

FCC Test Report

FCC ID : I8811AXAP2246E
Equipment : 802.11ax (WiFi 6E) Triple-Radio Unified Pro
Access Point
Model No. : WAX640S-6E
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 : May 10, 2022
Tested Date : May 25 ~ Jun. 24, 2022

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

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Release Record

Report No.	Version	Description	Issued Date
FR251701AN	Rev. 01	Initial issue	Aug. 02, 2022

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 0.163MHz 51.99 (Margin -13.31dB) - QP	Pass
15.407(b) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 5370.00MHz 53.86 (Margin -0.14dB) - 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: 25.44 5250~5350MHz: 23.89 5470~5725MHz: 23.72 5725~5850MHz: 25.48 Beamforming mode 5150~5250MHz: 22.43 5250~5350MHz: 20.88 5470~5725MHz: 20.71 5725~5850MHz: 22.47	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 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]	2	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]	2	MCS 0-15
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]	2	MCS 0-15
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]	2	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]	2	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]	2	MCS 0-9
5150-5250 5250-5350 5500-5700	ac (VHT160)	5250 5570	50 [1] 114 [1]	2	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]	2	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]	2	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]	2	MCS 0-11

Note: OFDM- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation.

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 5500-5700	ax (HE160)	5250 5570	50 [1] 114 [1]	2	MCS 0-11
Note: OFDM- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation.					

1.1.2 Antenna Details

Ant. No.	Brand / Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				Remark
				5150~5250	5250~5350	5470~5725	5725~5850	
1	DNI / P4	PIFA	UFL	4.58	5.57	2.90	5.15	Mounted 1: Antenna 1 / 3 Mounted 2: Antenna 2 / 4
2	DNI / P6	PIFA	UFL	5.04	5.51	2.84	5.22	
3	DNI / P11	PIFA	UFL	4.46	6.22	4.97	5.19	
4	DNI / P12	PIFA	UFL	4.69	6.29	5.04	5.20	

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter 56Vdc from POE
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Note: The above power supplies are not bundled in market.

1.1.4 Accessories

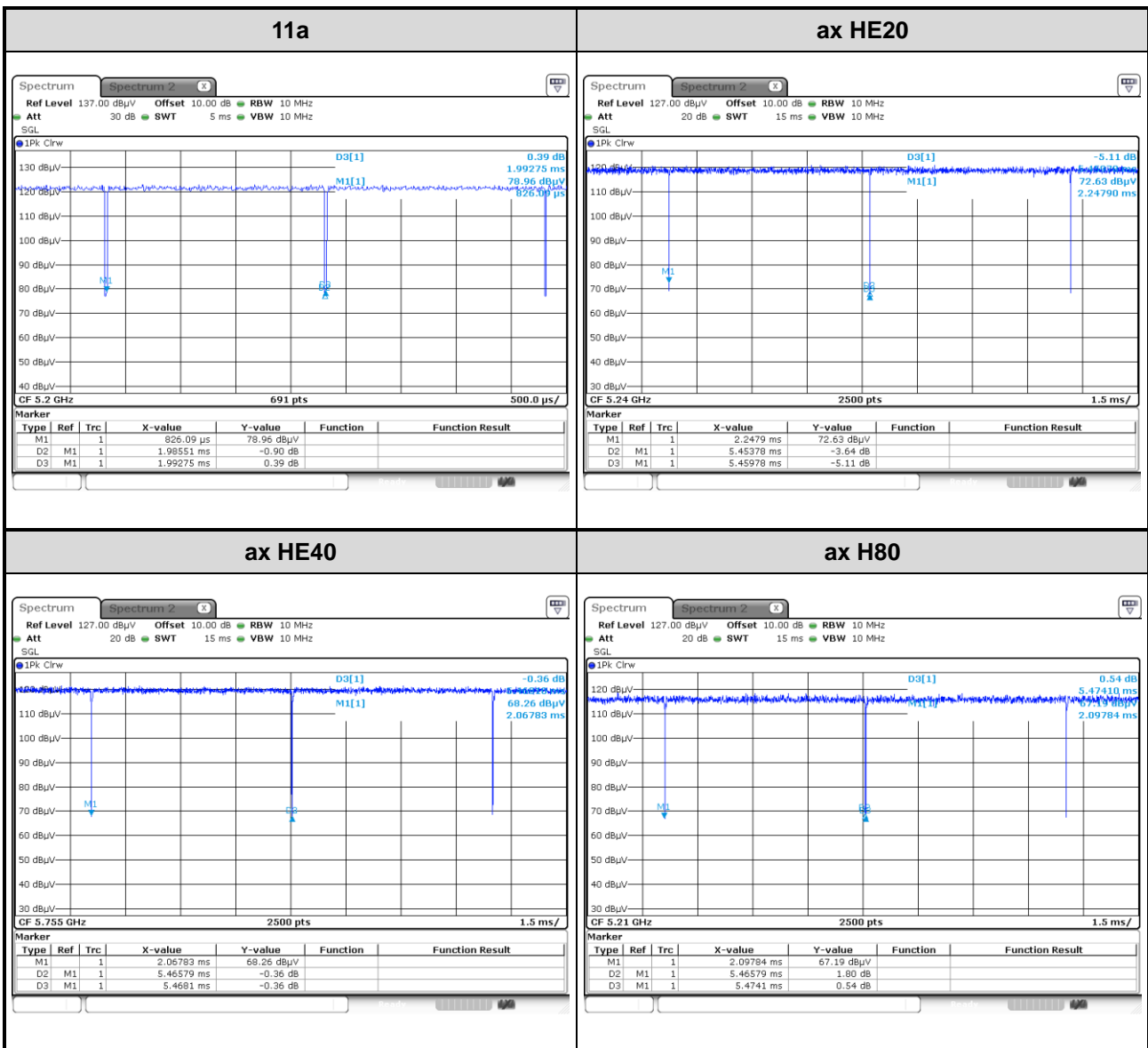
N/A

1.1.5 Channel List

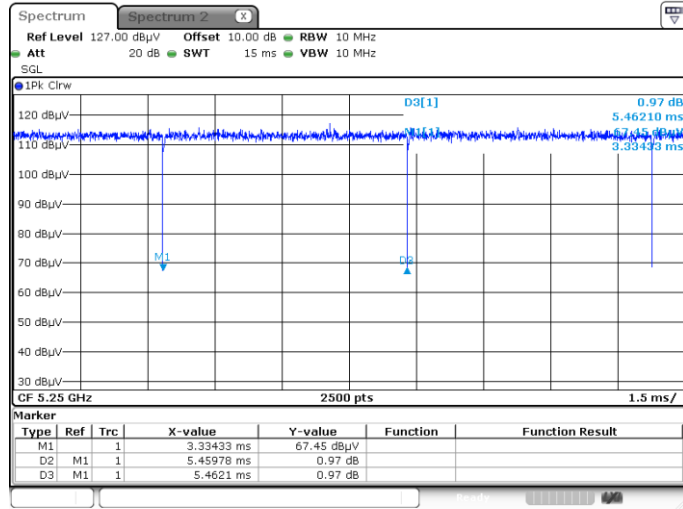
802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	118	5590
64	5320	126	5630
100	5500	134	5670
104	5520	142	5710
108	5540	151	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	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	QPSR, Version: 5.0-00200		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	99.64%	0.02
	ax HE20	99.89%	0.00
	ax HE40	99.96%	0.00
	ax HE80	99.85%	0.01
	ax HE160	99.96%	0.00



ax HE160



1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	22
11a	5200	22
11a	5240	22
11a	5260	16
11a	5300	16
11a	5320	16
11a	5500	18
11a	5580	18
11a	5700	18
11a	5745	22.5
11a	5785	22.5
11a	5825	22.5
ax HE20	5180	21.5
ax HE20	5200	22.5
ax HE20	5240	22.5
ax HE20	5260	20
ax HE20	5300	20
ax HE20	5320	20
ax HE20	5500	20
ax HE20	5580	20
ax HE20	5700	20
ax HE20	5745	22.5
ax HE20	5785	22.5
ax HE20	5825	22.5

Modulation Mode	Test Frequency (MHz)	Power Index
ax HE40	5190	20
ax HE40	5230	22.5
ax HE40	5270	21
ax HE40	5310	21
ax HE40	5510	19.5
ax HE40	5590	21
ax HE40	5670	20
ax HE40	5755	22.5
ax HE40	5795	22.5
ax HE80	5210	20.5
ax HE80	5290	20.5
ax HE80	5530	19
ax HE80	5610	21
ax HE80	5775	21
ax HE160	5250	19.5
ax HE160	5570	18.5

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5720	18
ax HE20	5720	19.5
ax HE40	5710	20.5
ax HE80	5690	21

1.2 Local Support Equipment List

Adapter mode

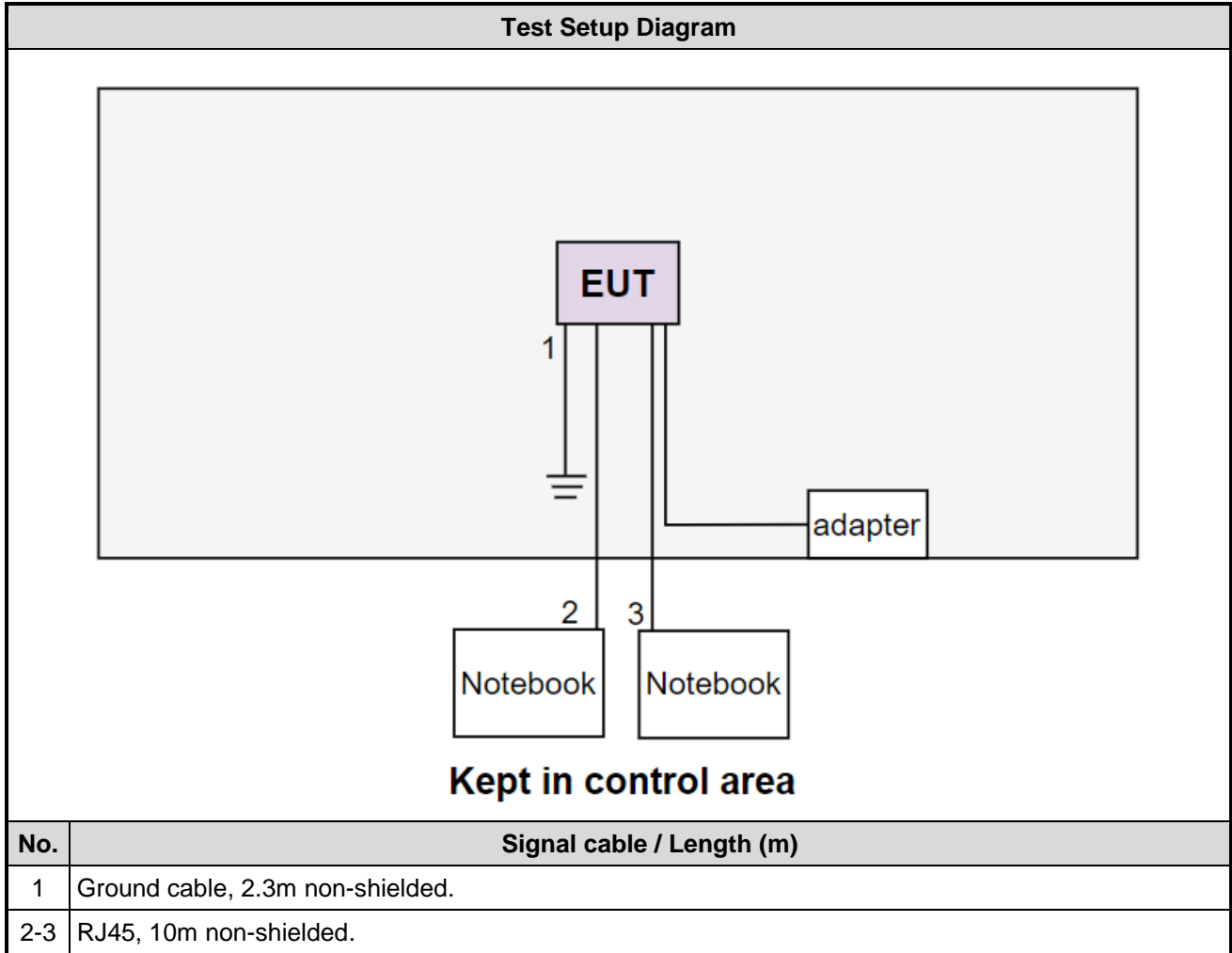
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude 5400	DoC	---
3	Adapter	APD	WA-30P12R	---	Remarks: I/P: 100-240Vac, 50-60Hz, 0.9A Max O/P: 12Vdc, 2.5A The plug can be replaced. (Provided by applicant.)

POE mode

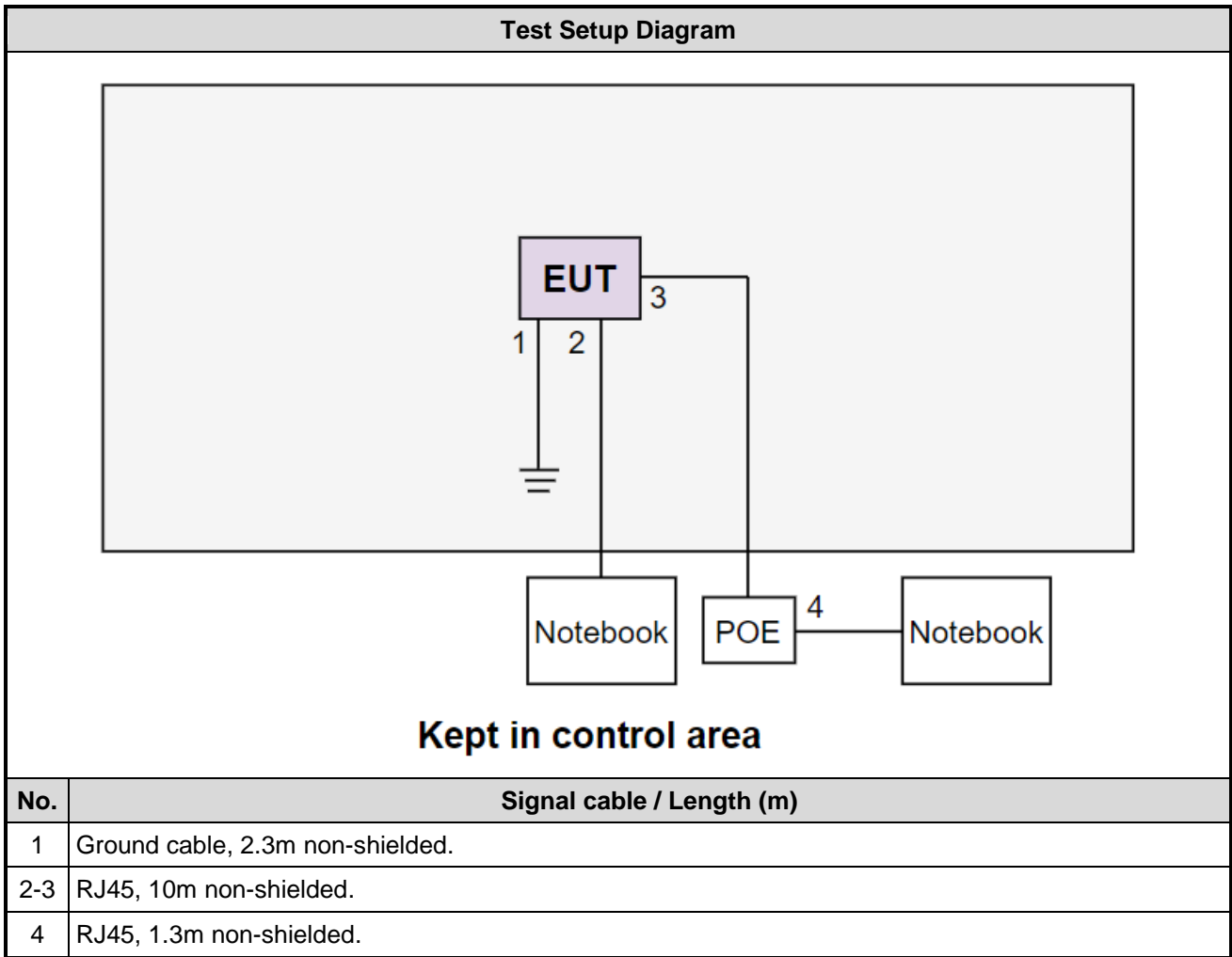
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude 5400	DoC	---
3	POE	ZYXEL	PoE12-60W	---	Remarks: I/P: 100-240Vac, 50-60Hz, 2.0A O/P: 56Vdc, 1.161A (Provided by applicant.)

1.3 Test Setup Chart

Adapter mode



POE mode



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Jun. 17, 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. 19, 2021	Oct. 18, 2022
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.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	May 25 ~ Jun. 13, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Spectrum Analyzer	R&S	FSV40	101499	Mar. 08, 2022	Mar. 07, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 08, 2021	Nov. 07, 2022
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jun. 30, 2021	Jun. 29, 2022
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	EMC02325	980187	Jul. 26, 2021	Jul. 25, 2022
Preamplifier	Agilent	83017A	MY39501309	Sep. 06, 2021	Sep. 05, 2022
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 05, 2021	Oct. 04, 2022
LF cable 3M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 24, 2021	Sep. 23, 2022
LF cable 11M	EMC	EMC8D-NM-NM-3000	131103	Sep. 24, 2021	Sep. 23, 2022
LF cable 1M	EMC	EMC8D-NM-NM-13000	131104	Sep. 24, 2021	Sep. 23, 2022
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 24, 2021	Sep. 23, 2022
RF Cable	EMC	EMC104-SM-SM-8000	181107	Sep. 24, 2021	Sep. 23, 2022
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	Jun. 06 ~ Jun. 24, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101910	Apr. 18, 2022	Apr. 17, 2023
Power Meter	Anritsu	ML2495A	1241002	Nov. 07, 2021	Nov. 06, 2022
Power Sensor	Anritsu	MA2411B	1207366	Nov. 07, 2021	Nov. 06, 2022
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GTH-150-40-CP-AR-T	MAA1407-012	Sep. 08, 2021	Sep. 07, 2022
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 03, 2021	Dec. 02, 2022
Measurement Software	Sporton	SENSE-15407_NII	V5.10.7.20	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	±1×10 ⁻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

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Non-beamforming mode				
AC Power Line Conducted Emissions	ax HE40	5230	MCS 0	1,2
Unwanted Emissions ≤1GHz	ax HE40	5230	MCS 0	1,2
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	
Unwanted Emissions >1GHz	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	5300	---	---
Beamforming mode				
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	
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. Test configurations are listed as below:				
1) Configuration 1: Adapter Mode				
2) Configuration 2: POE Mode				

Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Non-beamforming mode				
AC Power Line Conducted Emissions	ax HE20	5825	MCS 0	1,2
Unwanted Emissions ≤1GHz	ax HE20	5825	MCS 0	1,2
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	
Unwanted Emissions >1GHz	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	
ax HE160	5250 / 5570	MCS 0		
Frequency Stability	Un-modulation	5785	---	---
Beamforming mode				
Conducted Output Power	ax HE20	5745 / 5785 / 5825	MCS 0	1
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	
	ax HE160	5250 / 5570	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. Test configurations are listed as below:				
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.

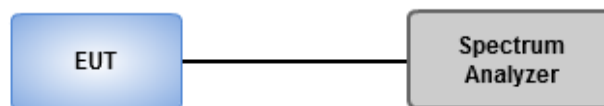
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW.
2. Set VBW \geq 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	24~25°C / 61~63%	Tested By	Roger Lu
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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
<input type="checkbox"/>	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)
<input checked="" type="checkbox"/>	Indoor access point	Conducted Power: 1 W
<input type="checkbox"/>	Fixed point-to-point access points	Conducted Power: 1 W
<input type="checkbox"/>	Client devices	Conducted Power: 250 mW

Frequency Band (MHz)		Limit
<input checked="" type="checkbox"/>	5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
<input checked="" type="checkbox"/>	5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
<input checked="" type="checkbox"/>	5725 ~ 5850	Conducted Power: 1 W

Note: "B" is the 26dB emission bandwidth in MHz.

3.2.2 Test Procedures

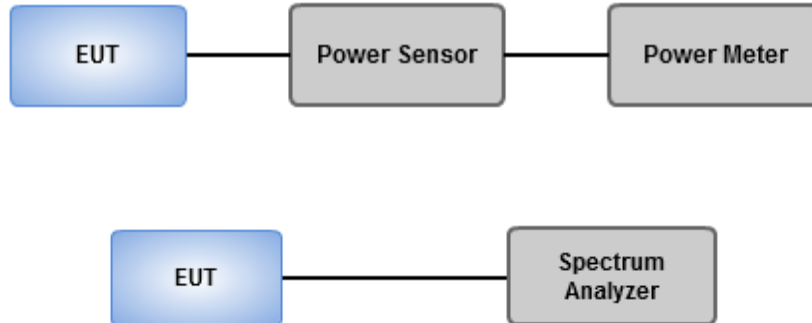
Method PM-G (Measurement using a gated RF average power meter)

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	24~25°C / 61~63%	Tested By	Roger Lu
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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
<input type="checkbox"/>	Outdoor access point	17 dBm / MHz
<input checked="" type="checkbox"/>	Indoor access point	17 dBm / MHz
<input type="checkbox"/>	Fixed point-to-point access points	17 dBm / MHz
<input type="checkbox"/>	Client devices	11 dBm / MHz

Frequency Band (MHz)		Limit
<input checked="" type="checkbox"/>	5250 ~ 5350	11 dBm / MHz
<input checked="" type="checkbox"/>	5470 ~ 5725	11 dBm / MHz
<input checked="" type="checkbox"/>	5725 ~ 5850	30 dBm /500 kHz

3.3.2 Test Procedures

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

Duty cycle \geq 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 $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
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

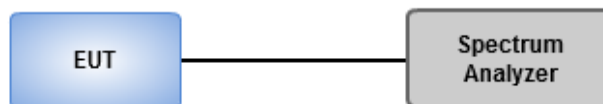
Duty cycle \geq 98 %

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 $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
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	24~25°C / 61~63%	Tested By	Roger Lu
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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).

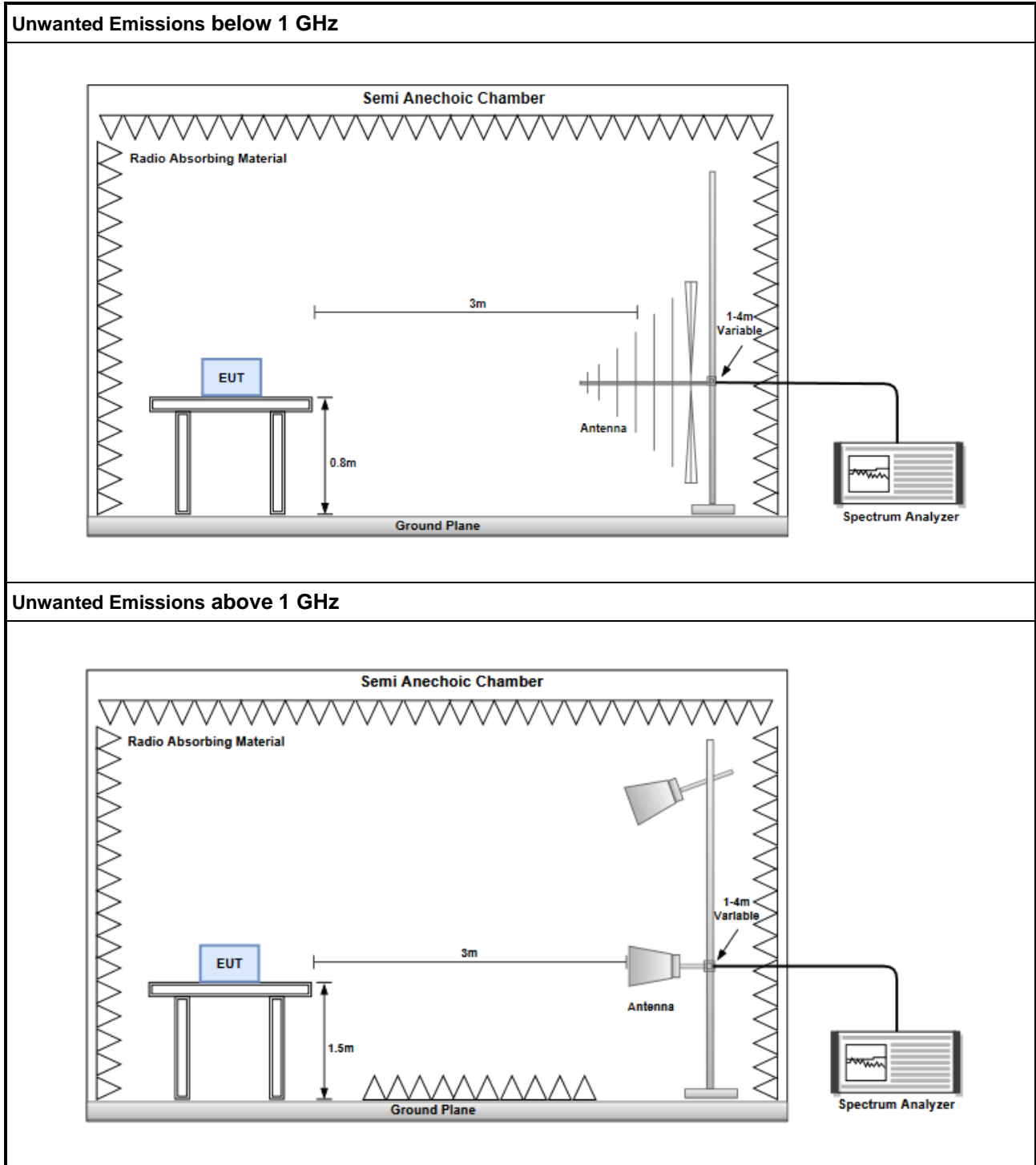
3.4.2 Test Procedures

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



3.4.4 Test Results

Refer to Appendix D.

3.5 Frequency Stability

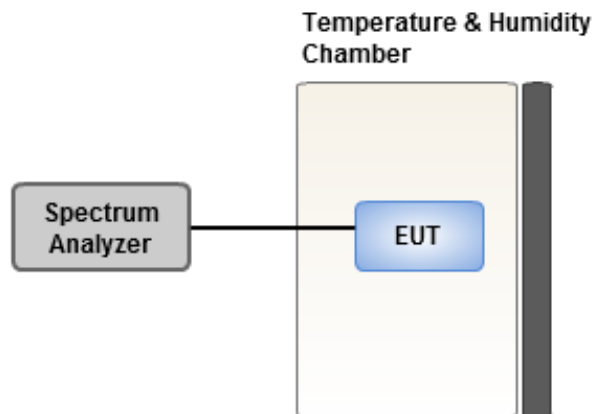
3.5.1 Limit of Frequency Stability

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	24~25°C / 61~63%	Tested By	Roger Lu
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Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

3.6.1 Limit of AC Power Line Conducted Emissions

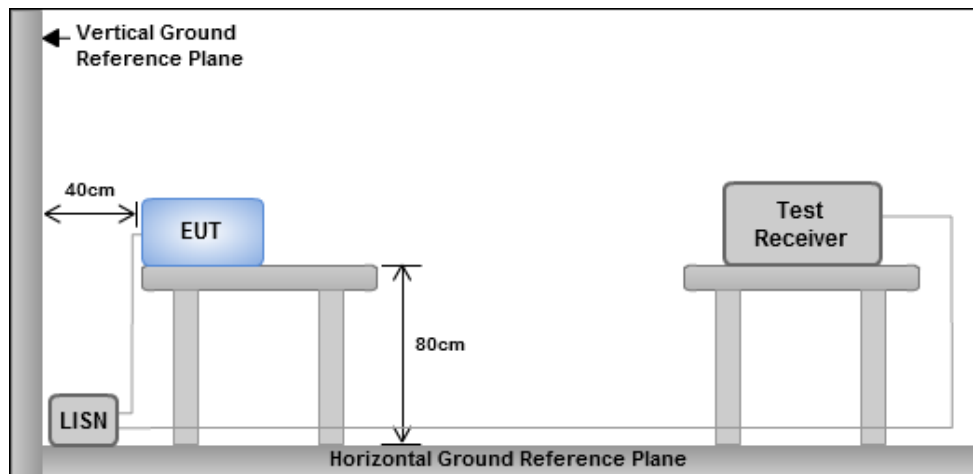
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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)_2TX	20.49M	16.372M	16M4D1D	18.99M	16.312M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.42M	18.891M	18M9D1D	20.91M	18.861M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.8M	37.781M	37M8D1D	40.02M	37.661M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.6M	76.762M	76M8D1D	81.36M	76.762M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.08M	78.041M	78M0D1D	81.92M	77.801M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.74M	16.312M	16M3D1D	18.96M	16.312M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.21M	18.861M	18M9D1D	20.7M	18.801M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.26M	37.721M	37M7D1D	39.96M	37.661M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.48M	76.762M	76M8D1D	81.48M	76.762M
802.11ax HEW160_Nss2,(MCS0)_2TX	82.56M	78.121M	78M1D1D	82.08M	78.121M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.77M	16.342M	16M3D1D	14.37M	13.088M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.09M	18.891M	18M9D1D	15.375M	14.363M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.38M	37.721M	37M7D1D	35.105M	33.583M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.84M	77.001M	77M0D1D	75.75M	72.639M
802.11ax HEW160_Nss2,(MCS0)_2TX	163.68M	154.723M	155MD1D	163.44M	154.483M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.12M	23.268M	23M3D1D	2.92M	3.658M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.78M	21.589M	21M6D1D	4.36M	4.638M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.2M	38.081M	38M1D1D	3.88M	4.198M
802.11ax HEW80_Nss2,(MCS0)_2TX	70.92M	77.001M	77M0D1D	4.06M	4.418M

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)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.49M	16.312M	19.47M	16.312M
5200MHz	Pass	Inf	20.34M	16.372M	18.99M	16.312M
5240MHz	Pass	Inf	20.46M	16.372M	19.5M	16.342M
5260MHz	Pass	Inf	19.41M	16.312M	18.99M	16.312M
5300MHz	Pass	Inf	19.65M	16.312M	18.96M	16.312M
5320MHz	Pass	Inf	19.74M	16.312M	19.05M	16.312M
5500MHz	Pass	Inf	19.77M	16.312M	19.5M	16.312M
5580MHz	Pass	Inf	19.53M	16.312M	18.9M	16.282M
5700MHz	Pass	Inf	19.5M	16.342M	18.99M	16.312M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.195M	13.103M	14.37M	13.088M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.16M	3.778M	2.92M	3.658M
5745MHz	Pass	500k	15.09M	16.342M	15.09M	16.402M
5785MHz	Pass	500k	15.12M	16.402M	15.06M	16.372M
5825MHz	Pass	500k	15.03M	23.268M	15.03M	17.001M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.21M	18.861M	20.91M	18.861M
5200MHz	Pass	Inf	21.09M	18.861M	21.09M	18.861M
5240MHz	Pass	Inf	21.42M	18.891M	20.94M	18.891M
5260MHz	Pass	Inf	20.7M	18.831M	20.73M	18.861M
5300MHz	Pass	Inf	20.7M	18.831M	20.73M	18.801M
5320MHz	Pass	Inf	21.09M	18.861M	21.21M	18.861M
5500MHz	Pass	Inf	20.79M	18.831M	20.94M	18.861M
5580MHz	Pass	Inf	20.88M	18.831M	20.82M	18.861M
5700MHz	Pass	Inf	20.88M	18.861M	21.09M	18.891M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.42M	14.363M	15.375M	14.363M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.36M	4.638M	4.46M	4.658M
5745MHz	Pass	500k	18.78M	18.891M	16.32M	18.951M
5785MHz	Pass	500k	13.08M	18.921M	13.71M	18.951M
5825MHz	Pass	500k	18.78M	21.589M	11.43M	19.22M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.32M	37.661M	40.08M	37.721M
5230MHz	Pass	Inf	40.8M	37.781M	40.02M	37.781M
5270MHz	Pass	Inf	40.26M	37.721M	40.02M	37.721M
5310MHz	Pass	Inf	40.2M	37.661M	39.96M	37.661M
5510MHz	Pass	Inf	40.2M	37.661M	40.14M	37.661M
5590MHz	Pass	Inf	40.38M	37.721M	40.08M	37.661M
5670MHz	Pass	Inf	40.08M	37.721M	40.38M	37.721M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.105M	33.653M	35.105M	33.583M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.04M	4.198M	3.88M	4.218M
5755MHz	Pass	500k	35.88M	37.781M	31.86M	37.961M
5795MHz	Pass	500k	36.54M	38.081M	37.2M	37.961M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.6M	76.762M	81.36M	76.762M
5290MHz	Pass	Inf	81.48M	76.762M	81.48M	76.762M
5530MHz	Pass	Inf	81.48M	76.642M	81.72M	76.762M
5610MHz	Pass	Inf	81.84M	77.001M	81.84M	76.762M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.75M	72.714M	75.9M	72.639M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.08M	4.418M	4.06M	4.418M
5775MHz	Pass	500k	70.92M	76.762M	68.16M	77.001M
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.08M	78.041M	81.92M	77.801M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.56M	78.121M	82.08M	78.121M
5570MHz	Pass	Inf	163.68M	154.723M	163.44M	154.483M

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

Port X-OBW = Port X 99% occupied bandwidth

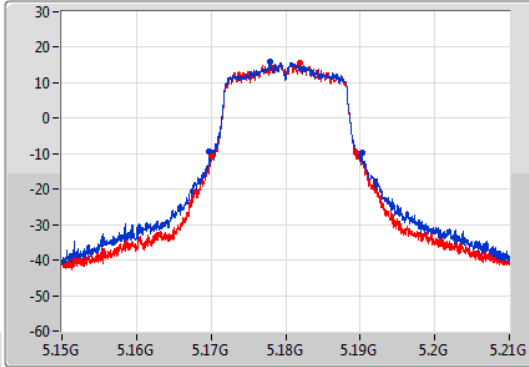


802.11a_Nss1,(6Mbps)_2TX

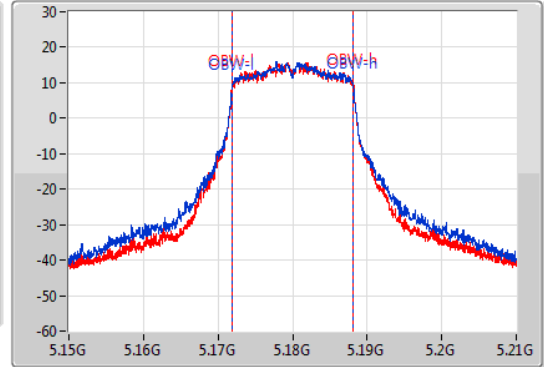
EBW

5180MHz

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



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



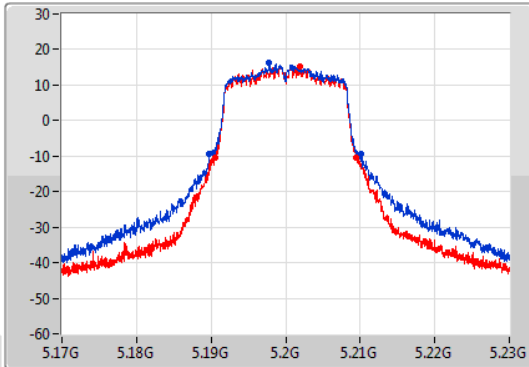
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.49M	5.1698G	5.19029G	16.312M	5.171874G	5.188186G	Inf	1
19.47M	5.17004G	5.18951G	16.312M	5.171874G	5.188186G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

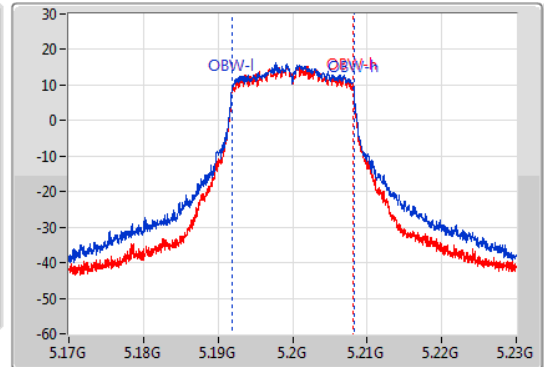
EBW

5200MHz

CF
5.2GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.2GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.34M	5.1898G	5.21014G	16.372M	5.191844G	5.208216G	Inf	1
18.99M	5.19052G	5.20951G	16.312M	5.191874G	5.208186G	Inf	2

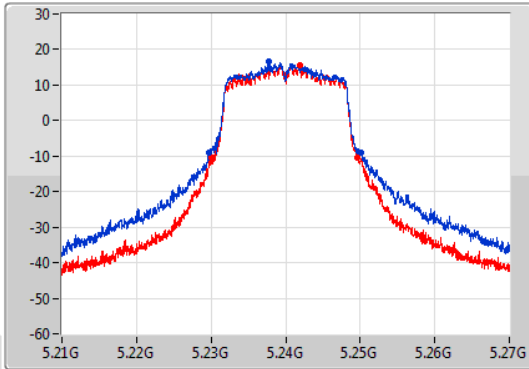


802.11a_Nss1,(6Mbps)_2TX

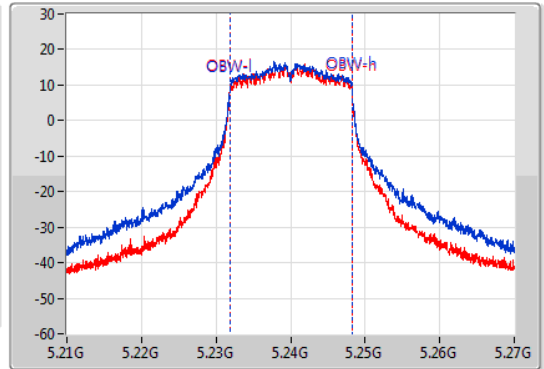
EBW

5240MHz

CF
5.24GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.24GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



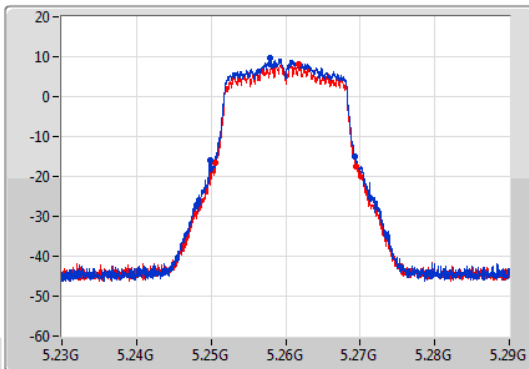
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.46M	5.22971G	5.25017G	16.372M	5.231844G	5.248216G	Inf	1
19.5M	5.23004G	5.24954G	16.342M	5.231874G	5.248216G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

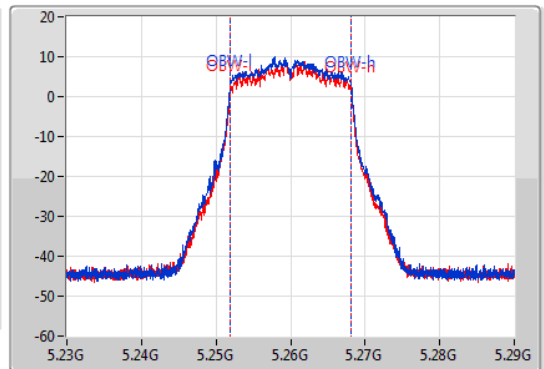
EBW

5260MHz

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



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



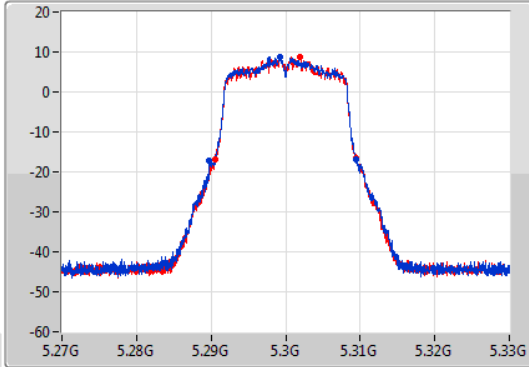
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.41M	5.24992G	5.26933G	16.312M	5.251874G	5.268186G	Inf	1
18.99M	5.25052G	5.26951G	16.312M	5.251874G	5.268186G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

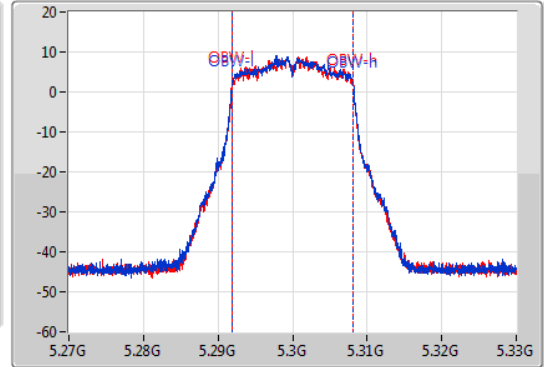
EBW

5300MHz

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



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



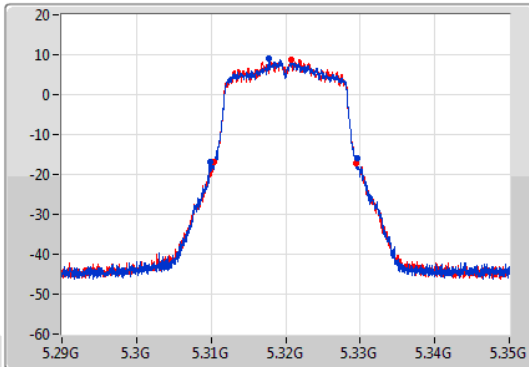
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.65M	5.2898G	5.30945G	16.312M	5.291874G	5.308186G	Inf	1
18.96M	5.29052G	5.30948G	16.312M	5.291874G	5.308186G	Inf	2

802.11a_Nss1,(6Mbps)_2TX

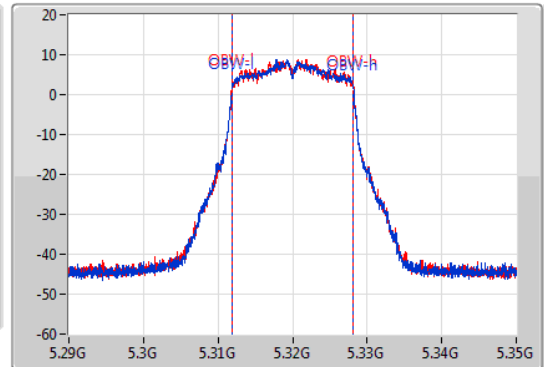
EBW

5320MHz

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



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



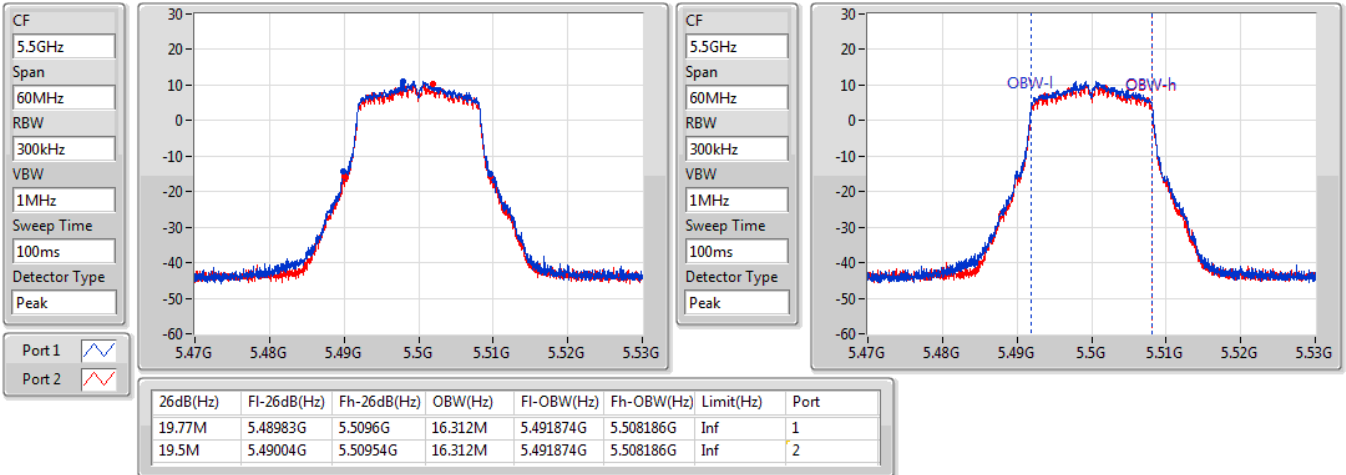
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.74M	5.30983G	5.32957G	16.312M	5.311874G	5.328186G	Inf	1
19.05M	5.31043G	5.32948G	16.312M	5.311874G	5.328186G	Inf	2



802.11a_Nss1,(6Mbps)_2TX

EBW

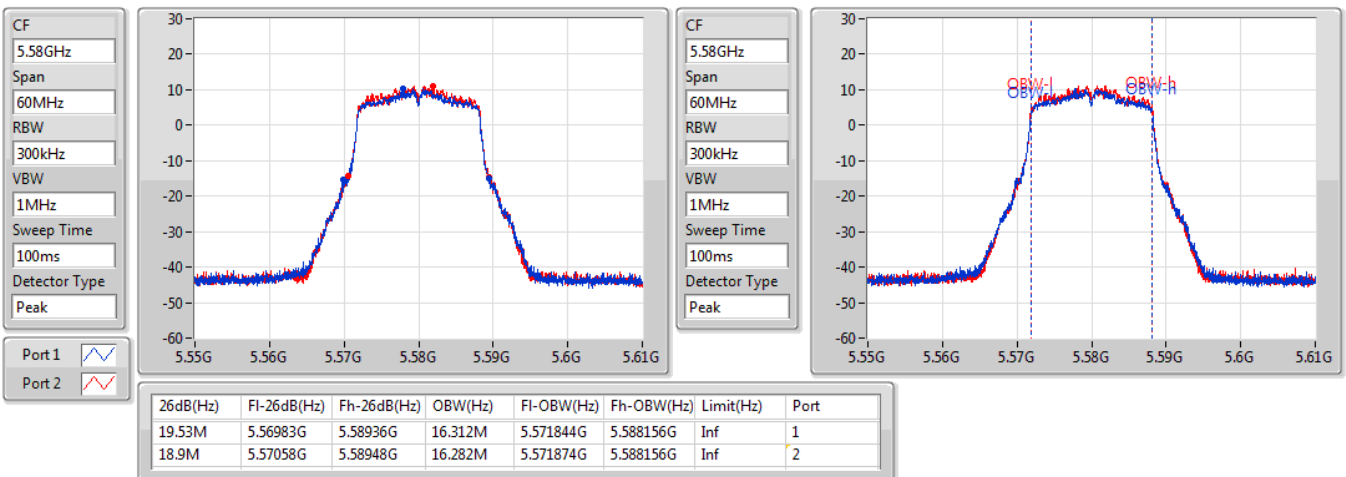
5500MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

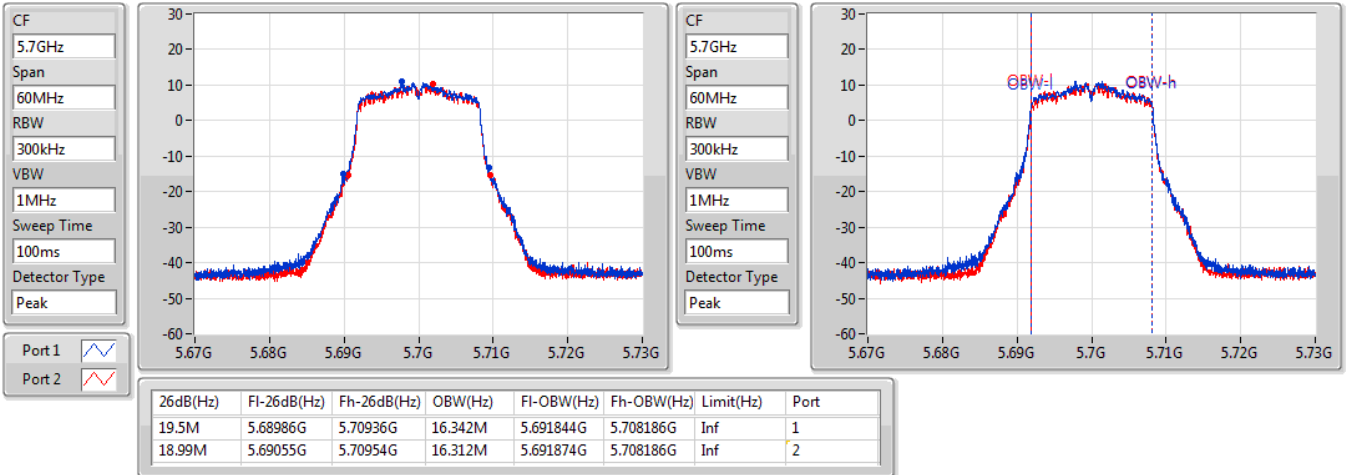
5580MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

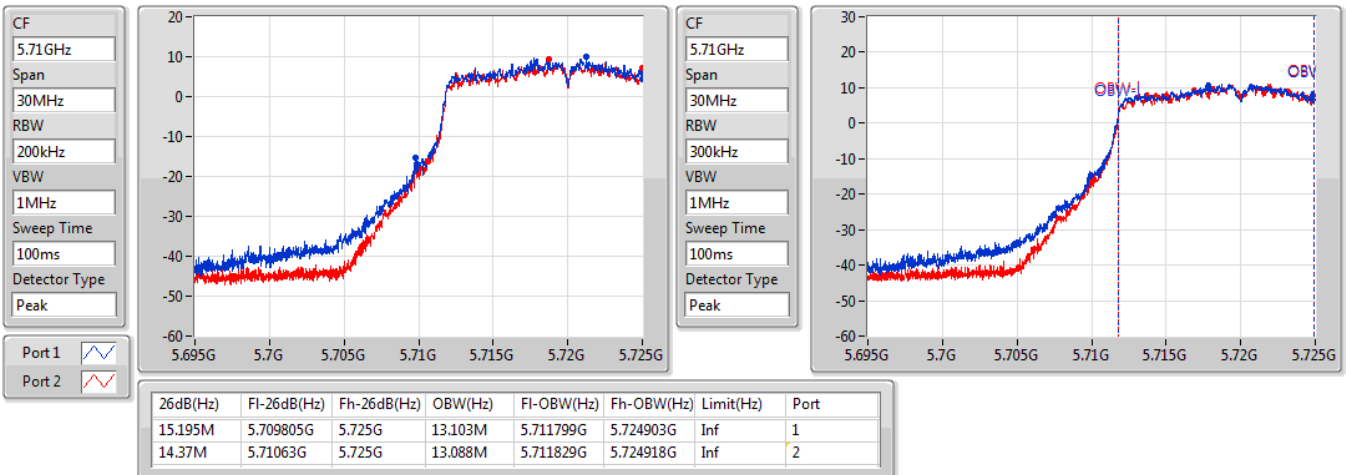
5700MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

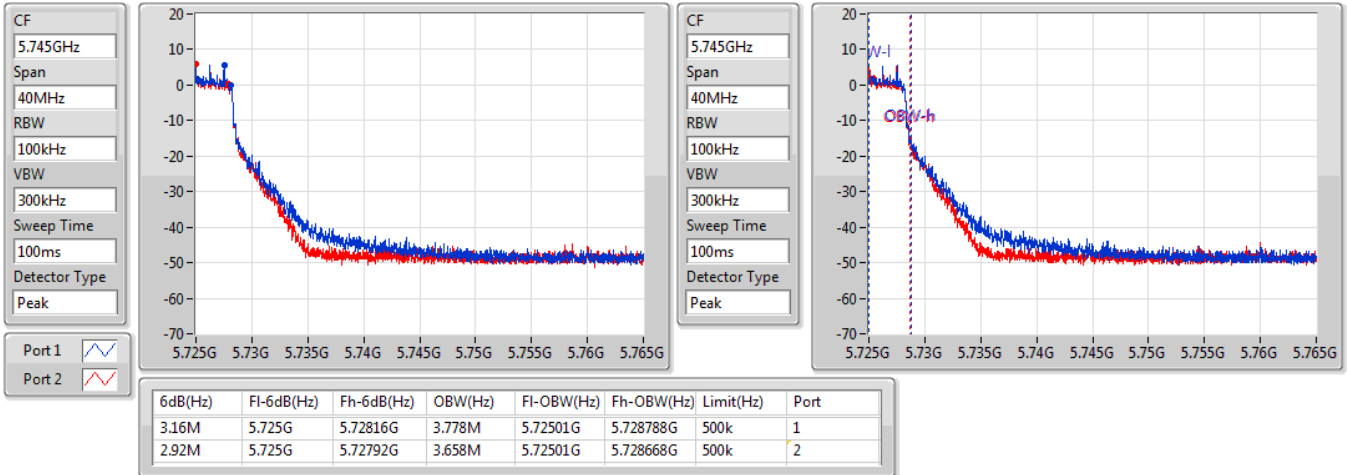




802.11a_Nss1,(6Mbps)_2TX

EBW

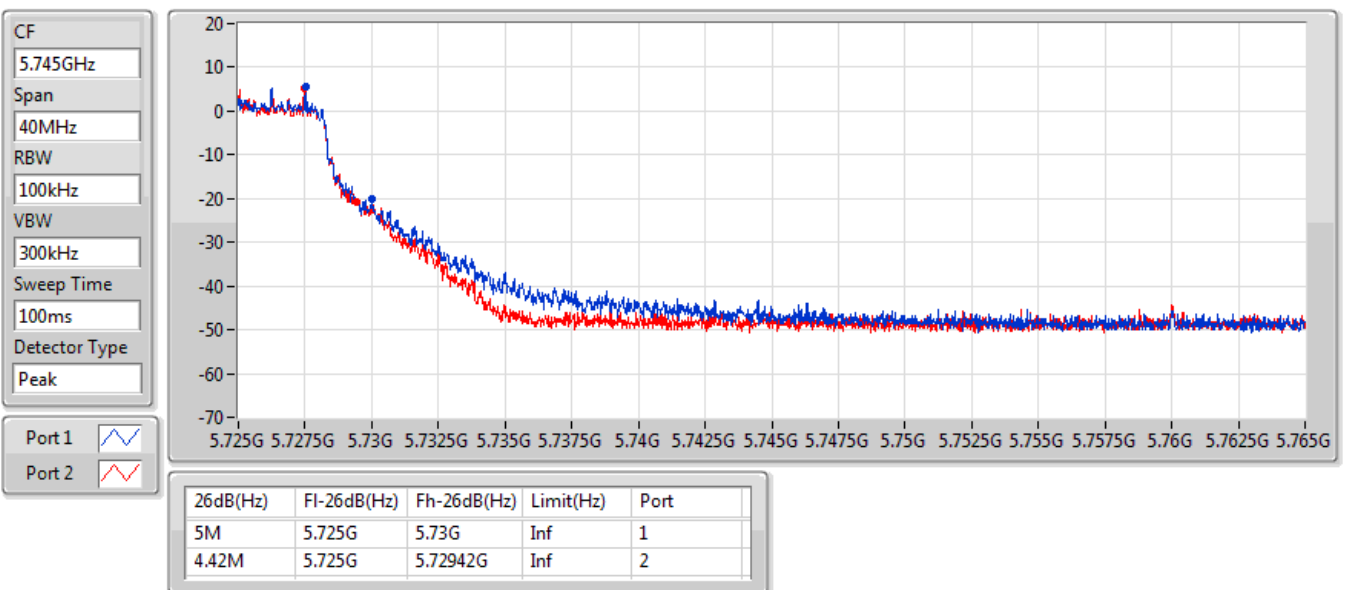
5720MHz Straddle 5.725-5.85GHz



802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

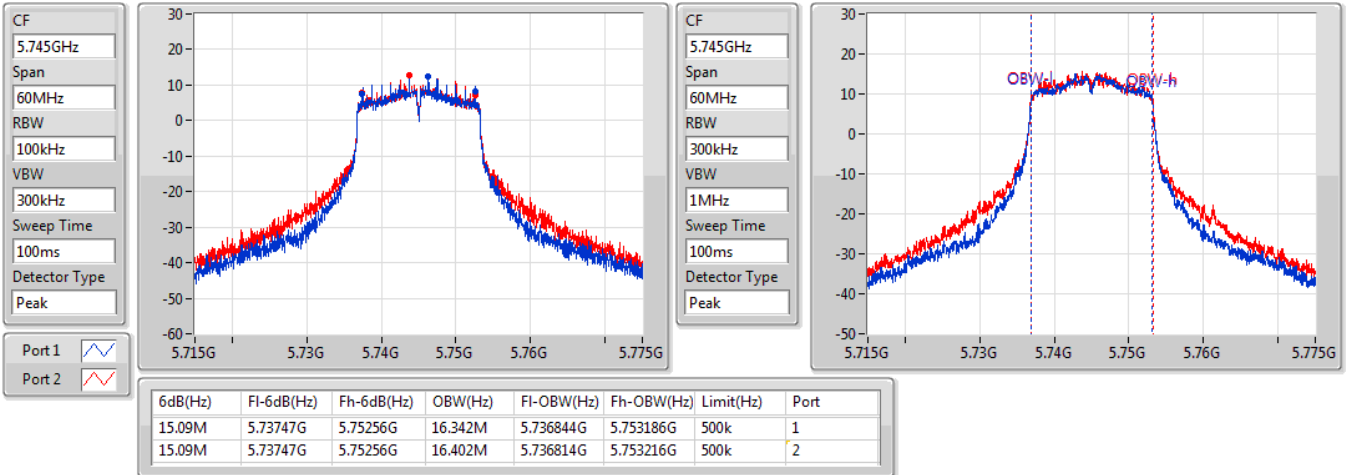




802.11a_Nss1,(6Mbps)_2TX

EBW

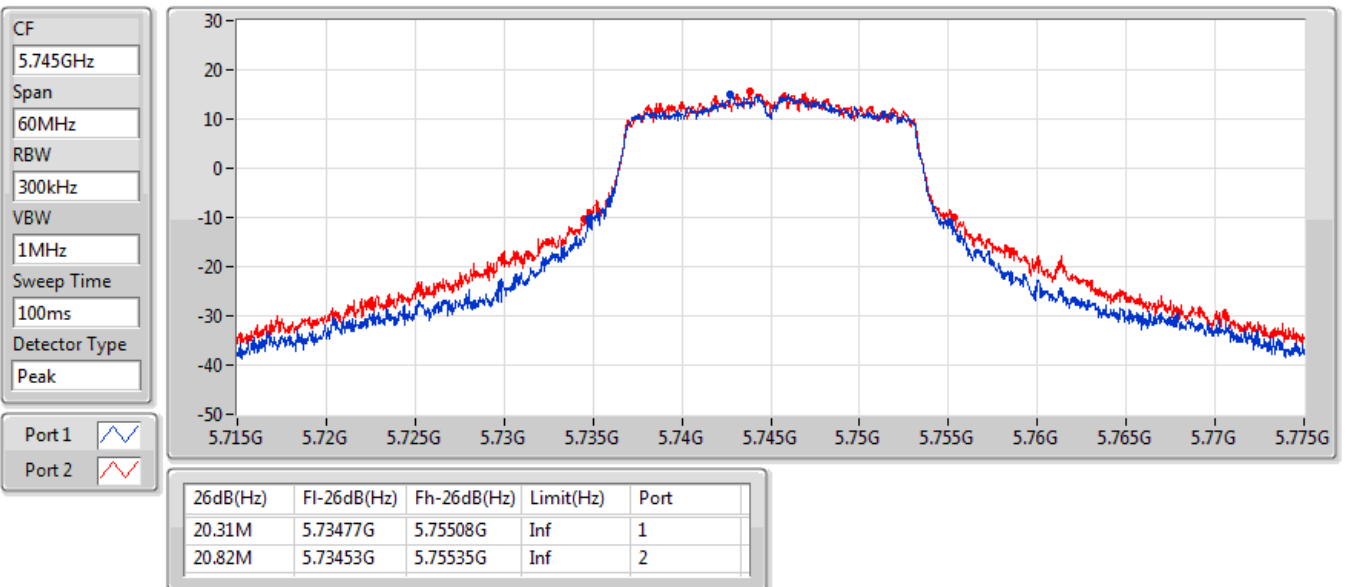
5745MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

