FCC Test Report

FCC ID	:	**A8J-EWS276FIT**
Equipment	:	**Fit6 4x4 Lite**
Model No.	:	**EWS276-FIT**
Brand Name	:	**EnGenius**
Applicant	:	**EnGenius Technologies**
Address	:	**1580 Scenic Avenue, Costa Mesa, CA, United States 92626**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**May 09, 2023**
Tested Date	:	**May 12 ~ Jun. 20, 2023**

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

Reviewed by: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

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Release Record

Report No.	Version	Description	Issued Date
FR350902AN	Rev. 01	Initial issue	Jul. 28, 2023
FR350902AN	Rev. 02	Adding description of output power of Beamforming mode is calculated.	Jul. 31, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 0.505MHz 42.33 (Margin -3.67dB) - AV	Pass
15.407(b) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 5150.00MHz 53.15 (Margin -0.85dB) - 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: 26.35 5725-5850MHz: 28.02 ***Beamforming mode*** 5150-5250MHz: 20.33 5725-5850MHz: 21.32	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 5725-5850	a	5180-5240 5745-5825	36-48 [4] 149-165 [5]	4	6-54 Mbps
5150-5250 5725-5850	n (HT20)	5180-5240 5745-5825	36-48 [4] 149-165 [5]	4	MCS 0-31
5150-5250 5725-5850	n (HT40)	5190-5230 5755-5795	38-46 [2] 151-159 [2]	4	MCS 0-31
5150-5250 5725-5850	ac (VHT20)	5180-5240 5745-5825	36-48 [4] 149-165 [5]	4	MCS 0-9
5150-5250 5725-5850	ac (VHT40)	5190-5230 5755-5795	38-46 [2] 151-159 [2]	4	MCS 0-9
5150-5250 5725-5850	ac (VHT80)	5210 5775	42 [1] 155 [1]	4	MCS 0-9
5150-5250 5725-5850	ax (HE20)	5180-5240 5745-5825	36-48 [4] 149-165 [5]	4	MCS 0-11
5150-5250 5725-5850	ax (HE40)	5190-5230 5755-5795	38-46 [2] 151-159 [2]	4	MCS 0-11
5150-5250 5725-5850	ax (HE80)	5210 5775	42 [1] 155 [1]	4	MCS 0-11
Note 1: OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation. Note 2: 802.11n/ac/ax supports beamforming function.					

1.1.2 Antenna Details

Model	**Type**	**Connector**	**Operating Frequencies (MHz) / Antenna Gain (dBi)**		
			2400~2483.5	**5150~5250**	**5725~5850**
2G-1	PIFA	UFL	3.5	--	--
2G-2	PIFA	UFL	3.8	--	--
2G-3	Dipole	UFL	4.3	--	--
2G-4	Dipole	UFL	4.4	--	--
5G-1	PIFA	UFL	--	4	4.6
5G-2	PIFA	UFL	--	4.2	5
5G-3	PIFA	UFL	--	5	6.7
5G-4	PIFA	UFL	--	3	4.6

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter 54Vdc from POE

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	151	5755
48	5240	159	5795
149	5745	**802.11ac VHT80 / ax HE80**	
153	5765	42	5210
157	5785	155	5775
161	5805	-	-
165	5825	-	-

1.1.6 Test Tool and Duty Cycle

Test Tool	QATool_Dbg, V 0.0.2.69		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	98.97%	0.05
	ax HE20-OFDMA	98.58%	0.06
	ax HE40-OFDMA	95.97%	0.18
	ax HE80-OFDMA	91.04%	0.41

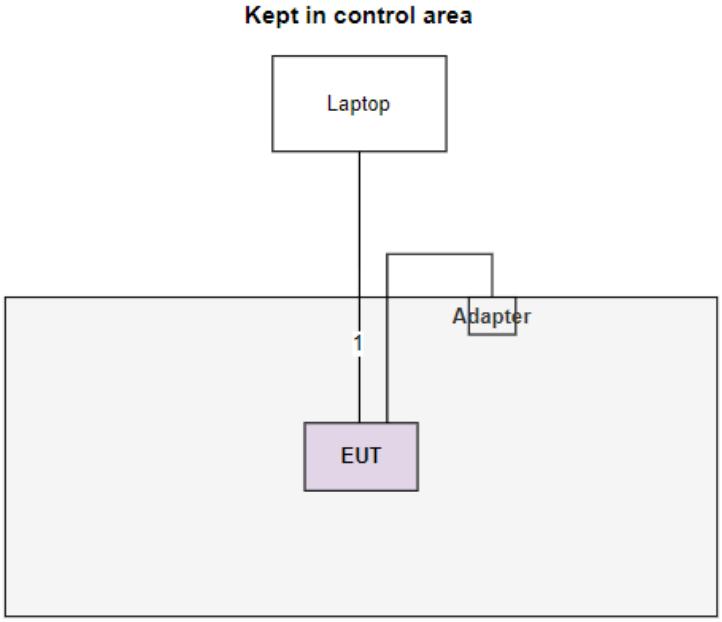
1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	19
11a	5200	19.5
11a	5240	19
11a	5745	23
11a	5785	22.5
11a	5825	23
ax HE20-OFDMA	5180	20.5
ax HE20-OFDMA	5200	21
ax HE20-OFDMA	5240	21
ax HE20-OFDMA	5745	23
ax HE20-OFDMA	5785	23
ax HE20-OFDMA	5825	23
ax HE40-OFDMA	5190	18
ax HE40-OFDMA	5230	21
ax HE40-OFDMA	5755	21
ax HE40-OFDMA	5795	22.5
ax HE80-OFDMA	5210	15.5
ax HE80-OFDMA	5775	19

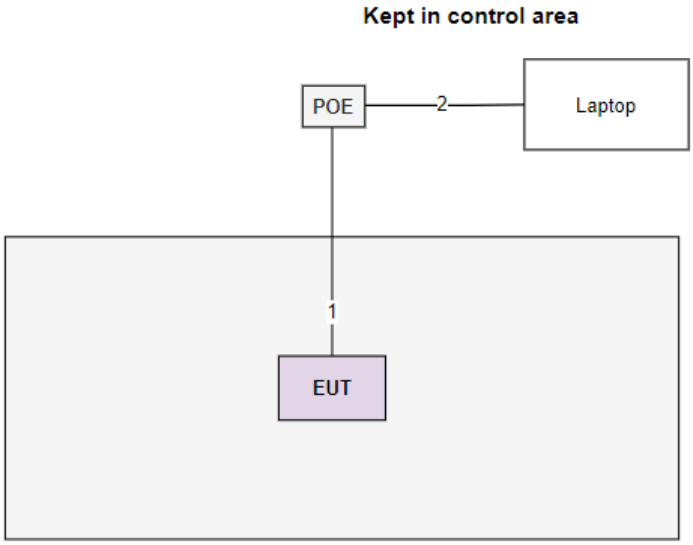
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Laptop	DELL	Latitude 5400	DoC	---
2	Adapter	LEI	MU18D1120150-A1	---	Remarks: I/P: 100-240V~, 50/60Hz, 0.6A O/P: 12V⎓1.5A (Provided by applicant.)
3	POE	EnGenius	EPA5006GAT	---	Remarks: I/P: 100-240V~, 50~60Hz, 0.8A O/P: 54V⎓0.6A (Provided by applicant.)

1.3 Test Setup Chart

Test Setup Diagram (Adapter mode)


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

Test Setup Diagram (POE mode)


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

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	May 23, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101579	May 09, 2023	May 08, 2024
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan .03, 2023	Jan .02, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	03	Jun. 08, 2022	Jun. 07, 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 12 ~ Jun. 20, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101499	Mar. 16, 2023	Mar. 15, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jun. 28, 2022	Jun. 27, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 15, 2022	Dec. 14, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980187	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980897	Aug. 01, 2022	Jul. 31, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Sep. 23, 2022	Sep. 22, 2023
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 23, 2022	Sep. 22, 2023
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 23, 2022	Sep. 22, 2023
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 23, 2022	Sep. 22, 2023
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 23, 2022	Sep. 22, 2023
HIGHPASS FILTER	K&L	11SH10-7000/T1800 0-O/OP	21	Sep. 28, 2022	Sep. 27, 2023
Attenuator	Pasternack	PE7005-10	10-3	Oct. 14, 2022	Oct. 13, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	May 25, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Jun. 22, 2022	Jun. 21, 2023
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 09, 2022	Dec. 08, 2023
Attenuator	Pasternack	PE7005-10	10-2	Oct. 06, 2022	Oct. 05, 2023
Measurement Software	Sporton	SENSE-15407_NII	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.407
ANSI C63.10-2013

1.6 Reference Guidance

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

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

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

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

2 Test Configuration

2.1 Testing Facility

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

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

2.1.1 The Worst Test Modes and Channel Details

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Non-beamforming mode				
AC Power Line Conducted Emission	ax HE20-OFDMA	5240	MCS 0	1, 2
Unwanted Emissions ≤1GHz	ax HE20-OFDMA	5240	MCS 0	1, 2
Unwanted Emissions >1GHz Conducted Output Power Emission Bandwidth Power Spectral Density	11a ax HE20-OFDMA ax HE40-OFDMA ax HE80-OFDMA	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0	1
Frequency Stability	Un-modulation	5200	---	1
Beamforming mode				
Conducted Output Power	ax HE20-OFDMA ax HE40-OFDMA ax HE80-OFDMA	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	1
For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Non-beamforming mode				
AC Power Line Conducted Emission	11a	5745	6 Mbps	1, 2
Unwanted Emissions ≤1GHz	11a	5745	6 Mbps	1, 2
Unwanted Emissions >1GHz Conducted Output Power Emission Bandwidth Power Spectral Density	11a ax HE20-OFDMA ax HE40-OFDMA ax HE80-OFDMA	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5775	6 Mbps MCS 0 MCS 0 MCS 0	1
Frequency Stability	Un-modulation	5785	---	1
Beamforming mode				
Conducted Output Power	ax HE20-OFDMA ax HE40-OFDMA ax HE80-OFDMA	5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0	1

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. Beamforming mode is calculated not measured. The calculation method is conducted power of non-beamforming – 6.02 dB.
3. Test Configurations are listed as below:
   1) Test Configuration 1: Adapter mode
   2) Test Configuration 2: POE mode

3 Transmitter Test Results

3.1 Emission Bandwidth

3.1.1 Limit of Emission Bandwidth

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

3.1.2 Test Procedures

26dB Bandwidth

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

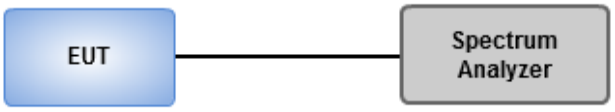
Occupied Bandwidth

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

6dB Bandwidth

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

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	22°C / 63%	**Tested By**	Brad Wu

Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

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

Frequency Band (MHz)		**Limit**
☒	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.

3.2.3 Test Setup

3.2.4 Test Results

Ambient Condition	22°C / 63%	**Tested By**	Brad Wu

Refer to Appendix B.

3.3 Power Spectral Density

3.3.1 Limit of Power Spectral Density

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

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

3.3.2 Test Procedures

For 5150 ~ 5250 MHz

Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

For 5725 ~ 5850 MHz

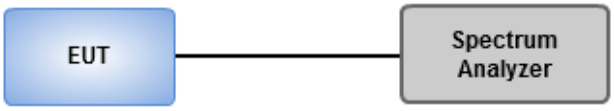
Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	22°C / 63%	Tested By	Brad Wu

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]
5.725 - 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

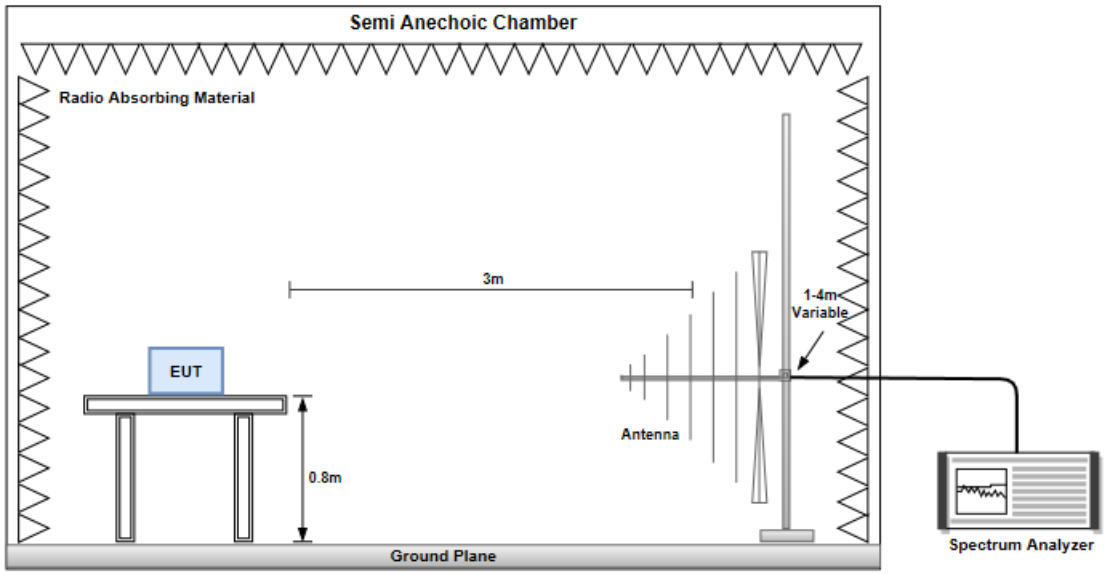
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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:

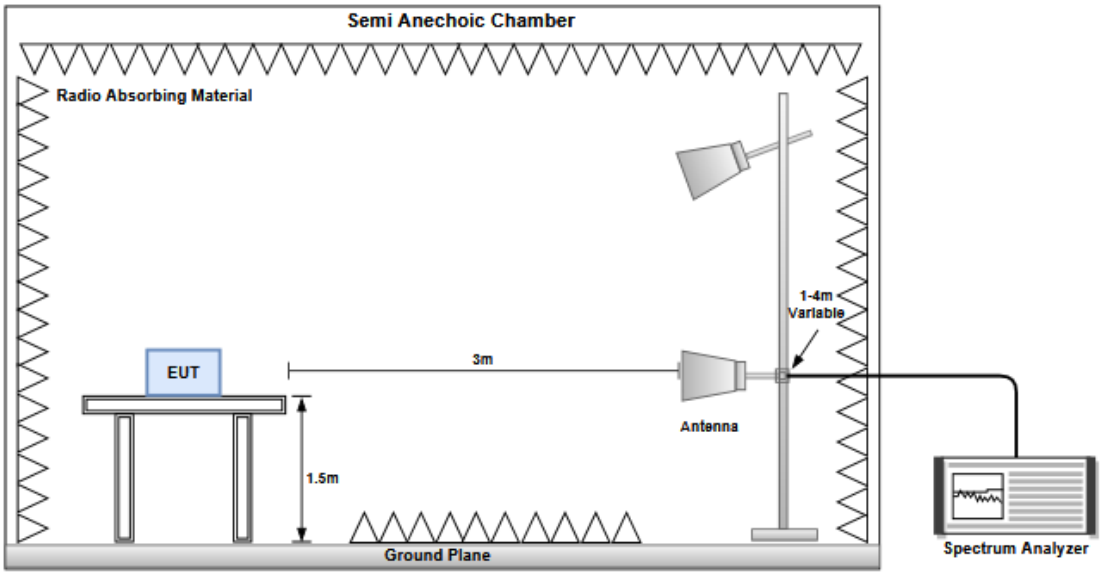
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.4.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.4.4 Test Results

Refer to Appendix D.

3.5 Frequency Stability

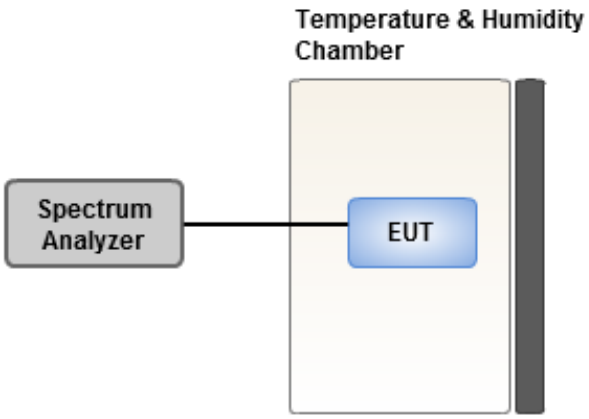
3.5.1 Limit of Frequency Stability

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

3.5.2 Test Procedures

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

3.5.3 Test Setup



3.5.4 Test Results

Ambient Condition	22°C / 63%	Tested By	Brad Wu

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

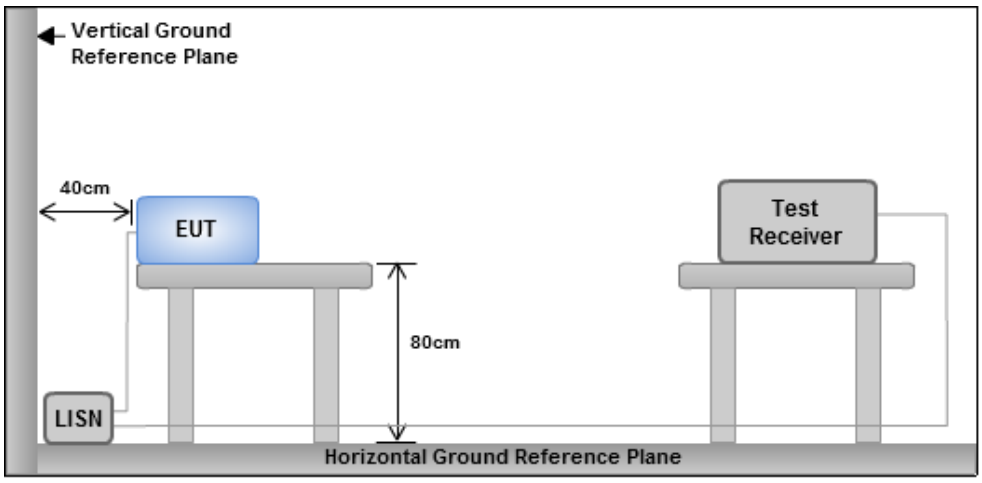
3.6.1 Limit of AC Power Line Conducted Emissions

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 33381, 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)_4TX	41.58M	17.415M	17M4D1D	25.542M	16.782M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	39.93M	19.25M	19M3D1D	26.004M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	50.16M	37.781M	37M8D1D	44.748M	37.721M
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	99.264M	77.121M	77M1D1D	80.256M	77.001M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.368M	27.627M	27M6D1D	16.302M	24.091M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	19.206M	23.178M	23M2D1D	18.678M	21.859M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	37.488M	38.321M	38M3D1D	33.792M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	75.24M	77.001M	77M0D1D	69.96M	76.882M

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

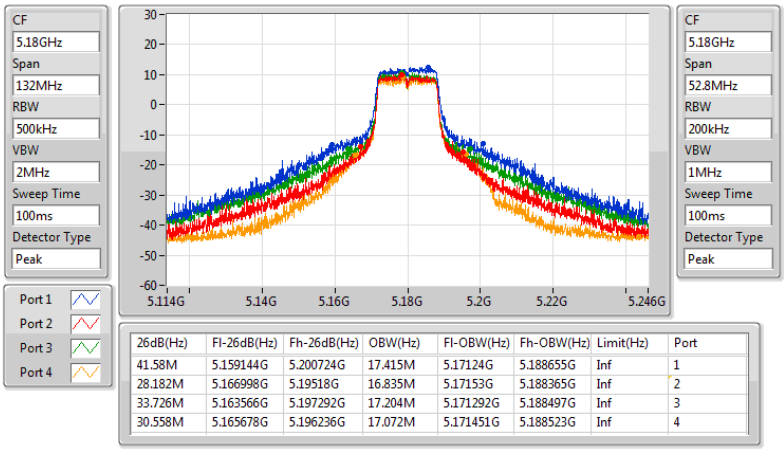
Result

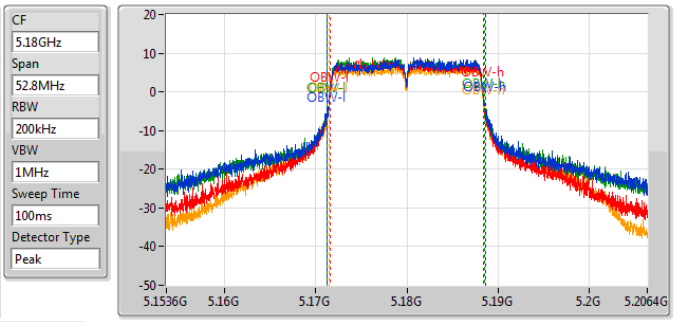
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	41.58M	17.415M	28.182M	16.835M	33.726M	17.204M	30.558M	17.072M
5200MHz	Pass	Inf	33.594M	16.861M	29.634M	16.914M	29.502M	16.782M	30.03M	16.835M
5240MHz	Pass	Inf	25.542M	16.914M	26.928M	16.782M	32.142M	16.835M	27.654M	16.835M
5745MHz	Pass	500k	16.368M	26.519M	16.368M	24.751M	16.302M	24.118M	16.368M	24.566M
5785MHz	Pass	500k	16.368M	24.804M	16.368M	24.091M	16.368M	25.305M	16.368M	24.909M
5825MHz	Pass	500k	16.302M	27.627M	16.368M	27.126M	16.368M	26.176M	16.368M	25.648M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	28.446M	19.16M	28.71M	19.19M	26.004M	19.19M	26.862M	19.19M
5200MHz	Pass	Inf	30.69M	19.25M	27.72M	19.19M	27.192M	19.22M	29.37M	19.19M
5240MHz	Pass	Inf	37.488M	19.04M	31.878M	19.07M	39.93M	19.1M	37.422M	19.07M
5745MHz	Pass	500k	19.008M	22.699M	19.206M	22.069M	18.942M	22.579M	18.942M	22.549M
5785MHz	Pass	500k	18.678M	22.549M	18.81M	21.859M	18.942M	23.178M	18.81M	22.999M
5825MHz	Pass	500k	18.942M	22.789M	18.744M	21.859M	18.81M	22.309M	18.942M	22.279M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	46.2M	37.721M	47.256M	37.721M	45.012M	37.781M	50.16M	37.721M
5230MHz	Pass	Inf	46.728M	37.721M	44.748M	37.721M	48.18M	37.721M	45.936M	37.721M
5755MHz	Pass	500k	36.168M	37.841M	34.98M	37.781M	34.98M	37.781M	37.488M	37.781M
5795MHz	Pass	500k	35.904M	38.321M	35.376M	38.201M	35.244M	38.201M	33.792M	38.321M
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	86.064M	77.121M	80.256M	77.001M	99.264M	77.121M	80.52M	77.121M
5775MHz	Pass	500k	71.544M	76.882M	73.92M	77.001M	75.24M	77.001M	69.96M	77.001M

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

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

5180MHz

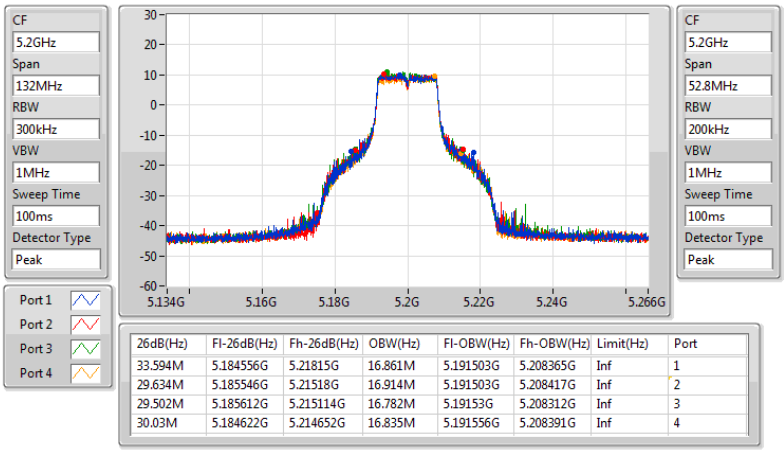


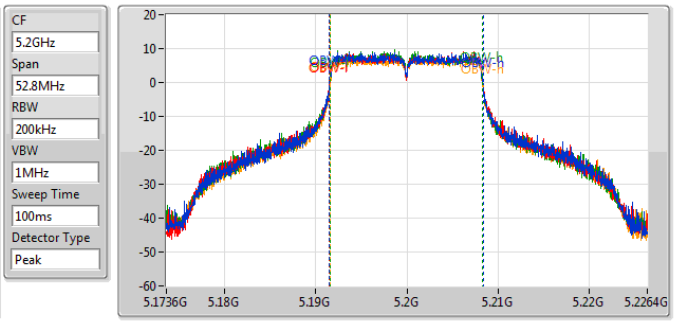


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.58M	5.159144G	5.200724G	17.415M	5.17124G	5.188655G	Inf	1
28.182M	5.166998G	5.19518G	16.835M	5.17153G	5.188365G	Inf	2
33.726M	5.163566G	5.197292G	17.204M	5.171292G	5.188497G	Inf	3
30.558M	5.165678G	5.196236G	17.072M	5.171451G	5.188523G	Inf	4

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

5200MHz

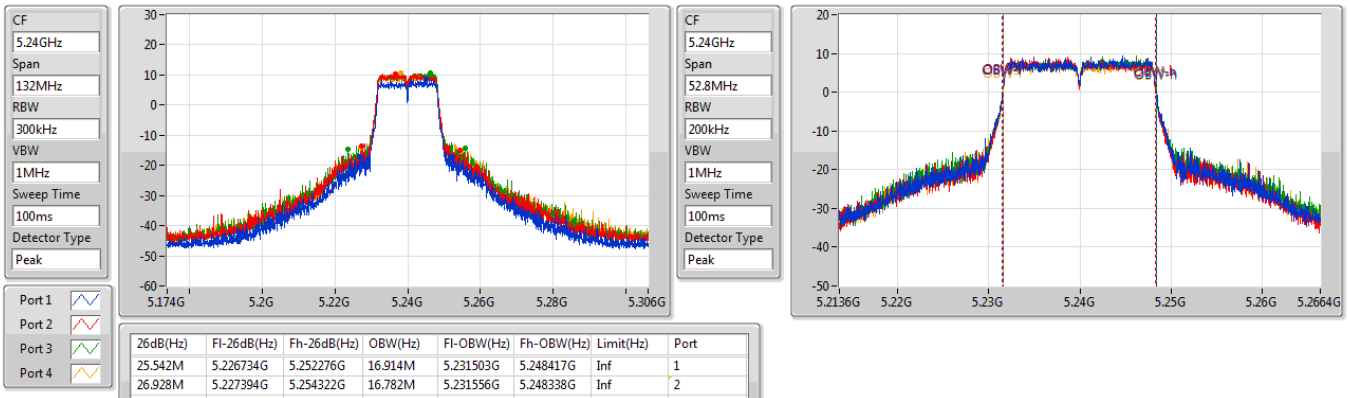




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.594M	5.184556G	5.21815G	16.861M	5.191503G	5.208365G	Inf	1
29.634M	5.185546G	5.21518G	16.914M	5.191503G	5.208417G	Inf	2
29.502M	5.185612G	5.215114G	16.782M	5.19153G	5.208312G	Inf	3
30.03M	5.184622G	5.214652G	16.835M	5.191556G	5.208391G	Inf	4

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

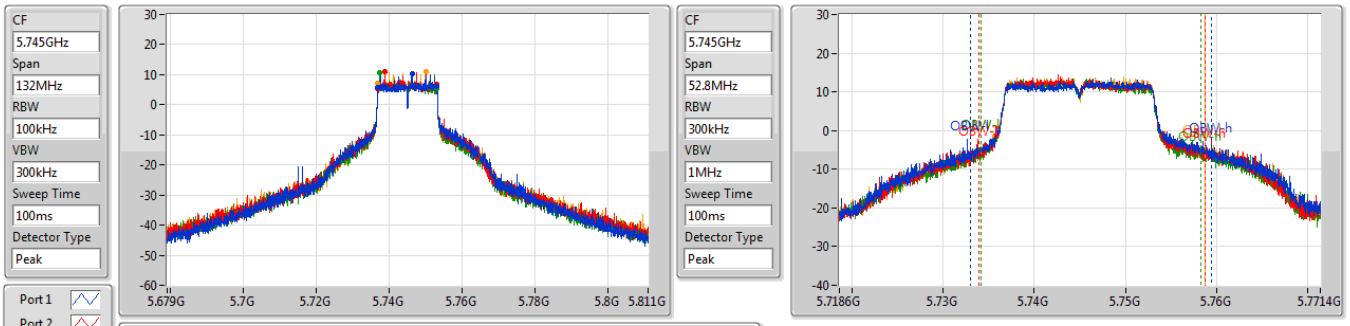
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.542M	5.226734G	5.252276G	16.914M	5.231503G	5.248417G	Inf	1
26.928M	5.227394G	5.254322G	16.782M	5.231556G	5.248338G	Inf	2
32.142M	5.223698G	5.25584G	16.835M	5.231556G	5.248391G	Inf	3
27.654M	5.227064G	5.254718G	16.835M	5.231556G	5.248391G	Inf	4

