FCC C2PC Test Report

FCC ID	:	**2AAS9-MI10**
Equipment	:	**Wi-Fi 6 AX6600 Tri-Radio Indoor Mesh Router**
Model No.	:	**MI10**
Brand Name	:	**PRISM**
Applicant	:	**Browan Communications Incorporation.**
Address	:	**No.15-1, Zhonghua Rd., Hsinchu Industrial Park, Hukou Hsinchu Hsien Taiwan 303**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Dec. 30, 2021**
Tested Date	:	**Jan. 29 ~ Feb. 14, 2022**

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

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

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Release Record

Report No.	Version	Description	Issued Date
FR1D3002-01AN	Rev. 01	Initial issue	Mar. 04, 2022

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.150MHz 61.49 (Margin -4.51dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 67.18 (Margin -1.02dB) - PK 5470.00MHz 67.18 (Margin -1.02dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5250~5350MHz: 17.43 5470~5725MHz: 23.09 ***Beamforming mode*** 5250~5350MHz: 14.37 5470~5725MHz: 17.07	Pass
15.407(a)	Peak 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

This is a Class II Permissive Change report (C2PC). The modification is concerned with following items:
- Adding 5250~5350MHz and 5470~5725 MHz band by software setting.

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**
5250-5350 5470-5725	a	5260-5320 5500-5700	52-64 [4] 100-140 [11]	2 4	6-54 Mbps
5250-5350 5470-5725	n (HT20)	5260-5320 5500-5700	52-64 [4] 100-140 [11]	2 4	MCS 0-15 MCS 0-31
5250-5350 5470-5725	n (HT40)	5270-5310 5510-5670	54-62 [2] 102-134 [5]	2 4	MCS 0-15 MCS 0-31
5250-5350 5470-5725	ac (VHT20)	5260-5320 5500-5700	52-64 [4] 100-140 [11]	2 4	MCS 0-9
5250-5350 5470-5725	ac (VHT40)	5270-5310 5510-5670	54-62 [2] 102-134 [5]	2 4	MCS 0-9
5250-5350 5470-5725	ac (VHT80)	5290 5530-5610	58 [1] 106-122 [2]	2 4	MCS 0-9
5250-5350 5470-5725	ac (VHT160)	5570	114 [1]	2 4	MCS 0-9
5250-5350 5470-5725	ax (HE20)	5260-5320 5500-5700	52-64 [4] 100-140 [11]	2 4	MCS 0-11
5250-5350 5470-5725	ax (HE40)	5270-5310 5510-5670	54-62 [2] 102-134 [5]	2 4	MCS 0-11
5250-5350 5470-5725	ax (HE80)	5290 5530-5610	58 [1] 106-122 [2]	2 4	MCS 0-11
5250-5350 5470-5725	ac (HE160)	5570	114 [1]	4	MCS 0-11
Note 1: OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation. Note 2: 802.11ax supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)	
				5250~5350	5470~5725
1	ANT0	PIFA	UFL	--	5.36
2	ANT1	PIFA	UFL	--	6.58
3	ANT2	PIFA	UFL	--	5.11
4	ANT3	PIFA	UFL	--	6.25
5	ANT5	PIFA	UFL	4.4	--
6	ANT6	PIFA	UFL	5.46	--

1.1.3 Radio Details

Radio	Function
1	2.4 GHz, 2T2R
2	5.250 GHz ~ 5.350 GHz, 2T2R
3	5.470 GHz ~ 5.725 GHz, 4T4R

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: MOSO Model: MSS-V3000WR120-042A0-US Power Rating: I/P: 100-240Vac, 50/60Hz, 1.2A max. O/P: 12Vdc, 3.0A Line: 1.2m non-shielded w/o core.
2	AC adapter	Brand: Frecom Model: F36L7-120300SPAU Power Rating: I/P: 100-240Vac, 50/60Hz, 0.9A O/P: 12Vdc, 3.0A, 36.0W Line: 1.2m non-shielded w/o core.
3	RJ45 (cat. 6)	Brand: EEKSONG Line: 1.9m non-shielded w/o core.
4	MOUNTING-BRACKET	---

1.1.6 Channel List

802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
52	5260	54	5270
56	5280	62	5310
60	5300	102	5510
64	5320	110	5550
100	5500	118	5590
104	5520	126	5630
108	5540	134	5670
112	5560	**802.11ac VHT80 / ax HE80**	
116	5580	58	5290
120	5600	106	5530
124	5620	122	5610
128	5640	**802.11ac VHT160 / ax HE160**	
132	5660	114	5570
136	5680	--	--
140	5700	--	--

1.1.7 Test Tool and Duty Cycle

Test Tool	QPSR, Version: V5.0-00201		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	93.22	0.30
	ax HE20-OFDMA	97.42	0.11
	ax HE40-OFDMA	97.42	0.11
	ax HE80-OFDMA	66.85	1.75
	ax HE160-OFDMA	41.62	3.81

1.1.8 Power Index of Test Tool

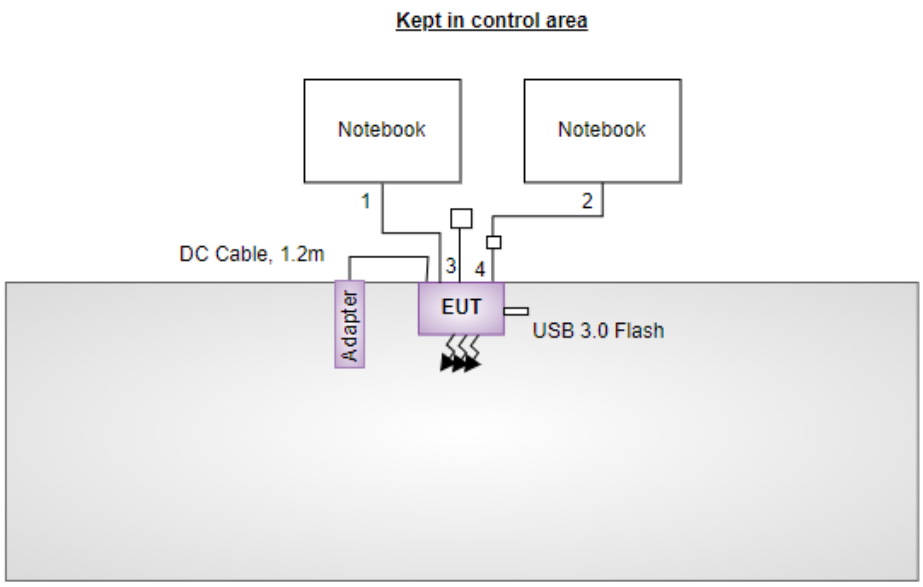
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5260	15
11a	5300	15
11a	5320	15
11a	5500	10
11a	5580	10.5
11a	5700	10.5
ax HE20-OFDMA	5260	15.5
ax HE20-OFDMA	5300	15.5
ax HE20-OFDMA	5320	15.5
ax HE20-OFDMA	5500	11
ax HE20-OFDMA	5580	11.5
ax HE20-OFDMA	5700	11.5
ax HE40-OFDMA	5270	15
ax HE40-OFDMA	5310	15
ax HE40-OFDMA	5510	14
ax HE40-OFDMA	5590	14.5
ax HE40-OFDMA	5670	14.5
ax HE80-OFDMA	5290	15
ax HE80-OFDMA	5530	15
ax HE80-OFDMA	5610	16
ax HE160-OFDMA	5570	12.5

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude 5400	DoC	---
2	Notebook	DELL	Latitude E5470	DoC	---
3	RJ45 Load	ICC	--	---	---
4	RJ45 Connector	ICC	RJ45 Connector	---	---
5	USB 3.0 Flash	Transcend	JetFlash 700	---	---

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1-2	RJ45, 10m non-shielded.
3	RJ45, 1m non-shielded with load.
4	RJ45, 1.9m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Feb. 12, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 12, 2021	Mar. 11, 2022
LISN	R&S	ENV216	101579	Mar. 17, 2021	Mar. 16, 2022
LISN (Support Unit)	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127477	Feb. 25, 2021	Feb. 24, 2022
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 19, 2021	Oct. 18, 2022
50 ohm terminal (Support Unit)	NA	50	04	May 25, 2021	May 24, 2022
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 chamber1 / (03CH01-WS)				
Tested Date	Jan. 29 ~ Feb. 14, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 12, 2021	Mar. 11, 2022
Spectrum Analyzer	R&S	FSV40	101498	Nov. 29, 2021	Nov. 28, 2022
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 08, 2021	Nov. 07, 2022
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jun. 30, 2021	Jun. 29, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 03, 2021	Dec. 02, 2022
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Jan. 11, 2022	Jan. 10, 2023
Preamplifier	EMC	EMC02325	980225	Jun. 29, 2021	Jun. 28, 2022
Preamplifier	Agilent	83017A	MY39501308	Sep. 28, 2021	Sep. 27, 2022
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 05, 2021	Oct. 04, 2022
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 05, 2021	Oct. 04, 2022
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 05, 2021	Oct. 04, 2022
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 05, 2021	Oct. 04, 2022
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 05, 2021	Oct. 04, 2022
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 05, 2021	Oct. 04, 2022
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Feb. 11 ~ Feb. 12, 2022				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Nov. 29, 2021	Nov. 28, 2022
Power Meter	Anritsu	ML2495A	1241002	Nov. 07, 2021	Nov. 06, 2022
Power Sensor	Anritsu	MA2411B	1207366	Nov. 07, 2021	Nov. 06, 2022
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	May 25, 2021	May 24, 2022
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 03, 2021	Dec. 02, 2022
Measurement Software	Sporton	SENSE-15407_NII	V5.10	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
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.4 °C

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-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.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Mode
Non-beamforming mode				
Conducted Emissions	11a	5300	6 Mbps	---
	ax HE80-OFDMA	5610	MCS 0	---
Radiated Emissions ≤1GHz	11a	5300	6 Mbps	---
	ax HE80-OFDMA	5610	MCS 0	---
RF Output Power Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 / 5320 5500 / 5580 / 5700	6 Mbps	---
	ax HE20-OFDMA	5260 / 5300 / 5320 5500 / 5580 / 5700	MCS 0	
	ax HE40-OFDMA	5270 / 5310 5510 / 5590 / 5670	MCS 0	
	ax HE80-OFDMA	5290 / 5530 / 5610	MCS 0	
	ax HE160-OFDMA	5570	MCS 0	
Frequency Stability	Un-modulation	5300 / 5580	---	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.
2. Two adapters (MOSO and Frecom) had been covered during the pretest, and found that MOSO adapter was the worst case of AC Power line conducted emission test item and Frecom adapter was the worst case of Radiated Spurious emission test item.

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Mode
Beamforming mode				
RF Output Power	ax HE20-OFDMA	5260 / 5300 / 5320 5500 / 5580 / 5700	MCS 0	---
	ax HE40-OFDMA	5270 / 5310 5510 / 5590 / 5670	MCS 0	---
	ax HE80-OFDMA	5290 / 5530 / 5610	MCS 0	---
	ax HE160-OFDMA	5570	MCS 0	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.
2. Two adapters (MOSO and Frecom) had been covered during the pretest, and found that MOSO adapter was the worst case of AC Power line conducted emission test item and Frecom adapter was the worst case of Radiated Spurious emission test item.

3 Transmitter Test Results

3.1 Conducted Emissions

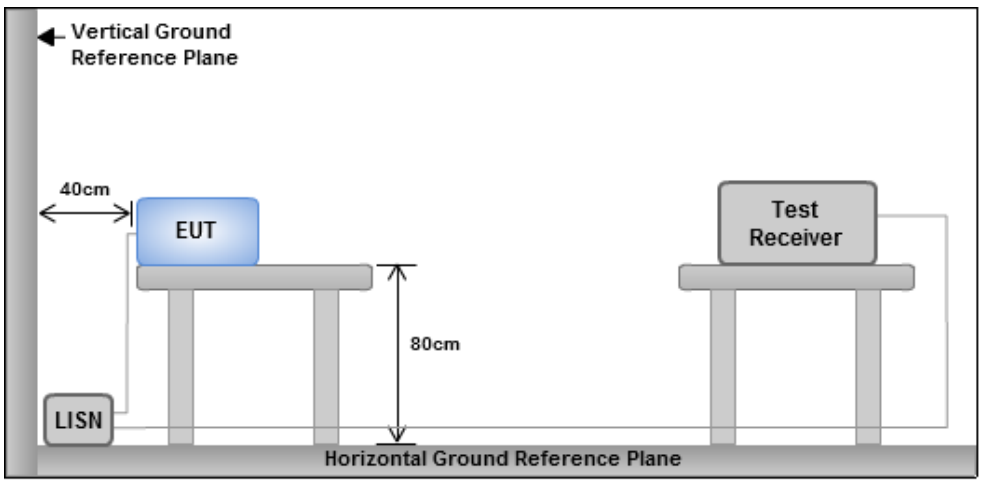
3.1.1 Limit of Conducted Emissions

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.		

3.1.2 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 110V/60Hz

3.1.3 Test Setup



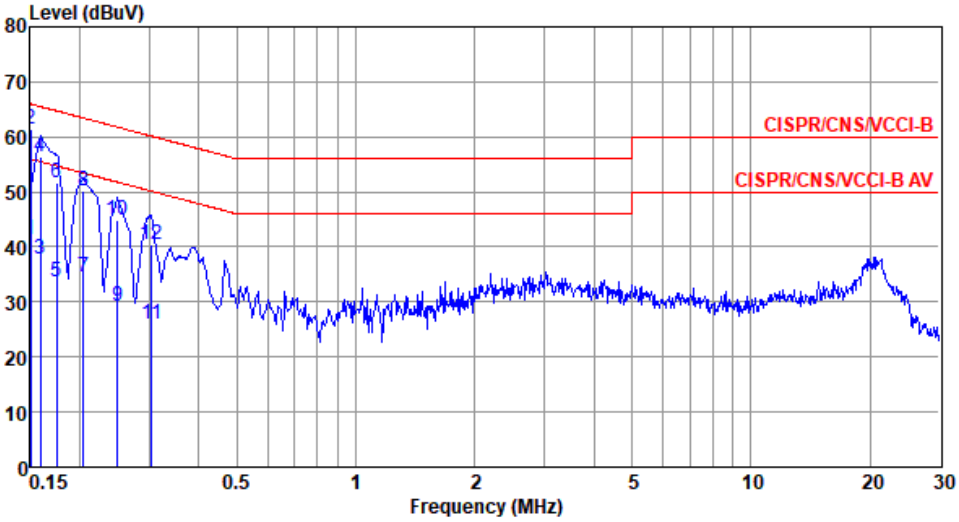
Note: 1. Support units were connected to second LISN.

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

3.1.4 Test Result of Conducted Emissions

Modulation	11a	Test Freq. (MHz)	5300
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 68%

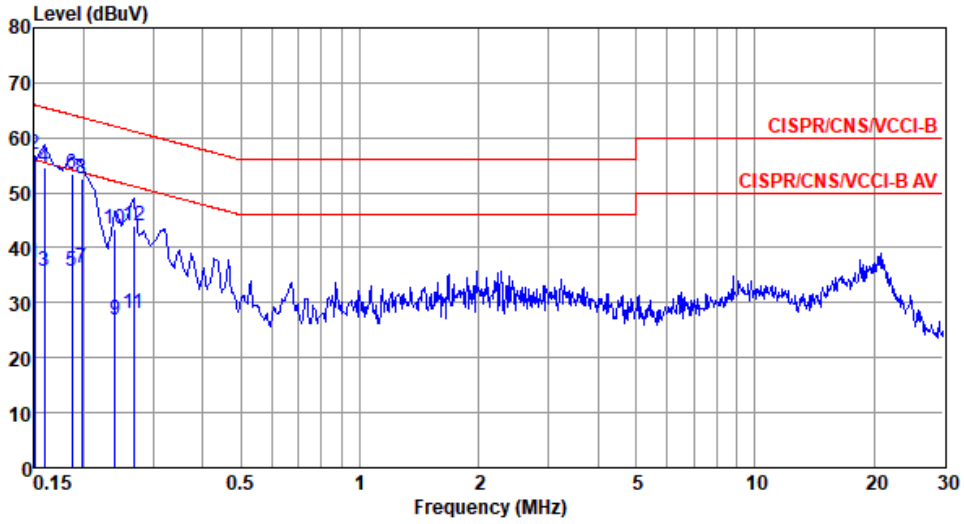


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	41.38	56.00	-14.62	31.44	9.66	0.08	0.20	Average
2*	0.150	61.49	66.00	-4.51	51.55	9.66	0.08	0.20	QP
3	0.159	37.84	55.52	-17.68	27.90	9.66	0.08	0.20	Average
4	0.159	56.27	65.52	-9.25	46.33	9.66	0.08	0.20	QP
5	0.175	33.56	54.72	-21.16	23.62	9.65	0.08	0.21	Average
6	0.175	51.75	64.72	-12.97	41.81	9.65	0.08	0.21	QP
7	0.204	34.68	53.45	-18.77	24.73	9.65	0.08	0.22	Average
8	0.204	50.32	63.45	-13.13	40.37	9.65	0.08	0.22	QP
9	0.249	29.28	51.78	-22.50	19.29	9.65	0.08	0.26	Average
10	0.249	44.86	61.78	-16.92	34.87	9.65	0.08	0.26	QP
11	0.303	25.94	50.15	-24.21	15.92	9.64	0.08	0.30	Average
12	0.303	40.55	60.15	-19.60	30.53	9.64	0.08	0.30	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	11a	Test Freq. (MHz)	5300
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 68%

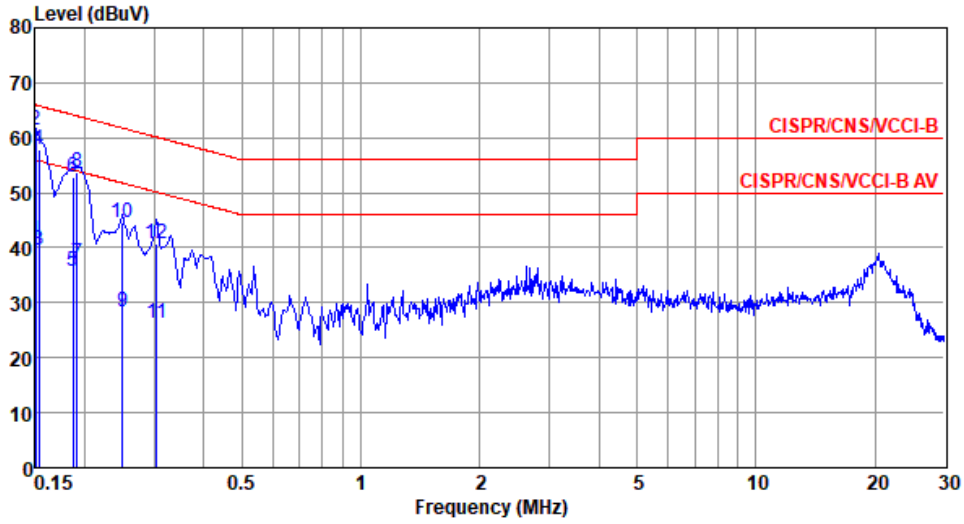


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	37.13	56.00	-18.87	27.20	9.69	0.08	0.16	Average
2*	0.150	57.10	66.00	-8.90	47.17	9.69	0.08	0.16	QP
3	0.159	35.70	55.52	-19.82	25.77	9.69	0.08	0.16	Average
4	0.159	54.68	65.52	-10.84	44.75	9.69	0.08	0.16	QP
5	0.186	35.79	54.20	-18.41	25.86	9.68	0.08	0.17	Average
6	0.186	53.48	64.20	-10.72	43.55	9.68	0.08	0.17	QP
7	0.198	36.19	53.71	-17.52	26.25	9.68	0.08	0.18	Average
8	0.198	52.56	63.71	-11.15	42.62	9.68	0.08	0.18	QP
9	0.240	26.93	52.08	-25.15	16.99	9.68	0.08	0.18	Average
10	0.240	43.44	62.08	-18.64	33.50	9.68	0.08	0.18	QP
11	0.267	28.00	51.20	-23.20	18.06	9.68	0.08	0.18	Average
12	0.267	44.04	61.20	-17.16	34.10	9.68	0.08	0.18	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	ax HE80-OFDMA	Test Freq. (MHz)	5610
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 68%

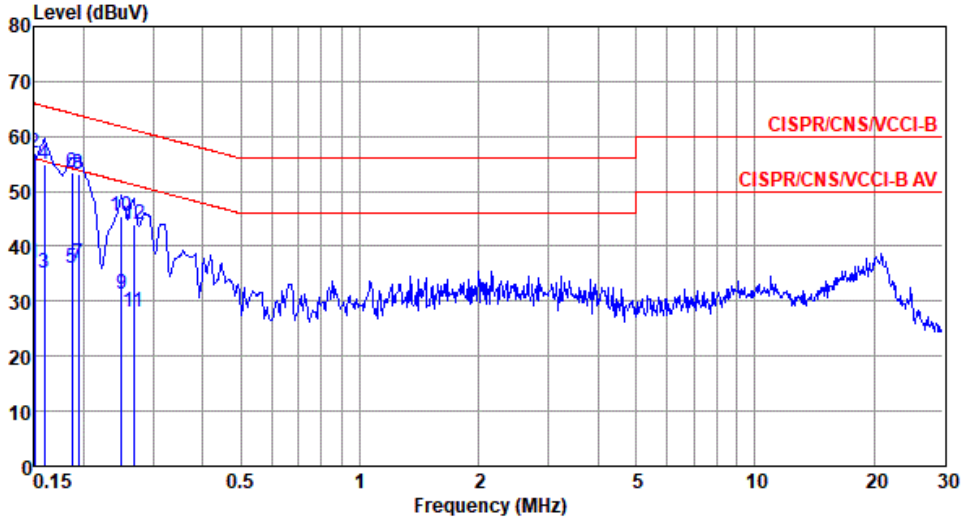


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	41.24	56.00	-14.76	31.30	9.66	0.08	0.20	Average
2*	0.150	61.27	66.00	-4.73	51.33	9.66	0.08	0.20	QP
3	0.153	39.54	55.82	-16.28	29.60	9.66	0.08	0.20	Average
4	0.153	57.82	65.82	-8.00	47.88	9.66	0.08	0.20	QP
5	0.186	35.62	54.20	-18.58	25.68	9.65	0.08	0.21	Average
6	0.186	52.99	64.20	-11.21	43.05	9.65	0.08	0.21	QP
7	0.191	37.21	53.98	-16.77	27.26	9.65	0.08	0.22	Average
8	0.191	53.73	63.98	-10.25	43.78	9.65	0.08	0.22	QP
9	0.249	28.33	51.78	-23.45	18.34	9.65	0.08	0.26	Average
10	0.249	44.49	61.78	-17.29	34.50	9.65	0.08	0.26	QP
11	0.303	26.32	50.15	-23.83	16.30	9.64	0.08	0.30	Average
12	0.303	40.81	60.15	-19.34	30.79	9.64	0.08	0.30	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	ax HE80-OFDMA	Test Freq. (MHz)	5610
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 68%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	36.82	56.00	-19.18	26.89	9.69	0.08	0.16	Average
2*	0.150	56.98	66.00	-9.02	47.05	9.69	0.08	0.16	QP
3	0.159	35.22	55.52	-20.30	25.29	9.69	0.08	0.16	Average
4	0.159	54.95	65.52	-10.57	45.02	9.69	0.08	0.16	QP
5	0.186	36.01	54.20	-18.19	26.08	9.68	0.08	0.17	Average
6	0.186	53.57	64.20	-10.63	43.64	9.68	0.08	0.17	QP
7	0.194	36.86	53.84	-16.98	26.92	9.68	0.08	0.18	Average
8	0.194	53.26	63.84	-10.58	43.32	9.68	0.08	0.18	QP
9	0.249	31.17	51.78	-20.61	21.23	9.68	0.08	0.18	Average
10	0.249	45.50	61.78	-16.28	35.56	9.68	0.08	0.18	QP
11	0.267	27.97	51.20	-23.23	18.03	9.68	0.08	0.18	Average
12	0.267	44.07	61.20	-17.13	34.13	9.68	0.08	0.18	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).

3.2 Emission Bandwidth

3.2.1 Test Procedures

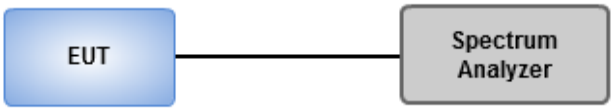
26dB Bandwidth

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.