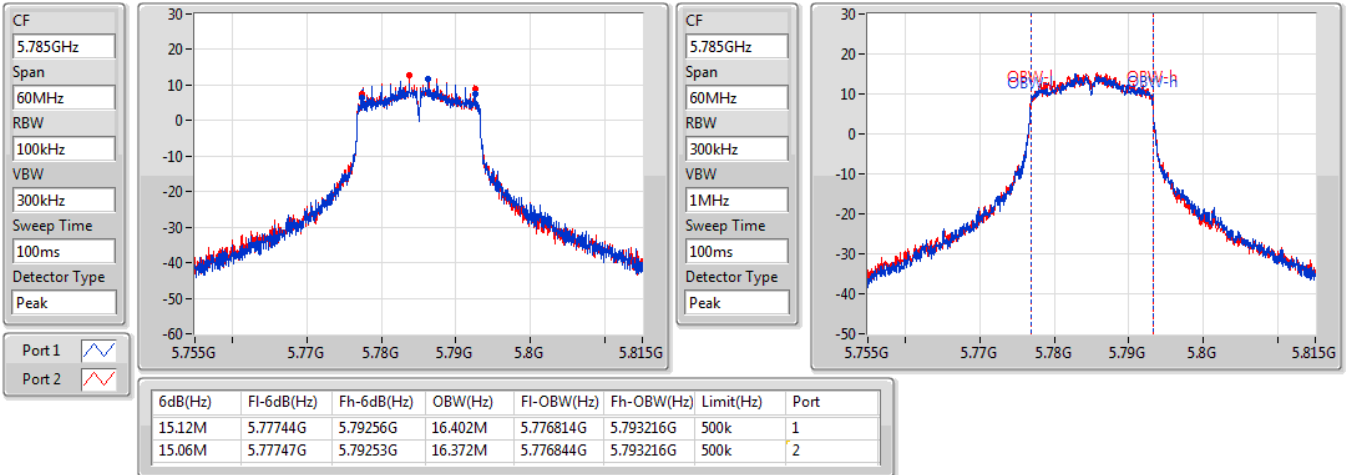




802.11a_Nss1,(6Mbps)_2TX

EBW

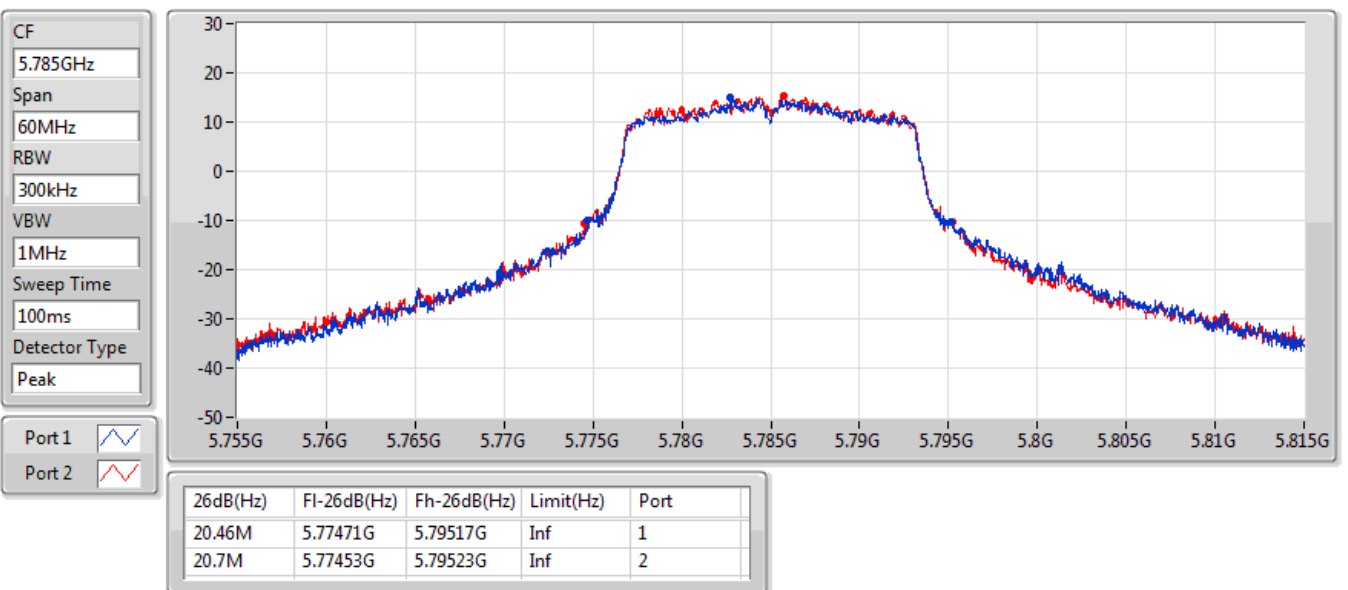
5785MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

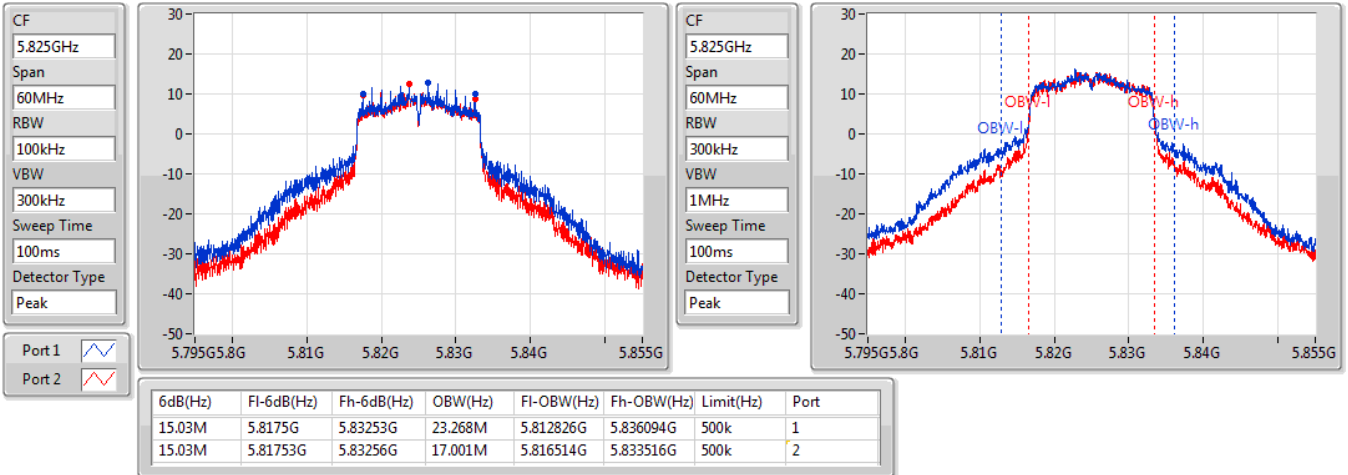
5785MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

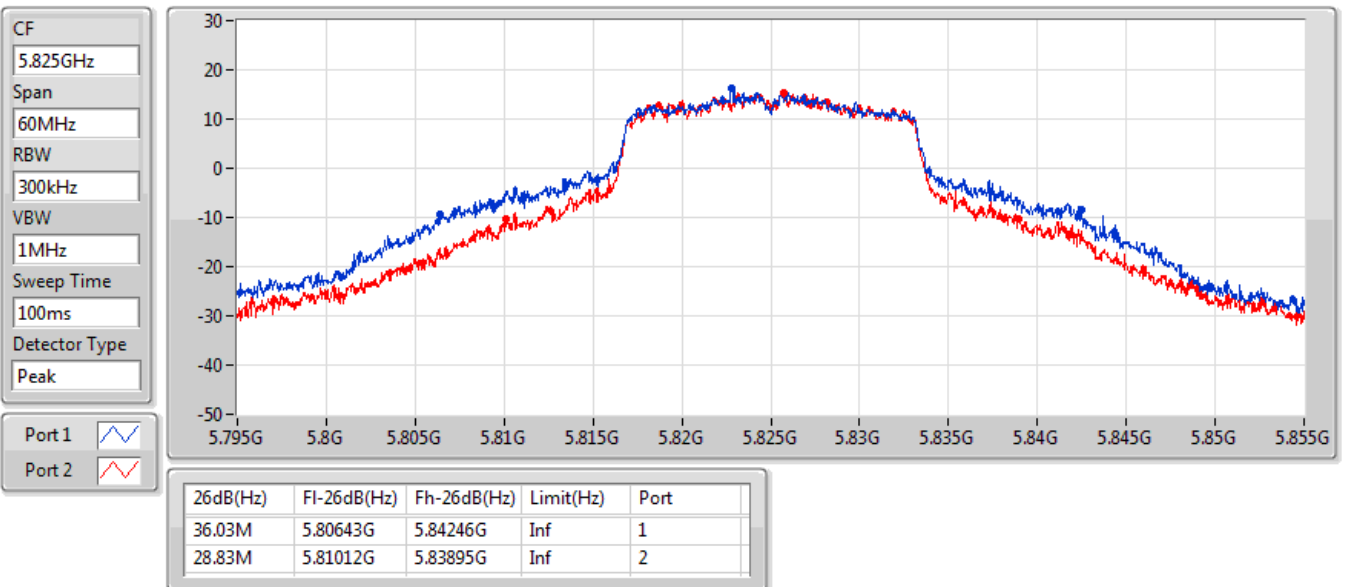
5825MHz



802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

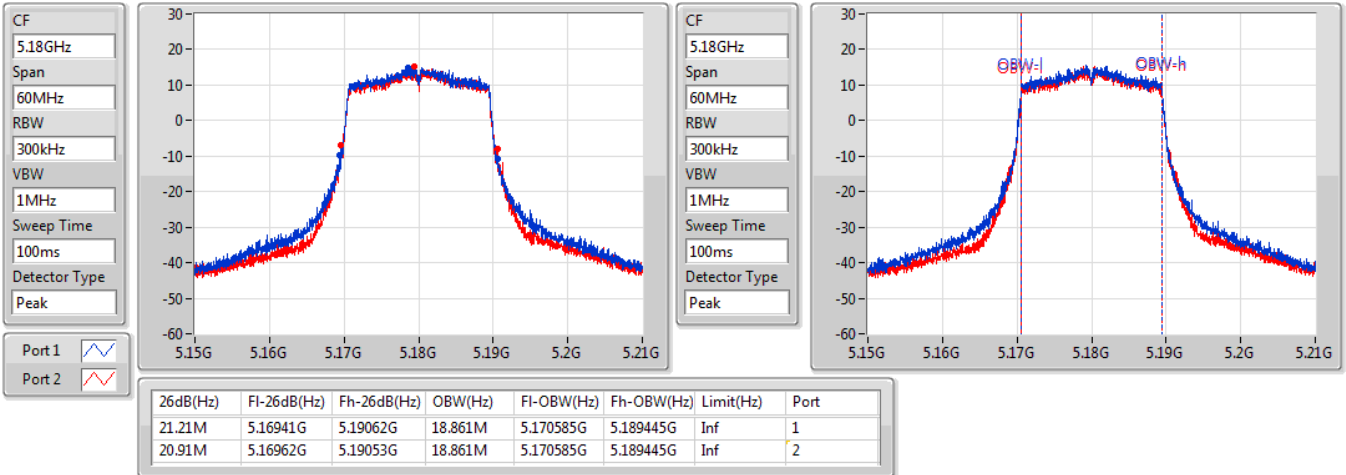




802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

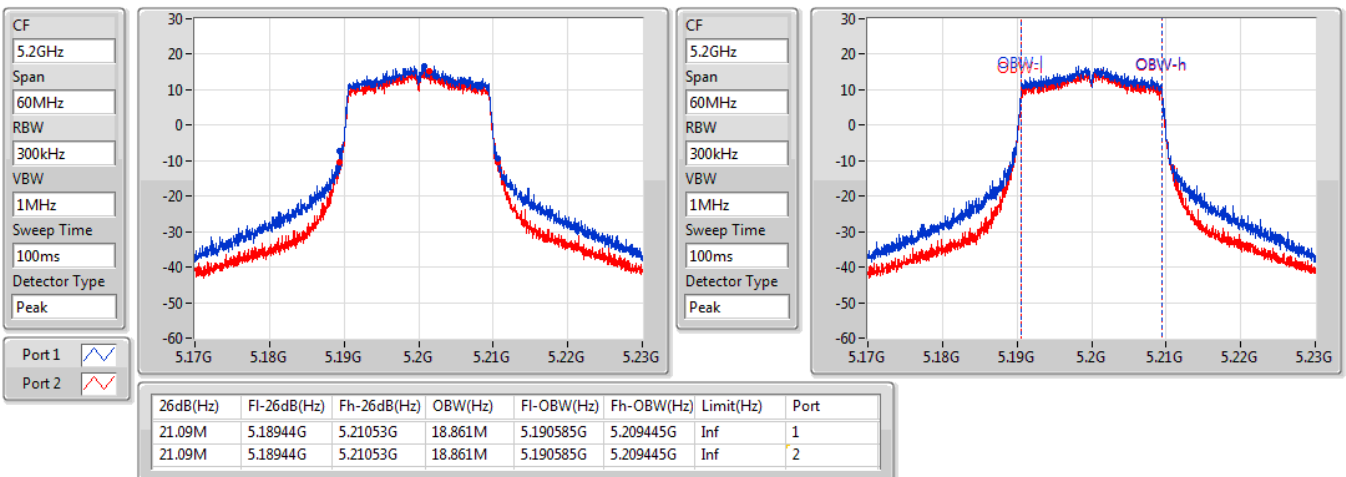
5180MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

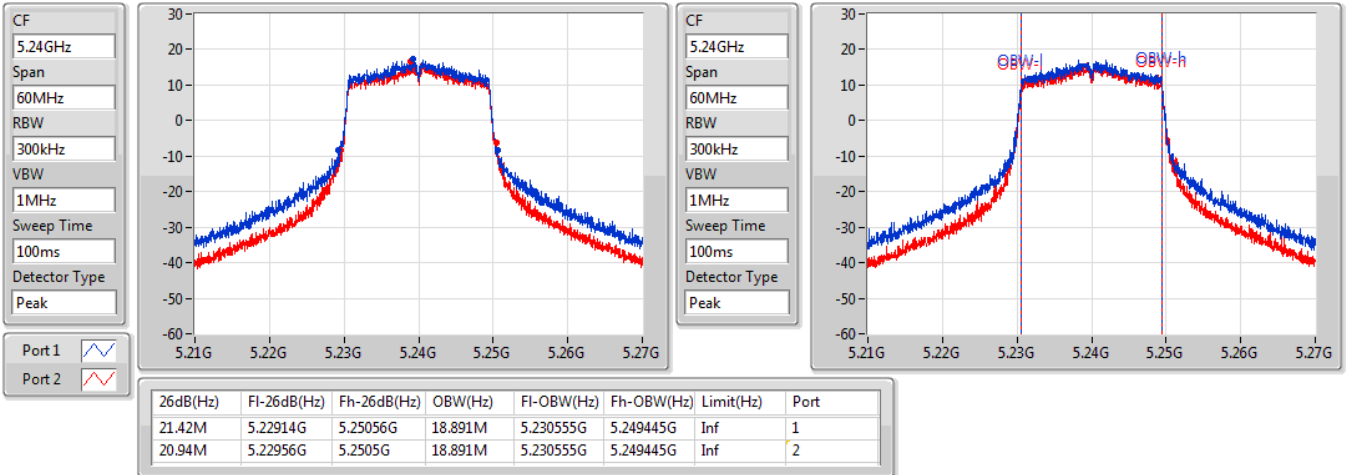
5200MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

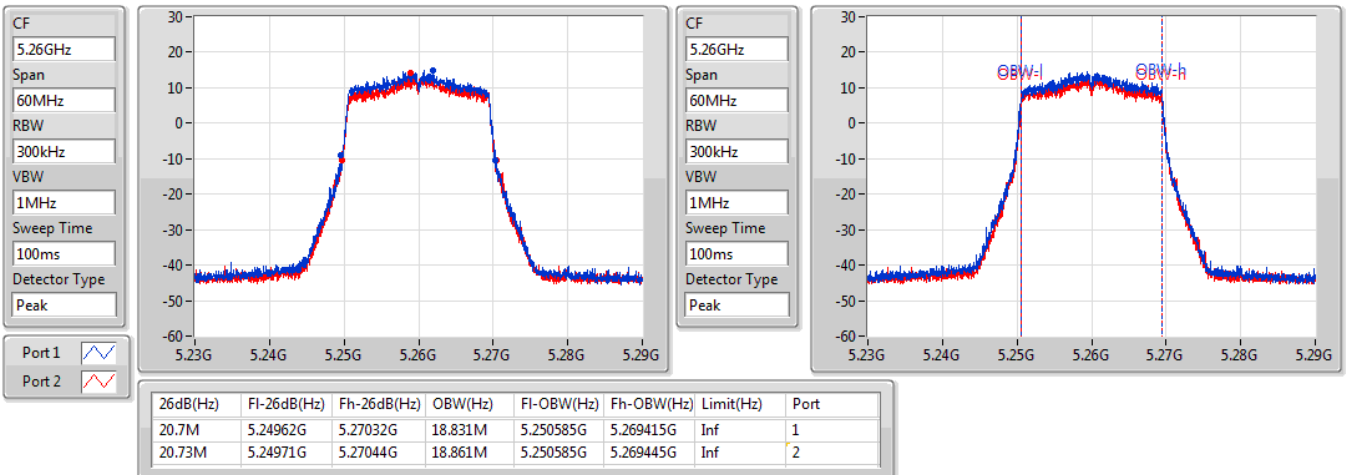
5240MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5260MHz

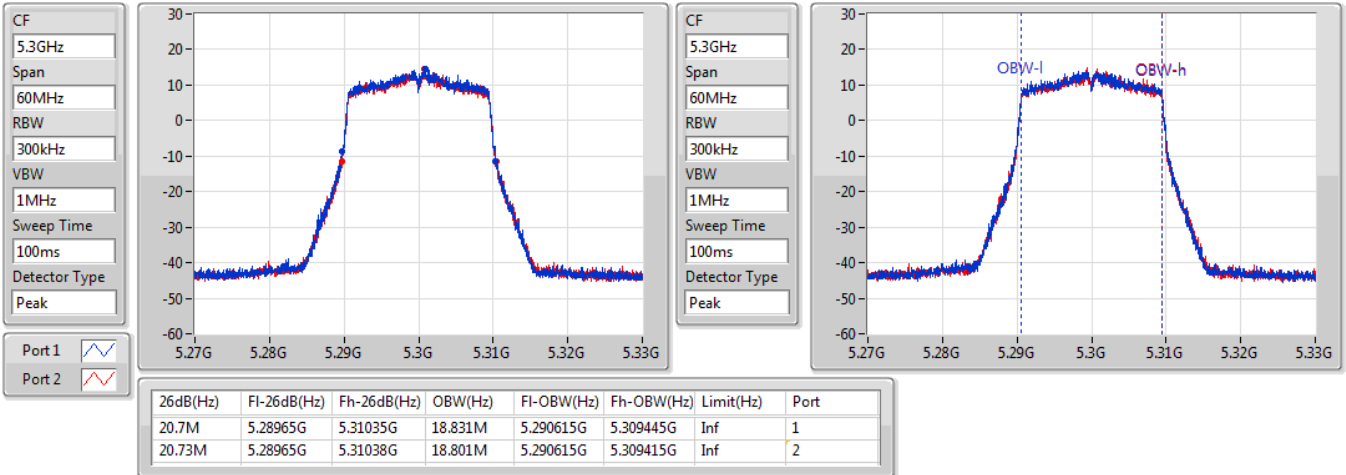




802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

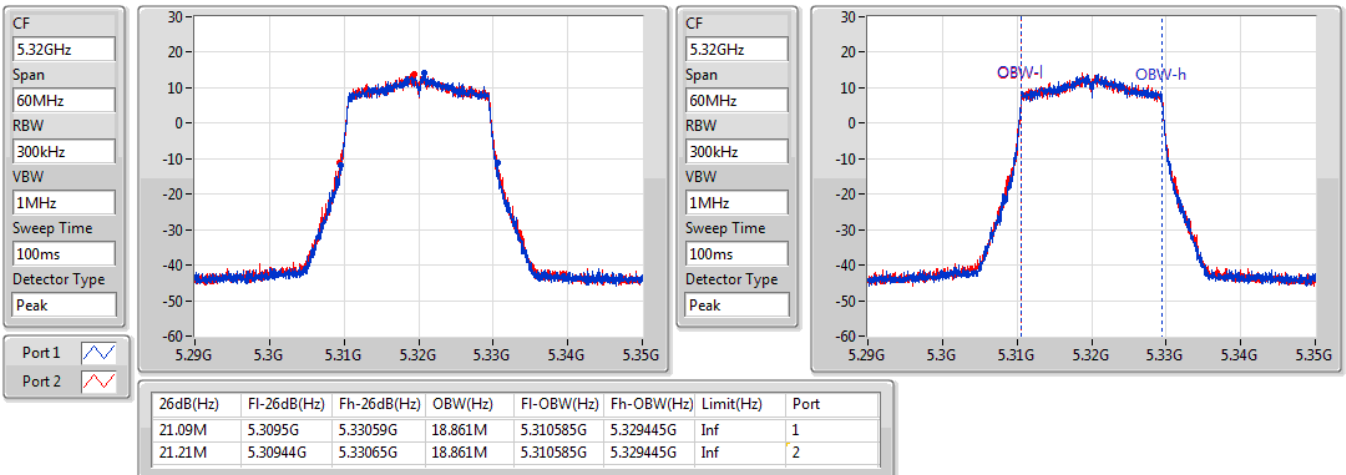
5300MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5320MHz

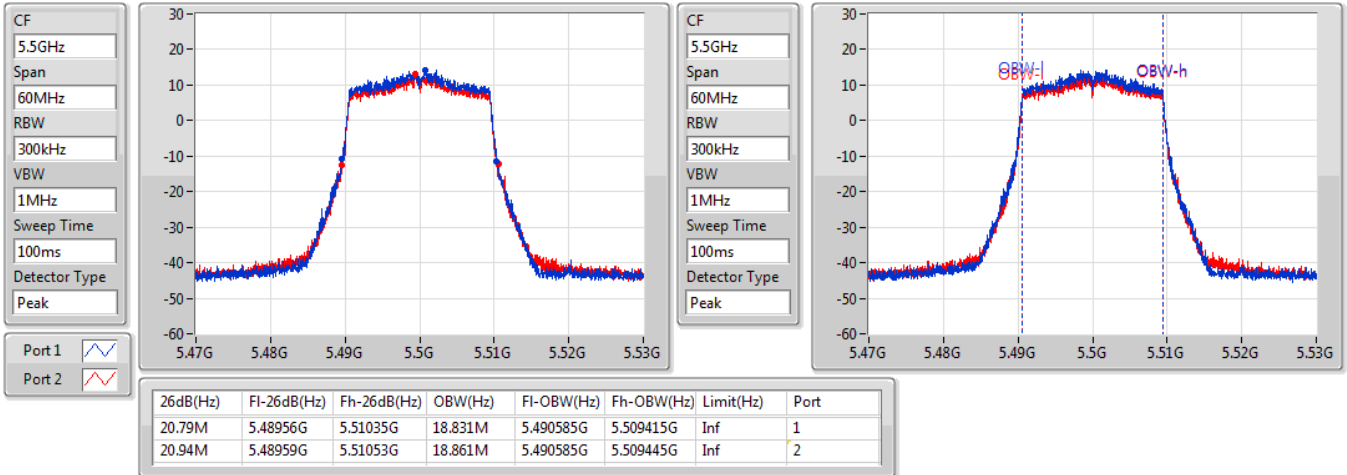




802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

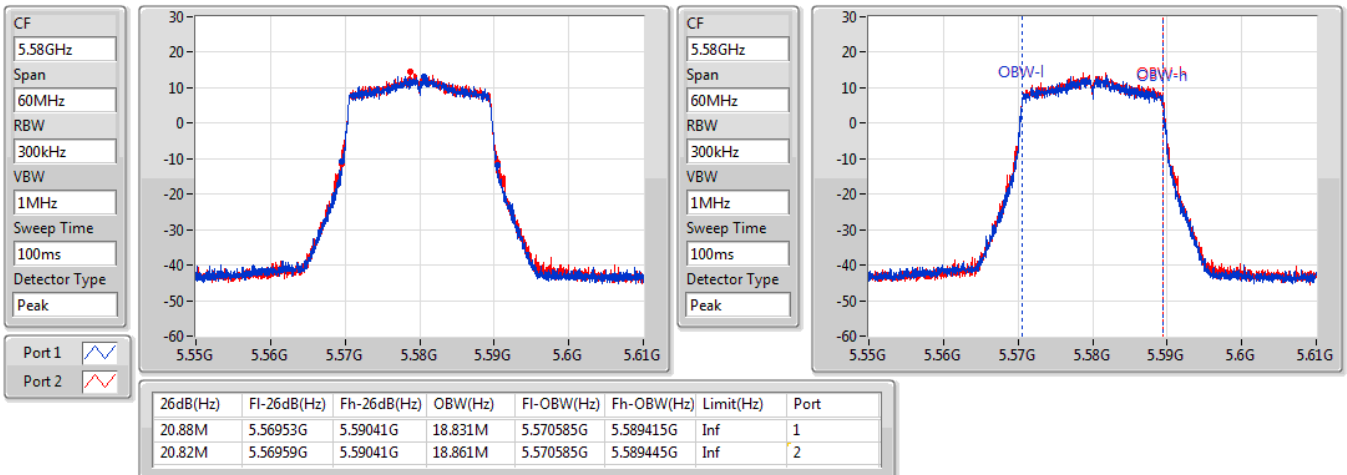
5500MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5580MHz

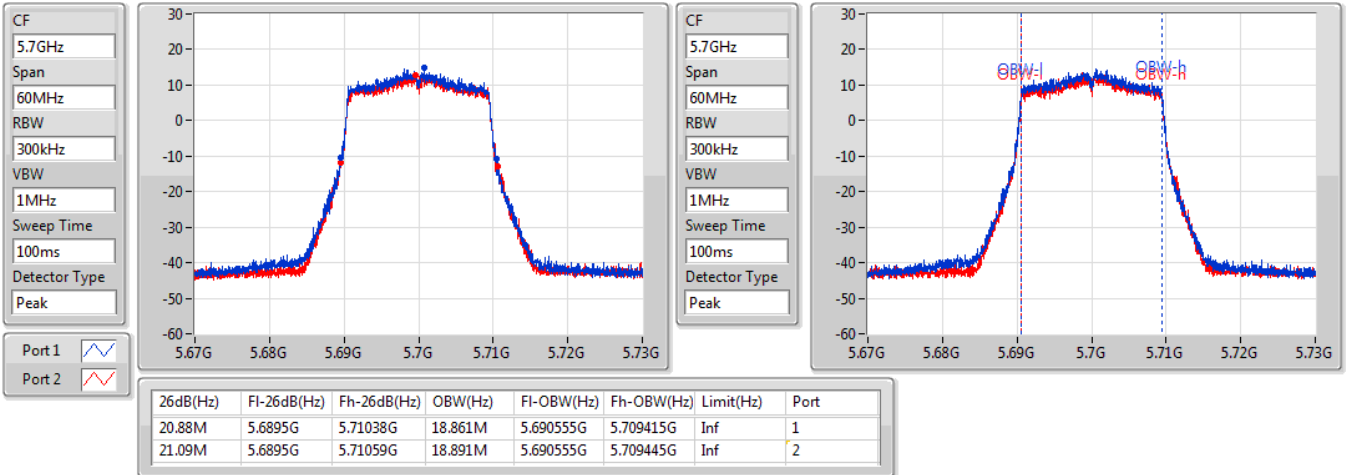




802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

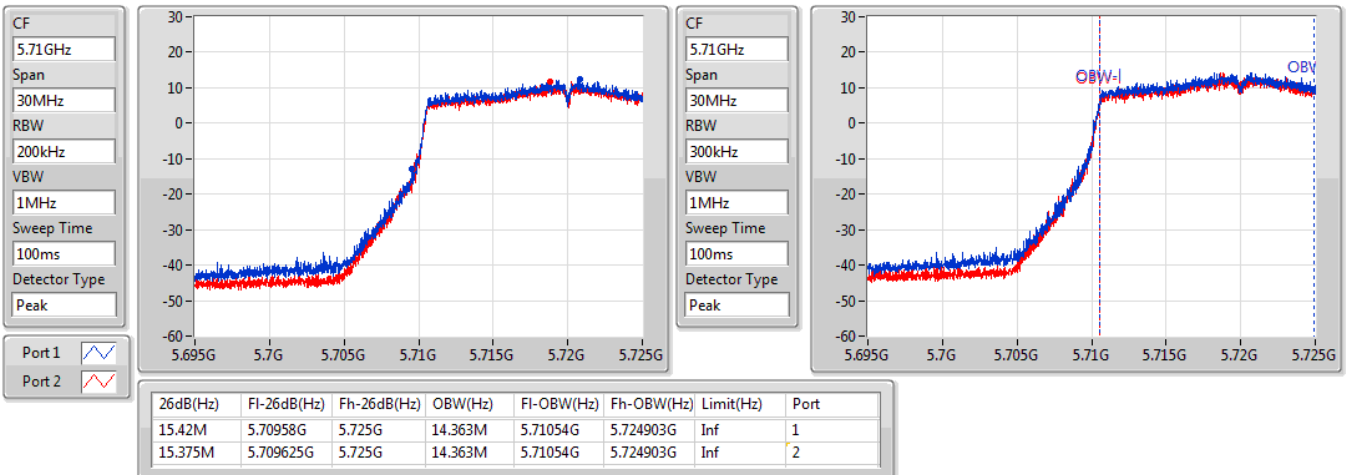
5700MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

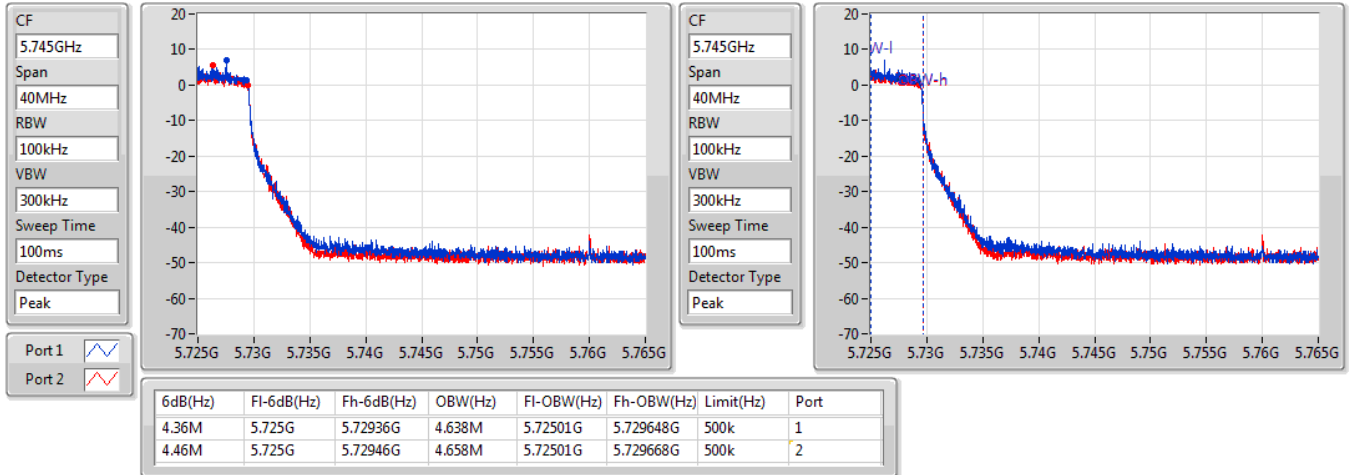
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

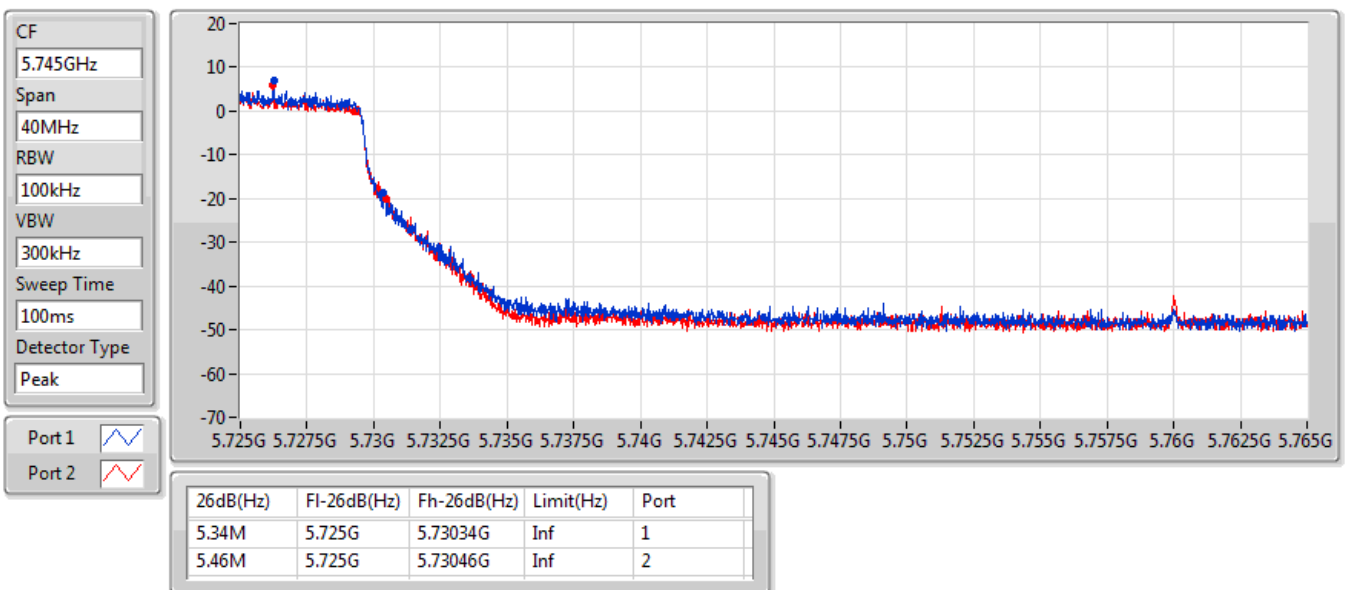
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

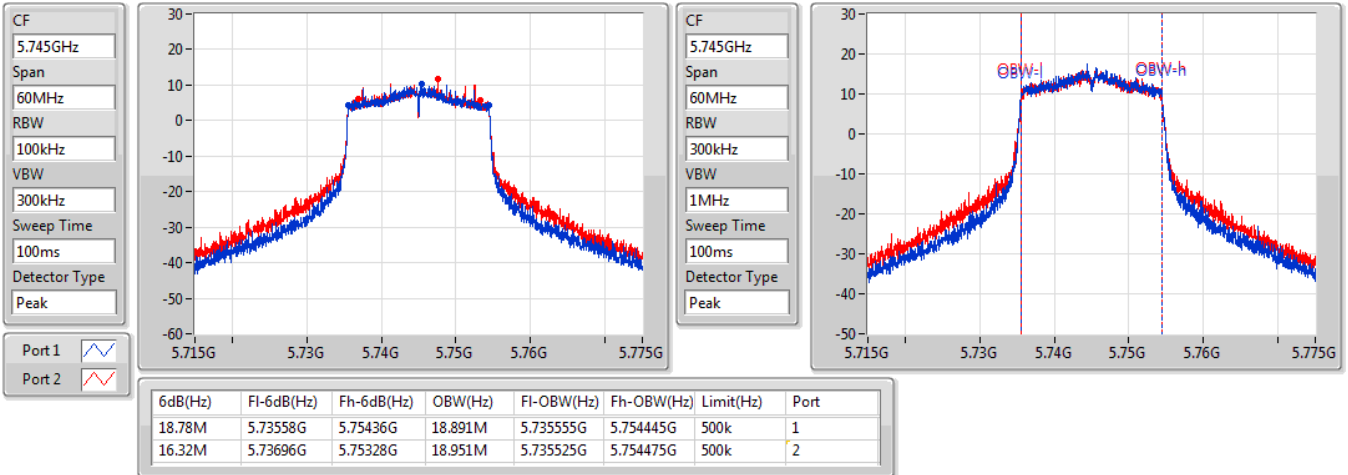




802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

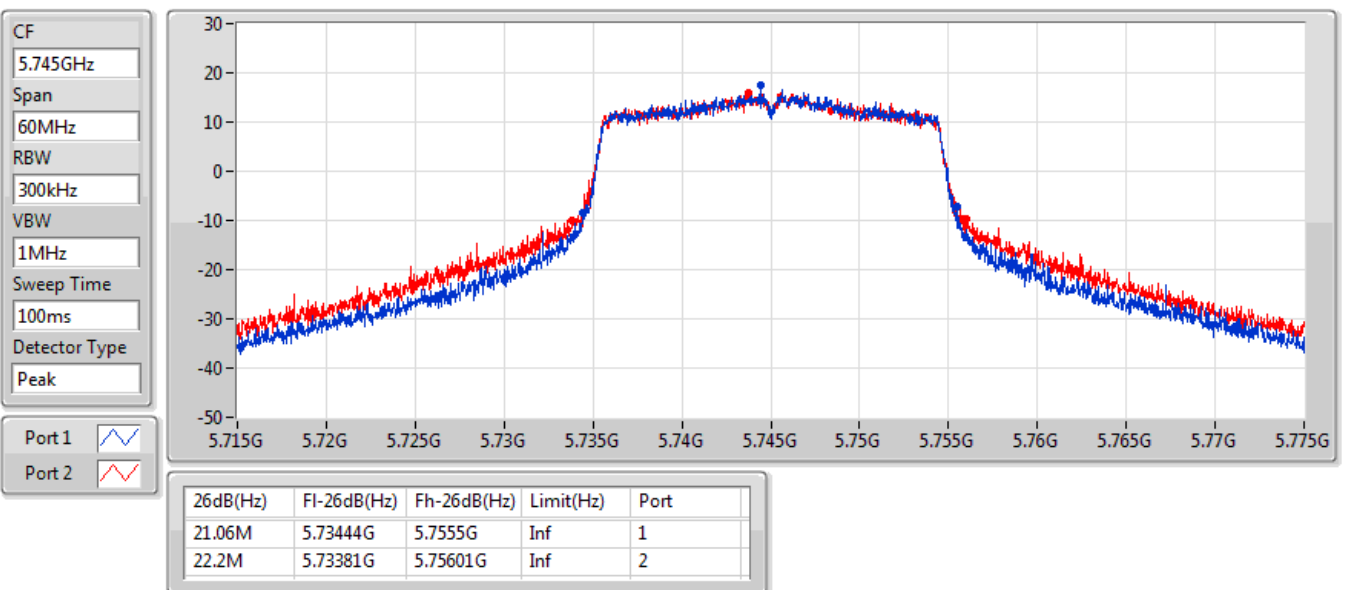
5745MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

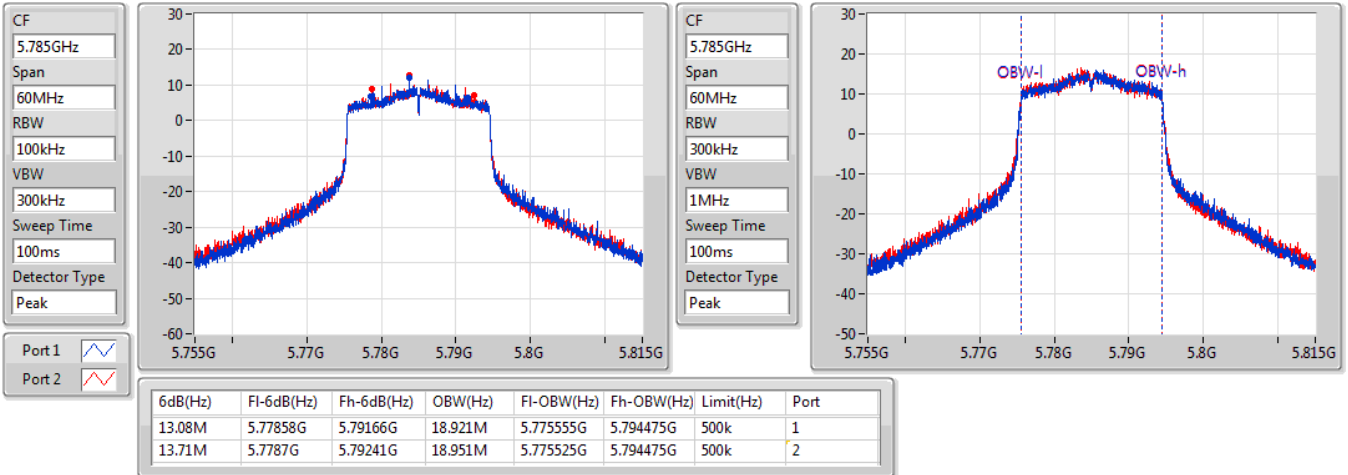
5745MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

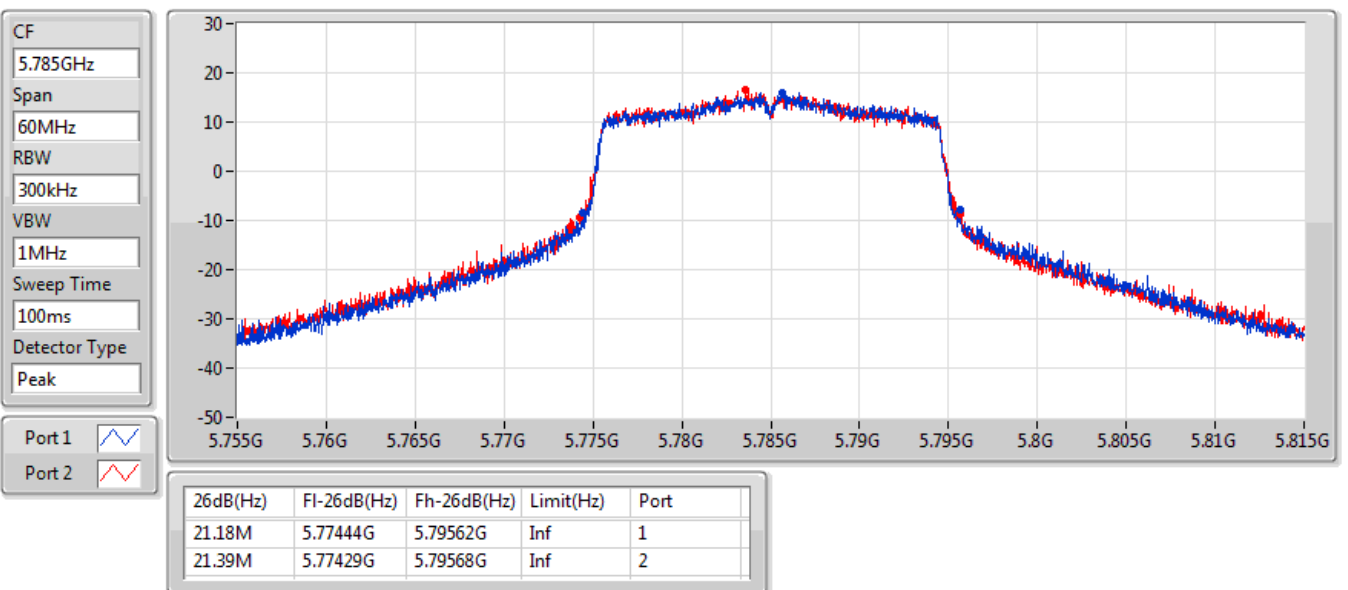
5785MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

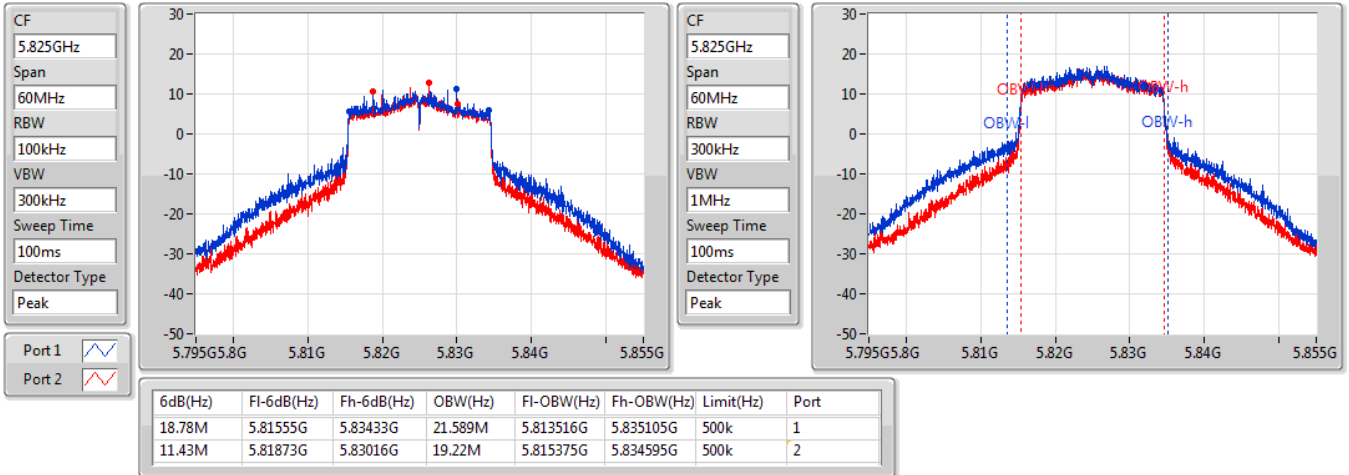
5785MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

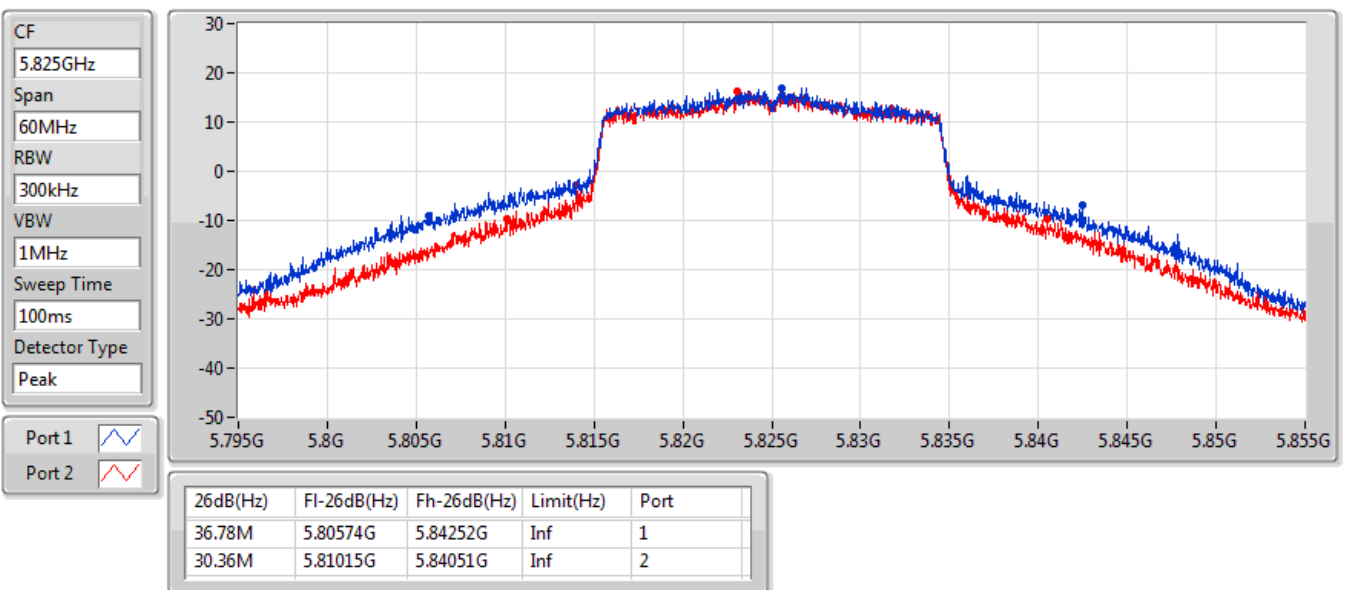
5825MHz



802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

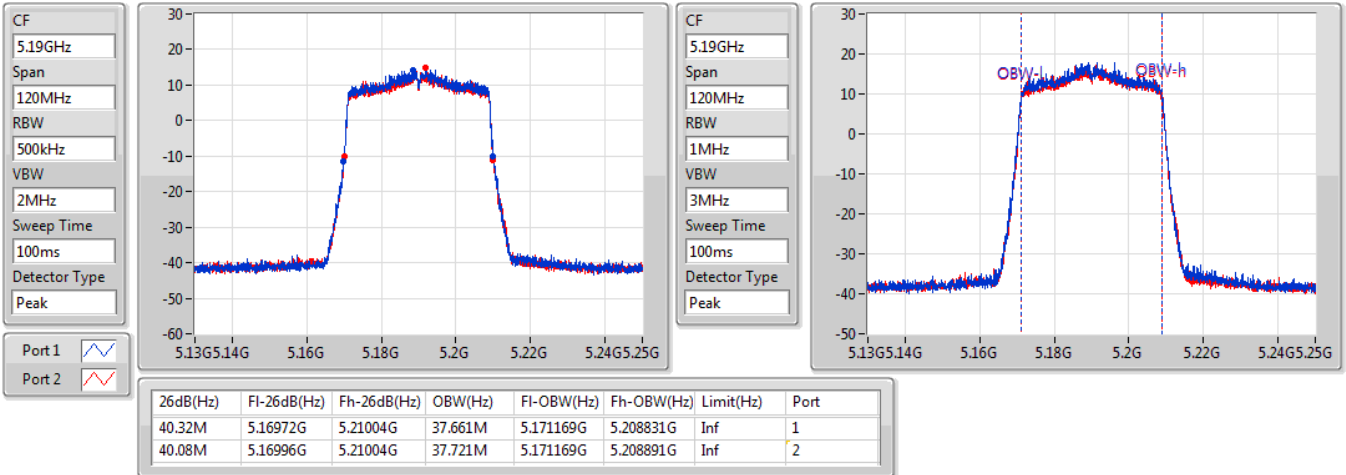
5825MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

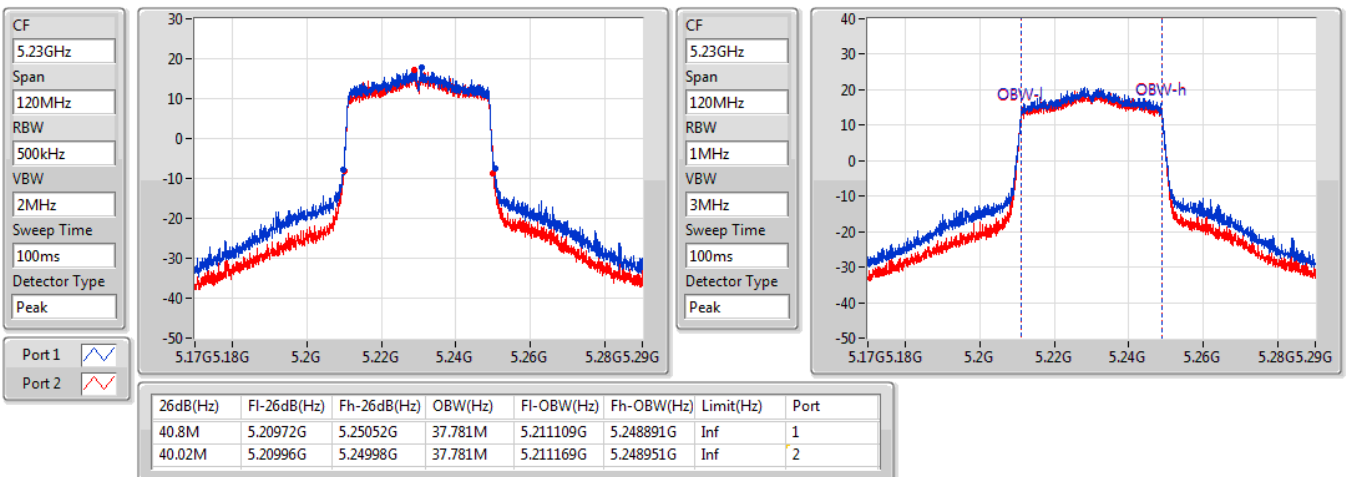
5190MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5230MHz



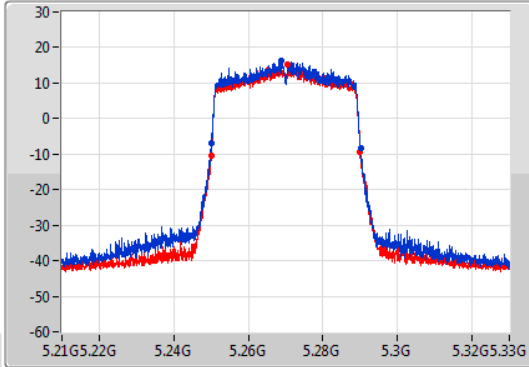


802.11ax HEW40_Nss2,(MCS0)_2TX

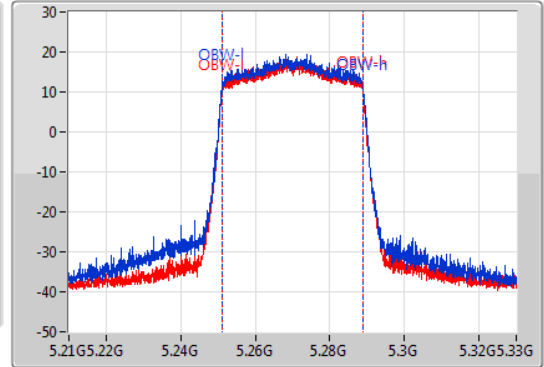
EBW

5270MHz

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



CF
5.27GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



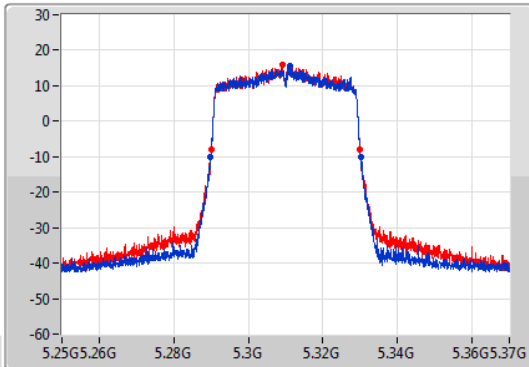
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.26M	5.24996G	5.29022G	37.721M	5.251109G	5.288831G	Inf	1
40.02M	5.25002G	5.29004G	37.721M	5.251169G	5.288891G	Inf	2

