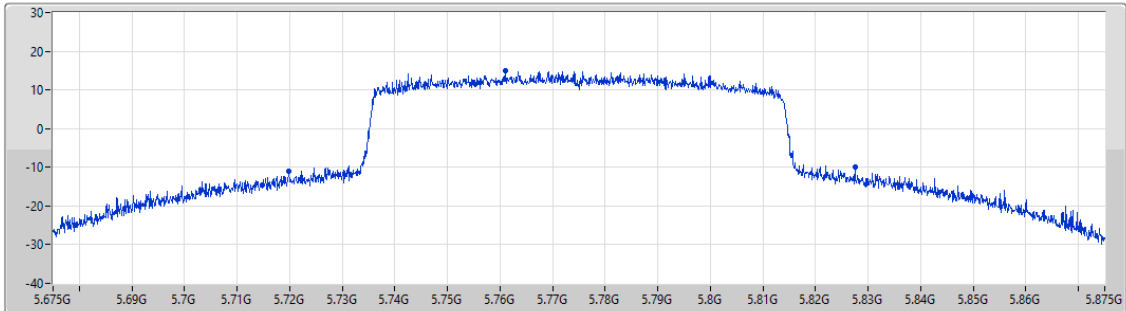
25/03/2023



5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
5775MHz

25/03/2023

CF
5.775GHz
Span
200MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak

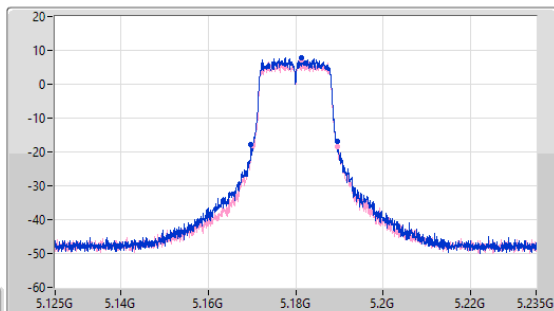


26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
107.6M	5.7199G	5.8275G	Inf	1

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5180MHz

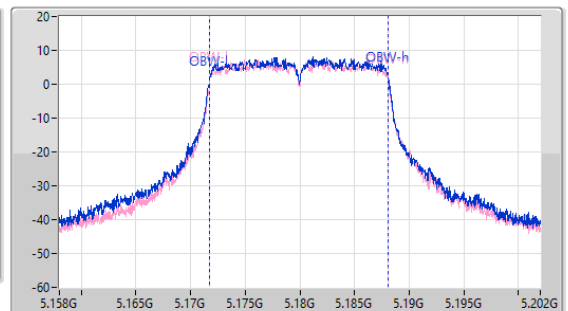
25/03/2023

CF
5.18GHz
Span
110MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



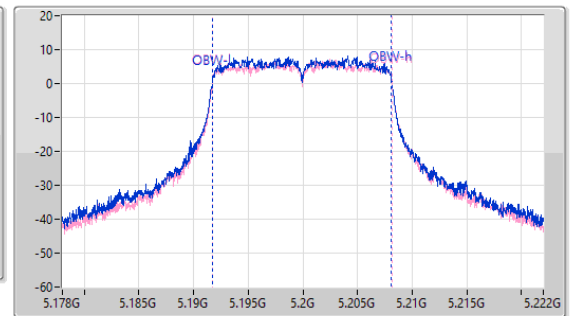
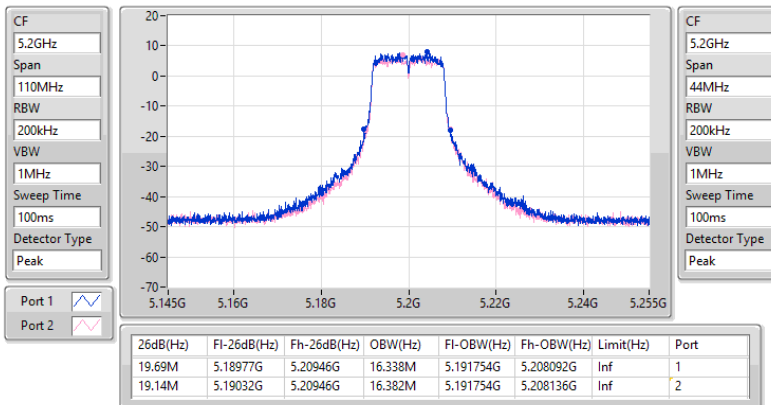
26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	FI-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.745M	5.169715G	5.18946G	16.382M	5.171732G	5.188114G	Inf	1
19.14M	5.17032G	5.18946G	16.338M	5.171776G	5.188114G	Inf	2

CF
5.18GHz
Span
44MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

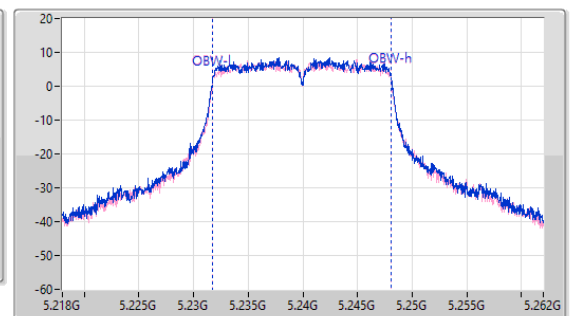
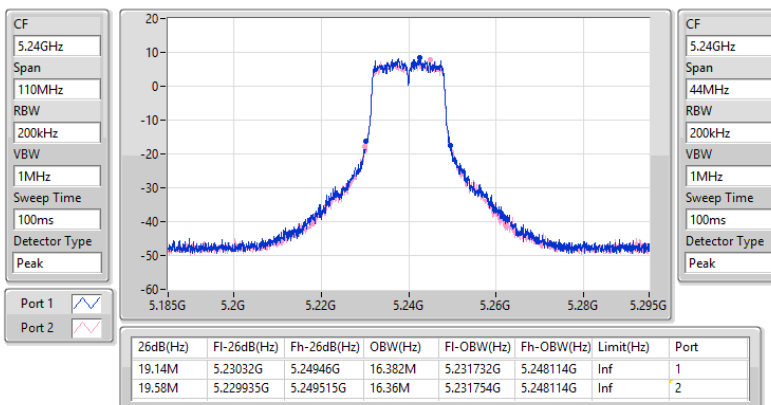


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5200MHz

25/03/2023

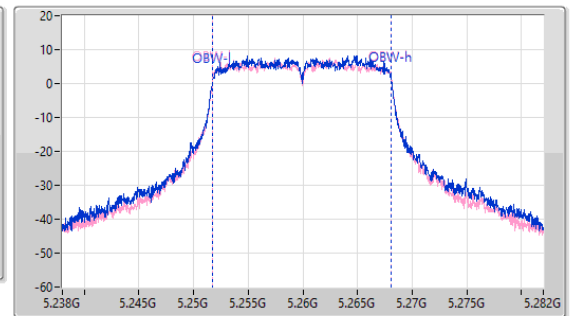
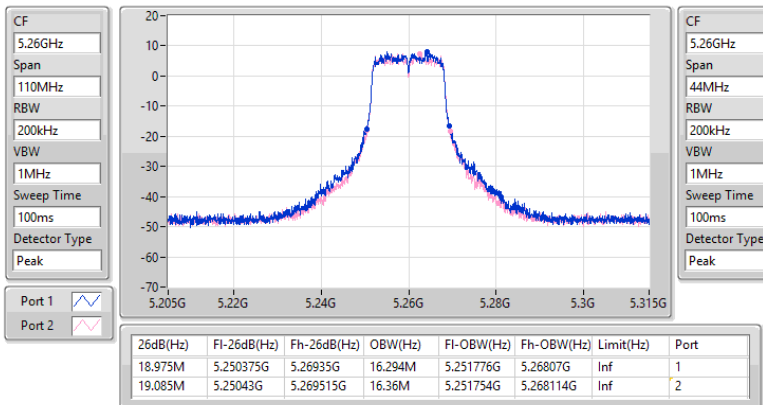

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5240MHz

25/03/2023

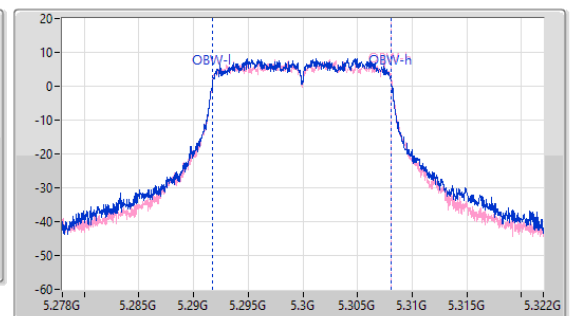
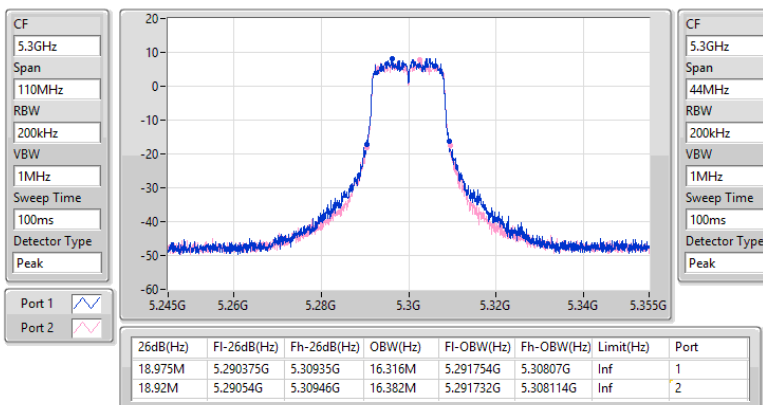


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5260MHz

25/03/2023

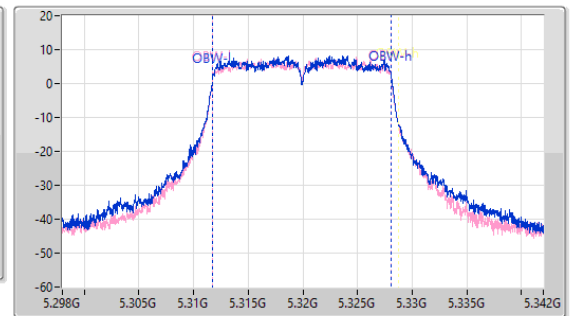
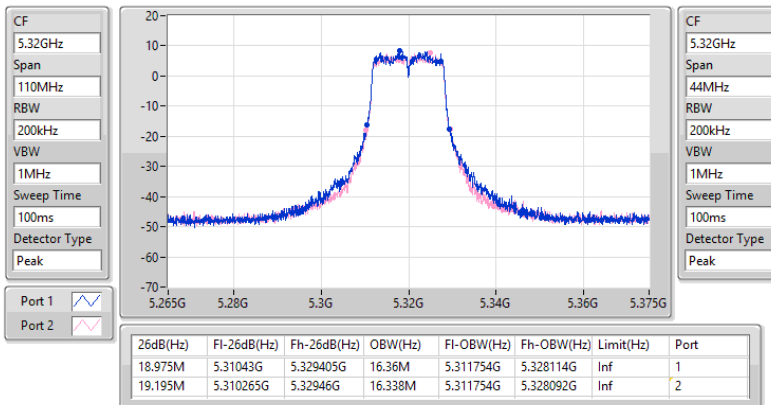

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5300MHz

25/03/2023

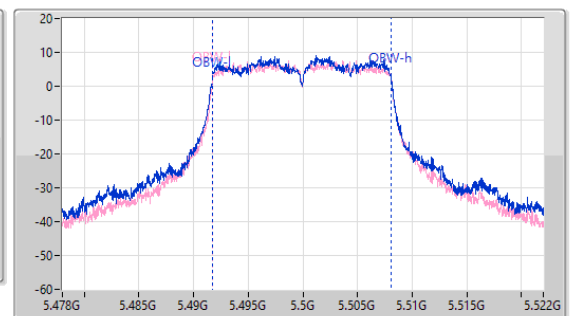
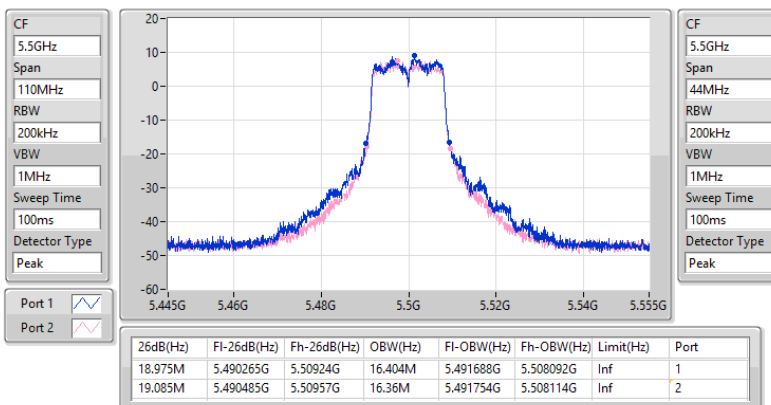


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5320MHz

25/03/2023

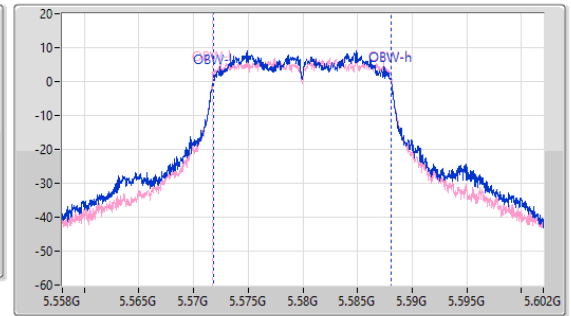
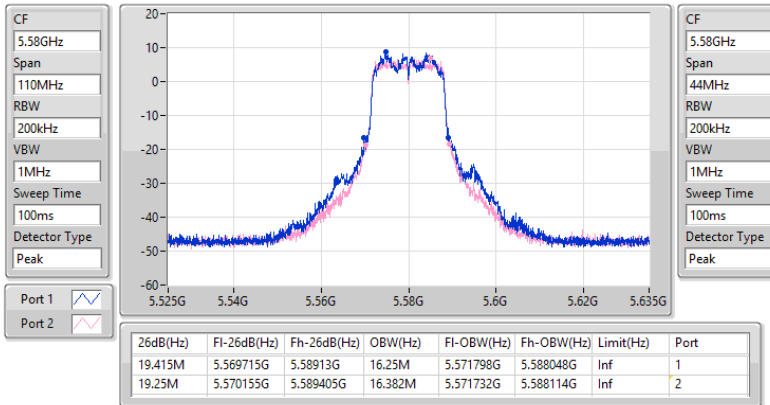

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5500MHz

25/03/2023

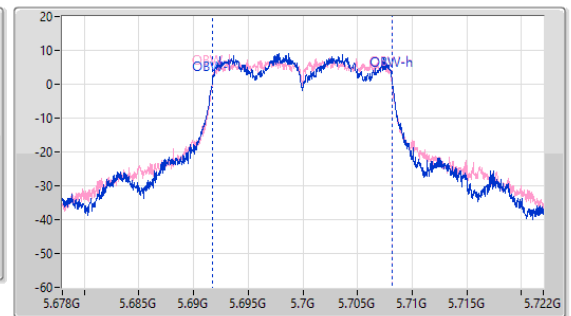
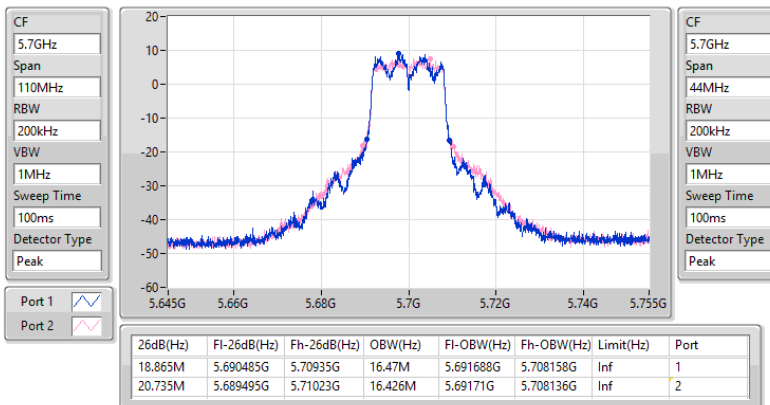


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5580MHz

25/03/2023


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5700MHz

25/03/2023

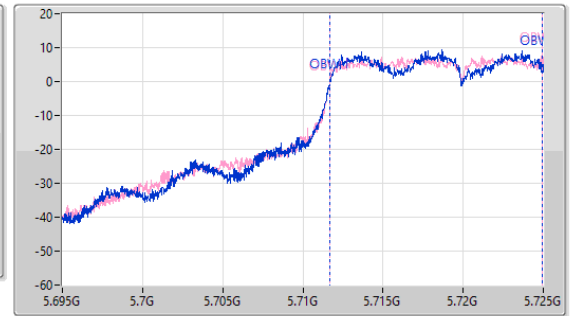
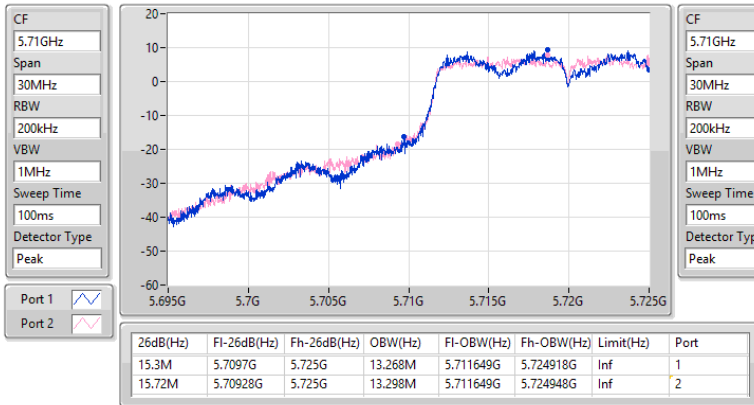


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

25/03/2023

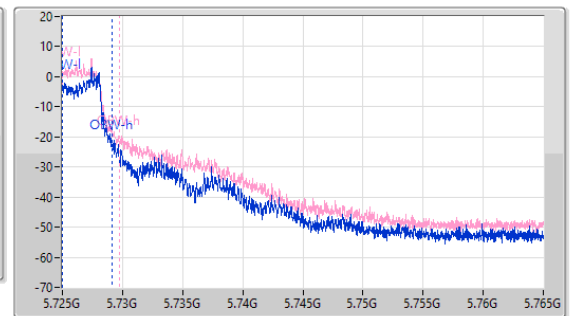
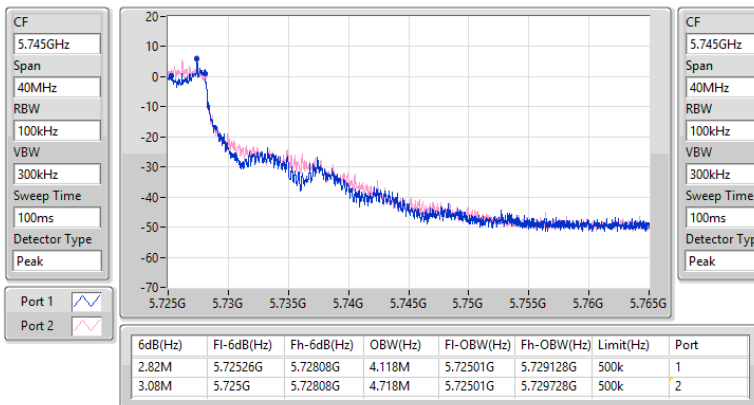


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

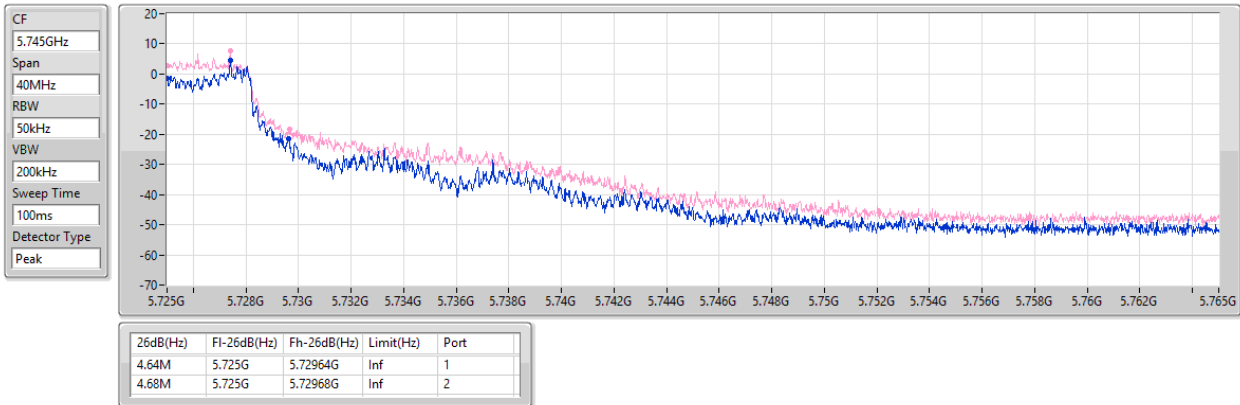
5720MHz Straddle 5.725-5.85GHz

25/03/2023

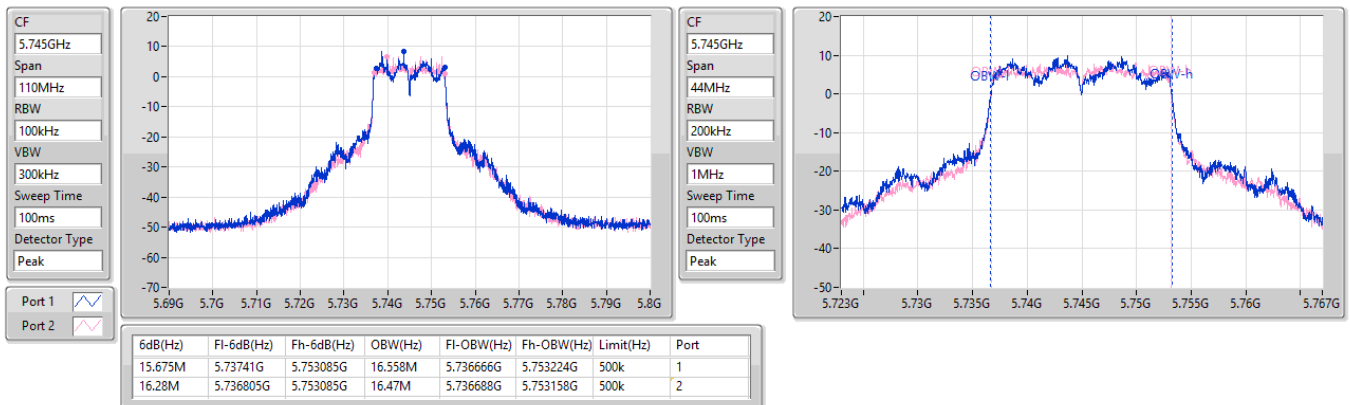


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5745MHz

25/03/2023

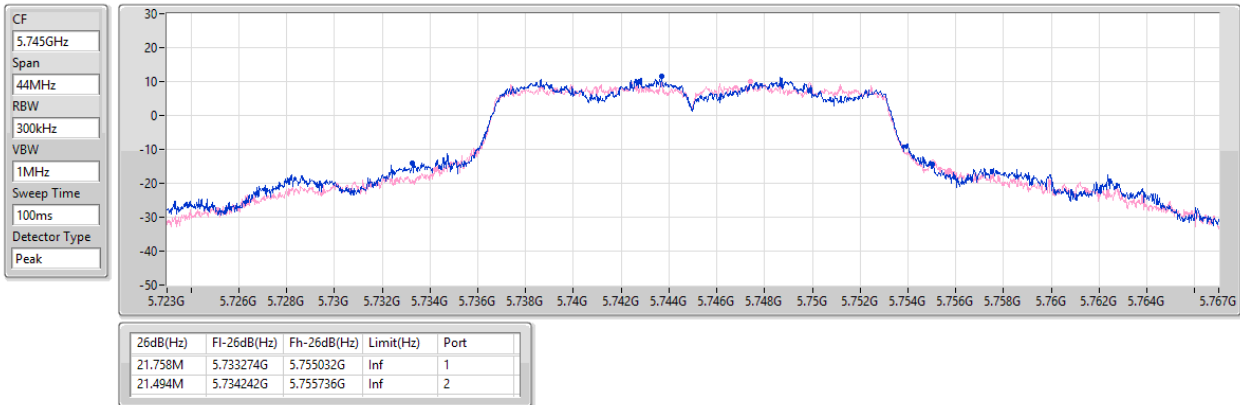


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

25/03/2023

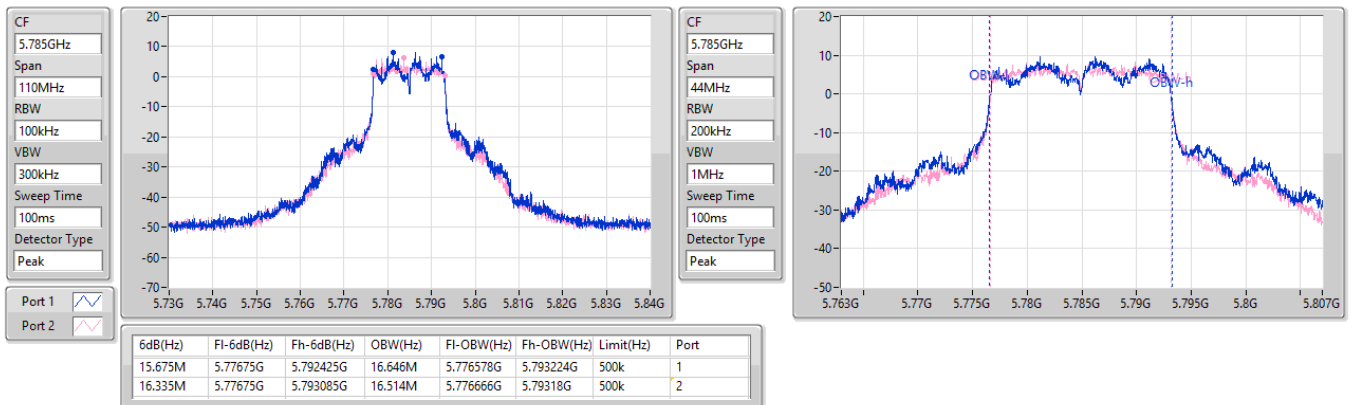


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

25/03/2023

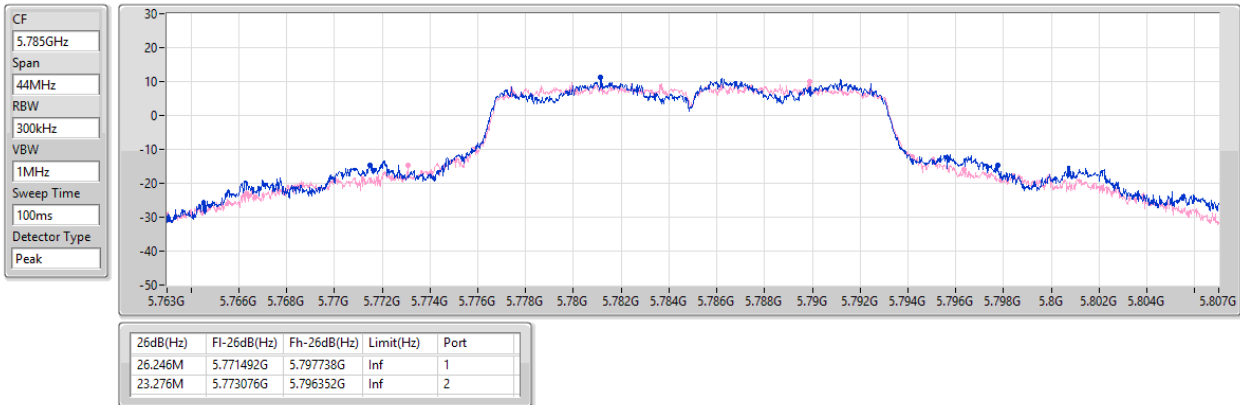


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

25/03/2023

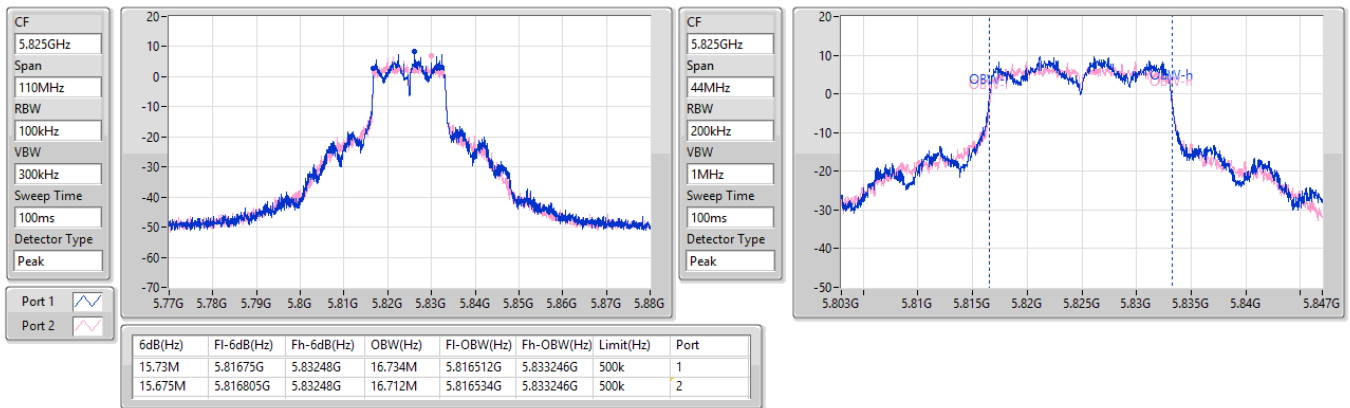


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

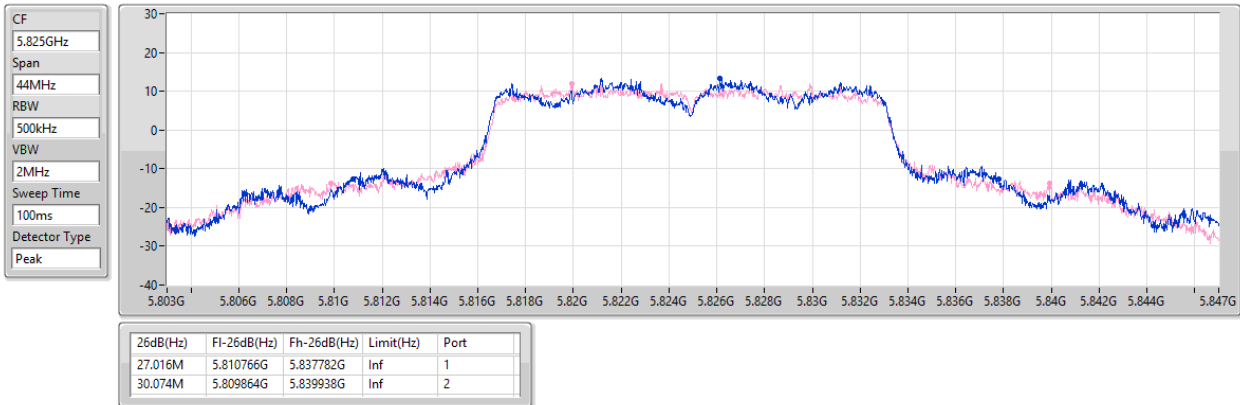
5825MHz

25/03/2023

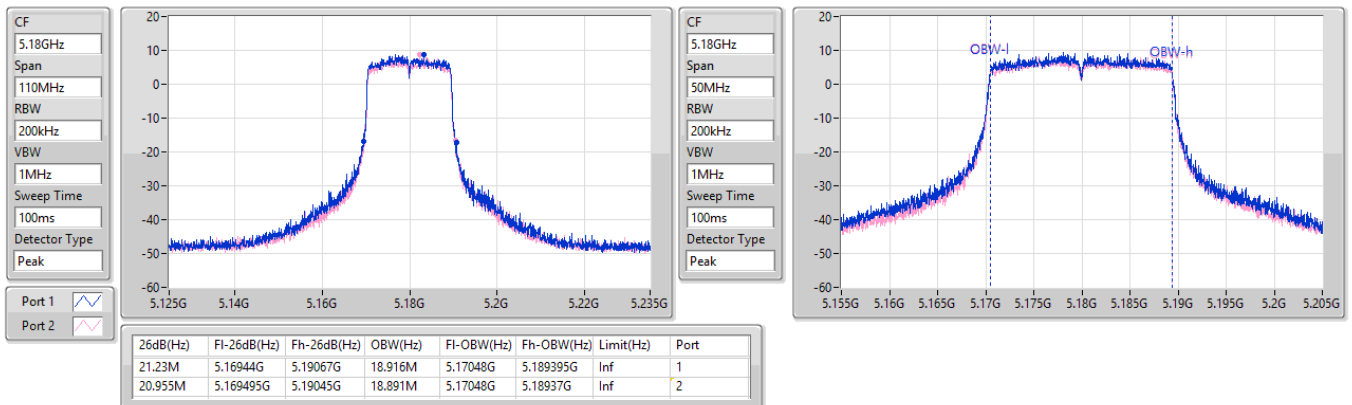


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX
EBW
5825MHz

25/03/2023

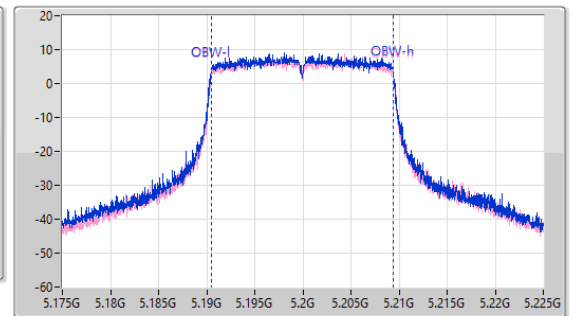
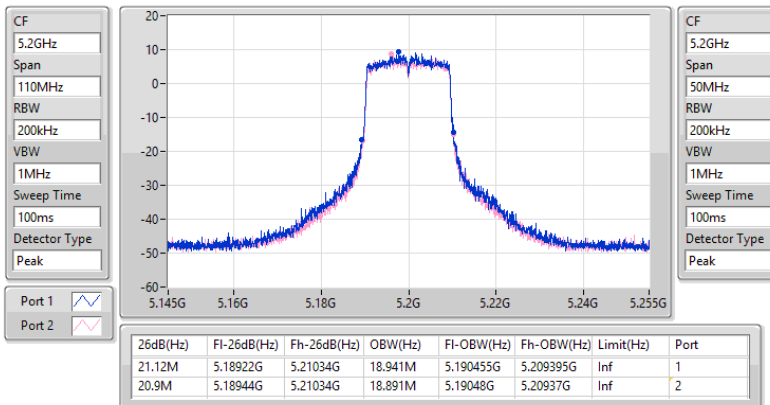