3.2.2 Test Setup



3.2.3 Test Result of Emission Bandwidth

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.87M	16.425M	16M4D1D	19.783M	16.425M
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	21.377M	18.813M	18M8D1D	20.507M	18.741M
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	40.29M	37.627M	37M6D1D	39.565M	37.627M
802.11ax HEW80_Nss1,(MCS0)_2TX-OFDMA	82.319M	77.279M	77M3D1D	82.319M	76.99M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	20.725M	16.57M	16M6D1D	19.638M	16.498M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	22.246M	18.886M	18M9D1D	21.449M	18.813M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	43.333M	37.916M	37M9D1D	42.029M	37.627M
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	82.899M	77.279M	77M3D1D	81.449M	76.99M
802.11ax HEW160_Nss1,(MCS0)_4TX-OFDMA	175.652M	157.453M	157MD1D	171.594M	156.874M

Max-N dB = Maximum 26dB down bandwidth
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

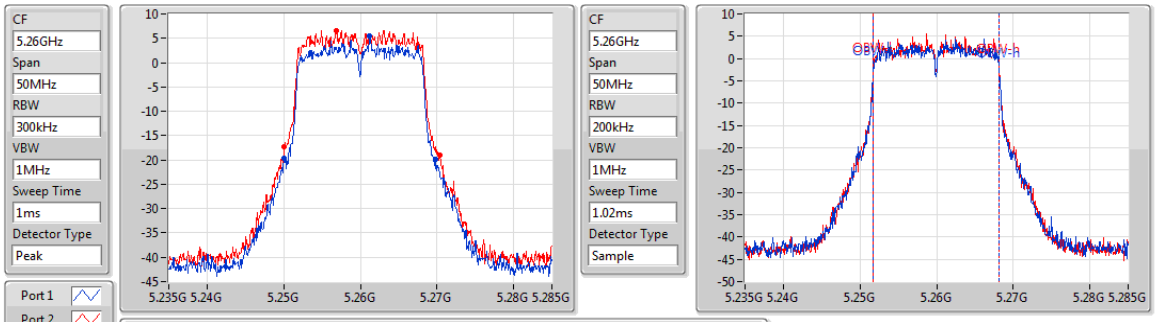
Result

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)_2TX										
5260MHz	Pass	Inf	19.783M	16.425M	20.362M	16.425M				
5300MHz	Pass	Inf	20.797M	16.425M	20.652M	16.425M				
5320MHz	Pass	Inf	20.87M	16.425M	20.507M	16.425M				
802.11a_Nss1,(6Mbps)_4TX										
5500MHz	Pass	Inf	20M	16.57M	19.783M	16.57M	19.638M	16.57M	20.072M	16.498M
5580MHz	Pass	Inf	20.145M	16.57M	20.725M	16.57M	19.855M	16.57M	19.783M	16.498M
5700MHz	Pass	Inf	20M	16.57M	20M	16.498M	20.58M	16.57M	19.783M	16.498M
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA										
5260MHz	Pass	Inf	20.507M	18.741M	21.014M	18.813M				
5300MHz	Pass	Inf	21.377M	18.741M	20.652M	18.741M				
5320MHz	Pass	Inf	20.652M	18.741M	20.942M	18.741M				
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA										
5500MHz	Pass	Inf	21.522M	18.813M	21.812M	18.813M	21.449M	18.813M	21.522M	18.886M
5580MHz	Pass	Inf	21.812M	18.886M	21.957M	18.813M	21.449M	18.886M	21.812M	18.886M
5700MHz	Pass	Inf	21.667M	18.886M	22.246M	18.813M	21.522M	18.813M	21.449M	18.813M
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA										
5270MHz	Pass	Inf	39.855M	37.627M	40.145M	37.627M				
5310MHz	Pass	Inf	40.29M	37.627M	39.565M	37.627M				
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA										
5510MHz	Pass	Inf	42.319M	37.627M	42.464M	37.771M	42.464M	37.771M	42.319M	37.771M
5590MHz	Pass	Inf	43.333M	37.771M	42.029M	37.771M	42.754M	37.627M	42.464M	37.627M
5670MHz	Pass	Inf	42.609M	37.771M	43.043M	37.916M	42.899M	37.627M	42.899M	37.627M
802.11ax HEW80_Nss1,(MCS0)_2TX-OFDMA										
5290MHz	Pass	Inf	82.319M	77.279M	82.319M	76.99M				
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA										
5530MHz	Pass	Inf	81.739M	77.279M	82.319M	77.279M	82.029M	76.99M	81.449M	77.279M
5610MHz	Pass	Inf	82.899M	76.99M	81.449M	76.99M	81.739M	76.99M	82.029M	76.99M
802.11ax HEW160_Nss1,(MCS0)_4TX-OFDMA										
5570MHz	Pass	Inf	175.652M	157.453M	171.594M	156.874M	175.652M	157.453M	172.174M	156.874M

Port X-N dB = 26dB down bandwidth
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_2TX **EBW**

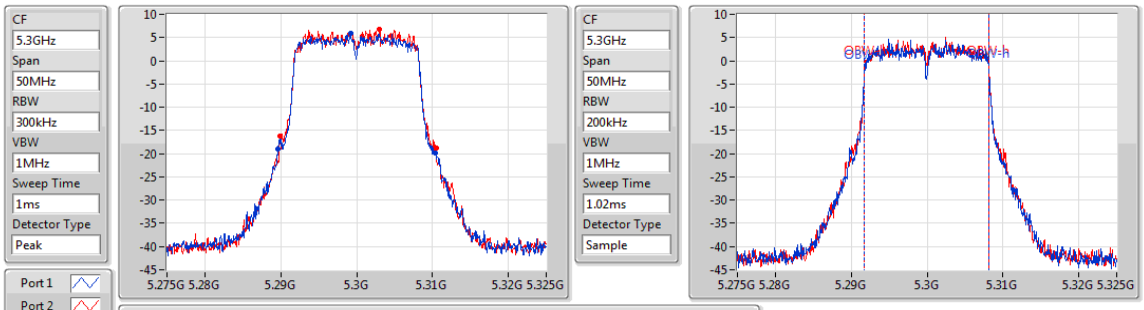
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.783M	5.25G	5.269783G	16.425M	5.251751G	5.268177G	Inf	1
20.362M	5.250072G	5.270435G	16.425M	5.251751G	5.268177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

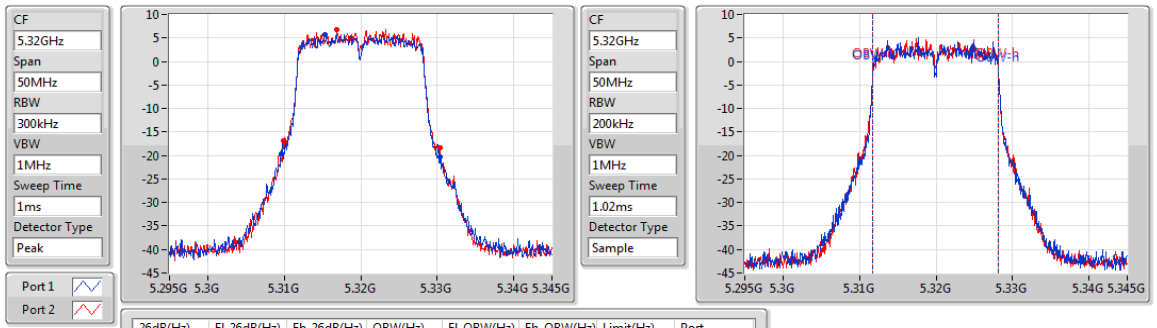
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.797M	5.289638G	5.310435G	16.425M	5.291751G	5.308177G	Inf	1
20.652M	5.289855G	5.310507G	16.425M	5.291751G	5.308177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX **EBW**

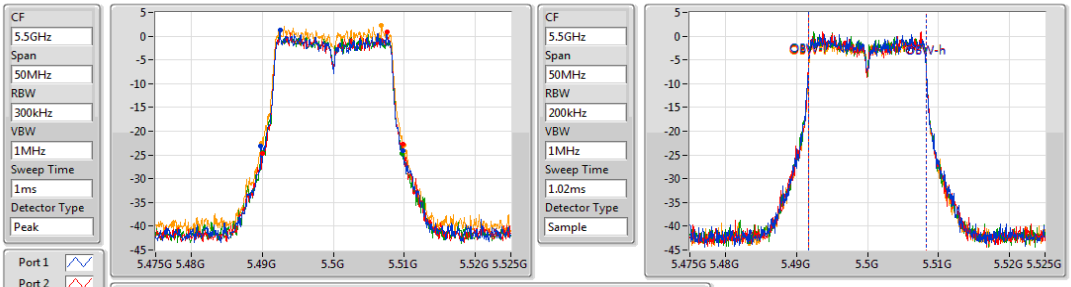
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.87M	5.309565G	5.330435G	16.425M	5.311751G	5.328177G	Inf	1
20.507M	5.309855G	5.330362G	16.425M	5.311751G	5.328177G	Inf	2

802.11a_Nss1,(6Mbps)_4TX **EBW**

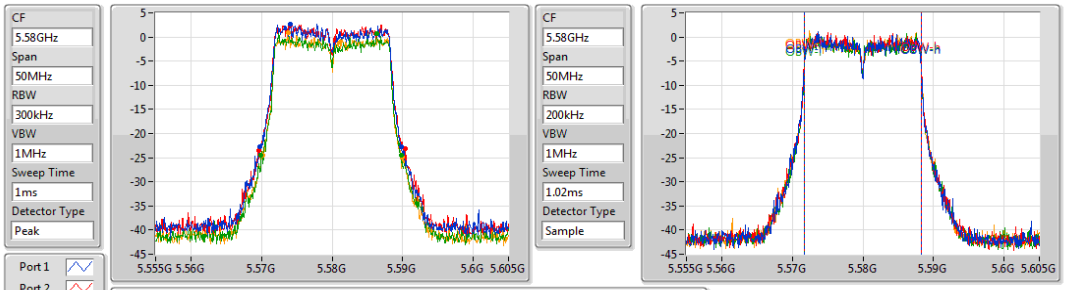
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.489783G	5.509783G	16.57M	5.491679G	5.508249G	Inf	1
19.783M	5.49G	5.509783G	16.57M	5.491679G	5.508249G	Inf	2
19.638M	5.49G	5.509638G	16.57M	5.491679G	5.508249G	Inf	3
20.072M	5.489855G	5.509928G	16.498M	5.491751G	5.508249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

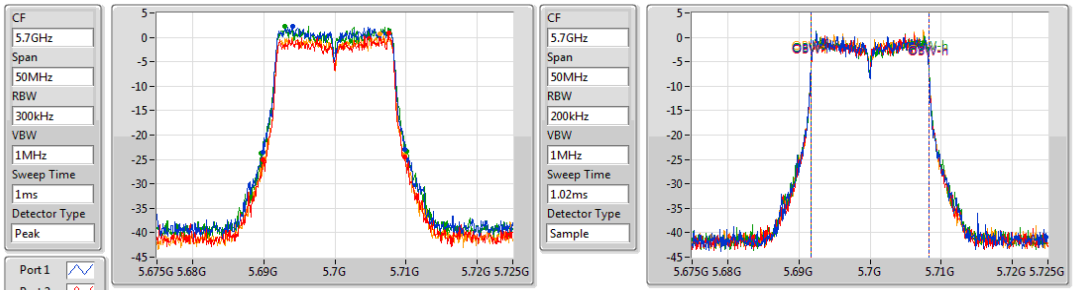
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.145M	5.56971G	5.589855G	16.57M	5.571679G	5.588249G	Inf	1
20.725M	5.569638G	5.590362G	16.57M	5.571679G	5.588249G	Inf	2
19.855M	5.569928G	5.589783G	16.57M	5.571679G	5.588249G	Inf	3
19.783M	5.570217G	5.59G	16.498M	5.571751G	5.588249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

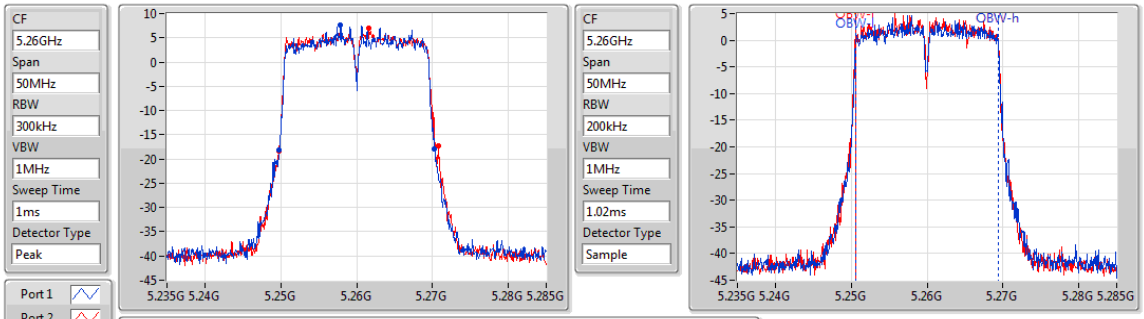
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.689855G	5.709855G	16.57M	5.691679G	5.708249G	Inf	1
20M	5.689855G	5.709855G	16.498M	5.691751G	5.708249G	Inf	2
20.58M	5.689565G	5.710145G	16.57M	5.691679G	5.708249G	Inf	3
19.783M	5.690072G	5.709855G	16.498M	5.691751G	5.708249G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

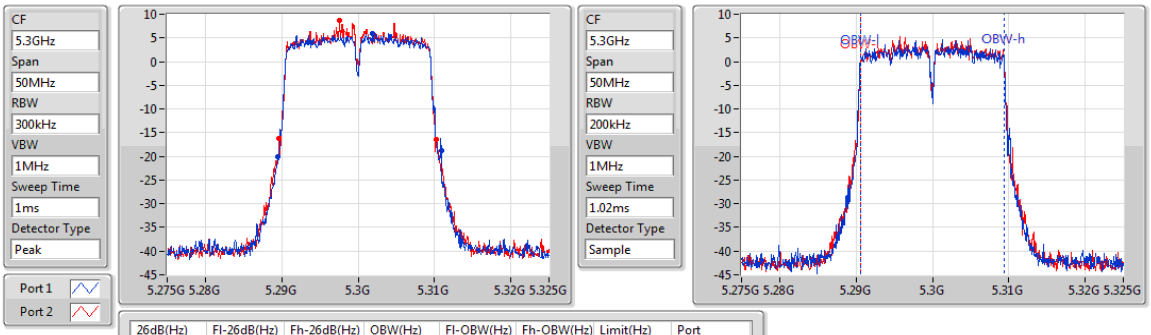
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.507M	5.249783G	5.27029G	18.741M	5.250593G	5.269334G	Inf	1
21.014M	5.24971G	5.270725G	18.813M	5.250593G	5.269407G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

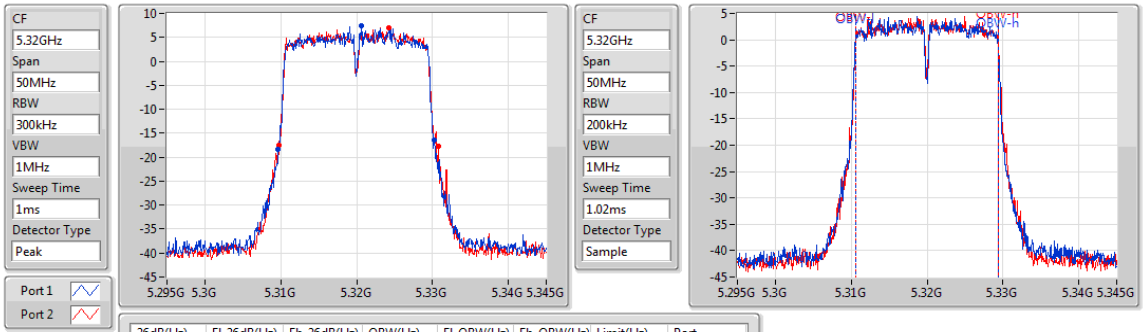
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.377M	5.289493G	5.31087G	18.741M	5.290593G	5.309334G	Inf	1
20.652M	5.289638G	5.31029G	18.741M	5.290593G	5.309334G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

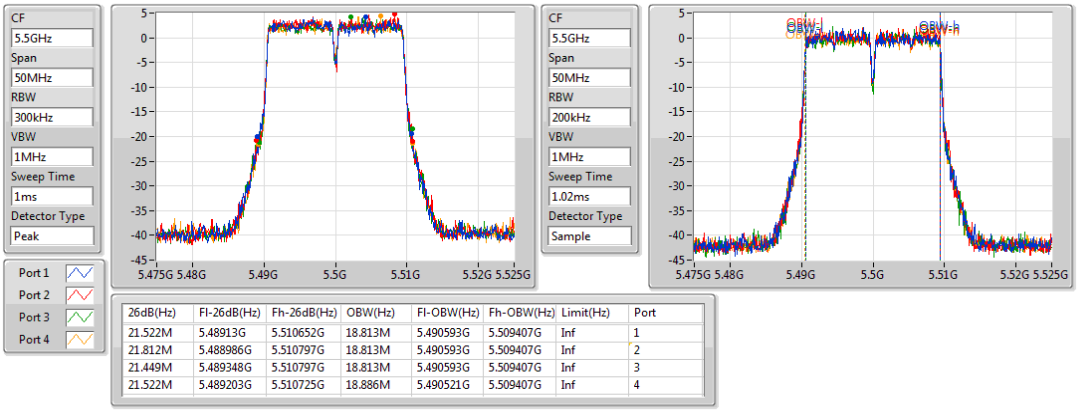
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.652M	5.309638G	5.33029G	18.741M	5.310593G	5.329334G	Inf	1
20.942M	5.309783G	5.330725G	18.741M	5.310593G	5.329334G	Inf	2

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

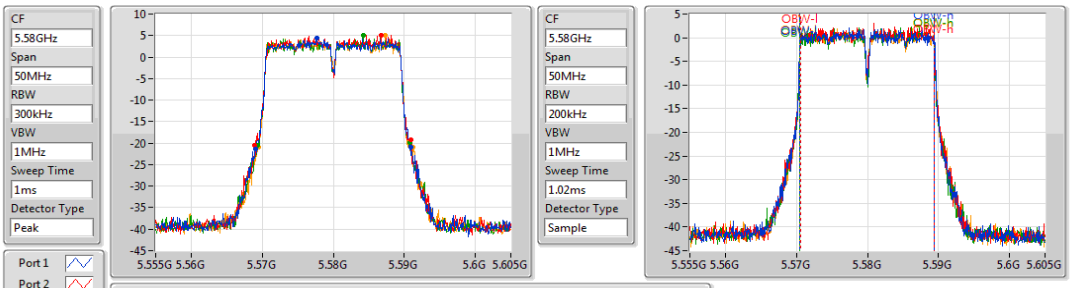
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.522M	5.48913G	5.510652G	18.813M	5.490593G	5.509407G	Inf	1
21.812M	5.488986G	5.510797G	18.813M	5.490593G	5.509407G	Inf	2
21.449M	5.489348G	5.510797G	18.813M	5.490593G	5.509407G	Inf	3
21.522M	5.489203G	5.510725G	18.886M	5.490521G	5.509407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

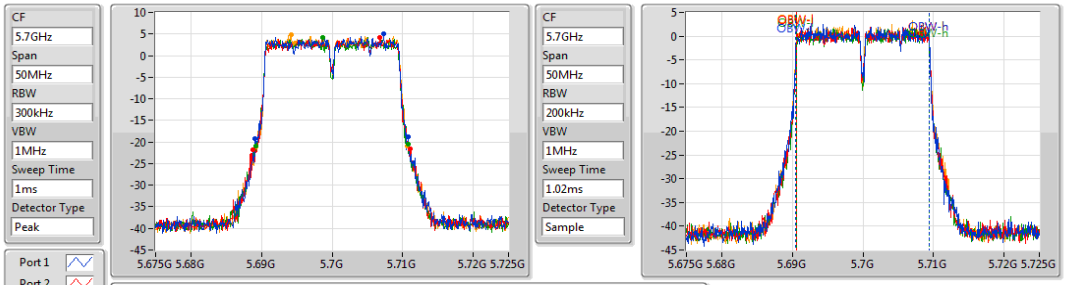
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.812M	5.569058G	5.59087G	18.886M	5.570521G	5.589407G	Inf	1
21.957M	5.568986G	5.590942G	18.813M	5.570593G	5.589407G	Inf	2
21.449M	5.569348G	5.590797G	18.886M	5.570521G	5.589407G	Inf	3
21.812M	5.56942G	5.591232G	18.886M	5.570521G	5.589407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

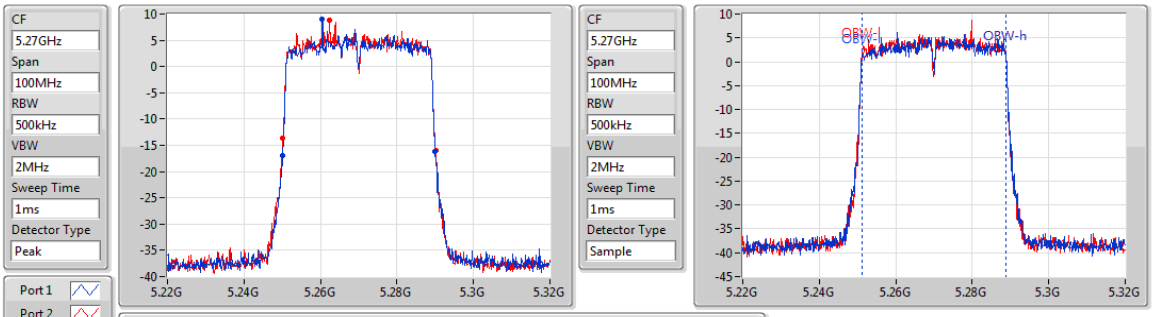
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.667M	5.68913G	5.710797G	18.886M	5.690521G	5.709407G	Inf	1
22.246M	5.688768G	5.711014G	18.813M	5.690593G	5.709407G	Inf	2
21.522M	5.689203G	5.710725G	18.813M	5.690593G	5.709407G	Inf	3
21.449M	5.689203G	5.710652G	18.813M	5.690593G	5.709407G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

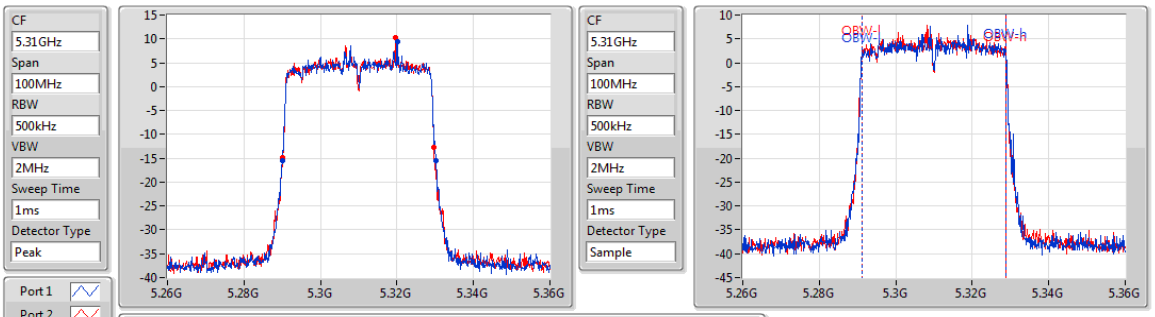
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.855M	5.250145G	5.29G	37.627M	5.251187G	5.288813G	Inf	1
40.145M	5.25G	5.290145G	37.627M	5.251187G	5.288813G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

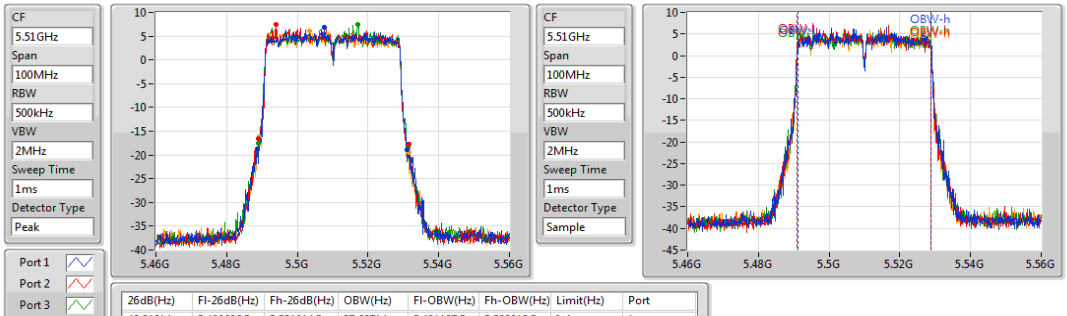
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.29G	5.33029G	37.627M	5.291187G	5.328813G	Inf	1
39.565M	5.290145G	5.32971G	37.627M	5.291187G	5.328813G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