802.11ax HEW40_Nss2,(MCS0)_2TX

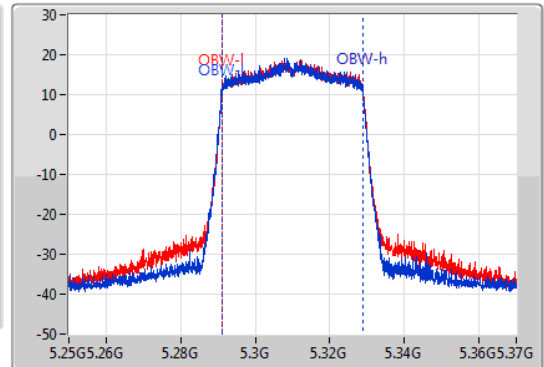
EBW

5310MHz

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



CF
5.31GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



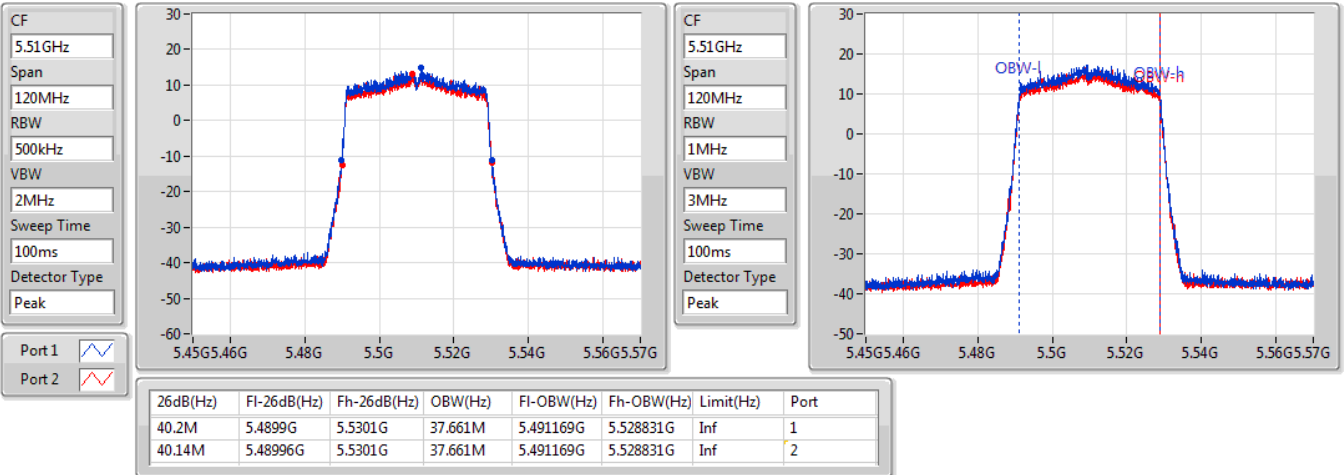
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.2M	5.2899G	5.3301G	37.661M	5.291109G	5.328771G	Inf	1
39.96M	5.28996G	5.32992G	37.661M	5.291169G	5.328831G	Inf	2



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

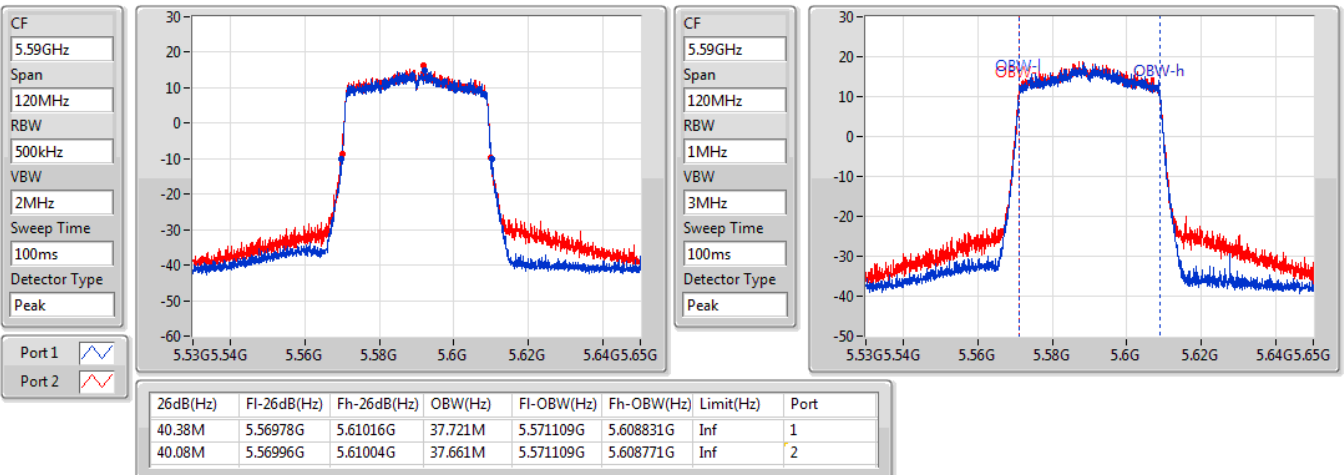
5510MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5590MHz

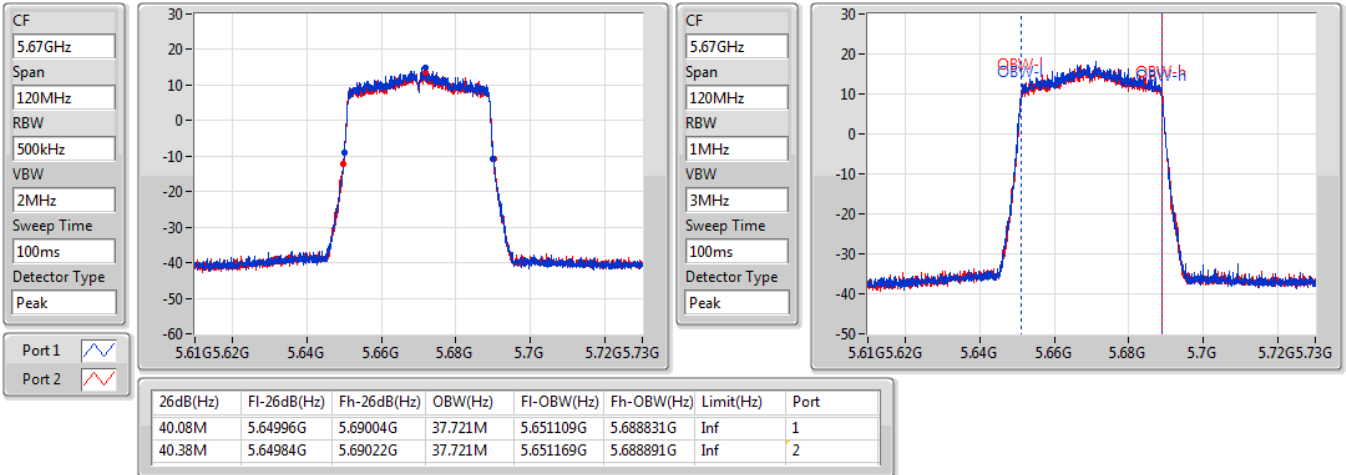




802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

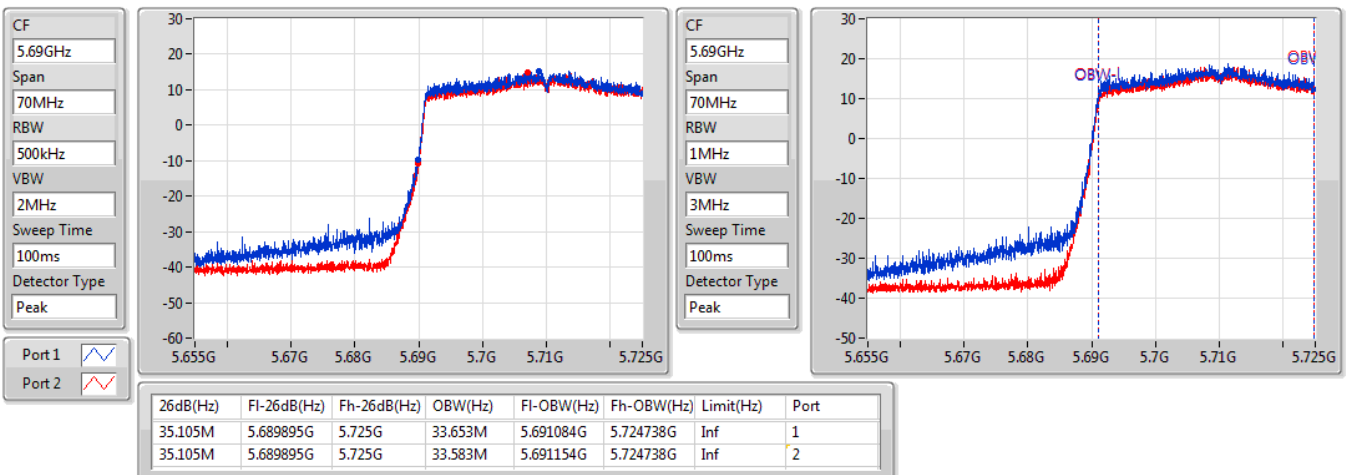
5670MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

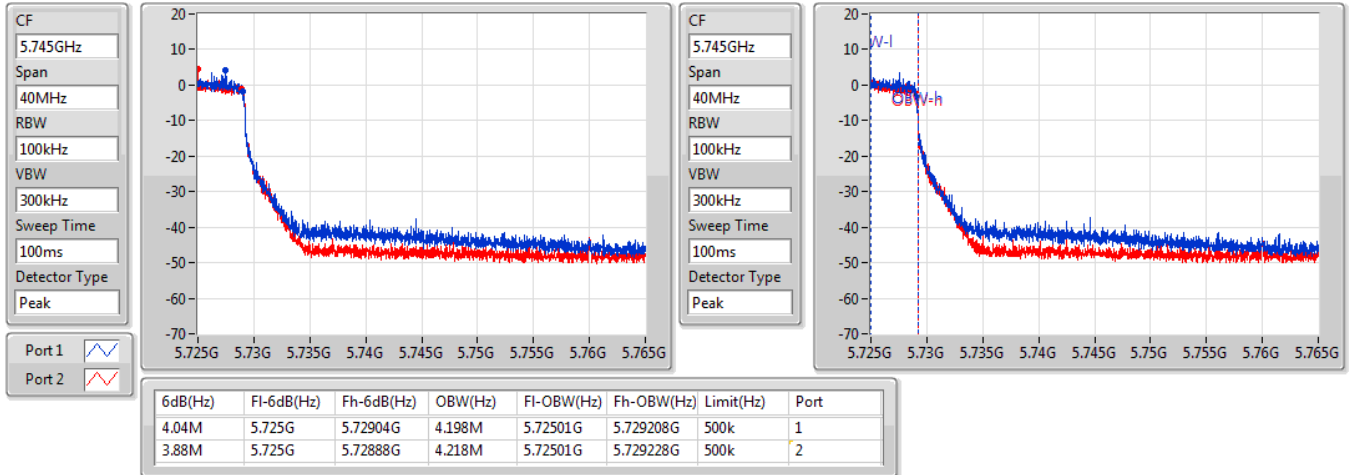
5710MHz Straddle 5.47-5.725GHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

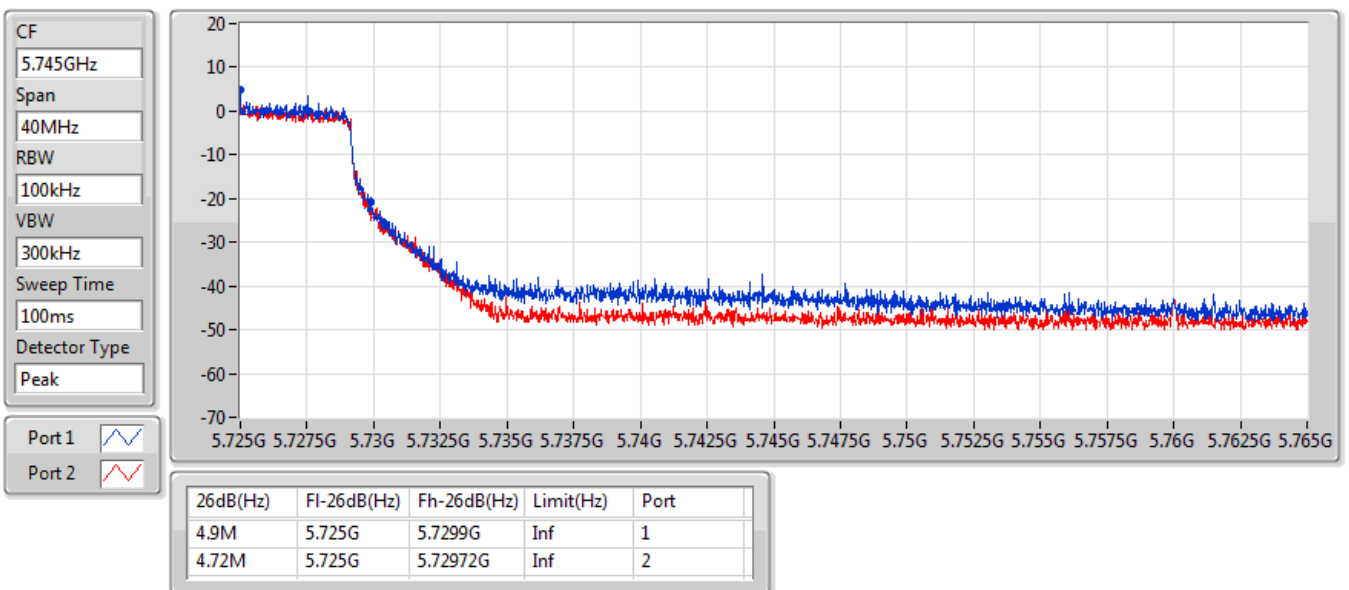
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

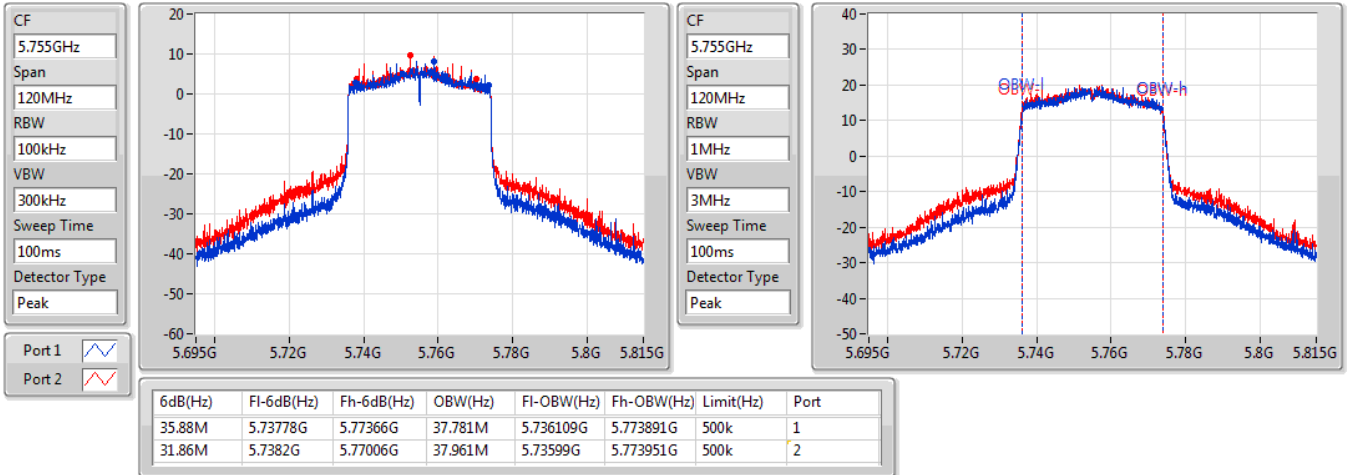




802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

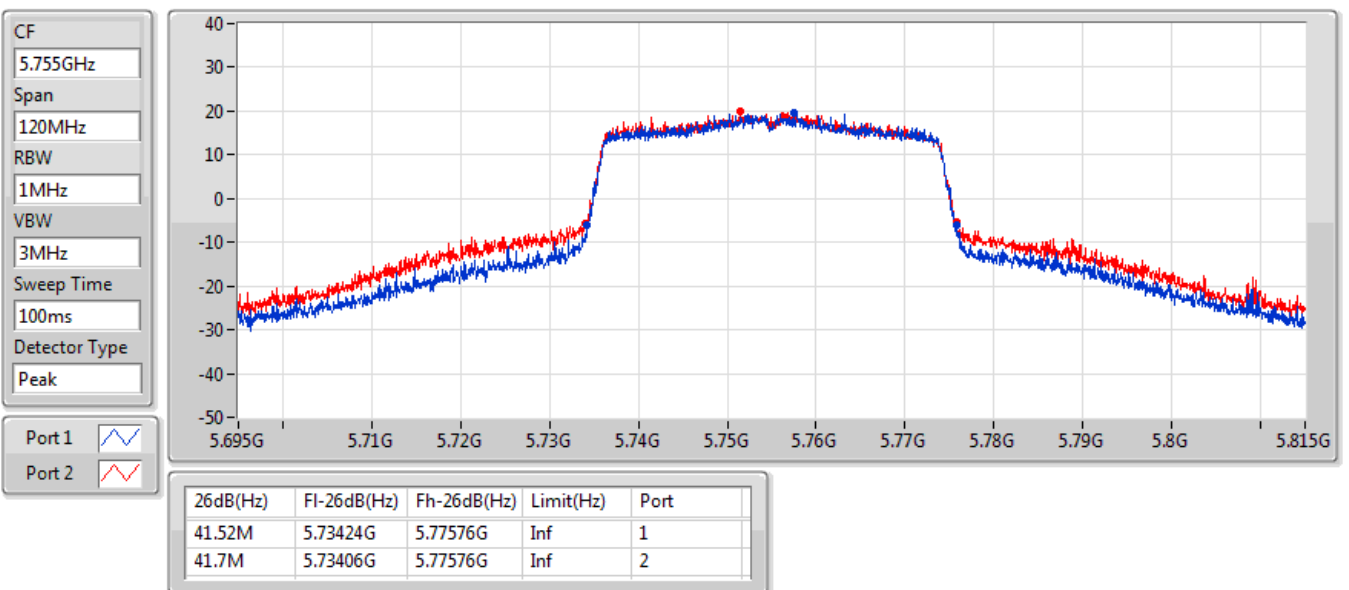
5755MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5755MHz

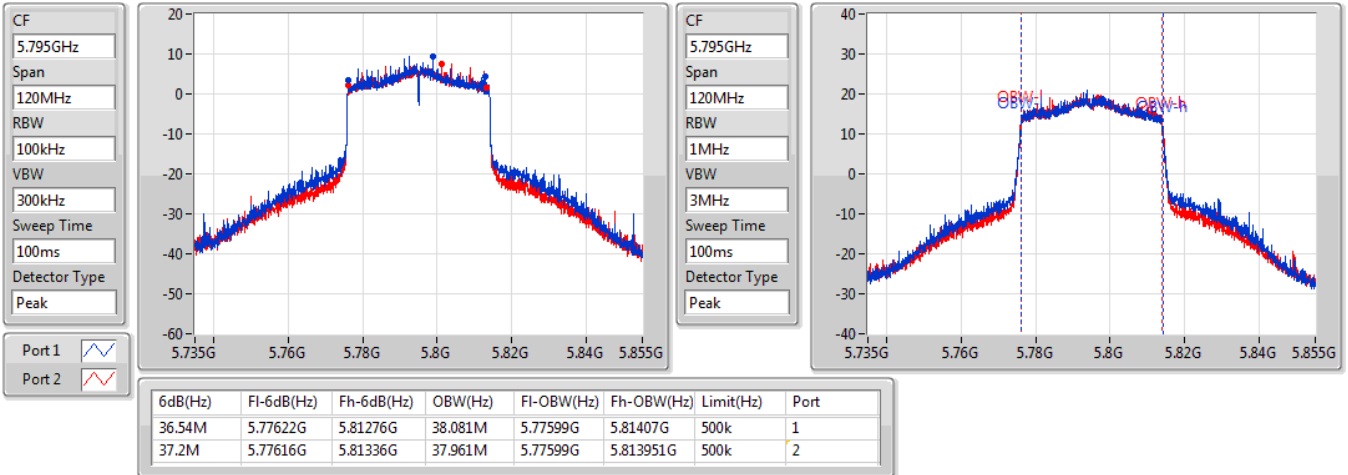




802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

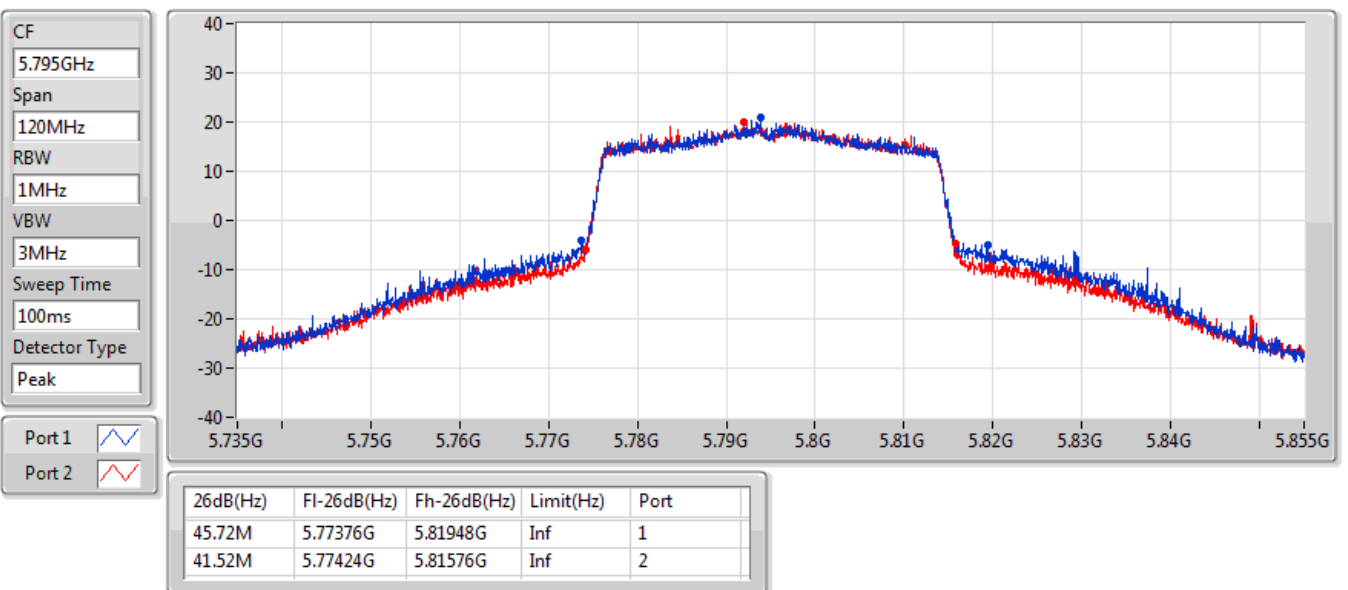
5795MHz



802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5795MHz

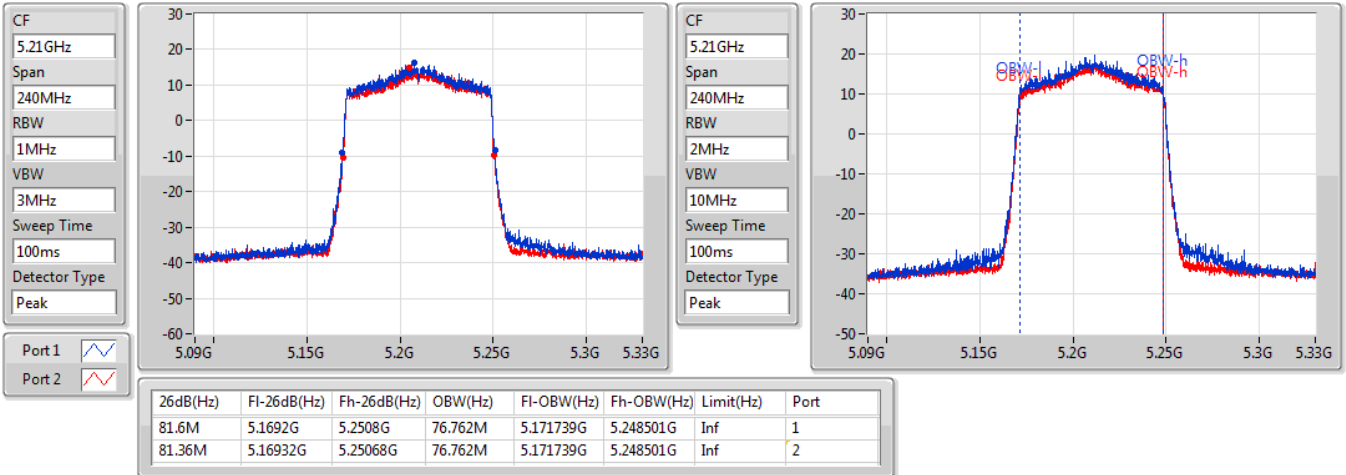




802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

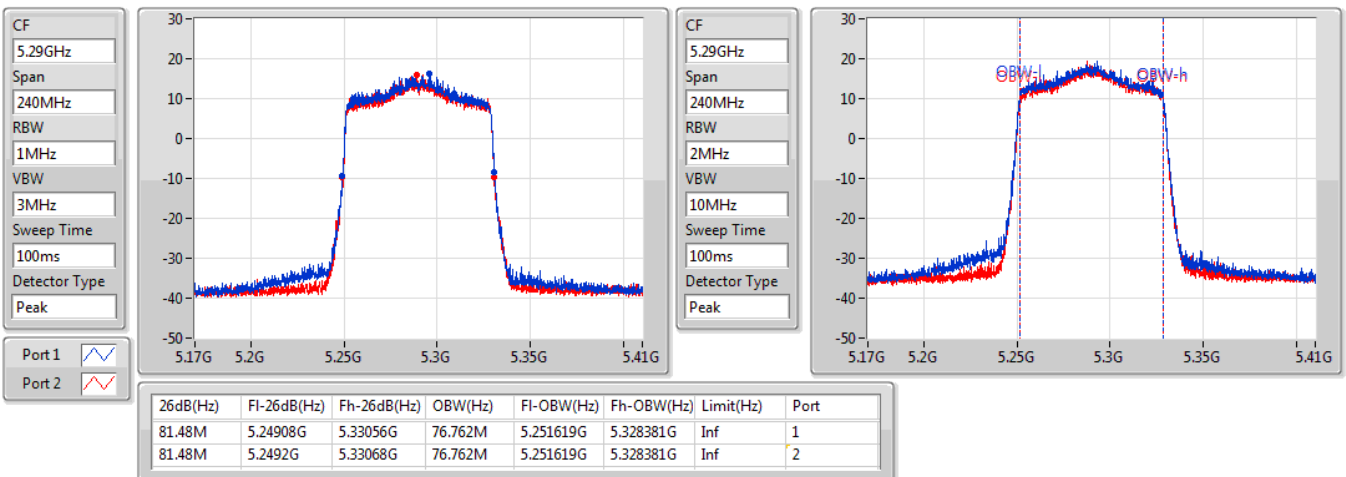
5210MHz



802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5290MHz

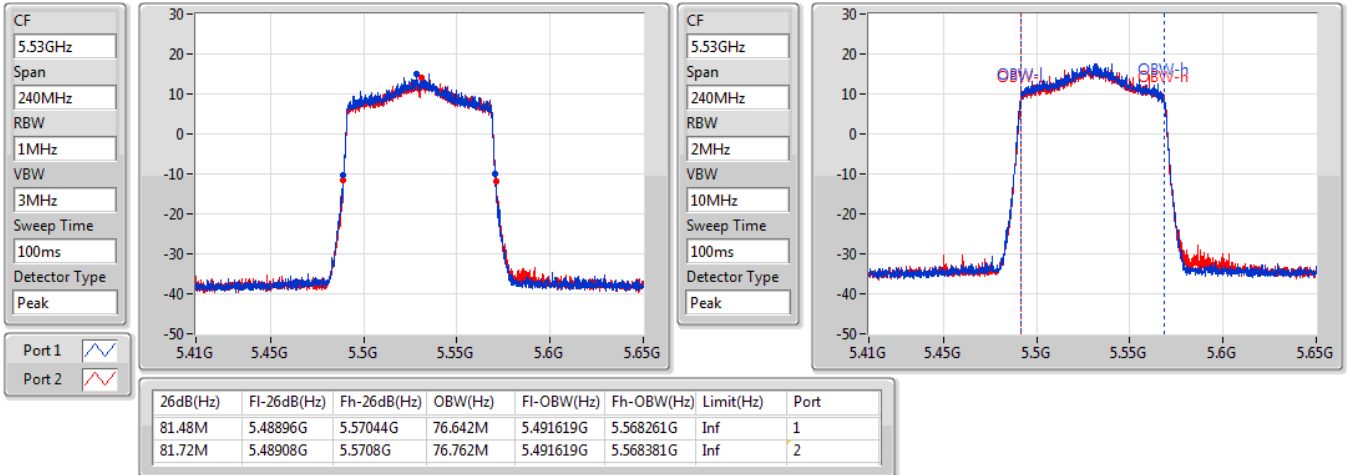




802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

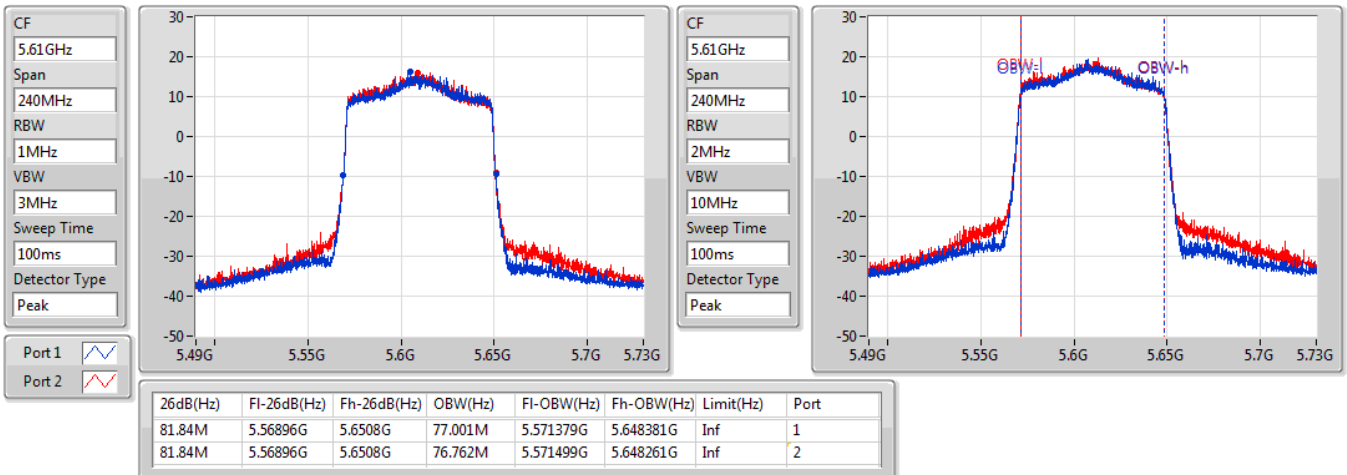
5530MHz



802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5610MHz

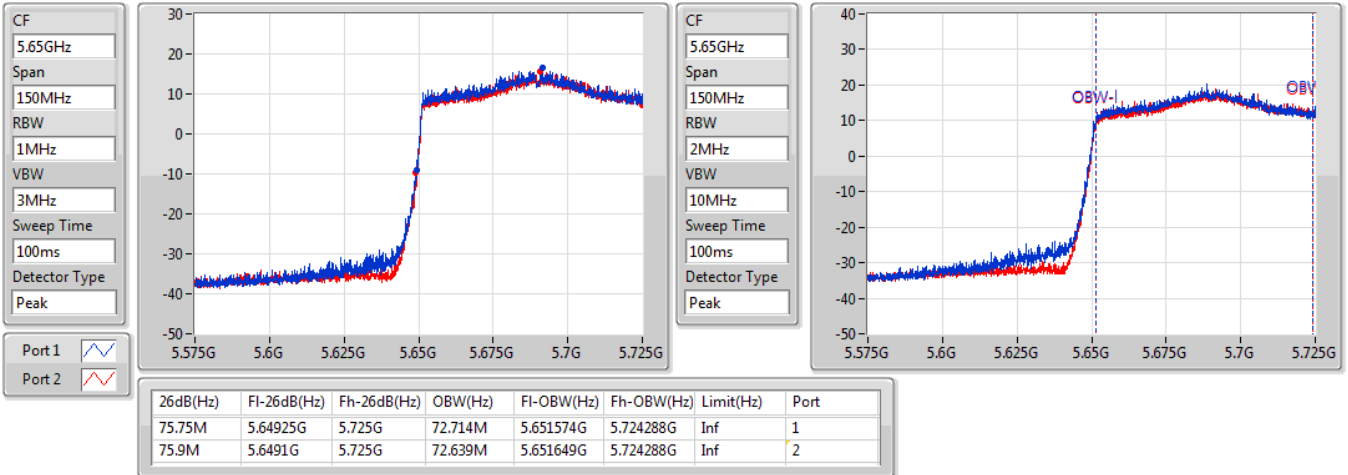




802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

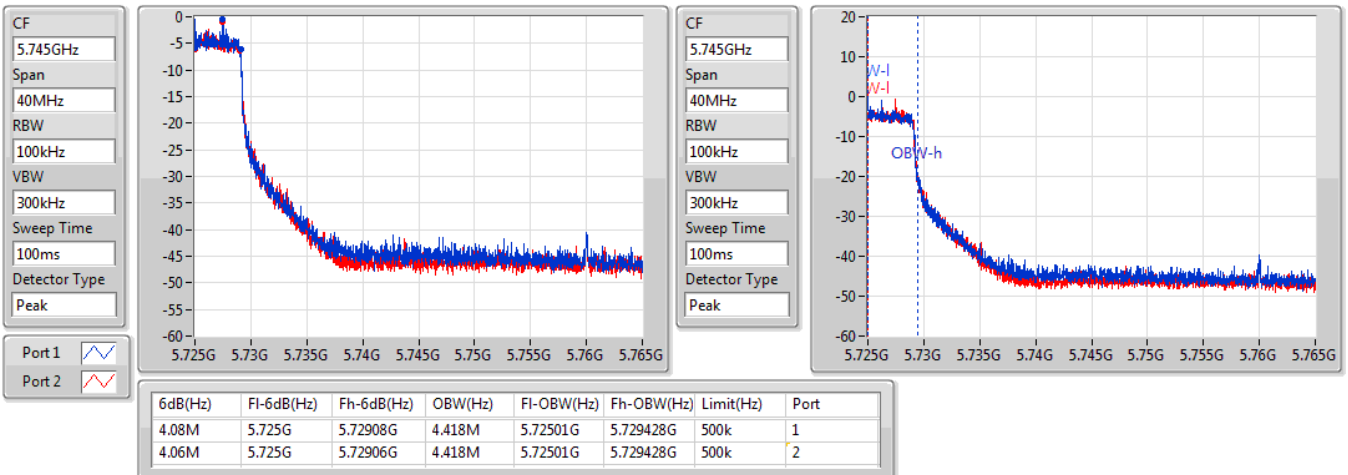
5690MHz Straddle 5.47-5.725GHz



802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

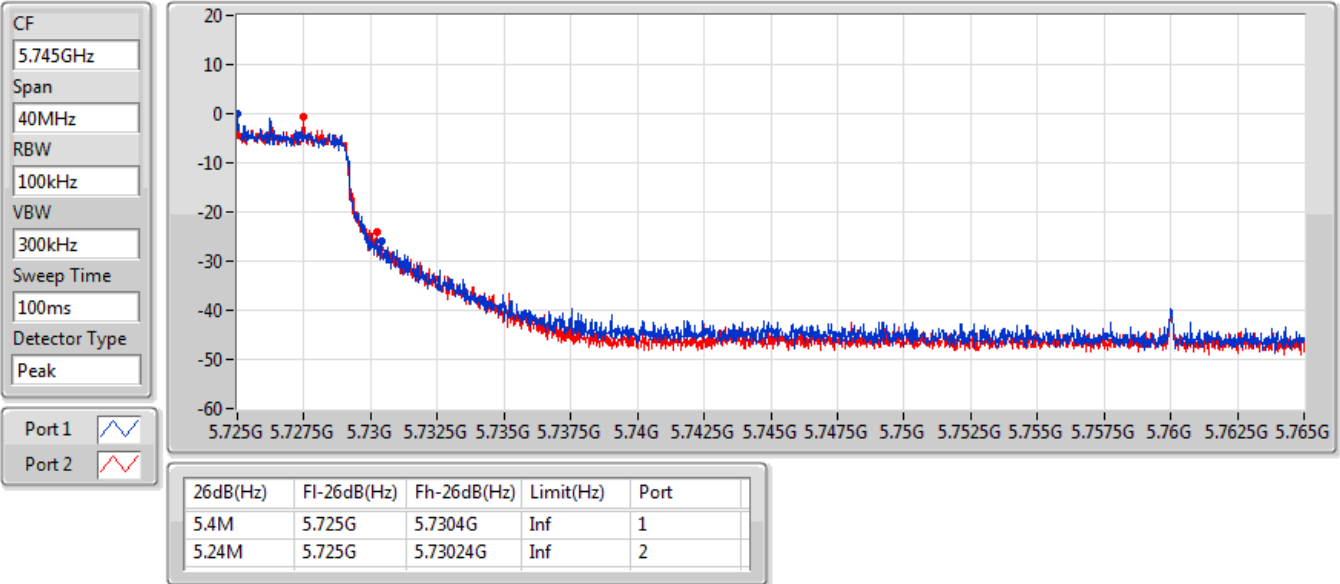




802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

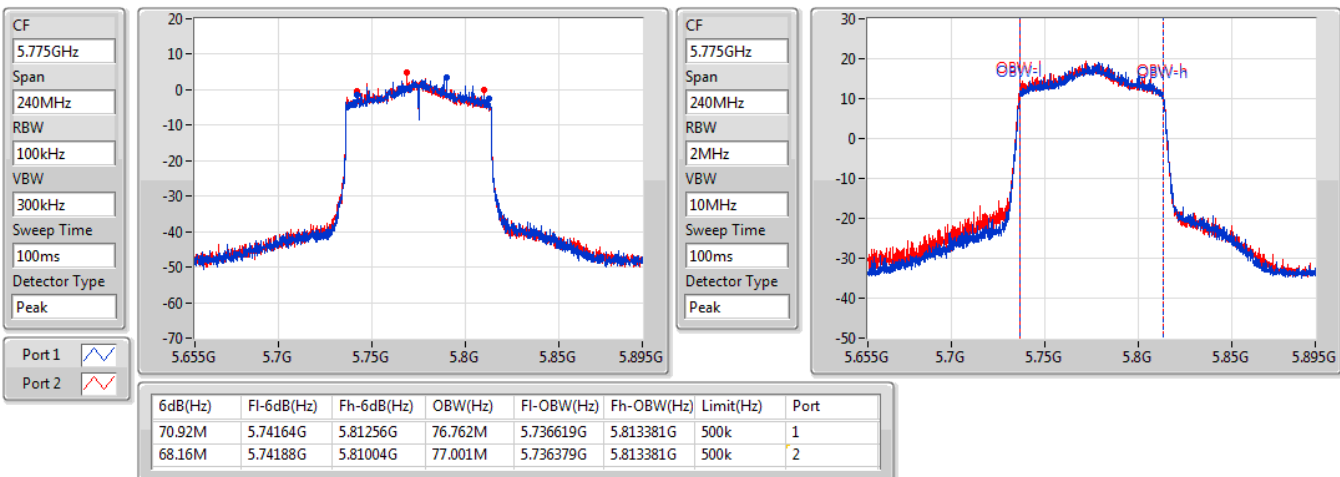
5690MHz Straddle 5.725-5.85GHz



802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5775MHz





802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5775MHz

CF
5.775GHz

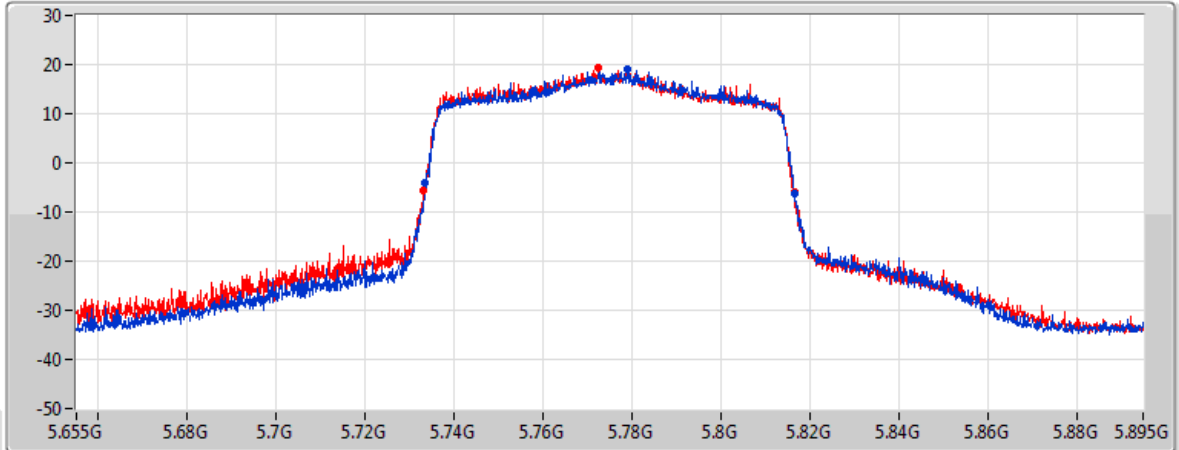
Span
240MHz

RBW
2MHz

VBW
10MHz

Sweep Time
100ms

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
83.28M	5.73336G	5.81664G	Inf	1
83.64M	5.733G	5.81664G	Inf	2

802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

CF
5.17GHz

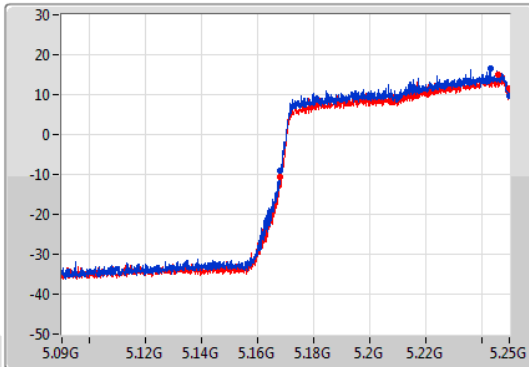
Span
160MHz

RBW
2MHz

VBW
10MHz

Sweep Time
100ms

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.08M	5.16792G	5.25G	78.041M	5.171599G	5.24964G	Inf	1
81.92M	5.16808G	5.25G	77.801M	5.171839G	5.24964G	Inf	2

CF
5.17GHz

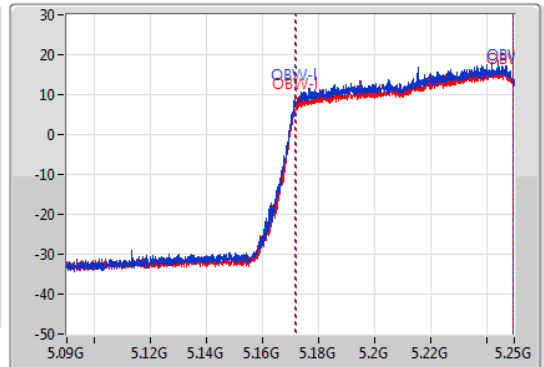
Span
160MHz

RBW
3MHz

VBW
10MHz

Sweep Time
100ms

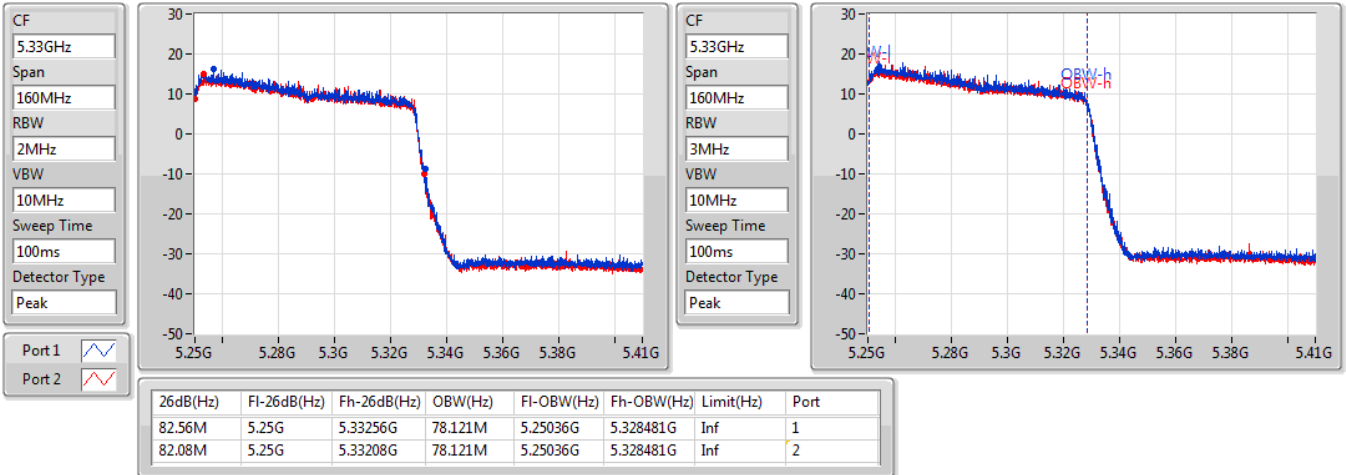
Detector Type
Peak



802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

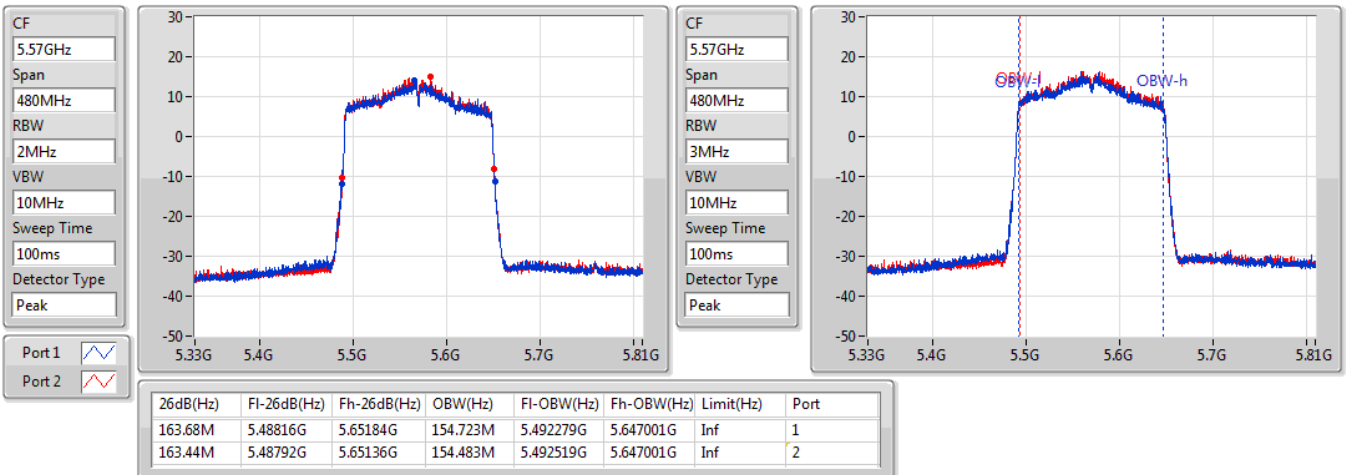
5250MHz Straddle 5.25-5.35GHz



802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz





Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_2TX	22.14	0.16368	27.01	0.50234
802.11ax HEW40-BF_Nss2,(MCS0)_2TX	22.43	0.17498	27.30	0.53703
802.11ax HEW80-BF_Nss2,(MCS0)_2TX	19.77	0.09484	24.64	0.29107
802.11ax HEW160-BF_Nss2,(MCS0)_2TX	16.81	0.04797	21.68	0.14723
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_2TX	19.45	0.08810	25.37	0.34435
802.11ax HEW40-BF_Nss2,(MCS0)_2TX	20.88	0.12246	26.80	0.47863
802.11ax HEW80-BF_Nss2,(MCS0)_2TX	20.12	0.10280	26.04	0.40179
802.11ax HEW160-BF_Nss2,(MCS0)_2TX	16.93	0.04932	22.85	0.19275
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_2TX	19.42	0.08750	23.50	0.22387
802.11ax HEW40-BF_Nss2,(MCS0)_2TX	20.70	0.11749	24.78	0.30061
802.11ax HEW80-BF_Nss2,(MCS0)_2TX	20.71	0.11776	24.79	0.30130
802.11ax HEW160-BF_Nss2,(MCS0)_2TX	19.44	0.08790	23.52	0.22491
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss2,(MCS0)_2TX	22.47	0.17660	27.68	0.58614
802.11ax HEW40-BF_Nss2,(MCS0)_2TX	22.24	0.16749	27.45	0.55590
802.11ax HEW80-BF_Nss2,(MCS0)_2TX	20.54	0.11324	25.75	0.37584



Conducted Output Power(Average)

Appendix B

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.87	18.13	17.75	20.95	30.00	25.82	36.00
5200MHz	Pass	4.87	19.44	18.46	21.99	30.00	26.86	36.00
5240MHz	Pass	4.87	19.58	18.63	22.14	30.00	27.01	36.00
5260MHz	Pass	5.92	17.02	15.72	19.43	24.00	25.35	30.00
5300MHz	Pass	5.92	16.64	16.22	19.45	24.00	25.37	30.00
5320MHz	Pass	5.92	16.42	16.44	19.44	24.00	25.36	30.00
5500MHz	Pass	4.08	16.82	15.74	19.32	24.00	23.40	30.00
5580MHz	Pass	4.08	16.07	16.6	19.35	24.00	23.43	30.00
5700MHz	Pass	4.08	16.78	16.01	19.42	24.00	23.50	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.08	16.01	15.35	18.70	24.00	22.78	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	5.21	9.15	8.64	11.91	30.00	17.12	36.00
5745MHz	Pass	5.21	19.02	19.18	22.11	30.00	27.32	36.00
5785MHz	Pass	5.21	18.84	19.14	22.00	30.00	27.21	36.00
5825MHz	Pass	5.21	19.6	19.32	22.47	30.00	27.68	36.00
802.11ax HEW40-BF_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.87	16.65	16.13	19.41	30.00	24.28	36.00
5230MHz	Pass	4.87	19.77	19.03	22.43	30.00	27.30	36.00
5270MHz	Pass	5.92	18.36	17.32	20.88	24.00	26.80	30.00
5310MHz	Pass	5.92	17.63	18.05	20.86	24.00	26.78	30.00
5510MHz	Pass	4.08	16.47	15.67	19.10	24.00	23.18	30.00
5590MHz	Pass	4.08	17.41	17.95	20.70	24.00	24.78	30.00
5670MHz	Pass	4.08	16.7	16.29	19.51	24.00	23.59	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.08	17.78	16.92	20.38	24.00	24.46	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	5.21	6.31	5.74	9.04	30.00	14.25	36.00
5755MHz	Pass	5.21	18.91	19.48	22.21	30.00	27.42	36.00
5795MHz	Pass	5.21	19.15	19.3	22.24	30.00	27.45	36.00
802.11ax HEW80-BF_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.87	17.21	16.26	19.77	30.00	24.64	36.00
5290MHz	Pass	5.92	17.49	16.69	20.12	24.00	26.04	30.00
5530MHz	Pass	4.08	15.8	15.41	18.62	24.00	22.70	30.00
5610MHz	Pass	4.08	17.57	17.83	20.71	24.00	24.79	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.08	17.57	17.05	20.33	24.00	24.41	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	5.21	1.64	1.77	4.72	30.00	9.93	36.00
5775MHz	Pass	5.21	17.48	17.58	20.54	30.00	25.75	36.00
802.11ax HEW160-BF_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.87	14.31	13.22	16.81	30.00	21.68	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	5.92	14.18	13.65	16.93	24.00	22.85	30.00



Conducted Output Power(Average)

Appendix B

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5570MHz	Pass	4.08	16.23	16.63	19.44	24.00	23.52	30.00

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

Directional Gain = $10 \log [(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{ANT}]$

Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
2	5.04	5.51	2.84	5.22
4	4.69	6.29	5.04	5.20
Directional Gain (dBi)	4.87	5.92	4.08	5.21



Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	24.89	0.30832	29.93	0.98401
802.11ax HEW20_Nss2,(MCS0)_2TX	25.15	0.32734	30.02	1.00462
802.11ax HEW40_Nss2,(MCS0)_2TX	25.44	0.34995	30.31	1.07399
802.11ax HEW80_Nss2,(MCS0)_2TX	22.78	0.18967	27.65	0.58210
802.11ax HEW160_Nss2,(MCS0)_2TX	19.82	0.09594	24.69	0.29444
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.89	0.07745	25.18	0.32961
802.11ax HEW20_Nss2,(MCS0)_2TX	22.46	0.17620	28.38	0.68865
802.11ax HEW40_Nss2,(MCS0)_2TX	23.89	0.24491	29.81	0.95719
802.11ax HEW80_Nss2,(MCS0)_2TX	23.13	0.20559	29.05	0.80353
802.11ax HEW160_Nss2,(MCS0)_2TX	19.94	0.09863	25.86	0.38548
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.54	0.11324	25.58	0.36141
802.11ax HEW20_Nss2,(MCS0)_2TX	22.43	0.17498	26.51	0.44771
802.11ax HEW40_Nss2,(MCS0)_2TX	23.71	0.23496	27.79	0.60117
802.11ax HEW80_Nss2,(MCS0)_2TX	23.72	0.23550	27.80	0.60256
802.11ax HEW160_Nss2,(MCS0)_2TX	22.45	0.17579	26.53	0.44978
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25.38	0.34514	30.60	1.14815
802.11ax HEW20_Nss2,(MCS0)_2TX	25.48	0.35318	30.69	1.17220
802.11ax HEW40_Nss2,(MCS0)_2TX	25.25	0.33497	30.46	1.11173
802.11ax HEW80_Nss2,(MCS0)_2TX	23.55	0.22646	28.76	0.75162



Conducted Output Power(Average)