5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX
EBW
5180MHz

25/03/2023

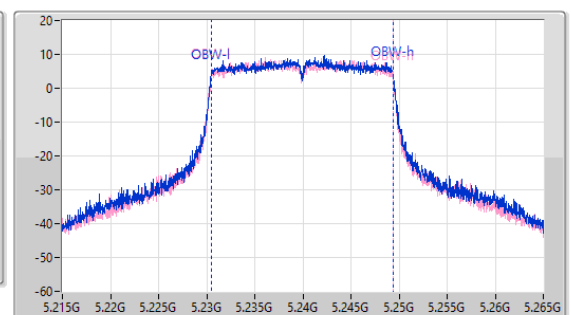
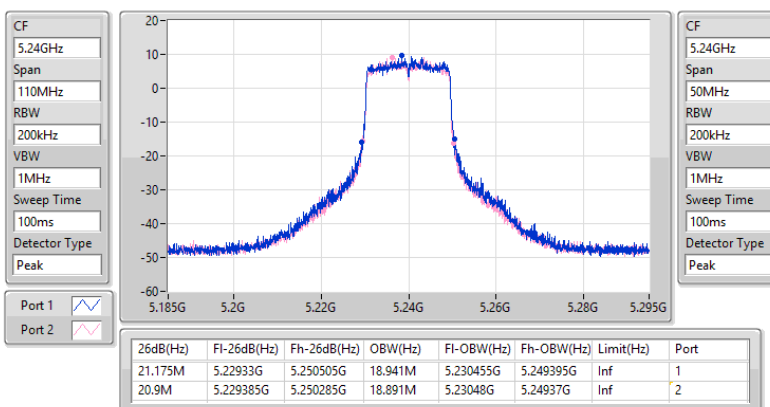


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5200MHz

25/03/2023

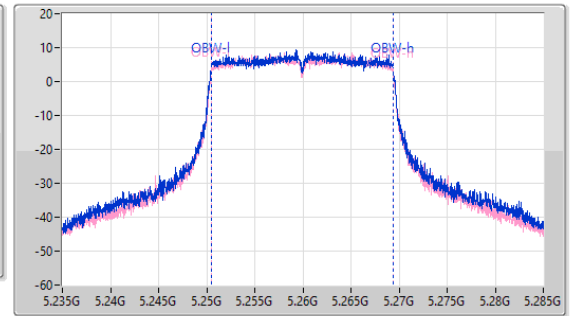
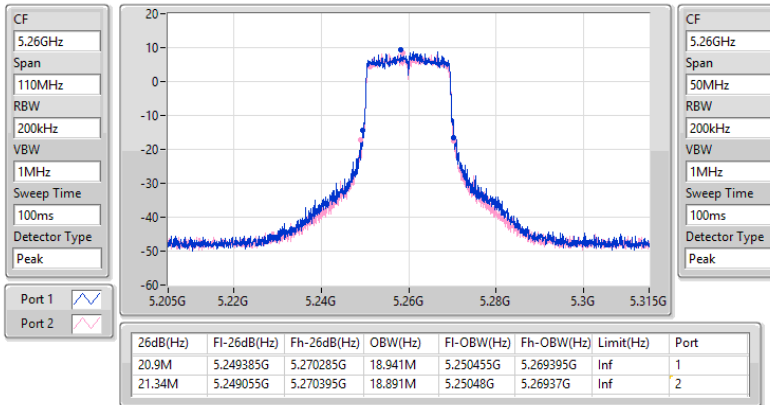

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5240MHz

25/03/2023

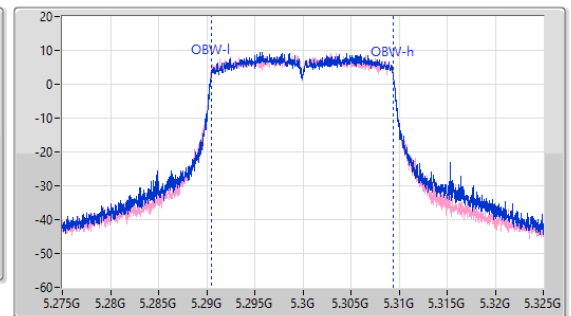
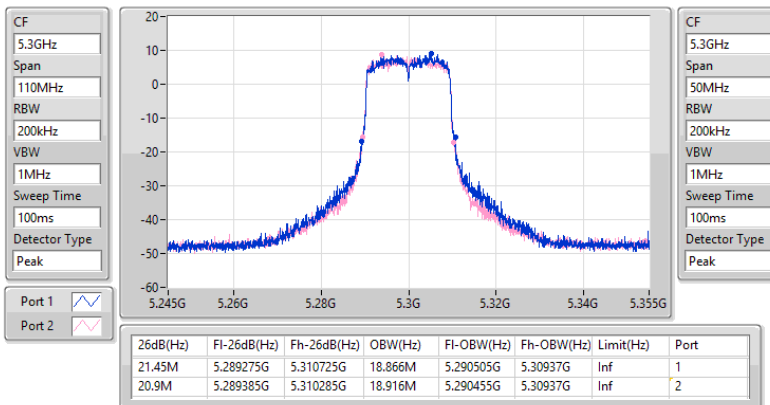


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5260MHz

25/03/2023

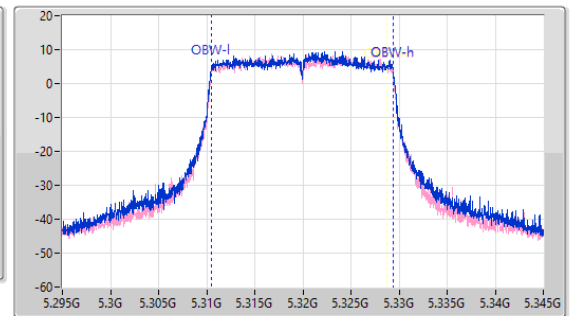
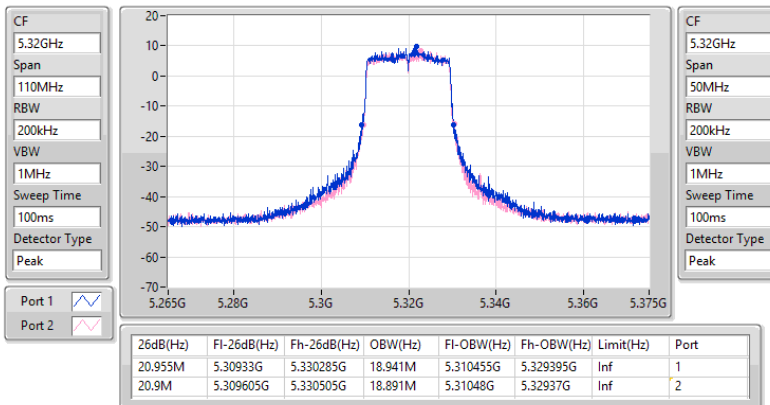

5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5300MHz

25/03/2023

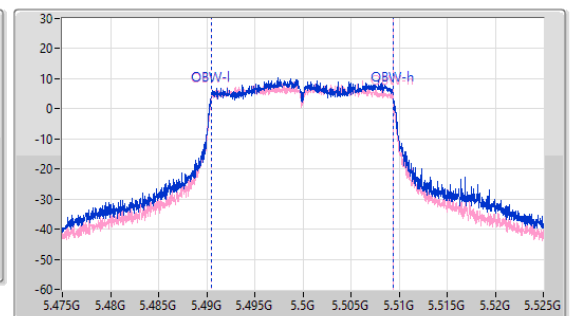
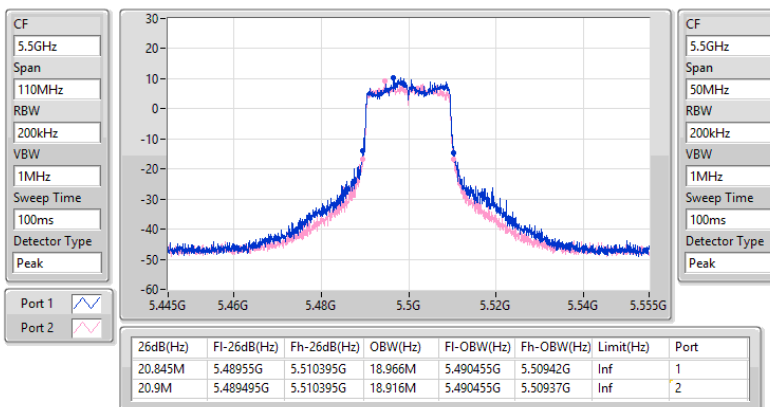


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5320MHz

25/03/2023

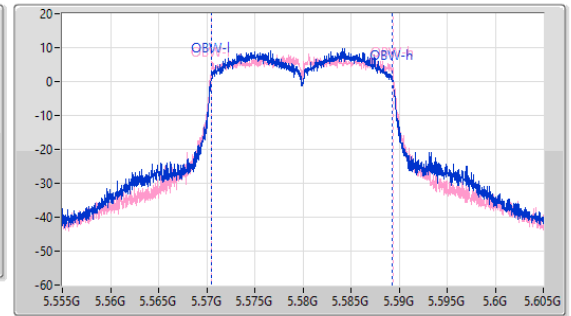
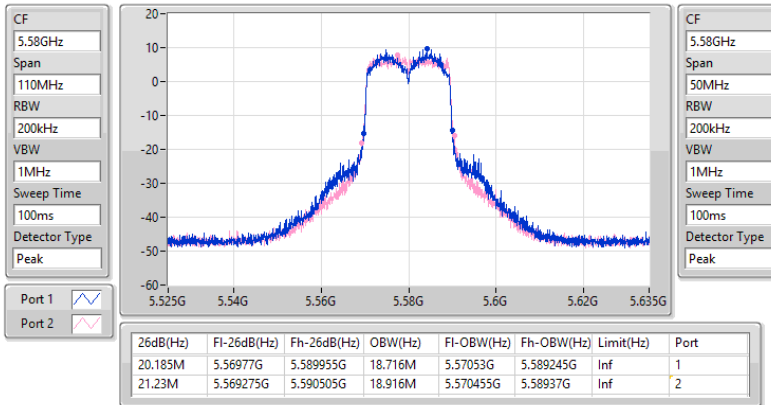

5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5500MHz

25/03/2023

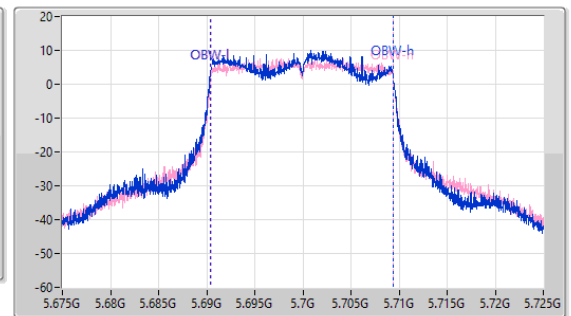
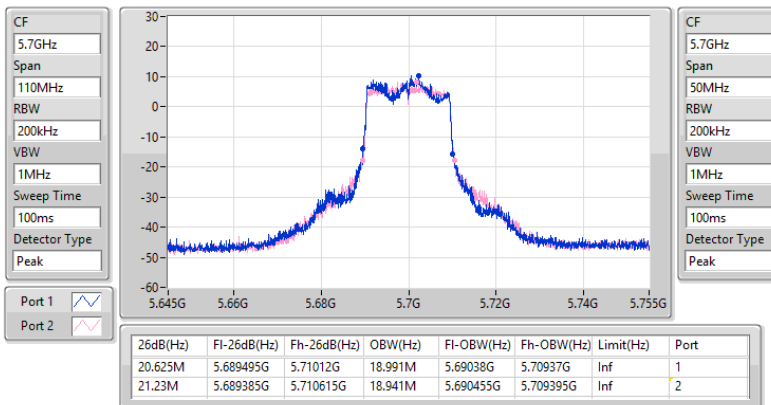


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5580MHz

25/03/2023

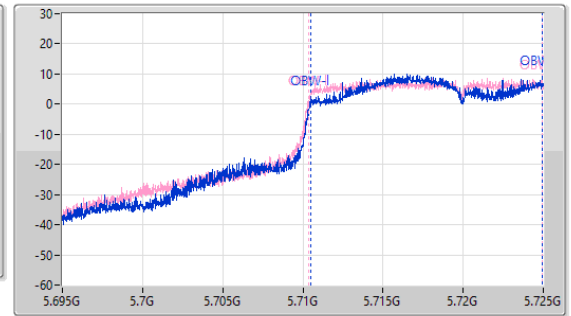
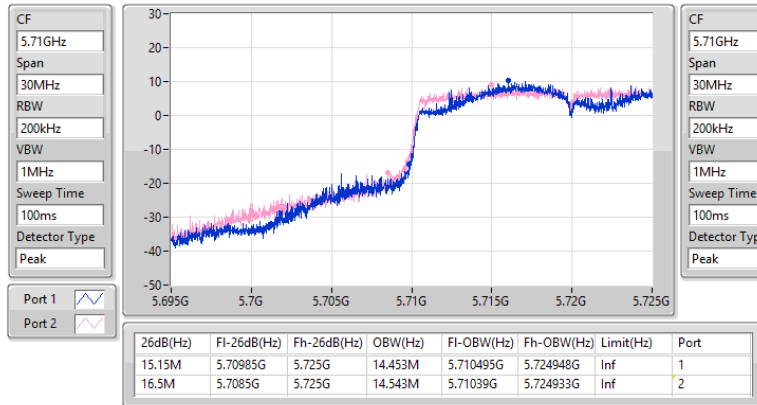

5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5700MHz

25/03/2023

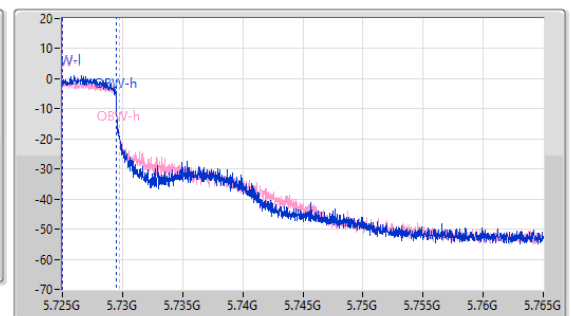
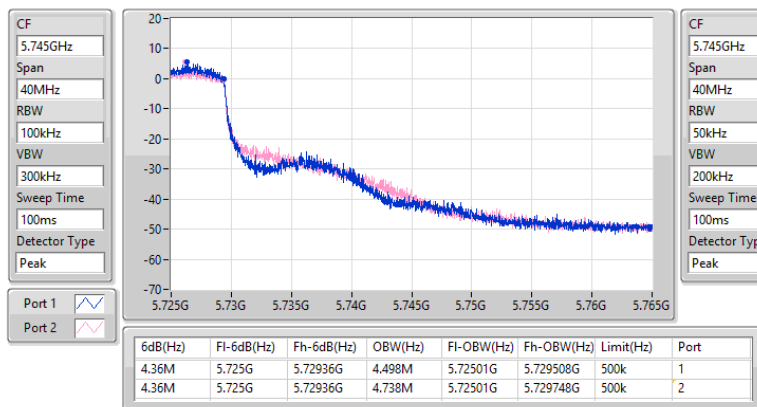


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5720MHz Straddle 5.47-5.725GHz

25/03/2023

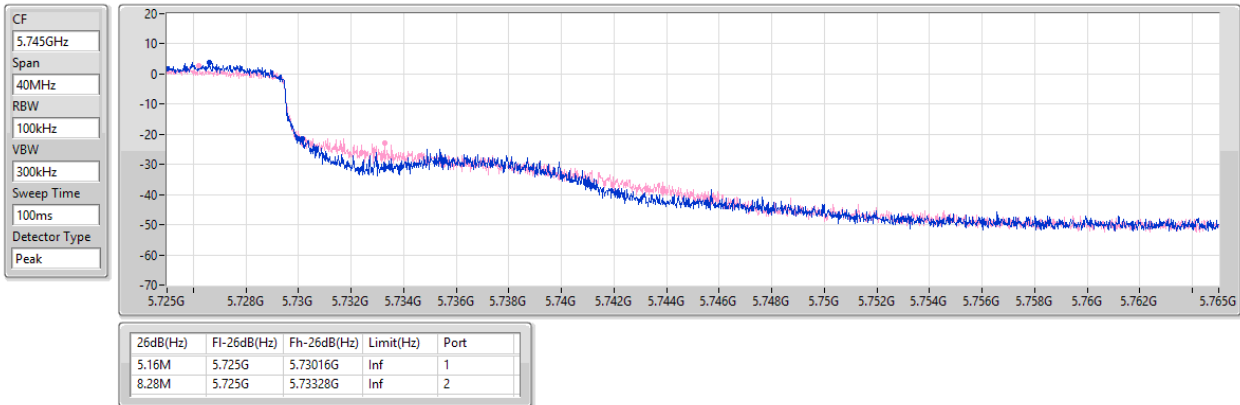

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

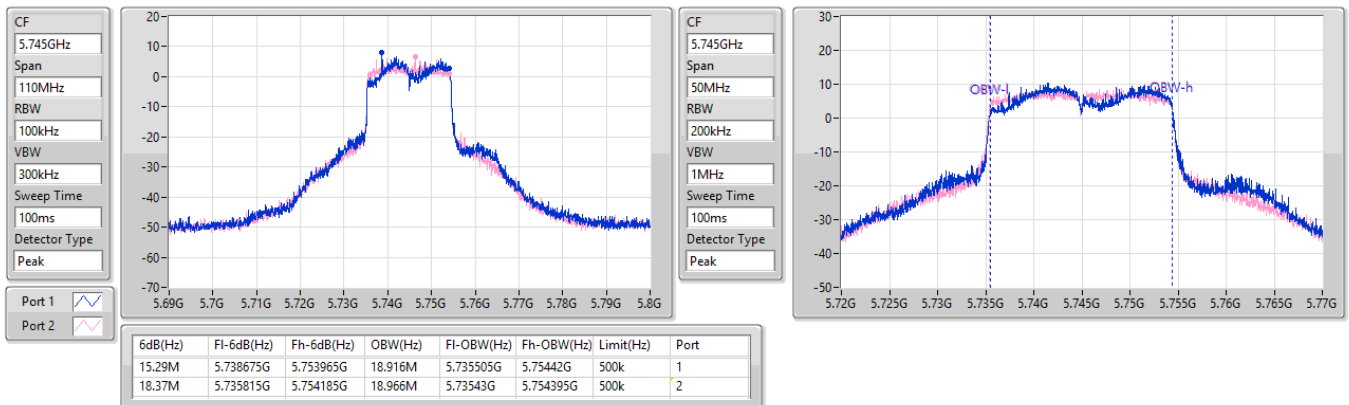


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5745MHz

25/03/2023

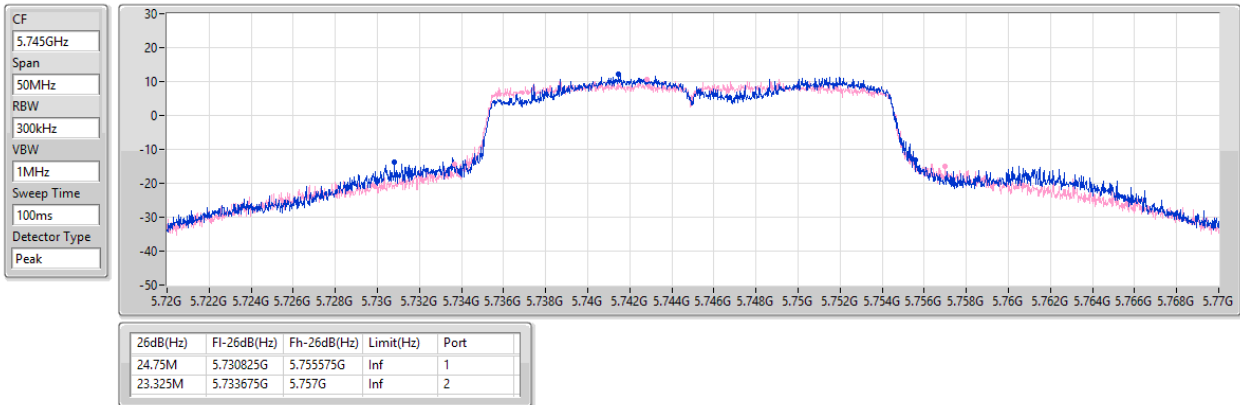


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

25/03/2023

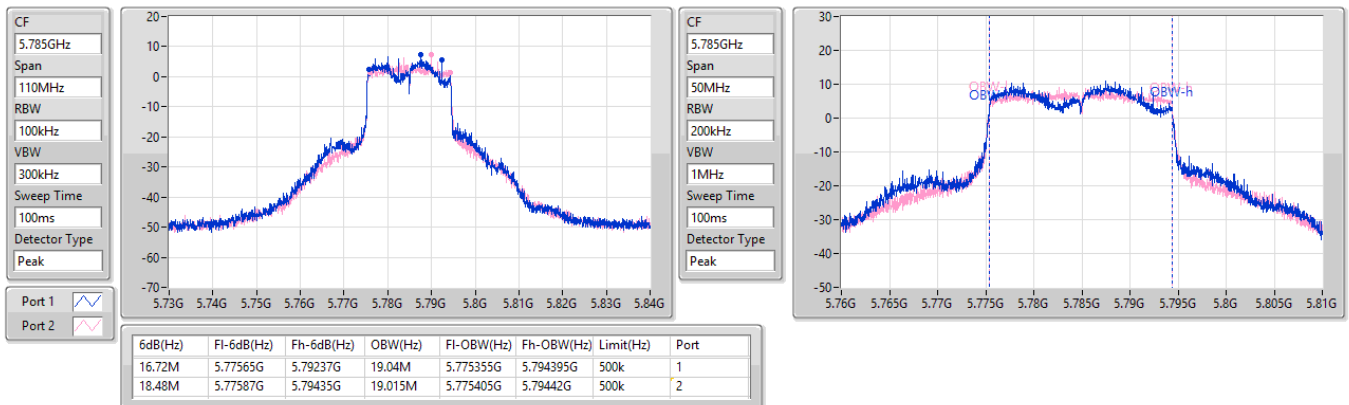


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

25/03/2023

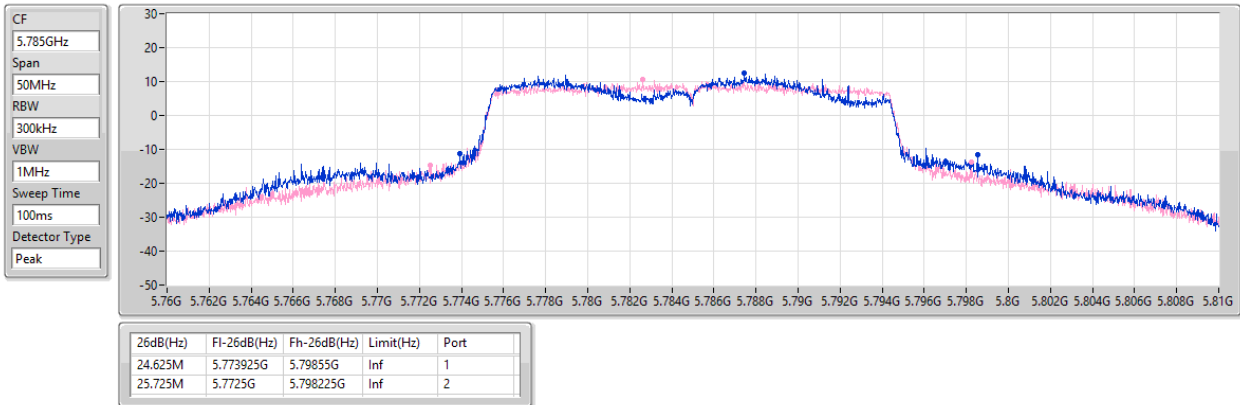


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

25/03/2023

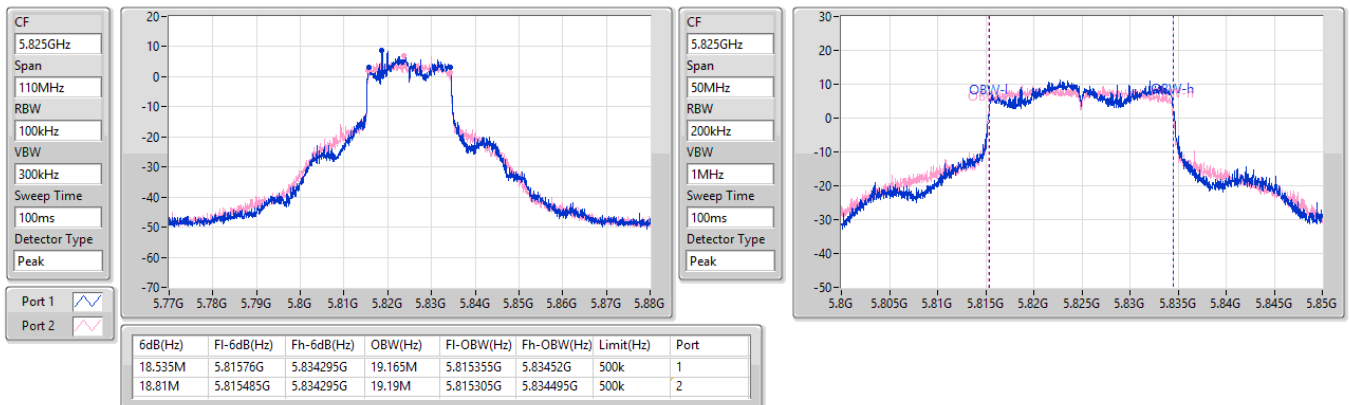


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

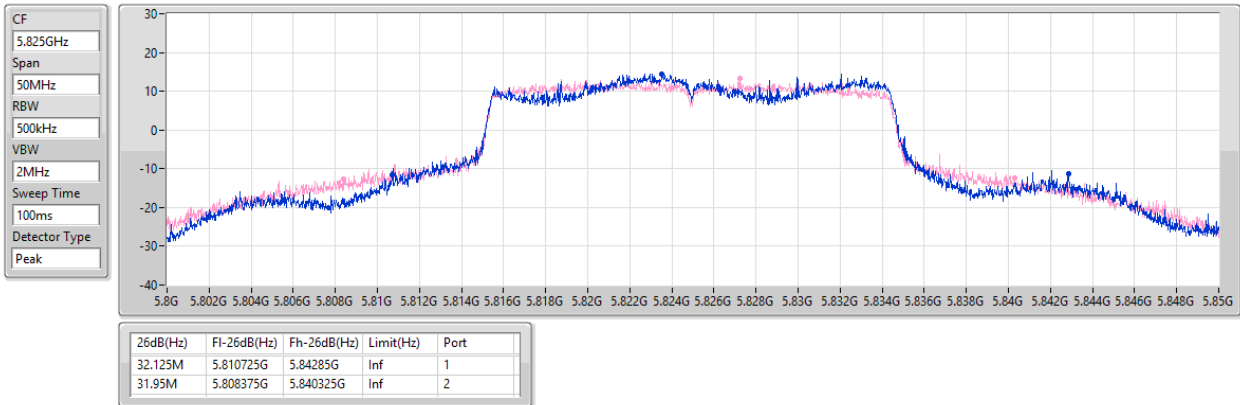
5825MHz

25/03/2023

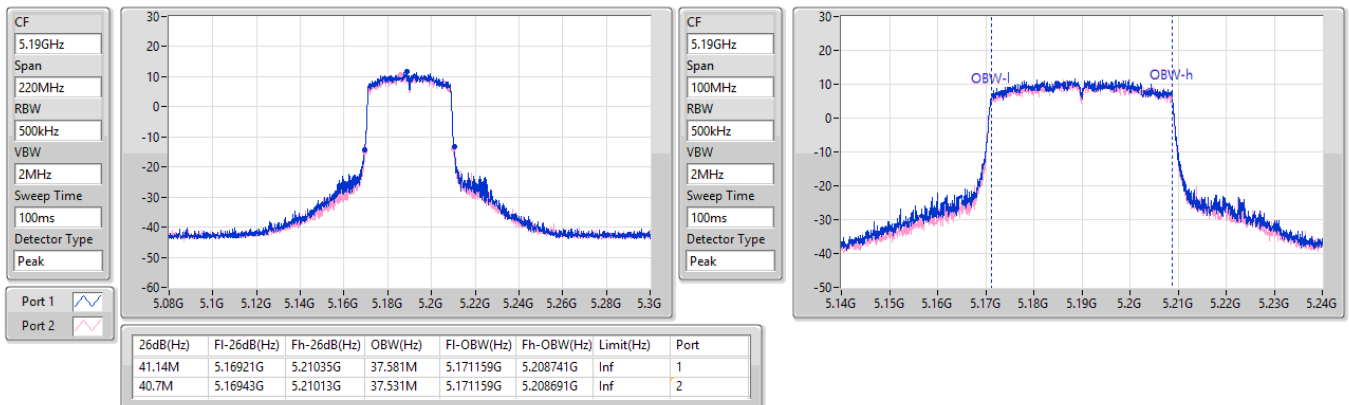


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5825MHz

25/03/2023

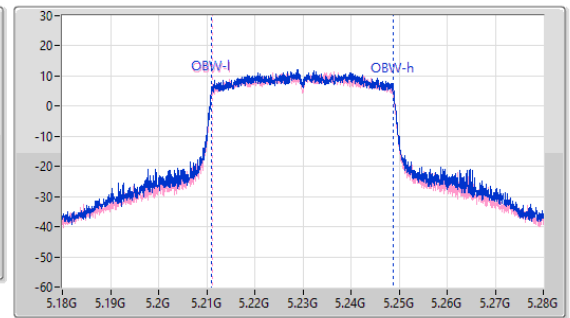
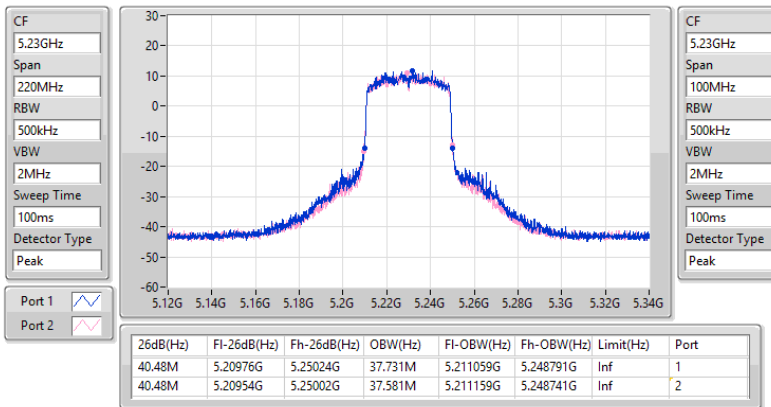

