FCC Test Report

FCC ID	:	**I8803911**
Equipment	:	**802.11ax (WiFi 6) Dual-Radio PoE Access Point**
Model No.	:	**NWA50AX PRO** **(Please refer to section 1.1.1 for more details)**
Brand Name	:	**ZYXEL**
Applicant	:	**Zyxel Communications Corporation**
Address	:	**No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Nov. 16, 2022**
Tested Date	:	**Nov. 23, 2022 ~ Jan. 04, 2023**

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:	**Approved by:**
Along Chen / Assistant Manager	**Gary Chang / Manager**

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR2N1601AN	Rev. 01	Initial issue	Jan. 16, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 11.548MHz 39.14 (Margin -10.86dB) - AV	Pass
15.407(b) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 5460.00MHz 53.89 (Margin -0.11dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	Conducted Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5150~5250MHz: 29.34 5250~5350MHz: 23.70 5470~5725MHz: 23.72 5725~5850MHz: 29.57 ***Beamforming mode*** 5150~5250MHz: 24.57 5250~5350MHz: 18.93 5470~5725MHz: 18.95 5725~5850MHz: 24.80	Pass
15.407(a)	Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZYXEL	NWA50AX PRO	802.11ax (WiFi 6) Dual-Radio PoE Access Point	Software cloud management functions are different
	NWA90AX PRO		
✦ The above models, model **NWA50AX PRO** was selected as a representative one for the final test and only its data was recorded in this report.			

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	3	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	3	MCS 0-23
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	3	MCS 0-23
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	3	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	3	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530~5690 5775	42 [1] 58 [1] 106-138 [3] 155 [1]	3	MCS 0-9
5150-5250 5250-5350 5500-5700	ac (VHT160)	5250 5570	50 [1] 114 [1]	3	MCS 0-11
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	3	MCS 0-11
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	3	MCS 0-11
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE80)	5210 5290 5530~5690 5775	42 [1] 58 [1] 106-138 [3] 155 [1]	3	MCS 0-11
5150-5250 5250-5350 5500-5700	ax (HE160)	5250 5570	50 [1] 114 [1]	3	MCS 0-11
Note 1: Modulation: BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM Note 2: 802.11 ax supports beamforming function. Note 3: TPC function is supported.					

1.1.3 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
					2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	Aristotole	11825-DB1	PIFA	No	0.9	1.64	2.78	3.25	2.15
2	Aristotole	11825-DB2	PIFA	No	2.6	2.87	4.3	3.96	2.69
3	Aristotole	11825-5G	PIFA	No	---	1.74	2.35	2.23	0.93

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter 56V dc from POE

Note: The POE power supply is not bundled in market.

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: DEE VAN Model: DSA-24PFS-12 FCA 120200 I/P: 100-240Vac, 50/60Hz, 0.8A O/P: 12V ⎓2.0A Power Line: 1.5m non-shielded without core

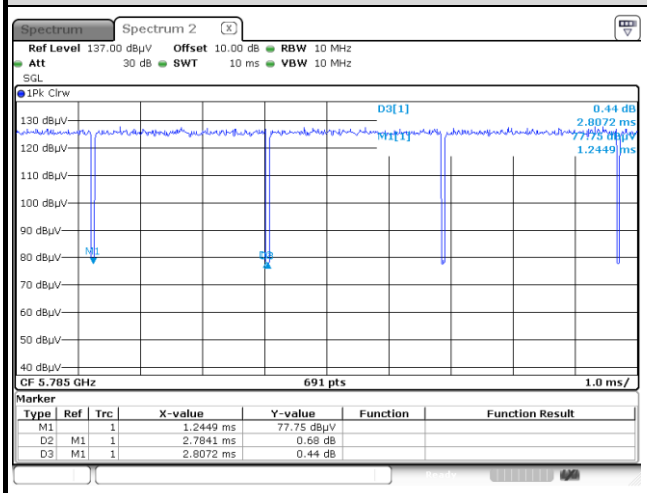
1.1.6 Channel List

802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	118	5590
64	5320	126	5630
100	5500	134	5670
104	5520	142	5710
108	5540	151	5755
112	5560	159	5795
116	5580	**802.11ac VHT80 / ax HE80**	
120	5600	42	5210
124	5620	58	5290
128	5640	106	5530
132	5660	122	5610
136	5680	138	5690
140	5700	155	5775
144	5720	**ac VHT160 / ax HE160**	
149	5745	50	5250
153	5765	114	5570
157	5785	---	---
161	5805	---	---
165	5825	---	---

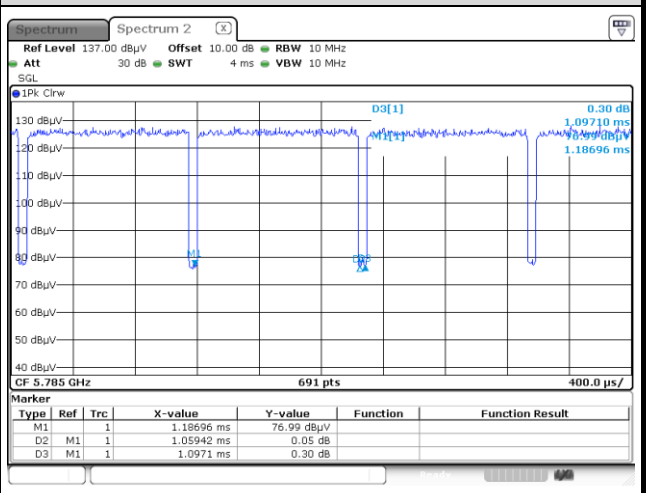
1.1.7 Test Tool and Duty Cycle

Test Tool	QATool, Version: UIv2.78_DLLv6.83_ap_2021.11.05		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	99.18%	0.04
	ax HE20	96.57%	0.15
	ax HE40	92.07%	0.36
	ax HE80	85.85%	0.66
	ax HE160	79.63%	0.99

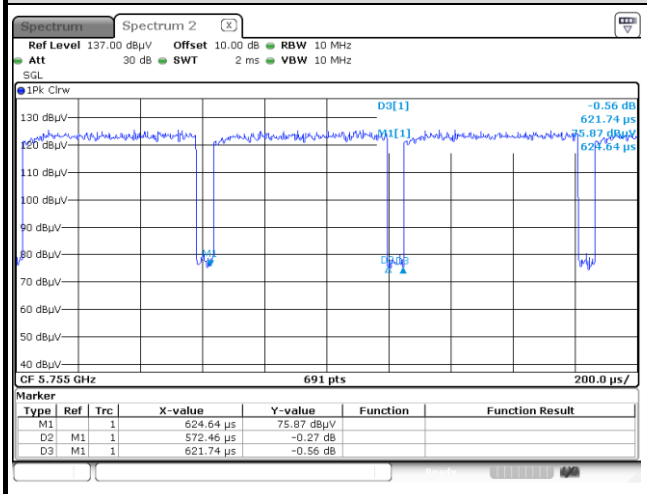
11a



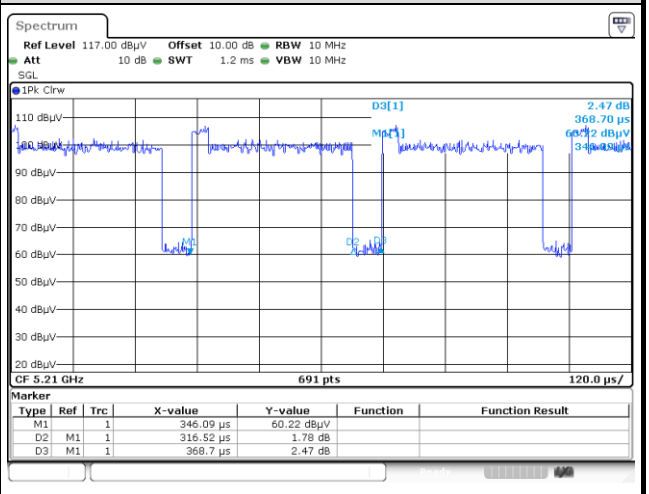
ax HE20

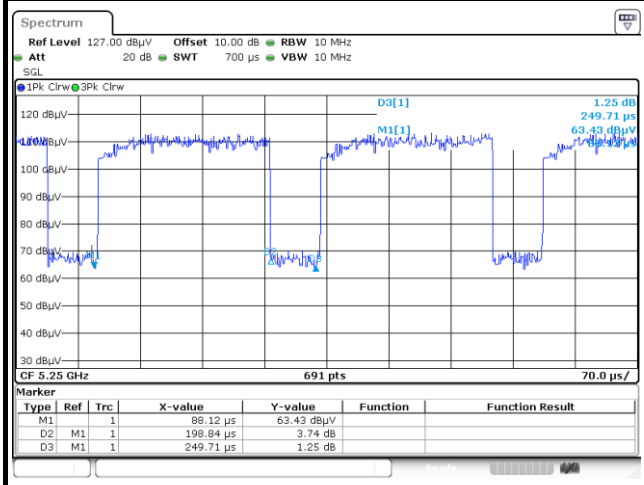


ax HE40



ax HE80



ax HE160	-
 Spectrum Ref Level 127.00 dBµV Offset 10.00 dB RBW 10 MHz Att 20 dB SWT 700 µs VBW 10 MHz SGL 1Pk Clrw 3Pk Clrw D3[1] 1.25 dB 249.71 µs M1[1] 63.43 dBµV 120 dBµV 110 dBµV 100 dBµV 90 dBµV 80 dBµV 70 dBµV 60 dBµV 50 dBµV 40 dBµV 30 dBµV CF 5.25 GHz 691 pts 70.0 µs/ Marker Type Ref Trc X-value Y-value Function Function Result M1 1 88.12 µs 63.43 dBµV D2 M1 1 198.84 µs 3.74 dB D3 M1 1 249.71 µs 1.25 dB	-

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	18.5
11a	5200	18.5
11a	5240	18.5
11a	5260	11.5
11a	5300	12
11a	5320	12
11a	5500	12
11a	5580	11.5
11a	5700	12
11a	5745	20
11a	5785	20
11a	5825	20
ax HE20	5180	19
ax HE20	5200	20
ax HE20	5240	20.5
ax HE20	5260	14.5
ax HE20	5300	14.5
ax HE20	5320	14.5
ax HE20	5500	15
ax HE20	5580	14
ax HE20	5700	14.5
ax HE20	5745	20.5
ax HE20	5785	20
ax HE20	5825	20

Modulation Mode	Test Frequency (MHz)	Power Index
ax HE40	5190	15
ax HE40	5230	19.5
ax HE40	5270	14.5
ax HE40	5310	14.5
ax HE40	5510	14.5
ax HE40	5590	14.5
ax HE40	5670	14.5
ax HE40	5755	20
ax HE40	5795	20
ax HE80	5210	11
ax HE80	5290	14
ax HE80	5530	13.5
ax HE80	5610	14.5
ax HE80	5775	19.5
ax HE160	5250	10.5
ax HE160	5570	11.5

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5720	11.5
ax HE20	5720	14
ax HE40	5710	14
ax HE80	5690	14.5

1.2 Local Support Equipment List

Adapter Mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---

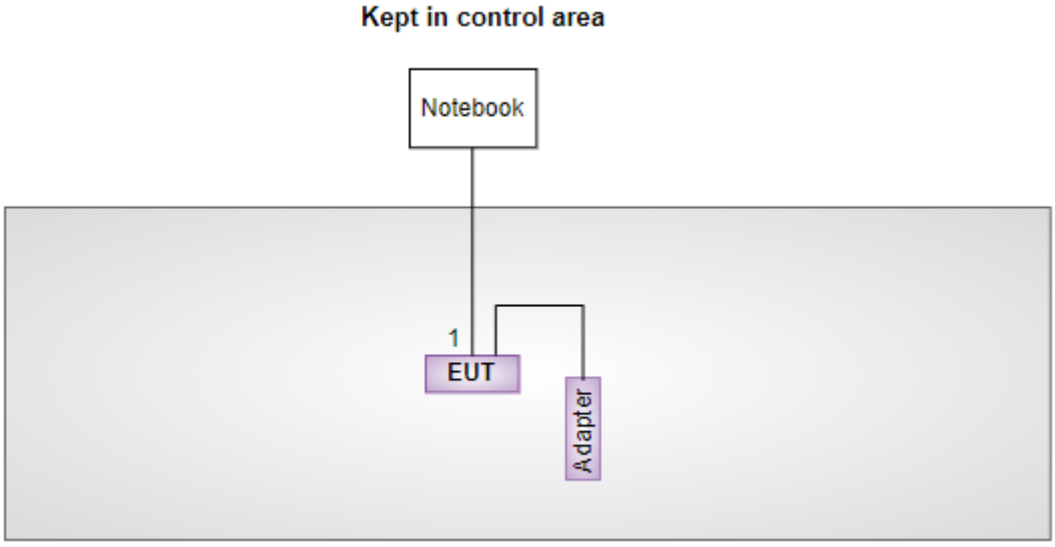
POE Mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---
2	PoE injector	ZYXEL	PoE12-60W	---	Provided by applicant.

1.3 Test Setup Chart

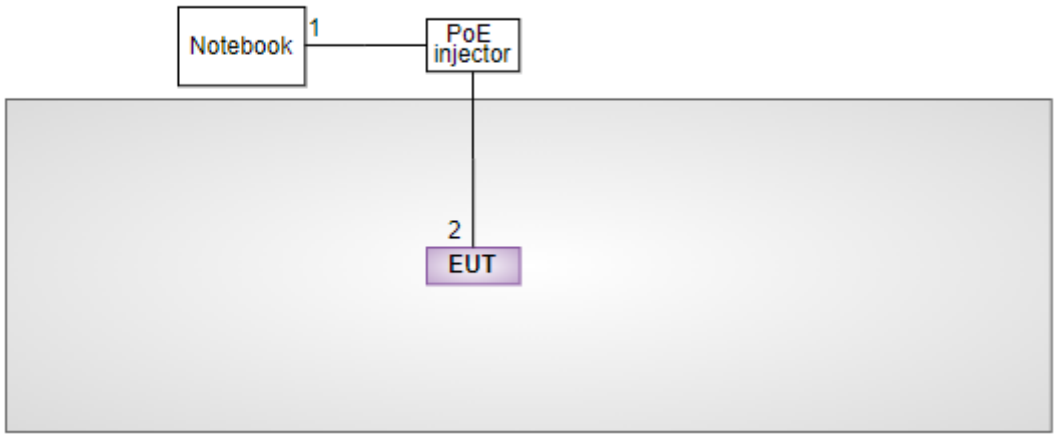
Adapter Mode

Test Setup Diagram



No.	Signal cable / Length (m)
1	RJ45, 10m non-shielded.

POE Mode

Test Setup Diagram
Kept in control area 

No.	Signal cable / Length (m)
1	RJ45, 1m non-shielded.
2	RJ45, 10m non-shielded.

1.4 The Equipment List

Test Item	Radiated Emission below 1GHz				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Dec. 29, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Jun. 28, 2022	Jun. 27, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jun. 28, 2022	Jun. 27, 2023
Preamplifier	EMC	EMC02325	980187	Jul. 16, 2022	Jul. 15, 2023
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 23, 2022	Sep. 22, 2023
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 23, 2022	Sep. 22, 2023
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 23, 2022	Sep. 22, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Nov. 23 ~ Nov. 25, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Mar. 08, 2022	Mar. 07, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 20, 2021	Dec. 19, 2022
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Jan. 11, 2022	Jan. 10, 2023
Preamplifier	EMC	EMC184045SE	980897	Aug. 01, 2022	Jul. 31, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 23, 2022	Sep. 22, 2023
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 23, 2022	Sep. 22, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 20, 2022 ~ Jan. 04, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 08, 2022	Apr. 07, 2023
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Jun. 22, 2022	Jun. 21, 2023
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 9, 2022	Dec. 8, 2023
Measurement Software	Sporton	SENSE-15407_NII	V5.10.8.7.3	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 30, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 16, 2022	Feb. 15, 2023
LISN	R&S	ENV216	101579	Apr. 21, 2022	Apr. 20, 2023
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan .07, 2022	Jan .06, 2023
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	01	May. 10, 2022	May. 09, 2023
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.407
ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 412172 D01 Determining ERP and EIRP v01r01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Unwanted Emission ≤ 1GHz	±3.96 dB
Unwanted Emission > 1GHz	±4.51 dB
Time	±0.1%
Temperature	±0.4 °C

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
Test Site	03CH03-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISED#: 10807C
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
AC Power Line Conducted Emissions	ax HE20	5240	MCS 0	1, 2
Unwanted Emissions ≤1GHz	ax HE20	5240	MCS 0	1, 2
Unwanted Emissions >1GHz Conducted Output Power Emission Bandwidth Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	1
	ax HE20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	ax HE80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax HE160	5250 / 5570	MCS 0	
Frequency Stability	Un-modulation	5320	---	1
Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
AC Power Line Conducted Emissions	ax HE40	5795	MCS 0	1, 2
Unwanted Emissions ≤1GHz	ax HE40	5795	MCS 0	1, 2
Unwanted Emissions >1GHz Conducted Output Power Emission Bandwidth 6dB bandwidth Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	1
	ax HE20	5745 / 5785 / 5825	MCS 0	
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	1

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. The EUT had been tested by following test configurations.
   1) Configuration 1: Adapter mode
   2) Configuration 2: POE mode

Beamforming mode

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Output Power	ax HE20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	1
	ax HE40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	ax HE80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax HE160	5250 / 5570	MCS 0	
Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Output Power	ax HE20	5745 / 5785 / 5825	MCS 0	1
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. The EUT had been tested by following test configurations.
   1) Configuration 1: Adapter mode
   2) Configuration 2: POE mode

3 Transmitter Test Results

3.1 Emission Bandwidth

3.1.1 Limit of Emission Bandwidth

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.1.2 Test Procedures

26dB Bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

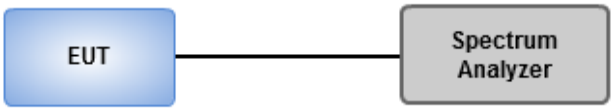
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW.
2. Set VBW ≥ 3 RBW.
3. Sample detection and single sweep mode shall be used.
4. Use the 99 % power bandwidth function of the instrument.

6dB Bandwidth

1. Set RBW = 100kHz, VBW = 300kHz.
2. Detector = Peak,Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	21-22°C / 64-66%	**Tested By**	Akun Chung

Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
☒	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☐	Client devices	Conducted Power: 250 mW

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
☒	5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
☒	5725 ~ 5850	Conducted Power: 1 W
Note: “B” is the 26dB emission bandwidth in MHz.		

3.2.2 Test Procedures

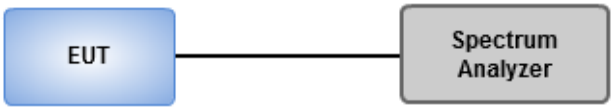
Method PM-G (Measurement using a gated RF average power meter)

Measurements is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Spectrum analyzer (For channel that extends across the 5.725 GHz boundary)

1. Set RBW = 1MHz, VBW = 3MHz, Sweep time = Auto, Detector = RMS.
2. Trace average at least 100 traces in power averaging mode.
3. Compute power by integrating the spectrum across the 26 dB EBW.
4. Add 10 log(1/X, X:duty cycle) if duty cycle is <98%).

3.2.3 Test Setup



3.2.4 Test Results

Ambient Condition	21-22°C / 64-66%	**Tested By**	Akun Chung

Refer to Appendix B.

3.3 Power Spectral Density

3.3.1 Limit of Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	17 dBm / MHz
☒	Indoor access point	17 dBm / MHz
☐	Fixed point-to-point access points	17 dBm / MHz
☐	Client devices	11 dBm / MHz

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz
☒	5725 ~ 5850	30 dBm /500 kHz

3.3.2 Test Procedures

For 5150 ~ 5250 MHz / 5250 ~ 5350 MHz / 5470 ~ 5725 MHz

Duty cycle ≥ 98 %

1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

Duty cycle < 98 %

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

For 5725 ~ 5850 MHz

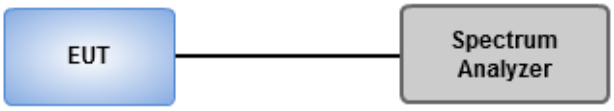
Duty cycle ≥ 98 %

1. Set RBW = 500 kHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

Duty cycle < 98 %

1. Set RBW = 500 kHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	21-22°C / 64-66%	Tested By	Akun Chung

Refer to Appendix C.

3.4 Unwanted Emissions

3.4.1 Limit of Unwanted Emissions

Restricted Band Emissions 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:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

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 - 5.850 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).	

3.4.2 Test Procedures

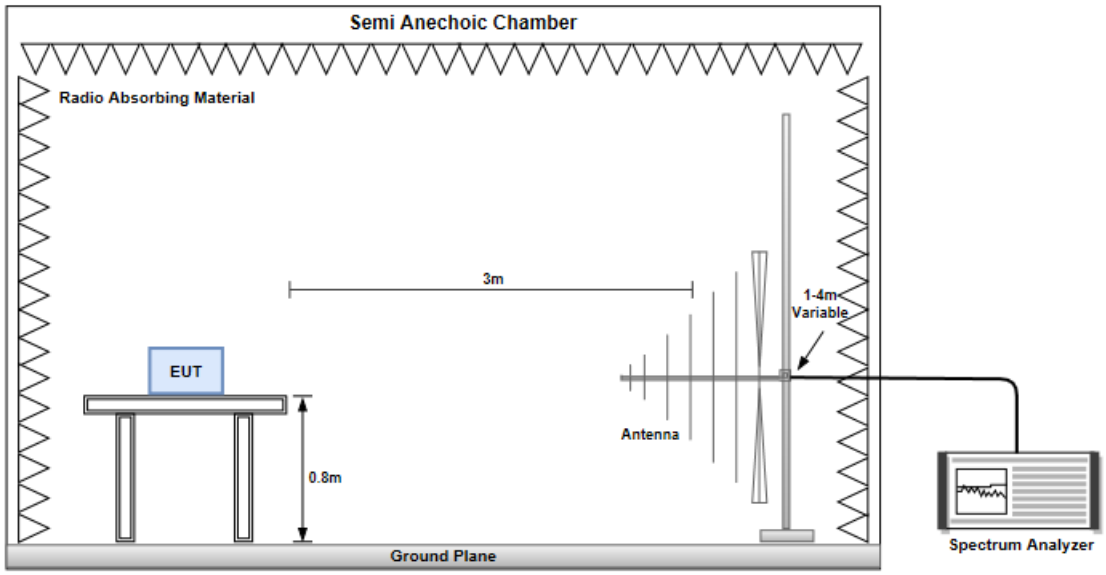
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

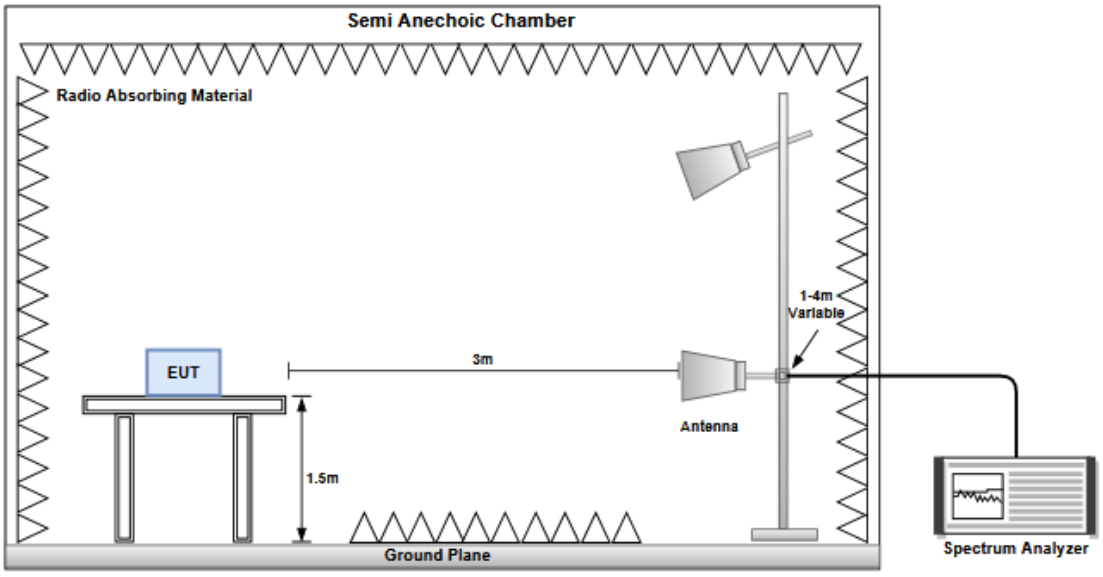
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.4.3 Test Setup

Unwanted Emissions below 1 GHz



Unwanted Emissions above 1 GHz



3.4.4 Test Results

Refer to Appendix D.

3.5 Frequency Stability

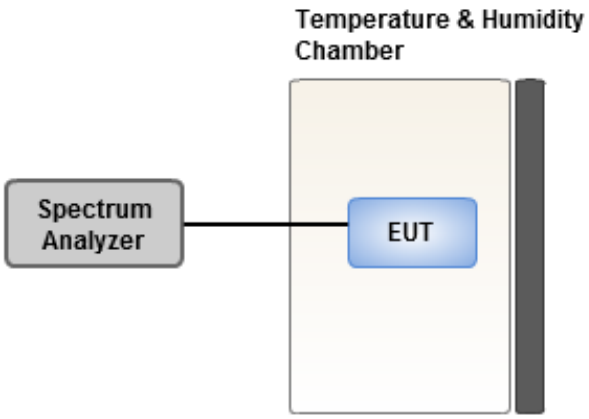
3.5.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.5.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 20 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under normal and extreme condition for temperature and voltage.

3.5.3 Test Setup



3.5.4 Test Results

Ambient Condition	21-22°C / 64-66%	Tested By	Akun Chung

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

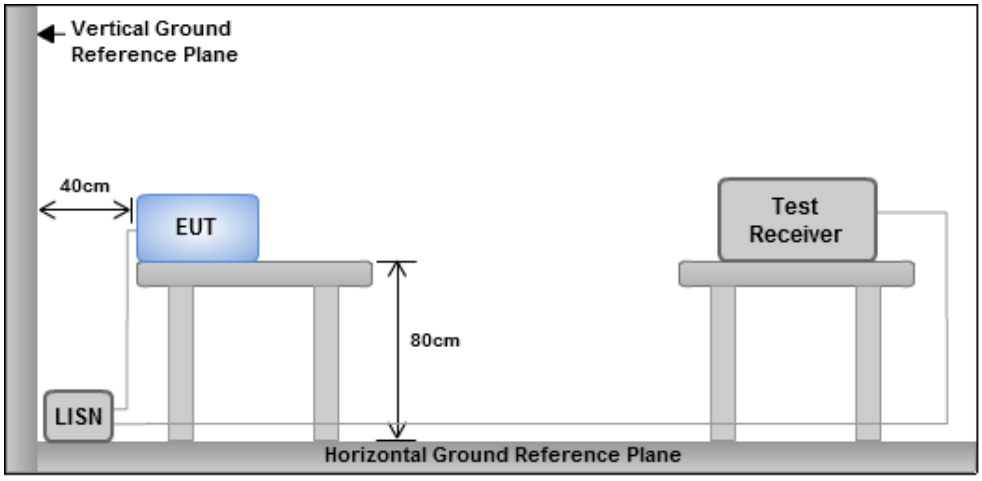
3.6.1 Limit of AC Power Line Conducted Emissions

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.		

3.6.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

3.6.3 Test Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.6.4 Test Results

Refer to Appendix F.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

No.2-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666
Fax: 886-3-318-0345
Email: ICC_Service@icertifi.com.tw

==END==

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)_3TX	24.48M	16.567M	16M6D1D	21.15M	16.439M
802.11ax HEW20_Nss2,(MCS0)_3TX	37.08M	18.983M	19M0D1D	23.91M	18.836M
802.11ax HEW40_Nss2,(MCS0)_3TX	53.22M	37.613M	37M6D1D	39.48M	37.437M
802.11ax HEW80_Nss2,(MCS0)_3TX	83.04M	76.519M	76M5D1D	80.4M	76.519M
802.11ax HEW160_Nss2,(MCS0)_3TX	80.4M	77.481M	77M5D1D	80.08M	77.401M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	25.23M	16.516M	16M5D1D	19.41M	16.337M
802.11ax HEW20_Nss2,(MCS0)_3TX	26.13M	18.924M	18M9D1D	21.06M	18.807M
802.11ax HEW40_Nss2,(MCS0)_3TX	42.3M	37.496M	37M5D1D	39.12M	37.261M
802.11ax HEW80_Nss2,(MCS0)_3TX	83.76M	76.754M	76M8D1D	80.16M	76.402M
802.11ax HEW160_Nss2,(MCS0)_3TX	80.32M	77.481M	77M5D1D	80.16M	77.321M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	25.92M	16.618M	16M6D1D	15.27M	13.208M
802.11ax HEW20_Nss2,(MCS0)_3TX	24.21M	18.895M	18M9D1D	15.615M	14.423M
802.11ax HEW40_Nss2,(MCS0)_3TX	48.42M	37.496M	37M5D1D	34.615M	33.408M
802.11ax HEW80_Nss2,(MCS0)_3TX	81.12M	76.637M	76M6D1D	74.925M	72.564M
802.11ax HEW160_Nss2,(MCS0)_3TX	165.36M	154.919M	155MD1D	162M	154.919M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	15.42M	18.096M	18M1D1D	3.1M	3.698M
802.11ax HEW20_Nss2,(MCS0)_3TX	17.88M	19.394M	19M4D1D	4.4M	4.518M
802.11ax HEW40_Nss2,(MCS0)_3TX	34.98M	37.731M	37M7D1D	3.94M	4.038M
802.11ax HEW80_Nss2,(MCS0)_3TX	72.6M	76.872M	76M9D1D	4M	4.078M

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

Result

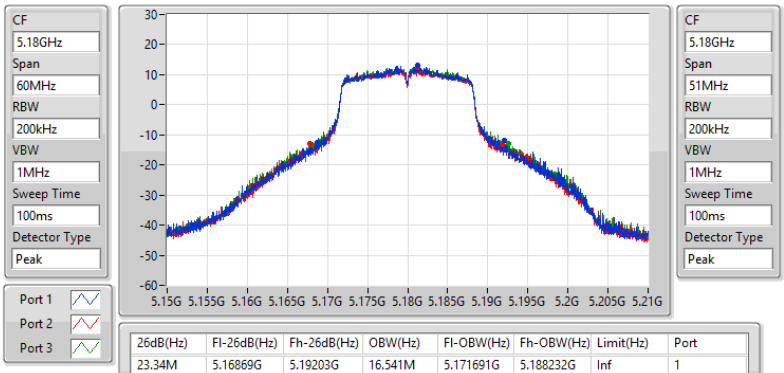
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.34M	16.541M	24.09M	16.465M	24.48M	16.465M
5200MHz	Pass	Inf	23.28M	16.541M	24.24M	16.49M	22.98M	16.465M
5240MHz	Pass	Inf	22.05M	16.567M	22.65M	16.49M	21.15M	16.439M
5260MHz	Pass	Inf	20.16M	16.414M	19.53M	16.363M	19.41M	16.337M
5300MHz	Pass	Inf	25.23M	16.516M	24.9M	16.49M	23.88M	16.49M
5320MHz	Pass	Inf	25.23M	16.49M	24.57M	16.49M	24.36M	16.465M
5500MHz	Pass	Inf	25.14M	16.49M	24.42M	16.465M	23.1M	16.465M
5580MHz	Pass	Inf	20.07M	16.337M	19.8M	16.363M	19.56M	16.363M
5700MHz	Pass	Inf	25.08M	16.618M	25.92M	16.618M	24.69M	16.567M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.27M	13.253M	15.525M	13.253M	15.75M	13.208M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.1M	3.898M	3.12M	3.918M	3.1M	3.698M
5745MHz	Pass	500k	15.33M	17.178M	15.12M	17.127M	15.42M	17M
5785MHz	Pass	500k	15.09M	17.255M	15.12M	17.025M	15.06M	17.051M
5825MHz	Pass	500k	15.09M	18.045M	15M	18.096M	15.12M	17.051M
802.11ax HEW20_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	25.38M	18.924M	23.91M	18.924M	24.24M	18.836M
5200MHz	Pass	Inf	30.93M	18.983M	25.98M	18.983M	27.66M	18.895M
5240MHz	Pass	Inf	31.68M	18.924M	37.08M	18.924M	29.16M	18.865M
5260MHz	Pass	Inf	21.69M	18.836M	21.3M	18.836M	21.06M	18.807M
5300MHz	Pass	Inf	24M	18.895M	26.13M	18.924M	23.19M	18.865M
5320MHz	Pass	Inf	23.34M	18.895M	21.33M	18.895M	22.14M	18.865M
5500MHz	Pass	Inf	24.21M	18.895M	22.41M	18.895M	22.8M	18.836M
5580MHz	Pass	Inf	21.33M	18.865M	21.15M	18.836M	20.97M	18.777M
5700MHz	Pass	Inf	23.25M	18.895M	22.86M	18.895M	21.51M	18.836M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.735M	14.423M	15.63M	14.438M	15.615M	14.423M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.538M	4.4M	4.518M	4.46M	4.518M
5745MHz	Pass	500k	15.48M	19.247M	15.54M	19.218M	17.88M	19.042M
5785MHz	Pass	500k	16.59M	19.277M	16.8M	19.071M	17.52M	19.012M
5825MHz	Pass	500k	16.8M	19.306M	16.77M	19.394M	15.96M	18.954M
802.11ax HEW40_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.46M	37.437M	41.58M	37.437M	39.48M	37.437M
5230MHz	Pass	Inf	53.22M	37.613M	47.16M	37.613M	43.98M	37.496M
5270MHz	Pass	Inf	39.12M	37.378M	39.24M	37.261M	39.12M	37.261M
5310MHz	Pass	Inf	42.3M	37.496M	40.08M	37.378M	39.54M	37.319M
5510MHz	Pass	Inf	45M	37.437M	41.7M	37.437M	39.54M	37.319M

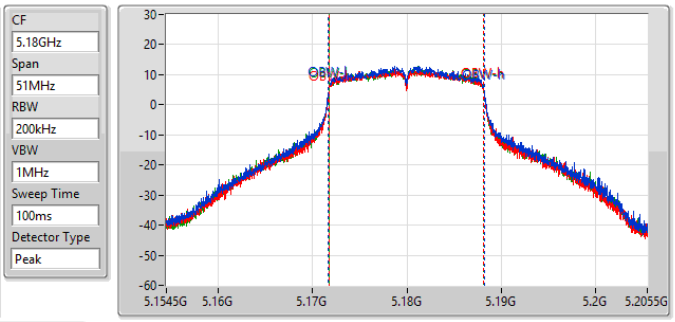
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
5590MHz	Pass	Inf	39.24M	37.319M	39.12M	37.319M	39.18M	37.319M
5670MHz	Pass	Inf	45.36M	37.496M	48.42M	37.437M	39.48M	37.378M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.685M	33.408M	34.615M	33.408M	34.65M	33.443M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4M	4.038M	3.94M	4.058M	4M	4.038M
5755MHz	Pass	500k	33.84M	37.731M	33.78M	37.731M	33.78M	37.613M
5795MHz	Pass	500k	34.98M	37.731M	33.78M	37.672M	32.58M	37.731M
802.11ax HEW80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	80.4M	76.519M	82.08M	76.519M	83.04M	76.519M
5290MHz	Pass	Inf	80.28M	76.402M	83.76M	76.519M	80.16M	76.754M
5530MHz	Pass	Inf	80.28M	76.637M	80.16M	76.402M	81.12M	76.519M
5610MHz	Pass	Inf	80.16M	76.284M	80.16M	76.284M	80.28M	76.284M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.075M	72.564M	75.075M	72.639M	74.925M	72.564M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.02M	4.078M	4M	4.078M	4M	4.078M
5775MHz	Pass	500k	72.6M	76.872M	72.6M	76.872M	72.6M	76.754M
802.11ax HEW160_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.08M	77.481M	80.16M	77.481M	80.4M	77.401M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	80.16M	77.481M	80.24M	77.321M	80.32M	77.321M
5570MHz	Pass	Inf	165.36M	154.919M	162M	154.919M	162.48M	154.919M