Appendix B

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.04	21.87	21.49	24.69	30.00	29.73	36.00
5200MHz	Pass	5.04	22.13	21.11	24.66	30.00	29.70	36.00
5240MHz	Pass	5.04	22.44	21.24	24.89	30.00	29.93	36.00
5260MHz	Pass	6.29	16.58	15.05	18.89	23.50	25.18	29.79
5300MHz	Pass	6.29	15.78	15.53	18.67	23.49	24.96	29.78
5320MHz	Pass	6.29	15.69	15.53	18.62	23.51	24.91	29.80
5500MHz	Pass	5.04	18.02	16.83	20.48	23.90	25.52	29.90
5580MHz	Pass	5.04	17.27	17.69	20.50	23.76	25.54	29.76
5700MHz	Pass	5.04	17.81	17.22	20.54	23.79	25.58	29.79
5720MHz Straddle 5.47-5.725GHz	Pass	5.04	17.78	17.22	20.52	22.57	25.56	28.57
5720MHz Straddle 5.725-5.85GHz	Pass	5.22	10	9.45	12.74	30.00	17.96	36.00
5745MHz	Pass	5.22	22.23	22.39	25.32	30.00	30.54	36.00
5785MHz	Pass	5.22	22.05	22.36	25.22	30.00	30.44	36.00
5825MHz	Pass	5.22	22.31	22.42	25.38	30.00	30.60	36.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.87	21.14	20.76	23.96	30.00	28.83	36.00
5200MHz	Pass	4.87	22.45	21.47	25.00	30.00	29.87	36.00
5240MHz	Pass	4.87	22.59	21.64	25.15	30.00	30.02	36.00
5260MHz	Pass	5.92	20.03	18.73	22.44	24.00	28.36	30.00
5300MHz	Pass	5.92	19.65	19.23	22.46	24.00	28.38	30.00
5320MHz	Pass	5.92	19.43	19.45	22.45	24.00	28.37	30.00
5500MHz	Pass	4.08	19.83	18.75	22.33	24.00	26.41	30.00
5580MHz	Pass	4.08	19.08	19.61	22.36	24.00	26.44	30.00
5700MHz	Pass	4.08	19.79	19.02	22.43	24.00	26.51	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.08	19.02	18.36	21.71	22.87	25.79	28.87
5720MHz Straddle 5.725-5.85GHz	Pass	5.21	12.16	11.65	14.92	30.00	20.13	36.00
5745MHz	Pass	5.21	22.03	22.19	25.12	30.00	30.33	36.00
5785MHz	Pass	5.21	21.85	22.15	25.01	30.00	30.22	36.00
5825MHz	Pass	5.21	22.61	22.33	25.48	30.00	30.69	36.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.87	19.66	19.14	22.42	30.00	27.29	36.00
5230MHz	Pass	4.87	22.78	22.04	25.44	30.00	30.31	36.00
5270MHz	Pass	5.92	21.37	20.33	23.89	24.00	29.81	30.00
5310MHz	Pass	5.92	20.64	21.06	23.87	24.00	29.79	30.00
5510MHz	Pass	4.08	19.48	18.68	22.11	24.00	26.19	30.00
5590MHz	Pass	4.08	20.42	20.96	23.71	24.00	27.79	30.00
5670MHz	Pass	4.08	19.71	19.3	22.52	24.00	26.60	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.08	20.79	19.93	23.39	24.00	27.47	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	5.21	9.32	8.75	12.05	30.00	17.26	36.00



Conducted Output Power(Average)

Appendix B

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5755MHz	Pass	5.21	21.92	22.49	25.22	30.00	30.43	36.00
5795MHz	Pass	5.21	22.16	22.31	25.25	30.00	30.46	36.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.87	20.22	19.27	22.78	30.00	27.65	36.00
5290MHz	Pass	5.92	20.5	19.7	23.13	24.00	29.05	30.00
5530MHz	Pass	4.08	18.81	18.42	21.63	24.00	25.71	30.00
5610MHz	Pass	4.08	20.58	20.84	23.72	24.00	27.80	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.08	20.58	20.06	23.34	24.00	27.42	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	5.21	4.65	4.78	7.73	30.00	12.94	36.00
5775MHz	Pass	5.21	20.49	20.59	23.55	30.00	28.76	36.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.87	17.32	16.23	19.82	30.00	24.69	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	5.92	17.19	16.66	19.94	24.00	25.86	30.00
5570MHz	Pass	4.08	19.24	19.64	22.45	24.00	26.53	30.00

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

For 802.11ax

$$\text{Directional Gain} = 10 \log [(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{ANT}]$$

Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
2	5.04	5.51	2.84	5.22
4	4.69	6.29	5.04	5.20
Directional Gain (dBi)	4.87	5.92	4.08	5.21

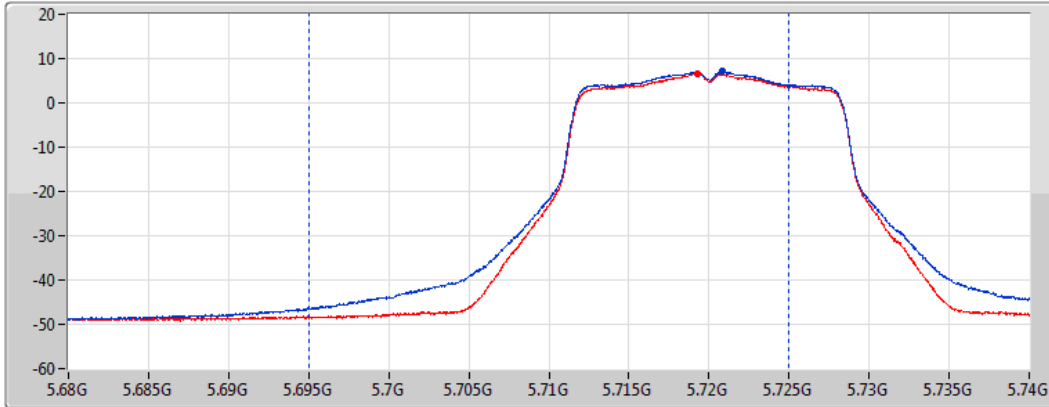


802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz_TnomVnom

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
5ms
Detector Type
RMS
CP BW
30MHz



Port 1
Port 2

Sum= Total Power
PX=Port X

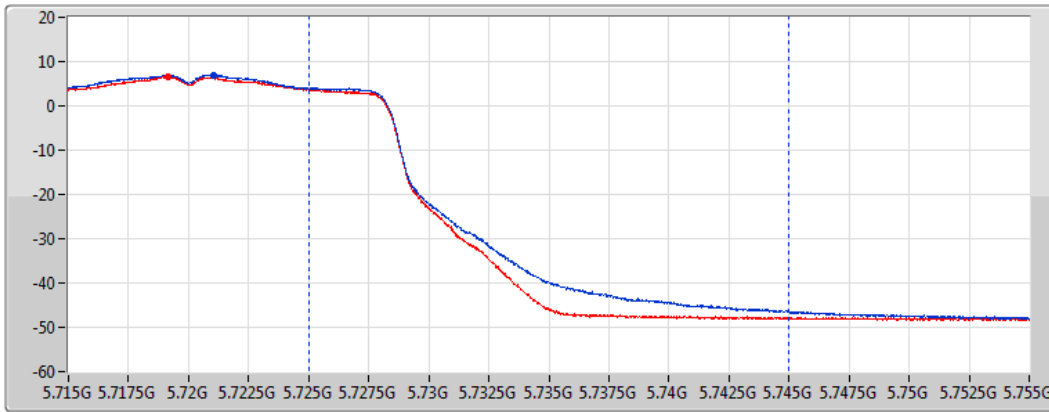
Sum(dBm)	P1(dBm)	P2(dBm)
20.52	17.78	17.22

802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

CF
5.735GHz
Span
40MHz
RBW
1MHz
VBW
3MHz
Sweep Time
5ms
Detector Type
RMS
CP BW
20MHz



Port 1
Port 2

Sum= Total Power
PX=Port X

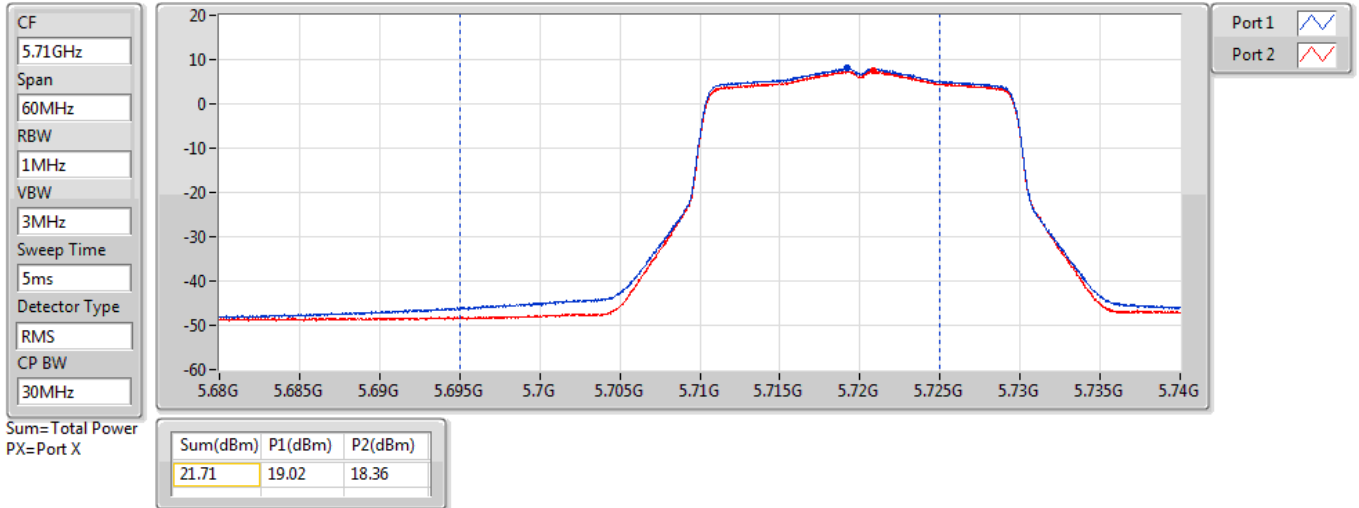
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802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

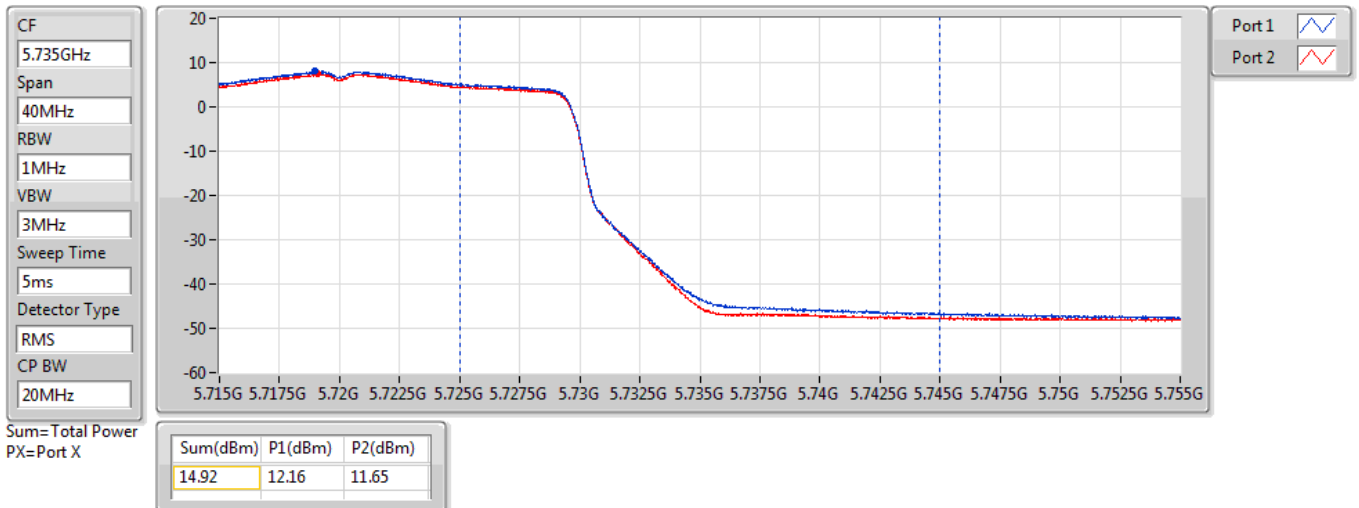
5720MHz Straddle 5.47-5.725GHz_TnomVnom



802.11ax HEW20_Nss2,(MCS0)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TnomVnom

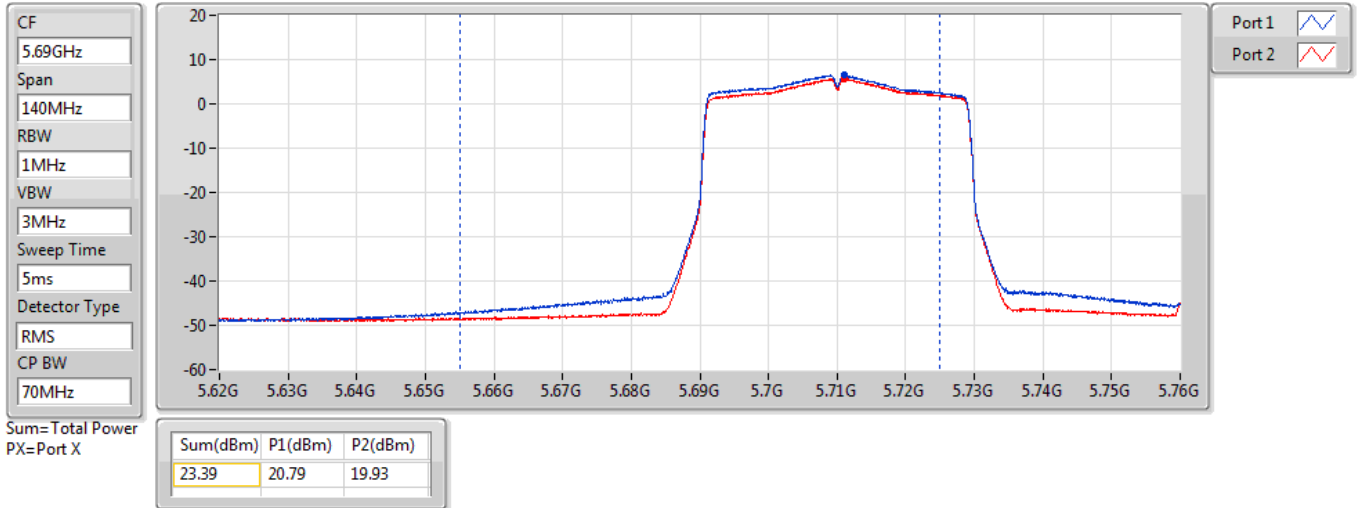




802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

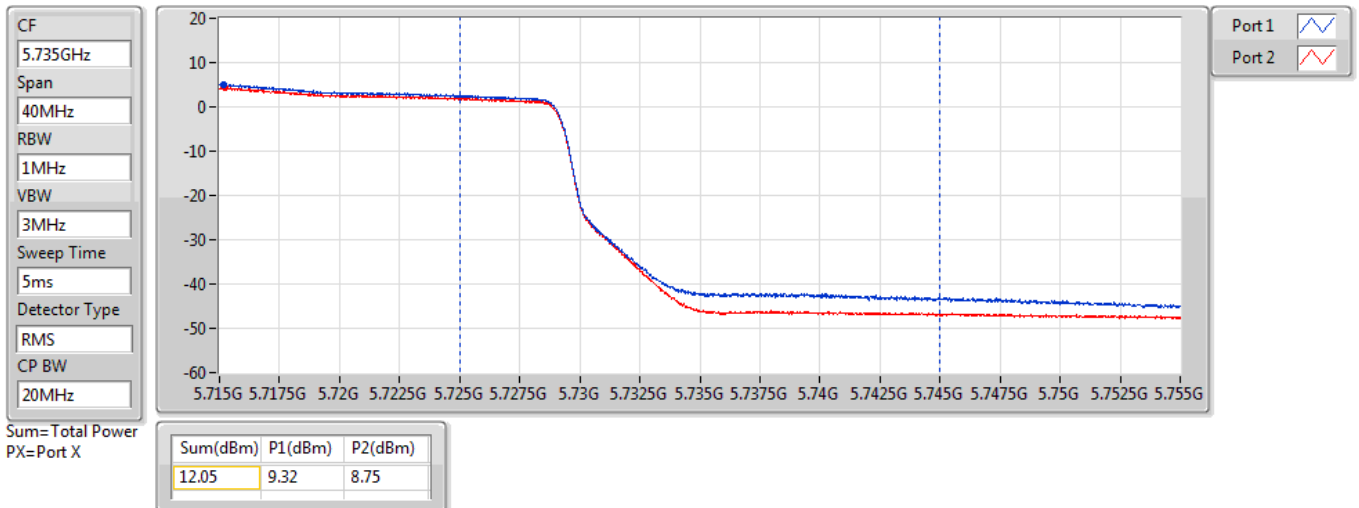
5710MHz Straddle 5.47-5.725GHz_TnomVnom



802.11ax HEW40_Nss2,(MCS0)_2TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TnomVnom

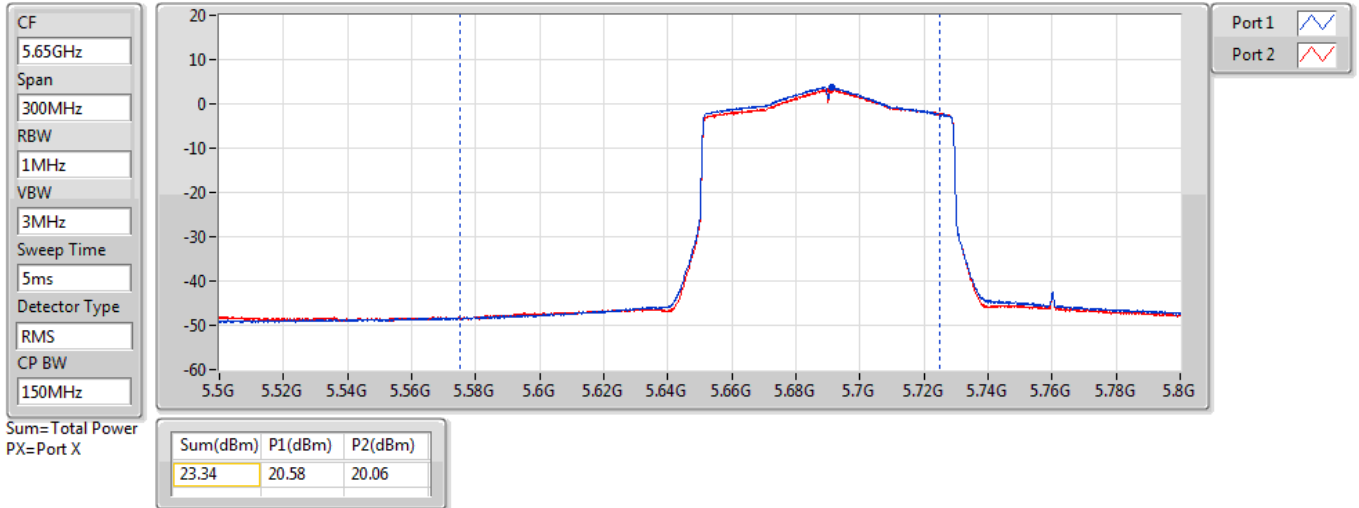




802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

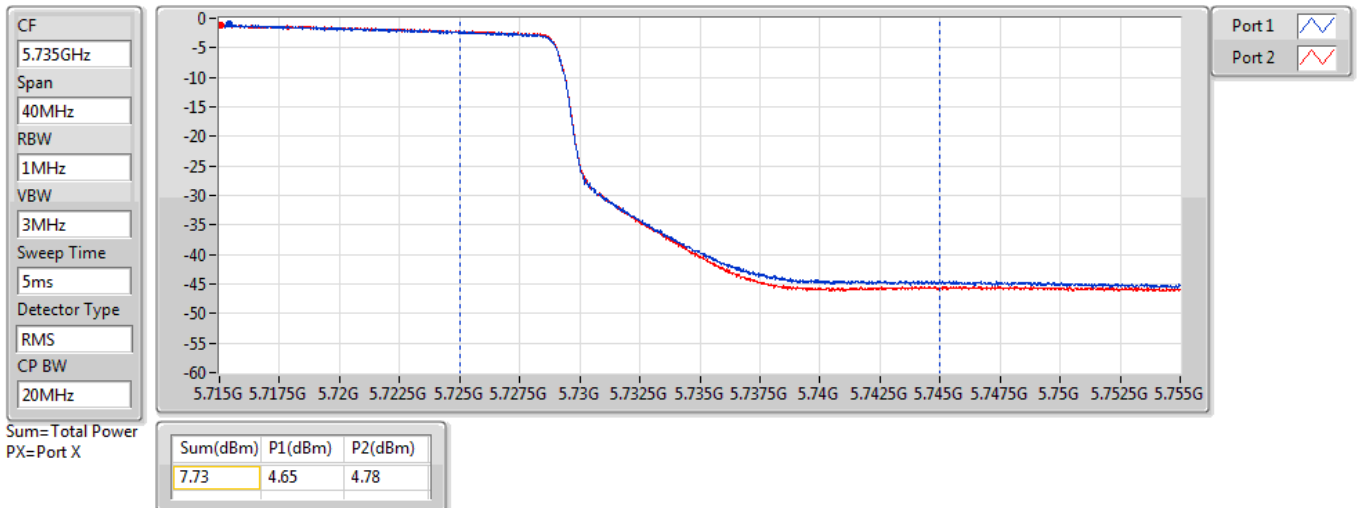
5690MHz Straddle 5.47-5.725GHz_TnomVnom



802.11ax HEW80_Nss2,(MCS0)_2TX

AV Power

5690MHz Straddle 5.725-5.85GHz_TnomVnom

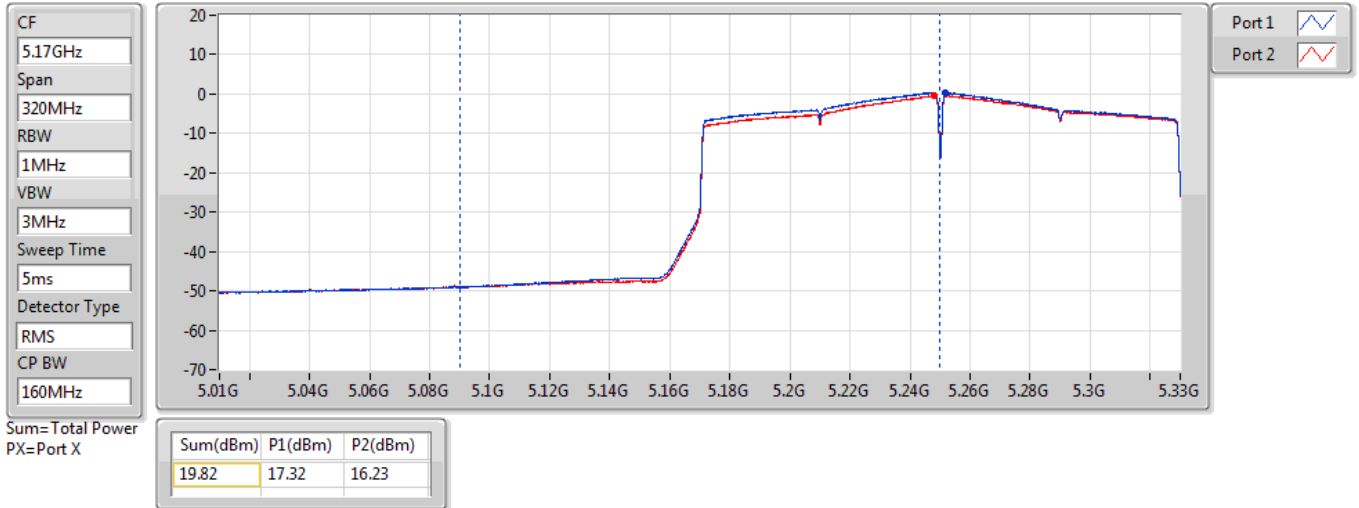




802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

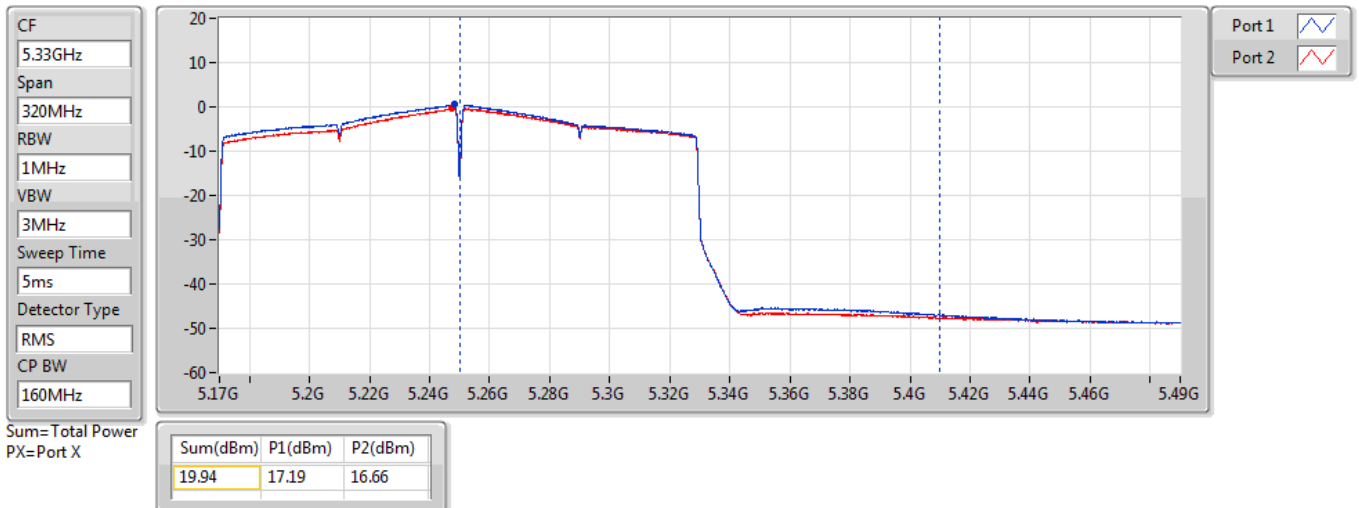
5250MHz Straddle 5.15-5.25GHz_TnomVnom



802.11ax HEW160_Nss2,(MCS0)_2TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TnomVnom





Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	14.59	22.47
802.11ax HEW20_Nss2,(MCS0)_2TX	13.58	18.45
802.11ax HEW40_Nss2,(MCS0)_2TX	11.14	16.01
802.11ax HEW80_Nss2,(MCS0)_2TX	6.27	11.14
802.11ax HEW160_Nss2,(MCS0)_2TX	3.05	7.92
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	7.77	16.69
802.11ax HEW20_Nss2,(MCS0)_2TX	10.90	16.82
802.11ax HEW40_Nss2,(MCS0)_2TX	9.72	15.64
802.11ax HEW80_Nss2,(MCS0)_2TX	6.41	12.33
802.11ax HEW160_Nss2,(MCS0)_2TX	3.02	8.94
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	9.77	16.79
802.11ax HEW20_Nss2,(MCS0)_2TX	10.83	14.91
802.11ax HEW40_Nss2,(MCS0)_2TX	9.28	13.36
802.11ax HEW80_Nss2,(MCS0)_2TX	7.01	11.09
802.11ax HEW160_Nss2,(MCS0)_2TX	1.97	6.05
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	12.83	21.05
802.11ax HEW20_Nss2,(MCS0)_2TX	12.28	17.49
802.11ax HEW40_Nss2,(MCS0)_2TX	9.67	14.88
802.11ax HEW80_Nss2,(MCS0)_2TX	5.29	10.50

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



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.88	11.78	11.34	14.42	15.12	22.30	23.00
5200MHz	Pass	7.88	11.98	11.08	14.48	15.12	22.36	23.00
5240MHz	Pass	7.88	12.13	11.05	14.59	15.12	22.47	23.00
5260MHz	Pass	8.92	5.51	3.96	7.77	8.08	16.69	17.00
5300MHz	Pass	8.92	4.83	4.43	7.60	8.08	16.52	17.00
5320MHz	Pass	8.92	4.62	4.53	7.56	8.08	16.48	17.00
5500MHz	Pass	7.02	7.16	5.89	9.49	9.98	16.51	17.00
5580MHz	Pass	7.02	6.46	6.83	9.46	9.98	16.48	17.00
5700MHz	Pass	7.02	6.70	6.30	9.35	9.98	16.37	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.02	7.05	6.81	9.77	9.98	16.79	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	8.22	2.65	2.19	5.41	27.78	13.63	36.00
5745MHz	Pass	8.22	9.43	9.64	12.48	27.78	20.70	36.00
5785MHz	Pass	8.22	9.16	9.65	12.30	27.78	20.52	36.00
5825MHz	Pass	8.22	9.87	9.80	12.83	27.78	21.05	36.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.87	9.64	9.00	12.20	17.00	17.07	23.00
5200MHz	Pass	4.87	10.91	9.91	13.37	17.00	18.24	23.00
5240MHz	Pass	4.87	11.17	10.21	13.58	17.00	18.45	23.00
5260MHz	Pass	5.92	8.62	7.22	10.89	11.00	16.81	17.00
5300MHz	Pass	5.92	8.22	7.69	10.90	11.00	16.82	17.00
5320MHz	Pass	5.92	7.87	7.87	10.77	11.00	16.69	17.00
5500MHz	Pass	4.08	8.35	7.23	10.74	11.00	14.82	17.00
5580MHz	Pass	4.08	7.70	8.31	10.83	11.00	14.91	17.00
5700MHz	Pass	4.08	8.36	7.55	10.78	11.00	14.86	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.08	8.16	7.41	10.73	11.00	14.81	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	5.21	3.86	3.05	6.48	30.00	11.69	36.00
5745MHz	Pass	5.21	8.96	9.16	11.90	30.00	17.11	36.00
5785MHz	Pass	5.21	8.66	9.00	11.79	30.00	17.00	36.00
5825MHz	Pass	5.21	9.56	9.10	12.28	30.00	17.49	36.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.87	5.48	5.05	8.21	17.00	13.08	23.00
5230MHz	Pass	4.87	8.67	7.73	11.14	17.00	16.01	23.00
5270MHz	Pass	5.92	7.22	6.14	9.60	11.00	15.52	17.00
5310MHz	Pass	5.92	6.73	6.86	9.72	11.00	15.64	17.00
5510MHz	Pass	4.08	5.65	4.48	7.90	11.00	11.98	17.00
5590MHz	Pass	4.08	6.03	6.55	9.28	11.00	13.36	17.00



Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5670MHz	Pass	4.08	5.61	4.94	8.16	11.00	12.24	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.08	6.31	5.73	9.01	11.00	13.09	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	5.21	1.17	0.62	3.68	30.00	8.89	36.00
5755MHz	Pass	5.21	6.46	6.85	9.67	30.00	14.88	36.00
5795MHz	Pass	5.21	6.66	6.64	9.56	30.00	14.77	36.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.87	3.87	2.71	6.27	17.00	11.14	23.00
5290MHz	Pass	5.92	3.83	3.17	6.41	11.00	12.33	17.00
5530MHz	Pass	4.08	2.30	1.71	5.00	11.00	9.08	17.00
5610MHz	Pass	4.08	3.78	4.22	7.01	11.00	11.09	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.08	3.82	3.54	6.69	11.00	10.77	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	5.21	-3.63	-3.55	-0.74	30.00	4.47	36.00
5775MHz	Pass	5.21	2.41	2.25	5.29	30.00	10.50	36.00
802.11ax HEW160_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.87	0.40	-0.29	3.05	17.00	7.92	23.00
5250MHz Straddle 5.25-5.35GHz	Pass	5.92	0.31	-0.31	3.02	11.00	8.94	17.00
5570MHz	Pass	4.08	-1.25	-0.67	1.97	11.00	6.05	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

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

Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
6	5.04	5.51	2.84	5.22
12	4.69	6.29	5.04	5.20
Directional Gain (dBi)	7.88	8.92	7.02	8.22

For 802.11ax

$$\text{Directional Gain} = 10 \log [(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$$

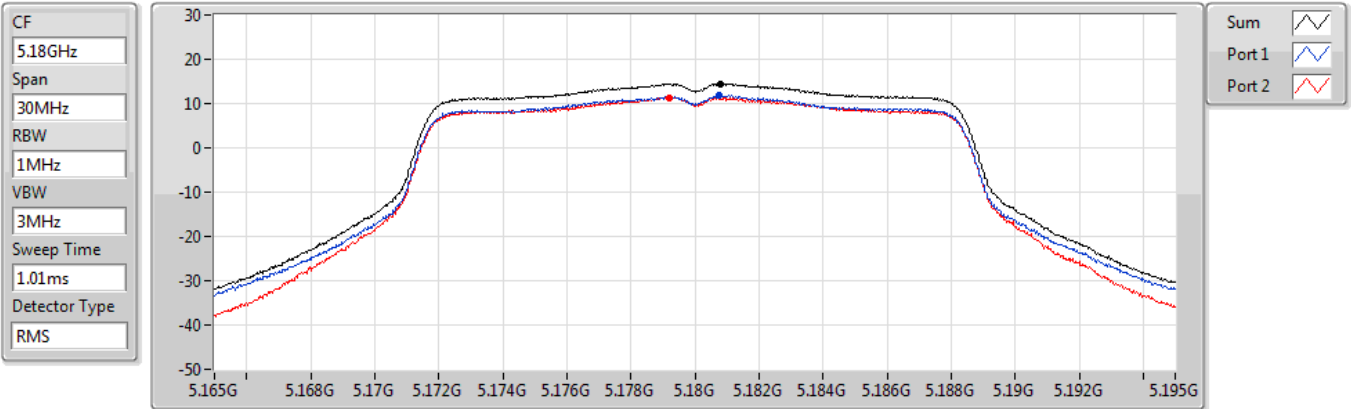
Ant. No.	Operating Frequencies (MHz) / Antenna Gain (dBi)			
	5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
6	5.04	5.51	2.84	5.22
12	4.69	6.29	5.04	5.20
Directional Gain (dBi)	4.87	5.92	4.08	5.21



802.11a_Nss1,(6Mbps)_2TX

PSD

5180MHz

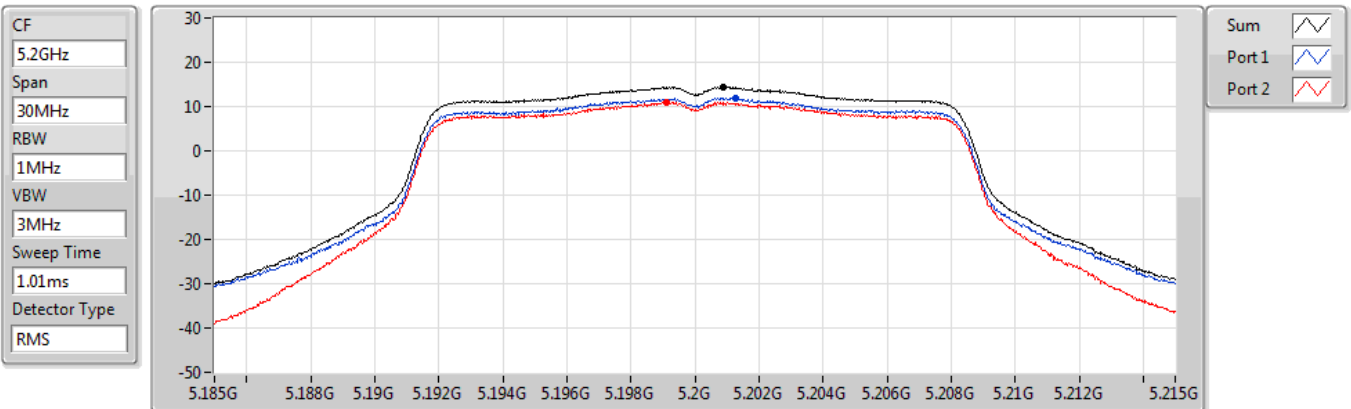


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.42	14.42	11.78	11.34

802.11a_Nss1,(6Mbps)_2TX

PSD

5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.48	14.48	11.98	11.08

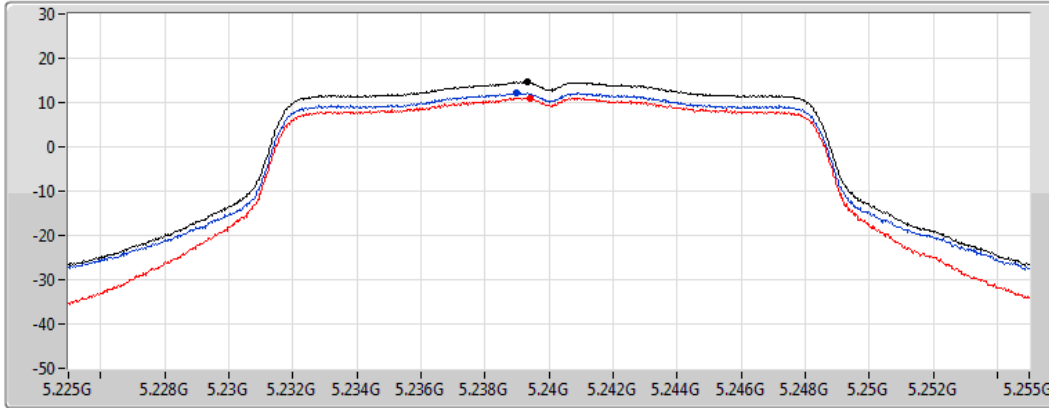


802.11a_Nss1,(6Mbps)_2TX

PSD

5240MHz

CF
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum

Port 1

Port 2

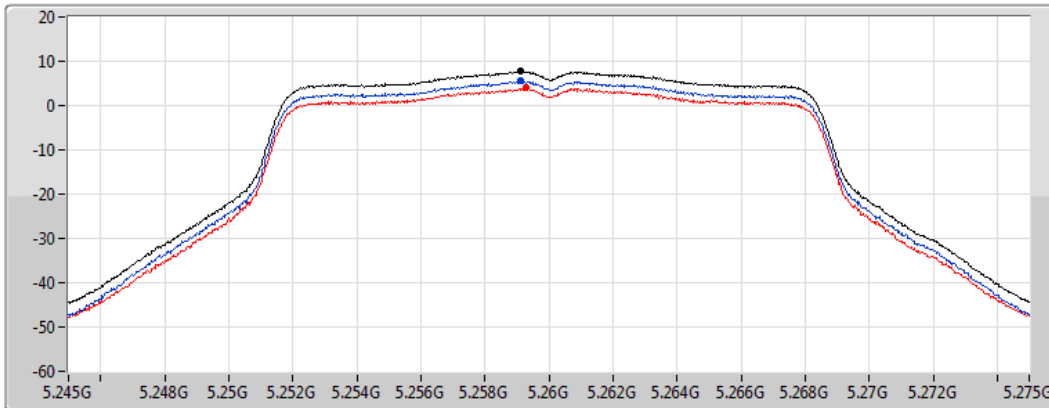
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.59	14.59	12.13	11.05

802.11a_Nss1,(6Mbps)_2TX

PSD

5260MHz

CF
5.26GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.77	7.77	5.51	3.96

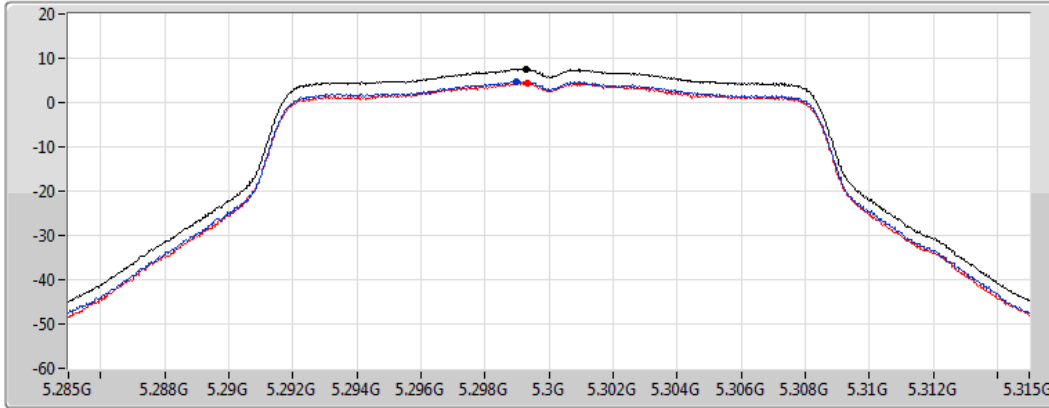


802.11a_Nss1,(6Mbps)_2TX

PSD

5300MHz

CF
5.3GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

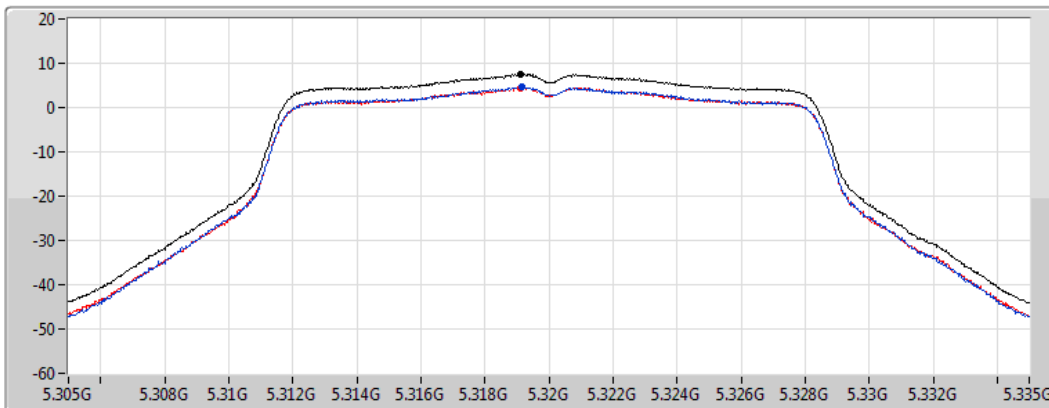
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.60	7.60	4.83	4.43

802.11a_Nss1,(6Mbps)_2TX

PSD

5320MHz

CF
5.32GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.56	7.56	4.62	4.53

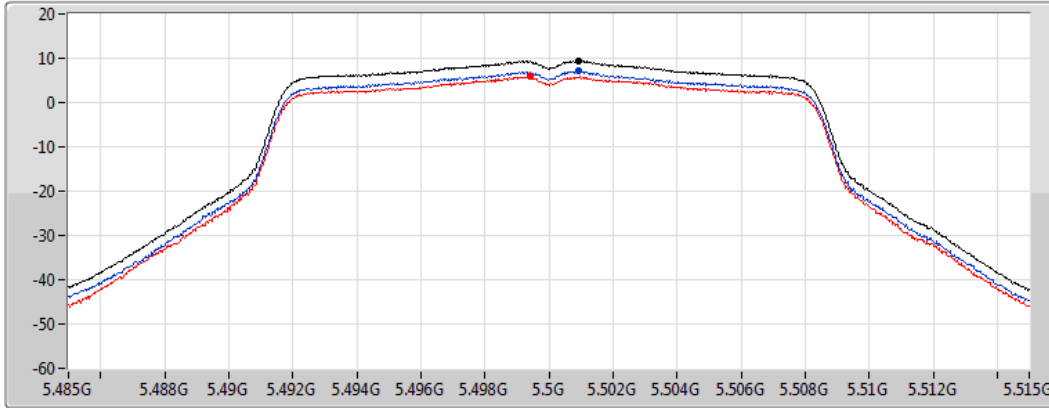


802.11a_Nss1,(6Mbps)_2TX

PSD

5500MHz

CF
5.5GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

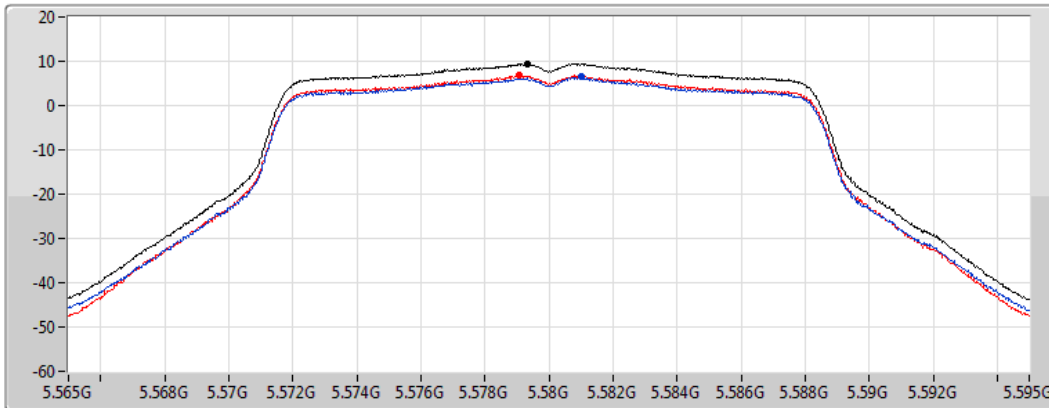
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.49	9.49	7.16	5.89

802.11a_Nss1,(6Mbps)_2TX

PSD

5580MHz

CF
5.58GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.46	9.46	6.46	6.83

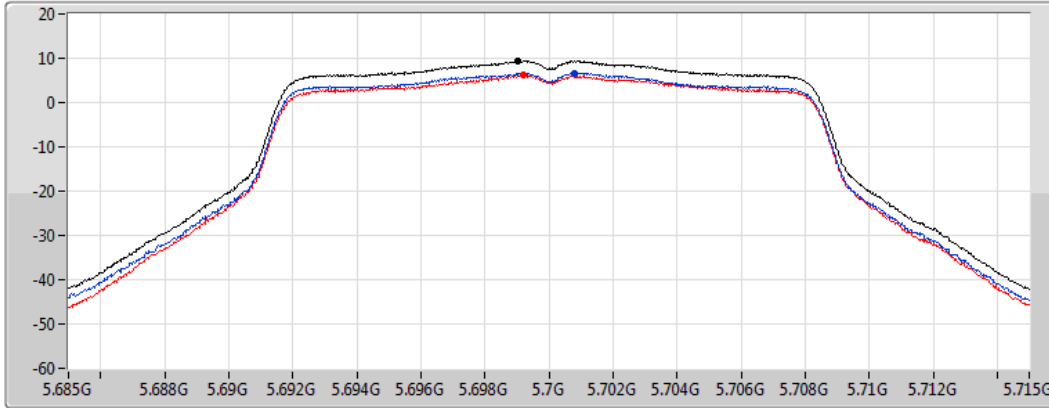


802.11a_Nss1,(6Mbps)_2TX

PSD

5700MHz

CF
5.7GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

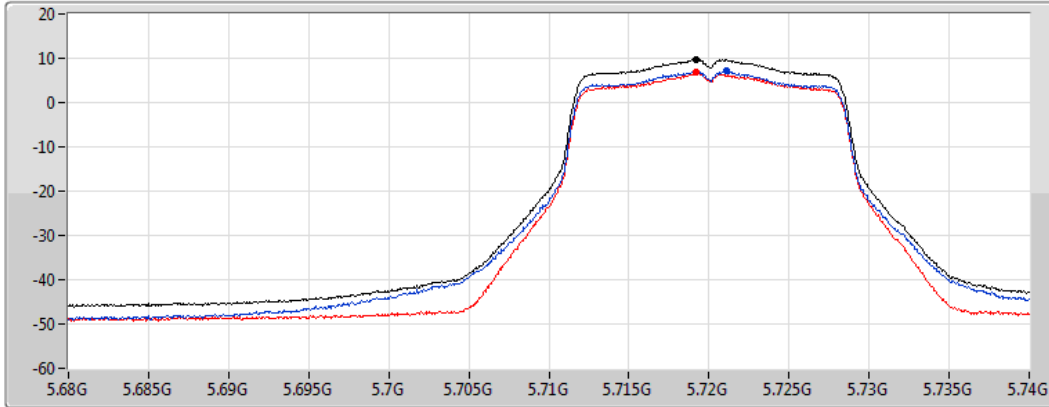
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.35	9.35	6.70	6.30

802.11a_Nss1,(6Mbps)_2TX

PSD

5720MHz Straddle 5.47-5.725GHz

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.77	9.77	7.05	6.81

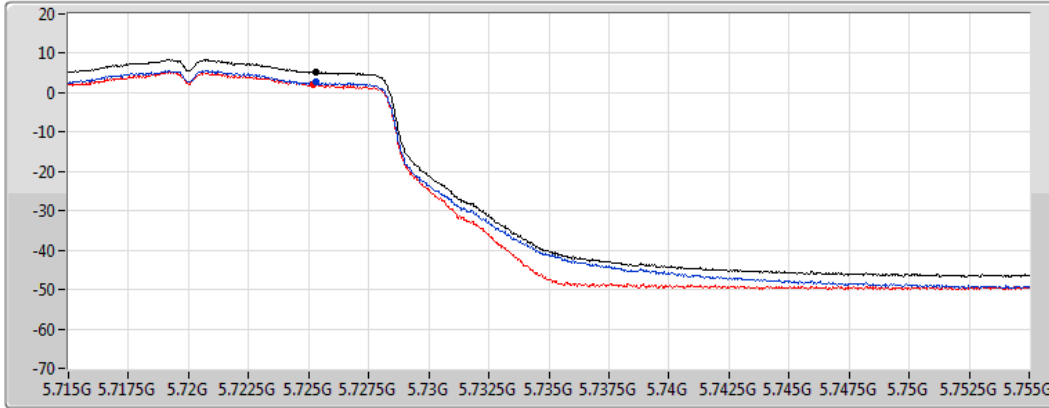


802.11a_Nss1,(6Mbps)_2TX

PSD

5720MHz Straddle 5.725-5.85GHz

CF
5.735GHz
Span
40MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

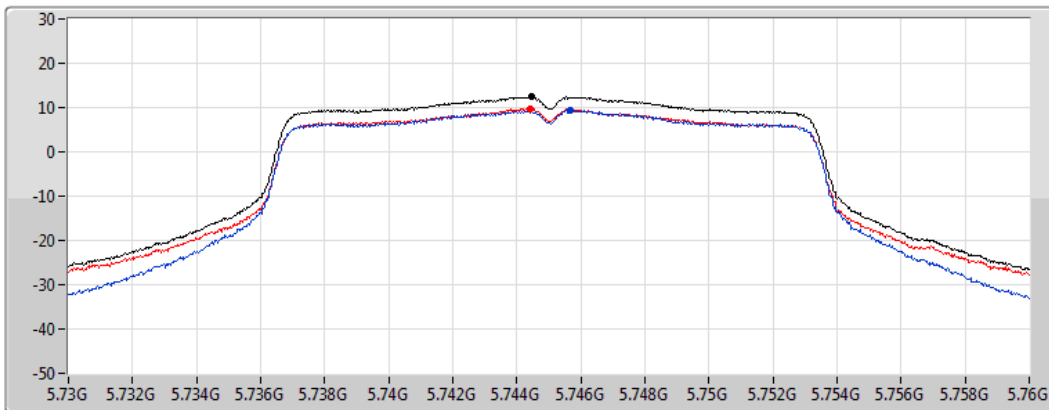
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.41	5.41	2.65	2.19

802.11a_Nss1,(6Mbps)_2TX

PSD

5745MHz

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.48	12.48	9.43	9.64

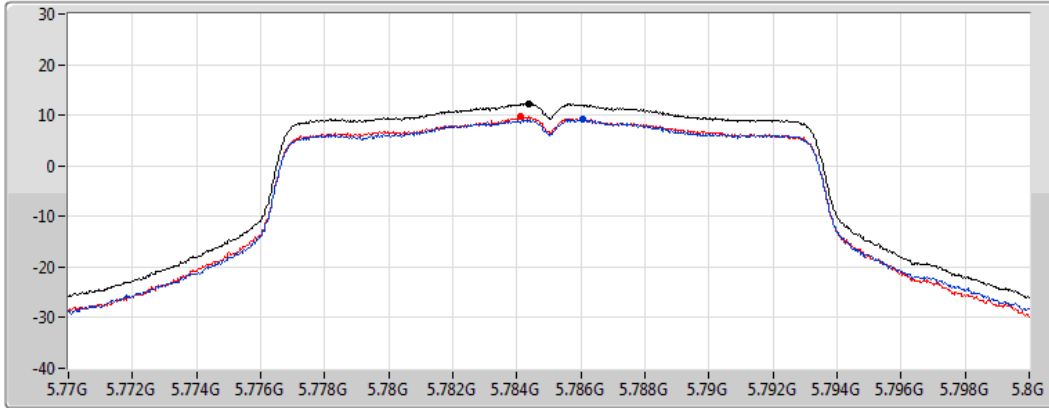


802.11a_Nss1,(6Mbps)_2TX

PSD

5785MHz

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

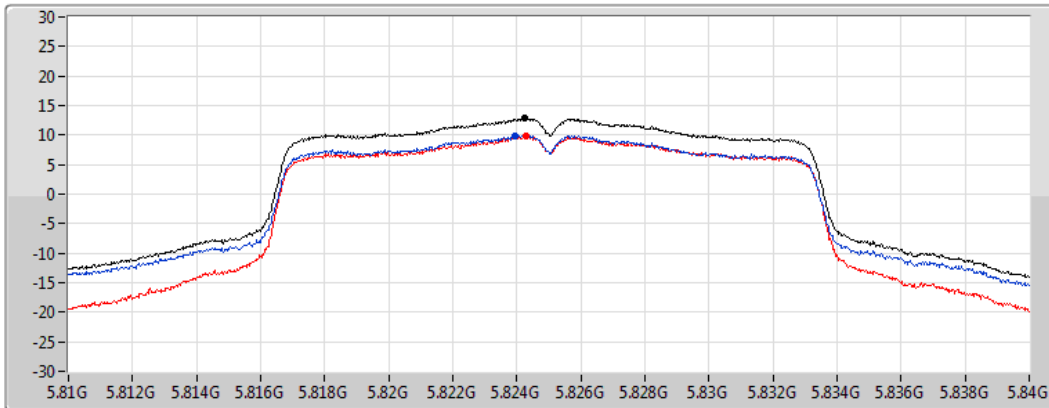
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.30	12.30	9.16	9.65

802.11a_Nss1,(6Mbps)_2TX

PSD

5825MHz

CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.83	12.83	9.87	9.80

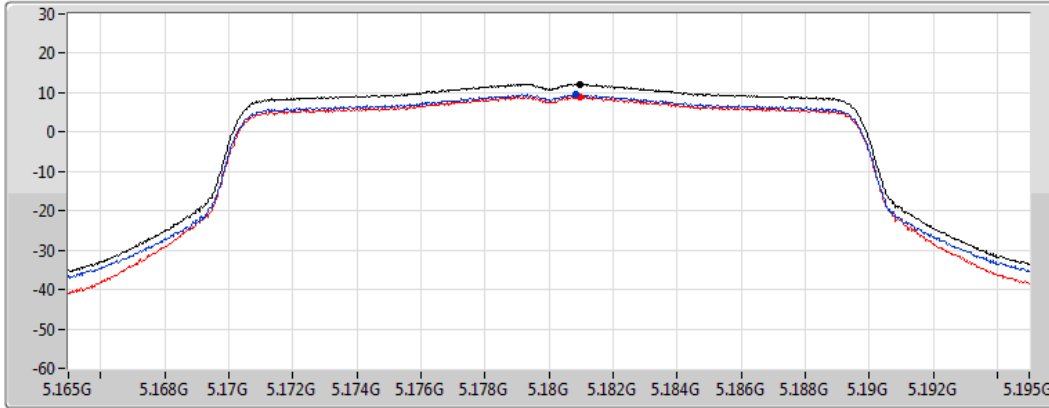


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5180MHz

CF
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

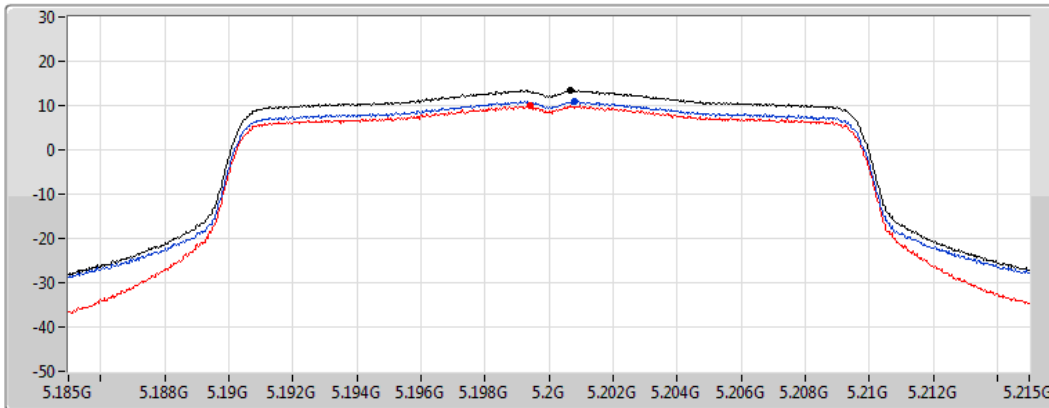
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.20	12.20	9.64	9.00