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5190MHz

25/03/2023

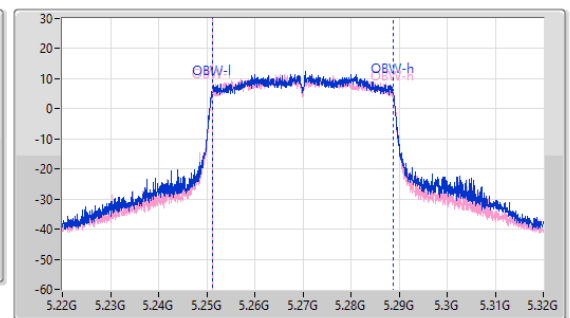
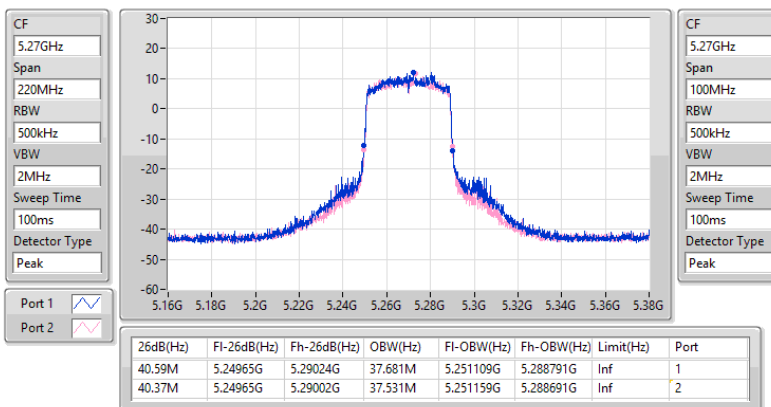


5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5230MHz

25/03/2023

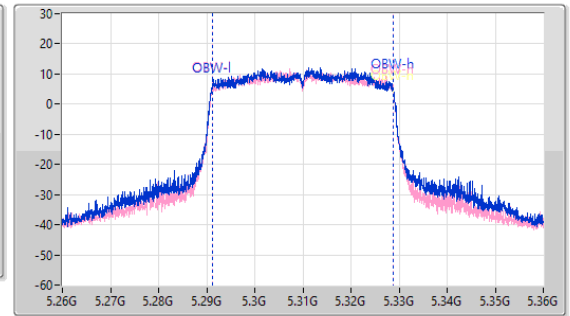
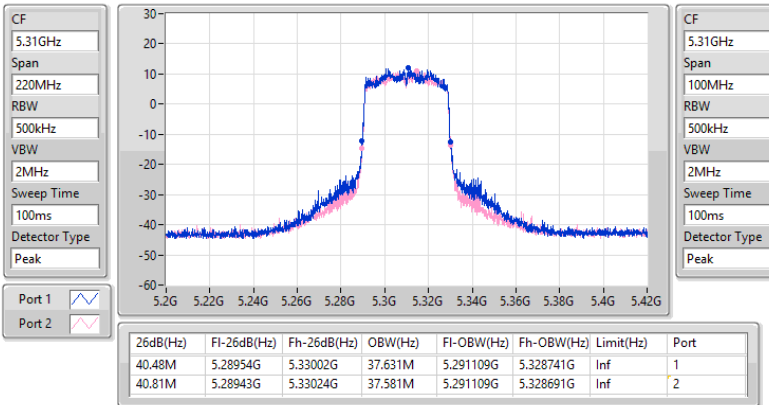

5.25-5.35GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5270MHz

25/03/2023

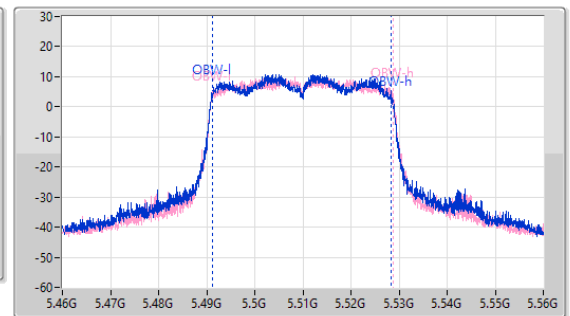
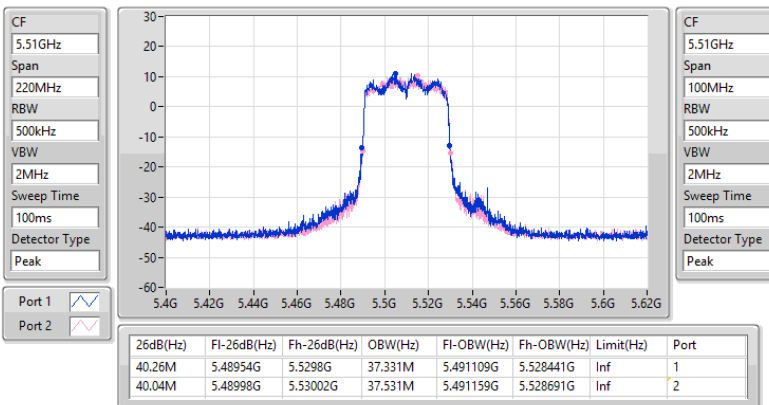


5.25-5.35GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5310MHz

25/03/2023

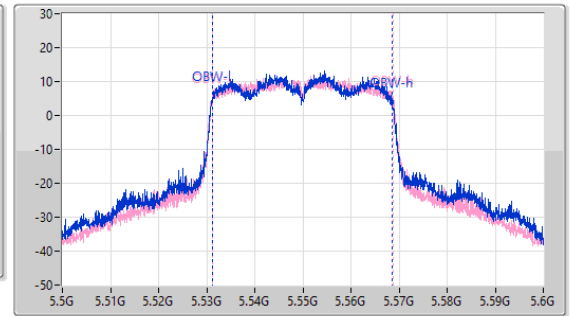
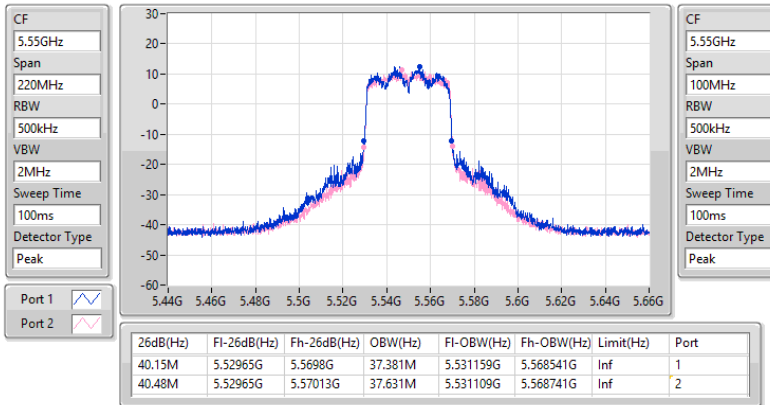

5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5510MHz

25/03/2023

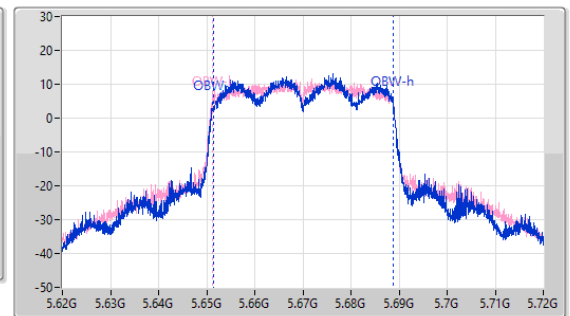
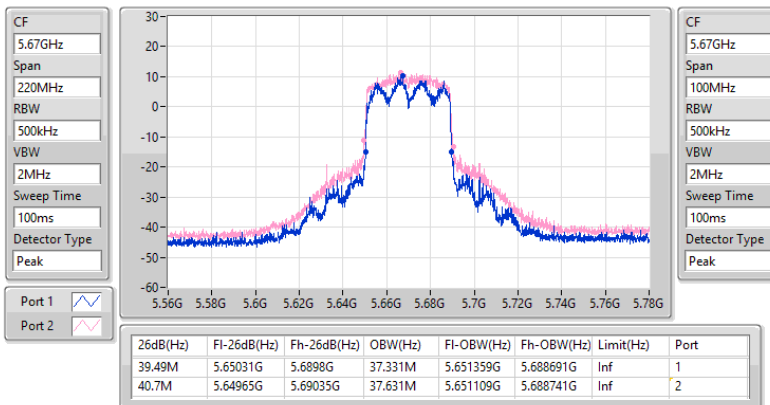


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5550MHz

25/03/2023

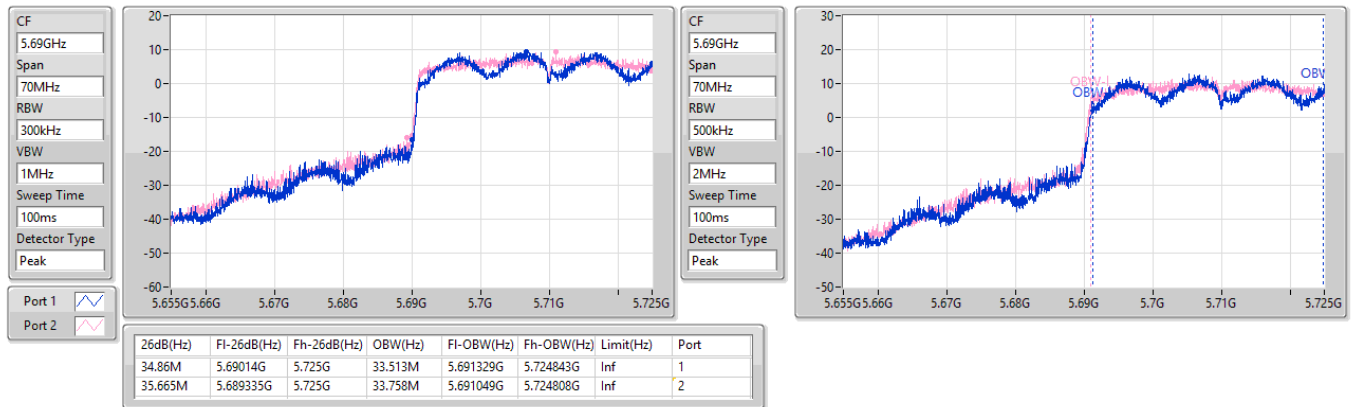

5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5670MHz

25/03/2023

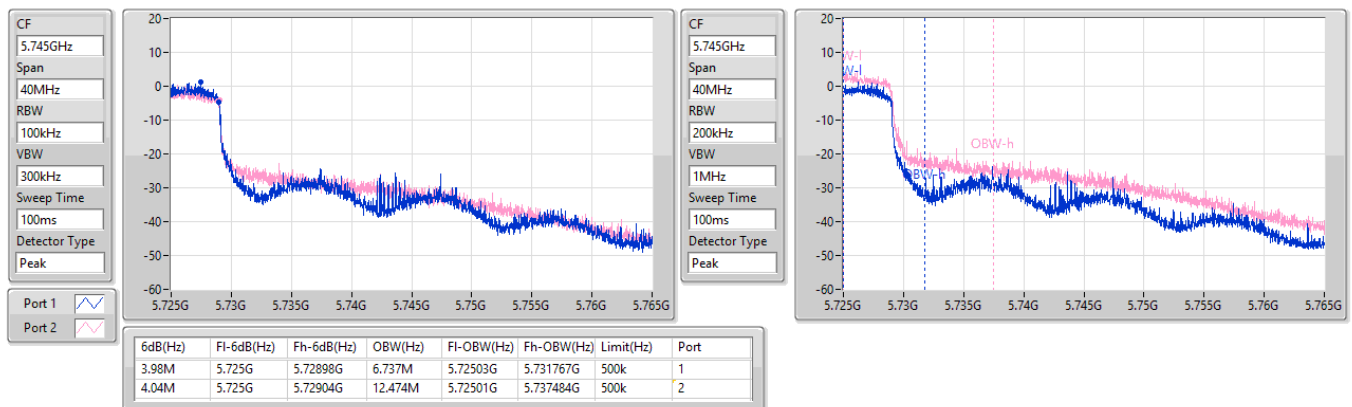


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5710MHz Straddle 5.47-5.725GHz

25/03/2023

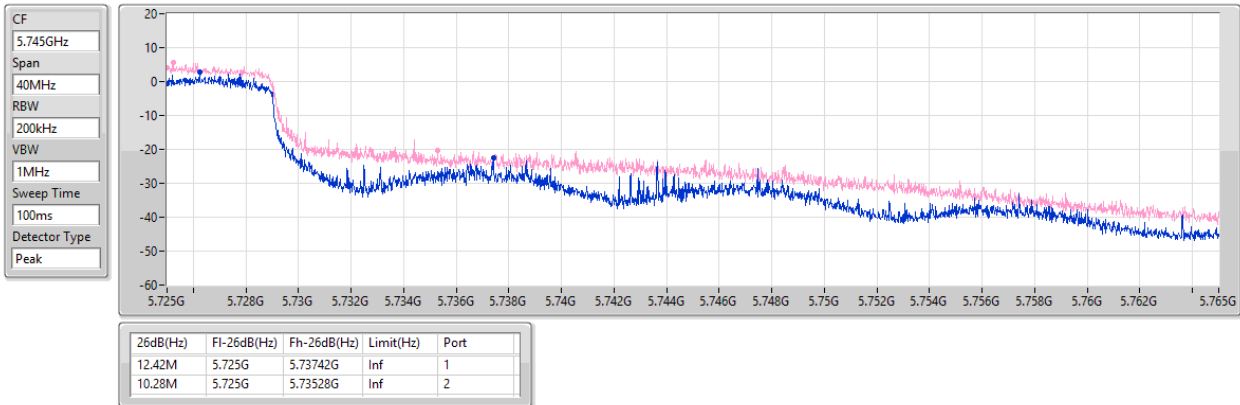

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023

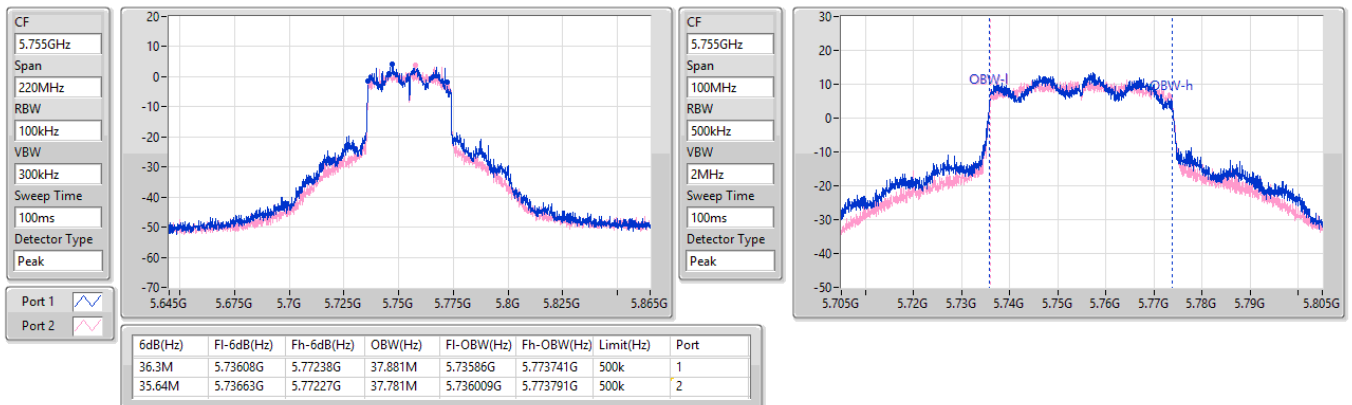


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023

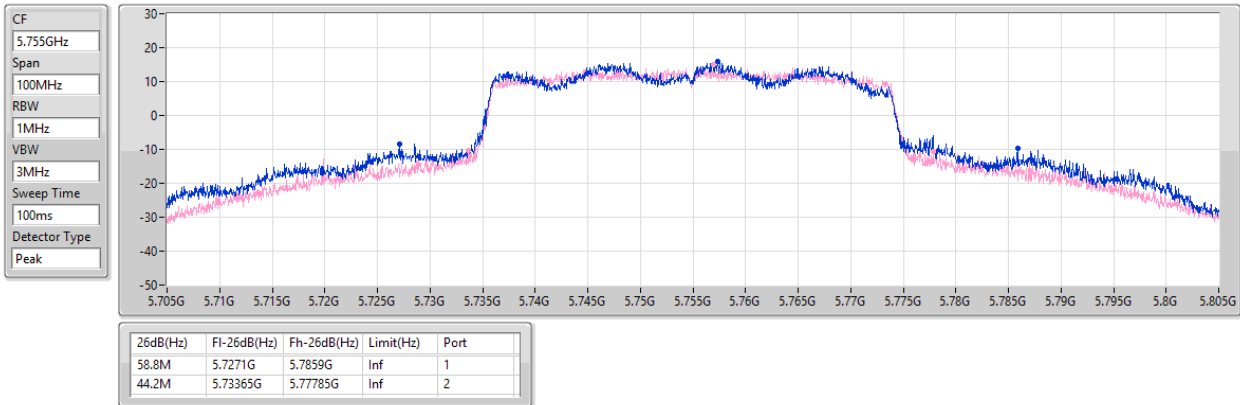

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5755MHz

25/03/2023

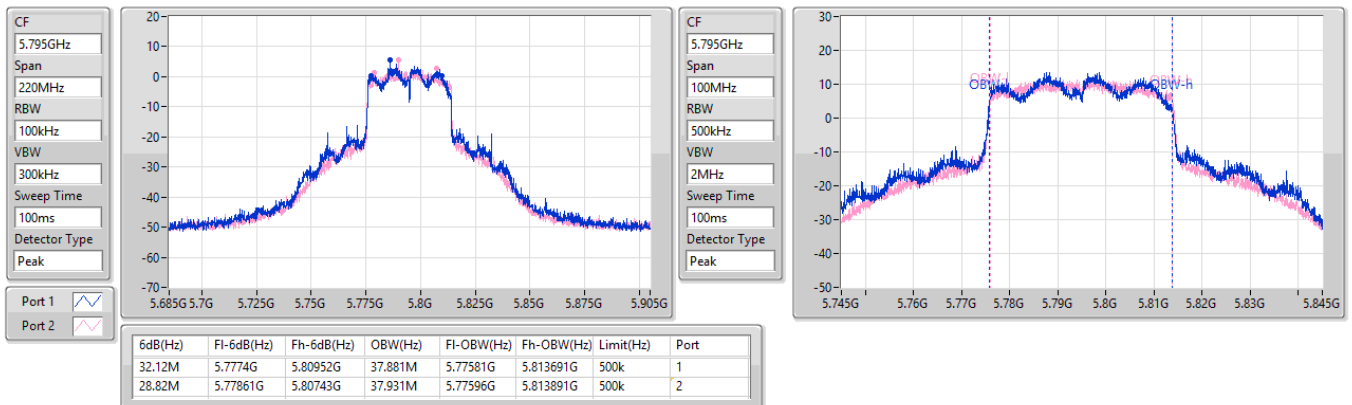


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5755MHz

25/03/2023

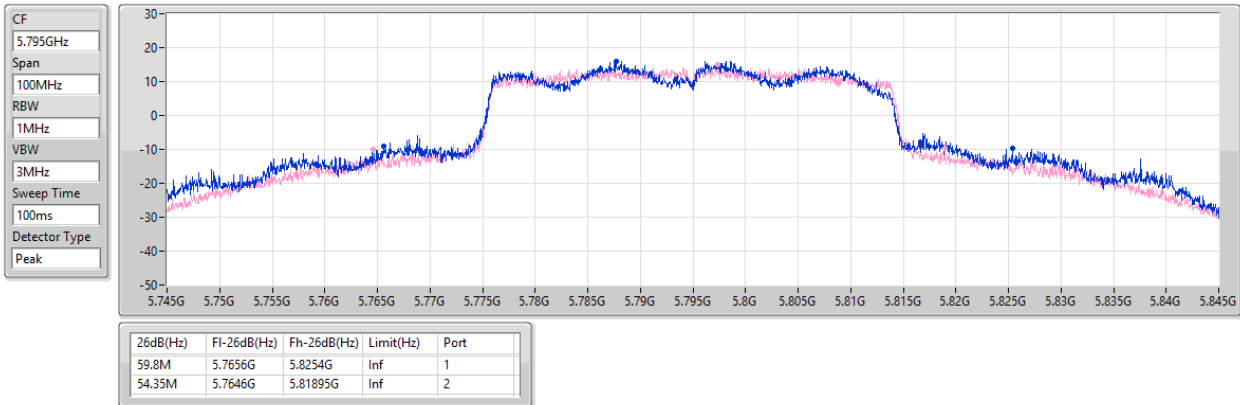

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5795MHz

25/03/2023

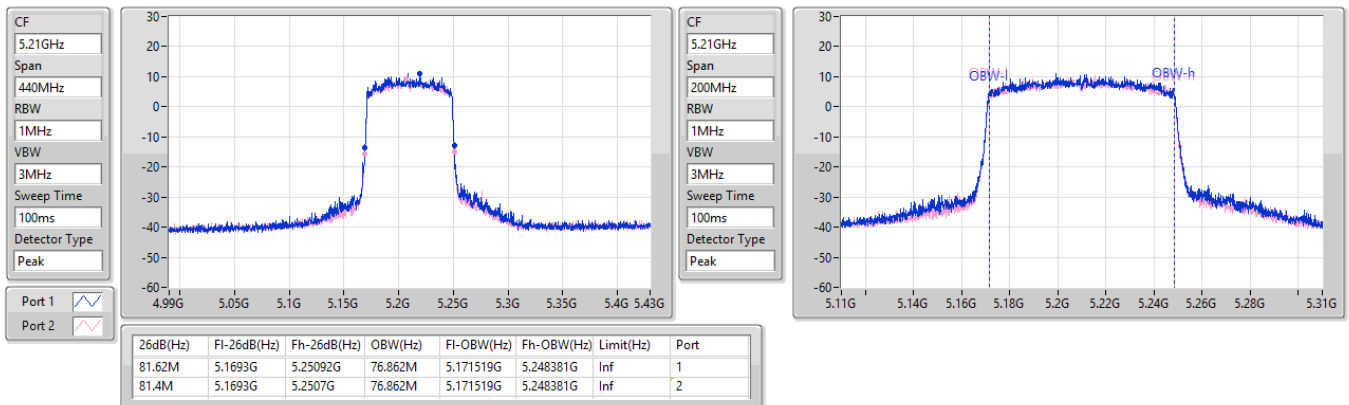


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
5795MHz

25/03/2023

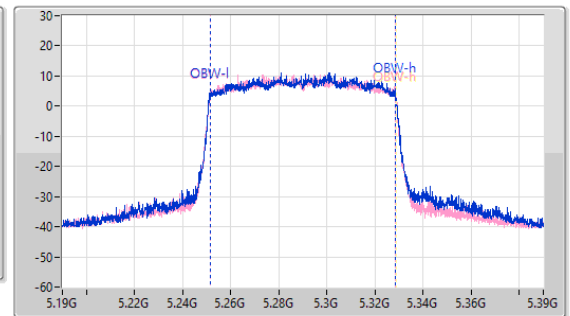
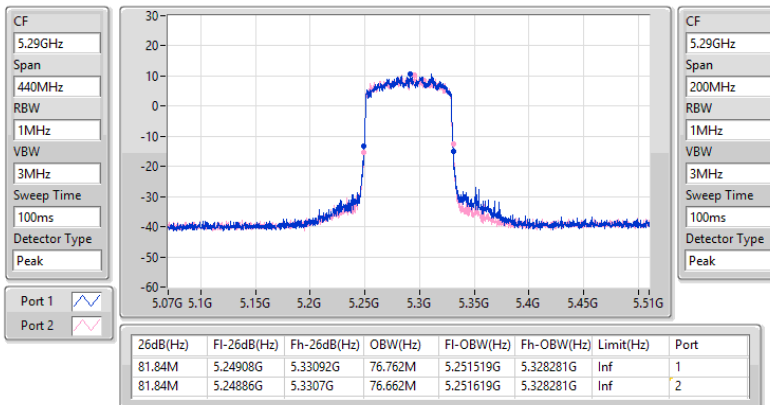

5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5210MHz

25/03/2023

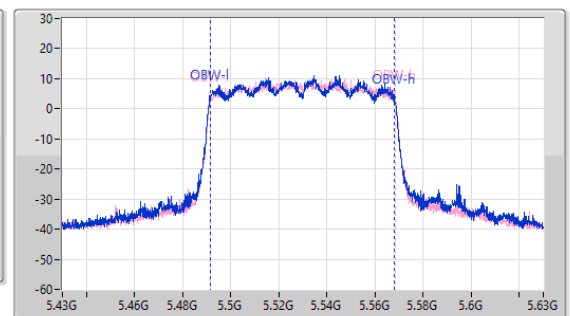
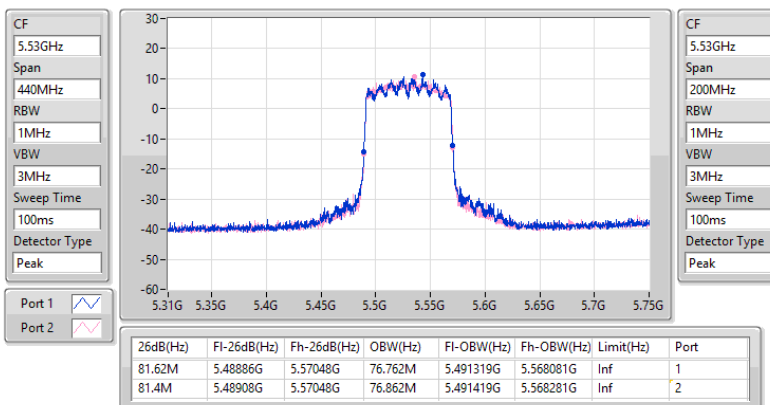


5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5290MHz

25/03/2023

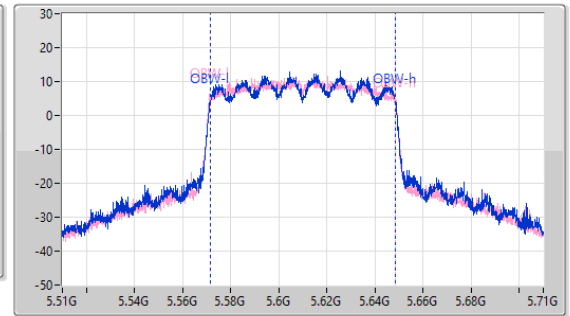
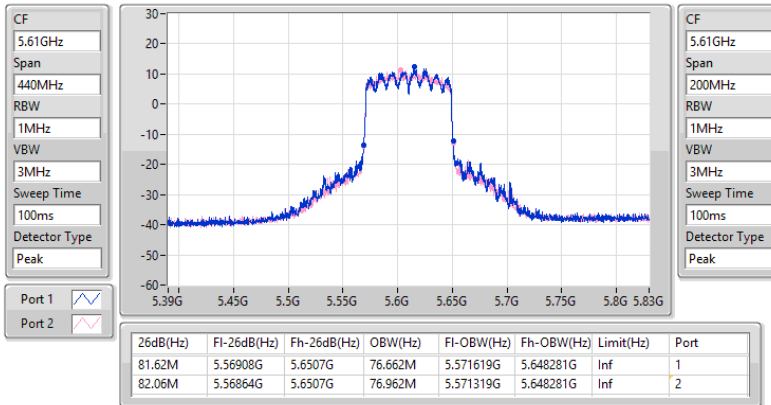

5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5530MHz

25/03/2023

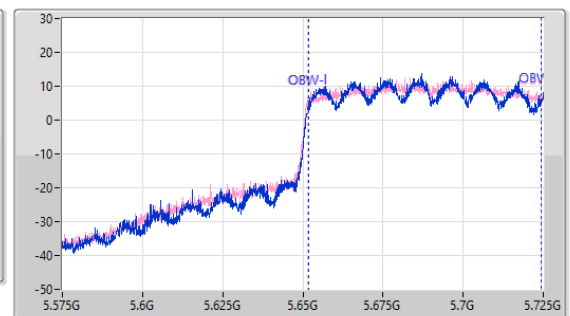
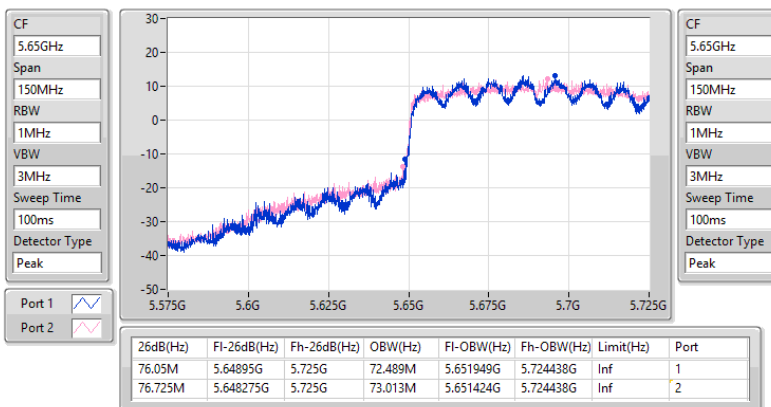