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)_3TX **EBW**

5180MHz

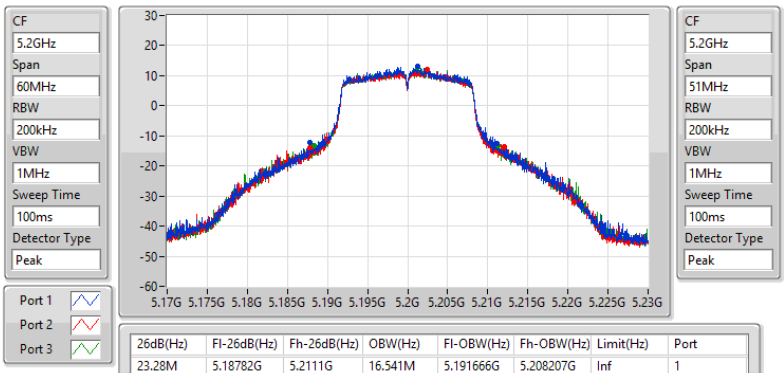


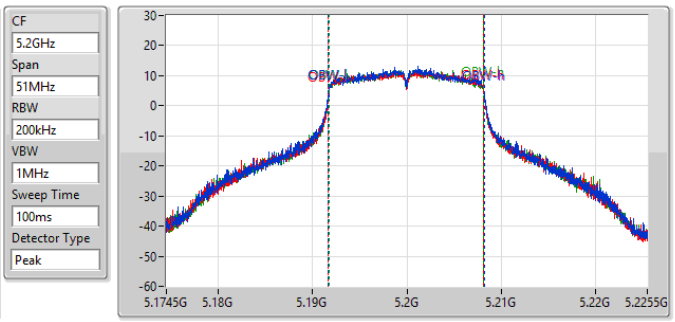


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.34M	5.16869G	5.19203G	16.541M	5.171691G	5.188232G	Inf	1
24.09M	5.16776G	5.19185G	16.465M	5.171717G	5.188181G	Inf	2
24.48M	5.16806G	5.19254G	16.465M	5.171717G	5.188181G	Inf	3

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5200MHz

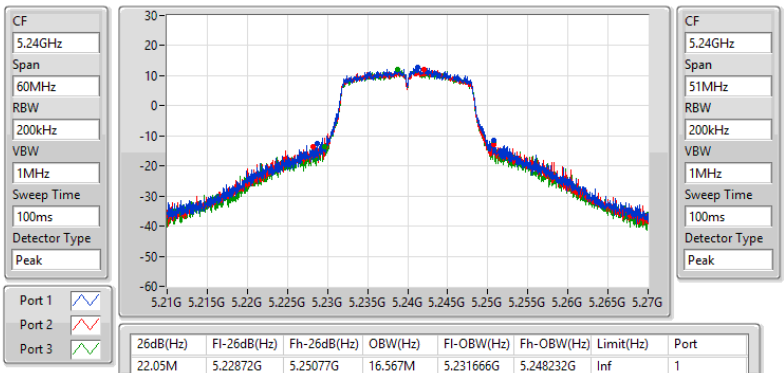


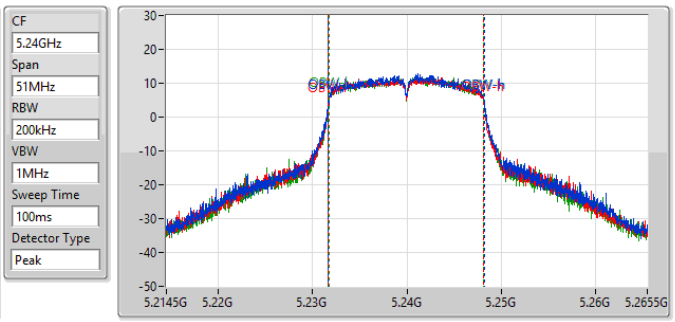


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.28M	5.18782G	5.2111G	16.541M	5.191666G	5.208207G	Inf	1
24.24M	5.18776G	5.212G	16.49M	5.191691G	5.208181G	Inf	2
22.98M	5.18836G	5.21134G	16.465M	5.191717G	5.208181G	Inf	3

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5240MHz

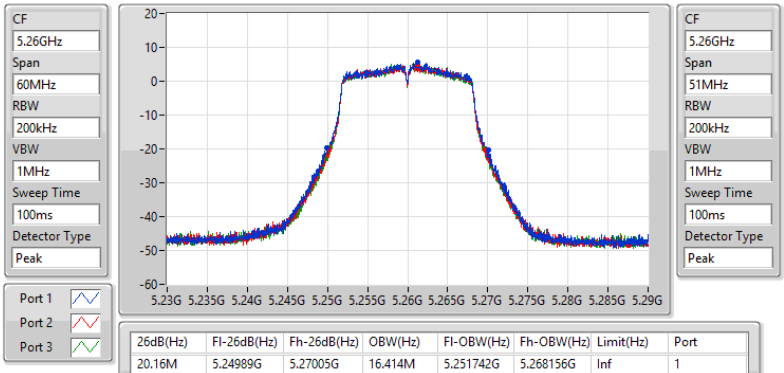


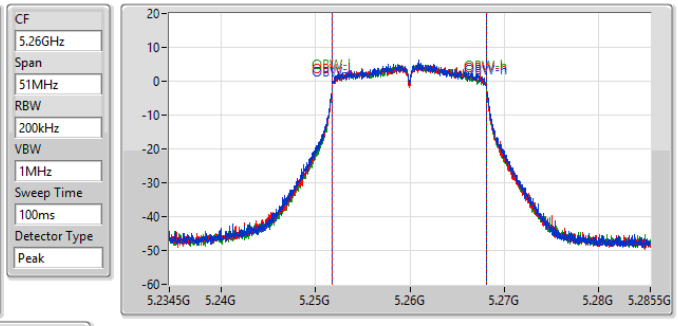


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.05M	5.22872G	5.25077G	16.567M	5.231666G	5.248232G	Inf	1
22.65M	5.22815G	5.2508G	16.49M	5.231691G	5.248181G	Inf	2
21.15M	5.22962G	5.25077G	16.439M	5.231742G	5.248181G	Inf	3

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5260MHz

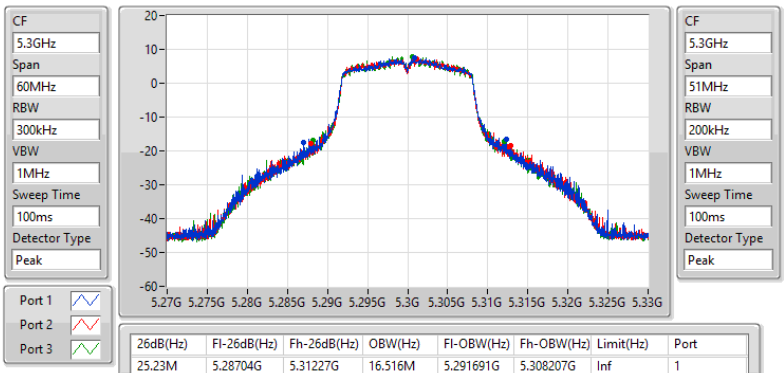


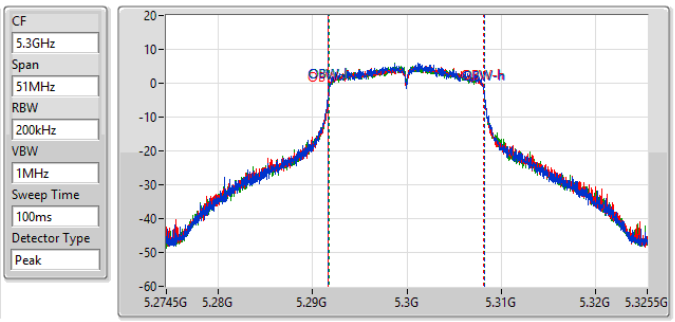


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.16M	5.24989G	5.27005G	16.414M	5.251742G	5.268156G	Inf	1
19.53M	5.25013G	5.26966G	16.363M	5.251768G	5.26813G	Inf	2
19.41M	5.25019G	5.2696G	16.337M	5.251793G	5.26813G	Inf	3

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5300MHz

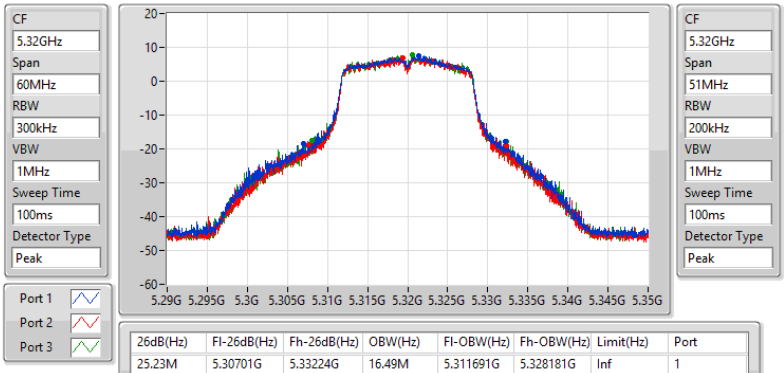


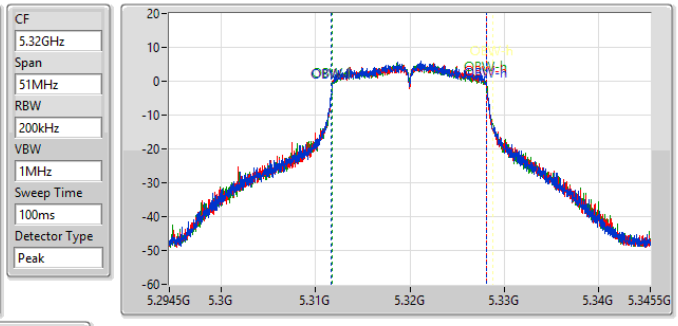


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.23M	5.28704G	5.31227G	16.516M	5.291691G	5.308207G	Inf	1
24.9M	5.28794G	5.31284G	16.49M	5.291691G	5.308181G	Inf	2
23.88M	5.28815G	5.31203G	16.49M	5.291717G	5.308207G	Inf	3

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5320MHz

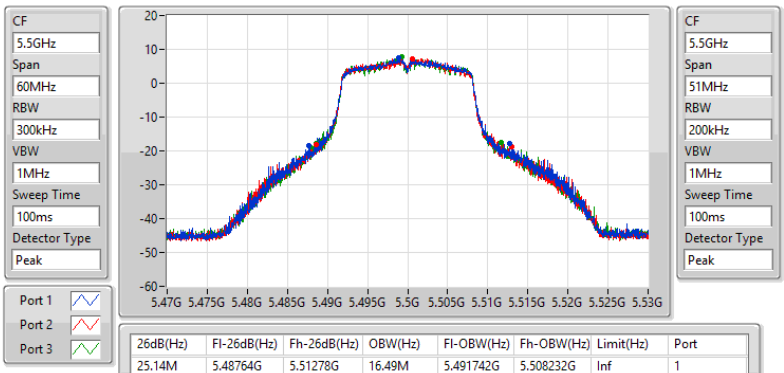




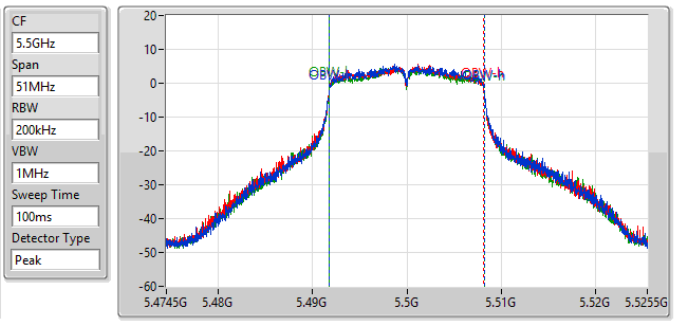
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.23M	5.30701G	5.33224G	16.49M	5.311691G	5.328181G	Inf	1
24.57M	5.30773G	5.3323G	16.49M	5.311691G	5.328181G	Inf	2
24.36M	5.308G	5.33236G	16.465M	5.311717G	5.328181G	Inf	3

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5500MHz

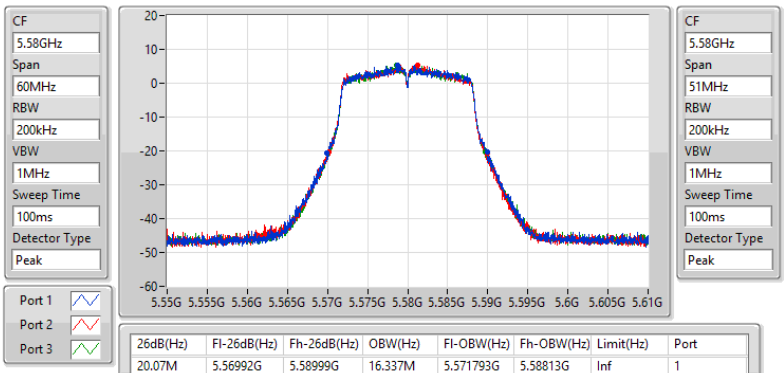


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.14M	5.48764G	5.51278G	16.49M	5.491742G	5.508232G	Inf	1
24.42M	5.48857G	5.51299G	16.465M	5.491717G	5.508181G	Inf	2
23.1M	5.48857G	5.51167G	16.465M	5.491742G	5.508207G	Inf	3

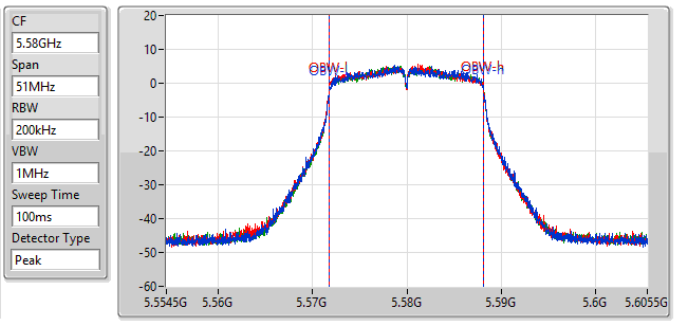


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5580MHz

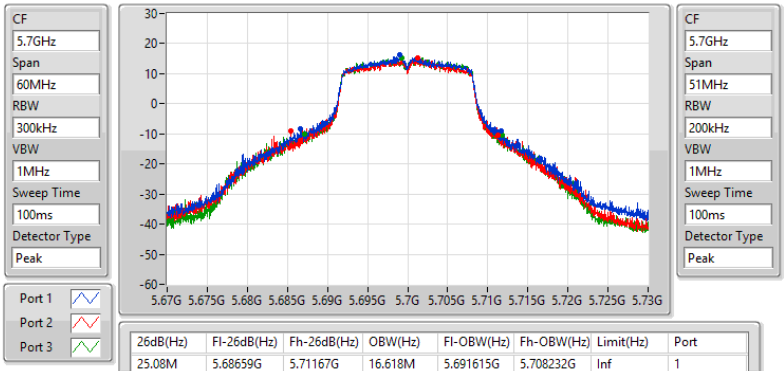


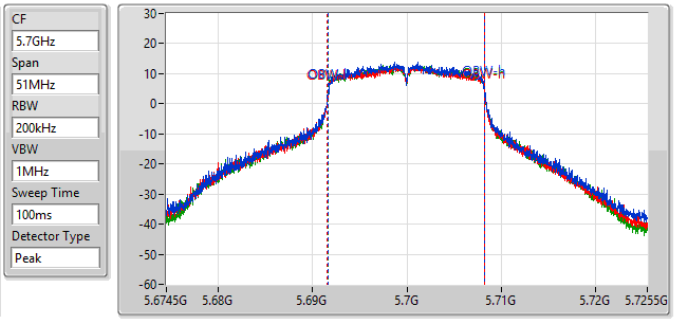
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.07M	5.56992G	5.58999G	16.337M	5.571793G	5.58813G	Inf	1
19.8M	5.57013G	5.58993G	16.363M	5.571768G	5.58813G	Inf	2
19.56M	5.5701G	5.58966G	16.363M	5.571768G	5.58813G	Inf	3



5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5700MHz

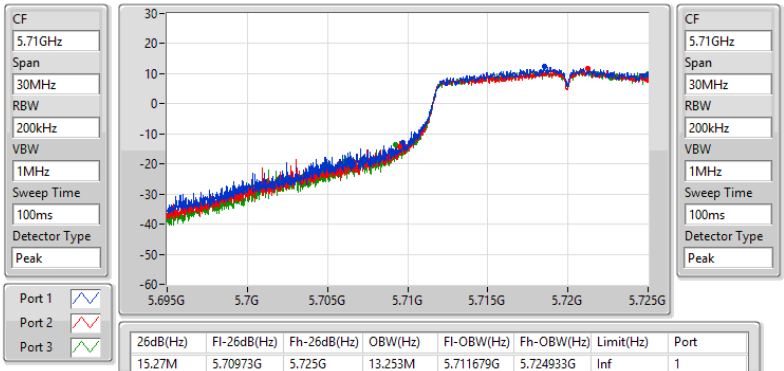


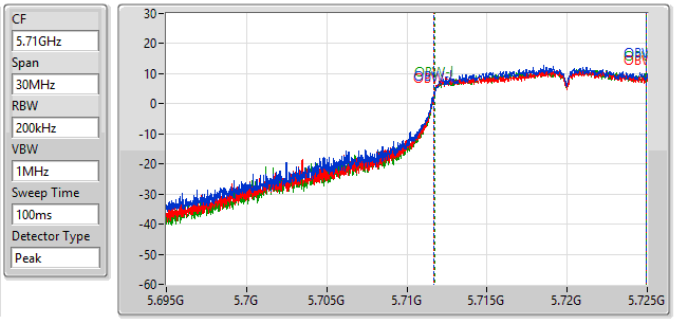


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.08M	5.68659G	5.71167G	16.618M	5.691615G	5.708232G	Inf	1
25.92M	5.68539G	5.71131G	16.618M	5.691589G	5.708207G	Inf	2
24.69M	5.68716G	5.71185G	16.567M	5.69164G	5.708207G	Inf	3

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5720MHz Straddle 5.47-5.725GHz

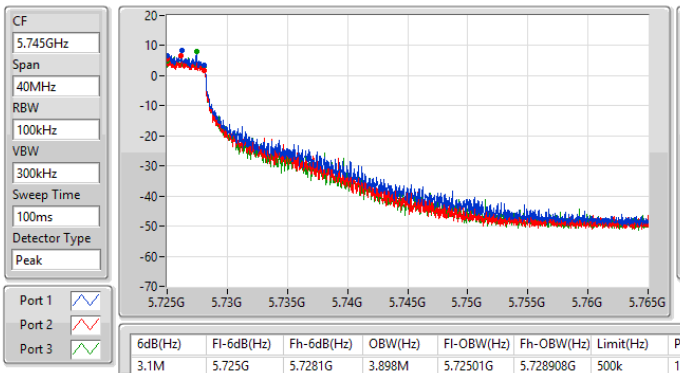


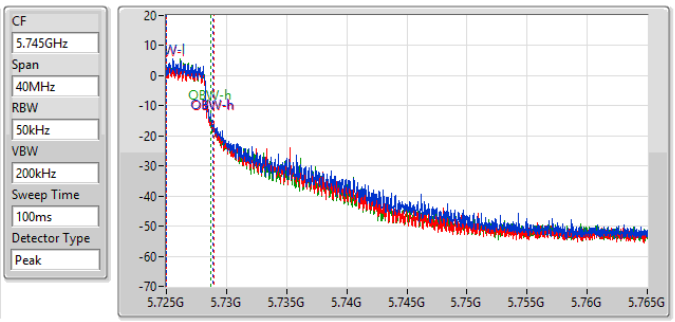


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.27M	5.70973G	5.725G	13.253M	5.711679G	5.724933G	Inf	1
15.525M	5.709475G	5.725G	13.253M	5.711679G	5.724933G	Inf	2
15.75M	5.70925G	5.725G	13.208M	5.711724G	5.724933G	Inf	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5720MHz Straddle 5.725-5.85GHz

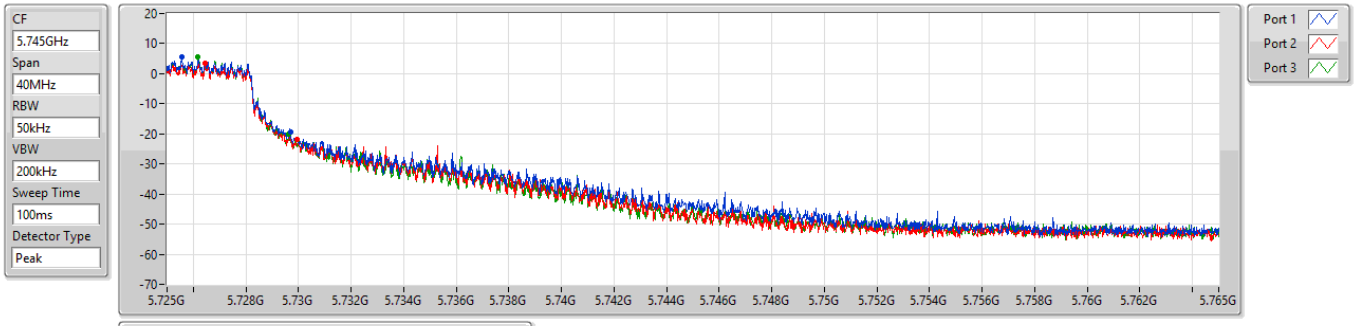




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.1M	5.725G	5.7281G	3.898M	5.72501G	5.728908G	500k	1
3.12M	5.725G	5.72812G	3.918M	5.72501G	5.728928G	500k	2
3.1M	5.725G	5.7281G	3.698M	5.72501G	5.728708G	500k	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

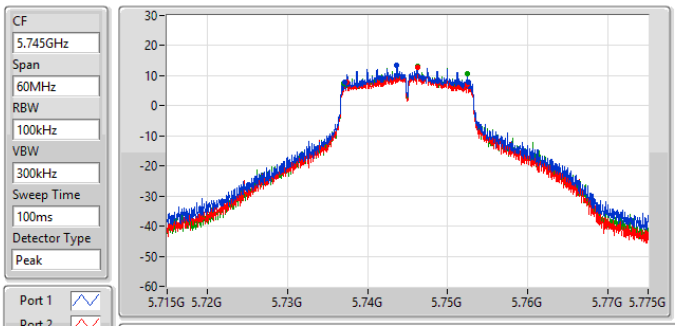
5720MHz Straddle 5.725-5.85GHz

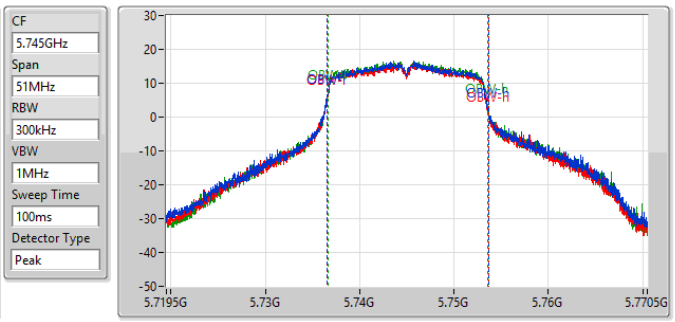


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
4.7M	5.725G	5.7297G	Inf	1
4.96M	5.725G	5.72996G	Inf	2
4.64M	5.725G	5.72964G	Inf	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5745MHz

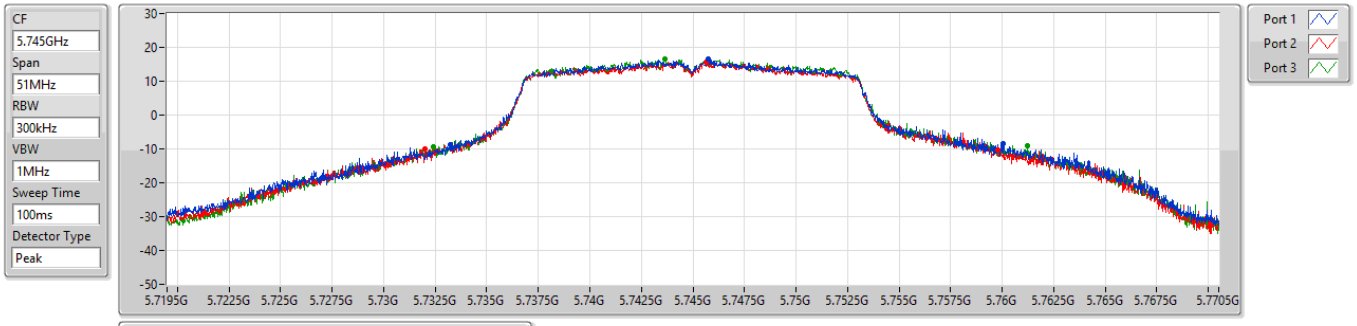




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.33M	5.7372G	5.75253G	17.178M	5.736538G	5.753717G	500k	1
15.12M	5.73738G	5.7525G	17.127M	5.736538G	5.753666G	500k	2
15.42M	5.73705G	5.75247G	17M	5.736615G	5.753615G	500k	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

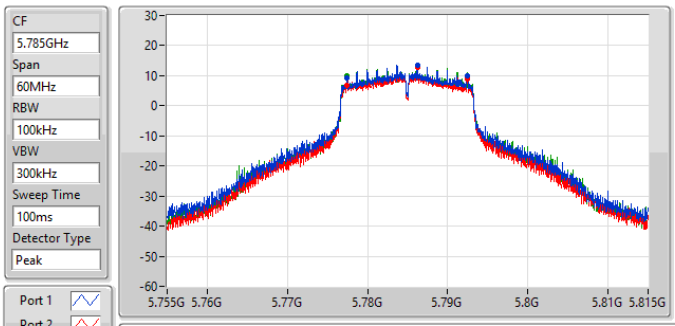
5745MHz

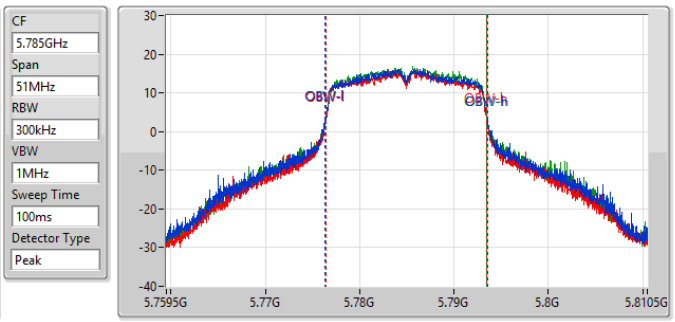


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
26.801M	5.733245G	5.760045G	Inf	1
27.795M	5.731995G	5.75979G	Inf	2
28.815M	5.732403G	5.761218G	Inf	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5785MHz

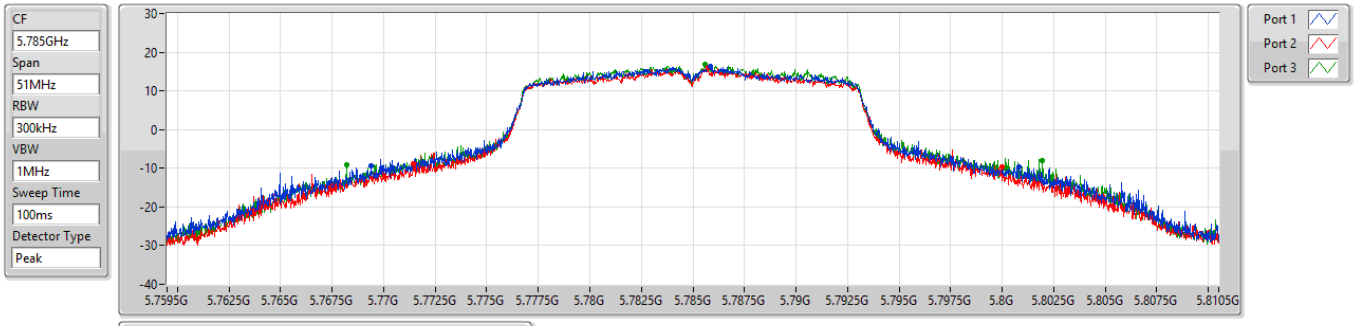




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.09M	5.77741G	5.7925G	17.255M	5.77636G	5.793615G	500k	1
15.12M	5.77738G	5.7925G	17.025M	5.776436G	5.793462G	500k	2
15.06M	5.77744G	5.7925G	17.051M	5.776462G	5.793513G	500k	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

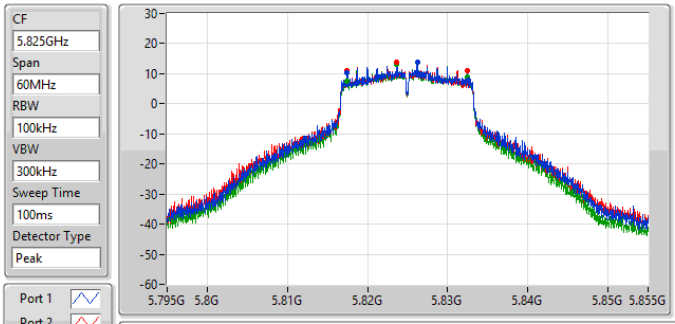
5785MHz

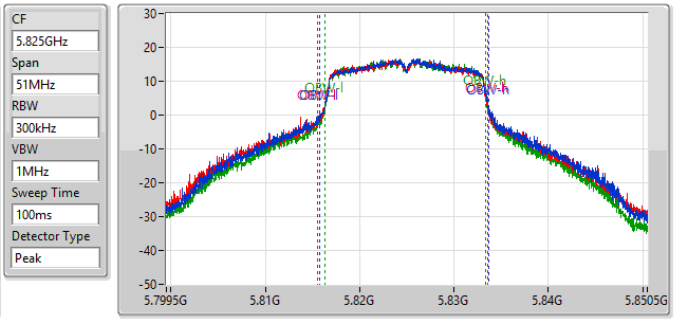


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
31.442M	5.769394G	5.800836G	Inf	1
28.535M	5.77146G	5.799994G	Inf	2
33.762M	5.768196G	5.801958G	Inf	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

5825MHz

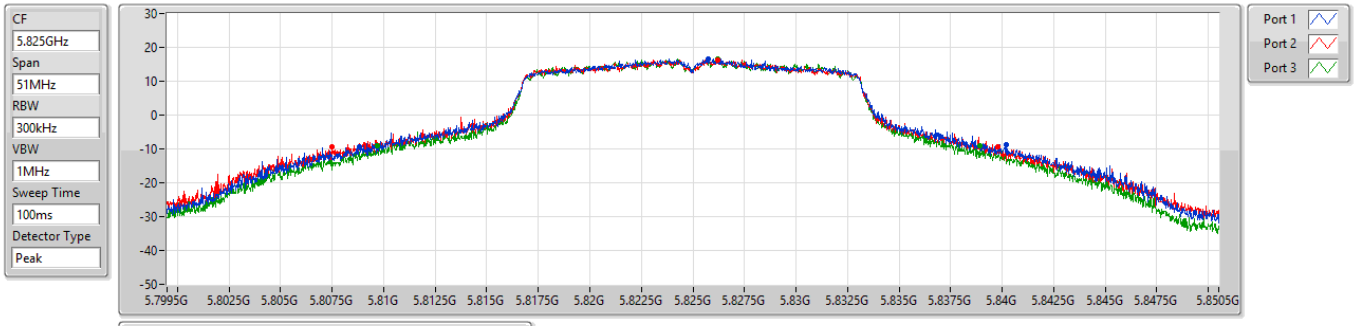




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.09M	5.81744G	5.83253G	18.045M	5.815697G	5.833742G	500k	1
15M	5.81744G	5.83244G	18.096M	5.815519G	5.833615G	500k	2
15.12M	5.81738G	5.8325G	17.051M	5.816334G	5.833385G	500k	3

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **EBW**

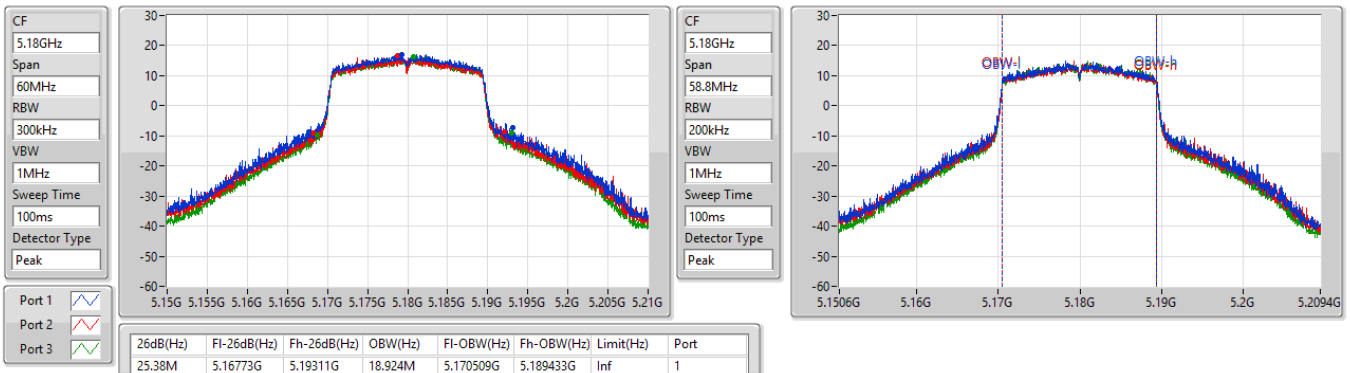
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
31.365M	5.808833G	5.840198G	Inf	1
32.283M	5.807507G	5.83979G	Inf	2
29.172M	5.809726G	5.838898G	Inf	3

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

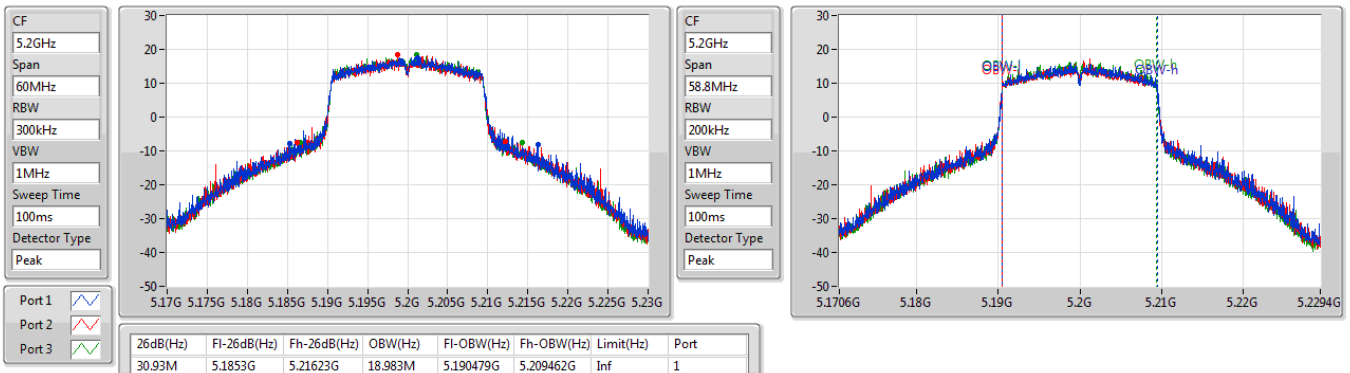
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.38M	5.16773G	5.19311G	18.924M	5.170509G	5.189433G	Inf	1
23.91M	5.16815G	5.19206G	18.924M	5.170509G	5.189433G	Inf	2
24.24M	5.16872G	5.19296G	18.836M	5.170538G	5.189374G	Inf	3