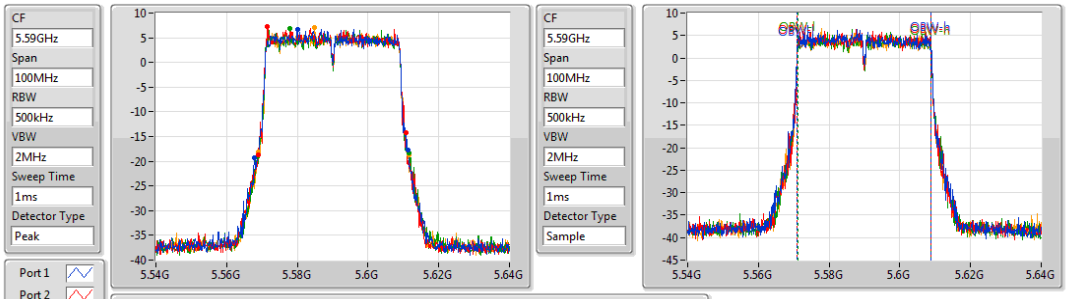
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.319M	5.488696G	5.531014G	37.627M	5.491187G	5.528813G	Inf	1
42.464M	5.488986G	5.531449G	37.771M	5.491042G	5.528813G	Inf	2
42.464M	5.488841G	5.531304G	37.771M	5.491042G	5.528813G	Inf	3
42.319M	5.48913G	5.531449G	37.771M	5.491042G	5.528813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

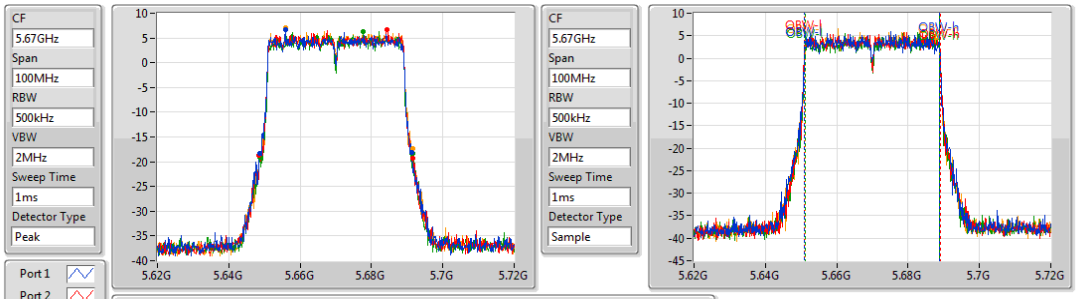
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.333M	5.567971G	5.611304G	37.771M	5.571042G	5.608813G	Inf	1
42.029M	5.568841G	5.61087G	37.771M	5.571042G	5.608813G	Inf	2
42.754M	5.568696G	5.611449G	37.627M	5.571187G	5.608813G	Inf	3
42.464M	5.568986G	5.611449G	37.627M	5.571187G	5.608813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

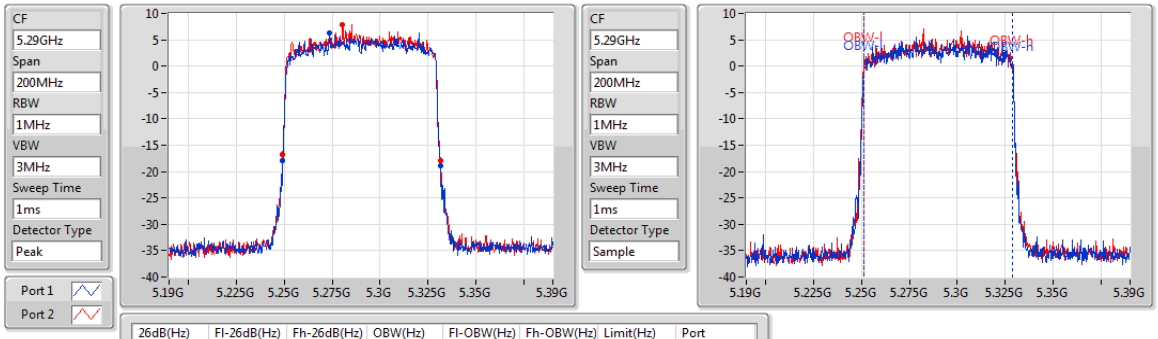
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.609M	5.648696G	5.691304G	37.771M	5.651042G	5.688813G	Inf	1
43.043M	5.648551G	5.691594G	37.916M	5.651042G	5.688958G	Inf	2
42.899M	5.648696G	5.691594G	37.627M	5.651187G	5.688813G	Inf	3
42.899M	5.648551G	5.691449G	37.627M	5.651187G	5.688813G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_2TX **EBW**

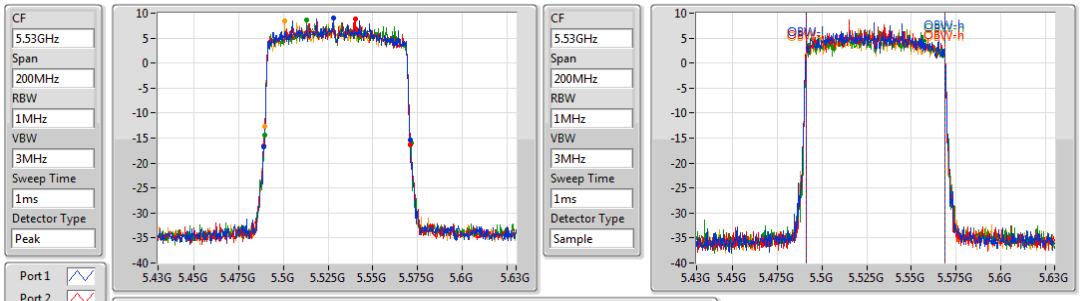
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.319M	5.24913G	5.331449G	77.279M	5.251505G	5.328784G	Inf	1
82.319M	5.24913G	5.331449G	76.99M	5.251505G	5.328495G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_4TX **EBW**

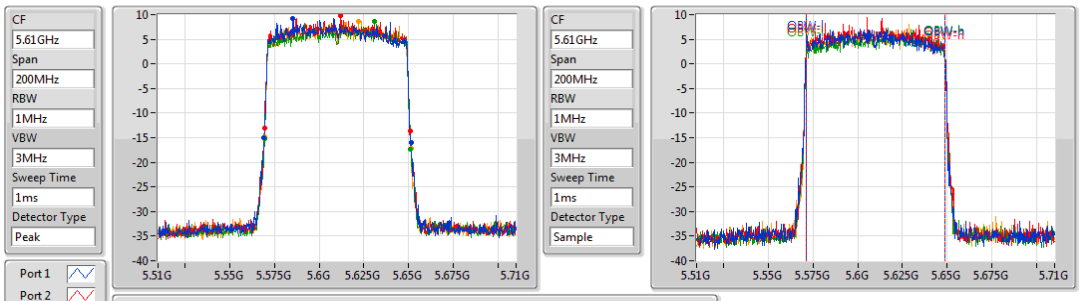
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.48913G	5.57087G	77.279M	5.491216G	5.568495G	Inf	1
82.319M	5.488841G	5.571159G	77.279M	5.491216G	5.568495G	Inf	2
82.029M	5.48942G	5.571449G	76.99M	5.491505G	5.568495G	Inf	3
81.449M	5.48942G	5.57087G	77.279M	5.491216G	5.568495G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX **EBW**

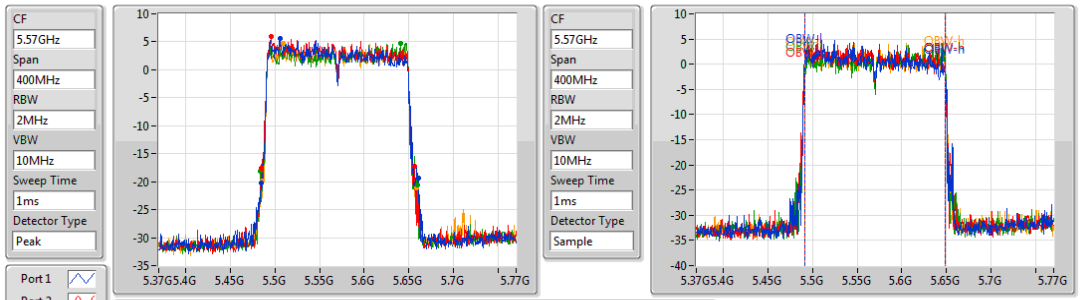
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.899M	5.568841G	5.651739G	76.99M	5.571505G	5.648495G	Inf	1
81.449M	5.56942G	5.65087G	76.99M	5.571505G	5.648495G	Inf	2
81.739M	5.56942G	5.651159G	76.99M	5.571505G	5.648495G	Inf	3
82.029M	5.56942G	5.651449G	76.99M	5.571505G	5.648495G	Inf	4

802.11ax HEW160_Nss1,(MCS0)_4TX **EBW**

5570MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
175.652M	5.484783G	5.660435G	157.453M	5.491274G	5.648726G	Inf	1
171.594M	5.484783G	5.656377G	156.874M	5.491274G	5.648148G	Inf	2
175.652M	5.484203G	5.659855G	157.453M	5.491274G	5.648726G	Inf	3
172.174M	5.485942G	5.658116G	156.874M	5.491852G	5.648726G	Inf	4

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

3.3.2 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.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

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

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	17.43	0.05534	22.89	0.19454
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	17.38	0.05470	22.84	0.19231
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	17.33	0.05408	22.79	0.19011
802.11ax HEW80_Nss1,(MCS0)_2TX-OFDMA	17.35	0.05433	22.81	0.19099
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	17.30	0.05370	23.88	0.24434
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	18.65	0.07328	25.23	0.33343
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	21.47	0.14028	28.05	0.63826
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	23.09	0.20370	29.67	0.92683
802.11ax HEW160_Nss1,(MCS0)_4TX-OFDMA	19.14	0.08204	25.72	0.37325

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)_2TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	5.46	14.21	14.49			17.36	23.96	22.82	29.96
5300MHz	Pass	5.46	14.25	14.59			17.43	24.00	22.89	30.00
5320MHz	Pass	5.46	14.31	14.51			17.42	24.00	22.88	30.00
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	6.58	11.02	10.81	11.03	10.76	16.93	23.35	23.51	29.93
5580MHz	Pass	6.58	11.22	11.35	11.23	11.28	17.29	23.38	23.87	29.96
5700MHz	Pass	6.58	11.26	10.85	11.31	11.67	17.30	23.38	23.88	29.96
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	5.46	14.05	14.49			17.29	24.00	22.75	30.00
5300MHz	Pass	5.46	14.22	14.52			17.38	24.00	22.84	30.00
5320MHz	Pass	5.46	14.31	14.41			17.37	24.00	22.83	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	6.58	12.22	12.33	12.29	12.03	18.24	23.42	24.82	30.00
5580MHz	Pass	6.58	12.46	12.71	12.69	12.66	18.65	23.42	25.23	30.00
5700MHz	Pass	6.58	12.46	12.26	12.56	13.09	18.62	23.42	25.20	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	5.46	14.15	14.46			17.32	24.00	22.78	30.00
5310MHz	Pass	5.46	14.29	14.35			17.33	24.00	22.79	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	6.58	15.26	15.22	15.35	14.86	21.20	23.42	27.78	30.00
5590MHz	Pass	6.58	15.26	15.41	15.67	15.46	21.47	23.42	28.05	30.00
5670MHz	Pass	6.58	15.26	15.27	15.23	15.75	21.40	23.42	27.98	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	5.46	14.15	14.52			17.35	24.00	22.81	30.00
802.11ax	-	-	-	-	-	-	-	-	-	-

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)
HEW80_Nss1,(MCS0)_ 4TX-OFDMA										
5530MHz	Pass	6.58	16.24	16.32	16.45	16.06	22.29	23.42	28.87	30.00
5610MHz	Pass	6.58	17.03	17.15	16.92	17.19	23.09	23.42	29.67	30.00
802.11ax HEW160_Nss1,(MCS0) _4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	6.58	13.02	13.31	13.11	13.05	19.14	23.42	25.72	30.00

Port X = Port X output power
DG = Directional Gain
Directional Gain of 5.470 ~ 5.725 GHs is 6.58dBi > 6dBi, so the limit shall be reduced to 24 dBm – (6.58dBi – 6dBi) =23.42 dBm.

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX-OFDMA	14.37	0.02735	22.33	0.17100
802.11ax HEW40-BF_Nss1,(MCS0)_2TX-OFDMA	14.32	0.02704	22.28	0.16904
802.11ax HEW80-BF_Nss1,(MCS0)_2TX-OFDMA	14.34	0.02716	22.30	0.16982
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	12.63	0.01832	24.50	0.28184
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	15.45	0.03508	27.32	0.53951
802.11ax HEW80-BF_Nss1,(MCS0)_4TX-OFDMA-OFDMA	17.07	0.05093	28.94	0.78343
802.11ax HEW160-BF_Nss1,(MCS0)_4TX-OFDMA	13.12	0.02051	24.99	0.31550

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,(MCS 0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	7.96	11.04	11.48			14.28	22.04	22.24	30.00
5300MHz	Pass	7.96	11.21	11.51			14.37	22.04	22.33	30.00
5320MHz	Pass	7.96	11.3	11.4			14.36	22.04	22.32	30.00
802.11ax HEW20-BF_Nss1,(MCS 0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	11.87	6.2	6.31	6.27	6.01	12.22	18.13	24.09	30.00
5580MHz	Pass	11.87	6.44	6.69	6.67	6.64	12.63	18.13	24.50	30.00
5700MHz	Pass	11.87	6.44	6.24	6.54	7.07	12.60	18.13	24.47	30.00
802.11ax HEW40-BF_Nss1,(MCS 0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	7.96	11.14	11.45			14.31	22.04	22.27	30.00
5310MHz	Pass	7.96	11.28	11.34			14.32	22.04	22.28	30.00
802.11ax HEW40-BF_Nss1,(MCS 0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	11.87	9.24	9.2	9.33	8.84	15.18	18.13	27.05	30.00
5590MHz	Pass	11.87	9.24	9.39	9.65	9.44	15.45	18.13	27.32	30.00
5670MHz	Pass	11.87	9.24	9.25	9.21	9.73	15.38	18.13	27.25	30.00
802.11ax HEW80-BF_Nss1,(MCS 0)_2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	7.96	11.14	11.51			14.34	22.04	22.30	30.00
802.11ax HEW80-BF_Nss1,(MCS 0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	11.87	10.22	10.3	10.43	10.04	16.27	18.13	28.14	30.00
5610MHz	Pass	11.87	11.01	11.13	10.9	11.17	17.07	18.13	28.94	30.00
802.11ax HEW160-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5570MHz	Pass	11.87	7	7.29	7.09	7.03	13.12	18.13	24.99	30.00

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

For 5250~5350MHz:
Directional gain = 10 x log((10$^{4.4/20}$+10$^{5.46/20}$)^2/2) = 7.96 dBi > 6 dBi, Limit shall be reduced to 24 dBm – (7.96 dBi – 6 dBi) = 22.04 dBm.

For 5470~5725MHz:
Directional gain = 10 x log((10$^{5.36/20}$+10$^{6.58/20}$+10$^{5.11/20}$+10$^{6.25/20}$)^2/4) = 11.87 dBi > 6 dBi, Limit shall be reduced to 24 dBm – (11.87 dBi – 6 dBi) = 18.13 dBm.

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz

3.4.2 Test Procedures

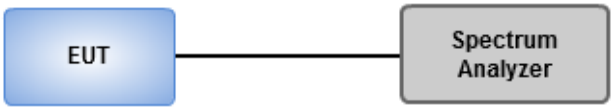
Duty cycle ≥ 98 %

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.

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	5.27	13.23
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	3.81	11.77
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	1.19	9.15
802.11ax HEW80_Nss1,(MCS0)_2TX-OFDMA	-1.3	6.66
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	4.88	16.75
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	5.03	16.90
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	4.79	16.66
802.11ax HEW80_Nss1,(MCS0)_4TX-OFDMA	3.7	15.57
802.11ax HEW160_Nss1,(MCS0)_4TX-OFDMA	-2.49	9.38

RBW = 1MHz

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)_2TX										
5260MHz	Pass	7.96	1.98	2.5			5.07	9.04	13.03	17.00
5300MHz	Pass	7.96	1.87	2.19			5.01	9.04	12.97	17.00
5320MHz	Pass	7.96	2.29	2.4			5.27	9.04	13.23	17.00
802.11a_Nss1,(6Mbps)_4TX										
5500MHz	Pass	11.87	-1.22	-1.47	-1.06	-1.75	4.59	5.13	16.46	17.00
5580MHz	Pass	11.87	-1.28	-0.94	-1	-1.07	4.80	5.13	16.67	17.00
5700MHz	Pass	11.87	-1.23	-1.38	-0.89	-0.77	4.88	5.13	16.75	17.00
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA										
5260MHz	Pass	7.96	0.49	0.84			3.57	9.04	11.53	17.00
5300MHz	Pass	7.96	0.25	1.46			3.81	9.04	11.77	17.00
5320MHz	Pass	7.96	0.92	0.94			3.78	9.04	11.74	17.00
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA										
5500MHz	Pass	11.87	-1.07	-1.38	-1.1	-1.42	4.58	5.13	16.45	17.00
5580MHz	Pass	11.87	-0.86	-0.68	-0.74	-0.85	5.03	5.13	16.90	17.00
5700MHz	Pass	11.87	-0.99	-1.24	-0.73	-0.41	4.98	5.13	16.85	17.00
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA										
5270MHz	Pass	7.96	-1.86	-1.59			1.19	9.04	9.15	17.00
5310MHz	Pass	7.96	-2.16	-1.6			0.98	9.04	8.94	17.00
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA										
5510MHz	Pass	11.87	-1.11	-1.37	-0.88	-1.62	4.55	5.13	16.42	17.00
5590MHz	Pass	11.87	-1.15	-1.22	-0.75	-0.89	4.79	5.13	16.66	17.00
5670MHz	Pass	11.87	-1.28	-1.25	-1.25	-0.76	4.70	5.13	16.57	17.00
802.11ax HEW80_Nss1,(MCS0) _2TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	7.96	-4.38	-4			-1.30	9.04	6.66	17.00
802.11ax HEW80_Nss1,(MCS0) _4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	11.87	-2.82	-2.85	-2.91	-3.37	2.80	5.13	14.67	17.00
5610MHz	Pass	11.87	-2.09	-1.72	-2.55	-2.3	3.70	5.13	15.57	17.00
802.11ax HEW160_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-

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)
5570MHz	Pass	11.87	-8.05	-7.58	-8.68	-8.97	-2.49	5.13	9.38	17.00

DG = Directional Gain; **RBW** = 1MHz
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density;
Port X = Port X power density;

For 5250~5350MHz:

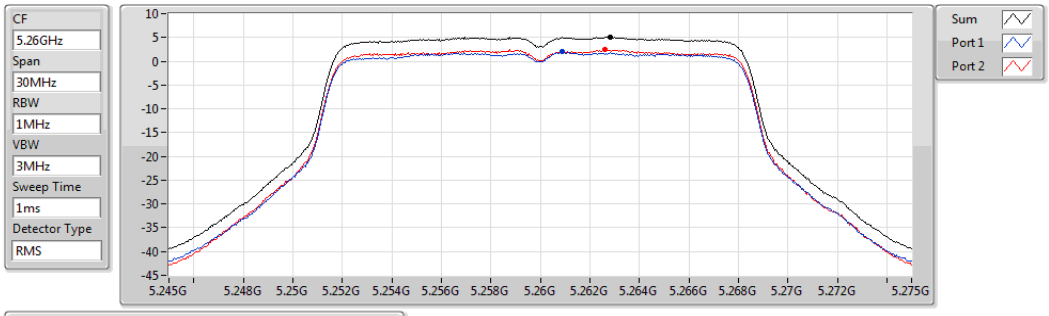
Directional gain = 10 x log((10$^{4.4/20}$+10$^{5.46/20}$)^2/2) = 7.96 dBi > 6 dBi, Limit shall be reduced to 11 dBm – (7.96 dBi – 6 dBi) = 9.04 dBm.

For 5470~5725MHz:

Directional gain = 10 x log((10$^{5.36/20}$+10$^{6.58/20}$+10$^{5.11/20}$+10$^{6.25/20}$)^2/4) = 11.87 dBi > 6 dBi, Limit shall be reduced to 11 dBm – (11.87 dBi – 6 dBi) = 5.13 dBm.

802.11a_Nss1,(6Mbps)_2TX **PSD**

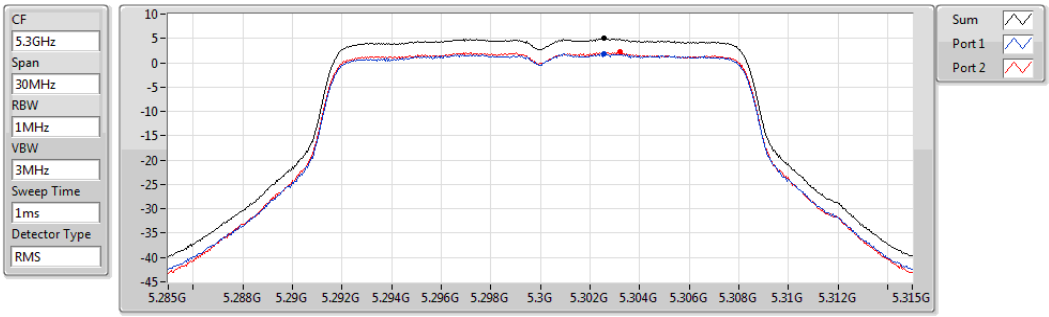
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.07	5.07	1.98	2.50

802.11a_Nss1,(6Mbps)_2TX **PSD**

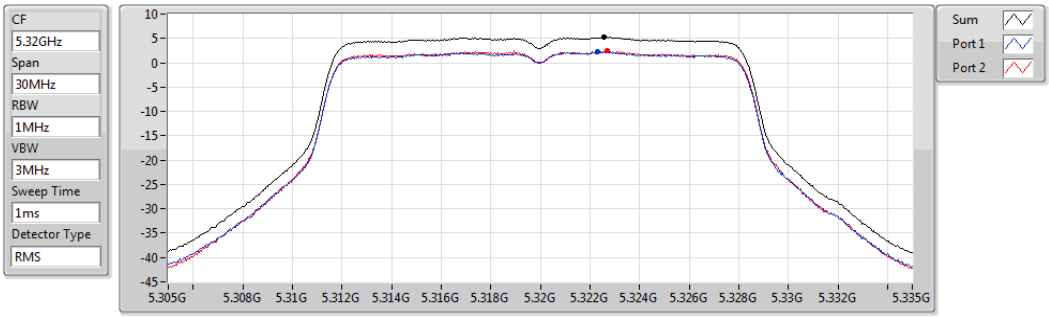
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.01	5.01	1.87	2.19

802.11a_Nss1,(6Mbps)_2TX **PSD**

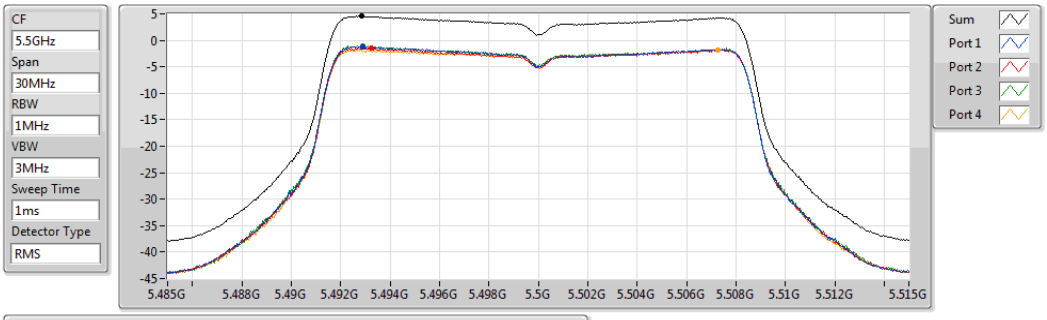
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.27	5.27	2.29	2.40

802.11a_Nss1,(6Mbps)_4TX **PSD**

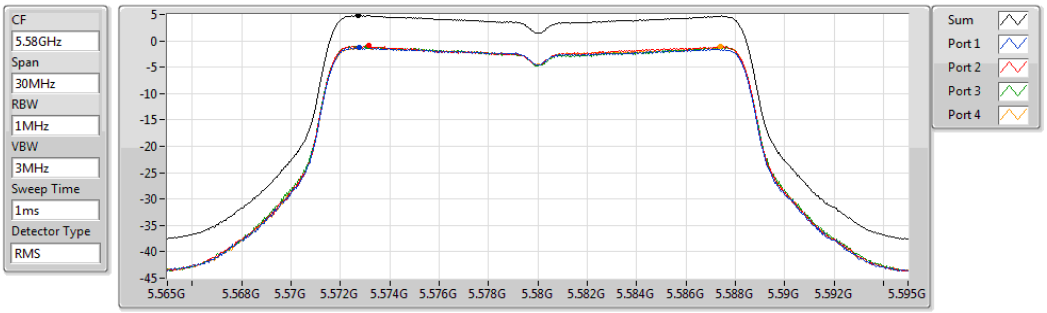
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.59	4.59	-1.22	-1.47	-1.06	-1.75