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5200MHz

CF
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.37	13.37	10.91	9.91

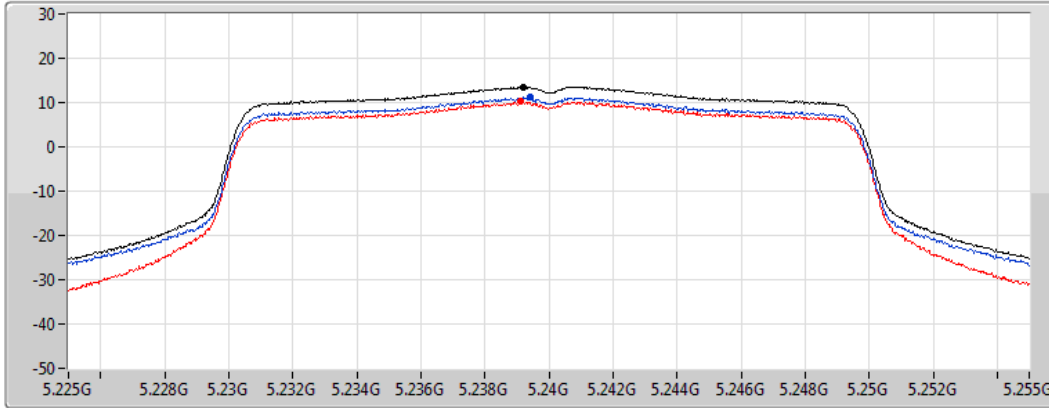


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5240MHz

CF
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

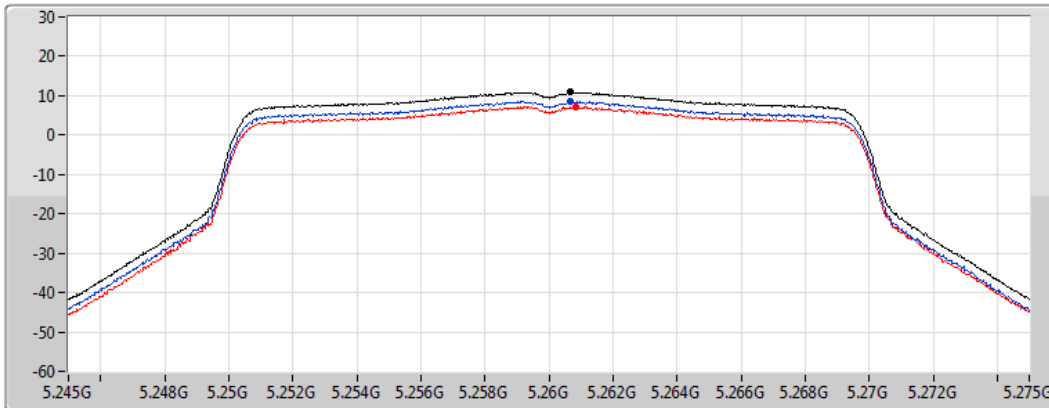
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.58	13.58	11.17	10.21

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5260MHz

CF
5.26GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.89	10.89	8.62	7.22

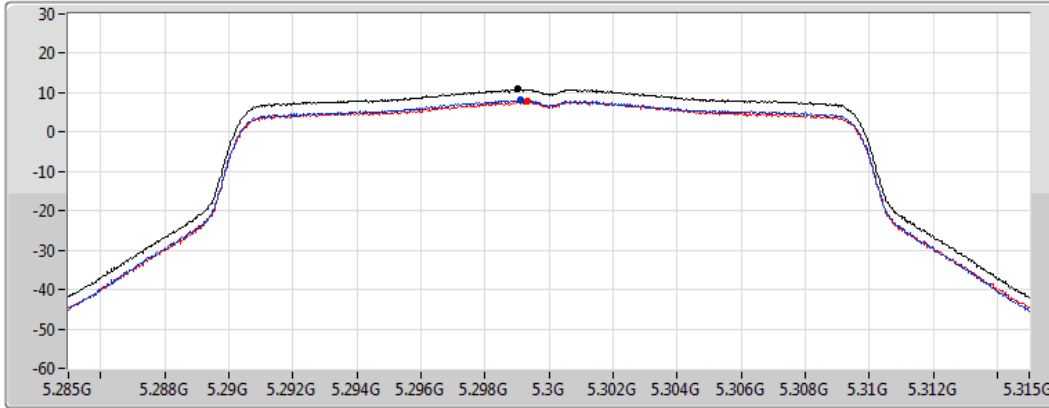


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5300MHz

CF
5.3GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

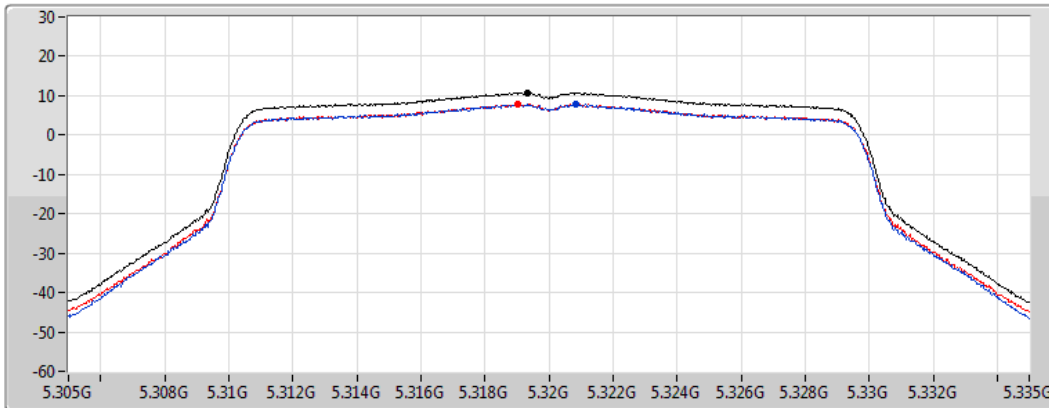
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.90	10.90	8.22	7.69

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5320MHz

CF
5.32GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.77	10.77	7.87	7.87

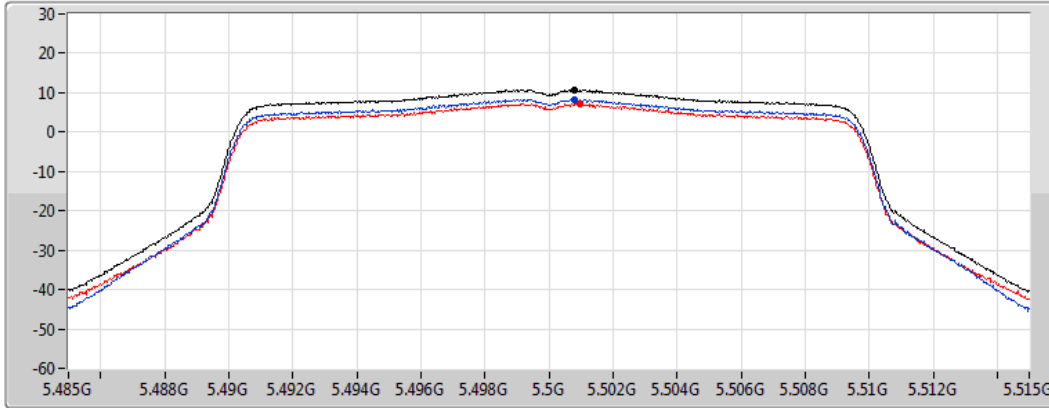


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5500MHz

CF
5.5GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

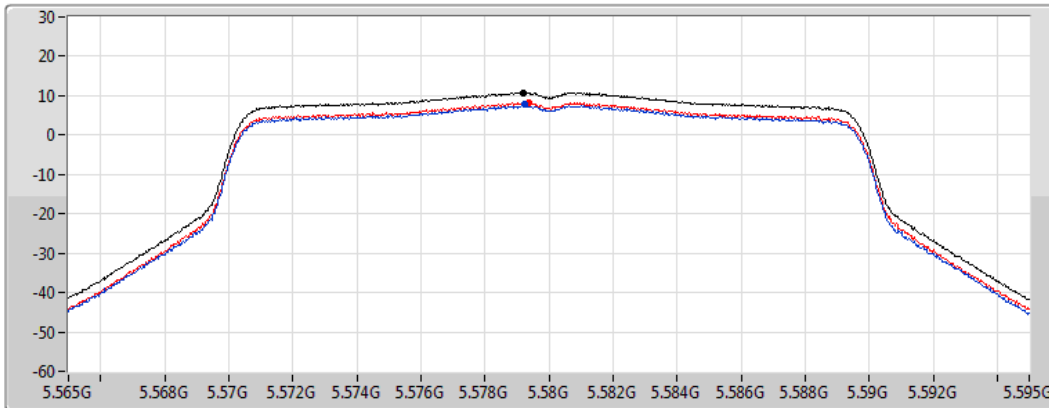
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.74	10.74	8.35	7.23

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5580MHz

CF
5.58GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.83	10.83	7.70	8.31

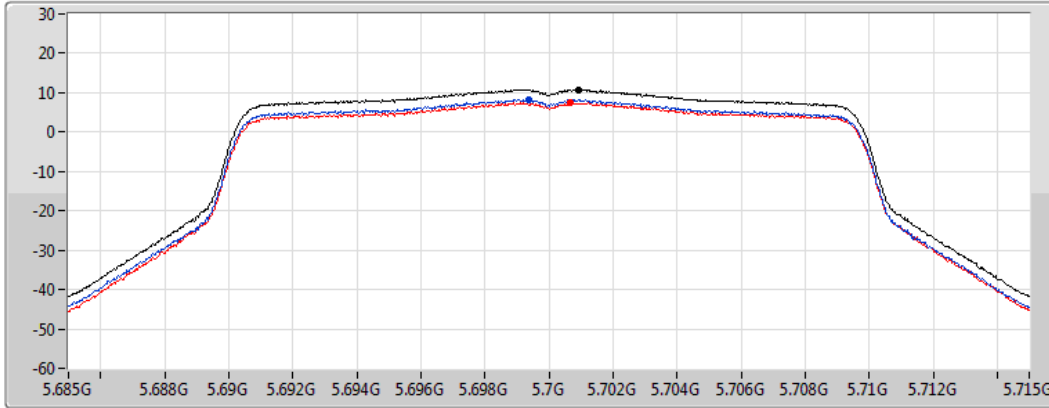


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5700MHz

CF
5.7GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

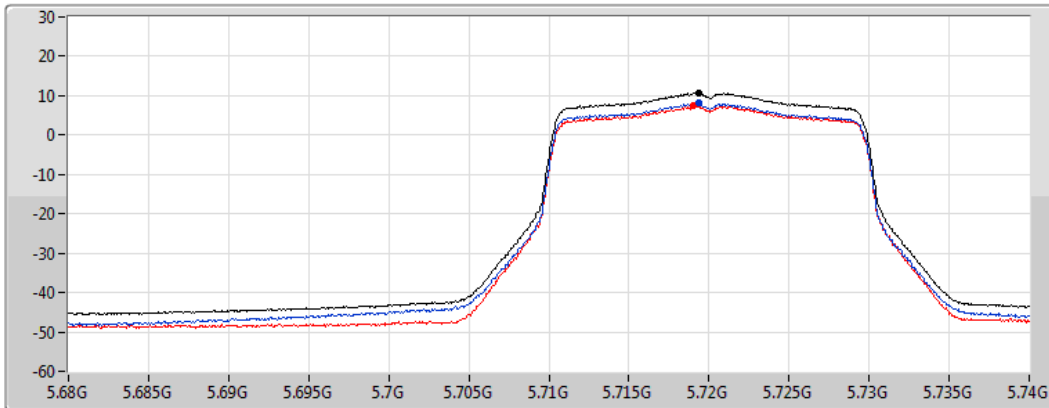
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.78	10.78	8.36	7.55

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5720MHz Straddle 5.47-5.725GHz

CF
5.71GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.73	10.73	8.16	7.41

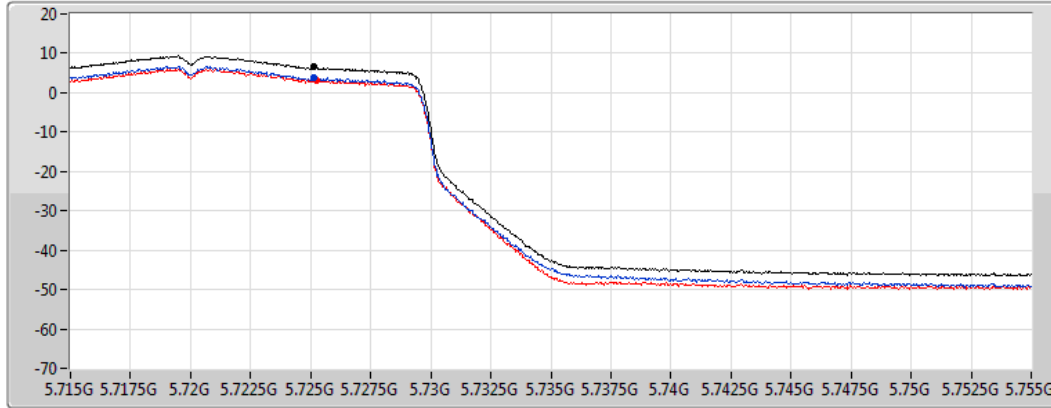


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5720MHz Straddle 5.725-5.85GHz

CF
5.735GHz
Span
40MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

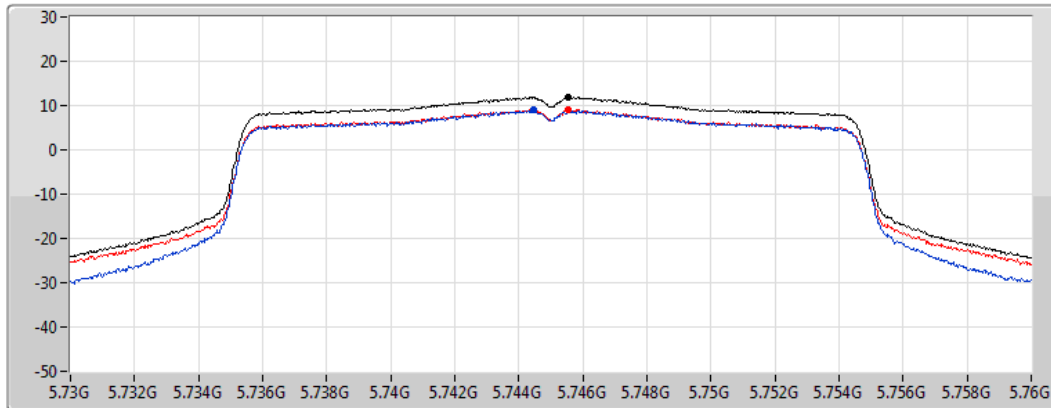
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.48	6.48	3.86	3.05

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5745MHz

CF
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.90	11.90	8.96	9.16

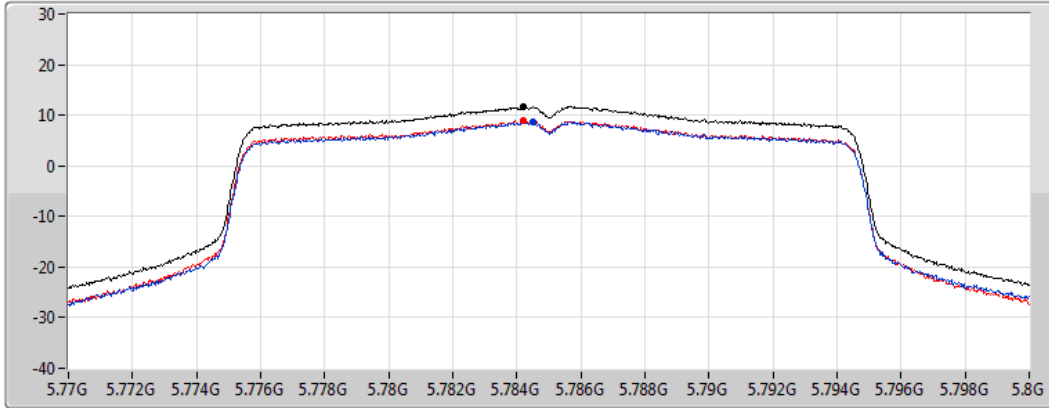


802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5785MHz

CF
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

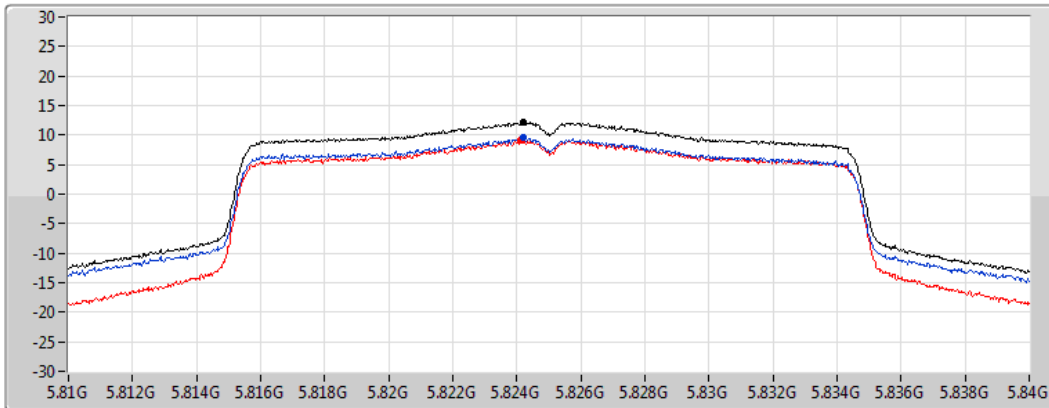
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.79	11.79	8.66	9.00

802.11ax HEW20_Nss2,(MCS0)_2TX

PSD

5825MHz

CF
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.28	12.28	9.56	9.10

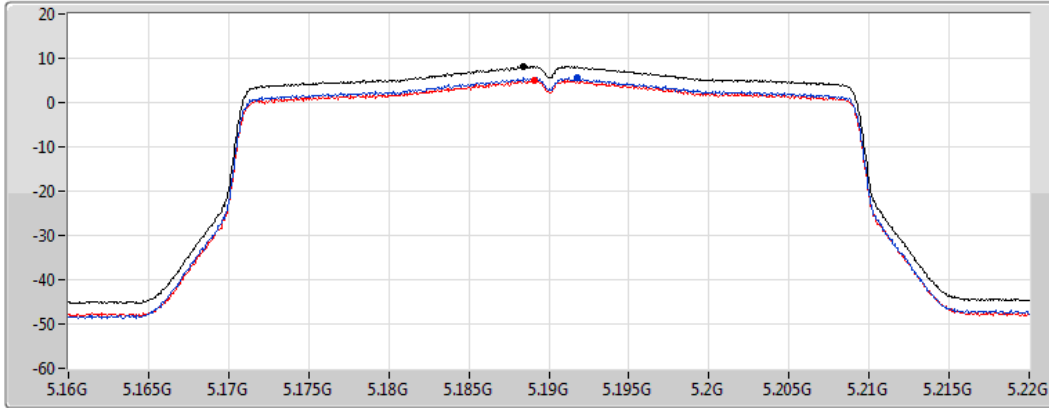


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5190MHz

CF
5.19GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

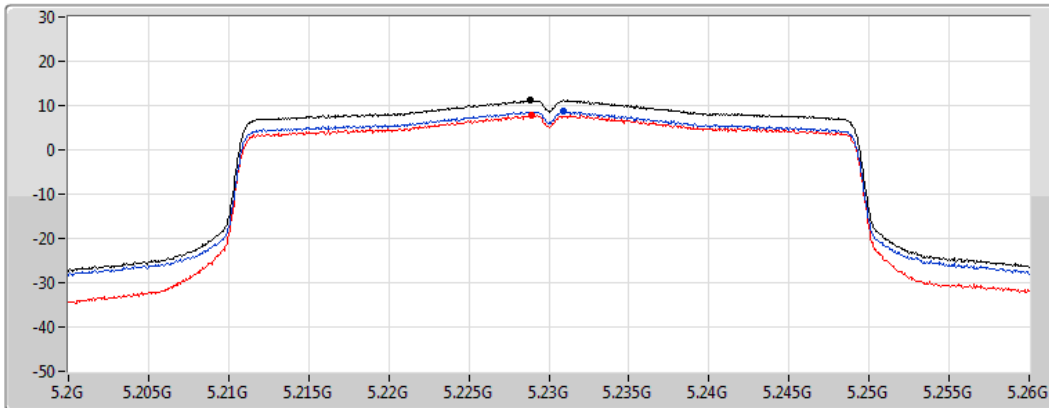
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.21	8.21	5.48	5.05

802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5230MHz

CF
5.23GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.14	11.14	8.67	7.73

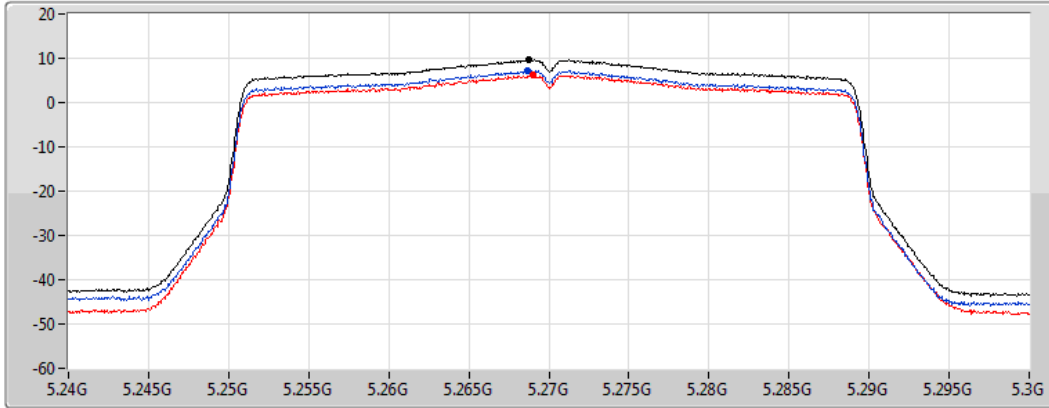


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5270MHz

CF
5.27GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

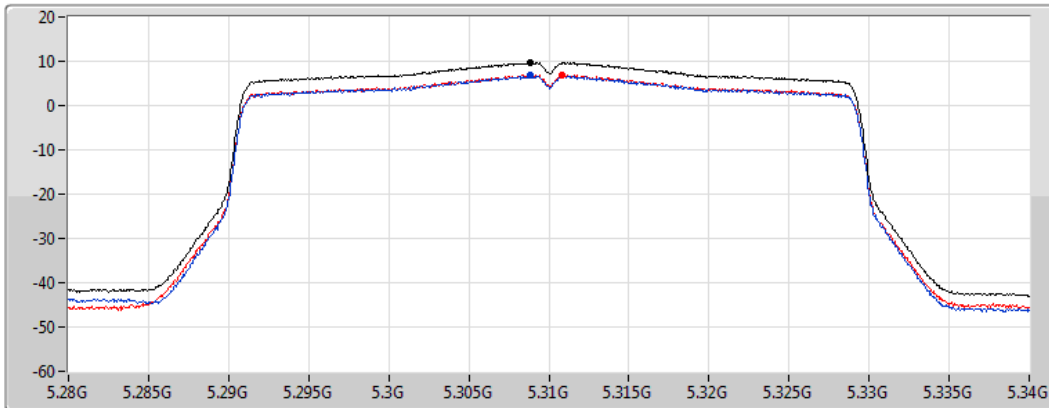
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.60	9.60	7.22	6.14

802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5310MHz

CF
5.31GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.72	9.72	6.73	6.86

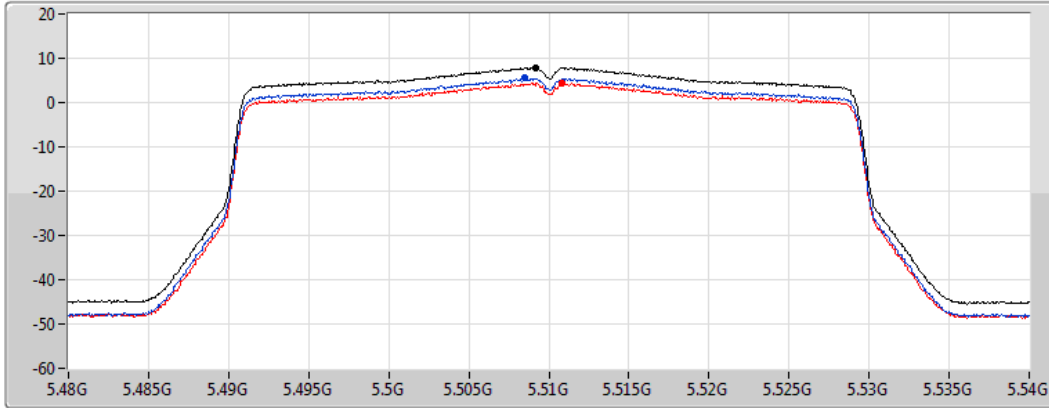


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5510MHz

CF
5.51GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

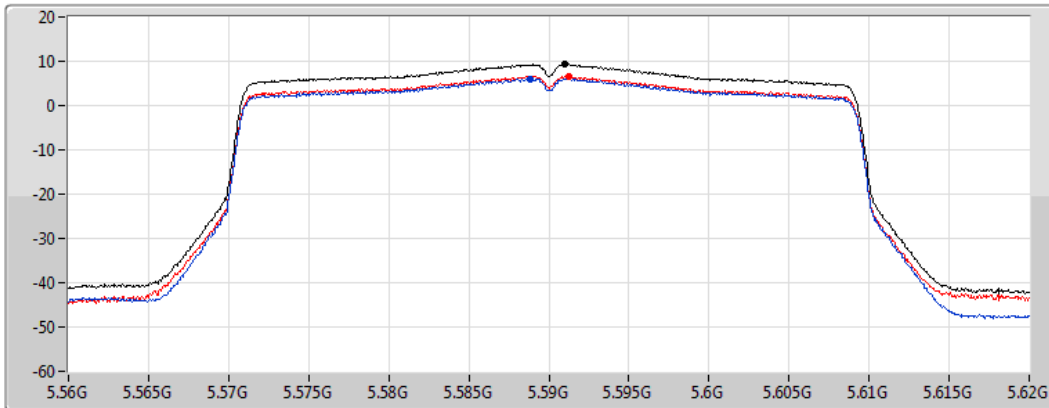
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.90	7.90	5.65	4.48

802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5590MHz

CF
5.59GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.28	9.28	6.03	6.55

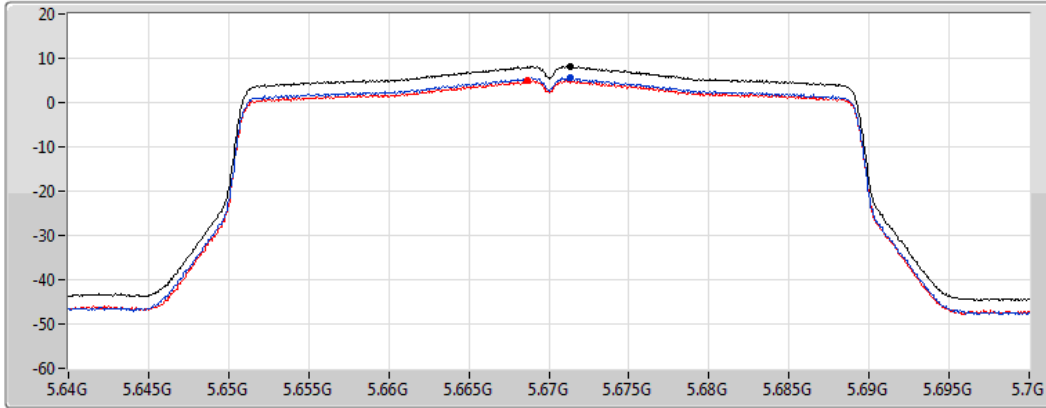


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5670MHz

CF
5.67GHz
Span
60MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

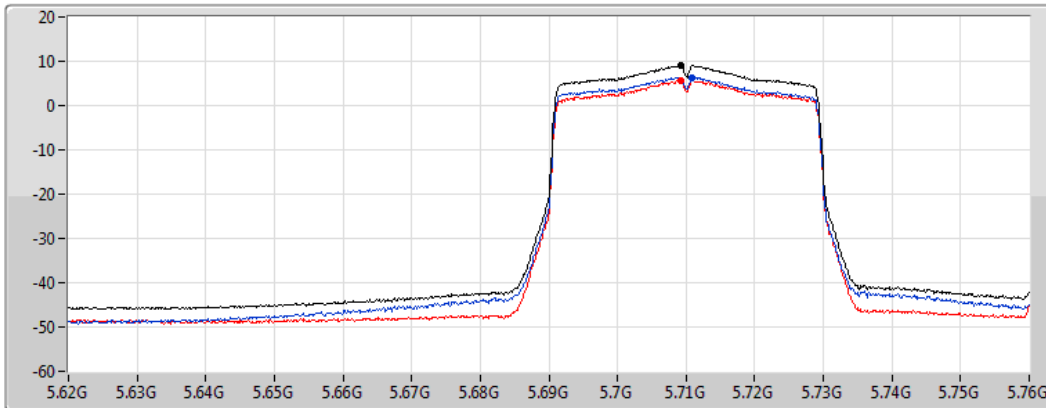
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	5.61	4.94

802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5710MHz Straddle 5.47-5.725GHz

CF
5.69GHz
Span
140MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

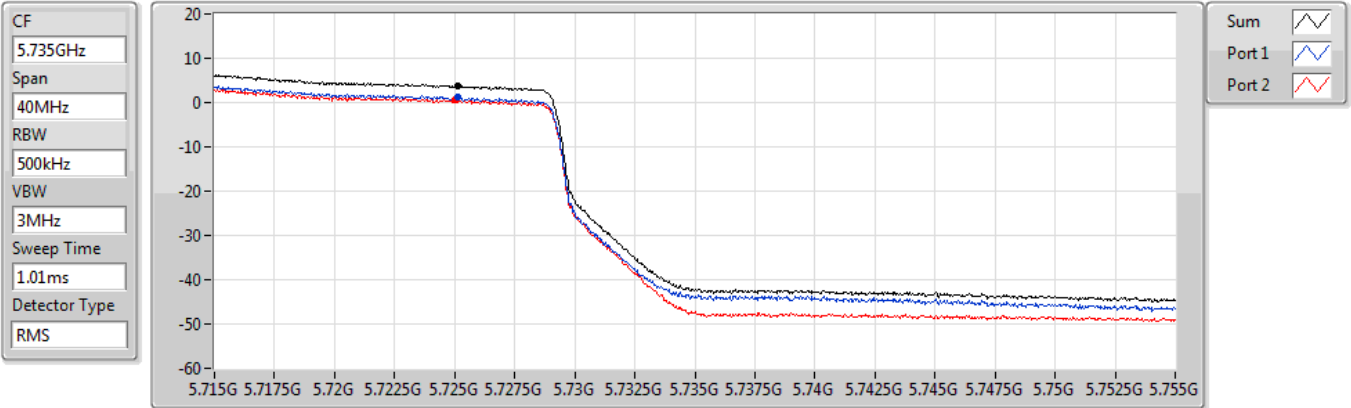
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.01	9.01	6.31	5.73



802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5710MHz Straddle 5.725-5.85GHz

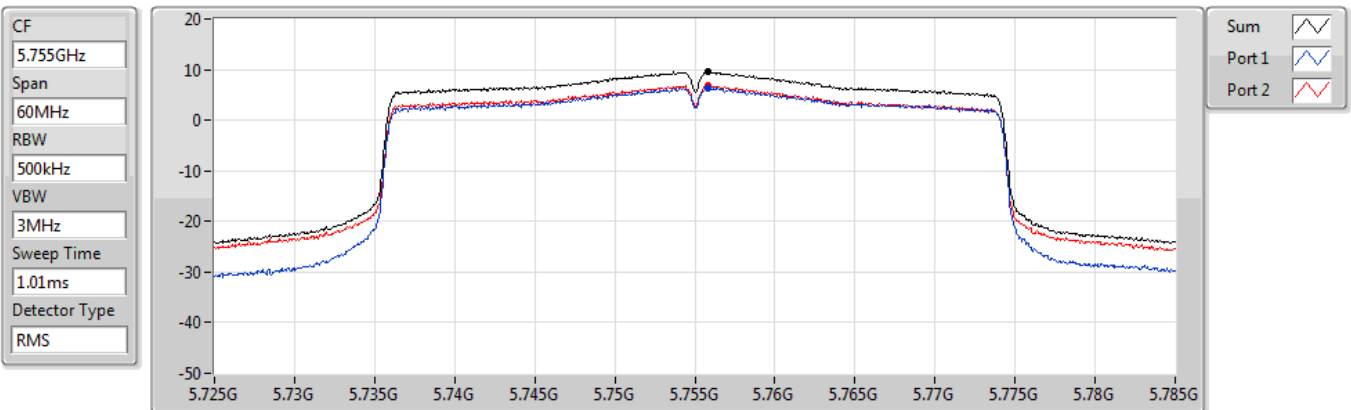


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.68	3.68	1.17	0.62

802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.67	9.67	6.46	6.85

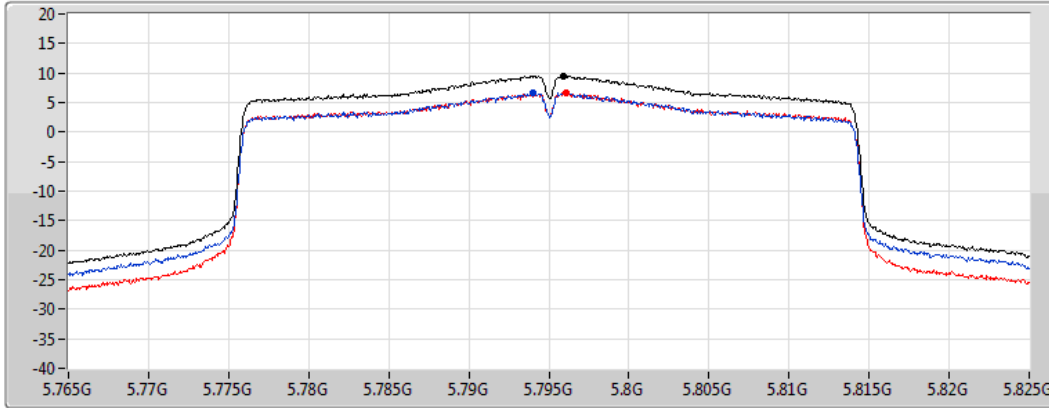


802.11ax HEW40_Nss2,(MCS0)_2TX

PSD

5795MHz

CF
5.795GHz
Span
60MHz
RBW
500kHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

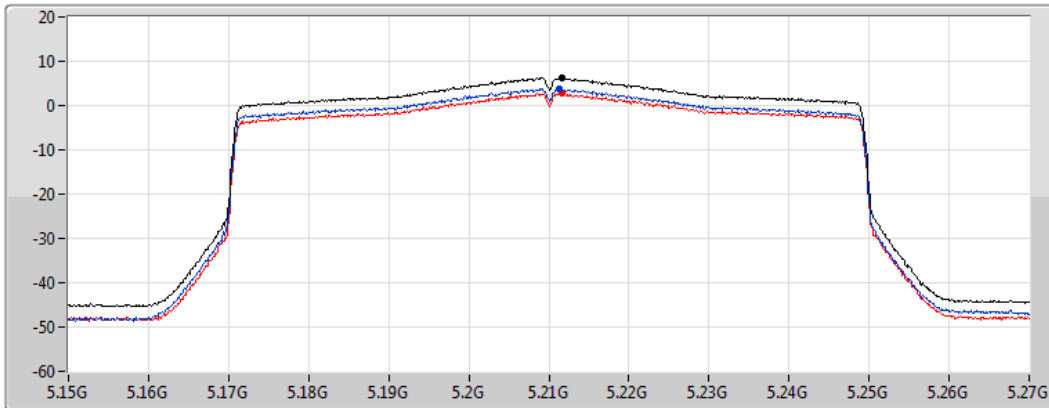
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.56	9.56	6.66	6.64

802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5210MHz

CF
5.21GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.27	6.27	3.87	2.71

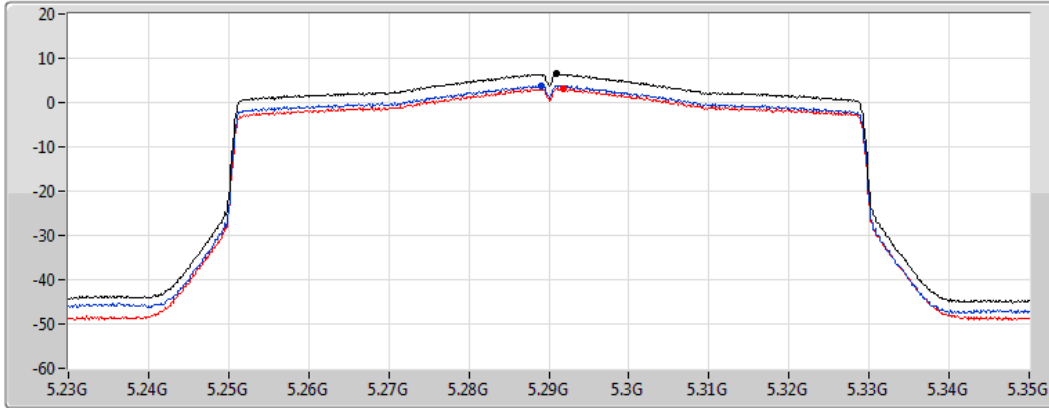


802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5290MHz

CF
5.29GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

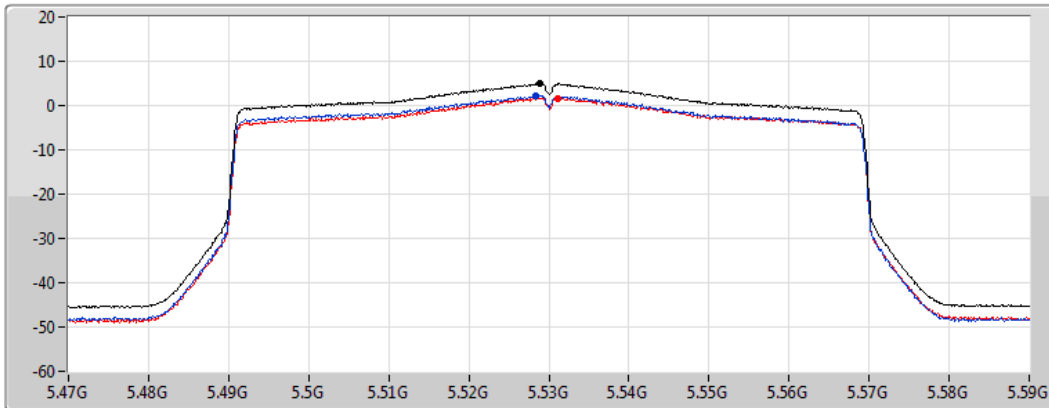
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.41	6.41	3.83	3.17

802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5530MHz

CF
5.53GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.00	5.00	2.30	1.71

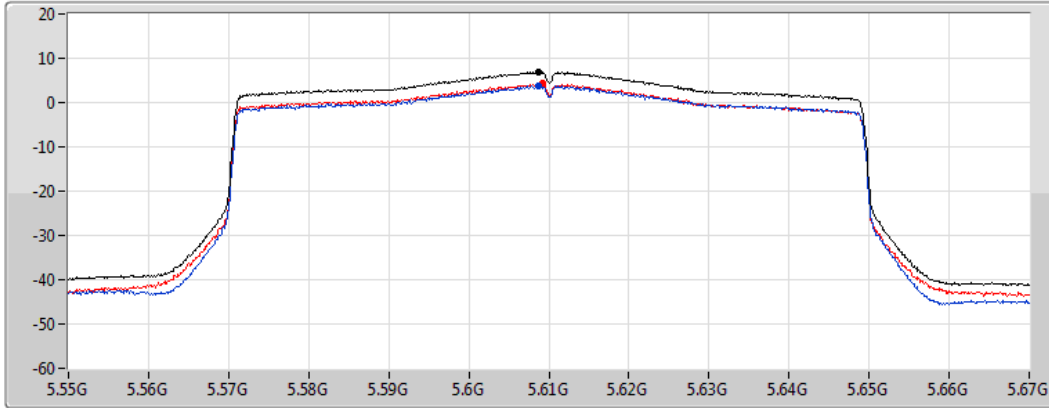


802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5610MHz

CF
5.61GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

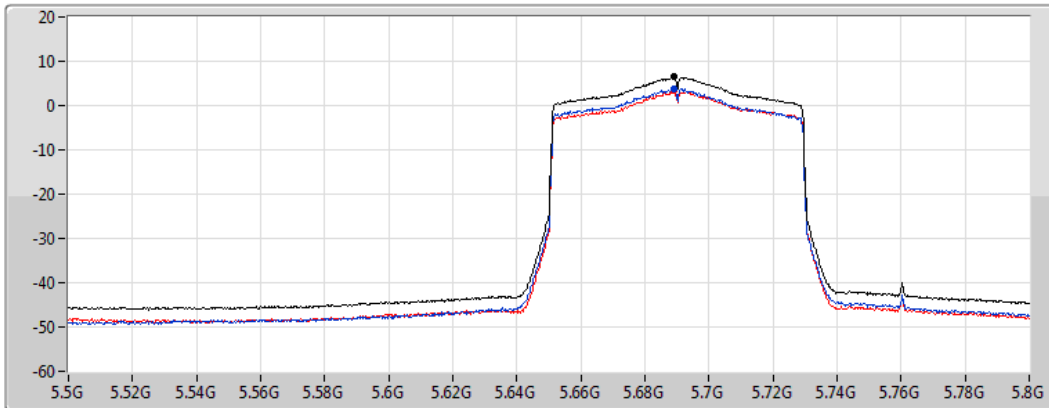
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.01	7.01	3.78	4.22

802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5690MHz Straddle 5.47-5.725GHz

CF
5.65GHz
Span
300MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

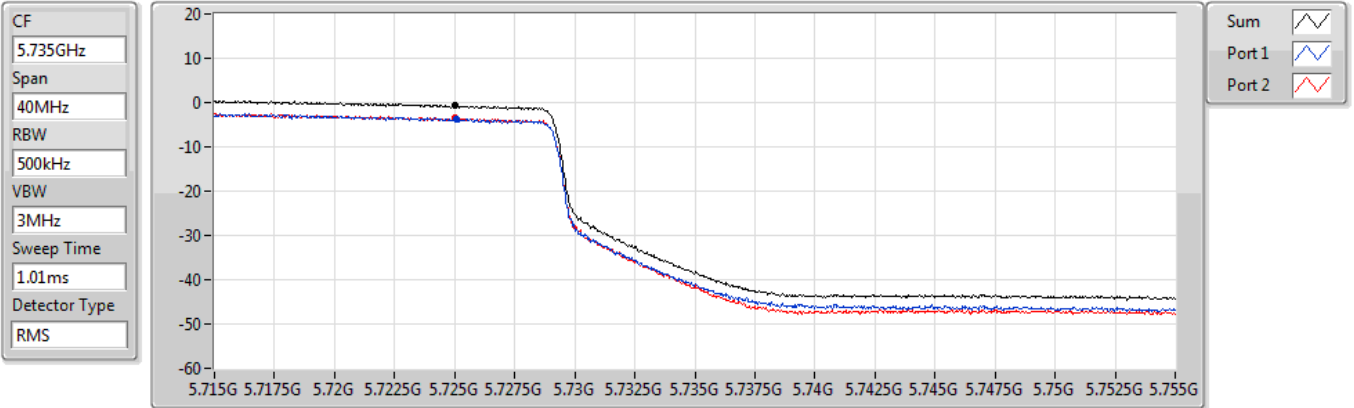
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.69	6.69	3.82	3.54



802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5690MHz Straddle 5.725-5.85GHz

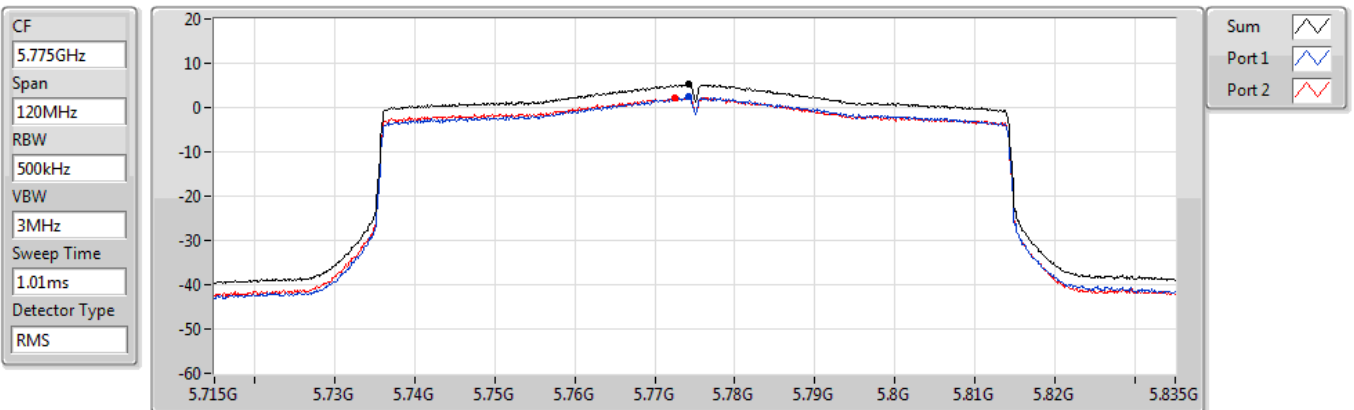


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.74	-0.74	-3.63	-3.55

802.11ax HEW80_Nss2,(MCS0)_2TX

PSD

5775MHz



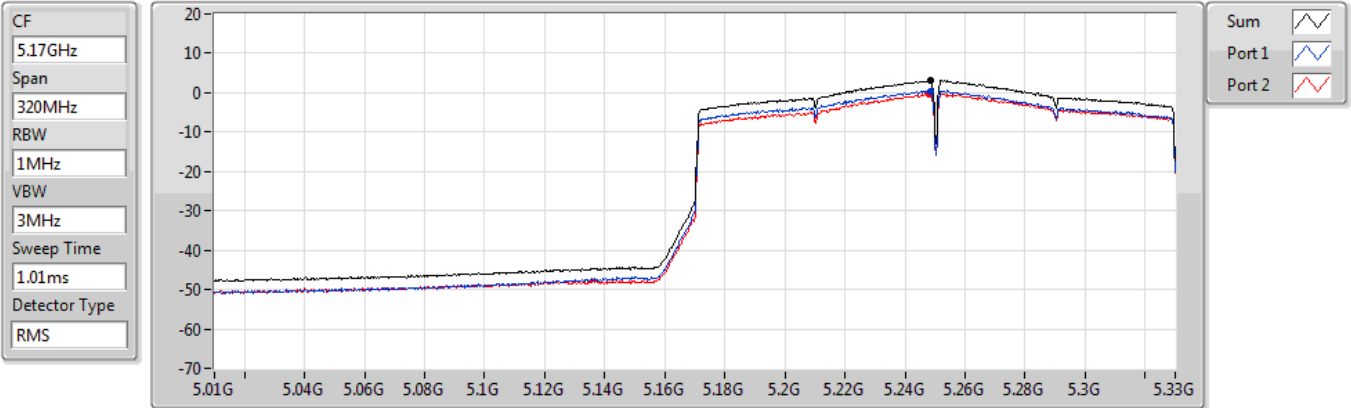
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.29	5.29	2.41	2.25



802.11ax HEW160_Nss2,(MCS0)_2TX

PSD

5250MHz Straddle 5.15-5.25GHz

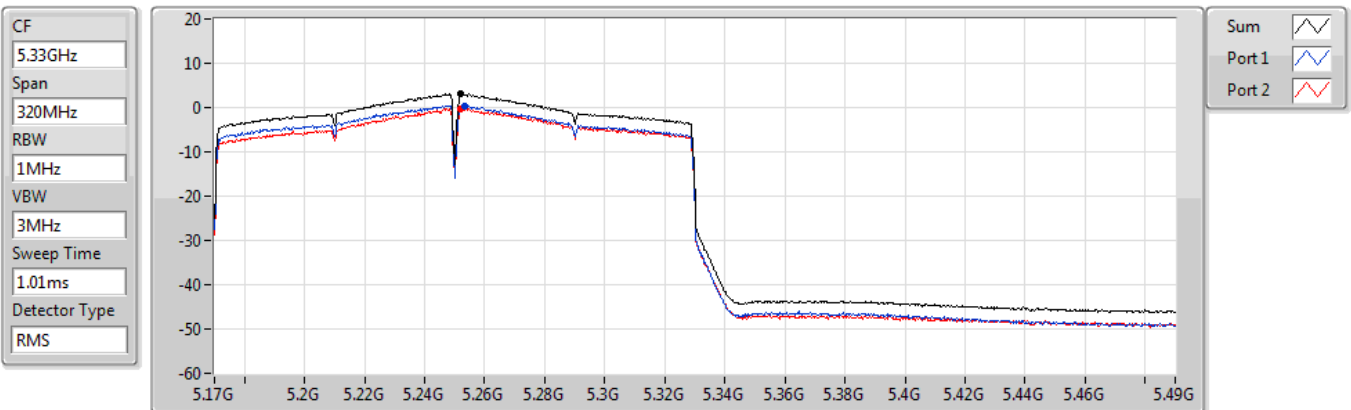


Sum	PD	Port 1	Port 2
(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)
3.05	3.05	0.40	-0.29

802.11ax HEW160_Nss2,(MCS0)_2TX

PSD

5250MHz Straddle 5.25-5.35GHz



Sum	PD	Port 1	Port 2
(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)
3.02	3.02	0.31	-0.31

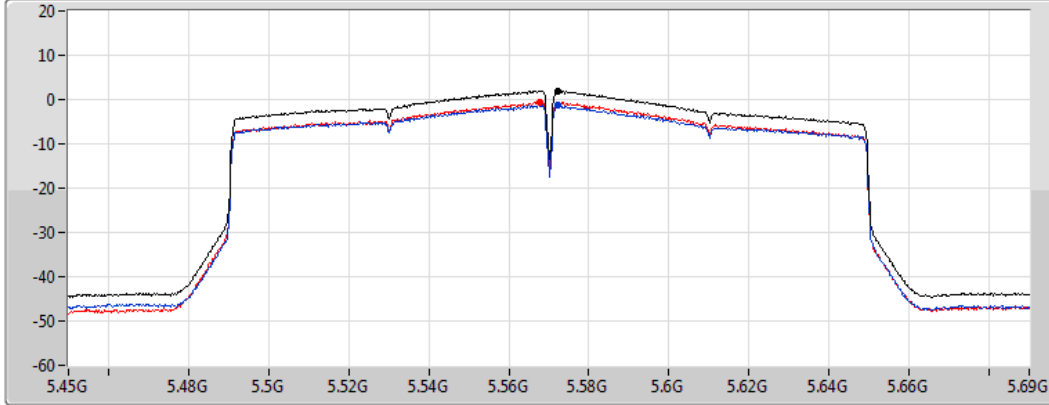


802.11ax HEW160_Nss2,(MCS0)_2TX

PSD

5570MHz

CF
5.57GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1.01ms
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.97	1.97	-1.25	-0.67

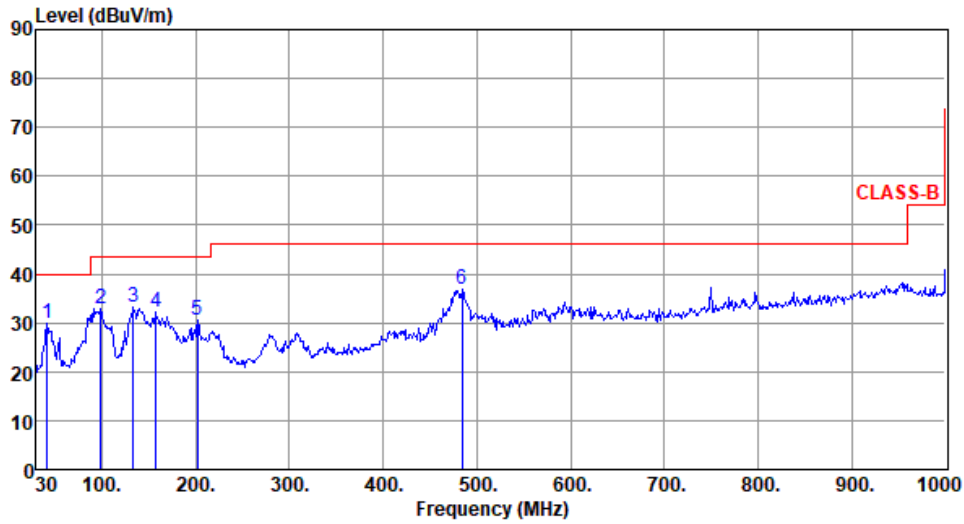


Adapter mode

Unwanted Emissions (Below 1GHz)

Modulation	ax HE40	Test Freq. (MHz)	5230
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):23 Humidity(%):68



	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	41.64	29.79	40.00	-10.21	38.32	-8.53	Peak	---	---
2	98.87	32.82	43.50	-10.68	46.17	-13.35	Peak	---	---
3	133.79	33.24	43.50	-10.26	42.47	-9.23	Peak	---	---
4	158.04	32.33	43.50	-11.17	40.83	-8.50	Peak	---	---
5	201.69	30.44	43.50	-13.06	41.98	-11.54	Peak	---	---
6	483.96	36.86	46.00	-9.14	39.64	-2.78	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

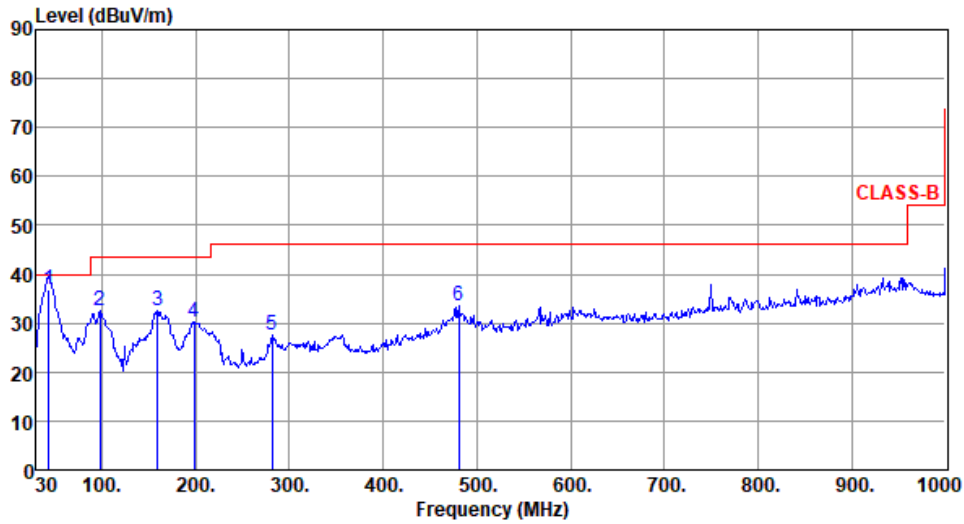
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	ax HE40	Test Freq. (MHz)	5230
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):23 Humidity(%):68



	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	43.58	36.88	40.00	-3.12	45.37	-8.49	QP	100	193
2	97.90	32.47	43.50	-11.03	45.93	-13.46	Peak	---	---
3	159.01	32.65	43.50	-10.85	41.04	-8.39	Peak	---	---
4	198.78	30.29	43.50	-13.21	41.73	-11.44	Peak	---	---
5	281.23	27.58	46.00	-18.42	35.84	-8.26	Peak	---	---
6	481.05	33.56	46.00	-12.44	36.36	-2.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

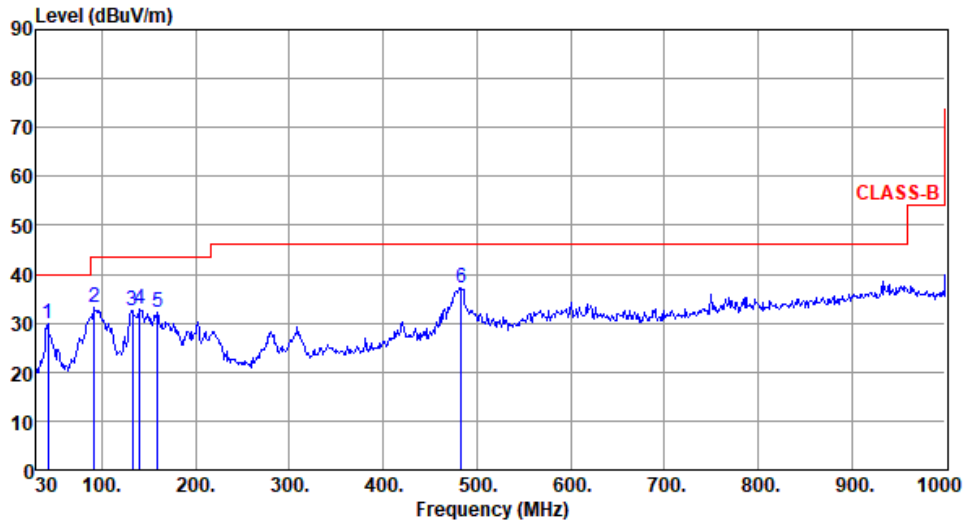
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	ax HE20	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 23 Humidity(%): 68



	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	42.61	29.81	40.00	-10.19	38.21	-8.40	Peak	---	---
2	92.08	33.11	43.50	-10.39	47.49	-14.38	Peak	---	---
3	132.82	32.61	43.50	-10.89	41.99	-9.38	Peak	---	---
4	140.58	32.89	43.50	-10.61	41.86	-8.97	Peak	---	---
5	159.01	32.12	43.50	-11.38	40.51	-8.39	Peak	---	---
6	482.99	37.21	46.00	-8.79	39.99	-2.78	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