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

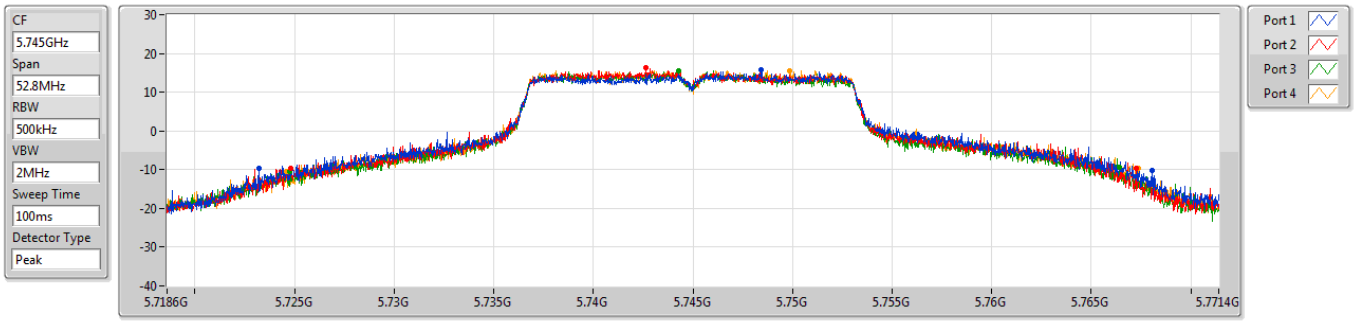
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.368M	5.73675G	5.753118G	26.519M	5.732941G	5.75946G	500k	1
16.368M	5.73675G	5.753118G	24.751M	5.733944G	5.758695G	500k	2
16.302M	5.73675G	5.753052G	24.118M	5.734181G	5.758299G	500k	3
16.368M	5.73675G	5.753118G	24.566M	5.734208G	5.758774G	500k	4

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

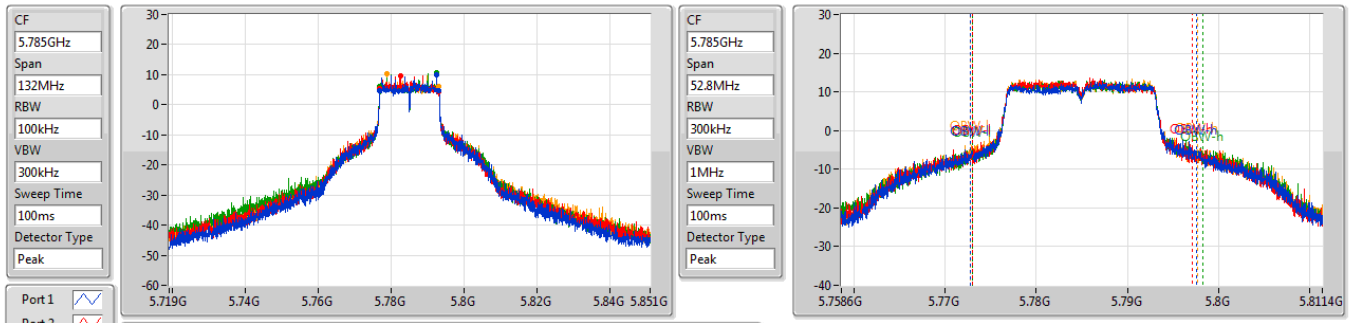
5745MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
44.88M	5.723194G	5.768074G	Inf	1
42.478M	5.724804G	5.767282G	Inf	2
41.659M	5.724751G	5.76641G	Inf	3
42.768M	5.724593G	5.767361G	Inf	4

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

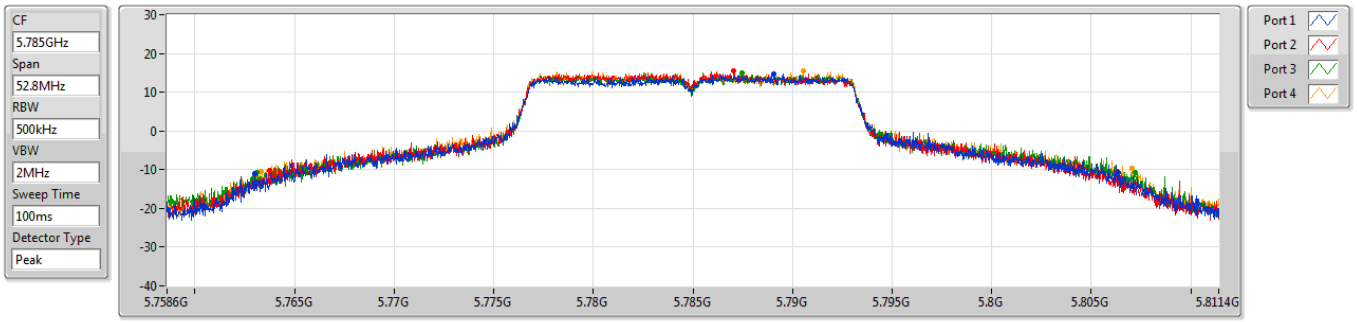
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.368M	5.77675G	5.793118G	24.804M	5.772783G	5.797587G	500k	1
16.368M	5.77675G	5.793118G	24.091M	5.772994G	5.797085G	500k	2
16.368M	5.77675G	5.793118G	25.305M	5.772941G	5.798246G	500k	3
16.368M	5.77675G	5.793118G	24.909M	5.772783G	5.797692G	500k	4

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

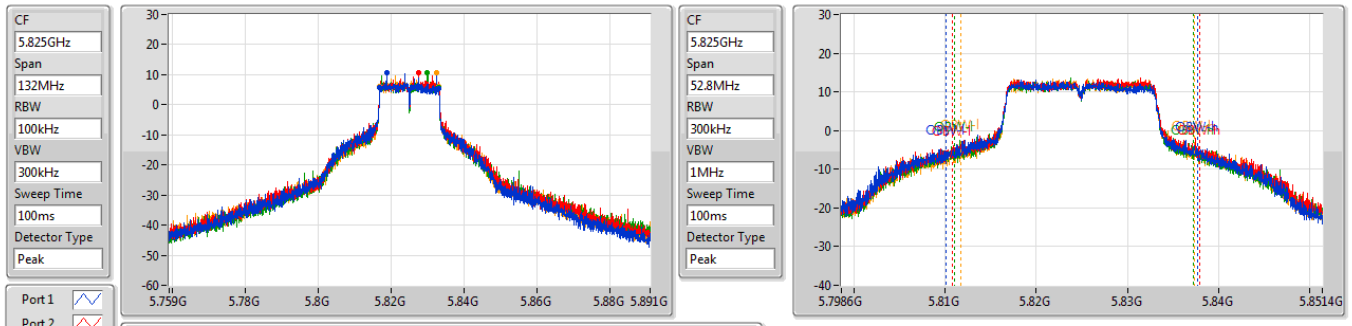
5785MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
43.375M	5.763009G	5.806384G	Inf	1
42.583M	5.763748G	5.806331G	Inf	2
44.141M	5.763088G	5.807229G	Inf	3
43.745M	5.763299G	5.807044G	Inf	4

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

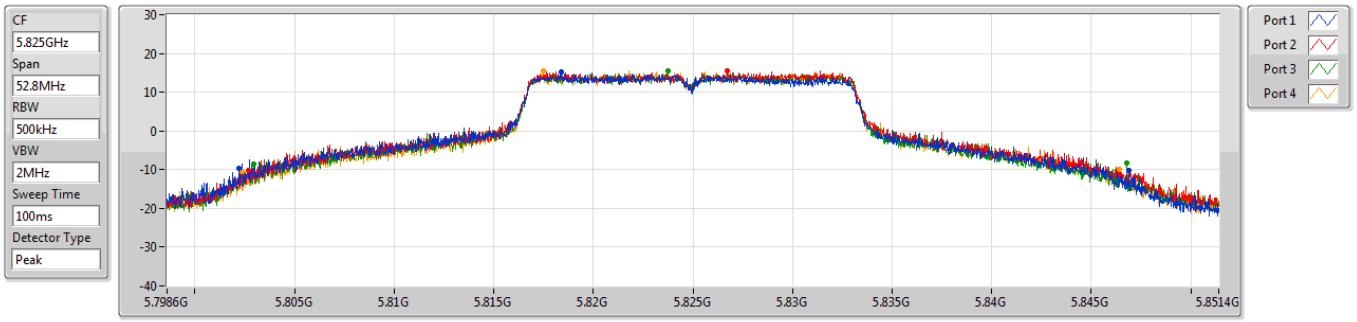
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.302M	5.81675G	5.833052G	27.627M	5.810118G	5.837745G	500k	1
16.368M	5.81675G	5.833118G	27.126M	5.810804G	5.83793G	500k	2
16.368M	5.81675G	5.833118G	26.176M	5.811068G	5.837243G	500k	3
16.368M	5.81675G	5.833118G	25.648M	5.811701G	5.837349G	500k	4

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

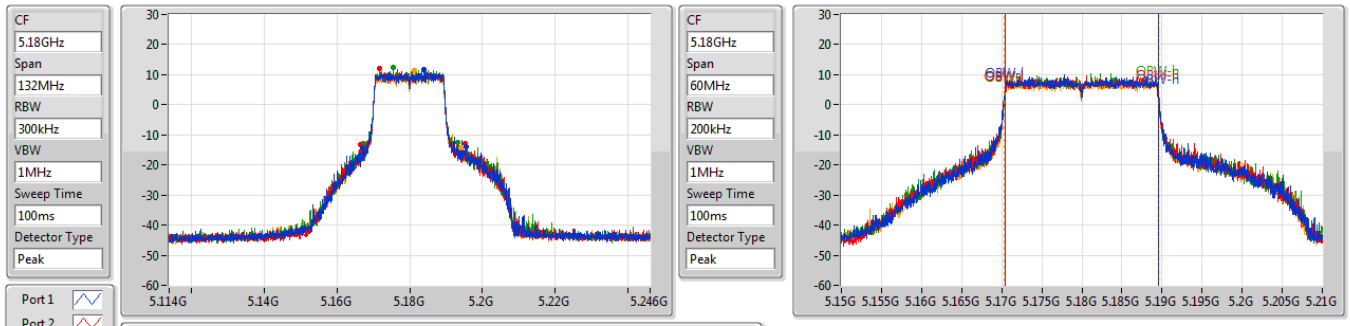
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
44.669M	5.802217G	5.846886G	Inf	1
44.246M	5.802666G	5.846912G	Inf	2
43.877M	5.80293G	5.846806G	Inf	3
44.062M	5.802349G	5.84641G	Inf	4

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

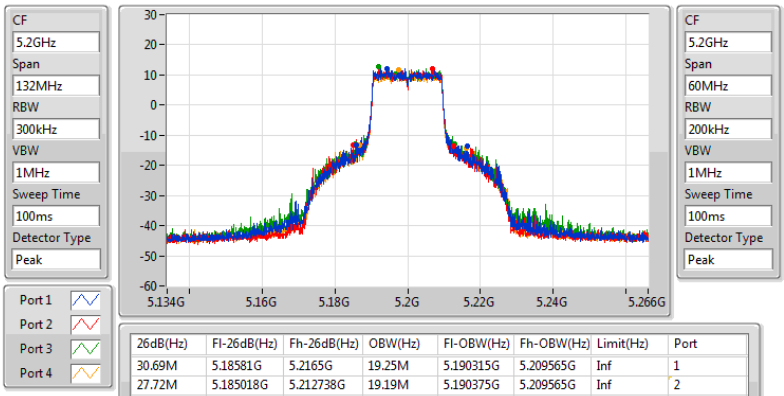
5180MHz

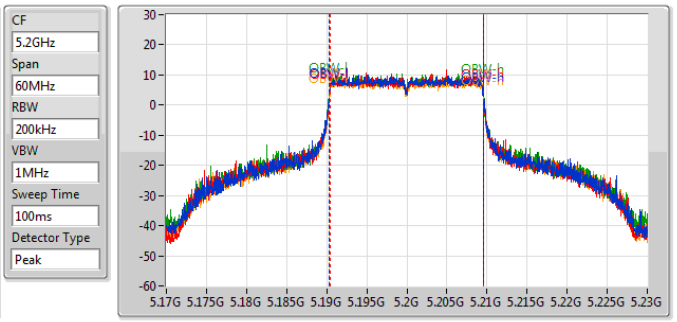


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
28.446M	5.167064G	5.19551G	19.16M	5.170375G	5.189535G	Inf	1
28.71M	5.166602G	5.195312G	19.19M	5.170375G	5.189565G	Inf	2
26.004M	5.167328G	5.193332G	19.19M	5.170375G	5.189565G	Inf	3
26.862M	5.167196G	5.194058G	19.19M	5.170345G	5.189535G	Inf	4

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

5200MHz

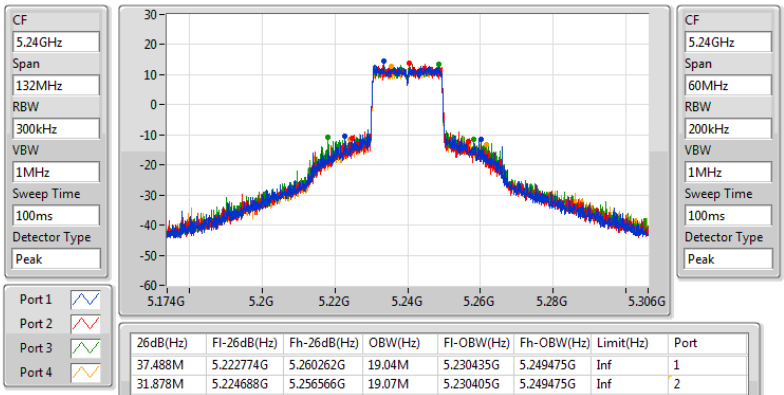


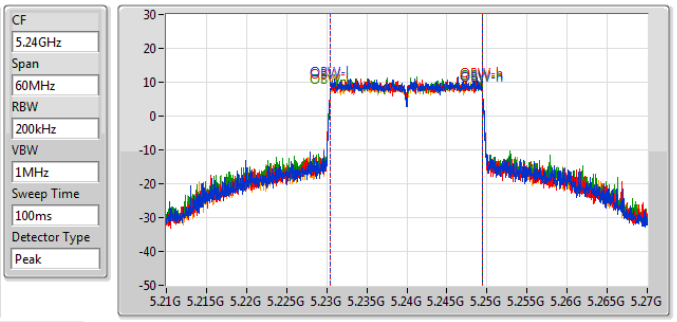


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.69M	5.18581G	5.2165G	19.25M	5.190315G	5.209565G	Inf	1
27.72M	5.185018G	5.212738G	19.19M	5.190375G	5.209565G	Inf	2
27.192M	5.185744G	5.212936G	19.22M	5.190315G	5.209535G	Inf	3
29.37M	5.186668G	5.216038G	19.19M	5.190345G	5.209535G	Inf	4

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

5240MHz

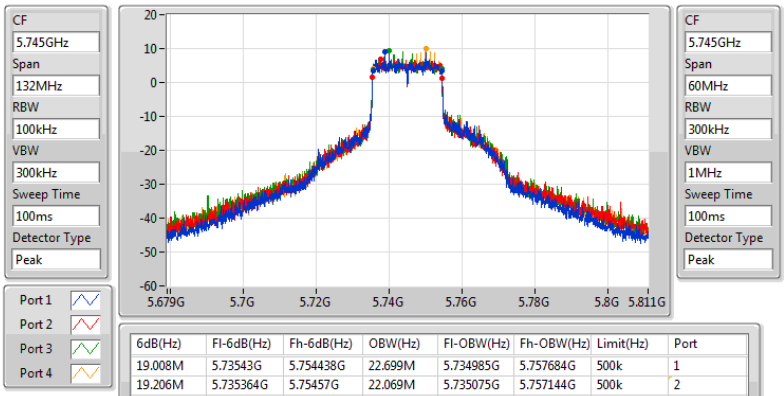


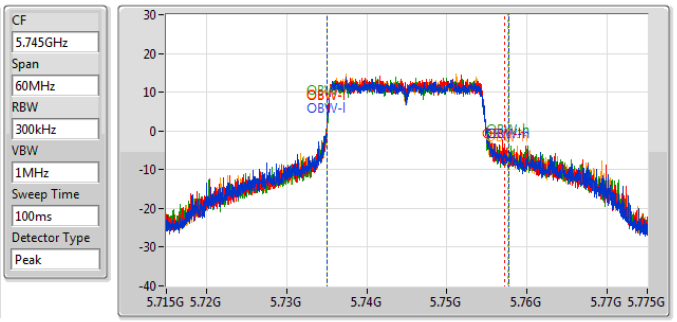


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.488M	5.222774G	5.260262G	19.04M	5.230435G	5.249475G	Inf	1
31.878M	5.224688G	5.256566G	19.07M	5.230405G	5.249475G	Inf	2
39.93M	5.21822G	5.25815G	19.1M	5.230375G	5.249475G	Inf	3
37.422M	5.224292G	5.261714G	19.07M	5.230405G	5.249475G	Inf	4

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

5745MHz

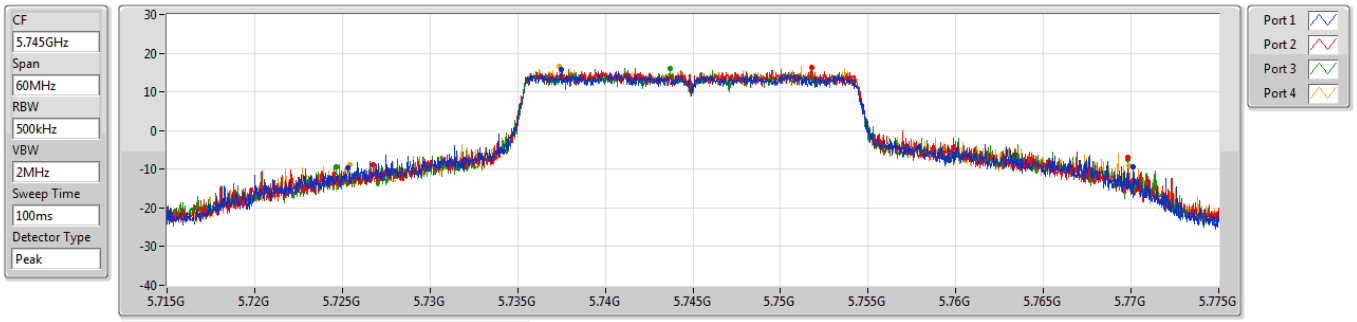




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.008M	5.73543G	5.754438G	22.699M	5.734985G	5.757684G	500k	1
19.206M	5.735364G	5.75457G	22.069M	5.735075G	5.757144G	500k	2
18.942M	5.73543G	5.754372G	22.579M	5.735105G	5.757684G	500k	3
18.942M	5.73543G	5.754372G	22.549M	5.735105G	5.757654G	500k	4

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

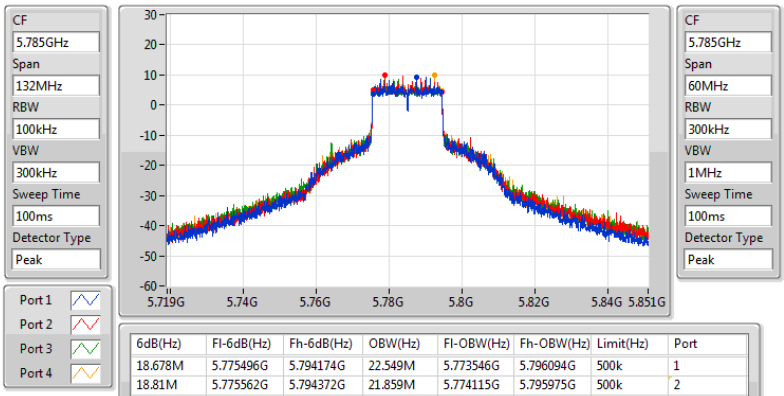
5745MHz

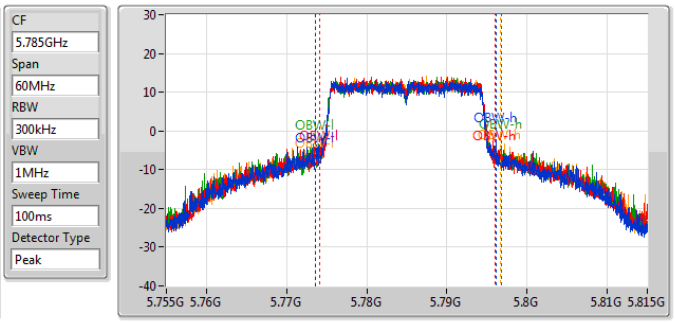


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
44.85M	5.72529G	5.77014G	Inf	1
43.11M	5.72673G	5.76984G	Inf	2
45.18M	5.72463G	5.76981G	Inf	3
44.46M	5.72544G	5.7699G	Inf	4

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

5785MHz

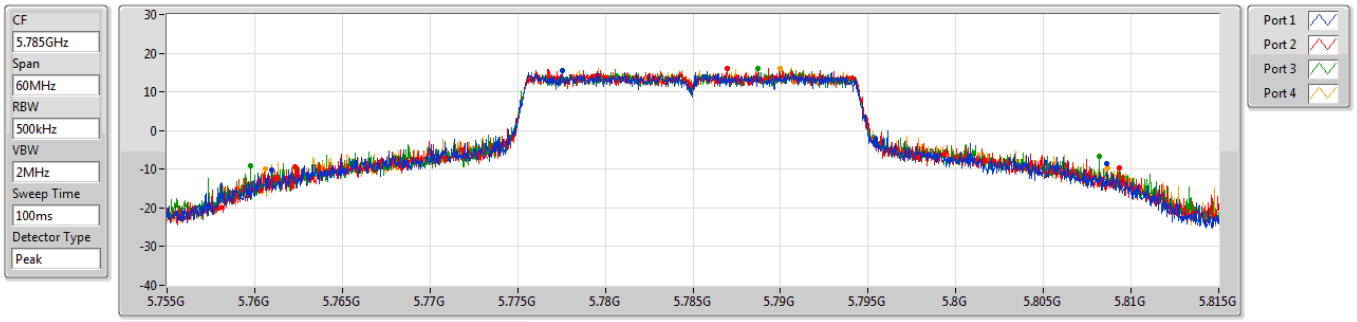




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.678M	5.775496G	5.794174G	22.549M	5.773546G	5.796094G	500k	1
18.81M	5.775562G	5.794372G	21.859M	5.774115G	5.795975G	500k	2
18.942M	5.77543G	5.794372G	23.178M	5.773636G	5.796814G	500k	3
18.81M	5.775496G	5.794306G	22.999M	5.773636G	5.796634G	500k	4

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

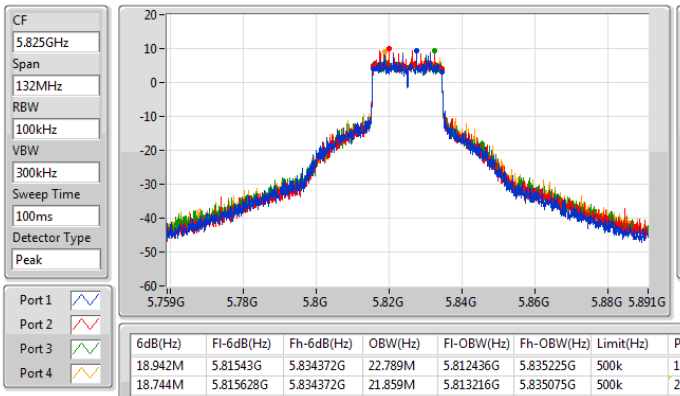
5785MHz

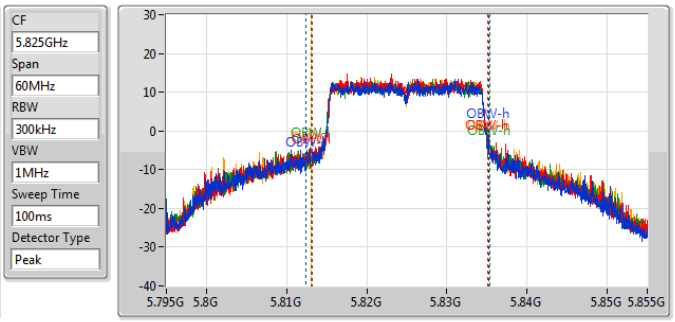


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
47.64M	5.76097G	5.80861G	Inf	1
47.04M	5.76232G	5.80936G	Inf	2
48.42M	5.75977G	5.80819G	Inf	3
48.06M	5.76061G	5.80867G	Inf	4

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

5825MHz

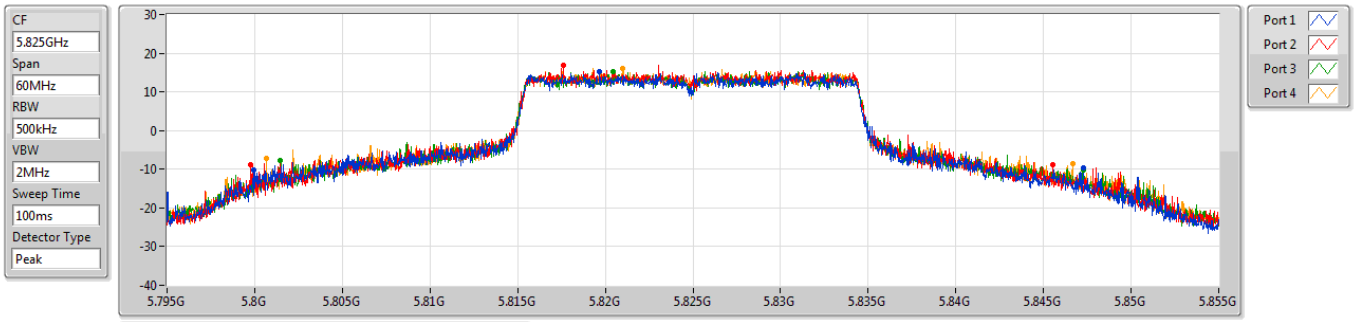




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.942M	5.81543G	5.834372G	22.789M	5.812436G	5.835225G	500k	1
18.744M	5.815628G	5.834372G	21.859M	5.813216G	5.835075G	500k	2
18.81M	5.81543G	5.83424G	22.309M	5.813006G	5.835315G	500k	3
18.942M	5.81543G	5.834372G	22.279M	5.813066G	5.835345G	500k	4

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

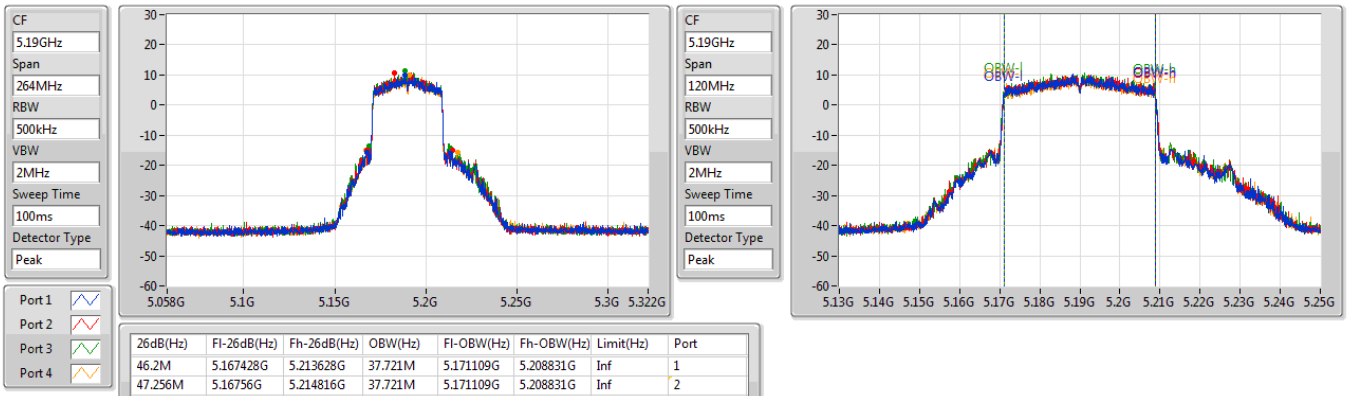
5825MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
47.34M	5.79992G	5.84726G	Inf	1
45.78M	5.79977G	5.84555G	Inf	2
45.81M	5.80145G	5.84726G	Inf	3
45.99M	5.80067G	5.84666G	Inf	4