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

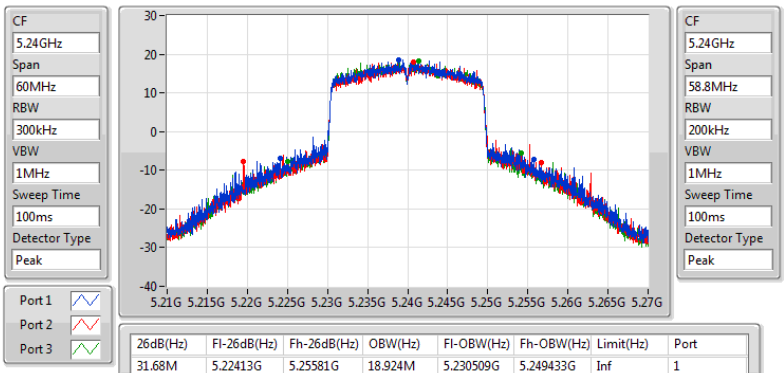
5200MHz

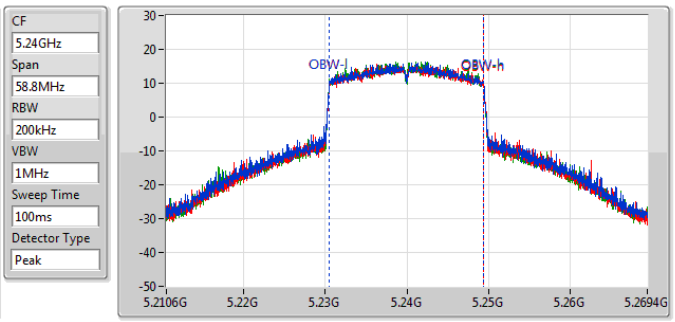


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.93M	5.1853G	5.21623G	18.983M	5.190479G	5.209462G	Inf	1
25.98M	5.1862G	5.21218G	18.983M	5.190479G	5.209462G	Inf	2
27.66M	5.18662G	5.21428G	18.895M	5.190509G	5.209403G	Inf	3

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5240MHz

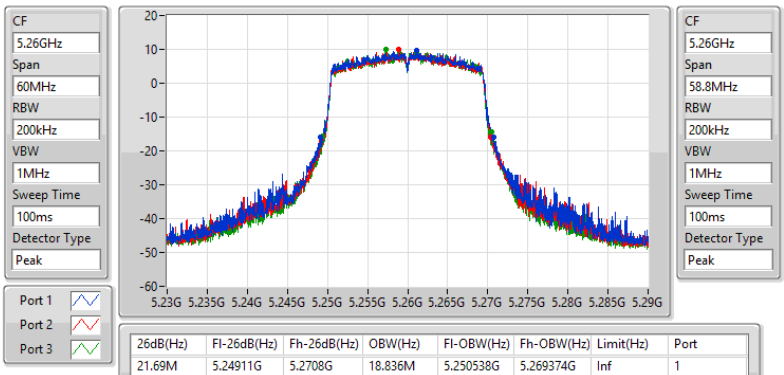


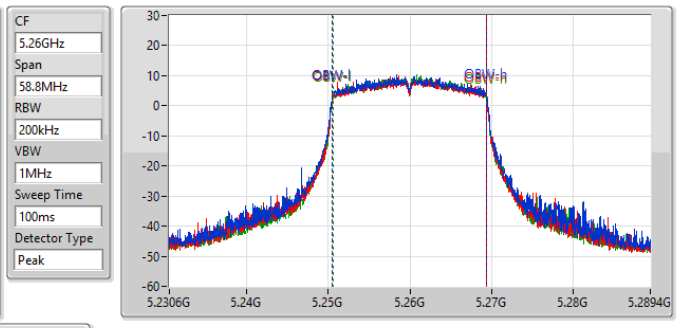


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.68M	5.22413G	5.25581G	18.924M	5.230509G	5.249433G	Inf	1
37.08M	5.21954G	5.25662G	18.924M	5.230509G	5.249433G	Inf	2
29.16M	5.225G	5.25416G	18.865M	5.230538G	5.249403G	Inf	3

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5260MHz

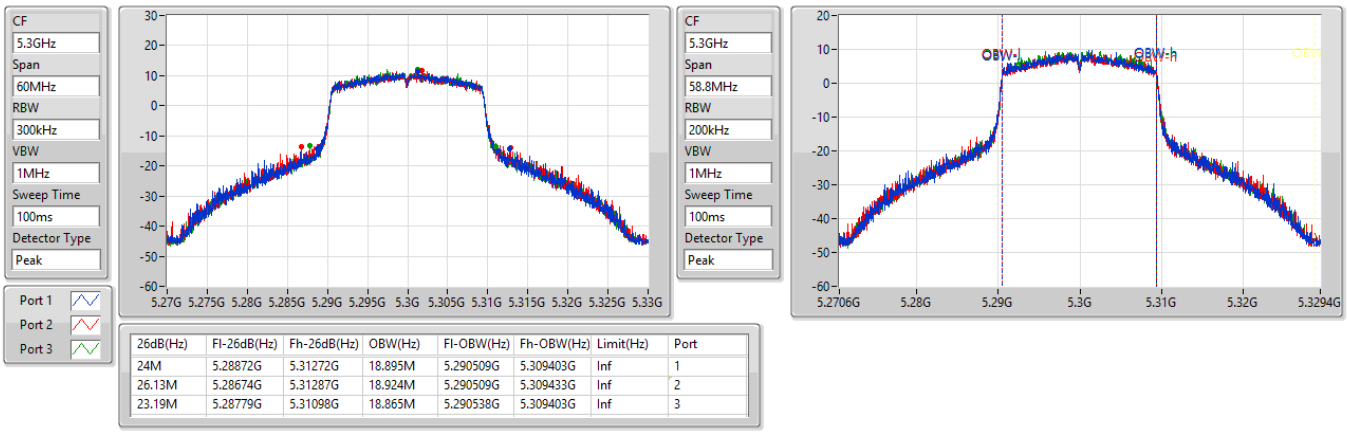




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.24911G	5.2708G	18.836M	5.250538G	5.269374G	Inf	1
21.3M	5.24911G	5.27041G	18.836M	5.250538G	5.269374G	Inf	2
21.06M	5.24941G	5.27047G	18.807M	5.250567G	5.269374G	Inf	3

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

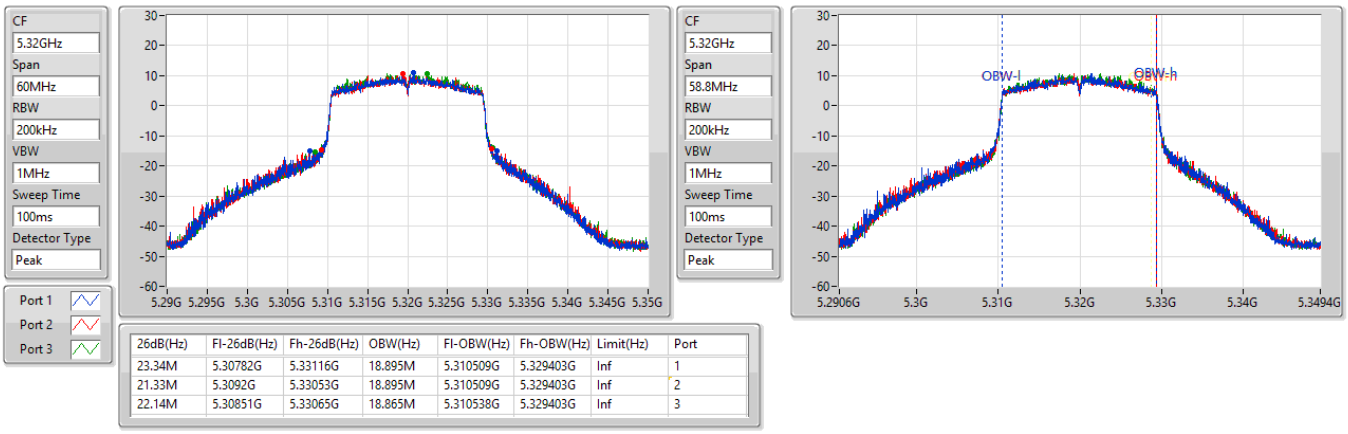
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24M	5.28872G	5.31272G	18.895M	5.290509G	5.309403G	Inf	1
26.13M	5.28674G	5.31287G	18.924M	5.290509G	5.309433G	Inf	2
23.19M	5.28779G	5.31098G	18.865M	5.290538G	5.309403G	Inf	3

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

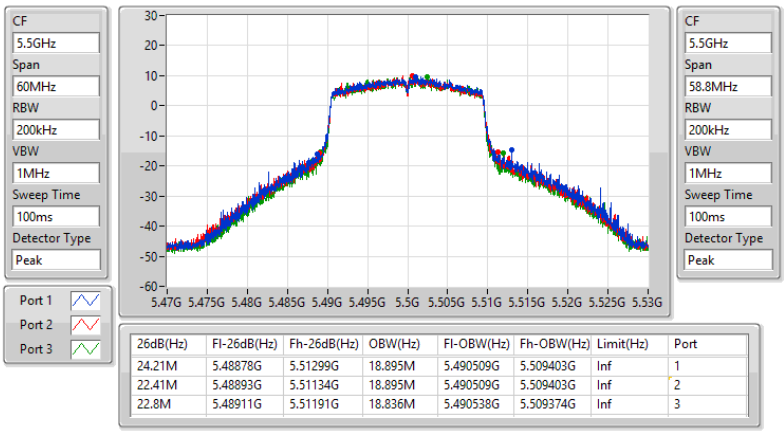
5320MHz



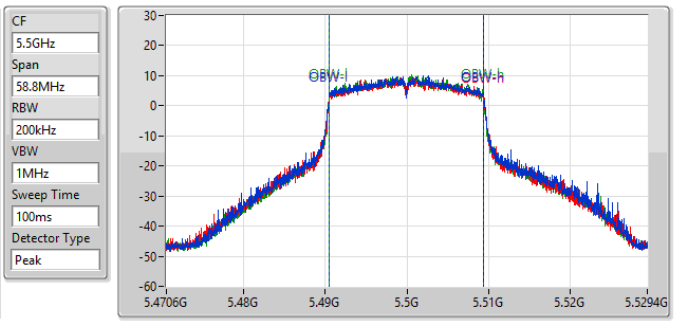
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.34M	5.30782G	5.33116G	18.895M	5.310509G	5.329403G	Inf	1
21.33M	5.3092G	5.33053G	18.895M	5.310509G	5.329403G	Inf	2
22.14M	5.30851G	5.33065G	18.865M	5.310538G	5.329403G	Inf	3

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5500MHz

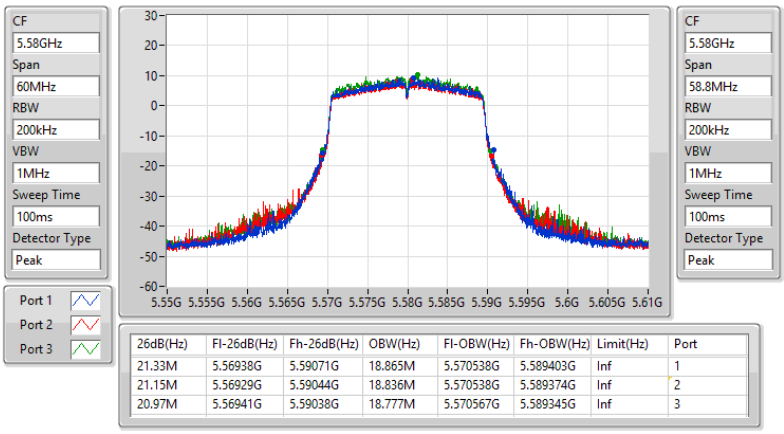


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.21M	5.48878G	5.51299G	18.895M	5.490509G	5.509403G	Inf	1
22.41M	5.48893G	5.51134G	18.895M	5.490509G	5.509403G	Inf	2
22.8M	5.48911G	5.51191G	18.836M	5.490538G	5.509374G	Inf	3

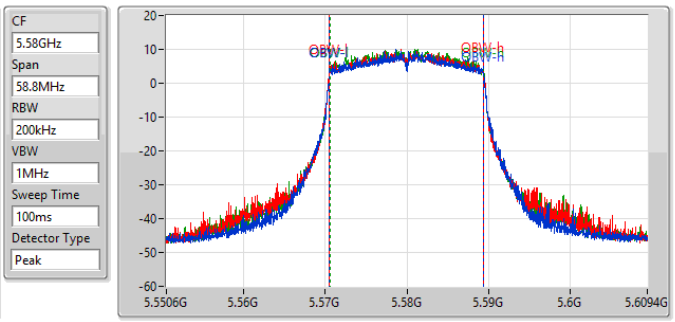


5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5580MHz

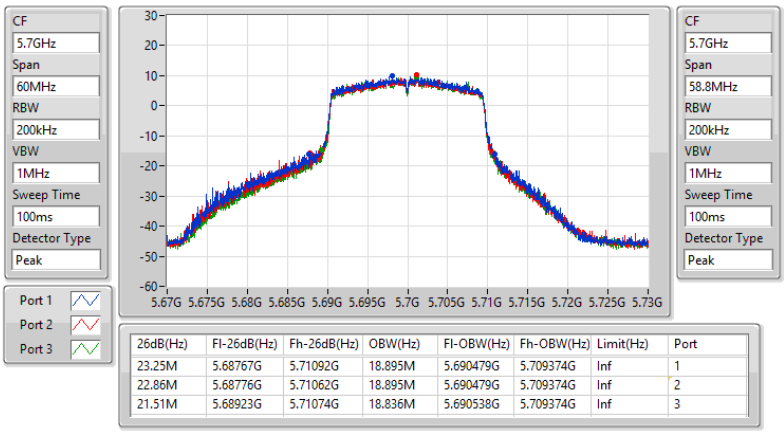


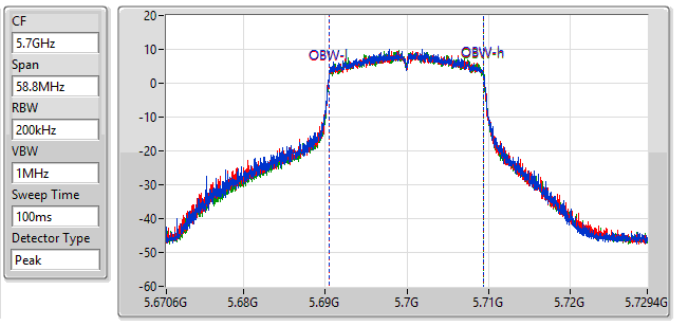
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.33M	5.56938G	5.59071G	18.865M	5.570538G	5.589403G	Inf	1
21.15M	5.56929G	5.59044G	18.836M	5.570538G	5.589374G	Inf	2
20.97M	5.56941G	5.59038G	18.777M	5.570567G	5.589345G	Inf	3



5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5700MHz

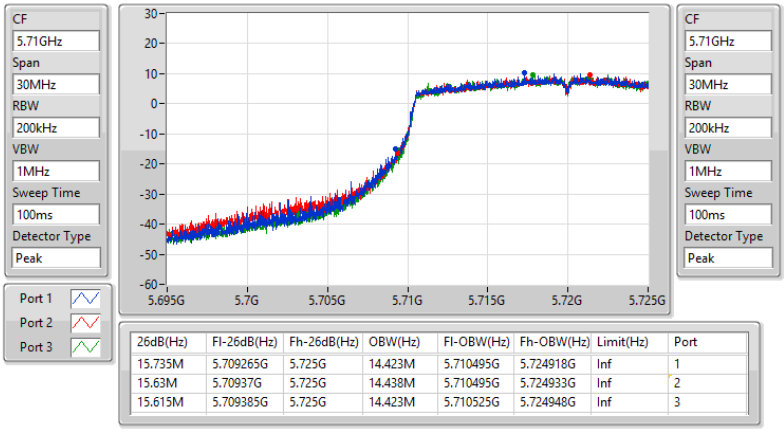


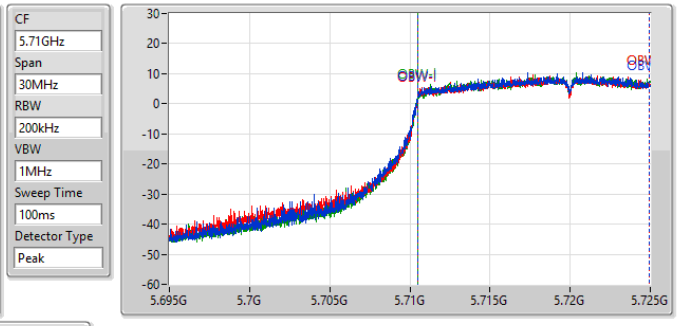


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.25M	5.68767G	5.71092G	18.895M	5.690479G	5.709374G	Inf	1
22.86M	5.68776G	5.71062G	18.895M	5.690479G	5.709374G	Inf	2
21.51M	5.68923G	5.71074G	18.836M	5.690538G	5.709374G	Inf	3

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5720MHz Straddle 5.47-5.725GHz

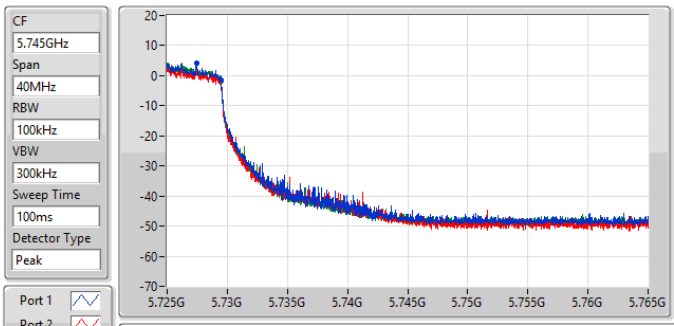


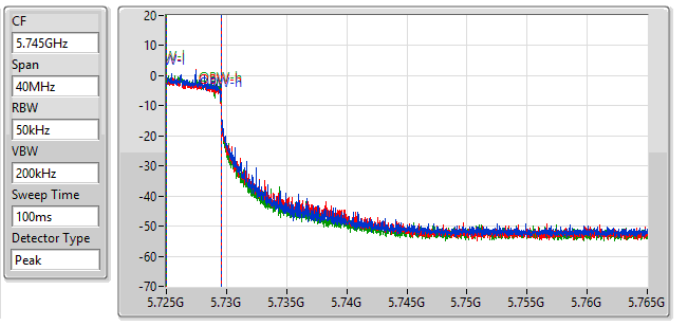


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.735M	5.709265G	5.725G	14.423M	5.710495G	5.724918G	Inf	1
15.63M	5.70937G	5.725G	14.438M	5.710495G	5.724933G	Inf	2
15.615M	5.709385G	5.725G	14.423M	5.710525G	5.724948G	Inf	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5720MHz Straddle 5.725-5.85GHz

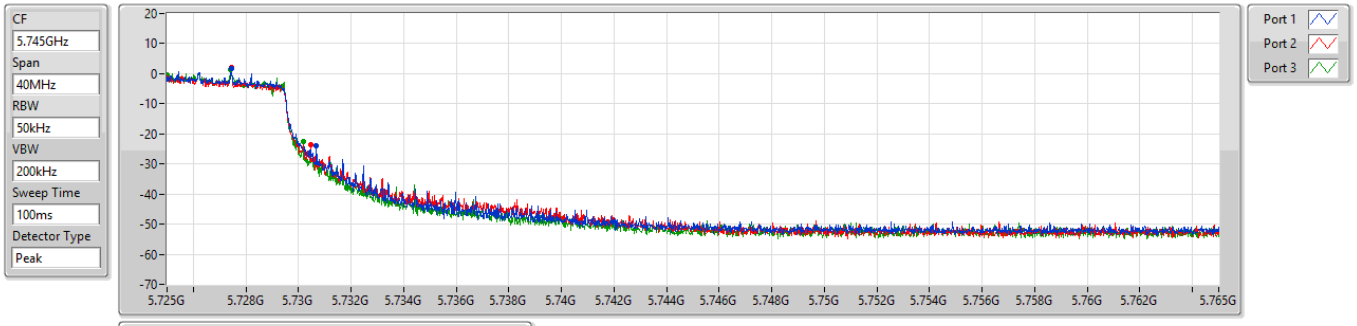




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.44M	5.725G	5.72944G	4.538M	5.72501G	5.729548G	500k	1
4.4M	5.725G	5.7294G	4.518M	5.72501G	5.729528G	500k	2
4.46M	5.725G	5.72946G	4.518M	5.72501G	5.729528G	500k	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

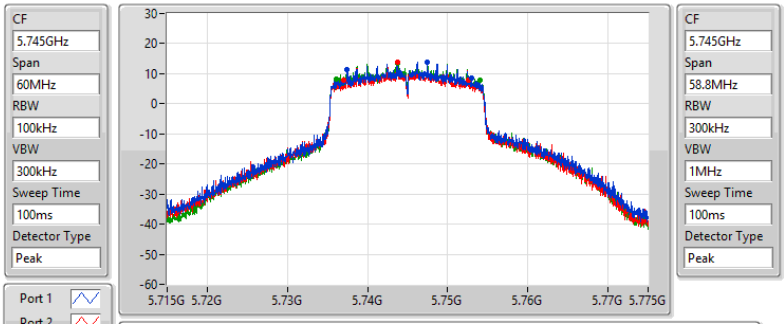
5720MHz Straddle 5.725-5.85GHz

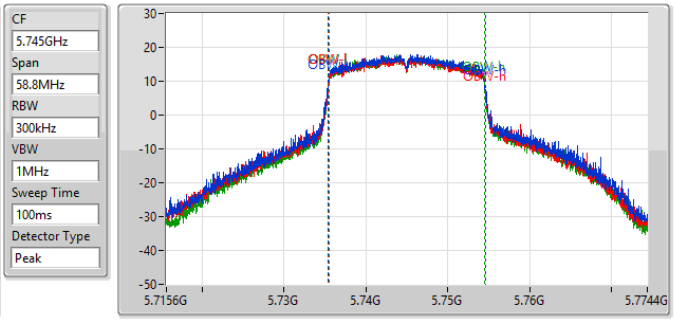


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
5.68M	5.725G	5.73068G	Inf	1
5.46M	5.725G	5.73046G	Inf	2
5.18M	5.725G	5.73018G	Inf	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5745MHz

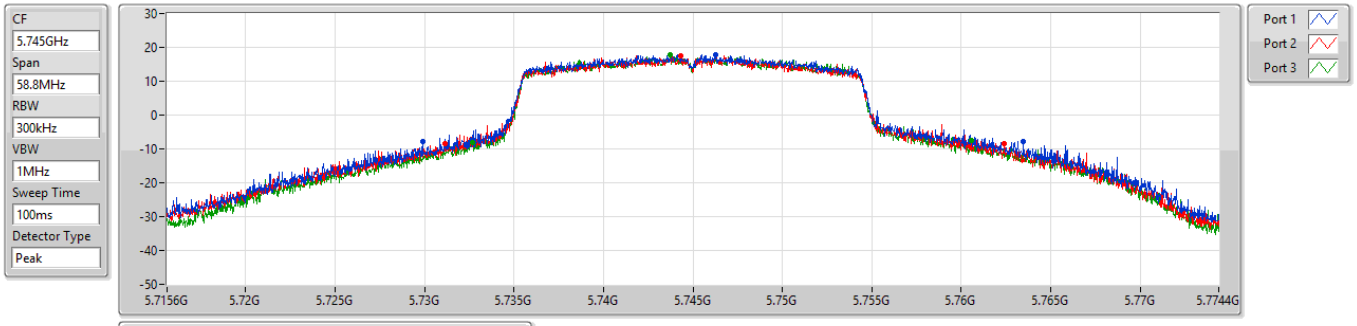




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.48M	5.73747G	5.75295G	19.247M	5.735391G	5.754638G	500k	1
15.54M	5.73699G	5.75253G	19.218M	5.735391G	5.754609G	500k	2
17.88M	5.73609G	5.75397G	19.042M	5.735479G	5.754521G	500k	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

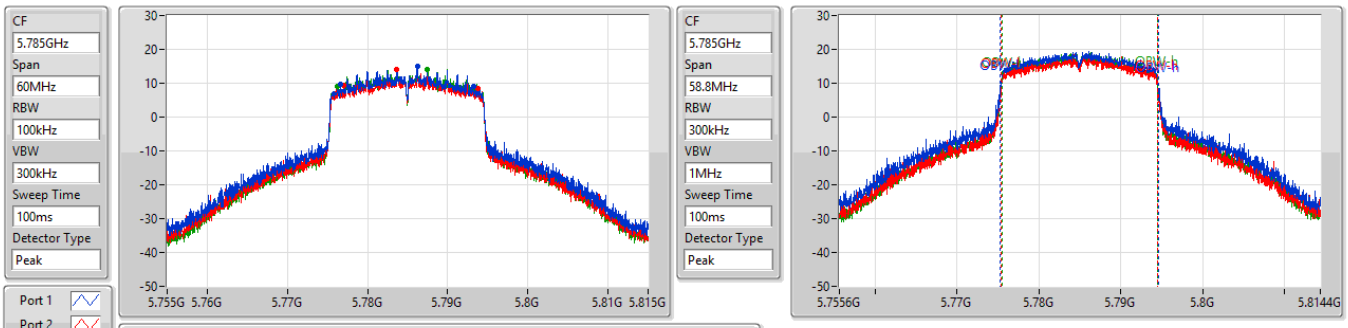
5745MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
33.604M	5.729888G	5.763493G	Inf	1
31.252M	5.731153G	5.762405G	Inf	2
27.901M	5.732681G	5.760582G	Inf	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

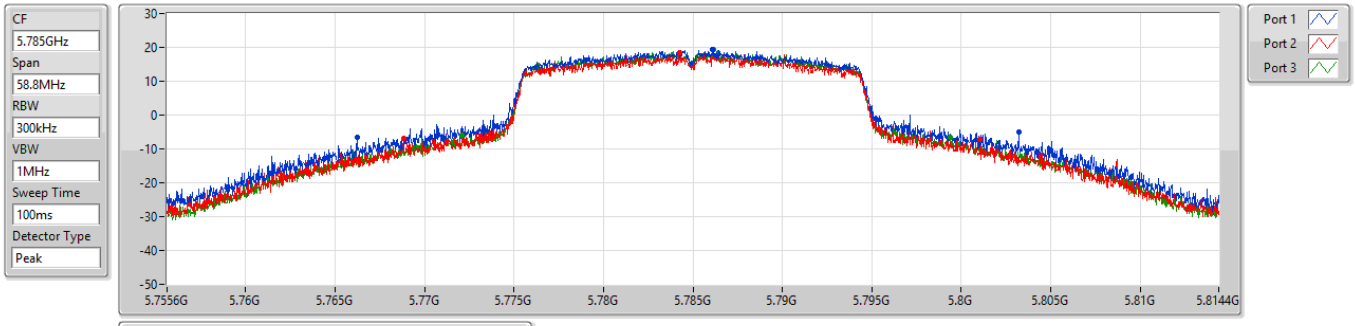
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.59M	5.77663G	5.79322G	19.277M	5.775303G	5.79458G	500k	1
16.8M	5.77696G	5.79376G	19.071M	5.77542G	5.794491G	500k	2
17.52M	5.77624G	5.79376G	19.012M	5.77545G	5.794462G	500k	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

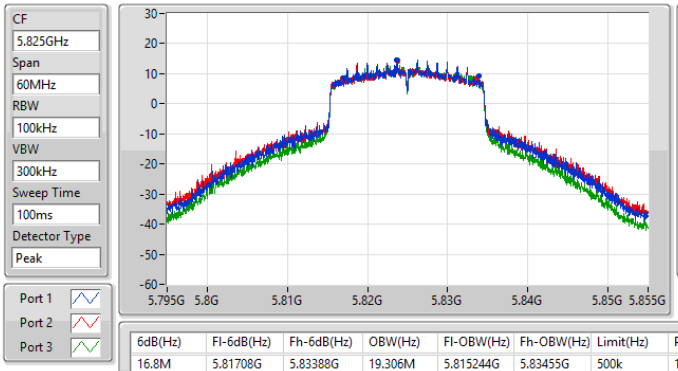
5785MHz

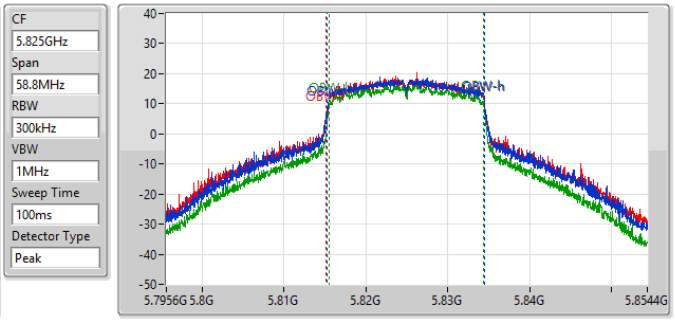


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
37.015M	5.766213G	5.803228G	Inf	1
32.222M	5.76883G	5.801052G	Inf	2
27.313M	5.772093G	5.799406G	Inf	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

5825MHz

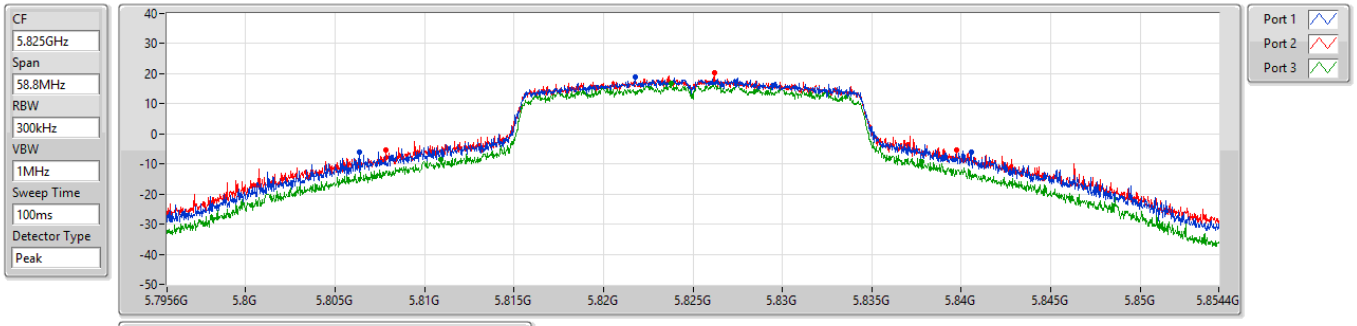




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.8M	5.81708G	5.83388G	19.306M	5.815244G	5.83455G	500k	1
16.77M	5.8169G	5.83367G	19.394M	5.815156G	5.83455G	500k	2
15.96M	5.81684G	5.8328G	18.954M	5.81545G	5.834403G	500k	3

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **EBW**

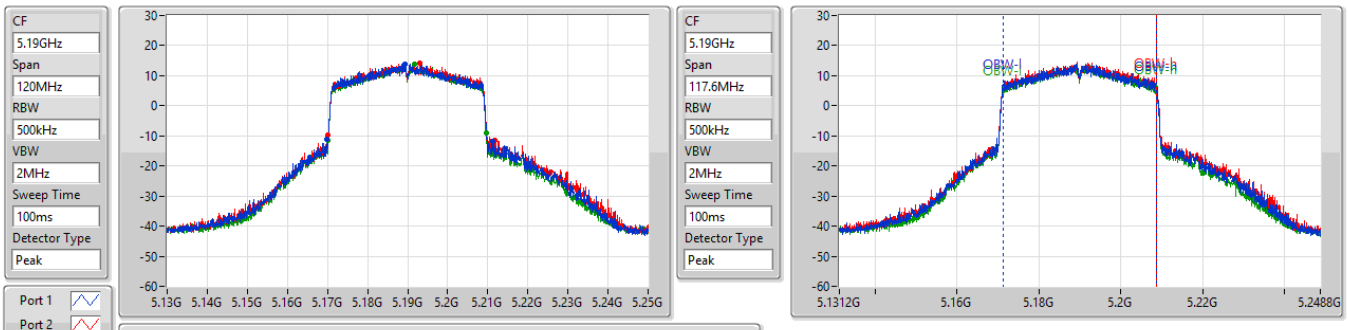
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
34.222M	5.806331G	5.840553G	Inf	1
31.87M	5.80786G	5.839729G	Inf	2
26.872M	5.810917G	5.837789G	Inf	3

5.15-5.25GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

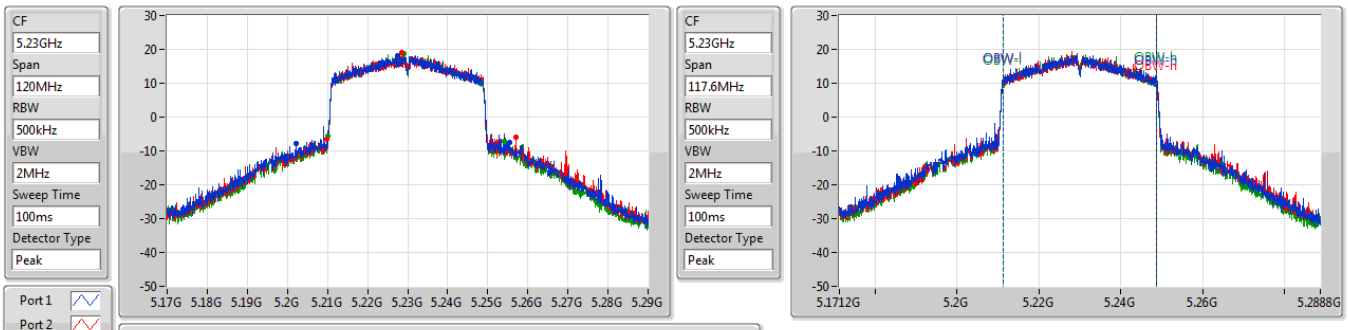
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.46M	5.16984G	5.2113G	37.437M	5.171252G	5.208689G	Inf	1
41.58M	5.17008G	5.21166G	37.437M	5.171311G	5.208748G	Inf	2
39.48M	5.1702G	5.20968G	37.437M	5.171311G	5.208748G	Inf	3

5.15-5.25GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

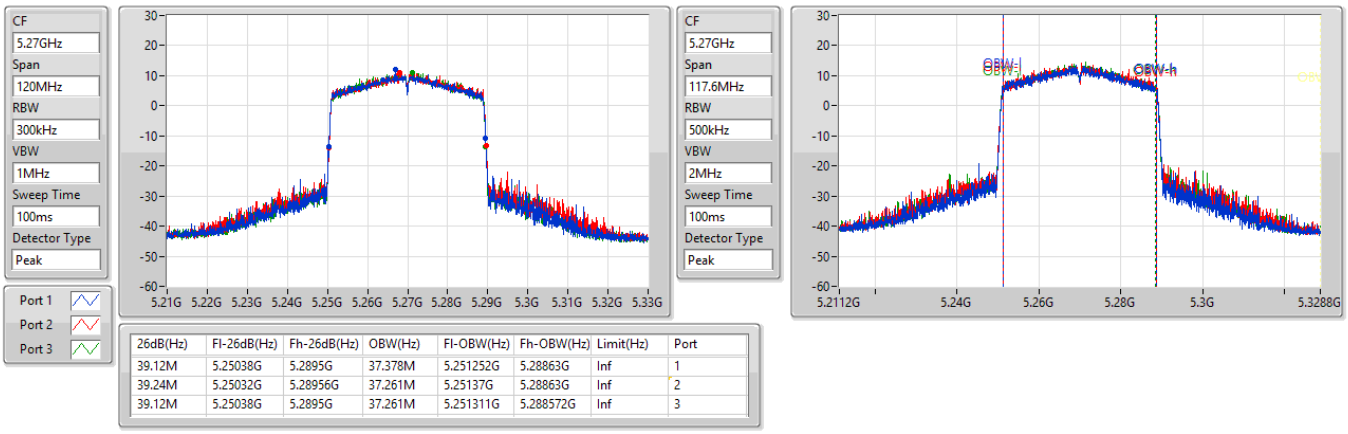
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
53.22M	5.2021G	5.25532G	37.613M	5.211135G	5.248748G	Inf	1
47.16M	5.2099G	5.25706G	37.613M	5.211193G	5.248807G	Inf	2
43.98M	5.2102G	5.25418G	37.496M	5.211193G	5.248689G	Inf	3