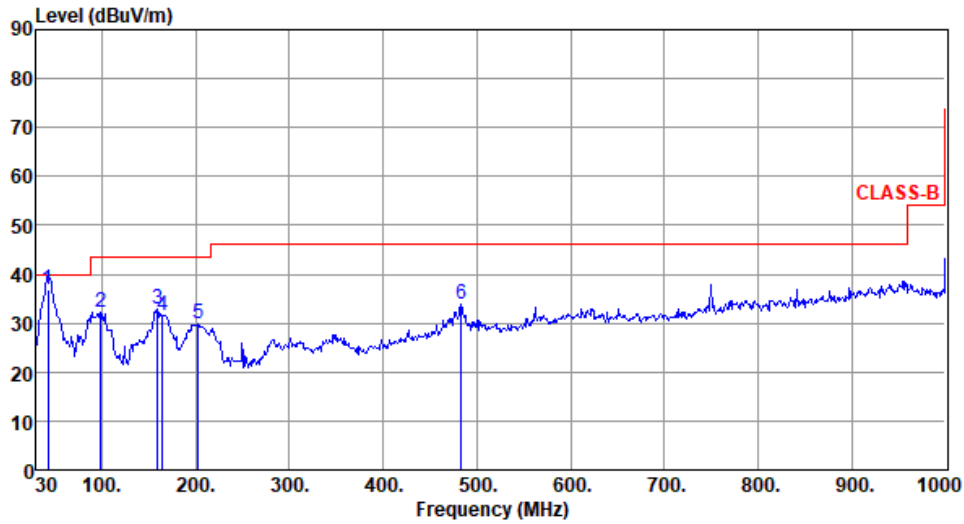
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Modulation	ax HE20	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):23 Humidity(%):68



	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	42.61	36.93	40.00	-3.07	45.33	-8.40	QP	100	194
2	98.87	32.23	43.50	-11.27	45.58	-13.35	Peak	---	---
3	159.01	32.77	43.50	-10.73	41.16	-8.39	Peak	---	---
4	164.83	31.55	43.50	-11.95	40.11	-8.56	Peak	---	---
5	202.66	29.92	43.50	-13.58	41.47	-11.55	Peak	---	---
6	482.99	33.79	46.00	-12.21	36.57	-2.78	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

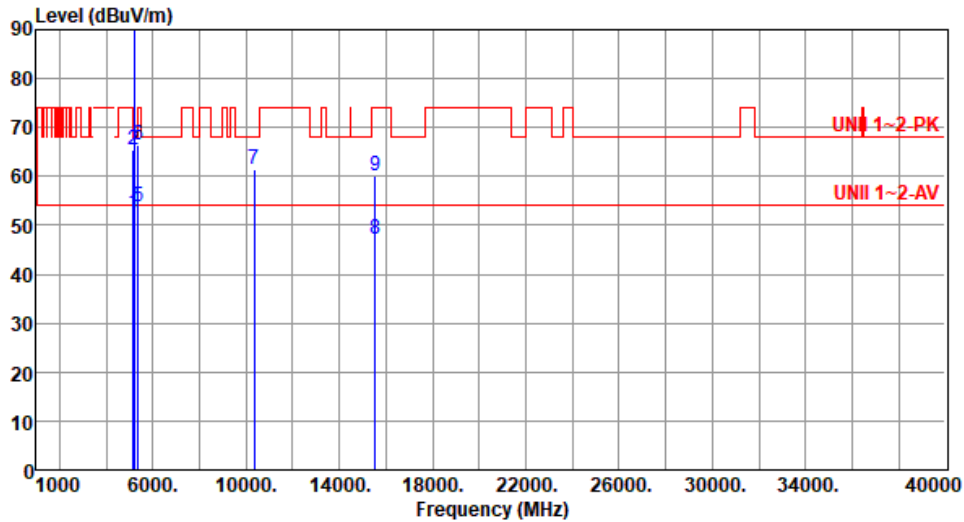
Modulation	11a	Test Freq. (MHz)	5180						
Polarization	Horizontal								
Test By :Akun Chung Temperature(°C):25 Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	53.28	54.00	-0.72	46.97	6.31	Average	215	1
2	5150.00	67.72	74.00	-6.28	61.41	6.31	Peak	215	1
3 *	5180.00	112.67			106.46	6.21	Average	215	1
4 *	5180.00	122.97			116.76	6.21	Peak	215	1
5	5370.00	47.63	54.00	-6.37	41.70	5.93	Average	205	3
6	5370.00	59.71	74.00	-14.29	53.78	5.93	Peak	205	3
7	10360.00	61.34	68.20	-6.86	46.89	14.45	Peak	175	4
8	15540.00	47.15	54.00	-6.85	30.75	16.40	Average	100	3
9	15540.00	60.05	74.00	-13.95	43.65	16.40	Peak	100	3

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



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

Test By : Akun Chung Temperature(°C): 25 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	5150.00	52.61	54.00	-1.39	46.30	6.31	Average	216	3
2	5150.00	65.29	74.00	-8.71	58.98	6.31	Peak	216	3
3 *	5180.00	112.26			106.05	6.21	Average	216	3
4 *	5180.00	122.45			116.24	6.21	Peak	216	3
5	5370.00	53.86	54.00	-0.14	47.93	5.93	Average	213	1
6	5370.00	66.48	74.00	-7.52	60.55	5.93	Peak	213	1
7	10360.00	61.32	68.20	-6.88	46.87	14.45	Peak	135	353
8	15540.00	47.25	54.00	-6.75	30.85	16.40	Average	100	2
9	15540.00	60.17	74.00	-13.83	43.77	16.40	Peak	100	2

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

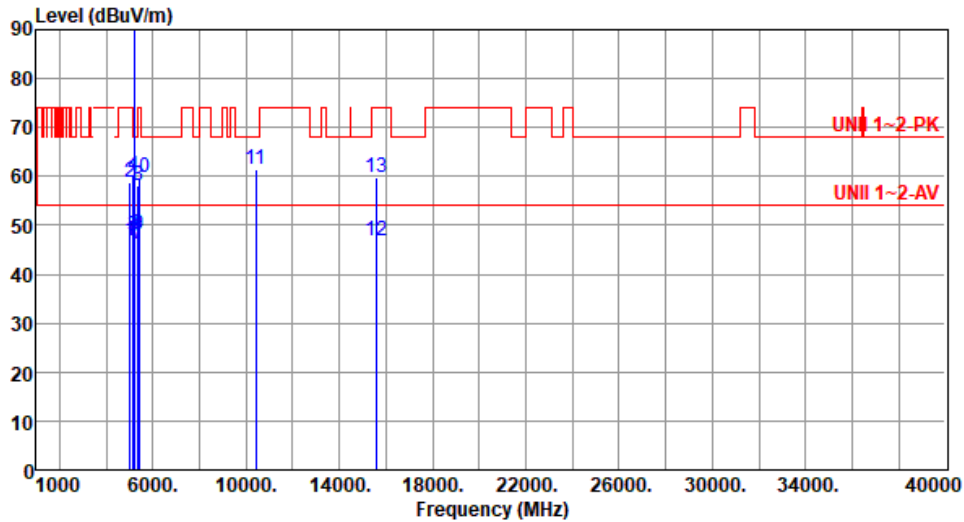
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5010.00	46.67	54.00	-7.33	40.66	6.01	Average	209	2
2	5010.00	58.64	74.00	-15.36	52.63	6.01	Peak	209	2
3	5150.00	47.97	54.00	-6.03	41.66	6.31	Average	209	2
4	5150.00	59.96	74.00	-14.04	53.65	6.31	Peak	209	2
5 *	5200.00	112.26			106.11	6.15	Average	209	2
6 *	5200.00	122.85			116.70	6.15	Peak	209	2
7	5350.00	46.05	54.00	-7.95	40.33	5.72	Average	209	2
8	5350.00	58.17	74.00	-15.83	52.45	5.72	Peak	209	2
9	5390.00	48.12	54.00	-5.88	41.98	6.14	Average	189	358
10	5390.00	59.79	74.00	-14.21	53.65	6.14	Peak	189	358
11	10400.00	61.43	68.20	-6.77	46.95	14.48	Peak	177	5
12	15600.00	46.78	54.00	-7.22	30.84	15.94	Average	100	4
13	15600.00	59.79	74.00	-14.21	43.85	15.94	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

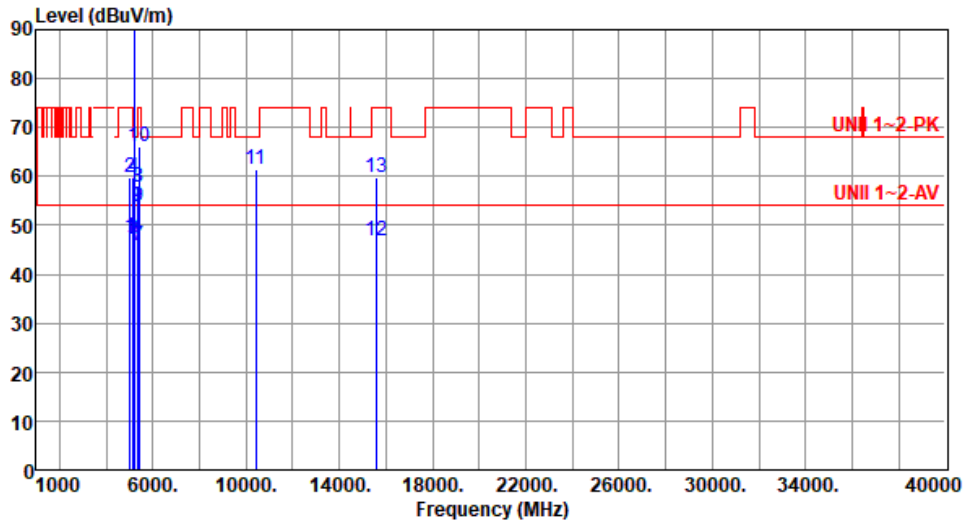
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5010.00	47.61	54.00	-6.39	41.60	6.01	Average	207	1
2	5010.00	59.81	74.00	-14.19	53.80	6.01	Peak	207	1
3	5150.00	47.08	54.00	-6.92	40.77	6.31	Average	207	1
4	5150.00	59.67	74.00	-14.33	53.36	6.31	Peak	207	1
5 *	5200.00	111.69			105.54	6.15	Average	207	1
6 *	5200.00	121.75			115.60	6.15	Peak	207	1
7	5350.00	45.90	54.00	-8.10	40.18	5.72	Average	207	1
8	5350.00	57.93	74.00	-16.07	52.21	5.72	Peak	207	1
9	5390.00	53.73	54.00	-0.27	47.59	6.14	Average	202	357
10	5390.00	66.07	74.00	-7.93	59.93	6.14	Peak	202	357
11	10400.00	61.46	68.20	-6.74	46.98	14.48	Peak	128	357
12	15600.00	46.93	54.00	-7.07	30.99	15.94	Average	100	351
13	15600.00	59.92	74.00	-14.08	43.98	15.94	Peak	100	351

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

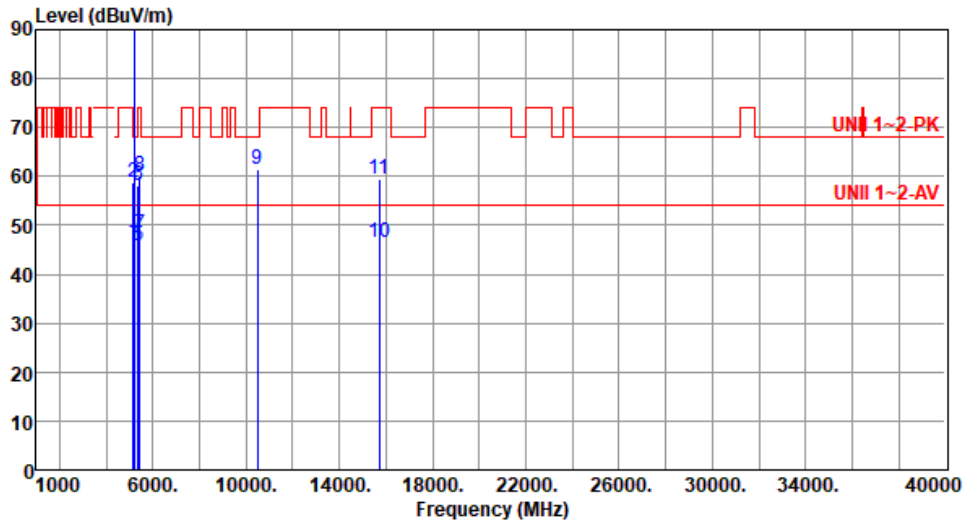
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.64	54.00	-7.36	40.33	6.31	Average	211	1
2	5150.00	58.71	74.00	-15.29	52.40	6.31	Peak	211	1
3 *	5240.00	111.73			105.88	5.85	Average	211	1
4 *	5240.00	122.03			116.18	5.85	Peak	211	1
5	5350.00	45.91	54.00	-8.09	40.19	5.72	Average	211	1
6	5350.00	58.00	74.00	-16.00	52.28	5.72	Peak	211	1
7	5430.00	48.03	54.00	-5.97	41.78	6.25	Average	216	2
8	5430.00	60.22	74.00	-13.78	53.97	6.25	Peak	216	2
9	10480.00	61.39	68.20	-6.81	46.76	14.63	Peak	183	2
10	15720.00	46.52	54.00	-7.48	30.57	15.95	Average	100	4
11	15720.00	59.45	74.00	-14.55	43.50	15.95	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

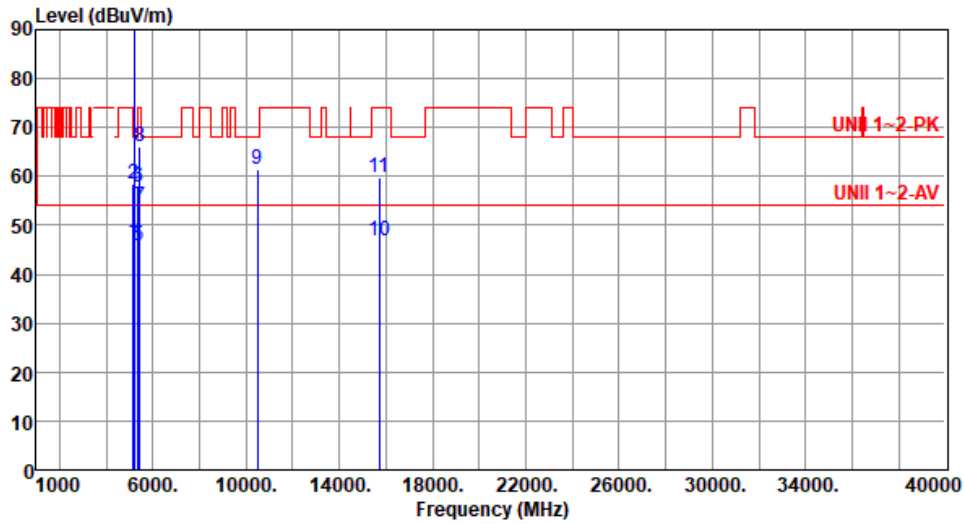
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.50	54.00	-7.50	40.19	6.31	Average	202	3
2	5150.00	58.51	74.00	-15.49	52.20	6.31	Peak	202	3
3 *	5240.00	111.29			105.44	5.85	Average	202	3
4 *	5240.00	121.54			115.69	5.85	Peak	202	3
5	5350.00	45.89	54.00	-8.11	40.17	5.72	Average	202	3
6	5350.00	57.91	74.00	-16.09	52.19	5.72	Peak	202	3
7	5430.00	53.85	54.00	-0.15	47.60	6.25	Average	212	357
8	5430.00	66.22	74.00	-7.78	59.97	6.25	Peak	212	357
9	10480.00	61.47	68.20	-6.73	46.84	14.63	Peak	112	6
10	15720.00	46.73	54.00	-7.27	30.78	15.95	Average	100	7
11	15720.00	59.72	74.00	-14.28	43.77	15.95	Peak	100	7

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

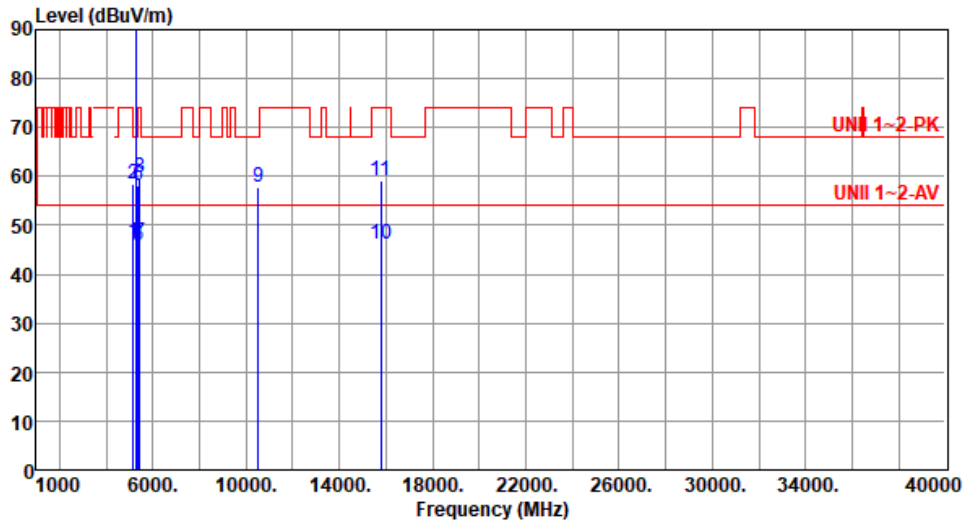
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.41	54.00	-7.59	40.10	6.31	Average	158	4
2	5150.00	58.51	74.00	-15.49	52.20	6.31	Peak	158	4
3 *	5260.00	104.86			99.11	5.75	Average	158	4
4 *	5260.00	115.29			109.54	5.75	Peak	158	4
5	5350.00	45.87	54.00	-8.13	40.15	5.72	Average	158	4
6	5350.00	57.97	74.00	-16.03	52.25	5.72	Peak	158	4
7	5450.00	46.63	54.00	-7.37	40.36	6.27	Average	158	4
8	5450.00	59.93	74.00	-14.07	53.66	6.27	Peak	158	4
9	10520.00	57.89	68.20	-10.31	43.22	14.67	Peak	100	1
10	15780.00	46.12	54.00	-7.88	30.26	15.86	Average	100	3
11	15780.00	59.05	74.00	-14.95	43.19	15.86	Peak	100	3

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

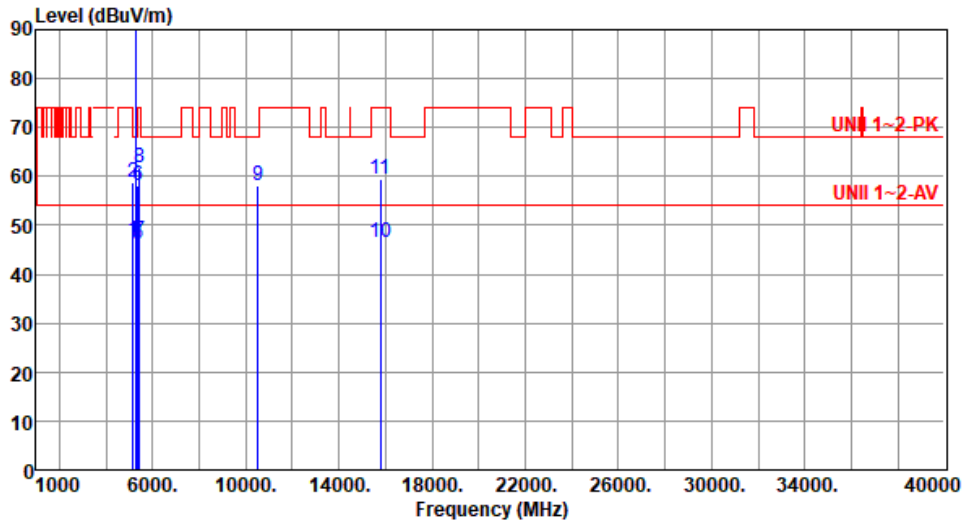
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.70	54.00	-7.30	40.39	6.31	Average	225	3
2	5150.00	58.67	74.00	-15.33	52.36	6.31	Peak	225	3
3 *	5260.00	105.17			99.42	5.75	Average	225	3
4 *	5260.00	115.50			109.75	5.75	Peak	225	3
5	5350.00	46.01	54.00	-7.99	40.29	5.72	Average	225	3
6	5350.00	58.03	74.00	-15.97	52.31	5.72	Peak	225	3
7	5450.00	46.96	54.00	-7.04	40.69	6.27	Average	222	1
8	5450.00	61.75	74.00	-12.25	55.48	6.27	Peak	222	1
9	10520.00	58.20	68.20	-10.00	43.53	14.67	Peak	100	11
10	15780.00	46.34	54.00	-7.66	30.48	15.86	Average	100	15
11	15780.00	59.37	74.00	-14.63	43.51	15.86	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

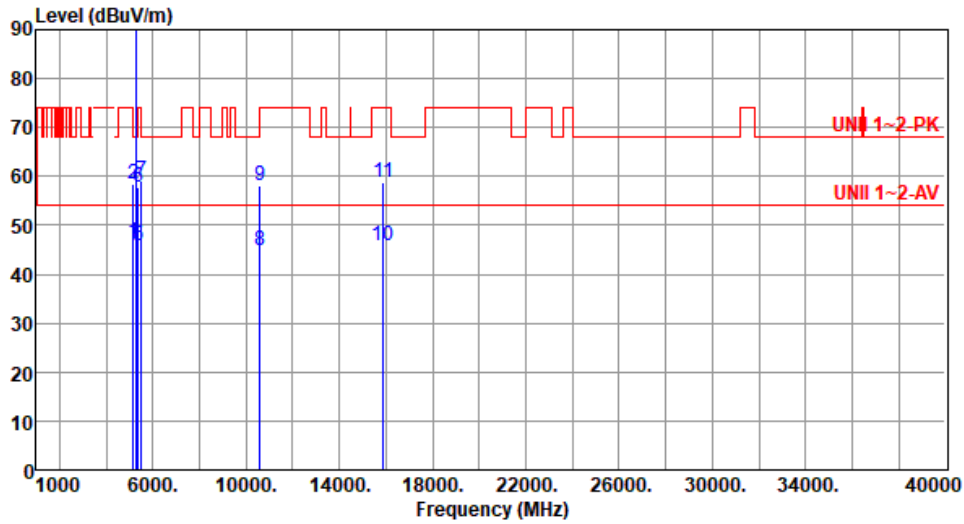
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.45	54.00	-7.55	40.14	6.31	Average	171	3
2	5150.00	58.37	74.00	-15.63	52.06	6.31	Peak	171	3
3 *	5300.00	104.80			99.11	5.69	Average	171	3
4 *	5300.00	115.01			109.32	5.69	Peak	171	3
5	5350.00	45.83	54.00	-8.17	40.11	5.72	Average	171	3
6	5350.00	57.84	74.00	-16.16	52.12	5.72	Peak	171	3
7	5490.00	58.96	68.20	-9.24	52.59	6.37	Peak	171	3
8	10600.00	44.96	54.00	-9.04	30.24	14.72	Average	100	1
9	10600.00	57.97	74.00	-16.03	43.25	14.72	Peak	100	1
10	15900.00	45.84	54.00	-8.16	30.27	15.57	Average	100	357
11	15900.00	58.76	74.00	-15.24	43.19	15.57	Peak	100	357

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

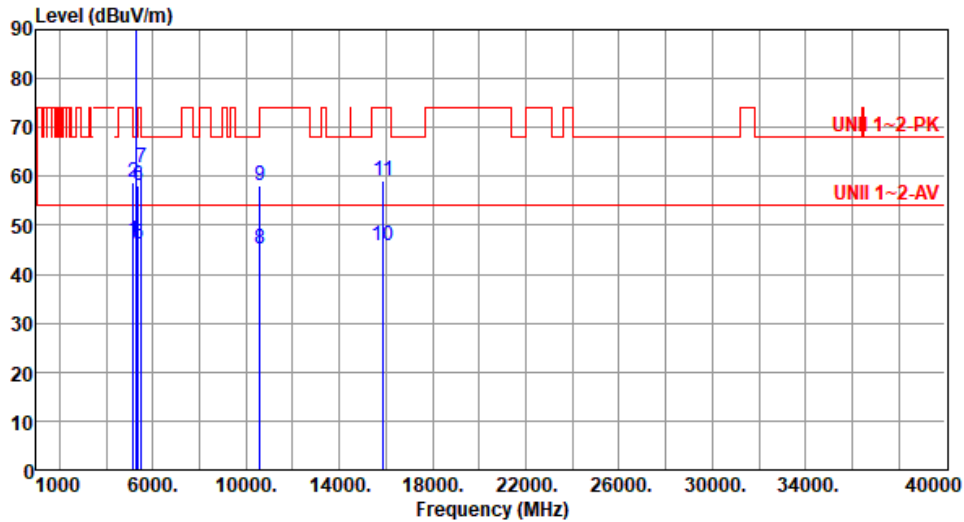
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5150.00	46.66	54.00	-7.34	40.35	6.31	Average	218	359
2	5150.00	58.66	74.00	-15.34	52.35	6.31	Peak	218	359
3 *	5300.00	104.98			99.29	5.69	Average	218	359
4 *	5300.00	115.28			109.59	5.69	Peak	218	359
5	5350.00	46.03	54.00	-7.97	40.31	5.72	Average	218	359
6	5350.00	58.05	74.00	-15.95	52.33	5.72	Peak	218	359
7	5490.00	61.85	68.20	-6.35	55.48	6.37	Peak	227	8
8	10600.00	45.07	54.00	-8.93	30.35	14.72	Average	100	7
9	10600.00	58.14	74.00	-15.86	43.42	14.72	Peak	100	7
10	15900.00	45.96	54.00	-8.04	30.39	15.57	Average	100	9
11	15900.00	58.97	74.00	-15.03	43.40	15.57	Peak	100	9

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

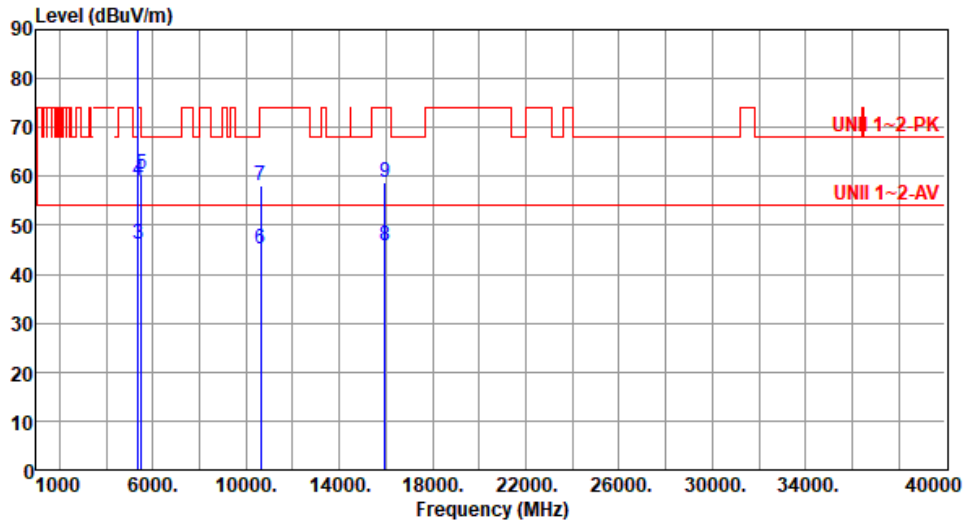
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	*	5320.00	105.06			99.35	5.71	Average	166	5
2	*	5320.00	115.47			109.76	5.71	Peak	166	5
3		5350.00	46.21	54.00	-7.79	40.49	5.72	Average	166	5
4		5350.00	59.20	74.00	-14.80	53.48	5.72	Peak	166	5
5		5510.00	60.37	68.20	-7.83	53.95	6.42	Peak	171	6
6		10640.00	45.03	54.00	-8.97	30.17	14.86	Average	100	355
7		10640.00	58.03	74.00	-15.97	43.17	14.86	Peak	100	355
8		15960.00	45.71	54.00	-8.29	30.06	15.65	Average	100	352
9		15960.00	58.77	74.00	-15.23	43.12	15.65	Peak	100	352

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

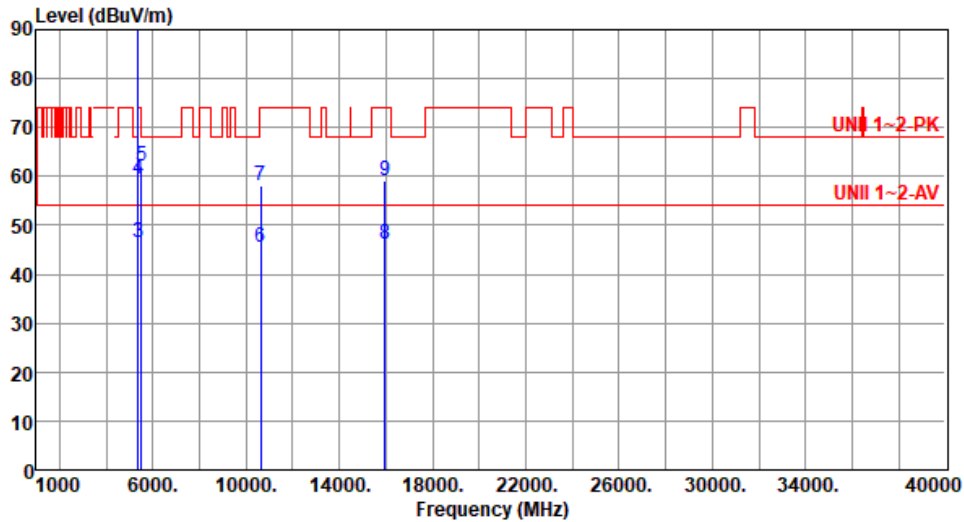
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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 *	5320.00	105.20			99.49	5.71	Average	221	1
2 *	5320.00	115.60			109.89	5.71	Peak	221	1
3	5350.00	46.42	54.00	-7.58	40.70	5.72	Average	221	1
4	5350.00	59.52	74.00	-14.48	53.80	5.72	Peak	221	1
5	5510.00	61.97	68.20	-6.23	55.55	6.42	Peak	220	3
6	10640.00	45.44	54.00	-8.56	30.58	14.86	Average	100	2
7	10640.00	58.21	74.00	-15.79	43.35	14.86	Peak	100	2
8	15960.00	46.12	54.00	-7.88	30.47	15.65	Average	100	4
9	15960.00	59.13	74.00	-14.87	43.48	15.65	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

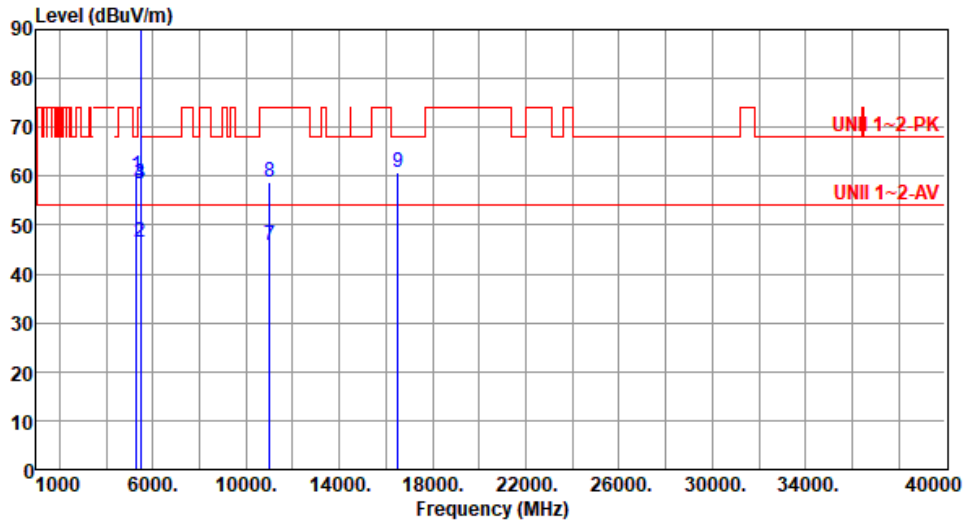
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):25 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	5310.00	60.03	68.20	-8.17	54.34	5.69	Peak	182	1
2	5460.00	46.49	54.00	-7.51	40.19	6.30	Average	182	1
3	5460.00	58.58	74.00	-15.42	52.28	6.30	Peak	182	1
4	5470.00	58.55	68.20	-9.65	52.23	6.32	Peak	182	1
5 *	5500.00	107.29			100.89	6.40	Average	182	1
6 *	5500.00	117.38			110.98	6.40	Peak	182	1
7	11000.00	45.87	54.00	-8.13	30.22	15.65	Average	100	357
8	11000.00	58.82	74.00	-15.18	43.17	15.65	Peak	100	357
9	16500.00	60.68	68.20	-7.52	43.22	17.46	Peak	100	352

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

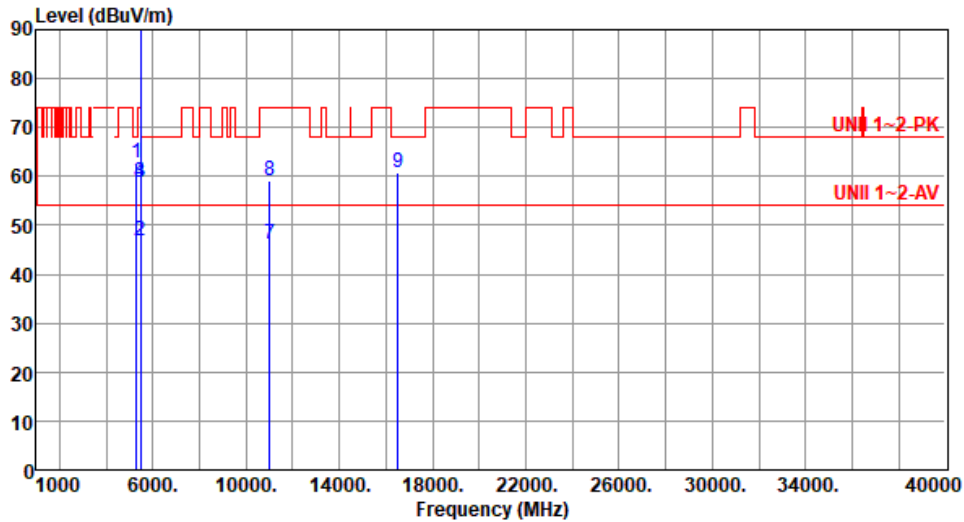
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5310.00	62.65	68.20	-5.55	56.96	5.69	Peak	220	1
2	5460.00	46.69	54.00	-7.31	40.39	6.30	Average	204	3
3	5460.00	58.87	74.00	-15.13	52.57	6.30	Peak	204	3
4	5470.00	58.92	68.20	-9.28	52.60	6.32	Peak	204	3
5 *	5500.00	107.39			100.99	6.40	Average	204	3
6 *	5500.00	117.44			111.04	6.40	Peak	204	3
7	11000.00	46.07	54.00	-7.93	30.42	15.65	Average	100	7
8	11000.00	59.15	74.00	-14.85	43.50	15.65	Peak	100	7
9	16500.00	60.91	68.20	-7.29	43.45	17.46	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

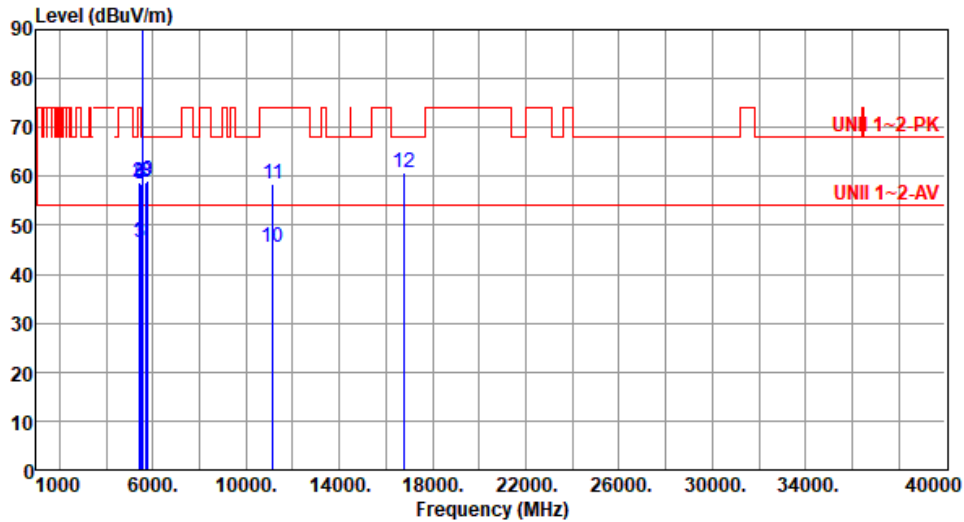
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5390.00	46.50	54.00	-7.50	40.36	6.14	Average	186	3
2	5390.00	58.69	74.00	-15.31	52.55	6.14	Peak	186	3
3	5460.00	46.39	54.00	-7.61	40.09	6.30	Average	186	3
4	5460.00	58.44	74.00	-15.56	52.14	6.30	Peak	186	3
5	5470.00	58.51	68.20	-9.69	52.19	6.32	Peak	186	3
6 *	5580.00	107.29			100.85	6.44	Average	186	3
7 *	5580.00	117.21			110.77	6.44	Peak	186	3
8	5725.00	58.75	68.20	-9.45	52.16	6.59	Peak	186	3
9	5770.00	59.21	68.20	-8.99	52.59	6.62	Peak	186	3
10	11160.00	45.39	54.00	-8.61	30.24	15.15	Average	100	1
11	11160.00	58.35	74.00	-15.65	43.20	15.15	Peak	100	1
12	16740.00	60.84	68.20	-7.36	43.14	17.70	Peak	100	2

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

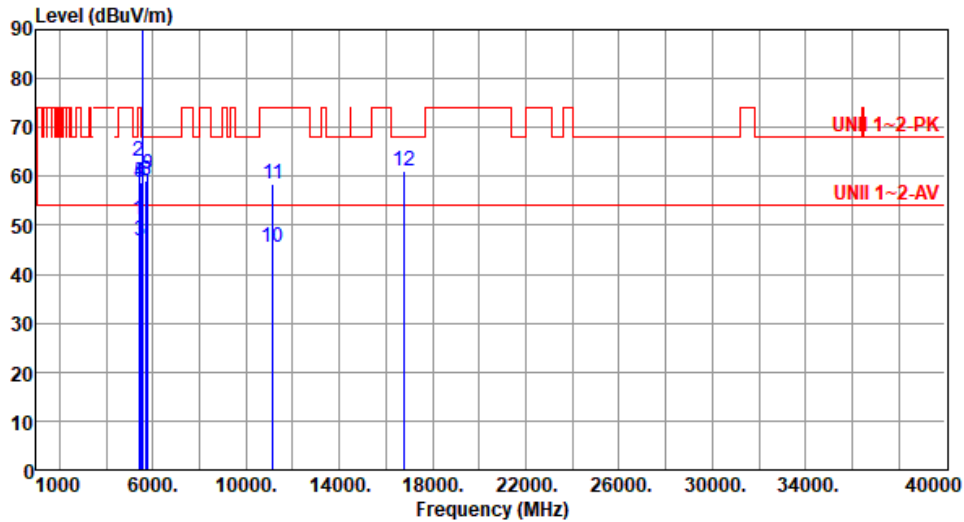
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5390.00	51.09	54.00	-2.91	44.95	6.14	Average	214	359
2	5390.00	62.99	74.00	-11.01	56.85	6.14	Peak	214	359
3	5460.00	46.79	54.00	-7.21	40.49	6.30	Average	202	2
4	5460.00	58.87	74.00	-15.13	52.57	6.30	Peak	202	2
5	5470.00	58.92	68.20	-9.28	52.60	6.32	Peak	202	2
6 *	5580.00	107.32			100.88	6.44	Average	202	2
7 *	5580.00	117.44			111.00	6.44	Peak	202	2
8	5725.00	59.11	68.20	-9.09	52.52	6.59	Peak	202	2
9	5770.00	60.29	68.20	-7.91	53.67	6.62	Peak	202	2
10	11160.00	45.50	54.00	-8.50	30.35	15.15	Average	100	4
11	11160.00	58.51	74.00	-15.49	43.36	15.15	Peak	100	4
12	16740.00	61.12	68.20	-7.08	43.42	17.70	Peak	100	8

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

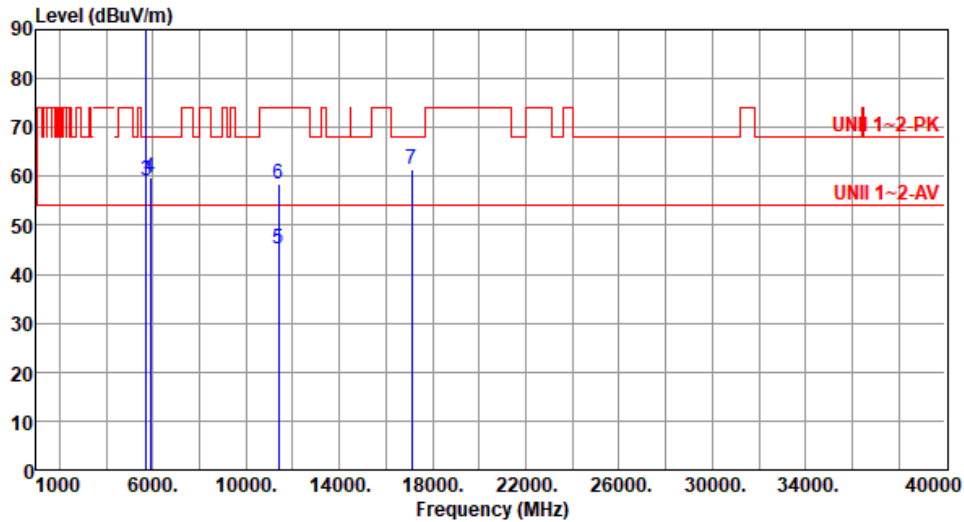
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	*	5700.00	107.39			100.86	6.53	Average	187	5
2	*	5700.00	116.68			110.15	6.53	Peak	187	5
3		5725.00	59.07	68.20	-9.13	52.48	6.59	Peak	187	5
4		5890.00	59.89	68.20	-8.31	52.96	6.93	Peak	187	5
5		11400.00	45.32	54.00	-8.68	30.17	15.15	Average	100	356
6		11400.00	58.34	74.00	-15.66	43.19	15.15	Peak	100	356
7		17100.00	61.39	68.20	-6.81	43.24	18.15	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

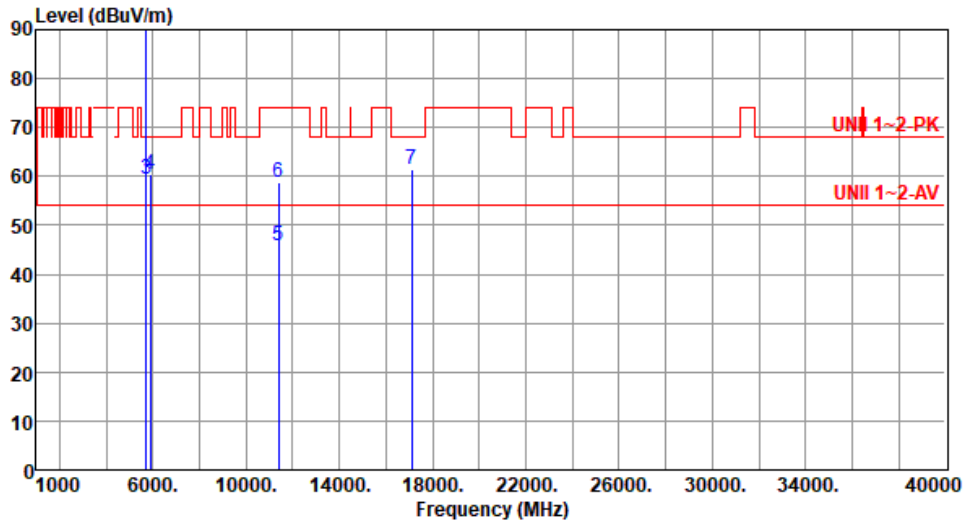
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	*	5700.00	107.53			101.00	6.53	Average	215	6
2	*	5700.00	117.60			111.07	6.53	Peak	215	6
3		5725.00	59.46	68.20	-8.74	52.87	6.59	Peak	215	6
4		5890.00	60.48	68.20	-7.72	53.55	6.93	Peak	215	6
5		11400.00	45.72	54.00	-8.28	30.57	15.15	Average	100	7
6		11400.00	58.63	74.00	-15.37	43.48	15.15	Peak	100	7
7		17100.00	61.60	68.20	-6.60	43.45	18.15	Peak	100	9

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

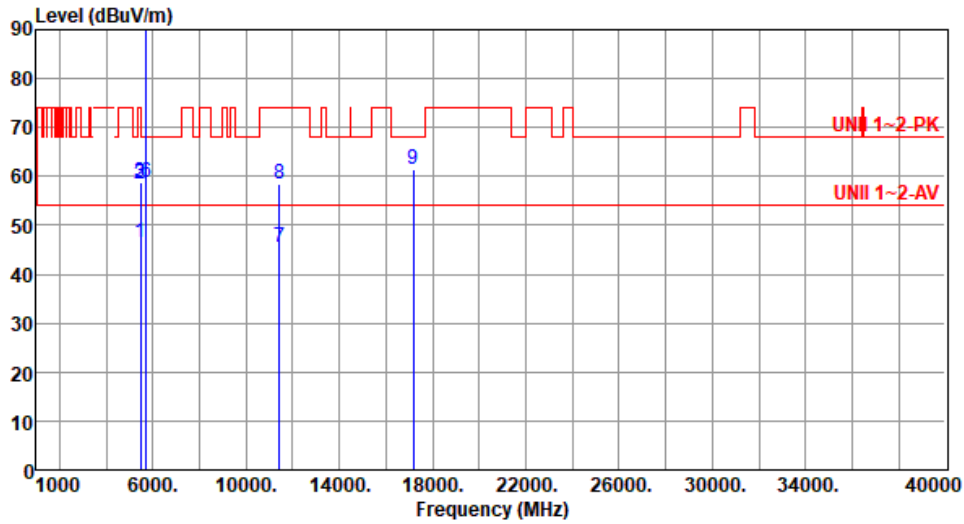
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5460.00	46.47	54.00	-7.53	40.17	6.30	Average	192	2
2	5460.00	58.54	74.00	-15.46	52.24	6.30	Peak	192	2
3	5470.00	58.62	68.20	-9.58	52.30	6.32	Peak	192	2
4 *	5720.00	107.27			100.69	6.58	Average	192	2
5 *	5720.00	117.39			110.81	6.58	Peak	192	2
6	5725.00	58.69	68.20	-9.51	52.10	6.59	Peak	192	2
7	11440.00	45.42	54.00	-8.58	30.17	15.25	Average	100	356
8	11440.00	58.45	74.00	-15.55	43.20	15.25	Peak	100	356
9	17160.00	61.43	68.20	-6.77	43.28	18.15	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

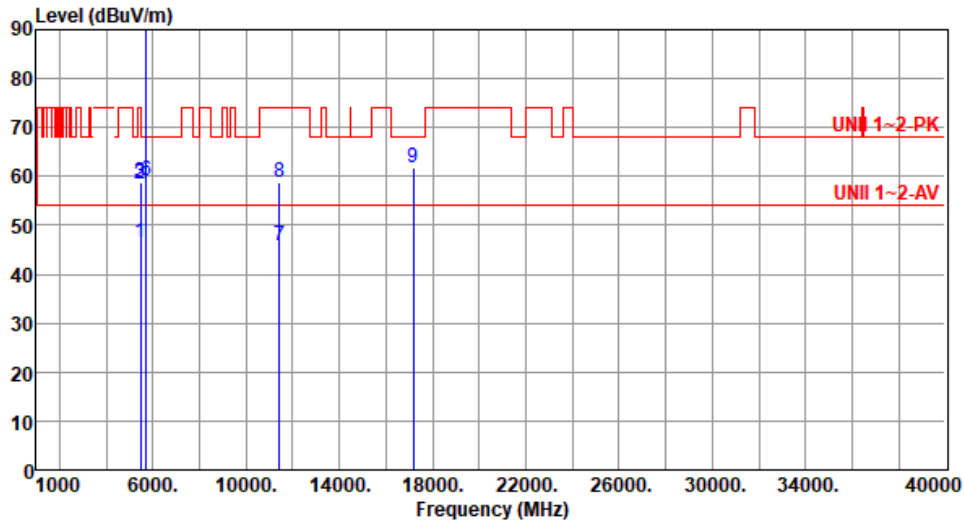
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5460.00	46.62	54.00	-7.38	40.32	6.30	Average	214	9
2	5460.00	58.53	74.00	-15.47	52.23	6.30	Peak	214	9
3	5470.00	58.68	68.20	-9.52	52.36	6.32	Peak	214	9
4 *	5720.00	107.46			100.88	6.58	Average	214	9
5 *	5720.00	117.51			110.93	6.58	Peak	214	9
6	5725.00	58.98	68.20	-9.22	52.39	6.59	Peak	214	9
7	11440.00	45.79	54.00	-8.21	30.54	15.25	Average	100	10
8	11440.00	58.83	74.00	-15.17	43.58	15.25	Peak	100	10
9	17160.00	61.65	68.20	-6.55	43.50	18.15	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

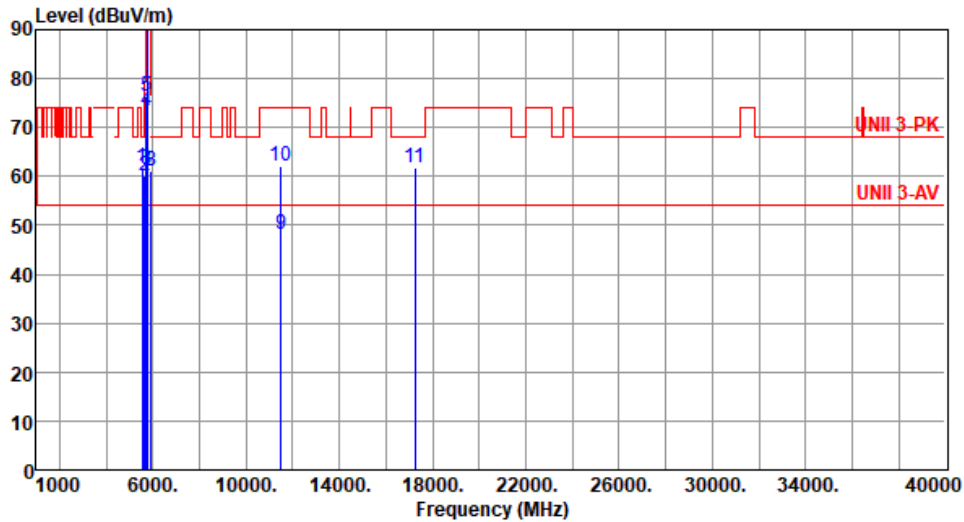
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 25 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	5555.00	61.93	68.20	-6.27	55.44	6.49	Peak	180	355
2	5650.00	60.28	68.20	-7.92	53.96	6.32	Peak	173	351
3	5700.00	61.42	105.20	-43.78	54.89	6.53	Peak	173	351
4	5720.00	73.54	110.80	-37.26	66.96	6.58	Peak	173	351
5	5725.00	76.54	122.20	-45.66	69.95	6.59	Peak	173	351
6 *	5745.00	111.23			104.59	6.64	Average	173	351
7 *	5745.00	121.30			114.66	6.64	Peak	173	351
8	5925.00	60.99	68.20	-7.21	53.96	7.03	Peak	173	351
9	11490.00	48.23	54.00	-5.77	32.85	15.38	Average	197	359
10	11490.00	62.25	74.00	-11.75	46.87	15.38	Peak	197	359
11	17235.00	61.91	68.20	-6.29	43.65	18.26	Peak	100	350

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

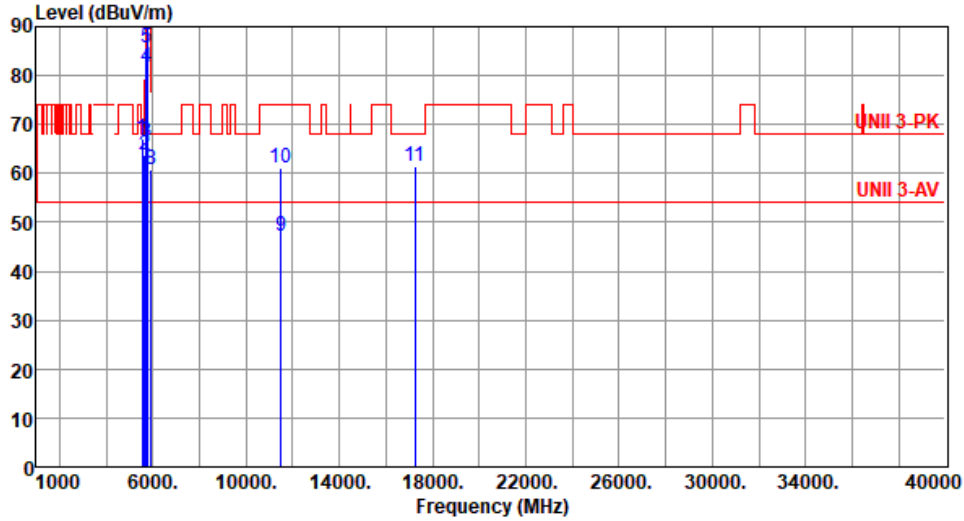
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5555.00	67.12	68.20	-1.08	60.63	6.49	Peak	221	357
2	5650.00	63.90	68.20	-4.30	57.58	6.32	Peak	220	356
3	5700.00	66.53	105.20	-38.67	60.00	6.53	Peak	220	356
4	5720.00	81.53	110.80	-29.27	74.95	6.58	Peak	220	356
5	5725.00	85.77	122.20	-36.43	79.18	6.59	Peak	220	356
6 *	5745.00	111.86			105.22	6.64	Average	220	356
7 *	5745.00	124.19			117.55	6.64	Peak	220	356
8	5925.00	60.91	68.20	-7.29	53.88	7.03	Peak	220	356
9	11490.00	47.17	54.00	-6.83	31.79	15.38	Average	204	3
10	11490.00	60.95	74.00	-13.05	45.57	15.38	Peak	204	3
11	17235.00	61.53	68.20	-6.67	43.27	18.26	Peak	100	5

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

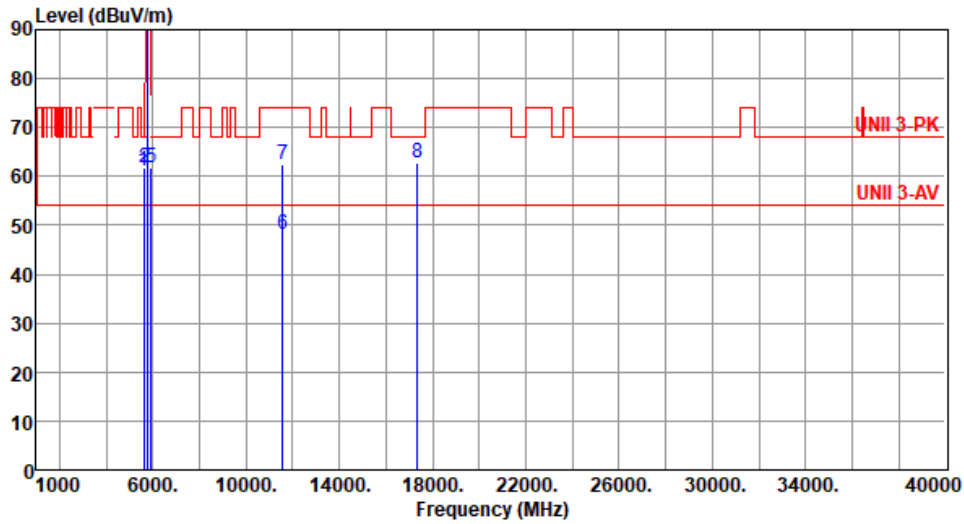
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):25 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	5595.00	61.19	68.20	-7.01	54.78	6.41	Peak	183	357
2	5650.00	61.92	68.20	-6.28	55.60	6.32	Peak	168	353
3 *	5785.00	111.34			104.74	6.60	Average	168	353
4 *	5785.00	121.32			114.72	6.60	Peak	168	353
5	5925.00	61.78	68.20	-6.42	54.75	7.03	Peak	168	353
6	11570.00	48.27	54.00	-5.73	32.89	15.38	Average	199	350
7	11570.00	62.33	74.00	-11.67	46.95	15.38	Peak	199	350
8	17355.00	62.84	68.20	-5.36	43.86	18.98	Peak	199	350