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

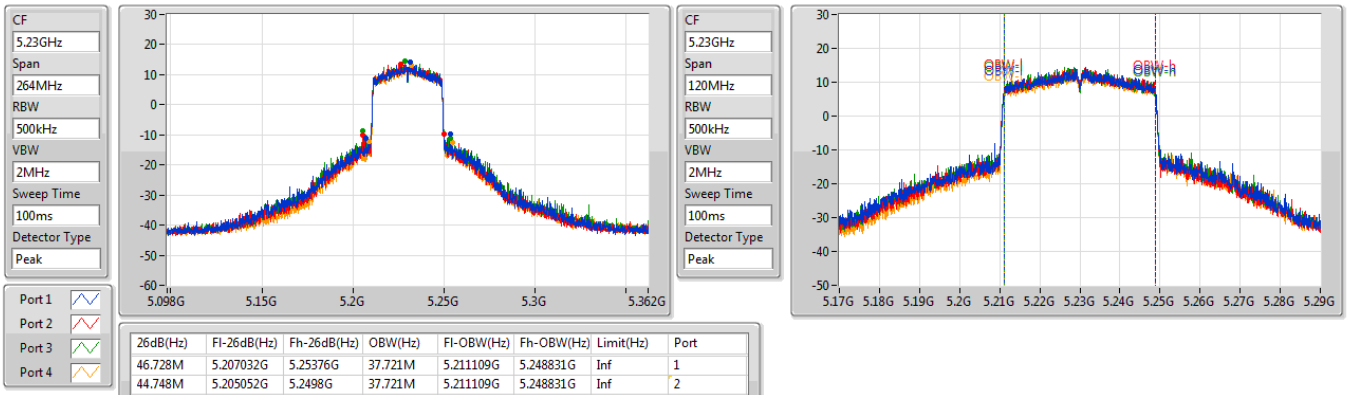
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
46.2M	5.167428G	5.213628G	37.721M	5.171109G	5.208831G	Inf	1
47.256M	5.16756G	5.214816G	37.721M	5.171109G	5.208831G	Inf	2
45.012M	5.168748G	5.21376G	37.781M	5.171049G	5.208831G	Inf	3
50.16M	5.167296G	5.217456G	37.721M	5.171109G	5.208831G	Inf	4

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

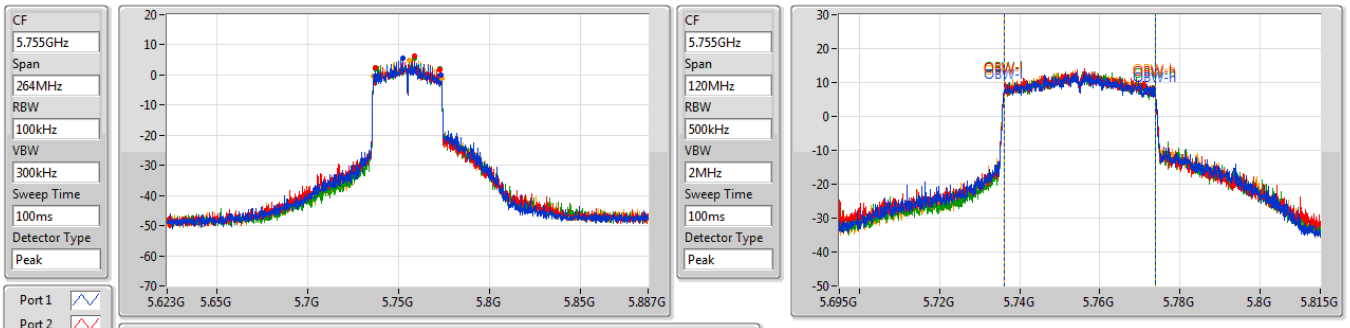
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
46.728M	5.207032G	5.25376G	37.721M	5.211109G	5.248831G	Inf	1
44.748M	5.205052G	5.2498G	37.721M	5.211109G	5.248831G	Inf	2
48.18M	5.205184G	5.253364G	37.721M	5.211109G	5.248831G	Inf	3
45.936M	5.208616G	5.254552G	37.721M	5.211109G	5.248831G	Inf	4

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

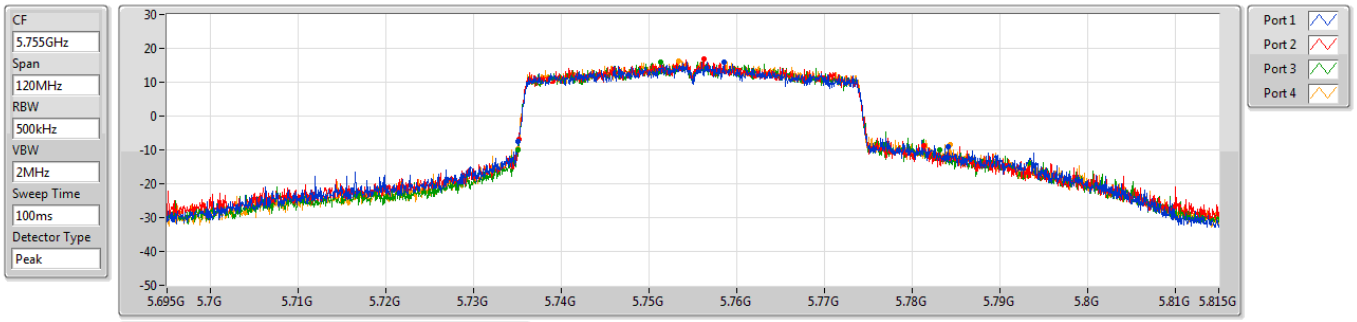
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.168M	5.737312G	5.77348G	37.841M	5.736109G	5.773951G	500k	1
34.98M	5.737444G	5.772424G	37.781M	5.736049G	5.773831G	500k	2
34.98M	5.737444G	5.772424G	37.781M	5.736109G	5.773891G	500k	3
37.488M	5.736256G	5.773744G	37.781M	5.736109G	5.773891G	500k	4

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

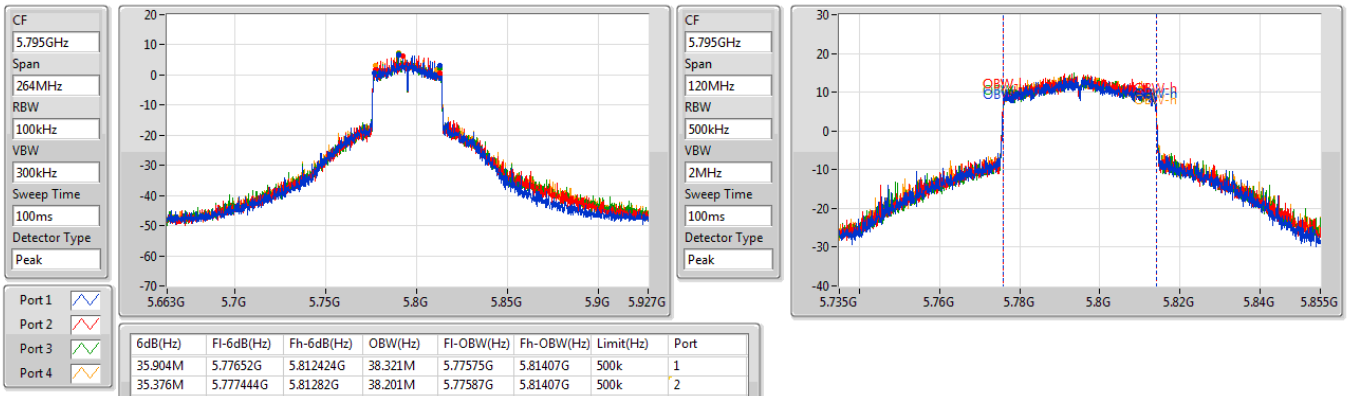
5755MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
49.02M	5.73508G	5.7841G	Inf	1
46.26M	5.73514G	5.7814G	Inf	2
48.12M	5.73508G	5.7832G	Inf	3
49.38M	5.73502G	5.7844G	Inf	4

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

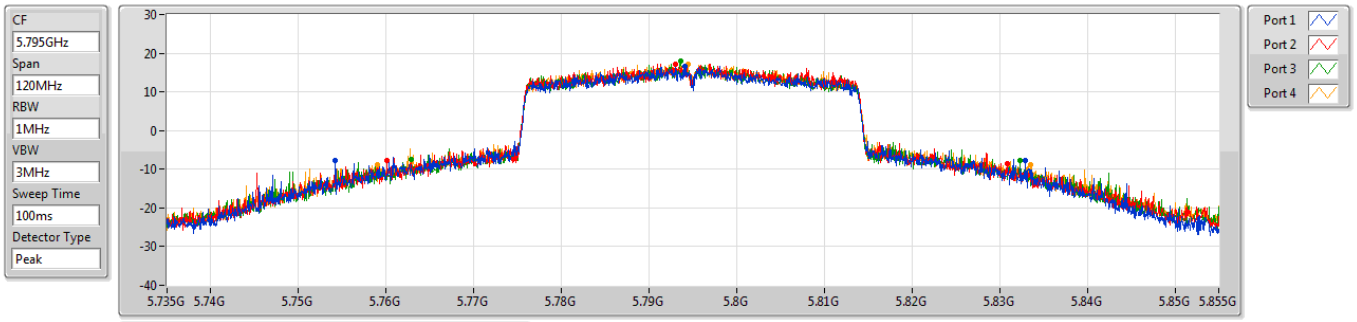
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.904M	5.77652G	5.812424G	38.321M	5.77575G	5.81407G	500k	1
35.376M	5.777444G	5.81282G	38.201M	5.77587G	5.81407G	500k	2
35.244M	5.77718G	5.812424G	38.201M	5.77587G	5.81407G	500k	3
33.792M	5.777444G	5.811236G	38.321M	5.77587G	5.81419G	500k	4

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

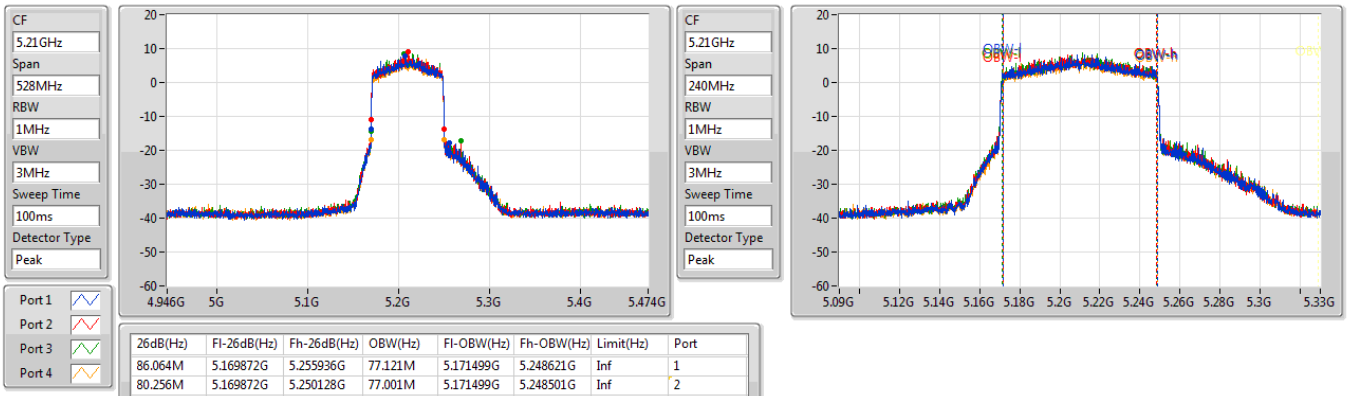
5795MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
78.78M	5.7542G	5.83298G	Inf	1
70.68M	5.76014G	5.83082G	Inf	2
69.54M	5.76284G	5.83238G	Inf	3
74.64M	5.75894G	5.83358G	Inf	4

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

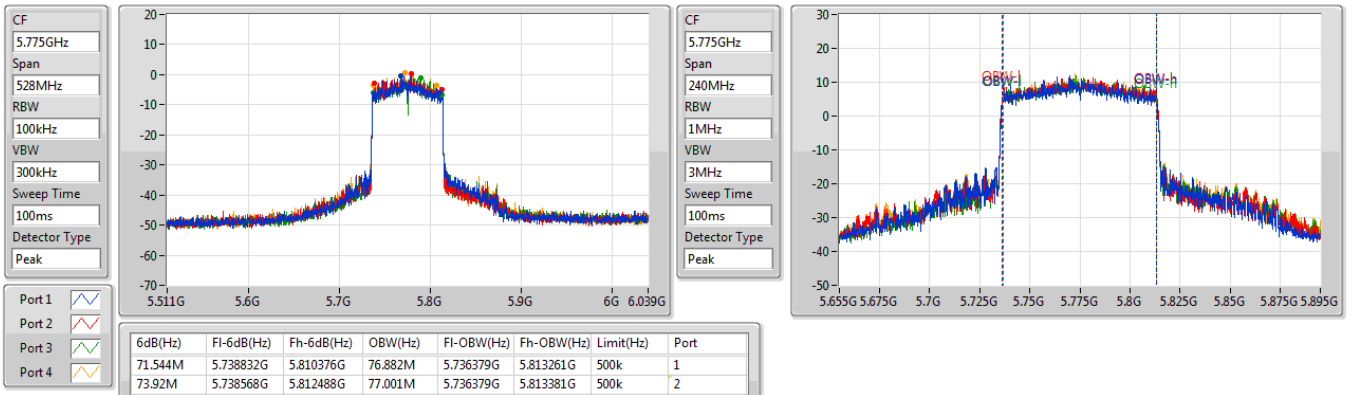
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
86.064M	5.169872G	5.255936G	77.121M	5.171499G	5.248621G	Inf	1
80.256M	5.169872G	5.250128G	77.001M	5.171499G	5.248501G	Inf	2
99.264M	5.169872G	5.269136G	77.121M	5.171379G	5.248501G	Inf	3
80.52M	5.169608G	5.250128G	77.121M	5.171499G	5.248621G	Inf	4

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

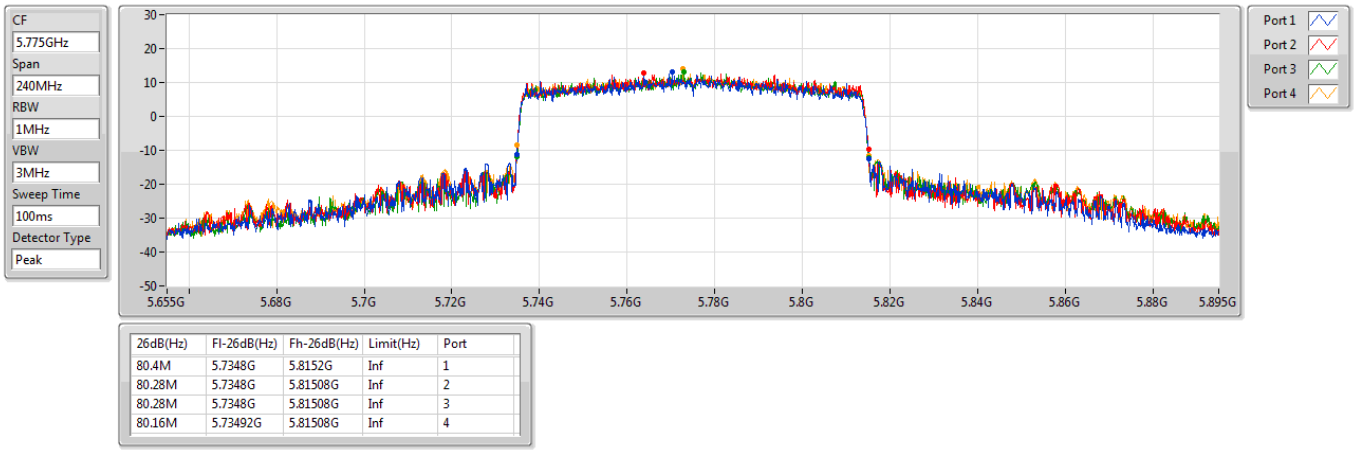
5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
71.544M	5.738832G	5.810376G	76.882M	5.736379G	5.813261G	500k	1
73.92M	5.738568G	5.812488G	77.001M	5.736379G	5.813381G	500k	2
75.24M	5.737512G	5.812752G	77.001M	5.736499G	5.813501G	500k	3
69.96M	5.737512G	5.807472G	77.001M	5.736499G	5.813501G	500k	4

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

5775MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
80.4M	5.7348G	5.8152G	Inf	1
80.28M	5.7348G	5.81508G	Inf	2
80.28M	5.7348G	5.81508G	Inf	3
80.16M	5.73492G	5.81508G	Inf	4

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	25.37	0.34435	30.37	1.08893
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	26.35	0.43152	31.35	1.36458
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	25.76	0.37670	30.76	1.19124
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	19.43	0.08770	24.43	0.27733
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	28.02	0.63387	34.72	2.96483
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	27.34	0.54200	34.04	2.53513
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	26.67	0.46452	33.37	2.17270
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	23.14	0.20606	29.84	0.96383

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	18.81	18.75	19.1	18.15	24.74	30.00	29.74	36.00
5200MHz	Pass	5.00	19.51	19.41	19.71	18.72	25.37	30.00	30.37	36.00
5240MHz	Pass	5.00	19.23	19.21	19.54	18.74	25.21	30.00	30.21	36.00
5745MHz	Pass	6.70	21.85	22.19	21.92	22.03	28.02	29.30	34.72	36.00
5785MHz	Pass	6.70	21.35	21.81	21.48	21.63	27.59	29.30	34.29	36.00
5825MHz	Pass	6.70	21.57	22.09	21.66	21.78	27.80	29.30	34.50	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.00	18.95	18.83	19.14	18.31	24.84	30.00	29.84	36.00
5200MHz	Pass	5.00	19.55	19.9	19.79	18.96	25.59	30.00	30.59	36.00
5240MHz	Pass	5.00	20.37	20.32	20.65	19.97	26.35	30.00	31.35	36.00
5745MHz	Pass	6.70	21.05	21.56	21.18	21.46	27.34	29.30	34.04	36.00
5785MHz	Pass	6.70	20.96	21.45	21.06	21.36	27.23	29.30	33.93	36.00
5825MHz	Pass	6.70	20.73	21.29	20.95	21.2	27.07	29.30	33.77	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.00	16.51	16.48	16.77	15.92	22.45	30.00	27.45	36.00
5230MHz	Pass	5.00	19.84	19.8	20.08	19.21	25.76	30.00	30.76	36.00
5755MHz	Pass	6.70	19.34	19.61	19.29	19.63	25.49	29.30	32.19	36.00
5795MHz	Pass	6.70	20.44	20.79	20.59	20.78	26.67	29.30	33.37	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.00	13.39	13.64	13.65	12.91	19.43	30.00	24.43	36.00
5775MHz	Pass	6.70	17.09	17.13	16.92	17.32	23.14	29.30	29.84	36.00

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

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	20.33	0.10789	30.43	1.10408
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	19.74	0.09419	29.84	0.96383
802.11ax HEW80-BF_Nss1,(MCS0)_4TX-OFDMA	13.41	0.02193	23.51	0.22439
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	21.32	0.13552	32.61	1.82390
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	20.65	0.11614	31.94	1.56315
802.11ax HEW80-BF_Nss1,(MCS0)_4TX-OFDMA	17.12	0.05152	28.41	0.69343

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.10	12.93	12.81	13.12	12.29	18.82	25.90	28.92	36.00
5200MHz	Pass	10.10	13.53	13.88	13.77	12.94	19.57	25.90	29.67	36.00
5240MHz	Pass	10.10	14.35	14.3	14.63	13.95	20.33	25.90	30.43	36.00
5745MHz	Pass	11.29	15.03	15.54	15.16	15.44	21.32	24.71	32.61	36.00
5785MHz	Pass	11.29	14.94	15.43	15.04	15.34	21.21	24.71	32.50	36.00
5825MHz	Pass	11.29	14.71	15.27	14.93	15.18	21.05	24.71	32.34	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.10	10.49	10.46	10.75	9.9	16.43	25.90	26.53	36.00
5230MHz	Pass	10.10	13.82	13.78	14.06	13.19	19.74	25.90	29.84	36.00
5755MHz	Pass	11.29	13.32	13.59	13.27	13.61	19.47	24.71	30.76	36.00
5795MHz	Pass	11.29	14.42	14.77	14.57	14.76	20.65	24.71	31.94	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.10	7.37	7.62	7.63	6.89	13.41	25.90	23.51	36.00
5775MHz	Pass	11.29	11.07	11.11	10.9	11.3	17.12	24.71	28.41	36.00

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

Remarks:
For 5180~5240MHz:
Directional gain = 10 x log($(10^{4/20}+10^{4.2/20}+10^{5/20}+10^{3/20})^2$/4) = 10.10 dBi > 6dBi, so the limit shall be reduced to 30 dBm – (10.10dBi – 6dBi) = 25.9 dBm
For 5745~5825MHz:
Directional gain = 10 x log($(10^{4.6/20}+10^{5/20}+10^{6.7/20}+10^{4.6/20})^2$/4) = 11.29 dBi > 6dBi, so the limit shall be reduced to 30 dBm – (11.29dBi – 6dBi) = 24.71 dBm

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	12.65	22.75
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	12.71	22.81
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	10.78	20.88
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	1.40	11.50
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	13.23	24.52
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	11.96	23.25
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	10.09	21.38
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	2.52	13.81

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

Result

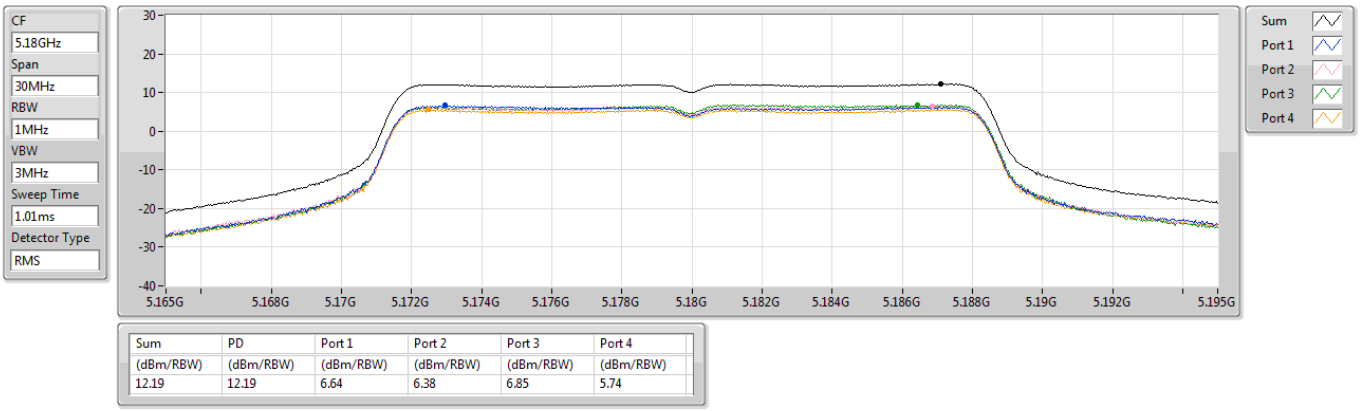
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.10	6.64	6.38	6.85	5.74	12.19	12.90	22.29	23.00
5200MHz	Pass	10.10	6.97	7.04	7.20	6.22	12.65	12.90	22.75	23.00
5240MHz	Pass	10.10	6.89	6.96	7.16	6.18	12.48	12.90	22.58	23.00
5745MHz	Pass	11.29	7.12	7.78	7.74	7.39	13.23	24.71	24.52	36.00
5785MHz	Pass	11.29	6.72	7.19	6.82	7.28	12.82	24.71	24.11	36.00
5825MHz	Pass	11.29	7.00	7.58	6.93	7.33	12.99	24.71	24.28	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.10	5.70	5.38	5.78	4.78	11.17	12.90	21.27	23.00
5200MHz	Pass	10.10	6.06	6.41	6.37	5.31	11.71	12.90	21.81	23.00
5240MHz	Pass	10.10	7.05	7.00	7.28	6.31	12.71	12.90	22.81	23.00
5745MHz	Pass	11.29	6.01	6.35	6.26	6.28	11.96	24.71	23.25	36.00
5785MHz	Pass	11.29	5.83	6.35	6.02	6.17	11.79	24.71	23.08	36.00
5825MHz	Pass	11.29	5.67	6.16	5.91	5.98	11.63	24.71	22.92	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.10	1.45	1.61	1.87	0.78	7.24	12.90	17.34	23.00
5230MHz	Pass	10.10	5.00	5.05	5.39	4.38	10.78	12.90	20.88	23.00
5755MHz	Pass	11.29	2.85	3.43	3.22	3.25	9.00	24.71	20.29	36.00
5795MHz	Pass	11.29	4.05	4.47	4.58	4.45	10.09	24.71	21.38	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.10	-4.67	-4.02	-3.86	-4.87	1.40	12.90	11.50	23.00
5775MHz	Pass	11.29	-3.26	-3.07	-3.05	-3.00	2.52	24.71	13.81	36.00

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;

Remarks:
For 5180~5240MHz:
Directional gain = 10 x log((10$^{4/20}$+10$^{4.2/20}$+10$^{5/20}$+10$^{3/20}$)^2/4) = 10.10 dBi > 6dBi, so the limit shall be reduced to 17 dBm – (10.10dBi – 6dBi) = 12.9 dBm
For 5745~5825MHz:
Directional gain = 10 x log((10$^{4.6/20}$+10$^{5/20}$+10$^{6.7/20}$+10$^{4.6/20}$)^2/4) = 11.29 dBi > 6dBi, so the limit shall be reduced to 30 dBm – (11.29dBi – 6dBi) = 24.71 dBm

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

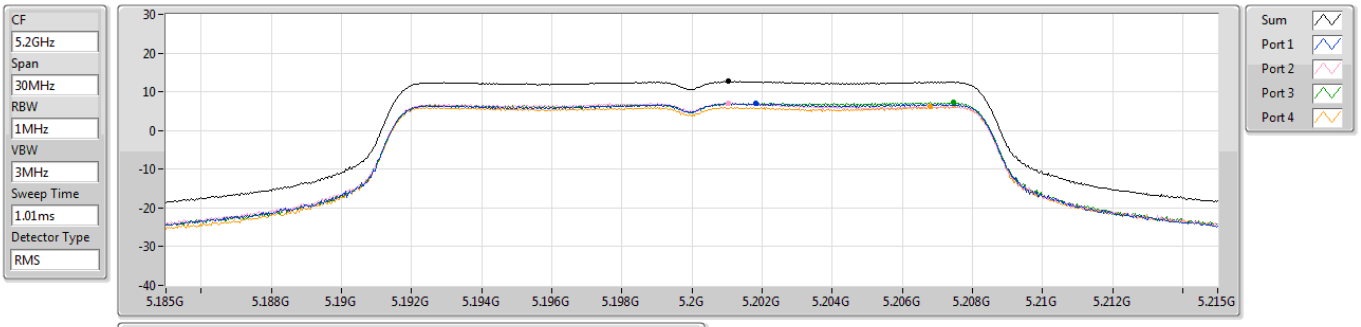
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.19	12.19	6.64	6.38	6.85	5.74

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

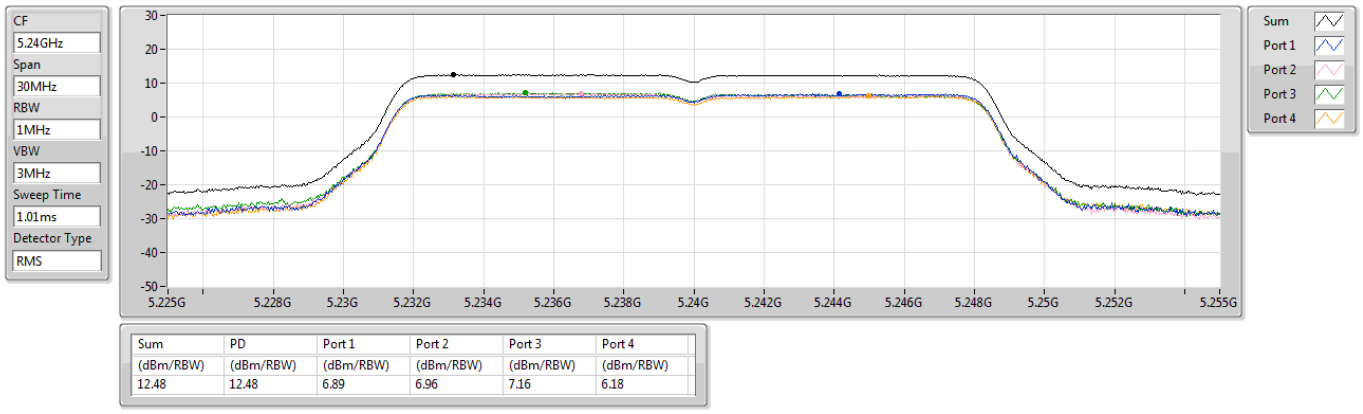
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.65	12.65	6.97	7.04	7.20	6.22

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

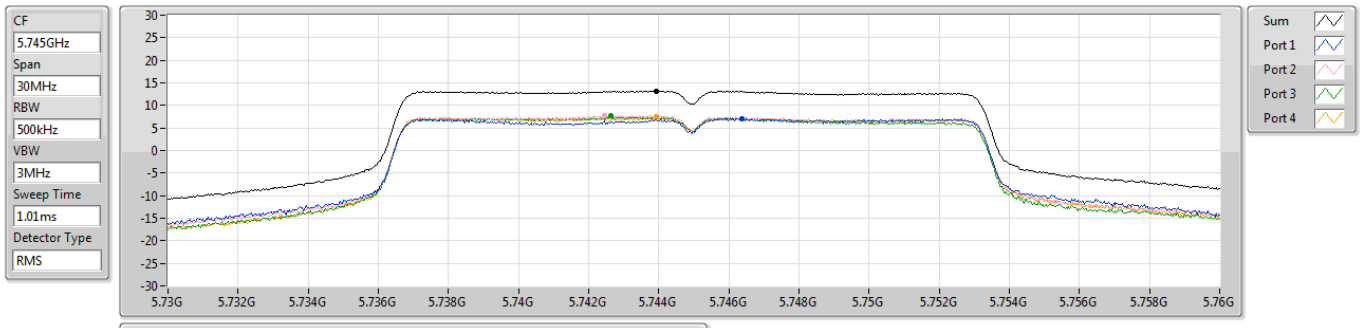
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.48	12.48	6.89	6.96	7.16	6.18