5.25-5.35GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

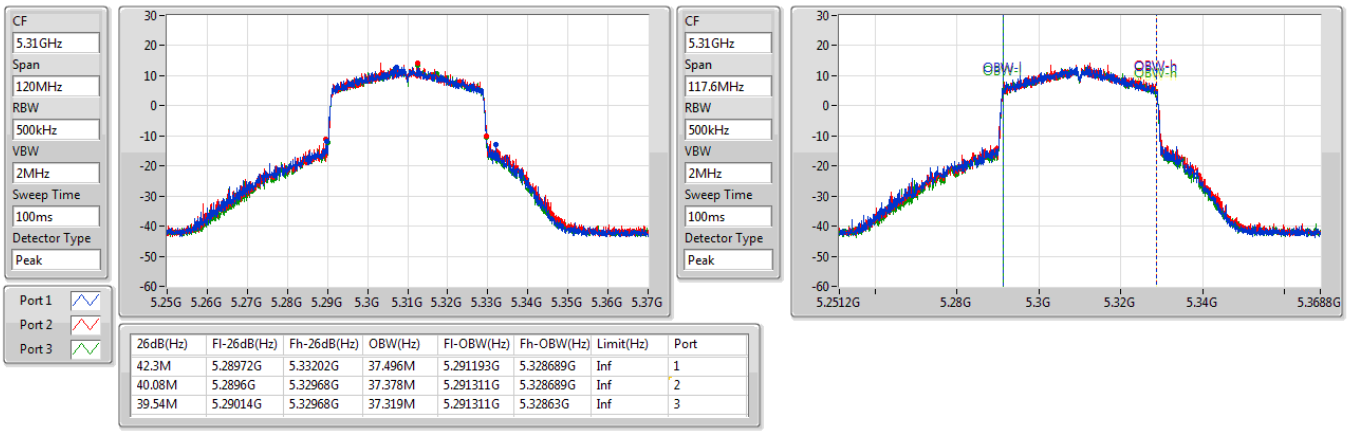
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.12M	5.25038G	5.2895G	37.378M	5.251252G	5.28863G	Inf	1
39.24M	5.25032G	5.28956G	37.261M	5.25137G	5.28863G	Inf	2
39.12M	5.25038G	5.2895G	37.261M	5.251311G	5.288572G	Inf	3

5.25-5.35GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

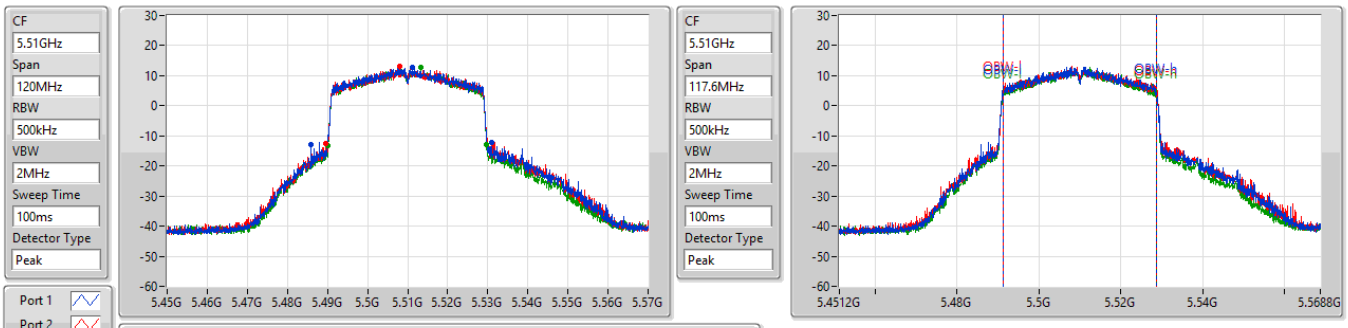
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.3M	5.28972G	5.33202G	37.496M	5.291193G	5.328689G	Inf	1
40.08M	5.2896G	5.32968G	37.378M	5.291311G	5.328689G	Inf	2
39.54M	5.29014G	5.32968G	37.319M	5.291311G	5.32863G	Inf	3

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

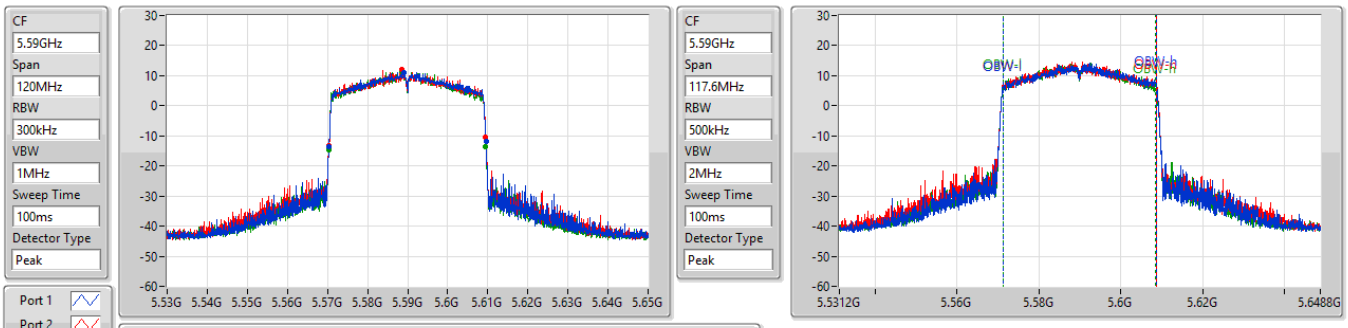
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45M	5.48588G	5.53088G	37.437M	5.491252G	5.528689G	Inf	1
41.7M	5.48948G	5.53118G	37.437M	5.491311G	5.528748G	Inf	2
39.54M	5.49014G	5.52968G	37.319M	5.491311G	5.52863G	Inf	3

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

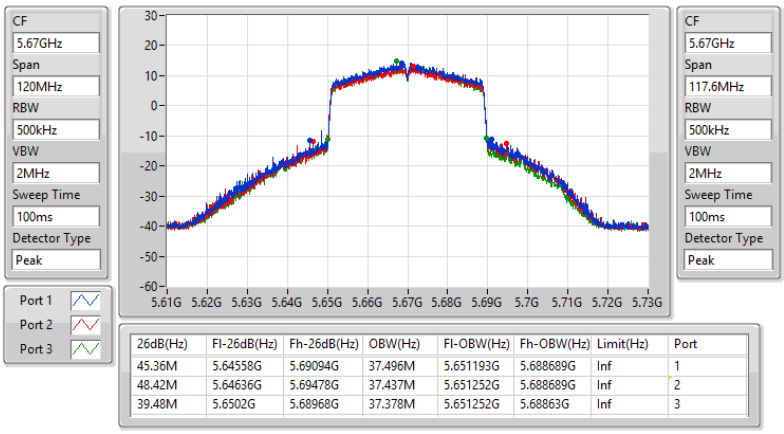
5590MHz

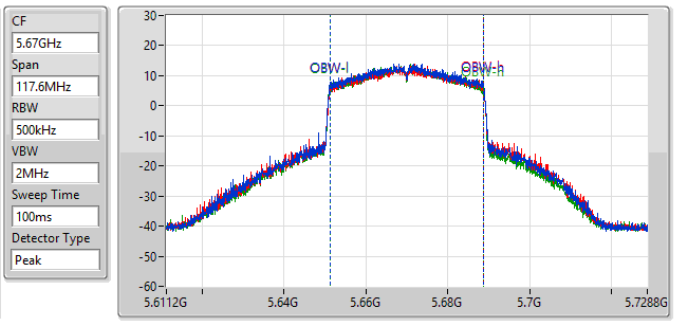


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.24M	5.57032G	5.60956G	37.319M	5.571311G	5.60863G	Inf	1
39.12M	5.57038G	5.6095G	37.319M	5.571311G	5.60863G	Inf	2
39.18M	5.57032G	5.6095G	37.319M	5.571252G	5.608572G	Inf	3

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

5670MHz

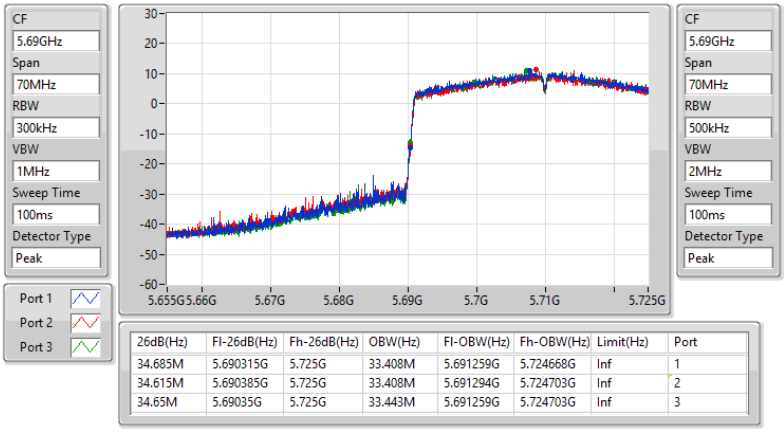


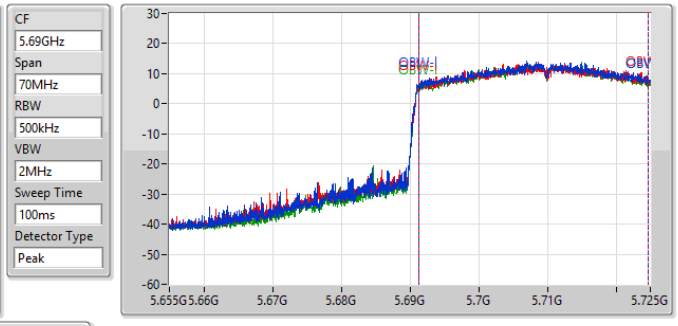


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45.36M	5.64558G	5.69094G	37.496M	5.651193G	5.688689G	Inf	1
48.42M	5.64636G	5.69478G	37.437M	5.651252G	5.688689G	Inf	2
39.48M	5.6502G	5.68968G	37.378M	5.651252G	5.68863G	Inf	3

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

5710MHz Straddle 5.47-5.725GHz

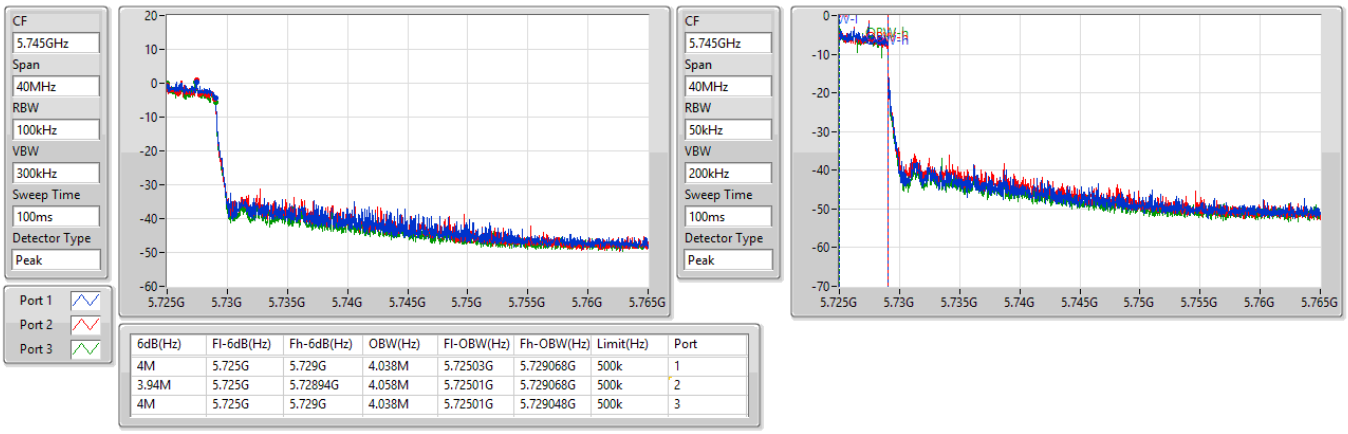




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.685M	5.690315G	5.725G	33.408M	5.691259G	5.724668G	Inf	1
34.615M	5.690385G	5.725G	33.408M	5.691294G	5.724703G	Inf	2
34.65M	5.69035G	5.725G	33.443M	5.691259G	5.724703G	Inf	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

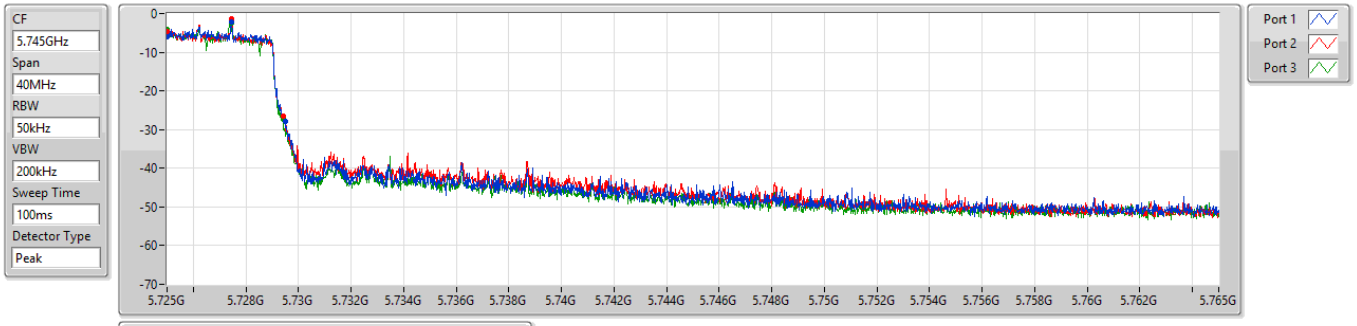
5710MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4M	5.725G	5.729G	4.038M	5.72503G	5.729068G	500k	1
3.94M	5.725G	5.72894G	4.058M	5.72501G	5.729068G	500k	2
4M	5.725G	5.729G	4.038M	5.72501G	5.729048G	500k	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

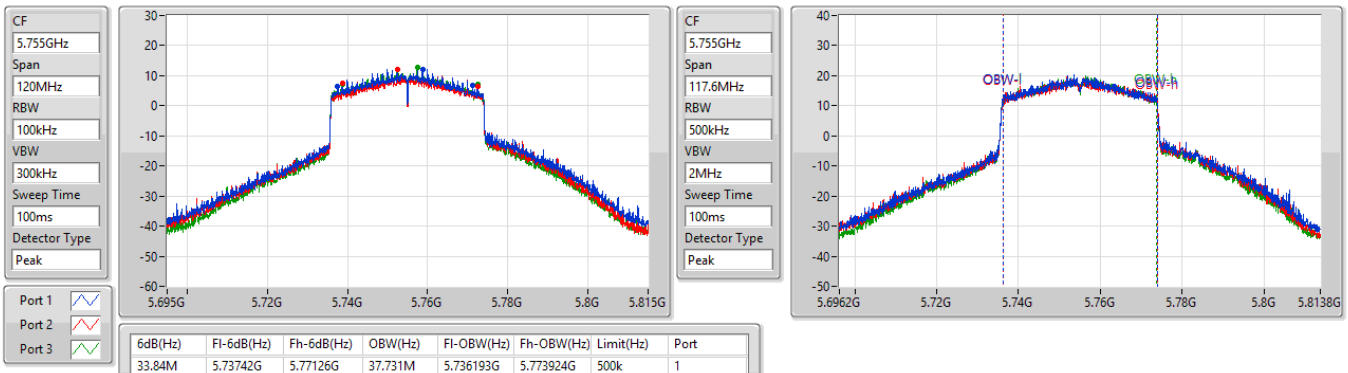
5710MHz Straddle 5.725-5.85GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
4.5M	5.725G	5.7295G	Inf	1
4.42M	5.725G	5.72942G	Inf	2
4.42M	5.725G	5.72942G	Inf	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

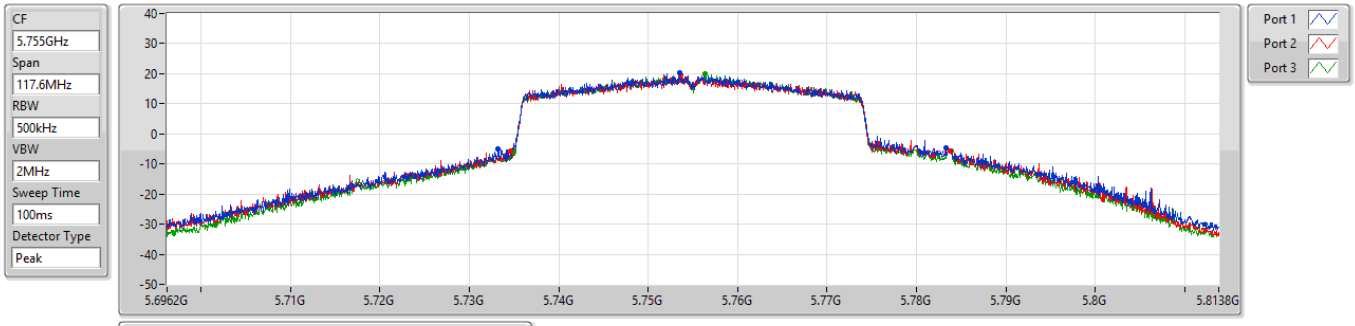
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.84M	5.73742G	5.77126G	37.731M	5.736193G	5.773924G	500k	1
33.78M	5.73868G	5.77246G	37.731M	5.736193G	5.773924G	500k	2
33.78M	5.73868G	5.77246G	37.613M	5.736193G	5.773807G	500k	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

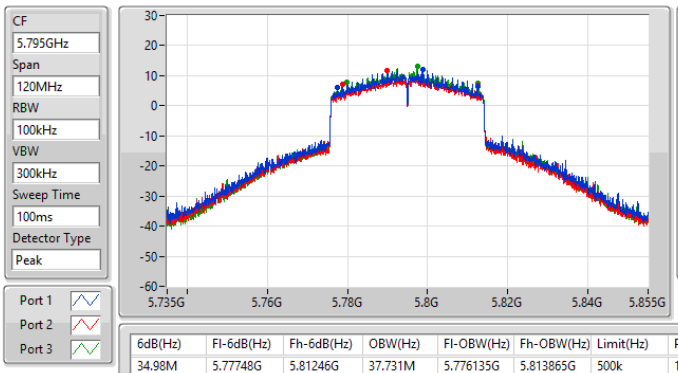
5755MHz

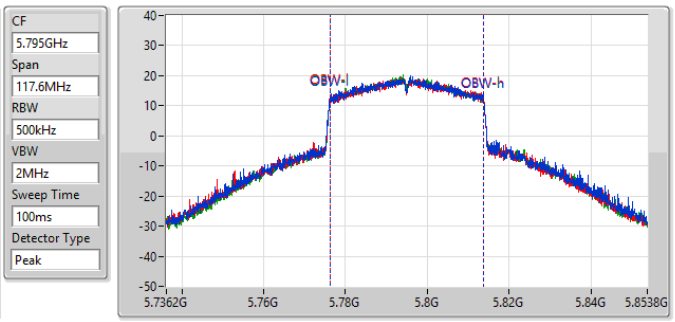


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
50.098M	5.733244G	5.783342G	Inf	1
49.216M	5.734596G	5.783812G	Inf	2
48.863M	5.735008G	5.783871G	Inf	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

5795MHz

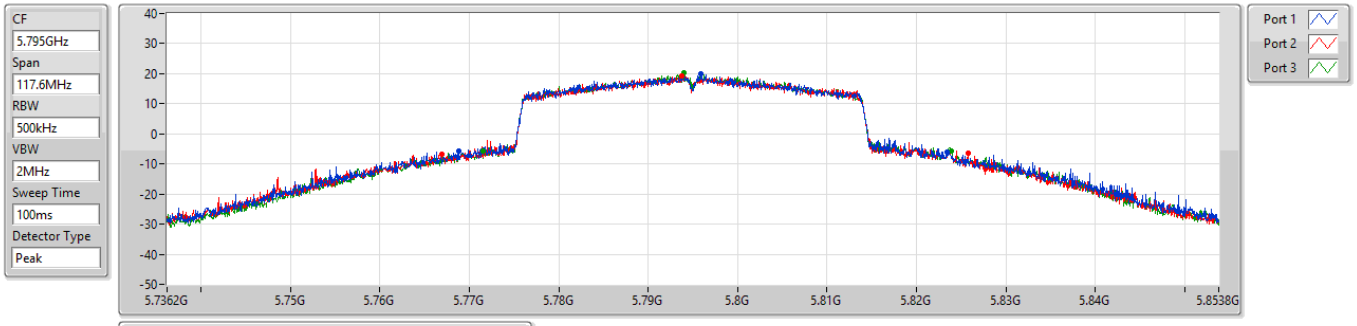




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.98M	5.77748G	5.81246G	37.731M	5.776135G	5.813865G	500k	1
33.78M	5.77868G	5.81246G	37.672M	5.776135G	5.813807G	500k	2
32.58M	5.77988G	5.81246G	37.731M	5.776135G	5.813865G	500k	3

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **EBW**

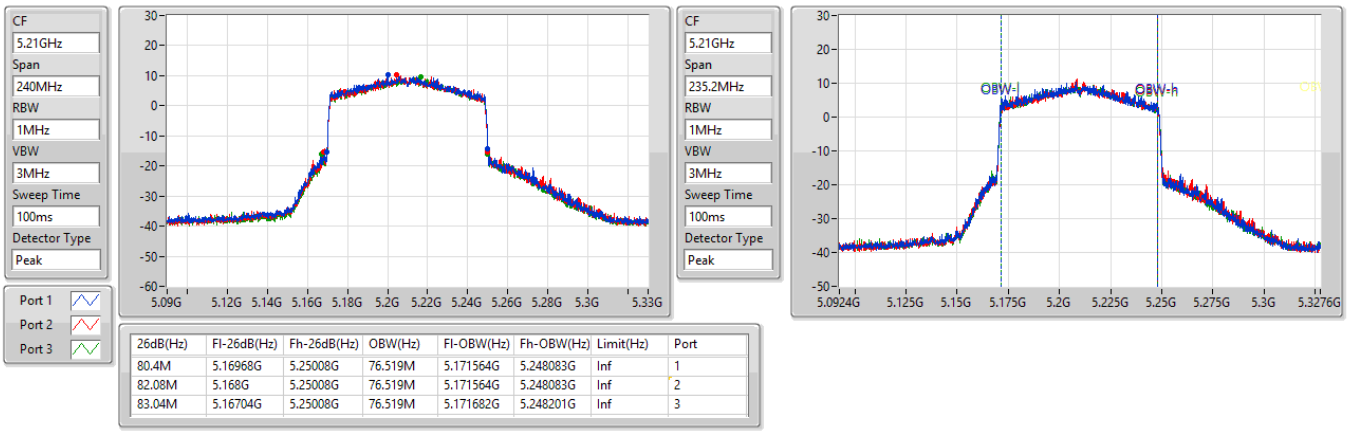
5795MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
54.566M	5.768834G	5.8234G	Inf	1
58.8M	5.766952G	5.825752G	Inf	2
52.273M	5.771598G	5.823871G	Inf	3

5.15-5.25GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

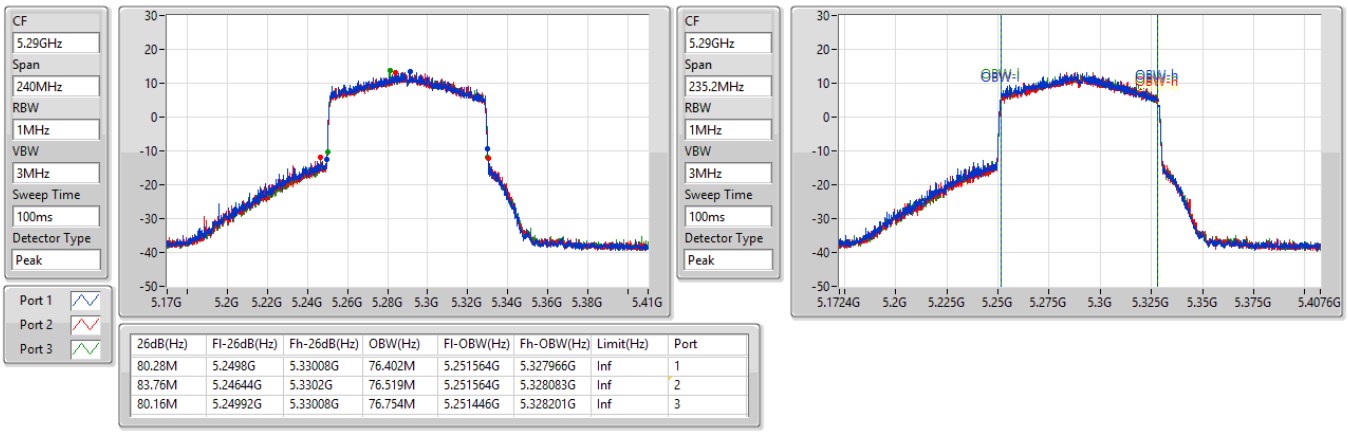
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.4M	5.16968G	5.25008G	76.519M	5.171564G	5.248083G	Inf	1
82.08M	5.168G	5.25008G	76.519M	5.171564G	5.248083G	Inf	2
83.04M	5.16704G	5.25008G	76.519M	5.171682G	5.248201G	Inf	3

5.25-5.35GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

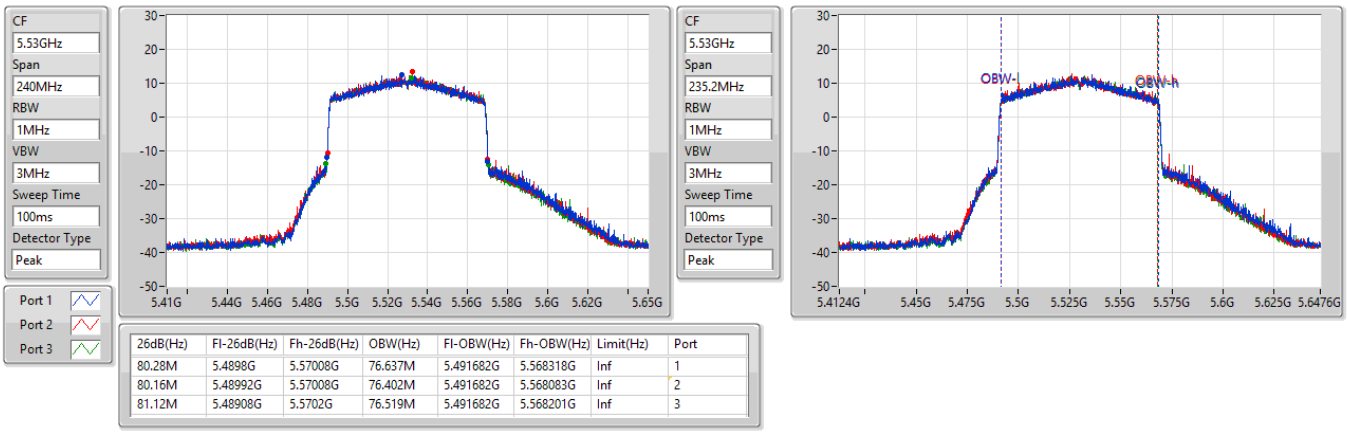
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.28M	5.2498G	5.33008G	76.402M	5.251564G	5.327966G	Inf	1
83.76M	5.24644G	5.3302G	76.519M	5.251564G	5.328083G	Inf	2
80.16M	5.24992G	5.33008G	76.754M	5.251446G	5.328201G	Inf	3

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

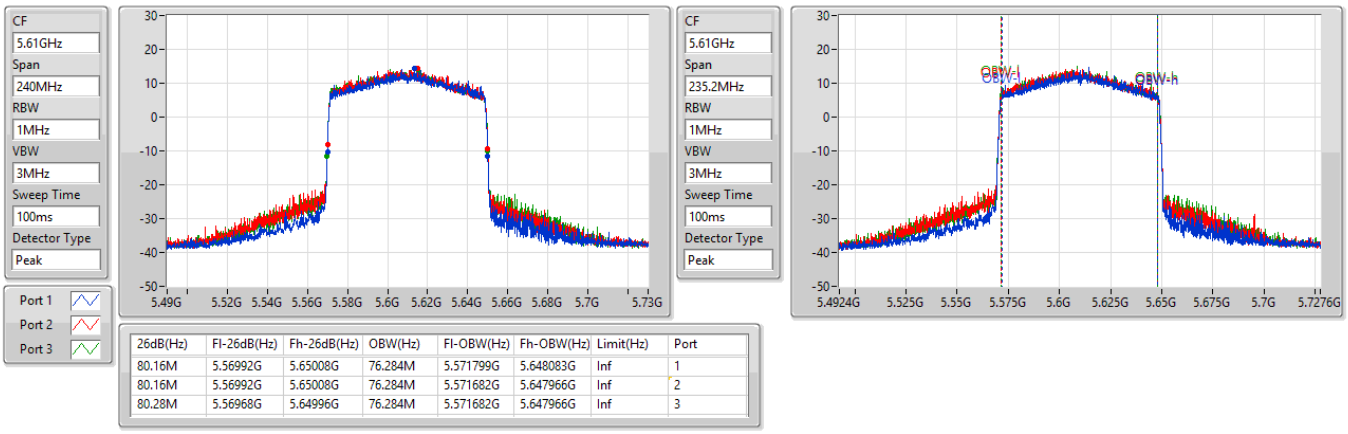
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.28M	5.4898G	5.57008G	76.637M	5.491682G	5.568318G	Inf	1
80.16M	5.48992G	5.57008G	76.402M	5.491682G	5.568083G	Inf	2
81.12M	5.48908G	5.5702G	76.519M	5.491682G	5.568201G	Inf	3

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

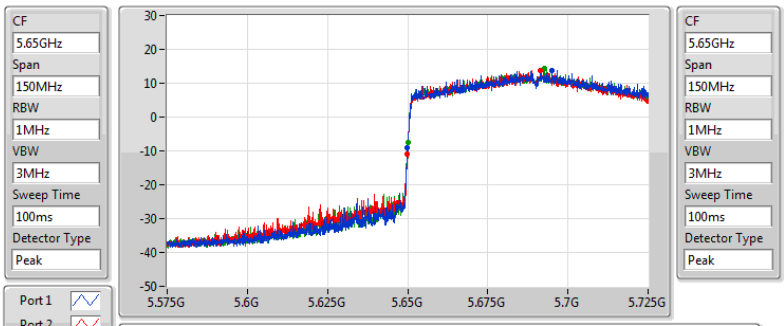
5610MHz

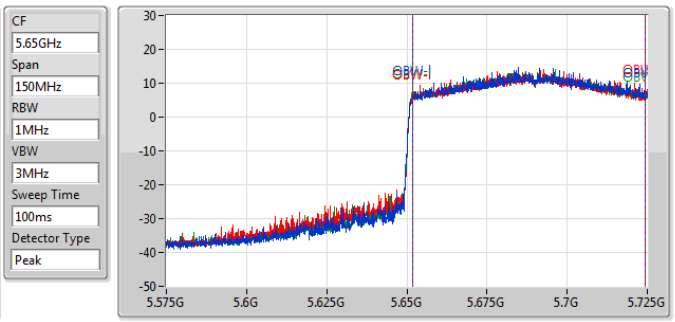


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.16M	5.56992G	5.65008G	76.284M	5.571799G	5.648083G	Inf	1
80.16M	5.56992G	5.65008G	76.284M	5.571682G	5.647966G	Inf	2
80.28M	5.56968G	5.64996G	76.284M	5.571682G	5.647966G	Inf	3

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

5690MHz Straddle 5.47-5.725GHz

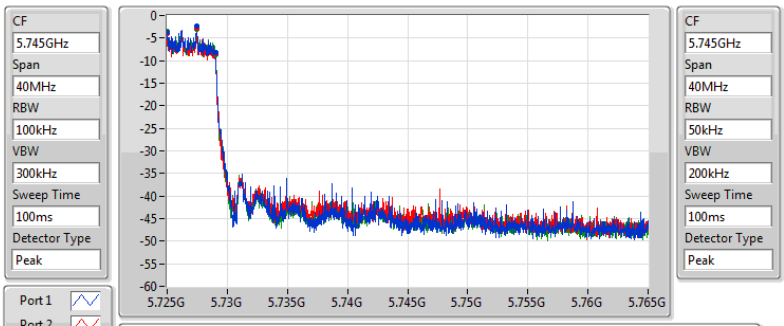


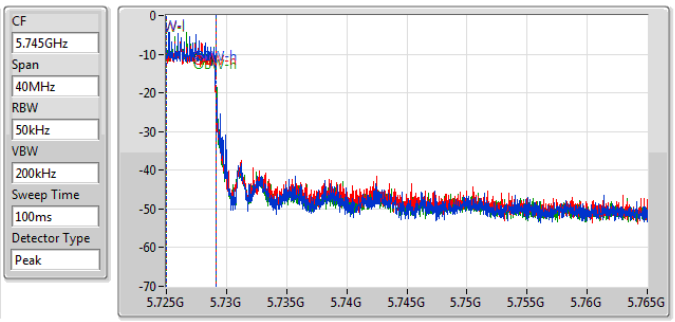


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.075M	5.649925G	5.725G	72.564M	5.651724G	5.724288G	Inf	1
75.075M	5.649925G	5.725G	72.639M	5.651724G	5.724363G	Inf	2
74.925M	5.650075G	5.725G	72.564M	5.651649G	5.724213G	Inf	3

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

5690MHz Straddle 5.725-5.85GHz

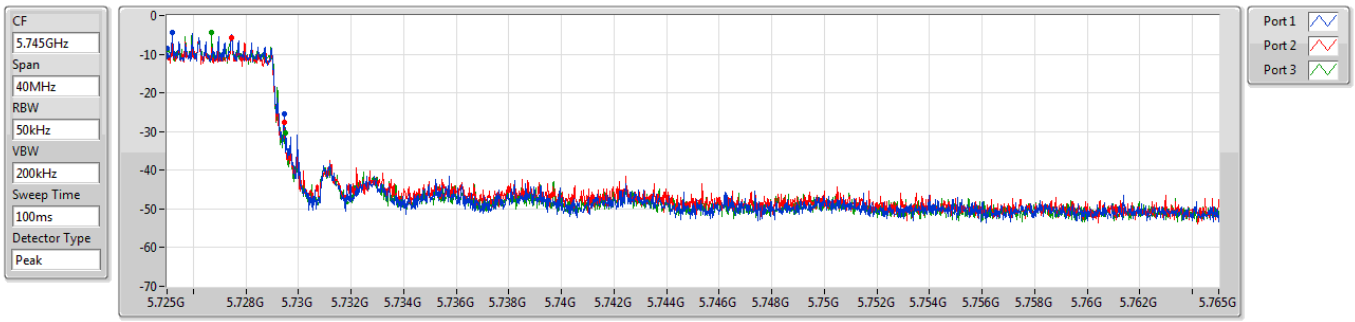




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.02M	5.725G	5.72902G	4.078M	5.72501G	5.729088G	500k	1
4M	5.725G	5.729G	4.078M	5.72501G	5.729088G	500k	2
4M	5.725G	5.729G	4.078M	5.72501G	5.729088G	500k	3

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

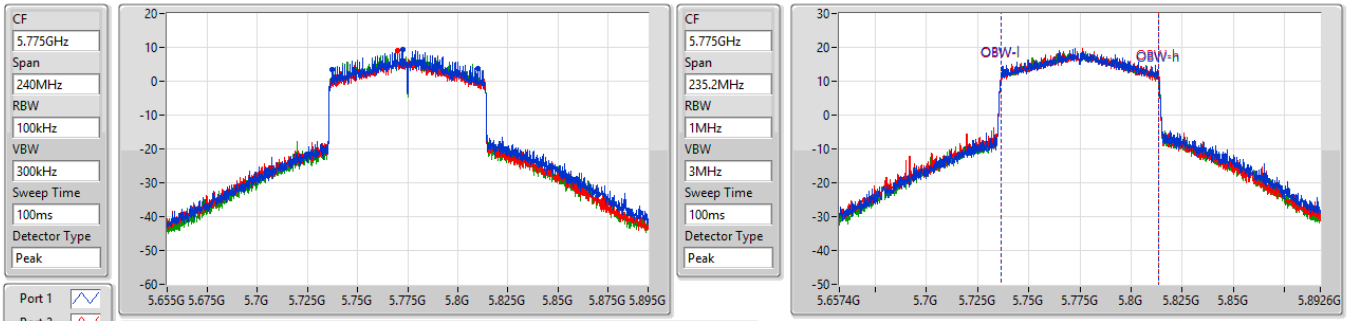
5690MHz Straddle 5.725-5.85GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
4.48M	5.725G	5.72948G	Inf	1
4.48M	5.725G	5.72948G	Inf	2
4.5M	5.725G	5.7295G	Inf	3