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5610MHz

25/03/2023

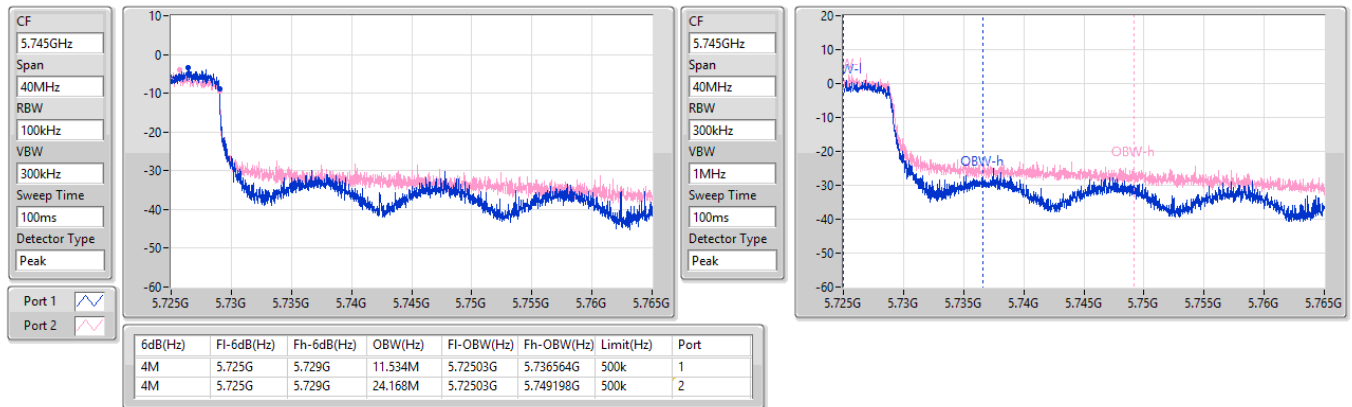

5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5690MHz Straddle 5.47-5.725GHz

25/03/2023

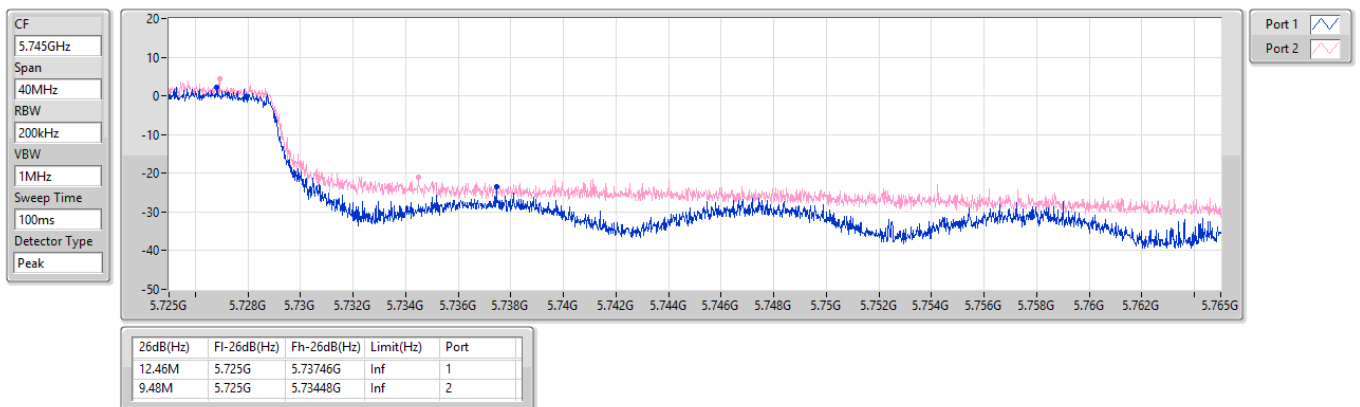


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

25/03/2023

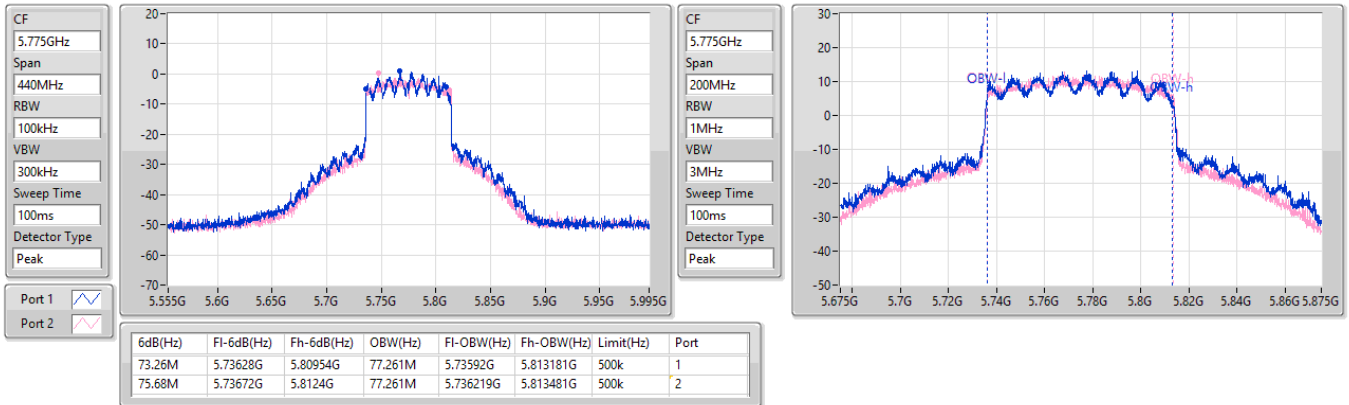

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5690MHz Straddle 5.725-5.85GHz

25/03/2023

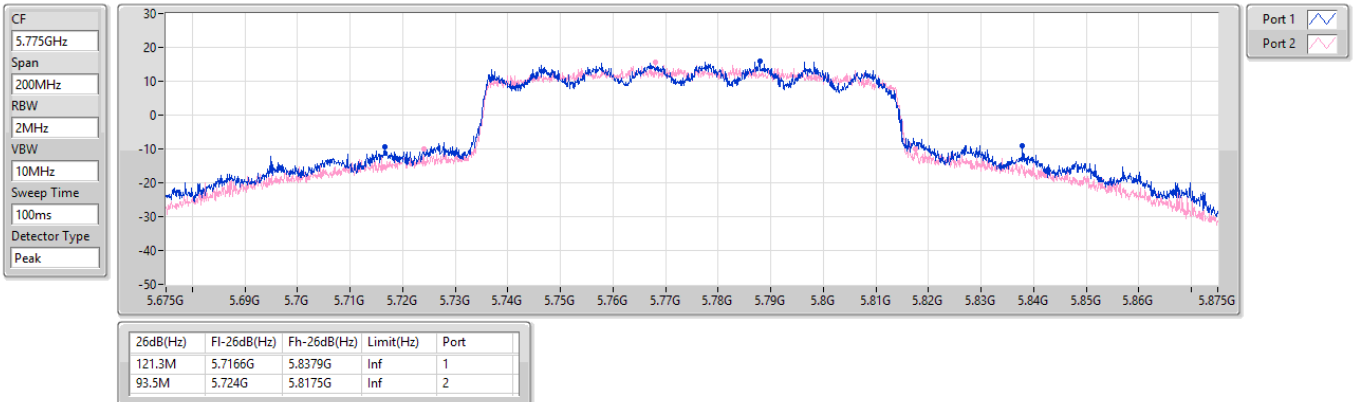


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5775MHz

25/03/2023


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX
EBW
5775MHz

25/03/2023

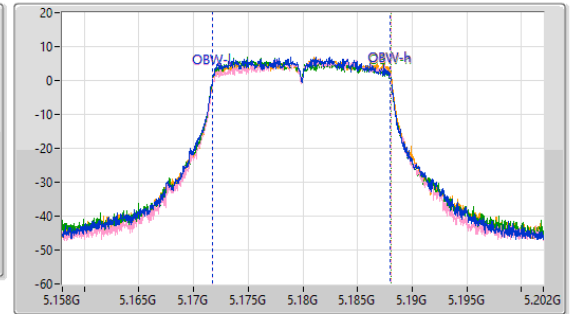
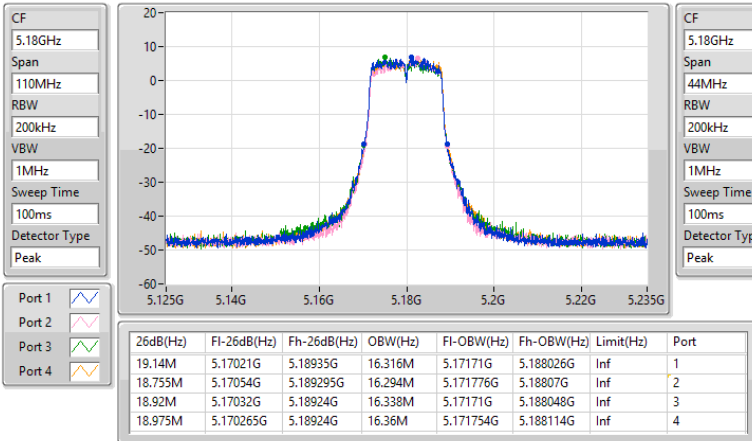


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

25/03/2023

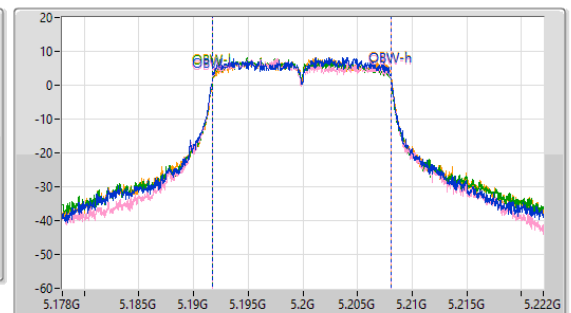
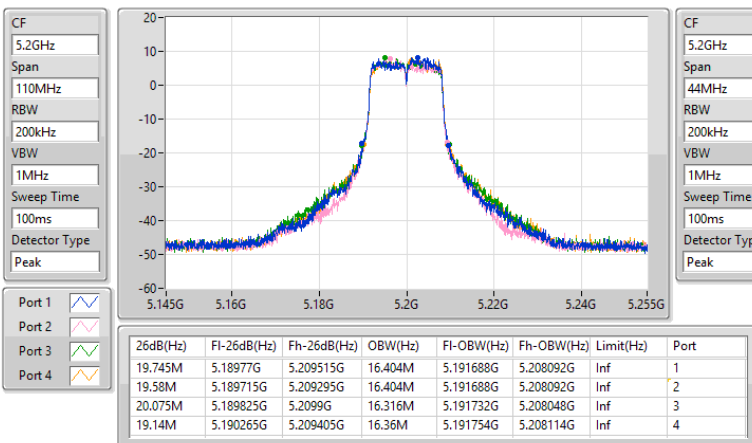


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

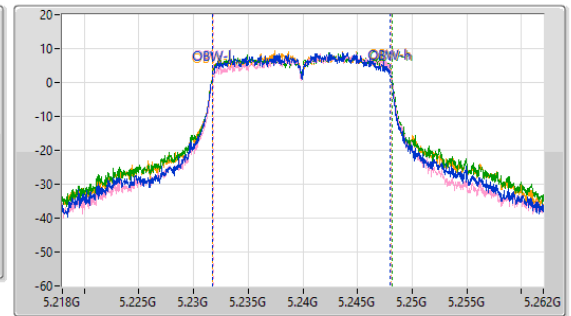
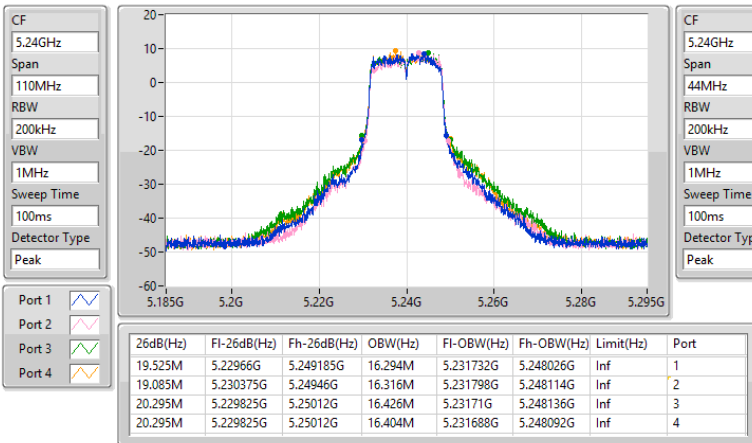
5200MHz

25/03/2023

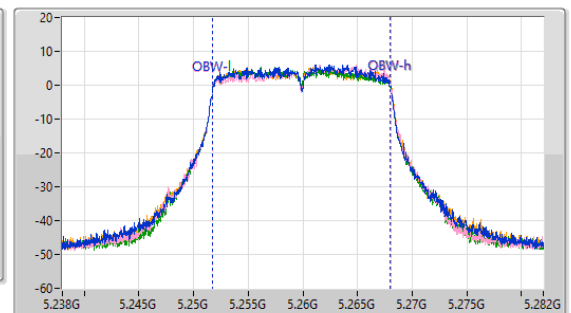
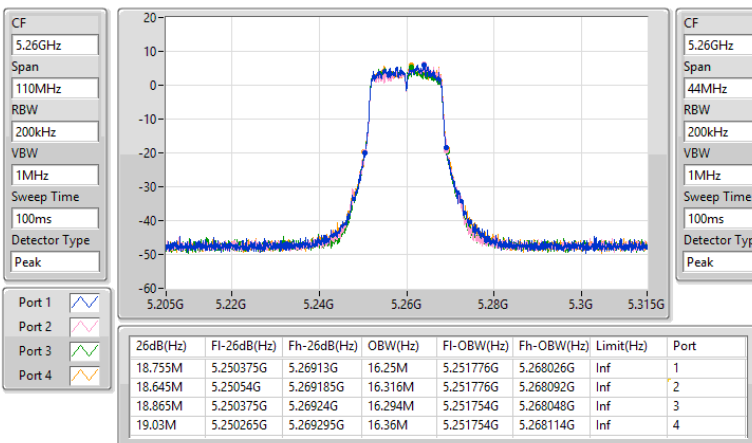


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz

25/03/2023


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5260MHz

25/03/2023

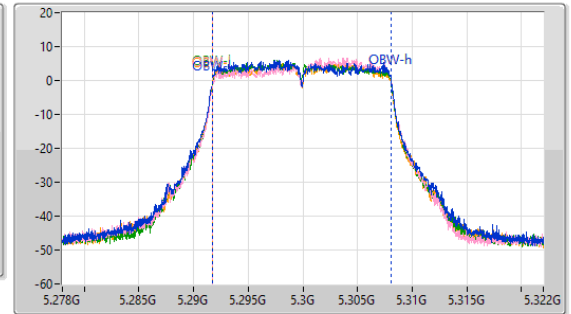
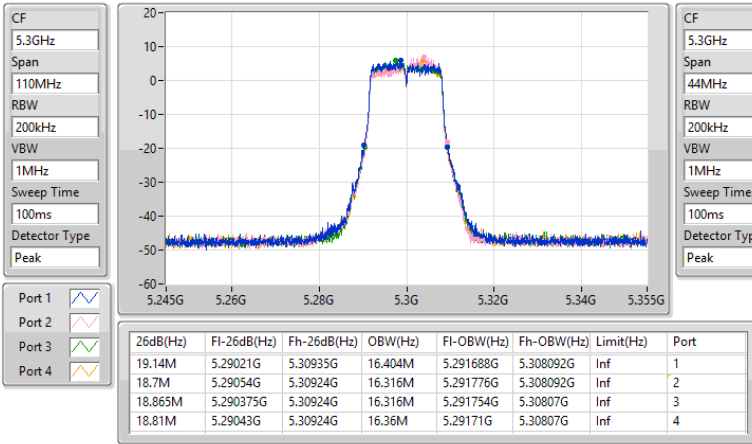


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5300MHz

25/03/2023

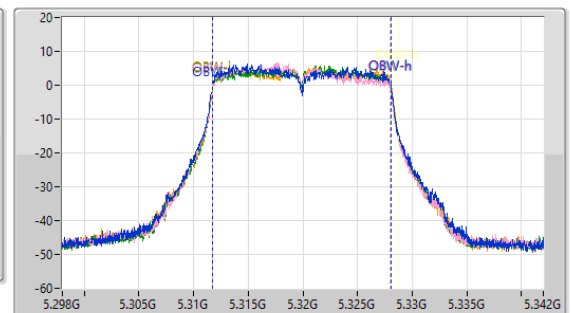
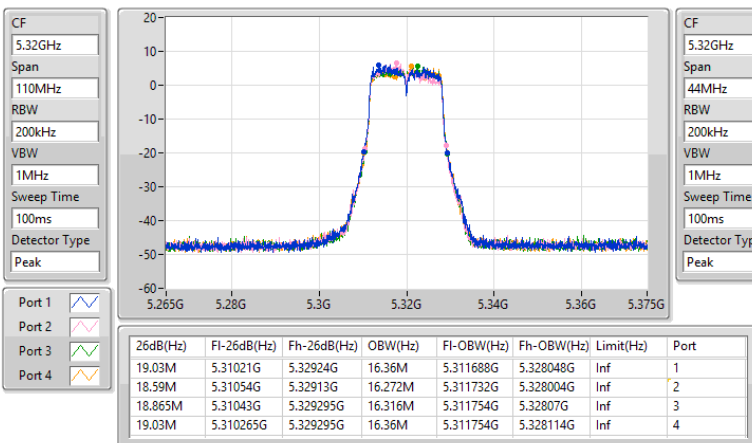


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

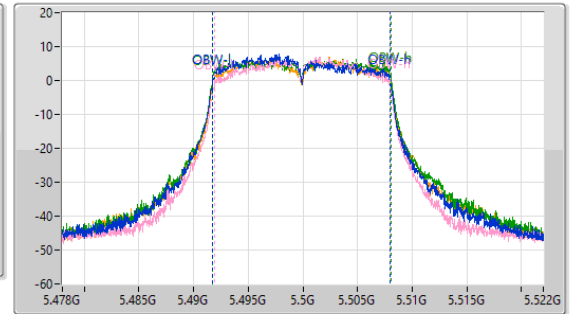
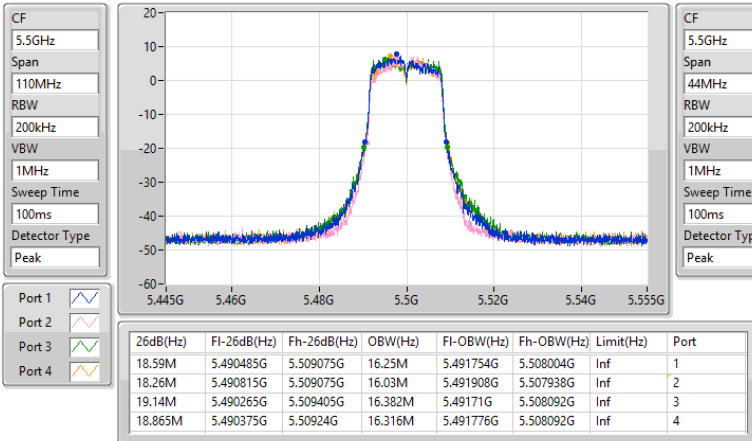
5320MHz

25/03/2023

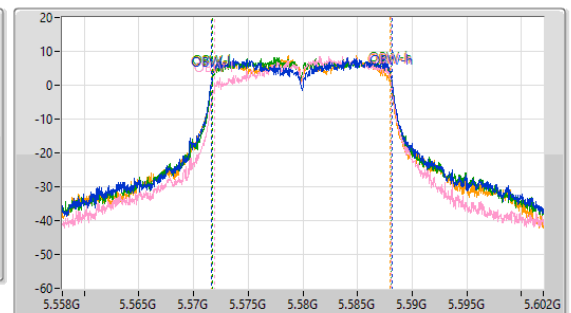
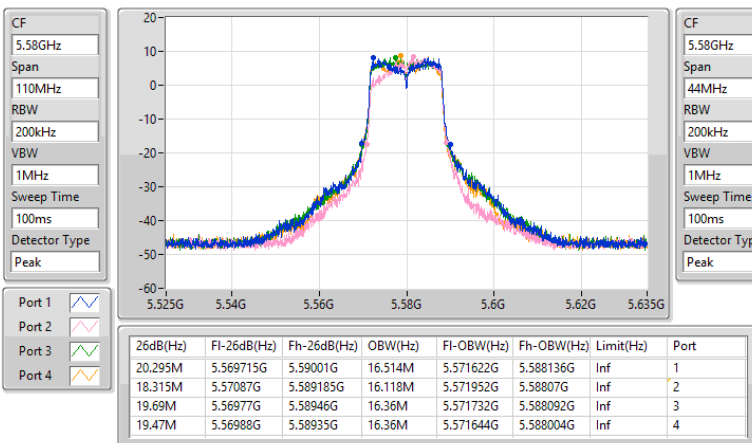


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

25/03/2023


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

25/03/2023

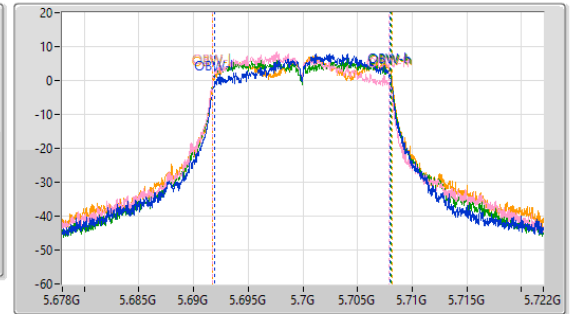
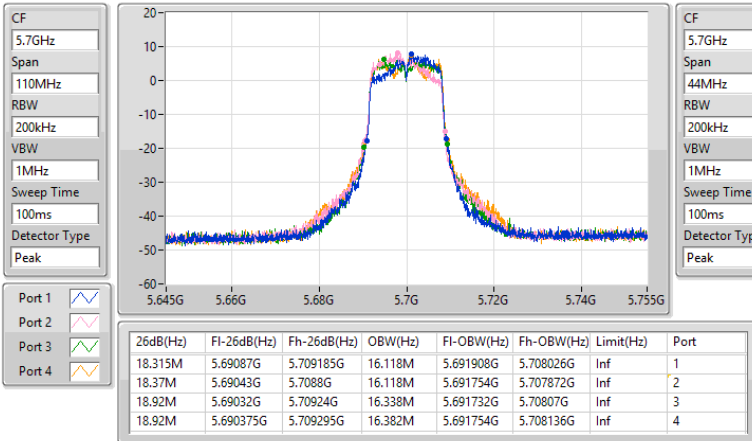


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5700MHz

25/03/2023

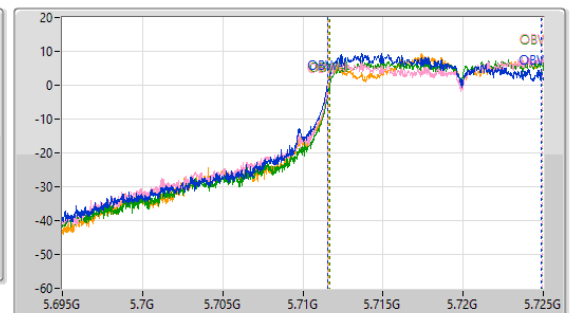
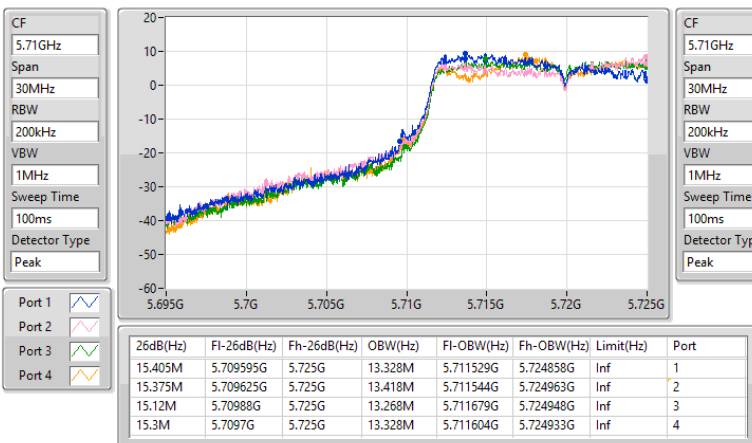