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

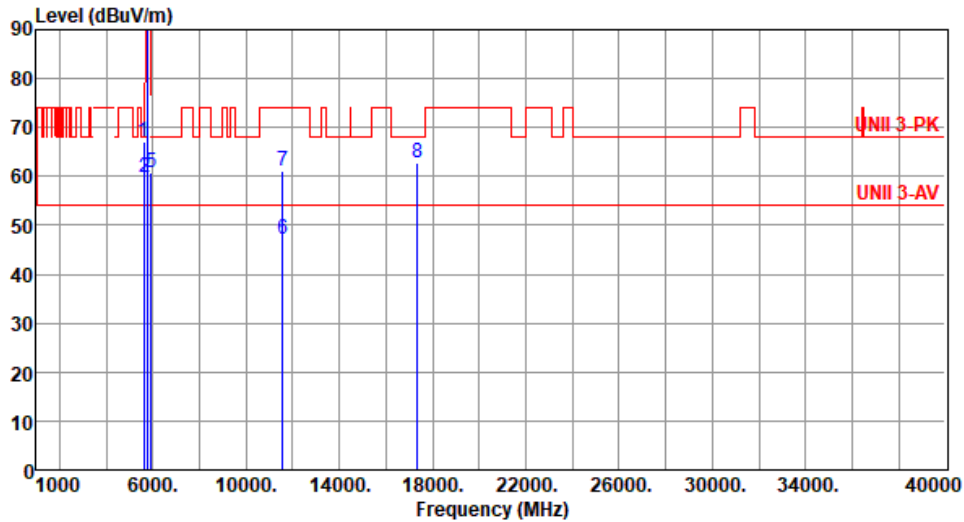
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 25 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	5595.00	67.16	68.20	-1.04	60.75	6.41	Peak	217	356
2	5650.00	59.90	68.20	-8.30	53.58	6.32	Peak	212	354
3 *	5785.00	111.99			105.39	6.60	Average	212	354
4 *	5785.00	124.16			117.56	6.60	Peak	212	354
5	5925.00	60.68	68.20	-7.52	53.65	7.03	Peak	212	354
6	11570.00	47.27	54.00	-6.73	31.89	15.38	Average	204	357
7	11570.00	60.96	74.00	-13.04	45.58	15.38	Peak	204	357
8	17355.00	62.65	68.20	-5.55	43.67	18.98	Peak	100	352

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

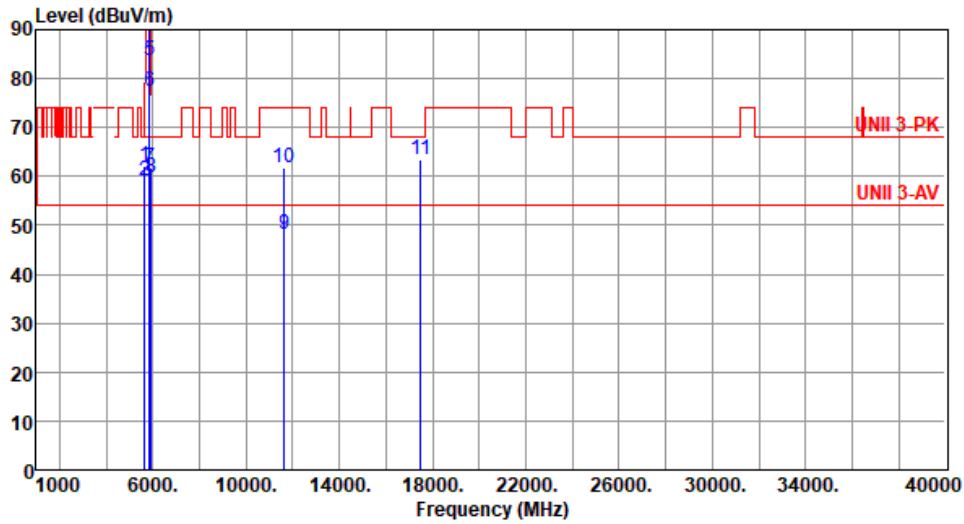
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):25 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	5635.00	62.11	68.20	-6.09	55.76	6.35	Peak	186	352
2	5650.00	59.20	68.20	-9.00	52.88	6.32	Peak	177	359
3 *	5825.00	110.81			104.14	6.67	Average	177	359
4 *	5825.00	122.17			115.50	6.67	Peak	177	359
5	5850.00	83.75	122.20	-38.45	76.98	6.77	Peak	177	359
6	5855.00	77.55	110.80	-33.25	70.75	6.80	Peak	177	359
7	5875.00	61.75	105.20	-43.45	54.87	6.88	Peak	177	359
8	5925.00	59.62	68.20	-8.58	52.59	7.03	Peak	177	359
9	11650.00	48.04	54.00	-5.96	32.87	15.17	Average	174	355
10	11650.00	61.92	74.00	-12.08	46.75	15.17	Peak	174	355
11	17475.00	63.40	68.20	-4.80	43.59	19.81	Peak	100	356

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

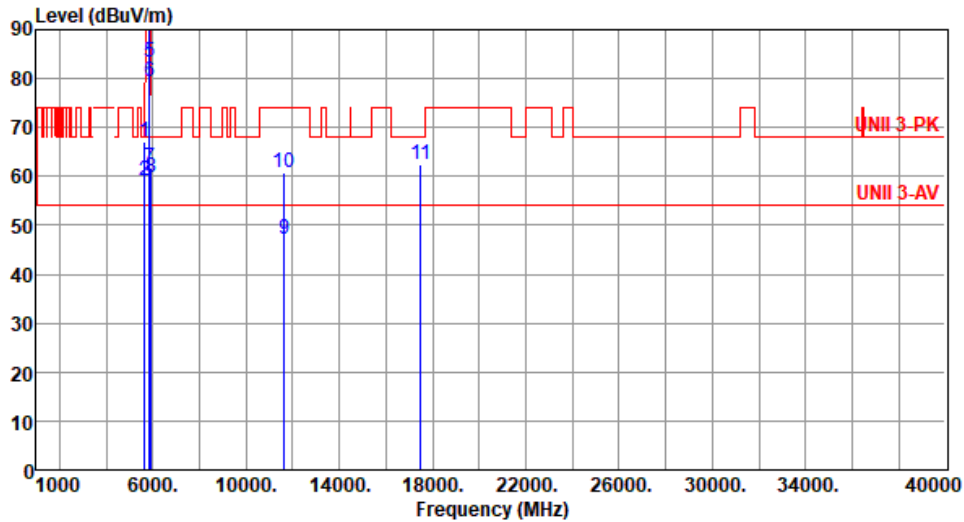
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):25 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	5635.00	66.97	68.20	-1.23	60.62	6.35	Peak	220	1
2	5650.00	59.02	68.20	-9.18	52.70	6.32	Peak	207	2
3 *	5825.00	111.73			105.06	6.67	Average	207	2
4 *	5825.00	124.00			117.33	6.67	Peak	207	2
5	5850.00	83.40	122.20	-38.80	76.63	6.77	Peak	207	2
6	5855.00	79.46	110.80	-31.34	72.66	6.80	Peak	207	2
7	5875.00	61.66	105.20	-43.54	54.78	6.88	Peak	207	2
8	5925.00	59.88	68.20	-8.32	52.85	7.03	Peak	207	2
9	11650.00	47.06	54.00	-6.94	31.89	15.17	Average	182	3
10	11650.00	60.75	74.00	-13.25	45.58	15.17	Peak	182	3
11	17475.00	62.32	68.20	-5.88	42.51	19.81	Peak	100	2

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



Unwanted Emissions (Above 1GHz) for ax HE20

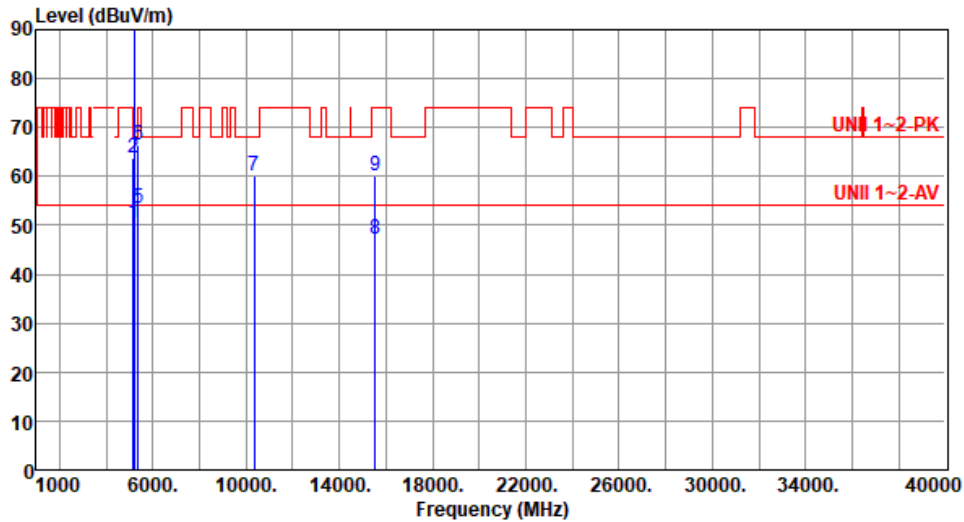
Modulation	ax HE20	Test Freq. (MHz)	5180						
Polarization	Horizontal								
Test By :Akun Chung Temperature(°C):23 Humidity(%):69									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	53.73	54.00	-0.27	47.42	6.31	Average	196	4
2	5150.00	66.89	74.00	-7.11	60.58	6.31	Peak	196	4
3 *	5180.00	110.04			103.83	6.21	Average	196	4
4 *	5180.00	124.41			118.20	6.21	Peak	196	4
5	5370.00	47.61	54.00	-6.39	41.68	5.93	Average	196	4
6	5370.00	59.51	74.00	-14.49	53.58	5.93	Peak	196	4
7	10360.00	58.90	68.20	-9.30	44.45	14.45	Peak	100	15
8	15540.00	46.83	54.00	-7.17	30.43	16.40	Average	100	17
9	15540.00	59.76	74.00	-14.24	43.36	16.40	Peak	100	17

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



Modulation	ax HE20	Test Freq. (MHz)	5180
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 23 Humidity(%): 69



	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	50.53	54.00	-3.47	44.22	6.31	Average	320	5
2	5150.00	63.90	74.00	-10.10	57.59	6.31	Peak	320	5
3 *	5180.00	108.74			102.53	6.21	Average	230	5
4 *	5180.00	121.76			115.55	6.21	Peak	230	5
5	5370.00	53.54	54.00	-0.46	47.61	5.93	Average	230	5
6	5370.00	66.43	74.00	-7.57	60.50	5.93	Peak	230	5
7	10360.00	60.25	68.20	-7.95	45.80	14.45	Peak	100	322
8	15540.00	47.08	54.00	-6.92	30.68	16.40	Average	100	328
9	15540.00	60.17	74.00	-13.83	43.77	16.40	Peak	100	328

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

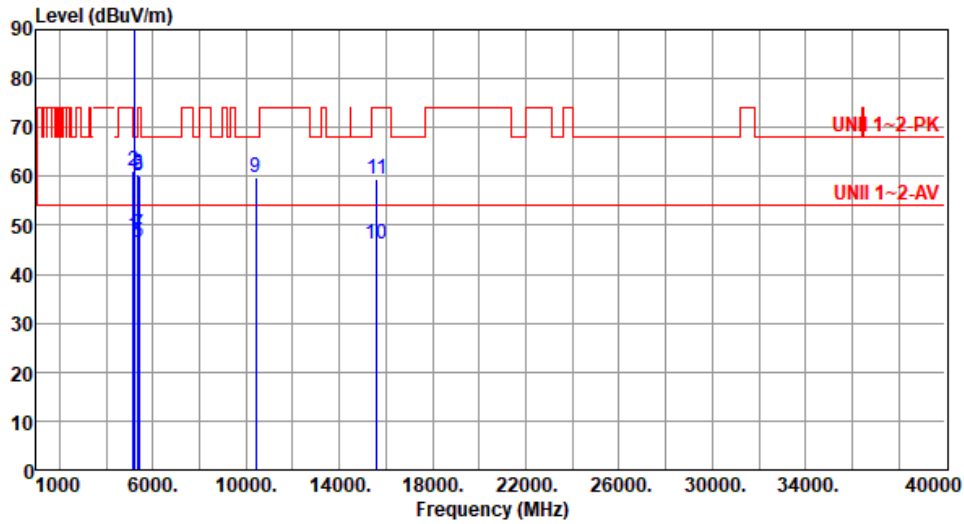
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5200
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	47.85	54.00	-6.15	41.54	6.31	Average	202	5
2	5150.00	61.26	74.00	-12.74	54.95	6.31	Peak	202	5
3 *	5200.00	110.84			104.69	6.15	Average	202	5
4 *	5200.00	123.37			117.22	6.15	Peak	202	5
5	5350.00	46.34	54.00	-7.66	40.62	5.72	Average	202	5
6	5350.00	60.38	74.00	-13.62	54.66	5.72	Peak	202	5
7	5390.00	48.13	54.00	-5.87	41.99	6.14	Average	201	2
8	5390.00	59.98	74.00	-14.02	53.84	6.14	Peak	201	2
9	10400.00	59.83	68.20	-8.37	45.35	14.48	Peak	100	11
10	15600.00	46.31	54.00	-7.69	30.37	15.94	Average	100	15
11	15600.00	59.33	74.00	-14.67	43.39	15.94	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

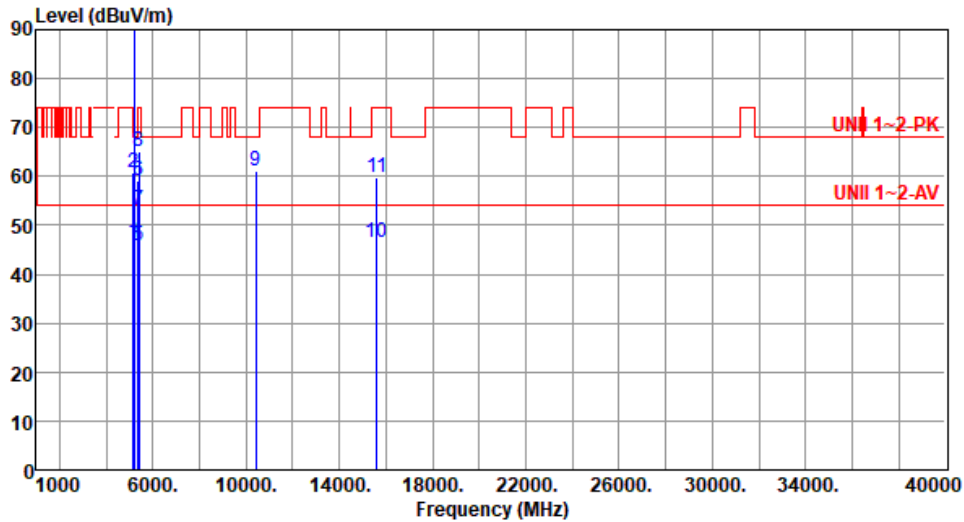
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5200
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	46.56	54.00	-7.44	40.25	6.31	Average	215	359
2	5150.00	60.67	74.00	-13.33	54.36	6.31	Peak	215	359
3 *	5200.00	110.69			104.54	6.15	Average	215	359
4 *	5200.00	122.35			116.20	6.15	Peak	215	359
5	5350.00	45.92	54.00	-8.08	40.20	5.72	Average	215	359
6	5350.00	59.27	74.00	-14.73	53.55	5.72	Peak	215	359
7	5390.00	53.29	54.00	-0.71	47.15	6.14	Average	214	357
8	5390.00	65.10	74.00	-8.90	58.96	6.14	Peak	214	357
9	10400.00	61.23	68.20	-6.97	46.75	14.48	Peak	100	324
10	15600.00	46.62	54.00	-7.38	30.68	15.94	Average	100	321
11	15600.00	59.71	74.00	-14.29	43.77	15.94	Peak	100	321

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

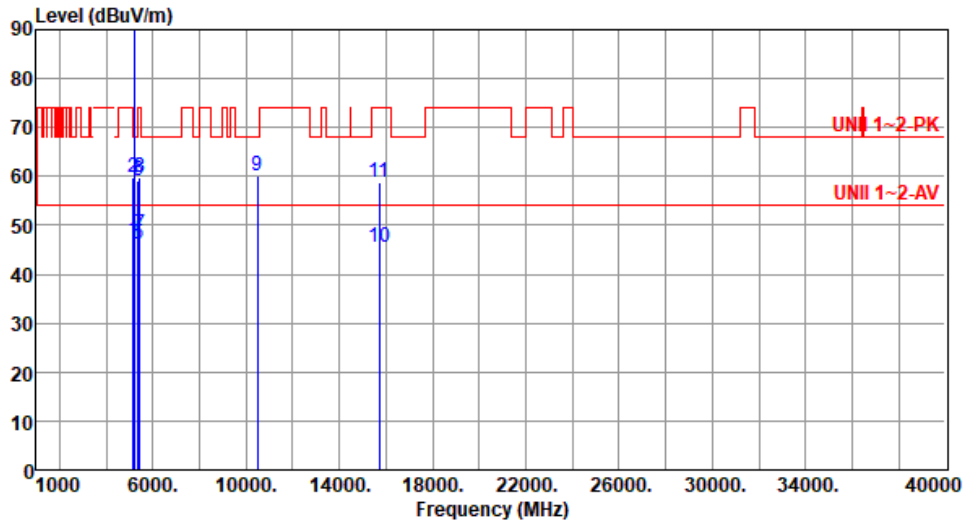
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



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

Test By : Akun Chung Temperature(°C): 23 Humidity(%): 69



	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	46.79	54.00	-7.21	40.48	6.31	Average	202	9
2	5150.00	59.84	74.00	-14.16	53.53	6.31	Peak	202	9
3 *	5240.00	111.02			105.17	5.85	Average	202	9
4 *	5240.00	123.12			117.27	5.85	Peak	202	9
5	5350.00	46.14	54.00	-7.86	40.42	5.72	Average	202	9
6	5350.00	59.23	74.00	-14.77	53.51	5.72	Peak	202	9
7	5430.00	48.14	54.00	-5.86	41.89	6.25	Average	200	11
8	5430.00	59.82	74.00	-14.18	53.57	6.25	Peak	200	11
9	10480.00	60.20	68.20	-8.00	45.57	14.63	Peak	180	10
10	15720.00	45.61	54.00	-8.39	29.66	15.95	Average	100	15
11	15720.00	58.65	74.00	-15.35	42.70	15.95	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

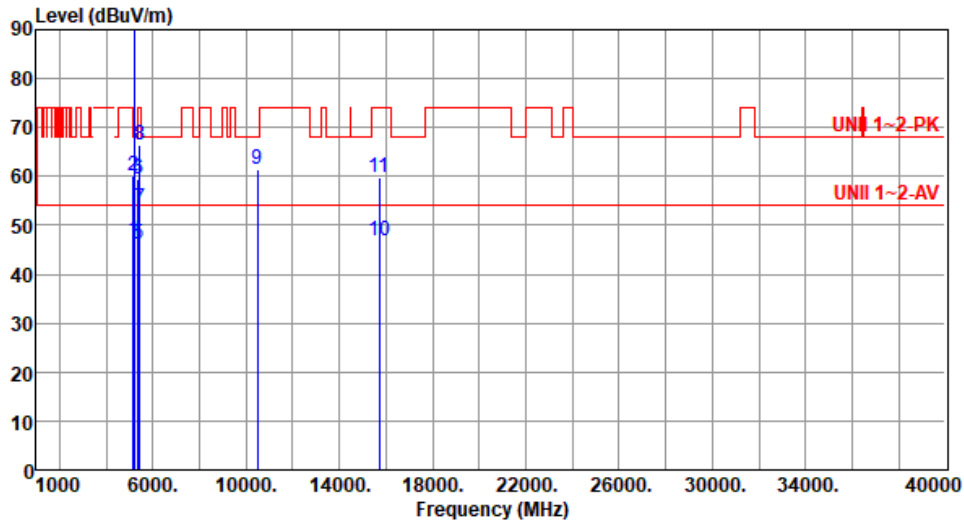
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



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

Test By : Akun Chung Temperature(°C): 23 Humidity(%): 69



	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	46.86	54.00	-7.14	40.55	6.31	Average	226	4
2	5150.00	59.99	74.00	-14.01	53.68	6.31	Peak	226	4
3 *	5240.00	111.05			105.20	5.85	Average	226	4
4 *	5240.00	123.53			117.68	5.85	Peak	226	4
5	5350.00	46.22	54.00	-7.78	40.50	5.72	Average	226	4
6	5350.00	59.47	74.00	-14.53	53.75	5.72	Peak	226	4
7	5430.00	53.43	54.00	-0.57	47.18	6.25	Average	196	1
8	5430.00	66.41	74.00	-7.59	60.16	6.25	Peak	196	1
9	10480.00	61.48	68.20	-6.72	46.85	14.63	Peak	118	332
10	15720.00	46.72	54.00	-7.28	30.77	15.95	Average	100	325
11	15720.00	59.71	74.00	-14.29	43.76	15.95	Peak	100	325

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

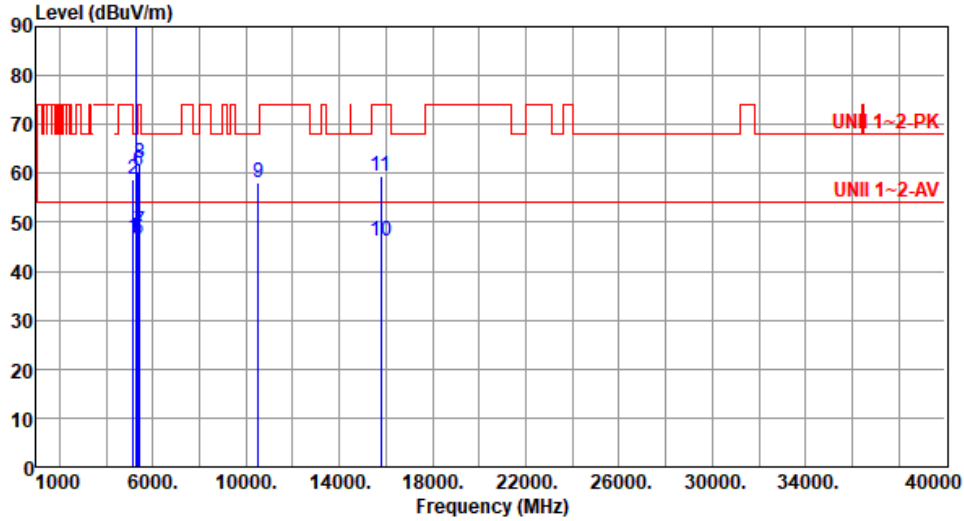
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5260
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):24 Humidity(%):67



	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	46.86	54.00	-7.14	40.55	6.31	Average	205	8
2	5150.00	58.89	74.00	-15.11	52.58	6.31	Peak	205	8
3 *	5260.00	108.17			102.42	5.75	Average	205	8
4 *	5260.00	122.00			116.25	5.75	Peak	205	8
5	5350.00	46.47	54.00	-7.53	40.75	5.72	Average	205	8
6	5350.00	60.49	74.00	-13.51	54.77	5.72	Peak	205	8
7	5450.00	48.13	54.00	-5.87	41.86	6.27	Average	192	1
8	5450.00	62.02	74.00	-11.98	55.75	6.27	Peak	192	1
9	10520.00	58.10	68.20	-10.10	43.43	14.67	Peak	100	4
10	15780.00	46.28	54.00	-7.72	30.42	15.86	Average	100	7
11	15780.00	59.34	74.00	-14.66	43.48	15.86	Peak	100	7

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

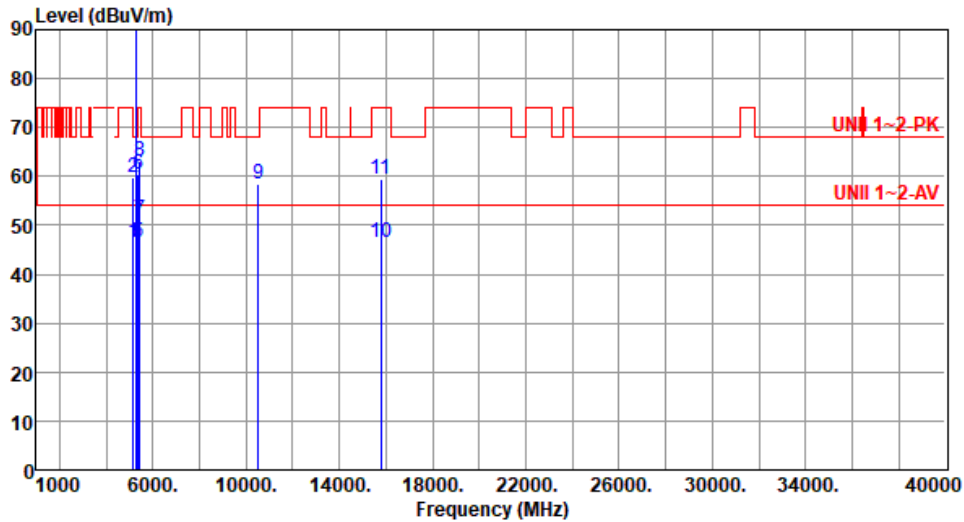
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5260
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	46.60	54.00	-7.40	40.29	6.31	Average	202	5
2	5150.00	59.71	74.00	-14.29	53.40	6.31	Peak	202	5
3 *	5260.00	109.11			103.36	5.75	Average	202	5
4 *	5260.00	123.71			117.96	5.75	Peak	202	5
5	5350.00	46.38	54.00	-7.62	40.66	5.72	Average	202	5
6	5350.00	60.38	74.00	-13.62	54.66	5.72	Peak	202	5
7	5450.00	51.15	54.00	-2.85	44.88	6.27	Average	223	1
8	5450.00	63.15	74.00	-10.85	56.88	6.27	Peak	223	1
9	10520.00	58.44	68.20	-9.76	43.77	14.67	Peak	100	12
10	15780.00	46.55	54.00	-7.45	30.69	15.86	Average	100	11
11	15780.00	59.58	74.00	-14.42	43.72	15.86	Peak	100	11

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

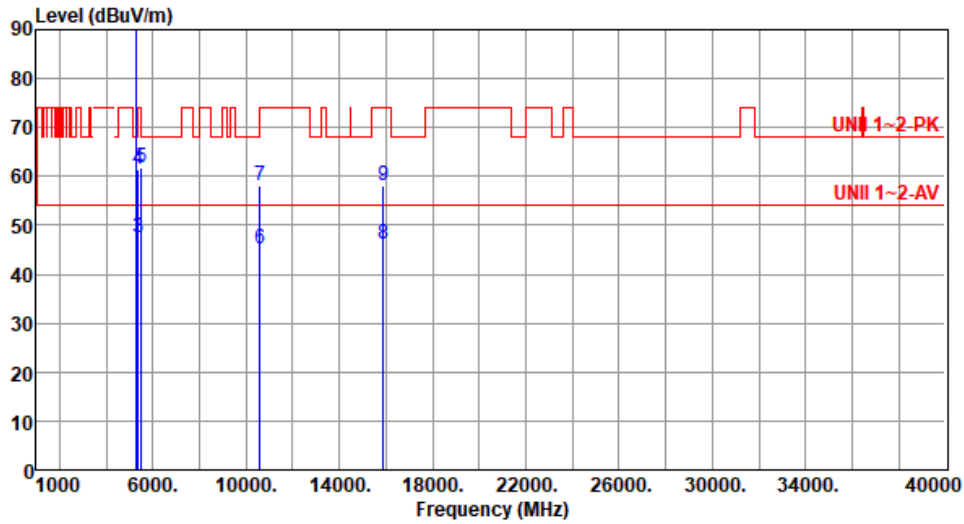
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5300
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



		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	*	5300.00	108.35			102.66	5.69	Average	209	7
2	*	5300.00	122.15			116.46	5.69	Peak	209	7
3		5350.00	47.34	54.00	-6.66	41.62	5.72	Average	209	7
4		5350.00	61.38	74.00	-12.62	55.66	5.72	Peak	209	7
5		5490.00	61.94	68.20	-6.26	55.57	6.37	Peak	209	7
6		10600.00	45.19	54.00	-8.81	30.47	14.72	Average	100	359
7		10600.00	58.14	74.00	-15.86	43.42	14.72	Peak	100	359
8		15900.00	46.00	54.00	-8.00	30.43	15.57	Average	100	2
9		15900.00	58.05	74.00	-15.95	42.48	15.57	Peak	100	2

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

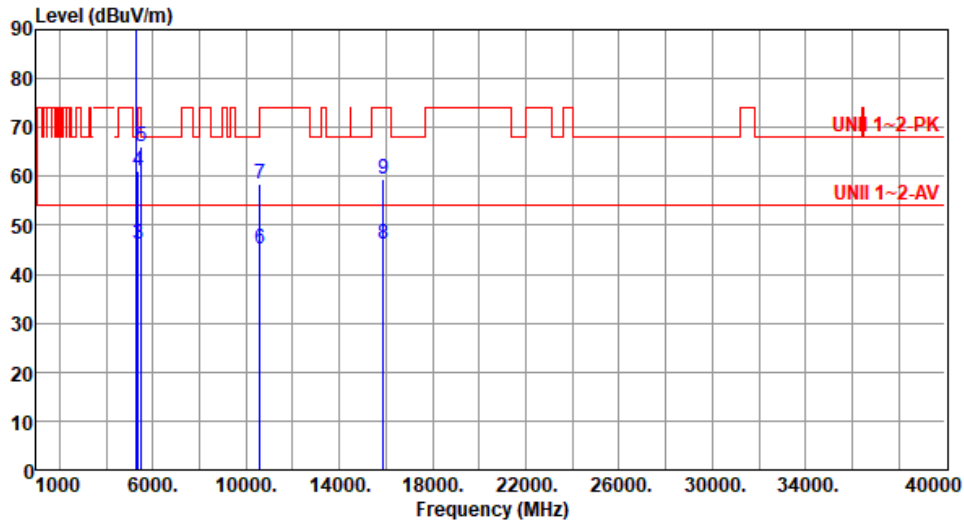
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5300
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



		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	*	5300.00	109.24			103.55	5.69	Average	194	5
2	*	5300.00	123.02			117.33	5.69	Peak	194	5
3		5350.00	46.27	54.00	-7.73	40.55	5.72	Average	194	5
4		5350.00	61.20	74.00	-12.80	55.48	5.72	Peak	194	5
5		5490.00	66.23	68.20	-1.97	59.86	6.37	Peak	222	3
6		10600.00	45.11	54.00	-8.89	30.39	14.72	Average	100	18
7		10600.00	58.57	74.00	-15.43	43.85	14.72	Peak	100	18
8		15900.00	46.29	54.00	-7.71	30.72	15.57	Average	100	14
9		15900.00	59.36	74.00	-14.64	43.79	15.57	Peak	100	14

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

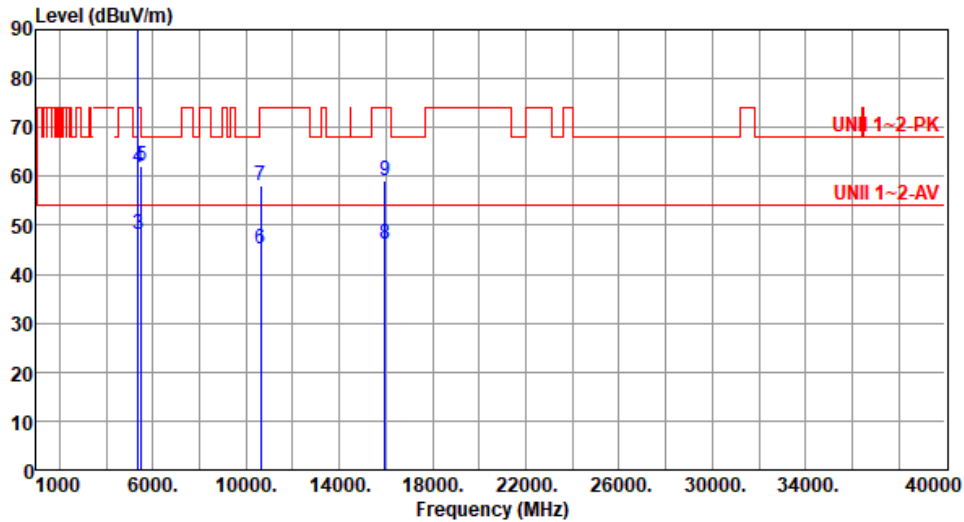
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5320.00	108.29			102.58	5.71	Average	203	11
2	*	5320.00	122.05			116.34	5.71	Peak	203	11
3		5350.00	48.13	54.00	-5.87	42.41	5.72	Average	203	11
4		5350.00	61.66	74.00	-12.34	55.94	5.72	Peak	203	11
5		5510.00	62.20	68.20	-6.00	55.78	6.42	Peak	199	7
6		10640.00	45.23	54.00	-8.77	30.37	14.86	Average	100	4
7		10640.00	58.24	74.00	-15.76	43.38	14.86	Peak	100	4
8		15960.00	46.07	54.00	-7.93	30.42	15.65	Average	100	5
9		15960.00	59.07	74.00	-14.93	43.42	15.65	Peak	100	5

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

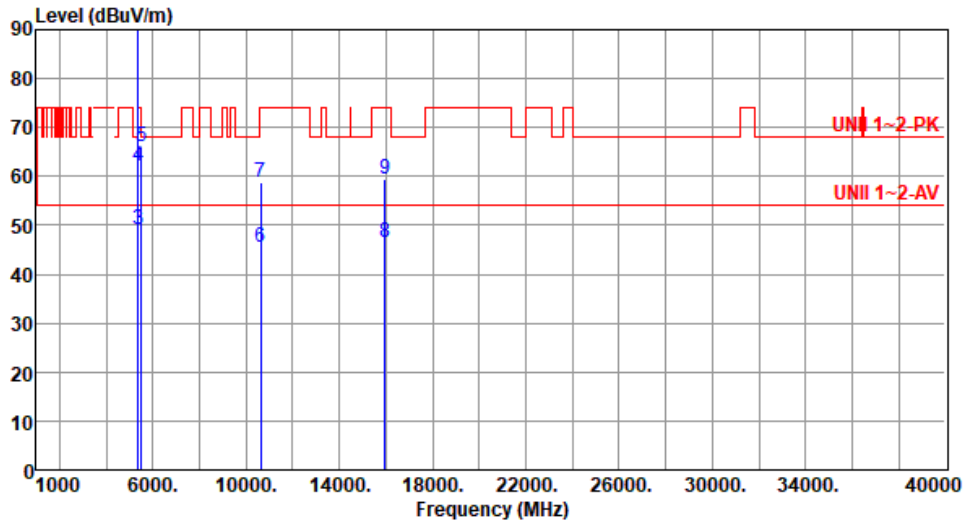
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5320.00	109.19			103.48	5.71	Average	197	3
2	*	5320.00	123.19			117.48	5.71	Peak	197	3
3		5350.00	49.30	54.00	-4.70	43.58	5.72	Average	197	3
4		5350.00	62.13	74.00	-11.87	56.41	5.72	Peak	197	3
5		5510.00	65.94	68.20	-2.26	59.52	6.42	Peak	220	1
6		10640.00	45.64	54.00	-8.36	30.78	14.86	Average	100	17
7		10640.00	58.67	74.00	-15.33	43.81	14.86	Peak	100	17
8		15960.00	46.44	54.00	-7.56	30.79	15.65	Average	100	14
9		15960.00	59.47	74.00	-14.53	43.82	15.65	Peak	100	14

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

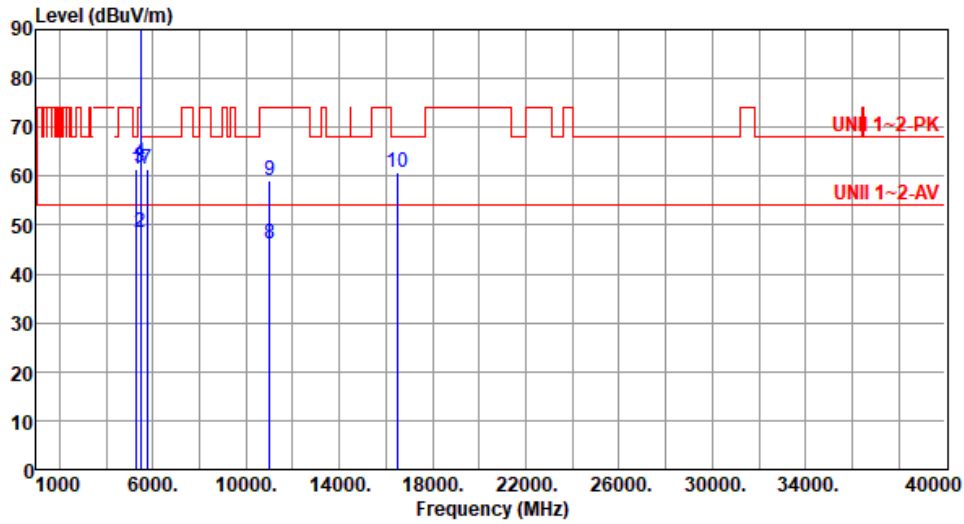
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5500
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5310.00	61.47	68.20	-6.73	55.78	5.69	Peak	183	358
2	5460.00	48.37	54.00	-5.63	42.07	6.30	Average	190	355
3	5460.00	61.80	74.00	-12.20	55.50	6.30	Peak	190	355
4	5470.00	62.74	68.20	-5.46	56.42	6.32	Peak	190	355
5 *	5500.00	109.62			103.22	6.40	Average	190	355
6 *	5500.00	122.78			116.38	6.40	Peak	190	355
7	5760.00	61.49	68.20	-6.71	54.85	6.64	Peak	196	353
8	11000.00	46.08	54.00	-7.92	30.43	15.65	Average	100	359
9	11000.00	59.07	74.00	-14.93	43.42	15.65	Peak	100	359
10	16500.00	60.89	68.20	-7.31	43.43	17.46	Peak	100	357

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

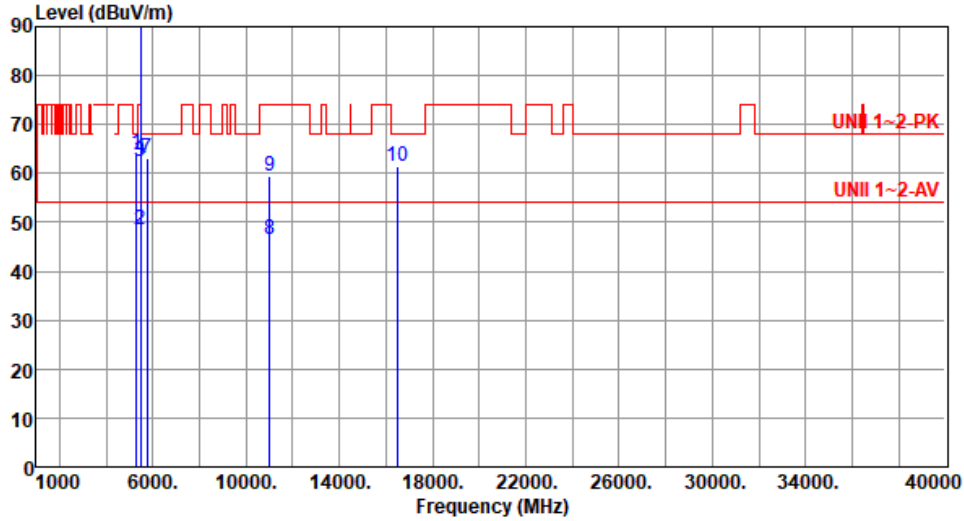
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5500
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5310.00	63.96	68.20	-4.24	58.27	5.69	Peak	216	1
2	5460.00	48.48	54.00	-5.52	42.18	6.30	Average	216	1
3	5460.00	62.43	74.00	-11.57	56.13	6.30	Peak	216	1
4	5470.00	63.00	68.20	-5.20	56.68	6.32	Peak	216	1
5 *	5500.00	108.68			102.28	6.40	Average	216	1
6 *	5500.00	122.42			116.02	6.40	Peak	216	1
7	5760.00	63.00	68.20	-5.20	56.36	6.64	Peak	216	1
8	11000.00	46.53	54.00	-7.47	30.88	15.65	Average	100	3
9	11000.00	59.60	74.00	-14.40	43.95	15.65	Peak	100	3
10	16500.00	61.31	68.20	-6.89	43.85	17.46	Peak	100	9

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

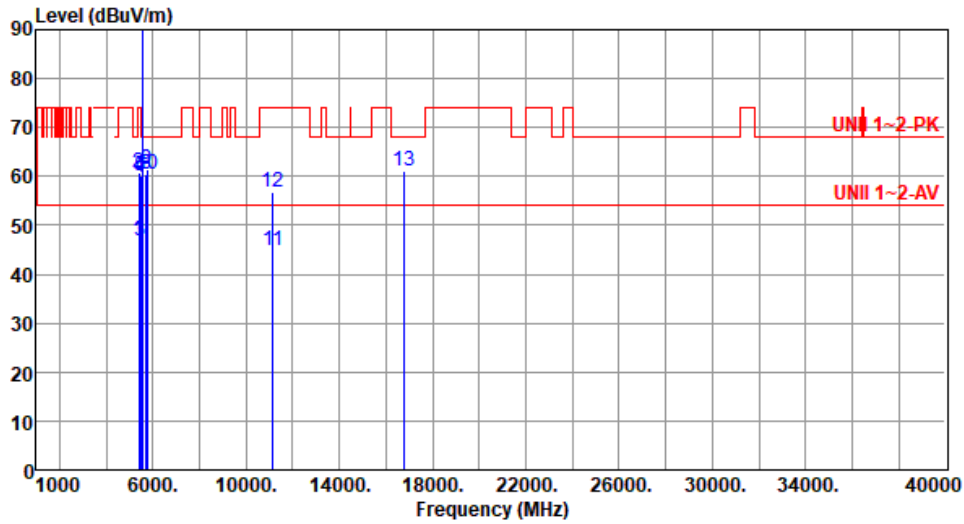
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5580
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5390.00	46.78	54.00	-7.22	40.64	6.14	Average	194	354
2	5390.00	60.65	74.00	-13.35	54.51	6.14	Peak	194	354
3	5460.00	46.88	54.00	-7.12	40.58	6.30	Average	194	354
4	5460.00	59.87	74.00	-14.13	53.57	6.30	Peak	194	354
5	5470.00	60.01	68.20	-8.19	53.69	6.32	Peak	194	354
6 *	5580.00	108.43			101.99	6.44	Average	194	354
7 *	5580.00	121.89			115.45	6.44	Peak	194	354
8	5725.00	60.41	68.20	-7.79	53.82	6.59	Peak	194	354
9	5760.00	61.55	68.20	-6.65	54.91	6.64	Peak	194	1
10	5770.00	60.43	68.20	-7.77	53.81	6.62	Peak	194	354
11	11160.00	44.92	54.00	-9.08	29.77	15.15	Average	100	15
12	11160.00	56.84	74.00	-17.16	41.69	15.15	Peak	100	15
13	16740.00	61.24	68.20	-6.96	43.54	17.70	Peak	100	29

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

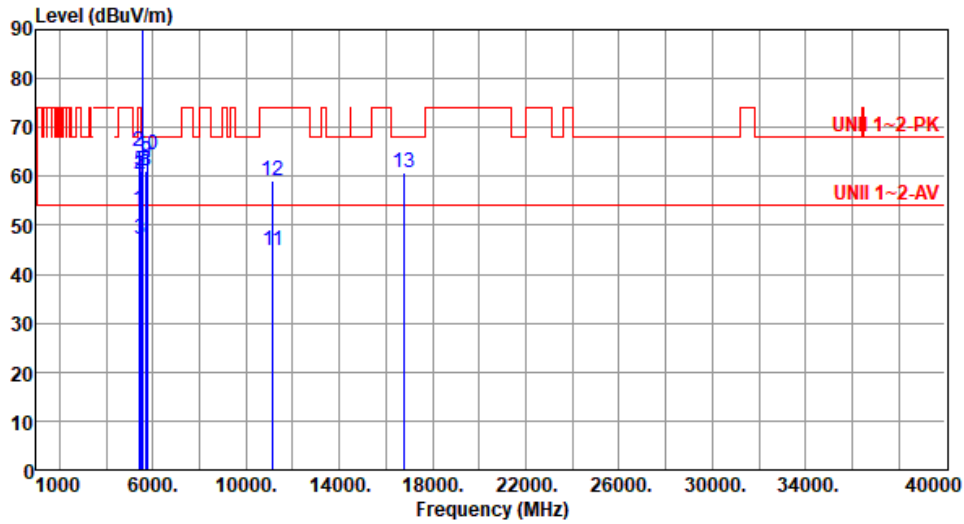
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5390.00	53.05	54.00	-0.95	46.91	6.14	Average	209	2
2	5390.00	65.06	74.00	-8.94	58.92	6.14	Peak	209	2
3	5460.00	47.08	54.00	-6.92	40.78	6.30	Average	214	359
4	5460.00	59.78	74.00	-14.22	53.48	6.30	Peak	214	359
5	5470.00	61.24	68.20	-6.96	54.92	6.32	Peak	214	359
6 *	5580.00	108.92			102.48	6.44	Average	214	359
7 *	5580.00	122.70			116.26	6.44	Peak	214	359
8	5725.00	60.98	68.20	-7.22	54.39	6.59	Peak	214	359
9	5760.00	63.12	68.20	-5.08	56.48	6.64	Peak	216	3
10	5770.00	64.31	68.20	-3.89	57.69	6.62	Peak	211	356
11	11160.00	44.98	54.00	-9.02	29.83	15.15	Average	100	353
12	11160.00	59.23	74.00	-14.77	44.08	15.15	Peak	100	353
13	16740.00	60.92	68.20	-7.28	43.22	17.70	Peak	100	12

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

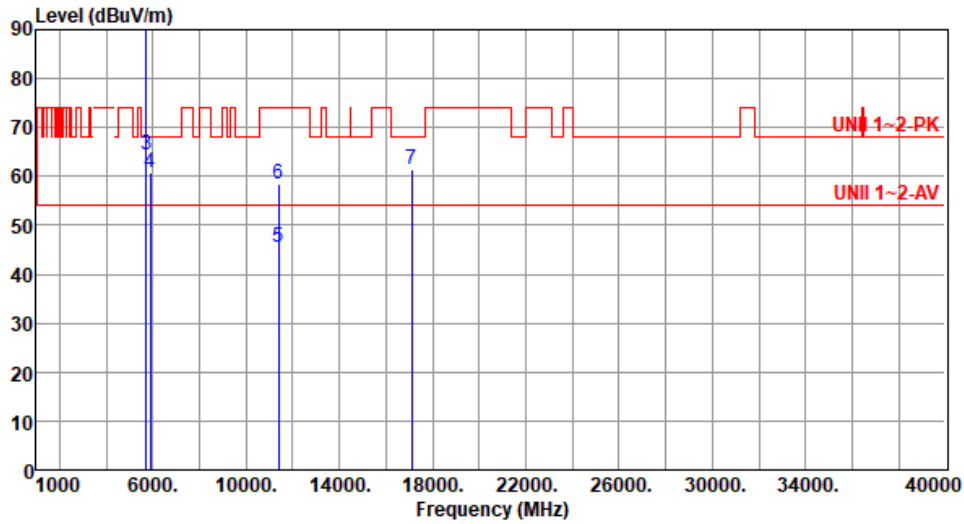
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5700.00	108.61			102.08	6.53	Average	192	351
2	*	5700.00	122.38			115.85	6.53	Peak	192	351
3		5725.00	64.26	68.20	-3.94	57.67	6.59	Peak	192	351
4		5890.00	60.74	68.20	-7.46	53.81	6.93	Peak	182	356
5		11400.00	45.57	54.00	-8.43	30.42	15.15	Average	100	357
6		11400.00	58.60	74.00	-15.40	43.45	15.15	Peak	100	357
7		17100.00	61.50	68.20	-6.70	43.35	18.15	Peak	100	355

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

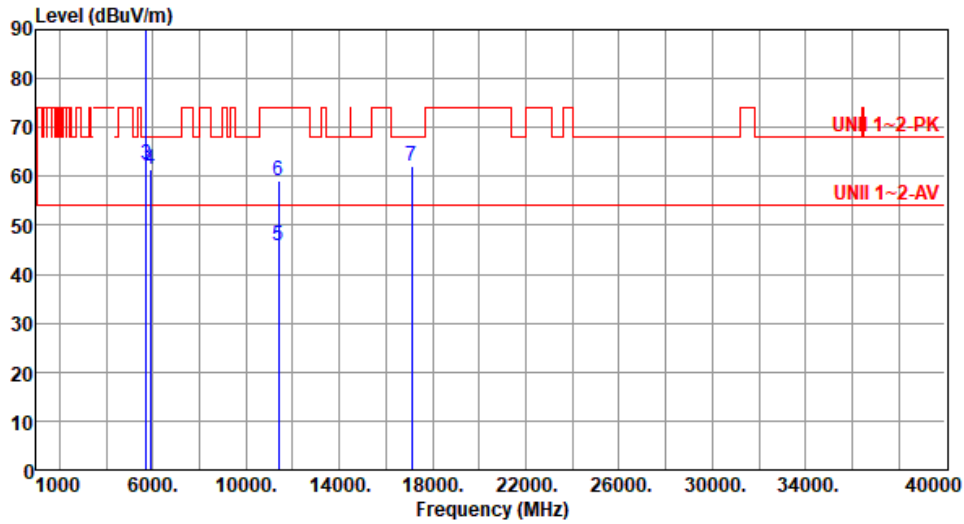
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5700.00	108.82			102.29	6.53	Average	207	357
2	*	5700.00	122.14			115.61	6.53	Peak	207	357
3		5725.00	62.52	68.20	-5.68	55.93	6.59	Peak	207	357
4		5890.00	61.45	68.20	-6.75	54.52	6.93	Peak	207	357
5		11400.00	45.90	54.00	-8.10	30.75	15.15	Average	100	3
6		11400.00	58.97	74.00	-15.03	43.82	15.15	Peak	100	3
7		17100.00	62.01	68.20	-6.19	43.86	18.15	Peak	100	5

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

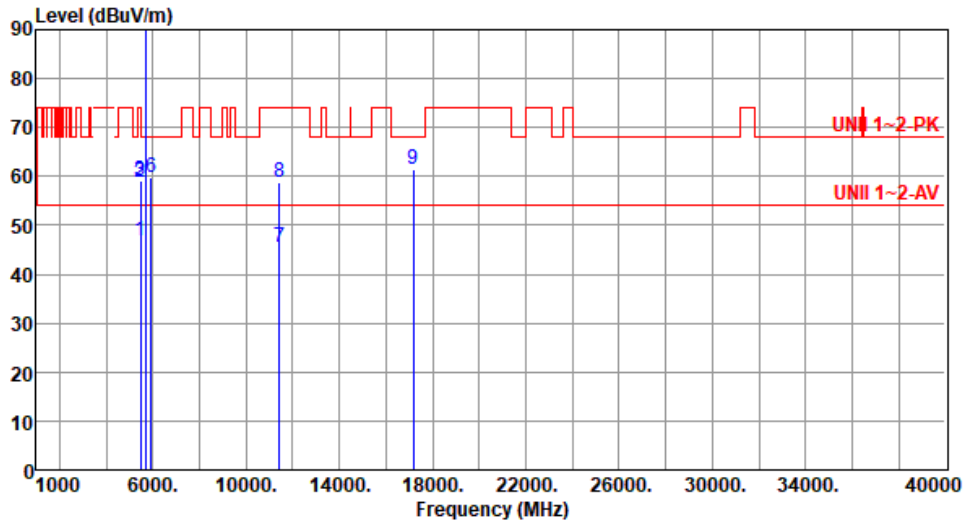
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5720
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	5460.00	46.94	54.00	-7.06	40.64	6.30	Average	192	354
2	5460.00	58.86	74.00	-15.14	52.56	6.30	Peak	192	354
3	5470.00	58.95	68.20	-9.25	52.63	6.32	Peak	192	354
4 *	5720.00	108.16			101.58	6.58	Average	192	354
5 *	5720.00	121.91			115.33	6.58	Peak	192	354
6	5925.00	59.78	68.20	-8.42	52.75	7.03	Peak	192	354
7	11440.00	45.58	54.00	-8.42	30.33	15.25	Average	100	359
8	11440.00	58.63	74.00	-15.37	43.38	15.25	Peak	100	359
9	17160.00	61.55	68.20	-6.65	43.40	18.15	Peak	100	3

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

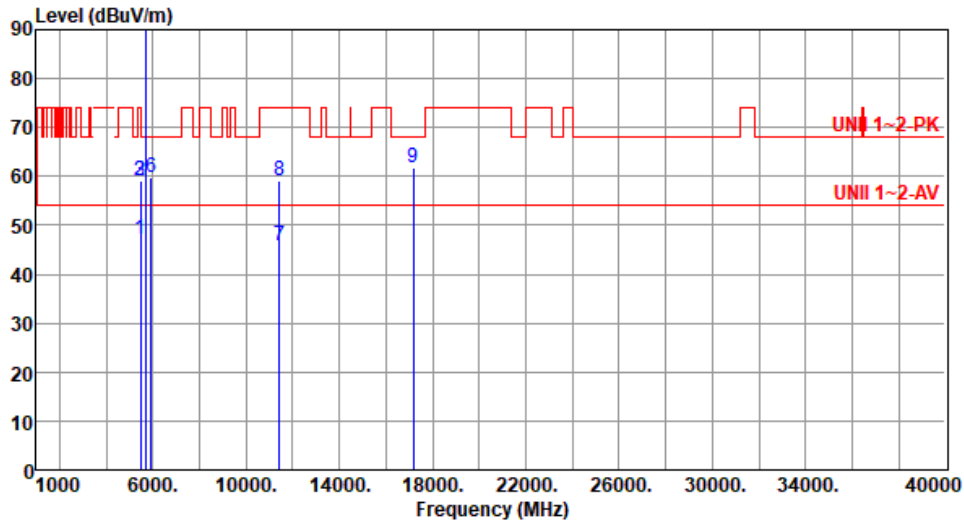
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5720
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	5460.00	47.03	54.00	-6.97	40.73	6.30	Average	223	357
2	5460.00	59.02	74.00	-14.98	52.72	6.30	Peak	223	357
3	5470.00	59.07	68.20	-9.13	52.75	6.32	Peak	223	357
4 *	5720.00	108.83			102.25	6.58	Average	223	357
5 *	5720.00	122.53			115.95	6.58	Peak	223	357
6	5925.00	59.80	68.20	-8.40	52.77	7.03	Peak	223	357
7	11440.00	45.99	54.00	-8.01	30.74	15.25	Average	100	2
8	11440.00	59.03	74.00	-14.97	43.78	15.25	Peak	100	2
9	17160.00	61.88	68.20	-6.32	43.73	18.15	Peak	100	9

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

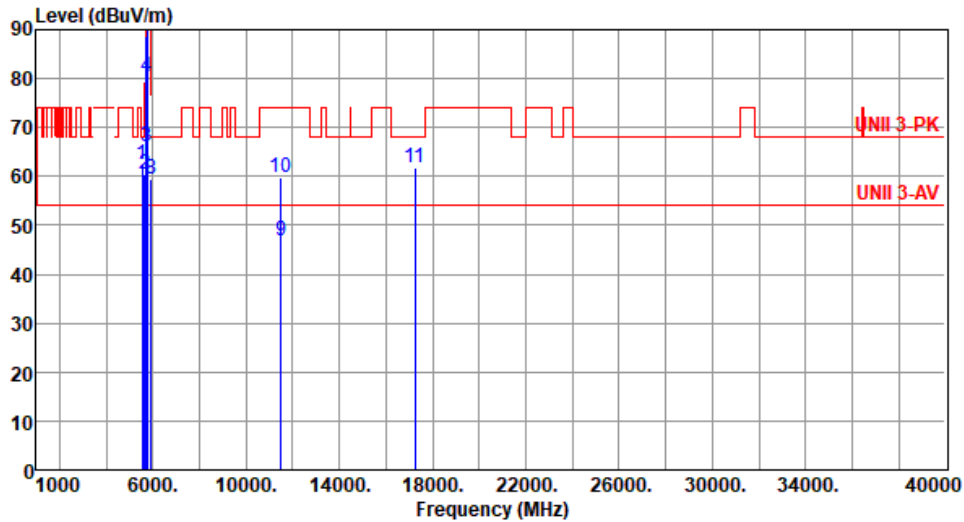
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5745
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):24 Humidity(%):67



	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	5550.00	62.35	68.20	-5.85	55.85	6.50	Peak	182	353
2	5650.00	60.57	68.20	-7.63	54.25	6.32	Peak	189	357
3	5700.00	66.11	105.20	-39.09	59.58	6.53	Peak	189	357
4	5720.00	80.44	110.80	-30.36	73.86	6.58	Peak	189	357
5	5725.00	88.70	122.20	-33.50	82.11	6.59	Peak	189	357
6 *	5745.00	110.85			104.21	6.64	Average	189	357
7 *	5745.00	124.10			117.46	6.64	Peak	189	357
8	5925.00	59.57	68.20	-8.63	52.54	7.03	Peak	189	357
9	11490.00	46.81	54.00	-7.19	31.43	15.38	Average	100	358
10	11490.00	59.82	74.00	-14.18	44.44	15.38	Peak	100	358
11	17235.00	61.73	68.20	-6.47	43.47	18.26	Peak	100	1