802.11a_Nss1,(6Mbps)_4TX **PSD**

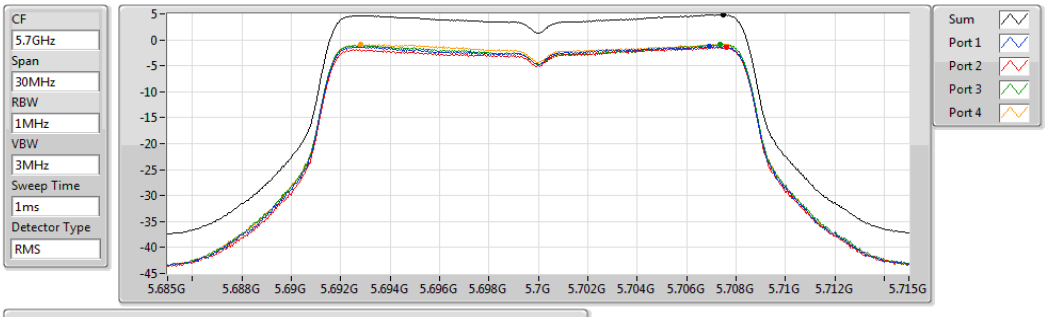
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.80	4.80	-1.28	-0.94	-1.00	-1.07

802.11a_Nss1,(6Mbps)_4TX **PSD**

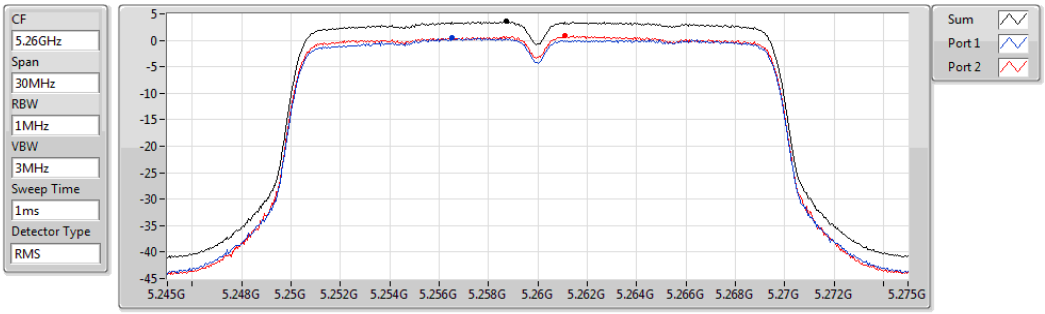
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.88	4.88	-1.23	-1.38	-0.89	-0.77

802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

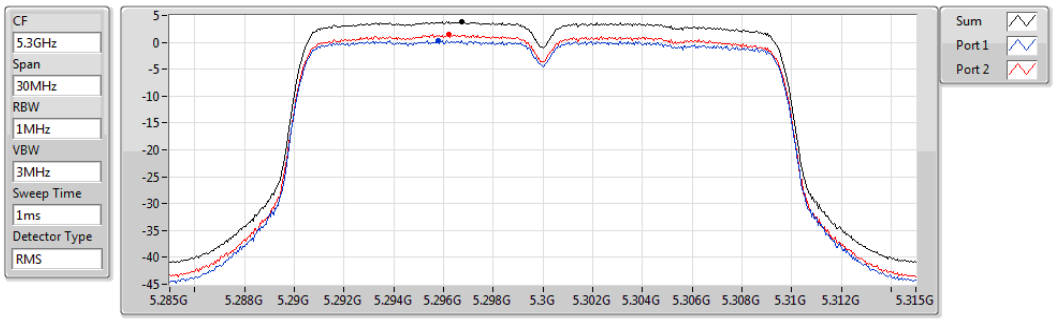
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.57	3.57	0.49	0.84

802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

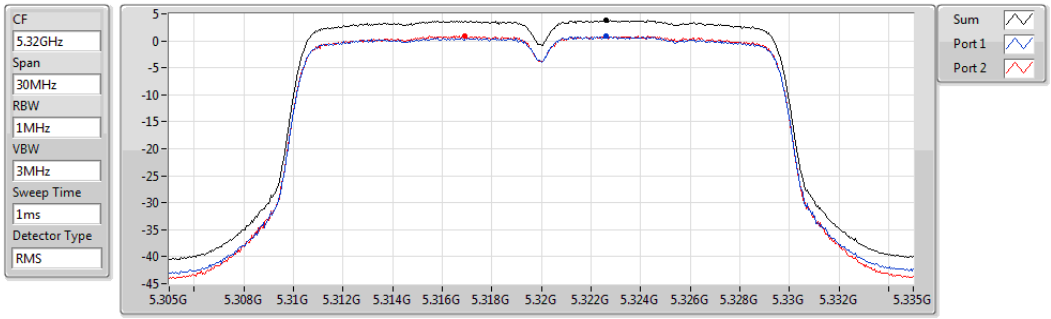
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.81	3.81	0.25	1.46

802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

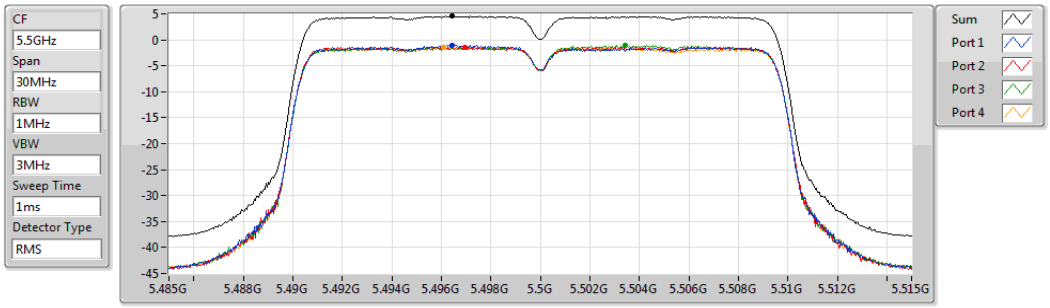
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.78	3.78	0.92	0.94

802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

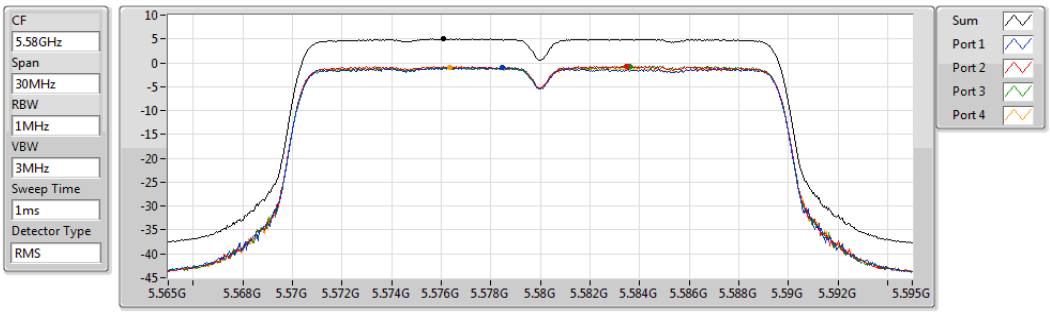
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.58	4.58	-1.07	-1.38	-1.10	-1.42

802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

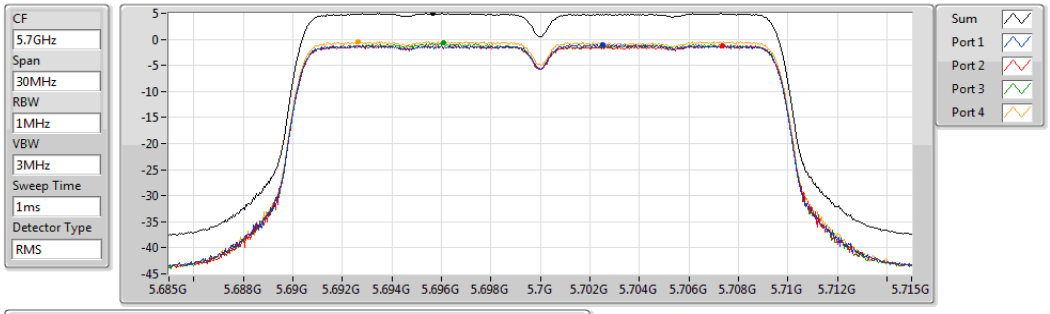
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.03	5.03	-0.86	-0.68	-0.74	-0.85

802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

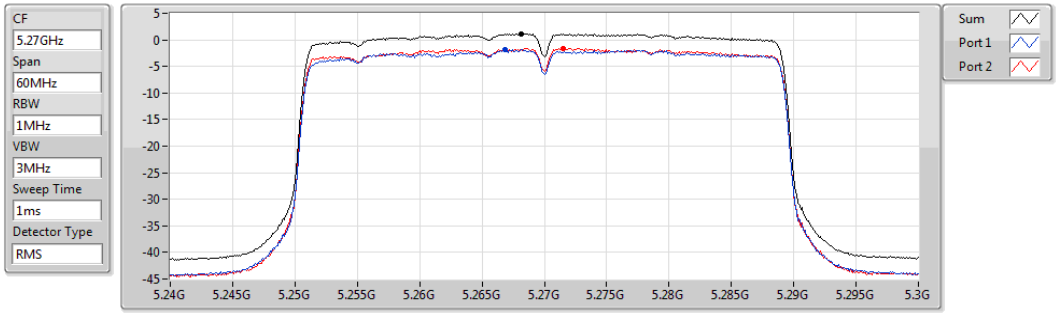
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.98	4.98	-0.99	-1.24	-0.73	-0.41

802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

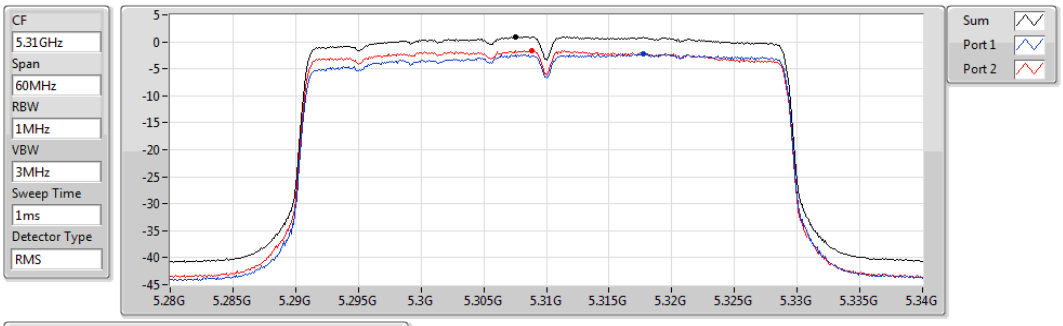
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.19	1.19	-1.86	-1.59

802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

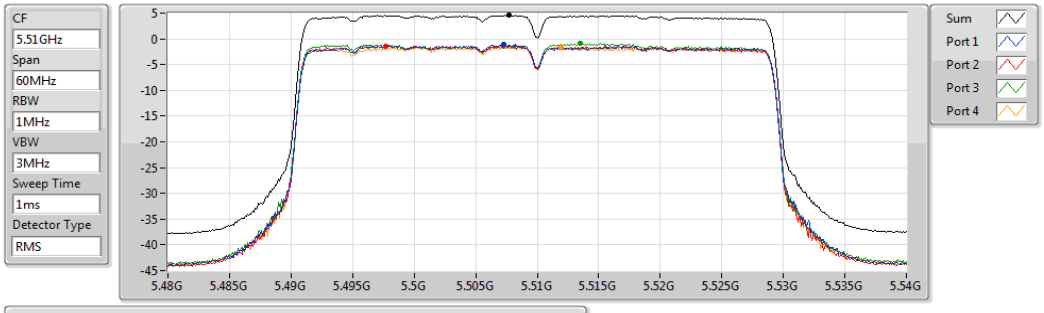
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.98	0.98	-2.16	-1.60

802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

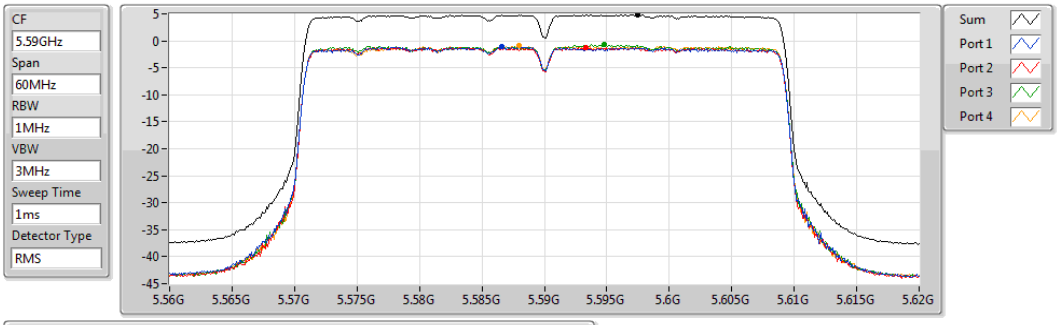
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.55	4.55	-1.11	-1.37	-0.88	-1.62

802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

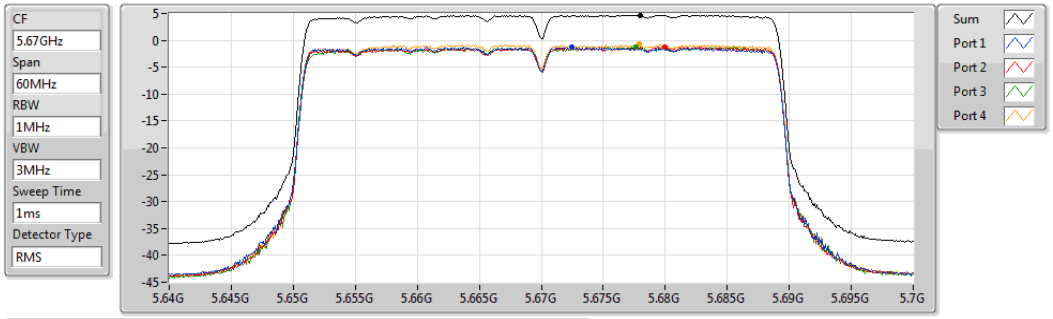
5590MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.79	4.79	-1.15	-1.22	-0.75	-0.89

802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

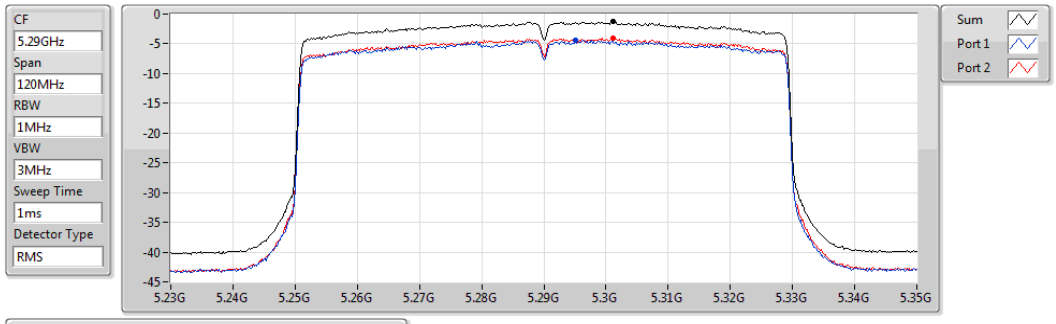
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.70	4.70	-1.28	-1.25	-1.25	-0.76

802.11ax HEW80_Nss1,(MCS0)_2TX **PSD**

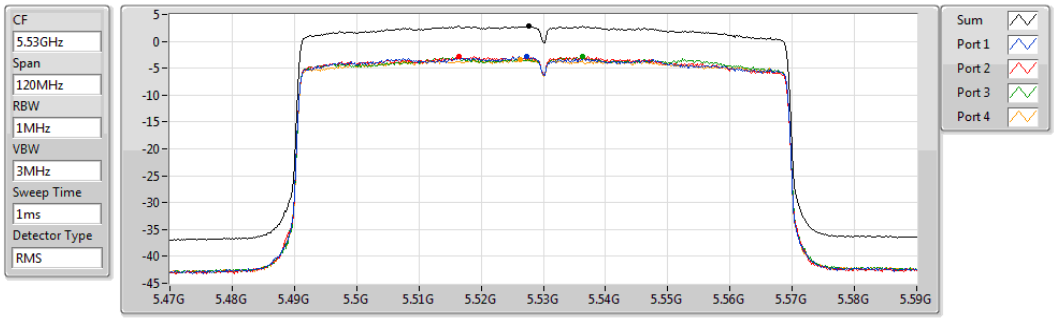
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.30	-1.30	-4.38	-4.00

802.11ax HEW80_Nss1,(MCS0)_4TX **PSD**

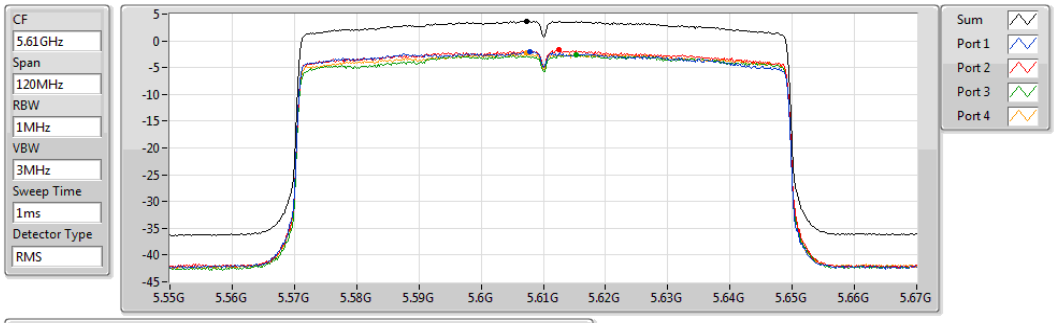
5530MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.80	2.80	-2.82	-2.85	-2.91	-3.37

802.11ax HEW80_Nss1,(MCS0)_4TX **PSD**

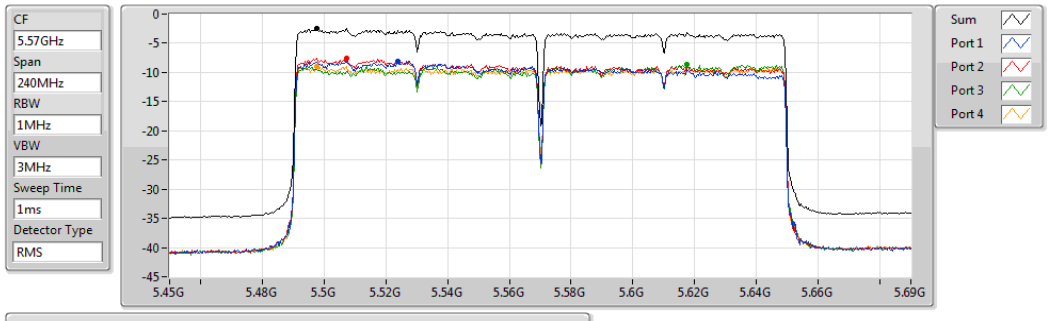
5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.70	3.70	-2.09	-1.72	-2.55	-2.30

802.11ax HEW160_Nss1,(MCS0)_4TX **PSD**

5570MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.49	-2.49	-8.05	-7.58	-8.68	-8.97

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge 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**
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Test Procedures

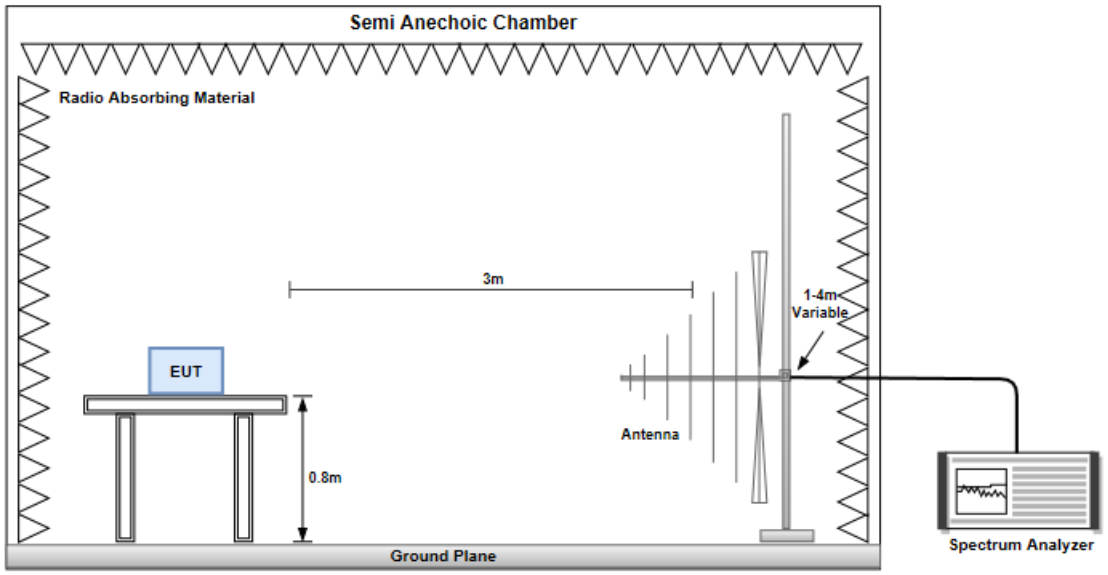
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

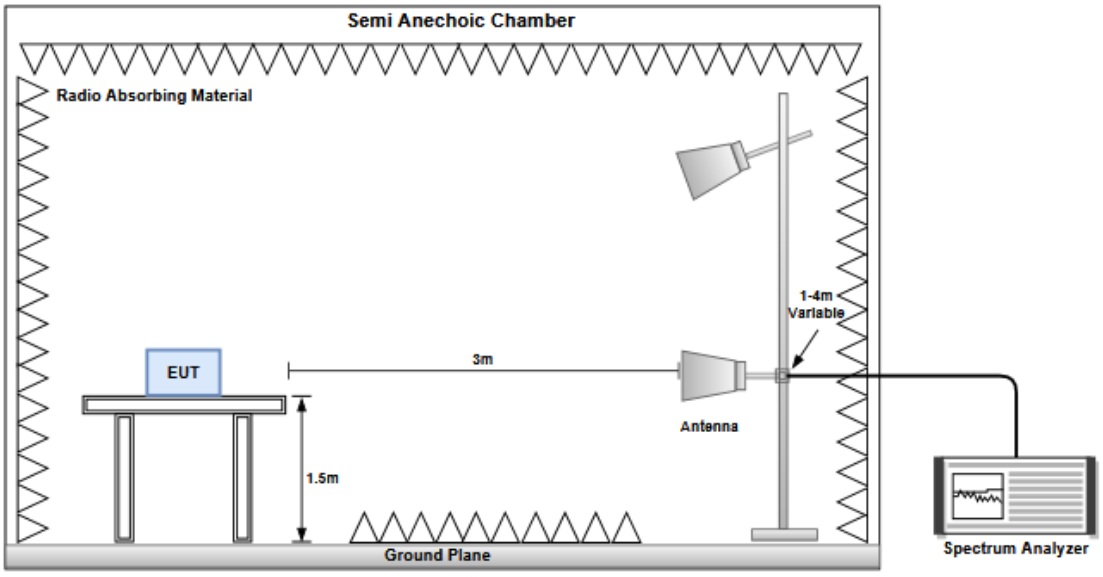
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



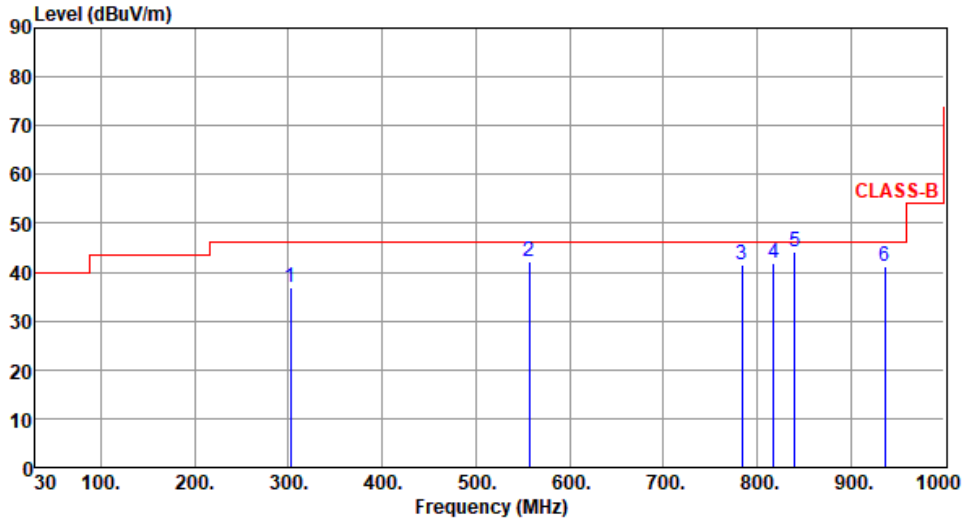
Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