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

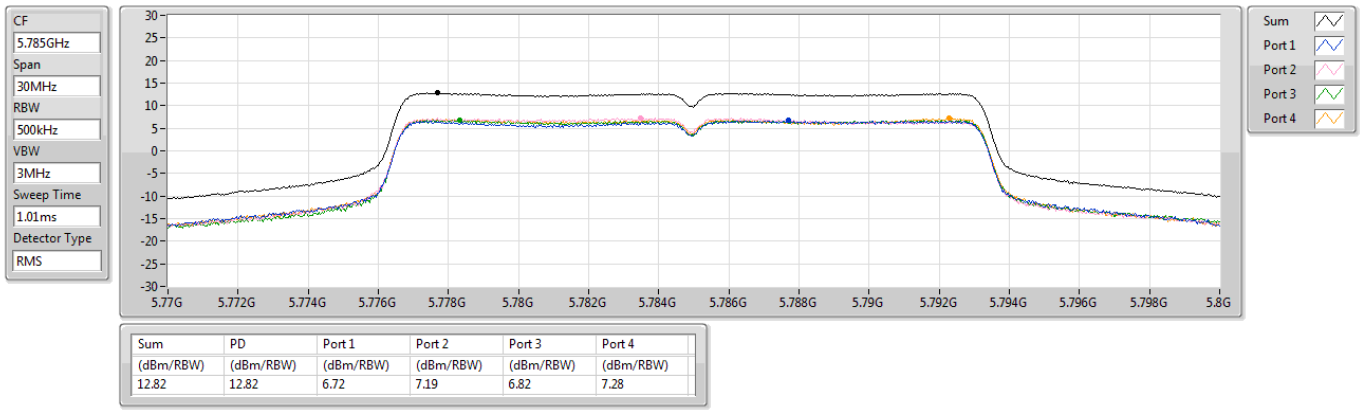
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.23	13.23	7.12	7.78	7.74	7.39

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

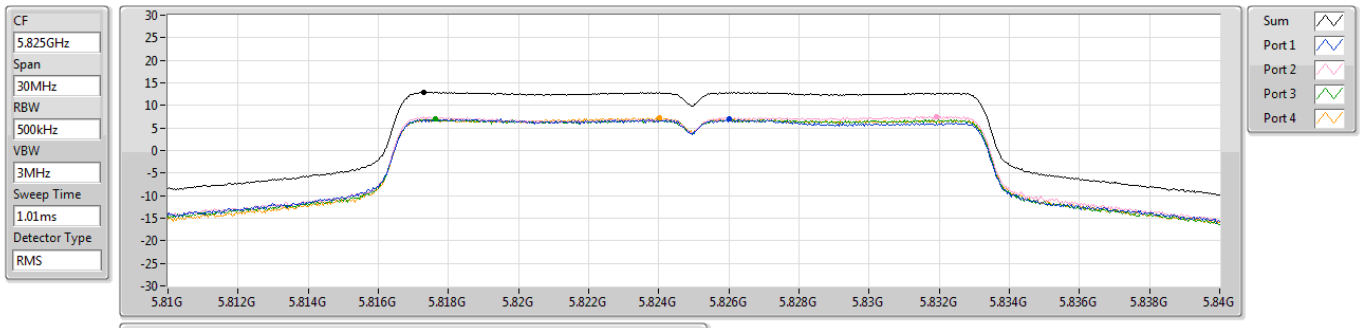
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.82	12.82	6.72	7.19	6.82	7.28

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

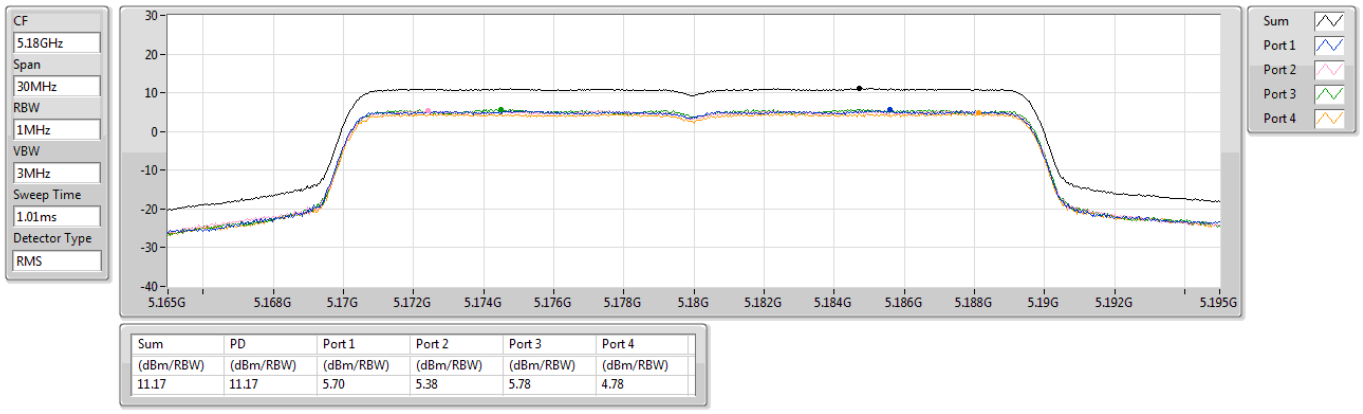
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.99	12.99	7.00	7.58	6.93	7.33

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

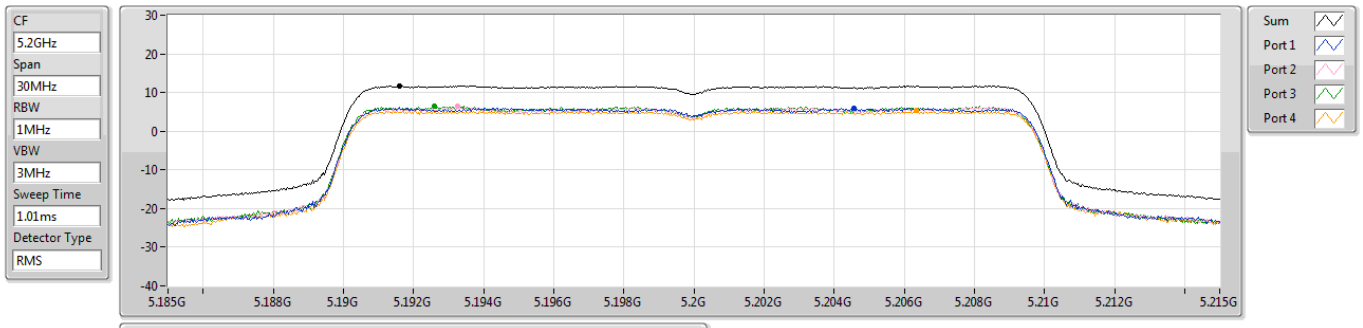
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.17	11.17	5.70	5.38	5.78	4.78

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

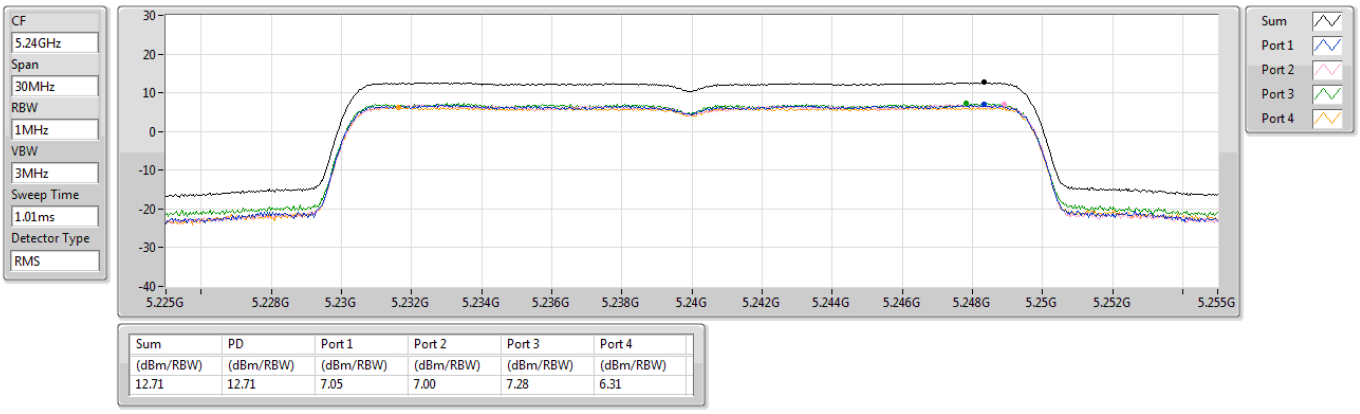
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.71	11.71	6.06	6.41	6.37	5.31

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

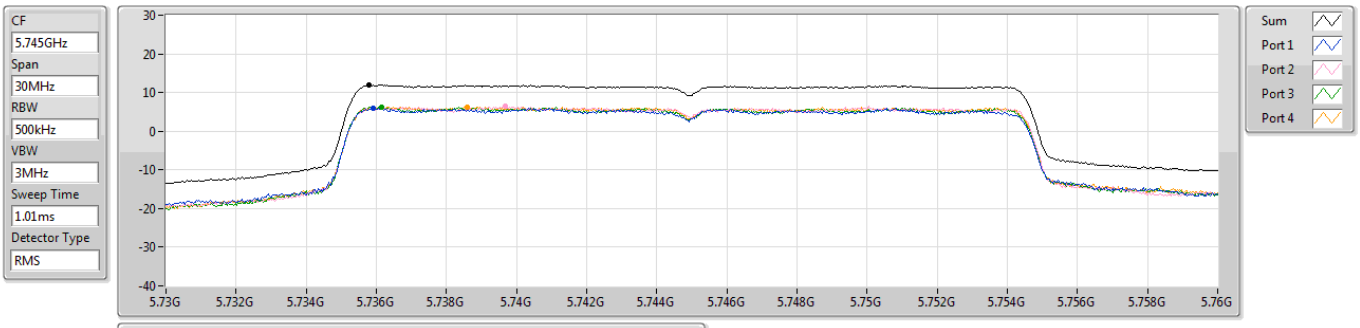
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.71	12.71	7.05	7.00	7.28	6.31

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

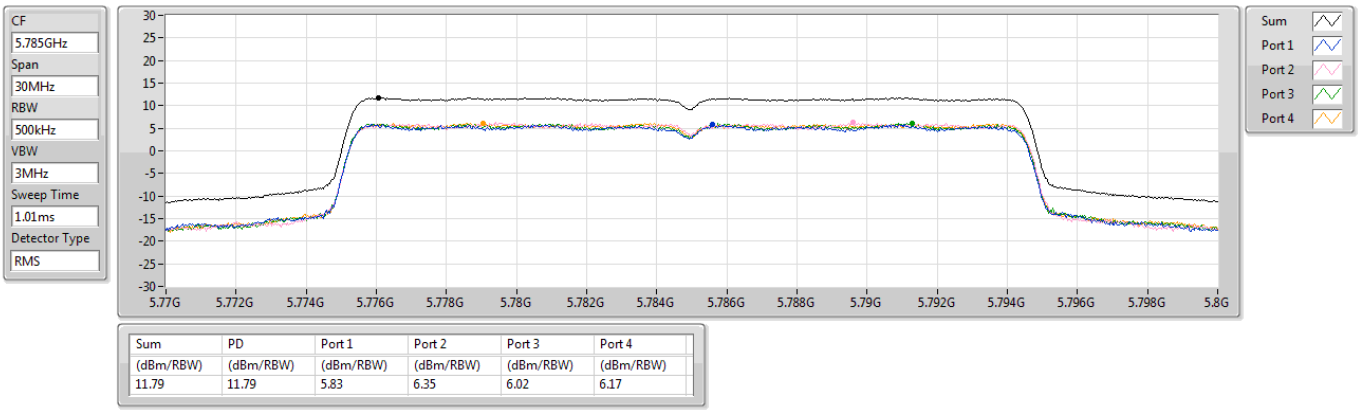
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.96	11.96	6.01	6.35	6.26	6.28

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

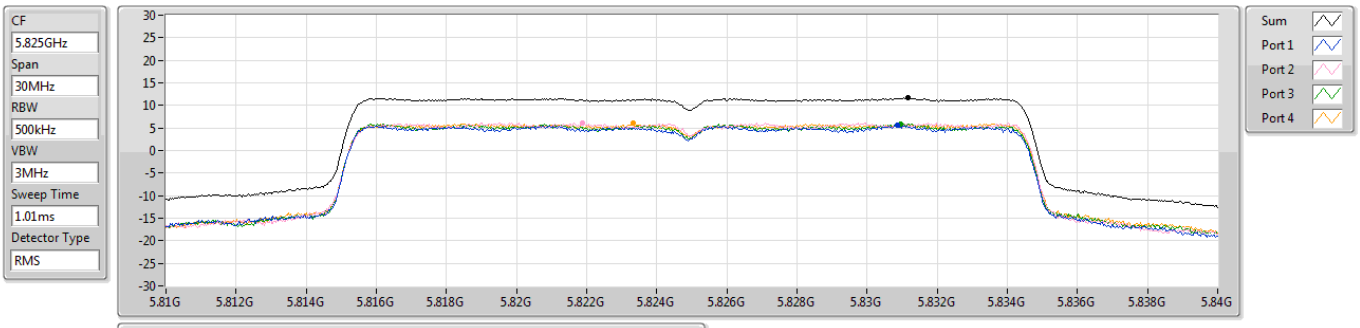
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.79	11.79	5.83	6.35	6.02	6.17

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

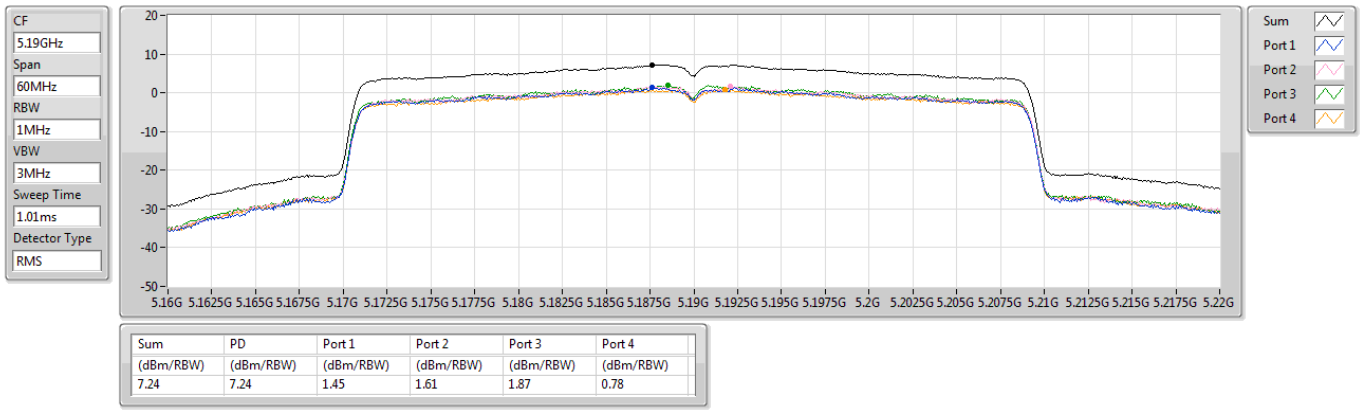
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.63	11.63	5.67	6.16	5.91	5.98

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

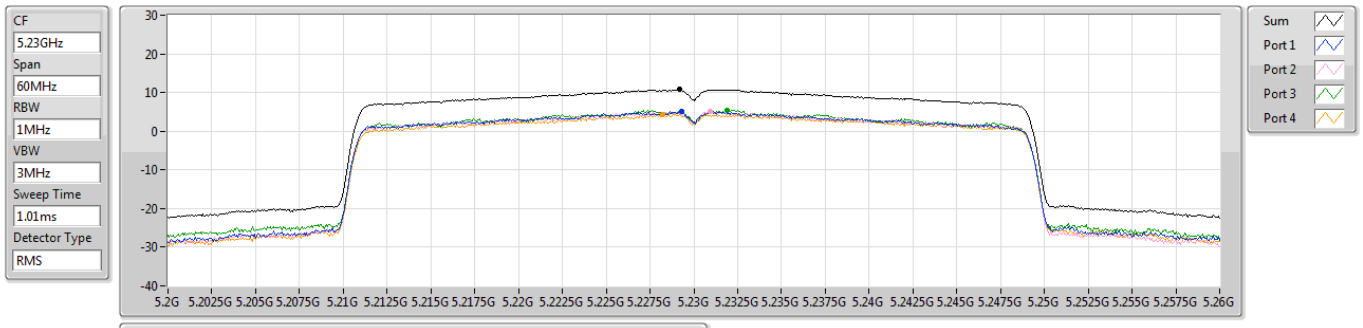
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.24	7.24	1.45	1.61	1.87	0.78

5.15-5.25GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

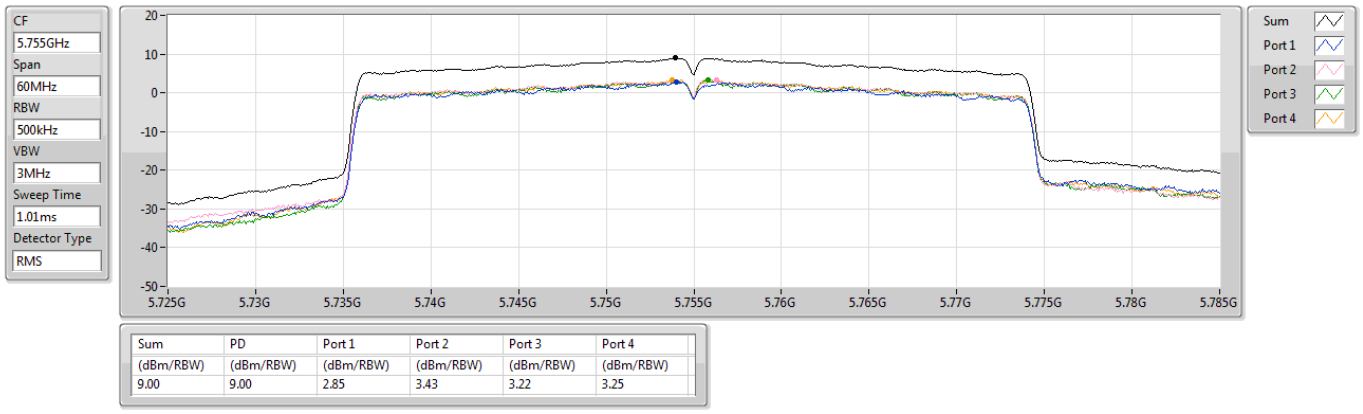
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.78	10.78	5.00	5.05	5.39	4.38

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

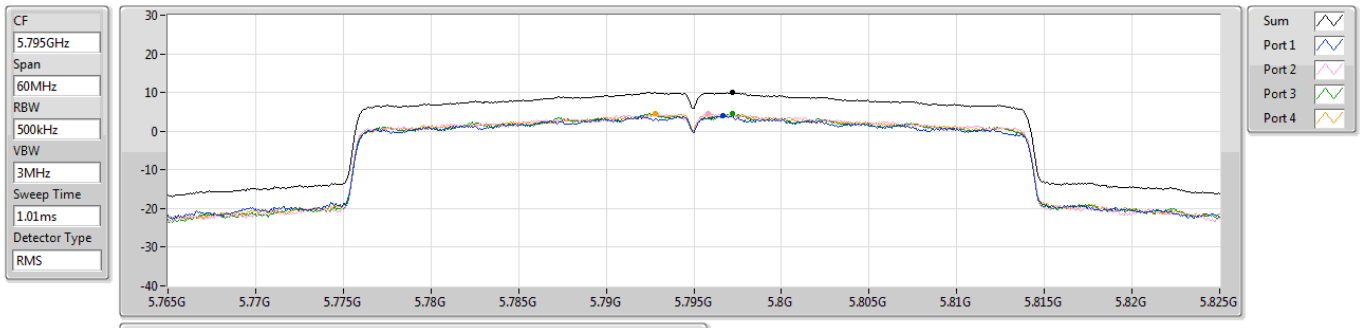
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.00	9.00	2.85	3.43	3.22	3.25

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

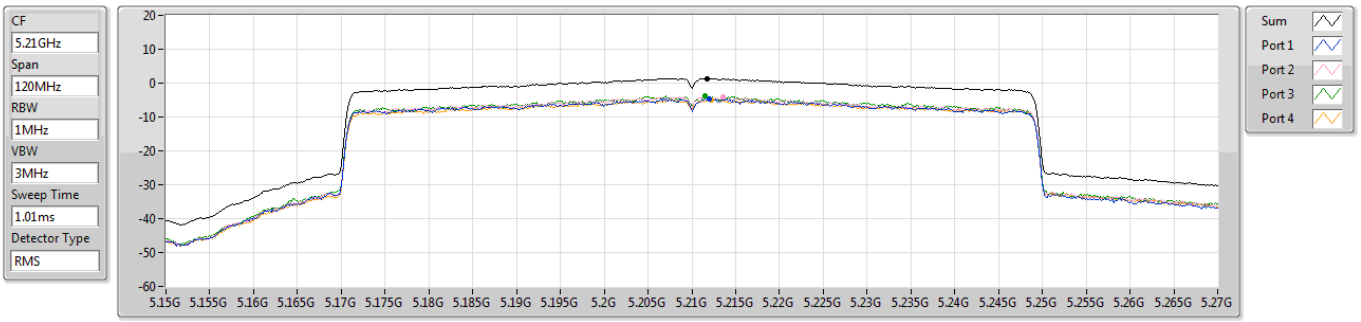
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.09	10.09	4.05	4.47	4.58	4.45

5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_4TX **PSD**

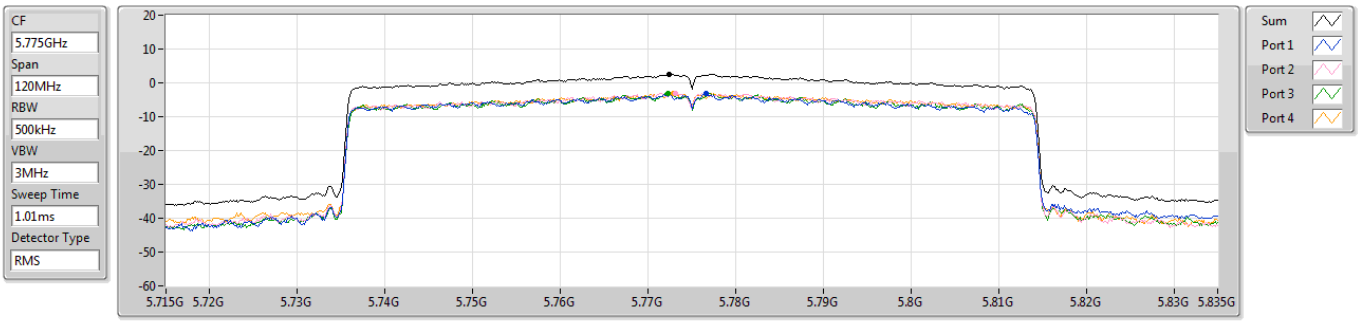
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.40	1.40	-4.67	-4.02	-3.86	-4.87

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_4TX **PSD**

5775MHz



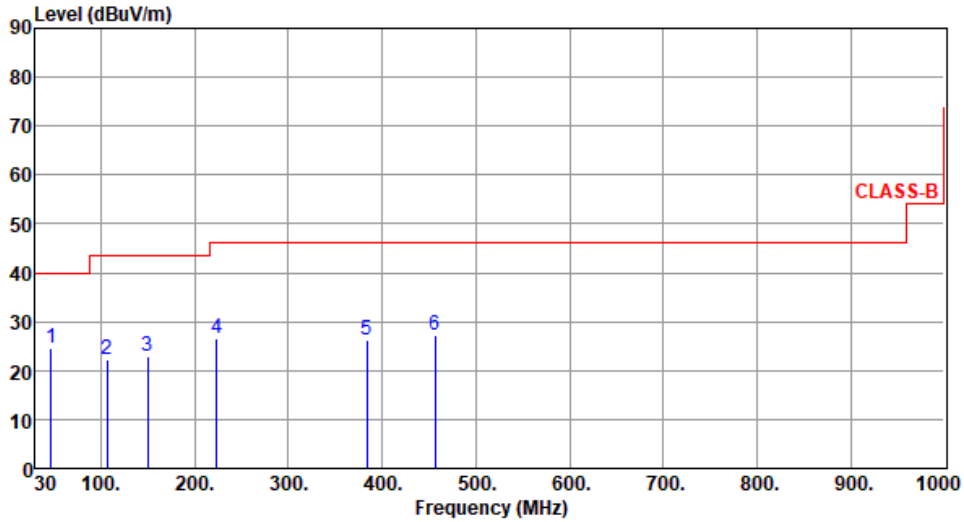
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.52	2.52	-3.26	-3.07	-3.05	-3.00

POE mode

Unwanted Emissions (Below 1GHz)

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

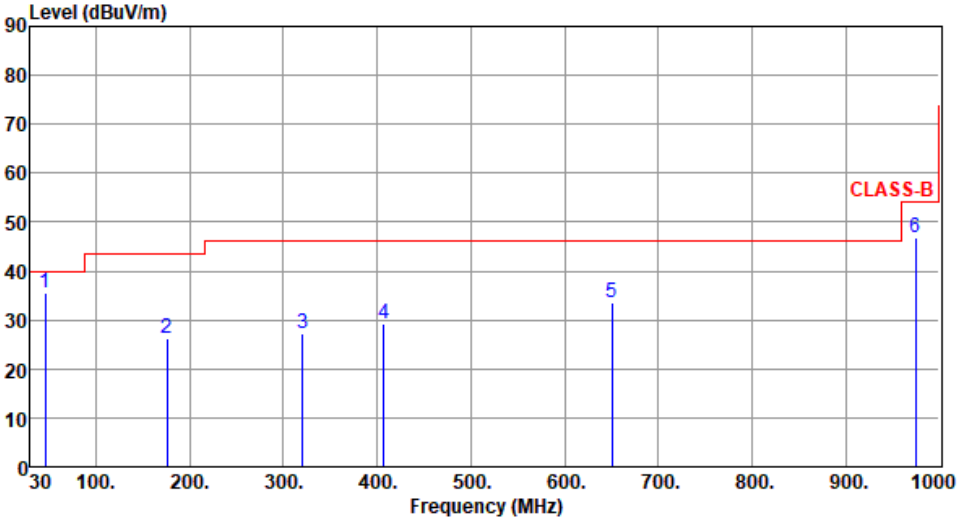


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	47.02	24.41	40.00	-15.59	32.93	-8.52	Peak	---	---
2	106.22	22.25	43.50	-21.25	34.72	-12.47	Peak	---	---
3	149.93	22.94	43.50	-20.56	31.40	-8.46	Peak	---	---
4	223.38	26.41	46.00	-19.59	38.31	-11.90	Peak	---	---
5	384.14	26.22	46.00	-19.78	31.60	-5.38	Peak	---	---
6	456.61	27.13	46.00	-18.87	30.35	-3.22	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-OFDMA	**Test Freq. (MHz)**	5240
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

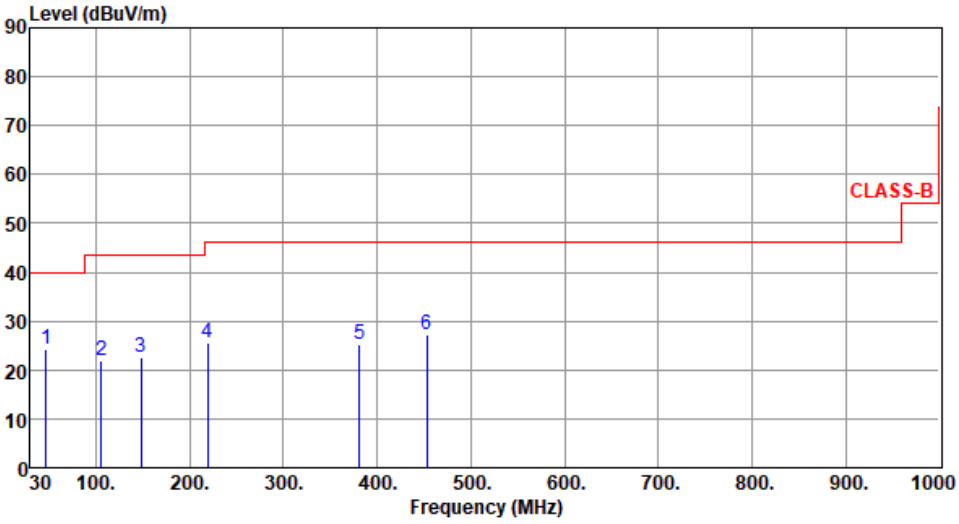


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.78	35.42	40.00	-4.58	43.87	-8.45	Peak	---	---
2	176.23	26.34	43.50	-17.16	35.91	-9.57	Peak	---	---
3	320.19	27.35	46.00	-18.65	34.59	-7.24	Peak	---	---
4	407.13	29.31	46.00	-16.69	34.07	-4.76	Peak	---	---
5	650.18	33.57	46.00	-12.43	32.55	1.02	Peak	---	---
6	974.45	46.95	54.00	-7.05	40.29	6.66	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	11a	**Test Freq. (MHz)**	5785
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