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

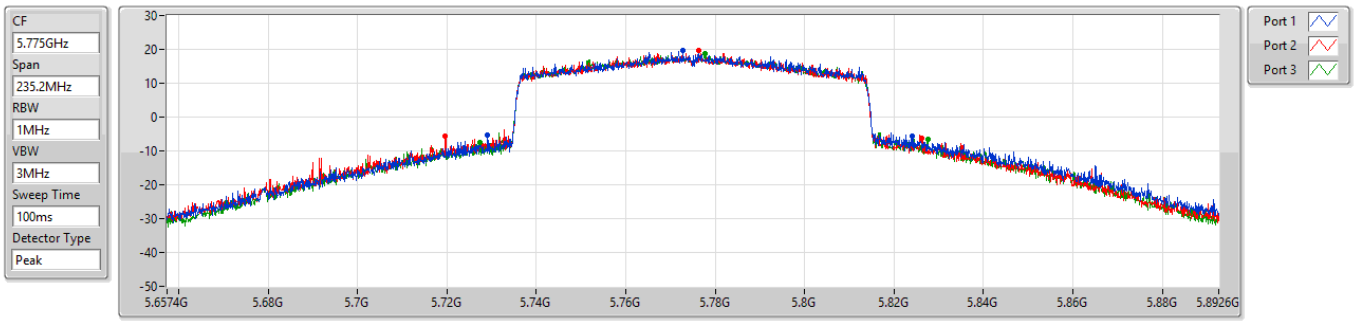
5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
72.6M	5.73744G	5.81004G	76.872M	5.736564G	5.813436G	500k	1
72.6M	5.73744G	5.81004G	76.872M	5.736564G	5.813436G	500k	2
72.6M	5.73744G	5.81004G	76.754M	5.736564G	5.813318G	500k	3

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **EBW**

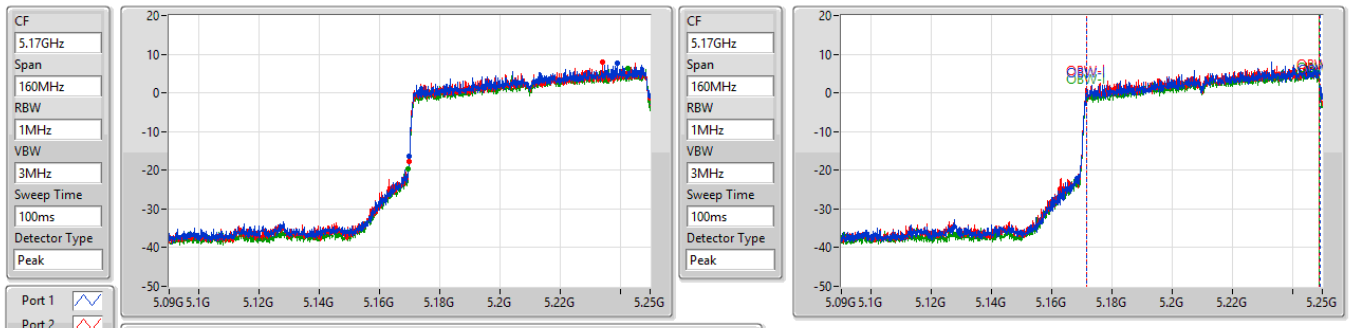
5775MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
94.903M	5.729136G	5.824039G	Inf	1
106.546M	5.71961G	5.826156G	Inf	2
100.313M	5.727254G	5.827567G	Inf	3

5.15-5.25GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **EBW**

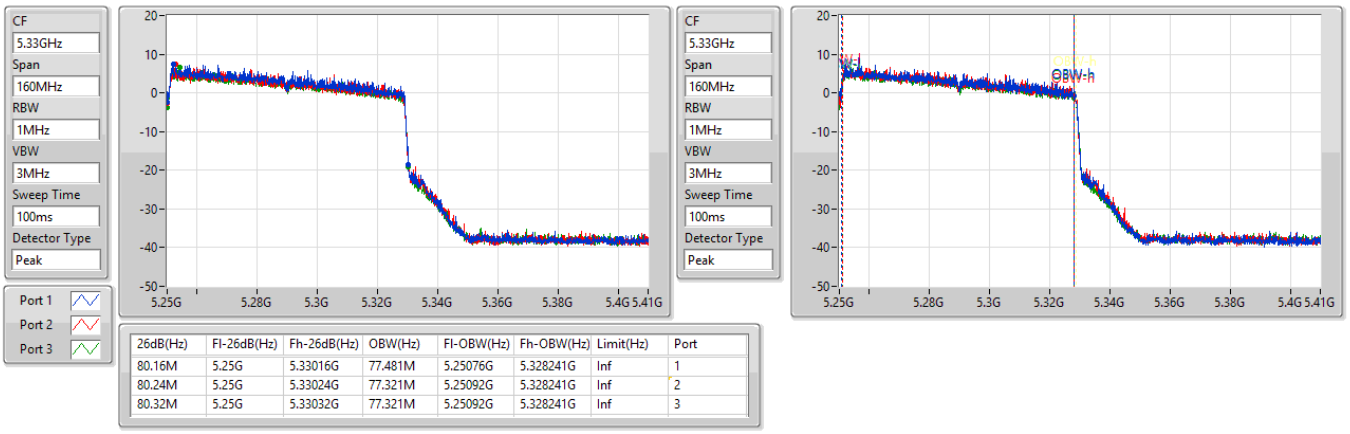
5250MHz Straddle 5.15-5.25GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.08M	5.16992G	5.25G	77.481M	5.171679G	5.24916G	Inf	1
80.16M	5.16984G	5.25G	77.481M	5.171599G	5.24908G	Inf	2
80.4M	5.1696G	5.25G	77.401M	5.171679G	5.24908G	Inf	3

5.25-5.35GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **EBW**

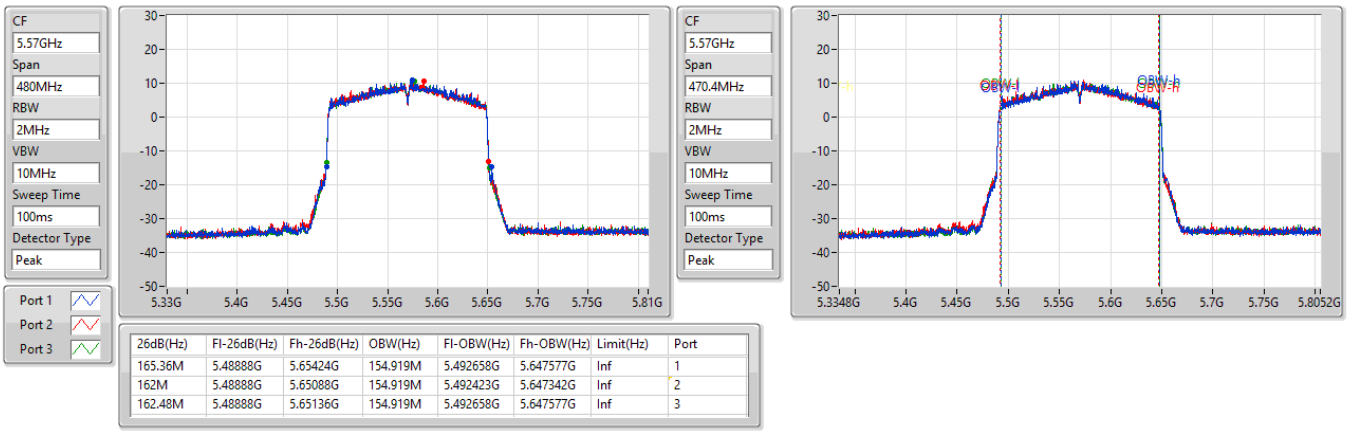
5250MHz Straddle 5.25-5.35GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.16M	5.25G	5.33016G	77.481M	5.25076G	5.328241G	Inf	1
80.24M	5.25G	5.33024G	77.321M	5.25092G	5.328241G	Inf	2
80.32M	5.25G	5.33032G	77.321M	5.25092G	5.328241G	Inf	3

5.47-5.725GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **EBW**

5570MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.36M	5.48888G	5.65424G	154.919M	5.492658G	5.647577G	Inf	1
162M	5.48888G	5.65088G	154.919M	5.492423G	5.647342G	Inf	2
162.48M	5.48888G	5.65136G	154.919M	5.492658G	5.647577G	Inf	3

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	27.37	0.54576	30.24	1.05682
802.11ax HEW20_Nss2,(MCS0)_3TX	29.34	0.85901	32.21	1.66341
802.11ax HEW40_Nss2,(MCS0)_3TX	28.95	0.78524	31.82	1.52055
802.11ax HEW80_Nss2,(MCS0)_3TX	20.00	0.10000	22.87	0.19364
802.11ax HEW160_Nss2,(MCS0)_3TX	16.33	0.04295	19.20	0.08318
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	20.54	0.11324	24.84	0.30479
802.11ax HEW20_Nss2,(MCS0)_3TX	23.57	0.22751	27.87	0.61235
802.11ax HEW40_Nss2,(MCS0)_3TX	23.70	0.23442	28.00	0.63096
802.11ax HEW80_Nss2,(MCS0)_3TX	22.77	0.18923	27.07	0.50933
802.11ax HEW160_Nss2,(MCS0)_3TX	16.23	0.04198	20.53	0.11298
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	20.59	0.11455	24.55	0.28510
802.11ax HEW20_Nss2,(MCS0)_3TX	23.37	0.21727	27.33	0.54075
802.11ax HEW40_Nss2,(MCS0)_3TX	23.72	0.23550	27.68	0.58614
802.11ax HEW80_Nss2,(MCS0)_3TX	23.52	0.22491	27.48	0.55976
802.11ax HEW160_Nss2,(MCS0)_3TX	20.09	0.10209	24.05	0.25410
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	29.32	0.85507	32.01	1.58855
802.11ax HEW20_Nss2,(MCS0)_3TX	29.51	0.89331	32.20	1.65959
802.11ax HEW40_Nss2,(MCS0)_3TX	29.57	0.90573	32.26	1.68267
802.11ax HEW80_Nss2,(MCS0)_3TX	28.88	0.77268	31.57	1.43549

Result

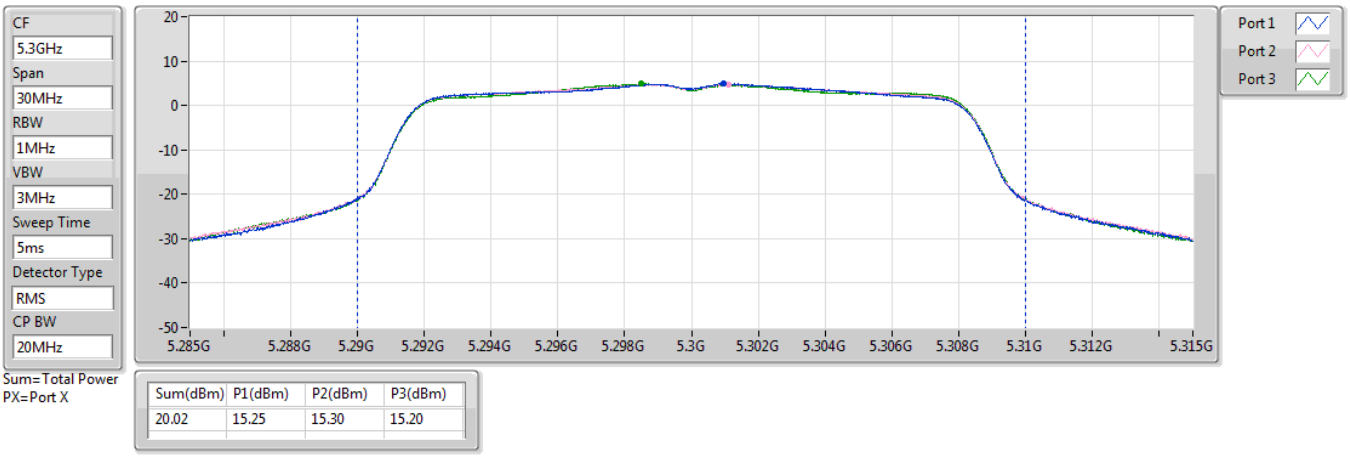
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-
5180MHz	Pass	2.87	22.64	22.33	22.48	27.26	30.00	30.13	36.00
5200MHz	Pass	2.87	22.57	22.4	22.47	27.25	30.00	30.12	36.00
5240MHz	Pass	2.87	22.7	22.57	22.52	27.37	30.00	30.24	36.00
5260MHz	Pass	4.30	15.73	15.69	15.59	20.44	23.88	24.74	29.88
5300MHz	Pass	4.30	15.71	15.82	15.79	20.54	24.00	24.84	30.00
5320MHz	Pass	4.30	15.77	15.72	15.69	20.50	24.00	24.80	30.00
5500MHz	Pass	3.96	15.73	15.62	15.25	20.31	24.00	24.27	30.00
5580MHz	Pass	3.96	15.43	15.68	15.43	20.29	23.91	24.25	29.91
5700MHz	Pass	3.96	16.05	15.91	15.48	20.59	24.00	24.55	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.96	15.07	14.95	14.52	19.62	22.84	23.58	28.84
5720MHz Straddle 5.725-5.85GHz	Pass	2.69	7.79	7.24	6.82	12.07	30.00	14.76	36.00
5745MHz	Pass	2.69	24.65	24.2	24.35	29.18	30.00	31.87	36.00
5785MHz	Pass	2.69	24.75	24.19	24.62	29.30	30.00	31.99	36.00
5825MHz	Pass	2.69	24.63	24.67	24.33	29.32	30.00	32.01	36.00
802.11ax HEW20_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5180MHz	Pass	2.87	23.22	23.02	23.21	27.92	30.00	30.79	36.00
5200MHz	Pass	2.87	24.24	24.05	24.18	28.93	30.00	31.80	36.00
5240MHz	Pass	2.87	24.56	24.51	24.63	29.34	30.00	32.21	36.00
5260MHz	Pass	4.30	18.76	18.81	18.82	23.57	24.00	27.87	30.00
5300MHz	Pass	4.30	18.38	18.39	18.22	23.10	24.00	27.40	30.00
5320MHz	Pass	4.30	18.35	18.37	18.11	23.05	24.00	27.35	30.00
5500MHz	Pass	3.96	18.75	18.62	18.42	23.37	24.00	27.33	30.00
5580MHz	Pass	3.96	17.7	18.25	18.29	22.86	24.00	26.82	30.00
5700MHz	Pass	3.96	18.32	18.41	18.24	23.10	24.00	27.06	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.96	17.21	17.24	17.06	21.94	22.94	25.90	28.94
5720MHz Straddle 5.725-5.85GHz	Pass	2.69	10.61	10.54	10.46	15.31	30.00	18.00	36.00
5745MHz	Pass	2.69	24.91	24.42	24.86	29.51	30.00	32.20	36.00
5785MHz	Pass	2.69	24.53	24.06	24.46	29.13	30.00	31.82	36.00
5825MHz	Pass	2.69	24.77	24.75	24.35	29.40	30.00	32.09	36.00
802.11ax HEW40_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5190MHz	Pass	2.87	19.54	19.51	19.4	24.25	30.00	27.12	36.00
5230MHz	Pass	2.87	24.13	24.18	24.22	28.95	30.00	31.82	36.00
5270MHz	Pass	4.30	18.82	18.86	19.05	23.68	24.00	27.98	30.00
5310MHz	Pass	4.30	18.82	19.02	18.93	23.70	24.00	28.00	30.00
5510MHz	Pass	3.96	18.92	18.76	18.15	23.39	24.00	27.35	30.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5590MHz	Pass	3.96	18.75	19.03	19.05	23.72	24.00	27.68	30.00
5670MHz	Pass	3.96	18.91	18.31	18.41	23.32	24.00	27.28	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.96	18.53	18.59	18.38	23.27	24.00	27.23	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	2.69	6.24	6.43	5.41	10.82	30.00	13.51	36.00
5755MHz	Pass	2.69	24.76	24.51	24.69	29.43	30.00	32.12	36.00
5795MHz	Pass	2.69	24.97	24.62	24.81	29.57	30.00	32.26	36.00
802.11ax HEW80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5210MHz	Pass	2.87	15.33	15.41	14.92	20.00	30.00	22.87	36.00
5290MHz	Pass	4.30	18.16	18.02	17.81	22.77	24.00	27.07	30.00
5530MHz	Pass	3.96	17.59	17.29	17.28	22.16	24.00	26.12	30.00
5610MHz	Pass	3.96	18.62	18.76	18.85	23.52	24.00	27.48	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.96	18.84	18.62	18.61	23.46	24.00	27.42	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	2.69	2.77	2.24	2.03	7.13	30.00	9.82	36.00
5775MHz	Pass	2.69	24.11	24.06	24.15	28.88	30.00	31.57	36.00
802.11ax HEW160_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.87	11.95	11.92	10.7	16.33	30.00	19.20	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.30	11.79	11.78	10.72	16.23	24.00	20.53	30.00
5570MHz	Pass	3.96	15.56	15.64	14.71	20.09	24.00	24.05	30.00

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

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **AV Power**

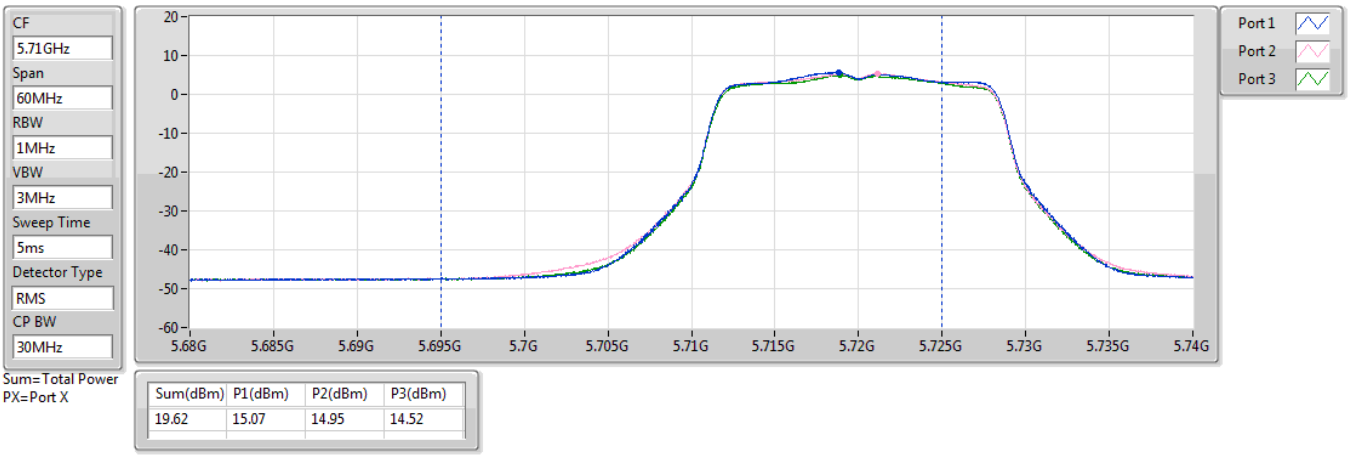
5300MHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
20.02	15.25	15.30	15.20

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **AV Power**

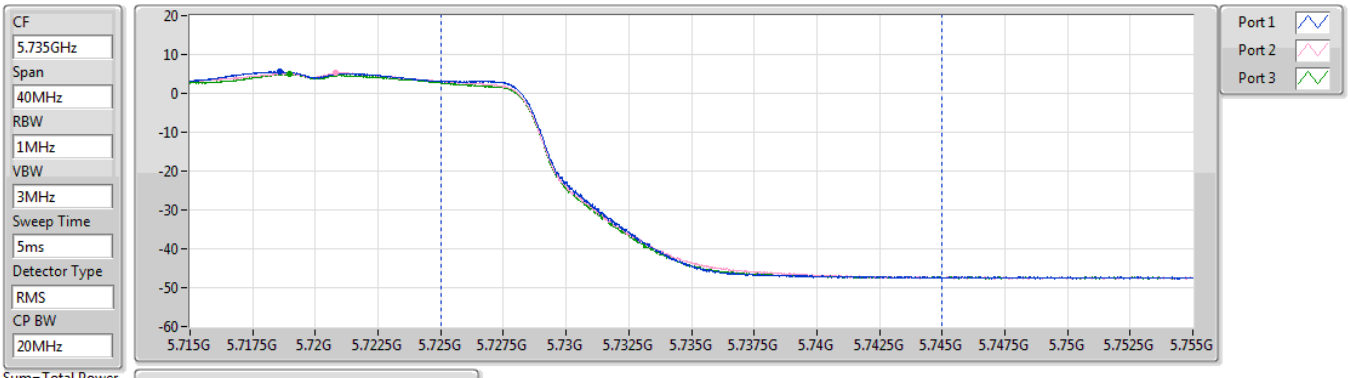
5720MHz Straddle 5.47-5.725GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
19.62	15.07	14.95	14.52

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **AV Power**

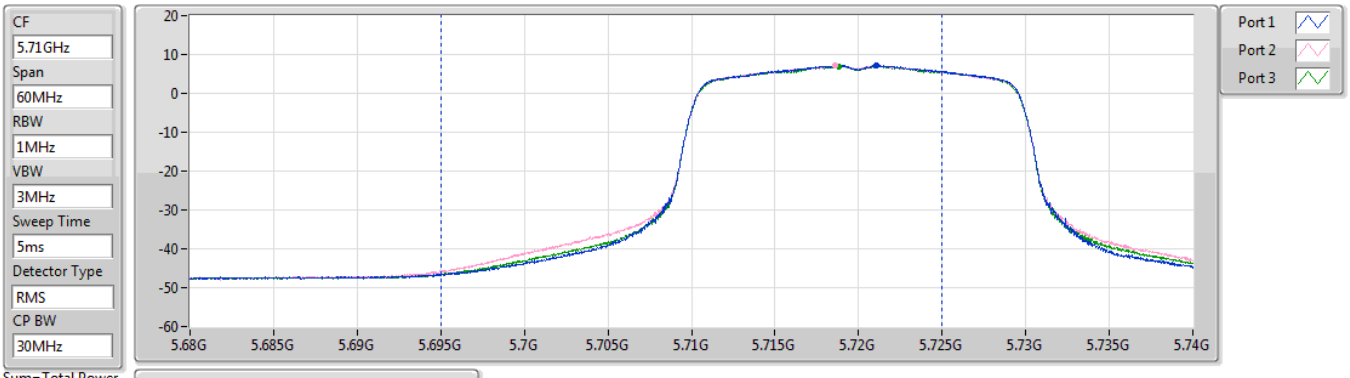
5720MHz Straddle 5.725-5.85GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
12.07	7.79	7.24	6.82

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **AV Power**

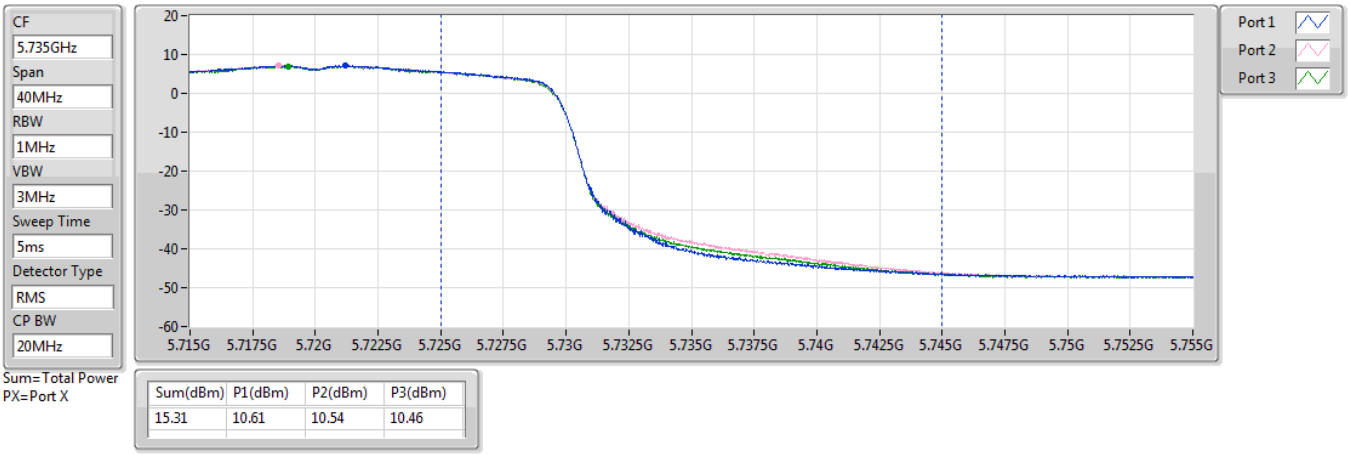
5720MHz Straddle 5.47-5.725GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
21.94	17.21	17.24	17.06

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **AV Power**

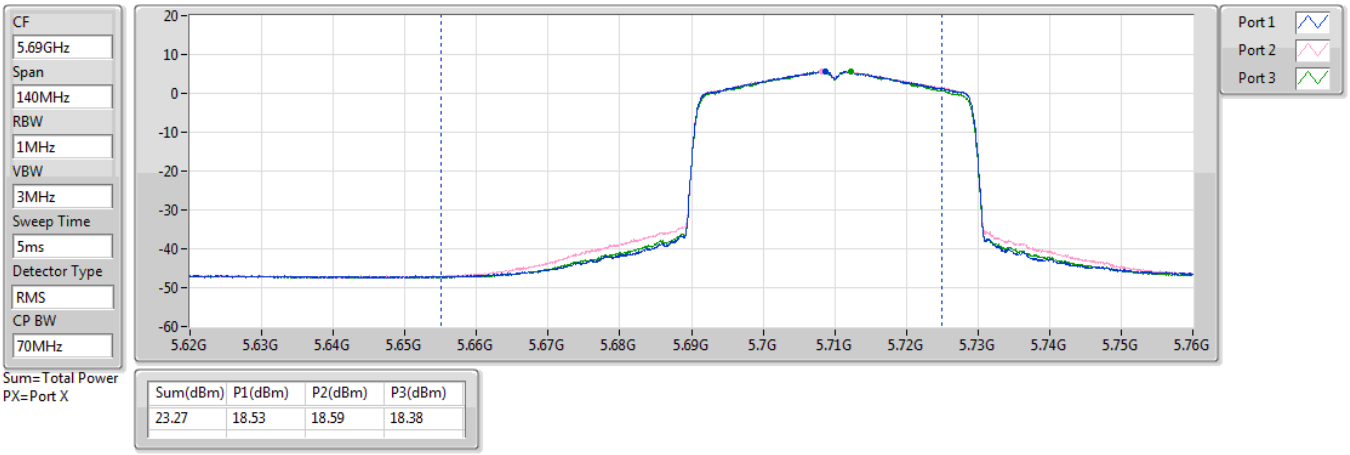
5720MHz Straddle 5.725-5.85GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
15.31	10.61	10.54	10.46

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **AV Power**

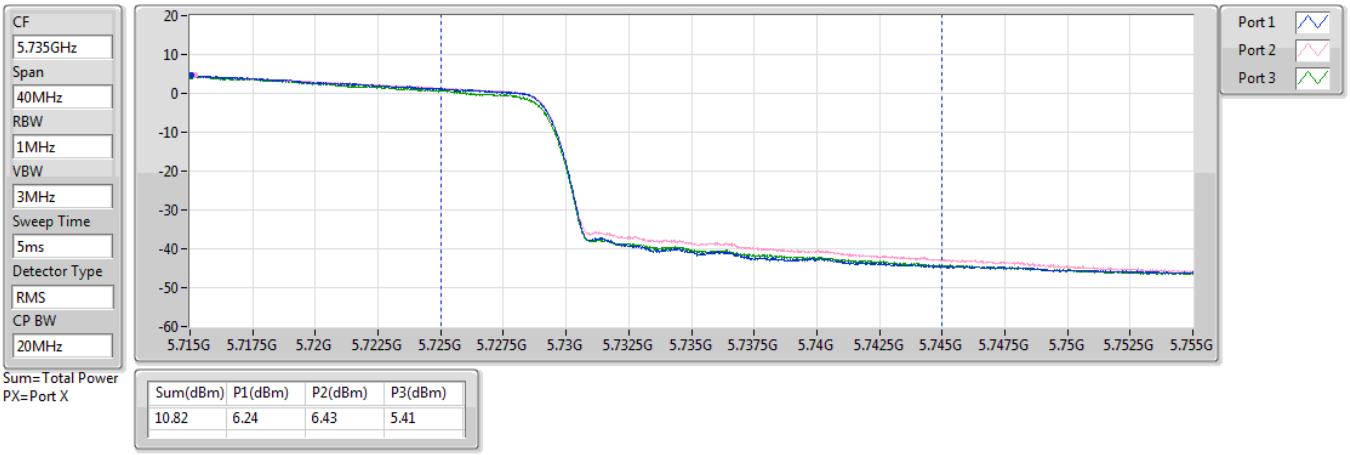
5710MHz Straddle 5.47-5.725GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
23.27	18.53	18.59	18.38

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **AV Power**

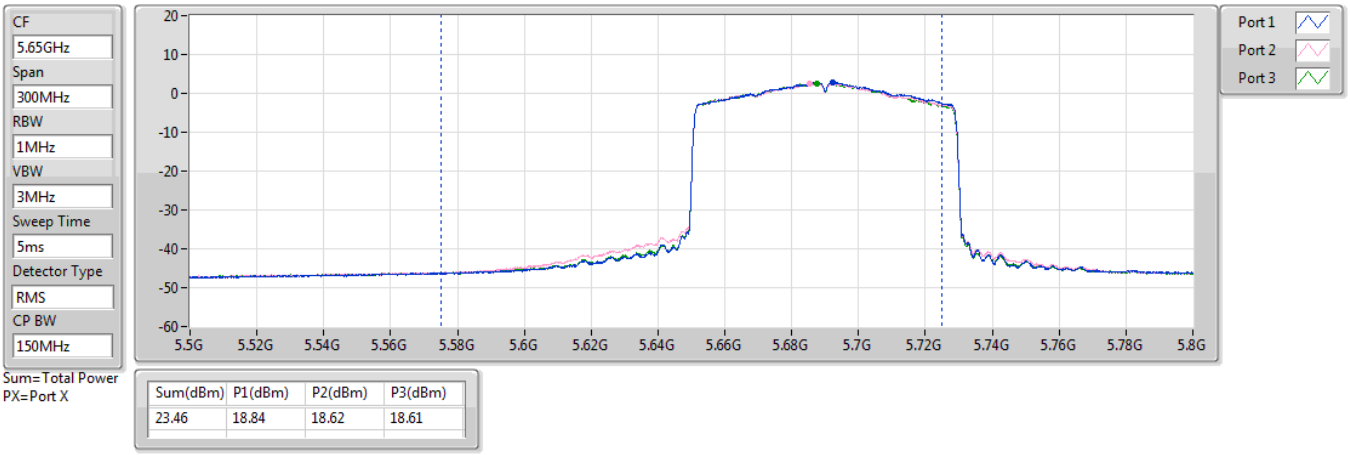
5710MHz Straddle 5.725-5.85GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
10.82	6.24	6.43	5.41

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **AV Power**

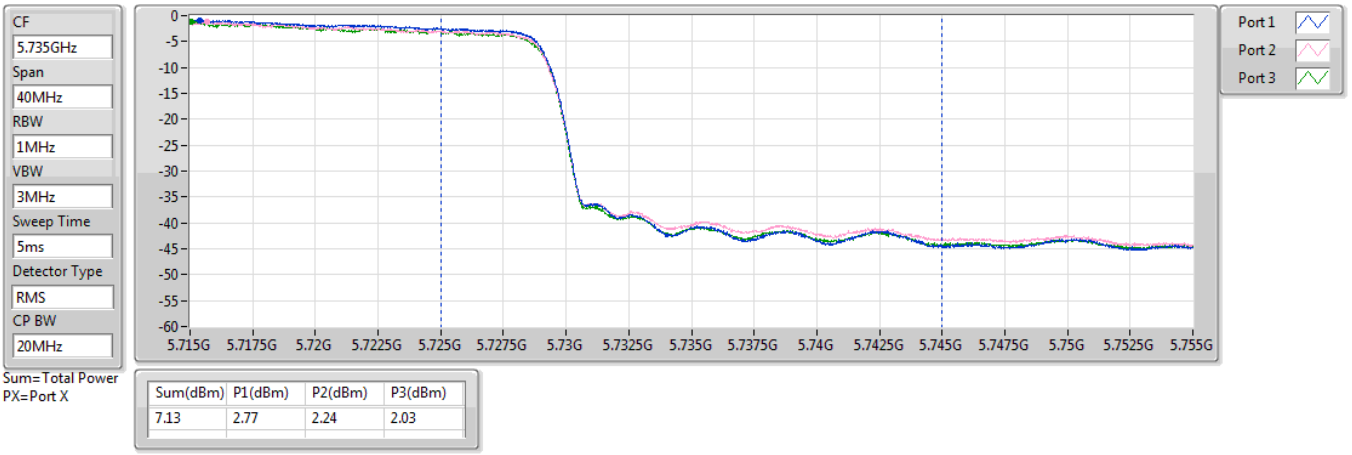
5690MHz Straddle 5.47-5.725GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
23.46	18.84	18.62	18.61

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **AV Power**

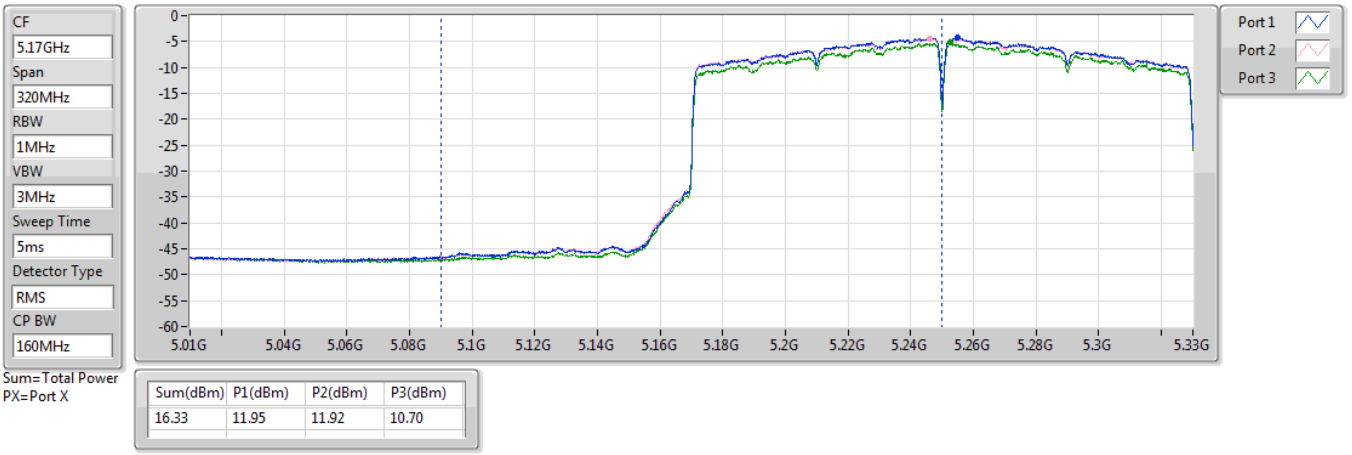
5690MHz Straddle 5.725-5.85GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
7.13	2.77	2.24	2.03