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

Test By :Roger Lu Temperature(℃):22 Humidity(%):68

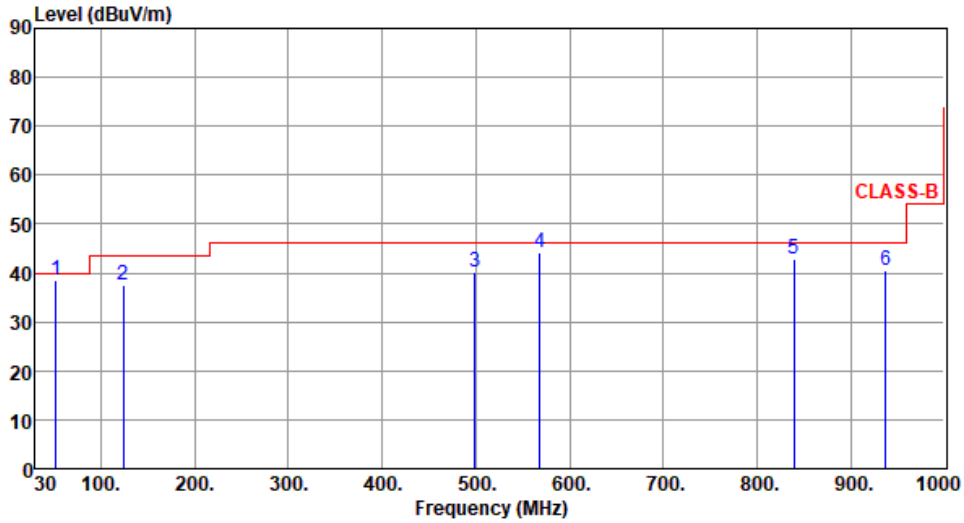


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	302.45	36.91	46.00	-9.09	44.97	-8.06	Peak	---	---
2	556.91	42.22	46.00	-3.78	44.47	-2.25	Peak	---	---
3	784.26	41.46	46.00	-4.54	39.61	1.85	QP	100	216
4	817.56	41.68	46.00	-4.32	39.30	2.38	QP	108	204
5	840.03	44.29	46.00	-1.71	41.80	2.49	QP	100	213
6	936.48	41.15	46.00	-4.85	36.91	4.24	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5300
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):68

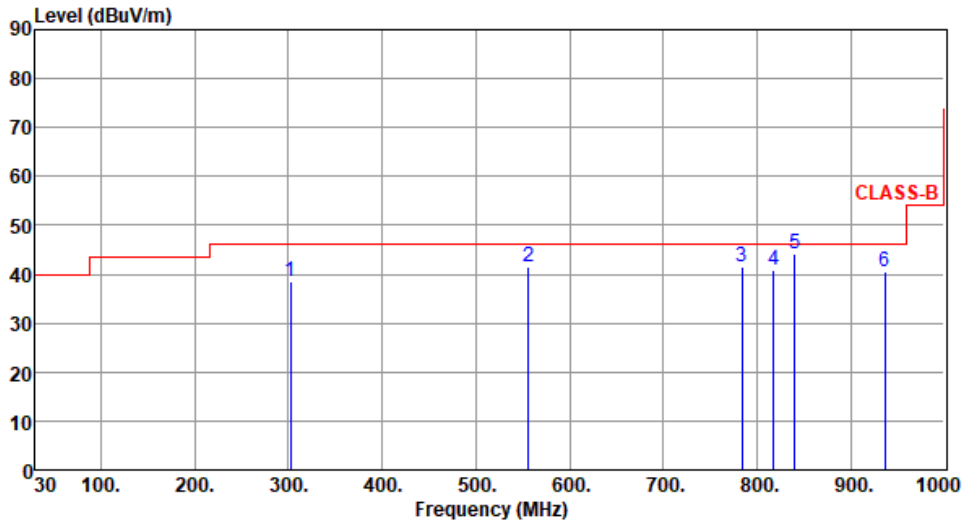


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.88	38.68	40.00	-1.32	47.47	-8.79	QP	100	342
2	124.26	37.49	43.50	-6.01	47.78	-10.29	Peak	---	---
3	499.15	40.03	46.00	-5.97	43.34	-3.31	QP	113	348
4	567.86	44.19	46.00	-1.81	46.13	-1.94	QP	100	172
5	839.67	42.88	46.00	-3.12	40.39	2.49	Peak	---	---
6	937.58	40.59	46.00	-5.41	36.34	4.25	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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 HE80-OFDMA	Test Freq. (MHz)	5610
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):22 Humidity(%):68

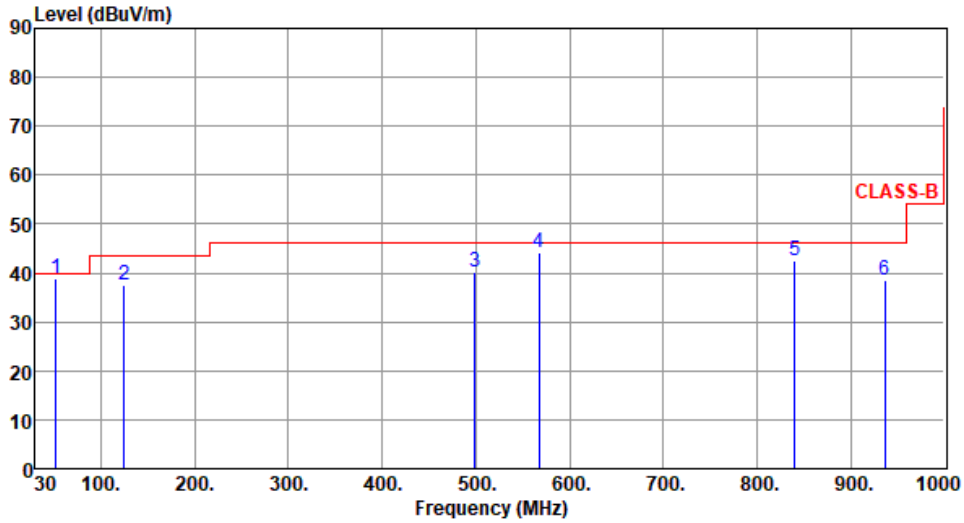


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	302.45	38.46	46.00	-7.54	46.52	-8.06	Peak	---	---
2	556.26	41.59	46.00	-4.41	43.88	-2.29	Peak	---	---
3	784.26	41.48	46.00	-4.52	39.63	1.85	QP	100	216
4	817.46	40.95	46.00	-5.05	38.57	2.38	QP	106	211
5	840.29	44.24	46.00	-1.76	41.74	2.50	QP	100	218
6	936.65	40.55	46.00	-5.45	36.31	4.24	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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 HE80-OFDMA	Test Freq. (MHz)	5610
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):22 Humidity(%):68



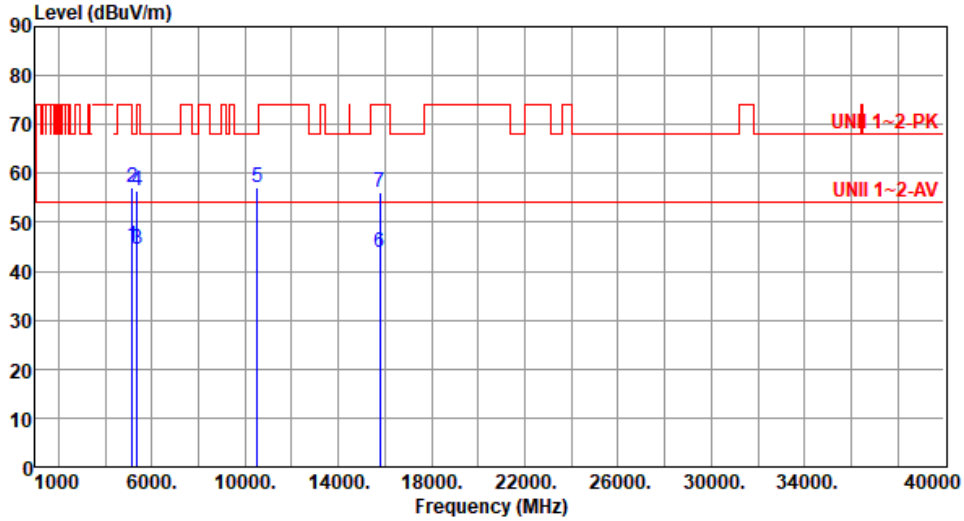
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	51.77	38.76	40.00	-1.24	47.55	-8.79	QP	100	342
2	124.56	37.46	43.50	-6.04	47.74	-10.28	Peak	---	---
3	499.12	40.11	46.00	-5.89	43.42	-3.31	QP	118	344
4	567.59	44.13	46.00	-1.87	46.08	-1.95	QP	100	179
5	840.18	42.61	46.00	-3.39	40.12	2.49	Peak	---	---
6	936.48	38.59	46.00	-7.41	34.35	4.24	Peak	---	---

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

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

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

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

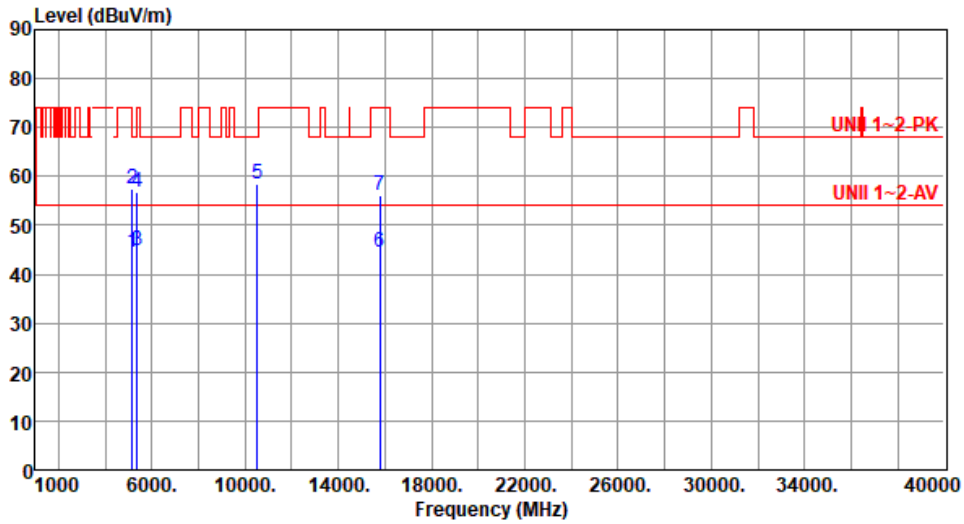


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	45.12	54.00	-8.88	40.11	5.01	Average	256	304
2	5150.00	57.05	74.00	-16.95	52.04	5.01	Peak	256	304
3	5350.00	44.48	54.00	-9.52	40.06	4.42	Average	256	304
4	5350.00	56.50	74.00	-17.50	52.08	4.42	Peak	256	304
5	10520.00	57.13	68.20	-11.07	42.66	14.47	Peak	100	260
6	15780.00	43.80	54.00	-10.20	30.32	13.48	Average	100	255
7	15780.00	56.03	74.00	-17.97	42.55	13.48	Peak	100	255

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5260
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

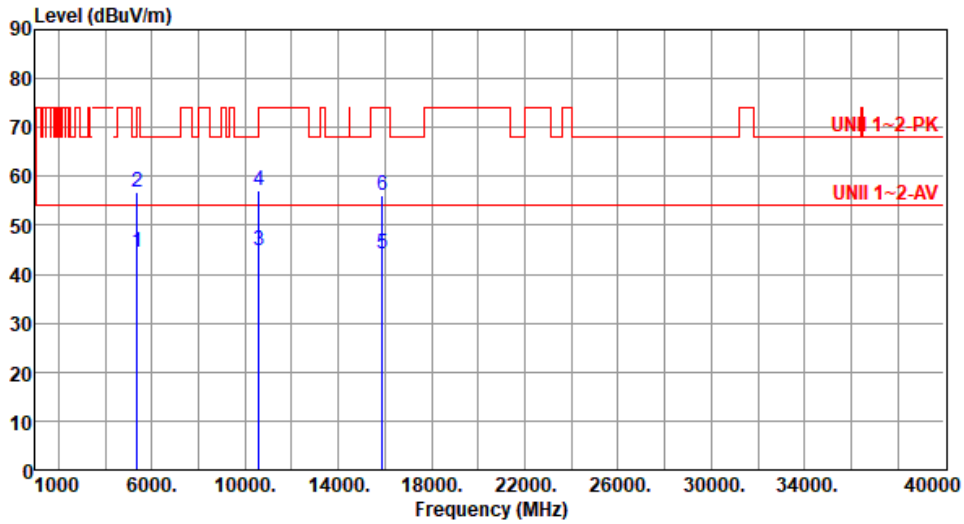


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5150.00	44.57	54.00	-9.43	39.56	5.01	Average	295	277
2	5150.00	57.46	74.00	-16.54	52.45	5.01	Peak	295	277
3	5350.00	44.74	54.00	-9.26	40.32	4.42	Average	295	277
4	5350.00	56.78	74.00	-17.22	52.36	4.42	Peak	295	277
5	10520.00	58.34	68.20	-9.86	43.87	14.47	Peak	100	60
6	15780.00	44.34	54.00	-9.66	30.86	13.48	Average	100	66
7	15780.00	56.25	74.00	-17.75	42.77	13.48	Peak	100	66

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5300
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):68

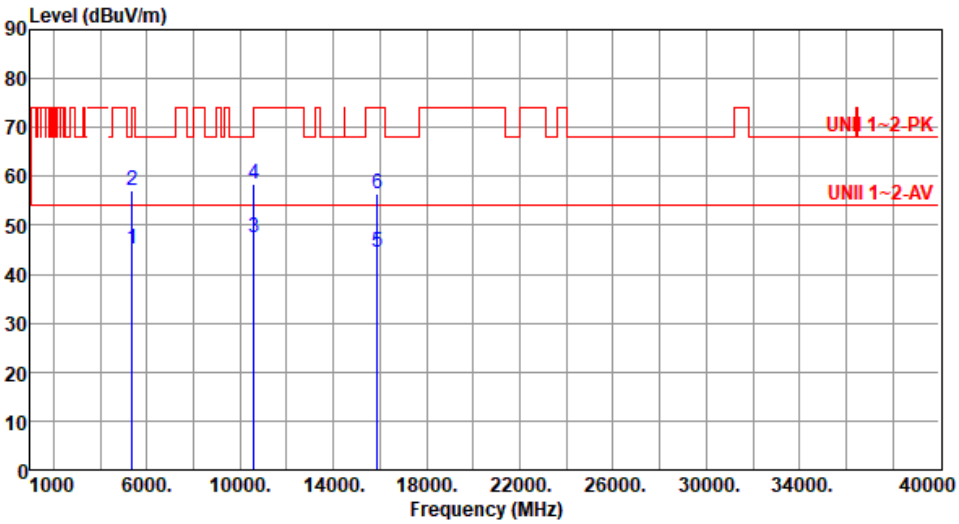


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.52	54.00	-9.48	40.10	4.42	Average	255	300
2	5350.00	56.63	74.00	-17.37	52.21	4.42	Peak	255	300
3	10600.00	45.00	54.00	-9.00	30.65	14.35	Average	100	255
4	10600.00	57.12	74.00	-16.88	42.77	14.35	Peak	100	255
5	15900.00	44.19	54.00	-9.81	30.62	13.57	Average	100	263
6	15900.00	56.26	74.00	-17.74	42.69	13.57	Peak	100	263

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5300
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):68

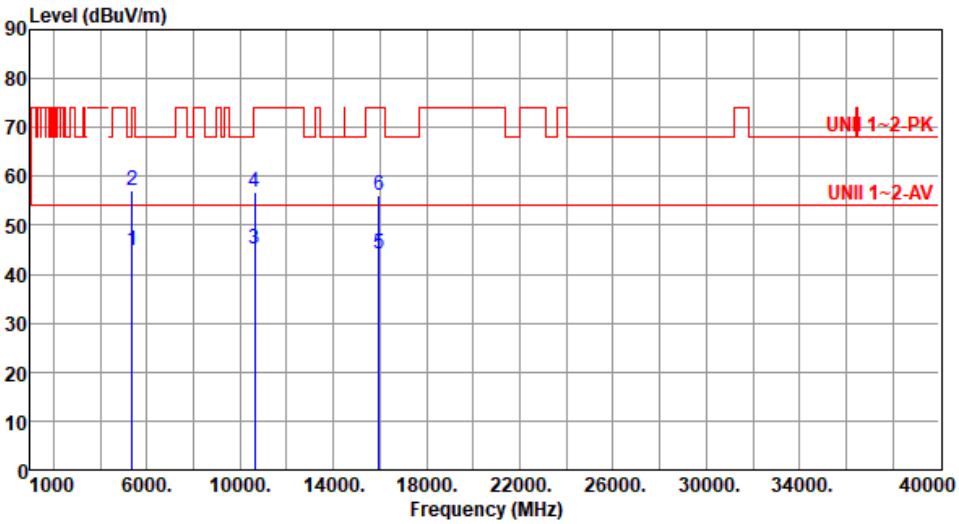


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	45.22	54.00	-8.78	40.80	4.42	Average	200	255
2	5350.00	57.02	74.00	-16.98	52.60	4.42	Peak	200	255
3	10600.00	47.34	54.00	-6.66	32.99	14.35	Average	100	59
4	10600.00	58.33	74.00	-15.67	43.98	14.35	Peak	100	59
5	15900.00	44.56	54.00	-9.44	30.99	13.57	Average	100	65
6	15900.00	56.45	74.00	-17.55	42.88	13.57	Peak	100	65

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5320
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65

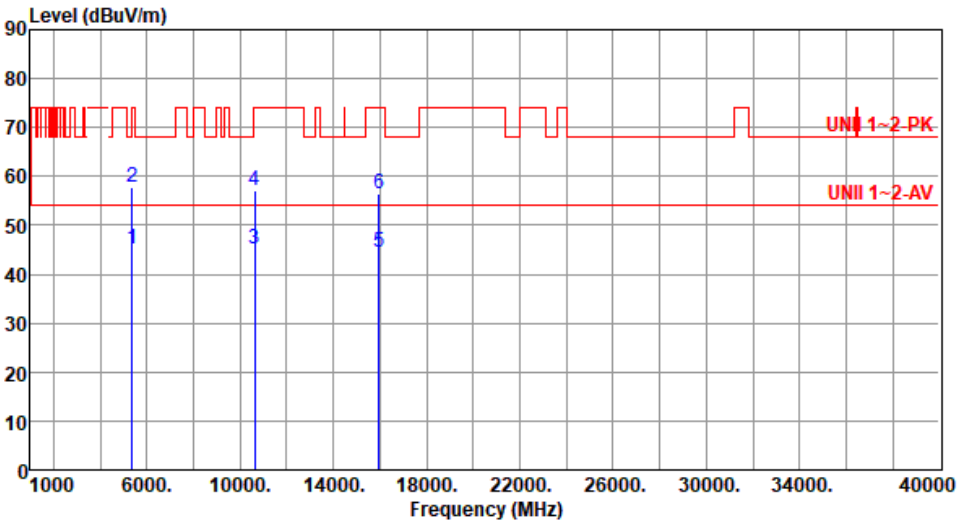


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.97	54.00	-9.03	40.55	4.42	Average	255	301
2	5350.00	56.98	74.00	-17.02	52.56	4.42	Peak	255	301
3	10640.00	45.02	54.00	-8.98	30.65	14.37	Average	100	254
4	10640.00	56.93	74.00	-17.07	42.56	14.37	Peak	100	254
5	15960.00	44.21	54.00	-9.79	30.53	13.68	Average	100	257
6	15960.00	56.25	74.00	-17.75	42.57	13.68	Peak	100	257

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5320
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65

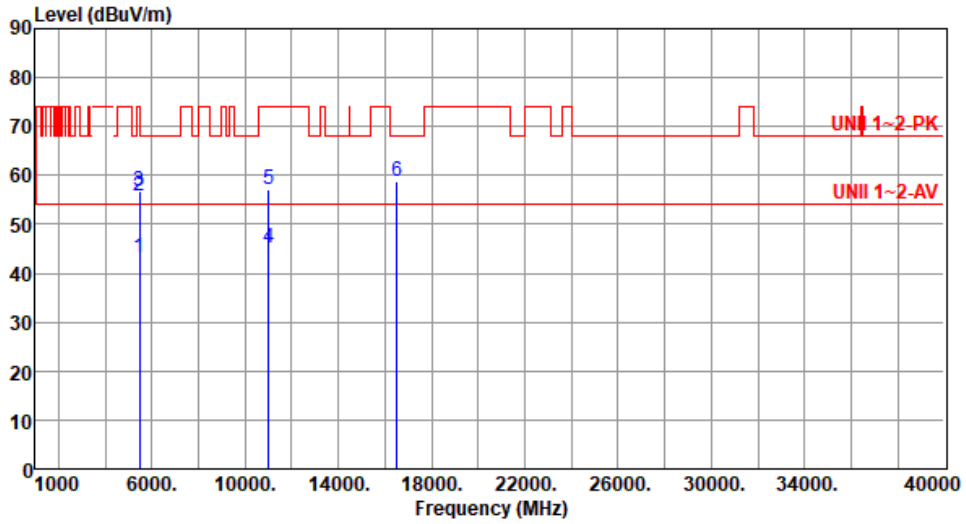


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	45.10	54.00	-8.90	40.68	4.42	Average	286	209
2	5350.00	57.71	74.00	-16.29	53.29	4.42	Peak	286	209
3	10640.00	45.28	54.00	-8.72	30.91	14.37	Average	100	71
4	10640.00	57.26	74.00	-16.74	42.89	14.37	Peak	100	71
5	15960.00	44.41	54.00	-9.59	30.73	13.68	Average	100	80
6	15960.00	56.56	74.00	-17.44	42.88	13.68	Peak	100	80

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5500
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65

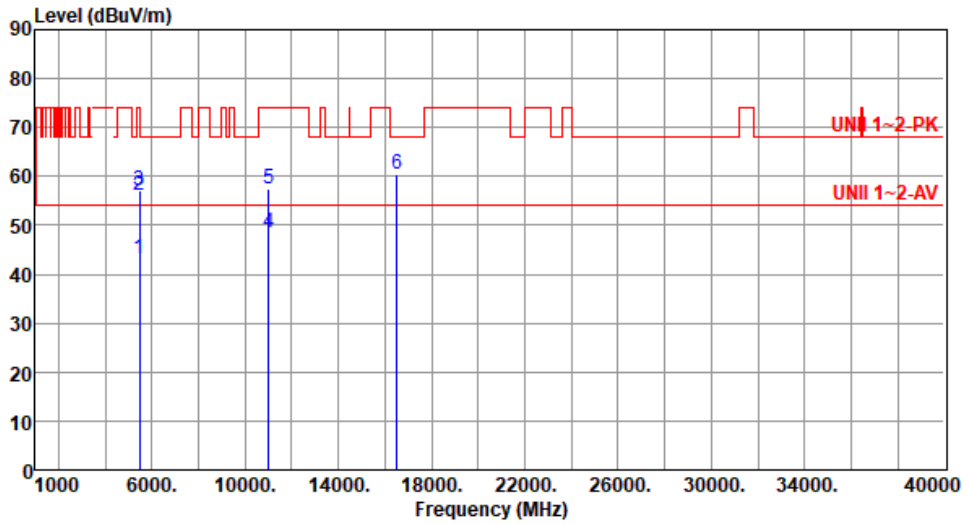


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.12	54.00	-10.88	38.45	4.67	Average	259	306
2	5460.00	55.90	74.00	-18.10	51.23	4.67	Peak	259	306
3	5470.00	56.85	68.20	-11.35	52.15	4.70	Peak	259	306
4	11000.00	45.25	54.00	-8.75	30.60	14.65	Average	100	50
5	11000.00	57.17	74.00	-16.83	42.52	14.65	Peak	100	50
6	16500.00	58.94	68.20	-9.26	42.60	16.34	Peak	100	55

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5500
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65

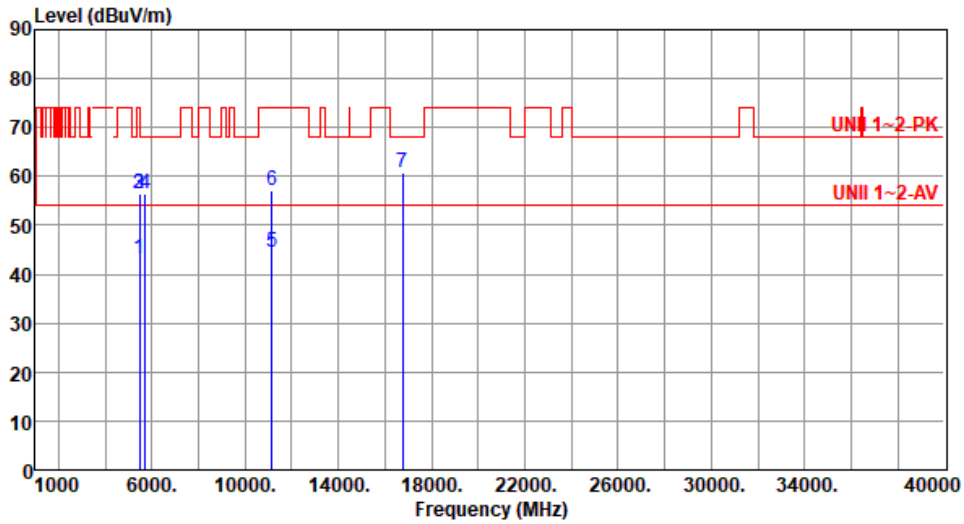


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.23	54.00	-10.77	38.56	4.67	Average	246	140
2	5460.00	56.11	74.00	-17.89	51.44	4.67	Peak	246	140
3	5470.00	57.05	68.20	-11.15	52.35	4.70	Peak	246	140
4	11000.00	48.53	54.00	-5.47	33.88	14.65	Average	100	300
5	11000.00	57.50	74.00	-16.50	42.85	14.65	Peak	100	300
6	16500.00	60.33	68.20	-7.87	43.99	16.34	Peak	100	305

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5580
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

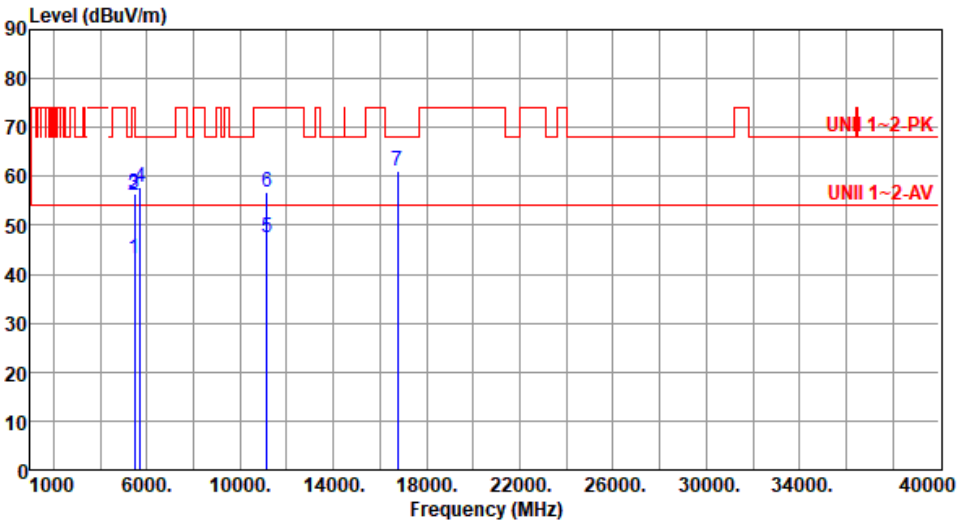


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.18	54.00	-10.82	38.51	4.67	Average	255	200
2	5460.00	56.56	74.00	-17.44	51.89	4.67	Peak	255	200
3	5470.00	56.60	68.20	-11.60	51.90	4.70	Peak	255	200
4	5725.00	56.37	68.20	-11.83	51.20	5.17	Peak	255	200
5	11160.00	44.63	54.00	-9.37	30.66	13.97	Average	100	65
6	11160.00	56.96	74.00	-17.04	42.99	13.97	Peak	100	65
7	16740.00	60.72	68.20	-7.48	43.55	17.17	Peak	100	55

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5580
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

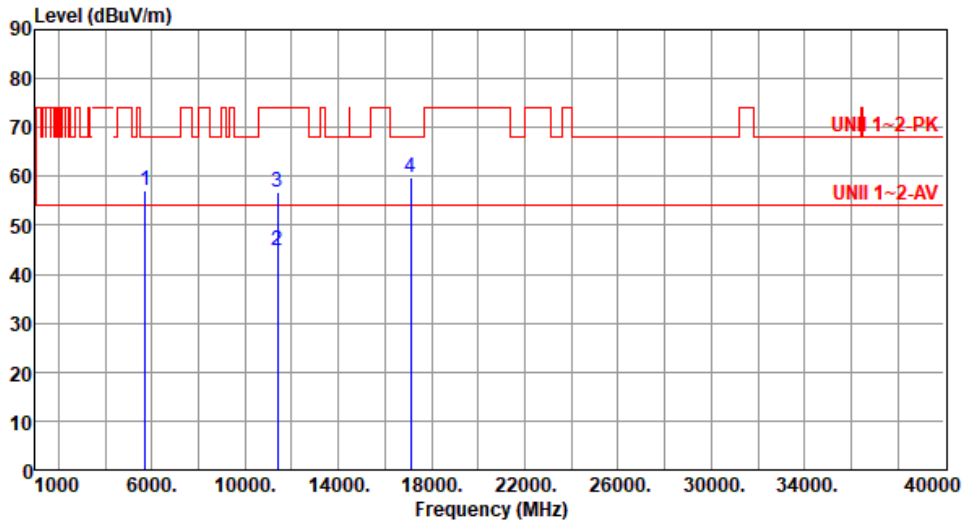


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.28	54.00	-10.72	38.61	4.67	Average	260	150
2	5460.00	55.98	74.00	-18.02	51.31	4.67	Peak	260	150
3	5470.00	56.60	68.20	-11.60	51.90	4.70	Peak	260	150
4	5725.00	57.83	68.20	-10.37	52.66	5.17	Peak	260	150
5	11160.00	47.63	54.00	-6.37	33.66	13.97	Average	100	300
6	11160.00	56.77	74.00	-17.23	42.80	13.97	Peak	100	300
7	16740.00	61.07	68.20	-7.13	43.90	17.17	Peak	100	301

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5700
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65

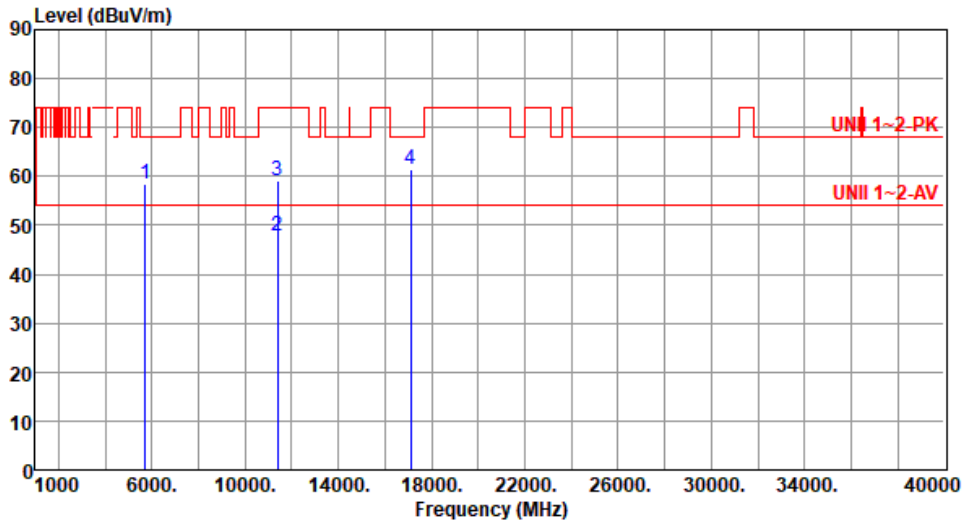


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	57.28	68.20	-10.92	52.11	5.17	Peak	248	302
2	11400.00	44.74	54.00	-9.26	30.60	14.14	Average	100	52
3	11400.00	56.75	74.00	-17.25	42.61	14.14	Peak	100	52
4	17100.00	59.94	68.20	-8.26	42.52	17.42	Peak	100	56

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5700
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65



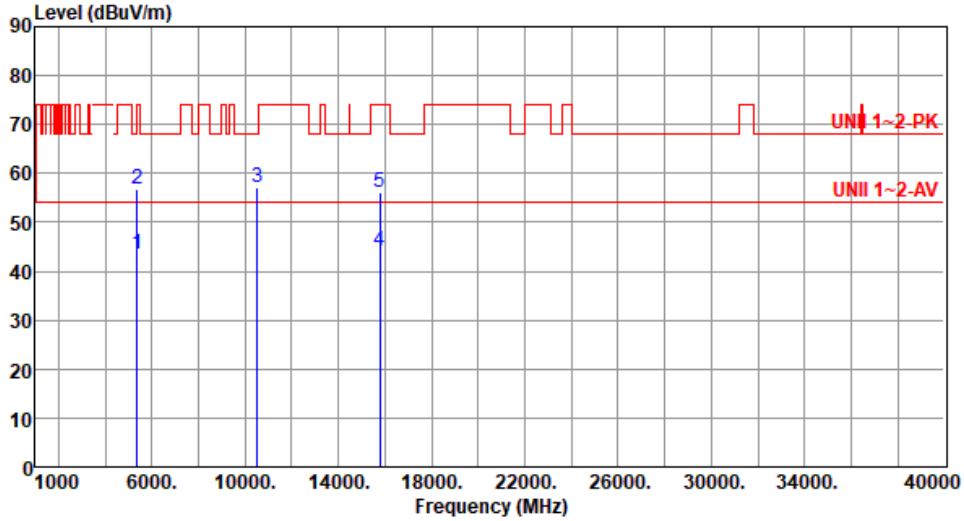
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	58.53	68.20	-9.67	53.36	5.17	Peak	246	138
2	11400.00	47.90	54.00	-6.10	33.76	14.14	Average	100	305
3	11400.00	59.03	74.00	-14.97	44.89	14.14	Peak	100	305
4	17100.00	61.37	68.20	-6.83	43.95	17.42	Peak	100	302

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

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

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

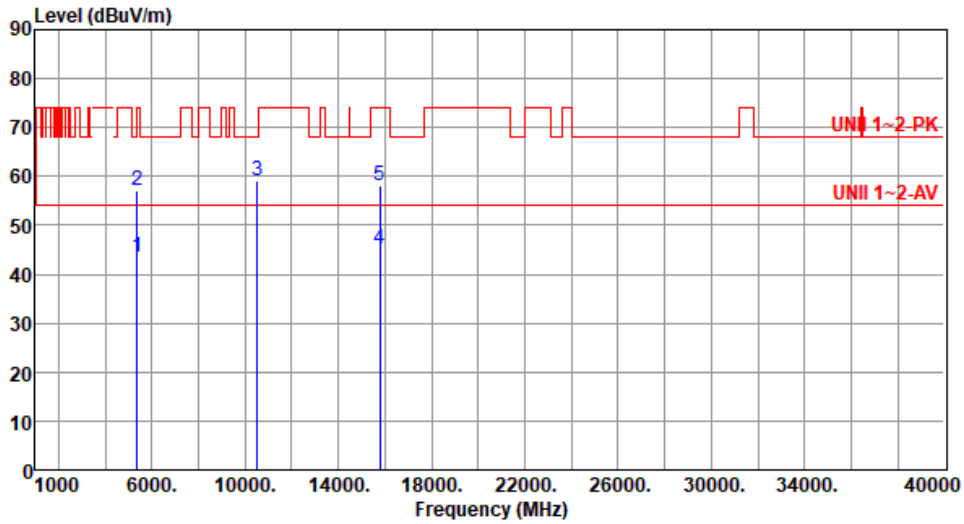


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	43.47	54.00	-10.53	39.05	4.42	Average	250	308
2	5350.00	56.96	74.00	-17.04	52.54	4.42	Peak	250	308
3	10520.00	56.99	68.20	-11.21	42.52	14.47	Peak	100	256
4	15780.00	44.04	54.00	-9.96	30.56	13.48	Average	100	257
5	15780.00	56.10	74.00	-17.90	42.62	13.48	Peak	100	257

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5260
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

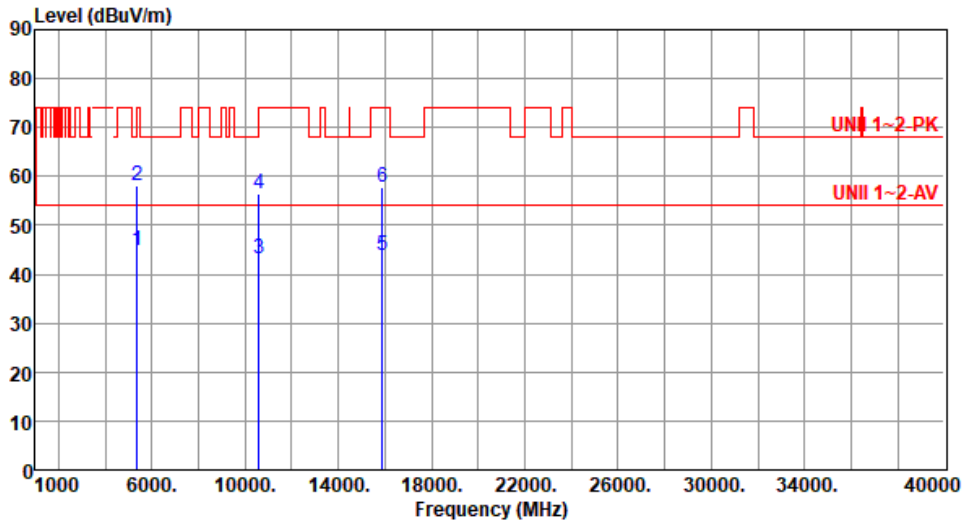


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	43.57	54.00	-10.43	39.15	4.42	Average	278	199
2	5350.00	57.11	74.00	-16.89	52.69	4.42	Peak	278	199
3	10520.00	59.21	68.20	-8.99	44.74	14.47	Peak	100	71
4	15780.00	45.27	54.00	-8.73	31.79	13.48	Average	100	78
5	15780.00	58.26	74.00	-15.74	44.78	13.48	Peak	100	78

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5300
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

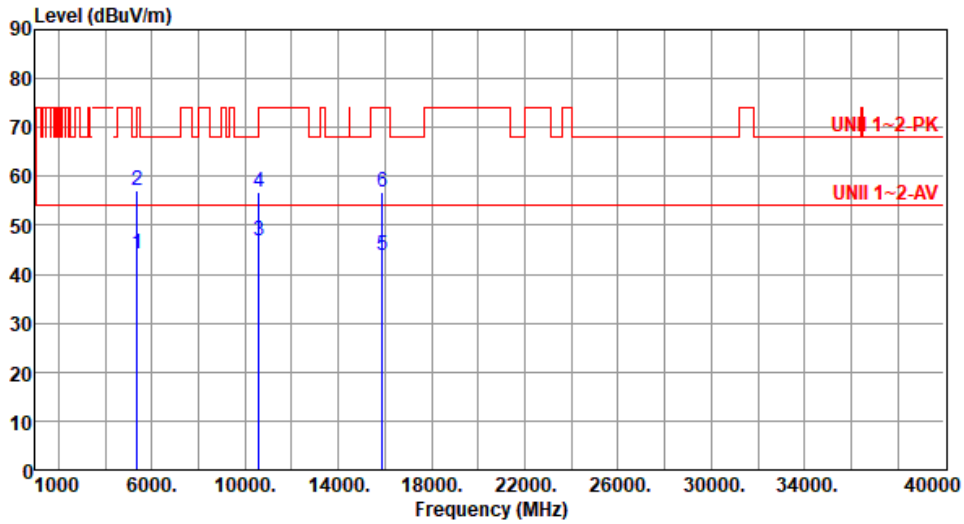


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.75	54.00	-9.25	40.33	4.42	Average	238	312
2	5350.00	57.96	74.00	-16.04	53.54	4.42	Peak	238	312
3	10600.00	43.22	54.00	-10.78	28.87	14.35	Average	100	18
4	10600.00	56.31	74.00	-17.69	41.96	14.35	Peak	100	18
5	15900.00	43.86	54.00	-10.14	30.29	13.57	Average	100	21
6	15900.00	57.94	74.00	-16.06	44.37	13.57	Peak	100	21

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5300
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

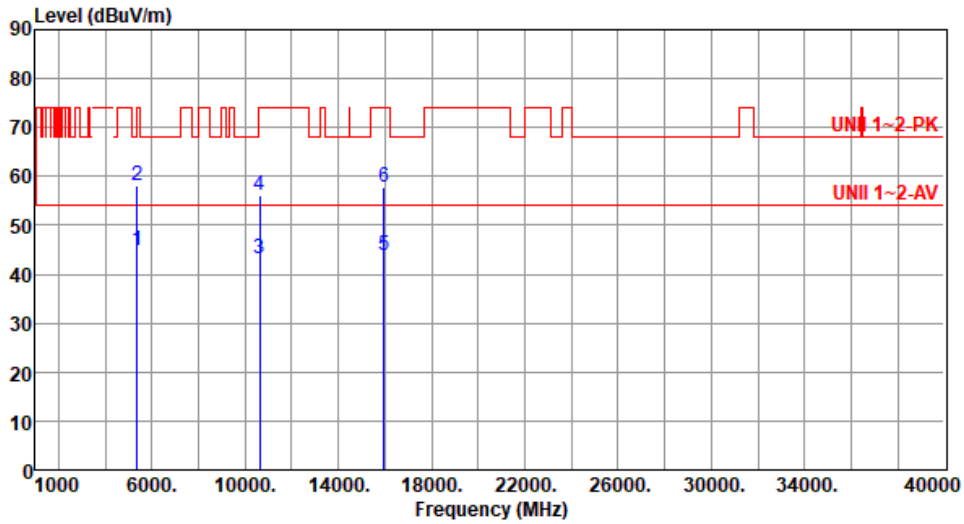


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.14	54.00	-9.86	39.72	4.42	Average	276	201
2	5350.00	57.00	74.00	-17.00	52.58	4.42	Peak	276	201
3	10600.00	46.82	54.00	-7.18	32.47	14.35	Average	100	68
4	10600.00	56.94	74.00	-17.06	42.59	14.35	Peak	100	68
5	15900.00	43.92	54.00	-10.08	30.35	13.57	Average	100	33
6	15900.00	56.81	74.00	-17.19	43.24	13.57	Peak	100	33

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5320
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

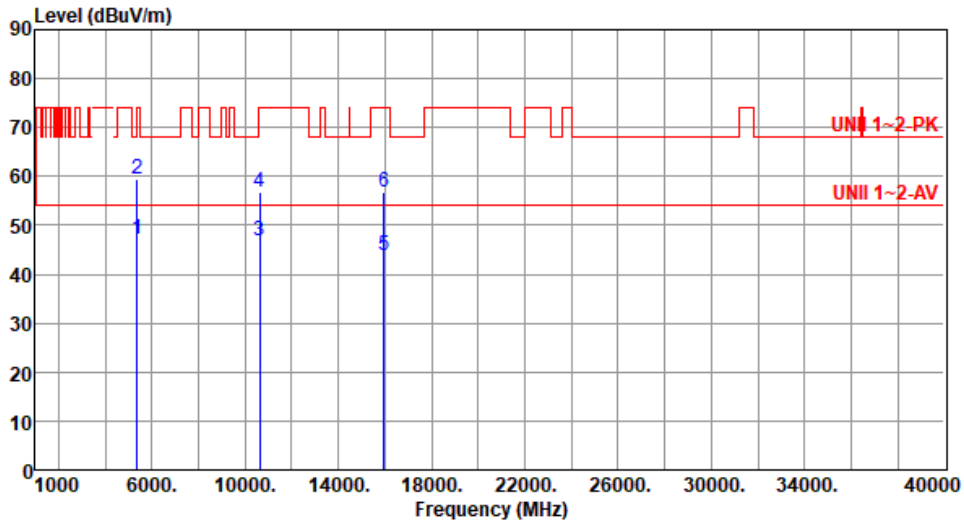


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.87	54.00	-9.13	40.45	4.42	Average	239	311
2	5350.00	58.01	74.00	-15.99	53.59	4.42	Peak	239	311
3	10640.00	43.18	54.00	-10.82	28.81	14.37	Average	100	15
4	10640.00	56.29	74.00	-17.71	41.92	14.37	Peak	100	15
5	15960.00	43.79	54.00	-10.21	30.11	13.68	Average	100	28
6	15960.00	57.82	74.00	-16.18	44.14	13.68	Peak	100	28

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5320
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

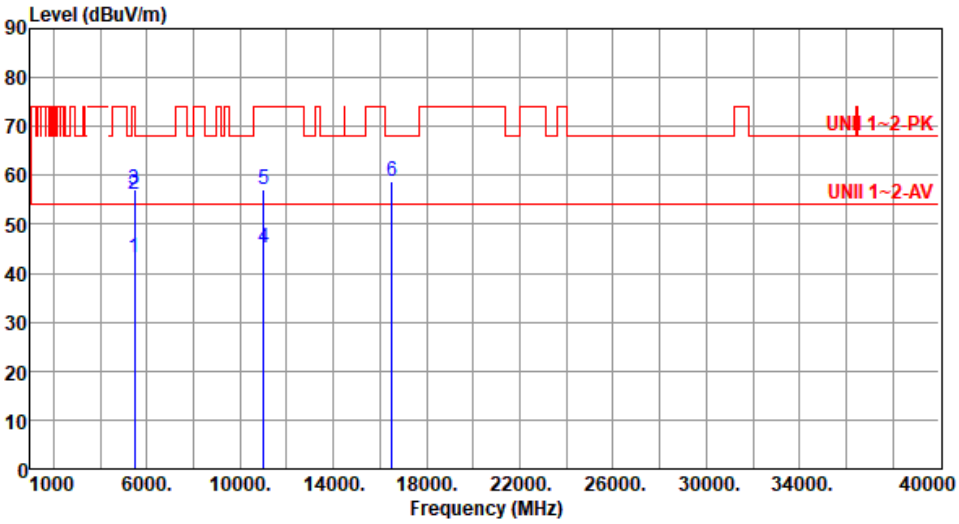


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	47.22	54.00	-6.78	42.80	4.42	Average	295	203
2	5350.00	59.52	74.00	-14.48	55.10	4.42	Peak	295	203
3	10640.00	46.77	54.00	-7.23	32.40	14.37	Average	100	59
4	10640.00	56.89	74.00	-17.11	42.52	14.37	Peak	100	59
5	15960.00	43.84	54.00	-10.16	30.16	13.68	Average	100	28
6	15960.00	56.66	74.00	-17.34	42.98	13.68	Peak	100	28

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)**	5500
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

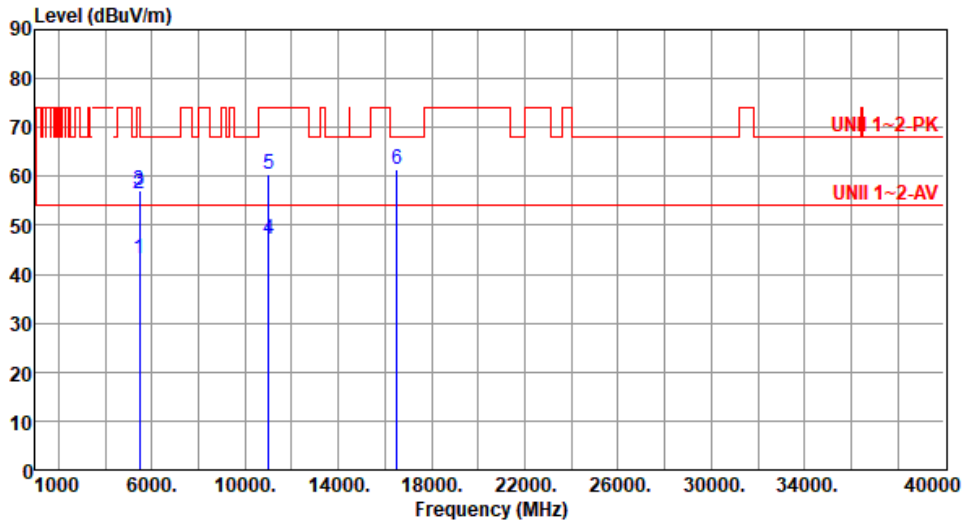


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.01	54.00	-10.99	38.34	4.67	Average	259	317
2	5460.00	56.23	74.00	-17.77	51.56	4.67	Peak	259	317
3	5470.00	57.03	68.20	-11.17	52.33	4.70	Peak	259	317
4	11000.00	45.07	54.00	-8.93	30.42	14.65	Average	100	51
5	11000.00	57.23	74.00	-16.77	42.58	14.65	Peak	100	51
6	16500.00	58.82	68.20	-9.38	42.48	16.34	Peak	100	59

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5500
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