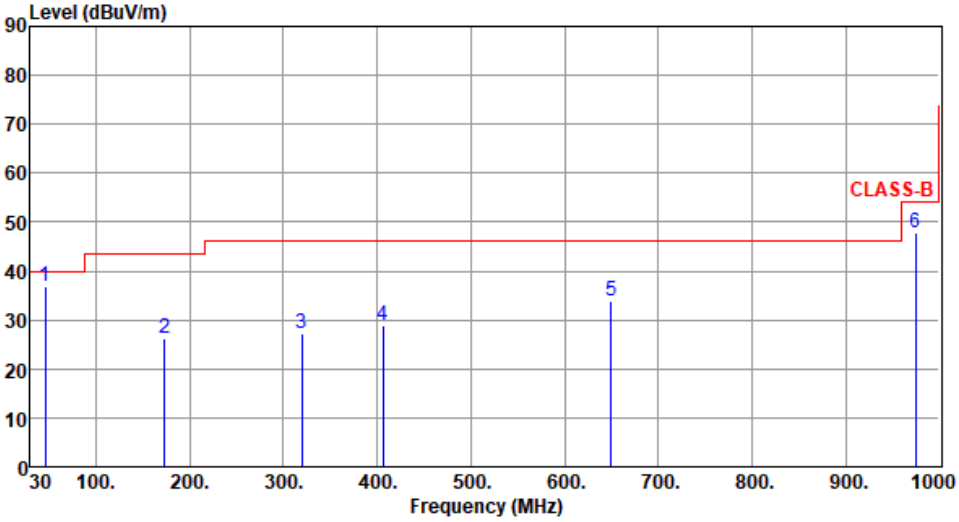


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	46.49	24.29	40.00	-15.71	32.76	-8.47	Peak	---	---
2	105.66	21.80	43.50	-21.70	34.28	-12.48	Peak	---	---
3	148.34	22.72	43.50	-20.78	31.34	-8.62	Peak	---	---
4	219.15	25.59	46.00	-20.41	37.35	-11.76	Peak	---	---
5	381.14	25.30	46.00	-20.70	30.82	-5.52	Peak	---	---
6	452.92	27.40	46.00	-18.60	30.71	-3.31	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	11a	**Test Freq. (MHz)**	5785
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.52	36.95	40.00	-3.05	45.43	-8.48	Peak	---	---
2	173.56	26.15	43.50	-17.35	35.47	-9.32	Peak	---	---
3	320.03	27.25	46.00	-18.75	34.50	-7.25	Peak	---	---
4	406.36	28.78	46.00	-17.22	33.56	-4.78	Peak	---	---
5	649.83	33.89	46.00	-12.11	32.87	1.02	Peak	---	---
6	974.78	47.78	54.00	-6.22	41.13	6.65	Peak	---	---

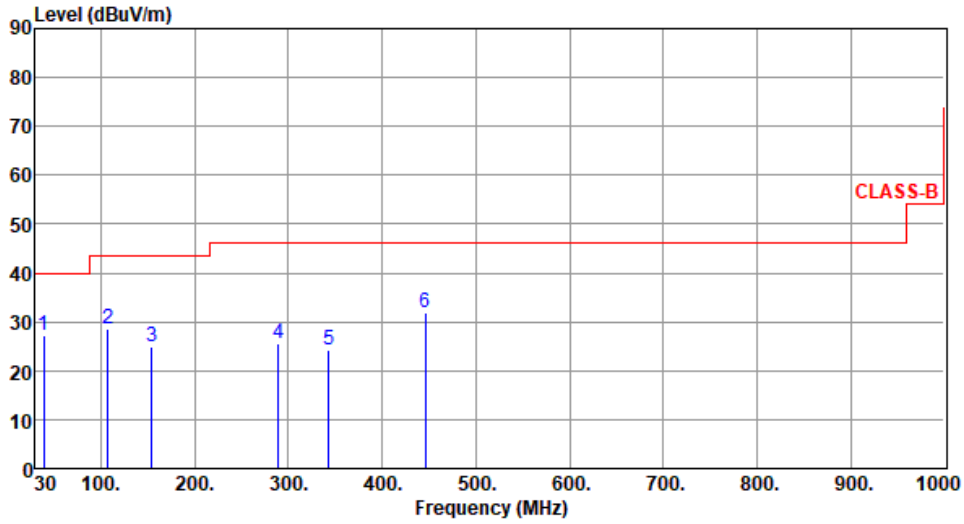
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Adapter mode

Unwanted Emissions (Below 1GHz)

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

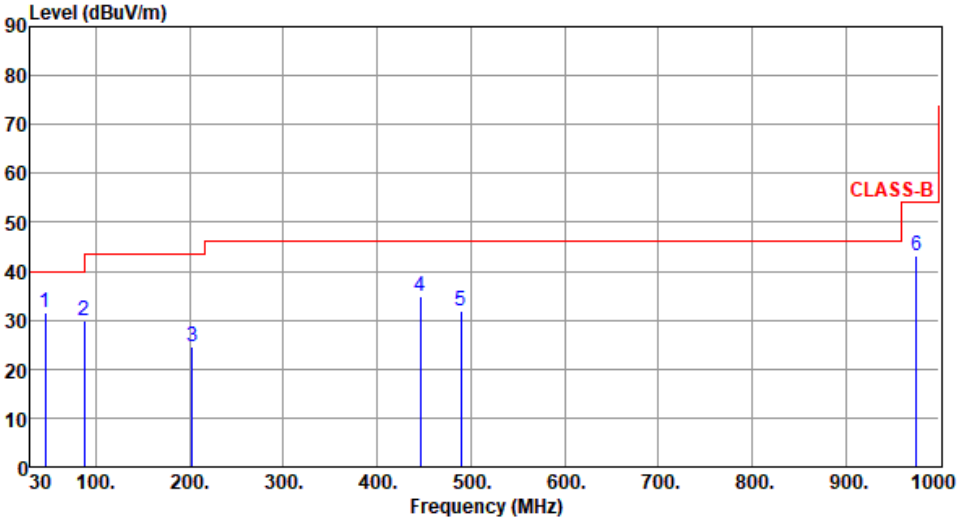


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	38.73	27.18	40.00	-12.82	36.57	-9.39	Peak	---	---
2	107.60	28.53	43.50	-14.97	40.77	-12.24	Peak	---	---
3	154.16	25.04	43.50	-18.46	33.44	-8.40	Peak	---	---
4	288.99	25.49	46.00	-20.51	33.62	-8.13	Peak	---	---
5	343.31	24.29	46.00	-21.71	31.01	-6.72	Peak	---	---
6	446.13	31.86	46.00	-14.14	35.34	-3.48	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-OFDMA	**Test Freq. (MHz)**	5240
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

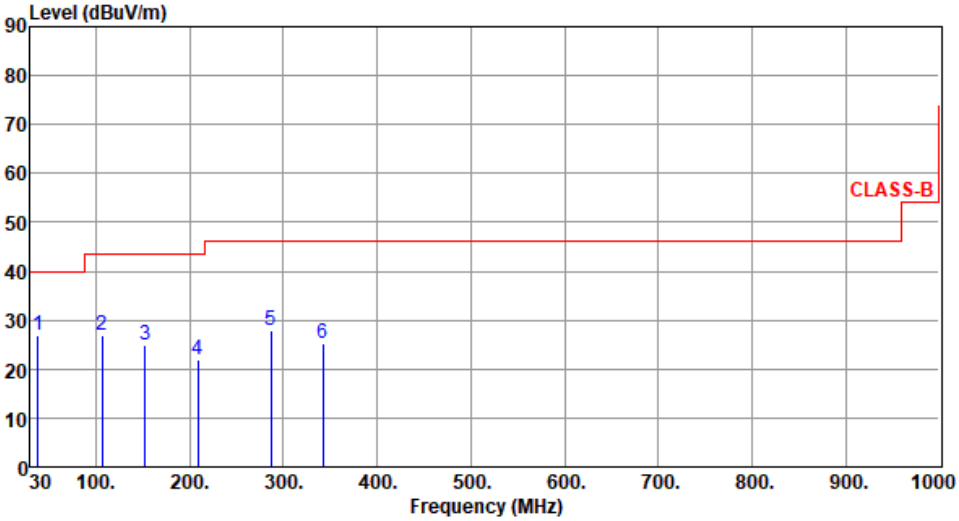


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.52	31.43	40.00	-8.57	39.91	-8.48	QP	100	35
2	87.23	29.83	40.00	-10.17	44.50	-14.67	Peak	---	---
3	202.66	24.53	43.50	-18.97	36.35	-11.82	Peak	---	---
4	446.13	34.86	46.00	-11.14	38.34	-3.48	Peak	---	---
5	489.78	32.01	46.00	-13.99	34.66	-2.65	Peak	---	---
6	975.75	43.14	54.00	-10.86	36.49	6.65	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	11a	**Test Freq. (MHz)**	5785
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66

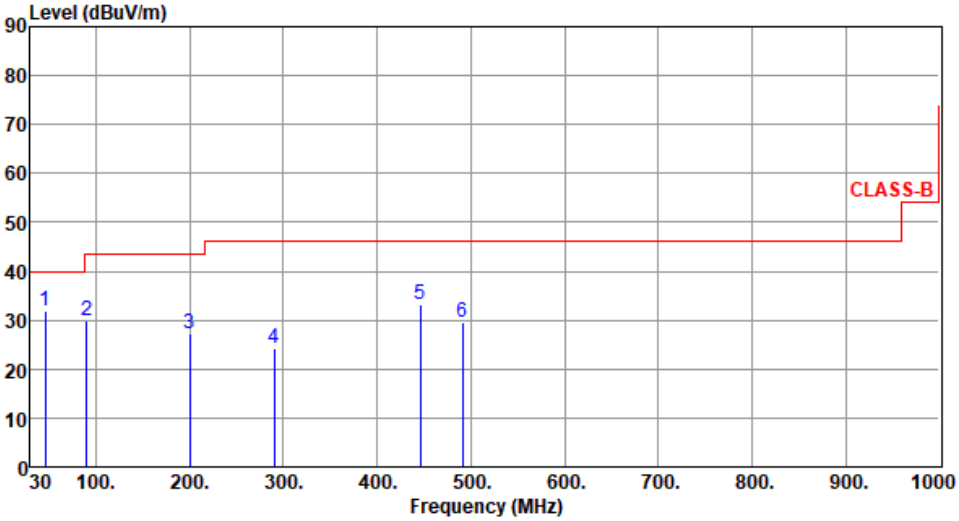


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	37.76	26.74	40.00	-13.26	36.34	-9.60	Peak	---	---
2	106.63	27.01	43.50	-16.49	39.38	-12.37	Peak	---	---
3	152.22	24.80	43.50	-18.70	33.26	-8.46	Peak	---	---
4	208.48	21.94	43.50	-21.56	33.78	-11.84	Peak	---	---
5	287.05	27.86	46.00	-18.14	36.04	-8.18	Peak	---	---
6	342.34	25.16	46.00	-20.84	31.88	-6.72	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	11a	**Test Freq. (MHz)**	5785
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):66



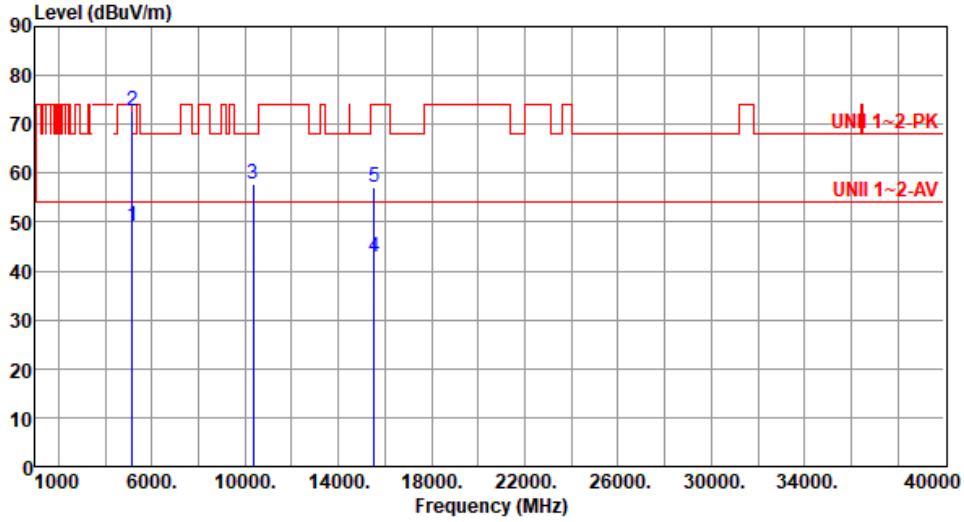
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.52	31.97	40.00	-8.03	40.45	-8.48	QP	100	8
2	90.14	29.98	43.50	-13.52	44.55	-14.57	Peak	---	---
3	199.75	27.12	43.50	-16.38	38.88	-11.76	Peak	---	---
4	289.96	24.10	46.00	-21.90	32.21	-8.11	Peak	---	---
5	446.13	33.05	46.00	-12.95	36.53	-3.48	Peak	---	---
6	490.75	29.41	46.00	-16.59	32.05	-2.64	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 :Paul Lin Temperature(℃):24 Humidity(%):64

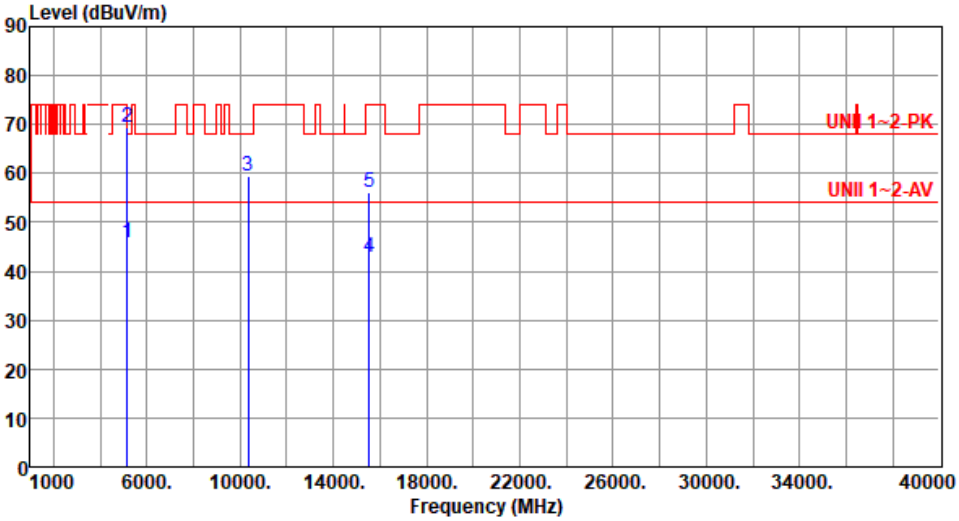


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	49.23	54.00	-4.77	48.41	0.82	Average	102	324
2	5150.00	72.84	74.00	-1.16	72.02	0.82	Peak	102	324
3	10360.00	57.86	68.20	-10.34	49.37	8.49	Peak	100	315
4	15540.00	42.95	54.00	-11.05	36.97	5.98	Average	100	229
5	15540.00	57.06	74.00	-16.94	51.08	5.98	Peak	100	229

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

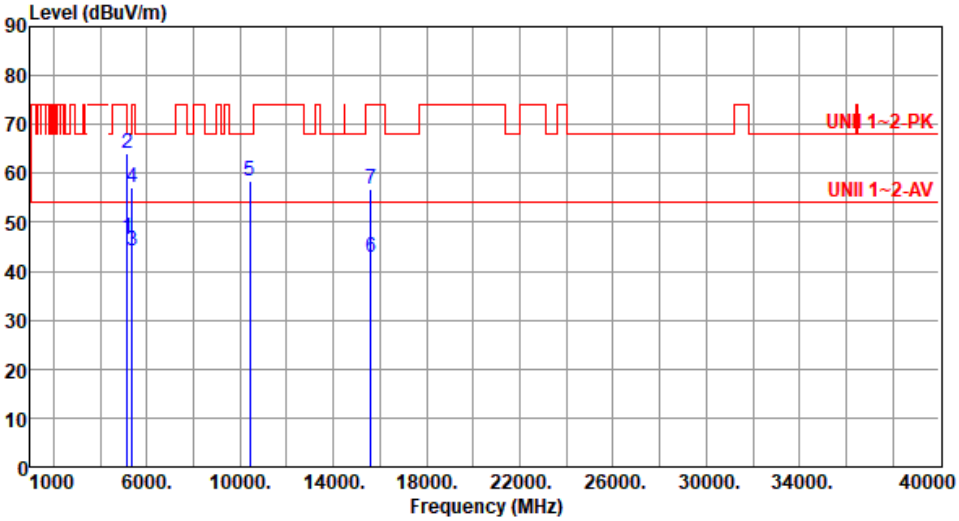


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.78	54.00	-8.22	44.96	0.82	Average	100	89
2	5150.00	69.48	74.00	-4.52	68.66	0.82	Peak	100	89
3	10360.00	59.45	68.20	-8.75	50.96	8.49	Peak	343	26
4	15540.00	43.00	54.00	-11.00	37.02	5.98	Average	100	116
5	15540.00	56.20	74.00	-17.80	50.22	5.98	Peak	100	116

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

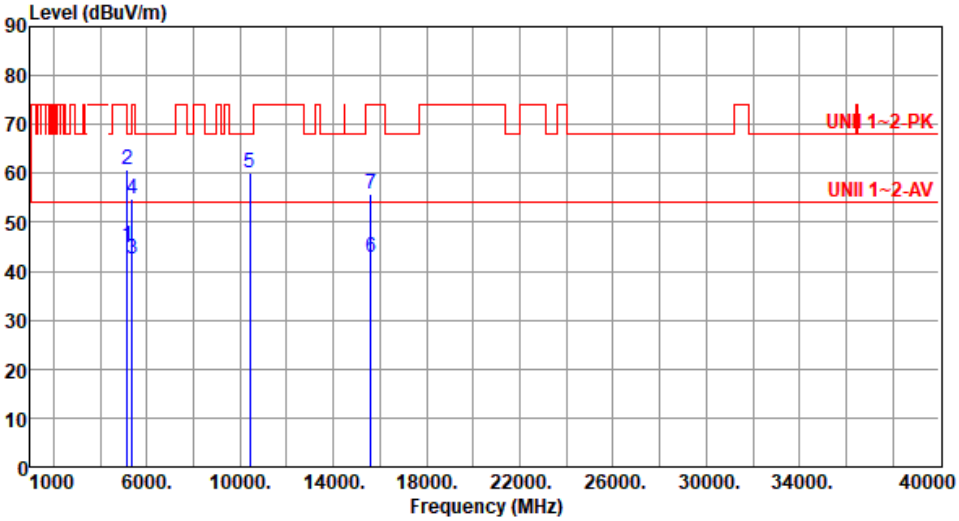


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	46.84	54.00	-7.16	46.02	0.82	Average	100	322
2	5150.00	64.20	74.00	-9.80	63.38	0.82	Peak	100	322
3	5350.00	44.32	54.00	-9.68	44.18	0.14	Average	100	322
4	5350.00	57.12	74.00	-16.88	56.98	0.14	Peak	100	322
5	10400.00	58.49	68.20	-9.71	49.85	8.64	Peak	100	322
6	15600.00	42.92	54.00	-11.08	37.17	5.75	Average	100	234
7	15600.00	56.92	74.00	-17.08	51.17	5.75	Peak	100	234

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

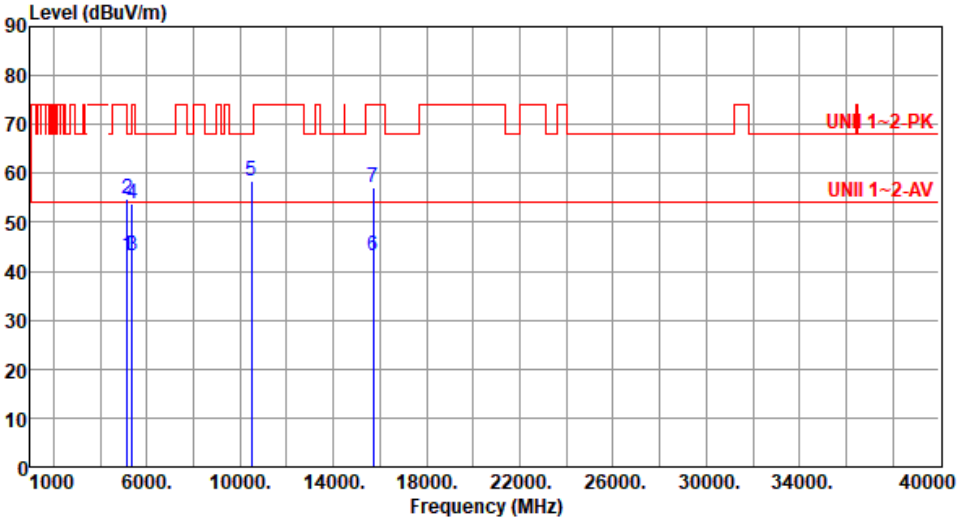


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.01	54.00	-8.99	44.19	0.82	Average	100	79
2	5150.00	60.80	74.00	-13.20	59.98	0.82	Peak	100	79
3	5350.00	42.36	54.00	-11.64	42.22	0.14	Average	100	79
4	5350.00	54.87	74.00	-19.13	54.73	0.14	Peak	100	79
5	10400.00	60.06	68.20	-8.14	51.42	8.64	Peak	346	19
6	15600.00	42.69	54.00	-11.31	36.94	5.75	Average	100	102
7	15600.00	55.89	74.00	-18.11	50.14	5.75	Peak	100	102

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

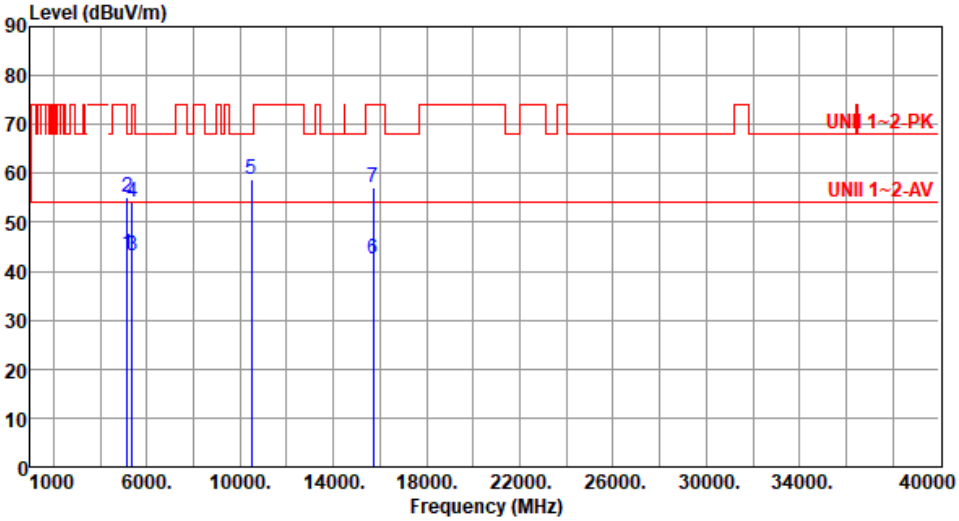


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	43.20	54.00	-10.80	42.38	0.82	Average	100	317
2	5150.00	54.70	74.00	-19.30	53.88	0.82	Peak	100	317
3	5350.00	43.32	54.00	-10.68	43.18	0.14	Average	100	317
4	5350.00	53.83	74.00	-20.17	53.69	0.14	Peak	100	317
5	10480.00	58.43	68.20	-9.77	49.74	8.69	Peak	229	331
6	15720.00	43.07	54.00	-10.93	37.35	5.72	Average	100	102
7	15720.00	57.05	74.00	-16.95	51.33	5.72	Peak	100	102

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

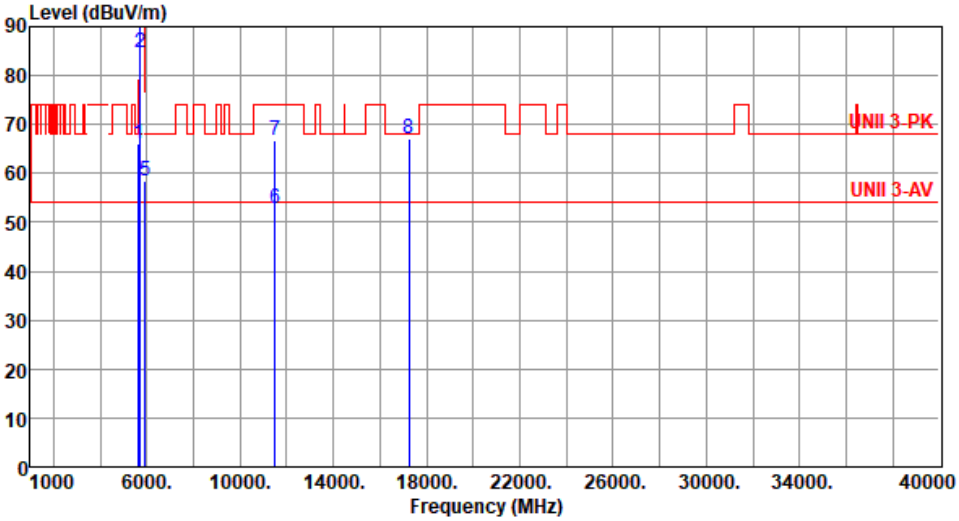


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	43.53	54.00	-10.47	42.71	0.82	Average	100	83
2	5150.00	54.98	74.00	-19.02	54.16	0.82	Peak	100	83
3	5350.00	43.25	54.00	-10.75	43.11	0.14	Average	100	83
4	5350.00	54.11	74.00	-19.89	53.97	0.14	Peak	100	83
5	10480.00	58.63	68.20	-9.57	49.94	8.69	Peak	317	16
6	15720.00	42.57	54.00	-11.43	36.85	5.72	Average	100	111
7	15720.00	57.20	74.00	-16.80	51.48	5.72	Peak	100	111

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

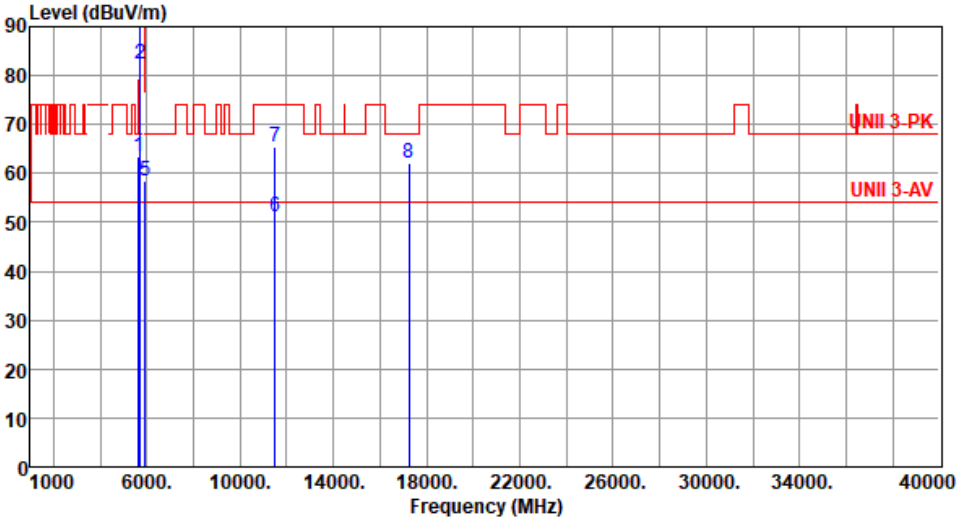


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	65.99	68.20	-2.21	65.45	0.54	Peak	108	321
2	5700.00	84.71	105.20	-20.49	83.85	0.86	Peak	108	321
3	5720.00	92.86	110.80	-17.94	91.95	0.91	Peak	108	321
4	5725.00	97.79	122.20	-24.41	96.86	0.93	Peak	108	321
5	5925.00	58.41	68.20	-9.79	56.92	1.49	Peak	108	321
6	11490.00	52.81	54.00	-1.19	44.10	8.71	Average	233	325
7	11490.00	66.60	74.00	-7.40	57.89	8.71	Peak	233	325
8	17235.00	67.10	68.20	-1.10	60.84	6.26	Peak	133	64

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

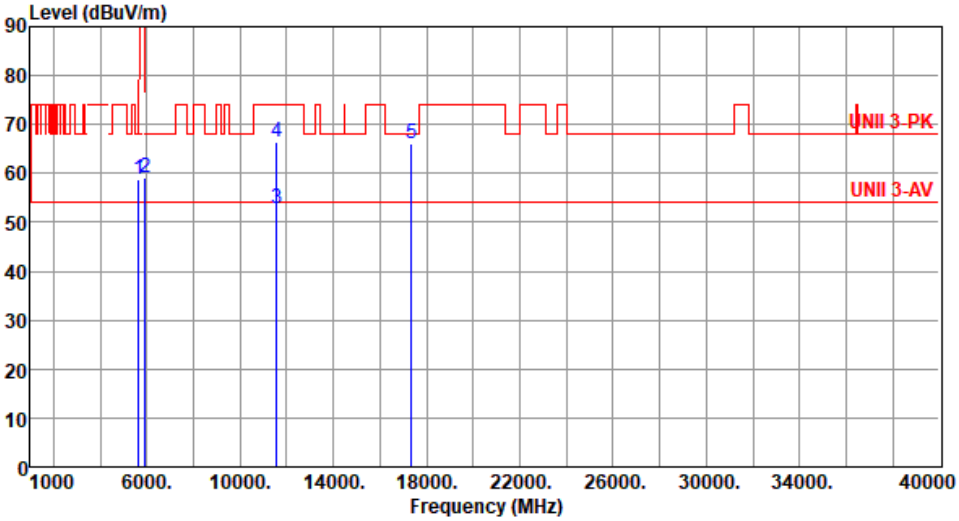


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	63.47	68.20	-4.73	62.93	0.54	Peak	115	91
2	5700.00	82.34	105.20	-22.86	81.48	0.86	Peak	115	91
3	5720.00	90.49	110.80	-20.31	89.58	0.91	Peak	115	91
4	5725.00	95.36	122.20	-26.84	94.43	0.93	Peak	115	91
5	5925.00	58.43	68.20	-9.77	56.94	1.49	Peak	115	91
6	11490.00	51.26	54.00	-2.74	42.55	8.71	Average	108	17
7	11490.00	65.53	74.00	-8.47	56.82	8.71	Peak	108	17
8	17235.00	62.16	68.20	-6.04	55.90	6.26	Peak	111	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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

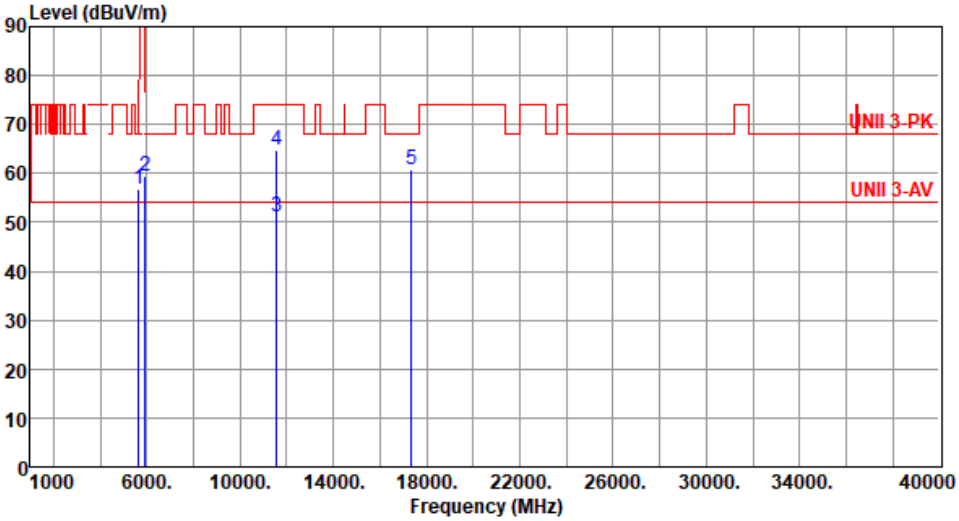


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	58.83	68.20	-9.37	58.29	0.54	Peak	100	317
2	5925.00	59.15	68.20	-9.05	57.66	1.49	Peak	100	317
3	11570.00	52.79	54.00	-1.21	44.20	8.59	Average	100	25
4	11570.00	66.34	74.00	-7.66	57.75	8.59	Peak	100	25
5	17355.00	65.93	68.20	-2.27	59.35	6.58	Peak	119	50

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).

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

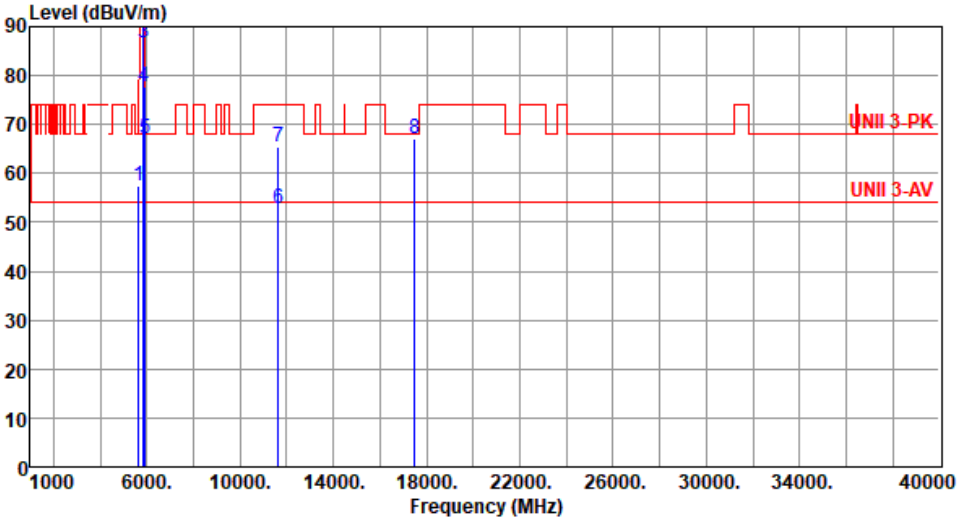


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.78	68.20	-11.42	56.24	0.54	Peak	107	85
2	5925.00	59.61	68.20	-8.59	58.12	1.49	Peak	107	85
3	11570.00	51.17	54.00	-2.83	42.58	8.59	Average	100	31
4	11570.00	64.85	74.00	-9.15	56.26	8.59	Peak	100	31
5	17355.00	60.67	68.20	-7.53	54.09	6.58	Peak	109	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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

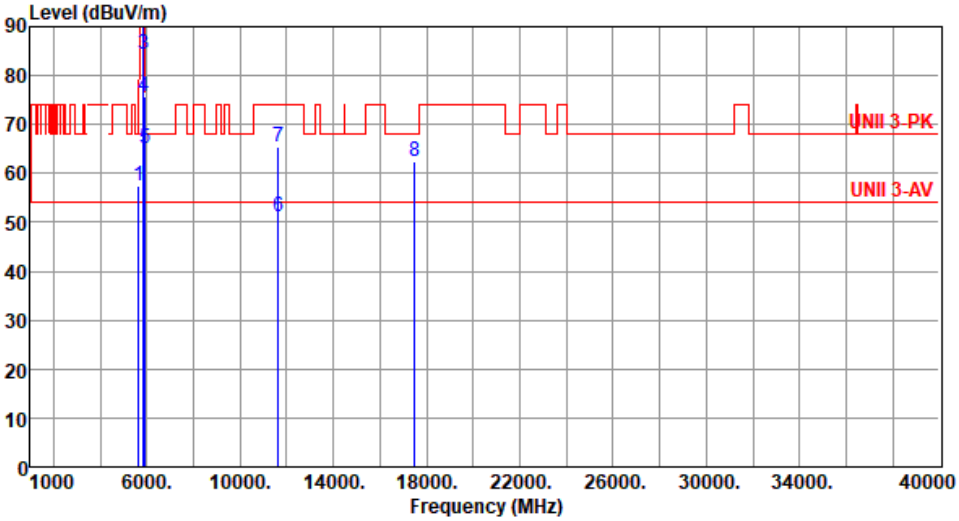


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.49	68.20	-10.71	56.95	0.54	Peak	102	314
2	5850.00	93.21	122.20	-28.99	91.97	1.24	Peak	102	314
3	5855.00	86.65	110.80	-24.15	85.39	1.26	Peak	102	314
4	5875.00	77.74	105.20	-27.46	76.38	1.36	Peak	102	314
5	5925.00	67.19	68.20	-1.01	65.70	1.49	Peak	102	314
6	11650.00	52.93	54.00	-1.07	44.70	8.23	Average	230	323
7	11650.00	65.35	74.00	-8.65	57.12	8.23	Peak	230	323
8	17475.00	67.19	68.20	-1.01	60.10	7.09	Peak	106	52

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64



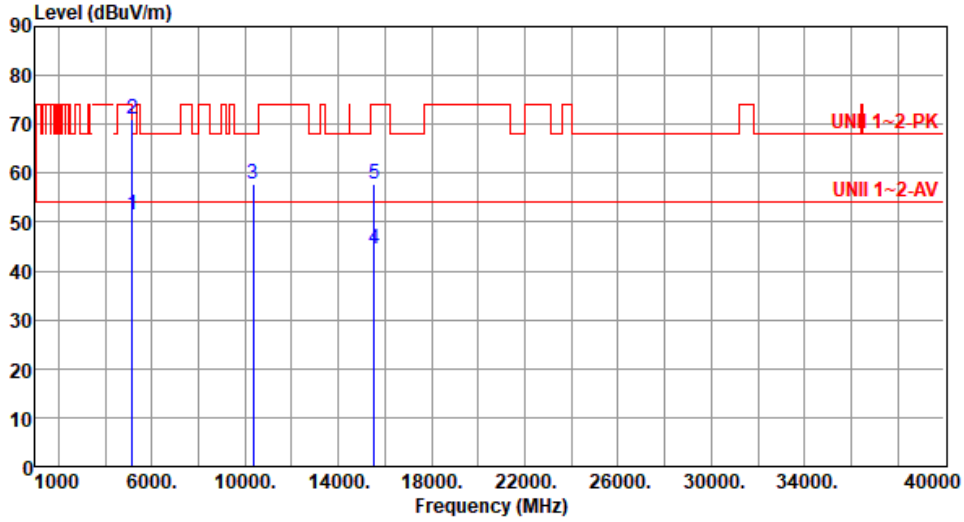
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.34	68.20	-10.86	56.80	0.54	Peak	113	79
2	5850.00	91.02	122.20	-31.18	89.78	1.24	Peak	113	79
3	5855.00	84.37	110.80	-26.43	83.11	1.26	Peak	113	79
4	5875.00	75.56	105.20	-29.64	74.20	1.36	Peak	113	79
5	5925.00	64.97	68.20	-3.23	63.48	1.49	Peak	113	79
6	11650.00	51.13	54.00	-2.87	42.90	8.23	Average	101	17
7	11650.00	65.45	74.00	-8.55	57.22	8.23	Peak	101	17
8	17475.00	62.53	68.20	-5.67	55.44	7.09	Peak	108	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).

Unwanted Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	5180
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

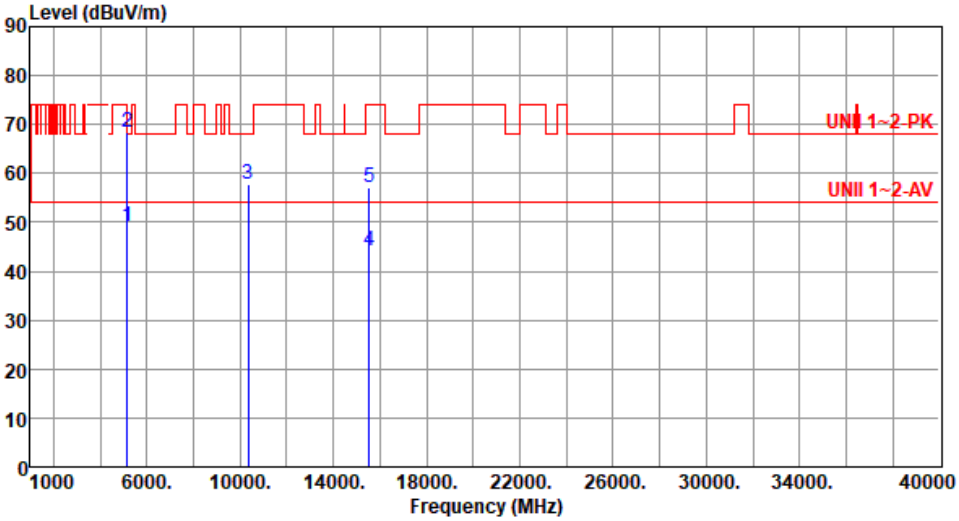


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	51.40	54.00	-2.60	50.58	0.82	Average	106	322
2	5150.00	71.04	74.00	-2.96	70.22	0.82	Peak	106	322
3	10360.00	57.72	68.20	-10.48	49.23	8.49	Peak	100	302
4	15540.00	44.53	54.00	-9.47	38.55	5.98	Average	100	57
5	15540.00	57.67	74.00	-16.33	51.69	5.98	Peak	100	57

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

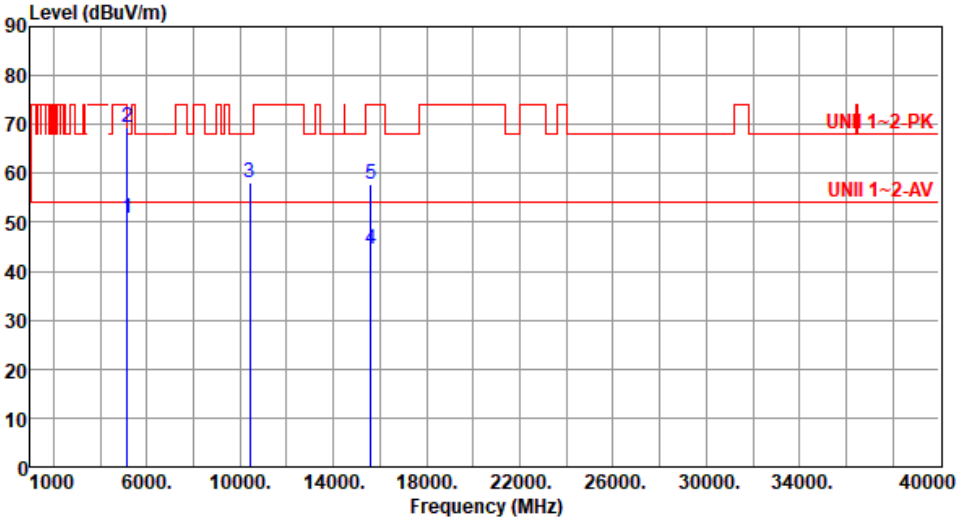


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	49.19	54.00	-4.81	48.37	0.82	Average	136	5
2	5150.00	68.34	74.00	-5.66	67.52	0.82	Peak	136	5
3	10360.00	57.64	68.20	-10.56	49.15	8.49	Peak	100	302
4	15540.00	44.16	54.00	-9.84	38.18	5.98	Average	100	57
5	15540.00	57.01	74.00	-16.99	51.03	5.98	Peak	100	57

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

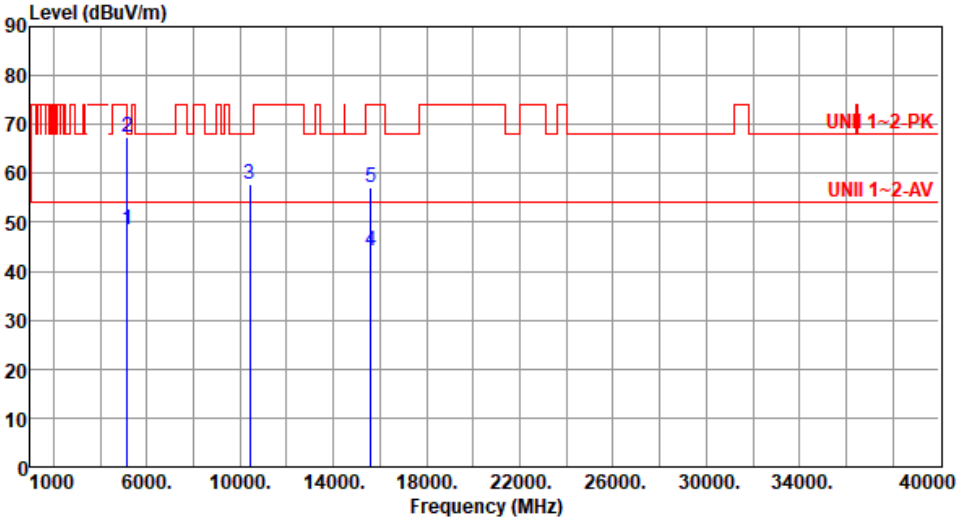


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	50.67	54.00	-3.33	49.85	0.82	Average	126	322
2	5150.00	69.42	74.00	-4.58	68.60	0.82	Peak	126	322
3	10400.00	58.15	68.20	-10.05	49.51	8.64	Peak	100	300
4	15600.00	44.49	54.00	-9.51	38.74	5.75	Average	100	48
5	15600.00	57.62	74.00	-16.38	51.87	5.75	Peak	100	48

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

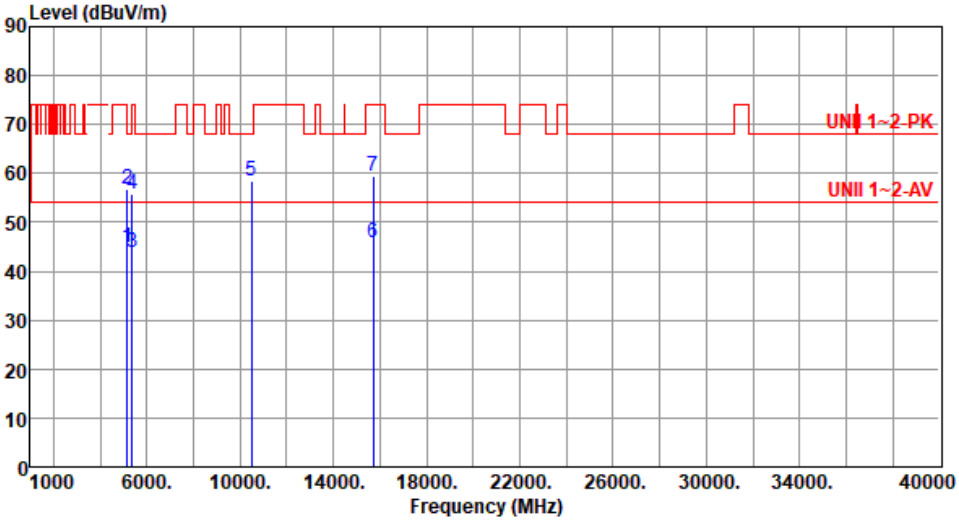


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	48.40	54.00	-5.60	47.58	0.82	Average	133	2
2	5150.00	67.53	74.00	-6.47	66.71	0.82	Peak	133	2
3	10400.00	57.86	68.20	-10.34	49.22	8.64	Peak	100	33
4	15600.00	44.32	54.00	-9.68	38.57	5.75	Average	100	39
5	15600.00	57.28	74.00	-16.72	51.53	5.75	Peak	100	39

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

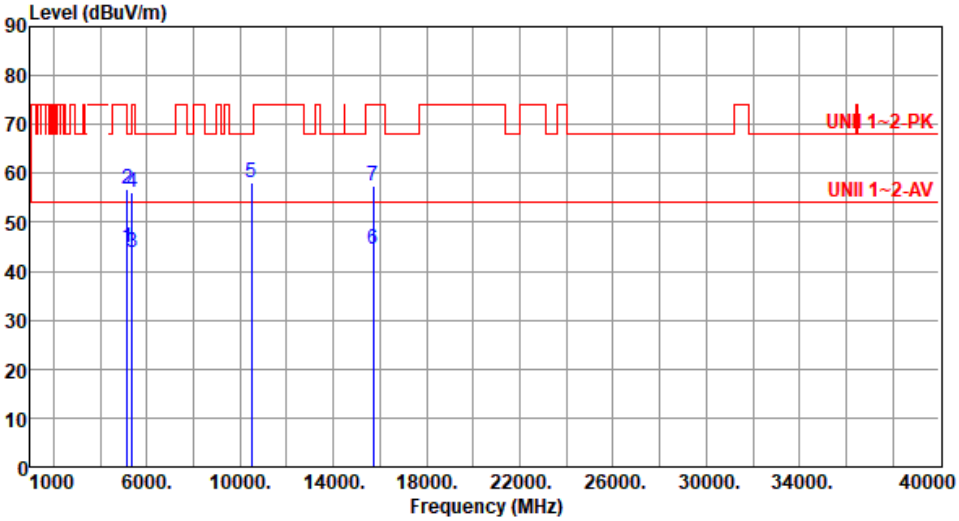


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	44.77	54.00	-9.23	43.95	0.82	Average	133	328
2	5150.00	56.69	74.00	-17.31	55.87	0.82	Peak	133	328
3	5350.00	43.88	54.00	-10.12	43.74	0.14	Average	133	328
4	5350.00	55.93	74.00	-18.07	55.79	0.14	Peak	133	328
5	10480.00	58.57	68.20	-9.63	49.88	8.69	Peak	105	309
6	15720.00	45.70	54.00	-8.30	39.98	5.72	Average	108	43
7	15720.00	59.47	74.00	-14.53	53.75	5.72	Peak	108	43

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

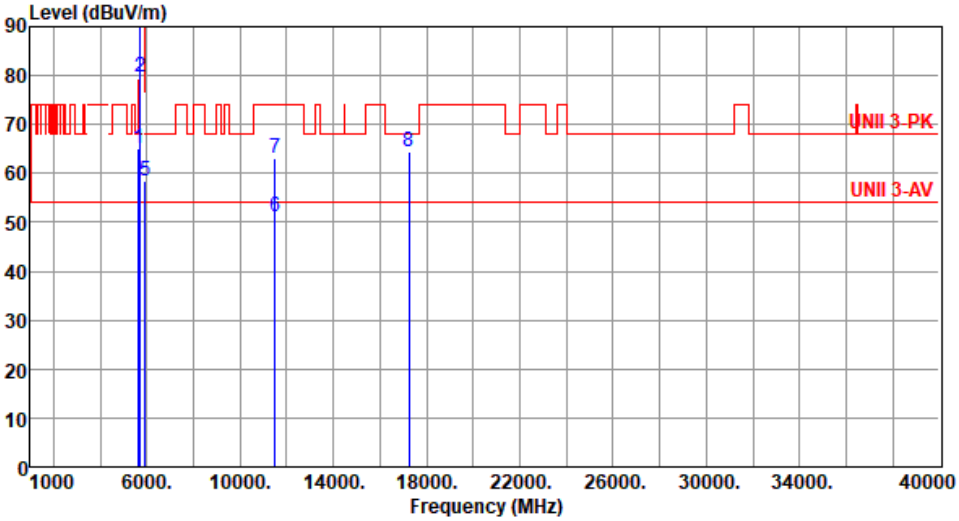


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	44.81	54.00	-9.19	43.99	0.82	Average	140	7
2	5150.00	56.78	74.00	-17.22	55.96	0.82	Peak	140	7
3	5350.00	43.97	54.00	-10.03	43.83	0.14	Average	140	7
4	5350.00	56.15	74.00	-17.85	56.01	0.14	Peak	140	7
5	10480.00	58.15	68.20	-10.05	49.46	8.69	Peak	100	37
6	15720.00	44.39	54.00	-9.61	38.67	5.72	Average	100	46
7	15720.00	57.44	74.00	-16.56	51.72	5.72	Peak	108	46

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

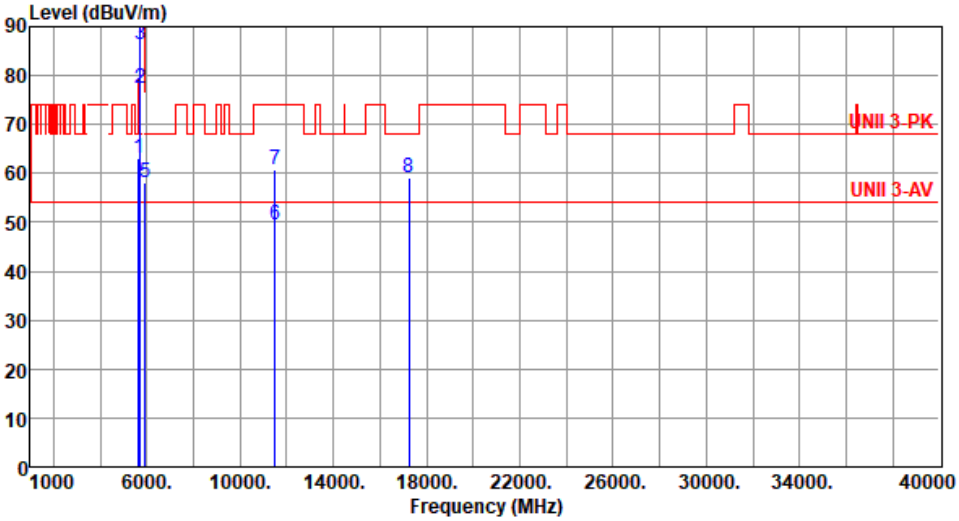


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	65.24	68.20	-2.96	64.70	0.54	Peak	101	314
2	5700.00	79.84	105.20	-25.36	78.98	0.86	Peak	101	314
3	5720.00	88.61	110.80	-22.19	87.70	0.91	Peak	101	314
4	5725.00	96.77	122.20	-25.43	95.84	0.93	Peak	101	314
5	5925.00	58.37	68.20	-9.83	56.88	1.49	Peak	101	314
6	11490.00	51.24	54.00	-2.76	42.53	8.71	Average	121	86
7	11490.00	62.95	74.00	-11.05	54.24	8.71	Peak	121	86
8	17235.00	64.58	68.20	-3.62	58.32	6.26	Peak	120	56

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

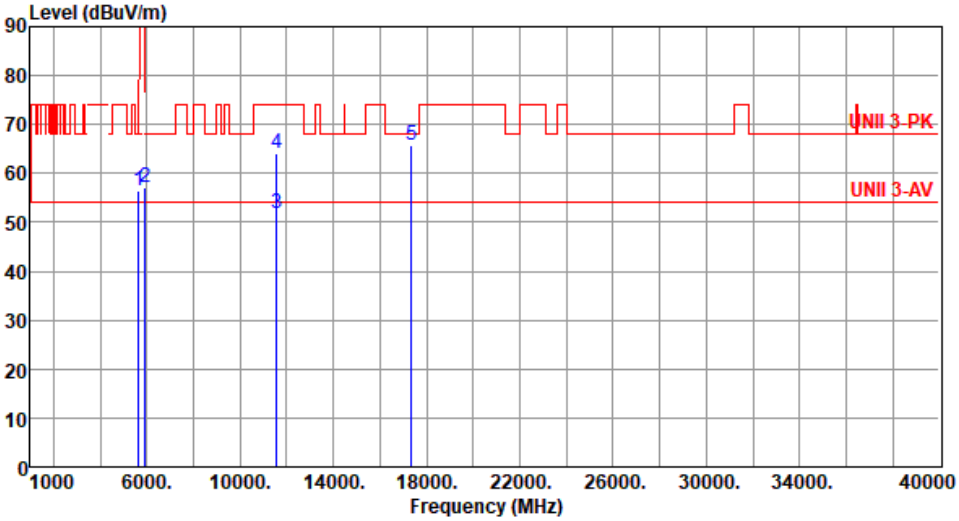


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	63.03	68.20	-5.17	62.49	0.54	Peak	137	26
2	5700.00	77.54	105.20	-27.66	76.68	0.86	Peak	137	26
3	5720.00	86.41	110.80	-24.39	85.50	0.91	Peak	137	26
4	5725.00	94.53	122.20	-27.67	93.60	0.93	Peak	137	26
5	5925.00	58.27	68.20	-9.93	56.78	1.49	Peak	137	26
6	11490.00	49.33	54.00	-4.67	40.62	8.71	Average	103	38
7	11490.00	60.73	74.00	-13.27	52.02	8.71	Peak	103	38
8	17235.00	59.27	68.20	-8.93	53.01	6.26	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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

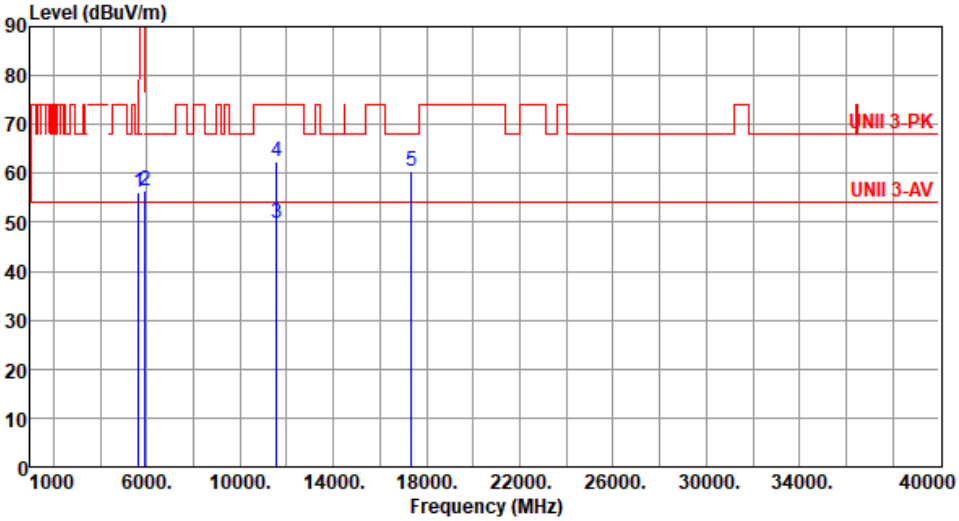


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	56.49	68.20	-11.71	55.95	0.54	Peak	102	316
2	5925.00	57.26	68.20	-10.94	55.77	1.49	Peak	102	316
3	11570.00	51.95	54.00	-2.05	43.36	8.59	Average	117	84
4	11570.00	64.25	74.00	-9.75	55.66	8.59	Peak	117	84
5	17355.00	65.83	68.20	-2.37	59.25	6.58	Peak	113	52

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

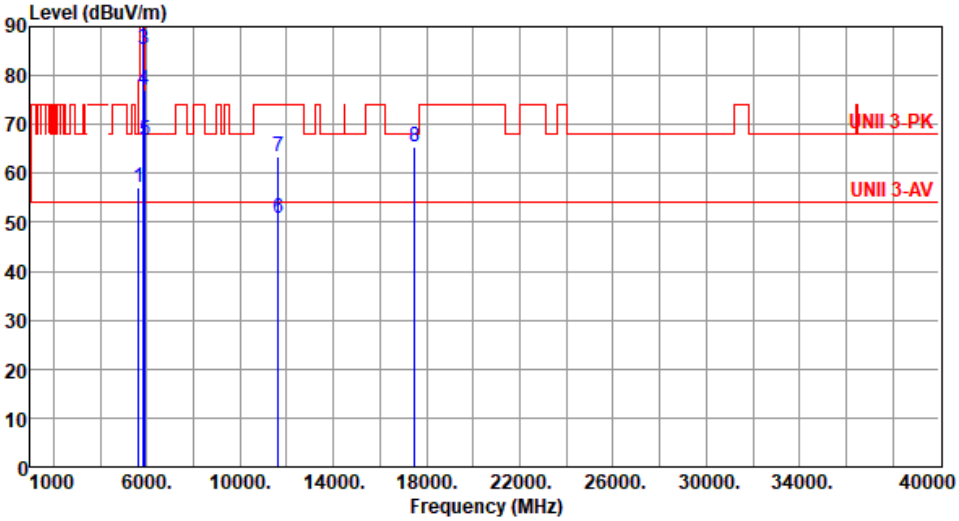


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	55.97	68.20	-12.23	55.43	0.54	Peak	130	22
2	5925.00	56.60	68.20	-11.60	55.11	1.49	Peak	130	22
3	11570.00	49.76	54.00	-4.24	41.17	8.59	Average	104	33
4	11570.00	62.47	74.00	-11.53	53.88	8.59	Peak	104	33
5	17355.00	60.51	68.20	-7.69	53.93	6.58	Peak	101	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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

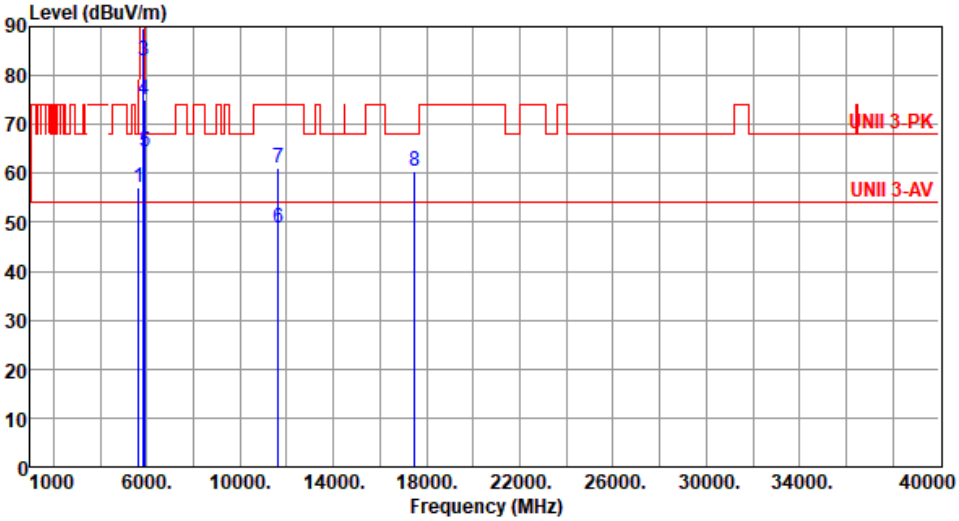


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.22	68.20	-10.98	56.68	0.54	Peak	108	316
2	5850.00	92.02	122.20	-30.18	90.78	1.24	Peak	108	316
3	5855.00	85.22	110.80	-25.58	83.96	1.26	Peak	108	316
4	5875.00	77.21	105.20	-27.99	75.85	1.36	Peak	108	316
5	5925.00	66.79	68.20	-1.41	65.30	1.49	Peak	108	316
6	11650.00	50.82	54.00	-3.18	42.59	8.23	Average	111	82
7	11650.00	63.31	74.00	-10.69	55.08	8.23	Peak	111	82
8	17475.00	65.53	68.20	-2.67	58.44	7.09	Peak	111	50

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64



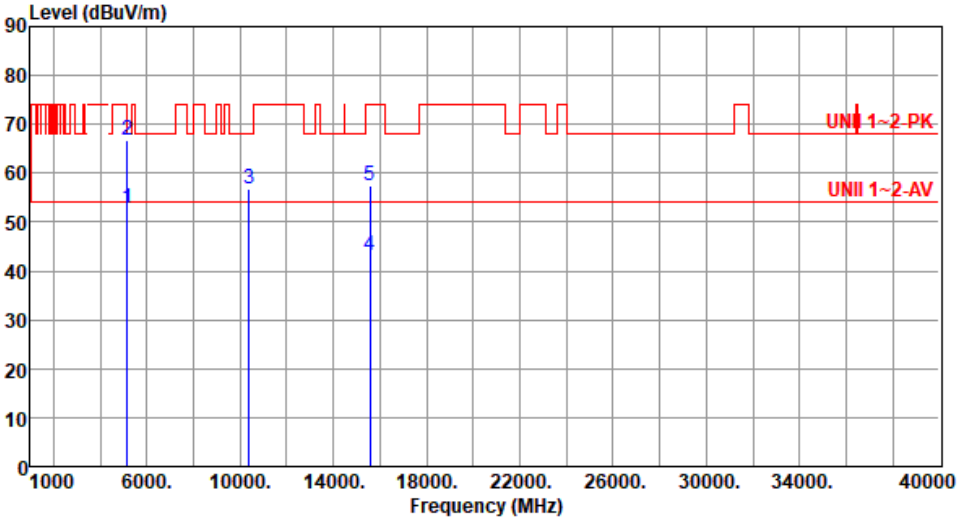
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	57.13	68.20	-11.07	56.59	0.54	Peak	135	26
2	5850.00	89.75	122.20	-32.45	88.51	1.24	Peak	135	26
3	5855.00	83.06	110.80	-27.74	81.80	1.26	Peak	135	26
4	5875.00	74.93	105.20	-30.27	73.57	1.36	Peak	135	26
5	5925.00	64.43	68.20	-3.77	62.94	1.49	Peak	135	26
6	11650.00	48.71	54.00	-5.29	40.48	8.23	Average	100	28
7	11650.00	61.19	74.00	-12.81	52.96	8.23	Peak	100	28
8	17475.00	60.46	68.20	-7.74	53.37	7.09	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).

Unwanted Emissions (Above 1GHz) for ax HE40-OFDMA

Modulation	ax HE40-OFDMA	**Test Freq. (MHz)**	5190
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):24 Humidity(%):64

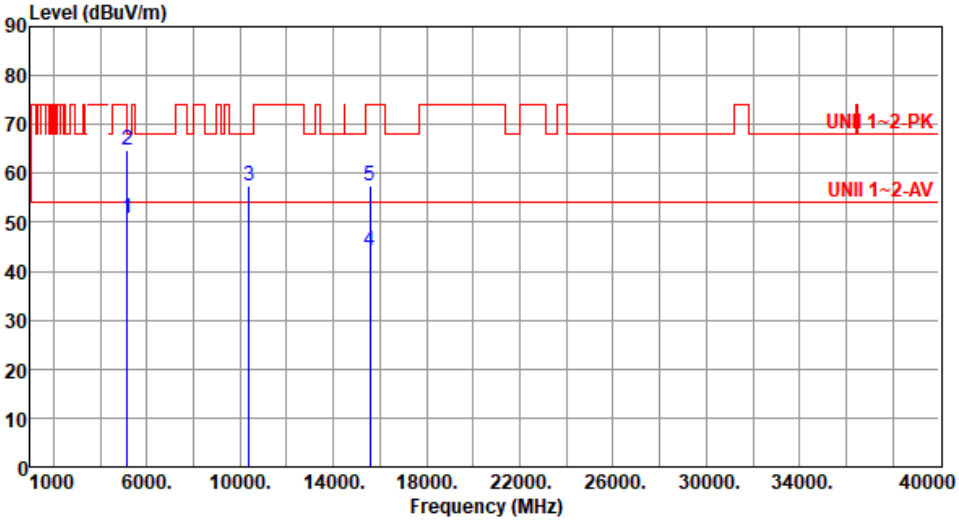


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	52.71	54.00	-1.29	51.89	0.82	Average	119	313
2	5150.00	66.67	74.00	-7.33	65.85	0.82	Peak	119	313
3	10380.00	56.72	68.20	-11.48	48.15	8.57	Peak	100	308
4	15570.00	43.04	54.00	-10.96	37.18	5.86	Average	100	45
5	15570.00	57.53	74.00	-16.47	51.67	5.86	Peak	100	45

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

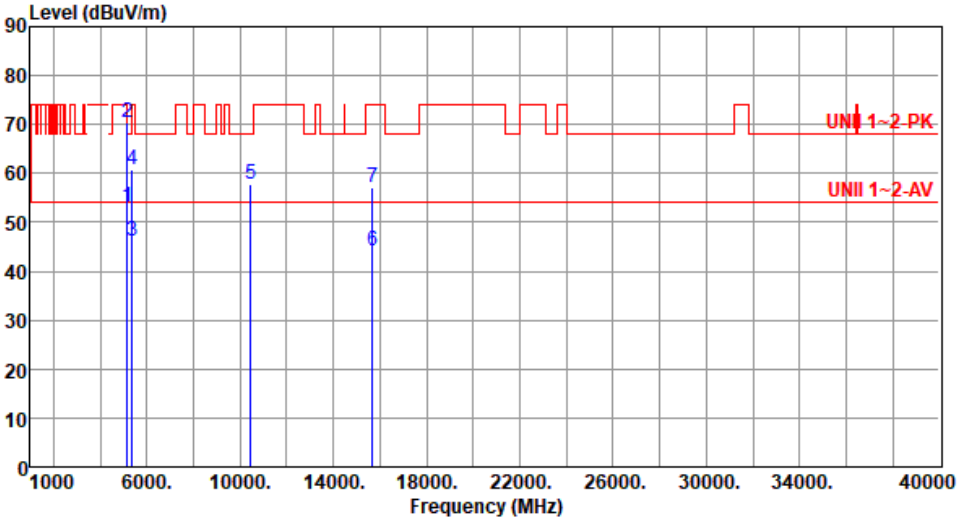


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	50.71	54.00	-3.29	49.89	0.82	Average	139	12
2	5150.00	64.81	74.00	-9.19	63.99	0.82	Peak	139	12
3	10380.00	57.38	68.20	-10.82	48.81	8.57	Peak	100	35
4	15570.00	44.32	54.00	-9.68	38.46	5.86	Average	100	42
5	15570.00	57.35	74.00	-16.65	51.49	5.86	Peak	100	42

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

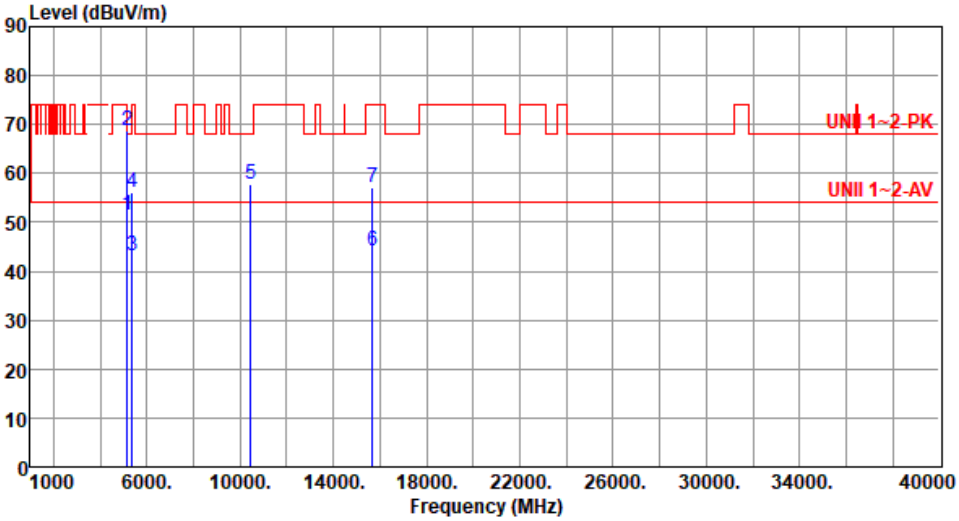


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	53.15	54.00	-0.85	52.33	0.82	Average	110	317
2	5150.00	70.50	74.00	-3.50	69.68	0.82	Peak	110	317
3	5350.00	46.01	54.00	-7.99	45.87	0.14	Average	110	317
4	5350.00	60.70	74.00	-13.30	60.56	0.14	Peak	110	317
5	10460.00	57.69	68.20	-10.51	49.01	8.68	Peak	100	306
6	15690.00	44.01	54.00	-9.99	38.26	5.75	Average	100	52
7	15690.00	57.06	74.00	-16.94	51.31	5.75	Peak	100	52

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

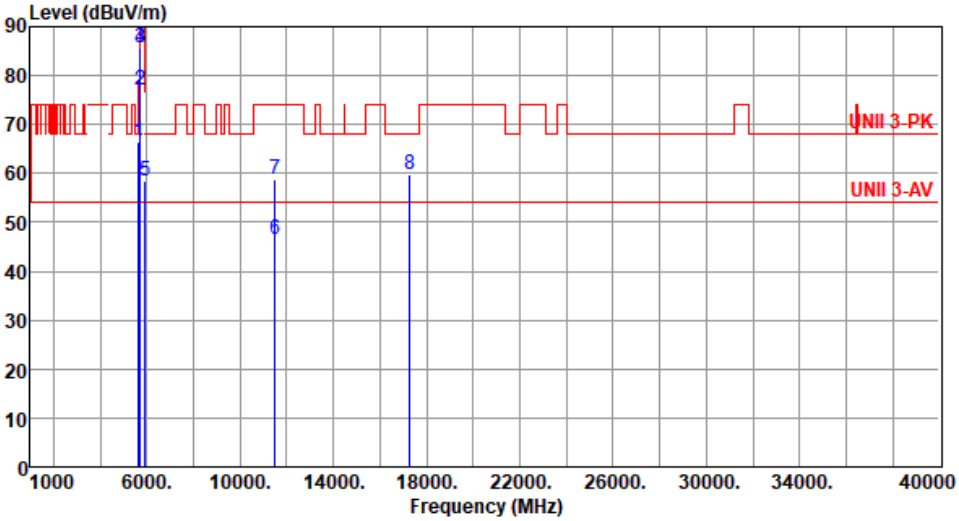


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	51.33	54.00	-2.67	50.51	0.82	Average	129	4
2	5150.00	68.71	74.00	-5.29	67.89	0.82	Peak	129	4
3	5350.00	43.27	54.00	-10.73	43.13	0.14	Average	129	4
4	5350.00	56.25	74.00	-17.75	56.11	0.14	Peak	129	4
5	10460.00	57.70	68.20	-10.50	49.02	8.68	Peak	100	29
6	15690.00	44.18	54.00	-9.82	38.43	5.75	Average	100	49
7	15690.00	57.11	74.00	-16.89	51.36	5.75	Peak	100	49

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

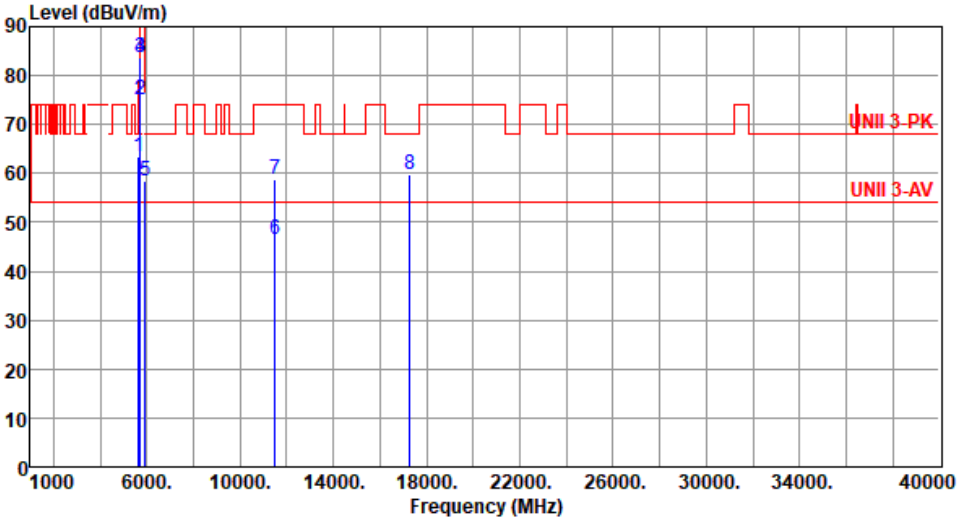


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	66.51	68.20	-1.69	65.97	0.54	Peak	101	321
2	5700.00	77.09	105.20	-28.11	76.23	0.86	Peak	101	321
3	5720.00	85.71	110.80	-25.09	84.80	0.91	Peak	101	321
4	5725.00	85.52	122.20	-36.68	84.59	0.93	Peak	101	321
5	5925.00	58.45	68.20	-9.75	56.96	1.49	Peak	101	321
6	11510.00	46.54	54.00	-7.46	37.84	8.70	Average	128	86
7	11510.00	58.78	74.00	-15.22	50.08	8.70	Peak	128	86
8	17265.00	59.79	68.20	-8.41	53.52	6.27	Peak	148	34

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

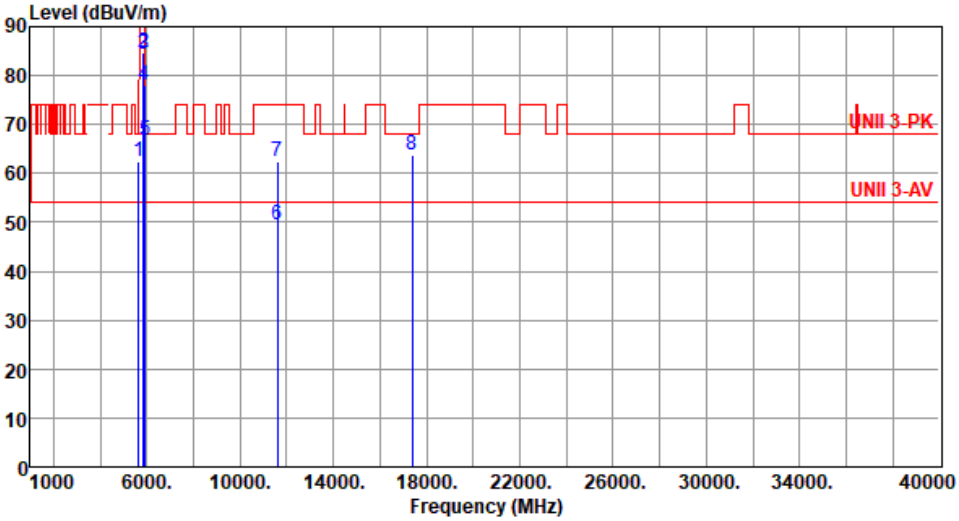


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	63.48	68.20	-4.72	62.94	0.54	Peak	141	25
2	5700.00	75.16	105.20	-30.04	74.30	0.86	Peak	141	25
3	5720.00	83.64	110.80	-27.16	82.73	0.91	Peak	141	25
4	5725.00	83.76	122.20	-38.44	82.83	0.93	Peak	141	25
5	5925.00	58.34	68.20	-9.86	56.85	1.49	Peak	141	25
6	11510.00	46.41	54.00	-7.59	37.71	8.70	Average	100	43
7	11510.00	58.84	74.00	-15.16	50.14	8.70	Peak	100	43
8	17265.00	59.66	68.20	-8.54	53.39	6.27	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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

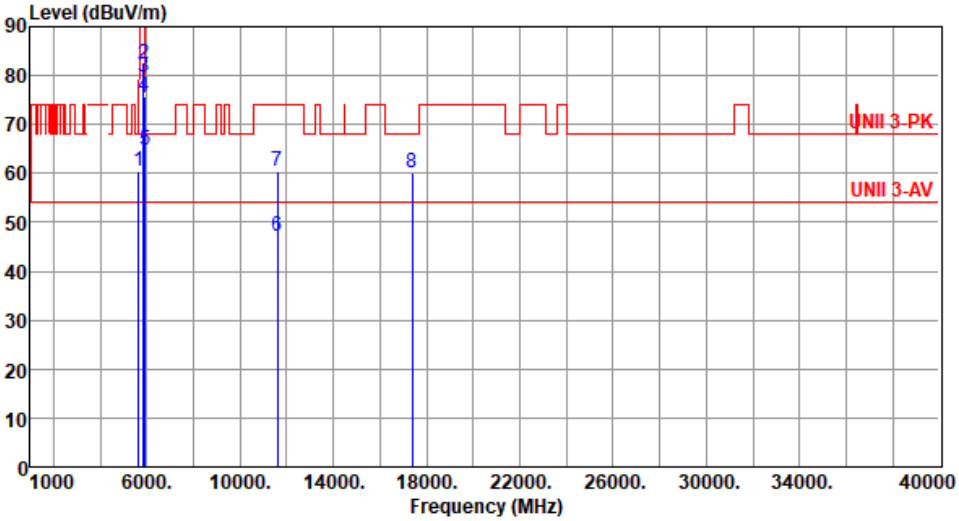


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	62.42	68.20	-5.78	61.88	0.54	Peak	105	316
2	5850.00	84.54	122.20	-37.66	83.30	1.24	Peak	105	316
3	5855.00	84.22	110.80	-26.58	82.96	1.26	Peak	105	316
4	5875.00	77.99	105.20	-27.21	76.63	1.36	Peak	105	316
5	5925.00	66.81	68.20	-1.39	65.32	1.49	Peak	105	316
6	11590.00	49.33	54.00	-4.67	40.78	8.55	Average	133	82
7	11590.00	62.50	74.00	-11.50	53.95	8.55	Peak	133	82
8	17385.00	63.67	68.20	-4.53	56.94	6.73	Peak	133	25

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).

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):64



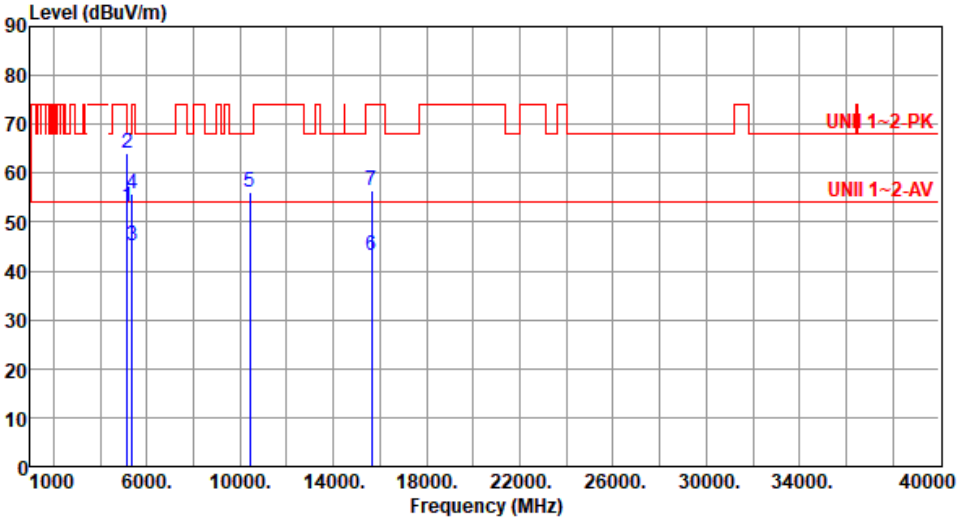
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	60.31	68.20	-7.89	59.77	0.54	Peak	136	19
2	5850.00	82.28	122.20	-39.92	81.04	1.24	Peak	136	19
3	5855.00	79.65	110.80	-31.15	78.39	1.26	Peak	136	19
4	5875.00	75.57	105.20	-29.63	74.21	1.36	Peak	136	19
5	5925.00	64.65	68.20	-3.55	63.16	1.49	Peak	136	19
6	11590.00	47.18	54.00	-6.82	38.63	8.55	Average	100	37
7	11590.00	60.33	74.00	-13.67	51.78	8.55	Peak	100	37
8	17385.00	60.02	68.20	-8.18	53.29	6.73	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).

Unwanted Emissions (Above 1GHz) for ax HE80-OFDMA

Modulation	ax HE80-OFDMA	**Test Freq. (MHz)**	5210
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

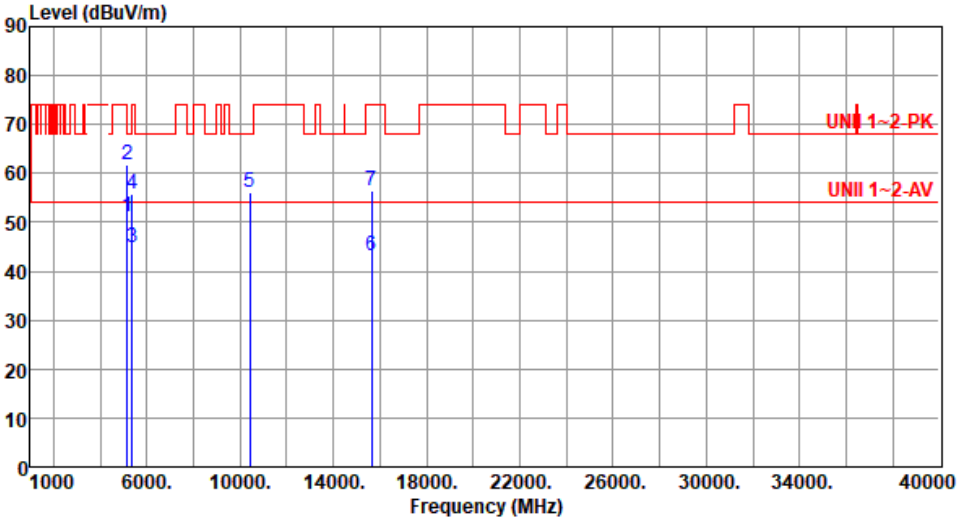


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	52.99	54.00	-1.01	52.17	0.82	Average	106	317
2	5150.00	63.94	74.00	-10.06	63.12	0.82	Peak	106	317
3	5350.00	45.02	54.00	-8.98	44.88	0.14	Average	106	317
4	5350.00	55.92	74.00	-18.08	55.78	0.14	Peak	106	317
5	10420.00	56.18	68.20	-12.02	47.53	8.65	Peak	100	302
6	15630.00	43.20	54.00	-10.80	37.46	5.74	Average	100	55
7	15630.00	56.31	74.00	-17.69	50.57	5.74	Peak	100	55

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).

Modulation	ax HE80-OFDMA	**Test Freq. (MHz)**	5210
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

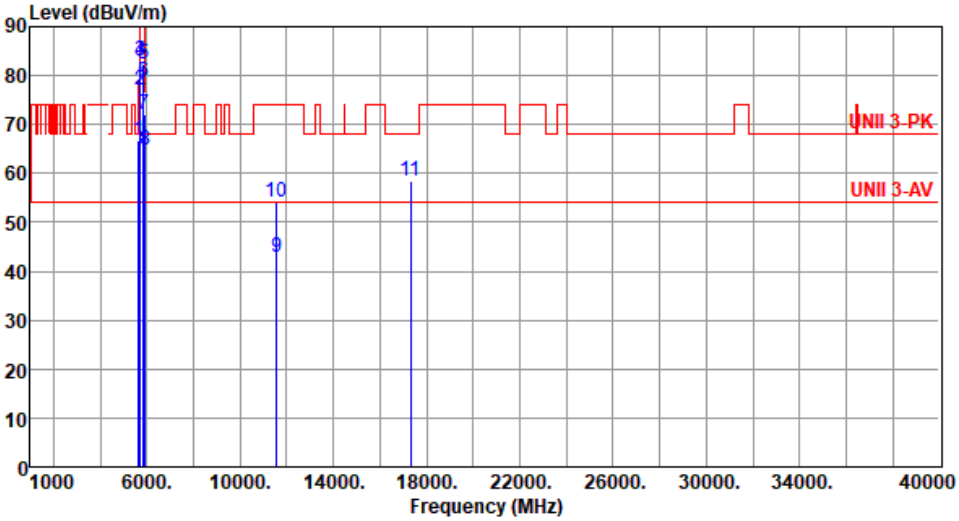


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	51.26	54.00	-2.74	50.44	0.82	Average	127	3
2	5150.00	61.68	74.00	-12.32	60.86	0.82	Peak	127	3
3	5350.00	44.69	54.00	-9.31	44.55	0.14	Average	127	3
4	5350.00	55.80	74.00	-18.20	55.66	0.14	Peak	127	3
5	10420.00	56.13	68.20	-12.07	47.48	8.65	Peak	100	307
6	15630.00	43.31	54.00	-10.69	37.57	5.74	Average	100	58
7	15630.00	56.32	74.00	-17.68	50.58	5.74	Peak	100	58

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).

Modulation	ax HE80-OFDMA	**Test Freq. (MHz)**	5775
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):64

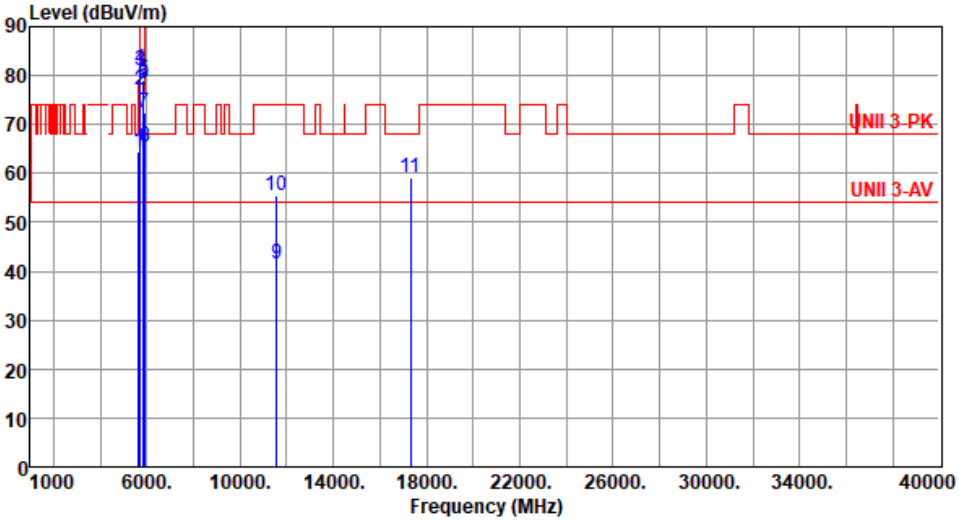


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5650.00	66.78	68.20	-1.42	66.24	0.54	Peak	106	324
2	5700.00	77.11	105.20	-28.09	76.25	0.86	Peak	106	324
3	5720.00	83.04	110.80	-27.76	82.13	0.91	Peak	106	324
4	5725.00	83.12	122.20	-39.08	82.19	0.93	Peak	106	324
5	5850.00	82.46	122.20	-39.74	81.22	1.24	Peak	106	324
6	5855.00	78.79	110.80	-32.01	77.53	1.26	Peak	106	324
7	5875.00	72.00	105.20	-33.20	70.64	1.36	Peak	106	324
8	5925.00	64.71	68.20	-3.49	63.22	1.49	Peak	106	324
9	11550.00	42.78	54.00	-11.22	34.15	8.63	Average	100	305
10	11550.00	54.16	74.00	-19.84	45.53	8.63	Peak	100	305
11	17325.00	58.37	68.20	-9.83	51.94	6.43	Peak	100	46

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).

Modulation	ax HE80-OFDMA	**Test Freq. (MHz)**	5775
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 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	5650.00	64.42	68.20	-3.78	63.88	0.54	Peak	123	19
2	5700.00	76.94	105.20	-28.26	76.08	0.86	Peak	123	19
3	5720.00	81.03	110.80	-29.77	80.12	0.91	Peak	123	19
4	5725.00	81.47	122.20	-40.73	80.54	0.93	Peak	123	19
5	5850.00	78.90	122.20	-43.30	77.66	1.24	Peak	123	19
6	5855.00	78.44	110.80	-32.36	77.18	1.26	Peak	123	19
7	5875.00	72.31	105.20	-32.89	70.95	1.36	Peak	123	19
8	5925.00	65.37	68.20	-2.83	63.88	1.49	Peak	123	19
9	11550.00	41.48	54.00	-12.52	32.85	8.63	Average	100	37
10	11550.00	55.34	74.00	-18.66	46.71	8.63	Peak	100	37
11	17325.00	59.02	68.20	-9.18	52.59	6.43	Peak	100	51

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).

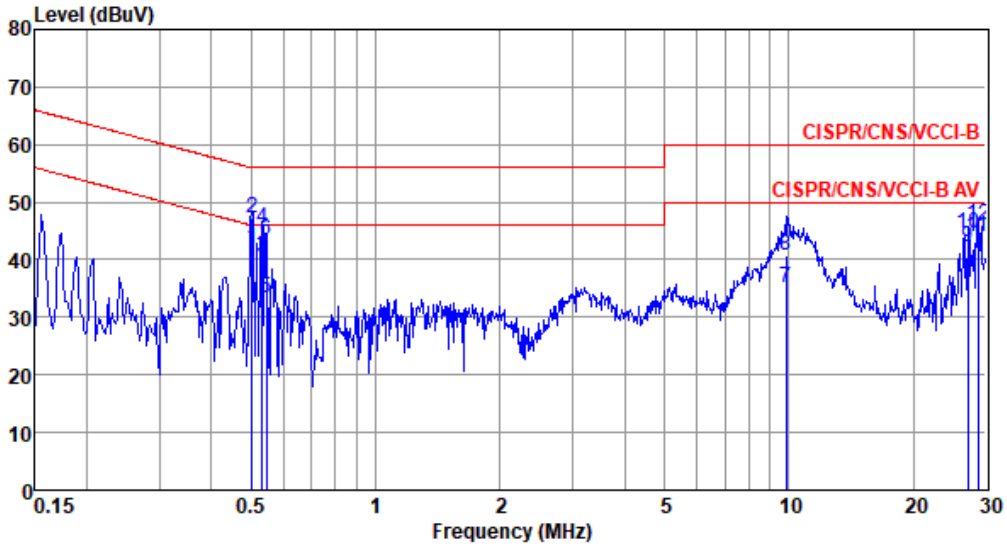
Frequency: 5200 MHz	Frequency Drift (ppm)			
Temperature (ºC)	**0 minute**	**2 minutes**	**5 minutes**	**10 minutes**
T20°CVmax	-0.40	-0.70	0.25	-0.49
T20°CVmin	-0.73	-0.69	-0.40	-0.56
T50°CVnom	-1.47	-1.17	-1.38	-1.42
T40°CVnom	0.29	0.25	0.16	0.59
T30°CVnom	-0.16	0.29	-0.48	0.38
T20°CVnom	-0.73	-0.50	-0.26	-1.09
T10°CVnom	3.01	2.85	2.80	3.08
T0°CVnom	5.43	5.02	5.32	6.09
T-10°CVnom	6.74	6.57	7.35	7.00
T-20°CVnom	8.23	8.98	8.74	8.55
T-30°CVnom	9.37	9.46	9.71	9.92
Vnom [V]: 120	Vmax [V]: 138		Vmin [V]: 102	
Tnom [°C]: 20	Tmax [°C]: 50		Tmin [°C]: -30	

Frequency: 5785 MHz	Frequency Drift (ppm			
Temperature (ºC)	**0 minute**	**2 minutes**	**5 minutes**	**10 minutes**
T20°CVmax	-0.84	-1.01	-0.37	-0.96
T20°CVmin	-0.75	-0.40	-0.24	-1.05
T50°CVnom	-1.39	-1.51	-1.54	-1.42
T40°CVnom	-0.30	-0.47	-0.33	0.15
T30°CVnom	-0.38	0.33	-0.23	-0.50
T20°CVnom	-1.19	-0.38	-1.04	-1.21
T10°CVnom	2.36	2.72	2.90	2.80
T0°CVnom	4.88	5.16	5.10	4.76
T-10°CVnom	6.11	6.16	6.49	6.18
T-20°CVnom	7.41	7.75	7.47	7.59
T-30°CVnom	7.85	8.16	8.17	8.14
Vnom [V]: 120	Vmax [V]: 138		Vmin [V]: 102	
Tnom [°C]: 20	Tmax [°C]: 50		Tmin [°C]: -30	

POE mode

Modulation Mode	ax HE20	Test Freq. (MHz)	5240
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

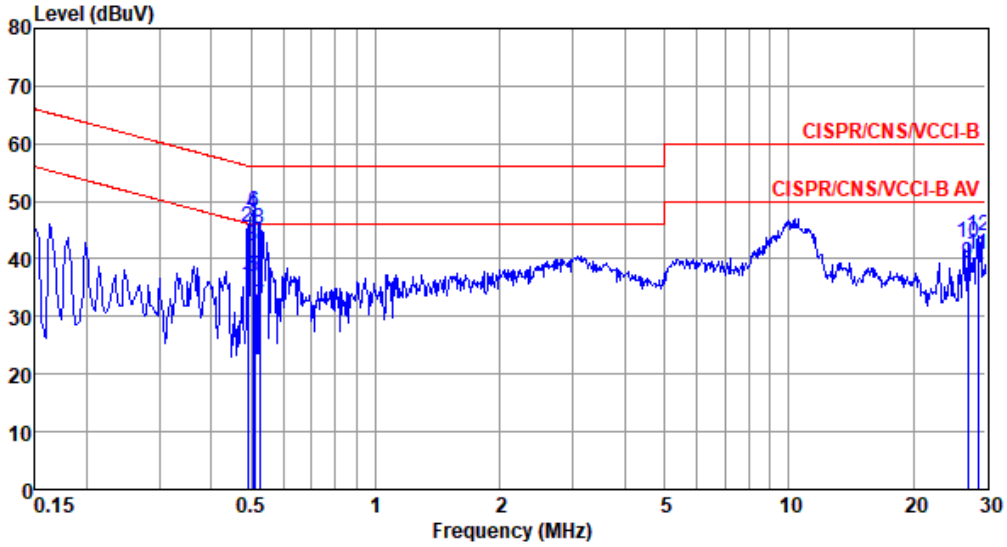


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1*	0.502	41.78	46.00	-4.22	31.78	9.62	0.07	0.31	Average
2	0.502	47.25	56.00	-8.75	37.25	9.62	0.07	0.31	QP
3	0.532	40.36	46.00	-5.64	30.35	9.62	0.08	0.31	Average
4	0.532	45.38	56.00	-10.62	35.37	9.62	0.08	0.31	QP
5	0.544	33.50	46.00	-12.50	23.49	9.62	0.08	0.31	Average
6	0.544	43.31	56.00	-12.69	33.30	9.62	0.08	0.31	QP
7	9.861	35.01	50.00	-14.99	24.52	9.69	0.36	0.44	Average
8	9.861	40.78	60.00	-19.22	30.29	9.69	0.36	0.44	QP
9	27.160	42.11	50.00	-7.89	31.18	9.63	0.58	0.72	Average
10	27.160	44.45	60.00	-15.55	33.52	9.63	0.58	0.72	QP
11	28.686	44.00	50.00	-6.00	33.00	9.63	0.60	0.77	Average
12	28.686	46.13	60.00	-13.87	35.13	9.63	0.60	0.77	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	ax HE20	**Test Freq. (MHz)**	5240
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

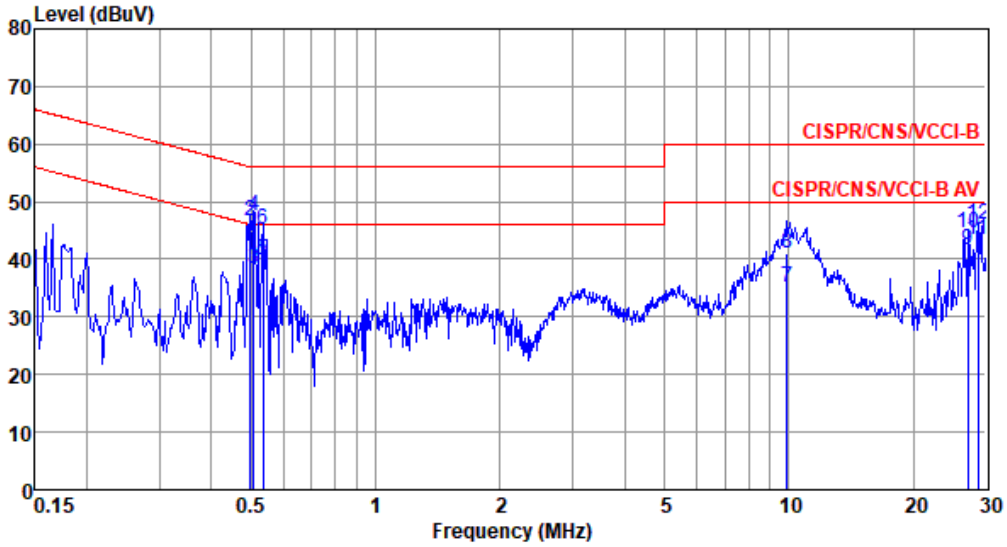


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.491	35.55	46.14	-10.59	25.55	9.62	0.07	0.31	Average
2	0.491	45.35	56.14	-10.79	35.35	9.62	0.07	0.31	QP
3*	0.505	42.33	46.00	-3.67	32.33	9.62	0.07	0.31	Average
4	0.505	47.93	56.00	-8.07	37.93	9.62	0.07	0.31	QP
5	0.510	36.81	46.00	-9.19	26.81	9.62	0.07	0.31	Average
6	0.510	48.02	56.00	-7.98	38.02	9.62	0.07	0.31	QP
7	0.524	31.77	46.00	-14.23	21.77	9.62	0.07	0.31	Average
8	0.524	45.19	56.00	-10.81	35.19	9.62	0.07	0.31	QP
9	27.160	39.13	50.00	-10.87	28.05	9.78	0.58	0.72	Average
10	27.160	42.92	60.00	-17.08	31.84	9.78	0.58	0.72	QP
11	28.686	40.62	50.00	-9.38	29.47	9.78	0.60	0.77	Average
12	28.686	44.09	60.00	-15.91	32.94	9.78	0.60	0.77	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11a	**Test Freq. (MHz)**	5745
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

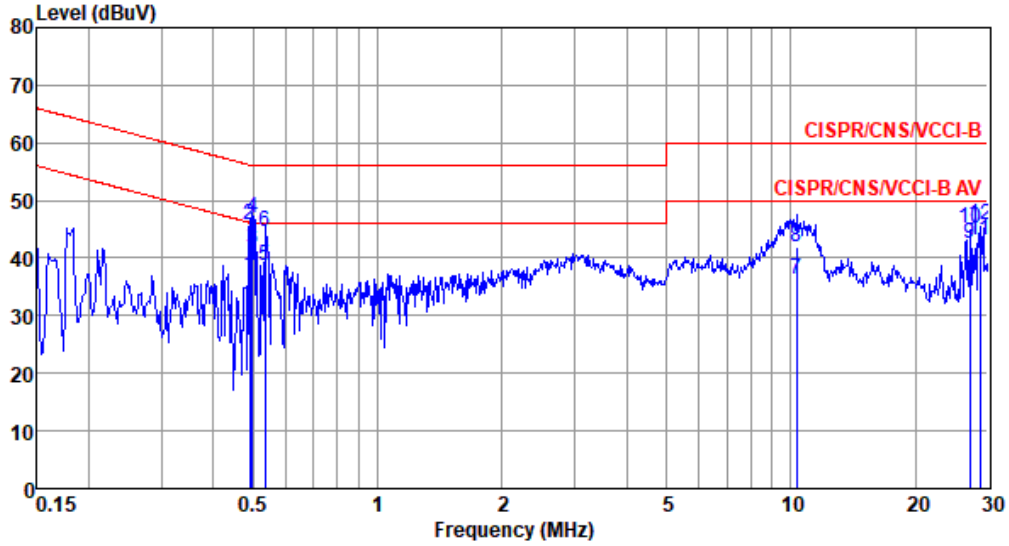


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1*	0.497	41.10	46.05	-4.95	31.10	9.62	0.07	0.31	Average
2	0.497	46.60	56.05	-9.45	36.60	9.62	0.07	0.31	QP
3	0.507	38.30	46.00	-7.70	28.30	9.62	0.07	0.31	Average
4	0.507	47.59	56.00	-8.41	37.59	9.62	0.07	0.31	QP
5	0.535	39.98	46.00	-6.02	29.97	9.62	0.08	0.31	Average
6	0.535	45.08	56.00	-10.92	35.07	9.62	0.08	0.31	QP
7	9.913	35.14	50.00	-14.86	24.65	9.69	0.36	0.44	Average
8	9.913	41.11	60.00	-18.89	30.62	9.69	0.36	0.44	QP
9	27.160	41.77	50.00	-8.23	30.84	9.63	0.58	0.72	Average
10	27.160	44.53	60.00	-15.47	33.60	9.63	0.58	0.72	QP
11	28.686	43.49	50.00	-6.51	32.49	9.63	0.60	0.77	Average
12	28.686	46.08	60.00	-13.92	35.08	9.63	0.60	0.77	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11a	**Test Freq. (MHz)**	5745
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 62%



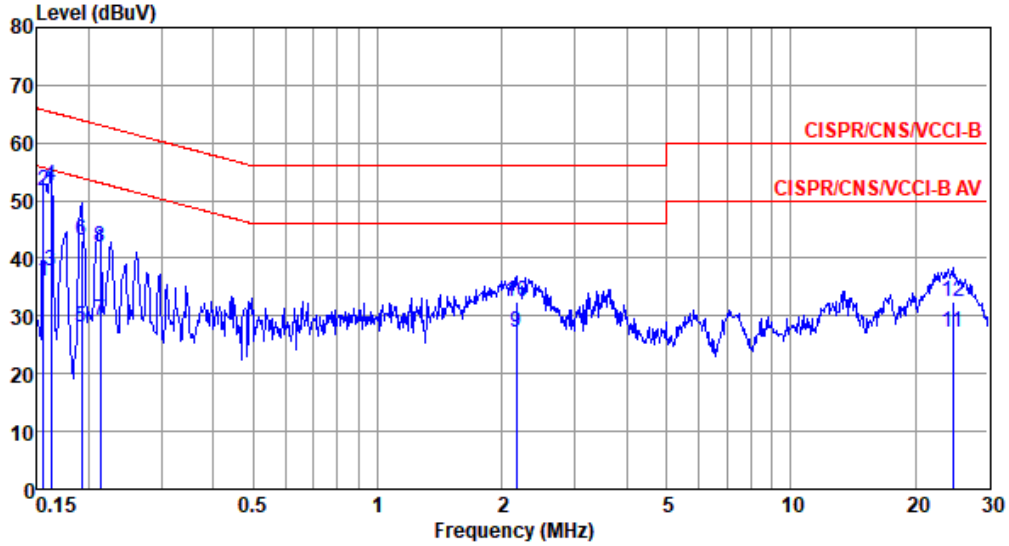
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.491	36.93	46.14	-9.21	26.93	9.62	0.07	0.31	Average
2	0.491	45.80	56.14	-10.34	35.80	9.62	0.07	0.31	QP
3*	0.497	41.66	46.05	-4.39	31.66	9.62	0.07	0.31	Average
4	0.497	46.97	56.05	-9.08	36.97	9.62	0.07	0.31	QP
5	0.535	38.79	46.00	-7.21	28.78	9.62	0.08	0.31	Average
6	0.535	44.51	56.00	-11.49	34.50	9.62	0.08	0.31	QP
7	10.342	36.16	50.00	-13.84	25.64	9.71	0.37	0.44	Average
8	10.342	41.84	60.00	-18.16	31.32	9.71	0.37	0.44	QP
9	27.160	42.44	50.00	-7.56	31.36	9.78	0.58	0.72	Average
10	27.160	45.06	60.00	-14.94	33.98	9.78	0.58	0.72	QP
11	28.686	43.19	50.00	-6.81	32.04	9.78	0.60	0.77	Average
12	28.686	45.88	60.00	-14.12	34.73	9.78	0.60	0.77	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Adapter mode

Modulation Mode	ax HE20	**Test Freq. (MHz)**	5240
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

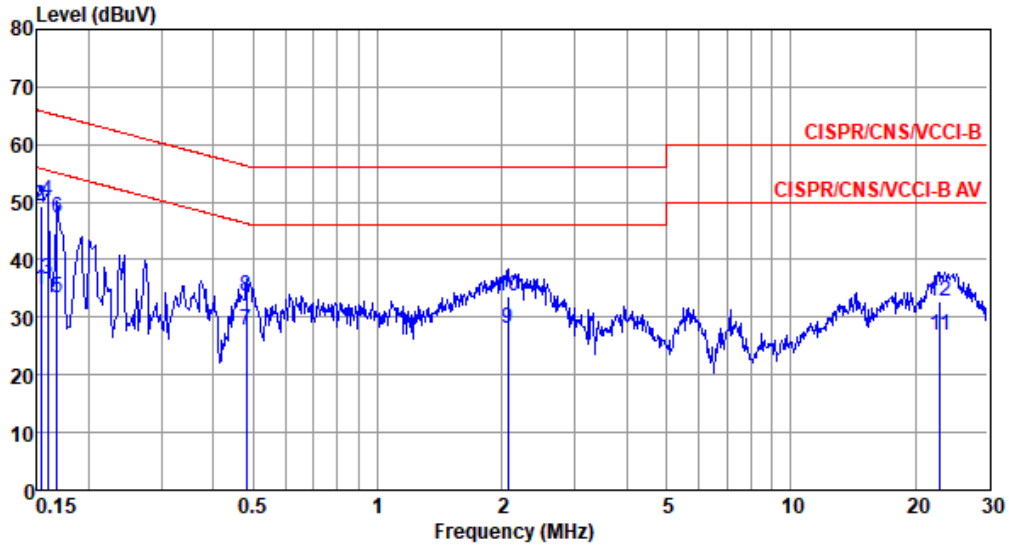


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.156	36.11	55.69	-19.58	26.24	9.63	0.06	0.18	Average
2	0.156	51.80	65.69	-13.89	41.93	9.63	0.06	0.18	QP
3	0.162	37.81	55.34	-17.53	27.94	9.63	0.06	0.18	Average
4*	0.162	52.58	65.34	-12.76	42.71	9.63	0.06	0.18	QP
5	0.192	28.19	53.93	-25.74	18.32	9.62	0.06	0.19	Average
6	0.192	43.19	63.93	-20.74	33.32	9.62	0.06	0.19	QP
7	0.213	29.14	53.10	-23.96	19.26	9.62	0.06	0.20	Average
8	0.213	42.04	63.10	-21.06	32.16	9.62	0.06	0.20	QP
9	2.167	27.23	46.00	-18.77	17.09	9.63	0.14	0.37	Average
10	2.167	32.60	56.00	-23.40	22.46	9.63	0.14	0.37	QP
11	24.659	27.19	50.00	-22.81	16.37	9.65	0.54	0.63	Average
12	24.659	32.62	60.00	-27.38	21.80	9.65	0.54	0.63	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	ax HE20	**Test Freq. (MHz)**	5240
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

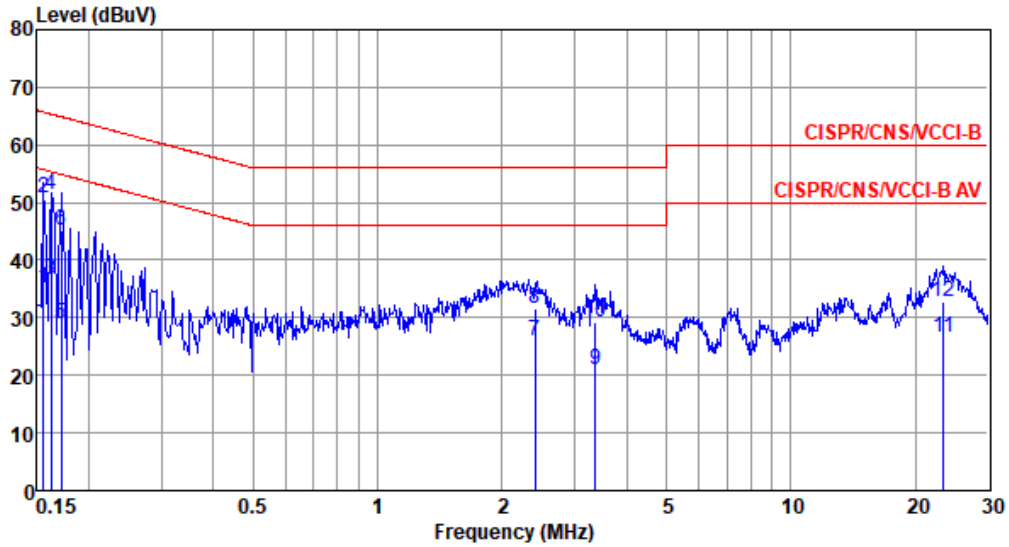


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.153	34.81	55.82	-21.01	24.94	9.63	0.06	0.18	Average
2	0.153	49.40	65.82	-16.42	39.53	9.63	0.06	0.18	QP
3	0.159	36.63	55.52	-18.89	26.76	9.63	0.06	0.18	Average
4*	0.159	50.10	65.52	-15.42	40.23	9.63	0.06	0.18	QP
5	0.168	33.28	55.08	-21.80	23.41	9.63	0.06	0.18	Average
6	0.168	47.32	65.08	-17.76	37.45	9.63	0.06	0.18	QP
7	0.481	27.79	46.32	-18.53	17.79	9.62	0.07	0.31	Average
8	0.481	33.69	56.32	-22.63	23.69	9.62	0.07	0.31	QP
9	2.066	28.00	46.00	-18.00	17.87	9.64	0.13	0.36	Average
10	2.066	33.51	56.00	-22.49	23.38	9.64	0.13	0.36	QP
11	23.018	26.76	50.00	-23.24	15.84	9.79	0.53	0.60	Average
12	23.018	32.64	60.00	-27.36	21.72	9.79	0.53	0.60	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11a	**Test Freq. (MHz)**	5745
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 62%

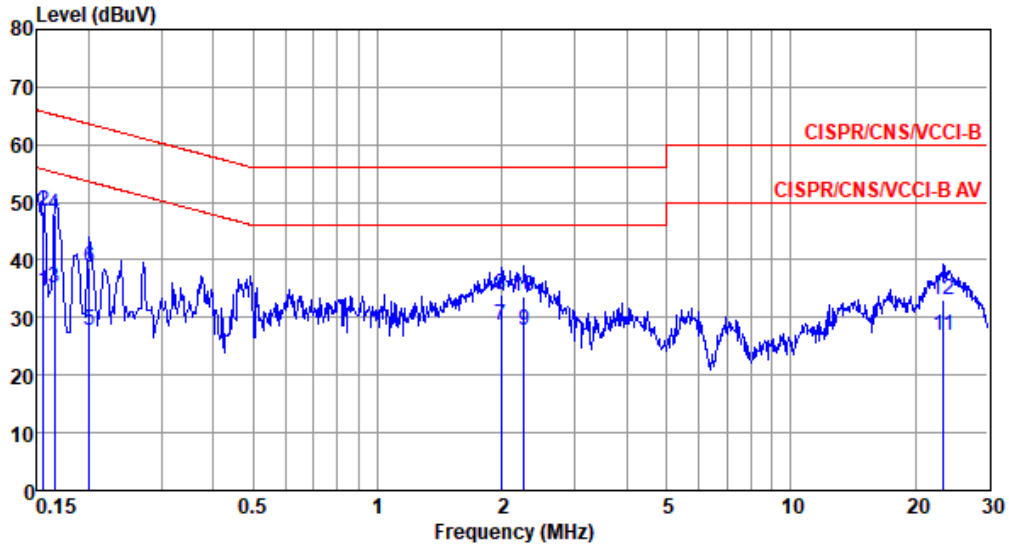


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.156	35.03	55.69	-20.66	25.16	9.63	0.06	0.18	Average
2	0.156	50.83	65.69	-14.86	40.96	9.63	0.06	0.18	QP
3	0.162	36.72	55.34	-18.62	26.85	9.63	0.06	0.18	Average
4*	0.162	51.44	65.34	-13.90	41.57	9.63	0.06	0.18	QP
5	0.171	28.96	54.90	-25.94	19.09	9.63	0.06	0.18	Average
6	0.171	45.22	64.90	-19.68	35.35	9.63	0.06	0.18	QP
7	2.409	26.01	46.00	-19.99	15.85	9.64	0.14	0.38	Average
8	2.409	31.72	56.00	-24.28	21.56	9.64	0.14	0.38	QP
9	3.364	21.03	46.00	-24.97	10.82	9.64	0.17	0.40	Average
10	3.364	29.28	56.00	-26.72	19.07	9.64	0.17	0.40	QP
11	23.387	26.57	50.00	-23.43	15.78	9.66	0.53	0.60	Average
12	23.387	32.90	60.00	-27.10	22.11	9.66	0.53	0.60	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11a	**Test Freq. (MHz)**	5745
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 62%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.156	34.62	55.69	-21.07	24.75	9.63	0.06	0.18	Average
2*	0.156	48.48	65.69	-17.21	38.61	9.63	0.06	0.18	QP
3	0.165	35.13	55.21	-20.08	25.26	9.63	0.06	0.18	Average
4	0.165	47.93	65.21	-17.28	38.06	9.63	0.06	0.18	QP
5	0.201	27.61	53.58	-25.97	17.73	9.63	0.06	0.19	Average
6	0.201	38.56	63.58	-25.02	28.68	9.63	0.06	0.19	QP
7	1.991	28.60	46.00	-17.40	18.47	9.64	0.13	0.36	Average
8	1.991	33.82	56.00	-22.18	23.69	9.64	0.13	0.36	QP
9	2.261	27.84	46.00	-18.16	17.69	9.64	0.14	0.37	Average
10	2.261	33.57	56.00	-22.43	23.42	9.64	0.14	0.37	QP
11	23.387	27.00	50.00	-23.00	16.08	9.79	0.53	0.60	Average
12	23.387	32.96	60.00	-27.04	22.04	9.79	0.53	0.60	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).