5.15-5.25GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **AV Power**

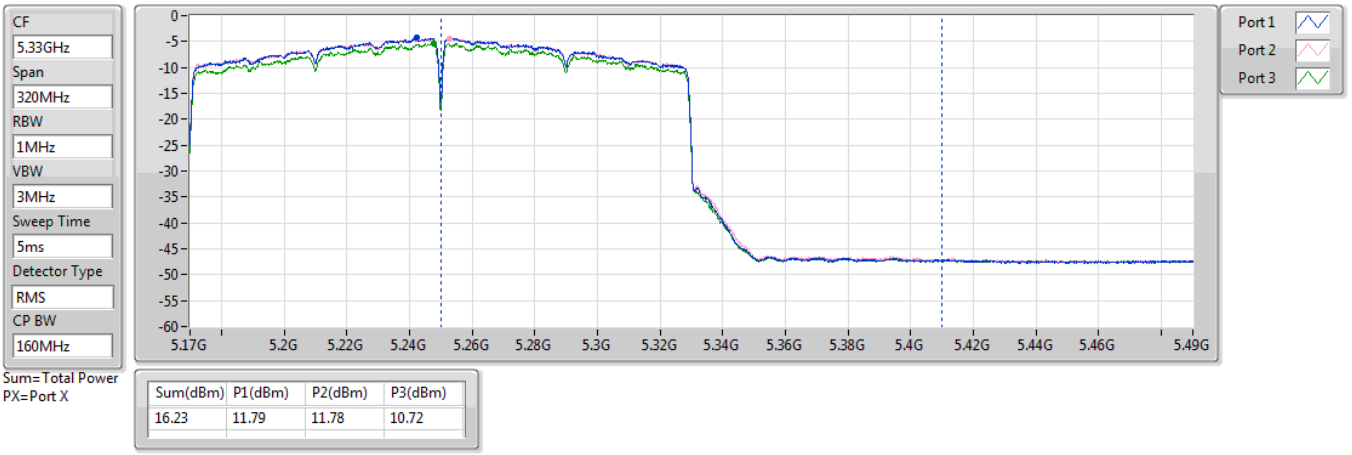
5250MHz Straddle 5.15-5.25GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
16.33	11.95	11.92	10.70

5.25-5.35GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **AV Power**

5250MHz Straddle 5.25-5.35GHz_TX



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)
16.23	11.79	11.78	10.72

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_3TX	24.57	0.28642	29.20	0.83176
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	24.18	0.26182	28.81	0.76033
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	15.23	0.03334	19.86	0.09683
802.11ax HEW160-BF_Nss2,(MCS0)_3TX	11.56	0.01432	16.19	0.04159
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_3TX	18.80	0.07586	24.86	0.30620
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	18.93	0.07816	24.99	0.31550
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	18.00	0.06310	24.06	0.25468
802.11ax HEW160-BF_Nss2,(MCS0)_3TX	11.46	0.01400	17.52	0.05649
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_3TX	18.60	0.07244	24.32	0.27040
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	18.95	0.07852	24.67	0.29309
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	18.75	0.07499	24.47	0.27990
802.11ax HEW160-BF_Nss2,(MCS0)_3TX	15.32	0.03404	21.04	0.12706
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_3TX	24.74	0.29785	29.19	0.82985
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	24.80	0.30200	29.25	0.84140
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	24.11	0.25763	28.56	0.71779

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.63	18.45	18.25	18.44	23.15	30.00	27.78	36.00
5200MHz	Pass	4.63	19.47	19.28	19.41	24.16	30.00	28.79	36.00
5240MHz	Pass	4.63	19.79	19.74	19.86	24.57	30.00	29.20	36.00
5260MHz	Pass	6.06	13.99	14.04	14.05	18.80	23.94	24.86	30.00
5300MHz	Pass	6.06	13.61	13.62	13.45	18.33	23.94	24.39	30.00
5320MHz	Pass	6.06	13.58	13.6	13.34	18.28	23.94	24.34	30.00
5500MHz	Pass	5.72	13.98	13.85	13.65	18.60	24.00	24.32	30.00
5580MHz	Pass	5.72	12.93	13.48	13.52	18.09	24.00	23.81	30.00
5700MHz	Pass	5.72	13.55	13.64	13.47	18.33	24.00	24.05	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	5.72	12.44	12.47	12.29	17.17	24.00	22.89	28.94
5720MHz Straddle 5.725-5.85GHz	Pass	4.45	5.84	5.77	5.69	10.54	30.00	14.99	36.00
5745MHz	Pass	4.45	20.14	19.65	20.09	24.74	30.00	29.19	36.00
5785MHz	Pass	4.45	19.76	19.29	19.69	24.36	30.00	28.81	36.00
5825MHz	Pass	4.45	20	19.98	19.58	24.63	30.00	29.08	36.00
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.63	14.77	14.74	14.63	19.48	30.00	24.11	36.00
5230MHz	Pass	4.63	19.36	19.41	19.45	24.18	30.00	28.81	36.00
5270MHz	Pass	6.06	14.05	14.09	14.28	18.91	23.94	24.97	30.00
5310MHz	Pass	6.06	14.05	14.25	14.16	18.93	23.94	24.99	30.00
5510MHz	Pass	5.72	14.15	13.99	13.38	18.62	24.00	24.34	30.00
5590MHz	Pass	5.72	13.98	14.26	14.28	18.95	24.00	24.67	30.00
5670MHz	Pass	5.72	14.14	13.54	13.64	18.55	24.00	24.27	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	5.72	13.76	13.82	13.61	18.50	24.00	24.22	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.45	1.47	1.66	0.64	6.05	30.00	10.50	36.00
5755MHz	Pass	4.45	19.99	19.74	19.92	24.66	30.00	29.11	36.00
5795MHz	Pass	4.45	20.2	19.85	20.04	24.80	30.00	29.25	36.00
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.63	10.56	10.64	10.15	15.23	30.00	19.86	36.00
5290MHz	Pass	6.06	13.39	13.25	13.04	18.00	23.94	24.06	30.00
5530MHz	Pass	5.72	12.82	12.52	12.51	17.39	24.00	23.11	30.00
5610MHz	Pass	5.72	13.85	13.99	14.08	18.75	24.00	24.47	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	5.72	14.07	13.85	13.84	18.69	24.00	24.41	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.45	-2	-2.53	-2.74	2.36	30.00	6.81	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5775MHz	Pass	4.45	19.34	19.29	19.38	24.11	30.00	28.56	36.00
802.11ax HEW160-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.63	7.18	7.15	5.93	11.56	30.00	16.19	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.06	7.02	7.01	5.95	11.46	23.94	17.52	30.00
5570MHz	Pass	5.72	10.79	10.87	9.94	15.32	24.00	21.04	30.00

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

Directional Gain = $G_{ANT\ MAX}$+10 log(N_{ANT}/N_{SS})= $G_{ANT\ MAX}$+10 log(3/2)

Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
1	1.64	2.78	3.25	2.15
2	2.87	4.3	3.96	2.69
3	1.74	2.35	2.23	0.93
Directional Gain (dBi)	4.63	6.06	5.72	4.45
Power limit	No impact	Shall be reduced 0.06 dB	No impact	No impact

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	15.82	22.69
802.11ax HEW20_Nss2,(MCS0)_3TX	16.88	21.51
802.11ax HEW40_Nss2,(MCS0)_3TX	14.34	18.97
802.11ax HEW80_Nss2,(MCS0)_3TX	2.39	7.02
802.11ax HEW160_Nss2,(MCS0)_3TX	-1.45	3.18
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	8.74	16.70
802.11ax HEW20_Nss2,(MCS0)_3TX	10.83	16.89
802.11ax HEW40_Nss2,(MCS0)_3TX	9.11	15.17
802.11ax HEW80_Nss2,(MCS0)_3TX	5.32	11.38
802.11ax HEW160_Nss2,(MCS0)_3TX	-1.44	4.62
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	8.80	16.75
802.11ax HEW20_Nss2,(MCS0)_3TX	10.90	16.62
802.11ax HEW40_Nss2,(MCS0)_3TX	9.36	15.08
802.11ax HEW80_Nss2,(MCS0)_3TX	6.45	12.17
802.11ax HEW160_Nss2,(MCS0)_3TX	-1.05	4.67
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	15.58	22.31
802.11ax HEW20_Nss2,(MCS0)_3TX	15.15	19.60
802.11ax HEW40_Nss2,(MCS0)_3TX	13.56	18.01
802.11ax HEW80_Nss2,(MCS0)_3TX	10.21	14.66

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_3TX									
5180MHz	Pass	6.87	11.31	10.78	11.20	15.82	16.13	22.69	23.00
5200MHz	Pass	6.87	11.44	10.83	11.23	15.76	16.13	22.63	23.00
5240MHz	Pass	6.87	11.18	10.70	10.99	15.58	16.13	22.45	23.00
5260MHz	Pass	7.96	4.08	3.90	4.06	8.64	9.04	16.60	17.00
5300MHz	Pass	7.96	4.21	3.96	4.12	8.74	9.04	16.70	17.00
5320MHz	Pass	7.96	4.20	3.99	3.85	8.72	9.04	16.68	17.00
5500MHz	Pass	7.95	4.01	4.09	3.60	8.61	9.05	16.56	17.00
5580MHz	Pass	7.95	3.57	4.42	4.06	8.72	9.05	16.67	17.00
5700MHz	Pass	7.95	4.41	4.24	3.90	8.80	9.05	16.75	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.95	4.14	4.05	3.61	8.63	9.05	16.58	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	6.73	0.24	0.15	-0.01	4.74	29.27	11.47	36.00
5745MHz	Pass	6.73	11.11	10.50	10.64	15.29	29.27	22.02	36.00
5785MHz	Pass	6.73	11.18	10.41	10.74	15.38	29.27	22.11	36.00
5825MHz	Pass	6.73	11.20	10.90	10.50	15.58	29.27	22.31	36.00
802.11ax HEW20_Nss2,(MCS0)_3TX									
5180MHz	Pass	4.63	11.09	10.73	10.93	15.55	17.00	20.18	23.00
5200MHz	Pass	4.63	11.88	11.88	11.86	16.57	17.00	21.20	23.00
5240MHz	Pass	4.63	12.33	12.30	12.38	16.88	17.00	21.51	23.00
5260MHz	Pass	6.06	6.22	6.26	6.14	10.83	10.94	16.89	17.00
5300MHz	Pass	6.06	6.00	5.96	5.88	10.51	10.94	16.57	17.00
5320MHz	Pass	6.06	5.96	6.00	5.91	10.57	10.94	16.63	17.00
5500MHz	Pass	5.72	6.46	6.29	6.11	10.90	11.00	16.62	17.00
5580MHz	Pass	5.72	5.62	6.01	6.10	10.57	11.00	16.29	17.00
5700MHz	Pass	5.72	5.88	6.18	5.95	10.65	11.00	16.37	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	5.72	5.85	5.86	5.92	10.46	11.00	16.18	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.45	2.66	2.59	2.66	7.35	30.00	11.80	36.00
5745MHz	Pass	4.45	10.56	10.24	10.40	15.15	30.00	19.60	36.00
5785MHz	Pass	4.45	10.16	9.89	10.27	14.77	30.00	19.22	36.00
5825MHz	Pass	4.45	10.50	10.37	9.89	14.92	30.00	19.37	36.00
802.11ax HEW40_Nss2,(MCS0)_3TX									
5190MHz	Pass	4.63	5.16	4.88	4.95	9.62	17.00	14.25	23.00
5230MHz	Pass	4.63	9.76	9.65	9.94	14.34	17.00	18.97	23.00
5270MHz	Pass	6.06	4.45	4.20	4.78	9.11	10.94	15.17	17.00
5310MHz	Pass	6.06	4.31	4.14	4.43	8.87	10.94	14.93	17.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5510MHz	Pass	5.72	4.03	3.85	3.97	8.62	11.00	14.34	17.00
5590MHz	Pass	5.72	4.41	4.85	4.94	9.36	11.00	15.08	17.00
5670MHz	Pass	5.72	4.33	4.04	4.52	8.85	11.00	14.57	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	5.72	4.34	4.31	4.27	8.85	11.00	14.57	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.45	-1.68	-1.17	-2.20	3.08	30.00	7.53	36.00
5755MHz	Pass	4.45	9.02	8.69	9.15	13.47	30.00	17.92	36.00
5795MHz	Pass	4.45	9.04	8.65	9.31	13.56	30.00	18.01	36.00
802.11ax HEW80_Nss2,(MCS0)_3TX									
5210MHz	Pass	4.63	-2.04	-1.93	-2.96	2.39	17.00	7.02	23.00
5290MHz	Pass	6.06	0.67	0.62	0.74	5.32	10.94	11.38	17.00
5530MHz	Pass	5.72	0.03	-0.09	-0.19	4.62	11.00	10.34	17.00
5610MHz	Pass	5.72	1.33	1.83	2.09	6.45	11.00	12.17	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	5.72	1.42	1.22	1.17	5.98	11.00	11.70	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.45	-5.18	-5.86	-5.89	-1.01	30.00	3.44	36.00
5775MHz	Pass	4.45	5.62	5.27	5.68	10.21	30.00	14.66	36.00
802.11ax HEW160_Nss2,(MCS0)_3TX									
5250MHz Straddle 5.15-5.25GHz	Pass	4.63	-5.62	-5.80	-6.89	-1.45	17.00	3.18	23.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.06	-5.93	-5.85	-6.61	-1.44	10.94	4.62	17.00
5570MHz	Pass	5.72	-6.41	-5.19	-5.67	-1.05	11.00	4.67	17.00

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

DG = Directional Gain
For 802.11a
Directional Gain = 10 log $[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/N_{ANT}]$

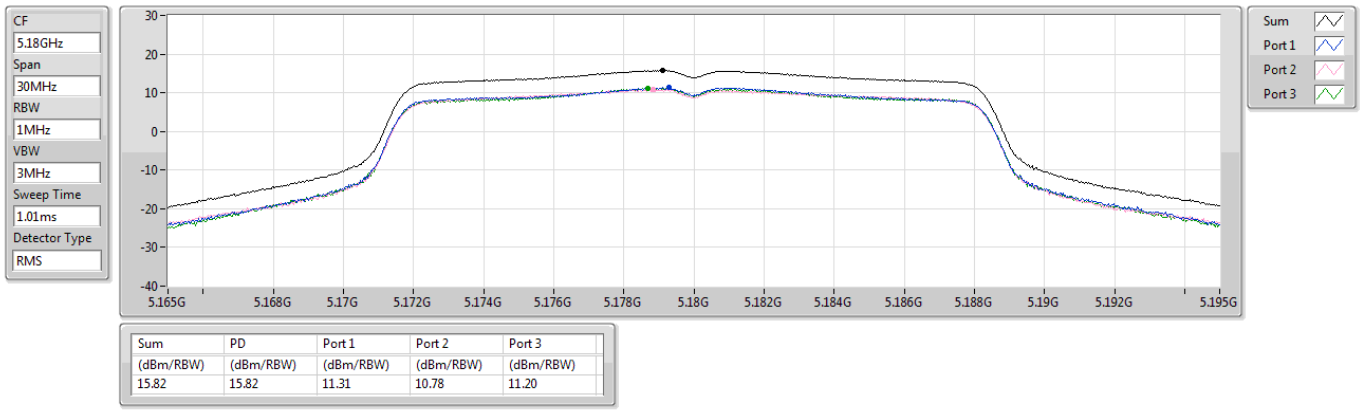
Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
1	1.64	2.78	3.25	2.15
2	2.87	4.3	3.96	2.69
3	1.74	2.35	2.23	0.93
Directional Gain (dBi)	6.87	7.96	7.95	6.73
PSD limit	Shall be reduced 0.87 dB	Shall be reduced 1.96 dB	Shall be reduced 1.95 dB	Shall be reduced 0.73 dB

For 802.11ax
Directional Gain = $G_{ANT\ MAX}$+10 log(N_{ANT}/N_{SS})= $G_{ANT\ MAX}$+10 log(3/2)

Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
1	1.64	2.78	3.25	2.15
2	2.87	4.3	3.96	2.69
3	1.74	2.35	2.23	0.93
Directional Gain (dBi)	4.63	6.06	5.72	4.45
PSD limit	No impact	Shall be reduced 0.06 dB	No impact	No impact

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

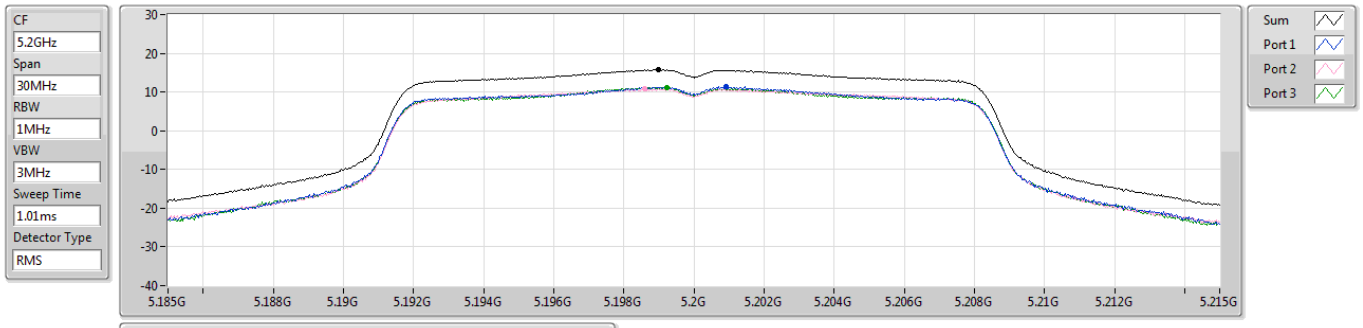
5180MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.82	15.82	11.31	10.78	11.20

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

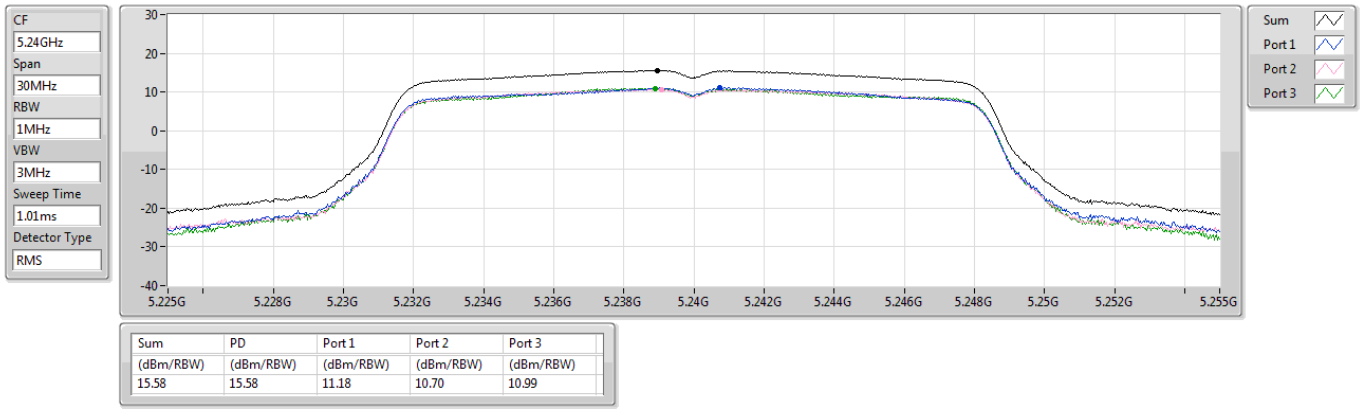
5200MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.76	15.76	11.44	10.83	11.23

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

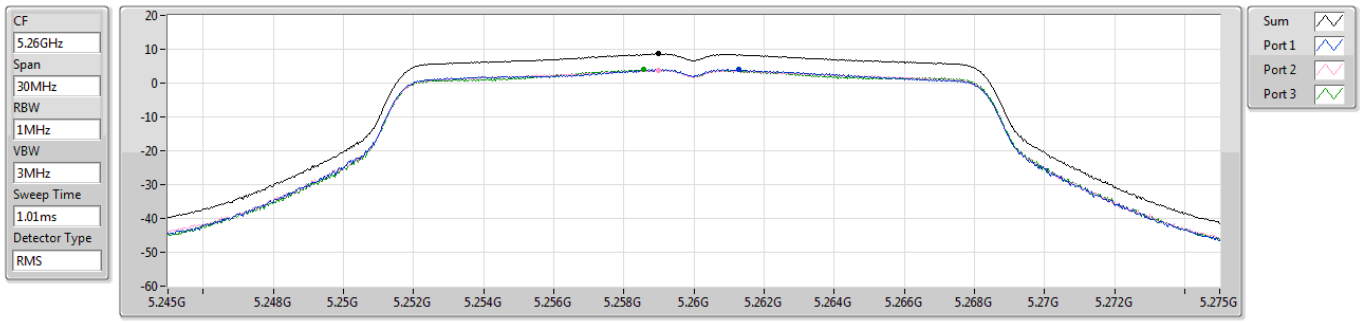
5240MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.58	15.58	11.18	10.70	10.99

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

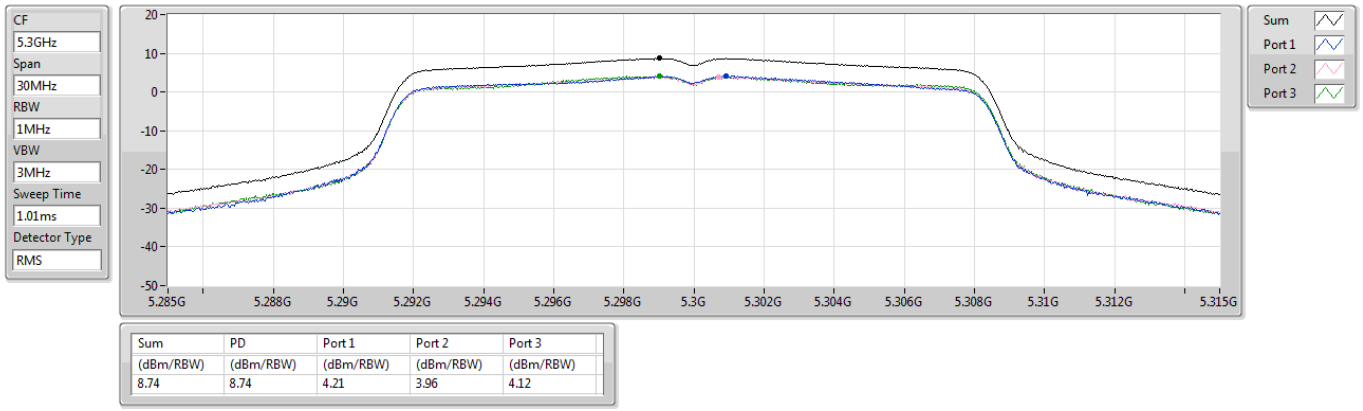
5260MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.64	8.64	4.08	3.90	4.06

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

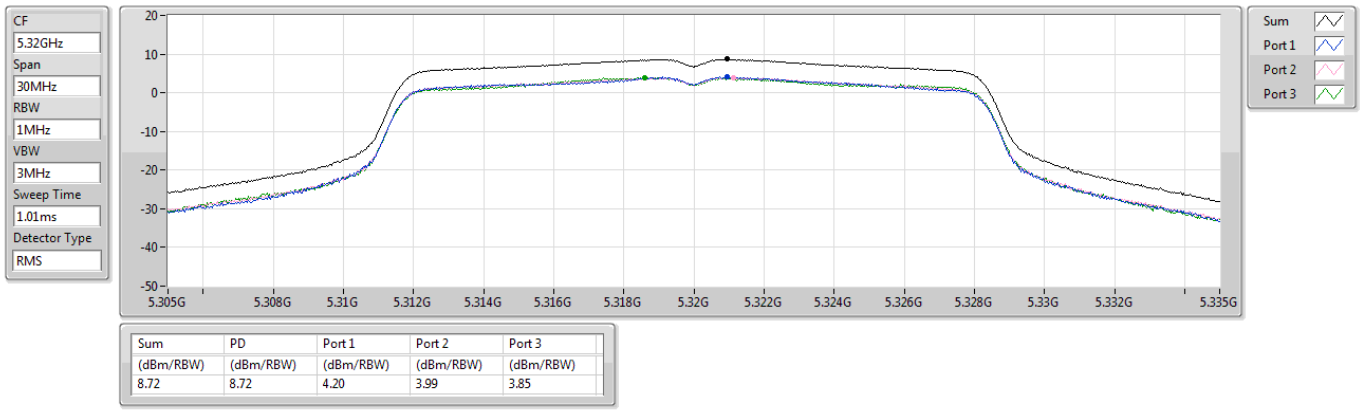
5300MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.74	8.74	4.21	3.96	4.12

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

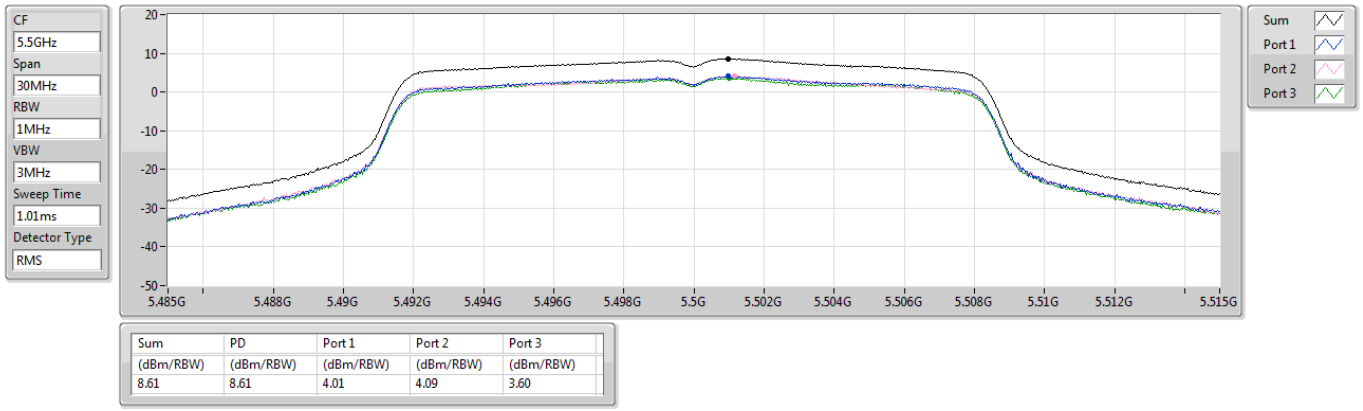
5320MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.72	8.72	4.20	3.99	3.85

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

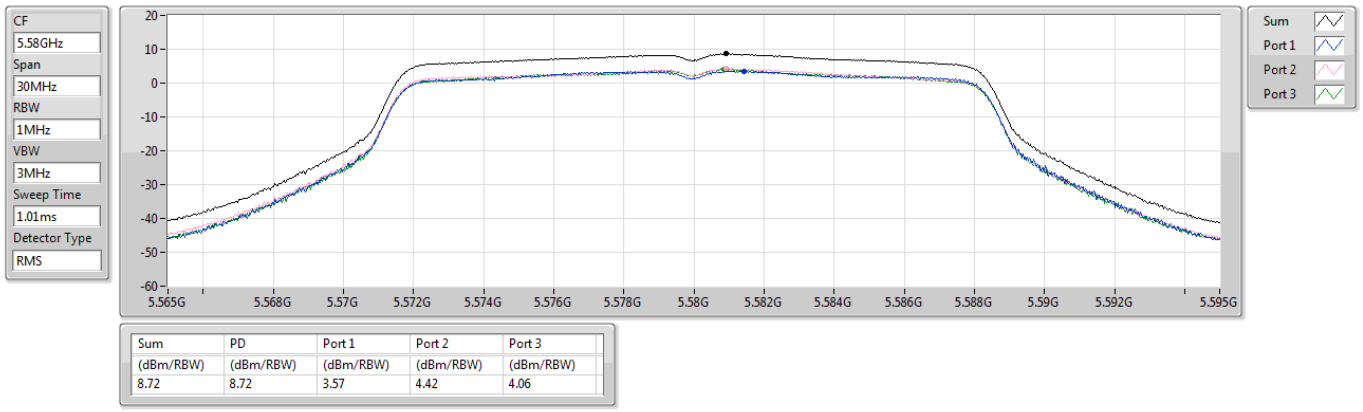
5500MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.61	8.61	4.01	4.09	3.60

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

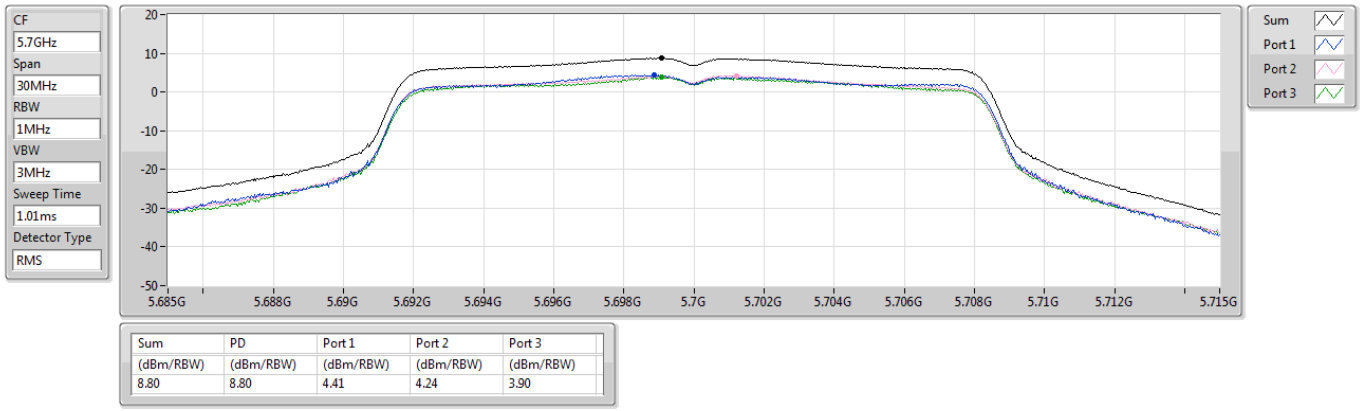
5580MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.72	8.72	3.57	4.42	4.06

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

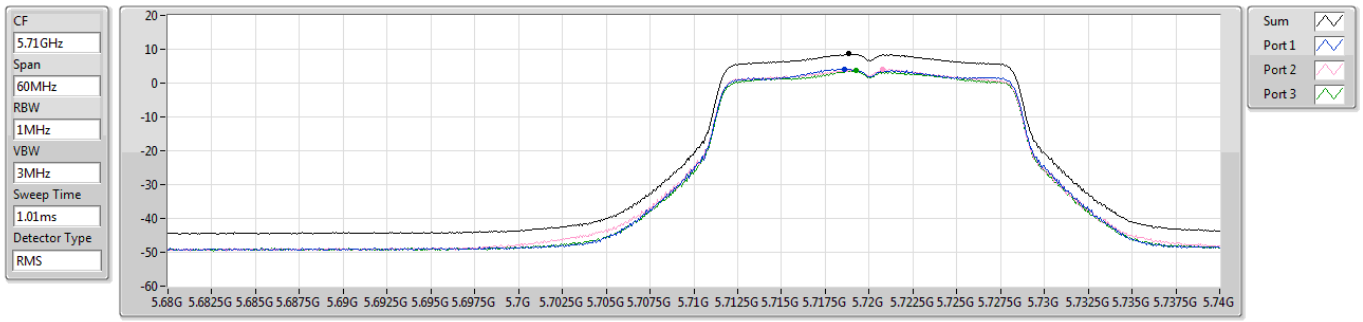
5700MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.80	8.80	4.41	4.24	3.90

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

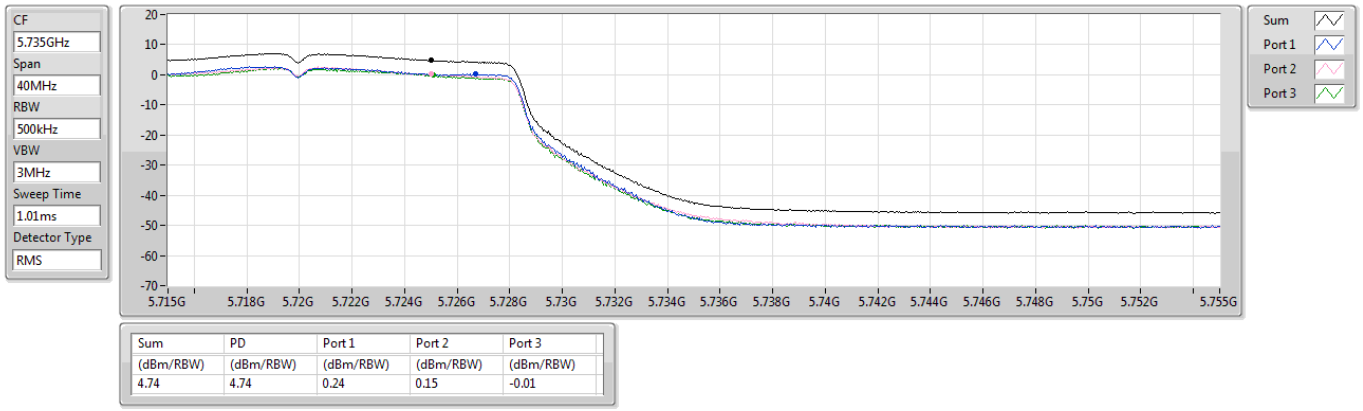
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.63	8.63	4.14	4.05	3.61

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

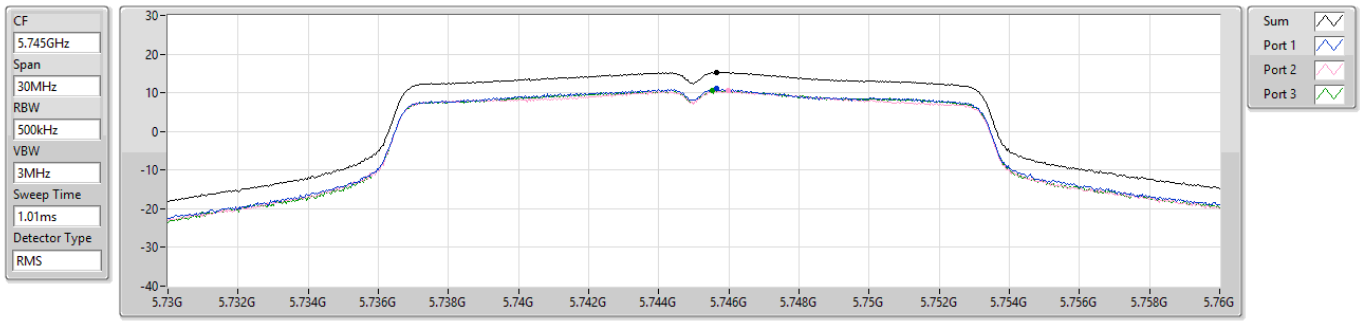
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.74	4.74	0.24	0.15	-0.01

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

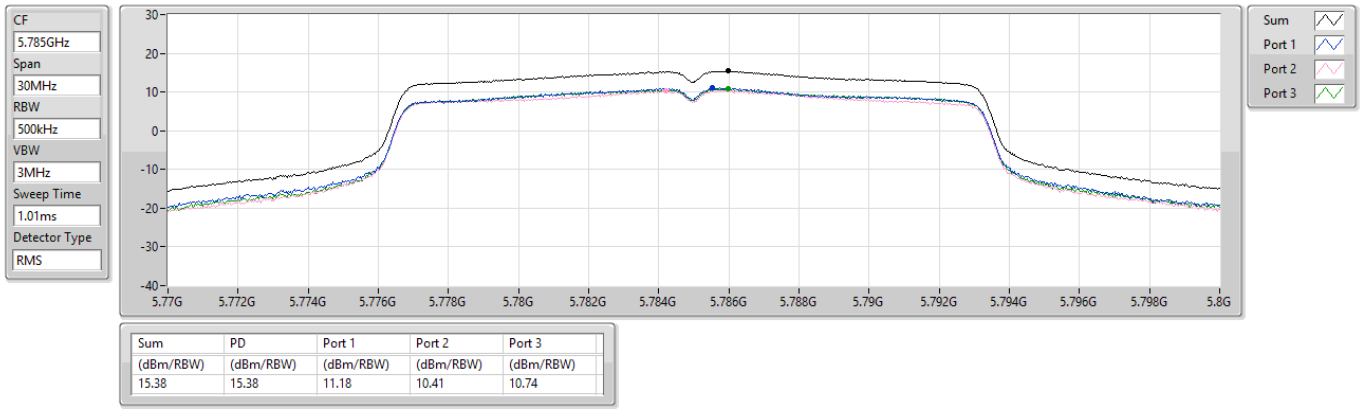
5745MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.29	15.29	11.11	10.50	10.64