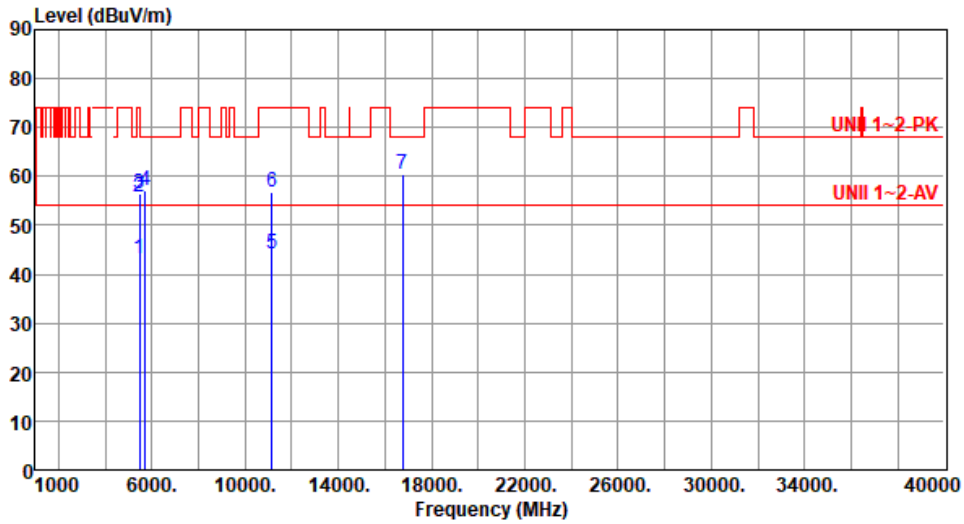


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.10	54.00	-10.90	38.43	4.67	Average	248	147
2	5460.00	56.37	74.00	-17.63	51.70	4.67	Peak	248	147
3	5470.00	57.11	68.20	-11.09	52.41	4.70	Peak	248	147
4	11000.00	47.31	54.00	-6.69	32.66	14.65	Average	100	308
5	11000.00	60.50	74.00	-13.50	45.85	14.65	Peak	100	308
6	16500.00	61.30	68.20	-6.90	44.96	16.34	Peak	100	300

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5580
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

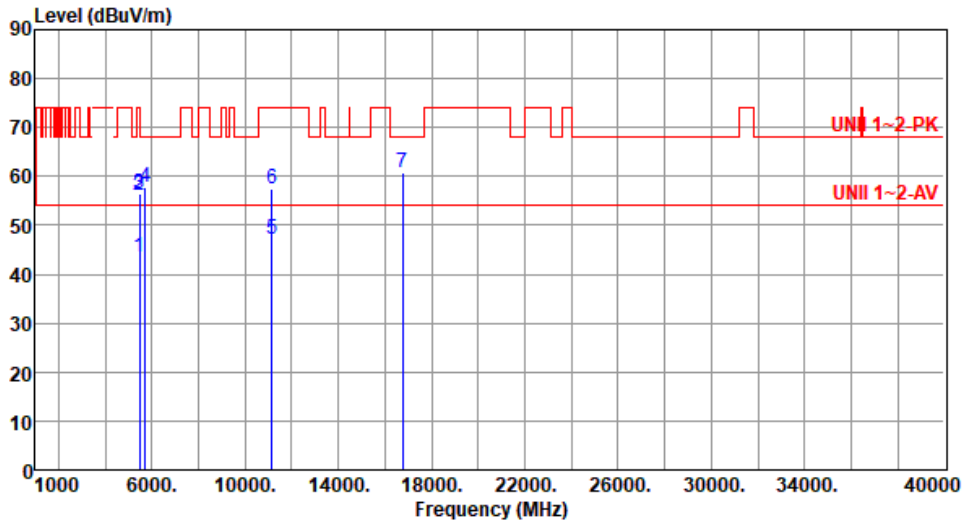


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.18	54.00	-10.82	38.51	4.67	Average	233	203
2	5460.00	55.91	74.00	-18.09	51.24	4.67	Peak	233	203
3	5470.00	56.40	68.20	-11.80	51.70	4.70	Peak	233	203
4	5725.00	57.20	68.20	-11.00	52.03	5.17	Peak	233	203
5	11160.00	44.33	54.00	-9.67	30.36	13.97	Average	100	63
6	11160.00	56.89	74.00	-17.11	42.92	13.97	Peak	100	63
7	16740.00	60.31	68.20	-7.89	43.14	17.17	Peak	100	19

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5580
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

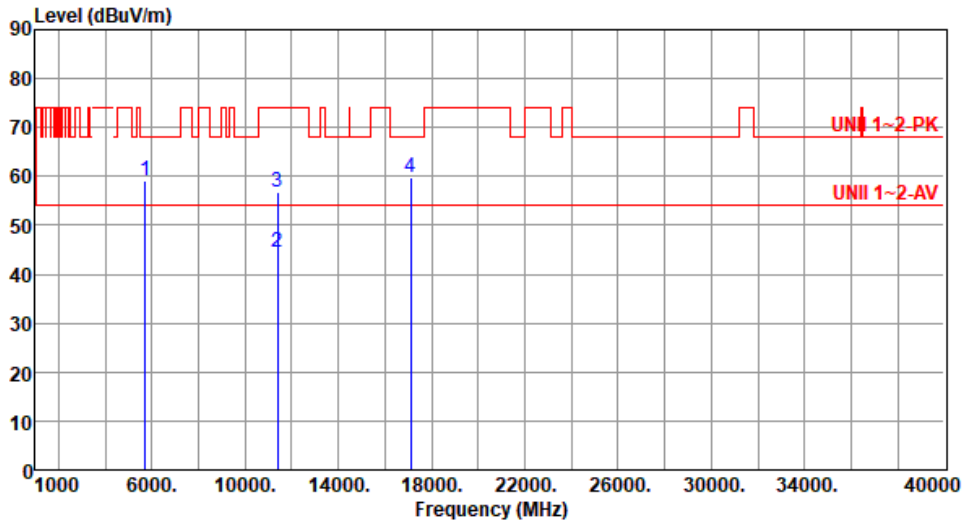


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.39	54.00	-10.61	38.72	4.67	Average	256	145
2	5460.00	56.13	74.00	-17.87	51.46	4.67	Peak	256	145
3	5470.00	56.56	68.20	-11.64	51.86	4.70	Peak	256	145
4	5725.00	57.66	68.20	-10.54	52.49	5.17	Peak	256	145
5	11160.00	47.16	54.00	-6.84	33.19	13.97	Average	100	298
6	11160.00	57.42	74.00	-16.58	43.45	13.97	Peak	100	298
7	16740.00	60.82	68.20	-7.38	43.65	17.17	Peak	100	298

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5700
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

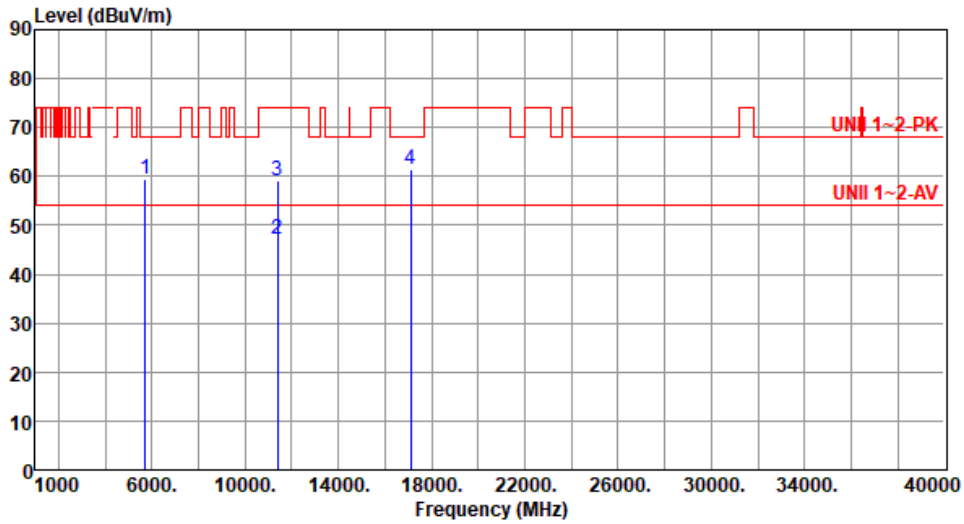


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	59.05	68.20	-9.15	53.88	5.17	Peak	263	315
2	11400.00	44.62	54.00	-9.38	30.48	14.14	Average	100	57
3	11400.00	56.73	74.00	-17.27	42.59	14.14	Peak	100	57
4	17100.00	59.94	68.20	-8.26	42.52	17.42	Peak	100	59

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5700
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66



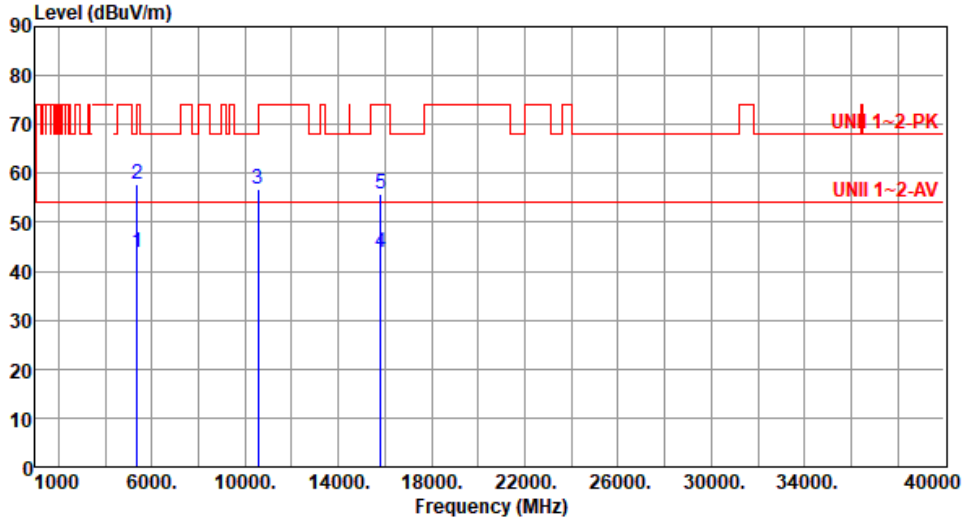
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	59.38	68.20	-8.82	54.21	5.17	Peak	253	146
2	11400.00	47.10	54.00	-6.90	32.96	14.14	Average	100	301
3	11400.00	59.03	74.00	-14.97	44.89	14.14	Peak	100	301
4	17100.00	61.29	68.20	-6.91	43.87	17.42	Peak	100	308

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

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

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

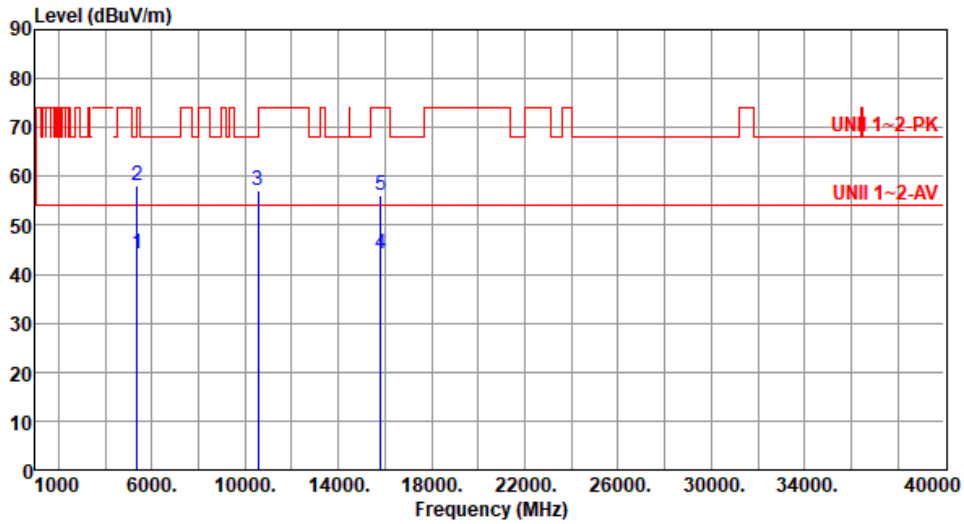


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	43.87	54.00	-10.13	39.45	4.42	Average	267	304
2	5350.00	57.67	74.00	-16.33	53.25	4.42	Peak	267	304
3	10540.00	56.92	68.20	-11.28	42.48	14.44	Peak	100	260
4	15810.00	43.91	54.00	-10.09	30.41	13.50	Average	100	255
5	15810.00	55.92	74.00	-18.08	42.42	13.50	Peak	100	255

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5270
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

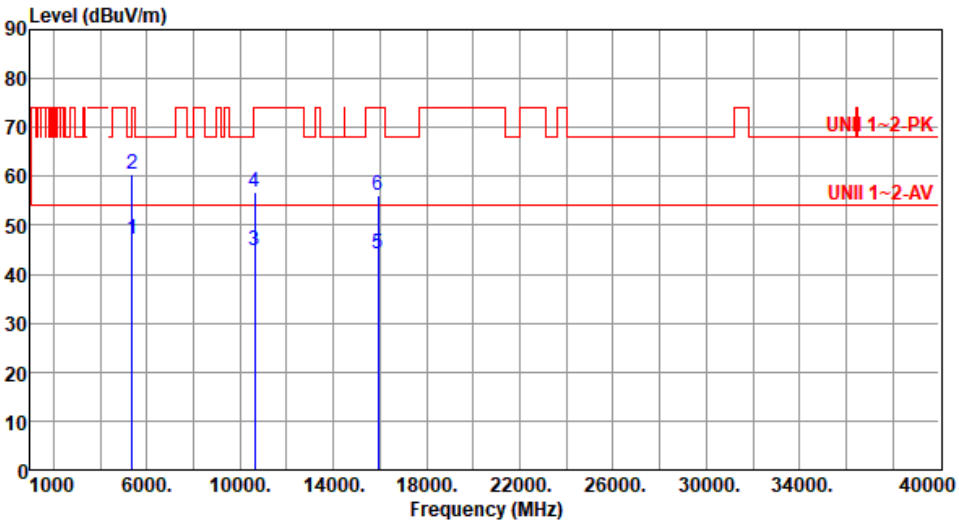


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	44.26	54.00	-9.74	39.84	4.42	Average	245	206
2	5350.00	57.97	74.00	-16.03	53.55	4.42	Peak	245	206
3	10540.00	57.13	68.20	-11.07	42.69	14.44	Peak	100	72
4	15810.00	44.16	54.00	-9.84	30.66	13.50	Average	100	73
5	15810.00	56.12	74.00	-17.88	42.62	13.50	Peak	100	73

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5310
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

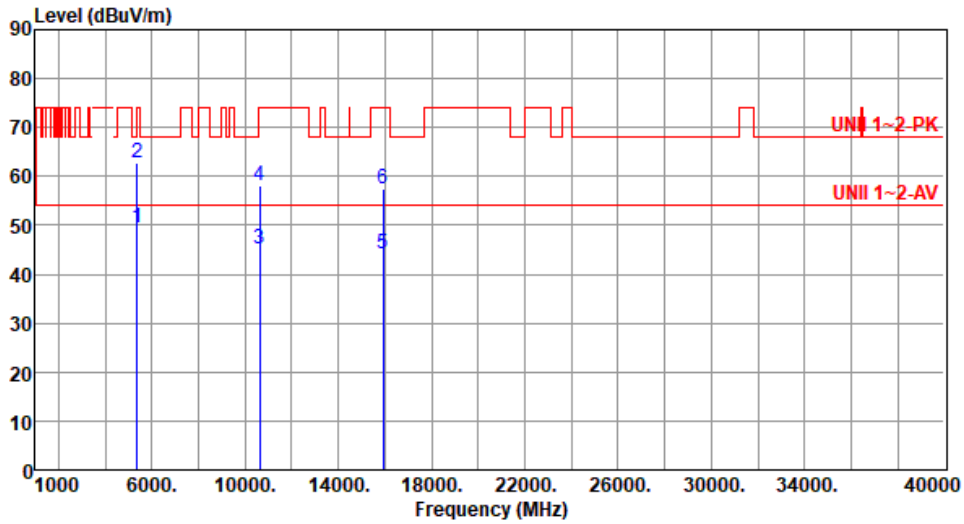


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	47.08	54.00	-6.92	42.66	4.42	Average	243	302
2	5350.00	60.41	74.00	-13.59	55.99	4.42	Peak	243	302
3	10620.00	44.85	54.00	-9.15	30.49	14.36	Average	100	260
4	10620.00	56.76	74.00	-17.24	42.40	14.36	Peak	100	260
5	15930.00	44.05	54.00	-9.95	30.42	13.63	Average	100	257
6	15930.00	56.10	74.00	-17.90	42.47	13.63	Peak	100	257

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5310
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

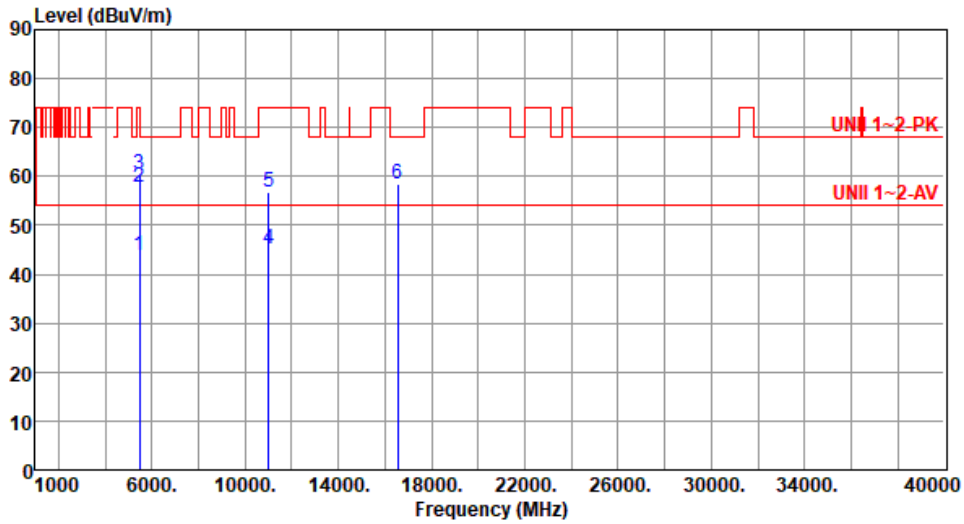


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	49.60	54.00	-4.40	45.18	4.42	Average	281	206
2	5350.00	62.85	74.00	-11.15	58.43	4.42	Peak	281	206
3	10620.00	45.05	54.00	-8.95	30.69	14.36	Average	100	66
4	10620.00	58.04	74.00	-15.96	43.68	14.36	Peak	100	66
5	15930.00	44.27	54.00	-9.73	30.64	13.63	Average	100	70
6	15930.00	57.32	74.00	-16.68	43.69	13.63	Peak	100	70

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5510
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

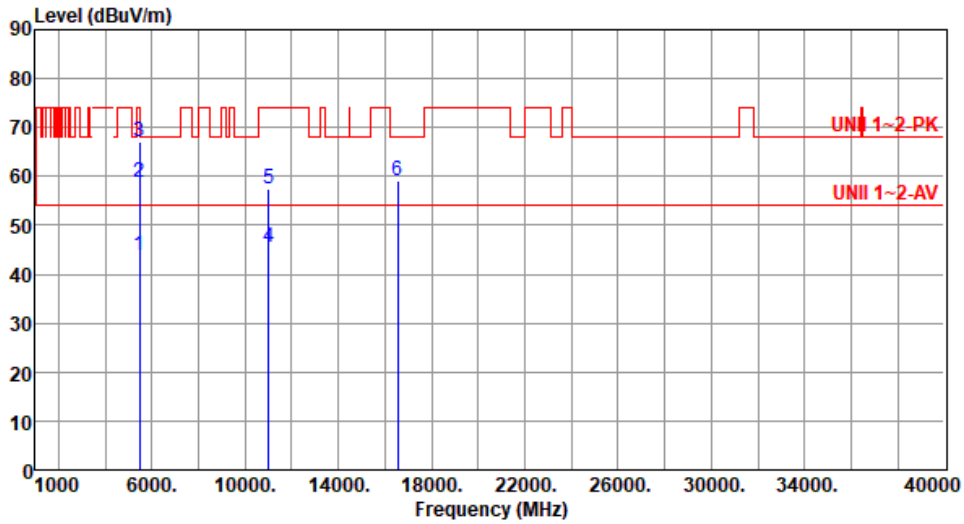


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.79	54.00	-10.21	39.12	4.67	Average	257	302
2	5460.00	57.67	74.00	-16.33	53.00	4.67	Peak	257	302
3	5470.00	60.55	68.20	-7.65	55.85	4.70	Peak	257	302
4	11020.00	45.00	54.00	-9.00	30.44	14.56	Average	100	57
5	11020.00	56.91	74.00	-17.09	42.35	14.56	Peak	100	57
6	16530.00	58.60	68.20	-9.60	42.36	16.24	Peak	100	59

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5510
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

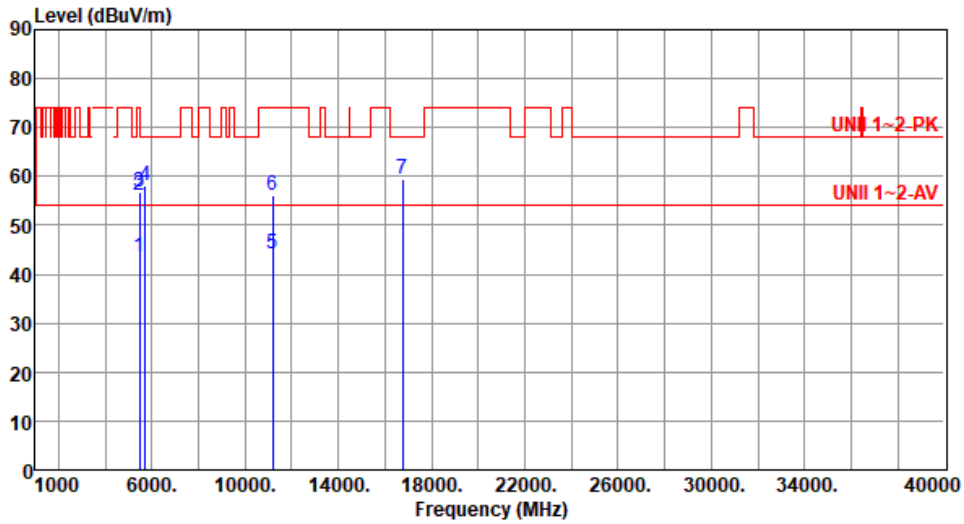


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.98	54.00	-10.02	39.31	4.67	Average	249	147
2	5460.00	58.92	74.00	-15.08	54.25	4.67	Peak	249	147
3	5470.00	67.15	68.20	-1.05	62.45	4.70	Peak	249	147
4	11020.00	45.55	54.00	-8.45	30.99	14.56	Average	100	253
5	11020.00	57.52	74.00	-16.48	42.96	14.56	Peak	100	253
6	16530.00	59.12	68.20	-9.08	42.88	16.24	Peak	100	258

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5590
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

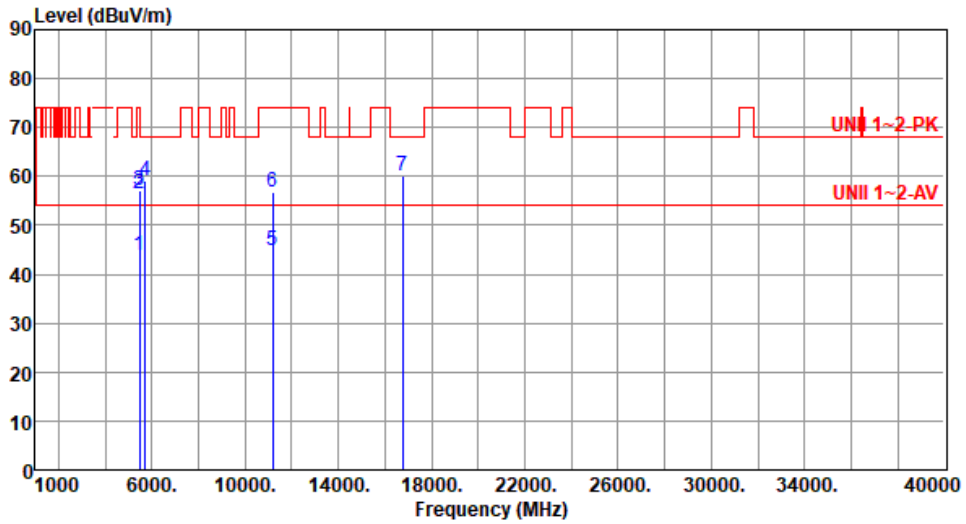


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.55	54.00	-10.45	38.88	4.67	Average	268	319
2	5460.00	56.23	74.00	-17.77	51.56	4.67	Peak	268	319
3	5470.00	56.92	68.20	-11.28	52.22	4.70	Peak	268	319
4	5725.00	58.13	68.20	-10.07	52.96	5.17	Peak	268	319
5	11180.00	44.18	54.00	-9.82	30.30	13.88	Average	100	58
6	11180.00	56.17	74.00	-17.83	42.29	13.88	Peak	100	58
7	16770.00	59.59	68.20	-8.61	42.24	17.35	Peak	100	52