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

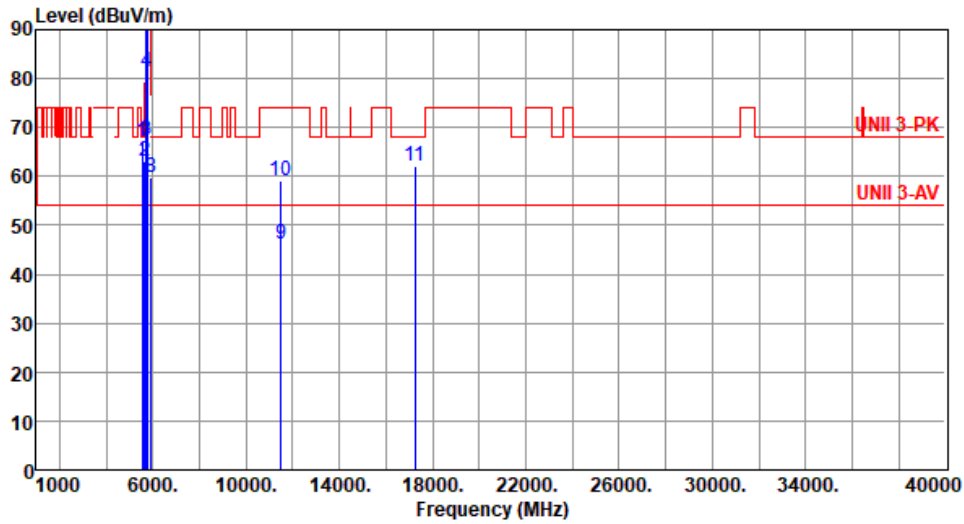
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5745
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):24 Humidity(%):67



	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	5550.00	66.94	68.20	-1.26	60.44	6.50	Peak	219	356
2	5650.00	63.20	68.20	-5.00	56.88	6.32	Peak	200	352
3	5700.00	67.29	105.20	-37.91	60.76	6.53	Peak	200	352
4	5720.00	81.38	110.80	-29.42	74.80	6.58	Peak	200	352
5	5725.00	90.14	122.20	-32.06	83.55	6.59	Peak	200	352
6 *	5745.00	111.39			104.75	6.64	Average	200	352
7 *	5745.00	124.74			118.10	6.64	Peak	200	352
8	5925.00	59.72	68.20	-8.48	52.69	7.03	Peak	200	352
9	11490.00	46.12	54.00	-7.88	30.74	15.38	Average	100	7
10	11490.00	59.15	74.00	-14.85	43.77	15.38	Peak	100	7
11	17235.00	62.07	68.20	-6.13	43.81	18.26	Peak	100	6

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

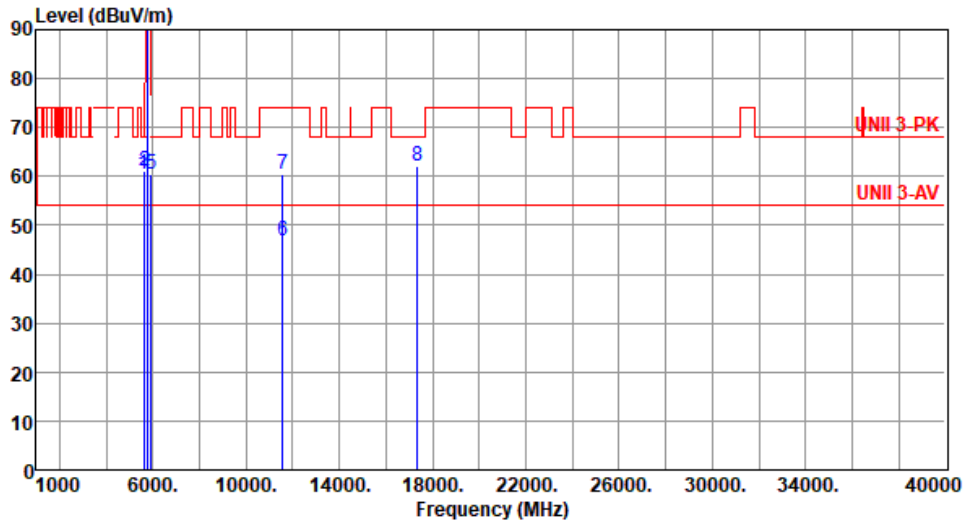
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5595.00	60.53	68.20	-7.67	54.12	6.41	Peak	189	355
2	5650.00	61.00	68.20	-7.20	54.68	6.32	Peak	189	355
3 *	5785.00	110.12			103.52	6.60	Average	189	355
4 *	5785.00	123.98			117.38	6.60	Peak	189	355
5	5925.00	60.44	68.20	-7.76	53.41	7.03	Peak	189	355
6	11570.00	46.98	54.00	-7.02	31.60	15.38	Average	191	345
7	11570.00	60.51	74.00	-13.49	45.13	15.38	Peak	191	345
8	17355.00	61.95	68.20	-6.25	42.97	18.98	Peak	100	11

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

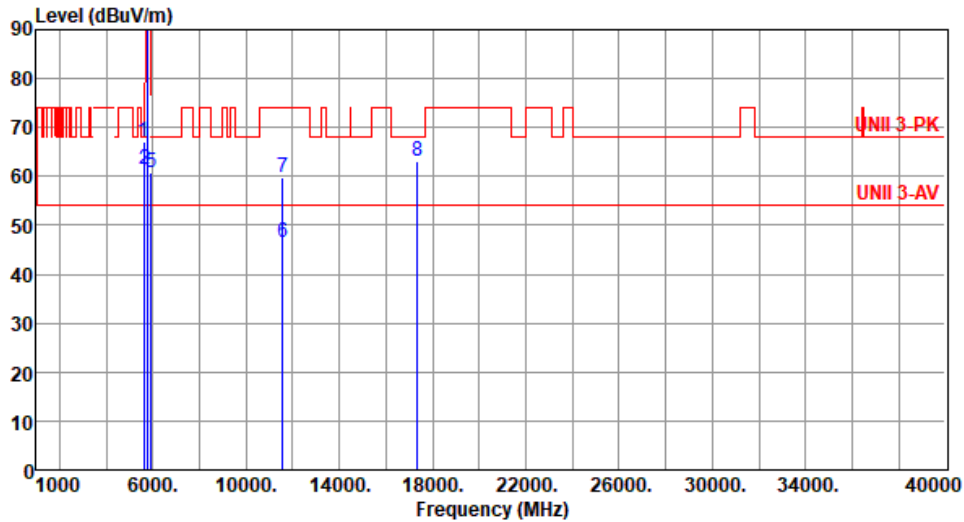
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5595.00	67.10	68.20	-1.10	60.69	6.41	Peak	220	358
2	5650.00	61.40	68.20	-6.80	55.08	6.32	Peak	202	355
3 *	5785.00	110.93			104.33	6.60	Average	202	355
4 *	5785.00	124.12			117.52	6.60	Peak	202	355
5	5925.00	60.61	68.20	-7.59	53.58	7.03	Peak	202	355
6	11570.00	46.55	54.00	-7.45	31.17	15.38	Average	184	350
7	11570.00	59.85	74.00	-14.15	44.47	15.38	Peak	184	350
8	17355.00	63.10	68.20	-5.10	44.12	18.98	Peak	100	6

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

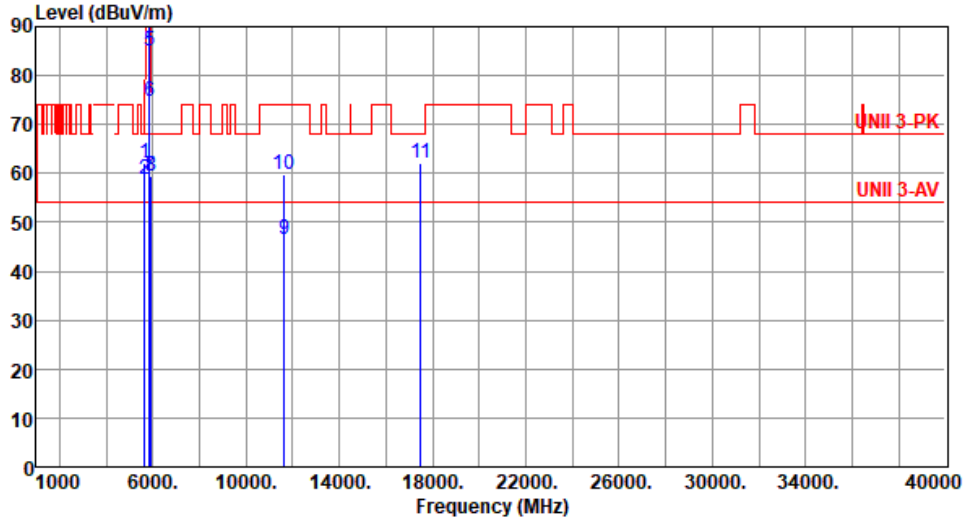
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5825
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):24 Humidity(%):67



	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	5635.00	62.11	68.20	-6.09	55.76	6.35	Peak	180	359
2	5650.00	58.76	68.20	-9.44	52.44	6.32	Peak	190	356
3 *	5825.00	110.78			104.11	6.67	Average	190	356
4 *	5825.00	124.11			117.44	6.67	Peak	190	356
5	5850.00	84.88	122.20	-37.32	78.11	6.77	Peak	190	356
6	5855.00	74.65	110.80	-36.15	67.85	6.80	Peak	190	356
7	5875.00	59.57	105.20	-45.63	52.69	6.88	Peak	190	356
8	5925.00	59.58	68.20	-8.62	52.55	7.03	Peak	190	356
9	11650.00	46.60	54.00	-7.40	31.43	15.17	Average	100	352
10	11650.00	59.62	74.00	-14.38	44.45	15.17	Peak	100	352
11	17475.00	62.25	68.20	-5.95	42.44	19.81	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

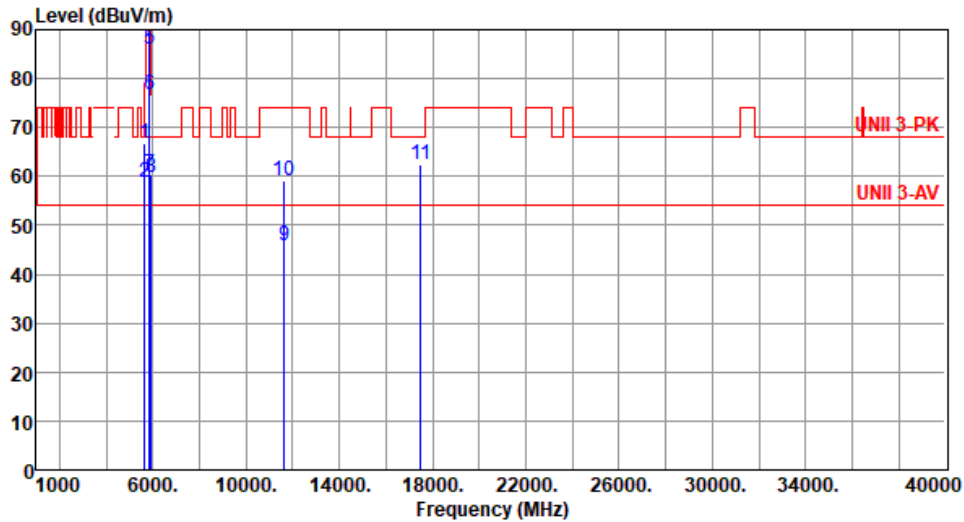
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE20	Test Freq. (MHz)	5825
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):24 Humidity(%):67



	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	5635.00	66.82	68.20	-1.38	60.47	6.35	Peak	221	355
2	5650.00	58.82	68.20	-9.38	52.50	6.32	Peak	203	351
3 *	5825.00	111.32			104.65	6.67	Average	203	351
4 *	5825.00	124.69			118.02	6.67	Peak	203	351
5	5850.00	86.03	122.20	-36.17	79.26	6.77	Peak	203	351
6	5855.00	76.79	110.80	-34.01	69.99	6.80	Peak	203	351
7	5875.00	60.57	105.20	-44.63	53.69	6.88	Peak	203	351
8	5925.00	59.80	68.20	-8.40	52.77	7.03	Peak	203	351
9	11650.00	45.94	54.00	-8.06	30.77	15.17	Average	100	5
10	11650.00	58.95	74.00	-15.05	43.78	15.17	Peak	100	5
11	17475.00	62.60	68.20	-5.60	42.79	19.81	Peak	100	2

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



Unwanted Emissions (Above 1GHz) for ax HE40

Modulation	ax HE40		Test Freq. (MHz)	5190					
Polarization	Horizontal								
Test By :Brad Wu			Temperature(°C):23			Humidity(%):69			
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		cm	deg
1	5150.00	52.43	54.00	-1.57	46.12	6.31	Average	198	7
2	5150.00	70.92	74.00	-3.08	64.61	6.31	Peak	198	7
3 *	5190.00	106.99			100.81	6.18	Average	198	7
4 *	5190.00	120.34			114.16	6.18	Peak	198	7
5	5380.00	47.69	54.00	-6.31	41.66	6.03	Average	186	359
6	5380.00	59.69	74.00	-14.31	53.66	6.03	Peak	186	359
7	10380.00	56.81	68.20	-11.39	42.35	14.46	Peak	100	4
8	15570.00	46.46	54.00	-7.54	30.29	16.17	Average	100	6
9	15570.00	58.49	74.00	-15.51	42.32	16.17	Peak	100	6

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

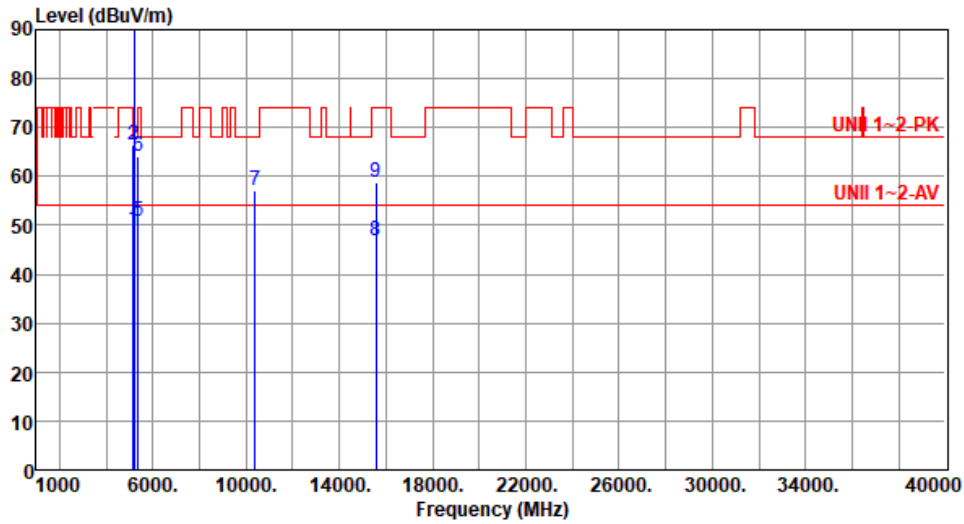
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5190
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	49.21	54.00	-4.79	42.90	6.31	Average	225	6
2	5150.00	66.47	74.00	-7.53	60.16	6.31	Peak	225	6
3 *	5190.00	105.92			99.74	6.18	Average	225	6
4 *	5190.00	119.61			113.43	6.18	Peak	225	6
5	5380.00	50.79	54.00	-3.21	44.76	6.03	Average	235	2
6	5380.00	64.07	74.00	-9.93	58.04	6.03	Peak	235	2
7	10380.00	57.05	68.20	-11.15	42.59	14.46	Peak	100	2
8	15570.00	46.73	54.00	-7.27	30.56	16.17	Average	100	4
9	15570.00	58.68	74.00	-15.32	42.51	16.17	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

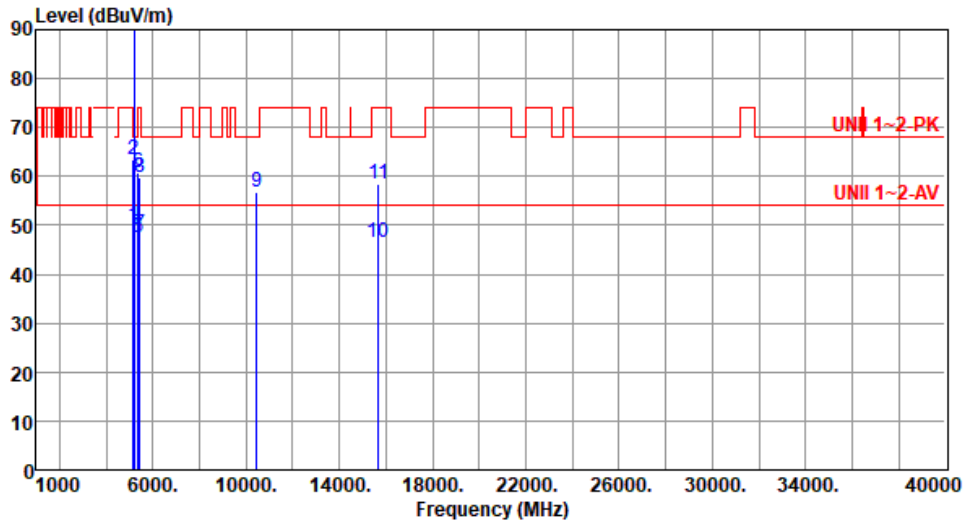
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5230
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	49.85	54.00	-4.15	43.54	6.31	Average	189	8
2	5150.00	63.50	74.00	-10.50	57.19	6.31	Peak	189	8
3 *	5230.00	108.54			102.62	5.92	Average	189	8
4 *	5230.00	122.63			116.71	5.92	Peak	189	8
5	5350.00	47.36	54.00	-6.64	41.64	5.72	Average	189	8
6	5350.00	60.81	74.00	-13.19	55.09	5.72	Peak	189	8
7	5420.00	48.02	54.00	-5.98	41.77	6.25	Average	186	2
8	5420.00	59.94	74.00	-14.06	53.69	6.25	Peak	186	2
9	10460.00	56.89	68.20	-11.31	42.30	14.59	Peak	100	1
10	15690.00	46.35	54.00	-7.65	30.37	15.98	Average	100	3
11	15690.00	58.33	74.00	-15.67	42.35	15.98	Peak	100	3

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

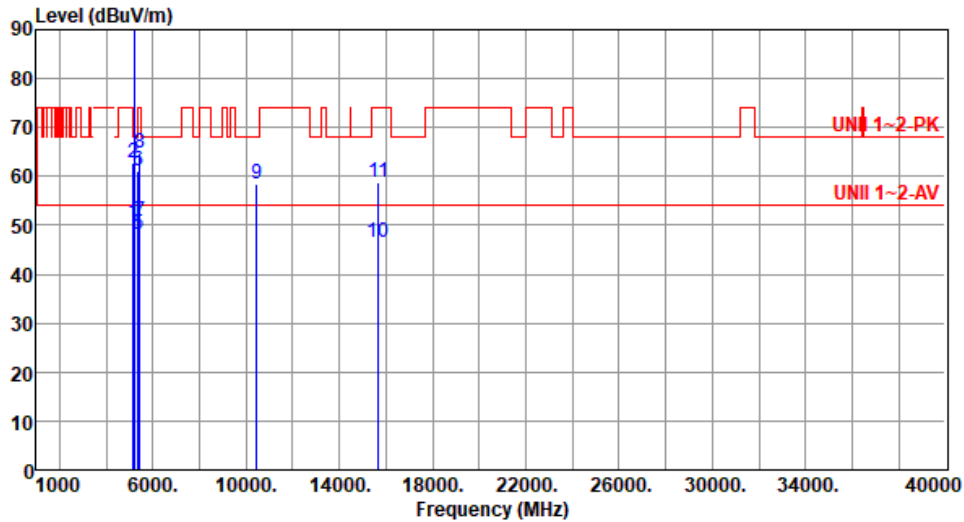
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5230
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	50.45	54.00	-3.55	44.14	6.31	Average	210	3
2	5150.00	62.67	74.00	-11.33	56.36	6.31	Peak	210	3
3 *	5230.00	108.05			102.13	5.92	Average	210	3
4 *	5230.00	121.44			115.52	5.92	Peak	210	3
5	5350.00	48.06	54.00	-5.94	42.34	5.72	Average	210	3
6	5350.00	61.17	74.00	-12.83	55.45	5.72	Peak	210	3
7	5420.00	50.89	54.00	-3.11	44.64	6.25	Average	200	1
8	5420.00	64.76	74.00	-9.24	58.51	6.25	Peak	200	1
9	10460.00	58.36	68.20	-9.84	43.77	14.59	Peak	100	339
10	15690.00	46.58	54.00	-7.42	30.60	15.98	Average	100	343
11	15690.00	58.83	74.00	-15.17	42.85	15.98	Peak	100	343

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

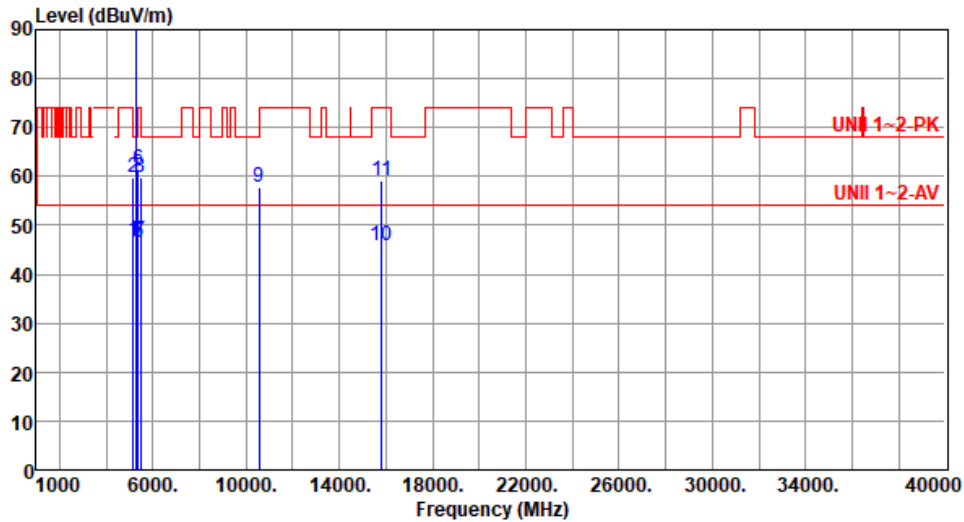
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5270
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	46.91	54.00	-7.09	40.60	6.31	Average	198	8
2	5150.00	59.85	74.00	-14.15	53.54	6.31	Peak	198	8
3 *	5270.00	106.86			101.12	5.74	Average	198	8
4 *	5270.00	120.49			114.75	5.74	Peak	198	8
5	5350.00	46.47	54.00	-7.53	40.75	5.72	Average	198	8
6	5350.00	61.59	74.00	-12.41	55.87	5.72	Peak	198	8
7	5460.00	46.95	54.00	-7.05	40.65	6.30	Average	198	8
8	5460.00	59.94	74.00	-14.06	53.64	6.30	Peak	198	8
9	10540.00	57.83	68.20	-10.37	43.15	14.68	Peak	100	6
10	15810.00	45.95	54.00	-8.05	30.15	15.80	Average	100	1
11	15810.00	59.00	74.00	-15.00	43.20	15.80	Peak	100	1

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

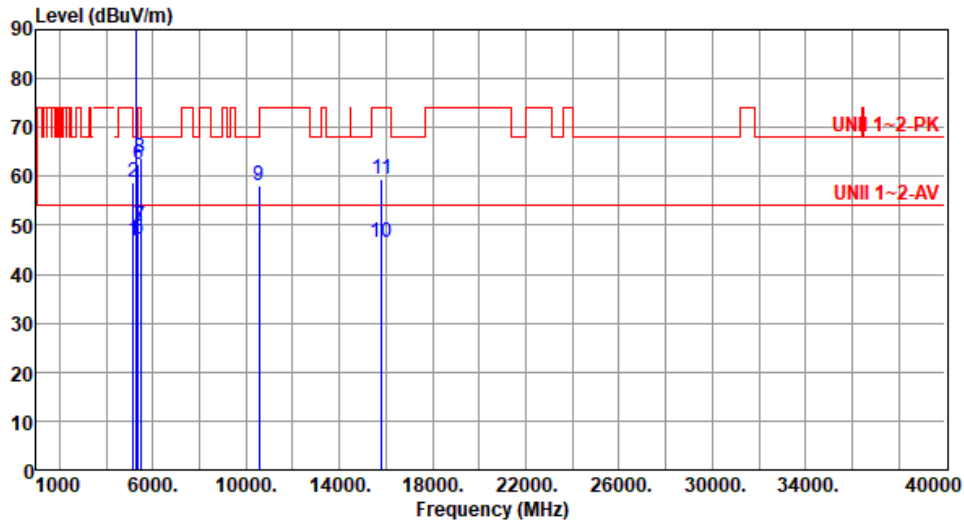
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5270
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	46.76	54.00	-7.24	40.45	6.31	Average	233	3
2	5150.00	58.76	74.00	-15.24	52.45	6.31	Peak	233	3
3 *	5270.00	107.07			101.33	5.74	Average	233	3
4 *	5270.00	121.10			115.36	5.74	Peak	233	3
5	5350.00	47.26	54.00	-6.74	41.54	5.72	Average	233	3
6	5350.00	62.57	74.00	-11.43	56.85	5.72	Peak	233	3
7	5460.00	49.87	54.00	-4.13	43.57	6.30	Average	203	2
8	5460.00	63.87	74.00	-10.13	57.57	6.30	Peak	203	2
9	10540.00	58.28	68.20	-9.92	43.60	14.68	Peak	100	7
10	15810.00	46.38	54.00	-7.62	30.58	15.80	Average	100	11
11	15810.00	59.49	74.00	-14.51	43.69	15.80	Peak	100	11

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

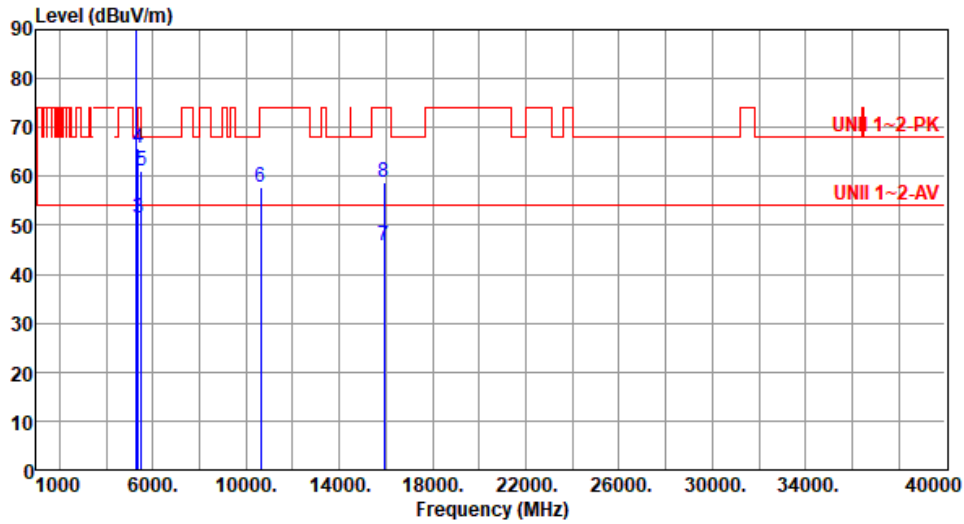
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5310
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5310.00	106.73			101.04	5.69	Average	199	10
2	*	5310.00	120.63			114.94	5.69	Peak	199	10
3		5350.00	51.33	54.00	-2.67	45.61	5.72	Average	199	10
4		5350.00	65.84	74.00	-8.16	60.12	5.72	Peak	199	10
5		5500.00	61.15	68.20	-7.05	54.75	6.40	Peak	186	7
6		10620.00	57.89	74.00	-16.11	43.10	14.79	Peak	100	1
7		15930.00	45.70	54.00	-8.30	30.08	15.62	Average	100	3
8		15930.00	58.79	74.00	-15.21	43.17	15.62	Peak	100	3

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

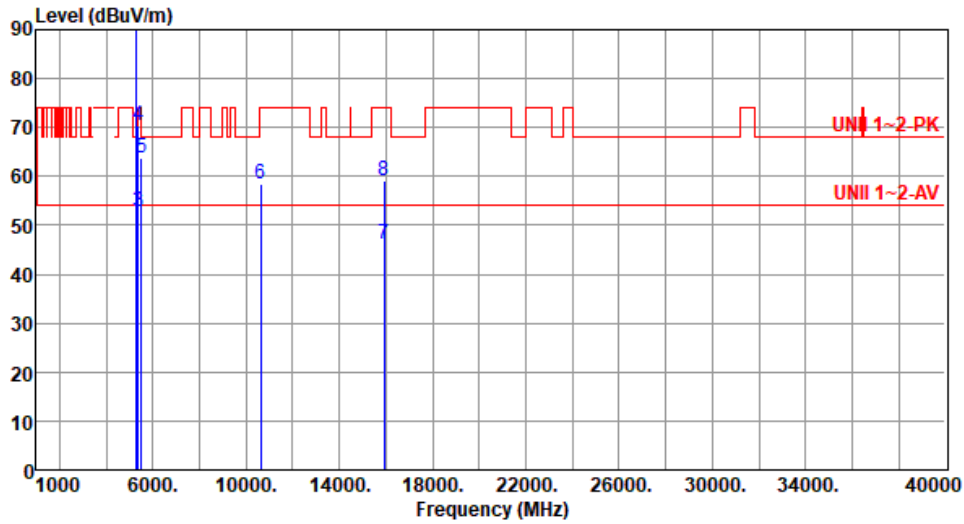
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5310
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



		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	*	5310.00	106.94			101.25	5.69	Average	229	2
2	*	5310.00	120.92			115.23	5.69	Peak	229	2
3		5350.00	52.73	54.00	-1.27	47.01	5.72	Average	229	2
4		5350.00	70.26	74.00	-3.74	64.54	5.72	Peak	229	2
5		5500.00	63.81	68.20	-4.39	57.41	6.40	Peak	217	1
6		10620.00	58.38	74.00	-15.62	43.59	14.79	Peak	100	12
7		15930.00	46.19	54.00	-7.81	30.57	15.62	Average	100	15
8		15930.00	59.24	74.00	-14.76	43.62	15.62	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

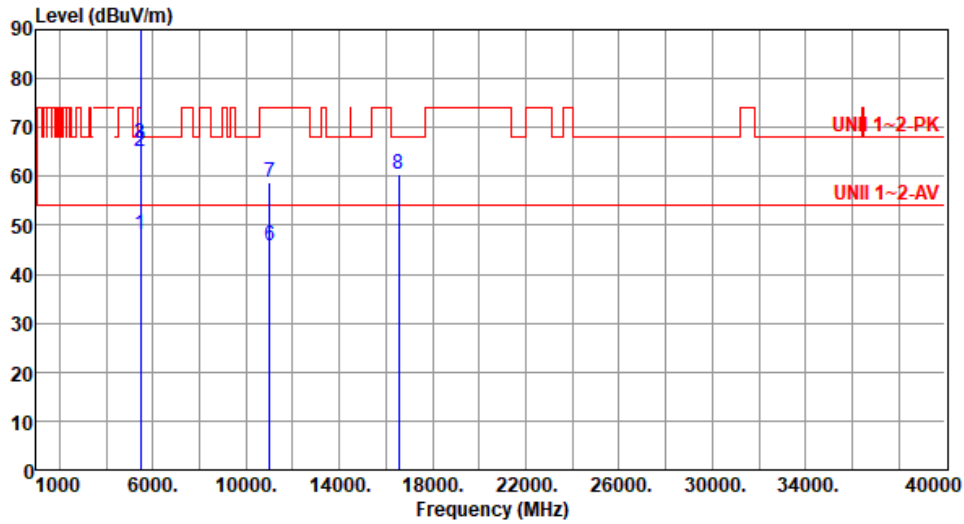
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5510
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5460.00	48.08	54.00	-5.92	41.78	6.30	Average	187	354
2	5460.00	65.09	74.00	-8.91	58.79	6.30	Peak	187	354
3	5470.00	66.75	68.20	-1.45	60.43	6.32	Peak	187	354
4 *	5510.00	106.20			99.78	6.42	Average	187	354
5 *	5510.00	119.67			113.25	6.42	Peak	187	354
6	11020.00	45.72	54.00	-8.28	30.14	15.58	Average	100	358
7	11020.00	58.81	74.00	-15.19	43.23	15.58	Peak	100	358
8	16530.00	60.43	68.20	-7.77	43.13	17.30	Peak	100	352

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

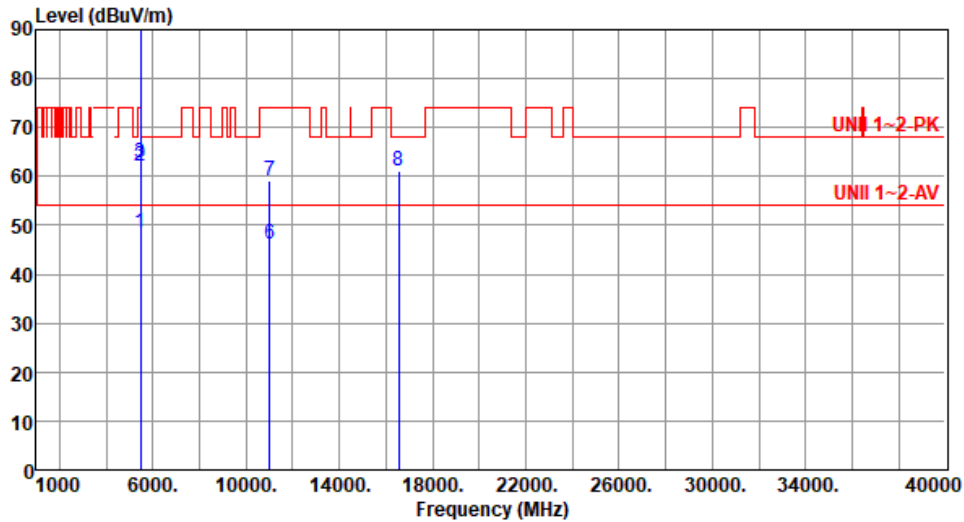
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5510
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5460.00	48.37	54.00	-5.63	42.07	6.30	Average	215	359
2	5460.00	62.15	74.00	-11.85	55.85	6.30	Peak	215	359
3	5470.00	62.85	68.20	-5.35	56.53	6.32	Peak	215	359
4 *	5510.00	105.54			99.12	6.42	Average	215	359
5 *	5510.00	119.63			113.21	6.42	Peak	215	359
6	11020.00	46.18	54.00	-7.82	30.60	15.58	Average	100	2
7	11020.00	59.27	74.00	-14.73	43.69	15.58	Peak	100	2
8	16530.00	61.03	68.20	-7.17	43.73	17.30	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

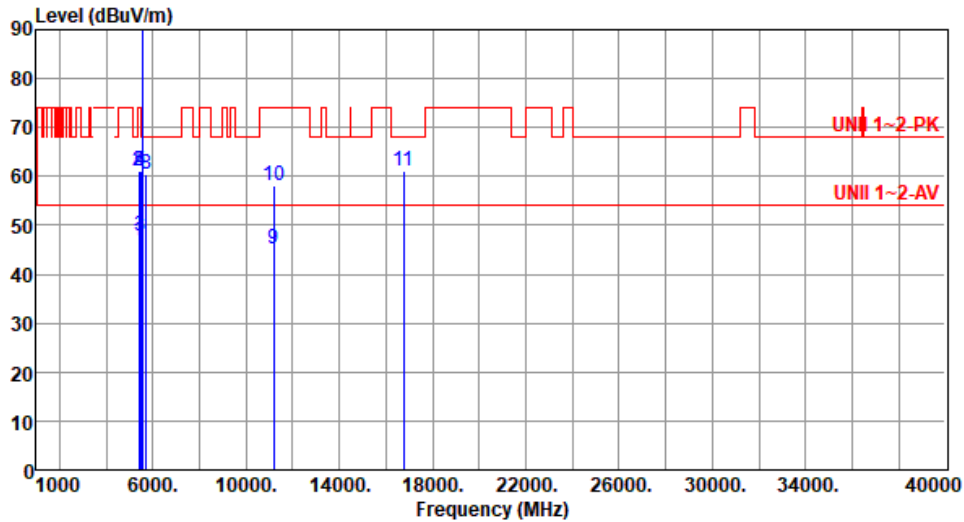
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5590
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5400.00	46.90	54.00	-7.10	40.66	6.24	Average	199	357
2	5400.00	61.12	74.00	-12.88	54.88	6.24	Peak	199	357
3	5460.00	47.95	54.00	-6.05	41.65	6.30	Average	201	353
4	5460.00	61.24	74.00	-12.76	54.94	6.30	Peak	201	353
5	5470.00	61.17	68.20	-7.03	54.85	6.32	Peak	201	353
6 *	5590.00	106.32			99.90	6.42	Average	201	353
7 *	5590.00	119.64			113.22	6.42	Peak	201	353
8	5725.00	60.28	68.20	-7.92	53.69	6.59	Peak	201	353
9	11180.00	45.28	54.00	-8.72	30.18	15.10	Average	100	358
10	11180.00	58.20	74.00	-15.80	43.10	15.10	Peak	100	358
11	16770.00	61.06	68.20	-7.14	43.19	17.87	Peak	100	353

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

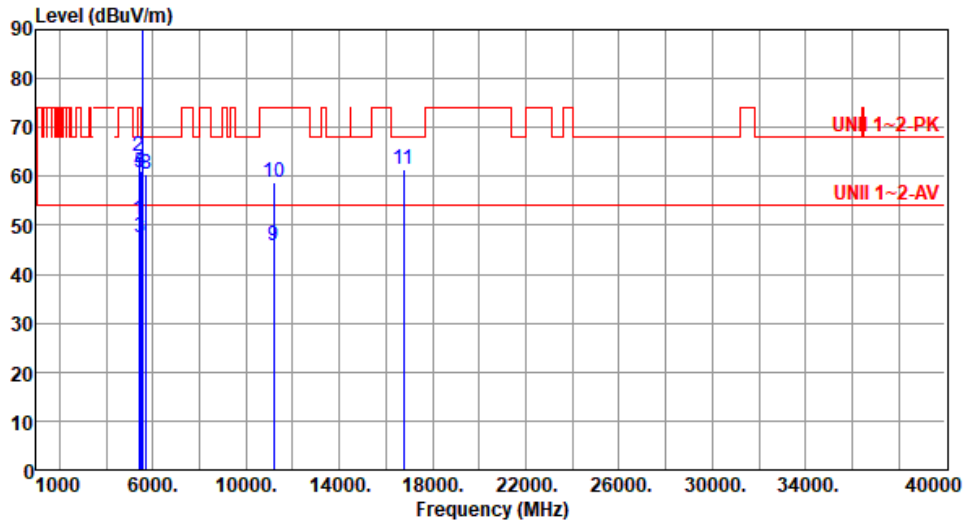
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5590
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5400.00	51.00	54.00	-3.00	44.76	6.24	Average	215	358
2	5400.00	63.99	74.00	-10.01	57.75	6.24	Peak	215	358
3	5460.00	47.53	54.00	-6.47	41.23	6.30	Average	215	358
4	5460.00	61.03	74.00	-12.97	54.73	6.30	Peak	215	358
5	5470.00	60.84	68.20	-7.36	54.52	6.32	Peak	215	358
6 *	5590.00	107.21			100.79	6.42	Average	215	358
7 *	5590.00	120.50			114.08	6.42	Peak	215	358
8	5725.00	60.60	68.20	-7.60	54.01	6.59	Peak	215	358
9	11180.00	45.69	54.00	-8.31	30.59	15.10	Average	100	3
10	11180.00	58.68	74.00	-15.32	43.58	15.10	Peak	100	3
11	16770.00	61.49	68.20	-6.71	43.62	17.87	Peak	100	5

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

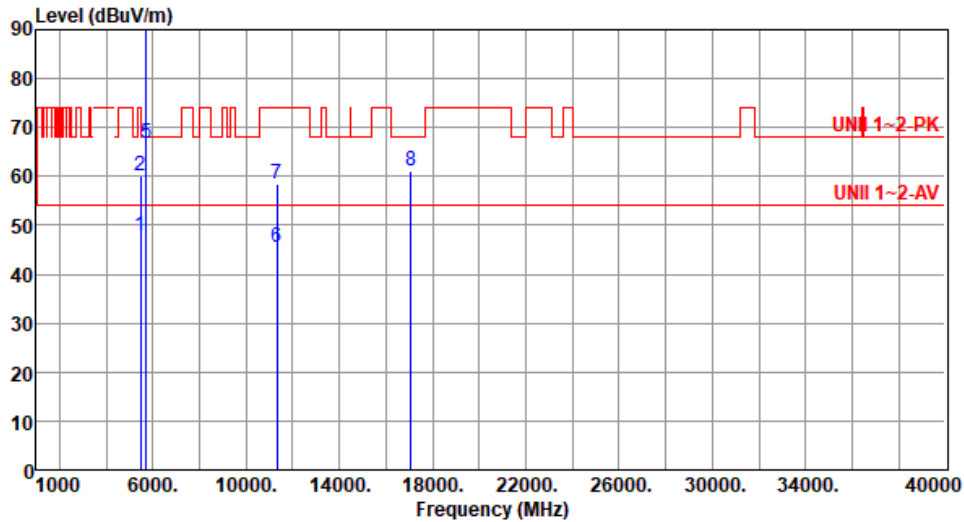
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5670
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5460.00	47.83	54.00	-6.17	41.53	6.30	Average	189	354
2	5460.00	59.99	74.00	-14.01	53.69	6.30	Peak	189	354
3 *	5670.00	106.17			99.77	6.40	Average	181	350
4 *	5670.00	119.09			112.69	6.40	Peak	181	350
5	5725.00	66.75	68.20	-1.45	60.16	6.59	Peak	181	350
6	11340.00	45.36	54.00	-8.64	30.24	15.12	Average	100	355
7	11340.00	58.38	74.00	-15.62	43.26	15.12	Peak	100	355
8	17070.00	61.21	68.20	-6.99	43.12	18.09	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

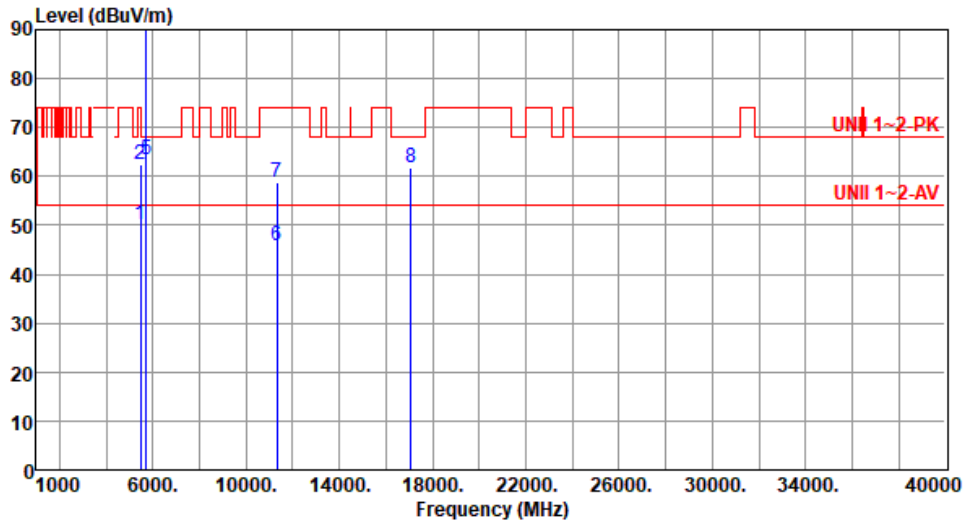
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5670
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5460.00	50.10	54.00	-3.90	43.80	6.30	Average	209	359
2	5460.00	62.41	74.00	-11.59	56.11	6.30	Peak	209	359
3 *	5670.00	105.96			99.56	6.40	Average	208	357
4 *	5670.00	119.72			113.32	6.40	Peak	208	357
5	5725.00	63.55	68.20	-4.65	56.96	6.59	Peak	208	357
6	11340.00	45.70	54.00	-8.30	30.58	15.12	Average	100	2
7	11340.00	58.72	74.00	-15.28	43.60	15.12	Peak	100	2
8	17070.00	61.63	68.20	-6.57	43.54	18.09	Peak	100	1

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

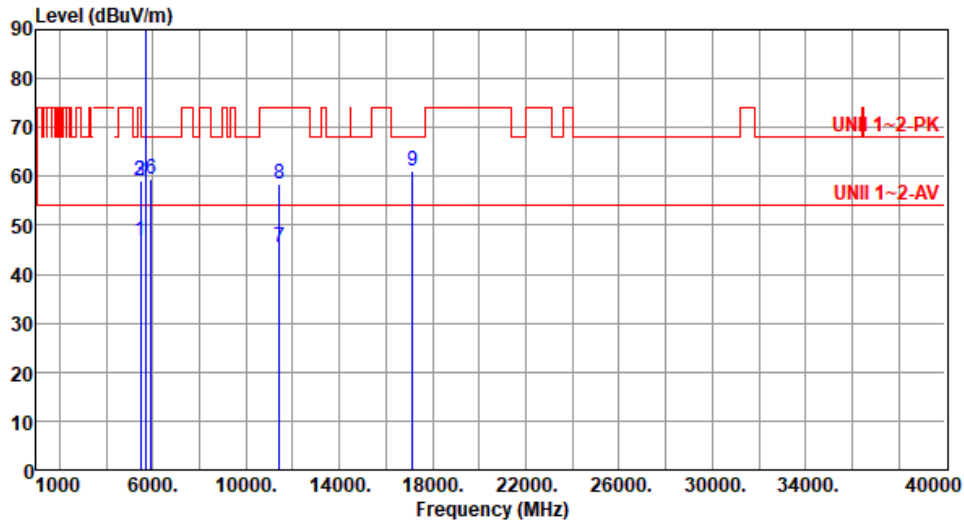
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5710
Polarization	Horizontal		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	5460.00	46.97	54.00	-7.03	40.67	6.30	Average	209	351
2	5460.00	58.97	74.00	-15.03	52.67	6.30	Peak	209	351
3	5470.00	59.02	68.20	-9.18	52.70	6.32	Peak	209	351
4 *	5710.00	106.01			99.45	6.56	Average	209	351
5 *	5710.00	119.71			113.15	6.56	Peak	209	351
6	5925.00	59.61	68.20	-8.59	52.58	7.03	Peak	209	351
7	11420.00	45.38	54.00	-8.62	30.18	15.20	Average	100	356
8	11420.00	58.31	74.00	-15.69	43.11	15.20	Peak	100	356
9	17130.00	61.27	68.20	-6.93	43.12	18.15	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

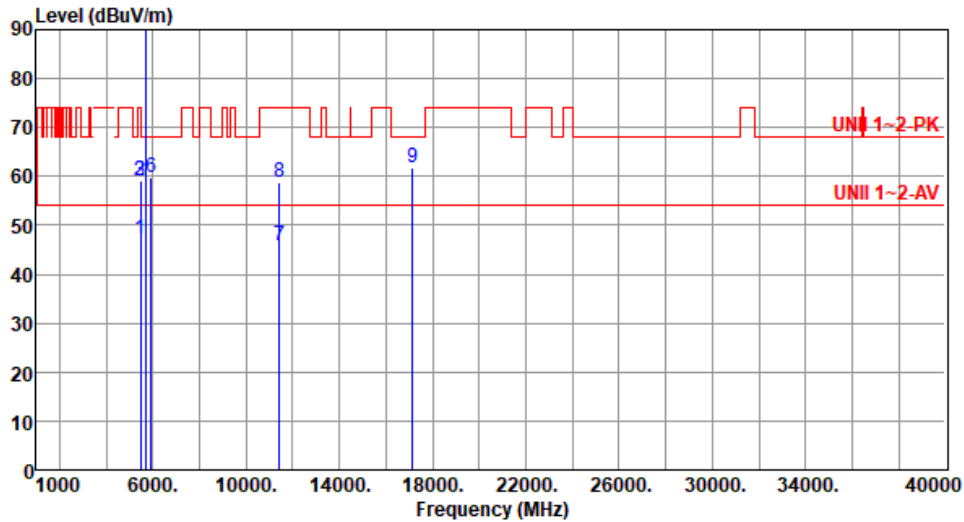
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5710
Polarization	Vertical		

Test By : Akun Chung Temperature(°C): 24 Humidity(%): 67



	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	5460.00	46.99	54.00	-7.01	40.69	6.30	Average	223	359
2	5460.00	59.15	74.00	-14.85	52.85	6.30	Peak	223	359
3	5470.00	59.04	68.20	-9.16	52.72	6.32	Peak	223	359
4 *	5710.00	106.89			100.33	6.56	Average	223	359
5 *	5710.00	120.51			113.95	6.56	Peak	223	359
6	5925.00	59.72	68.20	-8.48	52.69	7.03	Peak	223	359
7	11420.00	45.74	54.00	-8.26	30.54	15.20	Average	100	9
8	11420.00	58.79	74.00	-15.21	43.59	15.20	Peak	100	9
9	17130.00	61.67	68.20	-6.53	43.52	18.15	Peak	100	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

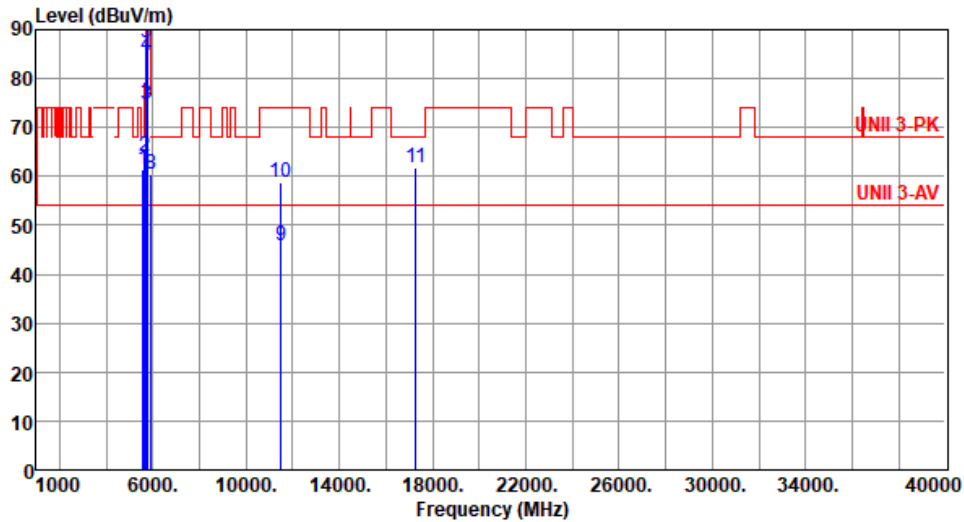
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5755
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5565.00	61.36	68.20	-6.84	54.90	6.46	Peak	185	352
2	5650.00	63.97	68.20	-4.23	57.65	6.32	Peak	188	358
3	5700.00	74.79	105.20	-30.41	68.26	6.53	Peak	188	358
4	5720.00	84.64	110.80	-26.16	78.06	6.58	Peak	188	358
5	5725.00	87.43	122.20	-34.77	80.84	6.59	Peak	188	358
6 *	5755.00	107.29			100.64	6.65	Average	188	358
7 *	5755.00	121.00			114.35	6.65	Peak	188	358
8	5925.00	60.34	68.20	-7.86	53.31	7.03	Peak	188	358
9	11510.00	45.76	54.00	-8.24	30.36	15.40	Average	100	359
10	11510.00	58.64	74.00	-15.36	43.24	15.40	Peak	100	359
11	17265.00	61.64	68.20	-6.56	43.31	18.33	Peak	100	355

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

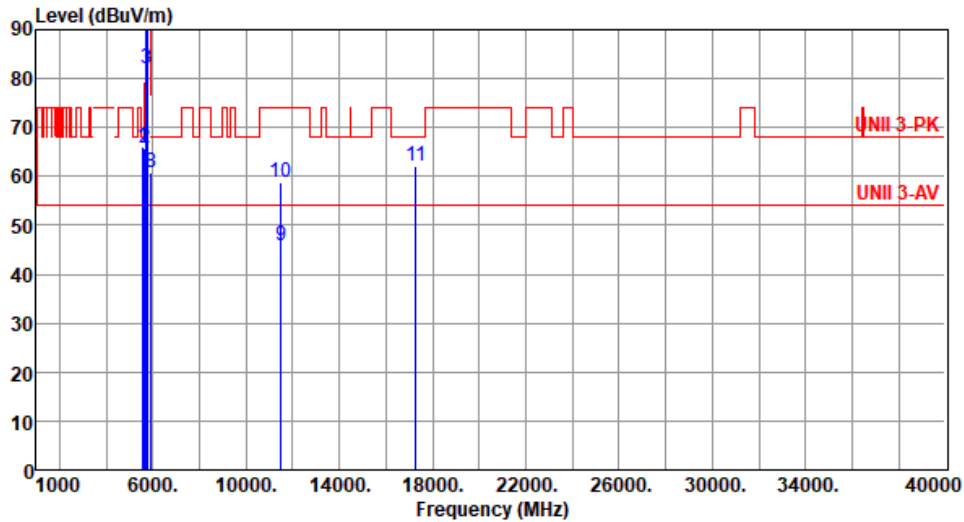
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3:"*" is Peak / Average value of fundamental frequency



Modulation	ax HE40	Test Freq. (MHz)	5755
Polarization	Vertical		

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5565.00	66.08	68.20	-2.12	59.62	6.46	Peak	214	1
2	5650.00	65.75	68.20	-2.45	59.43	6.32	Peak	209	354
3	5700.00	81.99	105.20	-23.21	75.46	6.53	Peak	209	354
4	5720.00	93.01	110.80	-17.79	86.43	6.58	Peak	209	354
5	5725.00	93.83	122.20	-28.37	87.24	6.59	Peak	209	354
6 *	5755.00	109.09			102.44	6.65	Average	209	354
7 *	5755.00	122.82			116.17	6.65	Peak	209	354
8	5925.00	60.89	68.20	-7.31	53.86	7.03	Peak	209	354
9	11510.00	45.98	54.00	-8.02	30.58	15.40	Average	100	7
10	11510.00	58.94	74.00	-15.06	43.54	15.40	Peak	100	7
11	17265.00	61.96	68.20	-6.24	43.63	18.33	Peak	100	5

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

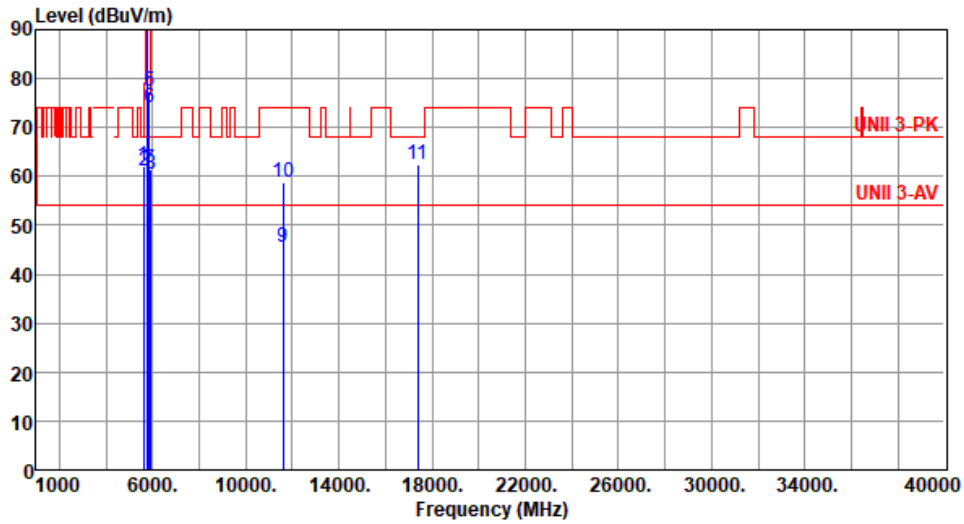
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency



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

Test By :Brad Wu Temperature(°C):23 Humidity(%):69



	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	5605.00	62.05	68.20	-6.15	55.66	6.39	Peak	184	356
2	5650.00	61.07	68.20	-7.13	54.75	6.32	Peak	193	352
3 *	5795.00	108.24			101.66	6.58	Average	193	352
4 *	5795.00	122.12			115.54	6.58	Peak	193	352
5	5850.00	77.31	122.20	-44.89	70.54	6.77	Peak	193	352
6	5855.00	73.95	110.80	-36.85	67.15	6.80	Peak	193	352
7	5875.00	61.40	105.20	-43.80	54.52	6.88	Peak	193	352
8	5925.00	60.60	68.20	-7.60	53.57	7.03	Peak	193	352
9	11590.00	45.56	54.00	-8.44	30.18	15.38	Average	100	3
10	11590.00	58.65	74.00	-15.35	43.27	15.38	Peak	100	3
11	17385.00	62.46	68.20	-5.74	43.17	19.29	Peak	100	1

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