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

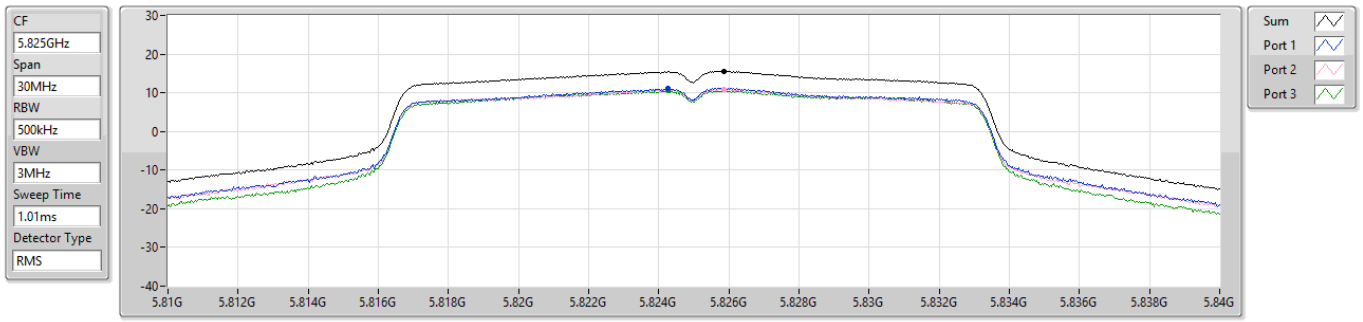
5785MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.38	15.38	11.18	10.41	10.74

5.725-5.85GHz_802.11a_Nss1,(6Mbps)_3TX **PSD**

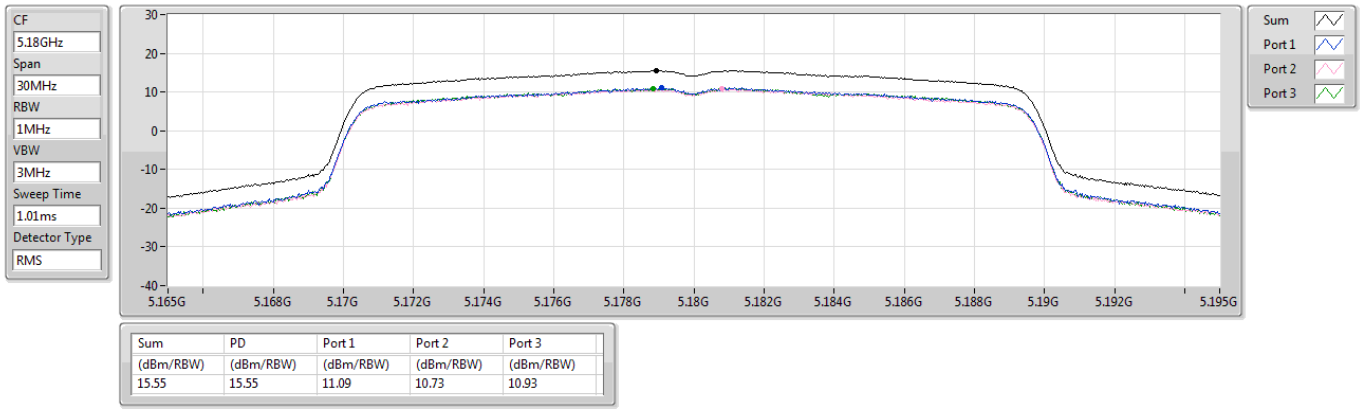
5825MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.58	15.58	11.20	10.90	10.50

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

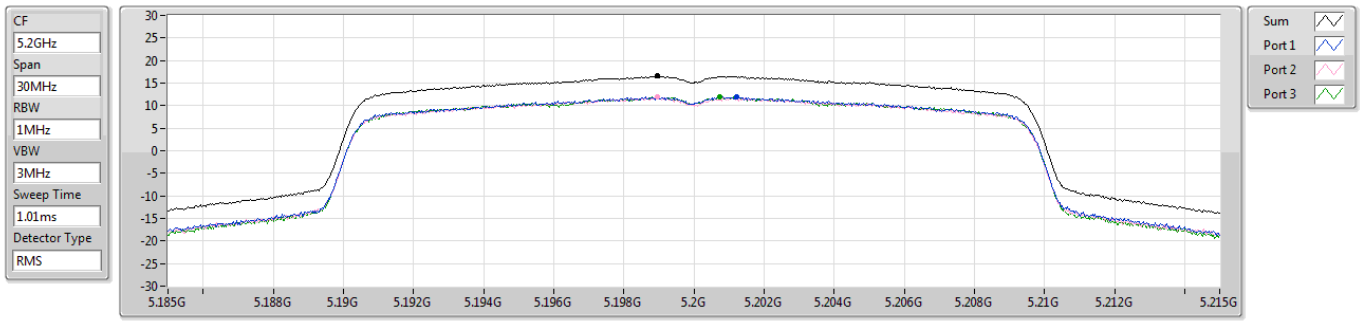
5180MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.55	15.55	11.09	10.73	10.93

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

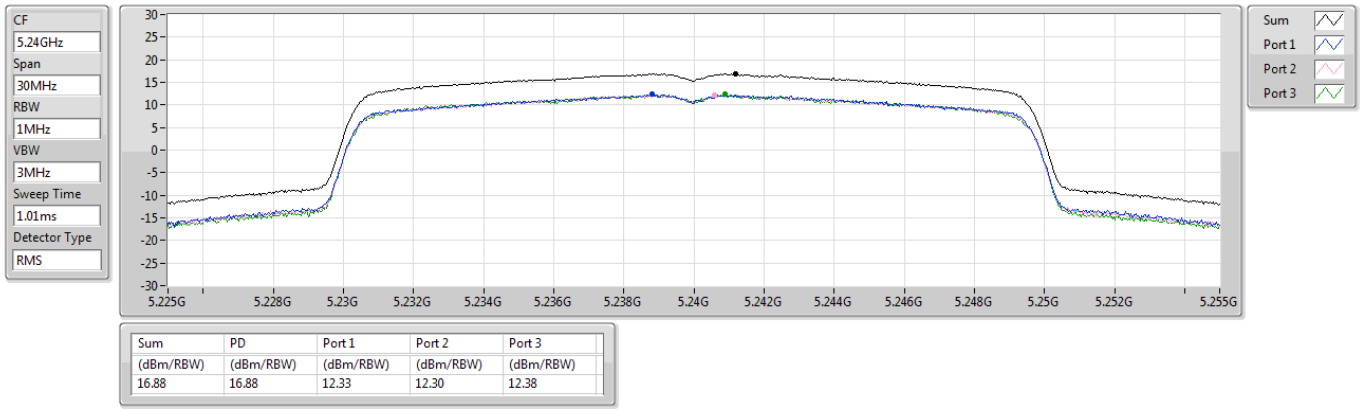
5200MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.57	16.57	11.88	11.88	11.86

5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

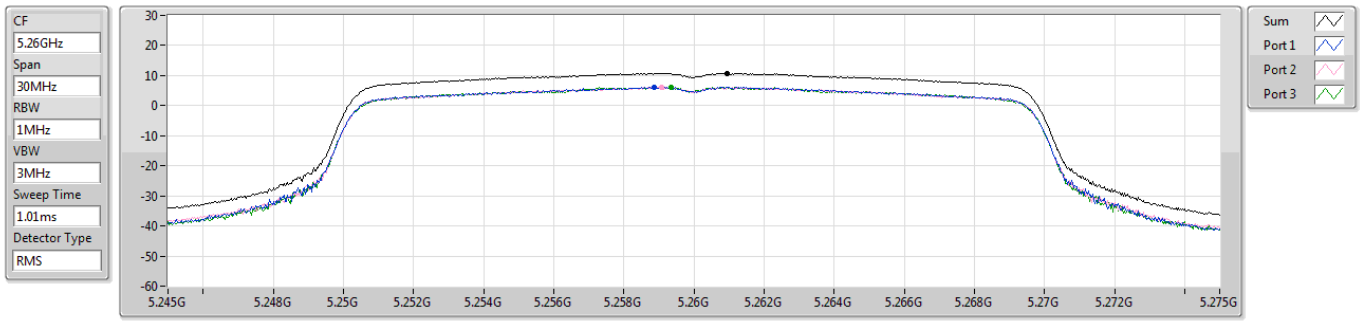
5240MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.88	16.88	12.33	12.30	12.38

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

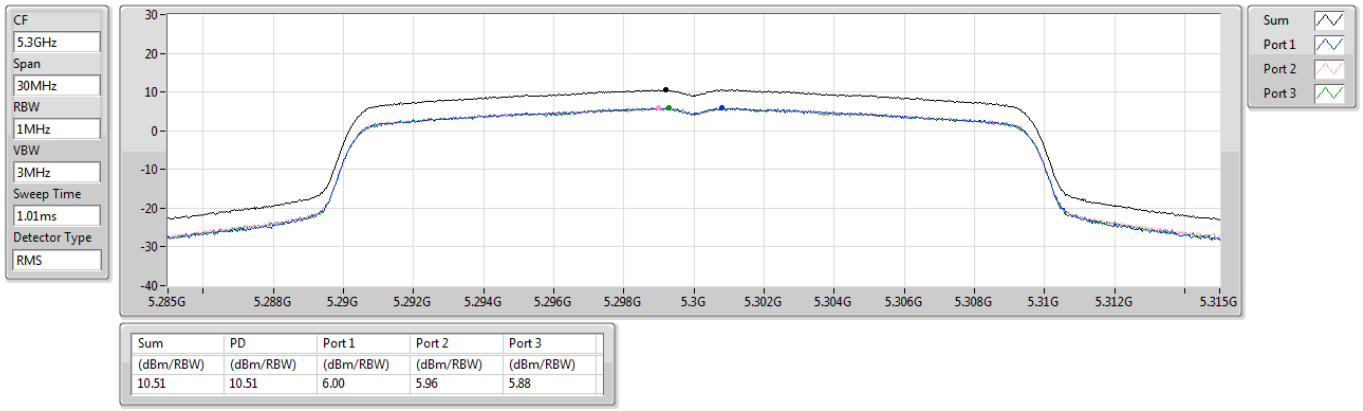
5260MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.83	10.83	6.22	6.26	6.14

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

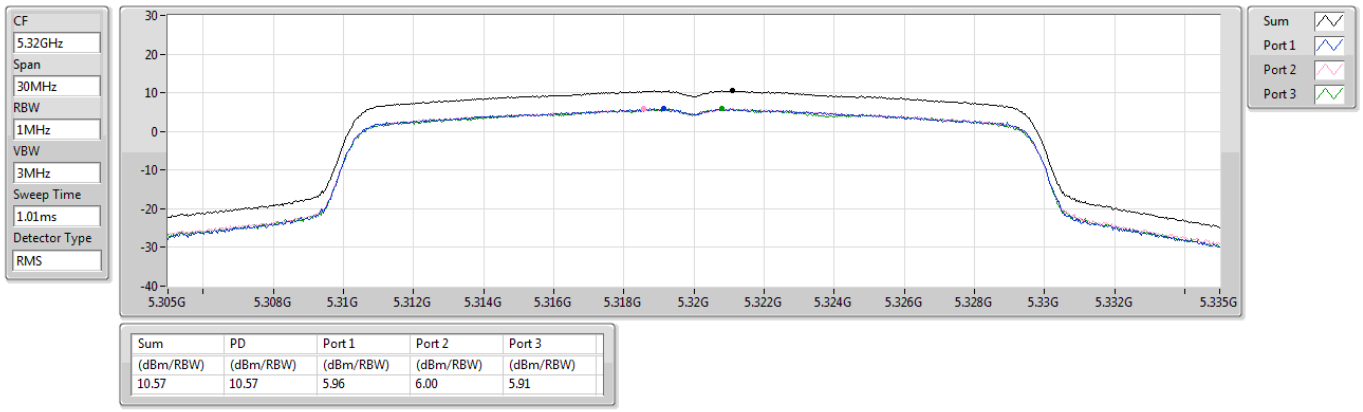
5300MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.51	10.51	6.00	5.96	5.88

5.25-5.35GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

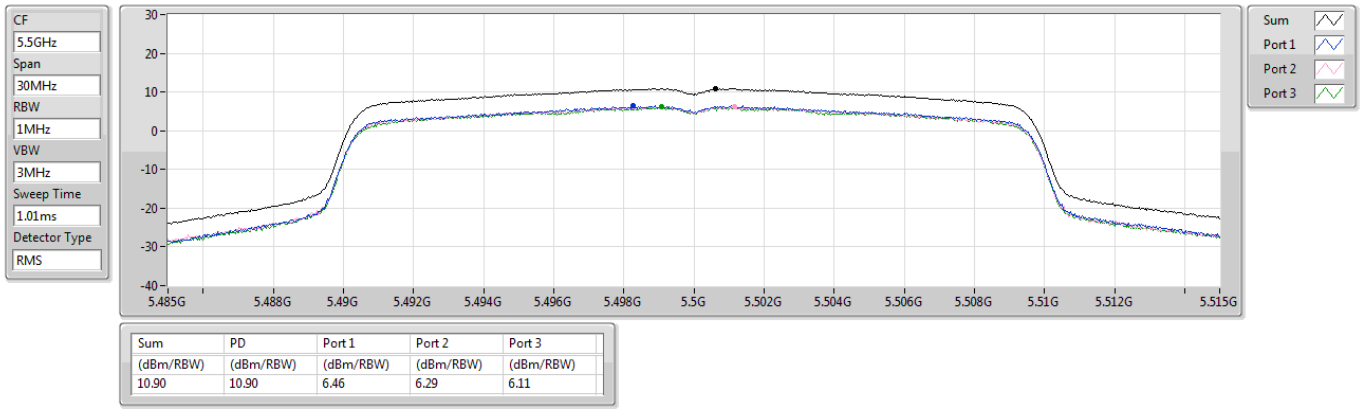
5320MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	5.96	6.00	5.91

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

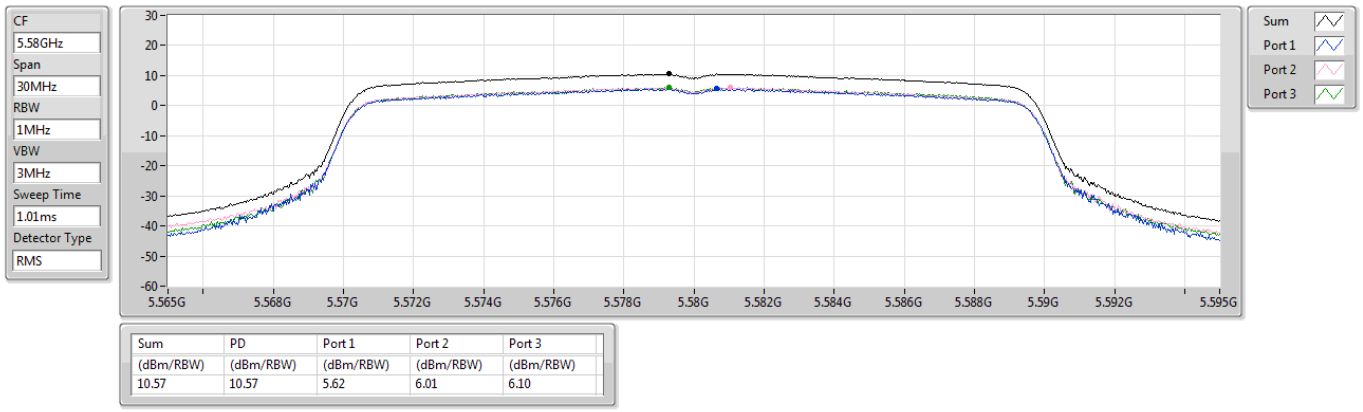
5500MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.90	10.90	6.46	6.29	6.11

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

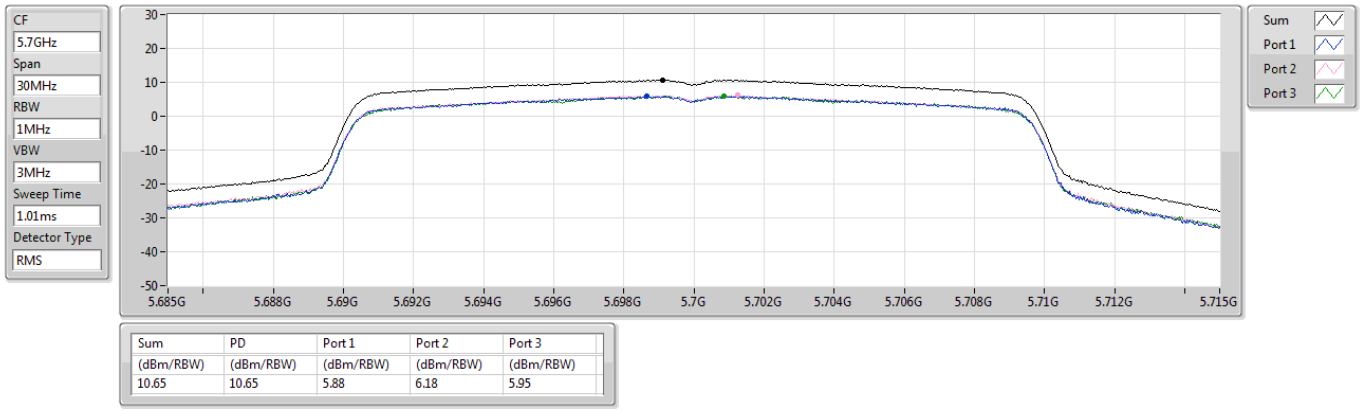
5580MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	5.62	6.01	6.10

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

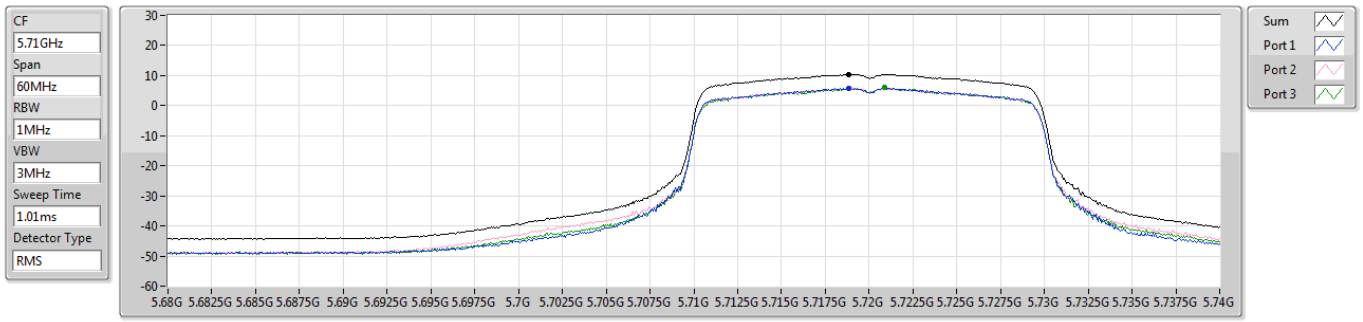
5700MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.65	10.65	5.88	6.18	5.95

5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

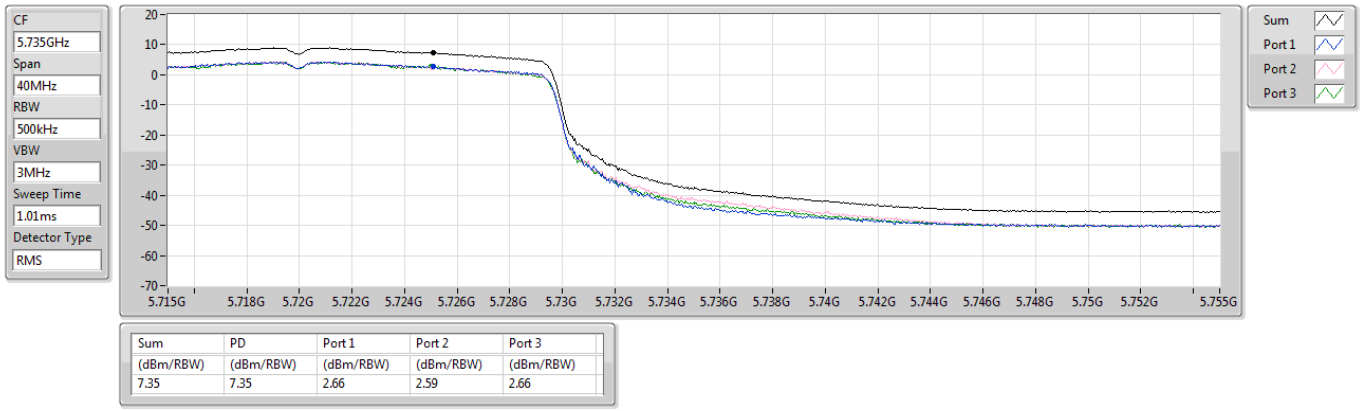
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.46	10.46	5.85	5.86	5.92

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

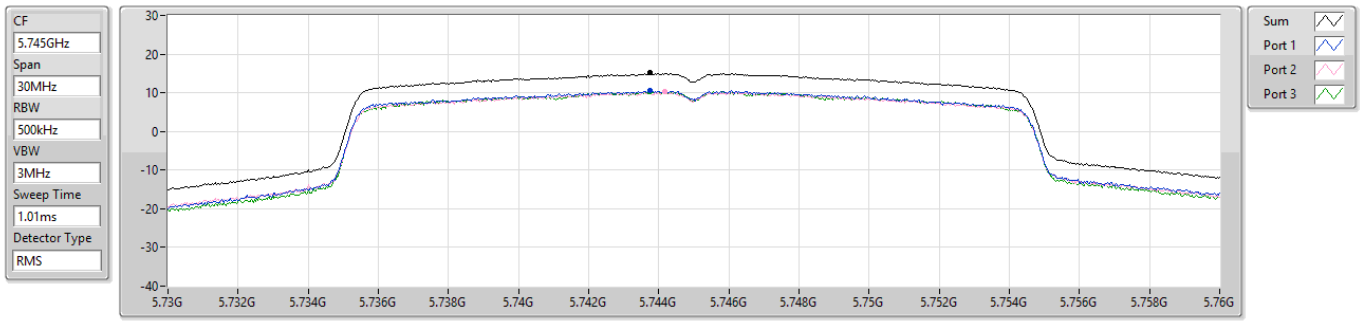
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.35	7.35	2.66	2.59	2.66

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

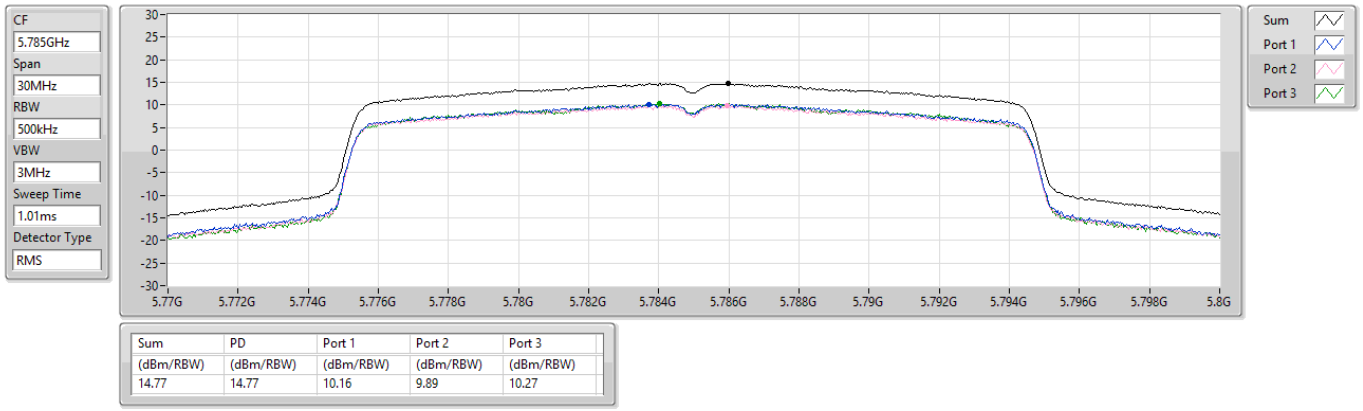
5745MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.15	15.15	10.56	10.24	10.40

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

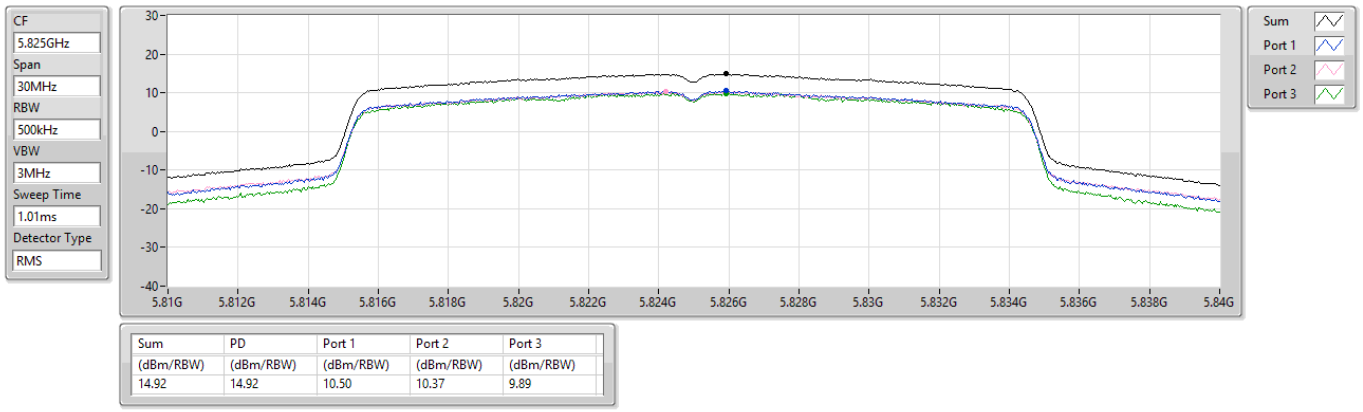
5785MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.77	14.77	10.16	9.89	10.27

5.725-5.85GHz_802.11ax HEW20_Nss2,(MCS0)_3TX **PSD**

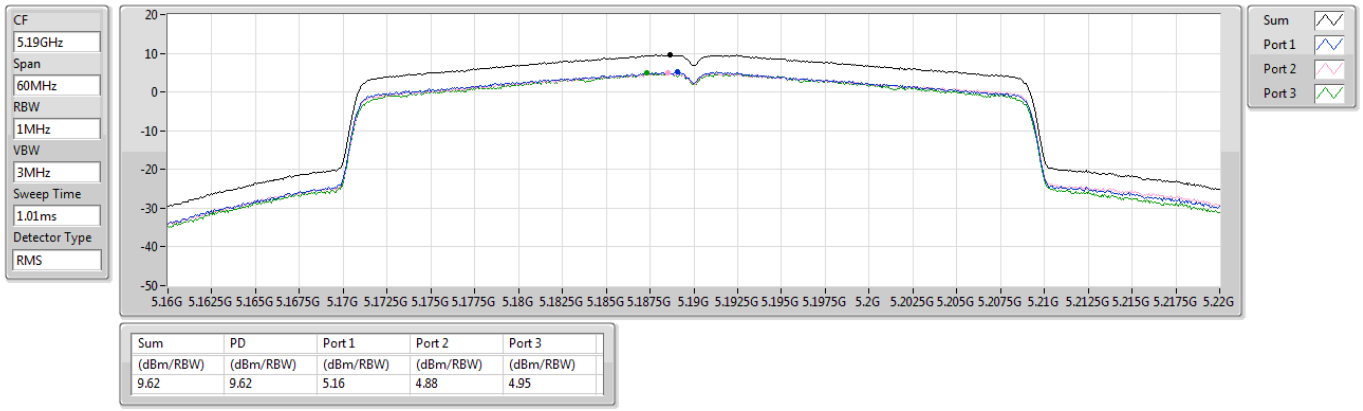
5825MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.92	14.92	10.50	10.37	9.89

5.15-5.25GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

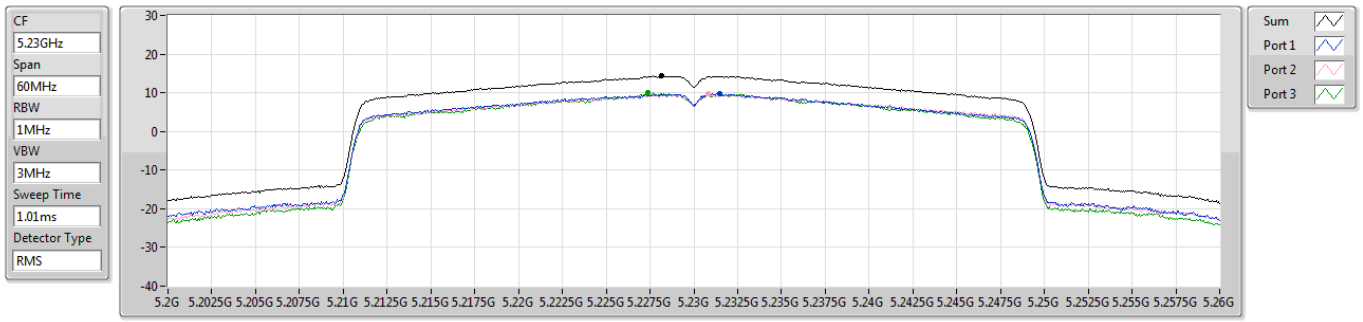
5190MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.62	9.62	5.16	4.88	4.95

5.15-5.25GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

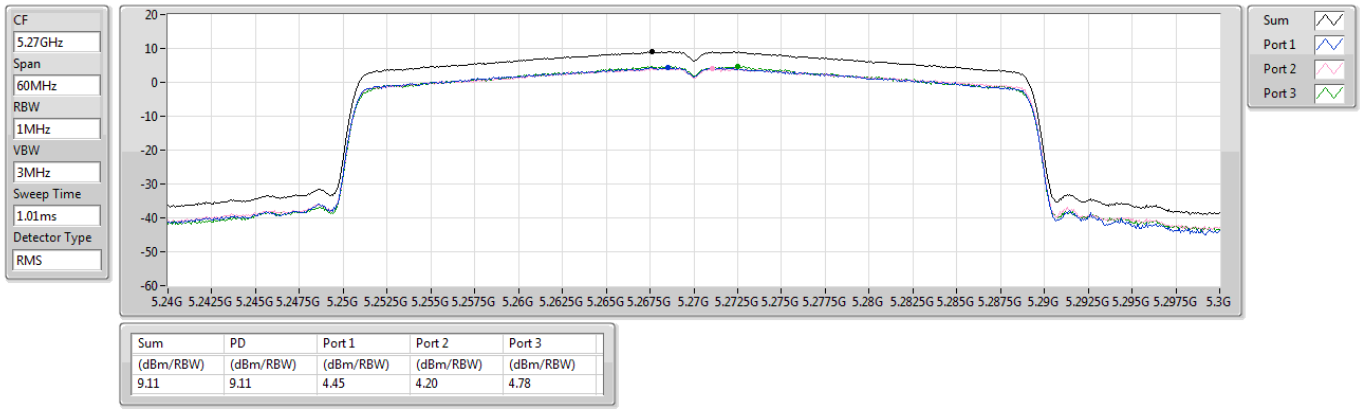
5230MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.34	14.34	9.76	9.65	9.94

5.25-5.35GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

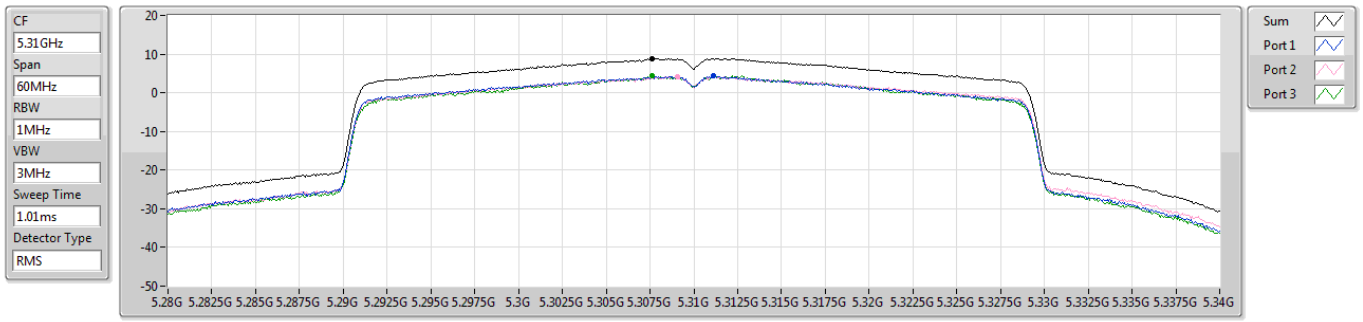
5270MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.11	9.11	4.45	4.20	4.78

5.25-5.35GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

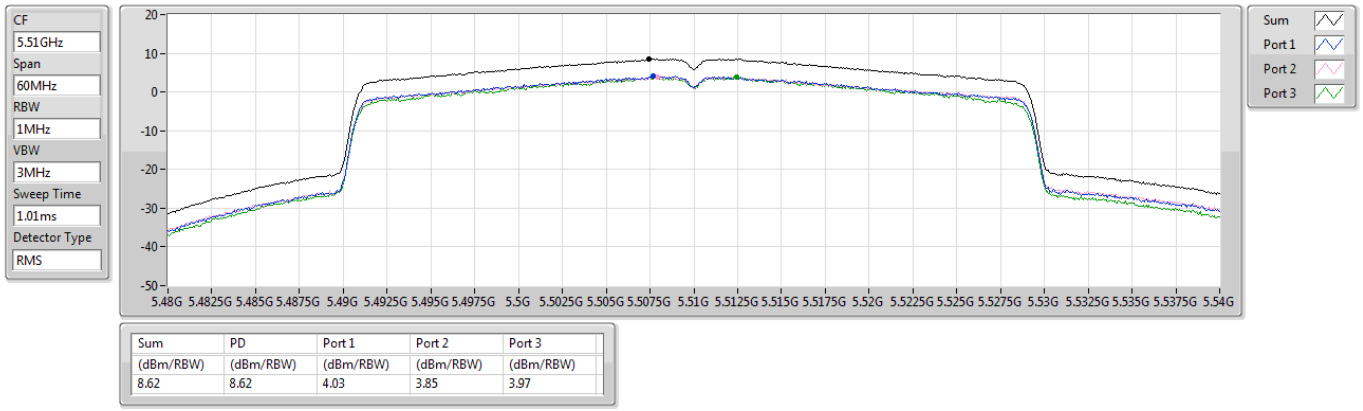
5310MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.87	8.87	4.31	4.14	4.43

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

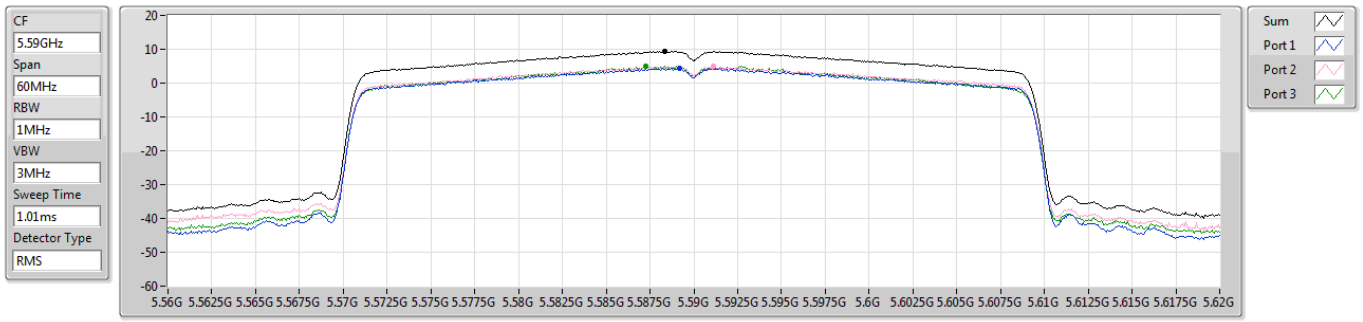
5510MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.62	8.62	4.03	3.85	3.97