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5590
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

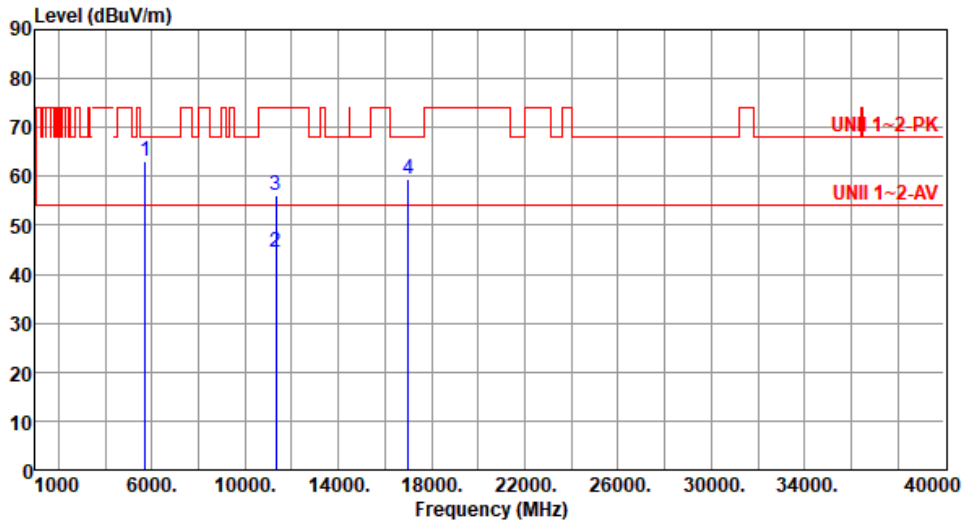


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	43.72	54.00	-10.28	39.05	4.67	Average	247	146
2	5460.00	56.62	74.00	-17.38	51.95	4.67	Peak	247	146
3	5470.00	57.26	68.20	-10.94	52.56	4.70	Peak	247	146
4	5725.00	59.02	68.20	-9.18	53.85	5.17	Peak	247	146
5	11180.00	44.76	54.00	-9.24	30.88	13.88	Average	100	263
6	11180.00	56.66	74.00	-17.34	42.78	13.88	Peak	100	263
7	16770.00	60.14	68.20	-8.06	42.79	17.35	Peak	100	251

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5670
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

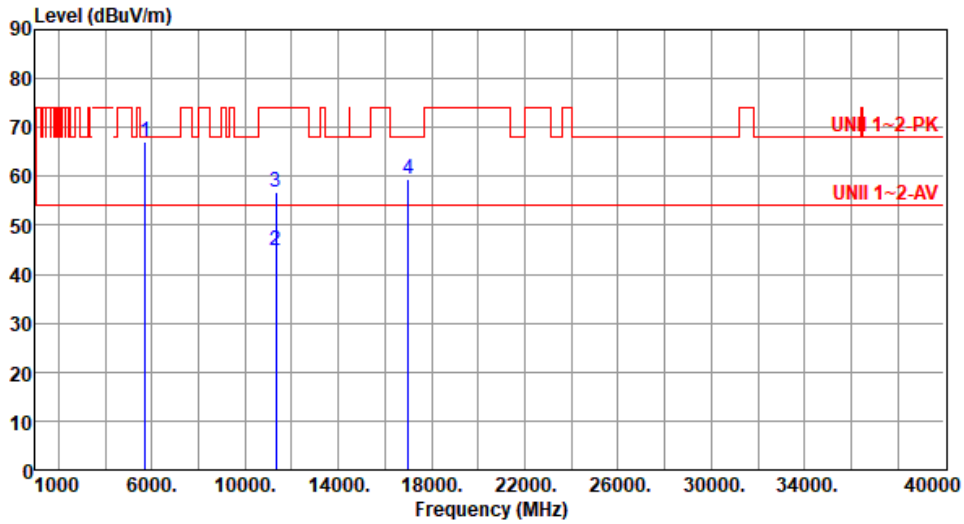


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	63.05	68.20	-5.15	57.88	5.17	Peak	266	307
2	11340.00	44.39	54.00	-9.61	30.41	13.98	Average	100	51
3	11340.00	56.23	74.00	-17.77	42.25	13.98	Peak	100	51
4	17010.00	59.54	68.20	-8.66	42.29	17.25	Peak	100	53

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5670
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66



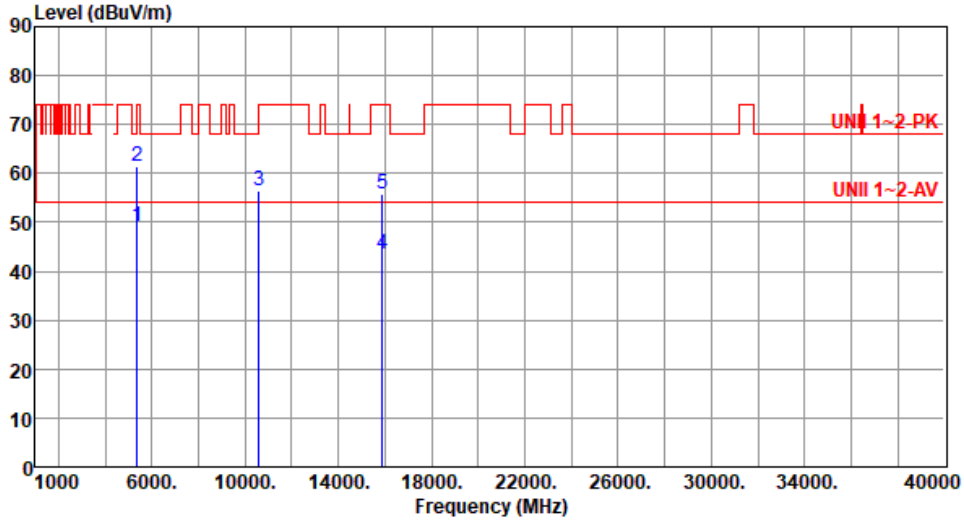
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	67.18	68.20	-1.02	62.01	5.17	Peak	255	146
2	11340.00	44.75	54.00	-9.25	30.77	13.98	Average	100	259
3	11340.00	56.73	74.00	-17.27	42.75	13.98	Peak	100	259
4	17010.00	59.61	68.20	-8.59	42.36	17.25	Peak	100	249

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Modulation	ax HE80-OFDMA	Test Freq. (MHz)	5290
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

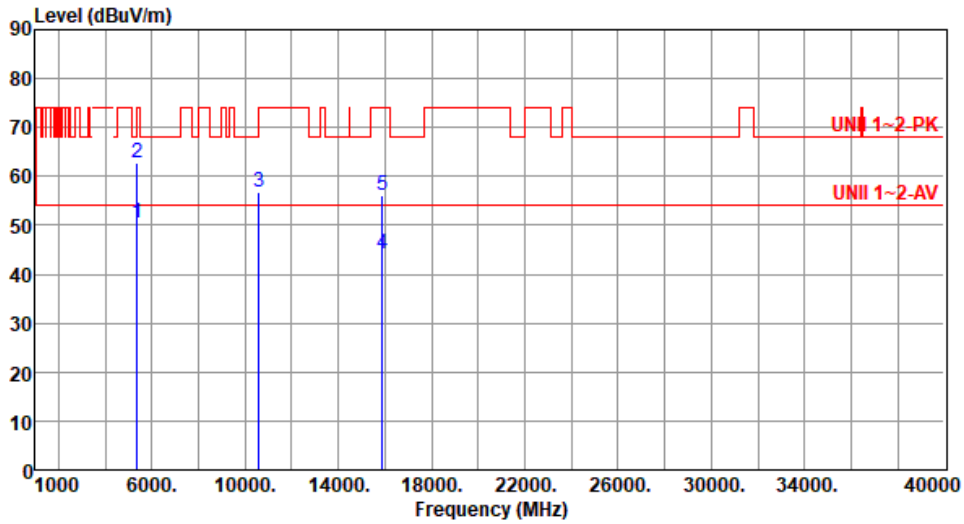


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	49.13	54.00	-4.87	44.71	4.42	Average	251	314
2	5350.00	61.28	74.00	-12.72	56.86	4.42	Peak	251	314
3	10580.00	56.59	68.20	-11.61	42.21	14.38	Peak	100	249
4	15870.00	43.66	54.00	-10.34	30.11	13.55	Average	100	254
5	15870.00	55.74	74.00	-18.26	42.19	13.55	Peak	100	254

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5290
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

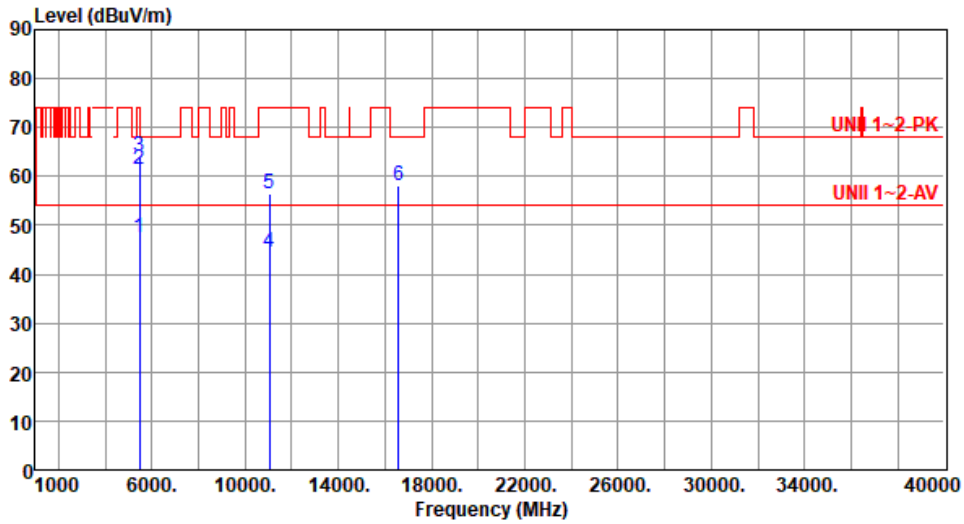


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5350.00	50.65	54.00	-3.35	46.23	4.42	Average	286	205
2	5350.00	62.66	74.00	-11.34	58.24	4.42	Peak	286	205
3	10580.00	56.89	68.20	-11.31	42.51	14.38	Peak	100	79
4	15870.00	44.05	54.00	-9.95	30.50	13.55	Average	100	80
5	15870.00	56.06	74.00	-17.94	42.51	13.55	Peak	100	80

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5530
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

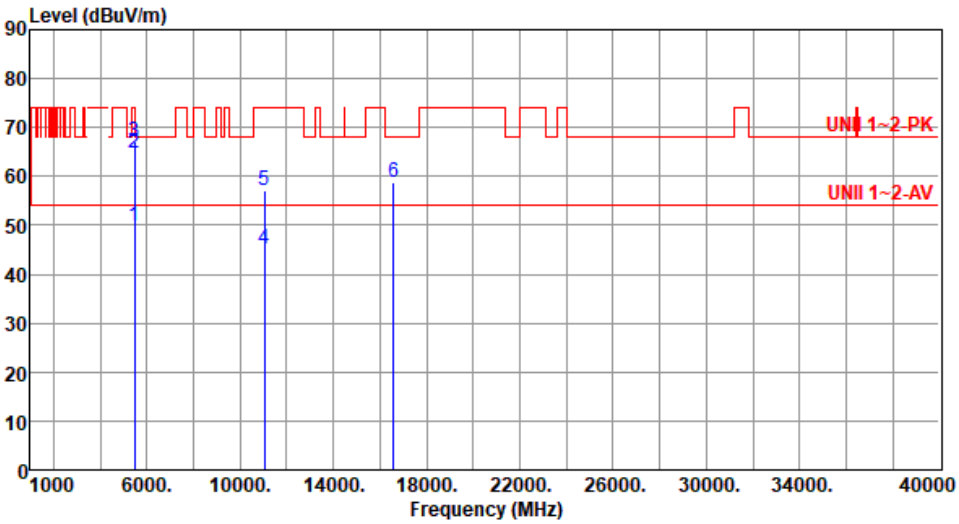


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	47.56	54.00	-6.44	42.89	4.67	Average	269	311
2	5460.00	61.56	74.00	-12.44	56.89	4.67	Peak	269	311
3	5470.00	64.14	68.20	-4.06	59.44	4.70	Peak	269	311
4	11060.00	44.61	54.00	-9.39	30.22	14.39	Average	100	46
5	11060.00	56.60	74.00	-17.40	42.21	14.39	Peak	100	46
6	16590.00	58.23	68.20	-9.97	42.19	16.04	Peak	100	57

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5530
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

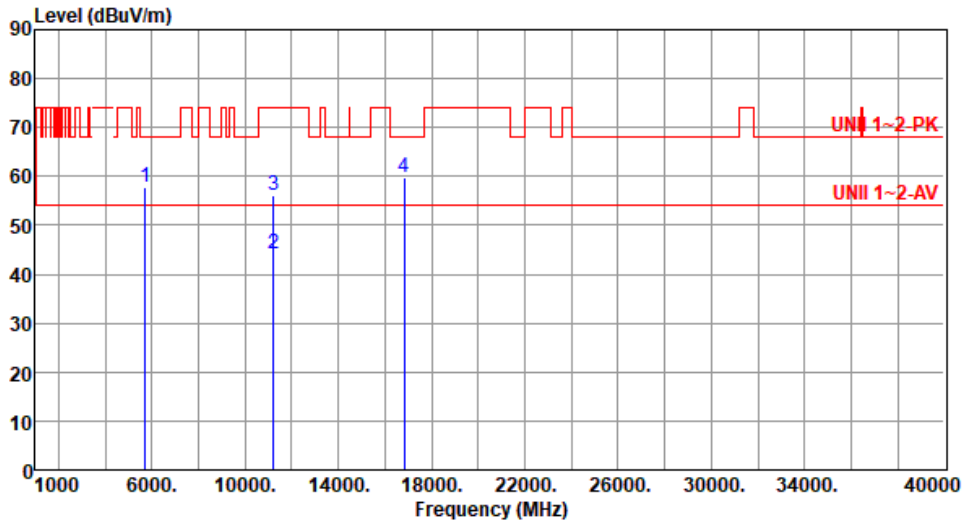


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	49.81	54.00	-4.19	45.14	4.67	Average	248	148
2	5460.00	64.66	74.00	-9.34	59.99	4.67	Peak	248	148
3	5470.00	67.18	68.20	-1.02	62.48	4.70	Peak	248	148
4	11060.00	45.16	54.00	-8.84	30.77	14.39	Average	100	309
5	11060.00	57.09	74.00	-16.91	42.70	14.39	Peak	100	309
6	16590.00	58.83	68.20	-9.37	42.79	16.04	Peak	100	302

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5610
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66

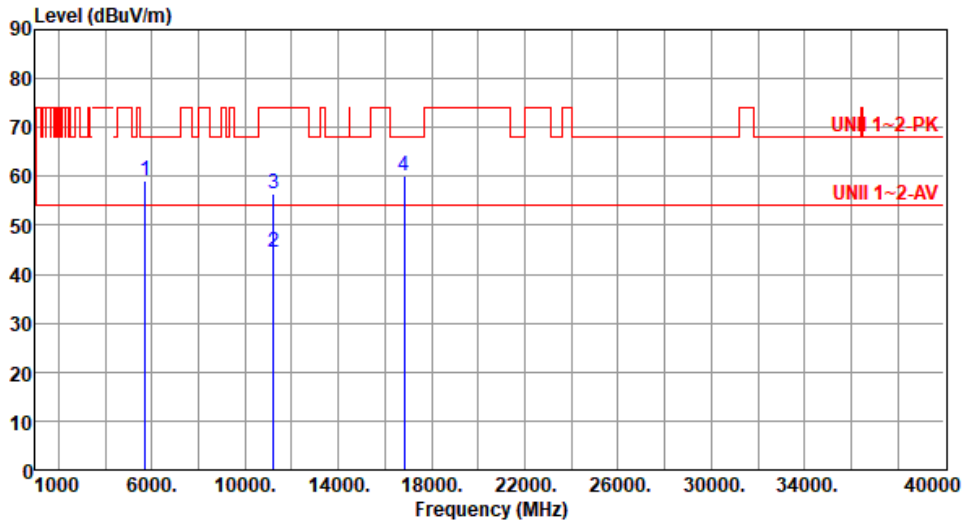


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	57.83	68.20	-10.37	52.66	5.17	Peak	338	306
2	11220.00	44.06	54.00	-9.94	30.24	13.82	Average	100	56
3	11220.00	56.00	74.00	-18.00	42.18	13.82	Peak	100	56
4	16830.00	59.63	68.20	-8.57	42.17	17.46	Peak	100	52

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*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)	5610
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):22 Humidity(%):66



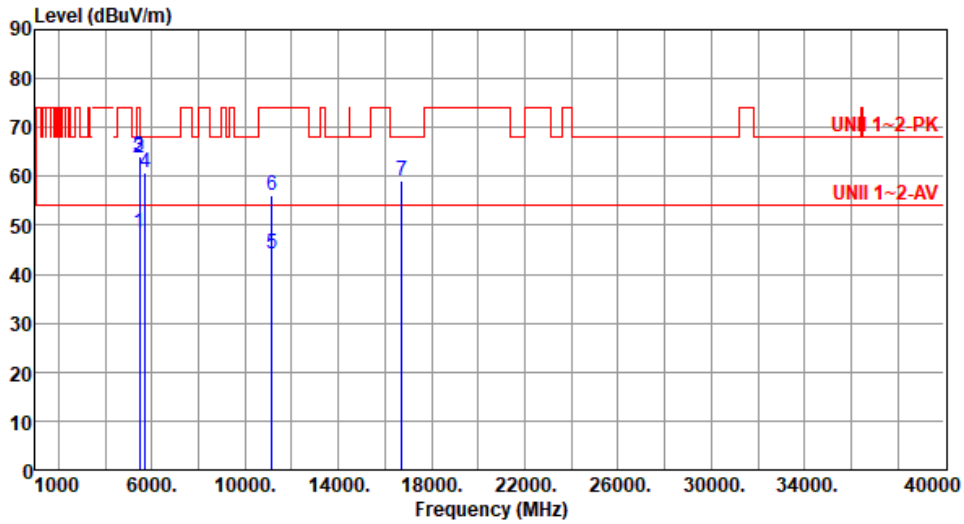
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5725.00	58.99	68.20	-9.21	53.82	5.17	Peak	241	146
2	11220.00	44.53	54.00	-9.47	30.71	13.82	Average	100	305
3	11220.00	56.51	74.00	-17.49	42.69	13.82	Peak	100	305
4	16830.00	60.11	68.20	-8.09	42.65	17.46	Peak	100	309

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for ax HE160-OFDMA

Modulation	ax HE160-OFDMA	Test Freq. (MHz)	5570
Polarization	Horizontal		

Test By :Brad Wu Temperature(°C):23 Humidity(%):65

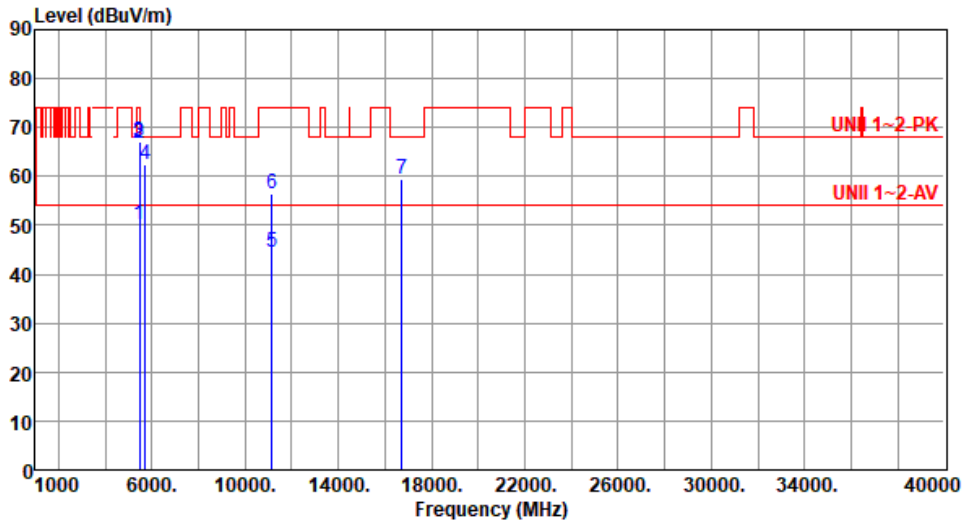


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	48.34	54.00	-5.66	43.67	4.67	Average	265	320
2	5460.00	63.90	74.00	-10.10	59.23	4.67	Peak	265	320
3	5470.00	63.95	68.20	-4.25	59.25	4.70	Peak	265	320
4	5725.00	60.72	68.20	-7.48	55.55	5.17	Peak	265	320
5	11140.00	44.10	54.00	-9.90	30.05	14.05	Average	100	57
6	11140.00	56.15	74.00	-17.85	42.10	14.05	Peak	100	57
7	16710.00	59.10	68.20	-9.10	42.10	17.00	Peak	100	59

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	ax HE160-OFDMA	Test Freq. (MHz)	5570
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):23 Humidity(%):65



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	50.22	54.00	-3.78	45.55	4.67	Average	239	49
2	5460.00	66.89	74.00	-7.11	62.22	4.67	Peak	239	49
3	5470.00	67.08	68.20	-1.12	62.38	4.70	Peak	239	49
4	5725.00	62.58	68.20	-5.62	57.41	5.17	Peak	239	49
5	11140.00	44.55	54.00	-9.45	30.50	14.05	Average	100	302
6	11140.00	56.50	74.00	-17.50	42.45	14.05	Peak	100	302
7	16710.00	59.44	68.20	-8.76	42.44	17.00	Peak	100	308

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6 Frequency Stability

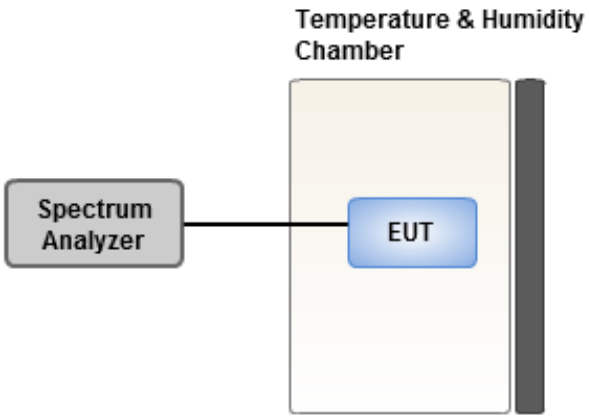
3.6.1 Limit of Frequency Stability

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.

3.6.2 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.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

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

Frequency: 5300 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-3.35	-3.96	-3.24	-3.46
T20°CVmin	-3.56	-3.79	-3.31	-3.28
T50°CVnom	-2.52	-2.50	-2.07	-2.04
T40°CVnom	-3.42	-2.78	-2.84	-2.90
T30°CVnom	-2.15	-1.80	-2.08	-1.99
T20°CVnom	-3.21	-3.25	-3.01	-3.21
T10°CVnom	-3.89	-3.85	-3.42	-4.26
T0°CVnom	-3.76	-3.40	-2.99	-3.53
T-10°CVnom	-2.26	-2.01	-2.01	-2.15
T-20°CVnom	-1.78	-2.03	-1.50	-1.73
T-30°CVnom	-2.12	-1.99	-2.09	-1.75
Vnom [V]: 110		Vmax [V]: 126.5		Vmin [V]: 93.5
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5580 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-3.55	-3.27	-3.83	-3.82
T20°CVmin	-3.80	-3.73	-4.22	-3.45
T50°CVnom	-3.73	-3.93	-3.51	-3.40
T40°CVnom	-4.19	-3.88	-4.07	-4.08
T30°CVnom	-2.27	-2.04	-1.57	-2.01
T20°CVnom	-3.59	-3.39	-3.29	-3.79
T10°CVnom	-2.02	-1.43	-2.17	-1.51
T0°CVnom	-2.89	-2.69	-2.22	-2.88
T-10°CVnom	-3.03	-2.59	-2.62	-3.31
T-20°CVnom	-2.08	-2.45	-1.92	-2.53
T-30°CVnom	-3.39	-3.15	-3.40	-2.77
Vnom [V]: 110		Vmax [V]: 126.5		Vmin [V]: 93.5
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

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

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

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

Linkou

Tel: 886-2-2601-1640

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

Kwei Shan

Tel: 886-3-271-8666

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

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

Kwei Shan Site II

Tel: 886-3-271-8640

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

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

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

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