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

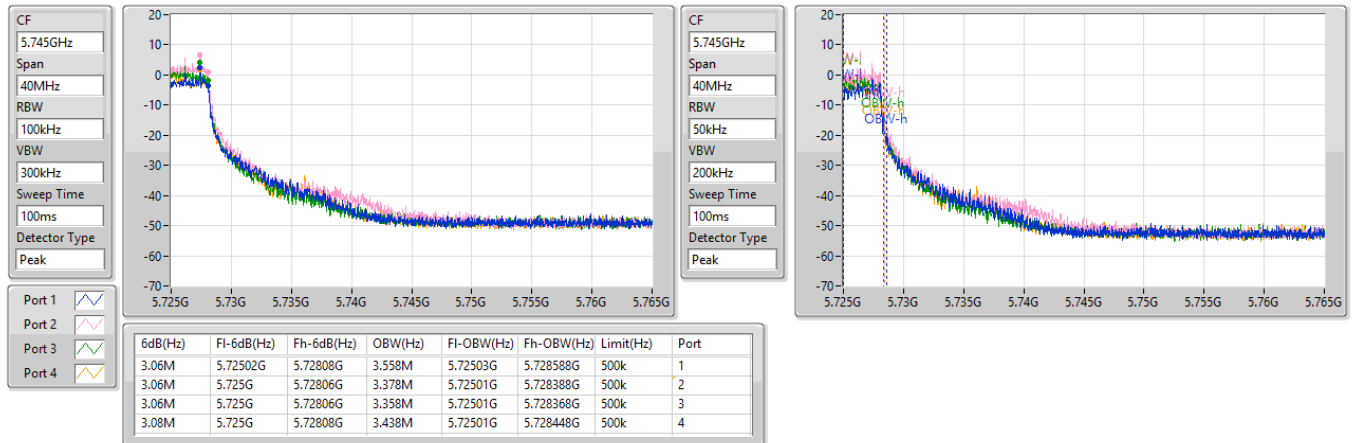
5720MHz Straddle 5.47-5.725GHz

25/03/2023

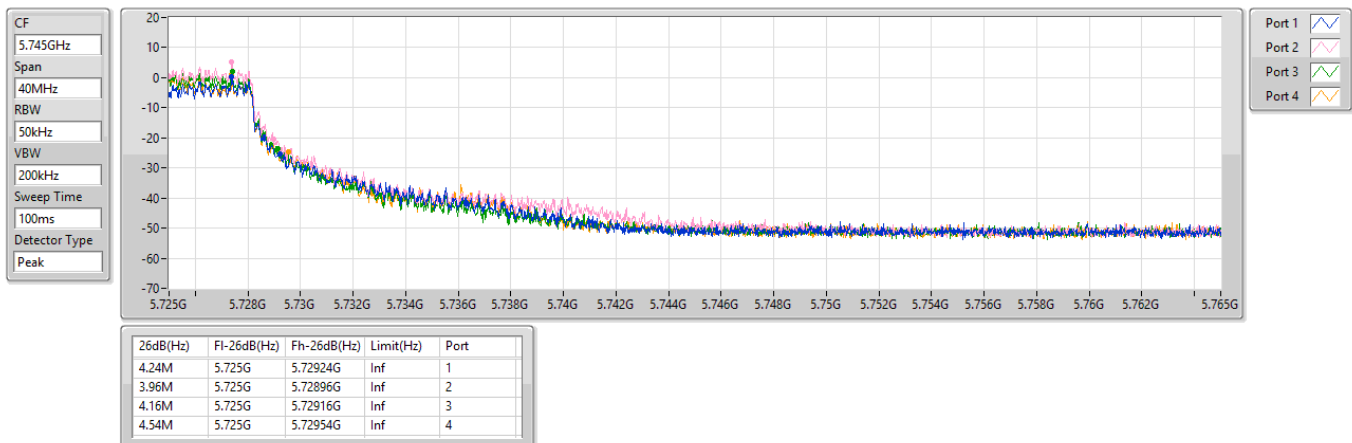


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

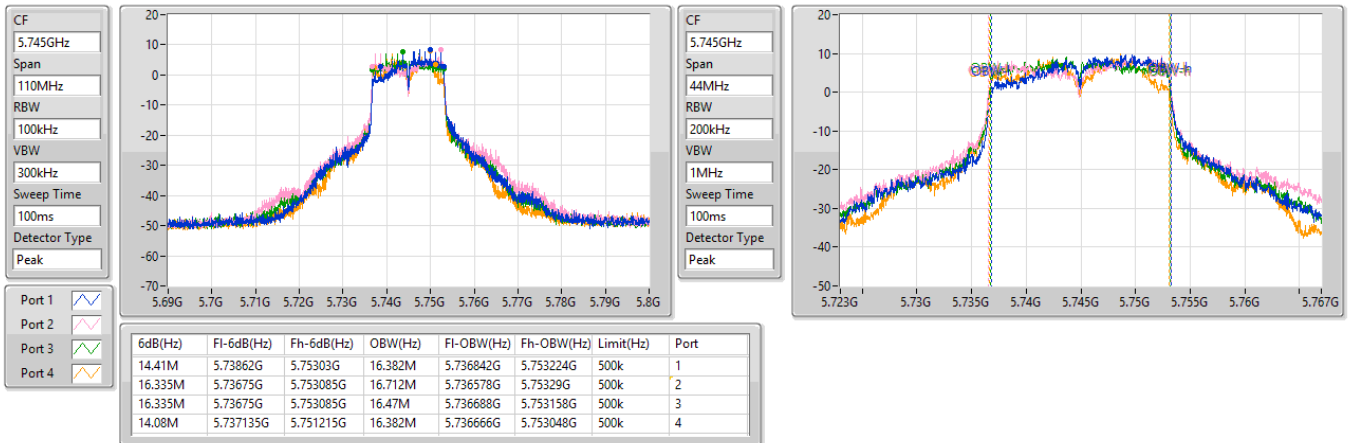

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

25/03/2023

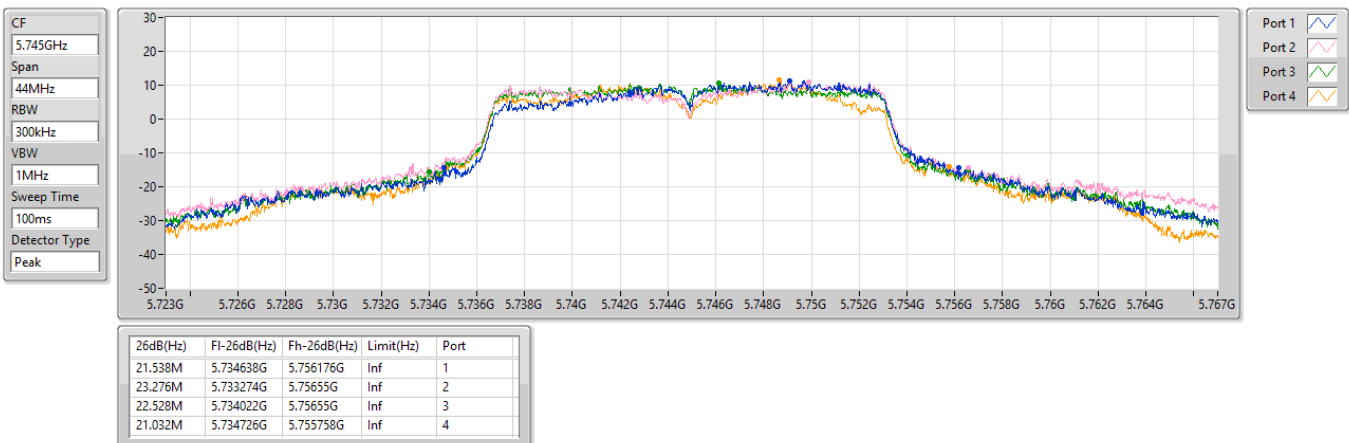


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

25/03/2023


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz

25/03/2023

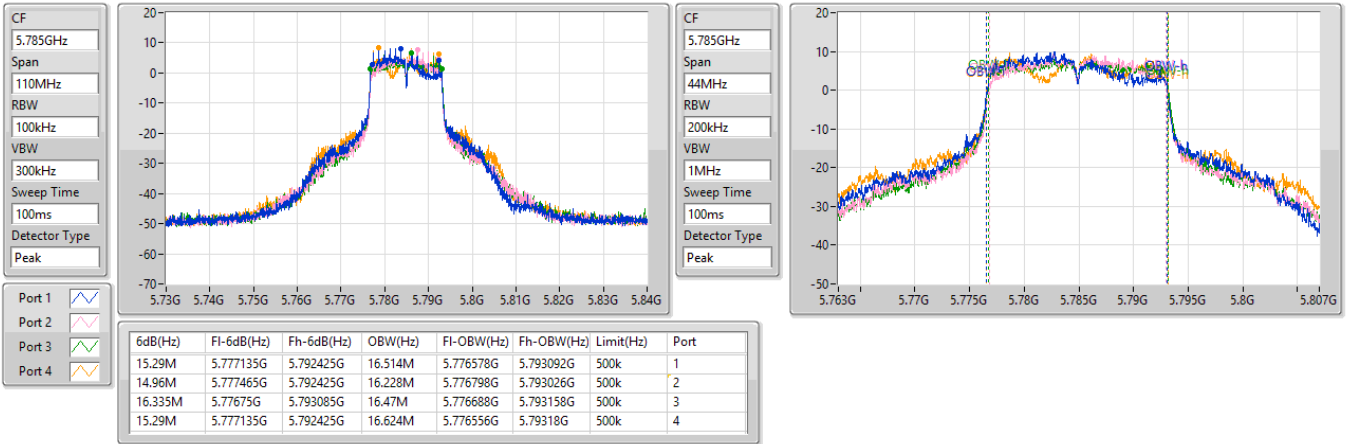


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

25/03/2023

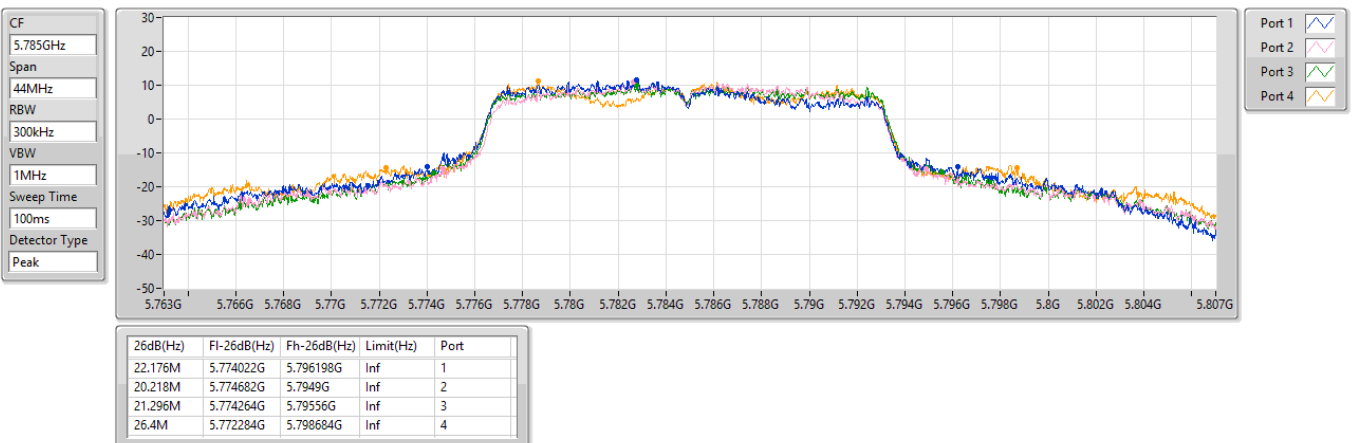


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

25/03/2023

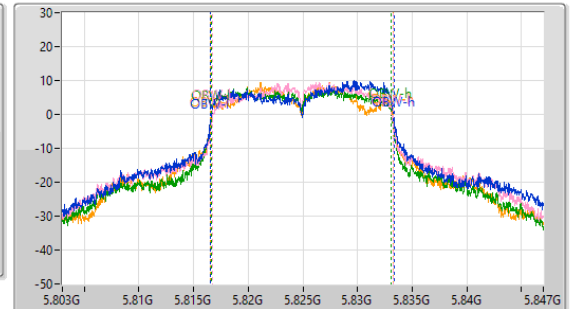
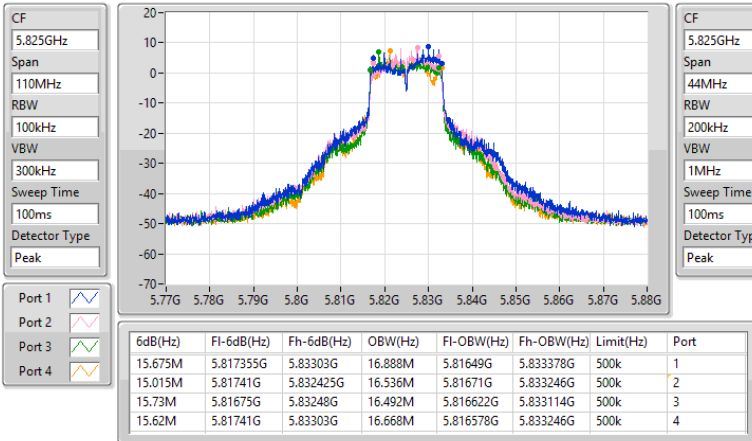


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

25/03/2023

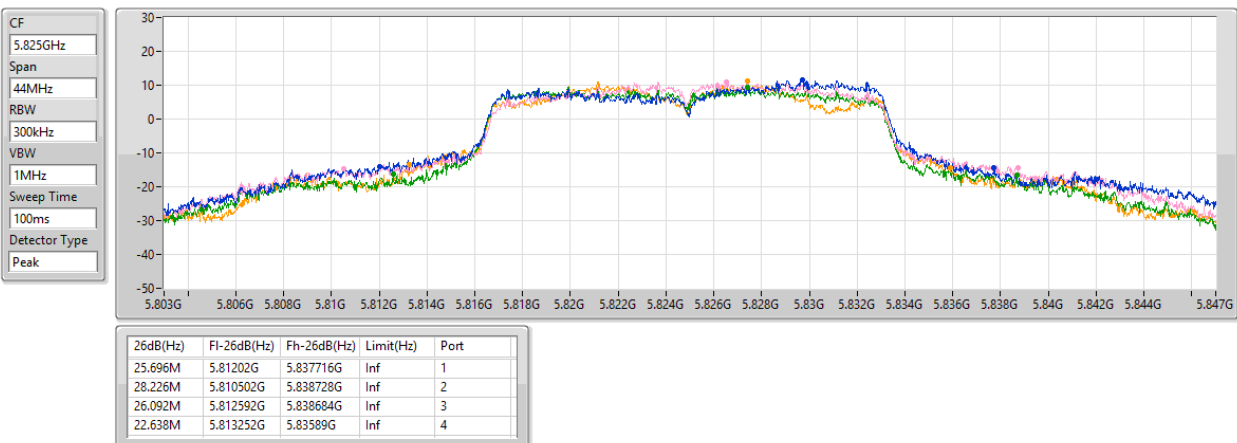


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

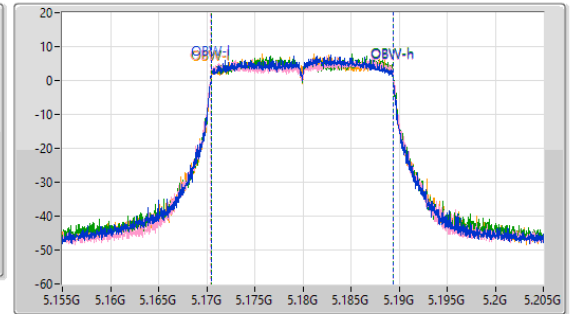
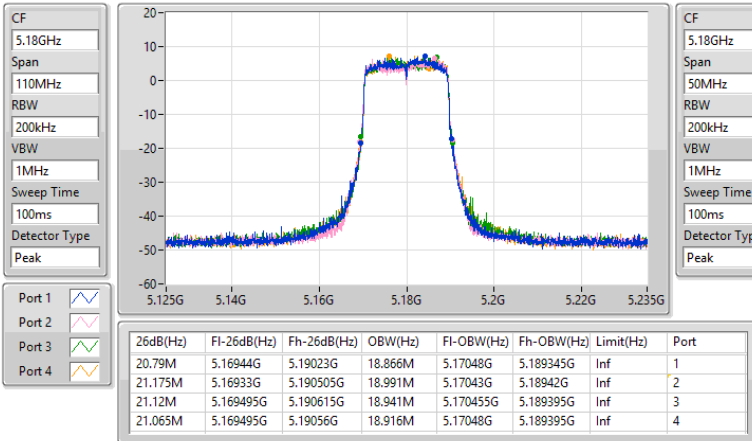
5825MHz

25/03/2023

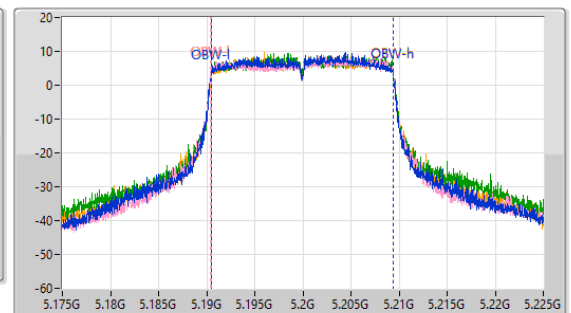
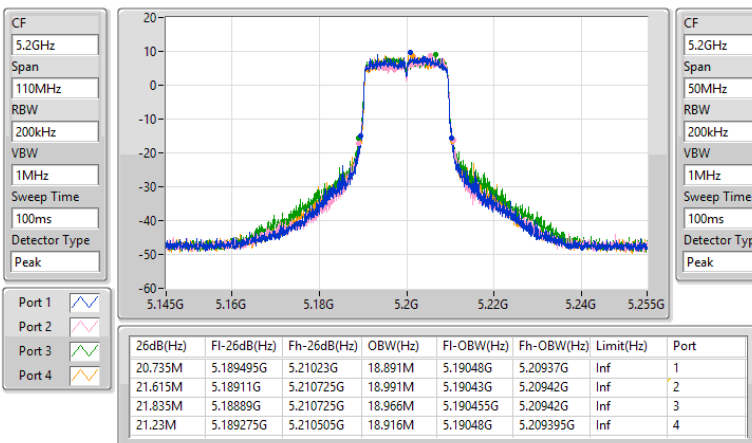


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX
EBW
5180MHz

25/03/2023

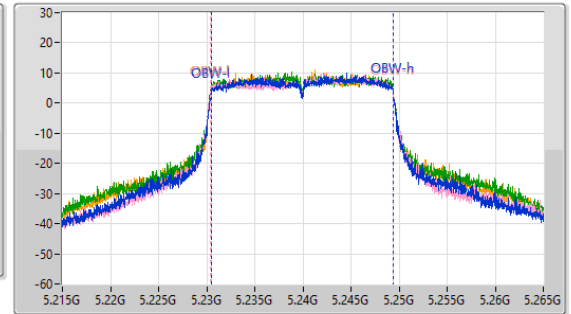
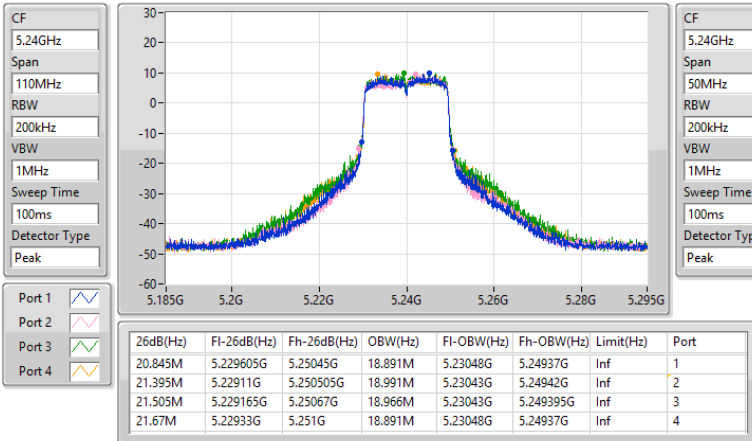

5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX
EBW
5200MHz

25/03/2023

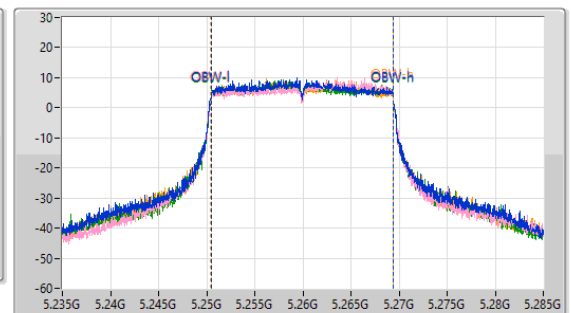
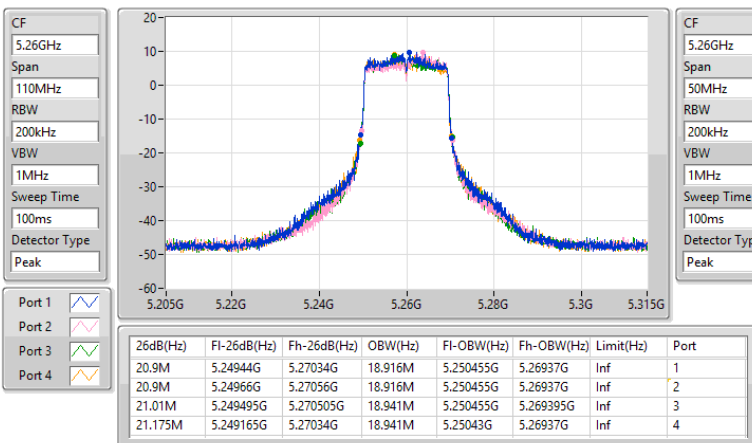


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5240MHz

25/03/2023


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
5260MHz

25/03/2023

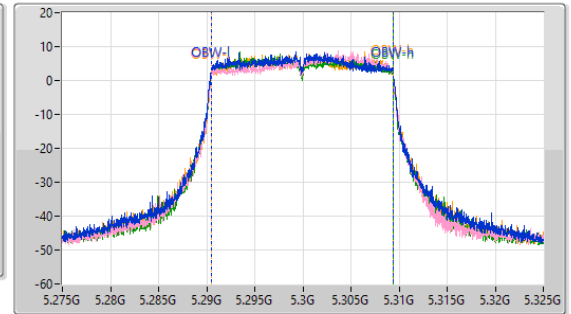
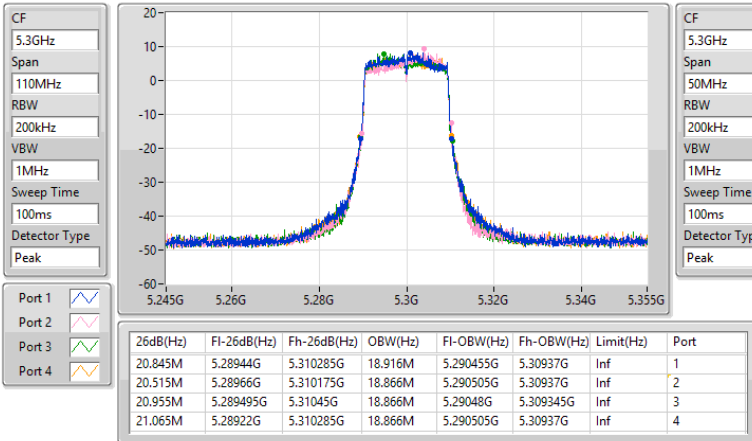


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5300MHz

25/03/2023

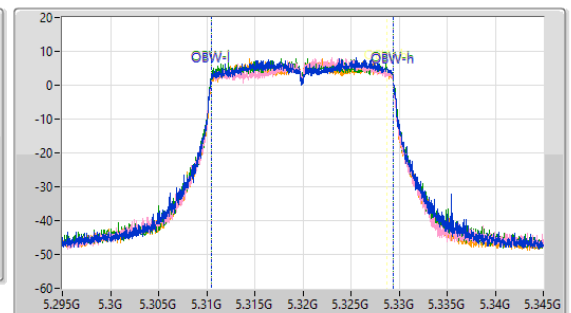
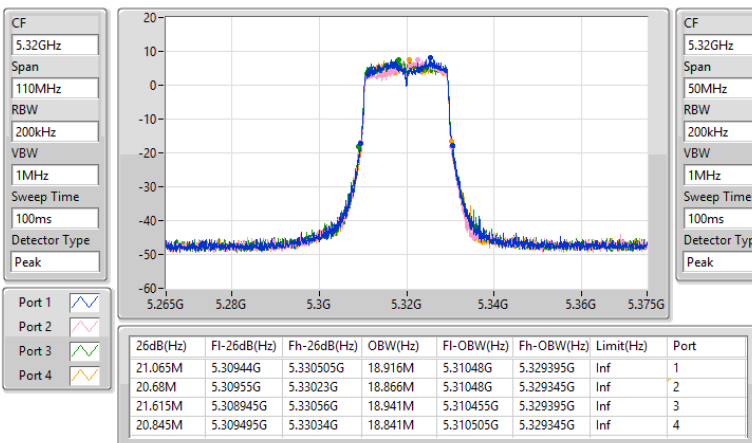


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5320MHz

25/03/2023

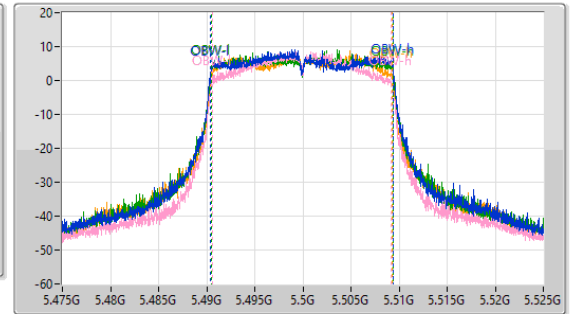
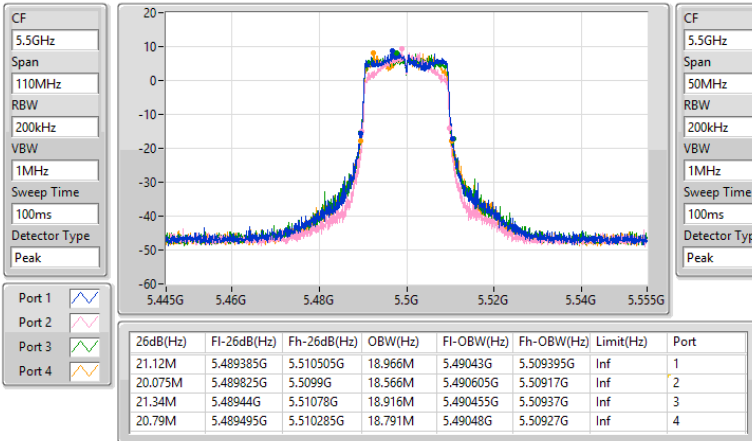


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5500MHz

25/03/2023

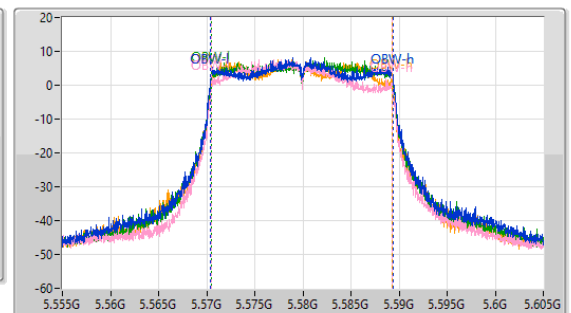
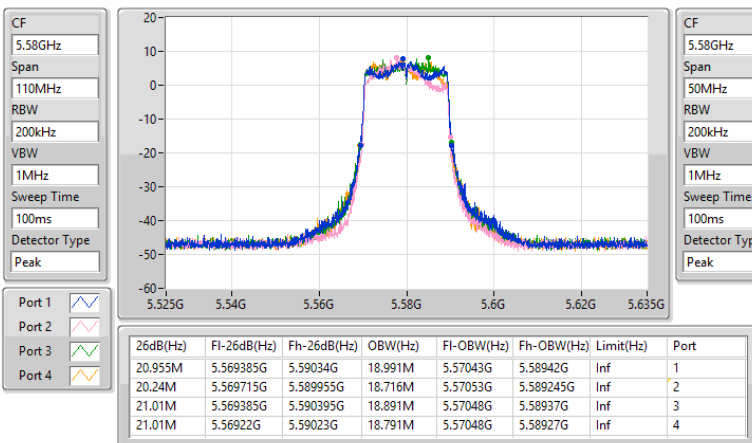


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5580MHz

25/03/2023

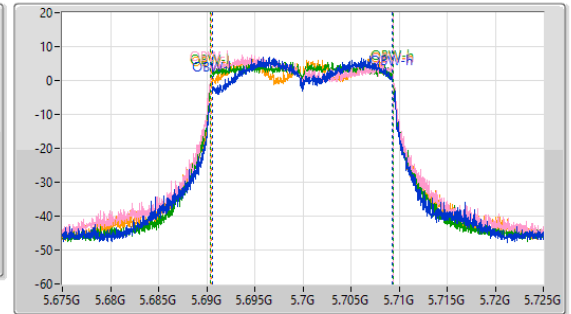
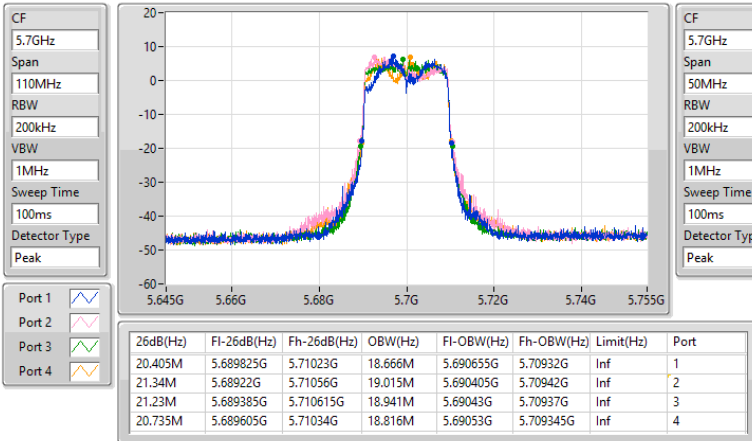


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5700MHz

25/03/2023

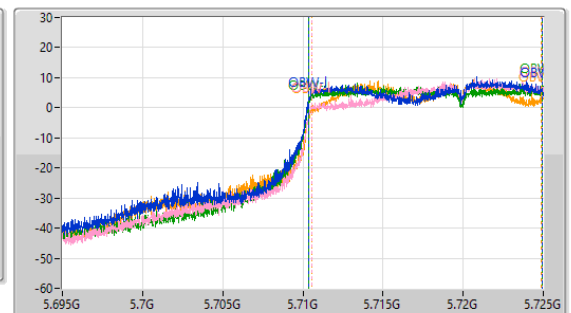
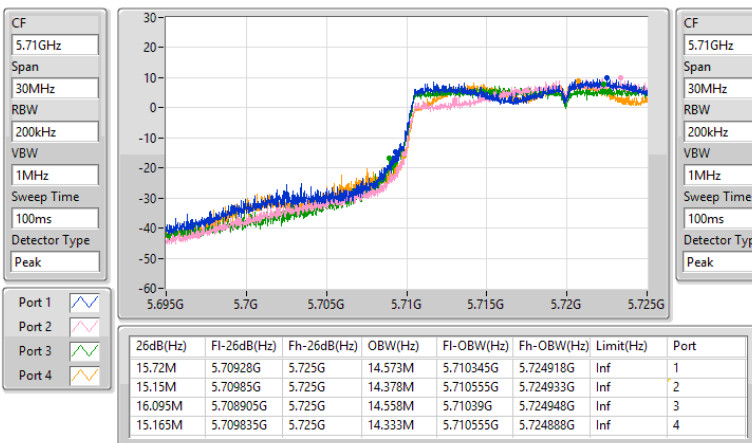


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

25/03/2023

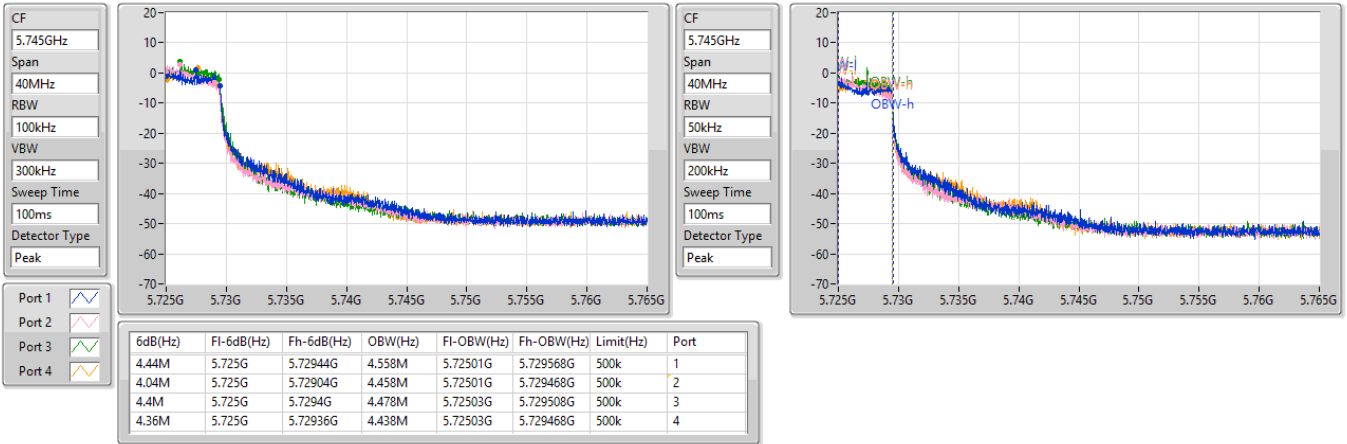


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

25/03/2023

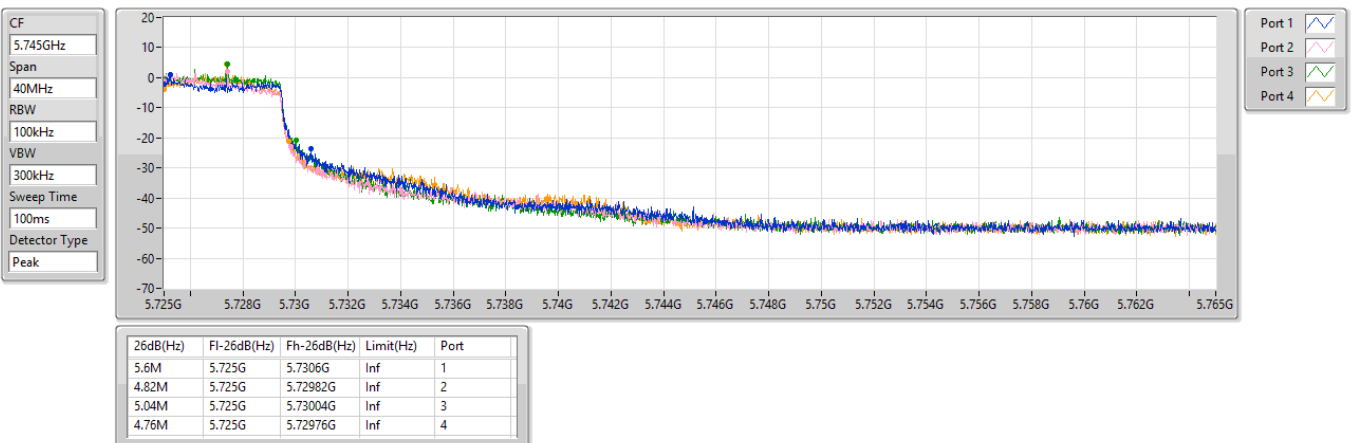


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

25/03/2023

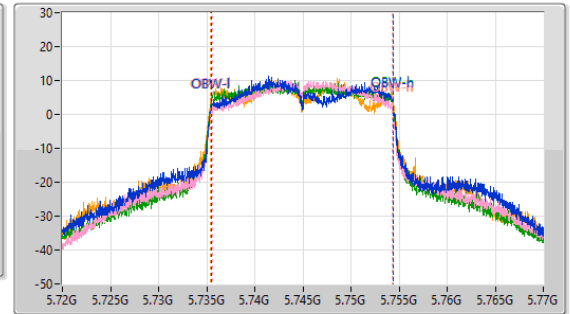
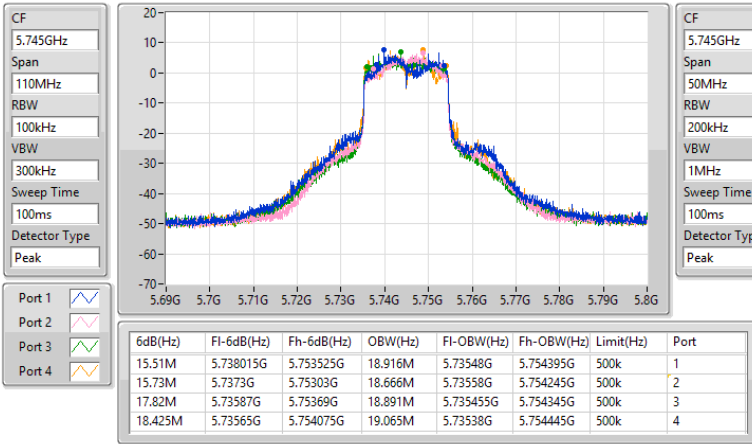


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

25/03/2023

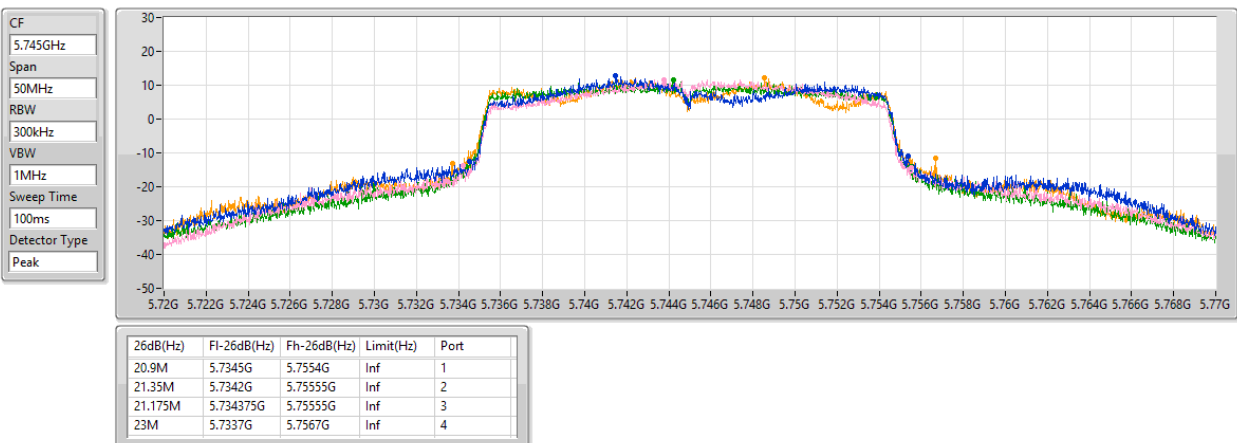


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

25/03/2023

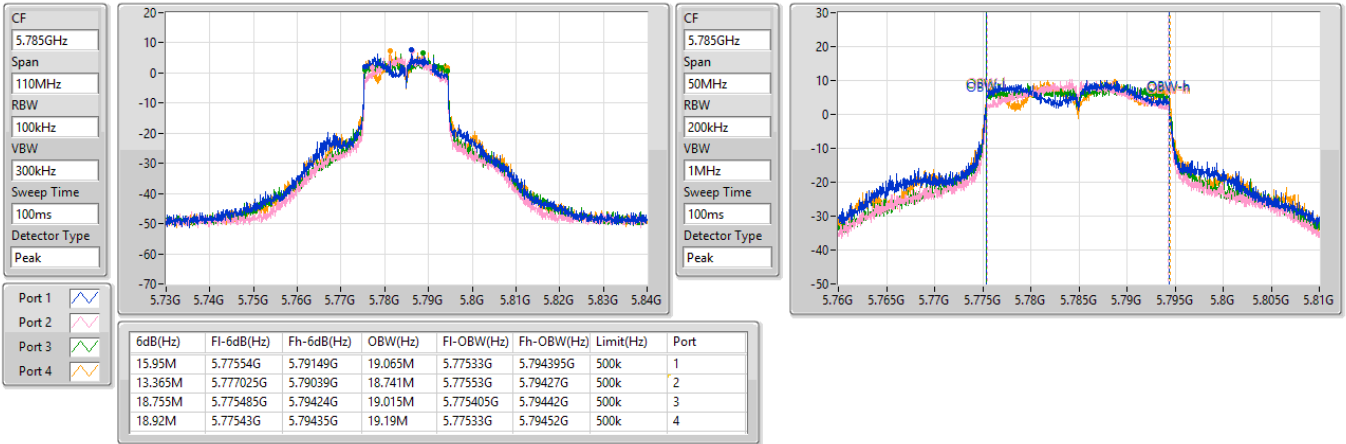


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

25/03/2023

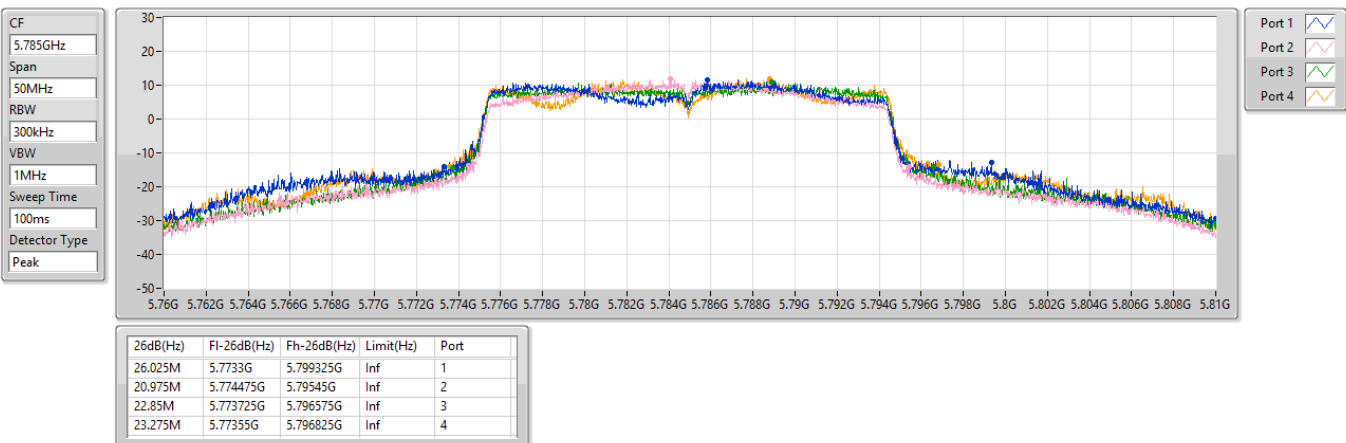


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

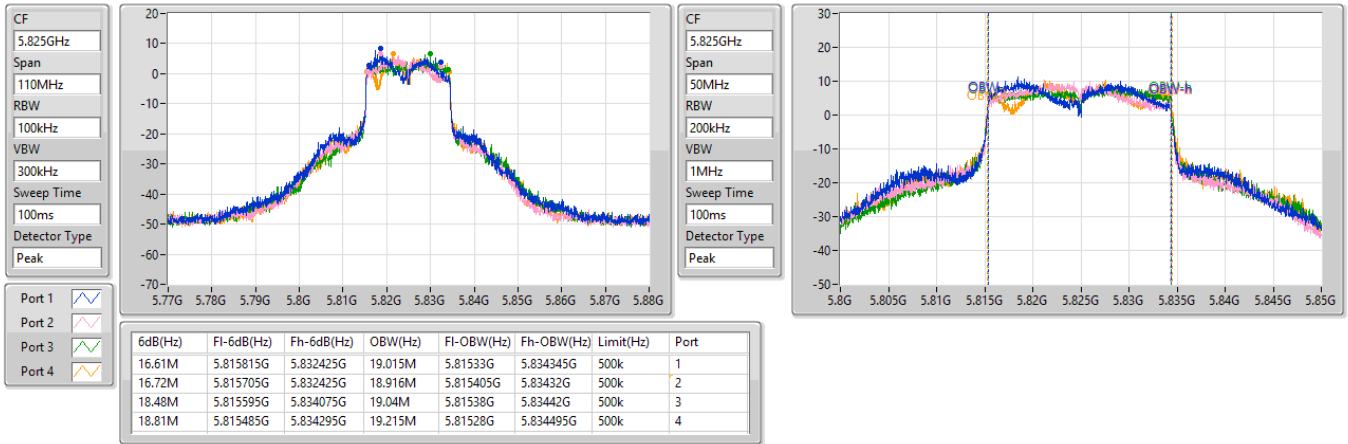
25/03/2023



5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW
5825MHz

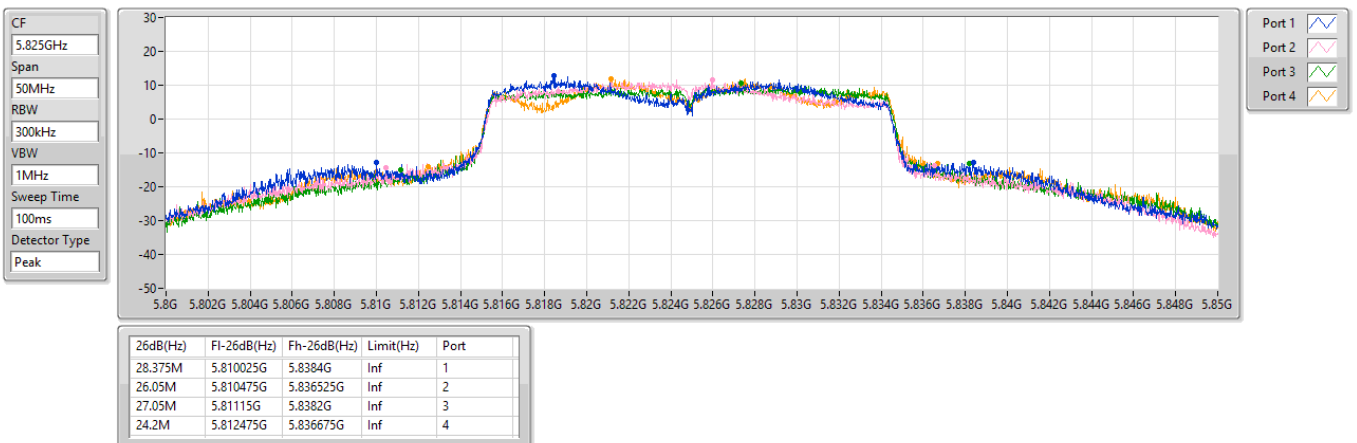
25/03/2023



5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW
5825MHz

25/03/2023

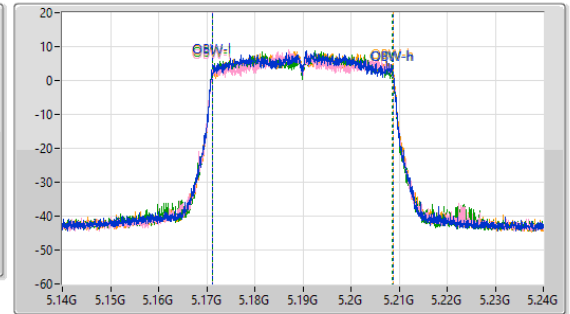
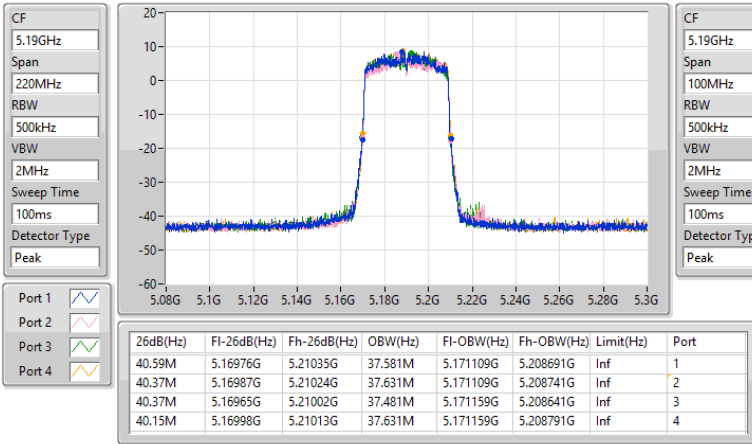


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5190MHz

25/03/2023

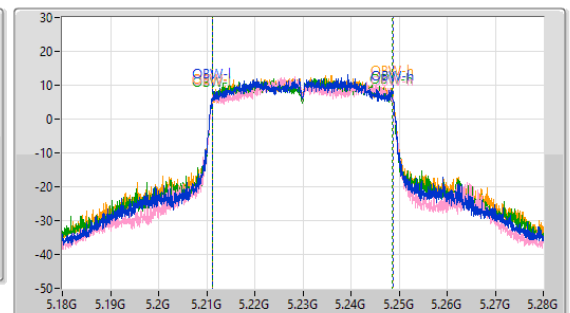
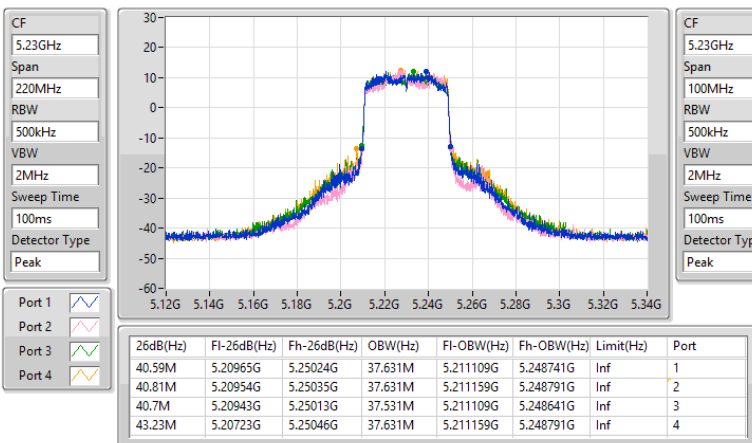


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5230MHz

25/03/2023

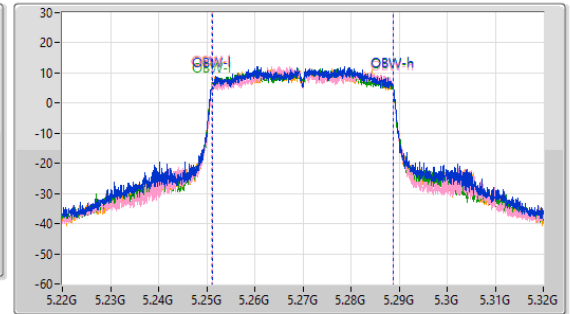
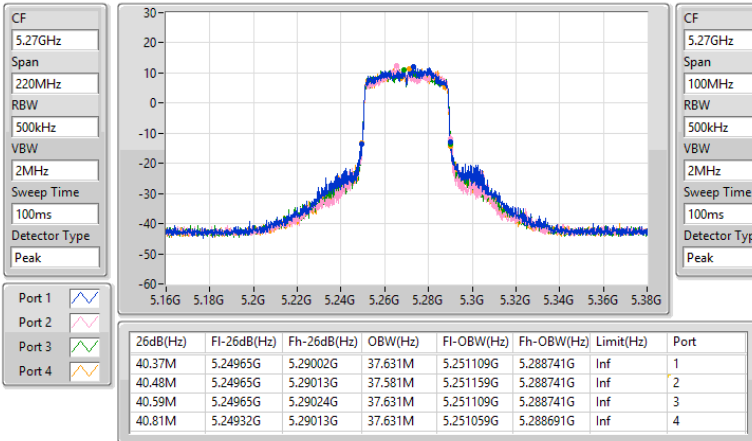


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5270MHz

25/03/2023

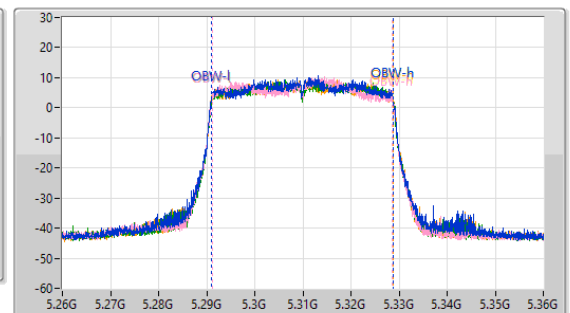
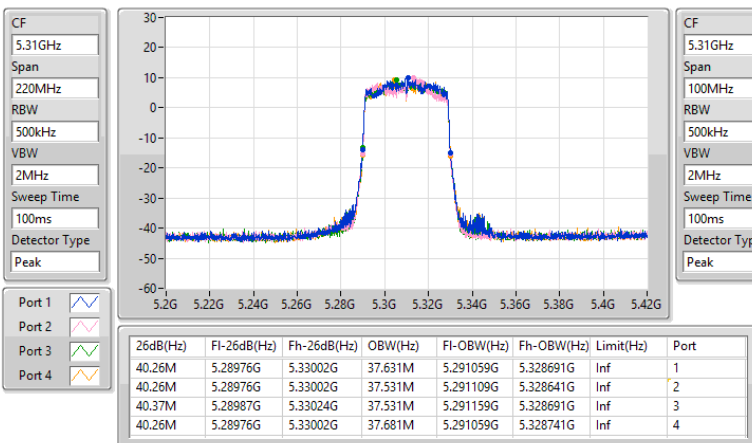


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5310MHz

25/03/2023

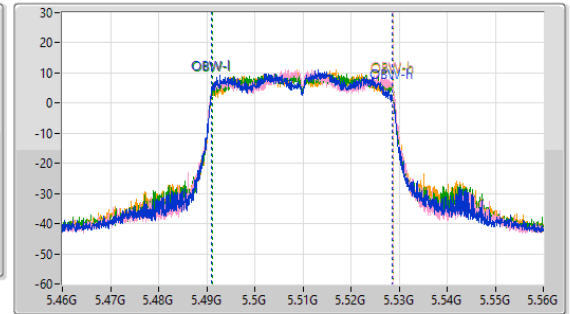
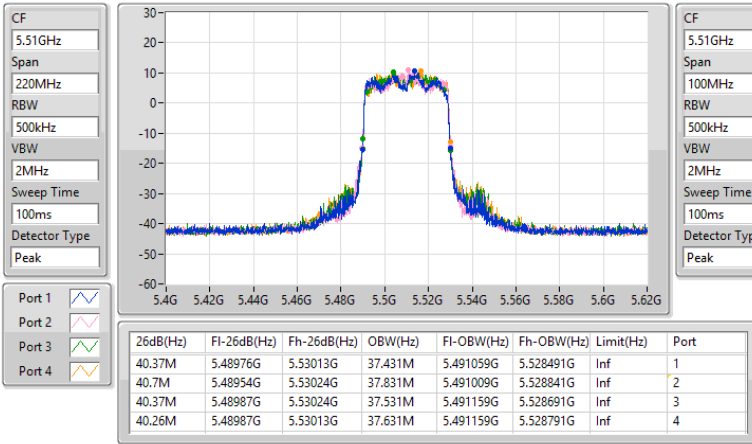


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5510MHz

25/03/2023

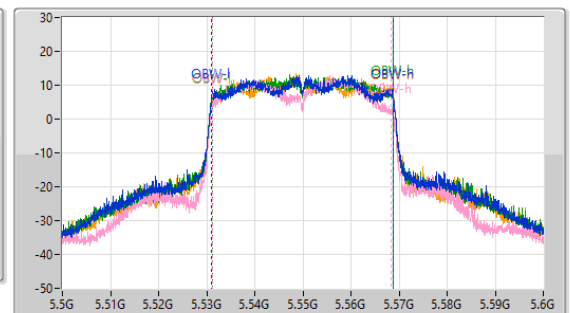
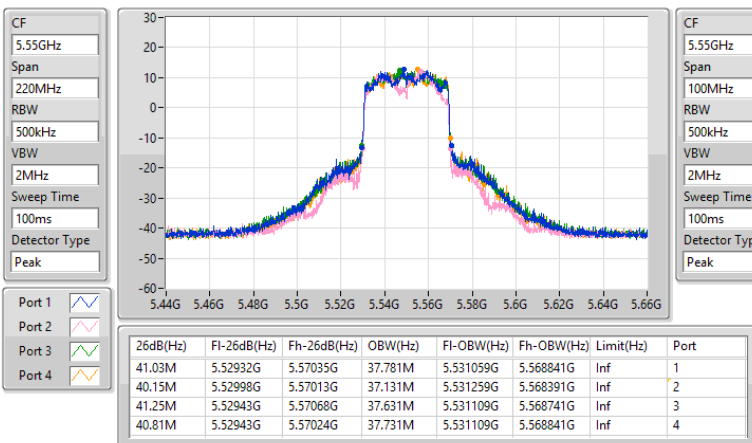


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5550MHz

25/03/2023

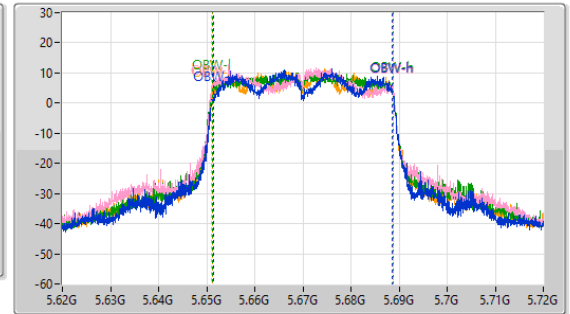
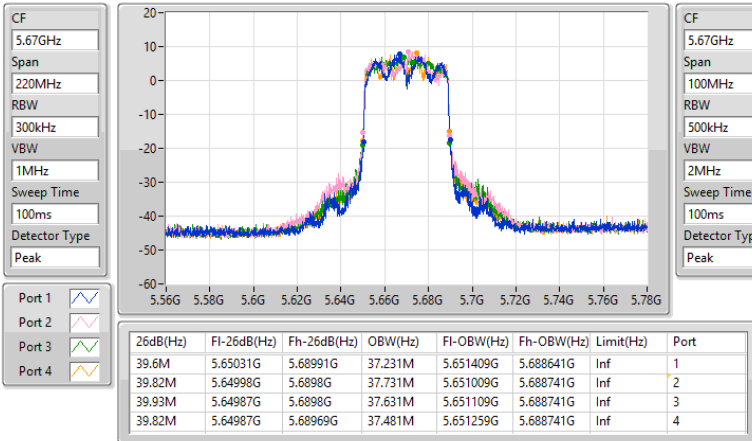


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5670MHz

25/03/2023

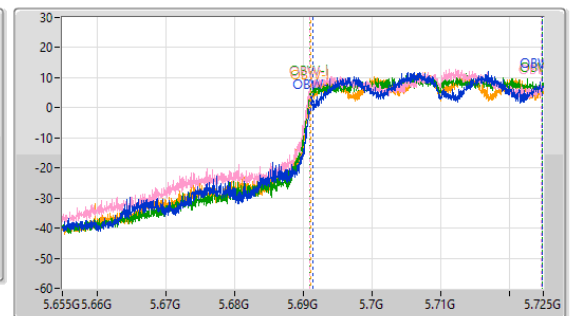
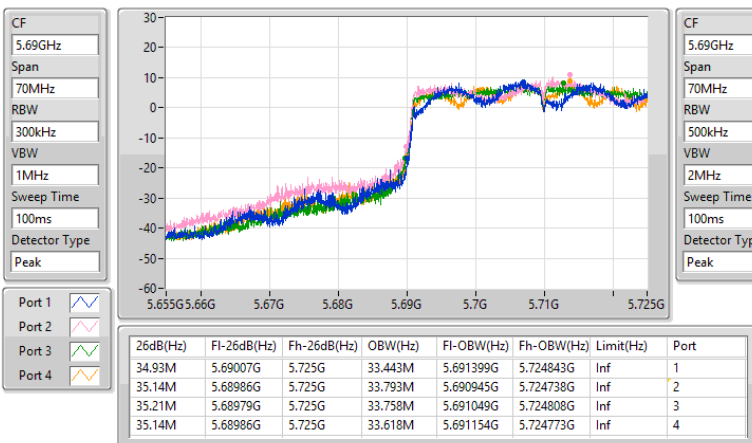


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

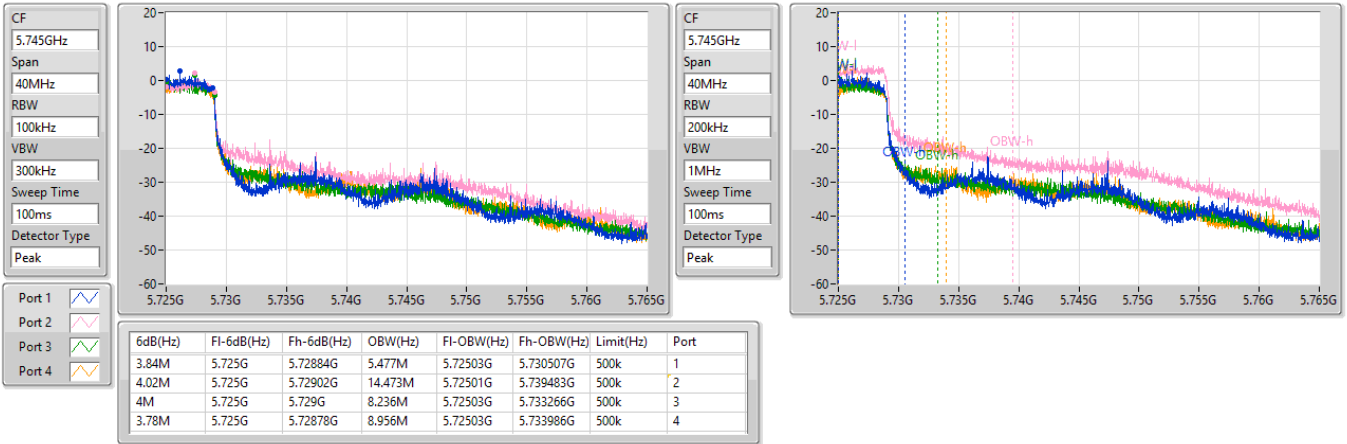
5710MHz Straddle 5.47-5.725GHz

25/03/2023

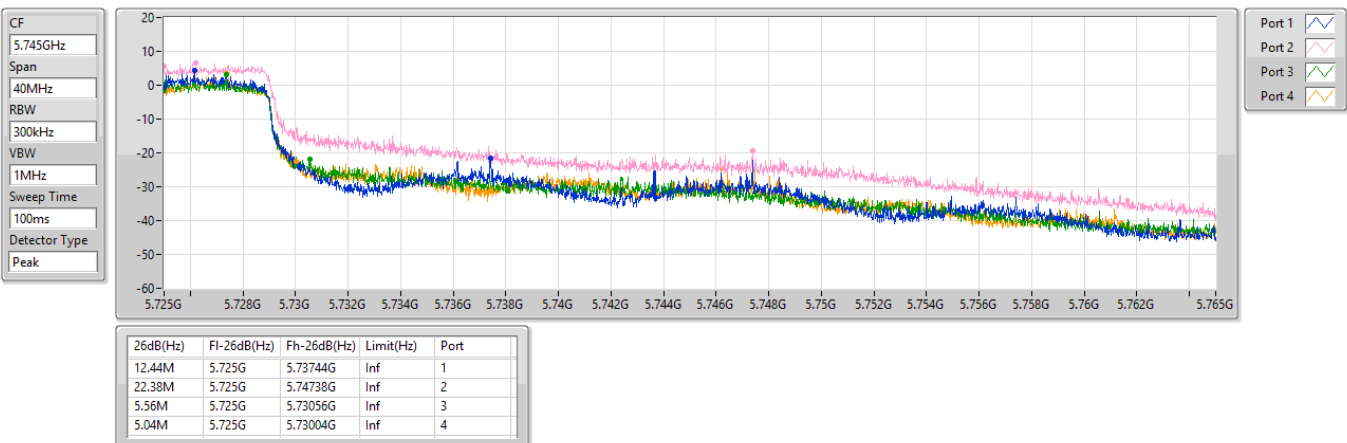


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

25/03/2023

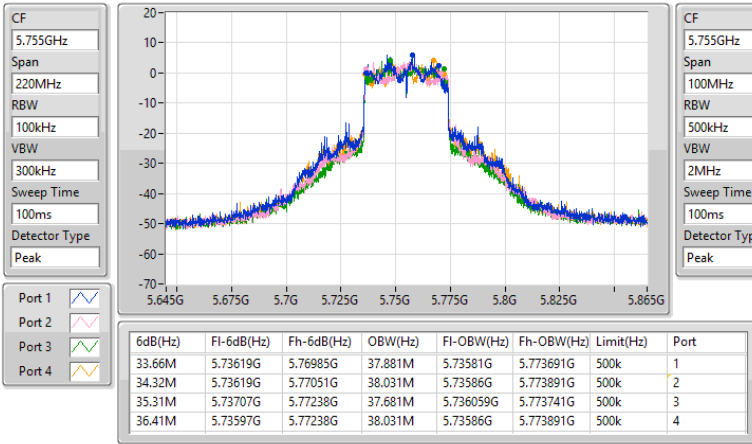


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5755MHz

25/03/2023

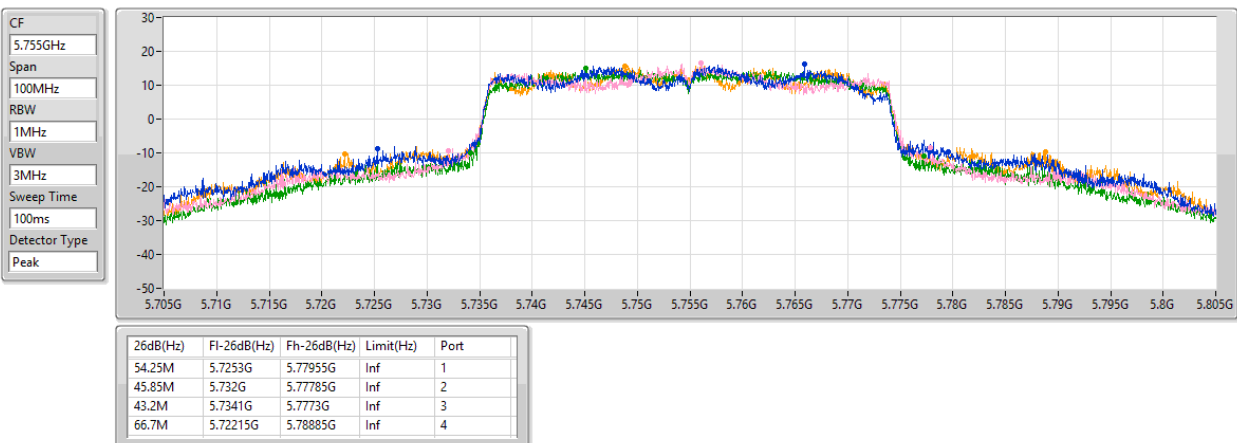


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

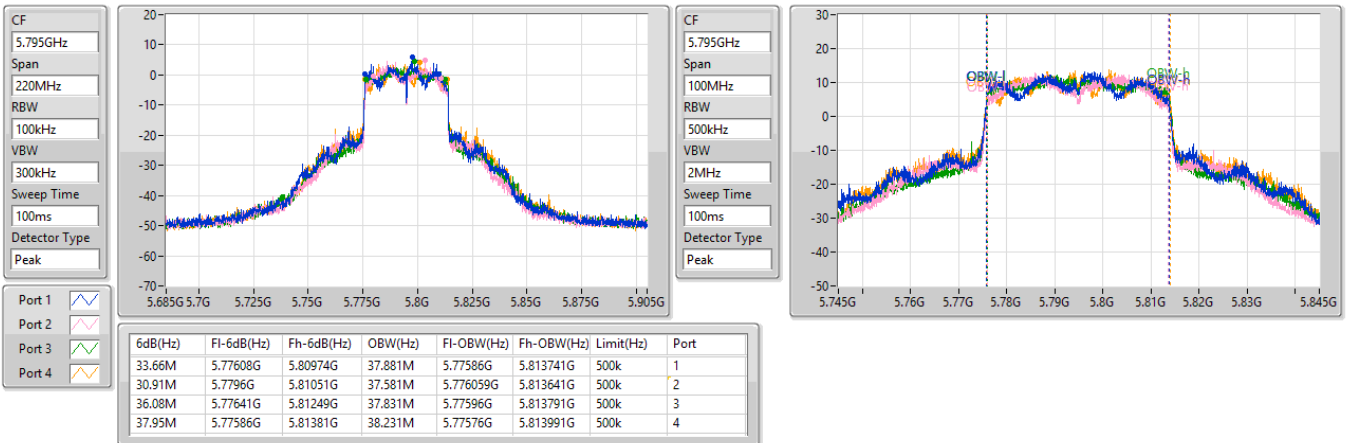
5755MHz

25/03/2023

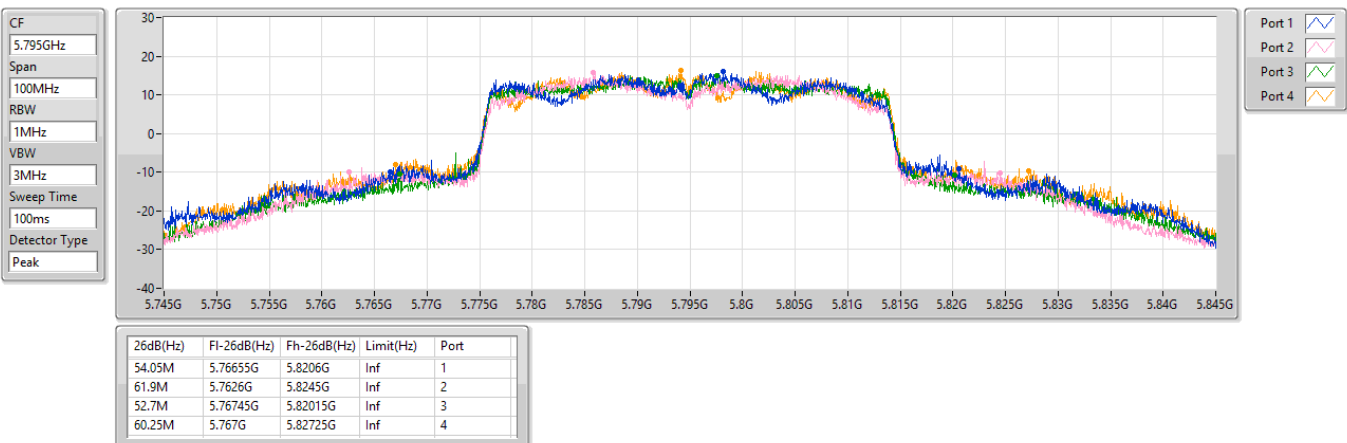


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz

25/03/2023

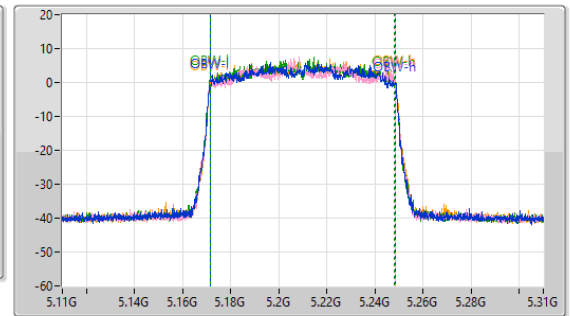
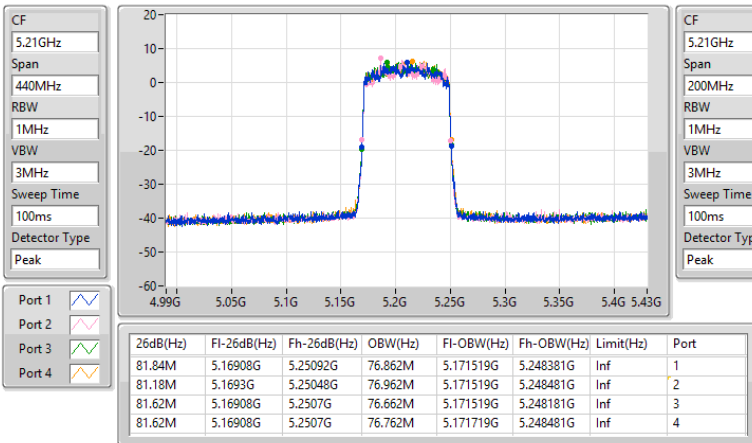