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

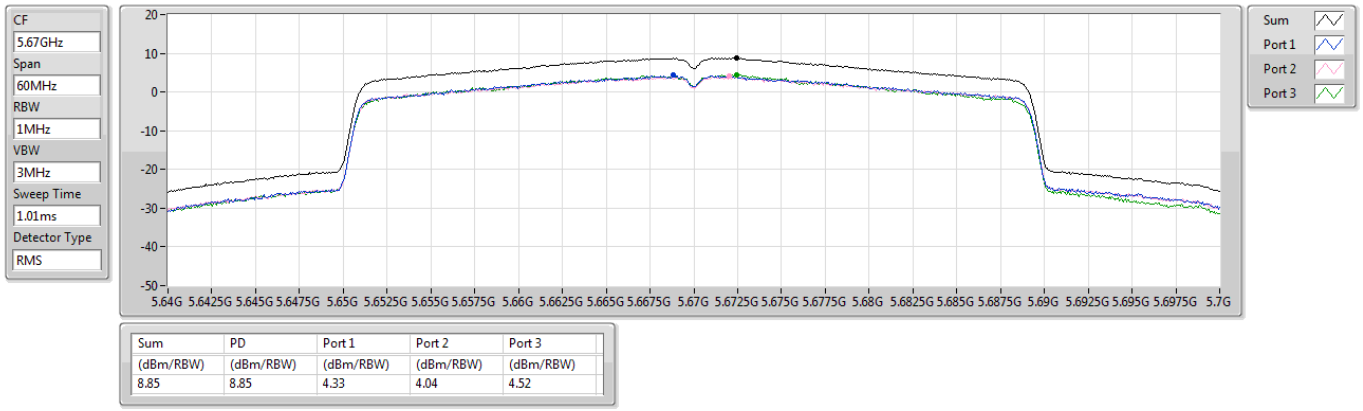
5590MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.36	9.36	4.41	4.85	4.94

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

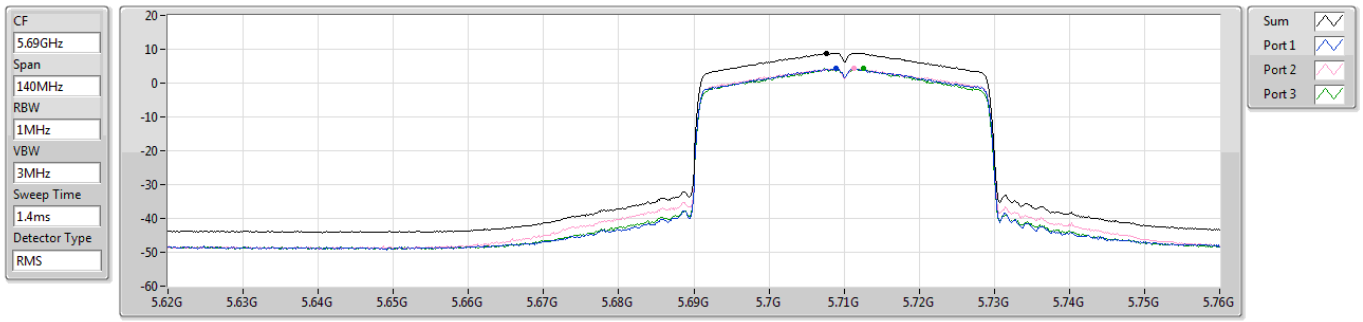
5670MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.85	8.85	4.33	4.04	4.52

5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

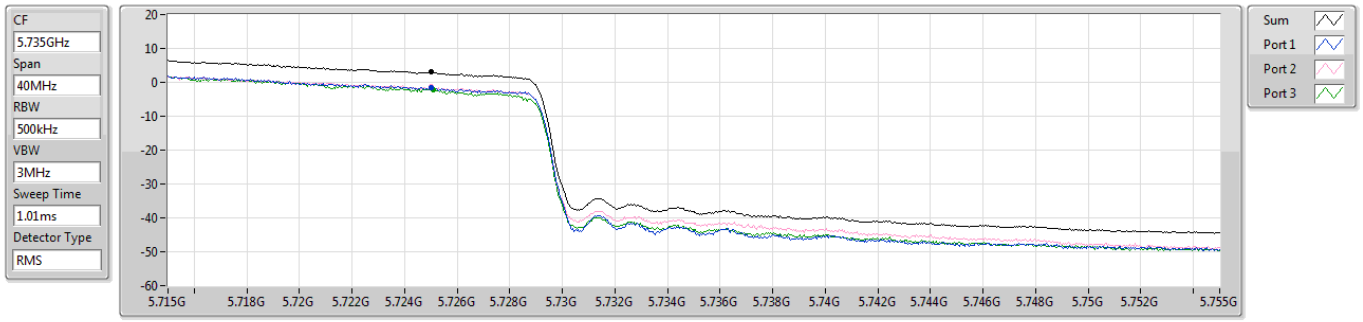
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.85	8.85	4.34	4.31	4.27

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

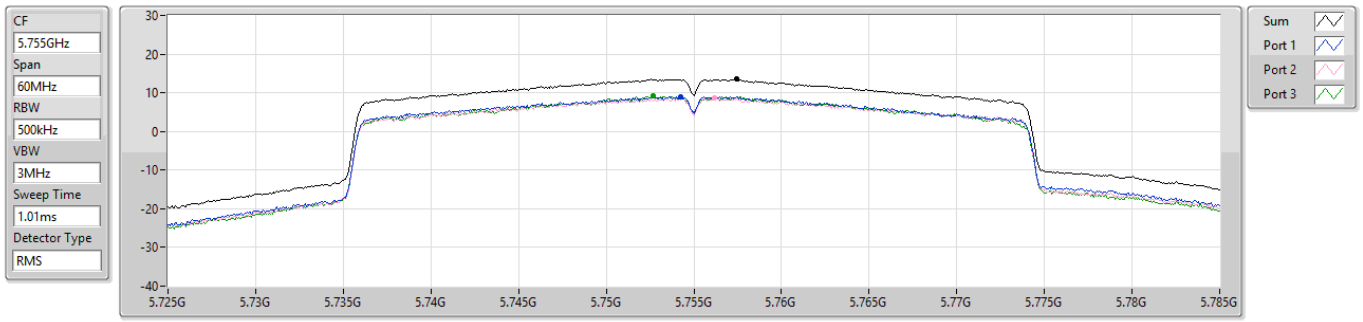
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.08	3.08	-1.68	-1.17	-2.20

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

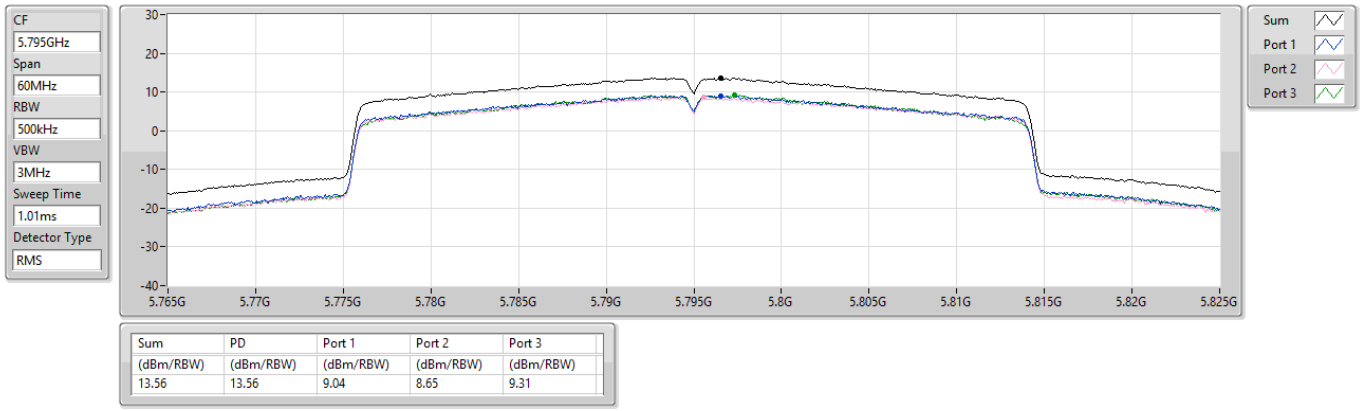
5755MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.47	13.47	9.02	8.69	9.15

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_3TX **PSD**

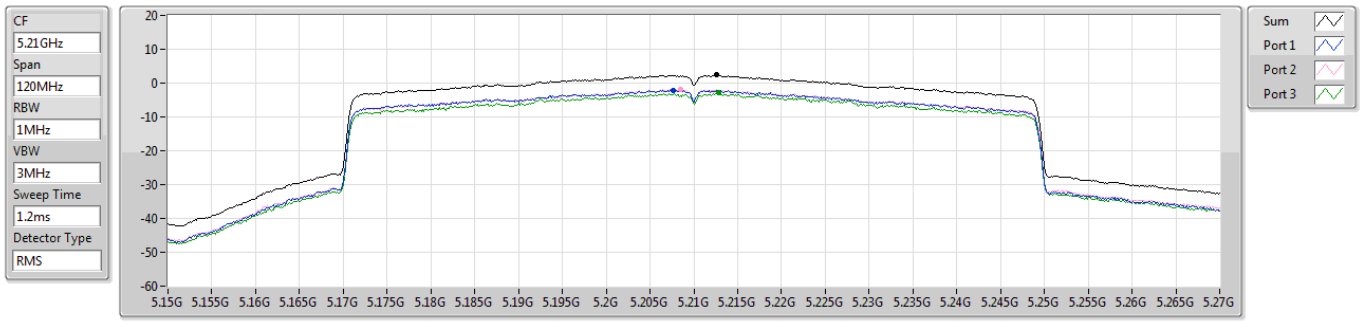
5795MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.56	13.56	9.04	8.65	9.31

5.15-5.25GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

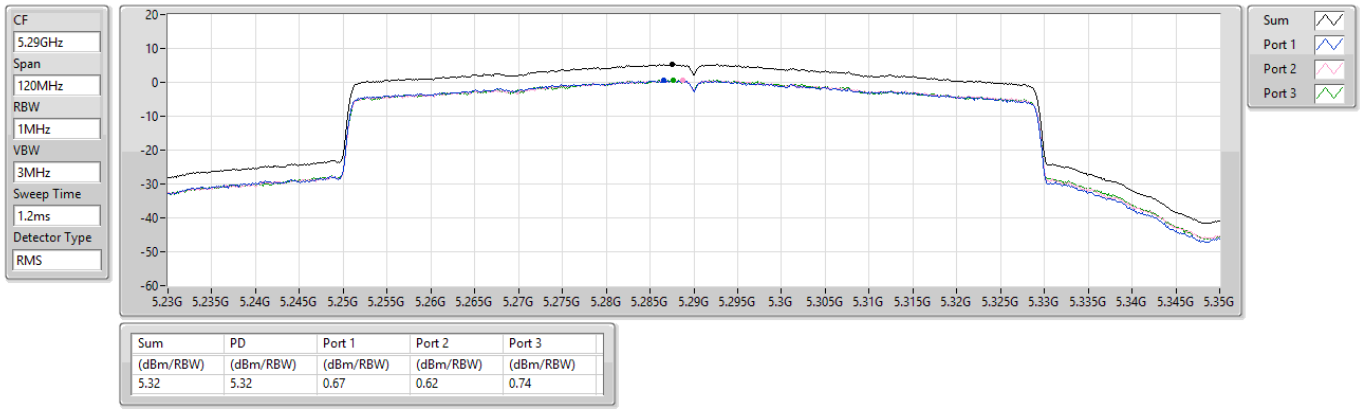
5210MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.39	2.39	-2.04	-1.93	-2.96

5.25-5.35GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

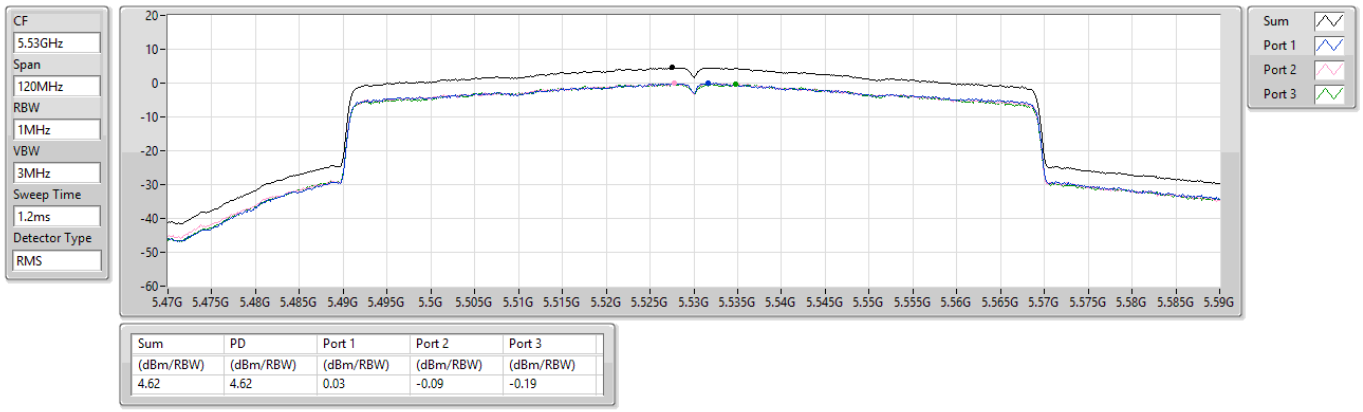
5290MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.32	5.32	0.67	0.62	0.74

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

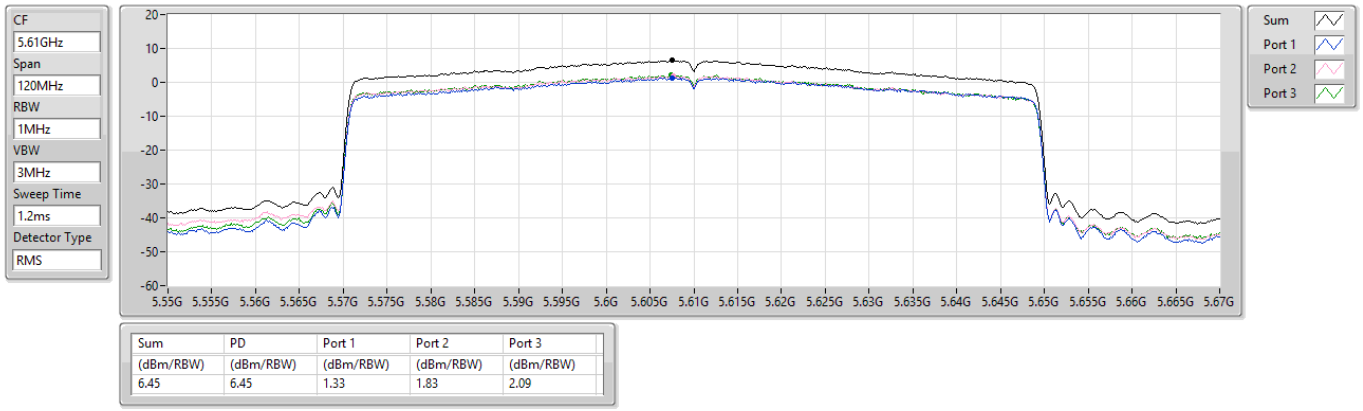
5530MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.62	4.62	0.03	-0.09	-0.19

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

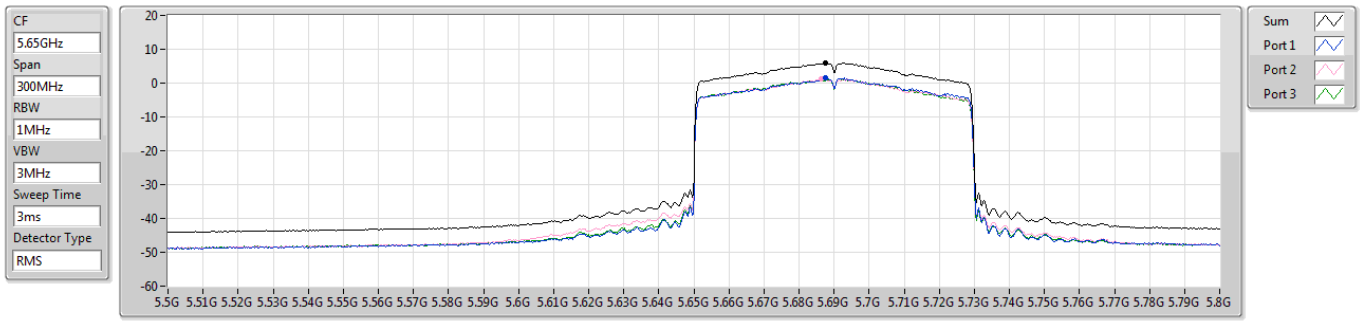
5610MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.45	6.45	1.33	1.83	2.09

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

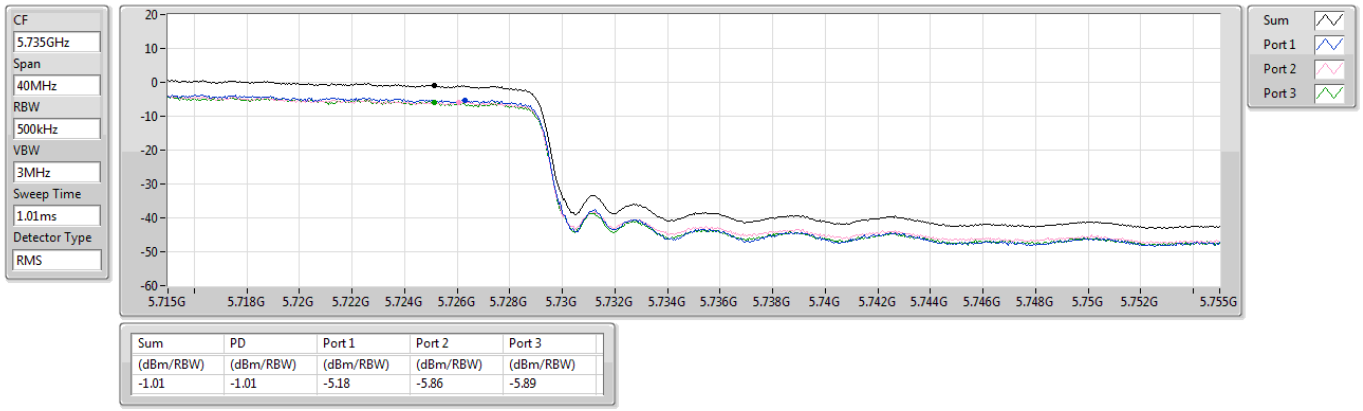
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.98	5.98	1.42	1.22	1.17

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

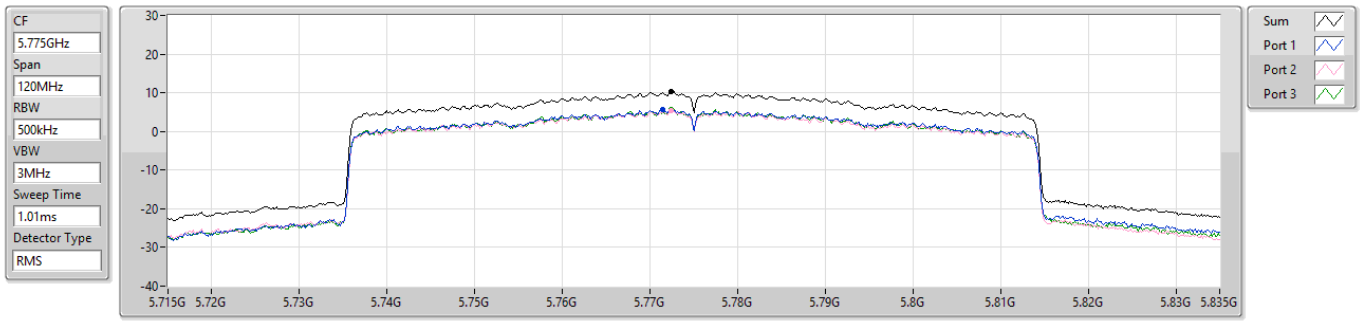
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.01	-1.01	-5.18	-5.86	-5.89

5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_3TX **PSD**

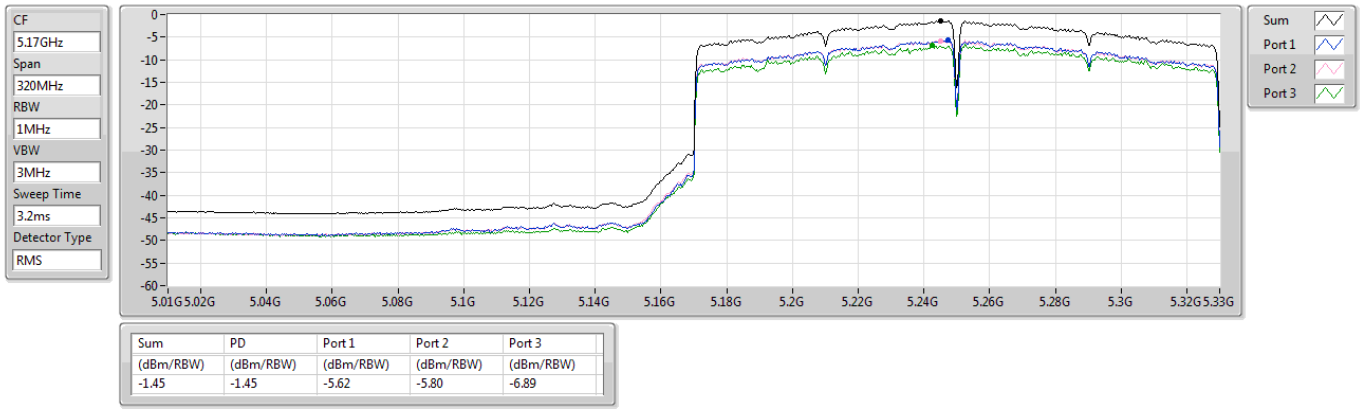
5775MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.21	10.21	5.62	5.27	5.68

5.15-5.25GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **PSD**

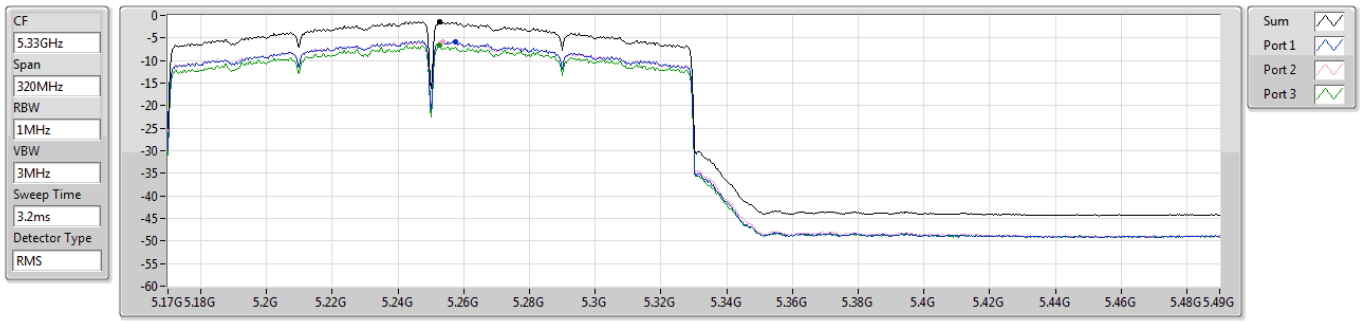
5250MHz Straddle 5.15-5.25GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.45	-1.45	-5.62	-5.80	-6.89

5.25-5.35GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **PSD**

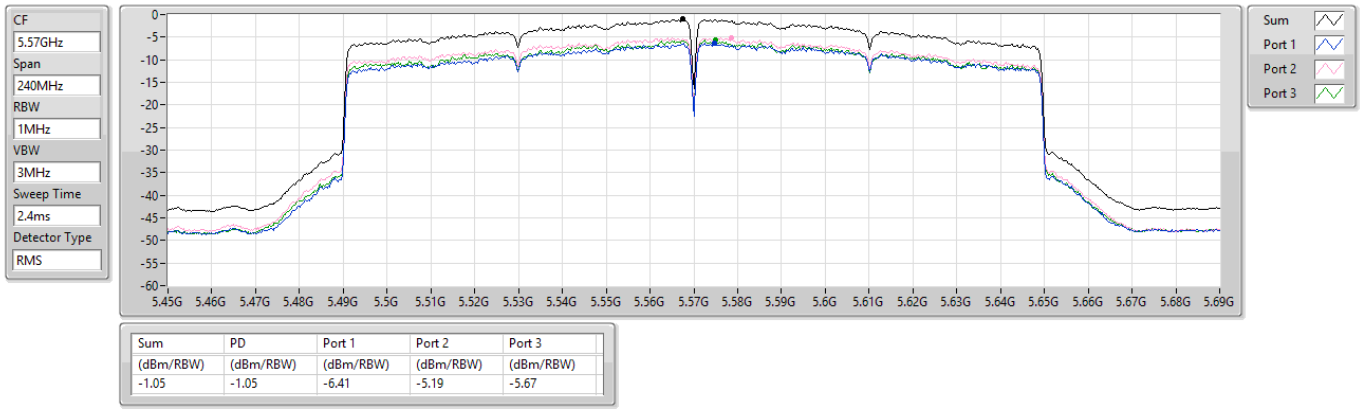
5250MHz Straddle 5.25-5.35GHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.44	-1.44	-5.93	-5.85	-6.61

5.47-5.725GHz_802.11ax HEW160_Nss2,(MCS0)_3TX **PSD**

5570MHz



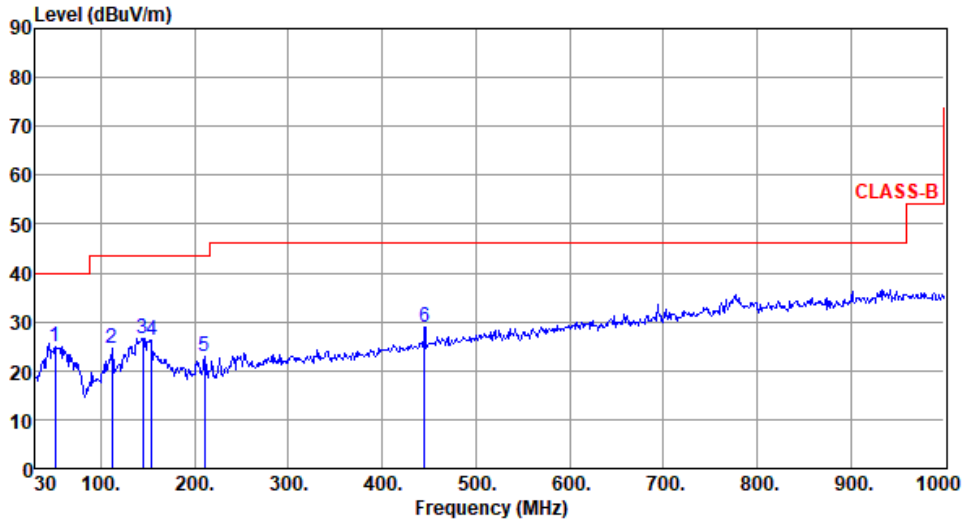
Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.05	-1.05	-6.41	-5.19	-5.67

Configuration 1: Adapter mode

Unwanted Emissions (Below 1GHz)

Modulation	ax HE20	Test Freq. (MHz)	5240
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):23 Humidity(%):64

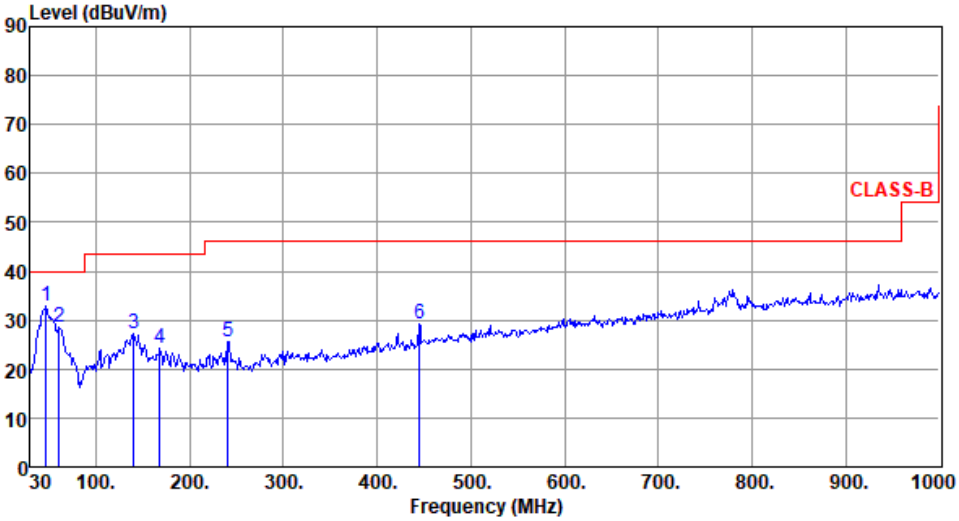


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.34	24.81	40.00	-15.19	33.08	-8.27	Peak	---	---
2	111.48	24.57	43.50	-18.93	36.46	-11.89	Peak	---	---
3	144.46	26.60	43.50	-16.90	35.45	-8.85	Peak	---	---
4	154.16	26.36	43.50	-17.14	34.76	-8.40	Peak	---	---
5	210.42	23.03	43.50	-20.47	34.84	-11.81	Peak	---	---
6	445.16	28.85	46.00	-17.15	32.36	-3.51	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	ax HE20	**Test Freq. (MHz)**	5240
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):64

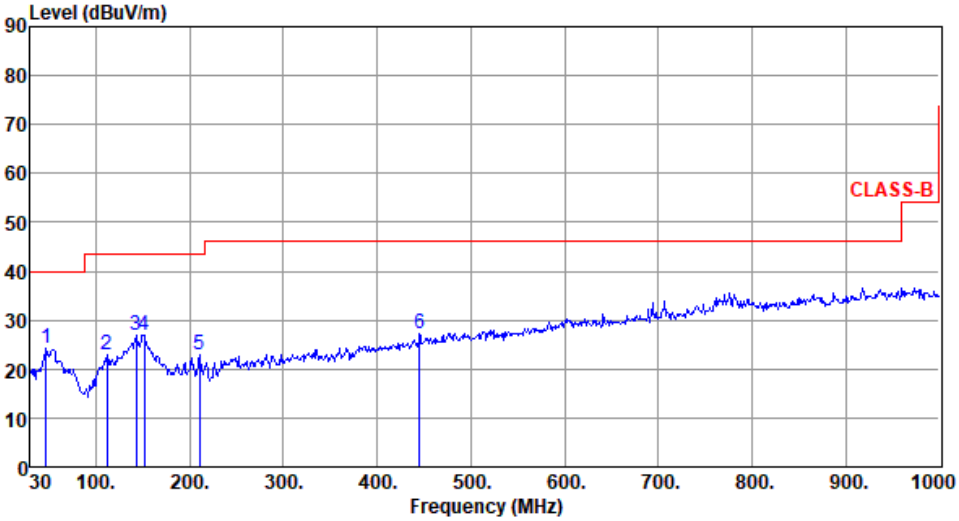


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	46.49	32.78	40.00	-7.22	41.25	-8.47	Peak	---	---
2	61.04	28.72	40.00	-11.28	38.15	-9.43	Peak	---	---
3	140.58	27.29	43.50	-16.21	36.51	-9.22	Peak	---	---
4	167.74	24.19	43.50	-19.31	33.04	-8.85	Peak	---	---
5	240.49	25.67	46.00	-20.33	35.53	-9.86	Peak	---	---
6	445.16	29.22	46.00	-16.78	32.73	-3.51	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	ax HE40	**Test Freq. (MHz)**	5795
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):23 Humidity(%):64

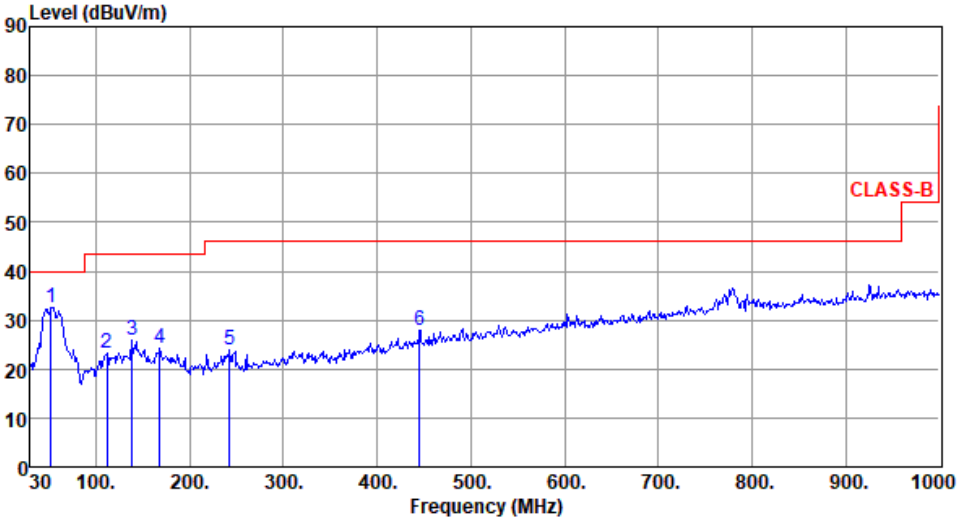


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	46.49	24.13	40.00	-15.87	32.60	-8.47	Peak	---	---
2	111.48	22.91	43.50	-20.59	34.80	-11.89	Peak	---	---
3	142.52	27.05	43.50	-16.45	35.97	-8.92	Peak	---	---
4	151.25	26.97	43.50	-16.53	35.41	-8.44	Peak	---	---
5	210.42	22.76	43.50	-20.74	34.57	-11.81	Peak	---	---
6	445.16	27.32	46.00	-18.68	30.83	-3.51	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	ax HE40	**Test Freq. (MHz)**	5795
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):64



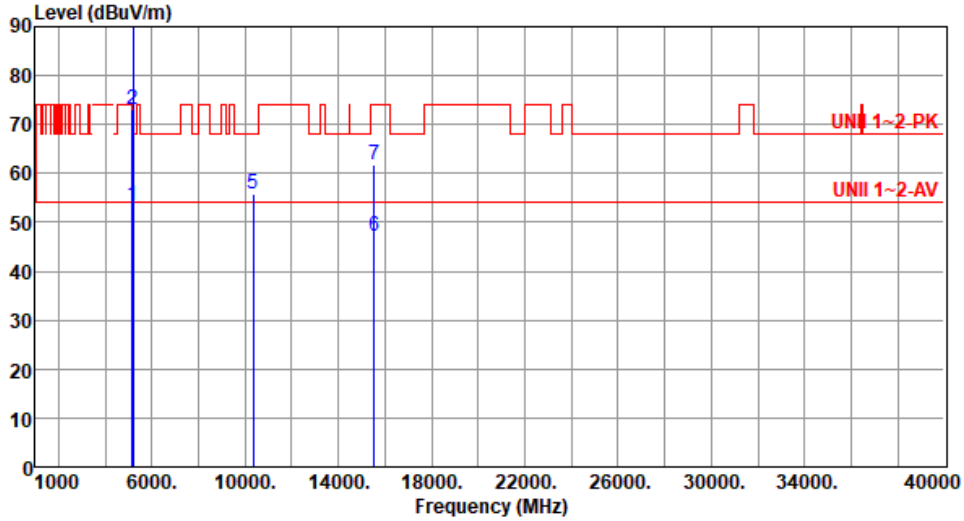
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	52.31	32.58	40.00	-7.42	40.99	-8.41	Peak	---	---
2	111.48	23.19	43.50	-20.31	35.08	-11.89	Peak	---	---
3	138.64	25.98	43.50	-17.52	35.24	-9.26	Peak	---	---
4	167.74	24.10	43.50	-19.40	32.95	-8.85	Peak	---	---
5	242.43	23.90	46.00	-22.10	33.71	-9.81	Peak	---	---
6	445.16	27.87	46.00	-18.13	31.38	-3.51	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Unwanted Emissions (Above 1GHz) for 11a

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):24 Humidity(%):66



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		5150.00	53.54	54.00	-0.46	53.12	0.42	Average	100	356
2		5150.00	73.19	74.00	-0.81	72.77	0.42	Peak	100	356
3	*	5180.00	111.25			110.95	0.30	Average	100	356
4	*	5180.00	122.40			122.10	0.30	Peak	100	356
5		10360.00	55.72	68.20	-12.48	47.61	8.11	Peak	100	25
6		15540.00	47.12	54.00	-6.88	41.56	5.56	Average	100	32
7		15540.00	61.64	74.00	-12.36	56.08	5.56	Peak	100	32

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency.