



RADIO TEST REPORT

FCC ID : LDKIW9167IH
Equipment : Cisco Catalyst IW9167I Heavy Duty Access Point
Brand Name : CISCO
Model Name : IW9167IH-B , IW9167IH-ROW
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 Feb. 16, 2023, and testing was started from Mar. 17, 2023 and completed on Jul. 10, 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

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	13
1.3 Testing Location Information	13
1.4 Measurement Uncertainty	14
2 Test Configuration of EUT	15
2.1 Test Channel Mode	15
2.2 The Worst Case Measurement Configuration	25
2.3 EUT Operation during Test	27
2.4 Accessories	28
2.5 Support Equipment.....	28
2.6 Test Setup Diagram	30
3 Transmitter Test Result	33
3.1 AC Power-line Conducted Emissions	33
3.2 Emission Bandwidth	35
3.3 Maximum Output Power	36
3.4 Power Spectral Density	39
3.5 Unwanted Emissions.....	42
4 Test Equipment and Calibration Data	47
Appendix A. Test Results of AC Power-line Conducted Emissions	
Appendix B. Test Results of Emission Bandwidth	
Appendix C. Test Results of Maximum Output Power	
Appendix D. Test Results of Power Spectral Density	
Appendix E. Test Results of Unwanted Emissions	
Appendix F. Test Results of Radiated Emission Co-location	
Appendix G. Test Photos	
Photographs of EUT v01	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4



Summary of Test Result

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

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:

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

Reviewed by: Sam Chen

Report Producer: Sophia Shiung



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]

For Iron Radio 1

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



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80	80	1, 2, 4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	1, 2, 4TX
5.25-5.35GHz	802.11a	20	1, 2, 4TX
5.25-5.35GHz	802.11n HT20	20	1, 2, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	1, 2, 4TX
5.25-5.35GHz	802.11n HT40	40	1, 2, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT80	80	1, 2, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1, 2, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	1, 2, 4TX
5.47-5.725GHz	802.11a	20	1, 2, 4TX
5.47-5.725GHz	802.11n HT20	20	1, 2, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW20	20	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	1, 2, 4TX
5.47-5.725GHz	802.11n HT40	40	1, 2, 4TX
5.47-5.725GHz	802.11n HT40-BF	40	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1, 2, 4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1, 2, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	1, 2, 4TX
5.725-5.85GHz	802.11a	20	1, 2, 4TX
5.725-5.85GHz	802.11n HT20	20	1, 2, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	1, 2, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1, 2, 4TX



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

For Scanning Radio 3

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX
5.15-5.25GHz	802.11n HT20	20	1TX
5.15-5.25GHz	802.11ac VHT20	20	1TX
5.15-5.25GHz	802.11ax HEW20	20	1TX
5.15-5.25GHz	802.11n HT40	40	1TX
5.15-5.25GHz	802.11ac VHT40	40	1TX
5.15-5.25GHz	802.11ax HEW40	40	1TX
5.15-5.25GHz	802.11ac VHT80	80	1TX
5.15-5.25GHz	802.11ax HEW80	80	1TX
5.15-5.35GHz	802.11ac VHT160	160	1TX
5.15-5.35GHz	802.11ax HEW160	160	1TX
5.25-5.35GHz	802.11a	20	1TX
5.25-5.35GHz	802.11n HT20	20	1TX
5.25-5.35GHz	802.11ac VHT20	20	1TX
5.25-5.35GHz	802.11ax HEW20	20	1TX
5.25-5.35GHz	802.11n HT40	40	1TX
5.25-5.35GHz	802.11ac VHT40	40	1TX
5.25-5.35GHz	802.11ax HEW40	40	1TX
5.25-5.35GHz	802.11ac VHT80	80	1TX
5.25-5.35GHz	802.11ax HEW80	80	1TX
5.47-5.725GHz	802.11a	20	1TX
5.47-5.725GHz	802.11n HT20	20	1TX
5.47-5.725GHz	802.11ac VHT20	20	1TX
5.47-5.725GHz	802.11ax HEW20	20	1TX



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

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 Antenna Information**

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	WNC	95XEAK15.G66	PIFA Antenna	I-PEX	Note 1
2	WNC	95XEAK15.G67	PIFA Antenna	I-PEX	
3	WNC	95XEAK15.G68	PIFA Antenna	I-PEX	
4	WNC	95XEAK15.G69	PIFA Antenna	I-PEX	
5	WNC	95XEAK15.G70	PIFA Antenna	I-PEX	
6	WNC	95XEAK15.G71	PIFA Antenna	I-PEX	
7	WNC	95XEAK15.G72	PIFA Antenna	I-PEX	
8	WNC	95XEAK15.G73	PIFA Antenna	I-PEX	
9	WNC	95XEAK15.G74	PIFA Antenna	I-PEX	
10	WNC	95XEAK15.G75	PIFA Antenna	I-PEX	
11	WNC	95XEAK15.G76	PIFA Antenna	I-PEX	
12	WNC	95XEAK15.G77	PIFA Antenna	I-PEX	

Ant.	Port					
	Iron Radio 1		Scanning Radio 3		Radio 4	Radio 5
	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	GPS
1	3	2	-	-	-	-
2	2	3	-	-	-	-
3	1	4	-	-	-	-
4	4	1	-	-	-	-
5~8	-	-	-	-	-	-
9	-	-	2	2	-	-
10	-	-	1	1	-	-
11	-	-	-	-	1	-
12	-	-	-	-	-	1

Note 1:

Ant.	Antenna Gain (dBi)				
	Iron Radio 1				
	WLAN 2.4GHz	WLAN 5GHz			
		UNII 1	UNII 2A	UNII 2C	UNII 3
1	2.17	1.39	1.71	3.09	3.45
2	3.28	3.37	3.54	4.2	4.12
3	3.95	3.42	3.05	3.92	4.41
4	2.63	1.47	1.36	2.39	2.26

Ant.	Antenna Gain (dBi)					
	Scanning Radio 3					Radio 4
	WLAN 2.4GHz	WLAN 5GHz				Bluetooth
		UNII 1	UNII 2A	UNII 2C	UNII 3	
9	3.06	3.81	3.38	3.2	2.54	-
10	2.52	3.21	2.86	3.11	3.78	-
11	-	-	-	-	-	3.05
12	-	-	-	-	-	2.4



Item	Directional Gain (dBi)				
	WLAN 2.4GHz	WLAN 5GHz			
		UNII 1	UNII 2A	UNII 2C	UNII 3
2T1S	6.28	2.85	2.93	5.09	5.42
2T2S	3.95	1.47	1.71	3.09	3.45
4T1S	8.04	6.58	6.15	6.87	7.35
4T2S	5.04	3.58	3.54	4.2	4.41
4T4S	3.95	3.42	3.54	4.2	4.41

Note 2: The above information (except antenna gain and directional gain of Ant. 1~11) was declared by manufacturer.

Note 3: The antenna gain and directional gain of Ant. 1~11 are measured which follow the procedure of KDB 662911 D03.

Note 4: The EUT does not enable the Ant. 5~8.

Note 5: **For Iron Radio 1**

For 2.4GHz function:

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

Only Port 1 can be use as transmitting antenna.

Port 1~4 can be used as receiving antenna.

Port 1~4 can receive simultaneously.

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

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

Port 1~4 can be used as receiving antenna.

Port 1 and Port 2 can transmit simultaneously; Port 1~4 can receive simultaneously.

For IEEE 802.11 b/g/n/VHT/ax (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 can transmit/receive simultaneously.

For 5GHz function:

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

Only Port 1 can be use as transmitting antenna.

Port 1~4 can be used as receiving antenna.

Port 1~4 can receive simultaneously.

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

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

Port 1~4 can be used as receiving antenna.

Port 1 and Port 2 can transmit simultaneously; Port 1~4 can receive simultaneously.

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

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 can transmit/receive simultaneously.

**For Scanning Radio 3****For 2.4GHz function:****For IEEE 802.11 b/g/n/VHT/ax (1TX/2RX):**

Only Port 1 can be use as transmitting antenna.

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

Port 1 and Port 2 can receive simultaneously.

For 5GHz function:**For IEEE 802.11 a/n/ac/ax (1TX/2RX):**

Only Port 1 can be use as transmitting antenna.

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

Port 1 and Port 2 can receive simultaneously.

For Radio 4**For bluetooth function (1TX/1RX):**

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

For Radio 5**For GPS function (1RX):**

Only Port 1 can be used as receiving antenna.

1.1.3 Mode Test Duty Cycle**For Iron Radio 1**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.937	0.28	1.977m	1k
802.11ax HEW20	0.8	0.97	5.446m	300
802.11ax HEW40	0.799	0.97	5.446m	300
802.11ax HEW80	0.798	0.98	5.445m	300

For Scanning Radio 3

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.934	0.3	1.977m	1k
802.11ax HEW20	0.79	1.02	5.446m	300
802.11ax HEW40	0.793	1.01	5.446m	300
802.11ax HEW80	0.788	1.03	5.446m	300
802.11ax HEW160	0.789	1.03	5.446m	300

Note:

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

**1.1.4 EUT Operational Condition**

EUT Power Type	From power adapter or PoE or DC 48V			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz in Iron Radio 1.			
Function	☒	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
	☒	Point-to-multipoint	☐	Point-to-point
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
TPC Function	☒	With TPC	☐	Without TPC
Channel Puncturing Function	☐	Supported	☒	Unsupported
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	QSPR 5.0-00201			
Supported Software Product IDs (PID)	IW9167IH-B, IW9167IH-ROW IW9167IH-B-AP, IW9167IH-ROW-AP			

Note: The above information was declared by manufacturer.

1.1.5 Table for Radio Function

Radio (R)	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	GPS
R1 (Iron Radio)	V (20MHz)	V (20/40/80MHz)	-	-
R2	-	-	-	-
R3 (Scanning Radio)	V (20MHz)	V (20/40/80/160MHz)	-	-
R4	-	-	V	-
R5	-	-	-	V

Note 1: The Radio 1 and Radio 3 can't operate at the same frequency.

Note 2: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
IW9167IH-B	All the models are identical, the difference model names served as marketing strategy.
IW9167IH-ROW	

Note 1: From the above models, model: IW9167IH-B was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Gino Huang	22.6~23.2 / 59~62	Mar. 17, 2023~ Mar. 23, 2023
				Jun. 13, 2023~ Jun. 14, 2023
Radiated < 1GHz	03CH05-CB	Roy Mai	24.2~25.1 / 57~61	Mar. 24, 2023~ May 25, 2023
	03CH06-CB		22.7~24.2 / 59~63	
Radiated > 1GHz	03CH01-CB		23.8~24.9 / 55~58	
Radiated (Co-location)	03CH05-CB		24.2~25.1 / 57~61	
AC Conduction	CO01-CB	Elvin Yeh	21~23 / 51~54	Jul. 10, 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))

Before Jun. 01, 2023

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

After May 31, 2023

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



2 Test Configuration of EUT

2.1 Test Channel Mode

For Iron Radio 1 – UNII 1 Indoor Use & UNII 2A~3 Indoor/Outdoor Use

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	23.5
5200MHz	24
5240MHz	24
5260MHz	22.5
5300MHz	22.5
5320MHz	23
5500MHz	23
5580MHz	23
5700MHz	20.5
5720MHz Straddle 5.47-5.725GHz	23
5720MHz Straddle 5.725-5.85GHz	23
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	23
5200MHz	24
5240MHz	24
5260MHz	23
5300MHz	23
5320MHz	23
5500MHz	22
5580MHz	23.5
5700MHz	20.5
5720MHz Straddle 5.47-5.725GHz	24
5720MHz Straddle 5.725-5.85GHz	24
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	21.5
5230MHz	24
5270MHz	23
5310MHz	21.5



Mode	Power Setting
5510MHz	21
5550MHz	23
5670MHz	21.5
5710MHz Straddle 5.47-5.725GHz	23
5710MHz Straddle 5.725-5.85GHz	23
5755MHz	24
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	21
5290MHz	21
5530MHz	20.5
5610MHz	23
5690MHz Straddle 5.47-5.725GHz	22.5
5690MHz Straddle 5.725-5.85GHz	22.5
5775MHz	22
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	21.5
5200MHz	24
5240MHz	24
5260MHz	19
5300MHz	19.5
5320MHz	19.5
5500MHz	20
5580MHz	20
5700MHz	20
5720MHz Straddle 5.47-5.725GHz	20
5720MHz Straddle 5.725-5.85GHz	20
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	21.5
5200MHz	24
5240MHz	24
5260MHz	19.5
5300MHz	19.5
5320MHz	20
5500MHz	20
5580MHz	20
5700MHz	19.5



Mode	Power Setting
5720MHz Straddle 5.47-5.725GHz	20.5
5720MHz Straddle 5.725-5.85GHz	20.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	19
5230MHz	23.5
5270MHz	19.5
5310MHz	20
5510MHz	20
5550MHz	20
5670MHz	20.5
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
5755MHz	24
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	19
5290MHz	20
5530MHz	19
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
5775MHz	21.5
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	19
5200MHz	21
5240MHz	21
5260MHz	16
5300MHz	15.5
5320MHz	16
5500MHz	15.5
5580MHz	15
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	24
5785MHz	24
5825MHz	24



Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	18.5
5200MHz	22
5240MHz	21
5260MHz	16
5300MHz	16
5320MHz	16.5
5500MHz	15.5
5580MHz	15.5
5700MHz	15
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	14
5230MHz	19.5
5270MHz	17
5310MHz	16
5510MHz	17
5550MHz	17
5670MHz	17.5
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	23
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	14.5
5290MHz	15
5530MHz	17
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	16.5
5690MHz Straddle 5.725-5.85GHz	16.5
5775MHz	20
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	21.5
5200MHz	24
5240MHz	24
5260MHz	19.5



Mode	Power Setting
5300MHz	19.5
5320MHz	20
5500MHz	20
5580MHz	20
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	20.5
5720MHz Straddle 5.725-5.85GHz	20.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	19
5230MHz	23.5
5270MHz	19.5
5310MHz	20
5510MHz	20
5550MHz	20
5670MHz	20.5
5710MHz Straddle 5.47-5.725GHz	20.5
5710MHz Straddle 5.725-5.85GHz	20.5
5755MHz	24
5795MHz	24
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	19
5290MHz	20
5530MHz	19
5610MHz	20
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
5775MHz	21.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	18.5
5200MHz	22
5240MHz	21
5260MHz	16
5300MHz	16
5320MHz	16.5
5500MHz	15.5
5580MHz	15.5
5700MHz	15



Mode	Power Setting
5720MHz Straddle 5.47-5.725GHz	15.5
5720MHz Straddle 5.725-5.85GHz	15.5
5745MHz	22.5
5785MHz	22.5
5825MHz	23
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	14
5230MHz	19.5
5270MHz	16.5
5310MHz	16
5510MHz	16
5550MHz	16.5
5670MHz	16.5
5710MHz Straddle 5.47-5.725GHz	16
5710MHz Straddle 5.725-5.85GHz	16
5755MHz	22.5
5795MHz	23
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	14.5
5290MHz	15
5530MHz	16
5610MHz	16
5690MHz Straddle 5.47-5.725GHz	14.5
5690MHz Straddle 5.725-5.85GHz	14.5
5775MHz	20

**For Iron Radio 1 – UNII 1 Outdoor Use**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	17.5
5200MHz	17.5
5240MHz	17.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	17
5230MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	17
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	13
5200MHz	13
5240MHz	13
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	12.5
5240MHz	12.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	13
5230MHz	13
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	12.5
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	10.5
5200MHz	10.5
5240MHz	10.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	10
5200MHz	10
5240MHz	10
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	10
5230MHz	10
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	10.5



Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	12.5
5200MHz	12.5
5240MHz	12.5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	13
5230MHz	13
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	12.5
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	8
5200MHz	8
5240MHz	8
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	8
5230MHz	8
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	8

**For Scanning Radio 3 – UNII 1 Indoor Use & UNII 2A~3 Indoor/Outdoor Use**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	24
5200MHz	24
5240MHz	24
5260MHz	23.5
5300MHz	23.5
5320MHz	24
5500MHz	24
5580MHz	23.5
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	23.5
5720MHz Straddle 5.725-5.85GHz	23.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	24
5200MHz	24
5240MHz	24
5260MHz	23.5
5300MHz	23.5
5320MHz	24
5500MHz	23.5
5580MHz	23.5
5700MHz	21.5
5720MHz Straddle 5.47-5.725GHz	24
5720MHz Straddle 5.725-5.85GHz	24
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	23
5230MHz	24
5270MHz	23
5310MHz	22.5
5510MHz	23.5
5550MHz	23
5670MHz	22
5710MHz Straddle 5.47-5.725GHz	23



Mode	Power Setting
5710MHz Straddle 5.725-5.85GHz	23
5755MHz	24
5795MHz	24
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	21
5290MHz	19.5
5530MHz	22.5
5610MHz	23
5690MHz Straddle 5.47-5.725GHz	22.5
5690MHz Straddle 5.725-5.85GHz	22.5
5775MHz	24
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	17
5250MHz Straddle 5.25-5.35GHz	17
5570MHz	19.5

For Scanning Radio 3 – UNII 1 Outdoor Use

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	17.5
5200MHz	17.5
5240MHz	17.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	17
5200MHz	17
5240MHz	17
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	17
5230MHz	17
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	17
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	17
5250MHz Straddle 5.25-5.35GHz	17

Note:

- ♦ The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been evaluated to be the worst case, so it was selected to test. The beamforming mode evaluates the output power only.
- ♦ HEW20 / HEW40 / HEW80 / HEW160 covers HT20 / HT40 / VHT20 / VHT40 / VHT80 / VHT160 due to similar modulation. The power setting for HT20 / HT40 / VHT20 / VHT40 / VHT80 / VHT160 is the same or lower than HEW20 / HEW40 / HEW80 / HEW160.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	EUT + Adapter_WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 2.4GHz (R3)
2	EUT + Adapter_WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 5GHz (R3)
Mode 2 has been evaluated to be the worst case among Mode 1~2, so measurement for Mode 3~5 will follow this same test mode.	
3	EUT + PoE_WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 5GHz (R3)
4	EUT + Ethernet cable + DC 48V_WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 5GHz (R3)
5	EUT + Ethernet cable + PoE_WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 5GHz (R3)
For operating, Mode 5 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains
1	R1: 1T1S
2	R1: 2T1S
3	R1: 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	CTX
After evaluating, the worst cases of axis position for each band were found at Radiated measurement above 1GHz, and the results are listed below. Thus, the measurement will follow these test configurations.	
1	EUT in Y axis + Adapter_WLAN 2.4GHz (R1)
2	EUT in Y axis + PoE_WLAN 2.4GHz (R1)
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~6 will follow this same test mode.	
3	EUT in Y axis + PoE_WLAN 5GHz (R1)
4	EUT in Y axis + PoE_WLAN 2.4GHz (R3)
5	EUT in Y axis + PoE_WLAN 5GHz (R3)
6	EUT in Z axis + PoE_Bluetooth (R4)
Mode 3 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7~8 will follow this same test mode.	
7	EUT in Y axis + Ethernet cable + DC 48V_WLAN 5GHz (R1)
8	EUT in Y axis + Ethernet cable + PoE_WLAN 5GHz (R1)
For operating, Mode 3 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
2	R1: 2T1S
3	R1: 4T1S
4	R3: 1T1S



The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement
Operating Mode > 1GHz	CTX (Cabinet)
After evaluating, the worst cases of axis position for each band were found, and the results are listed below. Thus, the measurement will follow these test configurations.	
1	EUT in Y axis_R1: 1T1S
2	EUT in Y axis_R1: 2T1S
3	EUT in Y axis_R1: 4T1S
4	EUT in Y axis_R3: 1T1S

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz (R1) + WLAN 5GHz (R1)
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 2.4GHz (R3) + Bluetooth (R4)
2	WLAN 2.4GHz (R1) + WLAN 5GHz (R1) + WLAN 5GHz (R3) + Bluetooth (R4)
Refer to Sporton Test Report No.: FA322212 for Co-location RF Exposure Evaluation.	

Note: The adapter and PoE were for measurement only and would not be marketed.

Their information is shown as below:

Equipment	Brand Name	Model Name	FCC ID
Adapter	LITEON	PA-1600-1C	N/A
PoE	CISCO	POE075U-1BT-C	N/A

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

Accessories
Waterproof cover 1*1
Waterproof cover 2*1
Waterproof cover 3*1
Wall bracket 1*1
Wall bracket 2*1
Ground cable*1: Non-shielded, 0.8m
DC cable (Yellow)*1: Non-shielded, 2.6m
DC cable connector*1
Ethernet cable*2: Shielded, 3m
Ethernet cable connector*2

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A
B	SFP LAN NB	DELL	E6430	N/A
C	2.4G Client	WNC	N/A	N/A
D	2.4G Client NB	DELL	E6430	N/A
E	5G Client	WNC	N/A	N/A
F	5G Client NB	DELL	E6430	N/A
G	Scan Radio Client	WNC	N/A	N/A
H	Scan Radio Client NB	DELL	E6430	N/A
I	GPS Simulator	WELNAVIGATE	GS-100	N/A
J	PoE	CISCO	POE075U-1BT-C	N/A

**For Radiated:
<Below 1GHz>**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	PoE	CISCO	POE075U-1BT-C	N/A

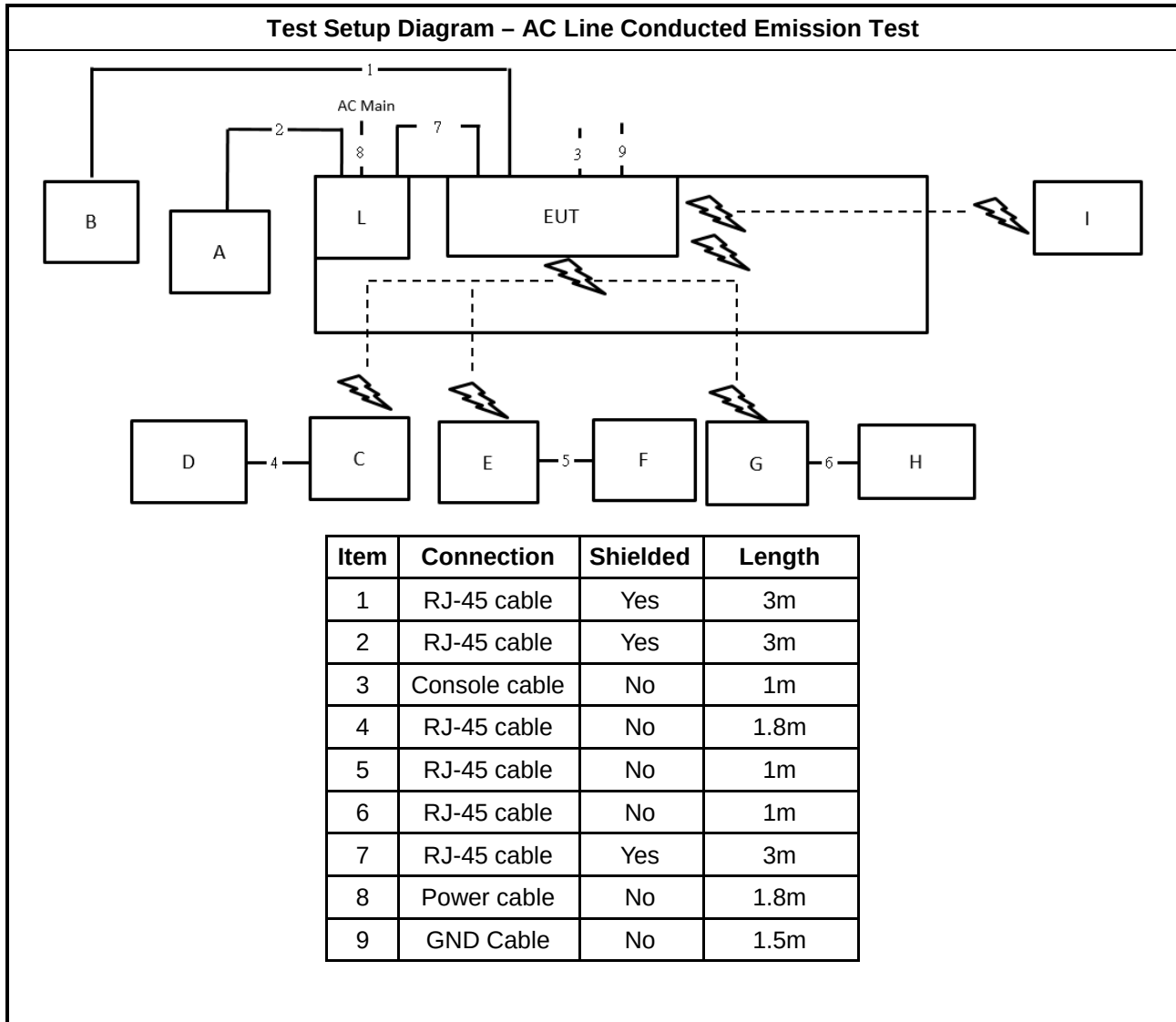
<Above 1GHz>

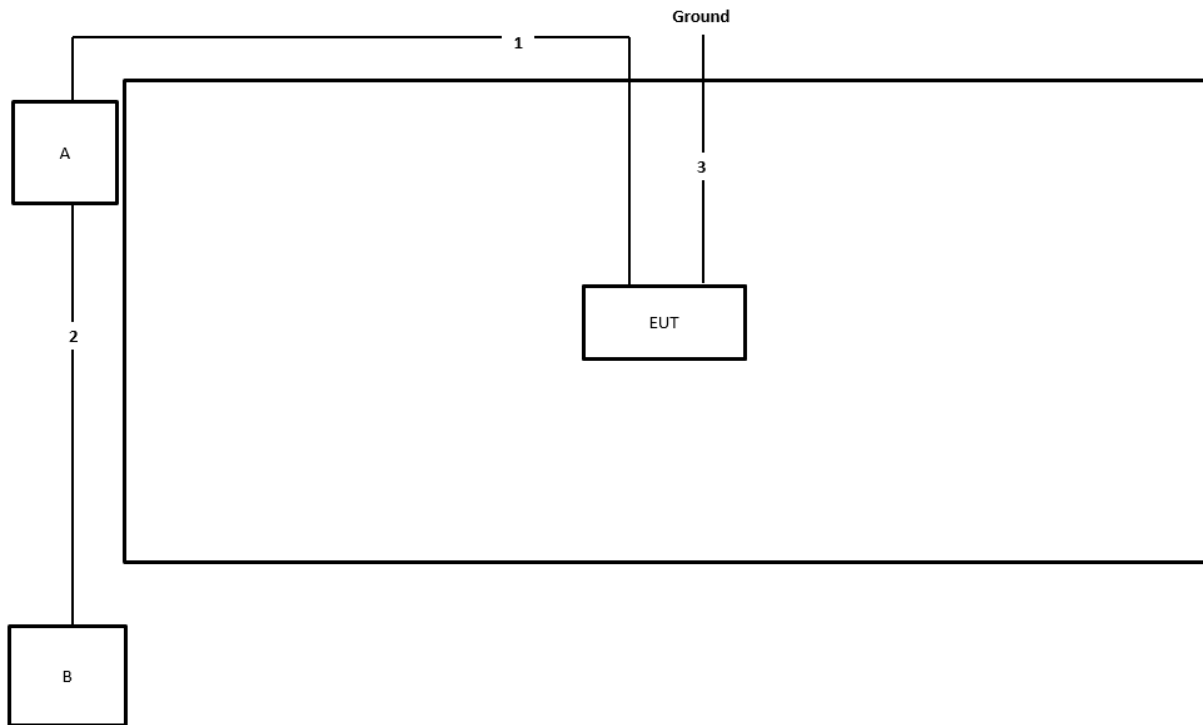
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Adapter	LITEON	PA-1600-1C	N/A

For RF Conducted:

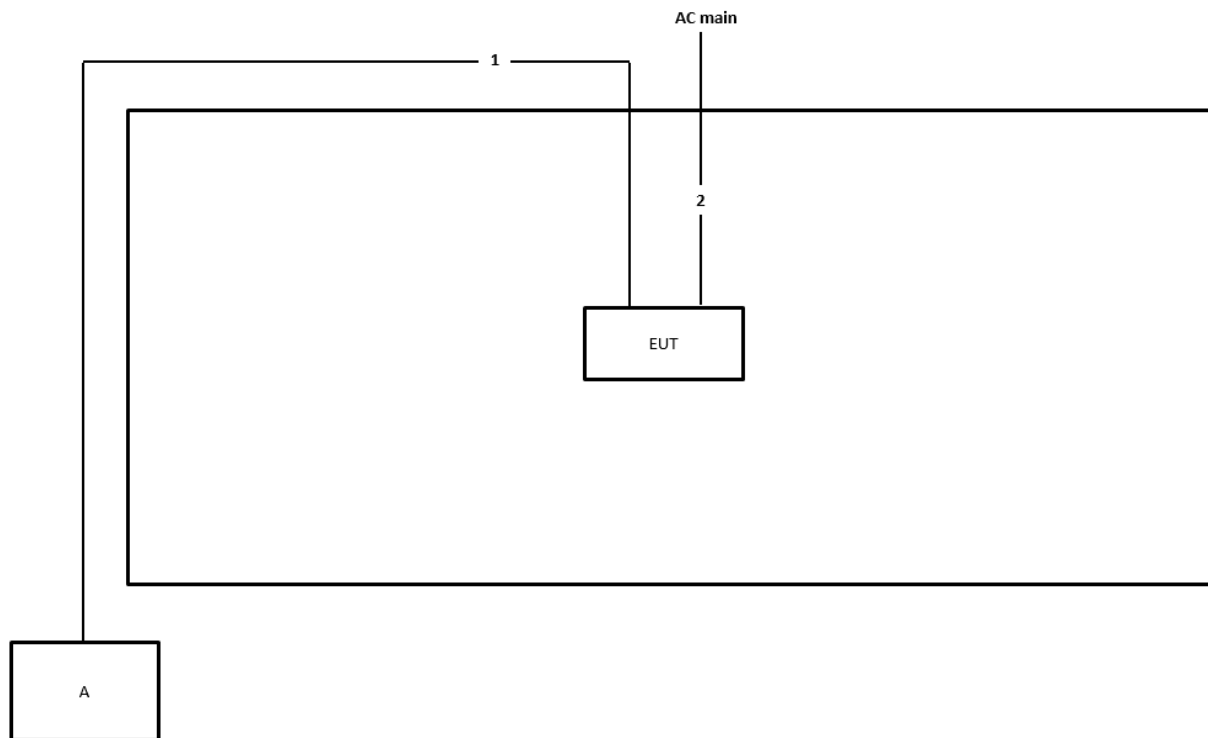
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Adapter	LITEON	PA-1600-1C	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	1.5m
2	RJ-45 cable	No	1.5m
3	Ground cable	No	0.8m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.6m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

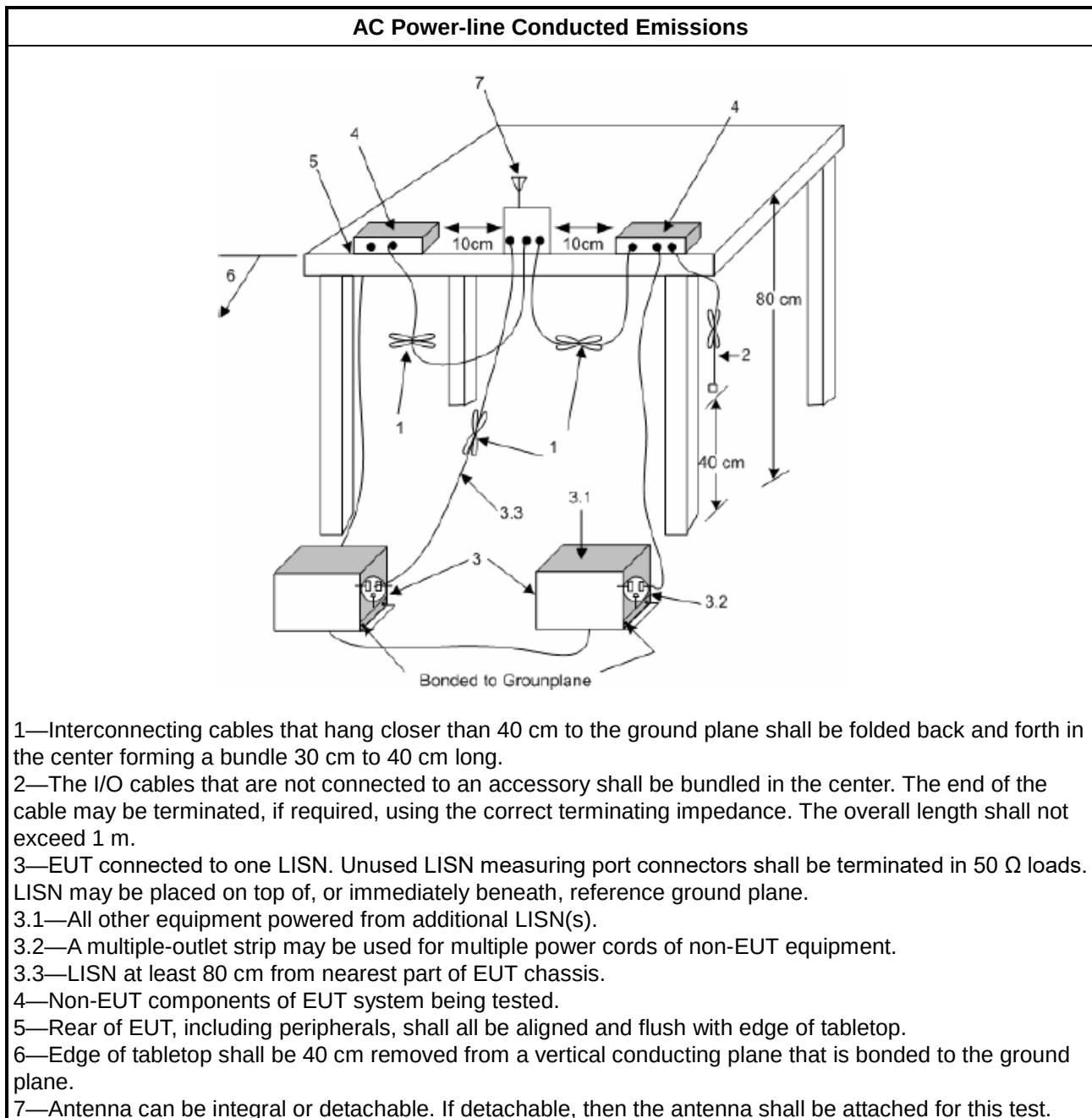
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

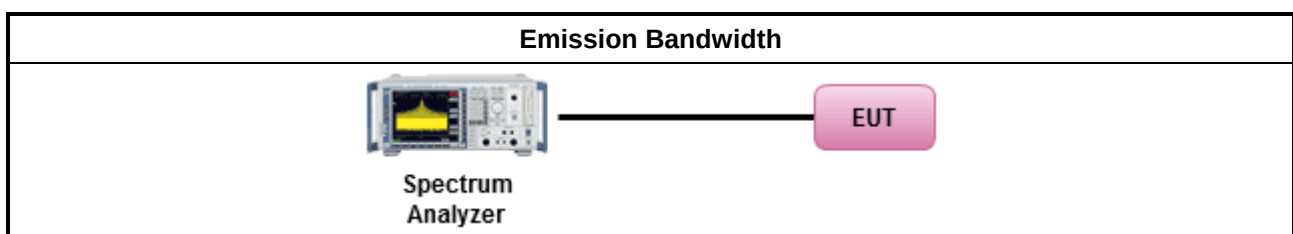
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Output Power

3.3.1 Limit

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

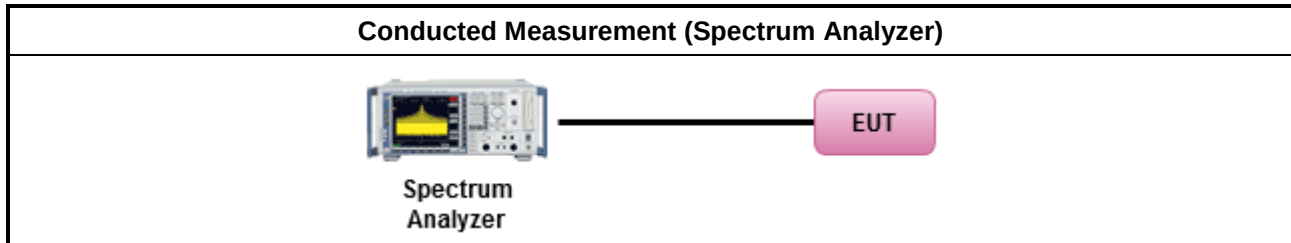
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

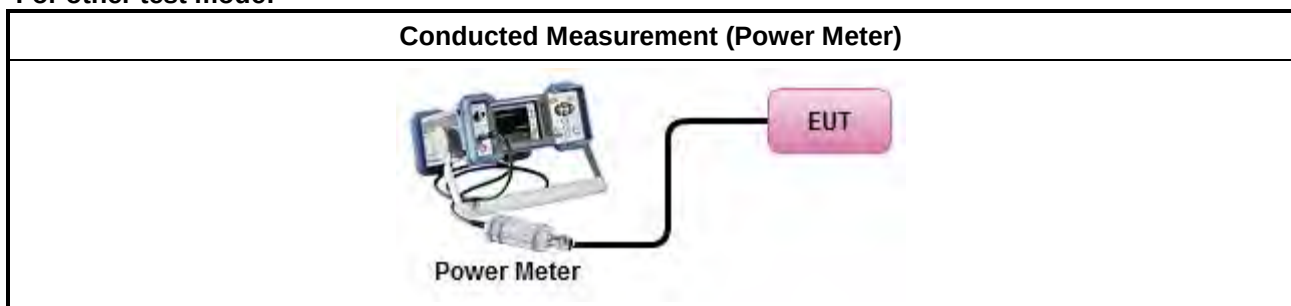
Test Method	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty 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 mode:



For other test mode:



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
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.	

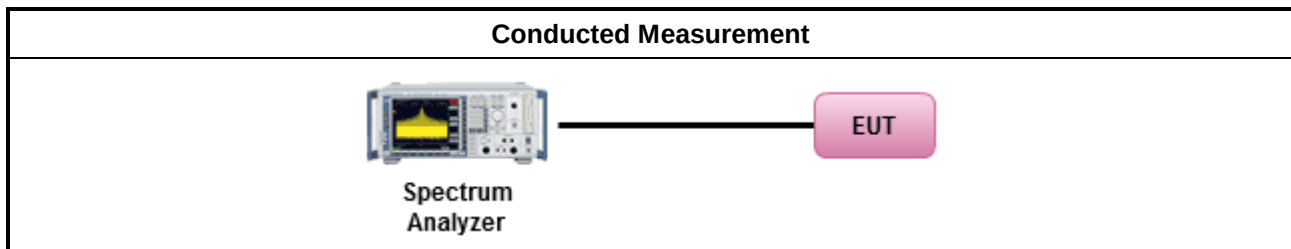
3.4.2 Measuring Instruments

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"	
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.

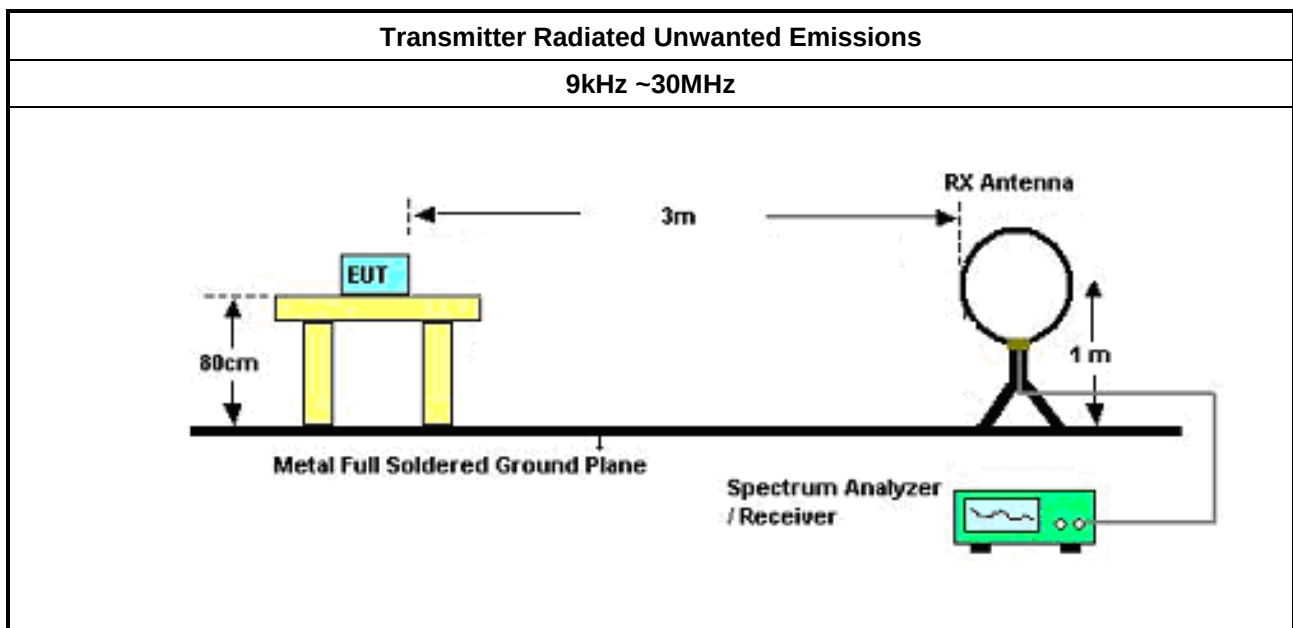
3.5.3 Test Procedures

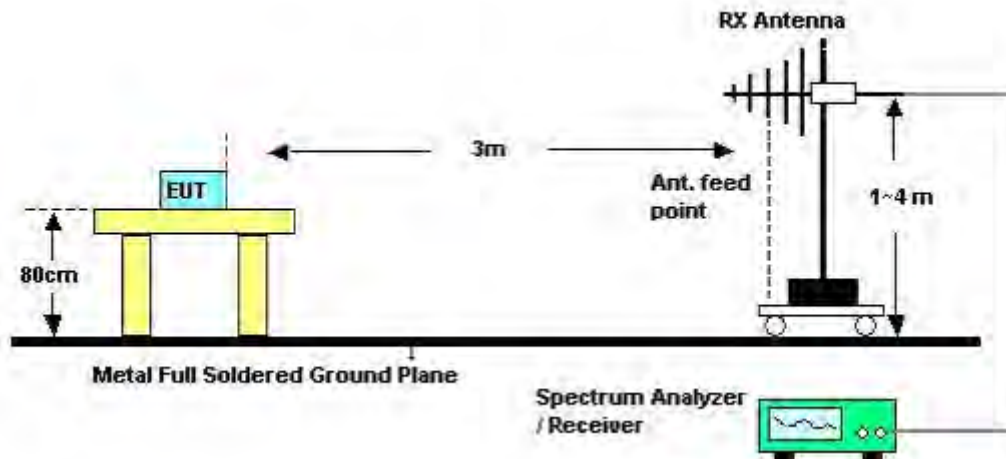
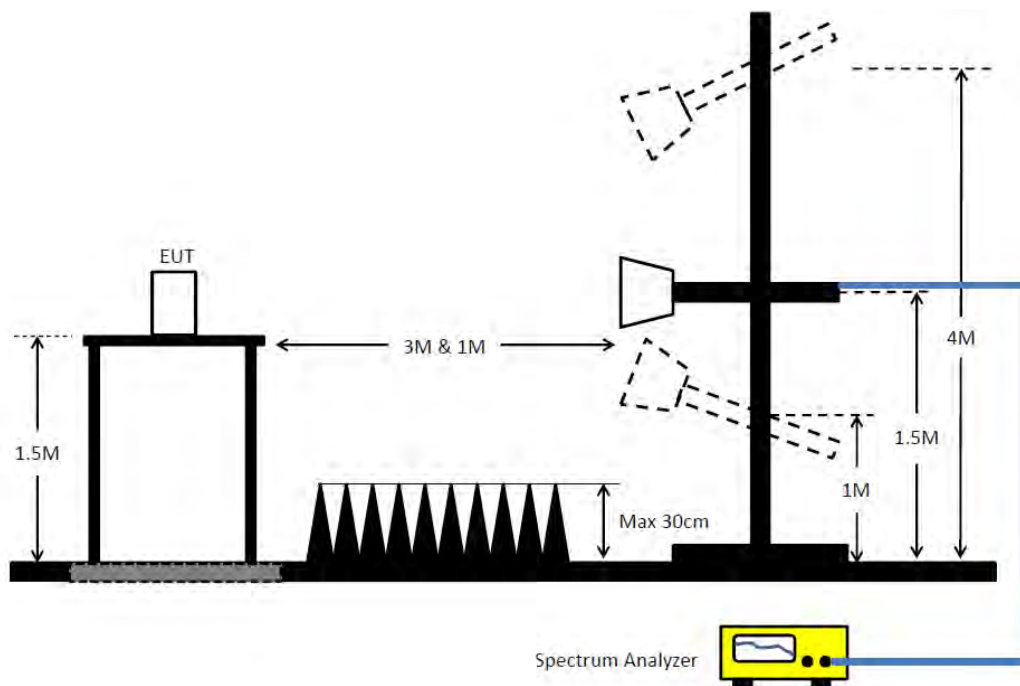
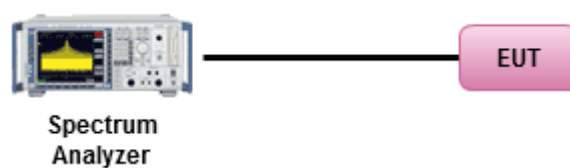
Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 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.

Test Method	
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	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 06, 2022	Nov. 05, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 24, 2023	Mar. 23, 2024	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH05-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH06-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH06-CB	30 MHz ~ 1 GHz	Aug. 04, 2022	Aug. 03, 2023	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Jul. 31, 2022	Jul. 30, 2023	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	Nov. 04, 2022	Nov. 03, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH06-CB)
RF Cable-low	Woken	RG402	Low Cable-24+68	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2022	Nov. 03, 2023	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 19, 2022	May 18, 2023	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 18, 2023	May 17, 2024	Radiation (03CH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 29, 2022	Nov. 29, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Conducted (TH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Conducted (TH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz ~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

NCR means Non-Calibration required.



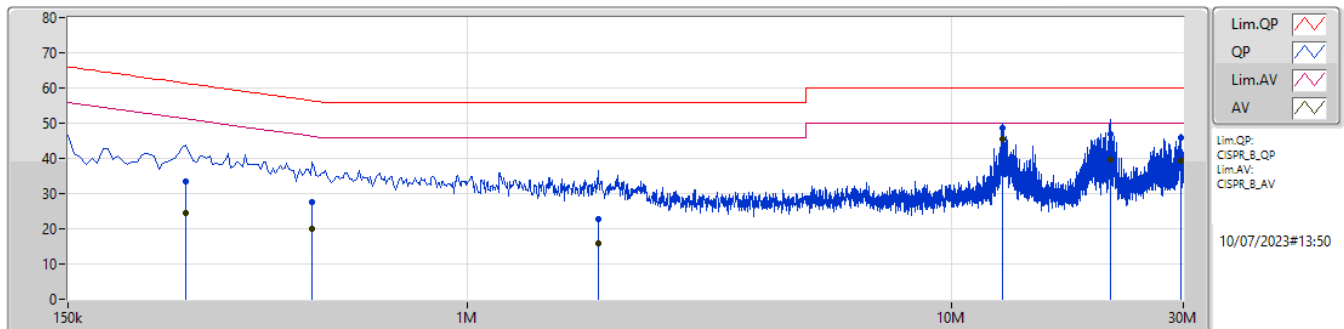
Conducted Emissions at Powerline

Appendix A

Summary

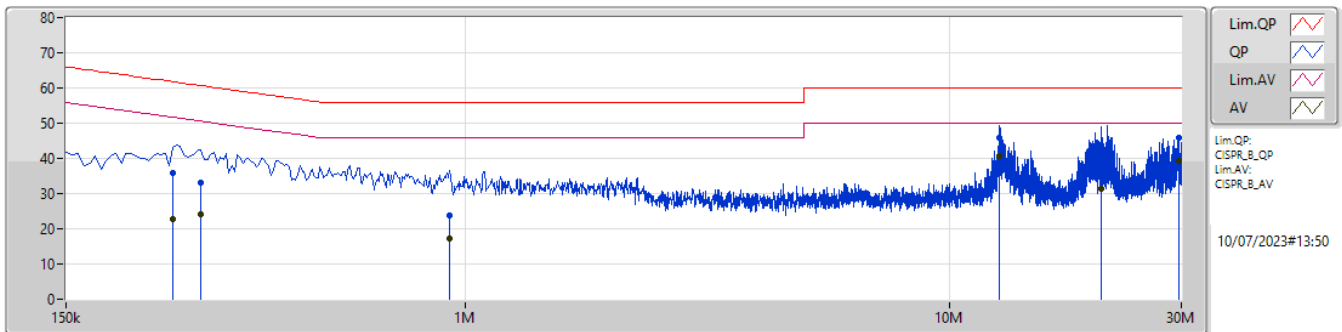
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 5	Pass	AV	12.723M	45.38	50.00	-4.62	Line

Mode 5



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	262.5k	33.42	61.35	-27.93	10.01	Line	-	23.41	0.08	0.05	9.88						
AV	262.5k	24.42	51.35	-26.93	10.01	Line	-	14.41	0.08	0.05	9.88						
QP	478.5k	27.52	56.36	-28.84	10.05	Line	-	17.47	0.09	0.06	9.90						
AV	478.5k	19.95	46.36	-26.41	10.05	Line	-	9.90	0.09	0.06	9.90						
QP	1.86M	22.88	56.00	-33.12	10.12	Line	-	12.76	0.14	0.08	9.90						
AV	1.86M	15.70	46.00	-30.30	10.12	Line	-	5.58	0.14	0.08	9.90						
QP	12.723M	48.72	60.00	-11.28	10.40	Line	-	38.32	0.27	0.17	9.96						
AV	12.723M	45.38	50.00	-4.62	10.40	Line	"Worst"	34.98	0.27	0.17	9.96						
QP	21.251M	47.05	60.00	-12.95	10.56	Line	-	36.49	0.30	0.24	10.02						
AV	21.251M	39.73	50.00	-10.27	10.56	Line	-	29.17	0.30	0.24	10.02						
QP	29.594M	45.81	60.00	-14.19	10.77	Line	-	35.04	0.33	0.34	10.10						
AV	29.594M	39.19	50.00	-10.81	10.77	Line	-	28.42	0.33	0.34	10.10						

Mode 5



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	249k	35.97	61.79	-25.82	9.99	Neutral	-	25.98	0.07	0.05	9.87						
AV	249k	22.92	51.79	-28.87	9.99	Neutral	-	12.93	0.07	0.05	9.87						
QP	285k	32.96	60.67	-27.71	10.00	Neutral	-	22.96	0.07	0.05	9.88						
AV	285k	24.11	50.67	-26.56	10.00	Neutral	-	14.11	0.07	0.05	9.88						
QP	928.5k	23.89	56.00	-32.11	10.02	Neutral	-	13.87	0.08	0.04	9.90						
AV	928.5k	17.07	46.00	-28.93	10.02	Neutral	-	7.05	0.08	0.04	9.90						
QP	12.669M	46.01	60.00	-13.99	10.38	Neutral	-	35.63	0.25	0.17	9.96						
AV	12.669M	40.73	50.00	-9.27	10.38	Neutral	"Worst"	30.35	0.25	0.17	9.96						
QP	20.531M	43.84	60.00	-16.16	10.53	Neutral	-	33.31	0.29	0.23	10.01						
AV	20.531M	31.44	50.00	-18.56	10.53	Neutral	-	20.91	0.29	0.23	10.01						
QP	29.594M	45.88	60.00	-14.12	10.85	Neutral	-	35.03	0.41	0.34	10.10						
AV	29.594M	39.26	50.00	-10.74	10.85	Neutral	-	28.41	0.41	0.34	10.10						



EBW_Radio 1 (UNII 1 Indoor Use and UNII 2A~3 Indoor/Outdoor Use) Appendix B.1

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	20.34M	16.363M	16M4D1D	19.68M	16.363M
802.11a_Nss1,(6Mbps)_2TX	20.43M	16.414M	16M4D1D	19.29M	16.337M
802.11a_Nss1,(6Mbps)_4TX	19.8M	16.388M	16M4D1D	19.05M	16.286M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.26M	18.954M	19M0D1D	21.51M	18.924M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.87M	18.983M	19M0D1D	21.18M	18.865M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.6M	18.954M	19M0D1D	21.03M	18.865M
802.11ax HEW40_Nss1,(MCS0)_1TX	42.06M	37.848M	37M8D1D	41.04M	37.79M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.16M	37.731M	37M7D1D	40.56M	37.672M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.28M	37.848M	37M8D1D	40.56M	37.554M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.32M	77.107M	77M1D1D	82.32M	77.107M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.08M	77.107M	77M1D1D	81.96M	76.99M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.56M	77.225M	77M2D1D	81.36M	76.872M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.65M	16.363M	16M4D1D	19.47M	16.363M
802.11a_Nss1,(6Mbps)_2TX	19.56M	16.414M	16M4D1D	19.26M	16.286M
802.11a_Nss1,(6Mbps)_4TX	20.04M	16.541M	16M5D1D	18.84M	16.286M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.63M	18.954M	19M0D1D	21.24M	18.924M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.81M	18.954M	19M0D1D	21.12M	18.836M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.78M	19.1M	19M1D1D	20.37M	18.718M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.64M	37.79M	37M8D1D	41.04M	37.731M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.1M	37.731M	37M7D1D	40.74M	37.613M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.98M	37.79M	37M8D1D	40.08M	37.143M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.92M	77.225M	77M2D1D	82.92M	77.225M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.44M	77.107M	77M1D1D	82.32M	77.107M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.32M	77.225M	77M2D1D	81.72M	76.637M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	19.89M	16.363M	16M4D1D	15.405M	13.283M
802.11a_Nss1,(6Mbps)_2TX	19.5M	16.388M	16M4D1D	14.7M	13.208M
802.11a_Nss1,(6Mbps)_4TX	19.68M	16.414M	16M4D1D	14.73M	13.133M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.69M	18.924M	18M9D1D	17.325M	14.543M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.3M	18.924M	18M9D1D	15.54M	14.468M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.9M	19.1M	19M1D1D	15.645M	14.438M
802.11ax HEW40_Nss1,(MCS0)_1TX	41.46M	37.79M	37M8D1D	35.77M	33.828M
802.11ax HEW40_Nss1,(MCS0)_2TX	41.22M	37.79M	37M8D1D	35.315M	33.758M
802.11ax HEW40_Nss1,(MCS0)_4TX	41.22M	37.79M	37M8D1D	35.385M	33.688M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.8M	77.342M	77M3D1D	76.725M	73.163M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.68M	77.225M	77M2D1D	76.05M	73.163M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.92M	77.225M	77M2D1D	75.75M	72.564M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.29M	16.541M	16M5D1D	3.08M	3.678M
802.11a_Nss1,(6Mbps)_2TX	16.32M	16.643M	16M6D1D	3.08M	3.358M
802.11a_Nss1,(6Mbps)_4TX	16.35M	16.822M	16M8D1D	2.32M	3.378M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.87M	19.012M	19M0D1D	4.4M	5.777M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.87M	19.1M	19M1D1D	4.32M	4.498M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.99M	19.218M	19M2D1D	3.44M	4.478M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.92M	37.966M	38M0D1D	3.98M	10.535M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.92M	37.907M	37M9D1D	3.88M	4.078M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.86M	37.966M	38M0D1D	3.24M	3.998M
802.11ax HEW80_Nss1,(MCS0)_1TX	77.64M	77.225M	77M2D1D	4.04M	5.097M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.32M	77.107M	77M1D1D	3.36M	4.038M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.52M	77.46M	77M5D1D	3.66M	4.058M

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



EBW_Radio 1 (UNII 1 Indoor Use and UNII 2A~3 Indoor/Outdoor Use) Appendix B.1

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	19.68M	16.363M	-	-	-	-	-	-
5200MHz	Pass	Inf	20.04M	16.363M	-	-	-	-	-	-
5240MHz	Pass	Inf	20.34M	16.363M	-	-	-	-	-	-
5260MHz	Pass	Inf	19.53M	16.363M	-	-	-	-	-	-
5300MHz	Pass	Inf	19.47M	16.363M	-	-	-	-	-	-
5320MHz	Pass	Inf	19.65M	16.363M	-	-	-	-	-	-
5500MHz	Pass	Inf	19.89M	16.363M	-	-	-	-	-	-
5580MHz	Pass	Inf	19.83M	16.363M	-	-	-	-	-	-
5700MHz	Pass	Inf	19.65M	16.363M	-	-	-	-	-	-
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.405M	13.283M	-	-	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.08M	3.678M	-	-	-	-	-	-
5745MHz	Pass	500k	16.29M	16.541M	-	-	-	-	-	-
5785MHz	Pass	500k	16.29M	16.388M	-	-	-	-	-	-
5825MHz	Pass	500k	16.02M	16.516M	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.51M	18.924M	-	-	-	-	-	-
5200MHz	Pass	Inf	21.66M	18.924M	-	-	-	-	-	-
5240MHz	Pass	Inf	22.26M	18.954M	-	-	-	-	-	-
5260MHz	Pass	Inf	21.45M	18.954M	-	-	-	-	-	-
5300MHz	Pass	Inf	21.24M	18.924M	-	-	-	-	-	-
5320MHz	Pass	Inf	21.63M	18.954M	-	-	-	-	-	-
5500MHz	Pass	Inf	21.33M	18.924M	-	-	-	-	-	-
5580MHz	Pass	Inf	21.69M	18.924M	-	-	-	-	-	-
5700MHz	Pass	Inf	21.42M	18.924M	-	-	-	-	-	-
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.325M	14.543M	-	-	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.4M	5.777M	-	-	-	-	-	-
5745MHz	Pass	500k	18.78M	19.012M	-	-	-	-	-	-
5785MHz	Pass	500k	18.87M	18.954M	-	-	-	-	-	-
5825MHz	Pass	500k	18.3M	19.012M	-	-	-	-	-	-
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.04M	37.79M	-	-	-	-	-	-
5230MHz	Pass	Inf	42.06M	37.848M	-	-	-	-	-	-
5270MHz	Pass	Inf	41.64M	37.79M	-	-	-	-	-	-
5310MHz	Pass	Inf	41.04M	37.731M	-	-	-	-	-	-
5510MHz	Pass	Inf	40.98M	37.79M	-	-	-	-	-	-
5550MHz	Pass	Inf	41.46M	37.79M	-	-	-	-	-	-
5670MHz	Pass	Inf	41.28M	37.731M	-	-	-	-	-	-
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.77M	33.828M	-	-	-	-	-	-
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	10.535M	-	-	-	-	-	-
5755MHz	Pass	500k	37.92M	37.966M	-	-	-	-	-	-
5795MHz	Pass	500k	37.8M	37.907M	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.32M	77.107M	-	-	-	-	-	-
5290MHz	Pass	Inf	82.92M	77.225M	-	-	-	-	-	-
5530MHz	Pass	Inf	82.56M	77.342M	-	-	-	-	-	-
5610MHz	Pass	Inf	82.8M	77.342M	-	-	-	-	-	-
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.725M	73.163M	-	-	-	-	-	-
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	5.097M	-	-	-	-	-	-
5775MHz	Pass	500k	77.64M	77.225M	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.53M	16.388M	19.29M	16.363M	-	-	-	-
5200MHz	Pass	Inf	20.07M	16.414M	19.71M	16.414M	-	-	-	-
5240MHz	Pass	Inf	20.43M	16.337M	19.86M	16.388M	-	-	-	-
5260MHz	Pass	Inf	19.32M	16.312M	19.26M	16.337M	-	-	-	-



EBW_Radio 1 (UNII 1 Indoor Use and UNII 2A~3 Indoor/Outdoor Use) 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	19.56M	16.414M	19.44M	16.388M	-	-	-	-
5320MHz	Pass	Inf	19.35M	16.286M	19.41M	16.337M	-	-	-	-
5500MHz	Pass	Inf	19.38M	16.312M	19.41M	16.388M	-	-	-	-
5580MHz	Pass	Inf	19.5M	16.388M	19.41M	16.363M	-	-	-	-
5700MHz	Pass	Inf	19.5M	16.363M	19.35M	16.388M	-	-	-	-
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.88M	13.208M	14.7M	13.238M	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.398M	3.08M	3.358M	-	-	-	-
5745MHz	Pass	500k	16.29M	16.592M	16.32M	16.439M	-	-	-	-
5785MHz	Pass	500k	15.06M	16.312M	15.69M	16.363M	-	-	-	-
5825MHz	Pass	500k	16.29M	16.643M	16.29M	16.465M	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.24M	18.895M	21.42M	18.895M	-	-	-	-
5200MHz	Pass	Inf	21.87M	18.983M	21.75M	18.954M	-	-	-	-
5240MHz	Pass	Inf	21.18M	18.865M	21.51M	18.895M	-	-	-	-
5260MHz	Pass	Inf	21.36M	18.836M	21.27M	18.865M	-	-	-	-
5300MHz	Pass	Inf	21.12M	18.865M	21.27M	18.865M	-	-	-	-
5320MHz	Pass	Inf	21.54M	18.954M	21.81M	18.954M	-	-	-	-
5500MHz	Pass	Inf	21.27M	18.895M	21.3M	18.924M	-	-	-	-
5580MHz	Pass	Inf	21.09M	18.865M	21.18M	18.895M	-	-	-	-
5700MHz	Pass	Inf	21.18M	18.865M	21.15M	18.865M	-	-	-	-
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.54M	14.468M	15.705M	14.483M	-	-	-	-
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.32M	4.498M	4.42M	4.498M	-	-	-	-
5745MHz	Pass	500k	18.75M	19.1M	18.87M	18.983M	-	-	-	-
5785MHz	Pass	500k	17.43M	18.836M	18.57M	18.895M	-	-	-	-
5825MHz	Pass	500k	16.74M	18.924M	18.33M	18.954M	-	-	-	-
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.56M	37.672M	40.62M	37.731M	-	-	-	-
5230MHz	Pass	Inf	41.1M	37.731M	41.16M	37.731M	-	-	-	-
5270MHz	Pass	Inf	40.74M	37.613M	41.1M	37.672M	-	-	-	-
5310MHz	Pass	Inf	40.98M	37.672M	40.8M	37.731M	-	-	-	-
5510MHz	Pass	Inf	41.04M	37.731M	40.98M	37.731M	-	-	-	-
5550MHz	Pass	Inf	41.04M	37.79M	40.8M	37.672M	-	-	-	-
5670MHz	Pass	Inf	41.16M	37.672M	41.22M	37.731M	-	-	-	-
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.49M	33.793M	35.315M	33.758M	-	-	-	-
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.078M	3.88M	4.098M	-	-	-	-
5755MHz	Pass	500k	37.32M	37.907M	37.62M	37.731M	-	-	-	-
5795MHz	Pass	500k	35.7M	37.731M	37.92M	37.79M	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.08M	77.107M	81.96M	76.99M	-	-	-	-
5290MHz	Pass	Inf	82.44M	77.107M	82.32M	77.107M	-	-	-	-
5530MHz	Pass	Inf	82.32M	77.107M	82.68M	77.107M	-	-	-	-
5610MHz	Pass	Inf	82.44M	77.225M	82.32M	77.107M	-	-	-	-
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.05M	73.313M	76.275M	73.163M	-	-	-	-
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.36M	4.038M	3.88M	4.078M	-	-	-	-
5775MHz	Pass	500k	76.2M	76.99M	76.32M	77.107M	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.8M	16.388M	19.38M	16.337M	19.29M	16.312M	19.44M	16.388M
5200MHz	Pass	Inf	19.05M	16.286M	19.08M	16.312M	19.5M	16.337M	19.38M	16.363M
5240MHz	Pass	Inf	19.47M	16.388M	19.44M	16.388M	19.35M	16.363M	19.35M	16.337M
5260MHz	Pass	Inf	18.99M	16.286M	19.35M	16.363M	19.56M	16.337M	19.47M	16.388M
5300MHz	Pass	Inf	19.68M	16.388M	20.04M	16.541M	19.35M	16.337M	19.35M	16.363M
5320MHz	Pass	Inf	18.84M	16.286M	19.53M	16.439M	19.53M	16.337M	19.47M	16.363M
5500MHz	Pass	Inf	19.68M	16.414M	19.38M	16.414M	19.41M	16.312M	19.17M	16.363M
5580MHz	Pass	Inf	19.26M	16.337M	18.06M	15.879M	19.14M	16.286M	19.35M	16.363M
5700MHz	Pass	Inf	19.05M	16.337M	18.99M	16.312M	19.14M	16.337M	18.99M	16.312M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.955M	13.283M	14.805M	13.238M	14.925M	13.268M	14.73M	13.133M



EBW_Radio 1 (UNII 1 Indoor Use and UNII 2A~3 Indoor/Outdoor Use) 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	3.1M	3.378M	3.08M	3.398M	3.08M	3.398M	2.32M	3.418M
5745MHz	Pass	500k	15.24M	16.465M	15.66M	16.49M	16.02M	16.439M	15.72M	16.388M
5785MHz	Pass	500k	16.32M	16.516M	16.35M	16.567M	15.39M	16.337M	15.69M	16.388M
5825MHz	Pass	500k	16.32M	16.822M	15.12M	16.312M	16.29M	16.516M	15.66M	16.643M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.15M	18.865M	21.21M	18.865M	21.6M	18.954M	21.57M	18.924M
5200MHz	Pass	Inf	21.6M	18.924M	21.09M	18.924M	21.42M	18.895M	21.48M	18.924M
5240MHz	Pass	Inf	21.03M	18.924M	21.3M	18.954M	21.36M	18.924M	21.24M	18.865M
5260MHz	Pass	Inf	21.3M	18.924M	21.54M	18.924M	21.6M	18.865M	21.45M	18.865M
5300MHz	Pass	Inf	21M	18.895M	21.48M	19.1M	21.18M	18.895M	21.39M	18.954M
5320MHz	Pass	Inf	21.63M	19.012M	20.37M	18.718M	21.78M	18.924M	21.09M	18.836M
5500MHz	Pass	Inf	21.06M	18.748M	21.9M	19.1M	21.09M	18.954M	21.24M	18.924M
5580MHz	Pass	Inf	21.15M	18.954M	20.31M	18.542M	21.3M	18.924M	21.24M	18.983M
5700MHz	Pass	Inf	21.33M	18.924M	20.58M	18.895M	21.21M	18.924M	20.67M	18.689M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.945M	14.438M	15.84M	14.483M	15.735M	14.498M	15.645M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.48M	4.478M	4.5M	4.518M	4.38M	4.478M	3.44M	4.498M
5745MHz	Pass	500k	18.81M	19.189M	15.24M	18.836M	18.69M	19.012M	16.62M	18.924M
5785MHz	Pass	500k	18.99M	19.071M	14.46M	18.689M	18.96M	19.042M	16.5M	18.836M
5825MHz	Pass	500k	18.78M	19.218M	18.96M	19.1M	15.93M	18.865M	16.59M	18.748M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.98M	37.672M	40.68M	37.79M	41.28M	37.731M	40.86M	37.848M
5230MHz	Pass	Inf	40.56M	37.554M	40.62M	37.731M	40.8M	37.731M	40.86M	37.731M
5270MHz	Pass	Inf	40.68M	37.496M	40.5M	37.613M	40.92M	37.79M	40.98M	37.672M
5310MHz	Pass	Inf	40.86M	37.554M	40.08M	37.143M	40.98M	37.79M	40.62M	37.731M
5510MHz	Pass	Inf	41.22M	37.79M	40.38M	37.496M	40.92M	37.731M	40.68M	37.731M
5550MHz	Pass	Inf	40.74M	37.672M	40.26M	37.025M	40.74M	37.613M	40.5M	37.731M
5670MHz	Pass	Inf	40.56M	37.79M	40.2M	37.613M	40.74M	37.731M	40.2M	37.378M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.63M	33.863M	35.385M	33.688M	35.875M	33.723M	35.455M	33.898M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	4.038M	4.02M	4.098M	4.04M	4.038M	3.24M	3.998M
5755MHz	Pass	500k	36.3M	37.79M	37.56M	37.848M	37.86M	37.848M	34.38M	37.731M
5795MHz	Pass	500k	36.3M	37.731M	37.68M	37.966M	36.54M	37.966M	33.78M	37.848M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	76.872M	81.36M	76.99M	82.08M	77.107M	82.56M	77.225M
5290MHz	Pass	Inf	82.08M	76.99M	81.72M	76.637M	82.32M	77.225M	82.32M	76.99M
5530MHz	Pass	Inf	82.8M	77.225M	81.24M	75.697M	82.92M	77.107M	82.08M	77.107M
5610MHz	Pass	Inf	81.96M	77.107M	81.24M	75.579M	82.32M	77.107M	82.08M	76.637M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.05M	73.388M	75.825M	72.564M	75.9M	73.013M	75.75M	73.163M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	4.058M	4.1M	4.158M	4.06M	4.118M	3.66M	4.058M
5775MHz	Pass	500k	76.68M	76.99M	77.52M	77.46M	76.08M	77.225M	74.52M	77.107M

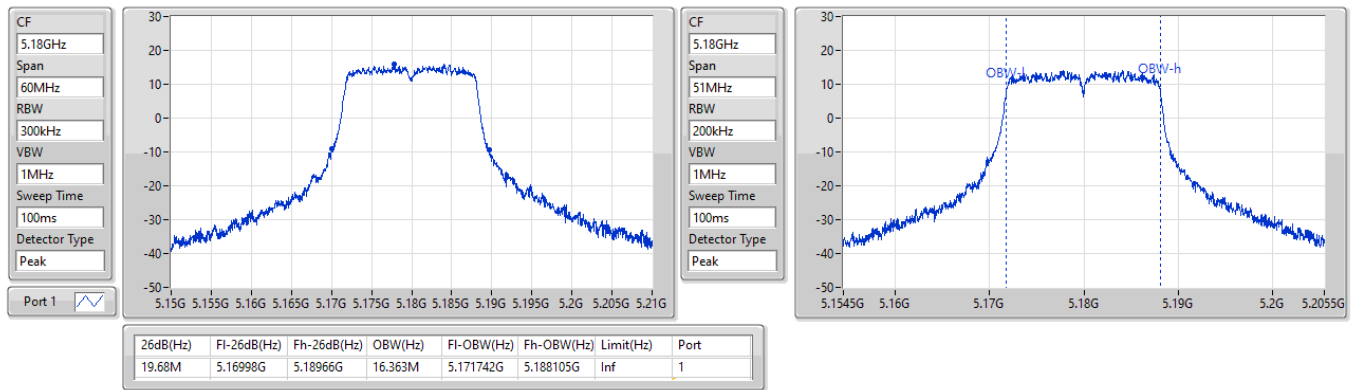
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

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

EBW

5180MHz

18/03/2023

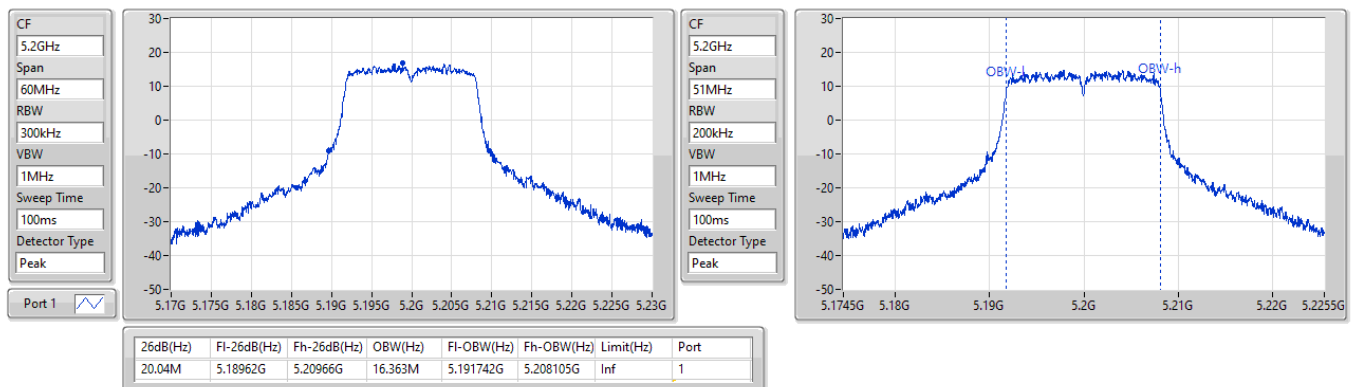


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5200MHz

18/03/2023

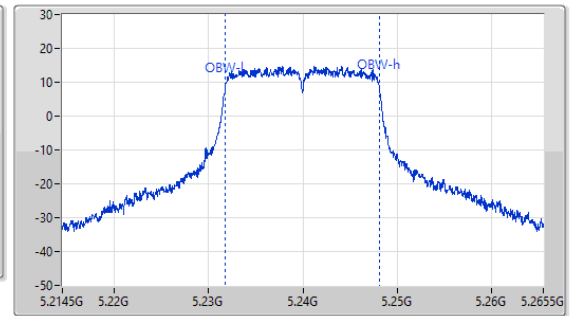
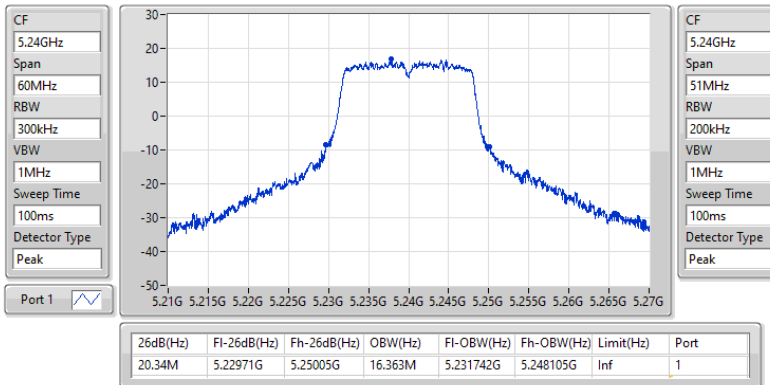


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5240MHz

18/03/2023

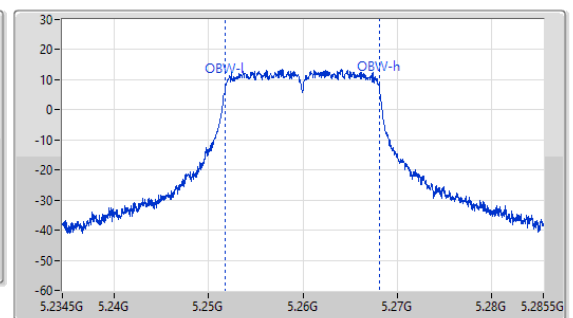
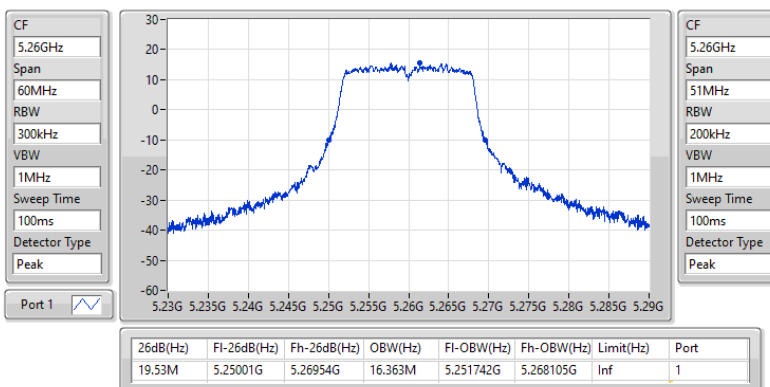


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5260MHz

19/03/2023

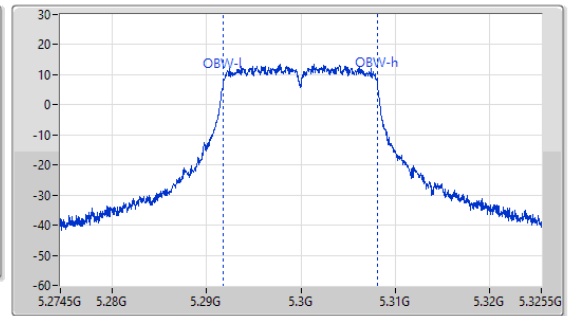
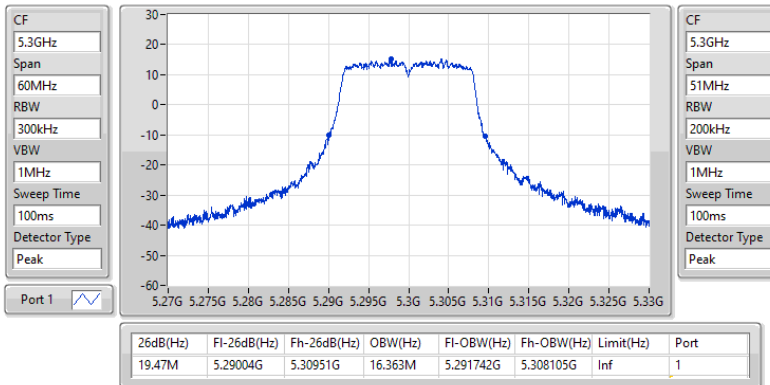


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5300MHz

19/03/2023

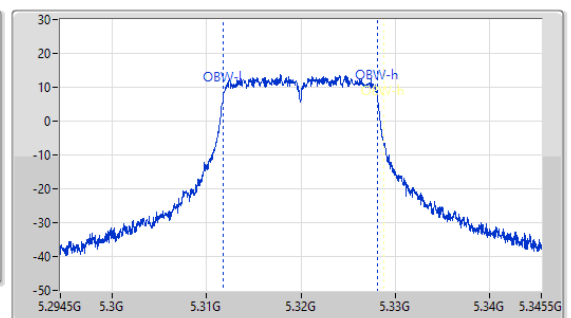
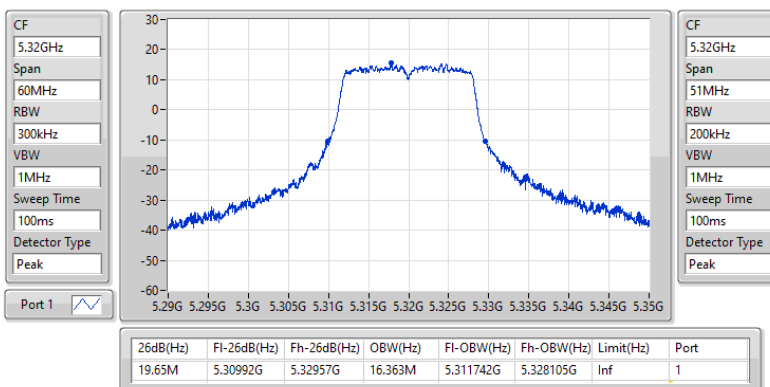


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5320MHz

18/03/2023

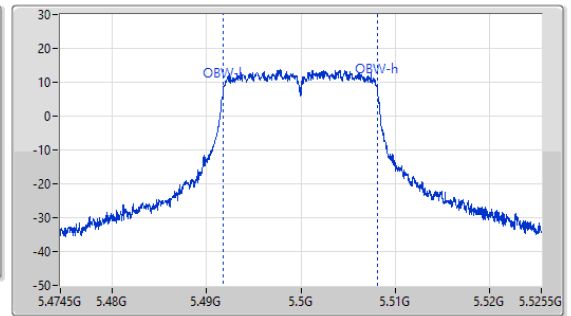
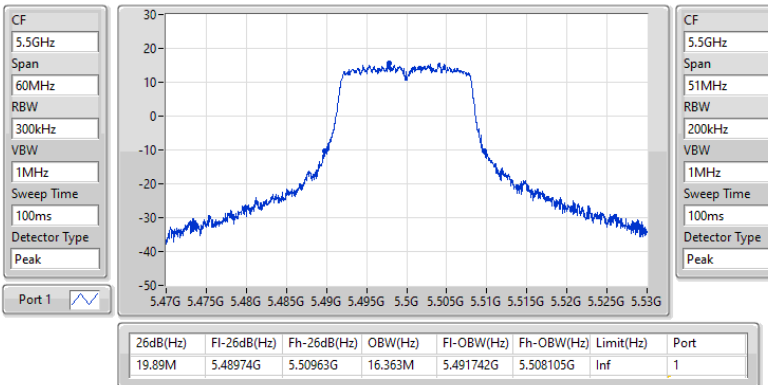


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5500MHz

18/03/2023

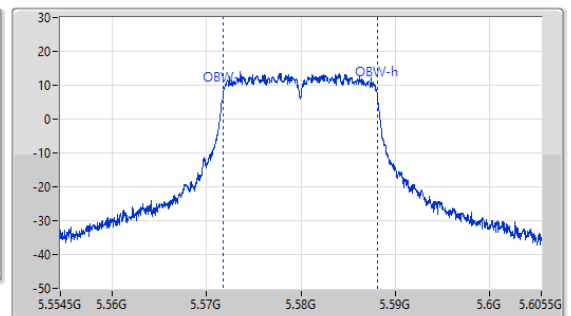
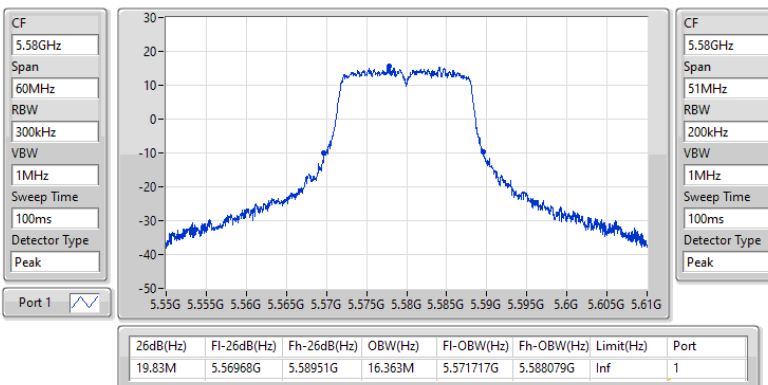


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5580MHz

19/03/2023

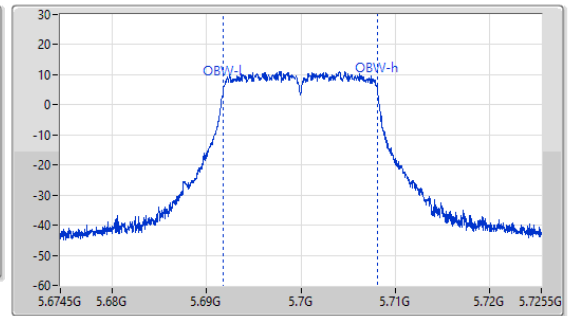
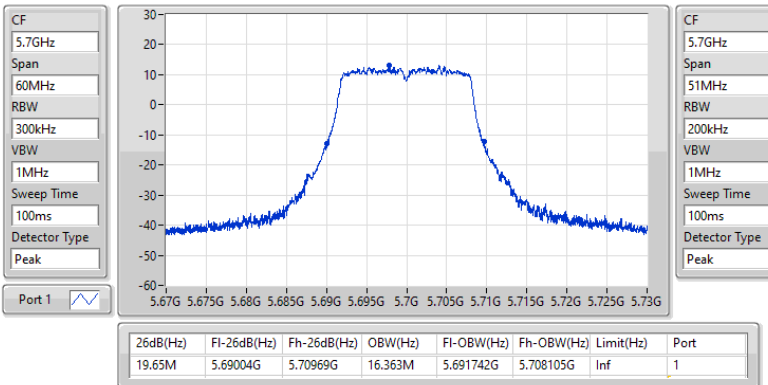


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5700MHz

18/03/2023

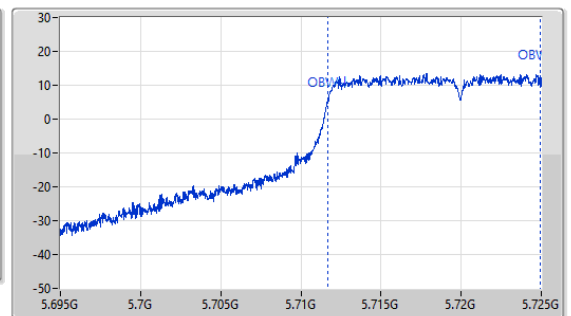
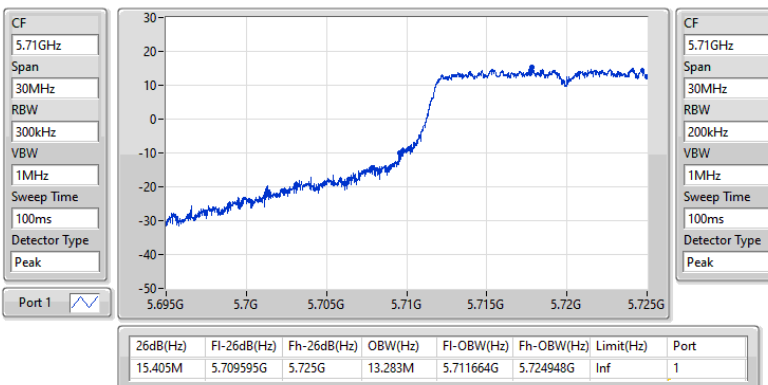


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

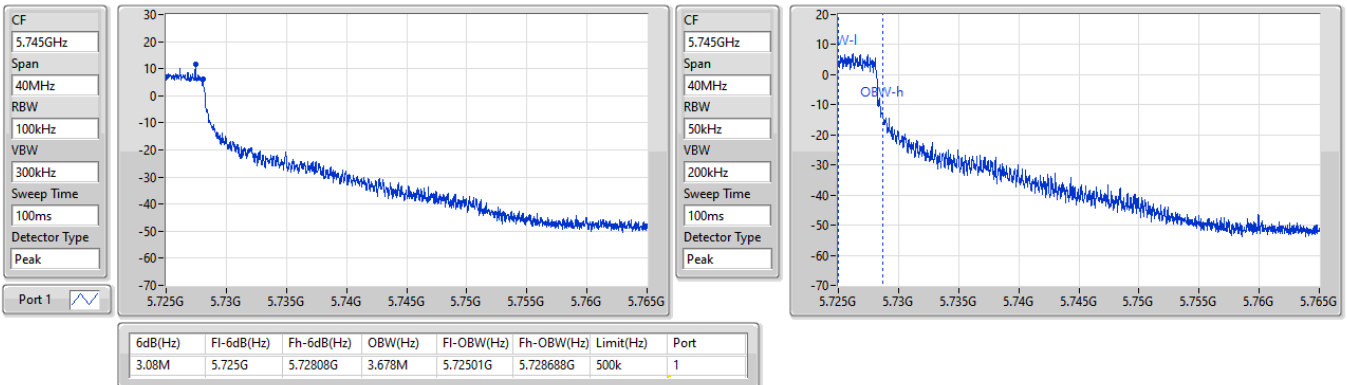


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

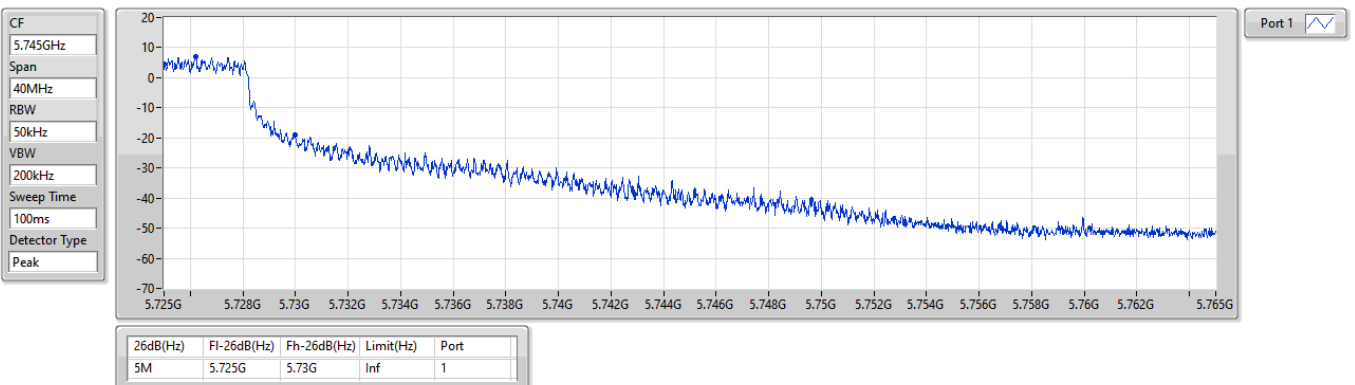


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

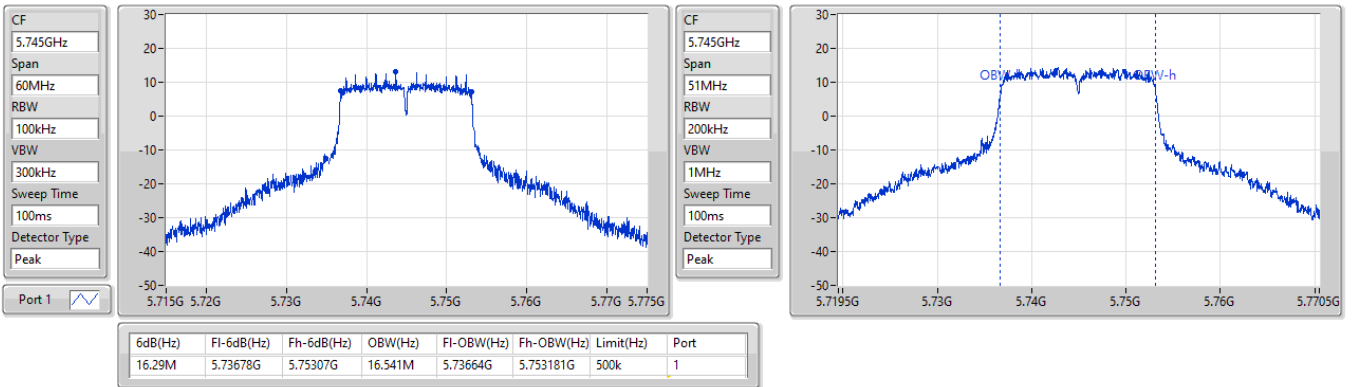


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

18/03/2023

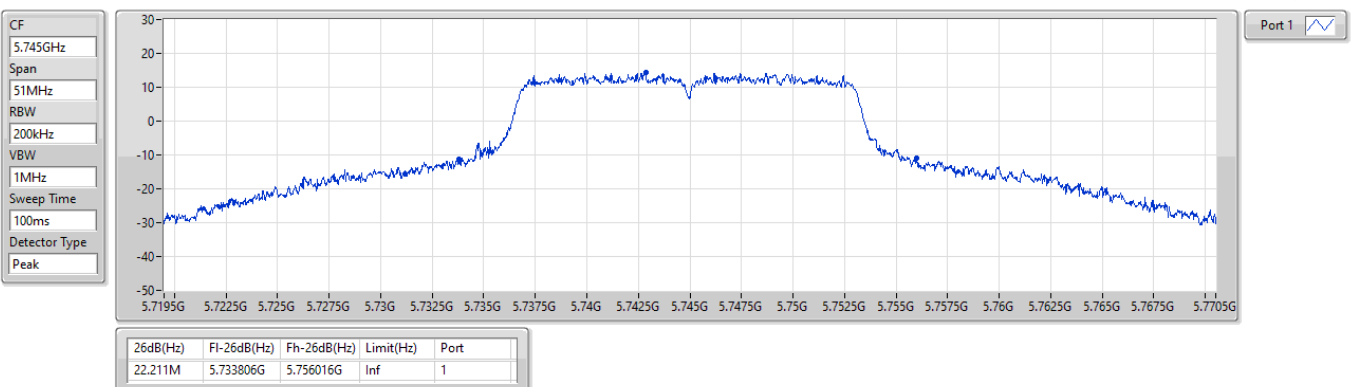


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5745MHz

18/03/2023

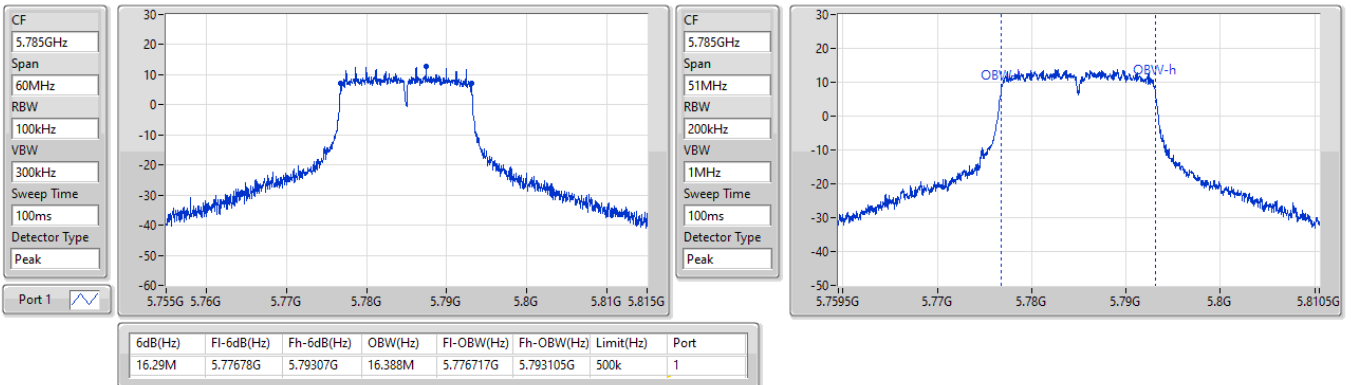


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

18/03/2023

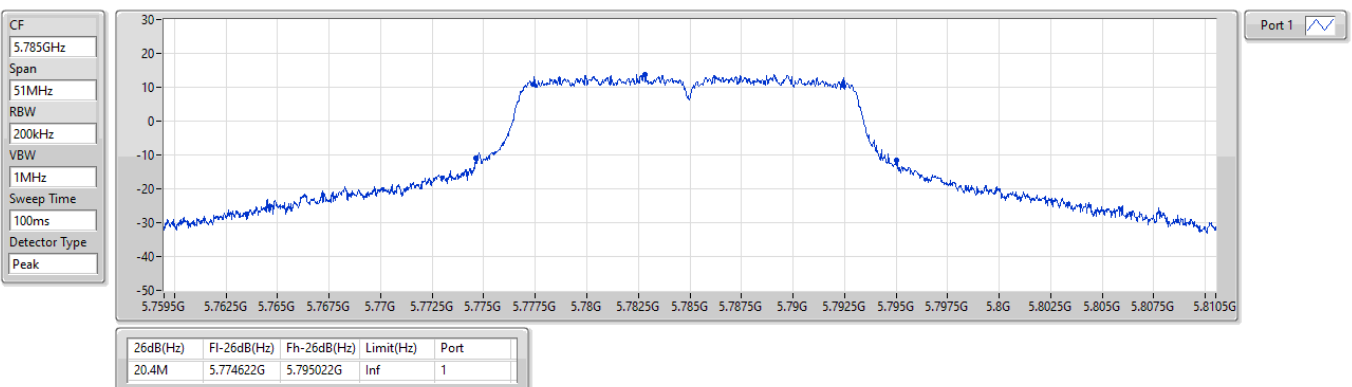


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5785MHz

18/03/2023

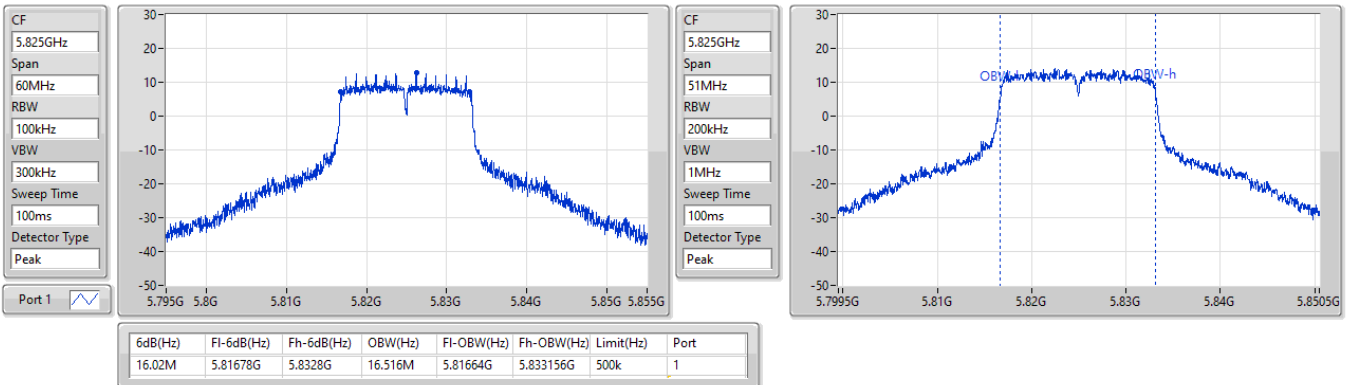


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

18/03/2023

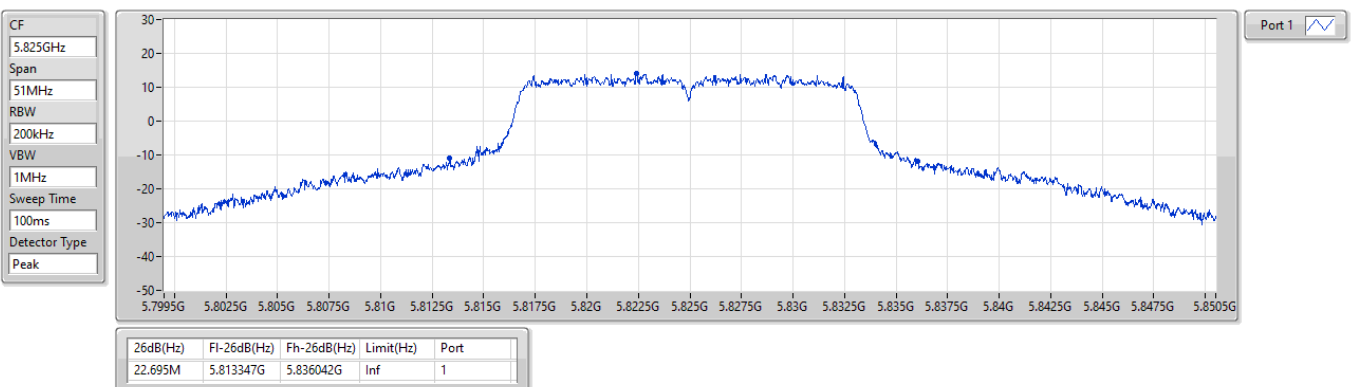


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5825MHz

18/03/2023

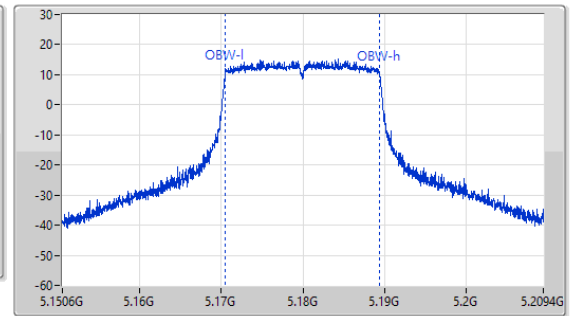
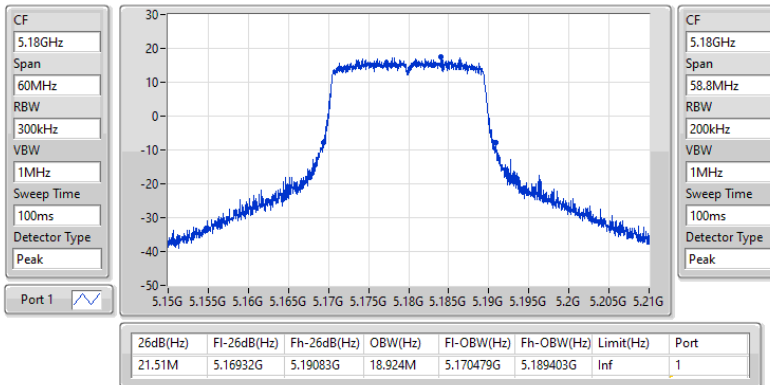


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5180MHz

18/03/2023

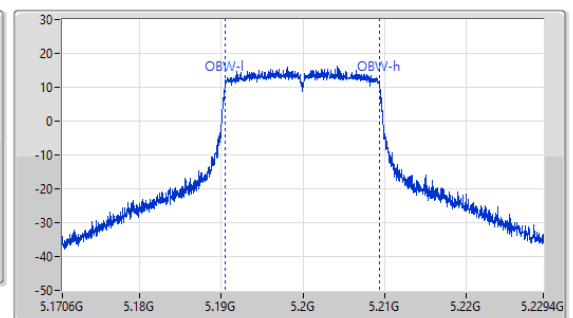
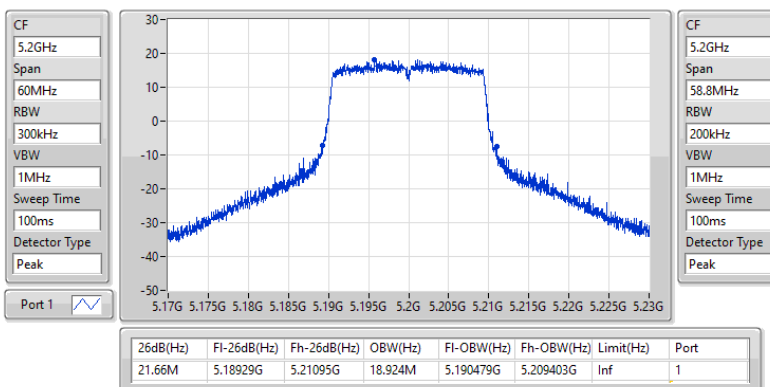


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5200MHz

18/03/2023

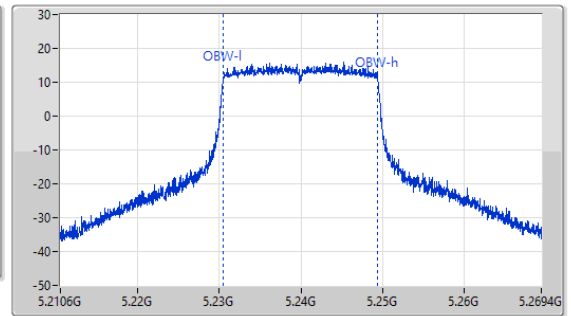
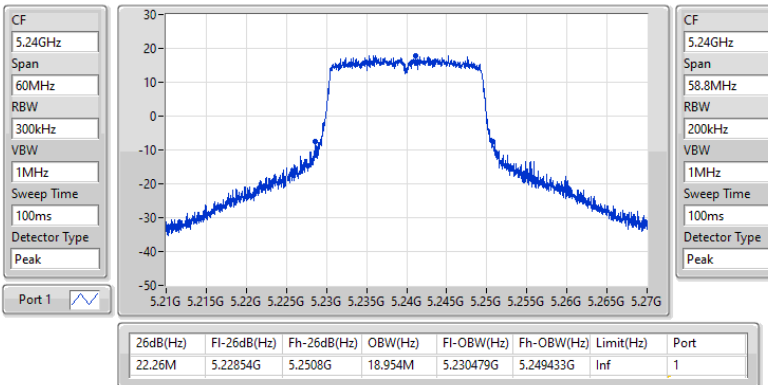


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5240MHz

18/03/2023

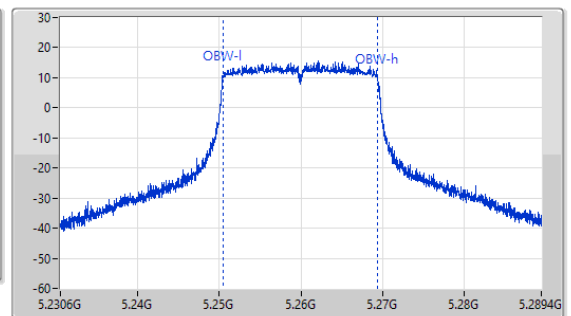
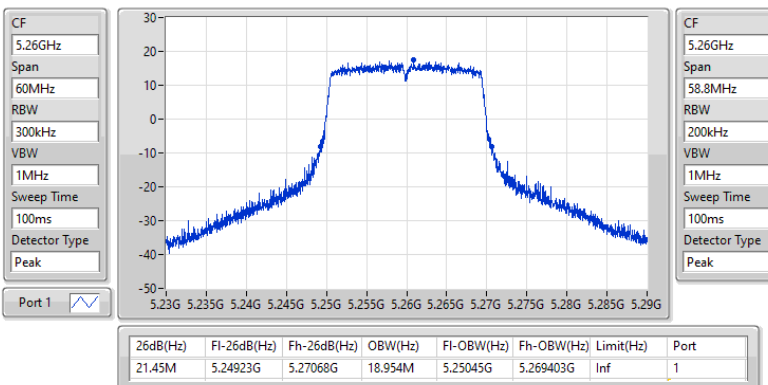


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5260MHz

19/03/2023

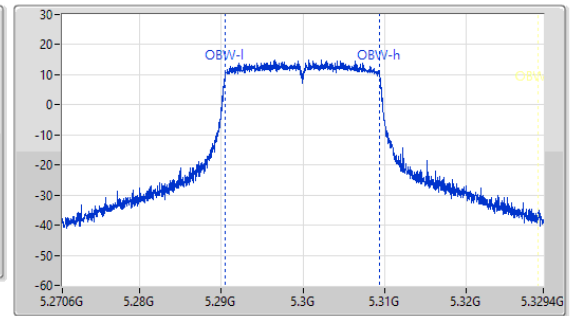
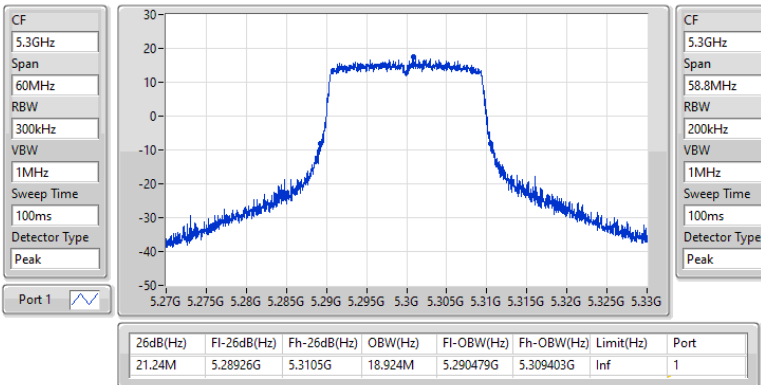


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

EBW

5300MHz

19/03/2023

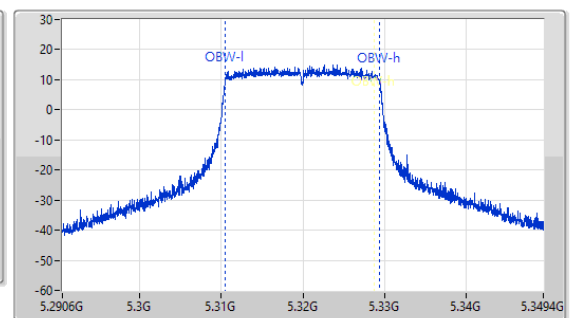
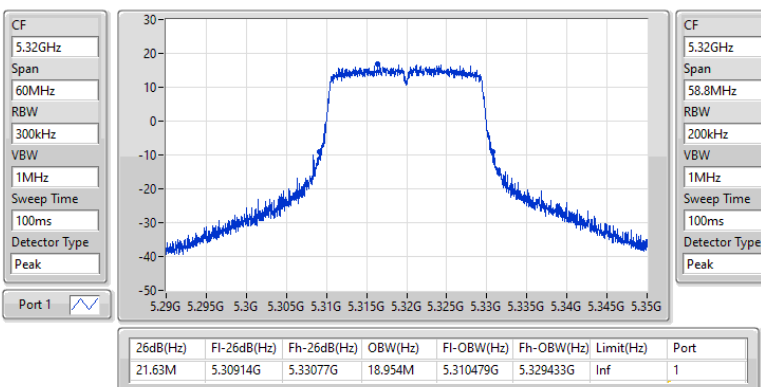


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

EBW

5320MHz

18/03/2023

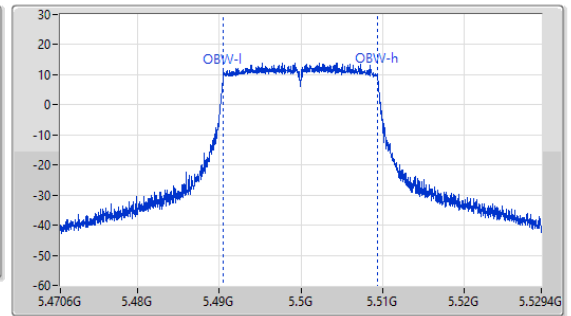
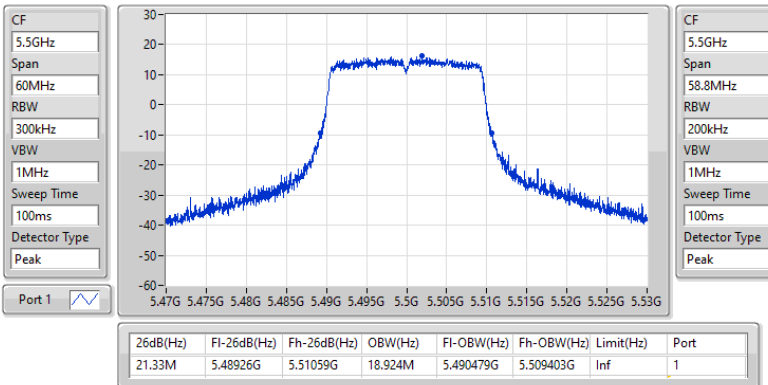


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5500MHz

18/03/2023

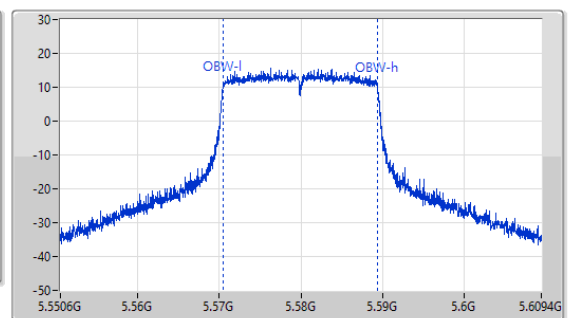
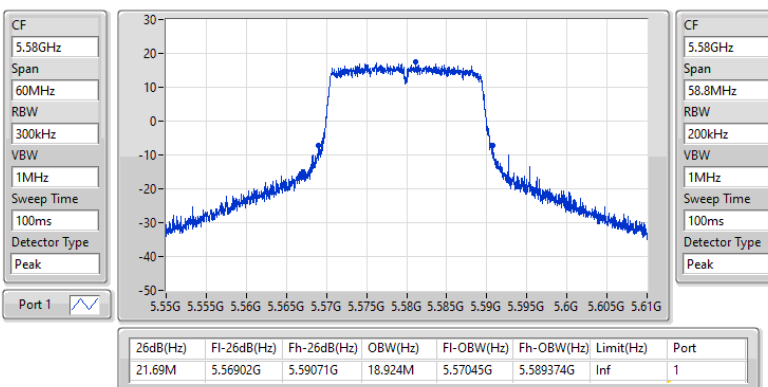


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5580MHz

19/03/2023

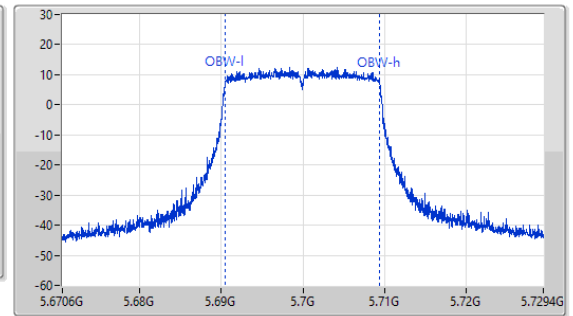
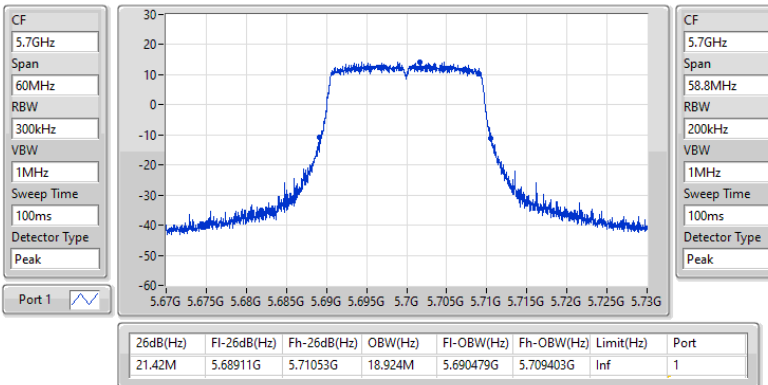


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5700MHz

18/03/2023

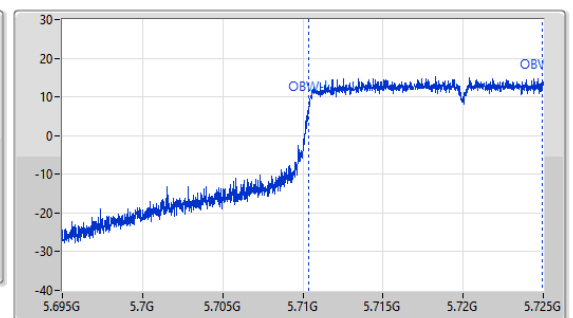
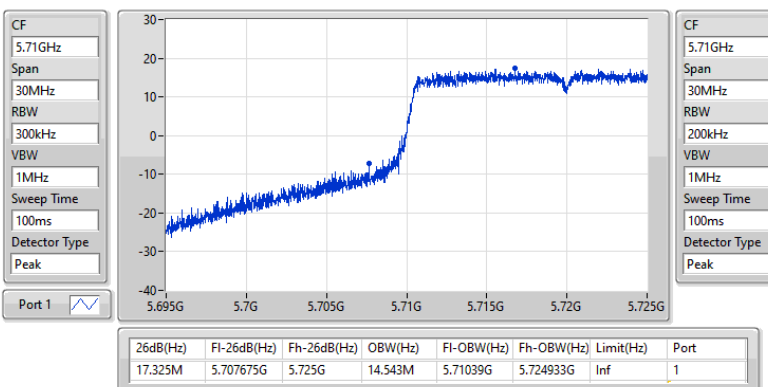


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

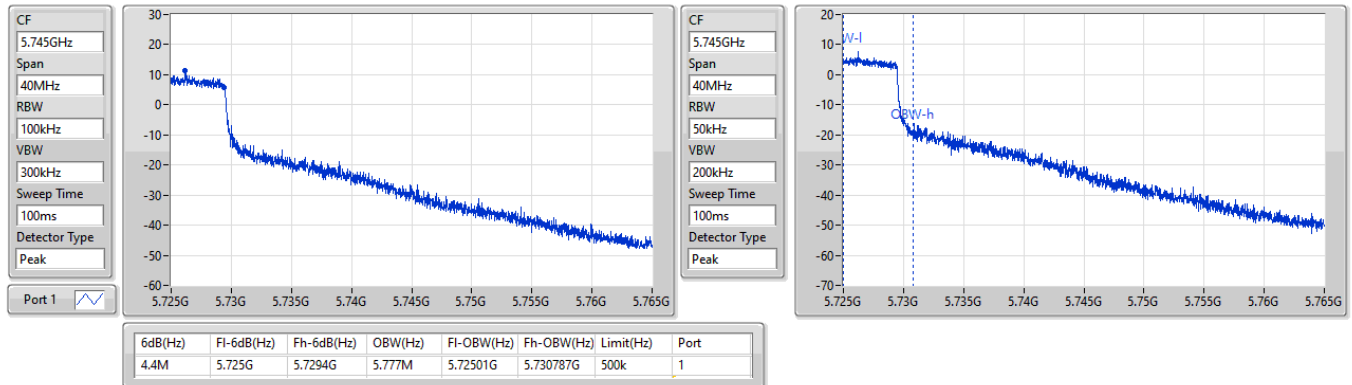


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

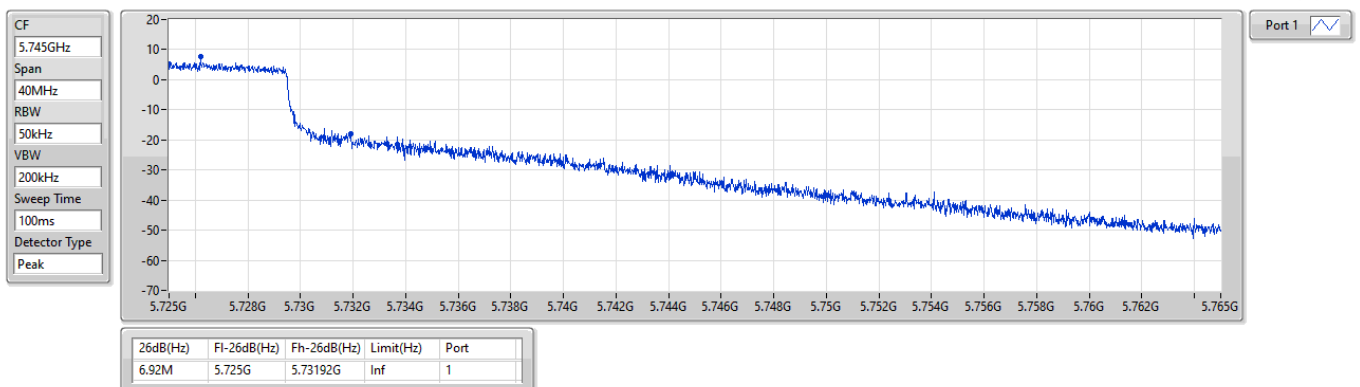


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

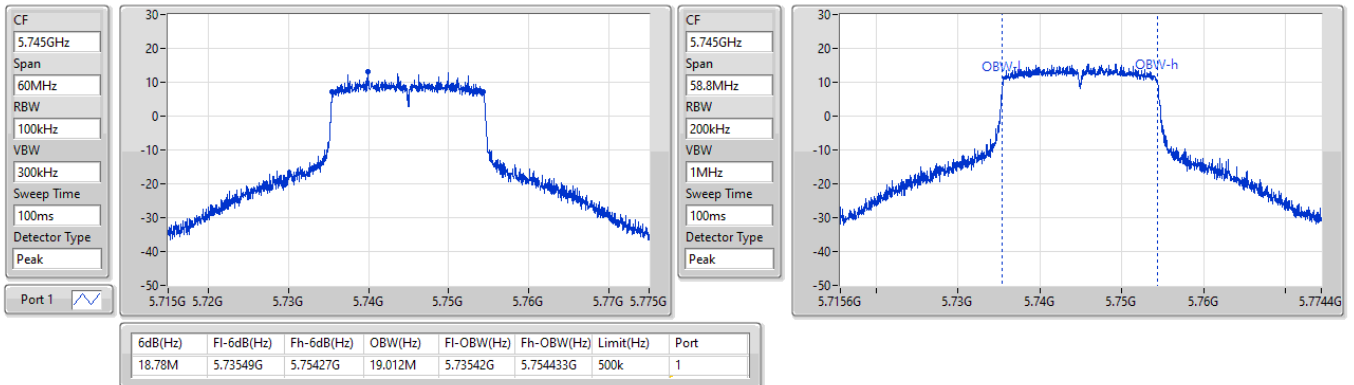


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

18/03/2023

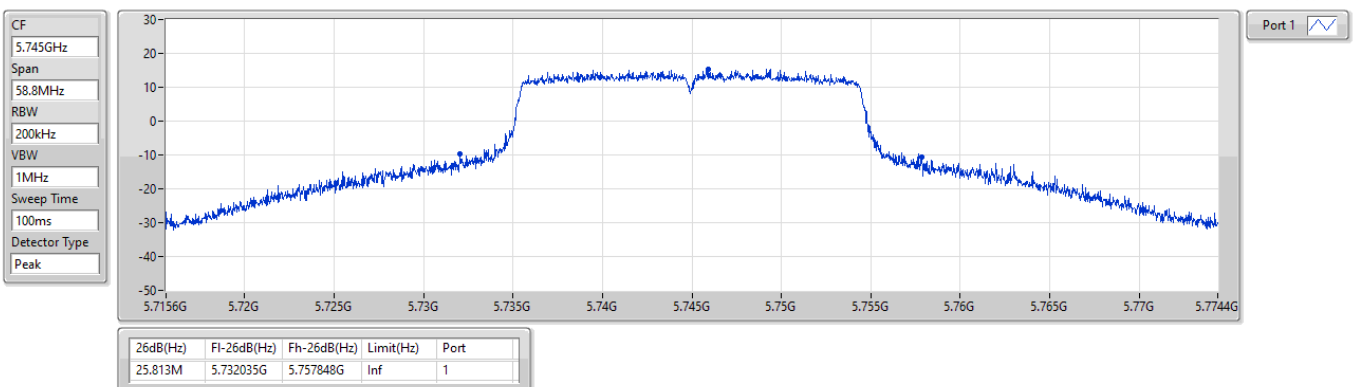


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5745MHz

18/03/2023

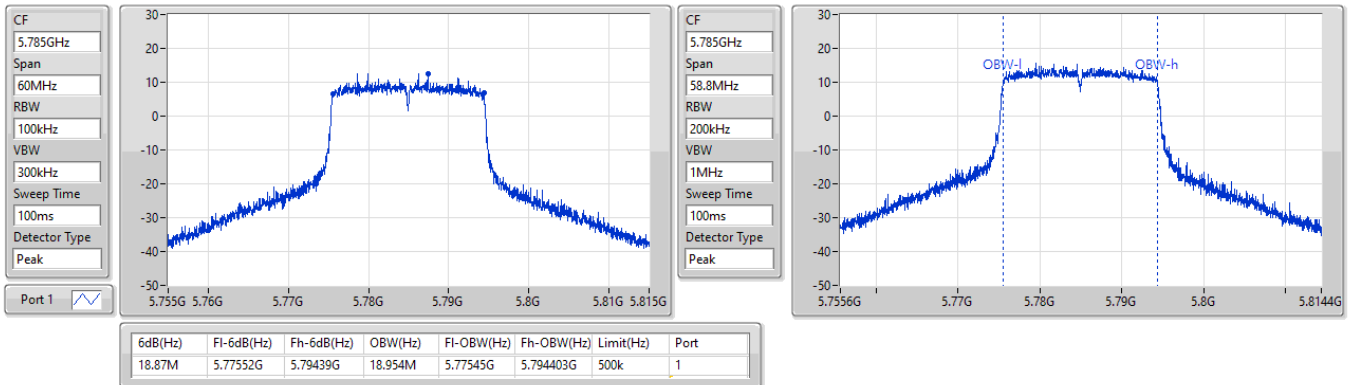


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

18/03/2023

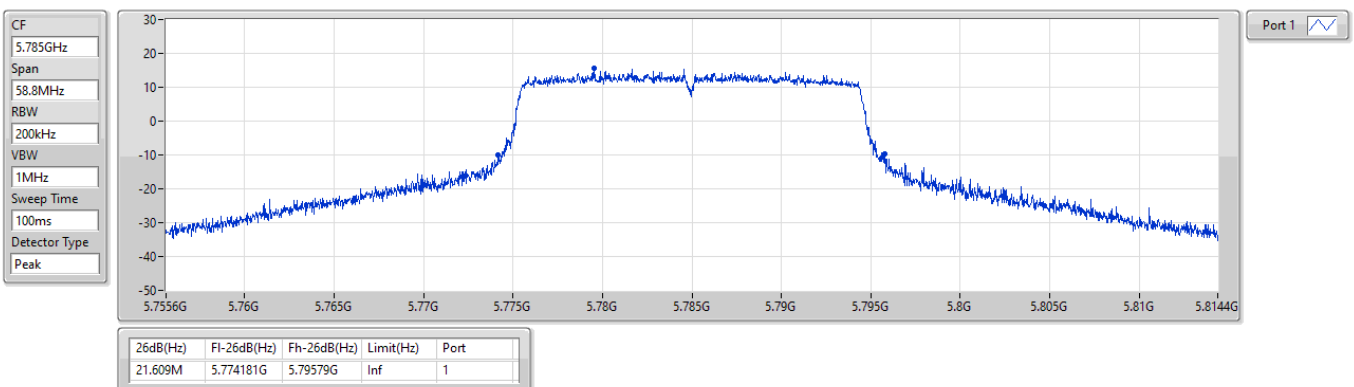


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5785MHz

18/03/2023

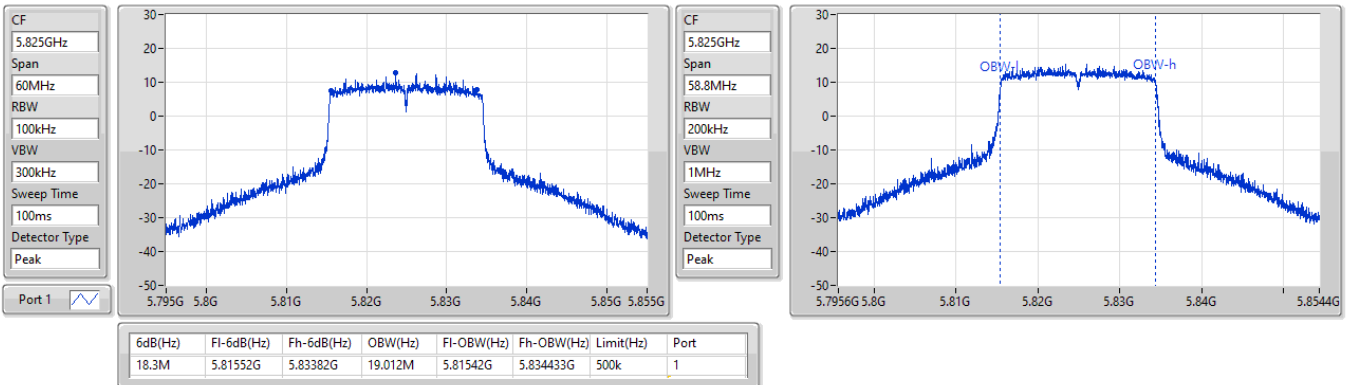


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

18/03/2023

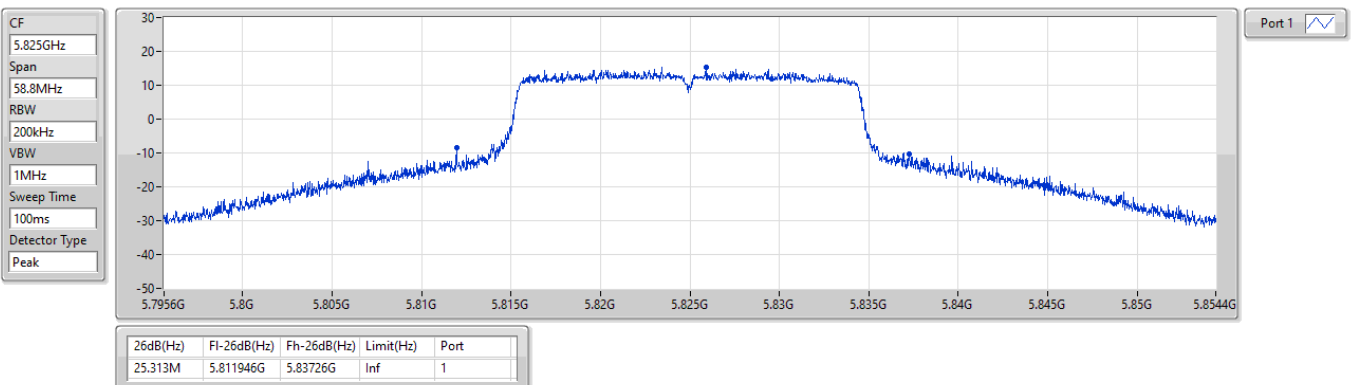


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5825MHz

18/03/2023

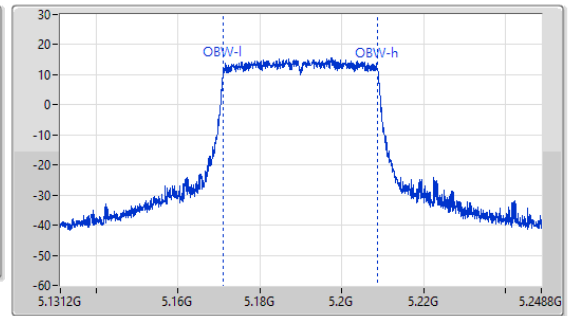
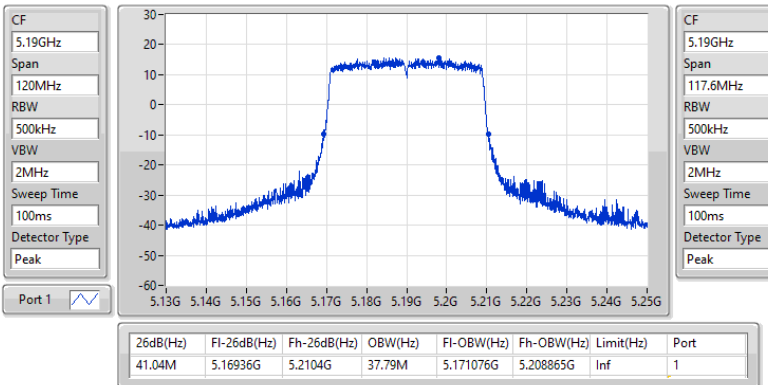


5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5190MHz

18/03/2023

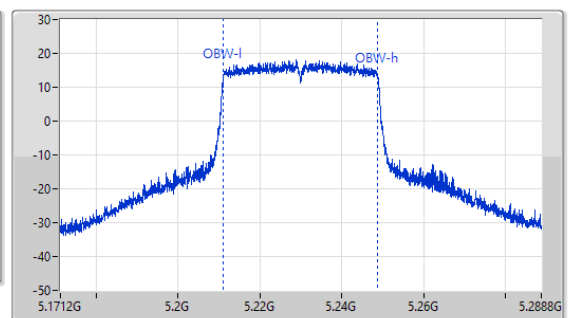
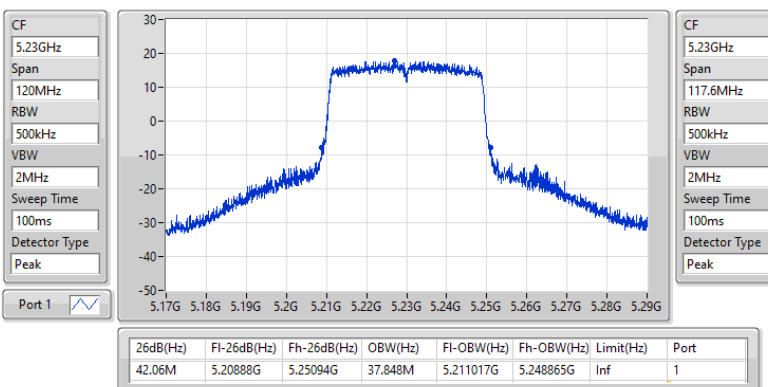


5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5230MHz

18/03/2023

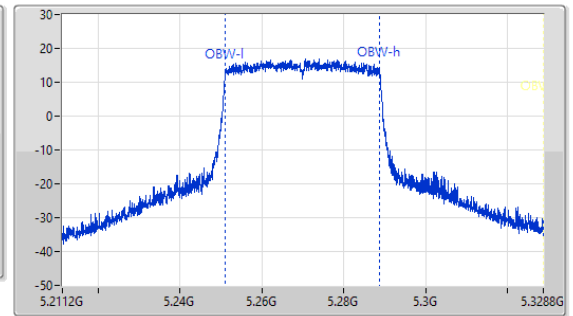
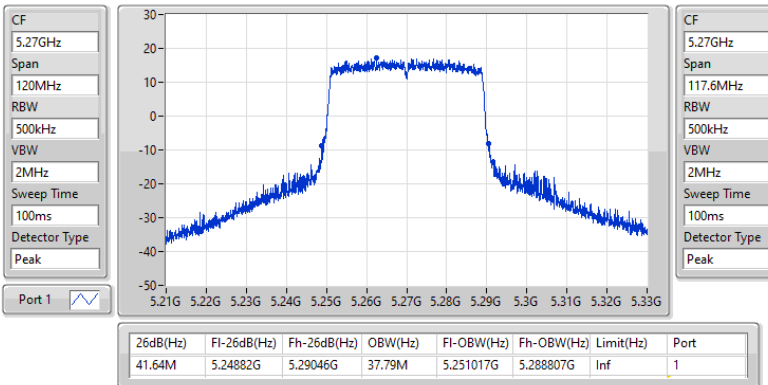


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

EBW

5270MHz

19/03/2023

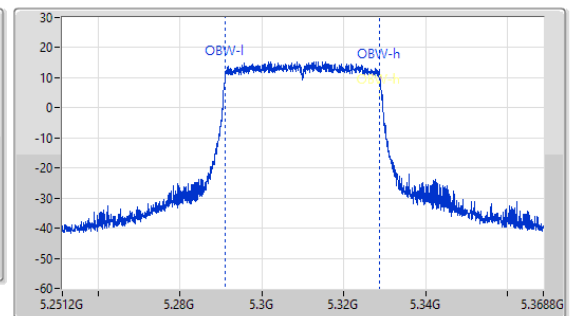
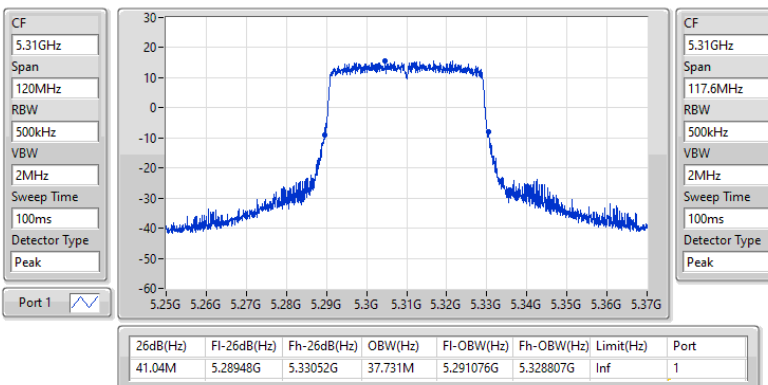


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

EBW

5310MHz

18/03/2023

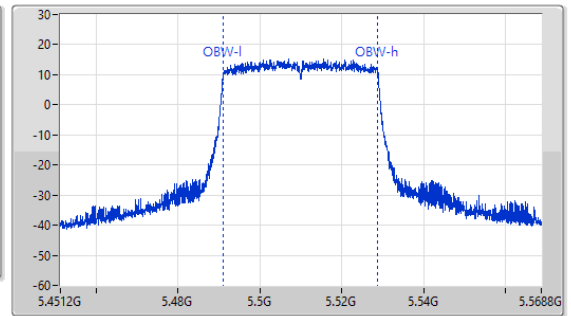
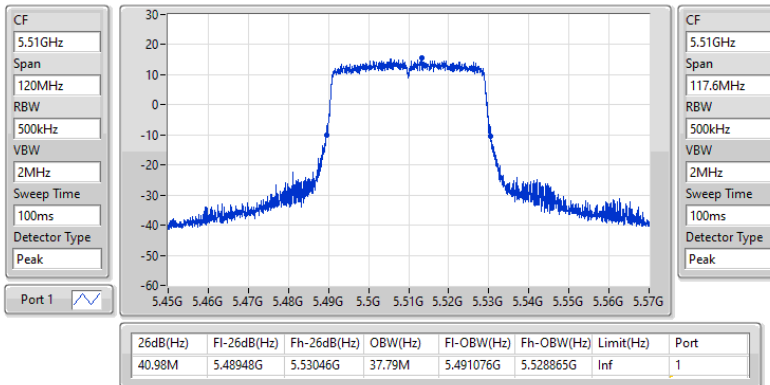


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5510MHz

18/03/2023

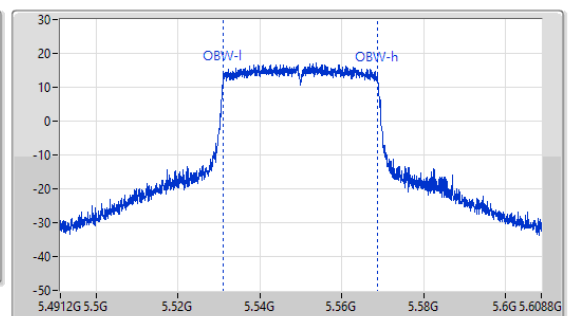
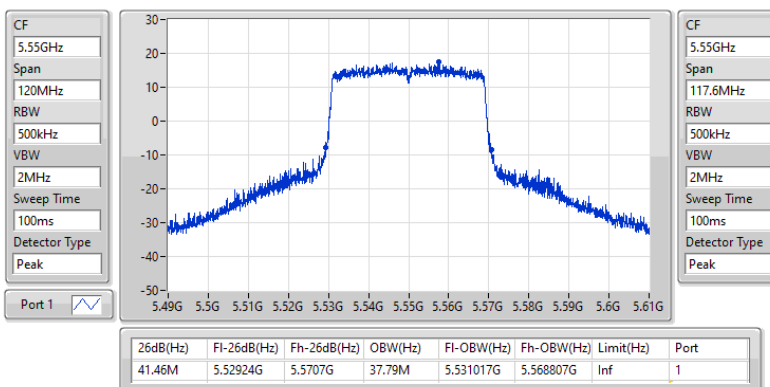


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5550MHz

19/03/2023

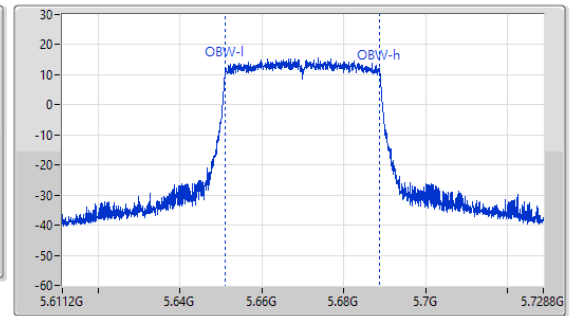
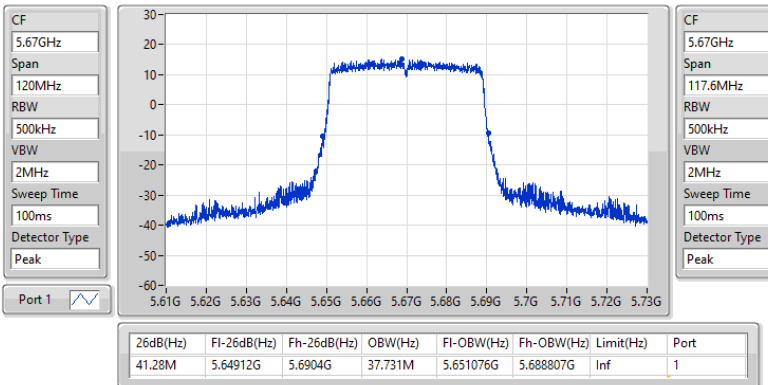


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5670MHz

18/03/2023

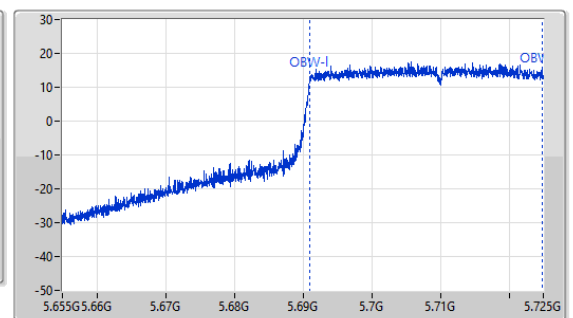
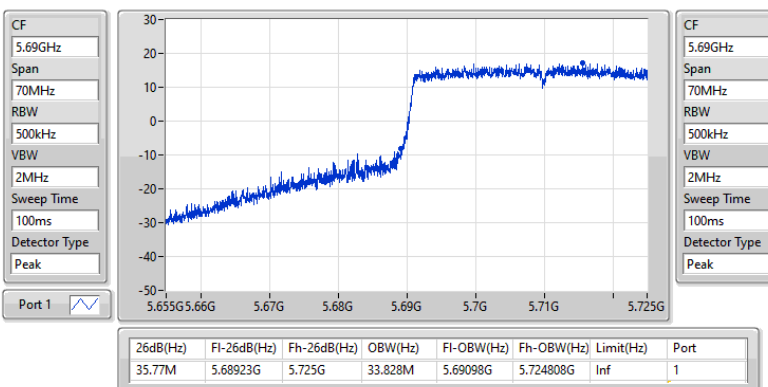


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5710MHz Straddle 5.47-5.725GHz

21/03/2023

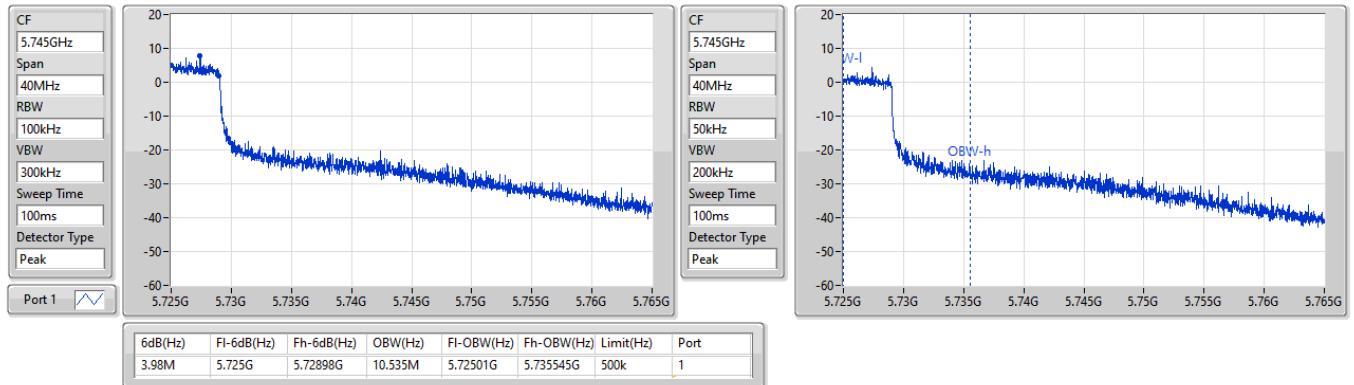


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5710MHz Straddle 5.725-5.85GHz

21/03/2023

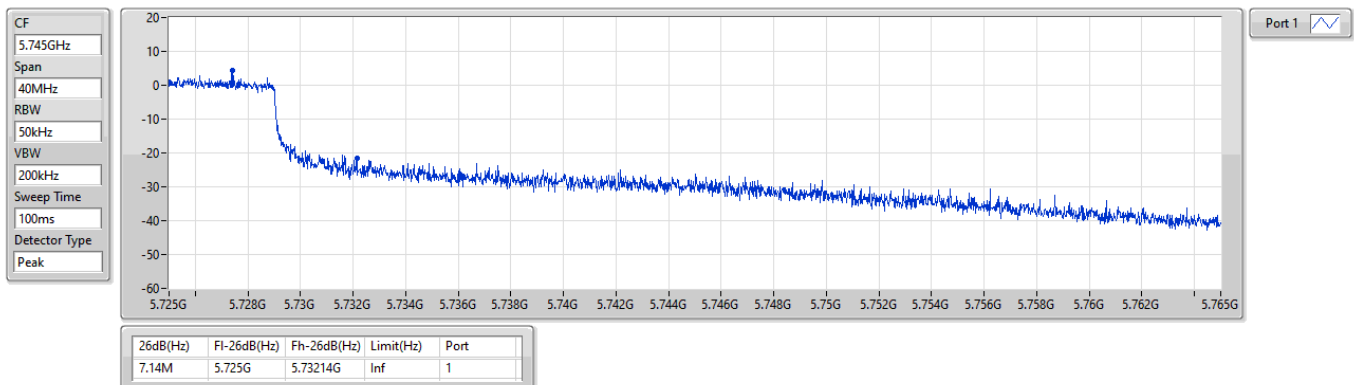


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5710MHz Straddle 5.725-5.85GHz

21/03/2023

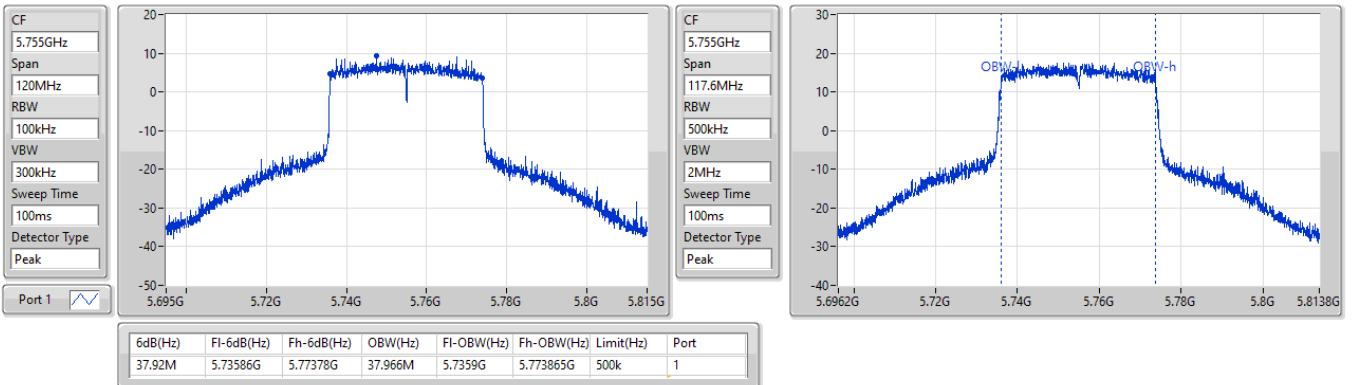


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

18/03/2023

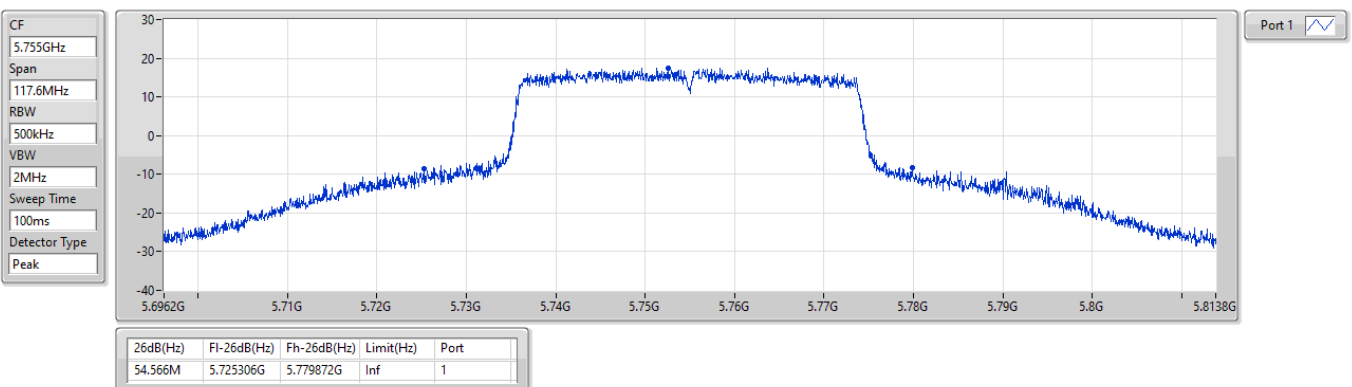


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5755MHz

18/03/2023

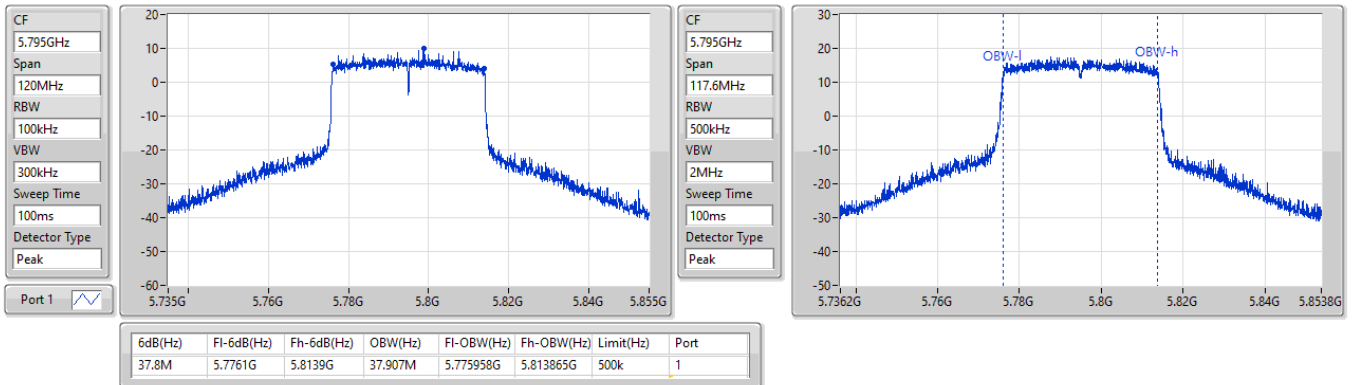


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

18/03/2023

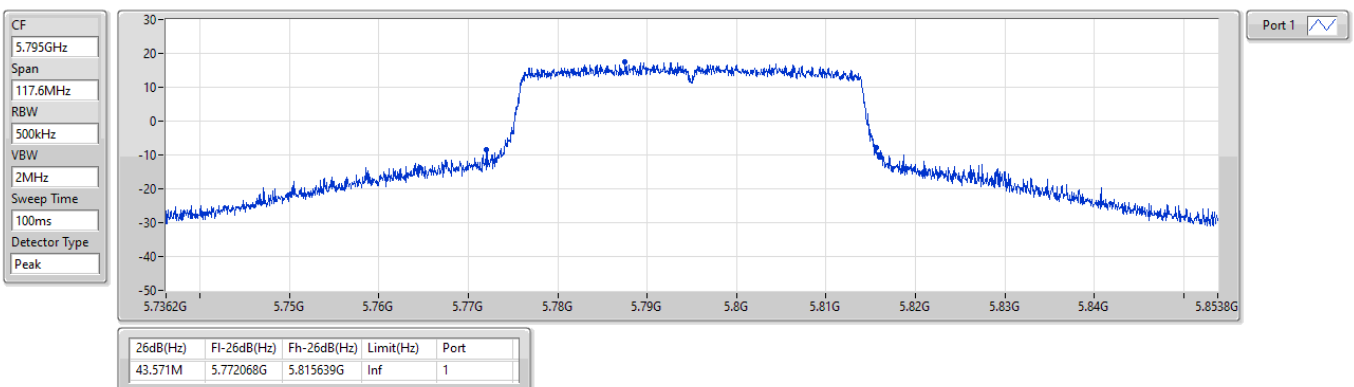


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

5795MHz

18/03/2023

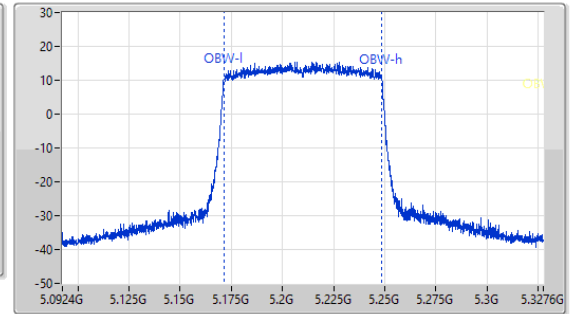
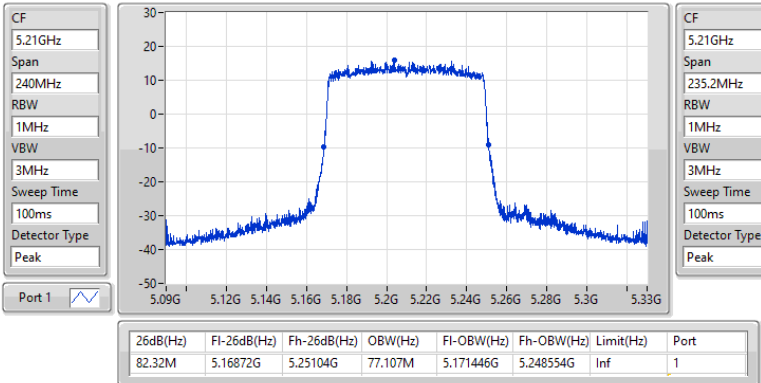


5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5210MHz

18/03/2023

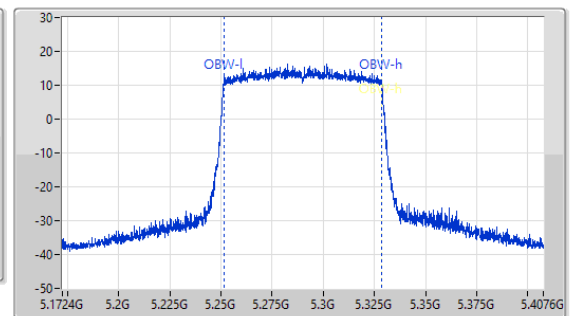
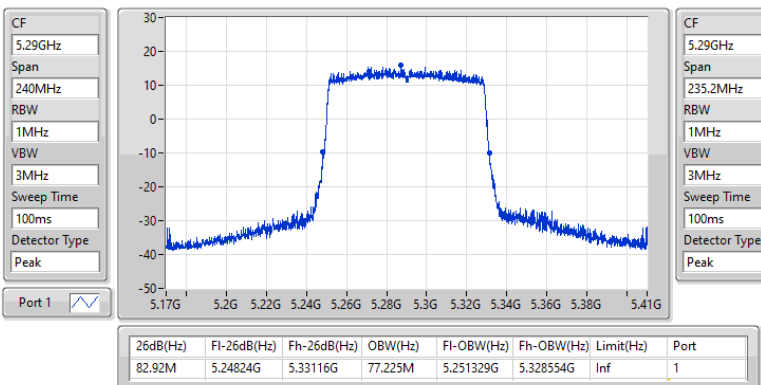


5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5290MHz

18/03/2023

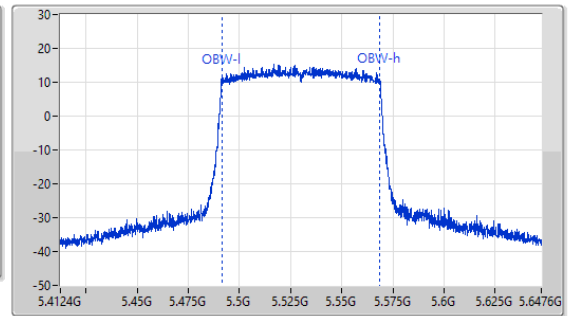
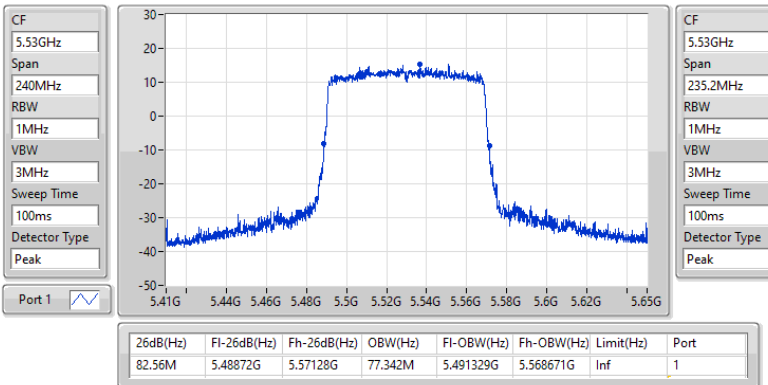


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5530MHz

18/03/2023

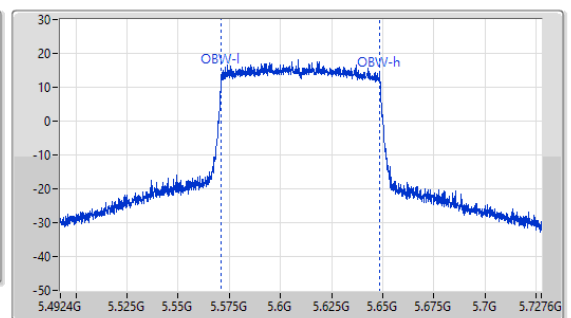
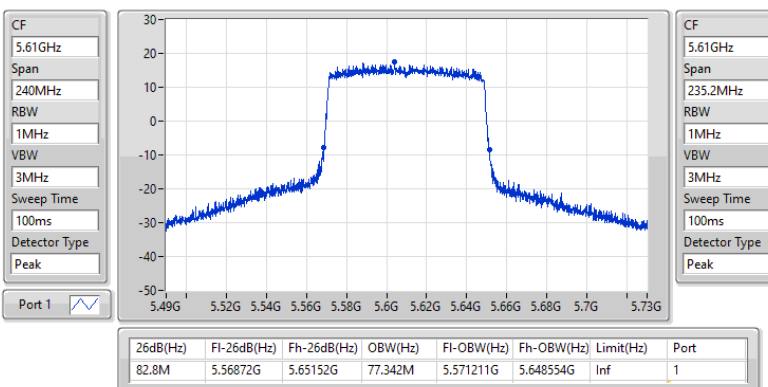


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5610MHz

18/03/2023

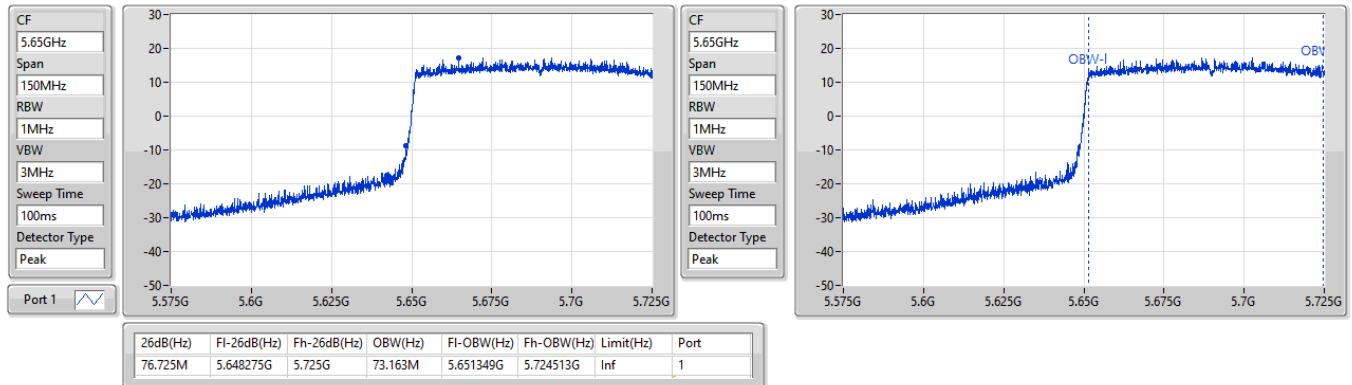


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.47-5.725GHz

21/03/2023

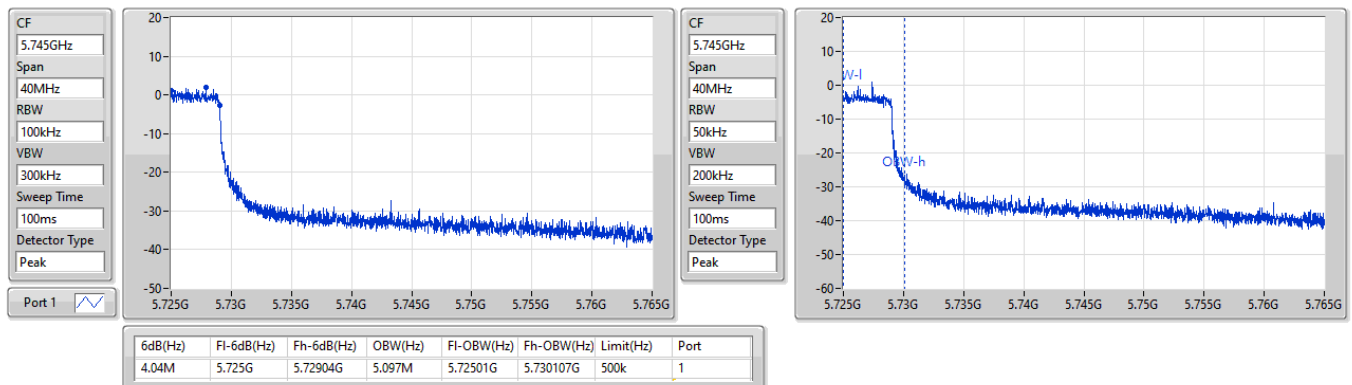


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.725-5.85GHz

21/03/2023

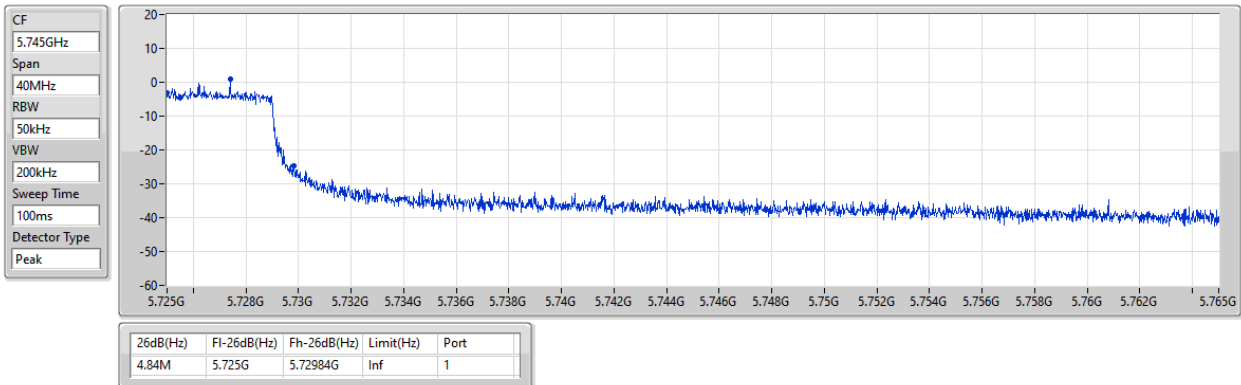


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.725-5.85GHz

21/03/2023

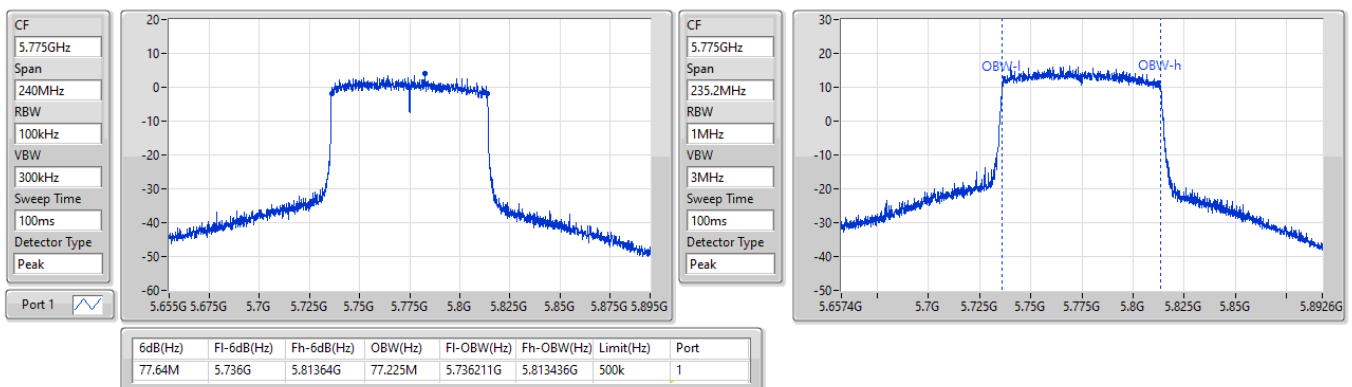


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

18/03/2023



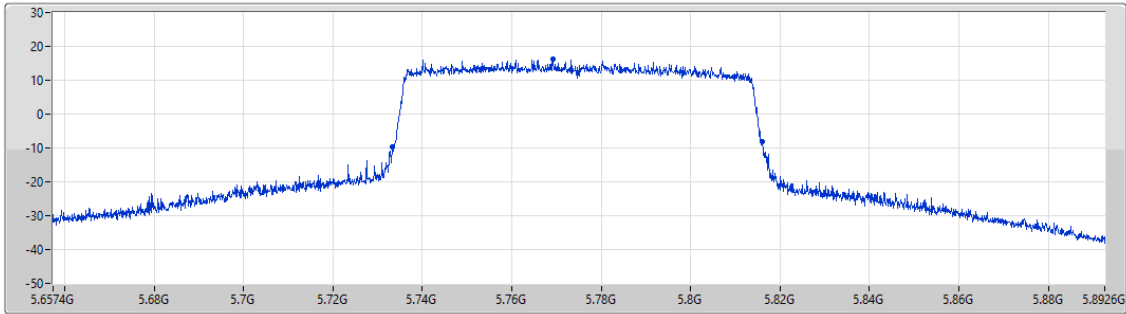
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5775MHz

18/03/2023

CF
5.775GHz
Span
235.2MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
82.79M	5.733252G	5.816042G	Inf	1

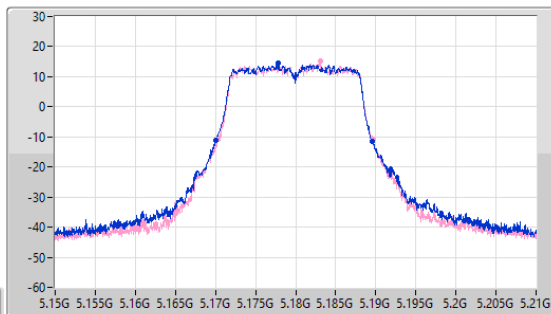
5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

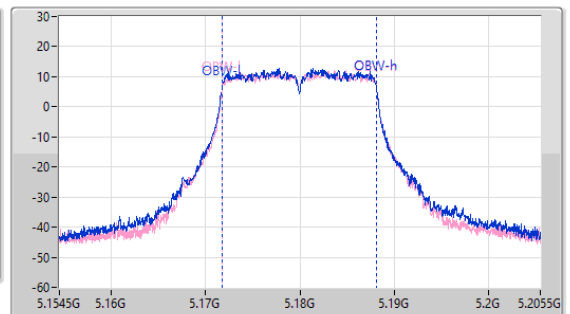
18/03/2023

CF
5.18GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.53M	5.17001G	5.18954G	16.388M	5.171717G	5.188105G	Inf	1
19.29M	5.17034G	5.18963G	16.363M	5.171768G	5.18813G	Inf	2

CF
5.18GHz
Span
51MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

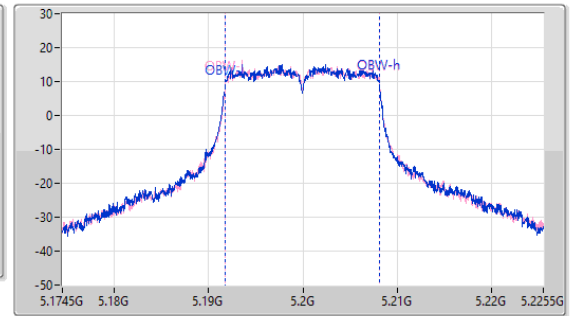
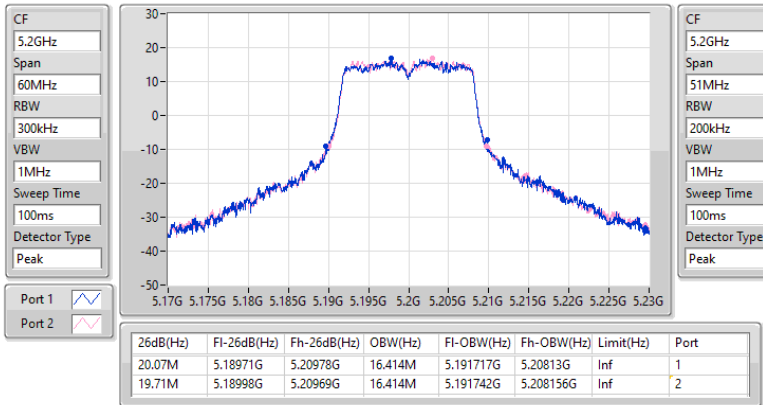


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5200MHz

18/03/2023

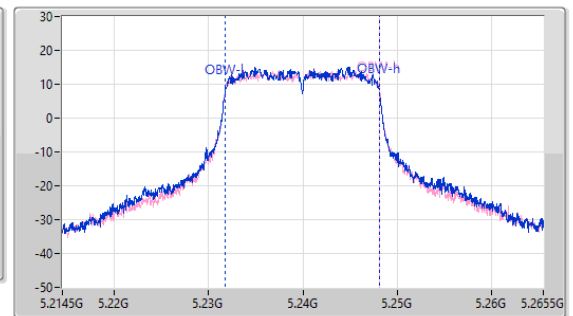
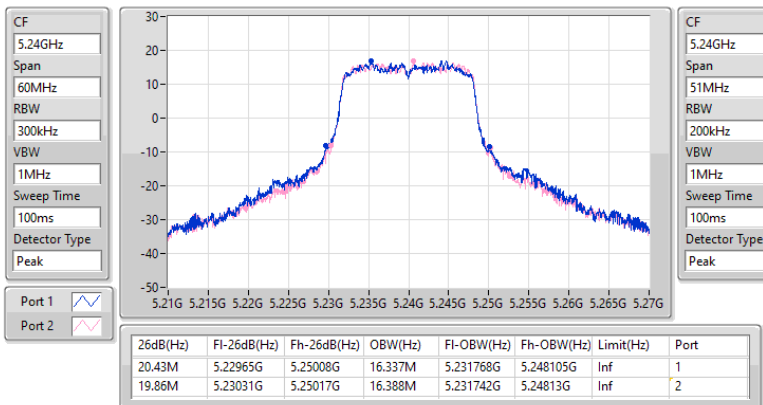


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5240MHz

18/03/2023

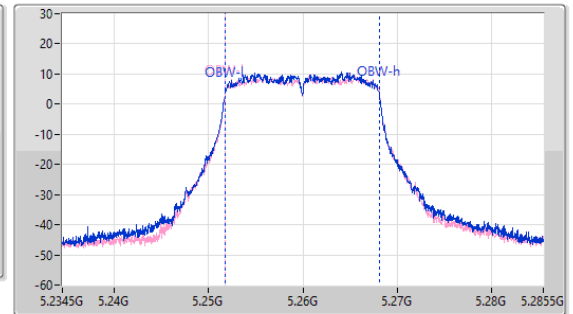
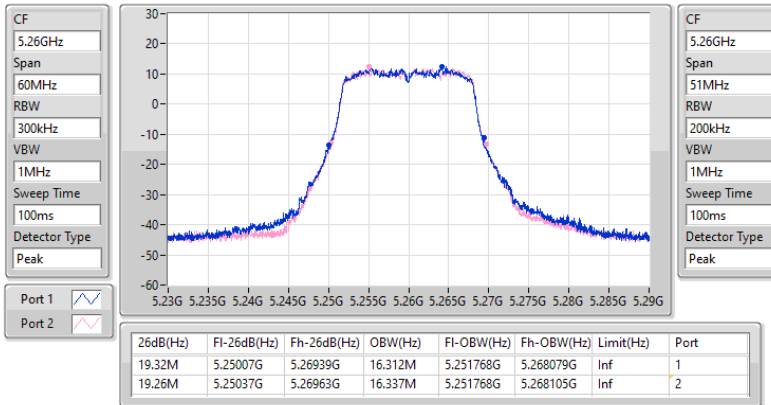


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5260MHz

19/03/2023

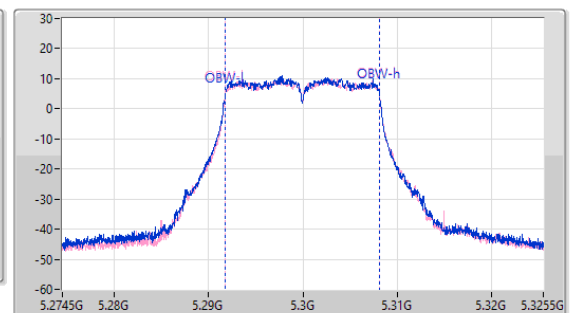
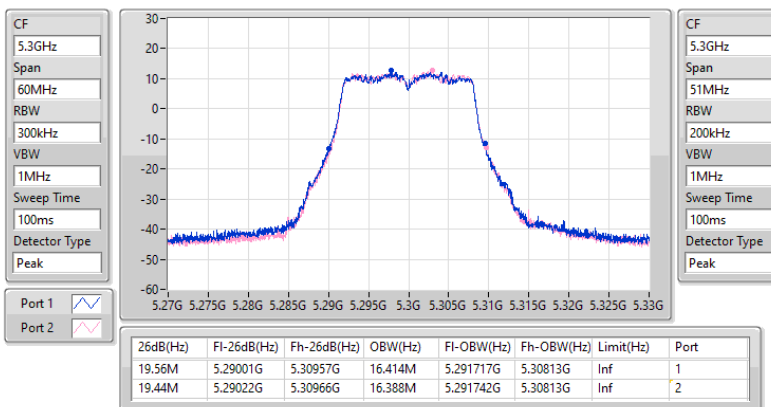


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

19/03/2023

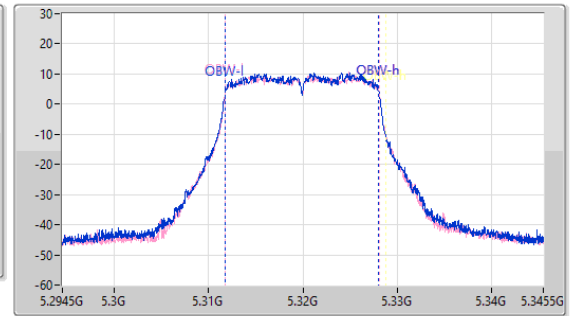
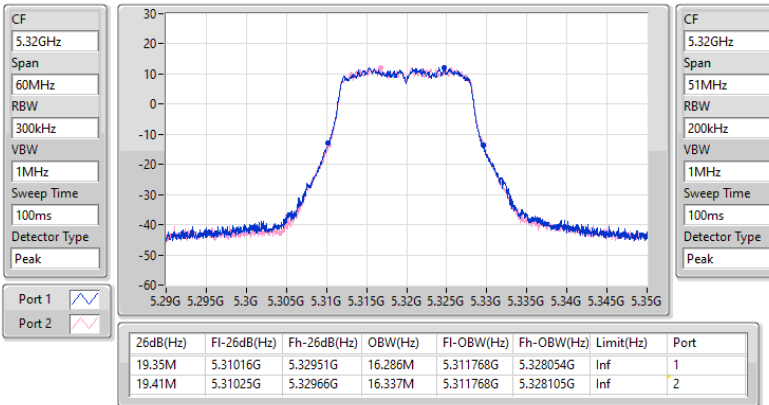


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

19/03/2023

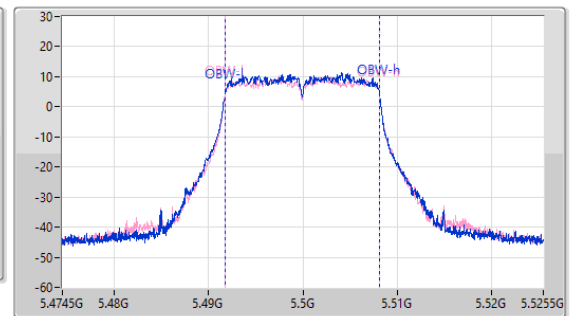
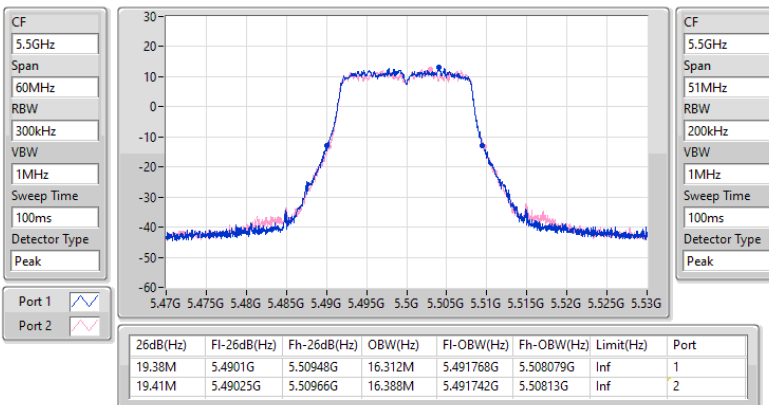


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

19/03/2023

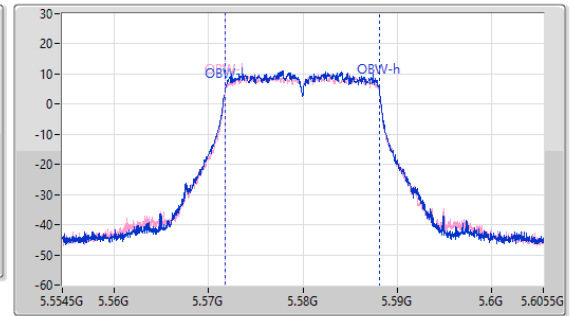
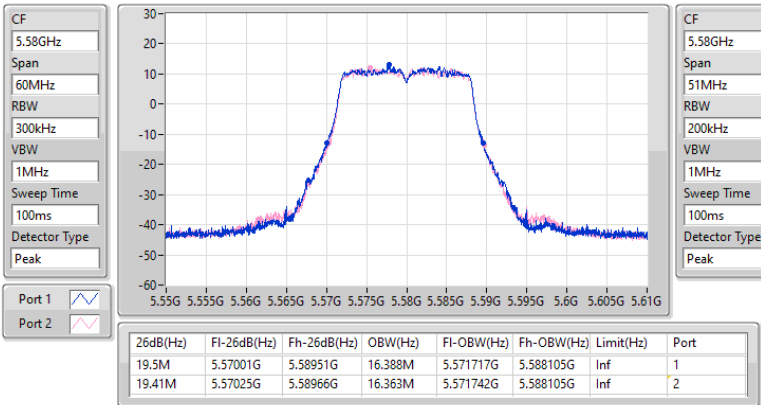


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

19/03/2023

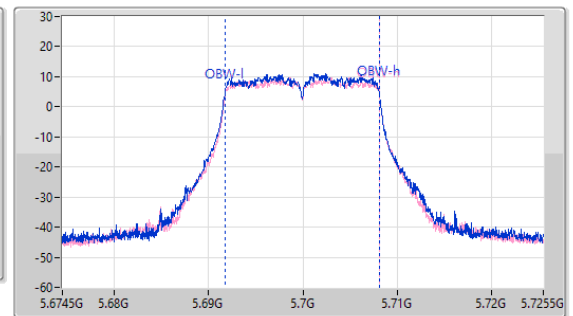
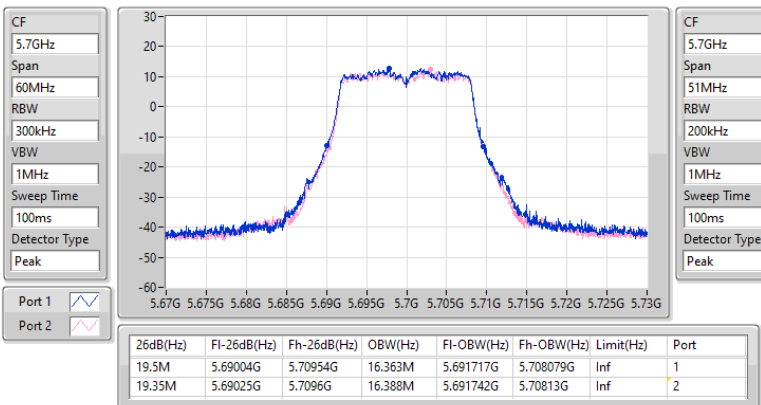


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

19/03/2023

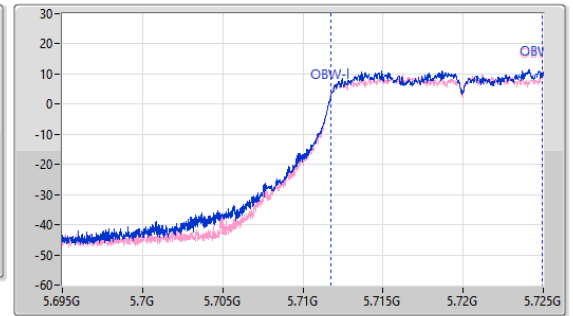
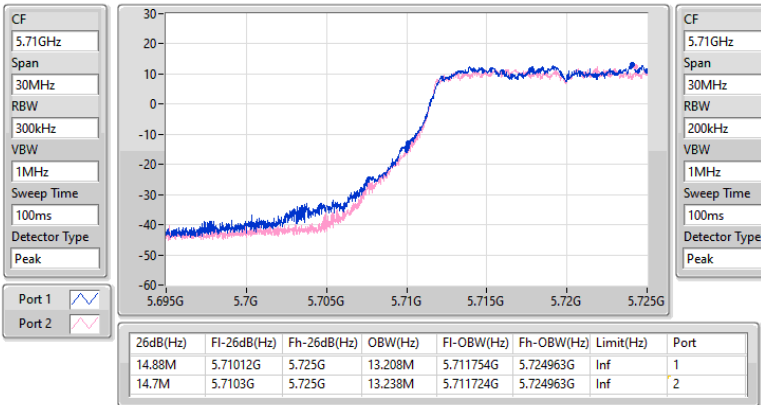


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

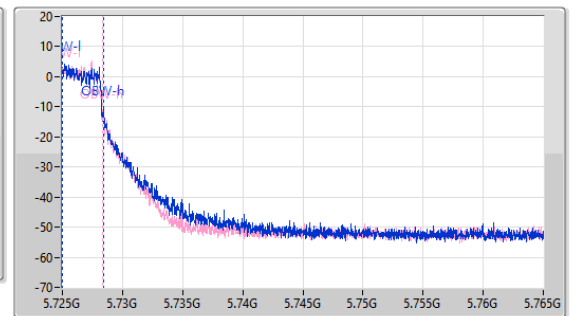
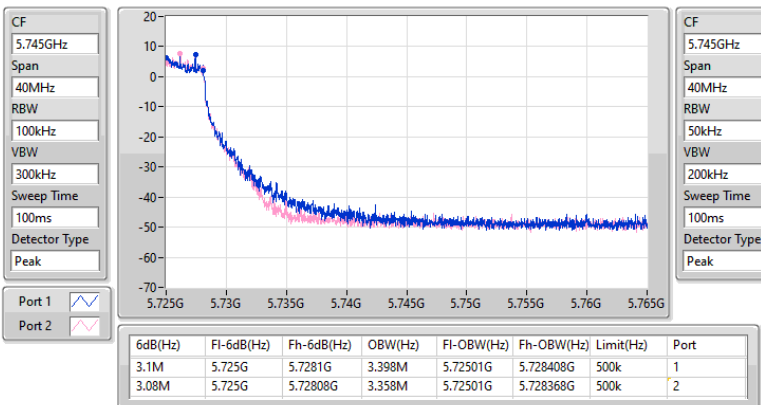


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

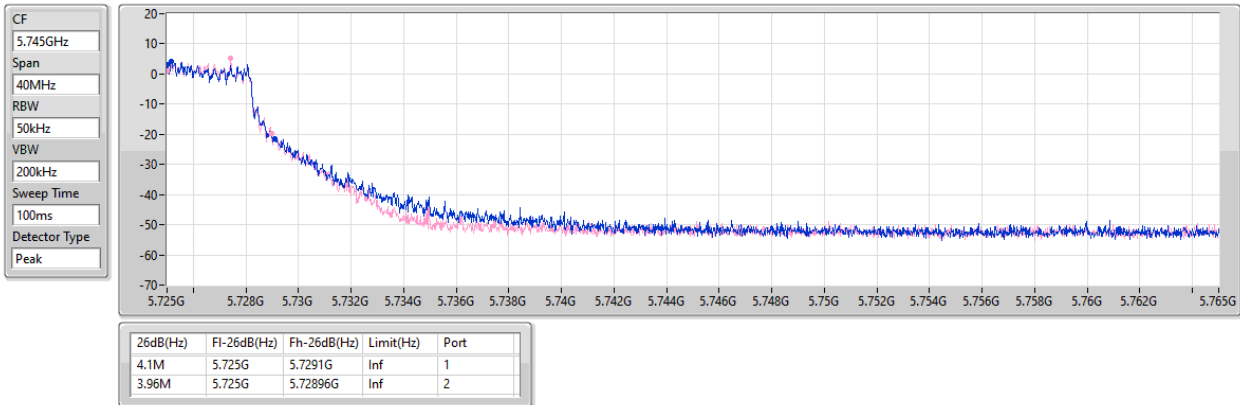


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

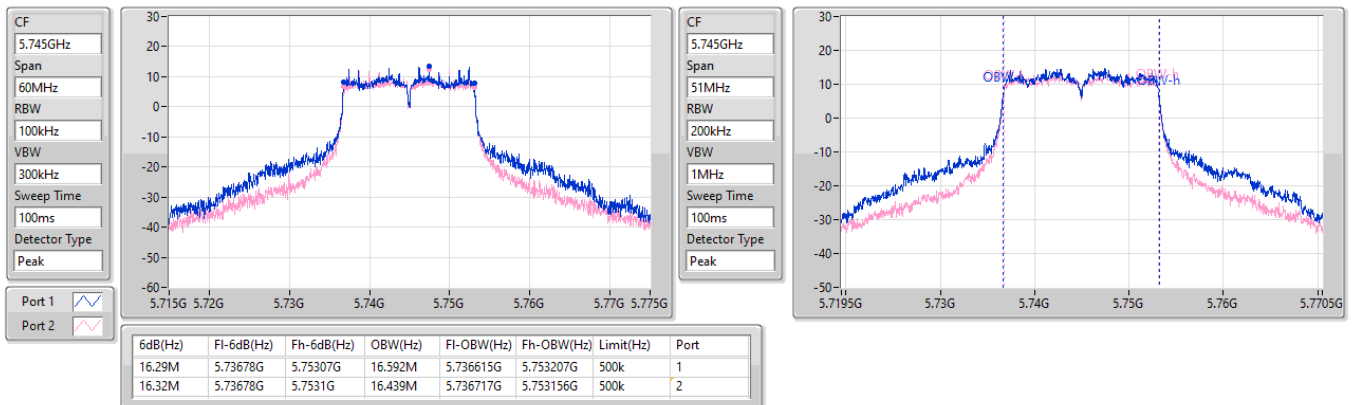


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

18/03/2023

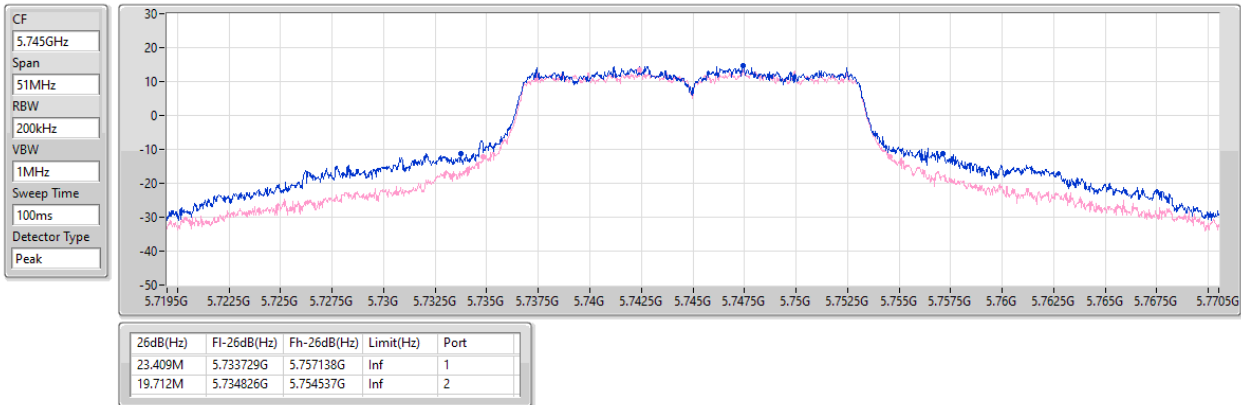


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

18/03/2023

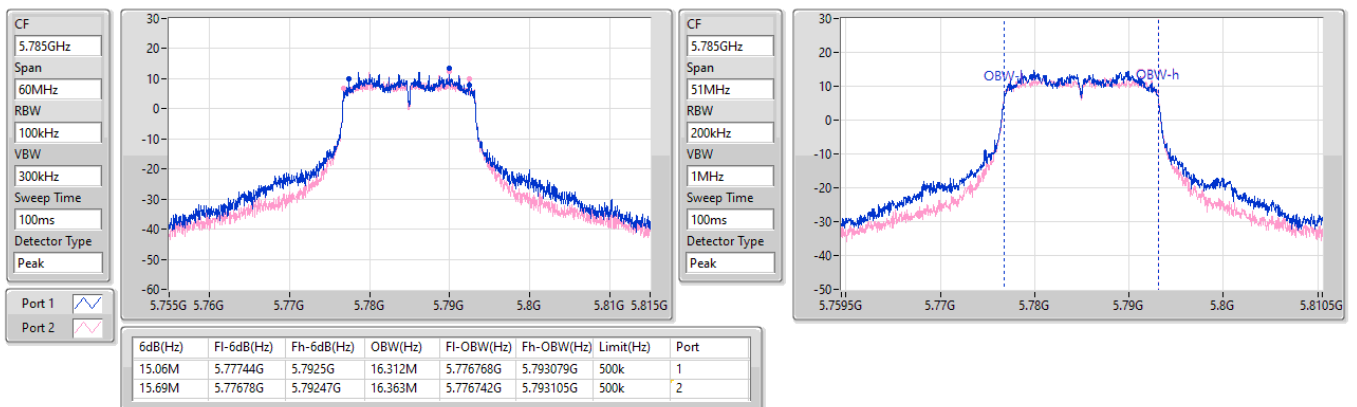


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

18/03/2023

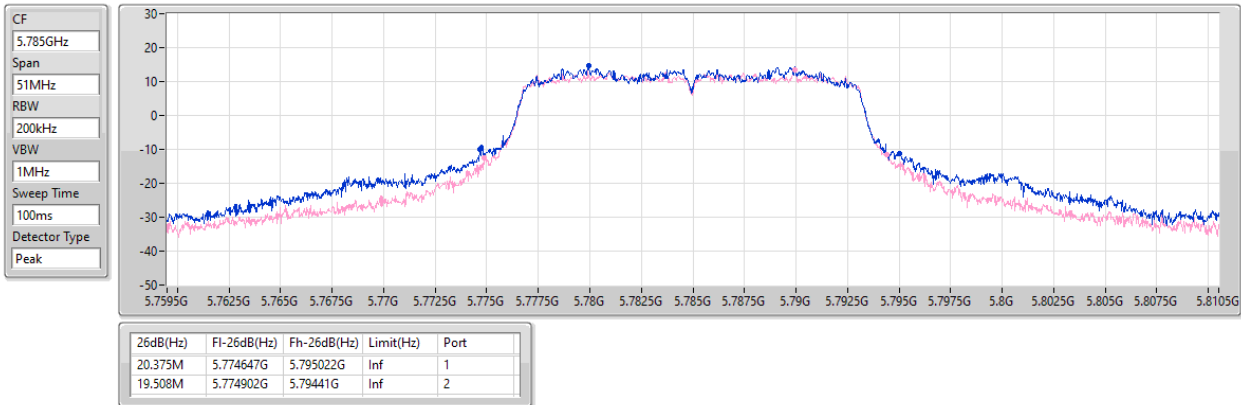


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

18/03/2023

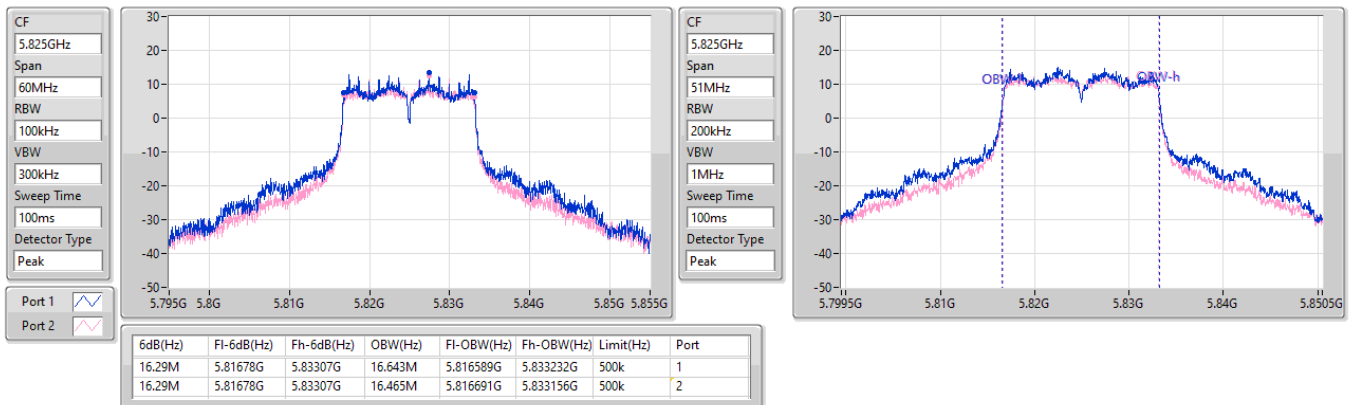


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

18/03/2023

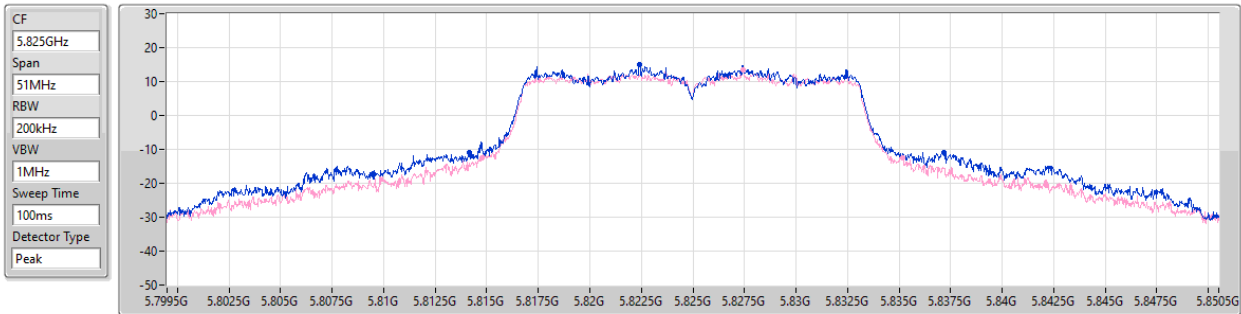


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

18/03/2023



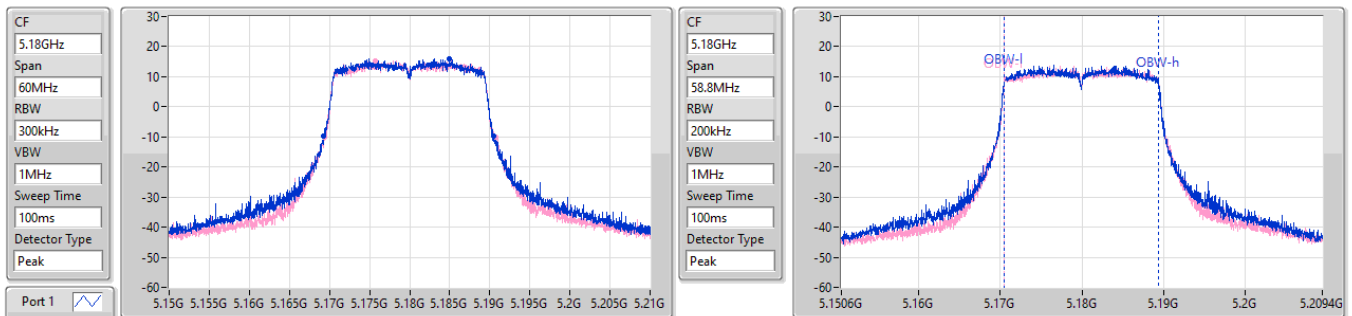
26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
23.027M	5.814163G	5.837189G	Inf	1
20.4M	5.814775G	5.835175G	Inf	2

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

EBW

5180MHz

18/03/2023



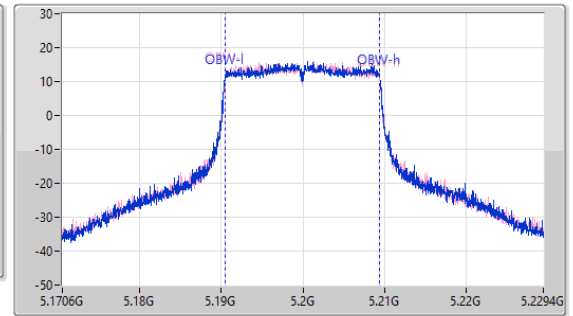
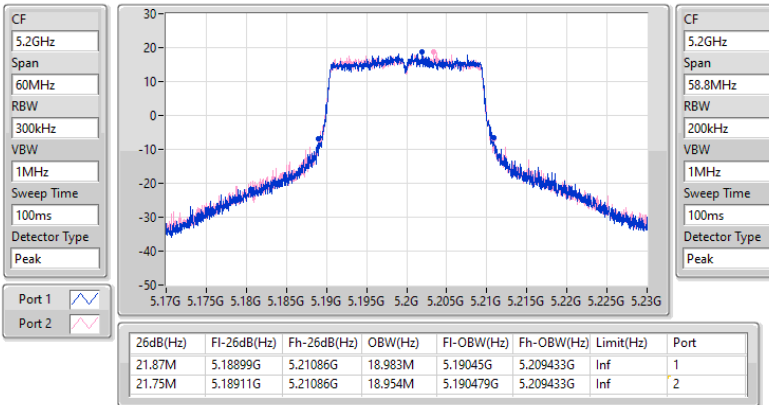
26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	FI-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.24M	5.16929G	5.19053G	18.895M	5.170479G	5.189374G	Inf	1
21.42M	5.16935G	5.19077G	18.895M	5.170509G	5.189403G	Inf	2

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

EBW

5200MHz

18/03/2023

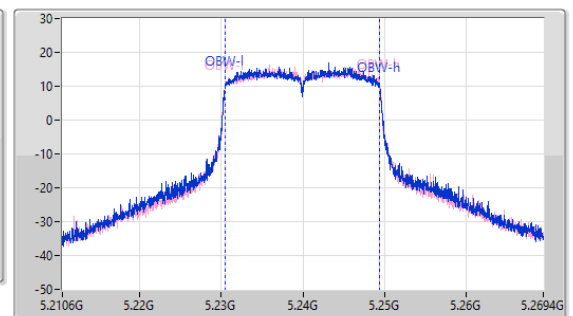
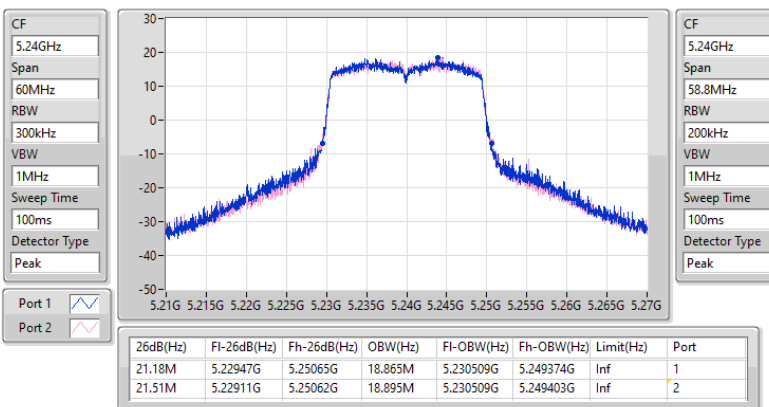


5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

18/03/2023

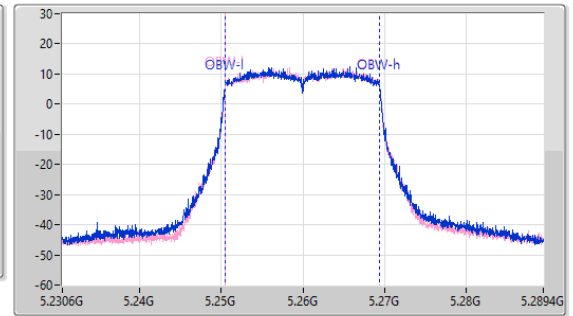
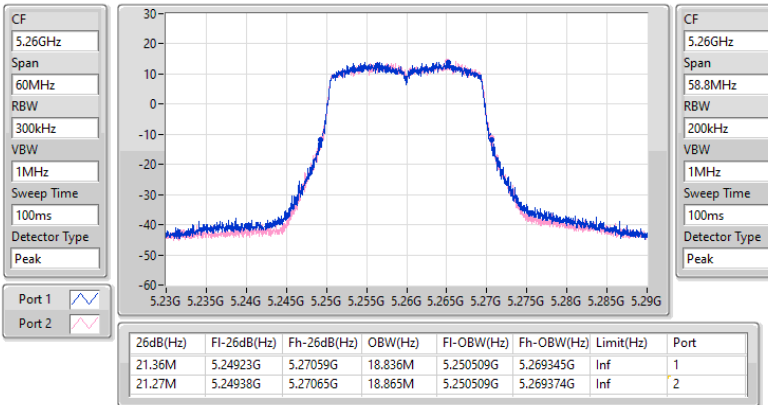


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5260MHz

19/03/2023

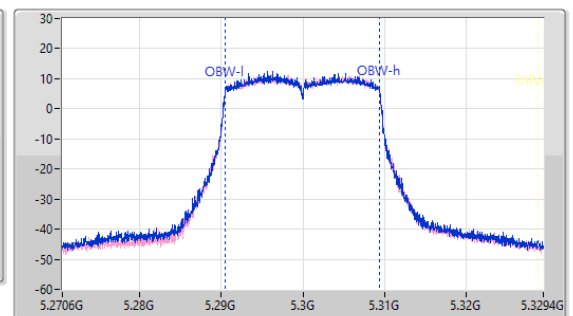
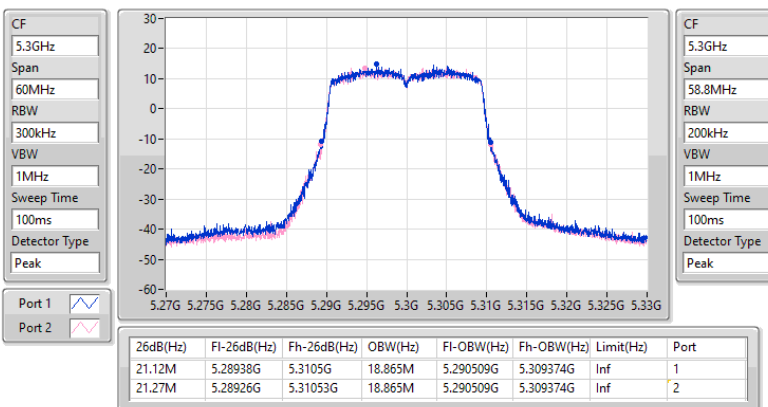


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5300MHz

19/03/2023

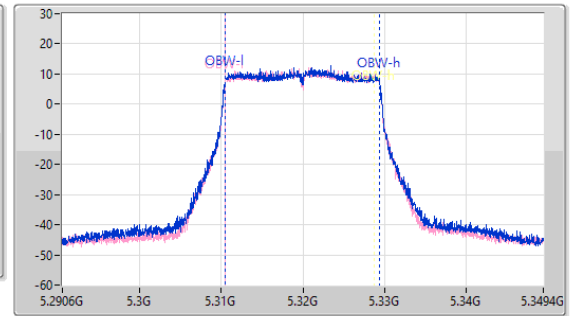
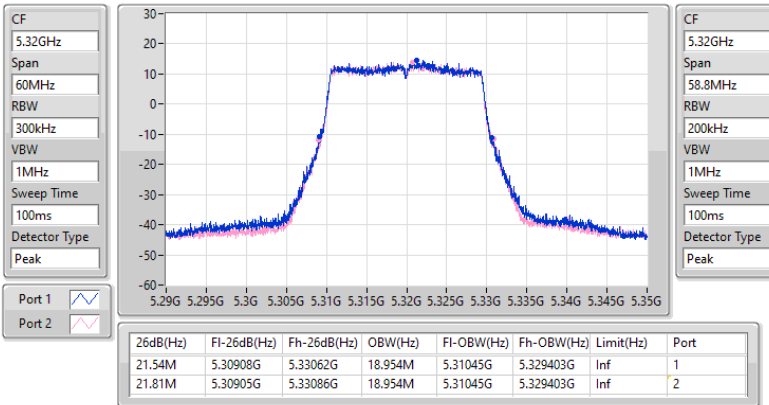


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5320MHz

19/03/2023

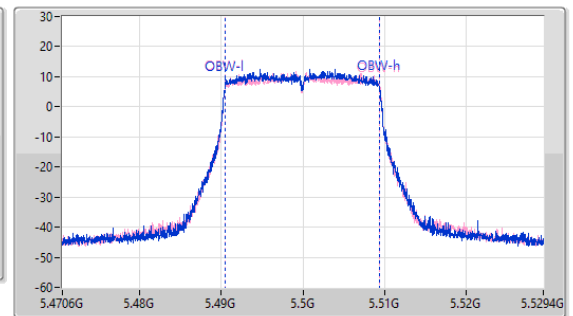
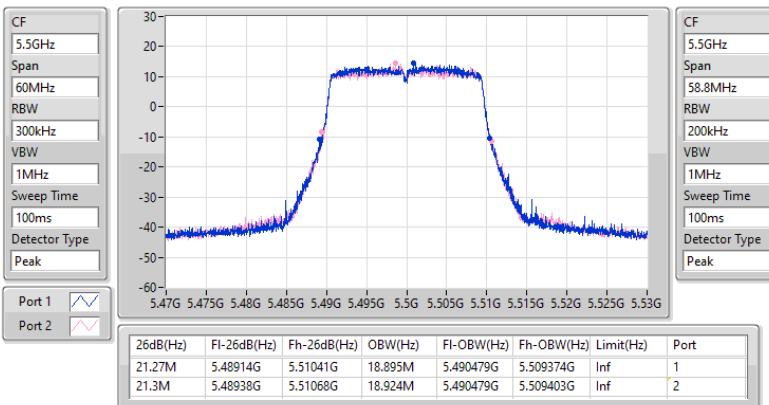


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5500MHz

19/03/2023

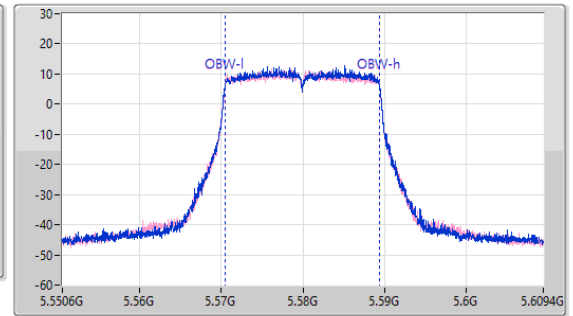
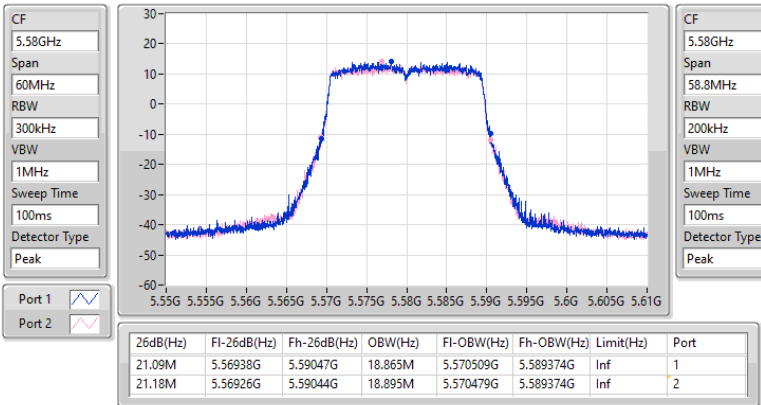


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5580MHz

19/03/2023

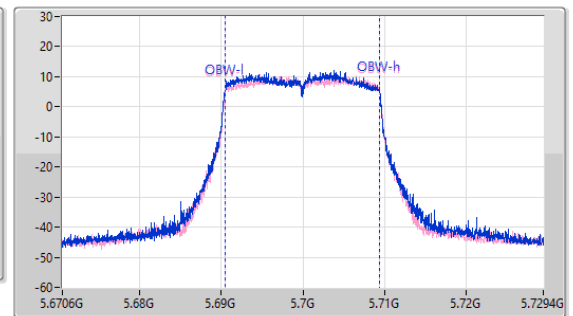
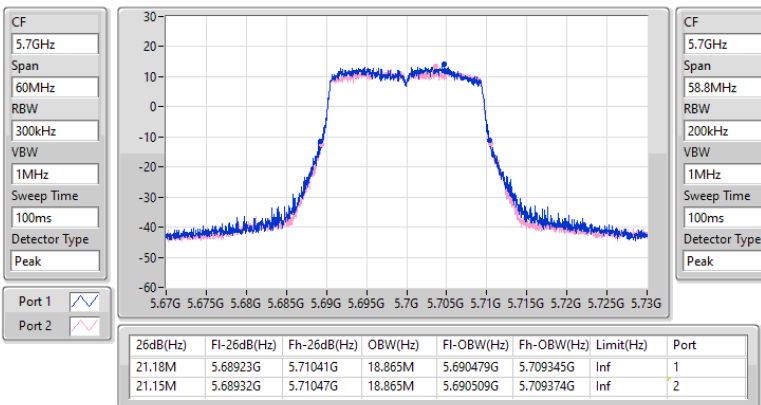


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5700MHz

18/03/2023

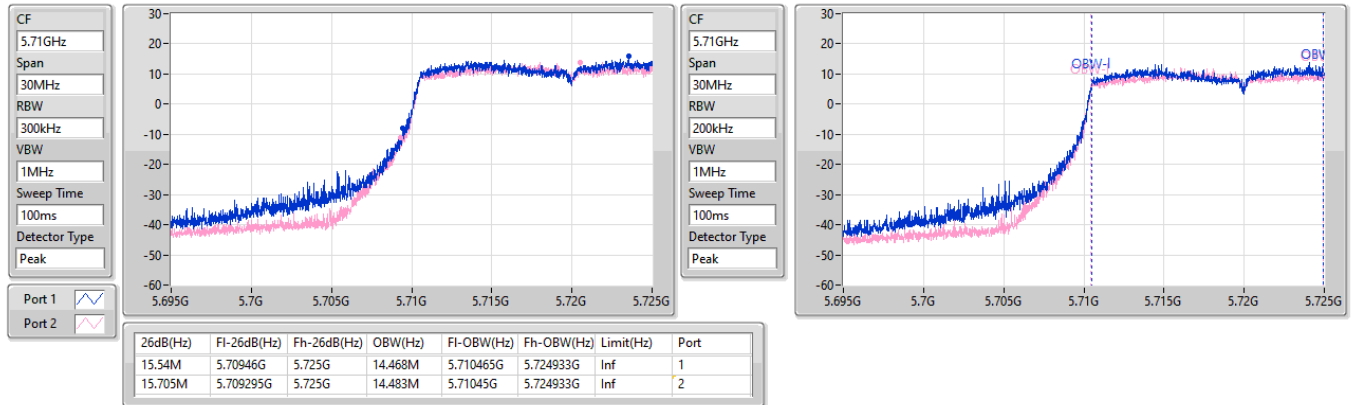


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

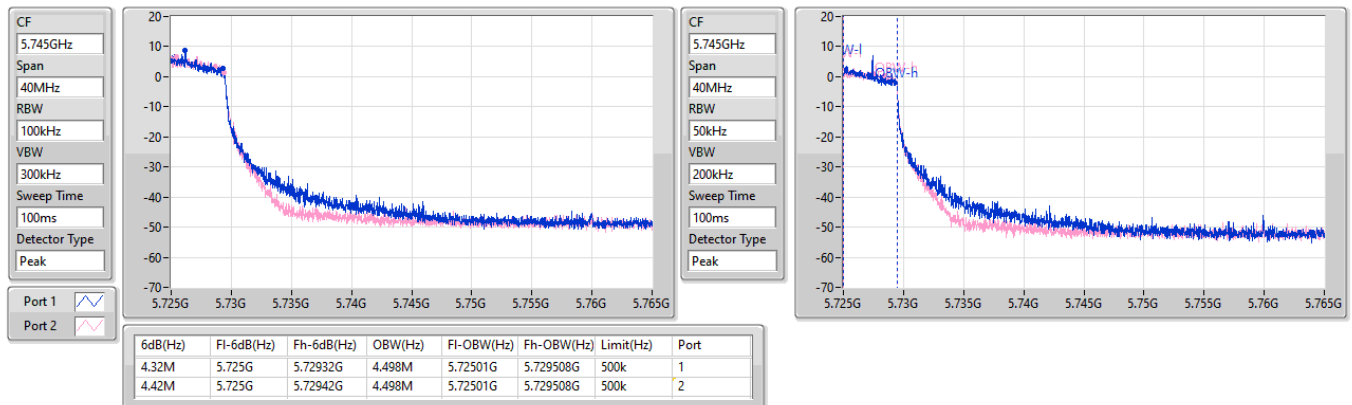


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

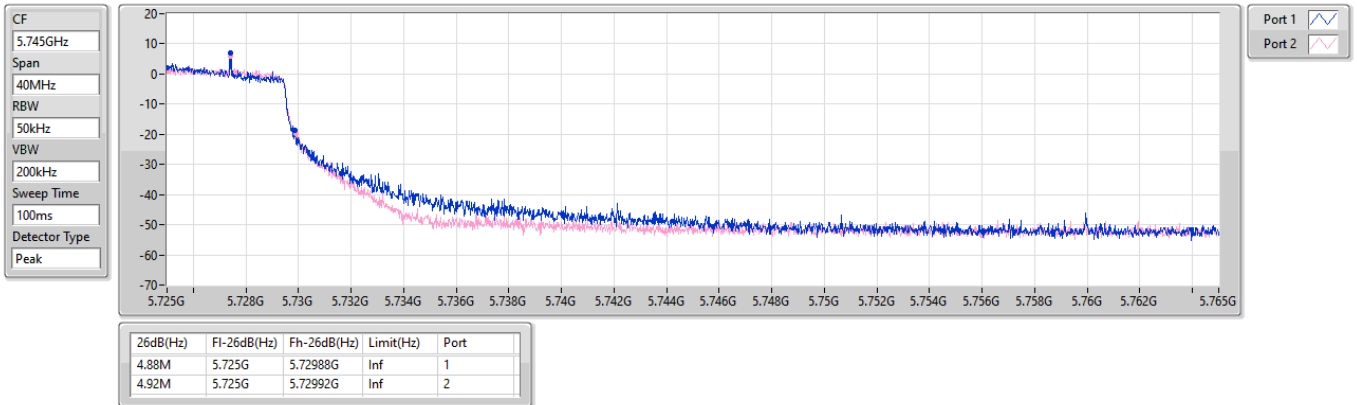


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

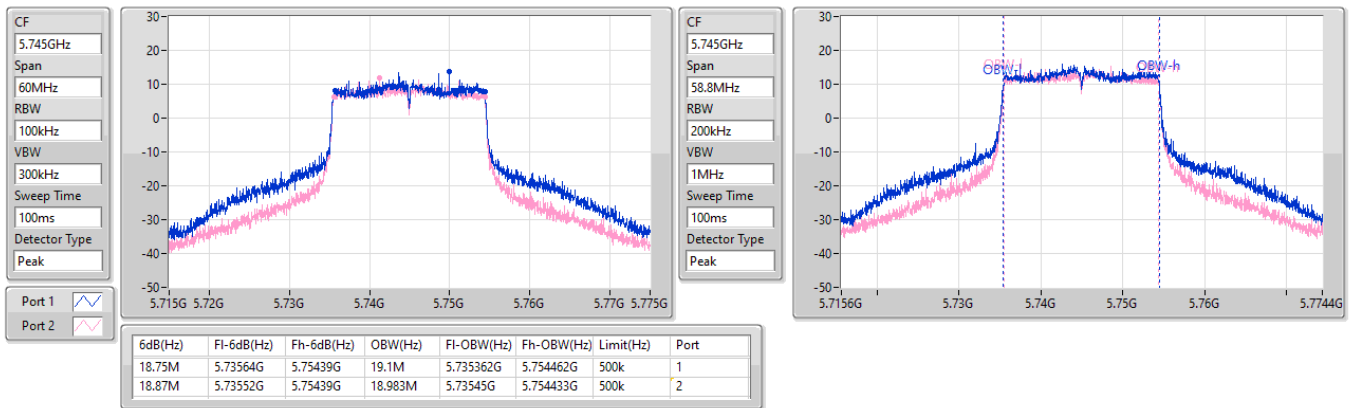


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

18/03/2023

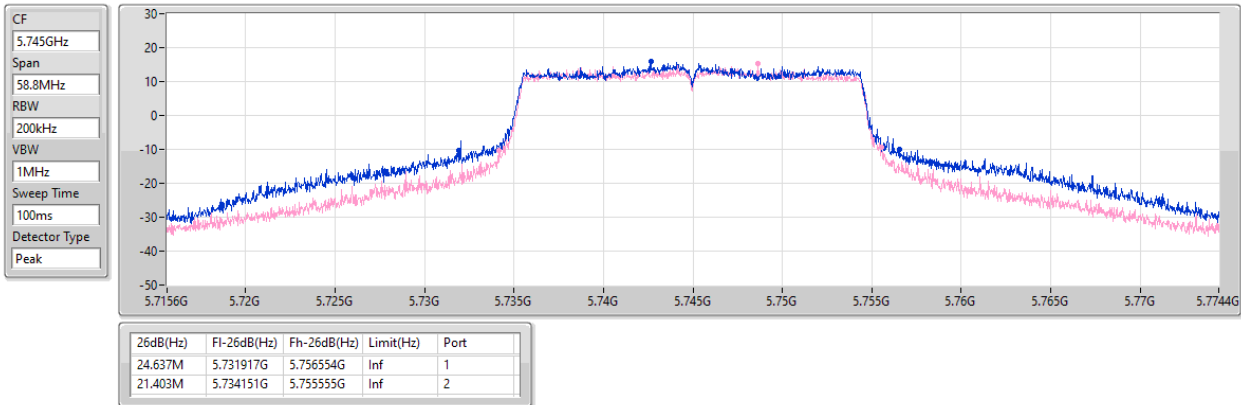


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

18/03/2023

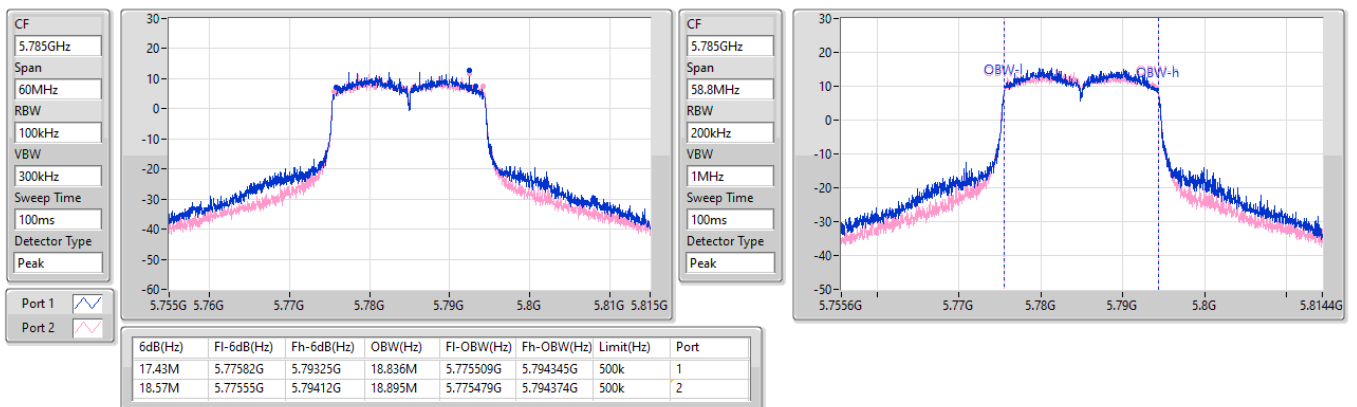


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

18/03/2023

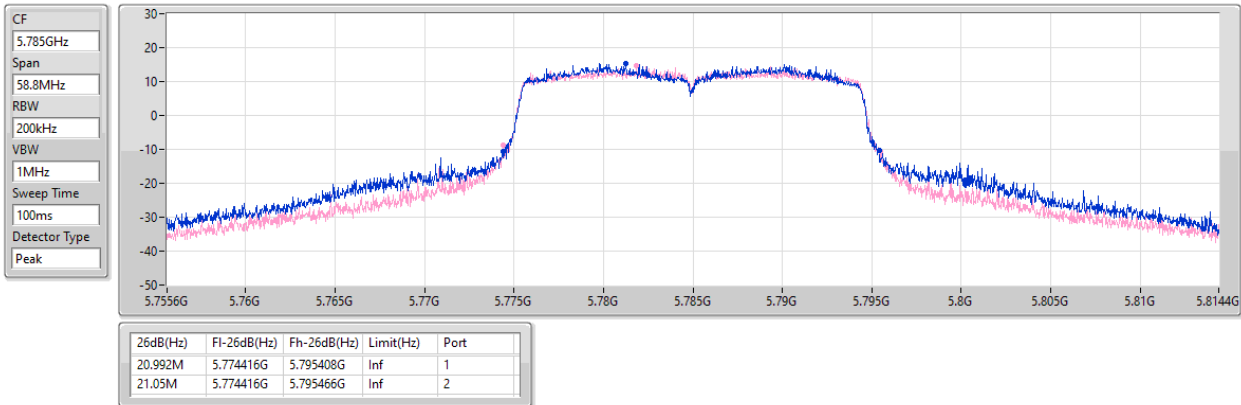


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

18/03/2023

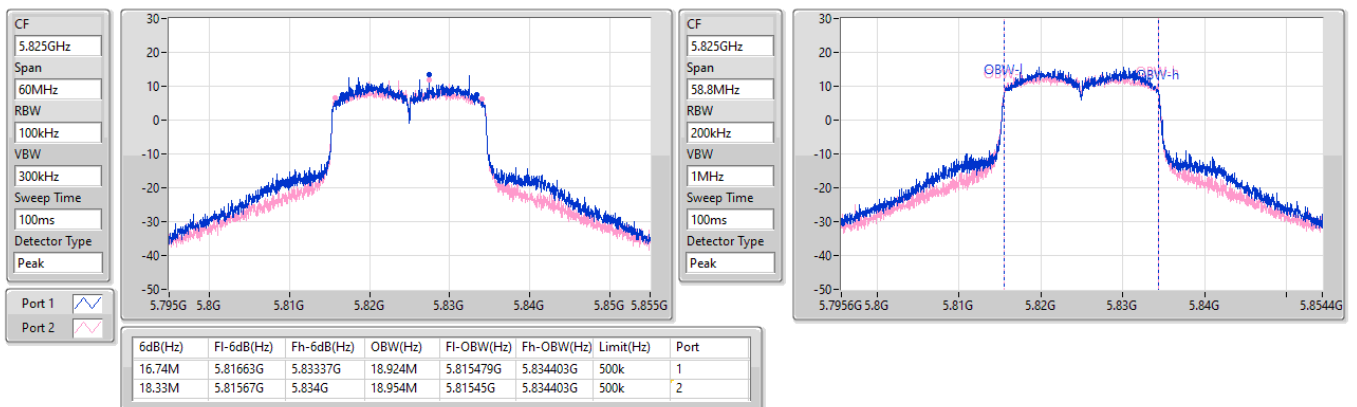


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

18/03/2023



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

EBW

5825MHz

18/03/2023

CF
5.825GHz

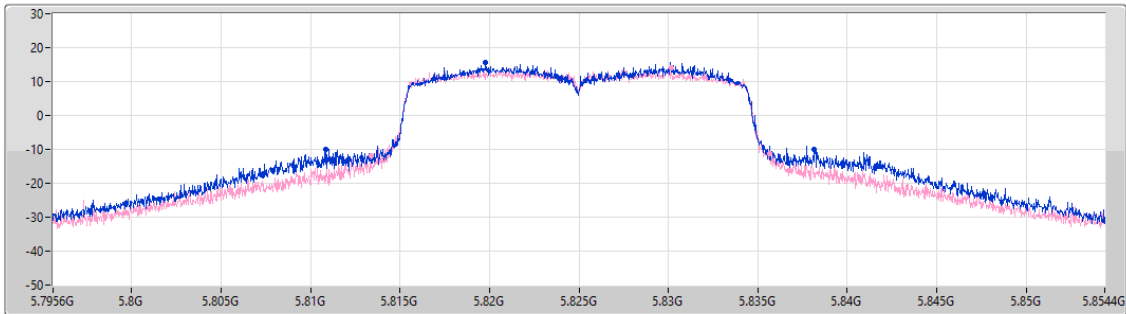
Span
58.8MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Peak



26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
27.313M	5.810859G	5.838171G	Inf	1
22.285M	5.813387G	5.835672G	Inf	2

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

EBW

5190MHz

18/03/2023

CF
5.19GHz

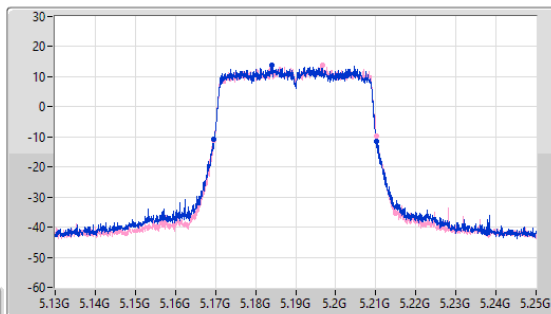
Span
120MHz

RBW
500kHz

VBW
2MHz

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
40.56M	5.1696G	5.21016G	37.672M	5.171076G	5.208748G	Inf	1
40.62M	5.16966G	5.21028G	37.731M	5.171135G	5.208865G	Inf	2

CF
5.19GHz

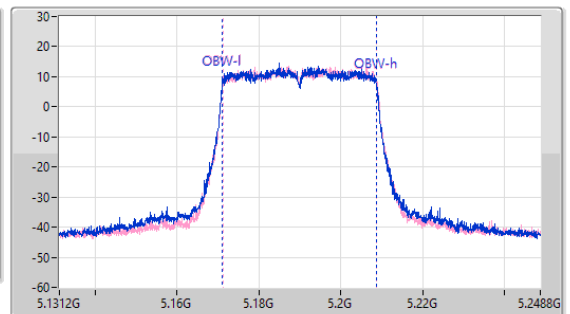
Span
117.6MHz

RBW
500kHz

VBW
2MHz

Sweep Time
100ms

Detector Type
Peak

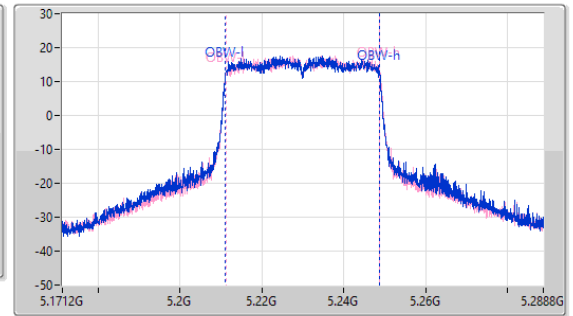
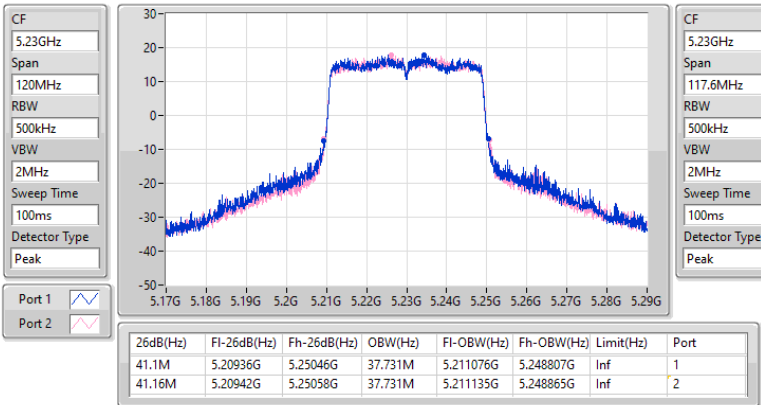


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

5230MHz

19/03/2023

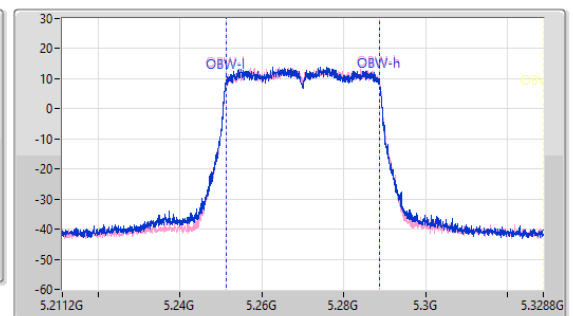
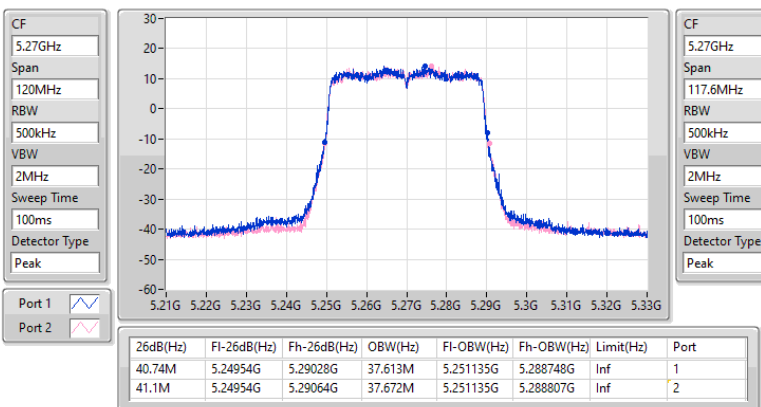


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

5270MHz

19/03/2023

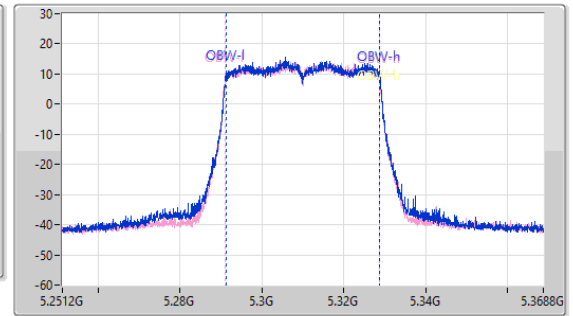
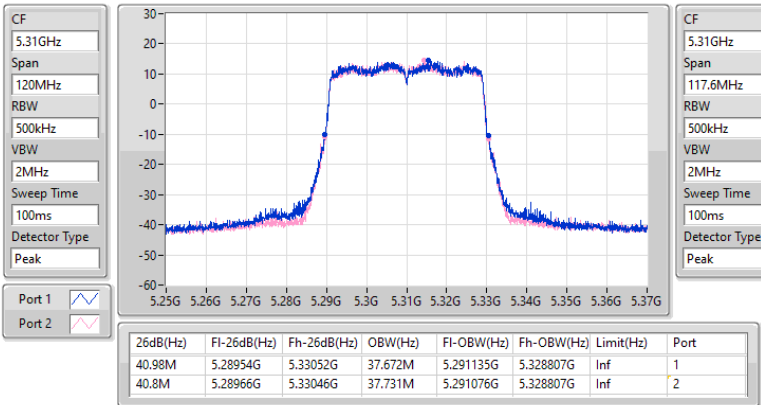


5.25-5.35GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5310MHz

19/03/2023

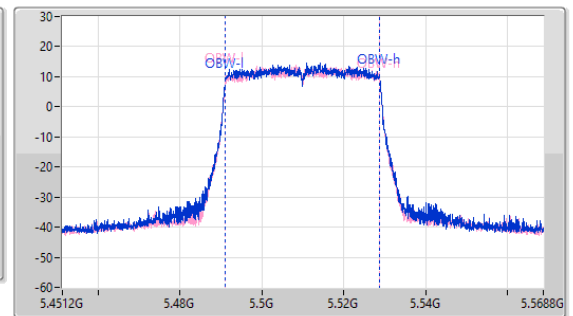
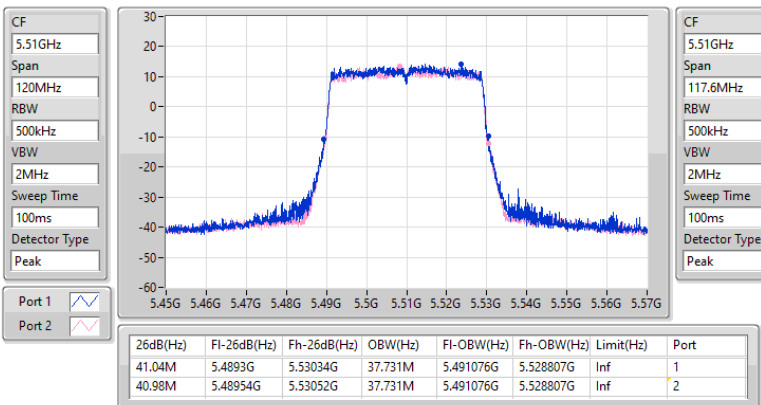


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5510MHz

18/03/2023

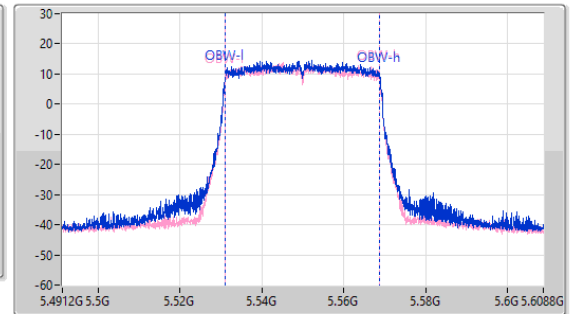
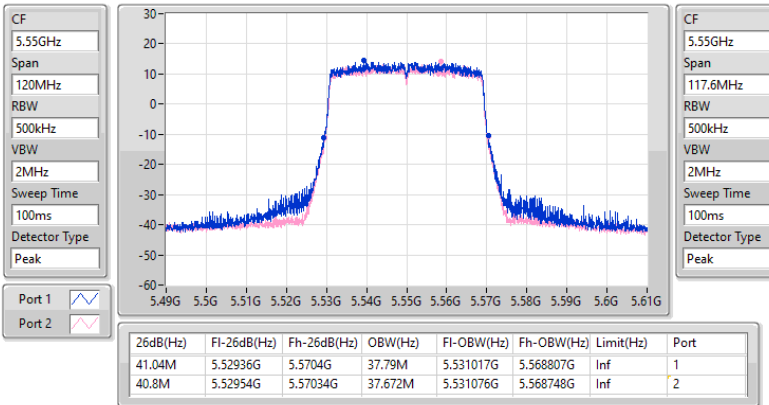


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5550MHz

19/03/2023

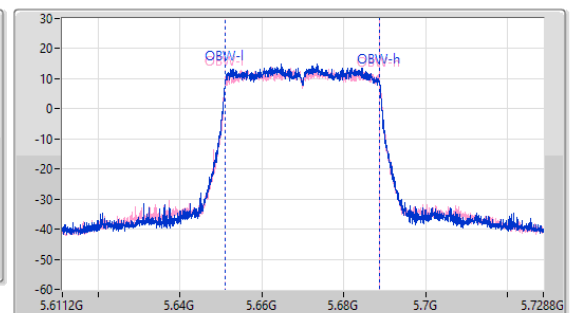
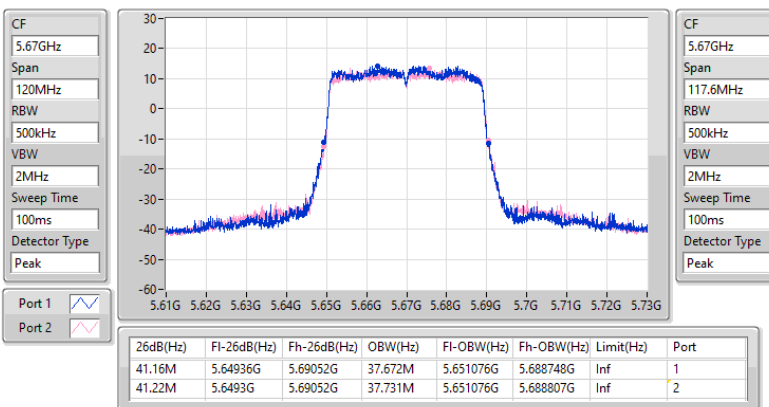


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5670MHz

18/03/2023

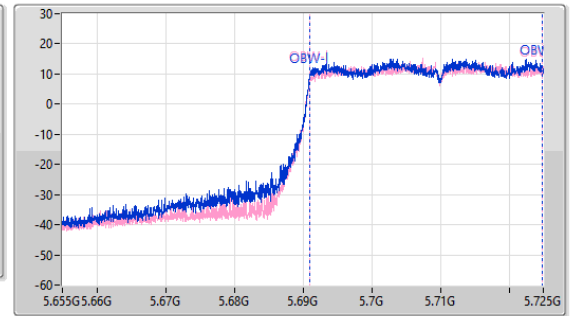
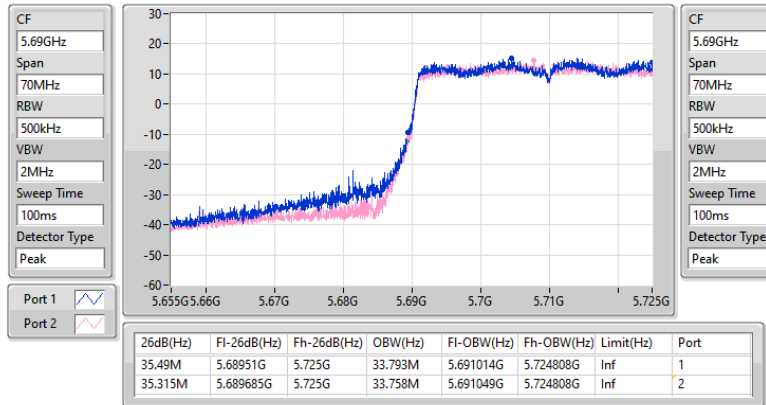


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

21/03/2023

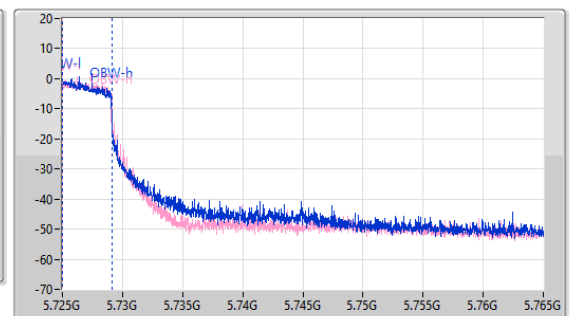
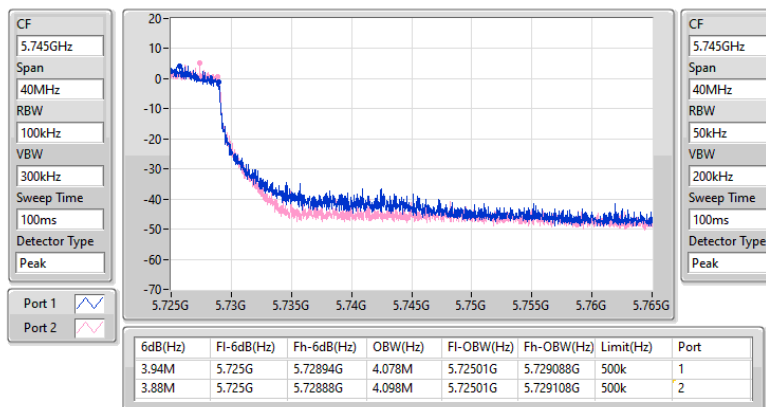


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

21/03/2023

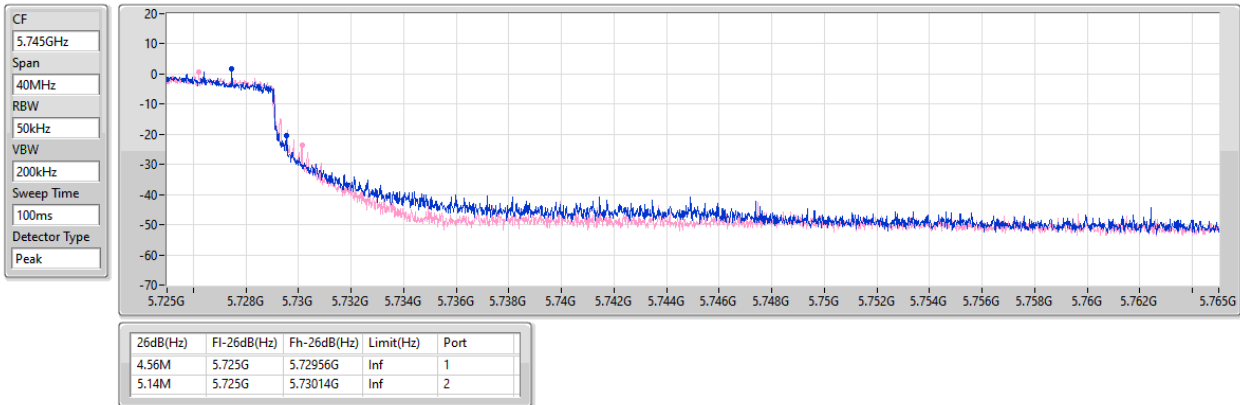


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

21/03/2023

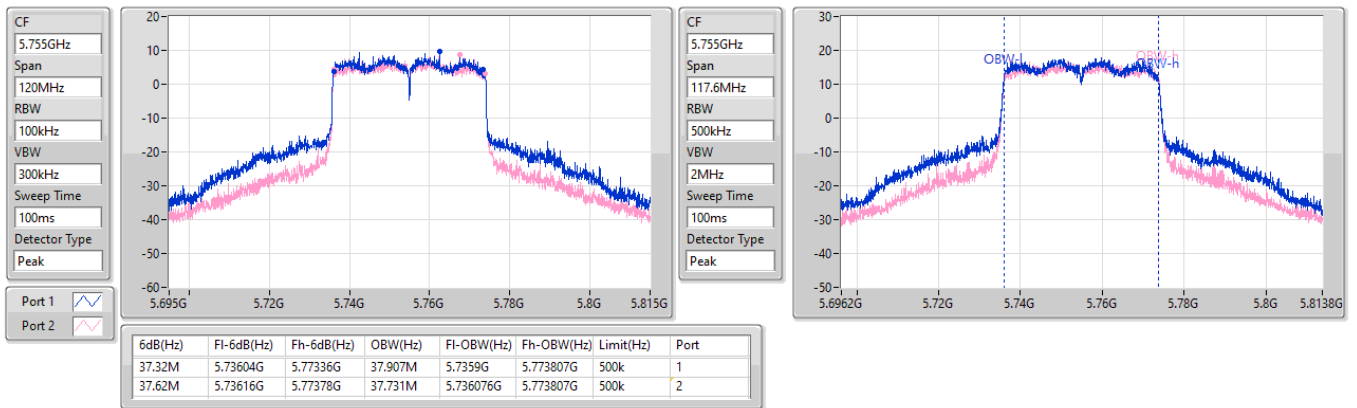


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

18/03/2023



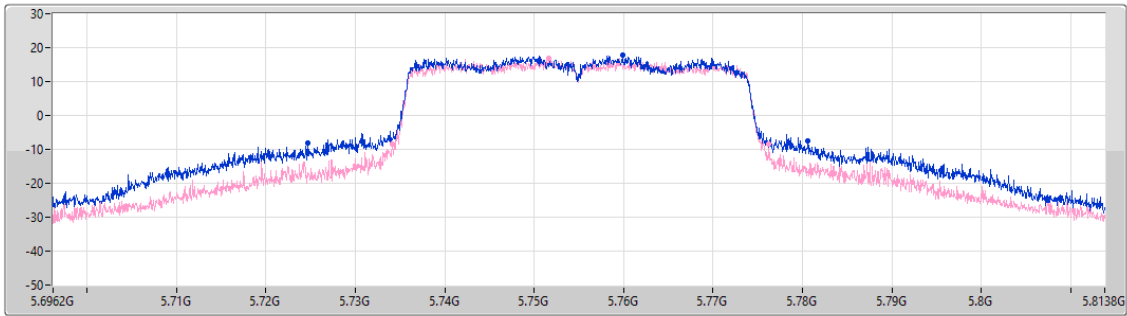
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

18/03/2023

CF
5.755GHz
Span
1117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	FI-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
55.978M	5.724659G	5.780637G	Inf	1
42.101M	5.734126G	5.776227G	Inf	2

Port 1
Port 2

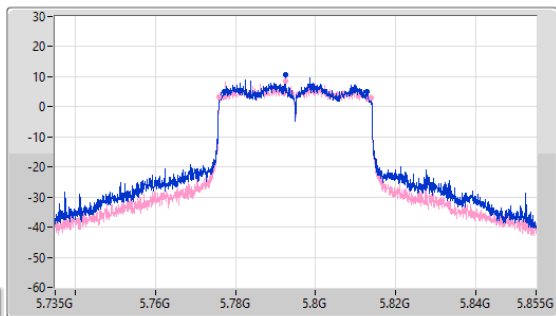
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

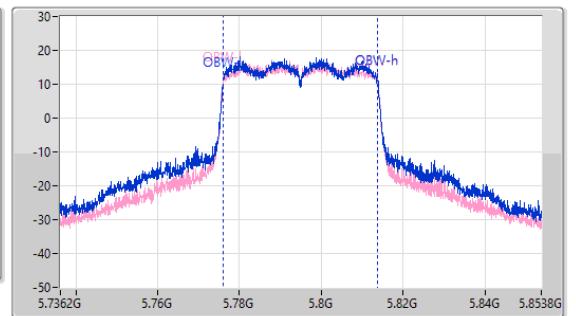
18/03/2023

CF
5.795GHz
Span
120MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	FI-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	FI-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.7M	5.77718G	5.81288G	37.731M	5.776017G	5.813748G	500k	1
37.92M	5.77598G	5.8139G	37.79M	5.776017G	5.813807G	500k	2

CF
5.795GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



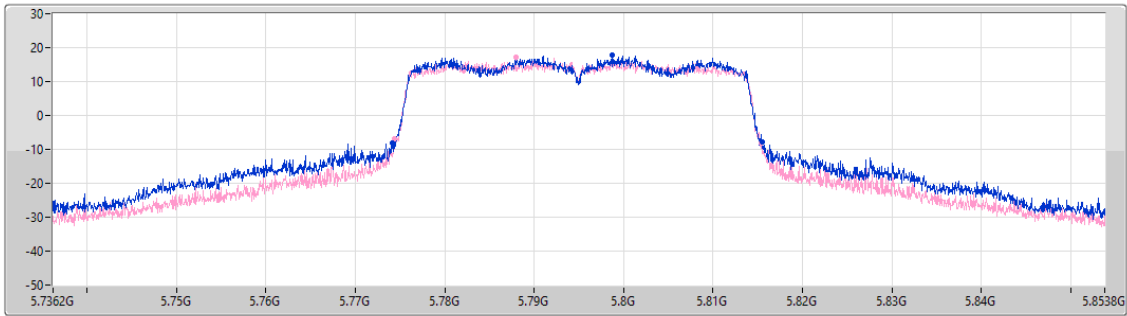
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

18/03/2023

CF
5.795GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
41.336M	5.774185G	5.815521G	Inf	1
40.984M	5.77442G	5.815404G	Inf	2

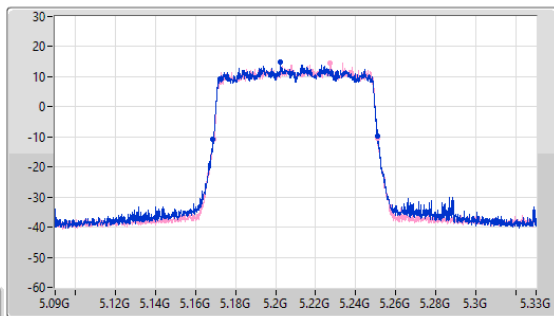
5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5210MHz

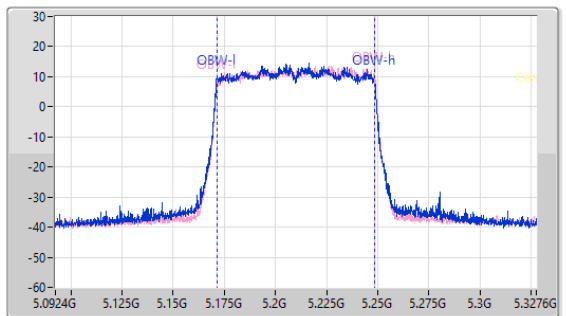
18/03/2023

CF
5.21GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.08M	5.16884G	5.25092G	77.107M	5.171329G	5.248436G	Inf	1
81.96M	5.16896G	5.25092G	76.99M	5.171564G	5.248554G	Inf	2

CF
5.21GHz
Span
235.2MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak

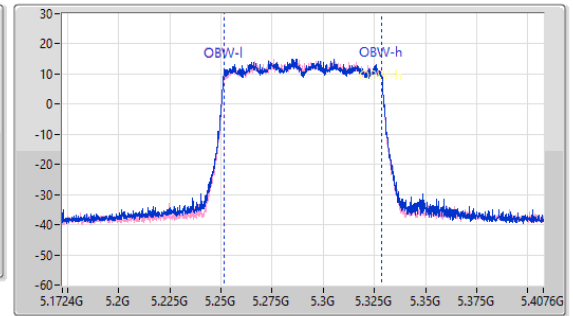
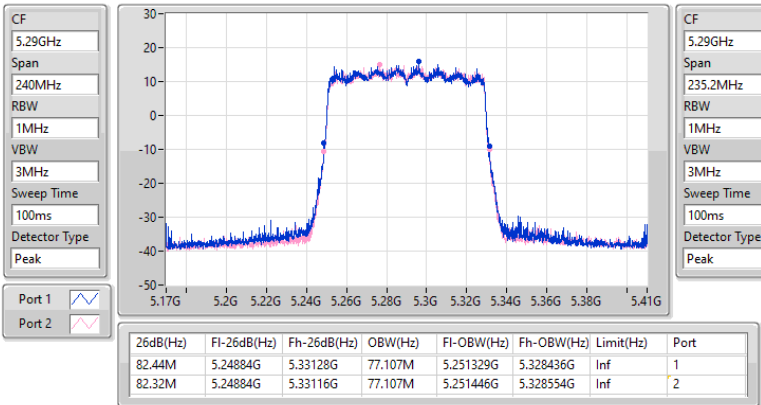


5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5290MHz

18/03/2023

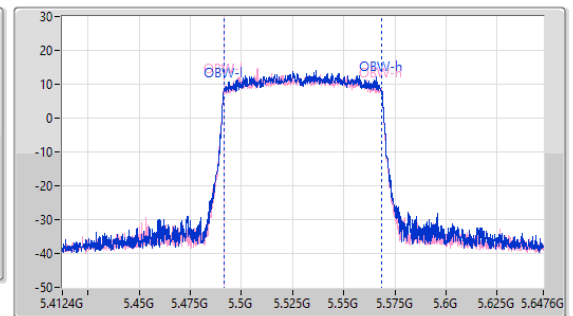
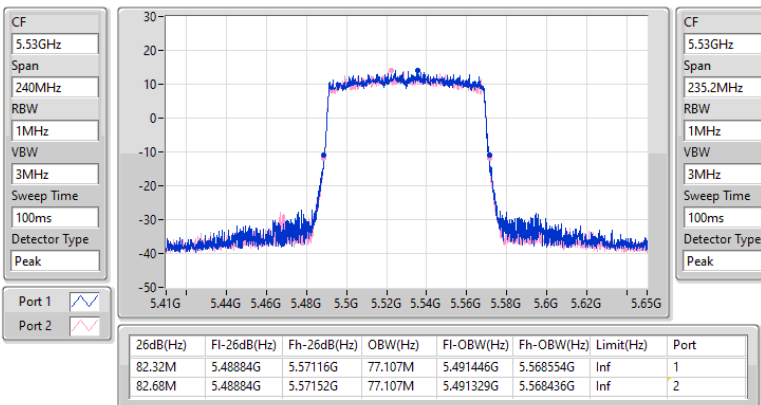


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5530MHz

18/03/2023

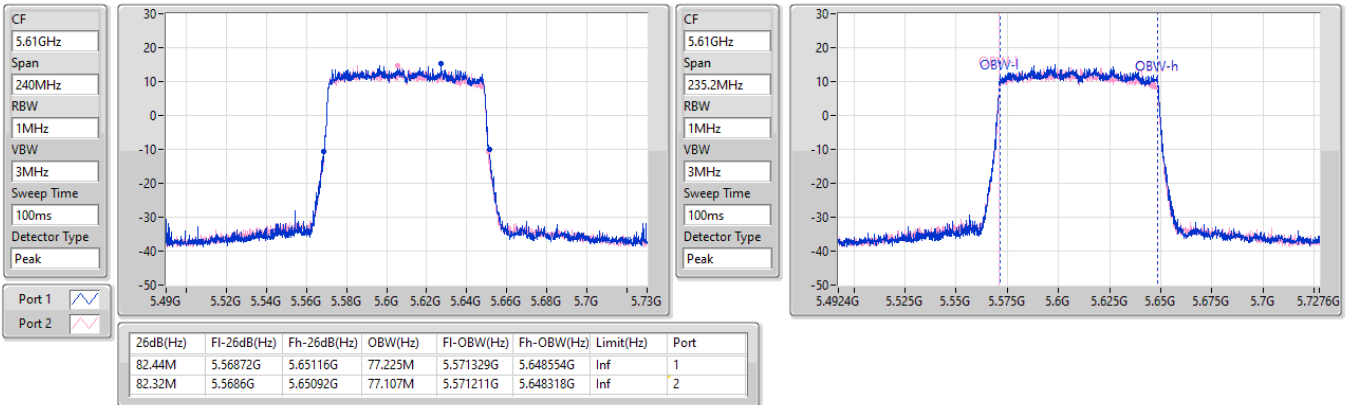


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5610MHz

19/03/2023

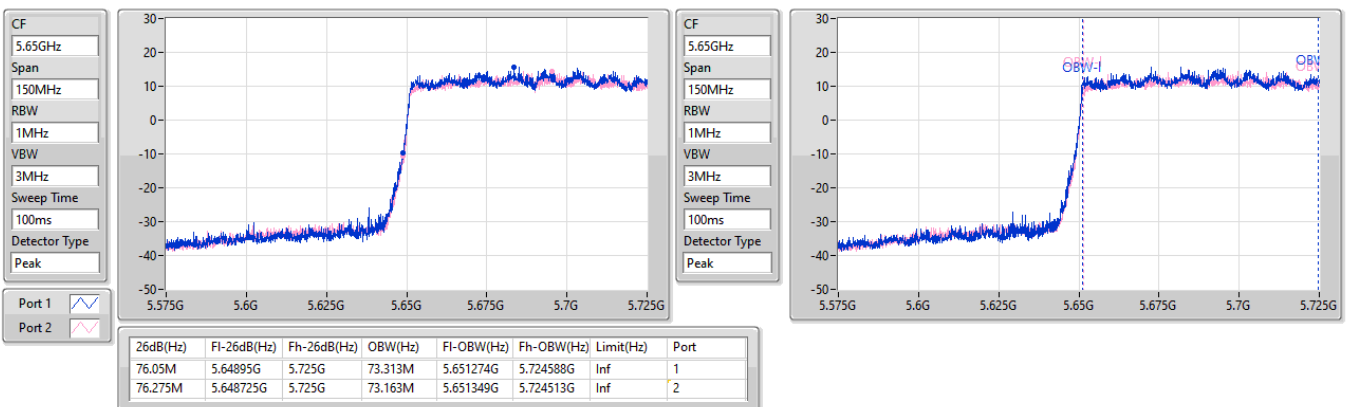


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

21/03/2023

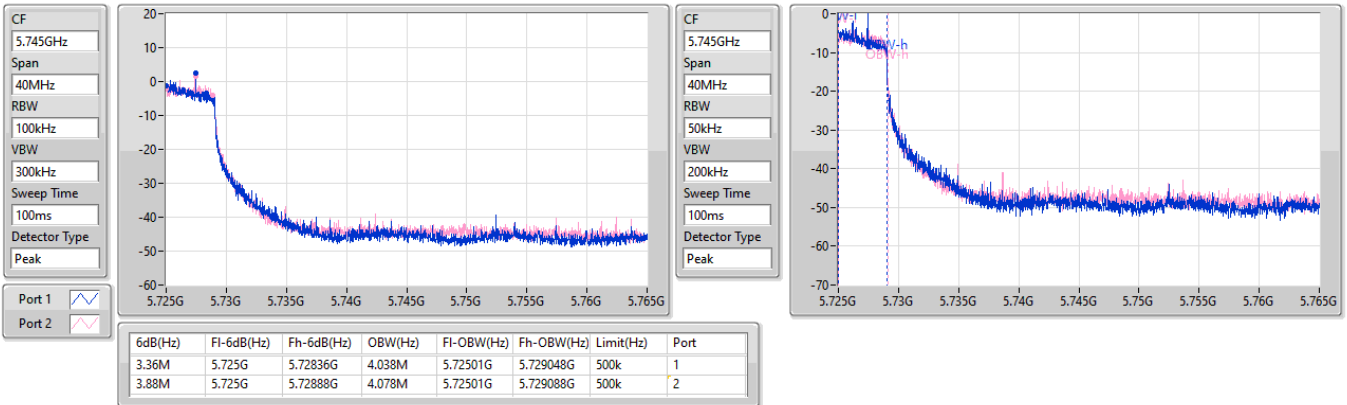


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

21/03/2023

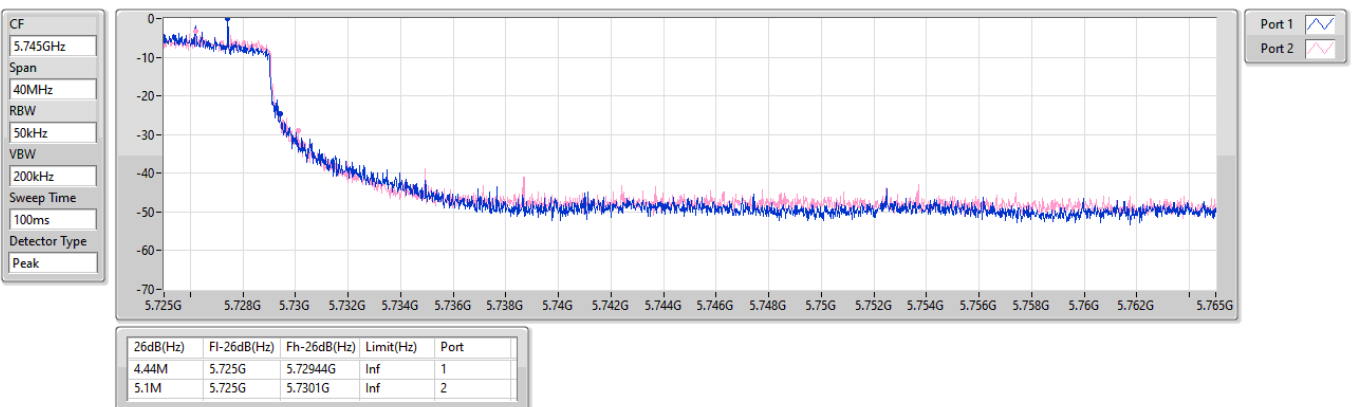


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

21/03/2023

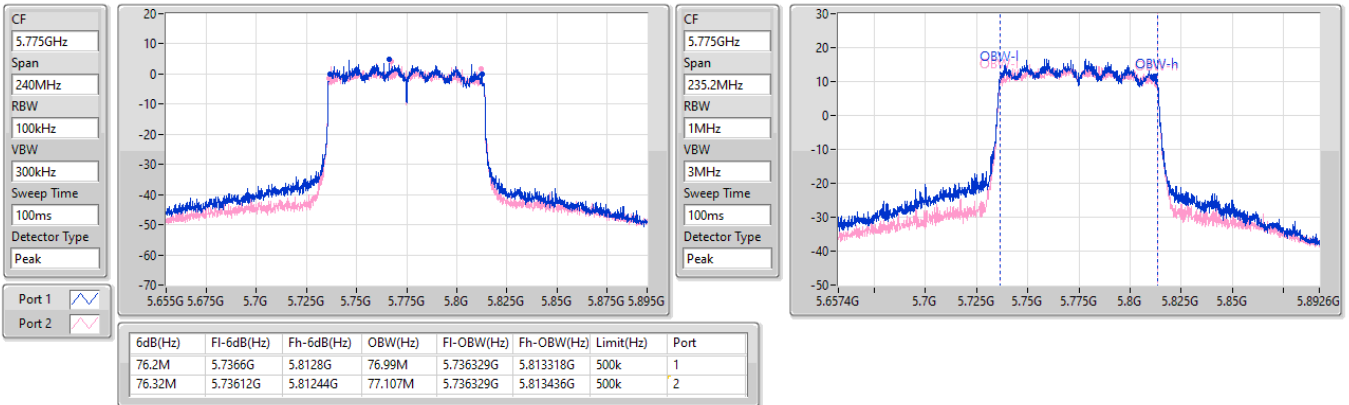


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

18/03/2023

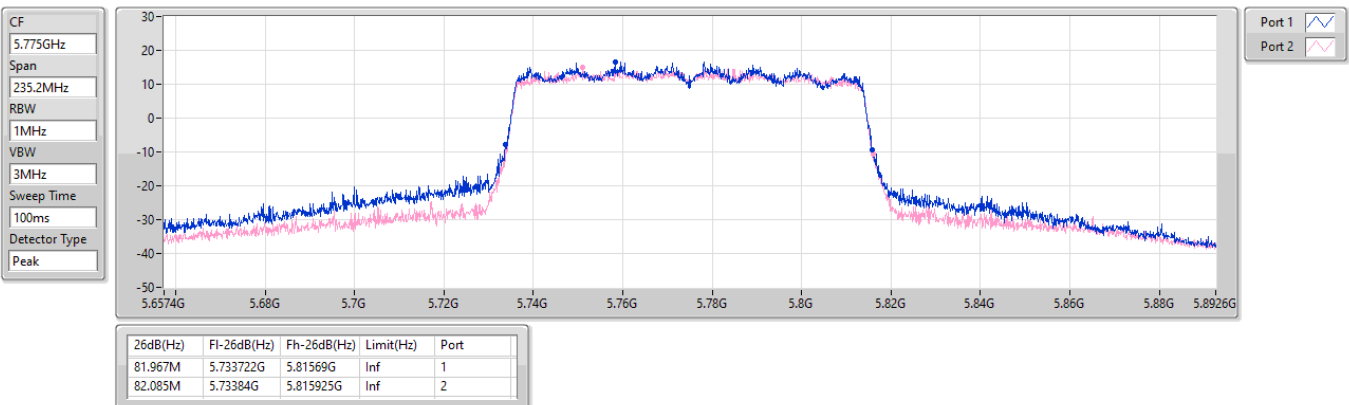


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

18/03/2023

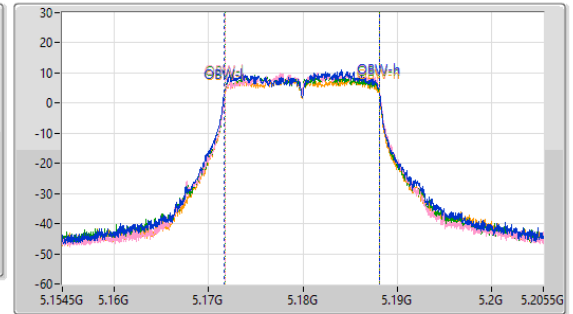
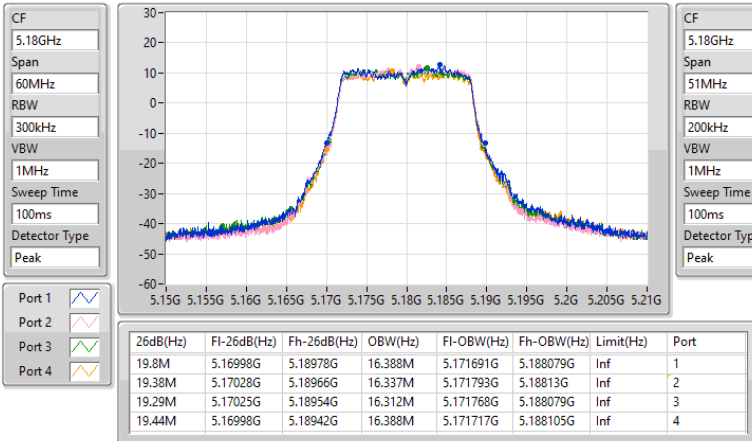


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

20/03/2023

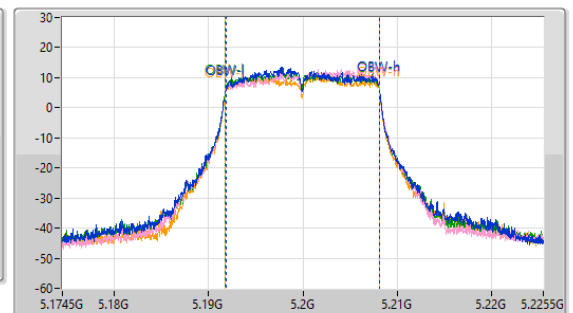
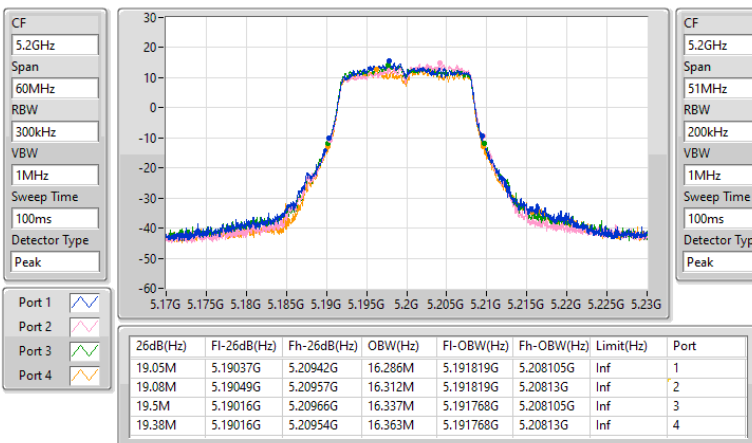


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

20/03/2023

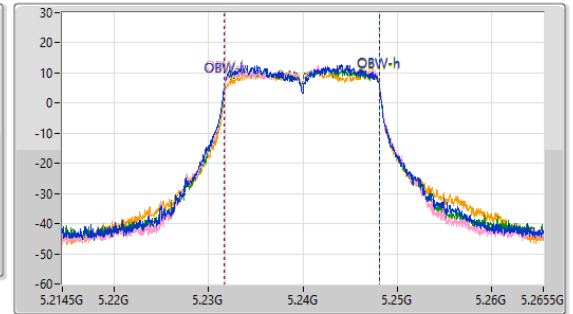
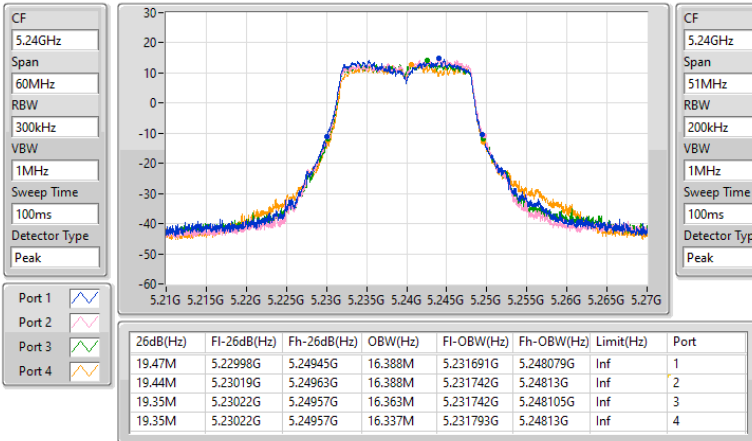


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

20/03/2023

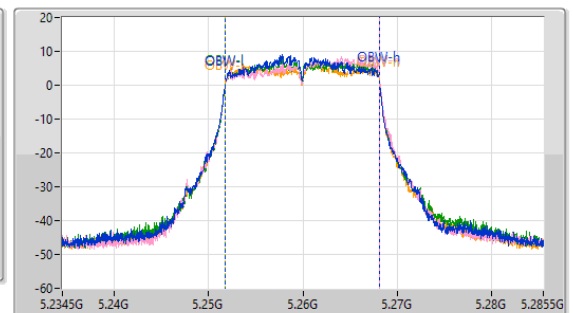
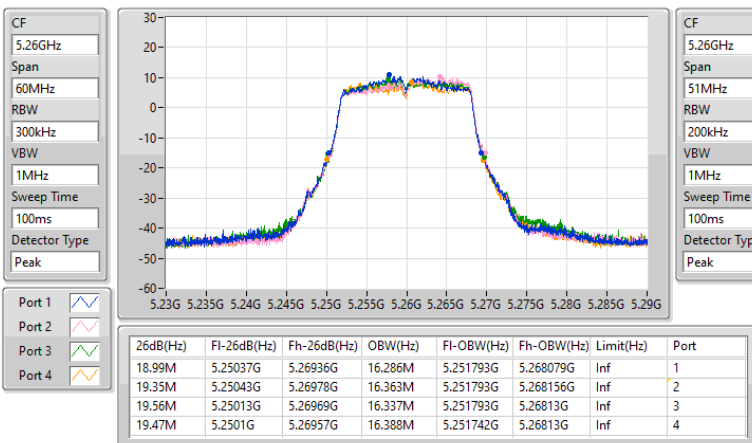


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5260MHz

20/03/2023

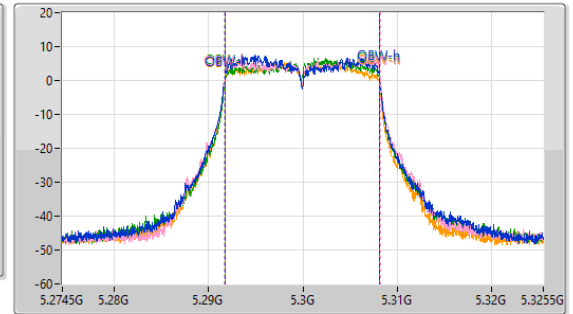
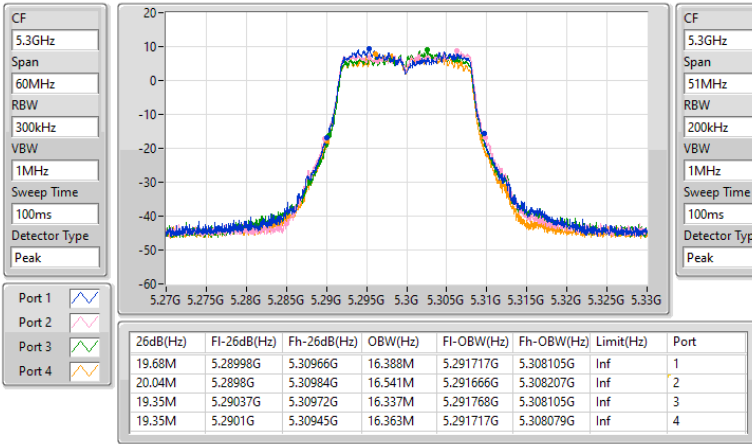


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5300MHz

20/03/2023

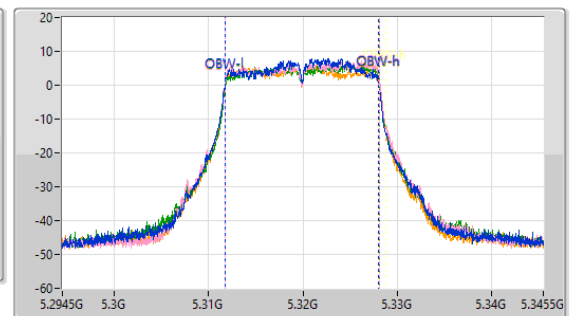
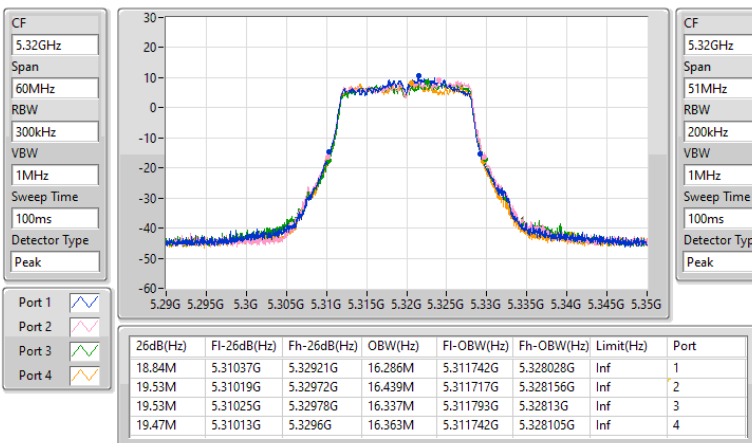


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5320MHz

20/03/2023

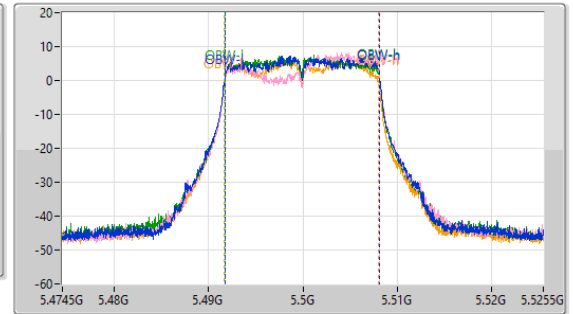
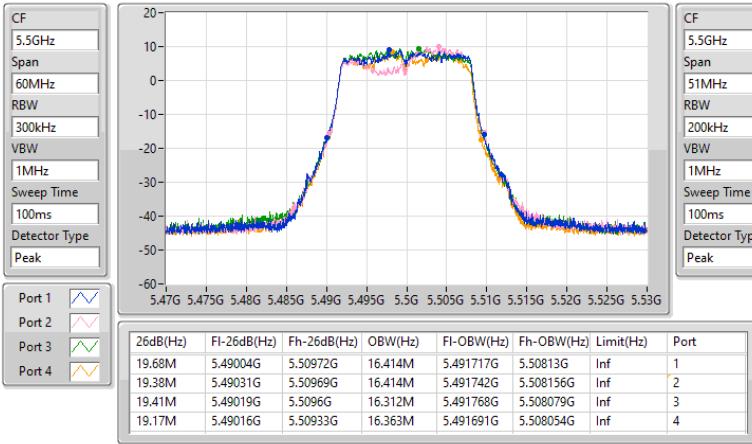


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5500MHz

20/03/2023

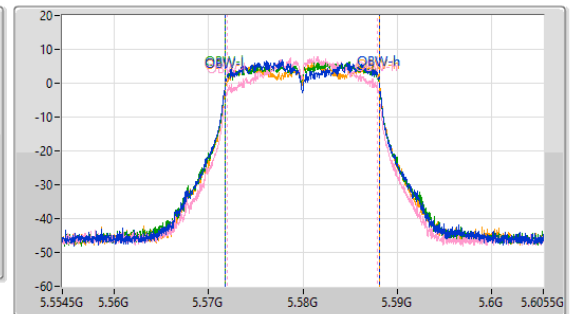
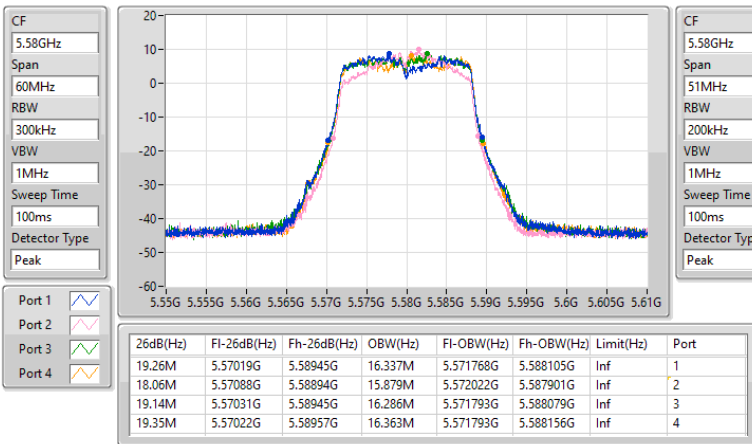


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5580MHz

20/03/2023

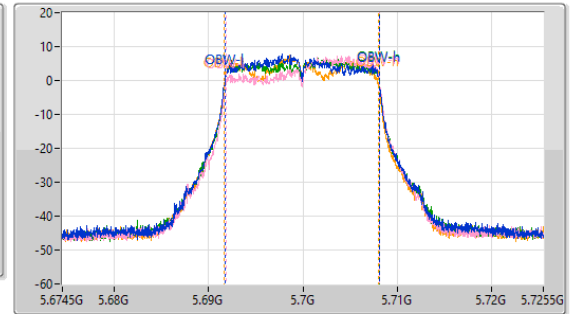
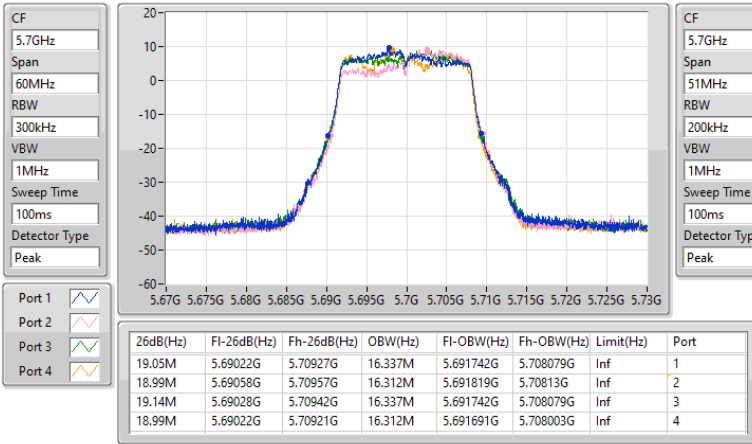


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5700MHz

20/03/2023

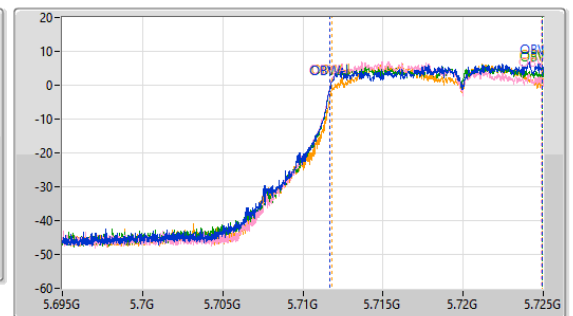
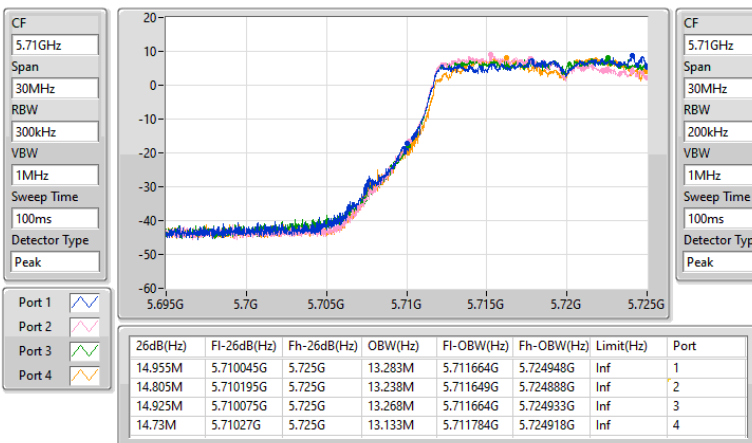


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

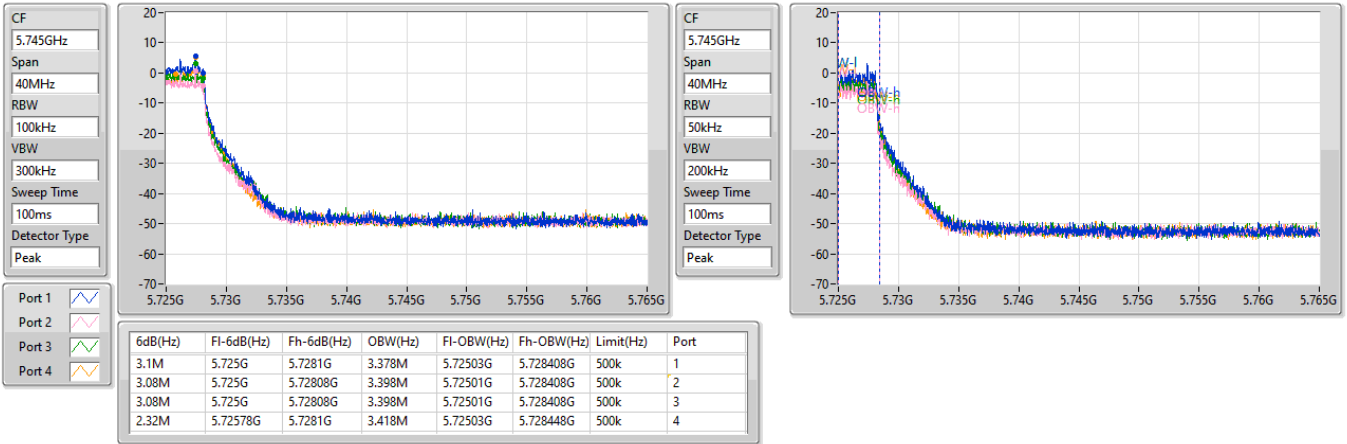


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

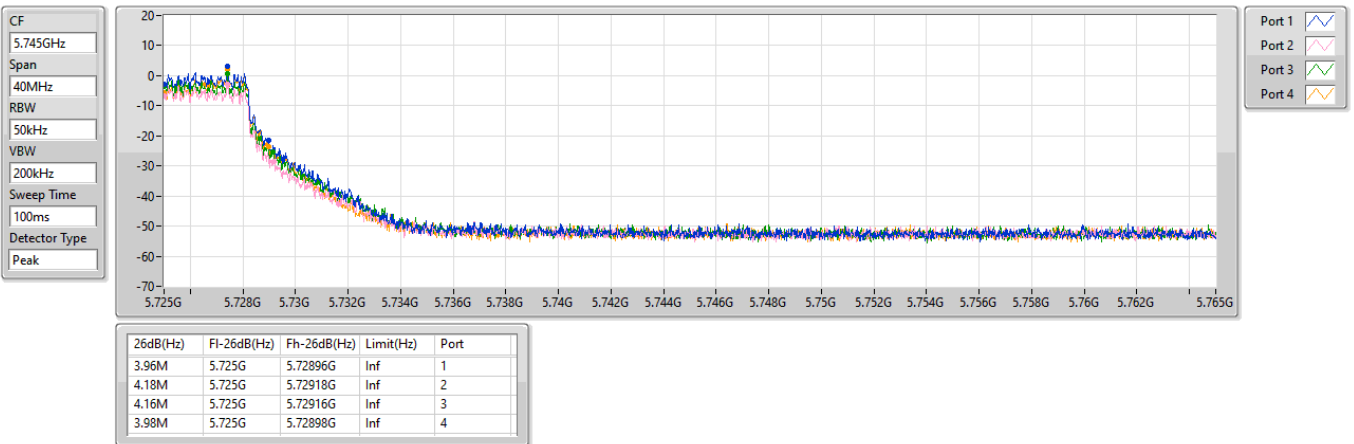


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

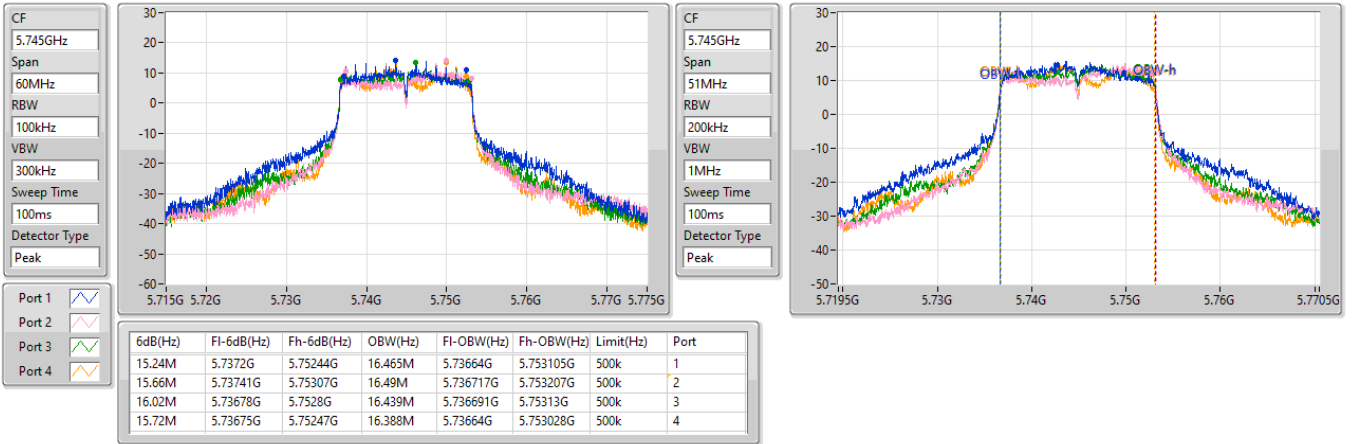


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

20/03/2023

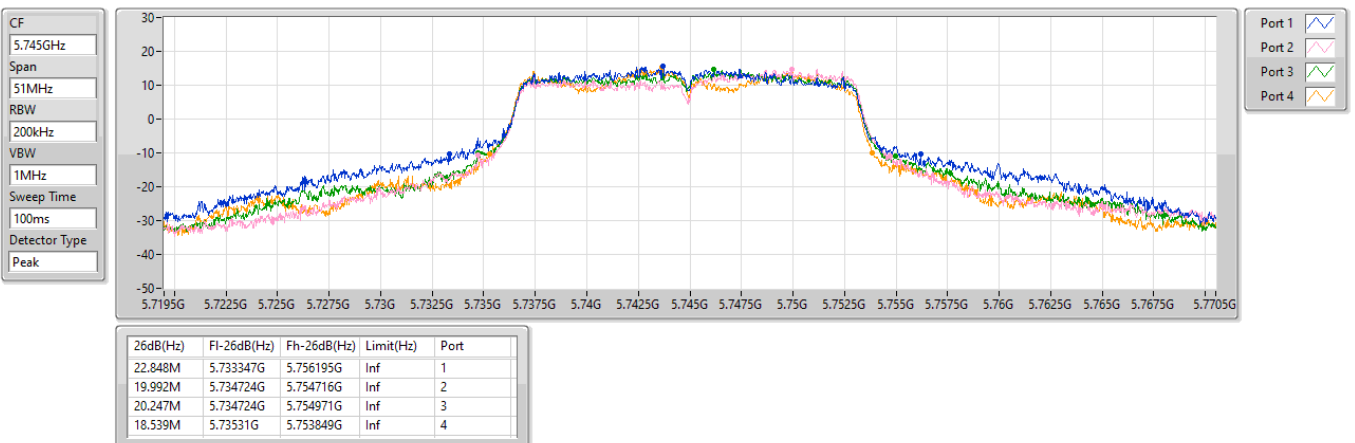


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

20/03/2023

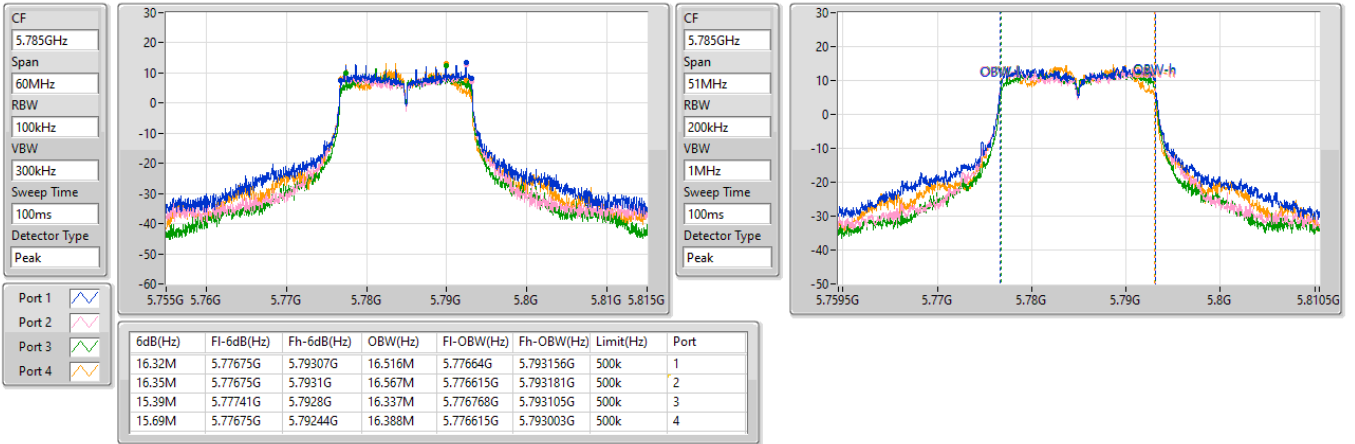


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

20/03/2023

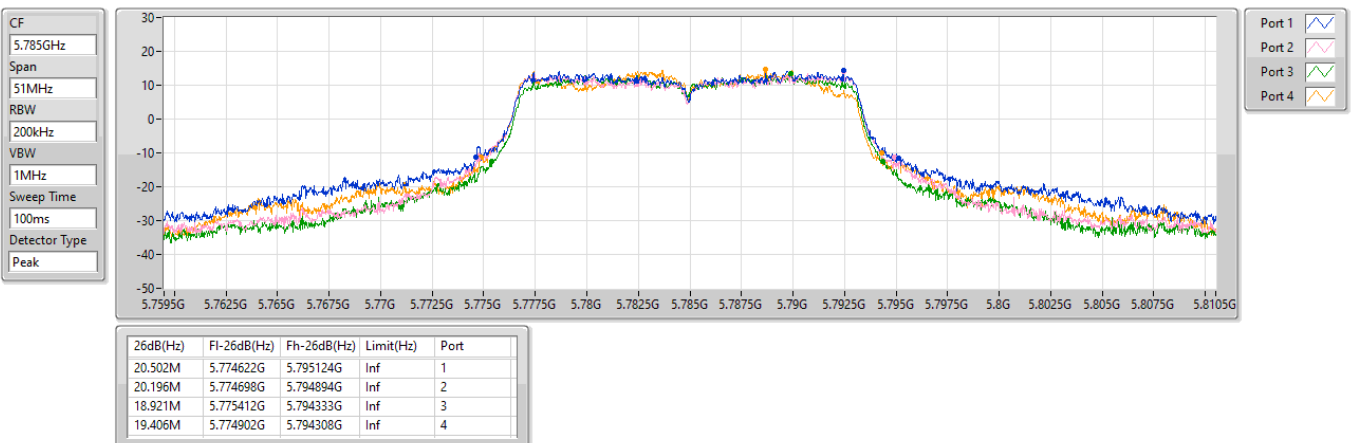


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

20/03/2023

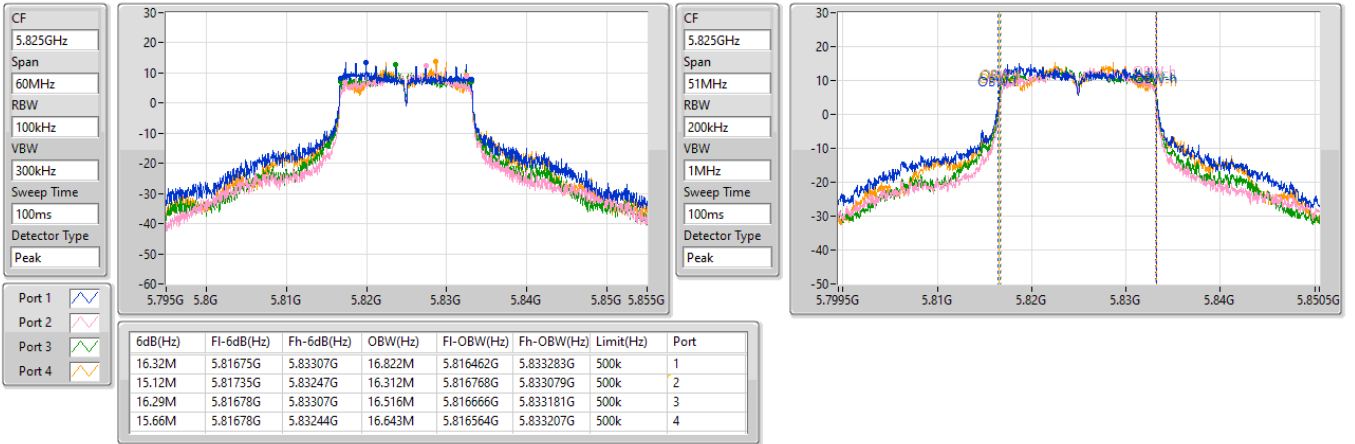


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

20/03/2023

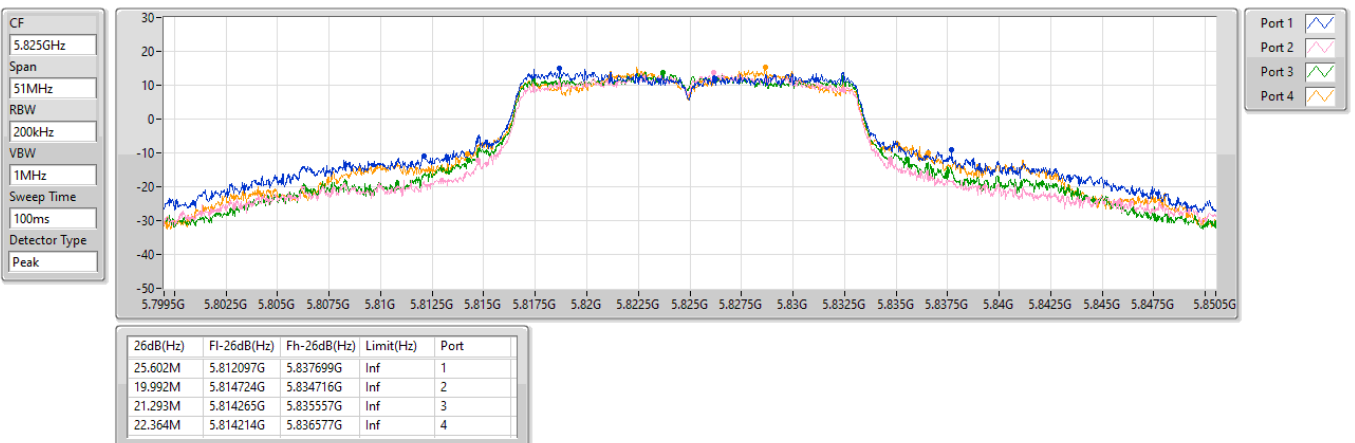


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

20/03/2023

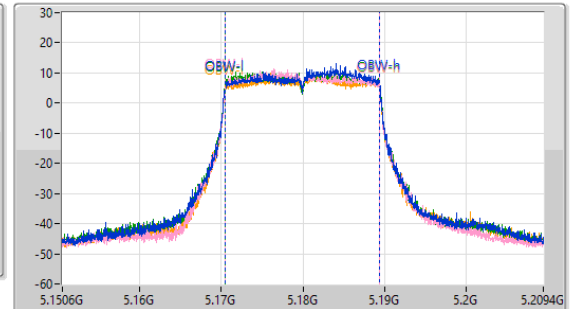
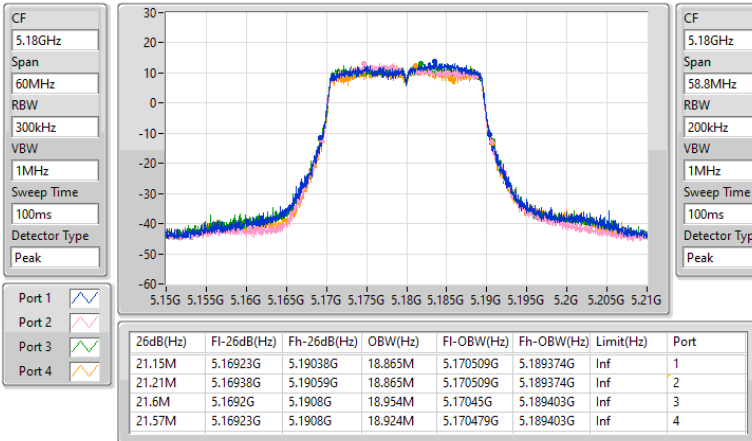


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5180MHz

20/03/2023

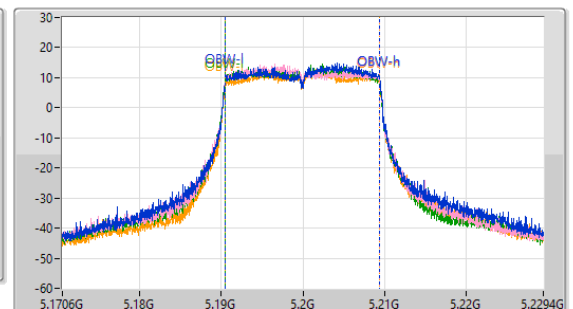
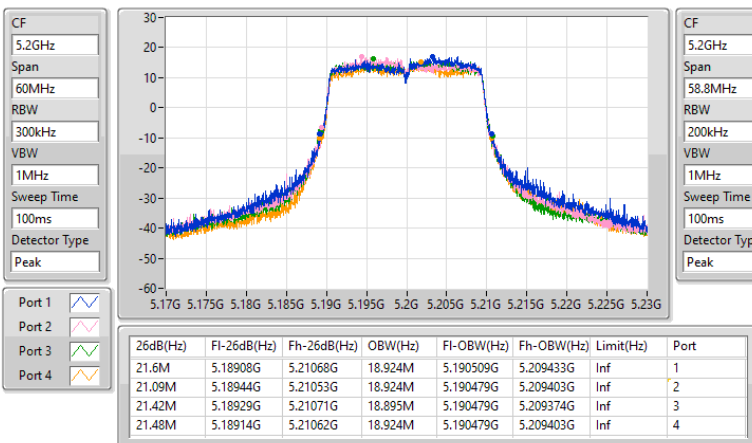


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5200MHz

20/03/2023

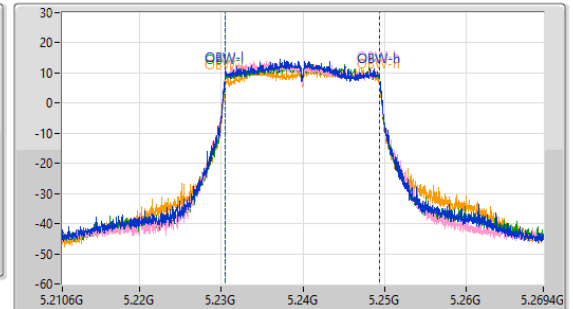
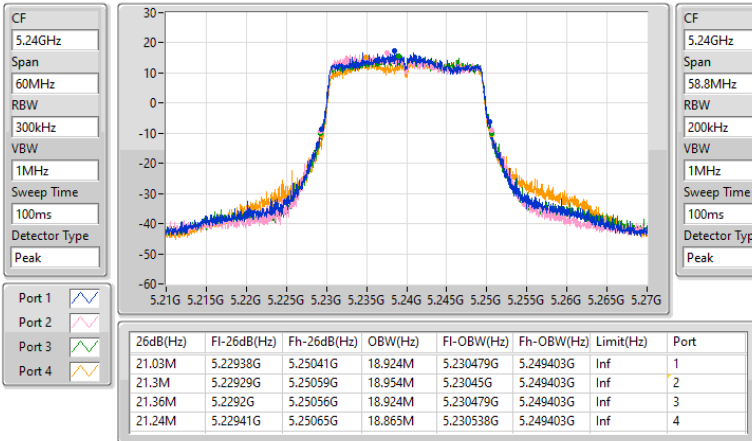


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5240MHz

20/03/2023

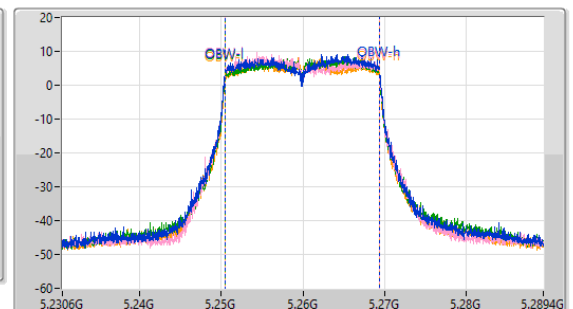
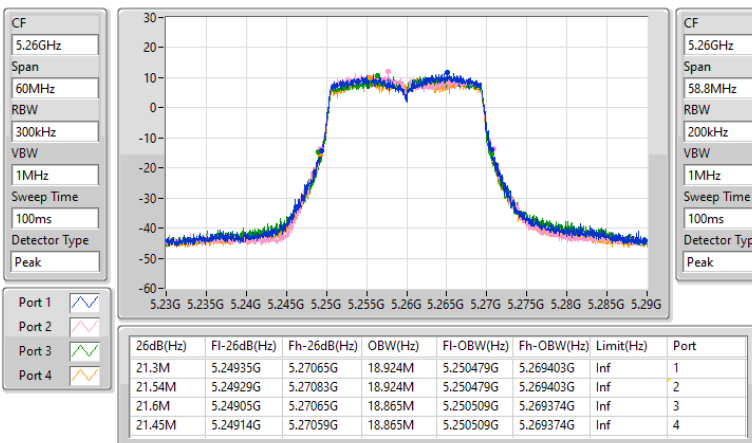


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5260MHz

20/03/2023

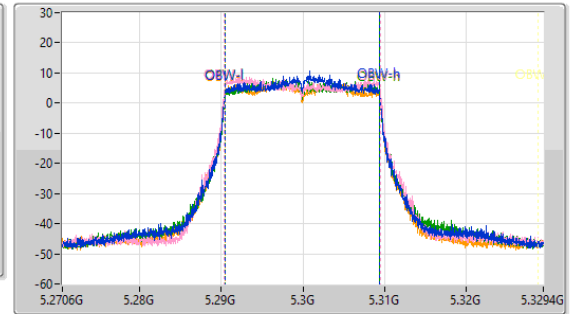
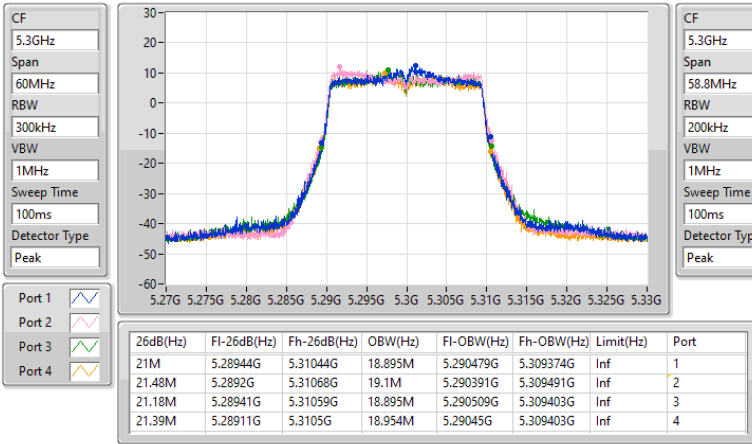


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5300MHz

20/03/2023

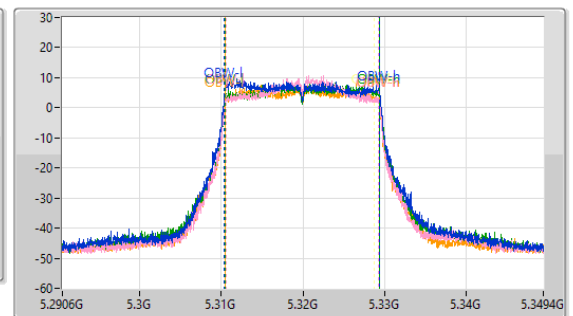
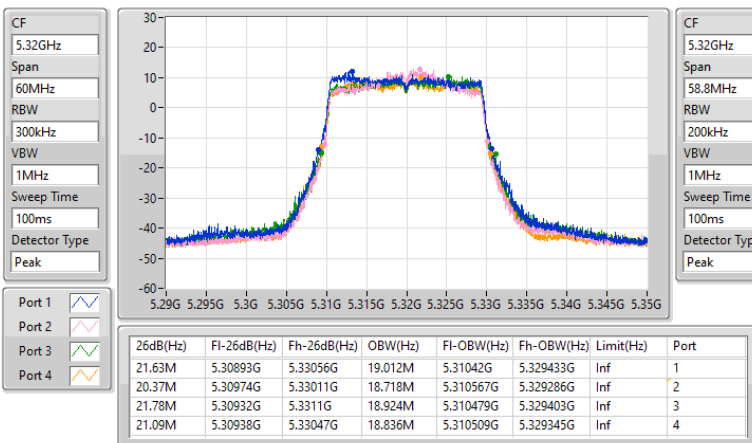


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

EBW

5320MHz

20/03/2023

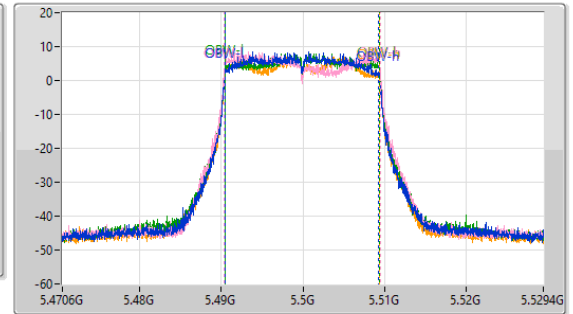
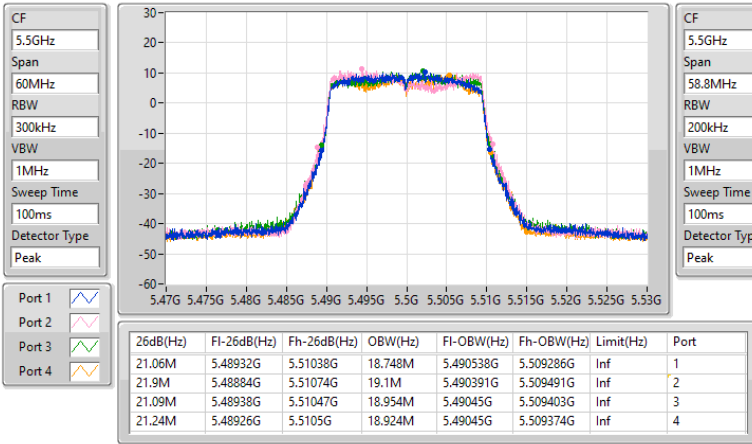


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5500MHz

20/03/2023

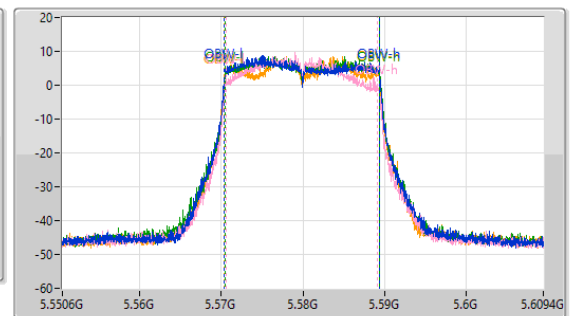
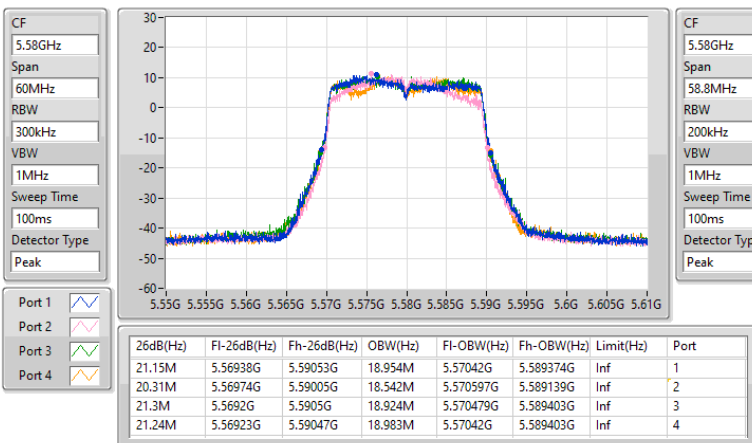


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5580MHz

20/03/2023

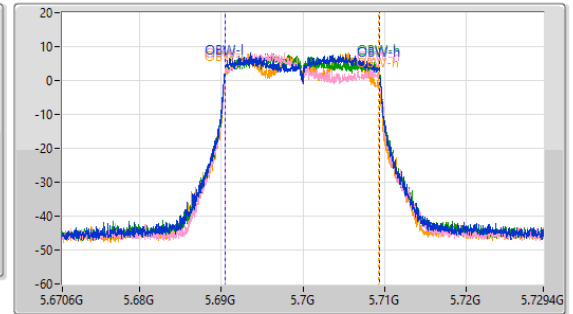
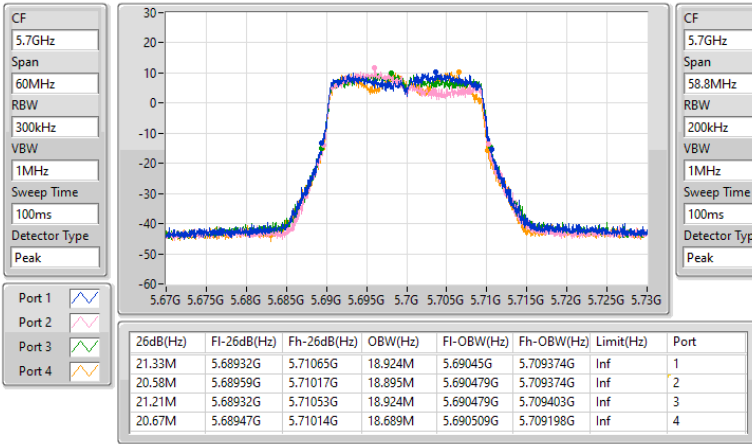


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5700MHz

20/03/2023

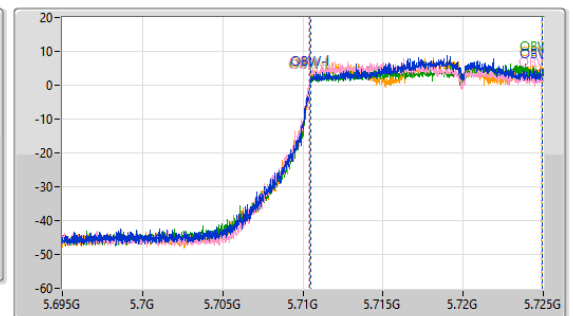
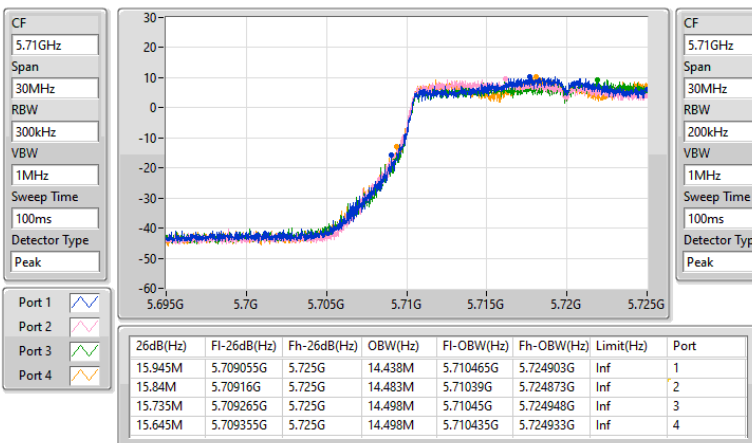


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.47-5.725GHz

21/03/2023

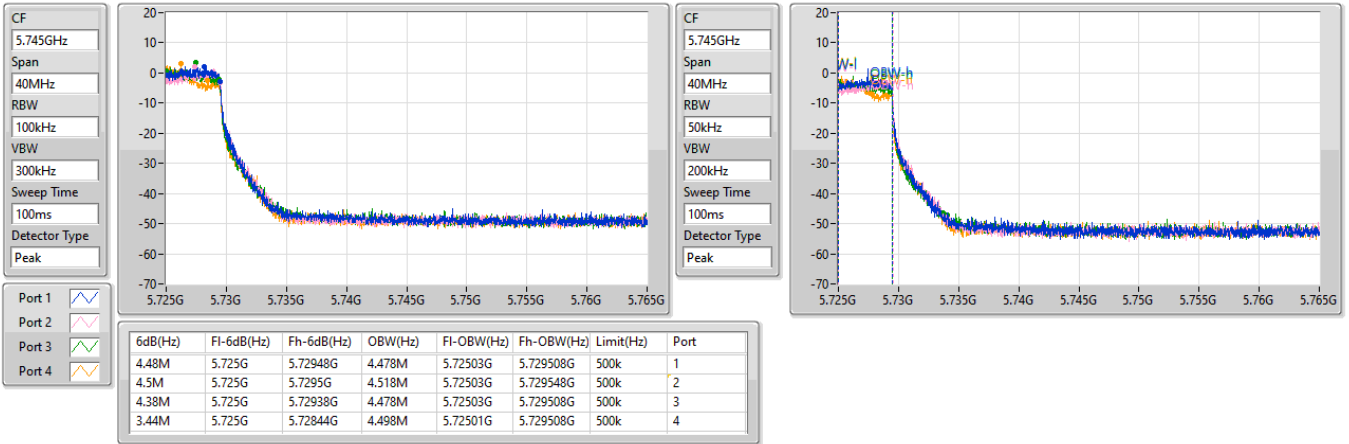


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

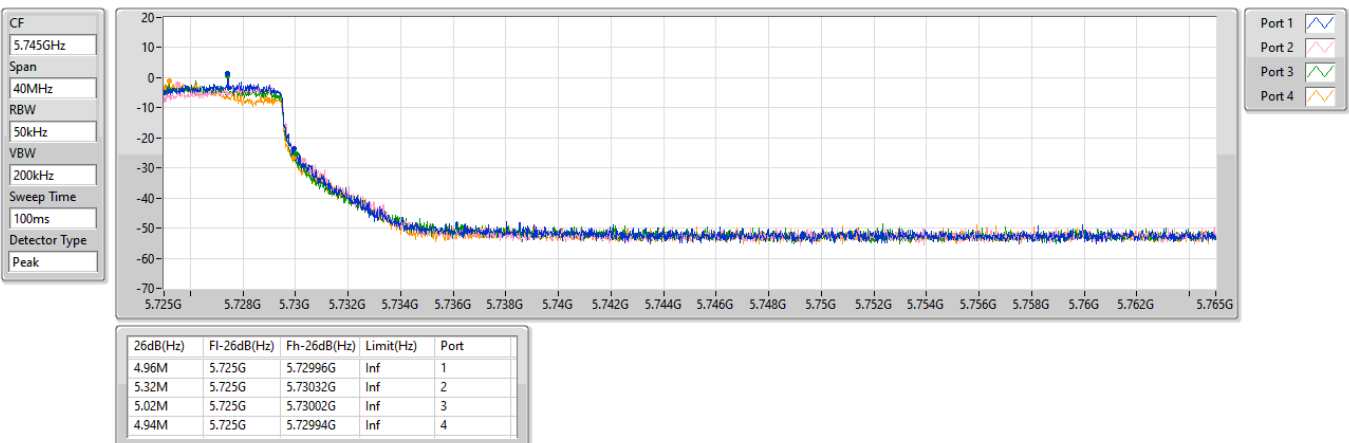


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5720MHz Straddle 5.725-5.85GHz

21/03/2023

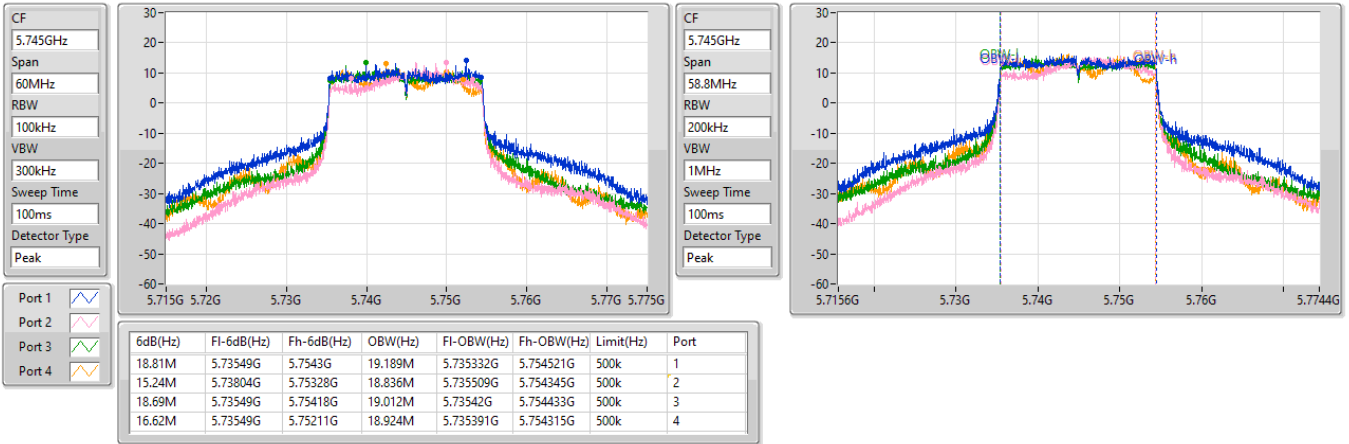


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

20/03/2023

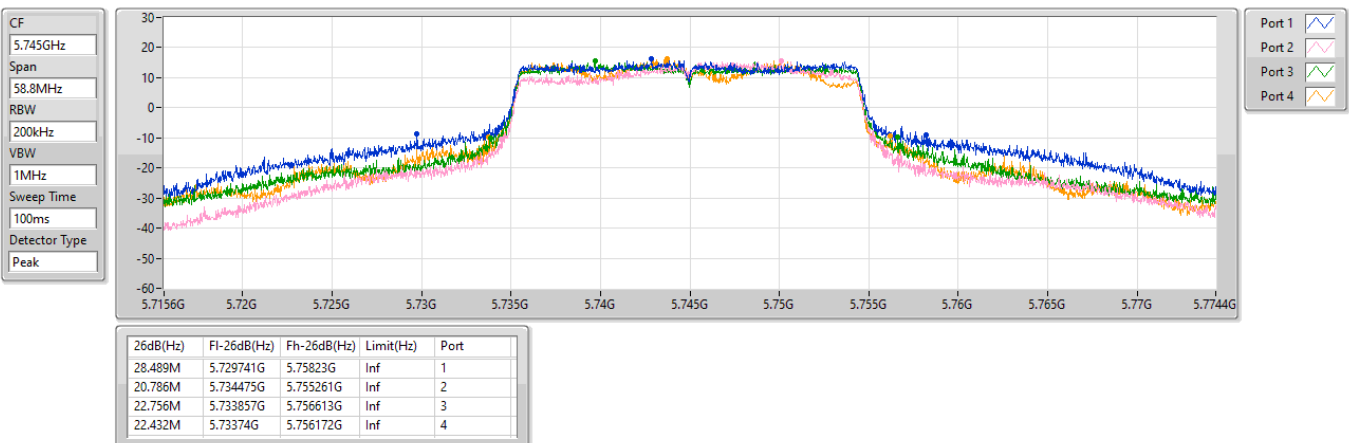


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5745MHz

20/03/2023

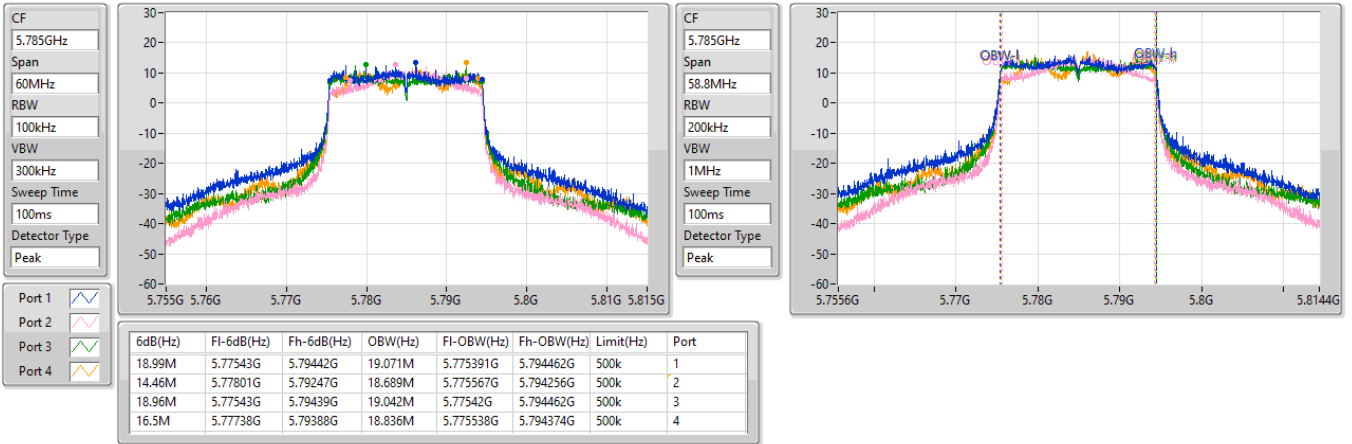


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

20/03/2023

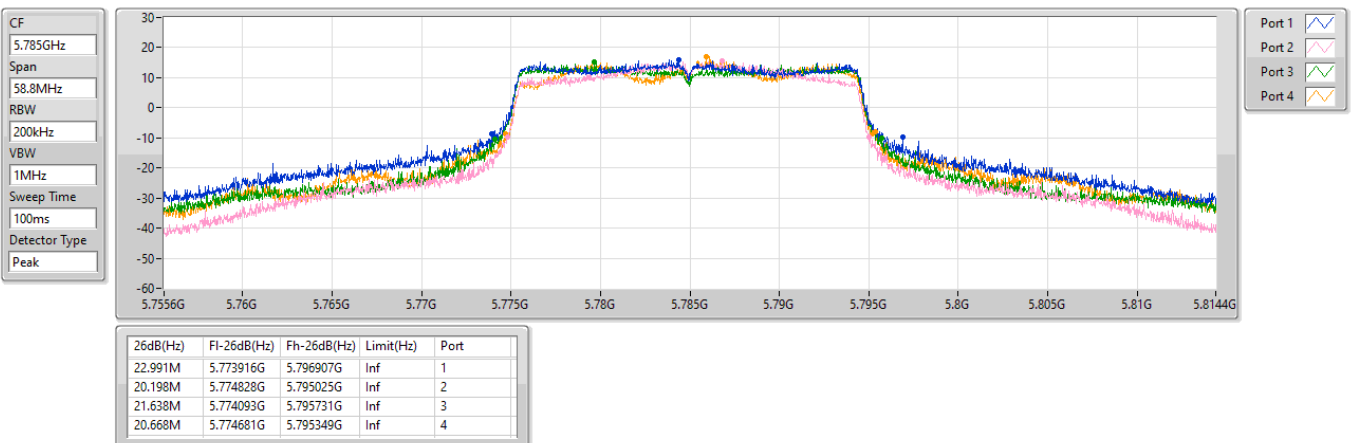


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5785MHz

20/03/2023

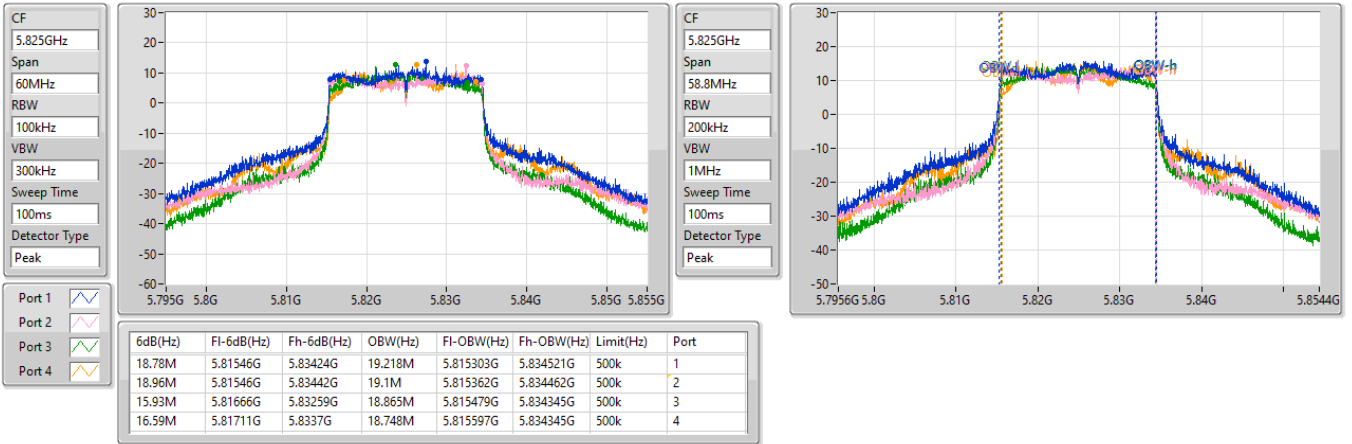


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

20/03/2023

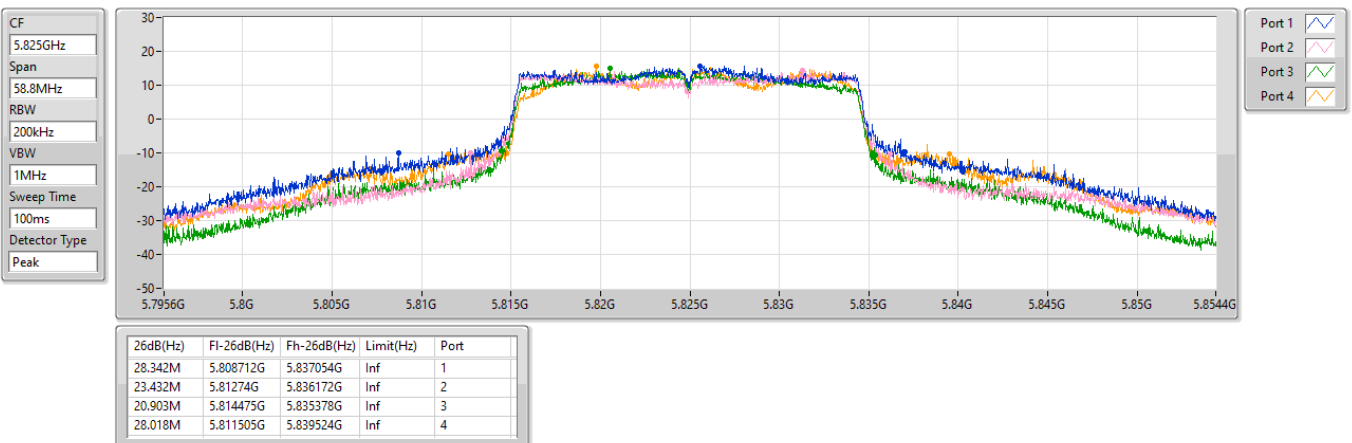


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5825MHz

20/03/2023

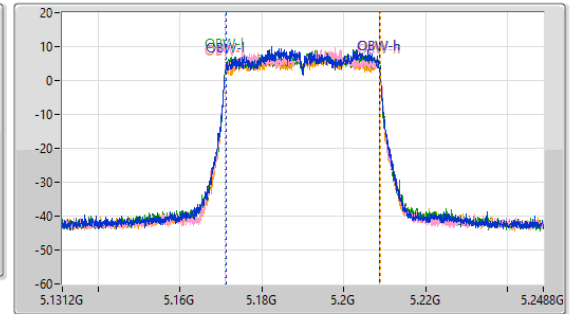
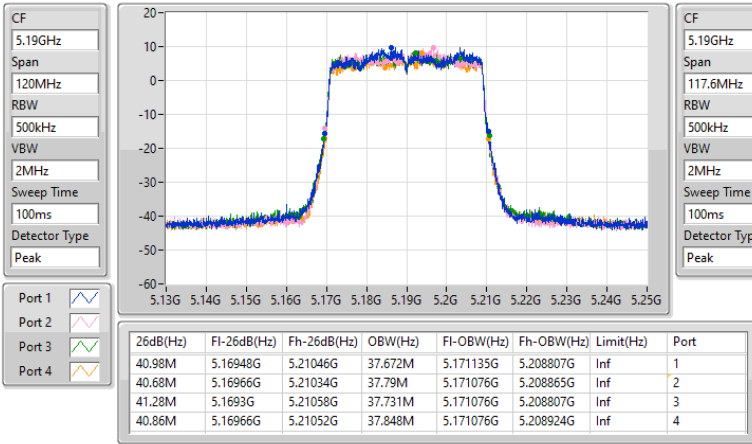


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5190MHz

20/03/2023

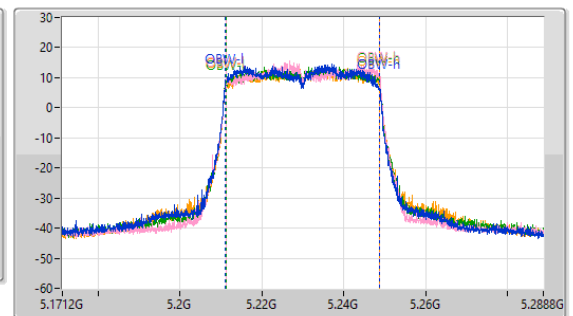
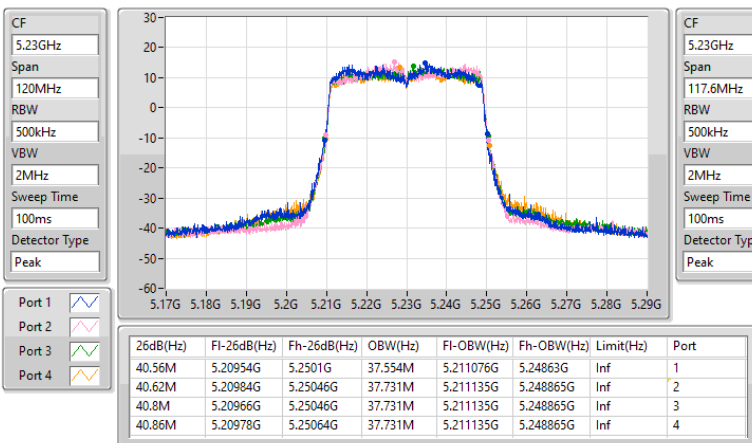


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5230MHz

20/03/2023

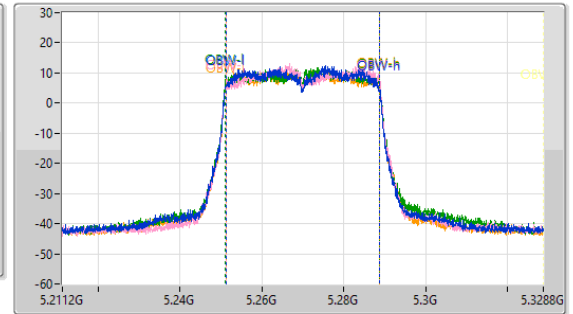
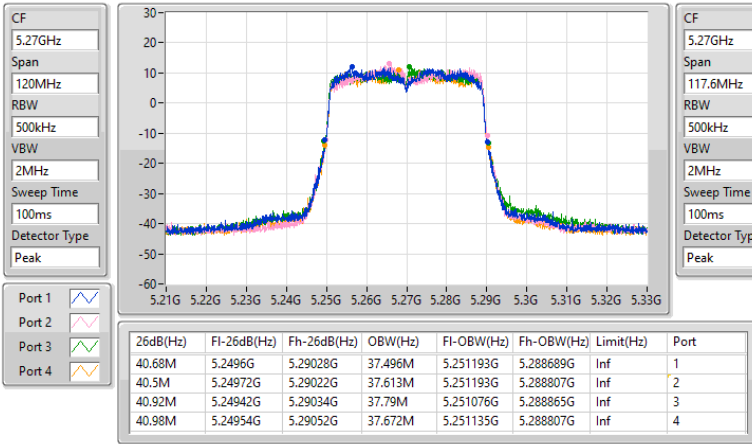


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5270MHz

20/03/2023

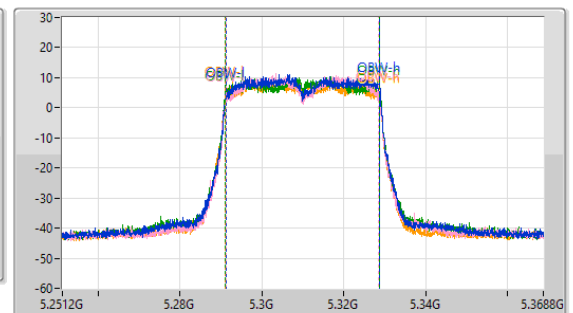
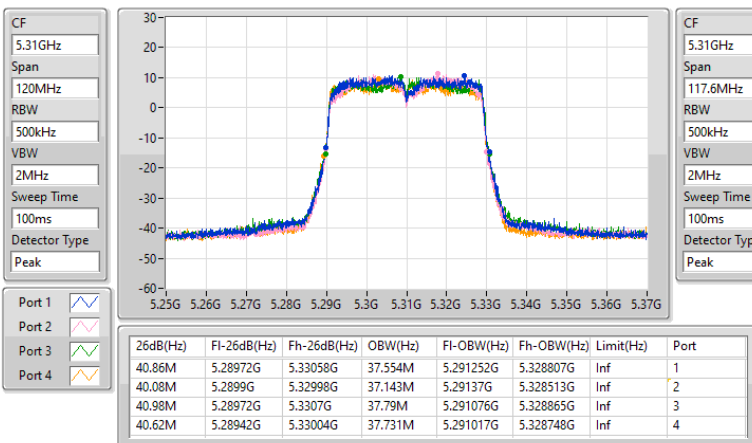


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

5310MHz

20/03/2023

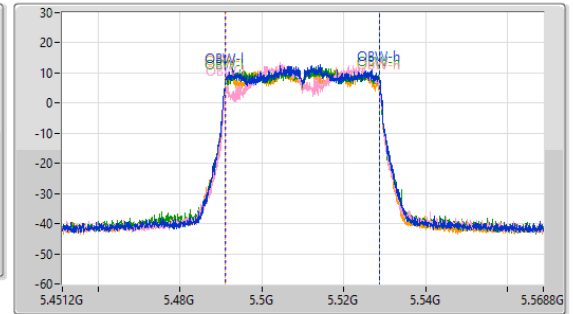
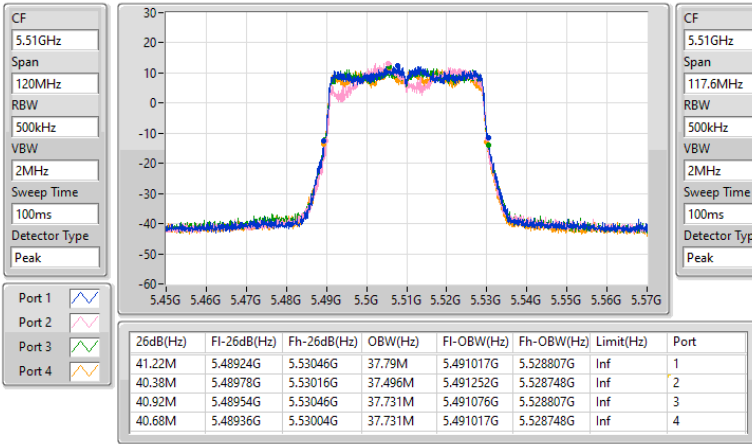


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5510MHz

20/03/2023

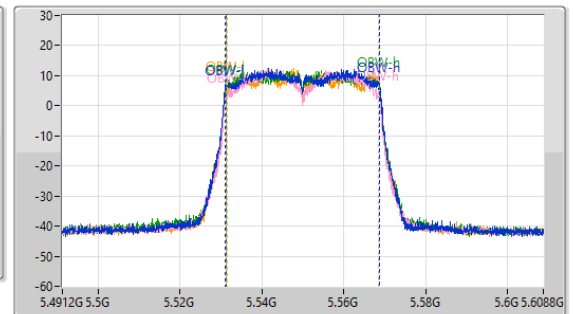
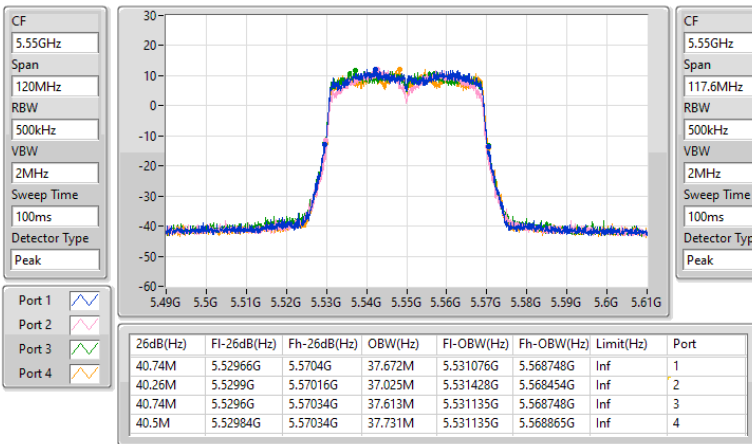


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5550MHz

20/03/2023

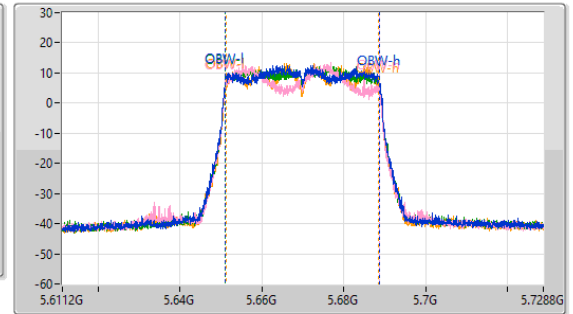
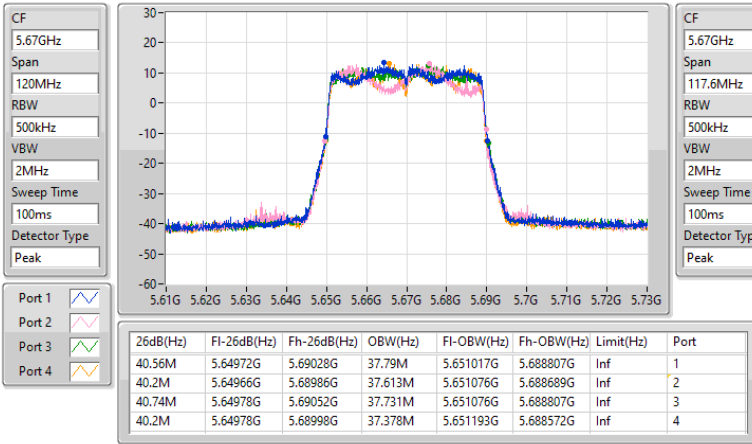


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5670MHz

20/03/2023



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

EBW

5710MHz Straddle 5.47-5.725GHz

21/03/2023