5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_4TX
EBW
5795MHz

25/03/2023

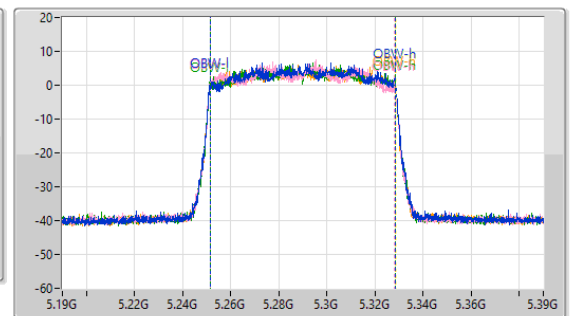
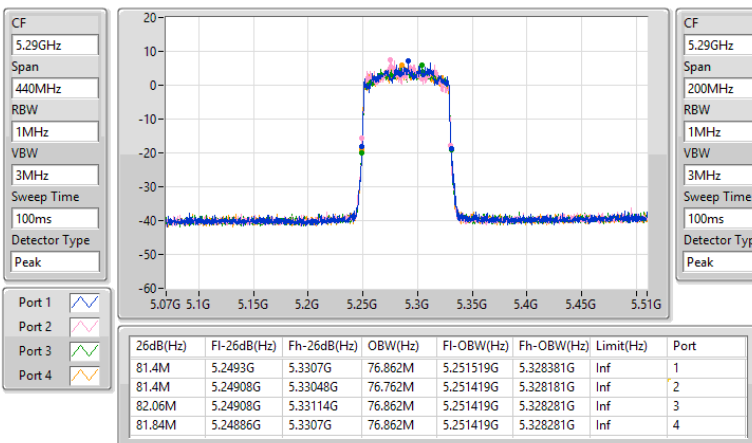


5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5210MHz

27/03/2023


5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5290MHz

27/03/2023

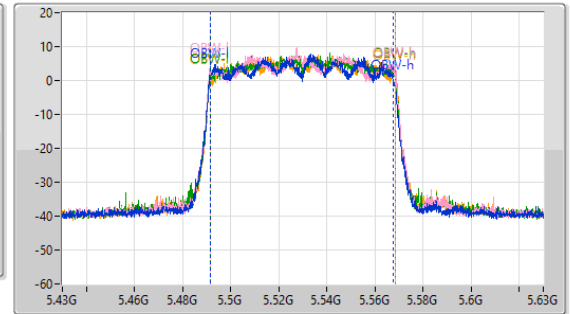
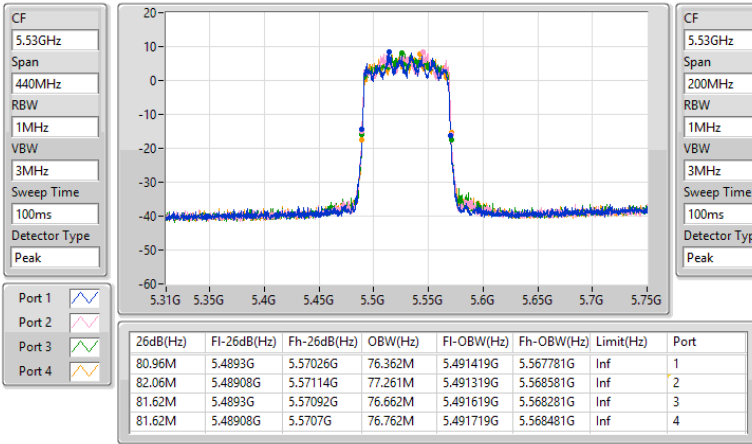


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5530MHz

27/03/2023

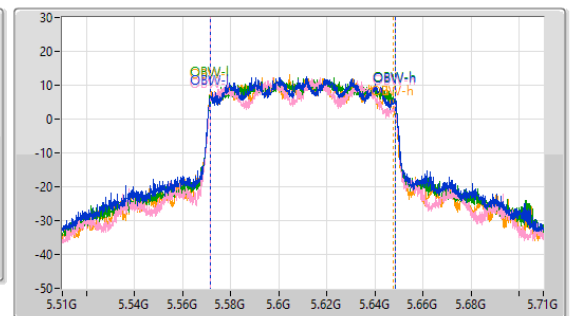
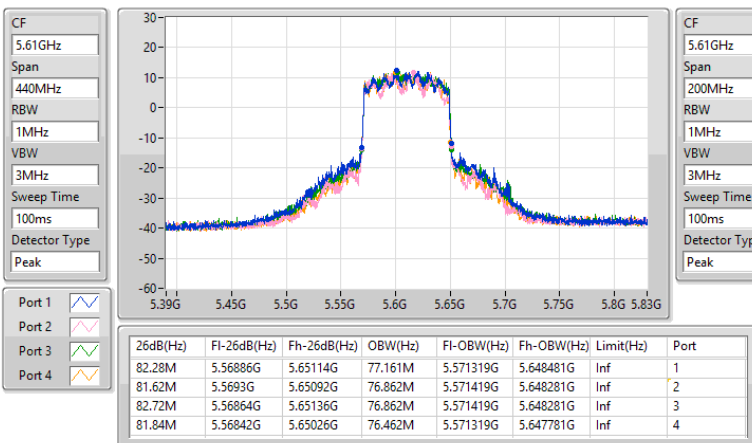


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

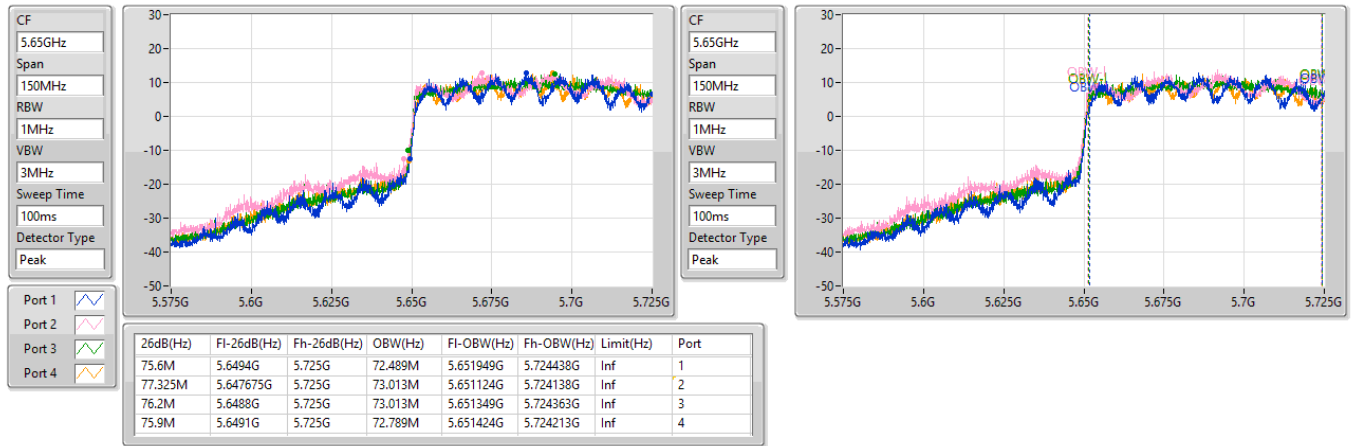
5610MHz

27/03/2023

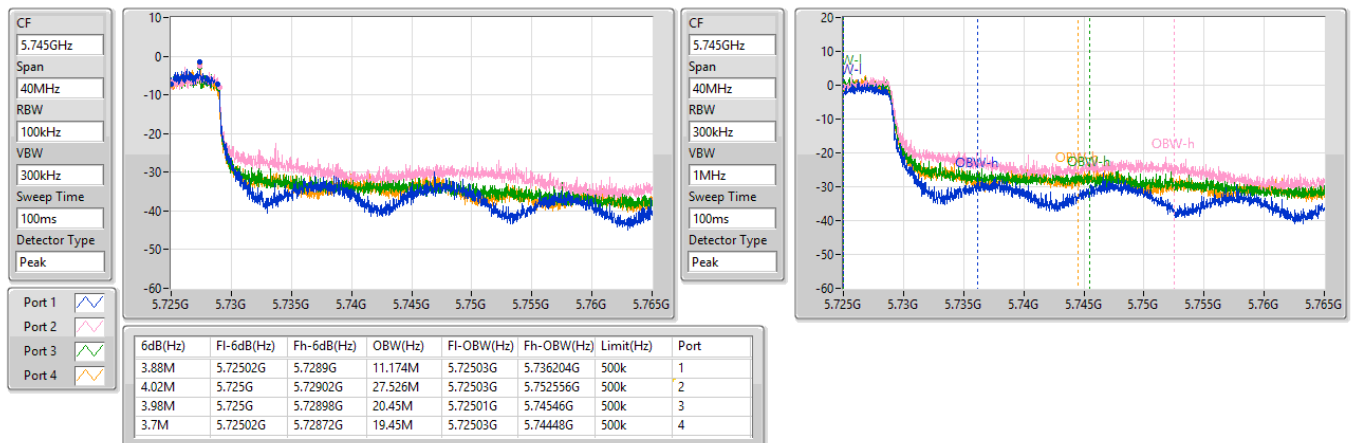


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

27/03/2023

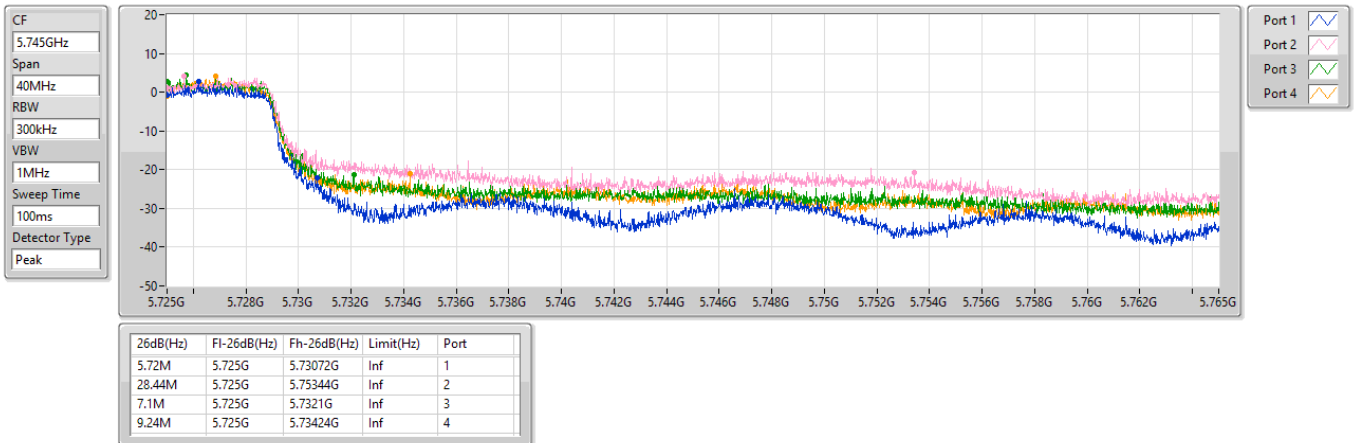

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/03/2023

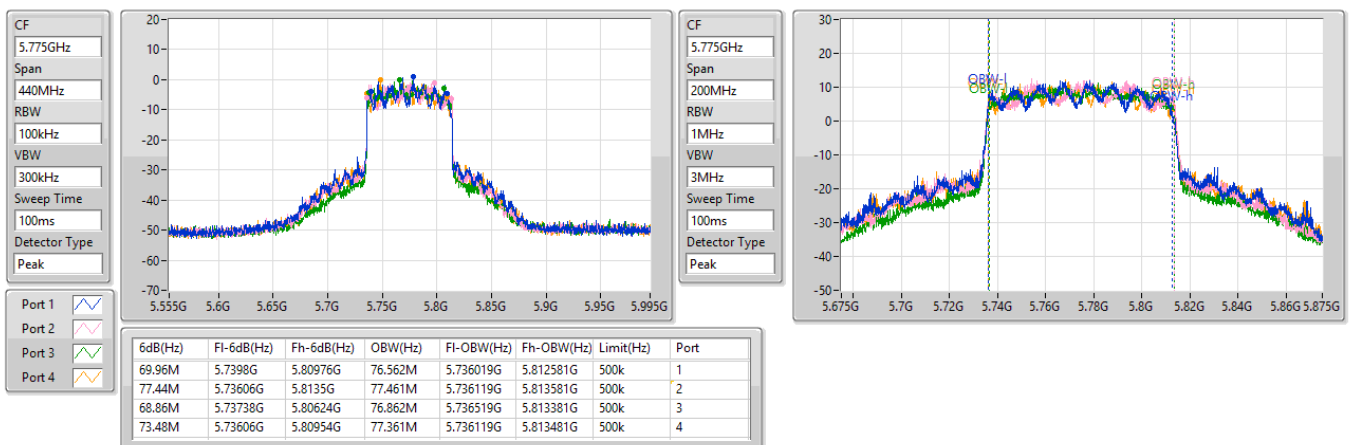


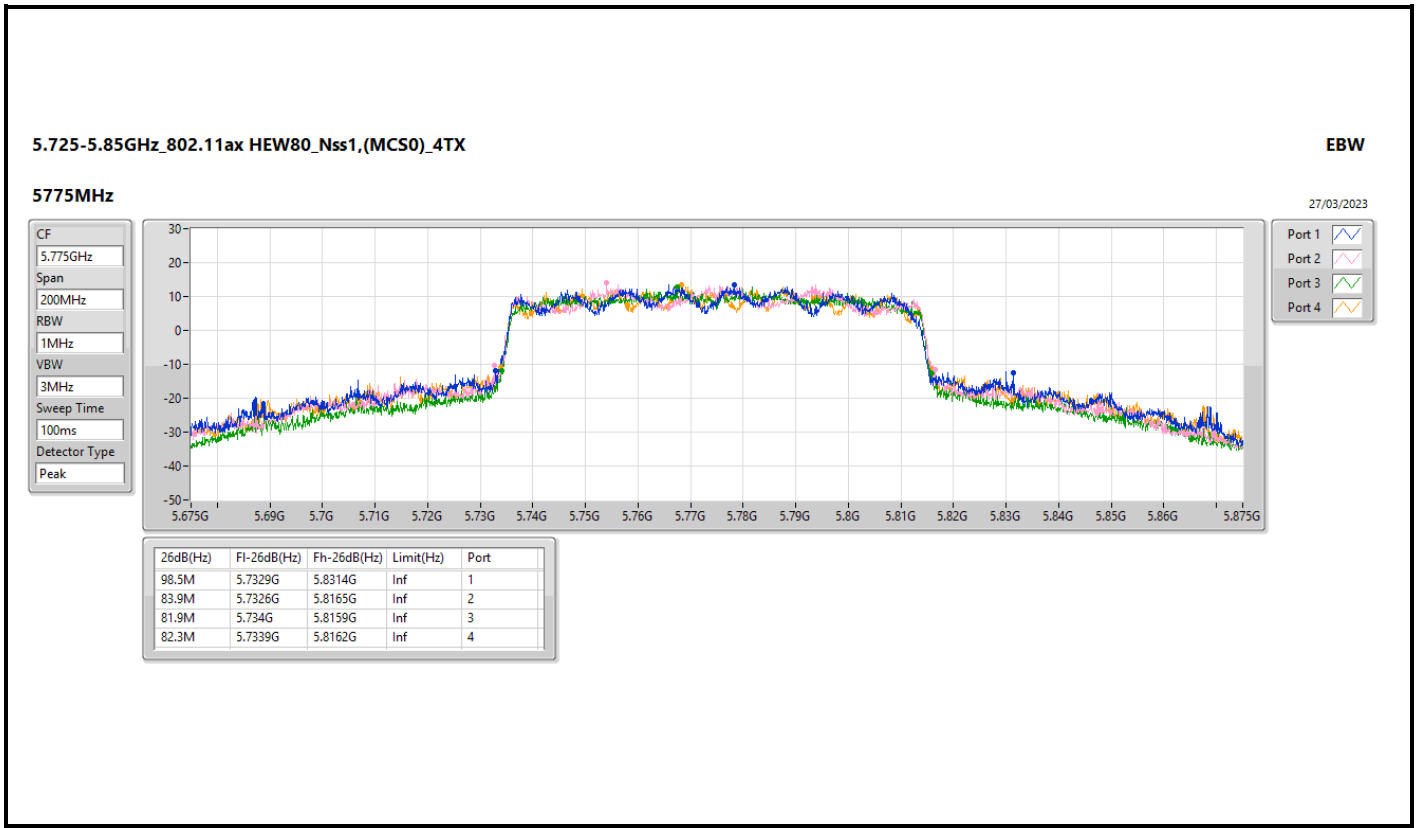
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

27/03/2023


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_4TX
EBW
5775MHz

27/03/2023





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_1TX	85.184M	77.203M	77M2D1D	85.184M	77.203M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	160.512M	142.334M	142MD1D	128.832M	77.411M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW80+80_Nss1,(MCS0)_1TX	161.216M	125.862M	126MD1D	161.216M	125.862M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	159.808M	115.511M	116MD1D	82.368M	77.104M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW80+80_Nss2,(MCS0)_2TX	161.568M	143.215M	143MD1D	82.016M	77.168M
802.11ax HEW80+80_Nss2,(MCS0)_4TX	162.624M	151.16M	151MD1D	81.312M	77.236M

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

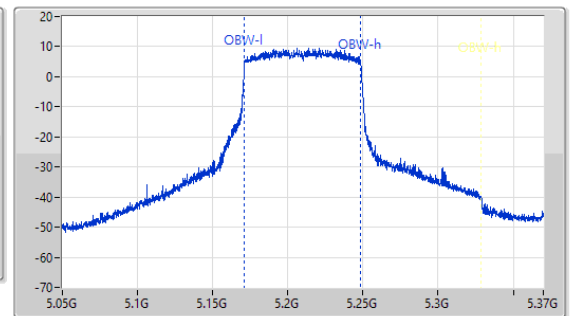
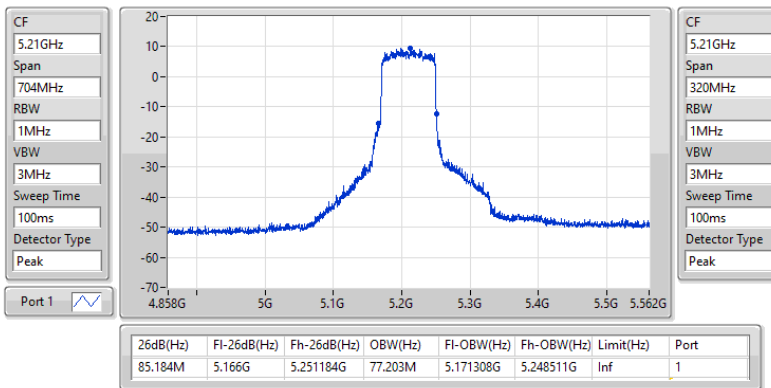
Result

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 HEW80+80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	85.184M	77.203M						
5210MHz,#5290MHz	Pass	Inf							161.216M	125.862M
802.11ax HEW80+80_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	Inf	82.016M	77.168M					161.568M	143.215M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
#5210MHz,5290MHz	Pass	Inf	128.832M	77.411M	160.512M	142.334M				
5210MHz,#5290MHz	Pass	Inf					82.368M	77.104M	159.808M	115.511M
802.11ax HEW80+80_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
#5530MHz,#5610MHz	Pass	Inf	81.312M	77.325M	162.624M	151.16M	82.368M	77.236M	161.216M	138.395M

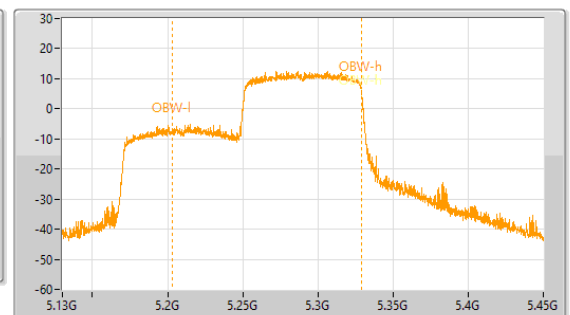
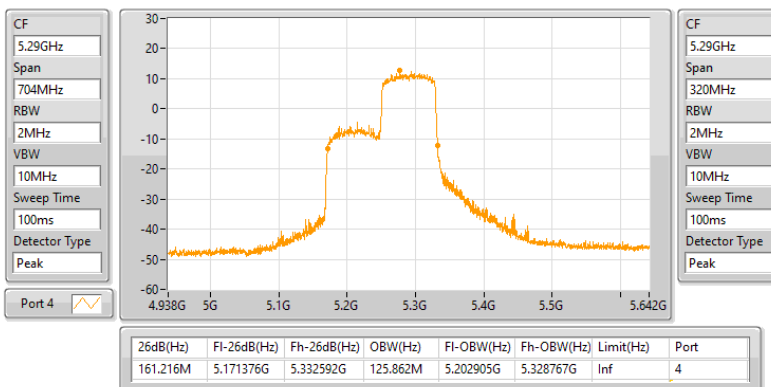
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11ax HEW80+80_Nss1,(MCS0)_1TX
EBW
#5210MHz,5290MHz

26/04/2023

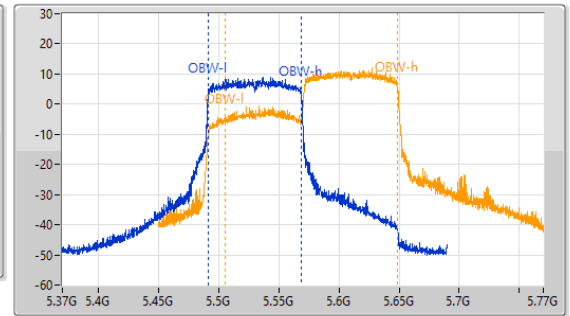
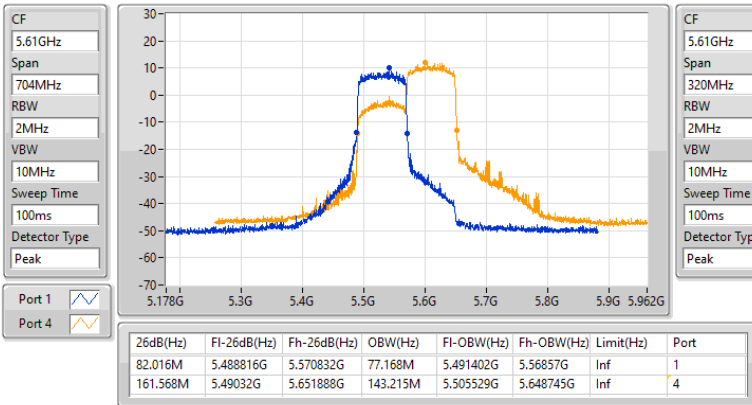

5.25-5.35GHz_802.11ax HEW80+80_Nss1,(MCS0)_1TX
EBW
5210MHz,#5290MHz

26/04/2023

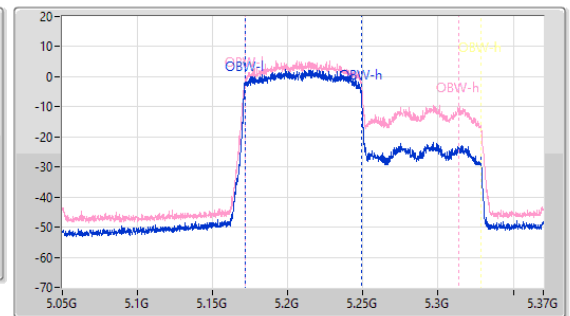
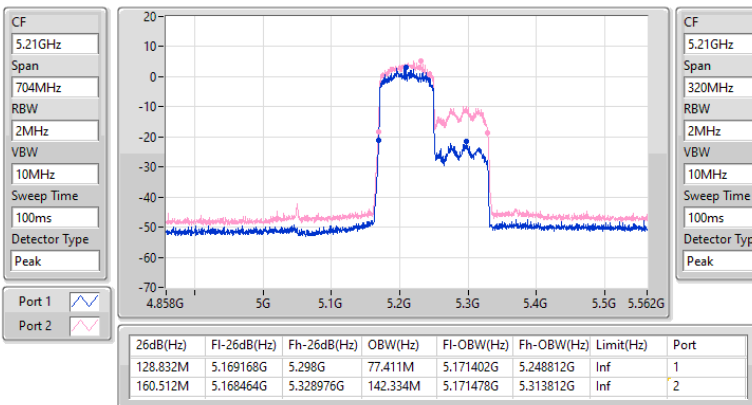


5.47-5.725GHz_802.11ax HEW80+80_Nss2,(MCS0)_2TX
EBW
#5530MHz,#5610MHz

26/04/2023

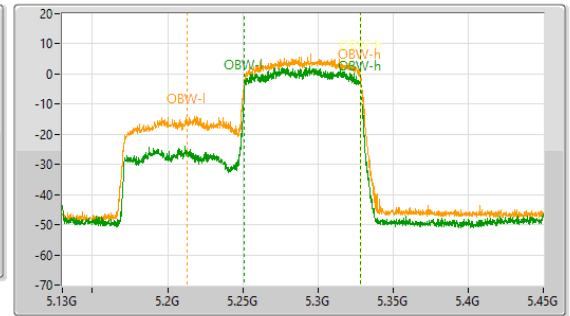
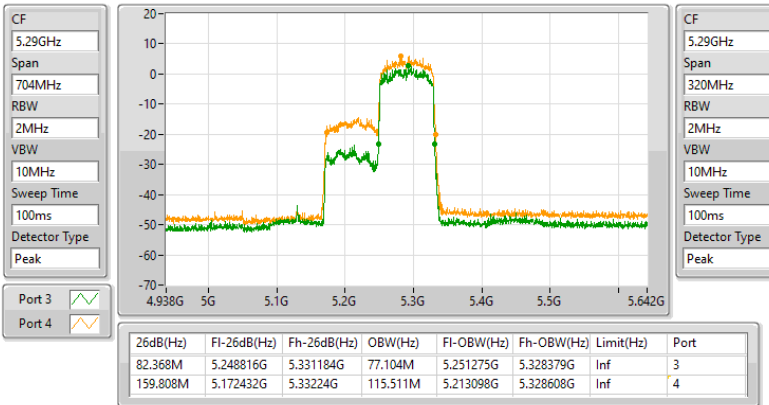

5.15-5.25GHz_802.11ax HEW80+80_Nss1,(MCS0)_2TX
EBW
#5210MHz,5290MHz

26/04/2023

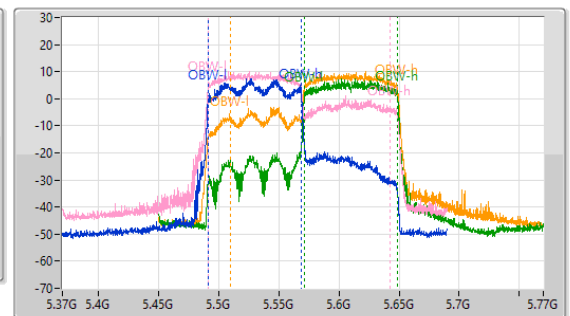
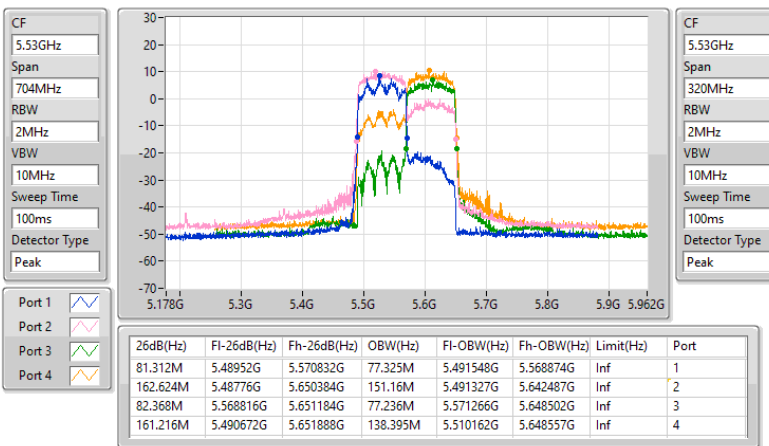


5.25-5.35GHz_802.11ax HEW80+80_Nss1,(MCS0)_2TX
EBW
5210MHz,#5290MHz

26/04/2023


5.47-5.725GHz_802.11ax HEW80+80_Nss2,(MCS0)_4TX
EBW
#5530MHz,#5610MHz

26/04/2023



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)_1TX	19.69M	16.338M	16M3D1D	15.285M	13.238M
802.11a_Nss1,(6Mbps)_2TX	19.415M	16.338M	16M3D1D	14.265M	13.193M
802.11a_Nss1,(6Mbps)_4TX	19.305M	16.338M	16M3D1D	14.115M	13.193M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.01M	18.891M	18M9D1D	15.585M	14.453M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.505M	18.891M	18M9D1D	15.435M	14.453M
802.11ax HEW20_Nss1,(MCS0)_4TX	20.9M	18.891M	18M9D1D	15.525M	14.453M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.48M	37.781M	37M8D1D	35.14M	33.723M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.81M	37.731M	37M7D1D	35M	33.723M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.59M	37.681M	37M7D1D	35M	33.688M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.72M	77.161M	77M2D1D	76.2M	73.238M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.94M	77.161M	77M2D1D	76.65M	73.163M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.5M	77.161M	77M2D1D	76.05M	73.163M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.12M	154.723M	155MD1D	164.12M	154.723M
802.11ax HEW160_Nss1,(MCS0)_2TX	164.12M	154.723M	155MD1D	164.12M	154.723M
802.11ax HEW160_Nss1,(MCS0)_4TX	165M	154.923M	155MD1D	163.24M	154.723M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.28M	16.338M	16M3D1D	3.08M	3.418M
802.11a_Nss1,(6Mbps)_2TX	16.28M	16.338M	16M3D1D	3.1M	3.398M
802.11a_Nss1,(6Mbps)_4TX	16.28M	16.338M	16M3D1D	3.08M	3.318M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.81M	18.891M	18M9D1D	4.42M	4.518M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.755M	18.891M	18M9D1D	4.38M	4.518M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.92M	18.916M	18M9D1D	4.28M	4.478M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.95M	37.681M	37M7D1D	3.96M	4.098M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.84M	37.681M	37M7D1D	4M	4.098M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.95M	37.731M	37M7D1D	3.92M	4.038M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.88M	77.261M	77M3D1D	4.04M	7.796M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.78M	77.161M	77M2D1D	3.96M	9.095M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.88M	77.161M	77M2D1D	3.94M	4.198M

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

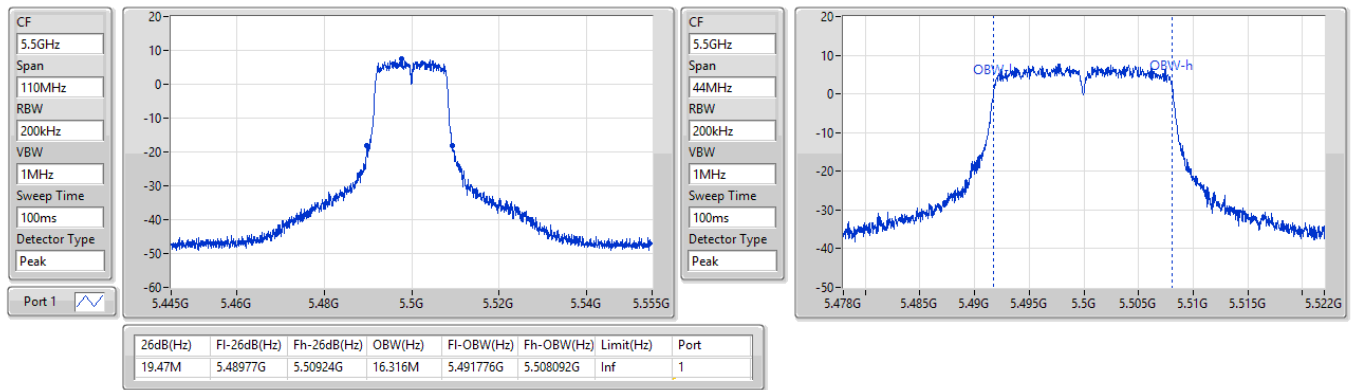
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	19.47M	16.316M						
5580MHz	Pass	Inf	19.69M	16.338M						
5700MHz	Pass	Inf	19.525M	16.338M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.285M	13.238M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.418M						
5745MHz	Pass	500k	16.28M	16.338M						
5785MHz	Pass	500k	16.06M	16.338M						
5825MHz	Pass	500k	16.28M	16.338M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	20.845M	18.866M						
5580MHz	Pass	Inf	21.01M	18.891M						
5700MHz	Pass	Inf	20.79M	18.866M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.585M	14.453M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.518M						
5745MHz	Pass	500k	18.81M	18.891M						
5785MHz	Pass	500k	18.315M	18.891M						
5825MHz	Pass	500k	18.59M	18.866M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	40.37M	37.681M						
5550MHz	Pass	Inf	40.48M	37.781M						
5670MHz	Pass	Inf	40.48M	37.631M						
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.14M	33.723M						
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	4.098M						
5755MHz	Pass	500k	37.95M	37.681M						
5795MHz	Pass	500k	36.96M	37.681M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	82.72M	77.161M						
5610MHz	Pass	Inf	82.72M	77.161M						
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.2M	73.238M						
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	7.796M						
5775MHz	Pass	500k	77.88M	77.261M						
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	164.12M	154.723M						
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	19.25M	16.338M	18.92M	16.338M				
5580MHz	Pass	Inf	19.195M	16.316M	19.415M	16.338M				
5700MHz	Pass	Inf	18.81M	16.316M	19.03M	16.316M				
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.255M	13.208M	14.265M	13.193M				
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.398M	3.1M	3.398M				
5745MHz	Pass	500k	16.005M	16.316M	16.28M	16.338M				
5785MHz	Pass	500k	16.28M	16.338M	16.28M	16.338M				
5825MHz	Pass	500k	15.73M	16.316M	16.28M	16.338M				
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	20.79M	18.866M	20.57M	18.866M				
5580MHz	Pass	Inf	20.79M	18.891M	21.505M	18.891M				
5700MHz	Pass	Inf	20.68M	18.866M	20.625M	18.866M				
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.435M	14.453M	15.555M	14.483M				
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.38M	4.518M	4.38M	4.538M				
5745MHz	Pass	500k	18.48M	18.891M	18.315M	18.891M				
5785MHz	Pass	500k	18.755M	18.891M	18.535M	18.891M				
5825MHz	Pass	500k	18.315M	18.866M	18.48M	18.891M				
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	39.93M	37.631M	39.93M	37.681M				
5550MHz	Pass	Inf	40.59M	37.731M	40.81M	37.731M				

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)
5670MHz	Pass	Inf	40.48M	37.631M	40.37M	37.681M				
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.175M	33.723M	35M	33.723M				
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4M	4.138M	4M	4.098M				
5755MHz	Pass	500k	37.4M	37.681M	37.51M	37.631M				
5795MHz	Pass	500k	37.84M	37.681M	37.51M	37.681M				
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	82.94M	77.061M	82.06M	77.061M				
5610MHz	Pass	Inf	82.28M	77.161M	82.06M	77.061M				
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.65M	73.313M	76.725M	73.163M				
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	9.095M	3.96M	11.534M				
5775MHz	Pass	500k	75.02M	77.161M	76.78M	77.061M				
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	164.12M	154.723M	164.12M	154.723M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	18.755M	16.316M	18.7M	16.316M	19.305M	16.316M	18.92M	16.338M
5580MHz	Pass	Inf	18.7M	16.316M	18.645M	16.316M	18.865M	16.316M	19.03M	16.338M
5700MHz	Pass	Inf	18.865M	16.316M	18.81M	16.316M	18.865M	16.316M	18.865M	16.316M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.115M	13.208M	14.205M	13.193M	14.19M	13.208M	14.175M	13.208M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.358M	3.08M	3.338M	3.1M	3.358M	3.1M	3.318M
5745MHz	Pass	500k	16.28M	16.338M	16.28M	16.338M	16.28M	16.338M	16.28M	16.338M
5785MHz	Pass	500k	16.28M	16.338M	16.28M	16.316M	16.28M	16.316M	16.28M	16.316M
5825MHz	Pass	500k	16.28M	16.316M	16.28M	16.316M	16.005M	16.316M	16.28M	16.316M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	20.735M	18.866M	20.79M	18.866M	20.625M	18.866M	20.735M	18.866M
5580MHz	Pass	Inf	20.68M	18.866M	20.68M	18.866M	20.79M	18.866M	20.845M	18.866M
5700MHz	Pass	Inf	20.735M	18.866M	20.79M	18.891M	20.9M	18.866M	20.735M	18.866M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.54M	14.468M	15.54M	14.453M	15.525M	14.453M	15.585M	14.453M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.34M	4.478M	4.28M	4.498M	4.44M	4.498M	4.3M	4.518M
5745MHz	Pass	500k	18.865M	18.866M	18.26M	18.866M	18.37M	18.866M	18.59M	18.891M
5785MHz	Pass	500k	18.7M	18.866M	18.7M	18.916M	18.315M	18.866M	18.92M	18.866M
5825MHz	Pass	500k	18.37M	18.891M	18.095M	18.891M	18.095M	18.891M	18.81M	18.866M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	40.26M	37.631M	40.37M	37.681M	40.48M	37.681M	40.15M	37.631M
5550MHz	Pass	Inf	40.48M	37.631M	40.26M	37.681M	40.37M	37.681M	40.15M	37.631M
5670MHz	Pass	Inf	40.26M	37.631M	40.15M	37.631M	40.48M	37.681M	40.59M	37.681M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.07M	33.723M	35M	33.723M	35.14M	33.723M	35M	33.688M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.058M	4.08M	4.098M	4M	4.078M	4.02M	4.038M
5755MHz	Pass	500k	37.73M	37.631M	37.73M	37.681M	37.95M	37.681M	37.62M	37.731M
5795MHz	Pass	500k	36.52M	37.631M	35.64M	37.681M	37.84M	37.731M	37.95M	37.681M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	81.62M	77.061M	82.06M	77.061M	81.84M	77.061M	82.06M	77.061M
5610MHz	Pass	Inf	81.84M	76.962M	82.5M	77.061M	81.84M	77.061M	82.28M	77.161M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.35M	73.163M	76.425M	73.163M	76.05M	73.163M	76.275M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.02M	4.258M	4.04M	4.198M	4M	4.238M	3.94M	4.218M
5775MHz	Pass	500k	77.44M	77.061M	77.88M	77.161M	76.78M	77.061M	75.24M	77.161M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	Inf	163.24M	154.723M	163.68M	154.723M	165M	154.923M	163.68M	154.723M

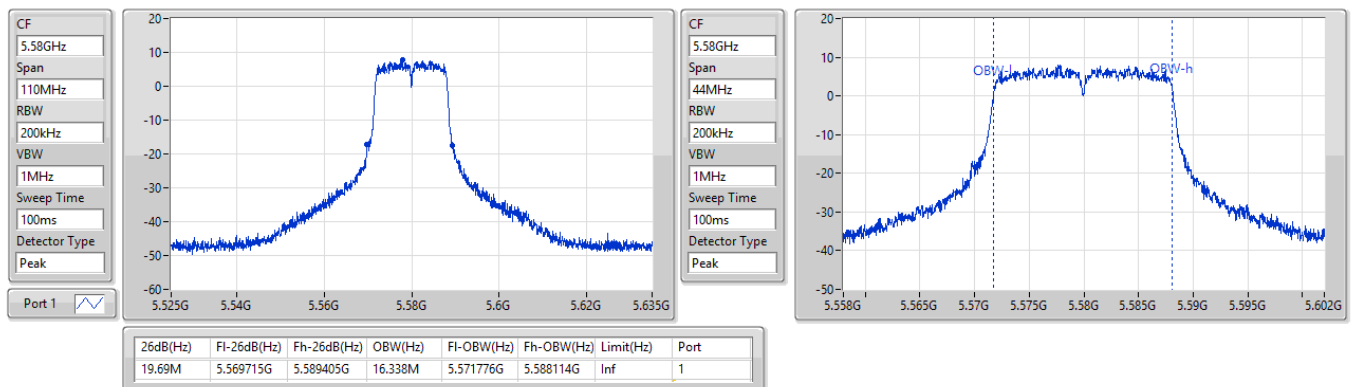
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5500MHz

28/03/2023

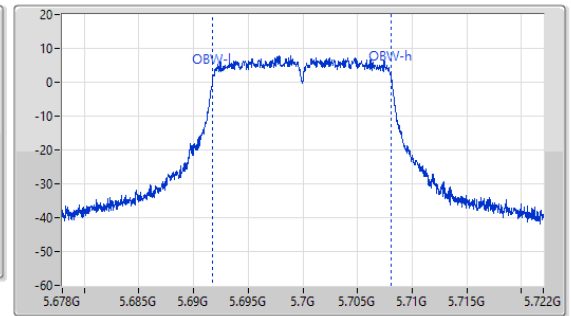
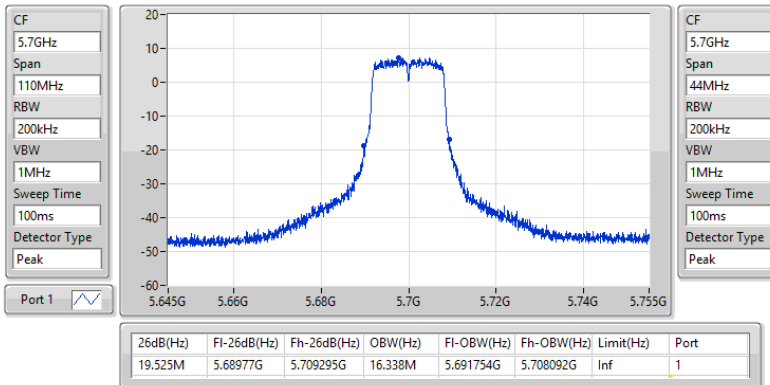

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5580MHz

28/03/2023

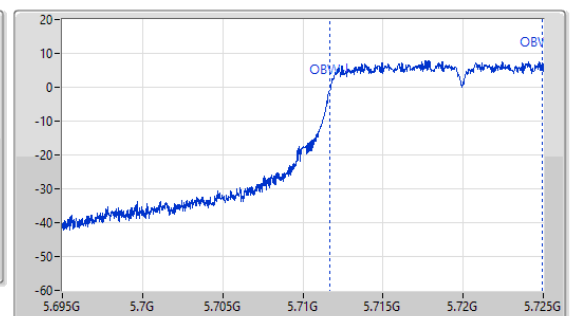
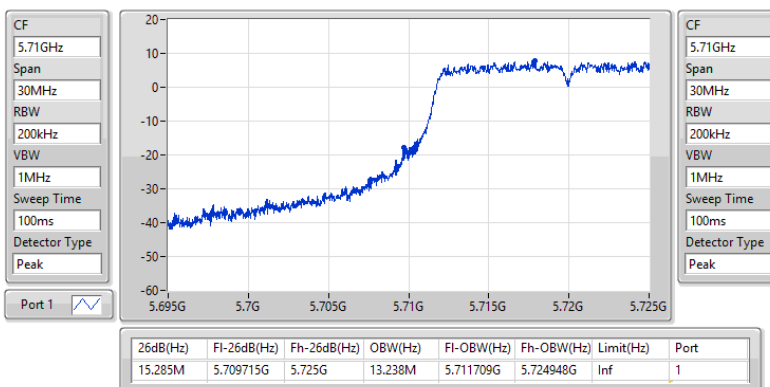


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5700MHz

28/03/2023

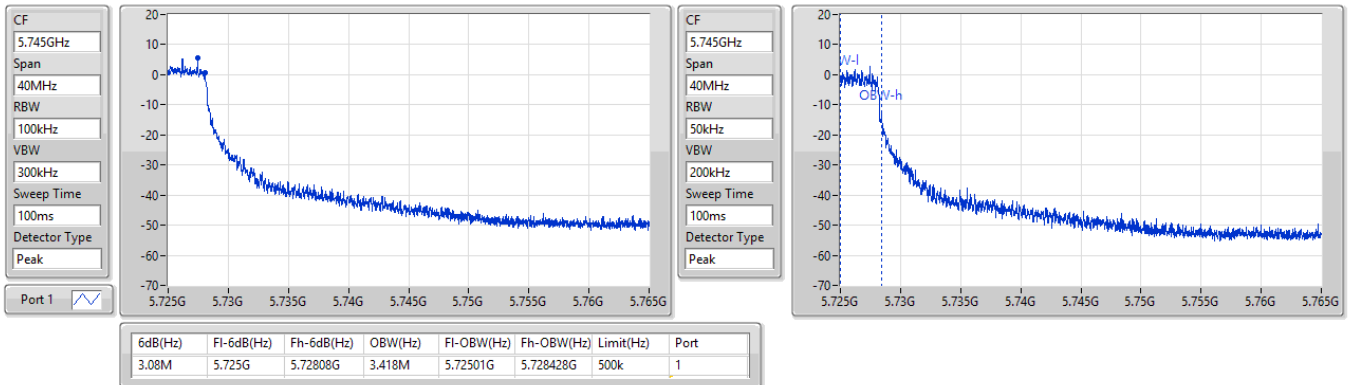

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/03/2023

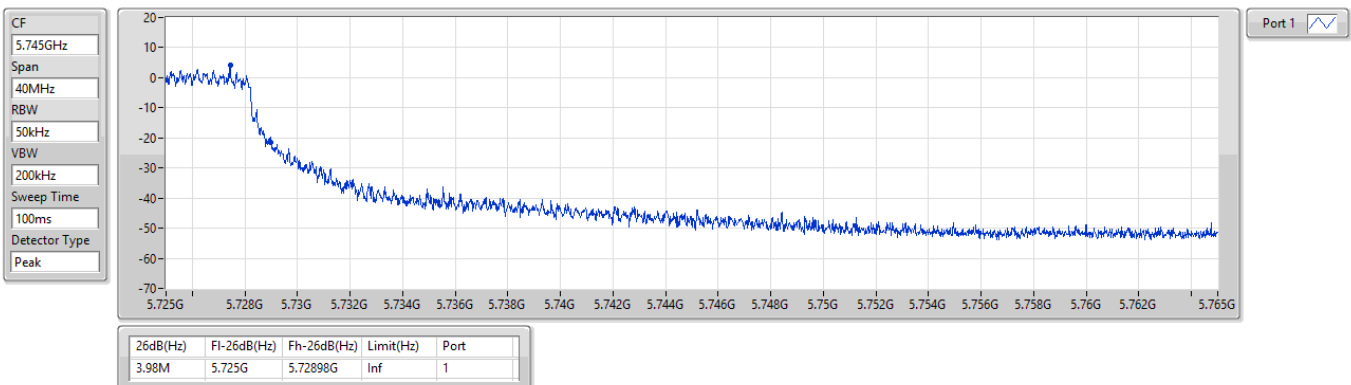


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/03/2023

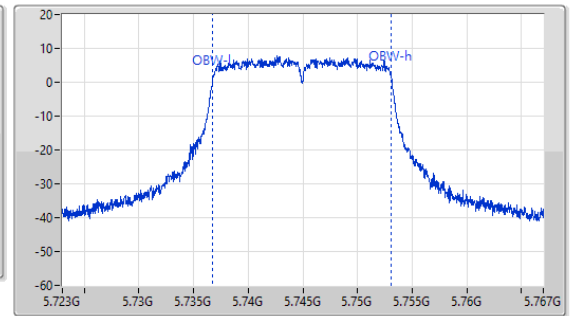
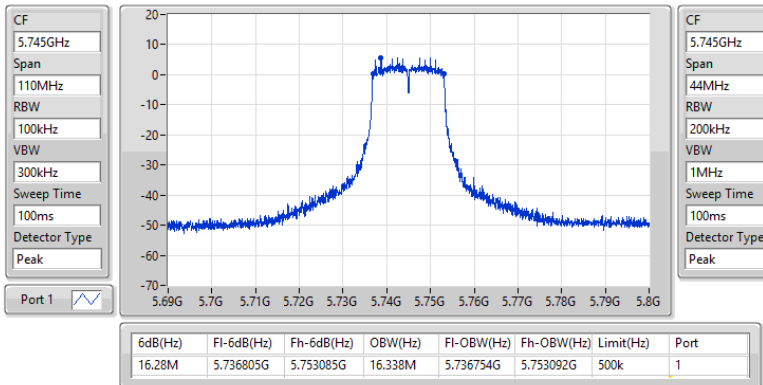

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5720MHz Straddle 5.725-5.85GHz

28/03/2023

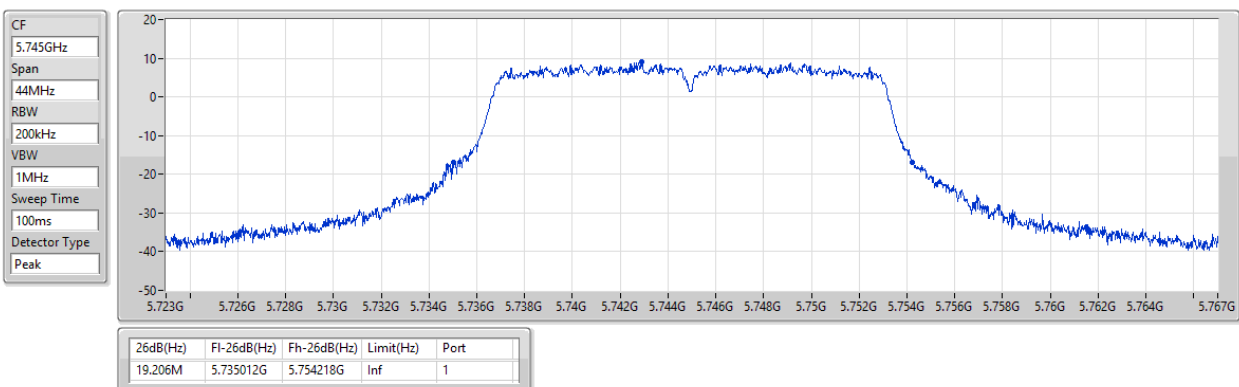


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

28/03/2023

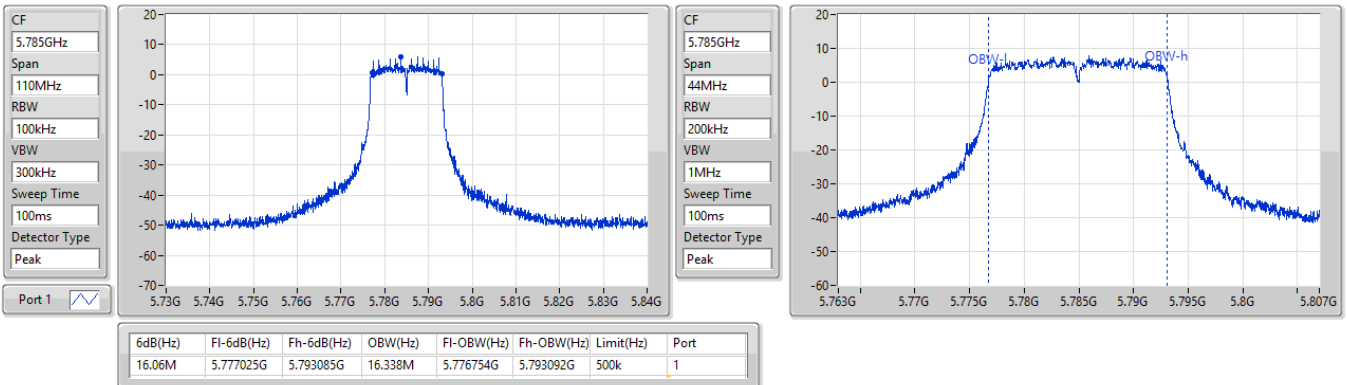

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5745MHz

28/03/2023

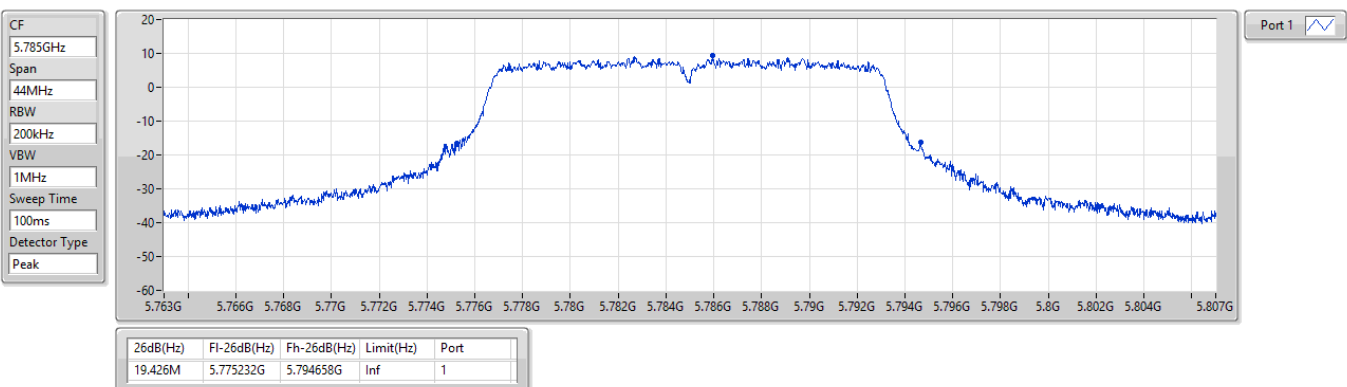


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

28/03/2023

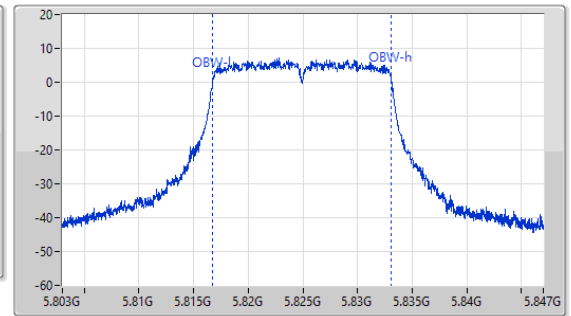
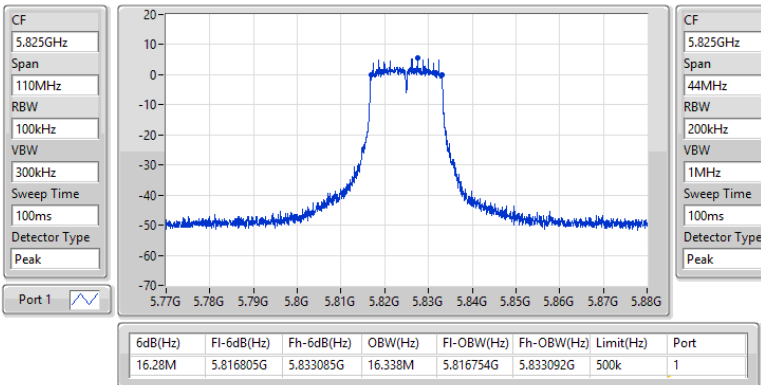

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5785MHz

28/03/2023

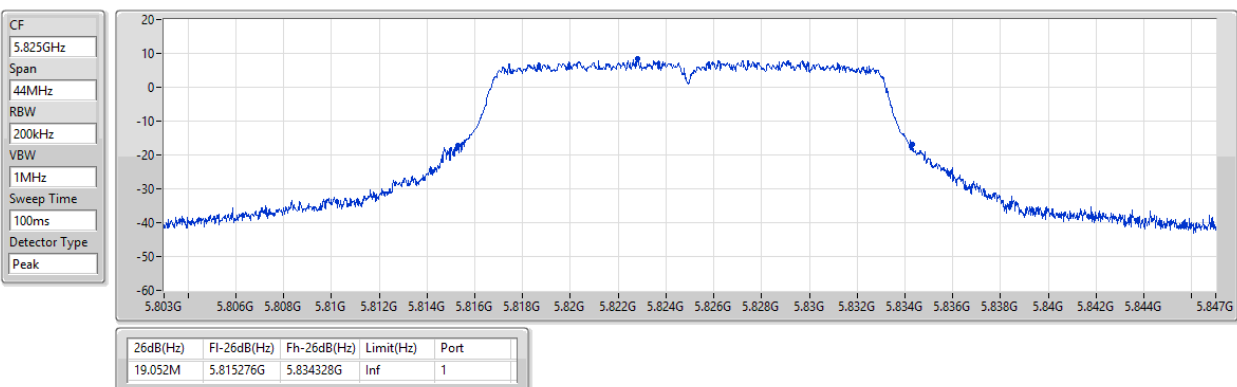


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

28/03/2023

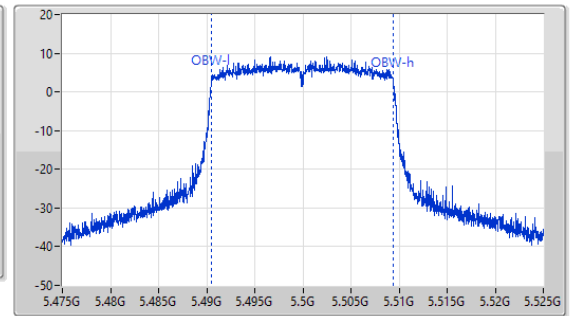
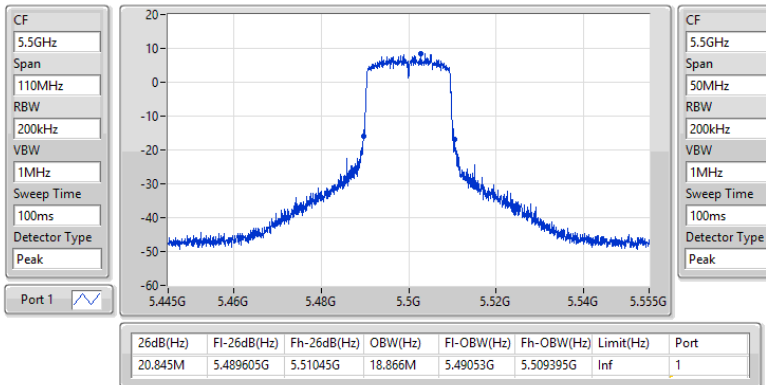

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX
EBW
5825MHz

28/03/2023

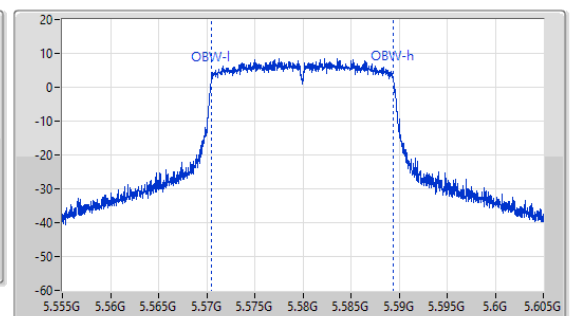
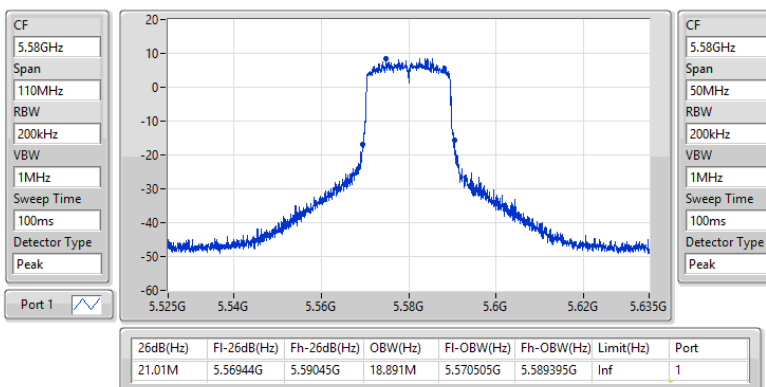


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5500MHz

28/03/2023

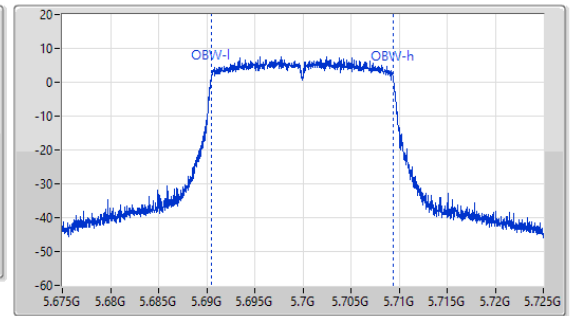
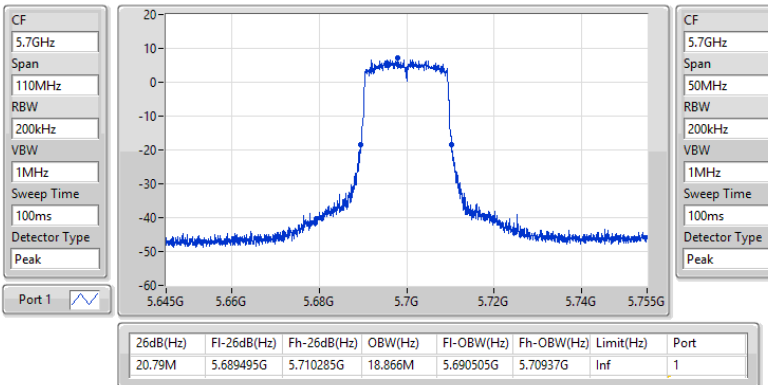

5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5580MHz

28/03/2023



5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5700MHz

28/03/2023


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5720MHz Straddle 5.47-5.725GHz

28/03/2023

